

DESIGN DATA				
Traffic	Average Daily			
Current 2026	Pass: 6,912	Trucks: 678	Total: 7,590	
Forecast 2046	Pass: 8,552	Trucks: 838	Total: 9,390	
Clear Zone Distance: 18 FT		Design Speed: 35 MPH		
Minimum Sight Dist. for Stopping: 250 FT				
Limited Access Control				
Pavement Design Life: 30 YEARS				
Design Accumulated One-way Rigid ESALs: N/A				

NORTH DAKOTA
DEPARTMENT OF TRANSPORTATION

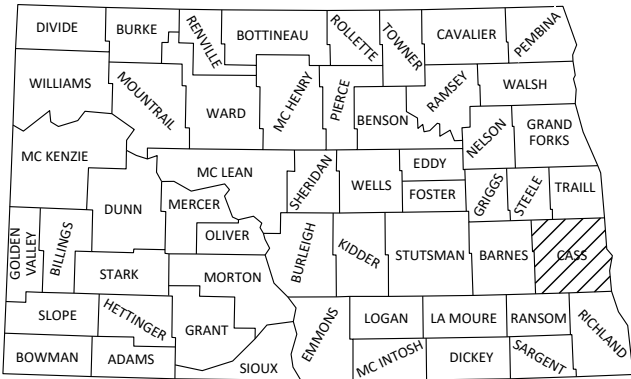
TMA-SU-FXP-8-992(045)
CITY IMPROVEMENT
DISTRICT NO 2265

CASS COUNTY
9th St NE from Main Ave to 12th Ave N
7th Ave NE from 9th St NE to City Limit
GRADING, SALVAGED BASE, PCC PAVEMENT, STORM DRAIN,
LIGHTING, SIGNALS, PAVEMENT MARKING, SIGNING, SHARED USE PATH,
AND WATER MAIN

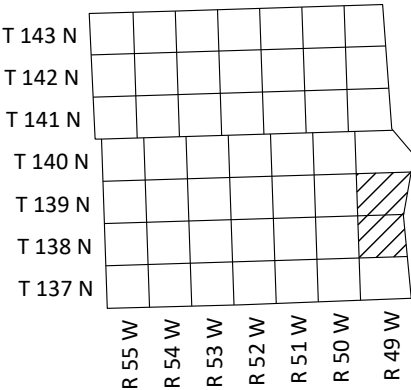
STATE	PROJECT NO.	PCN	SECTION NO.	SHEET NO.
ND	TMA-SU-FXP-8-992(045)	23537	1	1

GOVERNING SPECIFICATIONS	Date Published and Adopted by the North Dakota Department of Transportation
Standard Specifications	7/1/2024
Supplemental Specifications	NONE

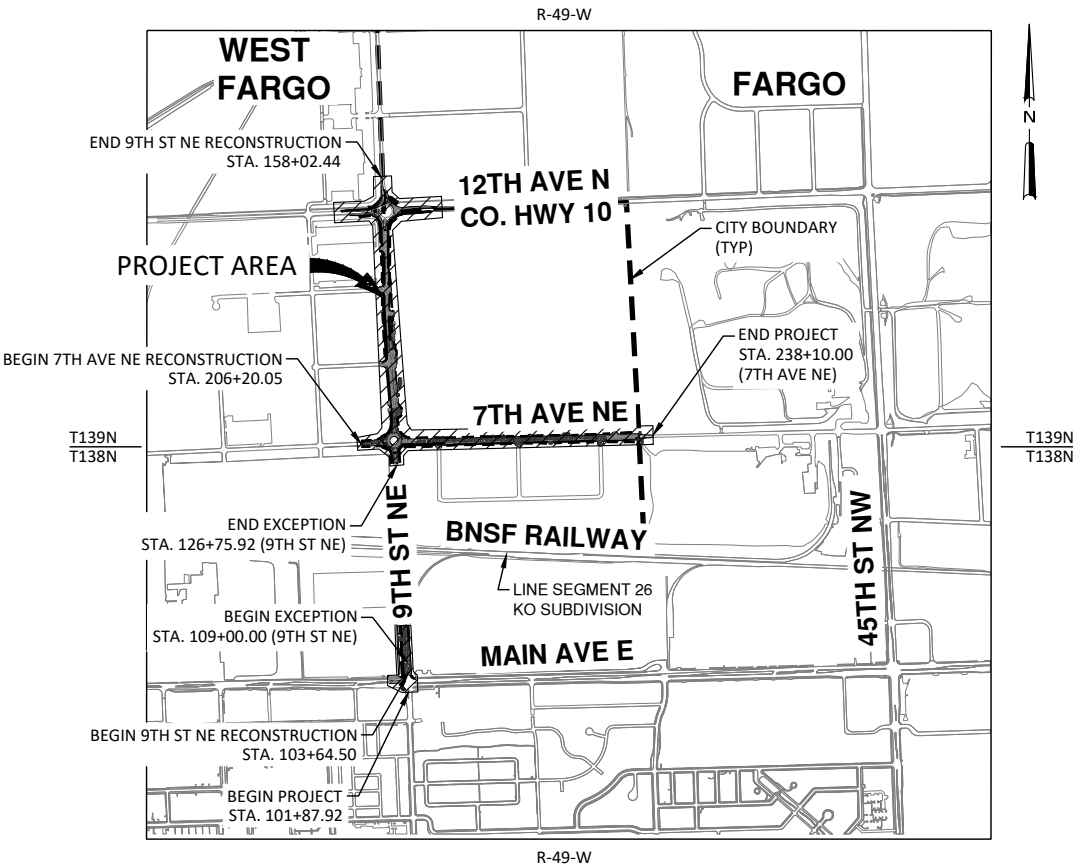
PROJECT NUMBER\DESCRIPTION	NET MILES	GROSS MILES
TMA-SU-FXP-8-992(045)	1.298	1.667
9th St NE	0.694	1.063
7th Ave NE	0.604	0.604



STATE COUNTY MAP



CASS COUNTY



APPROVED DATE 10/22/2025

Daniel Hanson
SENIOR DIRECTOR OF COMMUNITY &
DEVELOPMENT, CITY OF WEST FARGO

APPROVED DATE 10/22/2025

Jeremy McLaughlin
HOUSTON ENGINEERING INC

PROJECT MANAGER



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10	1 - 3	Basis of Estimate			
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40	1 - 7	Removals			
50	1 - 9	Inlet and Manhole Summary			
55	1 - 9	Utility Layouts - Watermain			
55	10 - 12	Utility Layouts - Sanitary Sewer			
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60	1 - 29	Plan & Profile			
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200	19 - 27	Cross Sections - 7th Ave NE			
200	28 - 44	Cross Sections - 7th Ave NE Roundabout			
200	45 - 59	Cross Sections - 12th Ave NE Roundabout			

SPECIAL PROVISIONS

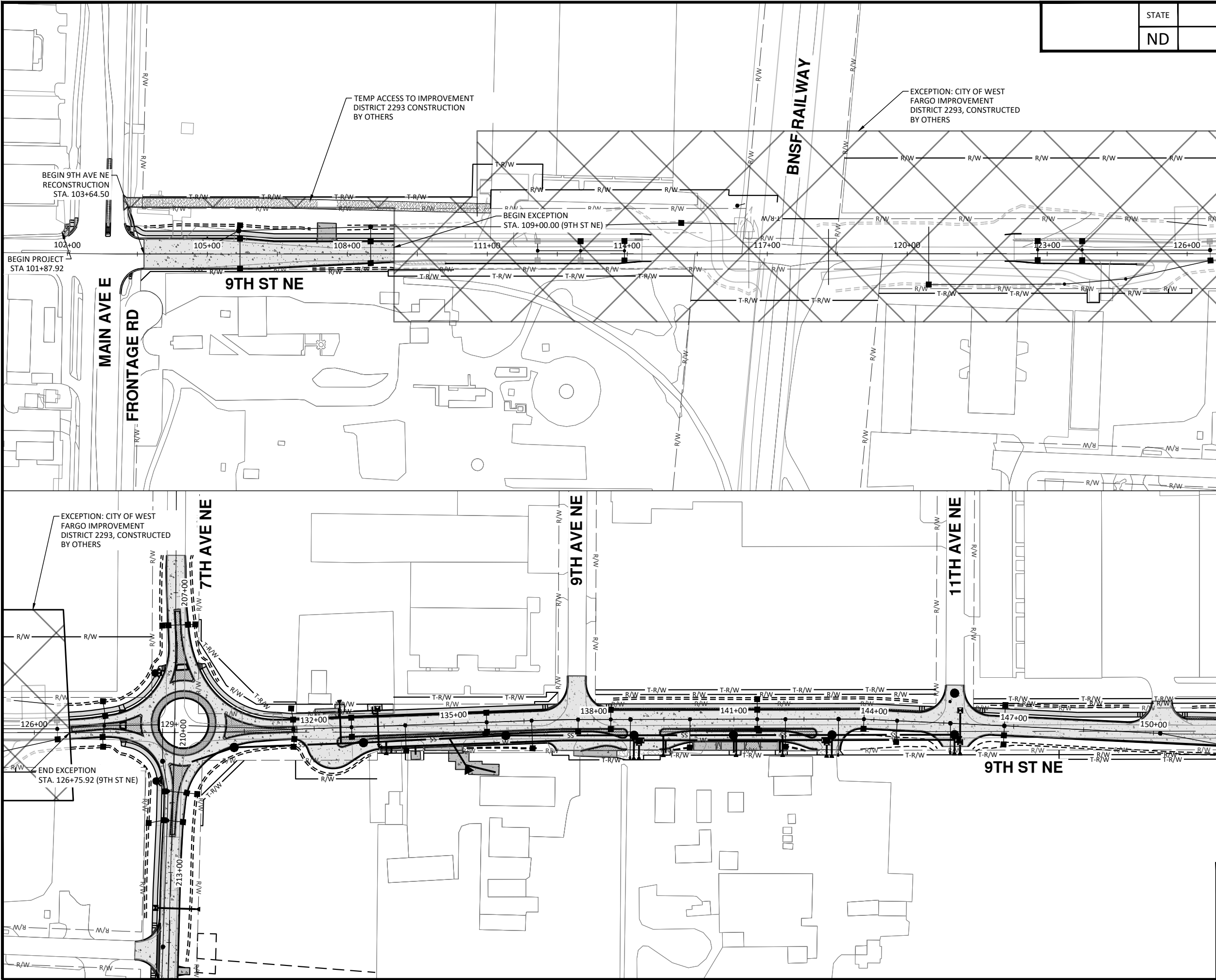
Number	Description
SSP 1	Temporary Erosion and Sediment Best Management Practices
PSP 89(24)	Permits and Environmental Considerations
SP 630(24)	City of West Fargo Specifications
SP 631(24)	Utility Coordination
SP 657(24)	Temporary Pedestrian Facilities

REVISED	9/30/2025	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
		ND	TMA-SU-FXP-8-992(045)	2	2

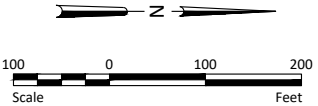
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D-101-10	NDDOT Utility Company and Organization Abbreviations
D-101-20, 21	Line Styles
D-101-30, 31-33	Symbols
D-256-1	Erosion And Siltation Controls
D-261-1	Erosion Control - Fiber Roll Placement Details
D-704-7	Breakaway Systems For Construction Zone Signs - Perforated Tube
D-704-8	Breakaway Systems For Construction Zone Signs - U-Channel Post
D-704-9	Construction Sign Details - Terminal And Guide Signs
D-704-10	Construction Sign Details - Regulatory Signs
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D-704-13	Barricade And Channelizing Device Details
D-704-14	Construction Sign Punching And Mounting Details
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D-754-24, 25	Mounting Details Perforated Tube
D-754-24A	Breakaway Coupler System For Perforated Tubes
D-754-26, 27-32	Sign Punching, Stringer and Support Location Details Regulatory, Warning and Guide Signs
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D-762-1	Pavement Marking Message Details
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STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	TMA-SU-FXP-8-992(045)	4	1



LEGEND	
INSTALL WATER MAIN	W
INSTALL SANITARY SEWER MAIN	SS
INSTALL STORM SEWER MAIN	STS
GATE VALVE	[Symbol]
FIRE HYDRANT	[Symbol]
STORM INLET	[Symbol]
MANHOLE	[Symbol]
PLUG	[Symbol]
10IN NON REINF CONCRETE PVMIT CL AE-DOWELED	[Symbol]
SIDEWALK CONCRETE	[Symbol]
DRIVEWAY CONCRETE	[Symbol]
PIGMENTED IMPRINTED CONCRETE	[Symbol]
DETECTABLE WARNING PANELS	[Symbol]
CURB & GUTTER - TYPE I	[Symbol]
DITCH BOTTOM	[Symbol]
RIGHT OF WAY	R/W
EXISTING RIGHT OF WAY	R/W
TEMPORARY RIGHT OF WAY	T-R/W
CITY LIMITS	[Symbol]



ALL ELEVATIONS ARE BASED ON
THE U.S.G.S. VERTICAL DATUM OF 1988.
(UNLESS NOTED OTHERWISE)

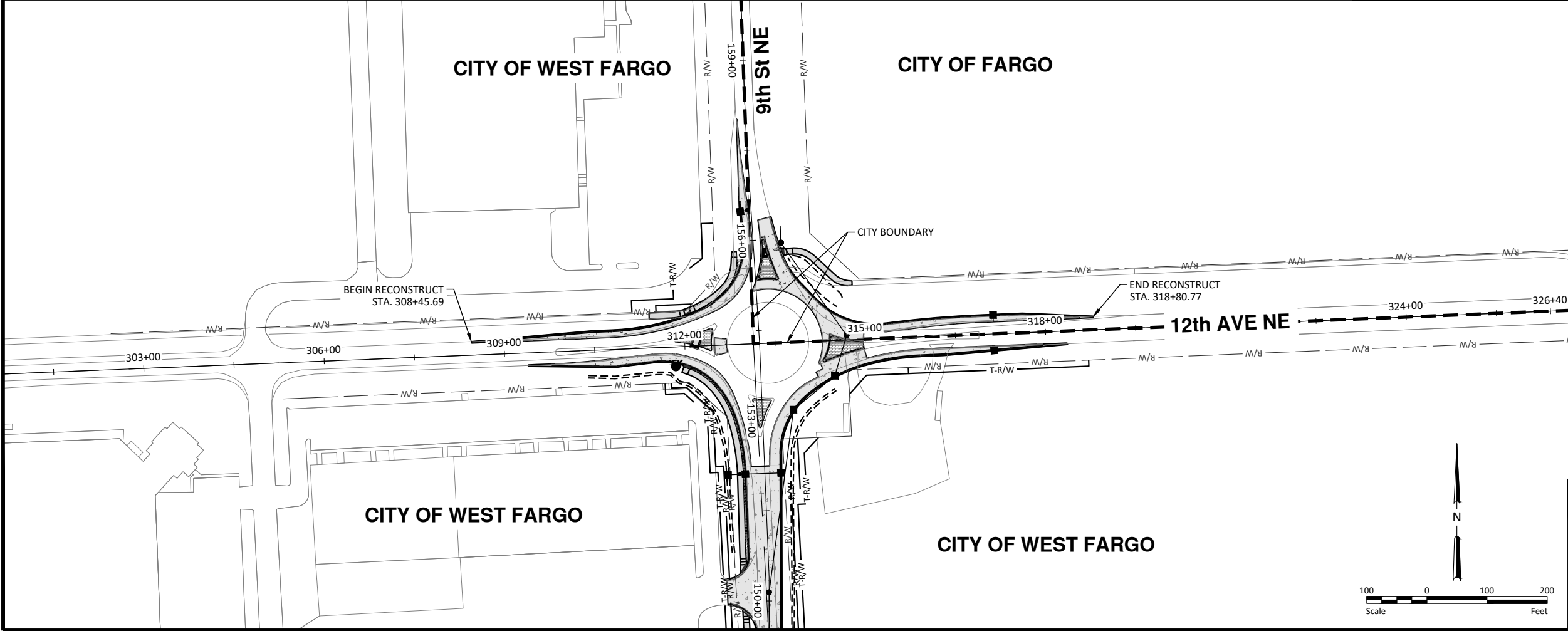
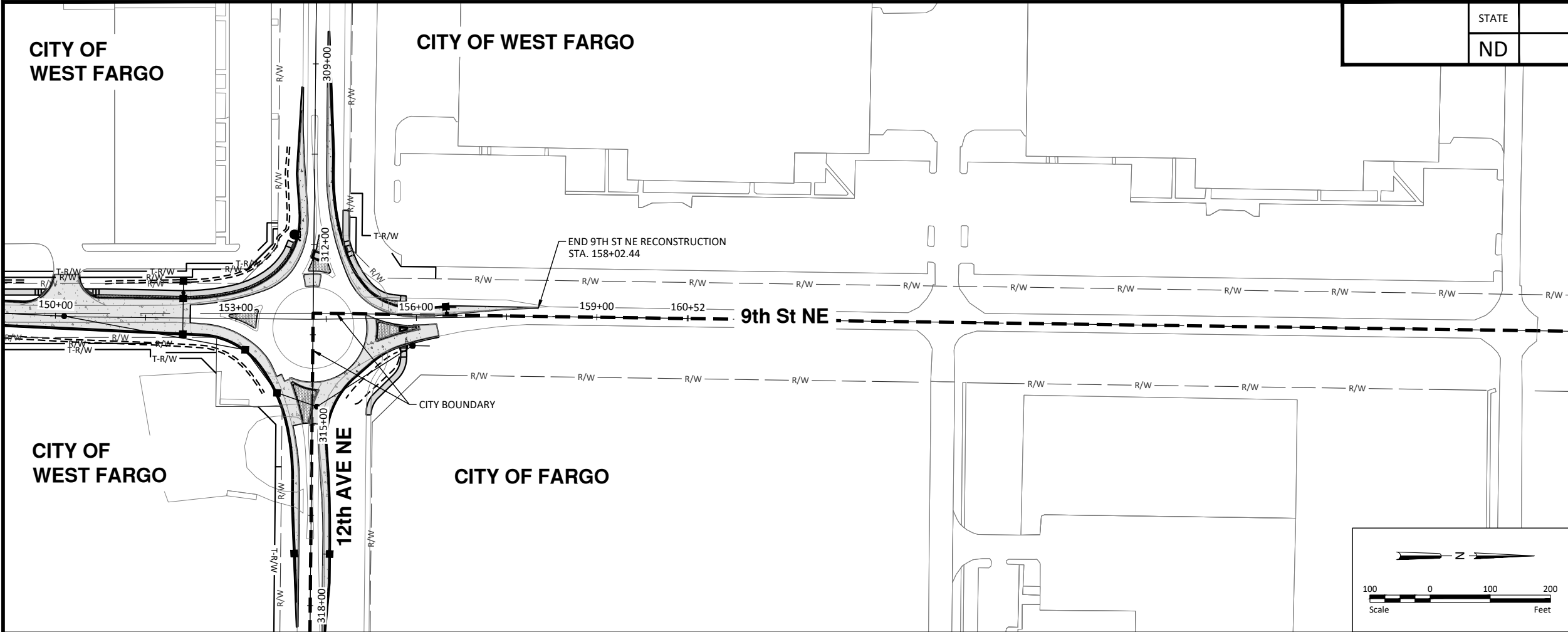


10/22/2025

Scope of Work - 9th St NE

9th St NE from Main Ave to 12th Ave N
7th Ave NE from 9th St NE to City Limit

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STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	TMA-SU-FXP-8-992(045)	4	2

LEGEND

INSTALL WATER MAIN	W
INSTALL SANITARY SEWER MAIN	SS
INSTALL STORM SEWER MAIN	STS
GATE VALVE	
FIRE HYDRANT	
STORM INLET	
MANHOLE	
PLUG	
10IN NON REINF CONCRETE PVMIT CL AE-DOWELED	
SIDEWALK CONCRETE	
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RIGHT OF WAY	R/W
EXISTING RIGHT OF WAY	R/W
TEMPORARY RIGHT OF WAY	T-R/W
CITY LIMITS	



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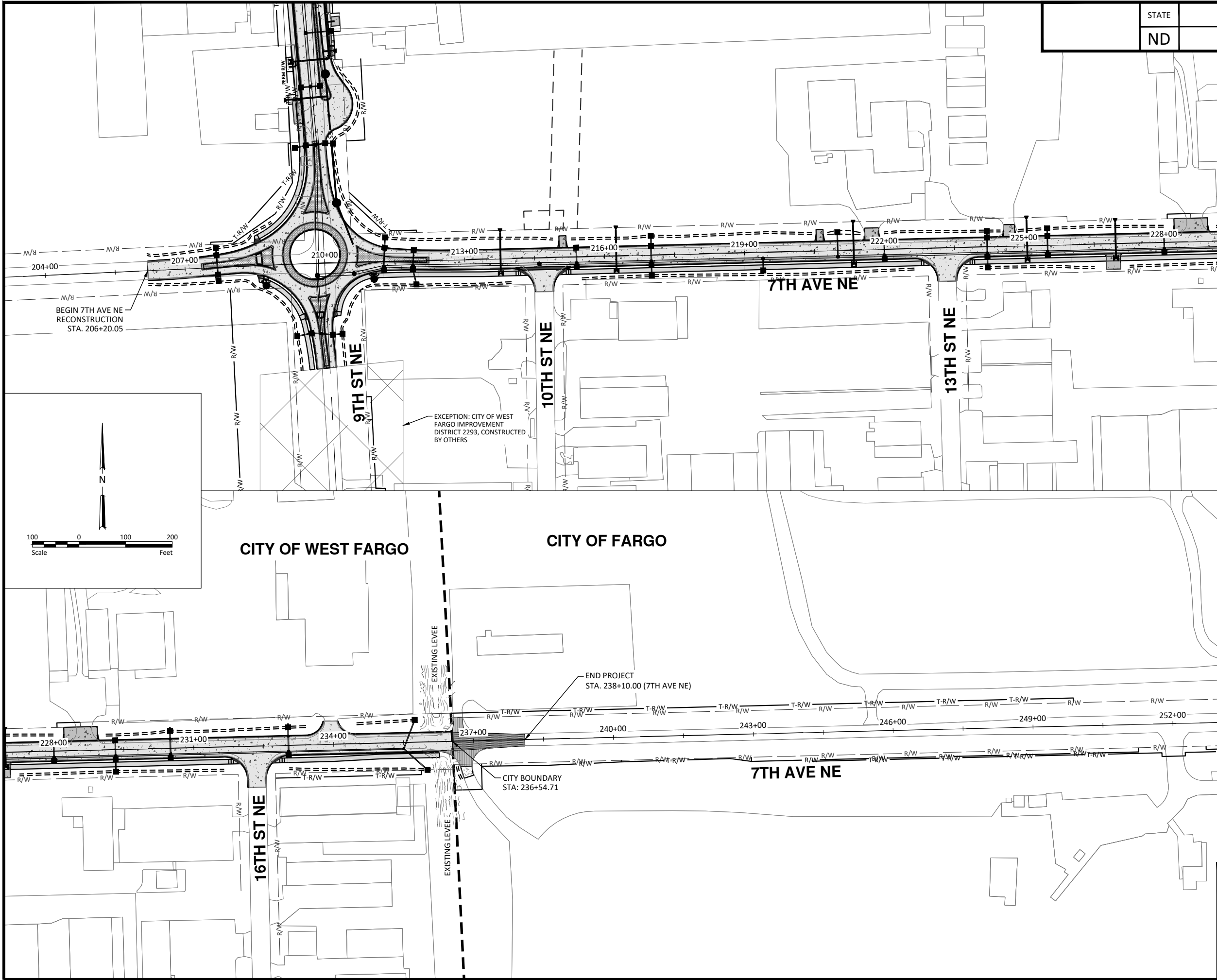


10/22/2025

Scope of Work - 9th St NE

9th St NE from Main Ave to 12th Ave N
7th Ave NE from 9th St NE to City Limit

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STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	TMA-SU-FXP-8-992(045)	4	3

LEGEND	
INSTALL WATER MAIN	W
INSTALL SANITARY SEWER MAIN	SS
INSTALL STORM SEWER MAIN	STS
GATE VALVE	
FIRE HYDRANT	
STORM INLET	
MANHOLE	
PLUG	
10IN NON REINF CONCRETE PVMT CL AE-DOWELED	
SIDEWALK CONCRETE	
DRIVEWAY CONCRETE	
PIGMENTED IMPRINTED CONCRETE	
DETECTABLE WARNING PANELS	
ASPHALT PAVEMENT	
ASPHALT DRIVEWAY	
CURB & GUTTER - TYPE I	
DITCH BOTTOM	
RIGHT OF WAY	R/W
EXISTING RIGHT OF WAY	R/W
TEMPORARY RIGHT OF WAY	T-R/W
CITY LIMITS	



ALL ELEVATIONS ARE BASED ON
THE U.S.G.S. VERTICAL DATUM OF 1988.
(UNLESS NOTED OTHERWISE)

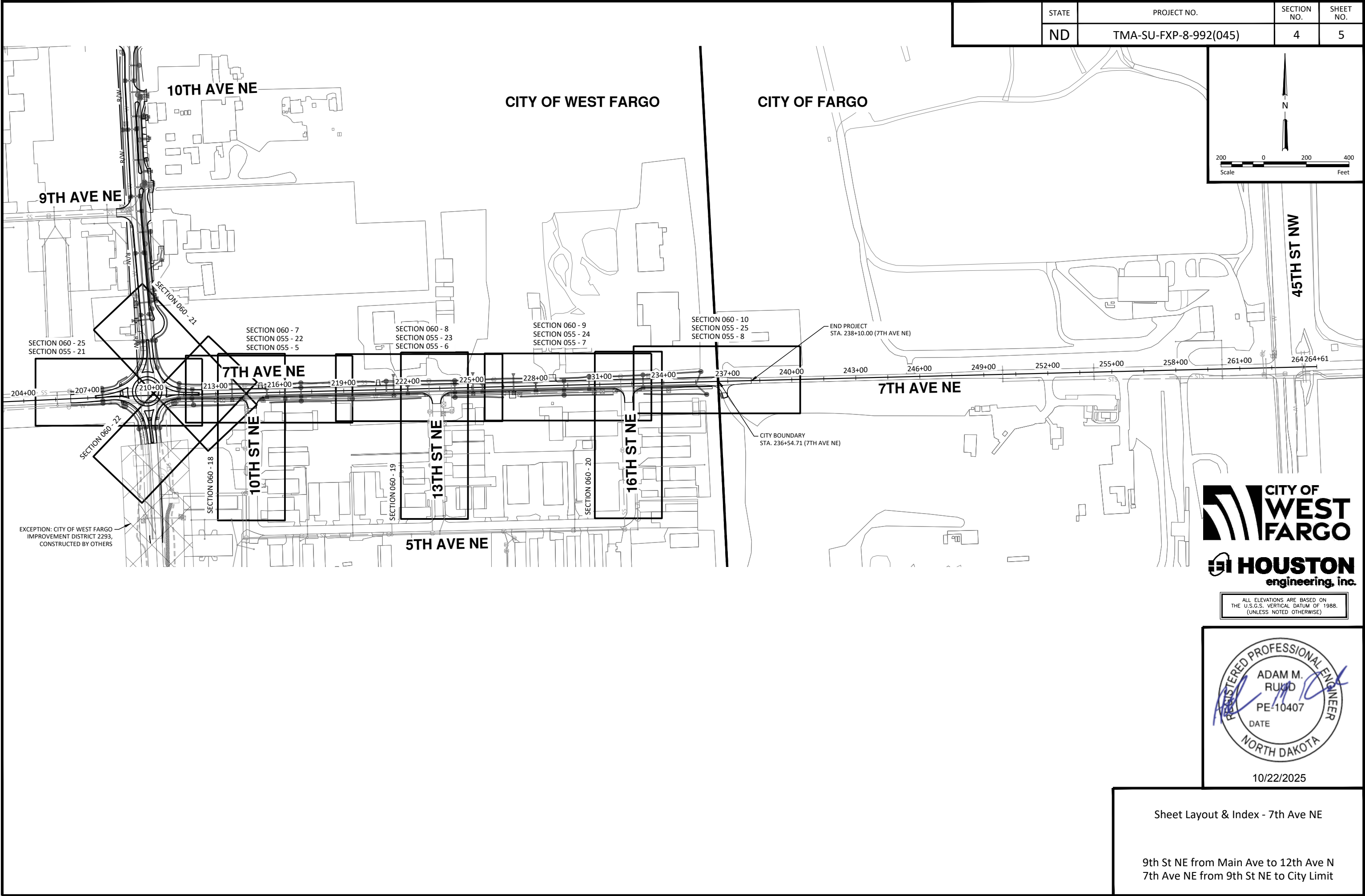


10/22/2025

Scope of Work - 7th Ave NE

9th St NE from Main Ave to 12th Ave N
7th Ave NE from 9th St NE to City Limit

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STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	TMA-SU-FXP-8-992(045)	6	1

NOTES

100-P01 COORDINATION OF PROJECTS: Another project in the vicinity of this project is under contract during the 2026 and 2027 construction seasons. This project is City of West Fargo Improvement District No 2293, 9th St NE Grade Separation and is located between Sta 109+00.00 and Sta 126+75.92.

Improvement District No 2293 will construct and maintain a temporary access road within the temporary easement west of the 9th St right of way from Main Ave, north to beyond Sta 109+00.00. Maintain work and operations to not impact this area or access for the adjacent project and properties.

Coordinate construction schedule and plans for maintaining storm sewer connectivity, drainage and accessibility north and south of BNSF Railway with the Contractor awarded City of West Fargo Improvement District No. 2293 prior to beginning construction.

Maintain construction outside of the limits shown for the temporary access west of 9th St from Sta 103+50 to 109+00.

100-P02 PROJECT COMPLETION: Phase and schedule construction activities to meet the following requirements:

Interim Completion 1: Complete the 48", 60" and 66" storm sewer installation from north of manhole STS-102 (Sta 105+18) north to Sta 109+00 by June 15, 2026. Do not impact the existing 48" line or make the connection at STS-102 (Sta 105+19) until the full installation of the 66" storm sewer line and outlet structure are constructed and operational under West Fargo Improvement District No 2293. The contractor for Improvement District No 2293 will provide written notification when the line is operational. Complete the 48" storm sewer installation from STS-102 (Sta 105+19) to STS-103 (Sta 105+67) within two weeks of the 66" storm sewer discharge being operational and accepted under West Fargo Improvement District No 2293. The contractor for City of West Fargo Improvement District 2293 has an interim completion date for this work on August 1, 2026. However the contractor for City of West Fargo Improvement District 2293 has the opportunity to provide a temporary connection, as approved by the engineer, between the 66" storm sewer discharge line and the existing storm sewer system to allow for earlier removal of the existing storm sewer. Interim completion for this final connection is anticipated to be by August 15, 2026. Alternative interim completion dates will be accepted if construction schedules and plans for maintaining storm sewer connectivity and drainage are provided to the engineer for review as detailed in note 100-P01.

Interim Completion 2: Complete all work impacting traffic within the intersection of 9th St NE and Main Ave by August 15, 2026. Restore full traffic operations through the intersection within the timeframe designated.

Work within the intersection may utilize lane closures as shown in the plans within the timeframe designated above for a total of 30 consecutive calendar days over the duration of the project. Closure beyond the 30 consecutive calendar days or failure to complete this work within the timeframe limitations noted, will result in an interim completion penalty of \$3,000 per calendar day.

Substantial Completion: Complete all work, except for finish grading and turf establishment, and open the roadway to normal traffic operations by October 17, 2026.

Failure to meet the substantial completion timeframe will result in liquidated damages being charged per the Contract.

Final Completion: Complete all work, including finish grading and seeding, by November 14, 2026. Complete final turf establishment by May 30, 2027. Failure to meet the final completion date will result in liquidated damages being charged per the Contract.

100-P03 SPECIFICATIONS: Follow City of West Fargo Standard Specifications for Construction for public utilities. See SP 630(24).

100-P04 STAGING AREA: A staging area has been secured for the project at the location shown in the plans. Access to the staging area is allowed after March 1, 2026 and will be available for 12 consecutive months. Submit a location for the staging area access point to the engineer an City for approval. Construct access point no wider than 50' and stabilized with aggregate surfacing prior to utilizing the site. Ensure existing drainage patterns are maintained. Restore the staging area to existing conditions at the conclusion of utilizing the site including seeding of the entire disturbed area. Include all costs associated with site restoration in the unit price bid for other items.

100-P05 UTILITY SERVICE CONNECTIONS: Coordinate connections or interruptions to existing utility services with the property owners a minimum of 3 days prior to impacting. Interruptions will be allowed for up to a four hour duration. If interruptions are unplanned or extend beyond this duration, provide temporary measures to maintain services and operation. Document existing surfacing conditions prior to working on private property. Repair all damage caused by construction to meet preexisting project conditions or better at no additional cost.

The location of the existing service connections at 133+25 Rt and from Sta 134+00 Rt to 137+50 Rt are approximate. Meet with the landowner onsite and field verify the location prior to pavement removal by excavating within the existing green space between 9th St and the adjacent properties. The landowner has agreed to allow work beyond the temporary easement limits shown in the plans to accommodate utility service connections. Minimize impacts to only what is needed for the connections.

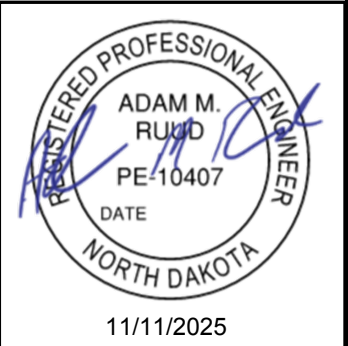
Include all costs to complete this work in the unit price bid for other items.

105-110 PAVEMENT SWEEPING: Sweep paved areas that were used by construction traffic before opening these areas to public traffic.

Sweep all newly constructed pavement no more than 24 hours before a scheduled final inspection.

Use a vacuum or pick-up type sweeper to perform this work.

105-P01 EXISTING LEVEE: There is an existing flood control levee located near Sta 236+00. Impacts to the embankment below the existing subgrade elevation is not permitted. See PSP 89(24), Permits and Environmental Considerations for more information.



NOTES

- 108-100

WEEKLY PLANNING & REPORTING MEETING: A weekly planning and reporting meeting is required.
- 108-150

PUBLIC RELATIONS COORDINATOR: Provide a public relations and information coordinator. The coordinator cannot be the project superintendent or construction foreman. The coordinator should be knowledgeable in construction operations, be able to develop effective media releases, possess written and verbal communication skills, and be able to organize productive meetings.

Provide the name, work address, and work phone number to the relevant project, community, and media personnel.

The public relations coordinator is responsible for providing the following:

1.

Organizing, scheduling, and conducting the meeting specified in Note 108-100, "Weekly Planning/Reporting Meeting".

2.

Advise Jerry Wallace, West Fargo City Engineer, PH: (701) 515-5104, of upcoming construction activities in regard to street closures and traffic detour routes so that city police, emergency services, schools, and other pertinent city agencies may be notified.

3.

Provide news releases and necessary drawings to the media before and during construction. News releases should inform the public on construction activities, schedules, street closures, width or height restrictions to traffic, and traffic detour routes. Update news releases regarding construction activities every other week, at a minimum.

4.

Be available for media interviews.

5.

Work directly with property owners and businesses affected by construction activities. The coordinator must have sufficient knowledge and authority to resolve property owner and business concerns regarding scheduling, maintaining access, and construction operations.
- 202-P01

REMOVAL OF CONCRETE: Remove existing Marvin sign and landscaping in the northwest corner of the 12th Ave roundabout as shown in the plans and dispose of properly offsite. Concrete sign is approximately 6 CY. The footing is buried approximately 6.5' and consists of a 4' x 16' concrete slab footing. Include all costs for the removal of sign, foundation, landscaping, shrubs and backfill in the price bid for "Removal of Concrete".
- 202-P02

REMOVAL OF PAVEMENT: Include all costs for removal of mainline HMA pavement, PCC pavement, concrete median and aggregate base in the price bid for "Removal of Pavement".
- 202-P03

CONTAMINATED SOIL: Petroleum Contaminated Soil (PCS) is anticipated to be encountered during installation of storm sewer and other utilities from Sta 101+87.92 to Sta 109+00.00. PCS is generally defined as soils exhibiting petroleum impacts based on visual, olfactory, or photo-ionization detector total organic vapor readings in excess of 100 parts-per-million (ppm), or as defined by Owner's onsite representative. See the Environmental Site Assessment in the supplemental design information for more details on the type of PCS anticipated to be encountered.

- Coordinate the complete, daily disposal of the removed PCS with an acceptable disposal facility.
- The contaminated material may be able to be disposed of at the City of Fargo Landfill but it is not guaranteed. Coordinate with the City of Fargo landfill for availability and possible schedule of delivery. If the City of Fargo landfill determines there is no availability, dispose of contaminated material at another appropriate landfill at no additional cost.

Tarp all loads of PCS. Remove all PCS from the tires and exterior of the truck prior to leaving the site to avoid spreading PCS beyond the site boundaries.

Overnight stockpiling or storage of PCS on the site is not permitted without approval by Owner's representative. It is recognized; however, that conditions outside of contractor control (weather, road conditions, disposal facility limitations, etc.) may arise that require temporary stockpiling.

If overnight stockpiling is approved by Owner's representative, segregate and store PCS on an impermeable surface or a minimum 40-mil plastic and covered at the end of each day with an impermeable membrane of not less than 6-mil reinforced plastic or 10-mil unreinforced plastic. Securely weight the covering membrane around the edges to prevent exposure to precipitation or wind.

Provide a health and safety plan for the excavation and handling of PCS.

Include all costs associated with screening, removal, hauling and disposing of material as well as importing, placing and compacting suitable material in the unit price bid for "Excavation & Disposal of Contaminated Soil".
- 203-010

SHRINKAGE: 15 percent additional volume is included for shrinkage in earth embankment.

203-360

COMPACTION AND DENSITY CONTROL: Compact material as specified in Section 203.04 G.2.b, "ND T-99".

Manipulate embankment material with diskimg equipment.

203-385

AVERAGE HAUL: No average haul has been computed for this project.
- A circular professional engineer seal for Adam M. Rupp, PE-10407, North Dakota. The seal includes the text "REGISTERED PROFESSIONAL ENGINEER", "ADAM M. RUPP", "PE-10407", "DATE", and "NORTH DAKOTA". A signature is written across the seal, and the date "11/11/2025" is printed at the bottom.
- 11/11/2025 2:55:28 PM H:\JBN\8600\8654\8654_0004 9th St\CAD\0_CITY PROJECT\Plans\006NT_001_notes.docm

NOTES

203-P01 PROOF ROLLING: In addition to density/moisture testing, perform a proof roll test to verify the uniformity of support and to identify unstable areas which will require correction. Perform a proof roll test on subgrade located under the roadway. In fill areas, perform a proof roll test per one foot of each compacted lift.

Complete proof rolling by using a fully loaded tandem dump truck. Other heavy equipment may be substituted to complete proof rolling upon prior approval of the Engineer. Offset each trip of the proof roller by no more than one tire width.

If the grade shows no signs of pumping, cracking, or rutting, the grade being tested is considered acceptable. Correct any defective areas discovered during proof rolling and proof roll again.

Include all costs associated with performing the proof roll test and any corrective work in the price bid for "Common Excavation-Type A."

203-P02 COMMON EXCAVATION SUBCUT: No subcuts are planned. If the Engineer determines that an area of the subgrade is too wet or unstable, a subcut may be required. A discretionary quantity of 500' of 18" subcutting has been provided.

203-P03 EARTHWORK: Common Excavation–Type A, Topsoil and Borrow-Excavation will not be measured for payment and will be paid at plan quantity. If materials underrun or overrun is encountered, no price adjustment will be considered.

251-P01 SEEDING CLASS III: Use the following seed mix for all permanent seeding.

Species	Pounds Live Seed/Acre
Kentucky Bluegrass	120
Fine Lead Perennial Ryegrass	60
Creeping Red Fescue	20

Rate of Seeding = 220 Lbs/Acre

Remove all stumps, brush, sticks, roots, stones larger than ½ inch in diameter, concrete chunks, rebar, wire or other material that may hinder seeding and maintenance operations. Dispose of any accumulated material at no additional cost to the City/State.

Drill seed prior to installation of hydraulic mulch. Water the seeded areas sufficiently to moisten the seedbed to a depth of 2 inches. Apply water in a manner that provides uniform coverage and prevents erosion and damage to the final surface. Provide daily watering for the first five days and sufficient water to maintain surface moisture in the top 2 inches of the soil until such time as the grass (not cover crop) has been evenly established to a height of 2 inches.

Include an additional 10 lbs of oats per acre if seeding is performed prior to June 15th or after August 15th.

Include all costs for labor, equipment and materials necessary to complete the work in the price bid for "Seeding Class III".

302-110 BASE COURSE: Trim base course as specified in Section 302.04 C.2, "Surface Tolerance Type B."

550-P01 STORM SEWER CASTINGS: Install storm sewer castings while the concrete is still in a plastic state and in a manner that does not create additional joints in the pavement, which were not part of the designed joint layout.

Temporarily place and align inlet castings prior to paving mainline pavement. Ensure the casting will not conflict with the mainline pour and there is sufficient space pour the curb as shown in the detail in Section 20. Once placement and clearances have been verified, the casting may be removed prior to pouring the mainline pavement. Integral curb is not intended for the project.

Install manhole castings that lie within the limits of the concrete pavement with the paving operation. Install castings 1/4 inch to 3/8 inch below the finished pavement surface.

If installing a casting after the paving machine has passed, use vibratory methods to consolidate concrete placed or disturbed as part of the casting installation.

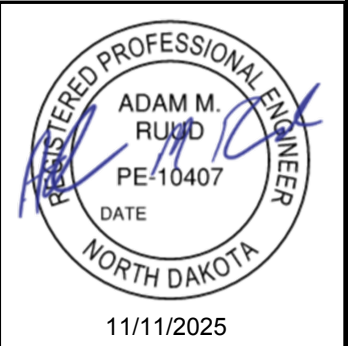
Include all costs for this work in the price bid for the concrete paving items.

704-100 TRAFFIC CONTROL SUPERVISOR: Provide a Traffic Control Supervisor.

704-P01 PORTABLE CHANGEABLE MESSAGE SIGN: Install Portable Changeable Message Signs (PCMS) before work begins on the project. The Engineer will determine the locations for PCMS installation. Relocate the PCMS as directed by the Engineer.

Provide an operator trained in the use of the PCMS.

The Engineer will determine the message to be displayed. The operator shall program the message within one hour of the Engineer's request to change the message.



NOTES

704-P02 TRAFFIC CONTROL PHASING: The traffic control details have been developed based on the premise that the project will be constructed in five phases. Include all costs to remove and reset traffic control devices in the price bid for individual items. Submit traffic control adjustments due to deviations from the listed assumptions for approval prior to implementing.

See Section 100 Sheet 5 for location and limits of each phase and subphase. Phases and subphases may not be constructed concurrently with the exception of Phase 5. Phase 5 may be constructed concurrently with other phases.

Phase 1A: Construct all 9th St NE and 12th Ave NE roundabout improvements except for the northwest and north legs of the intersection. Detour traffic on the Phase 1 detours. Maintain pedestrian access through the intersection on the existing shared use path at all times.

Phase 1B: Construct the northwest and north legs of the 9th St NE and 12th Ave NE roundabout improvements. Detour traffic on the Phase 1 detours. Provide pedestrian access through the intersection on the temporary pedestrian access route at all times.

Phase 2: Construct 9th St NE south of the 9th St NE and 12th Ave NE roundabout through the 9th Ave NE approach. Detour traffic on the Phase 2 detour. Cover or remove any 7th Ave NE detour signs during this phase. Provide access to the businesses along the east side of 9th St NE on temporary improvements at all times.

Phase 3: Construct 9th St NE north of the exception area and south of 9th Ave NE, the 9th St NE and 7th Ave NE roundabout, and 7th Ave NE east through the 10th St NE approach. Detour traffic on the Phase 3 detour.

Phase 4: Construct 7th Ave NE east of 10th Ave. Detour traffic on the Phase 4 detour. Cover or remove any 9th St NE detour signs during this phase. Provide access to the businesses along the north side of 7th Ave NE on temporary improvements at all times.

Phase 5A: Construct 9th St NE north of Main Ave and south of the exception. Detour traffic on the Phases 5A & 5B detour. Cover or remove any 7th Ave NE detour signs during this phase. Detour pedestrian traffic on the north side of Main Ave to the south side. Close the right lane of Main Ave westbound as needed to construct the north portion of the intersection of 9th St NE and Main Ave

Phase 5B: Construct the Main Ave median west of 9th St NE. Detour traffic on the Phases 5A & 5B detour. Cover or remove any 7th Ave NE detour signs during this phase. Detour pedestrian traffic on the north side of Main Ave to the south side. Close the left lane of Main Ave westbound.

Phase 5C: Construct the pedestrian ramps southwest of Main Ave and 9th St NE. Detour pedestrian traffic on the south side of Main Ave to the north side. Detour pedestrian traffic on the west side of 9th Ave NE to the east side.

706-P01 FIELD OFFICE: Provide a field office which meets the following requirements:

1. Minimum total area of 800 square feet
2. Indoor bathroom facilities and supplies with weekly cleaning services
3. Hookups for heat, electricity, sewer, and potable water.
4. Minimum cabinet space of 32 cubic feet
5. Minimum counter space of 40 square feet
6. Air conditioner with a minimum of 20,000 BTUs
7. Lighting with a minimum of 110 foot-candles
8. DSL broadband internet and a router that broadcasts Wi-Fi and will allow for hard wiring of a computer.
9. Photocopy/Printer with scanning capabilities capable of 11x17 photocopies and toner to last the duration of the project. Other features to include digital copying and scanning. Copier/printer machine with operating software compatible with that used by the NDDOT.

Place the field office on the project, or as close to the project as possible. The Contractor is responsible for furnishing the office equipment and for the pay for the following:

- Rental fees;
- Heating;
- Electrical;
- Sewer, and
- Potable water.

Make the field office available for occupancy one week before the start of the project. The Engineer will approve the location and the condition of the office. Do not remove the field office until the Engineer releases the field office.

All requirements of the Field Office are subject to approval by the Engineer. Include the costs for the field office in the bid item "Field Office".

Schedule for Payments:

- 25% when set up on site.
- 50% when 30% of the work is complete.
- 75% when 60% of the work is complete.
- 100% when project is complete.



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714-P01	PIPE CONC REINF _IN CL _ -STORM DRAIN: Construct all reinforced concrete pipe storm drains in accordance with City of West Fargo Standard Specifications for Construction Section 334213.13 "Storm Sewer Pipe". Include all costs including hand trimming, excavating, removing soft subsoil, bedding fill, compacting, backfilling, pipe, removing plugs, connection to structures or existing storm drains, assembled fittings and accessories in the price bid for "PIPE CONC REINF _IN CL _ -STORM DRAIN" all sizes and classes.	722-P05	INLET SPECIAL – TYPE 2 DOUBLE __IN: Construct structures in accordance with "INLET SPECIAL TYPE 2 DOUBLE" detail. Use Neenah Foundry R-3295-2 or EJ Iron Works 7031 casting frames. Use Neenah C or EJ Iron Works M2 grates.
714-P02	END SECT-CONC REINF _IN: Construct all reinforced concrete end sections in accordance with City of West Fargo Standard Specifications for Construction Section 334213.13 "Flared-End Section". Include all costs including hand trimming, excavation, bedding, backfilling, trach rack, tie bolts, fasteners, accessories, construction, furnishing, and installing structure in the price bid for "END SECT-CONC REINF _IN" all sizes. Length of structure not included in pipe quantity.	722-P06	INLET SPECIAL – CATCH BASIN __IN: If build height allows for the use of an eccentric cone section, construct structure in accordance with "MANHOLE 48"" or "MANHOLE 60"-96"" details. Where build height does not allow for the use of an eccentric cone section, construct concrete base and riser in accordance with "MANHOLE 48"" or "MANHOLE 60"-108"" details and construct covers in accordance with "INLET SPECIAL – CATCH BASIN COVER" detail. Use Neenah Foundry R-4342 or EJ Iron Works 6489 grates.
714-P03	PLUG PIPE – ALL TYPES AND SIZES: Plug pipe openings in a workman like manner that creates a watertight seal. Pipes indicated to in the plans to be plugged are not to be filled with grout and are to be able to be put back into service if future connections are made. Contractor to submit means for plugging pipes to Engineer for approval prior to installation. Include all costs to plug pipes including excavation, materials, backfilling, and compaction in the price bid for "PLUG PIPE – ALL TYPES AND SIZES".	722-P07	MANHOLE: If build height allows for the use of an eccentric cone section, construct structures in accordance with "MANHOLE 48"" or "MANHOLE 60"-108"" details. Where build height does not allow for the use of an eccentric cone section, construct concrete base and riser in accordance with "MANHOLE 48"" or "MANHOLE 60"-108"" details and construct covers in accordance with "INLET SPECIAL – CATCH BASIN COVER" detail. Use Neenah Foundry R-1733 or EJ Iron Works 1205Z for installations in the boulevard or asphalt paved areas, and floating Neenah Foundry R-1955-1 or EJ 3025 for installations in concrete pavement.
722-P01	INLETS AND MANHOLES: Inlets and manholes were designed with a minimum 4 foot riser height. Fill the bottom of each drainage structure with concrete, up to the lowest invert elevation. All precast concrete structures will be constructed and finished in accordance with City of West Fargo Standard Specifications for Construction Section 330561 "PRECAST CONCRETE STRUCTURES". Manhole risers paid separately from manhole bases, lids, and castings. Sanitary and Storm Sewer manhole and risers are included under a single bid item of corresponding size.	722-P08	INLET TYPE 2: Construct structures in accordance with "INLET TYPE 2" detail. Use Neenah Foundry R-3067 or EJ Iron Works 7030 casting frames. Use Neenah C or EJ Iron Works M2 grates.
722-P02	RISER RINGS: Provide precast concrete riser/adjusting rings or Cretex Pro-Rings for all inlets and manholes in accordance with City of West Fargo Standard Specifications for Construction Section 330561 "PRECAST CONCRETE STRUCTURES". Riser/adjusting rings are incidental to the structure where installed.	722-P09	INLET TYPE 2 DOUBLE: Construct structures in accordance with "INLET TYPE 2 DOUBLE" detail. Use Neenah Foundry R-3295-2 or EJ Iron Works 7031 casting frames. Use Neenah C or EJ Iron Works M2 grates.
722-P03	ABANDON STORM SEWER: Abandon pipes as indicated in the plans in accordance with City of West Fargo Standard Specifications for Construction Section 024200 "Abandon Pipe". Include all costs to abandon pipes including excavation, filling pipe with flowable fill, plugging pipe ends, backfilling, and compaction in the price bid for "ABANDON STORM SEWER".	722-P10	INLET CATCH BASIN: Construct structures in accordance with "INLET CATCH BASIN" detail. Use Neenah Foundry R-4342 or EJ Iron Works 6489 grates.
722-P04	INLET SPECIAL – TYPE 2 __IN: Construct in accordance with "INLET SPECIAL – TYPE 2" detail. Use Neenah Foundry R-3067 or EJ Iron Works 7030 casting frames. Use Neenah C or EJ Iron Works M2 grates. Where sufficient build height is available utilize 48" riser section without concentric cone.	724-P01	WATERMAIN _IN PVC: Construct, disinfect, and test all watermain in accordance with City of West Fargo Standard Specifications for Construction Section 331413 "Pipe" and related sections. All costs to provide excavation and backfill; pipe, disinfection, trace wire system, insulation, hydrostatic testing, and bedding is incidental to the price bid for "WATERMAIN _IN PVC" all sizes.
		724-P02	WATER SERVICE LINE _IN: Construct, disinfect, and test all water services 2" in diameter and smaller in accordance with City of West Fargo Standard Specifications for Construction Section 331417 "Water Service Line" and related sections. All costs to provide including hand-trimming excavation, pipe and fittings, bedding, thrust restraints, connection to service piping, tracer wire, disinfection, and municipal utility water source, and backfill is incidental to the price bid for "WATER SERVICE LINE _IN" all sizes.

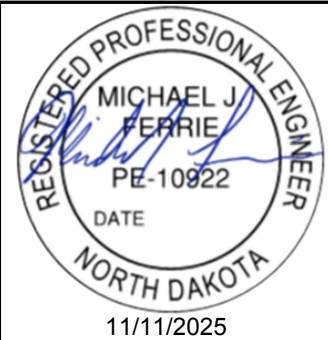


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- 724-P03CURB STOP & BOX _IN: Construct all curb stop and boxes in accordance with City of West Fargo Standard Specifications for Construction Section 331417 “Water Service Connection” and related sections. All costs including service saddle, corporation stop, curb stop, curb box and cover, connection to new or existing service line (if applicable), fittings, and accessories are incidental to the price bid for “CURB STOP & BOX _IN” all sizes.
- 724-P04GATE VALVE & BOX _IN: Construct all gate valve and boxes in accordance with City of West Fargo Standard Specifications for Construction Section 331419 “Valves”. All costs including excavation, valve, valve box, accessories, bedding, and backfill is incidental to the price bid for “GATE VALVE & BOX _IN” all sizes.
- 724-P05HYDRANT-INSTALL 5IN: Furnish and install all fire hydrants in accordance with City of West Fargo Standard Specifications for Construction Section 331419 “Fire Hydrant”. All costs including excavation, hydrant, top extension (where required), accessories, foundation bedding, and backfill is incidental to the price bid for “HYDRANT-INSTALL 5IN”.
- 724-P06_IN SANITARY SEWER PIPE: Construct all sanitary sewer pipe in accordance with City of West Fargo Standard Specifications for Construction Section 333111 “Pipe and Fittings”. All costs including hand trimming, excavation, bedding, pipe and fittings, plugs, bypass pumping (if required) is incidental to the price bid for “_IN SANTARY SEWER PIPE” all sizes.
- 724-P07_IN SEWER SERVICE PIPE: Construct all sanitary sewer pipe in accordance with City of West Fargo Standard Specifications for Construction Section 333111 “Pipe and Fittings”. All costs including hand trimming, excavation, bedding, pipe and fittings, plugs, bypass pumping (if required) is incidental to the price bid for “_IN SEWER SERVICE PIPE” all sizes.
- 724-P08_IN x _IN SEWER WYE BRANCH: Construct all sanitary sewer pipe in accordance with City of West Fargo Standard Specifications for Construction Section 333111 “Sanitary Sewer Service Connection”. Include all labor, excavation, backfilling, materials, and equipment necessary for furnishing and installing one (1) in-line sanitary sewer service connection as shown in the plans in the price bid for _IN x _IN SEWER WYE BRANCH” all sizes.
- 724-P09SANITARY SEWER CLEANOUT: Construct all sanitary sewer pipe in accordance with City of West Fargo Standard Specifications for Construction Section 333111 “Cleanout”. All costs Includes hand trimming, excavating, reinforced concrete pad, casting, unit installation with accessories, connection to sewer piping and backfilling is incidental to the price bid for “SANITARY SEWER CLEANOUT” all sizes.
- 724-P10ADJUST GATE VALVE AND BOX: Adjust gate valve and boxes to proposed grade in accordance with City of West Fargo Standard Specifications for Construction Section 331419 “Valves and Hydrants for Water Utility Service”. Include all costs including excavation, labor, equipment, and materials, testing, and backfill in the price bid for “ADJUST GATE VALVE AND BOX”.

- 724-P11HYDRANT-RELOCATE: Relocating existing fire hydrants to proposed location in accordance with City of West Fargo Standard Specifications for Construction Section 331419 “Valves and Hydrants for Water Utility Service”. Include all costs including removal and salvaging of existing hydrant, installing 6” plug on end of existing hydrant lead, removal of valve box and adaptor, excavation, piping, hardware and appurtenances, installation of barrel extension as needed, installation of the hydrant and tracer wires, accessories, testing, and backfill in the price bid for “HYDRANT-RELOCATE”.
- 724-P12ADJUST HYDRANT: Adjusting existing fire hydrants to proposed grade in accordance with City of West Fargo Standard Specifications for Construction Section 331419 “Valves and Hydrants for Water Utility Service”. Include all costs including removal of existing hydrant, excavation, piping, hardware and appurtenances, installation of barrel extension as needed, installation of the hydrant and tracer wires, accessories, testing, and backfill in the price bid for “ADJUST HYDRANT”.
- 724-P13TAPPING SLEEVE & VALVE _IN X _IN: Furnish and install all tapping sleeve and valves in accordance with City of West Fargo Standard Specifications for Construction Section 331413 “Taps”. All costs including excavation, tap, sleeve, accessories, and backfill is incidental to the price bid for “TAPPING SLEEVE & VALVE _IN X _IN” all sizes.



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724-P14 FITTINGS DUCTILE IRON: Unless otherwise noted on the plans, water main fittings will be measured by the pound without joint accessories or cement lining. The weight for fittings not listed in the tables below shall be in accordance with AWWA C153. The weight for fittings not listed in the tables below or in AWWA C153 shall be the actual weight of the fitting(s) furnished and installed based on acceptable documentation provided by the Contractor. Include all costs to provide and install watermain fittings and appurtenances in the price bid for "FITTINGS DUCTILE IRON". The standard weight of water main fittings, for payment purposes, shall be as follows:

Bends, Caps, and Plugs							
Size	Fitting Weights, lbs. (AWWA C153)						
	Bends (degrees)				Caps	Plugs	Sleeves
	90	45	22.5	11.25			
4	25	22	18	16	9	10	20
6	39	32	31	30	15	16	29
8	57	46	46	42	22	26	45
10	89	70	64	58	32	36	61
12	108	86	80	67	42	46	76

Bends, Caps, and Plugs							
Size	Fitting Weights, lbs. (AWWA C153)						
	Bends (degrees)				Caps	Plugs	Sleeves
	90	45	22.5	11.25			
14	210	160	136	93	66	75	128
16	264	202	172	148	92	95	159
20	400	305	310	245	125	135	236
24	565	405	412	315	166	175	306

Tees, Crosses, and Reducers									
Run	Branch	Fitting Weights, lbs. (AWWA C153)			Run	Branch	Fitting Weights, lbs. (AWWA C153)		
		Tee	Cross	Reducer			Tee	Cross	Reducer
4	4	32	40		16	6	228	240	124
6	4	46	57	24	16	8	248	260	124
6	6	56	75		16	10	264	317	124
8	4	60	68	32	16	12	280	306	112
8	6	72	74	36	16	14	316		140
8	8	86	105		16	16	322	385	
10	4	78	112	46	20	6	315		
10	6	90	119	47	20	8	345	379	
10	8	105	124	50	20	10	370		220
10	10	120	145		20	12	395	413	205
12	4	94	119	58	20	14	440		200
12	6	110	126	58	20	16	465		200
12	8	125	149	57	20	20	535		
12	10	140	179	61	24	6	415		
12	12	160	213		24	8	445	481	
14	4	172			24	10	470		
14	6	182	200	100	24	12	500	529	305
14	8	206	228	100	24	14	550		306
14	10	228		100	24	16	580	576	320
14	12	234		100	24	20	660	1589	300
14	14	280	299		24	24	720		



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- 750-P01

PIGMENTED IMPRINTED CONCRETE: Develop a mix design using any size coarse aggregate specified in Section 802.02 B.2, "Aggregate Gradation" and with a 60-40 fine aggregate-coarse aggregate ratio.

Provide a pigment from the list below or provide an approved equal. To be considered an approved equal, pigments must meet the requirements of ASTM C 979.

7th Ave NE and 9th St NE Roundabout – Truck Apron Only

1.

Number 775 Sedona, produced by Soloman Colors, Inc.
<http://www.solomoncolors.com/>;

2.

Number 10134 Terra Cotta, produced by Davis Colors <http://www.daviscolors.com/>

3.

Approved Equivalent

All Remaining Pigmented Imprinted Concrete

1.

Number 238 Marigold, produced by Soloman Colors, Inc.
<http://www.solomoncolors.com/>;

2.

Number 6804 Lakeside Brown, produced by Davis Colors <http://www.daviscolors.com/>

3.

Approved Equivalent

Use the same supplier for all colored concrete placed under the contract.

Add pigment at the ratio recommended by the manufacturer directly into the mixer along with the aggregate, cement, and water. Add pigment while the mixer is operating at mixing speed. Continue mixing for 5 to 10 minutes or between 50 and 100 revolutions.

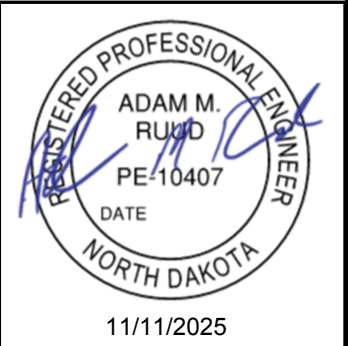
Form a pattern in the concrete using a roller to create a 4 inch × 8 inch brick pattern.

Cure concrete using curing compound that meets the requirements of ASTM C 309, Type 1.
- 752-P01

TEMPORARY SAFETY FENCE: Install and maintain a temporary safety fence in any areas where a hazardous situation may occur such as open trenches, pavement removal areas, access to BNSF right of way, or other areas that could be a hazard to the public. Include all costs to install, maintain and remove the fence in the price bid for other items.
- 752-P02

SCREENING CHAIN LINK: Construct a chain link fence with privacy slats, privacy tape or privacy fence screen providing 85% to 95% of privacy at the location shown in Section 80. Provide an earth-tone color of slats/tape/screen that match the adjacent fencing. Include all cost for slats/tape/screening, double brace assemblies, corner assembly and fence terminals in the price bid for "Screening Chain Link".
- 762-050

PAVEMENT MARKING: If the Engineer and Contractor agree, plan quantity will be used as the measurement for payment for pavement marking items.



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- 770-P01

COORDINATION OF PROJECTS: Another project in the vicinity of this project is under contract during the 2026 and 2027 construction seasons. This project is City of West Fargo Improvement District No 2293, 9th St NE Grade Separation and is located between Sta 109+00.00 and Sta 126+75.92. Include all costs for coordination in the contract unit price for "Lighting System".
- 770-P02

TESTING AND ACCEPTANCE: Perform testing and acceptance according to NDDOT Specification 770.04.N. The requirements for the lighting system south of Sta 109+00 are modified as follows:
 - Supply a power source to test the lighting system.
 - Lighting system will not be required to be in service for 30 consecutive days. At the time of acceptance, reperform tests. If a malfunction occurs, submit a written report detailing the malfunction and measures taken to correct the malfunction.
- 770-P03

EXISTING CONDUIT AND CONDUCTOR: Remove and abandon existing conduit and conductor as shown on the plans or as directed by the Engineer. Ends of abandon conduit to be plugged. Include all costs for labor, materials, and necessary equipment in the contract unit price for "Lighting System".
- 770-P04

SALVAGE LIGHT STANDARD: Remove, salvage, and deliver existing light standards and luminaires at locations shown on the plans. Disconnect branch circuit wiring at the fuse holder and salvage light standard and luminaire. Remove existing concrete foundation and internal pole wiring. Deliver light standards and luminaires to the City of West Fargo Sign Shop located at 327L 34th Avenue East. Coordinate delivery with City of West Fargo Assistant Public Works Director Ryan James (701-433-5400) a minimum of 24 hours in advance of drop-off. Any equipment deemed not salvageable by the City is to be disposed of by the Contractor. Include all costs for labor, materials, and necessary equipment for removing, salvaging, and delivering light standards and luminaires in the contract unit price for "Lighting System".
- 770-P05

RELOCATE LIGHT STANDARD: Salvage and reset existing light standards and luminaires at location shown on the plans. Disconnect branch circuit wiring at the fuse holder and salvage light standard and luminaire. Remove existing concrete foundation, anchor bolts, and internal pole wiring. Furnish and install new concrete foundation and anchor bolts. New anchor bolt dimensions and material grade to match existing anchor bolts; field verify. Reset existing light standard and luminaire on new foundation and provide new internal pole wiring, fuses, and connectors. Include all costs for labor, materials, and necessary equipment for salvaging and resetting light standards and luminaries in the contract unit price for "Lighting System".
- 770-P06

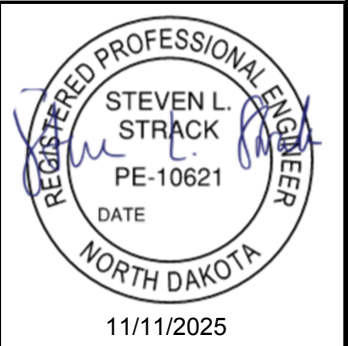
DECORATIVE LIGHT STANDARD – 30 FT: Provide Millerbernd, Decorative Stainless Steel Light Standard (product no. 8-SDN(B)1-8-300-001) or Decorative Twin Stainless Steel Light Standard (product no. 8-SDN(B)3-8-300-2-001), 28-foot pole height (30' mounting height), "H" base, decorative pole top arm mount, octagonal pole shaft, and black finish color. Provide stainless steel "H" base breakaway system. Mount light standards on a concrete foundation.

- Provide Millerbernd 70A203 Decorative DN8 Mast Arm or Millerbernd 70B273 Decorative DN8 Twin Mast Arm. Mast arms to be 8-footh length, black finish color, and have 70A205 Scroll Brace.
- Provide a 15 Amp rated GFCI receptacle (WR type) with an "in-use" outdoor rated cover on the pole, flush mounted, as shown on the plans. Meet requirements of NDDOT Specification 895.05. Niland Company is an approved equivalent. Include all costs to furnish and install decorative light standards in the contract unit price for "Lighting System".
- Provide clamp-on banner arms at locations identified in the lighting plans to accommodate banners that are 72" high by 29" wide banners with a 2.5" pocket. Clamp-on banner arms are to be aluminum with a 32" arm length, 1.25" diameter pipe with ball finial, and powder coated black to match the finish of the decorative light standards. Clamp-on banner arms to be manufactured by Holophane or approved equivalent. Banding will not be allowed. Include all costs to furnish and install clamp-on banner arms in the contract unit price for "Lighting System".
- 770-P07

ANTI-SEIZE: Provide anti-seize compound to all threaded bolts and screws.
- 770-P08

CONDUCTORS AND CONNECTORS: Provide continuously color-coded conductors (for all conductors), black and red for lighting, white for neutral, green for equipment ground, blue for receptacle power, and purple and pink as needed for additional circuits. Provide Tyco Electronics Gelcap SL splice cover kit with connector for all connections in street light bases. All other conductor splices to be UL Listed with Power Gel sealant. Provide fuse holders with 3" of heat shrink at conductor connections. Splicing is not permitted in pull boxes.
- 770-P09

DECORATIVE LIGHT FIXTURE (Decorative Teardrop 30'): Provide the LED luminaire listed below:
 - Holophane Esplanade, Model ESL3-P40S-40K-MVOLT-TG3-QSM-BK-AO
- Provide luminaires that meet the following requirements:
- Minimum average maintained illuminance: 1.0 footcandles
 - Uniformity ratio (average/minimum): 4:1
 - Light loss factor: 0.81
 - Maximum operating wattage: 150 watts
 - Minimum output: 20,000 lumens
 - Type III optical distribution
 - Color temperature of 4000K
 - 70 CRI (minimum)
 - Operating temperature: -40°C to +40°C
 - LED light engine rated at 100,000 hours at 25°C
 - Aluminum corrosion resistant housing
 - IP 66 rated
 - Tool-less entry



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- 770-P10

LIGHTING FEED POINT: Coordinate with the electric utility (Cass County Electric Cooperative – Brent Hodgson, 701-356-4462) for providing new electrical services for the new lighting feed point cabinets. Coordinate the installation of new service conductors and conduit between the feed point and utility transformer. Verify feed point locations and elevation with the Engineer and Cass County Electric before installation.

Provide 2” conduit for the service conductor between the meter socket on the feed point cabinet to the utility transformer. Provide rigid steel conduit where exposed.

Feed point cabinet assembly to be pedestal, pad-mounted type, prefabricated UL 508 Listed, service entrance rated, stainless steel, with one (1) meter socket. Refer to Section 140 details. Provide a meter socket with lever bypass meeting utility requirements. Meters to be provided by the utility company. Prefabricated feed point enclosure to be assembled by Milbank, States Electric, Povolny, or approved equivalent.

Provide permanent, typed, etched labeling for contactors, breakers, and control switch. Provide gasketed doors. Provide button type photocell and face north. Install all conduit within the concrete foundation. Include all costs for labor, materials, and coordination required to install the service in the contract unit price for “Lighting System”.
- 770-P11

CONCRETE FOUNDATION-FEED POINT: Install top of concrete foundation level and at an elevation to prevent flood damage. Duct seal all conduits with conductor. Provide two (2) spare 2” PVC conduits in the foundation. Provide conduit caps, with an oil-tight plug and wing nut, on the spare conduit sweeps and label each as to the direction each sweep faces.
- 770-P12

CONCRETE FOUNDATION-HIGHWAY LIGHTING: Provide mouse guard, Xcluder light pole gasket 2800g, 162727.
- 770-P13

SALVAGE POLE MOUNTED EQUIPMENT: Remove and salvage the existing pole mounted equipment on the existing light pole located at Sta 152+51, 16’ Rt. Deliver the equipment to the City of West Fargo Police Department at 800 4th Ave E. Call Jason Anderson at (701) 799-8880 two days prior to delivery. Replace any damaged components at no cost to the project. Include all costs to remove, salvage and deliver the system in the unit price bid for “Lighting System”.
- 772-P01

ACCESSIBLE PEDESTRIAN SIGNALS (APS) PUSHBUTTON AND SIGN: Provide pedestrian pushbuttons that include the features, installation procedures, and code compliance shown below:

A. Features:

1. Rapid tick WALK indication, no more than 2-5 dBA above ambient sound.

2. Vibrotactile WALK indication.

3. Speaker and vibrotactile indication located at pushbutton.

4. Pushbutton locator tone.

5. Tactile arrow on each device aligned in the direction of travel on the crosswalk.
- B. Installation Procedures:

1. APS should be reachable from the level landing of the curb ramp for the crossing or from a level surface with an accessible path to the ramp (MUTCD Section 4I.05 and PROWAG).

2. APS should be within 5 feet of the crosswalk line furthest from the center of the intersection and within 10 feet of the curb (MUTCD Section 4I.05).

3. Align tactile arrow parallel to the direction of travel on the crosswalk (MUTCD Section 4K.04).

4. Pushbutton is required to be located within reach range for wheelchair users (PROWAG, R406).

C. Code Compliance

1. Functionality: MUTCD 2023 – 4I

2. Temperature and Humidity – NEMA TS-2

3. Transient Voltage Protection: NEMA TS-2

4. Transient Suppression: IEC 61000-4-4, IEC 61000-4-5

5. Electronic Noise: FCC Title 47, Part 5, Class A

6. Mechanical Shock and Vibration: NEMA TS-2

7. EN4 PBS Enclosure: NEMA 250 – Type 4X

8. Electrical Reliability: NEMA TS 4
- Provide APS pushbuttons with black housing and R10-3e-9 instructional signs. APS pushbuttons will require a new APS pushbutton controller in the existing traffic signal cabinet. Include all costs for labor, materials, and necessary equipment in the contract unit price for “Revise Traffic Signal System”.
- 772-P02

SIGNAL EQUIPMENT:

A. Provide steel mounting brackets for pedestrian signal heads. Brackets to be colored black.

B. Provide LED 16” pedestrian with countdown displays. Housing to be black.

C. Provide stainless steel fasteners and use anti-seize lubricant on all threaded components.

772-P03

PULL BOXES: Provide polymer concrete type pull boxes. Clearly mark the cover as “Traffic Signal” as required. Provide the style as shown on the standard drawings and include the stackable bottom extension with knockouts. Include all costs for labor, materials, and necessary equipment in the contract unit price for “Revise Traffic Signal System”.

772-P04

DUCT SEAL: Seal all conduits with duct seal at the controller cabinet and all conduit entering and exiting pull boxes.

772-P05

WIRE SPLICING: No splicing will be allowed in pull boxes. Splicing may only take place at the signal transformer base terminal block, controller cabinet terminals blocks, and traffic signal head terminal blocks.
- A circular professional engineer seal for Steven L. Strack, a Registered Professional Engineer in North Dakota. The seal includes the text "REGISTERED PROFESSIONAL ENGINEER", "STEVEN L. STRACK", "PE-10621", "DATE", and "NORTH DAKOTA". The date "11/11/2025" is stamped at the bottom of the seal.
- 11/11/2025 2:55:28 PM H:\JBN\8600\8654\8654_0004 9th St\CAD\0_CITY PROJECT\Plans\006NT_001_notes.docm

NOTES

772-P06 CONTROLLER CABINET WIRING DIAGRAM: Label the following information on the cabinet wiring diagram, in addition to information required by NDDOT Standard Specification 772.03.D.

- 1. Label field wire terminals for the pedestrian head control cables with the phase number (i.e., Ø8 PED).
- 2. Label field wire terminals for the pedestrian push-button cables with the phase number (i.e., Ø8 PED).
- 3. Modify the intersection diagram on the cabinet door as necessary to include additional pushbuttons and pedestrian signal heads.

Use a heat-shrink labeling system. Do not strip cables back from the connection more than 12 inches. Include all costs for labor, materials, and necessary equipment for labeling the cabinet wiring diagram in the contract unit price for "Revise Traffic Signal System".

772-P07 LABEL ALL FIELD CABLES: Coordinate with the City of West Fargo for approved labeling materials. Provide plastic labels printed on a label machine. Labels must be readable without moving the cables. Label all field cables with the following cable designations:

TYPE	LABEL	LABEL LOCATION
Pedestrian Push Button	Phase/location (i.e. NW, SW, etc.)	Within 6" of terminals
Control Cable	Cable number & location (i.e. NW, SW, etc.)	Within 12" of conduit
Tracer Wire	Tracer Wire, Destination	*Within 6" of terminals

* Confirm tracer wire is labeled in the controller cabinet

Include all costs for labor, materials, and necessary equipment for labeling field cables in the contract unit price for "Revise Traffic Signal System".

772-P08 IT SYSTEM: Install (2) parallel 2" HDPE conduits as shown in the plans. Include a pull rope in each conduit run for future use. Terminate the pull rope within each pull box with a minimum of 10' of slack coiled within the pull box. Provide a pull rope with a minimum tensile strength of 1,800 lbs. Install a tracer wire, meeting the requirements detailed in SP 630(24) City of West Fargo Specifications, within one of the HDPE conduits continuously.

772-P09 IT SYSTEM PULL BOX: Provide pull boxes manufactured by Channell, model no. BULKU 1730 24 R 09 1 011 or approved equivalent. Provide BULK 3 Series pull boxes with a 24" deep high-density polyethylene (HDPE) body, 17.5" x 30.5" TIER 22 cover, rapid locate device, hex bolts, and marked fiber optic.

910-P01 MODIFY MANHOLE: Provide connections for proposed sanitary sewer at dimensions as indicated in the plans or as directed by the Engineer. The structures to be clean prior to the beginning of the modifications unless otherwise agreed to with the Engineer.

Connect new sanitary sewer in a workmanlike manner. Bring inverts into the existing manhole at the elevations indicated in the plans, and mortar in place.

Modify existing structure invert to elevations indicated in the plans.

If applicable, plug existing abandoned pipe openings in accordance with City of West Fargo Standard Specifications for Construction.

Seal all barrel-to-barrel joints with a gasketed joint for all sizes of manholes. Any section that is removed and reinstalled or replaced is to be sealed.

Where the height of the structure is to be lowered, remove the masonry or concrete to sufficient depth to allow for the installation of the casting, grate, adjusting rings, or cover at the new elevation.

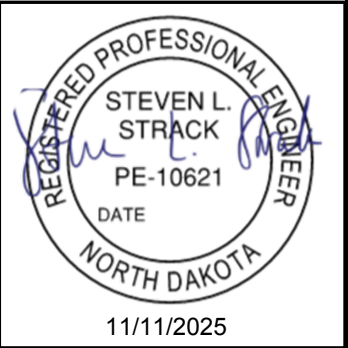
Accurately set new castings to correct elevation and line so that no subsequent adjustment will be necessary. Use Neenah Foundry R-1733 or EJ Iron Works 1205Z for installations in the boulevard or asphalt paved areas, and floating Neenah Foundry R-1955-1 or EJ 3025 for installations in concrete pavement.

Replace all deteriorated or faulty materials of the existing structure and complete the modification.

Include all costs for labor, materials, and equipment necessary to provide new sanitary sewer connections including any additional structure riser sections or adjustment rings in the contract unit price for "MODIFY MANHOLE".

970-P01 SPRING SNOW CRABAPPLE: Follow City of West Fargo Standard Specifications for Construction for tree plant selection, installation, maintenance and warranty. See SP 630(24). Provide trees with a minimum DBH (diameter at breast height) of 1". The lowest branch on the tree cannot be over 9' above the ground. Include all costs associated with this work in the unit price bid for "Spring Snow Crabapple". Payment for the trees will be made at the following intervals. Fifty percent (50%) will be distributed after initial planting and fifty percent (50%) upon acceptance of proper plant care maintenance and final acceptance.

990-P01 TEMPORARY ACCESS: Maintain local access through the project site at all times. Truck traffic is to be anticipated. Maintain access to businesses, north and south sides of the BNSF Railway, adjacent contractor access, and existing lift station near Sta 124+20 throughout the duration of the project on either the existing or proposed pavement or temporary improvements. The temporary improvements may be utilized for up to four months throughout the duration of the project and will consist of 24' wide gravel surfacing. Maintain the temporary improvements as directed by the Engineer. Include all costs to construct and remove the means to maintain local access at all times in the price bid for "Temporary Access".



ENVIRONMENTAL NOTES

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	TMA-SU-FXP-8-992(045)	6	12

ENVIRONMENTAL NOTES (EN): The City of West Fargo, North Dakota Department of Transportation and the Federal Highway Administration have made environmental commitments to secure approval of this project. The following environmental notes are requirements to comply with these commitments:

EN-1 TEMPORARY WETLAND IMPACT: Temporary impact areas within wetlands and or other waters are incorporated into the plans for this project. Remove temporary fill placed and sedimentation in wetlands or other waters. Restore these wetlands to preconstruction contours.

NOTIFICATIONS TO BE FILED BY CONTRACTOR:

EN-2 FAA Notice: Notification is required for work within 3 nautical miles of the airport. Complete the Federal Aviation Administration Notice of Proposed Construction or Alteration Form 7460-1 in accordance with 14 CFR 77.7 and 77.9 (at least 45 days before the start date of the proposed construction or alteration or the date an application for a construction permit is filed, whichever is earliest) (online at <http://oeaaa.faa.gov>).



Estimated Quantities						STATE	PROJECT NO.	SECTION NO.	SHEET NO.
						ND	TMA-SU-FXP-8-992(045)	8	1
SPEC	CODE	ITEM DESCRIPTION	UNIT	Participating	100% Non-Part.	Drainage	TOTAL		
103	0100	CONTRACT BOND	L SUM	0.95	0.05		1		
201	0352	REMOVAL OF TREES & BRUSH	L SUM	1			1		
202	0111	REMOVAL OF CONCRETE	L SUM	1			1		
202	0130	REMOVAL OF CURB & GUTTER	LF	5499			5499		
202	0136	REMOVAL OF PAVEMENT	TON	23194			23194		
202	0174	REMOVAL OF PIPE ALL TYPES AND SIZES	LF	2868	419		3287		
202	0288	EXCAVATION & DISPOSAL OF CONTAMINATED SOIL	CY	900			900		
202	0312	REMOVE EXISTING FENCE	LF	305			305		
203	0101	COMMON EXCAVATION-TYPE A	CY	18496			18496		
203	0109	TOPSOIL	CY	5609			5609		
203	0113	COMMON EXCAVATION-WASTE	CY	2296			2296		
203	0138	COMMON EXCAVATION-SUBCUT	CY	667			667		
216	0100	WATER	M GAL	829			829		
230	0300	SUBGRADE PREPARATION-TYPE A	STA	65			65		
251	0300	SEEDING CLASS III	ACRE	10.64			10.64		
251	2000	TEMPORARY COVER CROP	ACRE	10.64			10.64		
253	0201	HYDRAULIC MULCH	ACRE	10.64			10.64		
253	0301	BONDED FIBER MATRIX	ACRE	10.64			10.64		
260	0100	SILT FENCE UNSUPPORTED	LF	547			547		
260	0101	REMOVE SILT FENCE UNSUPPORTED	LF	547			547		
261	0112	FIBER ROLLS 12IN	LF	9341			9341		
261	0113	REMOVE FIBER ROLLS 12IN	LF	4397			4397		
302	0100	SALVAGED BASE COURSE	TON	31419			31419		
302	0356	AGGREGATE SURFACE COURSE CL 13	TON	101			101		
430	0043	SUPERPAVE FAA 43	TON	410			410		
430	5815	PG 58S-34 ASPHALT CEMENT	TON	25			25		
550	0310	10IN NON REINF CONCRETE PVMT CL AE-DOWELED	SY	35841			35841		
550	0335	NON-REINF CONCRETE PVMT CL AE-DOWELED-COLORED-TEXT	SY	515			515		
702	0100	MOBILIZATION	L SUM	0.95	0.05		1		
704	0100	FLAGGING	MHR	400			400		
704	1000	TRAFFIC CONTROL SIGNS	UNIT	3726			3726		
704	1052	TYPE III BARRICADE	EA	16			16		
704	1054	SIDEWALK BARRICADE	EA	6			6		
704	1056	PEDESTRIAN CHANNELIZATION	LF	1827			1827		
704	1060	DELINEATOR DRUMS	EA	46			46		
704	1067	TUBULAR MARKERS	EA	19			19		
704	1087	SEQUENCING ARROW PANEL-TYPE C	EA	1			1		
704	1500	OBLITERATION OF PAVEMENT MARKING	SF	345			345		
704	2108	TEMPORARY CURB RAMP	EA	2			2		
704	4011	PORTABLE CHANGEABLE MESSAGE SIGN	EA	2			2		
706	0400	FIELD OFFICE	EA	1			1		
706	0500	AGGREGATE LABORATORY	EA	1			1		
706	0600	CONTRACTOR'S LABORATORY	EA	1			1		
708	1540	INLET PROTECTION-SPECIAL	EA	112			112		
708	1541	REMOVE INLET PROTECTION-SPECIAL	EA	56			56		
709	0151	GEOSYNTHETIC MATERIAL TYPE R1	SY	45608			45608		
714	0215	PIPE CONC REINF 15IN CL V-STORM DRAIN	LF			1861	1861		

Estimated Quantities						STATE	PROJECT NO.	SECTION NO.	SHEET NO.
						ND	TMA-SU-FXP-8-992(045)	8	2
SPEC	CODE	ITEM DESCRIPTION	UNIT	Participating	100% Non-Part.	Drainage	TOTAL		
714	0337	PIPE CONC REINF 18IN CL V-STORM DRAIN	LF			607	607		
714	0620	PIPE CONC REINF 24IN CL III-STORM DRAIN	LF			313	313		
714	0825	PIPE CONC REINF 30IN CL III-STORM DRAIN	LF			701	701		
714	0910	PIPE CONC REINF 36IN CL III-STORM DRAIN	LF			350	350		
714	1010	PIPE CONC REINF 42IN CL III-STORM DRAIN	LF			931	931		
714	1110	PIPE CONC REINF 48IN CL III-STORM DRAIN	LF			1870	1870		
714	1212	PIPE CONC REINF 54IN CL III-STORM DRAIN	LF			1209	1209		
714	1312	PIPE CONC REINF 60IN CL III-STORM DRAIN	LF			283	283		
714	1412	PIPE CONC REINF 66IN CL III STORM DRAIN	LF			50	50		
714	2018	PIPE CONC REINF ARCH 51IN X 31IN CL II	LF			80	80		
714	9680	PLUG PIPE-ALL TYPES & SIZES	EA		6		6		
714	9696	EDGEDRAIN NON PERMEABLE BASE	LF	12796			12796		
722	0100	MANHOLE 48IN	EA	5	8		13		
722	0110	MANHOLE 60IN	EA	7			7		
722	0120	MANHOLE 72IN	EA	20			20		
722	0130	MANHOLE 84IN	EA	7			7		
722	0140	MANHOLE 96IN	EA	2			2		
722	0200	MANHOLE 108IN	EA	2			2		
722	1100	MANHOLE RISER 48IN	LF	32.97	89.92		122.89		
722	1110	MANHOLE RISER 60IN	LF	52.4			52.4		
722	1120	MANHOLE RISER 72IN	LF	189.11			189.11		
722	1130	MANHOLE RISER 84IN	LF	79.53			79.53		
722	1140	MANHOLE RISER 96IN	LF	24.76			24.76		
722	1200	MANHOLE RISER 108IN	LF	18.97			18.97		
722	3297	ABANDON STORM SEWER	LF	161			161		
722	3510	INLET-TYPE 2	EA	37			37		
722	3520	INLET-TYPE 2 DOUBLE	EA	4			4		
722	3701	INLET SPECIAL-TYPE 2 48IN	EA	9			9		
722	3768	INLET SPECIAL-TYPE 2 84IN	EA	2			2		
722	3825	INLET SPECIAL-TYPE 2 DOUBLE 84IN	EA	1			1		
722	4005	INLET CATCH BASIN	EA	28			28		
722	4114	INLET SPECIAL CATCH BASIN 84IN	EA	1			1		
722	4116	INLET SPECIAL CATCH BASIN 96IN	EA	1			1		
722	6140	ADJUST GATE VALVE BOX	EA		28		28		
724	0210	FITTINGS-DUCTILE IRON	LBS		2098		2098		
724	0310	GATE VALVE & BOX 8IN	EA		7		7		
724	0314	GATE VALVE & BOX 12IN	EA		1		1		
724	0420	HYDRANT-RELOCATE	EA		3		3		
724	0427	ADJUST HYDRANT	EA		7		7		
724	0530	TAPPING SLEEVE & VALVE 12IN X 6IN	EA		3		3		
724	0540	TAPPING SLEEVE & VALVE 12IN X 8IN	EA		5		5		
724	0552	TAPPING SLEEVE & VALVE 16IN X 8IN	EA		1		1		
724	0560	TAPPING SLEEVE & VALVE 16IN X 12IN	EA		1		1		
724	0611	WATER SERVICE LINE 1IN	LF		44		44		
724	0616	WATER SERVICE LINE 1 1/2IN	LF		95		95		
724	0830	WATERMAIN 8IN PVC	LF		1814		1814		
724	0850	WATERMAIN 12IN PVC	LF		115		115		

Estimated Quantities						STATE	PROJECT NO.	SECTION NO.	SHEET NO.
						ND	TMA-SU-FXP-8-992(045)	8	3
SPEC	CODE	ITEM DESCRIPTION	UNIT	Participating	100% Non-Part.	Drainage	TOTAL		
724	0905	CURB STOP & BOX 1IN	EA		2		2		
724	0907	CURB STOP & BOX 1 1/2IN	EA		4		4		
724	1110	8IN SANITARY SEWER PIPE	LF		85		85		
724	1115	10IN SANITARY SEWER PIPE	LF		1676		1676		
724	1120	6IN SEWER SERVICE PIPE	LF		351		351		
724	1135	10IN X 6IN SEWER WYE BRANCH	EA		6		6		
724	9002	SANITARY SEWER CLEANOUT	EA		1		1		
748	0120	CURB & GUTTER MOUNTABLE-TYPE I	LF	673			673		
748	0140	CURB & GUTTER-TYPE I	LF	18381			18381		
748	1030	VALLEY GUTTER 72IN	SY	70			70		
750	0030	PIGMENTED IMPRINTED CONCRETE	SY	2470			2470		
750	0125	SIDEWALK CONCRETE 5IN	SY	6577			6577		
750	0210	CONCRETE MEDIAN NOSE PAVING	SY	68			68		
750	1000	DRIVEWAY CONCRETE	SY	1792			1792		
750	2115	DETECTABLE WARNING PANELS	SF	854			854		
752	4170	SCREENING CHAIN LINK	LF	285			285		
754	0110	FLAT SHEET FOR SIGNS-TYPE XI REFL SHEETING	SF	590			590		
754	0112	FLAT SHEET FOR SIGNS-TYPE IV REFL SHEETING	SF	59			59		
754	0193	FLEXIBLE DELINEATORS-TYPE D	EA	46			46		
754	0206	STEEL GALV POSTS-TELESCOPING PERFORATED TUBE	LF	1197			1197		
754	0592	RESET SIGN PANEL	EA	1			1		
754	0801	OBJECT MARKERS - TYPE I	EA	8			8		
762	0122	PREFORMED PATTERNED PVMT MK-MESSAGE(GROOVED)	SF	1166			1166		
762	1305	PREFORMED PATTERNED PVMT MK 4IN LINE-GROOVED	LF	13986			13986		
762	1307	PREFORMED PATTERNED PVMT MK 6IN LINE-GROOVED	LF	1469			1469		
762	1309	PREFORMED PATTERNED PVMT MK 8IN LINE-GROOVED	LF	3198			3198		
762	1325	PREFORMED PATTERNED PVMT MK 24IN LINE-GROOVED	LF	622			622		
770	0001	LIGHTING SYSTEM	EA	1			1		
772	2904	REVISE TRAFFIC SIGNAL SYSTEM	EA	1			1		
772	9200	IT SYSTEM	EA	1			1		
910	0570	MODIFY MANHOLE	EA		3		3		
970	2202	SPRING SNOW CRABAPPLE	EA	3			3		
990	0230	TEMPORARY ACCESS	L SUM	1			1		

BASIS OF ESTIMATE

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	TMA-SU-FXP-8-992(045)	10	1

Project	Project Removals						Removal Total (TON) D = A+B+C	302-0100
	Removal of Pavement Pay Item							Salvaged Base Course Pay Item
	Removal of Aggregate		Removal of Asphalt		Removal of Concrete			
	(CY)	(TON) A	(CY)	(TON) B	(CY)	(TON) C		(TON)
9TH ST NE (Sta 101+87.92 to Sta 109+00.00) (Sta 126+75.92 to Sta 158+02.44)	2,911	5,458	2,780	5,559	1,277	2,554	13,571	19,633
12TH AVE NE (Sta 308+87.55 to Sta 311+84.00) (Sta 314+21.00 to Sta 318+80.56)	52	98			95	190	288	1,614
7TH AVE NE (Sta 206+20.05 to Sta 208+40.00) (Sta 211+25.00 to Sta 238+10.00)	1,994	3,739	2240	4479	560	1,119	9,337	10,172
Total	9,295		10,038		3,863		23,196	31,419

Notes:

1. This is not a balance sheet, calculate own balance of materials.
2. It is assumed 95% of removed materials may be reclaimed after the crushing process.

Removal of Pavement

Concrete Pavements @ 2.0 Ton/CY
Bituminous Pavements @ 2.0 Ton/CY
Aggregate Base @ 1.875 Ton/CY

Pavement

Salvaged Base Course @ 1.875 Ton/CY
Superpave FAA 43 @ 2 Ton/CY
PG 58S-34 Asphalt Cement @ 6% Superpave FAA 43



BASIS OF ESTIMATE

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	TMA-SU-FXP-8-992(045)	10	2

Required Salvaged Base Course

	Concrete			Curb & Gutter (Outside, Grass Blvd)			Curb & Gutter (Outside, Imp Conc Blvd/Sidewalk)			Curb & Gutter (Inside, Imp Conc Median)			Impressed Concrete			Valley Gutter 72IN		
	Surface Area	Depth	Weight	Area	Length	Weight	Area	Length	Weight	Area	Length	Weight	Surface Area	Depth	Weight	Surface Area	Depth	Weight
Station Range (Alignment)	SF	IN	TONS	SF	LF	TONS	SF	LF	TONS	SF	LF	TONS	SF	IN	TONS	SF	IN	TONS
Sta 101+87.92 to Sta 109+00 (Pr_9thSt)	29,221	12	2,029	3.44	1,220	291	2.94	46	9	2.94	295	60	1,107	24	154			0
Sta 126+75.92 to Sta 134+00 (Pr_9thSt)	41,596	12	2,889	3.44	2,014	481	2.94	426	87	2.94	1,224	250	8,428	24	1,171			0
Sta 134+00 to Sta 148+00 (Pr_9thSt)	87,902	12	6,104	3.44	1,531	366	2.94	1,243	254	2.94	1,642	335	6,324	24	878			0
Sta 148+00 to Sta 157+62.05 (Pr_9thSt)	36,276	12	2,519	3.44	1,247	298	2.94	427	87	2.94	153	31	3,227	24	448			0
Sta 308+45.81 to Sta 318+80.56 (Pr_12thAve)	14,994	12	1,041	3.44	1,476	352	2.94	3	1	2.94	157	32	1,253	24	174			0
Sta 206+20.05 to Sta 219+00 (Pr_7thAve)	37,822	12	2,627	3.44	1,998	477	2.94	21	4	2.94	387	79	1,897	24	263	628	12	44
Sta 219+00 to Sta 233+00 (Pr_7thAve)	59,831	12	4,155	3.44	2,667	637	2.94	201	41			0			0			0
Sta 233+00 to Sta 238+10 (Pr_7thAve)	14,931	12	1,037	3.44	676	161			0			0			0			0

Required Salvaged Base Course (Continued)

	Concrete (Truck Apron)			Median Nose			Driveway concrete			Asphalt Pavement (Mainline)			Asphalt Pavement (Driveway)			Sidewalk Concrete			Total
	Surface Area	Depth	Weight	Surface Area	Depth	Weight	Area	Depth	Weight	Area	Depth	Weight	Area	Depth	Weight	Area	Depth	Weight	
Station Range (Alignment)	SF	IN	TONS	SF	IN	TONS	SF	IN	TONS	SF	IN	TONS	SF	IN	TONS	SF	IN	TONS	TONS
Sta 101+87.92 to Sta 109+00 (Pr_9thSt)			0			0	1,527	2	18			0			0	6,223	2	72	2,634
Sta 126+75.92 to Sta 134+00 (Pr_9thSt)	4,637	12	322	334	12	23	1,158	2	13			0			0	9,114	2	105	5,341
Sta 134+00 to Sta 148+00 (Pr_9thSt)			0			0	7,970	2	92			0			0	12,068	2	140	8,169
Sta 148+00 to Sta 157+62.05 (Pr_9thSt)			0	89	12	6			0			0			0	8,559	2	99	3,489
Sta 308+45.81 to Sta 318+80.56 (Pr_12thAve)			0	47	12	3			0			0			0	890	2	10	1,614
Sta 206+20.05 to Sta 219+00 (Pr_7thAve)			0	140	12	10	420	2	5			0			0	6,965	2	81	3,590
Sta 219+00 to Sta 233+00 (Pr_7thAve)			0			0	5,040	2	58			0			0	12,111	2	140	5,031
Sta 233+00 to Sta 238+10 (Pr_7thAve)			0			0			0	5,031	8	233	2,374	6	82	3,267	2	38	1,551
Totals																9TH ST NE		19,633	
																12TH AVE NE		1,614	
																7TH AVE NE		10,172	
Total																			31,419



BASIS OF ESTIMATE

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	TMA-SU-FXP-8-992(045)	10	3

Required Aggregate Surface Course CL 13

	Aggregate Surface Course CL 13			Total
	Area	Depth	Volume	
Station Range (Alignment)	SF	IN	CY	TON
Sta 101+87.92 to Sta 109+00 (Pr_9thSt)				0
Sta 126+75.92 to Sta 134+00 (Pr_9thSt)	890	4	11	21
Sta 134+00 to Sta 148+00 (Pr_9thSt)	2941	4	36	68
Sta 148+00 to Sta 157+62.05 (Pr_9thSt)				0
Sta 308+45.81 to Sta 318+80.56 (Pr_12thAve)				0
Sta 206+20.05 to Sta 219+00 (Pr_7thAve)				0
Sta 219+00 to Sta 233+00 (Pr_7thAve)				0
Sta 233+00 to Sta 238+10 (Pr_7thAve)	512	4	6	12
TOTAL				101

Aggregate Surface Course CL 13

Aggregate Surface Course @ 1.875 Ton/CY

Required Superpave FAA 43

	Asphalt Pavement (Mainline 9")				Asphalt Pavement (Driveway 7")			
	Area	Depth	Volume	Weight	Area	Depth	Volume	Weight
Station Range (Alignment)	SF	IN	CY	TON	SF	IN	CY	TON
Sta 236+54.71 to Sta 238+10 (Pr_7thAve)	5,031	9	148	296	2,374	7	57	114
TOTAL								410

Required PG 58S-34 Asphalt Cement

	Asphalt Pavement (Mainline 9")		Asphalt Pavement (Driveway 7")	
	Superpave FAA 43	PG 58S-34 Asphalt Cement	Superpave FAA 44	PG 58S-34 Asphalt Cement
Station Range (Alignment)	TON	TON	TON	TON
Sta 236+54.71 to Sta 238+10 (Pr_7thAve)	296	18	114	7
TOTAL				25

Pavement

Superpave FAA 43 @ 2 Ton/CY

PG 58S-34 Asphalt Cement @ 6% Superpave FAA 43



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	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	TMA-SU-FXP-8-992(045)	11	1

Earthwork Summary

Location	Excavation (CY)	*Embankment (CY)	Common Excavation - Type A (CY) Pay Item	Excess Excavated Material (CY)	Borrow Material from Other Phases (CY)	Common Excavation - Waste (CY) Pay Item
9th St NE**	12,574	7,953	12,574	4,621		2,296
7th Ave NE	5,922	8,247	5,922		2,325	
Totals	18,496	16,200	18,496	4,621	2,325	2,296

*An additional volume of 15% has been included to allow for shrinkage.
**Includes 9th St NE and 7th Ave NE Roundabout and the 9th St NE and 12th Ave NE Roundabout

Topsoil Summary

Location	Topsoil from Stripping		Topsoil Placement
	Area	Volume	Volume
	(SY)	(CY)	(CY)
9th St NE	31,658	3,518	2,983
7th Ave NE	18,822	2,091	2,626
Totals	50,480	5,609	5,609

Notes:
1. Assumed stripping depth: 4"
2. Spread all stripped topsoil uniformly across the project limits.
 Assumed topsoil placement depth: 6.8"
3. If existing topsoil depth of less than 4" is encountered, spread the topsoil uniformly
 across the project site. The balance of material will be Borrow-Excavation.



ALL ELEVATIONS ARE BASED ON
THE U.S.G.S. VERTICAL DATUM OF 1988.
(UNLESS NOTED OTHERWISE)



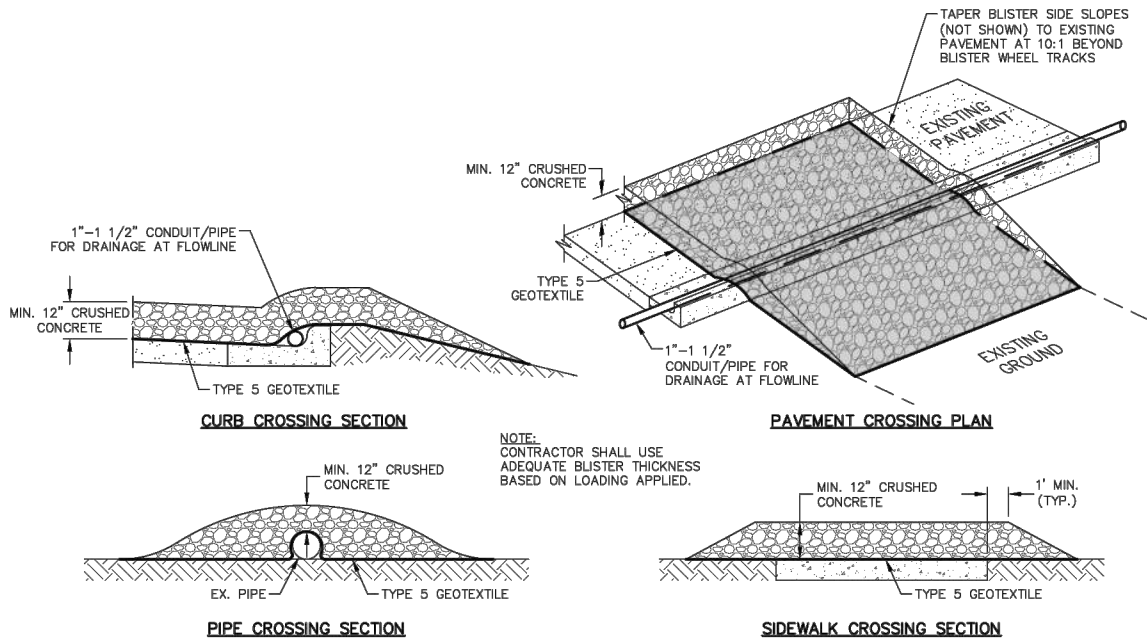
10/22/2025

Data Tables

9th St NE from Main Ave to 12th Ave N
7th Ave NE from 9th St NE to City Limit

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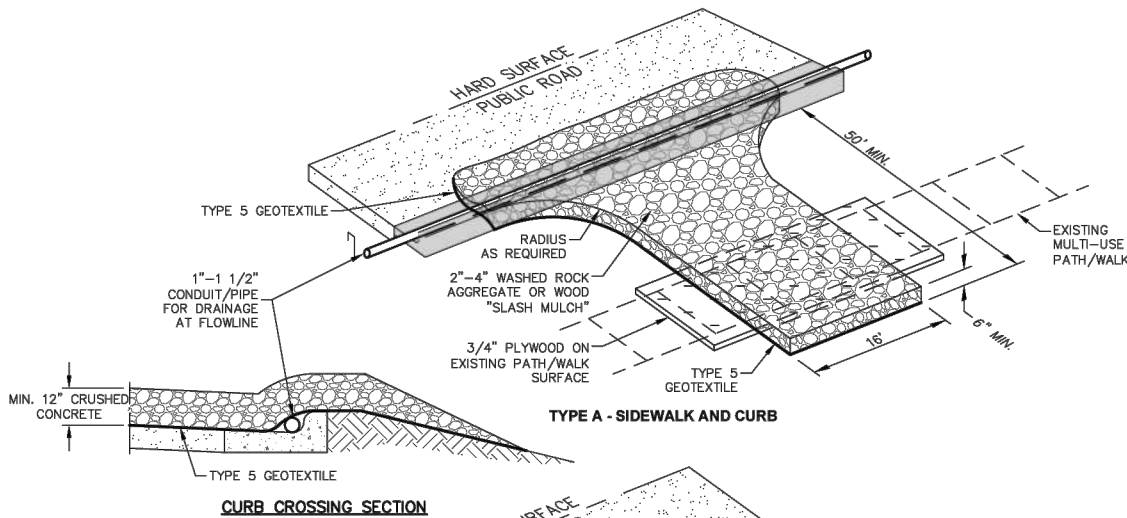
STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	TMA-SU-FXP-8-992(045)	20	1



PAVEMENT BLISTER
NO SCALE EROSION CONTROL 02.18.15

PAVEMENT BLISTER

SECTION:	EROSION CONTROL
DETAIL NO.	1
REVISION:	1
APPROVED BY:	DTS
DATE:	02.18.15



STABILIZED CONSTRUCTION ENTRANCE
NO SCALE EROSION CONTROL 03.01.18

STABILIZED CONSTRUCTION
ENTRANCE

SECTION:	EROSION CONTROL
DETAIL NO.	2
REVISION:	1
APPROVED BY:	DTS
DATE:	03.01.18



ALL ELEVATIONS ARE BASED ON
THE U.S.G.S. VERTICAL DATUM OF 1988.
(UNLESS NOTED OTHERWISE)



10/22/2025

General Details - Erosion Control

9th St NE from Main Ave to 12th Ave N
7th Ave NE from 9th St NE to City Limit

H:\JBW\8600\8654_0004 9th St\CAD\0_CITY PROJECT\Plans\020 - WF Standard Details EC.dwg- Detail (2)-10/22/2025 10:44 AM- (jerrickson)

STATE

PROJECT NO.

SECTION
NO.

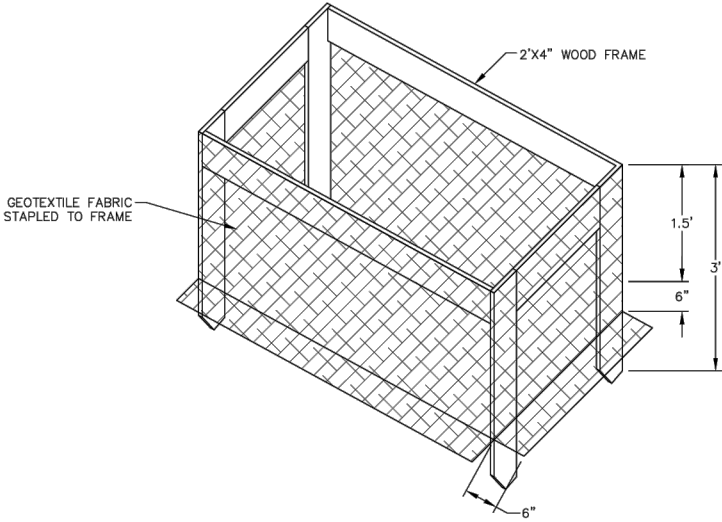
SHEET
NO.

ND

TMA-SU-FXP-8-992(045)

20

2



INLET PROTECTION SPECIAL

NO SCALE

EROSION CONTROL 03.01.22

INLET PROTECTION TYPE A-2

SECTION:	EROSION CONTROL
DETAIL NO.	4
REVISION:	1
APPROVED BY:	JFW
DATE:	01.14.22



ALL ELEVATIONS ARE BASED ON
THE U.S.G.S. VERTICAL DATUM OF 1988.
(UNLESS NOTED OTHERWISE)



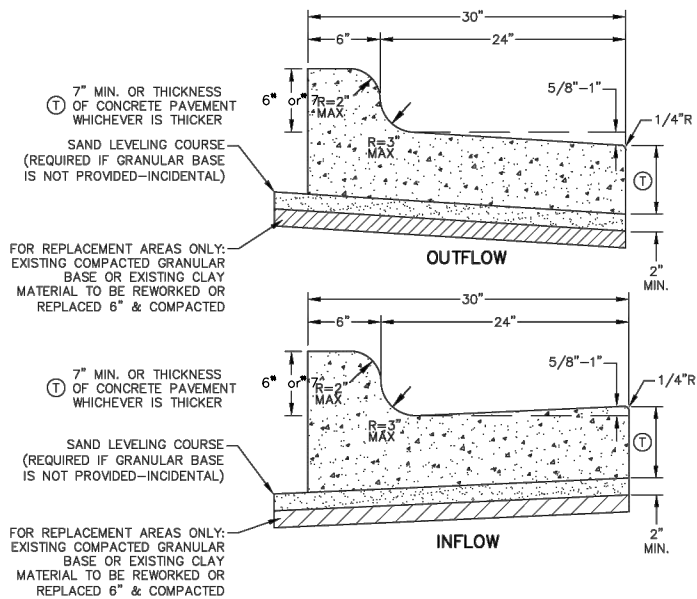
10/22/2025

General Details - Erosion Control

9th St NE from Main Ave to 12th Ave N
7th Ave NE from 9th St NE to City Limit

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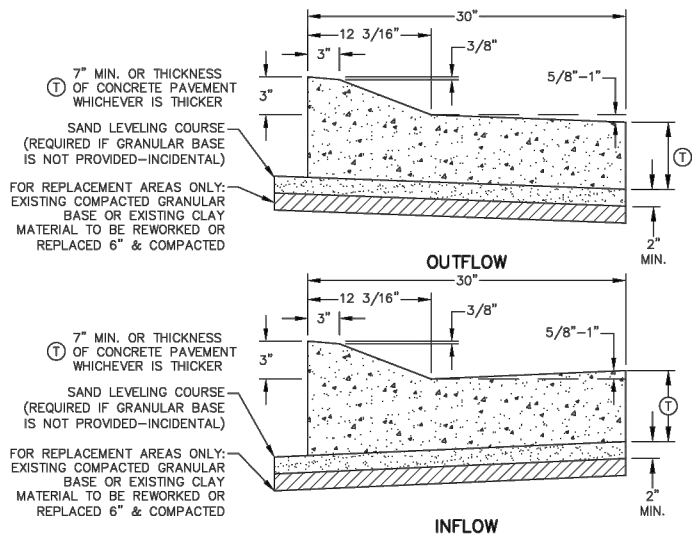
STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	TMA-SU-FXP-8-992(045)	20	3



**HIGH BACK CURB AND GUTTER
CURB & GUTTER - TYPE I**
NO SCALE PAVING 03.15.23

HIGH BACK CURB AND GUTTER

SPECIFICATION:	PAVING
DETAIL NO.	1
REVISION:	1
APPROVED BY:	JFW
DATE:	03.15.23



**MOUNTABLE CURB AND GUTTER
CURB & GUTTER MOUNTABLE - TYPE I**
NO SCALE PAVING 03.15.23

MOUNTABLE CURB AND GUTTER

SPECIFICATION:	PAVING
DETAIL NO.	2
REVISION:	1
APPROVED BY:	JFW
DATE:	03.15.23



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(UNLESS NOTED OTHERWISE)



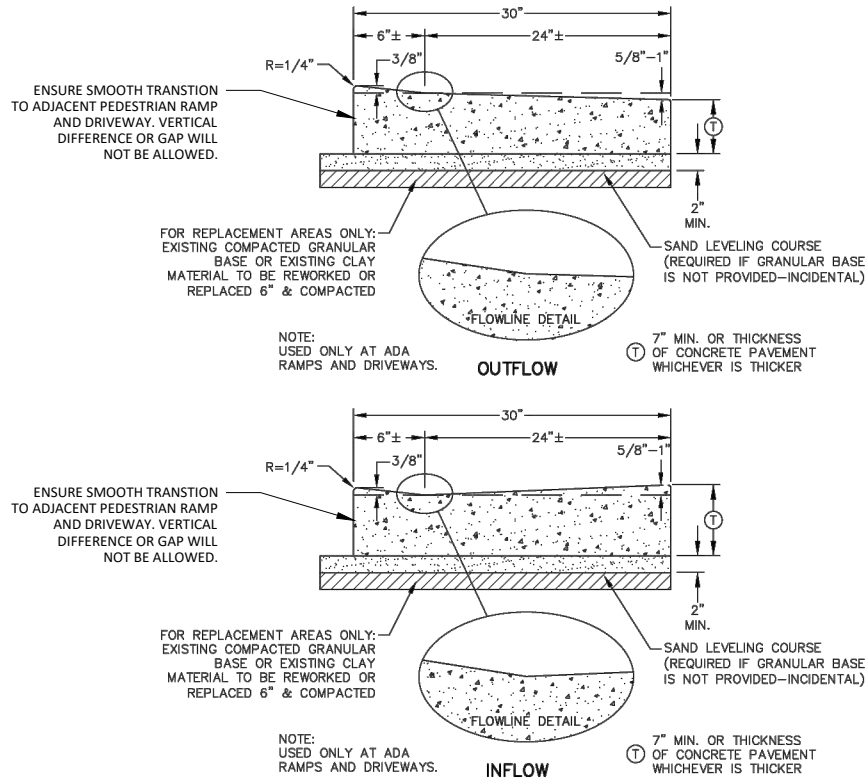
10/22/2025

General Details - Paving

9th St NE from Main Ave to 12th Ave N
7th Ave NE from 9th St NE to City Limit

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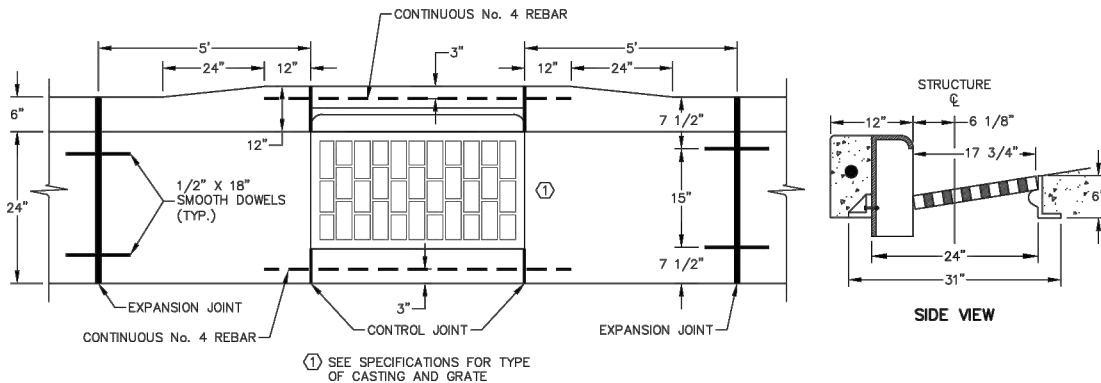
STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	TMA-SU-FXP-8-992(045)	20	4



KNOCKDOWN CURB AND GUTTER
CURB & GUTTER - TYPE I
NO SCALE PAVING 03.15.23

KNOCKDOWN CURB & GUTTER

SPECIFICATION:	PAVING
DETAIL NO.	3
REVISION:	1
APPROVED BY:	JFW
DATE:	03.15.23



CURB AND GUTTER INLET WITH HIGH BACK CURB
NO SCALE PAVING 03.15.23

CURB AND GUTTER INLET WITH
HIGH BACK CURB

SPECIFICATION:	PAVING
DETAIL NO.	4
REVISION:	1
APPROVED BY:	JFW
DATE:	03.15.23



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THE U.S.G.S. VERTICAL DATUM OF 1988.
(UNLESS NOTED OTHERWISE)



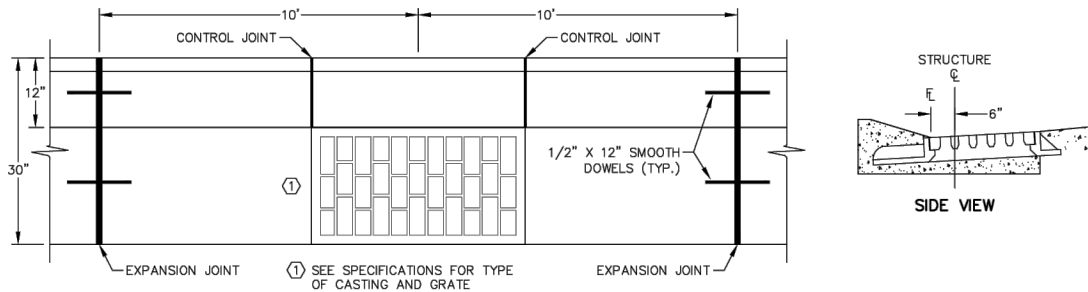
10/22/2025

General Details - Paving

9th St NE from Main Ave to 12th Ave N
7th Ave NE from 9th St NE to City Limit

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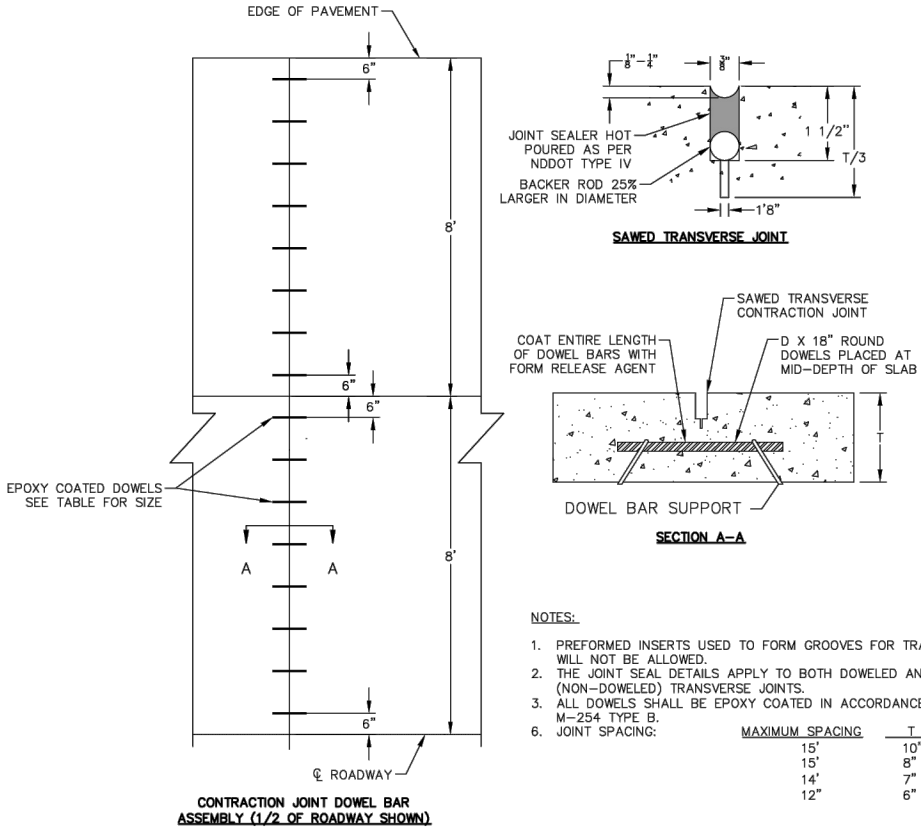
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	TMA-SU-FXP-8-992(045)	20	5



CURB AND GUTTER INLET WITH MOUNTABLE CURB
NO SCALE PAVING 01.14.22

CURB AND GUTTER INLET WITH
MOUNTABLE CURB

SPECIFICATION:	PAVING
DETAIL NO.	5
REVISION:	1
APPROVED BY:	DTS
DATE:	01.14.22



TRANSVERSE CONTRACTION JOINT
NO SCALE PAVING 03.15.23

TRANSVERSE CONTRACTION JOINT

SPECIFICATION:	PAVING
DETAIL NO.	6
REVISION:	1
APPROVED BY:	JFW
DATE:	03.15.23



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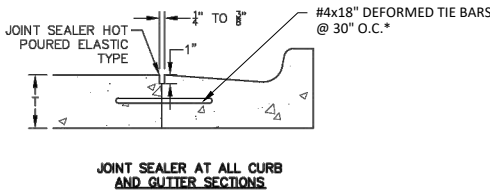
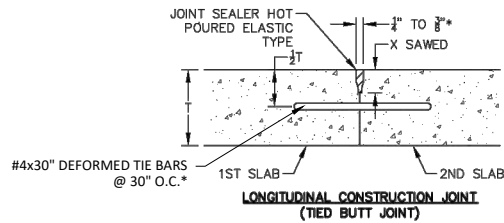
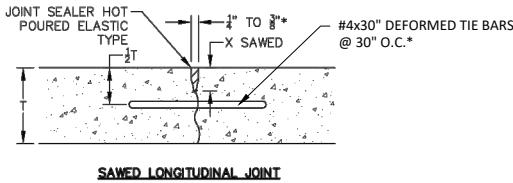
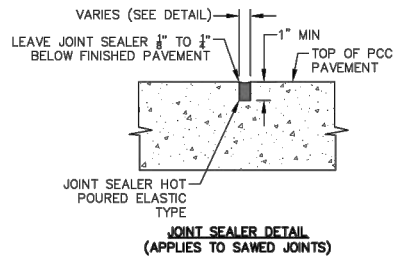
10/22/2025

General Details - Paving

9th St NE from Main Ave to 12th Ave N
7th Ave NE from 9th St NE to City Limit

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	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	TMA-SU-FXP-8-992(045)	20	6



NOTES:

1. THE HOT POURED ELASTIC TYPE JOINT SEALER SHALL BE IN ACCORDANCE WITH SECTION 826.02A.2 OF THE CITY OF WEST FARGO STANDARD SPECIFICATIONS.
2. THE TIED LONGITUDINAL JOINTS AND HOT POURED SEAL SHALL BE INCLUDED IN THE PRICE BID FOR THE PAVEMENT.
3. TIEBARS SHALL NOT BE PLACED WITHIN 15 (FIFTEEN) INCHES OF A TRANSVERSE JOINT.
4. WHERE TIEBARS ARE INSTALLED BENT AND LATER STRAIGHTENED GRADE 40 STEEL SHALL BE USED.
5. TIEBAR SPACING CAN BE INCREASED UP TO 10% TO FACILITATE CONSTRUCTION.
5. 48" MAXIMUM BAR SPACING.
6. JOINT SPACING

	MAXIMUM SPACING	T
	15'	10"
	15'	8"
	14'	7"
	12'	6"

* ALL LONGITUDINAL TIE BARS WITHIN THE 12TH AVE ROUNDABOUT LIMITS ARE TO BE SPACED AT 18" O.C..

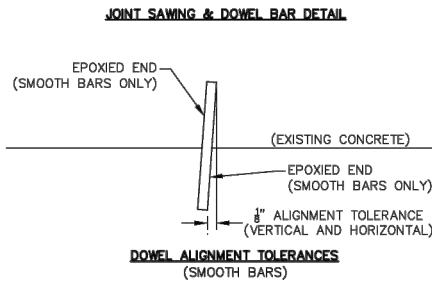
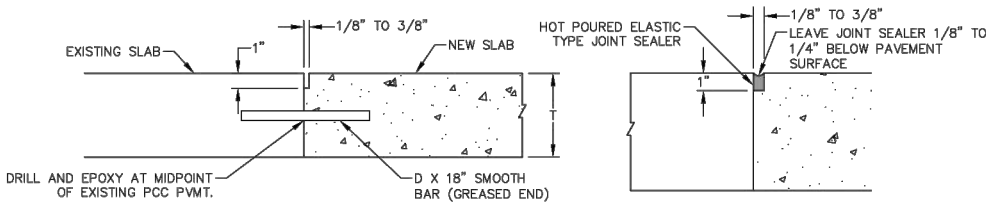
LONGITUDINAL JOINT

NO SCALE

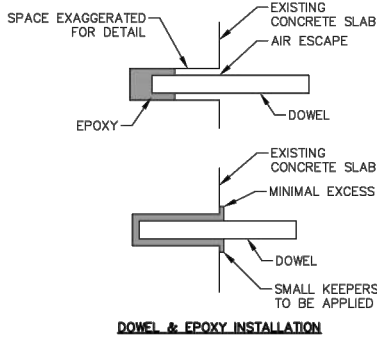
PAVING 03.15.23

LONGITUDINAL JOINT

SPECIFICATION:	PAVING
DETAIL NO.	7
REVISION:	1
APPROVED BY:	JFW
DATE:	03.15.23



T	D
10"	1 1/2"
8"	1"
7"	7/8"
6"	3/4"



DOWELED CONSTRUCTION JOINT

NO SCALE

PAVING 01.14.22

DOWELED CONSTRUCTION JOINT

SPECIFICATION:	PAVING
DETAIL NO.	8
REVISION:	1
APPROVED BY:	DTS
DATE:	01.14.22



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10/22/2025

General Details - Paving

9th St NE from Main Ave to 12th Ave N
7th Ave NE from 9th St NE to City Limit

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STATE

PROJECT NO.

SECTION NO.

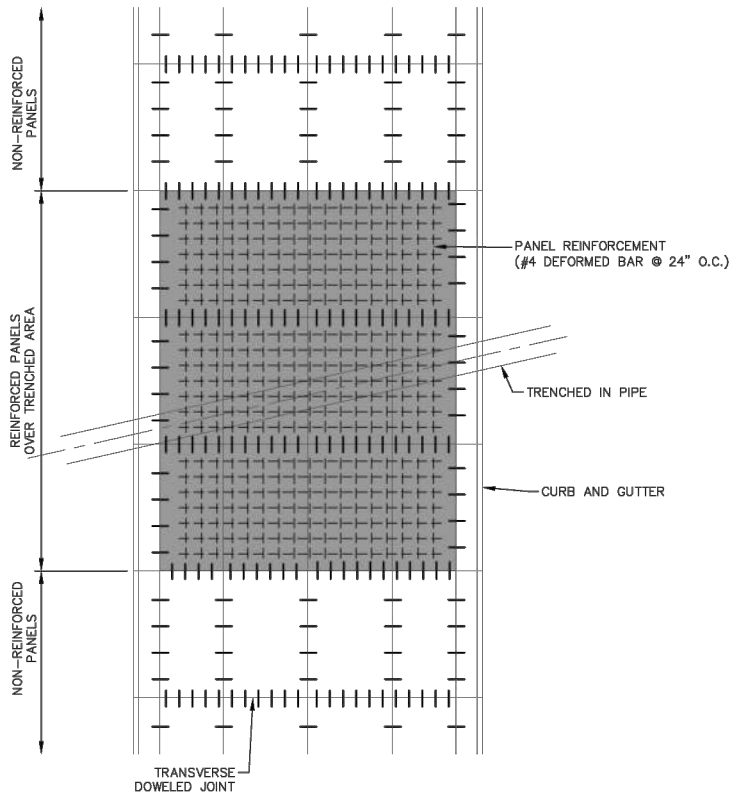
SHEET NO.

ND

TMA-SU-FXP-8-992(045)

20

7



NOTES:

1. PAYMENT FOR REINFORCEMENT SHALL BE INCIDENTAL TO THE PRICE OF THE CONCRETE PAVEMENT.
2. THE COMPLETE PANEL SHALL BE REINFORCED IF ANY PART OF THE PANEL IS WITHIN 5' OF THE STORM SEWER INLET LEAD PIPE CENTERLINE AND ANY PANEL THAT TOUCH A MANHOLE CASTING.
3. REBAR MAT SHALL BE SUPPORTED BY CHAIRS AT THE MID-DEPTH POINT OF THE SLAB.
4. REBAR SHALL STOP WITHIN 1' OF THE DOWELED CONTRACTION JOINT AT THE ADJACENT NON-REINFORCED PANEL.
5. MAXIMUM JOINT SPACING SHOULD BE 15 FEET.

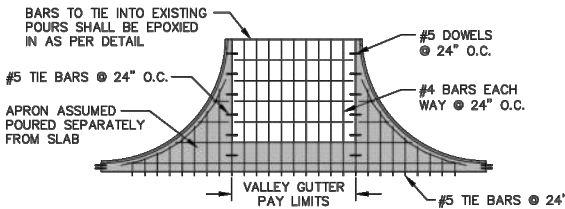
PAVEMENT REINFORCEMENT

NO SCALE

PAVING 08.11.20

PAVEMENT REINFORCEMENT

SPECIFICATION:	PAVING
DETAIL NO.	9
REVISION:	1
APPROVED BY:	JFW
DATE:	08.11.20



NOTES:

1. DOWELING, SAW CUTTING, OR OTHER MISCELLANEOUS ITEMS NEEDED TO COMPLETE SHALL BE INCIDENTAL IF ANY ITEM IS NOT APPROVED.
2. ASSUMING APRONS POURED SEPARATELY FROM SLAB. APRONS AND CURB POURED INTEGRALLY.
3. SEE PLAN FOR EXACT CONFIGURATION OF PAVEMENT.

CONCRETE APPROACH

NO SCALE

PAVING 02.18.15

CONCRETE APPROACH

SPECIFICATION:	PAVING
DETAIL NO.	10
REVISION:	1
APPROVED BY:	DTS
DATE:	02.08.15



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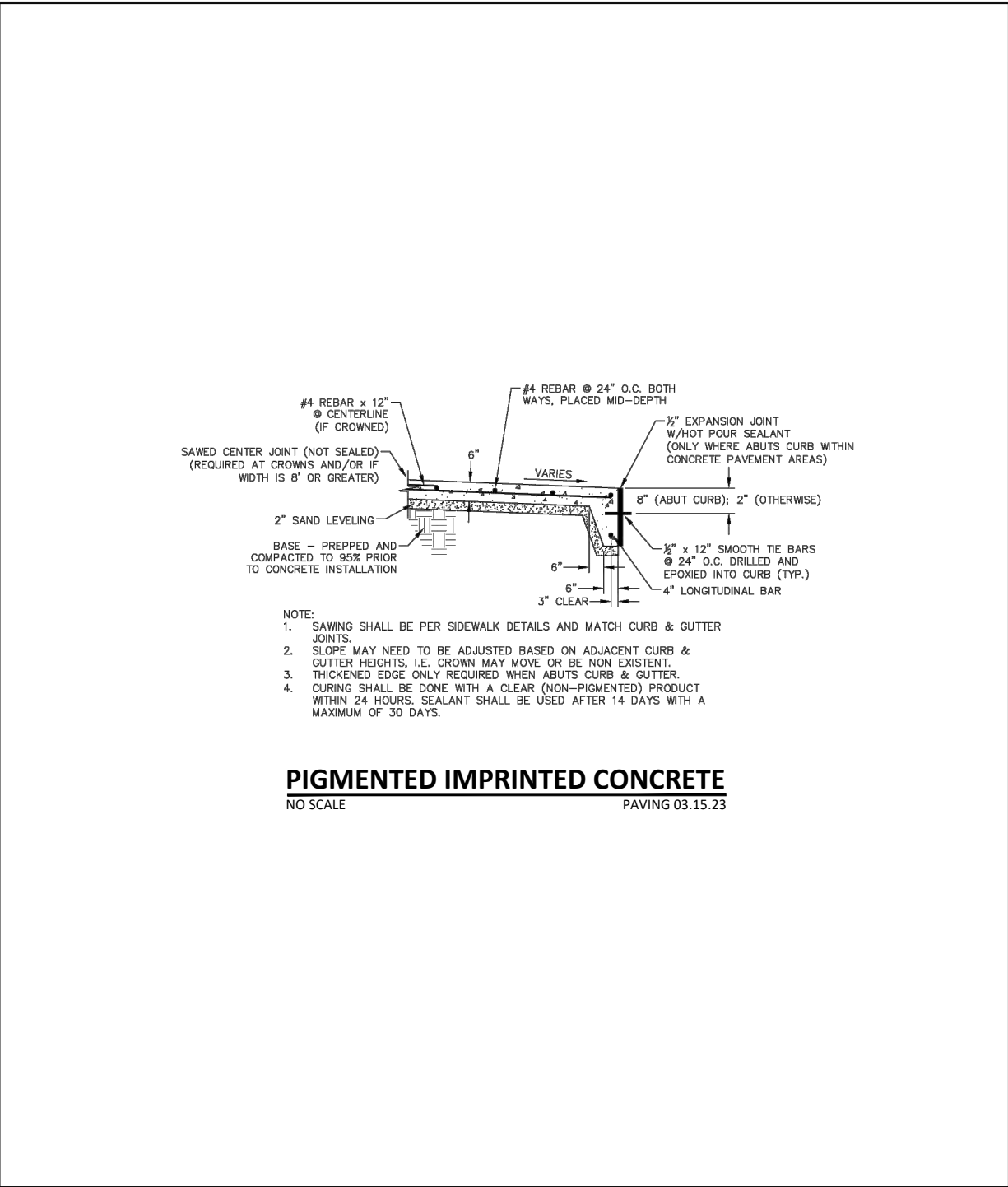


10/22/2025

General Details - Paving

9th St NE from Main Ave to 12th Ave N
7th Ave NE from 9th St NE to City Limit

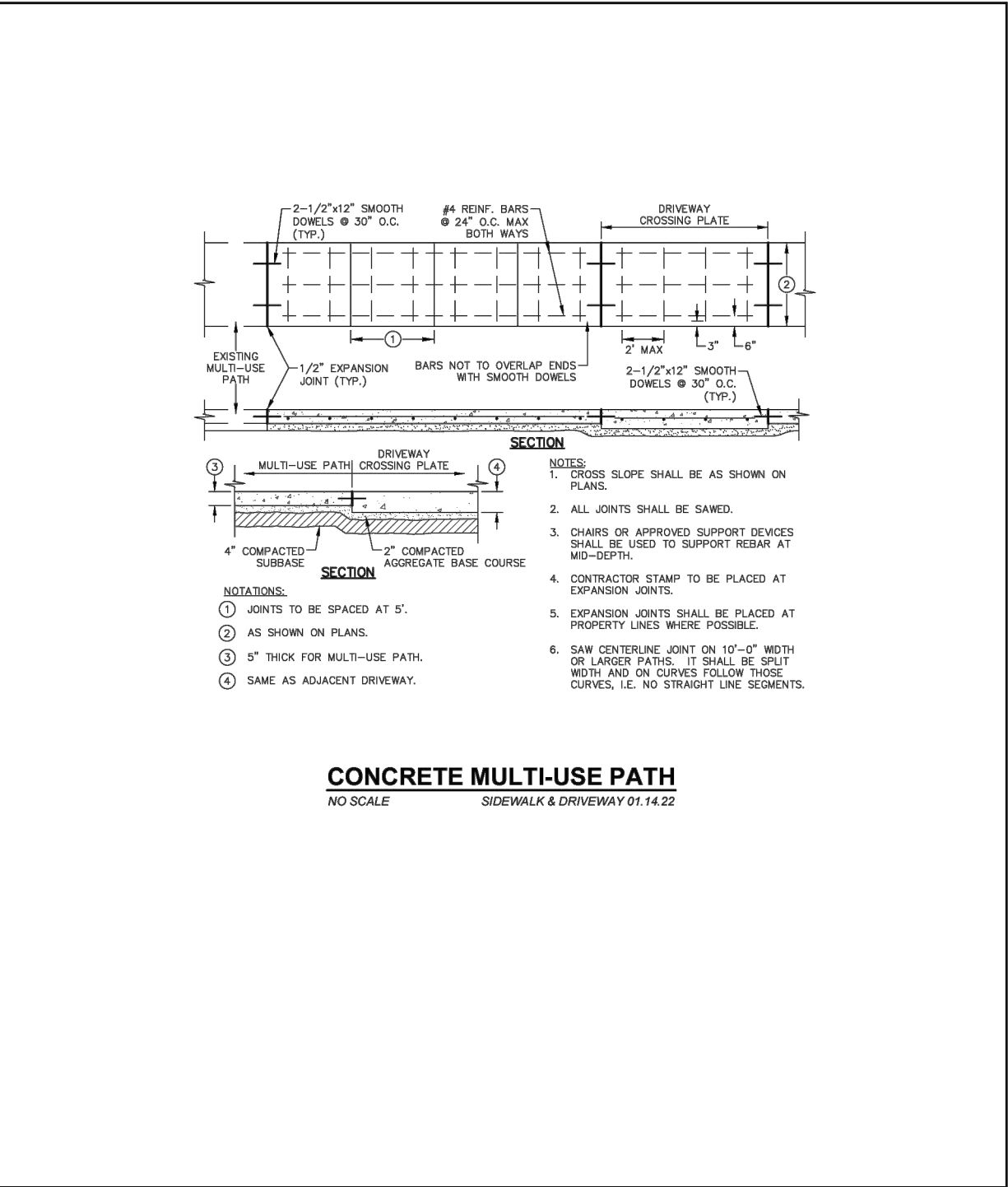
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PIGMENTED IMPRINTED CONCRETE
NO SCALE PAVING 03.15.23

DECORATIVE COLORED CONCRETE

SPECIFICATION:	PAVING
DETAIL NO.	11
REVISION:	1
APPROVED BY:	JFW
DATE:	03.15.23



CONCRETE MULTI-USE PATH
NO SCALE SIDEWALK & DRIVEWAY 01.14.22

CONCRETE MULTI-USE PATH

SECTION:	SIDEWALK & DRIVEWAYS
DETAIL NO.	1
REVISION:	1
APPROVED BY:	DTS
DATE:	01.14.22



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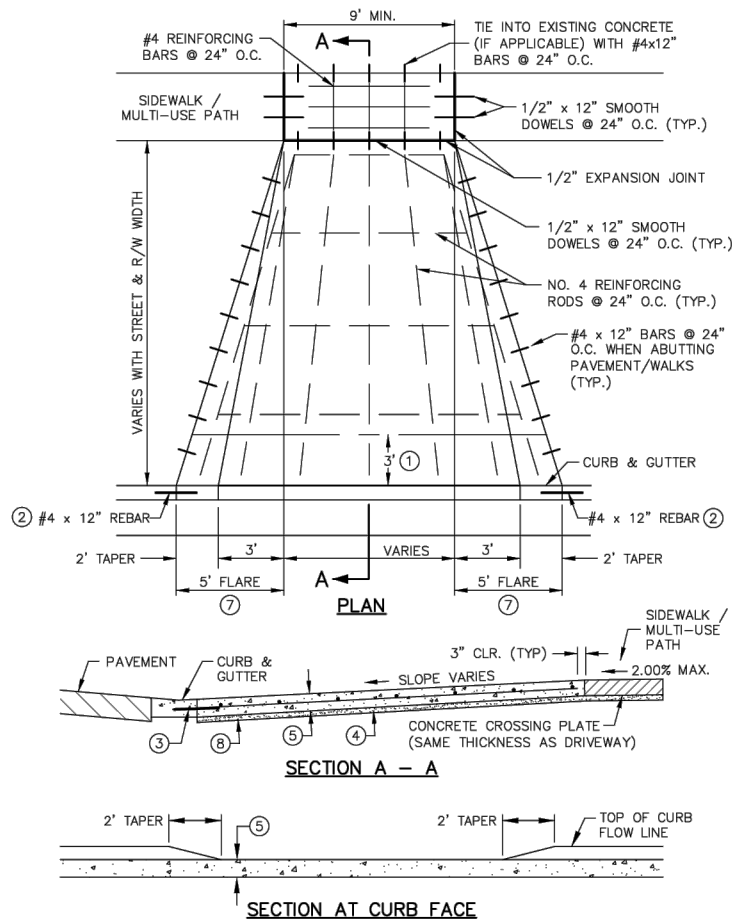
10/22/2025

General Details - Paving

9th St NE from Main Ave to 12th Ave N
7th Ave NE from 9th St NE to City Limit

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STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	TMA-SU-FXP-8-992(045)	20	9



NOTES:

- 1 SAW CUT, REMOVE AND REPLACE WHEN CURB & GUTTER IS BEING INSTALLED WITH EXISTING DRIVEWAY.
- 2 WHEN DRIVEWAY IS BEING INSTALLED WITH EXISTING CURB AND GUTTER, THE CURB AND GUTTER IS REMOVED AND REPLACED. NO INTEGRAL DRIVEWAY/CURB & GUTTER POURS SHALL BE ALLOWED.
- 3 THE DRIVEWAY AND REINFORCEMENT MAT SHALL BE TIED TO THE CURB AND GUTTER WITH #4 EPOXY COATED REBAR 12" LONG 24" ON CENTER.
- 4 CHAIRS OR APPROVED SUPPORT DEVICES SHALL BE USED TO SUPPORT REINFORCEMENT BARS AT MID-DEPTH.
- 5 6" MINIMUM FOR RESIDENTIAL; 7" MINIMUM FOR COMMERCIAL; OR AS NOTED ON PLANS.
- 6 SMOOTH DOWELS SHALL NOT BE TIED TO REINFORCING MATS.
- 7 60" TAPER WHEN SIDES OF DRIVEWAY ABUT PAVEMENTS/WALKS.
- 8 2" COMPACTED AGGREGATE BASE COURSE.

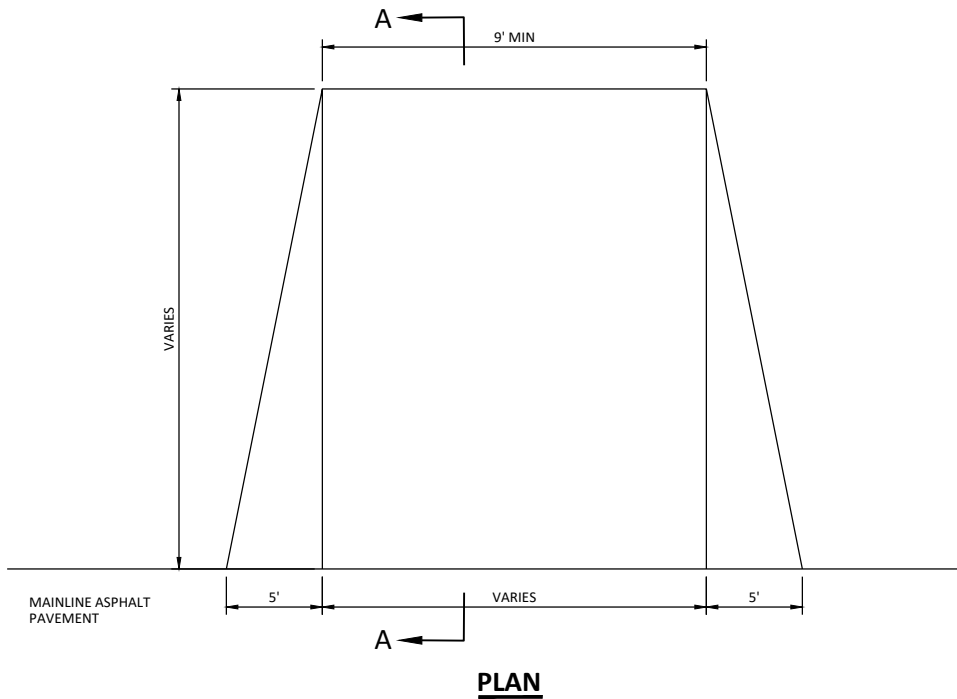
DRIVEWAY - WITH CURB & GUTTER AND CROSSING PLATE

NO SCALE

SIDEWALK & DRIVEWAY 03.15.23

DRIVEWAY-WITH CURB & GUTTER
AND CROSSING PLATE

SECTION:	SIDEWALK & DRIVEWAYS
DETAIL NO.	4
REVISION:	1
APPROVED BY:	JFW
DATE:	03.15.23



DRIVEWAY - ASPHALT

NOT TO SCALE



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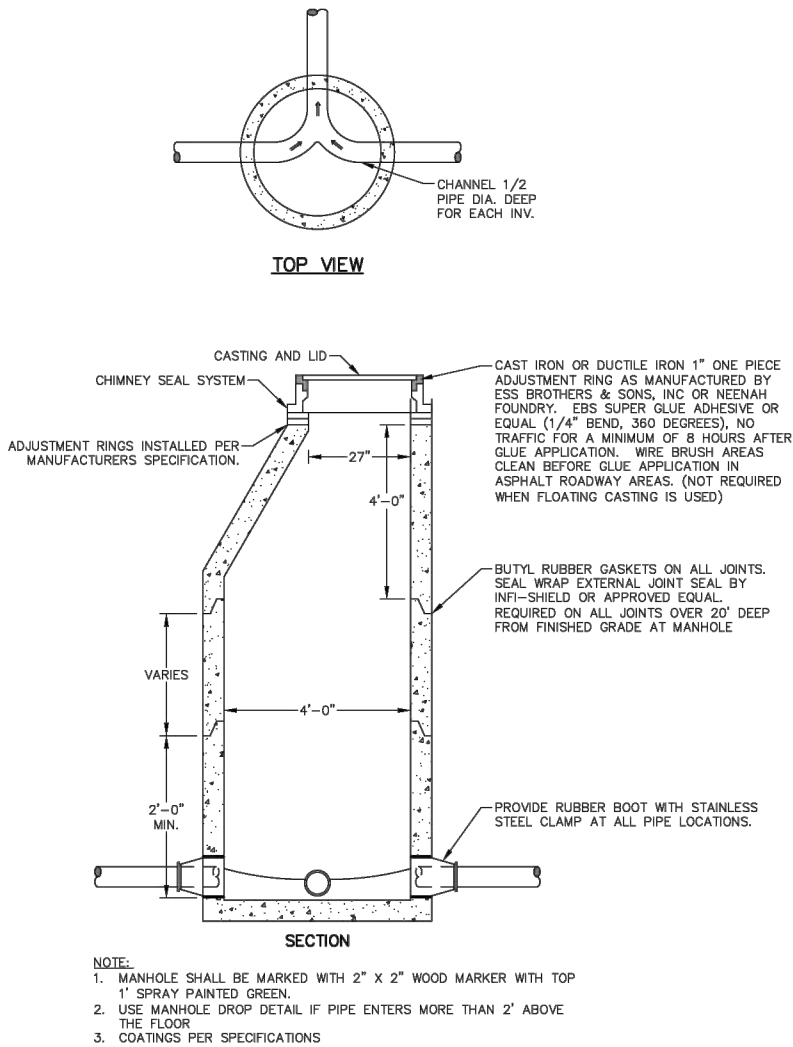
10/22/2025

General Details - Paving

9th St NE from Main Ave to 12th Ave N
7th Ave NE from 9th St NE to City Limit

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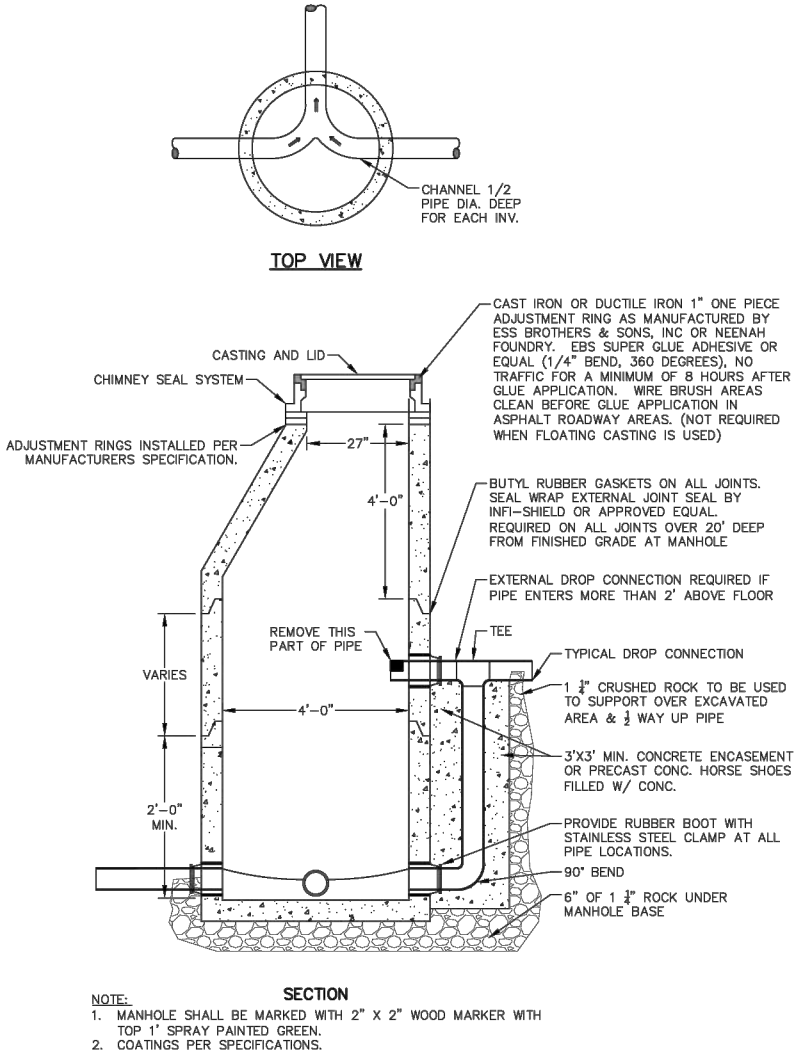
STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	TMA-SU-FXP-8-992(045)	20	10



SANITARY SEWER MANHOLE
NO SCALE SANITARY SEWER 03.15.23

SANITARY SEWER MANHOLE

SECTION:	SANITARY SEWER
DETAIL NO.	1
REVISION:	1
APPROVED BY:	JFW
DATE:	03.15.23



SANITARY SEWER MANHOLE (EXTERNAL DROP)
NO SCALE SANITARY SEWER 03.15.23

SANITARY SEWER MANHOLE
(EXTERNAL DROP)

SECTION:	SANITARY SEWER
DETAIL NO.	2
REVISION:	1
APPROVED BY:	JFW
DATE:	03.15.23



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10/22/2025

General Details - Sanitary Sewer

9th St NE from Main Ave to 12th Ave N
7th Ave NE from 9th St NE to City Limit

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STATE

PROJECT NO.

SECTION
NO.

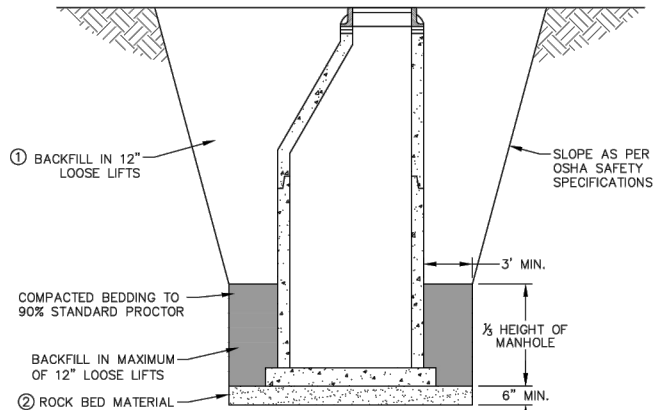
SHEET
NO.

ND

TMA-SU-FXP-8-992(045)

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11



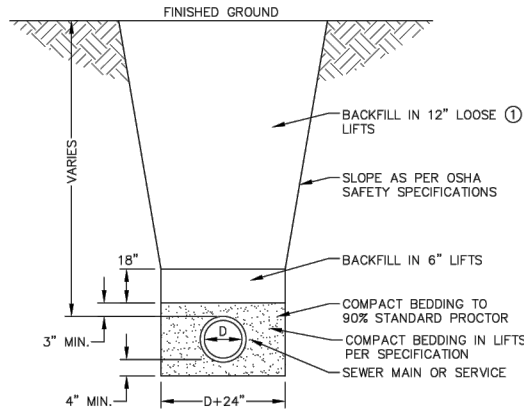
- ① COMPACT TO 95% MINIMUM STANDARD PROCTOR DENSITY.
② ROCK BED MATERIAL SHALL BE 1-1/4" CRUSHED ROCK. ROCK FOR BEDDING AND COMPACTED GRANULAR MATERIAL ARE INCIDENTAL TO MANHOLE INSTALLATION.
③ DETAIL SHALL BE USED FOR ALL MANHOLES.

MANHOLE TRENCH

NO SCALE SANITARY SEWER 03.15.23

MANHOLE TRENCH

SECTION:	SANITARY SEWER
DETAIL NO.	4
REVISION:	1
APPROVED BY:	JFW
DATE:	03.01.18



- ① COMPACT TO 95% MINIMUM STANDARD PROCTOR DENSITY.

**SANITARY SEWER
MAIN OR SERVICE TRENCH**

NO SCALE SANITARY SEWER 03.01.18

SANITARY SEWER MAIN OR
SERVICE TRENCH

SECTION:	SANITARY SEWER
DETAIL NO.	5
REVISION:	1
APPROVED BY:	JFW
DATE:	03.01.18



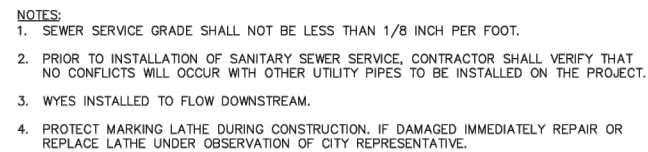
ALL ELEVATIONS ARE BASED ON
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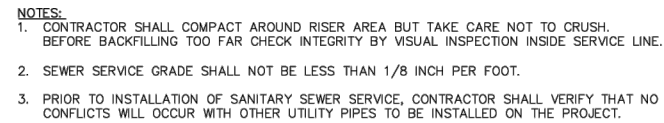
10/22/2025

General Details - Sanitary Sewer

9th St NE from Main Ave to 12th Ave N
7th Ave NE from 9th St NE to City Limit



SANITARY SEWER 03.15.23

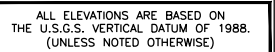


SANITARY SEWER 03.01.18

SECTION:	SANITARY SEWER
DETAIL NO.	6
REVISION:	1
APPROVED BY:	JFW
DATE:	03.15.23



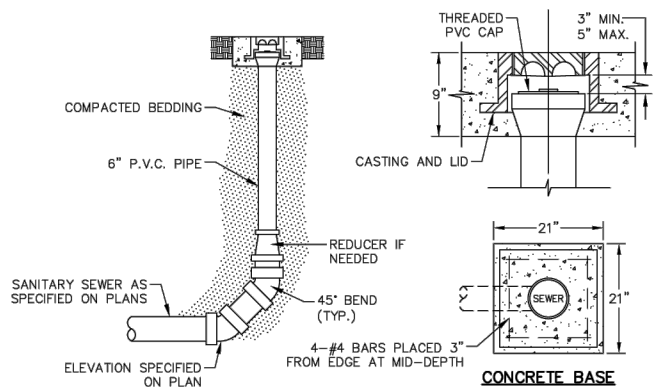
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DETAIL NO.	7
REVISION:	1
APPROVED BY:	DTS
DATE:	03.01.18



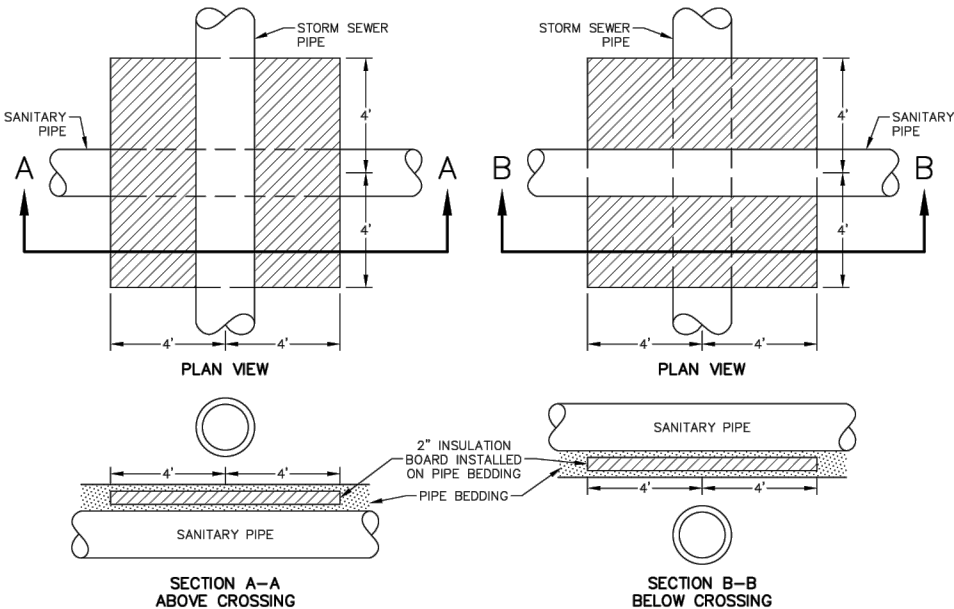
9th St NE from Main Ave to 12th Ave N
7th Ave NE from 9th St NE to City Limit

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	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	TMA-SU-FXP-8-992(045)	20	13



SANITARY SEWER CLEANOUT - ON MAIN
NO SCALE
SANITARY SEWER 04.21.15



SANITARY INSULATION FOR STORM CROSSING
NO SCALE
SANITARY SEWER 02.18.15

SANITARY SEWER CLEANOUT — ON
MAIN

SECTION:	SANITARY SEWER
DETAIL NO.	8
REVISION:	1
APPROVED BY:	DTS
DATE:	04.21.15



SANITARY INSULATION FOR STORM
CROSSING

SECTION:	SANITARY SEWER
DETAIL NO.	9
REVISION:	1
APPROVED BY:	DTS
DATE:	02.18.15



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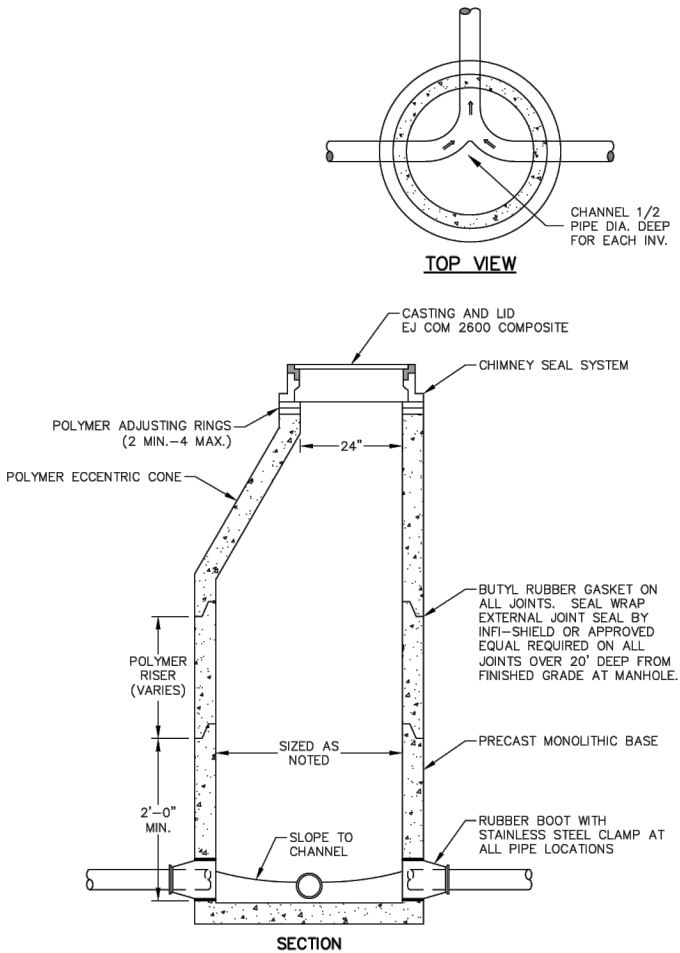
10/22/2025

General Details - Sanitary Sewer

9th St NE from Main Ave to 12th Ave N
7th Ave NE from 9th St NE to City Limit

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	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	TMA-SU-FXP-8-992(045)	20	14



NOTE:
1. MANHOLE SHALL BE MARKED WITH 2" X 2" WOOD MARKER WITH TOP 1' SPRAY PAINTED GREEN.

SANITARY SEWER POLYMER MANHOLE
NO SCALE SANITARY SEWER 03.01.18

SANITARY SEWER POLYMER
MANHOLE

SECTION:	SANITARY SEWER
DETAIL NO.	10
REVISION:	1
APPROVED BY:	JFW
DATE:	03.01.18



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10/22/2025

General Details - Sanitary Sewer

9th St NE from Main Ave to 12th Ave N
7th Ave NE from 9th St NE to City Limit

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STATE

PROJECT NO.

SECTION
NO.

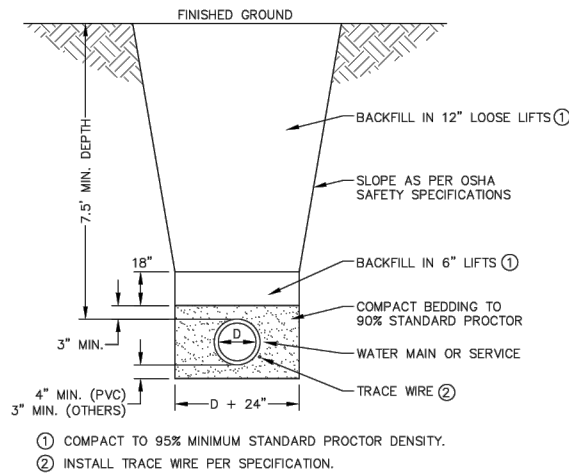
SHEET
NO.

ND

TMA-SU-FXP-8-992(045)

20

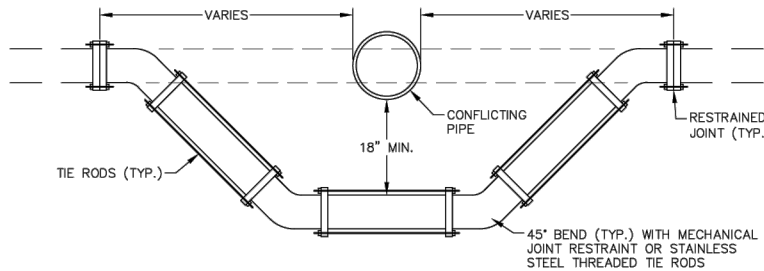
15



WATER MAIN OR SERVICE TRENCH

NO SCALE

WATER MAIN 03.15.23



NOTES:

1. ALL LOWERING AREA SHALL BE COVERED WITH 8 MIL POLYETHYLENE PLASTIC.
2. THRUST BLOCKS NEED TO BE INSTALLED AT ELBOWS.
3. INSULATE IF CLOSER THAN 24" TO CONFLICTING STORM PIPE OR CLOSER THAN 7.5' FROM FINISHED GROUND.
4. ADJUST AS SHOWN ON PLANS, OTHERWISE WATER MAIN MAY BE BELOW OR ABOVE CONFLICTING PIPE.
5. CATHODIC PROTECTIONS—SACRIFICIAL ANODE ZINC CAPS
6. INSTALL TRACE WIRE PER SPECIFICATIONS..

WATER MAIN ADJUSTMENT

NO SCALE

WATER MAIN 03.15.23

WATER MAIN OR SERVICE TRENCH

SECTION:	WATER MAIN
DETAIL NO.	1
REVISION:	1
APPROVED BY:	JFW
DATE:	03.15.23



WATER MAIN ADJUSTMENT

SECTION:	WATER MAIN
DETAIL NO.	2
REVISION:	1
APPROVED BY:	JFW
DATE:	03.15.23



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THE U.S.G.S. VERTICAL DATUM OF 1988.
(UNLESS NOTED OTHERWISE)



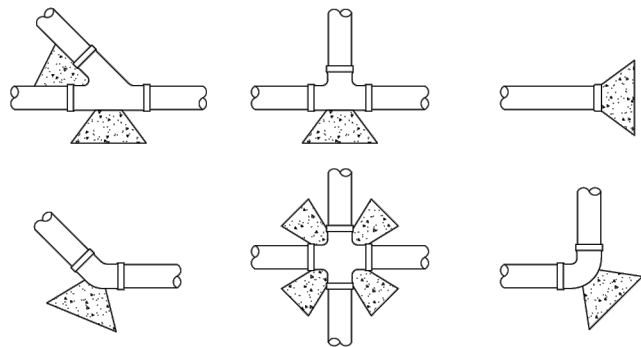
10/22/2025

General Details - Watermain

9th St NE from Main Ave to 12th Ave N
7th Ave NE from 9th St NE to City Limit

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STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	TMA-SU-FXP-8-992(045)	20	16

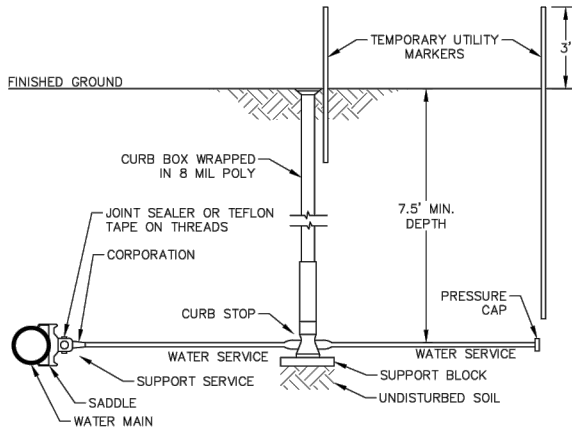


MINIMUM THRUST BLOCK SIZES											
PIPE DIAMETER	REQUIRED BEARING AREA (S.F.)										
	4"	6"	8"	10"	12"	14"	16"	18"	20"	24"	
CROSS, DEAD END OR TEE	2	4	7	11	16	21	28	36	44	63	
90 BEND	3	6	10	16	22	30	39	50	62	88	
45 BEND	2	3	6	9	12	17	21	27	34	48	
22 1/2 BEND	1	2	3	5	7	9	14	17	17	25	
NOTE: ALL THRUST BLOCKS A MINIMUM OF 12" THICK AND MUST BEAR AGAINST UNDISTURBED SOIL.											

THRUST BLOCKS
NO SCALE WATER MAIN 02.18.15

THRUST BLOCKS

SECTION:	WATER MAIN
DETAIL NO.	3
REVISION:	1
APPROVED BY:	DTS
DATE:	02.18.15



- NOTES:
1. CURB BOX TO BE INSTALLED TO FINISHED GROUND ELEVATION AS SPECIFIED ON PLANS, HALF WAY EXTENDED.
 2. ENTIRE SERVICE LINE TO BE PRESSURE TESTED.
 3. SEE SERVICE LAYOUT DETAIL OR PLAN SHEETS FOR LOCATION OF CURB STOP AND END OF SERVICE.
 4. PROVIDE STIFFENERS ON ALL CONNECTIONS WITH PEX_a PIPE.
 5. PROVIDE ADDITIONAL WATER SERVICE LINE LENGTH PER SPECIFICATION.

WATER SERVICE LINE
NO SCALE WATER MAIN 01.14.22

WATER SERVICE LINE

SECTION:	WATER MAIN
DETAIL NO.	4
REVISION:	1
APPROVED BY:	JFW
DATE:	01.14.22



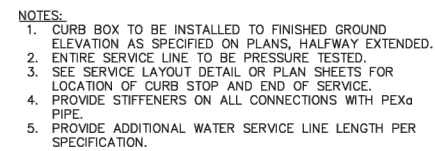
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(UNLESS NOTED OTHERWISE)



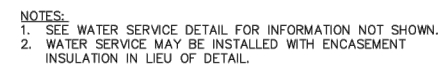
10/22/2025

General Details - Watermain

9th St NE from Main Ave to 12th Ave N
7th Ave NE from 9th St NE to City Limit



WATER MAIN 03.15.23



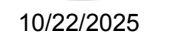
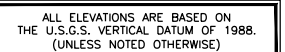
WATER MAIN 02.18.15



City of
**WEST
FARGO**



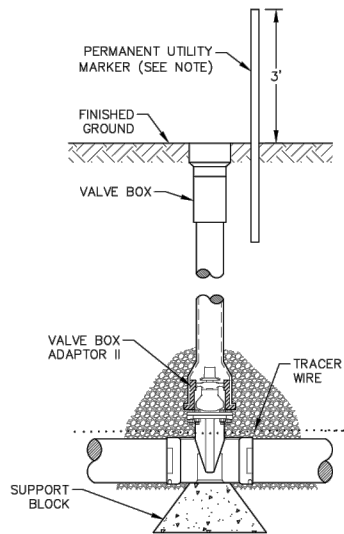
City of
**WEST
FARGO**



9th St NE from Main Ave to 12th Ave N
7th Ave NE from 9th St NE to City Limit

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	ND	TMA-SU-FXP-8-992(045)	20	18



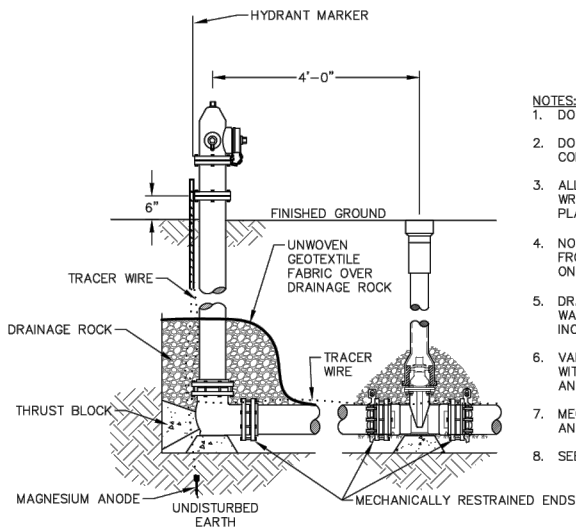
- NOTES:
1. WRAP ALL UNDERGROUND METAL ITEMS WITH 8 MIL POLYETHYLENE PLASTIC.
 2. VALVE AND BOX SHALL BE BACKFILLED WITH NDDOT CLASS 3 MATERIAL TO TOP AND COMPACTED TO 95% DENSITY.
 3. TOP OF VALVE BOX SHALL BE SET TO PROVIDE 12" OF UPWARD ADJUSTMENT.
 4. A PERMANENT UTILITY MARKER SHALL BE USED ONLY AT VALVES IN GREEN SPACES AFTER ALL CONSTRUCTION WORK IS COMPLETED.

VALVE AND BOX

NO SCALE WATER MAIN 03.15.23

VALVE AND BOX

SECTION:	WATER MAIN
DETAIL NO.	7
REVISION:	1
APPROVED BY:	JFW
DATE:	03.15.23



- NOTES:
1. DO NOT BLOCK WEEP HOLE ON HYDRANT.
 2. DO NOT COVER ANY JOINT WITH CONCRETE.
 3. ALL UNDERGROUND METAL ITEMS TO BE WRAPPED WITH 8 MIL POLYETHYLENE PLASTIC.
 4. NOZZLE HEIGHT SHALL BE MINIMUM 24" FROM FINISHED GROUND OR AS SHOWN ON PLANS.
 5. DRAINAGE ROCK SHALL BE 2" MINUS WASHED ROCK. ROCK SHALL BE INCIDENTAL TO HYDRANT.
 6. VALVE AND BOX SHALL BE BACKFILLED WITH NDDOT CLASS 3 MATERIAL TO TOP AND COMPACTED TO 95% DENSITY.
 7. MECHANICALLY RESTRAIN ALL FITTINGS AND HYDRANTS.
 8. SEE WATER MAIN TRACE WIRE DETAIL.

HYDRANT

NO SCALE WATER MAIN 03.15.23

HYDRANT

SECTION:	WATER MAIN
DETAIL NO.	8
REVISION:	1
APPROVED BY:	JFW
DATE:	03.15.23



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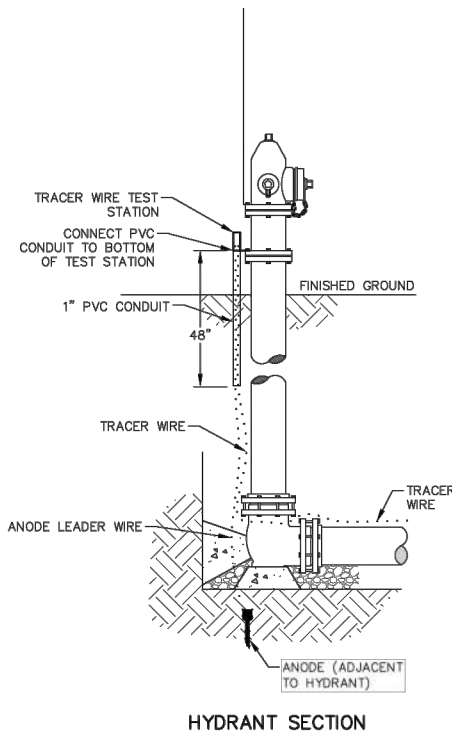
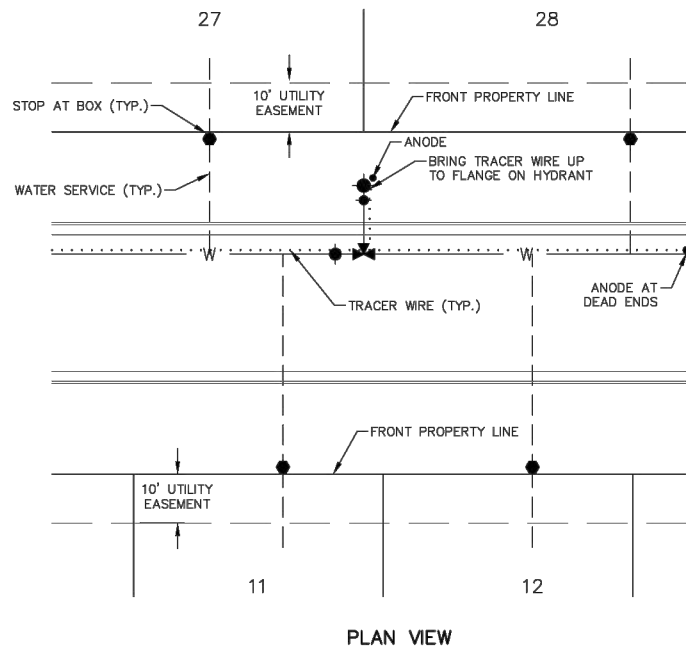
10/22/2025

General Details - Watermain

9th St NE from Main Ave to 12th Ave N
7th Ave NE from 9th St NE to City Limit

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STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	TMA-SU-FXP-8-992(045)	20	19

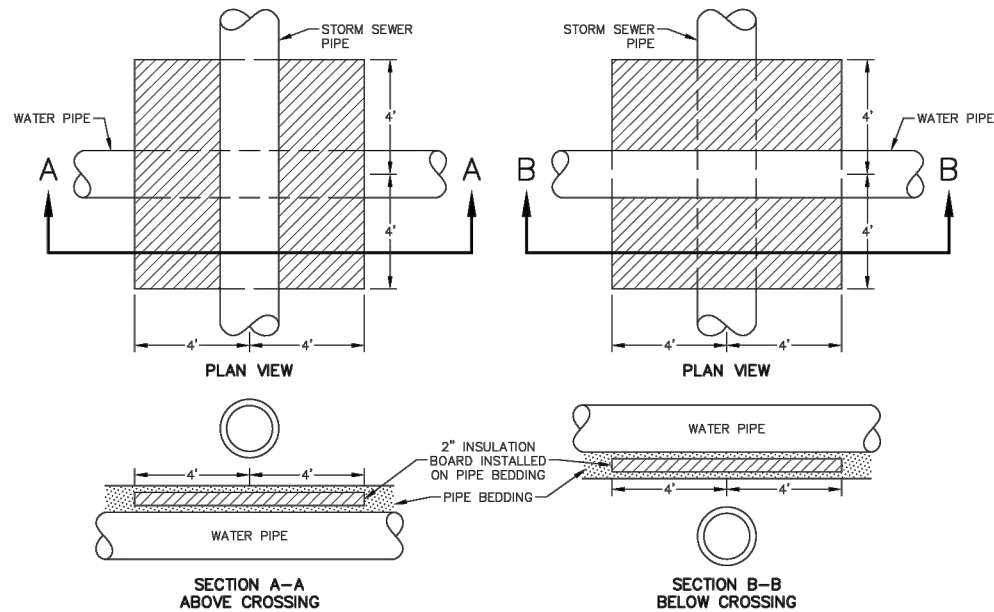


- NOTES:
1. TRACER WIRE SHALL BE INSTALLED ON SOUTH AND EAST SIDES OF PIPELINE BEING TRACED.
 2. ACCESS BOX WITH DUAL CONNECTION LID AND ANODE SHALL BE INSTALLED AT PLUGGED ENDS.

WATER MAIN TRACE WIRE
NO SCALE WATER MAIN 03.15.23

WATER MAIN TRACE WIRE

SECTION:	WATER MAIN
DETAIL NO.	9
REVISION:	1
APPROVED BY:	JFW
DATE:	03.15.23



- NOTES:
1. THIS DETAIL APPLIES TO BOTH MAINS & SERVICES WHERE CROSSING IS WITHIN 24\"/>

WATER INSULATION FOR STORM CROSSING
NO SCALE WATER MAIN 02.18.15

WATER INSULATION FOR STORM CROSSING

SECTION:	WATER MAIN
DETAIL NO.	10
REVISION:	1
APPROVED BY:	DTS
DATE:	02.18.15



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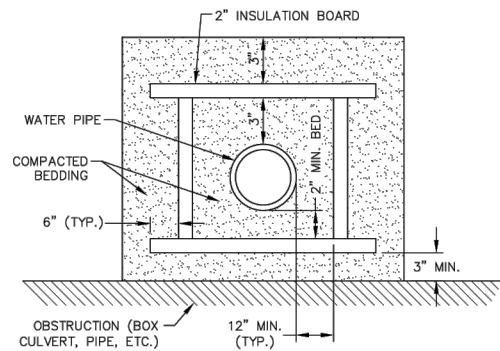
10/22/2025

General Details - Watermain

9th St NE from Main Ave to 12th Ave N
7th Ave NE from 9th St NE to City Limit

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	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	TMA-SU-FXP-8-992(045)	20	20



NOTE:
1. COMPACT PER WATER MAIN OR SERVICE TRENCH DETAIL.

WATER ENCASEMENT INSULATION
NO SCALE WF 02.18.15

TYPICAL DETAIL DESCRIPTION TAG

SECTION:	WATER MAIN
DETAIL NO.	##
REVISION:	#
APPROVED BY:	XXX
DATE:	MM.DD.YY



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THE U.S.G.S. VERTICAL DATUM OF 1988.
(UNLESS NOTED OTHERWISE)



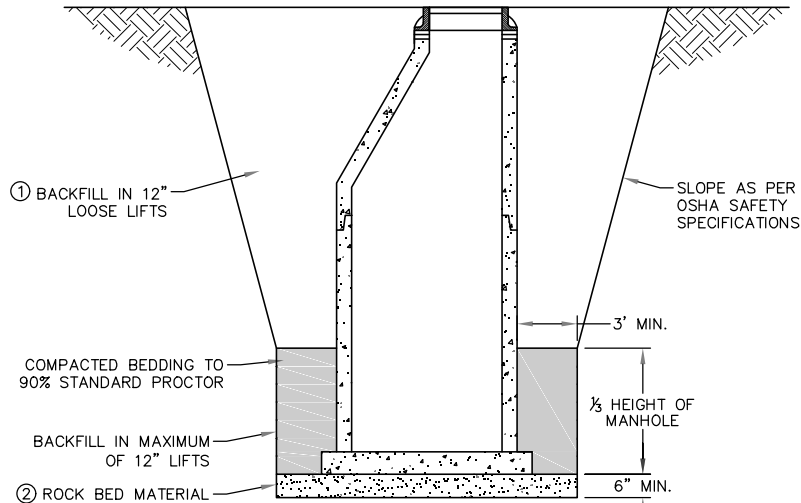
10/22/2025

General Details - Watermain

9th St NE from Main Ave to 12th Ave N
7th Ave NE from 9th St NE to City Limit

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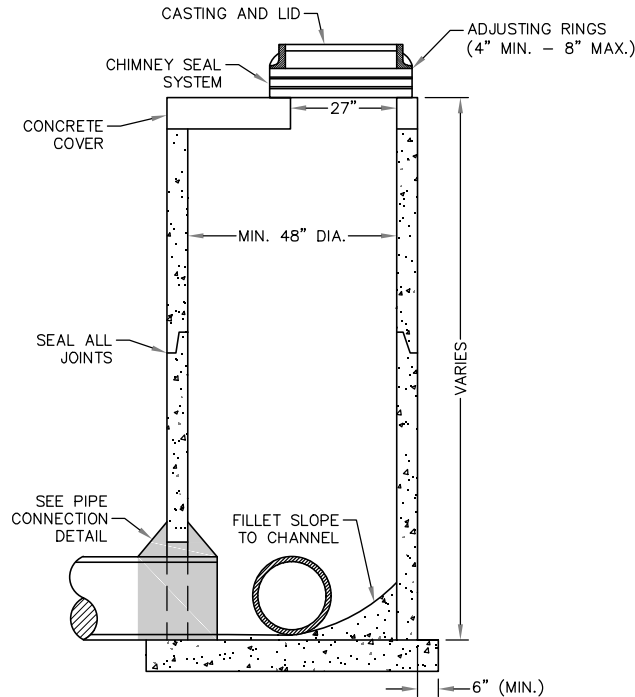
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	TMA-SU-FXP-8-992(045)	20	21



- ① COMPACT TO 95% MINIMUM STANDARD PROCTOR DENSITY.
- ② ROCK BED MATERIAL SHALL BE 1-1/4" CRUSHED ROCK. ROCK FOR BEDDING AND COMPACTED GRANULAR MATERIAL ARE INCIDENTAL TO MANHOLE INSTALLATION.
- ③ DETAIL SHALL BE USED FOR ALL MANHOLES AND CATCH BASINS.

MANHOLE/CATCH BASIN TRENCH

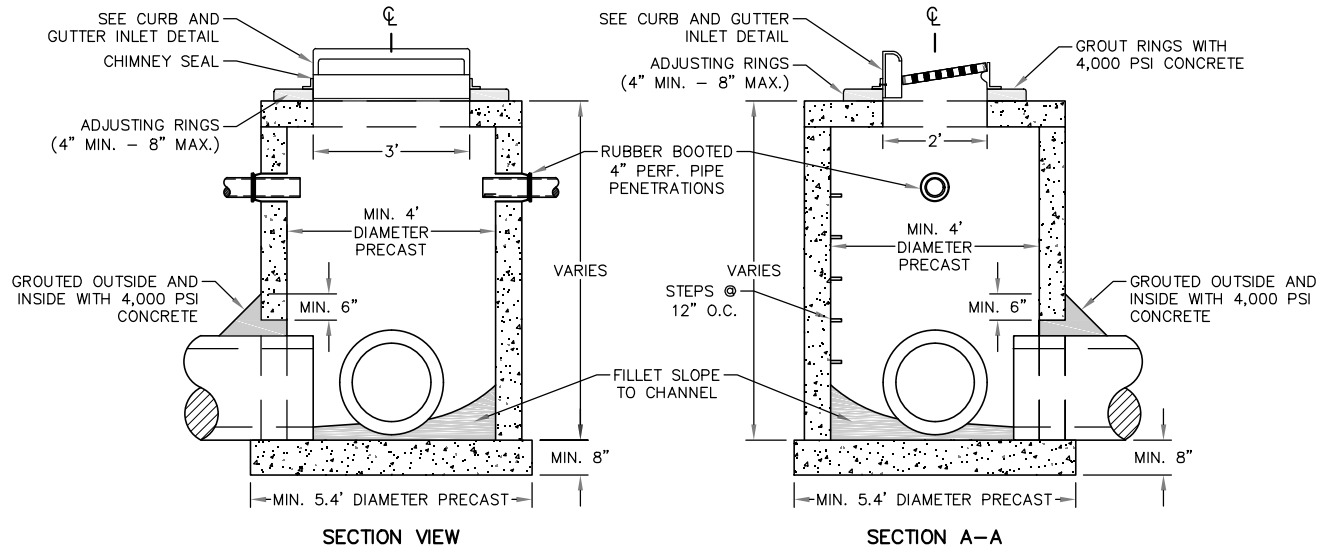
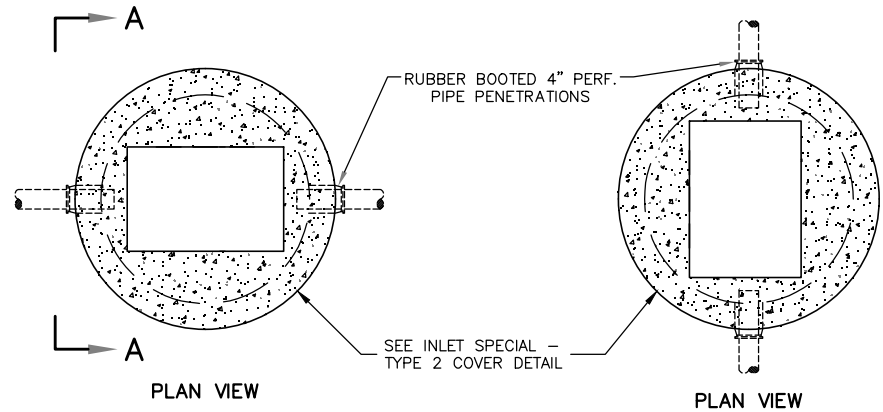
NO SCALE



- NOTE:
1. TOP BARREL SECTION AND COVER CAN BE SUBSTITUTED WITH AN ECCENTRIC CONE FOR APPLICABLE SIZES.

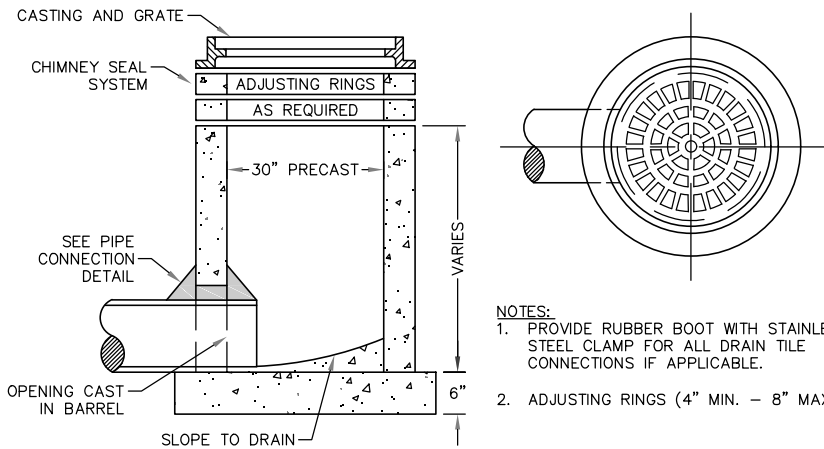
STORM SEWER STRUCTURE - MANHOLE - REGULAR

NO SCALE



INLET SPECIAL - TYPE 2

NO SCALE



- NOTES:
1. PROVIDE RUBBER BOOT WITH STAINLESS STEEL CLAMP FOR ALL DRAIN TILE CONNECTIONS IF APPLICABLE.
 2. ADJUSTING RINGS (4" MIN. - 8" MAX.).

INLET CATCH BASIN

NO SCALE



ALL ELEVATIONS ARE BASED ON THE U.S.G.S. VERTICAL DATUM OF 1988. (UNLESS NOTED OTHERWISE)



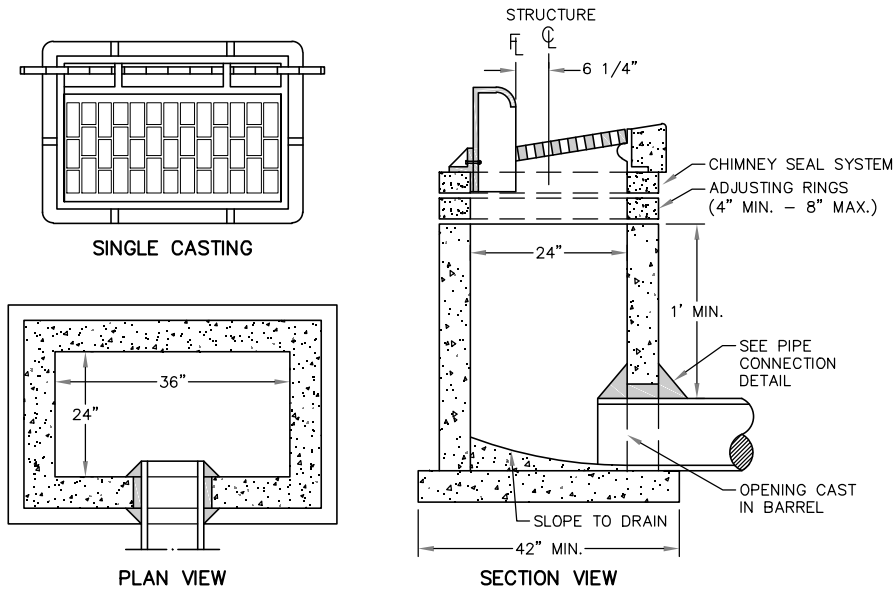
10/22/2025

General Details - Storm Sewer

9th St NE from Main Ave to 12th Ave N
7th Ave NE from 9th St NE to City Limit

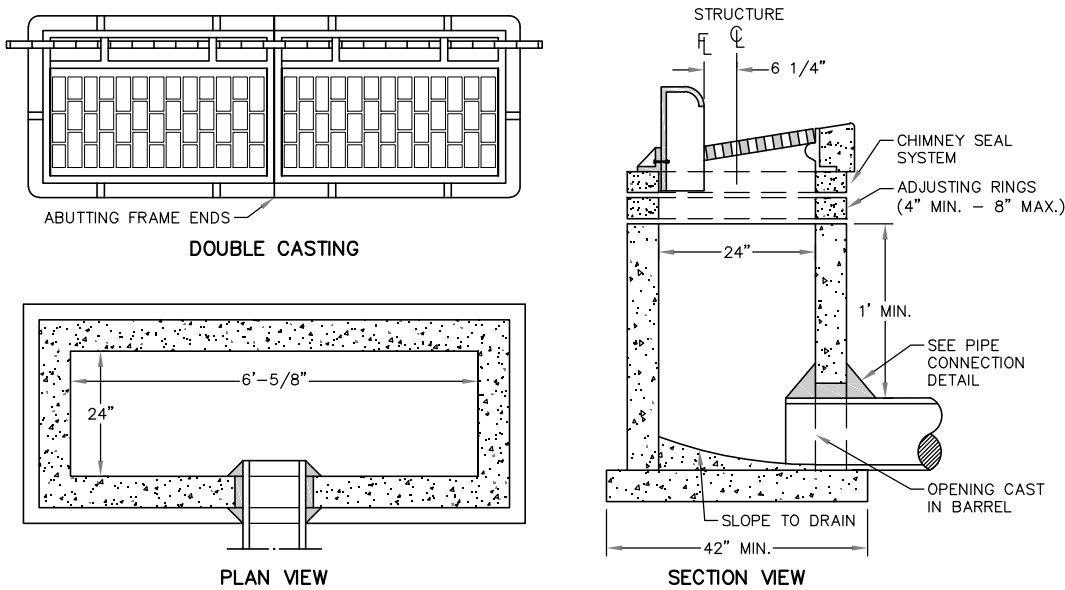
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ND	TMA-SU-FXP-8-992(045)	20	22



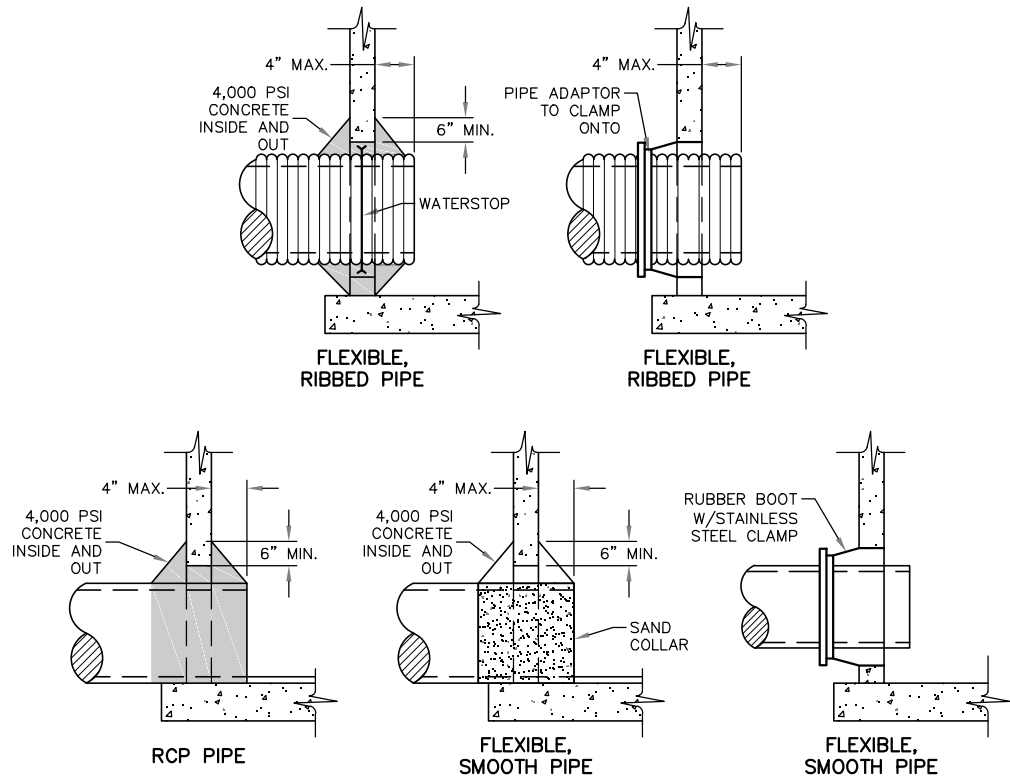
- NOTES:
1. PROVIDE RUBBER BOOT WITH STAINLESS STEEL CLAMP FOR ALL DRAIN TILE CONNECTIONS IF APPLICABLE.
 2. SEE CURB AND GUTTER DETAIL FOR CASTING PLACEMENT.

INLET TYPE 2
NO SCALE

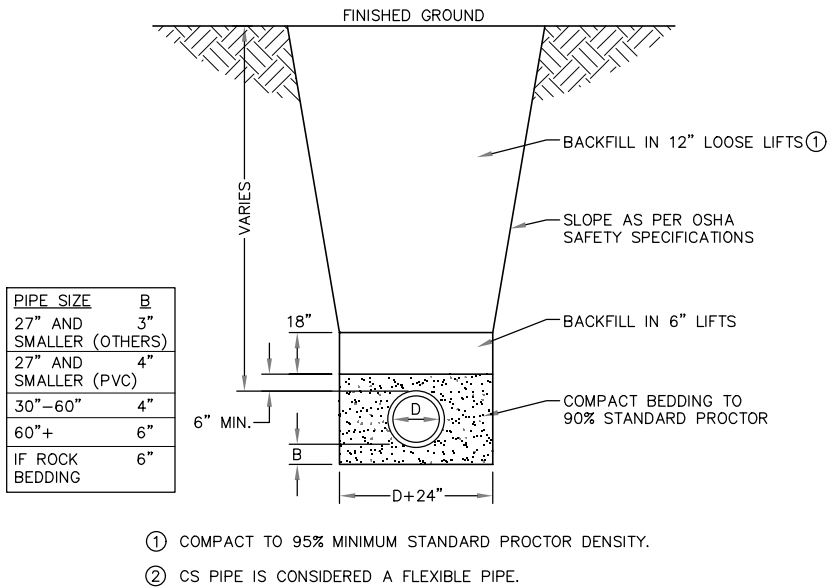


- NOTES:
1. PROVIDE RUBBER BOOT WITH STAINLESS STEEL CLAMP FOR ALL DRAIN TILE CONNECTIONS IF APPLICABLE.
 2. SEE CURB AND GUTTER DETAIL FOR CASTING PLACEMENT.

INLET TYPE 2 DOUBLE
NO SCALE



STORM SEWER PIPE CONNECTION
NO SCALE



- ① COMPACT TO 95% MINIMUM STANDARD PROCTOR DENSITY.
② CS PIPE IS CONSIDERED A FLEXIBLE PIPE.

FLEXIBLE PIPE STORM SEWER TRENCH
NO SCALE



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(UNLESS NOTED OTHERWISE)

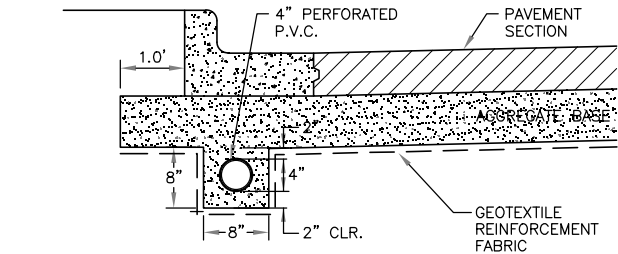


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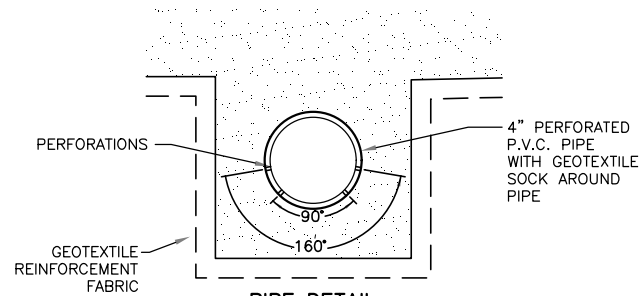
General Details - Storm Sewer

9th St NE from Main Ave to 12th Ave N
7th Ave NE from 9th St NE to City Limit

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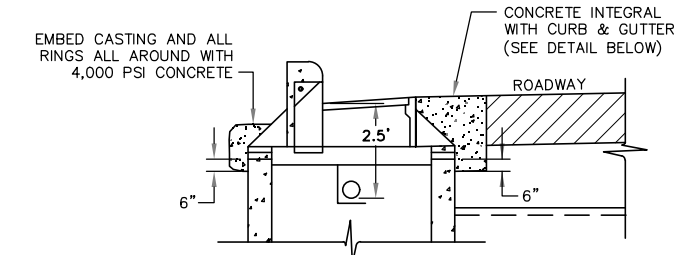
OVERALL LAYOUT



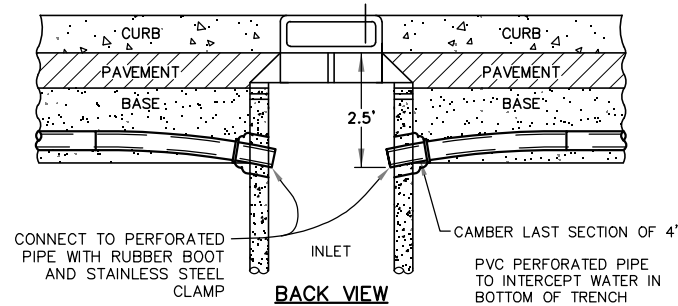
PIPE DETAIL
PERFORATION LOCATIONS

NOTES:

1. KNOCKOUTS SHALL BE PROVIDED IN INLETS TO ACCOMMODATE 4" PVC PERFORATED PIPE. COST OF KNOCKOUTS AND RUBBER BOOT CONNECTION SHALL BE INCLUDED IN THE PRICE BID FOR PERFORATED PVC PIPE.
2. NO BENDS OR FITTINGS SHALL BE USED UNLESS APPROVED BY THE ENGINEER. IF USED, SOLVENT WELD FITTINGS SHALL BE USED.
3. THE PIPE SHALL BE POLYVINYL CHLORIDE SEWER PIPE WITH SOLVENT CEMENTED JOINTS AS SPECIFIED IN ASTM SPEC. NO. 3034.
4. PERFORATIONS SHALL BE CIRCULAR AND $1/4" \pm 1/16"$ IN DIAMETER. THEY SHOULD BE ARRANGED IN ROWS PARALLEL TO THE AXIS OF THE PIPE AND SHALL BE SPACED APPROXIMATELY 3" CENTER TO CENTER ALONG THE ROWS. THE SPIGOT END OF THE PIPE SHALL BE UNPERFORATED FOR A LENGTH EQUAL TO THE DEPTH OF THE SOCKET. THE PLACEMENT AND TOTAL NUMBERS OF THE ROWS SHALL BE AS SHOWN ABOVE WITH AN ALLOWABLE TOLERANCE OF $\pm 10'$. THE SPIGOT AND BELL END SHALL BE UNPERFORATED FOR A LENGTH EQUAL TO THE DEPTH OF THE SPIGOT.
5. THE NOMINAL LAYING LENGTH OF THE PIPE SHALL BE 12.5'. SHORTER OR LONGER LAYING LENGTHS SHALL BE PROVIDED IF REQUIRED.
6. PIPE SIZE: 4"
7. ROWS OF PERFORATIONS: 4
8. PERFORATIONS PER ROW: 48 (FOR 12.5' PIPE LAYING LENGTHS)
9. 4" PERFORATED PIPE SHALL ALWAYS TERMINATE INSIDE OF INLETS OR MANHOLES AT LEAST 1" WITH A MAXIMUM OF 3".
10. PERFORATIONS SHALL BE PLACED FACING DOWN.
11. COST FOR EXTRA CLASS 5 GRAVEL, ADDITIONAL GEOTEXTILE FABRIC, AND EXCAVATION FOR THE PERFORATE PIPE INSTALLATION TO BE INCLUDED IN THE PERFORATED PIPE PAY ITEM.
12. BOOTS INSTALLED IN FIELD SHALL BE CORED.



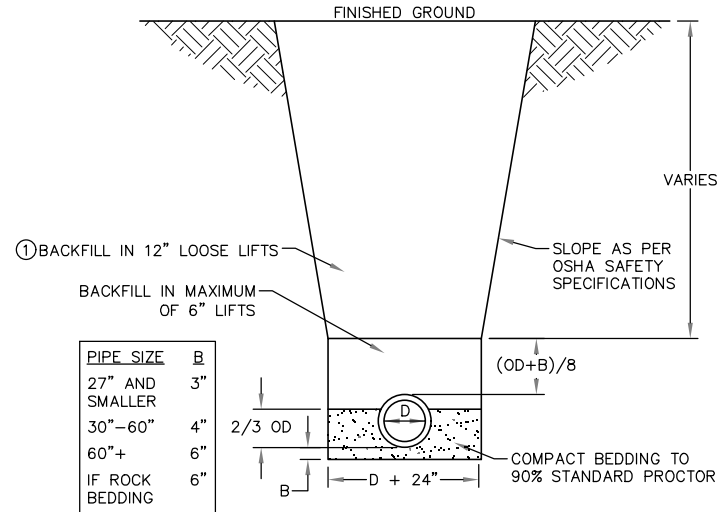
SIDE VIEW



BACK VIEW

PERFORATED PIPE DETAIL

NO SCALE

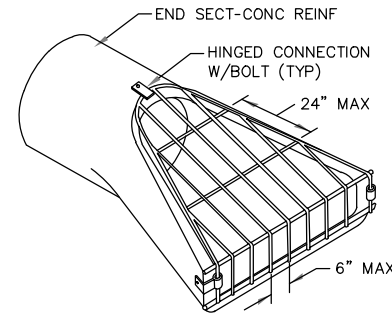


① COMPACT TO 95% MINIMUM STANDARD PROCTOR DENSITY.

RCP STORM SEWER TRENCH

NO SCALE

TRASH RACK SIZING		
PIPE SIZE	BARs	BOLTS
12"–18"	3/4"	5/8"
21"–42"	1"	3/4"
48"–72"	1 1/4"	1"



NOTES:

1. PROVIDE 3 ANCHOR CLIPS TO FASTEN TRASH RACK TO FLARED END SECTION. HOT DIP GALVANIZE AFTER FABRICATION.
2. TIE LAST 3 PIPE JOINTS. USE 2 TIE BOLT FASTENERS PER JOINT. INSTALL AT 60 DEGREES FROM TOP.
3. ALL PARTS SHALL BE HOT DIP GALVANIZED PER ASTM A153.

TRASH RACK - END SECT - CONC REINF

NO SCALE



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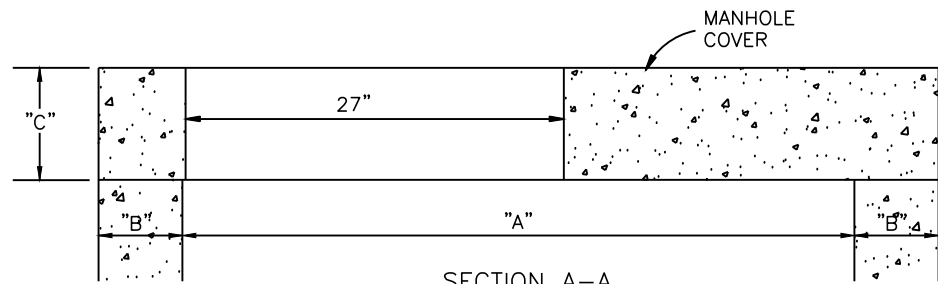
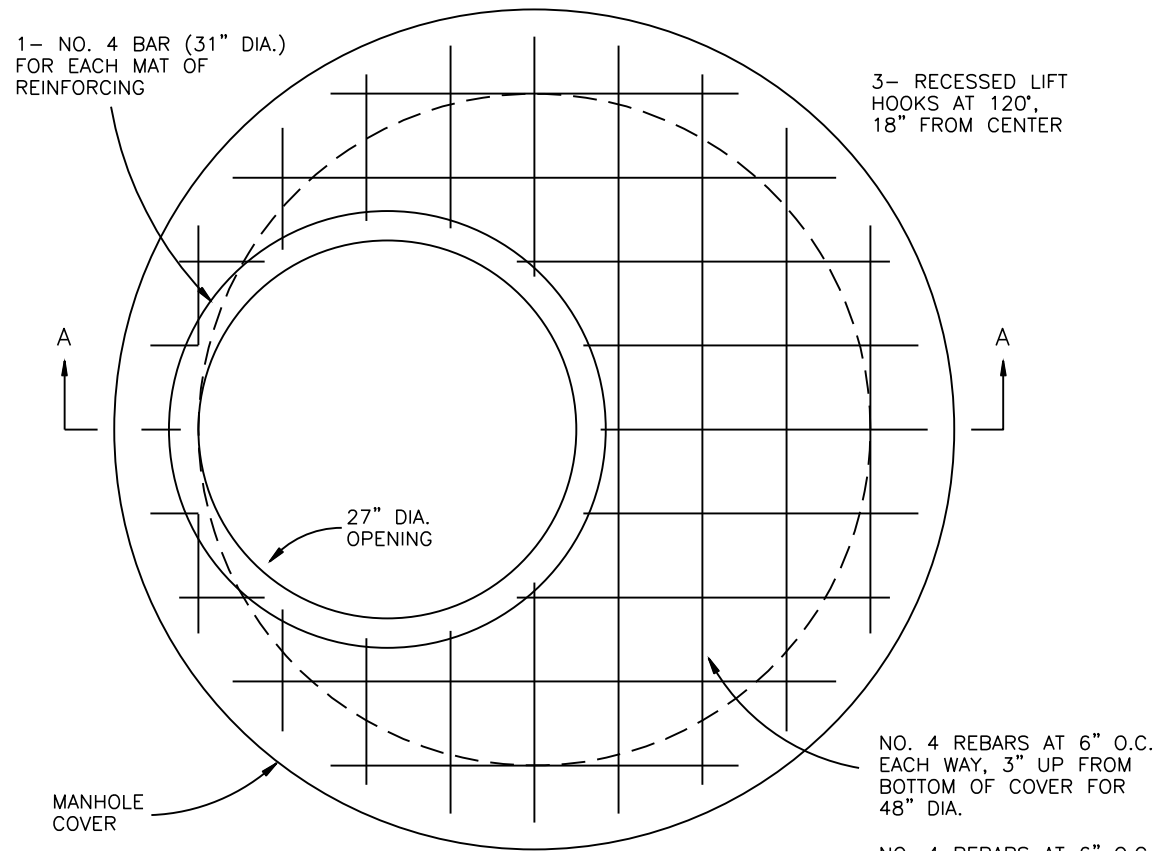
10/22/2025

General Details - Storm Sewer

9th St NE from Main Ave to 12th Ave N
7th Ave NE from 9th St NE to City Limit

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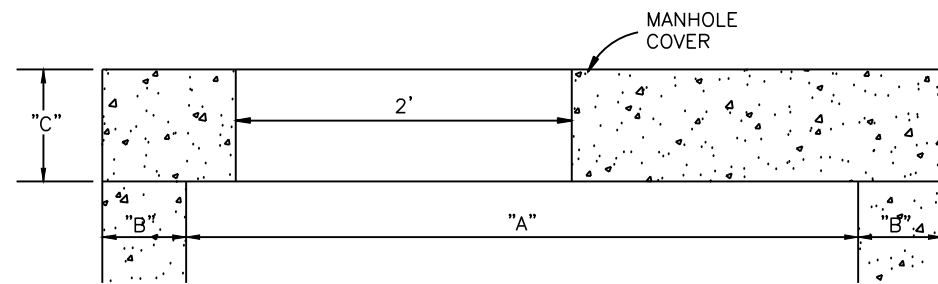
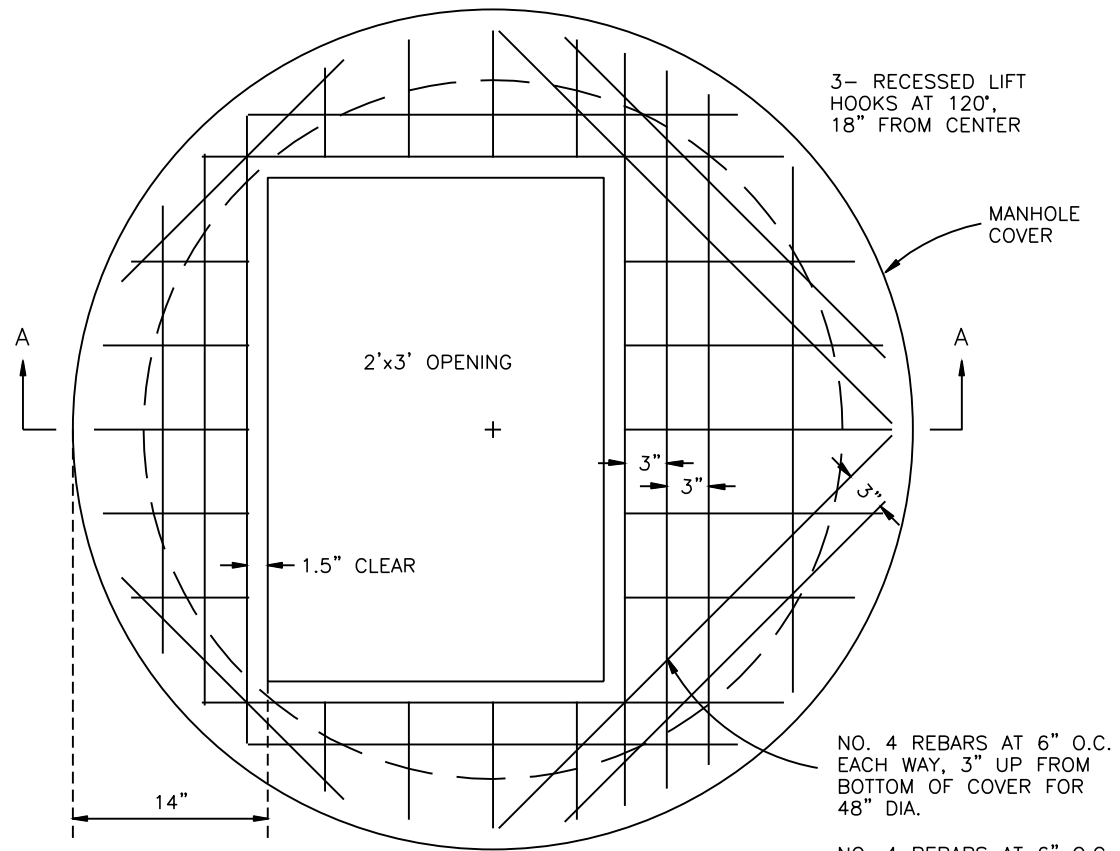
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	TMA-SU-FXP-8-992(045)	20	24



DIMENSION TABLE

A	B	C
48"	5"	6"
60"	6"	7"
72"	7"	8"
84"	8"	9"
96"	9"	9"

**INLET
SPECIAL - CATCH BASIN COVER**
NO SCALE



DIMENSION TABLE

A	B	C
48"	5"	6"
60"	6"	7"
72"	7"	8"
84"	8"	9"
96"	9"	9"

INLET SPECIAL - TYPE 2 COVER
NO SCALE



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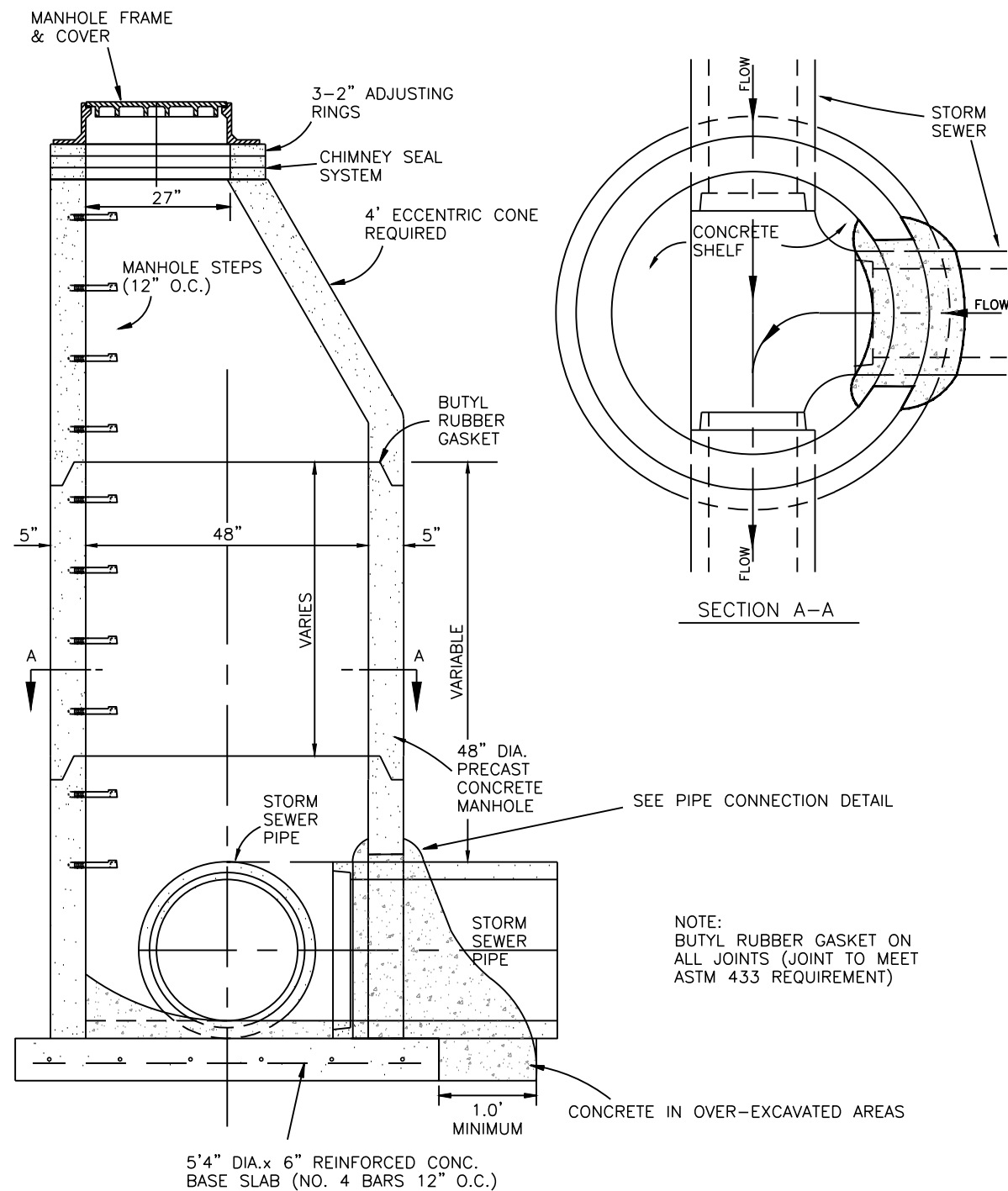
10/22/2025

General Details - Storm Sewer

9th St NE from Main Ave to 12th Ave N
7th Ave NE from 9th St NE to City Limit

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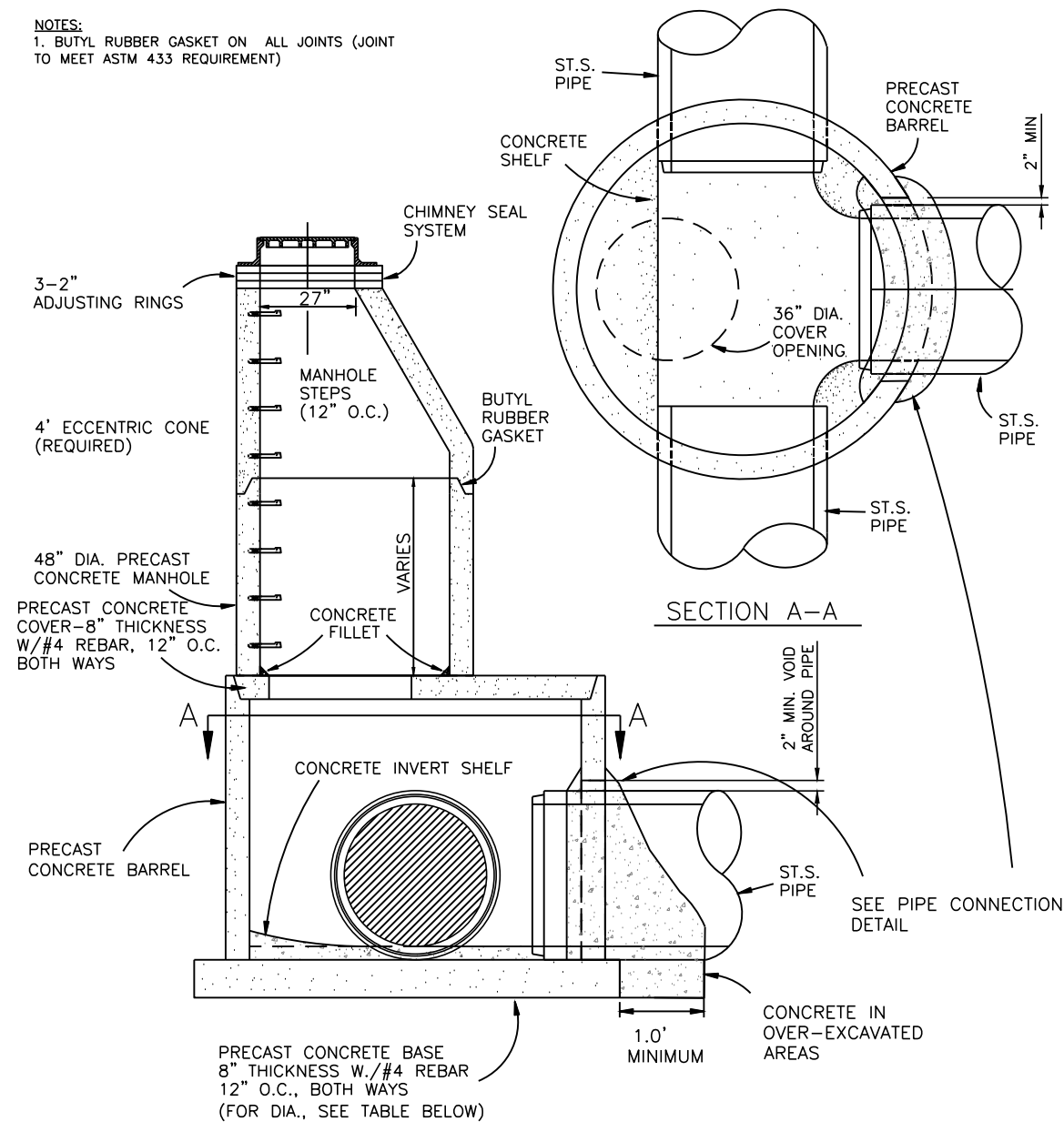
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	TMA-SU-FXP-8-992(045)	20	25



- NOTES:
1. MAXIMUM RCP DIA.-27" STRAIGHT THRU.
MAXIMUM RCP DIA-18" AT RIGHT ANGLES.
 2. ALL JOINTS AND LIFTING HOLES SHALL BE MORTARED.

MANHOLE 48"
NO SCALE

- NOTES:
1. BUTYL RUBBER GASKET ON ALL JOINTS (JOINT TO MEET ASTM 433 REQUIREMENT)



MANHOLE TYPE	(A) MANHOLE INSIDE DIA.	(B) MANHOLE OUTSIDE DIA.
A	60"	7'-0"
B	72"	8'-0"
C	84"	9'-4"
D	96"	10'-6"
E	108"	11'-8"

MANHOLE 60" - 108"
NO SCALE



ALL ELEVATIONS ARE BASED ON THE U.S.G.S. VERTICAL DATUM OF 1988. (UNLESS NOTED OTHERWISE)



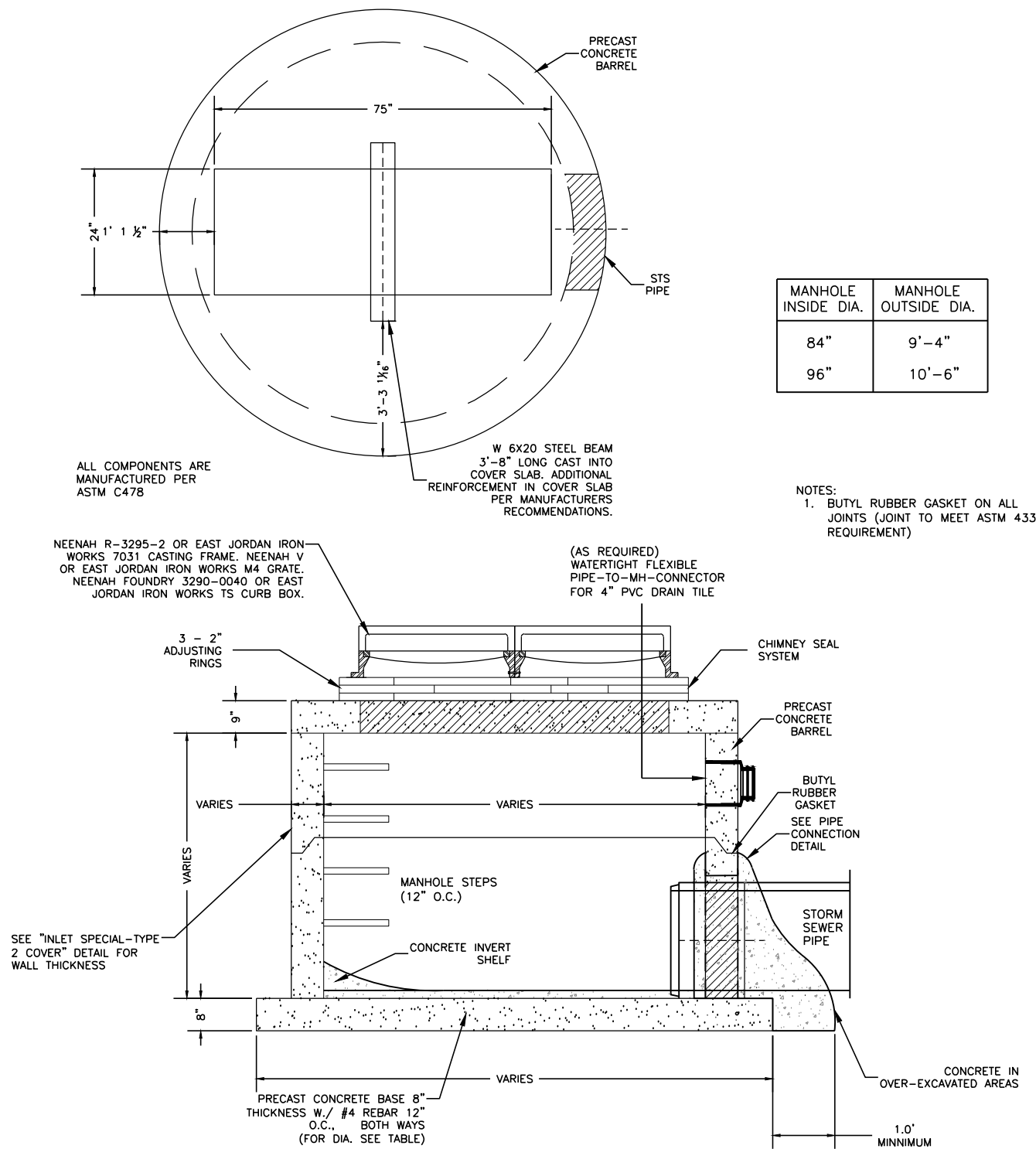
10/22/2025

General Details - Storm Sewer

9th St NE from Main Ave to 12th Ave N
7th Ave NE from 9th St NE to City Limit

H:\JBW\8600\8654\8654_0004-9th St\CAD\0_CITY PROJECT\Plans\020 - WF Standard Details Storm.dwg-Detail (6-10/22/2025 10:45 AM -jerickson)

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	TMA-SU-FXP-8-992(045)	20	26



INLET SPECIAL TYPE 2 DOUBLE

NO SCALE SEE "INLET TYPE 2 DOUBLE" DETAIL FOR INLET SPECIFICATIONS



ALL ELEVATIONS ARE BASED ON
THE U.S.G.S. VERTICAL DATUM OF 1988.
(UNLESS NOTED OTHERWISE)



10/22/2025

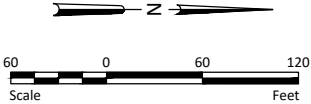
General Details - Storm Sewer

9th St NE from Main Ave to 12th Ave N
7th Ave NE from 9th St NE to City Limit

H:\JBN\8600\8654\8654_0004 9th St CAD\0_CITY PROJECT\Plans\020 - Staging Area.dwg-STAGING-10/22/2025 10:45 AM-[jerricson]



	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	TMA-SU-FXP-8-992(045)	20	27



LEGEND	
10IN NON REINF CONCRETE PVM T CL AE-DOWELED	
SIDEWALK CONCRETE	
DRIVEWAY CONCRETE	
PIGMENTED IMPRINTED CONCRETE	
DETECTABLE WARNING PANELS	
CURB & GUTTER - TYPE I	
DITCH BOTTOM	
RIGHT OF WAY	
EXISTING RIGHT OF WAY	
TEMPORARY RIGHT OF WAY	



ALL ELEVATIONS ARE BASED ON
THE U.S.G.S. VERTICAL DATUM OF 1988.
(UNLESS NOTED OTHERWISE)



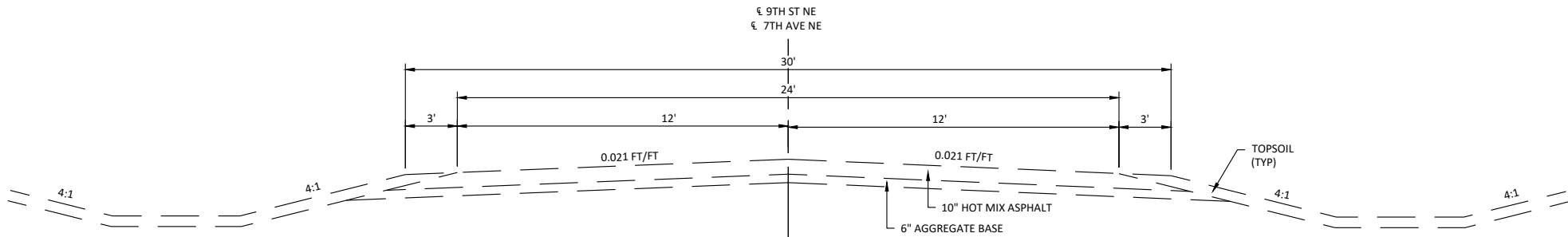
10/22/2025

Staging Area

9th St NE from Main Ave to 12th Ave N
7th Ave NE from 9th St NE to City Limit

H:\JBW\3600\8654_0004 9th St\CAD\0_CITY PROJECT\Plans\030 - Existing Typical Sections.dwg-Ex Typical Section-10/22/2025 10:14 AM-(jerickson)

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	TMA-SU-FXP-8-992(045)	30	1



ALL ELEVATIONS ARE BASED ON
THE U.S.G.S. VERTICAL DATUM OF 1988.
(UNLESS NOTED OTHERWISE)



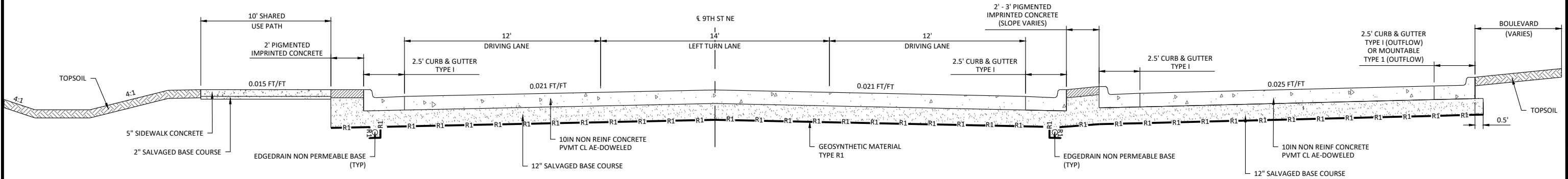
10/22/2025

Existing Typical Sections

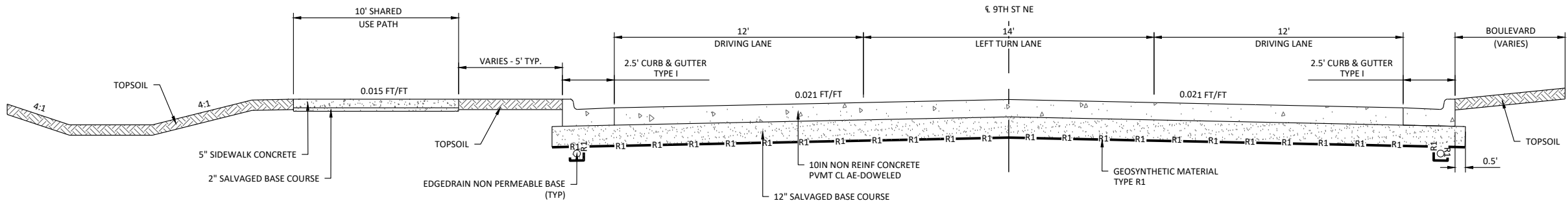
9th St NE from Main Ave to 12th Ave N
7th Ave NE from 9th St NE to City Limit

H:\JBN\3600\8654_0004 9th St\CAD\0_CITY PROJECT\Plans\030 - Proposed Typical Sections.dwg- Typ Sections (J)-10/22/2025 10:14 AM-(jerickson)

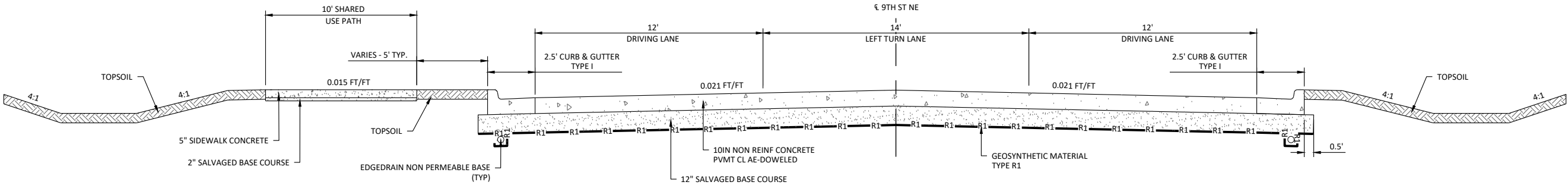
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	TMA-SU-FXP-8-992(045)	30	2



PROPOSED TYPICAL SECTION
NOT TO SCALE
STA 131+63.14 TO STA 143+74.15 (Align: Pr_9thSt)



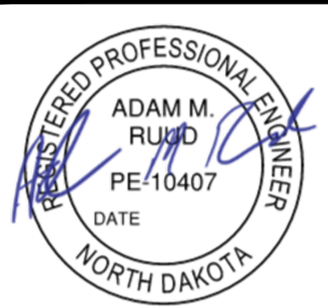
PROPOSED TYPICAL SECTION
NOT TO SCALE
STA 103+64.50 TO STA 107+25.00 (Align: Pr_9thSt)



PROPOSED TYPICAL SECTION
NOT TO SCALE
STA 107+25.00 TO STA 109+00.00 (Align: Pr_9thSt)
STA 145+73.28 TO STA 150+18.25 (Align: Pr_9thSt)



ALL ELEVATIONS ARE BASED ON
THE U.S.G.S. VERTICAL DATUM OF 1988.
(UNLESS NOTED OTHERWISE)



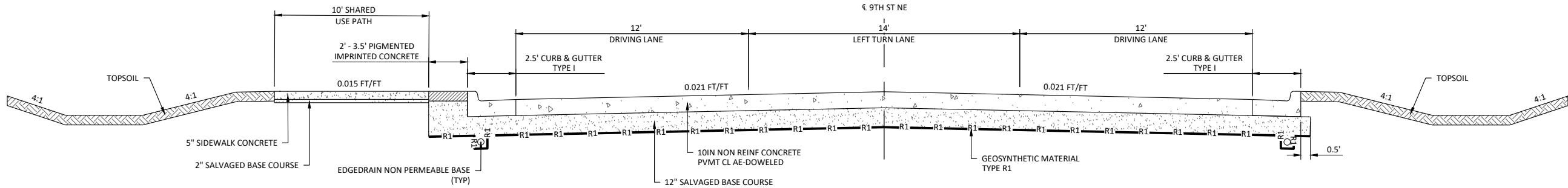
10/22/2025

Proposed Typical Sections

9th St NE from Main Ave to 12th Ave N
7th Ave NE from 9th St NE to City Limit

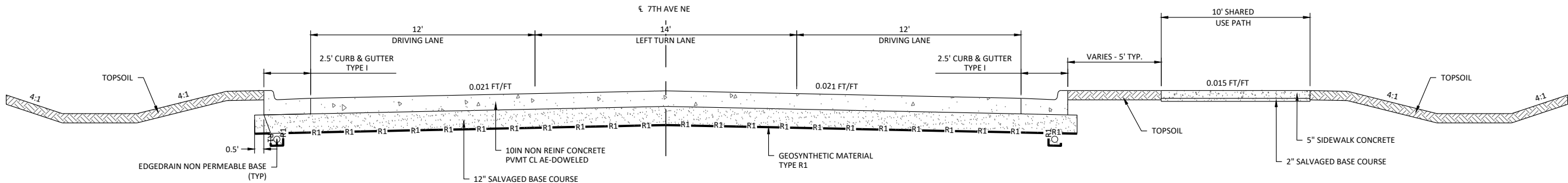
H:\JBW\8600\8654\8654_0004 9th St\CAD\0_CITY PROJECT\Plans\030 - Proposed Typical Sections.dwg:Typ Sections (2)-10/22/2025 10:14 AM-(jerickson)

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	TMA-SU-FXP-8-992(045)	30	3



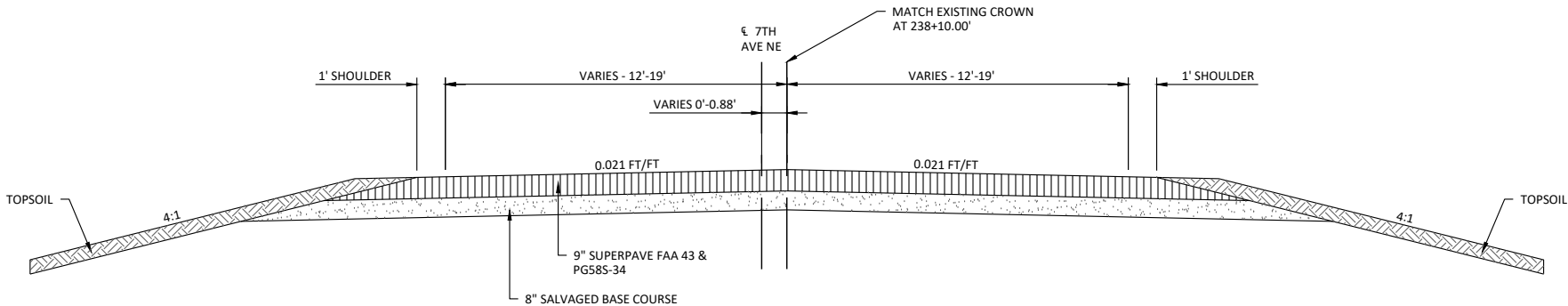
PROPOSED TYPICAL SECTION

NOT TO SCALE
STA 143+74.15 TO STA 145+73.28 (Align: Pr_9thSt)
STA 150+18.25 TO STA 152+24.20 (Align: Pr_9thSt)



PROPOSED TYPICAL SECTION

NOT TO SCALE
STA 213+38.70 TO STA 236+54.71 (Align: Pr_7thAve)



PROPOSED TYPICAL SECTION

NOT TO SCALE
STA 236+54.71 TO STA 238+10.00 (Align: Pr_7thAve)



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(UNLESS NOTED OTHERWISE)



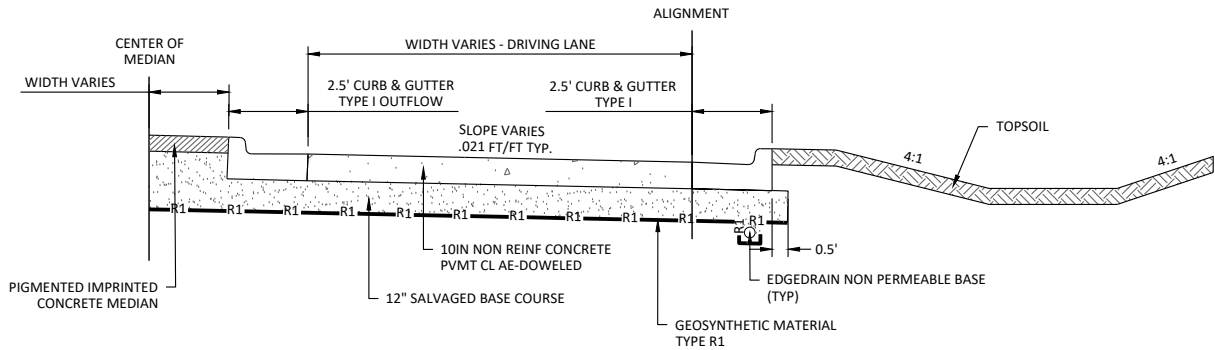
10/22/2025

Proposed Typical Sections

9th St NE from Main Ave to 12th Ave N
7th Ave NE from 9th St NE to City Limit

H:\JBN\3600\8654\8654_0004 9th St\CAD\0_CITY PROJECT\Plans\030 - Proposed Typical Sections.dwg:Typ Sections (4)-10/22/2025 10:14 AM-(jerickson)

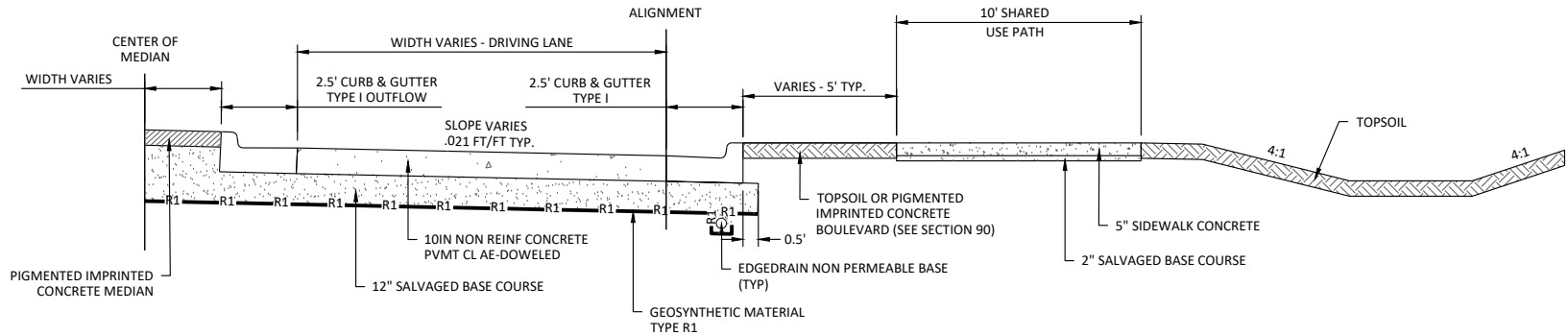
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	TMA-SU-FXP-8-992(045)	30	4



PROPOSED TYPICAL SECTION

NOT TO SCALE

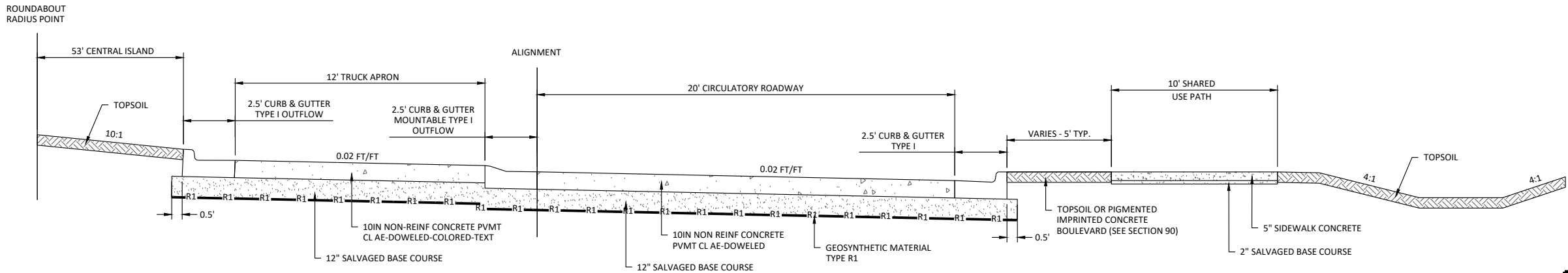
STA 200+00.00 TO STA 202+37.89 (Align: Pr_9th&7th_Roundabout_SW)
STA 301+16.18 TO STA 302+26.48 (Align: Pr_9th&7th_Roundabout_SE)
STA 400+00.00 TO STA 406+16.22 (Align: Pr_9th&7th_Roundabout_NE)
STA 503+83.15 TO STA 506+19.67 (Align: Pr_9th&7th_Roundabout_NW)



PROPOSED TYPICAL SECTION

NOT TO SCALE

STA 202+37.89 TO STA 204+99.22 (Align: Pr_9th&7th_Roundabout_SW)
STA 302+26.48 TO STA 306+02.44 (Align: Pr_9th&7th_Roundabout_SE)
STA 500+00.00 TO STA 503+83.15 (Align: Pr_9th&7th_Roundabout_NW)



PROPOSED TYPICAL SECTION

NOT TO SCALE

STA 100+00.00 TO STA 104+39.82 (Align: Pr_9th&7th_Roundabout_Circle)



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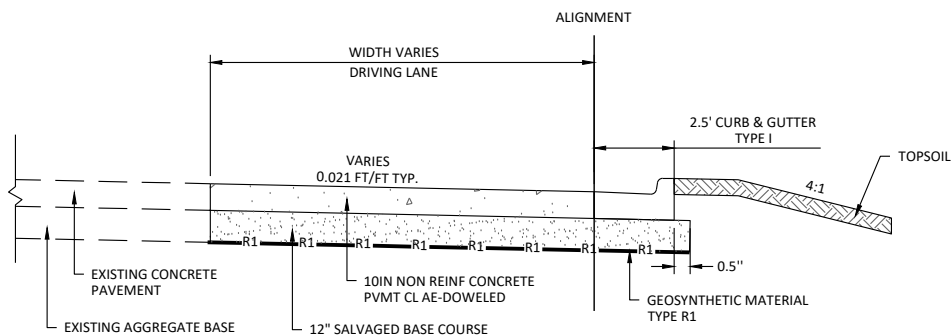
10/22/2025

Proposed Typical Sections

9th St NE from Main Ave to 12th Ave N
7th Ave NE from 9th St NE to City Limit

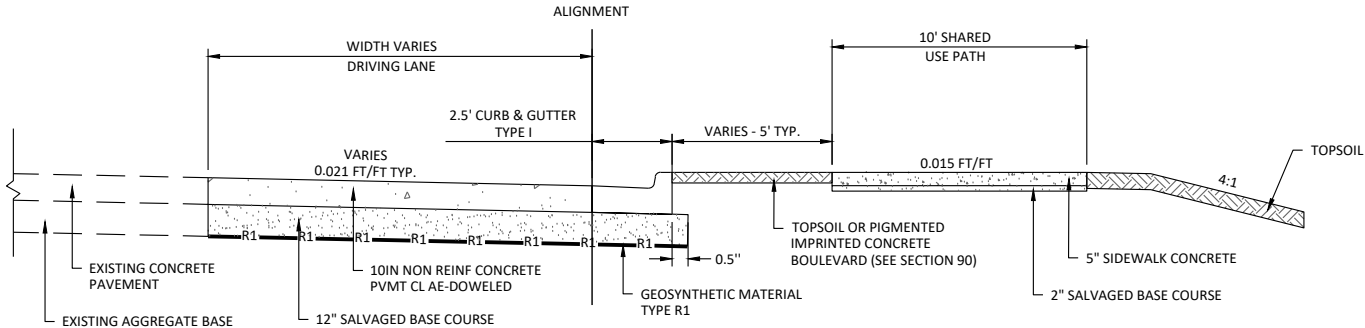
H:\JBN\3600\8654\8654_0004.9th St\CAD\0_CITY PROJECT\Plans\030 - Proposed Typical Sections.dwg:Typ Sections (5/10/22/2025 10:14 AM-[jerickson])

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	TMA-SU-FXP-8-992(045)	30	5



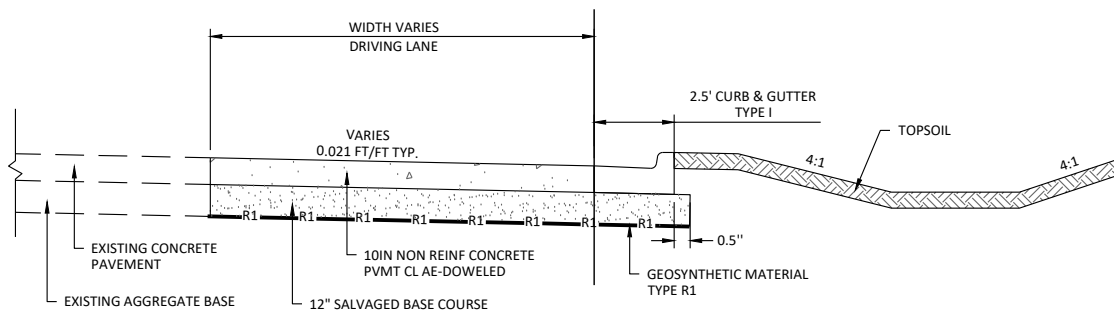
PROPOSED TYPICAL SECTION

NOT TO SCALE
STA 12+00.00 TO STA 16+02.44 (Align: Pr_12thAveRoundabout_SE)
STA 20+00.00 TO STA 24+30.32 (Align: Pr_12thAveRoundabout_NE)
STA 25+79.32 TO STA 26+35.04 (Align: Pr_12thAveRoundabout_NE)
STA 30+00.00 TO STA 32+20.09 (Align: Pr_12thAveRoundabout_NW)
STA 34+35.58 TO STA 37+35.11 (Align: Pr_12thAveRoundabout_NW)
STA 40+00.00 TO STA 41+00.00 (Align: Pr_12thAveRoundabout_SW)



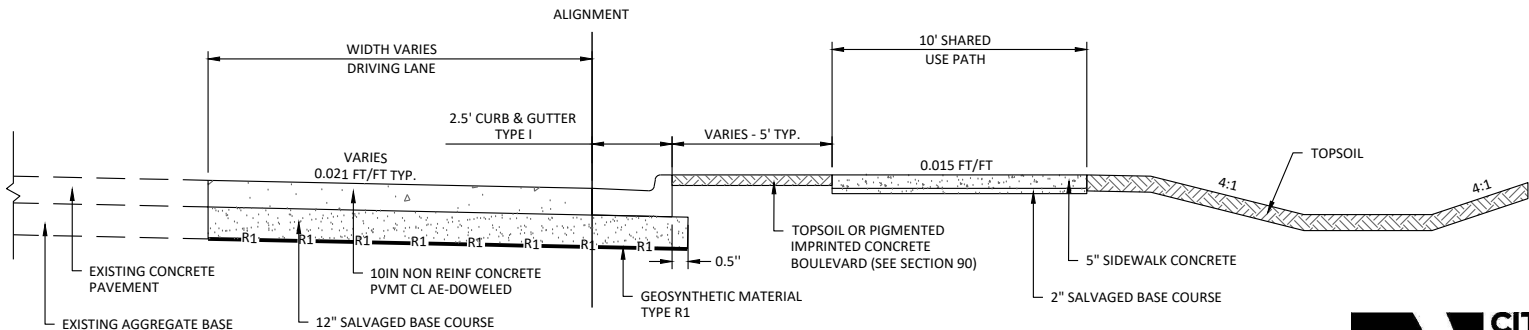
PROPOSED TYPICAL SECTION

NOT TO SCALE
STA 32+20.09 TO STA 34+35.58 (Align: Pr_12thAveRoundabout_NW)



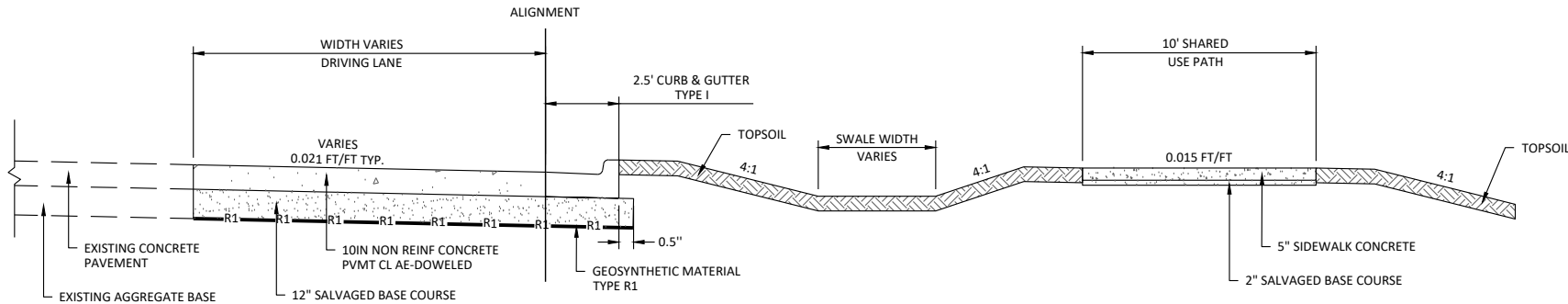
PROPOSED TYPICAL SECTION

NOT TO SCALE
STA 10+23.02 TO STA 12+00.00 (Align: Pr_12thAveRoundabout_SE)
STA 41+00.00 TO STA 42+61.17 (Align: Pr_12thAveRoundabout_SW)



PROPOSED TYPICAL SECTION

NOT TO SCALE
STA 42+61.17 TO STA 44+73.36 (Align: Pr_12thAveRoundabout_SW)



PROPOSED TYPICAL SECTION

NOT TO SCALE
STA 24+30.32 TO STA 25+79.32 (Align: Pr_12thAveRoundabout_NE)



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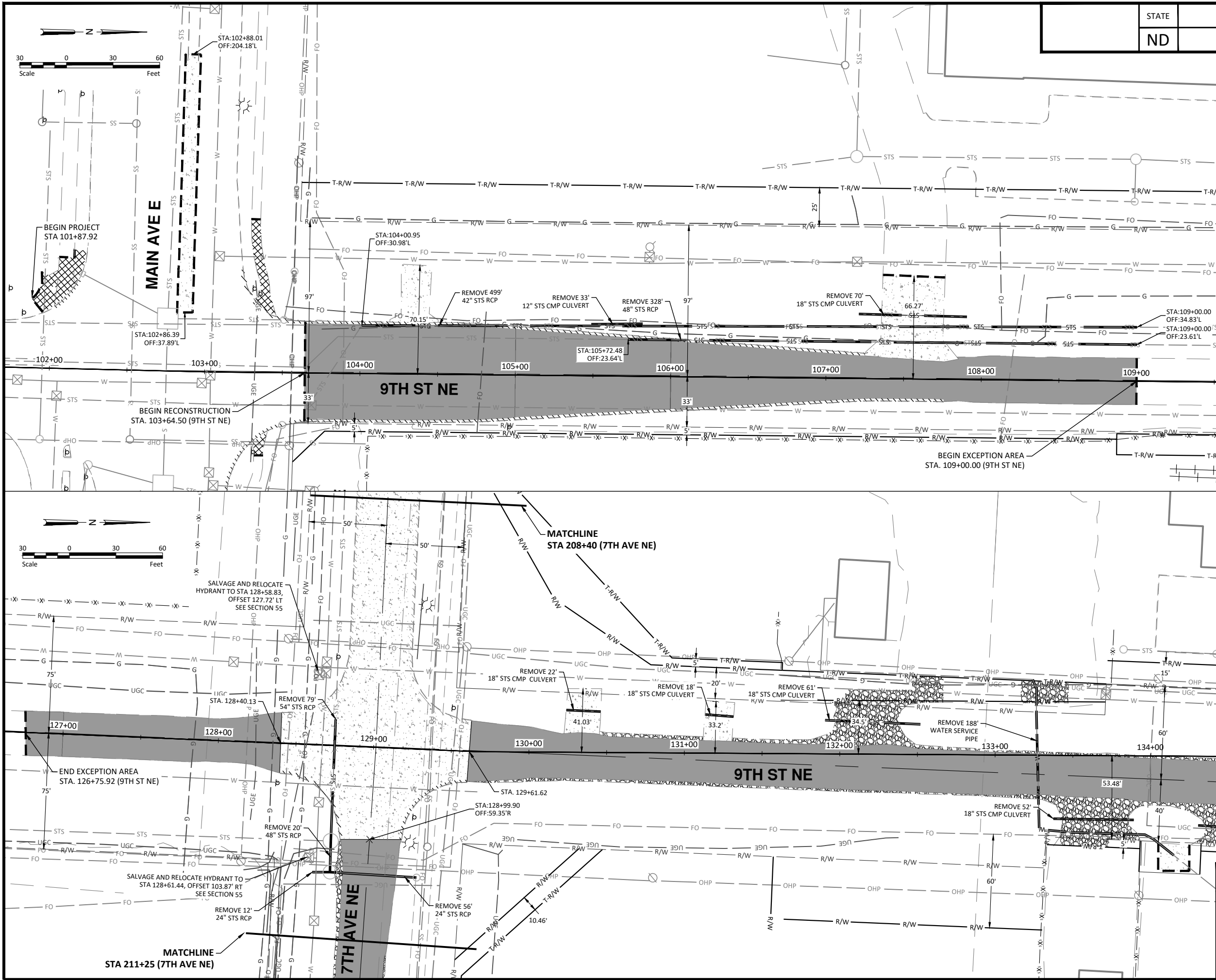


10/22/2025

Proposed Typical Sections

9th St NE from Main Ave to 12th Ave N
7th Ave NE from 9th St NE to City Limit

H:\JBA\8600\8654\8654_0004 9th St NE Removals.dwg-Removal (1-10/22/2025 10:20 AM-jerickson)



STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	TMA-SU-FXP-8-992(045)	40	1

SPEC CODE	BID ITEM	QTY	UNIT
202 0130	REMOVAL OF CURB & GUTTER		
	Sta 101+87.92 to Sta 109+00	940	LF
	Sta 126+75.92 to Sta 134+00	455	LF
202 0136	REMOVAL OF PAVEMENT		
	Sta 103+64.50 to Sta 109+00 (Asphalt)	1398	TON
	Sta 102+81.39 to Sta 109+00 (Concrete)	231	TON
	Sta 103+64.50 to Sta 109+00 (Aggregate Base)	948	TON
	Sta 126+75.92 to Sta 134+00 (Asphalt)	1211	TON
	Sta 126+75.92 to Sta 134+00 (Concrete)	897	TON
	Sta 126+75.92 to Sta 134+00 (Aggregate Base)	1380	TON
202 0174	REMOVAL OF PIPE ALL TYPES AND SIZES		
	Sta 104+00.95 to Sta 109+00	930	LF
	Sta 126+75.92 to Sta 134+00	508	LF

*Stationing is based on 9th St NE alignment

NOTE:
SEE SECTION 80 FOR REMOVAL/RECONSTRUCTION COORDINATE POINTS

REMOVALS	
WATER MAIN	W
SANITARY SEWER MAIN	SS
STORM SEWER MAIN	STS
SAW CUT	---
EXISTING RIGHT OF WAY	R/W
PROPOSED RIGHT OF WAY	R/W
TEMPORARY RIGHT OF WAY	T-R/W
REMOVAL OF CONCRETE CURB & GUTTER	[Hatched Pattern]
REMOVAL OF PAVEMENT (ASPHALT)	[Solid Grey Pattern]
REMOVAL OF PAVEMENT (CONCRETE)	[Dotted Pattern]
REMOVAL OF PAVEMENT (SIDEWALK)	[Cross-hatched Pattern]
REMOVAL OF PAVEMENT (AGGREGATE SURFACING)	[Stippled Pattern]



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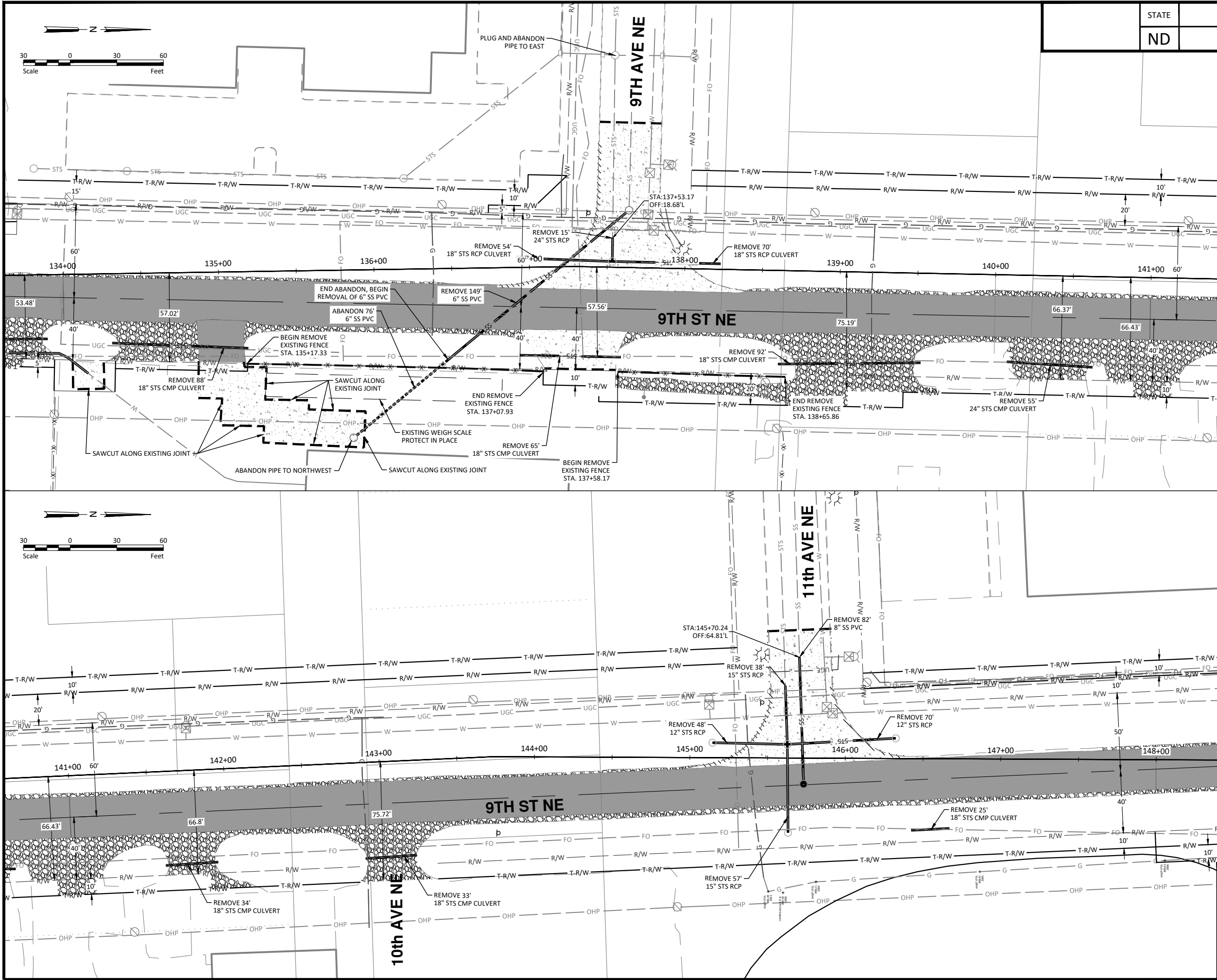


10/22/2025

Removals - 9th St NE

9th St NE from Main Ave to 12th Ave N
7th Ave NE from 9th St NE to City Limit

H:\JBN\8600\8654\8654_0004 9th St NE Removals.dwg-Removal (3)-10/22/2025 10:20 AM-(jerickson)



STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	TMA-SU-FXP-8-992(045)	40	2

SPEC CODE	BID ITEM	QTY	UNIT
202 0130	REMOVAL OF CURB & GUTTER		
	Sta 134+00 to Sta 141+00	255	LF
	Sta 141+00 to Sta 148+00	217	LF
202 0136	REMOVAL OF PAVEMENT		
	Sta 134+00 to Sta 141+00 (Asphalt)	1215	TON
	Sta 134+00 to Sta 141+00 (Concrete)	562	TON
	Sta 134+00 to Sta 141+00 (Aggregate Base)	1420	TON
	Sta 141+00 to Sta 148+00 (Asphalt)	1140	TON
	Sta 141+00 to Sta 148+00 (Concrete)	263	TON
	Sta 141+00 to Sta 148+00 (Aggregate Base)	1013	TON
202 0174	REMOVAL OF PIPE ALL TYPES AND SIZES		
	Sta 134+00 to Sta 141+00	588	LF
	Sta 141+00 to Sta 148+00	387	LF
202 0312	REMOVE EXISTING FENCE		
	Sta 134+00 to Sta 141+00	305	LF

*Stationing is based on 9th St NE alignment

NOTE:

SEE SECTION 80 FOR REMOVAL/RECONSTRUCTION
COORDINATE POINTS

REMOVALS

WATER MAIN	W
SANITARY SEWER MAIN	SS
STORM SEWER MAIN	STS
SAW CUT	
EXISTING RIGHT OF WAY	R/W
PROPOSED RIGHT OF WAY	R/W
TEMPORARY RIGHT OF WAY	T-R/W
REMOVE EXISTING FENCE	X

REMOVAL OF CONCRETE CURB & GUTTER		REMOVAL OF PAVEMENT (SIDEWALK)	
REMOVAL OF PAVEMENT (ASPHALT)		REMOVAL OF PAVEMENT (AGGREGATE SURFACING)	
REMOVAL OF PAVEMENT (CONCRETE)			



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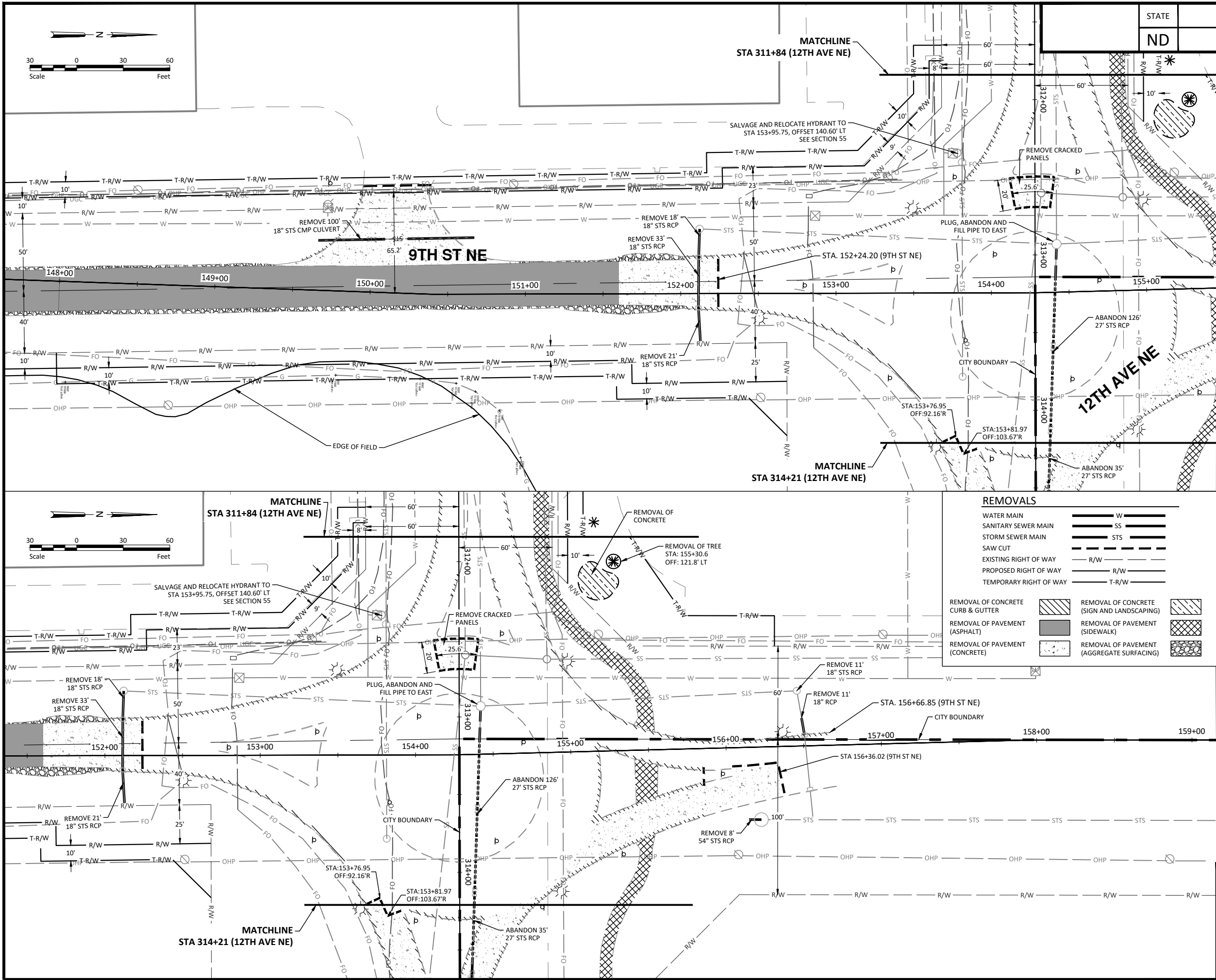


10/22/2025

Removals - 9th St NE

9th St NE from Main Ave to 12th Ave N
7th Ave NE from 9th St NE to City Limit

H:\JBN\3600\8654\8654_0004 9th St NE Removals.dwg-Removal (4-10/22/2025 10:20 AM-jerickson)



STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	TMA-SU-FXP-8-992(045)	40	3

SPEC CODE	BID ITEM	QTY	UNIT
202 0111	REMOVAL OF CONCRETE Sta 155+07 to Sta 155+34	1	LSUM
202 0130	REMOVAL OF CURB & GUTTER Sta 148+00 to Sta 155+00 Sta 155+00 to Sta 158+02.44	681 462	LF LF
202 0136	REMOVAL OF PAVEMENT Sta 148+00 to Sta 155+00 (Asphalt) Sta 148+00 to Sta 155+00 (Concrete) Sta 148+00 to Sta 155+00 (Aggregate Base) Sta 155+00 to Sta 158+02.44 (Concrete) Sta 155+00 to Sta 158+02.44 (Aggregate Base)	595 396 606 204 92	TON TON TON TON TON
202 0174	REMOVAL OF PIPE ALL TYPES AND SIZES Sta 148+00 to Sta 155+00 Sta 155+00 to Sta 158+02.44	172 19	LF LF
722 3297	ABANDON STORM SEWER Sta 148+00 to Sta 155+00	126	LF

*Stationing is based on 9th St NE alignment

NOTE:
SEE SECTION 80 FOR REMOVAL/RECONSTRUCTION
COORDINATE POINTS
INCLUDE ALL COSTS TO REMOVE TREE AT STATION 155+30.6
IN THE PRICE BID FOR "REMOVAL OF TREES AND BRUSH"



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(UNLESS NOTED OTHERWISE)

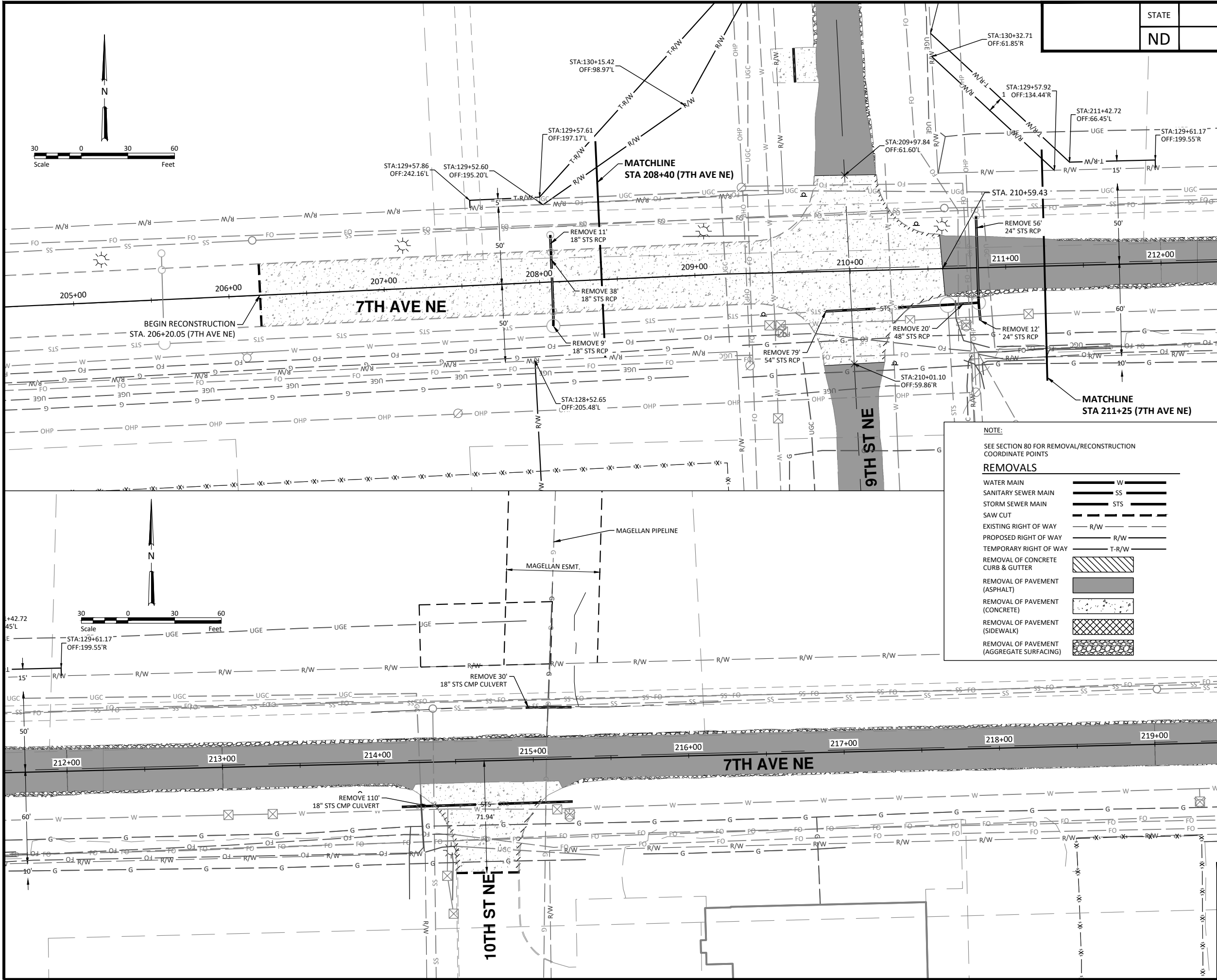


10/22/2025

Removals - 9th St NE

9th St NE from Main Ave to 12th Ave N
7th Ave NE from 9th St NE to City Limit

H:\JBN\8600\8654\8654_0004 9th St CAD\0 CITY PROJECT\Plans\040 - 7th Ave NE Removals.dwg Removal (1)-10/22/2025 10:21 AM (jeridson)



NOTE:
SEE SECTION 80 FOR REMOVAL/RECONSTRUCTION
COORDINATE POINTS

REMOVALS

WATER MAIN	W
SANITARY SEWER MAIN	SS
STORM SEWER MAIN	STS
SAW CUT	
EXISTING RIGHT OF WAY	R/W
PROPOSED RIGHT OF WAY	R/W
TEMPORARY RIGHT OF WAY	T-R/W
REMOVAL OF CONCRETE CURB & GUTTER	
REMOVAL OF PAVEMENT (ASPHALT)	
REMOVAL OF PAVEMENT (CONCRETE)	
REMOVAL OF PAVEMENT (SIDEWALK)	
REMOVAL OF PAVEMENT (AGGREGATE SURFACING)	

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	TMA-SU-FXP-8-992(045)	40	5

SPEC CODE	BID ITEM	QTY	UNIT
202 0130	REMOVAL OF CURB & GUTTER Sta 206+20.05 to Sta 208+40 Sta 212+00 to Sta 219+00	440 100	LF LF
202 0136	REMOVAL OF PAVEMENT Sta 206+20.05 to Sta 208+40 (Concrete) Sta 206+20.05 to Sta 208+40 (Aggregate Base) Sta 211+25 to Sta 212+00 (Asphalt) Sta 211+25 to Sta 212+00 (Aggregate Base) Sta 212+00 to Sta 219+00 (Asphalt) Sta 212+00 to Sta 219+00 (Concrete) Sta 212+00 to Sta 219+00 (Aggregate Base)	500 282 133 85 1163 190 837	TON TON TON TON TON TON TON
202 0174	REMOVAL OF PIPE ALL TYPES AND SIZES Sta 206+20.05 to Sta 208+40 Sta 212+00 to Sta 219+00	59 140	LF LF

*Stationing is based on 7th Ave NE alignment

WARNING
HIGH-PRESSURE PIPELINE(S)
Excavation and/or Construction Prohibited
Without compliance with **State One-Call**, AND
Without Written Permission From
MAGELLAN PIPELINE COMPANY, L.P.
A MAGELLAN REPRESENTATIVE MUST BE PRESENT DURING WORK AROUND PIPELINE(S)



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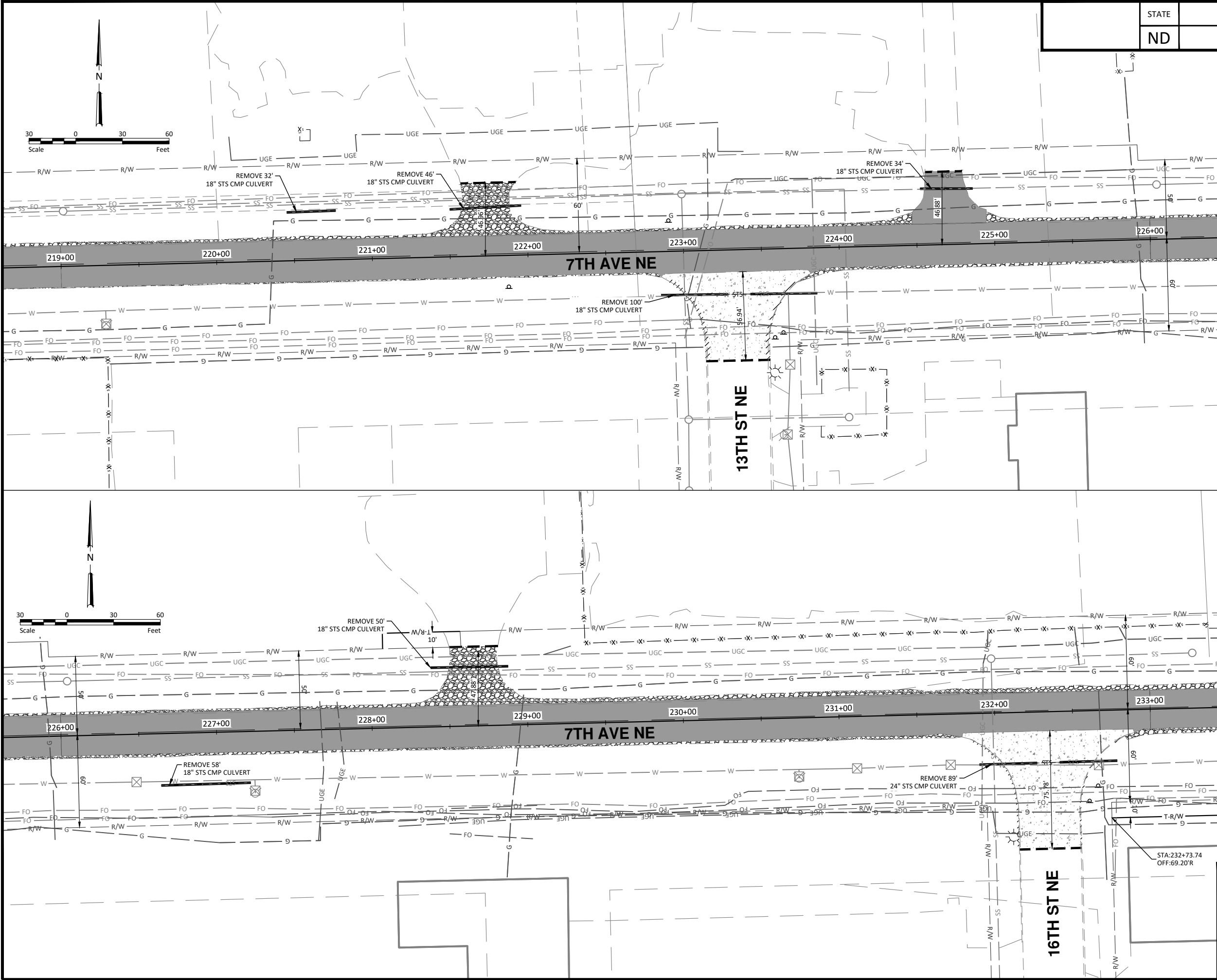


10/22/2025

Removals - 7th Ave NE

9th St NE from Main Ave to 12th Ave N
7th Ave NE from 9th St NE to City Limit

H:\JBN\3600\8654\8654_0004.9th St\CAD\0_CITY PROJECT\Plans\040 - 7th Ave NE Removals.dwg Removal (2)-10/22/2025 10:21 AM (jeridson)



STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	TMA-SU-FXP-8-992(045)	40	6

SPEC CODE	BID ITEM	QTY	UNIT
202 0130	REMOVAL OF CURB & GUTTER Sta 219+00 to Sta 226+00 Sta 226+00 to Sta 233+00	116 169	LF LF
202 0136	REMOVAL OF PAVEMENT Sta 219+00 to Sta 226+00 (Asphalt) Sta 219+00 to Sta 226+00 (Concrete) Sta 219+00 to Sta 226+00 (Aggregate Base) Sta 226+00 to Sta 233+00 (Asphalt) Sta 226+00 to Sta 233+00 (Concrete) Sta 226+00 to Sta 233+00 (Aggregate Base)	1228 180 903 1139 249 923	TON TON TON TON TON TON
202 0174	REMOVAL OF PIPE ALL TYPES AND SIZES Sta 219+00 to Sta 226+00 Sta 226+00 to Sta 233+00	212 197	LF LF

*Stationing is based on 7th Ave NE alignment

NOTE:
SEE SECTION 80 FOR REMOVAL/RECONSTRUCTION
COORDINATE POINTS

REMOVALS	
WATER MAIN	W
SANITARY SEWER MAIN	SS
STORM SEWER MAIN	STS
SAW CUT	
EXISTING RIGHT OF WAY	R/W
PROPOSED RIGHT OF WAY	R/W
TEMPORARY RIGHT OF WAY	T-R/W
REMOVAL OF CONCRETE CURB & GUTTER	
REMOVAL OF PAVEMENT (ASPHALT)	
REMOVAL OF PAVEMENT (CONCRETE)	
REMOVAL OF PAVEMENT (SIDEWALK)	
REMOVAL OF PAVEMENT (AGGREGATE SURFACING)	



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(UNLESS NOTED OTHERWISE)

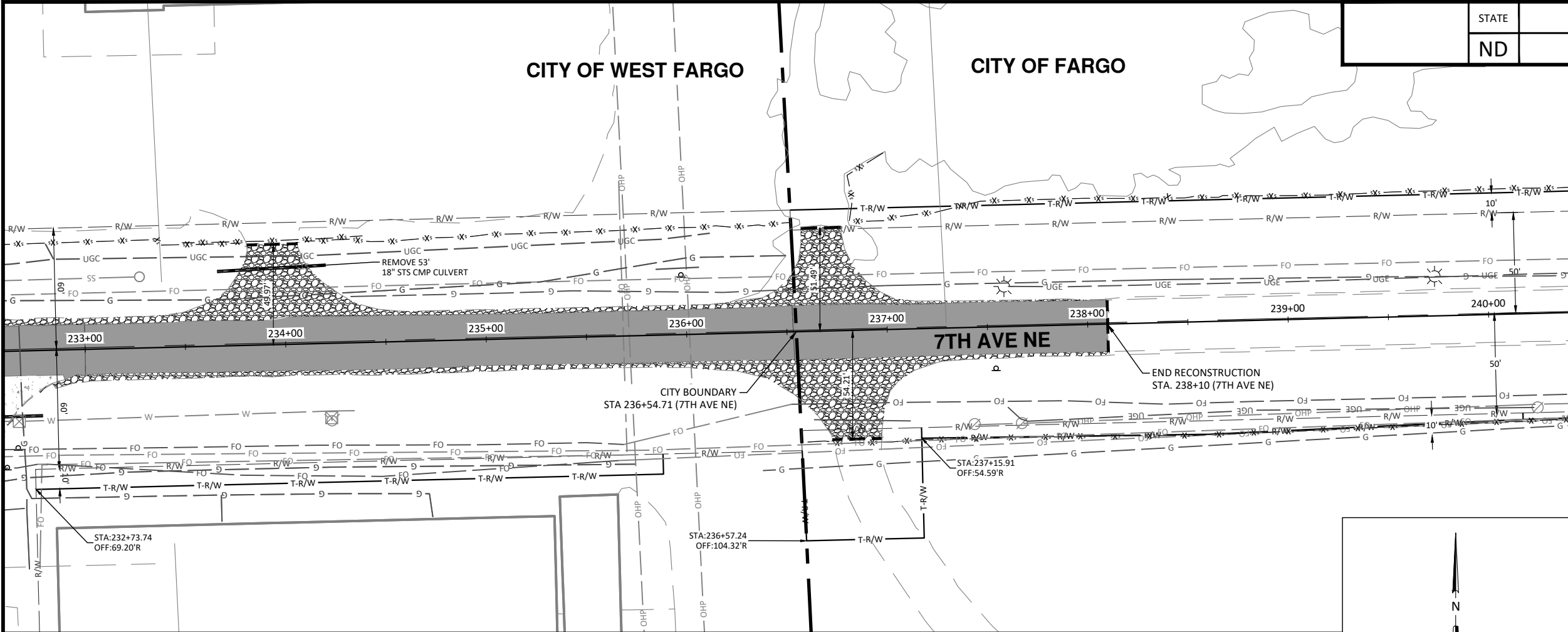


10/22/2025

Removals - 7th Ave NE

9th St NE from Main Ave to 12th Ave N
7th Ave NE from 9th St NE to City Limit

H:\JBW\3600\8654\8654_0004.9th St\CAD\0_CITY PROJECT\Plans\040 - 7th Ave NE Removals.dwg-Removal (3)-10/22/2025 10:21 AM-[jerikson]



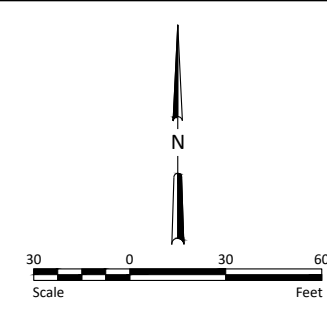
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	TMA-SU-FXP-8-992(045)	40	7

SPEC CODE	BID ITEM	QTY	UNIT
202 0136	REMOVAL OF PAVEMENT		
	Sta 233+00 to Sta 236+54.71 (Asphalt)	566	TON
	Sta 233+00 to Sta 236+54.71 (Aggregate Base)	456	TON
	Sta 236+54.71 to Sta 238+00 (Asphalt)	250	TON
	Sta 236+54.71 to Sta 238+00 (Aggregate Base)	253	TON
202 0174	REMOVAL OF PIPE ALL TYPES AND SIZES		
	Sta 233+00 to Sta 236+54.71	53	LF
*Stationing is based on 7th Ave NE alignment			

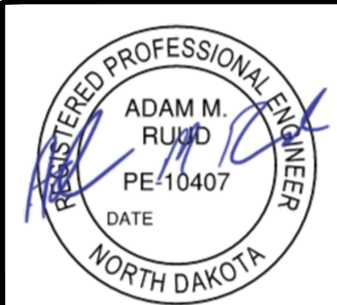
NOTE:
SEE SECTION 80 FOR REMOVAL/RECONSTRUCTION
COORDINATE POINTS

REMOVALS	
WATER MAIN	W
SANITARY SEWER MAIN	SS
STORM SEWER MAIN	STS
SAW CUT	
EXISTING RIGHT OF WAY	R/W
PROPOSED RIGHT OF WAY	R/W
TEMPORARY RIGHT OF WAY	T-R/W
CITY LIMITS	

REMOVAL OF CONCRETE CURB & GUTTER	
REMOVAL OF PAVEMENT (ASPHALT)	
REMOVAL OF PAVEMENT (CONCRETE)	
REMOVAL OF PAVEMENT (SIDEWALK)	
REMOVAL OF PAVEMENT (AGGREGATE SURFACING)	



ALL ELEVATIONS ARE BASED ON
THE U.S.G.S. VERTICAL DATUM OF 1988.
(UNLESS NOTED OTHERWISE)



Removals - 7th Ave NE

9th St NE from Main Ave to 12th Ave N
7th Ave NE from 9th St NE to City Limit

H:\JRN\1960018654_0004_9th St\CAD\0_CITY PROJECT\Plans\050 - Structure & Pipe Tables.dwg-STS-L-10/22/2025 10:31 AM-(bwall)

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	TMA-SU-FXP-8-992(045)	50	1

Structure No. STS-102 Type MANHOLE 72IN Grate Style R-1955-1 Sta. 105+18.84 -23.64L Rim Elev 902.49 Base Thickness 0.67 Riser 7.14 INV NE 894.1 48" RCP INV S 894.1 EX. 48" RCP	Structure No. STS-103 Type MANHOLE 108IN Grate Style R-1733 Sta. 105+67.32 -50.28L Rim Elev 902.4 Base Thickness 1 Riser 6.47 INV N 894.43 60" RCP INV E 897.4 15" RCP INV SW 894.43 48" RCP INV E 896.55 15" RCP	Structure No. STS-103A Type INLET - TYPE 2 DOUBLE Grate Style R-3295-2 Sta. 105+70.00 -33.36L Rim Elev 902.01 Base Thickness 0.67 Riser N/A INV W 897.5 15" RCP INV E 897.5 15" RCP	Structure No. STS-103B Type INLET - TYPE 2 Grate Style R-3067 Sta. 105+70.00 31.36R Rim Elev 901.76 Base Thickness 0.67 Riser N/A INV W 897.76 15" RCP
Structure No. STS-103C Type INLET CATCH BASIN Grate Style R-4342 Sta. 105+70.00 -61.55L Rim Elev 900.65 Base Thickness 0.5 Riser N/A INV W 896.65 15" RCP	Structure No. STS-104 Type INLET SPECIAL CATCH BASIN 96IN Grate Style R-4342 Sta. 108+50.00 -58.36L Rim Elev 902.34 Base Thickness 0.67 Riser N/A INV N 894.29 66" RCP INV S 894.29 60" RCP INV E 898.31 15" RCP	Structure No. STS-104A Type INLET - TYPE 2 Grate Style R-3067 Sta. 108+50.00 -27.5L Rim Elev 903.53 Base Thickness 0.67 Riser N/A INV W 899.21 15" RCP INV E 899.21 15" RCP	Structure No. STS-104B Type INLET - TYPE 2 Grate Style R-3067 Sta. 108+50.08 19.41R Rim Elev 903.41 Base Thickness 0.67 Riser N/A INV W 899.41 15" RCP
Structure No. STS-204 Type MANHOLE 60IN Grate Style R-1955-1 Sta. 127+49.85 -14.67L Rim Elev 900.96 Base Thickness 0.67 Riser 9 INV N 890.59 30" RCP INV W 892 15" RCP INV E 893.2 15" RCP INV S 890.59 30" RCP	Structure No. STS-204A Type INLET CATCH BASIN Grate Style R-4342 Sta. 127+47.12 -67.19L Rim Elev 897.71 Base Thickness 0.5 Riser N/A INV E 893.45 15" RCP	Structure No. STS-204B Type INLET - TYPE 2 Grate Style R-3067 Sta. 127+52.09 -35.72L Rim Elev 899.97 Base Thickness 0.67 Riser N/A INV W 893.3 15" RCP INV W 893.3 15" RCP	Structure No. STS-204C Type INLET - TYPE 2 Grate Style R-3067 Sta. 127+46.33 9.41R Rim Elev 900 Base Thickness 0.67 Riser N/A INV E 892.16 15" RCP INV E 892.16 15" RCP
Structure No. STS-204D Type INLET CATCH BASIN Grate Style R-4342 Sta. 127+47.54 30.18R Rim Elev 896.51 Base Thickness 0.5 Riser N/A INV W 892.26 15" RCP	Structure No. STS-205 Type MANHOLE 108IN Grate Style R-1733 Sta. 128+74.83 -17L Rim Elev 903.1 Base Thickness 1 Riser 12.5 INV N 889.06 48" RCP INV E 889.06 EX. 54" RCP INV E 889.06 54" RCP INV S 890.43 30" RCP	Structure No. STS-206 Type MANHOLE 72IN Grate Style R-1955-1 Sta. 131+55.02 0R Rim Elev 899.96 Base Thickness 0.67 Riser 9.74 INV N 888.97 48" RCP INV W 893.5 15" RCP INV E 892.38 15" RCP INV S 888.97 48" RCP	Structure No. STS-206A Type INLET CATCH BASIN Grate Style R-4342 Sta. 131+52.26 -44.93L Rim Elev 897.73 Base Thickness 0.5 Riser N/A INV E 893.73 15" RCP
Structure No. STS-206B Type INLET - TYPE 2 Grate Style R-3067 Sta. 131+55.58 -20.87L Rim Elev 898.98 Base Thickness 0.67 Riser N/A INV E 893.6 15" RCP INV W 893.6 15" RCP	Structure No. STS-206C Type INLET - TYPE 2 Grate Style R-3067 Sta. 131+56.62 20.77R Rim Elev 898.97 Base Thickness 0.67 Riser N/A INV W 892.5 15" RCP INV W 892.5 15" RCP	Structure No. STS-206D Type INLET CATCH BASIN Grate Style R-4342 Sta. 131+54.52 37.46R Rim Elev 896.58 Base Thickness 0.5 Riser N/A INV E 892.58 15" RCP	Structure No. STS-207 Type MANHOLE 72IN Grate Style R-1955-1 Sta. 132+80.18 0R Rim Elev 898.8 Base Thickness 0.67 Riser 8.64 INV N 888.91 48" RCP INV E 893.75 15" RCP INV W 893.75 15" RCP INV S 888.91 48" RCP

- * FACTORY INSTALL ONE (1) RUBBER BOOTS WITH STAINLESS STEEL CLAMPS FOR DRAIN TILE CONNECTION 2.5' BELOW RIM ELEVATION PER DETAIL ON SHEET 20-23
- ** FACTORY INSTALL TWO (2) RUBBER BOOTS WITH STAINLESS STEEL CLAMPS FOR DRAIN TILE CONNECTION 2.5' BELOW RIM ELEVATION PER DETAIL ON SHEET 20-23
- *** RISER HEIGHTS ARE BASED ON 7" CASTING AND 5" OF ADJUSTING RINGS. VERIFY ACTUAL BUILD HEIGHT FOR STRUCTURE CONSTRUCTION.



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10/22/2025

Inlet and Manhole Summary - Storm

9th St NE from Main Ave to 12th Ave N
7th Ave NE from 9th St NE to City Limit

H:\JBN\1960016654_0004_9th St\CAD\0_City\PROJECT\Plans\050 - Structure & Pipe Tables.dwg-STS-2-10/22/2025 10:31 AM-(bwall)

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	TMA-SU-FXP-8-992(045)	50	2

Structure No. STS-207A Type INLET - TYPE 2 DOUBLE Grate Style R-3295-2 Sta. 132+80.18 -20.5L Rim Elev 898.35 Base Thickness 0.67 Riser N/A INV E 893.85 15" RCP	**	Structure No. STS-207B Type INLET - TYPE 2 Grate Style R-3067 Sta. 132+80.18 20.5R Rim Elev 898.35 Base Thickness 0.67 Riser N/A INV W 893.85 15" RCP	**	Structure No. STS-208 Type MANHOLE 72IN Grate Style R-1955-1 Sta. 133+95.36 0R Rim Elev 899.38 Base Thickness 0.67 Riser 9.28 INV N 888.85 48" RCP INV E 894.9 15" RCP INV S 888.85 48" RCP	***	Structure No. STS-208A Type INLET CATCH BASIN Grate Style R-4342 Sta. 133+95.36 54.47R Rim Elev 899.6 Base Thickness 0.5 Riser N/A INV W 895.1 15" RCP	
Structure No. STS-209 Type MANHOLE 72IN Grate Style R-1955-1 Sta. 135+70.00 0R Rim Elev 899.42 Base Thickness 0.67 Riser 9.4 INV N 888.77 48" RCP INV W 894.37 15" RCP INV E 894.06 15" RCP INV S 888.77 48" RCP	***	Structure No. STS-209A Type INLET - TYPE 2 Grate Style R-3067 Sta. 135+70.00 -20.5L Rim Elev 898.97 Base Thickness 0.67 Riser N/A INV E 894.47 15" RCP	**	Structure No. STS-209B Type INLET - TYPE 2 Grate Style R-3067 Sta. 135+70.00 20.5R Rim Elev 898.97 Base Thickness 0.67 Riser N/A INV W 894.16 15" RCP INV SW 894.16 15" RCP		Structure No. STS-209C Type INLET - TYPE 2 Grate Style R-3067 Sta. 135+66.27 25.5R Rim Elev 898.76 Base Thickness 0.67 Riser N/A INV NE 894.26 15" RCP	
Structure No. STS-210 Type MANHOLE 72IN Grate Style R-1955-1 Sta. 136+66.27 0R Rim Elev 899.9 Base Thickness 0.67 Riser 9.93 INV N 888.72 48" RCP INV S 888.72 48" RCP INV E 893.27 15" RCP	***	Structure No. STS-210A Type INLET CATCH BASIN Grate Style R-4342 Sta. 136+66.27 59.43R Rim Elev 898.04 Base Thickness 0.5 Riser N/A INV W 893.54 15" RCP		Structure No. STS-211 Type MANHOLE 72IN Grate Style R-1955-1 Sta. 137+65.94 0R Rim Elev 900.02 Base Thickness 0.67 Riser 10.1 INV N 888.67 48" RCP INV E 894.44 15" RCP INV S 888.67 48" RCP	***	Structure No. STS-211A Type INLET - TYPE 2 DOUBLE Grate Style R-3295-2 Sta. 137+65.94 25.5R Rim Elev 899.04 Base Thickness 0.67 Riser N/A INV W 894.54 15" RCP	**
Structure No. STS-212 Type MANHOLE 72IN Grate Style R-1955-1 Sta. 138+36.00 0R Rim Elev 899.67 Base Thickness 0.67 Riser 9.79 INV N 888.63 48" RCP INV W 894.6 15" RCP INV E 894.6 15" RCP INV S 888.63 48" RCP	***	Structure No. STS-212A Type INLET - TYPE 2 Grate Style R-3067 Sta. 138+36.00 -20.73L Rim Elev 899.2 Base Thickness 0.67 Riser N/A INV E 894.7 15" RCP	**	Structure No. STS-212B Type INLET - TYPE 2 Grate Style R-3067 Sta. 138+36.00 20.5R Rim Elev 899.22 Base Thickness 0.67 Riser N/A INV W 894.72 15" RCP	**	Structure No. STS-213 Type MANHOLE 84IN Grate Style R-1955-1 Sta. 138+78.32 0R Rim Elev 899.88 Base Thickness 0.67 Riser 10.03 INV N 888.6 48" RCP INV E 893.8 18" RCP INV S 888.6 48" RCP	***
Structure No. STS-214 Type MANHOLE 72IN Grate Style R-1955-1 Sta. 140+05.85 0R Rim Elev 899.46 Base Thickness 0.67 Riser 9.67 INV N 888.54 48" RCP INV E 893.46 15" RCP INV S 888.54 48" RCP	***	Structure No. STS-214A Type INLET CATCH BASIN Grate Style R-4342 Sta. 140+05.44 60.49R Rim Elev 898.01 Base Thickness 0.5 Riser N/A INV W 893.76 15" RCP		Structure No. STS-215 Type MANHOLE 72IN Grate Style R-1955-1 Sta. 141+50.00 0R Rim Elev 898.74 Base Thickness 0.67 Riser 9.02 INV N 888.47 48" RCP INV S 888.47 48" RCP INV E 893.66 15" RCP INV W 893.08 15" RCP	***	Structure No. STS-215A Type INLET CATCH BASIN Grate Style R-4342 Sta. 141+50.00 -43.11L Rim Elev 897.28 Base Thickness 0.5 Riser N/A INV E 893.28 15" RCP	

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10/22/2025

Inlet and Manhole Summary - Storm

9th St NE from Main Ave to 12th Ave N
7th Ave NE from 9th St NE to City Limit

H:\JBN\1960016654_0004_9th St\CAD\0_CITY PROJECT\Plans\050 - Structure & Pipe Tables.dwg-STS-3-10/22/2025 10:31 AM-(dwg1)

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	TMA-SU-FXP-8-992(045)	50	3

Structure No. STS-215B Type INLET - TYPE 2 Grate Style R-3067 Sta. 141+50.00 -20.5L Rim Elev 898.29 Base Thickness 0.67 Riser N/A INV E 893.18 15" RCP INV W 893.18 15" RCP	**	Structure No. STS-215C Type INLET - TYPE 2 Grate Style R-3067 Sta. 141+50.00 20.5R Rim Elev 898.29 Base Thickness 0.67 Riser N/A INV W 893.76 15" RCP INV NE 893.76 15" RCP	**	Structure No. STS-215D Type INLET - TYPE 2 Grate Style R-3067 Sta. 141+53.45 24.5R Rim Elev 898.36 Base Thickness 0.67 Riser N/A INV SW 893.86 15" RCP		Structure No. STS-216 Type MANHOLE 72IN Grate Style R-1955-1 Sta. 142+10.49 0R Rim Elev 899.05 Base Thickness 0.67 Riser 9.36 INV N 888.44 48" RCP INV S 888.44 48" RCP INV E 893.3 15" RCP	***
Structure No. STS-216A Type INLET CATCH BASIN Grate Style R-4342 Sta. 142+10.49 58.8R Rim Elev 897.78 Base Thickness 0.5 Riser N/A INV W 893.53 15" RCP		Structure No. STS-217 Type MANHOLE 84IN Grate Style R-1955-1 Sta. 143+24.32 0R Rim Elev 899.61 Base Thickness 0.67 Riser 9.98 INV N 888.38 48" RCP INV E 890 18" RCP INV S 888.38 48" RCP	***	Structure No. STS-218 Type MANHOLE 72IN Grate Style R-1955-1 Sta. 143+78.69 0R Rim Elev 899.89 Base Thickness 0.67 Riser 10.29 INV N 888.35 48" RCP INV S 888.35 48" RCP INV W 894.84 15" RCP INV E 894.84 15" RCP	***	Structure No. STS-218A Type INLET - TYPE 2 Grate Style R-3067 Sta. 143+78.69 -20.5L Rim Elev 899.44 Base Thickness 0.67 Riser N/A INV E 894.94 15" RCP	**
Structure No. STS-218B Type INLET - TYPE 2 Grate Style R-3067 Sta. 143+78.69 20.5R Rim Elev 899.44 Base Thickness 0.67 Riser N/A INV W 894.94 15" RCP	**	Structure No. STS-219 Type MANHOLE 72IN Grate Style R-1955-1 Sta. 144+50.00 0R Rim Elev 900.24 Base Thickness 0.67 Riser 10.68 INV N 888.31 48" RCP INV E 892.65 15" RCP INV S 888.31 48" RCP	***	Structure No. STS-219A Type INLET CATCH BASIN Grate Style R-4342 Sta. 144+50.00 45.58R Rim Elev 897.35 Base Thickness 0.5 Riser N/A INV W 892.85 15" RCP		Structure No. STS-220 Type MANHOLE 84IN Grate Style R-1955-1 Sta. 145+64.22 0.01R Rim Elev 900.81 Base Thickness 0.67 Riser 11.34 INV N 888.26 54" RCP INV E 890.7 24" RCP INV S 888.26 48" RCP	***
Structure No. STS-221 Type MANHOLE 84IN Grate Style R-1955-1 Sta. 146+80.00 0.02R Rim Elev 900.46 Base Thickness 0.67 Riser 11.05 INV N 888.2 54" RCP INV S 888.2 54" RCP INV E 893.15 15" RCP INV W 894.95 15" RCP	***	Structure No. STS-221A Type INLET CATCH BASIN Grate Style R-4342 Sta. 146+80.00 -44.58L Rim Elev 899.35 Base Thickness 0.5 Riser N/A INV E 895.15 15" RCP		Structure No. STS-221B Type INLET - TYPE 2 Grate Style R-3067 Sta. 146+80.00 -20.5L Rim Elev 900.01 Base Thickness 0.67 Riser N/A INV E 895.05 15" RCP INV W 895.05 15" RCP	**	Structure No. STS-221C Type INLET SPECIAL - TYPE 2 48IN Grate Style R-3067 Sta. 146+80.00 20.24R Rim Elev 900.01 Base Thickness 0.5 Riser N/A INV W 893.25 15" RCP INV E 893.25 15" RCP	**
Structure No. STS-221D Type INLET CATCH BASIN Grate Style R-4342 Sta. 146+80.00 39.8R Rim Elev 897.64 Base Thickness 0.5 Riser N/A INV W 893.35 15" RCP		Structure No. STS-222 Type MANHOLE 84IN Grate Style R-1955-1 Sta. 150+14.49 0R Rim Elev 902.12 Base Thickness 0.67 Riser 12.85 INV N 888.06 54" RCP INV S 888.06 54" RCP	***	Structure No. STS-223 Type MANHOLE 48IN Grate Style R-1733 Sta. 152+12.26 -41.63L Rim Elev 902.95 Base Thickness 0.5 Riser 10.68 INV N 891 EX. 21" RCP INV E 897.7 15" RCP INV W 895.49 15" RCP		Structure No. STS-223A Type INLET CATCH BASIN Grate Style R-4342 Sta. 152+12.12 -61.3L Rim Elev 899.84 Base Thickness 0.5 Riser N/A INV E 895.59 15" RCP	

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10/22/2025

Inlet and Manhole Summary - Storm

9th St NE from Main Ave to 12th Ave N
7th Ave NE from 9th St NE to City Limit

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	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	TMA-SU-FXP-8-992(045)	50	4

Structure No. STS-223B Type INLET - TYPE 2 Grate Style R-3067 Sta. 152+12.15 -32.46L Rim Elev 902.56 Base Thickness 0.67 Riser N/A INV W 897.8 15" RCP INV E 897.8 15" RCP	**	Structure No. STS-223C Type INLET - TYPE 2 Grate Style R-3067 Sta. 152+11.90 26.96R Rim Elev 902.57 Base Thickness 0.67 Riser N/A INV W 898.07 15" RCP	**	Structure No. STS-224 Type INLET SPECIAL - TYPE 2 84IN Grate Style R-3067 Sta. 153+16.04 51.78R Rim Elev 903.35 Base Thickness 0.67 Riser N/A INV NE 887.93 54" RCP INV S 887.93 54" RCP	**	Structure No. STS-225 Type INLET SPECIAL - TYPE 2 84IN Grate Style R-3067 Sta. 153+69.53 122.79R Rim Elev 903.18 Base Thickness 0.67 Riser N/A INV N 887.89 54" RCP INV SW 887.89 54" RCP	**
Structure No. STS-226 Type MANHOLE 84IN Grate Style R-1955-1 Sta. 154+32.50 145.14R Rim Elev 903.28 Base Thickness 0.67 Riser 14.21 INV NE 887.86 54" RCP INV S 887.86 54" RCP INV E 887.86 EX. 27" RCP	***	Structure No. STS-226A Type INLET SPECIAL - TYPE 2 DOUE Grate Style R-3295-2 Sta. 317+13.94 -31.45L Rim Elev 900.52 Base Thickness 0.67 Riser N/A INV S 895 18" RCP INV N 895 EX. 18" RCP	**	Structure No. STS-226B Type INLET - TYPE 2 DOUBLE Grate Style R-3295-2 Sta. 317+13.69 27.5R Rim Elev 900.59 Base Thickness 0.67 Riser N/A INV N 896.8 15" RCP	**	Structure No. STS-227 Type MANHOLE 96IN Grate Style R-1733 Sta. 155+93.12 45.95R Rim Elev 903.13 Base Thickness 0.67 Riser 14.12 INV N 887.8 54" RCP INV SW 887.8 54" RCP	
Structure No. STS-228 Type MANHOLE 48IN Grate Style R-1955-1 Sta. 156+50.72 -6.86L Rim Elev 902.95 Base Thickness 0.5 Riser 5.67 INV W 895.99 18" RCP INV E 899.04 EX. 18" RCP	***	Structure No. STS-228A Type INLET SPECIAL - TYPE 2 48IN Grate Style R-3067 Sta. 156+49.06 -18.16L Rim Elev 902.69 Base Thickness 0.5 Riser N/A INV W 895.64 EX. 18" RCP INV E 895.64 18" RCP	**	Structure No. STS-230 Type MANHOLE 48IN Grate Style R-1733 Sta. 145+61.23 -46.58L Rim Elev 900.59 Base Thickness 0.5 Riser 5.31 INV W 893.97 EX. 15" RCP		Structure No. STS-300 Type INLET SPECIAL CATCH BASIN 84IN Grate Style R-4342 Sta. 207+70.63 28.37R Rim Elev 897.06 Base Thickness 0.67 Riser N/A INV W 889 EX. 54" RCP INV E 889 EX. 54" RCP INV N 892.65 18" RCP	
Structure No. STS-300A Type INLET CATCH BASIN Grate Style R-4342 Sta. 207+67.80 -42.05L Rim Elev 897.06 Base Thickness 0.5 Riser N/A INV S 893.05 15" RCP		Structure No. STS-300B Type INLET SPECIAL - TYPE 2 48IN Grate Style R-3067 Sta. 207+68.41 -26.56L Rim Elev 899.21 Base Thickness 0.5 Riser N/A INV S 892.95 15" RCP INV N 892.95 15" RCP	*	Structure No. STS-300C Type INLET SPECIAL - TYPE 2 48IN Grate Style R-3067 Sta. 207+70.00 15.46R Rim Elev 899.36 Base Thickness 0.5 Riser N/A INV S 892.75 18" RCP INV N 892.75 15" RCP	*	Structure No. STS-301 Type MANHOLE 96IN Grate Style R-1955-1 Sta. 210+62.09 23.35R Rim Elev 900.89 Base Thickness 0.67 Riser 10.6 INV W 889.08 54" RCP INV S 889.08 EX. 42" RCP INV E 889.08 48" RCP	***
Structure No. STS-302 Type MANHOLE 72IN Grate Style R-1955-1 Sta. 211+26.00 10.17R Rim Elev 900.26 Base Thickness 0.67 Riser 9.87 INV W 889.14 48" RCP INV S 895.48 15" RCP INV N 892 15" RCP INV E 889.14 48" RCP	***	Structure No. STS-302A Type INLET CATCH BASIN Grate Style R-4342 Sta. 211+30.36 -52.57L Rim Elev 896.3 Base Thickness 0.5 Riser N/A INV S 892.3 15" RCP		Structure No. STS-302B Type INLET SPECIAL - TYPE 2 48IN Grate Style R-3067 Sta. 211+28.47 -30.14L Rim Elev 900.09 Base Thickness 0.5 Riser N/A INV S 892.2 15" RCP INV N 892.2 15" RCP	**	Structure No. STS-302C Type INLET - TYPE 2 Grate Style R-3067 Sta. 211+26.45 17.66R Rim Elev 900.08 Base Thickness 0.67 Riser N/A INV N 895.58 15" RCP	**

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10/22/2025

Inlet and Manhole Summary - Storm

9th St NE from Main Ave to 12th Ave N
7th Ave NE from 9th St NE to City Limit

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	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	TMA-SU-FXP-8-992(045)	50	5

Structure No. STS-303 Type MANHOLE 72IN Grate Style R-1955-1 Sta. 211+88.47 9.97R Rim Elev 900.58 Base Thickness 0.67 Riser 10.14 INV W 889.19 48" RCP INV S 893.23 15" RCP INV N 895.7 15" RCP INV E 889.19 42" RCP	***	Structure No. STS-303A Type INLET - TYPE 2 Grate Style R-3067 Sta. 211+91.08 -23.69L Rim Elev 900.4 Base Thickness 0.67 Riser N/A INV S 895.9 15" RCP	**	Structure No. STS-303B Type INLET SPECIAL - TYPE 2 48IN Grate Style R-3067 Sta. 211+88.27 17.34R Rim Elev 900.39 Base Thickness 0.5 Riser N/A INV N 893.33 15" RCP INV S 893.33 15" RCP	**	Structure No. STS-303C Type INLET CATCH BASIN Grate Style R-4342 Sta. 211+95.15 49.88R Rim Elev 897.53 Base Thickness 0.5 Riser N/A INV N 893.53 15" RCP	
Structure No. STS-304 Type MANHOLE 84IN Grate Style R-1955-1 Sta. 214+59.60 12.31R Rim Elev 900.77 Base Thickness 0.67 Riser 10.07 INV W 889.41 42" RCP INV E 889.41 51"x31" RCPA	***	Structure No. STS-305 Type MANHOLE 72IN Grate Style R-1955-1 Sta. 215+39.59 13R Rim Elev 900.32 Base Thickness 0.67 Riser 9.55 INV W 889.48 51"x31" RCPA INV N 895.44 15" RCP INV S 895.54 15" RCP INV E 889.48 42" RCP	***	Structure No. STS-305A Type INLET - TYPE 2 Grate Style R-3067 Sta. 215+39.59 -20.5L Rim Elev 900.14 Base Thickness 0.67 Riser N/A INV S 895.64 15" RCP	**	Structure No. STS-305B Type INLET - TYPE 2 Grate Style R-3067 Sta. 215+39.59 20.5R Rim Elev 900.14 Base Thickness 0.67 Riser N/A INV N 895.64 15" RCP	
Structure No. STS-306 Type MANHOLE 72IN Grate Style R-1955-1 Sta. 217+00.00 13R Rim Elev 899.51 Base Thickness 0.67 Riser 8.58 INV W 889.64 42" RCP INV S 894.27 15" RCP INV N 892.36 18" RCP INV E 889.64 42" RCP	***	Structure No. STS-306A Type INLET CATCH BASIN Grate Style R-4342 Sta. 217+00.00 -38.05L Rim Elev 896.66 Base Thickness 0.5 Riser N/A INV S 892.66 18" RCP		Structure No. STS-306B Type INLET SPECIAL - TYPE 2 48IN Grate Style R-3067 Sta. 217+00.00 -20.24L Rim Elev 899.33 Base Thickness 0.5 Riser N/A INV S 892.56 18" RCP INV N 892.56 18" RCP	**	Structure No. STS-306C Type INLET - TYPE 2 Grate Style R-3067 Sta. 217+00.00 20.5R Rim Elev 899.33 Base Thickness 0.67 Riser N/A INV N 894.37 15" RCP INV S 894.37 15" RCP	
Structure No. STS-306D Type INLET CATCH BASIN Grate Style R-4342 Sta. 217+00.00 43.54R Rim Elev 898.47 Base Thickness 0.5 Riser N/A INV N 894.47 15" RCP		Structure No. STS-307 Type MANHOLE 72IN Grate Style R-1955-1 Sta. 219+39.47 13R Rim Elev 900.71 Base Thickness 0.67 Riser 9.55 INV W 889.87 42" RCP INV S 896.2 15" RCP INV E 889.87 42" RCP	***	Structure No. STS-307A Type MANHOLE 48IN Grate Style R-1733 Sta. 219+39.47 38.25R Rim Elev 900.36 Base Thickness 0.5 Riser 2.65 INV N 896.4 15" RCP INV S 896.8 12" RCP	***	Structure No. STS-308 Type MANHOLE 72IN Grate Style R-1955-1 Sta. 221+00.00 13R Rim Elev 900.8 Base Thickness 0.67 Riser 9.49 INV W 890.02 42" RCP INV E 890.02 42" RCP INV N 893.75 15" RCP	
Structure No. STS-308A Type INLET CATCH BASIN Grate Style R-4342 Sta. 221+00.00 -39.81L Rim Elev 898 Base Thickness 0.5 Riser N/A INV S 894 15" RCP		Structure No. STS-309 Type MANHOLE 72IN Grate Style R-1955-1 Sta. 222+00.00 13R Rim Elev 900.3 Base Thickness 0.67 Riser 8.89 INV W 890.12 42" RCP INV S 895.52 15" RCP INV N 895.42 15" RCP INV E 890.12 36" RCP	***	Structure No. STS-309A Type INLET - TYPE 2 Grate Style R-3067 Sta. 222+00.00 -20.5L Rim Elev 900.12 Base Thickness 0.67 Riser N/A INV S 895.62 15" RCP	**	Structure No. STS-309B Type INLET - TYPE 2 Grate Style R-3067 Sta. 222+00.00 20.5R Rim Elev 900.12 Base Thickness 0.67 Riser N/A INV N 895.62 15" RCP	**

- * FACTORY INSTALL ONE (1) RUBBER BOOTS WITH STAINLESS STEEL CLAMPS FOR DRAIN TILE CONNECTION 2.5' BELOW RIM ELEVATION PER DETAIL ON SHEET 20-23
- ** FACTORY INSTALL TWO (2) RUBBER BOOTS WITH STAINLESS STEEL CLAMPS FOR DRAIN TILE CONNECTION 2.5' BELOW RIM ELEVATION PER DETAIL ON SHEET 20-23
- *** RISER HEIGHTS ARE BASED ON 7" CASTING AND 5" OF ADJUSTING RINGS. VERIFY ACTUAL BUILD HEIGHT FOR STRUCTURE CONSTRUCTION.



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10/22/2025

Inlet and Manhole Summary - Storm

9th St NE from Main Ave to 12th Ave N
7th Ave NE from 9th St NE to City Limit

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	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	TMA-SU-FXP-8-992(045)	50	6

Structure No. STS-310 Type MANHOLE 60IN Grate Style R-1955-1 Sta. 224+20.50 13R Rim Elev 899.19 Base Thickness 0.67 Riser 7.5 INV W 890.36 36" RCP INV N 893.5 15" RCP INV S 893.99 15" RCP INV E 890.36 36" RCP	***	Structure No. STS-310A Type INLET CATCH BASIN Grate Style R-4342 Sta. 224+20.50 -34.2L Rim Elev 897.3 Base Thickness 0.5 Riser N/A INV S 893.8 15" RCP		Structure No. STS-310B Type INLET - TYPE 2 Grate Style R-3067 Sta. 224+20.50 -20.5L Rim Elev 899.01 Base Thickness 0.67 Riser N/A INV S 893.7 15" RCP INV N 893.7 15" RCP	**	Structure No. STS-310C Type INLET - TYPE 2 Grate Style R-3067 Sta. 224+20.50 20.5R Rim Elev 899.01 Base Thickness 0.67 Riser N/A INV N 894.09 15" RCP INV S 894.09 15" RCP	**
Structure No. STS-310D Type INLET CATCH BASIN Grate Style R-4342 Sta. 224+20.50 43.71R Rim Elev 898.19 Base Thickness 0.5 Riser N/A INV N 894.19 15" RCP		Structure No. STS-311 Type MANHOLE 60IN Grate Style R-1955-1 Sta. 225+50.00 13R Rim Elev 899.84 Base Thickness 0.67 Riser 8.01 INV W 890.5 36" RCP INV N 893.07 15" RCP INV S 895.06 15" RCP INV E 890.5 30" RCP	***	Structure No. STS-311A Type INLET CATCH BASIN Grate Style R-4342 Sta. 225+50.00 -36.75L Rim Elev 897.37 Base Thickness 0.5 Riser N/A INV S 893.37 15" RCP		Structure No. STS-311B Type INLET SPECIAL - TYPE 2 48IN Grate Style R-3067 Sta. 225+50.00 -20.24L Rim Elev 899.66 Base Thickness 0.5 Riser N/A INV S 893.27 15" RCP INV N 893.27 15" RCP	**
Structure No. STS-311C Type INLET - TYPE 2 Grate Style R-3067 Sta. 225+50.00 20.5R Rim Elev 899.66 Base Thickness 0.67 Riser N/A INV N 895.16 15" RCP	**	Structure No. STS-312 Type MANHOLE 60IN Grate Style R-1955-1 Sta. 228+00.00 13R Rim Elev 899.69 Base Thickness 0.67 Riser 7.27 INV W 891.05 30" RCP INV E 891.05 30" RCP INV N 894.81 15" RCP INV S 894.91 15" RCP	***	Structure No. STS-312B Type INLET - TYPE 2 Grate Style R-3067 Sta. 228+00.00 -20.5L Rim Elev 899.51 Base Thickness 0.67 Riser N/A INV S 895.01 15" RCP	**	Structure No. STS-312C Type INLET - TYPE 2 Grate Style R-3067 Sta. 228+00.00 20.5R Rim Elev 899.51 Base Thickness 0.67 Riser N/A INV N 895.01 15" RCP	**
Structure No. STS-313 Type MANHOLE 60IN Grate Style R-1955-1 Sta. 229+32.00 13R Rim Elev 899.03 Base Thickness 0.67 Riser 6.4 INV W 891.25 30" RCP INV E 891.25 30" RCP INV N 894.15 15" RCP INV S 893.8 15" RCP	***	Structure No. STS-313A Type INLET - TYPE 2 Grate Style R-3067 Sta. 229+32.00 -20.5L Rim Elev 898.85 Base Thickness 0.67 Riser N/A INV S 894.35 15" RCP	**	Structure No. STS-313B Type INLET - TYPE 2 Grate Style R-3067 Sta. 229+32.00 20.5R Rim Elev 898.85 Base Thickness 0.67 Riser N/A INV N 893.9 15" RCP INV S 893.9 15" RCP	**	Structure No. STS-313C Type INLET CATCH BASIN Grate Style R-4342 Sta. 229+32.00 46.86R Rim Elev 898 Base Thickness 0.5 Riser N/A INV N 894 15" RCP	
Structure No. STS-314 Type MANHOLE 60IN Grate Style R-1955-1 Sta. 230+50.00 13R Rim Elev 899.62 Base Thickness 0.67 Riser 6.82 INV W 891.43 30" RCP INV N 891.43 18" RCP INV S 894.84 15" RCP INV E 891.63 24" RCP	***	Structure No. STS-314A Type INLET CATCH BASIN Grate Style R-4342 Sta. 230+50.00 -37.56L Rim Elev 897.67 Base Thickness 0.5 Riser N/A INV S 891.58 18" RCP INV N 891.58 18" RCP		Structure No. STS-314B Type INLET SPECIAL - TYPE 2 48IN Grate Style R-3067 Sta. 230+50.00 -20.24L Rim Elev 899.45 Base Thickness 0.5 Riser N/A INV S 891.53 18" RCP INV N 891.53 18" RCP	**	Structure No. STS-314C Type INLET - TYPE 2 Grate Style R-3067 Sta. 230+50.00 20.5R Rim Elev 899.44 Base Thickness 0.67 Riser N/A INV N 894.94 15" RCP	**

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10/22/2025

Inlet and Manhole Summary - Storm

9th St NE from Main Ave to 12th Ave N
7th Ave NE from 9th St NE to City Limit

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	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	TMA-SU-FXP-8-992(045)	50	7

Structure No. STS-315 Type MANHOLE 60IN Grate Style R-1955-1 Sta. 233+03.20 13R Rim Elev 900.89 Base Thickness 0.67 Riser 7.4	***	Structure No. STS-315A Type INLET CATCH BASIN Grate Style R-4342 Sta. 233+03.20 -39.01L Rim Elev 897.8 Base Thickness 0.5 Riser N/A	Structure No. STS-315B Type INLET SPECIAL - TYPE 2 48IN Grate Style R-3067 Sta. 233+03.20 -20.24L Rim Elev 900.72 Base Thickness 0.5 Riser N/A	Structure No. STS-315C Type INLET - TYPE 2 Grate Style R-3067 Sta. 233+03.21 20.5R Rim Elev 900.72 Base Thickness 0.67 Riser N/A	**
INV W 892.07 24" RCP INV N 892.07 18" RCP INV S 896.12 15" RCP INV E 892.27 18" RCP		INV S 892.23 18" RCP INV N 892.23 18" RCP	INV S 892.17 18" RCP INV N 892.17 18" RCP	INV N 896.22 15" RCP	
Structure No. STS-316 Type MANHOLE 48IN Grate Style R-1955-1 Sta. 235+50.00 13R Rim Elev 903.13 Base Thickness 0.5 Riser 8.66	***	Structure No. STS-316A Type INLET CATCH BASIN Grate Style R-4342 Sta. 235+75.00 -48.18L Rim Elev 897.45 Base Thickness 0.5 Riser N/A	Structure No. STS-316B Type INLET CATCH BASIN Grate Style R-4342 Sta. 236+00.00 59.63R Rim Elev 897.55 Base Thickness 0.5 Riser N/A		
INV W 893.18 18" RCP INV SW 893.18 15" RCP INV N 893.18 15" RCP		INV S 893.45 15" RCP	INV NE 893.55 15" RCP		

- * FACTORY INSTALL ONE (1) RUBBER BOOTS WITH STAINLESS STEEL CLAMPS FOR DRAIN TILE CONNECTION 2.5' BELOW RIM ELEVATION PER DETAIL ON SHEET 20-23
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10/22/2025

Inlet and Manhole Summary - Storm

9th St NE from Main Ave to 12th Ave N
7th Ave NE from 9th St NE to City Limit

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	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	TMA-SU-FXP-8-992(045)	50	8

Storm Sewer Pipe Schedule				
Pipe	Description	Length	Slope	
STS-102 to STS-103	48" RCP	55.32'	-0.59%	
STS-103 to STS-104	60" RCP	282.79'	0.05%	
STS-103A to STS-103	15" RCP	17.13'	0.58%	
STS-103B to STS-103A	15" RCP	64.72'	0.40%	
STS-103C to STS-103	15" RCP	11.58'	0.86%	
STS-104 to CONNECT TO 66IN	66" RCP	50.00'	0.05%	
STS-104A to STS-104	15" RCP	30.86'	2.93%	
STS-104B to STS-104A	15" RCP	46.91'	0.43%	
STS-204 to STS-205	30" RCP	125.00'	0.13%	
STS-204A to STS-204B	15" RCP	31.86'	0.47%	
30IN PLUG to STS-204	30" RCP	74.60'	0.22%	
STS-204B to STS-204	15" RCP	21.17'	0.47%	
STS-204C to STS-204	15" RCP	24.34'	0.66%	
STS-204D to STS-204C	15" RCP	20.80'	0.48%	
STS-206 to STS-207	48" RCP	125.16'	0.05%	
STS-206A to STS-206B	15" RCP	24.29'	0.54%	
STS-206B to STS-206	15" RCP	20.88'	0.48%	
STS-206C to STS-206	15" RCP	20.83'	0.58%	
STS-206D to STS-206C	15" RCP	16.83'	0.48%	
STS-207 to STS-208	48" RCP	115.17'	0.05%	
STS-207A to STS-207	15" RCP	20.50'	0.49%	
STS-207B to STS-207	15" RCP	20.50'	0.49%	
STS-208 to STS-209	48" RCP	174.64'	0.05%	
STS-208A to STS-208	15" RCP	54.47'	0.37%	
STS-209 to STS-210	48" RCP	96.27'	0.05%	
STS-209A to STS-209	15" RCP	20.50'	0.49%	
STS-209B to STS-209	15" RCP	20.50'	0.49%	
STS-209C to STS-209B	15" RCP	6.24'	1.60%	
STS-210 to STS-211	48" RCP	99.65'	0.05%	
STS-210A to STS-210	15" RCP	59.43'	0.45%	
STS-211 to STS-212	48" RCP	70.06'	0.06%	
STS-211A to STS-211	15" RCP	25.50'	0.39%	
STS-212 to STS-213	48" RCP	42.32'	0.07%	
STS-212A to STS-212	15" RCP	20.73'	0.48%	
STS-212B to STS-212	15" RCP	20.50'	0.59%	
STS-213 to STS-214	48" RCP	127.53'	0.05%	
STS-213A to STS-213	18" RCP	78.66'	0.25%	
STS-214 to STS-215	48" RCP	144.15'	0.05%	
STS-214A to STS-214	15" RCP	60.49'	0.50%	
STS-215 to STS-216	48" RCP	60.49'	0.05%	
STS-215A to STS-215B	15" RCP	22.61'	0.44%	
STS-215B to STS-215	15" RCP	20.50'	0.49%	
STS-215C to STS-215	15" RCP	20.50'	0.49%	

Storm Sewer Pipe Schedule				
Pipe	Description	Length	Slope	
STS-215D to STS-215C	15" RCP	5.28'	1.89%	
STS-216 to STS-217	48" RCP	113.83'	0.05%	
STS-216A to STS-216	15" RCP	58.80'	0.39%	
STS-217 to STS-218	48" RCP	54.37'	0.06%	
STS-217A to STS-217	18" RCP	73.82'	0.28%	
STS-218 to STS-219	48" RCP	71.31'	0.06%	
STS-218A to STS-218	15" RCP	20.50'	0.49%	
STS-218B to STS-218	15" RCP	20.50'	0.49%	
STS-219 to STS-220	48" RCP	114.22'	0.05%	
STS-219A to STS-219	15" RCP	45.58'	0.44%	
STS-220 to STS-221	54" RCP	115.78'	0.05%	
STS-220A to STS-220	24" RCP	59.56'	0.20%	
STS-221 to STS-222	54" RCP	334.49'	0.04%	
STS-221A to STS-221B	15" RCP	24.08'	0.42%	
STS-221B to STS-221	15" RCP	20.51'	0.49%	
STS-221C to STS-221	15" RCP	20.22'	0.49%	
STS-221D to STS-221C	15" RCP	19.56'	0.51%	
STS-222 to STS-224	54" RCP	306.10'	0.04%	
STS-223A to STS-223	15" RCP	19.67'	0.51%	
STS-223B to STS-223	15" RCP	9.16'	1.09%	
STS-223C to STS-223B	15" RCP	59.42'	0.45%	
STS-224 to STS-225	54" RCP	88.91'	0.04%	
STS-225 to STS-226	54" RCP	69.98'	0.04%	
STS-226 to STS-227	54" RCP	188.78'	0.03%	
STS-226A to CONNECT TO EX. 18IN	18" RCP	10.24'	0.98%	
STS-226B to CONNECT TO EX. 15IN	15" RCP	6.00'	0.50%	
STS-227 to STS-227A	54" RCP	28.47'	0.07%	
STS-228 to STS-228A	18" RCP	11.42'	3.06%	
STS-300A to STS-300B	15" RCP	15.51'	0.64%	
STS-300B to STS-300C	15" RCP	42.04'	0.48%	
STS-300C to STS-300	18" RCP	12.92'	0.77%	
STS-301 to STS-205	54" RCP	78.45'	0.02%	
STS-302 to STS-301	48" RCP	65.25'	0.09%	
STS-302A to STS-302B	15" RCP	22.51'	0.44%	
STS-302B to STS-302	15" RCP	40.39'	0.50%	
STS-302C to STS-302	15" RCP	7.50'	1.33%	
STS-303 to STS-302	48" RCP	62.47'	0.08%	
STS-303A to STS-303	15" RCP	33.77'	0.59%	
STS-303B to STS-303	15" RCP	7.37'	1.36%	
STS-303C to STS-303B	15" RCP	33.26'	0.60%	
STS-304 to STS-303	42" RCP	271.14'	0.08%	
STS-305 to STS-304	51"x31" RCPA	80.00'	0.08%	
STS-305A to STS-305	15" RCP	33.50'	0.60%	

Storm Sewer Pipe Schedule				
Pipe	Description	Length	Slope	
STS-305B to STS-305	15" RCP	7.50'	1.33%	
STS-306 to STS-305	42" RCP	160.41'	0.10%	
STS-306A to STS-306B	18" RCP	21.58'	0.46%	
STS-306B to STS-306	18" RCP	33.24'	0.60%	
STS-306C to STS-306	15" RCP	7.50'	1.33%	
STS-306D to STS-306C	15" RCP	23.04'	0.43%	
STS-307 to STS-306	42" RCP	239.47'	0.10%	
STS-307A to STS-307	15" RCP	25.25'	0.79%	
STS-308 to STS-307	42" RCP	160.53'	0.10%	
STS-308A to STS-308	15" RCP	52.44'	0.48%	
STS-309 to STS-308	42" RCP	100.00'	0.10%	
STS-309A to STS-309	15" RCP	33.50'	0.60%	
STS-309B to STS-309	15" RCP	7.50'	1.33%	
STS-310 to STS-309	36" RCP	220.50'	0.11%	
STS-310A to STS-310B	15" RCP	13.70'	0.73%	
STS-310B to STS-310	15" RCP	33.50'	0.60%	
STS-310C to STS-310	15" RCP	7.50'	1.33%	
STS-310D to STS-310C	15" RCP	23.21'	0.43%	
STS-311 to STS-310	36" RCP	129.50'	0.11%	
STS-311A to STS-311B	15" RCP	16.51'	0.61%	
STS-311B to STS-311	15" RCP	33.24'	0.60%	
STS-311C to STS-311	15" RCP	7.50'	1.33%	
STS-312 to STS-311	30" RCP	250.00'	0.22%	
STS-312B to STS-312	15" RCP	33.50'	0.60%	
STS-312C to STS-312	15" RCP	7.50'	1.33%	
STS-313 to STS-312	30" RCP	132.00'	0.15%	
STS-313A to STS-313	15" RCP	33.50'	0.60%	
STS-313B to STS-313	15" RCP	7.50'	1.33%	
STS-313C to STS-313B	15" RCP	26.36'	0.38%	
STS-314 to STS-313	30" RCP	118.00'	0.15%	
STS-314A to STS-314B	18" RCP	17.32'	0.30%	
STS-314A.1 to STS-314A	18" RCP	8.00'	0.30%	
STS-314B to STS-314	18" RCP	33.24'	0.30%	
STS-314C to STS-314	15" RCP	7.50'	1.33%	
STS-315 to STS-314	24" RCP	253.20'	0.17%	
STS-315A to STS-315B	18" RCP	18.77'	0.30%	
STS-315A.1 to STS-315A	18" RCP	8.00'	0.30%	
STS-315B to STS-315	18" RCP	33.24'	0.30%	
STS-315C to STS-315	15" RCP	7.50'	1.33%	
STS-316 to STS-315	18" RCP	246.80'	0.37%	
STS-316A to STS-316	15" RCP	66.09'	0.41%	
STS-316B to STS-316	15" RCP	68.37'	0.55%	



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10/22/2025

Pipe Summary - Storm

9th St NE from Main Ave to 12th Ave N
7th Ave NE from 9th St NE to City Limit

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	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	TMA-SU-FXP-8-992(045)	50	9

Structure No. SS-100 Type MANHOLE 48IN Grate Style R-1955-1 Sta. 145+74.25 24.11R Rim Elev 900.39 Base Thickness 0.5 Riser 9.83 INV S 889.08 10" PVC INV E 889.18 10" PVC	*	Structure No. SS-101 Type MANHOLE 48IN Grate Style R-1955-1 Sta. 143+10.13 34R Rim Elev 899.49 Base Thickness 0.5 Riser 9.76 INV S 888.25 10" PVC INV E 888.35 8" PVC INV N 888.35 10" PVC	*	Structure No. SS-102 Type MANHOLE 48IN Grate Style R-1955-1 Sta. 140+98.80 34R Rim Elev 898.9 Base Thickness 0.5 Riser 9.86 INV S 887.56 10" PVC INV N 887.66 10" PVC	*	Structure No. SS-103 Type MANHOLE 48IN Grate Style R-1955-1 Sta. 138+85.87 34R Rim Elev 899.95 Base Thickness 0.5 Riser 11.61 INV S 886.86 10" PVC INV N 886.96 10" PVC INV E 886.96 8" PVC	*
Structure No. SS-104 Type MANHOLE 48IN Grate Style R-1955-1 Sta. 136+09.94 29.82R Rim Elev 899.09 Base Thickness 0.5 Riser 11.62 INV S 885.99 10" PVC INV N 886.09 10" PVC	*	Structure No. SS-105 Type MANHOLE 48IN Grate Style R-1955-1 Sta. 133+04.47 34R Rim Elev 899.52 Base Thickness 0.5 Riser 13 INV S 885.04 10" PVC INV N 885.14 10" PVC	*	Structure No. SS-106 Type MANHOLE 48IN Grate Style R-1733 Sta. 130+27.05 34R Rim Elev 900.25 Base Thickness 0.5 Riser 14.61 INV S 884.16 10" PVC INV N 884.26 10" PVC	*	Structure No. SS-108 Type MANHOLE 48IN Grate Style R-1955-1 Sta. 145+70.24 -64.81L Rim Elev 900.86 Base Thickness 0.5 Riser 9.63 INV W 889.75 8" PVC	*

* RISER HEIGHTS ARE BASED ON 7" CASTING AND 5" OF ADJUSTING RINGS. VERIFY ACTUAL BUILD HEIGHT FOR STRUCTURE CONSTRUCTION.

Sanitary Sewer Pipe Schedule			
Pipe	Description	Length	Slope
PLUG 10IN-1 to SS-100	10" PVC	34.99'	0.28%
PLUG 6IN-1 to 10X6 WYE-1	6" PVC	37.69'	2.00%
PLUG 6IN-2 to 10X6 WYE-2	6" PVC	37.76'	2.00%
PLUG 6IN-3 to 10X6 WYE-3	6" PVC	37.81'	2.00%
PLUG 6IN-4 to 10X6 WYE-4	6" PVC	84.27'	1.88%
PLUG 6IN-5 to 10X6 WYE-5	6" PVC	19.90'	2.00%
PLUG 8IN-1 to SS-101	8" PVC	39.65'	0.40%
SS-100 to SS-101	10" PVC	262.68'	0.28%
SS-101 to SS-102	10" PVC	211.33'	0.28%
SS-102 to SS-103	10" PVC	212.93'	0.28%
SS-103 to SS-104	10" PVC	274.82'	0.28%
SS-103.1 to SS-103	8" PVC	44.66'	0.40%
SS-104 to SS-105	10" PVC	305.50'	0.28%
SS-105 to SS-106	10" PVC	277.42'	0.28%
SS-106 to SS-107	10" PVC	96.03'	0.54%
SS-109 to 6IN 45DEG BEND	6" PVC	66.35'	2.50%
6IN 45DEG BEND to 10X6 WYE-6	6" PVC	66.97'	2.50%



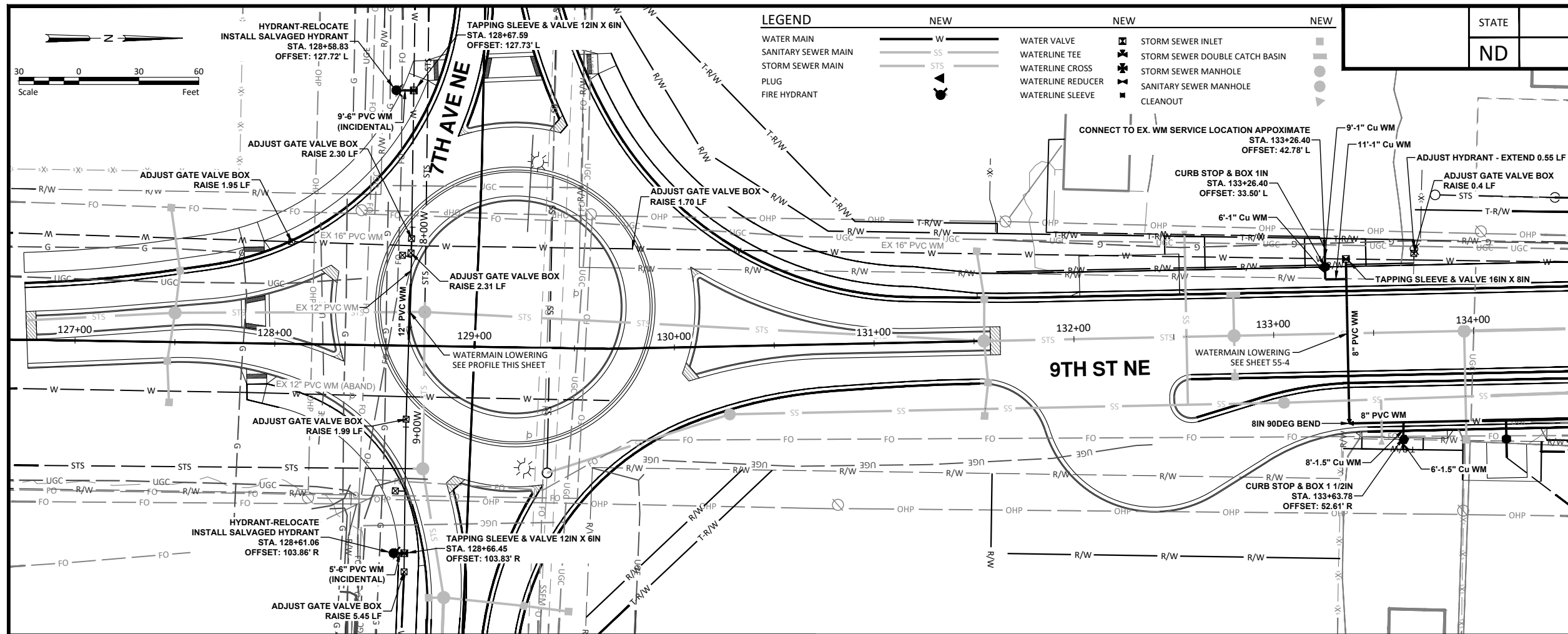
ALL ELEVATIONS ARE BASED ON THE U.S.G.S. VERTICAL DATUM OF 1988. (UNLESS NOTED OTHERWISE)

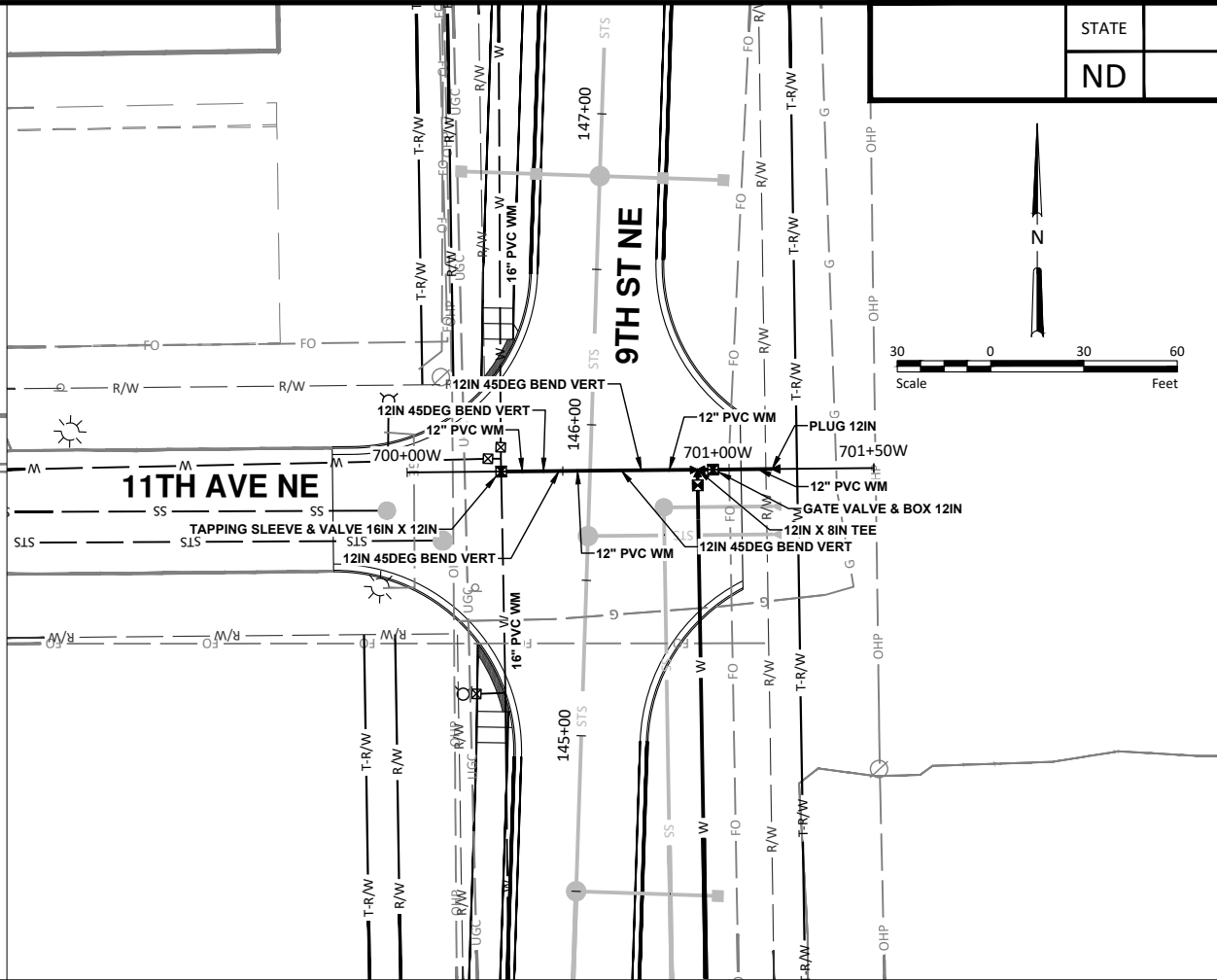


10/22/2025

Manhole and Pipe Summary - Sanitary

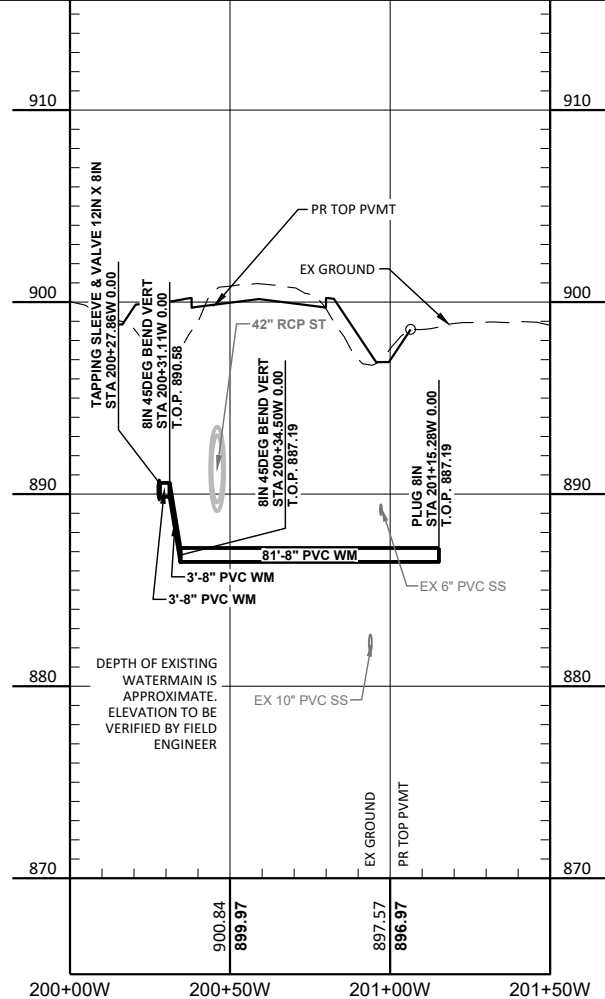
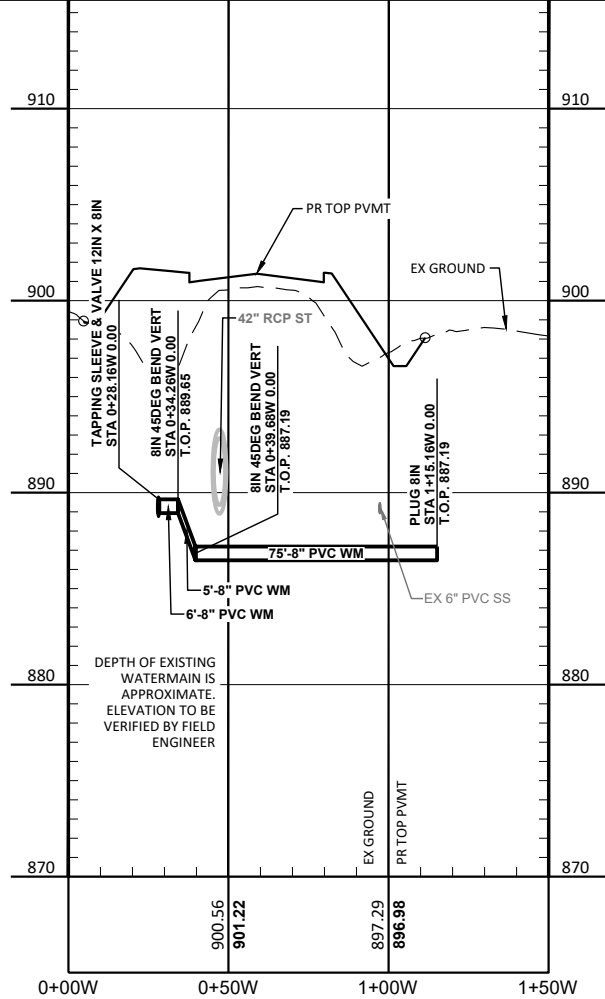
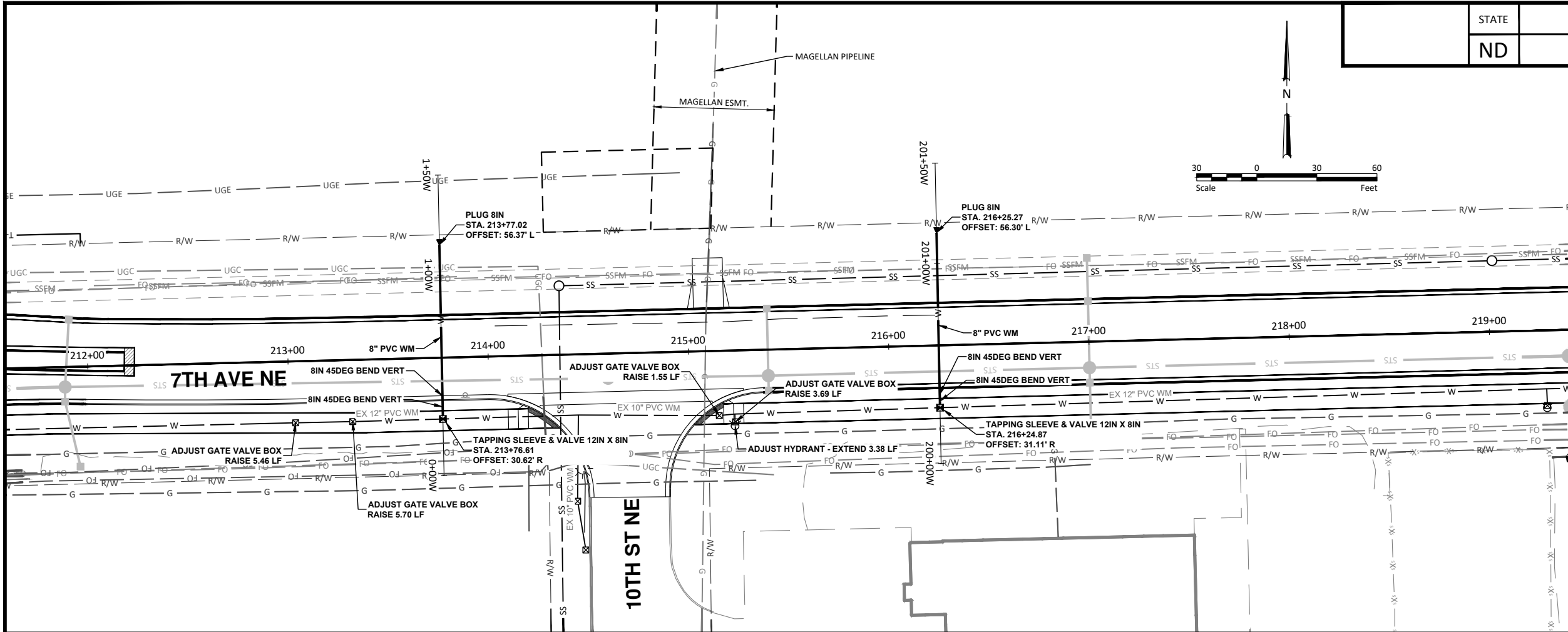
9th St NE from Main Ave to 12th Ave N
7th Ave NE from 9th St NE to City Limit





9th St NE from Main Ave to 12th Ave N
7th Ave NE from 9th St NE to City Limit

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STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	TMA-SU-FXP-8-992(045)	55	5

SPEC CODE	BID ITEM	QTY	UNIT
722 6140	ADJUST GATE VALVE BOX Sta 212+00 to 219+00	4	EA
724 210	FITTINGS-DUCTILE IRON Sta 212+00 to 219+00	236	LBS
724 427	ADJUST HYDRANT Sta 212+00 to 219+00	1	EA
724 540	TAPPING SLEEVE & VALVE 12IN X 8IN Sta 212+00 to 219+00	2	EA
724 830	WATERMAIN 8IN PVC Sta 212+00 to 219+00	175	LF

LEGEND		NEW
WATER MAIN	—	W
SANITARY SEWER MAIN	—	SS
STORM SEWER MAIN	—	STS
PLUG	▲	
FIRE HYDRANT	⊕	
WATER VALVE	⊕	
WATERLINE TEE	⊕	
WATERLINE CROSS	⊕	
WATERLINE REDUCER	⊕	
WATERLINE SLEEVE	⊕	
STORM SEWER INLET	⊕	
STORM SEWER DOUBLE CATCH BASIN	⊕	
STORM SEWER MANHOLE	⊕	
SANITARY SEWER MANHOLE	⊕	
CLEANOUT	⊕	

WARNING
HIGH-PRESSURE PIPELINE(S)
Excavation and/or Construction Prohibited
Without compliance with **State One-Call** AND
Without Written Permission From
MAGELLAN PIPELINE COMPANY, L.P.
A MAGELLAN REPRESENTATIVE MUST BE PRESENT DURING WORK AROUND PIPELINE(S)



ALL ELEVATIONS ARE BASED ON
THE U.S.G.S. VERTICAL DATUM OF 1988.
(UNLESS NOTED OTHERWISE)

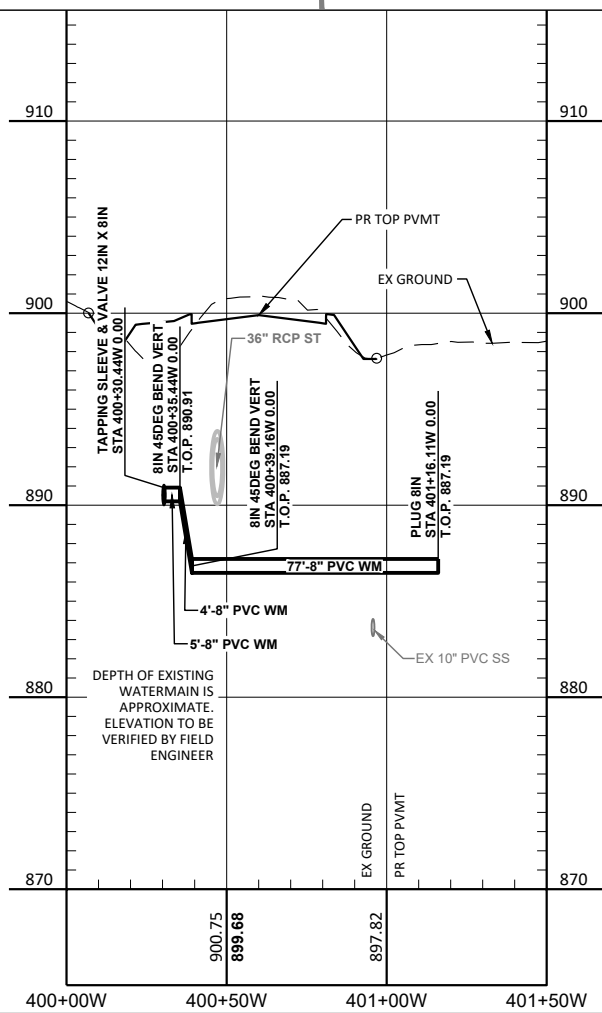
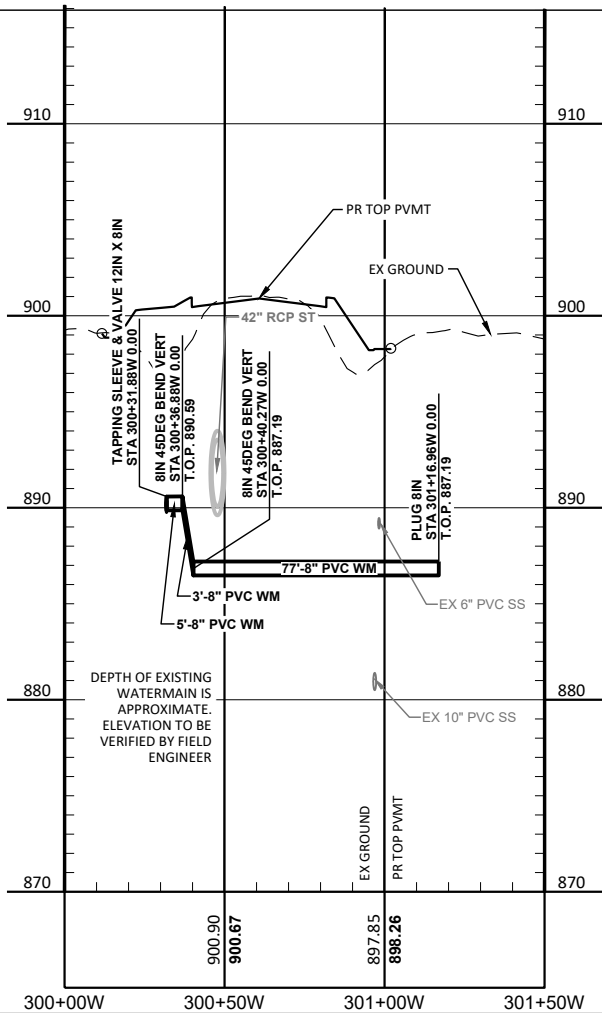
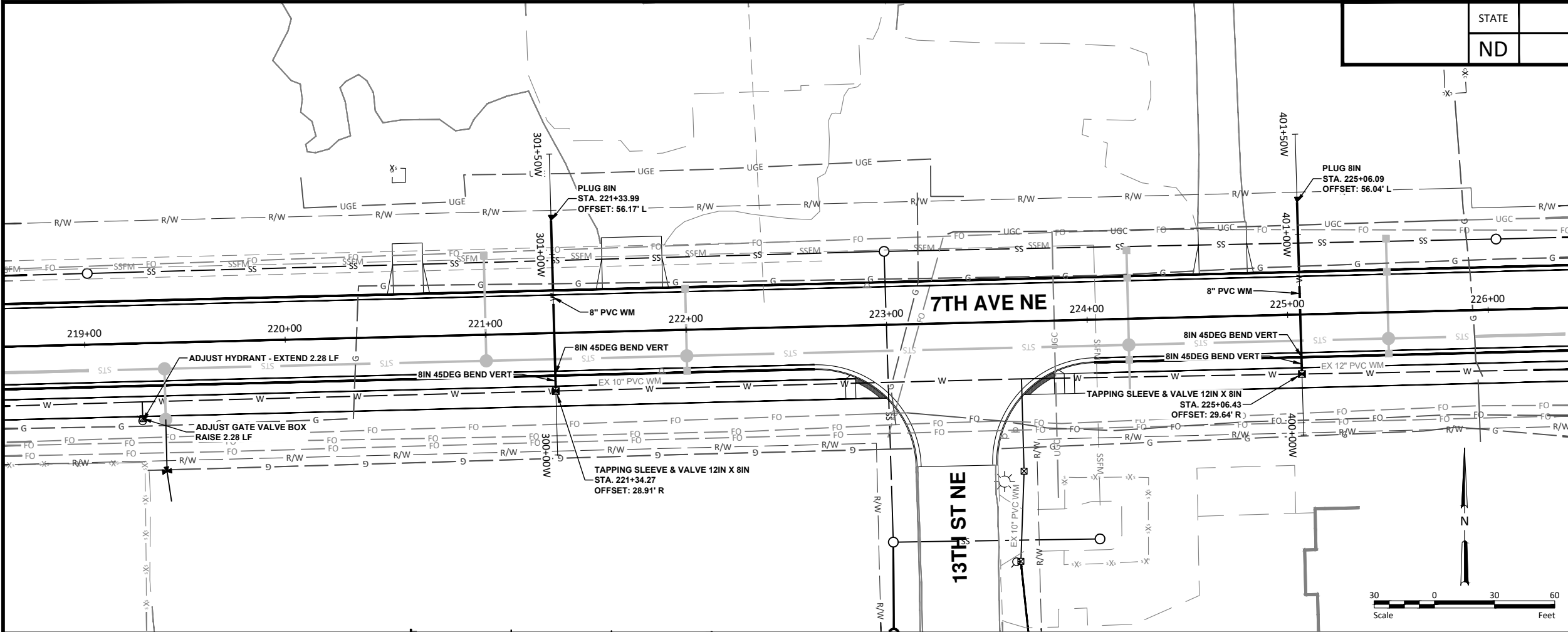


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Watermain Plan & Profile - 7th Ave NE
Sta 212+00 to Sta 219+00

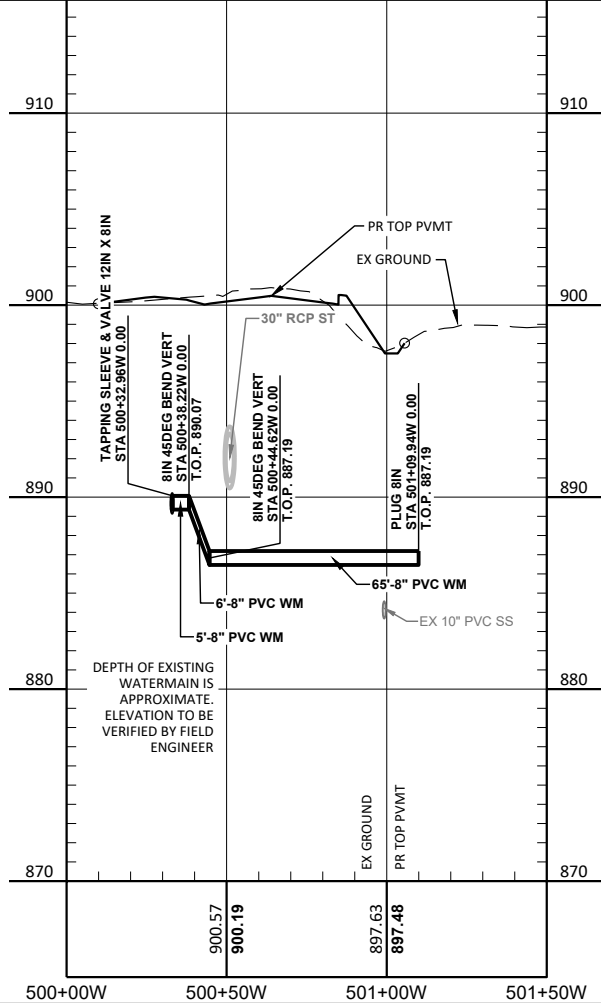
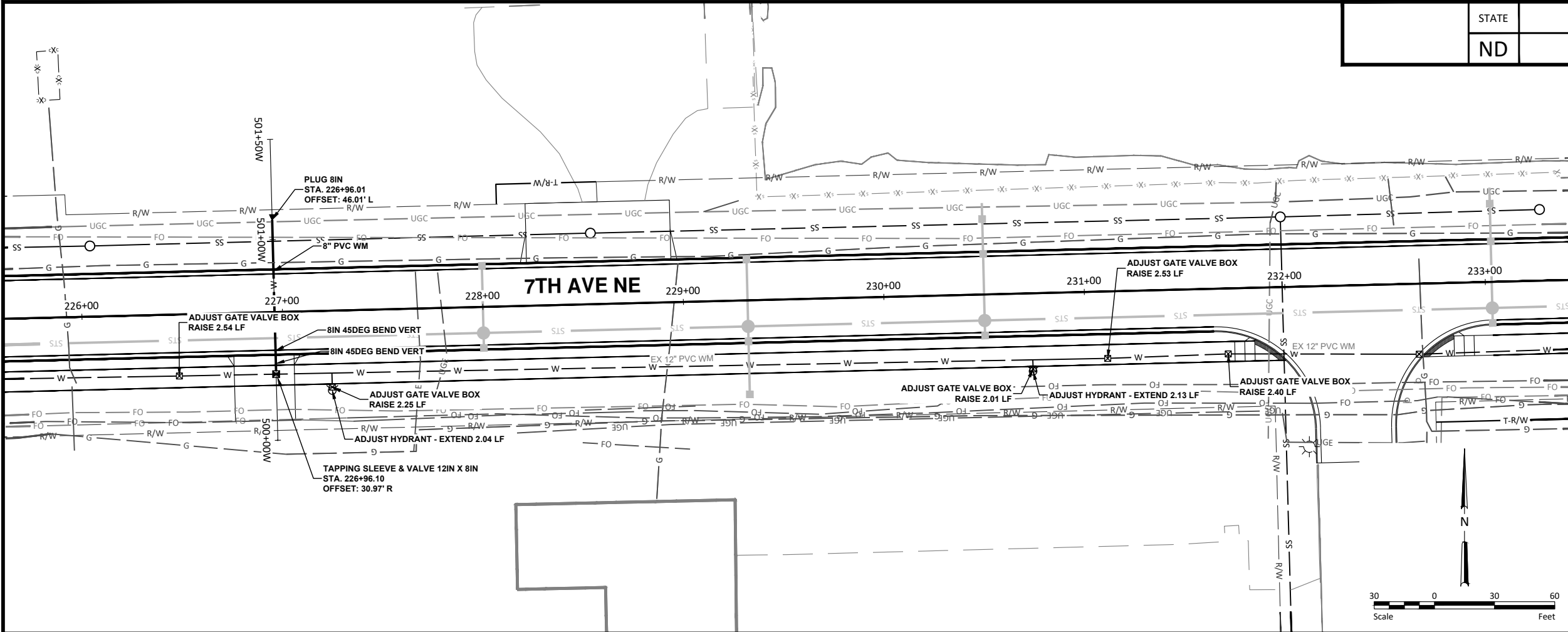
9th St NE from Main Ave to 12th Ave N
7th Ave NE from 9th St NE to City Limit

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STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	TMA-SU-FXP-8-992(045)	55	6
SPEC CODE BID ITEM			QTY UNIT
722	6140	ADJUST GATE VALVE BOX Sta 219+00 to 226+00	1 EA
724	210	FITTINGS-DUCTILE IRON Sta 219+00 to 226+00	236 LBS
724	427	ADJUST HYDRANT Sta 219+00 to 226+00	1 EA
724	540	TAPPING SLEEVE & VALVE 12IN X 8IN Sta 219+00 to 226+00	2 EA
724	830	WATERMAIN 8IN PVC Sta 219+00 to 226+00	171 LF
LEGEND			
			NEW
WATER MAIN			W
SANITARY SEWER MAIN			SS
STORM SEWER MAIN			STS
PLUG			▲
FIRE HYDRANT			⦿
WATER VALVE			⦿
WATERLINE TEE			⦿
WATERLINE CROSS			⦿
WATERLINE REDUCER			⦿
WATERLINE SLEEVE			⦿
STORM SEWER INLET			⦿
STORM SEWER DOUBLE CATCH BASIN			⦿
STORM SEWER MANHOLE			⦿
SANITARY SEWER MANHOLE			⦿
CLEANOUT			⦿
			
			
ALL ELEVATIONS ARE BASED ON THE U.S.G.S. VERTICAL DATUM OF 1988. (UNLESS NOTED OTHERWISE)			
			
10/22/2025			
Watermain Plan & Profile - 7th Ave NE Sta 219+00 to Sta 226+00			
9th St NE from Main Ave to 12th Ave N 7th Ave NE from 9th St NE to City Limit			

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STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	TMA-SU-FXP-8-992(045)	55	7

SPEC CODE	BID ITEM	QTY	UNIT
722 6140	ADJUST GATE VALVE BOX Sta 226+00 to 233+00	5	EA
724 210	FITTINGS-DUCTILE IRON Sta 226+00 to 233+00	118	LBS
724 427	ADJUST HYDRANT Sta 226+00 to 233+00	2	EA
724 540	TAPPING SLEEVE & VALVE 12IN X 8IN Sta 226+00 to 233+00	1	EA
724 830	WATERMAIN 8IN PVC Sta 226+00 to 233+00	77	LF

LEGEND	NEW
WATER MAIN	W
SANITARY SEWER MAIN	SS
STORM SEWER MAIN	STS
PLUG	▲
FIRE HYDRANT	▲
WATER VALVE	▲
WATERLINE TEE	▲
WATERLINE CROSS	▲
WATERLINE REDUCER	▲
WATERLINE SLEEVE	▲
STORM SEWER INLET	▲
STORM SEWER DOUBLE CATCH BASIN	▲
STORM SEWER MANHOLE	▲
SANITARY SEWER MANHOLE	▲
CLEANOUT	▲



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(UNLESS NOTED OTHERWISE)

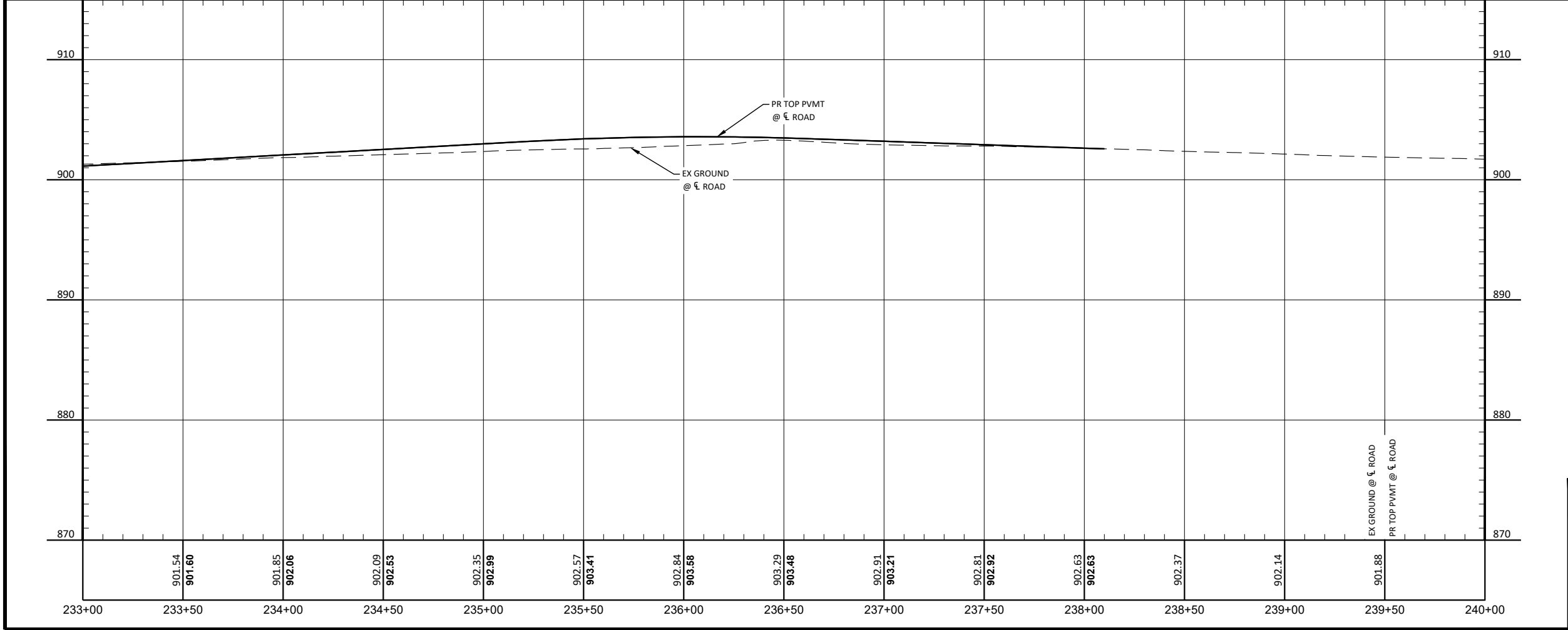
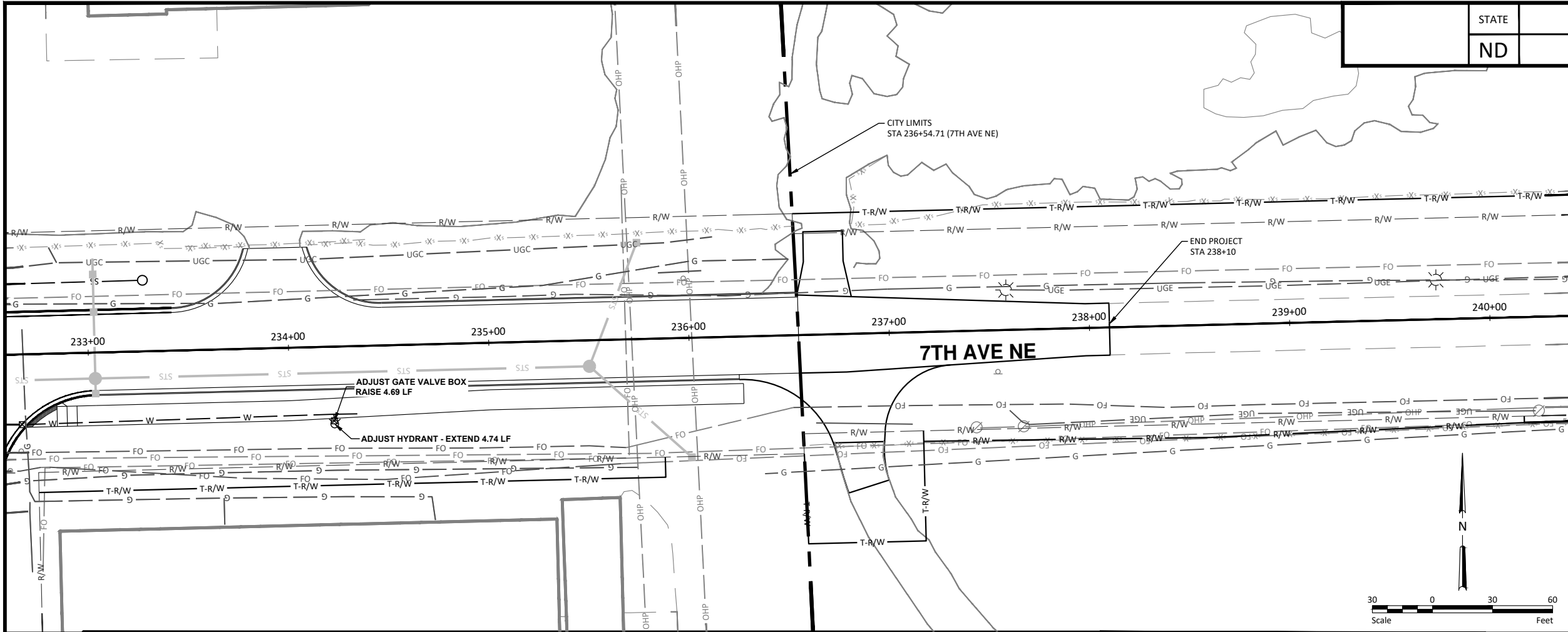


10/22/2025

Watermain Plan & Profile - 7th Ave NE
Sta 226+00 to Sta 233+00

9th St NE from Main Ave to 12th Ave N
7th Ave NE from 9th St NE to City Limit

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STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	TMA-SU-FXP-8-992(045)	55	8

SPEC CODE	BID ITEM	QTY	UNIT
722 6140	ADJUST GATE VALVE BOX Sta 233+00 to 240+00	1	EA
724 427	ADJUST HYDRANT Sta 233+00 to 240+00	1	EA

LEGEND	NEW
WATER MAIN	W
SANITARY SEWER MAIN	SS
STORM SEWER MAIN	STS
PLUG	▲
FIRE HYDRANT	■
WATER VALVE	■
WATERLINE TEE	■
WATERLINE CROSS	■
WATERLINE REDUCER	■
WATERLINE SLEEVE	■
STORM SEWER INLET	■
STORM SEWER DOUBLE CATCH BASIN	■
STORM SEWER MANHOLE	●
SANITARY SEWER MANHOLE	●
CLEANOUT	▼



ALL ELEVATIONS ARE BASED ON
THE U.S.G.S. VERTICAL DATUM OF 1988.
(UNLESS NOTED OTHERWISE)

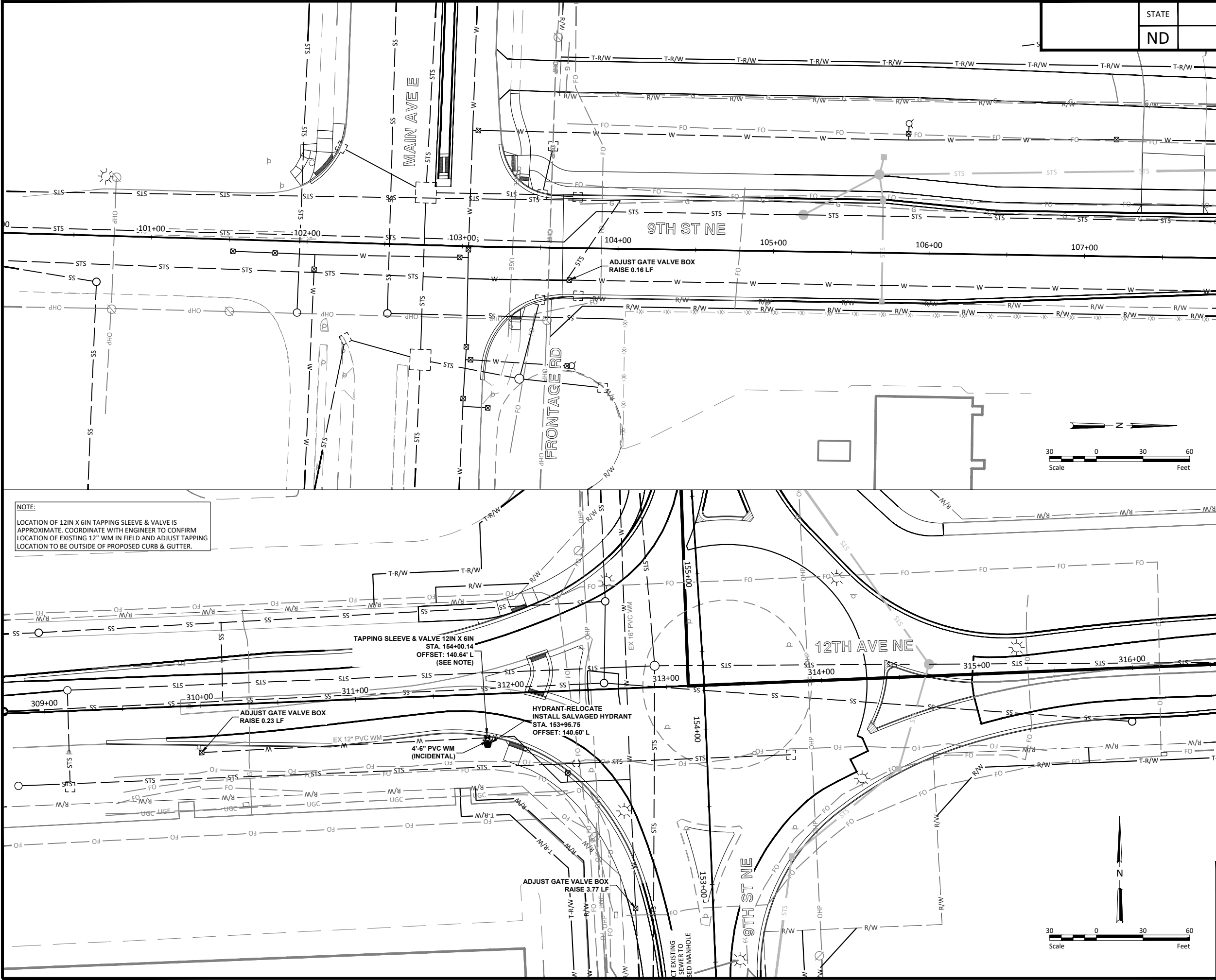


10/22/2025

Watermain Plan & Profile - 7th Ave NE
Sta 233+00 to Sta 240+00

9th St NE from Main Ave to 12th Ave N
7th Ave NE from 9th St NE to City Limit

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STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	TMA-SU-FXP-8-992(045)	55	9

SPEC CODE	BID ITEM	QTY	UNIT
724 420	HYDRANT-RELOCATE Sta 152+50 to 154+50	1	EA
722 6140	ADJUST GATE VALVE BOX Sta 101+00 to 107+00 Sta 152+50 to 154+50	1 2	EA EA
724 530	TAPPING SLEEVE & VALVE 12IN X 6IN Sta 152+50 to 154+50	1	EA

LEGEND	NEW
WATER MAIN	— W —
SANITARY SEWER MAIN	— SS —
STORM SEWER MAIN	— STS —
PLUG	▲
FIRE HYDRANT	⬮
WATER VALVE	⬮
WATERLINE TEE	⬮
WATERLINE CROSS	⬮
WATERLINE REDUCER	⬮
WATERLINE SLEEVE	⬮
STORM SEWER INLET	⬮
STORM SEWER DOUBLE CATCH BASIN	⬮
STORM SEWER MANHOLE	●
SANITARY SEWER MANHOLE	●
CLEANOUT	▲



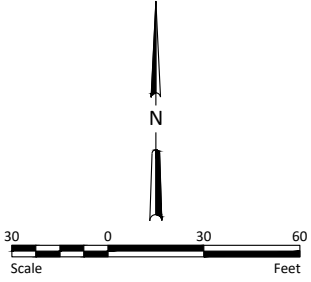
ALL ELEVATIONS ARE BASED ON THE U.S.G.S. VERTICAL DATUM OF 1988. (UNLESS NOTED OTHERWISE)



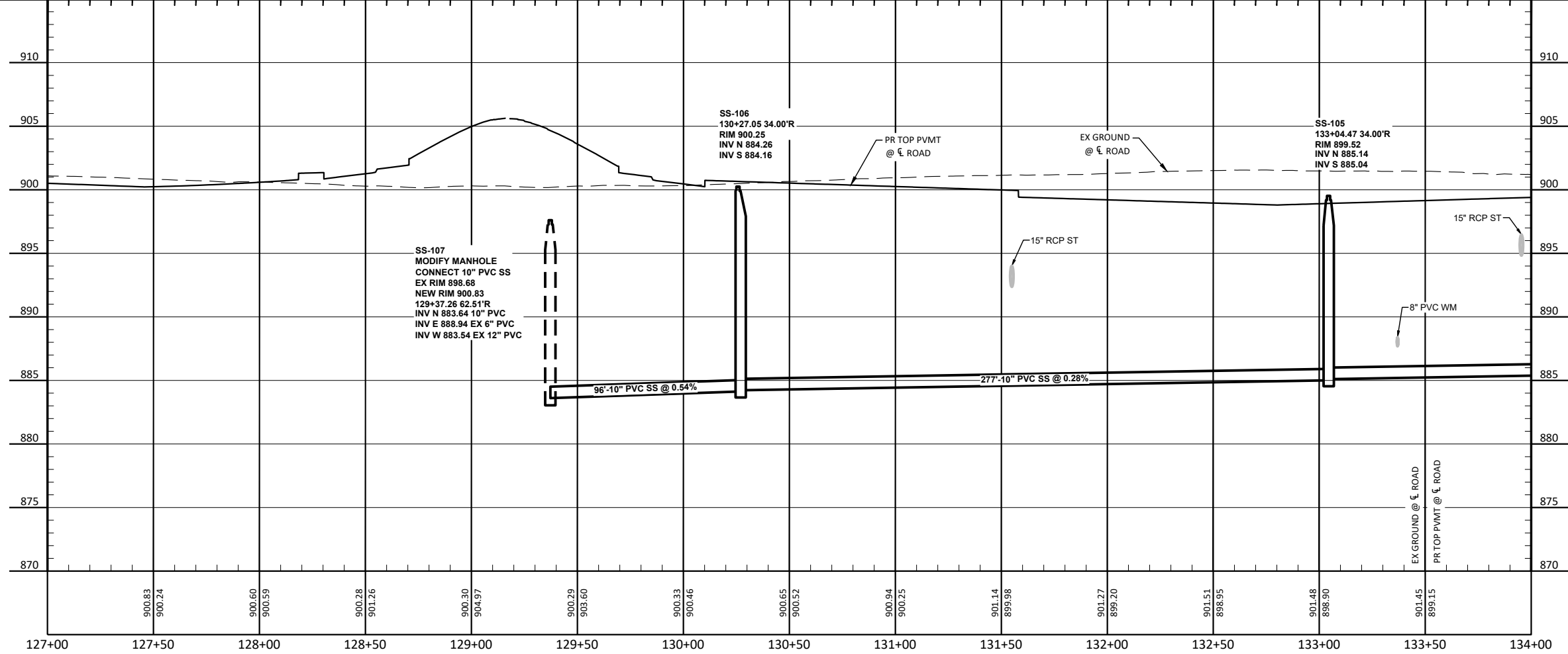
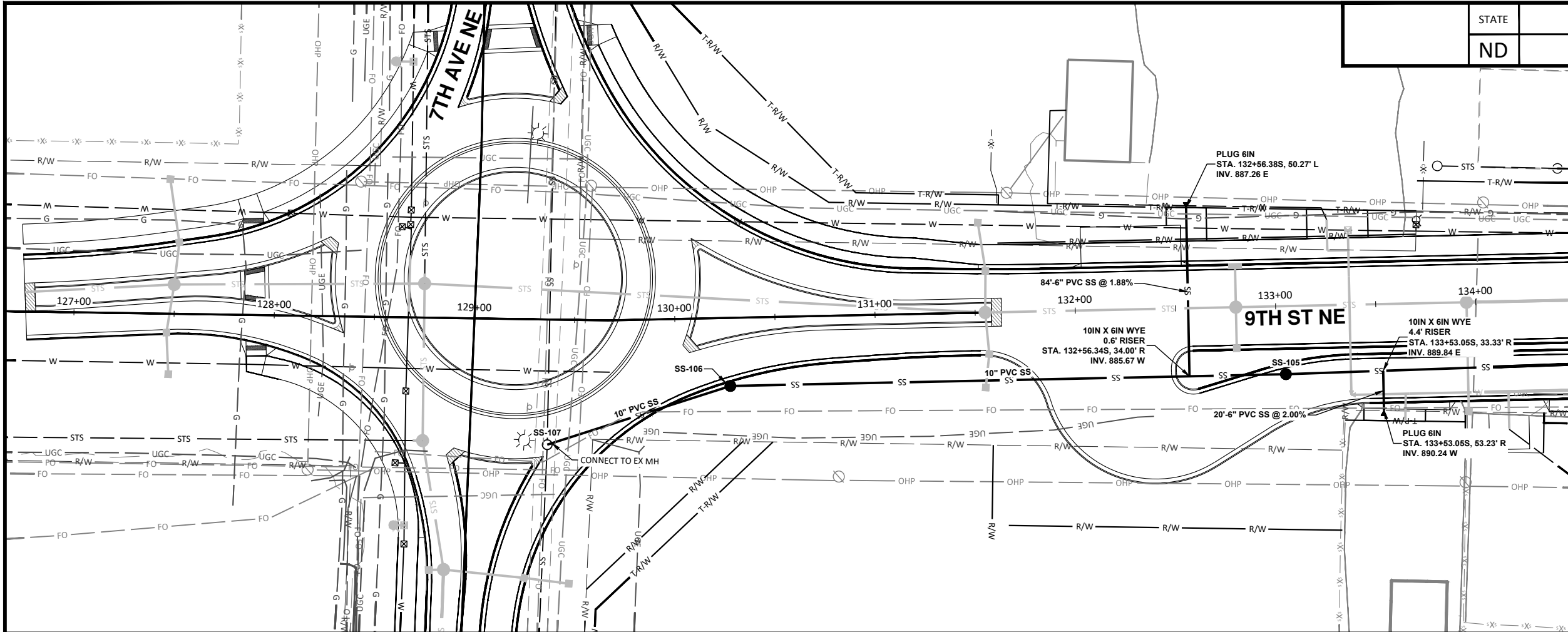
10/22/2025

Adjust Gate Valves and Hydrants
Sta 101+00 to Sta 154+50

9th St NE from Main Ave to 12th Ave N
7th Ave NE from 9th St NE to City Limit

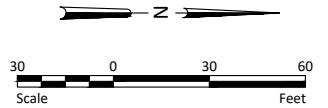


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STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	TMA-SU-FXP-8-992(045)	55	10

SPEC CODE	BID ITEM	QTY	UNIT
722 100	MANHOLE 48IN Sta 127+00 to 134+00	2	EA
722 1100	MANHOLE RISER 48IN Sta 127+00 to 134+00	27.61	LF
724 1115	10IN SANITARY SEWER PIPE Sta 127+00 to 134+00	469	LF
724 1120	6IN SEWER SERVICE PIPE Sta 127+00 to 134+00	104	LF
724 1135	10IN X 6IN SEWER WYE BRANCH Sta 127+00 to 134+00	2	EA
910 570	MODIFY MANHOLE Sta 127+00 to 134+00	1	EA



LEGEND	
WATER MAIN	NEW
SANITARY SEWER MAIN	W
STORM SEWER MAIN	SS
PLUG	
FIRE HYDRANT	
WATER VALVE	
WATERLINE TEE	
WATERLINE CROSS	
WATERLINE REDUCER	
WATERLINE SLEEVE	
STORM SEWER INLET	
STORM SEWER DOUBLE CATCH BASIN	
STORM SEWER MANHOLE	
SANITARY SEWER MANHOLE	
CLEANOUT	



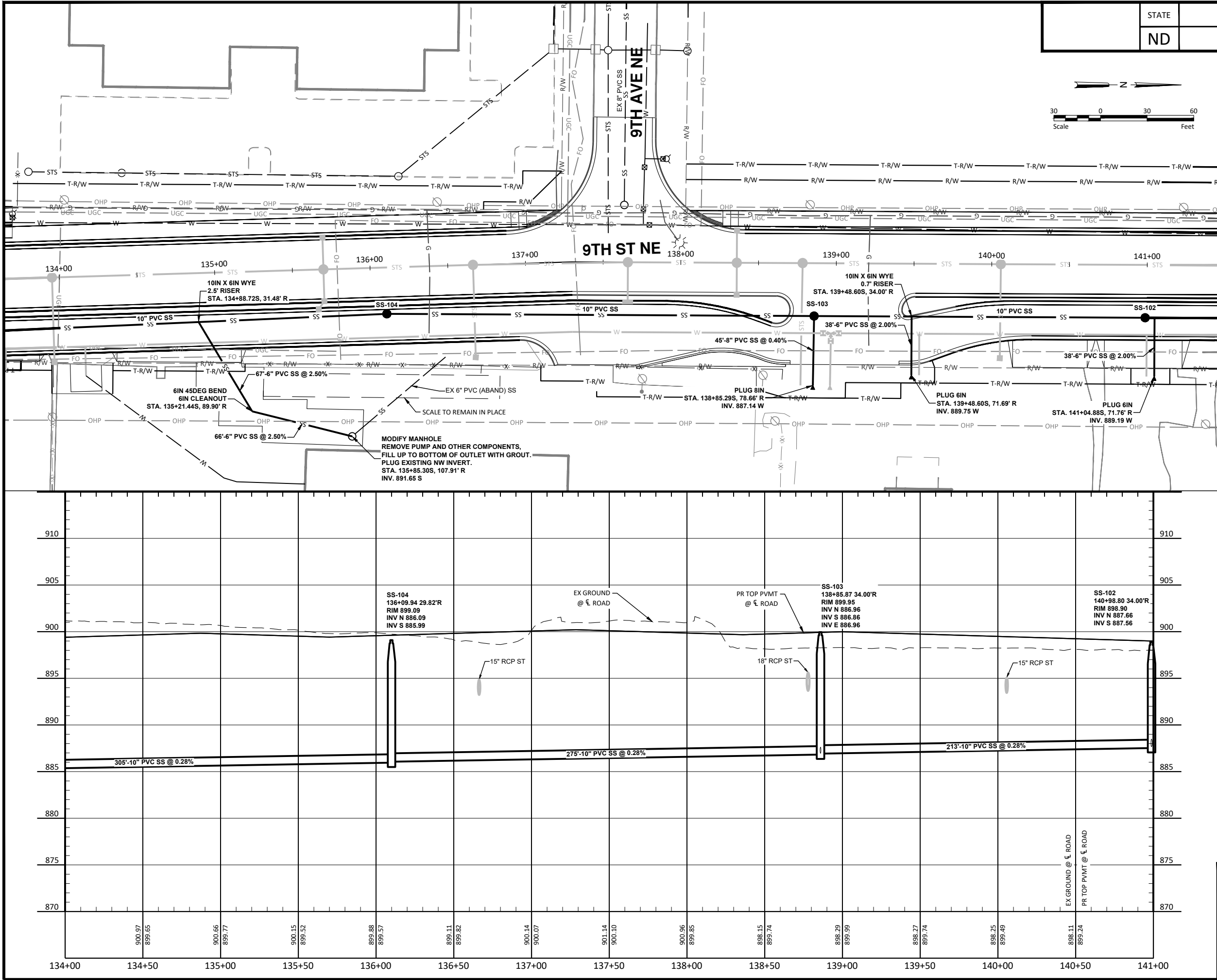
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Sanitary Sewer Plan & Profile - 9th St NE
Sta 127+00 to Sta 134+00

9th St NE from Main Ave to 12th Ave N
7th Ave NE from 9th St NE to City Limit

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STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	TMA-SU-FXP-8-992(045)	55	11

SPEC CODE	BID ITEM	QTY	UNIT
722 100	MANHOLE 48IN Sta 134+00 to 141+00	3	EA
722 1100	MANHOLE RISER 48IN Sta 134+00 to 141+00	33.09	LF
724 1110	8IN SANITARY SEWER PIPE Sta 134+00 to 141+00	45	LF
724 1115	10IN SANITARY SEWER PIPE Sta 134+00 to 141+00	699	LF
724 1120	6IN SEWER SERVICE PIPE Sta 134+00 to 141+00	171	LF
724 1135	10IN X 6IN SEWER WYE BRANCH Sta 134+00 to 141+00	2	EA
724 9002	SANITARY SEWER CLEANOUT Sta 134+00 to 141+00	1	EA
910 570	MODIFY MANHOLE Sta 134+00 to 141+00	1	EA

LEGEND	NEW
WATER MAIN	— W —
SANITARY SEWER MAIN	— SS —
STORM SEWER MAIN	— S —
PLUG	▲
FIRE HYDRANT	▲
WATER VALVE	▲
WATERLINE TEE	▲
WATERLINE CROSS	▲
WATERLINE REDUCER	▲
WATERLINE SLEEVE	▲
STORM SEWER INLET	▲
STORM SEWER DOUBLE CATCH BASIN	▲
STORM SEWER MANHOLE	●
SANITARY SEWER MANHOLE	●
CLEANOUT	▲



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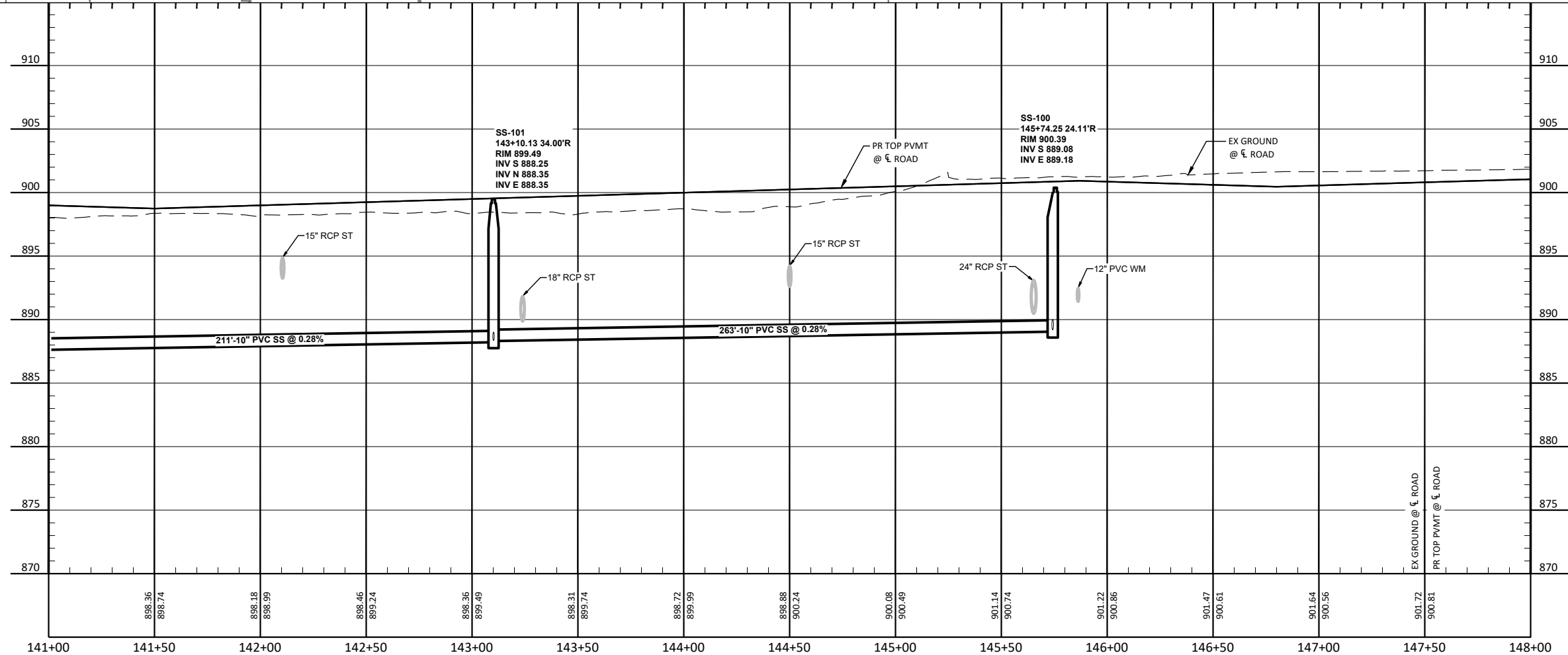
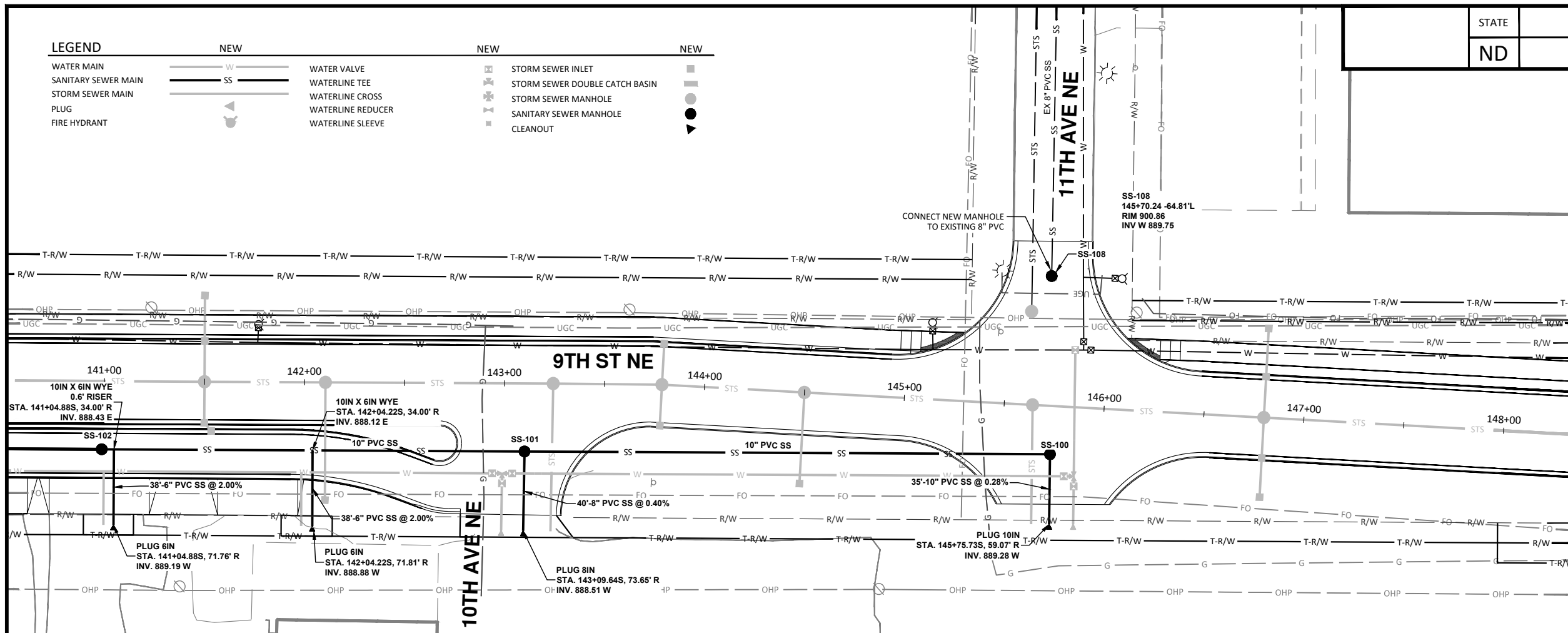


Sanitary Sewer Plan & Profile - 9th St NE
Sta 134+00 to Sta 141+00

9th St NE from Main Ave to 12th Ave N
7th Ave NE from 9th St NE to City Limit

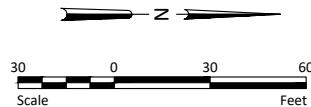
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LEGEND		NEW		NEW		NEW	
WATER MAIN	— W —	WATER VALVE	■	STORM SEWER INLET	■		
SANITARY SEWER MAIN	— SS —	WATERLINE TEE	■	STORM SEWER DOUBLE CATCH BASIN	■		
STORM SEWER MAIN	— S —	WATERLINE CROSS	■	STORM SEWER MANHOLE	■		
PLUG	▲	WATERLINE REDUCER	■	SANITARY SEWER MANHOLE	■		
FIRE HYDRANT	●	WATERLINE SLEEVE	■	CLEANOUT	▲		



STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	TMA-SU-FXP-8-992(045)	55	12

SPEC CODE	BID ITEM	QTY	UNIT
722 100	MANHOLE 48IN Sta 141+00 to 146+00	3	EA
722 1100	MANHOLE RISER 48IN Sta 141+00 to 146+00	29.22	LF
724 1110	8IN SANITARY SEWER PIPE Sta 141+00 to 146+00	40	LF
724 1115	10IN SANITARY SEWER PIPE Sta 141+00 to 146+00	508	LF
724 1120	6IN SEWER SERVICE PIPE Sta 141+00 to 146+00	76	LF
724 1135	10IN X 6IN SEWER WYE BRANCH Sta 141+00 to 146+00	2	EA

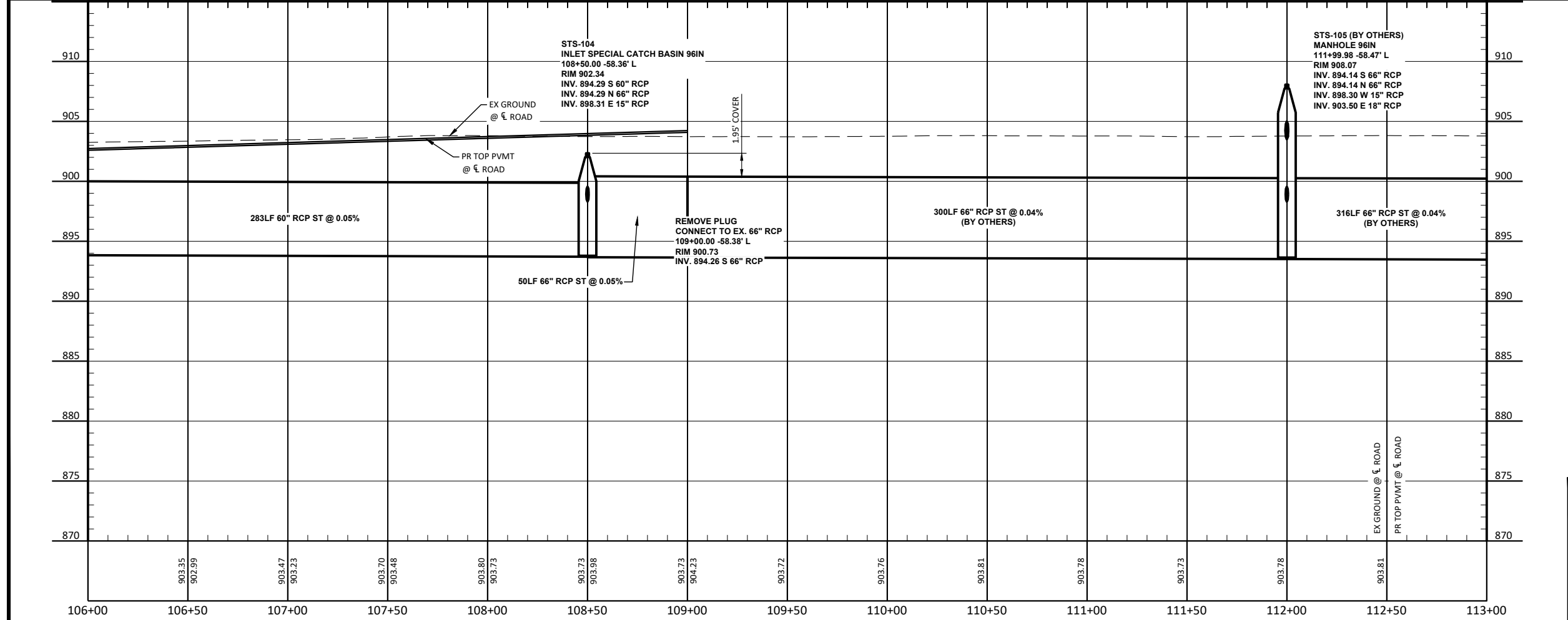


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(UNLESS NOTED OTHERWISE)

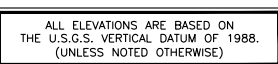


Sanitary Sewer Plan & Profile - 9th St NE
Sta 141+00 to Sta 148+00

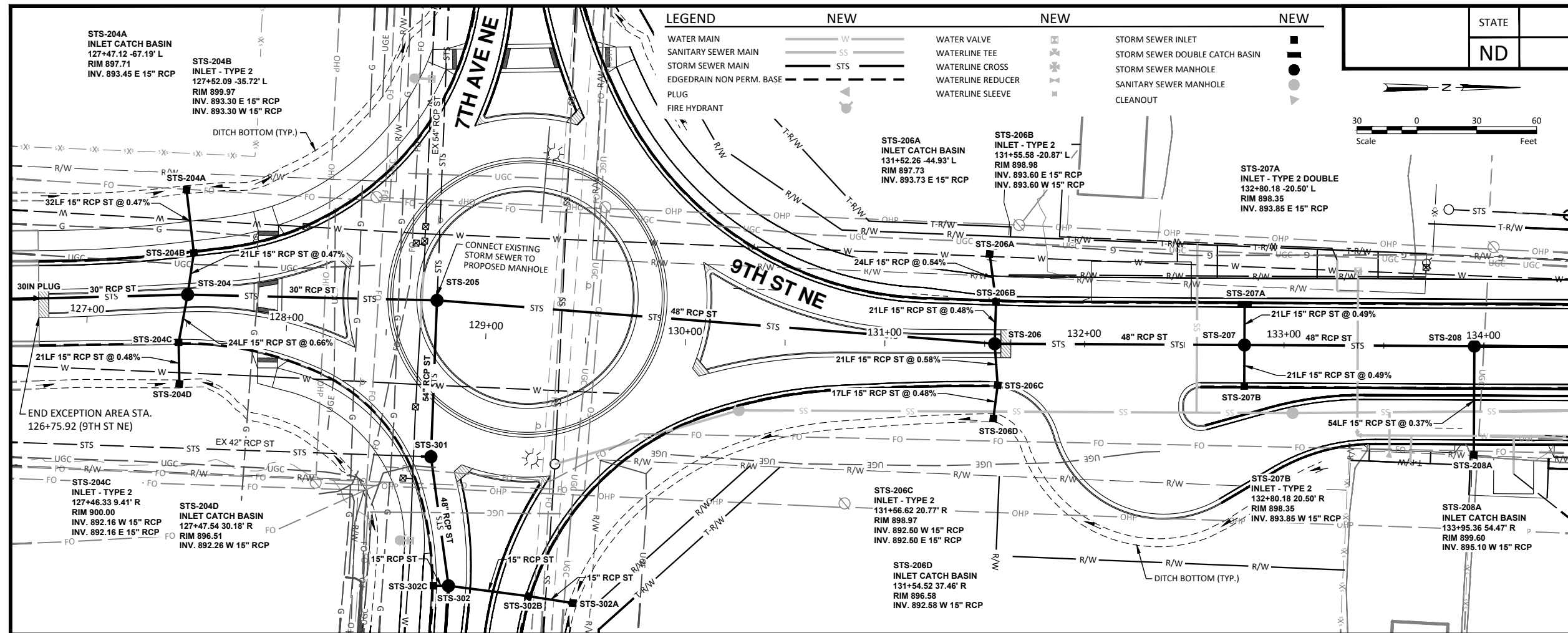
9th St NE from Main Ave to 12th Ave N
7th Ave NE from 9th St NE to City Limit



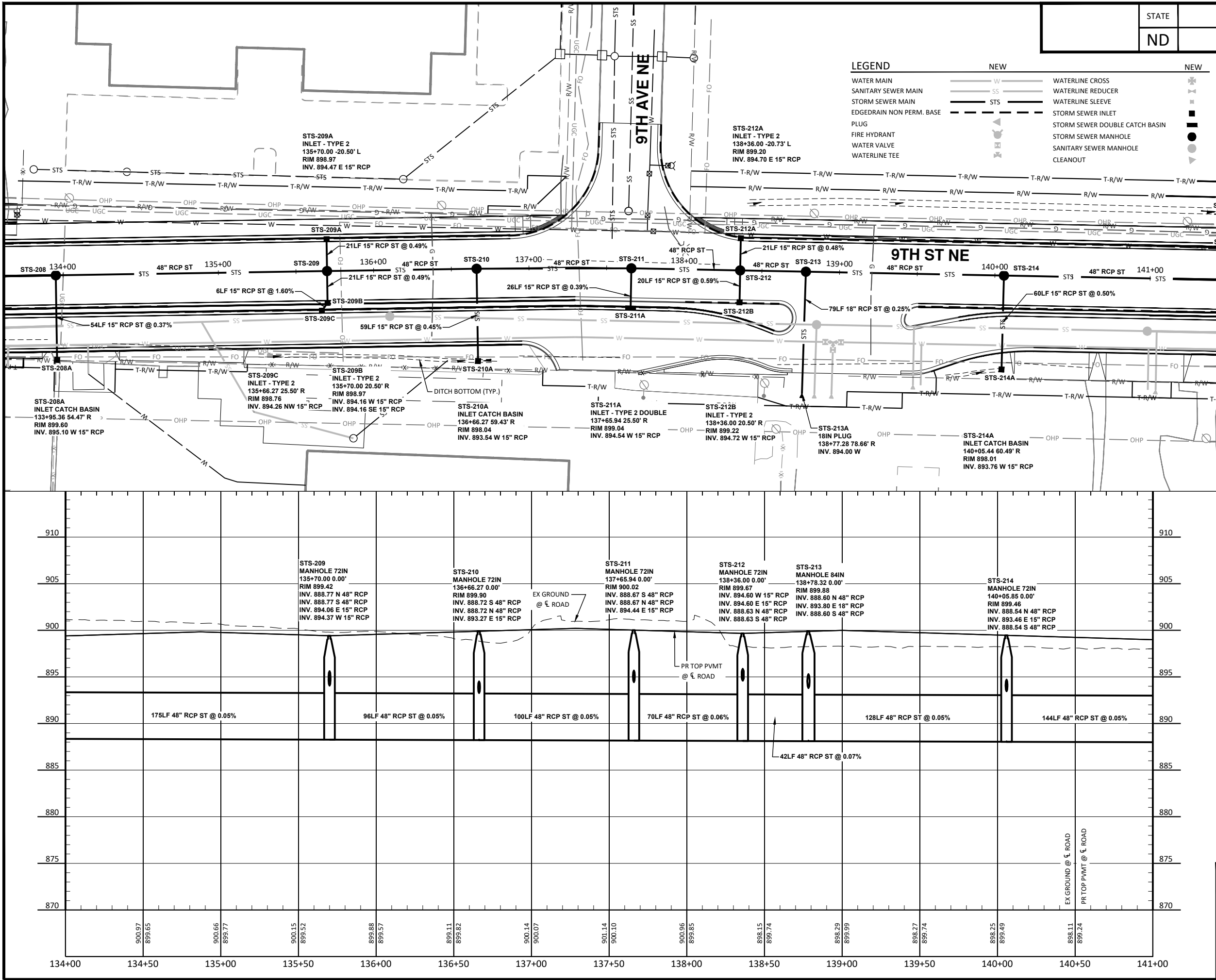
LEGEND		NEW
WATER MAIN		W
SANITARY SEWER MAIN		SS
STORM SEWER MAIN		STS
EDGE DRAIN NON PERM. BASE		
PLUG		
FIRE HYDRANT		
WATER VALVE		
WATERLINE TEE		
WATERLINE CROSS		
WATERLINE REDUCER		
WATERLINE SLEEVE		
STORM SEWER INLET		
STORM SEWER DOUBLE CATCH BASIN		
STORM SEWER MANHOLE		
SANITARY SEWER MANHOLE		
CLEANOUT		
STORM SEWER BY OTHERS		STS



9th St NE from Main Ave to 12th Ave N
7th Ave NE from 9th St NE to City Limit



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STATE		PROJECT NO.	SECTION NO.	SHEET NO.
ND		TMA-SU-FXP-8-992(045)	55	16
SPEC CODE	BID ITEM	QTY UNIT		
714 215	PIPE CONC REINF 15IN CL V-STORM DRAIN Sta 134+00 to 141+00	234	LF	
714 337	PIPE CONC REINF 18IN CL V-STORM DRAIN Sta 134+00 to 141+00	79	LF	
714 1110	PIPE CONC REINF 48IN CL III-STORM DRAIN Sta 134+00 to 141+00	700	LF	
714 9680	PLUG PIPE-ALL TYPES & SIZES Sta 134+00 to 141+00	1	EA	
722 120	MANHOLE 72IN Sta 134+00 to 141+00	5	EA	
722 130	MANHOLE 84IN Sta 134+00 to 141+00	1	EA	
722 1120	MANHOLE RISER 72IN Sta 134+00 to 141+00	48.89	LF	
722 1130	MANHOLE RISER 84IN Sta 134+00 to 141+00	10.03	LF	
722 3510	INLET-TYPE 2 Sta 134+00 to 141+00	5	EA	
722 3520	INLET-TYPE 2 DOUBLE Sta 134+00 to 141+00	1	EA	
722 4005	INLET CATCH BASIN Sta 134+00 to 141+00	2	EA	

CITY OF
WEST
FARGO

HOUSTON
engineering, inc.

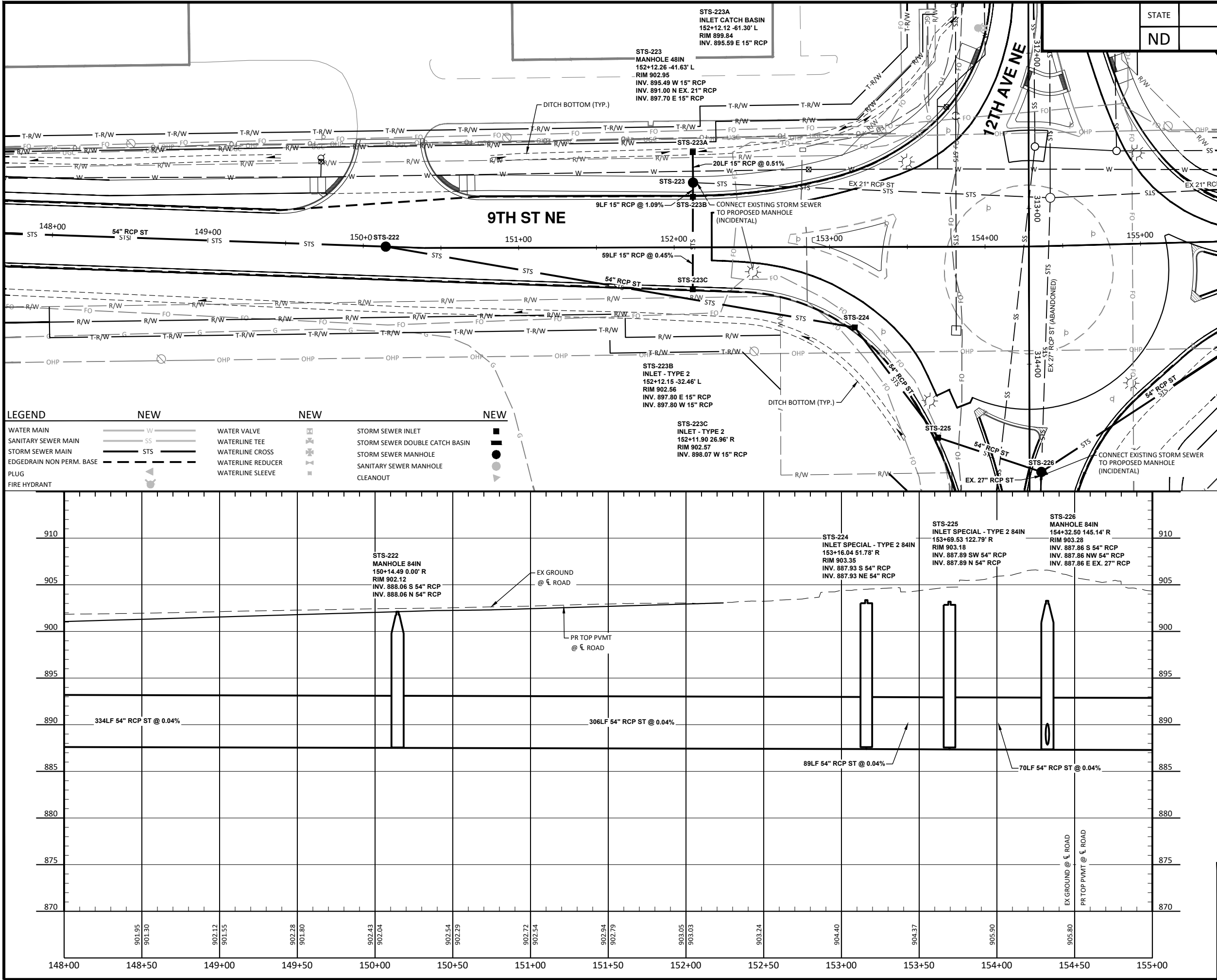
ALL ELEVATIONS ARE BASED ON
THE U.S.G.S. VERTICAL DATUM OF 1988.
(UNLESS NOTED OTHERWISE)

REGISTERED PROFESSIONAL ENGINEER
MICHAEL J. FERRIE
PE-10922
DATE
NORTH DAKOTA
10/22/2025

Storm Sewer Plan & Profile - 9th St NE
Sta 134+00 to Sta 141+00

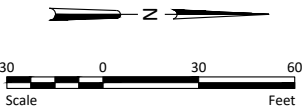
9th St NE from Main Ave to 12th Ave N
7th Ave NE from 9th St NE to City Limit

H:\JBN\8600\8654\8654_0004 9th St\CAD\0_CITY PROJECT\Plans\055 - Storm Sewer Plan & Profile.dwg-P&P (8)-10/22/2025 11:09 AM-(bwall)



STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	TMA-SU-FXP-8-992(045)	55	18

SPEC CODE	BID ITEM	QTY	UNIT
714 215	PIPE CONC REINF 15IN CL V-STORM DRAIN Sta 148+00 to 155+00	88	LF
714 1212	PIPE CONC REINF 54IN CL III-STORM DRAIN Sta 148+00 to 155+00	759	LF
722 100	MANHOLE 48IN Sta 148+00 to 155+00	1	EA
722 130	MANHOLE 84IN Sta 148+00 to 155+00	2	EA
722 1100	MANHOLE RISER 48IN Sta 148+00 to 155+00	10.68	LF
722 1130	MANHOLE RISER 84IN Sta 148+00 to 155+00	27.06	LF
722 3510	INLET-TYPE 2 Sta 148+00 to 155+00	2	EA
722 3768	INLET SPECIAL-TYPE 2 84IN Sta 148+00 to 155+00	2	EA
722 4005	INLET CATCH BASIN Sta 148+00 to 155+00	1	EA



ALL ELEVATIONS ARE BASED ON
THE U.S.G.S. VERTICAL DATUM OF 1988.
(UNLESS NOTED OTHERWISE)

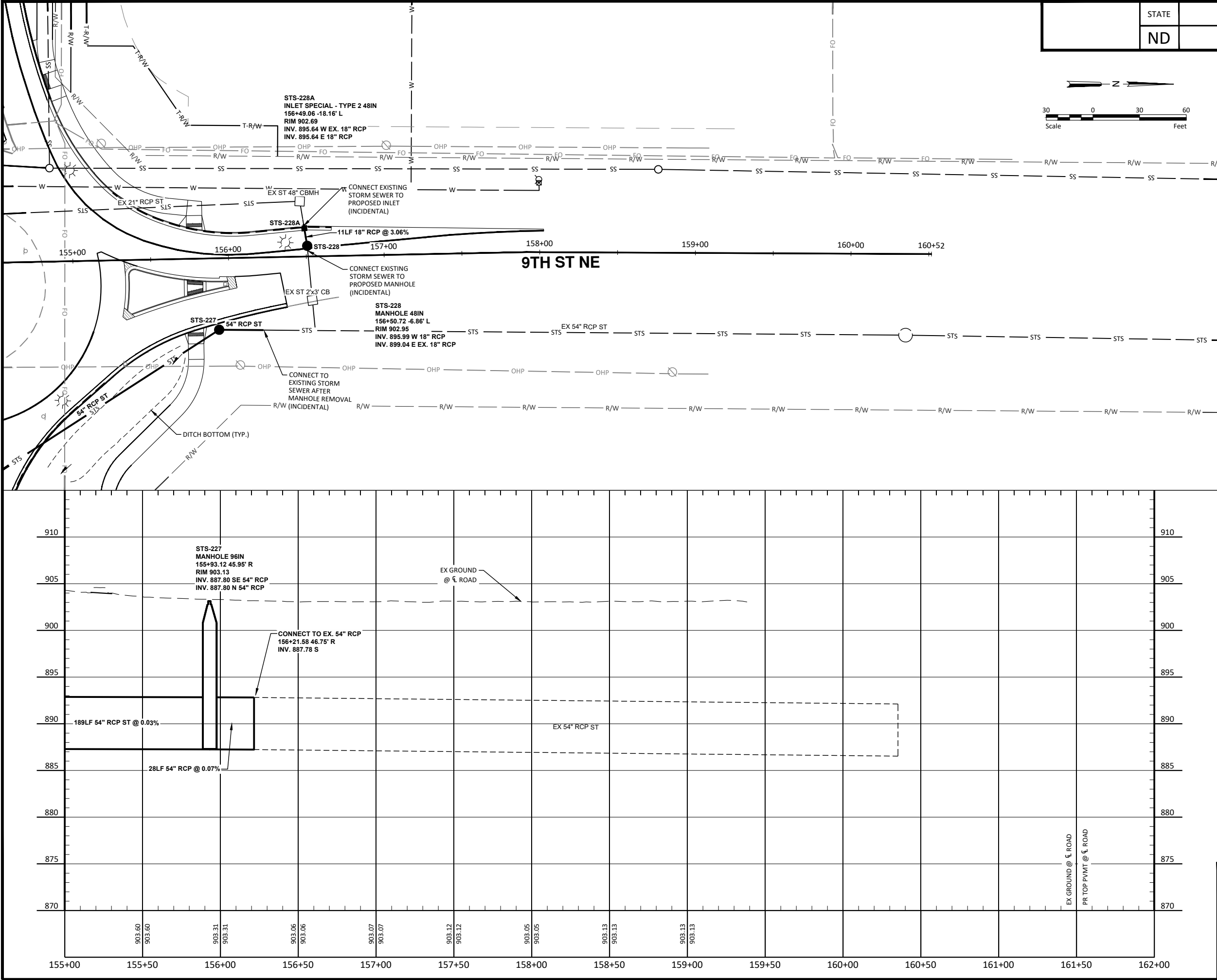


10/22/2025

Storm Sewer Plan & Profile - 9th St NE
Sta 148+00 to Sta 155+00

9th St NE from Main Ave to 12th Ave N
7th Ave NE from 9th St NE to City Limit

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STATE		PROJECT NO.	SECTION NO.	SHEET NO.
ND		TMA-SU-FXP-8-992(045)	55	19

SPEC CODE	BID ITEM	QTY	UNIT
714 337	PIPE CONC REINF 18IN CL V-STORM DRAIN Sta 155+00 to 160+00	11	LF
714 1212	PIPE CONC REINF 54IN CL III-STORM DRAIN Sta 155+00 to 160+00	138	LF
722 100	MANHOLE 48IN Sta 155+00 to 160+00	1	EA
722 140	MANHOLE 96IN Sta 155+00 to 160+00	1	EA
722 1100	MANHOLE RISER 48IN Sta 155+00 to 160+00	5.67	LF
722 1140	MANHOLE RISER 96IN Sta 155+00 to 160+00	14.16	LF
722 3701	INLET SPECIAL-TYPE 2 48IN Sta 155+00 to 160+00	1	EA

LEGEND

NEW	W
SS	SS
STS	STS
PLUG	
FIRE HYDRANT	
WATER VALVE	
WATERLINE TEE	
WATERLINE CROSS	
WATERLINE REDUCER	
WATERLINE SLEEVE	
STORM SEWER INLET	
STORM SEWER DOUBLE CATCH BASIN	
STORM SEWER MANHOLE	
SANITARY SEWER MANHOLE	
CLEANOUT	

ALL ELEVATIONS ARE BASED ON
THE U.S.G.S. VERTICAL DATUM OF 1988.
(UNLESS NOTED OTHERWISE)

Storm Sewer Plan & Profile - 9th St NE
Sta 155+00 to Sta 162+00

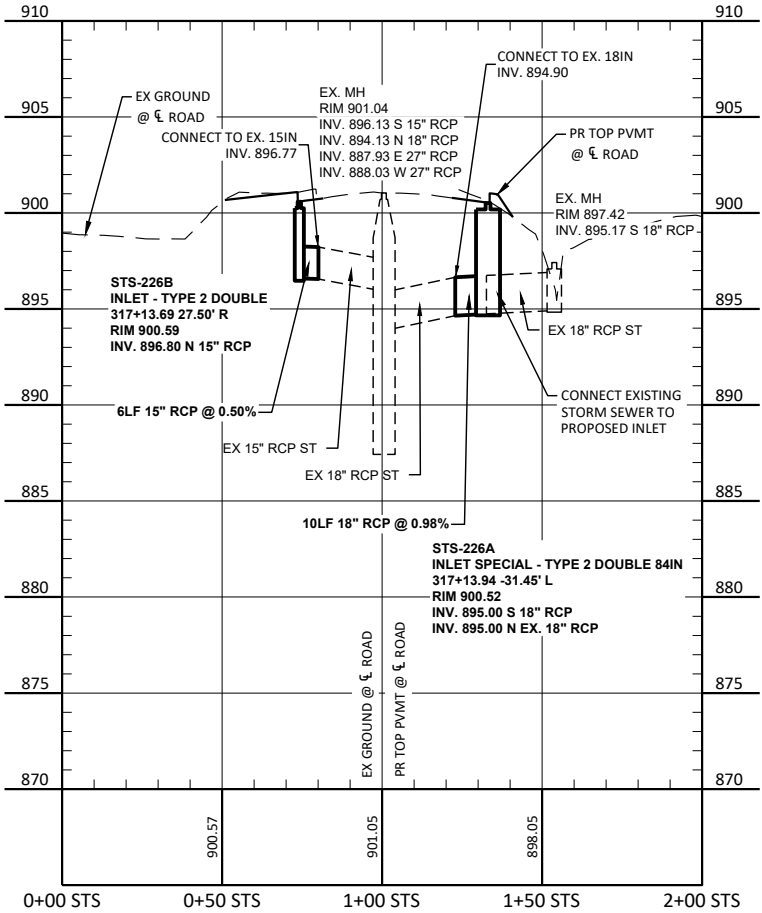
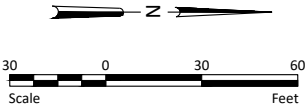
9th St NE from Main Ave to 12th Ave N
7th Ave NE from 9th St NE to City Limit

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STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	TMA-SU-FXP-8-992(045)	55	20

SPEC CODE	BID ITEM	QTY	UNIT
714 215	PIPE CONC REINF 15IN CL V-STORM DRAIN Sta 0+00 to 2+00	6	LF
714 337	PIPE CONC REINF 18IN CL V-STORM DRAIN Sta 0+00 to 2+00	10	LF
722 3520	INLET-TYPE 2 DOUBLE Sta 0+00 to 2+00	1	EA
722 3825	INLET SPECIAL-TYPE 2 DOUBLE 84IN Sta 0+00 to 2+00	1	EA

LEGEND	NEW
WATER MAIN	W
SANITARY SEWER MAIN	SS
STORM SEWER MAIN	STS
EDGEDRAIN NON PERM. BASE	
PLUG	
FIRE HYDRANT	
WATER VALVE	
WATERLINE TEE	
WATERLINE CROSS	
WATERLINE REDUCER	
WATERLINE SLEEVE	
STORM SEWER INLET	
STORM SEWER DOUBLE CATCH BASIN	
STORM SEWER MANHOLE	
SANITARY SEWER MANHOLE	
CLEANOUT	



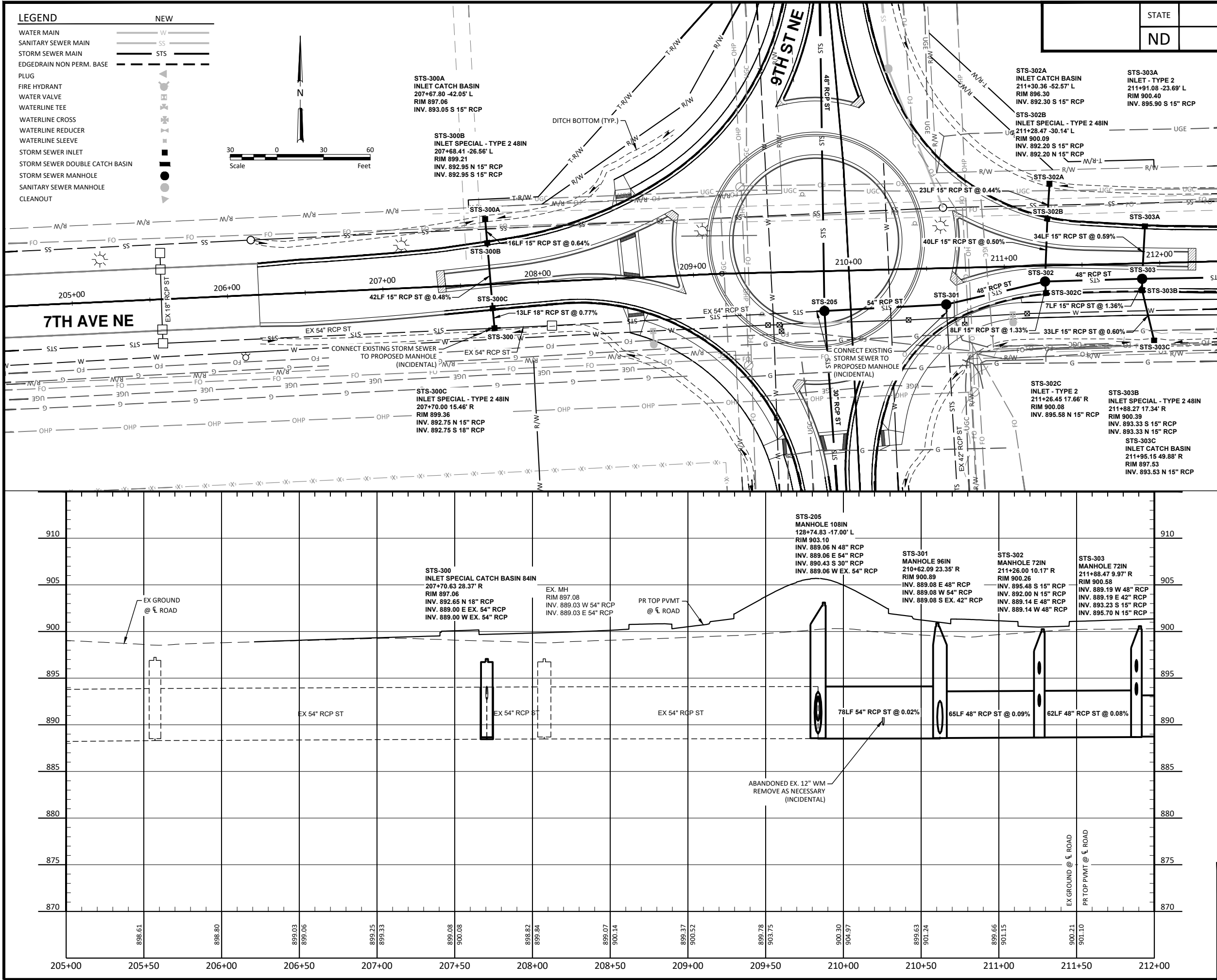
ALL ELEVATIONS ARE BASED ON
THE U.S.G.S. VERTICAL DATUM OF 1988.
(UNLESS NOTED OTHERWISE)



Storm Sewer Plan & Profile - 12th Ave NE
Sta 316+00 to Sta 318+00

9th St NE from Main Ave to 12th Ave N
7th Ave NE from 9th St NE to City Limit

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STATE		PROJECT NO.	SECTION NO.	SHEET NO.
ND		TMA-SU-FXP-8-992(045)	55	21
SPEC CODE BID ITEM			QTY UNIT	
714	215	PIPE CONC REINF 15IN CL V-STORM DRAIN Sta 207+00 to 212+00	203	LF
714	337	PIPE CONC REINF 18IN CL V-STORM DRAIN Sta 207+00 to 212+00	13	LF
714	1010	PIPE CONC REINF 42IN CL III-STORM DRAIN Sta 207+00 to 212+00	11	LF
714	1110	PIPE CONC REINF 48IN CL III-STORM DRAIN Sta 207+00 to 212+00	127	LF
714	1212	PIPE CONC REINF 54IN CL III-STORM DRAIN Sta 207+00 to 212+00	78	LF
722	120	MANHOLE 72IN Sta 207+00 to 212+00	2	EA
722	140	MANHOLE 96IN Sta 207+00 to 212+00	1	EA
722	1120	MANHOLE RISER 72IN Sta 207+00 to 212+00	20.01	LF
722	1140	MANHOLE RISER 96IN Sta 207+00 to 212+00	10.6	LF
722	3510	INLET-TYPE 2 Sta 207+00 to 212+00	2	EA
722	3701	INLET SPECIAL-TYPE 2 48IN Sta 207+00 to 212+00	4	EA
722	4005	INLET CATCH BASIN Sta 207+00 to 212+00	3	EA
722	4114	INLET SPECIAL CATCH BASIN 84IN Sta 207+00 to 212+00	1	EA

CITY OF WEST FARGO

HOUSTON engineering, inc.

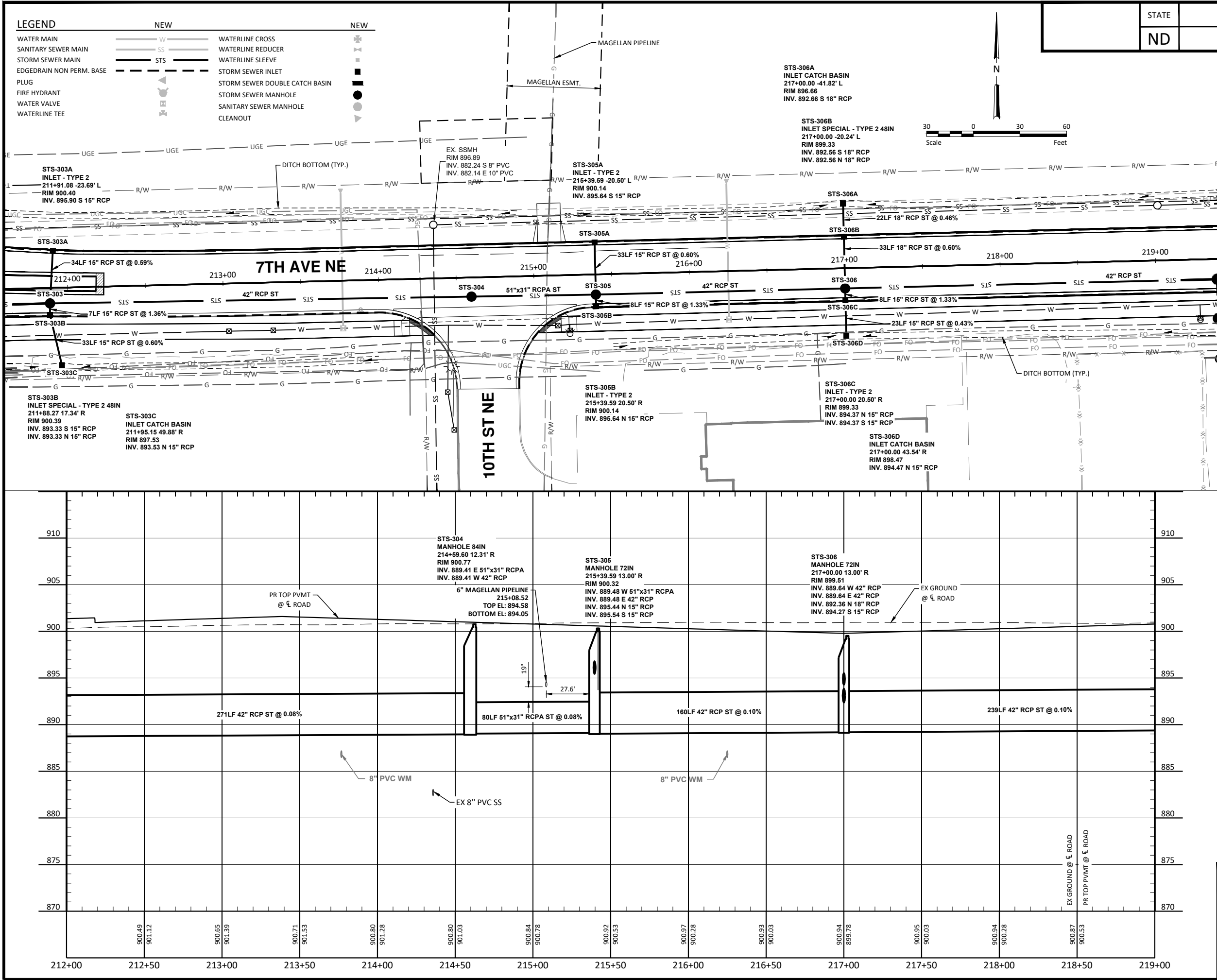
ALL ELEVATIONS ARE BASED ON THE U.S.G.S. VERTICAL DATUM OF 1988. (UNLESS NOTED OTHERWISE)

REGISTERED PROFESSIONAL ENGINEER
MICHAEL J. FERRIE
PE-10922
DATE
NORTH DAKOTA
10/22/2025

Storm Sewer Plan & Profile - 7th Ave NE
Sta 205+00 to Sta 212+00

9th St NE from Main Ave to 12th Ave N
7th Ave NE from 9th St NE to City Limit

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STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	TMA-SU-FXP-8-992(045)	55	22

SPEC CODE	BID ITEM	QTY	UNIT
714 215	PIPE CONC REINF 15IN CL V-STORM DRAIN Sta 212+00 to 219+00	72	LF
714 337	PIPE CONC REINF 18IN CL V-STORM DRAIN Sta 212+00 to 219+00	51	LF
714 1010	PIPE CONC REINF 42IN CL III-STORM DRAIN Sta 212+00 to 219+00	620	LF
722 120	MANHOLE 72IN Sta 212+00 to 219+00	2	EA
722 130	MANHOLE 84IN Sta 212+00 to 219+00	1	EA
722 1120	MANHOLE RISER 72IN Sta 212+00 to 219+00	18.13	LF
722 1130	MANHOLE RISER 84IN Sta 212+00 to 219+00	10.07	LF
714 2018	PIPE CONC REINF ARCH 51IN X 31IN CL II Sta 212+00 to 219+00	80	LF
722 3510	INLET-TYPE 2 Sta 212+00 to 219+00	3	EA
722 3701	INLET SPECIAL-TYPE 2 48IN Sta 212+00 to 219+00	1	EA
722 4005	INLET CATCH BASIN Sta 212+00 to 219+00	2	EA

WARNING
HIGH-PRESSURE PIPELINE(S)
Excavation and/or Construction Prohibited
Without compliance with State One-Call, AND
Without Written Permission From
MAGELLAN PIPELINE COMPANY, L.P.
A MAGELLAN REPRESENTATIVE MUST BE PRESENT DURING WORK AROUND PIPELINE(S)

CITY OF WEST FARGO

HOUSTON engineering, inc.

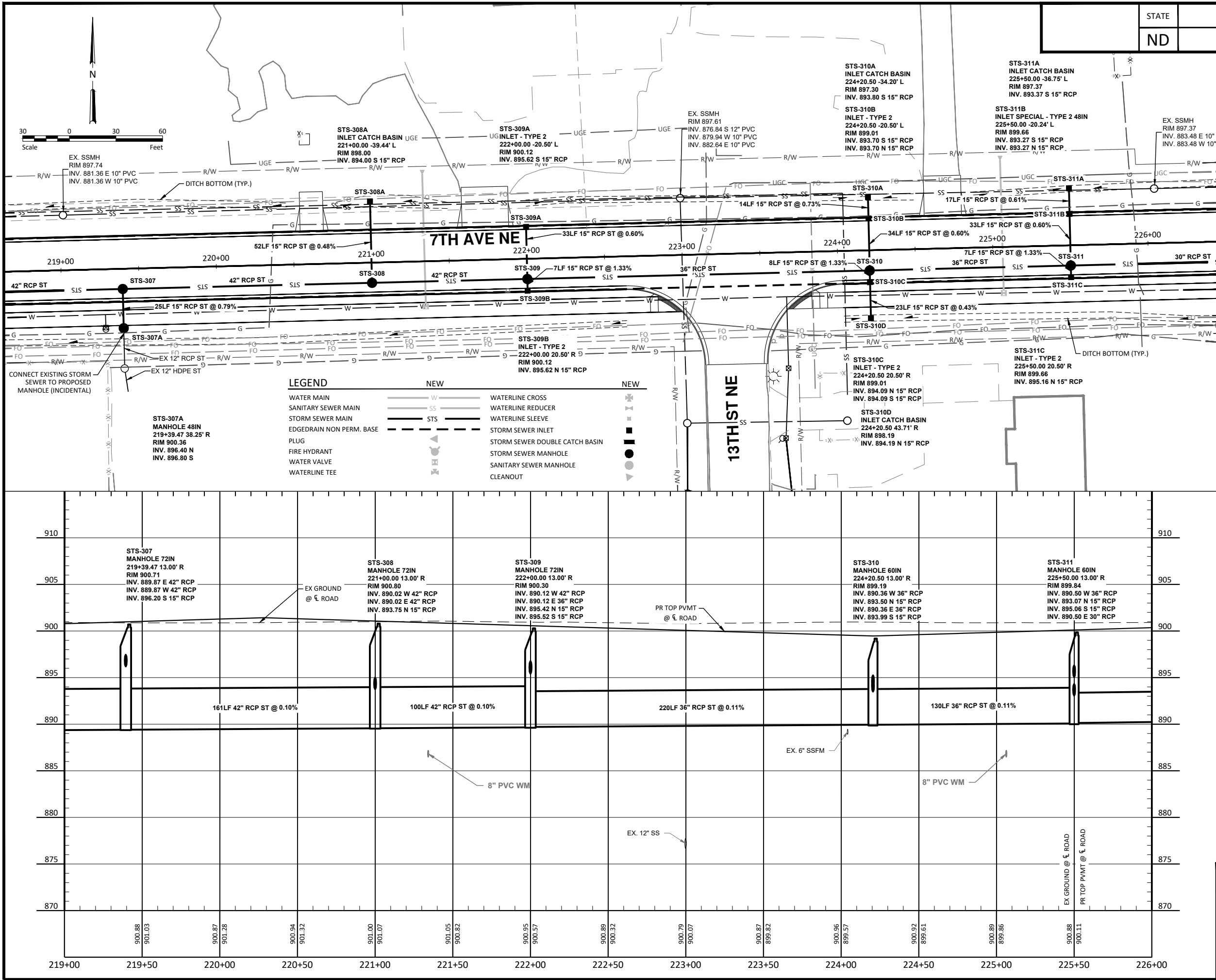
ALL ELEVATIONS ARE BASED ON THE U.S.G.S. VERTICAL DATUM OF 1988. (UNLESS NOTED OTHERWISE)

REGISTERED PROFESSIONAL ENGINEER
MICHAEL J. FERRIE
PE-10922
DATE
NORTH DAKOTA
10/22/2025

Storm Sewer Plan & Profile - 7th Ave NE
Sta 212+00 to Sta 219+00

9th St NE from Main Ave to 12th Ave N
7th Ave NE from 9th St NE to City Limit

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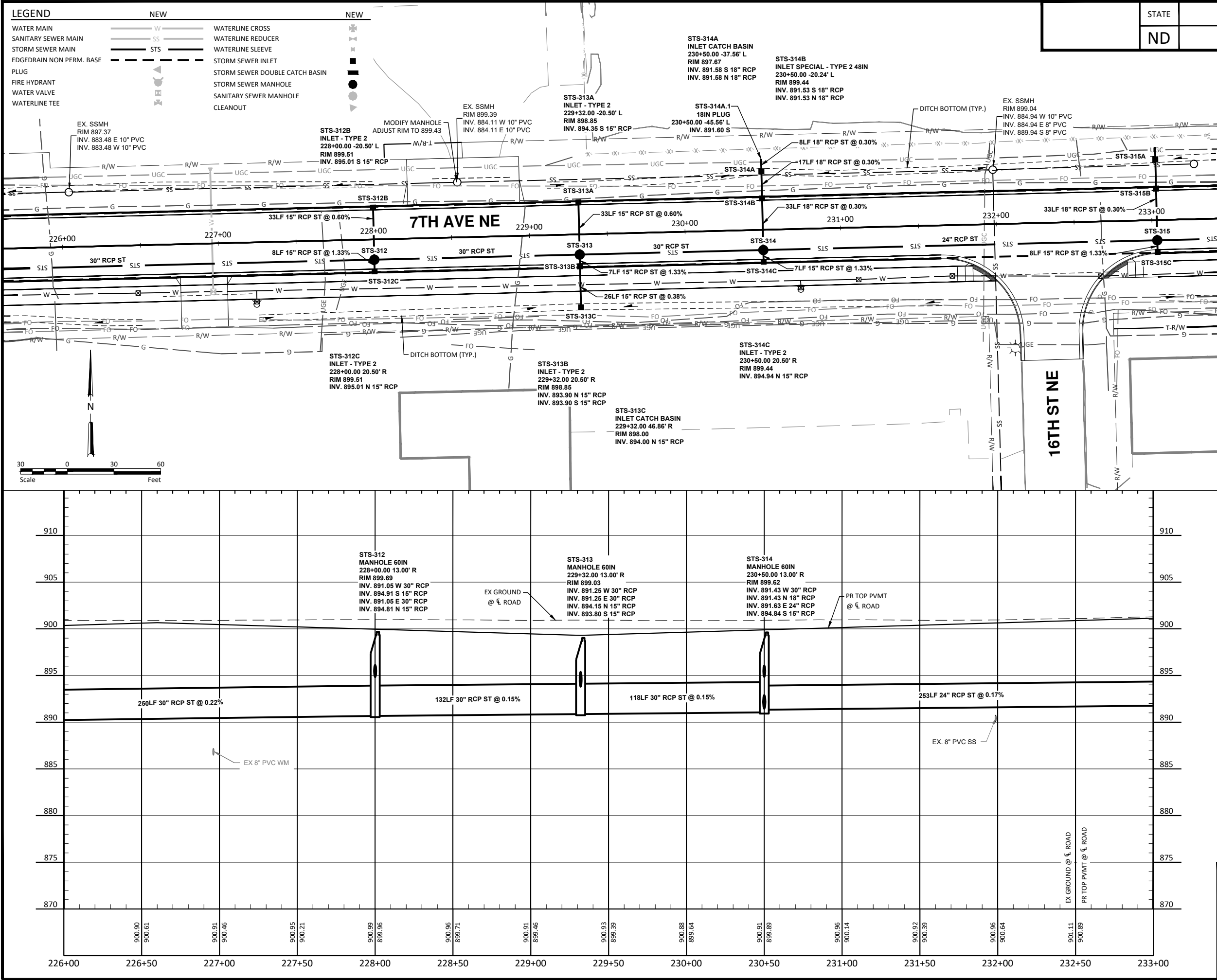
STATE		PROJECT NO.	SECTION NO.	SHEET NO.
ND		TMA-SU-FXP-8-992(045)	55	23
SPEC CODE BID ITEM			QTY UNIT	
714	215	PIPE CONC REINF 15IN CL V-STORM DRAIN Sta 219+00 to 226+00	254	LF
714	825	PIPE CONC REINF 30IN CL III-STORM DRAIN Sta 219+00 to 226+00	50	LF
714	910	PIPE CONC REINF 36IN CL III-STORM DRAIN Sta 219+00 to 226+00	350	LF
714	1010	PIPE CONC REINF 42IN CL III-STORM DRAIN Sta 219+00 to 226+00	300	LF
722	100	MANHOLE 48IN Sta 219+00 to 226+00	1	EA
722	110	MANHOLE 60IN Sta 219+00 to 226+00	2	EA
722	120	MANHOLE 72IN Sta 219+00 to 226+00	3	EA
722	1100	MANHOLE RISER 48IN Sta 219+00 to 226+00	2.65	LF
722	1110	MANHOLE RISER 60IN Sta 219+00 to 226+00	15.51	LF
722	1120	MANHOLE RISER 72IN Sta 219+00 to 226+00	27.93	LF
722	3510	INLET-TYPE 2 Sta 219+00 to 226+00	5	EA
722	3701	INLET SPECIAL-TYPE 2 48IN Sta 219+00 to 226+00	1	EA
722	4005	INLET CATCH BASIN Sta 219+00 to 226+00	4	EA

ALL ELEVATIONS ARE BASED ON THE U.S.G.S. VERTICAL DATUM OF 1988. (UNLESS NOTED OTHERWISE)

Storm Sewer Plan & Profile - 7th Ave NE
Sta 219+00 to Sta 226+00

9th St NE from Main Ave to 12th Ave N
7th Ave NE from 9th St NE to City Limit

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STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	TMA-SU-FXP-8-992(045)	55	24

SPEC CODE	BID ITEM	QTY	UNIT
714 215	PIPE CONC REINF 15IN CL V-STORM DRAIN Sta 226+00 to 233+00	114	LF
714 337	PIPE CONC REINF 18IN CL V-STORM DRAIN Sta 226+00 to 233+00	58	LF
714 620	PIPE CONC REINF 24IN CL III-STORM DRAIN Sta 226+00 to 233+00	250	LF
714 825	PIPE CONC REINF 30IN CL III-STORM DRAIN Sta 226+00 to 233+00	450	LF
714 9680	PLUG PIPE-ALL TYPES & SIZES Sta 226+00 to 233+00	1	EA
722 110	MANHOLE 60IN Sta 226+00 to 233+00	3	EA
722 1110	MANHOLE RISER 60IN Sta 226+00 to 233+00	20.49	LF
722 3510	INLET-TYPE 2 Sta 226+00 to 233+00	5	EA
722 3701	INLET SPECIAL-TYPE 2 48IN Sta 226+00 to 233+00	1	EA
722 4005	INLET CATCH BASIN Sta 226+00 to 233+00	2	EA
910 570	MODIFY MANHOLE Sta 226+00 to 233+00	1	EA



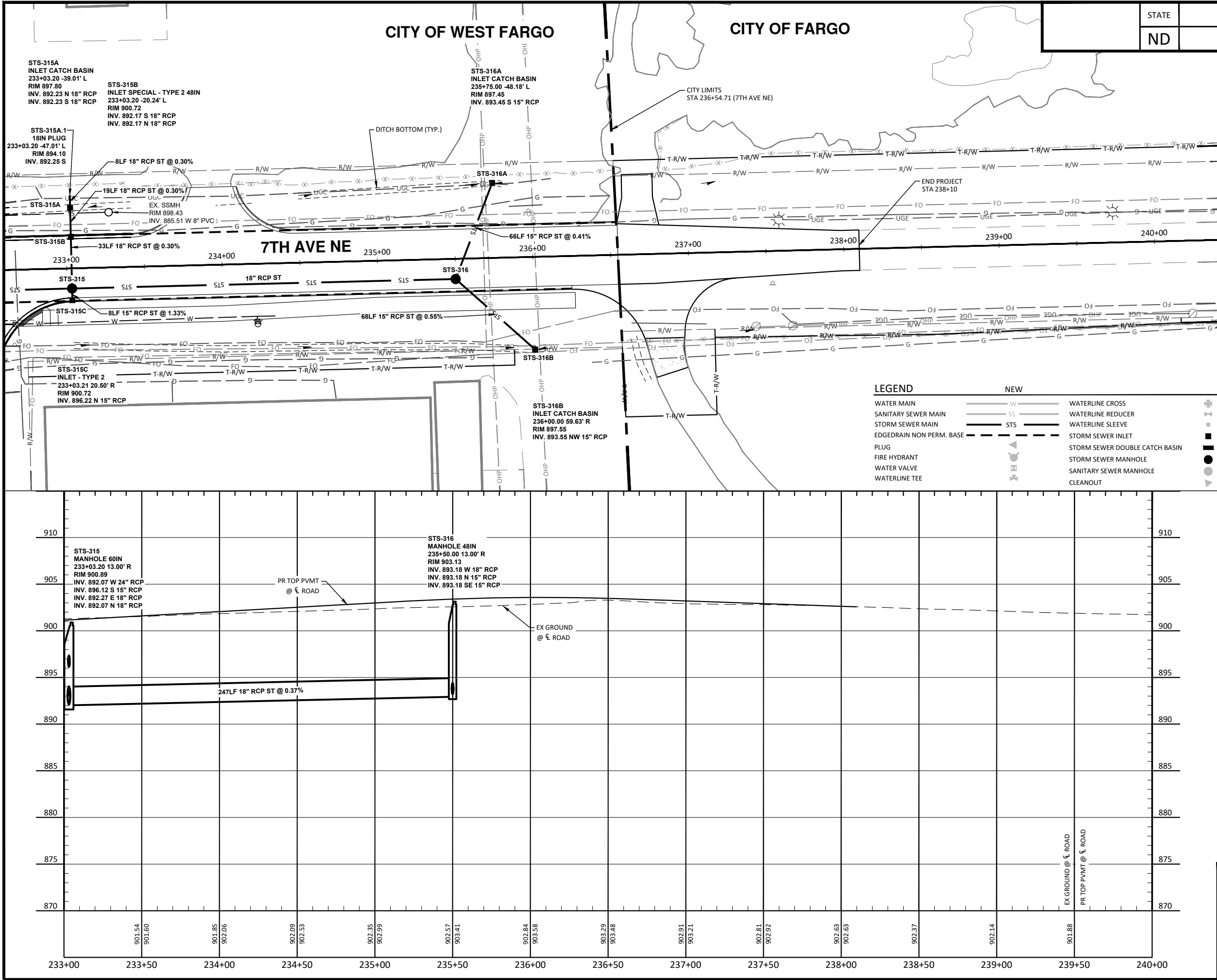
ALL ELEVATIONS ARE BASED ON
THE U.S.G.S. VERTICAL DATUM OF 1988.
(UNLESS NOTED OTHERWISE)



Storm Sewer Plan & Profile - 7th Ave NE
Sta 226+00 to Sta 233+00

9th St NE from Main Ave to 12th Ave N
7th Ave NE from 9th St NE to City Limit

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STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	TMA-SU-FXP-8-992(045)	55	25

SPEC CODE	BID ITEM	QTY	UNIT
714 215	PIPE CONC REINF 15IN CL V-STORM DRAIN Sta 233+00 to 236+00	142	LF
714 337	PIPE CONC REINF 18IN CL V-STORM DRAIN Sta 233+00 to 236+00	307	LF
714 620	PIPE CONC REINF 24IN CL III-STORM DRAIN Sta 233+00 to 236+00	3	LF
714 9680	PLUG PIPE-ALL TYPES & SIZES Sta 233+00 to 236+00	1	EA
722 100	MANHOLE 48IN Sta 233+00 to 236+00	1	EA
722 110	MANHOLE 60IN Sta 233+00 to 236+00	1	EA
722 1100	MANHOLE RISER 48IN Sta 233+00 to 236+00	8.66	LF
722 1110	MANHOLE RISER 60IN Sta 233+00 to 236+00	7.4	LF
722 3510	INLET-TYPE 2 Sta 233+00 to 236+00	1	EA

Scale 0 30 60 Feet

CITY OF WEST FARGO

HOUSTON engineering, inc.

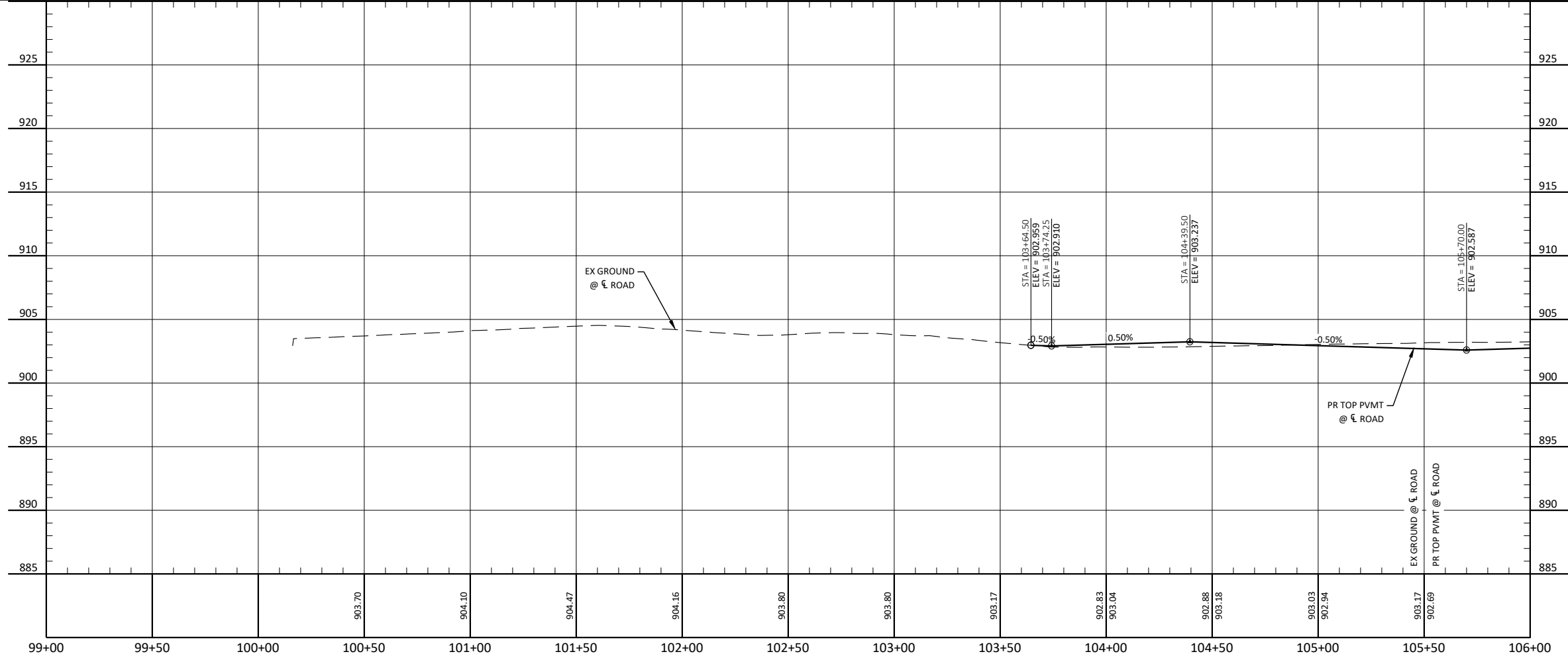
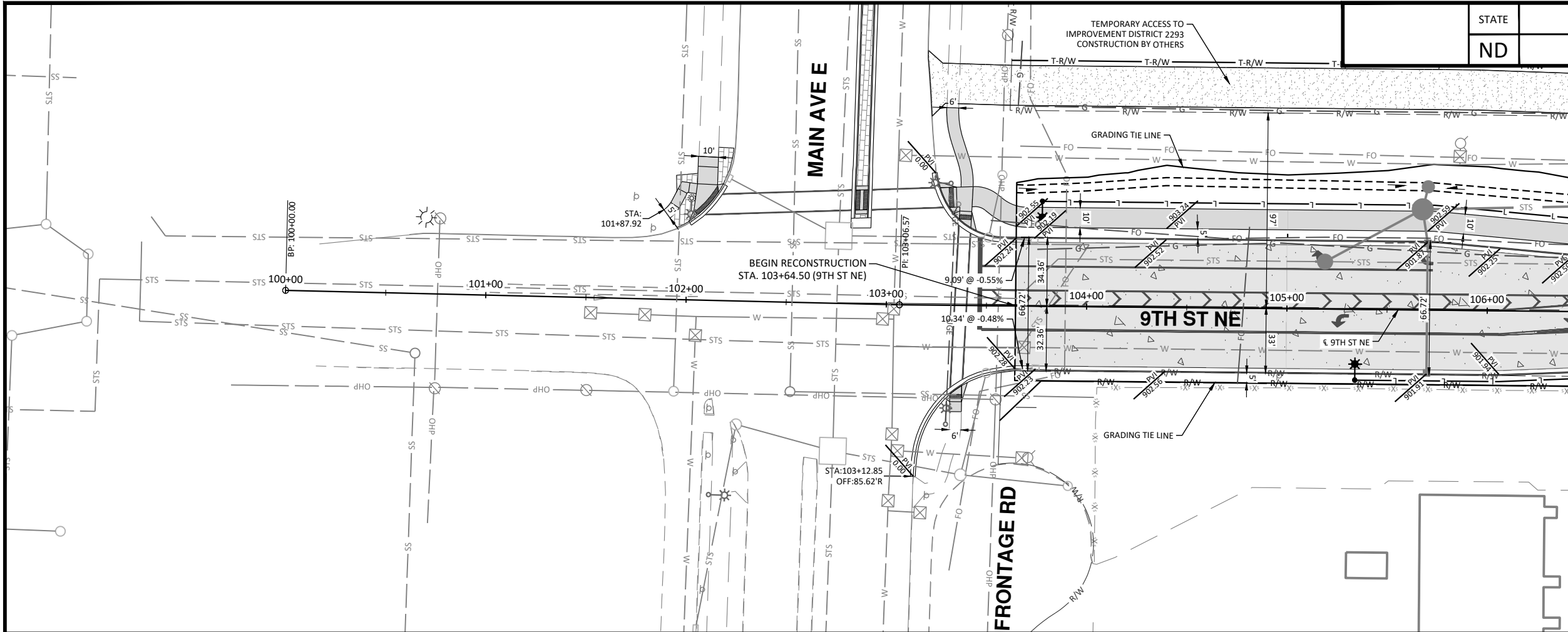
ALL ELEVATIONS ARE BASED ON THE U.S.G.S. VERTICAL DATUM OF 1988. (UNLESS NOTED OTHERWISE)

REGISTERED PROFESSIONAL ENGINEER
MICHAEL J. FERRIE
PE-10922
DATE
NORTH DAKOTA
10/22/2025

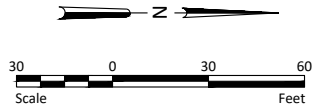
Storm Sewer Plan & Profile - 7th Ave NE
Sta 233+00 to Sta 240+00

9th St NE from Main Ave to 12th Ave N
7th Ave NE from 9th St NE to City Limit

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STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	TMA-SU-FXP-8-992(045)	60	1



NOTES:

1. ALL GRADES ARE FLOWLINE GRADES SHOWN AT FACE OF CURB UNLESS OTHERWISE NOTED.
2. ALL CURB IS STANDARD TYPE I UNLESS OTHERWISE NOTED.

LEGEND

EXISTING RIGHT OF WAY	R/W
PROPOSED RIGHT OF WAY	R/W
TEMPORARY RIGHT OF WAY	T-R/W
DITCH BOTTOM	---
GRADING TIE LINE	---
CURB & GUTTER - TYPE I	---
10IN NON REINF CONCRETE PVMT CL AE-DOWELED	---
SIDEWALK CONCRETE 5IN	---
DRIVEWAY CONCRETE (7IN)	---
PIGMENTED IMPRINTED CONCRETE (6IN)	---
AGGREGATE SURFACE COURSE CL 13 (4IN)	---
CONCRETE MEDIAN NOSE PAVING	---
DETECTABLE WARNING PANELS	---



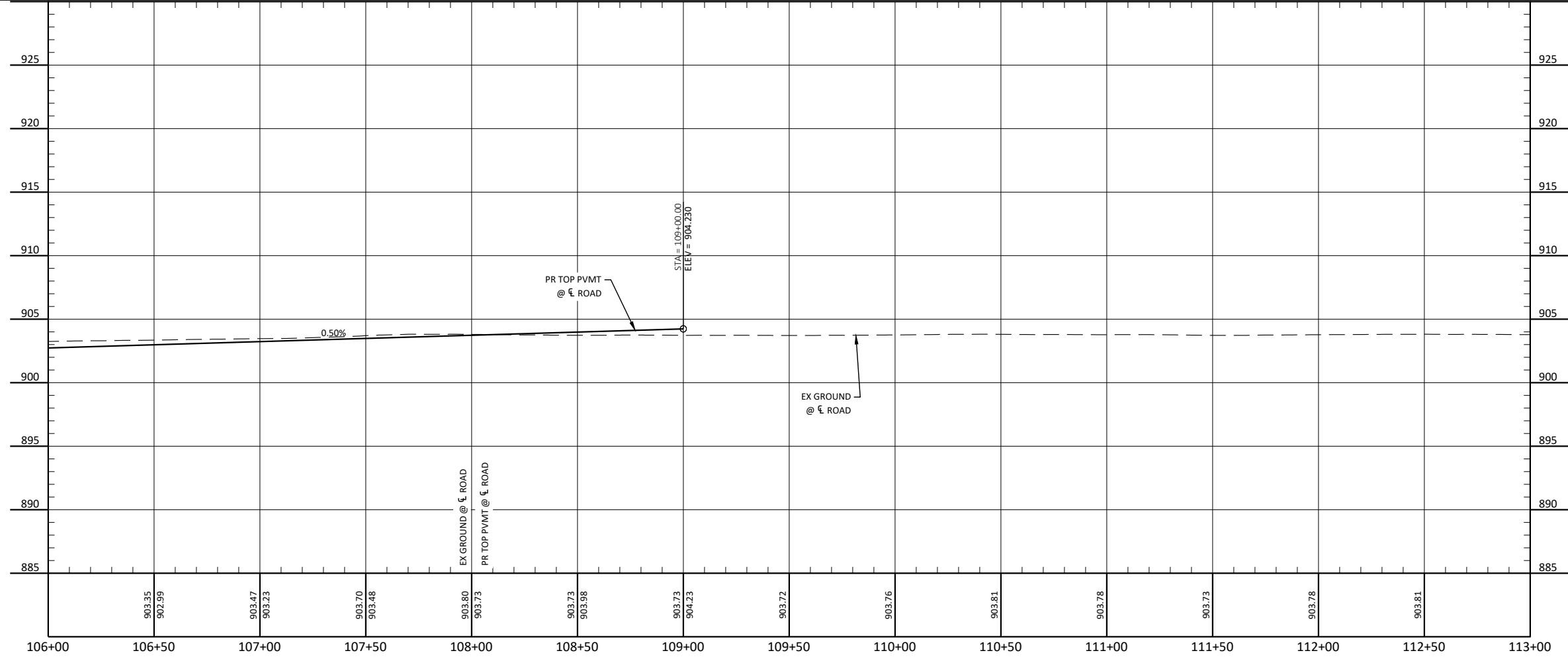
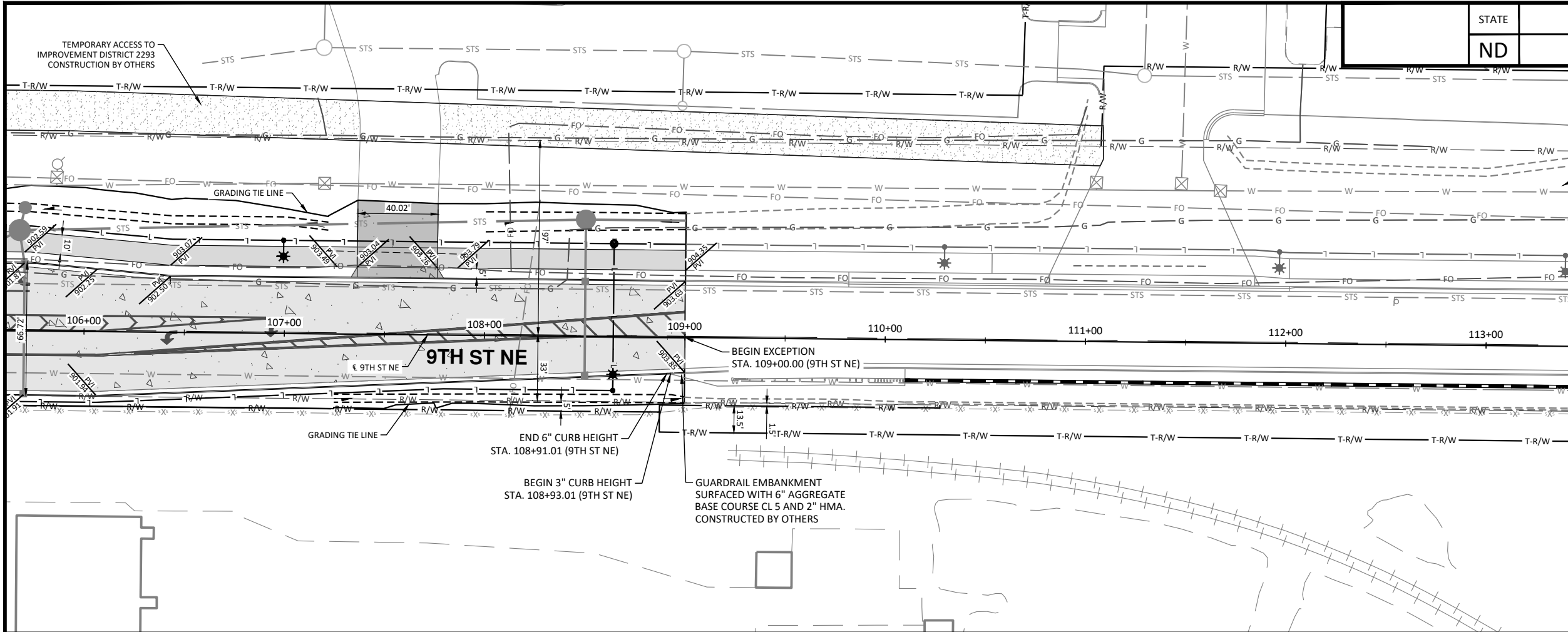
ALL ELEVATIONS ARE BASED ON THE U.S.G.S. VERTICAL DATUM OF 1988. (UNLESS NOTED OTHERWISE)



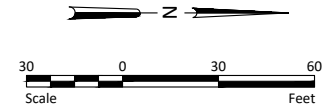
Plan & Profile - 9th St NE

9th St NE from Main Ave to 12th Ave N
7th Ave NE from 9th St NE to City Limit

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STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	TMA-SU-FXP-8-992(045)	60	2



NOTES:

1. ALL GRADES ARE FLOWLINE GRADES SHOWN AT FACE OF CURB UNLESS OTHERWISE NOTED.
2. ALL CURB IS STANDARD TYPE I UNLESS OTHERWISE NOTED.

LEGEND

EXISTING RIGHT OF WAY	R/W
PROPOSED RIGHT OF WAY	R/W
TEMPORARY RIGHT OF WAY	T-R/W
DITCH BOTTOM	=====
GRADING TIE LINE	=====
CURB & GUTTER - TYPE I	=====
10IN NON REINF CONCRETE PVMT CL AE-DOWELED	=====
SIDEWALK CONCRETE SIN	=====
DRIVEWAY CONCRETE (7IN)	=====
PIGMENTED IMPRINTED CONCRETE (6IN)	=====
AGGREGATE SURFACE COURSE CL 13 (4IN)	=====
CONCRETE MEDIAN NOSE PAVING	=====
DETECTABLE WARNING PANELS	=====



ALL ELEVATIONS ARE BASED ON THE U.S.G.S. VERTICAL DATUM OF 1988. (UNLESS NOTED OTHERWISE)

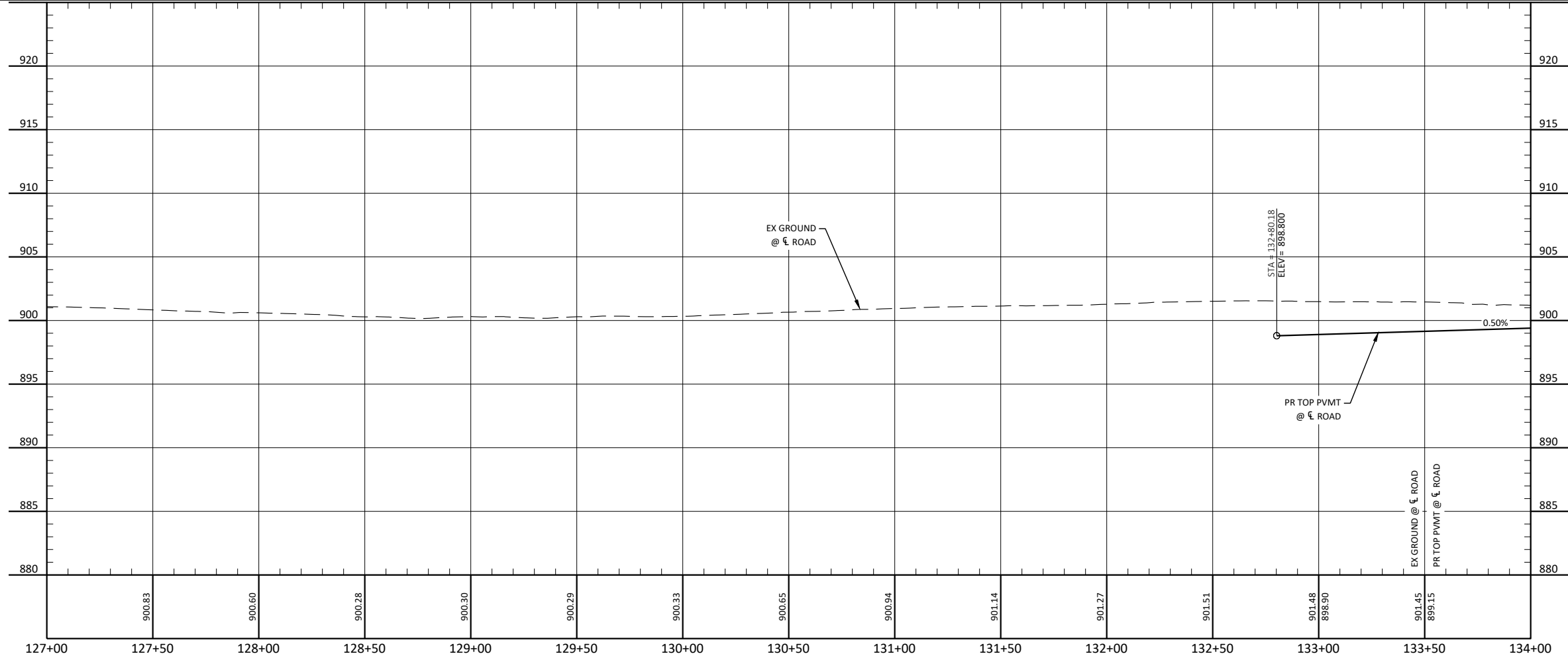
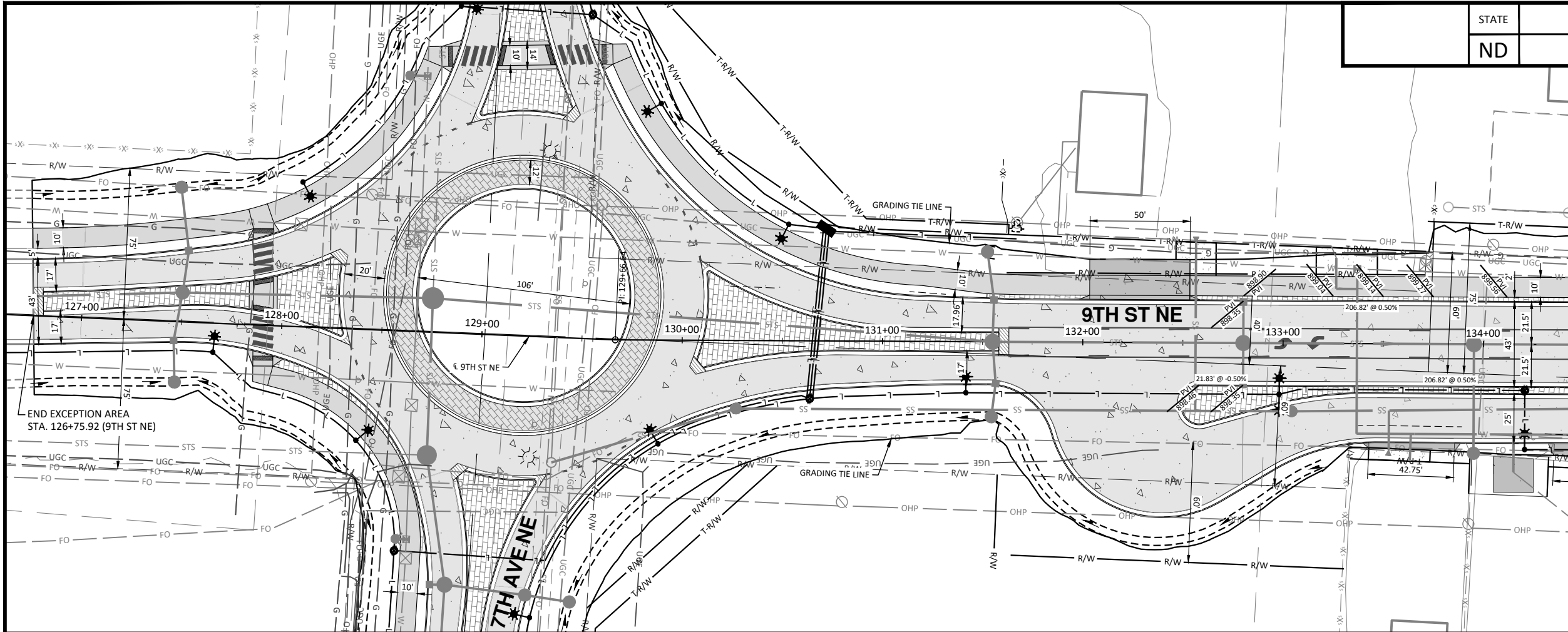


10/22/2025

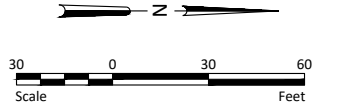
Plan & Profile - 9th St NE

9th St NE from Main Ave to 12th Ave N
7th Ave NE from 9th St NE to City Limit

H:\JBA\8600\8654\8654_0004 9th St\CAD\0_CITY PROJECT\Plans\060 - 9th St NE P & P.dwg-P&P (5)-10/22/2025 10:24 AM-(jerickson)



STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	TMA-SU-FXP-8-992(045)	60	3

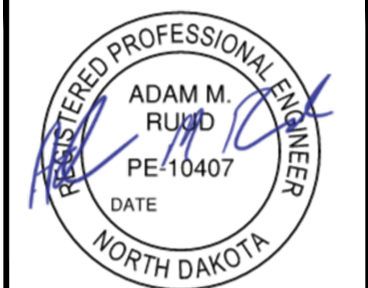


- NOTES:
- ALL GRADES ARE FLOWLINE GRADES SHOWN AT FACE OF CURB UNLESS OTHERWISE NOTED.
 - ALL CURB IS STANDARD TYPE I UNLESS OTHERWISE NOTED.

LEGEND	
EXISTING RIGHT OF WAY	R/W
PROPOSED RIGHT OF WAY	R/W
TEMPORARY RIGHT OF WAY	T-R/W
DITCH BOTTOM	---
GRADING TIE LINE	---
CURB & GUTTER - TYPE I	---
10IN NON REINF CONCRETE PVMT CL AE-DOWELED	---
SIDEWALK CONCRETE 5IN	---
DRIVEWAY CONCRETE (7IN)	---
PIGMENTED IMPRINTED CONCRETE (6IN)	---
AGGREGATE SURFACE COURSE CL 13 (4IN)	---
CONCRETE MEDIAN NOSE PAVING	---
DETECTABLE WARNING PANELS	---
10IN NON REINF CONCRETE PVMT CL AE-DOWELED -COLORED-TEXT	---



ALL ELEVATIONS ARE BASED ON THE U.S.G.S. VERTICAL DATUM OF 1988. (UNLESS NOTED OTHERWISE)

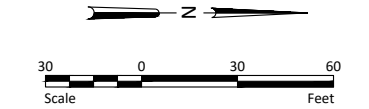
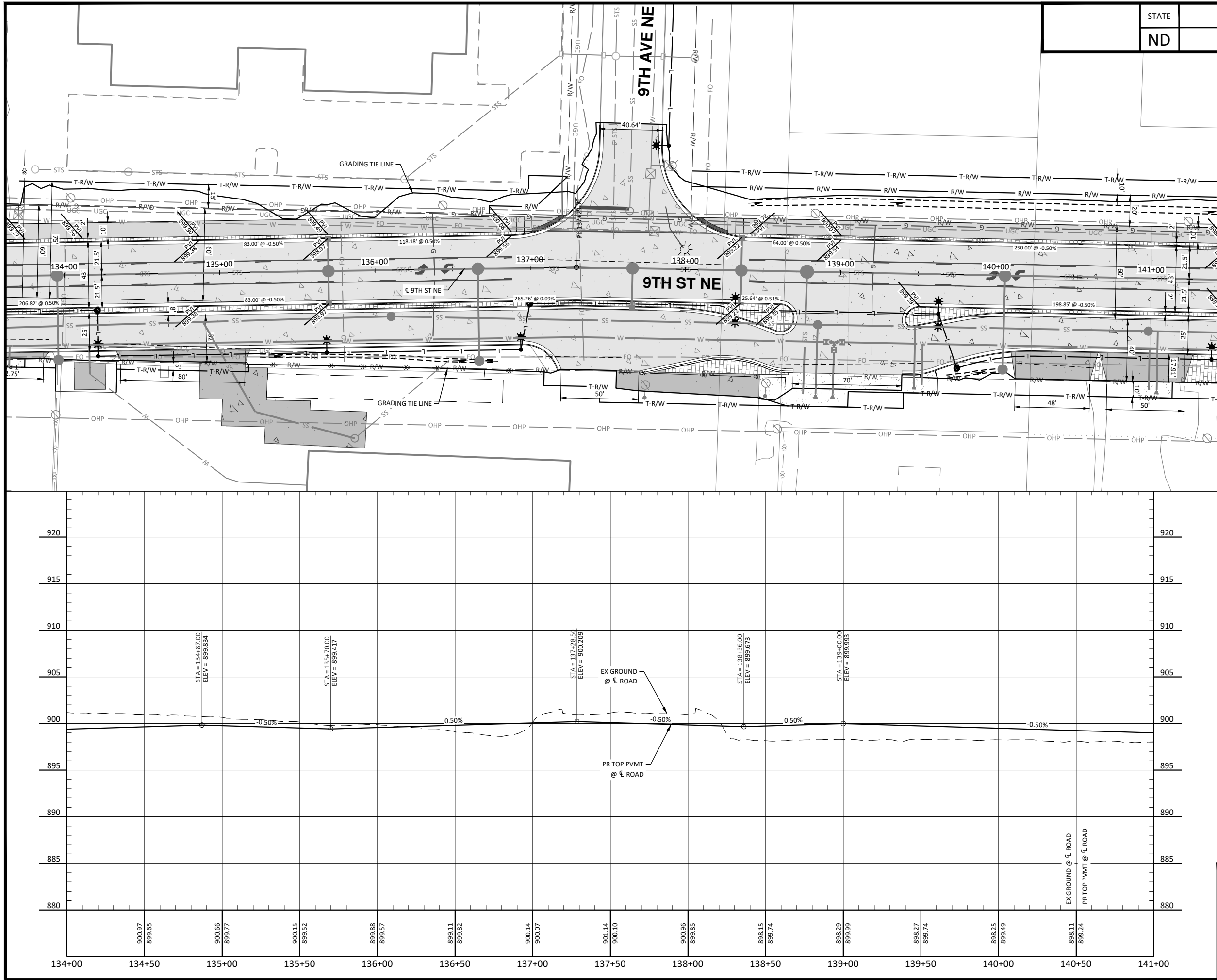


10/22/2025

Plan & Profile - 9th St NE

9th St NE from Main Ave to 12th Ave N
7th Ave NE from 9th St NE to City Limit

H:\JBN\8600\8654\8654_0004 9th St CAD\0_CITY PROJECT\Plans\060 - 9th St NE P & P.dwg-P&P (6)-10/22/2025 10:24 AM-(jerickson)



- NOTES:
1. ALL GRADES ARE FLOWLINE GRADES SHOWN AT FACE OF CURB UNLESS OTHERWISE NOTED.
 2. ALL CURB IS STANDARD TYPE I UNLESS OTHERWISE NOTED.

LEGEND	
EXISTING RIGHT OF WAY	R/W
PROPOSED RIGHT OF WAY	R/W
TEMPORARY RIGHT OF WAY	T-R/W
DITCH BOTTOM	---
GRADING TIE LINE	---
CURB & GUTTER - TYPE I	---
10IN NON REINF CONCRETE PVMT CL AE-DOWELED	---
SIDEWALK CONCRETE 5IN	---
DRIVEWAY CONCRETE (7IN)	---
PIGMENTED IMPRINTED CONCRETE (6IN)	---
AGGREGATE SURFACE COURSE CL 13 (4IN)	---
CONCRETE MEDIAN NOSE PAVING	---
DETECTABLE WARNING PANELS	---



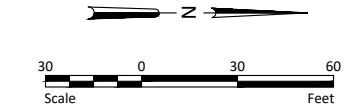
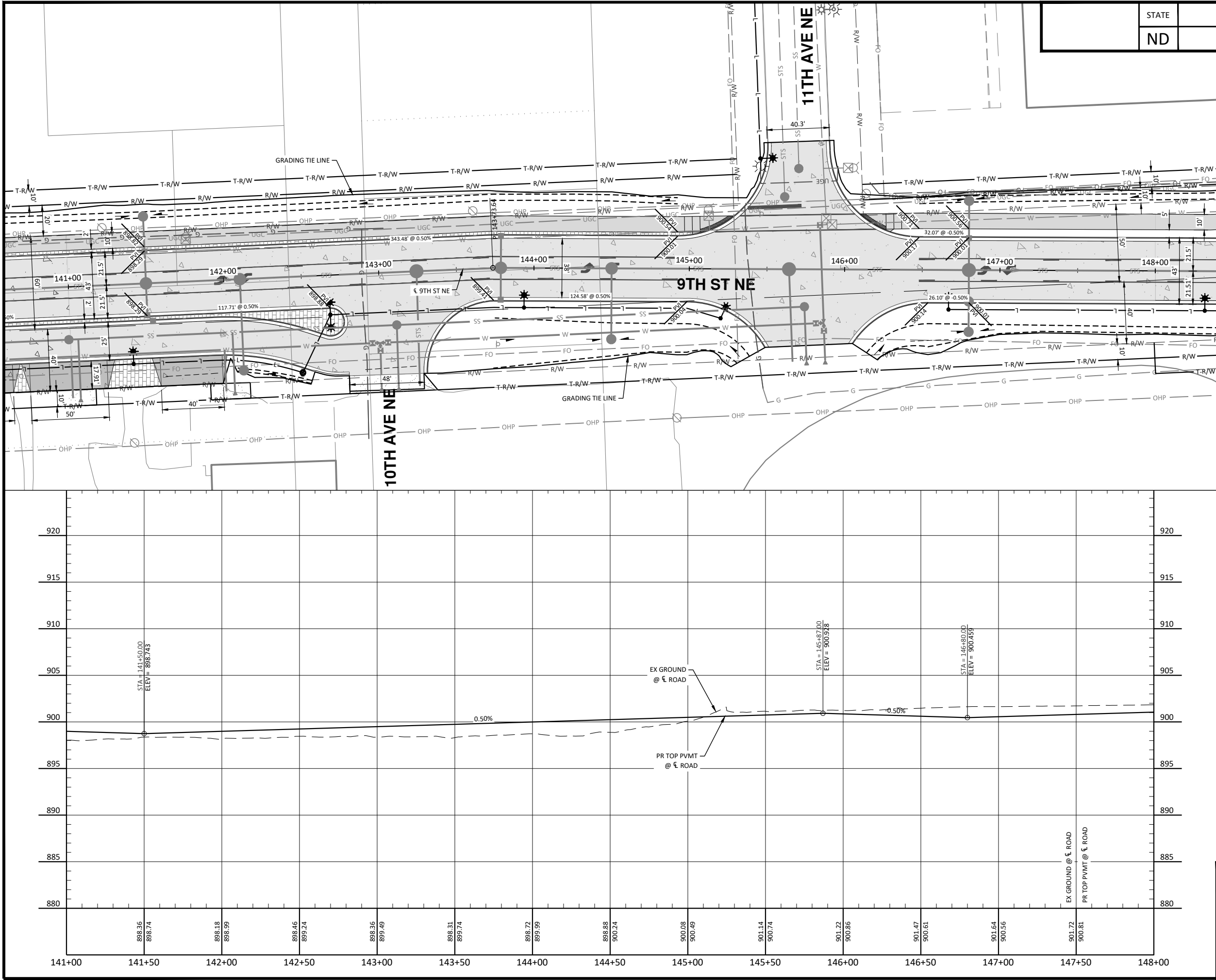
ALL ELEVATIONS ARE BASED ON THE U.S.G.S. VERTICAL DATUM OF 1988. (UNLESS NOTED OTHERWISE)



Plan & Profile - 9th St NE

9th St NE from Main Ave to 12th Ave N
7th Ave NE from 9th St NE to City Limit

H:\JBN\8600\8654\8654_0004 9th St NE P & P.dwg-P&P (7)-10/22/2025 10:24 AM (jerickson)



- NOTES:
1. ALL GRADES ARE FLOWLINE GRADES SHOWN AT FACE OF CURB UNLESS OTHERWISE NOTED.
 2. ALL CURB IS STANDARD TYPE I UNLESS OTHERWISE NOTED.

LEGEND	
EXISTING RIGHT OF WAY	R/W
PROPOSED RIGHT OF WAY	R/W
TEMPORARY RIGHT OF WAY	T-R/W
DITCH BOTTOM	---
GRADING TIE LINE	---
CURB & GUTTER - TYPE I	---
10IN NON REINF CONCRETE	---
PVMT CL AE-DOWELED	---
SIDEWALK CONCRETE 5IN	---
DRIVEWAY CONCRETE (7IN)	---
PIGMENTED IMPRINTED CONCRETE (6IN)	---
AGGREGATE SURFACE COURSE CL 13 (4IN)	---
CONCRETE MEDIAN NOSE PAVING	---
DETECTABLE WARNING PANELS	---



ALL ELEVATIONS ARE BASED ON THE U.S.G.S. VERTICAL DATUM OF 1988. (UNLESS NOTED OTHERWISE)

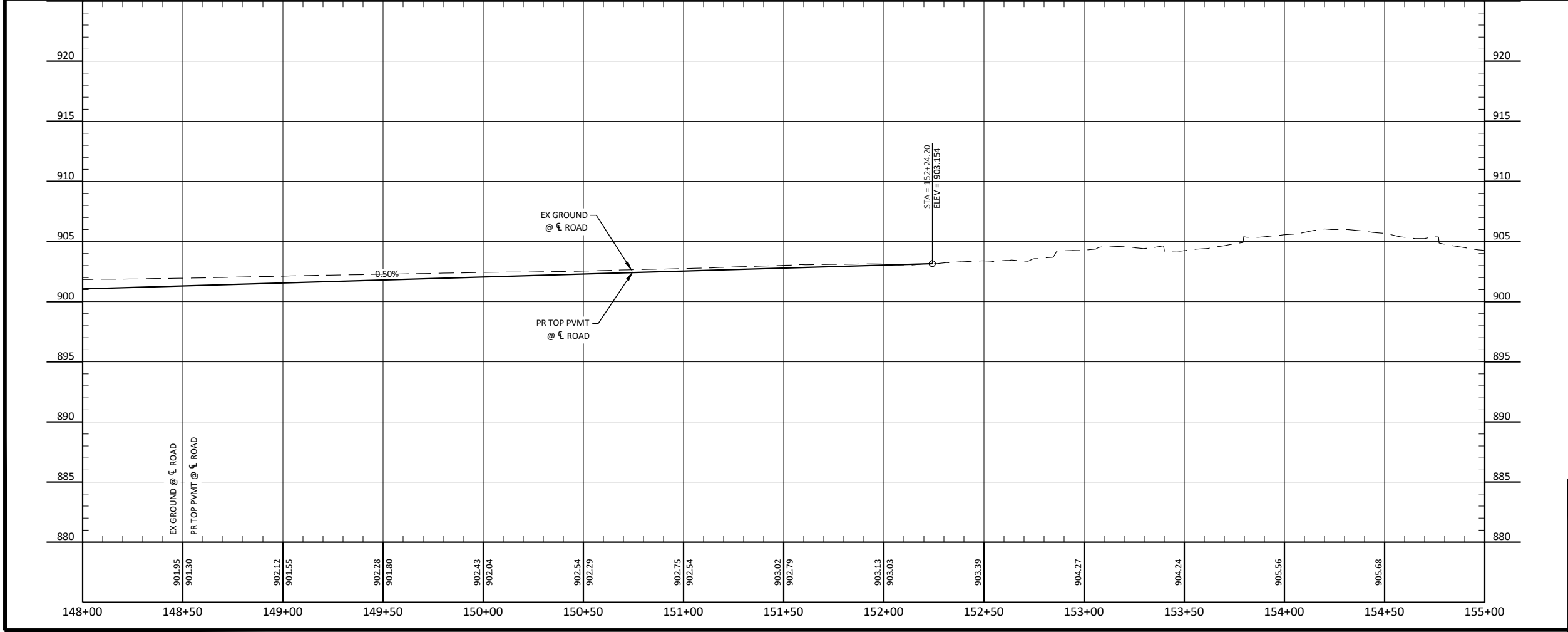
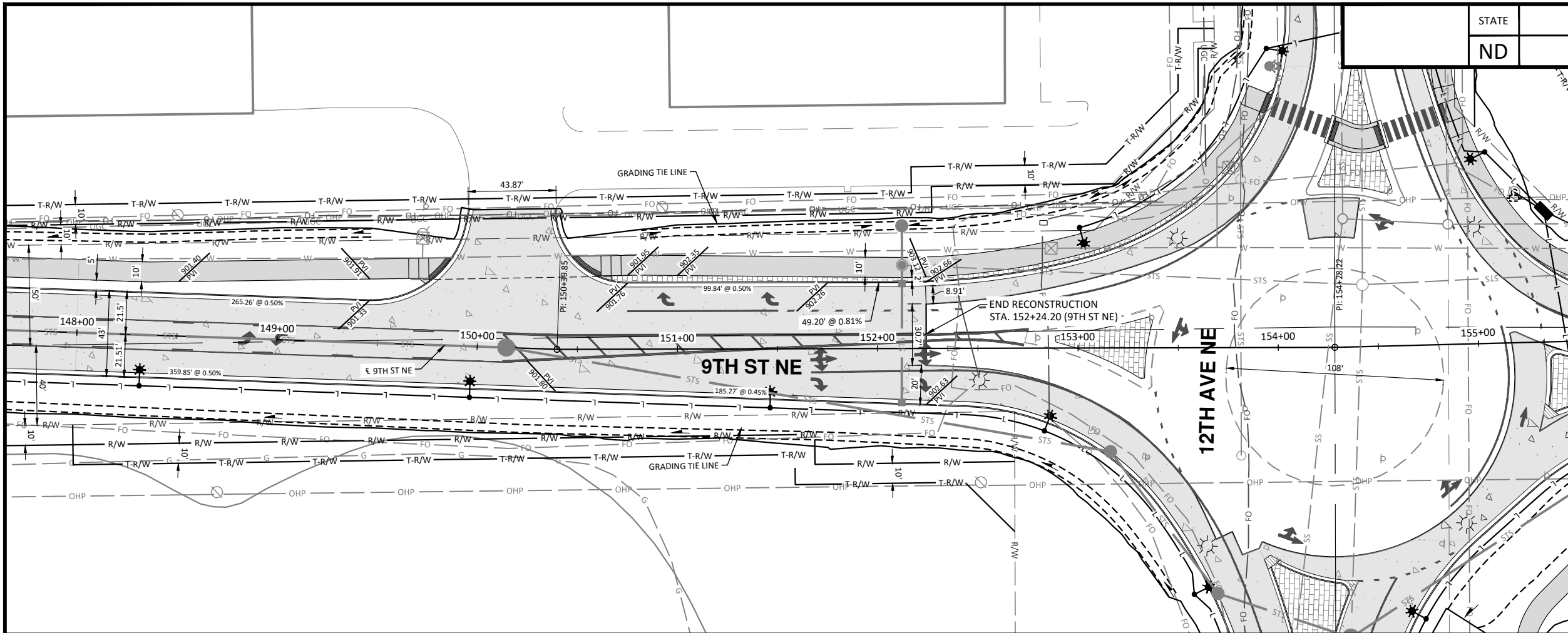


10/22/2025

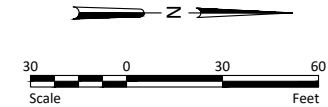
Plan & Profile - 9th St NE

9th St NE from Main Ave to 12th Ave N
7th Ave NE from 9th St NE to City Limit

H:\JBN\8600\8654\8654_0004 9th St\CAD\0_CITY PROJECT\Plans\060 - 9th St NE P & P.dwg-P&P (B)-10/22/2025 10:24 AM-(jerickson)



STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	TMA-SU-FXP-8-992(045)	60	6



- NOTES:
- ALL GRADES ARE FLOWLINE GRADES SHOWN AT FACE OF CURB UNLESS OTHERWISE NOTED.
 - ALL CURB IS STANDARD TYPE I UNLESS OTHERWISE NOTED.

LEGEND	
EXISTING RIGHT OF WAY	R/W
PROPOSED RIGHT OF WAY	R/W
TEMPORARY RIGHT OF WAY	T-R/W
DITCH BOTTOM	STB
GRADING TIE LINE	Grading Tie Line
CURB & GUTTER - TYPE I	Curb & Gutter - Type I
10IN NON REINF CONCRETE PVMT CL AE-DOWELED	10in Non Reinf Concrete PVMT CL AE-Doweled
SIDEWALK CONCRETE SIN	Sidewalk Concrete SIN
DRIVEWAY CONCRETE (7IN)	Driveway Concrete (7in)
PIGMENTED IMPRINTED CONCRETE (6IN)	Pigmented Imprinted Concrete (6in)
AGGREGATE SURFACE COURSE CL 13 (4IN)	Aggregate Surface Course CL 13 (4in)
CONCRETE MEDIAN NOSE PAVING	Concrete Median Nose Paving
DETECTABLE WARNING PANELS	Detectable Warning Panels



ALL ELEVATIONS ARE BASED ON THE U.S.G.S. VERTICAL DATUM OF 1988. (UNLESS NOTED OTHERWISE)

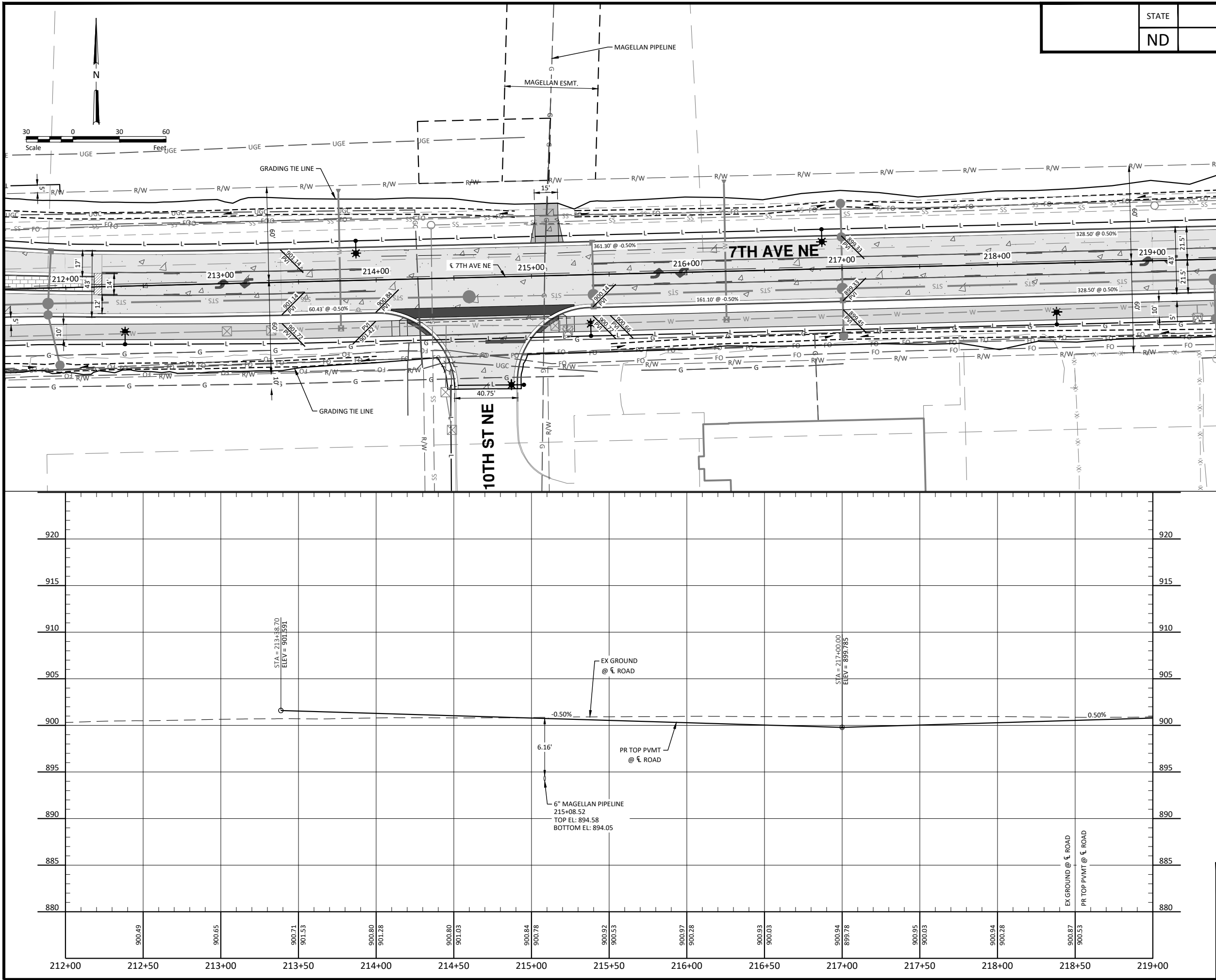


10/22/2025

Plan & Profile - 9th St NE

9th St NE from Main Ave to 12th Ave N
7th Ave NE from 9th St NE to City Limit

H:\JBN\8600\8654\8654_0004.9th St\CAD\0_CITY PROJECT\Plans\060 - 7th Ave NE P & P.dwg-P&P (2)-10/22/2025 10:25 AM-(jerrickson)



STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	TMA-SU-FXP-8-992(045)	60	7

NOTES:

1. ALL GRADES ARE FLOWLINE GRADES SHOWN AT FACE OF CURB UNLESS OTHERWISE NOTED.
2. ALL CURB IS STANDARD TYPE I UNLESS OTHERWISE NOTED.

LEGEND

EXISTING RIGHT OF WAY	R/W
PROPOSED RIGHT OF WAY	R/W
TEMPORARY RIGHT OF WAY	T-R/W
DITCH BOTTOM	
GRADING TIE LINE	
CURB & GUTTER - TYPE I	
10IN NON REINF CONCRETE PVMT CL AE-DOWELED	
SIDEWALK CONCRETE SIN	
DRIVEWAY CONCRETE (7IN)	
PIGMENTED IMPRINTED CONCRETE (6IN)	
AGGREGATE SURFACE COURSE CL 13 (4IN)	
CONCRETE MEDIAN NOSE PAVING	
DETECTABLE WARNING PANELS	
VALLEY GUTTER	

WARNING
HIGH-PRESSURE PIPELINE(S)
Excavation and/or Construction Prohibited
Without compliance with **State One-Call**, AND
Without Written Permission From
MAGELLAN PIPELINE COMPANY, L.P.
A MAGELLAN REPRESENTATIVE MUST BE PRESENT DURING WORK AROUND PIPELINE(S)



ALL ELEVATIONS ARE BASED ON
THE U.S.G.S. VERTICAL DATUM OF 1988.
(UNLESS NOTED OTHERWISE)

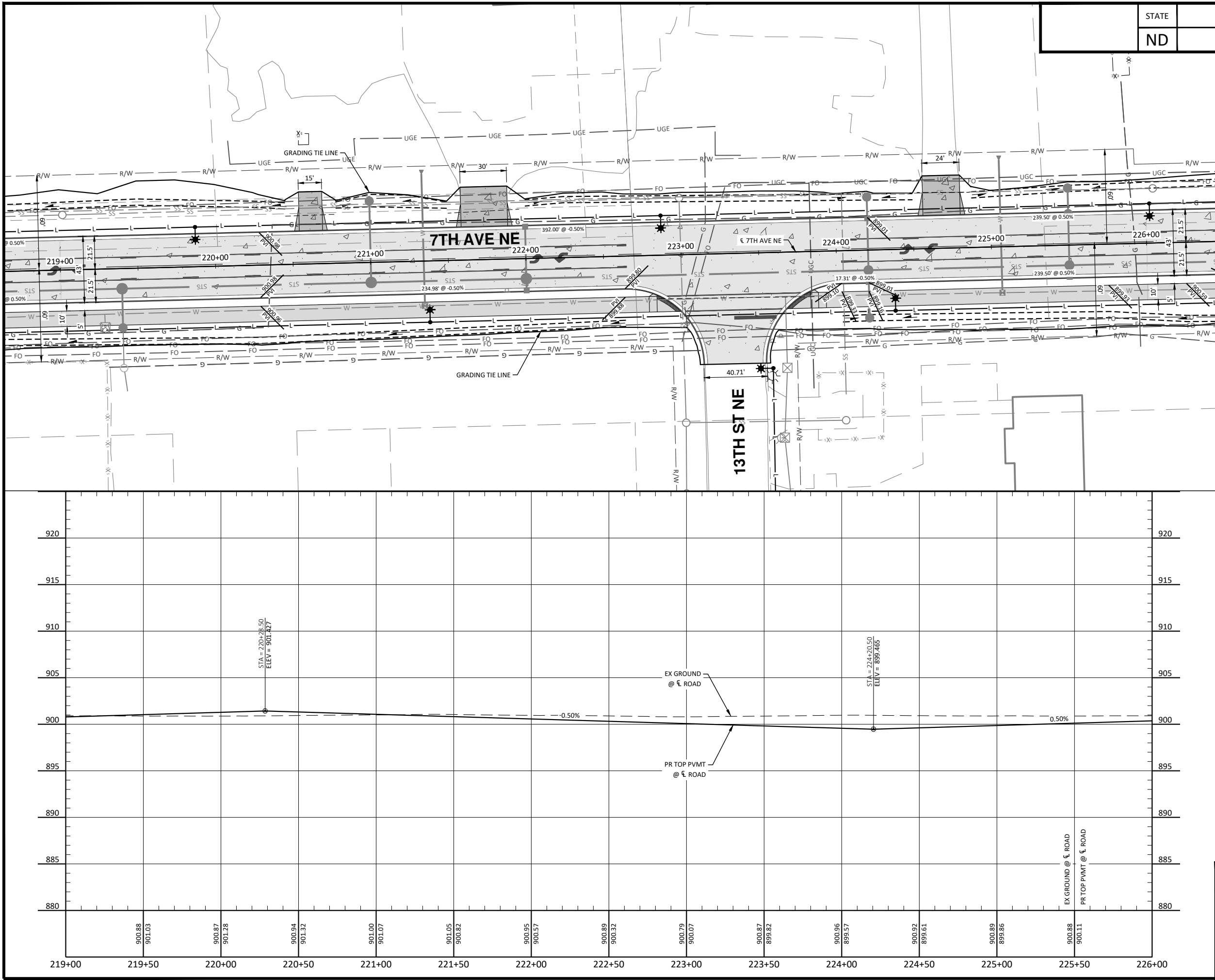


10/22/2025

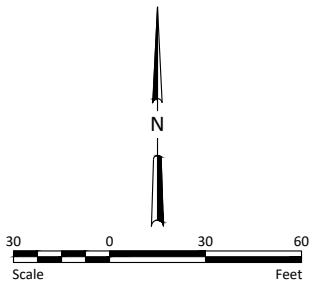
Plan & Profile - 7th Ave NE

9th St NE from Main Ave to 12th Ave N
7th Ave NE from 9th St NE to City Limit

H:\JBN\8600\8654\8654_0004 9th St\CAD\0_CITY PROJECT\Plans\060 - 7th Ave NE P & P.dwg-P&P (3)-10/22/2025 10:25 AM-(jerrickson)



STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	TMA-SU-FXP-8-992(045)	60	8



- NOTES:
1. ALL GRADES ARE FLOWLINE GRADES SHOWN AT FACE OF CURB UNLESS OTHERWISE NOTED.
 2. ALL CURB IS STANDARD TYPE I UNLESS OTHERWISE NOTED.

LEGEND	
EXISTING RIGHT OF WAY	R/W
PROPOSED RIGHT OF WAY	R/W
TEMPORARY RIGHT OF WAY	T-R/W
DITCH BOTTOM	
GRADING TIE LINE	
CURB & GUTTER - TYPE I	
10IN NON REINF CONCRETE PVMT CL AE-DOWELED	
SIDEWALK CONCRETE 5IN	
DRIVEWAY CONCRETE (7IN)	
PIGMENTED IMPRINTED CONCRETE (6IN)	
AGGREGATE SURFACE COURSE CL 13 (4IN)	
CONCRETE MEDIAN NOSE PAVING	
DETECTABLE WARNING PANELS	

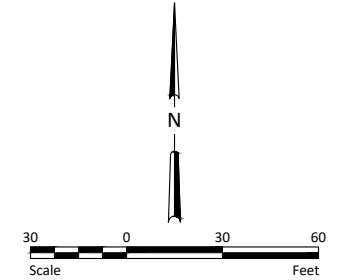
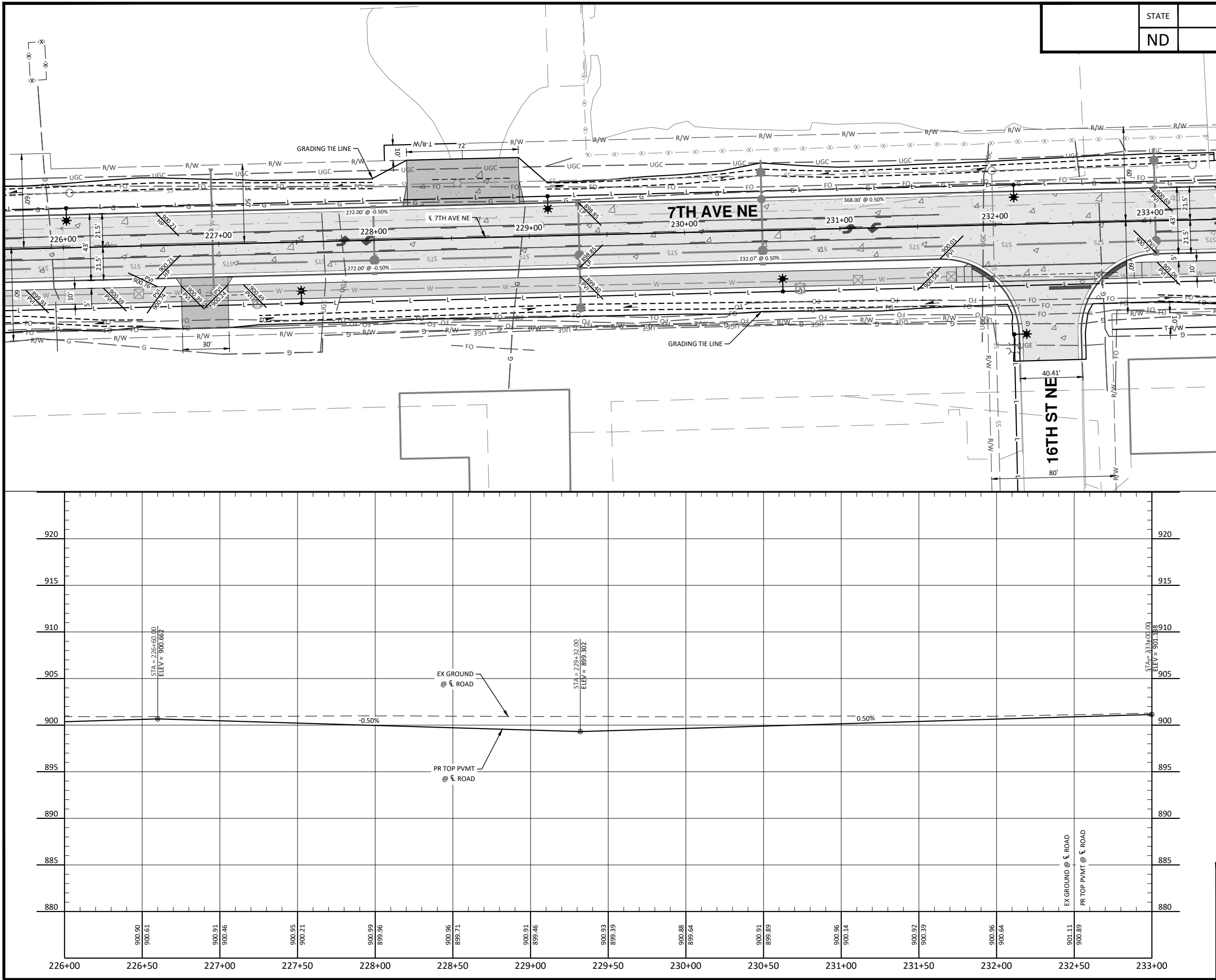


ALL ELEVATIONS ARE BASED ON THE U.S.G.S. VERTICAL DATUM OF 1988. (UNLESS NOTED OTHERWISE)



10/22/2025

H:\JBN\8600\8654\8654_0004 9th St\CAD\0_CITY PROJECT\Plans\060 - 7th Ave NE P & P.dwg-P&P (4)-10/22/2025 10:25 AM-(jerrickson)



- NOTES:
1. ALL GRADES ARE FLOWLINE GRADES SHOWN AT FACE OF CURB UNLESS OTHERWISE NOTED.
 2. ALL CURB IS STANDARD TYPE I UNLESS OTHERWISE NOTED.

LEGEND	
EXISTING RIGHT OF WAY	R/W
PROPOSED RIGHT OF WAY	R/W
TEMPORARY RIGHT OF WAY	T-R/W
DITCH BOTTOM	---
GRADING TIE LINE	---
CURB & GUTTER - TYPE I	---
10IN NON REINF CONCRETE PVMT CL AE-DOWELED	
SIDEWALK CONCRETE 5IN	
DRIVEWAY CONCRETE (7IN)	
PIGMENTED IMPRINTED CONCRETE (6IN)	
AGGREGATE SURFACE COURSE CL 13 (4IN)	
CONCRETE MEDIAN NOSE PAVING	
DETECTABLE WARNING PANELS	



ALL ELEVATIONS ARE BASED ON
THE U.S.G.S. VERTICAL DATUM OF 1988.
(UNLESS NOTED OTHERWISE)

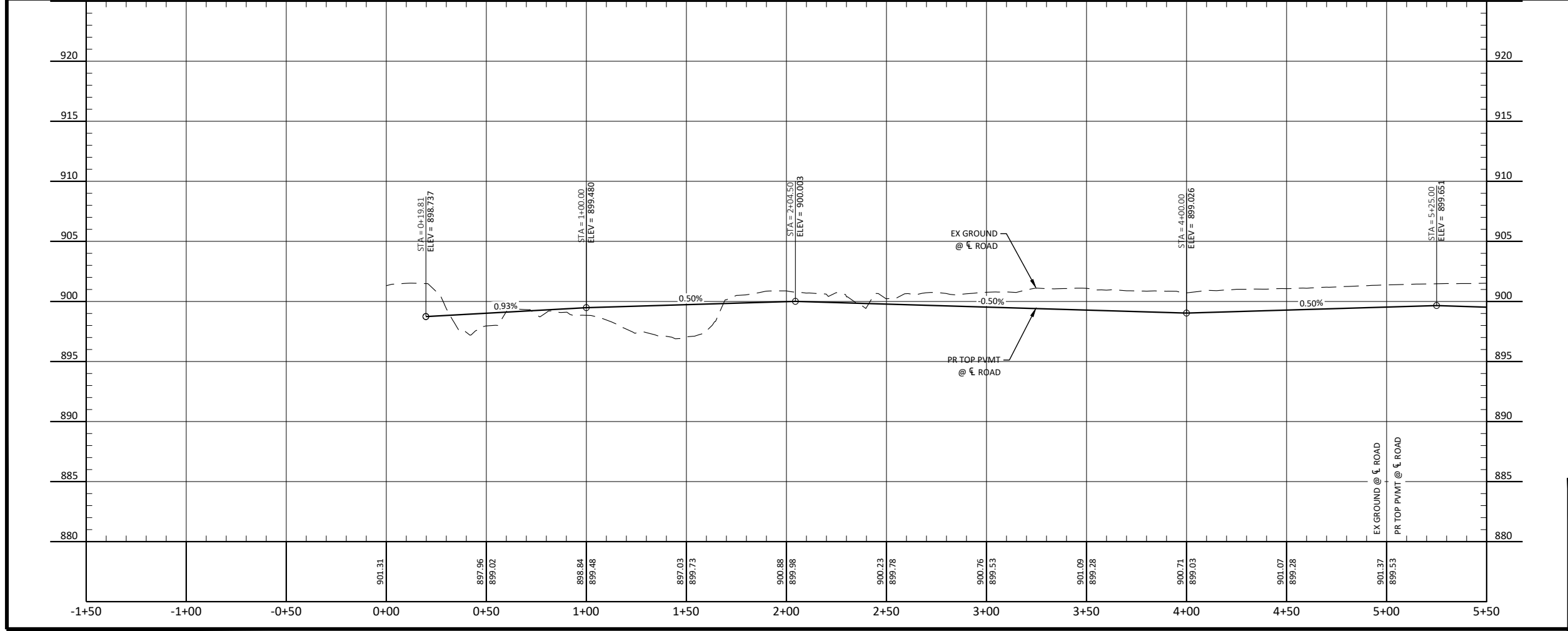
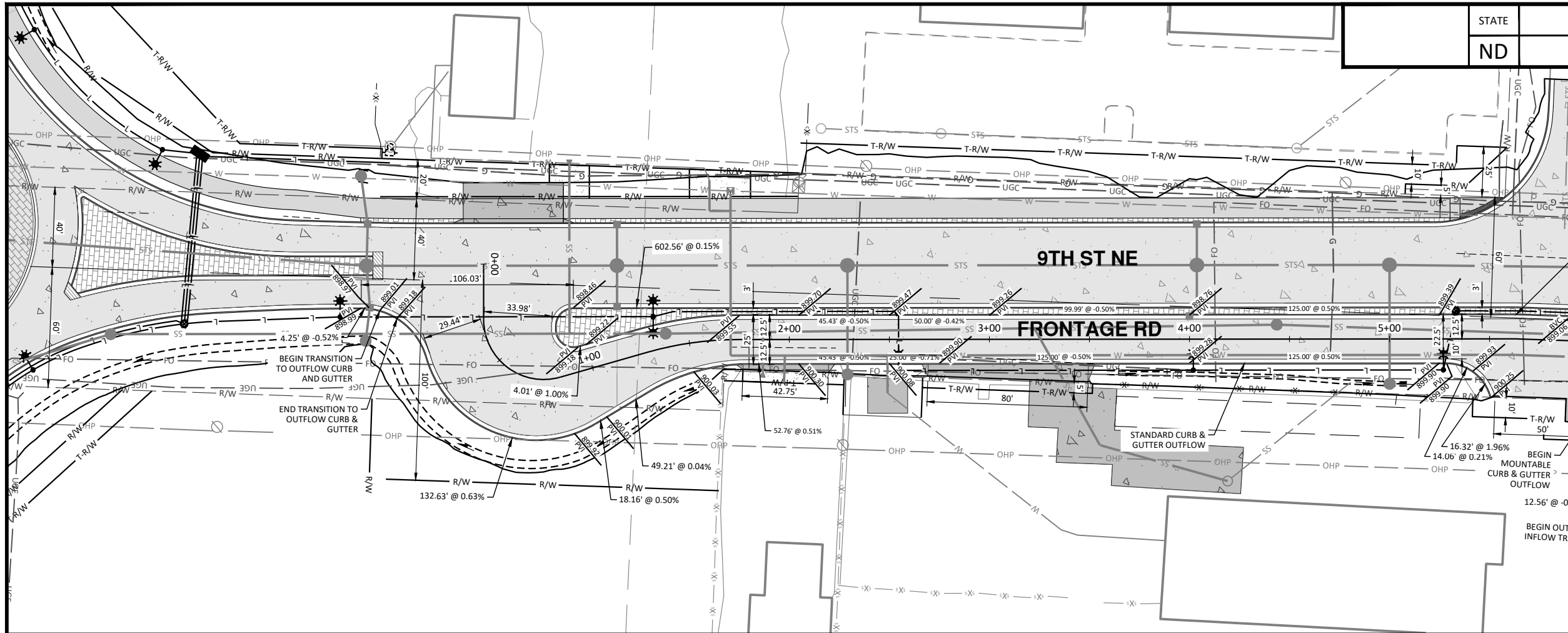


10/22/2025

Plan & Profile - 7th Ave NE

9th St NE from Main Ave to 12th Ave N
7th Ave NE from 9th St NE to City Limit

H:\JRW\3600\8654\8654_0004 9th St\CAD\0_CITY PROJECT\Plans\060 - Frontage Rd P & P.dwg P&P (1-10/22/2025 10:26 AM-jerickson)



STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	TMA-SU-FXP-8-992(045)	60	11



- NOTES:
- ALL GRADES ARE FLOWLINE GRADES SHOWN AT FACE OF CURB UNLESS OTHERWISE NOTED.
 - ALL CURB IS STANDARD TYPE I UNLESS OTHERWISE NOTED.

LEGEND	
EXISTING RIGHT OF WAY	R/W
PROPOSED RIGHT OF WAY	R/W
TEMPORARY RIGHT OF WAY	T-R/W
DITCH BOTTOM	-----
GRADING TIE LINE	-----
CURB & GUTTER - TYPE I	=====
10IN NON REINF CONCRETE PVMT CL AE-DOWELED	=====
SIDEWALK CONCRETE SIN	=====
DRIVEWAY CONCRETE (7IN)	=====
PIGMENTED IMPRINTED CONCRETE (6IN)	=====
AGGREGATE SURFACE COURSE CL 13 (4IN)	=====
CONCRETE MEDIAN NOSE PAVING	=====
DETECTABLE WARNING PANELS	=====



ALL ELEVATIONS ARE BASED ON THE U.S.G.S. VERTICAL DATUM OF 1988. (UNLESS NOTED OTHERWISE)

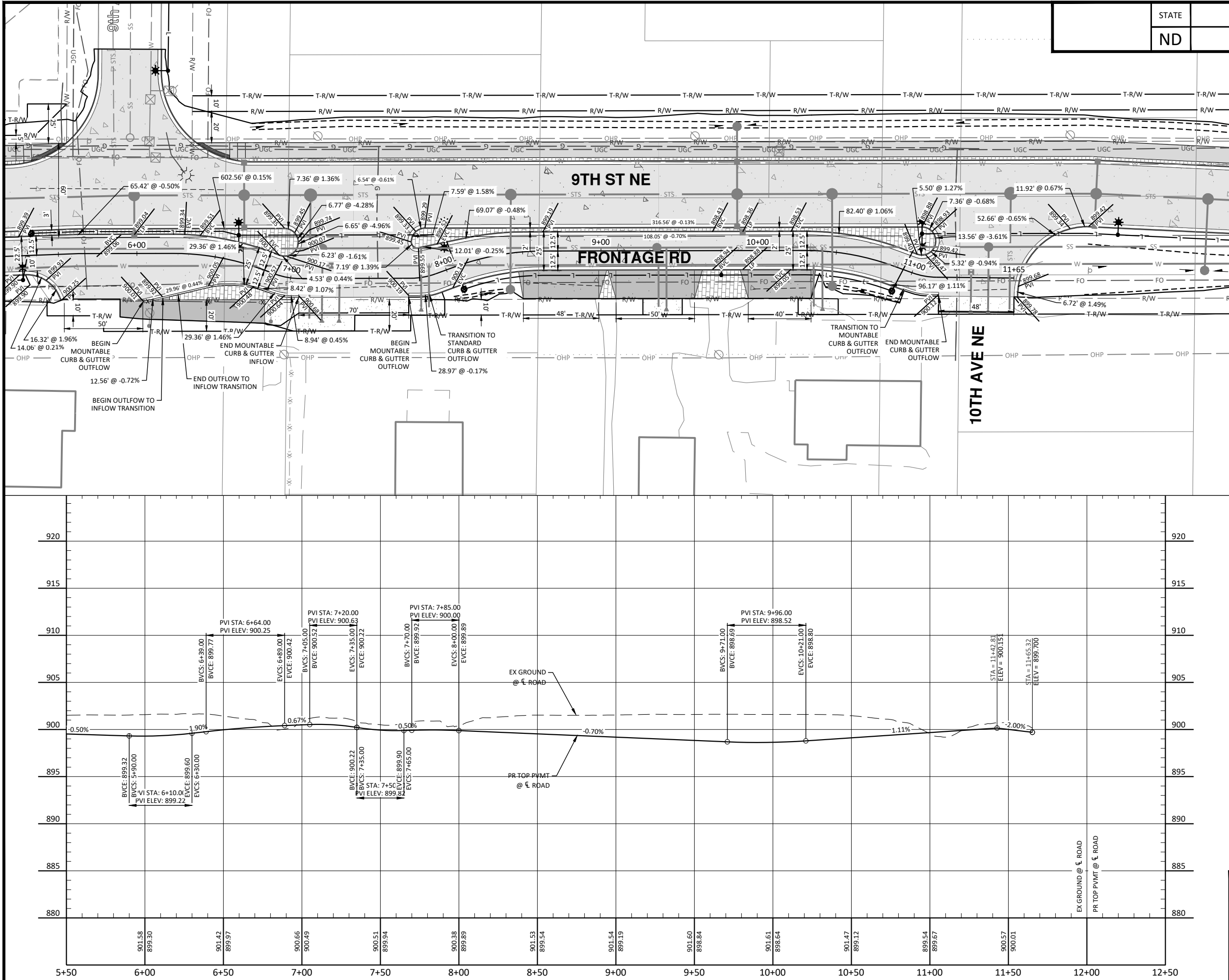


10/22/2025

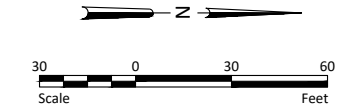
Plan & Profile - Frontage Road

9th St NE from Main Ave to 12th Ave N
7th Ave NE from 9th St NE to City Limit

H:\JBN\3600\8654\8654_0004 9th St\CAD\0_CITY PROJECT\Plans\060 - Frontage Rd P & P.dwg-P&P (2)-10/22/2025 10:26 AM-(jerickson)



STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	TMA-SU-FXP-8-992(045)	60	12

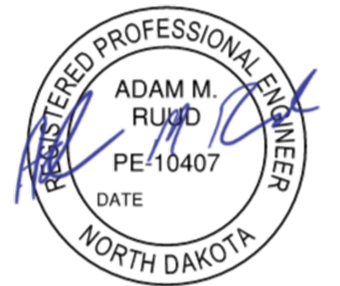


- NOTES:
- ALL GRADES ARE FLOWLINE GRADES SHOWN AT FACE OF CURB UNLESS OTHERWISE NOTED.
 - ALL CURB IS STANDARD TYPE I UNLESS OTHERWISE NOTED.

LEGEND	
EXISTING RIGHT OF WAY	R/W
PROPOSED RIGHT OF WAY	R/W
TEMPORARY RIGHT OF WAY	T-R/W
DITCH BOTTOM	---
GRADING TIE LINE	---
CURB & GUTTER - TYPE I	---
10IN NON REINF CONCRETE PVMT CL AE-DOWELED	---
SIDEWALK CONCRETE 5IN	---
DRIVEWAY CONCRETE (7IN)	---
PIGMENTED IMPRINTED CONCRETE (6IN)	---
AGGREGATE SURFACE COURSE CL 13 (4IN)	---
CONCRETE MEDIAN NOSE PAVING	---
DETECTABLE WARNING PANELS	---



ALL ELEVATIONS ARE BASED ON THE U.S.G.S. VERTICAL DATUM OF 1988. (UNLESS NOTED OTHERWISE)

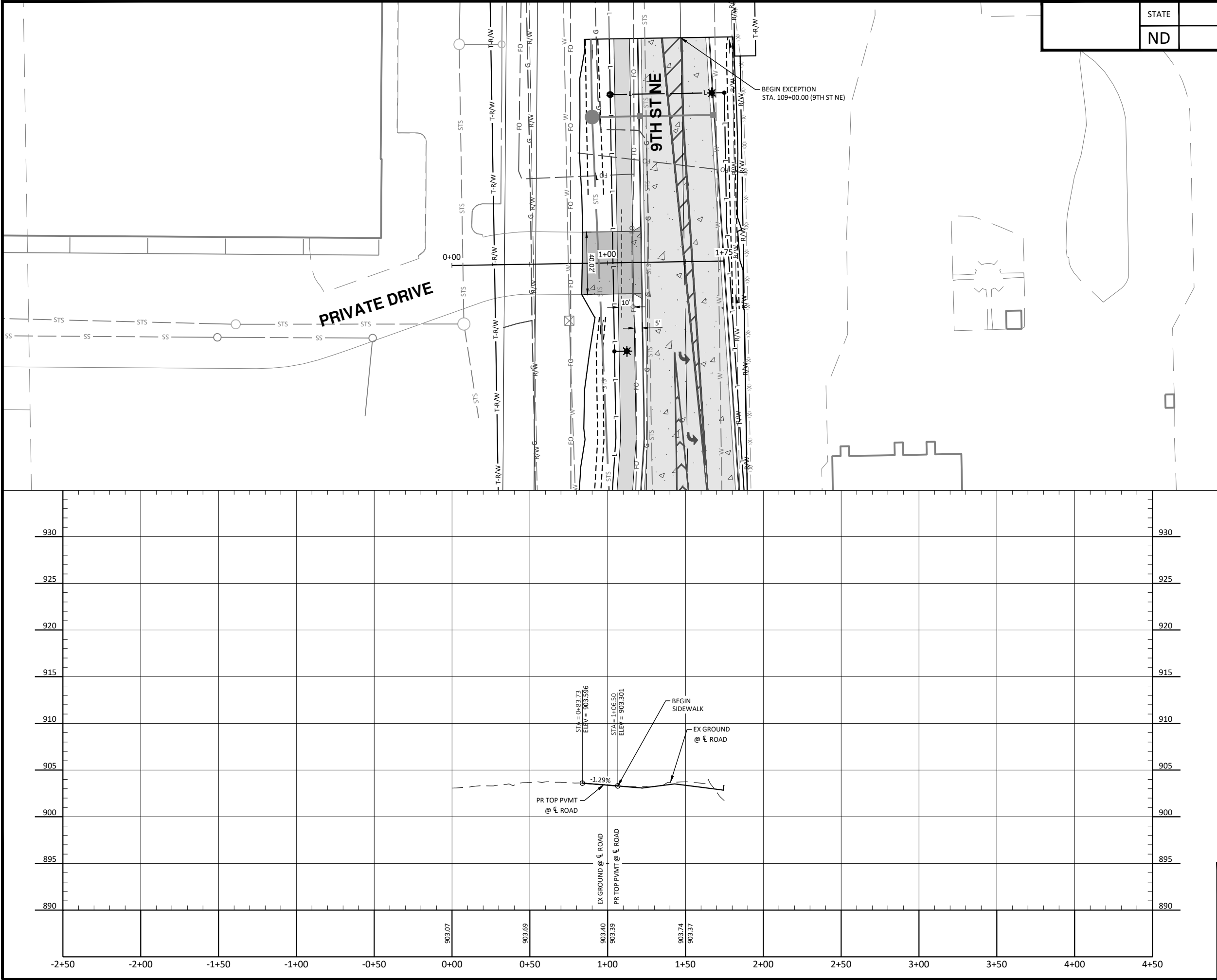


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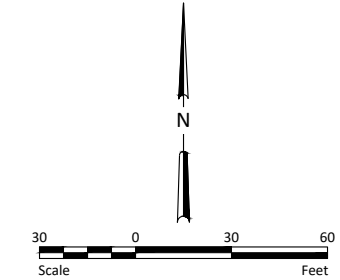
Plan & Profile - Frontage Road

9th St NE from Main Ave to 12th Ave N
7th Ave NE from 9th St NE to City Limit

H:\JBN\3600\8654\8654_0004 9th St\CAD\0_CITY PROJECT\Plans\060 - Side Roads P & P.dwg-Pvt Div (8)-10/22/2025 10:26 AM-(jerickson)



STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	TMA-SU-FXP-8-992(045)	60	13



NOTES:

1. ALL GRADES ARE FLOWLINE GRADES SHOWN AT FACE OF CURB UNLESS OTHERWISE NOTED.
2. ALL CURB IS STANDARD TYPE I UNLESS OTHERWISE NOTED.

LEGEND

EXISTING RIGHT OF WAY	— R/W —
PROPOSED RIGHT OF WAY	— R/W —
TEMPORARY RIGHT OF WAY	— T-R/W —
DITCH BOTTOM	=====
GRADING TIE LINE	=====
CURB & GUTTER - TYPE I	=====
10IN NON REINF CONCRETE PVMT CL AE-DOWELED	
SIDEWALK CONCRETE 5IN	
DRIVEWAY CONCRETE (7IN)	
PIGMENTED IMPRINTED CONCRETE (6IN)	
AGGREGATE SURFACE COURSE CL 13 (4IN)	
CONCRETE MEDIAN NOSE PAVING	
DETECTABLE WARNING PANELS	



ALL ELEVATIONS ARE BASED ON
THE U.S.G.S. VERTICAL DATUM OF 1988.
(UNLESS NOTED OTHERWISE)

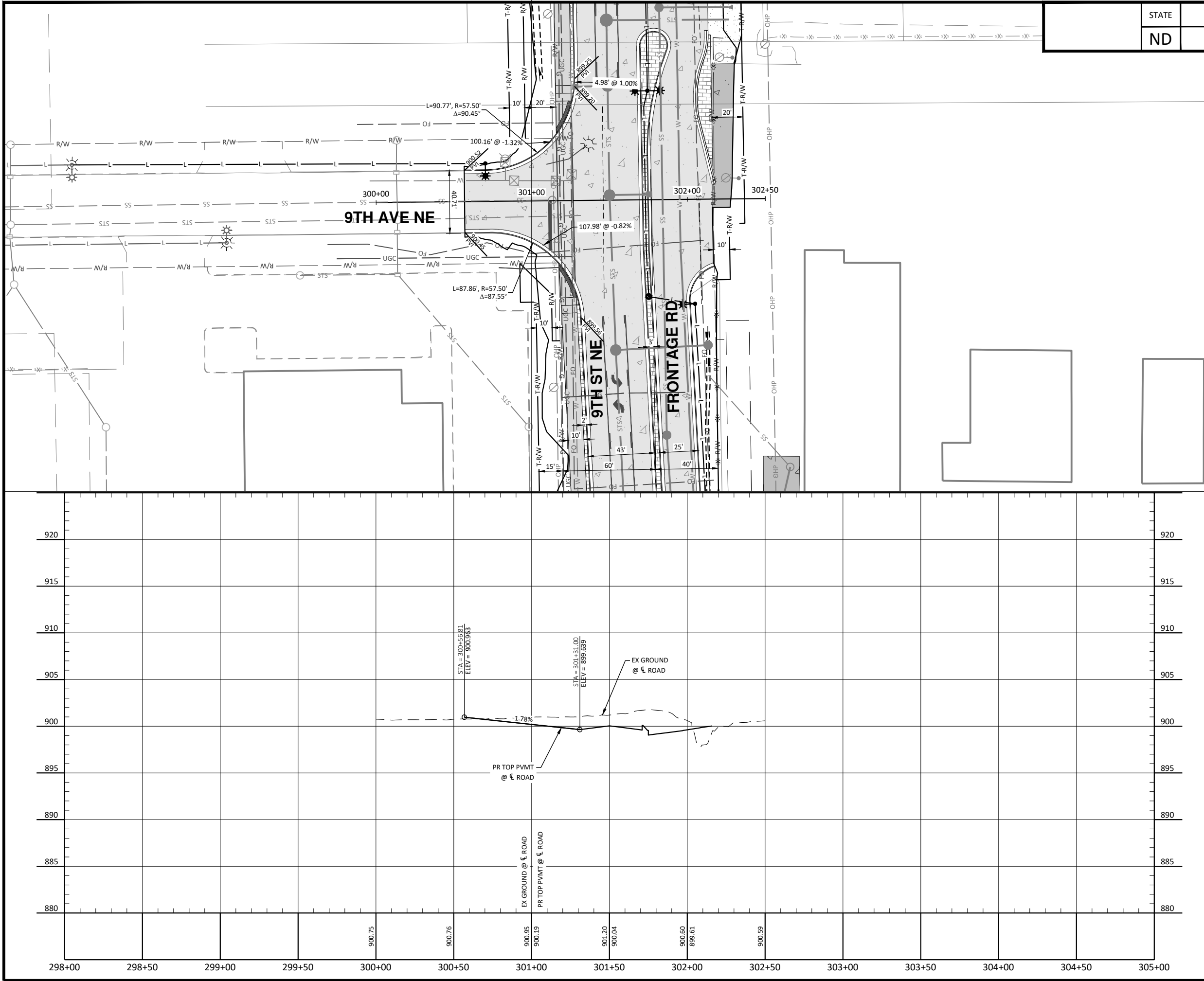


10/22/2025

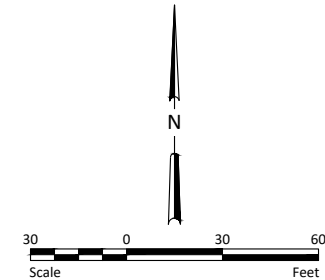
Plan & Profile - Private Drive

9th St NE from Main Ave to 12th Ave N
7th Ave NE from 9th St NE to City Limit

H:\JBN\3600\8654\8654_0004 9th St\CAD\0_CITY PROJECT\Plans\060 - Side Roads P & P.dwg-9th Ave (4-10/22/2025 10:26 AM-[jerickson])



STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	TMA-SU-FXP-8-992(045)	60	14



- NOTES:
1. ALL GRADES ARE FLOWLINE GRADES SHOWN AT FACE OF CURB UNLESS OTHERWISE NOTED.
 2. ALL CURB IS STANDARD TYPE I UNLESS OTHERWISE NOTED.

LEGEND	
EXISTING RIGHT OF WAY	— R/W —
PROPOSED RIGHT OF WAY	— R/W —
TEMPORARY RIGHT OF WAY	— T-R/W —
DITCH BOTTOM	-----
GRADING TIE LINE	=====
CURB & GUTTER - TYPE I	=====
10IN NON REINF CONCRETE PVMT CL AE-DOWELED	
SIDEWALK CONCRETE 5IN	
DRIVEWAY CONCRETE (7IN)	
PIGMENTED IMPRINTED CONCRETE (6IN)	
AGGREGATE SURFACE COURSE CL 13 (4IN)	
CONCRETE MEDIAN NOSE PAVING	
DETECTABLE WARNING PANELS	



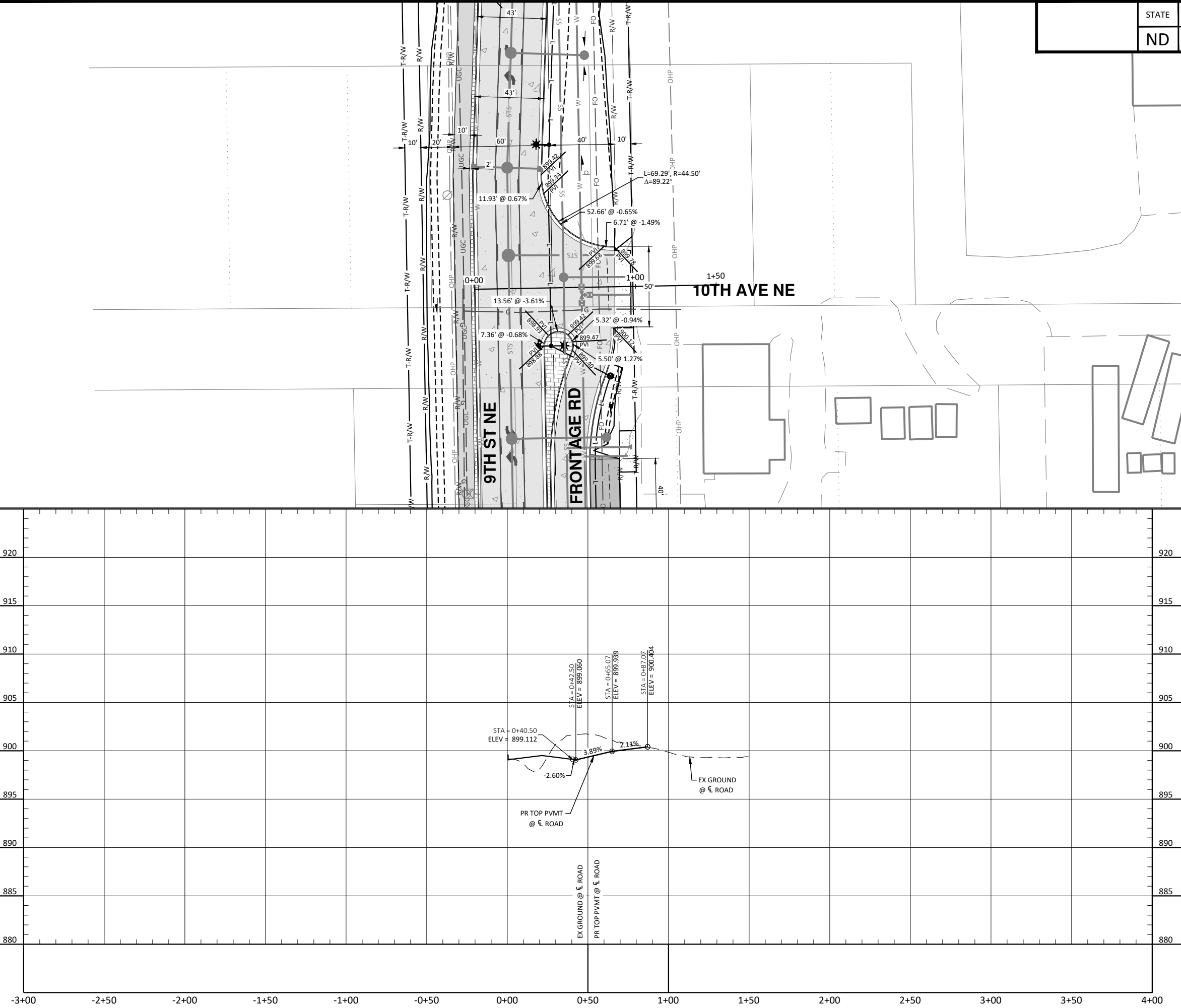
ALL ELEVATIONS ARE BASED ON
THE U.S.G.S. VERTICAL DATUM OF 1988.
(UNLESS NOTED OTHERWISE)



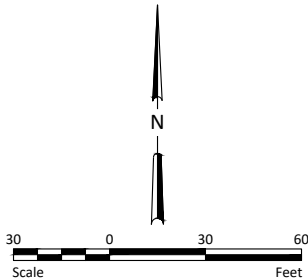
Plan & Profile - 9th Ave NE

9th St NE from Main Ave to 12th Ave N
7th Ave NE from 9th St NE to City Limit

H:\JBN\3600\8654\8654_0004 9th St\CAD\0_CITY PROJECT\Plans\060 - Side Roads P & P.dwg-10th Ave (2)-10/27/2025 10:27 AM-(jerrickson)



STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	TMA-SU-FXP-8-992(045)	60	16



- NOTES:
- ALL GRADES ARE FLOWLINE GRADES SHOWN AT FACE OF CURB UNLESS OTHERWISE NOTED.
 - ALL CURB IS STANDARD TYPE I UNLESS OTHERWISE NOTED.

LEGEND	
EXISTING RIGHT OF WAY	— R/W —
PROPOSED RIGHT OF WAY	— R/W —
TEMPORARY RIGHT OF WAY	— T-R/W —
DITCH BOTTOM	=====
GRADING TIE LINE	=====
CURB & GUTTER - TYPE I	=====
10IN NON REINF CONCRETE PVMT CL AE-DOWELED	
SIDEWALK CONCRETE 5IN	
DRIVEWAY CONCRETE (7IN)	
PIGMENTED IMPRINTED CONCRETE (6IN)	
AGGREGATE SURFACE COURSE CL 13 (4IN)	
CONCRETE MEDIAN NOSE PAVING	
DETECTABLE WARNING PANELS	



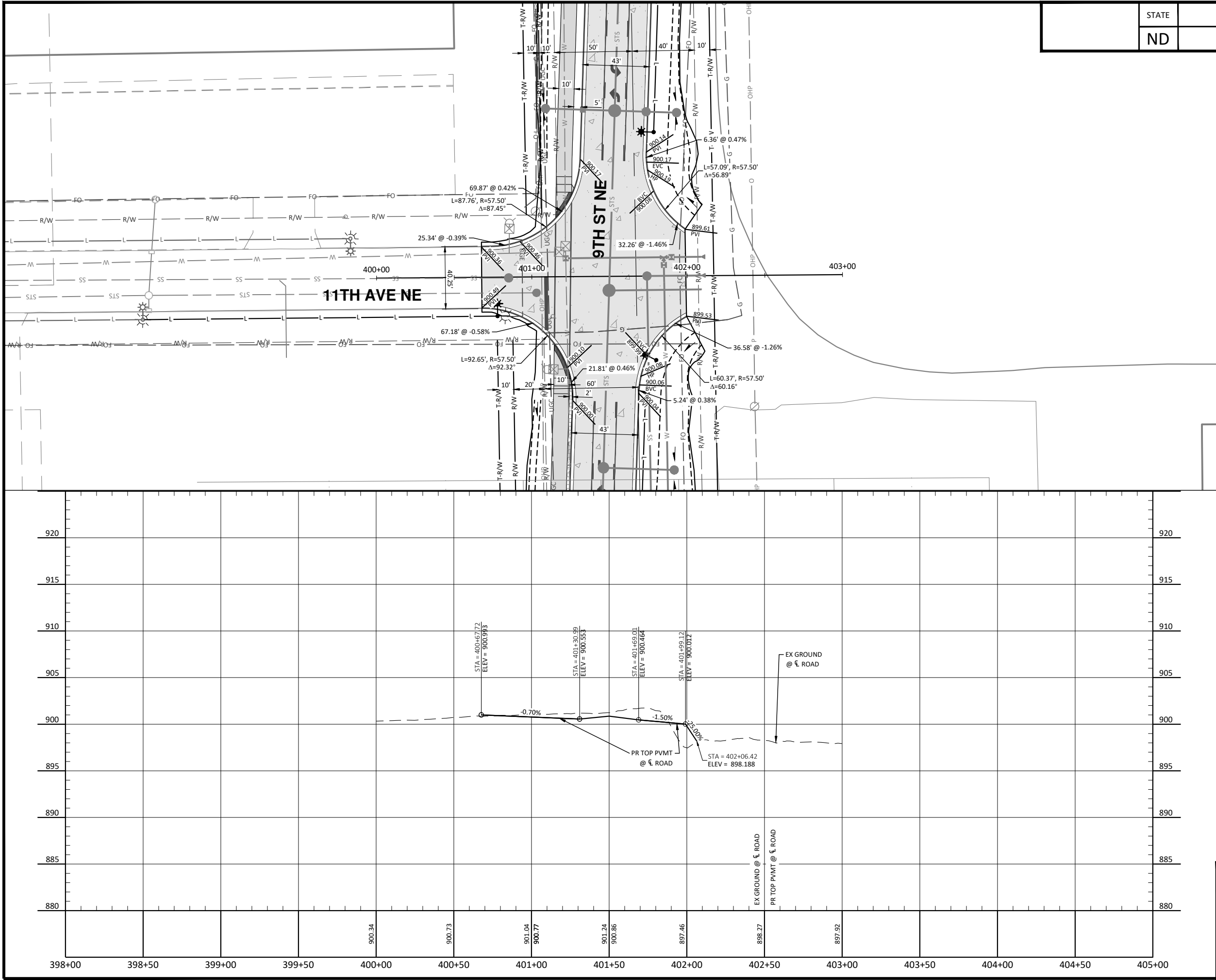
ALL ELEVATIONS ARE BASED ON
THE U.S.G.S. VERTICAL DATUM OF 1988.
(UNLESS NOTED OTHERWISE)



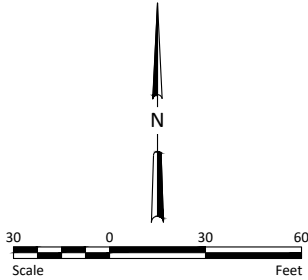
Plan & Profile - 10th Ave NE

9th St NE from Main Ave to 12th Ave N
7th Ave NE from 9th St NE to City Limit

H:\JBA\3600\8654\8654_0004 9th St\CAD\0_CITY PROJECT\Plans\060 - Side Roads P & P.dwg-11th Ave (1-10/2/2025 10:27 AM-[erickson])



STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	TMA-SU-FXP-8-992(045)	60	17



- NOTES:
1. ALL GRADES ARE FLOWLINE GRADES SHOWN AT FACE OF CURB UNLESS OTHERWISE NOTED.
 2. ALL CURB IS STANDARD TYPE I UNLESS OTHERWISE NOTED.

LEGEND	
EXISTING RIGHT OF WAY	R/W
PROPOSED RIGHT OF WAY	R/W
TEMPORARY RIGHT OF WAY	T-R/W
DITCH BOTTOM	-----
GRADING TIE LINE	-----
CURB & GUTTER - TYPE I	=====
10IN NON REINF CONCRETE PVMT CL AE-DOWELED	
SIDEWALK CONCRETE 5IN	
DRIVEWAY CONCRETE (7IN)	
PIGMENTED IMPRINTED CONCRETE (6IN)	
AGGREGATE SURFACE COURSE CL 13 (4IN)	
CONCRETE MEDIAN NOSE PAVING	
DETECTABLE WARNING PANELS	



ALL ELEVATIONS ARE BASED ON
THE U.S.G.S. VERTICAL DATUM OF 1988.
(UNLESS NOTED OTHERWISE)

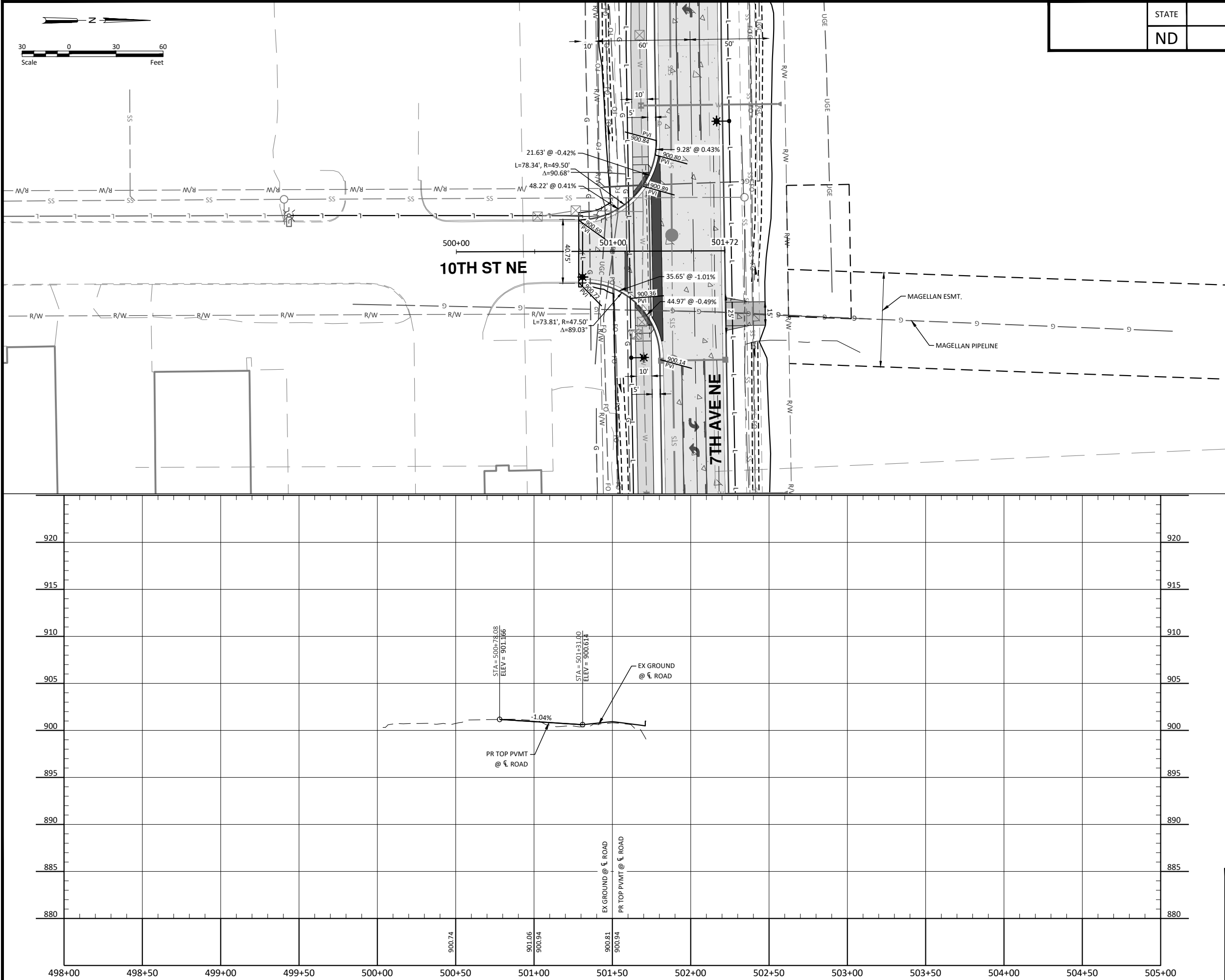


10/22/2025

Plan & Profile - 11th Ave NE

9th St NE from Main Ave to 12th Ave N
7th Ave NE from 9th St NE to City Limit

H:\JBN\3600\8654_0004 9th St\CAD\0_CITY PROJECT\Plans\060 - Side Roads P & P.dwg-10th St (5)-10/22/2025 10:27 AM-(jerrickson)



STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	TMA-SU-FXP-8-992(045)	60	18

- NOTES:
- ALL GRADES ARE FLOWLINE GRADES SHOWN AT FACE OF CURB UNLESS OTHERWISE NOTED.
 - ALL CURB IS STANDARD TYPE I UNLESS OTHERWISE NOTED.

LEGEND	
EXISTING RIGHT OF WAY	R/W
PROPOSED RIGHT OF WAY	R/W
TEMPORARY RIGHT OF WAY	T-R/W
DITCH BOTTOM	---
GRADING TIE LINE	---
CURB & GUTTER - TYPE I	---
10IN NON REINF CONCRETE PVMT CL AE-DOWELED	---
SIDEWALK CONCRETE 5IN	---
DRIVEWAY CONCRETE (7IN)	---
PIGMENTED IMPRINTED CONCRETE (6IN)	---
VALLEY GUTTER 72IN	---
AGGREGATE SURFACE COURSE CL 13 (4IN)	---
CONCRETE MEDIAN NOSE PAVING	---
DETECTABLE WARNING PANELS	---

WARNING
HIGH-PRESSURE PIPELINE(S)
Excavation and/or Construction Prohibited
Without compliance with **State One-Call**, AND
Without Written Permission From
MAGELLAN PIPELINE COMPANY, L.P.
A MAGELLAN REPRESENTATIVE MUST BE PRESENT DURING WORK AROUND PIPELINE(S)



ALL ELEVATIONS ARE BASED ON
THE U.S.G.S. VERTICAL DATUM OF 1988.
(UNLESS NOTED OTHERWISE)

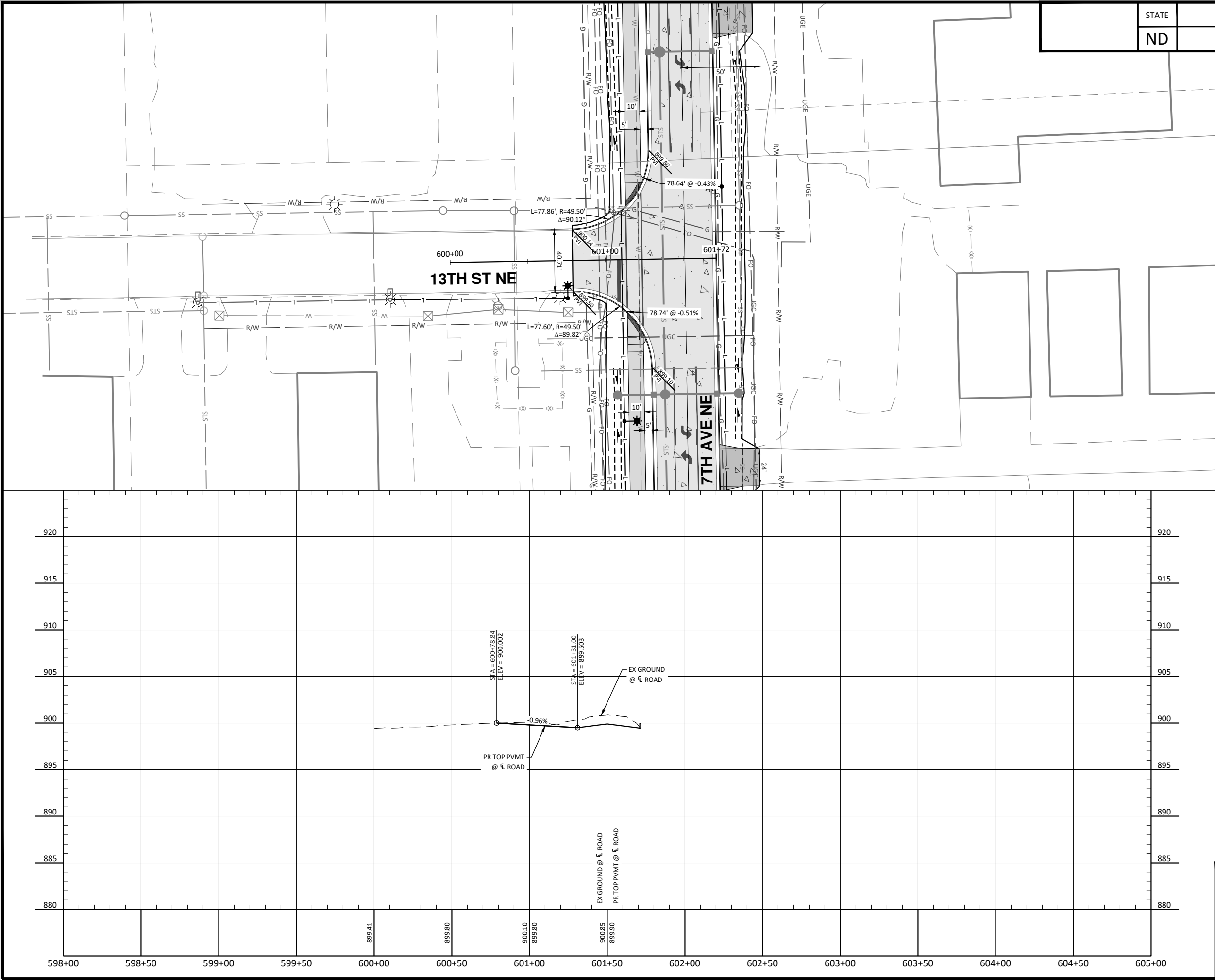


10/22/2025

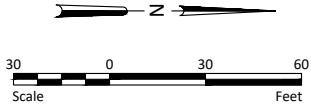
Plan & Profile - 10th St NE

9th St NE from Main Ave to 12th Ave N
7th Ave NE from 9th St NE to City Limit

H:\JAN\3600\8654\8654_0004 9th St\CAD\0_CITY PROJECT\Plans\060 - Side Roads P & P.dwg-13th St (6)-10/22/2025 10:27 AM-(jerrickson)



STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	TMA-SU-FXP-8-992(045)	60	19



- NOTES:
- ALL GRADES ARE FLOWLINE GRADES SHOWN AT FACE OF CURB UNLESS OTHERWISE NOTED.
 - ALL CURB IS STANDARD TYPE I UNLESS OTHERWISE NOTED.

LEGEND	
EXISTING RIGHT OF WAY	--- R/W ---
PROPOSED RIGHT OF WAY	--- R/W ---
TEMPORARY RIGHT OF WAY	--- T-R/W ---
DITCH BOTTOM	=====
GRADING TIE LINE	=====
CURB & GUTTER - TYPE I	=====
10IN NON REINF CONCRETE PVMT CL AE-DOWELED	
SIDEWALK CONCRETE SIN	
DRIVEWAY CONCRETE (7IN)	
PIGMENTED IMPRINTED CONCRETE (6IN)	
AGGREGATE SURFACE COURSE CL 13 (4IN)	
CONCRETE MEDIAN NOSE PAVING	
DETECTABLE WARNING PANELS	



ALL ELEVATIONS ARE BASED ON THE U.S.G.S. VERTICAL DATUM OF 1988. (UNLESS NOTED OTHERWISE)

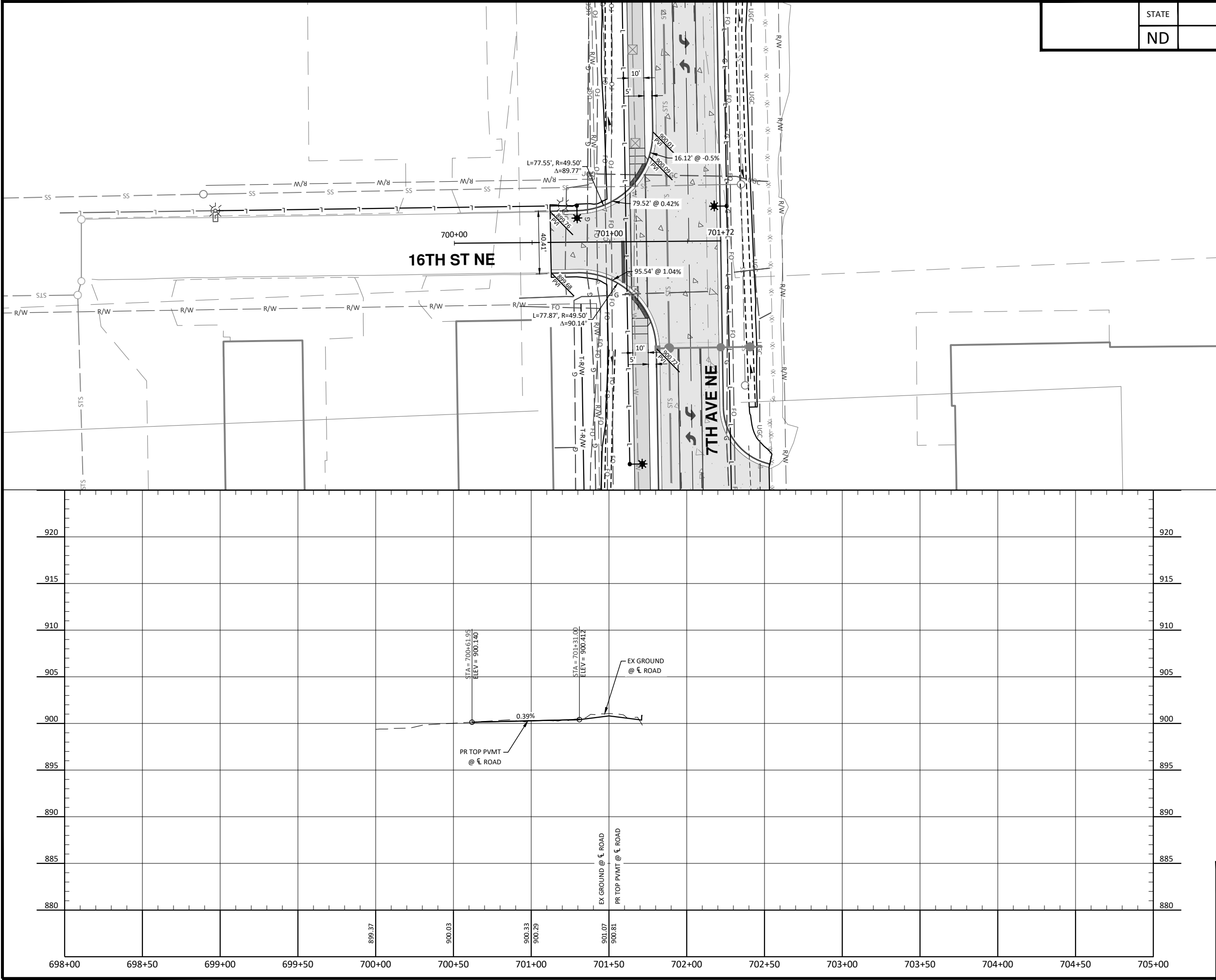


10/22/2025

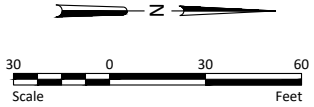
Plan & Profile - 13th St NE

9th St NE from Main Ave to 12th Ave N
7th Ave NE from 9th St NE to City Limit

H:\JBN\3600\8654\8654_0004 9th St\CAD\0_CITY PROJECT\Plans\060 - Side Roads P & P.dwg-16th St (7/10/22/2025 10:27 AM-jerickson)



STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	TMA-SU-FXP-8-992(045)	60	20

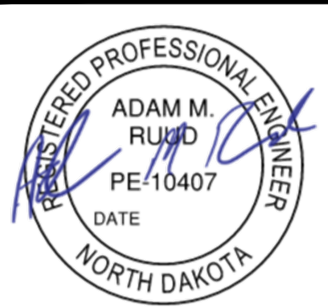


- NOTES:
1. ALL GRADES ARE FLOWLINE GRADES SHOWN AT FACE OF CURB UNLESS OTHERWISE NOTED.
 2. ALL CURB IS STANDARD TYPE I UNLESS OTHERWISE NOTED.

LEGEND	
EXISTING RIGHT OF WAY	— R/W —
PROPOSED RIGHT OF WAY	— R/W —
TEMPORARY RIGHT OF WAY	— T-R/W —
DITCH BOTTOM	-----
GRADING TIE LINE	-----
CURB & GUTTER - TYPE I	=====
10IN NON REINF CONCRETE PVMT CL AE-DOWELED	
SIDEWALK CONCRETE SIN	
DRIVEWAY CONCRETE (7IN)	
PIGMENTED IMPRINTED CONCRETE (6IN)	
AGGREGATE SURFACE COURSE CL 13 (4IN)	
CONCRETE MEDIAN NOSE PAVING	
DETECTABLE WARNING PANELS	

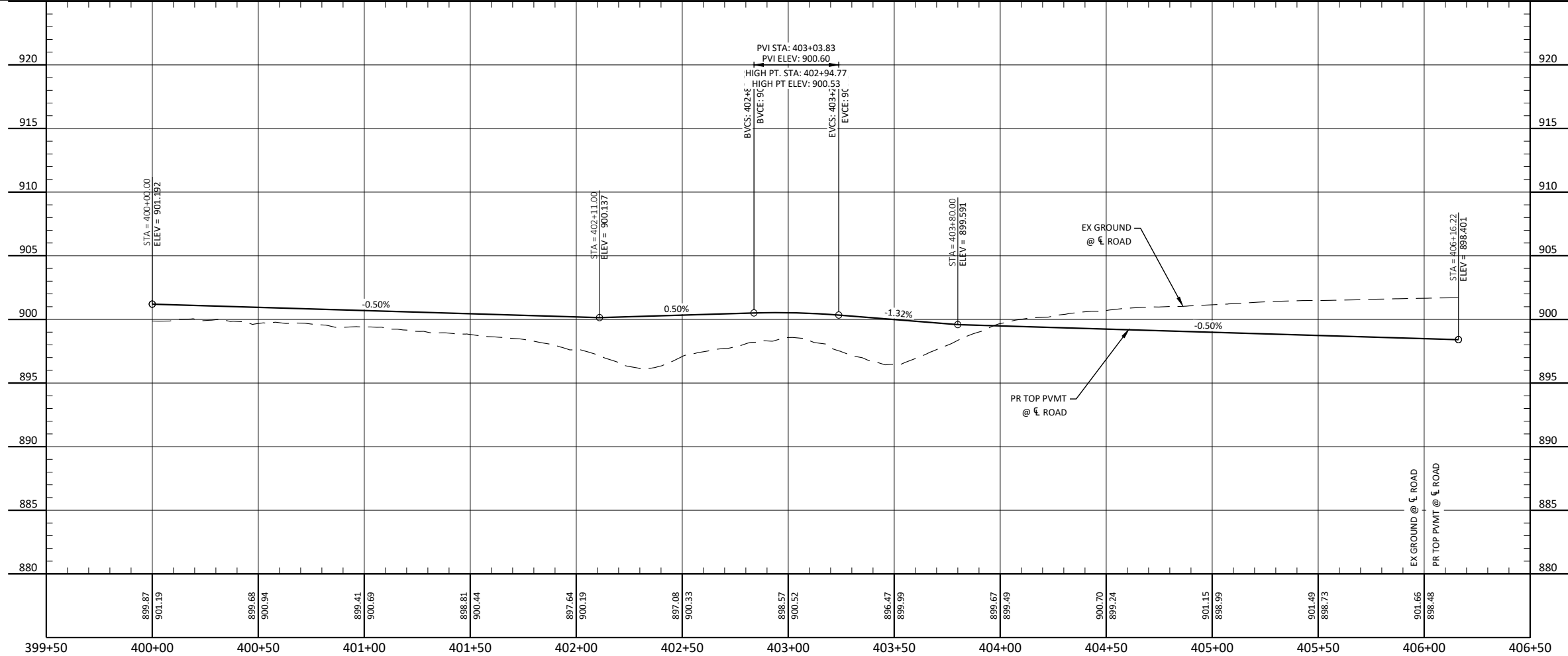
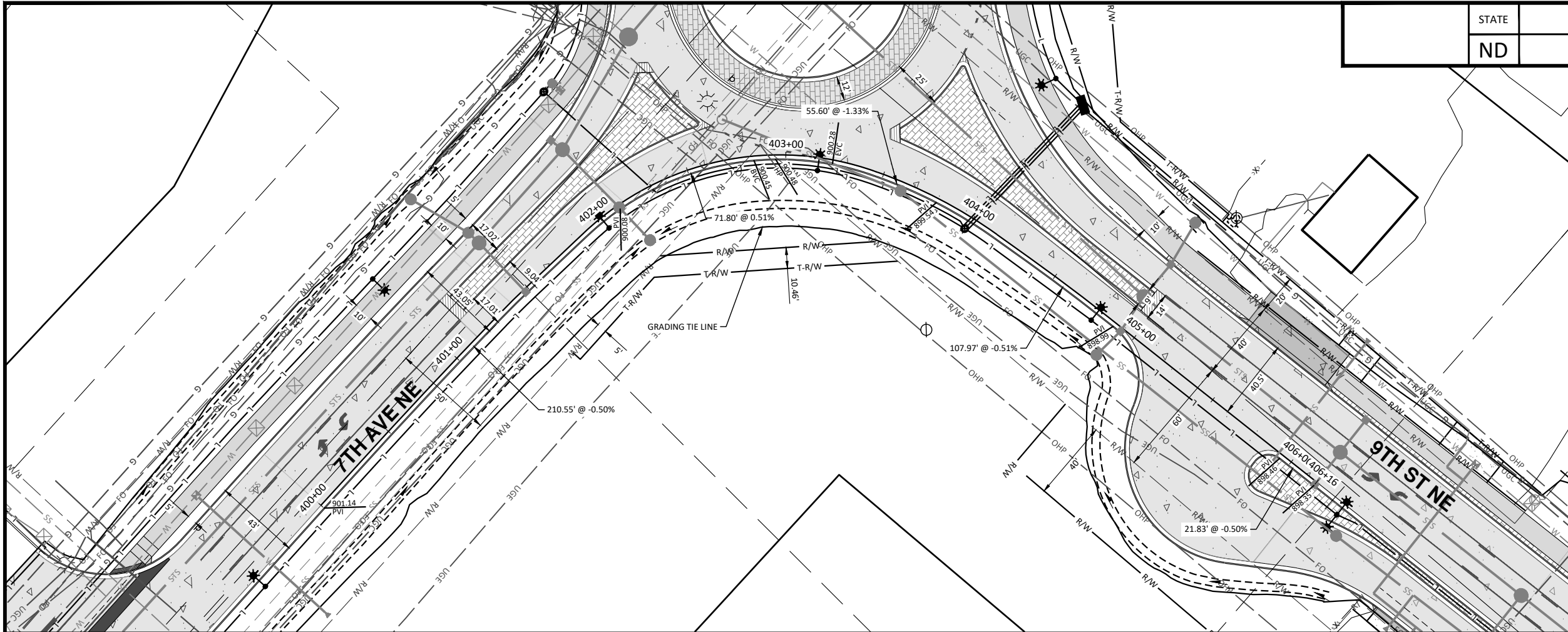


ALL ELEVATIONS ARE BASED ON
THE U.S.G.S. VERTICAL DATUM OF 1988.
(UNLESS NOTED OTHERWISE)

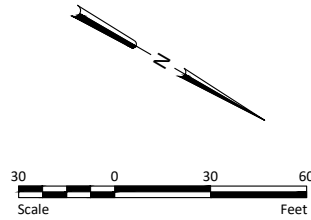


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STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	TMA-SU-FXP-8-992(045)	60	21



- NOTES:
- ALL GRADES ARE FLOWLINE GRADES SHOWN AT FACE OF CURB UNLESS OTHERWISE NOTED.
 - ALL CURB IS STANDARD TYPE I UNLESS OTHERWISE NOTED.

LEGEND	
EXISTING RIGHT OF WAY	— R/W —
PROPOSED RIGHT OF WAY	— R/W —
TEMPORARY RIGHT OF WAY	— T-R/W —
DITCH BOTTOM	=====
GRADING TIE LINE	=====
CURB & GUTTER - TYPE I	=====
10IN NON REINF CONCRETE PVMT CL AE-DOWELED	
SIDEWALK CONCRETE 5IN	
DRIVEWAY CONCRETE (7IN)	
PIGMENTED IMPRINTED CONCRETE (6IN)	
AGGREGATE SURFACE COURSE CL 13 (4IN)	
CONCRETE MEDIAN NOSE PAVING	
DETECTABLE WARNING PANELS	



ALL ELEVATIONS ARE BASED ON THE U.S.G.S. VERTICAL DATUM OF 1988. (UNLESS NOTED OTHERWISE)

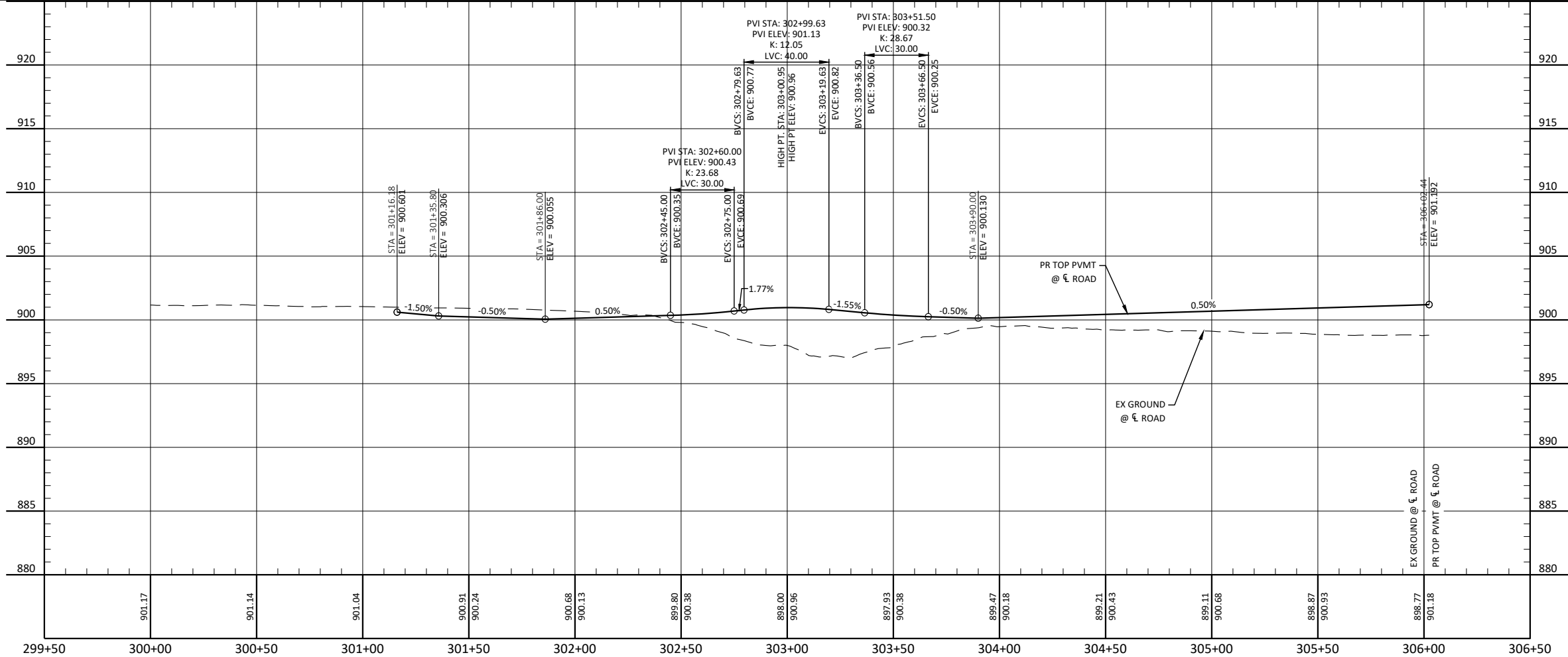
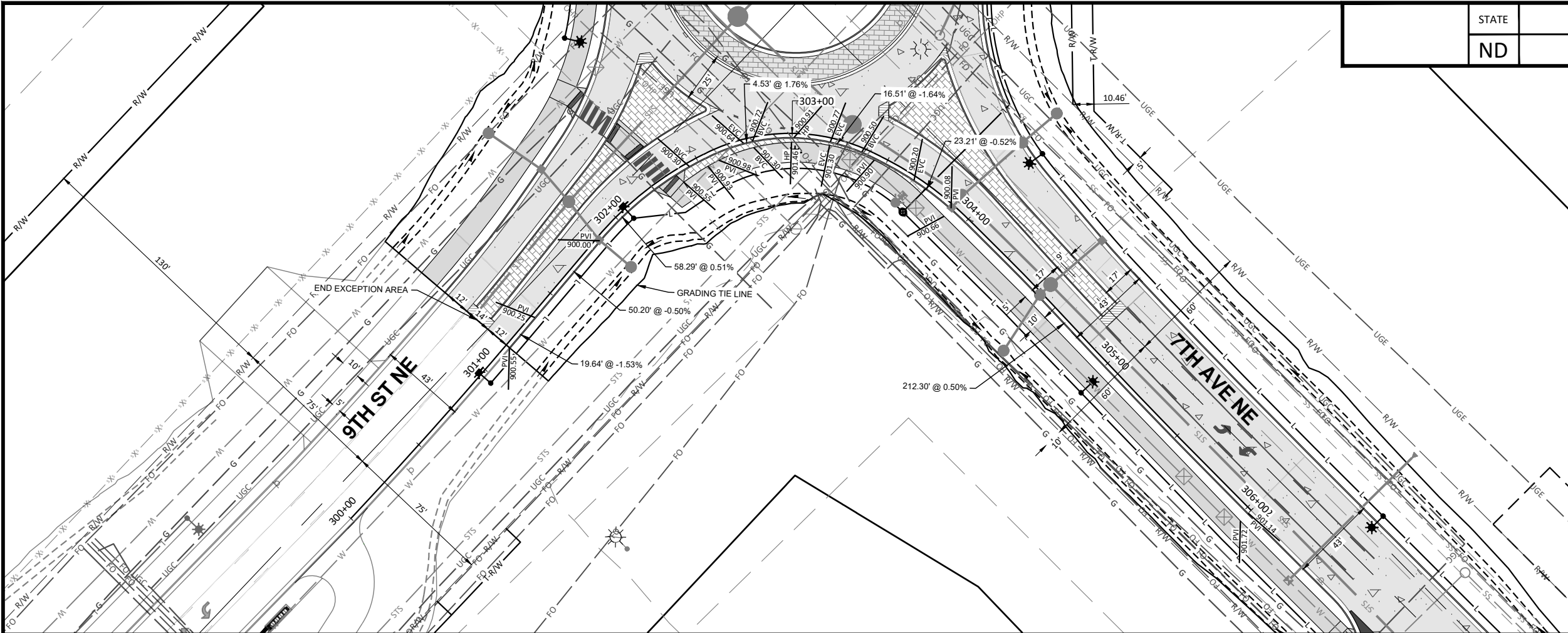


10/22/2025

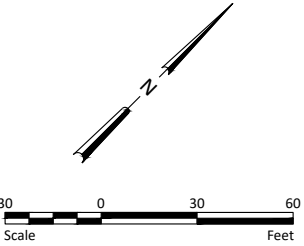
Plan & Profile - 7th Ave Roundabout NE

9th St NE from Main Ave to 12th Ave N
7th Ave NE from 9th St NE to City Limit

H:\JBN\3600\8654\8654_0004 9th St\CAD\0_CITY PROJECT\Plans\060 - SE RAB P & P.dwg-RAB (SE)-10/22/2025 10:28 AM-[jerrickson]



STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	TMA-SU-FXP-8-992(045)	60	22



- NOTES:
1. ALL GRADES ARE FLOWLINE GRADES SHOWN AT FACE OF CURB UNLESS OTHERWISE NOTED.
 2. ALL CURB IS STANDARD TYPE I UNLESS OTHERWISE NOTED.

LEGEND	
EXISTING RIGHT OF WAY	— R/W —
PROPOSED RIGHT OF WAY	— R/W —
TEMPORARY RIGHT OF WAY	— T-R/W —
DITCH BOTTOM	=====
GRADING TIE LINE	=====
CURB & GUTTER - TYPE I	=====
10IN NON REINF CONCRETE PVMT CL AE-DOWELED	=====
SIDEWALK CONCRETE 5IN	=====
DRIVEWAY CONCRETE (7IN)	=====
PIGMENTED IMPRINTED CONCRETE (6IN)	=====
AGGREGATE SURFACE COURSE CL 13 (4IN)	=====
CONCRETE MEDIAN NOSE PAVING	=====
DETECTABLE WARNING PANELS	=====



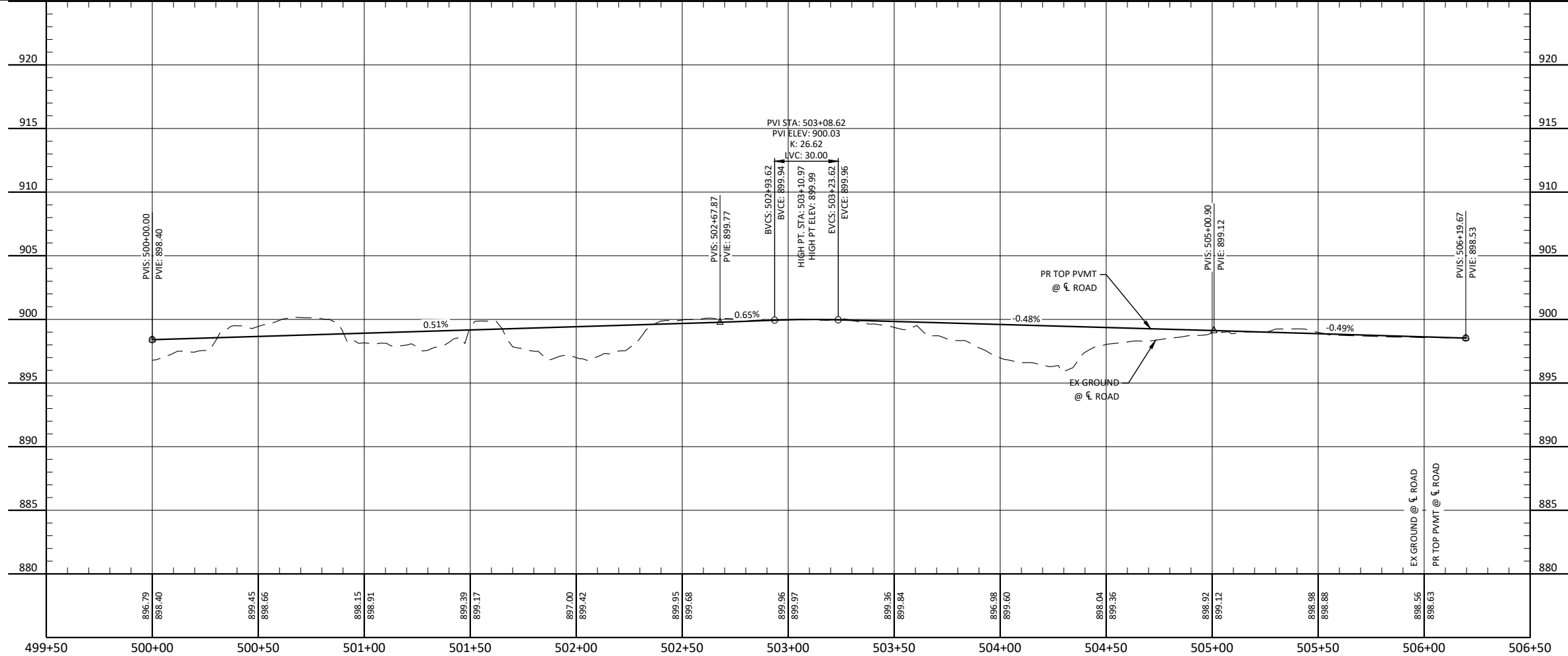
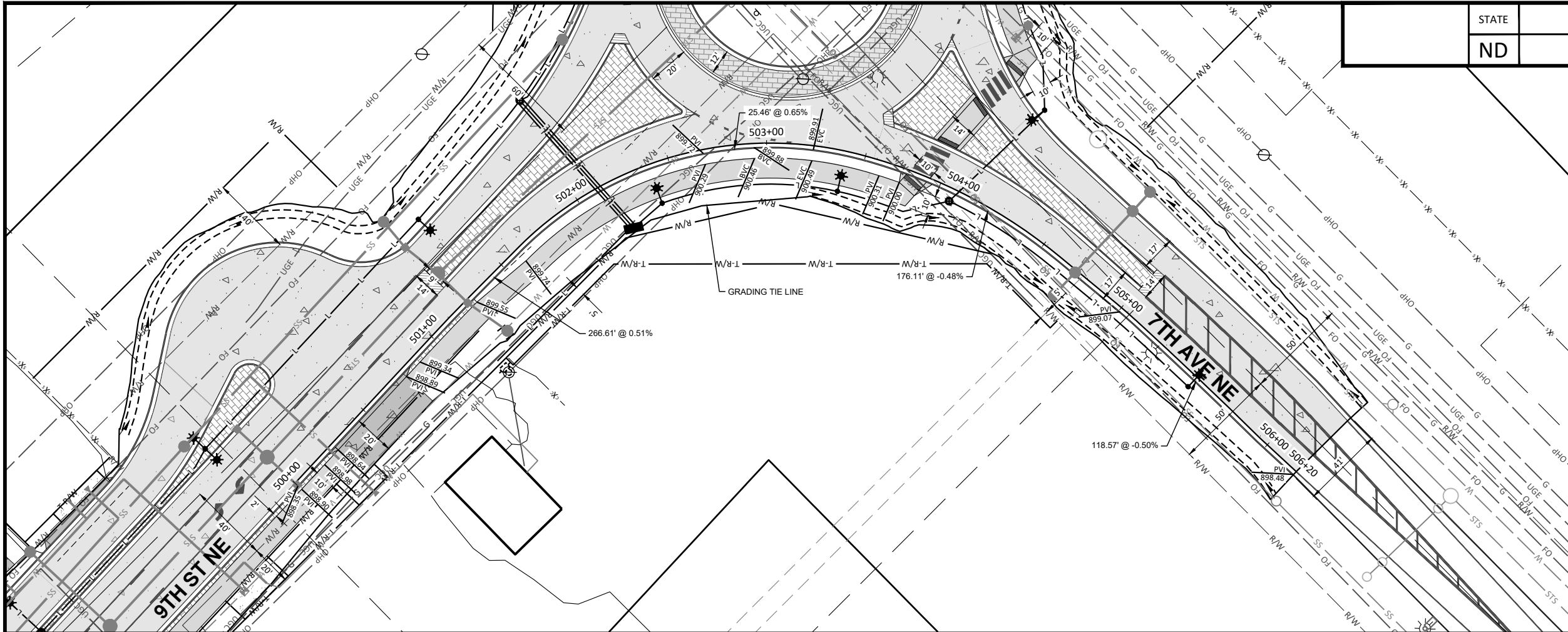
ALL ELEVATIONS ARE BASED ON THE U.S.G.S. VERTICAL DATUM OF 1988. (UNLESS NOTED OTHERWISE)



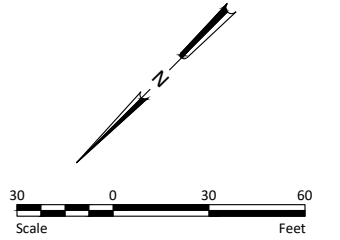
Plan & Profile - 7th Ave Roundabout SE

9th St NE from Main Ave to 12th Ave N
7th Ave NE from 9th St NE to City Limit

H:\JBN\3600\8654\8654_0004 9th St\CAD\0_CITY PROJECT\Plans\060 - NW RAB P & P.dwg-RAB (NW)-10/22/2025 10:29 AM-[jerdson]



STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	TMA-SU-FXP-8-992(045)	60	24



- NOTES:
- ALL GRADES ARE FLOWLINE GRADES SHOWN AT FACE OF CURB UNLESS OTHERWISE NOTED.
 - ALL CURB IS STANDARD TYPE I UNLESS OTHERWISE NOTED.

LEGEND	
EXISTING RIGHT OF WAY	R/W
PROPOSED RIGHT OF WAY	R/W
TEMPORARY RIGHT OF WAY	T-R/W
DITCH BOTTOM	
GRADING TIE LINE	
CURB & GUTTER - TYPE I	
10IN NON REINF CONCRETE PVMT CL AE-DOWELED	
SIDEWALK CONCRETE 5IN	
DRIVEWAY CONCRETE (7IN)	
PIGMENTED IMPRINTED CONCRETE (6IN)	
AGGREGATE SURFACE COURSE CL 13 (4IN)	
CONCRETE MEDIAN NOSE PAVING	
DETECTABLE WARNING PANELS	



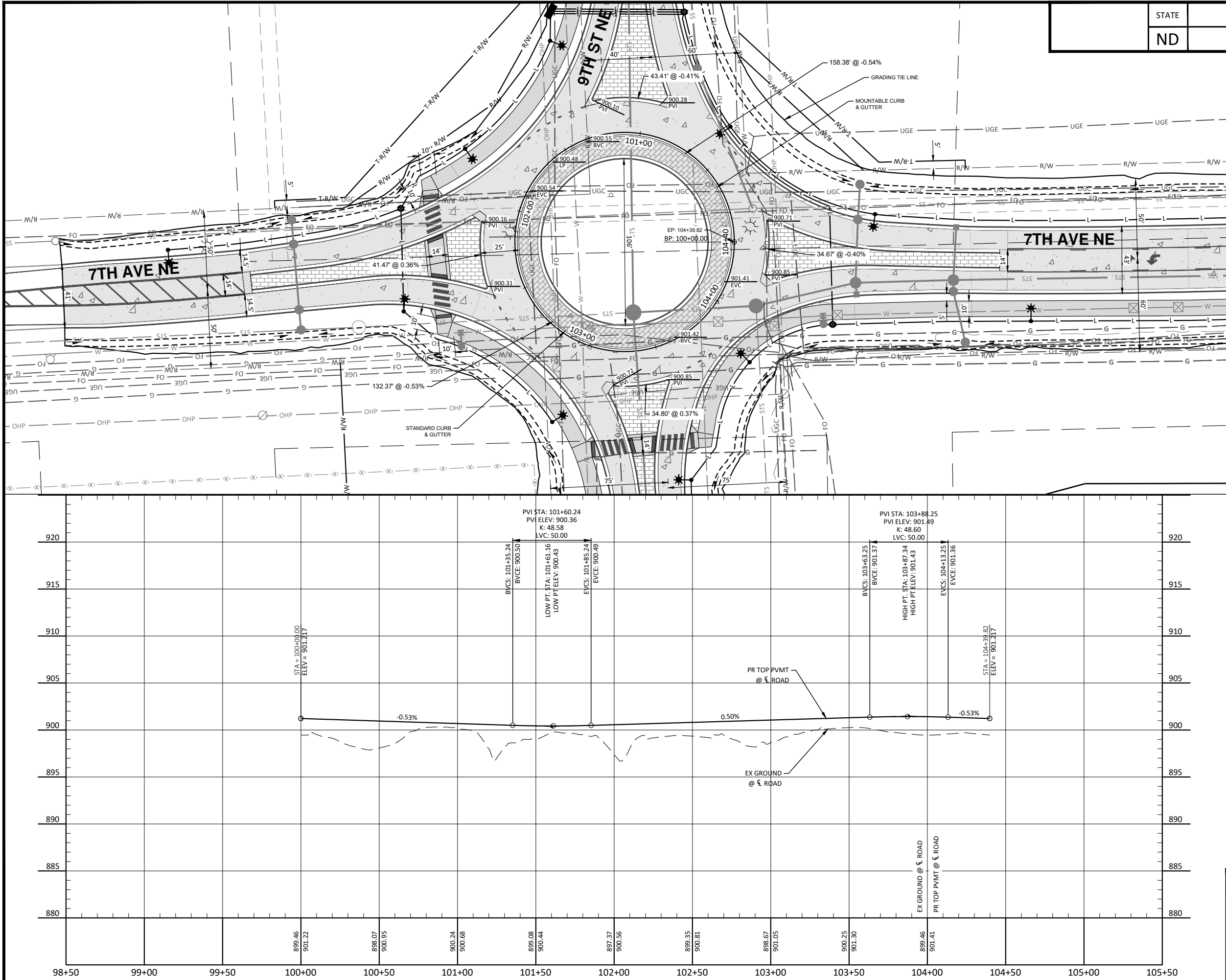
ALL ELEVATIONS ARE BASED ON THE U.S.G.S. VERTICAL DATUM OF 1988. (UNLESS NOTED OTHERWISE)



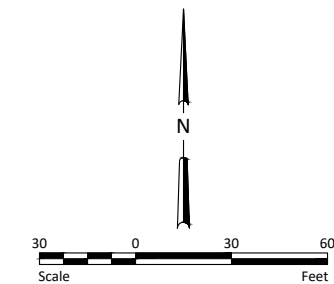
Plan & Profile - 7th Ave Roundabout NW

9th St NE from Main Ave to 12th Ave N
7th Ave NE from 9th St NE to City Limit

H:\JBN\3600\8654\8654_0004 9th St\CAD\0_CITY PROJECT\Plans\060 - Middle RAB P & P.dwg-RAB (Middle)-10/22/2025 10:29 AM-(jerickson)



STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	TMA-SU-FXP-8-992(045)	60	25



- NOTES:
1. ALL GRADES ARE FLOWLINE GRADES SHOWN AT FACE OF CURB UNLESS OTHERWISE NOTED.
 2. ALL CURB IS STANDARD TYPE I UNLESS OTHERWISE NOTED.

LEGEND	
EXISTING RIGHT OF WAY	R/W
PROPOSED RIGHT OF WAY	R/W
TEMPORARY RIGHT OF WAY	T-R/W
DITCH BOTTOM	
GRADING TIE LINE	
CURB & GUTTER - TYPE I	
10IN NON REINF CONCRETE PVMT CL AE-DOWELED	
SIDEWALK CONCRETE 5IN	
DRIVEWAY CONCRETE (7IN)	
PIGMENTED IMPRINTED CONCRETE (6IN)	
AGGREGATE SURFACE COURSE CL 13 (4IN)	
CONCRETE MEDIAN NOSE PAVING	
DETECTABLE WARNING PANELS	



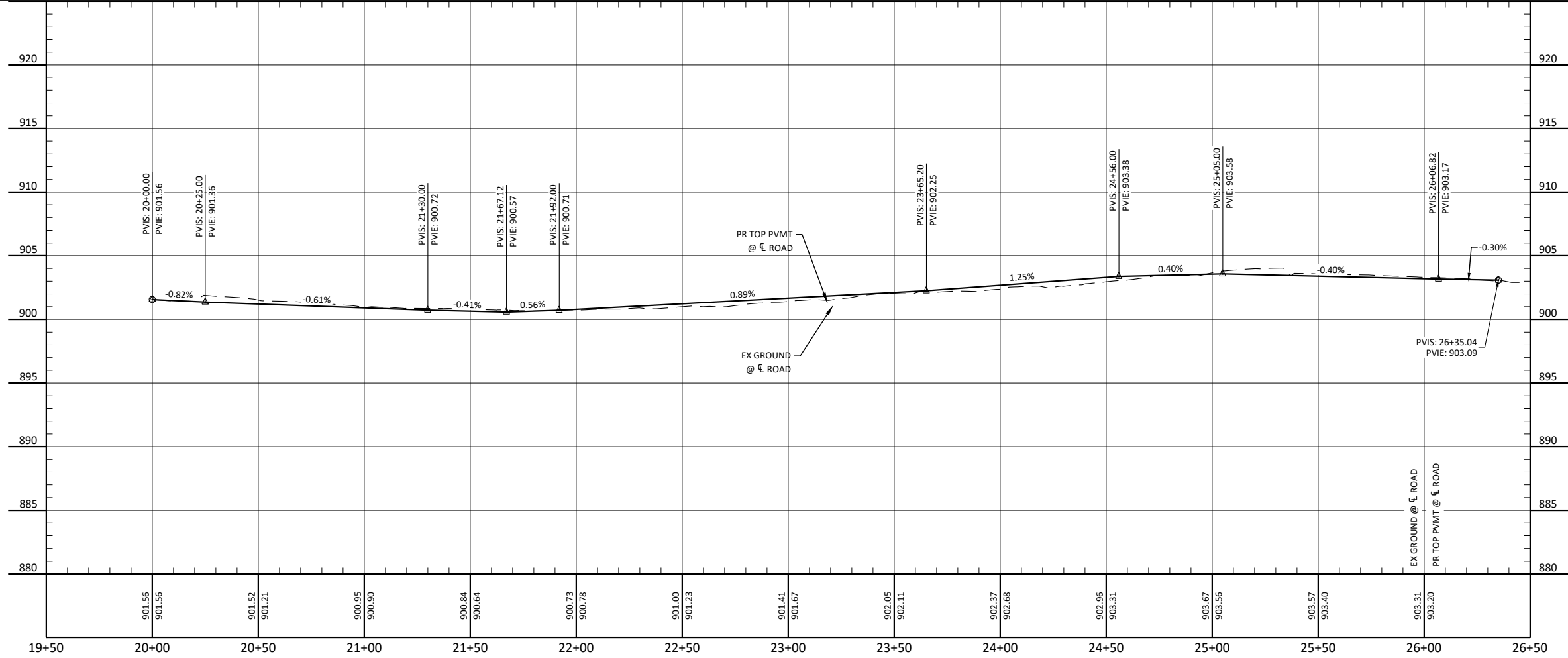
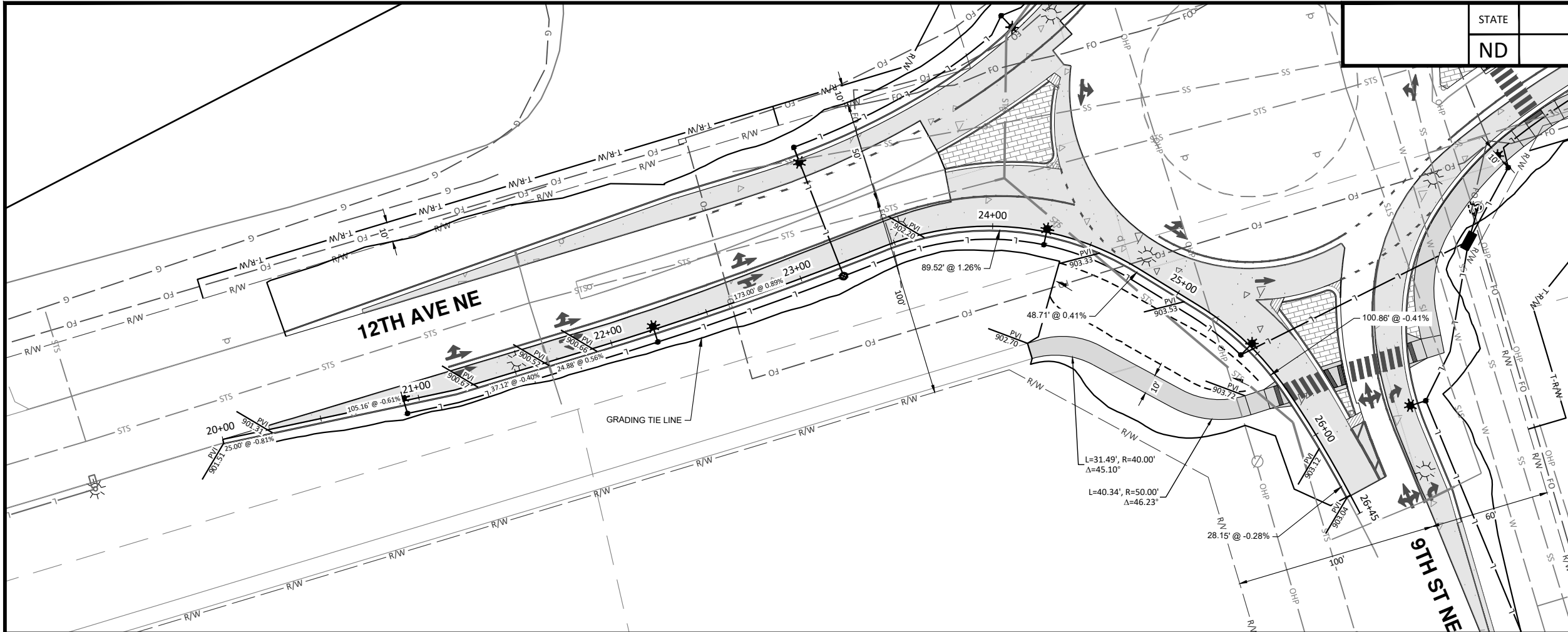
ALL ELEVATIONS ARE BASED ON THE U.S.G.S. VERTICAL DATUM OF 1988. (UNLESS NOTED OTHERWISE)



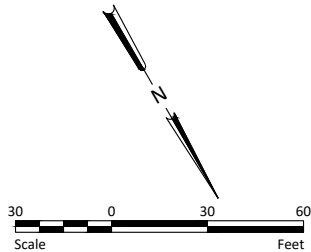
Plan & Profile - 7th Ave
Roundabout Inscribed Circle

9th St NE from Main Ave to 12th Ave N
7th Ave NE from 9th St NE to City Limit

H:\JBN\3600\8654\8654_0004 9th St\CAD\0_CITY PROJECT\Plans\060 - 12th Ave NE RAB P & P.dwg-12th Ave NE RAB (NE)-10/22/2025 10:30 AM-(jerickson)



STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	TMA-SU-FXP-8-992(045)	60	26



- NOTES:
1. ALL GRADES ARE FLOWLINE GRADES SHOWN AT FACE OF CURB UNLESS OTHERWISE NOTED.
 2. ALL CURB IS STANDARD TYPE I UNLESS OTHERWISE NOTED.

LEGEND	
EXISTING RIGHT OF WAY	— R/W —
PROPOSED RIGHT OF WAY	— R/W —
TEMPORARY RIGHT OF WAY	— T-R/W —
DITCH BOTTOM	=====
GRADING TIE LINE	=====
CURB & GUTTER - TYPE I	=====
10IN NON REINF CONCRETE PVMT CL AE-DOWELED	
SIDEWALK CONCRETE 5IN	
DRIVEWAY CONCRETE (7IN)	
PIGMENTED IMPRINTED CONCRETE (6IN)	
AGGREGATE SURFACE COURSE CL 13 (4IN)	
CONCRETE MEDIAN NOSE PAVING	
DETECTABLE WARNING PANELS	



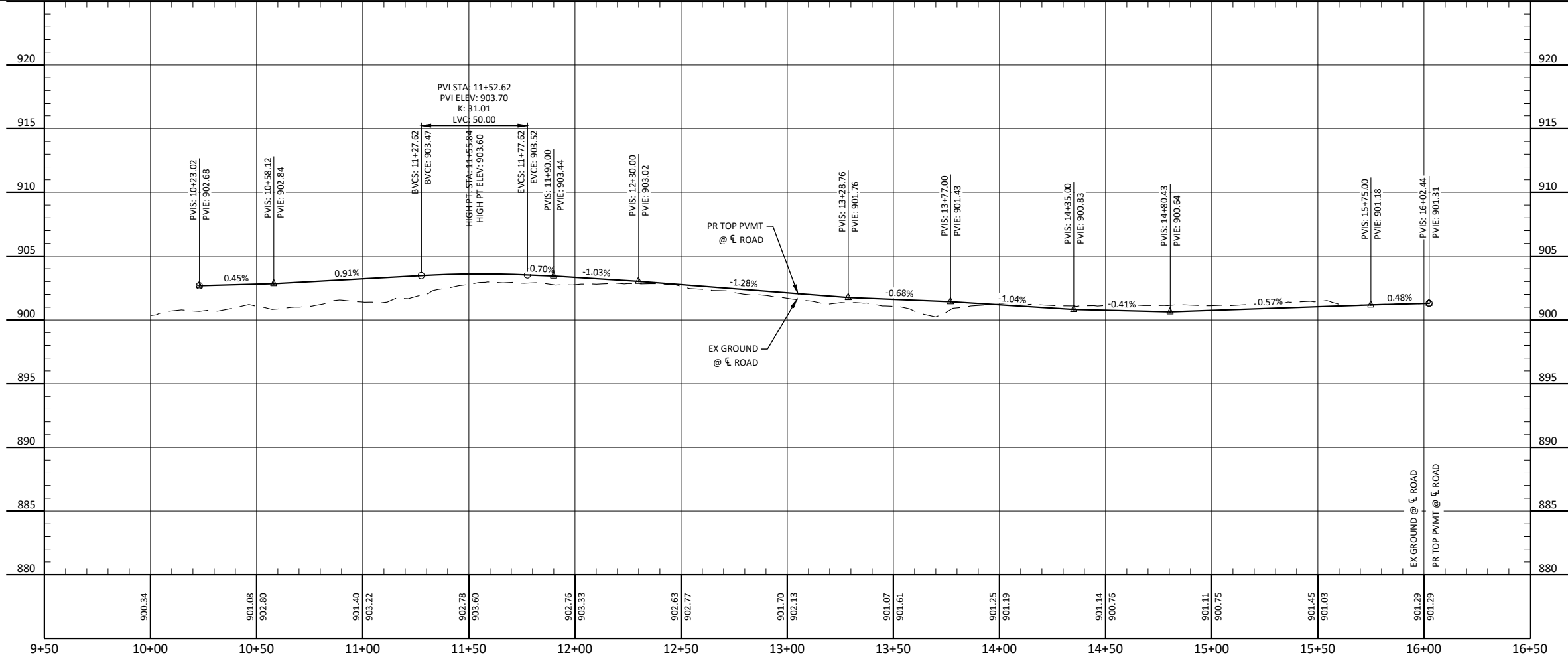
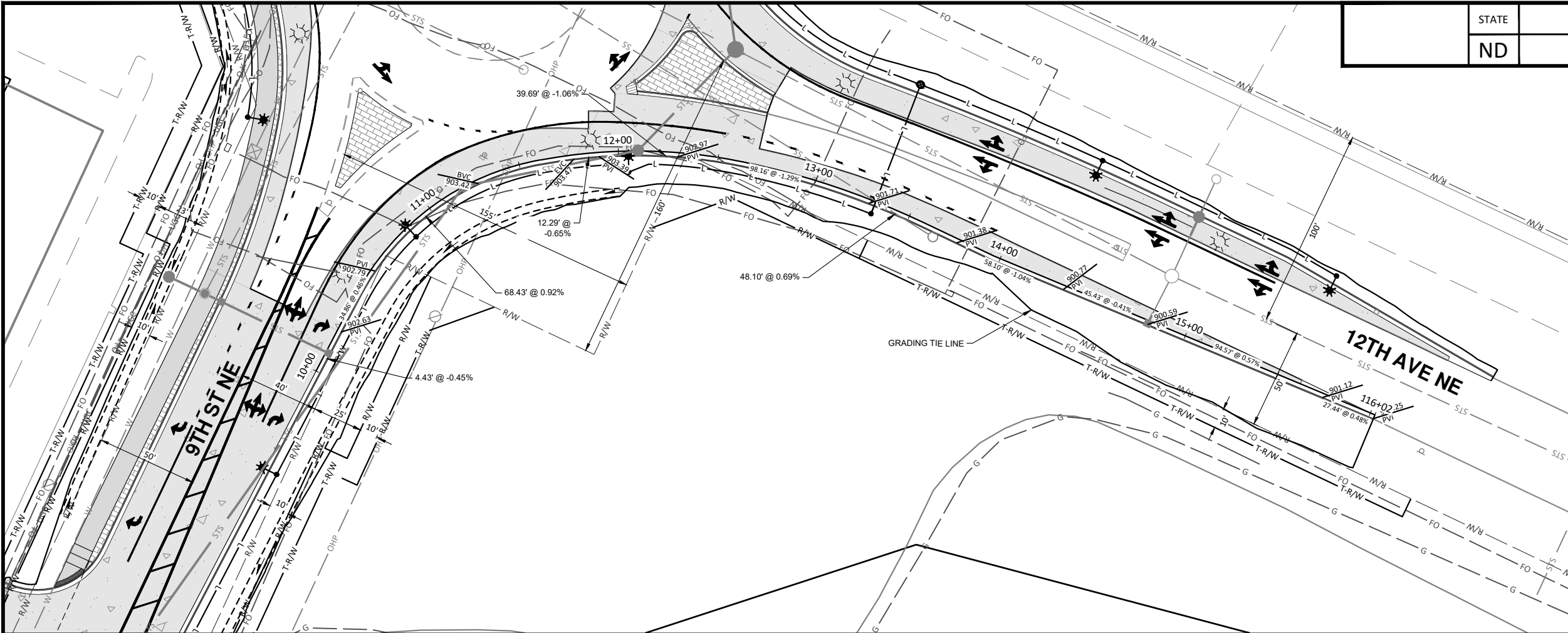
ALL ELEVATIONS ARE BASED ON THE U.S.G.S. VERTICAL DATUM OF 1988. (UNLESS NOTED OTHERWISE)



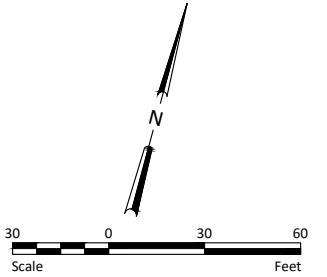
Plan & Profile - 12th Ave Roundabout NE

9th St NE from Main Ave to 12th Ave N
7th Ave NE from 9th St NE to City Limit

H:\JRW\3600\8654\8654_0004 9th St CAD\0_CITY PROJECT\Plans\060 - 12th Ave SE RAB P & P.dwg-12th Ave RAB (SE)-10/27/2025 10:30 AM-(jerickson)



STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	TMA-SU-FXP-8-992(045)	60	27



- NOTES:
1. ALL GRADES ARE FLOWLINE GRADES SHOWN AT FACE OF CURB UNLESS OTHERWISE NOTED.
 2. ALL CURB IS STANDARD TYPE I UNLESS OTHERWISE NOTED.

LEGEND	
EXISTING RIGHT OF WAY	R/W
PROPOSED RIGHT OF WAY	R/W
TEMPORARY RIGHT OF WAY	T-R/W
DITCH BOTTOM	
GRADING TIE LINE	
CURB & GUTTER - TYPE I	
10IN NON REINF CONCRETE PVMT CL AE-DOWELED	
SIDWALK CONCRETE 5IN	
DRIVEWAY CONCRETE (7IN)	
PIGMENTED IMPRINTED CONCRETE (6IN)	
AGGREGATE SURFACE COURSE CL 13 (4IN)	
CONCRETE MEDIAN NOSE PAVING	
DETECTABLE WARNING PANELS	



ALL ELEVATIONS ARE BASED ON THE U.S.G.S. VERTICAL DATUM OF 1988. (UNLESS NOTED OTHERWISE)

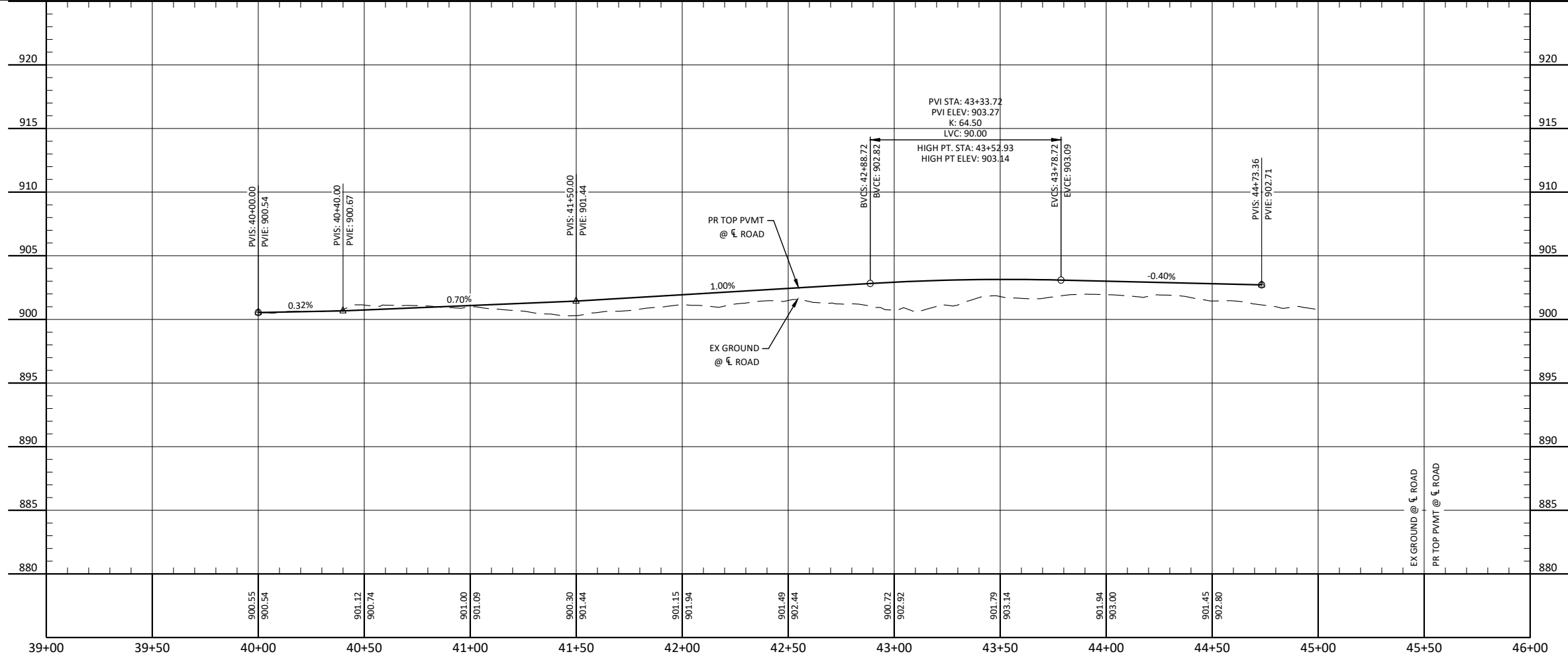
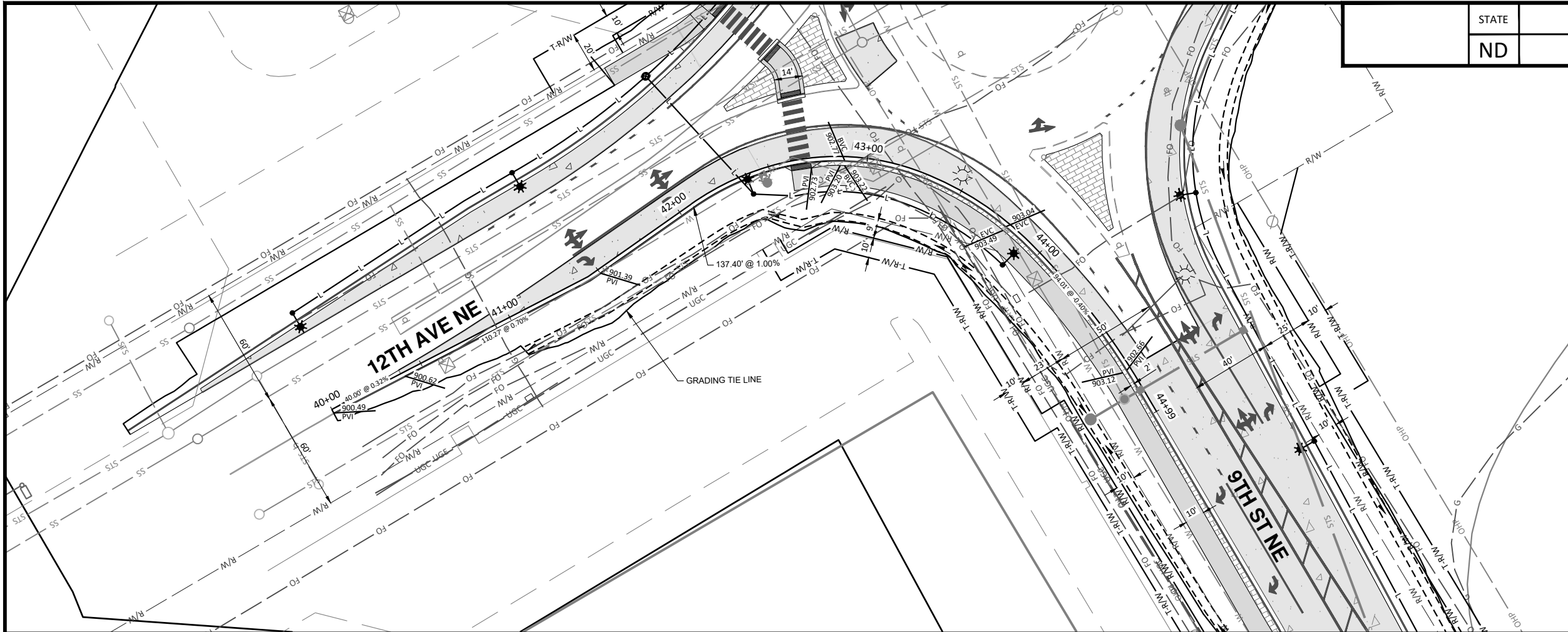


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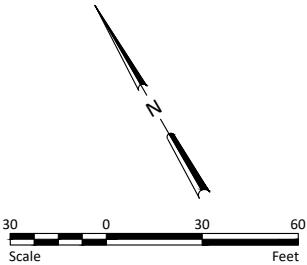
Plan & Profile - 12th Ave Roundabout SE

9th St NE from Main Ave to 12th Ave N
7th Ave NE from 9th St NE to City Limit

H:\JBN\3600\8654\8654_0004 9th St\CAD\0_CITY PROJECT\Plans\060 - 12th Ave SW RAB P & P.dwg-12th Ave RAB (SW)-10/22/2025 10:31 AM-(jerickson)



STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	TMA-SU-FXP-8-992(045)	60	28



- NOTES:
- ALL GRADES ARE FLOWLINE GRADES SHOWN AT FACE OF CURB UNLESS OTHERWISE NOTED.
 - ALL CURB IS STANDARD TYPE I UNLESS OTHERWISE NOTED.

LEGEND	
EXISTING RIGHT OF WAY	— R/W —
PROPOSED RIGHT OF WAY	— R/W —
TEMPORARY RIGHT OF WAY	— T-R/W —
DITCH BOTTOM	=====
GRADING TIE LINE	=====
CURB & GUTTER - TYPE I	=====
10IN NON REINF CONCRETE PVMT CL AE-DOWELED	△
SIDEWALK CONCRETE 5IN	=====
DRIVEWAY CONCRETE (7IN)	△
PIGMENTED IMPRINTED CONCRETE (6IN)	=====
AGGREGATE SURFACE COURSE CL 13 (4IN)	=====
CONCRETE MEDIAN NOSE PAVING	=====
DETECTABLE WARNING PANELS	=====



ALL ELEVATIONS ARE BASED ON THE U.S.G.S. VERTICAL DATUM OF 1988. (UNLESS NOTED OTHERWISE)

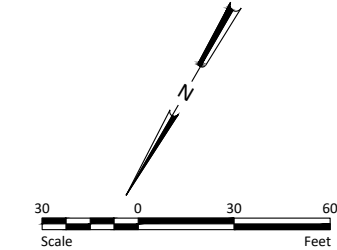
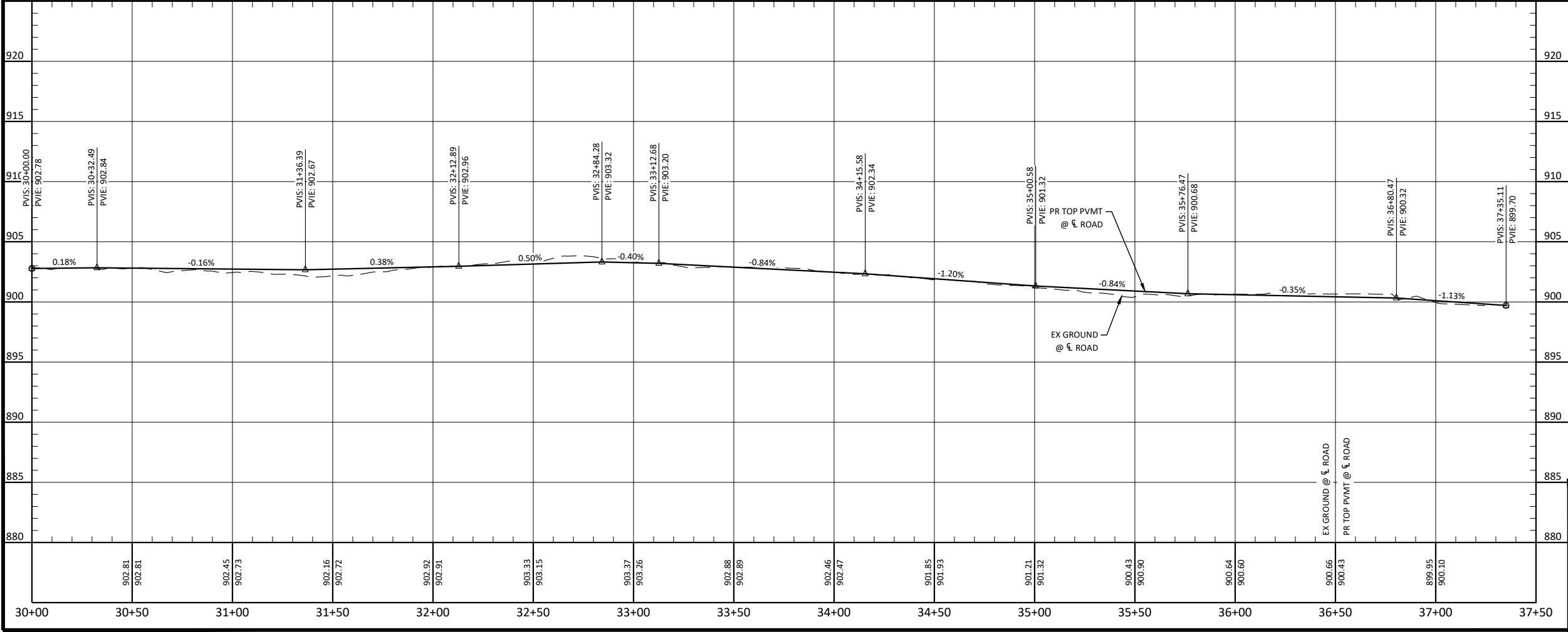
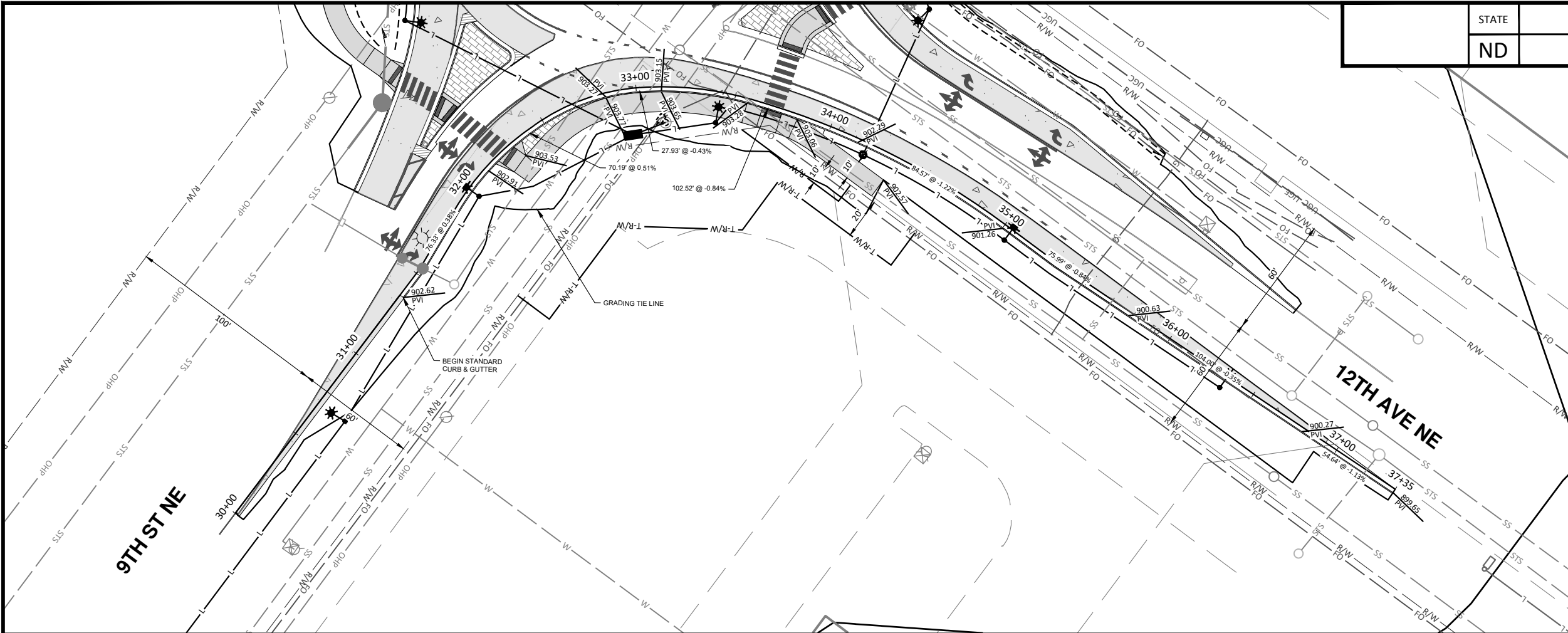


10/22/2025

Plan & Profile - 12th Ave Roundabout SW

9th St NE from Main Ave to 12th Ave N
7th Ave NE from 9th St NE to City Limit

H:\JBN\8600\8654\8654_0004 9th St CAD\0_CITY PROJECT\Plans\060 - 12th Ave NW\ RAB P & P.dwg-12th Ave NW (NW)-10/22/2025 10:31 AM-[jerrickson]



- NOTES:
1. ALL GRADES ARE FLOWLINE GRADES SHOWN AT FACE OF CURB UNLESS OTHERWISE NOTED.
 2. ALL CURB IS STANDARD TYPE I UNLESS OTHERWISE NOTED.

LEGEND	
EXISTING RIGHT OF WAY	— R/W —
PROPOSED RIGHT OF WAY	— R/W —
TEMPORARY RIGHT OF WAY	— T-R/W —
DITCH BOTTOM	----
GRADING TIE LINE	----
CURB & GUTTER - TYPE I	----
10IN NON REINF CONCRETE PVMT CL AE-DOWELED	----
SIDEWALK CONCRETE 5IN	----
DRIVEWAY CONCRETE (7IN)	----
PIGMENTED IMPRINTED CONCRETE (6IN)	----
AGGREGATE SURFACE COURSE CL 13 (4IN)	----
CONCRETE MEDIAN NOSE PAVING	----
DETECTABLE WARNING PANELS	----



ALL ELEVATIONS ARE BASED ON THE U.S.G.S. VERTICAL DATUM OF 1988. (UNLESS NOTED OTHERWISE)



10/22/2025

Plan & Profile - 12th Ave Roundabout NW

9th St NE from Main Ave to 12th Ave N
7th Ave NE from 9th St NE to City Limit