

CITY OF ANDOVER, MINNESOTA

CONSTRUCTION PLANS FOR

2026 STREET RECONSTRUCTION CREEKRIDGE ESTATES (C.P. 26-02A) EAST ROUND LAKE ESTATES (C.P. 26-02C) AND 2026 FULL DEPTH RECLAMATION NORTHGLEN AREA / WOODLAND POND (C.P. 26-11B)

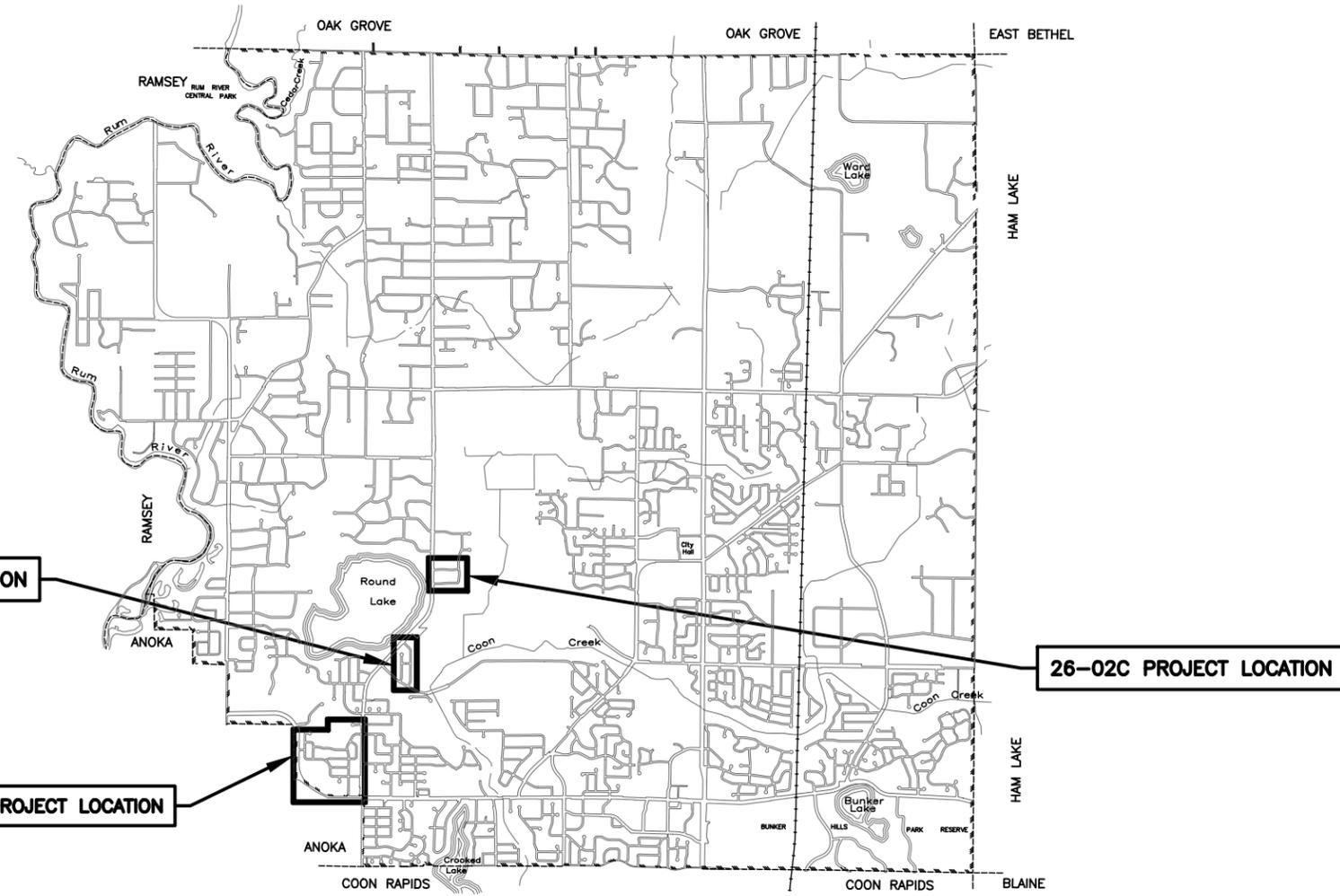
GOVERNING SPECIFICATIONS
THE 2025 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION" SHALL GOVERN.
CITY OF ANDOVER 2026 UTILITY AND STREET CONSTRUCTION SPECIFICATIONS SHALL APPLY.
ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE LATEST MMUTCD, INCLUDING THE LATEST FIELD MANUAL FOR TEMPORARY TRAFFIC CONTROL ZONE LAYOUTS.

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- ### LEGEND
- = CORPORATE LIMITS
 - - - = CENTERLINE
- ### EXISTING
- - - - = R.O.W.
 - - - - = PROPERTY LINE
 - UGT - = UNDERGROUND TELEPHONE LINE
 - UGE - = UNDERGROUND ELECTRIC LINE
 - UGE-3 - = UNDERGROUND ELECTRIC 3 PHASE
 - P-OH - = OVERHEAD ELECTRIC LINE
 - GAS - = GAS MAIN
 - PETRO - = GASOLINE MAIN
 - UGTV - = UNDERGROUND CABLE TV
 - UGFO - = UNDERGROUND FIBER OPTIC LINE
 □ = TELEPHONE/CABLE TV PEDESTAL
 □ = CONTROL CABINET/TRANSFORMER
 ○ = SIGN
 □ = CATCH BASIN
 ⊙ = STORM SEWER MANHOLE
 ○ = OUTLET CONTROL STRUCTURE
 ->- = STORM SEWER LINE
 = = CONCRETE CURB & GUTTER
- ### PROPOSED
- = = CONCRETE CURB & GUTTER
 ■ = CATCH BASIN
 ->- = STORM SEWER LINE

- NOTE:
- THE EXACT LOCATION OF UNDERGROUND UTILITIES SUCH AS GAS, TELEPHONE, FIBER OPTIC, ELECTRIC, CABLE TV, AND PIPE LINES ARE UNKNOWN. THE CONTRACTOR SHALL CONTACT GOPHER STATE ONE CALL (651-454-0002) BEFORE COMMENCING EXCAVATION.
 - THE SUBSURFACE UTILITY INFORMATION IN THIS PLAN IS UTILITY QUALITY LEVEL D. THIS UTILITY QUALITY LEVEL WAS DETERMINED ACCORDING TO THE GUIDELINES OF ASCE 38-22, ENTITLED "STANDARD GUIDELINES FOR INVESTIGATING AND DOCUMENTING EXISTING UTILITIES."
 - PROJECT 26-11B IS LOCATED WITHIN THE BOUNDARY OF THE LOWER RUM WATERSHED MANAGEMENT ORGANIZATION (LRRWMO).
 - PROJECTS 26-02A, 26-02B & 26-02C ARE LOCATED WITHIN THE BOUNDARY OF THE COON CREEK WATERSHED DISTRICT.



NO SCALE

PLAN REVISIONS SUMMARY			
NO.	BY	DATE	REVISIONS

THIS PLAN CONTAINS 44 SHEETS



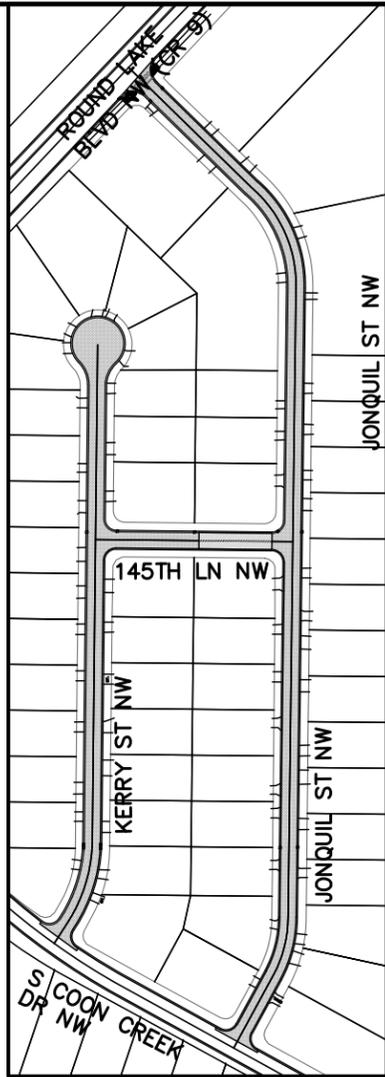
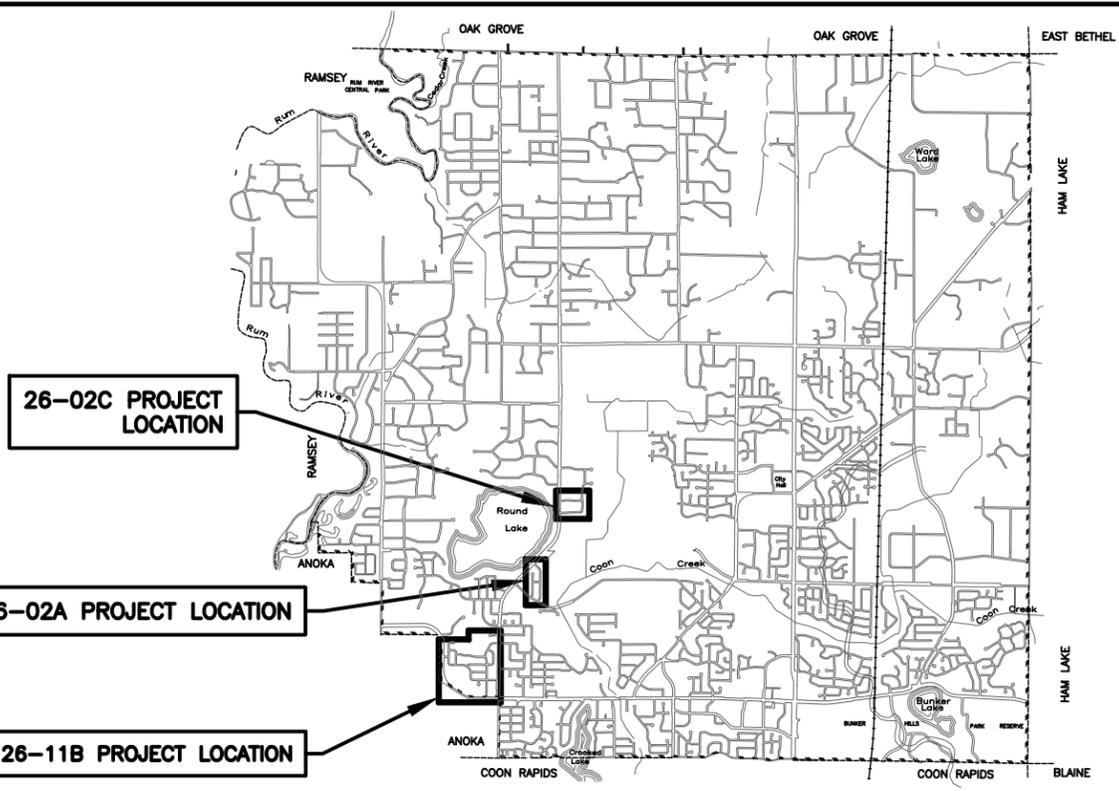
ANDOVER, MINNESOTA

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA

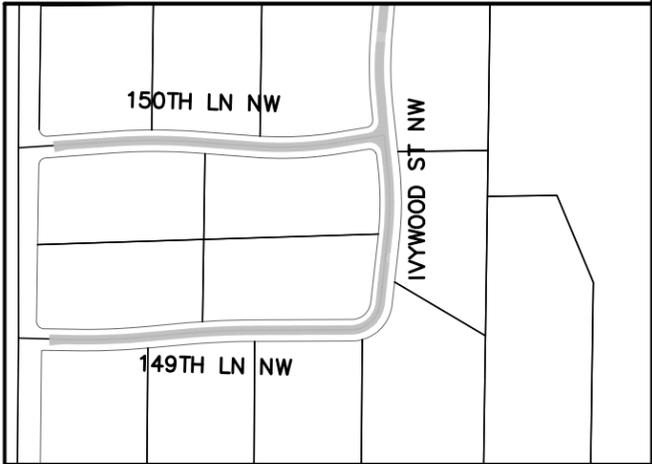
David D. Berkowitz DAVID D. BERKOWITZ, PE
ANDOVER DIRECTOR OF PUBLIC WORKS / CITY ENGINEER
DATE MARCH 3RD, 2026 LIC. NO. 26757

TITLE SHEET & LEGEND

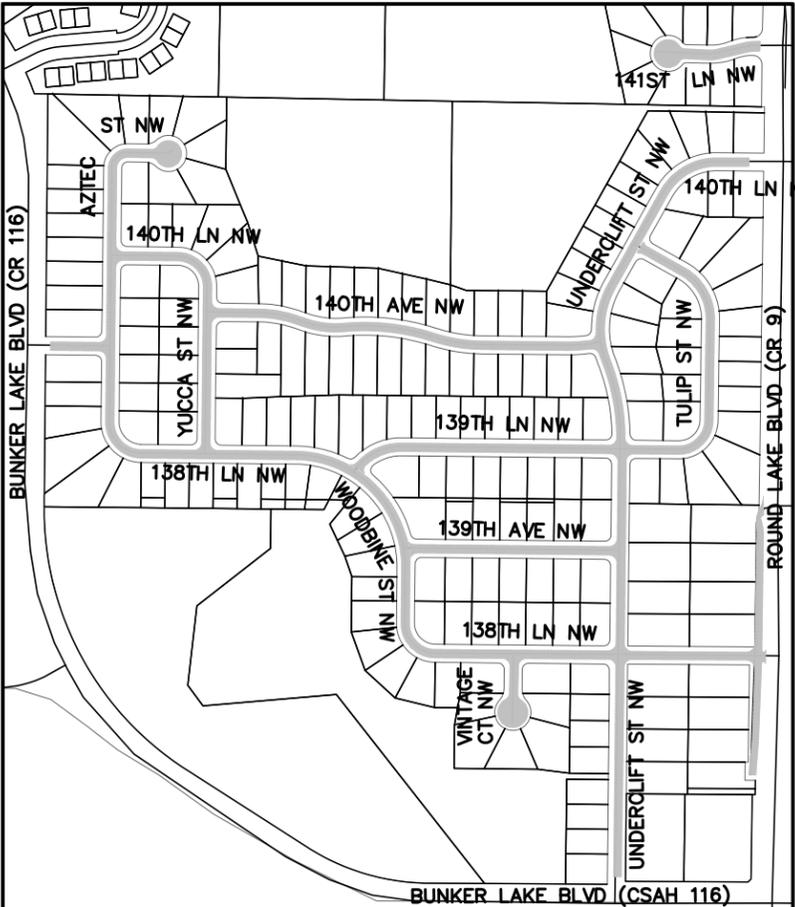
SHEET NO. 1 OF 54 SHEETS



2026 STREET RECONSTRUCTION
 EAST ROUND LAKE ESTATES (C.P. 26-02C)
 SEE SHEETS 25-32



2026 STREET RECONSTRUCTION
 CREEKRIDGE ESTATES (C.P. 26-02A)
 SEE SHEETS 6-13



2026 FULL DEPTH RECLAMATION
 NORTHGLEN AREA - WOODLAND POND (C.P. 26-11B)
 SEE SHEETS 33-54



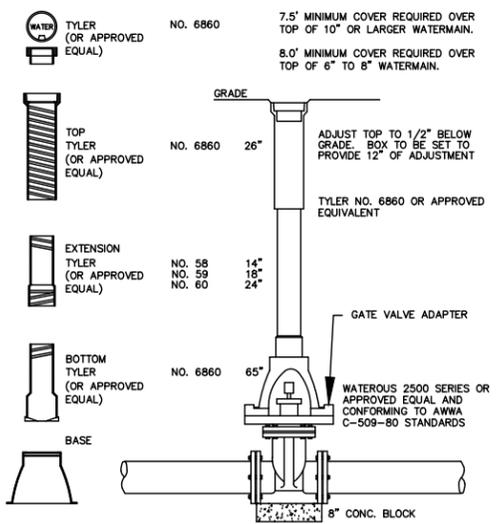
NO.	DATE	BY	DESCRIPTION OF REVISIONS

DESIGNED: JUL
 DRAWN: JBK
 CHECKED: DDB
 I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
 Signature: *David D. Berkowitz*
 SIGNATURE: DAVID D. BERKOWITZ
 DATE: MARCH 3RD, 2026 LIC. NO.: 28757

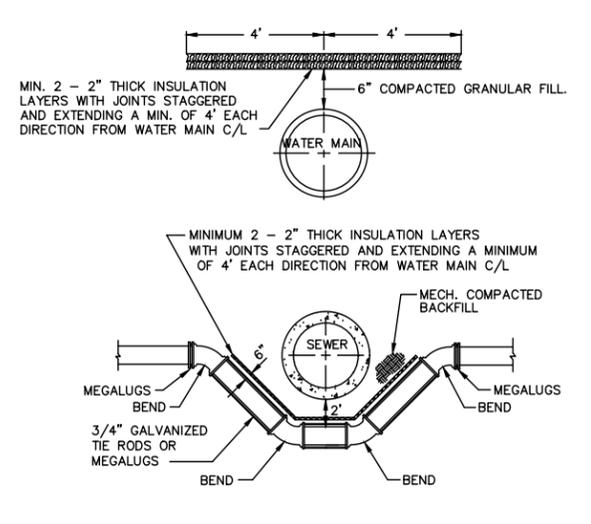


2026 STREET RECONSTRUCTION
 (C.P. 26-02A) & (C.P. 26-02C)
 2026 FULL DEPTH RECLAMATION
 (C.P. 26-11B)

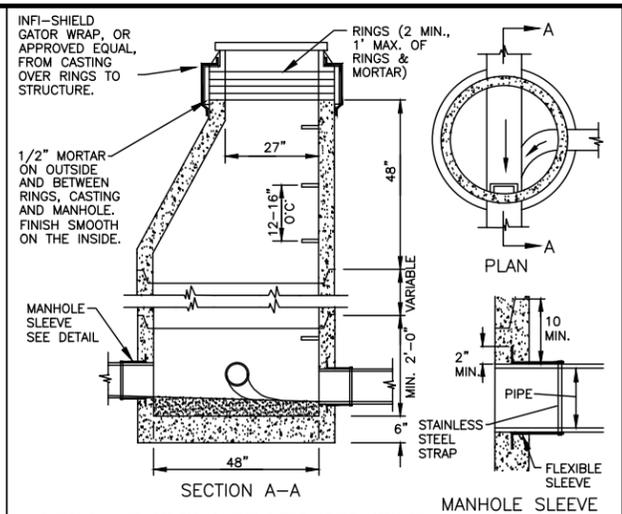
PROJECT LAYOUT (ALL PROJECTS)
 SHEET NO. 2 OF 54 SHEETS



GATE VALVE AND BOX

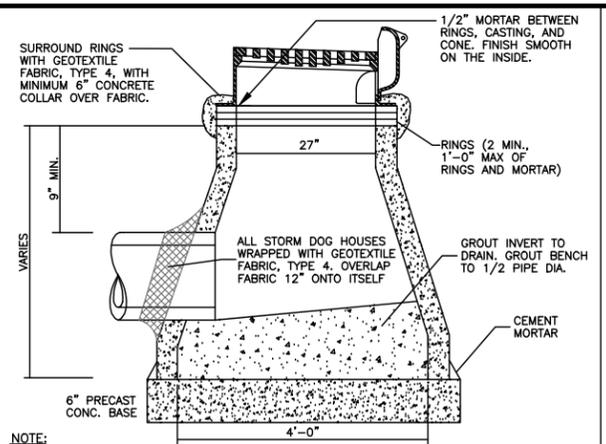


WATER MAIN INSULATION



NO WOOD SHALL BE USED FOR ADJUSTING CASTING; CEMENT MORTAR ONLY.
 CAST IRON MANHOLE FRAME & COVER AS PER SPECIFICATIONS (1642 B).
 MANHOLE STEPS SHALL BE CAST IRON, ALUMINUM, OR STEEL REINFORCED PLASTIC, PER ASTM C478, LOCATED OVER DOWNSTREAM PIPE.
 PRECAST REINFORCED CONCRETE MANHOLE SECTIONS PER ASTM C478, FURNISHED WITH O-RING GASKETS & LUBRICANT EXCEPT AS OTHERWISE SPECIFIED. LIFT HOLES NOT PERMITTED IN MANHOLE SECTIONS. A 12" OR 16" BARREL SECTION SHALL BE INSTALLED UNDER THE CONE WHENEVER POSSIBLE.
 PIPE CONNECTIONS TO MANHOLE SHALL BE MADE WATER TIGHT BY CAST INPLACE RUBBER SLEEVE & CEMENT MORTAR. INSIDE SURFACE SHALL BE FINISHED SMOOTH.
 PLACE "RAM-NECK" OUTSIDE OF O-RING GASKET AND WRAP MH SECTION JOINT WITH INFI-SHIELD GATOR WRAP, OR APPROVED EQUAL, ON ALL MANHOLE JOINTS BELOW WATER TABLE.
 ALL MORTAR SHALL CONFORM TO ASTM C270 AND MEET THE REQUIREMENTS OF MNDOT 2506.2B.

SANITARY SEWER MANHOLE, TYPE 301
(PIPES 27" OR LESS)



NO WOOD SHALL BE USED FOR ADJUSTING CASTING; CEMENT MORTAR ONLY.
 TYPICALLY USED FOR REAR YARD DRAINAGE AREAS AND PARKING LOTS.
 CAST IRON CATCH BASIN FRAME & COVER CASTINGS R-3250A UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER.
 CAST IRON CATCH BASIN FRAME & COVER CASTING R-3508C SHALL BE USED WHEN NEEDED IN A DRIVEWAY OR SURMOUNTABLE CURB.
 CAST IRON CATCH BASIN FRAME & COVER CASTING R-3508B SHALL BE USED WHEN NEEDED IN A COMMERCIAL DRIVEWAY OR VALLEY GUTTER.
 CAST IRON CATCH BASIN FRAME AND COVER CASTING R-2561A OR R-2535-A SHALL BE USED WHEN NEEDED IN A GREEN SPACE OR BACKYARD DRAINAGE AREA. WRAP CASTING OVER RINGS TO STRUCTURE WITH INFI-SHIELD GATOR WRAP, OR APPROVED EQUAL, INSTEAD OF CONCRETE COLLAR IN GREEN AREAS.
 PRECAST REINFORCED CONCRETE CONE SECTION AND PRECAST BASE PER ASTM C478.
 FILL OPENING BETWEEN PIPE AND MANHOLE WALL WITH CEMENT MORTAR. INSIDE SURFACE SHALL BE FINISHED SMOOTH. WRAP OUTSIDE OF DOGHOUSE WITH GEOTEXTILE FABRIC, TYPE 4, OVERLAP FABRIC 12" ONTO ITSELF.
 ALL MORTAR SHALL CONFORM TO ASTM C270 AND MEET THE REQUIREMENTS OF MNDOT 2506.2B.

CATCH BASIN, TYPE 401

6/19/12

5/22/06

12/10/2021

12/10/21



STANDARD DRAWING NO. 202A



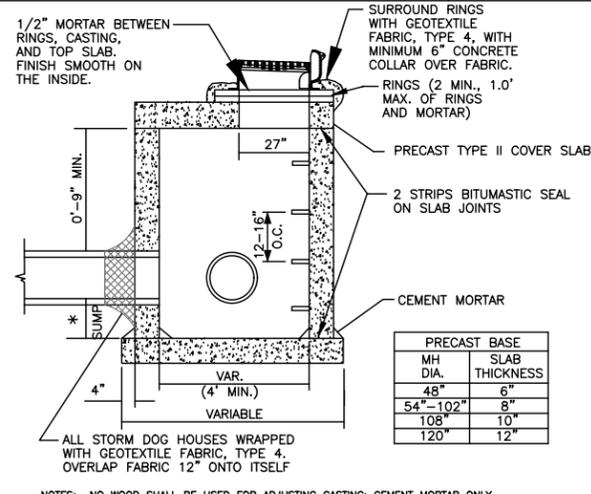
STANDARD DRAWING NO. 203A



STANDARD DRAWING NO. 301E



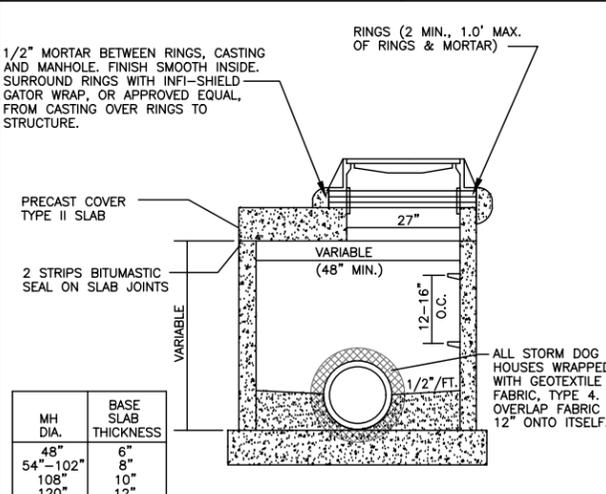
STANDARD DRAWING NO. 401L



MH DIA.	SLAB THICKNESS
48"	6"
54"-102"	8"
108"	10"
120"	12"

NOTES: NO WOOD SHALL BE USED FOR ADJUSTING CASTING; CEMENT MORTAR ONLY.
 CAST IRON FRAME & GRATE CASTINGS TYPE R-3250-A UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER.
 MANHOLE STEPS SHALL BE CAST IRON, ALUMINUM, OR STEEL REINFORCED PLASTIC PER ASTM C478. LOCATION SHALL BE EASILY ACCESSIBLE.
 PRECAST REINFORCED CONCRETE BASE SLAB & COVER SLAB PER ASTM C478.
 PRECAST REINFORCED CONCRETE MANHOLE SECTIONS PER ASTM C478, FURNISHED WITH O-RING GASKETS & LUBRICANT.
 FILL OPENING BETWEEN PIPE AND MANHOLE WALL WITH CEMENT MORTAR. INSIDE SURFACE SHALL BE FINISHED SMOOTH. WRAP OUTSIDE OF DOGHOUSE WITH GEOTEXTILE FABRIC, TYPE 4, OVERLAP FABRIC 12" ONTO ITSELF.
 ALL MORTAR SHALL CONFORM TO ASTM C270 AND MEET THE REQUIREMENTS OF MNDOT 2506.2B.
 * REFER TO PLANS FOR SUMP DEPTH, IF ANY.

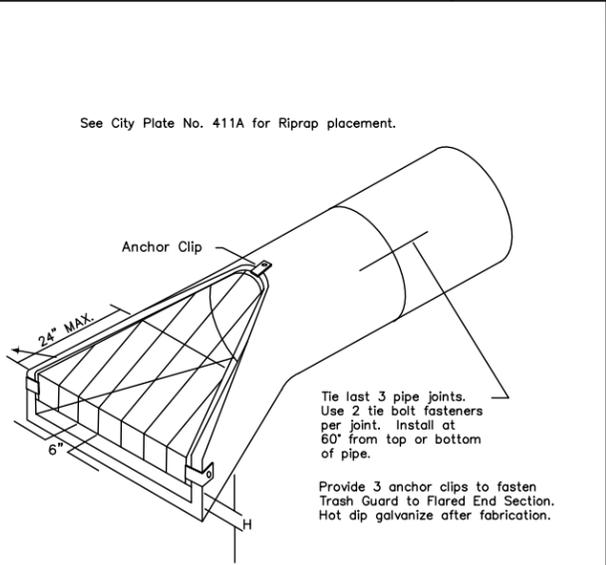
CATCH BASIN/MANHOLE WITH SUMP, TYPE 405



MH DIA.	BASE SLAB THICKNESS
48"	6"
54"-102"	8"
108"	10"
120"	12"

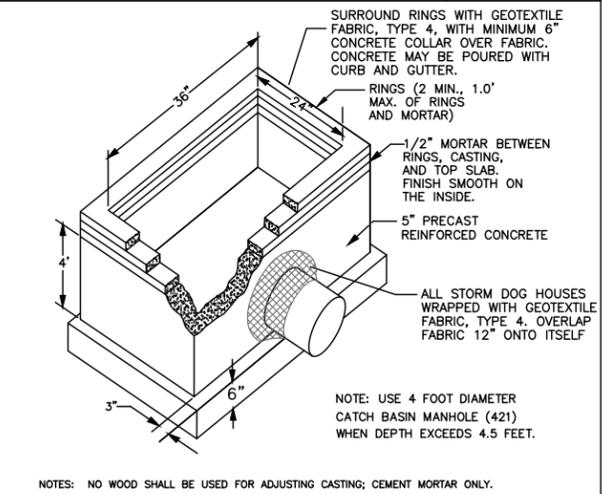
NOTE: NO WOOD SHALL BE USED FOR ADJUSTING CASTING; CEMENT MORTAR ONLY.
 CAST IRON MANHOLE FRAME & COVER AS PER SPECIFICATIONS (1642 B).
 STEPS SHALL BE CAST IRON, ALUMINUM OR STEEL REINFORCED PLASTIC, LOCATION AS SHOWN.
 PRECAST REINFORCED CONCRETE MANHOLE SECTIONS PER ASTM C478.
 FILL OPENING BETWEEN PIPE AND MANHOLE WALL WITH CEMENT MORTAR. INSIDE SURFACE SHALL BE FINISHED SMOOTH. WRAP OUTSIDE OF DOGHOUSE WITH GEOTEXTILE FABRIC, TYPE 4, OVERLAP FABRIC 12" ONTO ITSELF.
 ALL MORTAR SHALL CONFORM TO ASTM C270 AND MEET THE REQUIREMENTS OF MNDOT 2506.2B.

SHALLOW STORM SEWER MANHOLE



ISOMETRIC
FLARED END SECTION

3/4/10



NOTE: USE 4 FOOT DIAMETER CATCH BASIN MANHOLE (421) WHEN DEPTH EXCEEDS 4.5 FEET.
 NOTES: NO WOOD SHALL BE USED FOR ADJUSTING CASTING; CEMENT MORTAR ONLY.
 IN NEW DEVELOPMENTS CAST IRON FRAME AND GRATE CASTINGS TYPE R-3501-TB SHALL BE USED. CAST IRON FRAME AND GRATE CASTINGS TYPE R-3067-Y (ON A GRADE) OR R-3067-YB (LOW POINTS) SHALL BE USED IN RECONSTRUCTION AREAS OR AS CALLED OUT IN PLANS.
 PRECAST REINFORCED CONCRETE BASE SLAB PER ASTM C478.
 FILL OPENING BETWEEN PIPE AND MANHOLE WALL WITH CEMENT MORTAR. INSIDE SURFACE SHALL BE FINISHED SMOOTH. WRAP OUTSIDE OF DOGHOUSE WITH GEOTEXTILE FABRIC, TYPE 4, OVERLAP FABRIC 12" ONTO ITSELF.
 ALL MORTAR SHALL CONFORM TO ASTM C270 AND MEET THE REQUIREMENTS OF MNDOT 2506.2B.
 DOGHOUSE SHALL BE GROUTED ON BOTH THE OUTSIDE AND INSIDE.
 MAXIMUM DIAMETER RCP STORM SEWER PIPE IS 15" ON THE SHORT SIDE AND 18" ON THE LONG SIDE OF CATCH BASIN.
 GROUT SUMP TO PIPE INVERT UNLESS A SUMP IS CALLED OUT IN PLANS.

CATCH BASIN, TYPE 420

2/22/16



STANDARD DRAWING NO. 405K



STANDARD DRAWING NO. 409E



STANDARD DRAWING NO. 419A



STANDARD DRAWING NO. 420F

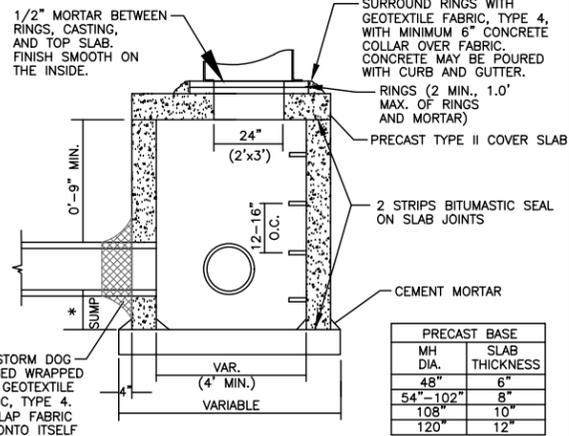
DESIGNED: JUL
 DRAWN: JBK
 CHECKED: DDB
 I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
 David D. Berkowitz
 DATE: MARCH 3RD, 2026 LIC. NO. 28757
 TYPED OR PRINTED NAME: DAVID D. BERKOWITZ



2026 STREET RECONSTRUCTION
(C.P. 26-02A) & (C.P. 26-02C)
2026 FULL DEPTH RECLAMATION
(C.P. 26-11B)

DETAILS/STANDARD PLANS & PLATES
(ALL PROJECTS)
SHEET NO. 3 OF 54 SHEETS

NO.	DATE	BY	DESCRIPTION OF REVISIONS



NOTES: NO WOOD SHALL BE USED FOR ADJUSTING CASTING; CEMENT MORTAR ONLY.

IN NEW DEVELOPMENTS CAST IRON FRAME AND GRATE CASTINGS TYPE R-3501-TB SHALL BE USED. CAST IRON FRAME AND GRATE CASTINGS TYPE R-3067-V (ON A GRADE) OR R-3067-VB (LOW POINTS) SHALL BE USED IN RECONSTRUCTION AREAS OR AS CALLED OUT IN PLANS.

MANHOLE STEPS SHALL BE CAST IRON, ALUMINUM, OR STEEL REINFORCED PLASTIC PER ASTM C478. LOCATION SHALL BE EASILY ACCESSIBLE.

PRECAST REINFORCED CONCRETE BASE SLAB & COVER SLAB PER ASTM C478.

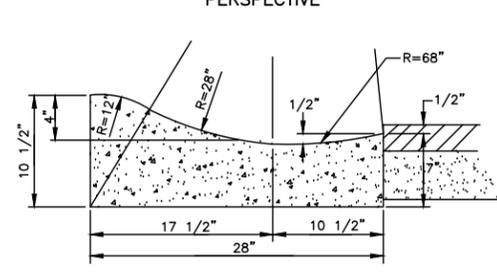
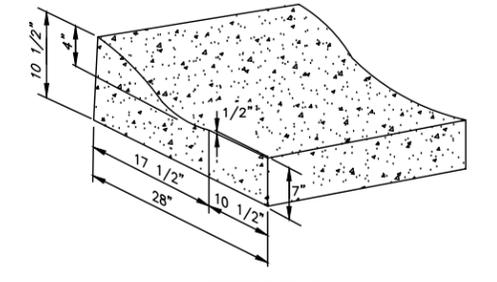
PRECAST REINFORCED CONCRETE MANHOLE SECTIONS PER ASTM C478, FURNISHED WITH O-RING GASKETS & LUBRICANT.

FILL OPENING BETWEEN PIPE AND MANHOLE WALL WITH CEMENT MORTAR. INSIDE SURFACE SHALL BE FINISHED SMOOTH. WRAP OUTSIDE OF DOGHOUSE WITH GEOTEXTILE FABRIC, TYPE 4, OVERLAP FABRIC 12" ONTO ITSELF.

ALL MORTAR SHALL CONFORM TO ASTM C270 AND MEET THE REQUIREMENTS OF MNDOT 2506.2B.

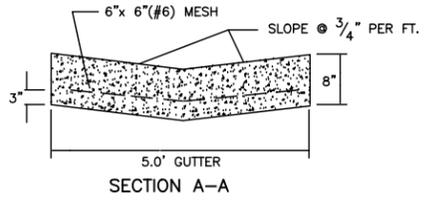
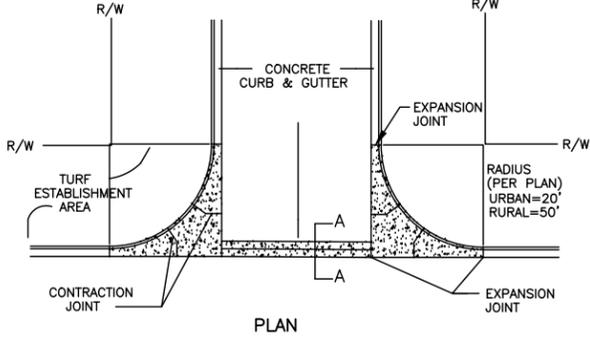
* REFER TO PLANS FOR SUMP DEPTH, IF ANY.

CATCH BASIN/MANHOLE WITH SUMP, TYPE 421



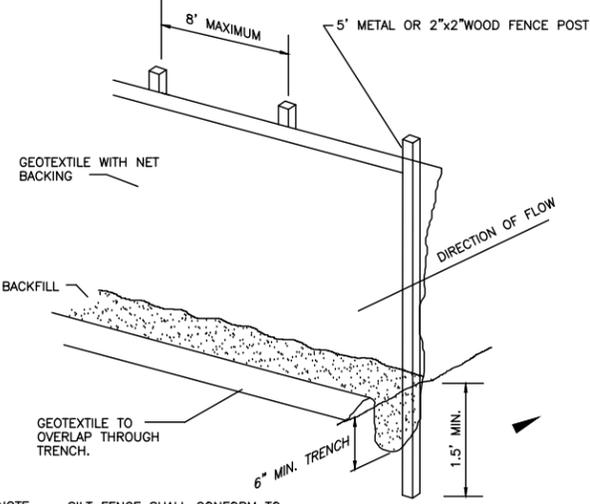
SURMOUNTABLE CONCRETE CURB & GUTTER

12/26/00



CONCRETE VALLEY GUTTER

2/19/08



NOTE: - SILT FENCE SHALL CONFORM TO MNDOT 3886, TYPE B.

- FENCING SHALL BE PLACED ALONG CONTOURS OR AS DIRECTED BY ENGINEER.

SILT FENCE

12/26/00



STANDARD DRAWING NO. 421G



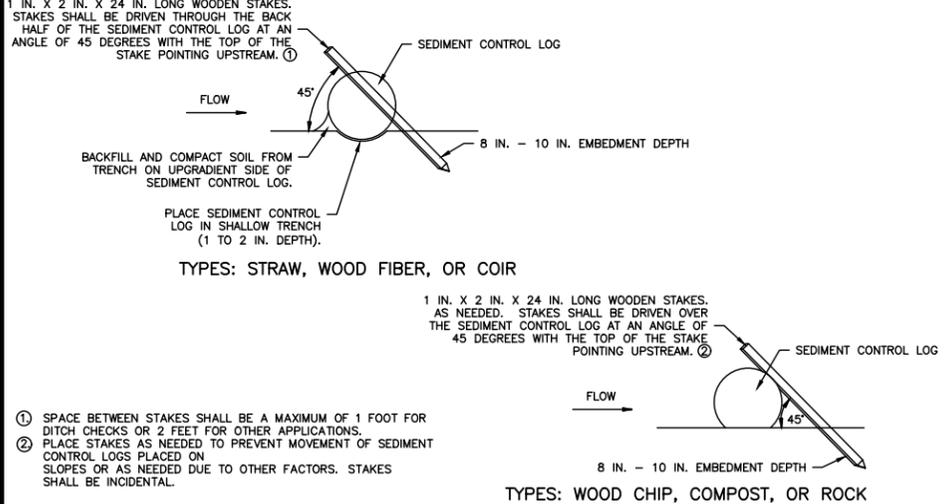
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STANDARD DRAWING NO. 504E



STANDARD DRAWING NO. 601

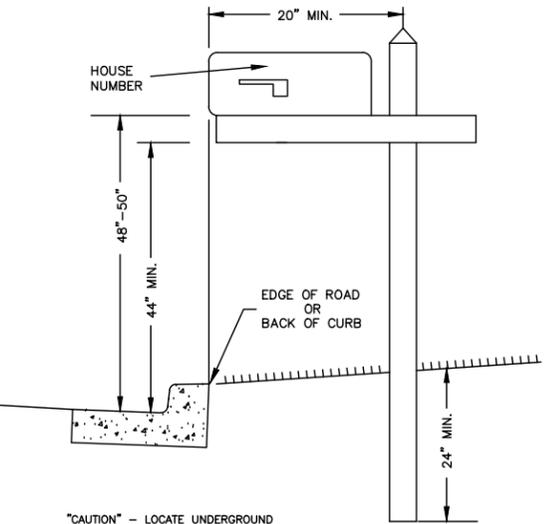


SEDIMENT CONTROL LOGS

1/29/20



STANDARD DRAWING NO. 602



"CAUTION" - LOCATE UNDERGROUND UTILITIES; GAS, TELEPHONE, ELECTRICAL, CABLE TV

HAVE BOX EXTEND AS FAR IN FRONT OF SUPPORT POST AS POSSIBLE (THIS PREVENTS POSSIBLE SNOW PLOW DAMAGE).

ADDRESS MUST BE ON SIDE OF BOX FROM WHICH CARRIER APPROACHES. IN LETTERS ABOUT ONE INCH HIGH OR ON FRONT WHERE BOXES ARE GROUPED.

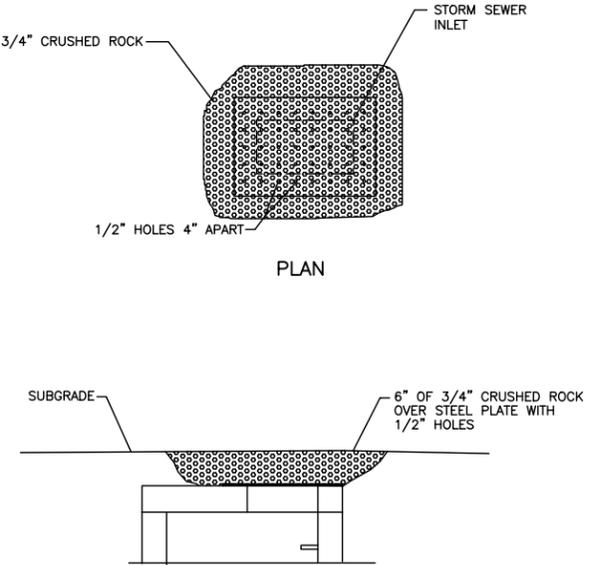
BOX MUST BE LOCATED SO CARRIER CAN SERVE WITHOUT LEAVING VEHICLE.

FACE OF MAIL BOX TO LINE UP WITH BACK OF CURB.

3/20/13



STANDARD DRAWING NO. 614A



ROCK FILTER FOR STORM SEWER INLET

NO SCALE

2/19/09



STANDARD DRAWING NO. 619

NO.	DATE	BY	DESCRIPTION OF REVISIONS

DESIGNED DRAWN JUL JBK

CHECKED DDB

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA

David D. Berkowitz

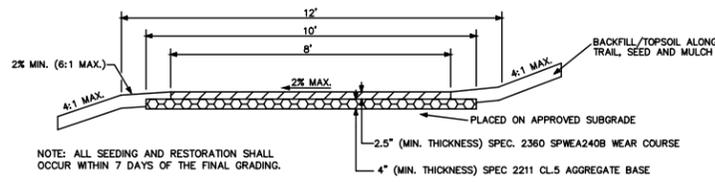
DAVID D. BERKOWITZ

SIGNATURE DATE: MARCH 3RD, 2026 LIC. NO. 28757



2026 STREET RECONSTRUCTION (C.P. 26-02A) & (C.P. 26-02C)
2026 FULL DEPTH RECLAMATION (C.P. 26-11B)

DETAILS/STANDARD PLANS & PLATES (ALL PROJECTS)
SHEET NO. 4 OF 54 SHEETS

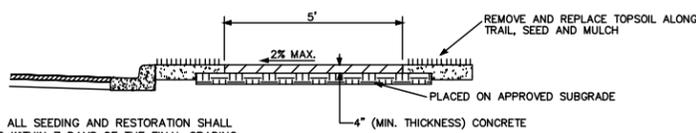


8' TYPICAL TRAIL SECTION

2/13/20



STANDARD DRAWING NO. 714D

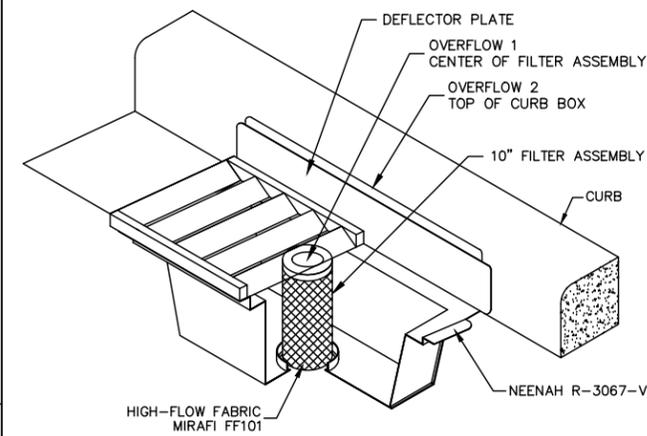


TYPICAL SIDEWALK SECTION

12/1/21



STANDARD DRAWING NO. 721B



WIMCO INLET PROTECTION
N.T.S.

* OR APPROVED EQUAL *

1/20/26



STANDARD DRAWING NO. 422

THE FOLLOWING STANDARD PLATES APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION SHALL APPLY ON THIS PROJECT

STANDARD PLATES	
PLATE NO.	DESCRIPTION
7038A	DETECTABLE WARNING SURFACE TRUNCATED DOMES
7100H	CONCRETE CURB AND GUTTER
8000K	TEMPORARY CHANNELIZERS - TYPE A

THE FOLLOWING STANDARD PLANS, APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION, SHALL APPLY ON THIS PROJECT

STANDARD PLANS			
INDEX NO.	SUBJECT	APPROVED	REVISED
5-297.250 (1 of 6)	PEDESTRIAN CURB RAMP DETAILS	11-04-2021	

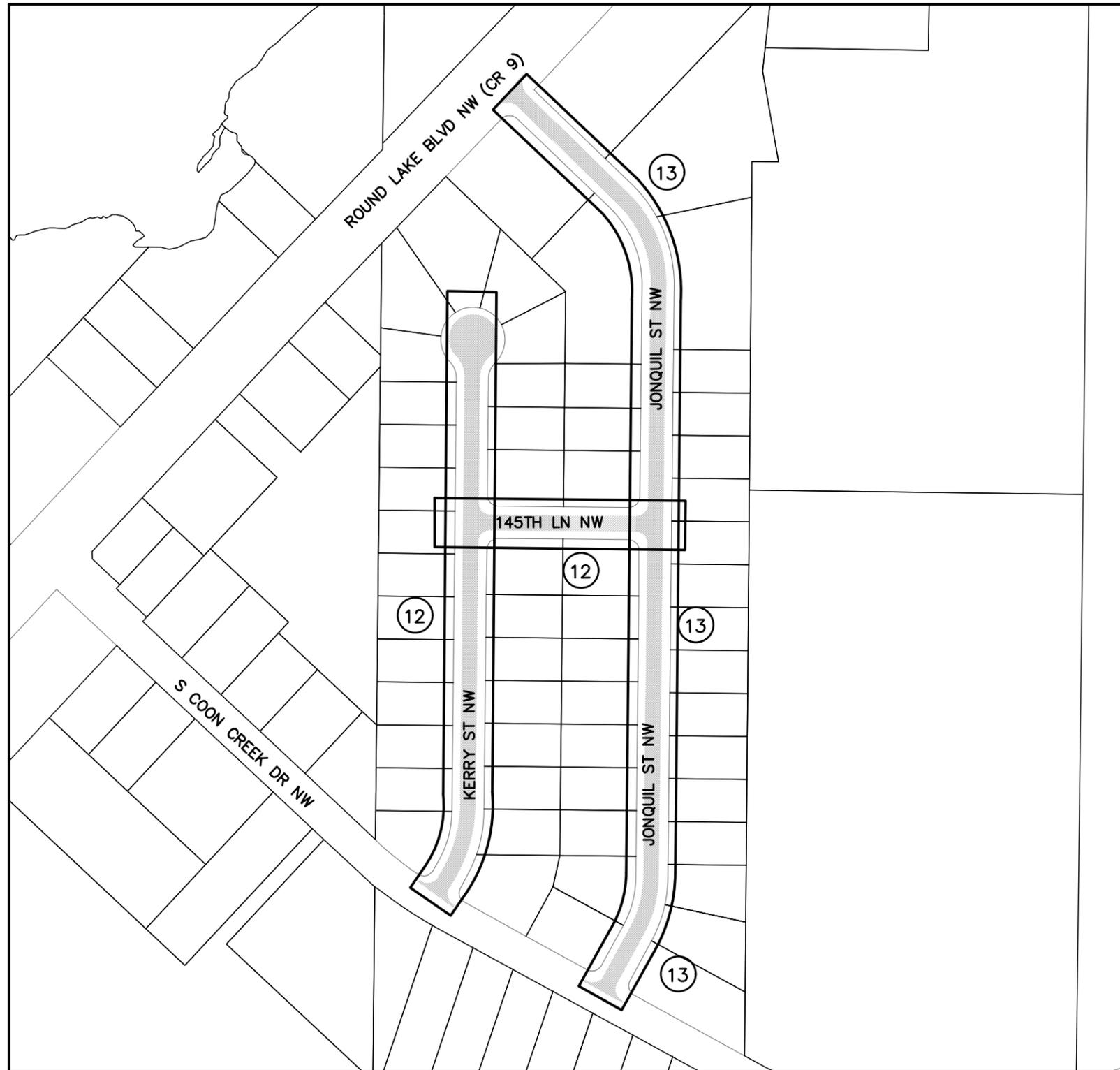
NO.	DATE	BY	DESCRIPTION OF REVISIONS

DESIGNED: JUL, DRAWN: JBK
 CHECKED: DDB
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 SIGNATURE: *David D. Berkowitz* DAVID D. BERKOWITZ
 DATE: MARCH 3RD, 2026 LIC. NO. 28757 TYPED OR PRINTED NAME



2026 STREET RECONSTRUCTION
 (C.P. 26-02A) & (C.P. 26-02C)
 2026 FULL DEPTH RECLAMATION
 (C.P. 26-11B)

DETAILS/STANDARD PLANS & PLATES
 (ALL PROJECTS)
 SHEET NO. 5 OF 54 SHEETS



ⓧ = REMOVALS, STORM SEWER, PAVING

NO.	DATE	BY	DESCRIPTION OF REVISIONS

DESIGNED: JUL
 DRAWN: JBK
 CHECKED: DDB
 I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
 SIGNATURE: *David D. Berkowitz*
 DATE: MARCH 3RD, 2026 LIC. NO. 26757
 TYPED OR PRINTED NAME: DAVID D. BERKOWITZ



2026 STREET RECONSTRUCTION – (C.P. 26-02A)
 CREEKRIDGE ESTATES

PROJECT LAYOUT
 SHEET NO. 6 OF 54 SHEETS

2026 Street Reconstruction: CreekrIDGE Estates
City Project: 26-02A
STATEMENT OF ESTIMATED QUANTITIES

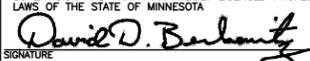
NOTES	ITEM NO.	DESCRIPTION	UNIT	TOTAL ESTIMATED PROJECT QUANTITIES	
				EST. QUAN.	ACT. QUAN.
	1	2021.501	Mobilization	LS	1.00
1	2	2104.502	Salvage Casting (Storm)	EA	4
	3	2104.502	Remove Drainage Structure	EA	3
2	4	2104.503	Sawing Concrete Pavement (Full Depth)	LF	25
2	5	2104.503	Sawing Bit Pavement (Full Depth)	LF	280
3	6	2104.503	Remove Curb & Gutter	LF	1,320
	7	2104.503	Remove Pipe Culvert / Storm Sewer	LF	44
2	8	2104.518	Remove Concrete Pavement	SF	200
2	9	2104.518	Remove Bituminous Pavement	SF	430
4	10	2105.607	Common Excavation (EV)	CY	10
5	11	2105.607	Subgrade Excavation (EV)	CY	450
6	12	2105.607	Salvage Reclaim Material (LV)	CY	1,360
7	13	2112.519	Subgrade Preparation	RDST	32.9
8	14	2130.523	Water	MGAL	30
9	15	2211.509	Aggregate Base Class 5	TN	10
10	16	2211.607	Place Salvaged Reclaim Material (CV)	CY	510
	17	2215.504	Full Depth Reclamation	SY	10,790
	18	2232.504	Mill Bituminous Surface (1.5")	SY	30
	19	2357.506	Bituminous Material For Tack Coat	Gal	550
	20	2360.509	Type SP 9.5 Wearing Course Mix (2,C)	TN	1,050
11	21	2360.509	Type SP 9.5 Bit Mixture for Patching (2,B)	TN	20
	22	2360.509	Type SP 12.5 Wearing Course Mixture (2,C)	TN	1,050
12	23	2451.607	Trench Stabilization Material (CV)	CY	5
	24	2503.503	12" RC Pipe Sewer Des 3006 Class V	LF	36
	25	2503.503	15" RC Pipe Sewer Des 3006 Class V	LF	8
	26	2503.602	Connect to Existing Storm Sewer	EA	2
13	27	2504.602	Adjust Gate Valve Box	EA	7
14	28	2504.602	Adjust Gate Valve Box - F&I New Valve Box Top	EA	2
15	29	2504.602	Gate Valve Casting Adjustment	EA	1
16	30	2504.602	Irrigation System Modifications	EA	30
17	31	2506.502	Manhole Casting Adjustment	EA	1
18,19	32	2506.502	Adjust Frame & Ring Casting	EA	11
19,20	33	2506.502	Casting Assembly - Sanitary	EA	1
19,20	34	2506.502	Casting Assembly - Storm	EA	1
19	35	2506.502	Install Casting - Storm	EA	4
	36	2506.602	Construct Drainage Structure, Type 401 - 27" Dia.	EA	1
	37	2506.602	Construct Drainage Structure, Type 405 - 48" Dia.	EA	2
21	38	2506.602	Mud Existing Casting Rings	EA	9
22	39	2506.602	Mud Doghouse	EA	10
23	40	2521.618	Concrete Curb Ramp Walk	SF	360
	41	2531.503	Concrete Curb and Gutter Surmountable	LF	1,320
	42	2531.504	6" Concrete Driveway Pavement	SY	10
	43	2531.602	Saw and Seal Concrete Curb & Gutter	EA	15
	44	2531.604	8" Concrete Valley Gutter	SY	80
	45	2531.618	Truncated Domes	SF	50
	46	2563.601	Traffic Control	LS	1.00
	47	2573.502	Storm Drain Inlet Protection	EA	14
	48	2574.507	Loam Topsoil Borrow (LV)	CY	150
	49	2575.504	Sodding Type Lawn	SY	440
24	50	2575.505	Weed Spraying	ACRE	0.10
	51	2582.503	18" Solid Line Paint	LF	16
	52	2582.518	Pavement Message Paint	SF	170

C.P. 26-02A Notes:

- Item includes temporary plating of structure if necessary.
- Regardless of depth.
- Regardless of type/dimension of curb. Sawcut of curb and excavation and off-site disposal of material behind curb replacement incidental.
- For all excavation except subgrade excavation. Dispose excess and/or unsuitable material off-site. See Earthwork Tabulation.
- For exc. beneath reclaimed agg. base where profile lowered or unsuitable material encountered. Dispose excess and/or unsuitable material off-site. See Earthwork Tabulation.
- For excavating/hauling/stockpiling reclaim material salvaged for subgrade exc. and/or excess material. Excess property of contractor. See Earthwork Tabulation.
- Includes grading reclaim material from areas of excess to areas requiring material (under curb, along shoulder, increased crown), fine grading, and compacting reclaimed agg. base.
- For dust control only as directed by the engineer. Water to achieve compaction shall be incidental.
- Item includes furnishing, hauling, placing and compacting. See Earthwork Tabulation.
- Includes loading/hauling/placing/grading/compacting salvaged reclaim material in areas of subgrade exc. or correction.
- Item shall be used for patching of bituminous trails, driveway replacements, and adjacent to concrete valley gutters.
- Rock shall be 1.5" nominal diameter. Use under utility pipe and structures if water table is high.
- Adjust valve box top to grade, includes sawcut, pavement removal, plating, lowering for reclaim and adjust to final grade. Use item if existing valve box top can be adjusted.
- Use item if existing valve box top is rusted shut and not adjustable. Includes sawcut, pavement removal, plating, remove existing valve box top and F&I new valve box top.
- F&I gate valve casting adjustment(if necessary). Clean and glue to existing frame.
- Based upon number or irrigation heads removed / replaced. Item shall include all items necessary to temporarily cap existing systems, replace damaged lines, heads, adjust systems, and return them to pre-project condition or better. Work shall be performed by a licensed irrigation contractor.
- F&I manhole casting adjustment (if necessary). Contractor to verify casting diameter. Clean and glue to existing frame. Neenah R-1979 series, or approved equal.
- Item includes sawcut, pavement removal, plating, salvaging and reinstalling casting regardless of required adjusting rings.
- Includes new concrete adjusting rings regardless of depth, Infi-Shield Gator Wrap (manholes), or wrap rings with geotextile fabric and concrete collar (catch basins).
- For use if salvaged casting breaks or is unuseable or new casting required per plans.
- Protect casting, touch up mud on existing concrete adjustment rings inside structure.
- Item shall include regrouting all doghouses within structure. The "Each" item refers to each structure regardless of the number of doghouses in the structure.
- For 6" thick pedestrian curb ramps.
- Only to be used if requested by engineer prior to or during site restoration.

BASIS OF ESTIMATED QUANTITIES	
Bituminous Wear Course	120 # / SY / inch
Bituminous Non-Wear Course	120 # / SY / inch
Aggregate Base, Class 5	110 # / SY / inch
Tack Coat	0.05 Gal / SY

NO.	DATE	BY	DESCRIPTION OF REVISIONS

DESIGNED JUL	DRAWN JBK	I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA  DAVID D. BERKOWITZ TYPED OR PRINTED NAME
CHECKED DDB	DATE MARCH 3RD, 2026	



2026 STREET RECONSTRUCTION -- (C.P. 26-02A)
 CREEKRIDGE ESTATES

EARTH WORK TABLE

City Project 26-02A: Creekridge Estates

Aggregate Base Class 7 (Reclaim)

Existing 2.5" +/- of bituminous and 4" +/- aggregate base based on road cores
 Reclaim 7.5"+/- deep (pull some sand into reclaim)

Roadway Length = 3.285 LF

Salvage Reclaim Material

Volume of salvaged reclaim material = 840 CY (CV)
 Volume of salvaged reclaim material = 66 CY (CV)
Total Salvaged Reclaim = 906 CY (CV)

2.75" over entire reclaimed area
 6" salvage in areas of subgrade correction 125 LF x 28.33' wide
 Available material

Salvaged Reclaim Required

Volume required = 0 CY (CV)
 Volume required = 444 CY (CV)
 Volume required = 60 CY (CV)
Total Salvaged Reclaim Required = 504 CY (CV)

5"- areas of profile grade/ crown changes
 Backfill for subgrade correction area (corresponds to assumed correction volume)
 5"- areas of subgrade corrections

Aggregate Base Class 5 Required

Volume required = 3 CY (CV)
Total Class 5 Required = 3 CY (CV)

Driveway and pedestrian ramps

Subgrade Excavation

Volume of subgrade exc. = 0 CY (EV)
 Volume of subgrade exc. = 444 CY (EV)
Total Subgrade Excavation = 444 CY (EV)

Areas of lowering of roadway profile
 Subgrade correction areas. Assume 3' depth in correction areas

Common Excavation

Volume of common exc. = 6 CY (EV)
Total Common Excavation = 6 CY (EV)

Miscellaneous excavation for driveway apron and pedestrian ramp replacements

Topsoil Borrow

Volume required = 100 CY (CV)
 Volume required = 2 CY (CV)
102 CY (CV)

Curb replacement areas. Assume 1.75' wide x 1' deep. Utilize any salvaged material if suitable.
 Adjacent to pedestrian ramp replacements

EARTHWORK SUMMARY**

Salvage Reclaim Material

Volume of salvaged reclaim 906 CY (CV)
 1360 CY (LV)

Place Salvaged Reclaim Material

Volume of salvaged reclaim material to replace = 510 CY (CV)

For replacement of salvaged reclaim in areas of profile lowering or subgrade correction

Reclaimed Aggregate Base Balance

Volume of salvaged reclaim material available = 906 CY (CV)
 Volume of required reclaim material = 510 CY (CV)
 Balance of reclaim material = 396 CY (CV)
 600 CY (LV)

Haul out and dispose of excess. All excess is property of contractor.

Common Excavation

10 CY (EV)

Haul out and dispose of unsuitable and excess material off-site (exc. behind curb replacement incidental).

Subgrade Excavation

450 CY (EV)

Haul out and dispose of unsuitable and excess material off-site.

Aggregate Base Class 5

10 Tons

Topsoil Borrow

102 CY (CV)
 150 CY (LV)

Excess Excavation Material to Dispose of Off-Site

790 CY (EV)
 1030 CY (LV)

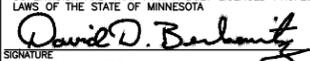
Excess reclaim, and assumed 85% of common exc material and subgrade exc material
 Does not include material behind curb replacement which is incidental to curb removal

** quantities for pay items are rounded to nearest 10

Swell Factors

EV to LV = 1.3
 LV to CV = 1.4
 LV to CV = 1.5 (For reclaimed material)
 1 CY Class 5 = 2 tons (147 #/CF)

NO.	DATE	BY	DESCRIPTION OF REVISIONS

DESIGNED DRAWN
 JUL JBK
 CHECKED
 DDB
 I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA

 SIGNATURE DATE MARCH 3RD, 2026 LIC. NO. 26757
 DAVID D. BERKOWITZ
 TYPED OR PRINTED NAME



2026 STREET RECONSTRUCTION -- (C.P. 26-02A)
 CREEKRIDGE ESTATES

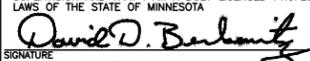
EARTHWORK SUMMARY
 SHEET NO. 8 OF 54 SHEETS

**Existing Storm Sewer Structures Table
2026 Street Recon: Creekridge Estates (C.P. 26-02A)**

CB / MH #	Remove Structure (Each)	New Structure Type	Structure Diameter (ft)	Mud Dog House (Each)	Mud Rings (Each)	Salvage Casting (Each)	Install Casting (Each)	# Exist Rings (Inches) (1)
DCB6			4	1	1			8
DCB7			4	1	1			4
DCB8			4	1		1	1	6
DCB9			4	1	1			8
DCB10	1	405-48"				1	1	
DCB330			4	1	1			8
DCB331			3	1	1			8
DCB332			3	1	1			8
DCB333			3	1	1			8
DCB334	1	401-27"				1	1	
DCB335	1	405-48"				1	1	
DCB2703			3	1	1			12
DCB2704			3	1	1			8
Total	3			10	9	4	4	

Notes 1): When installing casting, 6" and 1' rings shall be used so that there are no more than 5 rings per casting.

NO.	DATE	BY	DESCRIPTION OF REVISIONS

DESIGNED JUL	DRAWN JBK	<small>I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA</small>  <small>DAVID D. BERKOWITZ</small>
CHECKED DDB	DATE MARCH 3RD, 2026	



2026 STREET RECONSTRUCTION – (C.P. 26-02A)
CREEKRIDGE ESTATES

STORM SEWER TABLE
SHEET NO. 9 OF 54 SHEETS

GENERAL NOTES:

THE 2025 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION" SHALL GOVERN. CITY OF ANDOVER 2026 UTILITY AND STREET CONSTRUCTION SPECIFICATIONS SHALL APPLY.

THE SUBSURFACE UTILITY INFORMATION IN THIS PLAN IS UTILITY QUALITY LEVEL D. THIS QUALITY LEVEL WAS DETERMINED ACCORDING TO THE GUIDELINES OF ASCE 38-22, ENTITLED "STANDARD GUIDELINES FOR INVESTIGATING AND DOCUMENTING EXISTING UTILITIES.

ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO AND BE INSTALLED IN ACCORDANCE WITH THE "MINNESOTA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MMUTCD)" AND THE "TEMPORARY TRAFFIC CONTROL ZONE LAYOUTS FIELD MANUAL", NEWEST ADDITIONS.

THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE EXCAVATING CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. HE AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES. THE CONTRACTOR IS REQUIRED TO CALL GOPHER ONE CALL AT LEAST 48 HOURS IN ADVANCE OF CONSTRUCTION. (651-454-2000)

CONSTRUCTION NOTES:

ROAD WORK AHEAD SIGNS SHALL BE MAINTAINED AT ALL INTERSECTING ROADS TO THE PROJECT. TYPE B CHANNELIZERS SHALL BE USED IN ALL NECESSARY LOCATIONS. TRAIL CLOSED SIGNS ON TYPE III BARRICADES SHALL BE PLACED AT ALL LOCATIONS IMPACTED BY PEDESTRIAN RAMP/SIDEWALK/TRAIL IMPROVEMENTS.

CONSTRUCTION SHALL BE STAGED SUCH THAT TRAFFIC IS MAINTAINED AT ALL TIMES. CONTRACTOR SHALL USE FLAG PERSON, IF NEEDED (INCIDENTAL TO TRAFFIC CONTROL).

COMPACTION OF ALL BITUMINOUS MIXTURE SHALL BE BY THE "SPECIFIED DENSITY METHOD" EXCEPT FOR PATCHES AND TRAILS, WHICH SHALL BE BY THE "ORDINARY COMPACTION METHOD".

THE CONTRACTOR SHALL USE FLAG PERSON'S AND APPROPRIATE TRAFFIC CONTROL DEVICES TO DIRECT TRAFFIC AT INTERSECTING COUNTY ROADS. ALL TRAFFIC CONTROL MUST BE ACCEPTABLE TO THE ANOKA COUNTY HIGHWAY DEPARTMENT. CONTRACTOR SHALL APPLY FOR A PERMIT FOR WORKING WITHIN ANOKA COUNTY RIGHT OF WAY. PROVIDE A COPY OF COUNTY PERMIT TO CITY ENGINEER.

ABSENT A ROAD CLOSURE, RECONSTRUCTION SHALL BE PERFORMED IN A MANNER TO ALLOW LOCAL TRAFFIC TO BE MAINTAINED TO A MINIMUM OF HALF THE ROADWAY WIDTH. THE CONTRACTOR SHALL USE FLAG PERSON'S TO DIRECT TRAFFIC AS NEEDED.

CONTRACTOR SHALL PROVIDE 3 DAY NOTICE PRIOR TO POTENTIAL ROAD CLOSURE FOR UNDERGROUND UTILITY CONSTRUCTION. TYPE 3 BARRICADES WITH "ROAD CLOSED" SHALL BE INSTALLED ON BOTH SIDES OF UTILITY CONSTRUCTION ACTIVITY. STAGE CONSTRUCTION TO ALLOW FOR LOCAL RESIDENT ACCESS AS NEEDED.

DURING ALL ASPECTS OF CONSTRUCTION DRIVEWAYS SHALL BE RAMPED WITH GRAVEL IN A TIMELY MANNER TO PROVIDE RESIDENTS ACCESS. UPON THREE DAYS OF CURE, CONC. CURBING AT DRIVEWAYS SHALL BE BACKFILLED & RAMPED WITH GRAVEL TO PROVIDE ACCESS.

DURING THE CONSTRUCTION OF CONC. CURB & DRIVEWAYS, THE CONTRACTOR SHALL COORDINATE WITH ENGINEER TO NOTIFY RESIDENTS OF PENDING CONSTRUCTION ACTIVITY. A THREE DAY NOTICE IS REQUIRED PRIOR TO POURING CONC. CURB & DRIVEWAYS. IMMEDIATELY UPON COMPLETION THE ROADWAY SHALL BE GRADED TO ALLOW RESIDENTS TO PARK ON STREET ADJACENT TO THEIR PROPERTY.

CONCRETE CURBING SHALL BE KNOCKED DOWN AT ALL DRIVEWAY ENTRANCES (INCIDENTAL). CONSTRUCT B618 C&G ON ALL RADII, CATCH BASIN LOCATIONS & ADDITIONAL LOCATIONS AS NOTED ON PLAN. (PAID AS SURMOUNTABLE C&G).

EXISTING MAILBOXES SHALL BE SALVAGED AND REINSTALLED WHERE CALLED OUT IN PLANS. DURING CONSTRUCTION TEMPORARY MAILBOXES SHALL BE PLACED NEAR THE ORIGINAL MAILBOX LOCATION. THE TEMPORARY MAILBOXES SHALL BE MOUNTED ON BARRELS TO BE PORTABLE. PROPERTY OWNER MAY SUPPLY NEW POST AND/OR BOX TO BE PLACED IN THE ORIGINAL LOCATION.

RESIDENTS WILL BE ASKED TO MARK IRRIGATION PRIOR TO CONSTRUCTION. CONTRACTOR SHALL VERIFY LOCATION OF EXISTING SYSTEMS. WHERE BOULEVARD IRRIGATION MODIFICATIONS ARE REQUIRED THE IRRIGATION LINES/HEADS SHALL BE REMOVED & DISPOSED. REMAINING LINES SHALL BE PLUGGED & MARKED. ALL REPLACED IRRIGATION LINES/HEADS SHALL BE WITH NEW COMMERCIAL GRADE MATERIALS. CONTRACTOR WILL BE PAID A UNIT PER HEAD REPLACED. EXISTING LOCATIONS SHOWN ON PLANS ARE ONLY SCHEMATIC. ALL WORK SHALL BE BY AN IRRIGATION CONTRACTOR LICENSED TO WORK IN THE CITY OF ANDOVER.

THE CONTRACTOR SHALL PROTECT, SALVAGE AND REPAIR ALL EXISTING LANDSCAPING IN KIND. THIS SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT.

THE FOLLOWING CONSTRUCTION ITEM'S SHALL OCCUR PRIOR TO COMMENCING THE RECLAIMING OPERATION. INSTALL TRAFFIC CONTROL, REMOVE STREET SIGN'S (CITY), INSTALL TEMP. EROSION CONTROL MEASURES, IDENTIFY & CAP IRRIGATION SYSTEMS IN AREAS OF CURB REPLACEMENT, SALVAGE LANDSCAPING, REMOVE EX. & INSTALL TEMP. MAILBOX'S WHERE IDENTIFIED IN PLANS.

MACHINE CURB ON STRETCHES OVER 100'. ALSO, SALVAGE AND INSTALL MAILBOXES IN AREAS WHERE THERE WILL BE MACHINE CURB.

EXISTING DRIVEWAYS SHALL BE SAWCUT AS DIRECTED BY ENGINEER, REMOVED AND DISPOSED OF OFF SITE. BITUMINOUS AND CONCRETE DRIVEWAYS SHALL BE REPLACED IN KIND. GRAVEL DRIVEWAYS SHALL BE REPLACED WITH A 10-15' BITUMINOUS APRON. ANY DAMAGE CAUSED BY CONSTRUCTION ACTIVITY SHALL BE SAWCUT AND REPAIRED IN KIND AT THE CONTRACTORS EXPENSE.

WHERE SUBGRADE EXCAVATION AND/OR UTILITY WORK OCCURS WITHIN THE ROADWAY THE RECLAIMED BASE SHALL BE SALVAGED & REPLACED PER THE TYPICAL SECTION (INCIDENTAL). THIS WORKSHALL BE DONE IN A MANNER SO RECLAIMED BASE IS NOT CONTAMINATED WITH SPOIL MATERIAL. COMPACTION OF THE RECLAIMED BASE MATERIAL SHALL BE ACHIEVED BY THE PENETRATION INDEX METHOD IN ACCORDANCE WITH MNDOT 2211.3C3. THE BOTTOM OF THE SUBCUTS SHALL BE SHAPED AND COMPACTED BY THE "QUALITY COMPACTION METHOD"

THE CONTRACTOR SHALL STRIP AND STOCKPILE EXISTING TOPSOIL MATERIAL, IF ANY, FOR RE-USE (LITTLE IS EXPECTED). RE-USED TOPSOIL SHALL BE CLEAN WITH NO SOD CHUNKS / EXISTING VEGETATION. TOPSOIL STRIPING, IF ANY, SHALL BE CONSIDERED INCIDENTAL TO COMMON EXCAVATION.

SELECT EXCAVATED MATERIALS SHALL BE UTILIZED TO THE FULLEST EXTENT WITHIN THE PROJECT LIMITS TO BACKFILL PROPOSED CURB & GUTTERS. ANY EXCESS MATERIAL, OR MATERIAL WITH DEBRIS / SOD CHUCKS SHALL BE DISPOSED OF OFF-SITE.

EXCAVATION AND DISPOSAL OF SOIL/TURF MATERIAL SHALL BE INCIDENTAL TO REMOVAL PAY ITEMS UNLESS OTHERWISE NOTED. CONTRACTOR SHALL MINIMIZE EXCAVATION AND DISTURBANCE ALONG THE PROJECT CORRIDOR.

ALL DISTURBED AREAS SHALL BE BACKFILLED WITH SALVAGED TOPSOIL, IF ANY. DISTURBED AREAS SHALL BE RESTORED WITH 4" (MINIMUM) TOPSOIL & SOD. ALL RESTORATION SHALL OCCUR WITHIN 7 DAYS OF GRADING COMPLETION. SOIL STOCKPILES SHALL BE STABILIZED WITHIN 7 DAYS OF ROUGH GRADING OR INACTIVITY (INCIDENTAL). RESTORATION WORK SHALL BE COMPLETED PRIOR TO PAVING WEARING COURSE UNLESS OTHERWISE APPROVED BY THE ENGINEER IN THE FIELD.

ALL EXISTING SIGNS SHALL BE REMOVED AND REPLACED BY THE ANDOVER SIGN DEPARTMENT UNLESS CALLED OUT OTHERWISE IN THE PLANS. COORDINATE WITH MINIMUM 48 HOUR NOTICE WITH ENGINEER IN FIELD.

CONCRETE WASHOUT SHALL BE CONTAINED WITHIN CONCRETE TRUCKS, NOT DISPOSED OF ON-SITE.

CONTRACTOR SHALL SWEEP ALL MATERIAL OFF ADJACENT STREETS DUE TO CONSTRUCTION ACTIVITY, DAILY AS NECESSARY (INCIDENTAL).

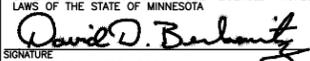
CONTRACTOR IS REQUIRED TO REPAIR AND MAINTAIN ALL TEMPORARY AND PERMANENT EROSION AND SEDIMENT CONTROL PRACTICES (INCIDENTAL).

CONTRACTOR SHALL REMOVE ALL TEMPORARY SEDIMENT CONTROL PRACTICES ONCE VEGETATION IS RE-ESTABLISHED (INCIDENTAL).

REFER TO SWPPP IN PROJECT SPECIFICATION FOR ADDITIONAL CONSTRUCTION/EROSION CONTROL REQUIREMENTS.

WHEN CONNECTING NEW PAVED SURFACING TO ANY IN-PLACE PAVEMENTS, CUT VERTICALLY TO THE BOTTOM OF THE IN-PLACE PAVEMENTS OR TO THE BOTTOM OF THE NEW SURFACING, WHICHEVER IS DEEPER, THEN AT 2(V):1(H) SLOPE TO THE TOP OF THE SUBGRADE.

NO.	DATE	BY	DESCRIPTION OF REVISIONS

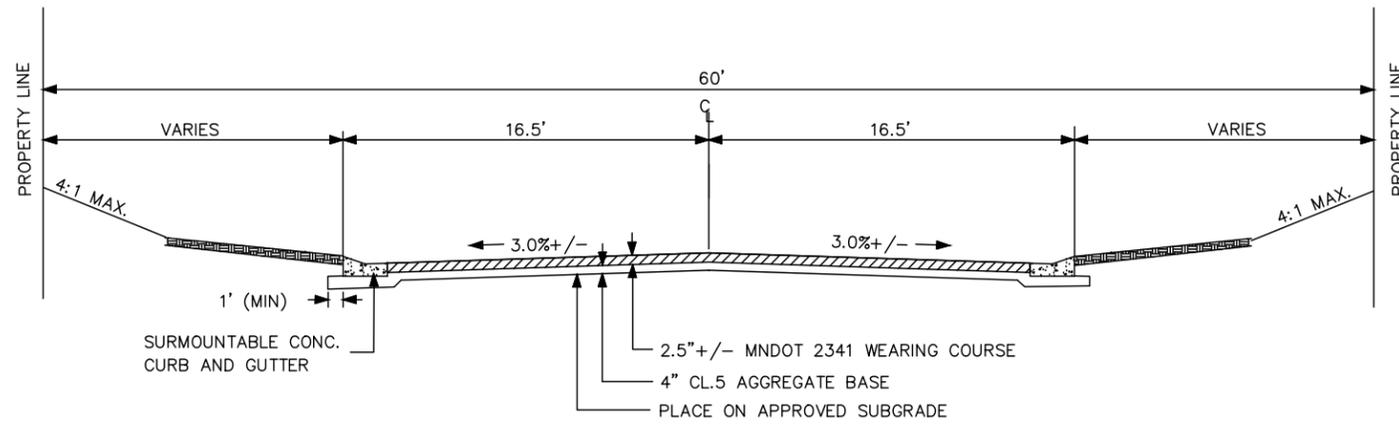
DESIGNED: JUL
 DRAWN: JBK
 CHECKED: DDB
 I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA

 DAVID D. BERKOWITZ
 TYPED OR PRINTED NAME
 DATE: MARCH 3RD, 2026 LIC. NO. 28757



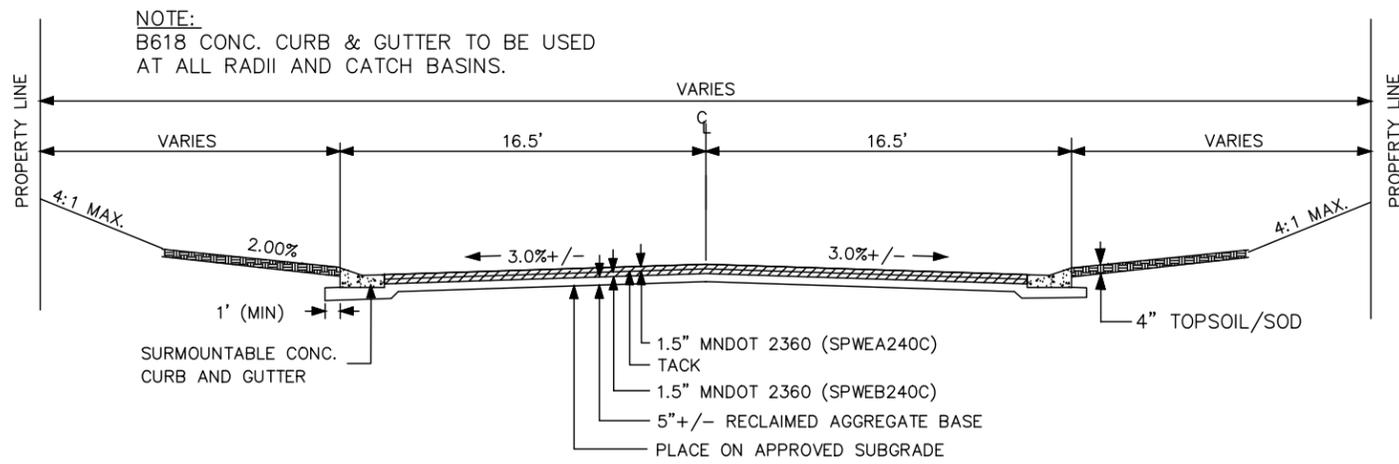
2026 STREET RECONSTRUCTION - (C.P. 26-02A)
 CREEKRIDGE ESTATES

CONSTRUCTION NOTES
 SHEET NO. 10 OF 54 SHEETS

RECLAIM 7.5" +/- DEPTH, OR AS NECESSARY TO PROVIDE HOMOGENEOUS MIXTURE MEETING GRADATION SPEC IN MNDOT 2215. WITH 100% PASSING 3 INCH SIEVE.



26-02A EXISTING STREET SECTION



26-02A PROPOSED STREET SECTION

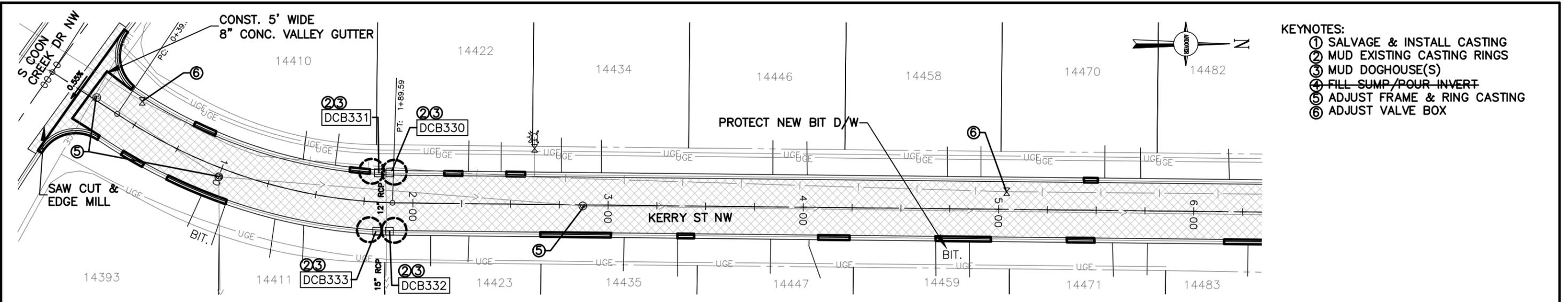
NO.	DATE	BY	DESCRIPTION OF REVISIONS

DESIGNED: JUL, DRAWN: JBK
 CHECKED: DDB
 I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
 SIGNATURE: *David D. Berkowitz*
 DATE: MARCH 3RD, 2026 LIC. NO.: 28757
 TYPED OR PRINTED NAME: DAVID D. BERKOWITZ

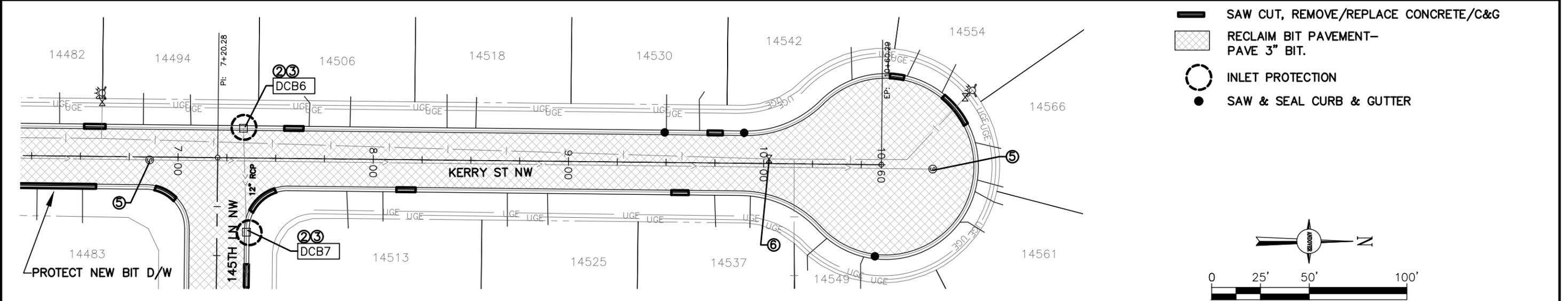


2026 STREET RECONSTRUCTION - (C.P. 26-02A)
 CREEKRIDGE ESTATES

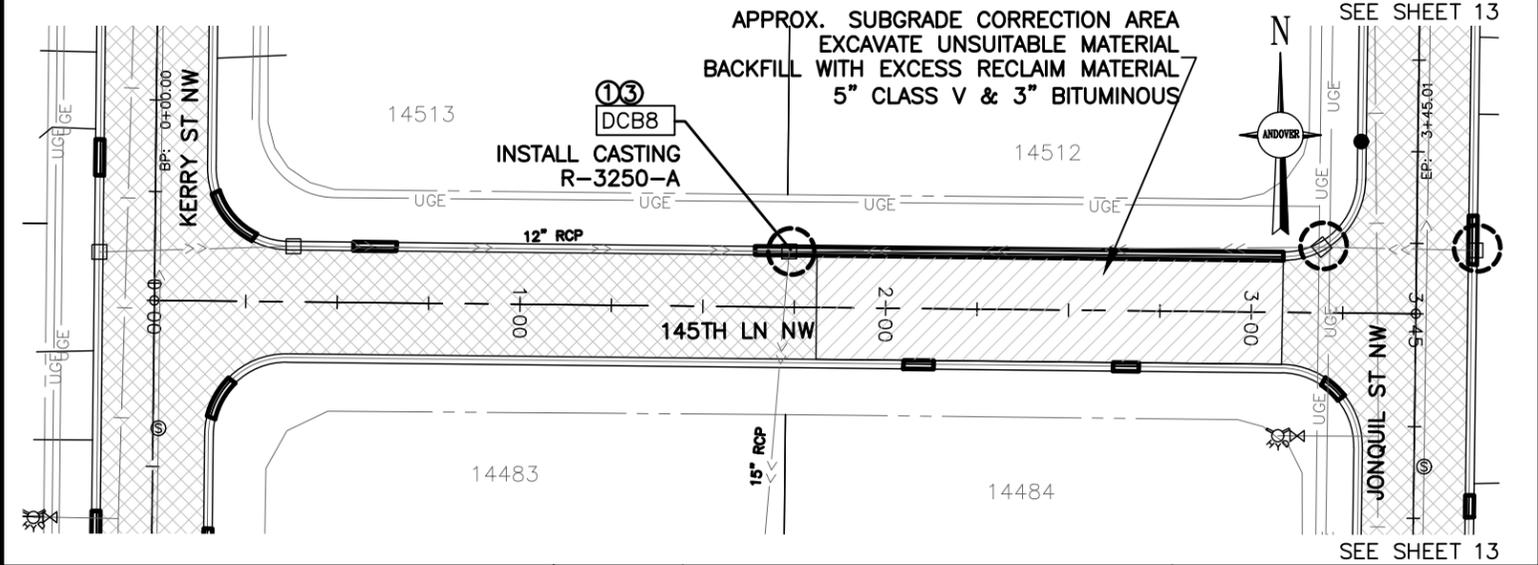
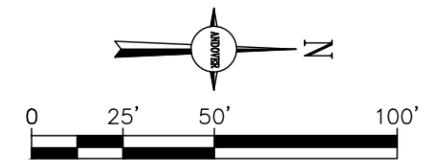
TYPICAL SECTION
 SHEET NO. 11 OF 54 SHEETS



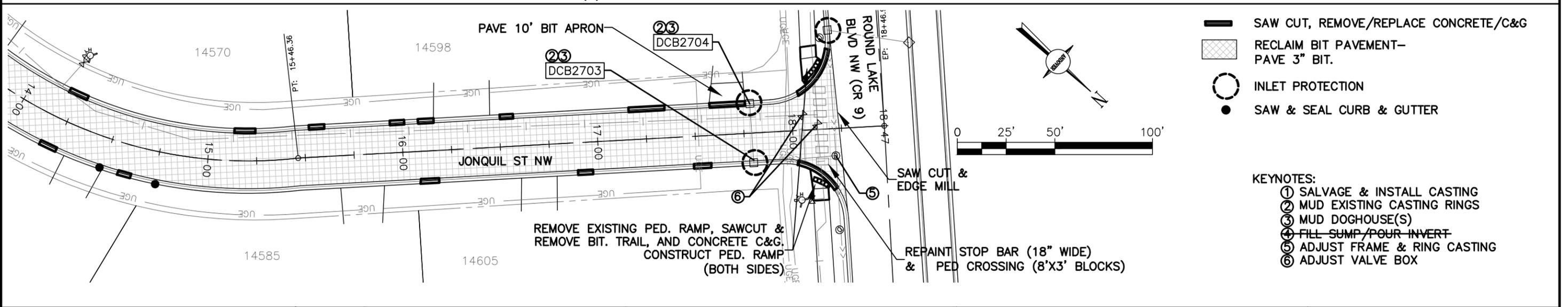
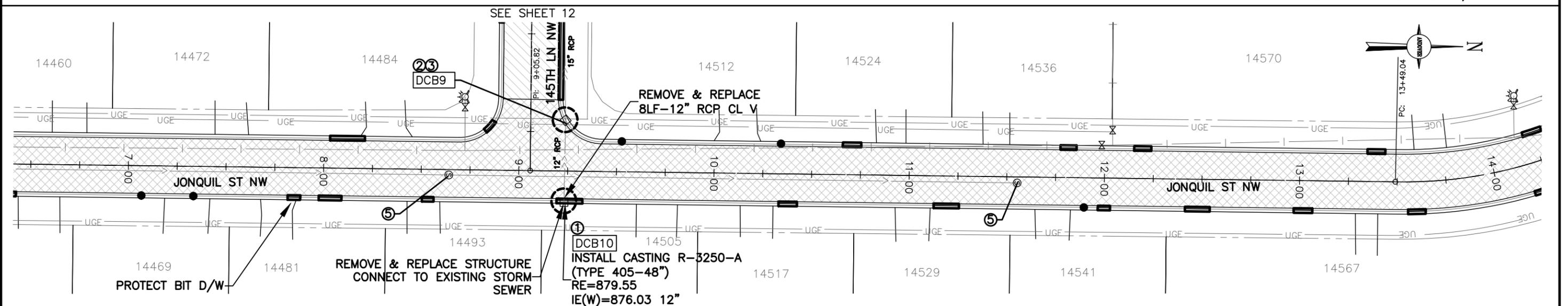
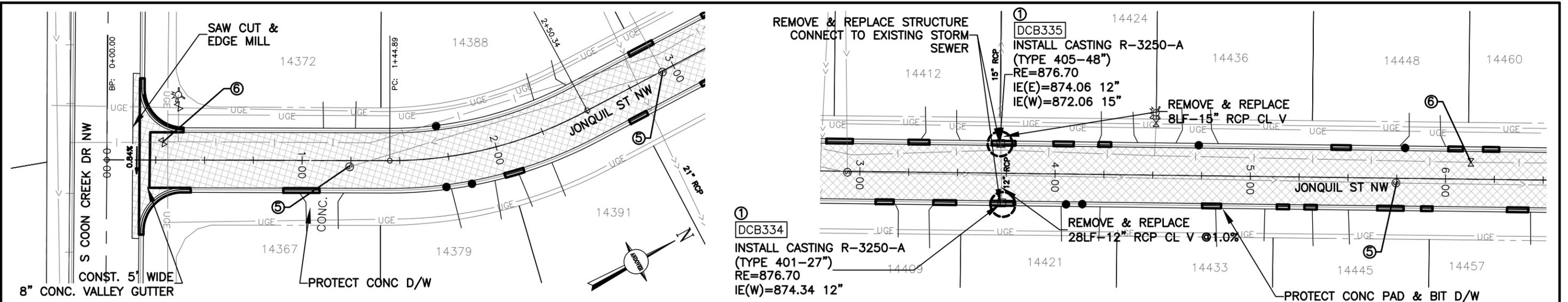
- KEYNOTES:**
- ① SALVAGE & INSTALL CASTING
 - ② MUD EXISTING CASTING RINGS
 - ③ MUD DOGHOUSE(S)
 - ④ FILL SUMP/POUR INVERT
 - ⑤ ADJUST FRAME & RING CASTING
 - ⑥ ADJUST VALVE BOX



- SAW CUT, REMOVE/REPLACE CONCRETE/C&G
- ▨ RECLAIM BIT PAVEMENT—PAVE 3\"/>
- INLET PROTECTION
- SAW & SEAL CURB & GUTTER



<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%;">NO.</td> <td style="width: 33%;">DATE</td> <td style="width: 33%;">BY</td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </table>	NO.	DATE	BY				<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">DESIGNED JUL</td> <td style="width: 50%;">DRAWN JBK</td> </tr> <tr> <td style="width: 50%;">CHECKED DDB</td> <td style="width: 50%;">DATE MARCH 3RD, 2026</td> </tr> </table>	DESIGNED JUL	DRAWN JBK	CHECKED DDB	DATE MARCH 3RD, 2026	<p style="font-size: small;">I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA</p> <p style="text-align: center;"><i>David D. Berkowitz</i> DAVID D. BERKOWITZ SIGNATURE TYPED OR PRINTED NAME LIC. NO. 26757</p>		<p>2026 STREET RECONSTRUCTION – (C.P. 26-02A) CREEKRIDGE ESTATES</p>	<p>REMOVALS, STREET PAVING SHEET NO. 12 OF 54 SHEETS</p>
NO.	DATE	BY													
DESIGNED JUL	DRAWN JBK														
CHECKED DDB	DATE MARCH 3RD, 2026														



- SAW CUT, REMOVE/REPLACE CONCRETE/C&G
- RECLAIM BIT PAVEMENT-PAVE 3" BIT.
- INLET PROTECTION
- SAW & SEAL CURB & GUTTER

- KEYNOTES:**
- ① SALVAGE & INSTALL CASTING
 - ② MUD EXISTING CASTING RINGS
 - ③ MUD DOGHOUSE(S)
 - ④ FILL SUMP/POUR INVERT
 - ⑤ ADJUST FRAME & RING CASTING
 - ⑥ ADJUST VALVE BOX

NO.	DATE	BY	DESCRIPTION OF REVISIONS
1	2/23/26	JBK	ACHD COMMENTS

DESIGNED: JUL
 DRAWN: JBK
 CHECKED: DDB

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

David D. Berkowitz
 SIGNATURE: DAVID D. BERKOWITZ
 DATE: MARCH 3RD, 2026 LIC. NO. 26757



2026 STREET RECONSTRUCTION - (C.P. 26-02A)
 CREEKCRIDGE ESTATES

REMOVALS, STREET PAVING
 SHEET NO. 13 OF 54 SHEETS

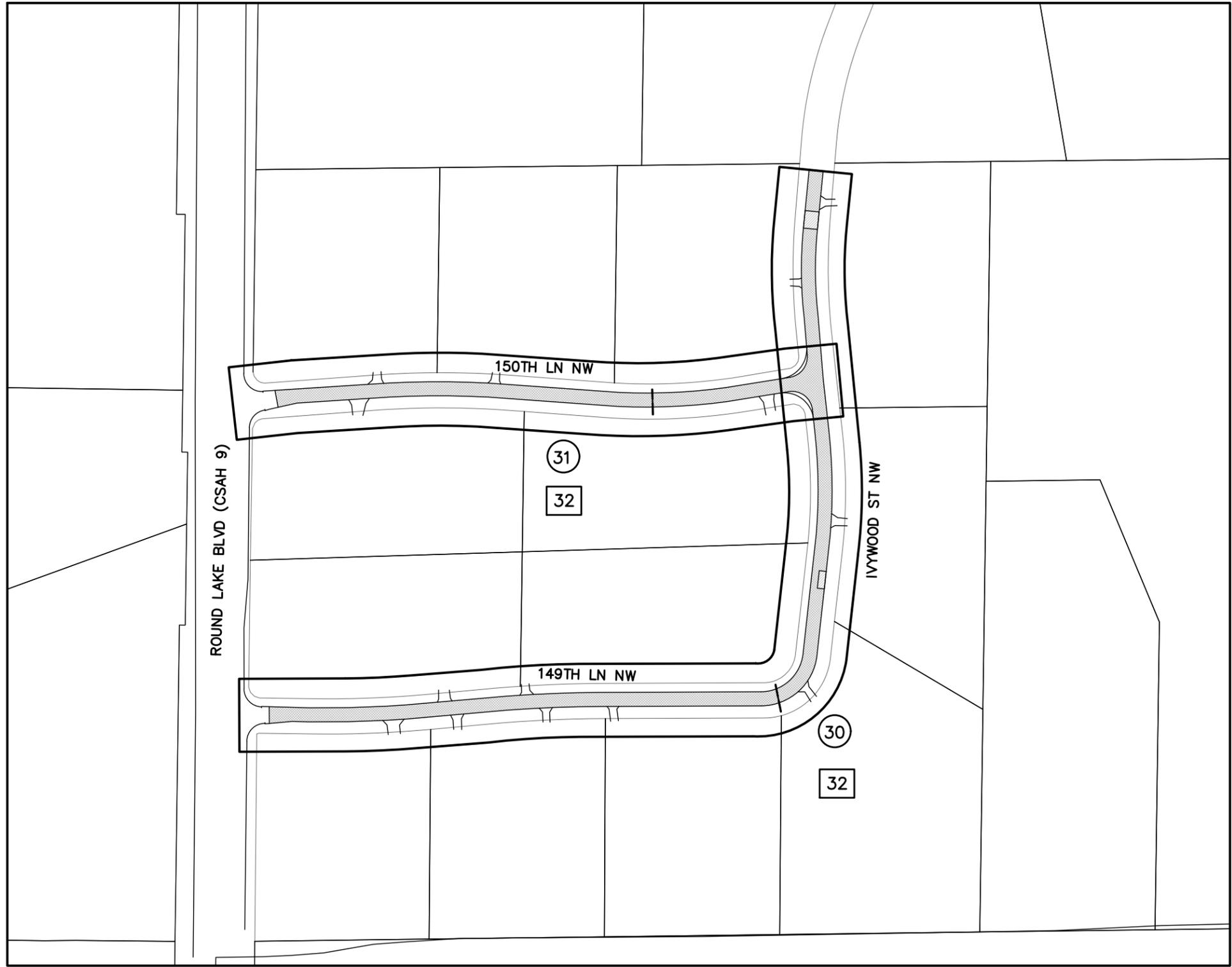
SHEETS 14 TO
24 OMITTED

NO.	DATE	BY	DESCRIPTION OF REVISIONS

DESIGNED
JUL
DRAWN
JBK
CHECKED
DDB

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David D. Berkowitz
SIGNATURE
DATE MARCH 3RD, 2026 Lic. No. 26757
DAVID D. BERKOWITZ
TYPED OR PRINTED NAME





⊗ = REMOVALS, STREET PAVING

⊠ CULVERT PLAN / PROFILES

NO.	DATE	BY	DESCRIPTION OF REVISIONS

DESIGNED
JUL

DRAWN
JBK

CHECKED
DDB

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David D. Berkowitz
SIGNATURE

DAVID D. BERKOWITZ
TYPED OR PRINTED NAME

DATE: MARCH 3RD, 2026 LIC. NO. 26757



2026 STREET RECONSTRUCTION – (C.P. 26-02C)
EAST ROUND LAKE ESTATES

PROJECT LAYOUT
SHEET NO. 25 OF 54 SHEETS

2026 Full Depth Reclamation: East Round Lake Estates
City Project: 26-02C
STATEMENT OF ESTIMATED QUANTITIES

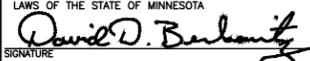
C.P. 26-02C Notes:

1. Regardless of depth.
2. For all excavation except subgrade excavation. Dispose excess and/or unsuitable material off-site. See Earthwork Tabulation.
3. For exc. beneath reclaimed agg. base where profile lowered or unsuitable material encountered. Dispose excess and/or unsuitable material off-site. See Earthwork Tabulation.
4. For excavating/hauling/stockpiling reclaim material salvaged for subgrade exc. and/or excess material. Excess property of contractor. See Earthwork Tabulation.
5. Only to be used if sufficient material not generated on-site for subgrade excavation / correction backfill, if necessary.
6. Includes grading reclaim material from areas of excess to areas requiring material (under curb, along shoulder, increased crown), fine grading, and compacting reclaimed agg. base.
7. For dust control only as directed by the engineer. Water to achieve compaction shall be incidental.
8. Item includes furnishing, hauling, placing and compacting. See Earthwork Tabulation.
9. Includes loading/hauling/placing/grading/compacting salvaged reclaim material in areas of subgrade exc. or correction.
10. Item shall be used for patching of bituminous trails and driveway replacements.
11. Rock shall be 1.5" nominal diameter. Use under utility pipe and structures if water table is high.
12. Based upon number or irrigation heads removed / replaced. Item shall include all items necessary to temporarily cap existing systems, replace damaged lines, heads, adjust systems, and return them to pre-project condition or better. Work shall be performed by a licensed irrigation contractor.
13. Analysis 22-5-10.
14. Straw or wood fiber blanket is an acceptable alternative. Netting material shall be jute netting.
15. Only to be used if requested by engineer prior to or during site restoration.

NOTES	ITEM NO.		DESCRIPTION	UNIT	TOTAL ESTIMATED PROJECT QUANTITIES	
					EST. QUAN.	ACT. QUAN.
	101	2021.501	Mobilization	LS	1.00	
1	102	2104.503	Sawing Bit Pavement (Full Depth)	LF	320	
	103	2104.503	Remove Pipe Culvert / Storm Sewer	LF	102	
1	104	2104.518	Remove Bituminous Pavement	SF	3,300	
2	105	2105.607	Common Excavation (EV)	CY	130	
3	106	2105.607	Subgrade Excavation (EV)	CY	90	
4	107	2105.607	Salvage Reclaim Material (LV)	CY	20	
5	108	2105.607	Select Granular Borrow (LV)	CY	120	
6	109	2112.519	Subgrade Preparation	RDST	27.6	
7	110	2130.523	Water	MGAL	25	
8	111	2211.509	Aggregate Base Class 5	TN	20	
9	112	2211.607	Place Salvaged Reclaim Material (CV)	CY	20	
	113	2215.504	Full Depth Reclamation	SY	8,140	
	114	2232.504	Mill Bituminous Surface (1.5")	SY	10	
	115	2357.506	Bituminous Material For Tack Coat	Gal	380	
	116	2360.509	Type SP 9.5 Wearing Course Mix (2,C)	TN	730	
10	117	2360.509	Type SP 9.5 Bit Mixture for Patching (2,B)	TN	100	
	118	2360.509	Type SP 12.5 Wearing Course Mixture (2,C)	TN	760	
11	119	2451.607	Trench Stabilization Material (CV)	CY	5	
	120	2501.502	18" RC Pipe Apron & Grate	EA	4	
	121	2501.503	18" RC Pipe Culvert Des 3006 Class V	LF	76	
12	122	2504.602	Irrigation System Modifications	EA	20	
	123	2563.601	Traffic Control	LS	1.00	
	124	2573.502	Storm Drain Inlet Protection	EA	3	
	125	2573.503	Sediment Control Log Type Wood Chip	LF	120	
	126	2574.507	Loam Topsoil Borrow (LV)	CY	310	
13	127	2574.508	Fertilizer Type 3	LB	250	
14	128	2575.504	Rolled Erosion Prevention Category 20	SY	400	
15	129	2575.505	Weed Spraying	ACRE	0.70	
	130	2575.505	Seeding	ACRE	0.70	
	131	2575.508	Hydraulic Mulch Matrix	LB	1,750	
	132	2575.508	Seed Residential Turfgrass	LB	140	
	133	2582.503	18" Solid Line Paint	LF	36	
	134	2582.518	Pavement Message Paint	SF	320	

BASIS OF ESTIMATED QUANTITIES		
Bituminous Wear Course	120	# / SY / inch
Bituminous Non-Wear Course	120	# / SY / inch
Aggregate Base, Class 5	110	# / SY / inch
Tack Coat	0.07	Gal / SY
Hydraulic Mulch Matrix	2500	# / acre
Fertilizer Type 3 (Analysis 22-5-10)	350	# / acre
Seed Mixture: Residential Turfgrass	200	# / acre

NO.	DATE	BY	DESCRIPTION OF REVISIONS

DESIGNED: JUL DRAWN: JBK
 CHECKED: DDB
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 DAVID D. BERKOWITZ
 TYPED OR PRINTED NAME
 DATE: MARCH 3RD, 2026 LIC. NO. 26757



2026 STREET RECONSTRUCTION – (C.P. 26-02C)
 EAST ROUND LAKE ESTATES

STATEMENT OF ESTIMATED QUANTITIES
 SHEET NO. 26 OF 54 SHEETS

EARTH WORK TABLE

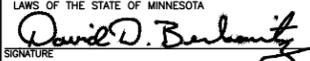
City Project 26-02C: East Round Lake Estates			
Aggregate Base Class 7 (Reclaim)		Roadway Length = 2,760 LF	
Existing 2" +/- of bituminous and 3.5" +/- aggregate base based on road cores			
Reclaim 6.5" +/- deep (pull some sand into reclaim)			
Salvage Reclaim Material			
Volume of salvaged reclaim material =	0 CY (CV)	6" salvage in areas of subgrade / profile lowering	0 LF x 24' wide
Volume of salvaged reclaim material =	13 CY (CV)	6" salvage in areas of subgrade correction, if any	30 LF x 24' wide
Total Salvaged Reclaim =	13 CY (CV)	Available material to be re-used on-site	
Salvaged Reclaim Required			
Volume required =	0 CY (CV)	5" minimum - replace in subgrade exc. areas, if any	
Volume required =	13 CY (CV)	5" minimum - replace in subgrade correction areas, if any	
Total Salvaged Reclaim / Class 5 Required	13 CY (CV)		
Aggregate Base Class 5 Required			
Volume required =	8 CY (CV)	If needed for driveway apron replacements	
Total Class 5 Required	8 CY (CV)		
Subgrade Excavation			
Volume of subgrade exc. =	0 CY (EV)	Areas of lowering of roadway profile	
Volume of subgrade exc. =	87 CY (EV)	Subgrade correction areas. Assume 3' depth in correction areas	
Total Salvaged Reclaim =	87 CY (EV)		
Common Excavation			
Volume of common exc. =	7 CY (EV)	Miscellaneous excavation for driveway apron replacements/gravel driveway paving	
Volume of common exc. =	110 CY (EV)	Excavate 2' wide x 3" deep along existing bit edge prior to reclaiming. Haul out and dispose of material.	
Volume of common exc. =	5 CY (EV)	Excavate culvert aprons to drain as necessary	
Total Common Excavation =	122 CY (EV)		
Topsoil Borrow	220 CY (CV)	Length x 2 x 4' wide x 3" deep. Utilize any salvaged material if suitable. Place with shouldering machine.	

EARTHWORK SUMMARY**			
Salvage Reclaim Material	13 CY (CV)		
Volume of salvaged reclaim	20 CY (LV)		
Place Salvaged Reclaim Material	20 CY (CV)	For replacement of salvaged reclaim in areas of profile lowering or subgrade correction	
Volume of salvaged reclaim material to replace =			
Reclaimed Aggregate Base Balance			
Volume of salvaged reclaim material available =	13 CY (CV)		
Volume of required reclaim material =	8 CY (CV)		
Balance of reclaim material =	5 CY (CV)		
	10 CY (LV)	Haul out and dispose of excess. Excess property of contractor	
Common Excavation	130 CY (EV)	Haul out and dispose of unsuitable and excess material off-site.	
Subgrade Excavation	90 CY (EV)	Haul out and dispose of unsuitable and excess material off-site.	
Aggregate Base Class 5	20 Tons	For driveway apron paving and replacements if necessary	
Topsoil Borrow	220 CY (CV)	Place on shoulder with shouldering machine after wear course paved.	
	310 CY (LV)		
Select Granular Borrow	120 CY (LV)	For backfill of subgrade correction if necessary. Only used if sufficient material not available on-site.	
Excess Excavation Material to Dispose of Off-Site	200 CY (EV)	Excess reclaim, and assumed 85% of common exc material and subgrade exc material	
	260 CY (LV)		

** quantities for pay items are rounded to nearest 10

Swell Factors
 EV to LV = 1.3
 LV to CV = 1.4
 LV to CV = 1.5 (For reclaimed material)
 1 CY Class 5 = 2 tons (147 #/CF)

NO.	DATE	BY	DESCRIPTION OF REVISIONS

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CHECKED DDB	DATE MARCH 3RD, 2026	



2026 STREET RECONSTRUCTION – (C.P. 26–02C)
 EAST ROUND LAKE ESTATES

EARTHWORK SUMMARY
 SHEET NO. 27 OF 54 SHEETS

GENERAL NOTES:

THE 2025 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION" SHALL GOVERN. CITY OF ANDOVER 2026 UTILITY AND STREET CONSTRUCTION SPECIFICATIONS SHALL APPLY.

THE SUBSURFACE UTILITY INFORMATION IN THIS PLAN IS UTILITY QUALITY LEVEL D. THIS QUALITY LEVEL WAS DETERMINED ACCORDING TO THE GUIDELINES OF ASCE 38-22, ENTITLED "STANDARD GUIDELINES FOR INVESTIGATING AND DOCUMENTING EXISTING UTILITIES.

ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO AND BE INSTALLED IN ACCORDANCE WITH THE "MINNESOTA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MMUTCD)" AND THE "TEMPORARY TRAFFIC CONTROL ZONE LAYOUTS FIELD MANUAL", NEWEST ADDITIONS.

THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE EXCAVATING CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. HE AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES. THE CONTRACTOR IS REQUIRED TO CALL GOPHER ONE CALL AT LEAST 48 HOURS IN ADVANCE OF CONSTRUCTION. (651-454-2000)

CONSTRUCTION NOTES:

ROAD WORK AHEAD SIGNS SHALL BE MAINTAINED AT ALL INTERSECTING ROADS TO THE PROJECT. TYPE B CHANNELIZERS SHALL BE USED IN ALL NECESSARY LOCATIONS. TRAIL CLOSED SIGNS ON TYPE III BARRICADES SHALL BE PLACED AT ALL LOCATIONS IMPACTED BY PEDESTRIAN RAMP/SIDEWALK/TRAIL IMPROVEMENTS.

CONSTRUCTION SHALL BE STAGED SUCH THAT TRAFFIC IS MAINTAINED AT ALL TIMES. CONTRACTOR SHALL USE FLAG PERSON, IF NEEDED (INCIDENTAL TO TRAFFIC CONTROL).

COMPACTION OF ALL BITUMINOUS MIXTURE SHALL BE BY THE "SPECIFIED DENSITY METHOD" EXCEPT FOR PATCHES AND TRAILS, WHICH SHALL BE BY THE "ORDINARY COMPACTION METHOD".

THE CONTRACTOR SHALL USE FLAG PERSON'S AND APPROPRIATE TRAFFIC CONTROL DEVICES TO DIRECT TRAFFIC AT INTERSECTING COUNTY ROADS. ALL TRAFFIC CONTROL MUST BE ACCEPTABLE TO THE ANOKA COUNTY HIGHWAY DEPARTMENT. CONTRACTOR SHALL APPLY FOR A PERMIT FOR WORKING WITHIN ANOKA COUNTY RIGHT OF WAY. PROVIDE A COPY OF COUNTY PERMIT TO CITY ENGINEER.

ABSENT A ROAD CLOSURE, RECONSTRUCTION SHALL BE PERFORMED IN A MANNER TO ALLOW LOCAL TRAFFIC TO BE MAINTAINED TO A MINIMUM OF HALF THE ROADWAY WIDTH. THE CONTRACTOR SHALL USE FLAG PERSON'S TO DIRECT TRAFFIC AS NEEDED.

CONTRACTOR SHALL PROVIDE 3 DAY NOTICE PRIOR TO POTENTIAL ROAD CLOSURE FOR UNDERGROUND UTILITY CONSTRUCTION. TYPE 3 BARRICADES WITH "ROAD CLOSED" SHALL BE INSTALLED ON BOTH SIDES OF UTILITY CONSTRUCTION ACTIVITY. STAGE CONSTRUCTION TO ALLOW FOR LOCAL RESIDENT ACCESS AS NEEDED.

DURING ALL ASPECTS OF CONSTRUCTION DRIVEWAYS SHALL BE RAMPED WITH GRAVEL IN A TIMELY MANNER TO PROVIDE RESIDENTS ACCESS.

DURING THE CONSTRUCTION OF CONCRETE DRIVEWAYS, THE CONTRACTOR SHALL COORDINATE WITH ENGINEER TO NOTIFY RESIDENTS OF PENDING CONSTRUCTION ACTIVITY. A THREE DAY NOTICE IS REQUIRED PRIOR TO POURING CONCRETE DRIVEWAYS. IMMEDIATELY UPON COMPLETION THE ROADWAY SHALL BE GRADED TO ALLOW RESIDENTS TO PARK ON STREET ADJACENT TO THEIR PROPERTY.

EXISTING MAILBOXES SHALL BE SALVAGED AND REINSTALLED WHERE CALLED OUT IN PLANS. DURING CONSTRUCTION TEMPORARY MAILBOXES SHALL BE PLACED NEAR THE ORIGINAL MAILBOX LOCATION. THE TEMPORARY MAILBOXES SHALL BE MOUNTED ON BARRELS TO BE PORTABLE. PROPERTY OWNER MAY SUPPLY NEW POST AND/OR BOX TO BE PLACED IN THE ORIGINAL LOCATION.

RESIDENTS WILL BE ASKED TO MARK IRRIGATION PRIOR TO CONSTRUCTION. CONTRACTOR SHALL VERIFY LOCATION OF EXISTING SYSTEMS. WHERE BOULEVARD IRRIGATION MODIFICATIONS ARE REQUIRED THE IRRIGATION LINES/HEADS SHALL BE REMOVED & DISPOSED. REMAINING LINES SHALL BE PLUGGED & MARKED. ALL REPLACED IRRIGATION LINES/HEADS SHALL BE WITH NEW COMMERCIAL GRADE MATERIALS. CONTRACTOR WILL BE PAID A UNIT PER HEAD REPLACED. EXISTING LOCATIONS SHOWN ON PLANS ARE ONLY SCHEMATIC. ALL WORK SHALL BE BY AN IRRIGATION CONTRACTOR LICENSED TO WORK IN THE CITY OF ANDOVER.

THE CONTRACTOR SHALL PROTECT, SALVAGE AND REPAIR ALL EXISTING LANDSCAPING IN KIND. THIS SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT.

THE FOLLOWING CONSTRUCTION ITEM'S SHALL OCCUR PRIOR TO COMMENCING THE RECLAIMING OPERATION. INSTALL TRAFFIC CONTROL, REMOVE STREET SIGN'S (CITY), INSTALL TEMP. EROSION CONTROL MEASURES, IDENTIFY & CAP IRRIGATION SYSTEMS IN AREAS OF CURB REPLACEMENT, SALVAGE LANDSCAPING, REMOVE EX. & INSTALL TEMP. MAILBOX'S WHERE IDENTIFIED IN PLANS, EXCAVATE BOULEVARD MATERIAL PER TYPICAL SECTION.

EXISTING DRIVEWAYS SHALL BE SAWCUT AS DIRECTED BY ENGINEER, REMOVED AND DISPOSED OF OFF SITE. BITUMINOUS AND CONCRETE DRIVEWAYS SHALL BE REPLACED IN KIND. GRAVEL DRIVEWAYS SHALL BE REPLACED WITH A 10-15' BITUMINOUS APRON. ANY DAMAGE CAUSED BY CONSTRUCTION ACTIVITY SHALL BE SAWCUT AND REPAIRED IN KIND AT THE CONTRACTORS EXPENSE.

WHERE SUBGRADE EXCAVATION AND/OR UTILITY WORK OCCURS WITHIN THE ROADWAY THE RECLAIMED BASE SHALL BE SALVAGED & REPLACED PER THE TYPICAL SECTION (INCIDENTAL). THIS WORKSHALL BE DONE IN A MANNER SO RECLAIMED BASE IS NOT CONTAMINATED WITH SPOIL MATERIAL. COMPACTION OF THE RECLAIMED BASE MATERIAL SHALL BE ACHIEVED BY THE PENETRATION INDEX METHOD IN ACCORDANCE WITH MNDOT 2211.3C3. THE BOTTOM OF THE SUBCUTS SHALL BE SHAPED AND COMPACTED BY THE "QUALITY COMPACTION METHOD"

THE CONTRACTOR SHALL STRIP AND STOCKPILE EXISTING TOPSOIL MATERIAL, IF ANY, FOR RE-USE (LITTLE IS EXPECTED). RE-USED TOPSOIL SHALL BE CLEAN WITH NO SOD CHUNKS / EXISTING VEGETATION. TOPSOIL STRIPING, IF ANY, SHALL BE CONSIDERED INCIDENTAL.

SELECT EXCAVATED MATERIALS SHALL BE UTILIZED TO THE FULLEST EXTENT WITHIN THE PROJECT LIMITS. ANY EXCESS MATERIAL, OR MATERIAL WITH DEBRIS / SOD CHUCKS SHALL BE DISPOSED OF OFF-SITE.

EXCAVATION AND DISPOSAL OF SOIL/TURF MATERIAL SHALL BE INCIDENTAL TO REMOVAL PAY ITEMS UNLESS OTHERWISE NOTED. CONTRACTOR SHALL MINIMIZE EXCAVATION AND DISTURBANCE ALONG THE PROJECT CORRIDOR.

ALL DISTURBED AREAS SHALL BE BACKFILLED WITH SALVAGED TOPSOIL, IF ANY. DISTURBED AREAS SHALL BE RESTORED WITH TOPSOIL, FERTILIZER, SEED, & HYDRAULIC MULCH MATRIX. ALL RESTORATION SHALL OCCUR WITHIN 7 DAYS OF GRADING COMPLETION. SOIL STOCKPILES SHALL BE STABILIZED WITHIN 7 DAYS OF ROUGH GRADING OR INACTIVITY (INCIDENTAL). TOPSOIL SHALL BE PLACED WITH A SHOULDERING MACHINE & RESTORATION COMPLETED IN AREAS WITH DITCH SECTIONS AFTER PAVING OF WEAR COURSE UNLESS OTHERWISE APPROVED BY ENGINEER IN THE FIELD.

ALL EXISTING SIGNS SHALL BE REMOVED AND REPLACED BY THE ANDOVER SIGN DEPARTMENT UNLESS CALLED OUT OTHERWISE IN THE PLANS. COORDINATE WITH MINIMUM 48 HOUR NOTICE WITH ENGINEER IN FIELD.

CONCRETE WASHOUT SHALL BE CONTAINED WITHIN CONCRETE TRUCKS, NOT DISPOSED OF ON-SITE.

CONTRACTOR SHALL SWEEP ALL MATERIAL OFF ADJACENT STREETS DUE TO CONSTRUCTION ACTIVITY, DAILY AS NECESSARY (INCIDENTAL).

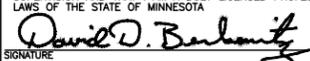
CONTRACTOR IS REQUIRED TO REPAIR AND MAINTAIN ALL TEMPORARY AND PERMANENT EROSION AND SEDIMENT CONTROL PRACTICES (INCIDENTAL).

CONTRACTOR SHALL REMOVE ALL TEMPORARY SEDIMENT CONTROL PRACTICES ONCE VEGETATION IS RE-ESTABLISHED (INCIDENTAL).

REFER TO SWPPP IN PROJECT SPECIFICATION FOR ADDITIONAL CONSTRUCTION/EROSION CONTROL REQUIREMENTS.

WHEN CONNECTING NEW PAVED SURFACING TO ANY IN-PLACE PAVEMENTS, CUT VERTICALLY TO THE BOTTOM OF THE IN-PLACE PAVEMENTS OR TO THE BOTTOM OF THE NEW SURFACING, WHICHEVER IS DEEPER, THEN AT 2(V):1(H) SLOPE TO THE TOP OF THE SUBGRADE.

NO.	DATE	BY	DESCRIPTION OF REVISIONS

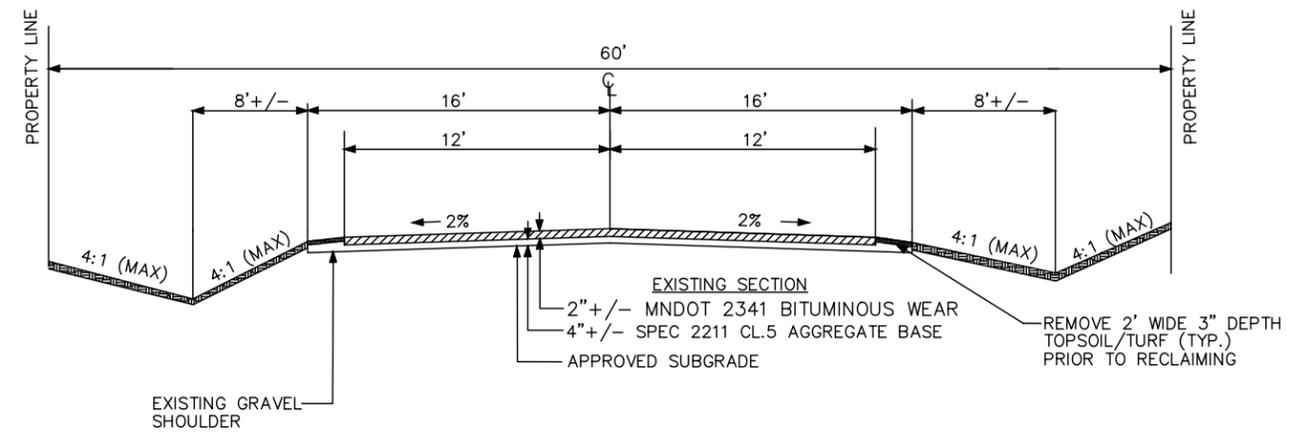
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 SIGNATURE: DAVID D. BERKOWITZ
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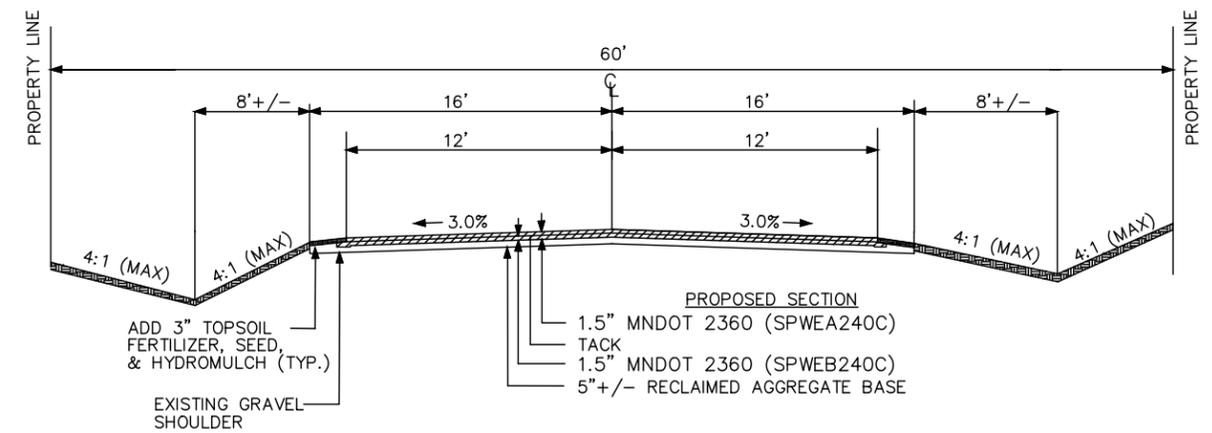
2026 STREET RECONSTRUCTION - (C.P. 26-02C)
 EAST ROUND LAKE ESTATES

CONSTRUCTION NOTES
 SHEET NO. 28 OF 54 SHEETS

RECLAIM 6.5" +/- DEPTH, OR AS NECESSARY TO PROVIDE HOMOGENEOUS MIXTURE MEETING GRADATION SPEC IN MNDOT 2215. WITH 100% PASSING 3 INCH SIEVE



26-02C EXISTING STREET SECTION



26-02C PROPOSED STREET SECTION

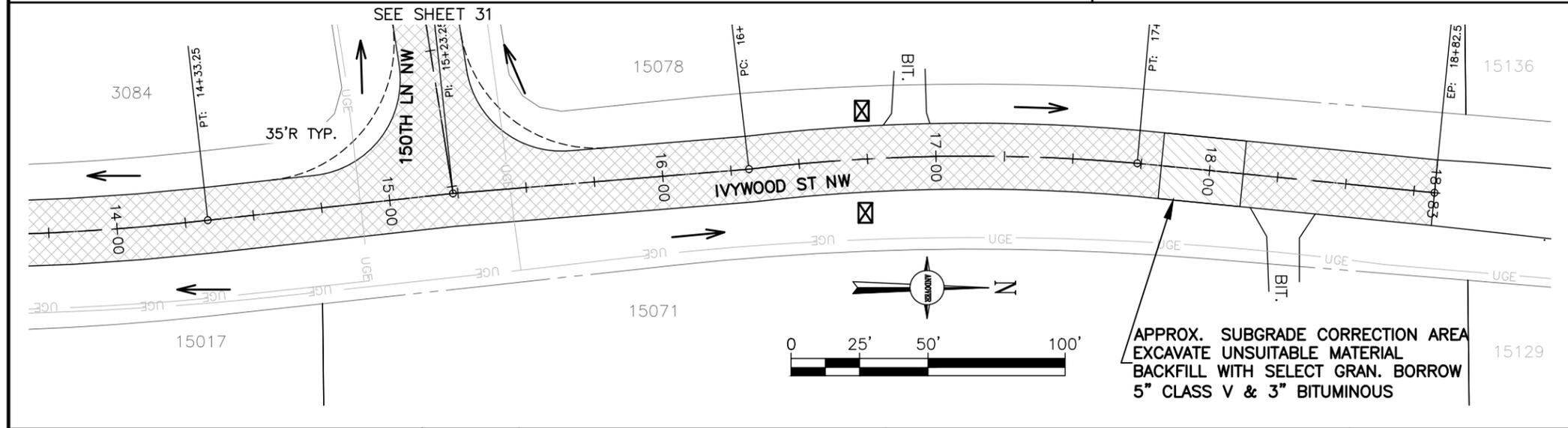
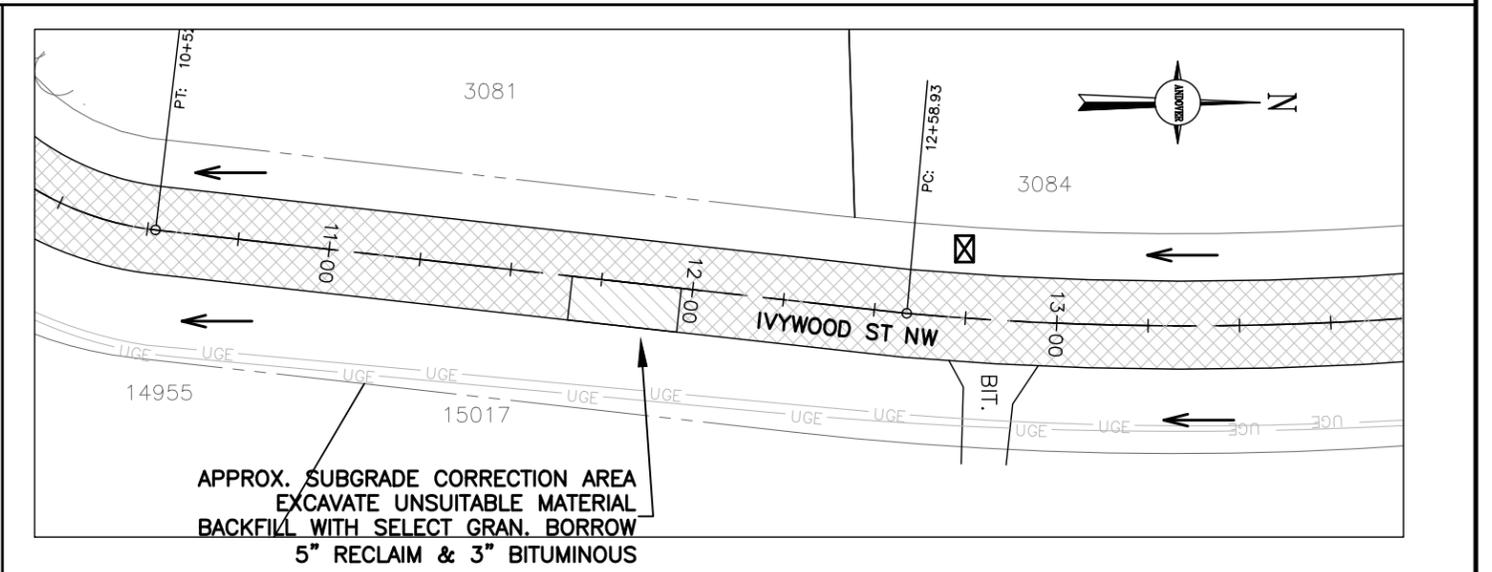
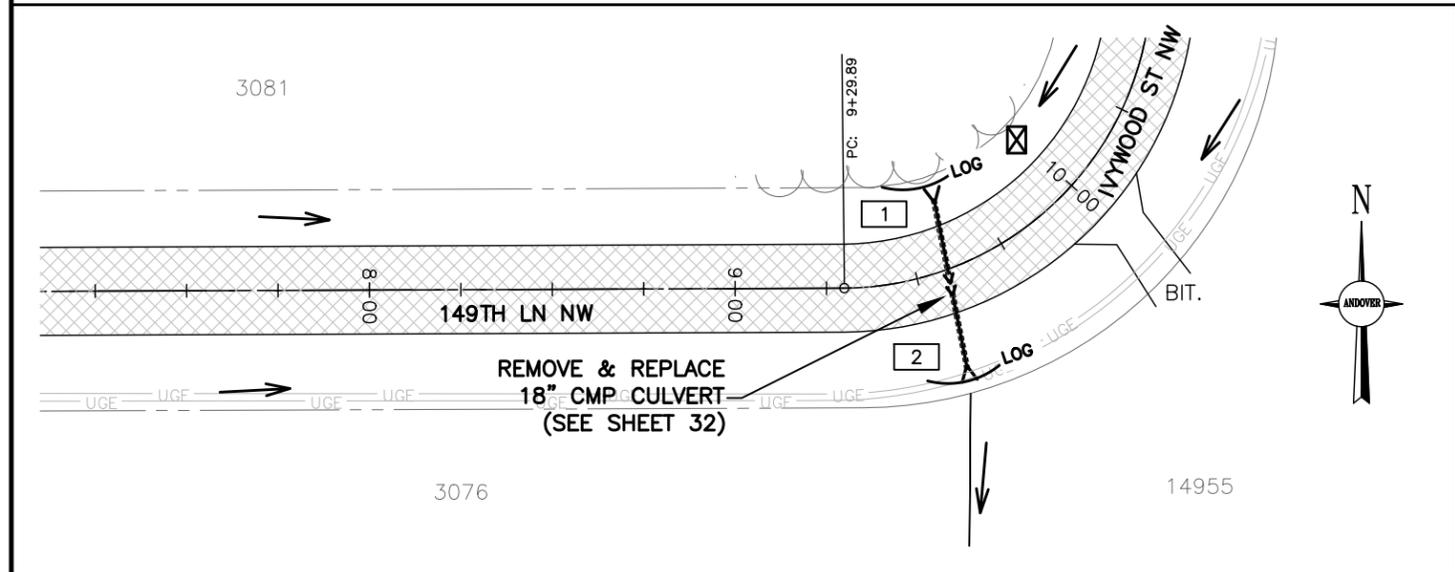
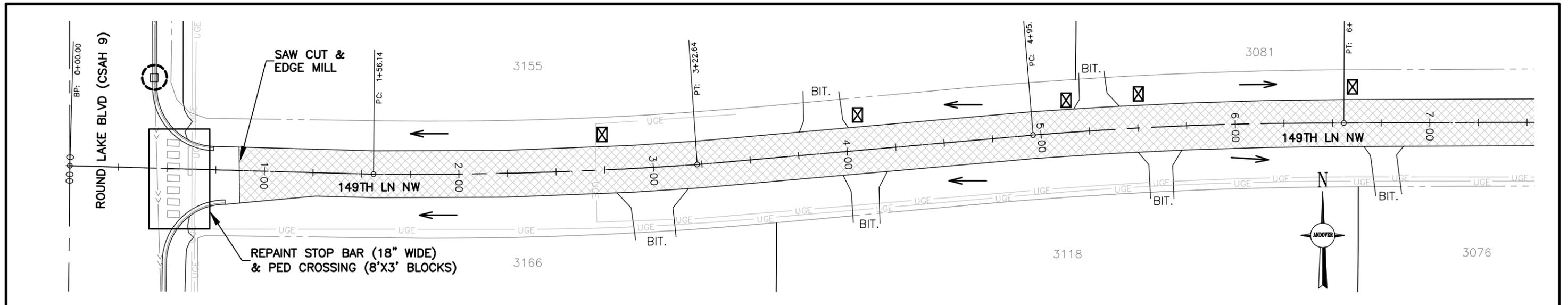
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 Signature: *David D. Berkowitz*
 DAVID D. BERKOWITZ
 DATE: MARCH 3RD, 2026 LIC. NO.: 26757



2026 STREET RECONSTRUCTION - (C.P. 26-02C)
 EAST ROUND LAKE ESTATES

TYPICAL SECTIONS
 SHEET NO. 29 OF 54 SHEETS



- RECLAIM BIT PAVEMENT-PAVE 3" BIT.
 - INLET PROTECTION
 - FLOW DIRECTION
 - EROSION CONTROL LOG
 - PROTECT MAILBOX
- NOTE:
 ① REMOVE AND PATCH 10'-12' +/- OF DRIVEWAY APRONS TO MATCH PROPOSED OVERLAY.

NO.	DATE	BY	DESCRIPTION OF REVISIONS
1	2/23/26	JBK	ACHD COMMENTS

DESIGNED: JDL
 DRAWN: JBK
 CHECKED: DDB

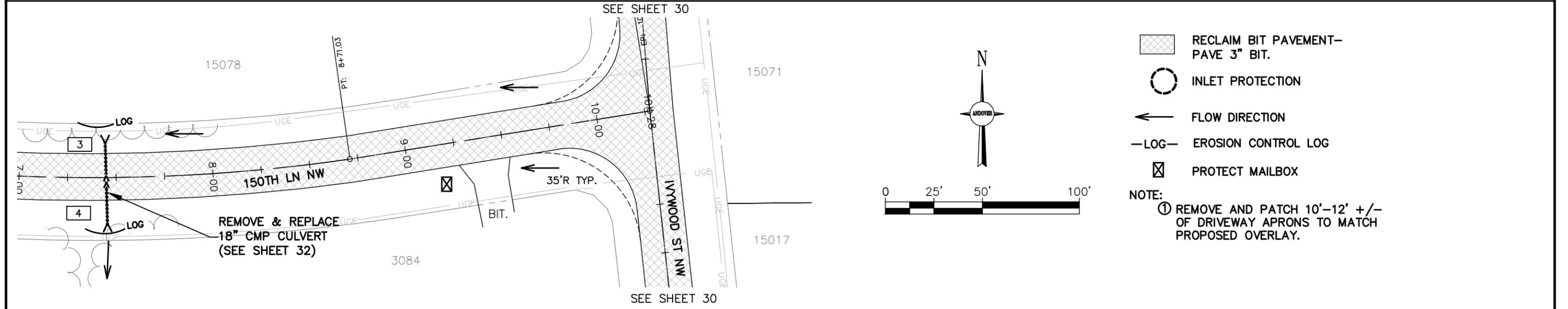
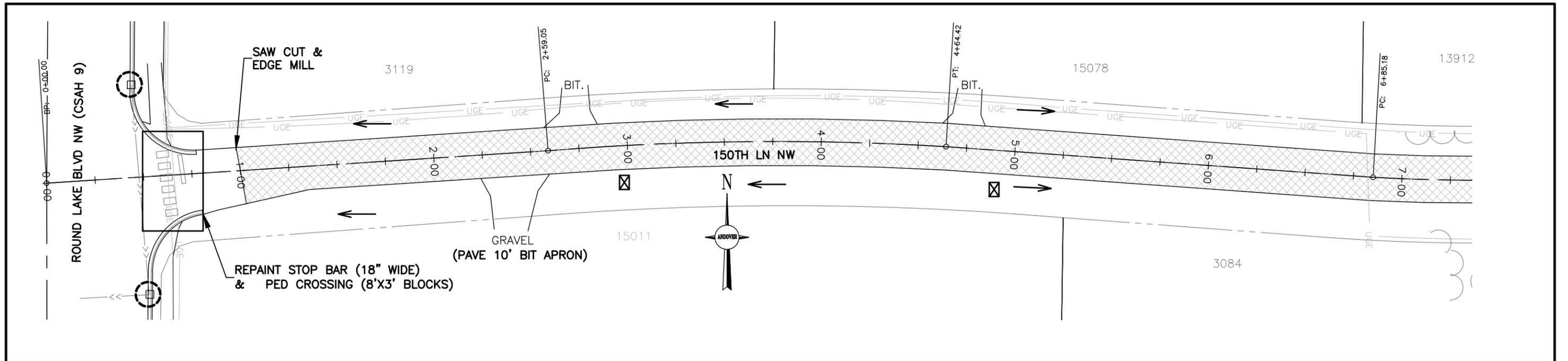
I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

David D. Berkowitz
 DAVID D. BERKOWITZ
 DATE: MARCH 3RD, 2026 LIC. NO. 26757



2026 STREET RECONSTRUCTION - (C.P. 26-02C)
 EAST ROUND LAKE ESTATES

REMOVALS, STREET PAVING
 SHEET NO. 30 OF 54 SHEETS



-  RECLAIM BIT PAVEMENT—PAVE 3" BIT.
 -  INLET PROTECTION
 -  FLOW DIRECTION
 -  EROSION CONTROL LOG
 -  PROTECT MAILBOX
- NOTE:
 ① REMOVE AND PATCH 10'-12' +/- OF DRIVEWAY APRONS TO MATCH PROPOSED OVERLAY.

NO.	DATE	BY	DESCRIPTION OF REVISIONS
1	2/23/26	JBK	ACHD COMMENTS

DESIGNED: JLL
 DRAWN: JBK
 CHECKED: DDB

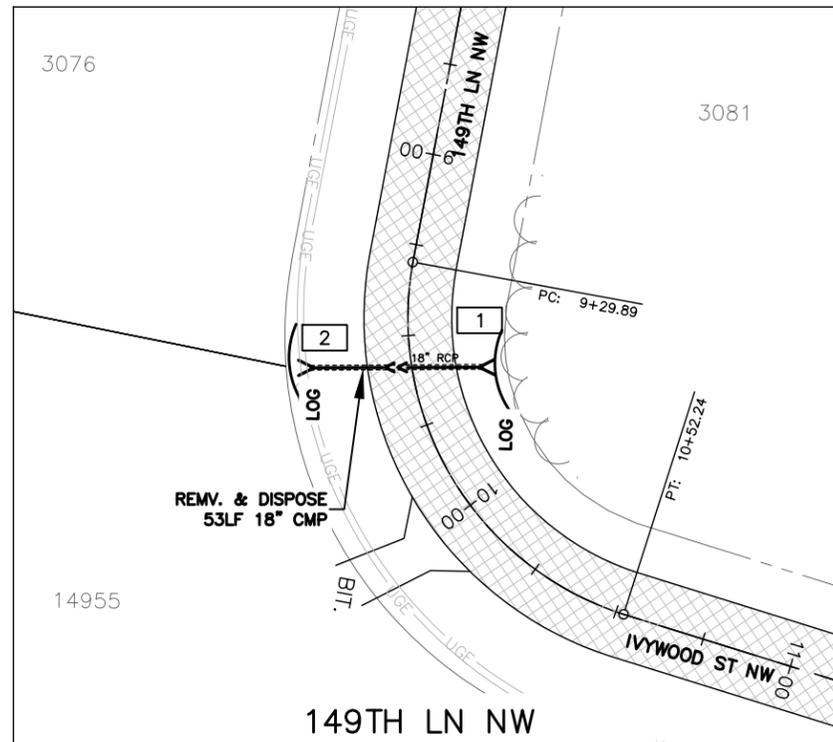
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David D. Berkowitz
 SIGNATURE: DAVID D. BERKOWITZ
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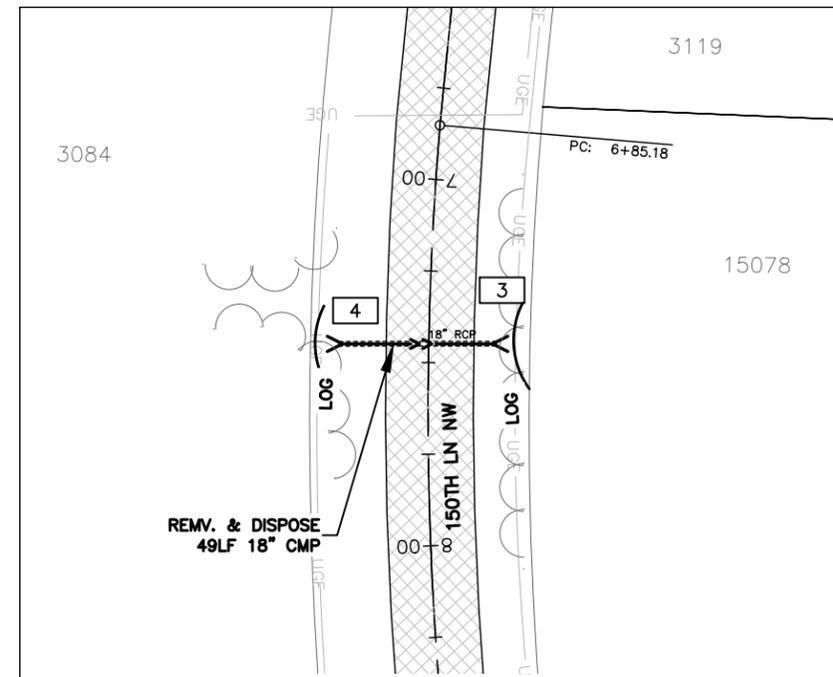
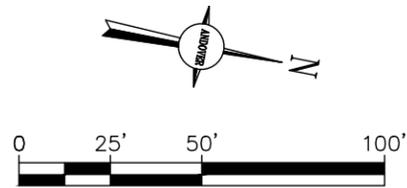


2026 STREET RECONSTRUCTION — (C.P. 26-02C)
 EAST ROUND LAKE ESTATES

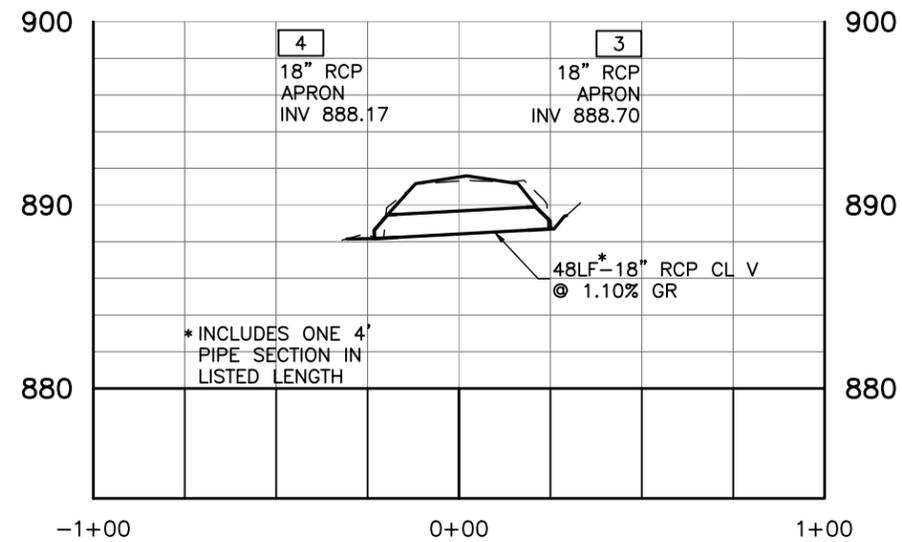
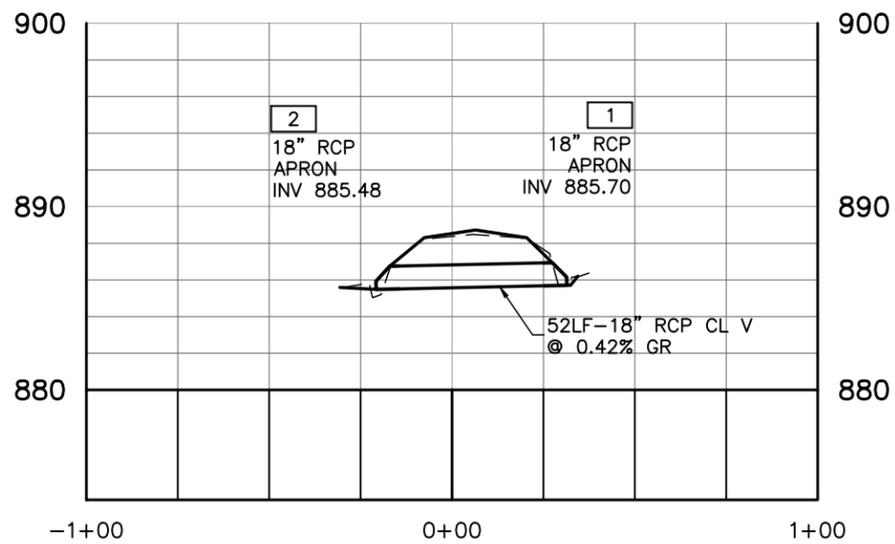
REMOVALS, STREET PAVING
 SHEET NO. 31 OF 54 SHEETS



149TH LN NW
CULVERT REPLACEMENT



150TH LN NW
CULVERT REPLACEMENT



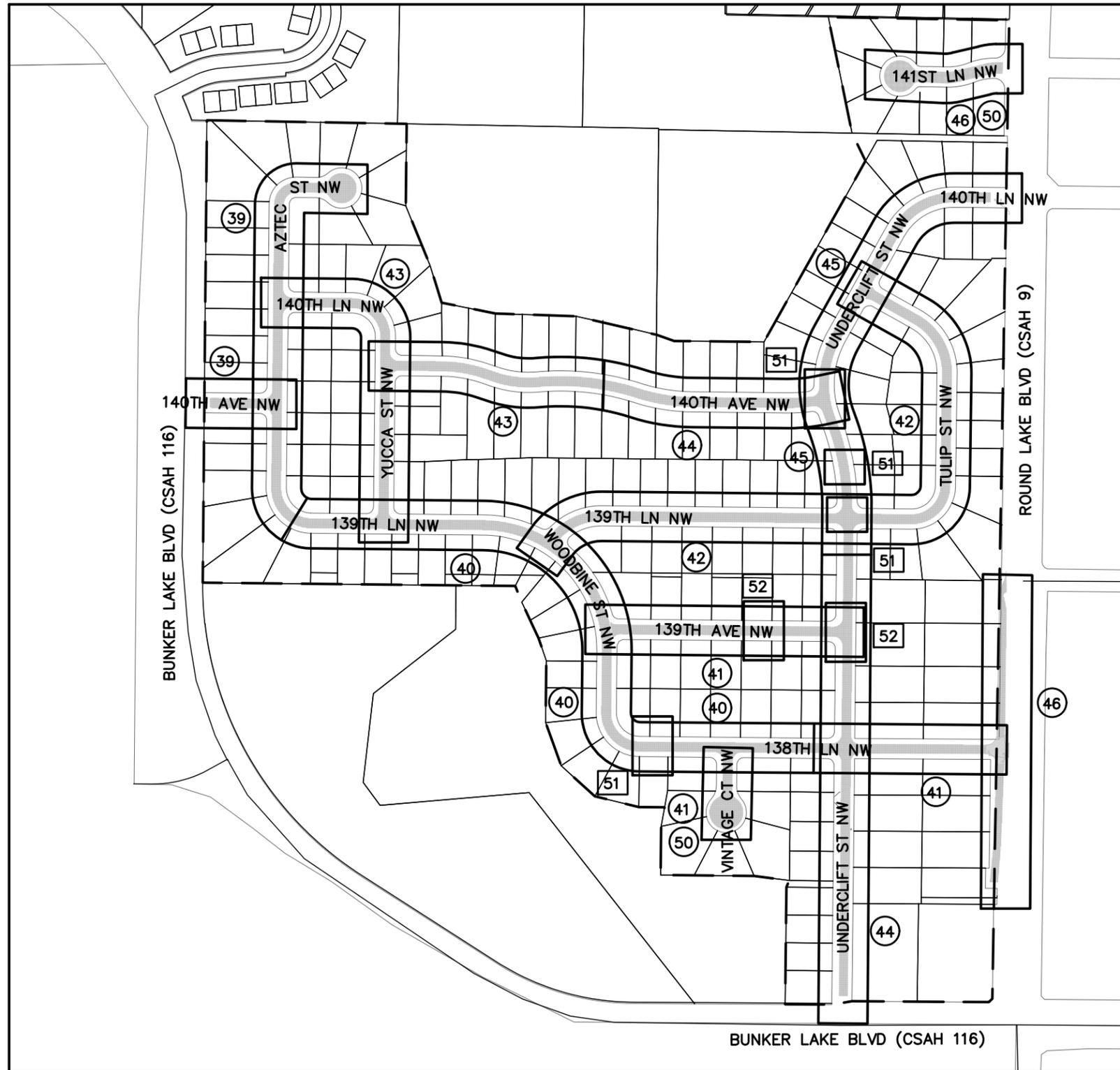
NO.	DATE	BY	DESCRIPTION OF REVISIONS

DESIGNED DRAWN JUL JBK
 CHECKED DDB
 I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA
David D. Berkowitz
 SIGNATURE DATE MARCH 3RD, 2026 LIC. NO. 28757
 DAVID D. BERKOWITZ
 TYPED OR PRINTED NAME



2026 STREET RECONSTRUCTION - (C.P. 26-02C)
 EAST ROUND LAKE ESTATES

CULVERT PLAN / PROFILES
 SHEET NO. 32 OF 54 SHEETS



⊗ = REMOVALS, STORM SEWER, PAVING
 ☐ = STORM SEWER PLAN/PROFILES

NO.	DATE	BY	DESCRIPTION OF REVISIONS

DESIGNED: JUL
 DRAWN: JBK
 CHECKED: DDB
 I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
 SIGNATURE: *David D. Berkowitz*
 DATE: MARCH 3RD, 2026
 LIC. NO.: 26757
 TYPED OR PRINTED NAME: DAVID D. BERKOWITZ



2026 FULL DEPTH RECLAMATION (C.P. 26-11B)
 NORTHGLEN AREA/WOODLAND POND

PROJECT LAYOUT
 SHEET NO. 33 OF 54 SHEETS

2026 Full Depth Reclamation: Northglen Area / Woodland Pond
City Project: 26-11B
STATEMENT OF ESTIMATED QUANTITIES

NOTES	ITEM NO.	DESCRIPTION	UNIT	TOTAL ESTIMATED PROJECT QUANTITIES	
				EST. QUAN.	ACT. QUAN.
	201	2021.501	Mobilization	LS	1.00
1	202	2104.502	Salvage Casting (Storm)	EA	13
	203	2104.502	Remove Drainage Structure	EA	13
2	204	2104.503	Sawing Concrete Pavement (Full Depth)	LF	340
2	205	2104.503	Sawing Bit Pavement (Full Depth)	LF	620
3	206	2104.503	Remove Curb & Gutter	LF	4,900
	207	2104.503	Remove Pipe Culvert / Storm Sewer	LF	390
2	208	2104.518	Remove Concrete Pavement	SF	3,440
2	209	2104.518	Remove Bituminous Pavement	SF	7,290
4	210	2104.602	Salvage and Reinstall Mailbox	EA	30
5	211	2105.607	Common Excavation (EV)	CY	360
6	212	2105.607	Subgrade Excavation (EV)	CY	190
7	213	2105.607	Salvage Reclaim Material (LV)	CY	4,910
8	214	2105.607	Select Granular Borrow (LV)	CY	60
9	215	2112.519	Subgrade Preparation	RDST	129.7
10	216	2130.523	Water	MGAL	75
11	217	2211.509	Aggregate Base Class 5	TN	22
12	218	2211.607	Place Salvaged Reclaim Material (CV)	CY	210
	219	2215.504	Full Depth Reclamation	SY	41,300
	220	2232.504	Mill Bituminous Surface (1.5")	SY	30
	221	2357.506	Bituminous Material For Tack Coat	Gal	2,110
	222	2360.509	Type SP 9.5 Wearing Course Mix (2,C)	TN	4,040
13	223	2360.509	Type SP 9.5 Bit Mixture for Patching (2,B)	TN	100
	224	2360.509	Type SP 12.5 Wearing Course Mixture (2,C)	TN	4,040
14	225	2451.607	Trench Stabilization Material (CV)	CY	20
	226	2503.503	12" RC Pipe Sewer Des 3006 Class V	LF	96
	227	2503.503	15" RC Pipe Sewer Des 3006 Class V	LF	24
	228	2503.503	18" RC Pipe Sewer Des 3006 Class V	LF	21
	229	2503.503	21" RC Pipe Sewer Des 3006 Class III	LF	24
	230	2503.503	24" RC Pipe Sewer Des 3006 Class III	LF	26
	231	2503.503	30" RC Pipe Sewer Des 3006 Class III	LF	87
	232	2503.602	Connect to Existing Storm Sewer	EA	11
	233	2503.603	Lining Sewer Pipe 21"	LF	4
	234	2503.603	Clean & Televis Storm Sewer and Culverts	LF	280
	235	2503.604	4" Polystyrene Insulation	SY	10
15	236	2504.602	Adjust Gate Valve Box	EA	16
16	237	2504.602	Adjust Gate Valve Box - F&I New Valve Box Top	EA	6
17	238	2504.602	Gate Valve Casting Adjustment	EA	2
18	239	2504.602	Irrigation System Modifications	EA	80
19	240	2506.502	Manhole Casting Adjustment	EA	2
20,21	241	2506.502	Adjust Frame & Ring Casting	EA	57
21,22	242	2506.502	Casting Assembly - Sanitary	EA	2
21,22	243	2506.502	Casting Assembly - Storm	EA	5
21	244	2506.502	Install Casting - Storm	EA	10
	245	2506.602	Connect to Existing Drainage Structure	EA	1
	246	2506.602	Construct Drainage Structure, Type 401 - 27" Dia.	EA	2
	247	2506.602	Construct Drainage Structure, Type 405 - 60" Dia.	EA	2
	248	2506.602	Construct Drainage Structure, Type 405 - 72" Dia.	EA	2
	249	2506.602	Construct Drainage Structure, Type 409 - 48" Dia.	EA	4
	250	2506.602	Construct Drainage Structure, Type 420 - 2'x3'	EA	3

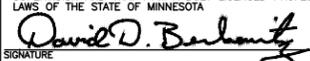
	251	2506.602	Construct Drainage Structure, Type 421 - 48" Dia.	EA	1
	252	2506.602	Construct Drainage Structure, Type 421 - 60" Dia.	EA	1
23	253	2506.602	Mud Existing Casting Rings	EA	22
24	254	2506.602	Mud Doghouse	EA	11
26	255	2506.607	Fill Catch Basin Sump	CY	4
26	256	2521.618	Concrete Curb Ramp Walk	SF	270
	257	2531.503	Concrete Curb & Gutter Design Surmountable	LF	6,700
	258	2531.504	6" Concrete Driveway Pavement	SY	310
	259	2531.602	Saw and Seal Concrete Curb & Gutter	EA	35
	260	2531.604	8" Concrete Valley Gutter	SY	115
	261	2531.618	Truncated Domes	SF	48
	262	2563.601	Traffic Control	LS	1.00
	263	2573.502	Storm Drain Inlet Protection	EA	38
	264	2574.507	Loam Topsoil Borrow (LV)	CY	980
27	265	2574.508	Fertilizer Type 3	LB	20
28	266	2575.504	Rolled Erosion Prevention Category 20	SY	130
	267	2575.504	Sodding Type Lawn	SY	3,030
29	268	2575.505	Weed Spraying	ACRE	0.50
	269	2575.505	Seeding	ACRE	0.05
	270	2575.508	Seed Residential Turfgrass (RT)	LB	10
	271	2582.503	18" Solid Line Paint	LF	50
	272	2582.518	Pavement Message Paint	SF	530
30	273	2582.601	Protect Poly Preform Pavement Markings	LS	1.00

BASIS OF ESTIMATED QUANTITIES	
Bituminous Wear Course	120 # / SY / inch
Bituminous Non-Wear Course	120 # / SY / inch
Aggregate Base, Class 5	110 # / SY / inch
Tack Coat	0.05 Gal / SY
Hydraulic Mulch Matrix	2500 # / acre
Fertilizer Type 3 (Analysis 22-5-10)	350 # / acre
Seed Mixture: Residential Turfgrass	200 # / acre

C.P. 26-11B Notes:

- Item includes temporary plating of structure if necessary.
- Regardless of depth.
- Regardless of type/dimension of curb. Sawcut of curb and excavation and off-site disposal of material behind curb incidental.
- Includes salvage and reinstall of existing mailbox, and temporary placement of mailbox in barrel at each existing location during construction.
- For all excavation except subgrade excavation. Dispose excess and/or unsuitable material off-site. See Earthwork Tabulation.
- For exc. beneath reclaimed agg. base where profile lowered or unsuitable material encountered. Dispose excess and/or unsuitable material off-site. See Earthwork Tabulation.
- For excavating/hauling/stockpiling reclaim material salvaged for subgrade exc. and/or excess material. 400 CY of material shall be hauled and stockpiled at Andover Public Works yard and become property of City of Andover. All other excess material is property of contractor. See Earthwork Tabulation.
- Only to be used if sufficient material not generated on-site for subgrade excavation / correction backfill, if necessary. Use reclaim material first.
- Includes grading reclaim material from areas of excess to areas requiring material (under curb, along shoulder, increased crown), fine grading, and compacting reclaimed agg. base.
- For dust control only as directed by the engineer. Water to achieve compaction shall be incidental.
- Item includes furnishing, hauling, placing and compacting. See Earthwork Tabulation.
- Includes loading/hauling/placing/grading/compacting salvaged reclaim material in areas of subgrade exc. or correction.
- Item shall be used for patching of bituminous trails and driveway replacements.
- Rock shall be 1.5" nominal diameter. Use under utility pipe and structures if water table is high.
- Adjust valve box top to grade, includes sawcut, pavement removal, plating, lowering for reclaim and adjust to final grade. Use item if existing valve box top can be adjusted.
- Use item if existing valve box top is rusted and not adjustable or if called out in plans. Includes sawcut, pavement removal, plating, remove existing valve box top and F&I new valve box top.
- F&I gate valve casting adjustment(if necessary). Clean and glue to existing frame.
- Based upon number or irrigation heads removed / replaced. Item shall include all items necessary to temporarily cap existing systems, replace damaged lines, heads, adjust systems, and return them to pre-project condition or better. Work shall be performed by a licensed irrigation contractor.
- F&I manhole casting adjustment (if necessary). Contractor to verify casting diameter. Clean and glue to existing frame. Neenah R-1979 series, or approved equal.
- Item includes sawcut, pavement removal, plating, salvaging and reinstalling casting regardless of required adjusting rings.
- Includes new concrete adjusting rings regardless of depth. Infi-Shield Gator Wrap (manholes), or wrap rings with geotextile fabric and concrete collar (catch basins).
- For use if salvaged casting breaks or is unuseable or new casting required per plans.
- Protect casting, touch up mud on existing concrete adjustment rings inside structure.
- Item shall include regrouting all doghouses within structure. The "Each" item refers to each structure regardless of the number of doghouses in the structure.
- Includes filling sump with redi-mix, pouring invert, constructing benches to 1/3 of pipe diameter. Includes regrouting doghouses as necessary.
- For 6" thick pedestrian curb ramps.
- Analysis 22-5-10.
- Straw or wood fiber blanket is an acceptable alternative. Netting material shall be jute netting.
- Only to be used if requested by engineer prior to or during site restoration.
- Contractor shall install temporary protective covering for existing poly preform crosswalks, stop bars and turn arrows. Damage to existing markings shall be replaced in-kind with no additional compensation.

NO.	DATE	BY	DESCRIPTION OF REVISIONS

DESIGNED JUL	DRAWN JBK	I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA  DAVID D. BERKOWITZ TYPED OR PRINTED NAME
CHECKED DDB	SIGNATURE	
DATE: MARCH 3RD, 2026		LIC. NO.: 26757



2026 FULL DEPTH RECLAMATION (C.P. 26-11B)
 NORTHGLEN AREA/WOODLAND POND

STATEMENT OF ESTIMATED QUANTITIES
 SHEET NO. 34 OF 54 SHEETS

EARTH WORK TABLE

City Project 26-11B: Northglen Area / Woodland Pond		
Aggregate Base Class 7 (Reclaim)		
Existing 2"-2.5" +/- of bituminous and 4" +/- aggregate base based on road cores		Roadway Length = 12,970 LF
Reclaim 7"+/- deep (pull some sand into reclaim)		New Curb Length (none existing) = 1,800 LF
		Subgrade Correction Length (assumed) = 50 LF
Salvage Reclaim Material		
Volume of salvaged reclaim material =	3280 CY (CV)	2.8" salvaged over entire reclaimed area (for bituminous section)
Volume of salvaged reclaim material =	(37) CY (CV)	Material bladed under proposed curb where none exists (2" min.) to 1' behind curb (part of subgrade preparation)
Volume of salvaged reclaim material =	26 CY (CV)	6" salvage in areas of subgrade correction x street width
Total Salvaged Reclaim =	3,269 CY (CV)	Reclaim material available
Salvaged Reclaim Required		
Volume required =	183 CY (CV)	Backfill for subgrade correction area (corresponds to assumed correction volume)
Volume required =	25 CY (CV)	5'- areas of subgrade corrections
Total Salvaged Reclaim Required	208 CY (CV)	
Aggregate Base Class 5 Required		
Volume required =	11 CY (CV)	Driveway and pedestrian ramps
Total Class 5 Required	11 CY (CV)	
Subgrade Excavation		
Volume of subgrade exc. =	0 CY (EV)	Areas of lowering of roadway profile
Volume of subgrade exc. =	183 CY (EV)	Subgrade correction areas Assume 3' depth in correction areas
Total Subgrade Excavation =	183 CY (EV)	
Common Excavation		
Volume of common exc. =	300 CY (EV)	Areas where curb and gutter added where none is existing. Assume 3.5' wide x 1.25' deep.
Volume of common exc. =	40 CY (EV)	3' wide x 5" deep along Round Lake Blvd Service Road west side
Volume of common exc. =	12 CY (EV)	Miscellaneous excavation for driveway apron and pedestrian ramp replacements
Total Common Excavation =	352 CY (EV)	
Topsoil Borrow		
Volume required =	660 CY (CV)	Behind curb and gutter. Assume 2.5' wide x 1' deep. Utilize salvaged material if suitable. 4" min. in all disturbed areas
Volume required =	32 CY (CV)	4" in disturbed boulevard along Round Lake Blvd Service Road west side.
Volume required =	5 CY (CV)	Adjacent to pedestrian ramp replacements
	697 CY (CV)	

EARTHWORK SUMMARY**

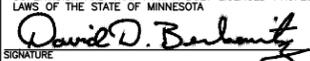
Salvage Reclaim Material	3269 CY (CV)	
Volume of salvaged reclaim	4910 CY (LV)	
Place Salvaged Reclaim Material		
Volume of salvaged reclaim material to replace =	210 CY (CV)	For replacement of salvaged reclaim in areas of profile lowering or subgrade correction
Reclaimed Aggregate Base Balance		
Volume of salvaged reclaim material available =	3269 CY (CV)	
Volume of required reclaim material =	210 CY (CV)	
Balance of reclaim material =	3059 CY (CV)	
	4590 CY (LV)	Haul out and dispose of excess 400 CY to be hauled and stockpiled at Andover Public Works yard and become property of City of Andover. All additional excess is property of contractor.
Common Excavation	360 CY (EV)	Haul out and dispose of unsuitable and excess material off-site (exc. behind curb replacement incidental).
Subgrade Excavation	190 CY (EV)	Haul out and dispose of unsuitable and excess material off-site
Aggregate Base Class 5	22 Tons	
Topsoil Borrow	697 CY (CV)	
	980 CY (LV)	
Select Granular Borrow	60 CY (LV)	For backfill of subgrade correction. Only used if sufficient material not available on-site. Use salvaged reclaim first.
Excess Excavation Material to Dispose of Off-Site	3527 CY (EV)	Excess reclaim, and assumed 85% of common exc material and subgrade exc material
	4590 CY (LV)	Does not include material behind curb replacement which is incidental to curb removal

** quantities for pay items are rounded to nearest 10

Swell Factors

EV to LV = 1.3
 LV to CV = 1.4
 LV to CV = 1.5 (For reclaimed material)
 1 CY Class 5 = 2 tons (147 #/CF)

NO.	DATE	BY	DESCRIPTION OF REVISIONS

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CHECKED DDB	SIGNATURE	
DATE: MARCH 3RD, 2026		LIC. NO.: 26757



2026 FULL DEPTH RECLAMATION (C.P. 26-11B)
 NORTHGLEN AREA/WOODLAND POND

EARTHWORK SUMMARY

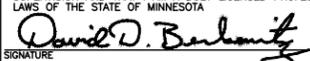
SHEET NO. 35 OF 54 SHEETS

**Existing Storm Sewer Structures Table
2026 FDR: Northglen Area / Woodland Pond (C.P. 26-11B)**

CB / MH #	Remove Structure (Each)	New Structure Type	Fill Sump / Pour Invert (CY) (2)	Structure Diameter (ft)	Sump Depth (ft)	Mud Dog House (Each)	Mud Rings (Each)	Adjust Frame & Ring Casting (Each)	Salvage Casting (Each)	Install Casting (Each)	# Exist Rings (Inches) (1)
DCB892				4			1				6
DCB893				4			1				6
DCB894				4		1	1				5
DCB895				4			1				2
DCB896	1	401-27"							1	1	
DCB897	1	405-60"							1	1	
DCBXXX	1	405-60"							1	1	
DCBZZZ		405-72"								1	
DCB898				4			1				8
DCB899				4			1				12
DCB900	1	401-27"							1	1	
DCB901				4		1	1				7
DCB902	1	421 - 48"							1	1	
DCB903				4		1	1				2
DCB905				4		1	1				6
DCB906	1	420							1		
DCB907	1	421-60"							1		
DCB908	1	420							1		
DCB909	1	420							1		
DCB910			0.8	4	1		1				3
DCB911				4		1	1				1
DCB912			0.8	4	1		1				5
DCB913				4		1	1				3
DCB914			0.8	4	1		1				2
DCB915			0.8	4	1		1				6
DCB916				4		1	1				12
DCB934				4		1	1				2
DCB935				4			1				4
DCB936				4			1				9
DCB937				4			1				10
DCB938				4		1	1				6
DCB1347				4			1				8
DMH194	1	409-48"							1	1	
DMH195	1	409-48"							1	1	
DMH196	1	409-48"				1			1	1	
DMH197				4				1			8
DMH198				4		1		1			7
DMH199	1	409-48"							1	1	
Total	13		4			11	22	2	13	10	

Notes 1): When installing casting, 6" and 1' rings shall be used so that there are no more than 5 rings per casting.
2) Mudding of doghouses incidental to filling CB sump.

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CHECKED DDB	DATE MARCH 3RD, 2026	



2026 FULL DEPTH RECLAMATION (C.P. 26-11B)
NORTHGLEN AREA/WOODLAND POND

STORM SEWER TABLE
SHEET NO. 36 OF 54 SHEETS

GENERAL NOTES:

THE 2025 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION" SHALL GOVERN. CITY OF ANDOVER 2026 UTILITY AND STREET CONSTRUCTION SPECIFICATIONS SHALL APPLY.

THE SUBSURFACE UTILITY INFORMATION IN THIS PLAN IS UTILITY QUALITY LEVEL D. THIS QUALITY LEVEL WAS DETERMINED ACCORDING TO THE GUIDELINES OF ASCE 38-22, ENTITLED "STANDARD GUIDELINES FOR INVESTIGATING AND DOCUMENTING EXISTING UTILITIES.

ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO AND BE INSTALLED IN ACCORDANCE WITH THE "MINNESOTA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MMUTCD)" AND THE "TEMPORARY TRAFFIC CONTROL ZONE LAYOUTS FIELD MANUAL", NEWEST ADDITIONS.

THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE EXCAVATING CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. HE AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES. THE CONTRACTOR IS REQUIRED TO CALL GOPHER ONE CALL AT LEAST 48 HOURS IN ADVANCE OF CONSTRUCTION. (651-454-2000)

CONSTRUCTION NOTES:

ROAD WORK AHEAD SIGNS SHALL BE MAINTAINED AT ALL INTERSECTING ROADS TO THE PROJECT. TYPE B CHANNELIZERS SHALL BE USED IN ALL NECESSARY LOCATIONS. TRAIL CLOSED SIGNS ON TYPE III BARRICADES SHALL BE PLACED AT ALL LOCATIONS IMPACTED BY PEDESTRIAN RAMP/SIDEWALK/TRAIL IMPROVEMENTS.

CONSTRUCTION SHALL BE STAGED SUCH THAT TRAFFIC IS MAINTAINED AT ALL TIMES. CONTRACTOR SHALL USE FLAG PERSON, IF NEEDED (INCIDENTAL TO TRAFFIC CONTROL).

COMPACTION OF ALL BITUMINOUS MIXTURE SHALL BE BY THE "SPECIFIED DENSITY METHOD" EXCEPT FOR PATCHES AND TRAILS, WHICH SHALL BE BY THE "ORDINARY COMPACTION METHOD".

THE CONTRACTOR SHALL USE FLAG PERSON'S AND APPROPRIATE TRAFFIC CONTROL DEVICES TO DIRECT TRAFFIC AT INTERSECTING COUNTY ROADS. ALL TRAFFIC CONTROL MUST BE ACCEPTABLE TO THE ANOKA COUNTY HIGHWAY DEPARTMENT. CONTRACTOR SHALL APPLY FOR A PERMIT FOR WORKING WITHIN ANOKA COUNTY RIGHT OF WAY. PROVIDE A COPY OF COUNTY PERMIT TO CITY ENGINEER.

ABSENT A ROAD CLOSURE, RECONSTRUCTION SHALL BE PERFORMED IN A MANNER TO ALLOW LOCAL TRAFFIC TO BE MAINTAINED TO A MINIMUM OF HALF THE ROADWAY WIDTH. THE CONTRACTOR SHALL USE FLAG PERSON'S TO DIRECT TRAFFIC AS NEEDED.

CONTRACTOR SHALL PROVIDE 3 DAY NOTICE PRIOR TO POTENTIAL ROAD CLOSURE FOR UNDERGROUND UTILITY CONSTRUCTION. TYPE 3 BARRICADES WITH "ROAD CLOSED" SHALL BE INSTALLED ON BOTH SIDES OF UTILITY CONSTRUCTION ACTIVITY. STAGE CONSTRUCTION TO ALLOW FOR LOCAL RESIDENT ACCESS AS NEEDED.

DURING ALL ASPECTS OF CONSTRUCTION DRIVEWAYS SHALL BE RAMPED WITH GRAVEL IN A TIMELY MANNER TO PROVIDE RESIDENTS ACCESS. UPON THREE DAYS OF CURE, CONC. CURBING AT DRIVEWAYS SHALL BE BACKFILLED & RAMPED WITH GRAVEL TO PROVIDE ACCESS.

DURING THE CONSTRUCTION OF CONC. CURB & DRIVEWAYS, THE CONTRACTOR SHALL COORDINATE WITH ENGINEER TO NOTIFY RESIDENTS OF PENDING CONSTRUCTION ACTIVITY. A THREE DAY NOTICE IS REQUIRED PRIOR TO POURING CONC. CURB & DRIVEWAYS. IMMEDIATELY UPON COMPLETION THE ROADWAY SHALL BE GRADED TO ALLOW RESIDENTS TO PARK ON STREET ADJACENT TO THEIR PROPERTY.

CONCRETE CURBING SHALL BE KNOCKED DOWN AT ALL DRIVEWAY ENTRANCES (INCIDENTAL). CONSTRUCT B618 C&G ON ALL RADII, CATCH BASIN LOCATIONS & ADDITIONAL LOCATIONS AS NOTED ON PLAN. (PAID AS SURMOUNTABLE C&G).

EXISTING MAILBOXES SHALL BE SALVAGED AND REINSTALLED WHERE CALLED OUT IN PLANS. DURING CONSTRUCTION TEMPORARY MAILBOXES SHALL BE PLACED NEAR THE ORIGINAL MAILBOX LOCATION. THE TEMPORARY MAILBOXES SHALL BE MOUNTED ON BARRELS TO BE PORTABLE. PROPERTY OWNER MAY SUPPLY NEW POST AND/OR BOX TO BE PLACED IN THE ORIGINAL LOCATION.

RESIDENTS WILL BE ASKED TO MARK IRRIGATION PRIOR TO CONSTRUCTION. CONTRACTOR SHALL VERIFY LOCATION OF EXISTING SYSTEMS. WHERE BOULEVARD IRRIGATION MODIFICATIONS ARE REQUIRED THE IRRIGATION LINES/HEADS SHALL BE REMOVED & DISPOSED. REMAINING LINES SHALL BE PLUGGED & MARKED. ALL REPLACED IRRIGATION LINES/HEADS SHALL BE WITH NEW COMMERCIAL GRADE MATERIALS. CONTRACTOR WILL BE PAID A UNIT PER HEAD REPLACED. EXISTING LOCATIONS SHOWN ON PLANS ARE ONLY SCHEMATIC. ALL WORK SHALL BE BY AN IRRIGATION CONTRACTOR LICENSED TO WORK IN THE CITY OF ANDOVER.

THE CONTRACTOR SHALL PROTECT, SALVAGE AND REPAIR ALL EXISTING LANDSCAPING IN KIND. THIS SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT.

THE FOLLOWING CONSTRUCTION ITEM'S SHALL OCCUR PRIOR TO COMMENCING THE RECLAIMING OPERATION. INSTALL TRAFFIC CONTROL, REMOVE STREET SIGN'S (CITY), INSTALL TEMP. EROSION CONTROL MEASURES, IDENTIFY & CAP IRRIGATION SYSTEMS IN AREAS OF CURB REPLACEMENT, SALVAGE LANDSCAPING, REMOVE EX. & INSTALL TEMP. MAILBOX'S WHERE IDENTIFIED IN PLANS.

MACHINE CURB ON STRETCHES OVER 100'. ALSO, SALVAGE AND INSTALL MAILBOXES IN AREAS WHERE THERE WILL BE MACHINE CURB.

EXISTING DRIVEWAYS SHALL BE SAWCUT AS DIRECTED BY ENGINEER, REMOVED AND DISPOSED OF OFF SITE. BITUMINOUS AND CONCRETE DRIVEWAYS SHALL BE REPLACED IN KIND. GRAVEL DRIVEWAYS SHALL BE REPLACED WITH A 10-15' BITUMINOUS APRON. ANY DAMAGE CAUSED BY CONSTRUCTION ACTIVITY SHALL BE SAWCUT AND REPAIRED IN KIND AT THE CONTRACTORS EXPENSE.

WHERE SUBGRADE EXCAVATION AND/OR UTILITY WORK OCCURS WITHIN THE ROADWAY THE RECLAIMED BASE SHALL BE SALVAGED & REPLACED PER THE TYPICAL SECTION (INCIDENTAL). THIS WORKSHALL BE DONE IN A MANNER SO RECLAIMED BASE IS NOT CONTAMINATED WITH SPOIL MATERIAL. COMPACTION OF THE RECLAIMED BASE MATERIAL SHALL BE ACHIEVED BY THE PENETRATION INDEX METHOD IN ACCORDANCE WITH MNDOT 2211.3C3. THE BOTTOM OF THE SUBCUTS SHALL BE SHAPED AND COMPACTED BY THE "QUALITY COMPACTION METHOD"

THE CONTRACTOR SHALL STRIP AND STOCKPILE EXISTING TOPSOIL MATERIAL, IF ANY, FOR RE-USE (LITTLE IS EXPECTED). RE-USED TOPSOIL SHALL BE CLEAN WITH NO SOD CHUNKS / EXISTING VEGETATION. TOPSOIL STRIPING, IF ANY, SHALL BE CONSIDERED INCIDENTAL.

SELECT EXCAVATED MATERIALS SHALL BE UTILIZED TO THE FULLEST EXTENT WITHIN THE PROJECT LIMITS TO BACKFILL PROPOSED CURB & GUTTERS. ANY EXCESS MATERIAL, OR MATERIAL WITH DEBRIS / SOD CHUCKS SHALL BE DISPOSED OF OFF-SITE.

EXCAVATION AND DISPOSAL OF SOIL/TURF MATERIAL SHALL BE INCIDENTAL TO REMOVAL PAY ITEMS UNLESS OTHERWISE NOTED. CONTRACTOR SHALL MINIMIZE EXCAVATION AND DISTURBANCE ALONG THE PROJECT CORRIDOR.

ALL DISTURBED AREAS SHALL BE BACKFILLED WITH SALVAGED TOPSOIL, IF ANY. DISTURBED AREAS SHALL BE RESTORED WITH 4" (MINIMUM) TOPSOIL & SOD. ALL RESTORATION SHALL OCCUR WITHIN 7 DAYS OF GRADING COMPLETION. SOIL STOCKPILES SHALL BE STABILIZED WITHIN 7 DAYS OF ROUGH GRADING OR INACTIVITY (INCIDENTAL). RESTORATION WORK SHALL BE COMPLETED PRIOR TO PAVING WEARING COURSE UNLESS OTHERWISE APPROVED BY ENGINEER IN THE FIELD.

ALL EXISTING SIGNS SHALL BE REMOVED AND REPLACED BY THE ANDOVER SIGN DEPARTMENT UNLESS CALLED OUT OTHERWISE IN THE PLANS. COORDINATE WITH MINIMUM 48 HOUR NOTICE WITH ENGINEER IN FIELD.

CONCRETE WASHOUT SHALL BE CONTAINED WITHIN CONCRETE TRUCKS, NOT DISPOSED OF ON-SITE.

CONTRACTOR SHALL SWEEP ALL MATERIAL OFF ADJACENT STREETS DUE TO CONSTRUCTION ACTIVITY, DAILY AS NECESSARY (INCIDENTAL).

INSTALL INLET PROTECTION DEVICES ON ALL STORM SEWER STRUCTURES. PRIOR TO PLACING CASTINGS ON STORM SEWER STRUCTURES THE CONTRACTOR SHALL FOLLOW STANDARD DETAIL IN THE PLANS TO ALLOW FOR INFLOW INTO THE STORM SEWERS. ONCE CASTINGS ARE INSTALLED ON STORM SEWER STRUCTURES THE CONTRACTOR SHALL INSTALL INLET PROTECTION ON ALL STRUCTURES SUCH THAT SEDIMENT IS CAPTURED WITH A HIGH FLOW BYPASS. CLEAN AS NECESSARY.

CONTRACTOR IS REQUIRED TO REPAIR AND MAINTAIN ALL TEMPORARY AND PERMANENT EROSION AND SEDIMENT CONTROL PRACTICES ACCORDING TO THE MPCA BEST MANAGEMENT PRACTICES MANUAL, SWPP, AND THE MINNESOTA STORM WATER MANUAL (INCIDENTAL).

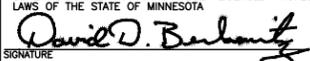
CONTRACTOR SHALL REMOVE ALL TEMPORARY SEDIMENT CONTROL PRACTICES ONCE VEGETATION IS RE-ESTABLISHED (INCIDENTAL).

REFER TO SWPPP IN PROJECT SPECIFICATION FOR ADDITIONAL CONSTRUCTION/EROSION CONTROL REQUIREMENTS.

WHEN CONNECTING NEW PAVED SURFACING TO ANY IN-PLACE PAVEMENTS, CUT VERTICALLY TO THE BOTTOM OF THE IN-PLACE PAVEMENTS OR TO THE BOTTOM OF THE NEW SURFACING, WHICHEVER IS DEEPER, THEN AT 2(V):1(H) SLOPE TO THE TOP OF THE SUBGRADE.

CONTRACTOR SHALL COORDINATE WITH ANOKA COUNTY HIGHWAY DEPARTMENT SIGNAL MODIFICATIONS AT 138TH LANE & 140TH LANE. PROTECT LOOP DETECTORS.

NO.	DATE	BY	DESCRIPTION OF REVISIONS

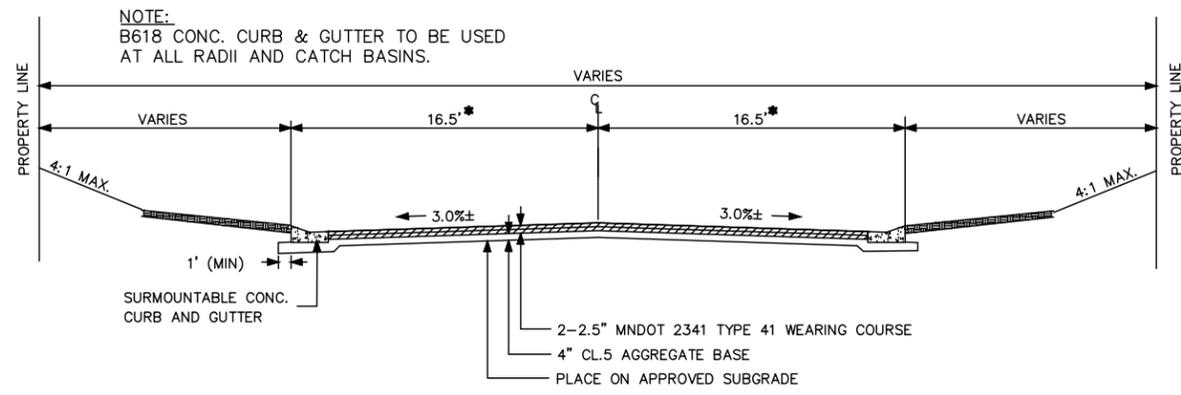
DESIGNED: JUL
 DRAWN: JBK
 CHECKED: DDB
 I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA

 SIGNATURE: DAVID D. BERKOWITZ
 DATE: MARCH 3RD, 2026 LIC. NO. 26757



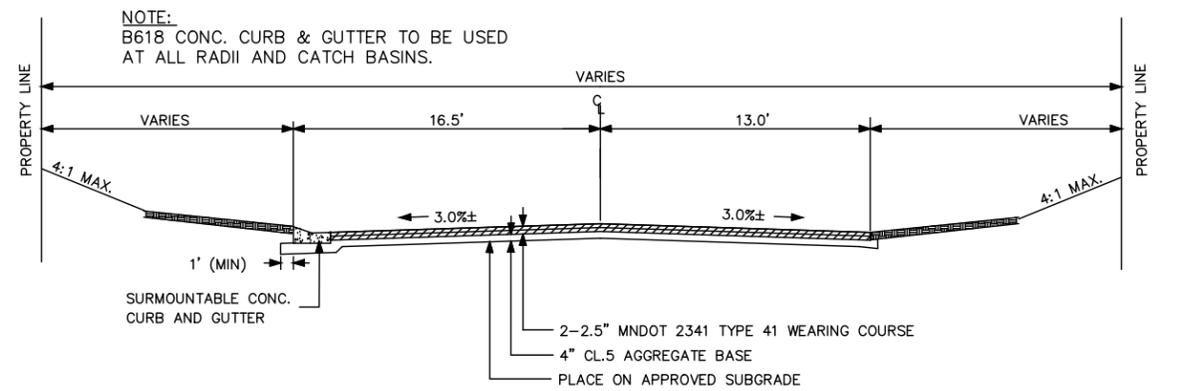
2026 FULL DEPTH RECLAMATION (C.P. 26-11B)
 NORTHGLEN AREA/WOODLAND POND

CONSTRUCTION NOTES
 SHEET NO. 37 OF 54 SHEETS

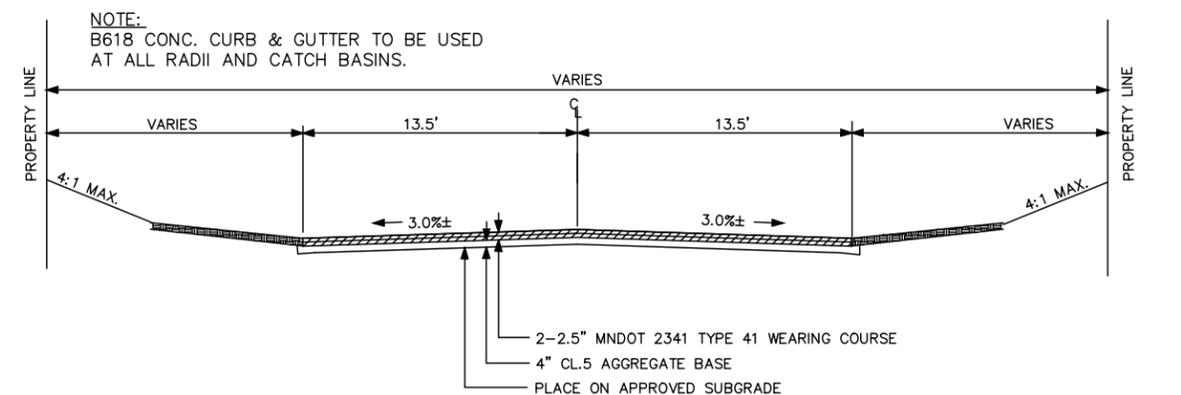
RECLAIM 7" +/- DEPTH, OR AS NECESSARY TO PROVIDE HOMOGENEOUS MIXTURE MEETING GRADATION SPEC IN MNDOT 2215. WITH 100% PASSING 3 INCH SIEVE.



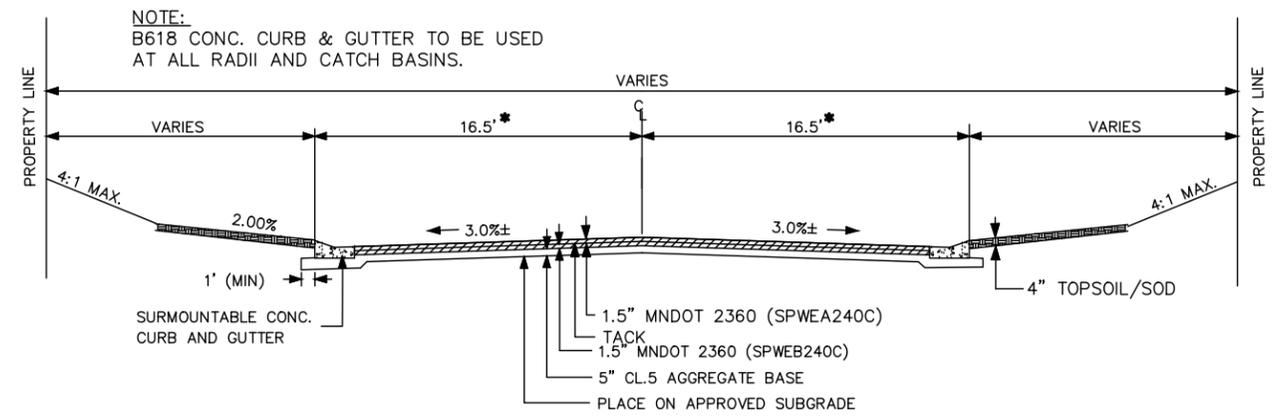
26-11B EXISTING STREET SECTION
*15.5' ON UNDERCLIFT STREET STATIONS 0+50 TO 3+45



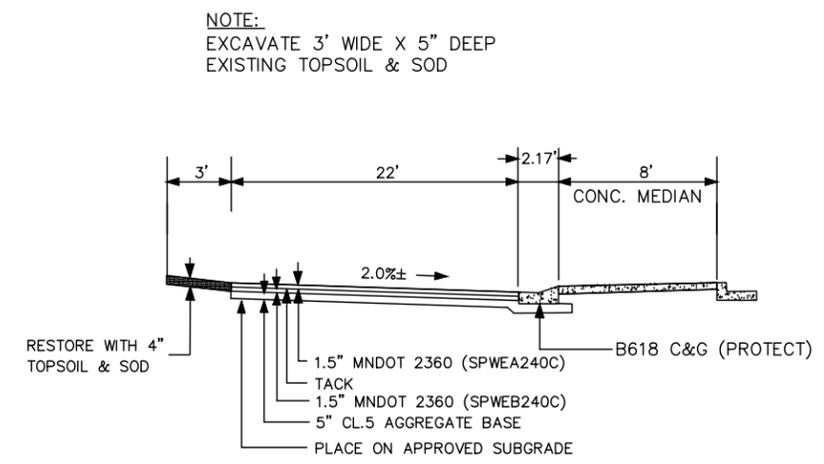
26-11B EXISTING STREET SECTION
UNDERCLIFT STREET STATIONS 3+45 TO 13+50



26-11B EXISTING STREET SECTION
138TH LANE STATIONS 32+80 TO 37+25



26-11B PROPOSED STREET SECTION
*15.5' ON UNDERCLIFT STREET STATIONS 0+50 TO 8+00



26-11B PROPOSED STREET SECTION
ROUND LAKE BLVD SERVICE ROAD

NO.	DATE	BY	DESCRIPTION OF REVISIONS

DESIGNED: JUL
DRAWN: JBK
CHECKED: DDB
DATE: MARCH 3RD, 2026

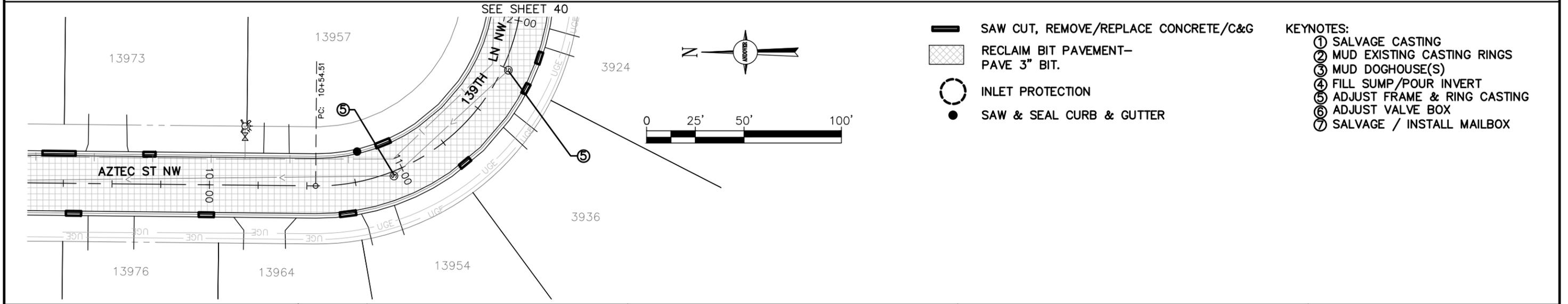
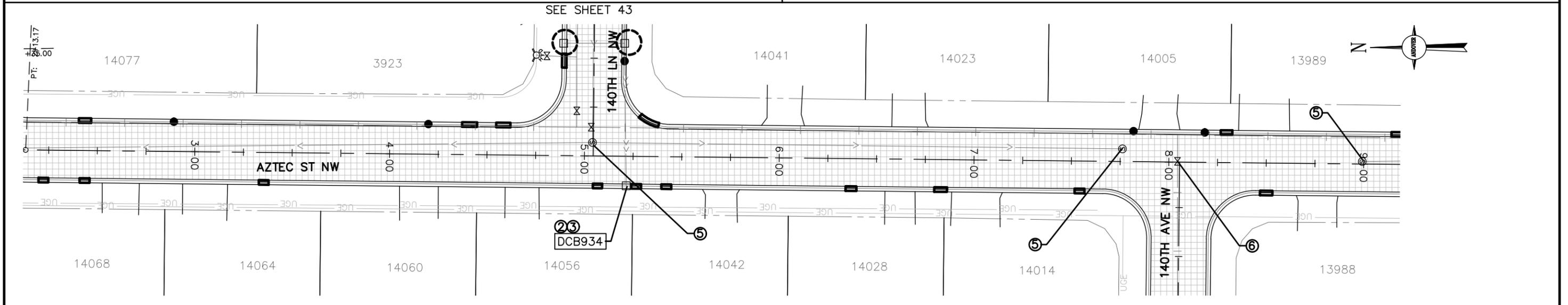
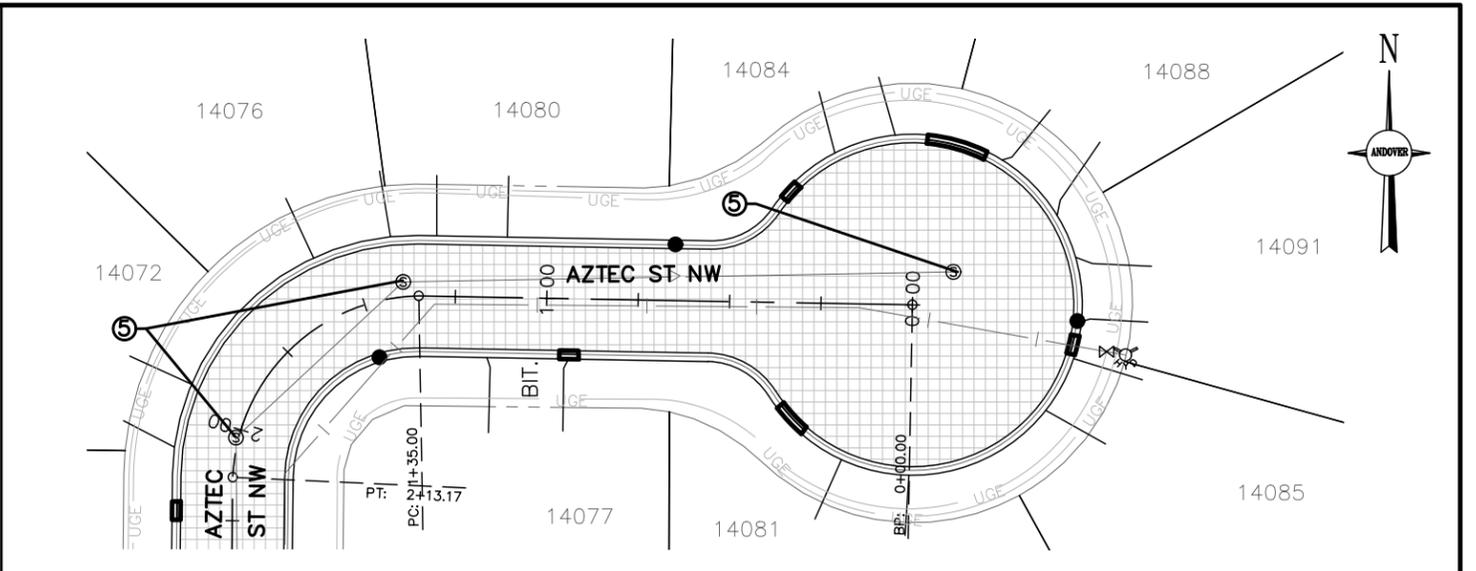
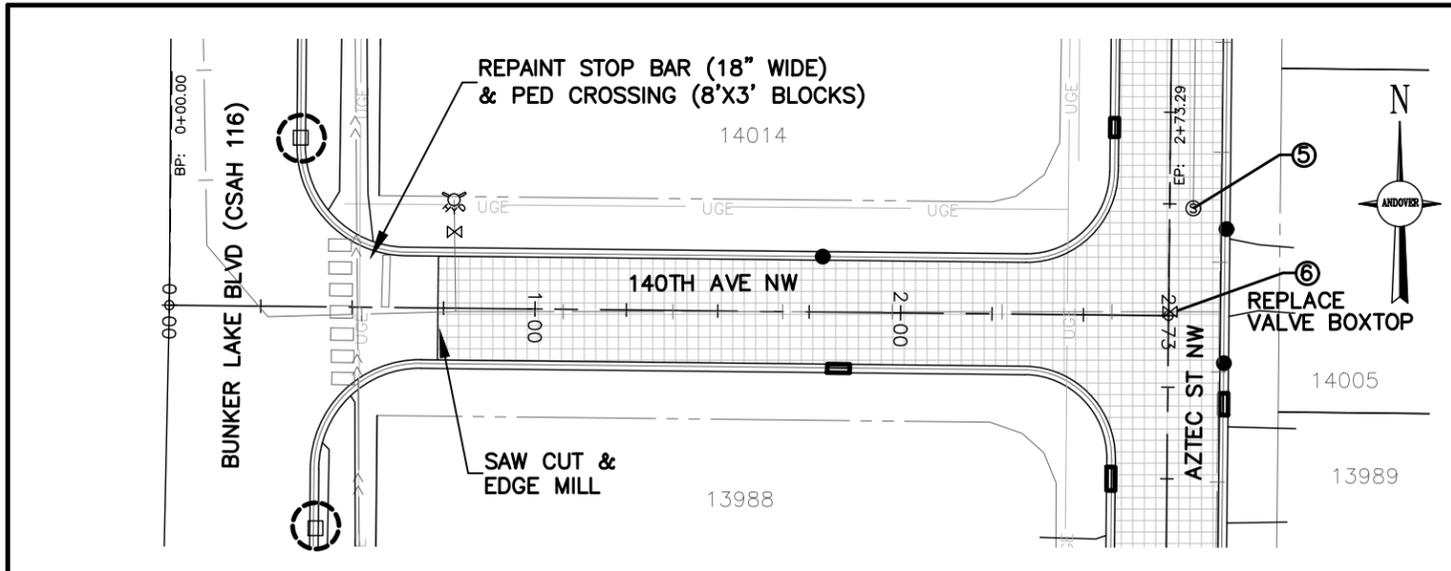
I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

David D. Berkowitz
SIGNATURE: DAVID D. BERKOWITZ
DATE: MARCH 3RD, 2026 LIC. NO.: 26757



2026 FULL DEPTH RECLAMATION (C.P. 26-11B)
NORTHGLEN AREA/WOODLAND POND

TYPICAL SECTIONS
SHEET NO. 38 OF 54 SHEETS



- SAW CUT, REMOVE/REPLACE CONCRETE/C&G
- RECLAIM BIT PAVEMENT—PAVE 3" BIT.
- INLET PROTECTION
- SAW & SEAL CURB & GUTTER

- KEYNOTES:**
- ① SALVAGE CASTING
 - ② MUD EXISTING CASTING RINGS
 - ③ MUD DOGHOUSE(S)
 - ④ FILL SUMP/POUR INVERT
 - ⑤ ADJUST FRAME & RING CASTING
 - ⑥ ADJUST VALVE BOX
 - ⑦ SALVAGE / INSTALL MAILBOX

NO.	DATE	BY	DESCRIPTION OF REVISIONS
1	2/23/26	JBK	ACHD COMMENTS

DESIGNED: JLL
 DRAWN: JBK
 CHECKED: DDB

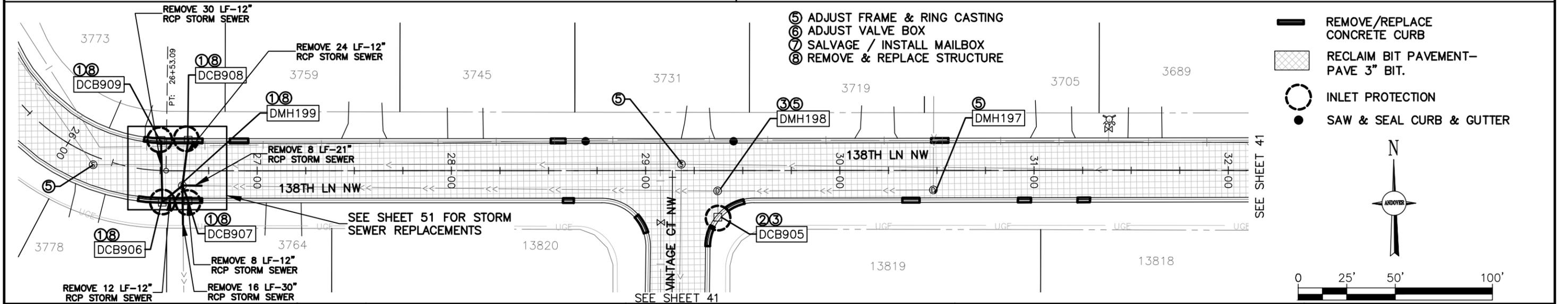
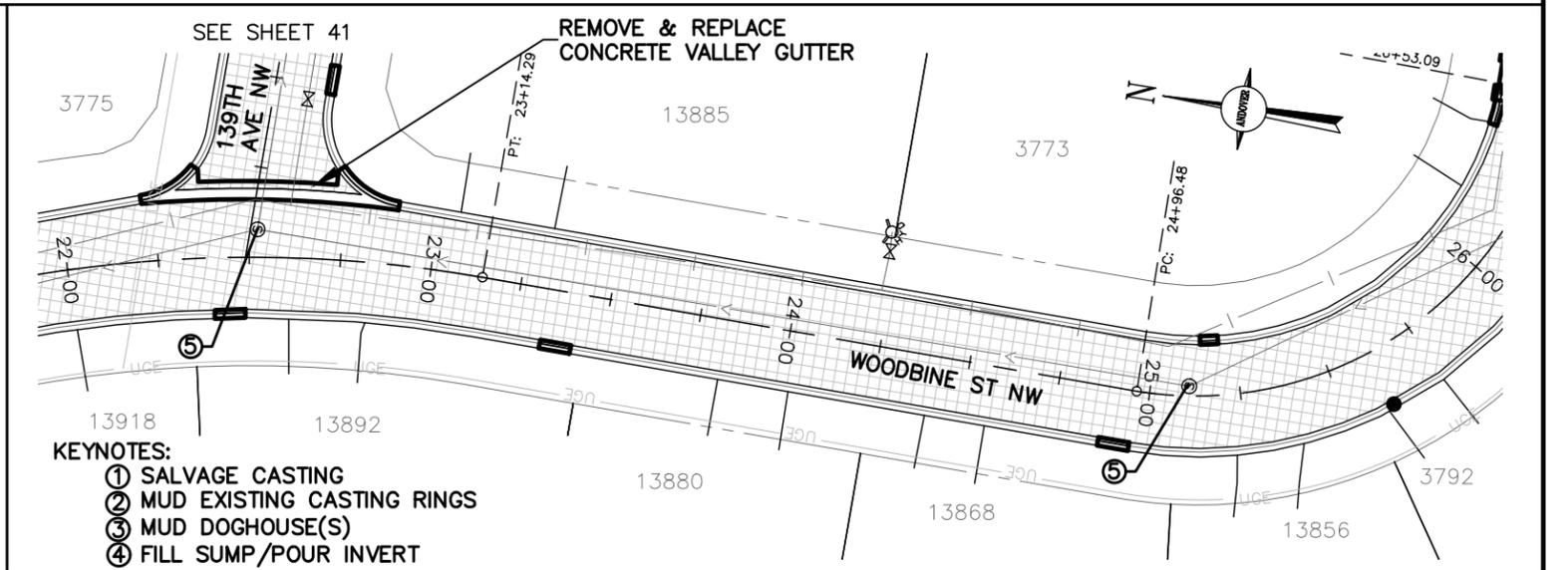
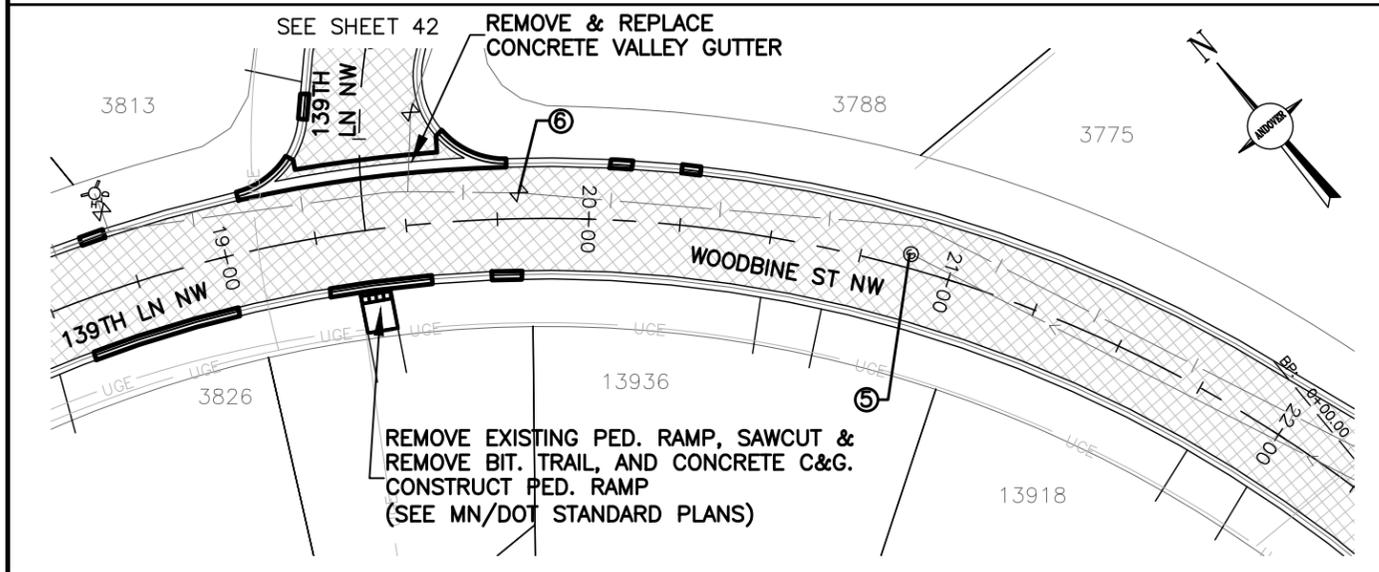
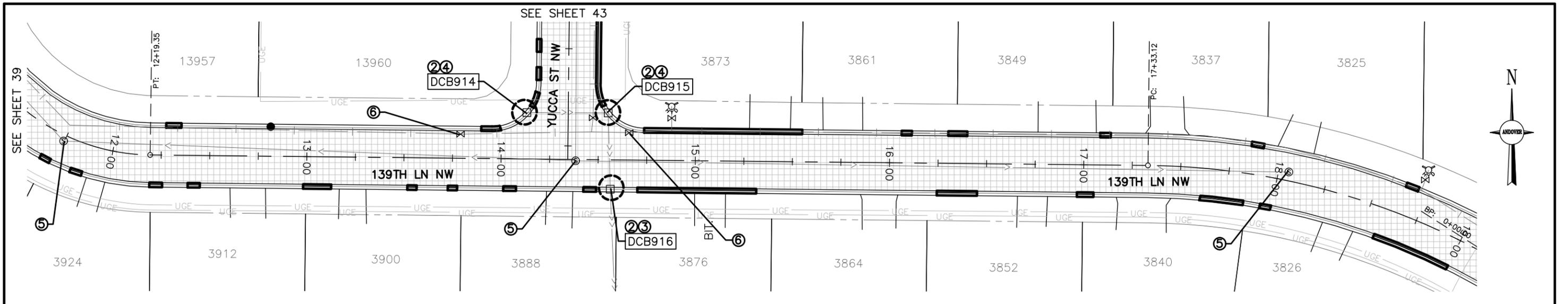
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David D. Berkowitz
 SIGNATURE: DAVID D. BERKOWITZ
 DATE: MARCH 3RD, 2026 LIC. NO. 26757



2026 FULL DEPTH RECLAMATION (C.P. 26-11B)
 NORTHGLEN AREA/WOODLAND POND

REMOVALS, UTILITIES, STREET/PAVING
 SHEET NO. 39 OF 54 SHEETS



NO.	DATE	BY	DESCRIPTION OF REVISIONS

DESIGNED: JUL
 DRAWN: JBK
 CHECKED: DDB

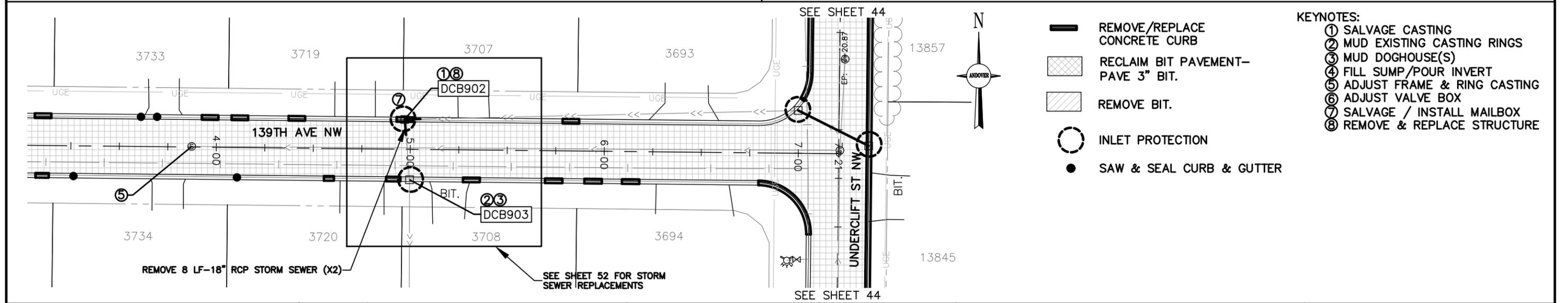
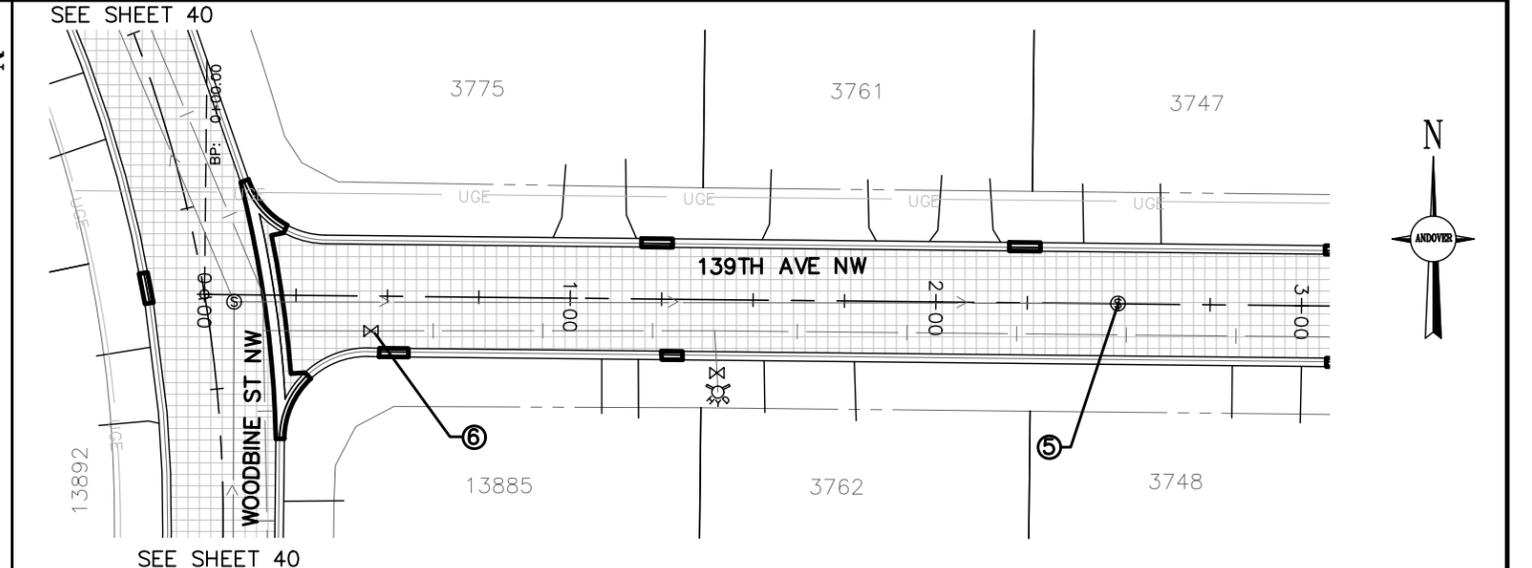
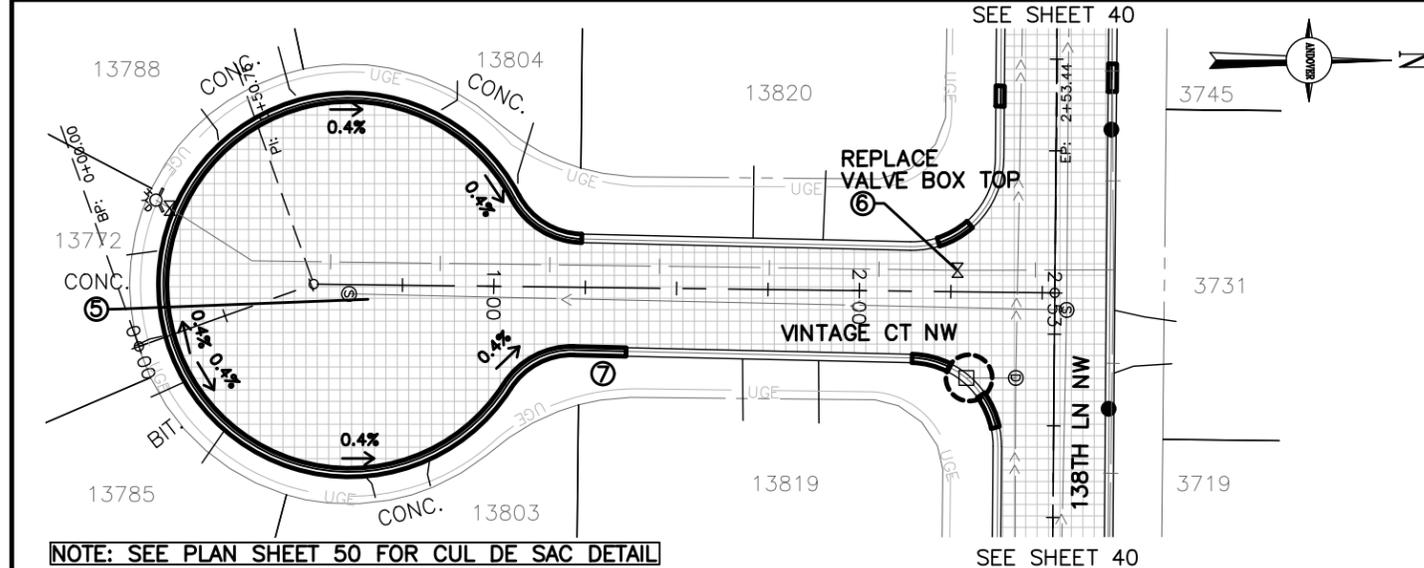
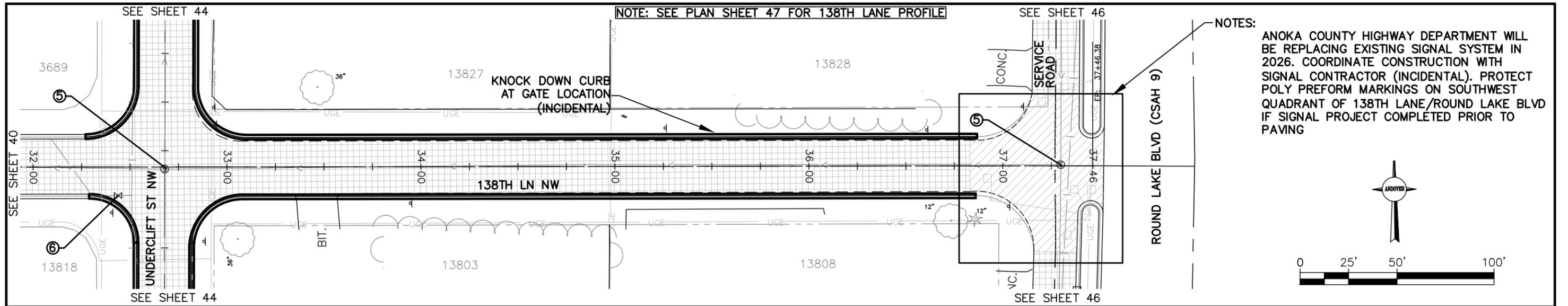
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David D. Berkowitz
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 SIGNATURE DATE: MARCH 3RD, 2026 LIC. NO. 26757



2026 FULL DEPTH RECLAMATION (C.P. 26-11B)
 NORTHGLEN AREA/WOODLAND POND

REMOVALS, UTILITIES, STREET/PAVING
 SHEET NO. 40 OF 54 SHEETS



NO.	DATE	BY	DESCRIPTION OF REVISIONS

DESIGNED JUL
 DRAWN JBK
 CHECKED DDB

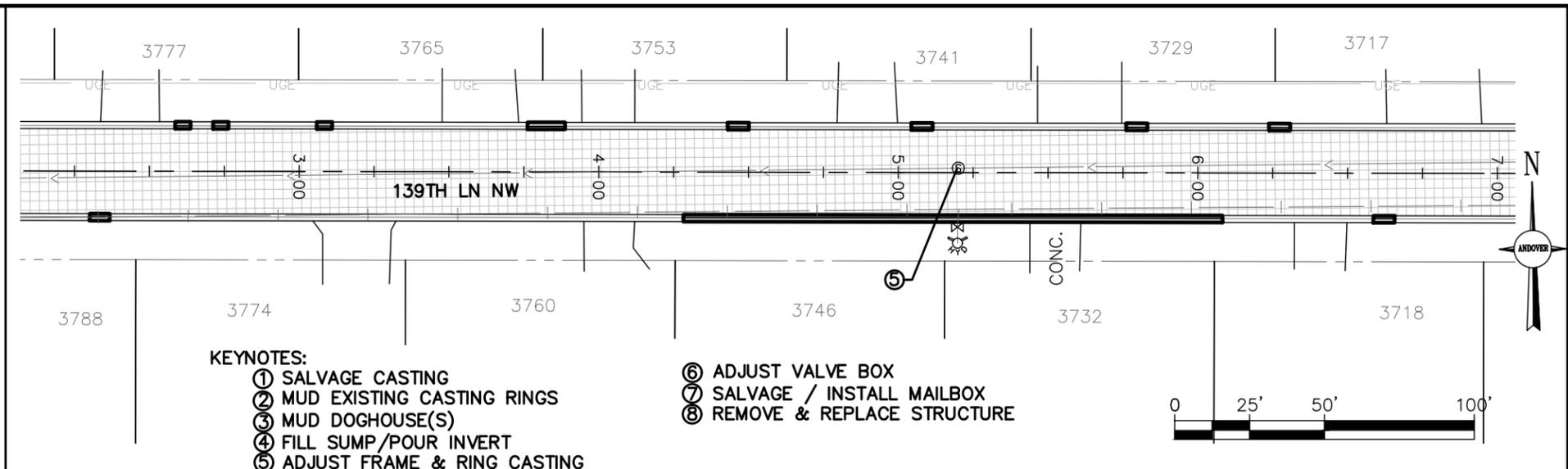
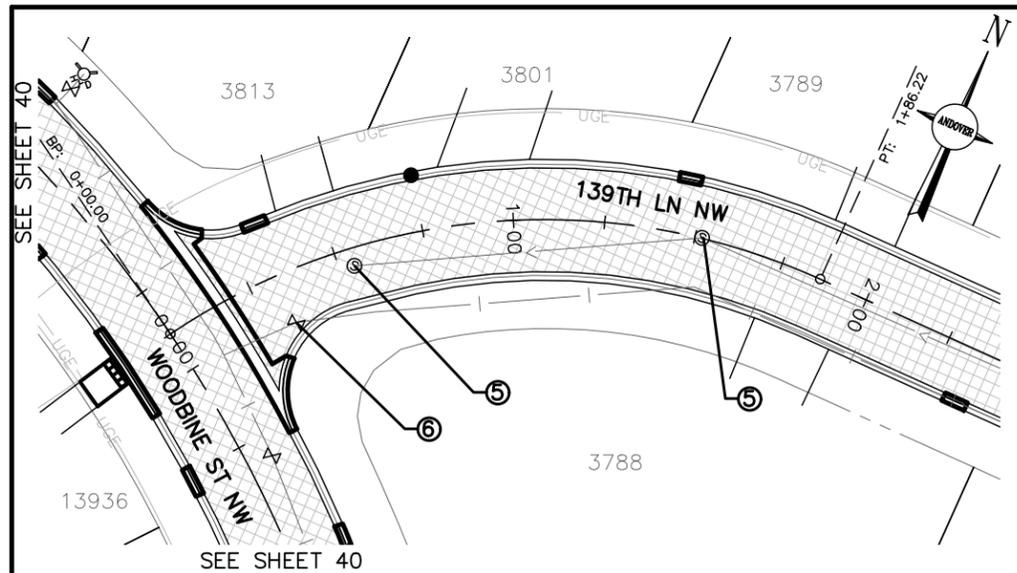
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David D. Berkowitz
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 DATE: MARCH 3RD, 2026 LIC. NO. 26757

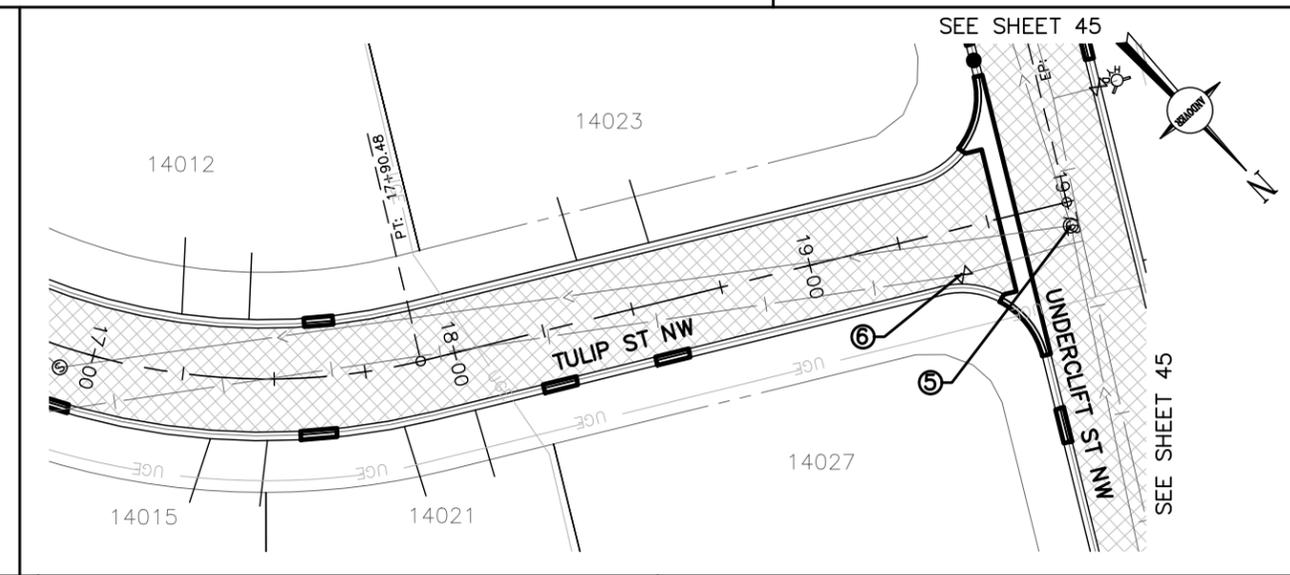
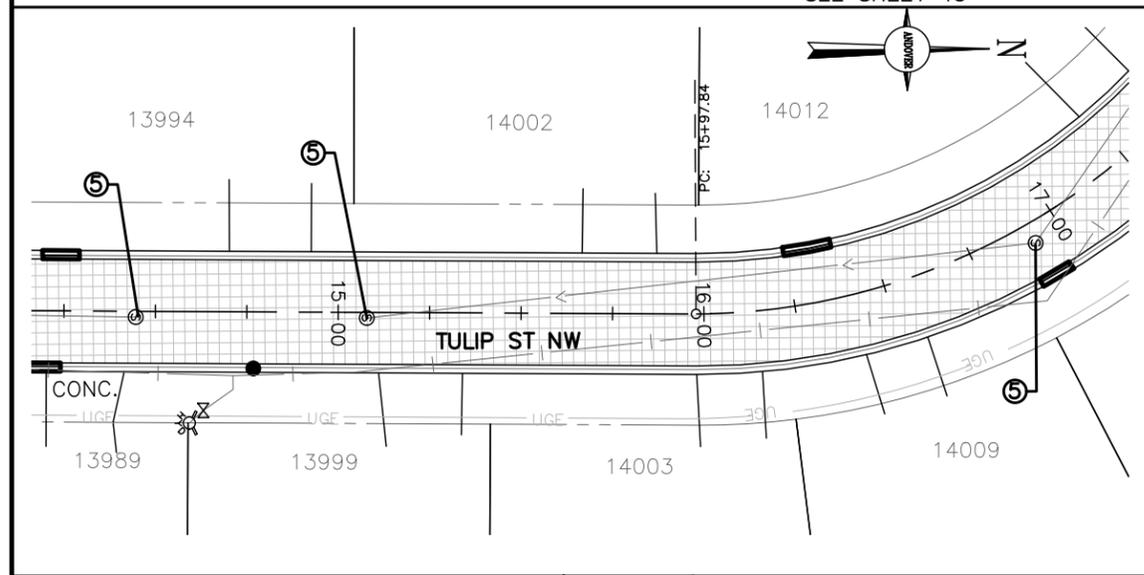
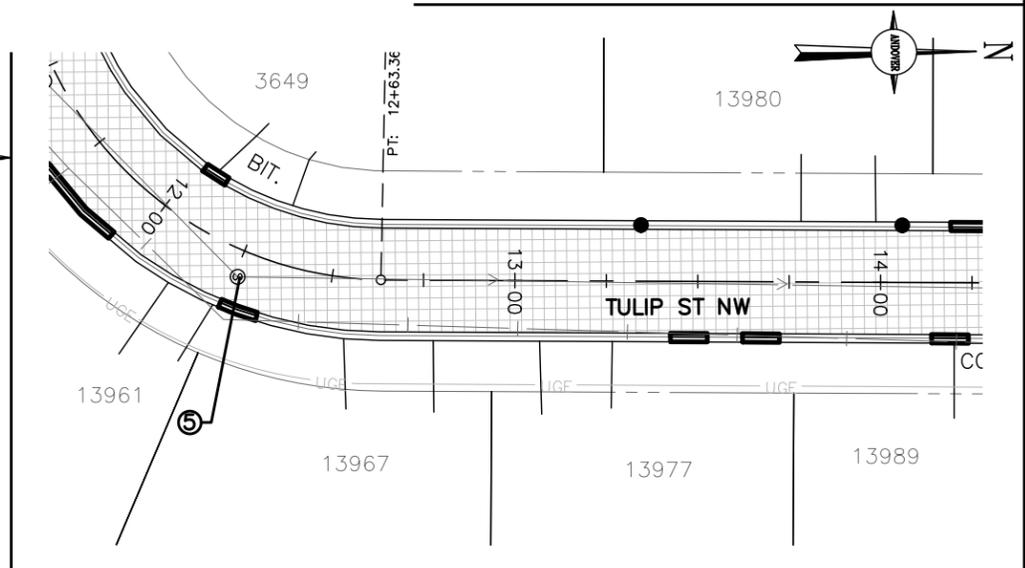
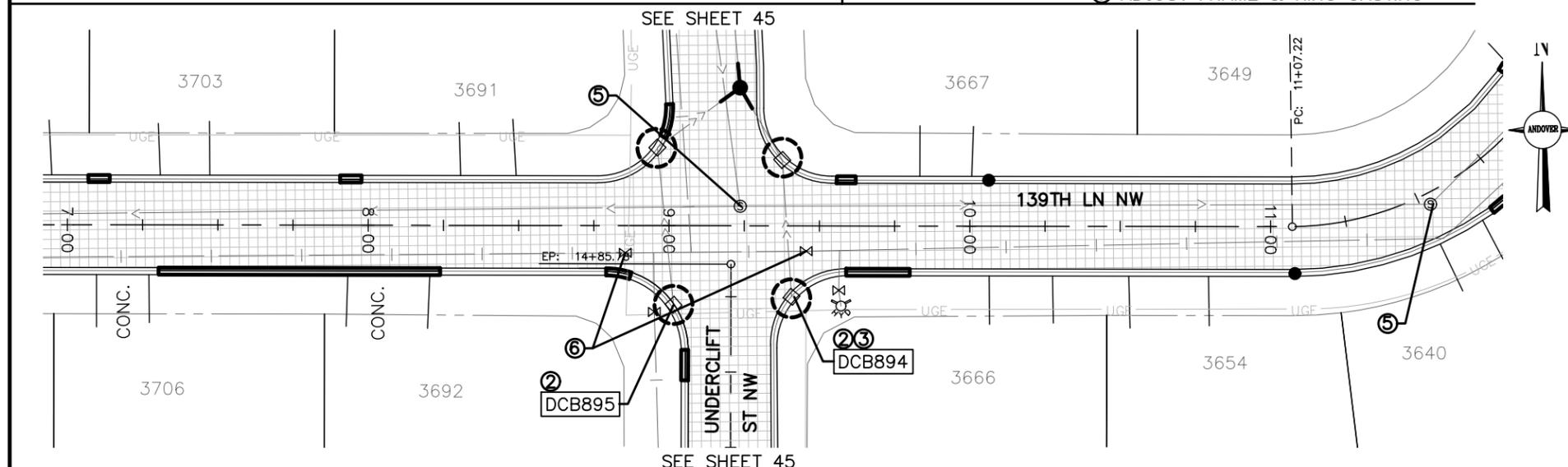
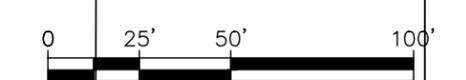


2026 FULL DEPTH RECLAMATION (C.P. 26-11B)
 NORTHGLEN AREA/WOODLAND POND

REMOVALS, UTILITIES, STREET/PAVING
 SHEET NO. 41 OF 54 SHEETS



- KEYNOTES:**
- ① SALVAGE CASTING
 - ② MUD EXISTING CASTING RINGS
 - ③ MUD DOGHOUSE(S)
 - ④ FILL SUMP/POUR INVERT
 - ⑤ ADJUST FRAME & RING CASTING
 - ⑥ ADJUST VALVE BOX
 - ⑦ SALVAGE / INSTALL MAILBOX
 - ⑧ REMOVE & REPLACE STRUCTURE



- REMOVE/REPLACE CONCRETE CURB
- ▨ RECLAIM BIT PAVEMENT—PAVE 3" BIT.
- INLET PROTECTION
- SAW & SEAL CURB & GUTTER

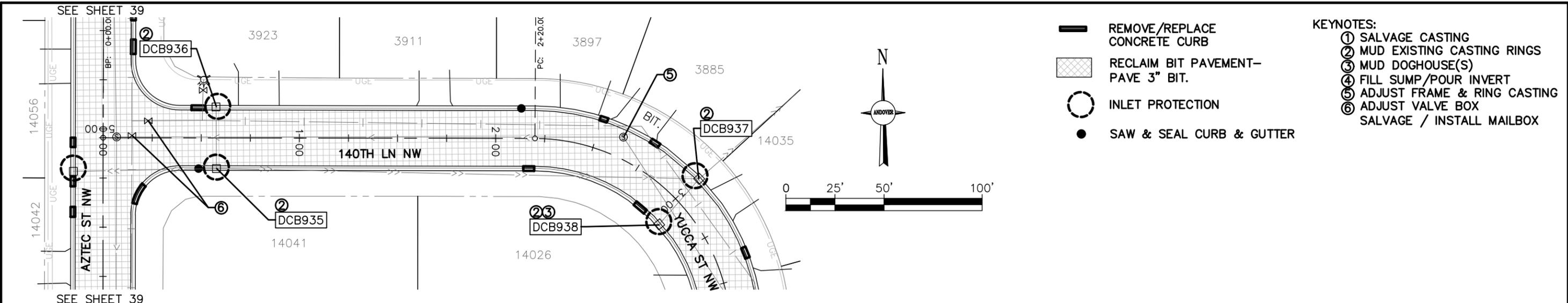
NO.	DATE	BY	DESCRIPTION OF REVISIONS

DESIGNED: JLL
 DRAWN: JBK
 CHECKED: DDB
 I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
David D. Berkowitz
 DAVID D. BERKOWITZ
 SIGNATURE: DATE: MARCH 3RD, 2026 LIC. NO.: 26757



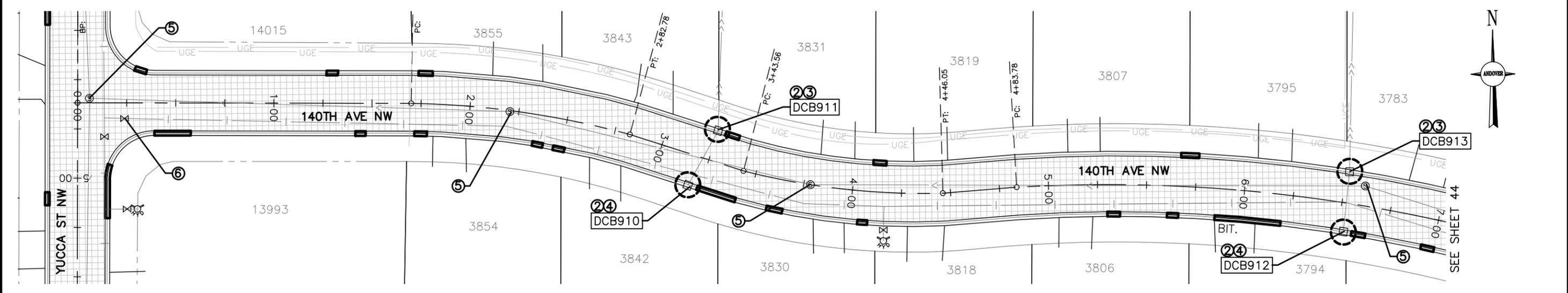
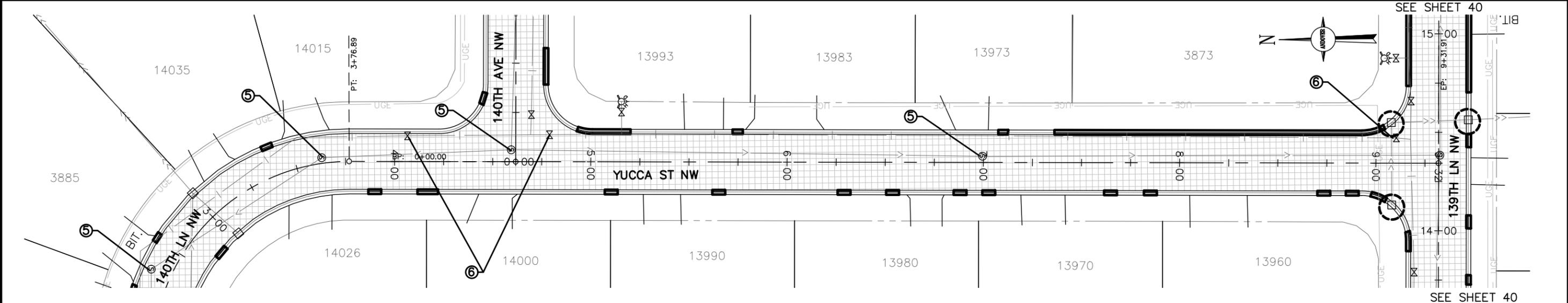
2026 FULL DEPTH RECLAMATION (C.P. 26-11B)
 NORTHGLEN AREA/WOODLAND POND

REMOVALS, UTILITIES, STREET/PAVING
 SHEET NO. 42 OF 54 SHEETS



- REMOVE/REPLACE CONCRETE CURB
- RECLAIM BIT PAVEMENT-PAVE 3" BIT.
- INLET PROTECTION
- SAW & SEAL CURB & GUTTER

- KEYNOTES:**
- ① SALVAGE CASTING
 - ② MUD EXISTING CASTING RINGS
 - ③ MUD DOGHOUSE(S)
 - ④ FILL SUMP/POUR INVERT
 - ⑤ ADJUST FRAME & RING CASTING
 - ⑥ ADJUST VALVE BOX SALVAGE / INSTALL MAILBOX



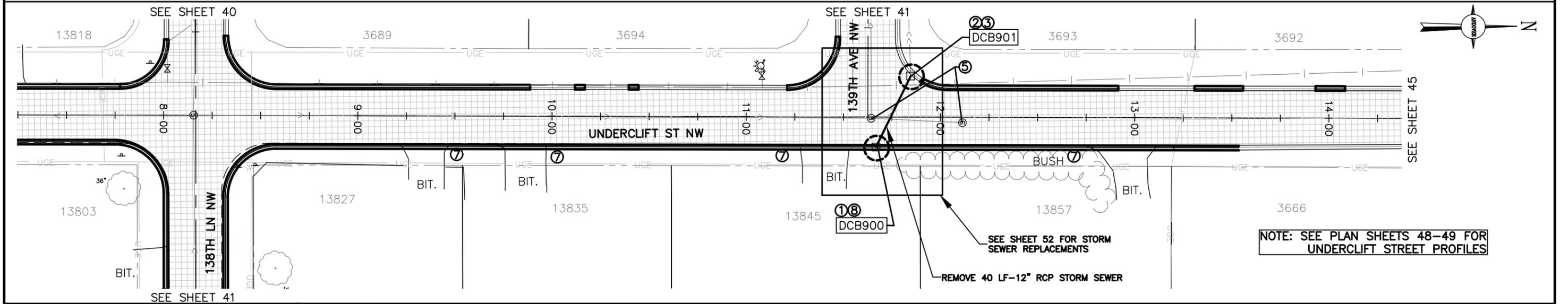
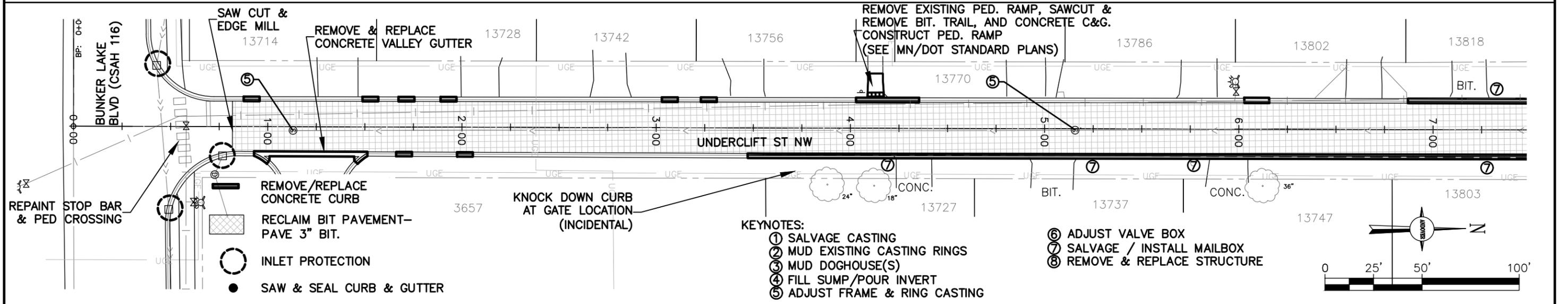
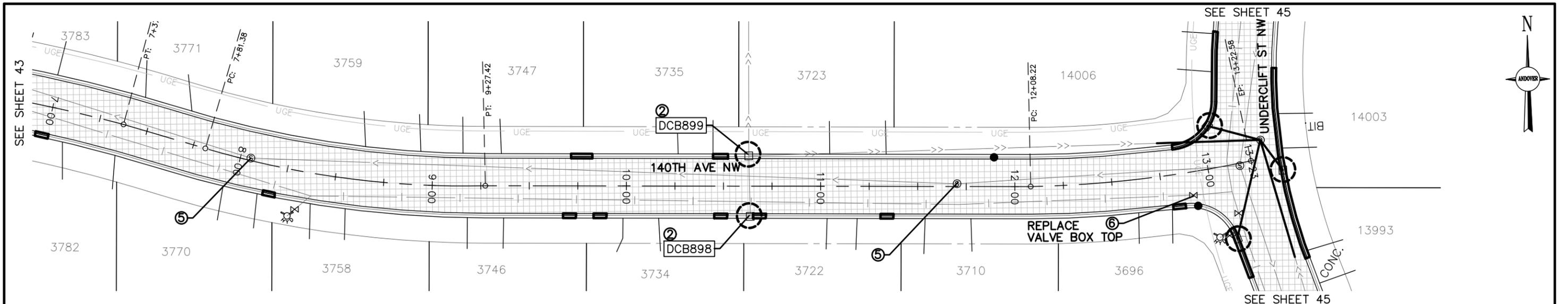
NO.	DATE	BY	DESCRIPTION OF REVISIONS

DESIGNED: JUL
 DRAWN: JBK
 CHECKED: DDB
 I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
David D. Berkowitz
 SIGNATURE: DAVID D. BERKOWITZ
 DATE: MARCH 3RD, 2026 LIC. NO.: 26757



2026 FULL DEPTH RECLAMATION (C.P. 26-11B)
 NORTHGLEN AREA/WOODLAND POND

REMOVALS, UTILITIES, STREET/PAVING
 SHEET NO. 43 OF 54 SHEETS



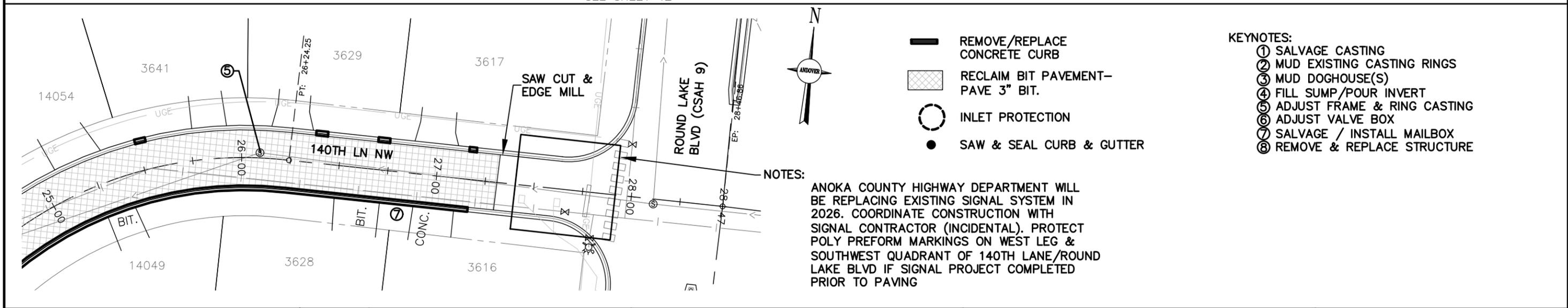
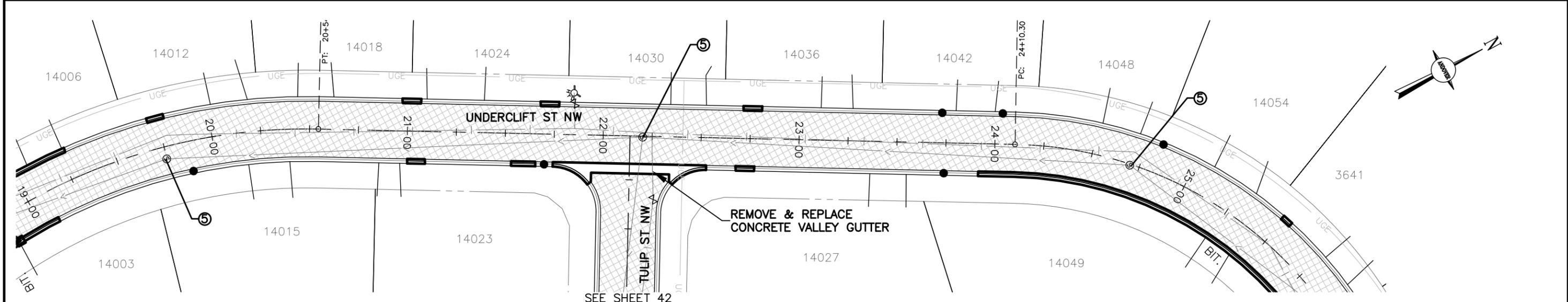
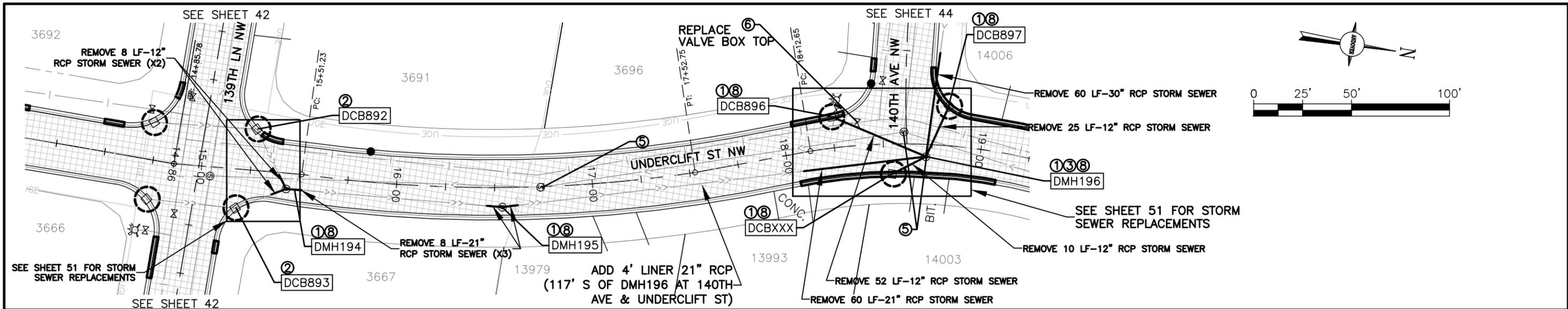
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 SIGNATURE: *David D. Berkowitz*
 DATE: MARCH 3RD, 2026
 TYPED OR PRINTED NAME: DAVID D. BERKOWITZ
 LIC. NO.: 26757



2026 FULL DEPTH RECLAMATION (C.P. 26-11B)
 NORTHGLEN AREA/WOODLAND POND

REMOVALS, UTILITIES, STREET/PAVING
 SHEET NO. 44 OF 54 SHEETS



- REMOVE/REPLACE CONCRETE CURB
- RECLAIM BIT PAVEMENT—PAVE 3" BIT.
- INLET PROTECTION
- SAW & SEAL CURB & GUTTER

- KEYNOTES:**
- ① SALVAGE CASTING
 - ② MUD EXISTING CASTING RINGS
 - ③ MUD DOGHOUSE(S)
 - ④ FILL SUMP/POUR INVERT
 - ⑤ ADJUST FRAME & RING CASTING
 - ⑥ ADJUST VALVE BOX
 - ⑦ SALVAGE / INSTALL MAILBOX
 - ⑧ REMOVE & REPLACE STRUCTURE

NOTES:
 ANOKA COUNTY HIGHWAY DEPARTMENT WILL BE REPLACING EXISTING SIGNAL SYSTEM IN 2026. COORDINATE CONSTRUCTION WITH SIGNAL CONTRACTOR (INCIDENTAL). PROTECT POLY PREFORM MARKINGS ON WEST LEG & SOUTHWEST QUADRANT OF 140TH LANE/ROUND LAKE BLVD IF SIGNAL PROJECT COMPLETED PRIOR TO PAVING

NO.	DATE	BY	DESCRIPTION OF REVISIONS

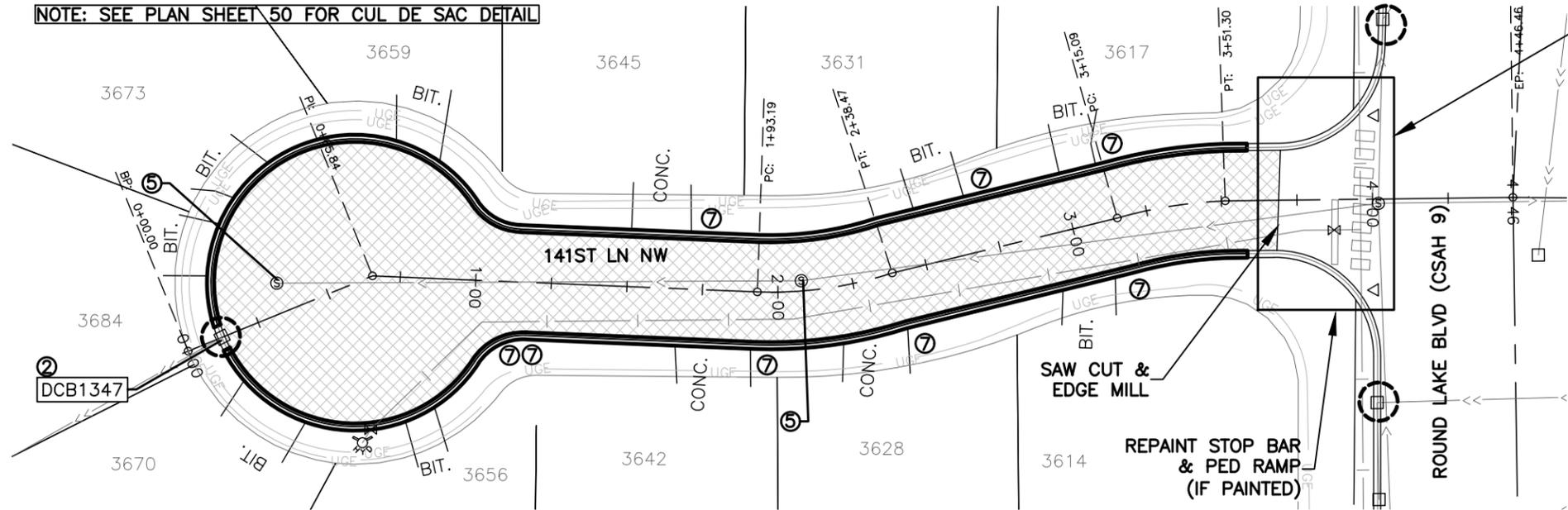
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 Signature: *David D. Berkowitz*
 DATE: MARCH 3RD, 2026 LIC. NO. 26757
 TYPED OR PRINTED NAME: DAVID D. BERKOWITZ



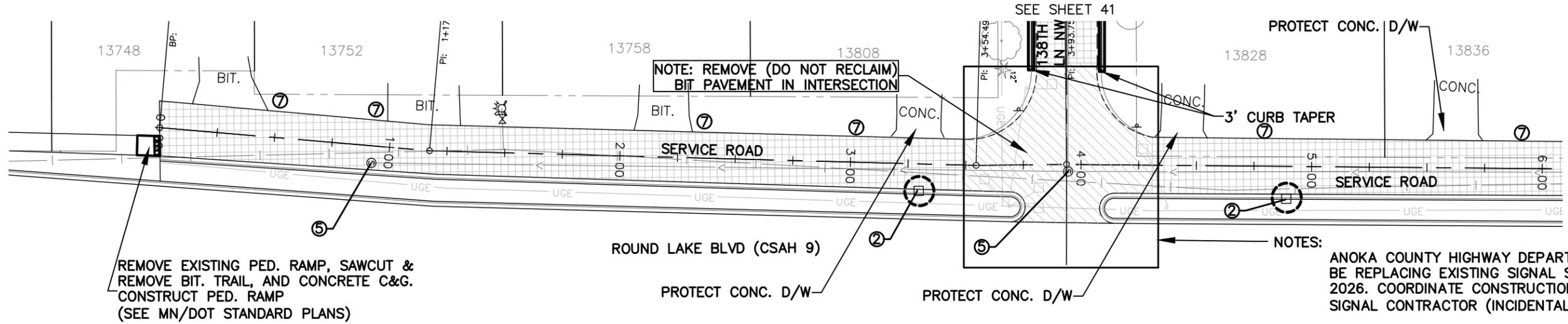
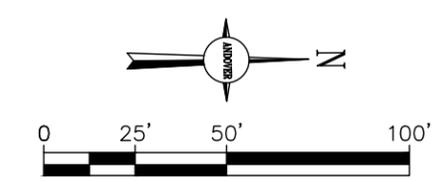
2026 FULL DEPTH RECLAMATION (C.P. 26-11B)
 NORTHGLEN AREA/WOODLAND POND

REMOVALS, UTILITIES, STREET/PAVING
 SHEET NO. 45 OF 54 SHEETS

NOTE: SEE PLAN SHEET 50 FOR CUL DE SAC DETAIL

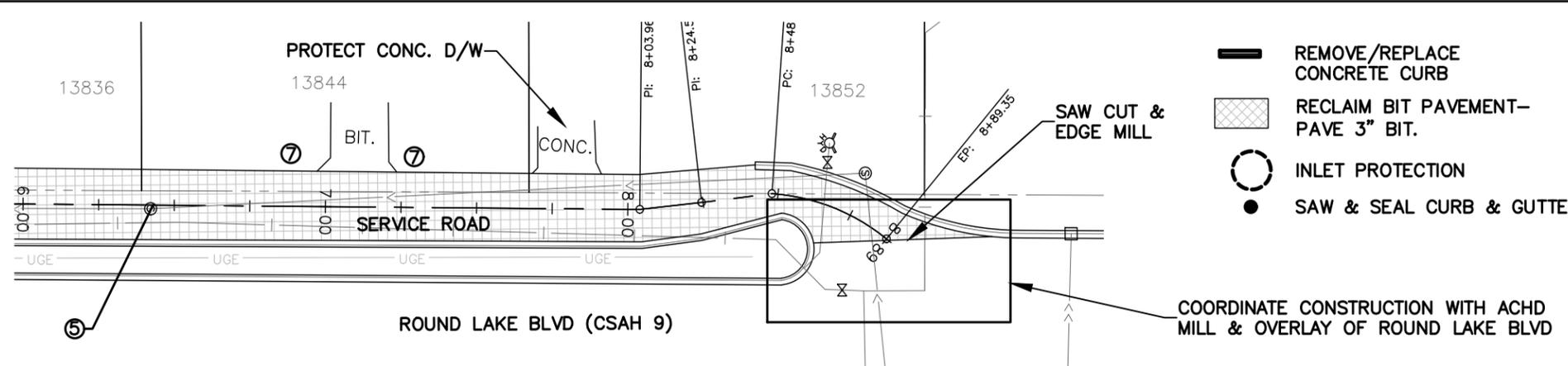


NOTES:
 ANOKA COUNTY HIGHWAY DEPARTMENT WILL BE REPLACING EXISTING SIGNAL SYSTEM IN 2026. COORDINATE CONSTRUCTION WITH SIGNAL CONTRACTOR (INCIDENTAL). PROTECT POLY PREFORM MARKINGS ON SOUTHWEST QUADRANT OF 141ST LANE/ROUND LAKE BLVD IF SIGNAL PROJECT COMPLETED PRIOR TO PAVING



NOTE: REMOVE (DO NOT RECLAIM) BIT PAVEMENT IN INTERSECTION

NOTES:
 ANOKA COUNTY HIGHWAY DEPARTMENT WILL BE REPLACING EXISTING SIGNAL SYSTEM IN 2026. COORDINATE CONSTRUCTION WITH SIGNAL CONTRACTOR (INCIDENTAL)



- REMOVE/REPLACE CONCRETE CURB
- RECLAIM BIT PAVEMENT—PAVE 3" BIT.
- INLET PROTECTION
- SAW & SEAL CURB & GUTTER

- KEYNOTES:
- ① SALVAGE CASTING
 - ② MUD EXISTING CASTING RINGS
 - ③ MUD DOGHOUSE(S)
 - ④ FILL SUMP/POUR INVERT
 - ⑤ ADJUST FRAME & RING CASTING
 - ⑥ ADJUST VALVE BOX
 - ⑦ SALVAGE / INSTALL MAILBOX

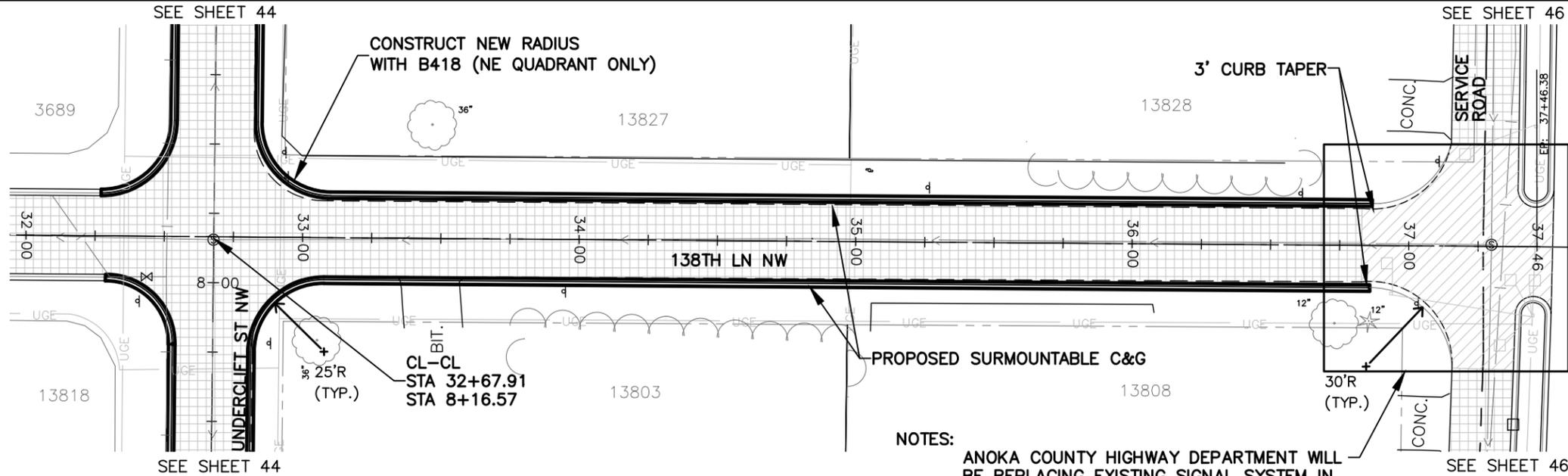
DESIGNED: JUL
 DRAWN: JBK
 CHECKED: DDB
 I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA
 SIGNATURE: *David D. Berkowitz*
 DATE: MARCH 3RD, 2026 LIC. NO.: 26757



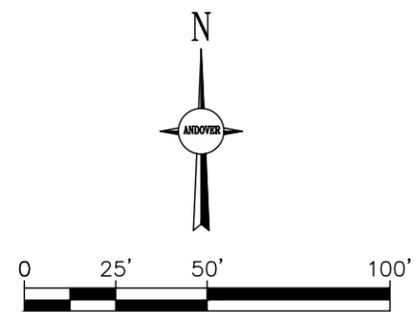
2026 FULL DEPTH RECLAMATION (C.P. 26-11B)
 NORTHGLEN AREA/WOODLAND POND

REMOVALS, UTILITIES, STREET/PAVING
 SHEET NO. 46 OF 54 SHEETS

NO.	DATE	BY	DESCRIPTION OF REVISIONS

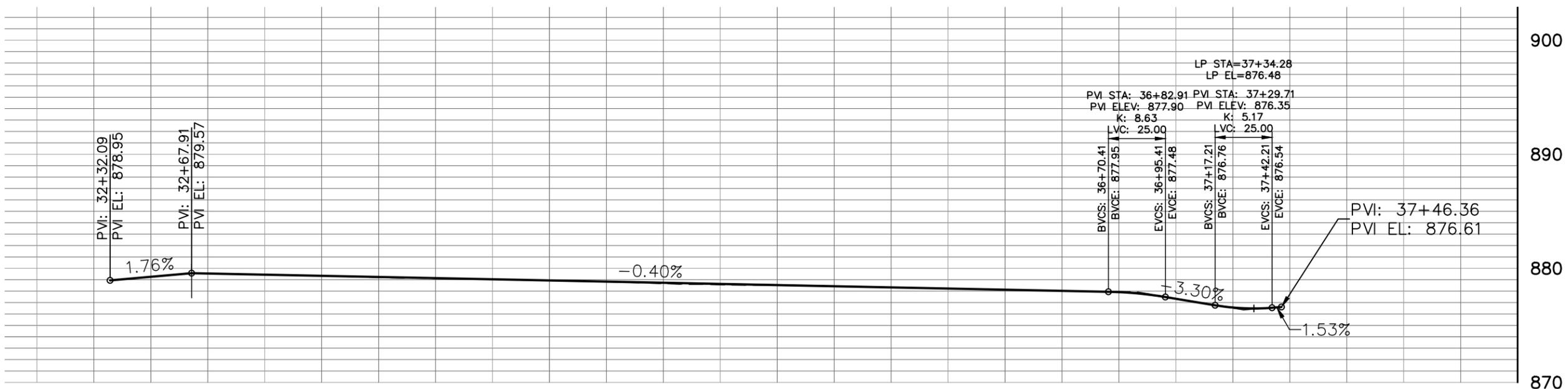


ROUND LAKE BLVD (CSAH 9)



NOTES:
 ANOKA COUNTY HIGHWAY DEPARTMENT WILL BE REPLACING EXISTING SIGNAL SYSTEM IN 2026. COORDINATE CONSTRUCTION WITH SIGNAL CONTRACTOR (INCIDENTAL)

REMOVE BIT.



879.3	879.26	879.5	879.55	879.4	879.44	879.3	879.34	879.2	879.24	879.1	879.14	879.0	879.04	878.9	878.94	878.8	878.84	878.7	878.74	878.6	878.64	878.5	878.54	878.5	878.43	878.3	878.33	878.2	878.23	878.1	878.13	878.0	878.03	878.0	877.92	877.4	877.33	876.6	876.57
32+00		33+00				34+00				35+00				36+00				37+00				38+00		38+50															

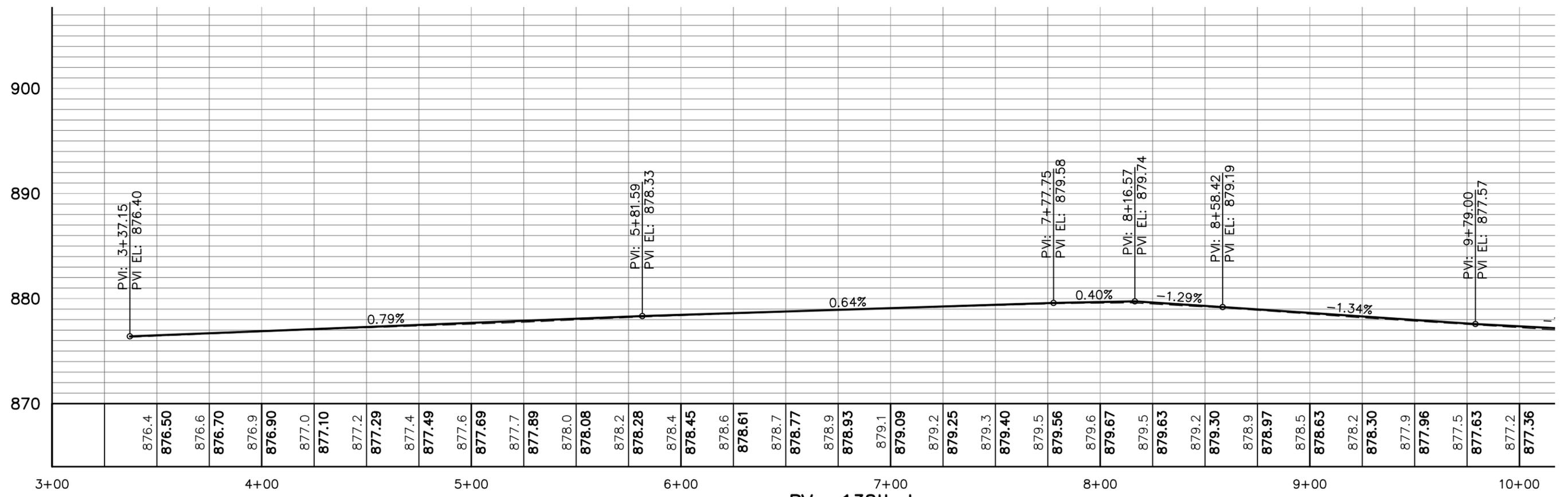
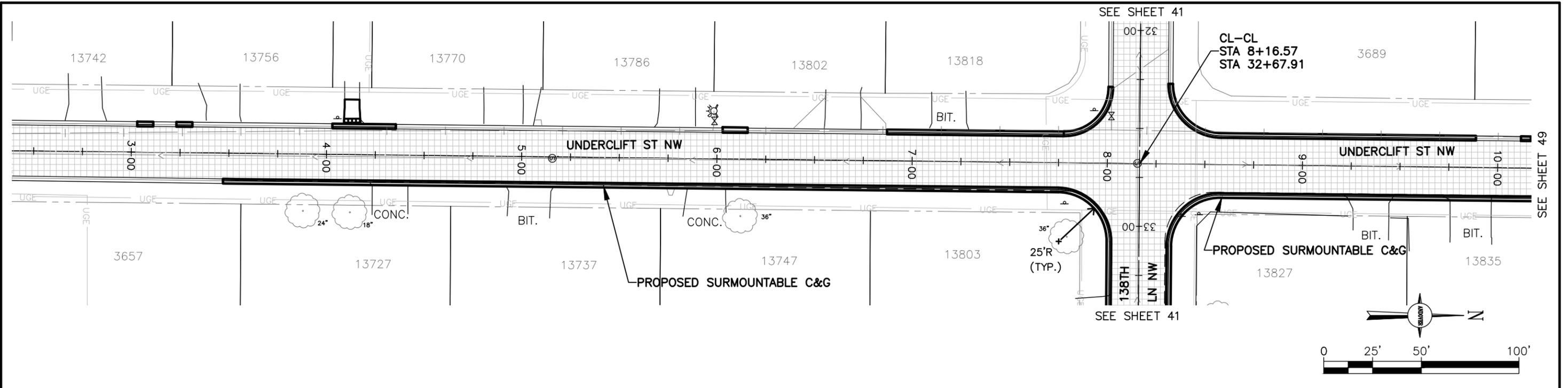
DESIGNED: JUL
 DRAWN: JBK
 CHECKED: DDB
 I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
 SIGNATURE: *David D. Berkowitz*
 DATE: MARCH 3RD, 2026 LIC. NO. 26757
 TYPED OR PRINTED NAME: DAVID D. BERKOWITZ



2026 FULL DEPTH RECLAMATION (C.P. 26-11B)
 NORTHGLEN AREA/WOODLAND POND

138TH LN NW PLAN / PROFILE
 SHEET NO. 47 OF 54 SHEETS

NO.	DATE	BY	DESCRIPTION OF REVISIONS



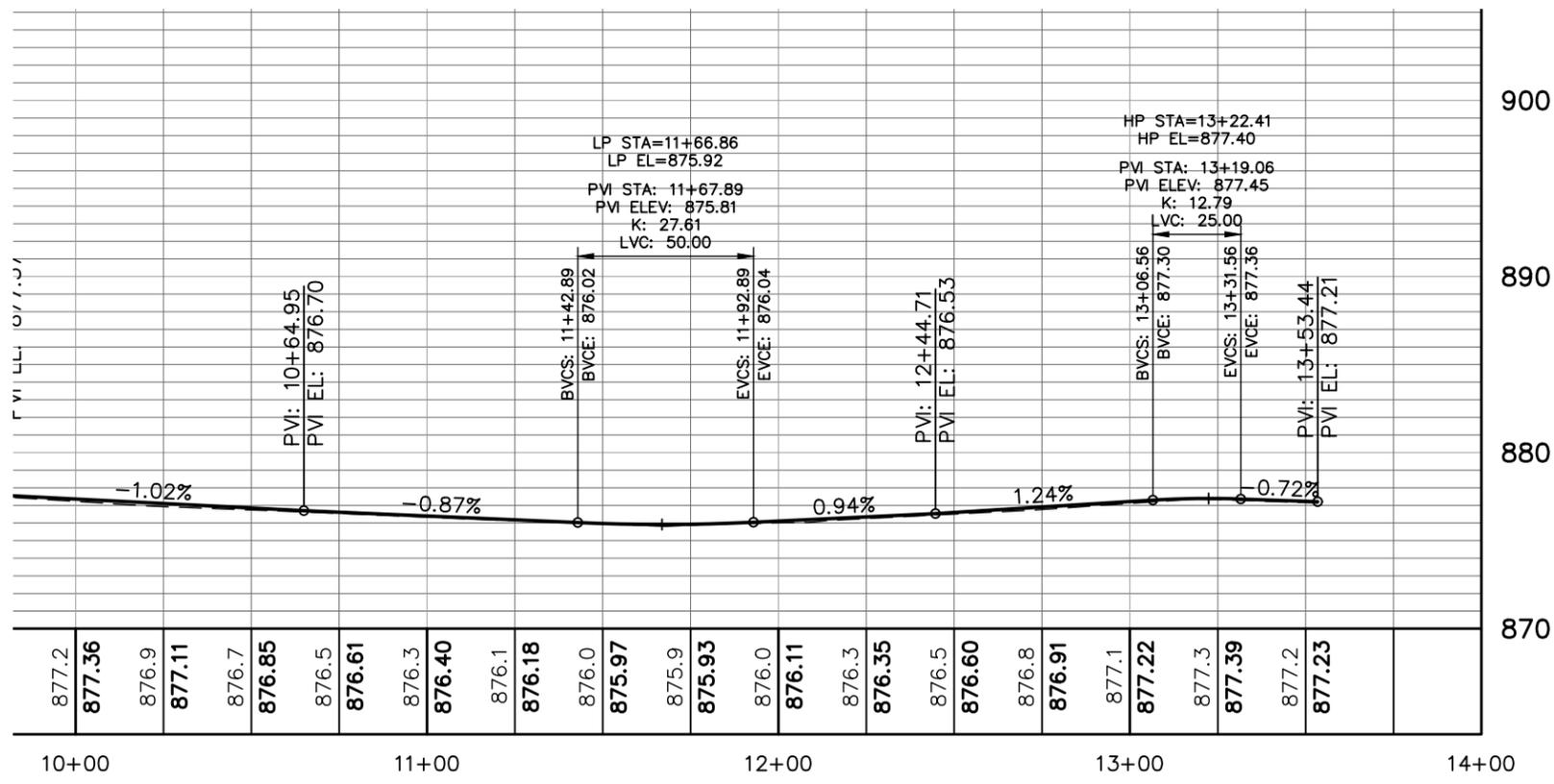
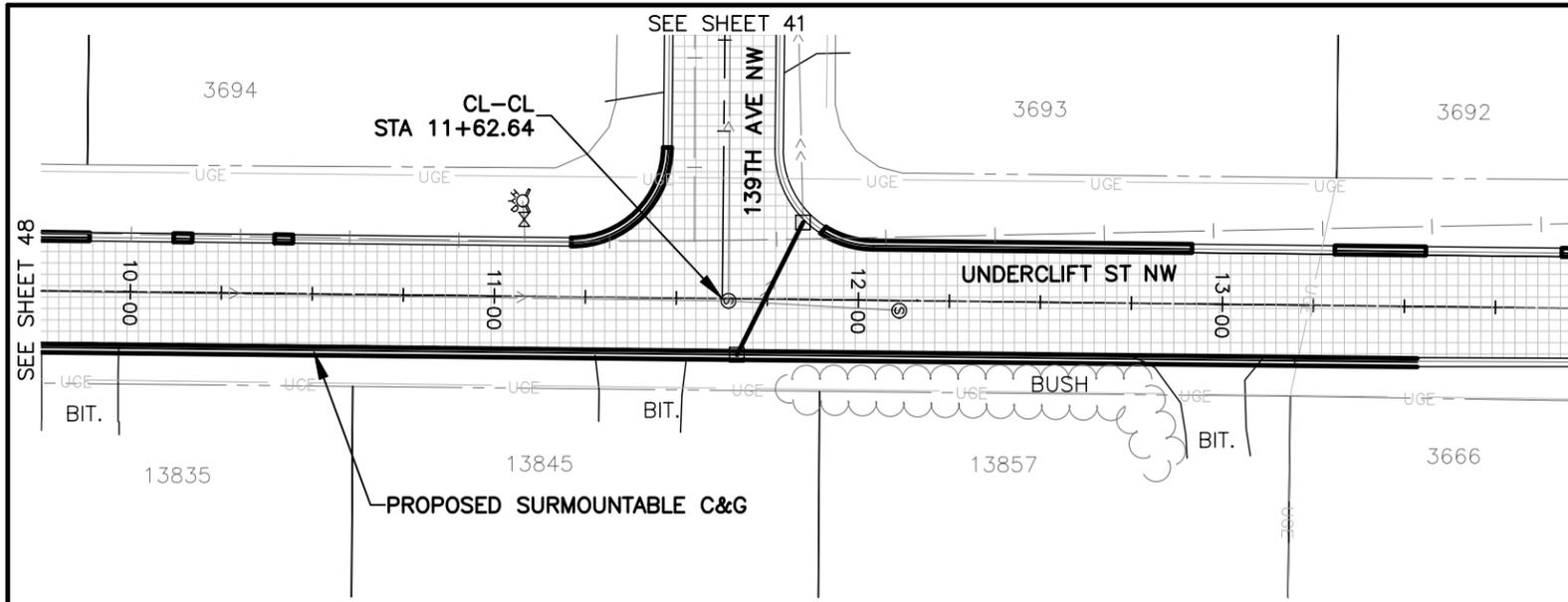
NO.	DATE	BY	DESCRIPTION OF REVISIONS

DESIGNED: JVL
 DRAWN: JBK
 CHECKED: DDB
 I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
 SIGNATURE: *David D. Berkowitz*
 DATE: MARCH 3RD, 2026
 LIC. NO.: 26757
 TYPED OR PRINTED NAME: DAVID D. BERKOWITZ



2026 FULL DEPTH RECLAMATION (C.P. 26-11B)
 NORTHGLEN AREA/WOODLAND POND

UNDERCLIFT ST NW PLAN / PROFILE
 SHEET NO. 48 OF 54 SHEETS



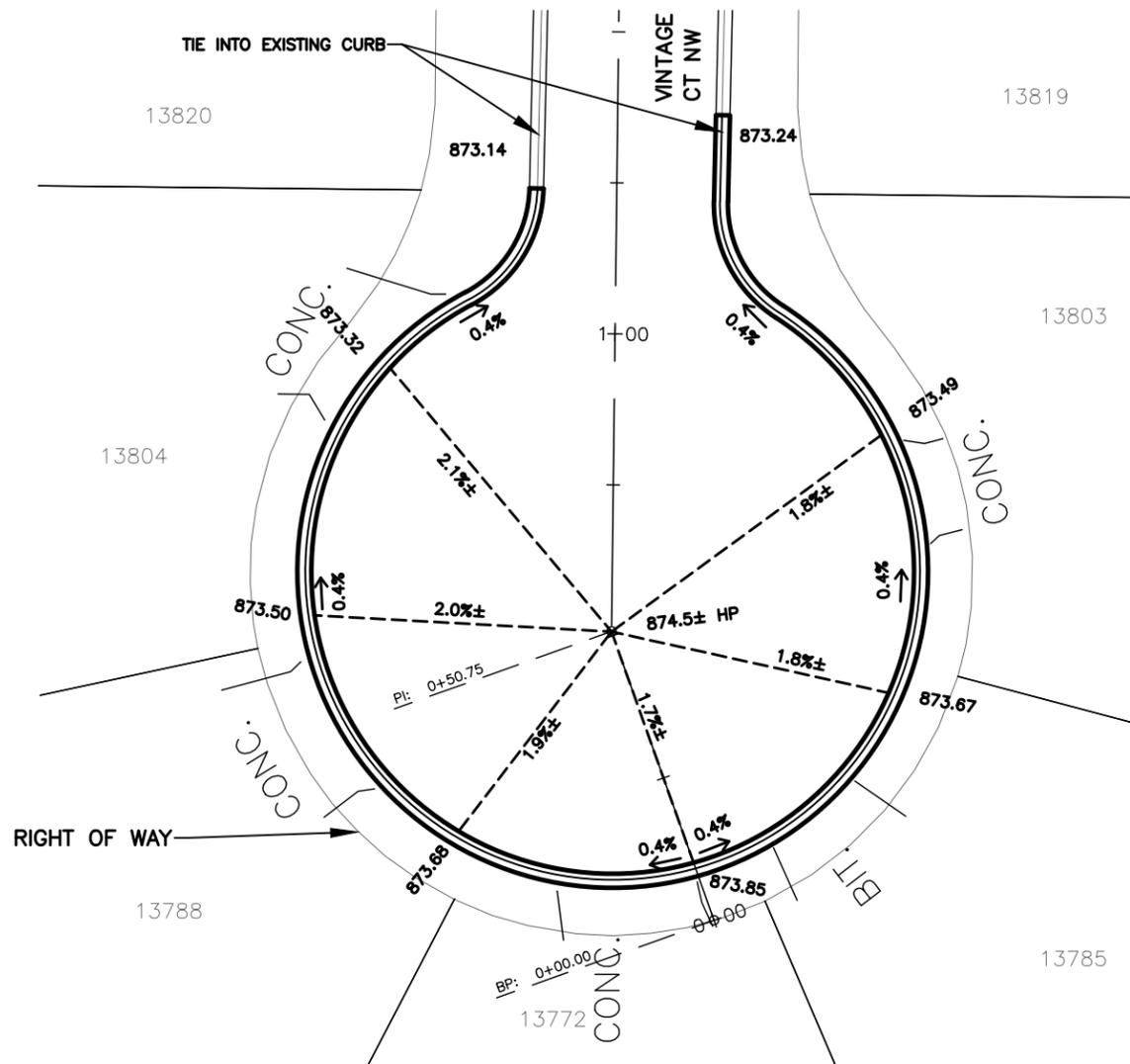
NO.	DATE	BY	DESCRIPTION OF REVISIONS

DESIGNED: JVL
 DRAWN: JBK
 CHECKED: DDB
 I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
 SIGNATURE: *David D. Berkowitz*
 DATE: MARCH 3RD, 2026 LIC. NO. 26757
 TYPED OR PRINTED NAME: DAVID D. BERKOWITZ

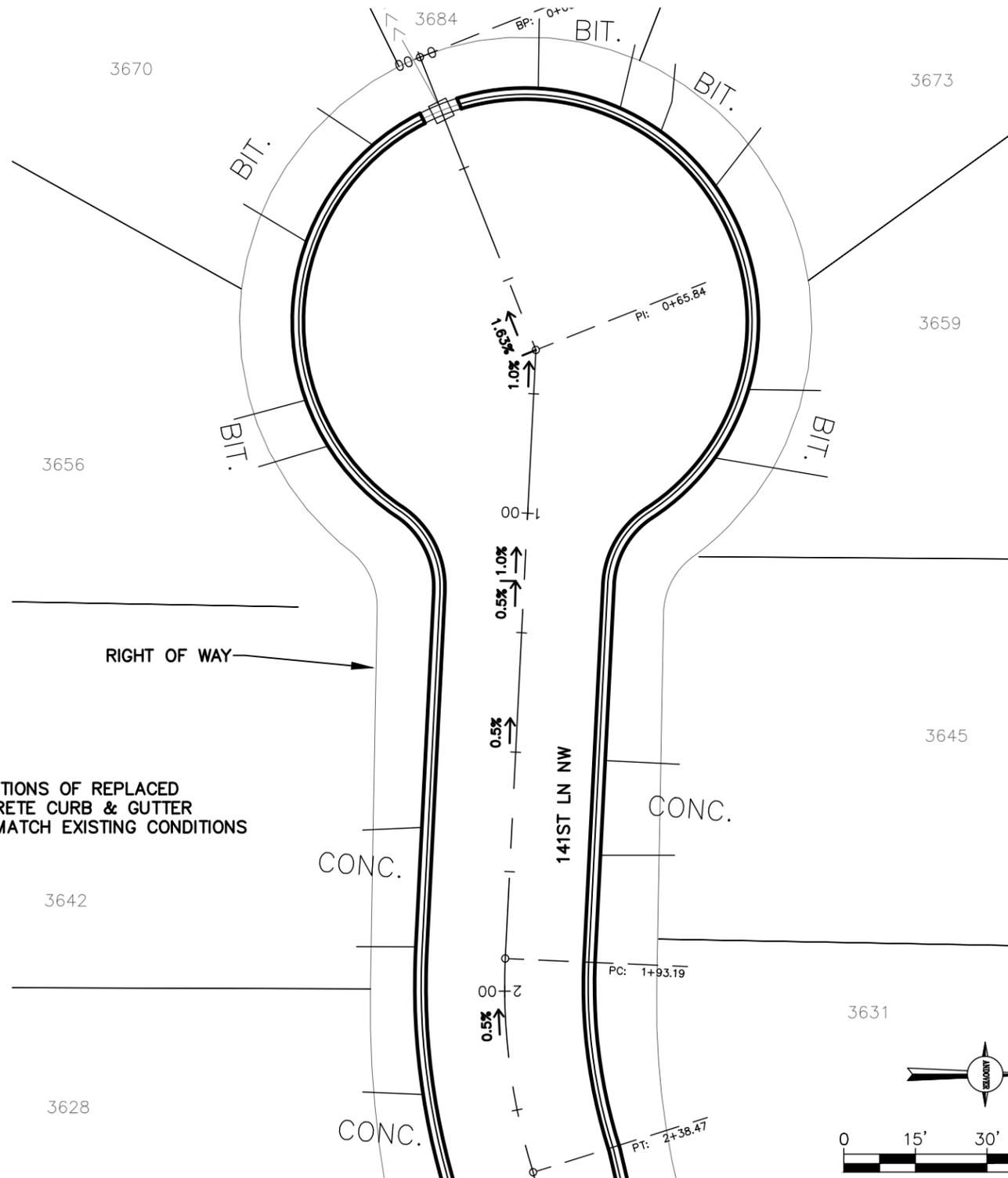


2026 FULL DEPTH RECLAMATION (C.P. 26-11B)
 NORTHGLEN AREA/WOODLAND POND

UNDERCLIFT ST NW PLAN / PROFILE
 SHEET NO. 49 OF 54 SHEETS



NOTES:
CURB ELEVATIONS ARE TO FLOW
LINE OF CURB UNLESS NOTED.



NOTES:
ELEVATIONS OF REPLACED
CONCRETE CURB & GUTTER
WILL MATCH EXISTING CONDITIONS



NO.	DATE	BY	DESCRIPTION OF REVISIONS

DESIGNED: JVL
DRAWN: JBK
CHECKED: DDB
DATE: MARCH 3RD, 2026

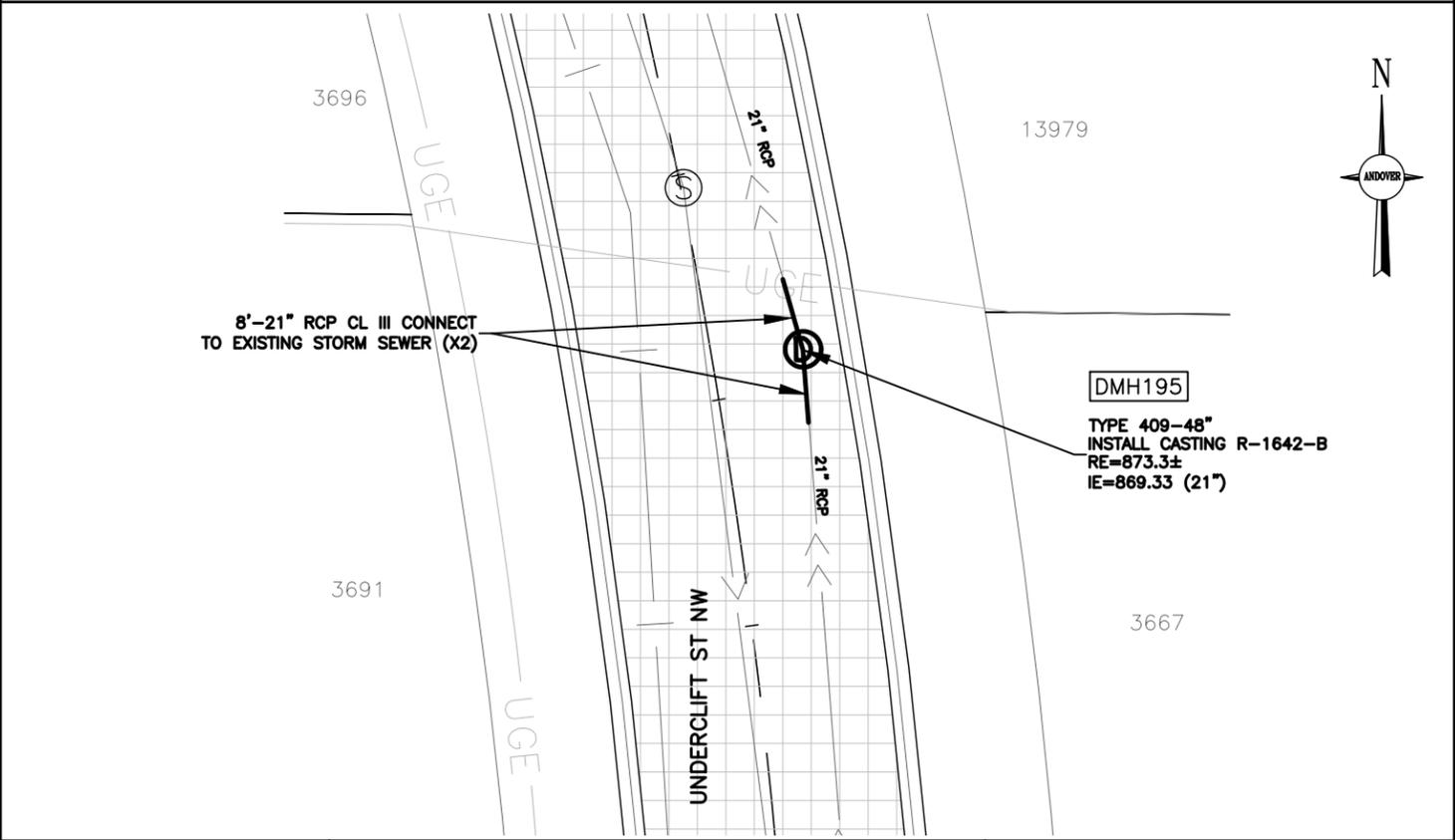
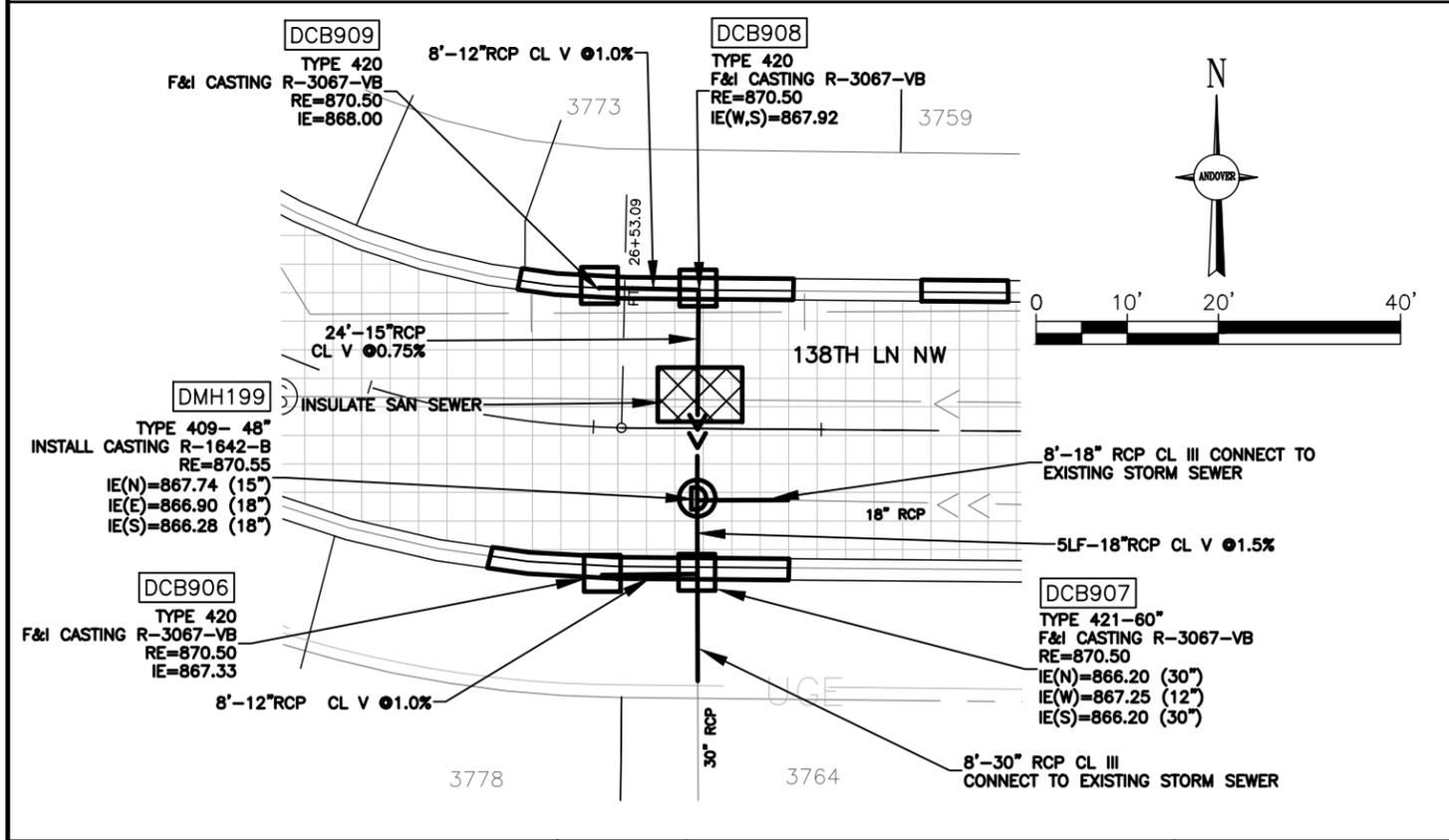
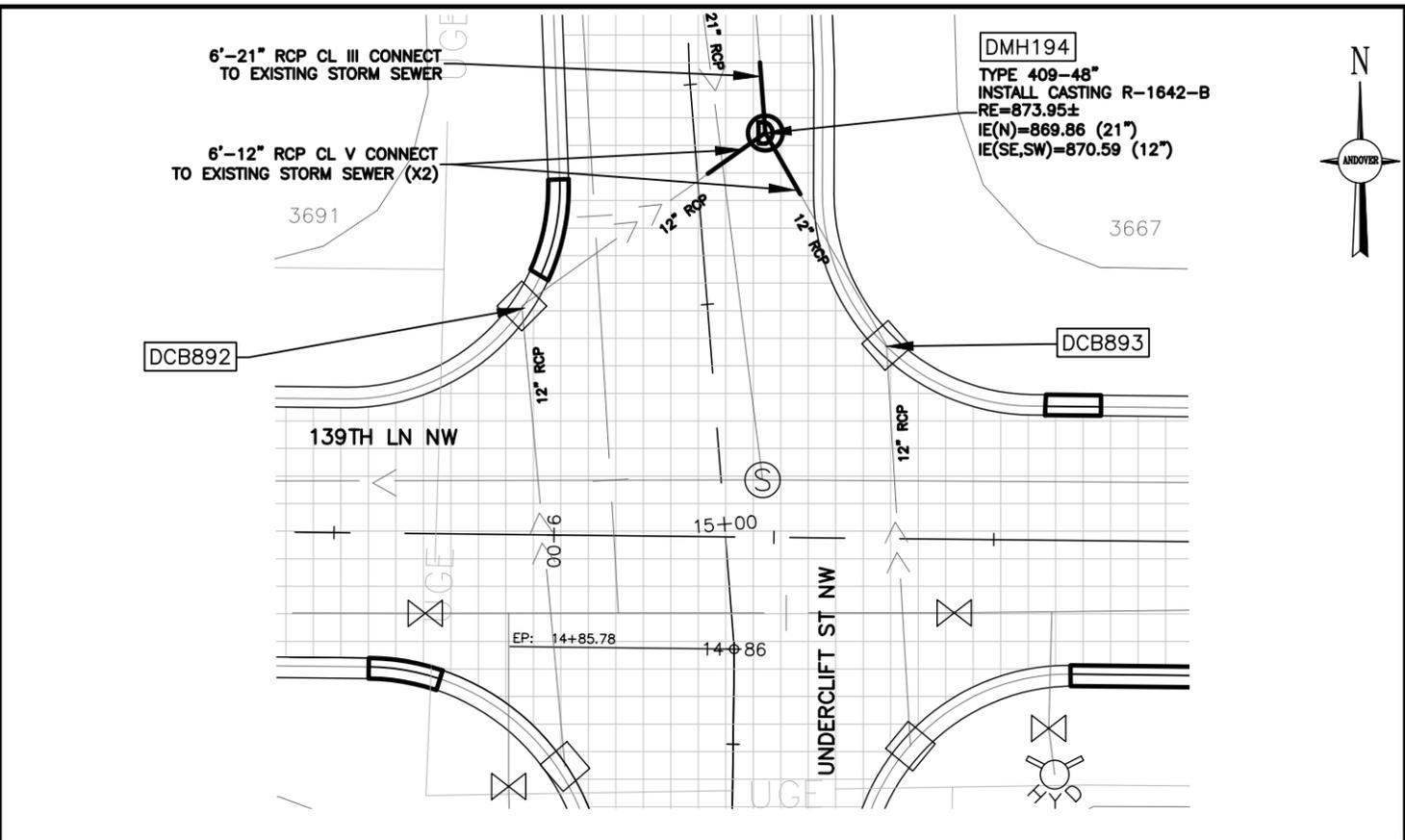
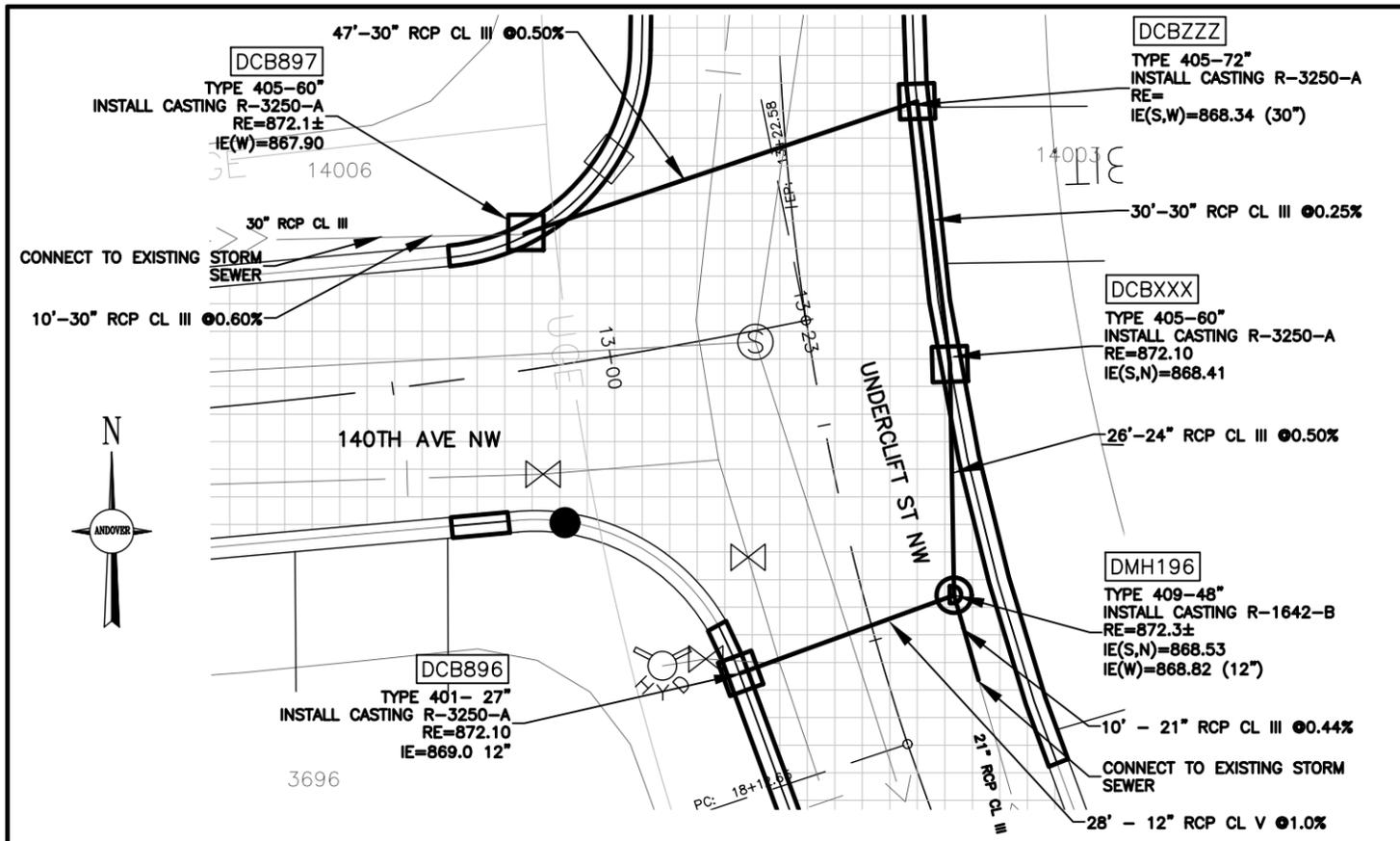
I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

David D. Berkowitz
SIGNATURE: DAVID D. BERKOWITZ
DATE: MARCH 3RD, 2026 LIC. NO.: 26757



2026 FULL DEPTH RECLAMATION (C.P. 26-11B)
NORTHGLEN AREA/WOODLAND POND

CUL DE SAC GRADES
SHEET NO. 50 OF 54 SHEETS



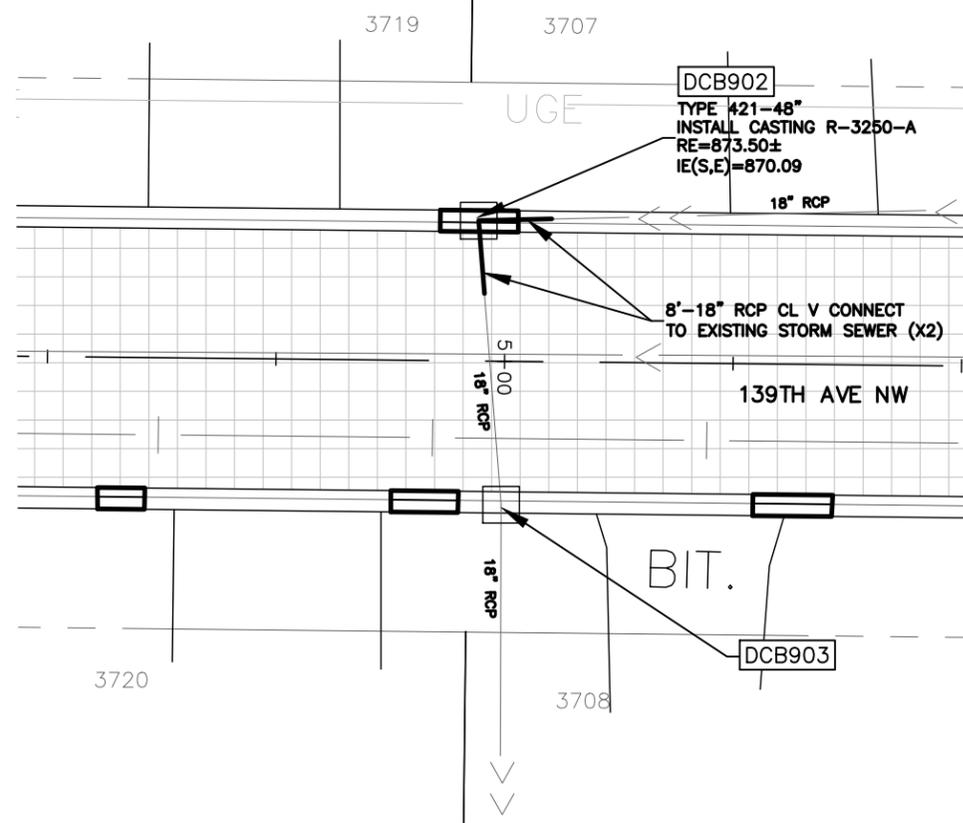
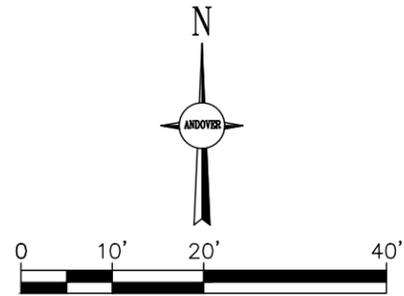
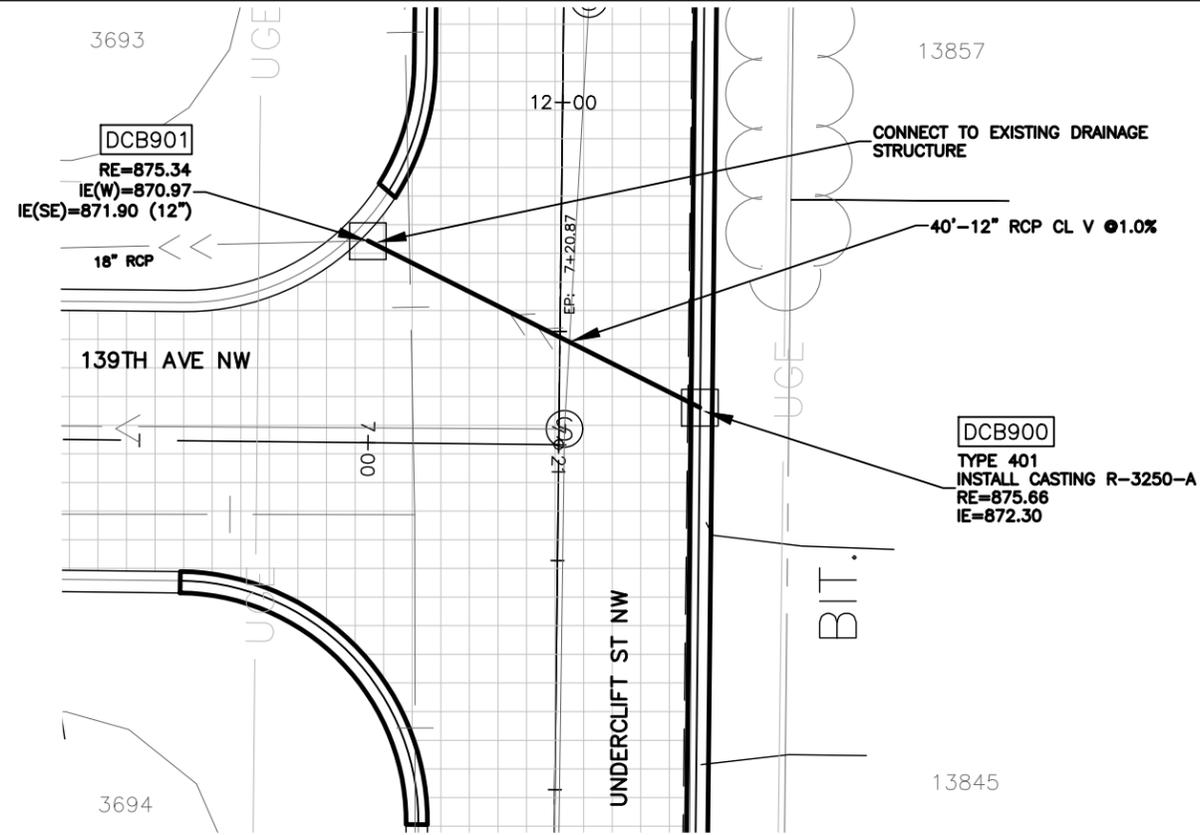
NO.	DATE	BY	DESCRIPTION OF REVISIONS

DESIGNED: JUL
 DRAWN: JBK
 CHECKED: DDB
 I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
 Signature: David D. Berkowitz
 DATE: MARCH 3RD, 2026 LIC. NO.: 26757



2026 FULL DEPTH RECLAMATION (C.P. 26-11B)
 NORTHGLEN AREA/WOODLAND POND

STORM SEWER REPLACEMENTS
 SHEET NO. 51 OF 54 SHEETS



NO.	DATE	BY	DESCRIPTION OF REVISIONS

DESIGNED: JUL
DRAWN: JBK
CHECKED: DDB

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

David D. Berkowitz
SIGNATURE: DAVID D. BERKOWITZ
DATE: MARCH 3RD, 2026 LIC. NO.: 26757



2026 FULL DEPTH RECLAMATION (C.P. 26-11B)
NORTHGLEN AREA/WOODLAND POND

STORM SEWER REPLACEMENTS

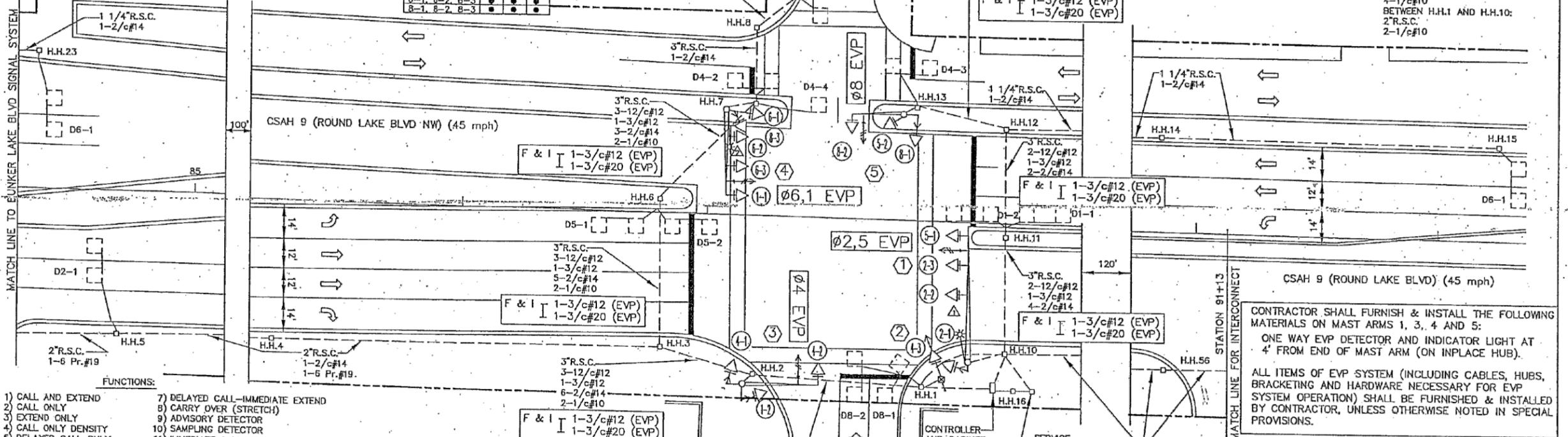
SHEET NO. 52 OF 54 SHEETS

7099

NOTES:

- 1) ALL ITEMS OF SIGNAL SYSTEM ARE INPLACE AND SHALL BE REUSED AND MAINTAINED INPLACE, EXCEPT AS DENOTED BELOW AND ELSEWHERE ON THIS PLAN SHEET.
- 2) CONTRACTOR SHALL SALVAGE ALL INPLACE INCANDESCENT VEHICLE SIGNAL INDICATIONS AND SHALL FURNISH AND INSTALL NEW LED SIGNAL INDICATIONS IN THEIR PLACE (INCIDENTAL TO ITEM NO. 2565.616-REVISE SIGNAL SYSTEM).
- 3) CONTRACTOR SHALL SALVAGE ALL INPLACE PEDESTRIAN INDICATIONS, AND SHALL FURNISH AND INSTALL NEW ONE SECTION "HAND/WALKING PERSON" LED SIGNAL INDICATIONS AND HOUSINGS IN THEIR PLACE (INCIDENTAL TO ITEM NO. 2565.616-REVISE SIGNAL SYSTEM).
- 4) SIGNAL SYSTEM FLASH MODE SHALL BE ALL RED.
- 5) EACH SIGNAL FACE HAS BACKGROUND SHIELD.
- 6) LOOP DETECTOR WIRES ARE CROSS-LINKED POLYETHYLENE (XLP) IN 1"N.M.C.
- 7) EACH HANDHOLE IS A CONCRETE HANDHOLE WITH TYPE "C" COVER PER Mn/DOT STANDARD PLATE NO.8117F.
- 8) F & I = ITEMS TO BE FURNISHED AND INSTALLED BY CONTRACTOR. SALVAGE = ITEMS TO BE REMOVED AND SALVAGED BY CONTRACTOR.
- 9) (INTERCONNECT) DENOTES MATERIALS TO BE FURNISHED AND INSTALLED BY CONTRACTOR UNDER ITEM NO. 2565.601 (TRAFFIC CONTROL INTERCONNECTION).
- 10) (EVP) DENOTES MATERIALS TO BE FURNISHED AND INSTALLED BY CONTRACTOR UNDER ITEM NO. 2565.601 (EMERGENCY VEHICLE PREEMPTION SYSTEM "C").
- 11) INPLACE ITEMS TO BE REUSED INPLACE AS PART OF REVISE SIGNAL SYSTEM SHALL BE PROTECTED AND MAINTAINED INPLACE.
- 12) CONTRACTOR SHALL MAINTAIN OPERATION OF SIGNAL SYSTEM AT ALL TIMES, UNLESS APPROVED BY ENGINEER TO BE TURNED OFF.

LED SIGNAL FACES		ALL 12"		
SIGNAL FACE		R	Y	G
1-1	1-2	●	●	●
2-1	2-2	●	●	●
4-1	4-2	●	●	●
5-1	5-2	●	●	●
6-1	6-2	●	●	●
8-1	8-2	●	●	●



- FUNCTIONS:
- 1) CALL AND EXTEND
 - 2) CALL ONLY
 - 3) EXTEND ONLY
 - 4) CALL ONLY DENSITY
 - 5) DELAYED CALL ONLY
 - 6) DELAYED CALL ONLY DENSITY
 - 7) DELAYED CALL-IMMEDIATE EXTEND
 - 8) CARRY OVER (STRETCH)
 - 9) ADVISORY DETECTOR
 - 10) SAMPLING DETECTOR
 - 11) IMMEDIATE CALL DURING PHASE 4/8 GREEN

NMC LOOP DETECTORS (INPLACE)			
NUMBER	SIZE (FT.)	LOCATION	FUNCTION
D1-1	2-6x6	20'	7,11
D1-2	2-6x6	5'	7,11
D2-1	2-6x6	330'	1
D4-1	2-6x6	5'	7
D4-2	2-6x6	5'	7
D4-3	2-6x6	5'	7
D5-1	2-6x6	20'	7,11
D5-2	2-6x6	5'	7,11
D6-1	2-6x6	330'	1
D8-1	2-6x6	5'	7
D8-2	2-6x6	5'	7

NOTE: LOCATION = DISTANCE FROM STOP BAR TO LOOP DETECTOR.

DRAWN BY: JMG	DESIGNED BY: JMG	CHECKED BY: JMG
DESIGN TEAM	NO. BY DATE	REVISIONS

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

Signature: *John M. Gray*
 Name: John M. Gray, P.E.
 License No.: 22457
 Date: March 7, 2003

SEH
 ANOKA COUNTY, MINNESOTA
 CITY OF ANDOVER
 S.A.P. 02-609-12
 S.A.P. 108-020-17

REVISE SIGNAL SYSTEM
 INTERSECTION LAYOUT
 CSAH 9 (ROUND LAKE BLVD NW)

FILE NO. AANKCO102.00
 SIGNAL SHEET 107



EXTENDED INTO H.H.10:
 2'R.S.C.

1-6 Pr.#19-INPLACE (REMOVE) (INTERCONNECT)
 1-6 Pr.#19 (INTERCONNECT)

CONTROLLER AND CABINET CABINET FOUNDATION
 EXTENDED INTO H.H.16:
 METERED SIGNAL SERVICE
 1 1/4'R.S.C.
 3-1/c#6
 EXTENDED INTO H.H.1:
 4'R.S.C.
 6-12/c#12
 3-3/c#12
 8-2/c#14

EXTENDED INTO H.H.10:
 4'R.S.C.
 4-12/c#12
 1-3/c#12 (EVP)
 4-2/c#14

EXTENDED INTO H.H.1:
 4'R.S.C.
 2'R.S.C.
 1-6 Pr.#19

EXTENDED INTO H.H.1:
 4'R.S.C.
 4-12/c#12
 1-3/c#12 (EVP)
 4-2/c#14

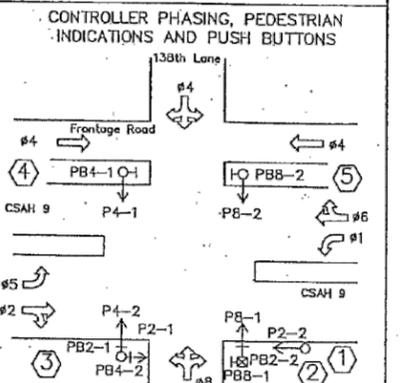
EXTENDED INTO H.H.1:
 4'R.S.C.
 2'R.S.C.
 1-6 Pr.#19

EXTENDED INTO H.H.10:
 2'R.S.C.
 1-6 Pr.#19

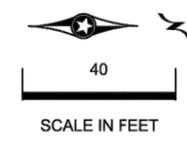
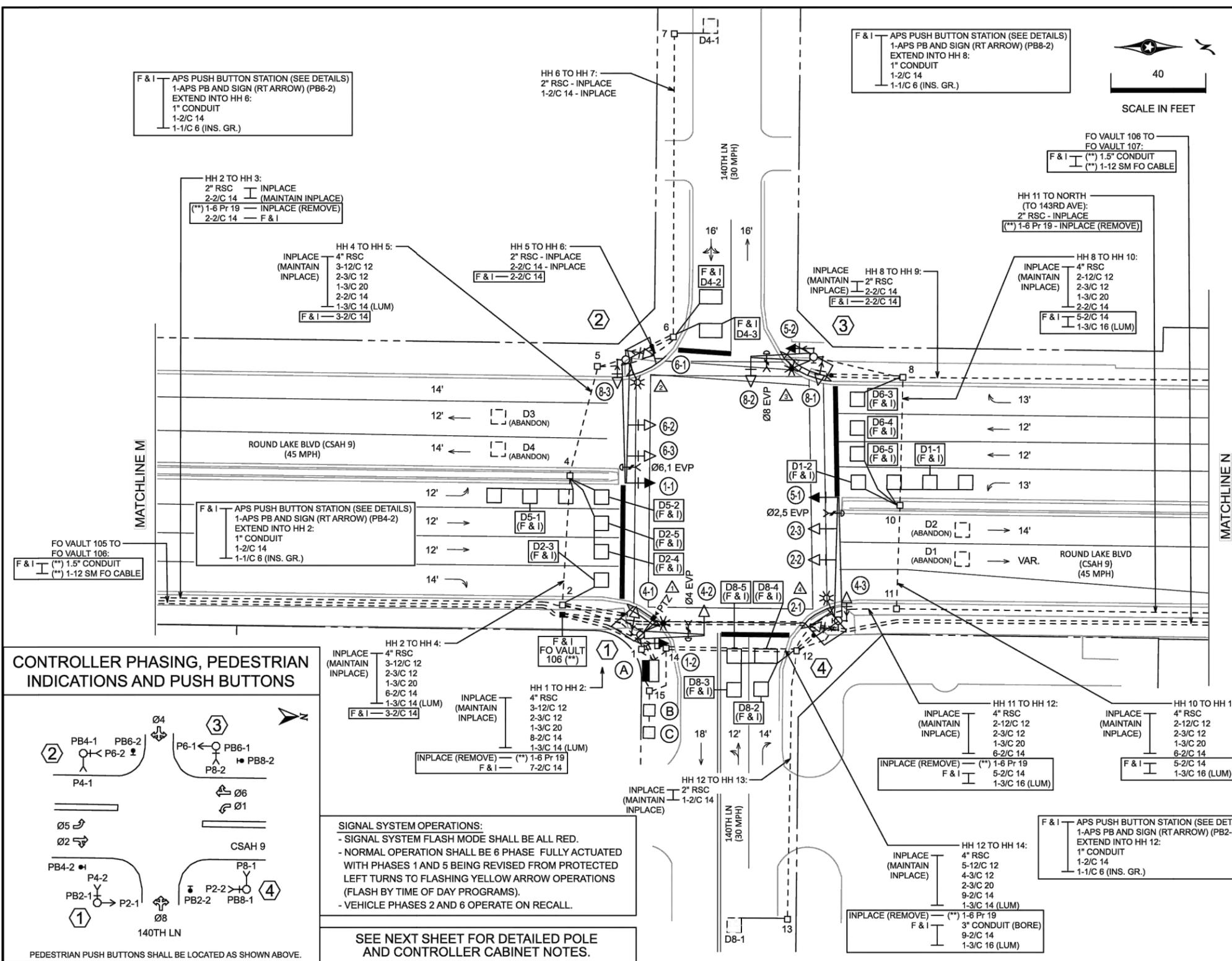
EXTENDED INTO H.H.10:
 UNMETERED STREET LIGHT SERVICE
 1 1/4'R.S.C.
 3-1/c#6
 EXTENDED INTO H.H.10:
 UNMETERED STREET LIGHT SERVICE
 1 1/4'R.S.C.
 4-1/c#10
 BETWEEN H.H.1 AND H.H.10:
 2'R.S.C.
 2-1/c#10

CONTRACTOR SHALL FURNISH & INSTALL THE FOLLOWING MATERIALS ON MAST ARMS 1, 3, 4 AND 5:
 ONE WAY EVP DETECTOR AND INDICATOR LIGHT AT 4' FROM END OF MAST ARM (ON INPLACE HUB).

ALL ITEMS OF EVP SYSTEM (INCLUDING CABLES, HUBS, BRACKETING AND HARDWARE NECESSARY FOR EVP SYSTEM OPERATION) SHALL BE FURNISHED & INSTALLED BY CONTRACTOR, UNLESS OTHERWISE NOTED IN SPECIAL PROVISIONS.



1:38:46 PM
 9/25/2025
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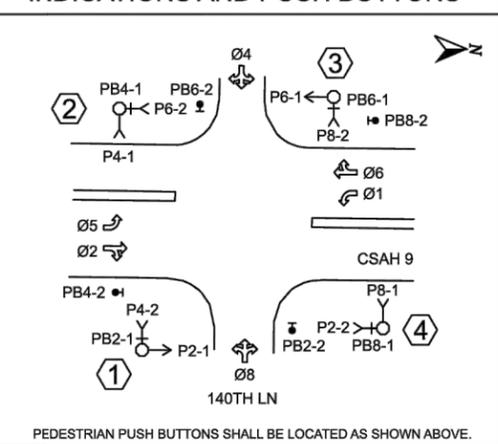


PVC LOOP DETECTORS

NUMBER	SIZE (FT.)	LOCATION	FUNCTION	STATUS
D1-1, D5-1	3-6X8	20', 35', 50'	1	1
D1-2, D5-2	6X6	5'	1	2
D2-1, D2-2	6X6	450'	1	3
D2-3	6X6	5'	11	3
D2-4, D2-5	6X6	5'	11	4
D4-1	6X6	120'	3,8	INPLACE
D4-2	6X10	20'	7	4
D4-3	6X10	5'	7	3
D6-1, D6-2	6X6	450'	1	3
D6-3	6X6	5'	11	3
D6-4, D6-5	6X6	5'	11	4
D8-1	6X6	120'	3,8	INPLACE
D8-2	6X6	20'	7	4
D8-3	6X6	20'	7	4
D8-4	6X10	5'	7	3
D8-5	6X6	5'	7	3

NOTE:
 LOCATION = DISTANCE FROM STOP BAR TO FRONT OF LOOP DETECTOR
 LOOP DETECTOR FUNCTIONS:
 1) CALL AND EXTEND
 3) EXTEND ONLY
 7) DELAYED CALL-IMMEDIATE EXTEND
 8) CARRY OVER (STRETCH)
 11) SPECIAL DETECTOR (COUNTING)
 LOOP DETECTOR STATUS:
 1) DETACH EXISTING FRONT (10') AND BACK (40') LOOP DETECTORS FROM EXISTING LEAD-IN CABLES, FURNISH & INSTALL NEW PVC LOOP DETECTOR, AND SPLICE ALL 3 LOOP DETECTORS TO BACK LEAD-IN CABLE (F & I NEW SPLICE KIT).
 2) FURNISH & INSTALL NEW PVC LOOP DETECTOR AT 5' FROM STOP BAR. SPLICE THE NEW LOOP DETECTOR TO THE EXISTING FRONT LEAD-IN CABLE (F & I NEW SPLICE KIT).
 3) FURNISH & INSTALL NEW PVC LOOP DETECTOR AND NEW LEAD-IN CABLE.
 4) FURNISH & INSTALL NEW PVC LOOP DETECTOR AND CONNECT TO INPLACE LEAD-IN CABLE (F & I NEW SPLICE KIT).

CONTROLLER PHASING, PEDESTRIAN INDICATIONS AND PUSH BUTTONS



SIGNAL SYSTEM OPERATIONS:
 - SIGNAL SYSTEM FLASH MODE SHALL BE ALL RED.
 - NORMAL OPERATION SHALL BE 6 PHASE FULLY ACTUATED WITH PHASES 1 AND 5 BEING REVISED FROM PROTECTED LEFT TURNS TO FLASHING YELLOW ARROW OPERATIONS (FLASH BY TIME OF DAY PROGRAMS).
 - VEHICLE PHASES 2 AND 6 OPERATE ON RECALL.

SEE NEXT SHEET FOR DETAILED POLE AND CONTROLLER CABINET NOTES.

LED SIGNAL HEAD CHART

SIGNAL HEAD	R	Y	FYA	G	STATUS
1-1	←	←	←	←	1
1-2	←	←	←	←	2
2-1, 2-2, 2-3	○	○	○	○	INPLACE
4-1, 4-2, 4-3	○	○	○	○	INPLACE
5-1	←	←	←	←	1
5-2	←	←	←	←	2
6-1, 6-2, 6-3	○	○	○	○	INPLACE
8-1, 8-2, 8-3	○	○	○	○	INPLACE

○ = INPLACE LED (REUSE INPLACE)
 ← = F & I NEW LED INDICATION
 FYA = FLASHING YELLOW ARROW
STATUS:
 1) REMOVE IN-PLACE OVERHEAD 3-SECTION SIGNAL AND F & I NEW OVERHEAD 4-SECTION SIGNAL ON END OF EXISTING MAST ARM.
 2) REMOVE IN-PLACE POLE MOUNTED 3-SECTION SIGNAL AND F & I NEW POLE MOUNTED 4-SECTION SIGNAL (ON NEW SIGNAL BRACKETING).

DESIGN TEAM	NO.	BY	DATE
DRAWN BY:	MJB		
DESIGNER:	MJB		
CHECKED BY:	JMG		

REVISIONS

I hereby certify that this plan was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.
 Signature: *John M. Gray*
 Printed Name: JOHN M. GRAY
 License No. 22457 Date: 09/23/2025

ANOKA COUNTY, MN
 CSAH 9
 SAP 002-609-023
 CITY OF ANDOVER SAP 198-020-042, CITY PROJECT 25-13
 CITY OF ANOKA SAP 103-020-020

REVISE SIGNAL SYSTEM "E"
 INTERSECTION LAYOUT
 CSAH 9 (ROUND LAKE BOULEVARD) AT 140TH LANE
112
133

NO.	DATE	BY	DESCRIPTION OF REVISIONS

DESIGNED: JUL
 DRAWN: JBK
 CHECKED: DDB
 I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
 Signature: *David D. Berkowitz*
 DAVID D. BERKOWITZ
 DATE: MARCH 3RD, 2026 LIC. NO. 26757



2026 FULL DEPTH RECLAMATION (C.P. 26-11B)
 NORTHGLEN AREA/WOODLAND POND

EXISTING SIGNAL PLAN
 SHEET NO. 54 OF 54 SHEETS