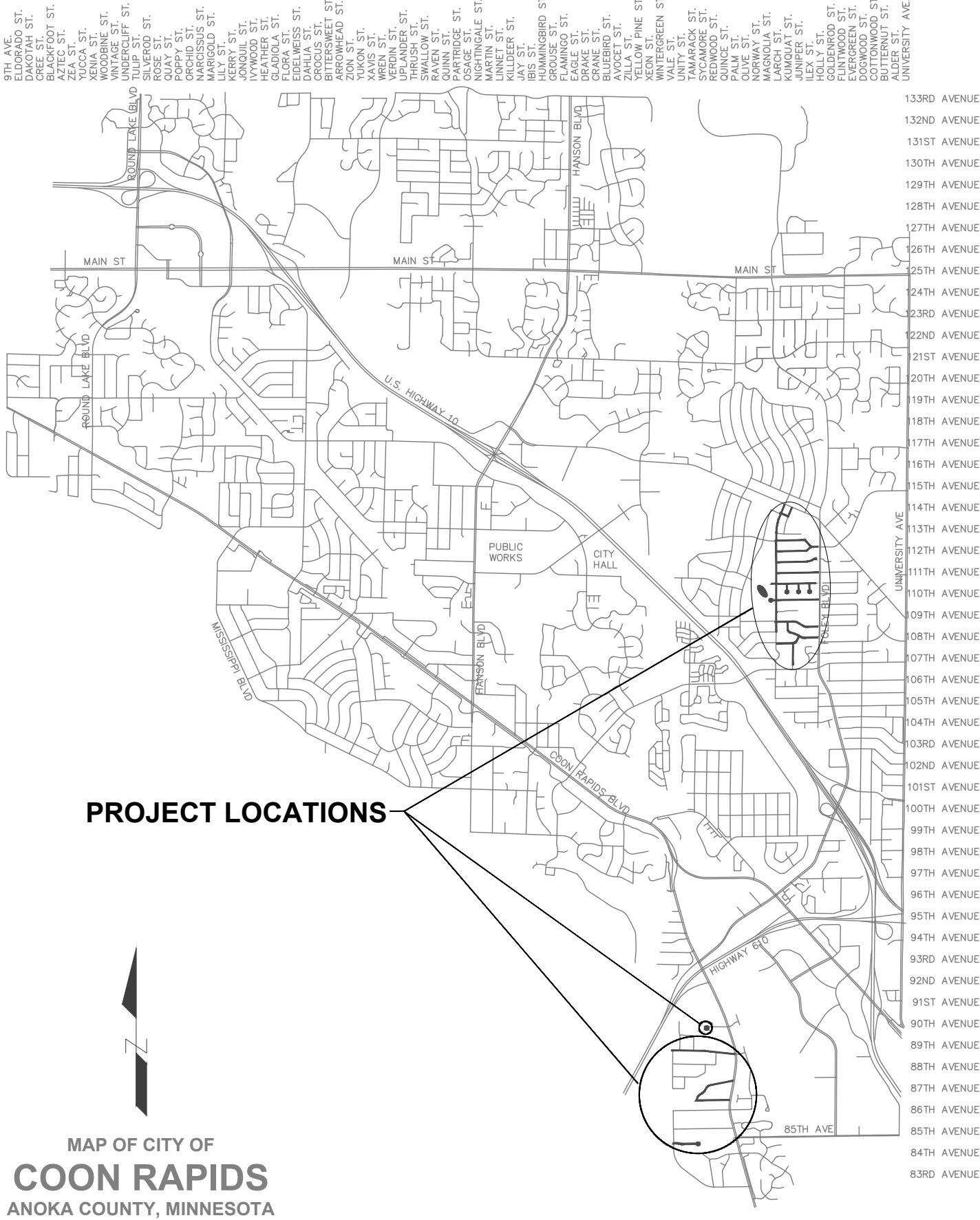




GOVERNING SPECIFICATIONS

THE 2020 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION" SHALL APPLY.

THE MOST CURRENT EDITION OF THE CITY ENGINEERS ASSOCIATION OF MINNESOTA (CEAM) STANDARD SPECIFICATION SHALL APPLY.

GENERAL NOTES

ALL TRAFFIC CONTROL DEVICES AND SIGNING SHALL CONFORM TO THE MMUTCD, INCLUDING FIELD MANUAL FOR TEMPORARY TRAFFIC CONTROL ZONE LAYOUTS, LATEST ISSUE.

THE SUBSURFACE UTILITY QUALITY INFORMATION IN THIS PLAN IS LEVEL D. THIS UTILITY QUALITY LEVEL WAS DETERMINED ACCORDING TO THE GUIDELINES OF CI/ASCE 38-02 ENTITLED "STANDARD GUIDELINES FOR THE COLLECTION AND DEPICTION OF EXISTING SUBSURFACE UTILITY DATA".

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO UTILIZE THE GOPHER STATE ONE CALL EXCAVATION NOTICE SYSTEM REQUIRED BY MINNESOTA STATUE, CHAPTER 216D FOR ALL UNDERGROUND UTILITY LOCATIONS.

SHEET INDEX

SHEET	SHEET TITLE
1	COVER SHEET
2	LEGEND
3	OVERVIEW SHEET
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10	MOORE PARK POND DETAILS
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18 - 61	PLAN AND PROFILE
62	MOORE PARK POND PLAN
63 - 65	SIGNS AND STRIPING



NO.	DATE	REVISIONS



CITY OF COON RAPIDS
ENGINEERING DEPARTMENT
11155 ROBINSON DRIVE
COON RAPIDS, MN. 55433-3761
763-755-2880
FAX 163-767-6491

SURVEY:	R.M.T
DESIGNED:	J.W.H.
CHECKED:	M.C.H.
DATE:	11/10/2025

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE STATE OF MINNESOTA.

NAME: Mark C. Hansen, P.E.
LICENSE # 43920
DATE: 3/6/2025



26-1 STREET RECONSTRUCTION

CITY OF COON RAPIDS, MINNESOTA

COVER SHEET

SHEET 1 OF 65 SHEETS

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LINE TYPES

SYMBOLS

HATCH PATTERNS

EXISTING		PROPOSED
	CENTERLINE	---
=====	CURB	=====
_____	EDGE OF BUILDING	_____
-----	RIGHT-OF-WAY	-----
-----	EASEMENT LINE	-----
_____	ASPHALT EDGE	_____
_____	SIDEWALK CONC EDGE	_____
-----	EXCAVATION EDGE	-----
_____	LIMIT OF CONSTRUCTION	_____
----- ----- -----	WATER MAIN	----- ----- -----
----->-----	SANITARY SEWER	----->-----
----->>-----	STORM DRAIN	----->>-----
-----GAS-----	NATURAL GAS	
-----EOH-----	ELECTRIC OVERHEAD	
-----EUG-----	ELECTRIC UNDERGROUND	
-----CTV-----	CABLE TELEVISION	
-----FO-OH-----	FIBER OPTIC OVERHEAD	
-----FO-UG-----	FIBER OPTIC UNDER GROUND	
-----SIG-UG-----	TRAFFIC SIGNAL	
-----V-----V-----V-----V-----V-----V-----	RETAINING WALL	-----V-----V-----V-----V-----V-----V-----
-----X-----X-----	FENCE LINE	-----X-----X-----
	SILT FENCE	-----SF-----
	EROSION CONTROL LOG BIROL	-----o-----o-----o-----
-----WET-----	WETLAND	
-----~-----~-----~-----~-----~-----~-----	TREE LINE	
-----964-----	CONTOURS	-----964-----
	MATCH LINE	-----MATCH LINE-----
-----	SANITARY FORCE MAIN	

EXISTING		PROPOSED
	1-FIRE HYDRANT (ENG DEPT)	
	2-WATER GATE VALVE (ENG DEPT)	
	3-WATER TEE (ENG DEPT)	
	24-WATER CURB STOP (ENG DEPT)	
	4-SANITARY MANHOLE (ENG DEPT)	
	5-STORM MANHOLE (ENG DEPT)	
	6-STORM CATCH BASIN (ENG DEPT)	
	7-INLET PROTECTION (ENG DEPT)	
	8-POLE (ENG DEPT)	
	9-LIGHT POLE (ENG DEPT)	
	10-GUY WIRE (ENG DEPT)	
	12-SIGN (ENG DEPT)	
	13-STREET NAME SIGN (ENG DEPT)	
	11-TRAFFIC SIGNAL (ENG DEPT)	
	14-UTILITY HANDHOLE (ENG DEPT)	
	15-UTILITY MANHOLE (ENG DEPT)	
	16-PEDESTAL (ENG DEPT)	
	17-TREE STUMP (ENG DEPT)	
	18-CONIFEROUS TREE (ENG DEPT)	
	19-DECIDUOUS TREE (ENG DEPT)	
	20-BENCHMARK (ENG DEPT)	
	21-SOIL BORING (ENG DEPT)	
	22-KEY NOTE (ENG DEPT)	
	23-CULVERT (ENG DEPT)	

	ASPHALT PATCHING
	REMOVE ASPHALT
	ASPHALT SECTION
	CONCRETE PAVEMENT
	EROSION CONTROL MAT
	CONSTRUCTION ENTRANCE
	GRASS
	PAVERS
	COMPACTED FILL / SUB BASE
	GRAVEL
	SAND

- 1

REMOVE & DISPOSE EXISTING SANITARY SEWER MANHOLE CASTING, LID & RINGS. INSTALL NEW CASTING, LID (R-1733-5044) & RINGS. INSTALL 1 & 1 BARRIER AROUND THE RINGS. PAYMENT SHALL BE MADE AS
1) REMOVE / DISPOSE SANITARY SEWER CASTING, LID & RINGS.
2) FURNISH & INSTALL SANITARY SEWER CASTING & LID. PLACE 1 & 1 BARRIER AROUND THE RINGS.
3) 2" CONCRETE ADJUSTING RINGS (EA)
- 2

REMOVE & DISPOSE EXISTING STORM SEWER MANHOLE CASTING, LID & RINGS. INSTALL NEW CASTING, LID (R-1733-5044) & RINGS. INSTALL FABRIC AROUND THE RINGS. PAYMENT SHALL BE MADE AS
1) REMOVE / DISPOSE STORM SEWER CASTING, LID & RINGS.
2) FURNISH & INSTALL STORM SEWER CASTING & LID. PLACE FABRIC AROUND THE RINGS.
3) 2" CONCRETE ADJUSTING RINGS (EA)
- 3

REMOVE & DISPOSE EXISTING STORM INLET CASTING, GRATE & RINGS. INSTALL NEW INLET CASTING, GRATE & RINGS. INSTALL FABRIC AROUND THE RINGS. SEE GENERAL NOTE 1. PAYMENT SHALL BE MADE AS
1) REMOVE / DISPOSE STORM INLET CASTING, GRATE & RINGS.
2) FURNISH & INSTALL STORM INLET CASTING & GRATE.(R-3067-L) OR (R-3067-L LOW PROFILE, ESS BROS.) PLACE FABRIC AROUND THE RINGS.
3) 2" CONCRETE ADJUSTING RINGS (EA)
- 4

REMOVE & DISPOSE EXISTING STORM INLET CASTING, GRATE & RINGS. INSTALL NEW INLET CASTING, GRATE & RINGS. INSTALL FABRIC AROUND THE RINGS. SEE GENERAL NOTE 1. PAYMENT SHALL BE MADE AS
1) REMOVE / DISPOSE STORM INLET CASTING, GRATE & RINGS.
2) FURNISH & INSTALL STORM INLET CASTING & GRATE. (R-3067-L) OR (R-3067-L LOW PROFILE, ESS BROS.) PLACE FABRIC AROUND THE RINGS.
3) FURNISH & INSTALL 3067-27 ESS BROS. ADAPTER PLATE.
4) 2" CONCRETE ADJUSTING RINGS (EA)
- 5

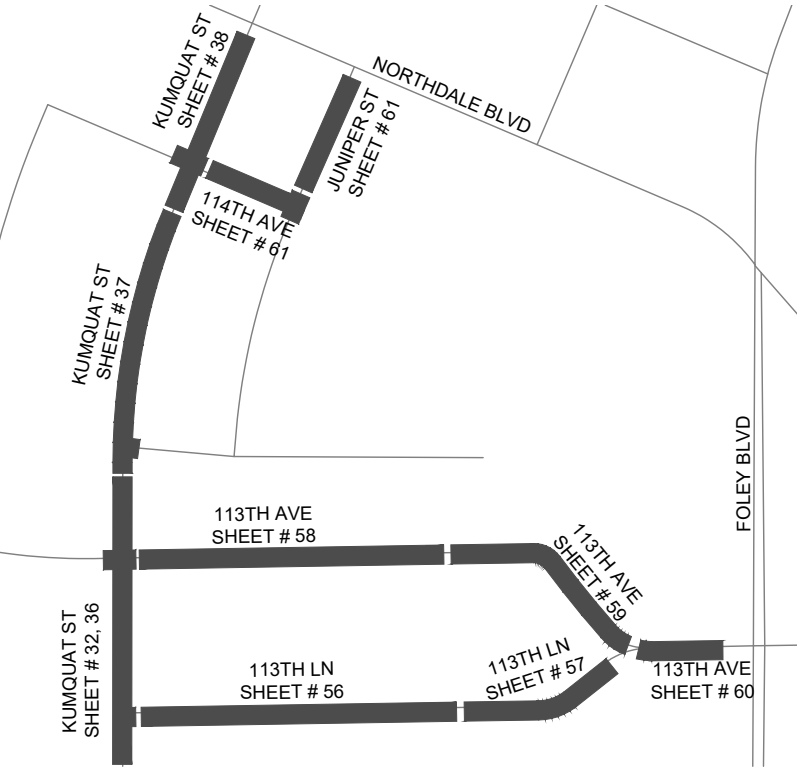
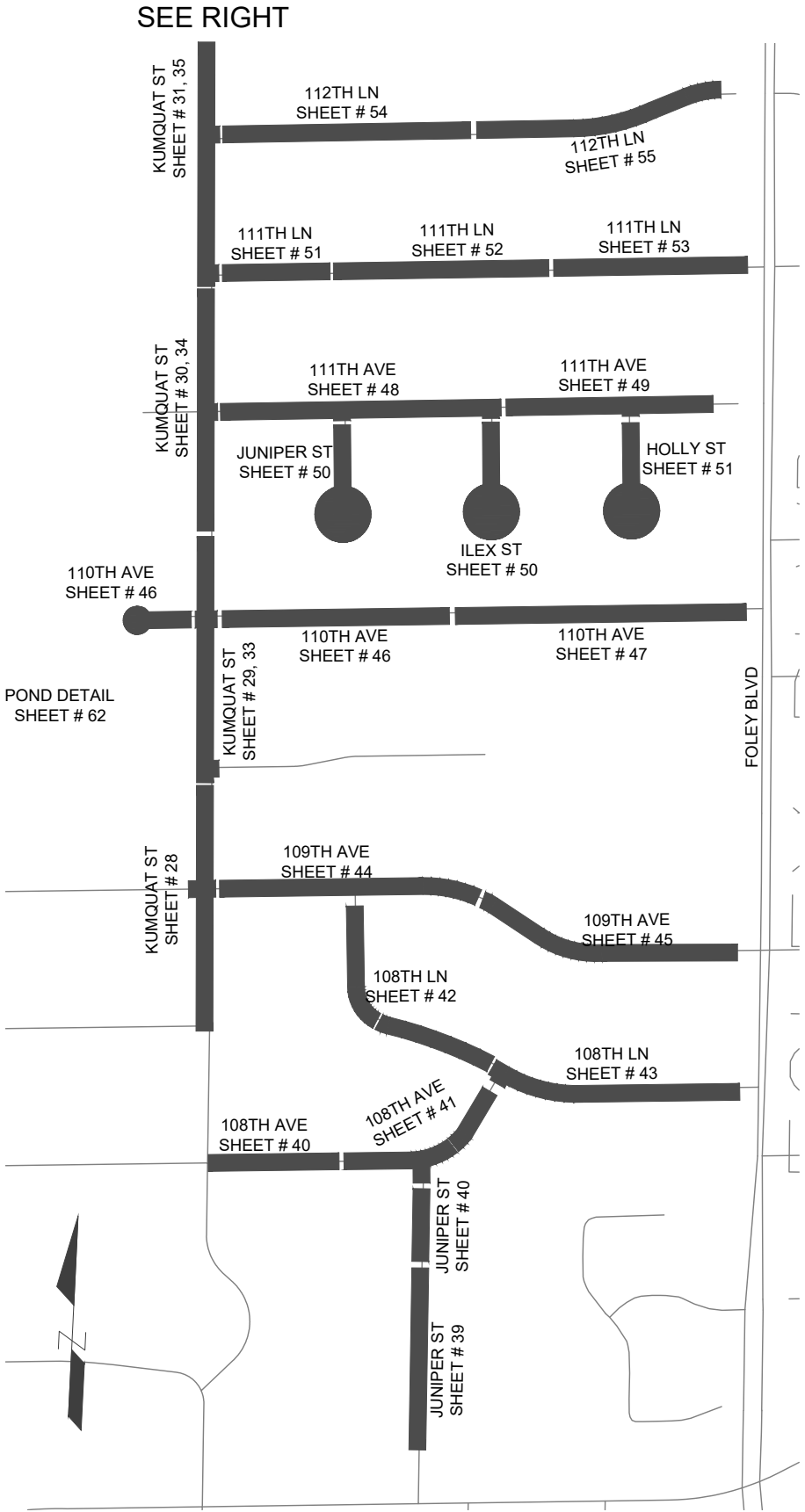
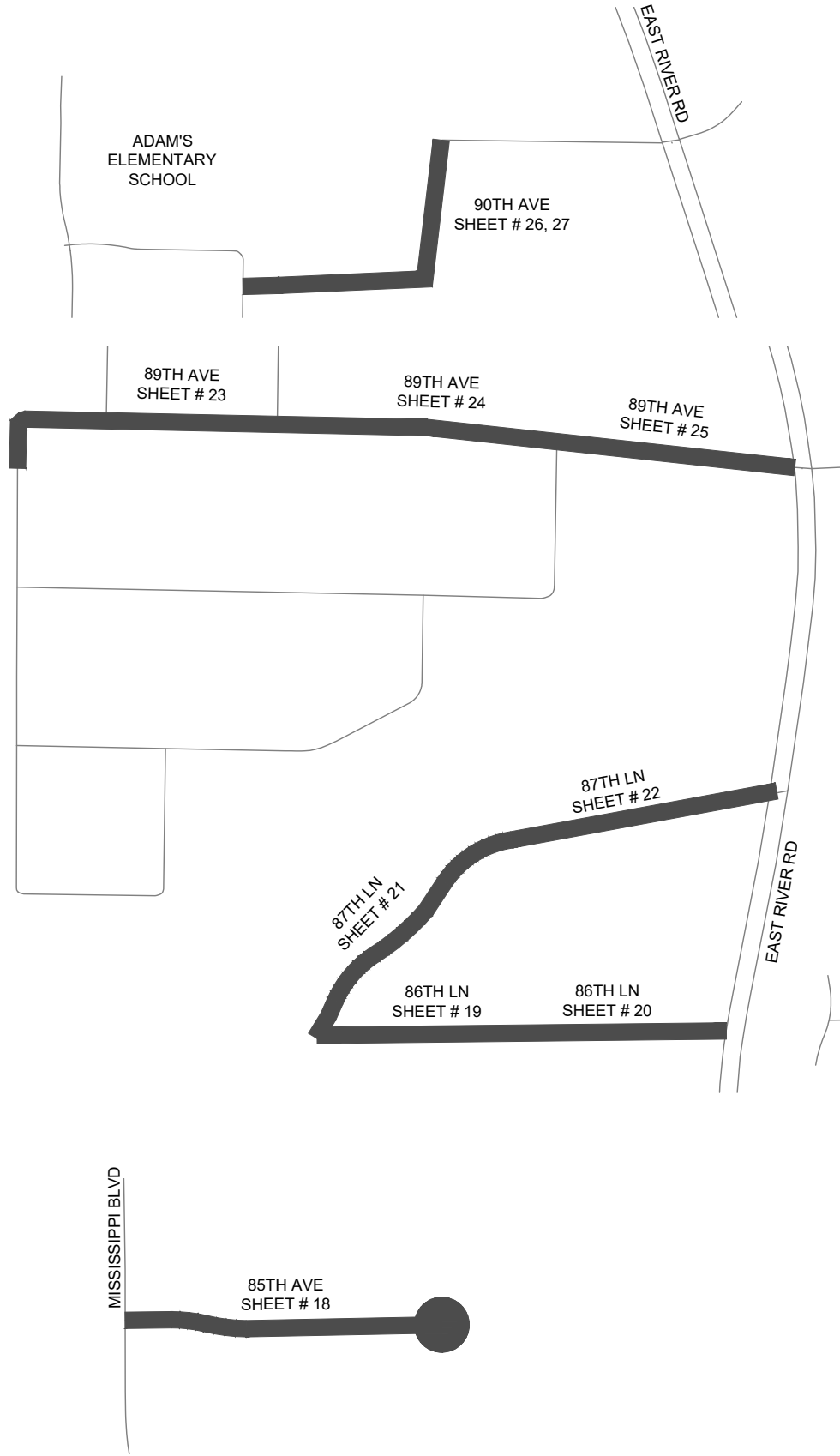
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1) REMOVE / DISPOSE STORM INLET CASTING, GRATE & RINGS.
2) FURNISH & INSTALL STORM INLET CASTING & GRATE. (R-3501-L2) PLACE FABRIC AROUND THE RINGS.
3) 2" CONCRETE ADJUSTING RINGS (EA)
- 6

REPAINT CITY FIRE HYDRANT, SANDBLAST, PRIME AND MINIMUM OF TWO COATS OF RED PAINT BE APPLIED, FURNISH & INSTALL NEW FLAG, PAYMENT SHALL BE MADE AT THE CONTRACT UNIT PRICE PER EACH.
- 7

CONNECT TO EXISTING WATER MAIN WITH STAINLESS STEEL SADDLE, 1" BALL CORP., 10 - 55 LF - 1" TYPE K COPPER & 1" CURB STOP WITH BOX. CONNECT TO EXISTING 1" SERVICE, INSTALL CURB STOP 10' BEHIND BACK OF CURB, OR IN SAME LOCATION IF EXISTING CURB STOP IS BEYOND 10' BACK OF CURB. IF EXISTING OR NEW SWLK, PLACE CURB STOP 1' BEYOND WALK. TOP CURB BOX TO BE FLUSH WITH FINISHED GROUND (TYP).

K:\2026 CAD\26-1\DESIGN DRAWINGS\26-1_STREET RECONSTRUCTION

March 4, 2026



GENERAL NOTES

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BASIS OF PLAN QUANTITIES

- BITUMINOUS TACK MATERIAL – 0.05 GALLONS PER SY
- BITUMINOUS WEARING & NON-WEARING COURSE
 - BITUMINOUS MIXTURE – 115 POUNDS PER SY PER INCH
- SELECT GRANULAR BORROW (SAND)
 - 1 CUBIC YARD (CV) = 1.3 CUBIC YARD (LV)
- COMMON EXCAVATION
 - 1 CUBIC YARD (CV) = 1.3 CUBIC YARD (LV)
- HYDROSEEDING – INCLUDES
 - 6,000 GAL / ACRE
 - HYDRAULIC MATRIX TYPE MULCH 2100 LBS / ACRE
 - SEED MIXTURE 25-131 220 LBS / ACRE
 - FERTILIZER TYPE 2 200 LBS / ACRE

SPECIFICATIONS REFERENCE

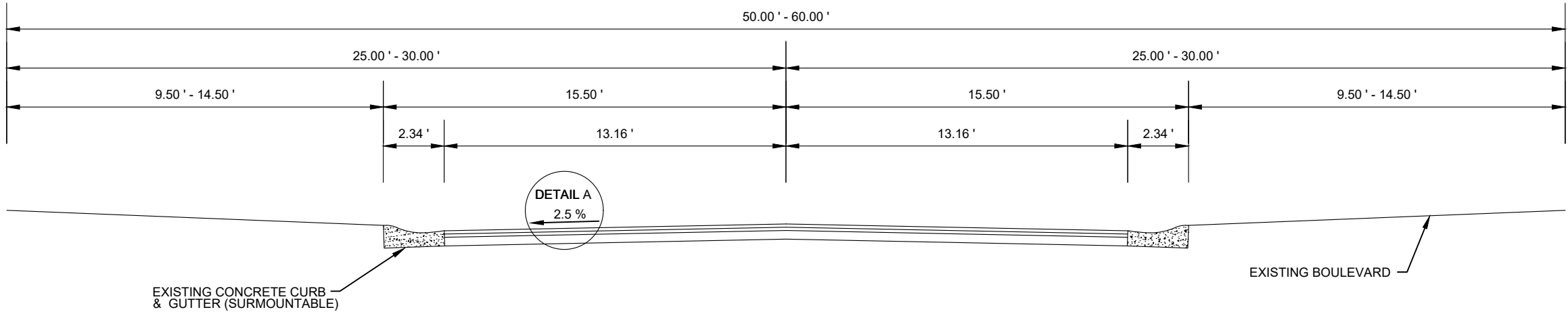
THE 2020 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION" SHALL GOVERN. THE MOST CURRENT CITY ENGINEERS ASSOCIATION OF MINNESOTA, AND THE MOST CURRENT CITY OF COON RAPIDS STANDARD SPECIFICATIONS FOR CONSTRUCTION, SHALL GOVERN.

NO.			DATE	REVISIONS	 CITY OF COON RAPIDS ENGINEERING DEPARTMENT 11155 ROBINSON DRIVE COON RAPIDS, MN. 55433-3761 763-755-2880 FAX 163-767-6491	SURVEY: R.M.T	I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE STATE OF MINNESOTA. NAME: Mark C. Hansen, P.E. LICENSE # 43920 DATE: 3/6/2025 	26-1 STREET RECONSTRUCTION		OVERVIEW MAP	
						DESIGNED: J.W.H.		CITY OF COON RAPIDS, MINNESOTA		SHEET 3 OF 65 SHEETS	
						CHECKED: M.C.H.					
						DATE: 11/10/2025					

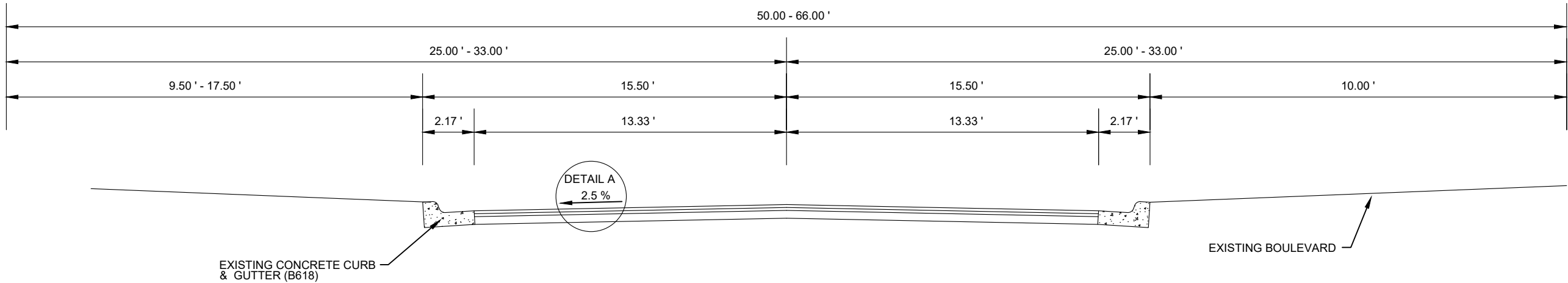
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March 4, 2026

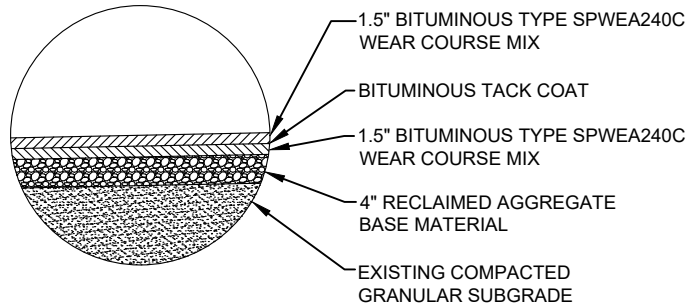
TYPICAL SECTION 1
85TH AVE AND 111TH LANE



TYPICAL SECTION 2
**KUMQUAT ST (3+42 - 6+85) AND ALL OTHER
STREETS EXCEPT FOR 85TH AVE, 89TH AVE,
109TH AVE, 110TH AVE, 111TH LANE AND 113TH
LANE. NOTE, KUMQUAT ST. SHALL HAVE A 2%
CROSS SLOPE.**



DETAIL A ALL STREETS



NO.	DATE	REVISIONS
1	3/28/2025	ADDENDUM NO. 1



CITY OF COON RAPIDS
ENGINEERING DEPARTMENT
11155 ROBINSON DRIVE
COON RAPIDS, MN. 55433-3761
763-755-2880
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NAME: Mark C. Hansen, P.E.
LICENSE # 43920
DATE: 3/6/2025



26-1 STREET RECONSTRUCTION

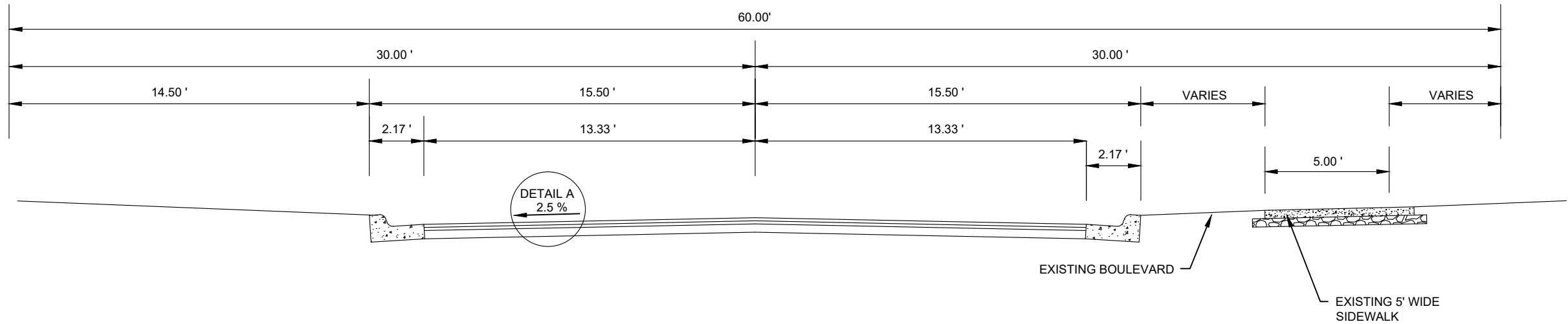
CITY OF COON RAPIDS, MINNESOTA

TYPICAL SECTIONS
SHEET 4 OF 65 SHEETS

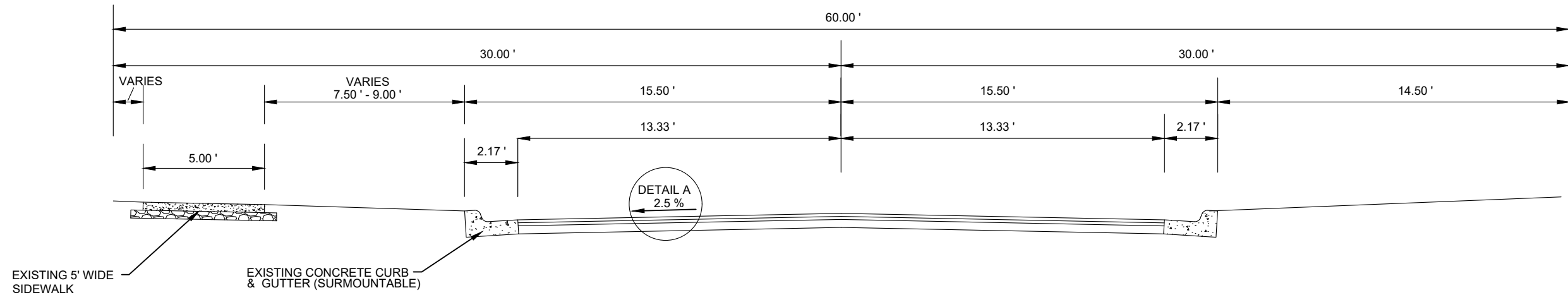
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March 4, 2026

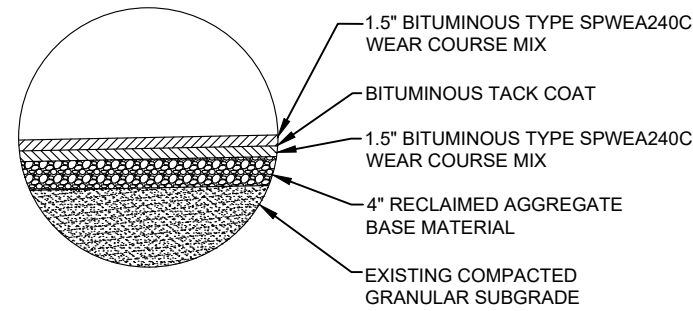
TYPICAL SECTION 3
89TH AVE AND 113TH AVE



TYPICAL SECTION 4
109TH AVE



DETAIL A ALL STREETS



NO.	DATE	REVISIONS
1	3/28/2025	ADDENDUM NO. 1



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26-1 STREET RECONSTRUCTION
CITY OF COON RAPIDS, MINNESOTA

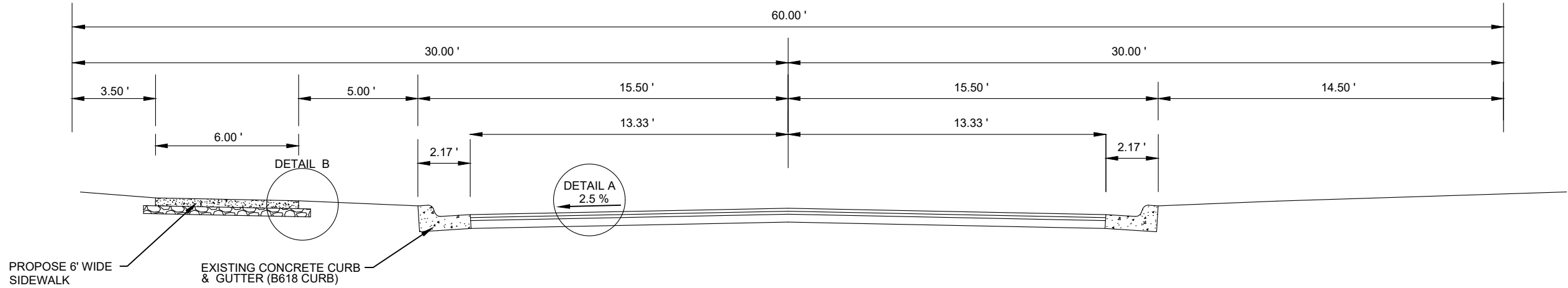
TYPICAL SECTIONS
SHEET 5 OF 62 SHEETS

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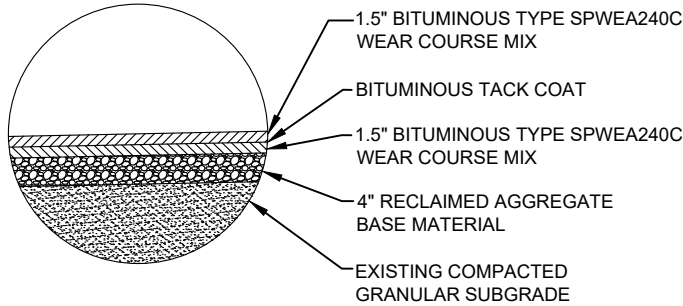
March 4, 2026

TYPICAL SECTION 5

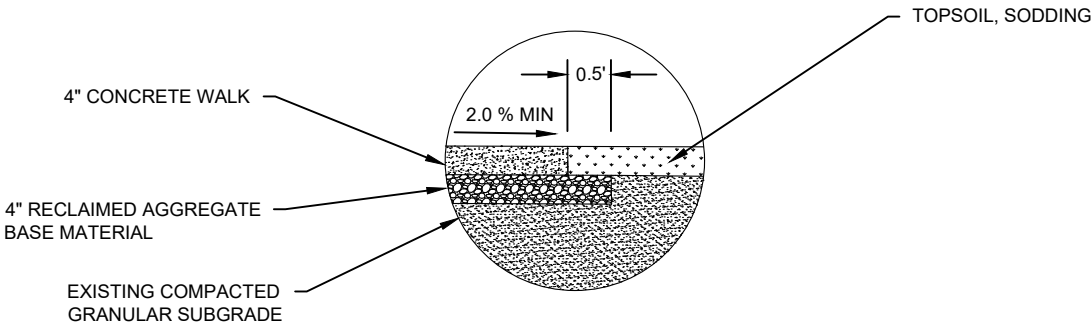
KUMQUAT ST (6+84 - 42+72)
AND 110TH AVE. NOTE KUMQUAT ST.
SHALL HAVE A 2% CROSS SLOPE.



DETAIL A ALL STREETS



DETAIL B



NO.	DATE	REVISIONS
1	3/28/2025	ADDENDUM NO. 1



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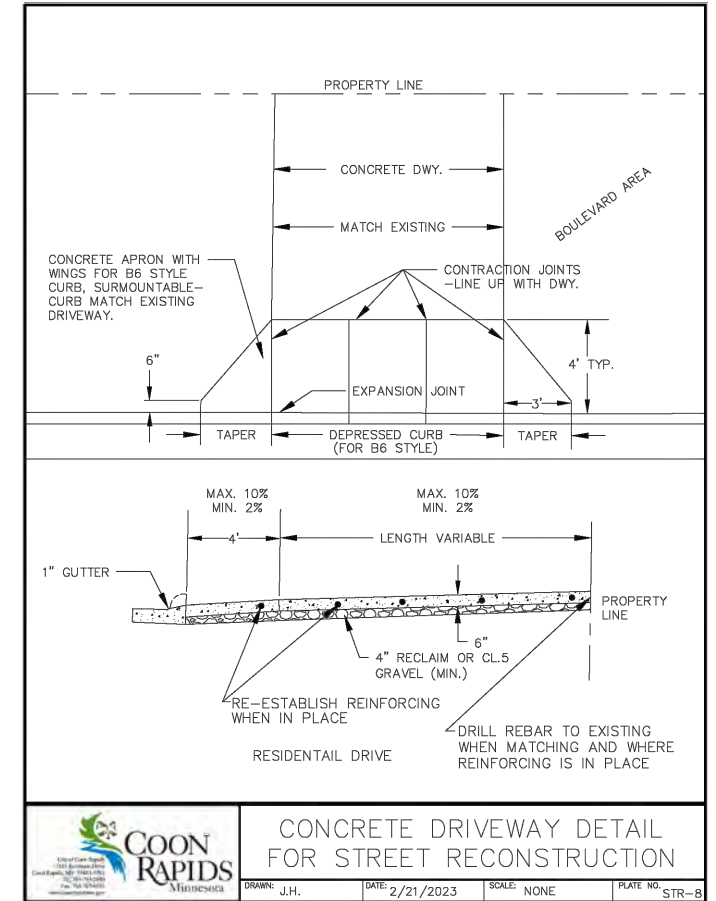
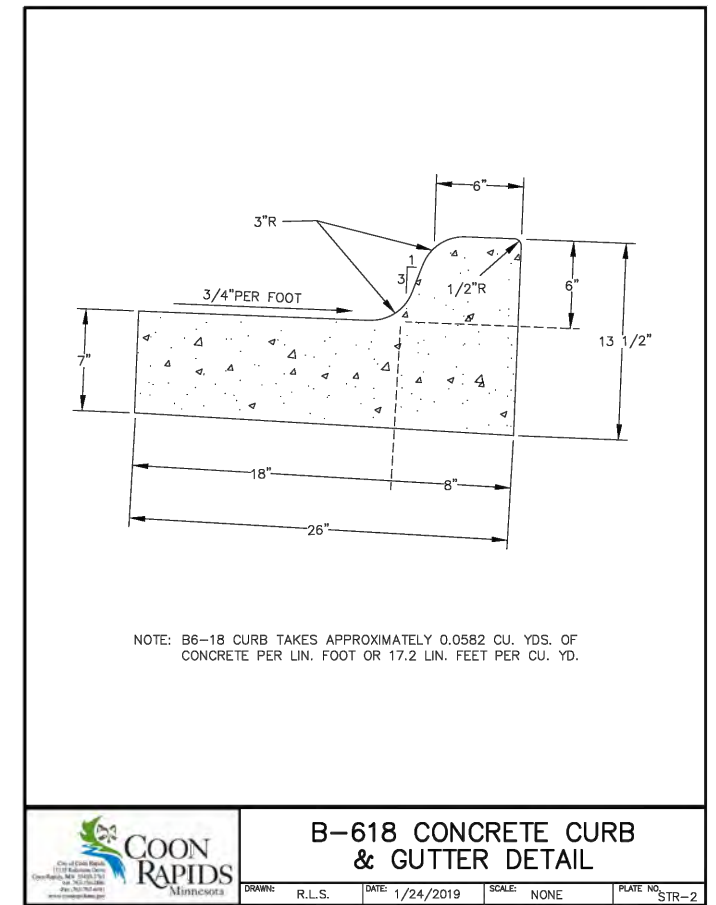
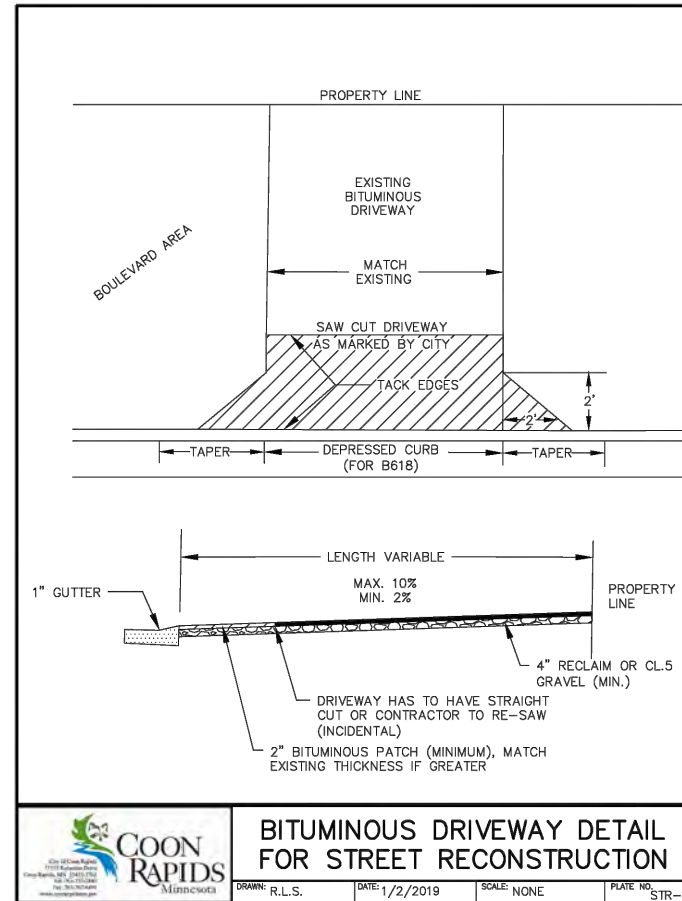
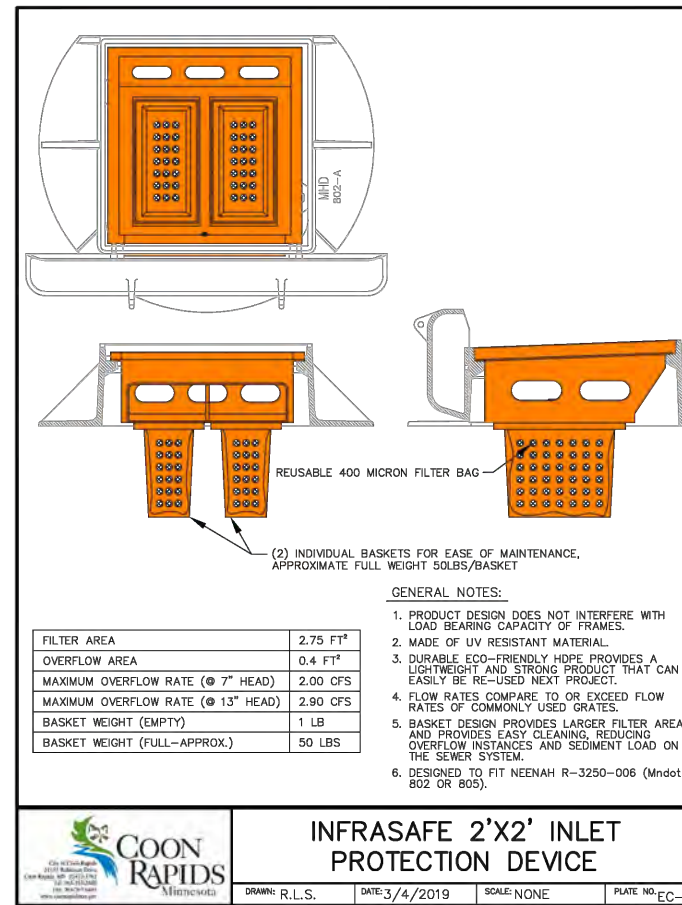
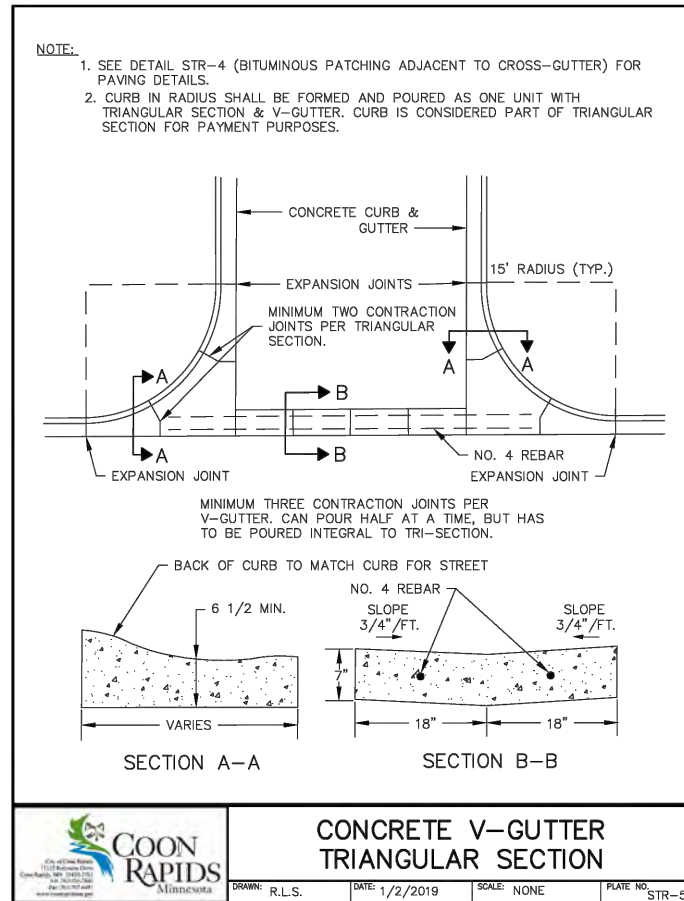
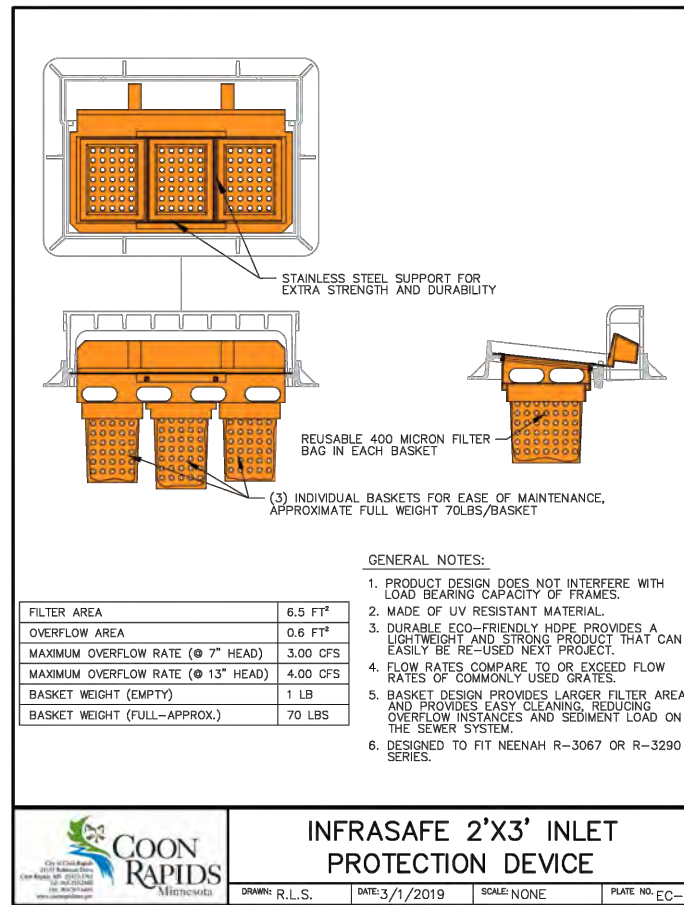
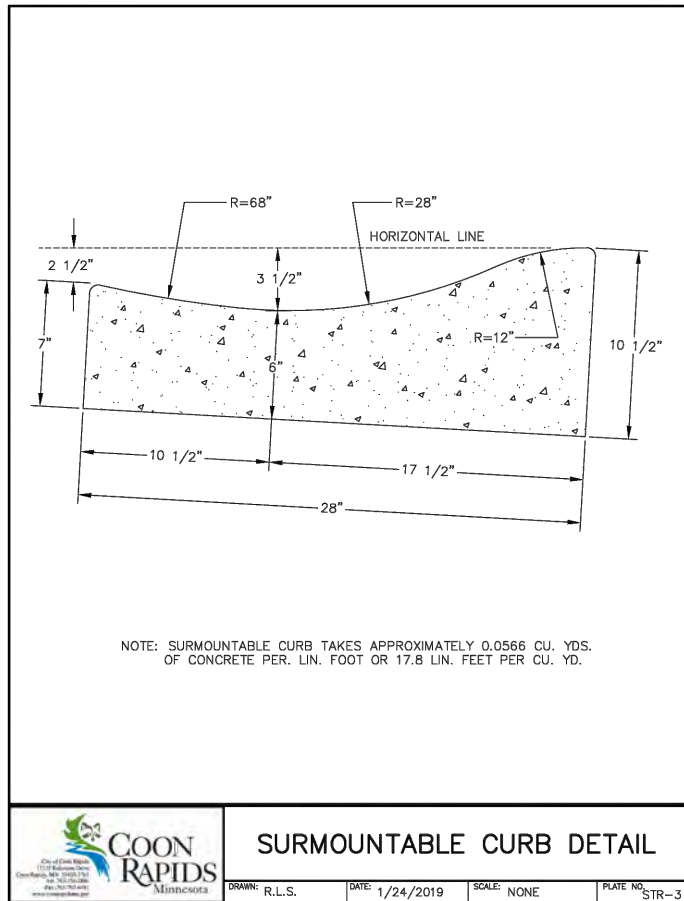
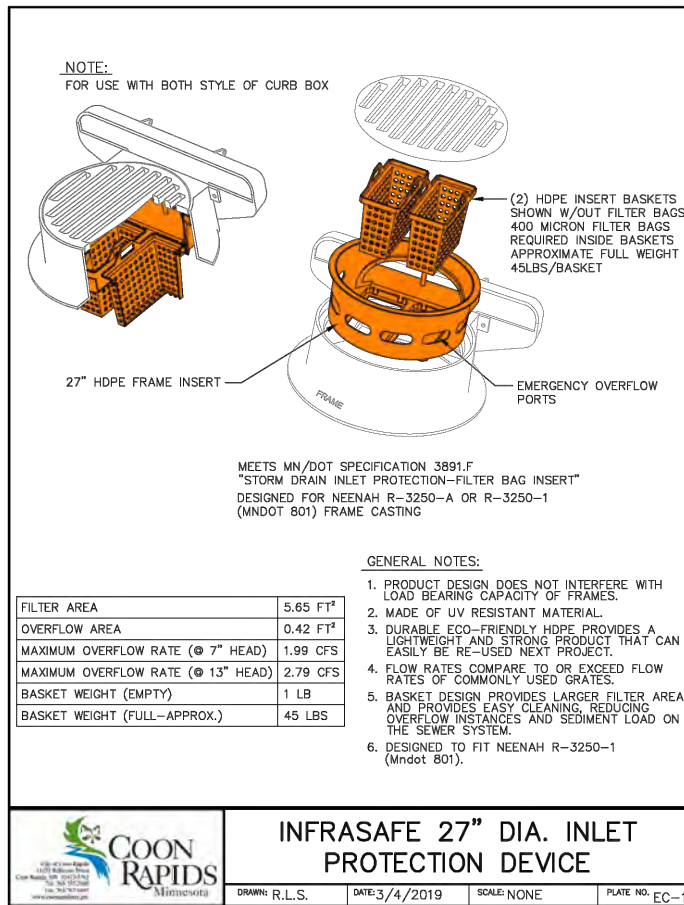
Mark C. Hansen

26-1 STREET RECONSTRUCTION

CITY OF COON RAPIDS, MINNESOTA

TYPICAL SECTIONS

SHEET 6 OF 65 SHEETS



NO.	DATE	REVISIONS



CITY OF COON RAPIDS
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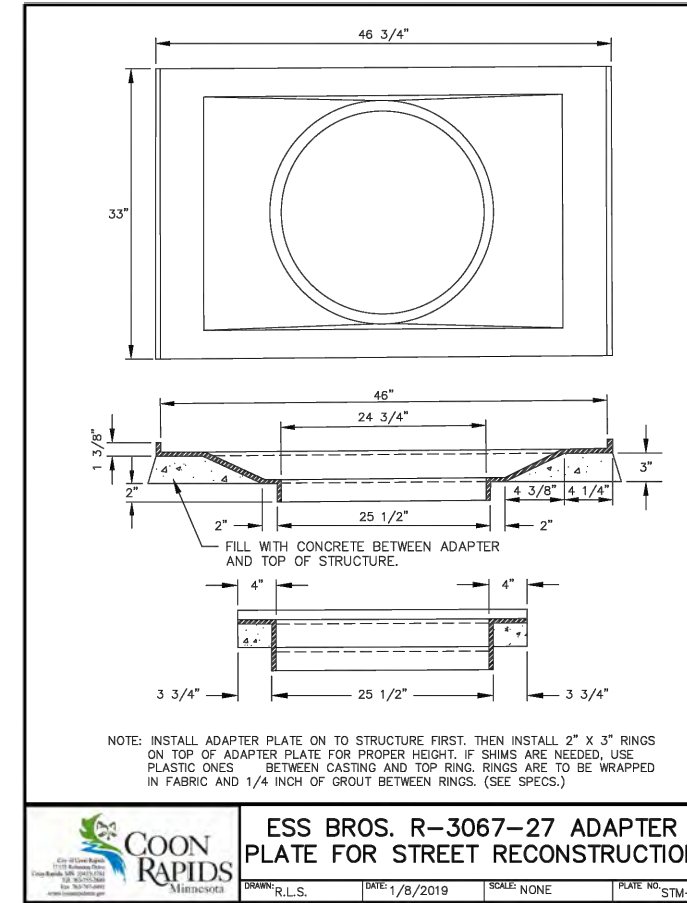
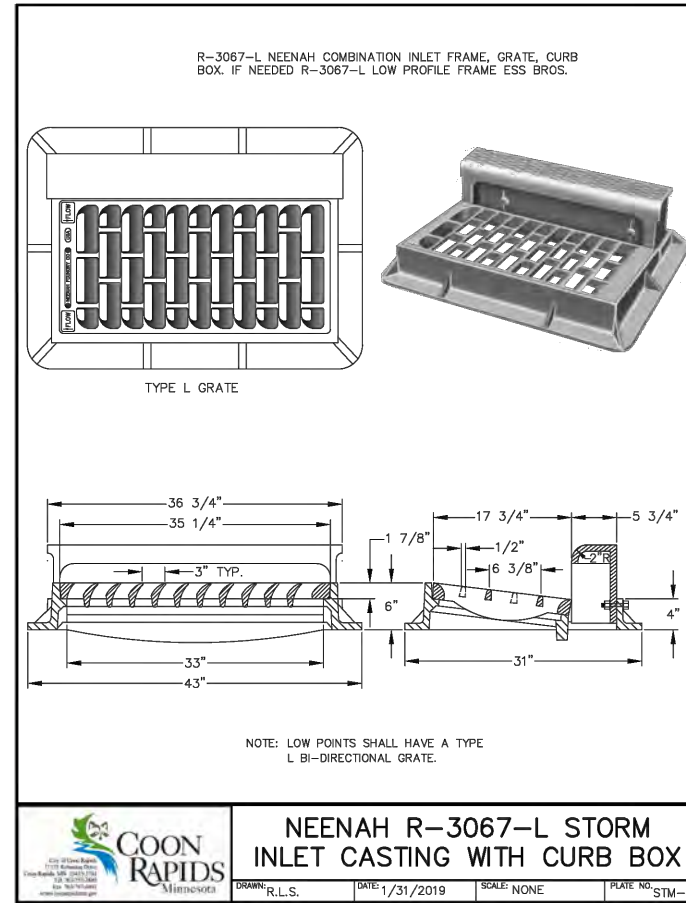
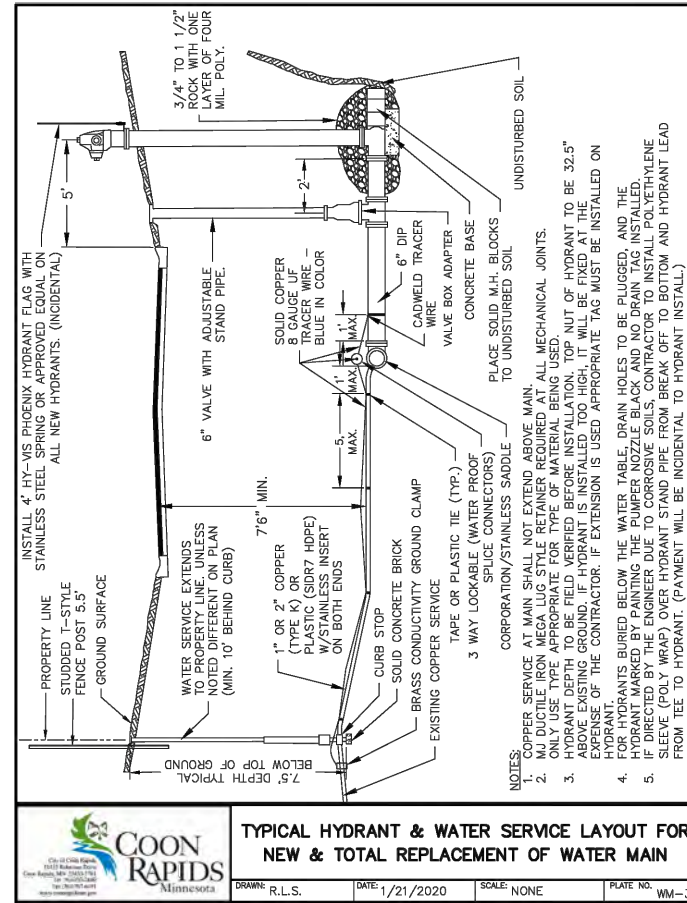
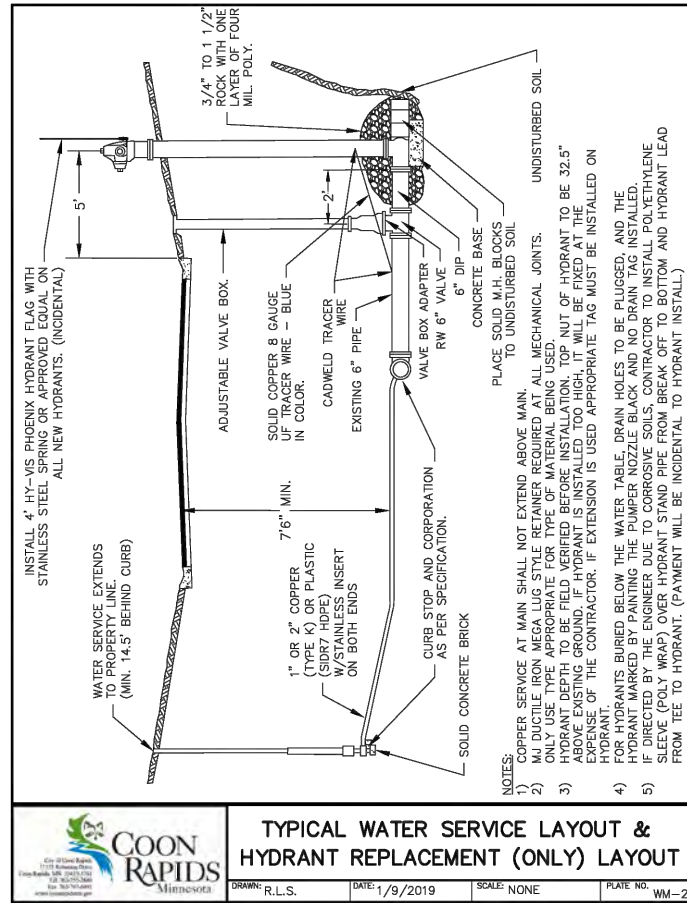
NAME: Mark C. Hansen, P.E.
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26-1 STREET RECONSTRUCTION

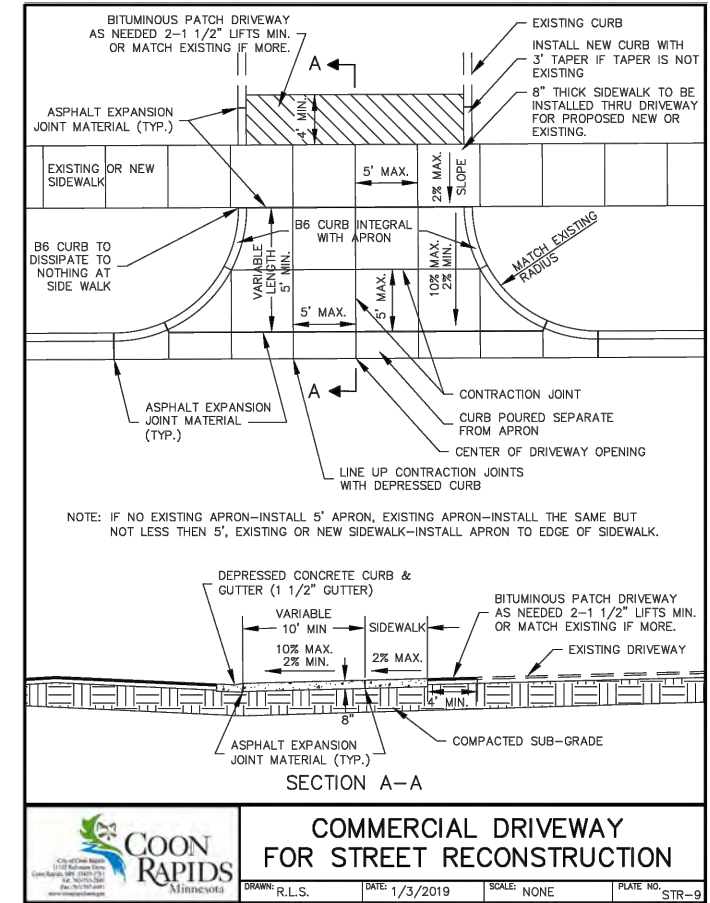
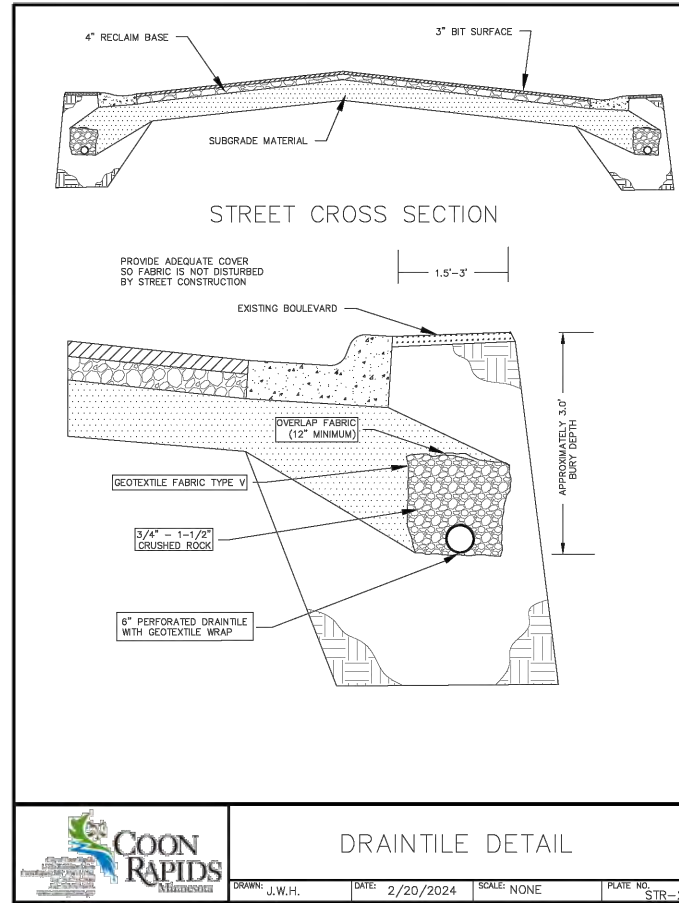
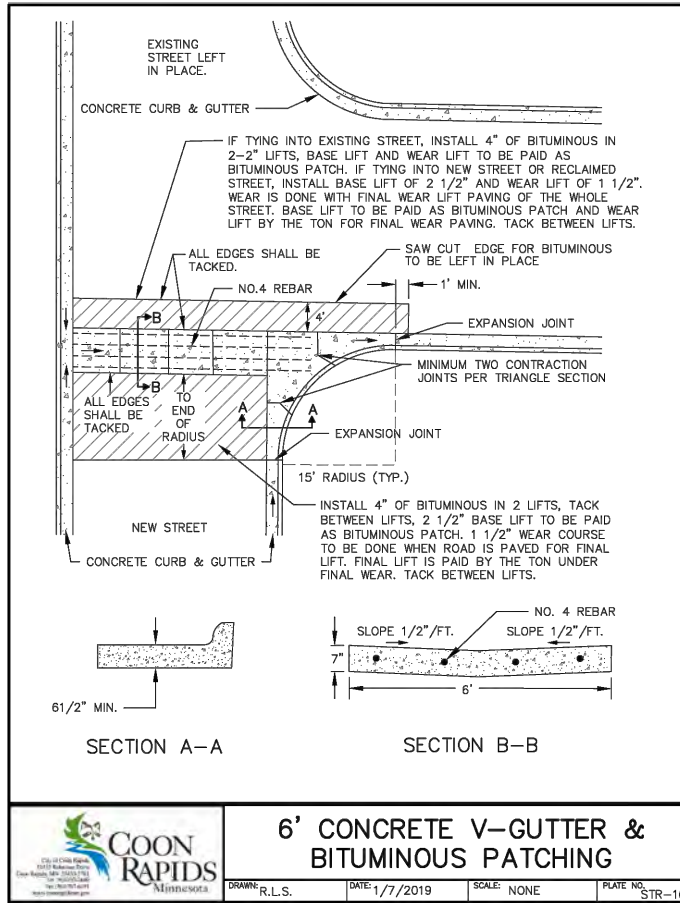
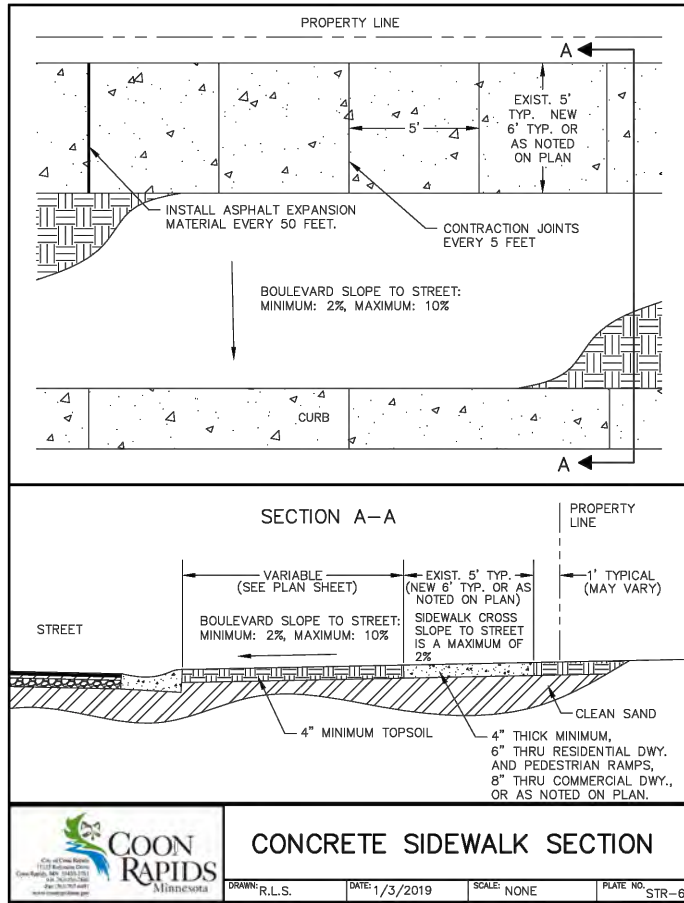
CITY OF COON RAPIDS, MINNESOTA

STANDARD PLATES

SHEET 7 OF 65 SHEETS



NO.	DATE	REVISIONS	 CITY OF COON RAPIDS ENGINEERING DEPARTMENT 11155 ROBINSON DRIVE COON RAPIDS, MN. 55433-3761 763-755-2880 FAX 163-767-6491	SURVEY: R.M.T DESIGNED: J.W.H. CHECKED: M.C.H. DATE: 11/10/2025	I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE STATE OF MINNESOTA. NAME: Mark C. Hansen, P.E. LICENSE # 43920 DATE: 3/6/2025 	26-1 STREET RECONSTRUCTION CITY OF COON RAPIDS, MINNESOTA	STANDARD PLATES SHEET 8 OF 65 SHEETS



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M. C. A.

26-1 STREET RECONSTRUCTION

CITY OF COON RAPIDS, MINNESOTA

STANDARD PLATES

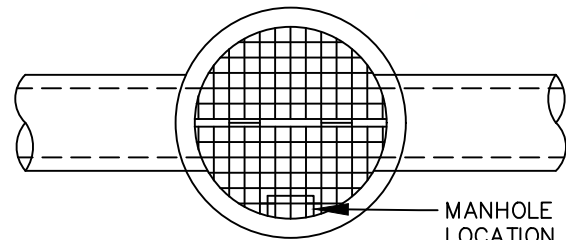
SHEET 9 OF 65 SHEETS

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3:25 PM
March 4, 2026

HOT-DIPPED GALVANIZED GRATE IN 2 SECTIONS
WITH HEAVY DUTY HINGES ABLE TO SUPPORT 250 LB/SF
AND ABLE TO REMOVE ONE SECTION FOR ACCESS TO STEPS
BY REMOVING NUTS FROM TWO ANCHOR BOLTS.
HAALA WOODBURY STYLE OR APPROVED EQUAL.
SUBMIT SHOP DRAWING TO ENGINEERING FOR REVIEW
PRIOR TO FABRICATION.

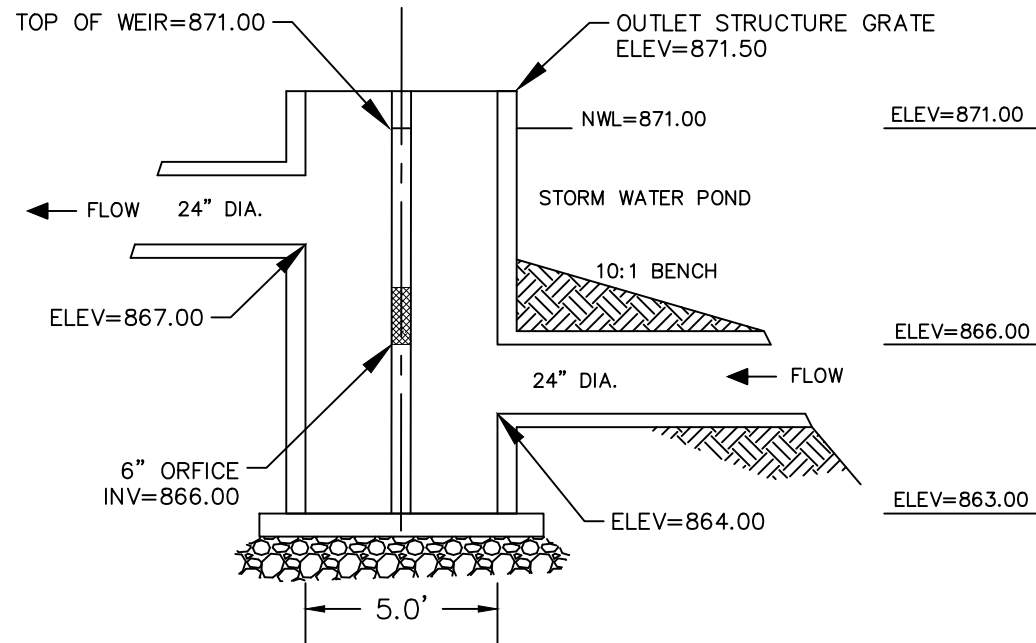


PROVIDE 4-1/2" SS ANCHOR BOLTS

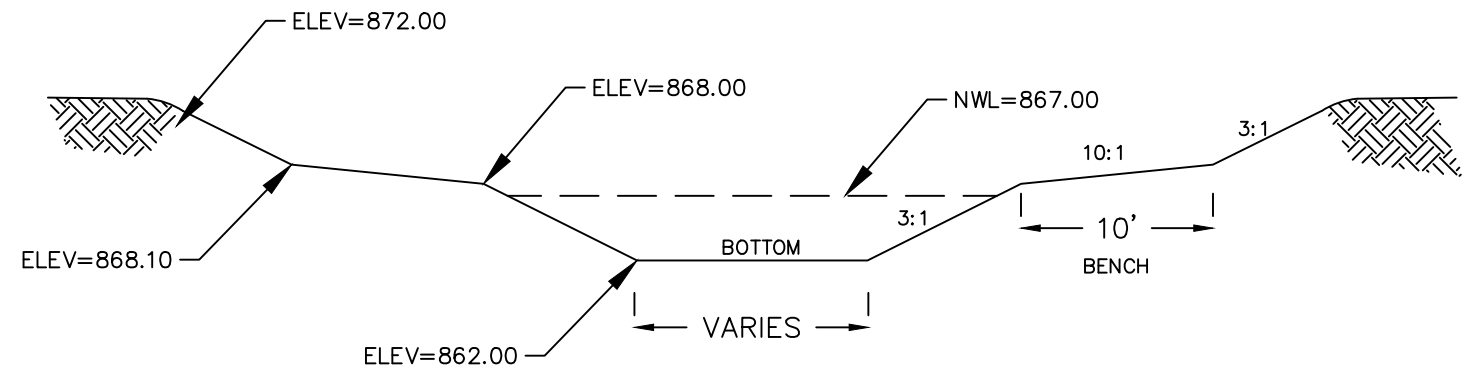
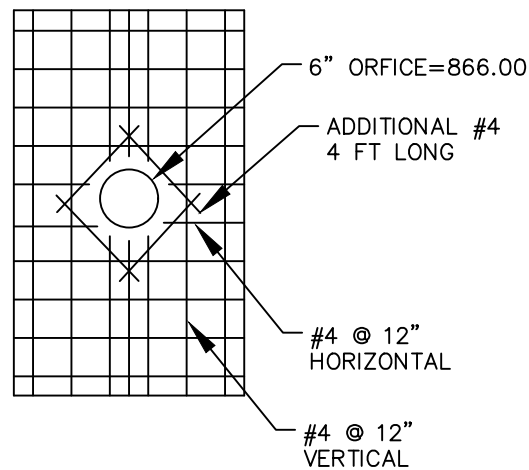


MANHOLE STEPS SHALL BE PLACED SO THAT
LOCATION IS PERPENDICULAR TO THE OPENING

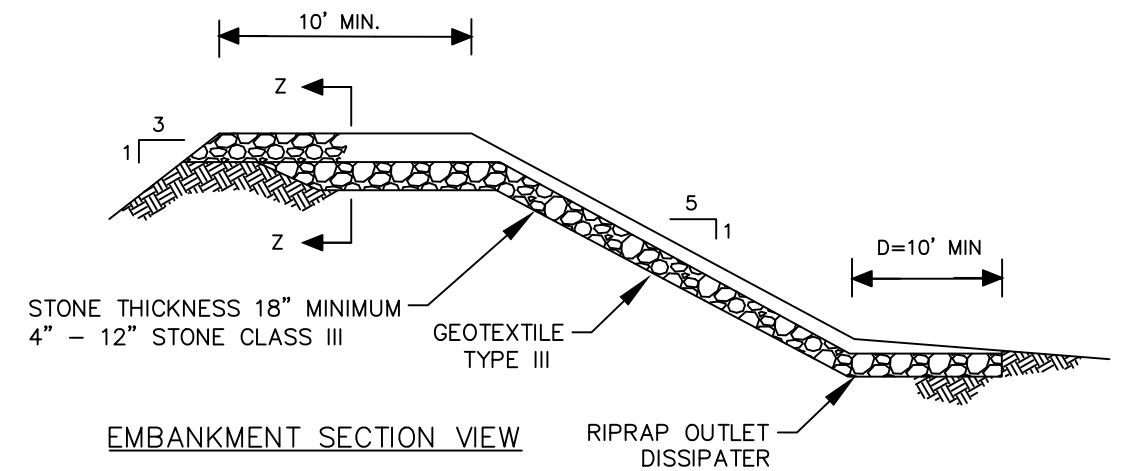
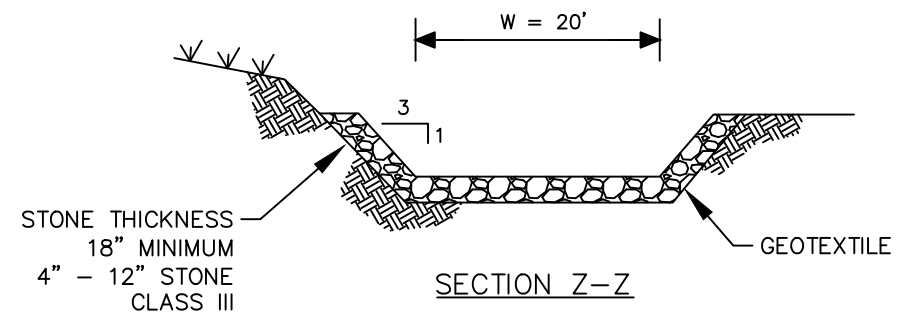
OUTLET STRUCTURE GRATE



POND OUTLET STRUCTURE
CB 228



TYPICAL POND SECTION



BASIN EMERGENCY SPILLWAY WITH RIPRAP LINING

NO.	DATE	REVISIONS



CITY OF COON RAPIDS
ENGINEERING DEPARTMENT
11155 ROBINSON DRIVE
COON RAPIDS, MN. 55433-3761
763-755-2880
FAX 163-767-6491

SURVEY:	R.M.T
DESIGNED:	J.W.H
CHECKED:	M.C.H.
DATE:	11/10/2025

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS
PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND I AM A DULY
REGISTERED PROFESSIONAL ENGINEER UNDER THE STATE OF MINNESOTA.

NAME: Mark C. Hansen, P.E.
LICENSE # 43920
DATE: 3/6/2025

M.C.H.

26-1 STREET RECONSTRUCTION

CITY OF COON RAPIDS, MINNESOTA

MOORE PARK POND DETAIL

SHEET 10 OF 65 SHEETS

K:\2026 CAD\26-1\DESIGN DRAWINGS\26-1_STREET RECONCONSTRUCTION

March 4, 2026

GENERAL NOTES:

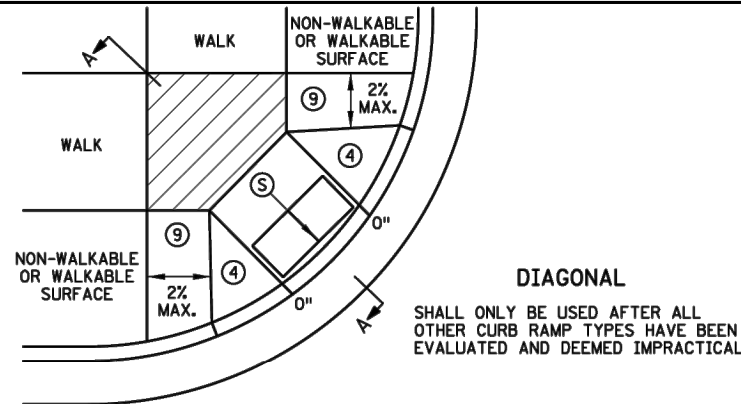
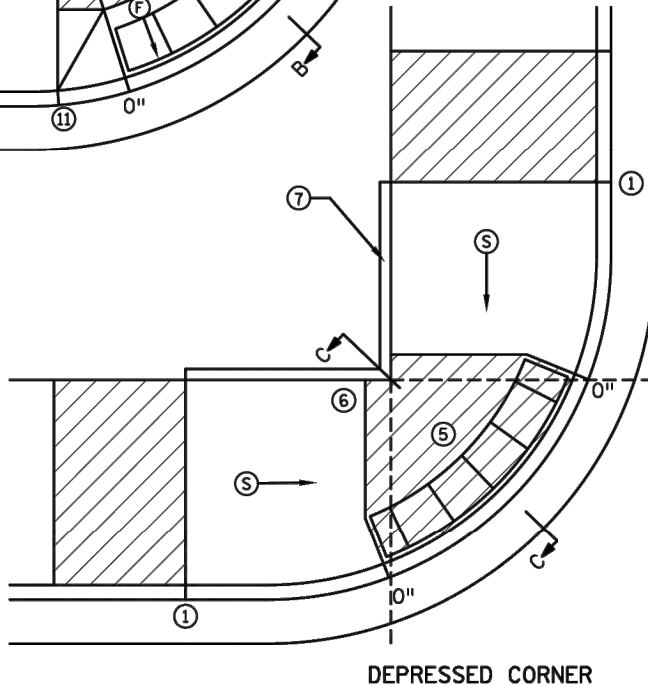
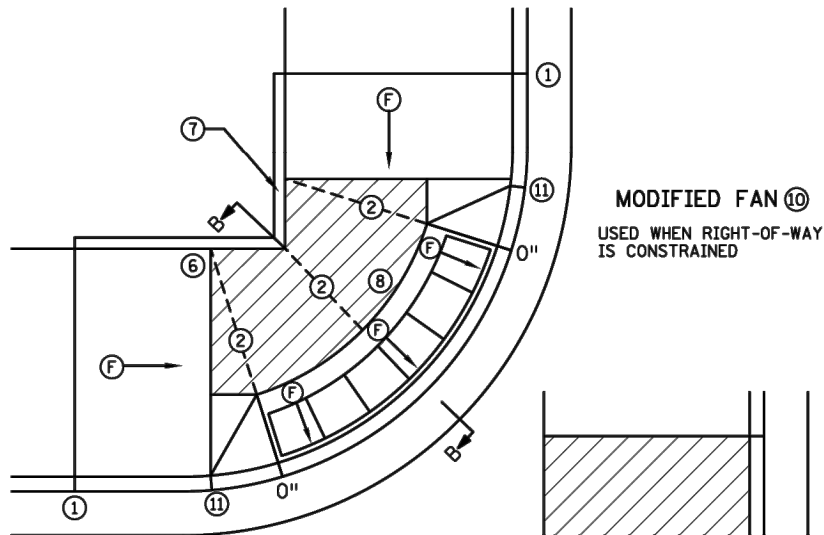
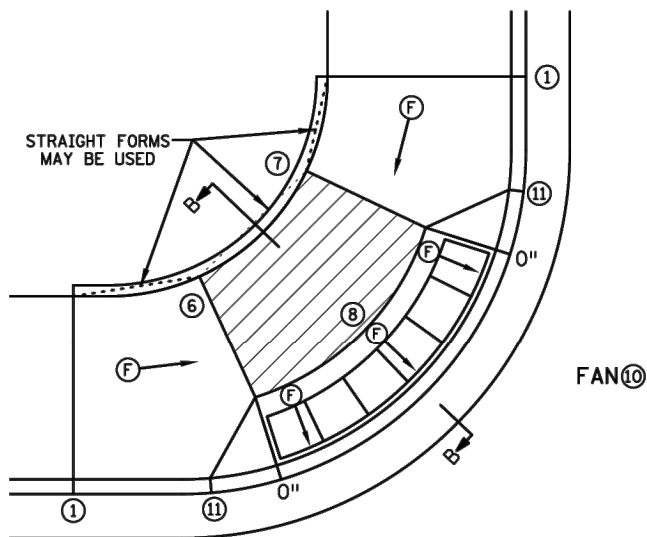
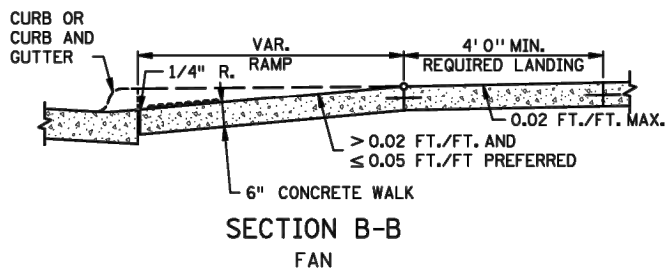
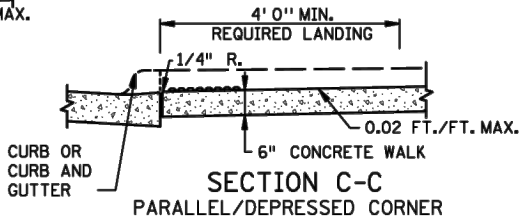
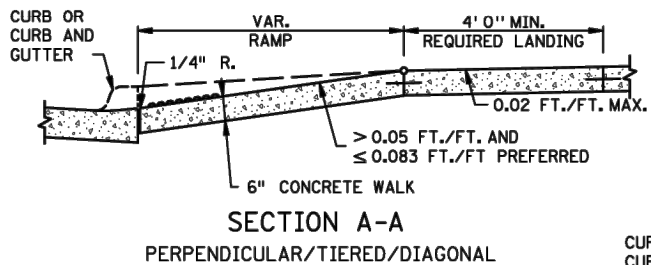
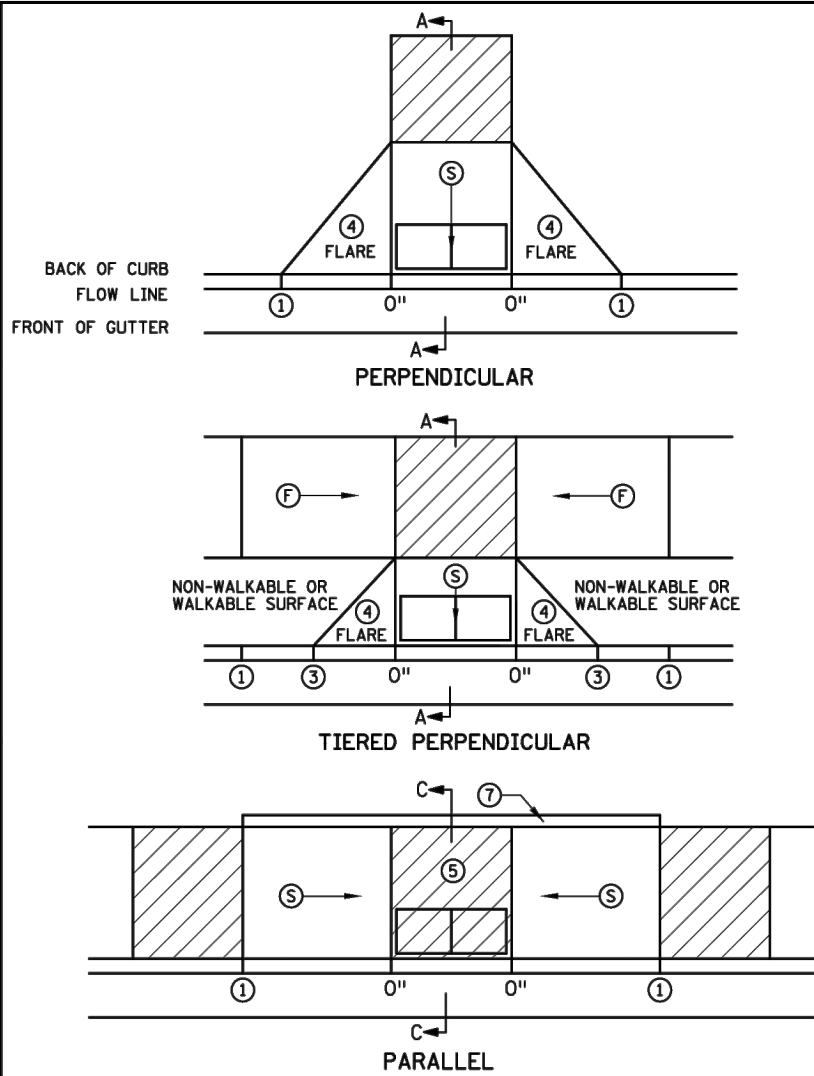
1. INLET PROTECTION REQUIRED ON ALL CATCH BASINS - SEE SWPPP & DETAILS IN SPECS.
2. ALL CURB, BITUMINOUS AND CONCRETE REMOVALS SHALL BE SAW CUT FULL DEPTH TO PROVIDE A CLEAN EDGE FOR NEW JOINT. EXISITING PAVEMENT SHALL BE BUTT-JOINTED AT ALL INTERSECTIONS.
3. CURB IS CONCRETE B618 & SURMOUNTABLE (SEE TYPICAL SECTIONS ON PAGES 4 - 6 OF THIS PLAN FOR LOCATIONS). STREET WITH SURMOUNTABLE CURB WILL HAVE B6-18 CURB TRANSITIONS AT CATCH BASINS (SEE DETAIL STM-15).
4. ALL CURB LENGTHS OVER 50' IDENTIFIED FOR REPLACEMENT SHALL BE MACHINED POURED. 5' ON EACH SIDE OF CATCH BASINS, TO BE PAID AS HAND PLACED.
5. CURB REMOVAL SHALL BE MARKED IN THE FIELD BY THE ENGINEER. CONTRACTOR NOT TO REMOVE ANY CURB UNTIL STAKED BY THE CITY FOR GRADES. OTHERWISE IT WILL BE CONTRACTORS RESPONSIBLY TO STAKE IT AT NO COST TO THE CITY.
6. ALL PEDESTRIAN RAMPS WILL HAVE TRUNCATED DOMES INSTALLED, ALL PEDESTRIAN RAMPS WILL BE POURED 6" THICK, GRAY IN COLOR, AND BE ADA COMPLIANT.
7. CONTRACTOR SHALL PROVIDE A MINIMUM 24 HRS NOTICE TO RESIDENTS PRIOR TO REMOVING AND REPLACING CONCRETE THAT WILL AFFECT THEIR ABILITY TO ACCESS THEIR PROPERTY. CONCRETE WORK SHALL NOT BE ALLOWED IN DRIVEWAY AREA PRIOR TO 8 A.M.
8. EXPANSION JOINTS IN CURB SHALL BE PLACED EVERY 100 LF AND 5' ON EACH SIDE OF CATCH BASINS AND AT RADIUS POINTS.
9. SIDEWALK SHALL HAVE EXPANSION PLACED IN EVERY LOCATION WHERE SIDEWALK AND PEDESTRIAN RAMPS ARE REPLACED. PLACE EXPANSION BETWEEN SIDEWALK AND CURB FOR PEDESTRIAN RAMP. NEW SIDEWALK WILL HAVE EXPANSION EVERY 50 LF. EXPANSION WILL BE PLACED AT DRIVEWAYS ON EACH SIDE WHERE SIDEWALK MEETS DRIVEWAY.
10. THE CONTRACTOR SHALL REPAIR AND MAINTAIN ALL TEMPORARY AND PERMANENT EROSION AND SEDIMENT CONTROL DEVICES THROUGHOUT THE PROJECT.

11. CONTRACTOR TO USE EXISTING RECLAIM MATERIAL FROM SITE OR CITY YARD AS NEEDED TO FILL CURB AND GUTTER EDGE TO PROVIDE A REASONABLE SURFACE FOR PUBLIC SAFETY (INCIDENTAL).
12. CONTRACTOR TO COORDINATE ANY LANDSCAPING REMOVAL, INCLUDING ROCK, PLANTS, TIMBERS, EDGING, ETC. WITH HOMEOWNER (INCIDENTAL). IF THE HOMEOWNER DOES NOT PERFORM THE REMOVALS, THE CONTRACTOR SHALL CAREFULLY MOVE THESE ITEMS OUT OF THE WAY OF CONSTRUCTION (INCIDENTAL).
13. STABILIZING VEGETATION SHALL BE PLACED ON ALL DISTURBED AREAS WITHIN SEVEN (7) DAYS OF ROUGH GRADING.
14. THE CITY WILL NOT BE STAKING SUB-GRADE OR RECLAIM MATERIAL CENTERLINE FINISHED GRADE EXCEPT IN THE AREAS WHERE NEW WATERMAIN IS BEING INSTALLED.
15. STREET SWEEPING WILL TAKE PLACE DAILY OR AS DIRECTED BY THE CITY.
16. PERIMETER SEDIMENT CONTROL TO BE INSTALLED AS NEEDED (INCIDENTAL).
17. INSTALL NEW RINGS AND INSTALL I & I BARRIER (SEE DETAIL) ON ALL EXISTING AND NEW SANITARY CASTINGS & WRAP WITH FABRIC ALL STORM DRAIN CASTINGS. PLACE 4" THICK BIT AROUND ALL SANITARY AND STORM DRAIN MANHOLES THAT ARE IN THE ROAD. SEE DETAIL.
18. PAYMENT FOR ALL STORM AND SANITARY SEWER STRUCTURE REPLACEMENTS TO BE PAID AS MEASURED FROM LOWEST INVERT TO TOP OF STRUCTURE (LF), BOTTOM OF RINGS. RINGS ARE PAID SEPARATELY AND BY THE EACH.
19. ALL ITEMS SALVAGED FOR RE-USE SHALL BE STORED AND PROTECTED BY THE CONTRACTOR. ANY ITEMS DAMAGED OR LOST DURING THE STORAGE PERIOD SHALL BECOME THE CONTRACTOR'S RESPONSIBILITY TO REPLACE WITH NEW AT NO ADDITIONAL COMPENSATION.
20. ROCK CONSTRUCTION ENTRANCES TO BE INSTALLED AT THE DIRECTION OF THE ENGINEER.
21. SOIL STOCKPILES WILL BE FITTED WITH APPROVED SEDIMENT-TRAPPING MEASURES AND BE STABILIZED WITHIN 7 DAYS OF INACTIVITY.
22. SOILS & SOIL STOCKPILES MUST BE STABILIZED WITHIN 24 HOURS OF INACTIVITY.
23. COMMERCIAL & RESIDENTIAL CONCRETE DRIVEWAYS THAT CONTAIN REBAR SHALL HAVE REBAR INCLUDED IN THE REPLACEMENT SECTION. CONTRACTOR SHALL DRILL REBAR INTO ALL EXISTING CONCRETE DRIVEWAYS, (4' SPACING), (INCIDENTAL).

WATER MAIN NOTES:

1. REMOVED EXISTING WATER MAIN, FITTINGS, VALVES, HYDRANTS, WATER SERVICES, ETC. (UNLESS NOTED OTHERWISE) THESE ITEMS WILL BECOME THE PROPERTY OF THE CONTRACTOR, THE CITY WILL NOT BE ACCEPTING ANY OF IT.
2. NEW WATER MAIN, EPOXY FITTINGS, VALVES, HYDRANTS, WATER SERVICES, BOLTS, ETC. ARE TO BE MANUFACTURED IN THE U.S.A. (SEE SPECIFICATIONS FOR DETAILS).
3. ALL VALVE BOXES-INCLUDING HYDRANT VALVES WILL HAVE A VALVE BOX ADAPTER INSTALLED. (SEE SPECIFICATIONS FOR DETAILS).
4. FOR HYDRANTS BURIED BELOW THE WATER TABLE, DRAIN HOLES TO BE PLUGGED, AND THE HYDRANT MARKED BY PAINTING THE PUMPER NOZZLE BLACK AND NO DRAIN TAG INSTALLED ON THE HYDRANT. (INCIDENTAL TO HYDRANT INSTALLATION).
5. IF THE EXISTING TOP SECTION OF THE GATE VALVE BOX IS BROKEN PRIOR TO CONSTRUCTION OR CAN'T BE ADJUSTED, CONTRACTOR SHALL REPLACE THE TOP SECTION AND CAP WITH NEW ONES. BID PRICE FOR VALVE BOX SECTIONS SHALL INCLUDE NEW CAP. VALVE BOXES SHALL BE LEFT BELOW RECLAIM DEPTH AND ADJUSTED TO FINAL GRADE PRIOR TO WEAR COURSE PAVING. ANY DAMAGE TO VALVE BOXES DURING CONSTRUCTION, SHALL BE REPAIRED AT NO COST TO THE CITY. PAYMENT IS VALVE BOX SECTIONS (EACH) AND INCLUDES NEW CAP. ADJUSTMENT FOR FINAL PAVING IS ADJUST VALVE BOX (EACH).
6. ALL SLEEVES INSTALLED FOR WATER MAIN, SHALL BE MJ SOLID SLEEVE LONG (12" MIN. LENGTH).
7. MJ DUCTILE IRON MEGA LUG STYLE RETAINERS ARE REQUIRED AT ALL MECHANICAL JOINTS. ONLY USE THE APPROPRIATE TYPE FOR THE TYPE OF PIPE MATERIAL BEING USED.
8. CONTRACTOR TO MEASURE HEIGHT OF ALL EXISTING HYDRANTS PRIOR TO REMOVAL. INSTALL NEW HYDRANT BASED ON THAT MEASUREMENT AND THAT TOP NUT HAS TO BE 32.5" ABOVE EXISTING GROUND. THIS COULD MAKE FOR A TALLER OR SHORTER HYDRANT THEN FIRST MEASURED. IF HYDRANT IS INSTALLED TOO HIGH, IT WILL BE FIXED AT THE CONTRACTORS EXPENSE. IF HYDRANT HAS TO HAVE A EXTENSION INSTALLED, APPROPRIATE TAG HAS TO BE INSTALLED SAYING IT HAS ONE AND SIZE. ASSEMBLIES SHALL HAVE MJ RETAINER GLANDS AT ALL JOINTS, INCLUDING VALVE TO EXISTING PIPE. SEE WATER MAIN DETAIL WM-2 FOR ALL REQUIREMENTS. FOR HYDRANTS IN THE WATER TABLE THE DRAIN HOLES NEED TO BE PLUGGED AND THE PUMPER NOZZLE PAINTED BLACK AND NO DRAIN TAG INSTALLED ON THE HYDRANT (INCIDENTAL TO HYDRANT INSTALLATION). SET HYDRANT ON SOLID CONCRETE BLOCK. BLOCK BEHIND HYDRANT WITH SOLID CONCRETE M.H. BLOCK TO UNDISTURBED SOIL.
9. REMOVE EXISTING 6", 8" & 10" C.I.P, INSTALL NEW WATER MAIN 6", 8" AND 10" DUCTILE IRON CL 52, INSTALLED WITH POLY WRAP, AS SHOWN ON THE PLANS. HYDRANT LEADS SHALL BE 6" DIP AND ALL NEW WM TO BE INSTALLED WITH POLY WRAP PER THE LATEST CITY ENGINEERS ASSOCIATION OF MINNESOTA SPECIFICATIONS.
10. THE CONTRACTOR SHALL INSTALL, PRESSURIZE, DISINFECT THE TEMPORARY WATER SYSTEM AND MAINTAIN FOR THE DURATION OF THE PROJECT. CONTRACTOR SHALL INSTALL TEMPORARY WATER ON BOTH SIDES OF THE STREET BEHIND CURB. CONTRACTOR SHALL MAINTAIN ACCESS THRU CROSS STREETS AND DRIVEWAYS TO THE HOMES AFFECTED AND IS INCIDENTAL TO CONTRACT. PROPOSED LAYOUT TO BE SUBMITTED FOR REVIEW PRIOR TO INSTALL.
11. REPLACE WATER SERVICES, AND INSTALL CURB STOP FROM MAIN 10' BEHIND BACK OF CURB OR IN SAME LOCATION IF EXISTING CURB STOP IS BEYOND 10' BACK OF CURB. IF EXISTING OR NEW SWLK PLACE CURB STOP 1' BEYOND WALK. INSTALL NEW CORP, 1" TYPE K COPPER SERVICE PIPE, CURB STOP AND CURB STOP BOX AND ROD (2"x4" BRICK UNDER CURB STOP).
12. THE EXISTING WATER MAIN VARIES IN DEPTH, AND NEW WATER MAIN TO BE 7.5' MIN. COVER. THE SAME FOR WATER SERVICES.

NO.	DATE	REVISIONS	 CITY OF COON RAPIDS ENGINEERING DEPARTMENT 11155 ROBINSON DRIVE COON RAPIDS, MN. 55433-3761 763-755-2880 FAX 163-767-6491	SURVEY: R.M.T DESIGNED: J.W.H. CHECKED: M.C.H. DATE: 11/10/2025	I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE STATE OF MINNESOTA. NAME: Mark C. Hansen, P.E. LICENSE # 43920 DATE: 3/6/2025 	26-1 STREET RECONSTRUCTION	CONSTRUCTION NOTES
						CITY OF COON RAPIDS, MINNESOTA	SHEET 11 OF 65 SHEETS



NOTES:

- LANDINGS SHALL BE LOCATED ANYWHERE THE PEDESTRIAN ACCESS ROUTE (PAR) CHANGES DIRECTION AT THE TOP OF RAMPS THAT HAVE RUNNING SLOPES GREATER THAN 5.0%, AND IF THE APPROACHING WALK IS INVERSE GRADE GREATER THAN 2%.
- INITIAL CURB RAMP LANDINGS SHALL BE CONSTRUCTED WITHIN 15' FROM THE BACK OF CURB, WITH 6' FROM THE BACK OF CURB BEING THE PREFERRED DISTANCE, ONLY APPLICABLE WHEN THE INITIAL RAMP RUNNING SLOPE IS OVER 5.0%.
- SECONDARY CURB RAMP LANDINGS ARE REQUIRED FOR EVERY 30" OF VERTICAL RISE WHEN THE LONGITUDINAL RUNNING SLOPE IS GREATER THAN 5.0%.
- CONTRACTION JOINTS SHALL BE CONSTRUCTED ALONG ALL GRADE BREAKS WITHIN THE PAR. 1/4" DEEP VISUAL JOINTS SHALL BE USED AT THE TOPS OF CONCRETE FLARES ADJACENT TO WALKABLE SURFACES.
- ALL GRADE BREAKS WITHIN THE PAR SHALL BE PERPENDICULAR TO THE PATH OF TRAVEL. THUS BOTH SIDES OF A SLOPED WALKING SURFACE MUST BE EQUAL LENGTH. (EXCEPT AS STATED IN (6) BELOW.
- TO ENSURE RAMPS AND LANDINGS ARE PROPERLY CONSTRUCTED, ALL INITIAL LANDINGS AT A TOP OF A RAMPED SURFACE (RUNNING SLOPE GREATER THAN 2%) SHALL BE FORMED AND PLACED SEPARATELY IN AN INDEPENDENT CONCRETE POUR. FOLLOW SIDEWALK REINFORCEMENT DETAILS ON SHEET 6 OF 6 FOR ALL SEPARATELY POURED INITIAL LANDINGS.
- WHEN SIDEWALK IS AT BACK OF CURB, TOP OF CURB SHALL MATCH PROPOSED ADJACENT WALK GRADE. MAINTAIN POSITIVE BOULEVARD DRAINAGE TO TOP OF CURB.
- ALL RAMP TYPES SHOULD HAVE A MINIMUM 3' LONG RAMP LENGTH.
- 4' MINIMUM WIDTH OF DETECTABLE WARNING IS REQUIRED FOR ALL RAMPS. DETECTABLE WARNINGS SHALL CONTINUOUSLY EXTEND FOR A MIN. OF 24" IN THE PATH OF TRAVEL. DETECTABLE WARNING TO COVER THE ENTIRE PAR WIDTH OF SHARED-USE PATHS AND THE ENTIRE PAR WIDTH OF THE WALK WITH THE EXCEPTION OF 3" MAXIMUM ON EACH OUTSIDE EDGE WHICH ENSURES THE DETECTABLE WARNINGS ARE ENCASED IN CONCRETE WHEN ADJACENT TO TURF. WHEN ADJACENT TO CONCRETE FLARES 0" - 3" OFFSET IS ALLOWED.
- WHEN DESIGNING OR ORDERING RECTANGULAR DETECTABLE WARNING SURFACES SHOULD BE 6" LESS THAN THE INCOMING PAR. ARC LENGTH OF THE RADIAL DETECTABLE WARNINGS SHOULD NOT BE GREATER THAN 20 FEET.
- RECTANGULAR DETECTABLE WARNINGS SHALL BE SETBACK 3" FROM THE BACK OF CURB. RADIAL DETECTABLE WARNINGS SHALL BE SETBACK 3" MINIMUM TO 6" MAXIMUM FROM THE BACK OF CURB.
- (1) MATCH FULL HEIGHT CURB.
- (2) 4' MINIMUM DEPTH LANDING REQUIRED ACROSS TOP OF RAMP.
- (3) 3" HIGH CURB WHEN USING A 3' LONG RAMP, 4" HIGH CURB WHEN USING A 4' LONG RAMP.
- (4) SEE SHEET 4 OF 6, TYPICAL SIDE TREATMENT OPTIONS, FOR DETAILS ON FLARES AND RETURNED CURBS.
- (5) DETECTABLE WARNINGS MAY BE PART OF THE 4' X 4' MIN. LANDING AREA IF IT IS NOT FEASIBLE TO CONSTRUCT THE LANDING OUTSIDE OF THE DETECTABLE WARNING AREA.
- (6) THE GRADE BREAK SHALL BE PERPENDICULAR TO THE BACK OF WALK. THIS WILL ENSURE THAT THE GRADE BREAK IS PERPENDICULAR TO THE DIRECTION OF TRAVEL. (TYPICAL FOR ALL)
- (7) WHEN ADJACENT TO GRASS, GRADING SHALL ALWAYS BE USED WHEN FEASIBLE. V CURB, IF USED, SHALL BE PLACED OUTSIDE THE SIDEWALK LIMITS WHEN RIGHT OF WAY ALLOWS. WHEN ADJACENT TO PARKING LOTS, CONCRETE OR BITUMINOUS TAPERS LESS THAN 5% RUNNING SLOPE SHOULD BE USED OVER V CURB TO REDUCE TRIPPING HAZARDS AND FACILITATE SNOW & ICE REMOVAL.
- (8) A 7' MIN TOP RADIUS GRADE BREAK IS REQUIRED TO BE CONSTRUCTIBLE.
- (9) PAVE FULL WALK WIDTH.
- (10) "S" SLOPES ON FANS SHALL ONLY BE USED WHEN ALL OTHER FEASIBLE OPTIONS HAVE BEEN EVALUATED AND DEEMED IMPRACTICAL.
- (11) INTERMEDIATE CURB HEIGHTS TAPER SHALL RISE AT 8-10% TO A MINIMUM 3" CURB HEIGHT. REDUCE INTERMEDIATE CURB HEIGHT TO 2+ INCHES IF NECESSARY TO MATCH ADJACENT BOULEVARD OR SIDEWALK GRADES.

LEGEND	
THESE LONGITUDINAL SLOPE RANGES SHALL BE THE STARTING POINT. IF SITE CONDITIONS WARRANT, LONGITUDINAL SLOPES UP TO 8.3% OR FLATTER ARE ALLOWED.	
(S)	INDICATES PEDESTRIAN RAMP - SLOPE SHALL BE BETWEEN 5.0% MINIMUM AND 8.3% MAXIMUM IN THE DIRECTION SHOWN AND THE CROSS SLOPE SHALL NOT EXCEED 2.0%.
(F)	INDICATES PEDESTRIAN RAMP - SLOPE SHALL BE GREATER THAN 2.0% AND LESS THAN 5.0% IN THE DIRECTION SHOWN AND CROSS SLOPE SHALL NOT EXCEED 2.0%.
(X)	LANDING AREA - 4' X 4' MIN. (5' X 5' MIN. PREFERRED) DIMENSIONS AND MAX. 2.0% SLOPE IN ALL DIRECTIONS. LANDING SHALL BE FULL WIDTH OF INCOMING PAR.
X"	CURB HEIGHT

REVISION:
APPROVED: 11-04-2021
Jeffrey Perkins
OPERATIONS DIVISION

	STANDARD PLAN 5-297.250	1 OF 6
	APPROVED: 11-04-2021	REVISOR:
THOMAS TYRIBICKI	STATE PROJ. NO.	

PEDESTRIAN CURB RAMP DETAILS

(TH) SHEET NO. OF SHEETS

NO.	DATE	REVISIONS



SURVEY:	R.M.T
DESIGNED:	J.W.H.
CHECKED:	M.C.H.
DATE:	11/10/2025

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE STATE OF MINNESOTA.

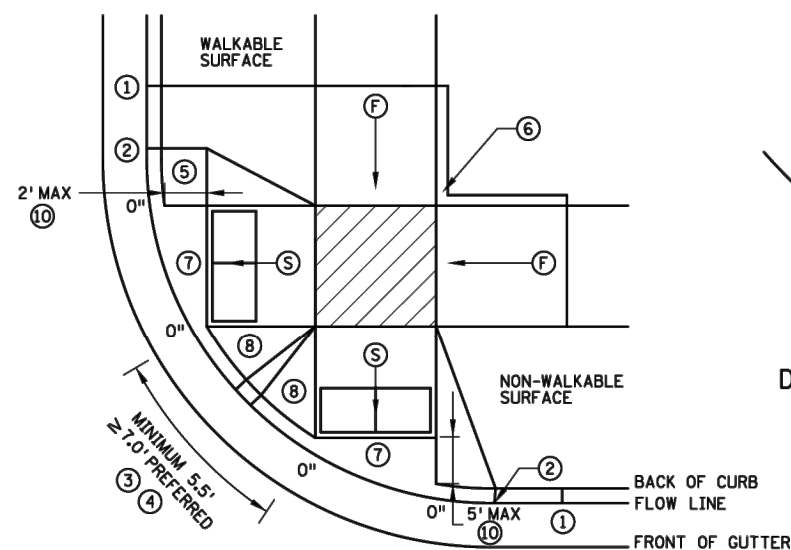
NAME: Mark C. Hansen, P.E.
LICENSE # 43920
DATE: 3/6/2025

26-1 STREET RECONSTRUCTION

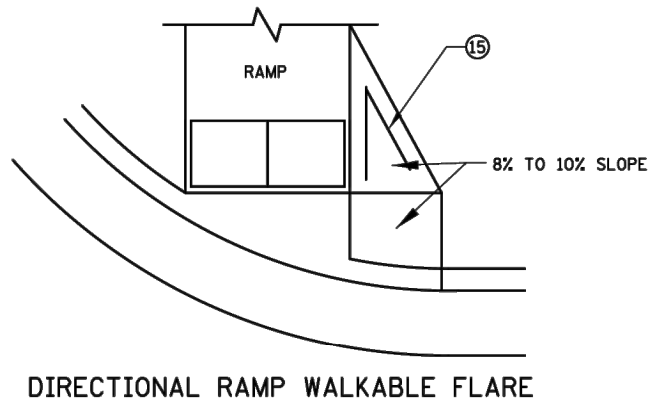
CITY OF COON RAPIDS, MINNESOTA

PEDESTRIAN CURB RAMP DETAILS

SHEET 12 OF 65 SHEETS

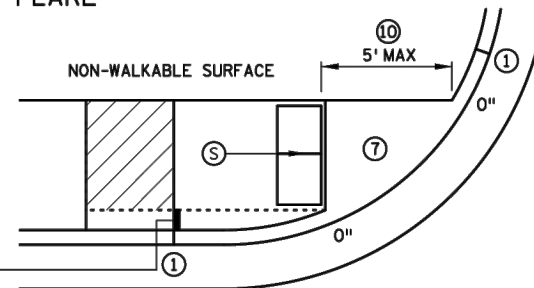


COMBINED DIRECTIONAL

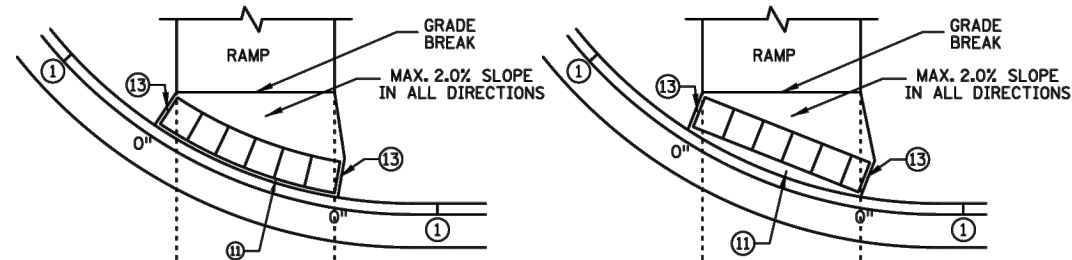


DIRECTIONAL RAMP WALKABLE FLARE

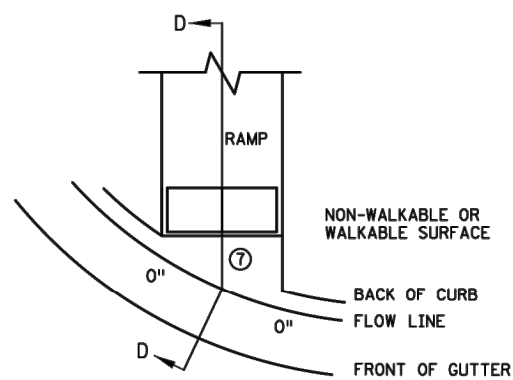
IF NON-CONCRETE BLVD. IS
CONSTRUCTED AND IS LESS THAN 2'
IN WIDTH AT TOP OF CURB
TRANSITION, PAVE CONCRETE RAMP
WIDTH TO ADJACENT BACK OF CURB.



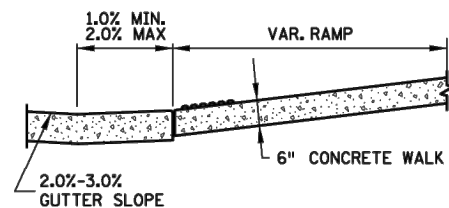
STANDARD ONE-WAY DIRECTIONAL ⑨



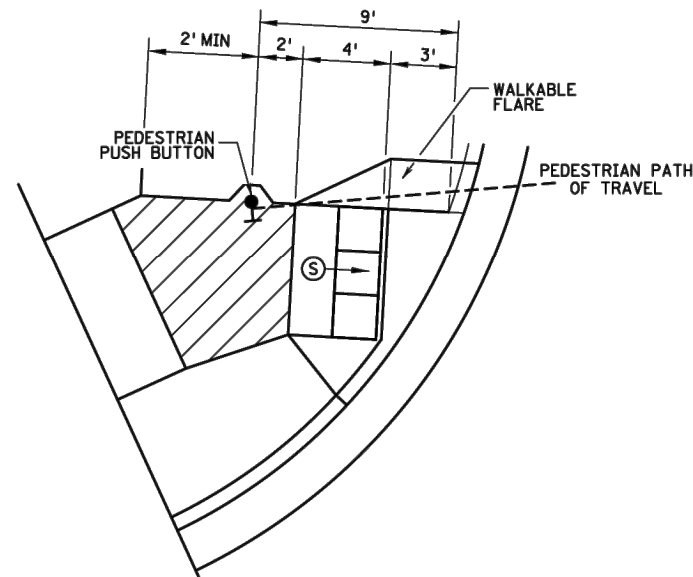
DETECTABLE WARNING PLACEMENT WHEN
SETBACK CRITERIA IS EXCEEDED ⑫

ONE-WAY DIRECTIONAL WITH DETECTABLE
WARNING AT BACK OF CURB

CURB FOR DIRECTIONAL RAMPS ⑭



SECTION D-D



SEMI-DIRECTIONAL RAMP ③④⑨

3' DOME SETBACK, 4' LONG RAMP AND
PUSH BUTTON 9' FROM THE BACK OF CURB
PRIMARYLY USED FOR APS APPLICATIONS
WHERE THE PAR DOES NOT CONTINUE PAST
THE PUSH BUTTON (DEAD-END SIDEWALK)

NOTES:

LANDINGS SHALL BE LOCATED ANYWHERE THE PEDESTRIAN ACCESS ROUTE (PAR) CHANGES
DIRECTION, AT THE TOP OF RAMPS THAT HAVE RUNNING SLOPES GREATER THAN 5.0%,
AND IF THE APPROACHING WALK IS INVERSE GRADE.

INITIAL CURB RAMP LANDINGS SHALL BE CONSTRUCTED WITHIN 15' FROM THE BACK
OF CURB, WITH 6' FROM THE BACK OF CURB BEING THE PREFERRED DISTANCE, ONLY
APPLICABLE WHEN THE INITIAL RAMP RUNNING SLOPE IS OVER 5.0%.

SECONDARY CURB RAMP LANDINGS ARE REQUIRED FOR EVERY 30' OF VERTICAL RISE
WHEN THE LONGITUDINAL SLOPE IS GREATER THAN 5.0%.

CONTRACTION JOINTS SHALL BE CONSTRUCTED ALONG ALL GRADE BREAKS WITHIN THE PAR, 1/4" DEEP VISUAL
JOINTS SHALL BE USED AT THE TOP GRADE BREAK OF CONCRETE FLARES ADJACENT TO WALKABLE SURFACES.

ALL GRADE BREAKS WITHIN THE PAR SHALL BE PERPENDICULAR TO THE PATH OF TRAVEL.
THUS BOTH SIDES OF A SLOPED WALKING SURFACE MUST BE EQUAL LENGTH.

TO ENSURE INITIAL RAMPS AND INITIAL LANDINGS ARE PROPERLY CONSTRUCTED, LANDINGS
SHALL BE CAST SEPARATELY, FOLLOW SIDEWALK REINFORCEMENT DETAILS ON SHEET 6 AND
THE ADA SPECIAL PROVISION (PROSECUTION OF WORK).

TOP OF CURB SHALL MATCH PROPOSED ADJACENT WALK GRADE.

WHEN THE BOULEVARD IS 4' WIDE OR LESS, THE TOP OF CURB TAPER SHALL MATCH THE RAMP
SLOPES TO REDUCE NEGATIVE BOULEVARD SLOPES FROM THE TOP BACK OF CURB TO THE PAR.

ALL RAMP TYPES SHOULD HAVE A MINIMUM 3' LONG RAMP LENGTH.

4' MINIMUM WIDTH OF DETECTABLE WARNING IS REQUIRED FOR ALL RAMPS. DETECTABLE WARNINGS SHALL
CONTINUOUSLY EXTEND FOR A MIN. OF 24" IN THE PATH OF TRAVEL. DETECTABLE WARNING TO COVER
THE ENTIRE PAR WIDTH OF SHARED-USE PATHS AND THE ENTIRE PAR WIDTH OF THE WALK WITH THE
EXCEPTION OF 3" MAXIMUM ON EACH OUTSIDE EDGE WHICH ENSURES THE DETECTABLE WARNINGS ARE
ENCASED IN CONCRETE WHEN ADJACENT TO TURF. WHEN ADJACENT TO CONCRETE FLARES 0" - 3" OFFSET
IS ALLOWED.

WHEN DESIGNING OR ORDERING RECTANGULAR DETECTABLE WARNING SURFACES SHOULD BE 6" LESS THAN
THE INCOMING PAR. ARC LENGTH OF THE RADIAL DETECTABLE WARNINGS SHOULD NOT BE GREATER THAN
20 FEET.

RADIAL DETECTABLE WARNINGS SHALL BE SETBACK 3" MINIMUM TO 6" MAXIMUM FROM THE BACK OF CURB.
SEE NOTES ⑩ & ⑪ FOR INFORMATION REGARDING RECTANGULAR DETECTABLE WARNING PLACEMENT.

① MATCH FULL CURB HEIGHT.

② 3" HIGH CURB WHEN USING A 3' LONG RAMP

④ 4" HIGH CURB WHEN USING A 4' LONG RAMP.

③ 3" MINIMUM CURB HEIGHT (5.5' MIN. DISTANCE REQUIRED BETWEEN DOMES)

④ 4" PREFERRED (7' MIN. DISTANCE REQUIRED BETWEEN DOMES).

④ THE "BUMP" IN BETWEEN THE RAMPS SHOULD NOT BE IN THE PATH OF TRAVEL FOR COMBINED DIRECTIONAL
RAMPS. IF THIS OCCURS MODIFY THE RAMP LOCATION OR SWITCH RAMP TO A FAN/DEPRESSED CORNER.

⑤ WHEN USING CONCRETE PAVED FLARES ON THE OUTSIDE OF DIRECTIONAL RAMPS, AND ADJACENT TO A
WALKABLE SURFACE, DIRECTIONAL RAMP FLARES SHALL BE USED. SEE THE DETAIL ON THIS SHEET.

⑥ GRADING SHALL ALWAYS BE USED WHEN FEASIBLE. V CURB, IF USED, SHALL BE PLACED OUTSIDE THE SIDEWALK
LIMITS. WHEN RIGHT OF WAY ALLOWS, WHEN ADJACENT TO PARKING LOTS, CONCRETE OR BITUMINOUS TAPERS
SHOULD BE USED OVER V CURB TO REDUCE TRIPPING HAZARDS AND FACILITATE SNOW & ICE REMOVAL.

⑦ MAX. 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK AND DRAIN TO FLOW LINE. SHALL BE
CONSTRUCTED INTEGRAL WITH CURB AND GUTTER.

⑧ 8% TO 10% WALKABLE FLARE.

⑨ PLACE DOMES AT THE BACK OF CURB WHEN ALLOWABLE SETBACK CRITERIA IS EXCEEDED.

⑩ FRONT EDGE OF DETECTABLE WARNING SHALL BE SET BACK 2' MAXIMUM WHEN ADJACENT TO WALKABLE
SURFACE, AND 5' MAXIMUM WHEN ADJACENT TO NON-WALKABLE SURFACE WITH ONE CORNER SET 3" FROM
BACK OF CURB. A WALKABLE SURFACE IS DEFINED AS A PAVED SURFACE ADJACENT TO A CURB RAMP
WITHOUT RAISED OBSTACLES THAT COULD MISTAKENLY BE TRAVERSED BY A USER WHO IS VISUALLY
IMPAIRED.

⑪ RECTANGULAR DETECTABLE WARNINGS MAY BE SETBACK UP TO 9" FROM THE BACK OF CURB WITH CORNERS
SET 3" FROM BACK OF CURB. IF 9" SETBACK IS EXCEEDED USE RADIAL DETECTABLE WARNINGS.

⑫ FOR DIRECTIONAL RAMPS WITH THE DETECTABLE WARNINGS PLACED AT THE BACK OF CURB, THE DETECTABLE
WARNINGS SHALL COVER THE ENTIRE WIDTH OF THE WALK/PATH. THIS ENSURES A DETECTABLE EDGE
AND HELPS ELIMINATE THE CURB TAPER OBSTRUCTING THE PATH OF PEDESTRIAN TRAVEL.

⑬ THE CONCRETE WALK SHALL BE FORMED AND CONSTRUCTED PERPENDICULAR TO THE BACK OF CURB.
MAINTAIN 3" BETWEEN EDGE OF DOMES AND EDGE OF CONCRETE.

⑭ TO BE USED FOR ALL DIRECTIONAL RAMPS, EXCEPT WHERE DOMES ARE PLACED ALONG THE BACK OF CURB.

⑮ PLACE 2 NO. 4 BARS 4 INCHES FROM SIDE OF FORMS WITH A MINIMUM 2 INCHES
OF CONCRETE COVER ALONG EACH SIDE OF FLARE (INCIDENTAL).

LEGEND

THESE LONGITUDINAL SLOPE RANGES SHALL BE THE STARTING POINT. IF SITE
CONDITIONS WARRANT, LONGITUDINAL SLOPES UP TO 8.3% OR FLATTER ARE ALLOWED.

⑤ INDICATES PEDESTRIAN RAMP - SLOPE SHALL BE BETWEEN
5.0% MINIMUM AND 8.3% MAXIMUM IN THE DIRECTION SHOWN
AND THE CROSS SLOPE SHALL NOT EXCEED 2.0%.

⑥ INDICATES PEDESTRIAN RAMP - SLOPE SHALL BE GREATER
THAN 2.0% AND LESS THAN 5.0% IN THE DIRECTION SHOWN
AND CROSS SLOPE SHALL NOT EXCEED 2.0%.

⑦ LANDING AREA - 4' X 4' MIN. (5' X 5' MIN. PREFERRED) DIMENSIONS AND MAX
2.0% SLOPE IN ALL DIRECTIONS. LANDING SHALL BE FULL WIDTH OF INCOMING PAR.

X" CURB HEIGHT

REVISION:

APPROVED: 11-04-2021

Jeffrey J. Perkins
JEFFREY PERKINS
OPERATIONS DIVISION



STANDARD PLAN 5-297.250

2 OF 6

PEDESTRIAN CURB RAMP DETAILS

APPROVED: 11-04-2021

REVISED:

STATE PROJ. NO.

(T.H.)

SHEET NO. OF SHEETS

NO.	DATE	REVISIONS



CITY OF COON RAPIDS
ENGINEERING DEPARTMENT
11155 ROBINSON DRIVE
COON RAPIDS, MN. 55433-3761
763-755-2880
FAX 163-767-6491

SURVEY: R.M.T
DESIGNED: J.W.H.
CHECKED: M.C.H.
DATE: 11/10/2025

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS
PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND I AM A DULY
REGISTERED PROFESSIONAL ENGINEER UNDER THE STATE OF MINNESOTA.

NAME: Mark C. Hansen, P.E.
LICENSE # 43920
DATE: 3/6/2025

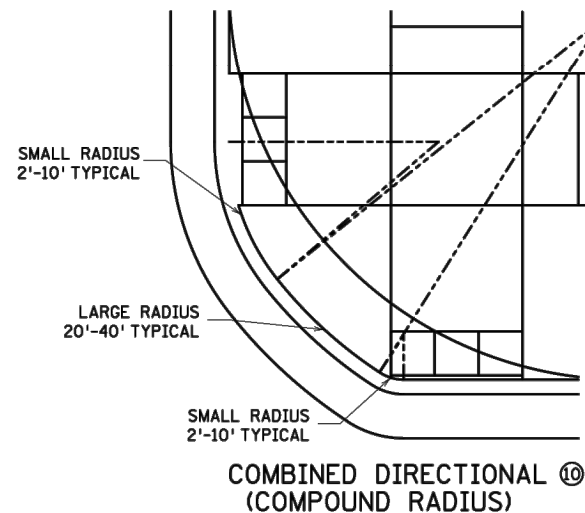
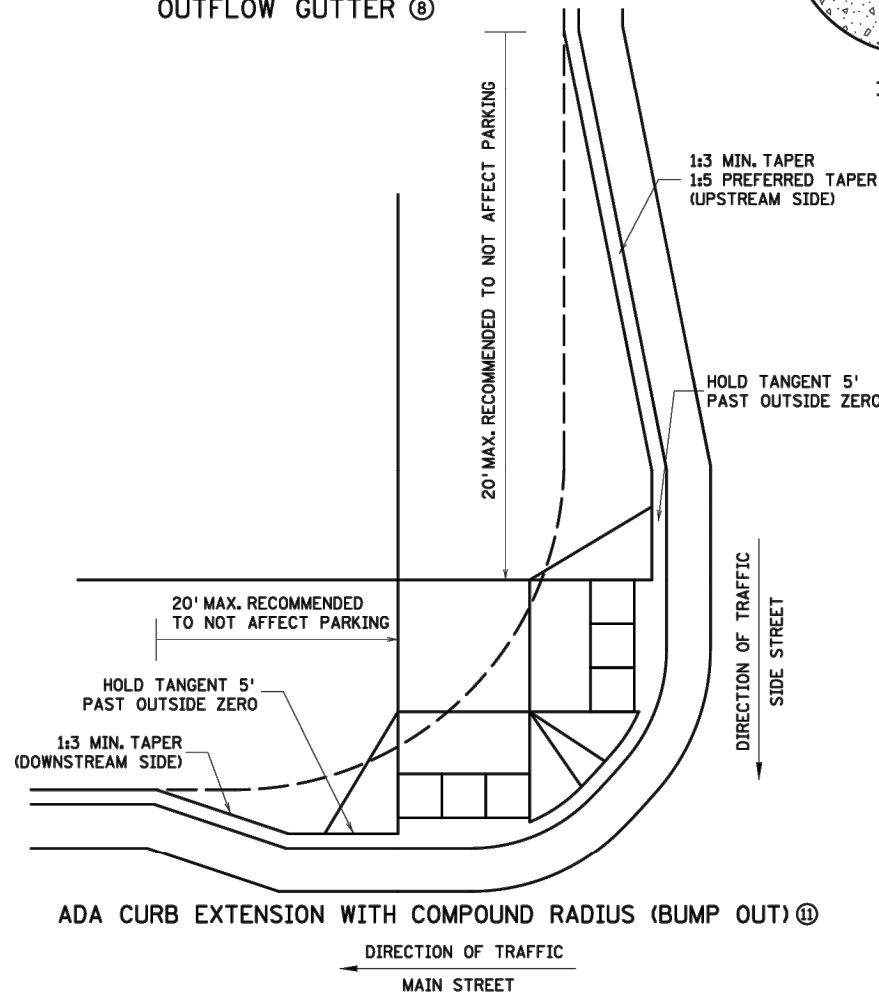
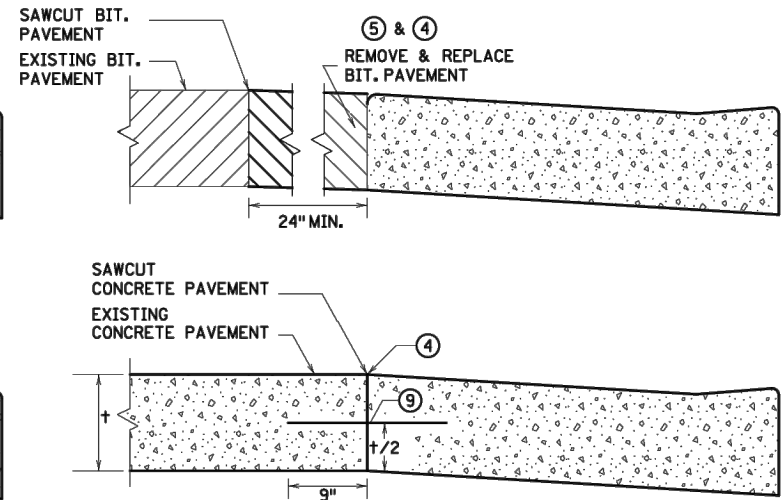
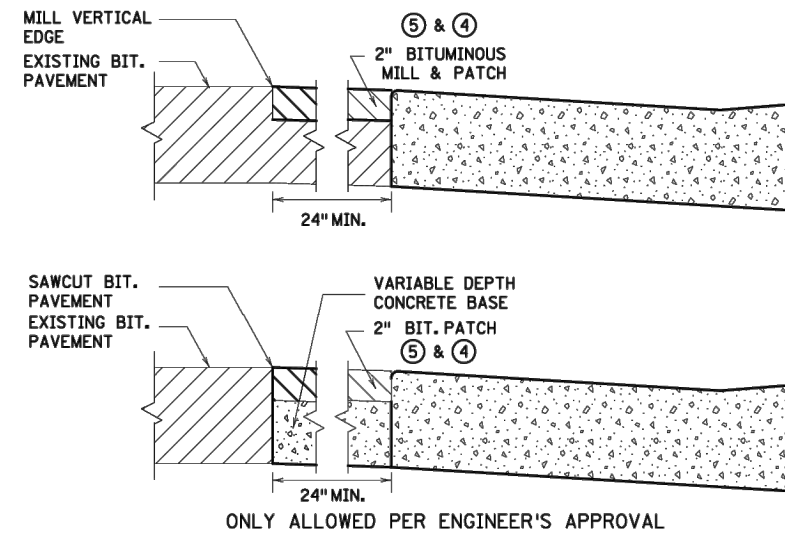
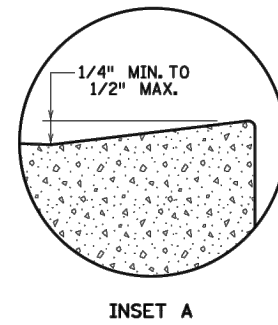
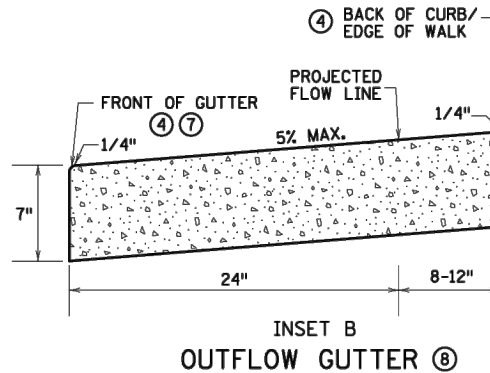
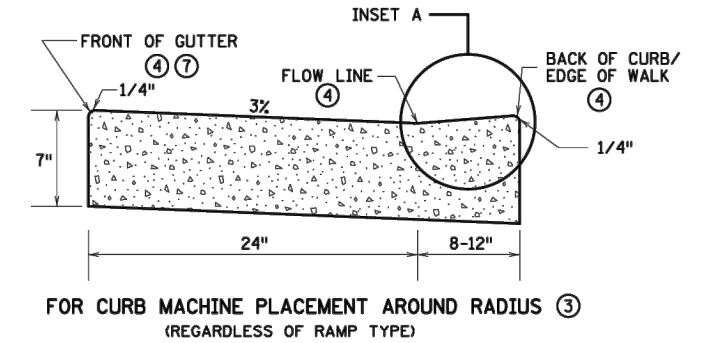
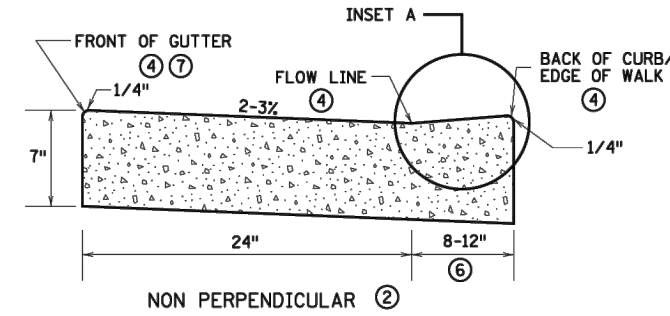
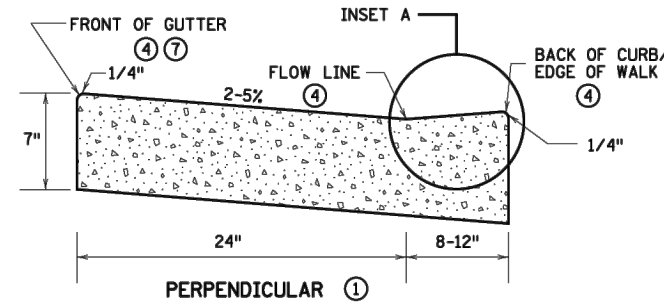
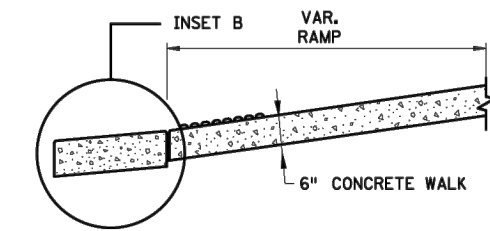
M.C.H.

26-1 STREET RECONSTRUCTION

CITY OF COON RAPIDS, MINNESOTA

PEDESTRIAN CURB
RAMP DETAILS

SHEET 13 OF 65 SHEETS



- NOTES:**
- POSITIVE FLOW LINE DRAINAGE SHALL BE MAINTAINED THROUGH THE PEDESTRIAN ACCESS ROUTE (PAR) AT A 2% MAXIMUM. NO PONDING SHALL BE PRESENT IN THE PAR.
- ANY VERTICAL LIP THAT OCCURS AT THE FLOW LINE SHALL NOT BE GREATER THAN 1/4 INCH.
- ① FOR USE AT CURB CUTS WHERE THE PEDESTRIAN'S PATH OF TRAVEL IS ASSUMED PERPENDICULAR TO THE GUTTER FLOW LINE. RAMP TYPES INCLUDE: PERPENDICULAR, TIERED PERPENDICULAR, PARALLEL, AND DIAGONAL RAMPS.
- ② FOR USE AT CURB RAMPS WHERE THE PEDESTRIAN'S PATH OF TRAVEL IS ASSUMED NON PERPENDICULAR TO THE GUTTER FLOW LINE. RAMP TYPES INCLUDE: FANS & DEPRESSED CORNERS.
- ③ BEGIN GUTTER SLOPE TRANSITION 10' OUTSIDE OF ALL CURB RAMPS.
- ④ THERE SHALL BE NO VERTICAL DISCONTINUITIES GREATER THAN 1/4\".
- ⑤ ELEVATION CHANGE TAKES PLACE FROM THE EXISTING TO NEW FRONT OF GUTTER. PATCH IS USED TO MATCH THE NEW GUTTER FACE INTO THE EXISTING ROADWAY.
- ⑥ VARIABLE WIDTH FOR DIRECTIONAL CURB APPLICATIONS. SEE SHEET 2 FOR DIRECTIONAL CURB SLOPE REQUIREMENTS.
- ⑦ TOP FRONT OF GUTTER SHALL BE CONSTRUCTED FLUSH WITH PROPOSED ADJACENT PAVEMENT ELEVATION. TOP 1.5\" OF THE GUTTER FACE MUST BE A FORMED EDGE. PAR GUTTER SHALL NOT BE OVERLAID.
- ⑧ SHOULD BE USED AT VERTICALLY CONSTRAINED AREAS WHEN AT A DRAINAGE HIGH POINT OR SUPER ELEVATED ROADWAY SEGMENTS.
- ⑨ DRILL AND GROUT NO. 4 EPOXY-COATED 18\" LONG TIE BARS AT 30\" CENTER TO CENTER INTO EXISTING CONCRETE PAVEMENT 1' MINIMUM FROM ALL JOINTS.
- ⑩ HELPS PROVIDE TWO SEPARATE RAMPS, REDUCES THE DOME SETBACK LENGTH AND MINIMIZES DIRECTIONAL CURB. THIS RADIUS DESIGN CLOSELY FOLLOWS THE TURNING VEHICLE PATH WHILE OPTIMIZING CURB RAMP LENGTH.
- ⑪ CURB EXTENSIONS SHOULD BE USED IN VERTICALLY CONSTRAINED AREAS, USUALLY IN DOWNTOWN ROADWAY SEGMENTS WHERE ON-STREET PARKING IS AVAILABLE. CURB EXTENSIONS SHOULD BE CONSIDERED FOR APS INTERSECTIONS WHERE SPACE IS LIMITED. PUSH BUTTONS MUST MEET APS CRITERIA AS DESCRIBED IN THE PUSH BUTTON LOCATION DETAIL SHEET.

REVISION:
APPROVED: 11-04-2021
Jeffrey J. Perkins
JEFFREY PERKINS
OPERATIONS DIVISION

	STANDARD PLAN 5-297.250	3 OF 6	PEDESTRIAN CURB RAMP DETAILS		
	APPROVED: 11-04-2021 REVISOR: <i>Tom Styrbicki</i> THOMAS STYRBICKI STATE DESIGN ENGINEER	STATE PROJ. NO.	(TH)	SHEET NO.	OF SHEETS

NO.	DATE	REVISIONS

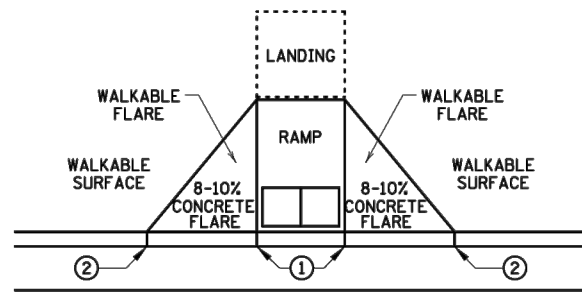
	CITY OF COON RAPIDS ENGINEERING DEPARTMENT 11155 ROBINSON DRIVE COON RAPIDS, MN. 55433-3761 763-755-2880 FAX 163-767-6491
SURVEY: R.M.T. DESIGNED: J.W.H. CHECKED: M.C.H. DATE: 11/10/2025	I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE STATE OF MINNESOTA. NAME: Mark C. Hansen, P.E. LICENSE # 43920 DATE: 3/6/2025 <i>M.C.H.</i>

26-1 STREET RECONSTRUCTION

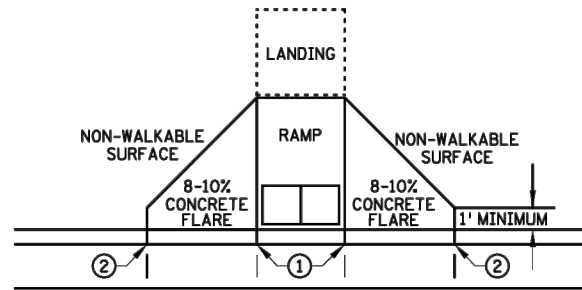
CITY OF COON RAPIDS, MINNESOTA

PEDESTRIAN CURB
RAMP DETAILS

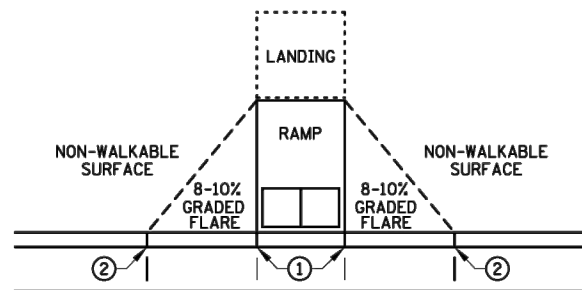
SHEET 14 OF 65 SHEETS



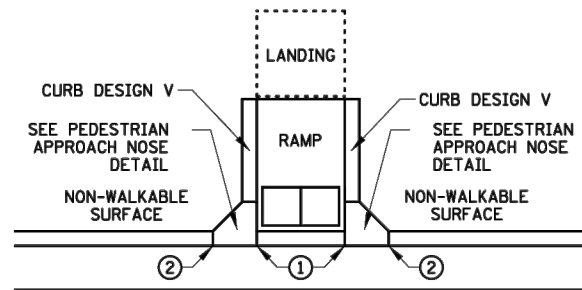
PAVED FLARES
ADJACENT TO WALKABLE SURFACE



PAVED FLARES
ADJACENT TO NON-WALKABLE SURFACE



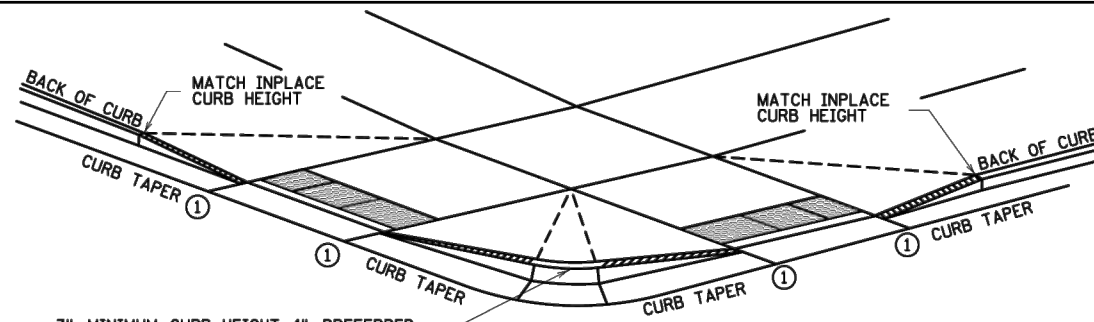
GRADED FLARES



RETURNED CURB ④

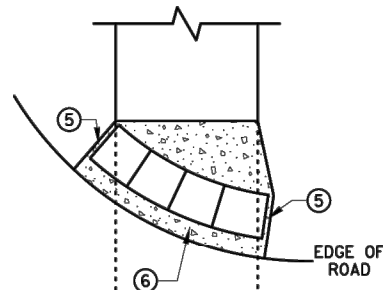
TYPICAL SIDE TREATMENT OPTIONS ③ ⑩

REVISION:
APPROVED: 11-04-2021
<i>Jeffrey Perkins</i>
JEFFREY PERKINS OPERATIONS DIVISION

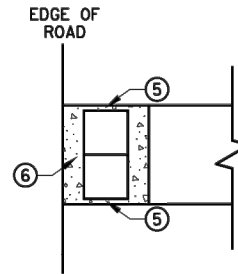


3" MINIMUM CURB HEIGHT, 4" PREFERRED
(MEASURED AT FRONT FACE OF CURB)
FOR A MIN. 6" LENGTH (MEASURED ALONG FLOW LINE)

DETECTABLE EDGE WITH CURB AND GUTTER ⑦

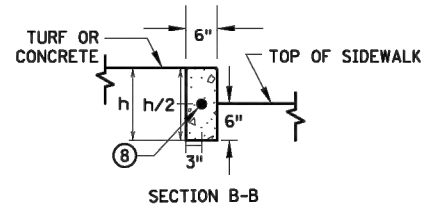
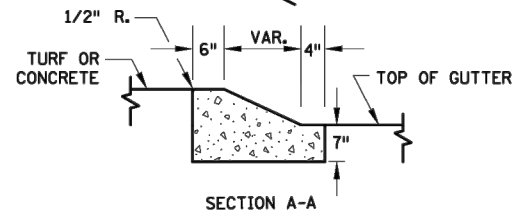
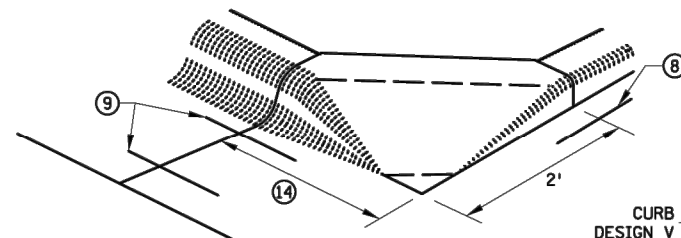


RADIAL DETECTABLE WARNING

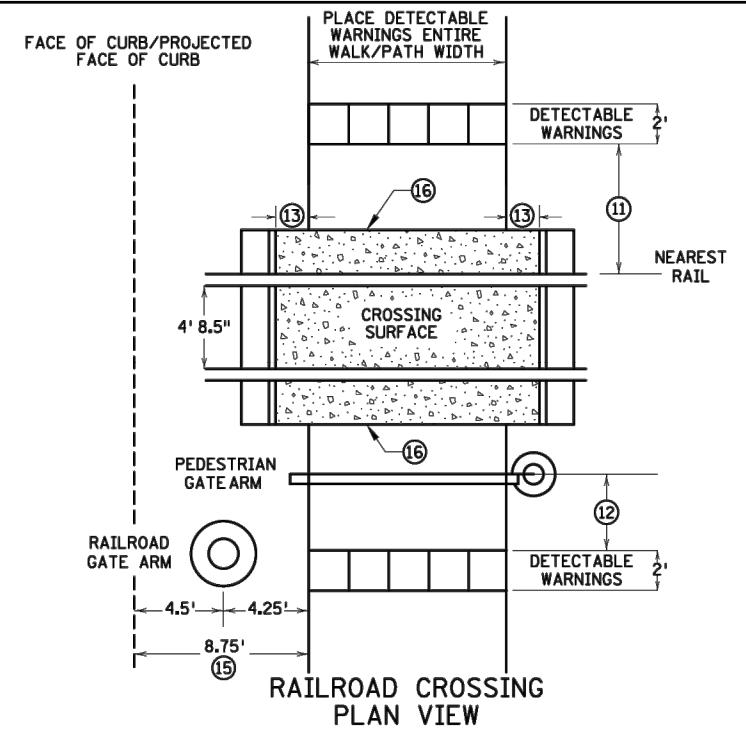


RECTANGULAR DETECTABLE WARNING

DETECTABLE EDGE WITHOUT CURB AND GUTTER



PEDESTRIAN APPROACH
NOSE DETAIL
(FOR RETURNED CURB
SIDE TREATMENT)



RAILROAD CROSSING
PLAN VIEW

NOTES:

INTERMEDIATE CURB HEIGHTS TAPER SHALL RISE AT 8-10% TO A MINIMUM 3 INCH CURB HEIGHT. INCREASE CURB TAPER LENGTH AT LESS THAN 8% OR REDUCE INTERMEDIATE CURB HEIGHT TO 2+ INCHES IF NECESSARY TO MATCH ADJACENT BOULEVARD OR SIDEWALK GRADES.

SEE STANDARD PLATE 7038 AND THIS SHEET FOR ADDITIONAL DETAILS ON DETECTABLE WARNING.

A WALKABLE SURFACE IS DEFINED AS A PAVED SURFACE ADJACENT TO A CURB RAMP WITHOUT RAISED OBSTACLES THAT COULD MISTAKENLY BE TRAVERSED BY A USER WHO IS VISUALLY IMPAIRED.

CONCRETE FLARE LENGTHS ADJACENT TO NON-WALKABLE SURFACES SHOULD BE LESS THAN 8' LONG MEASURED ALONG THE RAMPS FROM THE BACK OF CURB.

① 0" CURB HEIGHT. SEE INSET A ON SHEET 3 OF 6.

② FULL CURB HEIGHT.

③ SIDE TREATMENTS ARE APPLICABLE TO ALL RAMP TYPES AND SHOULD BE IMPLEMENTED AS NEEDED AS FIELD CONDITIONS DICTATE. THE ENGINEER SHALL DETERMINE THE RAMP SIDE TREATMENTS BASED ON MAINTENANCE OF BOTH ROADWAY AND SIDEWALK, ADJACENT PROPERTY CONSIDERATIONS, AND MITIGATING CONSTRUCTION IMPACTS.

④ TYPICALLY USED FOR MEDIANS AND ISLANDS.

⑤ WHEN NO CONCRETE FLARES ARE PROPOSED, THE CONCRETE WALK SHALL BE FORMED AND CONSTRUCTED PERPENDICULAR TO THE EDGE OF ROADWAY. MAINTAIN 3" MAX. BETWEEN EDGE OF DOMES AND EDGE OF CONCRETE.

⑥ IF NO CURB AND GUTTER IS PLACED IN RURAL SECTIONS, DETECTABLE WARNINGS SHALL BE PLACED 1' FROM THE EDGE OF BITUMINOUS ROADWAY AND/OR BITUMINOUS SHARED-USE PATH TO PROVIDE VISUAL CONTRAST.

⑦ ALL CONSTRUCTED CURBS MUST HAVE A CONTINUOUS DETECTABLE EDGE FOR THE VISUALLY IMPAIRED. THIS DETECTABLE EDGE REQUIRES DETECTABLE WARNINGS WHEREVER THERE IS ZERO-INCH HIGH CURB. CURB TAPERS ARE CONSIDERED A DETECTABLE EDGE WHEN THE TAPER STARTS WITHIN 3" OF THE EDGE OF THE DETECTABLE WARNINGS, AND UNIFORMLY RISES TO A 3-INCH MINIMUM CURB HEIGHT. ANY CURB NOT PART OF A CURB TAPER AND LESS THAN 3 INCHES IN HEIGHT IS NOT CONSIDERED A DETECTABLE EDGE AND THEREFORE IS NOT COMPLIANT WITH ACCESSIBILITY STANDARDS.

⑧ DRILL AND GROUT 1 - NO. 4 12" LONG REINFORCEMENT BAR (EPOXY COATED) WITH 3" MIN. COVER. REINFORCEMENT BARS ARE NOT NEEDED IF THE APPROACH NOSE IS POURED INTEGRAL WITH THE V CURB.

⑨ DRILL AND GROUT 2 - NO. 4 12" LONG REINFORCEMENT BARS (EPOXY COATED) WITH 3" MIN. COVER. REINFORCEMENT BARS ARE NOT NEEDED IF THE APPROACH NOSE IS POURED INTEGRAL WITH THE CURB AND GUTTER.

⑩ SIDE TREATMENT EXAMPLES SHOWN ARE WHEN THE INITIAL LANDING IS APPROXIMATELY LEVEL WITH THE FULL HEIGHT CURB (I.E. 6' LONG RAMP FOR 6" HIGH CURB). WHEN THE INITIAL LANDING IS MORE THAN 1" BELOW FULL HEIGHT CURB REFER TO SHEETS 1 & 2 TO MODIFY THE CURB HEIGHT TAPERS AND MAINTAIN POSITIVE BOULEVARD DRAINAGE. CONSTRUCT THESE TAPERS AT 0"-3" AT 8-10%, THEN LESS THAN 5% FROM 3" CURB TO FULL CURB HEIGHT.

⑪ NEAREST EDGE OF DETECTABLE WARNING SURFACES SHALL BE PLACED 12' MINIMUM TO 15' MAXIMUM FROM THE NEAREST RAIL. FOR SKEWED RAILWAYS IN NO INSTANCE SHALL THE DETECTABLE WARNING BE CLOSER THAN 12' MEASURED PERPENDICULAR TO THE NEAREST RAIL.

⑫ WHEN PEDESTRIAN GATES ARE PROVIDED, DETECTABLE WARNING SURFACES SHALL BE PLACED ON THE SIDE OF THE GATES OPPOSITE THE RAIL, 2' FROM THE APPROACHING SIDE OF THE GATE ARM. THIS CRITERIA GOVERNS OVER NOTE ⑪.

⑬ CROSSING SURFACE SHALL EXTEND 2' MINIMUM PAST THE OUTSIDE EDGE OF WALK OR SHARED-USE PATH.

⑭ 3' FOR MEDIANS AND SPLITTER ISLANDS. NOSE CAN BE REDUCED TO 2' ON FREE RIGHT ISLANDS.

⑮ SIDEWALK TO BE PLACED 8.75' MIN. FROM THE FACE OF CURB/PROJECTED FACE OF CURB. THIS ENSURES MIN. CLEARANCE BETWEEN THE SIDEWALK AND GATE ARM COUNTERWEIGHT SUPPORTS.

⑯ CONSTRUCT WITH EXPANSION MATERIAL PER MNDOT SPECIFICATION 3702 TYPES A-E. EXPANSION MATERIAL SHALL MATCH FULL HEIGHT OF ADJACENT CONCRETE.



STANDARD PLAN 5-297.250

4 OF 6

PEDESTRIAN CURB RAMP DETAILS

APPROVED: 11-04-2021

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CITY OF COON RAPIDS
ENGINEERING DEPARTMENT
11155 ROBINSON DRIVE
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SURVEY:	R.M.T
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NAME: Mark C. Hansen, P.E.
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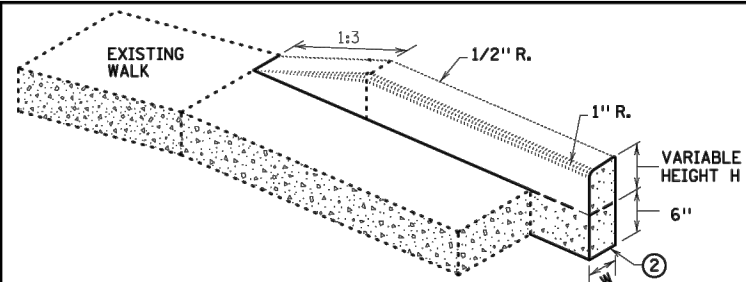
M.C.H.

26-1 STREET RECONSTRUCTION

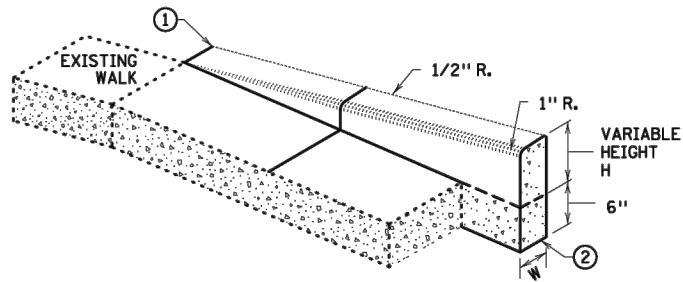
CITY OF COON RAPIDS, MINNESOTA

PEDESTRIAN CURB RAMP DETAILS

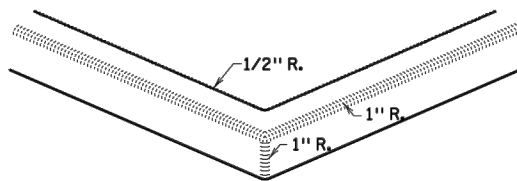
SHEET 15 OF 65 SHEETS



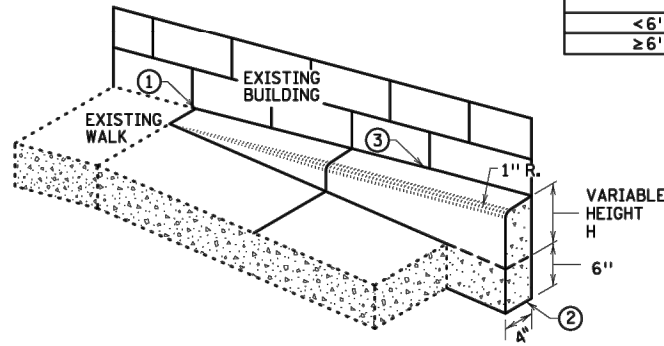
V CURB ADJACENT TO LANDSCAPE
CURB WITHIN SIDEWALK LIMITS



V CURB ADJACENT TO LANDSCAPE
CURB OUTSIDE SIDEWALK LIMITS

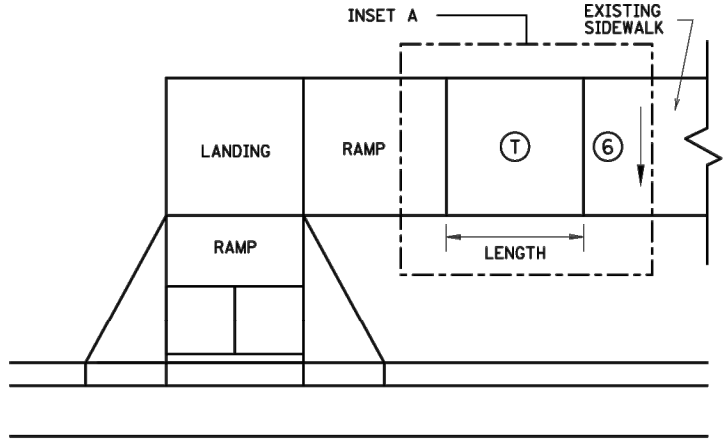


V CURB INTERSECTION

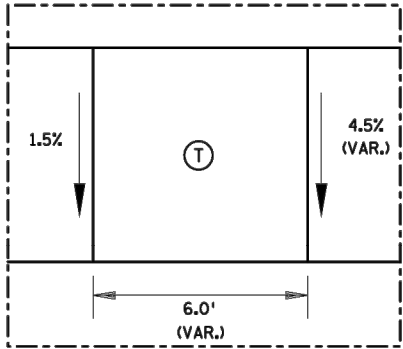


V CURB ADJACENT TO BUILDING
OR BARRIER

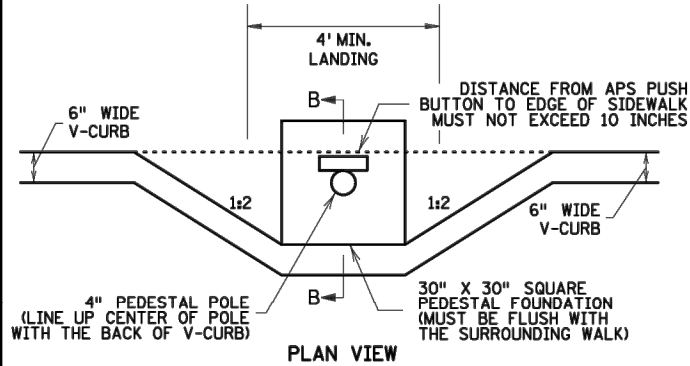
CONCRETE CURB DESIGN V	
CURB HEIGHT H	CURB WIDTH W
< 6"	4"
≥ 6"	6"



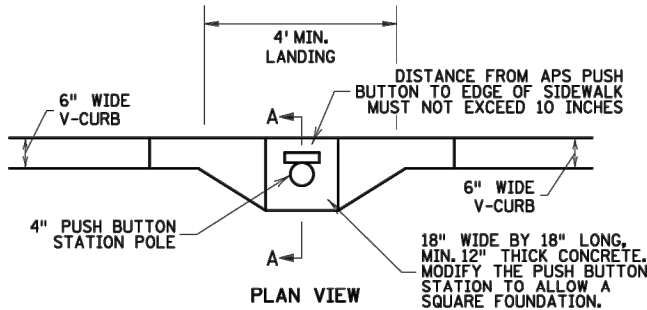
TRANSITION PANEL ④ ⑤



INSET A



PLAN VIEW
SECTION B-B
SIGNAL PEDESTAL & PUSH BUTTON (V-CURB)



PLAN VIEW
SECTION A-A
PUSH BUTTON STATION (V-CURB)

NOTES:

- A WALKABLE FLARE IS AN 8-10% CONCRETE FLARE THAT IS REQUIRED WHEN THE FLARE IS ADJACENT TO A WALKABLE SURFACE, OR WHEN THE PEDESTRIAN PATH OF TRAVEL OF A PUSH BUTTON TRAVERSES THE FLARE.
- ALL V CURB CONTRACTION JOINTS SHALL MATCH CONCRETE WALK JOINTS.
- WHERE RIGHT-OF-WAY ALLOWS, USE OF V CURB SHOULD BE MINIMIZED. GRADING ADJACENT TURF OR SLOPING ADJACENT PAVEMENT IS PREFERRED.
- V CURB SHALL BE PLACED OUTSIDE THE SIDEWALK LIMITS WHEN RIGHT OF WAY ALLOWS.
- V CURB NEXT TO BUILDING SHALL BE A 4" WIDTH AND SHALL MATCH PREVIOUS TOP OF SIDEWALK ELEVATIONS.
- ① END TAPERS AT TRANSITION SECTION SHALL MATCH INPLACE SIDEWALK GRADES.
- ② ALL V CURB SHALL MATCH BOTTOM OF ADJACENT WALK.
- ③ CONSTRUCT USING APPROVED EXPANSION MATERIAL PER MNDOT TYPE A-E EXPANSION. LEAVE A MINIMUM 1/2" TOP GAP AND SEAL WITH MNDOT APPROVED SILICONE PER MNDOT SPEC 3722.
- ④ THE MAX. RATE OF CROSS SLOPE TRANSITIONING IS 1' LINEAR FOOT OF SIDEWALK PER HALF PERCENT CROSS SLOPE. WHEN PAR WIDTH IS GREATER THAN 6' OR THE RUNNING SLOPE IS GREATER THAN 5%, DOUBLE THE CALCULATED TRANSITION LENGTH.
- ⑤ TRANSITION PANEL(S) - TO BE USED AFTER THE RAMP, OR IF NEEDED, LANDING ARE AT THE FULL CURB HEIGHT (TYPICAL SECTION).
- ⑥ EXISTING CROSS SLOPE GREATER THAN 2.0%.

LEGEND

THESE LONGITUDINAL SLOPE RANGES SHALL BE THE STARTING POINT. IF SITE CONDITIONS WARRANT, LONGITUDINAL SLOPES UP TO 8.3% OR FLATTER ARE ALLOWED.

- ⑤ INDICATES PEDESTRIAN RAMP - SLOPE SHALL BE BETWEEN 5.0% MINIMUM AND 8.3% MAXIMUM IN THE DIRECTION SHOWN AND THE CROSS SLOPE SHALL NOT EXCEED 2.0%.
- LANDING AREA - 4' X 4' MIN. (5' X 5' MIN. PREFERRED) DIMENSIONS AND MAX 2.0% SLOPE IN ALL DIRECTIONS. LANDING SHALL BE FULL WIDTH OF INCOMING PARS.
- ① TRANSITION PANEL(S) - TO BE USED FOR TRANSITIONING THE CROSS-SLOPE OF A RAMP TO THE EXISTING WALK CROSS-SLOPE. RATE OF TRANSITION SHOULD BE 0.5% PER 1 LINEAR FOOT OF WALK. SEE THIS SHEET FOR ADDITIONAL INFORMATION.

REVISION:
APPROVED: 11-04-2021
<i>Jeffrey J. Perkins</i>
JEFFREY PERKINS OPERATIONS DIVISION



STANDARD PLAN 5-297.250

5 OF 6

PEDESTRIAN CURB RAMP DETAILS

APPROVED: 11-04-2021
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STATE PROJ. NO.

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DATE: 11/10/2025

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE STATE OF MINNESOTA.

NAME: Mark C. Hansen, P.E.
LICENSE # 43920
DATE: 3/6/2025

26-1 STREET RECONSTRUCTION

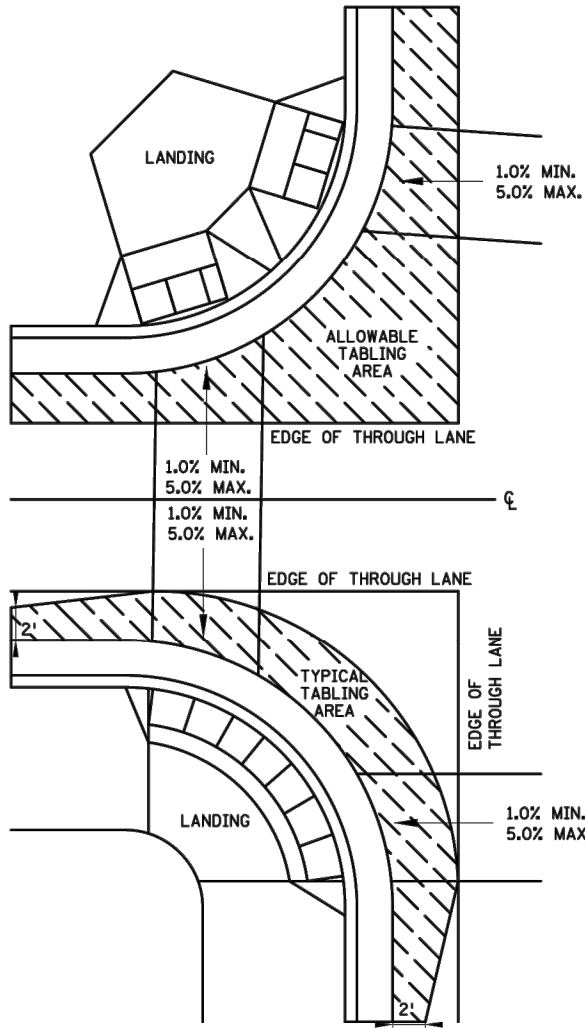
CITY OF COON RAPIDS, MINNESOTA

PEDESTRIAN CURB
RAMP DETAILS

SHEET 16 OF 65 SHEETS

K:\2026 CAD\26-1\DESIGN DRAWINGS\26-1_STREET RECONSTRUCTION

March 4, 2026



CURB LINE AND ROAD CROSSING ADJUSTMENTS

GENERAL NOTES:

"TABLING" OF CROSSWALKS MEANS MAINTAINING LESS THAN 2% CROSS SLOPE WITHIN A CROSSWALK, IS REQUIRED WHEN A ROADWAY IS IN A STOP OR YIELD CONDITION AND THE PROJECT SCOPE ALLOWS.

RECONSTRUCTION PROJECTS: ON FULL PAVEMENT REPLACEMENT PROJECTS "TABLING" OF ENTIRE CROSSWALK SHALL OCCUR WHEN FEASIBLE.

MILL & OVERLAY PROJECTS: "TABLING" OF FLOW LINES, IN FRONT OF THE PEDESTRIAN RAMP, IS REQUIRED WHEN THE EXISTING FLOW LINE IS GREATER THAN 2%. WARPING OF THE BITUMINOUS PAVEMENT CAN NOT EXTEND INTO THE THROUGH LANE. TABLE THE FLOW LINE TO 2% OR AS MUCH AS POSSIBLE WHILE ADHERING TO THE FOLLOWING CRITERIA:

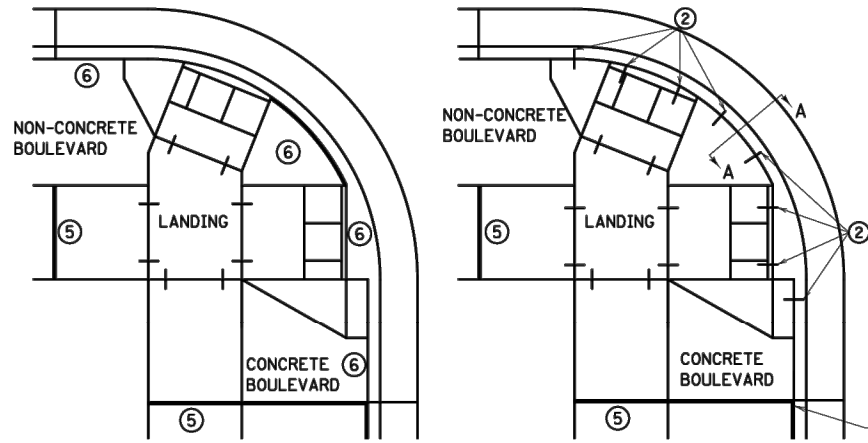
- 1) 1.0% MIN. CROSS-SLOPE OF THE ROAD
- 2) 5.0% MAX. CROSS-SLOPE OF THE ROAD
- 3) "TABLE" FLOW LINE UP TO 4% CHANGE FROM EXISTING SLOPE IN FRONT OF PEDESTRIAN RAMP
- 4) UP TO 2% CHANGE IN FLOW LINE FROM EXISTING SLOPE BEYOND THE PEDESTRIAN CURB RAMP

STAND-ALONE ADA RETROFITS: FOLLOW MILL & OVERLAY CRITERIA ABOVE HOWEVER ALL PAVEMENT WARPING IS DONE WITH BITUMINOUS PATCHING ON BITUMINOUS ROADWAYS AND FULL-DEPTH APRON REPLACEMENT ON CONCRETE ROADWAYS.

RAISING OF CURB LINES SHOULD OCCUR IN VERTICALLY CONSTRAINED AREAS. RAISE THE CURB LINES ENOUGH TO ALLOW COMPLIANT RAMPS OR AS MUCH AS POSSIBLE WHILE ADHERING TO THE FOLLOWING CRITERIA:

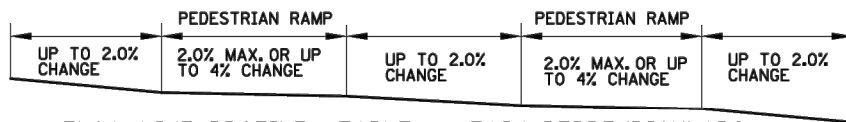
- 1) 1.0% MIN. AND 5.0% MAXIMUM CROSS-SLOPE OF THE ROAD
- 2) 1.0% MIN. FLOW LINE (ON EITHER SIDE OF PEDESTRIAN RAMP) TO MAINTAIN POSITIVE DRAINAGE
- 3) 5.0% RECOMMENDED MAX. FLOW LINE
- 4) LONGITUDINAL THROUGH LANE ROADWAY TAPERS SHOULD BE 1" VERTICAL PER 15' HORIZONTAL

REVISION:
APPROVED: 11-04-2021
<i>Jeffrey Perkins</i>
JEFFREY PERKINS OPERATIONS DIVISION

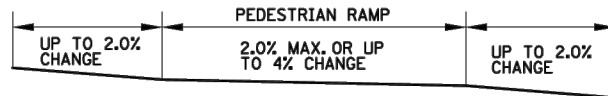


EXPANSION MATERIAL PLACEMENT FOR CONCRETE ROADWAYS

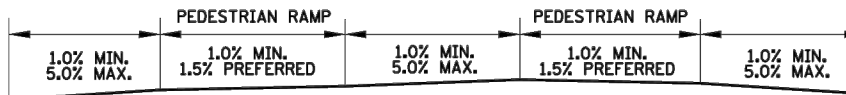
CURB LINE REINFORCEMENT ④ PLACEMENT ON BITUMINOUS ROADWAYS



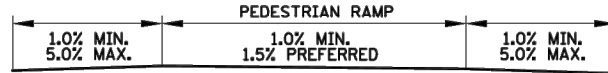
FLOW LINE PROFILE "TABLE" - TWIN PERPENDICULARS



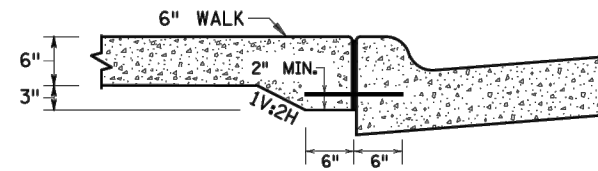
FLOW LINE PROFILE "TABLE" - FAN



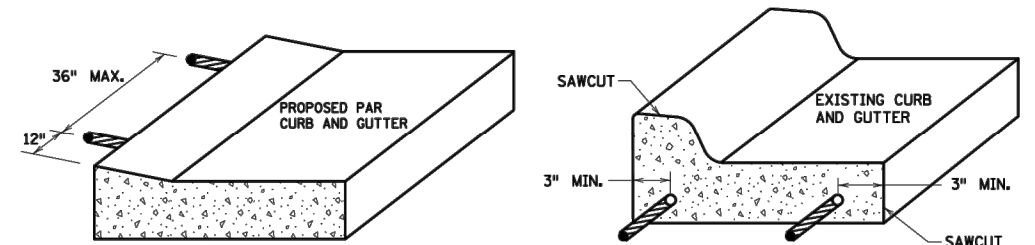
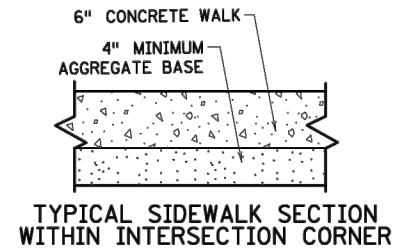
FLOW LINE PROFILE RAISE - TWIN PERPENDICULARS



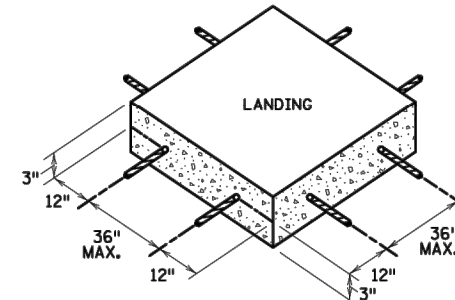
FLOW LINE PROFILE RAISE - FAN



SECTION VIEW A-A THICKENED SECTION THROUGH CURB RAMP FLARES



CURB RAMP REINFORCEMENT DETAILS ② ④



SEPARATE LANDING POUR REINFORCEMENT ① ②

NOTES:

- ① TO ENSURE RAMPS AND LANDINGS ARE PROPERLY CONSTRUCTED, ALL INITIAL LANDINGS AT A TOP OF A RAMPED SURFACE (RUNNING SLOPE GREATER THAN 2%) SHALL BE FORMED AND PLACED SEPARATELY IN AN INDEPENDENT CONCRETE POUR. FOLLOW SIDEWALK REINFORCEMENT DETAILS ON THIS SHEET FOR ALL SEPARATELY POURED INITIAL LANDINGS.
- ② DRILL AND GROUT NO. 4 12" LONG REINFORCEMENT BARS (EPOXY COATED) AT 36" MAXIMUM CENTER TO CENTER MINIMUM 12" SPACING FROM CONSTRUCTION JOINTS. BARS TO BE ADJUSTED TO MATCH RAMP GRADE. BARS TO BE PAID BY EACH.
- ③ DRILL AND GROUT 2 - NO. 4 X 12" LONG (6" EMBEDDED) REINFORCEMENT BARS (EPOXY COATED). REINFORCEMENT REQUIRED FOR ALL CONSTRUCTION JOINTS. BARS TO BE PAID BY EACH.
- ④ THIS CURB LINE REINFORCEMENT DETAIL SHALL BE USED ON BITUMINOUS ROADWAYS. FOR CONCRETE ROADWAYS, SEE NOTE 6.
- ⑤ CONSTRUCT WITH EXPANSION MATERIAL PER MNDOT SPECIFICATION 3702 TYPES A-E. EXPANSION MATERIAL SHALL MATCH FULL HEIGHT OF ADJACENT CONCRETE.
- ⑥ USE AN APPROVED TYPE F (1/4 INCH THICK) SEPARATION MATERIAL. SEPARATION MATERIAL SHALL MATCH FULL HEIGHT DIMENSION OF ADJACENT CONCRETE.

m MINNESOTA DEPARTMENT OF TRANSPORTATION	STANDARD PLAN 5-297.250	6 OF 6	PEDESTRIAN CURB RAMP DETAILS	
	APPROVED: 11-04-2021 REVIS: <i>Tom Sten</i>			
STATE PROJ. NO.		(TH)	SHEET NO.	OF SHEETS

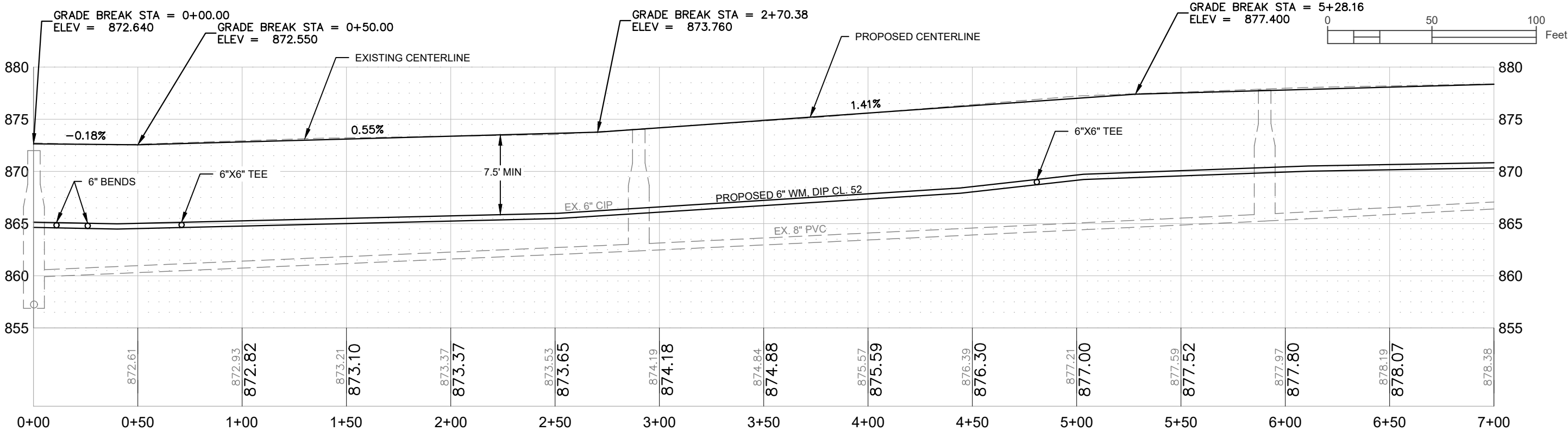
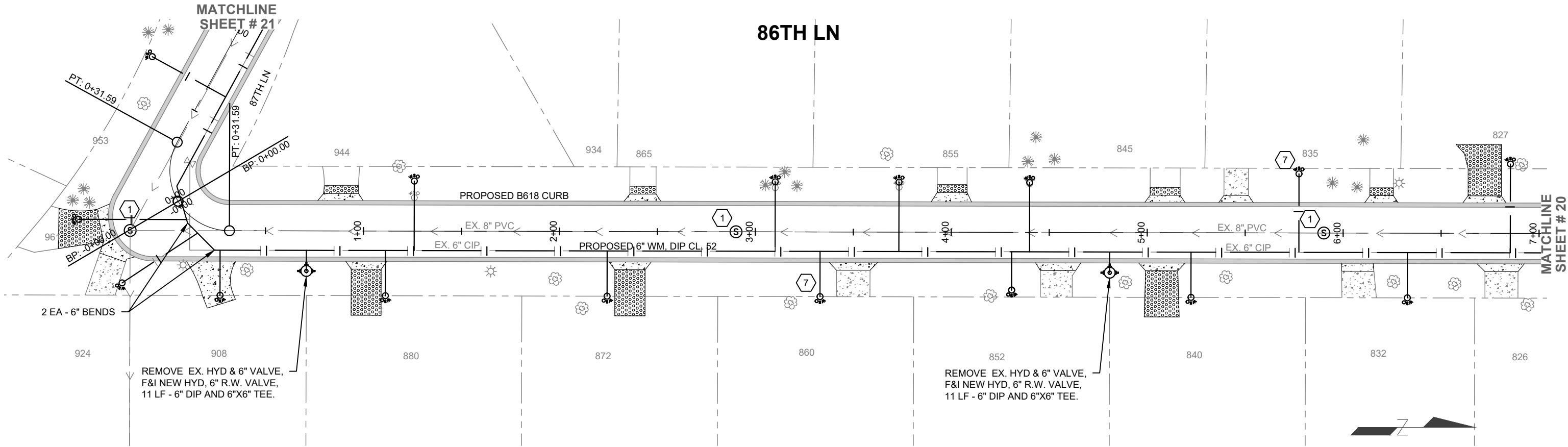
NO.	DATE	REVISIONS	 CITY OF COON RAPIDS ENGINEERING DEPARTMENT 11155 ROBINSON DRIVE COON RAPIDS, MN. 55433-3761 763-755-2880 FAX 163-767-6491	SURVEY: R.M.T DESIGNED: J.W.H. CHECKED: M.C.H. DATE: 11/10/2025	I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE STATE OF MINNESOTA. NAME: Mark C. Hansen, P.E. LICENSE # 43920 DATE: 3/6/2025	26-1 STREET RECONSTRUCTION CITY OF COON RAPIDS, MINNESOTA	PEDESTRIAN CURB RAMP DETAILS SHEET 17 OF 65 SHEETS

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3:26 PM

March 4, 2026

86TH LN



NO.	DATE	REVISIONS

 CITY OF COON RAPIDS
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COON RAPIDS, MN. 55433-3761
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SURVEY: R.M.T
DESIGNED: Z.J.P.
CHECKED: M.C.H.
DATE: 12/5/2024

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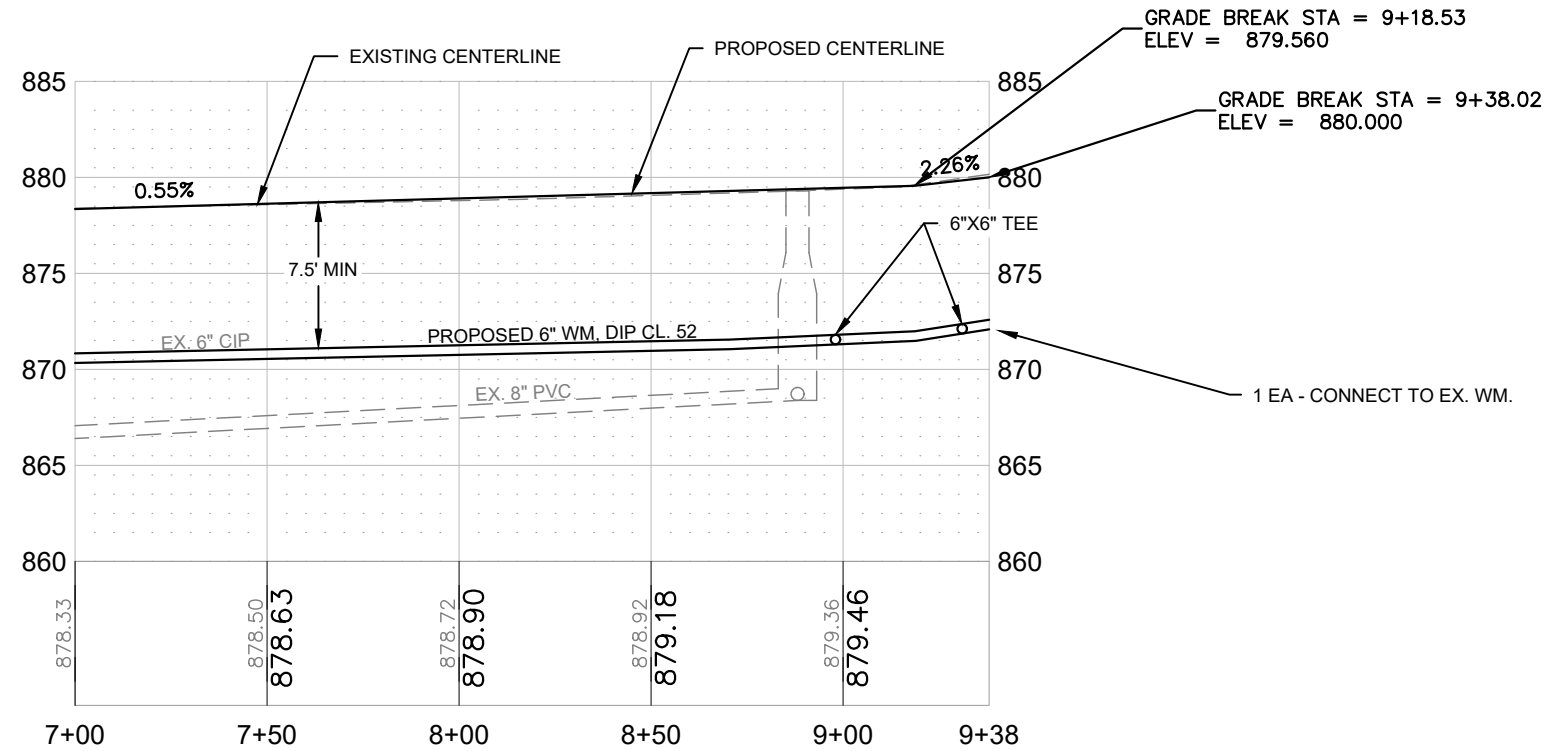
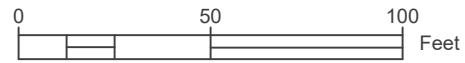
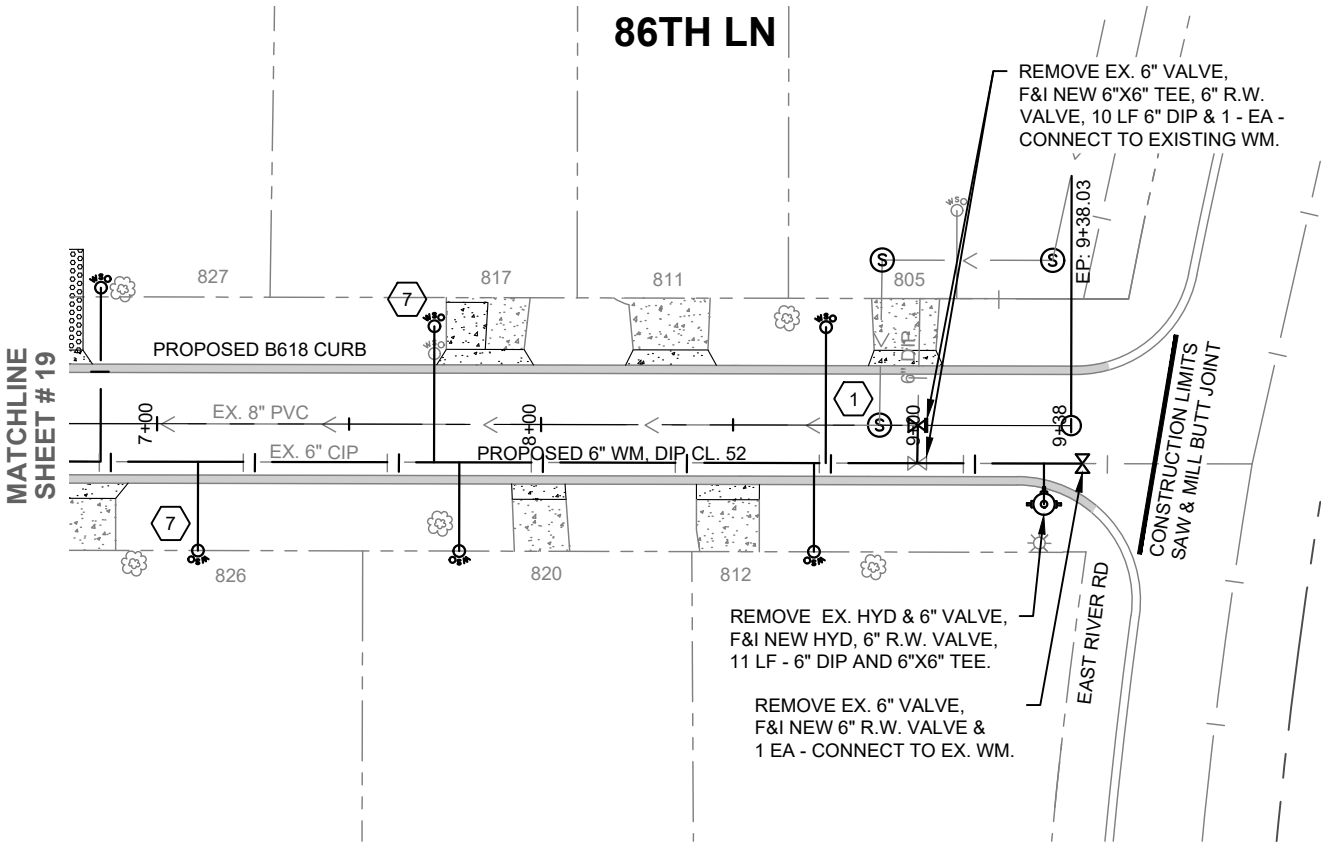
26-1 STREET RECONSTRUCTION

CITY OF COON RAPIDS, MINNESOTA

PLAN AND PROFILE

SHEET 19 OF 65 SHEETS

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26-1 STREET RECONSTRUCTION

CITY OF COON RAPIDS, MINNESOTA

PLAN AND PROFILE

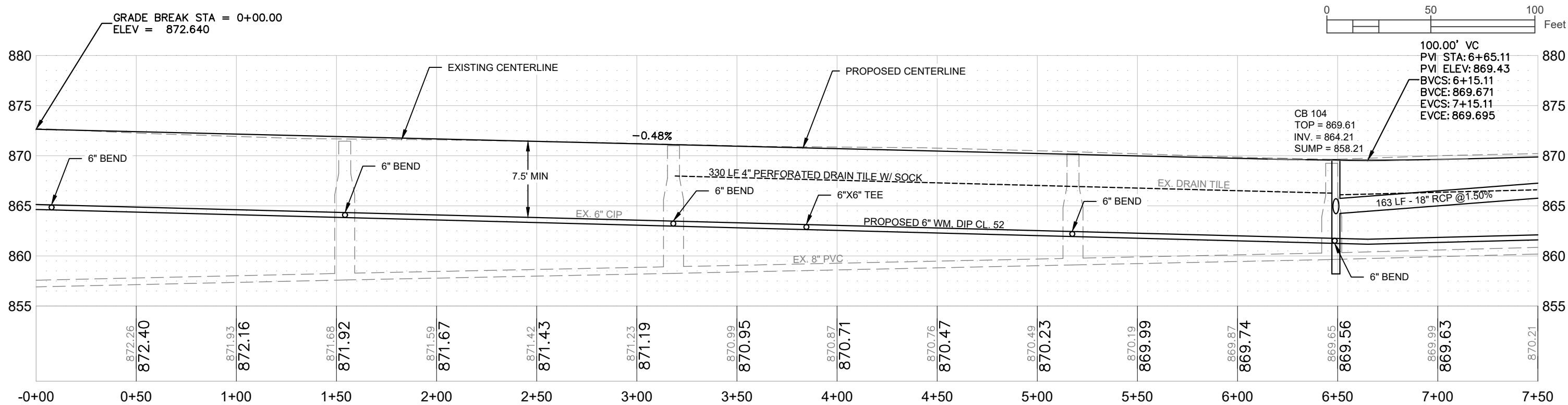
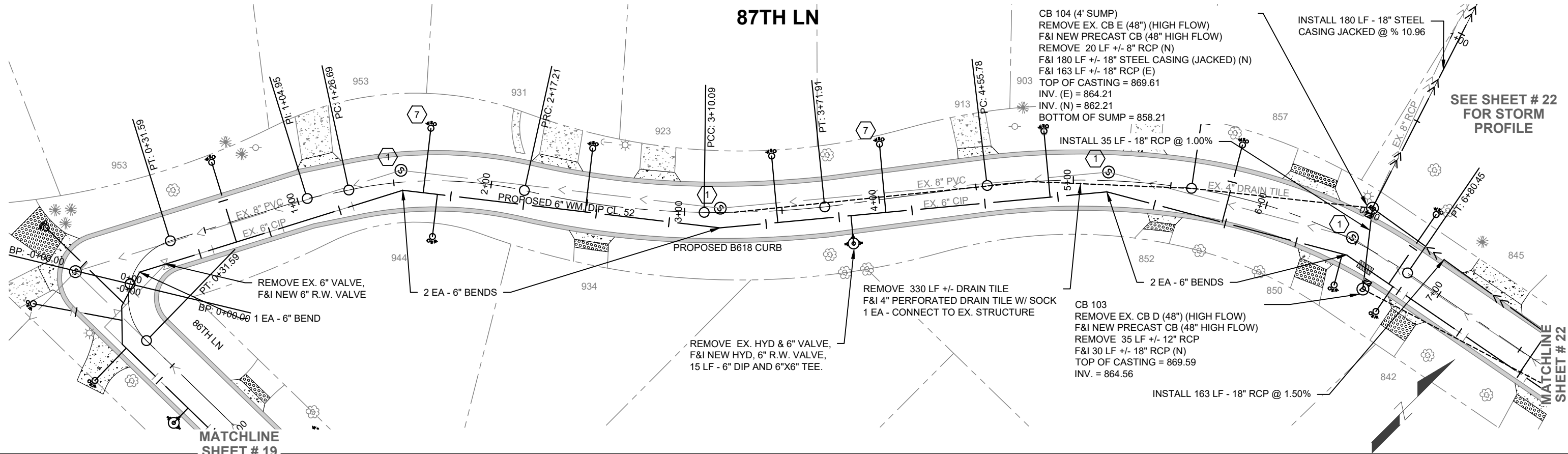
SHEET 20 OF 65 SHEETS

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March 4, 2026

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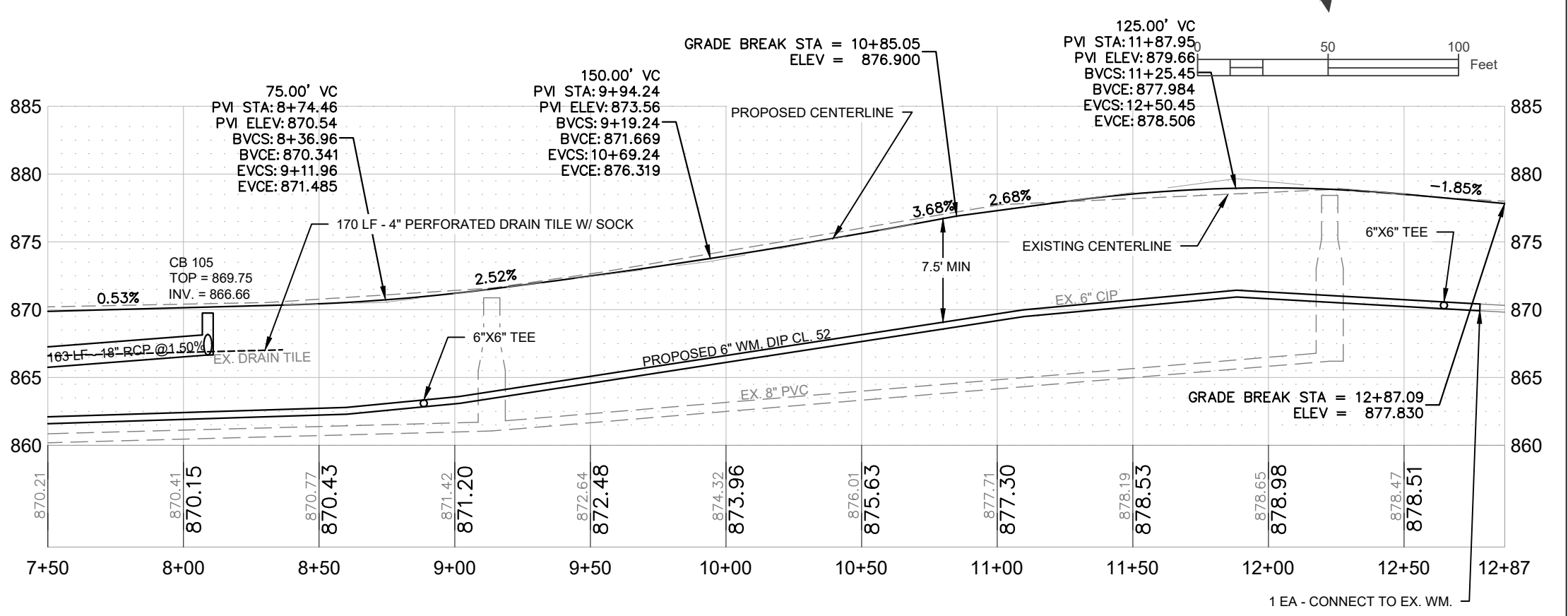
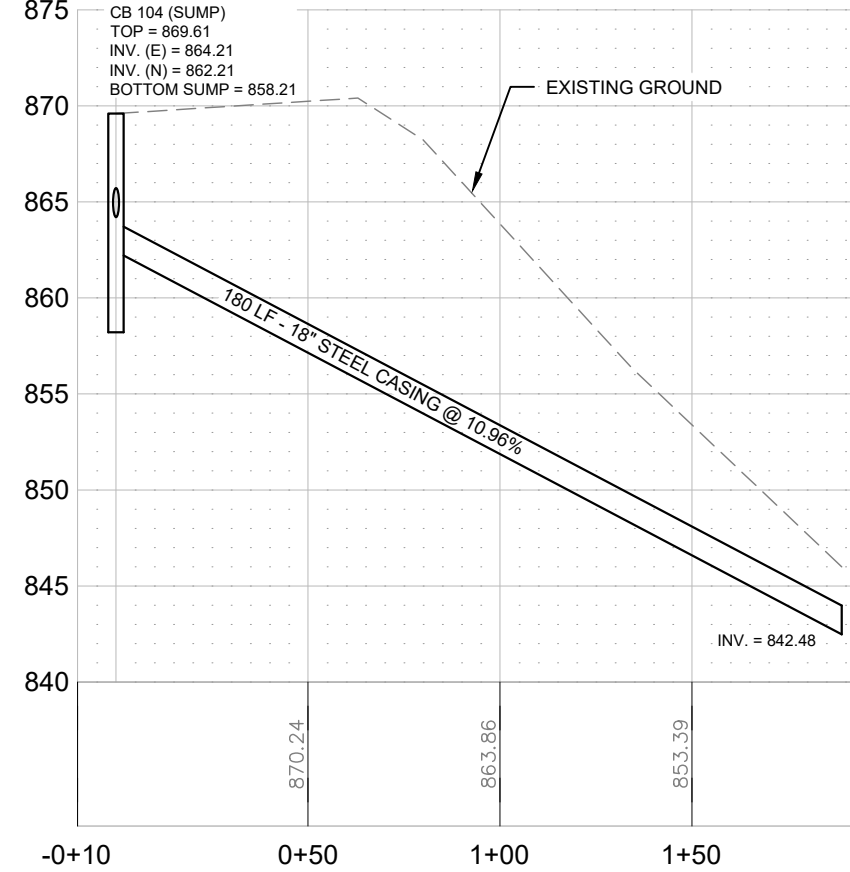
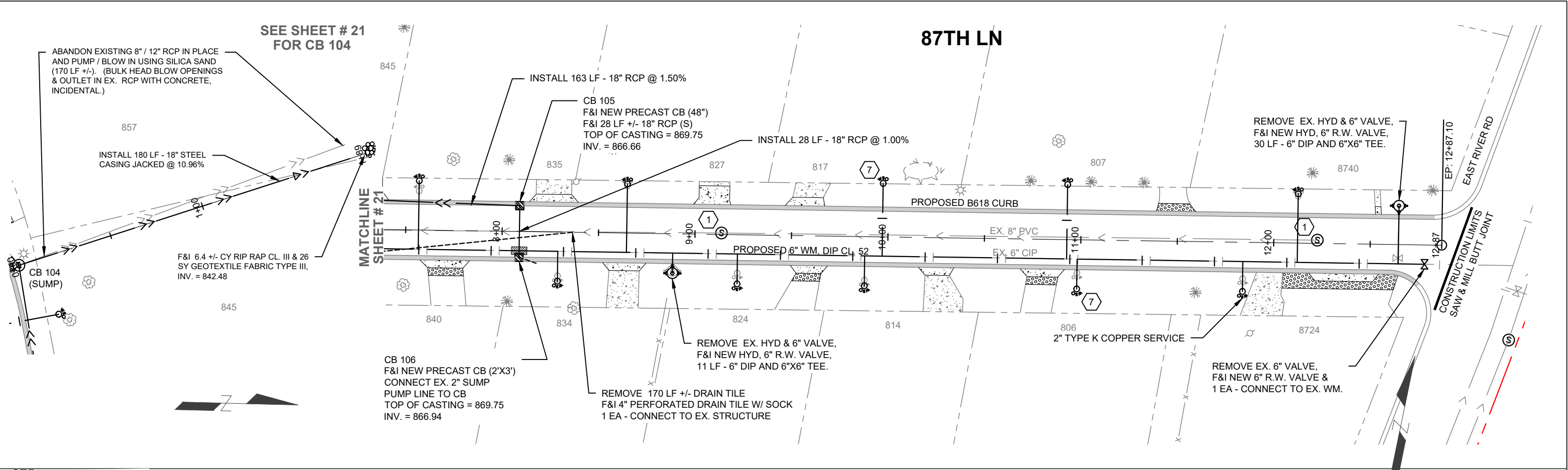
26-1 STREET RECONSTRUCTION

CITY OF COON RAPIDS, MINNESOTA

PLAN AND PROFILE

SHEET 21 OF 65 SHEETS

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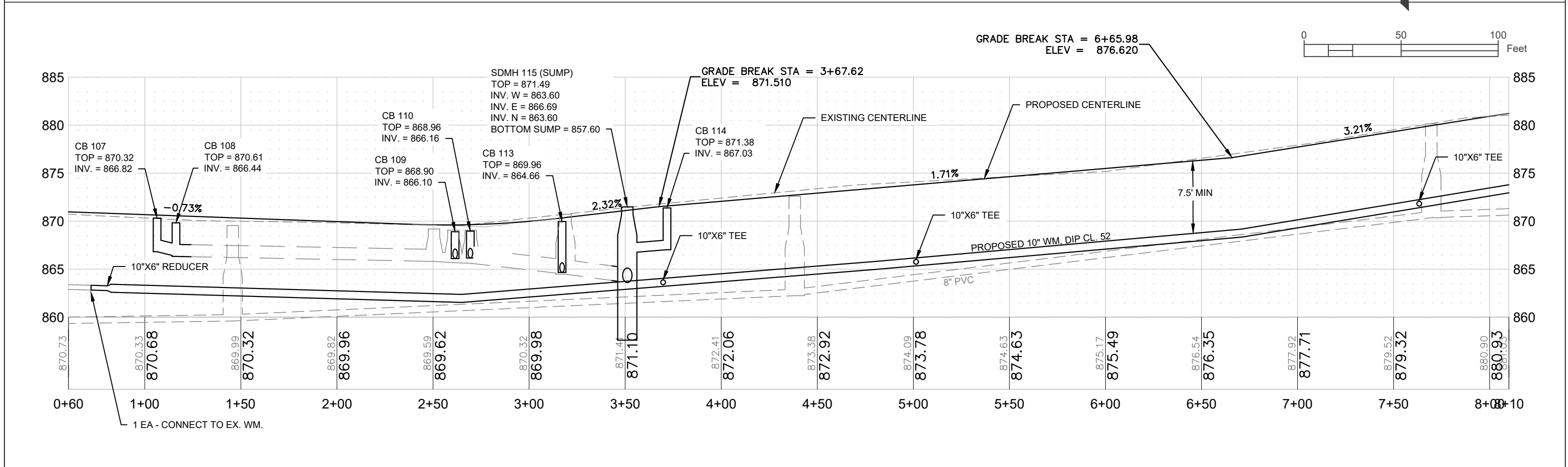


26-1 STREET RECONSTRUCTION

CITY OF COON RAPIDS, MINNESOTA

PLAN AND PROFILE

SHEET 22 OF 65 SHEETS

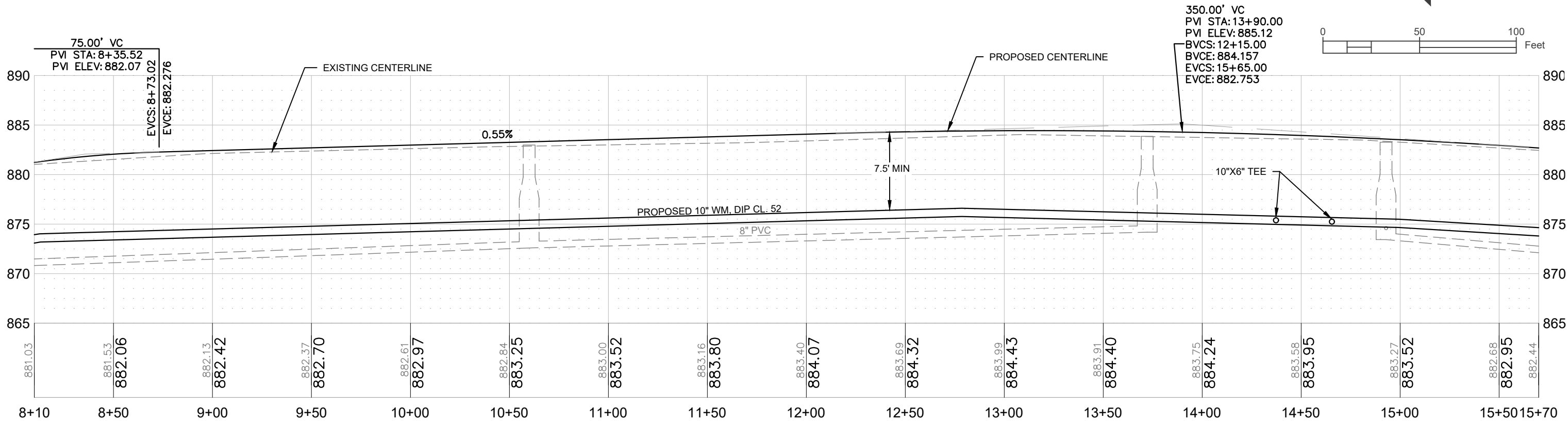
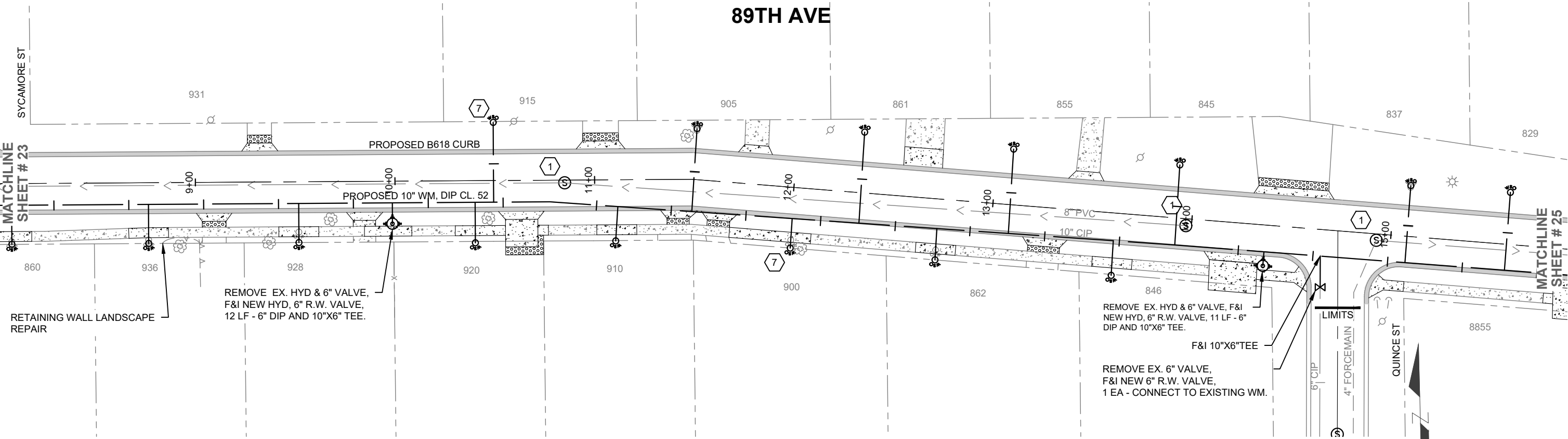


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26-1 STREET RECONSTRUCTION

CITY OF COON RAPIDS, MINNESOTA

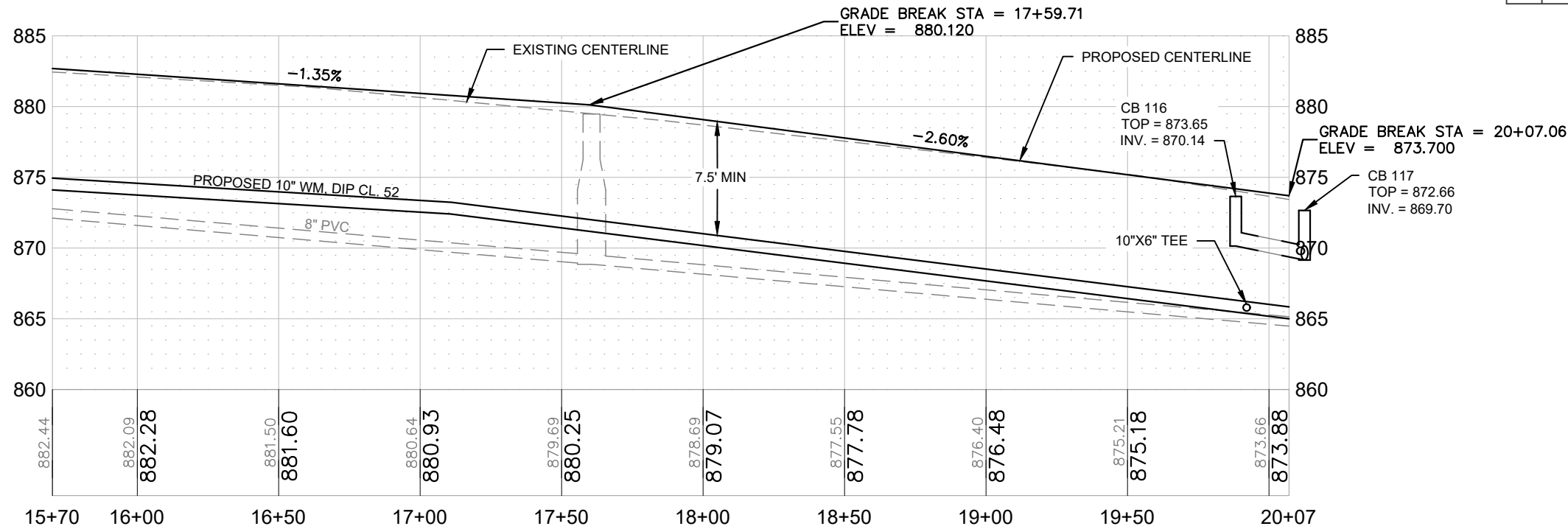
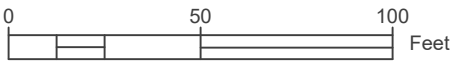
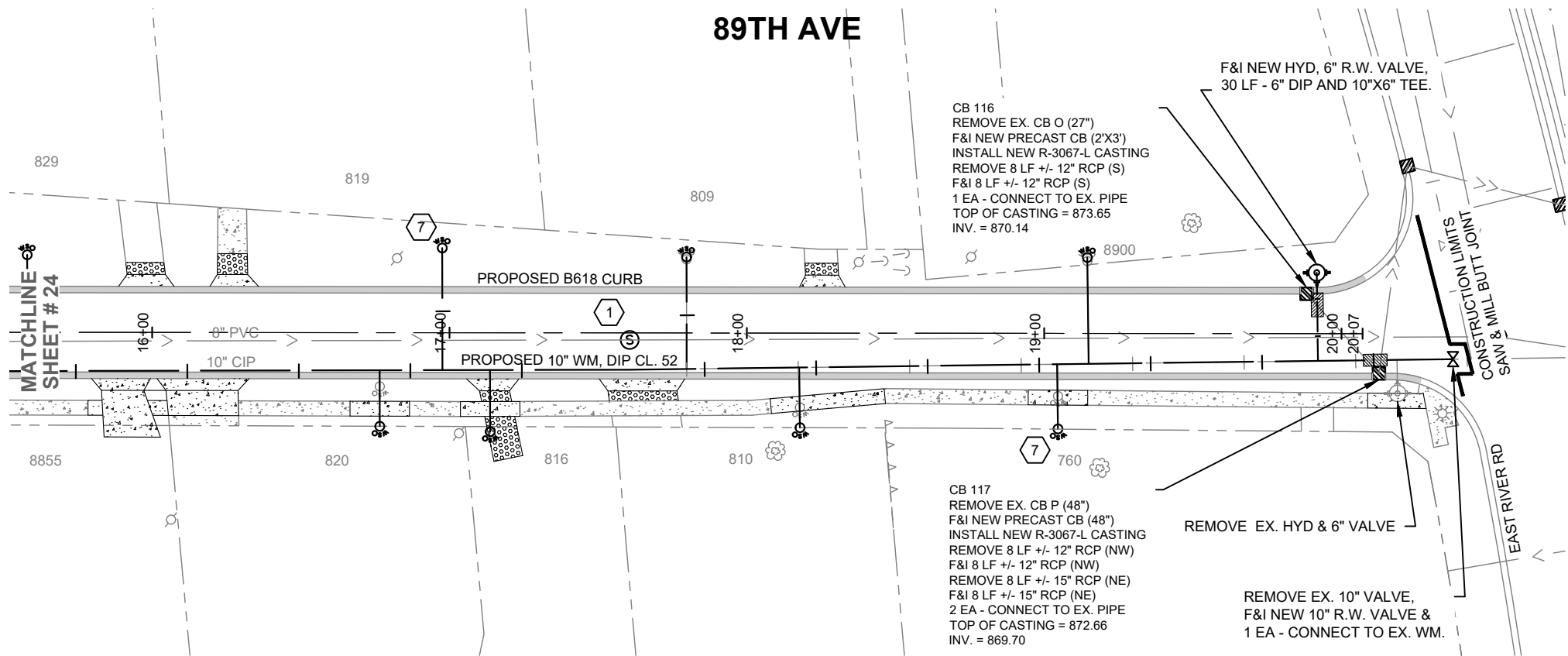
PLAN AND PROFILE

SHEET 24 OF 65 SHEETS

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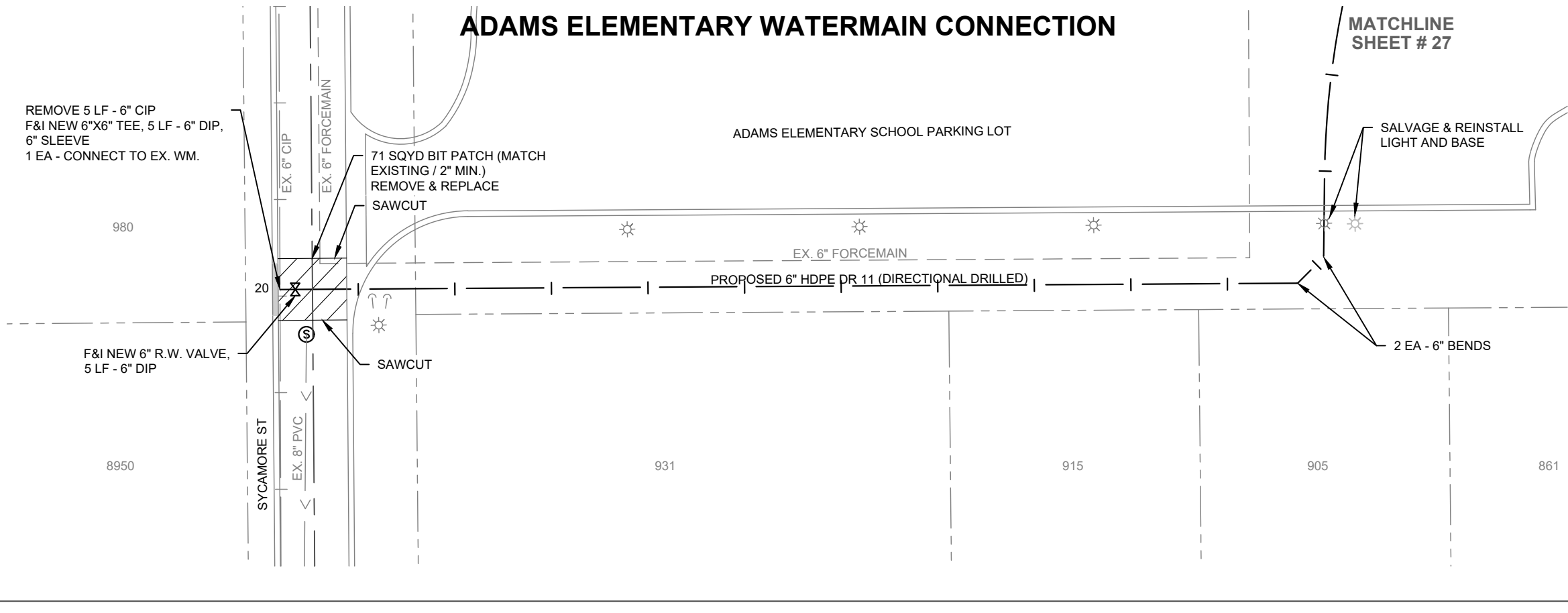
26-1 STREET RECONSTRUCTION

CITY OF COON RAPIDS, MINNESOTA

PLAN AND PROFILE

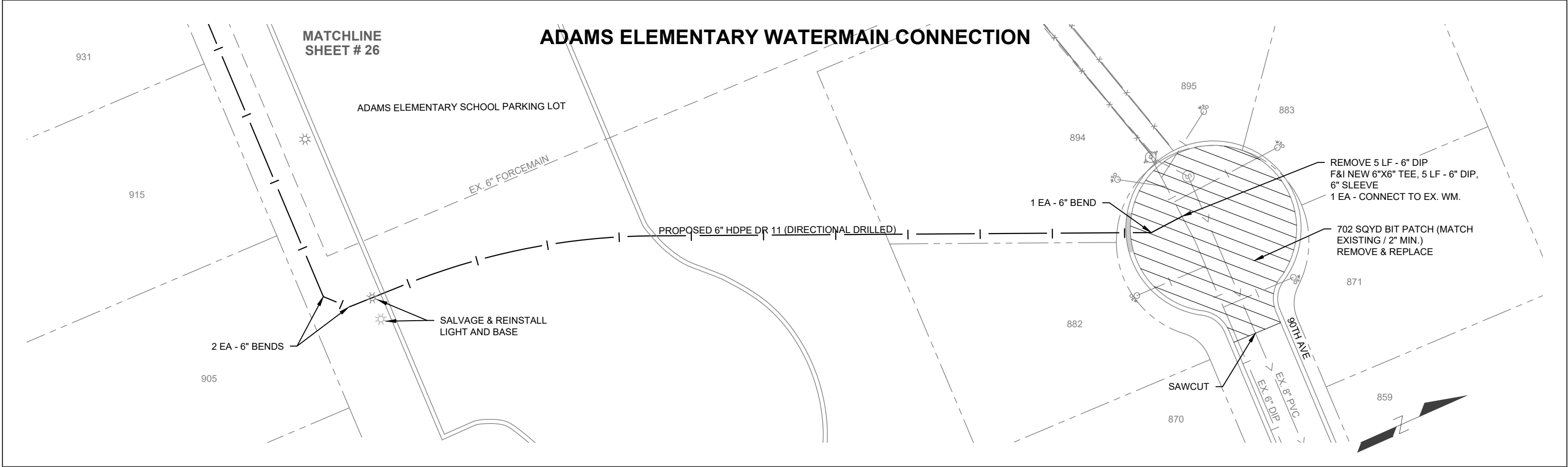
SHEET 25 OF 65 SHEETS

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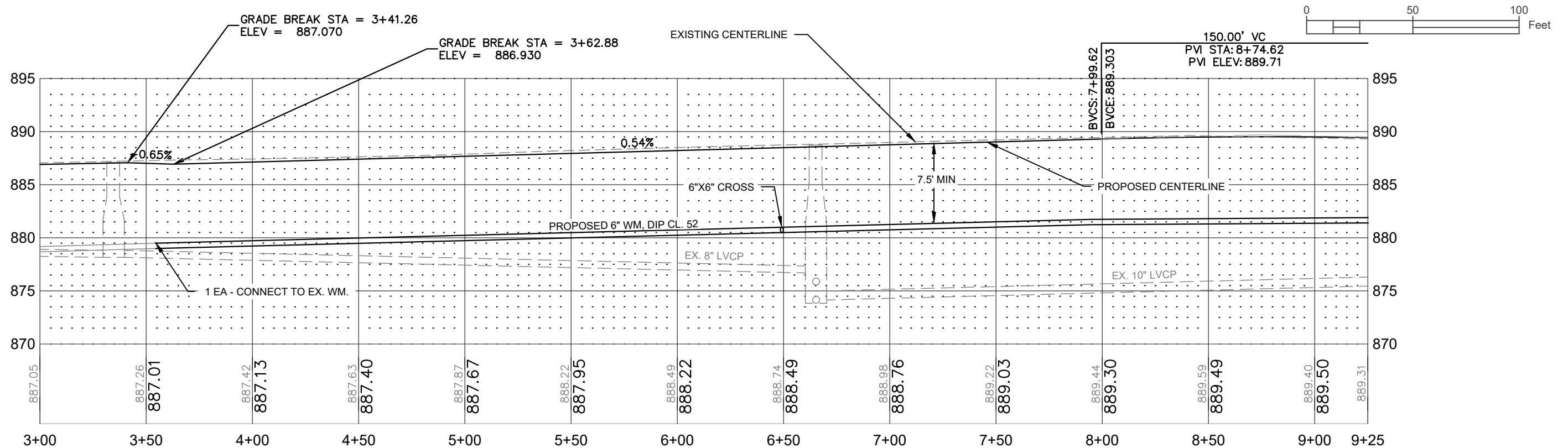


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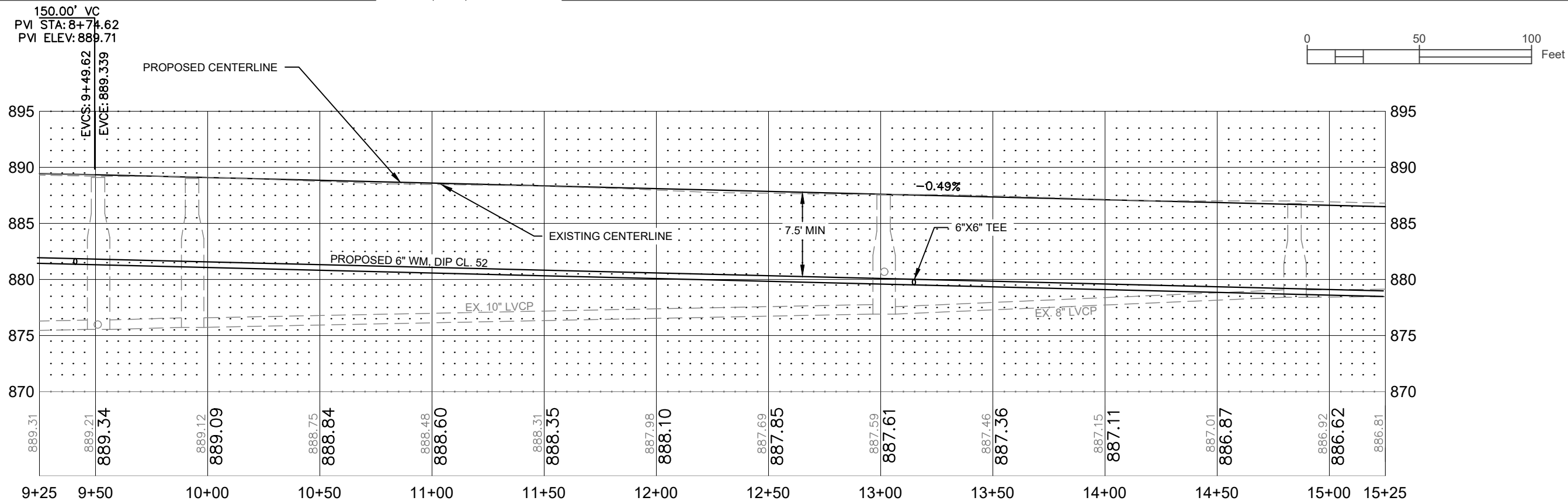
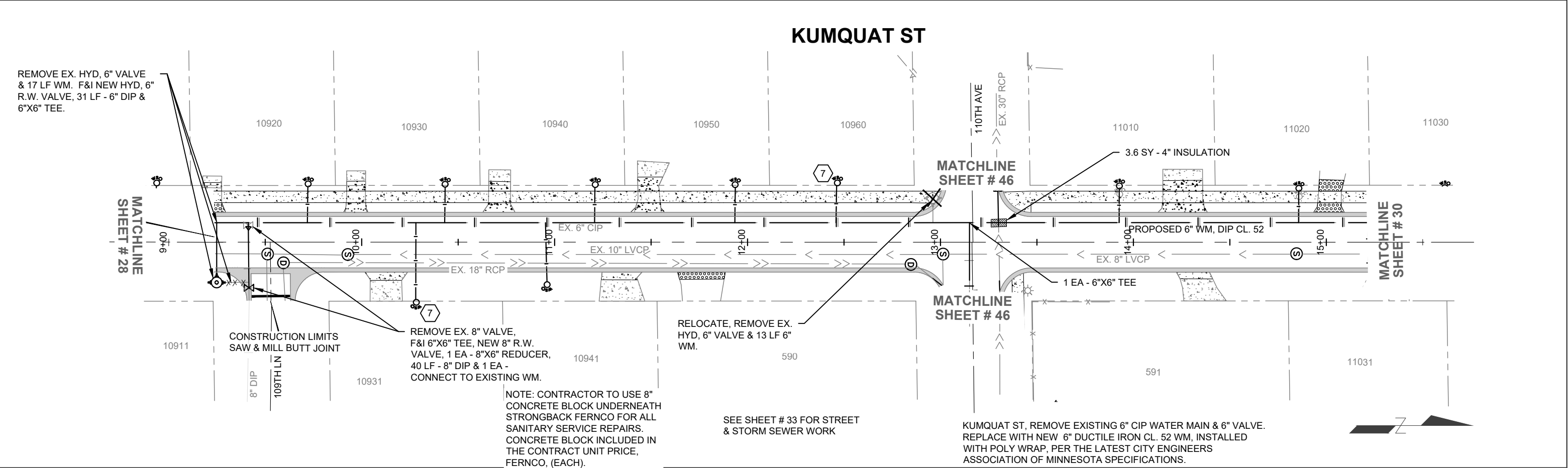


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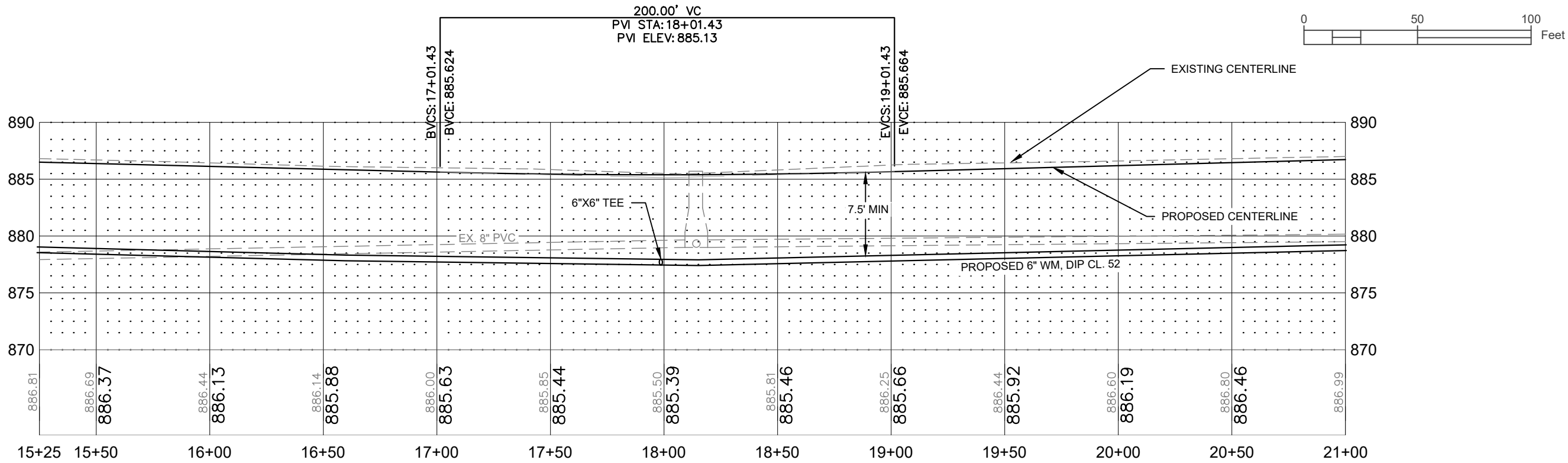
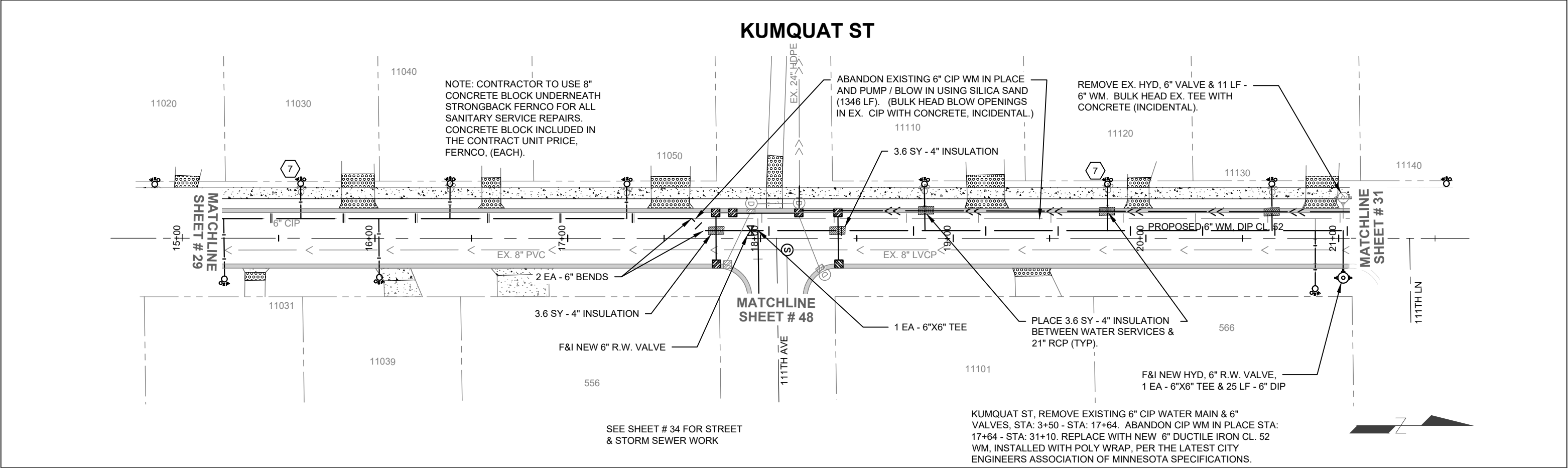
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March 4, 2026

REMOVE EX. 6" VALVE, RELOCATE, F&I NEW 6"x6" TEE, 1 EA - 6" R.W. VALVE AND 3.6 SY - 4" INSULATION.

NOTE: CONTRACTOR TO USE 8" CONCRETE BLOCK UNDERNEATH STRONGBACK FERNCO FOR ALL SANITARY SERVICE REPAIRS. CONCRETE BLOCK INCLUDED IN THE CONTRACT UNIT PRICE, FERNCO, (EACH).

MATCHLINE
SHEET # 51

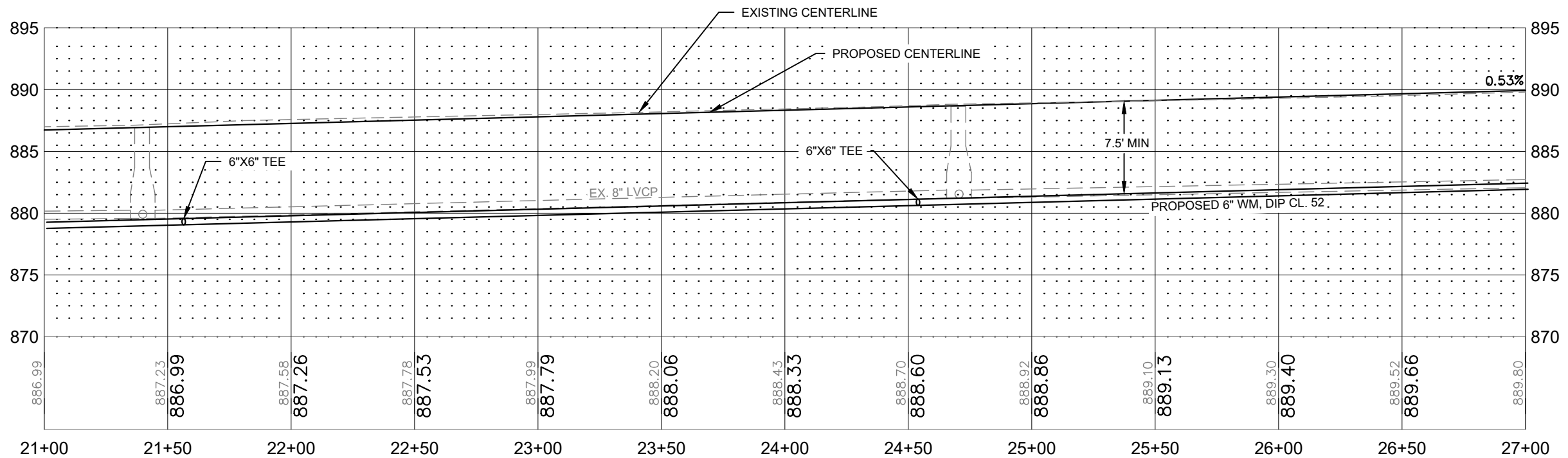
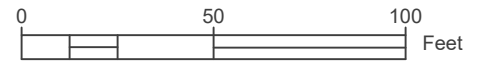
F&I NEW 6"x6" TEE AND 1 EA - 6" R.W. VALVE.

REMOVE / RELOCATE EX. HYD & 6" VALVE, F&I NEW HYD, 6" R.W. VALVE, 13 LF - 6" DIP & 6"x6" TEE.

MATCHLINE
SHEET # 54

SEE SHEET # 35 FOR STREET & STORM SEWER WORK

KUMQUAT ST, REMOVE EXISTING 6" CIP WATER MAIN & 6" VALVES, STA: 3+50 - STA: 17+64. ABANDON CIP WM IN PLACE STA: 17+64 - STA: 31+10. REPLACE WITH NEW 6" DUCTILE IRON CL. 52 WM, INSTALLED WITH POLY WRAP, PER THE LATEST CITY ENGINEERS ASSOCIATION OF MINNESOTA SPECIFICATIONS.



NO.	DATE	REVISIONS



CITY OF COON RAPIDS
ENGINEERING DEPARTMENT
11155 ROBINSON DRIVE
COON RAPIDS, MN. 55433-3761
763-755-2880
FAX 163-767-6491

SURVEY:	R.M.T
DESIGNED:	J.W.H.
CHECKED:	M.C.H.
DATE:	11/10/2025

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE STATE OF MINNESOTA.

NAME: Mark C. Hansen, P.E.
LICENSE # 43920
DATE: 3/6/2025



26-1 STREET RECONSTRUCTION

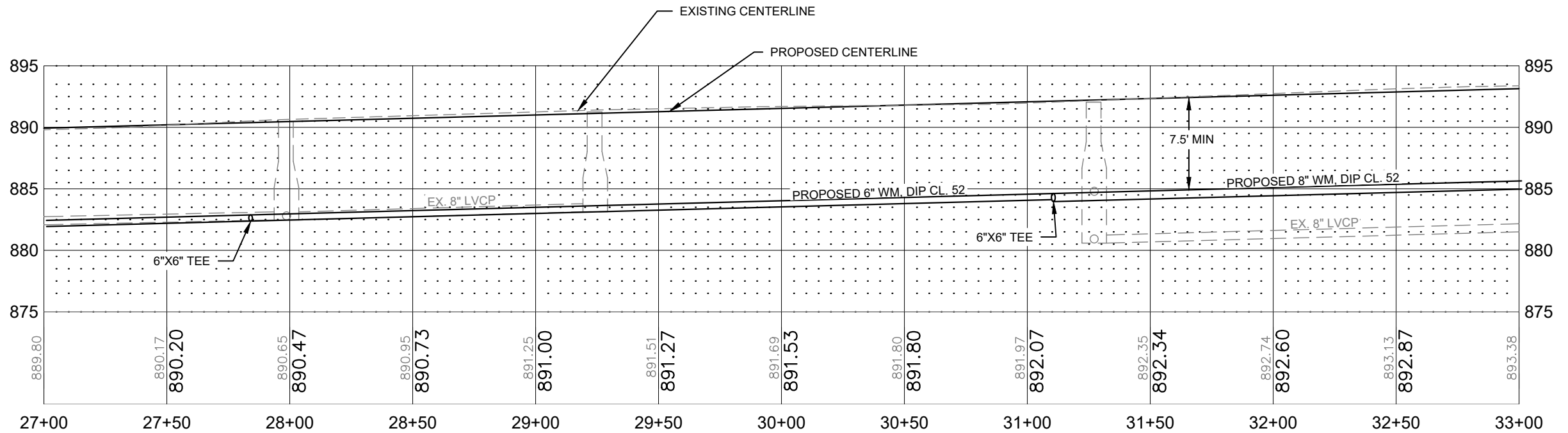
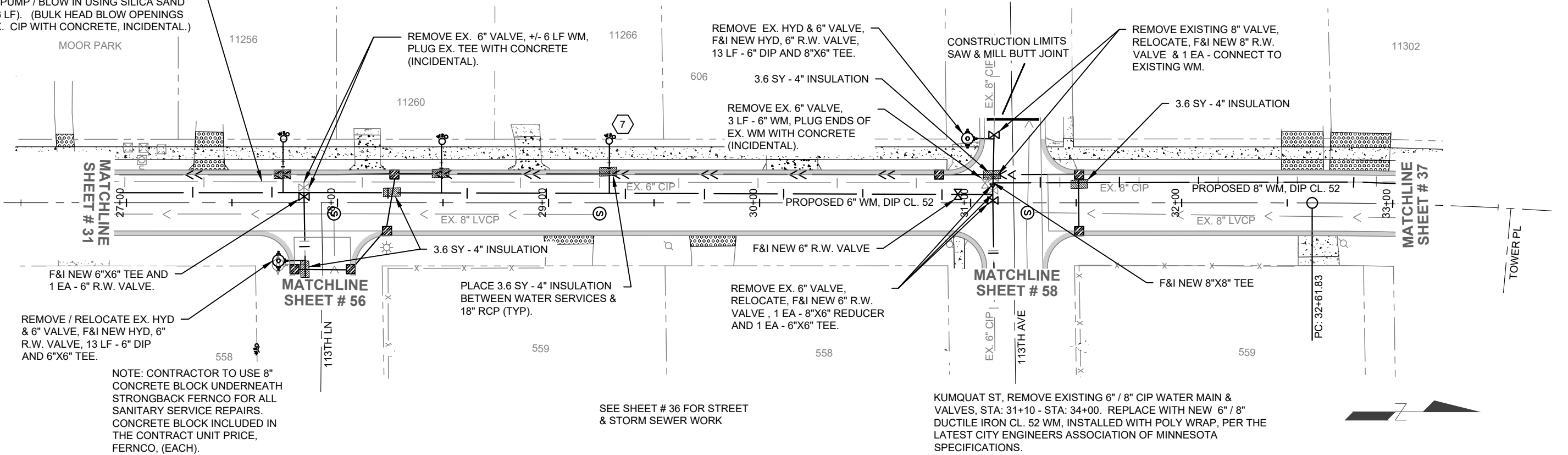
CITY OF COON RAPIDS, MINNESOTA

PLAN AND PROFILE

SHEET 31 OF 65 SHEETS

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ABANDON EXISTING 6" CIP WM IN PLACE AND PUMP / BLOW IN USING SILICA SAND (1346 LF). (BULK HEAD BLOW OPENINGS IN EX. CIP WITH CONCRETE, INCIDENTAL.)



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 **COON RAPIDS**
MINNESOTA

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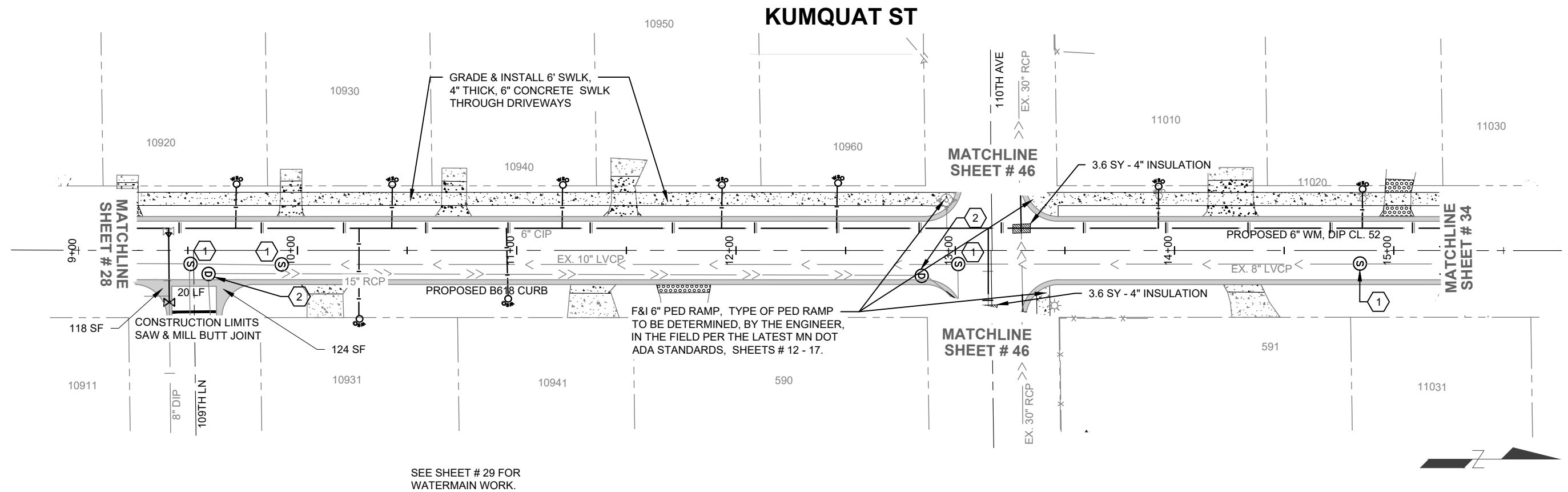


26-1 STREET RECONSTRUCTION

CITY OF COON RAPIDS, MINNESOTA

PLAN AND PROFILE

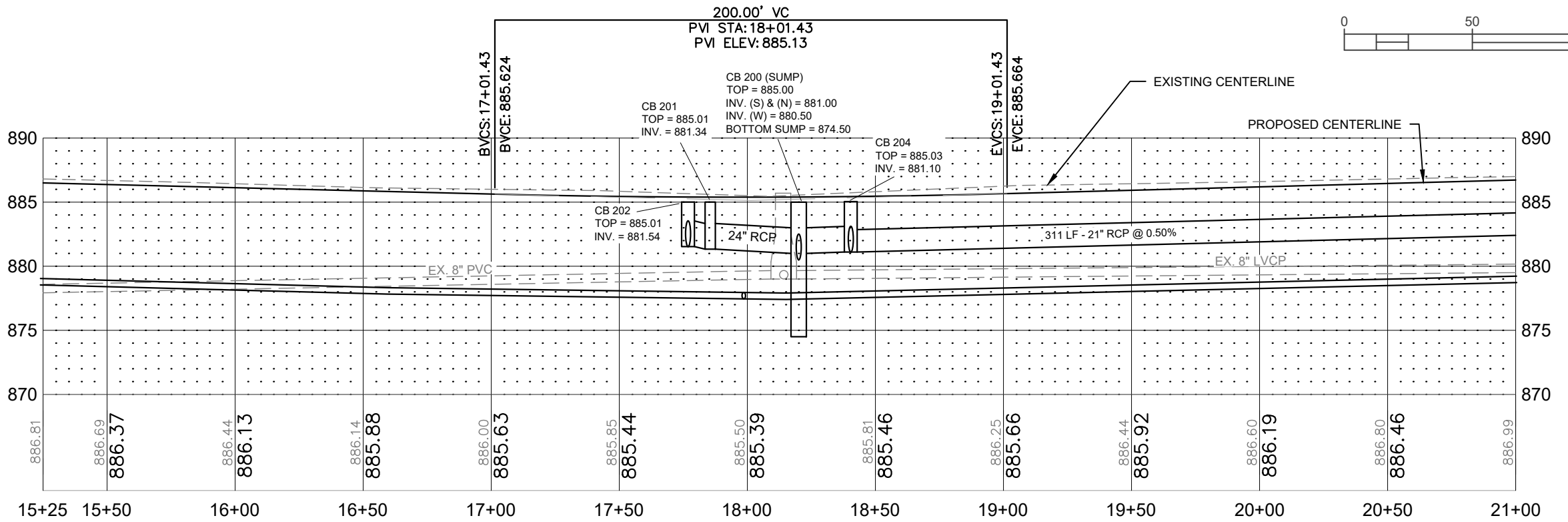
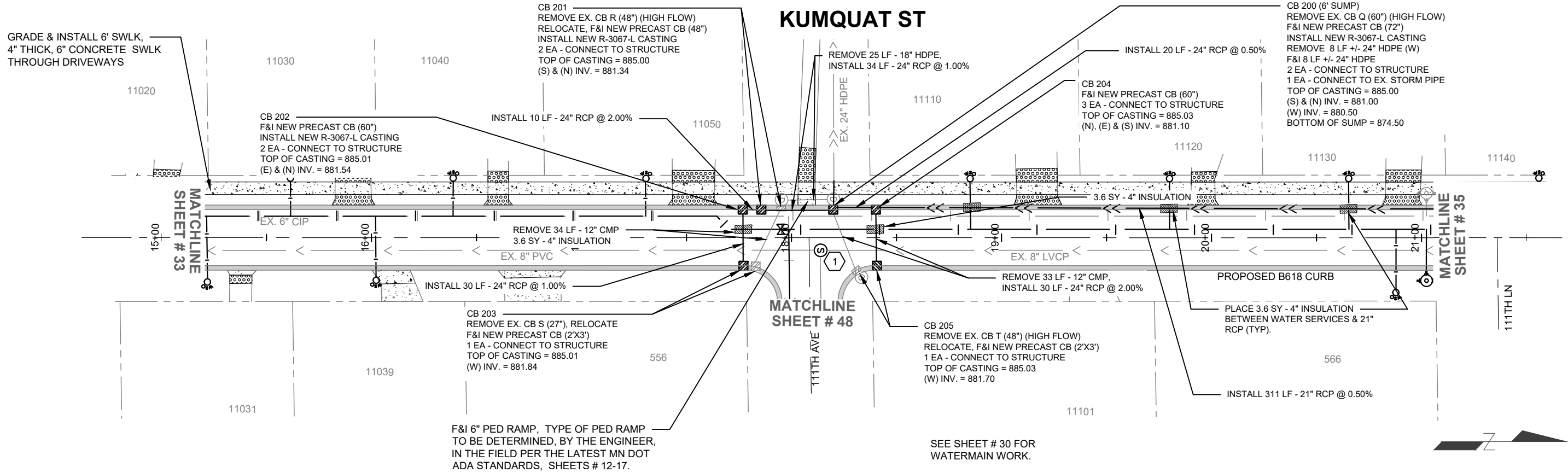
SHEET 32 OF 65 SHEETS



NO.	DATE	REVISIONS	 CITY OF COON RAPIDS ENGINEERING DEPARTMENT 11155 ROBINSON DRIVE COON RAPIDS, MN. 55433-3761 763-755-2880 FAX 163-767-6491	SURVEY: R.M.T DESIGNED: J.W.H. CHECKED: M.C.H. DATE: 11/10/2025	I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE STATE OF MINNESOTA. NAME: Mark C. Hansen, P.E. LICENSE # 43920 DATE: 3/6/2025 	26-1 STREET RECONSTRUCTION CITY OF COON RAPIDS, MINNESOTA	PLAN AND PROFILE SHEET 33 OF 65 SHEETS

K:\2026 CAD\26-1\DESIGN DRAWINGS\26-1_STREET RECONSTRUCTION

March 4, 2026



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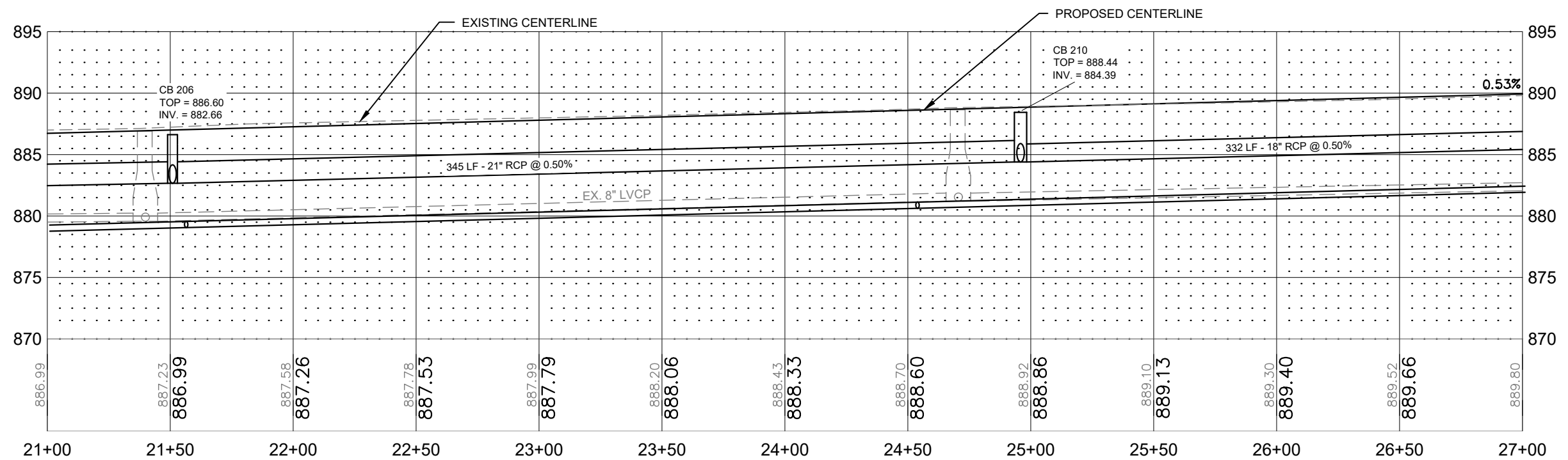
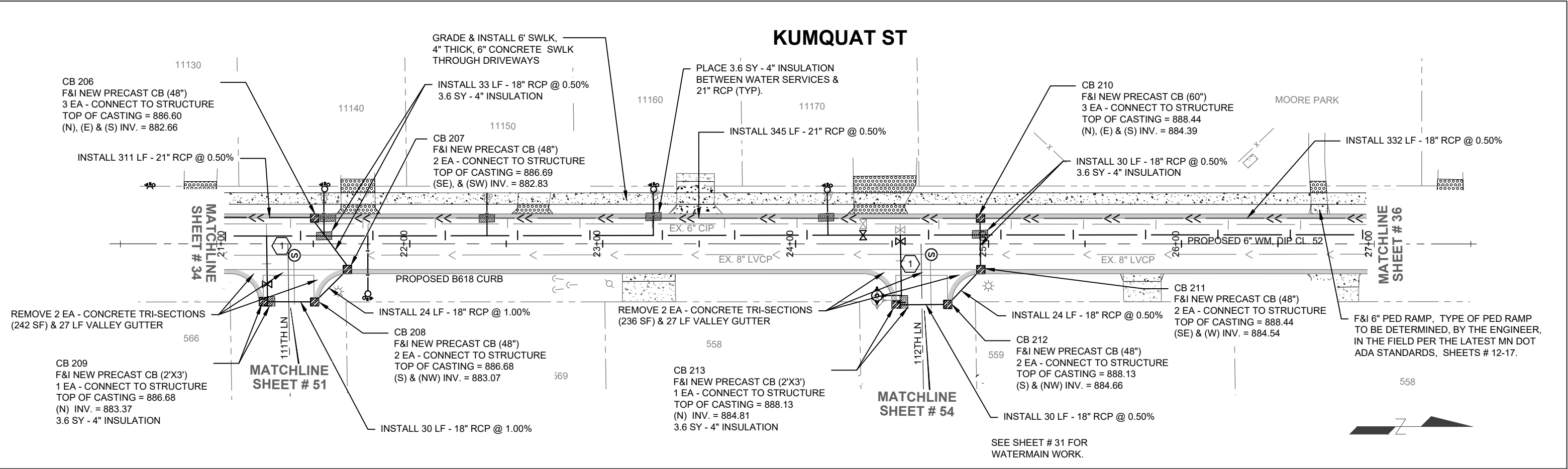
26-1 STREET RECONSTRUCTION

CITY OF COON RAPIDS, MINNESOTA

PLAN AND PROFILE

SHEET 34 OF 65 SHEETS

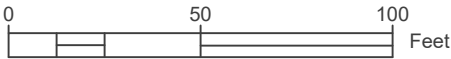
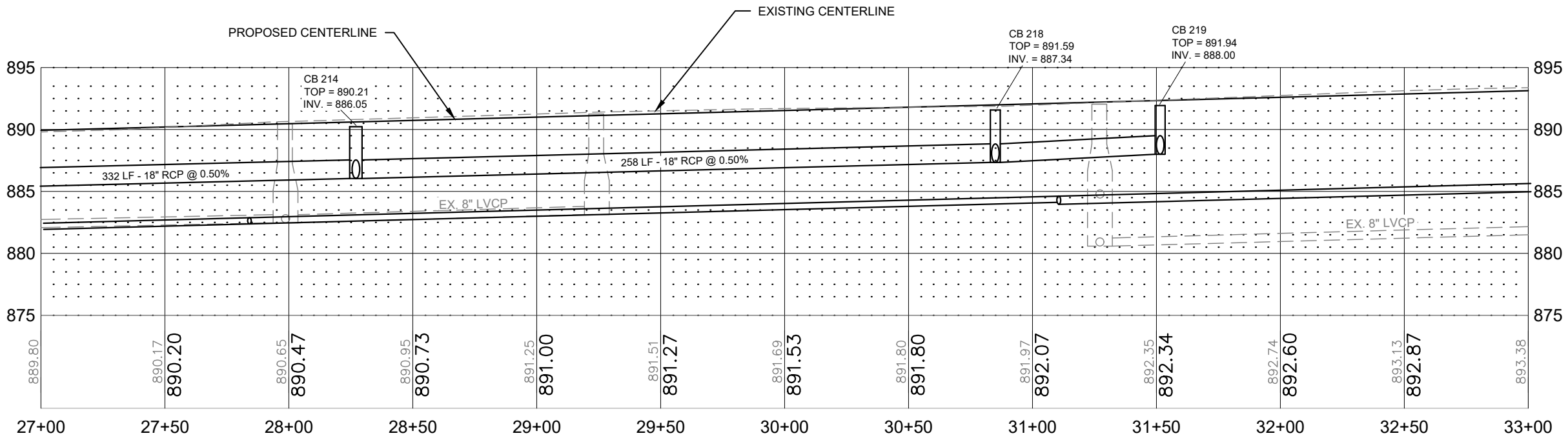
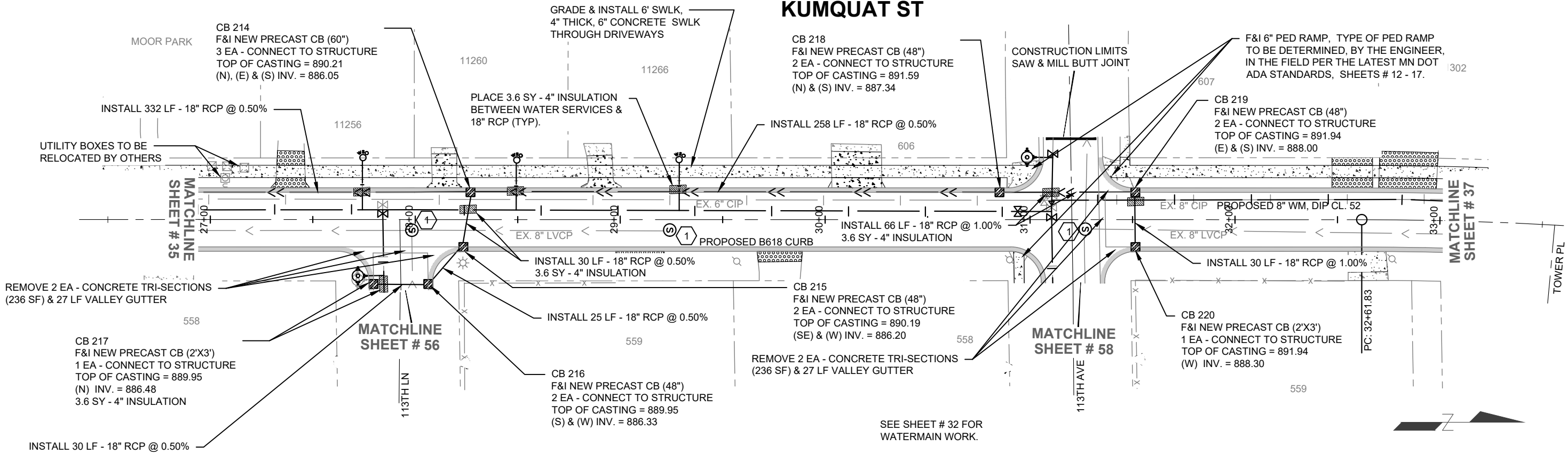
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				DESIGNED: J.W.H.			
				CHECKED: M.C.H.			
				DATE: 11/10/2025			
						CITY OF COON RAPIDS, MINNESOTA	SHEET 35 OF 65 SHEETS

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KUMQUAT ST



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26-1 STREET RECONSTRUCTION

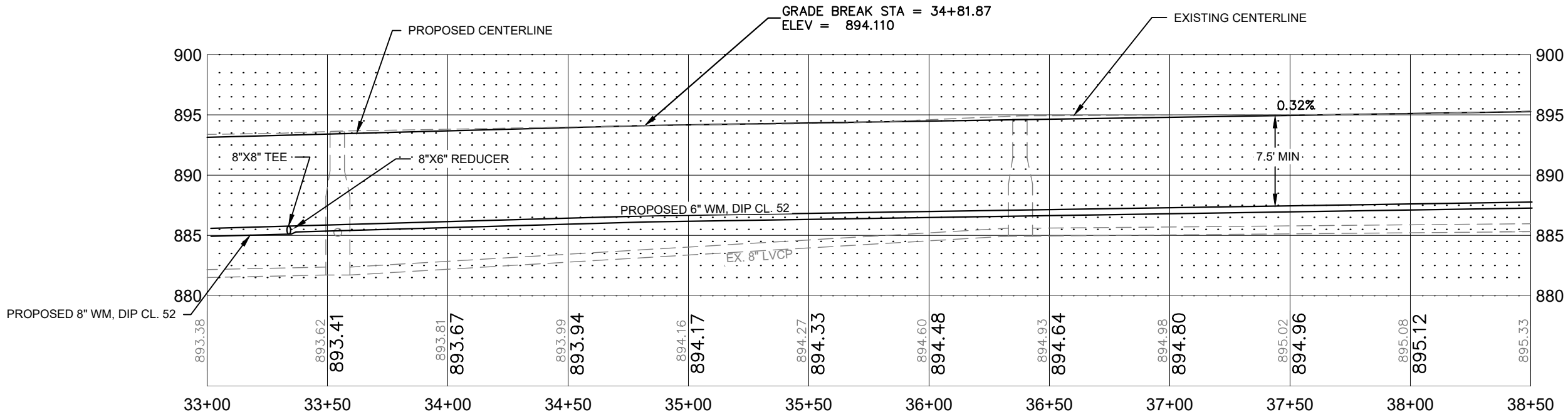
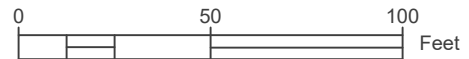
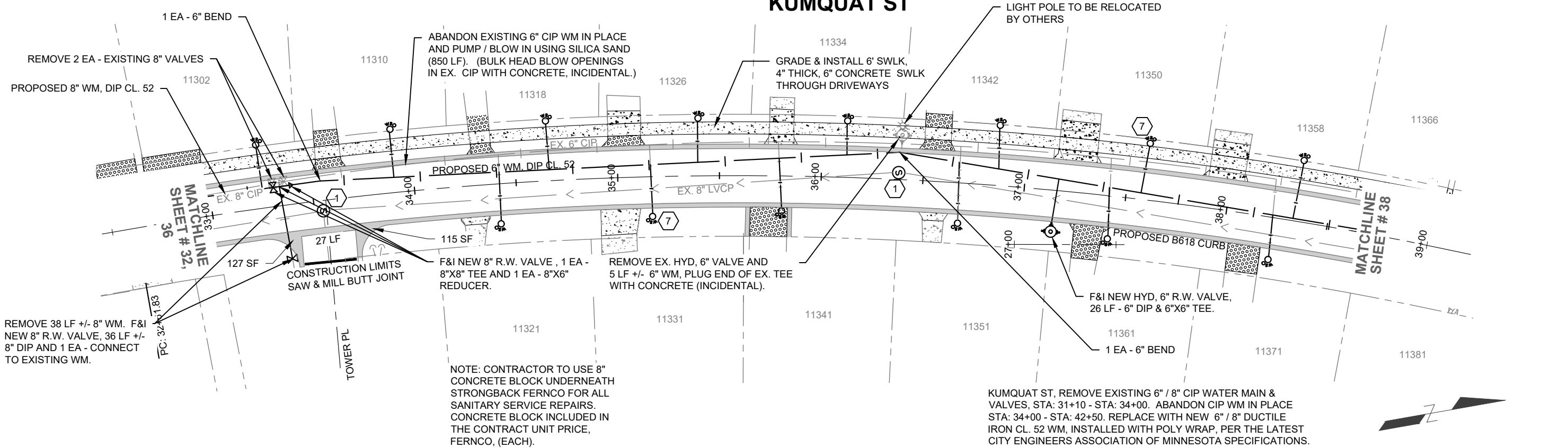
CITY OF COON RAPIDS, MINNESOTA

PLAN AND PROFILE

SHEET 36 OF 65 SHEETS

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26-1 STREET RECONSTRUCTION

CITY OF COON RAPIDS, MINNESOTA

PLAN AND PROFILE

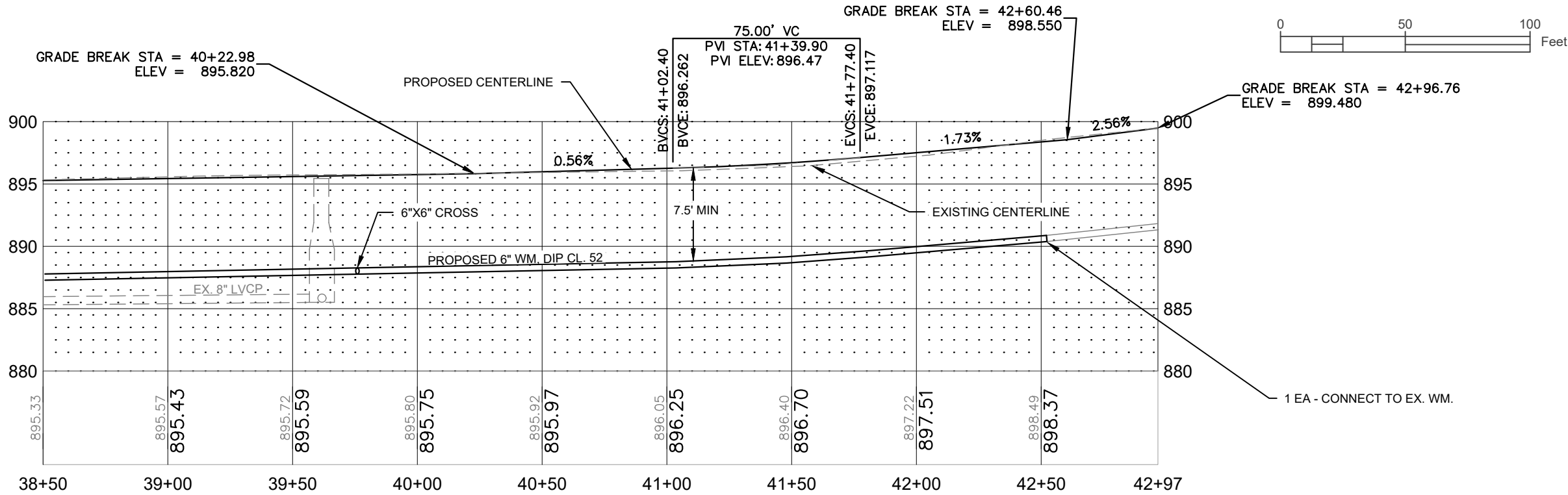
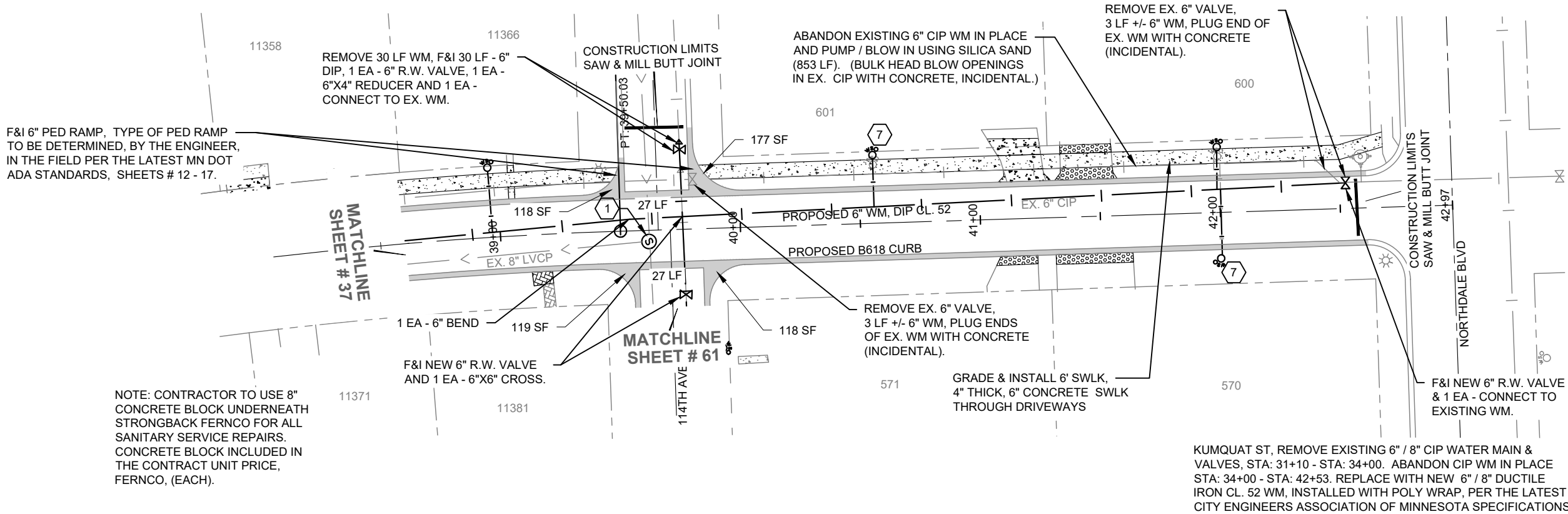
SHEET 37 OF 65 SHEETS

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March 4, 2026

KUMQUAT ST



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M.C.H.

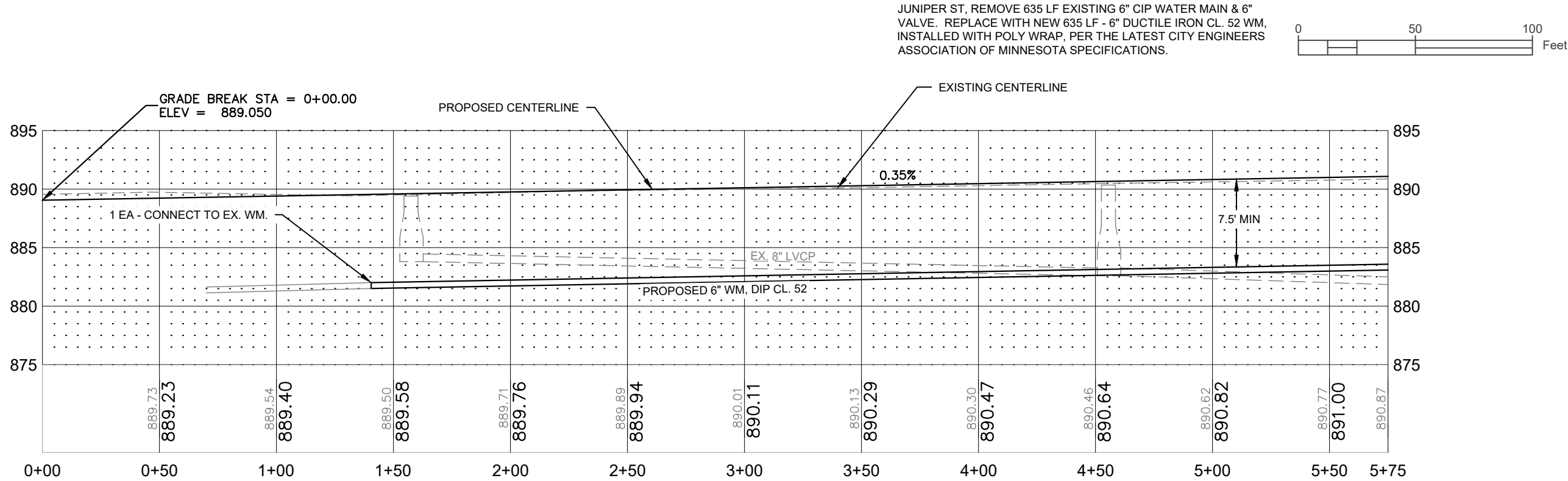
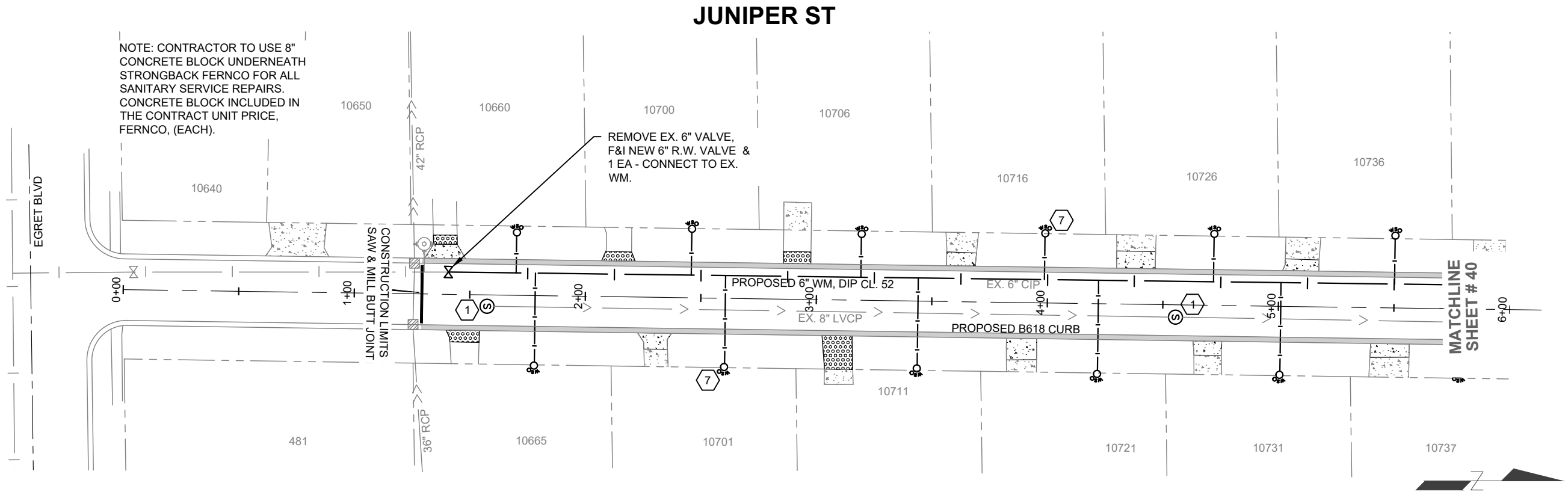
26-1 STREET RECONSTRUCTION

CITY OF COON RAPIDS, MINNESOTA

PLAN AND PROFILE

SHEET 38 OF 65 SHEETS

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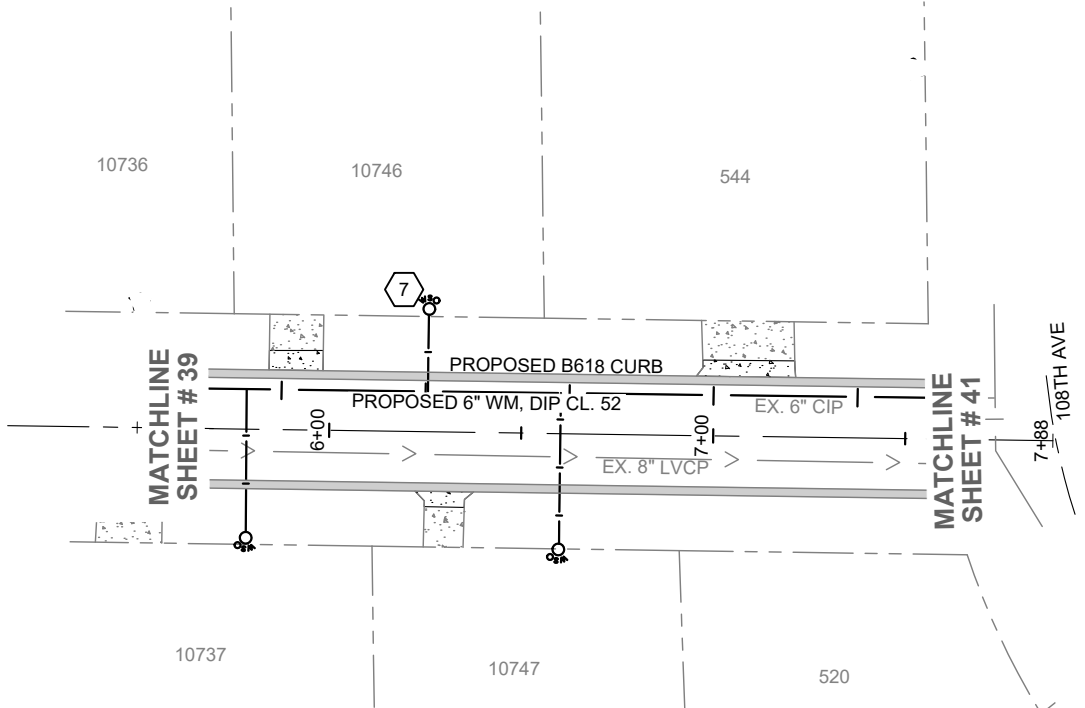
CITY OF COON RAPIDS, MINNESOTA

PLAN AND PROFILE

SHEET 39 OF 65 SHEETS

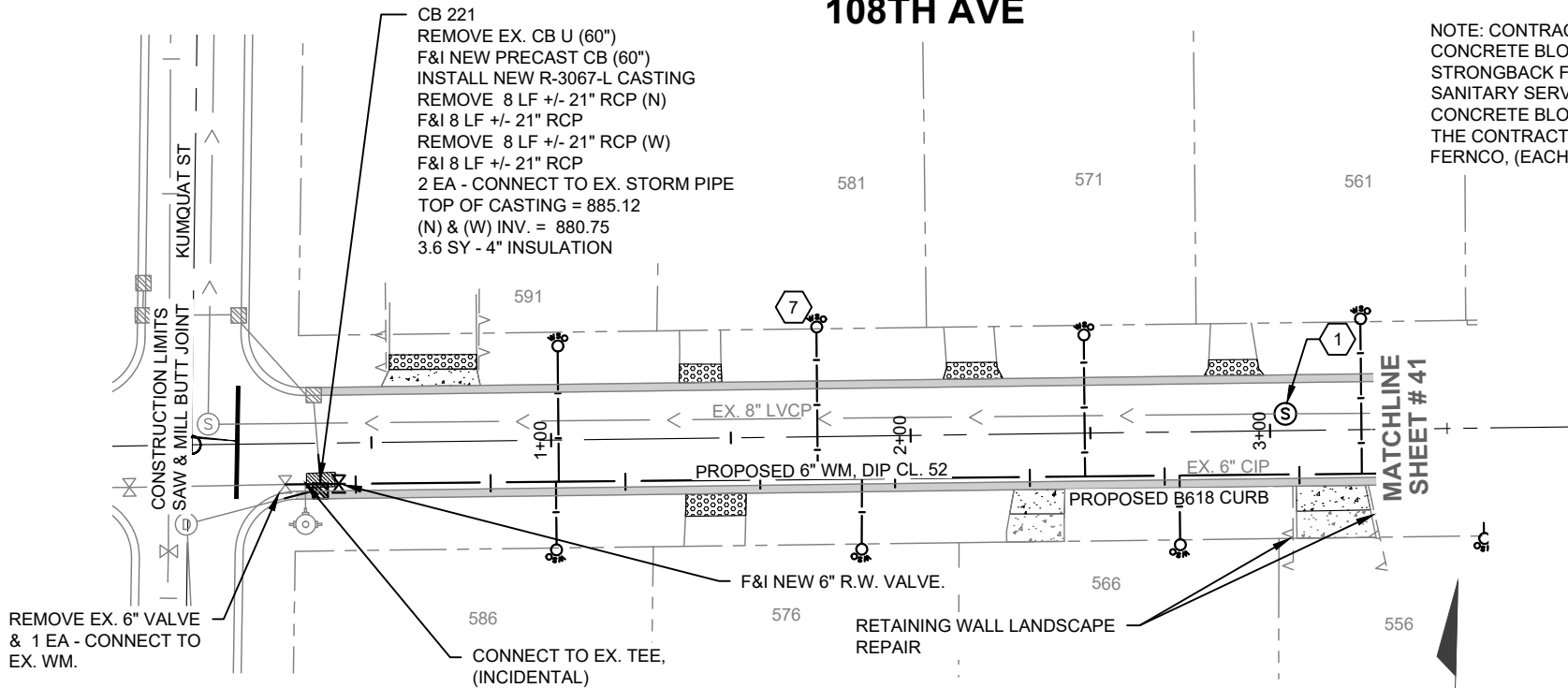
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JUNIPER ST



JUNIPER ST, REMOVE 635 LF EXISTING 6" CIP WATER MAIN & 6" VALVE. REPLACE WITH NEW 635 LF - 6" DUCTILE IRON CL. 52 WM, INSTALLED WITH POLY WRAP, PER THE LATEST CITY ENGINEERS ASSOCIATION OF MINNESOTA SPECIFICATIONS.

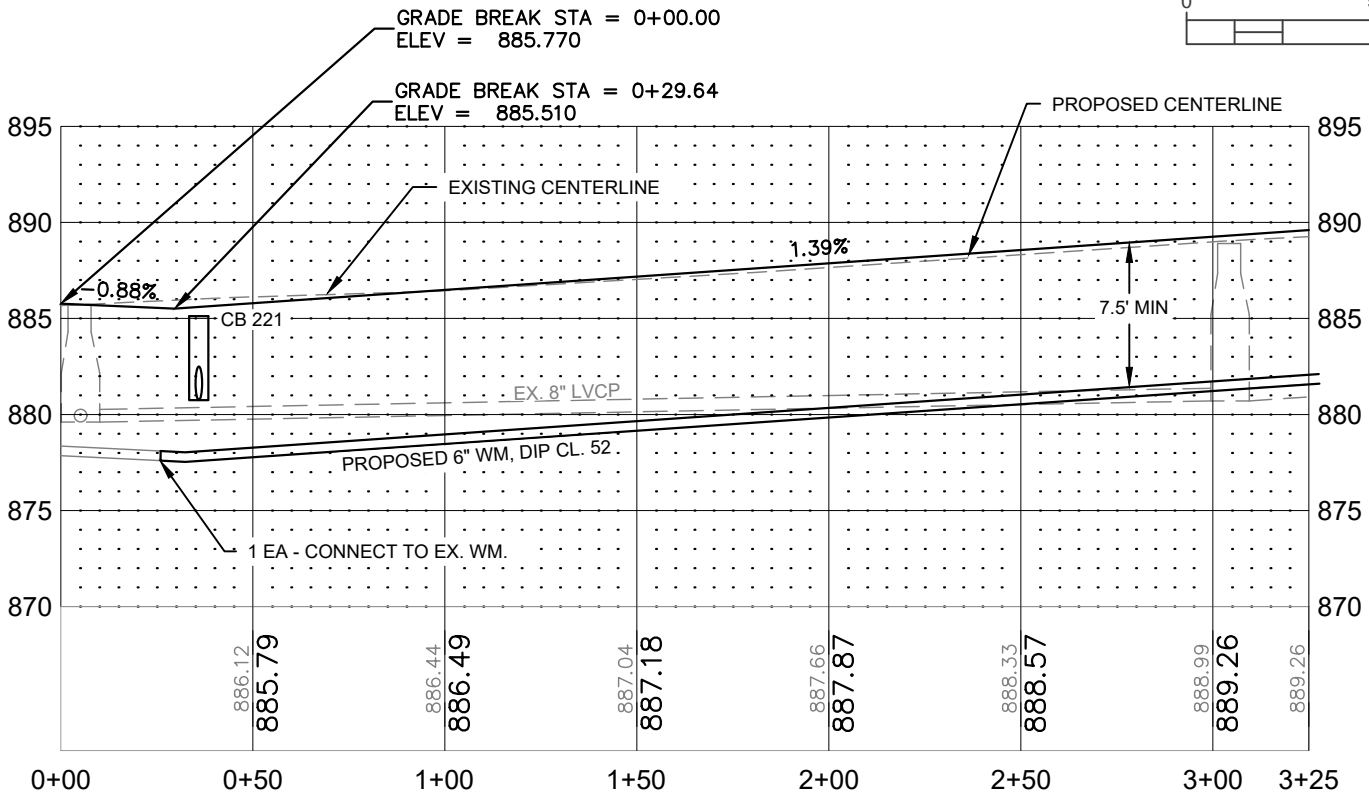
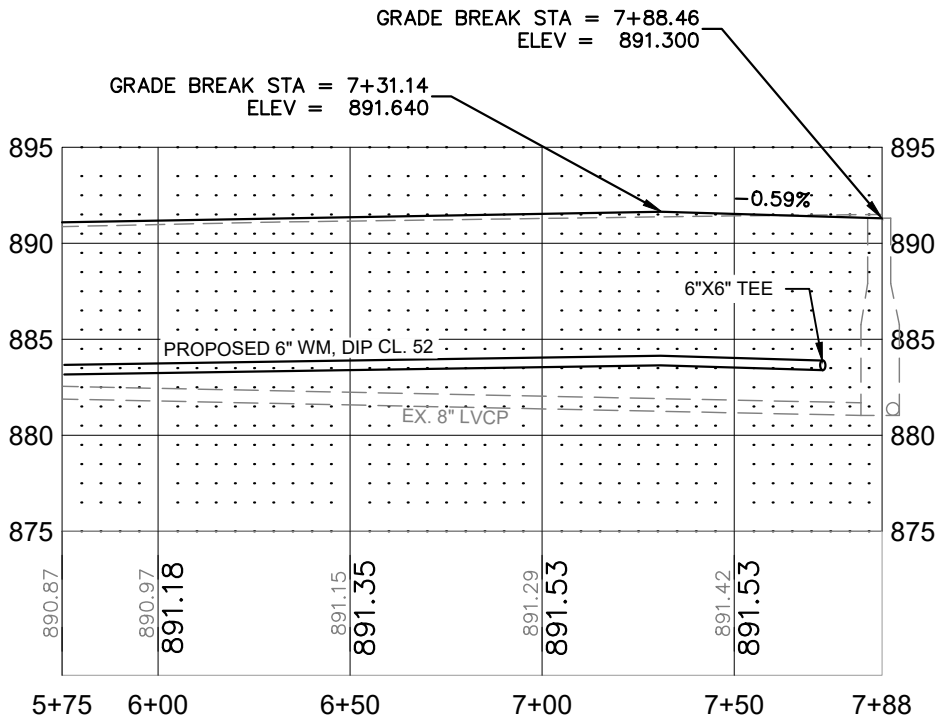
108TH AVE



CB 221
REMOVE EX. CB U (60")
F&I NEW PRECAST CB (60")
INSTALL NEW R-3067-L CASTING
REMOVE 8 LF +/- 21" RCP (N)
F&I 8 LF +/- 21" RCP
REMOVE 8 LF +/- 21" RCP (W)
F&I 8 LF +/- 21" RCP
2 EA - CONNECT TO EX. STORM PIPE
TOP OF CASTING = 885.12
(N) & (W) INV. = 880.75
3.6 SY - 4" INSULATION

NOTE: CONTRACTOR TO USE 8" CONCRETE BLOCK UNDERNEATH STRONGBACK FERNCO FOR ALL SANITARY SERVICE REPAIRS. CONCRETE BLOCK INCLUDED IN THE CONTRACT UNIT PRICE, FERNCO, (EACH).

108TH AVE, REMOVE 791 LF EXISTING 6" CIP WATER MAIN & 6" VALVE. REPLACE WITH NEW 791 LF - 6" DUCTILE IRON CL. 52 WM, INSTALLED WITH POLY WRAP, PER THE LATEST CITY ENGINEERS ASSOCIATION OF MINNESOTA SPECIFICATIONS.



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NAME: Mark C. Hansen, P.E.
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26-1 STREET RECONSTRUCTION

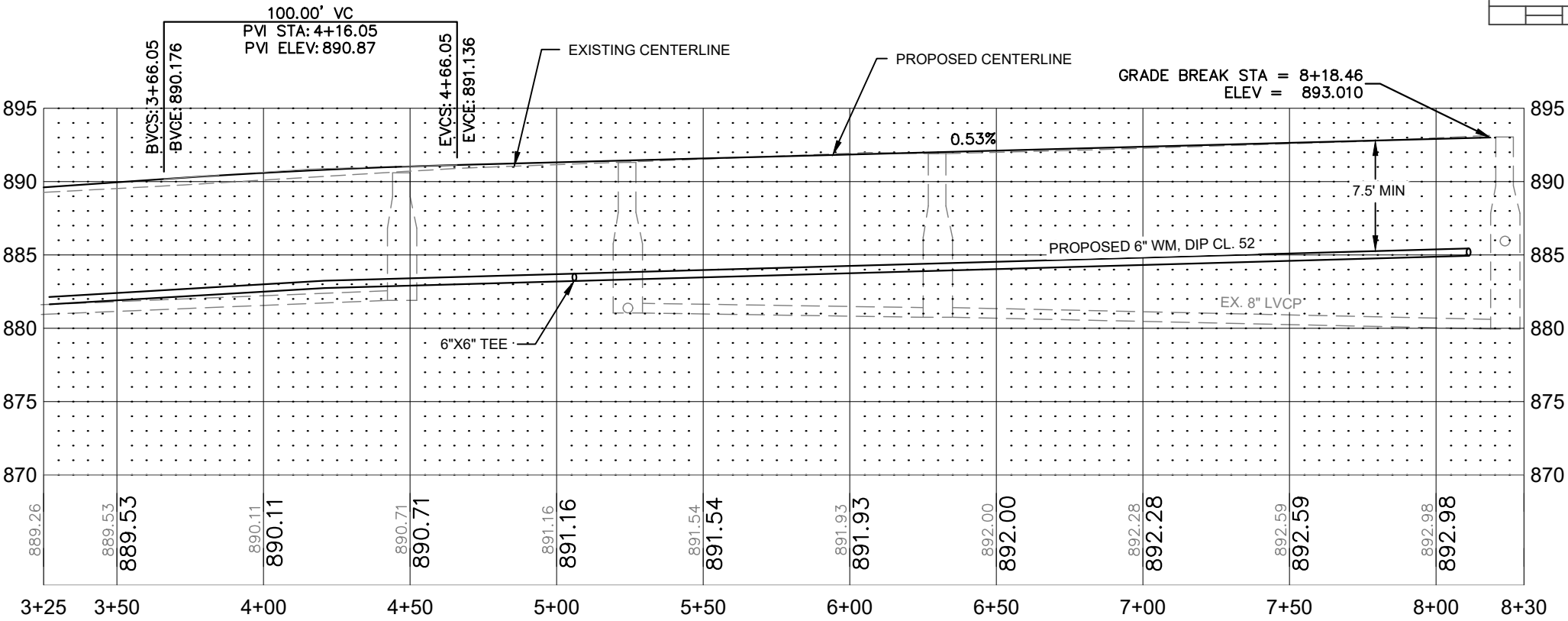
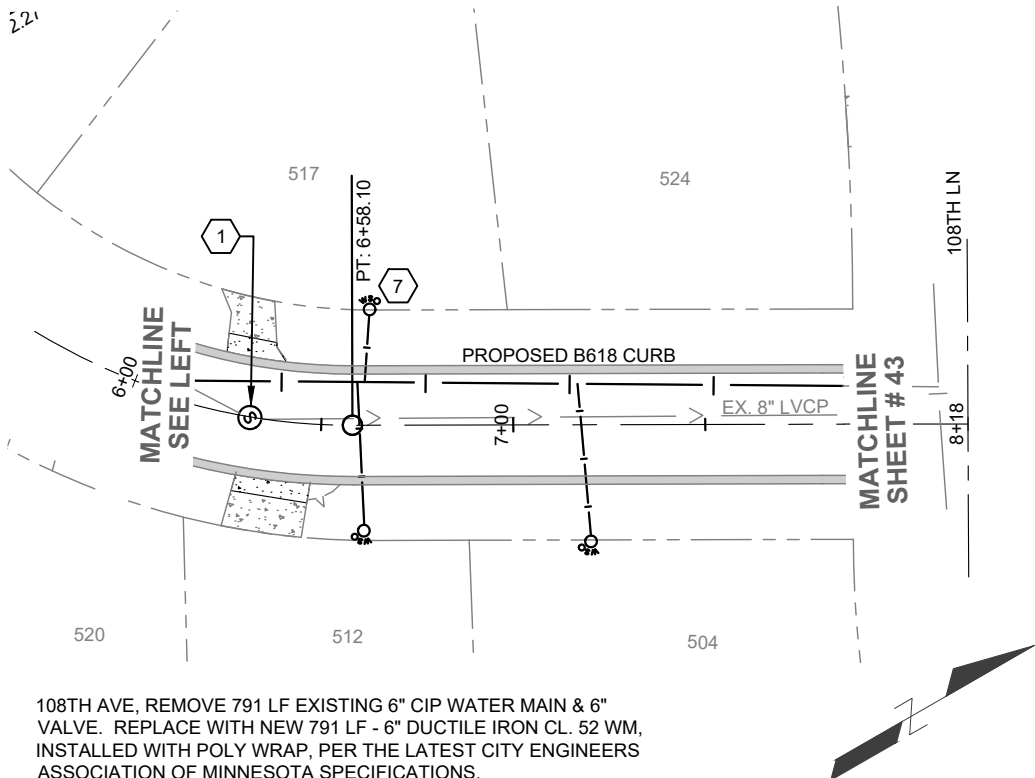
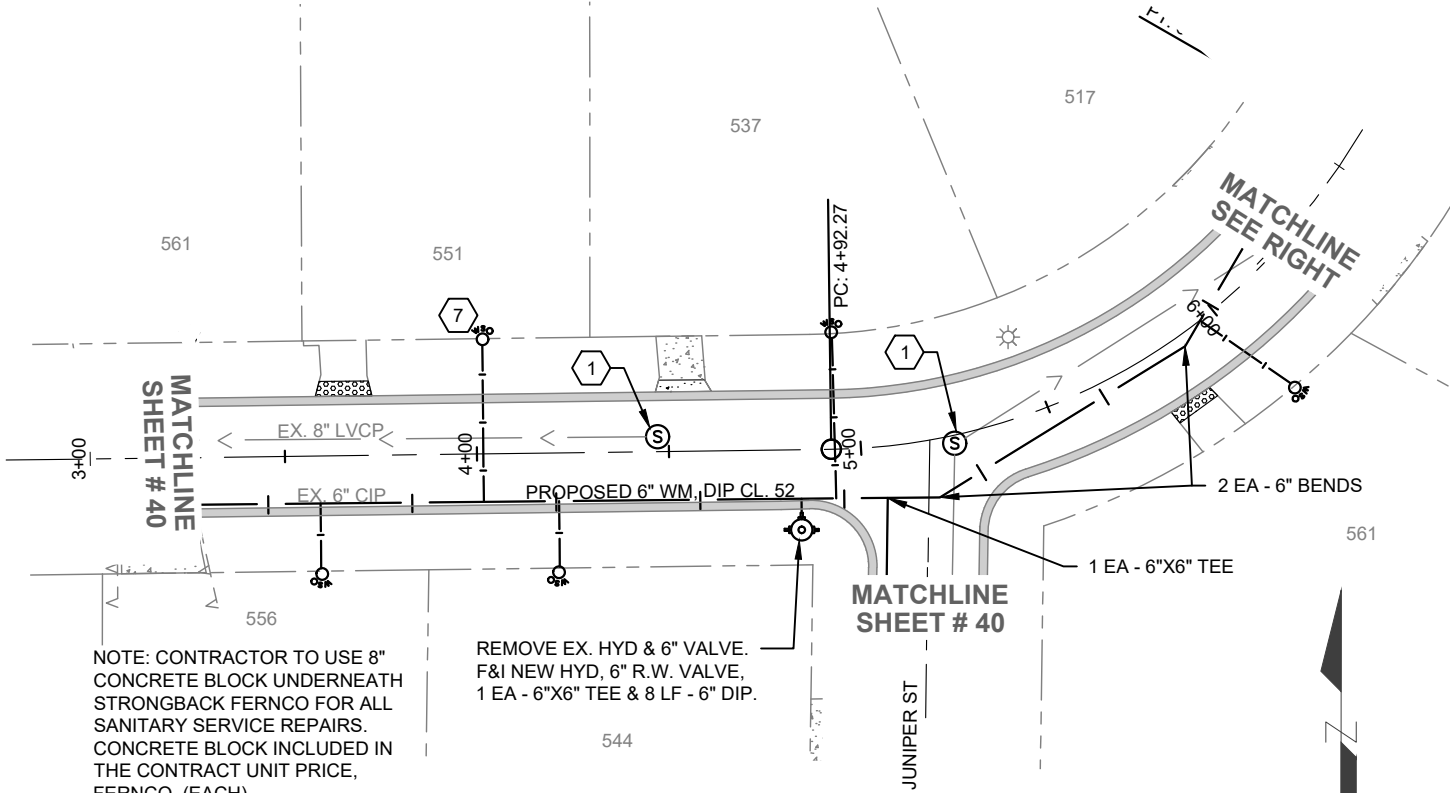
CITY OF COON RAPIDS, MINNESOTA

PLAN AND PROFILE

SHEET 40 OF 65 SHEETS

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108TH AVE



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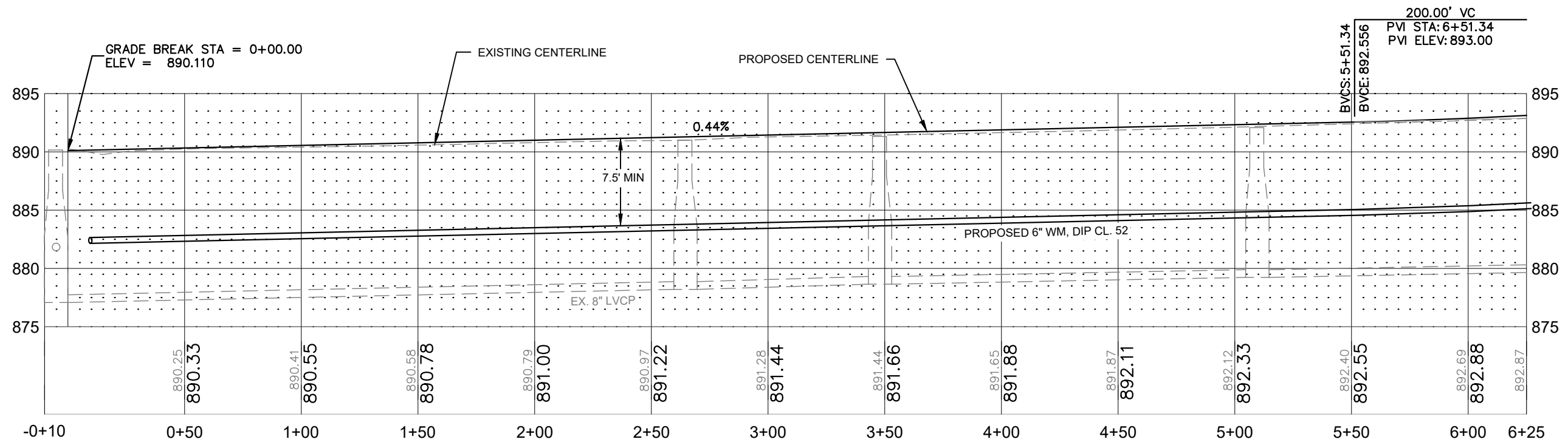
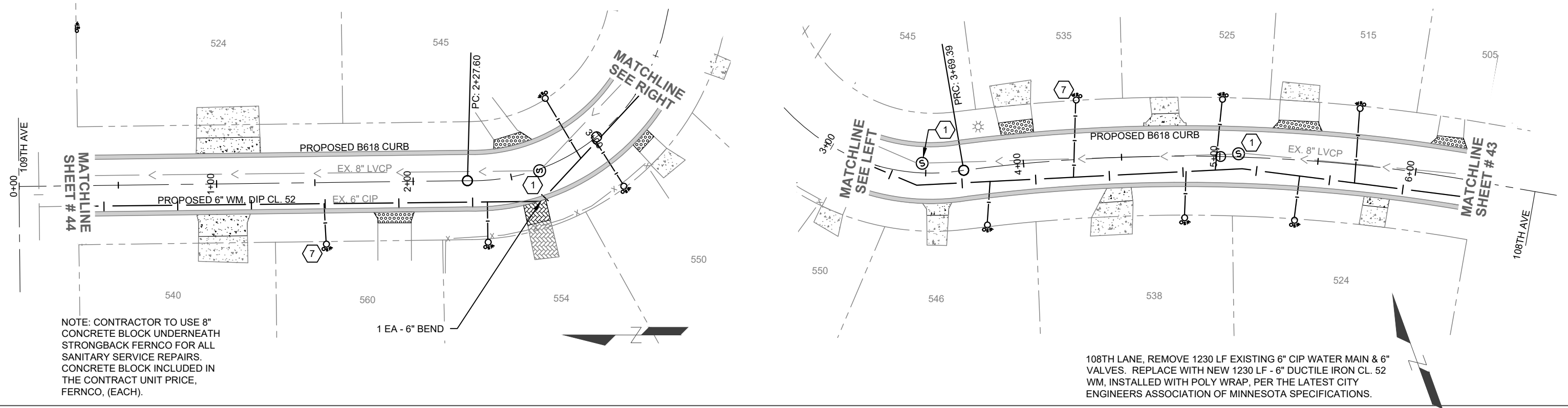
26-1 STREET RECONSTRUCTION

CITY OF COON RAPIDS, MINNESOTA

PLAN AND PROFILE

SHEET 41 OF 65 SHEETS

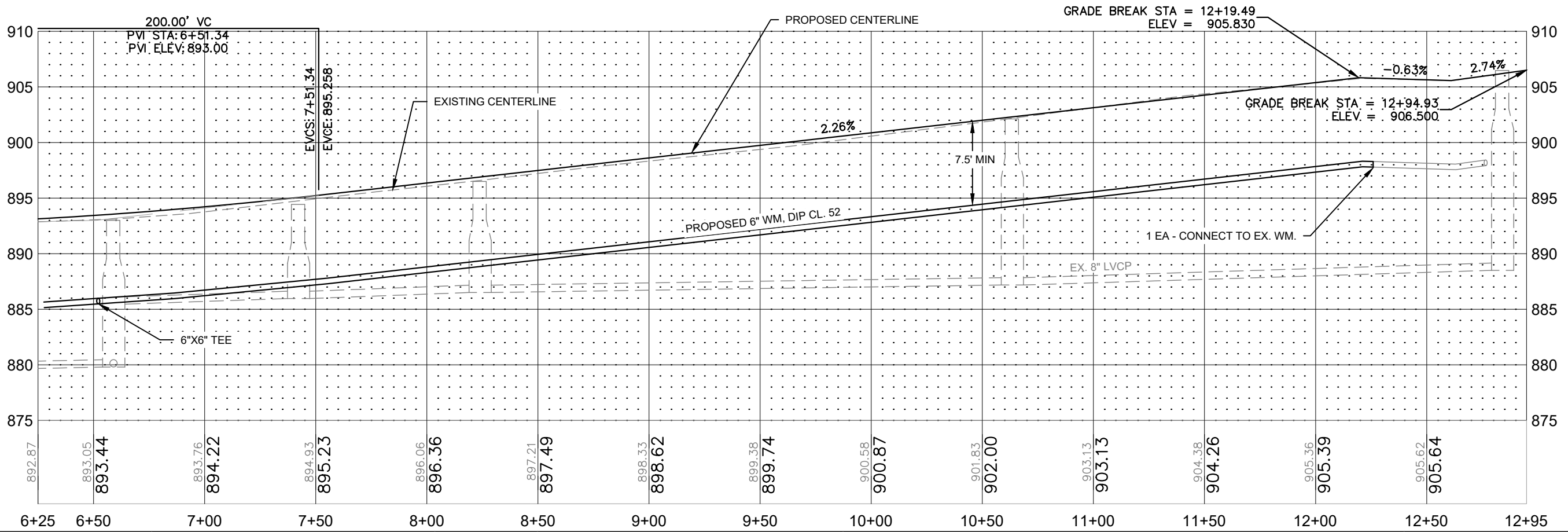
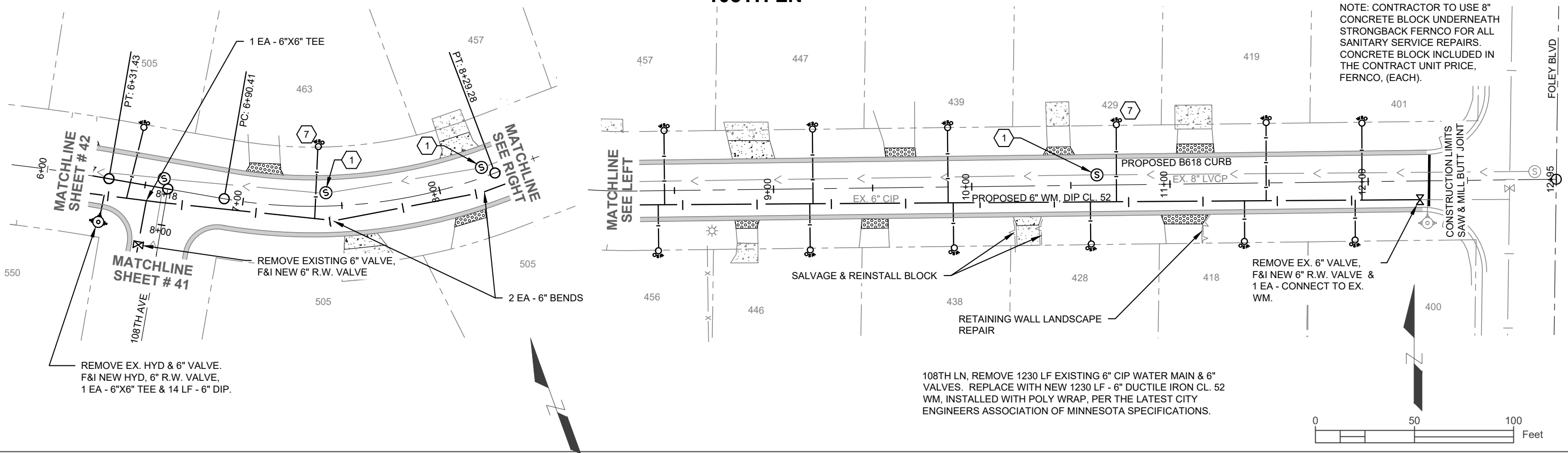
108TH LN



NO.			DATE			REVISIONS			 CITY OF COON RAPIDS ENGINEERING DEPARTMENT 11155 ROBINSON DRIVE COON RAPIDS, MN. 55433-3761 763-755-2880 FAX 163-767-6491	SURVEY: R.M.T	I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE STATE OF MINNESOTA. NAME: Mark C. Hansen, P.E. LICENSE # 43920 DATE: 3/6/2025 	26-1 STREET RECONSTRUCTION	PLAN AND PROFILE
						DESIGNED: J.W.H.							
						CHECKED: M.C.H.	CITY OF COON RAPIDS, MINNESOTA	SHEET 42 OF 65 SHEETS					
						DATE: 11/10/2025							

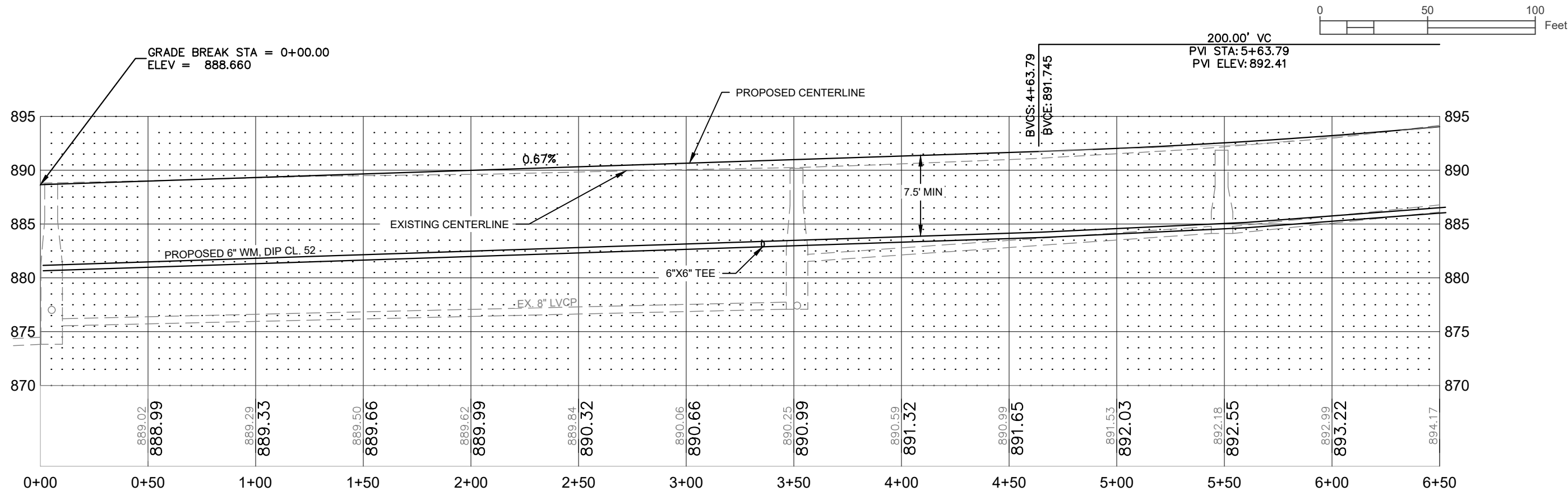
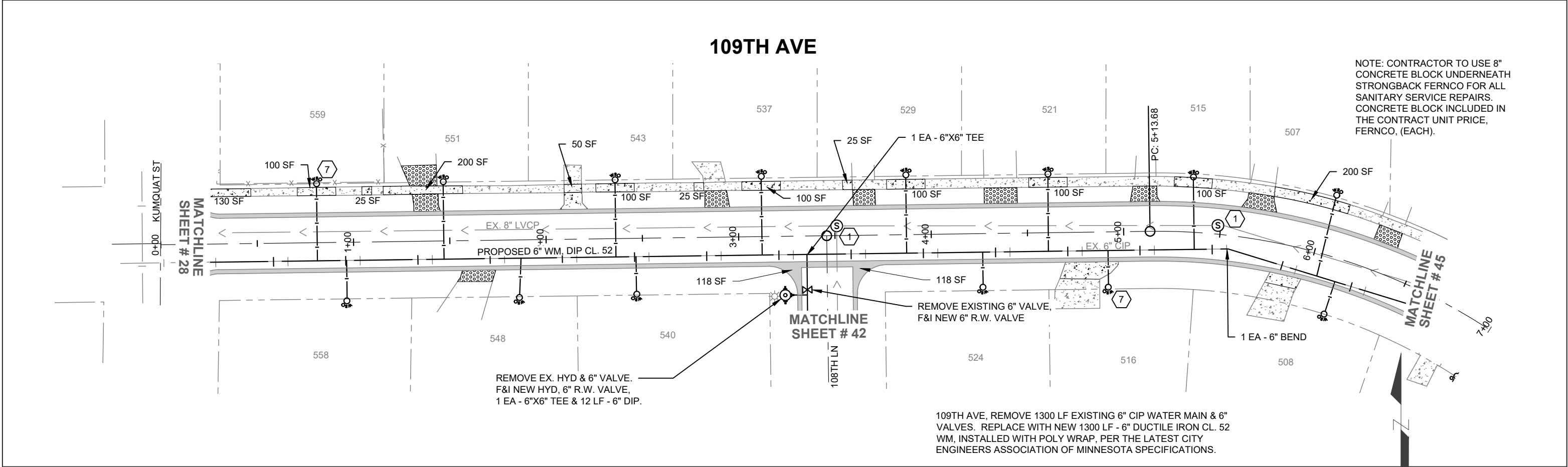
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108TH LN



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			DATE: 11/10/2025					
					CITY OF COON RAPIDS, MINNESOTA			SHEET 43 OF 65 SHEETS

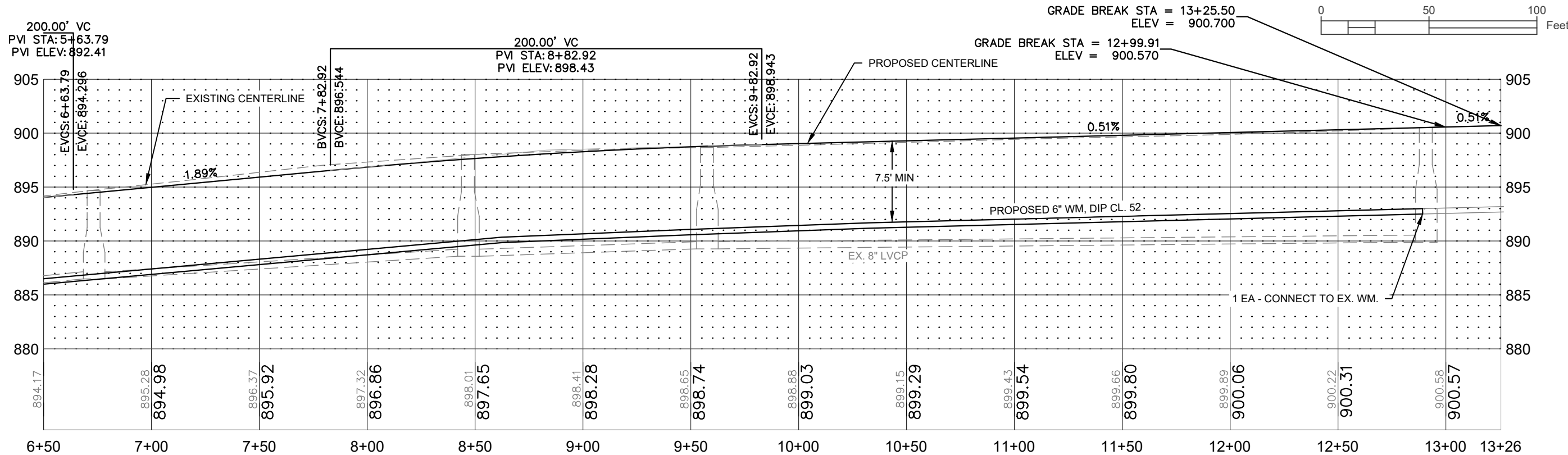
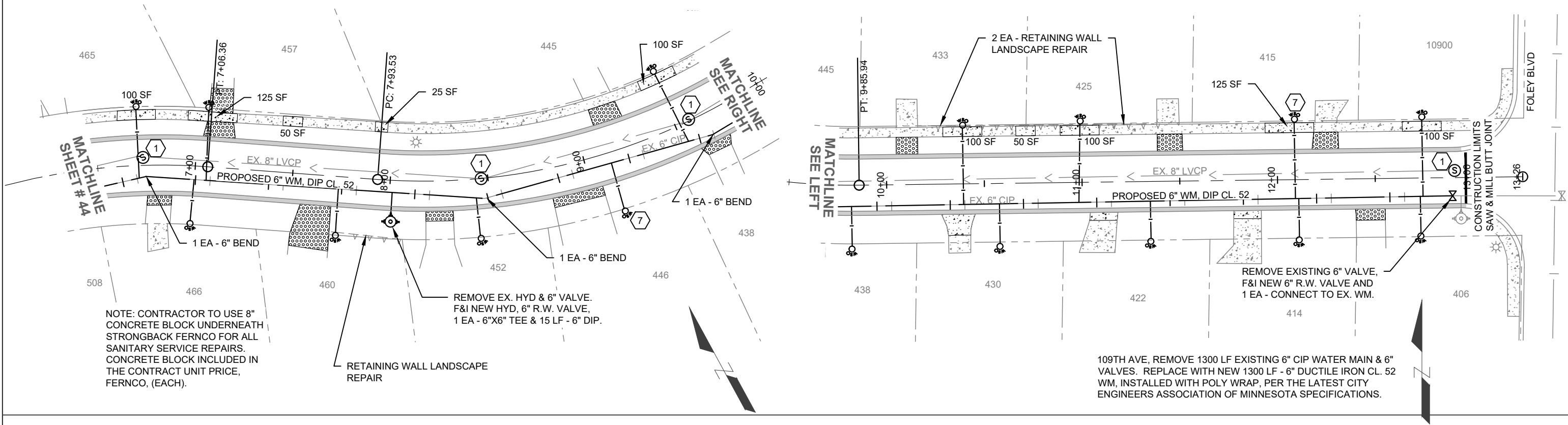
March 4, 2026 3:29 PM K:\2026 CAD\26-1\DESIGN DRAWINGS\26-1_STREET RECONSTRUCTION



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CITY OF COON RAPIDS, MINNESOTA								SHEET 44 OF 65 SHEETS

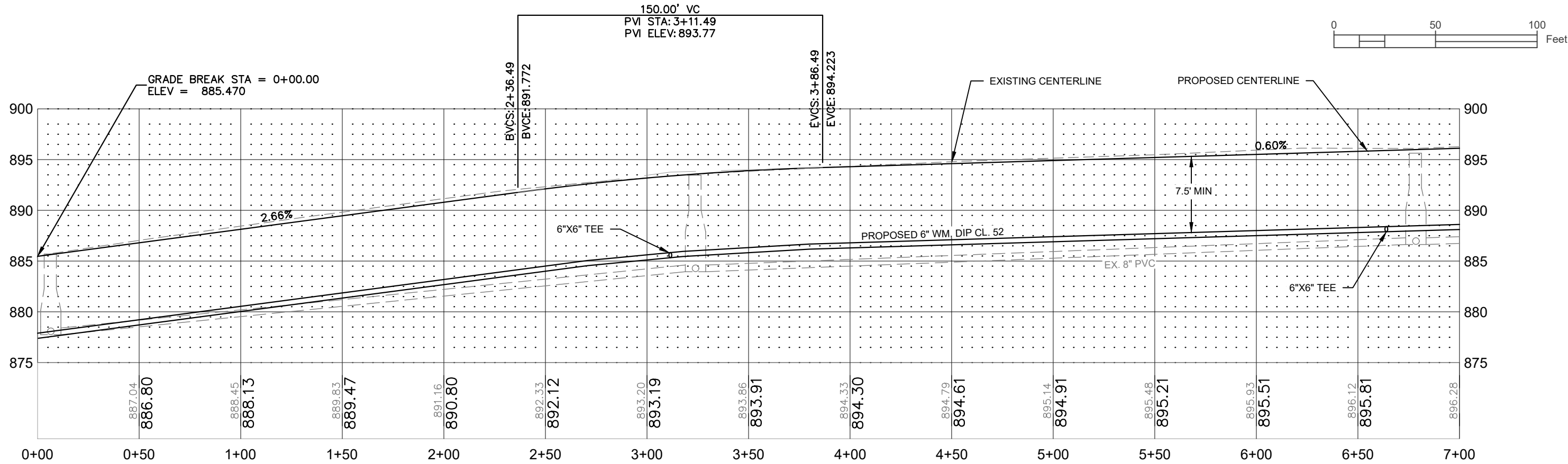
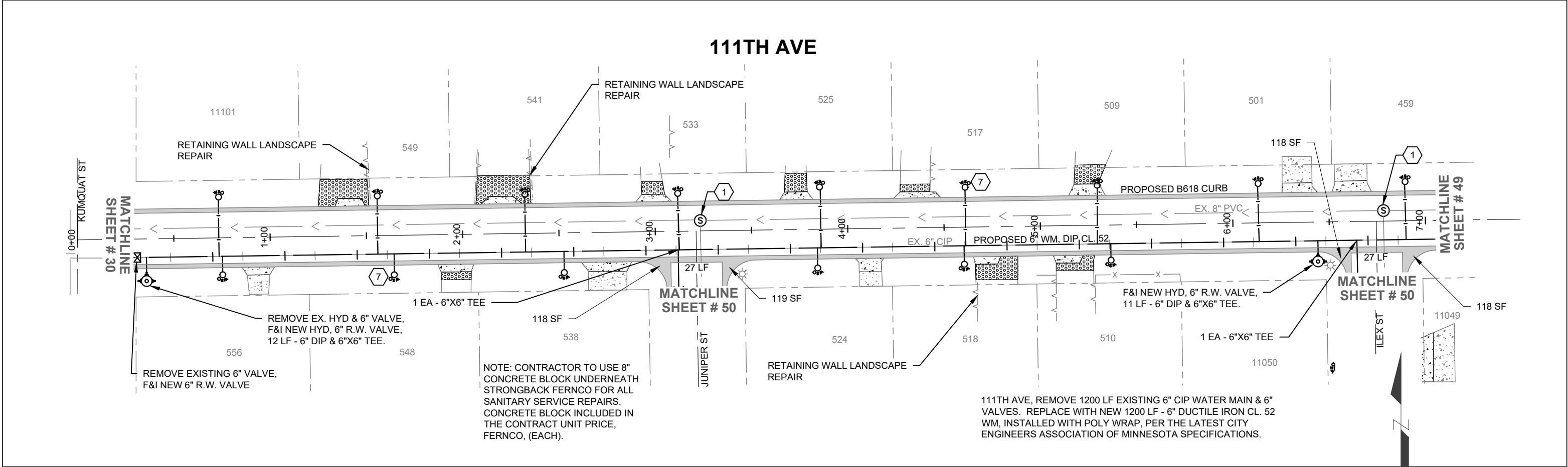
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109TH AVE



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I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE STATE OF MINNESOTA.

NAME: Mark C. Hansen, P.E.
LICENSE # 43920
DATE: 3/6/2025



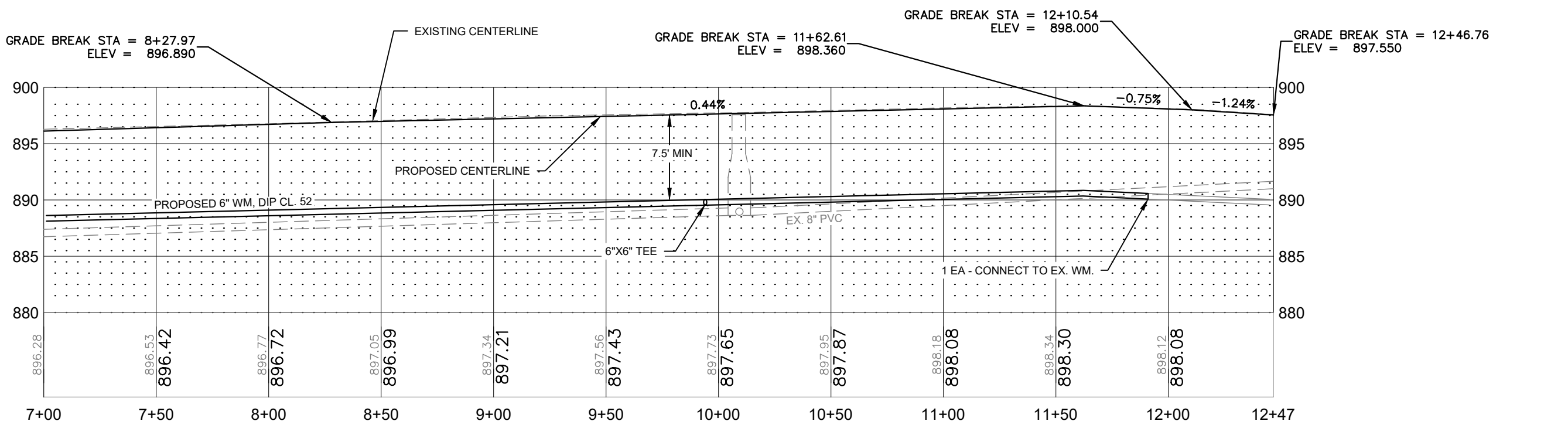
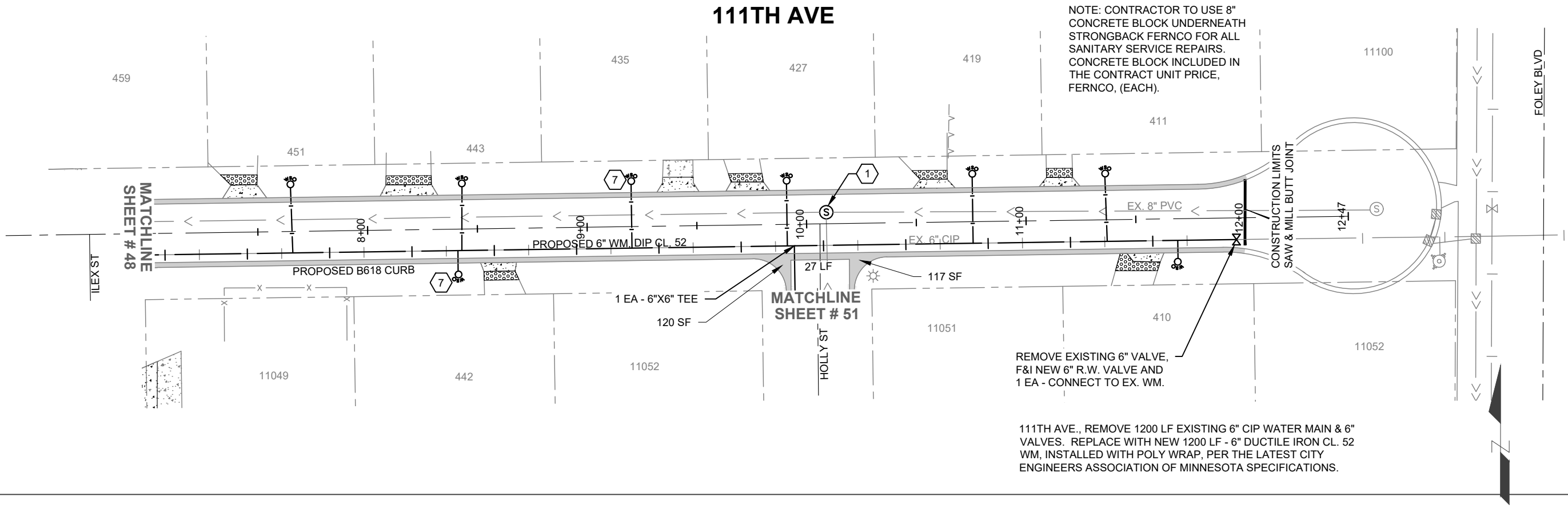
26-1 STREET RECONSTRUCTION

CITY OF COON RAPIDS, MINNESOTA

PLAN AND PROFILE

SHEET 48 OF 65 SHEETS

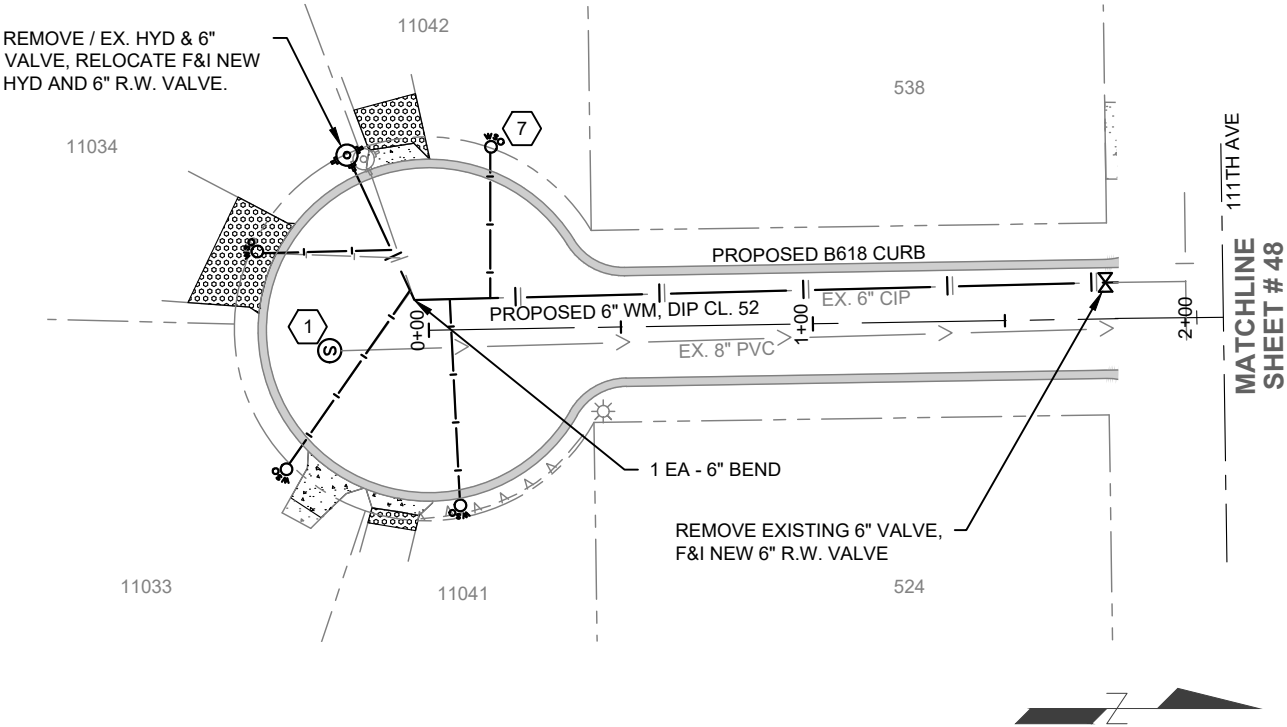
March 4, 2026 3:29 PM K:\2026 CAD\26-1\DESIGN DRAWINGS\26-1_STREET RECONSTRUCTION



NO.		DATE	REVISIONS	 CITY OF COON RAPIDS ENGINEERING DEPARTMENT 11155 ROBINSON DRIVE COON RAPIDS, MN. 55433-3761 763-755-2880 FAX 163-767-6491	SURVEY: R.M.T	I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE STATE OF MINNESOTA. NAME: Mark C. Hansen, P.E. LICENSE # 43920 DATE: 3/6/2025 	26-1 STREET RECONSTRUCTION	PLAN AND PROFILE
					DESIGNED: J.W.H.		CITY OF COON RAPIDS, MINNESOTA	SHEET 49 OF 65 SHEETS
					CHECKED: M.C.H.			
					DATE: 11/10/2025			

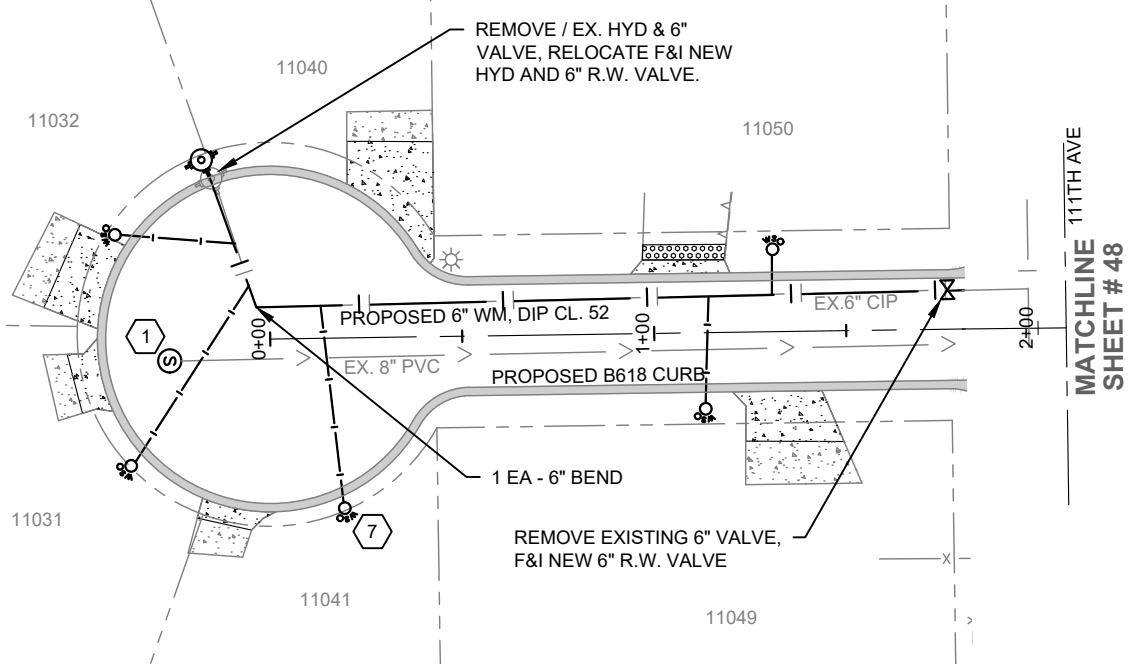
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JUNIPER ST

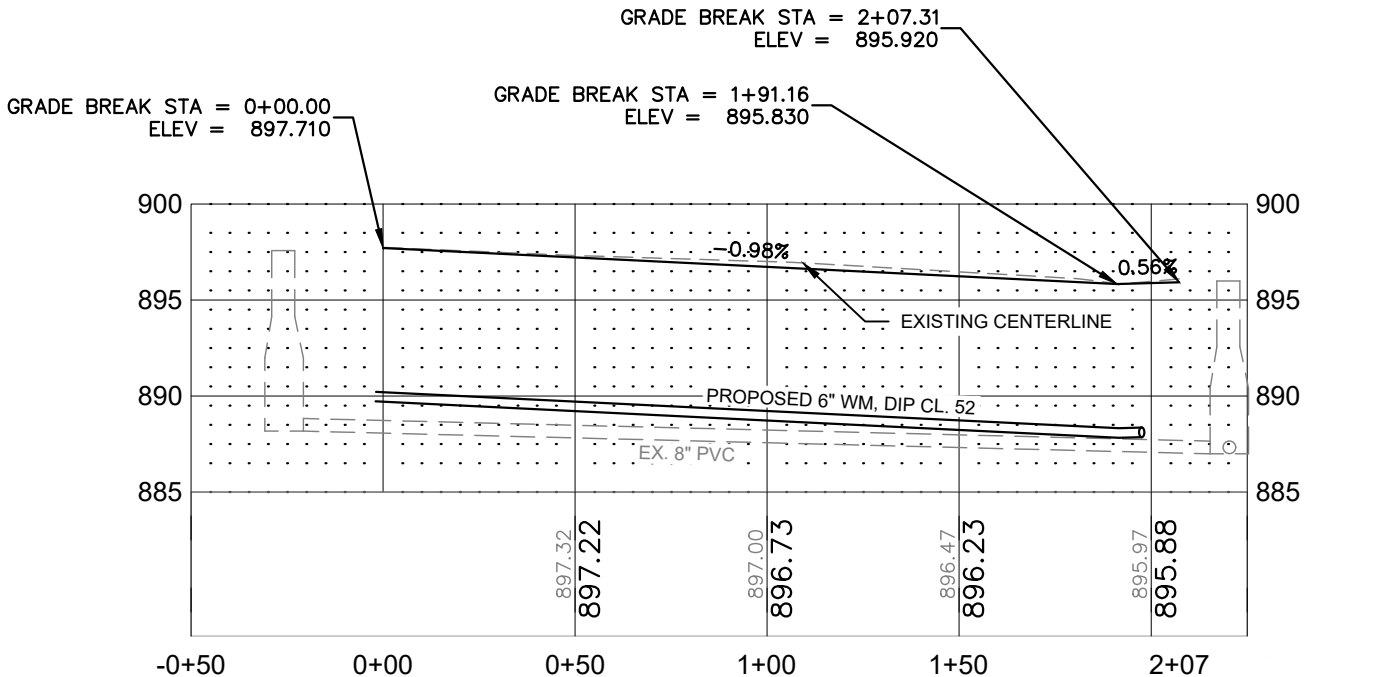
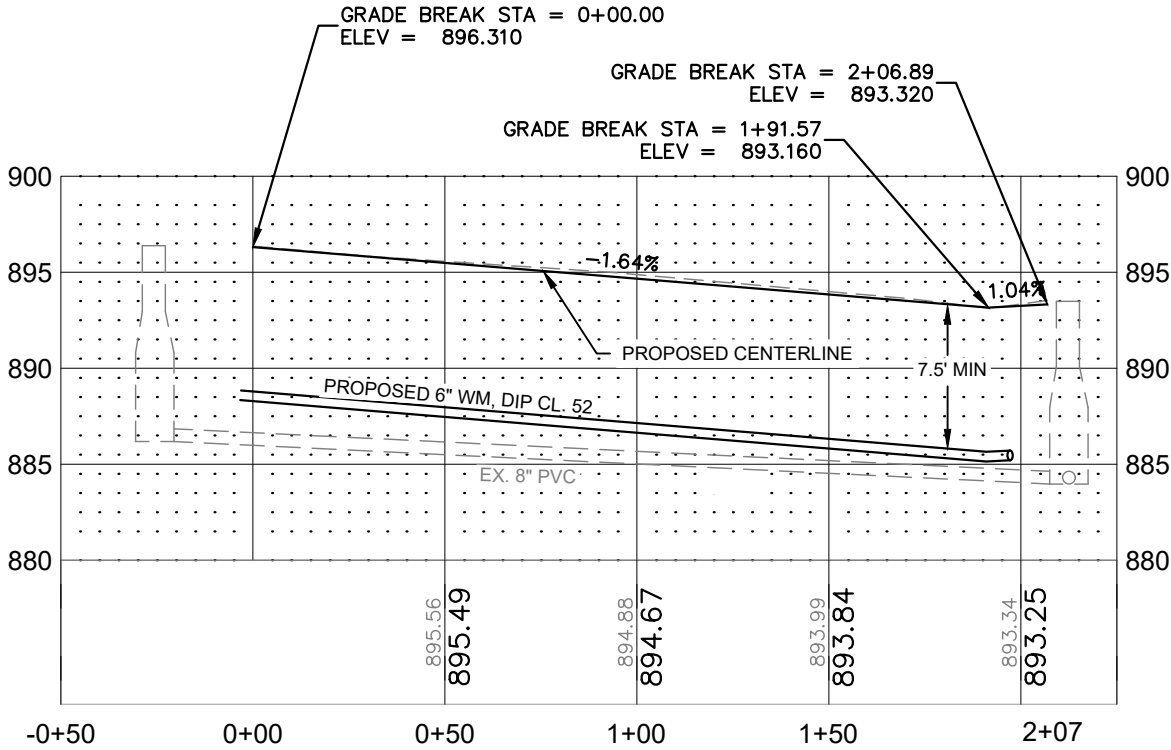


NOTE: CONTRACTOR TO USE 8" CONCRETE BLOCK UNDERNEATH STRONGBACK FERNCO FOR ALL SANITARY SERVICE REPAIRS. CONCRETE BLOCK INCLUDED IN THE CONTRACT UNIT PRICE, FERNCO, (EACH).

ILEX ST



JUNIPER ST & ILEX ST, REMOVE 475 LF EXISTING 6" CIP WATER MAIN & 6" VALVES. REPLACE WITH NEW 475 LF - 6" DUCTILE IRON CL. 52 WM, INSTALLED WITH POLY WRAP, PER THE LATEST CITY ENGINEERS ASSOCIATION OF MINNESOTA SPECIFICATIONS.



NO.	DATE	REVISIONS



CITY OF COON RAPIDS
ENGINEERING DEPARTMENT
11155 ROBINSON DRIVE
COON RAPIDS, MN. 55433-3761
763-755-2880
FAX 163-767-6491

SURVEY:	R.M.T
DESIGNED:	J.W.H.
CHECKED:	M.C.H.
DATE:	11/10/2025

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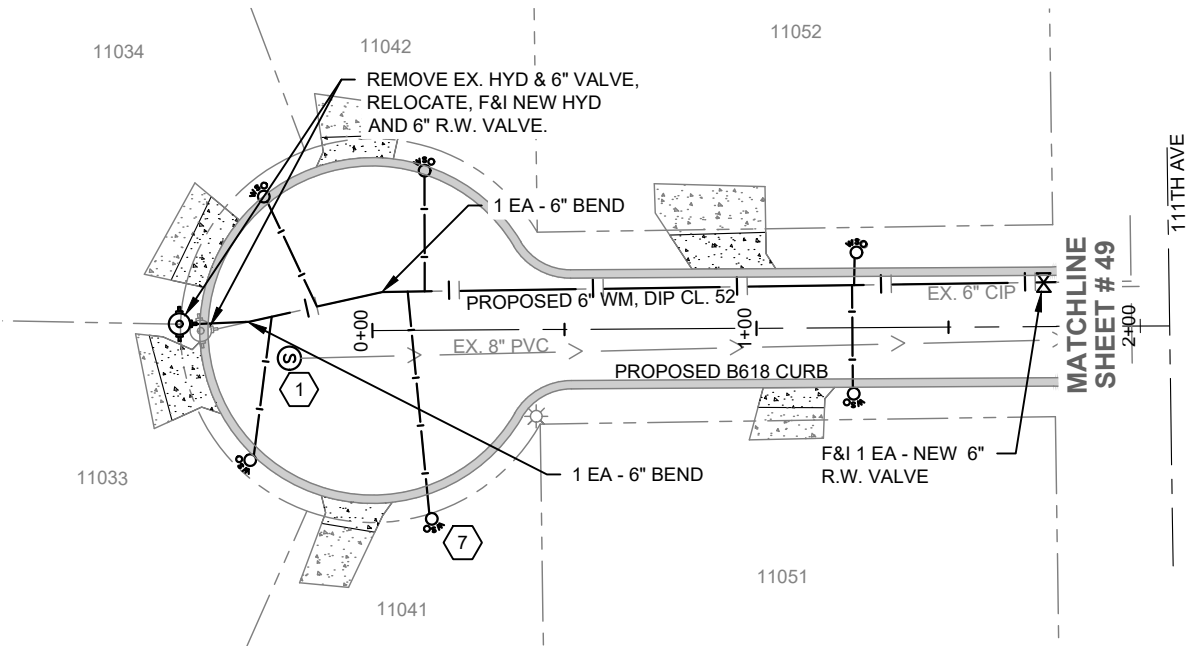
NAME: Mark C. Hansen, P.E.
LICENSE # 43920
DATE: 3/6/2025

26-1 STREET RECONSTRUCTION
CITY OF COON RAPIDS, MINNESOTA

PLAN AND PROFILE
SHEET 50 OF 65 SHEETS

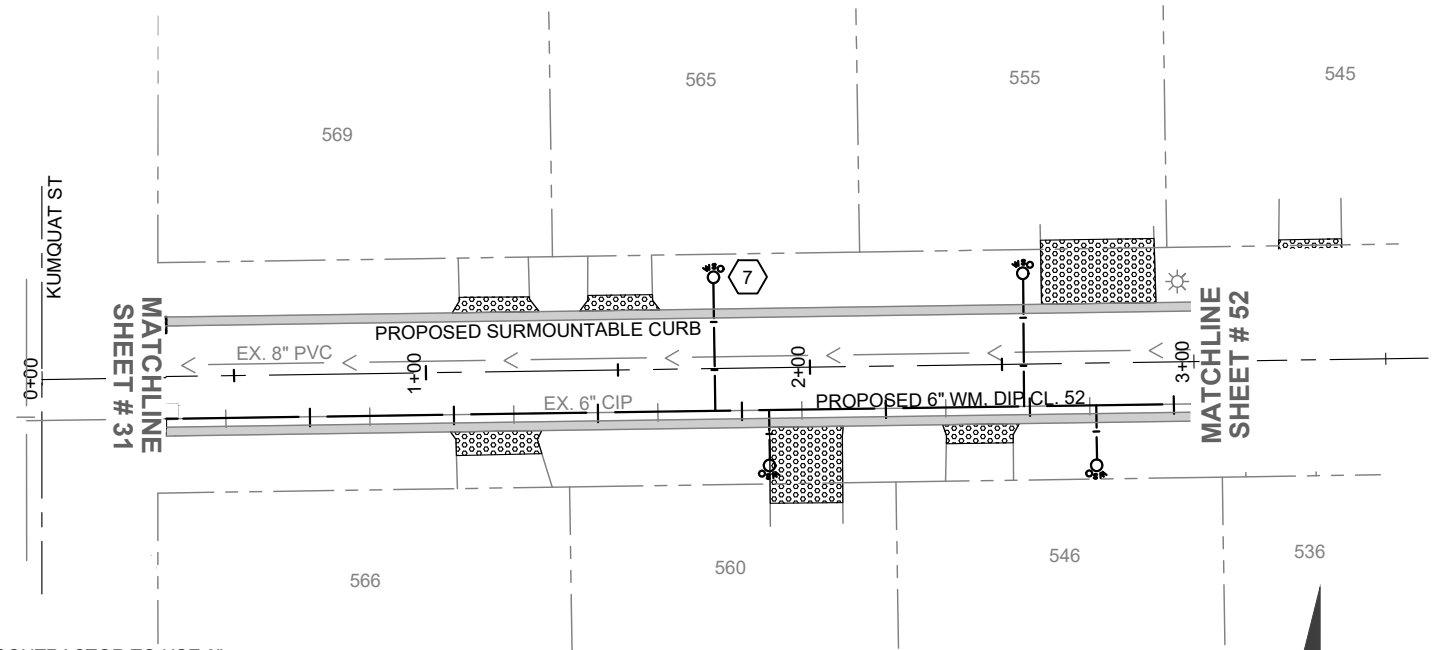
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HOLLY ST



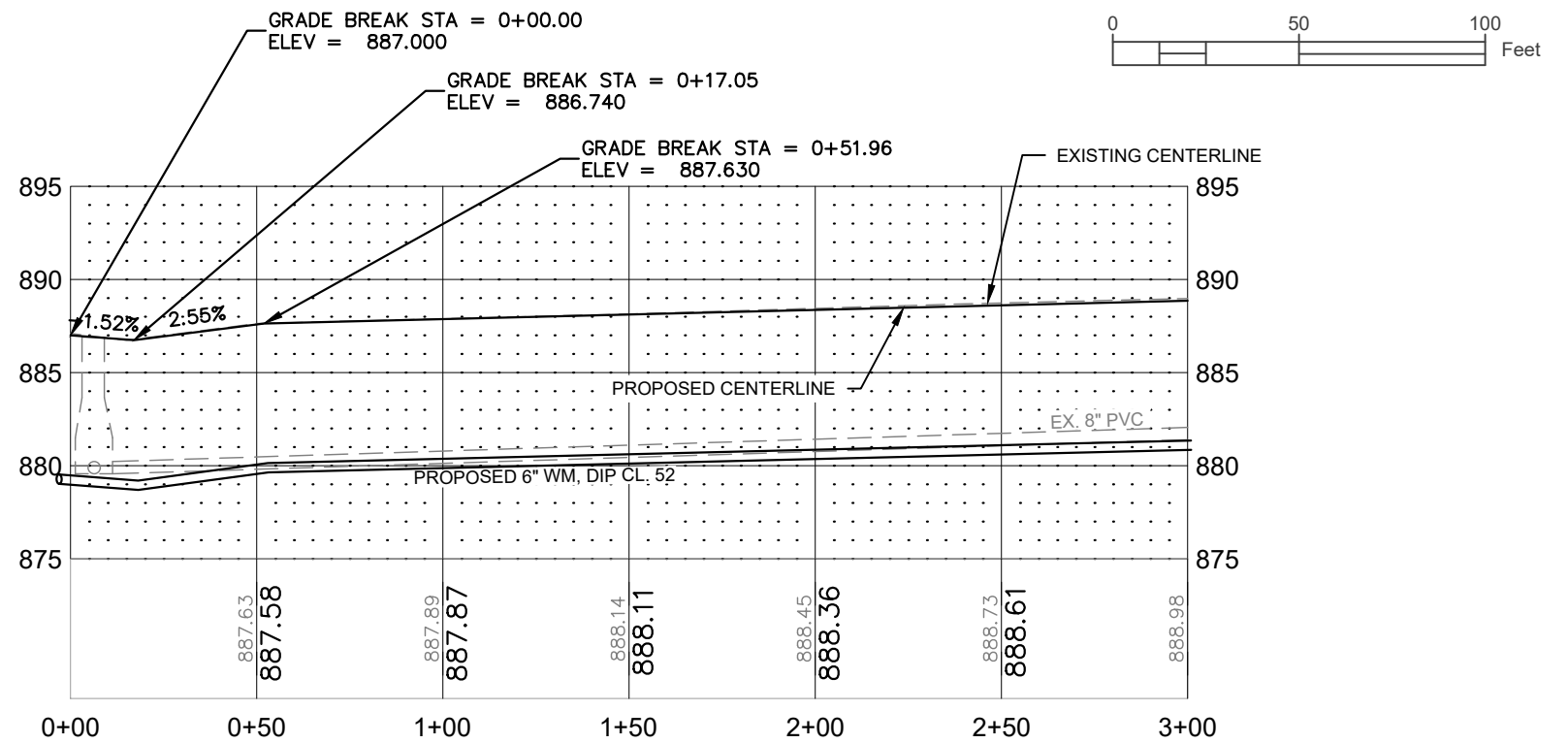
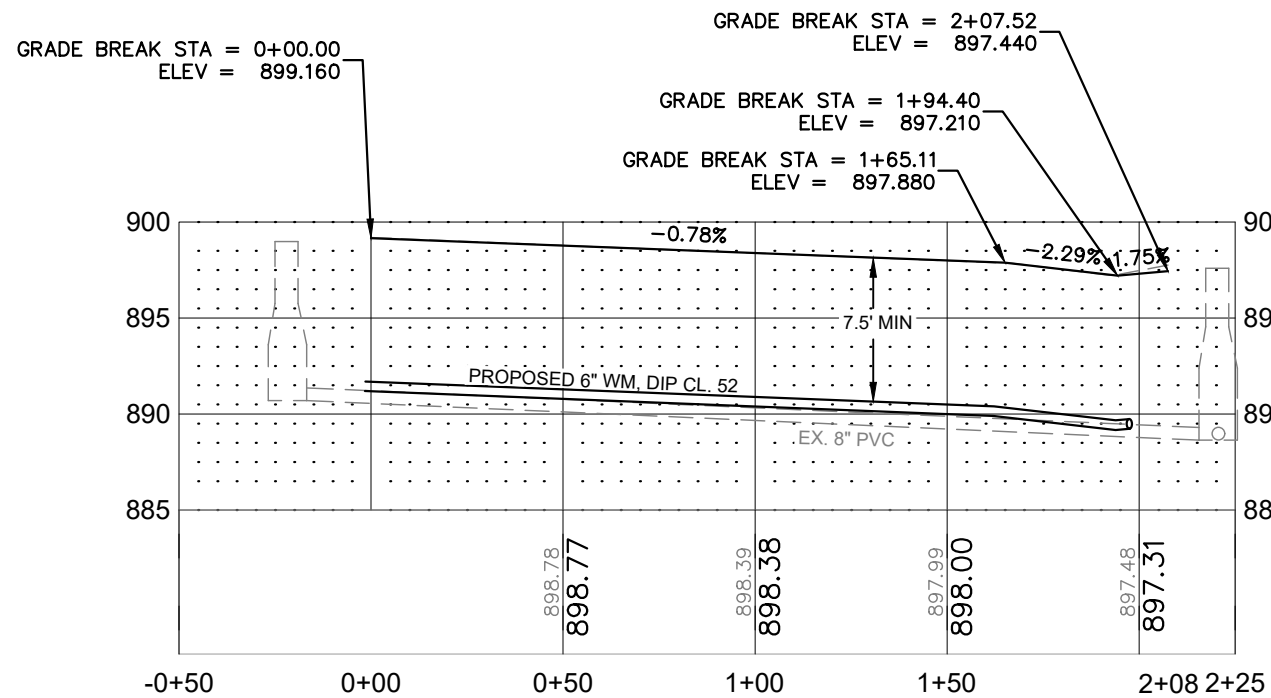
HOLLY ST, REMOVE 239 LF EXISTING 6" CIP WATER MAIN & 6" VALVES. REPLACE WITH NEW 245 LF - 6" DUCTILE IRON CL. 52 WM, INSTALLED WITH POLY WRAP, PER THE LATEST CITY ENGINEERS ASSOCIATION OF MINNESOTA SPECIFICATIONS.

111TH LN



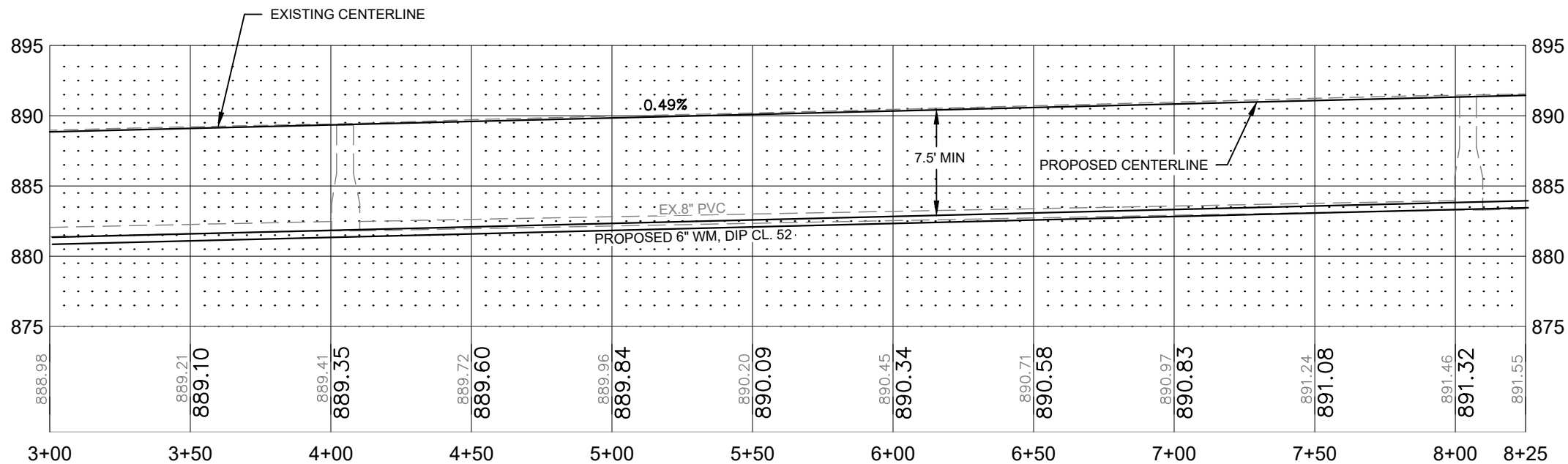
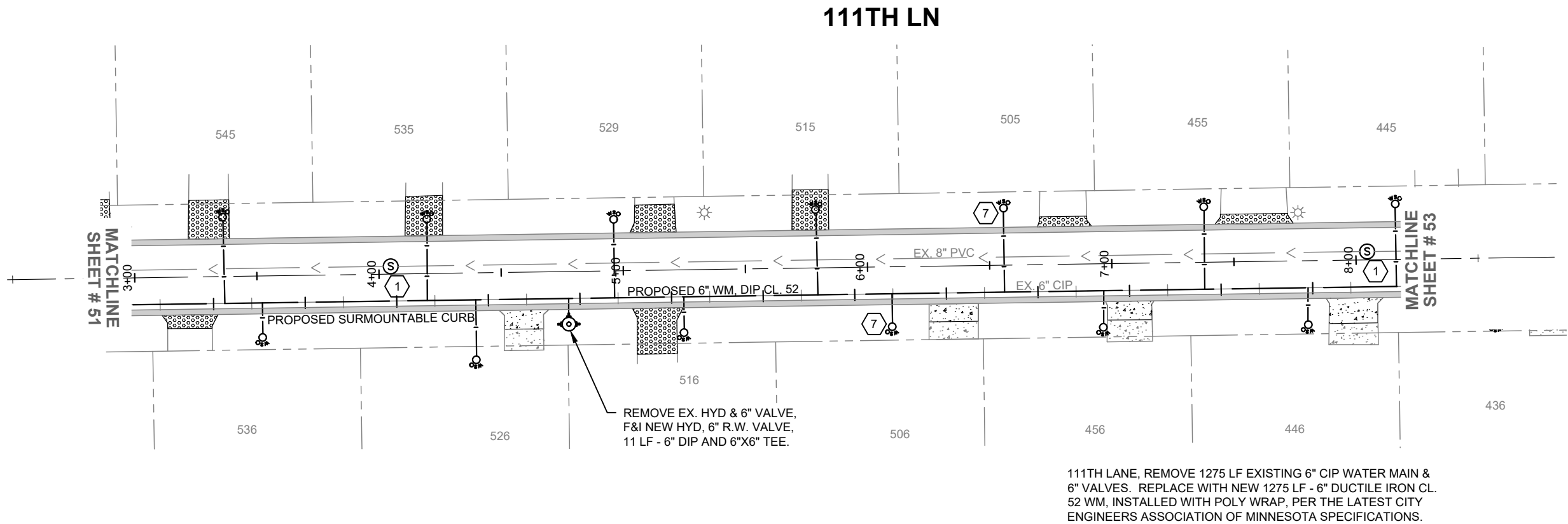
NOTE: CONTRACTOR TO USE 8" CONCRETE BLOCK UNDERNEATH STRONGBACK FERNCO FOR ALL SANITARY SERVICE REPAIRS. CONCRETE BLOCK INCLUDED IN THE CONTRACT UNIT PRICE, FERNCO, (EACH).

111TH LANE, REMOVE 1275 LF EXISTING 6" CIP WATER MAIN & 6" VALVES. REPLACE WITH NEW 1275 LF - 6" DUCTILE IRON CL. 52 WM, INSTALLED WITH POLY WRAP, PER THE LATEST CITY ENGINEERS ASSOCIATION OF MINNESOTA SPECIFICATIONS.



NO.	DATE	REVISIONS	 CITY OF COON RAPIDS ENGINEERING DEPARTMENT 11155 ROBINSON DRIVE COON RAPIDS, MN. 55433-3761 763-755-2880 FAX 163-767-6491	SURVEY: R.M.T		I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE STATE OF MINNESOTA. NAME: Mark C. Hansen, P.E. LICENSE # 43920 DATE: 3/6/2025	26-1 STREET RECONSTRUCTION		PLAN AND PROFILE
				DESIGNED: J.W.H.			CITY OF COON RAPIDS, MINNESOTA		SHEET 51 OF 65 SHEETS
				CHECKED: M.C.H.					
				DATE: 11/10/2025					

March 4, 2026 3:30 PM K:\2026 CAD\26-1\DESIGN DRAWINGS\26-1_STREET RECONSTRUCTION



NO.	DATE	REVISIONS



CITY OF COON RAPIDS
ENGINEERING DEPARTMENT
11155 ROBINSON DRIVE
COON RAPIDS, MN. 55433-3761
763-755-2880
FAX 163-767-6491

SURVEY:	R.M.T
DESIGNED:	J.W.H.
CHECKED:	M.C.H.
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NAME: Mark C. Hansen, P.E.
LICENSE # 43920
DATE: 3/6/2025



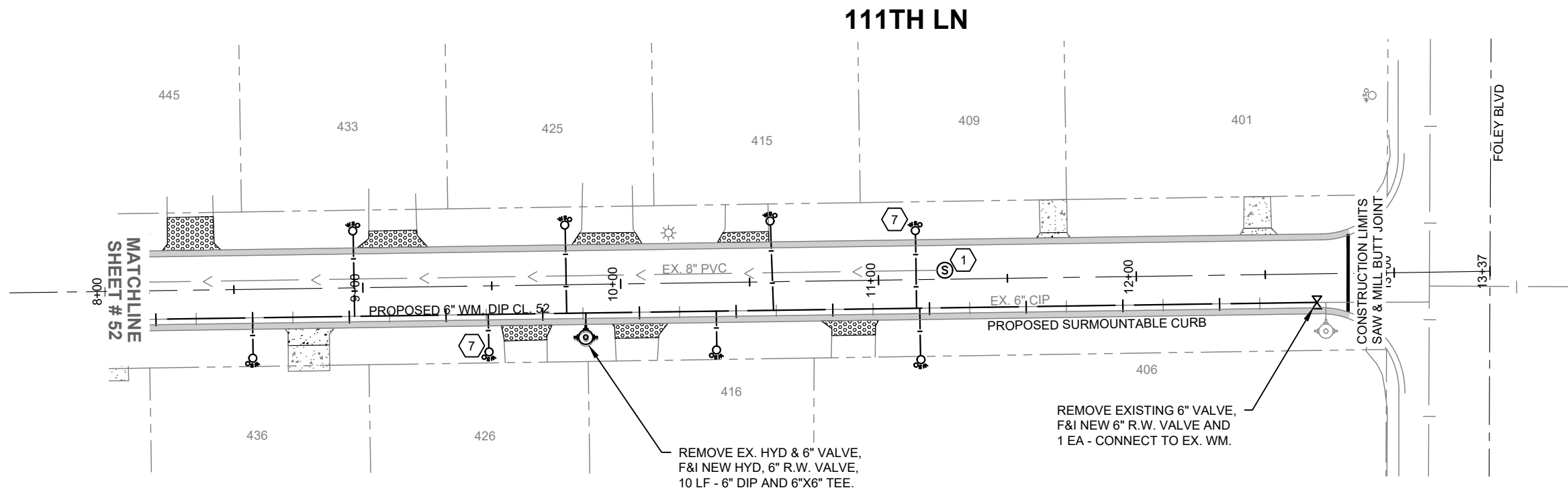
26-1 STREET RECONSTRUCTION

CITY OF COON RAPIDS, MINNESOTA

PLAN AND PROFILE

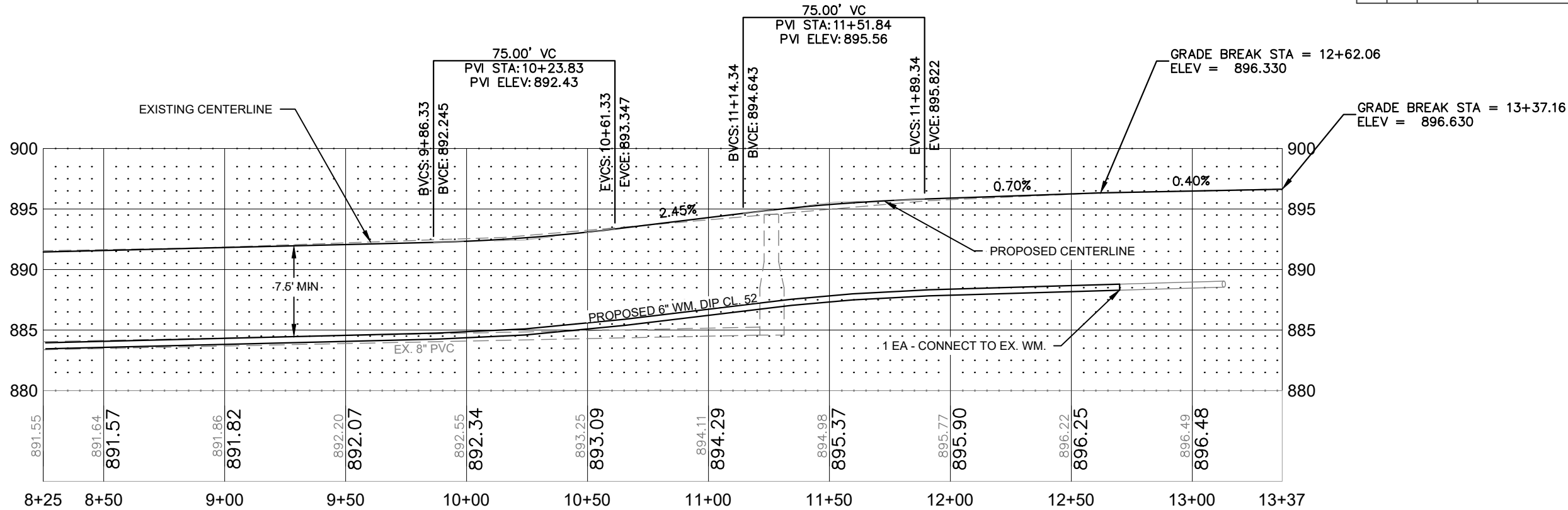
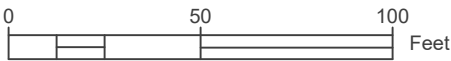
SHEET 52 OF 65 SHEETS

K:\2026 CAD\26-1\DESIGN DRAWINGS\26-1_STREET RECONSTRUCTION 3:30 PM March 4, 2026



NOTE: CONTRACTOR TO USE 8" CONCRETE BLOCK UNDERNEATH STRONGBACK FERNCO FOR ALL SANITARY SERVICE REPAIRS. CONCRETE BLOCK INCLUDED IN THE CONTRACT UNIT PRICE, FERNCO, (EACH).

111TH LANE, REMOVE 1275 LF EXISTING 6" CIP WATER MAIN & 6" VALVES. REPLACE WITH NEW 1275 LF - 6" DUCTILE IRON CL. 52 WM, INSTALLED WITH POLY WRAP, PER THE LATEST CITY ENGINEERS ASSOCIATION OF MINNESOTA SPECIFICATIONS.



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CITY OF COON RAPIDS
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SURVEY: R.M.T
DESIGNED: J.W.H.
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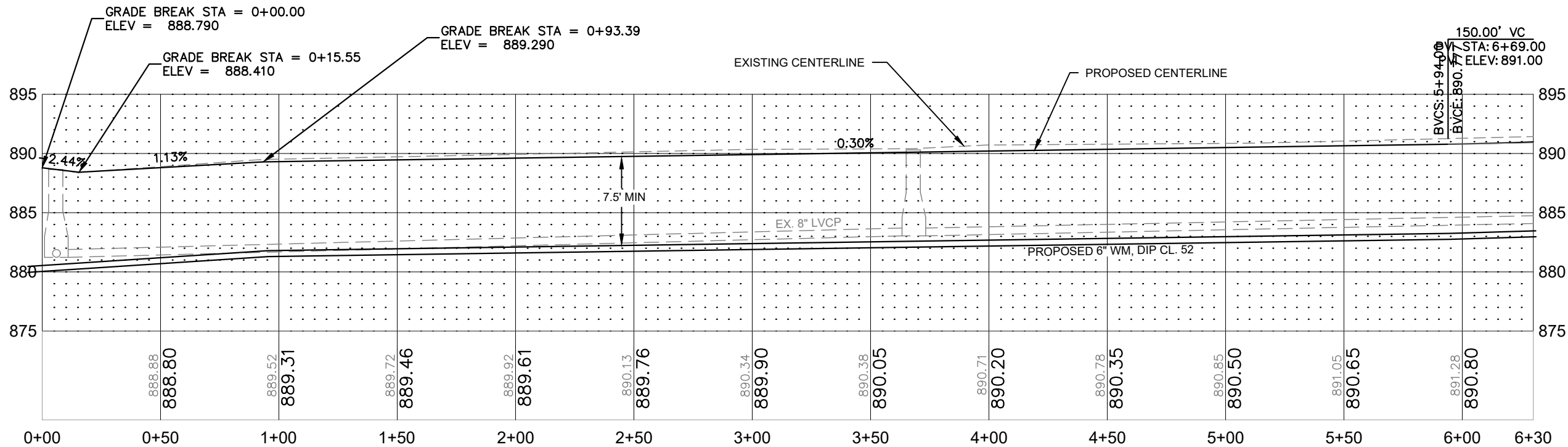
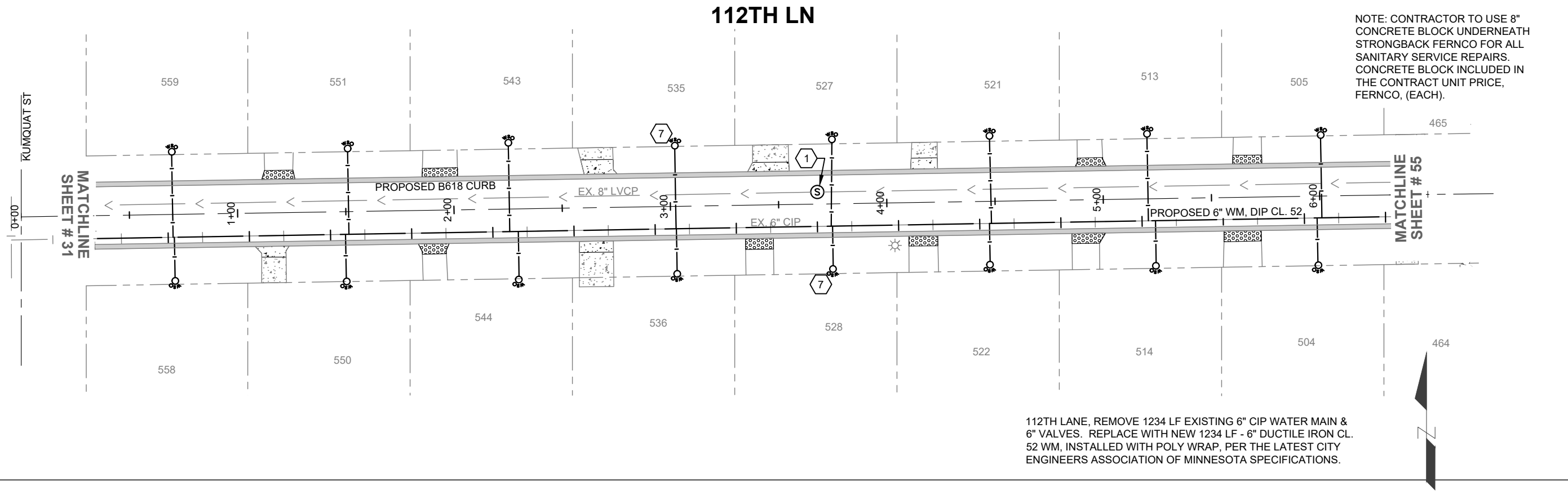
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NAME: Mark C. Hansen, P.E.
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DATE: 3/6/2025

26-1 STREET RECONSTRUCTION
CITY OF COON RAPIDS, MINNESOTA

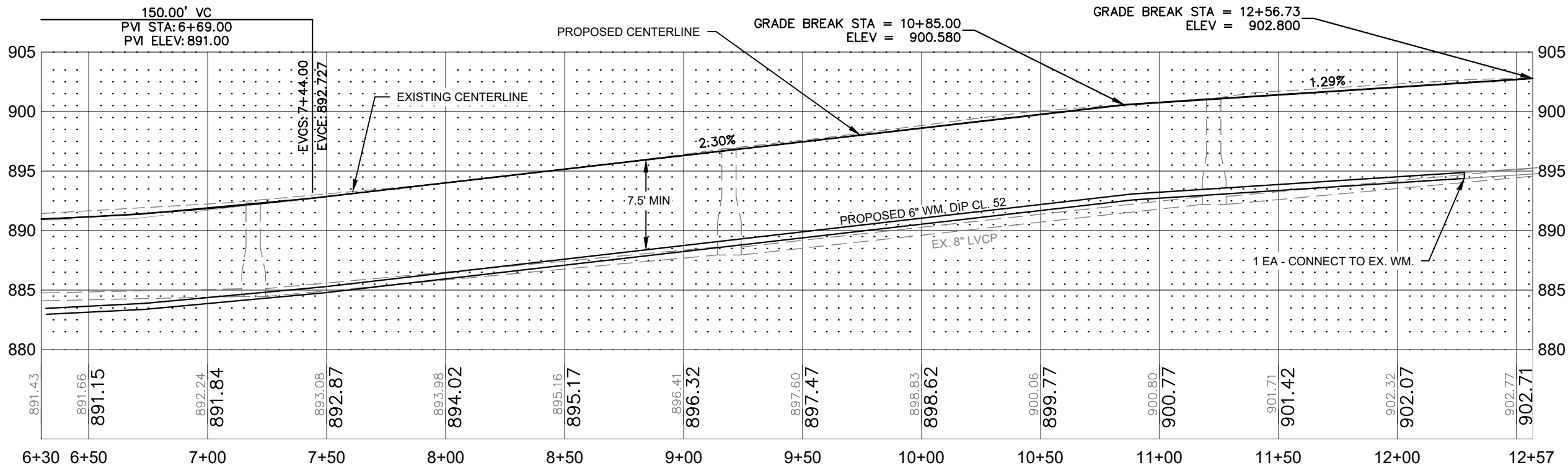
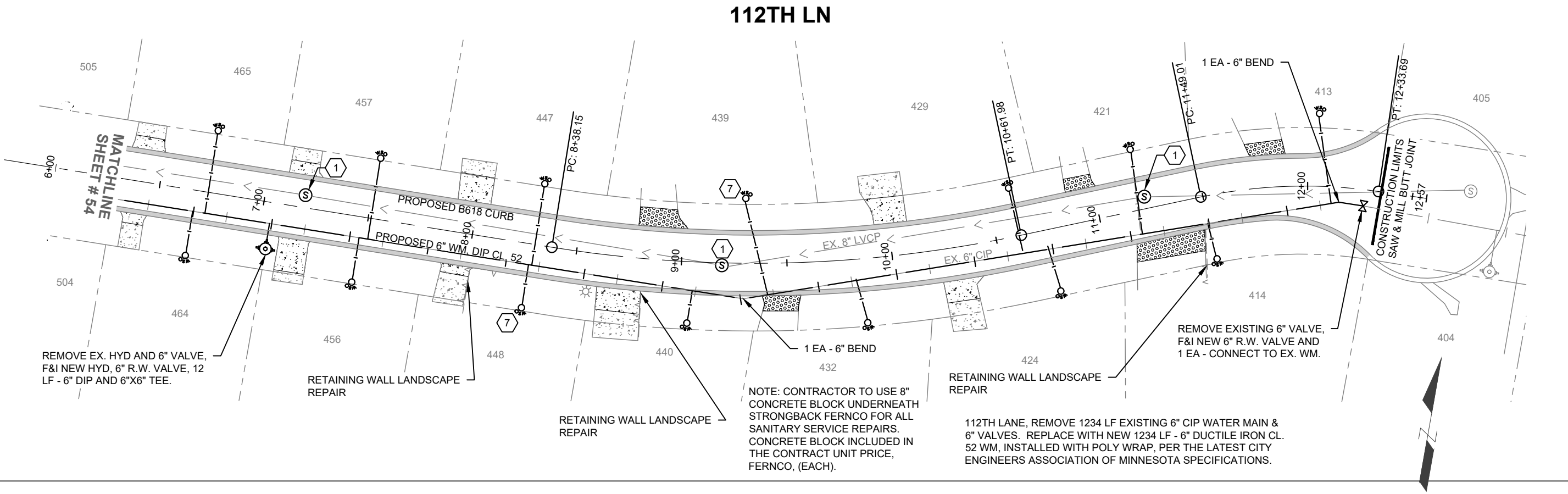
PLAN AND PROFILE
SHEET 53 OF 65 SHEETS

March 4, 2026 3:30 PM K:\2026 CAD\26-1\DESIGN DRAWINGS\26-1_STREET RECONSTRUCTION



NO.			DATE	REVISIONS	 CITY OF COON RAPIDS ENGINEERING DEPARTMENT 11155 ROBINSON DRIVE COON RAPIDS, MN. 55433-3761 763-755-2880 FAX 163-767-6491	SURVEY: R.M.T	I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE STATE OF MINNESOTA. NAME: Mark C. Hansen, P.E. LICENSE # 43920 DATE: 3/6/2025 	26-1 STREET RECONSTRUCTION		PLAN AND PROFILE	
						DESIGNED: J.W.H.					
						CHECKED: M.C.H.					
						DATE: 11/10/2025		CITY OF COON RAPIDS, MINNESOTA		SHEET 54 OF 65 SHEETS	

March 4, 2026 3:30 PM K:\2026 CAD\26-1\DESIGN DRAWINGS\26-1_STREET RECONSTRUCTION



NO.	DATE	REVISIONS



CITY OF COON RAPIDS
ENGINEERING DEPARTMENT
11155 ROBINSON DRIVE
COON RAPIDS, MN. 55433-3761
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NAME: Mark C. Hansen, P.E.
LICENSE # 43920
DATE: 3/6/2025

M.C.H.

26-1 STREET RECONSTRUCTION

CITY OF COON RAPIDS, MINNESOTA

PLAN AND PROFILE

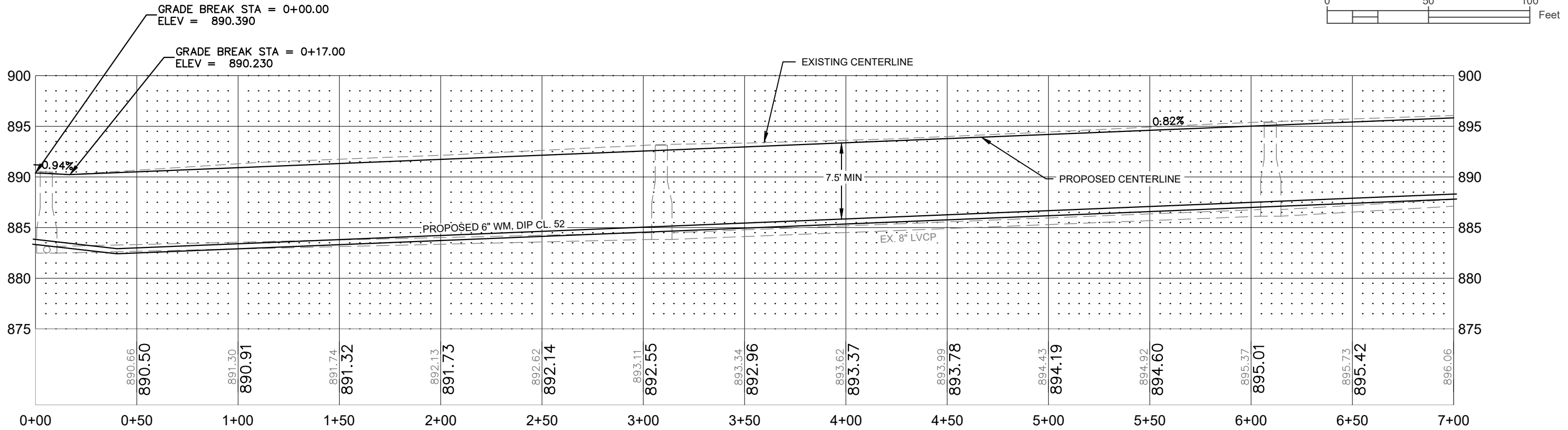
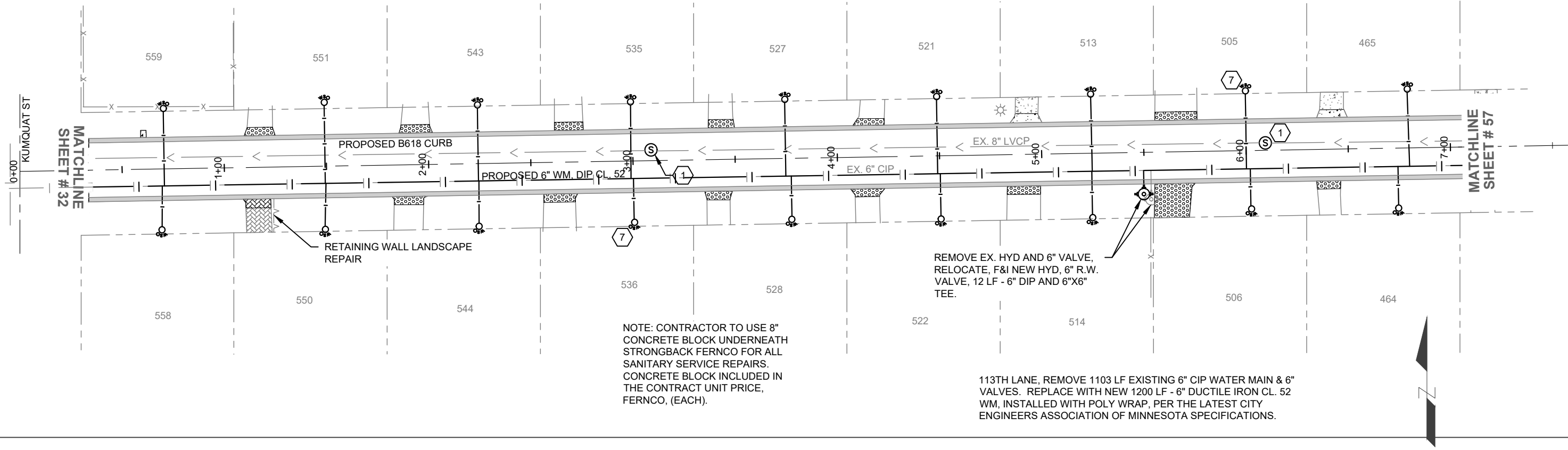
SHEET 55 OF 65 SHEETS

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March 4, 2026

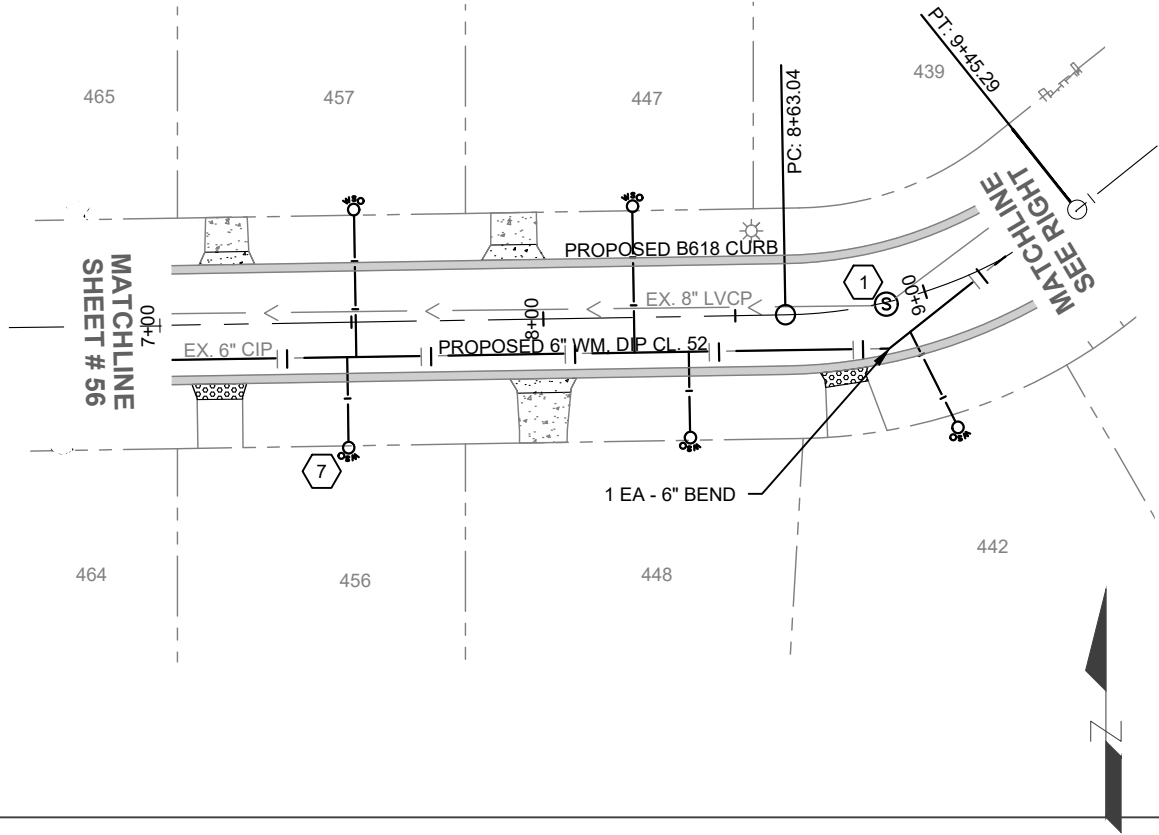
113TH LN



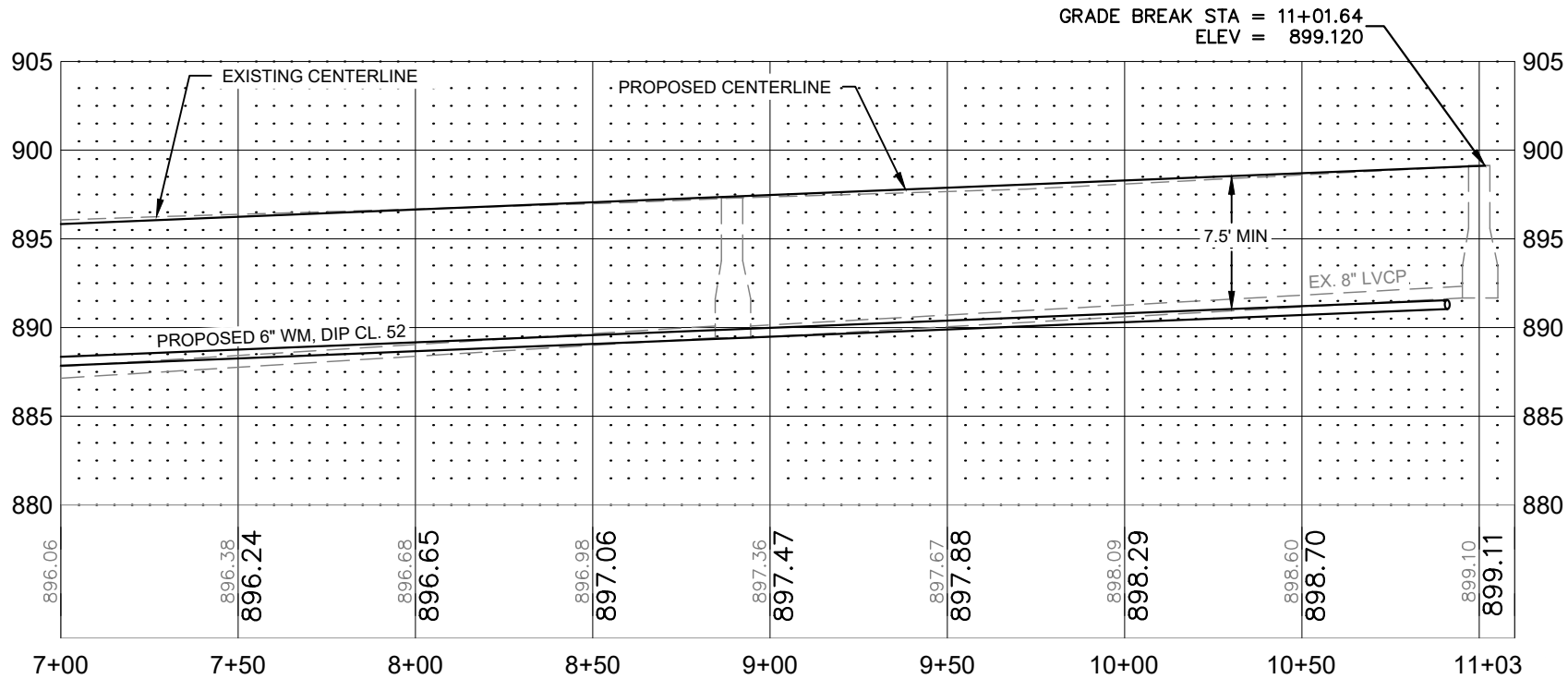
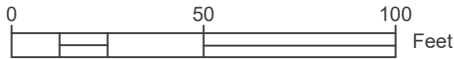
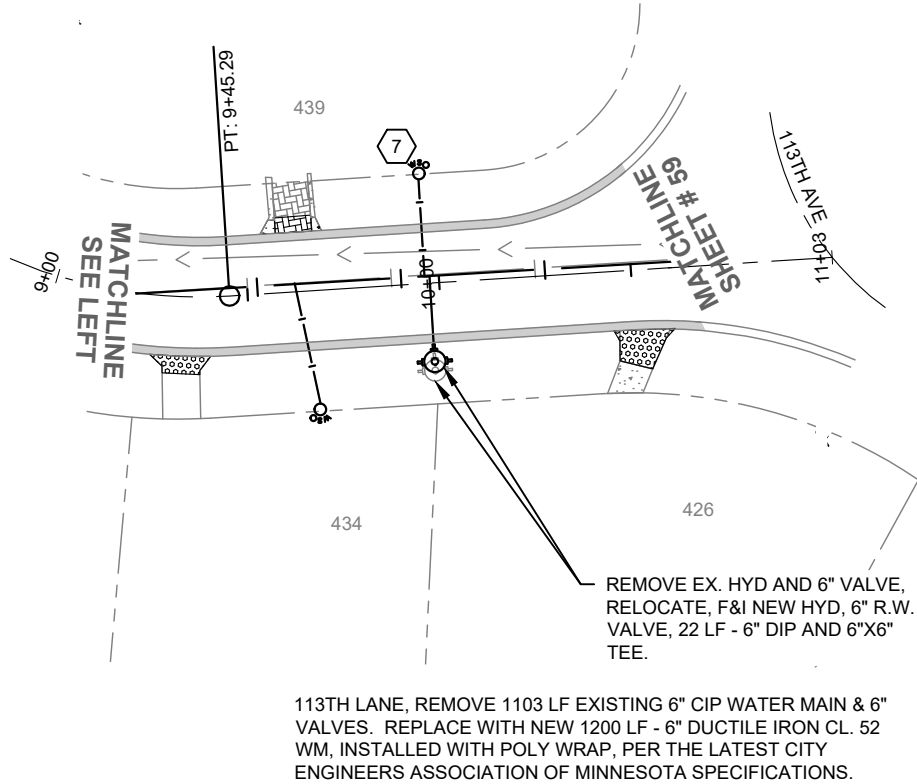
NO.	DATE	REVISIONS	 CITY OF COON RAPIDS ENGINEERING DEPARTMENT 11155 ROBINSON DRIVE COON RAPIDS, MN. 55433-3761 763-755-2880 FAX 163-767-6491	SURVEY: R.M.T	I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE STATE OF MINNESOTA. NAME: Mark C. Hansen, P.E. LICENSE # 43920 DATE: 3/6/2025 	26-1 STREET RECONSTRUCTION	PLAN AND PROFILE
				DESIGNED: J.W.H.			
				CHECKED: M.C.H.		CITY OF COON RAPIDS, MINNESOTA	SHEET 56 OF 65 SHEETS
				DATE: 11/10/2025			

March 4, 2026 3:30 PM K:\2026 CAD\26-1\DESIGN DRAWINGS\26-1_STREET RECONSTRUCTION

113TH LN



NOTE: CONTRACTOR TO USE 8" CONCRETE BLOCK UNDERNEATH STRONGBACK FERNCO FOR ALL SANITARY SERVICE REPAIRS. CONCRETE BLOCK INCLUDED IN THE CONTRACT UNIT PRICE, FERNCO, (EACH).



NO.	DATE	REVISIONS



CITY OF COON RAPIDS
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COON RAPIDS, MN. 55433-3761
763-755-2880
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SURVEY: R.M.T
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NAME: Mark C. Hansen, P.E.
LICENSE # 43920
DATE: 3/6/2025



26-1 STREET RECONSTRUCTION

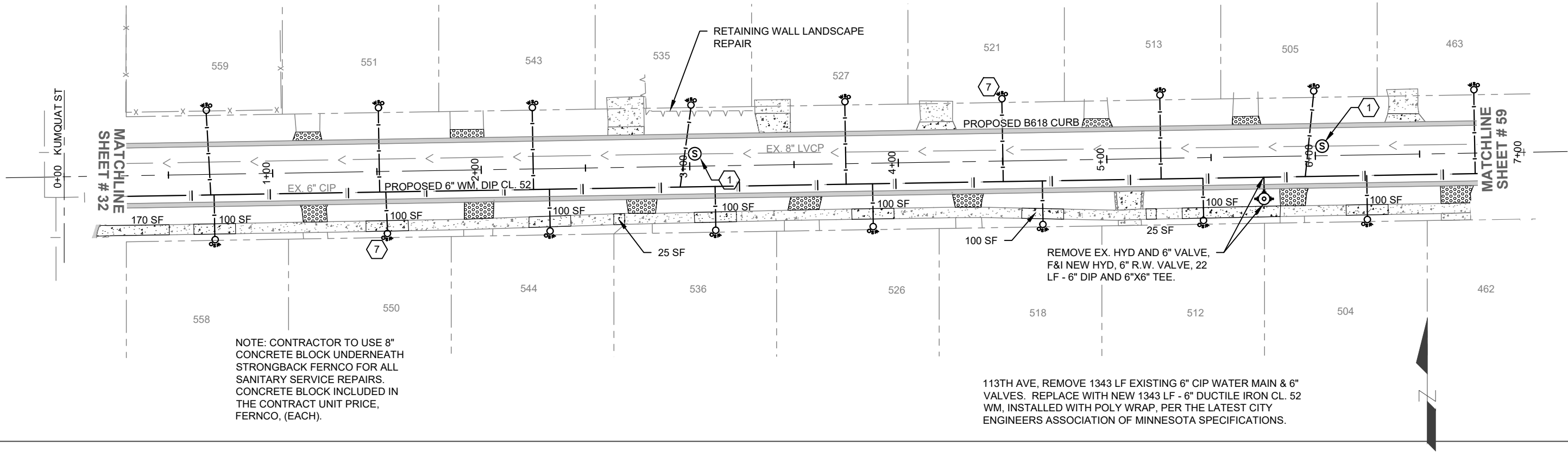
CITY OF COON RAPIDS, MINNESOTA

PLAN AND PROFILE

SHEET 57 OF 65 SHEETS

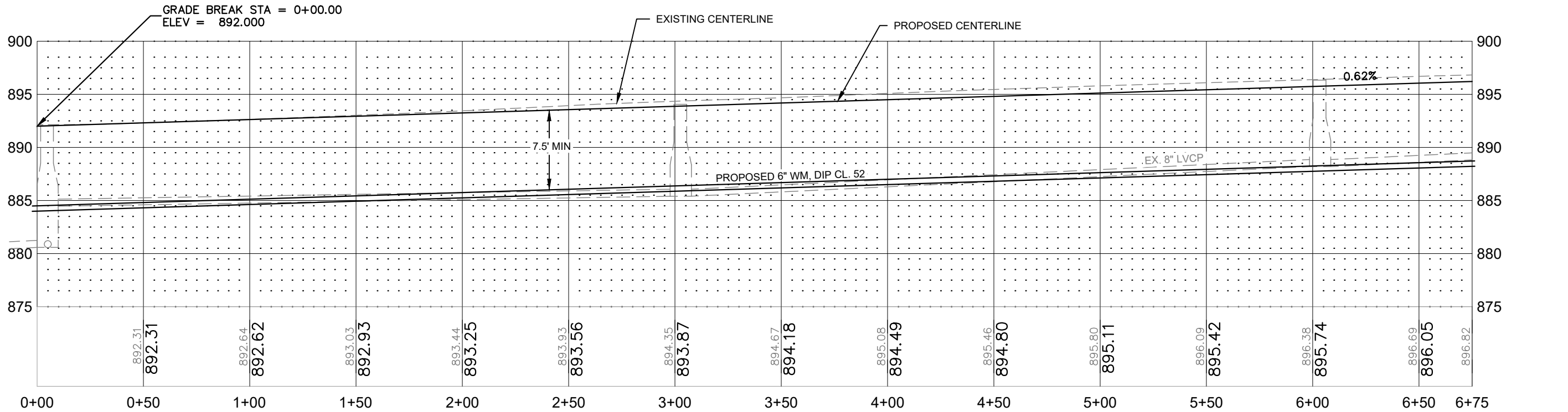
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3:30 PM
March 4, 2026

113TH AVE



NOTE: CONTRACTOR TO USE 8" CONCRETE BLOCK UNDERNEATH STRONGBACK FERNCO FOR ALL SANITARY SERVICE REPAIRS. CONCRETE BLOCK INCLUDED IN THE CONTRACT UNIT PRICE, FERNCO, (EACH).

113TH AVE, REMOVE 1343 LF EXISTING 6" CIP WATER MAIN & 6" VALVES. REPLACE WITH NEW 1343 LF - 6" DUCTILE IRON CL. 52 WM, INSTALLED WITH POLY WRAP, PER THE LATEST CITY ENGINEERS ASSOCIATION OF MINNESOTA SPECIFICATIONS.



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CITY OF COON RAPIDS
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SURVEY:	R.M.T
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NAME: Mark C. Hansen, P.E.
LICENSE # 43920
DATE: 3/6/2025



26-1 STREET RECONSTRUCTION

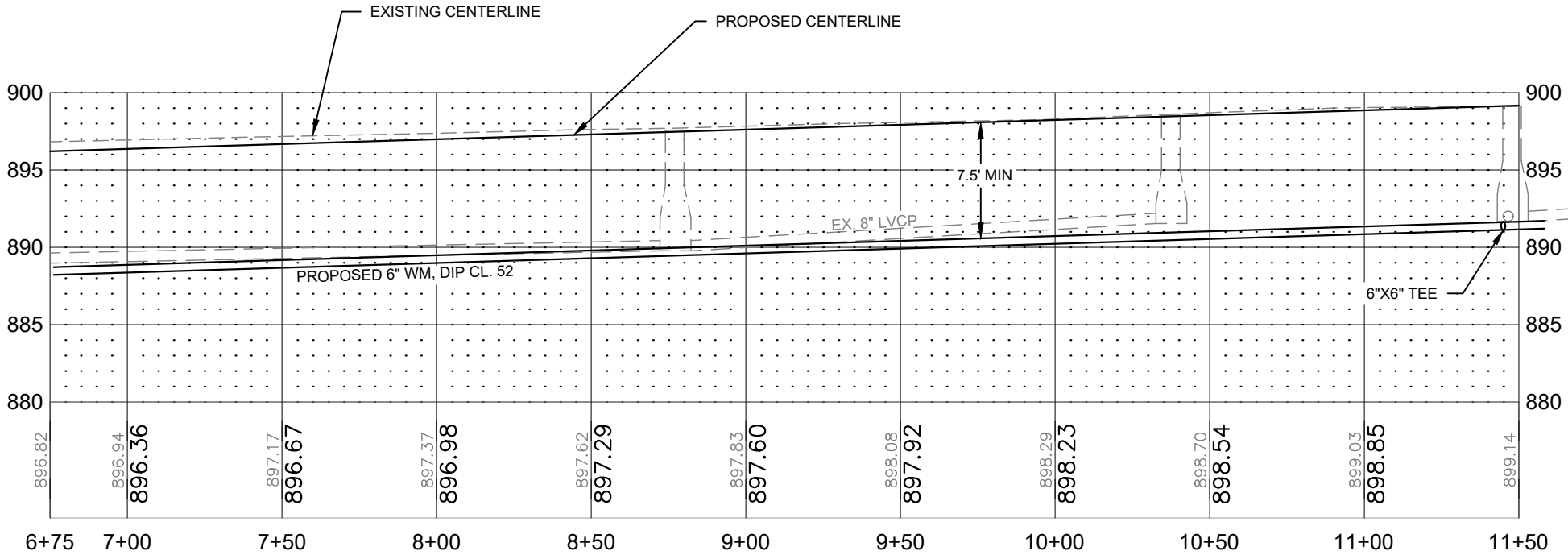
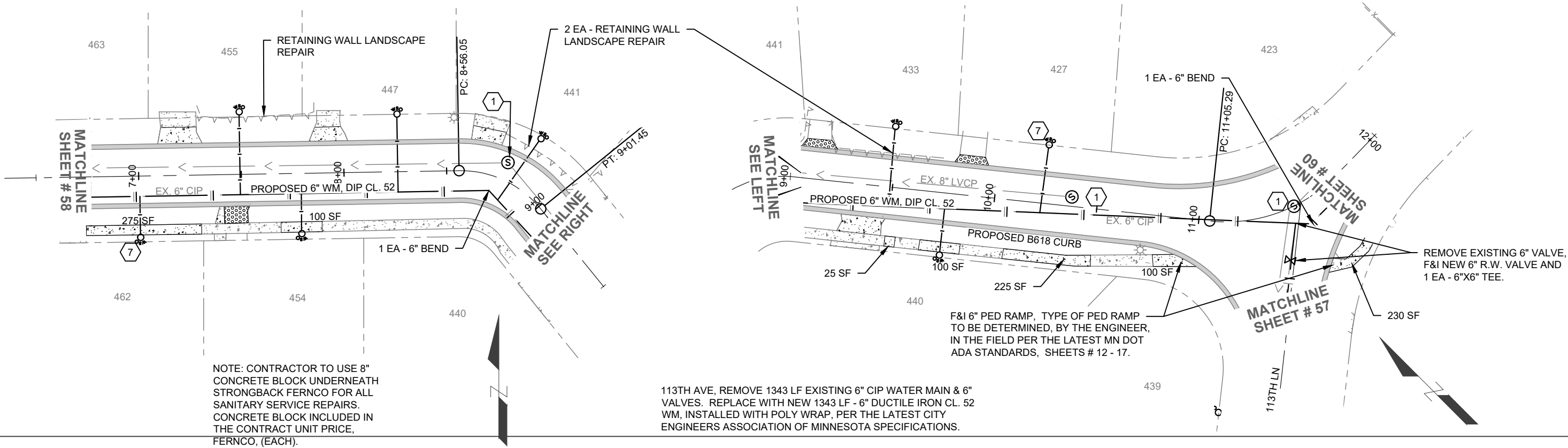
CITY OF COON RAPIDS, MINNESOTA

PLAN AND PROFILE

SHEET 58 OF 65 SHEETS

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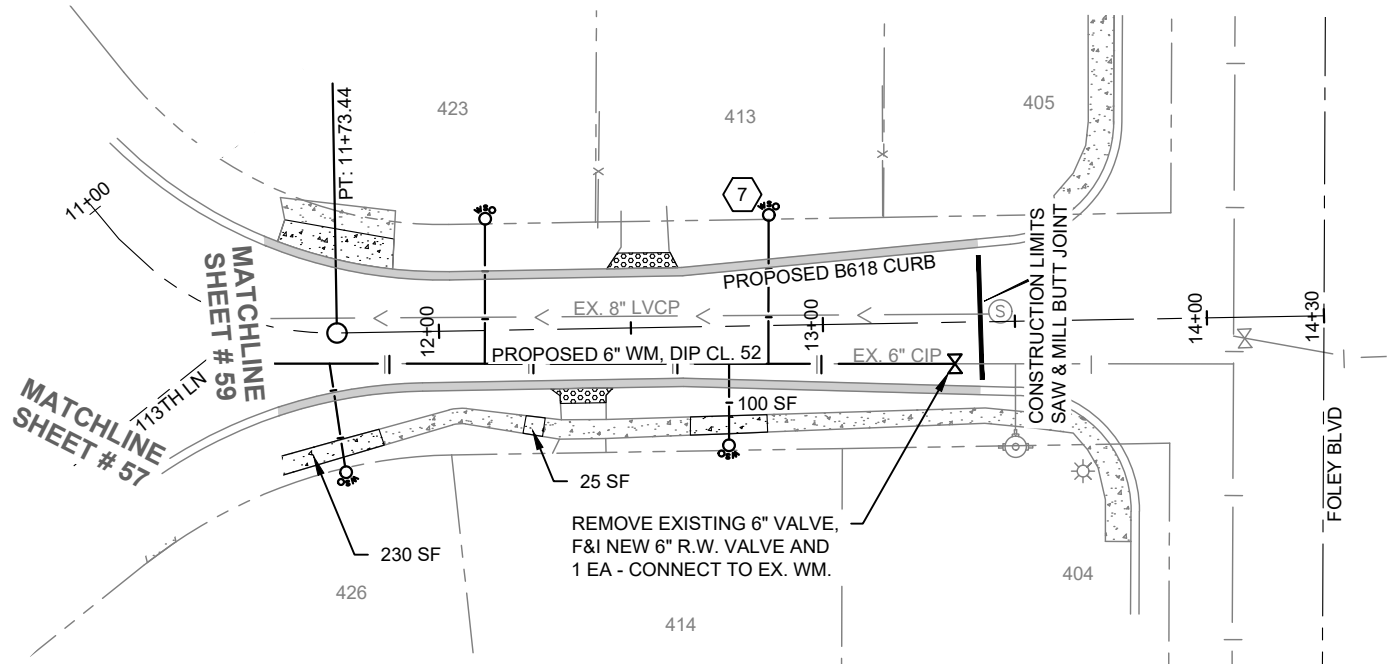
113TH AVE



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				DESIGNED: J.W.H.					
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				DATE: 11/10/2025		CITY OF COON RAPIDS, MINNESOTA		SHEET 59 OF 65 SHEETS	

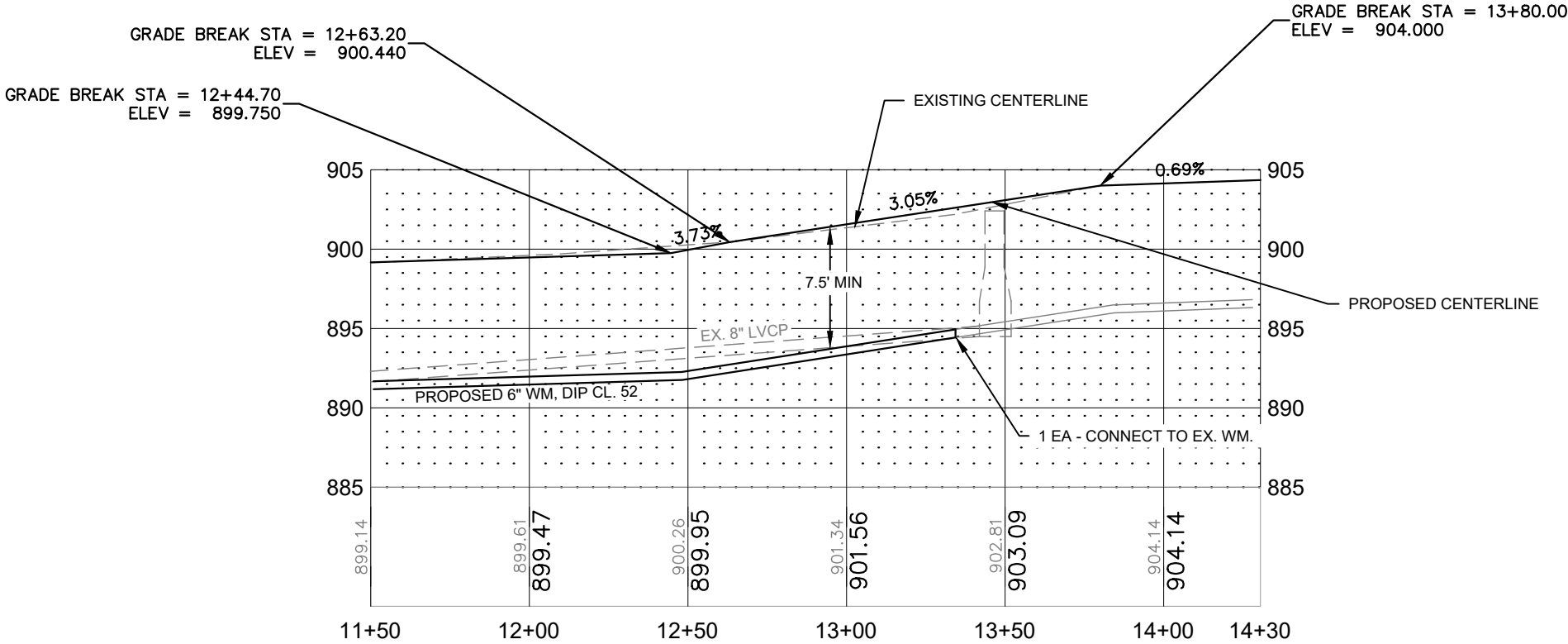
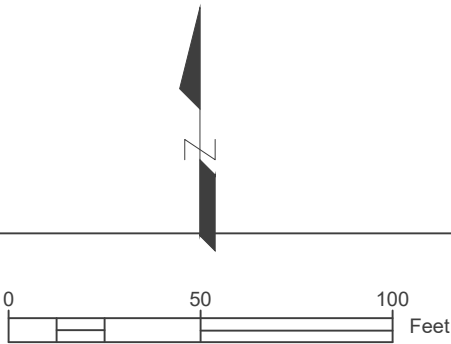
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3:30 PM
March 4, 2026

113TH AVE

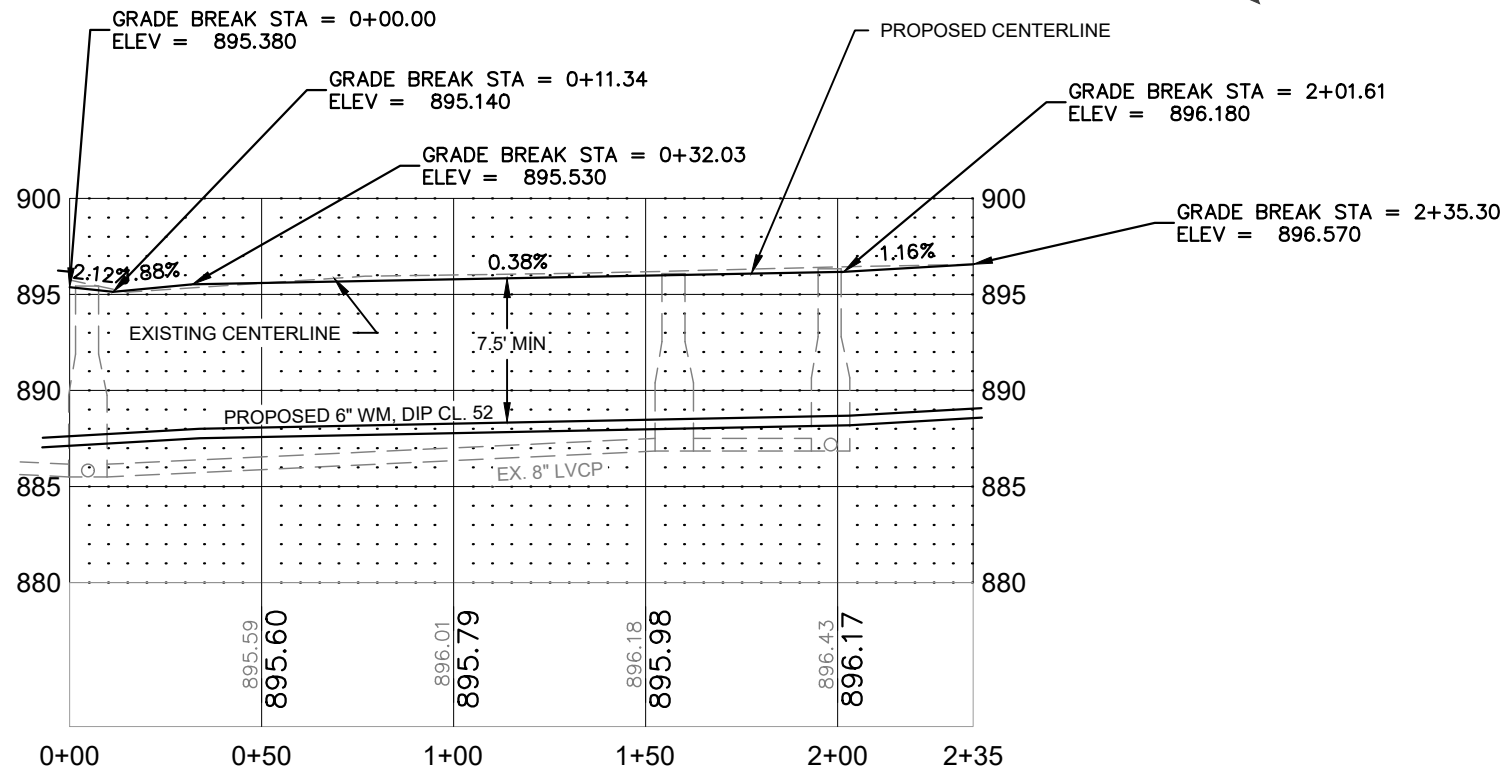


NOTE: CONTRACTOR TO USE 8" CONCRETE BLOCK UNDERNEATH STRONGBACK FERNCO FOR ALL SANITARY SERVICE REPAIRS. CONCRETE BLOCK INCLUDED IN THE CONTRACT UNIT PRICE, FERNCO, (EACH).

113TH AVE, REMOVE 1343 LF EXISTING 6" CIP WATER MAIN & 6" VALVES. REPLACE WITH NEW 1343 LF - 6" DUCTILE IRON CL. 52 WM, INSTALLED WITH POLY WRAP, PER THE LATEST CITY ENGINEERS ASSOCIATION OF MINNESOTA SPECIFICATIONS.



NO.			DATE	REVISIONS	 CITY OF COON RAPIDS ENGINEERING DEPARTMENT 11155 ROBINSON DRIVE COON RAPIDS, MN. 55433-3761 763-755-2880 FAX 163-767-6491	SURVEY: R.M.T	I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE STATE OF MINNESOTA. NAME: Mark C. Hansen, P.E. LICENSE # 43920 DATE: 3/6/2025 	26-1 STREET RECONSTRUCTION		PLAN AND PROFILE	
						DESIGNED: J.W.H.		CITY OF COON RAPIDS, MINNESOTA			
						CHECKED: M.C.H.					
						DATE: 11/10/2025				SHEET 60 OF 65 SHEETS	

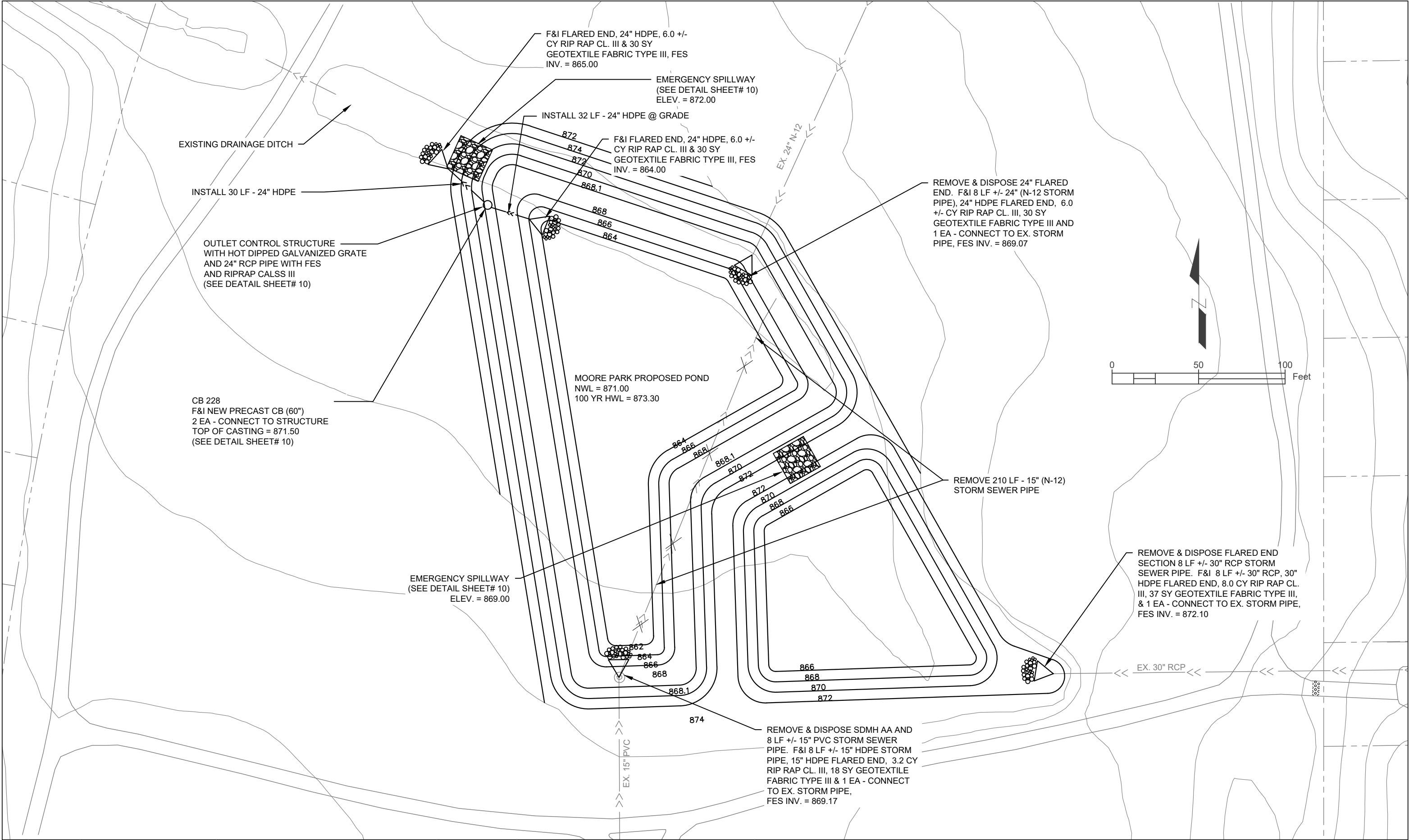


NO. DATE REVISIONS			 CITY OF COON RAPIDS ENGINEERING DEPARTMENT 11155 ROBINSON DRIVE COON RAPIDS, MN. 55433-3761 763-755-2880 FAX 163-767-6491	SURVEY: R.M.T	I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE STATE OF MINNESOTA. NAME: Mark C. Hansen, P.E. LICENSE # 43920 DATE: 3/6/2025 	26-1 STREET RECONSTRUCTION	PLAN AND PROFILE
				DESIGNED: J.W.H.			
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				DATE: 11/10/2025			

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March 4, 2026



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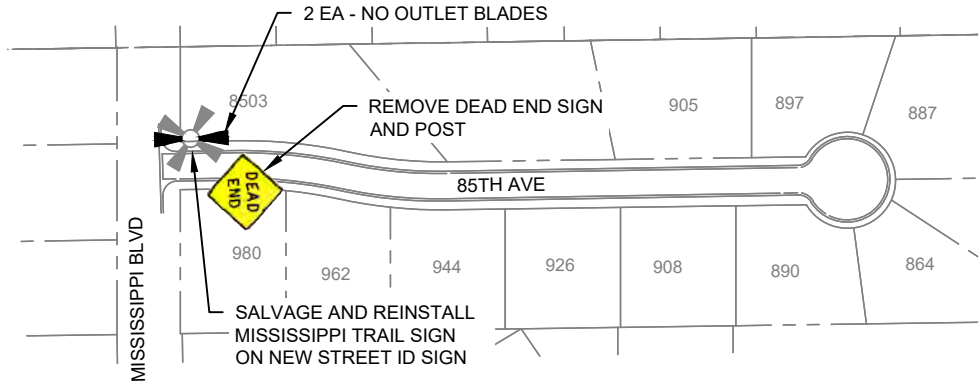
26-1 STREET RECONSTRUCTION

CITY OF COON RAPIDS, MINNESOTA

MOORE PARK POND

SHEET 62 OF 65 SHEETS

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IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO HAUL & LOAD REMOVED SIGNS / POSTS TO THE CITY'S PUBLIC WORKS FACILITY.

9"

9"

3" MIN.

Coon Rapids Blvd

SUFFIX ABBREVIATIONS

STREET -ST
AVENUE-AVE
LANE-LN
CIRCLE-CIR
BOULEVARD-BLVD
DRIVE-DR
PLACE-PL

2 3/8" O.D. 12 GAUGE GALVANIZED STEEL POST

PROPOSED FINISHED GRADE

BREAKAWAY SLEEVE (INSTALLED 2" ABOVE GROUND) CONCRETE (12"DIA.)

3" MIN.

ORNAMENTAL TOP NUT

USE FOR CUL DE SAC & DEAD END STREETS ONLY

PLATE HOLDER WITH STAR HOLE

5/8-INCH SQUARE CENTER ROD

NO OUTLET

Crocus St

NAME PLATES

124th Ave

ROD IS WELDED TO POST CAP

POST CAP WITH ALLEN SET SCREWS

THIS PICTURE IS FOR BLADE MOUNTING ONLY. SEE LEFT NOTES BELOW AND CITY SPECIFICATIONS FOR BLADE & LETTERING REQUIREMENTS.

NOTES:

1. SIGN BLADE SIZE IS 9" FOR 40 MPH AND LESS, 12" FOR 45 MPH AND GREATER, ARE MADE OUT OF .080" THICK ALUMINUM AND HAVE ROUNDED CORNERS.

2. BLADE LENGTH SHALL BE 24" MIN. OR AS NECESSARY TO FIT NAME AND LOGO.

3. BLADES SHALL BE SINGLE FACED AND FASTENED TOGETHER WITH STAINLESS STEEL BOLTS WITH NYLON INSERT LOCK NUTS.

4. LETTER SIZE IS 8" UPPER CASE & 4.5" LOWER CASE FOR STREET NAME ON 9" BLADES, 8" UPPER CASE & 6" LOWER CASE FOR STREET NAME ON 12" BLADES, 3" UPPER CASE & 2.5" LOWER CASE FOR SUFFIX ON 9" & 12" BLADES. NO OUTLET ALL UPPER CASE.

5. THE FONT TO USE FOR LETTERING IS SERIES B.

6. WHITE DIAMOND GRADE SHEETING, GREEN BACKGROUND FOR PUBLIC STREETS, BLUE BACKGROUND FOR PRIVATE STREETS, EC 1170 UV LAMINATE FILM OVERLAY WITH LOGO AND NO BORDER. GREEN BACKGROUND SHALL CONSIST OF FEDERAL GREEN R-19, C-109 AND B-84.

7. THE CITY LOGO WILL PRECEDE THE STREET NAME ON BLADE.

8. STREET NAMES SHALL BE SPELLED COMPLETELY EXCEPT FOR SUFFIXES.

9. SIGN BRACKETS SHALL BE LYLE SIGNS NO. E450 OR E650 FOR NO OUTLET.

10. SIGN POST SHALL BE 2 3/8" O.D. X 12' LONG GALVANIZED ROUND TUBE AND INSTALLED WITH BREAKAWAY SLEEVE IN CONCRETE.

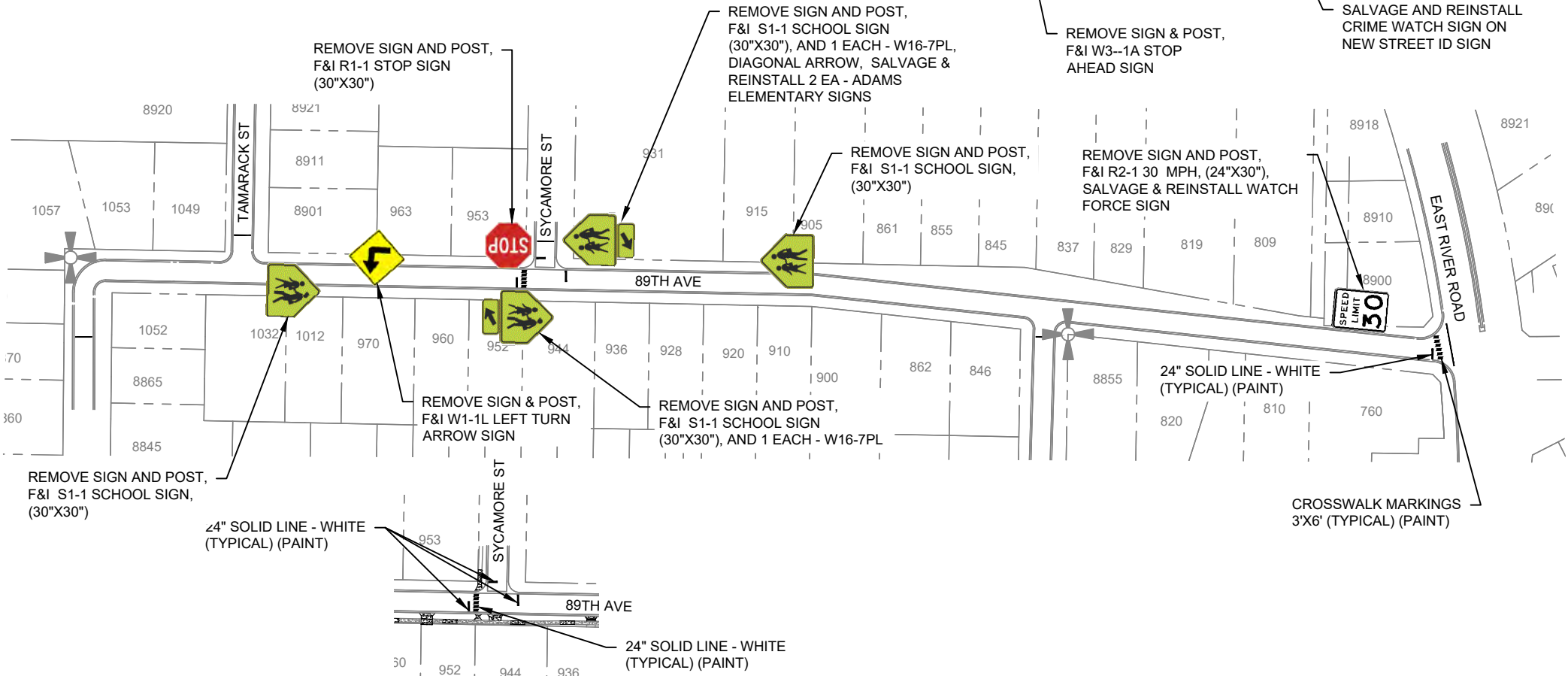
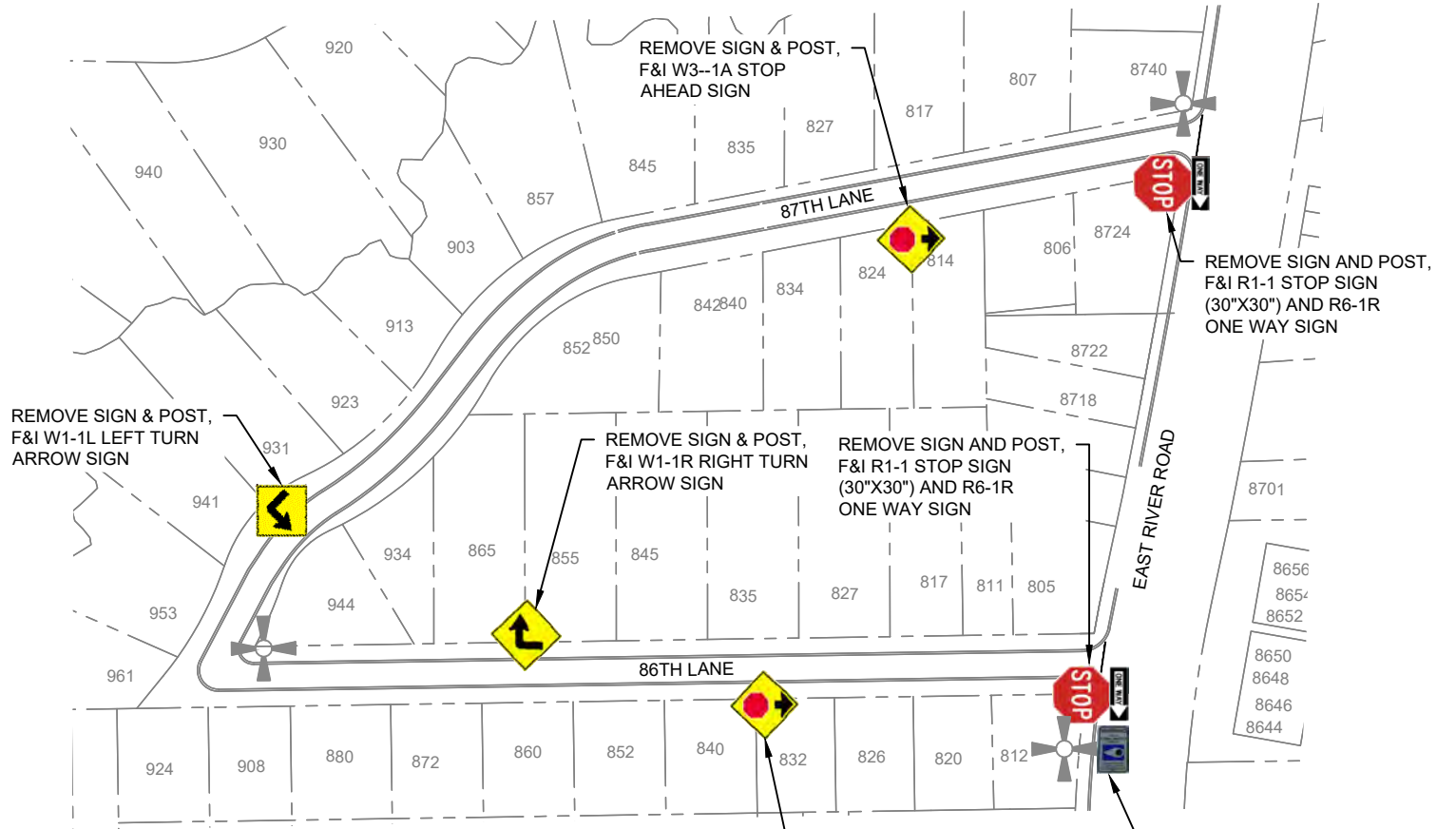
11. A SIGN PLAN SHOWING SIGN COLORS, SIZES AND LETTERING MUST BE SUBMITTED TO THE CITY FOR REVIEW AND APPROVAL.

12. SEE CITY SPECIFICATIONS FOR MORE DETAILS ON MATERIALS AND LAYOUT.

13. PERMANENT SIGNS SHALL BE PLACED SUCH THAT OBSTACLES DO NOT BLOCK THEM FROM BEING VIEWED BY APPROACHING ROAD USERS. OBSTACLES MAY INCLUDE, BUT ARE NOT LIMITED TO, LIGHT POLES, TREES, SIGNS, AND BUILDINGS.

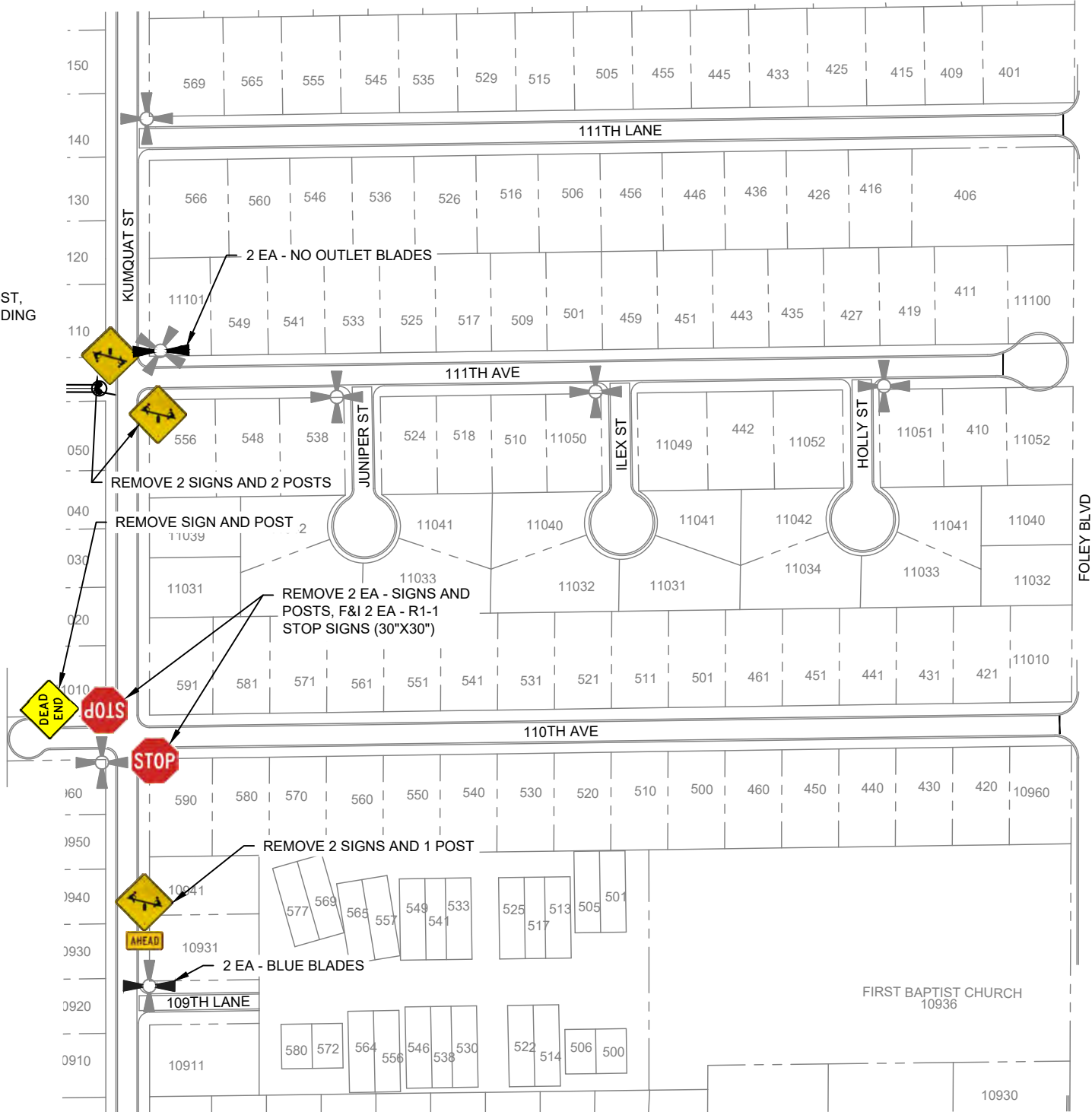
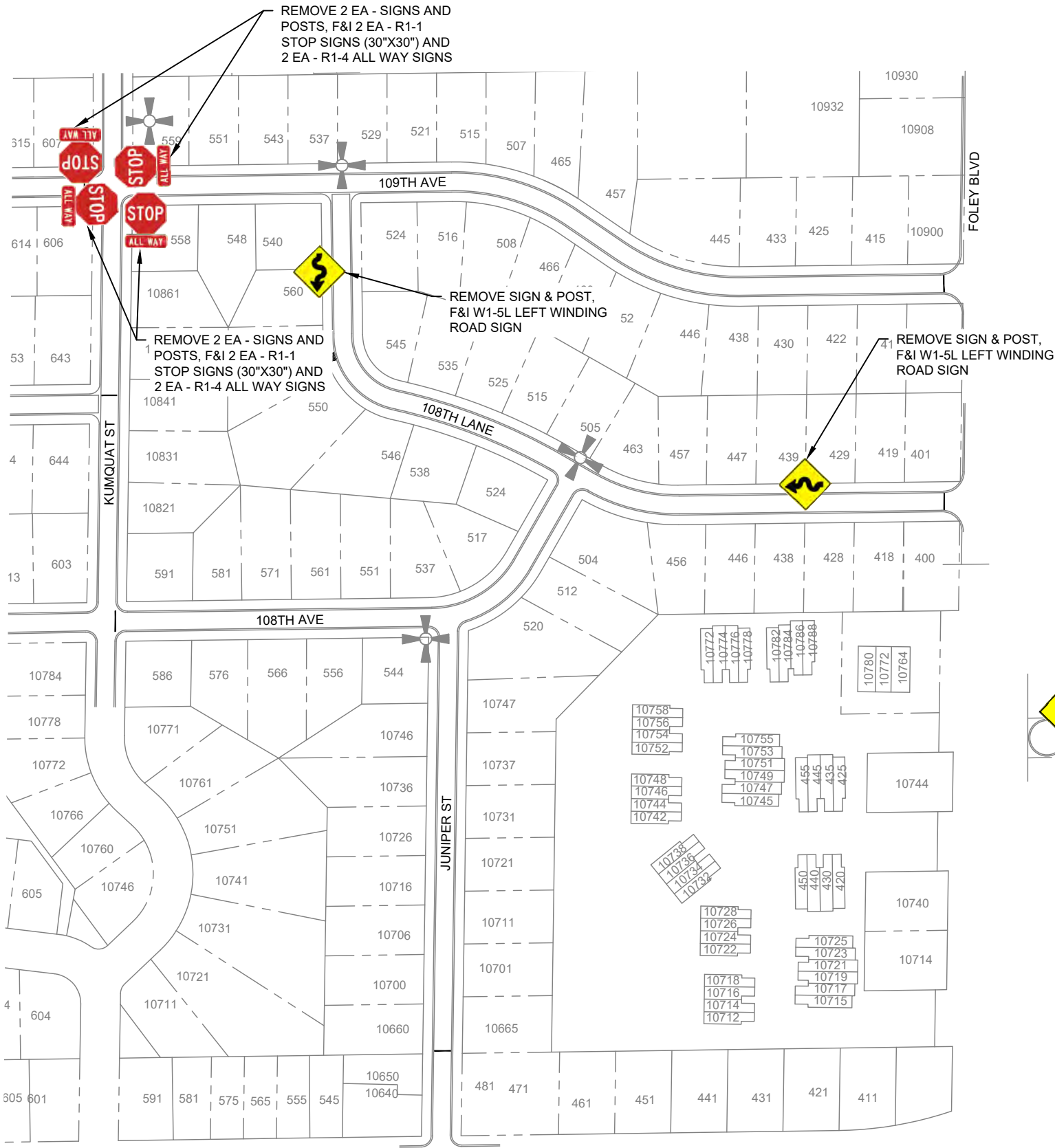
STREET SIGN INSTALLATION

DRAWN: J.W.H. DATE: 03/04/2026 SCALE: NONE PLATE NO. STR-13



NO.			DATE	REVISIONS			

	CITY OF COON RAPIDS ENGINEERING DEPARTMENT 11155 ROBINSON DRIVE COON RAPIDS, MN. 55433-3761 763-755-2880 FAX 163-767-6491		SURVEY: R.M.T.	I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE STATE OF MINNESOTA. NAME: Mark C. Hansen, P.E. LICENSE # 43920 DATE: 3/6/2025 	26-1 STREET RECONSTRUCTION CITY OF COON RAPIDS, MINNESOTA	SIGN PLAN SHEET 63 OF 65 SHEETS
			DESIGNED: J.W.H.			
			CHECKED: M.C.H.			
			DATE: 11/10/2025			



NO.	DATE	REVISIONS



CITY OF COON RAPIDS
ENGINEERING DEPARTMENT
11155 ROBINSON DRIVE
COON RAPIDS, MN. 55433-3761
763-755-2880
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SURVEY:	R.M.T
DESIGNED:	J.W.H.
CHECKED:	M.C.H.
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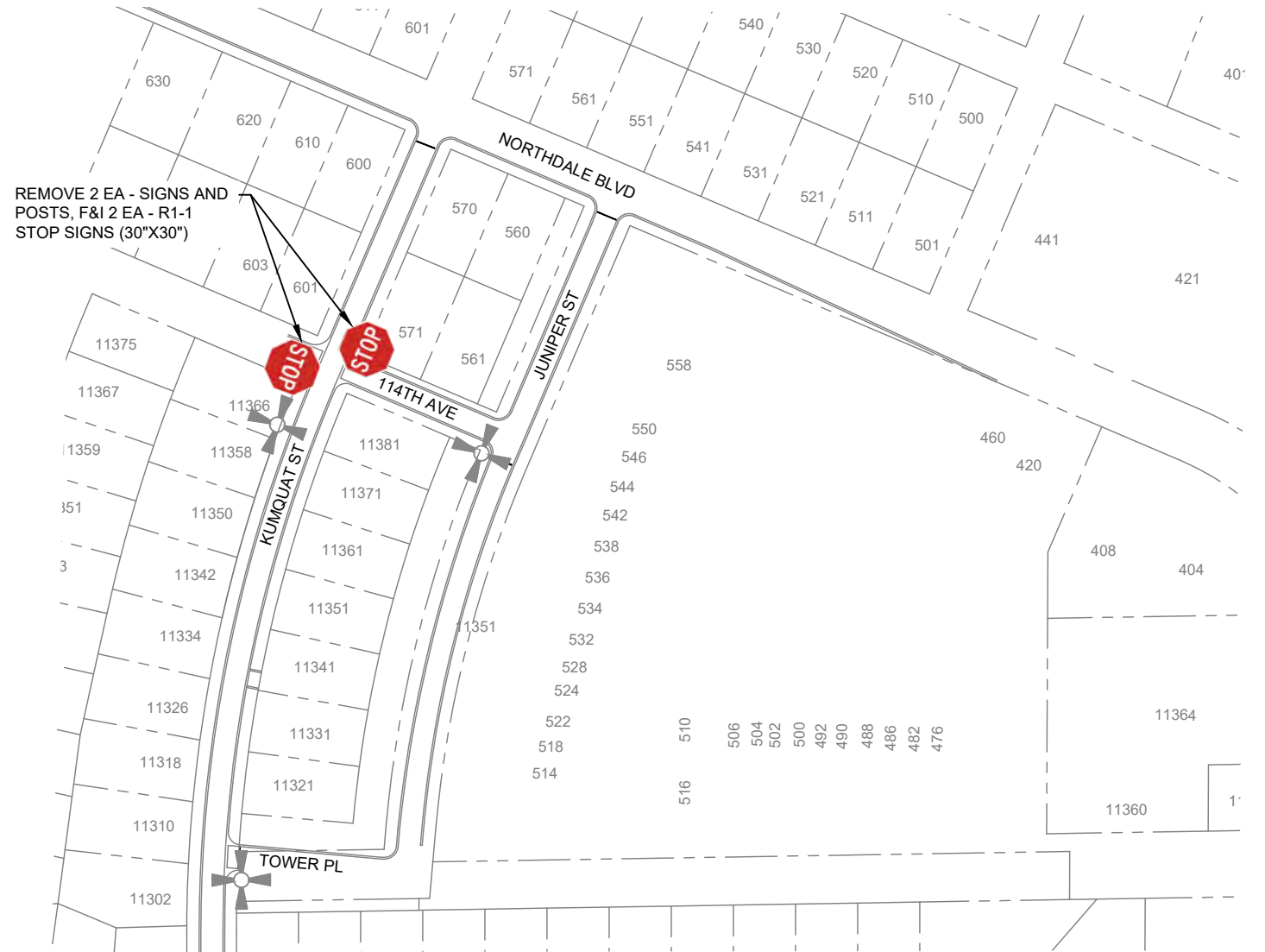
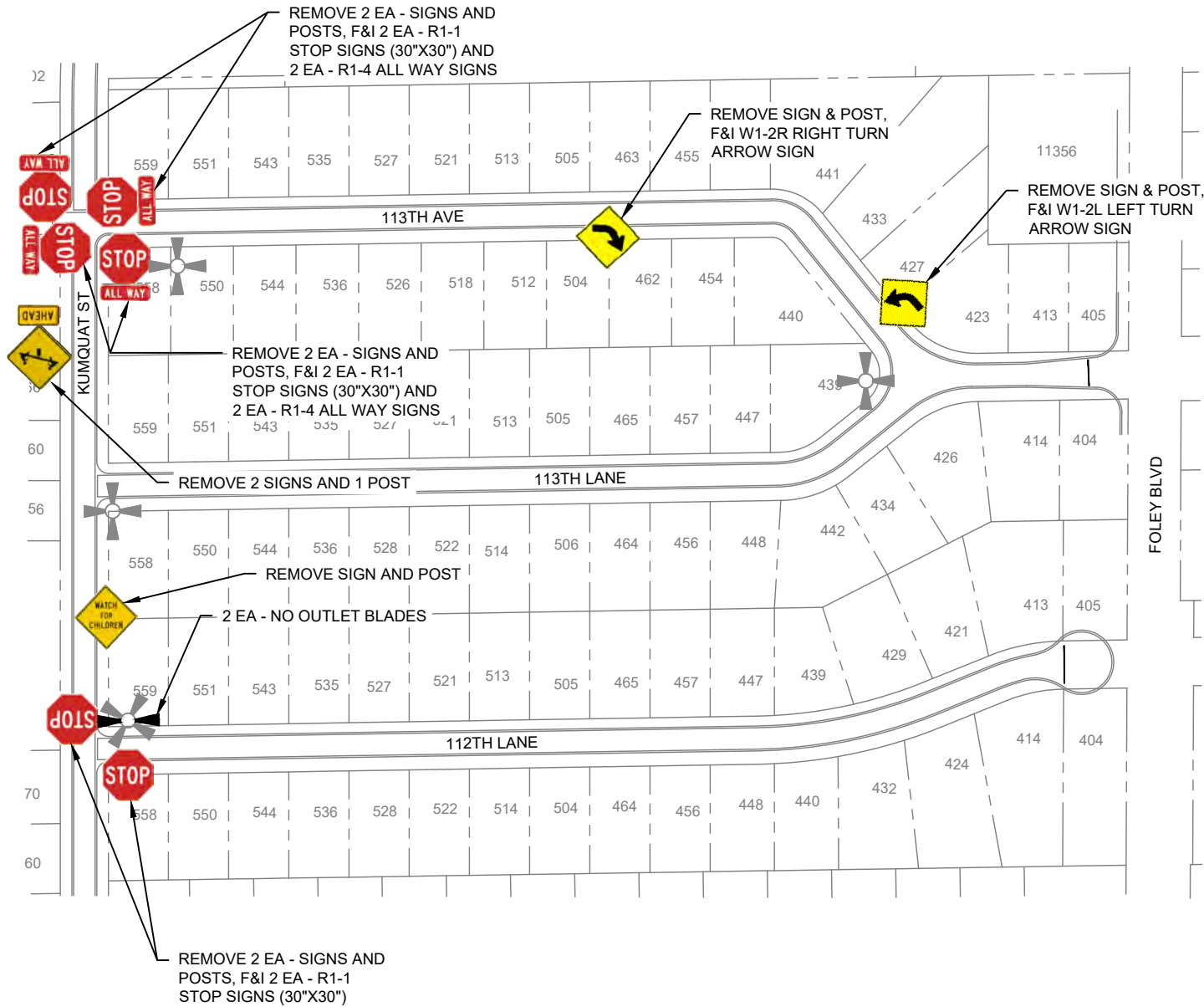
I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE STATE OF MINNESOTA.

NAME: Mark C. Hansen, P.E.
LICENSE # 43920
DATE: 3/6/2025



26-1 STREET RECONSTRUCTION

CITY OF COON RAPIDS, MINNESOTA



NO.	DATE	REVISIONS



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26-1 STREET RECONSTRUCTION

CITY OF COON RAPIDS, MINNESOTA

SIGN PLAN

SHEET 65 OF 65 SHEETS