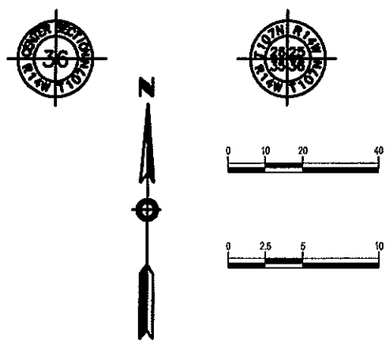
CONVENTIONAL SIGNS AND ABBREVIATIONS

CORPORATE LIMITS	
SECTION LINE	
RIGHT OF WAY LINE (STATE)	
PROPERTY LINE (STREET)	
ADDITION LINE	
SURVEY LINE	.1 .2
CENTER LINE	
WIRE FENCE	
STONE WALL OR FENCE	
HEDGE	
GUARD RAIL	
CREEK OR RIVER	
DRY RUN	
RAILROAD	
RAILROAD RIGHT OF WAY LINE	
CURB & GUTTER INP.	
SIDEWALK INP.	
SANITARY SEWER INP.	
STORM SEWER INP.	
WATERMAIN, GATEVALVE & BOX INP.	
ELECTRIC UNDERGROUND INP.	E
TELEPHONE UNDERGROUND INP.	T
STEAM MAIN INP.	S
GAS MAIN INP.	
CURB INP.	
HYDRANT INP.	
TELEPHONE, POWER POLES	
LIGHT POLES	
TRAFFIC SIGNAL	
FIRE ALARM BOX	
RAILROAD CROSSING SIGN	RXR
RAILROAD CROSSING BELL	
TREE	
STUMP	
BUILDING	1-S-F
IRON PIPE	
STONE MONUMENT	
MANHOLE INP.	
BRICK INP.	
BRIDGE INP.	
CULVERT INP.	
CATCH BASIN INP.	36
CURB & GUTTER CONST.	
SIDEWALK CONST.	
SANITARY, STORM SEWER CONST.	
WATERMAIN CONST.	
MANHOLE CONST.	
CATCH BASIN CONST.	
HYDRANT CONST.	
CROSS	
TEE	
TAPPING MACHINE SLEEVE & VALVE	
BEND, ELBOW	
INCREASER, DECREASER	
CONCRETE	
SAND	
CRUSHED ROCK	R
BITUMINOUS	
CLEAR & GRUB TREE	124
SW, C&G, CONC BASE, DRWY-REMOVE(GRD & ALIGN)	
SW, C&G, CONC BASE, DRWY-REMOVE(CONDEMED SW)	
SOIL BORING LOCATION	NO. 2

ACRE	A.
ADJUST	ADJ.
AGGREGATE	AGG.
APPROACH	APP.
BENCH MARK	B.M.
BITUMINOUS	BIT.
BRIDGE	BR.
BUILDING	BLDG.
CAST IRON PIPE	C.I.P.
CATCH BASIN	C.B.
CENTER LINE	℄
CENTER TO CENTER	C TO C
CLAY SEWER PIPE	C.S.P.
CONCRETE	CONC.
CONSTRUCT	CONST.
CORNER	COR.
CORRUGATED METAL PIPE	C.M.P.
CORRUGATED METAL PIPE ARCH	C.M.P.-A
CRUSHED ROCK	CR. RK.
CURB & GUTTER	C & G
DEFLECTION LEFT	D L
DEFLECTION RIGHT	D R
DEGREE OF CURVE	D
DELTA OR INTERSECTION ANGLE	Δ
DRIVE	DR.
DRIVEWAY	DRWY.
DROP INLET	D.I.
DUCTILE IRON PIPE	D.I.P.
EAST	E.
ELEVATION	EL.
EMBANKMENT	EMB.
ENTRANCE	ENT.
EQUATION	EQ.
ESTIMATE	EST.
EXCAVATION	EXC.
EXPANSION	EXP.
FLOW LINE	F.L.
FOOT	FT.
FOUNDATION	FD'N.
FRAME	FR.
FURNISH AND INSTALL	F. & I.
GALLON	GAL.
GATEVALVE	GV
GRATE	GR.
HIGH WATER	H.W.
HIGHWAY	HWY.
HORIZONTAL	HORIZ.
HYDRANT	HYD.
INLET	INL.
INPLACE	INPL.
INSTALL	INST.
INVERT	INV.
IRON PIPE	I. P.
JUNCTION	JCT.
LEFT	LT.
LENGTH OF CURVE	L
LINEAL	LIN.
LOW WATER	L.W.
MANHOLE	M.H.
MINIMUM	MIN.
MISCELLANEOUS	MISC.
MONUMENT	MON.
NORTH	N.
NORTH EAST	N.E.
NORTH WEST	N.W.
NUMBER	NO.
OUTLET	OUTL.
PERFORATED	PERF.
POINT OF CURVATURE	P.C.
POINT OF INTERSECTION	P.I.
POINT OF TANGENCY	P.T.
POINT ON TANGENT	P.O.T.
RADIUS, ROCK, RANGE	R.
RAILROAD	R.R.
REINFORCED	REINF.
REINFORCED CONCRETE PIPE	R.C.P.
RETURN	RET.
RIGHT	RT.
SANITARY	SAN.
SEWER	SEW.
SIDEWALK, SOUTH WEST	S.W.
SOUTH	S.
SOUTH EAST	S.E.
SPECIFICATION, SPECIAL	SPEC.
STANDARD	STD.
STATION	STA.
STORM, STATE, STUCCO	ST.
STREET, STONE, STEEL	ST.
SUBDRAIN	SD,SUBD
SURFACE	SURF.
TANGENT	TAN.
TURNING POINT, TELEPHONE POLE	T.P.
VARIABLE	VAR.
VEHICULAR MEASURE	V.M.
VERTICAL	VERT.
VERTICAL CURVE	V.C.
VETRIFIED	VIT.
WEST, WATER	W.

NOTE: SECTION NUMBERS READ FROM SOUTH

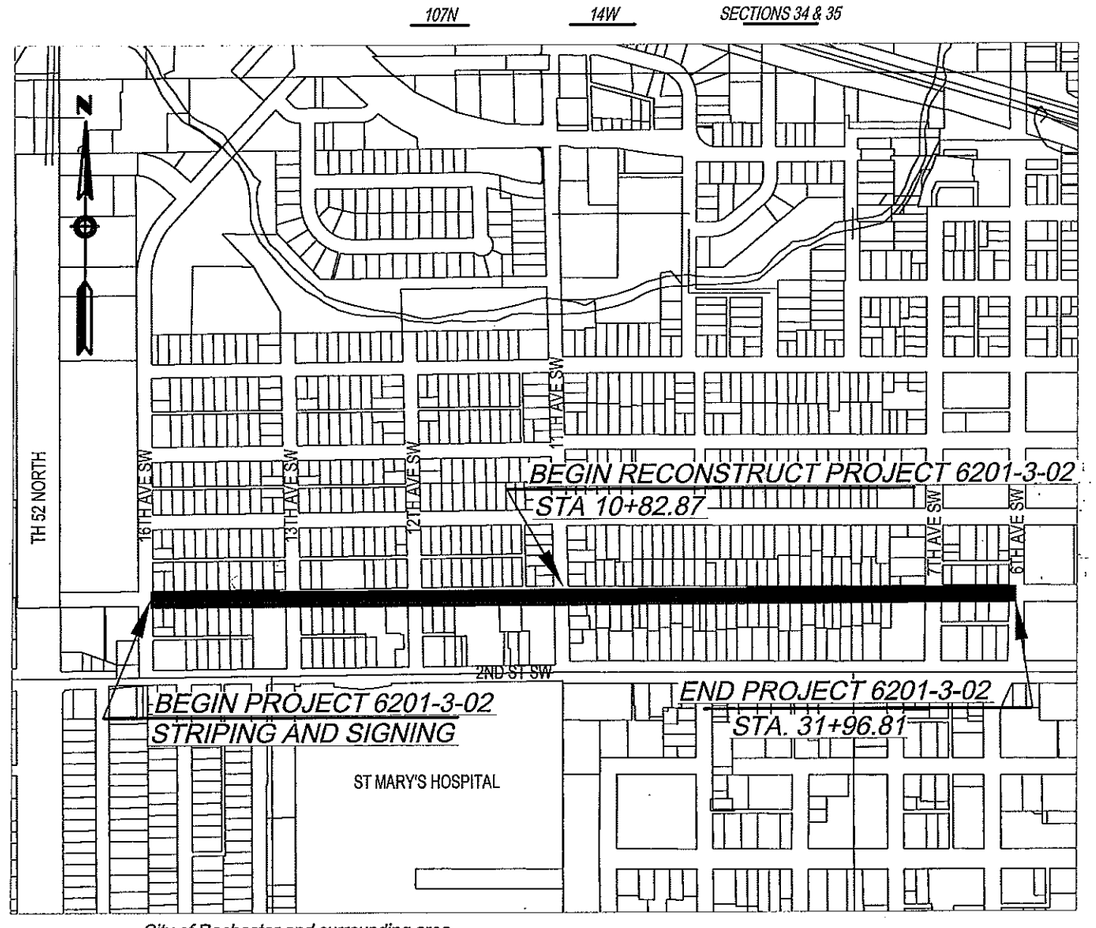


ELECTRONIC FILE

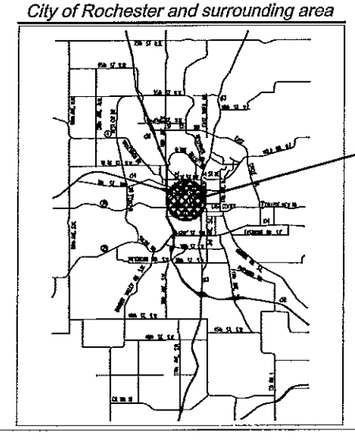
City of Rochester, Minnesota

Department Of Public Works

REONSTRUCT 1ST ST SW FROM 6TH AVE SW TO 11TH AVE SW
AND STRIPING AND SIGNING FROM 6TH AVE SW TO 16TH AVE SW



City of Rochester and surrounding area



APPROXIMATE PROJECT LOCATION

PROJECT LOCATION
OLMSTED COUNTY
ROCHESTER DISTRICT

GOVERNING SPECIFICATIONS

State of Minnesota

The 2014 edition of the Minnesota Department of Transportation "Standard Specifications for Construction" shall govern except as modified by special provision.

City of Rochester, Minnesota

- General Requirements and Covenants for Public Works Construction, 2000 edition.
- S100 Standard Specifications for Sewer Construction.
- C150 Standard Specifications for Construction of Service Connections.
- W200 Standard Specifications for Watermain Construction.
- T100 Standard Specifications for Trench Excavation, Backfill & Surface Restoration
- C700 Standard Specifications for Sidewalk Construction.

UTILITY QUALITY LEVEL

The subsurface utility information in this plan is quality level D. This quality level was determined according to the guidelines of CI/ASCE 38-2, entitled "Standard Guidelines for the Collection and Depiction of Existing Subsurface Utility Data."

INDEX TO PLANS

Sheet Title	Sht. No.
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This plan contains 53 Total sheets

City of Rochester, Minnesota
Department Of Public Works

201 4th Street S.E.
Room 108 - City Hall
Rochester, MN 55904
Phone: (507) 328-2400
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Ronald Wallace 12/19/13
Ronald Wallace, Design Technician — Date

Russell Kuhn, Design Engineer: 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.
Date: 12-19-13 Registration Number 24667

Douglas A. Nelson 12/19/13
Approved: Douglas Nelson, Assist. City of Rochester Engineer — Date

Richard Frease 12/19/13
Approved: Richard Frease, City of Rochester Engineer — Date

Project No 6201-3-02 J 7215

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ESTIMATED QUANTITIES

NOTES	TABLE	SHEET NO	SPECIFICATION REFERENCE NUMBER	ITEM DESCRIPTION	UNIT	TOTAL ESTIMATED QUANTITY
				STREET		
			2021.501/00010	MOBILIZATION	LS	1
	B	9	2101.502/00010	CLEARING	TREE	10
	B	9	2101.507/00010	GRUBBING	TREE	10
	C	9	2104.501/00022	REMOVE CURB AND GUTTER	LF	4,162
	C	9	2104.505/00100	REMOVE PAVEMENT	SY	6,963
	C	9	2104.505/00108	REMOVE CONCRETE DRIVEWAY PAVEMENT	SY	432
	C	9	2104.505/00110	REMOVE CONCRETE PAVEMENT	SY	572
	C	9	2104.505/00120	REMOVE BITUMINOUS PAVEMENT	SY	5
	E	10	2104.513/00011	SAWING BIT PAVEMENT (FULL DEPTH)	LF	84
	T	14	2104.523/00539	SALVAGE SIGN	EACH	23
P	A	9	2105.501/00010	COMMON EXCAVATION (P)	CY	3,579
P	E	10	2105.522/00031	SELECT GRANULAR BORROW MOD (CV) (P)	CY	170
P			2105.604/00035	GEOTEXTILE FABRIC TYPE V (P)	SY	8,100
P	I	10	2105.525/00030	TOPSOIL BORROW (CV) (P)	CY	311
2	E	10	2211.501/00050	AGGREGATE BASE CLASS 5	TON	100
P	E	10	2211.503/00050	AGGREGATE BASE (CV) CLASS 5 (P)	CY	1,760
	E	10	2301.501/00010	CONCRETE PAVEMENT	SY	508
	E	10	2301.513/00010	STRUCTURAL CONCRETE HE	CY	121
	E	10	2301.529/00011	REINFORCEMENT BARS (EPOXY COATED)	LB	135
	E	10	2301.538/00010	DOWEL BAR	EACH	93
	E	10	2301.602/00016	DRILL & GROUT DOWEL BAR (EPOXY COATED)	EACH	72
	E	10	2301.602/00021	DRILL & GROUT REINF BAR (EPOXY COATED)	EACH	126
1	E	10	2360.501/12200	TYPE SP 9.5 WEARING COURSE MIX (2,B)	TON	686
1	E	10	2360.502/22200	TYPE SP 12.5 NON WEAR COURSE MIX (2,B)	TON	858
4	F	10	2531.501/02320	CONCRETE CURB & GUTTER DESIGN B624	LF	4,292
	D	10	2531.507/00060	6" CONCRETE DRIVEWAY PAVEMENT	SY	545
	D	10	2531.507/00070	7" CONCRETE DRIVEWAY PAVEMENT	SY	164
			2545.523/00041	1.5" NON-METALLIC CONDUIT	LF	4,000
			2563.601/00010	TRAFFIC CONTROL	LS	1
	V	14	2564.531/00130	SIGN PANELS TYPE C	SF	52
	T	14	2564.602/00015	INSTALL SIGN	EACH	23
			2571.502/02200	DECIDUOUS TREE 2" CAL BR	TREE	16
	H	10	2571.602/00051	TREE PROTECTION TYPE I	EACH	26
	H	10	2571.602/00052	TREE PROTECTION TYPE II	EACH	6
	H	10	2571.602/00053	TREE PROTECTION TYPE III	EACH	39
3	H	10	2573.530/00010	STORM DRAIN INLET PROTECTION	EACH	17
			2573.601/00020	EROSION CONTROL SUPERVISOR	LS	1
	H	10	2573.602/00020	TEMPORARY ROCK CONSTRUCTION ENTRANCE	EACH	2
	I	10	2575.505/00060	SODDING TYPE MINERAL	SY	3,729
	U	14	2582.602/03120	PAVT MSSG (SHARROW) EPOXY (WR)	EACH	32
	U	14	2582.603/61104	4" SOLID LINE WHITE-EPOXY (WR)	LF	4,630
	U	14	2582.603/62204	4" BROKEN LINE YELLOW-EPOXY (WR)	LF	780
	U	14	2582.618/00140	CROSSWALK MARKING-EPOXY (WR)	SF	721
P			S100.509/00005	BREAKER RUN PLACED (P)	CY	1,350
				PED FACILITIES		
	C	9	2104.505/00021	REMOVE CONCRETE WALK	SY	362
2	G	10	2521.501/00040	4" CONCRETE WALK	SF	900
	G	10	2521.501/00060	6" CONCRETE WALK	SF	1,821
	G	10	2531.618/00010	TRUNCATED DOMES	SF	128
				STORM SEWER		
	K	11	2104.501/00016	REMOVE SEWER PIPE (STORM)	LF	744
	J	11	2104.509/00101	REMOVE MANHOLE	EACH	6
	J	11	2104.509/00102	REMOVE CATCH BASIN	EACH	12
	Q	13	2503.602/00042	CONNECT TO EXISTING STORM SEWER	EACH	1
	Q	13	2506.602/00025	CONNECT INTO EXISTING MANHOLE	EACH	1
	R	13	S100.516/00125	FURNISH & INSTALL 12IN REINFORCED CONCRETE PIPE CLASS 5	LF	332
	R	13	S100.516/00183	FURNISH & INSTALL 18IN REINFORCED CONCRETE PIPE CLASS 3	LF	231
	Q	13	S100.545/10006	CONSTRUCT STRUCTURE TYPE 1 0FT TO 6FT DEEP	STR	16
	Q	13	S100.545/40406	CONSTRUCT STRUCTURE TYPE 4 (48IN) 0FT TO 6FT DEEP	STR	7
	J	11	S100.548/00010	FURNISH & INSTALL CASTING ASSEMBLY	EACH	1
				SANITARY SEWER		
	L	11	2104.501/00017	REMOVE SEWER PIPE (SANITARY)	LF	1,959
	L	11	2104.509/00101	REMOVE MANHOLE	EACH	6
2			S100.507/00010	SOLID ROCK EXCAVATION	CY	196
2			S100.509/00020	SELECT MATERIAL FOR BACKFILL (LV)	CY	100
2			S100.511/00010	AGGREGATE FOR PIPE FOUNDATION GRADATION A	CY	100
	P	13	S100.522/00080	FURNISH & INSTALL 8IN ALTERNATE PRESSURE PIPE SEWER	LF	1,959
	O	13	S100.545/30010	CONSTRUCT STRUCTURE TYPE 3 6FT TO 10FT DEEP	STR	4
	O	13	S100.545/30013	CONSTRUCT STRUCTURE TYPE 3 10FT TO 13FT DEEP	STR	2
	L	11	S100.548/00010	FURNISH & INSTALL CASTING ASSEMBLY	EACH	1
	L	11	S100.578/00010	FURNISH & INSTALL MANHOLE WATERPROOFING-INTERIOR	EACH	1

ESTIMATED QUANTITIES

NOTES	TABLE	SHEET NO	SPECIFICATION REFERENCE NUMBER	ITEM DESCRIPTION	UNIT	TOTAL ESTIMATED QUANTITY
				WATERMAIN		
2			W200.507/00010	SOLID ROCK EXCAVATION	CY	225
2			W200.511/00010	AGGREGATE FOR PIPE FOUNDATION GRADATION A	CY	100
	S	14	W200.528/00040	FURNISH & INSTALL 4IN DUCTILE IRON PIPE CLASS 52	LF	40
	S	14	W200.528/00060	FURNISH & INSTALL 6IN DUCTILE IRON PIPE CLASS 52	LF	146
	S	14	W200.528/00080	FURNISH & INSTALL 8IN DUCTILE IRON PIPE CLASS 52	LF	49
	S	14	W200.528/00120	FURNISH & INSTALL 12IN DUCTILE IRON PIPE CLASS 52	LF	14
	S	14	W200.528/00160	FURNISH & INSTALL 16IN DUCTILE IRON PIPE CLASS 52	LF	2,268
	S	14	W200.550/00040	FURNISH & INSTALL 4IN GATE VALVE AND BOX	EACH	1
	S	14	W200.550/00060	FURNISH & INSTALL 6IN GATE VALVE AND BOX	EACH	9
	S	14	W200.550/00080	FURNISH & INSTALL 8IN GATE VALVE AND BOX	EACH	1
	S	14	W200.550/00120	FURNISH & INSTALL 12IN GATE VALVE AND BOX	EACH	1
	S	14	W200.550/00160	FURNISH & INSTALL 16IN GATE VALVE AND BOX	EACH	8
	S	14	W200.560/00020	FURNISH & INSTALL HYDRANT ASSEMBLY	EACH	5
	S	14	W200.562/00010	FURNISH & INSTALL WATER MAIN FITTINGS	LB	5,476
	N	13	W200.564/00030	REMOVE HYDRANT ASSEMBLY	EACH	4
	N	13	W200.564/00040	REMOVE EXISTING WATERMAIN	LF	95
	N	13	W200.564/30060	REMOVE 6IN GATE VALVE AND BOX	EACH	9
	N	13	W200.564/30100	REMOVE 10IN GATE VALVE AND BOX	EACH	1
	N	13	W200.564/30120	REMOVE 12IN GATE VALVE AND BOX	EACH	1
				SERVICE CONNECTIONS		
2			C150.503/10004	4IN SANITARY SEWER SERVICE CONNECTION	LF	10
2			C150.503/10006	6IN SANITARY SEWER SERVICE CONNECTION	LF	10
2			C150.504/10009	3/4IN WATER SERVICE CONNECTION	LF	100
2			C150.504/10010	1IN WATER SERVICE CONNECTION	LF	100
2			C150.504/10090	3/4IN WATER SERVICE CONNECTION (DIRECTIONAL BORE)	LF	100
2			C150.504/10100	1IN WATER SERVICE CONNECTION (DIRECTIONAL BORE)	LF	100
	M	12	C150.550/00009	3/4IN CURB STOP AND BOX	EACH	1
	M	12	C150.550/00010	1IN CURB STOP AND BOX	EACH	1
	M	12	C150.568/00010	REBUILD EXISTING SEWER SERVICE CONNECTIONS	EACH	10
	M	12	C150.568/00020	REBUILD EXISTING WATER SERVICE CONNECTIONS	EACH	22
	M	12	C150.569/00010	RECONNECT EXISTING SEWER SERVICE CONNECTIONS	EACH	68
	M	12	C150.569/00020	RECONNECT EXISTING WATER SERVICE CONNECTIONS	EACH	42

ESTIMATED QUNATITIES NOTES:
(P) PLANNED QUANTITY
(1) BITUMINOUS MATERIAL FOR TACKCOAT INCIDENTAL
(2) INCLUDES AS A TOKEN AMOUNT NOT SUBJECT TO THE PROVISIONS OF 1903
(3) SEE CITY OF ROCHESTER STANDARD DETAIL PLATE 7-05
(4) INCLUDES TRANSITION CURB

STANDARD DETAIL PLATES

CITY OF ROCHESTER

NO.	DETAIL PLATE
1-01 H	STRUCTURE TYPE 1
1-02 H	STRUCTURE TYPES 2 AND 2A
1-04 H	STRUCTURE TYPE 4 (XXin.)
1-07 A	MANHOLE WATERPROOFING
1-10 C	CURB BOX COVER
1-11 H	CASTING REFERENCE NUMBERS
1-12 A	STANDARD CASTING ASSEMBLIES
1-13 C	STRUCTURE ADJUSTING RINGS
2-01 D	CONCRETE CURB & GUTTER
2-02 D	CONCRETE SILL
2-04 A	BITUMINOUS CURB
2-06 C	CURB & GUTTER REINFORCEMENT AT CATCH BASINS
2-07 D	CONCRETE DRIVE APPROACH TYPE A
2-13 I	PEDESTRIAN CURB RAMP
2-14 E	SIDEWALK DETAILS
4-01 F	SERVICE CONNECTIONS STUBBED INTO BOULEVARD
4-03 B	STREET CROSSINGS FOR UTILITY CONDUITS
5-01 B	CONCRETE INSULATION & PROTECTION FOR UNDERGROUND PIPE
6-04 D	HYDRANT BRANCH DETAIL
6-05 D	RESTRAINED JOINT DETAIL
6-06 A	POLYETHYLENE ENCASEMENT
6-07 C	ALIGNMENT OF WATERMAIN AT SEWER MANHOLE IN COMMON TRENCH
6-08 B	ELECTRICAL CONTINUITY
6-09 A	INSTALLATION DETAIL
6-10 B	FIRE HYDRANT THREAD PATTERN (4IN. NOZZLE) (PRE-2010)
6-14 B	BACKFLOW PREVENTION FOR WATER TANKERS
6-15 A	TYPICAL FITTING CUT-IN AND REMOVAL DETAILS
6-17 A	HYDRANT PROTECTIVE POSTS
7-01 B	SILT FENCE DETAILS
7-05 A	INLET PROTECTION
7-06 D	TEMPORARY ROCK CONSTRUCTION ENTRANCE

7-06 D	TEMPORARY ROCK CONSTRUCTION ENTRANCE

THE FOLLOWING STANDARD PLATES, APPROVED BY THE

STATE OF MINNESOTA

NO.	DETAIL PLATE
1150Q	Construction of Header Joints
3000L1	Reinforced Concrete Pipe (1 of 5 Sheets)
3000L2	Reinforced Concrete Pipe (2 of 5 Sheets)
3000L3	Reinforced Concrete Pipe (3 of 5 Sheets)
3000L4	Reinforced Concrete Pipe (4 of 5 Sheets)
3000L5	Reinforced Concrete Pipe (5 of 5 Sheets)
3006G1	Gasket Joint for R.C. Pipe (1 of 2 Sheets)
3006G2	Gasket Joint for R.C. Pipe (2 of 2 Sheets)
5010A	Reinforced Concrete Pipe Energy Dissipater
7000E	Integrant Curbs (Design B, Design V and Design D)
8000I	Standard Barricades

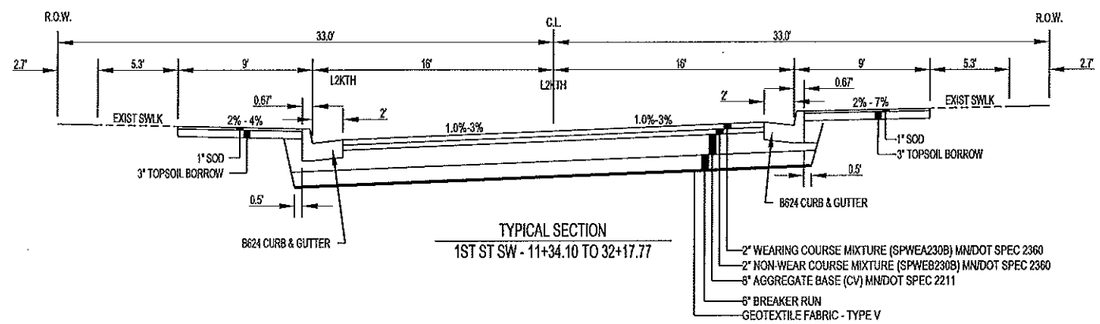
Revision comment: –
Revised: –

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.
Date: 08/17/13 Lic. No. 24667

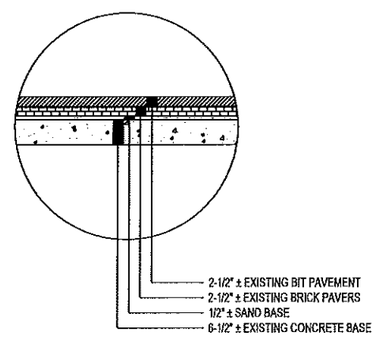
City of Rochester, Minnesota
Department Of Public Works
201 4th Street S.E.
Rochester, MN 55904
Phone: (507) 328-2450
FAX: (507) 328-2401

Title: ESTIMATED QUANTITIES
Designer: RLW
Checker: RJK

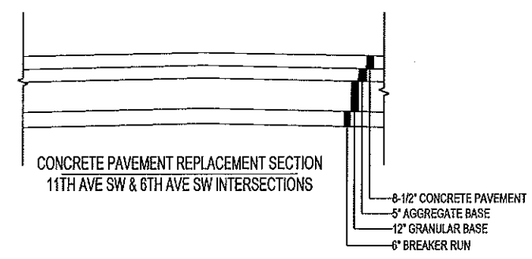
Project No. 6201-3-02 J7215
Sheet 2 of 53 Sheets



TYPICAL SECTION
1ST ST SW - 11+34.10 TO 32+17.77



EXISTING STREET SECTION
6TH AVE SW TO 11TH AVE SW



CONCRETE PAVEMENT REPLACEMENT SECTION
11TH AVE SW & 6TH AVE SW INTERSECTIONS

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Revision comment: —
Revised: —

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.
Date: 08/27/13 Lic. No. 24067

City of Rochester, Minnesota
Department Of Public Works
201 4th Street S.E.
Rochester, MN 55904
Phone: (507) 328-2429
FAX: (507) 328-2401

Title: TYPICAL SECTIONS

Designer: RLW
Checker: RJK

Project No. 6201-3-02 J7215
Sheet 3 of 53 Sheets

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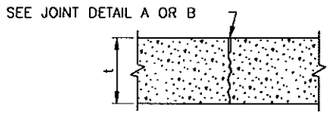
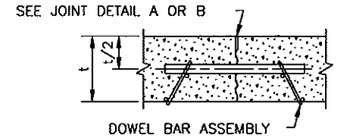
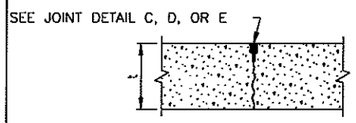


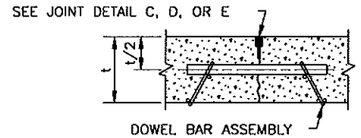
C1U & C2H



C1U–D & C2H–D



C3P, C4S, C5H



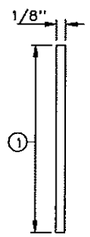
C3P–D, C4S–D, C5H–D

CONTRACTION JOINT REFERENCE, DETAIL & SEALER SPEC. TABLE

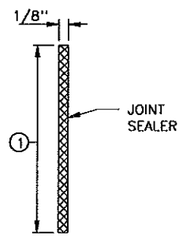
JOINT REFERENCE		JOINT DETAIL	JOINT SEALER SPEC.	JOINT WIDTH
WITHOUT DOWELS	WITH DOWELS			
C1U	C1U–D	A	UNSEALED	1/8"
C2H	C2H–D	B	3725	1/8"
C3P	C3P–D	C	3721	3/8"
C4S	C4S–D	D	3722	3/8"
C5H	C5H–D	E	3725	3/8"

LEGEND — EXAMPLE: C2H–D

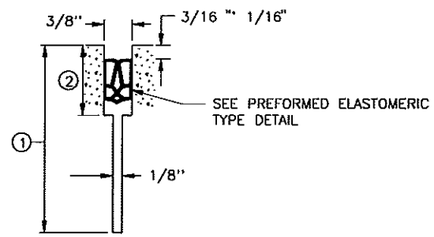
- C = CONTRACTION JOINT
- NO. = JOINT REFERENCE
- U = UNSEALED
- H = HOT POURED
- P = PREFORMED
- S = SILICONE
- –D = DOWEL BARS



JOINT DETAIL A
SAWED & UNSEALED



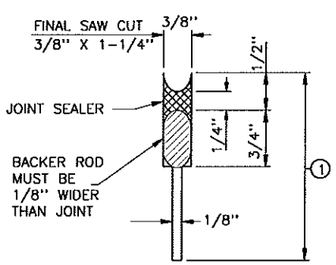
JOINT DETAIL B ③
SAWED & SEALED



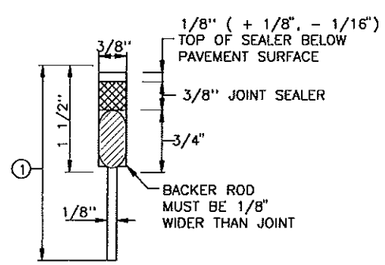
JOINT DETAIL C ③
SAWED AND SEALED

DOWEL BAR DIAMETER TABLE

PAVEMENT THICKNESS t	DOWEL BAR DIAMETER
LESS THAN 6"	NONE
6" – 6 1/2"	1"
7" – 10"	1 1/4"
10 1/2" – 14"	1 1/2"



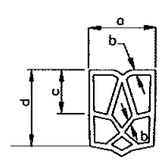
JOINT DETAIL D ③④
SAWED AND SEALED



JOINT DETAIL E ③⑤
SAWED AND SEALED

REQUIRED DIMENSIONS

JOINT TYPE	TRANSVERSE
NOMINAL SEALER SIZE USE IN ALL 3/8" JOINTS	11/16"
a 0.69"	+ 0.13" – 0.05"
b	0.08" ± 0.02"
c	0.25" MIN.
d	0.63" MIN.



SPEC. REFERENCE 3721

TYPICAL SHAPE FOR SATISFACTORY INSTALLATION IN JOINT (5 CELL MIN.)

PREFORMED ELASTOMERIC TYPE DETAIL

CONTRACTION JOINTS
DESIGN C

NOTES:

SEE STANDARD PLATE 1103 FOR DOWEL BAR ASSEMBLY.

SEE STANDARD PLATE 1150 FOR CONSTRUCTION OF HEADER JOINTS.

JOINT WIDTH TOLERANCE IS + 1/16" TO – 1/32"

FURNISH AND INSTALL ALL JOINT SEALER IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

SEE STANDARD PLANS 5–297.217 AND 5–297.219, FOR CONCRETE MAINLINE/RAMP PAVEMENT.

SEE PAVING LAYOUTS IN THE PLANS FOR JOINT CLASS DESIGNATION TO BE USED AND SPECIAL REINFORCEMENT REQUIRED.

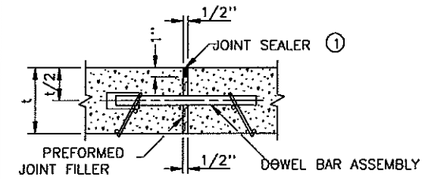
① JOINT DEPTH SHALL BE:
FOR CONCRETE OVERLAYS – 1/3 THE PAVEMENT THICKNESS
FOR CONCRETE PAVEMENT – 1/4 THE PAVEMENT THICKNESS

② SEE CONTRACTION JOINT SEALER DETAIL. WHEN USING PREFORMED JOINT SEALER, THE DEPTH SHALL BE 1/4" MORE THAN THE PREFORMED SEALER, WHEN COMPRESSED, TO FIT THE JOINT DESIGN WIDTH. "a" DIMENSION SHALL APPLY AT ANY POINT THROUGHOUT "c" DEPTH. SHARP INTERNAL CORNERS WILL NOT BE PERMITTED. ALL CORNERS SHALL BE PROVIDED WITH SUITABLE FILLET.

③ WHEN SEALING, THE JOINT FACES SHALL BE CLEANED AND DRIED BY SANDBLASTING AND AIR BLASTING.

④ PRIOR TO SEALING THE JOINT, A 1/2" DIA. CLOSED CELL BACKER ROD SHALL BE PLACED SUCH THAT THE TOP OF THE BACKER ROD IS 1/2" BELOW THE SURFACE OF THE PAVEMENT. NON SELF–LEVELING SILICONE SHALL BE TOOLED INTO THE JOINT MAINTAINING A SEAL AND BEAD THICKNESS OF 1/4".

⑤ PRIOR TO SEALING THE JOINT, A 1/2" DIA. CLOSED CELL BACKER ROD CAPABLE OF WITHSTANDING SEALANT TEMPERATURES OF 400 DEGREES F. SHALL BE PLACED 1/2" BELOW THE TOP OF PAVEMENT.



E1H–D (W/DOWELS) E1H (W/O DOWELS)

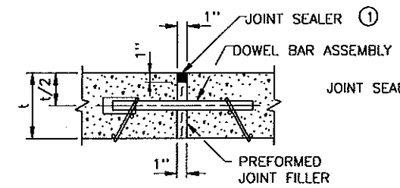
JOINT DETAIL A

EXPANSION JOINT REFERENCE, DETAIL & SEALER SPEC. TABLE

JOINT REFERENCE		JOINT DETAIL	JOINT SEALER SPEC.	JOINT WIDTH
WITHOUT DOWELS	WITH DOWELS			
E1H	E1H–D	A	3725	1/2"
E2H	E2H–D	B	3725	1"
E4H		C	3725	2"
	E4H–D	D	3725	2"
E8H		STANDARD PLAN 5–297.229	3725	4"

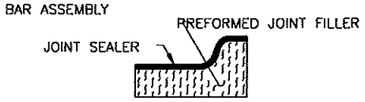
LEGEND — EXAMPLE: E4H–D

- E = EXPANSION JOINT
- NO. = JOINT REFERENCE
- H = HOT POURED
- –D = DOWEL BARS

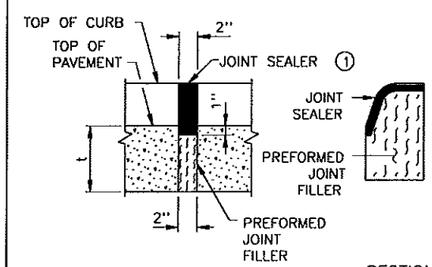


E2H–D (W/DOWELS) E2H (W/O DOWELS)

JOINT DETAIL B



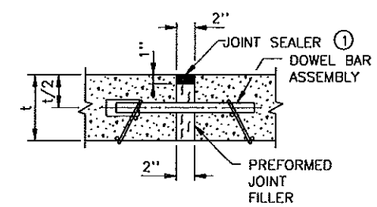
SECTION THRU CURB



E4H (W/O DOWELS)

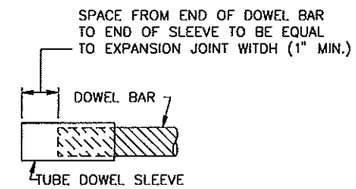
SECTION THRU CURB

JOINT DETAIL C



E4H–D (W/DOWELS)

JOINT DETAIL D



DOWEL BAR SLEEVE DETAIL

NOTES:

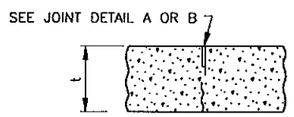
PREFORMED JOINT FILLER MATERIAL, SPEC. 3702.

FOR DOWEL BAR ASSEMBLY, SEE STANDARD PLATE 1103.

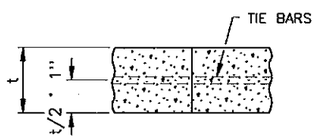
① JOINT SEALER SPEC. 3725. THE JOINT FACES SHALL BE CLEANED AND DRIED BY SANDBLASTING AND AIR BLASTING. TOP OF SEALER, FLUSH TO 1/8" BELOW TOP OF PAVEMENT SURFACE. MAKE TOP OF SEALER FOR CURB SECTION D JOINTS FLUSH WITH SURFACE "1/8".

EXPANSION JOINTS
DESIGN E

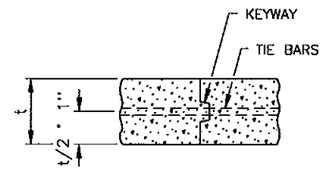
STANDARD SHEET NO.	TITLE:
5–297.221 (1 OF 2)	PAVEMENT JOINTS CONTRACTION (DESIGN C) AND EXPANSION (DESIGN E)
STANDARD APPROVED: APRIL 14, 2010	



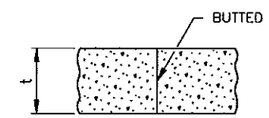
L1U & L1H ①



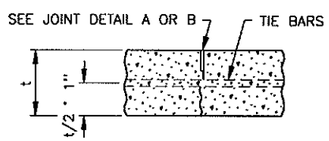
L2TU ②



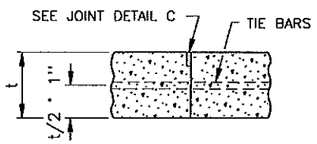
L2KTU ③



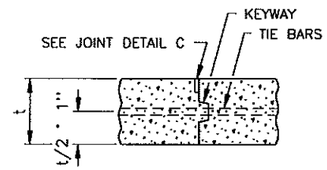
L3U



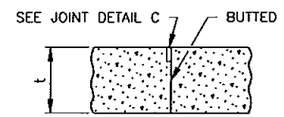
L1TU & L1TH ①



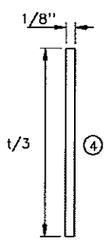
L2TH ②



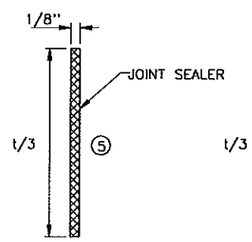
L2KTH ③



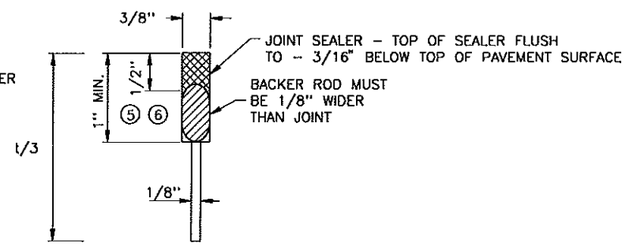
L3H



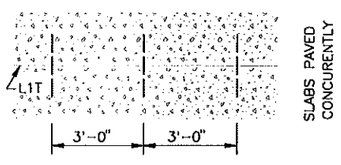
JOINT DETAIL A
SAWED & UNSEALED



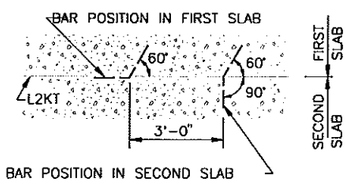
JOINT DETAIL B
SAWED & SEALED



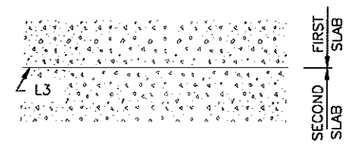
JOINT DETAIL C
SAWED & SEALED



L1T PAVING DETAIL



L2T & L2KT TIE BAR BENDING AND PAVING DETAIL



L3 PAVING DETAIL

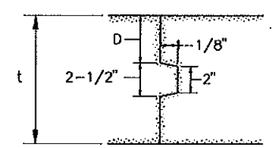
TIEBAR TABLE

PAVEMENT THICKNESS	TIEBAR SIZE	LENGTH
< 10-1/2"	NO. 4	30"
≥ 10-1/2"	NO. 5	36"
ALL THICKNESS WHEN TYING TO CURB AND GUTTER	NO. 4	30"

THE TIE BAR SPACING FOR ALL L2T AND L2KT JOINTS SHALL BE 3'-0" CENTER TO CENTER AND BENT 60° AS SHOWN, EXCEPT WHEN NOTED OTHERWISE IN THE PLANS.

TIE BARS IN THE L2T AND L2KT JOINTS SHALL BE THE SAME SIZE AND LENGTH AS USED FOR THE L1T JOINTS, WHEN TYING PAVEMENT TO PAVEMENT. TIE BARS IN THE L2KT JOINTS SHALL BE NO. 13 X 2' - 6", WHEN TYING CURB & GUTTER TO PAVEMENT.

ALL TIE BARS SHALL BE EPOXY COATED AND COMPLY WITH SPEC. 3301.



PAVEMENT KEYWAY DETAIL
(USE CITY KEYWAY DETAIL)

KEYWAY DIMENSION TABLE

t PAVEMENT THICKNESS	D (TOLERANCE ± 1/4")
< 7"	NO KEYWAY
7" TO 7-1/2"	3"
8" TO 10"	4"
≥ 10-1/2"	5"

KEYWAY (1-1/8" x 2" x 2-1/2") MAY BE FORMED WITH MOLD OR METAL FORM. OTHER APPROVED KEYWAY SHAPES GIVING EQUIVALENT CONSTRUCTION FEATURES MAY BE USED WITH APPROVAL OF THE ENGINEER.

LONGITUDINAL JOINT REFERENCE, DETAIL & SEALER SPECIFICATION TABLE

JOINT REFERENCE			JOINT DETAIL	JOINT SEALER SPEC	JOINT WIDTH
WITHOUT TIE BARS	WITH TIE BARS	WITH KEYWAY & TIE BARS			
L1U	L1TU		A	UNSEALED	1/8"
L1H	L1TH		B	3725	1/8"
	L2TU	L2KTU	NONE	UNSEALED	
	L2TH	L2KTH	C	3725	3/8"
L3U			NONE	UNSEALED	
L3H			C	3725	3/8"

LEGEND — EXAMPLE: L2KTH

- L = LONGITUDINAL JOINT
- NO. = JOINT REFERENCE
- 1 = PAVED CONSTRUCTION JOINT
- 2 = TIED/KEYED CONSTRUCTION JOINT
- 3 = BUTTED CONSTRUCTION JOINT
- K = KEYWAY
- T = TIE BARS
- U = UNSEALED
- H = HOT POURED

NOTES:

NORMALLY, TIED PAVEMENT WIDTHS SHALL NOT EXCEED FOUR LANES, EXCEPT BRIDGE APPROACH PANELS AND PAVEMENT TAPERS.

JOINT WIDTH TOLERANCE IS + 1/16 IN. TO - 1/32 IN.

FURNISH AND INSTALL ALL JOINT SEALER IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

TIED/KEYED AND BUTTED CONSTRUCTION JOINTS SHALL BE UNSEALED EXCEPT AS OTHERWISE NOTED IN THE PLAN OR REQUIRED BY THE ENGINEER.

SEE STANDARD PLANS 5-297.217 AND 5-297.219 FOR CONCRETE MAINLINE AND RAMP PAVEMENT.

SEE PAVING LAYOUTS IN THE PLANS FOR JOINT CLASS DESIGNATIONS TO BE USED AND SPECIAL REINFORCEMENT REQUIRED.

WHEN CURB AND GUTTER IS PLACED ADJACENT TO CONCRETE MAINLINE, THE TIEBARS SHALL BE PLACED A MINIMUM OF 2" ABOVE THE CURB AND GUTTER GRADE.

① SEE THE LONGITUDINAL JOINT REFERENCE, DETAIL & SEALER SPECIFICATION TABLE TO DETERMINE JOINT DETAIL.

② CONCRETE PAVEMENTS LESS THAN 7" SHALL USE L2TU AND L2TH JOINTS UNLESS OTHERWISE ALLOWED BY THE ENGINEER.

③ CONCRETE PAVEMENTS GREATER THAN OR EQUAL TO 7" SHALL USE L2KTU AND L2KTH JOINTS UNLESS OTHERWISE ALLOWED BY THE ENGINEER.

④ THE JOINT FACES SHALL BE CLEANED WITH WATER DURING THE SAW CUTTING OPERATION OR BY WATER BLASTING AFTER SAWING.

⑤ THE JOINT FACES SHALL BE CLEANED AND DRIED BY SANDBLASTING AND AIR BLASTING.

⑥ PRIOR TO SEALING THE JOINT, A 1/2" DIAMETER CLOSED CELL BACKER ROD CAPABLE OF WITHSTANDING SEALANT TEMPERATURES OF 400 DEGREES F. SHALL BE PLACED 1/2" BELOW THE TOP OF THE PAVEMENT.

REVISION DATE 3-22-2013

STANDARD SHEET NO.	TITLE:
5-297.221 (2 OF 2)	PAVEMENT JOINTS LONGITUDINAL (DESIGN L)
STANDARD APPROVED: APRIL 14, 2010	

Project No. 6201-3-02 J7215 Sheet 5 of 53 Sheets

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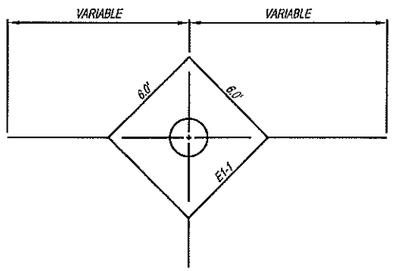
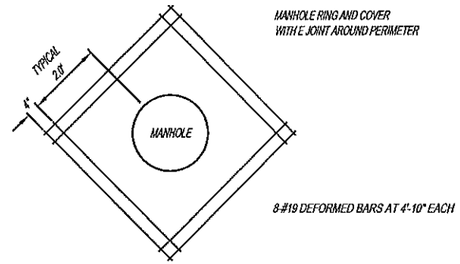


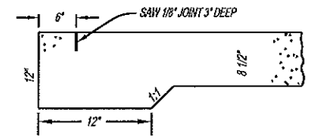
TYPICAL BOX OUT DETAIL AT MANHOLE

0 2 4 8



TYPICAL REINFORCEMENT AT MANHOLES

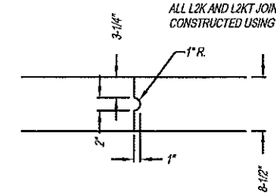
0 1 2 4



THICKENED EDGE WITH TEMPORARY HEADER

0 0.5 1 2

NOTE:
ALL L2K AND L2KT JOINTS SHALL BE CONSTRUCTED USING THIS KEYWAY.



PAVEMENT KEYWAY

0 0.5 1 2

Revision comment: —
Revised: —

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.
Date: 08/17/13 Lic. No. 24667

City of Rochester, Minnesota
Department Of Public Works
201 4th Street S.E.
Rochester, MN 55904
Phone: (507) 328-2450
FAX: (507) 328-2401

Designer: RLW
Checker: RJK
Title: DETAILS - MISCELLANEOUS

Project No. 6201-3-02 J7215
Sheet 6 of 53 Sheets

P:\PROJECTS\J-PROJ\J7215\Design\Dwgs\7215D3.dwg, DETAILS - MISCELLANEOUS, 1/8/2014 1:51:00 PM, 1:2

STORM WATER POLLUTION PREVENTION PLAN (SWPPP) NARRATIVE

PROJECT DESCRIPTION/LOCATION

The project will reconstruct the 32 ft urban bituminous roadway, including parking lanes, and curb & gutter.

The proposed improvement consists of removing the bituminous and brick pavement, utility replacements, correcting the subgrade and aggregate base, installing curb and gutter, and bituminous pavement. Sharrow route pavement markings and signage will be included from 16th Ave to 6th Ave SW.

Utility replacements includes watermain pipe and services, sanitary sewer pipe and structures, and storm sewer improvements.

See also the grading and underground plan sheets for project features.

SPECIAL AND IMPAIRED RECEIVING WATERS

THERE ARE SPECIAL OR IMPAIRED WATERS LOCATED WITHIN ONE MILE OF THE PROJECT LIMITS AND RECEIVE RUNOFF FROM THE PROJECT SITE.

NAME OF WATER BODY	TYPE (DITCH,POND,WETLAND, LAKE,STREAM,RIVER)	SPECIAL WATER	IMPAIRED WATER
ZUMBRO RIVER	RIVER	NO	YES
CASCADE CREEK	RIVER	NO	YES

SWPPP TRAINING III.A.2

THIS SWPPP WAS PREPARED BY CITY PERSONNEL THAT ARE CERTIFIED IN THE DESIGN OF CONSTRUCTION SWPPPS. COPIES OF THE CERTIFICATIONS ARE ON FILE WITH MN/DOT AND ARE AVAILABLE UPON REQUEST. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING A CERTIFIED EROSION CONTROL SUPERVISOR THAT IS RESPONSIBLE FOR OVERSEEING THE IMPLEMENTATION OF TH SWPPP.

EROSION CONTROL SUPERVISOR

IN ACCORDANCE WITH SPEC. 2573.3 A1 THE CONTRACTOR WILL PROVIDE A CERTIFIED EROSION CONTROL SUPERVISOR IN GOOD STANDING WHO IS KNOWLEDGEABLE AND EXPERIENCED IN THE APPLICATION OF EROSION PREVENTION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES. (THE EROSION CONTROL SUPERVISOR IS INCEDENTAL TO THE PROJECT)

THE EROSION CONTROL SUPERVISOR WILL WORK WITH THE PROJECT ENGINEER TO OVERSEE THE IMPLEMENTATION OF THE SWPPP AND THE INSTALLATION , INSPECTION, AND MAINTENANCE OF THE EROSION PREVENTION AND SEDIMENT CONTROL BMS BEFORE, DURING AND AFTER CONSTRUCTION UNTIL THE NOTICE OF TERMINATION (NOT) HAS BEEN FILED WITH THE MPCA.

THE EROSION CONTROL SUPERVISOR IS RESPONSIBLE FOR COMPLYING WITH ALL THE INSPECTION AND MAINTENANCE REQUIREMENTS STATED IN THE NPDES PERMIT PART IV. F. INSPECTIONS OF THE ENTIRE CONSTRUCTION SITE WILL OCCUR A MINIMUM OF ONCE EVERY SEVEN DAYS DURING ACTIVE CONSTRUCTION AND WITHIN 24 HOURS AFTER A RAINFALL EVENT GREATER THAN 0.5 INCHES IN 24 HOURS. THE EROSION CONTROL SUPERVISOR WILL THOROUGHLY INSPECT ALL EROSION PREVENTION AND SEDIMENT CONTROL BMPS TO ENSURE INTEGRITY AND EFFECTIVENESS OF EACH BMP. ALL IN SPECTIONS AND MAINTENANCE CONDUCTED DURING CONSTRUCTION MUST BE RECORDED ON THE CITY OF ROCHESTER'S WEBSITE (PERMITRACK) AND THESE RECORDS MUST BE RETAINED WITH THE SWPPP. INSPECTION REPORTS MUST BE SUBMITTED TO THE PROJECT ENGINEER IN A FORMAT THAT MEETS OR EXCEEDS THE PROJECT ENGINEERS EXPECTATIONS . RECORDS OF EACH INSPECTION AND MAINTENANCE ACTIVITY SHALL INCLUDE:

A. DATE AND TIME OF INSPECTIONS;
B. NAME OF PERSONS CONDUCTING INSPECTIONS;
C. FINDINGS OF INSPECTIONS, INCLUDING RECOMMENDATIONS FOR CORRECTIVE ACTIONS;
D. CORRECTIVE ACTIONS TAKEN INCLUDING DATES, TIMES, AND PARTY COMPLETING MAINTENANCE ACTIVITIES;
E. DATE AND AMOUNT OF ALL RAINFALL EVENTS GREATER THAN 0.5 INCHS IN 24 HOURS;
F. DOCUMENTS AND CHANGES MADE TO THE SWPPP.

SOIL TYPES

SOIL TYPES TYPICALLY FOUND ON THIS PROJECT ARE SANDY LOAM, LOAMY SAND, SILTY LOAM

LAND FEATURE CHANGES

TOTAL DISTURBED AREA: 3.3 ACRES
TOTAL EXISTING IMPERVIOUS SURFACE AREA: 2.0 ACRES
TOTAL PROPOSED IMPERVIOUS SURFACE AREA: 2.0 ACRES
TOTAL PROPOSED NET CHANGE IN IMPERVIOUS SURFACE AREA: 0.0 ACRES

PROJECT CONTACTS INFORMATION

ORGANIZATION	CONTACT NAME	PHONE
MPCA	ROBERTA GETMAN	(507) 280-2996
ROCHESTER	DOUG NELSON	(507) 328-2423
CONTRACTOR	CONTRACTOR	(000) 000-0000
STATE DUTY OFFICER		(800) 422-0798

MPCA 24 HOUR EMERGENCY NOTIFICATION: 651-649-5451
800-422-0798

CREEK WORK EROSION AND SEDIMENTATION CONTROL

1. SLOPES WITHIN 200 FEET OF A SURFACE WATER REQUIRE RAPID STABILIZATION FOR CRITICAL AREAS AS PER MN/DOT SPEC. 2575.3N.
2. USE OF FLOATING SILT CURTAINS ARE REQUIRED DOWNSTREAM OF CREEK WORK.
3. TEMPORARY ROCK BERMS SHALL BE USED TO SEPARATE WORK AREAS FROM FLOWING WATER TO MINIMIZE FILL FROM WASHING DOWNSTREAM.
4. CONCRETE WASH AREAS WILL NOT BE ALLOWED WITHIN 200 FEET OF CRITICAL AREAS.

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Revision comment: —
Revised: —
Creation Date:
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.
Date: 06/17/13 Lic. No. 24067
City of Rochester, Minnesota
Department Of Public Works
201 4th Street S.E.
Rochester, MN 55904
Phone: (507) 328-2459
FAX: (507) 328-2401
Title: STORM WATER POLLUTION PREVENTION PLAN (SWPPP) NARRATIVE
Designer: RLW
Checker: RJK
Project No. 6201-3-02 J7215
Sheet 7 of 53 Sheets

STORM WATER POLLUTION PREVENTION PLAN (SWPPP) NARRATIVE (CONTINUED)

GENERAL SWPPP NOTES FOR CONSTRUCTION ACTIVITY

1. THE CONTRACTOR WILL DEVELOP A CHAIN OF COMMAND WITH ALL OPERATORS ON THE SITE TO ENSURE THAT THE SWPPP WILL BE IMPLEMENTED AND STAY IN EFFECT UNTIL THE CONSTRUCTION PROJECT IS COMPLETE. THE ENTIRE SITE HAS UNDERGONE FINAL STABILIZATION, AND A NOTICE OF TERMINATION (NOT) HAS BEEN SUBMITTED TO THE MPCA.

2. THE CONTRACTOR WILL PREPARE WEEKLY AND EVENT DRIVEN EROSION INSPECTION ON A WEBSITE PROVIDED BY THE CITY (PERMITRACK) FOR DOCUMENTATION OF THE CONDITION OF THE ACTIVITIES AND NOTE ANY REPAIRS NEEDED AND ACTIONS TAKEN.

3. THE CONTRACTOR WILL COMPLY WITH THE REQUIREMENTS REGARDING POLLUTION PREVENTION MANAGEMENT DURING CONSTRUCTION, WHICH WILL INCLUDE, BUT NOT LIMITED TO, PROVIDING:
   A. CONCRETE WASHOUT AREAS FOR USE BY ALL SUBCONTRACTORS AND MN/DOT PERSONNEL. LOCATION OF WASHOUT AREAS MUST BE IDENTIFIED BY SIGNAGE AND MUST BE AT LEAST 200' FROM SITE PLAN REQUIREMENT AREAS OR ENVIRONMENTALLY SENSITIVE AREAS, AND UTILIZE A LEAK-PROOF CONTAINMENT FACILITY OR IMPERMEABLE LINER THAT PREVENTS RUNOFF ONTO ADJACENT SOILS. AN ENGINEERED COLLECTION SYSTEM CAN ALSO BE USED IF IT IS APPROVED BY THE PROJECT ENGINEER.
   B. SOLID WASTE COLLECTION AND REMOVAL
   C. SECONDARY CONTAINMENT
   D. SECURED HAZARDOUS WASTE STORAGE CONTAINERS
   E. CHEMICAL SPILL KITS
   F. PORTABLE RESTROOM FACILITIES THAT ARE ANCHORED TO PREVENT TIPPING

4. CHEMICALS MUST BE KEPT IN A SECURE STORAGE AREA WHEN NOT IN USE. CHEMICAL STORAGE CONTAINERS MUST HAVE SECONDARY CONTAINMENT WHEN BEING USED OR STORED ON THE PROJECT SITE. CHEMICAL SPILLS OF ANY KIND (OIL, FUEL, FERTILIZER, ETC.) MUST BE CLEANED UP AND REMOVED FROM THE SITE IMMEDIATELY. THE CONTRACTOR MUST HAVE A SPILL KIT ON SITE AT ALL TIMES.

5. BURNING OF ANY MATERIAL IS NOT ALLOWED WITHIN THE CITY OF ROCHESTER.

6. THE EROSION PREVENTION AND SEDIMENT CONTROL BMPS SHALL BE INSTALLED AS NECESSARY TO MINIMIZE EROSION FROM DISTURBED SURFACES AND CAPTURE SEDIMENT ON SITE. ALL EROSION CONTROL MEASURES SHALL BE INPLACE PRIOR TO ANY REMOVAL WORK AND/OR GROUND DISTURBING ACTIVITIES COMMENCE AND SHALL BE MAINTAINED UNTIL THE POTENTIAL FOR EROSION HAS BEEN ELIMINATED.

7. SEDIMENT CONTROL DEVICES MUST BE ESTABLISHED ON ALL DOWN GRADIENT PERIMETERS BEFORE ANY UP GRADIENT LAND DISTURBING ACTIVITIES BEGIN. SEDIMENT CONTROL DEVICES INCLUDE, BUT ARE NOT LIMITED TO:
   A. PERIMETER CONTROL SHALL BE LOCATED ON THE CONTOUR TO CAPTURE OVERLAND, LOW-VELOCITY SHEET FLOWS DOWN GRADIENT OF ALL EXPOSED SOILS AND PRIOR TO DISCHARGING TO SURFACE WATERS WITH THE BMP J-HOOKED AT A MAXIMUM OF 100 FOOT INTERVALS AND SHALL CONTAIN NO MORE THAN 1/4 ACRE OF DRAINAGE AREA.
   B. DITCH CHECKS WILL BE PLACED AS INDICATED ON THE PLANS DURING ALL PHASES OF CONSTRUCTION. TEMPORARY DITCH CHECKS WILL CONSIST OF USING ROCK DITCH CHECKS, BIOLOGS AND ROCK WEEPERS IN FRONT OF CULVERT INLETS.
      2. FILTER LOGS WILL BE PLACED DURING PERMANENT TURF ESTABLISHMENT AT THE INTERVALS IDENTIFIED IN THE PLAN.
   C. SEDIMENT DAMAGE FROM STOCKPILES WILL BE MINIMIZED BY PLACING A ROW OF SILT FENCE A MINIMUM 5 FEET FROM THE TOE.

8. STORM SEWER INLETS WILL BE PROTECTED AT ALL TIMES WITH THE APPROPRIATE INLET PROTECTION FOR EACH SPECIFIC PHASE OF CONSTRUCTION. INLET PROTECTION DEVICES MAY NEED TO BE PLACED MULTIPLE TIMES IN THE SAME LOCATION OVER THE LIFE OF THE CONTRACT. INLET PROTECTION DEVICES WILL BE PAID FOR ONCE PER INLET REGARDLESS OF THE NUMBER OF TIMES THE BMP IS PLACED. ALL STORM SEWER INLET PROTECTION DEVICES WILL BE KEPT IN GOOD FUNCTIONAL CONDITION AT ALL TIMES. IF THE PROJECT ENGINEER DEEMS AN INLET PROTECTION DEVICE TO BE NONFUNCTIONAL, IN POOR CONDITION, INEFFECTIVE OR NOT APPROPRIATE FOR THE CURRENT CONSTRUCTION ACTIVITIES IT WILL BE REPLACED WITH A SUITABLE ALTERNATIVE AT NO COST TO THE CITY OF ROCHESTER.

9. OUTLETS INTO SURFACE WATERS SHALL BE STABILIZED WITH ENERGY DISSIPATION PRIOR TO BEING CONSTRUCTED.

10. THE CONTRACTOR WILL PLACE CONSTRUCTION EXITS, AS NECESSARY, TO PREVENT TRACKING OF SEDIMENT ONTO PAVED SURFACES AND IN COMPLIANCE WITH PART IV OF THE NPDES PERMIT. CONSTRUCTION EXITS WILL BE SUFFICIENTLY SIZED AND MAINTAINED TO PREVENT TRACK OUT.

11. THE CONTRACTOR SHALL CLEAN ALL TRACKED MATERIALS ON ADJACENT ROADWAYS ON A DAILY BASIS AND AS NEEDED AT THE DISCRETION OF THE CITY ENGINEER AND/OR HIS DESIGNATED REPRESENTATIVES.

12. THE CONTRACTOR MUST USE METHODS AND OPERATIONAL PROCEDURES THAT PREVENT CONCRETE DUST, PARTICLES, SAW CUT SLURRY, PLANING WASTE AND OTHER OR FUTURE VEGETATED AREAS OR ENTERING STORMWATER CONVEYANCE SYSTEM INCLUDING INLETS AND CURB FLOW LINES.

13. ALL EXPOSED SOIL AREAS MUST BE TEMPORARILY OR PERMANENTLY STABILIZED NO MORE THAN 7 DAYS AFTER CONSTRUCTION ACTIVITY ON THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED.

14. THE CONTRACTOR SHALL COMPLY WITH THE FOLLOWING INSPECTION AND MAINTENANCE REQUIREMENTS:
   A. SILT FENCE MUST BE REPAIRED, REPLACED OR SUPPLEMENTED WHEN IT BECOMES NON-FUNCTIONAL OR SEDIMENT REACHES 1/3 THE HEIGHT OF THE SILT FENCE. REPAIRS MUST BE MADE WITHIN 24 HOURS OF DISCOVERY.
   B. INLET PROTECTION DEVICES SHOULD BE REPAIRED WHEN THEY BECOME NON-FUNCTIONAL OR SEDIMENT REACHES 1/3 THE HEIGHT AND/OR THE DEPTH OF THE DEVICE.
   C. TEMPORARY SEDIMENT BASIN MUST HAVE THE SEDIMENT REMOVED ONCE THE SEDIMENT HAS REACHED 1/2 THE STORAGE VOLUME WITHIN 72 HOURS OF DISCOVERY.
   D. TRACKED SEDIMENT MUST BE REMOVED WITHIN 24 HOURS OF DISCOVERY OF TRACKING ONTO PAVED SURFACES.
   E. ALL OTHER NON-FUNCTIONAL BMPS MUST BE REPAIRED, REPLACED, OR SUPPLEMENTED WITHIN 24 HOURS OF DISCOVERY.
   F. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL BMPS UNTIL WORK HAS BEEN COMPLETED, SITE HAS GONE UNDER FINAL STABILIZATION, AND THE NOTICE OF TERMINATION HAS BEEN SUBMITTED TO THE MPCA IN ACCORDANCE WITH PART II.B.5 OF THE CONSTRUCTION GENERAL PERMIT.

15. TEMPORARY DEWATERING ACTIVITIES MAY BE REQUIRED FOR THE UTILITY WORK. THEREFORE, IT IS POSSIBLE THAT A PERMIT FOR THE TEMPORARY APPROPRIATION OF WATERS OF THE STATE, NON-IRRIGATION FROM MN/DNR WILL BE REQUIRED FOR THIS PROJECT. THE CONTRACTOR WILL BE RESPONSIBLE FOR OBTAINING THIS PERMIT. ALL TEMPORARY DEWATERING SHALL BE DISCHARGED TO AN APPROVED LOCATION FOR TREATMENT PRIOR TO DISCHARGE TO THE RECEIVING WATER. THE CONTRACTOR IS REQUIRED TO SUBMIT SITE PLANS TO ENGINEER FOR APPROVAL PRIOR TO COMMENCING WORK ACCORDING TO SPEC. 1717.2E.

POLLUTION PREVENTION

16. IF A SPILL OCCURS, OBSERVE THE SAFETY PRECAUTIONS ASSOCIATED WITH THE SPILLED MATERIAL. STOP THE SOURCE OF THE SPILL, IF POSSIBLE. CALL THE LOCAL FIRE AND/OR POLICE DEPARTMENTS IF FIRE OR PUBLIC SAFETY HAZARDS ARE CREATED. CONTAIN THE SPILLED MATERIAL. DIRT, SAND, OR ANY SEMI IMPERMEABLE MATERIAL MAY BE USED TO CREATE A CONTAINMENT STRUCTURE TO PREVENT THE MATERIAL FROM FLOWING. REPORT THE SPILL TO THE MINNESOTA POLLUTION CONTROL AGENCY (MPCA) THROUGH THE STATE DUTY OFFICER. 24 HOUR TELEPHONE NUMBERS ARE: 651/649-5451 OR 800/422-0798. CLEANUP THE SPILLED MATERIAL AND DISPOSE OF THE WASTES PROPERLY. WITH THE EXCEPTION OF USED OIL, WASTES GENERATED FROM PETROLEUM SPILLS THAT HAVE BEEN REPORTED AND CLEANED UP IMMEDIATELY ARE EXEMPT FROM MINNESOTA'S HAZARDOUS WASTE RULES. WASTE GENERATED FROM USED OIL SPILLS MUST BE SENT TO A FACILITY FOR ENERGY RECOVERY.

17. IF CONTAMINATED SOILS ARE DISCOVERED DURING THE COURSE OF THE PROJECT, THE STATE DUTY OFFICER SHALL IMMEDIATELY BE CALLED AT THE NUMBER(S) STATED ABOVE AND EMERGENCY CONTAINMENT ACTIONS TAKEN. THE CITY SHALL ALSO BE NOTIFIED IMMEDIATELY.

18. TRASH AND CONSTRUCTION DEBRIS SHALL BE DISPOSED OF PROPERLY. PROPER MEASURES SHALL BE TAKEN BY THE CONTRACTOR TO KEEP DEBRIS FROM SURFACE WATERS DURING BRIDGE CONSTRUCTION.

Revision comment:
Revised: —
Creation Date: —

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.
Date: 08/17/12 Lic. No. 24067

City of Rochester, Minnesota
Department Of Public Works
201 4th Street S.E.
Rochester, MN 55904
Phone: (507) 328-2429
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Title: STORM WATER POLLUTION PREVENTION PLAN (SWPPP) NARRATIVE

Designer: RLW
Checker: RJK

Project No. 6201-3-02 J7215
Sheet 8 of 53 Sheets

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CONTROL & TRAVERSE POINTS

NODE ID	STATION	LOCATION	DESCRIPTION	NORTHING	ELEVATION	EASTING
1ST ST SW						
1	11+92.78	34.03 R	169073.09	615265.74	1023.78	TRAV_STA
2	15+95.10	31.63 L	169136.85	615668.37	1024	PROP_COR
3	12+57.66	33.00 L	169139.84	615330.91	1026.67	PROP_COR
4	12+16.12	32.97 R	169074.05	615289.08	1028.37	PROP_COR
5	12+16.19	33.00 R	169074.02	615289.15	1028.37	PROP_COR
6	11+31.94	32.92 L	169140.31	615205.19	1028.09	BLK_COR
7	17+47.85	32.67 L	169137.09	615821.12	1029.92	PROP_COR
8	17+48.87	33.03 R	169071.38	615821.8	1031.06	PROP_COR
9	17+95.88	33.02 R	169071.15	615868.8	1031.15	PROP_COR
10	18+39.38	33.27 L	169137.21	615912.65	1028.65	PROP_COR
11	18+39.21	32.74 L	169136.68	615912.48	1028.78	PROP_COR
12	18+89.29	32.63 L	169136.32	615962.56	1028.35	PROP_COR
13	20+35.35	32.99 R	169069.93	616108.28	1027.04	PROP_COR
14	20+53.17	23.85 R	169078.98	616126.14	1021.72	TRAV_STA
15	19+83.81	32.73 L	169135.92	616057.08	1026.85	PROP_COR
16	20+79.31	32.80 L	169135.49	616152.58	1025.46	PROP_COR
17	20+79.37	32.87 L	169135.56	616152.64	1025.48	PROP_COR
18	22+80.80	33.00 L	169134.64	616354.07	1026.85	PROP_COR
19	23+89.13	23.18 L	169124.26	616462.34	1022.84	TRAV_STA
20	22+48.30	32.92 R	169068.9	616321.22	1028.02	PROP_COR
21	27+57.73	21.34 L	169121.39	616830.87	1018.42	TRAV_STA
22	25+44.30	33.00 L	169133.61	616617.48	1021.79	PROP_COR
23	28+20.30	300.41 R	168799.5	616892.82	1029.75	BLK_COR
24	28+20.47	192.73 R	168907.18	616893.19	1024.98	PROP_COR
25	28+18.37	179.81 L	169279.72	616891.8	1015.73	PROP_COR
26	28+21.12	301.27 L	169401.17	616894.79	1013.07	BLK_COR
27	31+18.64	37.50 L	169136.84	617191.8	1017.52	BLK_COR
28	31+18.87	301.27 L	169400.6	617192.53	1010.61	BLK_COR

EXISTING QWEST COMMUNICATIONS

STATION	LOCATION	INPLACE UTILITY	LEAVE AS IS	CASTING ELEV	ADJUST	NEW CASTING EL
1ST ST SW						
12+66.90	6.50 LT	TELE MH		1021.38	X	1021.05
17+00.95	19.76 LT	TELE MH		1024.85	X	1024.48
17+13.25	13.12 LT	TELE MH		1024.08	X	1024.01
20+58.22	12.86 LT	TELE MH		1020.25	X	1019.98
23+79.84	19.52 LT	TELE MH		1022.85	X	1022.82
24+05.32	21.77 LT	TELE MH		1022.99	X	1022.63
28+02.84	20.85 LT	TELE MH		1017.82	X	1018.25
31+35.30	17.59 LT	TELE MH		1017.59	X	1017.59
31+39.81	15.00 LT	TELE MH		1017.72	X	1017.72
31+28.56	52.03 RT	TELE MH	X	1020.30		
31+40.52	41.54 RT	TELE MH	X	1019.05		
31+41.88	34.12 RT	TELE MH	X	1018.87		

EXISTING ROCHESTER PUBLIC UTILITIES

STATION	LOCATION	INPLACE UTILITY	LEAVE AS IS	RELOCATE	ADJUST	ELEV
11+23.18	22.13 LT	POWER POLE		X		
11+61.07	20.31 RT	LIGHT POLE	X			
11+70.58	19.65 LT	POWER POLE	X			
13+16.59	19.82 RT	LIGHT POLE	X			
14+80.14	20.51 RT	LIGHT POLE		X		
15+93.51	27.55 RT	ELEC MH	X			
16+46.87	19.79 RT	LIGHT POLE		X		
17+96.48	20.9 RT	LIGHT POLE	X			
19+35.81	21.29 RT	ELEC HANDHOLE	X			
19+37.73	26.97 RT	ELEC MH	X			
20+91.92	20.27 RT	LIGHT POLE		X		
22+39.67	20.23 RT	LIGHT POLE		X		
24+01.96	19.02 RT	LIGHT POLE	X			
24+53.57	27.47 RT	ELEC MH	X			
25+61.19	19.94 RT	LIGHT POLE		X		
26+93.39	20.53 RT	LIGHT POLE	X			
27+52.85	27.61 RT	ELEC MH			X	1019.60
27+98.14	40.58 RT	LIGHT POLE		X		
28+97.16	24.79 RT	LIGHT POLE	X			
30+76.69	31.15 RT	ELEC MH	X			
31+30.97	42.40 RT	LIGHT POLE		X		

NOTES
THE "LEAVE AS IS" AND "RELOCATE" COLUMNS ARE BASED UPON THE BEST INFORMATION NOT REFLECT THE ACTUAL EFFECTS ON THE UTILITIES CONSTRUCTION. ACTUAL DETERM IN THE FIELD DURING CONSTRUCTION.

UTILITIES ARE SHOWN AT APPROXIMATE LOCATIONS. THE CONTRATOR SHALL DETERMINE THE ACTUAL LOCATION OF ALL UTILITIES IN THE FIELD.

ALL UTILITY WORK SHOWN ON THIS SHEET WILL BE DONE BY OTHERS UNLESS NOTED.

ALIGNMENT DATA

CONTROL POINT	STATION	NORTHING	EASTING	DIRECTION	DISTANCE
BOP	10+00.00	169107.9715	615073.1097	S 69°44'51" E	423.57
PI	14+23.57	169106.1054	615496.6720	S 69°42'07" E	988.61
PI	24+12.38	169100.9597	616485.4705	S 69°50'54" E	370.83
PI	27+83.21	169099.9773	616856.2992	S 69°53'27" E	416.79
EOP	32+00.00	169099.1826	617273.0901		

VERTICAL CONTROL

LOCATION	ELEVATION	DESCRIPTION
11TH AVE SW & 1ST ST SW	1025.32	TOP OF HYD NUT
FRONT OF HOUSE #625	1020.53	TOP OF HYD NUT
7TH AVE SW & 2ND ST SW	1031.61	TOP OF HYD NUT

REMOVE TREES (B)

STATION LOCATION	EACH	NOTES
1ST ST SW		
11+61.90 - 21.6' LT	1	
13+94.1 - 21.1' LT	1	
15+61.4 - 20.9' RT	1	
16+24.7 - 20.4' RT	1	
17+21.3 - 21.5' LT	1	
17+34.6 - 20.8' RT	1	
17+67.1 - 21.9' LT	1	
18+17.0 - 20.1' RT	1	
20+29.6 - 20.6' LT	1	
30+92.0 - 25.1' LT	1	
TOTALS	10	

REMOVE PAVEMENT & CONCRETE (C)

STATION LOCATION		BIT PAVEMENT (SY)(1)	PAVEMENT (SY)(2)	CONCRETE PAVEMENT (SY)(3)	SIDEWALK (SY)	CURB (LF)	DRIVE (SY)
11TH AVE SW to 15+75			1,375.59				
LEFT SIDE						459.03	
RIGHT SIDE						488.76	
11TH AVE SW INTERSECTION				325.15			
6TH AVE SW INTERSECTION				246.01			
11+30	RT				20.13		
12+17.49	LT				9.76		10.90
12+60.67	RT						13.73
12+81.22	LT				3.23		
12+88.44	RT				2.80		
12+96.53	LT						8.82
13+18.44	LT				2.14		
13+45.10	RT				2.06		
13+57	LT				3.61		
13+65.32	RT						9.55
13+78.64	LT						13.76
14+00.86	LT				2.55		
14+28.33	LT				3.27		
14+49.91	RT						9.21
14+60.90	RT				1.89		
14+59.06	LT						9.34
15+75 to 20+75			1,511.66				
LEFT SIDE						500.00	
RIGHT SIDE						500.00	
14+90.99	RT						
15+49.54	LT						
15+81.56	RT						10.23
16+38.20	RT						9.26
16+47.42	LT						8.65
16+64.66	LT				2.27		
17+19.97	RT						9.48
17+35.45	LT						8.83
17+53.53	RT						9.20
18+12	LT				30.85		
18+38.60	LT						9.96
18+39.28	RT						8.18
18+87.45	RT						10.87
19+03.41	RT				2.20		
19+16.50	LT				2.57		
19+29.09	LT						9.05
19+64.11	RT				1.93		
19+84.54	LT						16.73
19+90.14	RT						9.30
20+71.94	LT						12.79
20+78.55	RT						16.62

EARTHWORK SUMMARY (A)

	1ST ST SW BETWEEN INTERSECTIONS	11TH AVE SW INTERSECTION	7TH AVE SW INTERSECTION	6TH AVE SW INTERSECTION	TOTALS
CROSS SECTION VOLUME (BM)	4,962	279	439	345	6,025
REMOVE BITUMINOUS PAVEMENT	966		90	12	1,068
REMOVE CONCRETE PAVEMENT	1,134	63	105	77	1,379
COMMON EXCAVATION (BM)	2,862	216	244	257	3,579
MATERIAL AVAILABLE (CV) (1)	2,602	197	222	234	3,254
EMBANKMENT (CV)					
TOPSOIL REQUIRED (CV)	311				311
EXCESS MATERIAL AVAILABLE (CV)	2,291	197	222	234	2,943
EXCESS MATERIAL AVAILABLE (LV) (2)	2,978	256	288	304	3,825

NOTES:
(2) 1.3 SHRINKAGE FACTOR FROM COMPACTED VOLUME (CV) TO LOOSE VOLUME (LV)

REMOVE PAVEMENT & CONCRETE (C)

STATION LOCATION		BIT PAVEMENT (SY)(1)	PAVEMENT (SY)(2)	CONCRETE PAVEMENT (SY)(3)	SIDEWALK (SY)	CURB (LF)	DRIVE (SY)
20+75 to 25+75			1,511.41				
LEFT SIDE						500.00	
RIGHT SIDE						500.00	
21+24.97	LT						10.11
21+45.26	LT				2.27		
21+76.58	LT						9.72
21+85.38	RT						9.74
22+01.81	LT				2.57		
22+47.50	RT						8.40
22+72.28	LT						10.64
23+00.87	RT				1.89		
23+18.24	LT						9.07
23+23.96	RT						9.47
23+40.86	LT				2.50		
23+67.74	LT						10.96
23+86.62	RT				3.05		
24+12.54	RT						11.24
24+32.05	LT				3.16		
24+55.27	LT						9.43
24+70.21	RT				3.04		
24+92.59	LT						10.52
25+03.88	RT						9.08
25+21.98	RT				3.14		
25+26.74	LT				3.49		
25+44.39	LT						11.22
25+50.83	RT						8.54
25+64.78	RT				2.95		
25+64.47	LT				3.46		
25+75 to 30+75			2,362.76				
LEFT SIDE						500.20	
RIGHT SIDE						558.55	
25+99.47	RT						12.10
26+33.47	LT						13.74
27+01.76	LT				2.65		
27+50	LT				19.46		
27+50	RT				26.75		
28+15	LT				26.16		
28+15	RT				30.43		
28+88.10	LT						15.71
29+51.07	RT						10.65
30+31.14	RT						16.89
30+75 to 6TH AVE SW		5.00	200.64				
LEFT SIDE						80.39	
RIGHT SIDE						74.71	
31+25	LT				16.82		
31+25	RT				16.83		
VARIOUS LOCATIONS							
11TH AVE SW TO 6TH AVE SW					100.00		
TOTAL		5	6,963	572	362	4,162	432

(1) APPROXIMATE BITUMINOUS DEPTH 4"
(2) INCLUDES REMOVAL OF 2-1/2 +- BIT, 2-1/2" BRICK PAVER AND 6-1/2"+- CONCRETE BASE
(3) 7" CONCRETE PAVEMENT WITH 4" AGG BASE

Revision comment: –
Revised: –

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.
Ronald J. Klein Date: 06/17/13 Lic. No. 24067

City of Rochester, Minnesota
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TABULATIONS (A-C)

Title:
Designer: RLW
Checker: RJK

Project No. 6201-3-02 J7215
Sheet 9 of 53 Sheets

CONSTRUCT DRIVEWAYS (D)

LOCATION		ADDRESS	TYPE	RESIDENTIAL (6") (1)	COMMERCIAL (7") (1)
1ST ST SW				(SY)	(SY)
12+17.48	LT	1017	B	12.85	
12+60.62	RT	1016-1012	B	16.78	
12+98.14	LT	1013-1009	B	12.90	
13+64.52	RT	1108-1002	B	13.42	
13+78.36	LT	1005-1001	B	17.36	
14+49.49	RT	926-930	B	20.05	
14+59.72	LT	929-925	B	11.35	
14+89.35	RT	922	B	30.43	
15+49.33	LT	921-917	B	21.74	
15+81.21	RT	918	B	19.33	
16+44.18	LT	913-907	B	18.90	
16+37.71	RT	912-908	B	16.23	
17+20.06	RT	904-902	B	12.11	
17+37.27	LT	903	B	11.68	
17+53.51	RT	858	B	11.32	
18+39.04	LT	855-851	B	13.03	
18+39.23	RT	854	B	12.28	
18+87.87	RT	850	B	11.78	
19+28.05	LT	849	B	12.62	
19+84.31	LT	845-837	B	20.35	
19+90.04	RT	842-838	B	12.78	
20+72.60	LT	835	B	14.47	
20+78.75	RT	834-826	B	20.83	
21+24.51	LT	827	B	13.33	
21+77.08	LT	821	B	12.06	
21+84.29	RT	822-818	B		24.58
22+47.41	RT	818-814	B		10.96
22+72.92	LT	815	B		13.52
23+18.11	LT	811	B	10.99	
23+24.87	RT	810-806	B	13.14	
23+67.50	LT	805-801	B	12.26	
24+12.98	RT	802-730	B	15.48	
24+53.63	LT	729	B	17.15	
24+92.75	LT	725	B	12.31	
25+03.95	RT	728-724	B	20.02	
25+42.39	LT	723-719	B	24.22	
25+52.91	RT	714	B	12.05	
26+00.44	RT	705	B	17.36	
26+33.62	LT	715-703	B		15.68
28+85.10	LT	621	B		22.61
29+57.23	RT	620-624	B		41.27
30+29.28	RT	103-6TH AVE	B		35.20
				545	164

(1) INCLUDES 4" AGGREGATE BASE

CONSTRUCT CONCRETE WALK (G)

LOCATION - OFFSET		6" (SQ FT) (1)	TRUNCATED DOMES
1ST ST SW			
11+30	LT	173.56	16
11+30	RT	173.9	16
27+50	LT	226.35	16
27+50	RT	278.15	16
28+15	LT	245.17	16
28+15	RT	246.07	16
31+25	LT	233.6	16
31+25	RT	243.6	16
TOTALS		1821	128

(1) INCLUDES 4" AGGREGATE BASE

CONSTRUCT ROADWAY - E

1ST ST SW		5" AGG. BASE (CL 5)	8" AGG. BASE (CL 5)	6" BREAKER RUN	12" GRANULAR BASE	2" 2360 TYPE LV NON-WEAR (SPWEB230B) (1)	2" 2360 TYPE LV WEAR (SPWEA230B) (1)	SAW-CUT BIT	8-1/2" CONCRETE PAVEMENT	STRUCTURAL CONCRETE (HE)	REINF. #4 BARS (EXOPY COATED) (2)	1-1/4 DOWEL BAR (EPOXY COATED)	DRILL & GROUT 1-1/4 DOWEL BAR (EPOXY COATED)	DRILL & GROUT NO. 4 REBAR (EPOXY COATED)	NOTES
FROM	TO	(CY)	(CY)	(CY)	(CY)	(TON)	(TON)	(LF)	(SY)	(CU YD)	(POUND)	(EACH)	(EACH)	(EACH)	
11TH AVE SW	15+75	41.31	343.98	305.88	88.66	173.41	138.73		265.98	62.95	59.45	93.00	62.00	64.40	
15+75	20+75		415.77	310.28		213.14	170.51								
20+75	25+75		399.90	298.43		203.04	162.43								
25+75	30+75		486.87	363.34		251.62	201.29	59.16							
30+75	6TH AVE SW	39.09	31.82	70.29	80.52	15.82	12.66	24.00	241.57	57.17	75.48		10.00	61.60	
	TOTALS	81	1679	1349	170	858	686	84	508	121	135	93	72	126	

NOTES:
(1) QUANTITIES COMPUTED AT A RATE OF 113/LBS/SQ YD/INCH
(2) QUANTITIES COMPUTED AT A RATE OF 0.668LBS/LIN FT

EROSION CONTROL & TREE PROTECTION (H)

LOCATION		TEMPORARY ROCK ENTRANCE	INLET PROTECTION	TREE PROTECTION		
1ST ST SW		EACH	EACH	TYPE 1	TYPE 2	TYPE 3
11TH AVE SW INTERSECTION		1				
11+18.9	46.0 RT		1			
11+73.15	22.17 RT					1
11+97.41	20.76 LT				1	
12+22.40	22.46 RT					1
12+50.38	20.98 LT					1
12+69.13	21.29 LT			1		
12+84.1	14.9 LT		1			
12+84.3	15.4 RT		1			
12+95.56	22.03 RT					1
13+10.85	21.60 LT			1		
13+36.45	21.75 RT					1
13+45.78	20.83 LT			1		
13+89.58	22.11 RT					1
14+16.55	21.33 LT			1		
14+32.06	21.47 RT			1		
14+41.35	20.97 LT			1		
14+66.00	19.72 RT					1
15+09.94	22.04 RT					1
15+28.38	21.66 RT					1
15+38.96	21.02 LT			1		
15+85.79	21.64 LT				1	
16+10.89	20.63 RT					1
16+16.50	20.81 LT			1		
16+55.21	19.10 LT					1
16+66.48	22.14 RT					1
16+91.12	20.85 LT				1	
17+04.88	21.01 RT					1
18+49.42	21.20 RT					1
18+51.63	21.21 LT			1		
19+00.71	20.76 RT					1
19+55.50	20.47 RT					1
20+09.96	20.06 LT					1
20+11.58	20.50 RT			1		

EROSION CONTROL & TREE PROTECTION (H)

LOCATION		TEMPORARY ROCK ENTRANCE	INLET PROTECTION	TREE PROTECTION		
1ST ST SW		EACH	EACH	TYPE 1	TYPE 2	TYPE 3
20+50.49	20.30 RT			1		
20+95.21	21.39 LT			1		
21+03.4	15.0 LT		1			
21+18.1	11.2 RT		1			
21+40.21	19.49 RT					1
21+61.64	20.89 LT					1
21+64.94	21.24 RT			1		
22+00.42	19.75 RT					1
22+10.36	22.43 RT			1		
22+30.65	22.15 LT					1
22+63.84	21.43 LT			1		
22+71.58	20.87 RT					1
22+90.04	20.93 LT					1
23+10.28	21.65 RT					1
23+31.35	21.47 LT					1
23+56.78	20.84 RT					1
23+93.84	21.88 LT					1
23+95.11	19.47 RT					1
24+41.42	21.89 LT					1
24+48.91	21.24 RT			1		
24+74.27	21.77 LT					1
24+76.23	18.73 RT					1
25+18.95	21.41 LT					1
25+31.41	21.88 RT					1
25+74.50	20.69 LT					1
25+84.86	22.56 RT					1
26+10.98	21.25 LT				1	
26+42.68	21.06 RT			1		
26+49.03	20.79 LT					1
26+77.07	20.86 LT			1		
26+78.06	21.16 RT				1	
27+20.93	21.10 LT				1	
27+22.38	20.93 RT					1
27+39.3	10.8 LT		1			
27+39.4	10.1 RT		1			
27+70.0	38.9 RT		1			
27+96.6	42.0 RT		1			
28+26.3	10.8 LT		1			
28+26.3	10.9 RT		1			
28+40.15	26.95 RT			1		
28+42.64	25.60 LT			1		
28+72.78	25.04 LT					1
28+83.49	26.26 RT			1		
29+02.60	24.84 LT					1
29+38.3	14.9 RT		1			
29+38.6	15.0 LT		1			
29+53.78	24.75 LT			1		
29+87.72	25.09 LT			1		
30+37.87	24.96 LT			1		
30+48.7	15.2 LT		1			
30+66.92	25.17 RT			1		
30+96.48	25.67 RT			1		
31+14.4	11.2 RT		1			
31+15.3	11.3 LT		1			
31+34.54	40' RT		1			
6TH AVE SW INTERSECTION		1				
TOTALS		2	17	26	6	39

CONSTRUCT CURB AND GUTTER (F)

LOCATION	TYPE B624 (LF)	NOTES
1ST ST SW		
11TH AVE SW TO 15+75		
RT SIDE	482.72	
LT SIDE	484.25	
15+75 TO 20+75		
RT SIDE	500.37	
LT SIDE	501.06	
20+75 TO 25+75		
RT SIDE	500.00	
LT SIDE	502.56	
25+75 TO 30+75		
RT SIDE	547.94	
LT SIDE	580.69	
30+75 TO 6TH AVE SW		
RT SIDE	99.38	
LT SIDE	92.61	
TOTALS	4,292	

TURF ESTABLISHMENT (I)

LOCATION		SODDING MINERAL	TOPSOIL BORROW (CV)
1ST ST SW		SQ YD	CY
11TH AVE SW TO 15+75	LT	365.63	30.47
	RT	431.42	35.95
15+75 TO 20+75	LT	407.72	33.98
	RT	405.68	33.81
20+75 TO 25+75	LT	329.44	27.45
	RT	452.62	37.72
25+75 TO 30+75	LT	659.83	54.99
	RT	621.89	51.82
30+75 TO 6TH AVE SW	LT	26.60	2.22
	RT	28.09	2.34
TOTAL		3,729	311

Revision comment: —
Revised: —

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.
Ronald J. Klun Date: 08/17/12 Lic. No. 24067

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Title: TABULATIONS (D-I)
Designer: RLW
Checker: RJK

Project No. 6201-3-02 J7215
Sheet 10 of 53 Sheets

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INPLACE STORM SEWER STRUCTURES (J)

STATION	LOCATION	STRUCT TYPE	INPLACE CASTING EL.	REPLACE CASTING (1)	NEW CASTING EL.	REMOVE MANHOLE	REMOVE CATCH BASIN	INL EL	INL EL	OUTL EL	REMARKS
11+12.33	11.59 RT	MH	1023.51	1	1023.51						
11+12.33	11.59 RT										
11+13.86	45.50 RT	MH	1023.46								
11+20.45	46.14 RT	CB	1023.89								
12+58.85	16.20 RT	CB	1020.51				1			1017.04-12" S	
12+58.90	10.70 RT	MH	1021.41			1				1016.46-18" W	
12+58.97	17.45 LT	CB	1021.25				1			1018.91-12" N	
21+03.76	13.89 LT	DI MH	1019.63			1		1015.23-10" S		1015.28-12" NW	
21+03.87	17.20 LT	CB	1019.52				1			1017.56-12" S	
21+04.35	17.69 RT	CB	1019.71				1				
27+45.06	18.42 RT	CB	1018.00				1			1015.40-12" E	
27+45.48	16.86 LT	CB	1018.64				1			1016.68-12" E	
27+62.44	38.36 RT	CB	1019.23				1			1016.85-10" N	
27+66.00	17.01 RT	MH	1019.16			1		1016.09-10" S	1015.59-12" W	1012.82-12" E&N	
27+66.37	17.52 LT	MH	1018.16			1		1014.17-12" W	1012.09-12" S	1011.16-12" N	
27+99.39	17.58 RT	MH	1018.88			1		1014.21-12" S	1014.77-8" NE	1012.66-12" E&W	
28+19.39	22.16 RT	CB	1018.17				1			1014.70-12" N	
28+20.39	20.92 LT	CB	1017.22				1			1014.74-8" SW	
31+13.46	22.71 LT	CB	1017.76				1			1014.08-12" S	
31+14.52	18.18 RT	JB				1					
31+14.52	21.34 RT	CB	1017.95				1	1014.06-12" SE		1014.06-12" N	
31+32.34	39.83 RT	CB	1018.69				1			1016.85-10" N	
			TOTALS	1		6	12				

(1) ADJUST FRAME AND RING CASTING (2506.522)

INPLACE STORM PIPE AND CULVERTS (K)

STATION	LOCATION	PIPE SIZE	PIPE TYPE	REMOVE SEWER PIPE (STORM)	REMARKS
11+13.86	45.50 RT				
11+20.45	46.14 RT				
11+12.33	11.59 RT				
12+58.90	10.70 RT	18"	RCP	146.6	
12+58.85	16.20 RT				
12+58.97	17.45 LT	12"	PVC	33.7	
21+03.76	13.89 LT				
21+04.35	17.69 RT				
21+03.87	17.20 LT	10"	VCP	31.6	
27+45.06	18.42 RT				
27+66.00	17.01 RT	12"	PVC	17.5	
27+66.00	17.01 RT				
27+62.44	38.36 RT	10"	VCP	18	
27+66.00	17.01 RT				
27+66.37	17.52 LT	12"	VCP	31.5	
27+45.48	16.86 LT				
27+66.37	17.52 LT	12"	PVC	18.6	
27+66.00	17.01 RT				
27+99.39	17.58 RT	12"	VCP	29.6	
27+99.39	17.58 RT				
28+20.39	20.92 LT	8"		39.6	
28+19.39	22.16 RT	10"		2.4	
27+99.39	17.58 RT				
31+14.52	18.18 RT	12"	VCP	311.8	
31+14.52	21.34 RT				
31+13.46	22.71 LT	2-8"	PVC	37.8	
31+14.52	21.34 RT				
31+32.34	39.83 RT	12"	RCP	24.4	
TOTAL				744	

INPLACE SANITARY SEWER STRUCTURES (L)

STATION	LOCATION	STRUCT TYPE	INPLACE CASTING EL.	REMOVE MH	REPLACE CASTING (2)	NEW CASTING EL.	REMOVE PIPE: PIPE LENGTH (LF)	REMOVE PIPE: PIPE SIZE	REMOVE PIPE: PIPE TYPE	M.H. WATERPROOFING INTERIOR (1)	REPL. CASTING	CASTING TYPE	INV EL	OUTL EL
10+99.76	0.46 LT	MH			1	1023.44				1	1	2A		
11+82.03	0.45 RT	MH	1022.65	1		1022.21	401.3	8"	VCP					1015.05-8" E
15+83.34	0.34 RT	MH	1024.14	1		1023.66	396.2	8"	VCP				1014.04-8" E&W	
19+83.45	0.16 RT	MH	1022.07	1		1021.51	395.2	8"	VCP				1013.24-8" E&W	
23+82.74	0.03 LT	MH	1022.90	1		1022.39	396.2	8"	VCP				1012.26-8" E&W	
27+82.92	0.31 RT	MH	1019.25	1		1018.48	369.2	8"	VCP				1011.16-8" E&W	
31+56.14	0.05 LT	MH	1018.11	1		1018.11							1007.49-8"	
			TOTAL	6	1		1959			1	1			

NOTES:
(1) SEE DETAIL MANHOLE WATERPROOFING INTERIOR BARRIER
(2) ADJUST FRAME AND RING CASTING (2506.522)

Revision comment: —
Revised: —

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.
Ronald J. Kolb Date: 06/17/13 Lic. No. 24067

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Title: TABULATIONS (J-L)
Designer: RLW
Checker: RJK

Project No. 6201-3-02 J7215
Sheet 11 of 53 Sheets

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SANITARY, STORM AND WATER SERVICES (M)

ADDRESS	STATION	OFFSET	WATER SIZE & TYPE	RECONSTRUCT	RECONNECT	REPLACE CURB BOX	REMARKS
SANITARY SERVICES							
1023	11+86.22	LT			1		
1016	12+38.51	RT			1		
1017	12+40.08	LT			1		
1012	12+69.32	RT			1		
1013	12+75.13	LT			1		
1009	13+11.43	LT			1		
1008	13+33.20	RT			1		
1005	13+53.78	LT			1		
1001	13+91.39	LT			1		
929	14+34.48	LT			1		
926	14+71.66	RT			1		
925	14+79.29	LT			1		
922	15+20.66	RT			1		
921	15+22.51	LT			1		
917	15+58.51	LT			1		
918	15+57.05	RT			1		
913	16+13.96	LT			1		
912	16+24.81	RT			1		
908	16+76.80	RT			1		
907	16+84.01	LT			1		
904	17+11.59	RT			1		
903	17+22.53	LT			1		
902	17+32.53	RT			1		
857	17+67.30	LT			1		
858	17+72.13	RT			1		
854	18+15.03	RT			1		
855	18+32.48	LT			1		
850	18+61.80	RT			1		
851	18+80.46	LT			1		
848	19+20.90	RT			1		
849	19+23.24	LT			1		
845	19+65.41	LT			1		
842	19+76.38	RT			1		
838	20+21.71	RT			1		
837	20+25.50	LT			1		
834	20+75.66	RT			1		
835	20+75.99	LT			1		
826	21+12.63	RT			1		
827	21+22.30	LT			1		
821	21+37.94	LT			1		
822	21+56.41	RT			1		
818	22+10.28	RT			1		
817	22+17.55	LT			1		
815	22+51.68	LT			1		
814	22+77.30	RT			1		
811	23+00.51	LT			1		
810	23+12.40	RT			1		
806	23+36.87	RT			1		
805	23+58.43	LT			1		
802	23+75.55	RT			1		
801	23+85.42	LT			1		
730	24+25.78	RT			1		
729	24+32.02	LT			1		
725	24+81.85	LT			1		
728	24+88.33	RT			1		
724	25+19.21	RT			1		
723	25+28.58	LT			1		
719	25+73.56	LT			1		
714	25+80.09	RT			1		
715	26+00.50	LT			1		
703	27+08.08	LT			1		
625	28+36.13	LT			1		
624	28+51.91	RT			1		
620	29+19.35	RT			1		
621	29+57.20	LT			1		
611	29+93.30	LT			1		
603	30+87.02	LT			1		
103-6TH AVE SW	30+92.29	RT			1		
			TOTALS	0	68		

SANITARY, STORM AND WATER SERVICES (M)

ADDRESS	STATION	OFFSET	WATER SIZE & TYPE	RECONSTRUCT	RECONNECT	REPLACE CURB BOX	REMARKS
WATER SERVICES							
1023	11+60.80	LT	3/4' CU		1		
1016	12+37.00	LT	3/4" CU		1		
1017	12+38.12	LT	??		1		
1012	12+70.62	LT	3/4" CU		1		
1013	12+73.17	LT	1" CU		1		
1009	13+09.54	LT	3/4" CU		1		
1008	13+31.61	LT	3/4" CU		1		
1005	13+81.07	LT	3/4" LEAD	1			
1001	13+82.57	LT	3/4" LEAD	1			
929	14+32.51	LT	3/4" CU		1		
926	14+76.68	LT	3/4" LEAD	1			
925	14+77.32	LT	3/4" CU		1		
922	15+19.37	LT	3/4" CU		1		
921	15+20.54	LT	3/4" CU		1		
917	15+53.96	LT	3/4" LEAD	1			
918	15+62.48	LT	1" CU	1			
913	16+12.05	LT	3/4" CU		1		
912	16+23.30	LT	3/4" CU	1			
908	16+75.35	LT	3/4" CU	1			
907	16+82.04	LT	3/4" CU		1		
904	17+15.00	LT	3/4" LEAD	1			
903	17+20.56	LT	3/4" LEAD	1			
902	17+30.90	LT	3/4" LEAD	1			
857	17+65.32	LT	3/4" CU		1		
858	17+70.70	LT	3/4" CU		1		
854	18+13.39	LT	3/4" LEAD	1			
855	18+30.49	LT	1" CU		1		
850	18+60.36	LT	3/4" CU		1		
851	18+79.03	LT	3/4" CU		1		
848	19+19.23	LT	3/4" CU		1		
849	19+21.27	LT	3/4" LEAD	1			
845	19+63.57	LT	3/4" LEAD	1			
842	19+74.89	LT	??		1		
838	20+20.21	LT	??		1		
837	20+23.61	LT	??		1		
834	20+74.24	LT	??		1		
835	20+77.71	LT	3/4" CU		1		
826	21+11.13	LT	3/4" CU		1		
827	21+20.33	LT	3/4" CU		1		
821	21+35.97	LT	3/4" CU		1		
822	21+54.90	LT	3/4" LEAD	1			
817	22+15.63	LT	3/4" LEAD	1			
818	22+20.80	LT	3/4" LEAD	1			
815	22+57.93	LT	1-1/2" CU		1		
814	22+81.43	LT	3/4" CU		1		
810	23+10.90	LT	??	1			
811	23+16.38	LT	3/4" CU		1		
805	23+18.29	LT	3/4" CU	1			
806	23+35.40	LT	1" CU		1		
805	23+46.83	LT	3/4" CU		1		
802	23+74.00	LT	4" DIP				SEE W-22 IN WATERMAIN TABULATION
801	23+83.45	LT	3/4" LEAD	1			
730	24+24.28	LT	3/4" CU	1			
729	24+30.27	LT	1" CU		1		
725	24+79.93	LT	3/4" CU		1		
728	24+86.83	LT	3/4" GALV	1			
724	25+17.71	LT	3/4" CU		1		
723	25+26.64	LT	1" CU		1	1	
719	25+71.61	LT	3/4" CU		1		
714	25+78.59	LT	3/4" CU		1		
715	25+98.55	LT	??	1		1	
705	26+75.05	19.6 RT	1" CU				ABANDONED
703	27+06.24	LT	1" CU		1		
625	28+34.19	LT	3/4" CU		1		
624	28+50.42	LT	3/4" CU				ABANDONED
620	29+17.88	LT	3/4" CU				ABANDONED
621	29+55.20	LT	6" CIP				SEE W-37 IN WATERMAIN TABULATION
611	29+91.24	LT	3/4" CU		1		
603	30+85.47	LT	1-1/2" CU		1		
103-6TH AVE SW	30+90.79	LT	6" DIP				SEE W-38 IN WATERMAIN TABULATION
			TOTALS	22	42	2	

Revision comment: —

Reviewed: —

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.

Date: 08/17/12 Lic. No. 24667

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Department Of Public Works
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TABULATIONS (M)

Title:

Designer: RLW

Checker: RJK

Project No. 6201-3-02 J7215

Sheet 12 of 53 Sheets

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INPLACE WATERMAIN (N)

STATION	LOCATION	TYPE	REMOVE GATEVALE	REMOVE HYDRANT	ADJ. CURB STOP	REMOVE CURB BOX	REMOVE PIPE (LF)	REMARKS
1ST ST SW								
10+88.6	6.0 LT	6" PIPE					44	
11+46.5	9.5 LT							
10+97.5	12 RT	12" PIPE					18	
10+97.74	17.62 RT	10" GV	1					
11+33.0	6.0 LT	6" GV	1					
11+35.60	19.25 LT	6" GV						
11+35.60	22.2 LT	HYD						
11+48.36	9.6' LT	6" GV	1					
13+80.2	23.9 LT	CB				1		
13+83.5	23.6 LT	CB				1		
15+54.0	24.5 LT	CB				1		
16+18.78	15.46 LT	6' GV	1					
16+29.84	21.6 LT	HYD		1				
17+20.7	22.1 LT	CB				1		
19+21.4	22.9 LT	CB				1		
19+56.96	15.10 LT	6" GV	1					
19+58.51	20.84 LT	HYD		1				
21+55.0	24.3 RT	CB				1		
23+37.40	15.40 LT	6" GV	1					
23+46.92	24.0 LT	CB				1		
23+51.62	21.73 LT	HYD		1				
23+83.57	24.2 LT	CB				1		
24+24.28	29.1 RT	CB				1		
24+86.83	23.9 RT					1		
25+26.8	24.5 LT	CB				1		
25+98.7	24.1 LT	CB				1		
27+38.53	23.71 RT	6" GV	1					
27+60.79	8.83 LT	6" GV	1					
27+74.84	23.32 RT	10" GV	1					
28+24.37	23.16 LT	6" GV	1					
28+24.42	27.66 LT	HYD		1				
29+55.21	7.71 LT	6" GV						
31+46.87	22.32 RT	10" GV						
31+80.7	5.2 LT	6" GV	1					
31+59	5.0 LT	6" PIPE					33	
31+92.8	5.0 LT							
		TOTALS	11	4		12	95	

CONSTRUCT SANITARY SEWER STRUCTURES (O)

NO.	STATION	LOCATION	TYPE 3 6'-10'	TYPE 3 10'-13'	CAST. EL.	CAST ASSEM	C-INV EL	REMARKS
1	11+82.00	C.L.	1		1022.21	2A	1015.05-8" E	
2	15+83.30	C.L.	1		1023.66	2A	1013.77-8" E&W	
3	19+83.50	C.L.	1		1021.51	2A	1012.77-8" E&W	
4	23+82.70	C.L.		1	1022.39	2A	1010.58-8" E&W	
5	27+87.90	C.L.	1		1018.22	2A	1008.97-8" E&W	
6	31+56.10	C.L.		1	1018.1	2A	1007.49-8" W&N	
		TOTALS	4	2				

CONSTRUCT SANITARY SEWER PIPE (P)

FROM	TO	8" ALT.	SLOPE (%) C.C.	REMARKS
11+82.00	15+83.30	401.30	0.29	
15+83.30	19+83.50	396.20	0.40	
19+83.50	23+82.70	395.20	0.40	
23+82.70	27+87.90	396.20	0.41	
27+87.90	31+56.10	369.20	0.40	
31+56.10				
TOTALS		1959		

CONSTRUCT STORM SEWER PIPE (R)

FROM	TO	12" RCP C.C. LENGTH (FT)	18" RCP C.C. LENGTH (FT)	SLOPE (%) C. TO C.	REMARKS
S-1	S-2		174.40	0.46	
S-2	S-3	26.17		3.59	
S-2	S-4	4.17		41.73	
S-5	S-6	31.33		3.03	
S-10	S-7	30.47		5.74	
S-10	S-11	21.31		0.90	
S-10	S-9	27.82		9.35	
S-11	S-8	28.00		6.43	
S-10	S-12		25.98	0.49	
S-12	S-13	27.82		9.35	
S-12	S-14		30.36	0.49	
S-14	S-15	23.34		1.00	
S-14	S-17	111.48		0.49	
TOTALS		332	231		

CONSTRUCT STORM SEWER STRUCTURES (Q)

NO.	STATION	LOCATION	TYPE 1	TYPE 4	CONNECT TO INPL. MH	CONNECT TO INPL. STORM SEWER	CAST ASSEM	CASTING EL.	T.S. EL	T.C. ELEV	DEPTH	C-INL EL	C-INL EL	C-OUTL EL	C-INV EL	REMARKS
S-1	11+12.33	11.59 RT			1		2A	1023.51			9.09	1014.53 18" E		1014.42 18" N		
S-2	12+84.13	10.70 RT		1			2A	1021.47	1020.65		6.33	1015.54 12" N&S		1015.14 18" W		
S-3	12+84.13	15.67 LT	1				B	1020.48		1021.13	4.00			1016.48 12" S		
S-4	12+84.13	15.67 RT	1				B	1021.28		1021.93	4.00			1017.28 12" N		
S-5	21+03.47	15.67 LT	1				B	1019.36		1020.01	4.08	1015.28 12" VCP NW		1015.28 12"S		
S-6	21+18.20	11.74 RT	1				B	1020.13		1020.78	4.00			1016.13		
S-7	27+39.68	11.67 RT	1				B	1018.54		1019..19	4.00			1014.54 12" E		
S-8	27+39.75	11.67 LT	1				B	1018.00		1018.65	4.00			1014.00 12" E		
S-9	27+69.18	38.82 RT	1				B	1018.99		1019.64	4.00			1014.99 12" N		
S-10	27+70.18	11.00 RT		1			2A	1018.65	1017.73		5.86	1012.79 12" W	1012.89 12" N&S	1012.39 18" N&E		
S-11	27+67.44	10.13 LT		1			2A	1018.15	1017.23		5.95	1012.20 12" W&S		1012.20 18" S		
S-12	27+69.18	11.00 RT		1			2A	1018.45	1017.53		5.93	1013.02 12" S			1012.52 18" E&W	
S-13	27+96.82	41.69 RT	1				B	1018.80		1019.45	4.00			1014.80 12" N		
S-14	28+26.52	11.67 RT	1				B	1017.87		1018.52	4.97	1013.32 N			1012.90 18" E&W	USE ALTERNATE TOP SLAB (SDP 1-04)
S-15	28+26.55	11.67 LT	1				B	1017.33		1017.98	3.77			1013.56 12" S		
S-16	29+38.00	15.67 LT	1				B	1016.97		1017.62	2.75			1014.22 12" S		
S-17	29+38.00	11.00 RT		1			2A	1018.04	1017.12		4.14	1013.90 12" N&S		1013.90 18"W		
S-18	29+38.00	15.67 RT	1				B	1017.81		1018.46	3.67			1014.14 12" N		
S-19	30+48.15	11.00 RT		1			2A	1018.00	1017.08		4.27	1013.73 12" N			1013.73 18" E&W	
S-20	30+48.16	15.67 LT	1				B	1016.99		1017.64	2.94			1014.05 12" S		
S-21	31+14.53	18.45 RT		1			2A	1018.83	1017.91	1018.72	4.77				1014.06 ALL DIRECTIONS	
S-22	31+14.54	11.67 RT	1				B	1018.07		1018.72	3.94			1014.13 12" N&S		
S-23	31+14.54	11.67 LT	1				B	1017.57		1018.22	3.20			1014.37 12" S		
S-24	31+34.50	39.92 RT	1				B	1018.63		1019.28	4.00			1014.63 12" NW		
S-25	31+39.75	18.7 RT				1									1014.46 12"	
			16	7	1	1										

Revision comment: —
Revised: —

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.
Date: 09/17/13 Lic. No. 24957

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Title: TABULATIONS (N-R)

Designer: RLW
Checker: RJK

Project No. 6201-3-02 J 7215
Sheet 13 of 53 Sheets

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CONSTRUCT WATERMAIN PIPE (S)

FITTING NO.	STATION	LOCATION	W.A. STATIONING	DESCRIPTION	WEIGHT (LBS)	HYDRANT 6"	HYDRANT B.O. EL.	GATEVALVE SIZE 4"	GATEVALVE SIZE 6"	GATEVALVE SIZE 8"	GATEVALVE SIZE 12"	GATEVALVE SIZE 16"	PIPE SIZE AND TYPE 4" DIP (L.F.)	6" DIP (L.F.)	8" DIP (L.F.)	12" DIP (L.F.)	16" DIP (L.F.)	TO	REMARKS
W-1	10+92.35	17.73 RT	10+92.35	16" X 10" REDUCER	124												9.11	W-2	
		17.73 RT		45D BEND-16"	202														
	10+94.46	15.60 RT		16" GV & BOX								1							
W-2	10+98.82	11.21 RT	11+01.54	16" X 12" TEE	280												4.12	W-2A	
		9.09 RT		12" GV & BOX							1								
W-2A	11+01.74	8.26 RT	11+05.66	45D BEND-16"	202												10.76	W-2B	
W-2B	11+09.29	0.64 RT	11+16.42	45D BEND-16"	202												6.53	W-3	
W-3	11+13.89	4.00 LT	11+43.12	45D BEND-16"	202												21.71	W-4	
W-4	11+35.60	4.00 LT	11+64.83	16" X 6" TEE	228												366.72	W-7A	
		4.00 LT		6" SLEEVE	36														
W-5	11+92.03	4.00 LT	12+21.28	WATERMAIN P.I.															
W-6	12+32.01	1.50 LT	12+61.34	WATERMAIN P.I.															
W-7A	15+02.25	1.50 LT	15+31.55	16" GV & BOX								1					3.00	W-7	
W-7	15+05.25	1.50 LT	15+34.55	16" X 6" TEE	228												381.39	W-12	
		19.90 LT		6" GV & BOX					1					18.40					
		22.90 LT		6" HYDRANT		1								3.00					
W-8	15+33.32	1.50 LT	15+62.62	WATERMAIN P.I.															
W-9	15+73.29	4.00 LT	16+02.57	WATERMAIN P.I.															
W-10	15+93.29	4.05 LT	16+22.57	WATERMAIN P.I.															
W-11	16+33.28	1.50 LT	16+62.63	WATERMAIN P.I.															
W-12	18+86.48	1.50 LT	19+15.83	16" GV & BOX								1					3.00	W-13	
W-13	18+89.48	1.50 LT	19+18.83	16" X 6" TEE	228									18.40			340.53	W-18	
		19.90 LT		6" GV & BOX					1					3.00					
		22.90 LT		6" HYDRANT		1													
W-14	19+33.47	1.50 LT	19+62.81	WATERMAIN P.I.															
W-15	19+73.44	4.00 LT	20+02.86	WATERMAIN P.I.															
W-16	19+93.44	4.00 LT	20+22.86	WATERMAIN P.I.															
W-17	20+33.42	1.50 LT	20+62.92	WATERMAIN P.I.															
W-18	22+29.85	1.50 LT	22+59.35	16" X 6" TEE	228												10.35	W-19A	
		1.50 RT		6" GV & BOX					1					3.00					
		19.0 RT		6" SLEEVE	36									17.50					
W-19A	22+40.26	1.50 LT	22+69.76	16" GV & BOX								1					3.00	W-19	
W-19	22+43.26	1.50 LT	22+72.76	16" X 6" TEE	228												128.81	W-21	
		19.90 LT		6" GV & BOX					1					18.40					
		22.90 LT		6" HYDRANT		1								3.00					
W-20	23+32.03	1.50 LT	23+61.52	WATERMAIN P.I.															
W-21	23+72.00	4.00 LT	24+01.57	WATERMAIN P.I.					1								2.00	W-22	
W-22	23+74.00	4.00 LT	24+03.57	16"X 6" TEE	228												129.04	W-25	
		2.00 LT		6" X4" REDUCER	24														
		3.5 RT		4" GV & BOX				1					7.00						
		19.4 RT		4" SLEEVE	20								16.40						
W-23	23+92.00	4.00 LT	24+21.57	WATERMAIN P.I.															
W-24	24+31.98	1.50 LT	24+61.62	WATERMAIN P.I.															
W-25	25+02.97	1.50 LT	25+32.61	16" X 6" TEE	228												147.03	W-26	
		19.90 LT		6" GV & BOX					1										
		22.90 LT		6" HYDRANT		1													
W-26	26+50	1.50 LT	26+79.64	16" GV & BOX								1					79.31	W-27	
W-27	27+29.32	1.50 LT	27+58.95	WATERMAIN P.I.													3.92	W-28	
W-28	27+33.22	1.72 LT	27+62.87	16" X 6" TEE	228												12.51	W-30	
		3.30 RT		6" GV & BOX					1					19.95					
		10.7 RT		45D BEND - 6"	32														
W-29	27+38.54	15.99 RT		45D BEND - 6"	32									9.22					
		25.21 RT		6" SLEEVE	36														
W-30	27+45.72	2.41 LT	27+75.38	16" GV & BOX								1					28.56	W-31	
W-31	27+74.24	4.00 LT	28+03.94	WATERMAIN P.I.													3.00	W-32	
W-32	27+77.21	4.00 LT	28+06.94	16" X 8" TEE	248												178.06	W-39	
		38.64 LT		8"X6" TEE											34.55				
		44.22 LT		8"X4" TEE											5.68				
		50.22 LT		8" GV &BOX						1					6.00				
		53.0 LT		8" PLUG	45										2.77				
W-33	27+60.81	44.23 LT		90D BEND - 4"	27								13.43					W-33	
W-34	27+74.24	44.22 LT											3.00					W-31	
W-35	28+04.26	38.51 LT		6" GV & BOX					1								27.00	W-31	
W-36	28+07.26	38.51 LT		6" HYDRANT		1											3.00	W-34	
W-37	27+93.22	4.00 LT	28+22.94	WATERMAIN P.I.															
W-38	28+33.19	1.50 LT	28+62.99	WATERMAIN P.I.													122.01	W-38	
W-39	29+55.20	1.50 LT	29+85.00	16" X 6" TEE	228									6.20			135.59	W-40	
W-40	30+90.79	1.50 LT	31+20.59	16" X 6" TEE	228												30.23	W-41	
		3.50 RT		6" GV & BOX					1					5.00			3.00	W-42	
		23.75 RT		6" SLEEVE	36									20.25					
W-41	31+21.02	1.50 LT	31+50.82	16" GV & BOX								1							
W-42	31+24.02	1.50 LT	31+53.82	45D BEND - 16"	202												13.56	W-43	
W-43	31+36.54	11.0 RT	31+64.38	45D BEND - 16"	202												13.28	W-44	
W-44	31+46.88	11.0 RT	31+77.66	16" X 12" TEE	280												15.69	W-45	
		11.0 RT		16" X 12" REDUCER	124														
		5.18 LT		12" SLEEVE	76											13.27			
W-45	31+59.78	11.0 RT	31+93.35	45D BEND - 16"	202												18.73	W-46	
W-46	31+75.82	5.15 LT	32+12.08	45D BEND - 16"	202												13.08	W-47	
W-47	31+88.92	5.20 LT	32+25.16	16" GV & BOX								1							
				16" X 10" REDUCER	124														
					5476	5		1	9	1	1	8	40	146	49	14	2268		TOTALS

SALVAGE AND INSTALL SIGNS (T) TYPE C & D

LOCATION		LT	RT
1ST ST SW			
11TH AVE SW	15+75	3	1
15+75	20+75	3	
20+75	25+75	3	
25+75	30+75	1	4
30+75	6TH AVE SW	5	3
		15	8
	TOTAL	23	

STRIPING TABULATIONS (U)

STATION FROM	STATION TO	A 4" SOLID LINE WHITE	E 4" BROKEN LINE YELLOW	F BICYCLE SHARROW SYMBOLS	L CROSSWALK BLOCKS
		LIN FT	LIN FT	EACH	SQ FT
1ST STSW					
16TH AVE SW	13TH AVE SW	845	140	6	113
13TH AVE SW	12TH AVE SW	652	110	4	
12TH AVE SW TO 11TH AVE SW		828	130	6	
11TH AVE INTERSECTION					518
11TH AVE SW	7TH AVE SW	1935	330	14	
7TH AVE SW	6TH AVE SW	370	70	2	
6TH AVE INTERSECTION					90
	TOTALS	4630	780	32	721

FURNISH & INSTALL SIGN TYPE C (V)

LOCATION	PANEL DESIGNATION NUMBER	PANEL LEGEND	REMARKS	QUANTITY 1ST ST SW	PANEL SIZE (IN)	PANEL AREA (SQ FT)
16TH AVE SW TO 11TH AVE SW						
RIGHT	W16-1AP	SHARE THE ROAD		1	24X24	4.00
	W11-1	BICYCLE CROSSING		1	30X30	6.25
	D11-C	TO DOWNTOWN	REPLACE "BIKE ROUTE" WITH "TO DOWNTOWN"	1	24X18	2.66
LEFT	W16-1AP	SHARE THE ROAD		1	24X24	4.00
	W11-1	BICYCLE CROSSING		1	30X30	6.25
	D11-C	TO DOWNTOWN	REPLACE "BIKE ROUTE" WITH "TO DOWNTOWN"	1	24X18	2.66
11TH AVE SW TO 6TH AVE SW						
RIGHT	W16-1AP	SHARE THE ROAD		1	24X24	4.00
	W11-1	BICYCLE CROSSING		1	30X30	6.25
	D11-C	TO DOWNTOWN	REPLACE "BIKE ROUTE" WITH "TO DOWNTOWN"	1	24X18	2.66
LEFT	W16-1AP	SHARE THE ROAD		1	24X24	4.00
	W11-1	BICYCLE CROSSING		1	30X30	6.25
	D11-C	TO DOWNTOWN	REPLACE "BIKE ROUTE" WITH "TO DOWNTOWN"	1	24X18	2.66
			TOTAL	12		52

Revision comment: —
Revised: —

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.
Date: 06/17/13 Lic. No. 24667

City of Rochester, Minnesota
Department Of Public Works
201 4th Street S.E.
Rochester, MN 55904
Phone: (507) 328-2450
FAX: (507) 328-2401

Title: TABULATIONS (S-V)

Designer: RLW
Checker: RJK

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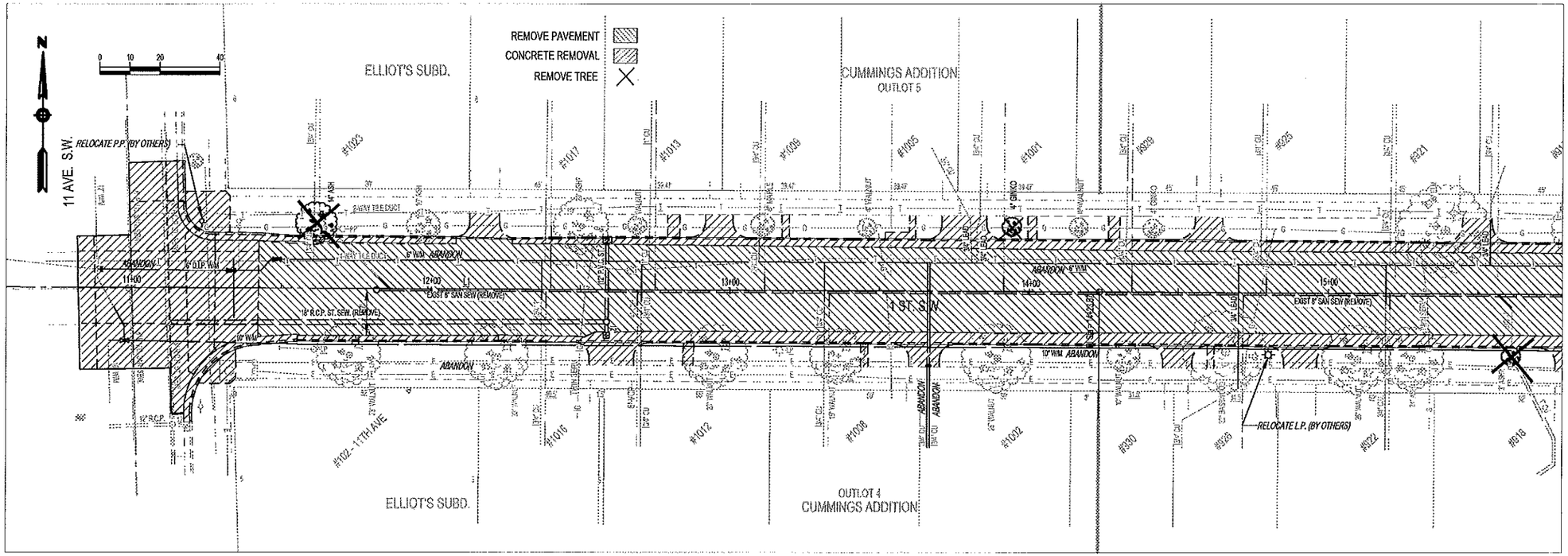

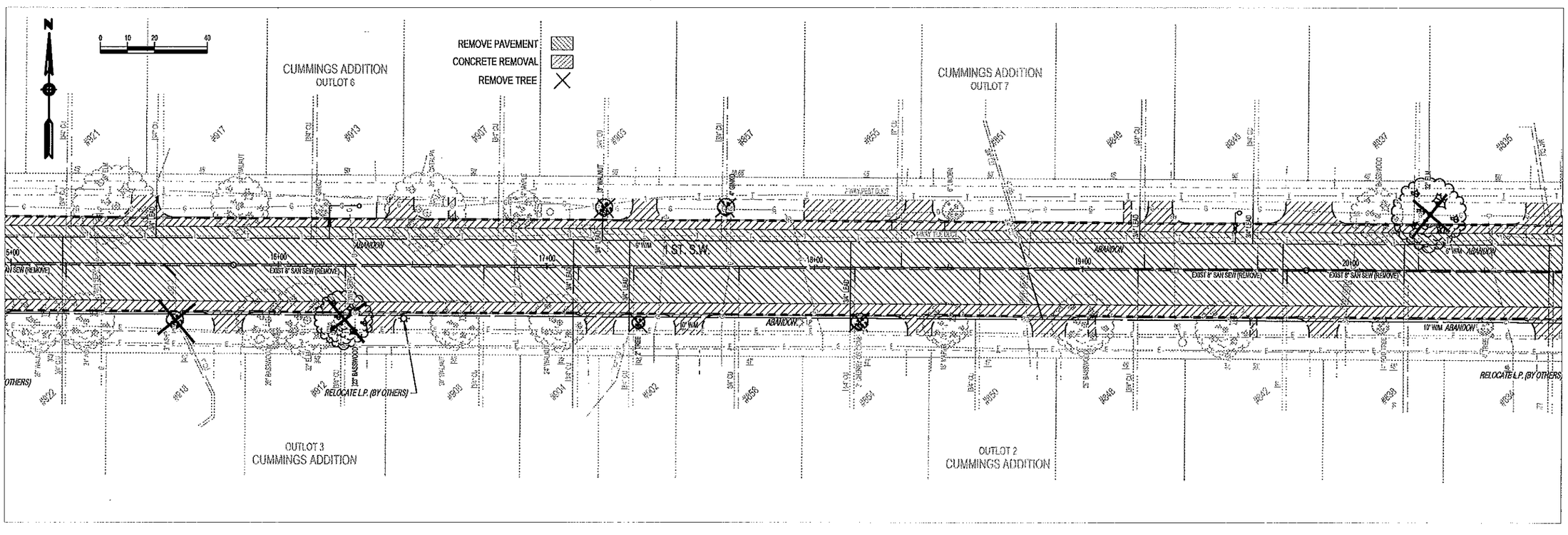

Revision comment: —

Revised: —

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.

Date: 06/17/13 Lic. No. 24067

City of Rochester, Minnesota
Department Of Public Works
201 4th Street S.E.
Rochester, MN 55904
Phone: (507) 328-2459
FAX: (507) 328-2401

Title: REMOVALS - 11TH AVE SW TO STA 20+75

Designer: RLW

Checker: RJK

Project No. 6201-3-02 J7215

Sheet 15 of 53 Sheets

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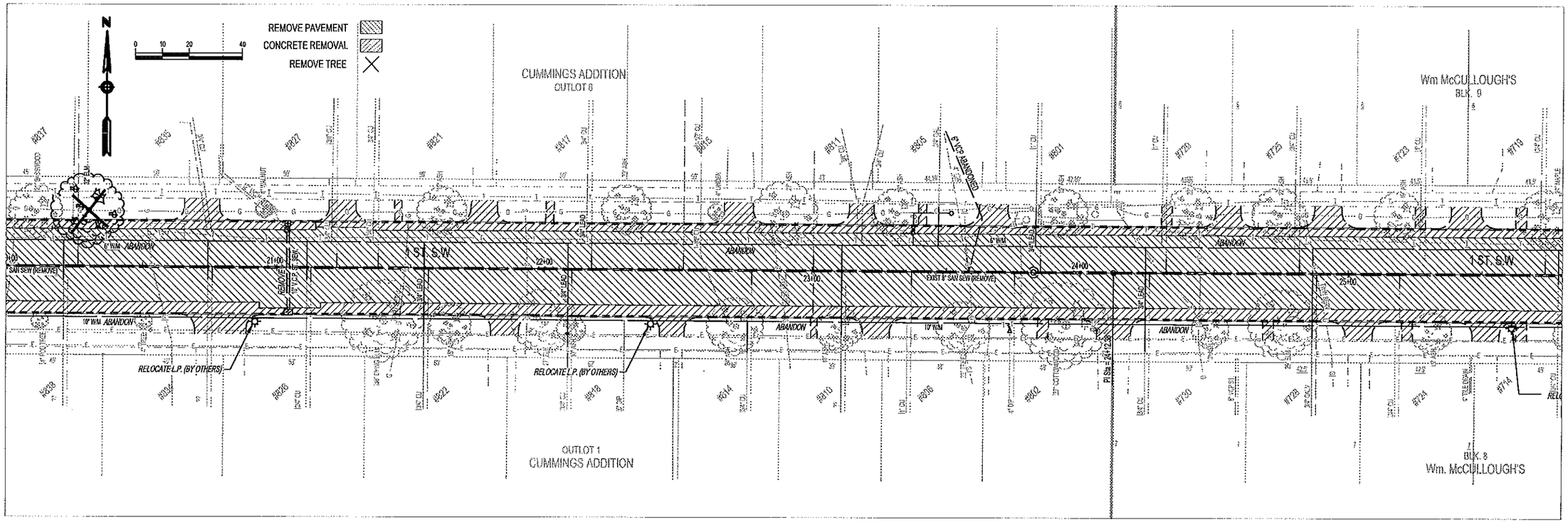
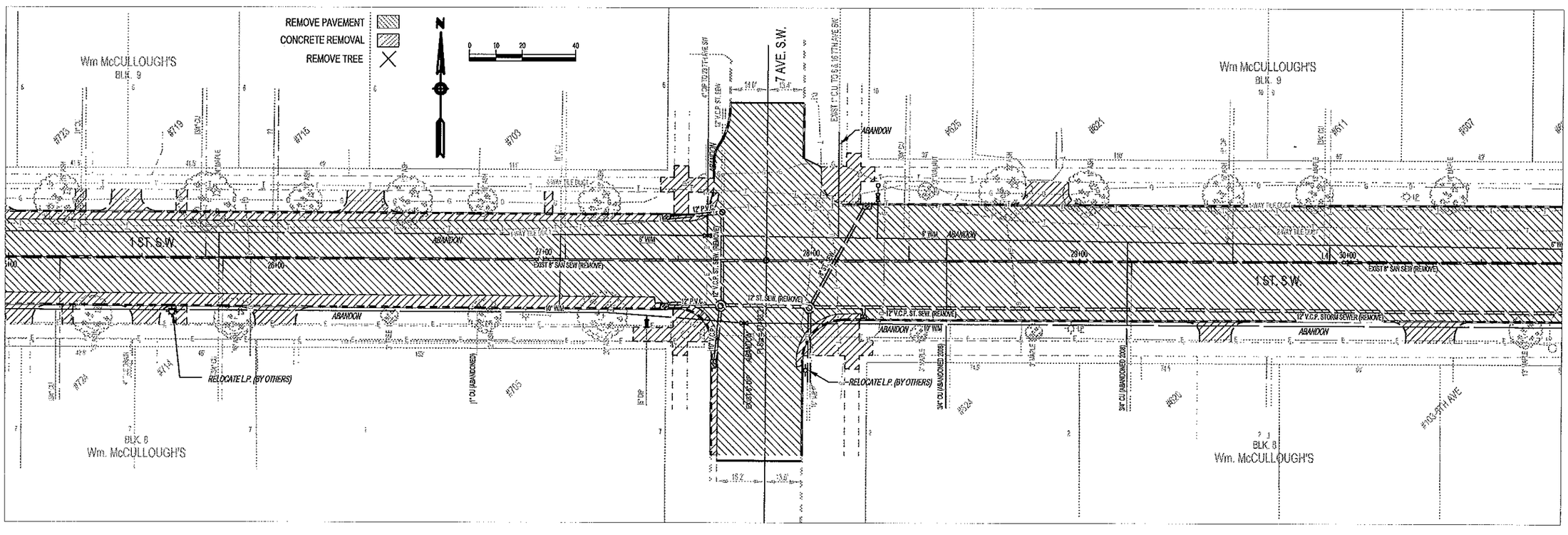




Revision comment: —

Revised: —

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.

Date: 08/17/13 Lic. No. 24667

City of Rochester, Minnesota
Department Of Public Works

201 4th Street S.E.
Rochester, MN 55904
Phone: (507) 328-2450
FAX: (507) 328-2401

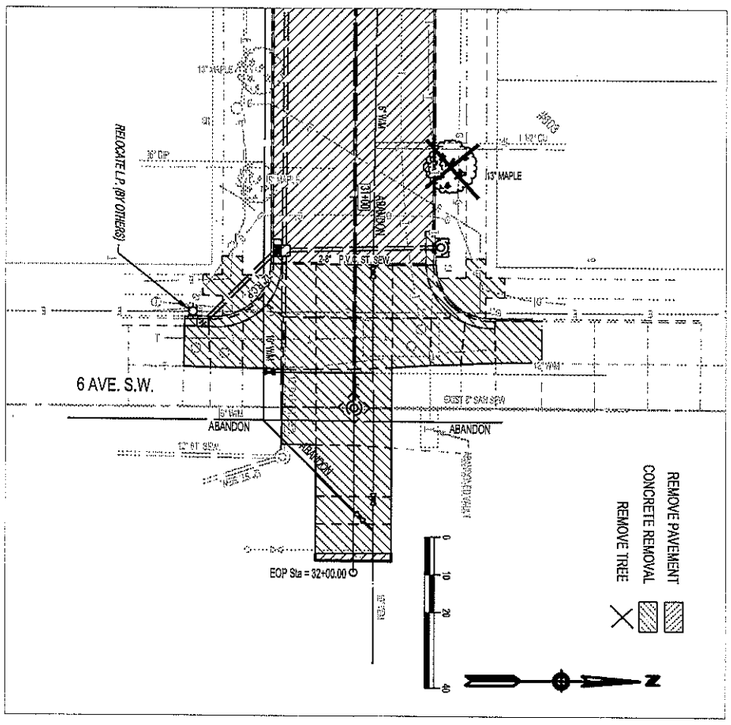
Title: REMOVALS - STA 20+00 TO 30+75

Designer: RLW

Checker: RJK

Project No. 6201-3-02 J7215

Sheet 16 of 53 Sheets



Project No. 6201-3-02 J7215 Sheet 17 of 53 Sheets	Designer: RLW Checker: RJK	Title: REMOVALS - STA 30+00 TO 6TH AVE SW	City of Rochester, Minnesota Department Of Public Works	201 4th Street S.E. Rochester, MN 55904 Phone: (507) 328-2450 FAX: (507) 328-2401	Revision comment: — Revised: — 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. Russell J. Klun Date: 06/17/13 Lic. No. 24687

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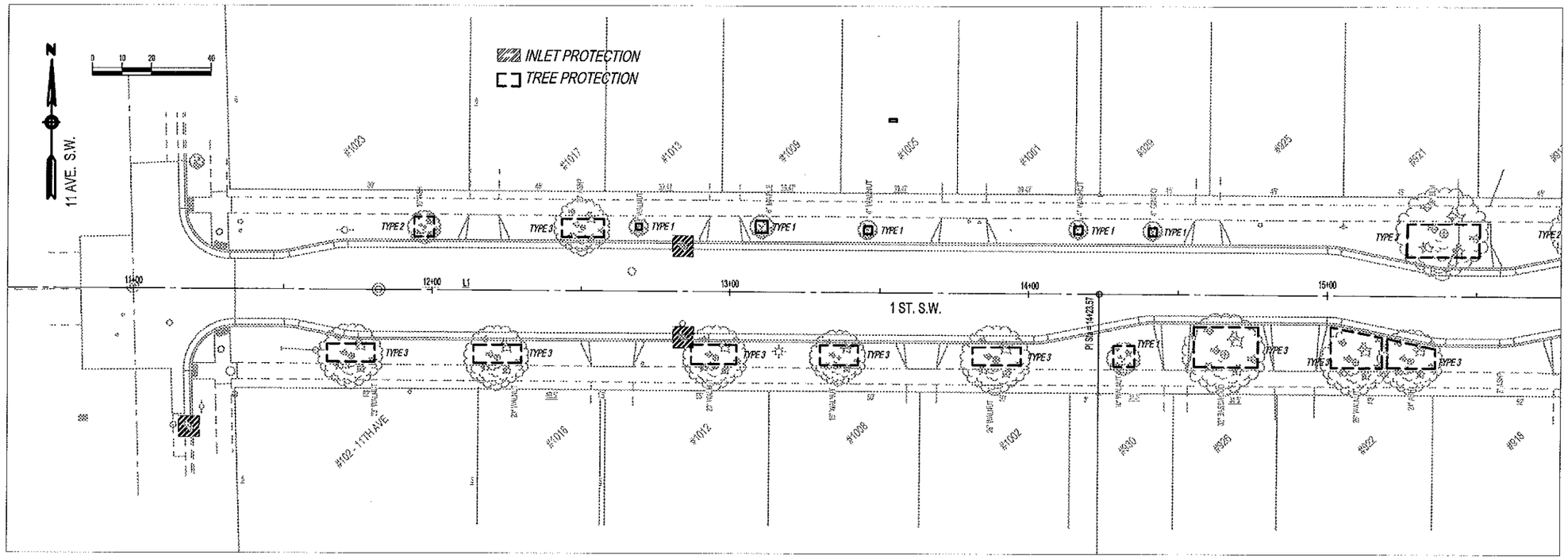

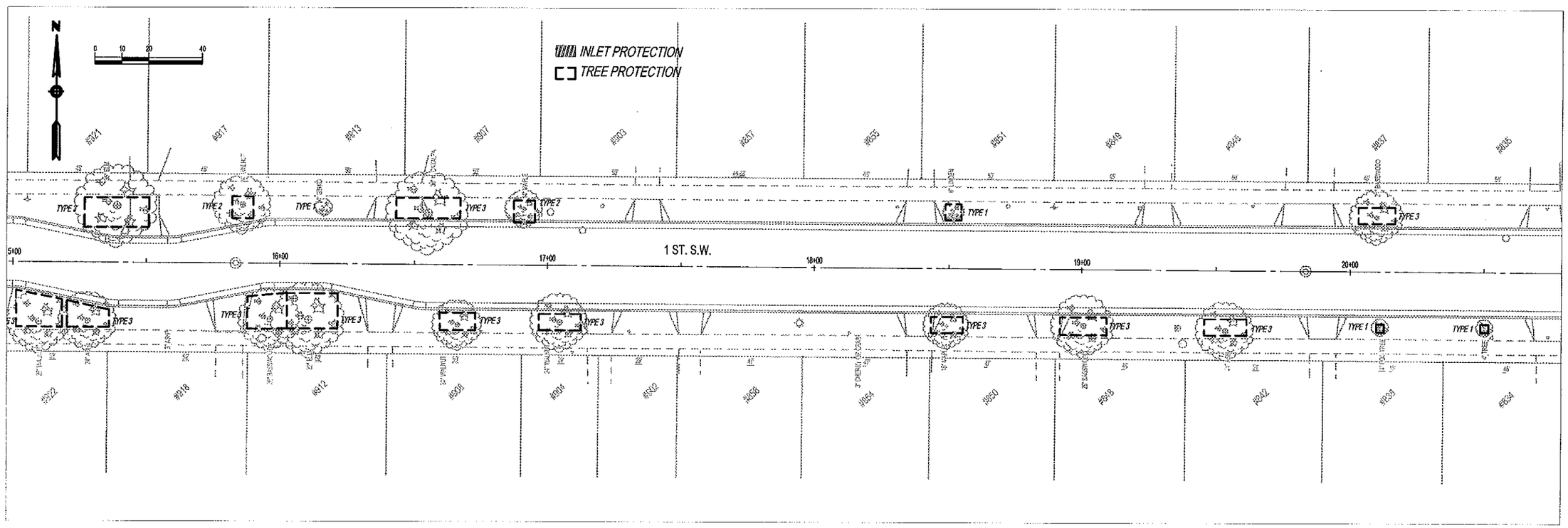

Revision comment: —

Revised: —

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.

Date: 06/17/13 Lic. No. 24667

City of Rochester, Minnesota
Department Of Public Works

201 4th Street S.E.
Rochester, MN 55904
Phone: (507) 328-2450
FAX: (507) 328-2401

Title: EROSION CONTROL - 11TH AVE SW TO STA 20+75

Designer: RLW
Checker: RJK

Project No. 6201-3-02 J7215

Sheet 18 of 53 Sheets

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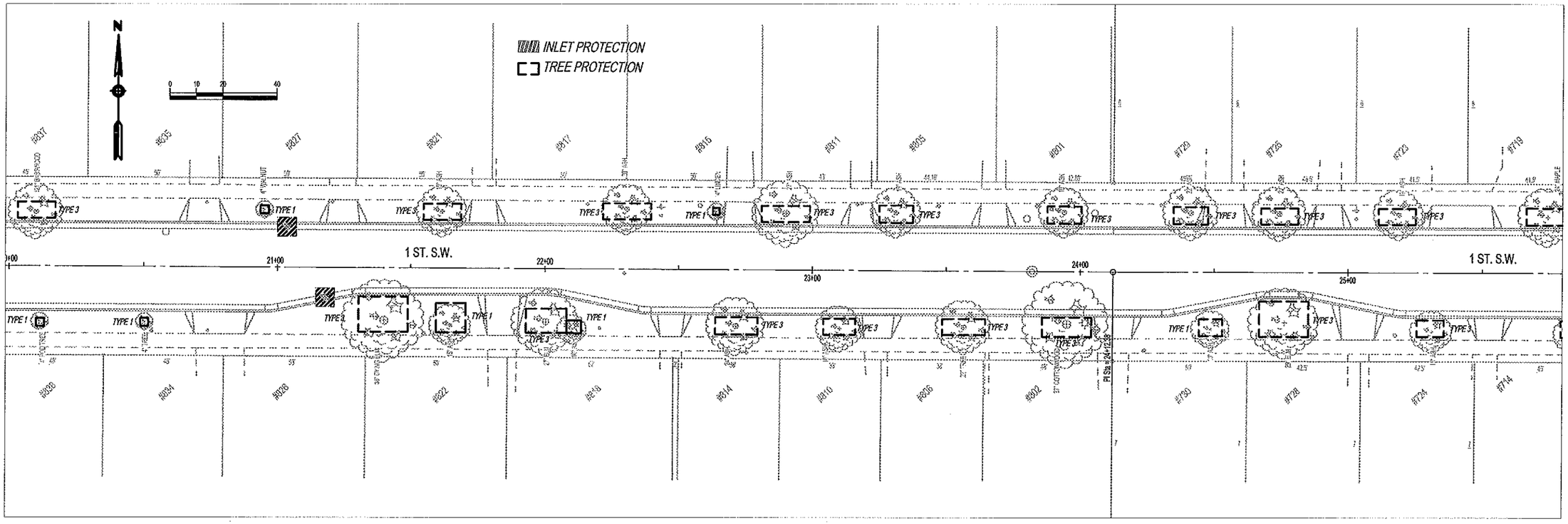
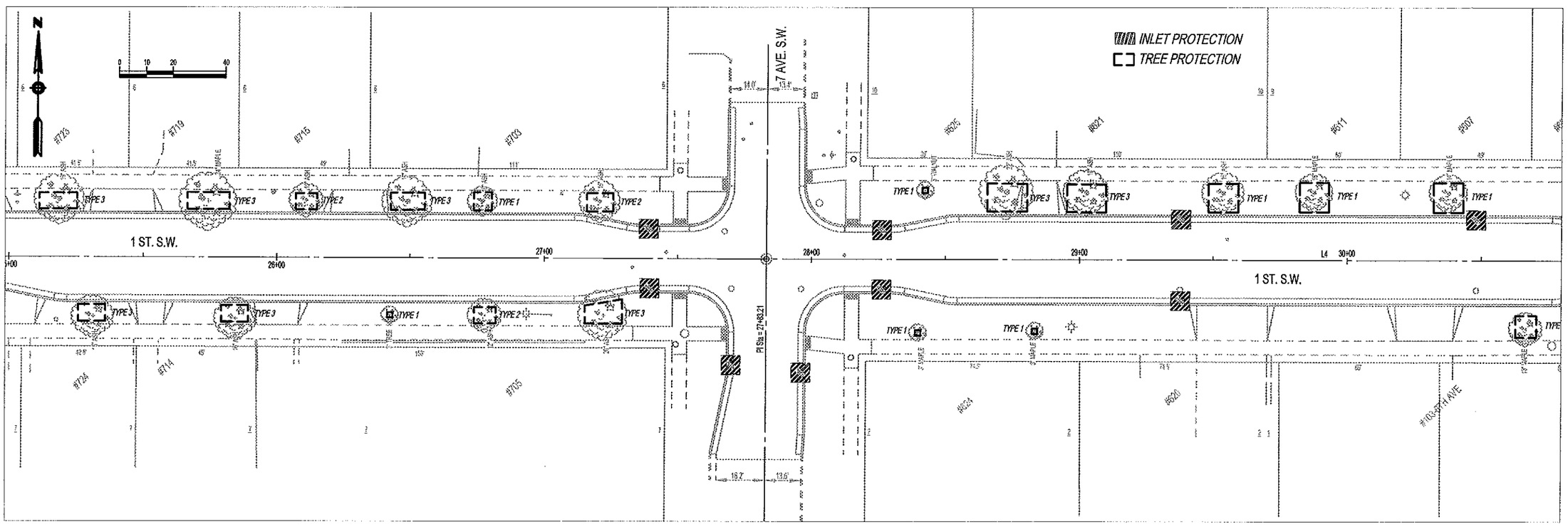




Revision comment: —

Revised: —

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.

Date: 06/17/13 Lic. No. 24067

City of Rochester, Minnesota
Department Of Public Works
201 4th Street S.E.
Rochester, MN 55904
Phone: (507) 328-2450
FAX: (507) 328-2401

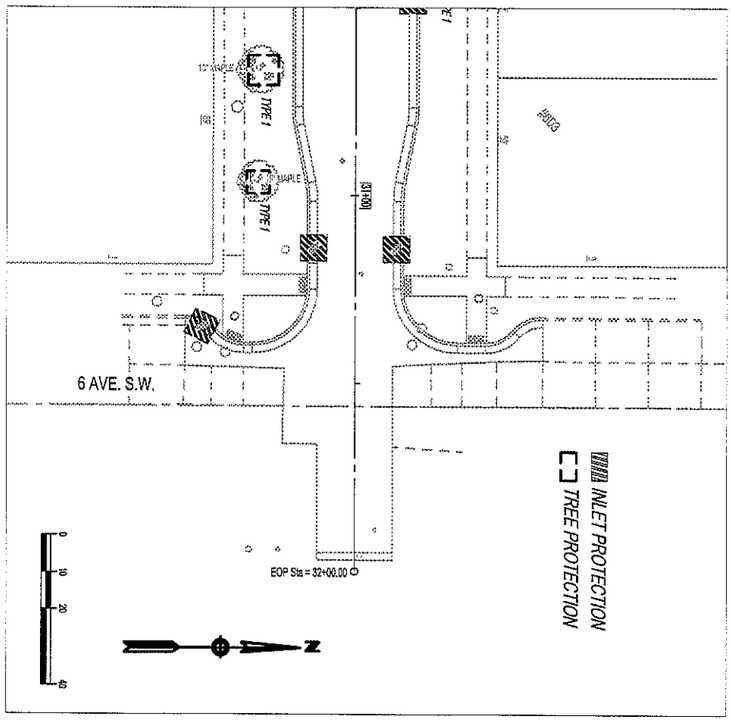
Title: EROSION CONTROL - STA 20+00 TO STA 30+75

Designer: RLW

Checker: RJK

Project No. 6201-3-02 J7215

Sheet 19 of 53 Sheets



Project No. 6201-3-02 J7215 Sheet 20 of 53 Sheets	Designer: RLW Checker: RJK	Title: EROSION CONTROL - STA 30+00 TO 6TH AVE SW	City of Rochester, Minnesota Department Of Public Works	201 4th Street S.E. Rochester, MN 55904 Phone: (507) 328-2450 FAX: (507) 328-2401

Revision comment: —

Revised: —

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.

Russell J. Klun Date: 06/17/13 Lic. No. 24667

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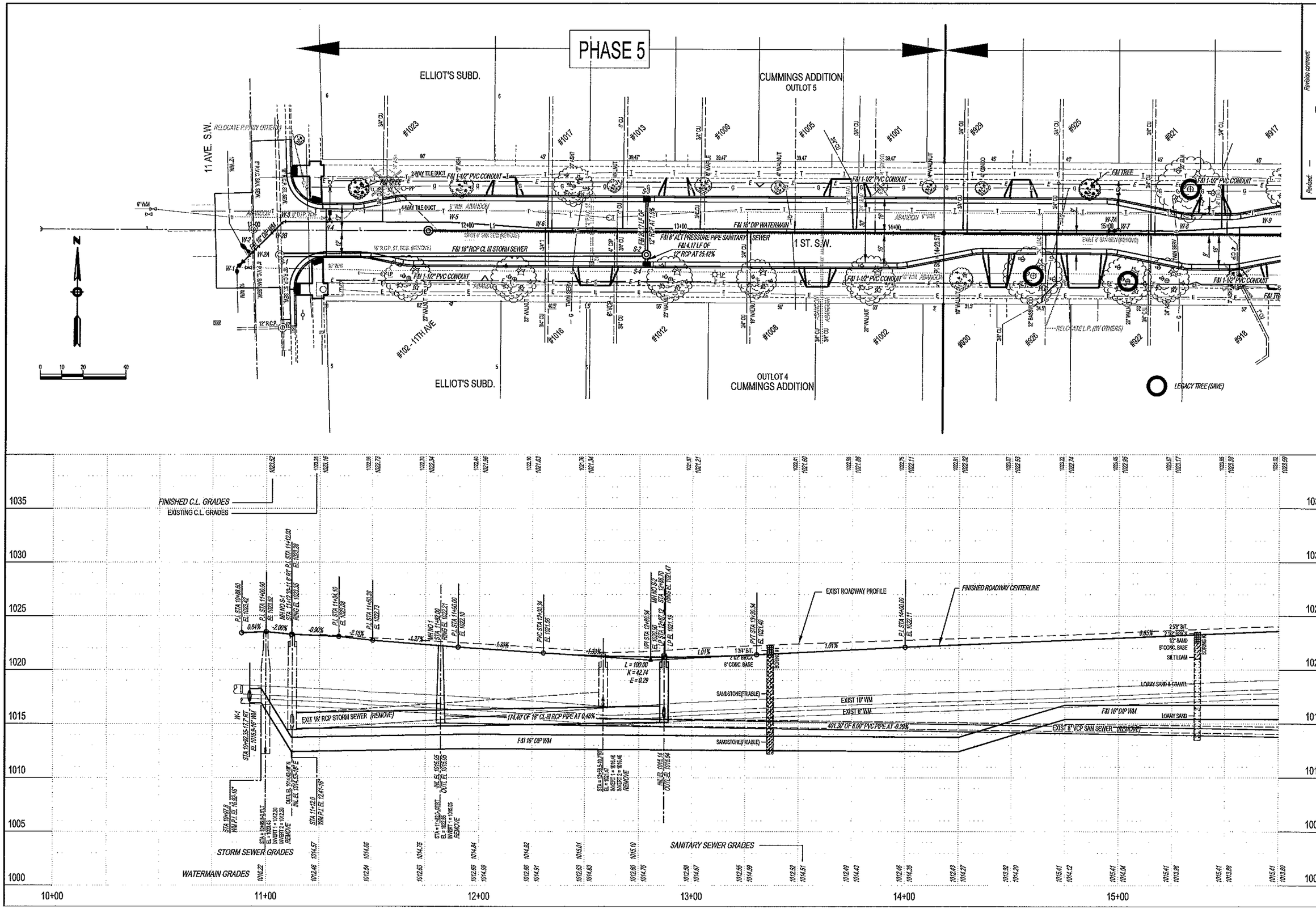

Revision comments: —

Revised: —

Creation Date: —

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.

Date: 08/17/13 Reg. No. 24057

City of Rochester, Minnesota
Department Of Public Works

231 4th Street S.E.
Rochester, MN 55904
Phone: (507) 328-2450
FAX: (507) 328-2401

Title: UNDERGROUND & PHASING - 11TH AVE SW TO STA 15+75

Designer: RLW

Checker: RJK

Project No. 6201-3-02 J7215

Sheet 21 of 53 Sheets

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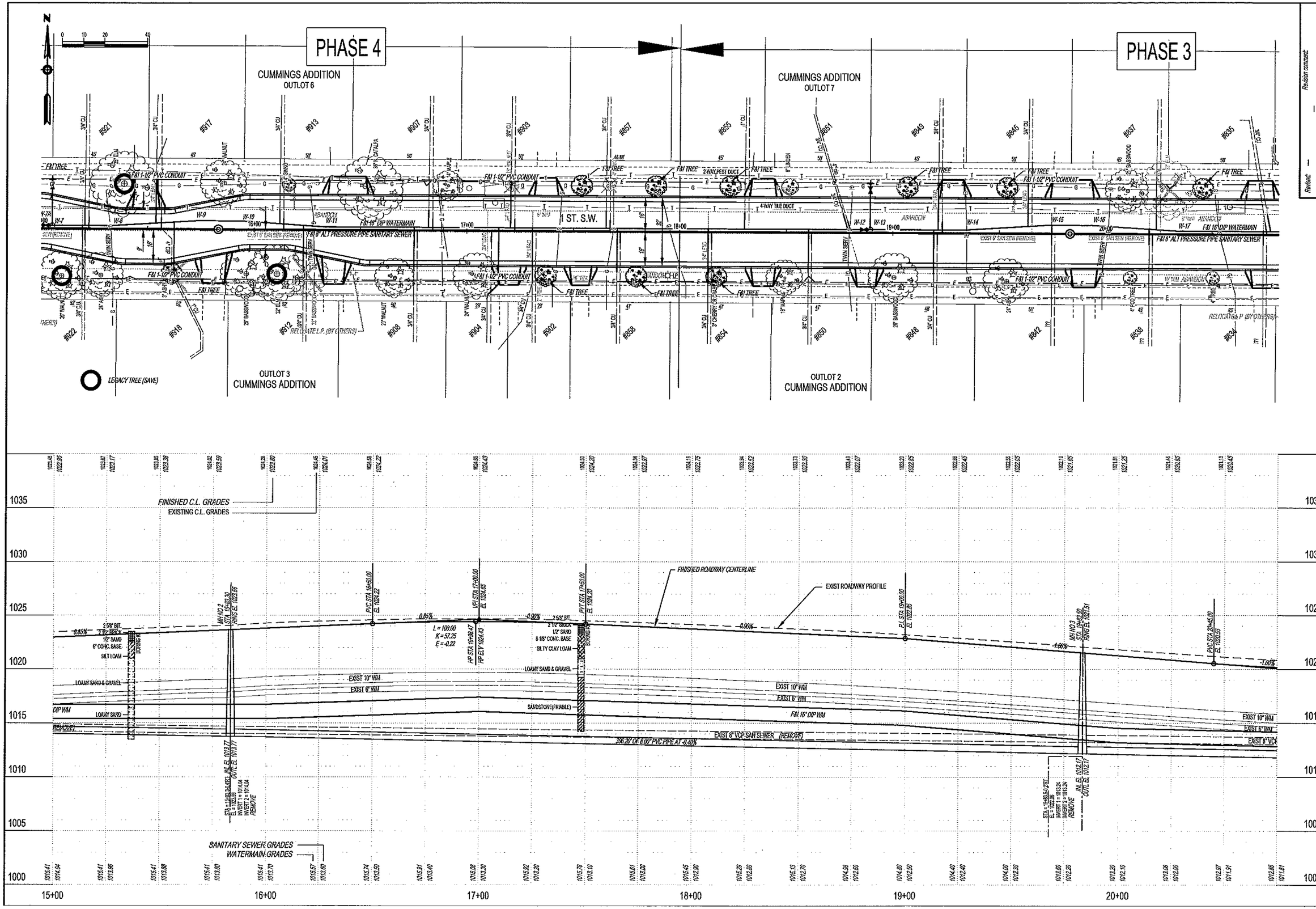


Revision comment: —
Revised: —
Creation Date: —

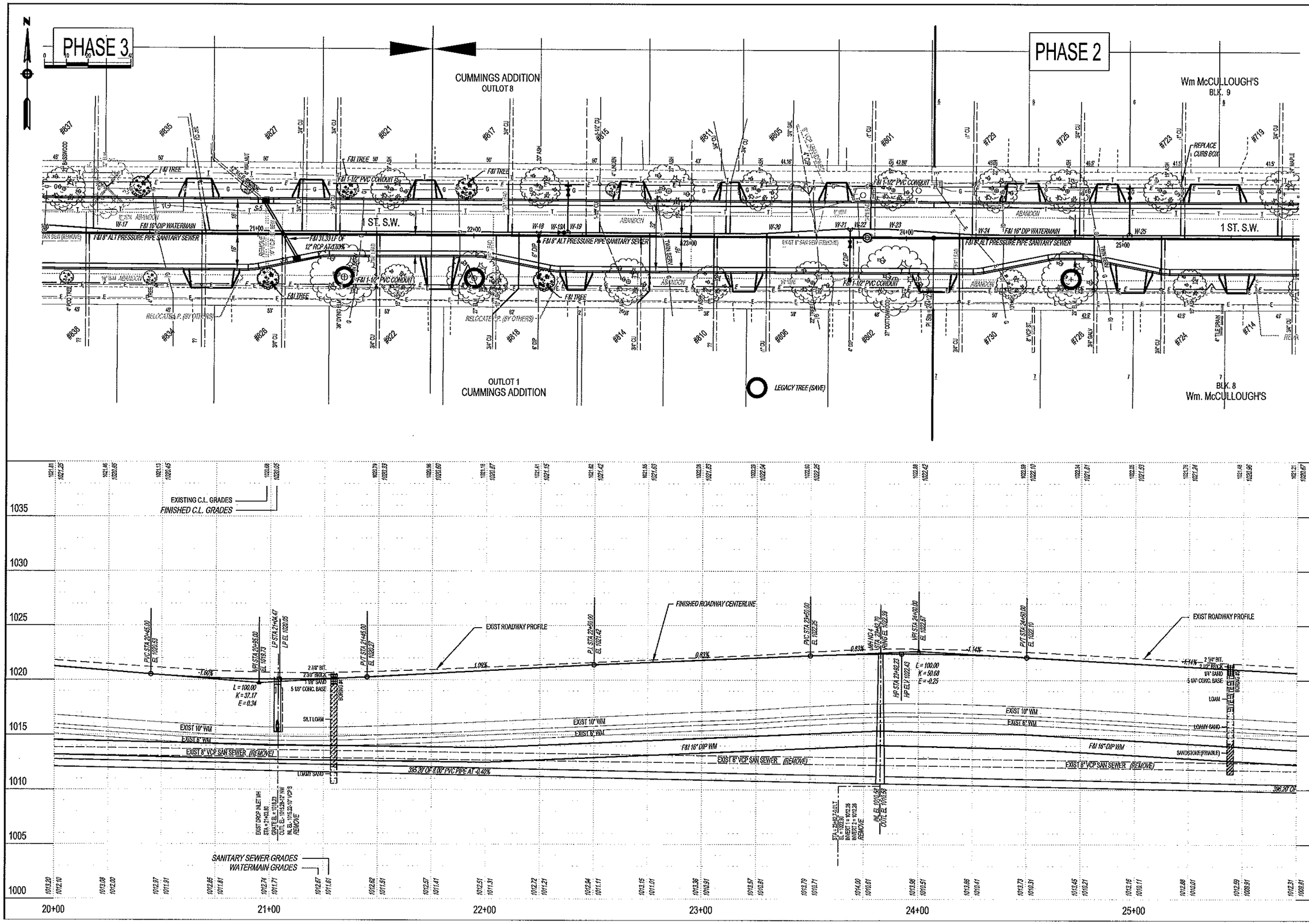
I hereby certify that this plan was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.
Date: 06/17/13 Reg. No. 24067

City of Rochester, Minnesota
Department Of Public Works
201 4th Street S.E.
Rochester, MN 55904
Phone: (507) 328-2429
FAX: (507) 328-2401

Title: UNDERGROUND & PHASING - STA 15+00 TO STA 20+75

Designer: RLW
Checker: RJK

Project No. 6201-3-02 J 7215
Sheet 22 of 53 Sheets



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Revision comment: 1

Revised: –

Creation Date:

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.

Date: 06/17/13 Reg. No. 24067

City of Rochester, Minnesota
Department Of Public Works

201 4th Street S.E.
Rochester, MN 55904
Phone: (507) 328-2450
FAX: (507) 328-2401

Title: UNDERGROUND & PHASING - STA 20+00 TO STA 25+75

Designer: RJW

Checker: RJK

Project No. 6201-3-02 J7215

Sheet 23 of 53 Sheets

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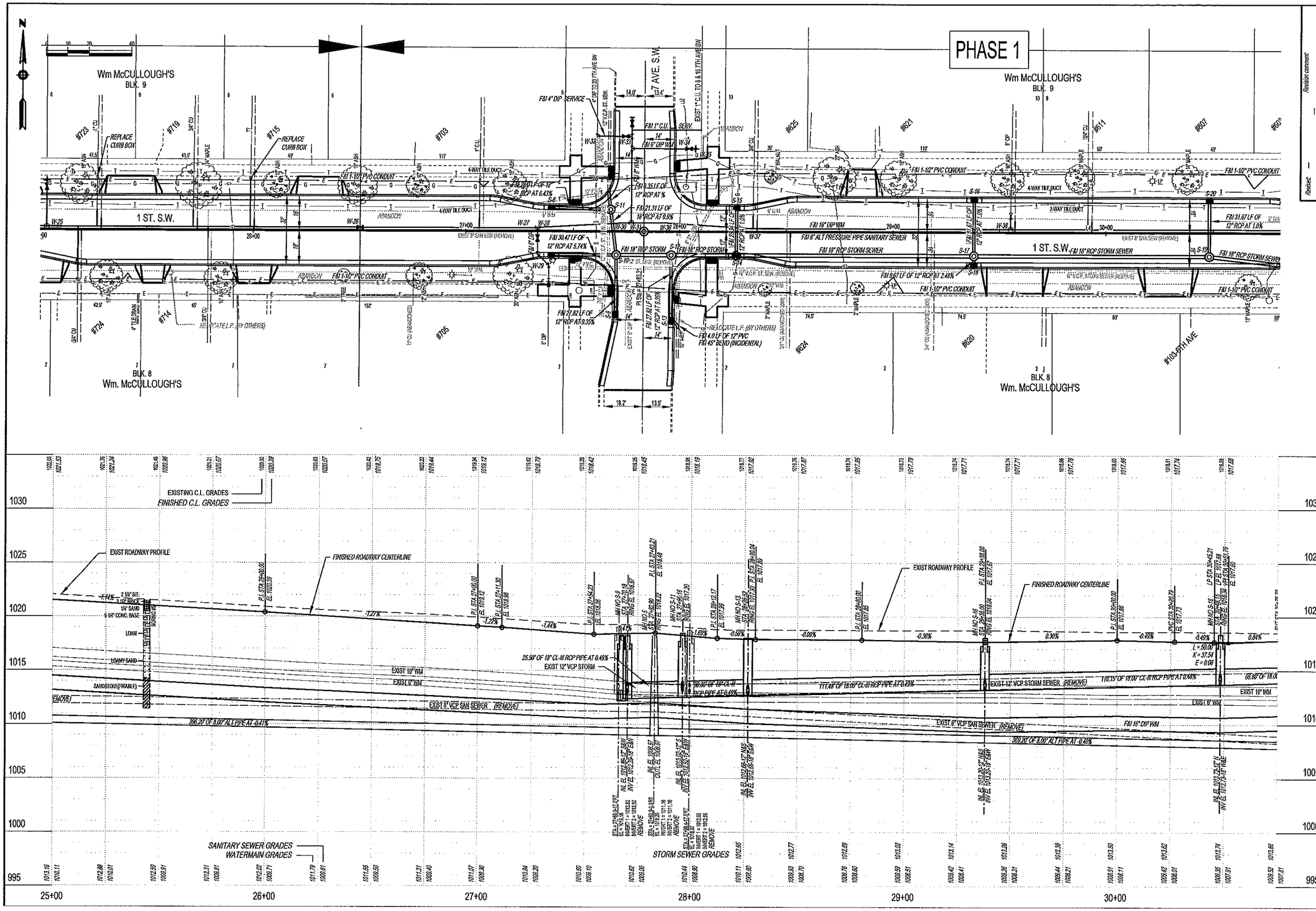


Revision comment: —
Revision#: —
Creation Date: —

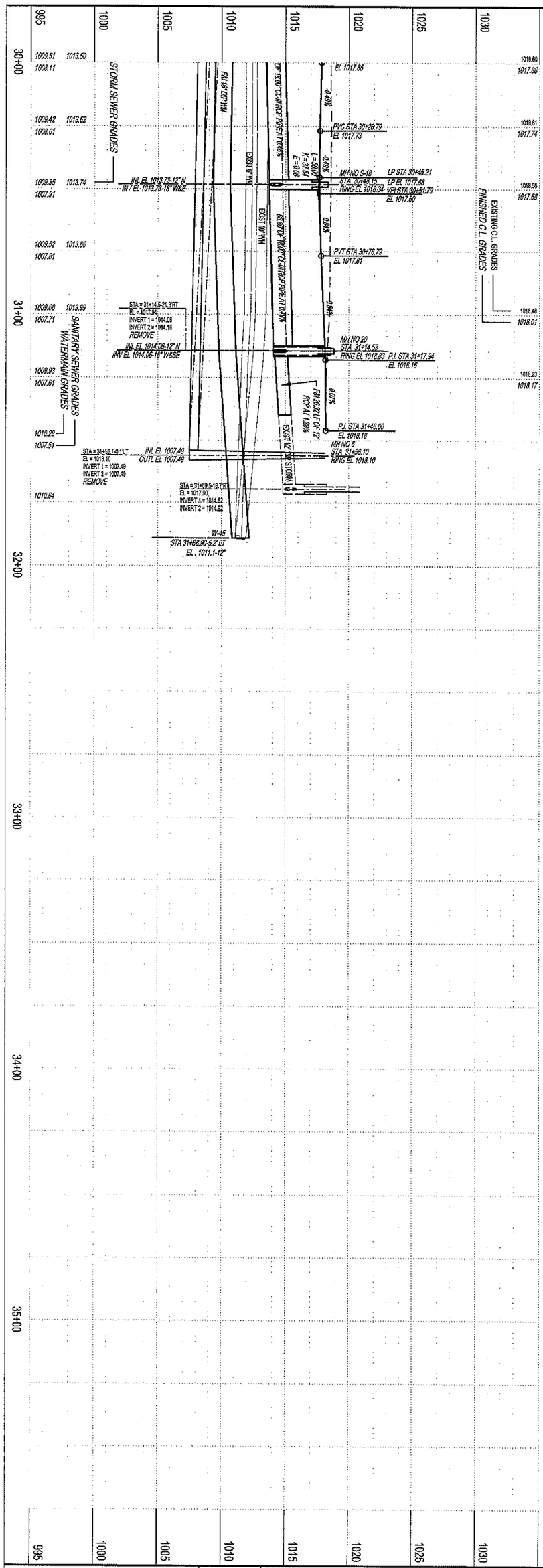
I hereby certify that this plan was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.
Date: 06/17/13 Reg. No. 24067

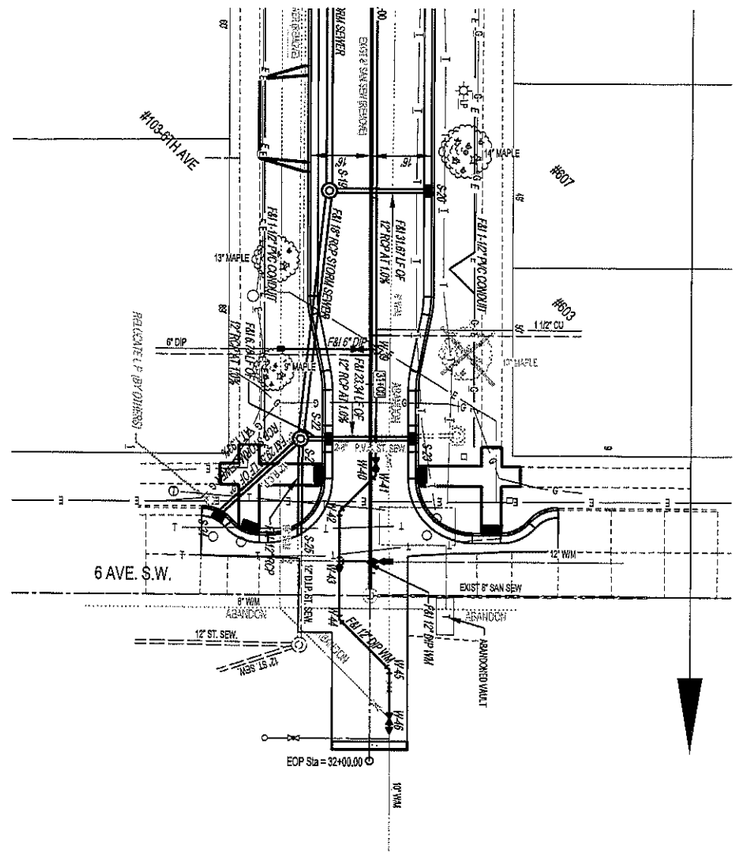
City of Rochester, Minnesota
Department Of Public Works
201 4th Street S.E.
Rochester, MN 55904
Phone: (507) 328-2430
FAX: (507) 328-2401

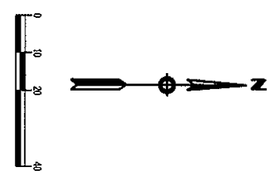
Title: UNDERGROUND & PHASING - STA 25+00 TO STA 30+00

Designer: RLW
Checker: RJK

Project No. 6201-3-02 J7215
Sheet 24 of 53 Sheets







Project No. 6201-3-02 J7215 Sheet 25 of 53 Sheets	Designer: RLW Checker: RJK	Title: UNDERGROUND & PHASING - STA 30+00 TO 6TH AVE SW	City of Rochester, Minnesota Department Of Public Works	201 4th Street S.E. Rochester, MN 55904 Phone: (507) 328-2450 FAX: (507) 328-2401	Revised: — Revision comment: — Creation Date: 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. Russell J. Klein Date: 06/17/13 Reg. No. 24667

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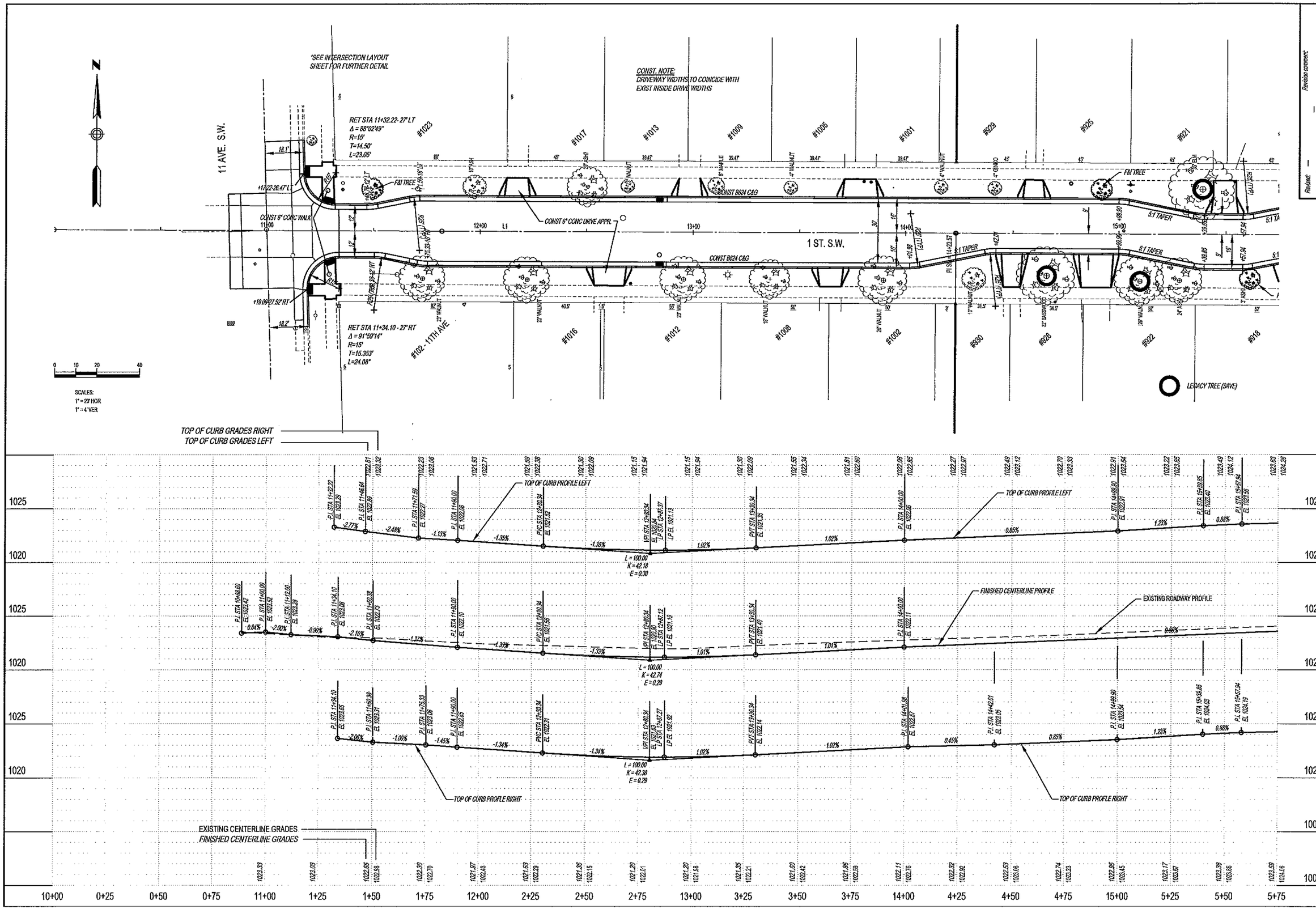

Revision number: —
Revised: —
Creation Date:

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.
Date: 06/17/13 Reg. No. 24667

City of Rochester, Minnesota
Department Of Public Works
201 4th Street S.E.
Rochester, MN 55904
Phone: (507) 328-3450
FAX: (507) 328-2401

Title: GRADING - 11TH AVE SW TO STA 15+75

Designer: RJW
Checker: RJK

Project No. 6201-3-02 J7215
Sheet 26 of 53 Sheets

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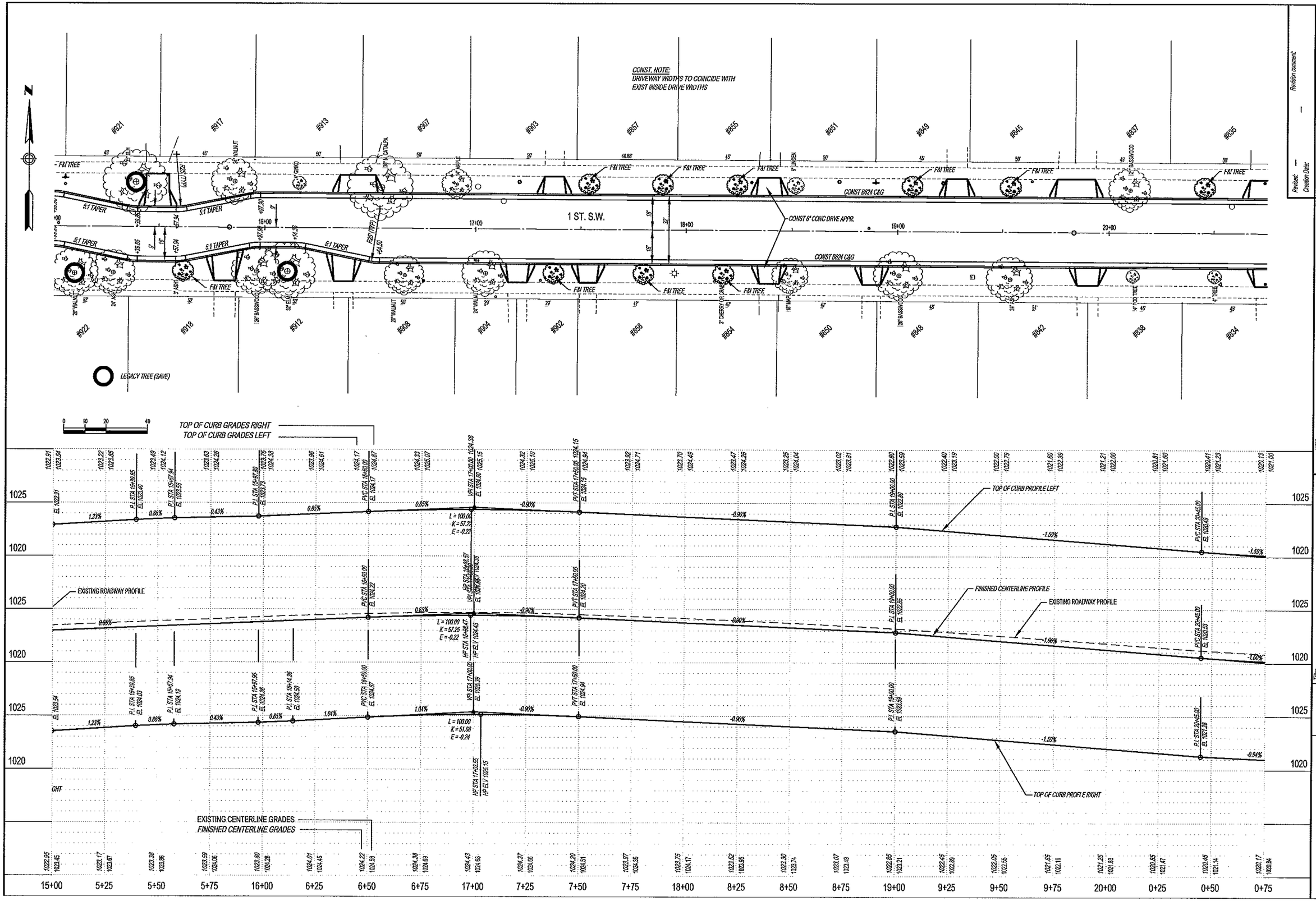

Revised: –
Creation Date: –
Revision comment: –

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.

Date: 09/17/13 Reg. No. 24997

City of Rochester, Minnesota
Department Of Public Works
201 4th Street S.E.
Rochester, MN 55904
Phone: (507) 328-2429
FAX: (507) 328-2401

Title: GRADING - STA 15+00 TO STA 20+75

Designer: RLW
Checker: RJK

Project No. 6201-3-02 J7215
Sheet 27 of 53 Sheets

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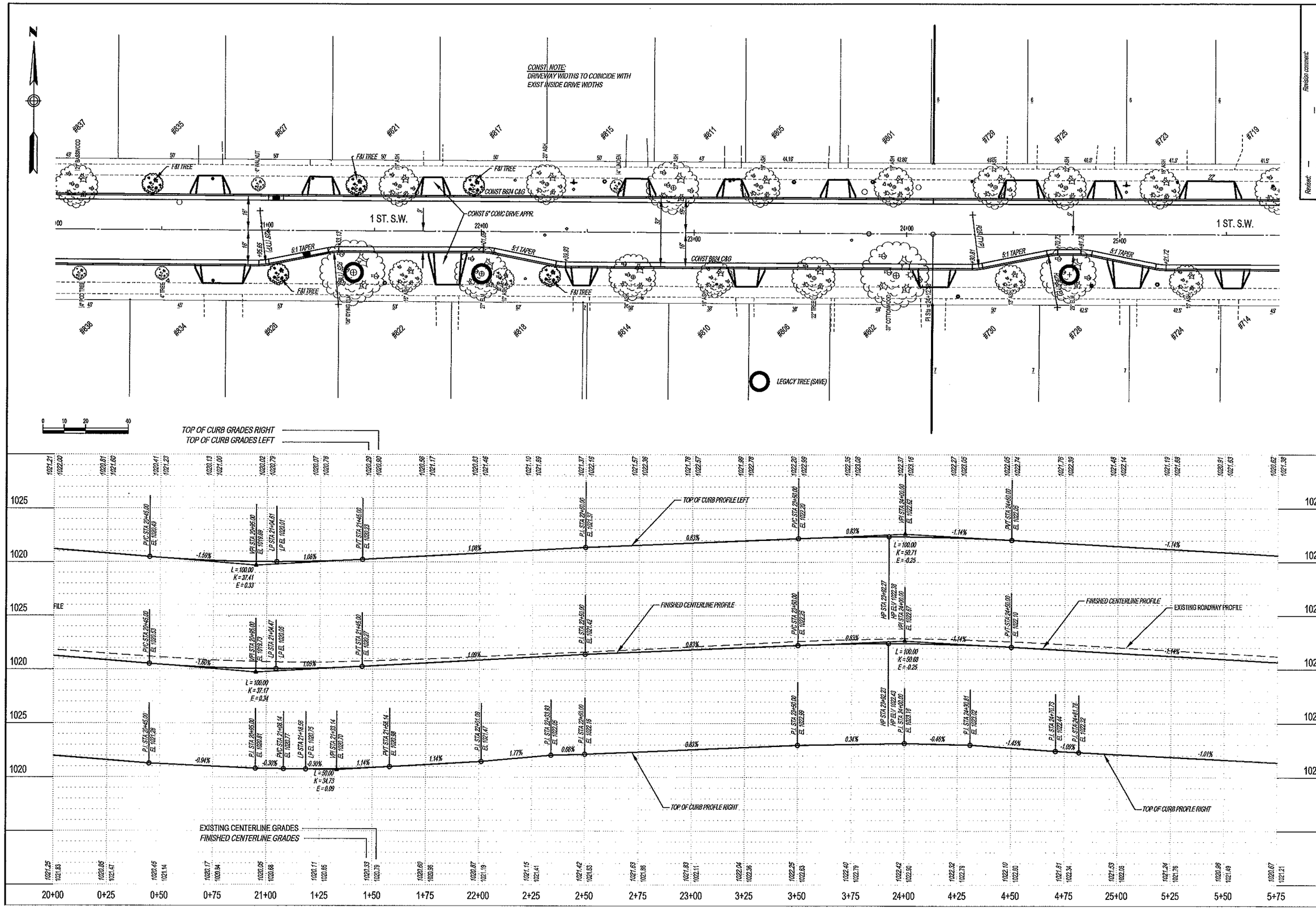

Revision comment: —
Revision#: —
Creation Date: —

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.
Date: 09/17/13 Reg. No. 24067

City of Rochester, Minnesota
Department Of Public Works
201 4th Street S.E.
Rochester, MN 55904
Phone: (507) 328-2429
FAX: (507) 328-2401

Title: GRADING - STA 20+00 TO STA 25+75

Designer: RLW
Checker: RJK

Project No. 6201-3-02 J7215
Sheet 28 of 53 Sheets

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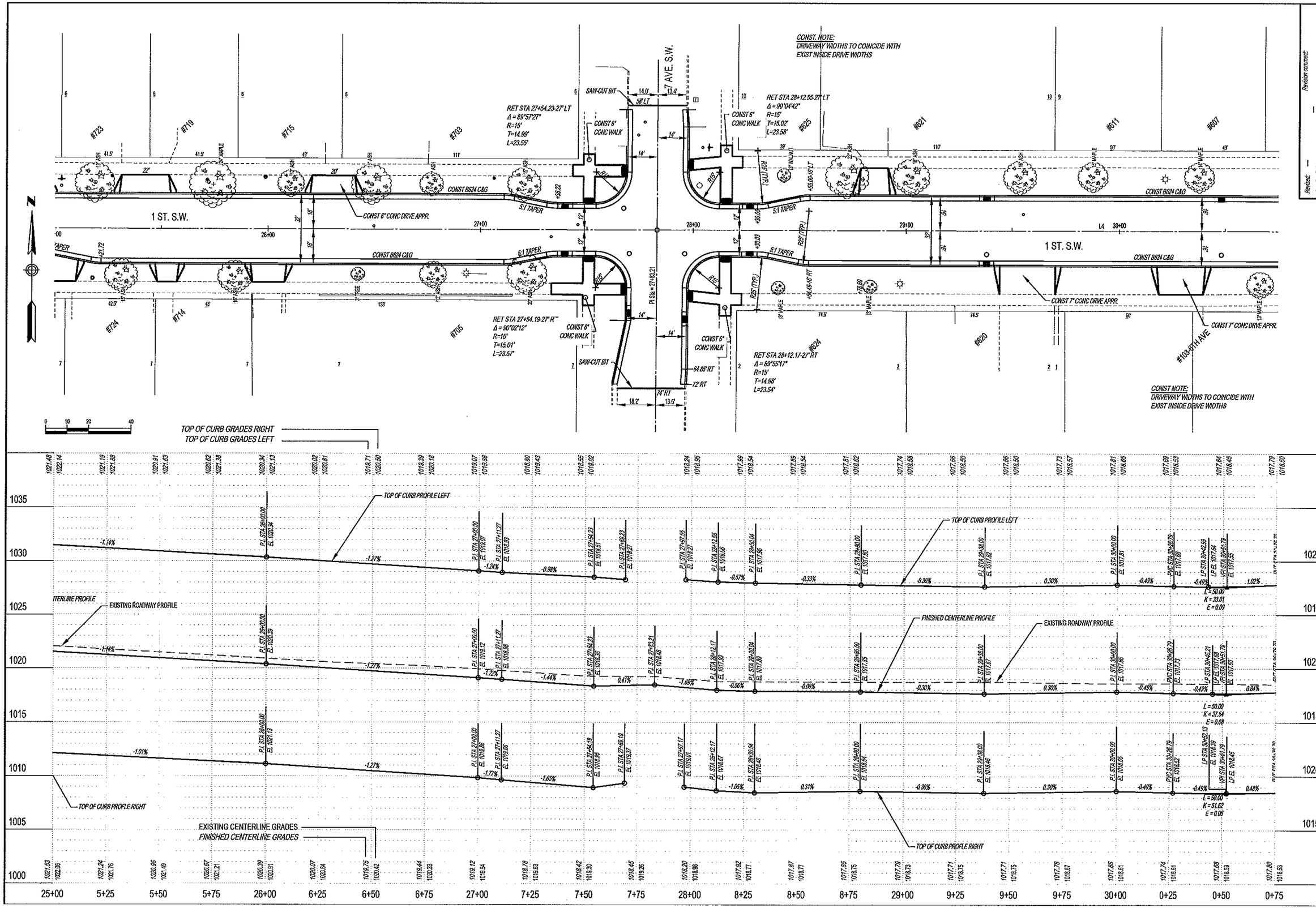

Revision comment: —

Revised: —

Creation Date:

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.

Date: 09/27/13 Reg. No. 24567

City of Rochester, Minnesota
Department Of Public Works

201 4th Street S.E.
Rochester, MN 55904
Phone: (507) 328-2459
FAX: (507) 328-2401

Title: GRADING - STA 25+00 TO STA 30+75

Designer: PLW

Checker: RJK

Project No. 6201-3-02 J7215

Sheet 29 of 53 Sheets

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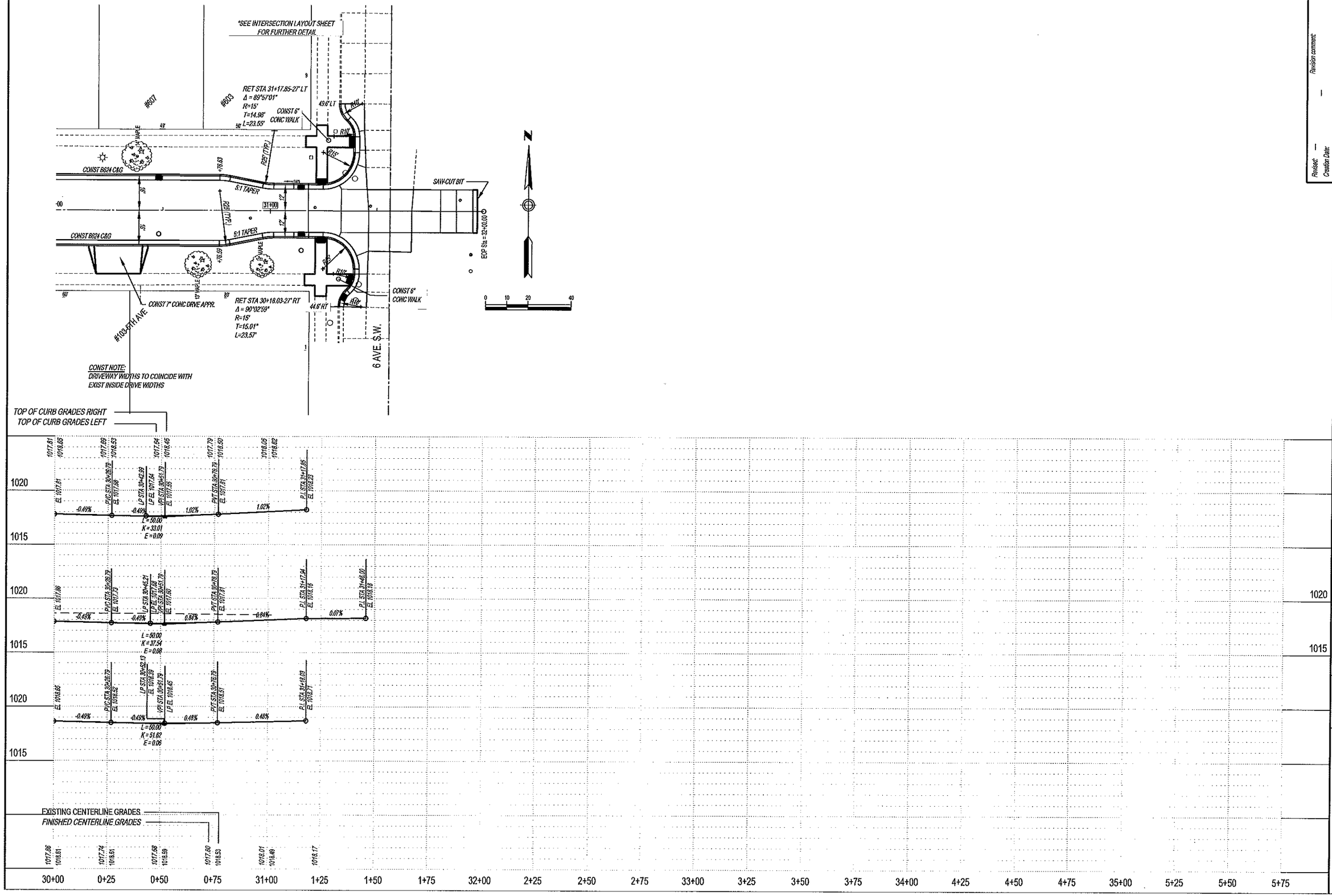

Revised: —
Creation Date: —
Revision comment: —

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.
Date: 08/17/13 Reg. No. 24927

City of Rochester, Minnesota
Department Of Public Works
201 4th Street S.E.
Rochester, MN 55904
Phone: (507) 328-2450
FAX: (507) 328-2401

GRADING - STA 30+00 TO 6TH AVE SW

Tiller:
Designer: PLW
Checker: RJK

Project No. 6201-3-02 J7215
Sheet 30 of 53 Sheets

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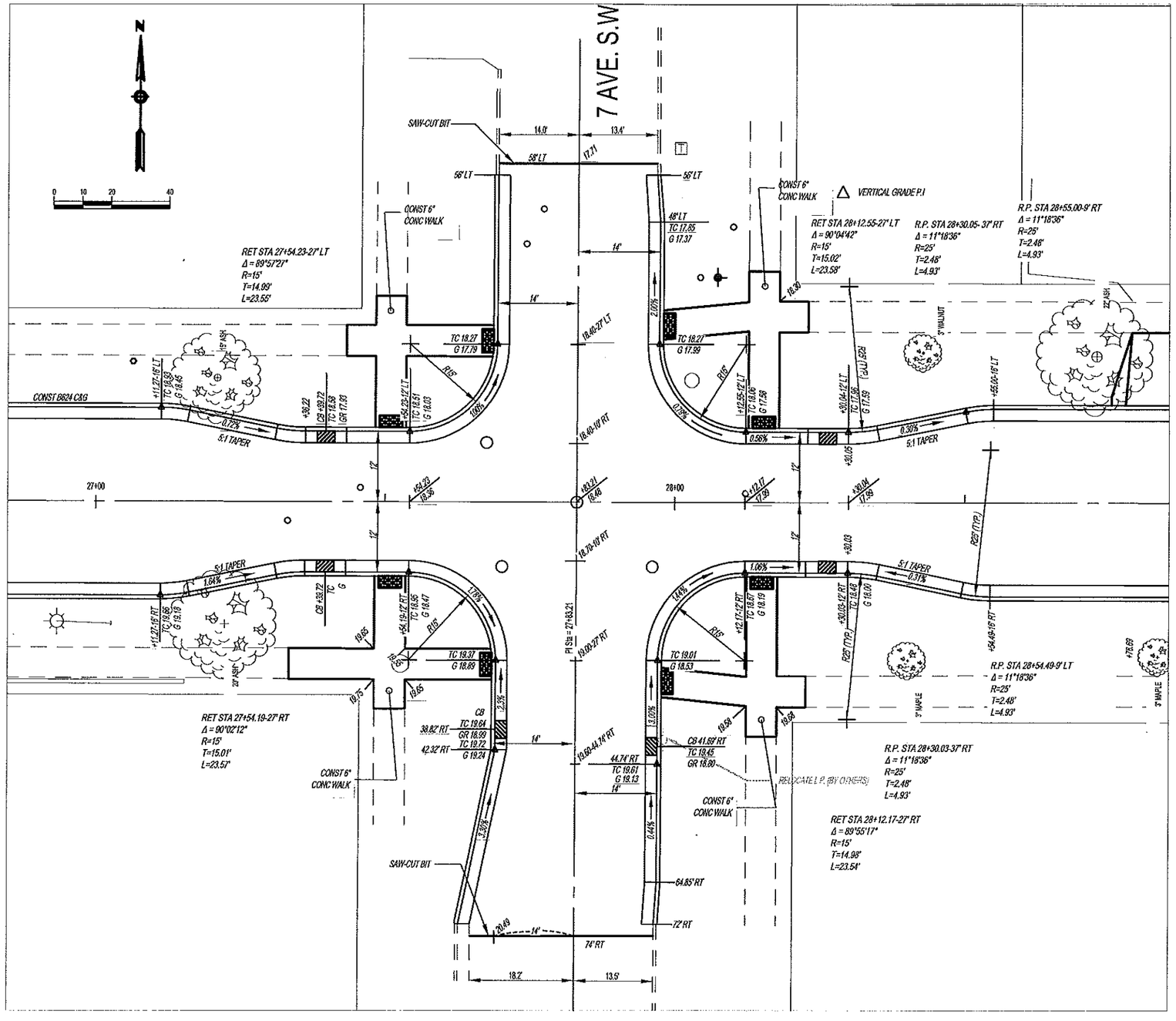


Revision comment: —
Revised: —

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.

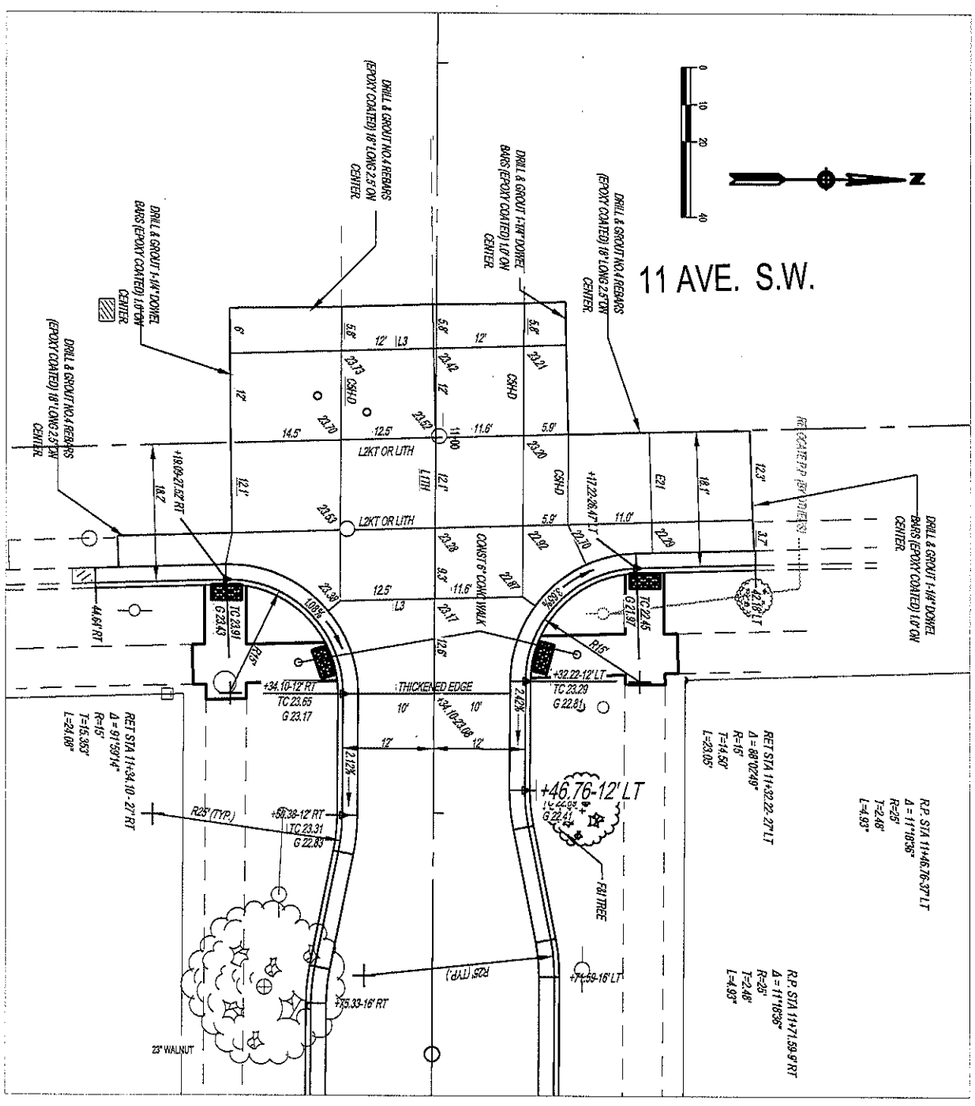
Date: 08/17/13 Lic. No. 24667

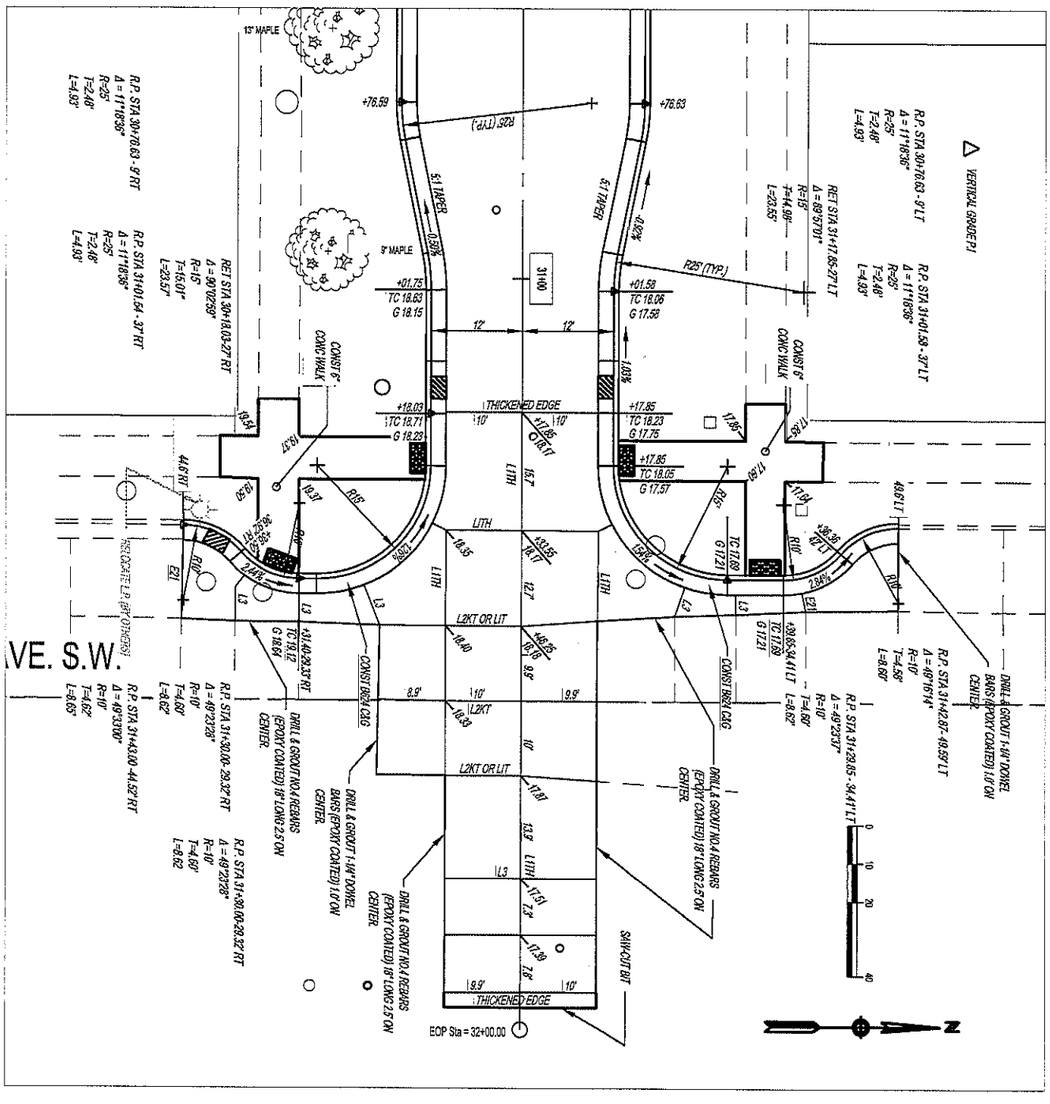
City of Rochester, Minnesota
Department Of Public Works
201 4th Street S.E.
Rochester, MN 55904
Phone: (507) 328-2430
FAX: (507) 328-2401

Title: INTERSECTION LAYOUT - 7TH AVE SW

Designer: RLW
Checker: RJK

Project No. 6201-3-02 J7215
Sheet 31 of 53 Sheets





Revision comment: —

Revised: —

Project No. 6201-3-02 J7215

Sheet 32 of 53 Sheets

Designer: RLW

Checker: RJK

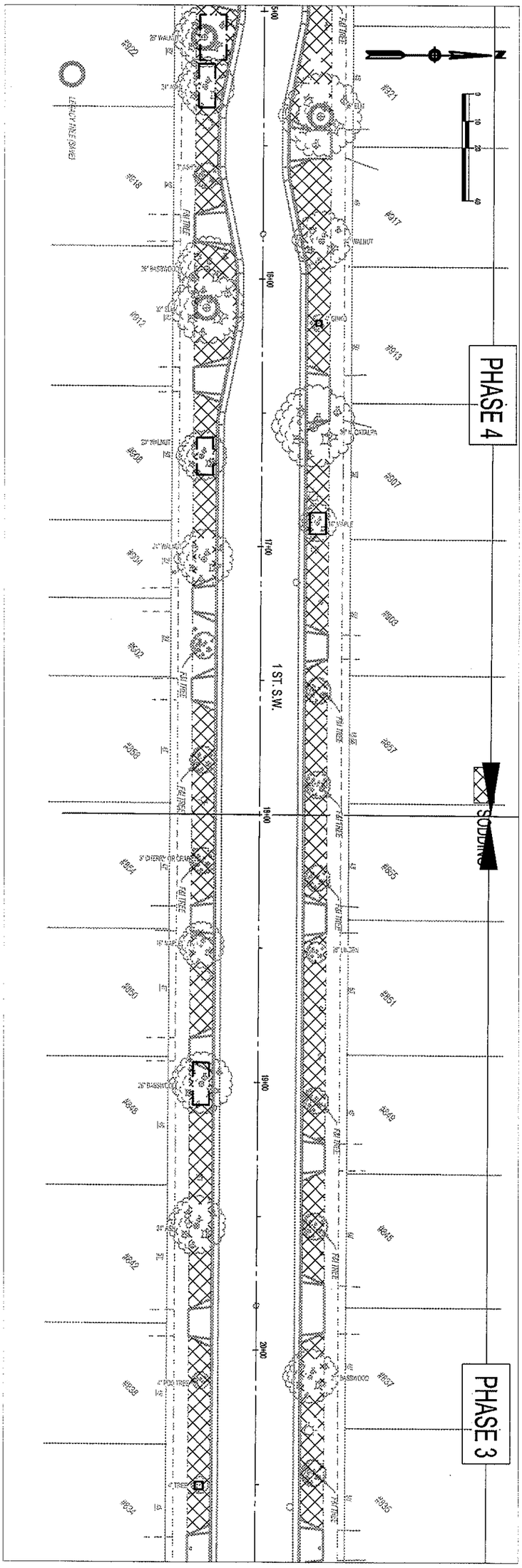
Title: INTERSECTION LAYOUT (6TH AVE & 11TH AVE SW)

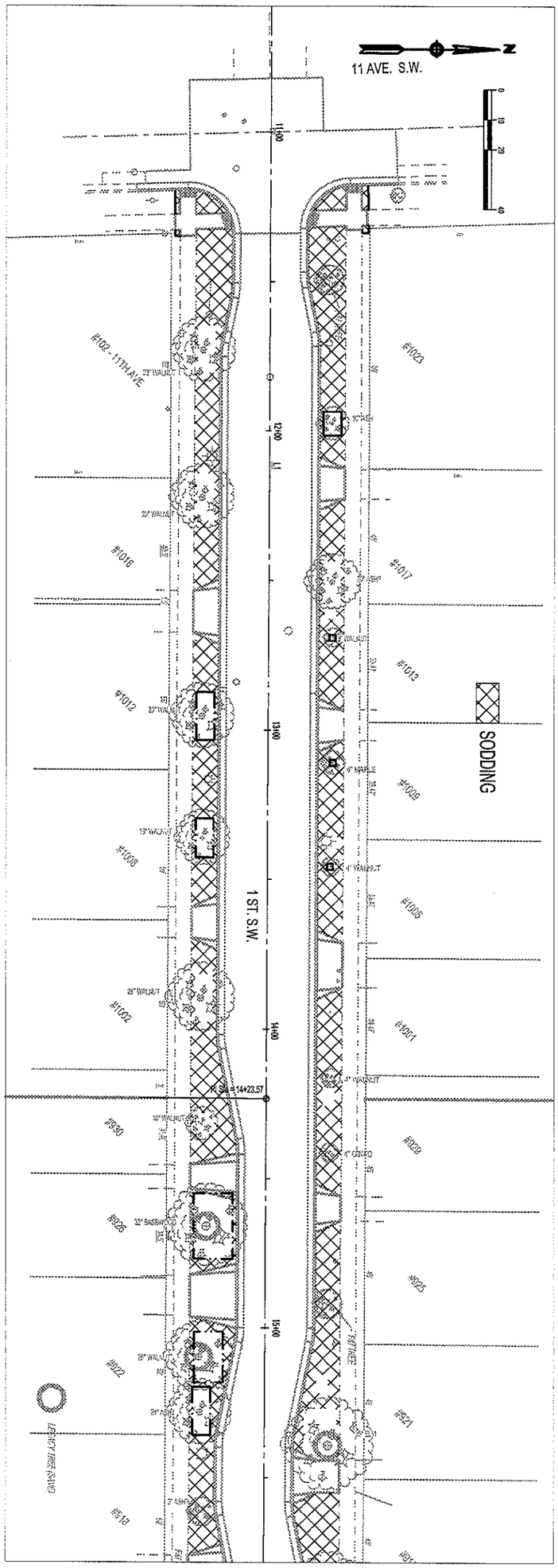
City of Rochester, Minnesota
Department Of Public Works

201 4th Street S.E.
Rochester, MN 55904
Phone: (507) 328-2450
FAX: (507) 328-2401

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.

Russell J. Klein Date: 06/17/13 Lic. No. 24667





Revision comment: —

Revised: —

Project No. 6201-3-02 J7215
Sheet 33 of 53 Sheets

Designer: RLW
Checker: RJK

Title: TURF ESTABLISHMENT - 11TH AVE SW TO STA 20+75

City of Rochester, Minnesota
Department Of Public Works

201 4th Street S.E.
Rochester, MN 55904
Phone: (507) 328-2450
FAX: (507) 328-2401

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Russell J. Klan Date: 06/17/13 Lic. No. 24667

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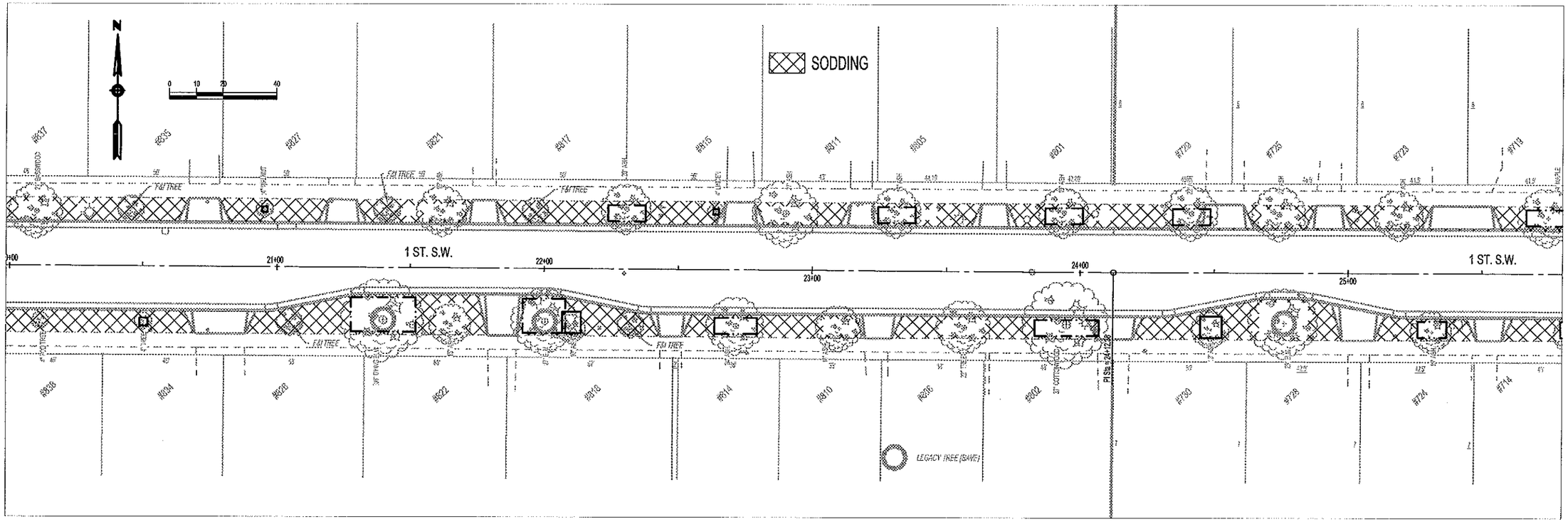

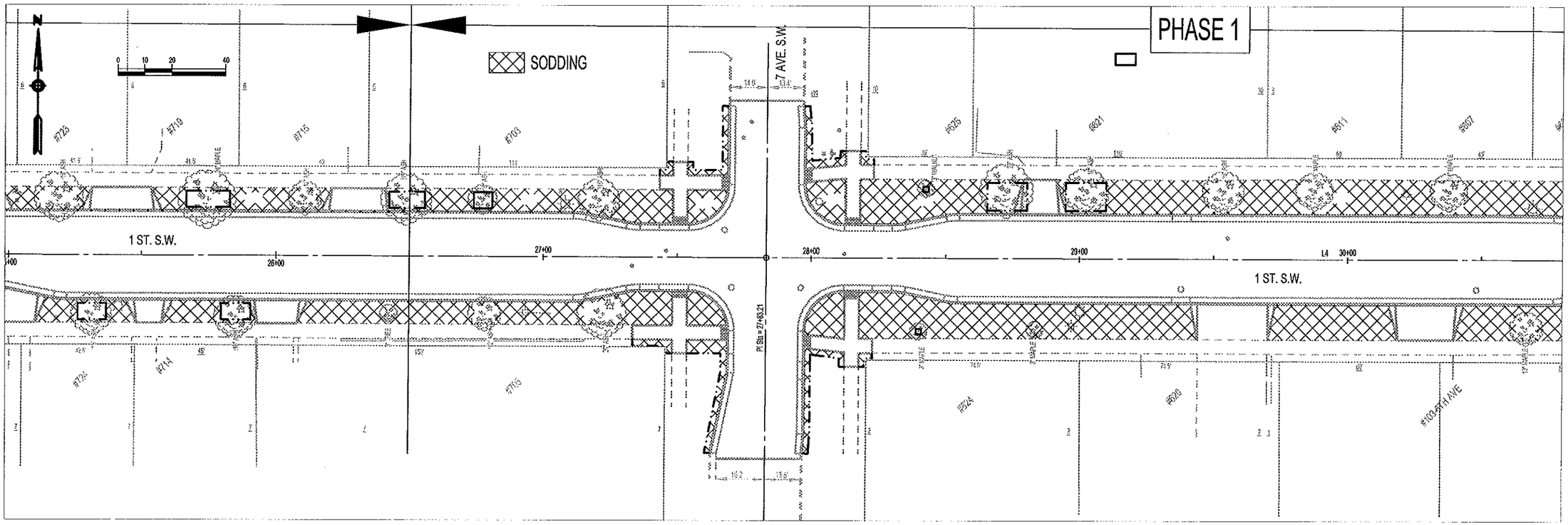

Revision comment: —

Revised: —

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Date: 08/17/12 Lic. No. 24567

City of Rochester, Minnesota
Department Of Public Works

231 4th Street S.E.
Rochester, MN 55904
Phone: (507) 328-2459
FAX: (507) 328-2401

Title: TURF ESTABLISHMENT - STA 20+00 TO 30+75

Designer: RLW
Checker: RJK

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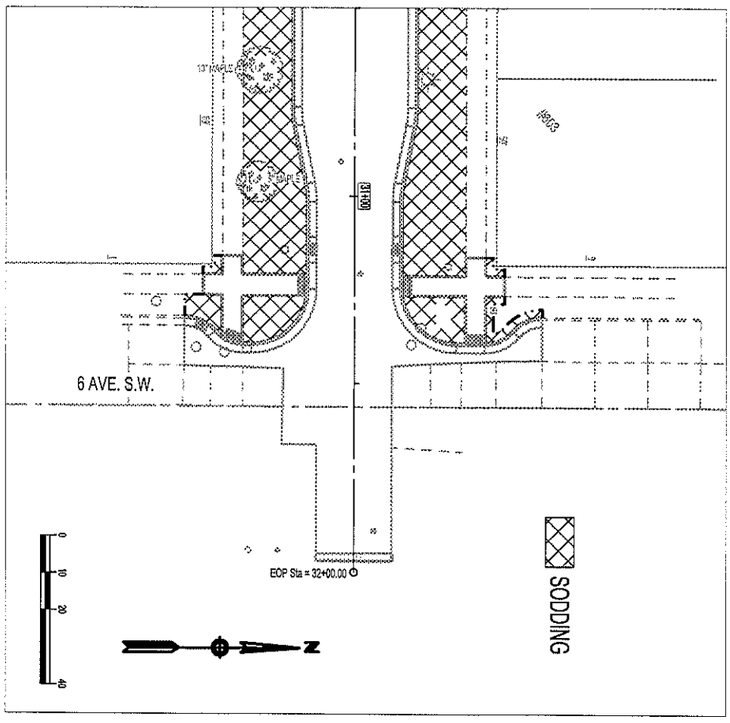
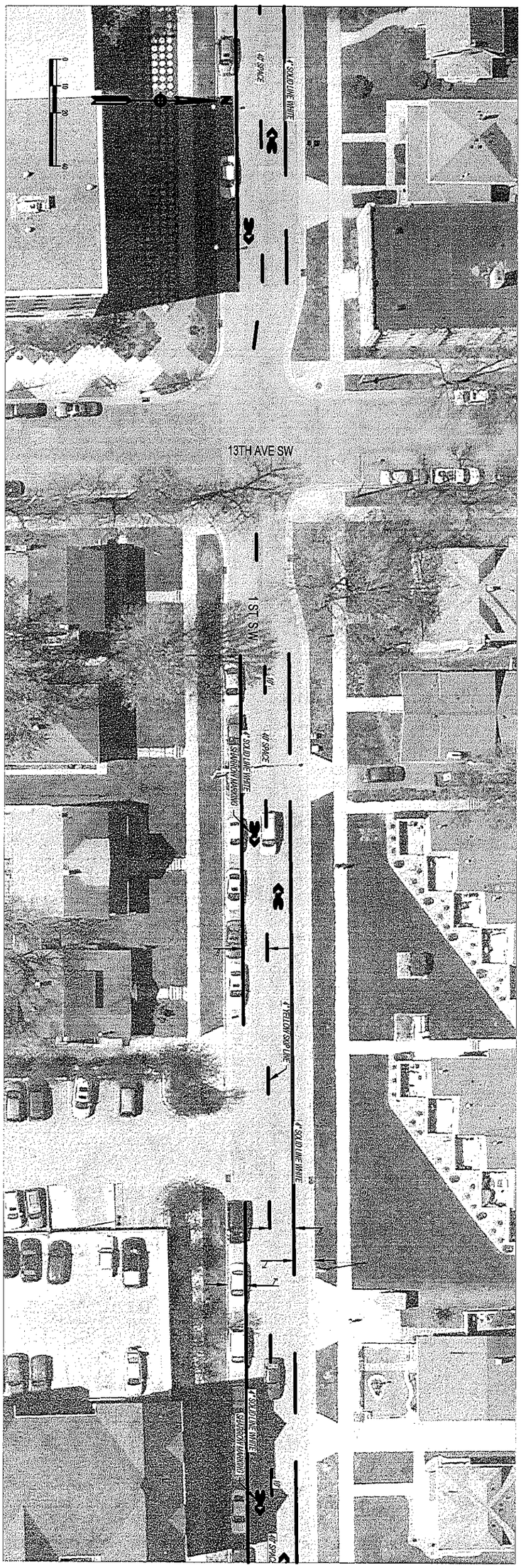
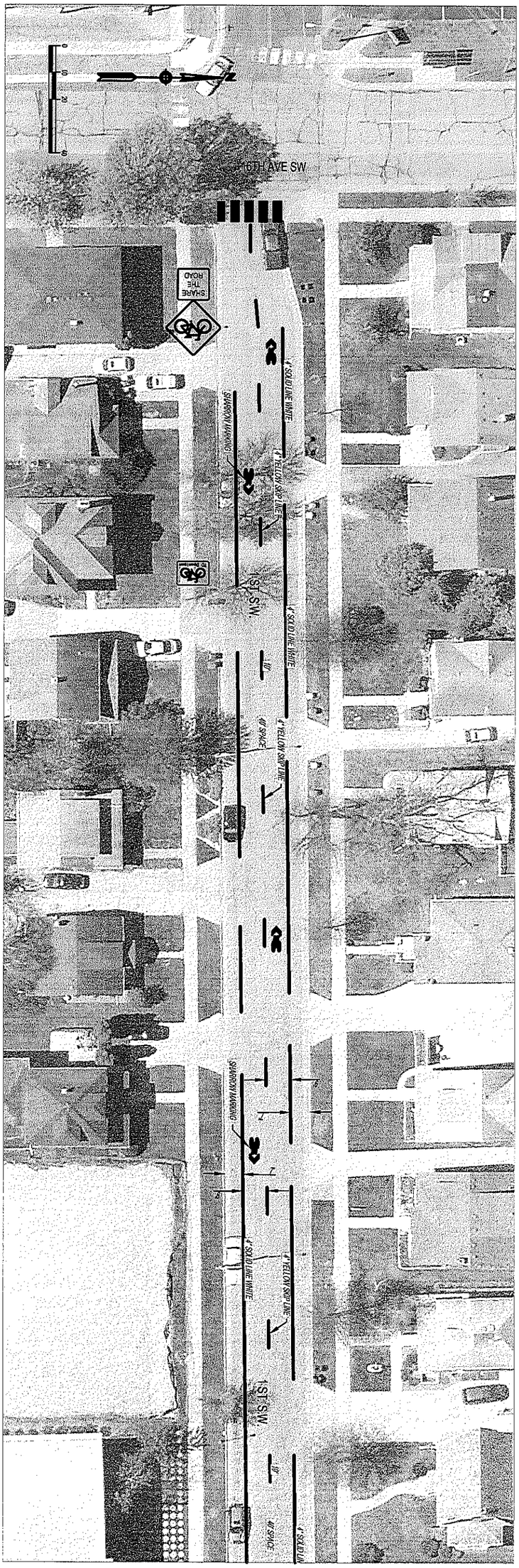
Sheet 34 of 53 Sheets

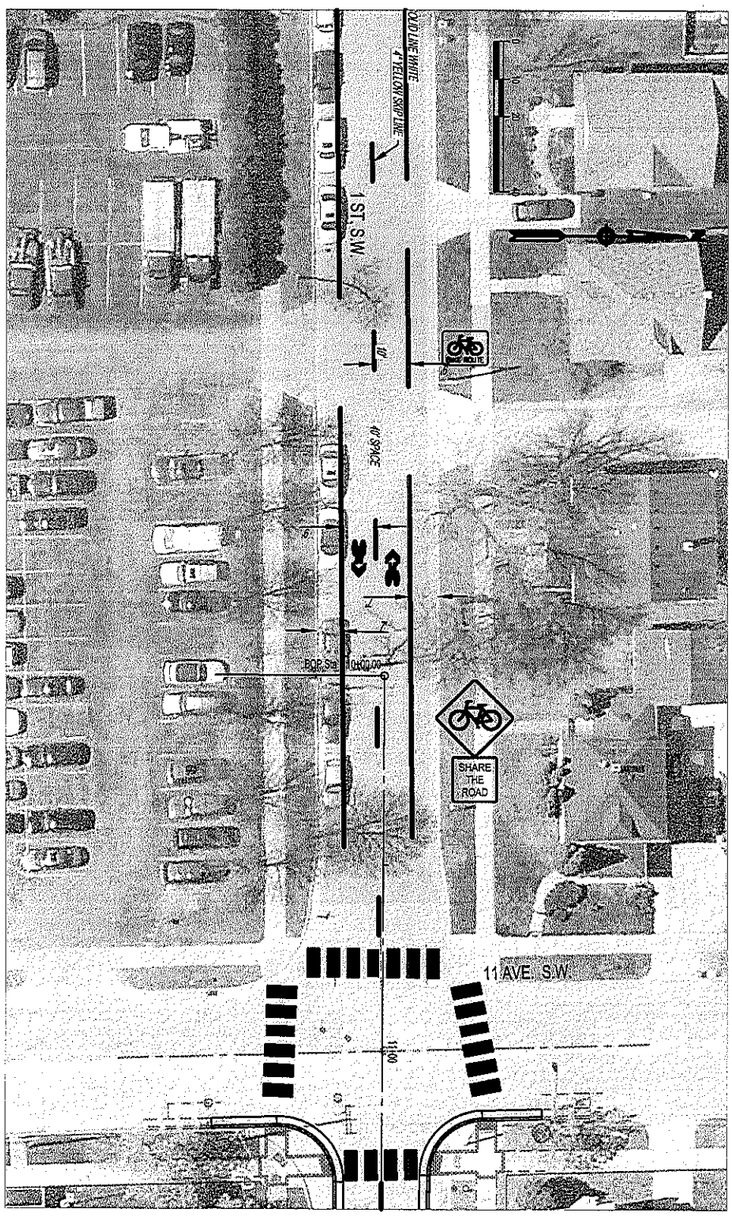


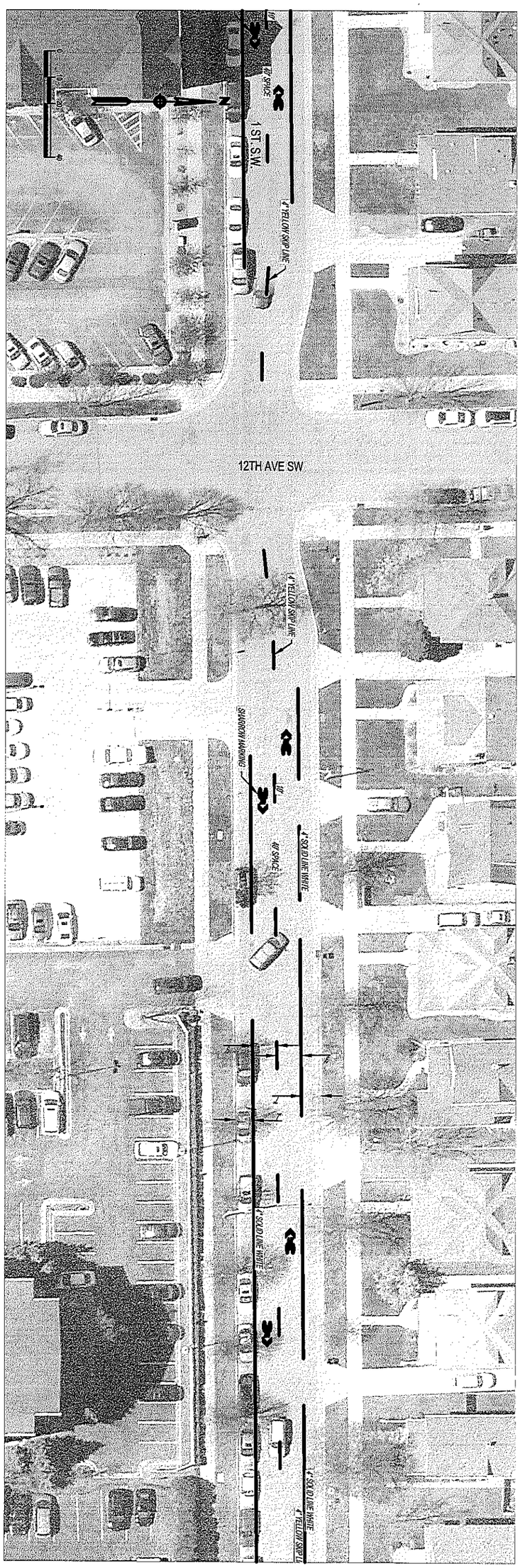
Project No. 6201-3-02 J7215 Sheet 35 of 53 Sheets	Designer: RLW Checker: RJK	Title: TURF ESTABLISHMENT - STA 30+00 TO 6TH AVE SW	City of Rochester, Minnesota Department Of Public Works	201 4th Street S.E. Rochester, MN 55904 Phone: (507) 328-2450 FAX: (507) 328-2401	Revision comment: — Revised: — I hereby 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. Russell J. Klun Date: 08/17/13 Lic. No. 24667



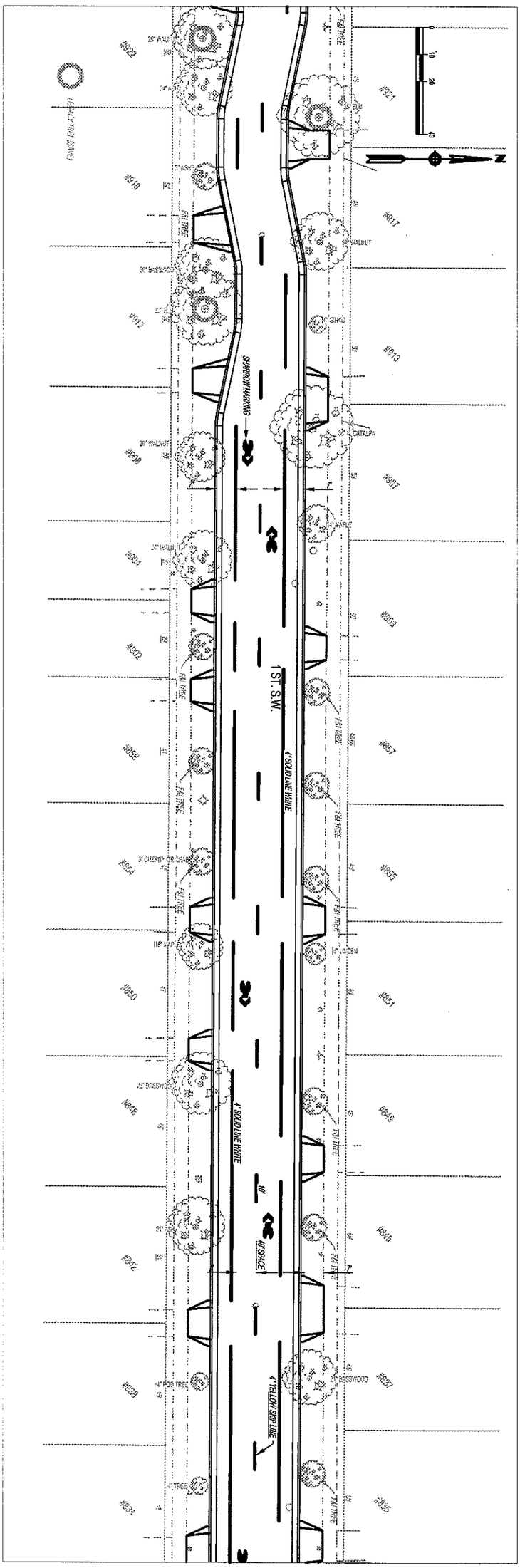


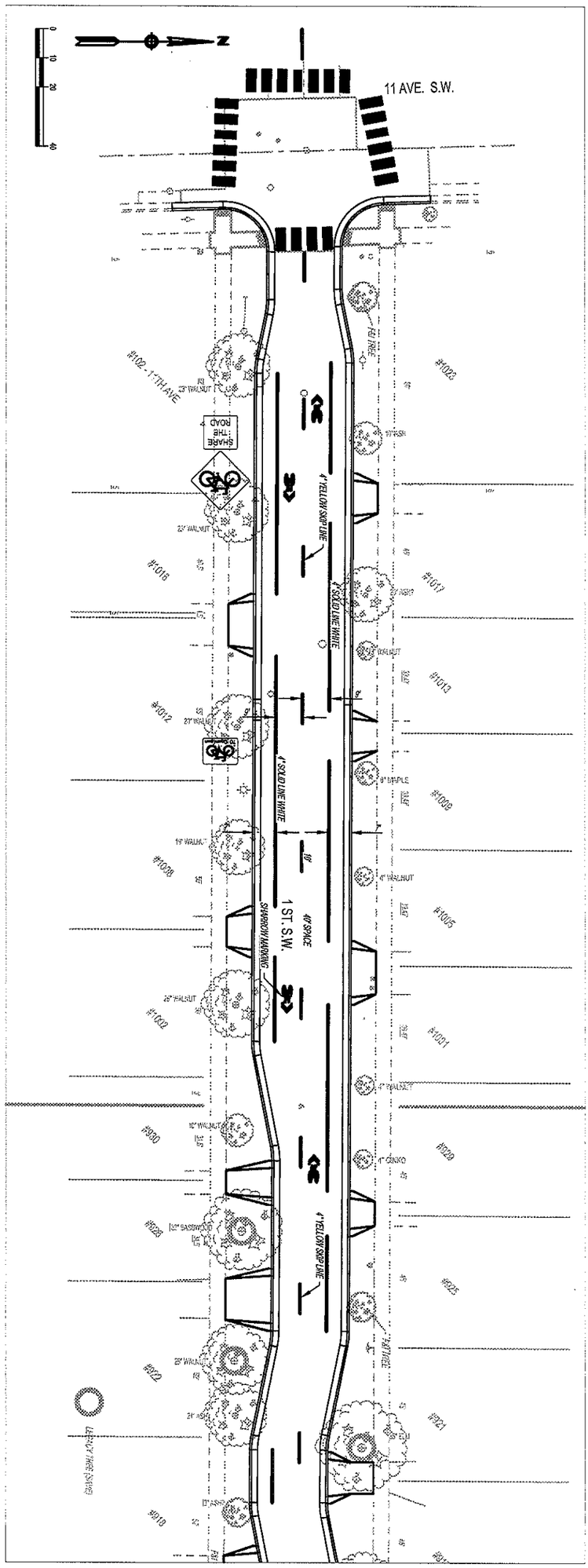
Project No. 6201-3-02 J7215 Sheet 36 of 53 Sheets	Designer: RLW Checker: RJK	Title: STRIPING AND SIGNING FROM 16TH AVE SW TO EAST OF 13TH AVE SW	City of Rochester, Minnesota Department Of Public Works 201 4th Street S.E. Rochester, MN 55904 Phone: (507) 328-2450 FAX: (507) 328-2401	Revision comment: — Revised: — 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. Russell J. Klun Date: 06/17/13 Lic. No. 24667





Project No. 6201-3-02 J7215 Sheet 37 of 53 Sheets	Designer: RLW Checker: RJK	Title: STRIPING AND SIGNING FROM WEST OF 12TH AVE SW TO 11TH AVE SW	City of Rochester, Minnesota Department Of Public Works	201 4th Street S.E. Rochester, MN 55904 Phone: (507) 328-2450 FAX: (507) 328-2401	Revision comment: — Revised: — 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. Russell J. Klun Date: 06/17/13 Lic. No. 24667





Revision comment: —

Revised: —

Project No. 6201-3-02 J7215
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Designer: RLW
Checker: RJK

Title: STRIPING AND SIGNING FROM 11TH AVE SW TO STA 20+75

City of Rochester, Minnesota
Department Of Public Works

201 4th Street S.E.
Rochester, MN 55904
Phone: (507) 328-2450
FAX: (507) 328-2401

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Russell J. Klun Date: 06/17/13 Lic. No. 24667

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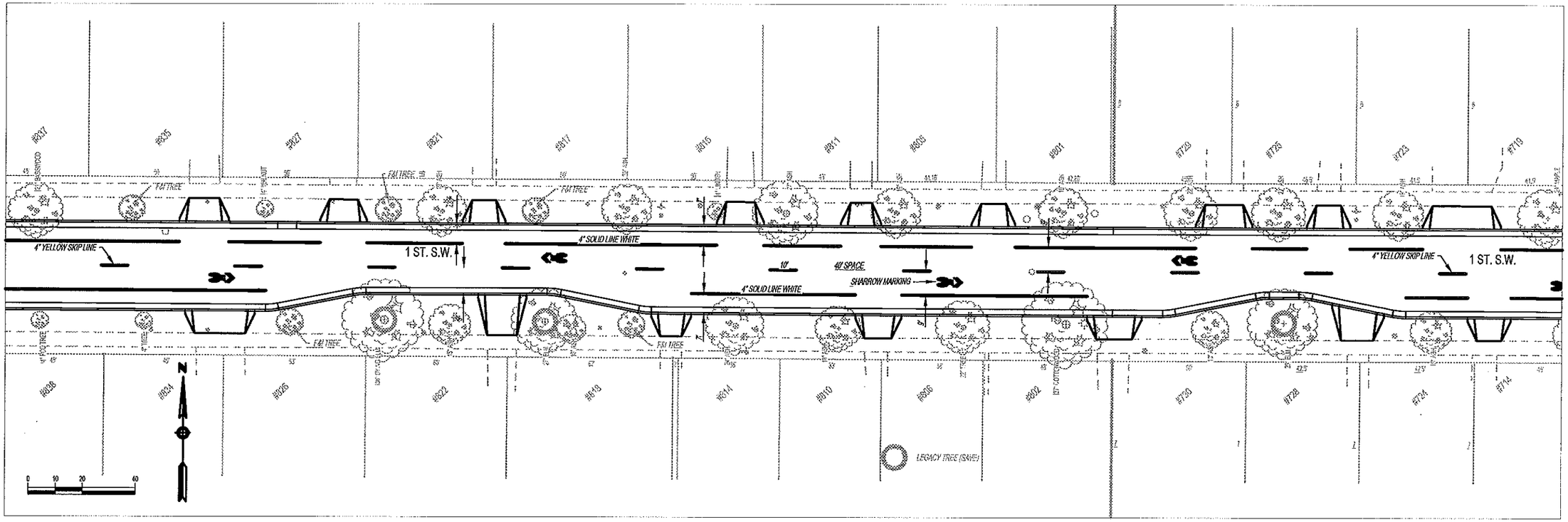

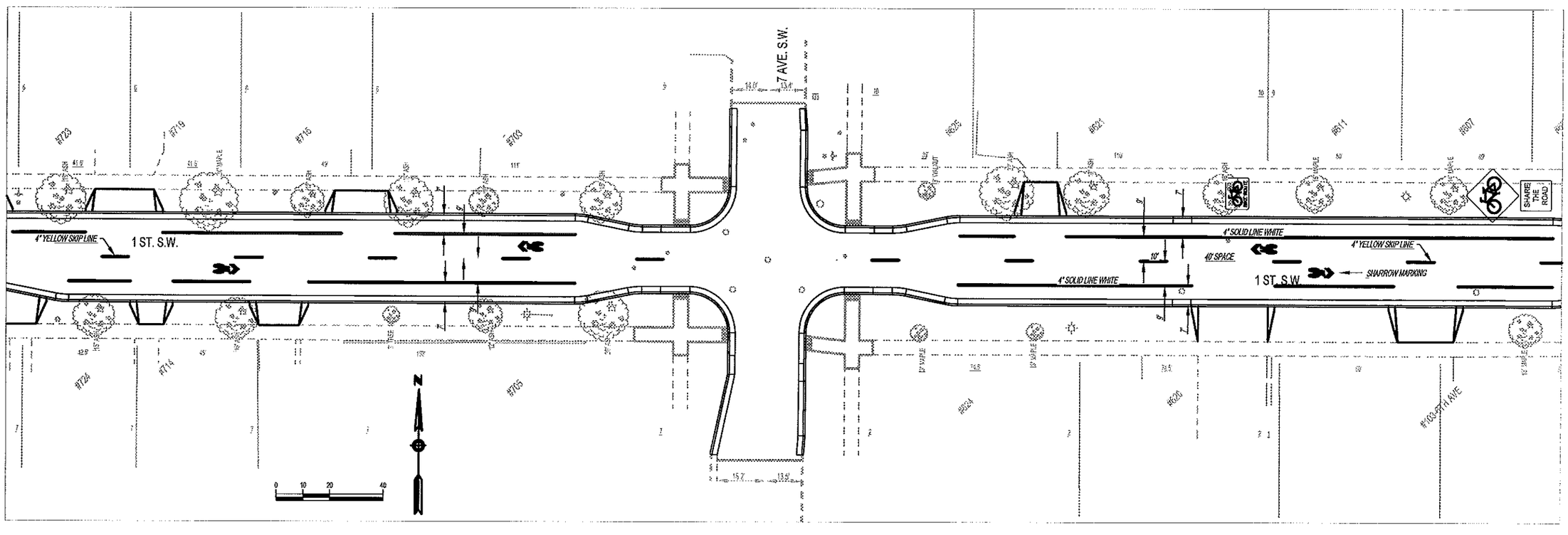

Revision comment: —
Revised: —

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.
Date: 08/17/12 Lic. No. 24087

City of Rochester, Minnesota
Department Of Public Works
201 4th Street S.E.
Rochester, MN 55904
Phone: (507) 328-2450
FAX: (507) 328-2401

Title: STRIPING AND SIGNING FROM STA 20+00 TO STA 30+75

Designer: RLW
Checker: RJK

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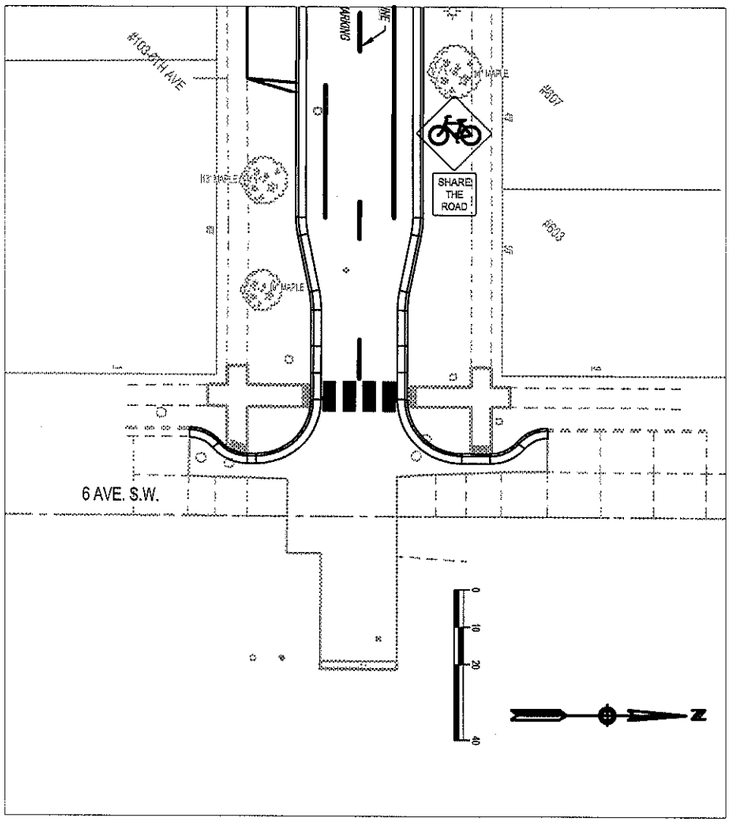

Project No. 6201-3-02 J7215 Sheet 40 of 53 Sheets	Designer: RLW Checker: RJK	Title: STRIPING AND SIGNING FROM STA 30+00 TO 6TH AVE SW	City of Rochester, Minnesota Department Of Public Works	201 4th Street S.E. Rochester, MN 55904 Phone: (507) 328-2450 FAX: (507) 328-2401	Revision comment: — Revised: — 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. Russell J. Klam Date: 06/17/13 Lic. No. 24667

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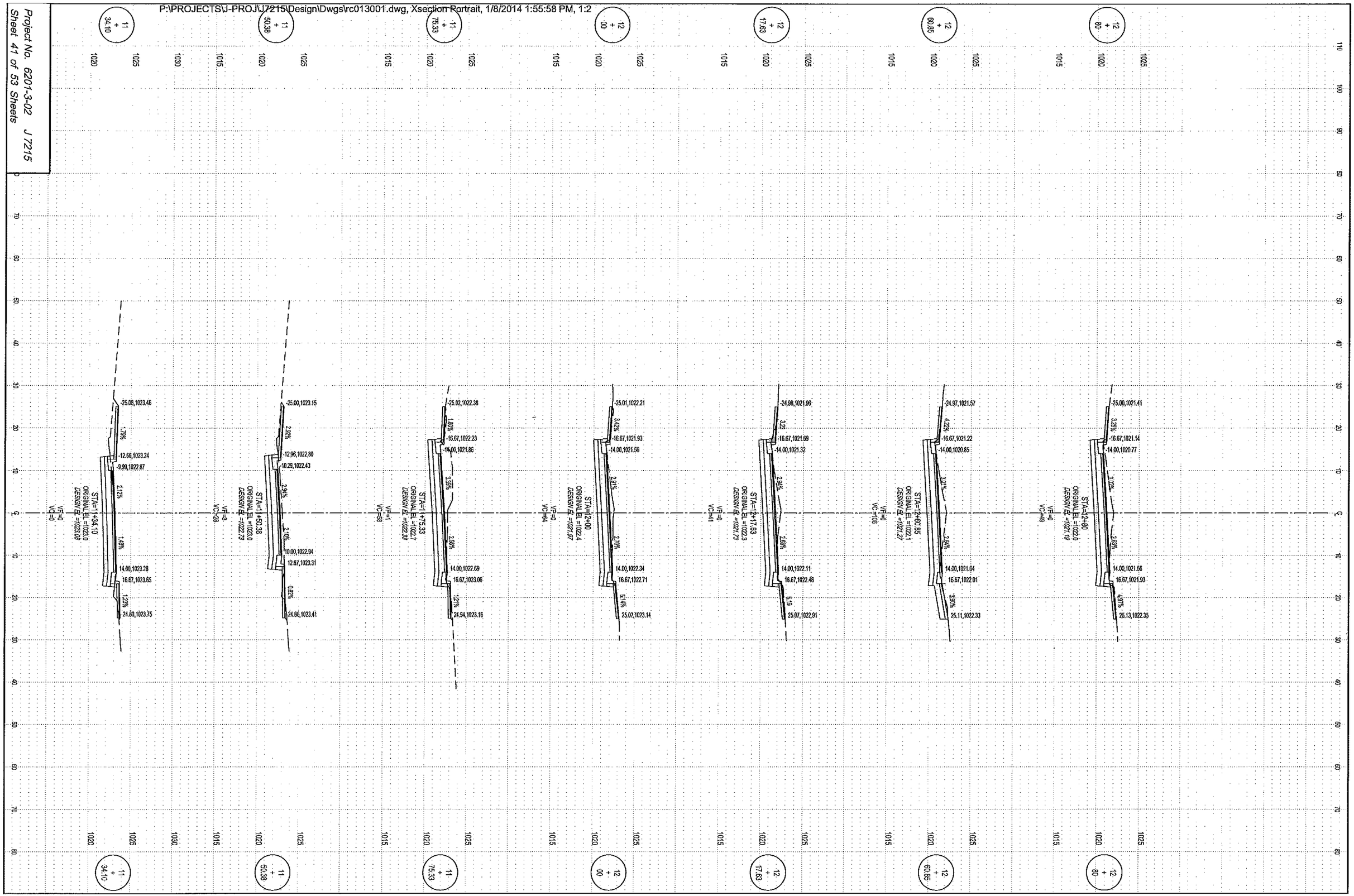

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Project No. 6201-3-02 J 7215
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Project No. 6201-3-02 J 7215
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Project No. 6201-3-02 J 7215
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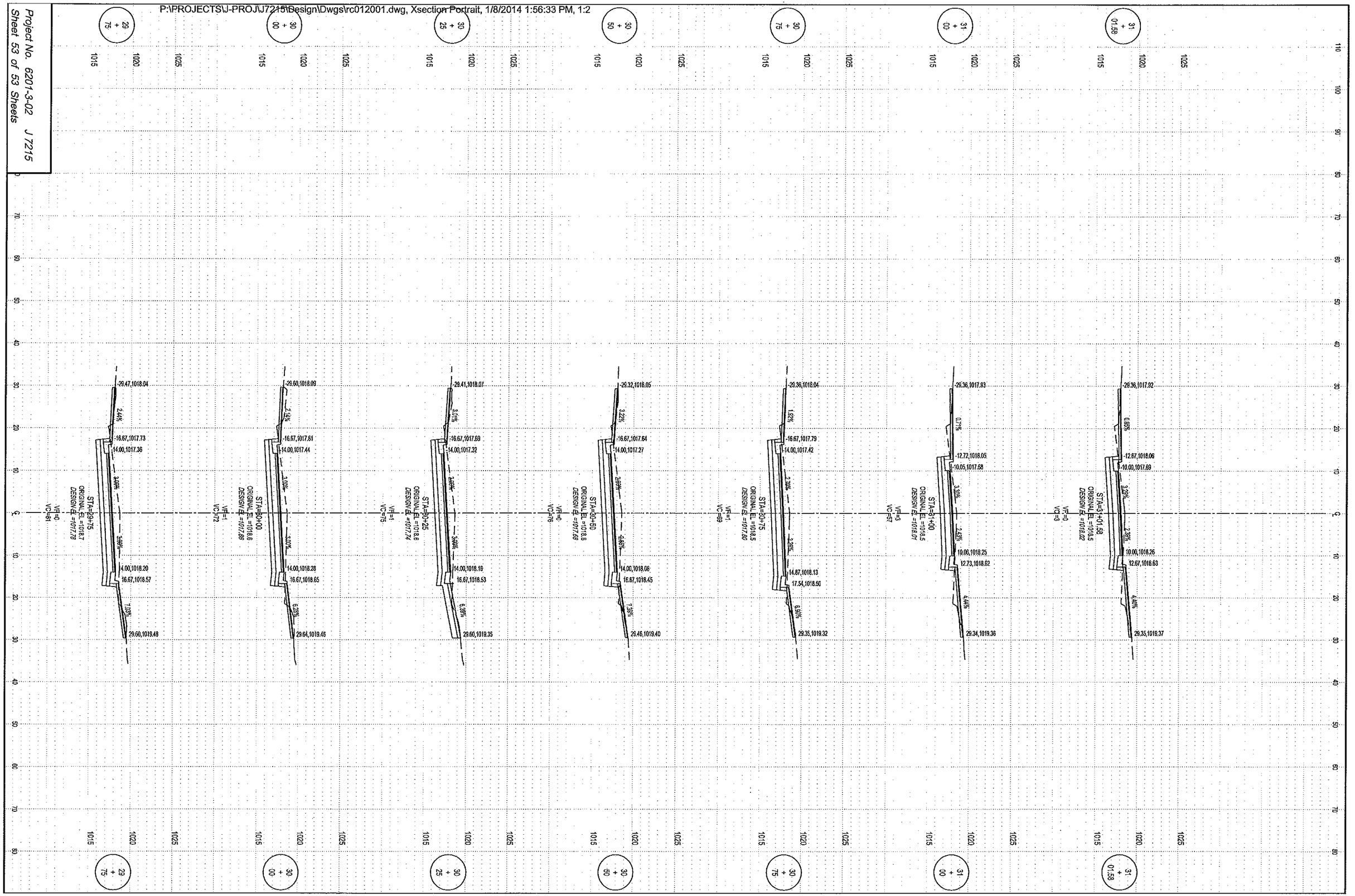
Project No. 6201-3-02 J 7215
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