WITH:

INDEX OF SHEETS

Sheet No.	1	Title
Sheet No.		Typical Sections and Details
Sheet No.		Miscellaneous Quantities
Sheet No.		Plan and Profile
Sheet No.		Computer Earthwork Data
Sheet No.		Cross Sections

TOTAL SHEETS =

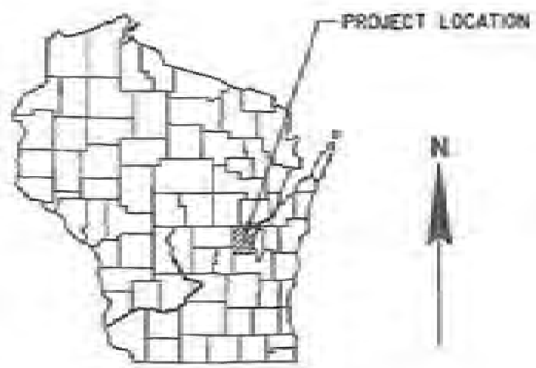
WINNEBAGO COUNTY

PLAN OF PROPOSED IMPROVEMENT

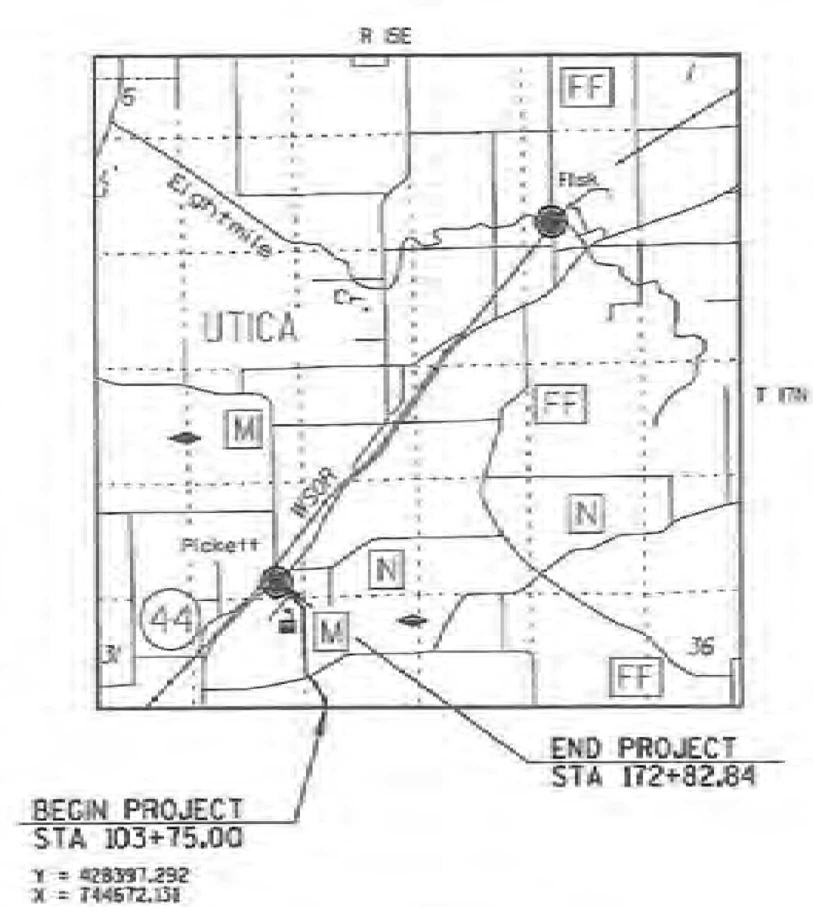
CTH M

LIMITS

SOUTH COUNTY LINE TO STH 44



SEH PROJECT NUMBER
AWINNW0302.00



LAYOUT
SCALE 0 1.0 MI.

TOTAL NET LENGTH OF CENTERLINE = 1.308 MI.

DESIGN DESIGNATION

A.D.T.	2007	= 959
A.D.T.	2027	= 1133
D.H.V.		= 60/40
D.		= 0.50
T.		= 7.5%
DESIGN SPEED		= 56/40
ESALS		= 197,100

CONVENTIONAL SYMBOLS

COUNTY LINE	COMBUSTIBLE FLUIDS
CORPORATE LIMITS	UNDERGROUND UTILITIES
PROPERTY LINE	GAS — G —
LOT LINE	ELECTRIC — E —
LIMITED EASEMENT	TELEPHONE OR TELEGRAPH — T —
EARTHWORK BALANCE POINT	TV/CABLE — TV —
	SERVICE PEDESTAL
EXISTING RIGHT OF WAY	POWER POLE
PROPOSED OR NEW R/W LINE	TELEPHONE POLE
SURVEY LINE	RAILROAD
SLOPE INTERCEPT	SANITARY SEWER — SAN —
ORIGINAL GROUND	STORM SEWER — SS —
MARSH OR ROCK PROFILE (To be noted as such)	WATER — W —
	EXISTING CULVERT
MARSH AREA	PROPOSED CULVERT (Box or Pipe)
WOODED OR SHRUB AREA	CULVERT (Profile View)

Coordinates on this plan are referenced to the Wisconsin County Coordinate System (WCCS), Winnebago County.

ACCEPTED FOR

COUNTY of WINNEBAGO

[illegible] 13 [signature]
DATE:

ORIGINAL PLANS PREPARED BY:

SEH

FILE NAME : [illegible] PLAN DATE: [illegible] PLOT TIME: [illegible]

STANDARD ABBREVIATIONS

ABUT	ABUTMENT	HYD	HYDRANT
AC	ACRE	ID	INSIDE DIAMETER
AGG	AGGREGATE	INV	INVERT
AECPRC	APRON ENDWALL FOR CULVERT PIPE REINFORCED CONCRETE	IP	IRON PIPE ON PIN
		LHF	LEFT-HAND FORWARD
ASPH	ASPHALTIC	L	LENGTH OF CURVE
AVG	AVERAGE	LF	LINEAR FOOT
ADT	AVERAGE DAILY TRAFFIC	LC	LONG CHORD OF CURVE
BF	BACK FACE	LS	LUMP SUM
BM	BENCH MARK	MH	MANHOLE
BR	BRIDGE	MOR	MID POINT OF RADIUS
CE	COMMERCIAL ENTRANCE	NC	NORMAL CROWN
CL OR C/L OR ℄	CENTER LINE	NO	NUMBER
Δ	CENTRAL ANGLE OR DELTA	OBLIT	OBLITERATE
CONC	CONCRETE	PAVT	PAVEMENT
CPRC	CULVERT PIPE REINFORCED CONCRETE	PE	PRIVATE ENTRANCE
CPRCHE	CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL	PVRC	POINT OF VERTICAL REVERSE CURVE
		QOR	QUARTER POINT OF RADIUS
CR	CREEK	R	RADIUS
CY	CUBIC YARD	REQ'D	REQUIRED
C & G	CURB AND GUTTER	RES	RESIDENCE OR RESIDENTIAL
D	DEGREE OF CURVE	RHF	RIGHT-HAND FORWARD
DHV	DESIGN HOUR VOLUME	R/W	RIGHT-OF-WAY
DISCH	DISCHARGE	R	RIVER
DG	DITCH GRADE	RDWY	ROADWAY
DWY	DRIVEWAY	R/L OR ℞	REFERENCE LINE
X	EAST GRID COORDINATE	SALV	SALVAGED
EAT	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL	SAN	SANITARY SEWER
		SF	SQUARE FEET
EOR	END POINT OF RADIUS	SY	SQUARE YARD
EL	ELEVATION	SDD	STANDARD DETAIL DRAWINGS
ENT	ENTRANCE	STA	STATION
ESALS	EQUIVALENT SINGLE AXLE LOADS	SS	STORM SEWER
EXC	EXCAVATION	SSPRC	STORM SEWER PIPE REINFORCED CONCRETE
EBS	EXCAVATION BELOW SUBGRADE	SE	SUPERELEVATION RATE
EXIST	EXISTING	TC	TOP OF CURB
FC	FACE OF CURB	T OR TN	TOWN
FF	FACE TO FACE	T	TRUCKS (PERCENT OF)
FERT	FERTILIZE	TYP	TYPICAL
FE	FIELD ENTRANCE	VAR	VARIABLE
FL	FLOW LINE	VC	VERTICAL CURVE
FO	FIBER OPTIC	Y	NORTH GRID COORDINATE
CWT	HUNDREDWEIGHT	YD	YARD

UTILITY CONTACTS

CENTURYLINK
201 STARK ST
RANDOLPH, WI 53956
TELEPHONE: 920.236.2224
EMAIL: TIM.KROEZE@CENTURYLINK.COM
ATTENTION: TIM KROEZE

WISCONSIN PUBLIC SERVICE-GAS
300 N MAIN ST
OSHKOSH, WI 54901
TELEPHONE: 920.236.5908
ATTENTION: PAUL SPANGLER

WISCONSIN PUBLIC SERVICE-ELECTRIC
300 N MAIN ST
OSHKOSH, WI 54901
TELEPHONE: 920.236.5912
ATTENTION: BYRON WALLESER

DNR CONTACT
625 EAST CTH Y, SUITE 700
OSHKOSH, WI 54901-9731
TELEPHONE: 920.303.5442
ATTENTION: BOBBI JO FISCHER

DESIGN CONTACT
SEH INC
425 WEST WATER STREET, SUITE 300
APPLETON, WI 54911-6058
TELEPHONE: 920.380.2800
ATTENTION: RICH GLEN, P.E.

TO OBTAIN LOCATION OF PARTICIPANT'S UNDERGROUND FACILITIES BEFORE YOU DIG IN WISCONSIN

DIGGERS HOTLINE

FOR FIELD LOCATES
CALL: 1.800.242.8511
www.DiggersHotline.com

WIS. STATUTE 182.0175 (1974) REQUIRES MIN. OF 3 WORK DAYS NOTICE BEFORE YOU EXCAVATE.

GENERAL NOTES

ELEVATIONS SHOWN ON THE PLAN ARE REFERENCED TO THE NGVD 29 DATUM.

THE LOCATION OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.

NO TREES OR SHRUBS ARE TO BE REMOVED WITHOUT THE APPROVAL OF THE ENGINEER.

CURVE DATA IS BASED ON THE ARC DEFINITION.

THE EXACT LOCATION OF THE EROSION CONTROL DEVICES SHALL BE DETERMINED IN THE FIELD.

DISTURBED AREAS WITHIN THE RIGHT-OF-WAY, EXCEPT THE AREAS WITHIN THE FINISHED SHOULDER POINTS, ARE TO BE 4-INCH SALVAGED TOPSOIL, FERTILIZED, SEEDED, AND MULCHED.

BEARINGS SHOWN ON THE PLANS ARE GROUND BEARINGS TO THE NEAREST SECOND.

THE LOCATION OF ALL DRIVEWAYS WILL BE DETERMINED IN THE FIELD.

ALL CURB AND GUTTER RADII, PAVEMENT DIMENSIONS AND STATIONS ARE SHOWN TO THE EDGE OF PAVEMENT UNLESS NOTED OTHERWISE.

A VERTICAL SAWCUT SHALL BE MADE THROUGH EXISTING DRIVEWAYS AND PAVEMENTS AT REMOVAL LIMITS.

TACK COAT HAS BEEN ESTIMATED AT AN APPLICATION RATE OF 0.025 GAL/S.Y. AND SHALL BE PLACED BETWEEN LAYERS OF ASPHALTIC PAVEMENT.

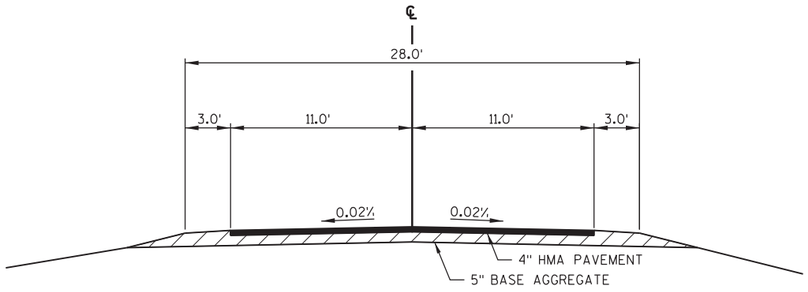
FILL AS SHOWN ON THE PLANS PERTAINS TO EMBANKMENTS CONSTRUCTED FROM UNCLASSIFIED EXCAVATION. THE ALLOWANCE USED FOR EXPANDING THE FILLS TO COMPUTE THE VOLUME OF MATERIAL REQUIRED IS 25 PERCENT. ALL FILL VOLUMES SHOWN ARE ACTUAL VOLUMES.

ALL DRAIN TILE OUTLETS SHALL BE MAINTAINED.

ALL NEW DRIVEWAY CULVERTS WHICH FALL WITHIN THE CLEAR ZONE AS SHOWN ON THE TYPICAL SECTION SHALL BE INSTALLED WITH SLOPED END SECTION ENDWALLS

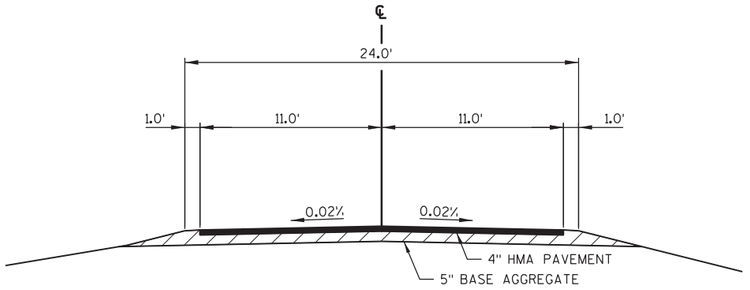
WINNEBAGO COUNTY HIGHWAY DEPARTMENT FORCES WILL PERFORM THE CLEARING FOR THE PROJECT. TREES WILL BE REMOVED DOWN TO A STUMP. REMOVAL OR GRUBBING OF STUMPS SHALL BE INCIDENTAL TO EXCAVATION COMMON.

2



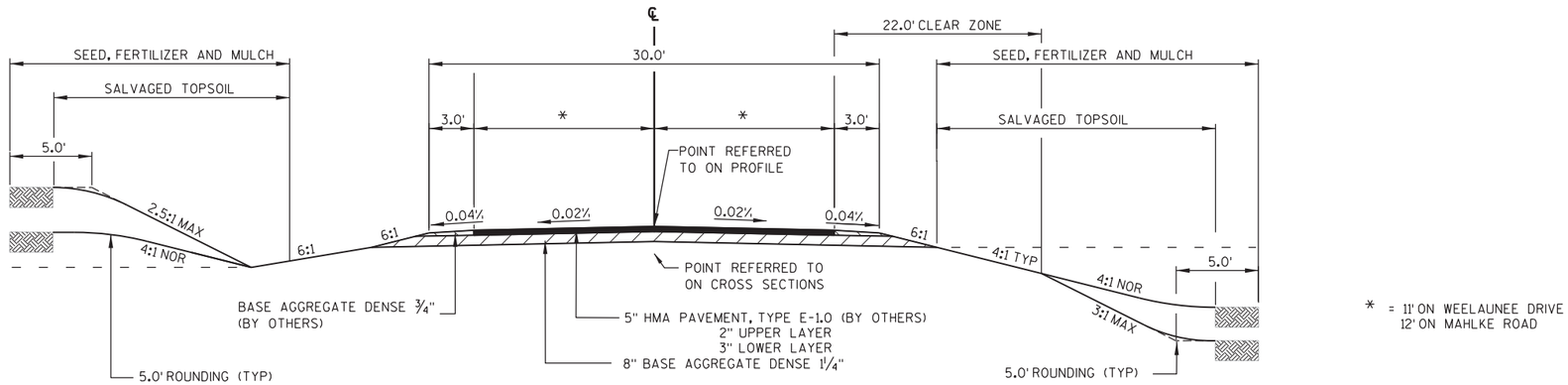
EXISTING SECTION

CTH M



EXISTING SECTION

MAHLKE ROAD
WEELAUNEE DRIVE

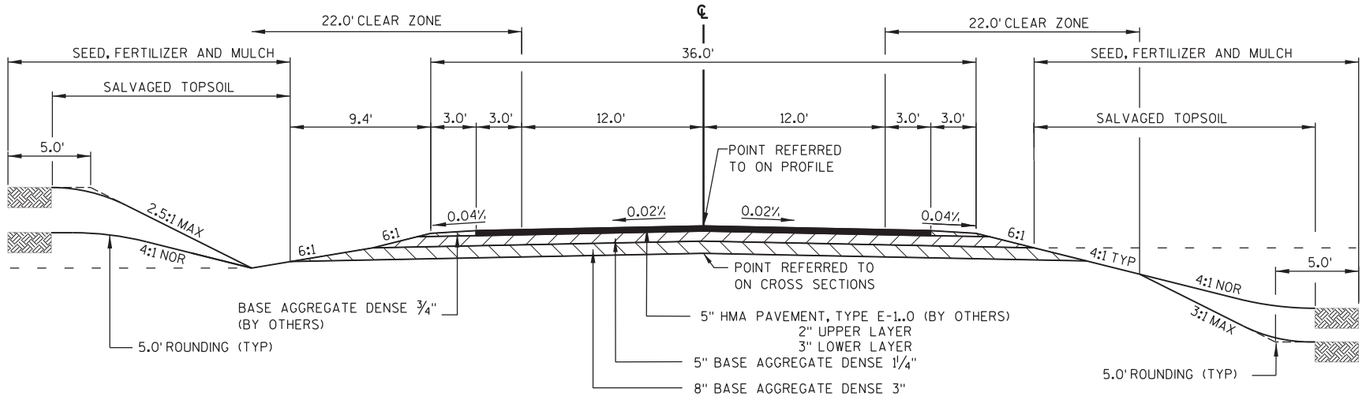


TYPICAL FINISHED SECTION

MAHLKE ROAD
WEELAUNEE DRIVE

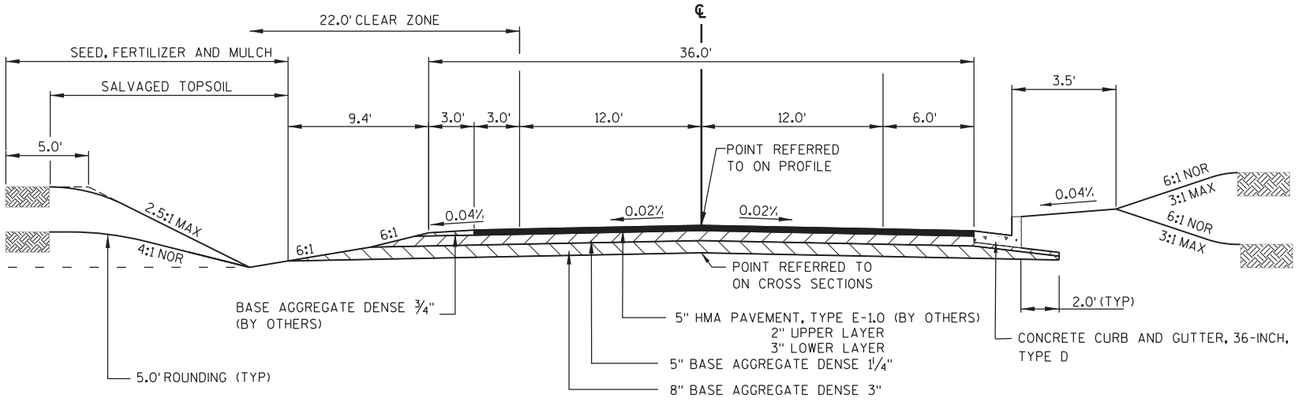
PROJECT NO:	HWY: CTH M	COUNTY: WINNEBAGO	TYPICAL SECTIONS	SHEET 3	E

2



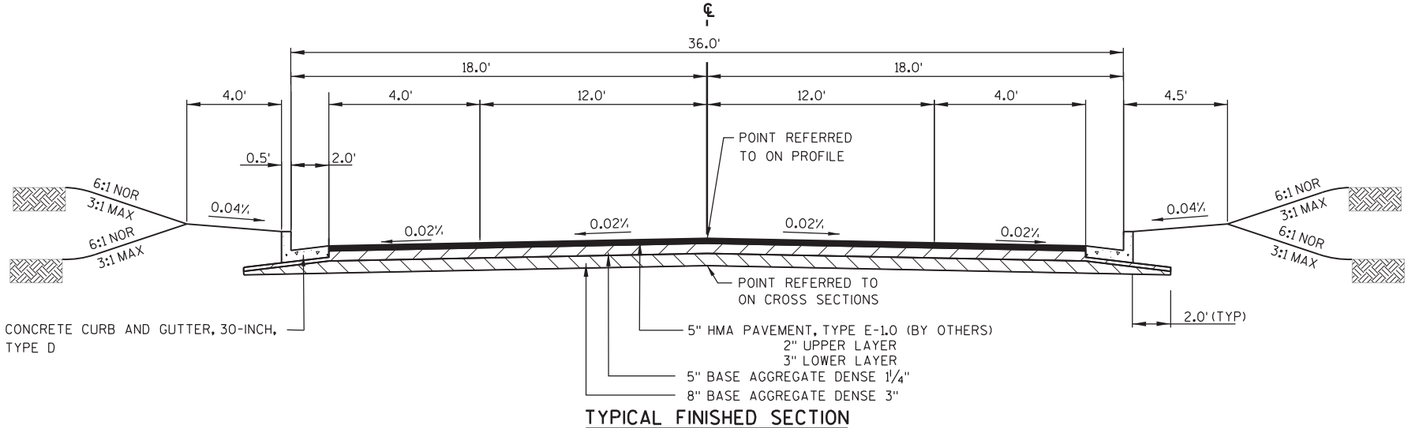
TYPICAL FINISHED SECTION

STA 103+75.00 TO STA 145+00.00
STA 149+00.00 TO STA 156+50.00
STA 158+00.00 TO STA 161+00.00



TYPICAL FINISHED SECTION

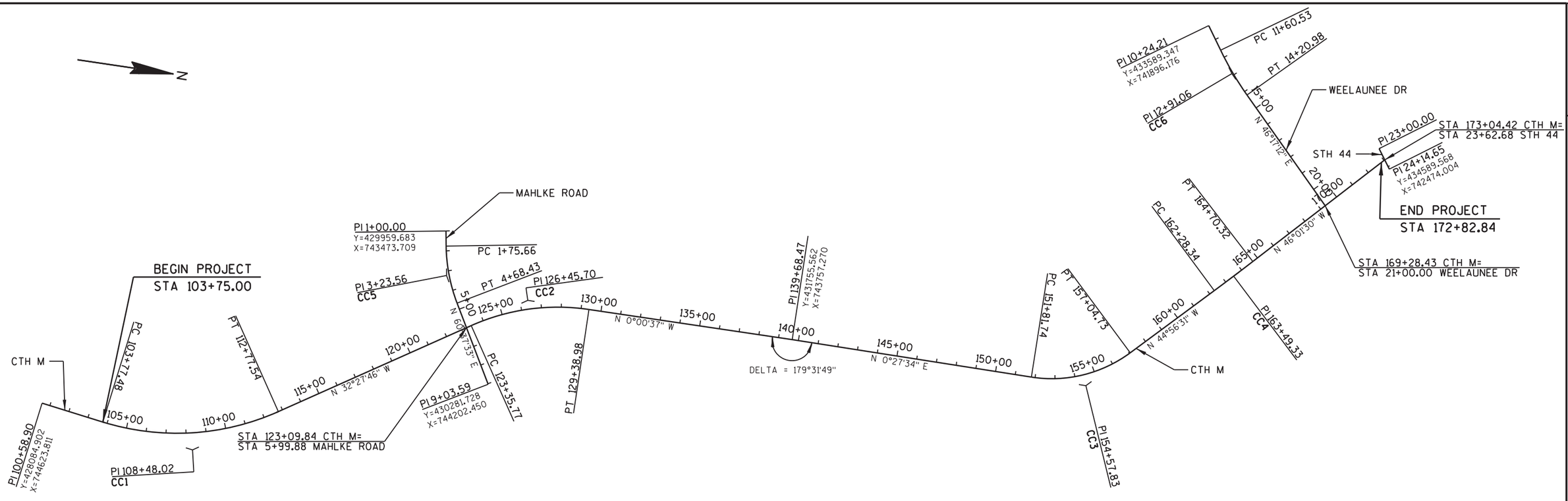
STA 145+00.00 TO STA 149+00.00
STA 156+50.00 TO STA 158+00.00



TYPICAL FINISHED SECTION

STA 161+00.00 TO STA 172+82.84

PROJECT NO:	HWY: CTH M	COUNTY: WINNEBAGO	TYPICAL SECTIONS	SHEET 4	E



CURVE DATA CC1
DELTA =-41°15'19" (LT)
D =4°35'01"
T =470.53
L =900.05
E =85.63
R =1250.00
DB =N 8°47'34" E
DA =N 32°27'46" W
PC STA 103+77.48
PC Y =428399.7474
PC X =744672.5107
PI STA 108+48.02
PI Y =428864.7517
PI X =744744.4362
PT STA 112+77.54
PT Y =429261.7603
PT X =744491.8766
SE = 5.8

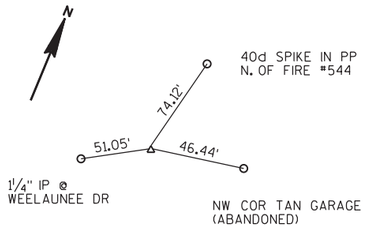
CURVE DATA CC2
DELTA =32°27'09" (RT)
D =5°22'48"
T =309.94
L =603.22
E =44.18
R =1065.00
DB =N 32°27'46" W
DA =N 0°00'37" W
PC STA 123+35.77
PC Y =430154.6294
PC X =743923.8721
PI STA 126+45.70
PI Y =430416.1376
PI X =743757.5120
PT STA 129+38.98
PT Y =430726.0767
PT X =743757.4559
SE = 6.0

CURVE DATA CC3
DELTA =-45°24'05" (LT)
D =8°40'52"
T =276.09
L =522.99
E =55.42
R =660.00
DB =N 0°27'34" E
DA =N 44°56'31" W
PC STA 151+81.74
PC Y =432968.7971
PC X =743766.9998
PI STA 154+57.83
PI Y =433244.8816
PI X =743769.2139
PT STA 157+04.73
PT Y =433440.3070
PT X =743574.1845
SE = 3.8

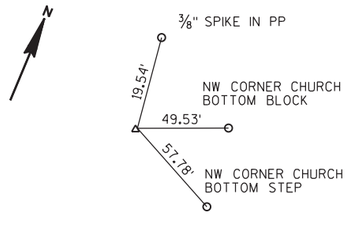
CURVE DATA CC4
DELTA =-1°04'59" (LT)
D =0°26'51"
T =120.99
L =241.97
E =.57
R =12800.00
DB =N 44°56'31" W
DA =N 46°01'30" W
PC STA 162+28.34
PC Y =433810.9352
PC X =743204.3073
PI STA 163+49.33
PI Y =433896.5748
PI X =743118.8412
PT STA 164+70.32
PT Y =433980.5836
PT X =743031.7715
SE = NC

CURVE DATA CC5
DELTA =-20°05'47" (LT)
D =6°51'51"
T =147.90
L =292.77
E =13.00
R =834.70
DB =N 80°43'19" E
DA =N 60°37'33" E
PC STA 1+75.66
PC Y =429971.8805
PC X =743548.3749
PI STA 3+23.56
PI Y =429995.7262
PI X =743694.3443
PT STA 4+68.43
PT Y =430068.2750
PT X =743823.2333

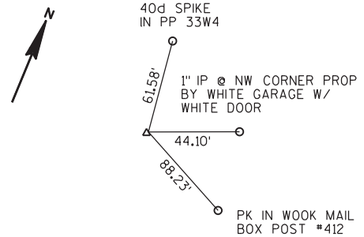
CURVE DATA CC6
DELTA =-9°32'24" (LT)
D =3°39'46"
T =130.53
L =260.45
E =5.44
R =1564.23
DB =N 55°49'36" E
DA =N 46°17'12" E
PC STA 11+60.53
PC Y =433665.9202
PC X =742008.9629
PI STA 12+91.06
PI Y =433739.2368
PI X =742116.9529
PT STA 14+20.98
PT Y =433829.4371
PT X =742211.2984



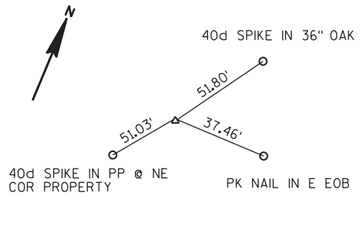
CP 1
⅜" SPIKE IN GRASS SHOULDER EAST SIDE CTH M
SE COR CTH M AND WEELAUNEE DR
7'+/- NE OF NE EOB AND 17' S OF FIRE #544



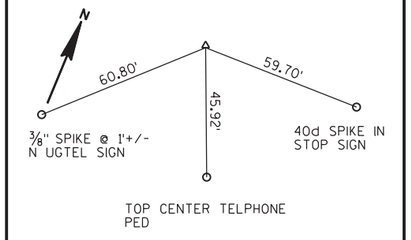
CP 2
⅜" SPIKE IN GRAVEL SHOULDER EAST SIDE CTH M
49.5'W OF NW COR OF GRACE LUTERN CHURCH,
19.5'S OF PP #29R45



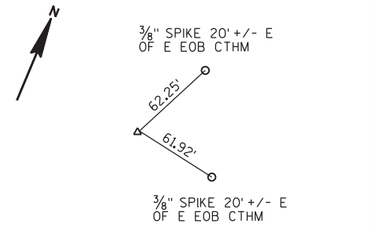
CP 3
⅜" SPIKE 2'+/- WEST OF WEST EOB CTH M
88.5'NW OF MAIL BOX #412 AND 34' WEST OF
15 MPH SIGN



CP 4
⅜" SPIKE 5'+/- WEST OF W EOB CTH M @ FEILD
ENTRANCE TO WEST

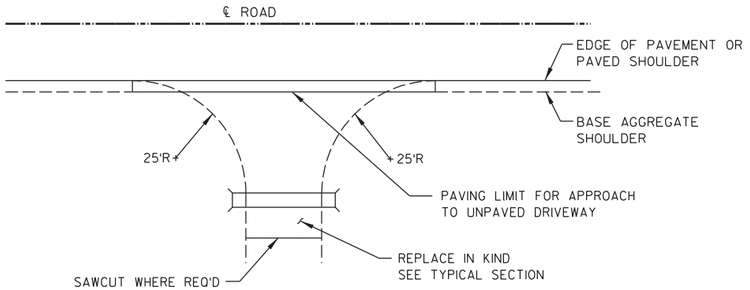


CP 5
MAGNAIL N EOB NW CORNER MEHLKE RD AND CTH M
46'+/- N OF TELEPHONE PEDESTAL AND 60'+/- NW
OF STOP SIGN

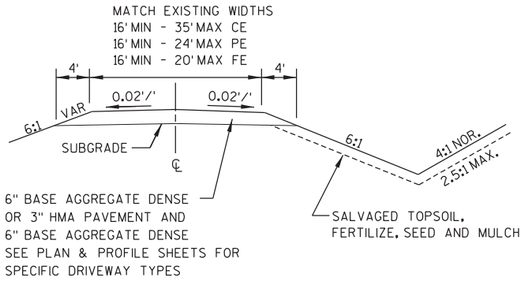


CP 6
¾" IP TOP OF KNOB 20'+/- W OF W EOB CTH M
900'+/- S OF MEHLKE ROAD

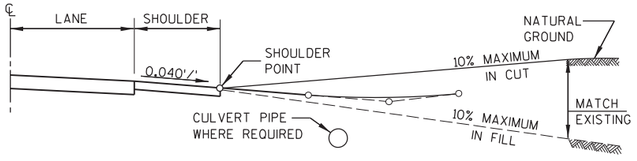
PROJECT NO:	HWY: CTH M	COUNTY: WINNEBAGO	ALINGMENT DIAGRAM	SCALE, FEET 0 NTS	SHEET 5	E



PLAN VIEW

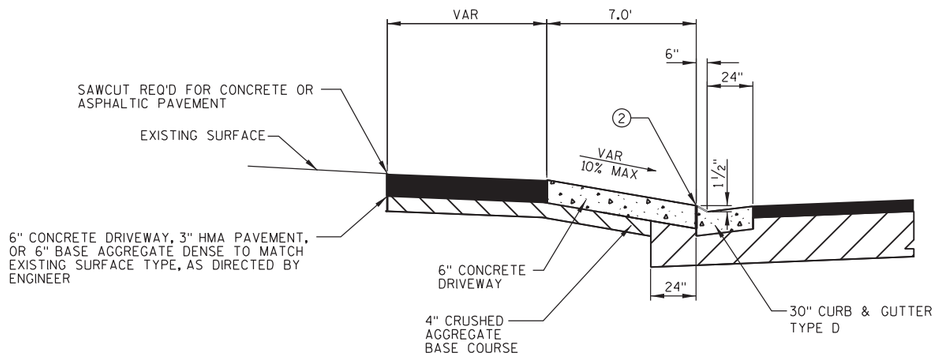


TYPICAL SECTION

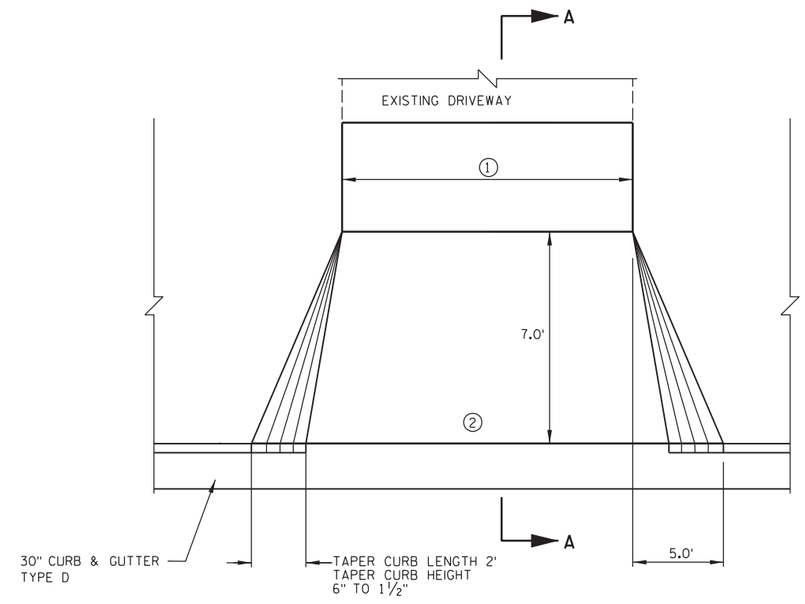


PROFILE VIEW

RURAL DRIVEWAY DETAIL



SECTION A-A

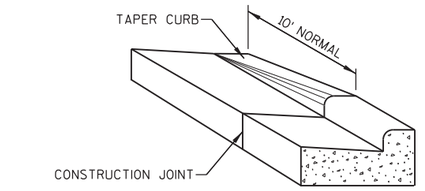


URBAN ENTRANCE

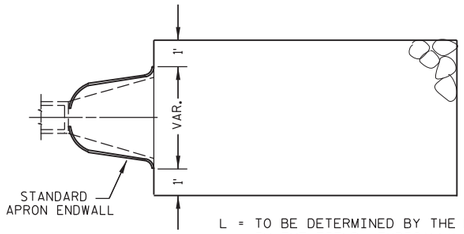
NOTES:

① MATCH EXISTING DRVEWAY WIDTHS (35' MAX WIDTH)

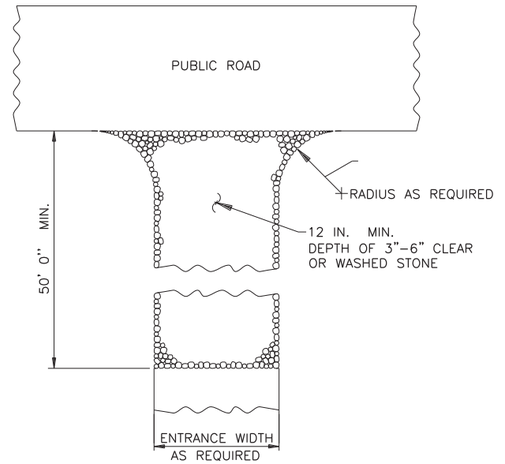
② ½" PREFORMED EXPANSION FILLER BETWEEN CURB AND NEW DRIVEWAY AND BETWEEN NEW DRIVEWAY AND EXISTING CONCRETE DRIVEWAY.



DETAIL OF CURB & GUTTER TERMINI



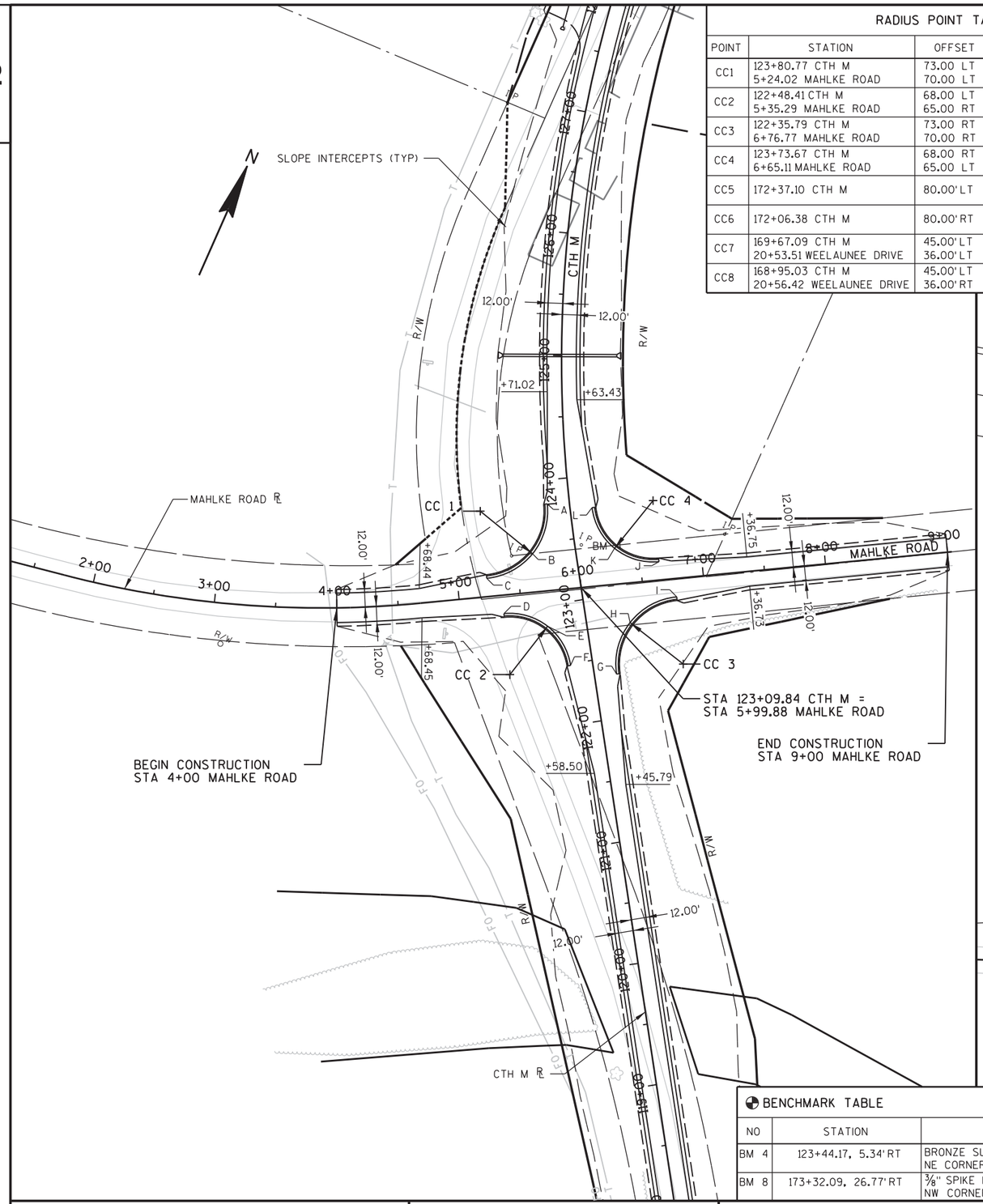
RIPRAP DISCHARGE APRON

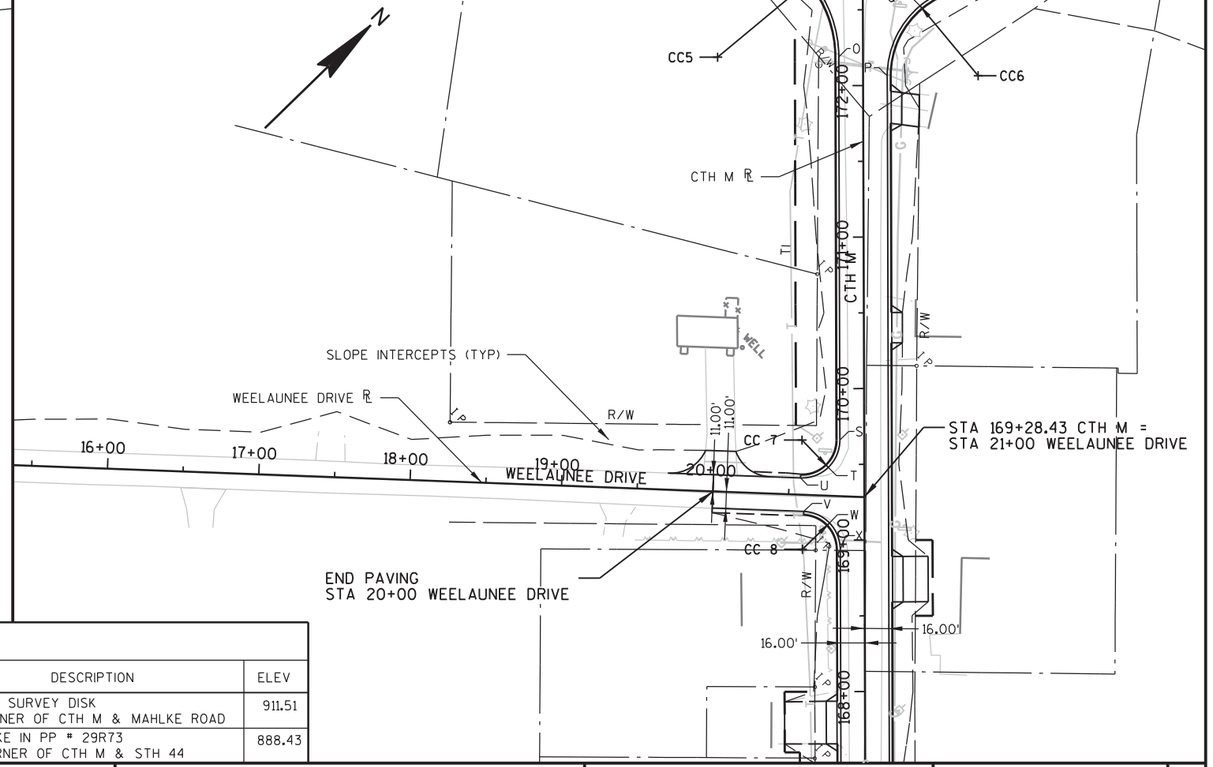


NOTES:
STONES AT ENTRANCE CLEAN WORKSITE MUD OFF OF TRUCKS TIRES BEFORE DRIVING ON MAIN ROAD. THIS WILL PREVENT AUTO DAMAGE. KEEP CONSTRUCTION SEDIMENT OUT OF DRAINAGE SYSTEMS AND WETLANDS.

TRACKING PAD DETAIL

2





RADIUS POINT TABLE

POINT	STATION	OFFSET	RADIUS	COORDINATES
CC1	123+80.77 CTH M 5+24.02 MAHLKE ROAD	73.00 LT 70.00 LT	55.00'	Y = 430,156.543 X = 743,837.340
CC2	122+48.41 CTH M 5+35.29 MAHLKE ROAD	68.00 LT 65.00 RT	50.00'	Y = 430,044.384 X = 743,913.384
CC3	122+35.79 CTH M 6+76.77 MAHLKE ROAD	73.00 RT 70.00 RT	55.00'	Y = 430,109.468 X = 744,039.123
CC4	123+73.67 CTH M 6+65.11 MAHLKE ROAD	68.00 RT 65.00 LT	50.00'	Y = 430,221.392 X = 743,962.743
CC5	172+37.10 CTH M	80.00' LT	60.00'	Y = 434,431.335 X = 742,426.336
CC6	172+06.38 CTH M	80.00' RT	60.00'	Y = 434,546.319 X = 742,554.879
CC7	169+67.09 CTH M 20+53.51 WEELAUNEE DRIVE	45.00' LT 36.00' LT	25.00'	Y = 434,295.331 X = 742,646.507
CC8	168+95.03 CTH M 20+56.42 WEELAUNEE DRIVE	45.00' LT 36.00' RT	25.00'	Y = 434,245.297 X = 742,698.364

CURVE POINT TABLE

POINT	STATION	OFFSET	ELEVATION
A	123+80.77 CTH M	18.00' LT	912.83
B	123+42.88 CTH M 5+63.39 MAHLKE ROAD	35.03' LT 31.34' LT	912.75
C	5+24.02 MAHLKE ROAD	15.00' LT	912.43
D	5+35.29 MAHLKE ROAD	15.00' RT	912.30
E	122+82.79 CTH M 5+69.69 MAHLKE ROAD	31.70' LT 28.70' RT	912.07
F	122+48.41 CTH M	18.00' LT	911.50
G	122+35.79 CTH M	18.00' RT	910.97
H	122+75.71 CTH M 6+36.85 MAHLKE ROAD	35.17' RT 31.17' RT	910.69
I	6+76.77 MAHLKE ROAD	15.00' RT	910.32
J	6+65.11 MAHLKE ROAD	15.00' LT	910.33
K	123+37.56 CTH M 6+30.08 MAHLKE ROAD	31.73' RT 29.33' LT	910.66
L	123+73.67 CTH M	18.00' RT	910.80

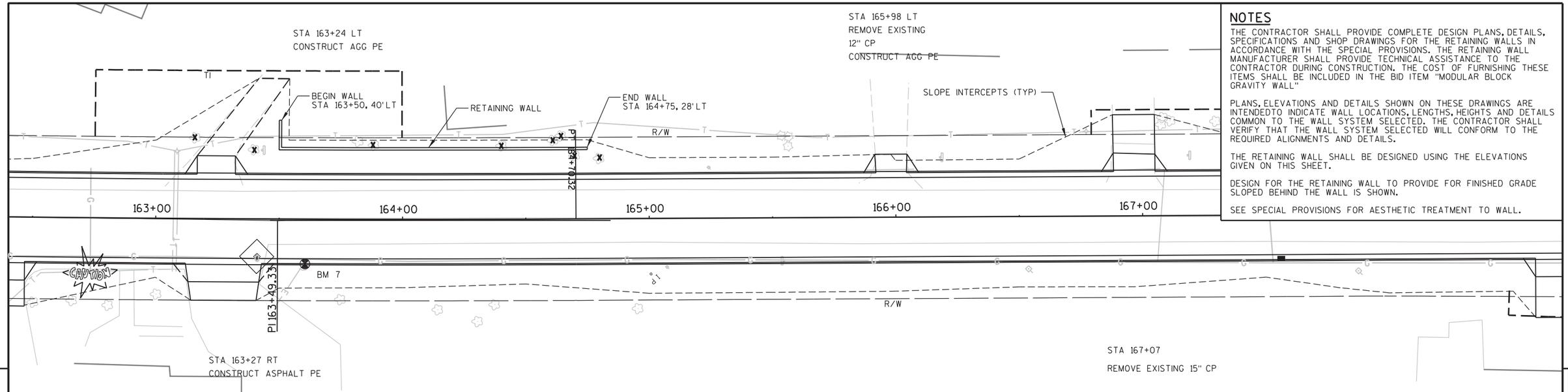
CURVE POINT TABLE

POINT	STATION	OFFSET	ELEVATION
M	172+96.03 CTH M	68.68' LT	MATCH EXIST
N	172+69.90 CTH M	34.33' LT	886.00
O	172+18.99 CTH M	16.00' LT	884.54
P	172+06.39 CTH M	16.00' RT	884.16
Q	172+52.69 CTH M	37.78' RT	886.97
R	172+65.30 CTH M	91.32' RT	MATCH EXIST
S	169+66.35 CTH M	16.00' LT	877.92
T	169+48.04 CTH M 20+75.49 WEELAUNEE DRIVE	23.68' LT 18.71' LT	877.68
U	20+57.48 WEELAUNEE DRIVE	11.00' LT	878.09
V	20+60.46 WEELAUNEE DRIVE	11.00' RT	877.90
W	169+11.33 CTH M 20+77.79 WEELAUNEE DRIVE	22.97' LT 17.94' RT	877.31
X	168+94.02 CTH M	16.00' LT	877.18

BENCHMARK TABLE

NO	STATION	DESCRIPTION	ELEV
BM 4	123+44.17, 5.34' RT	BRONZE SURVEY DISK NE CORNER OF CTH M & MAHLKE ROAD	911.51
BM 8	173+32.09, 26.77' RT	3/8" SPIKE IN PP # 29R73 NW CORNER OF CTH M & STH 44	888.43

PROJECT NO:	HWY: CTH M	COUNTY: WINNEBAGO	INTERSECTION DETAILS	SCALE, FEET 0 50 100	SHEET 7	E



NOTES

THE CONTRACTOR SHALL PROVIDE COMPLETE DESIGN PLANS, DETAILS, SPECIFICATIONS AND SHOP DRAWINGS FOR THE RETAINING WALLS IN ACCORDANCE WITH THE SPECIAL PROVISIONS. THE RETAINING WALL MANUFACTURER SHALL PROVIDE TECHNICAL ASSISTANCE TO THE CONTRACTOR DURING CONSTRUCTION. THE COST OF FURNISHING THESE ITEMS SHALL BE INCLUDED IN THE BID ITEM "MODULAR BLOCK GRAVITY WALL"

PLANS, ELEVATIONS AND DETAILS SHOWN ON THESE DRAWINGS ARE INTENDEDTO INDICATE WALL LOCATIONS, LENGTHS, HEIGHTS AND DETAILS COMMON TO THE WALL SYSTEM SELECTED. THE CONTRACTOR SHALL VERIFY THAT THE WALL SYSTEM SELECTED WILL CONFORM TO THE REQUIRED ALIGNMENTS AND DETAILS.

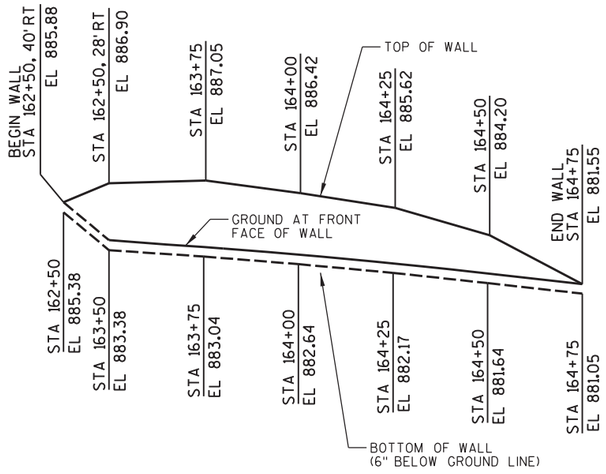
THE RETAINING WALL SHALL BE DESIGNED USING THE ELEVATIONS GIVEN ON THIS SHEET.

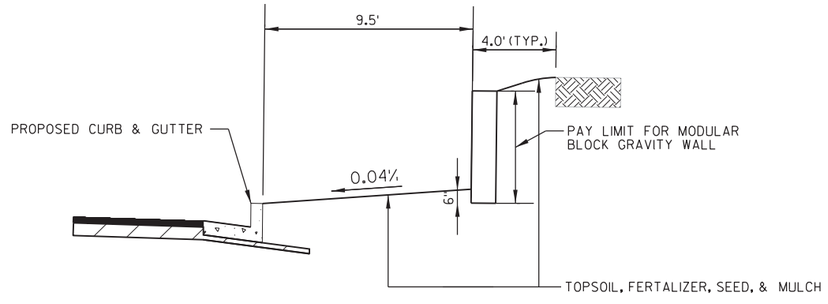
DESIGN FOR THE RETAINING WALL TO PROVIDE FOR FINISHED GRADE SLOPED BEHIND THE WALL IS SHOWN.

SEE SPECIAL PROVISIONS FOR AESTHETIC TREATMENT TO WALL.

BENCHMARK TABLE

NO	STATION	DESCRIPTION	ELEV
BM 7	163+61.13, 17.96'RT	⅜" SPIKE IN PP ▪ 29R45 EAST SIDE OF EXISTING CTH M	885.38





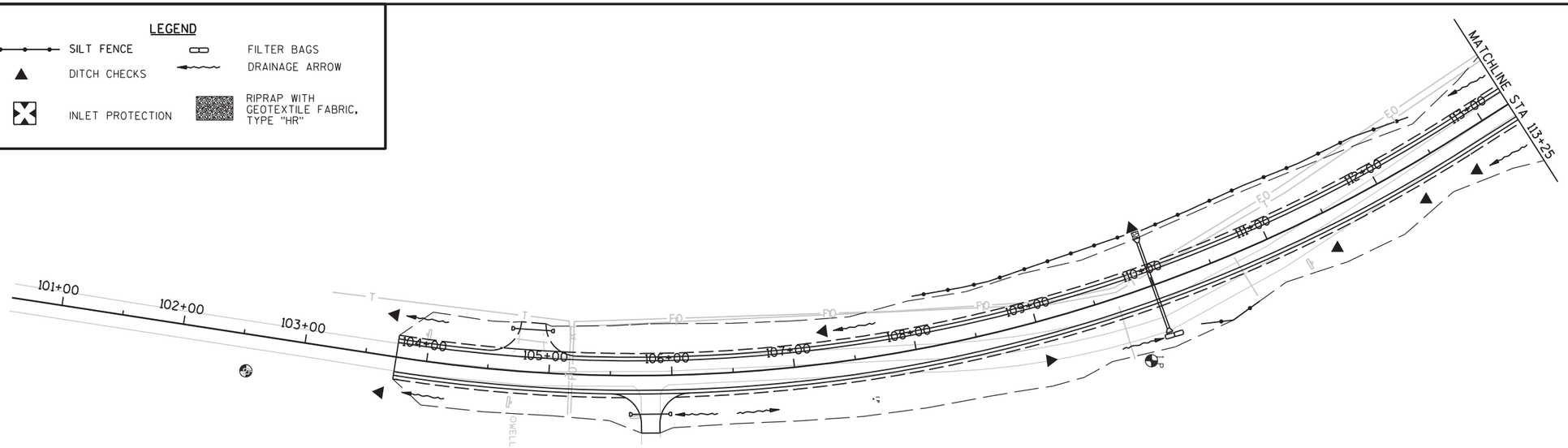
TYPICAL CROSS SECTION AT RETAINING WALL

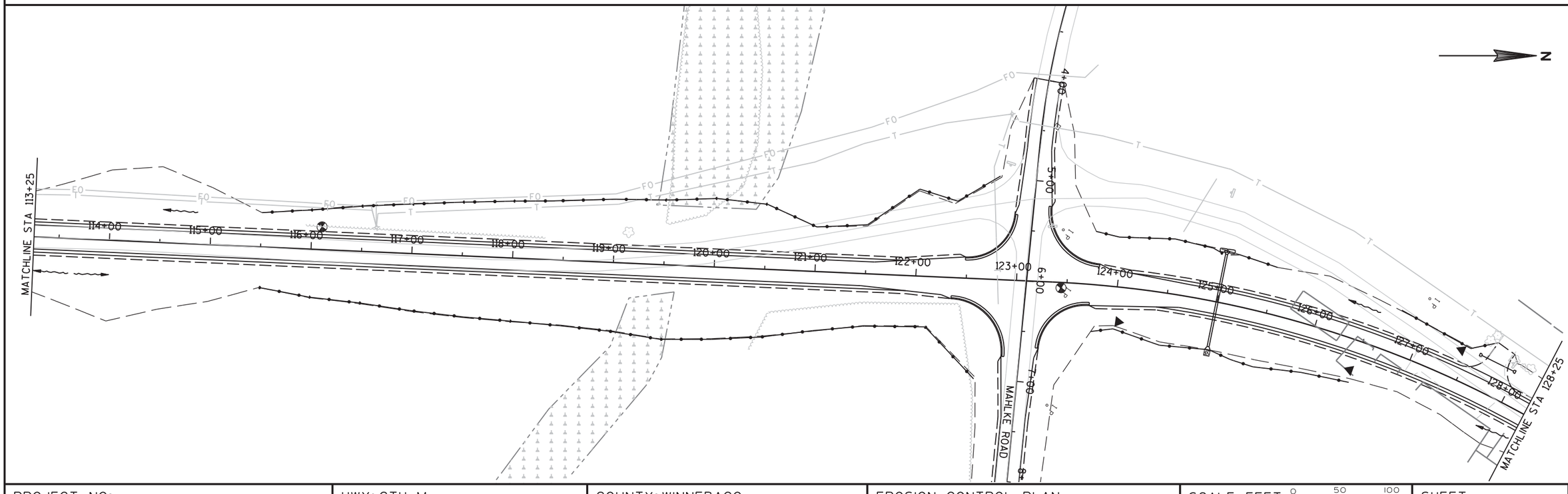
PROJECT NO:	HWY: CTH M	COUNTY: WINNEBAGO	RETAINING WALL DETAIL	SCALE, FEET 0 20 40	SHEET 8	E

2

LEGEND

- SILT FENCE
- FILTER BAGS
- DITCH CHECKS
- DRAINAGE ARROW
- INLET PROTECTION
- RIPRAP WITH GEOTEXTILE FABRIC, TYPE "HR"





PROJECT NO:	HWY: CTH M	COUNTY: WINNEBAGO	EROSION CONTROL PLAN	SCALE, FEET 0 50 100	SHEET 9	E

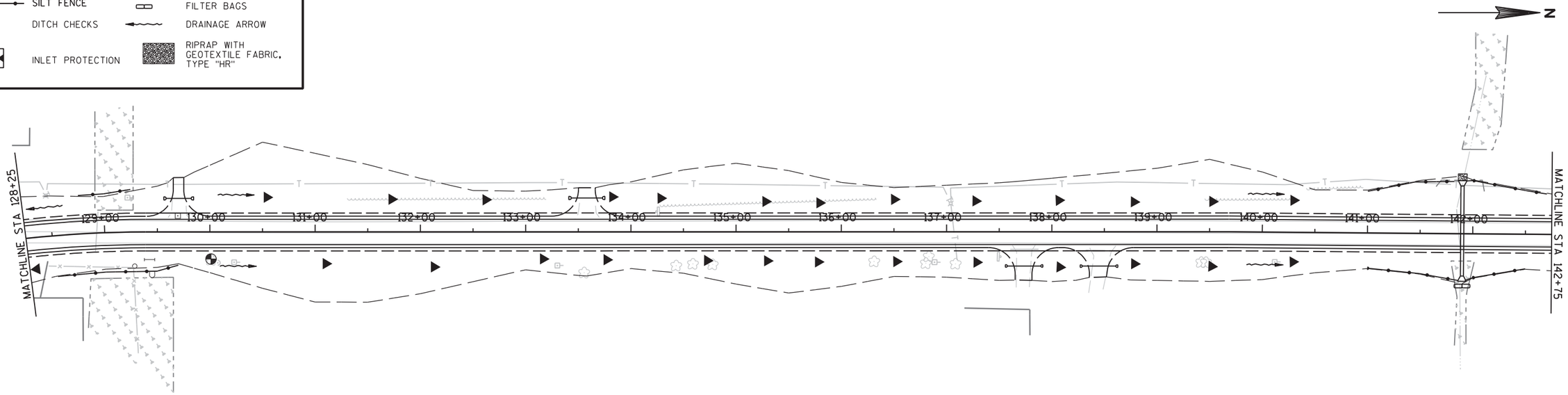
FILE NAME : P:\UZ\W\WINNC\030200_CTH_M\CAD\eccthm01.dgn PLOT TIME : 12:56:02 PM PLOT DATE : 1/18/2013 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A

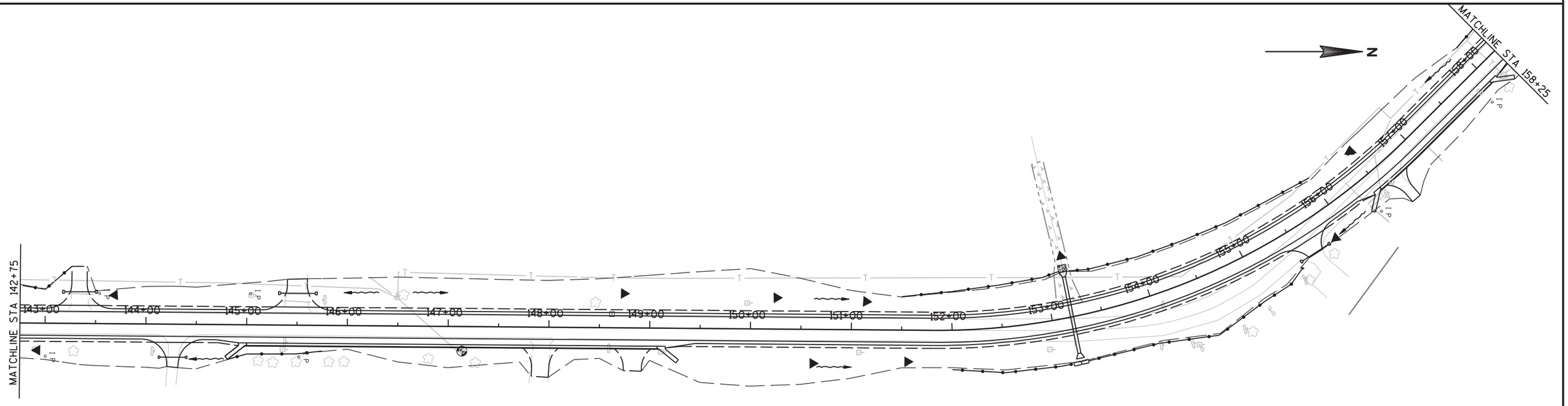
WISDOT/CADDS SHEET 42

2

LEGEND

SILT FENCE
FILTER BAGS
DITCH CHECKS
DRAINAGE ARROW
INLET PROTECTION
RIPRAP WITH GEOTEXTILE FABRIC, TYPE "HR"





PROJECT NO:	HWY: CTH M	COUNTY: WINNEBAGO	EROSION CONTROL PLAN	SCALE, FEET 0 50 100	SHEET 10	E

FILE NAME : P:\UZ\W\WINNC\030200_CTH_M\CAD\eccthm02.dgn PLOT TIME : 12:56:02 PM PLOT DATE : 1/18/2013 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A

LEGEND

SILT FENCE — FILTER BAGS

DITCH CHECKS — DRAINAGE ARROW

INLET PROTECTION — RIPRAP WITH GEOTEXTILE FABRIC, TYPE "HR"

N

MATCHLINE STA 158+25

159+00 160+00 161+00 162+00 163+00 164+00 165+00 166+00 167+00 168+00 169+00 170+00 171+00 172+00 173+00

16+00 17+00 18+00 19+00 20+00 23+00 24+00

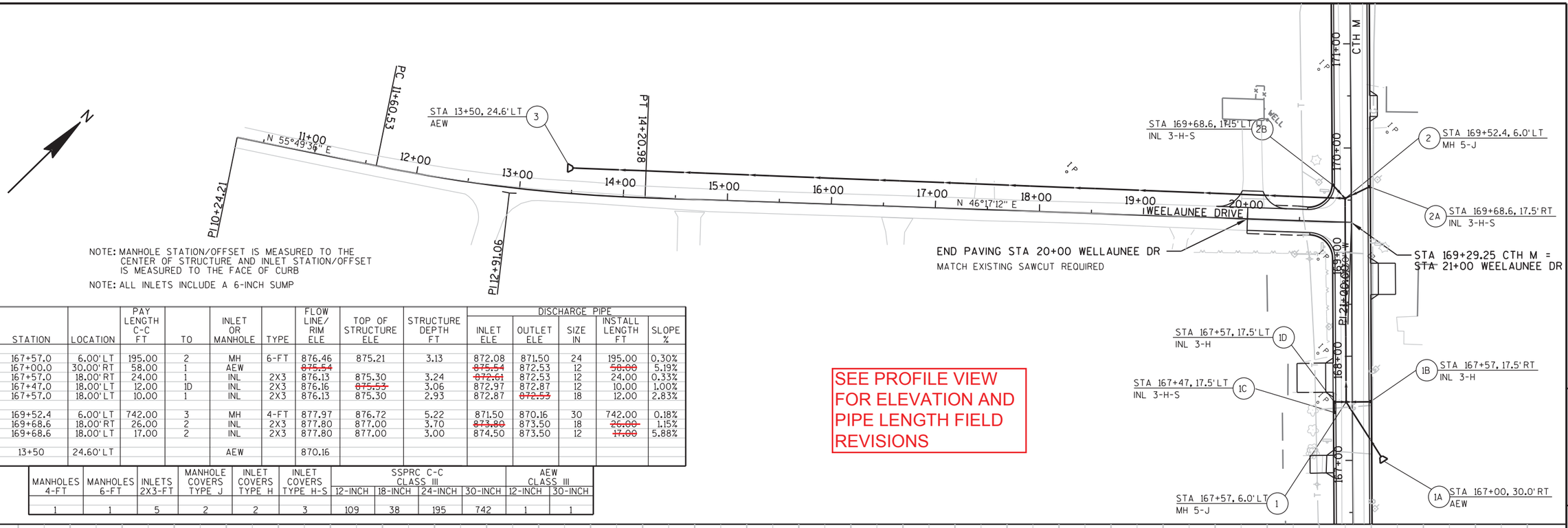
WEELAUNEE DRIVE

WELL

PROJECT NO:	HWY:CTH M	COUNTY:WINNEBAGO	EROSION CONTOL PLAN	SCALE, FEET 0 50 100	SHEET 11	E

FILE NAME :$FILE$ PLOT TIME : $TIME$ PLOT DATE : $DATE$ PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 42



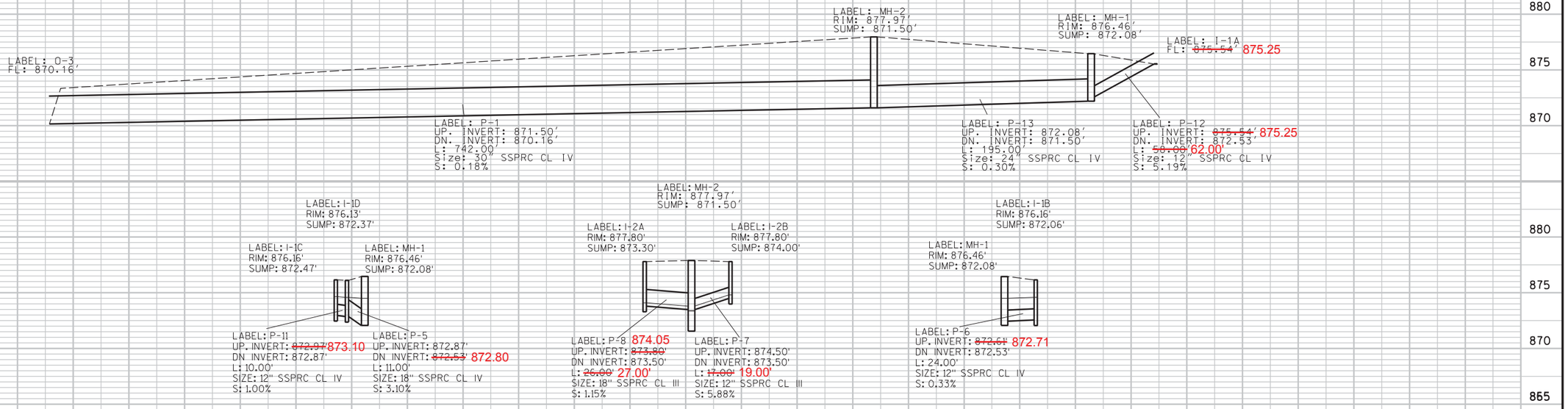
NOTE: MANHOLE STATION/OFFSET IS MEASURED TO THE CENTER OF STRUCTURE AND INLET STATION/OFFSET IS MEASURED TO THE FACE OF CURB

NOTE: ALL INLETS INCLUDE A 6-INCH SUMP

STRUCTURE NO.	STATION	LOCATION	PAY LENGTH C-C FT	TO	INLET OR MANHOLE	TYPE	FLOW LINE/ RIM ELE	TOP OF STRUCTURE ELE	STRUCTURE DEPTH FT	DISCHARGE PIPE				
										INLET ELE	OUTLET ELE	SIZE IN	INSTALL LENGTH FT	SLOPE %
1	167+57.0	6.00' LT	195.00	2	MH	6-FT	876.46	875.21	3.13	872.08	871.50	24	195.00	0.30%
1A	167+00.0	30.00' RT	58.00	1	AEW		~~875.54~~			~~875.54~~	872.53	12	~~58.00~~	5.19%
1B	167+57.0	18.00' RT	24.00	1	INL	2X3	876.13	875.30	3.24	~~872.61~~	872.53	12	24.00	0.33%
1C	167+47.0	18.00' LT	12.00	1D	INL	2X3	876.16	~~875.53~~	3.06	872.97	872.87	12	10.00	1.00%
1D	167+57.0	18.00' LT	10.00	1	INL	2X3	876.13	875.30	2.93	872.87	~~872.53~~	18	12.00	2.83%
2	169+52.4	6.00' LT	742.00	3	MH	4-FT	877.97	876.72	5.22	871.50	870.16	30	742.00	0.18%
2A	169+68.6	18.00' RT	26.00	2	INL	2X3	877.80	877.00	3.70	~~873.80~~	873.50	18	~~26.00~~	1.15%
2B	169+68.6	18.00' LT	17.00	2	INL	2X3	877.80	877.00	3.00	874.50	873.50	12	~~17.00~~	5.88%
3	13+50	24.60' LT			AEW		870.16							

MANHOLES 4-FT	MANHOLES 6-FT	INLETS 2X3-FT	MANHOLE COVERS TYPE J	INLET COVERS TYPE H	INLET COVERS TYPE H-S	SSPRC C-C CLASS III				AEW CLASS III	
						12-INCH	18-INCH	24-INCH	30-INCH	12-INCH	30-INCH
1	1	5	2	2	3	109	38	195	742	1	1

SEE PROFILE VIEW FOR ELEVATION AND PIPE LENGTH FIELD REVISIONS



PROJECT NO:	HWY: CTH M	COUNTY: WINNEBAGO	PLAN AND PROFILE - CTH M	SCALE, FEET 0 50 100	SHEET 12	E

3

REMOVING SMALL PIPE CULVERTS

STATION	LOCATION	203.0100 EACH
104+85	CTH M, LT	1
105+83	CTH M, RT	1
109+69	CTH M	1
110+73	CTH M	1
124+73	CTH M	1
128+92	CTH M	1
137+73	CTH M, RT	1
138+45	CTH M, RT	1
141+90	CTH M	1
143+34	CTH M, LT	1
144+27	CTH M, RT	1
145+50	CTH M, LT	1
148+84	CTH M, RT	1
153+20	CTH M	1
158+74	CTH M, RT	1
158+83	CTH M	1
159+56	CTH M, RT	1
165+98	CTH M, LT	1
166+97	CTH M, LT	1
167+07	CTH M	1
	TOTAL	20

REMOVING CURB AND GUTTER

STATION - STATION	LOCATION	204.0150 L.F.
172+17 - 172+83	CTH M, RIGHT	73
172+60 - 172+83	CTH M, LEFT	61
	TOTAL	134

REMOVING CONCRETE SIDEWALK

STATION - STATION	LOCATION	204.0155 S.Y.
166+97	CTH M, LEFT	22
	TOTAL	22

REMOVING FENCE

STATION-STATION	LOCATION	204.0170 L.F.
128+44 - 129+27	CTH M, RT	85
	TOTAL	85

EXCAVATION COMMON

LOCATION	205.0100 EXCAVATION COMMON C.Y.	FILL C.Y.	*EXPAND. FILL C.Y.	+BORROW -WASTE C.Y.
CTH M	24,386	27,730	36,049	11,663
MAHLKE ROAD	941	0	0	-941
WEELAUNEE ROAD	324	64	83	-241
TOTALS	25,651	27,794	36,132	10,481

*NOTE: EXPANSION FACTOR = 1.3

BASE AGGREGATE DENSE

STATION - STATION	LOCATION	305.0120 1 1/4-INCH TONS	305.0130 3-INCH TONS	311.0110 BREAKER RUN TONS
103+75 - 121+00	CTH M	2200	4125	---
121+00 - 125+00	CTH M	525	985	---
125+00 - 145+00	CTH M	2550	4780	---
145+00 - 149+00	CTH M	510	930	---
149+00 - 156+50	CTH M	805	1510	---
156+50 - 158+00	CTH M	195	350	---
158+00 - 161+00	CTH M	380	715	---
161+00 - 172+00	CTH M	1370	2565	---
172+00 - 172+82.84	CTH M	155	290	---
4+00 - 9+00	MAHLKE ROAD	1280	---	---
20+00 - 21+00	WEELAUNEE DR.	225	---	---
DRIVEWAYS		605	---	---
UNDISTRIBUTED		---	---	100
	TOTALS	10800	16250	100

3

CONCRETE DRIVEWAY, 6-INCH

STATION	LOCATION	416.0160 S.Y.
161+69	CTH M, LT	30
162+30	CTH M, RT	33
163+24	CTH M, LT	17
163+27	CTH M, RT	29
165+98	CTH M, LT	14
166+97	CTH M, LT	46
167+80	CTH M, LT	28
168+74	CTH M, RT	29
170+40	CTH M, RT	21
171+85	CTH M, RT	27
	TOTAL	274

CONCRETE CURB & GUTTER

STATION - STATION	LOCATION	601.0411 30-INCH TYPE D L.F.	601.0557 36-INCH TYPE D L.F.	REMARKS
122+35 - 123+10	CTH M, RT	---	90	MAHLKE ROAD
122+48 - 123+10	CTH M, LT	---	76	MAHLKE ROAD
123+10 - 123+74	CTH M, RT	---	78	MAHLKE ROAD
123+10 - 123+80	CTH M, LT	---	60	MAHLKE ROAD
145+00 - 149+00	CTH M, RT	---	400	
156+50 - 158+00	CTH M, RT	---	150	
161+00 - 172+83	CTH M, LT	1227	---	
161+00 - 172+83	CTH M, RT	1184	---	
	TOTAL	2411	854	

3

CROSS DRAINS & PRIVATE ENTRANCE PIPES

STATION	LOCATION	CULVERT CORRUGATED STEEL 521.0115 15-INCH L.F.	521.0124 24-INCH L.F.	521.0136 36-INCH L.F.	APRON ENDWALLS FOR CULVERT PIPE 521.1015 15-INCH EACH	633.5200 MARKERS CULVERT END EACH
104+85	CTH M, LT	25	---	---	2	---
105+83	CTH M, RT	25	---	---	2	---
109+50	CTH M	---	90	---	---	2
125+00	CTH M	---	100	---	---	2
127+80	CTH M, LT	27	---	---	2	---
129+70	CTH M, LT	27	---	---	2	---
133+58	CTH M, LT	27	---	---	2	---
137+73	CTH M, RT	33	---	---	2	---
138+45	CTH M, RT	29	---	---	2	---
141+90	CTH M	---	---	100	---	2
143+34	CTH M, LT	23	---	---	2	---
144+27	CTH M, RT	18	---	---	2	---
145+50	CTH M, LT	35	---	---	2	---
153+20	CTH M	---	---	88	---	2
155+63	CTH M, RT	22	---	---	2	---
158+74	CTH M, RT	34	---	---	2	---
159+56	CTH M, RT	17	---	---	2	---
159+85	CTH M	---	---	72	---	2
	TOTALS	342	190	260	26	10

WALL MODULAR BLOCK GRAVITY

STATION - STATION	LOCATION	532.0200.S S.Y.
162+50 - 164+75	CTH M, LEFT	420
	TOTAL	420

RIPRAP AND GEOTEXTILE FABRIC

STATION	LOCATION	606.0200 RIPRAP MEDIUM C.Y.	645.0120 GEOTEXTILE FABRIC TYPE HR S.Y.
109+50	CTH M	2	4
125+00	CTH M	2	4
141+90	CTH M	2	6
153+20	CTH M	2	6
160+00	CTH M	2	6
	TOTALS	10	26

EROSION CONTROL

STATION - STATION	LOCATION	628.1504 SILT FENCE LF	628.152 SILT FENCE MAINTENANCE LF	628.7504 TEMPORARY DITCH CHEKS LF	628.757 ROCK BAGS EACH	INLET PROTECTION 628.7005 TYPE A EACH	INLET PROTECTION 628.7010 TYPE B EACH	INLET PROTECTION 628.7015 TYPE C EACH
103+75 - 113+25	CTH M	450	450	80	5	---	---	---
113+25 - 128+25	CTH M	1393	1393	20	5	---	---	---
128+25 - 149+75	CTH M	425	425	270	5	---	---	---
149+75 - 158+25	CTH M	875	875	80	5	---	---	---
158+25 - 173+00	CTH M	1500	1500	10	5	5	5	5
	TOTALS	4643	4643	460	25	5	5	5

SAWING ASPHALT

STATION	LOCATION	690.0150 L.F.	REMARKS
103+75	CTH M	23	
172+82.84	CTH M	110	
4+00	MAHLKE ROAD	24	
9+00	MAHLKE ROAD	23	
20+00	WEELAUNEE DRIVE	23	
105+83	CTH M, RT	15	PE
144+27	CTH M, RT	11	PE
155+63	CTH M, RT	16	PE
156+70	CTH M, RT	10	PE
158+74	CTH M, RT	18	PE
162+30	CTH M, RT	27	PE
163+27	CTH M, RT	45	PE
166+97	CTH M, LT	17	PE
171+85	CTH M, RT	21	PE
20+00	WEELAUNEE DRIVE, LT	18	PE
	TOTAL	401	

TOPSOIL, SALVAGED TOPSOIL, MULCHING, FERTILIZER, AND SEEDING

STATION - STATION	LOCATION	625.0500 SALVAGED TOPSOIL S.Y.	627.0200 MULCHING S.Y.	629.0210 FERTILIZER TYPE B CWT	630.0130 SEEDING MIXTURE NO. 30 LB	630.0140 SEEDING MIXTURE NO. 40 LB	630.0200 SEEDING TEMPORARY LB
103+75 - 123+00	CTH M	11250	11250	7	187	16	304
123+00 - 161+00	CTH M	20600	20600	13	329	42	556
161+00 - 172+83	CTH M	13085	13085	9	182	54	353
4+00 - 9+00	MAHLKE ROAD	1890	1890	1	34	---	51
20+00 - 21+00	WEELAUNEE DRIVE	1920	1920	1	---	35	52
TOTALS		48745	48745	31	732	147	1316

PAVEMENT MARKING EPOXY

STATION - STATION	LOCATION	646.0106 4-INCH EDGELINE WHITE L.F.	646.0106 4-INCH YELLOW L.F.	647.0556 STOPLINE 12-INCH WHITE L.F.
103+75 - 172+83	CTH M	6760	9450	35
4+00 - 9+00	MAHLKE ROAD	---	880	40
20+00 - 21+00	WEELAUNEE DR	---	160	20
	TOTALS	6760	10490	95

R/W PROJECT NUMBER	SHEET NUMBER	TOTAL SHEETS
AWINNW0302.00		
FEDERAL PROJECT NUMBER	4.1	5

PLAT OF RIGHT-OF-WAY REQUIRED FOR

SOUTH COUNTY LINE TO STH 44

CTH M — WINNEBAGO CO.

CONSTRUCTION PROJECT NUMBER
AWINNW0302.00

CONVENTIONAL SIGNS AND ABBREVIATIONS

AP	ACCESS POINT
AC	ACRES
AG	AGRICULTURAL
ALUM.	ALUMINUM
ANT	ANTENNA
B	BARN
BLDG	BUILDING
℄	CENTERLINE
CONC	CONCRETE
COR	CORNER
CSM	CERTIFIED SURVEY MAP
CTH	COUNTY TRUNK HIGHWAY
DOC	DOCUMENT
EASE	EASEMENT
ETAL	AND OTHERS
FDN	FOUNDATION
FE	FIELD ENTRANCE
FRL	FRACTIONAL
G	GARAGE
GP	GAS PUMPS
GRAV	GRAVEL
GV	GAS
HSE	HOUSE
IP	IRON PIPE OR PIN
L	LENGTH OF CURVE
LC	LONG CHORD OR LAND CONTRACT
LCB	LONG CHORD BEARING
LT	LEFT
MH	MANHOLE
MON	MONUMENT
OL	OUTLOT
P	PAGE
PC	POINT OF CURVATURE
PE	PRIVATE ENTRANCE
PI	POINT OF INTERSECTION
PK	PARKER-KALON FASTENER
PL	PROPERTY LINE
PLE	PERMANENT LIMITED EASEMENT
PT	POINT OF TANGENCY
R	RADIUS OR RANGE
RDE	RESTRICTED DEVELOPMENT EASEMENT
REM	REMAINING
℞	REFERENCE LINE
RT	RIGHT
R/W	RIGHT OF WAY
S	SHED
SEC	SECTION
SEPV	SEPTIC VENT
STH	STATE TRUNK HIGHWAY
STA	STATION
T	TANGENT LENGTH OF CURVE OR TOWN
TAV	TAVERN
TLE	TEMPORARY LIMITED EASEMENT
USH	UNITED STATES HIGHWAY
V	VOLUME
W	WALL
X	EAST COORDINATE (GRID)
Y	NORTH COORDINATE (GRID)
N	NORTH COORDINATE (GROUND) OR NORTH
E	EAST COORDINATE (GROUND), EAST OR EXTERNAL
△	CENTRAL ANGLE OR DELTA

- STATE LINE
- COUNTY LINE
- TOWN OR RANGE LINE
- SECTION LINE
- QUARTER LINE
- SIXTEENTH LINE
- PROPOSED OR NEW R/W LINE
- EXISTING R/W LINE
- LOT LINE
- P.L. ± 58.1 PROPERTY LINE
- NO ACCESS (By Previous Acquisition)
- NO ACCESS (By Acquisition)
- NO ACCESS (By Statutory Authority)
- CORPORATE LIMITS
- FEE ACQUISITION (Cross-hatching varies by parcel)
- PLE ACQUISITION (Pattern varies by parcel)
- TLE ACQUISITION (Pattern varies by parcel)

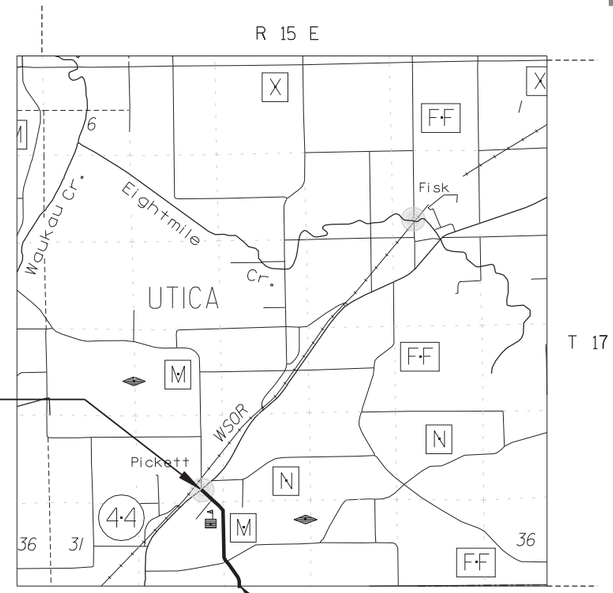
- SECTION CORNER
- 608 RIGHT OF WAY POINT (NOT MONUMENTED)
- 243 RIGHT OF WAY POINT (MONUMENTED)
- IP (Type) RECOVERED IRON PIN/PIPE
- TRIANGULATION POINT OR HORIZONTAL CONTROL STATION
- INLET
- HYDRANT

COMPENSABLE	NON COMPENSABLE
●	○ TELEPHONE POLE
■	□ POWER POLE

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

- (Size) W WATER
- (Size) G GAS
- T TELEPHONE OR TELEGRAPH
- E ELECTRIC
- TV CABLE TELEVISION
- FO FIBER OPTIC
- (Size) SAN SANITARY SEWER
- (Size) SS STORM SEWER
- CAUTION NOTATION FOR COMBUSTIBLE FLUIDS
- SERVICE PEDESTAL
- (Label) SILO, MANHOLE OR WELL, ETC.

- RAILROAD
- BRIDGE
- (Label) BUILDING
- (Label) FOUNDATION OR RUINS
- FENCE
- MARSH AREA
- LAKE OR POND
- WOODED OR SHRUB AREA
- TREE
- BUILDING TO BE REMOVED



END RELOCATION ORDER
STA. 173+04.42
Y= 434,559.737
X= 742,431.516
783.97 FEET NORTH AND 1349.21 FEET WEST OF THE SE CORNER OF SECTION 29, T17N, R15E.

BEGIN RELOCATION ORDER
STA. 103+77.48
Y= 428,399.747
X= 744,672.511
101.61 FEET SOUTH AND 922.85 FEET EAST OF THE SW CORNER OF SECTION 33, T17N, R15E.

LAYOUT
SCALE 0 1 2 MI.

TOTAL NET LENGTH OF CENTERLINE = 1.312 MI.

NOTES:

COORDINATES AND BEARINGS ON THIS PLAT ARE ORIENTED TO THE WISCONSIN COUNTY COORDINATE SYSTEM, WINNEBAGO COUNTY (ENGLISH) NAD 83, 1997 ADJUSTMENT. ALL DISTANCES ARE GROUND LENGTH.

RIGHT OF WAY MONUMENTS ARE TYPE-2 (3/4" X 24" REINFORCEMENT BAR WEIGHING 1.502 lb/FT) AND ARE PLACED PRIOR TO THE COMPLETION OF THE PROJECT

RIGHT OF WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC LAND SURVEY OR OTHER SURVEYS OF PUBLIC RECORD.

ORIGINAL PLANS PREPARED BY

SEH

WISCONSIN
DUANE A. HOLMAN
S-1294
BLOOMER
WI
LAND SURVEYOR

DATE: 12/15/2006 (Signature)

REVISION DATE

WINNEBAGO COUNTY

APPROVED FOR WINNEBAGO COUNTY

DATE: _____ (Signature)

16 E

SCHEDULE OF LANDS & INTERESTS REQUIRED

AREAS SHOWN IN THE TOTAL ACRES COLUMN MAY BE APPROXIMATE AND ARE DERIVED FROM TAX ROLLS OR OTHER AVAILABLE SOURCES AND MAY NOT INCLUDE LANDS OF THE OWNER WHICH ARE NOT CONTIGUOUS TO THE AREA TO BE ACQUIRED.

PARCEL NUMBER	SHEET NUMBER	OWNER (S)	INTEREST REQUIRED	TOTAL ACRES	R/W ACRES REQUIRED			TOTAL ACRES REM.	TLE ACRES
					NEW	EXISTING	TOTAL		
1	4.3	NANCY L. MUCKS, DAVID C. MILLER, BRUCE M. MILLER & JEFFREY J. MILLER	FEE	78.81	1.48	2.03	3.51	75.30	-
2	4.3,4.4	THOMAS R. HUETTL & CLAUDIA HUETTL	FEE,TLE	136.30	1.48	2.01	3.49	132.81	0.02
3	4.3	NICHOLAS J. RIPPLE III & THERESA A. CROSSMAN-RIPPLE	FEE,TLE	5.00	0.92	0.86	1.78	3.22	0.30
4	4.3	BRUCE M. MILLER	FEE	1.19	0.11	0.19	0.30	0.89	-
5	4.3	D. JERRY HALE & LEIGH O. HALE	FEE	56.58	0.58	0.62	1.20	55.38	-
6	4.4	MARGARET MACKIE	FEE	2.00	0.20	0.23	0.43	1.57	-
7	4.4,4.5	MICHEAL J. HINZ & KAREN L. HINZ	FEE,TLE	36.94	0.70	1.35	2.05	34.89	0.03
8	4.4	NELSON HINZ & SHIRLEY HINZ	FEE	115.05	0.51	0.87	1.38	113.67	-
9	4.4	DENNIS J. CLARK & DAWN M. CLARK	FEE	2.21	0.10	0.15	0.25	1.96	-
10	4.4	TOBIN J. STORZER & LAURA T. STORZER	FEE	2.80	0.12	0.19	0.31	2.49	-
12	4.4	MARY K. FLANAGAN & SCOTT L. KEARNEY	FEE,TLE	2.06	0.04	0.22	0.26	1.80	0.02
13	4.4	HERMAN F. BERNDT & DIANE D. BERNDT	FEE,TLE	0.55	0.02	0.12	0.14	0.41	0.01
14	4.4,4.5	GRACE EVANGELICAL LUTHERAN CHURCH	TLE	3.54	-	-	-	3.54	0.05
16	4.5	GARY JOLIN & JUDY JOLIN	TLE	1.00	-	-	-	1.00	0.04
18	4.5	JOHN D. TOPPER	TLE	0.36	-	-	-	0.36	0.02
19	4.5	THOMAS J. EBERHART & JOYCE J. EBERHART	TLE	0.11	-	-	-	0.11	0.02
21	4.5	CENTURYTEL OF CENTRAL WISCONSIN, LLC	TLE	0.71	-	-	-	0.71	0.03
22	4.5	ROBERT M. HUNTER & PATRICIA C. HUNTER	TLE	4.00	-	-	-	4.00	0.05
24	4.5	SHELLY WINK	TLE	0.89	-	-	-	0.89	0.01
40	4.3,4.4	CENTURYTEL OF CENTRAL WISCONSIN, LLC	RELEASE OF RIGHTS						

4

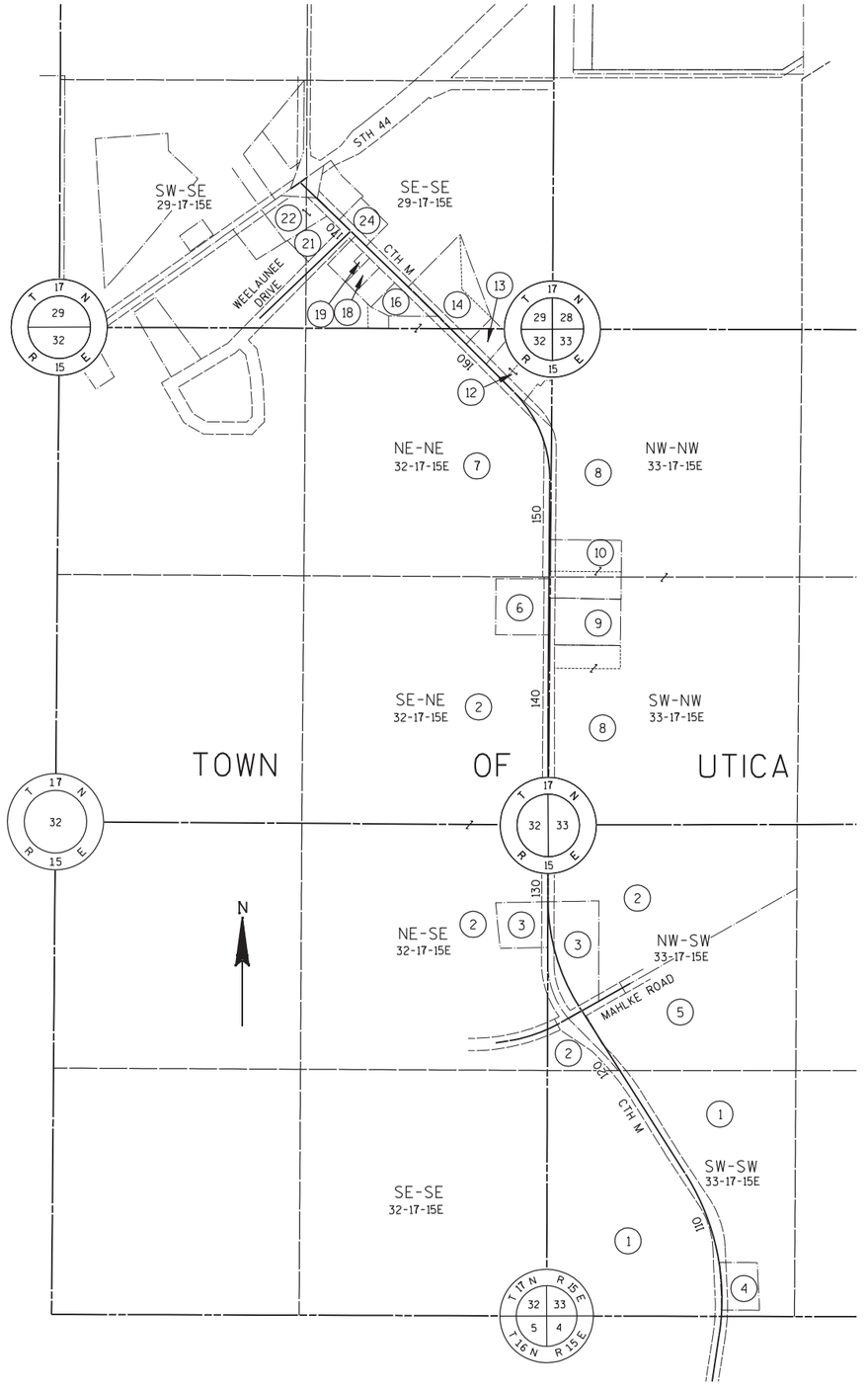
4

PROPOSED R/W POINT NO. AND COORDINATE VALUE

POINT	Y	X	POINT	Y	X
700	428499.4660	744633.7183	727	429288.5979	744534.0636
701	428863.6364	744605.7777	728	429123.4624	744623.0733
702	429234.9228	744449.6895	729	428886.3710	744703.1591
703	429340.5560	744341.0083	730	428499.2516	744733.9718
704	429485.9034	744290.0266	731	431755.8244	743690.2697
705	429937.0806	743961.5253	732	431887.5314	743703.3264
706	430030.1580	743822.7063	733	432687.5057	743709.7421
707	430088.4138	743791.5882	734	432787.5426	743705.5442
708	430152.9245	743821.9048	735	432969.1981	743717.0014
709	430391.2466	743755.7912	736	433167.5239	743685.5392
710	430470.3132	743723.0473	737	433300.8528	743628.0307
711	430726.0706	743723.8763	738	433412.0515	743545.8716
712	430837.0792	743672.4359	739	433621.0519	743337.2946
713	430987.0825	743690.4087	740	433697.0626	743271.8946
714	431125.8701	743690.3836	741	433708.6500	743354.2880
715	431125.5049	743803.6724	742	433678.9758	743395.3361
716	430912.1073	743827.4223	743	433469.9754	743603.9131
717	430726.0858	743807.4559	744	433424.0520	743639.6514
718	430246.6303	743927.9329	745	433352.8880	743711.0068
719	430233.6004	744027.2452	746	433256.8296	743776.3081
720	430284.0037	744139.6737	747	433132.0557	743801.4983
721	430226.4883	744172.0478	748	432786.5802	743825.5403
722	430138.2933	744049.5609	749	432686.6637	743814.7387
723	430069.6002	744043.1499	750	431886.6894	743808.3230
724	429853.6740	744216.0687	751	431755.3815	743803.2698
725	429539.5785	744374.4006	752	431437.1029	743803.3274
726	429434.4875	744488.6629	753	431337.1055	743817.3454

RECOVERED MONUMENT TABLE

POINT	STATION	OFFSET	Y	X	DESCRIPTION
2973	107+59.62	33.91'RT	428785.56	744706.26	1" IRON PIPE HIT
2938	109+79.02	57.49'RT	429011.74	744675.09	BRASS CAP MON
101	123+35.45	122.26'RT	430219.99	744027.20	1" IRON PIPE
100	123+43.64	52.18'LT	430133.61	743875.44	1" IRON PIPE
2654	123+44.27	5.36'RT	430164.67	743923.88	BRASS CAP
102	126+95.55	63.80'LT	430470.29	743723.06	1" IRON PIPE
103	129+28.28	32.28'RT	430715.71	743789.79	1" IRON PIPE
105	143+00.34	32.71'RT	432087.16	743792.64	3/4 " REBAR
104	143+53.88	30.09'LT	432141.20	743730.27	1" IRON PIPEHIT
2043	145+03.75	30.86'LT	432291.08	743730.70	1" IRON PIPE HIT
2010	145+52.05	31.49'RT	432338.87	743793.44	1" IRON PIPE HIT
110	156+36.57	37.33'RT	433413.17	743648.76	1" IRON PIPE
111	157+87.25	34.53'RT	433523.11	743540.33	1" IRON PIPE
112	159+16.83	33.87'RT	433614.36	743448.33	1" IRON PIPE
113	160+65.87	24.56'RT	433713.28	743336.47	1" IRON PIPE
1366	165+00.58	22.57'RT	434017.84	743025.67	1 1 1/4" IRON PIPE
114	167+56.02	33.24'LT	434155.04	742803.09	1" IRON PIPE
1384	168+03.11	32.96'LT	434187.94	742769.39	1" IRON PIPE
1385	168+93.40	32.19'LT	434251.19	742704.95	1" IRON PIPE
116	170+14.93	34.78'LT	434383.76	742664.00	1" IRON PIPE
115	170+75.64	30.58'LT	434378.89	742574.92	1" IRON PIPE



REVISION DATE	DATE	SCALE. FEET	HWY: CTH M	STATE R/W PROJECT NUMBER AWINNW0302.00	PLAT SHEET NO: 4.2	
		0 N/A	COUNTY: WINNEBAGO	CONSTRUCTION PROJECT NUMBER AWINNW0302.00	PS&E SHEET 17	E

BASIS OF EXISTING R/W
EXISTING R/W FOR C.T.H. M & MAHLKE ROAD ESTABLISHED FROM
CENTER LINE OF EXISTING PAVEMENT, PRIVATE SURVEYS, CSM 3982
AND FROM PREVIOUS COUNTY AID PROJECT NO. 3570.

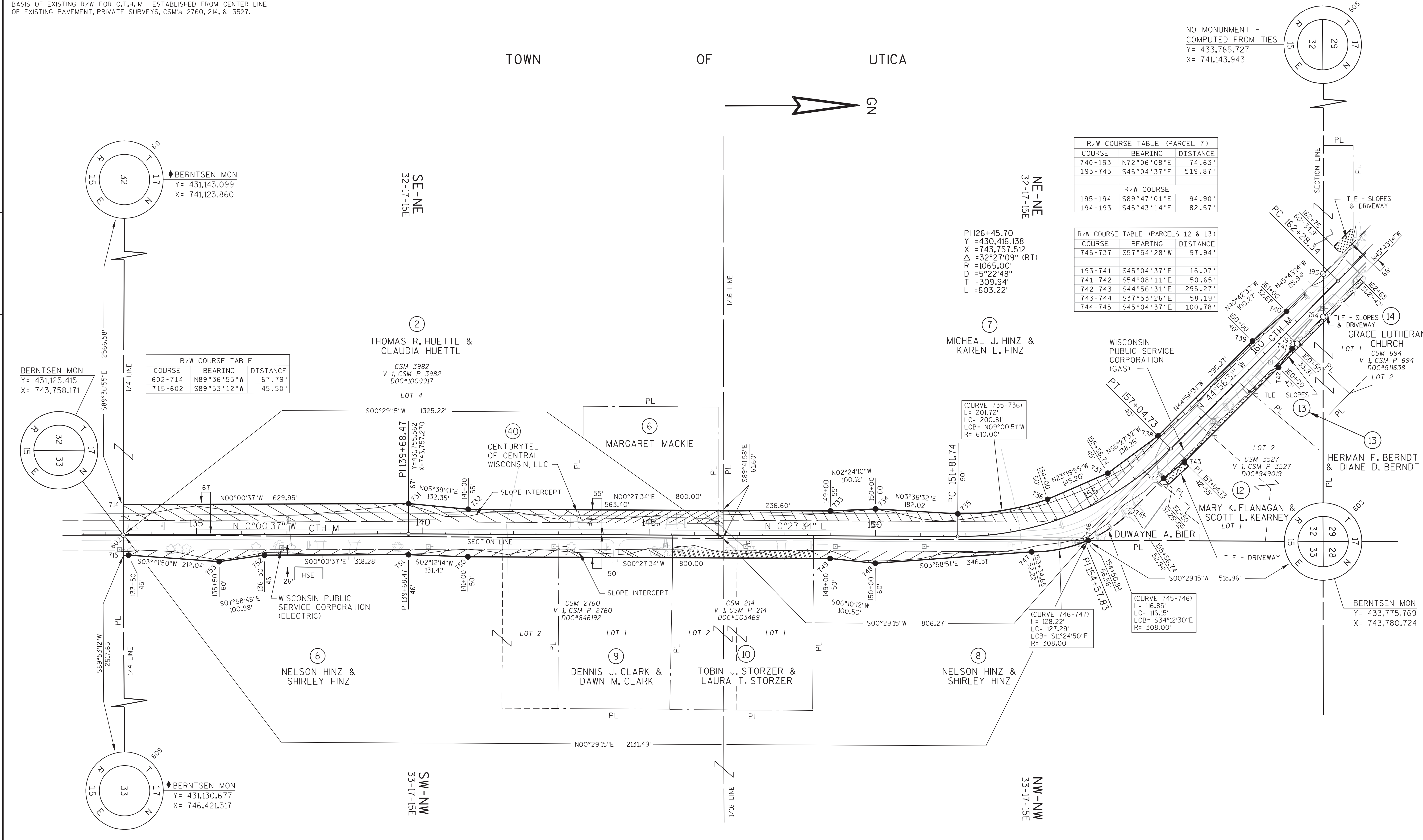
R/W COURSE TABLE		
COURSE	BEARING	DISTANCE
706-707	N28°06'34"W	66.05'
707-708	N25°10'16"E	71.28'
709-710	N22°29'45"W	85.58'
710-711	N00°11'09"E	255.76'
711-712	N24°51'45"W	122.35'
602-709	S00°11'09"W	734.17'

R/W COURSE TABLE		
COURSE	BEARING	DISTANCE
714-602	S89°36'55"E	67.79'
602-715	N89°53'12"E	45.50'
718-719	S82°31'31"E	100.16'
719-720	N65°51'09"E	123.21'
720-721	S29°22'27"E	66.00'

◆ = Y,X COORDINATES AND MON TYPE
PER COUNTY RECORDS

REVISION DATE	DATE	SCALE, FEET 0 100 200	HWY: CTH M	STATE R/W PROJECT NUMBER AWINNW0302.00	PLAT SHEET NO: 4.3	
	GRID FACTOR N/A		COUNTY: WINNEBAGO	CONSTRUCTION PROJECT NUMBER AWINNW0302.00	PS&E SHEET 18	E

BASIS OF EXISTING R/W FOR C.T.H. M ESTABLISHED FROM CENTER LINE OF EXISTING PAVEMENT, PRIVATE SURVEYS, CSM's 2760, 214, & 3527.


TOWN OF UTICA
GN
4
NO MONUNMENT - COMPUTED FROM TIES
Y= 433,785.727
X= 741,143.943
BERNTSEN MON
Y= 431,143.099
X= 741,123.860
SE-NE 32-17-15E
NE-NE 32-17-15E
SW-NW 33-17-15E
NW-NW 33-17-15E
BERNTSEN MON
Y= 431,125.415
X= 743,758.171
BERNTSEN MON
Y= 431,130.677
X= 746,421.317
BERNTSEN MON
Y= 433,775.769
X= 743,780.724
PI 126+45.70
Y =430,416.138
X =743,757.512
Δ =32°27'09" (RT)
R =1065.00'
D =5°22'48"
T =309.94'
L =603.22'
2 THOMAS R. HUETTL & CLAUDIA HUETTL
CSM 3982
V 1, CSM P 3982
DOC#1009917
LOT 4
7 MICHEAL J. HINZ & KAREN L. HINZ
40 CENTURYTEL OF CENTRAL WISCONSIN, LLC
6 MARGARET MACKIE
8 NELSON HINZ & SHIRLEY HINZ
9 DENNIS J. CLARK & DAWN M. CLARK
10 TOBIN J. STORZER & LAURA T. STORZER
CSM 2760
V 1, CSM P 2760
DOC#846192
CSM 214
V 1, CSM P 214
DOC#503469
12 MARY K. FLANAGAN & SCOTT L. KEARNEY
CSM 3527
V 1, CSM P 3527
DOC#949019
13 HERMAN F. BERNDT & DIANE D. BERNDT
14 GRACE LUTHERAN CHURCH
CSM 694
V 1, CSM P 694
DOC#511638
DUWAYNE A. BIER
WISCONSIN PUBLIC SERVICE CORPORATION (GAS)
WISCONSIN PUBLIC SERVICE CORPORATION (ELECTRIC)
N 0°00'37" W CTH M
N 0°27'34" E
N 44°56'31" W CTH M
SECTION LINE
1/4 LINE
1/16 LINE
SLOPE INTERCEPT
TLE - SLOPES & DRIVEWAY
TLE - SLOPES
TLE - DRIVEWAY
S00°29'15"W 1325.22'
S00°29'15"W 806.27'
S00°29'15"W 518.96'
N00°29'15"E 2131.49'
S89°36'55"E 2566.58'
S89°53'12"W 2617.65'
PI 139+68.47
Y=431,755.562
X=743,757.270
PC 151+81.74
PT 157+04.73
PC 162+28.34
PI 154+57.83
(CURVE 735-736)
L= 201.72'
LC= 200.81'
LCB= N09°00'51"W
R= 610.00'
(CURVE 746-747)
L= 128.22'
LC= 127.29'
LCB= S11°24'50"E
R= 308.00'
(CURVE 745-746)
L= 116.85'
LC= 116.15'
LCB= S34°12'30"E
R= 308.00'

R/W COURSE TABLE		
COURSE	BEARING	DISTANCE
602-714	N89°36'55"W	67.79'
715-602	S89°53'12"W	45.50'

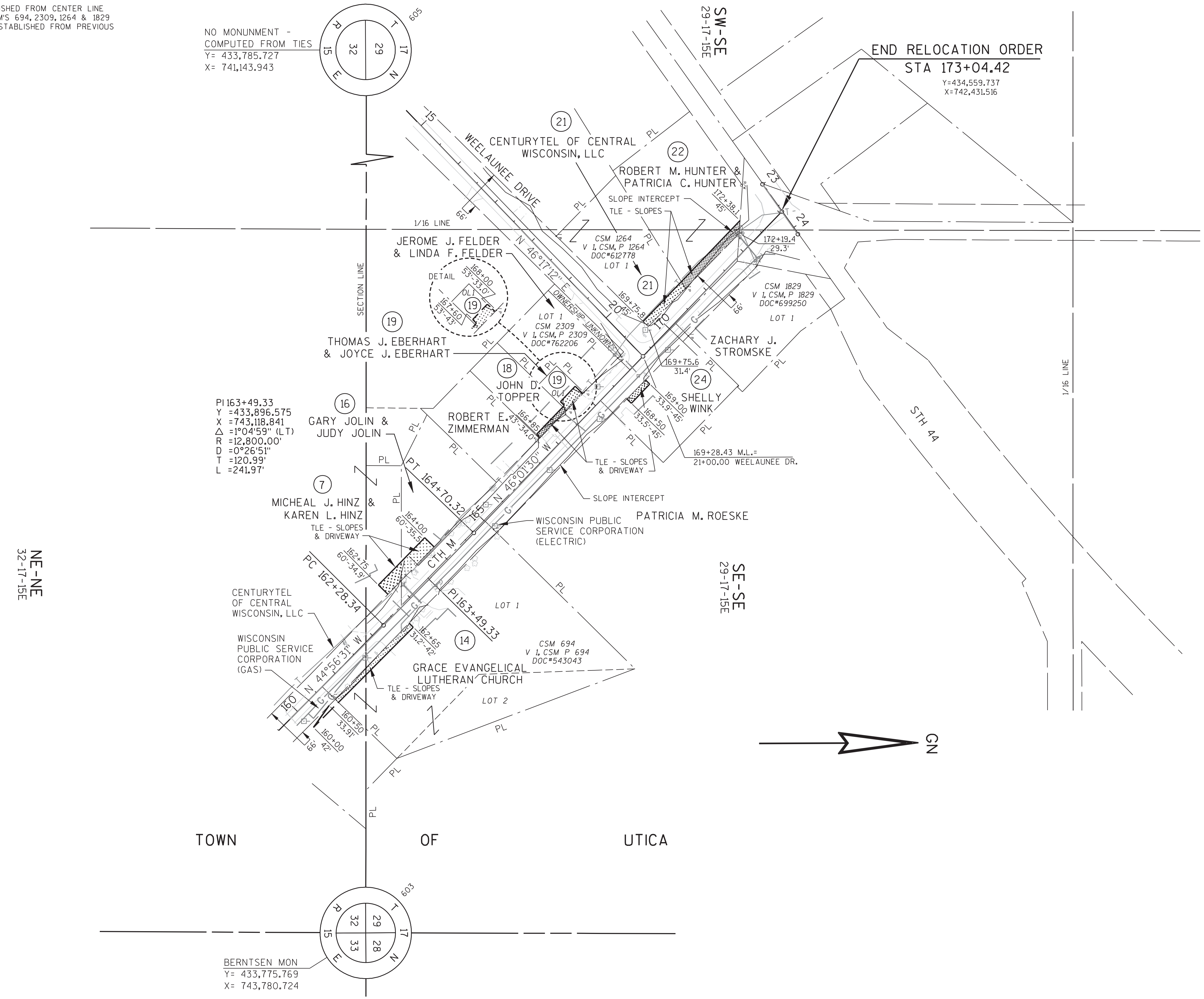
R/W COURSE TABLE (PARCEL 7)		
COURSE	BEARING	DISTANCE
740-193	N72°06'08"E	74.63'
193-745	S45°04'37"E	519.87'
R/W COURSE		
195-194	S89°47'01"E	94.90'
194-193	S45°43'14"E	82.57'

R/W COURSE TABLE (PARCELS 12 & 13)		
COURSE	BEARING	DISTANCE
745-737	S57°54'28"W	97.94'
193-741	S45°04'37"E	16.07'
741-742	S54°08'11"E	50.65'
742-743	S44°56'31"E	295.27'
743-744	S37°53'26"E	58.19'
744-745	S45°04'37"E	100.78'

REVISION DATE	DATE	SCALE, FEET 0 100 200	HWY: CTH M	STATE R/W PROJECT NUMBER AWINNW0302.00	PLAT SHEET NO: 4.4
	GRID FACTOR N/A		COUNTY: WINNEBAGO	CONSTRUCTION PROJECT NUMBER AWINNW0302.00	PS&E SHEET 19 E

BASIS OF EXISTING R/W FOR C.T.H. M ESTABLISHED FROM CENTER LINE OF EXISTING PAVEMENT, PRIVATE SURVEYS, CSM'S 694, 2309, 1264 & 1829
BASIS OF EXISTING R/W FOR S.T.H. 44 R/W ESTABLISHED FROM PREVIOUS WISDOT PROJECT NO. F 073-1(2).

4



NO MONUMENT -
COMPUTED FROM TIES
Y= 433,785.727
X= 741,143.943
END RELOCATION ORDER
STA 173+04.42
Y=434,559.737
X=742,431.516
SW-SE
29-17-15E
CENTURYTEL OF CENTRAL WISCONSIN, LLC
ROBERT M. HUNTER & PATRICIA C. HUNTER
SLOPE INTERCEPT
TLE - SLOPES
WEELAUNEE DRIVE
1/16 LINE
JEROME J. FELDER & LINDA F. FELDER
CSM 1264
V 1, CSM, P 1264
DOC#612778
LOT 1
CSM 1829
V 1, CSM, P 1829
DOC#699250
LOT 1
SECTION LINE
DETAIL
OWNERSHIP UNKNOWN
LOT 1
CSM 2309
V 1, CSM, P 2309
DOC#762206
THOMAS J. EBERHART & JOYCE J. EBERHART
ZACHARY J. STROMSKE
JOHN D. TOPPER
SHELLY WINK
PI 163+49.33
Y =433,896.575
X =743,118.841
Δ =1°04'59" (LT)
R =12,800.00'
D =0°26'51"
T =120.99'
L =241.97'
GARY JOLIN & JUDY JOLIN
ROBERT E. ZIMMERMAN
169+28.43 M.L.=
21+00.00 WEELAUNEE DR.
TLE - SLOPES & DRIVEWAY
SLOPE INTERCEPT
1/16 LINE
STH 44
MICHEAL J. HINZ & KAREN L. HINZ
TLE - SLOPES & DRIVEWAY
PT 164+70.32
N 46°01'30" W
WISCONSIN PUBLIC SERVICE CORPORATION (ELECTRIC)
PATRICIA M. ROESKE
CTH M
NE-NE
32-17-15E
SE-SE
29-17-15E
PC 162+28.34
PI 163+49.33
LOT 1
CENTURYTEL OF CENTRAL WISCONSIN, LLC
WISCONSIN PUBLIC SERVICE CORPORATION (GAS)
N 44°56'31" W
CSM 694
V 1, CSM P 694
DOC#543043
GRACE EVANGELICAL LUTHERAN CHURCH
TLE - SLOPES & DRIVEWAY
LOT 2
GN
TOWN OF UTICA
BERNTSEN MON
Y= 433,775.769
X= 743,780.724

4

REVISION DATE	DATE	SCALE, FEET 0 100 200	HWY: CTH M	STATE R/W PROJECT NUMBER AWINNW0302.00	PLAT SHEET NO: 4.5	
	GRID FACTOR N/A		COUNTY: WINNEBAGO	CONSTRUCTION PROJECT NUMBER AWINNW0302.00	PS&E SHEET 20	E

FILE NAME : p:\uz\w\Winnc\030200\CAD\rdcthm03.dgn PLOT TIME : 9:54:06 AM PLOT DATE : 12/15/2006 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A

BENCHMARK TABLE

NO	STATION	DESCRIPTION	ELEV
BM 1	102+55.82, 29.74' RT	⅜" SPIKE IN PP # 16-15-4, EAST SIDE OF EXISTING CTH M	899.19
BM 2	109+78.99, 57.52' RT	BRONZE SURVEY DISK, EAST SIDE OF EXISTING CTH M	903.48

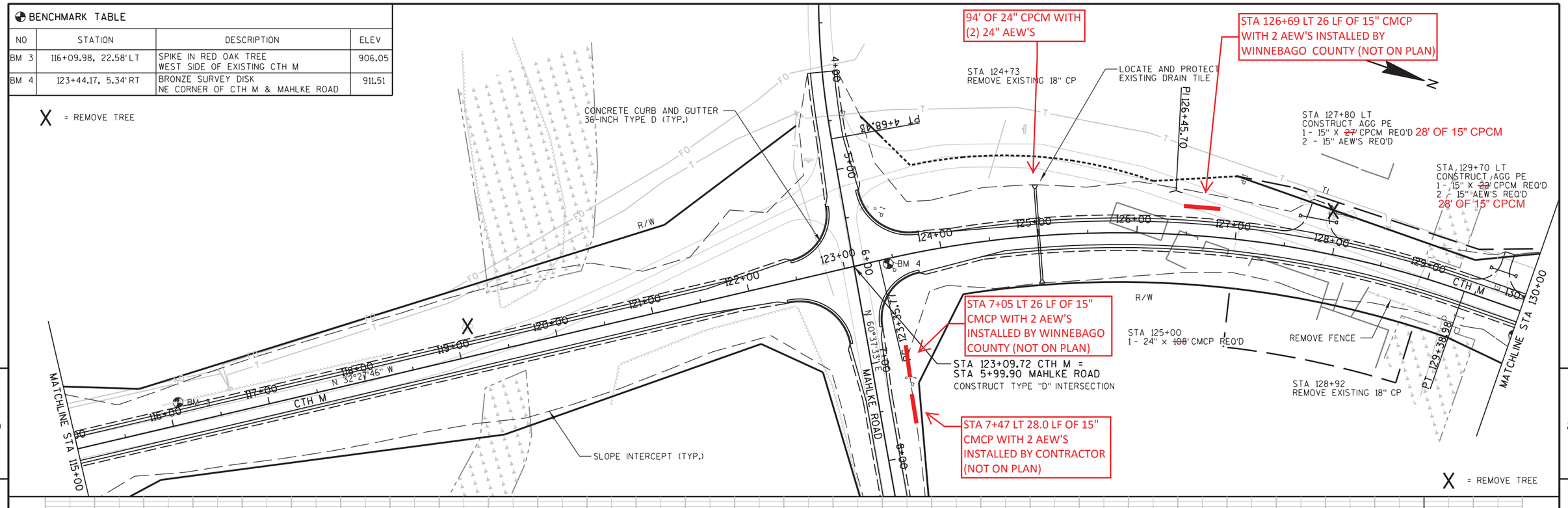
PROJECT NO:	HWY: CTH M	COUNTY: WINNEBAGO	PLAN AND PROFILE - CTH M	SCALE, FEET 0 50 100	SHEET 21	E

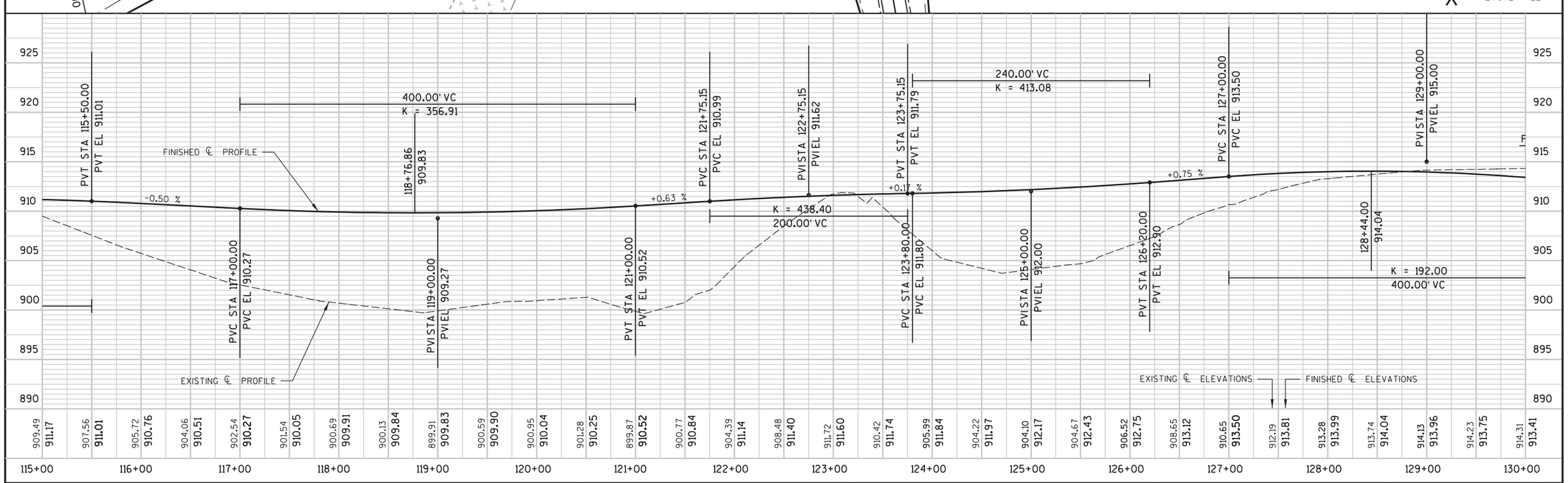
FILE NAME : P:\UZ\W\WINNC\030200_CTH_M\CAD\ppcthm01.dgn PLOT TIME : 12:56:04 PM PLOT DATE : 1/18/2013 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A

BENCHMARK TABLE

NO	STATION	DESCRIPTION	ELEV
BM 3	116+09.98, 22.58' LT	SPIKE IN RED OAK TREE WEST SIDE OF EXISTING CTH M	906.05
BM 4	123+44.17, 5.34' RT	BRONZE SURVEY DISK NE CORNER OF CTH M & MAHLKE ROAD	911.51

X = REMOVE TREE

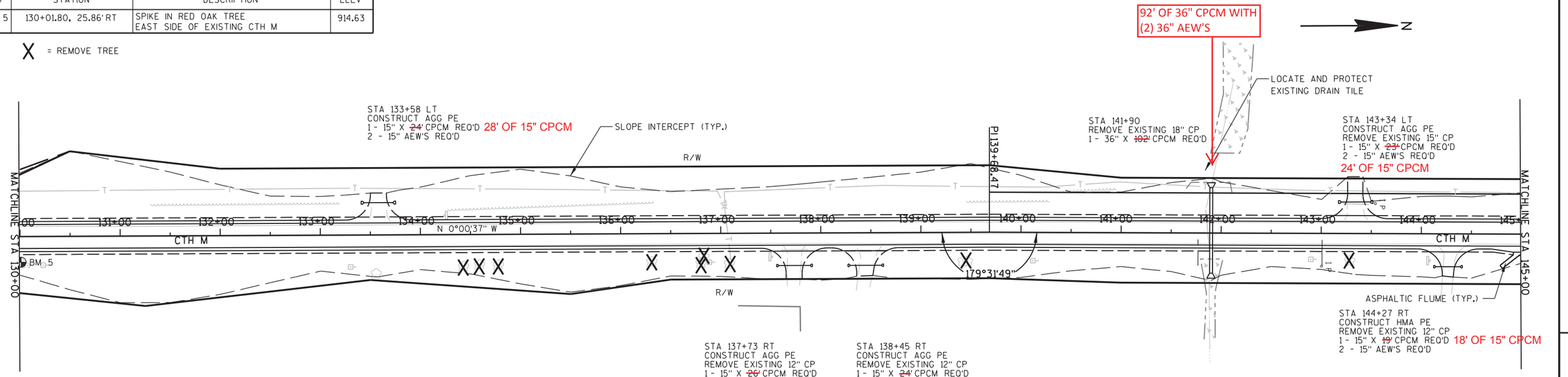


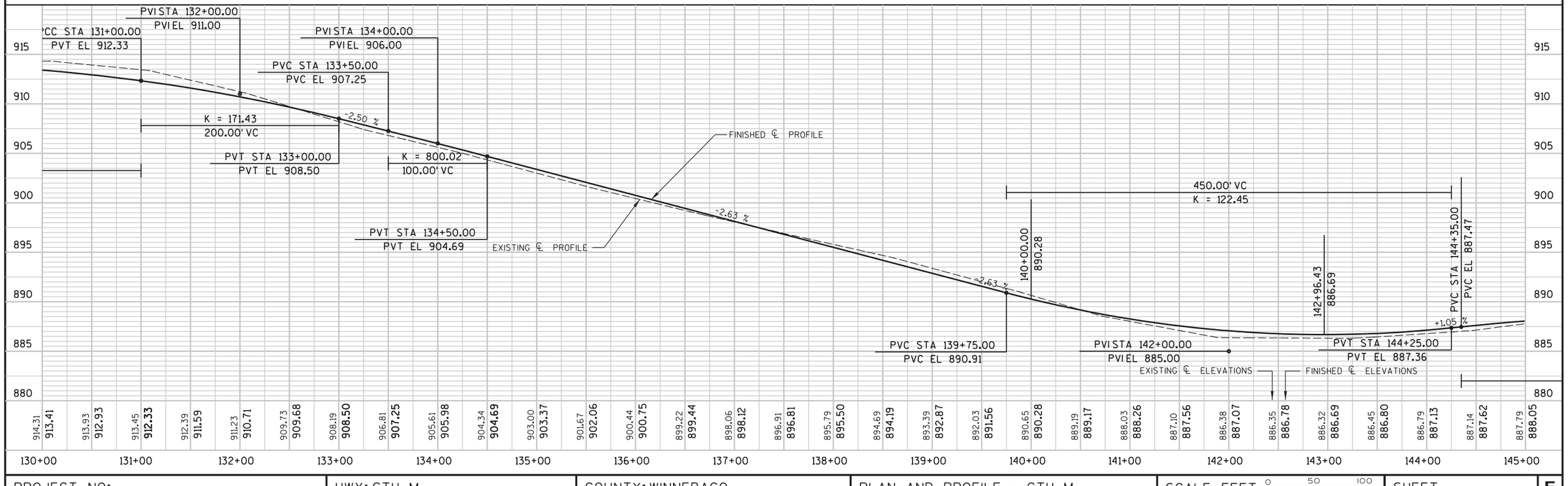


PROJECT NO:	HWY: CTH M	COUNTY: WINNEBAGO	PLAN AND PROFILE - CTH M	SCALE, FEET 0 50 100	SHEET 22	E

BENCHMARK TABLE			
NO	STATION	DESCRIPTION	ELEV
BM 5	130+01.80, 25.86' RT	SPIKE IN RED OAK TREE EAST SIDE OF EXISTING CTH M	914.63

X = REMOVE TREE





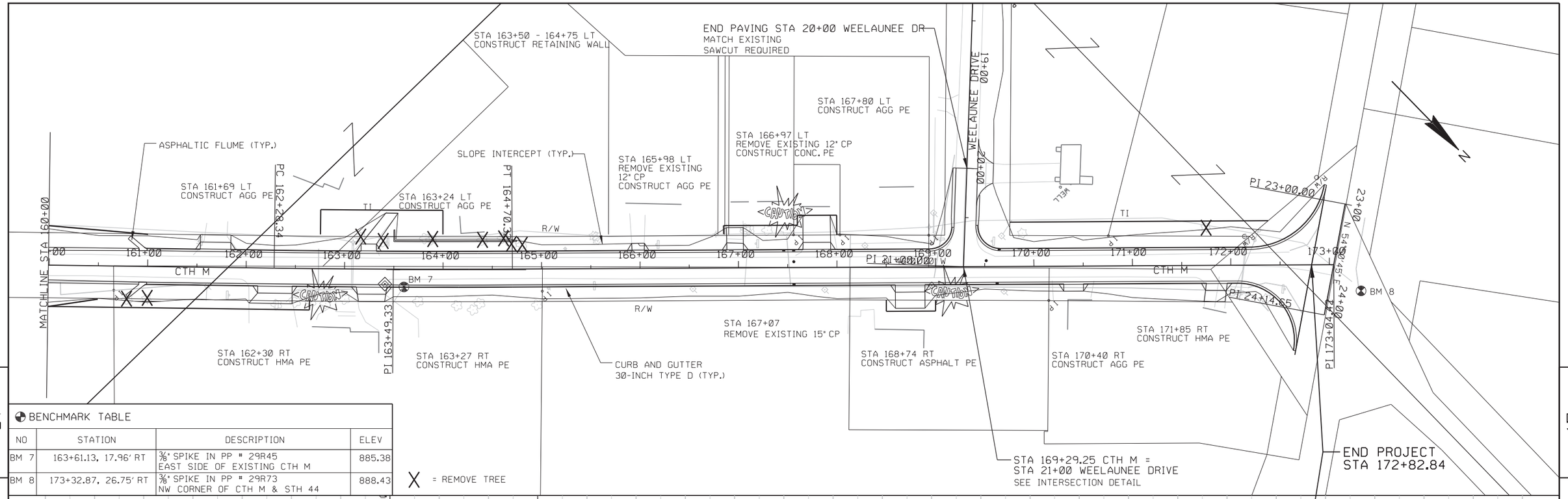
PROJECT NO:	HWY: CTH M	COUNTY: WINNEBAGO	PLAN AND PROFILE - CTH M	SCALE, FEET 0 50 100	SHEET 23	E

BENCHMARK TABLE

NO	STATION	DESCRIPTION	ELEV
BM 6	147+14.57, 24.31' RT	⅜" SPIKE IN PP # 33W5 EAST SIDE OF EXISTING CTH M	891.55

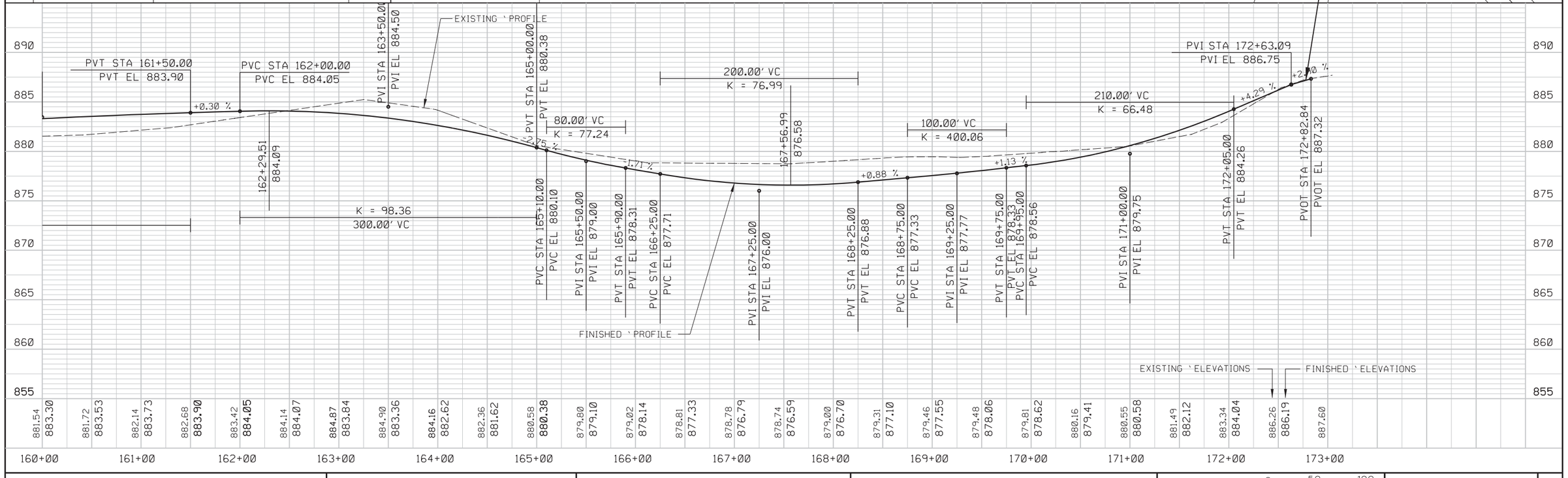
X = REMOVE TREE

PROJECT NO:	HWY:CTH M	COUNTY:WINNEBAGO	PLAN AND PROFILE - CTH M	SCALE, FEET 0 50 100	SHEET 24	E

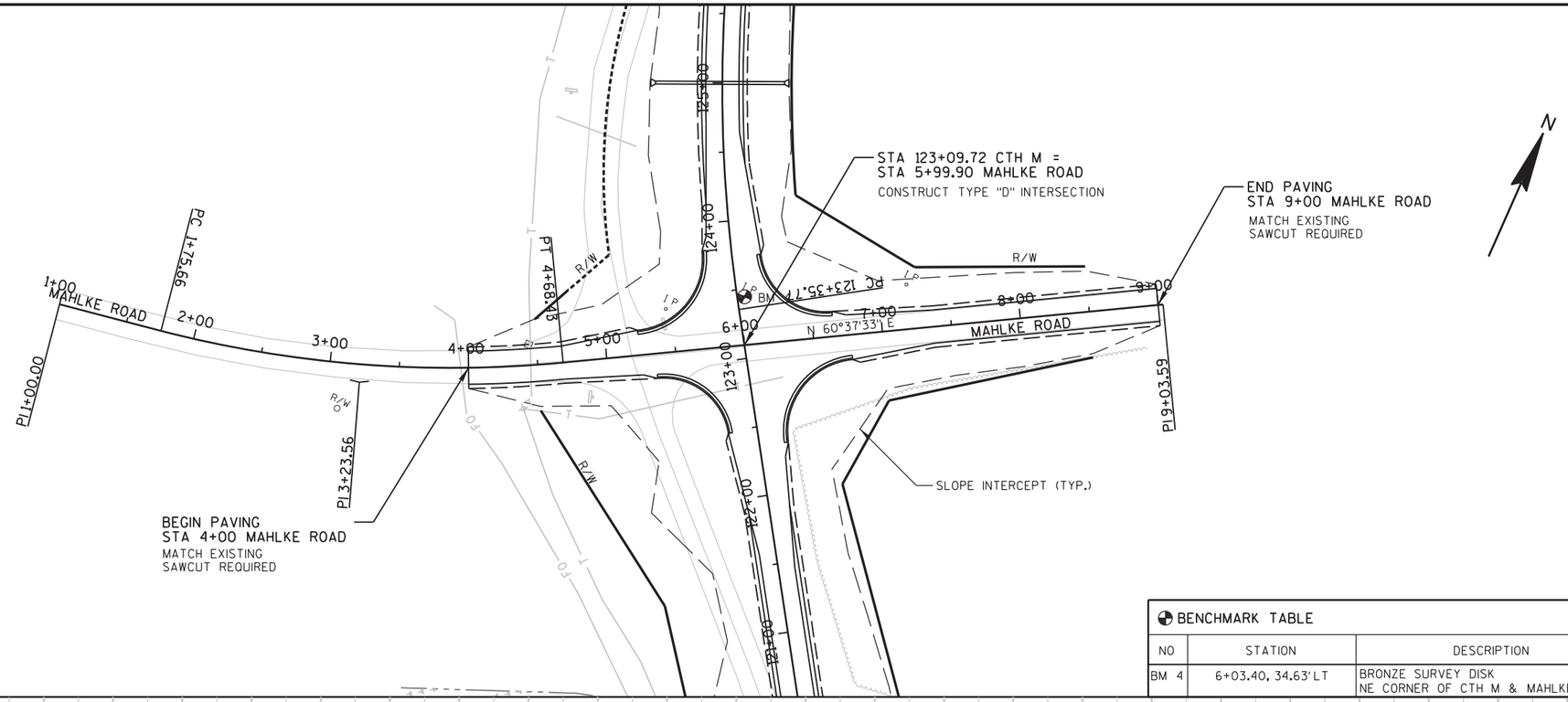


BENCHMARK TABLE			
NO	STATION	DESCRIPTION	ELEV
BM 7	163+61.13, 17.96' RT	3/8" SPIKE IN PP = 29R45 EAST SIDE OF EXISTING CTH M	885.38
BM 8	173+32.87, 26.75' RT	3/8" SPIKE IN PP = 29R73 NW CORNER OF CTH M & STH 44	888.43

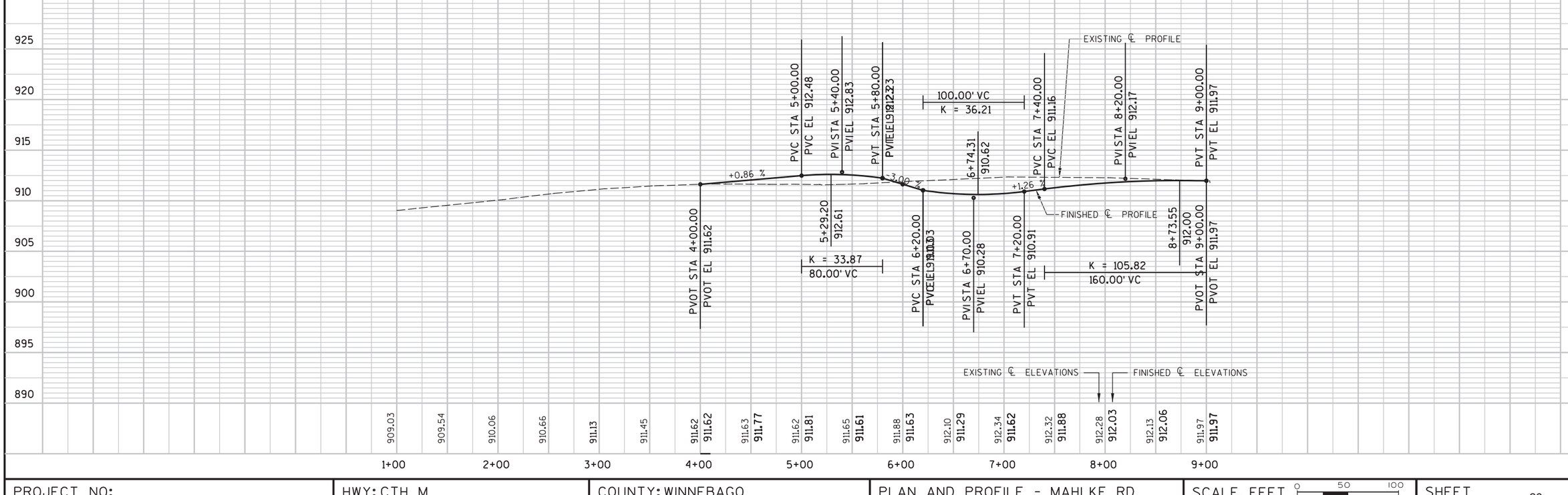
X = REMOVE TREE



PROJECT NO:	HWY:CTH M	COUNTY:WINNEBAGO	PLAN AND PROFILE - CTH M	SCALE, FEET 0 50 100	SHEET 25	E



BENCHMARK TABLE			
NO	STATION	DESCRIPTION	ELEV
BM 4	6+03.40, 34.63' LT	BRONZE SURVEY DISK NE CORNER OF CTH M & MAHLKE ROAD	911.51



PROJECT NO:	HWY: CTH M	COUNTY: WINNEBAGO	PLAN AND PROFILE - MAHLKE RD	SCALE, FEET 0 50 100	SHEET 26	E

FILE NAME : P:\UZ\W\WINNC\030200_CTH_M\CAD\ppcthm06.dgn PLOT TIME : 12:56:06 PM PLOT DATE : 1/18/2013 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A

WISDOT/CADDS SHEET 40

BEGIN CONSTRUCTION
STA 12+50 WEELAUNEE DRIVE
MATCH EXISTING

PC 11+60.53

PT 14+20.98

PI 10+24.21

PI 12+91.06

N 55°49'36" E

N 46°17'12" E

WEELAUNEE DRIVE

STA 17+50 LT
CONSTRUCT AGG PE

STA 20+00 LT
REMOVE EXISTING 12" CP
CONSTRUCT HMA PE

BEGIN PAVING
STA 20+00 WEELAUNEE DRIVE

SLOPE INTERCEPT (TYP.)

STA 169+28.40 CTH M =
STA 21+00 WEELAUNEE DRIVE

CTH M

WELL

R/W

PI 21+00.00

EXISTING ℄ PROFILE

FINISHED ℄ PROFILE

PVC STA 20+00.00
PVC EL 879.26

PVI STA 20+40.00
PVI EL 878.70

PVT STA 20+80.00
PVT EL 877.63

+2.00 %

PVI STA 20+84.00
PVI EL 877.52

PVOT STA 21+00.00
PVOT EL 877.84

K = 62.41
80.00' VC

EXISTING ℄ ELEVATIONS

FINISHED ℄ ELEVATIONS

867.43 867.85 869.47 869.53 869.53 870.59 871.67 871.67 872.74 873.76 873.76 874.78 875.67 876.31 877.14 877.91 878.70 878.55 879.48 879.84 879.82 879.56 879.26 879.26 879.12 878.36 877.84

11+00 12+00 13+00 14+00 15+00 16+00 17+00 18+00 19+00 20+00 21+00 22+00

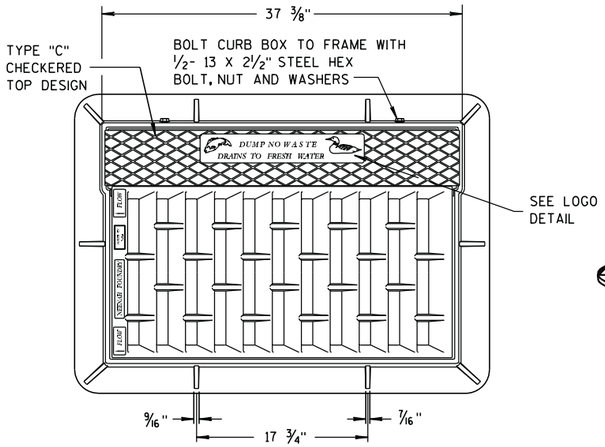
895 890 885 880 875 870 865 860

PROJECT NO:	HWY: CTH M	COUNTY: WINNEBAGO	PLAN AND PROFILE-WEELAUNEE DR	SCALE, FEET 0 50 100	SHEET 27	E

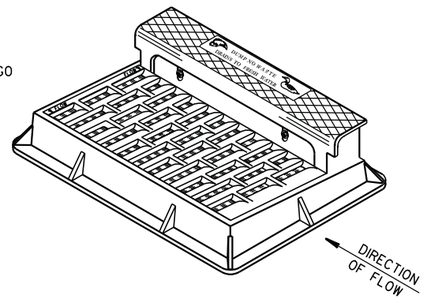
FILE NAME : P:\UZ\W\WINNC\030200_CTH_M\CAD\ppcthm07.dgn PLOT TIME : 12:56:07 PM PLOT DATE : 1/18/2013 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A

WISDOT/CADDS SHEET 40

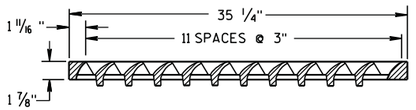
8A5 sheet a: Inlet Covers Type A, H, A-S, & H-S

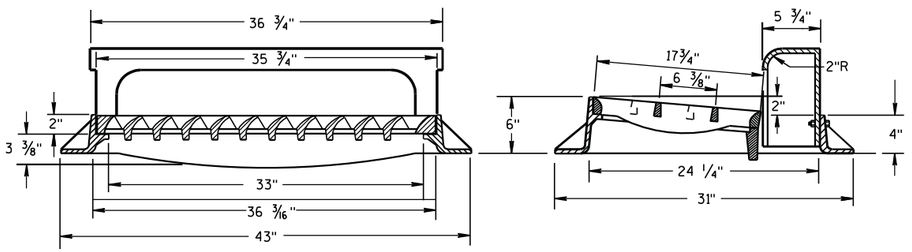


NOTE:
GRATE IS REVERSIBLE.



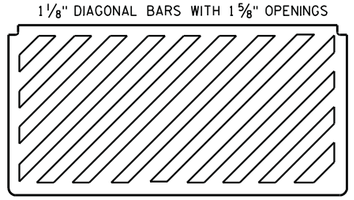
NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"





TYPE "H"

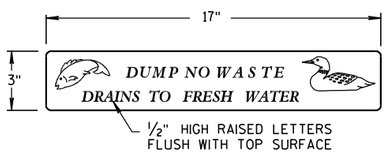
(APPROXIMATE WEIGHT 441 LBS.)
FRAME..... 181 LBS.
GRATE..... 146 LBS.
CURB BOX..... 114 LBS.



SPECIAL GRATE FOR TYPE "H" COVER

(MEASURES 35 1/4" X 17 3/4" X 2")
(APPROXIMATE WEIGHT 159 LBS.)
GRATE..... 159 LBS.

(NOTED AS TYPE H-S ON DRAINAGE TABLE)



LOGO DETAIL

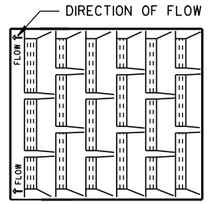
GENERAL NOTES

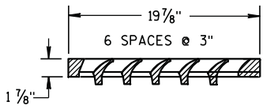
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

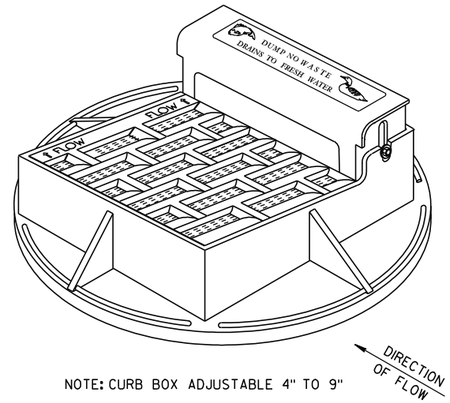
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.

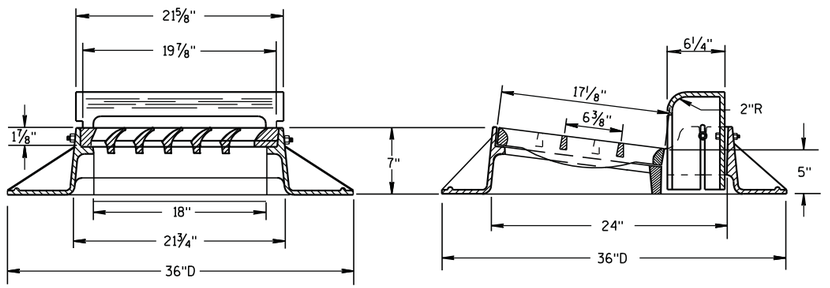
THE ACTUAL WEIGHT OF COVERS MAY VARY WITHIN 5 PERCENT, PLUS OR MINUS, OF THE APPROXIMATE WEIGHT.





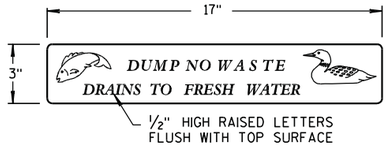


NOTE: CURB BOX ADJUSTABLE 4" TO 9"



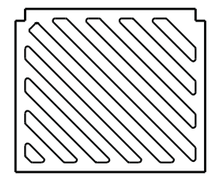
TYPE "A"

(APPROXIMATE WEIGHT 340 LBS.)
FRAME..... 185 LBS.
GRATE..... 71 LBS.
CURB BOX..... 84 LBS.



LOGO DETAIL

NOTE:
GRATE IS REVERSIBLE.



SPECIAL GRATE FOR TYPE "A" COVER

(MEASURES 19 3/4" X 17" X 1 7/8"
GRATE..... 84 LBS.

(NOTED AS TYPE A-S ON DRAINAGE TABLE)

INLET COVERS
TYPE A, H, A-S, & H-S

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6/5/2012
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER

FHWA

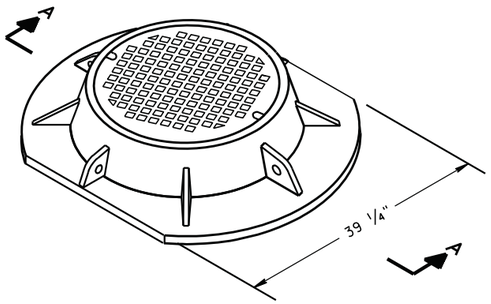
6

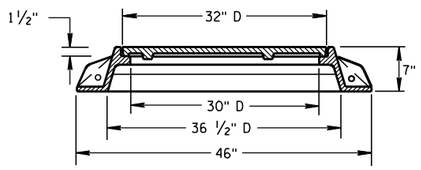
S.D.D. 8 A 5-18a

6

S.D.D. 8 A 5-18a

8A5 sheet d: Inlet Covers Type BW, Z; Manhole Covers Type J, J-S, K, L & M



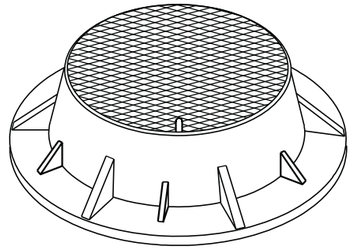


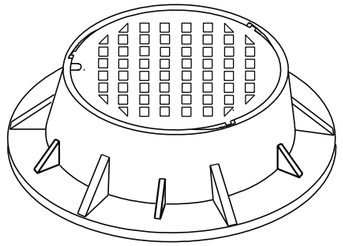
SECTION A-A

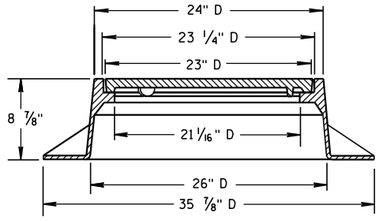
TYPE "K"

(APPROXIMATE WEIGHT 439 LBS.)

FRAME.....216 LBS.
LID.....223 LBS.



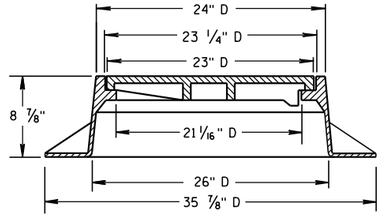




TYPE "J"

(APPROXIMATE WEIGHT 267 LBS.)

FRAME.....152 LBS.
LID.....115 LBS.



TYPE "J" SPECIAL

TYPE "B" NON-ROCKING SELF-SEAL LID

(APPROXIMATE WEIGHT 267 LBS.)

FRAME.....158 LBS.
LID.....109 LBS.

(NOTED AS TYPE J-S ON THE DRAINAGE TABLE)

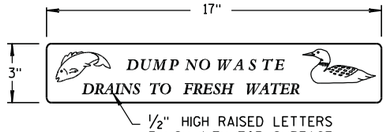
GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

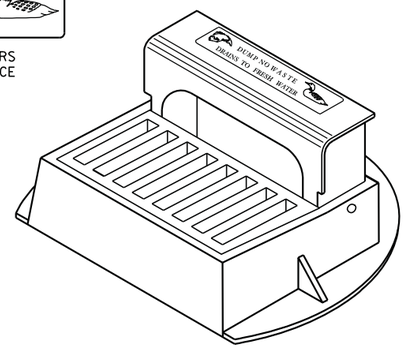
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR MANHOLE COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

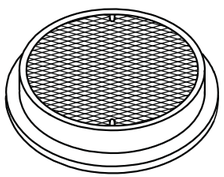
ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.

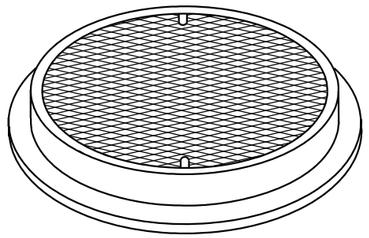
THE ACTUAL WEIGHT OF COVERS MAY VARY WITH 5 PERCENT, PLUS OR MINUS, OF THE APPROXIMATE WEIGHT.

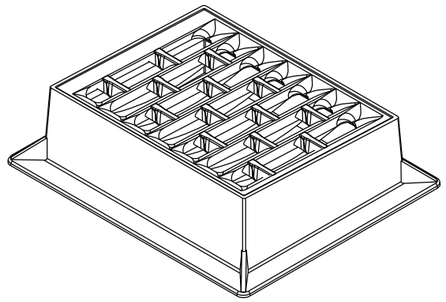


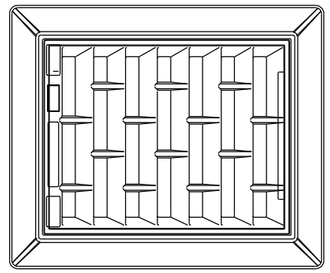
LOGO DETAIL

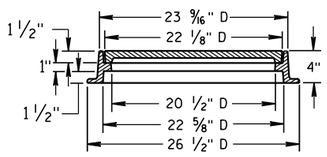








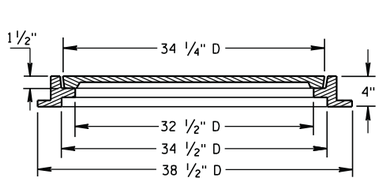




TYPE "L"

(APPROXIMATE WEIGHT 158 LBS.)

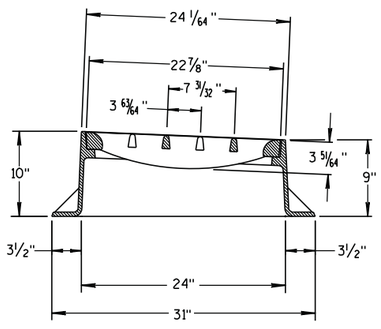
FRAME.....81 LBS.
LID.....77 LBS.

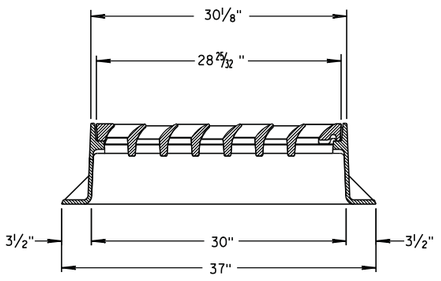


TYPE "M"

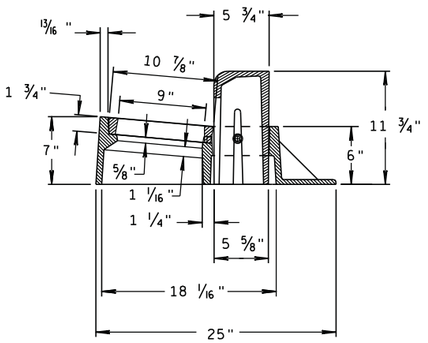
(APPROXIMATE WEIGHT 377 LBS.)

FRAME..... 125 LBS.
LID..... 252 LBS.





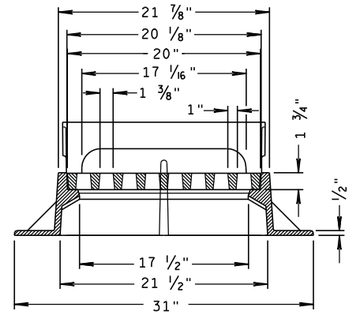
INLET COVER TYPE "BW"



INLET COVER TYPE "Z"

(APPROXIMATE WEIGHT 344 LBS.)

FRAME.....206 LBS.
GRATE..... 46 LBS.
CURB BOX..... 92 LBS.



INLET COVERS, TYPE BW, Z
MANHOLE COVERS, TYPE K, J, J-S, L & M

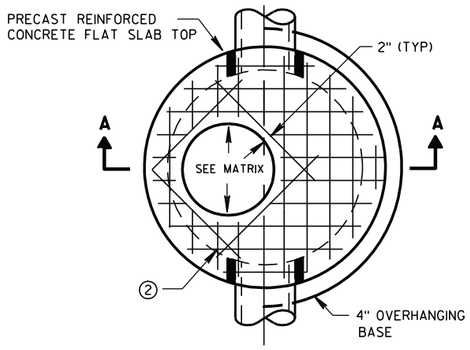
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

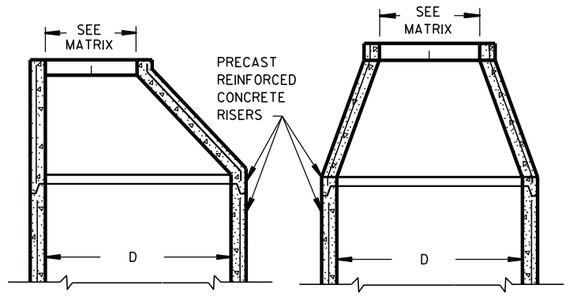
6/5/2012
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER

FHWA

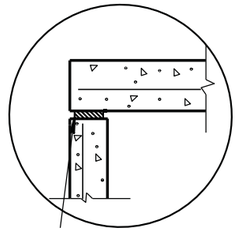


PLAN VIEW CIRCULAR OPENING



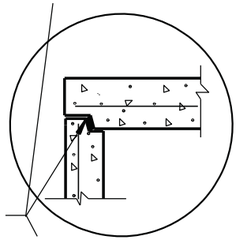
OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP

OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP

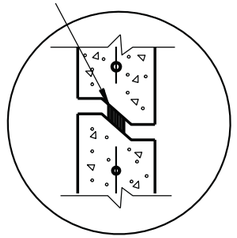


TOP WITH PLAIN END JOINT

JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C990 (TYP)

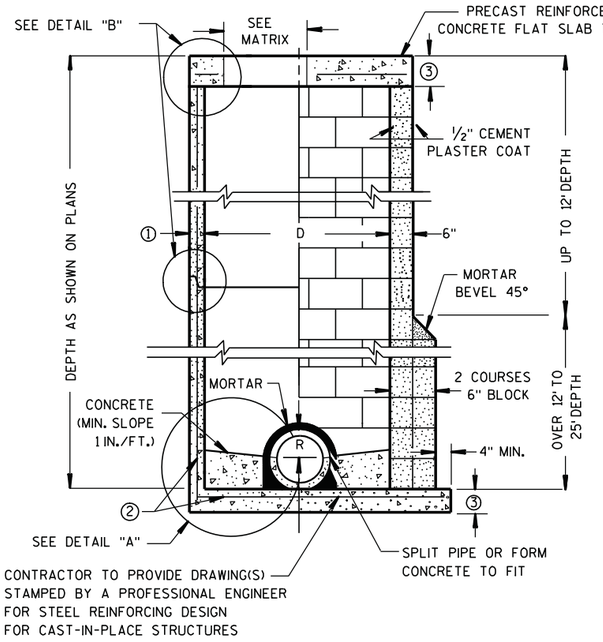


TOP WITH TONGUE AND GROOVE JOINT



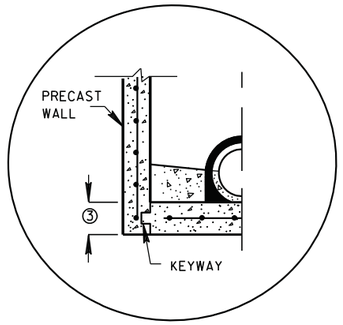
RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B"

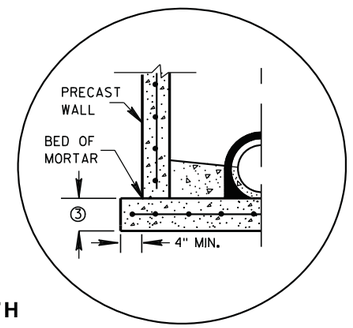


PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

CONCRETE BLOCK WITH CAST-IN-PLACE OR PRECAST REINFORCED CONCRETE BASE ②

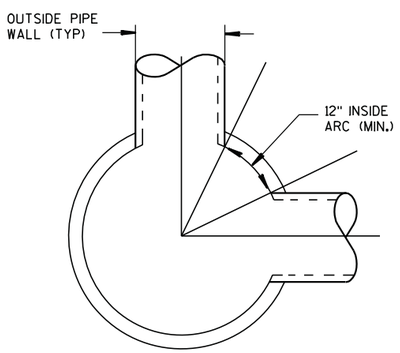


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION



SEPERATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"



DETAIL "C"

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST MANHOLE UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATE THE SIZE OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF GRANULAR BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

PRECAST REINFORCED CONE TOPS (ECCENTRIC OR CONCENTRIC) OR PRECAST REINFORCED FLAT SLAB TOPS MAY BE USED ON CONCRETE BLOCK STRUCTURES. THE CONE TOPS SHALL BE INSTALLED ON A BED OF MORTAR.

ECCENTRIC CONE TOPS MAY BE USED ON ALL STRUCTURES, AND CONCENTRIC CONE TOPS SHALL BE USED ONLY ON STRUCTURES 5 FEET OR LESS IN DEPTH, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

STEPS MEETING AASHTO M199 AND THE FOLLOWING REQUIREMENTS SHALL BE INSTALLED IN ALL STRUCTURES OVER 5 FEET IN DEPTH: 16 INCH C-C MAXIMUM SPACING; PROJECT A MINIMUM CLEAR DISTANCE OF 4 INCHES FROM THE WALL AT THE POINT OF EMBEDMENT; MINIMUM LENGTH OF 10 INCHES; MINIMUM WALL EMBEDMENT OF 3 INCHES. FERROUS METAL STEPS NOT PAINTED OR TREATED TO RESIST CORROSION SHALL HAVE A MINIMUM CROSS SECTIONAL DIMENSION OF 1 INCH.

STEPS OF APPROVED POLYPROPYLENE PLASTIC COATED REINFORCEMENT BAR ARE ACCEPTABLE. REINFORCING BAR MUST BE A MINIMUM OF ½" AND MEET THE REQUIREMENTS OF ASTM A615.

CERTIFICATION SHALL BE PROVIDED THAT INSTALLED STEPS WHEN TESTED IN ACCORDANCE WITH SECTION 10 OF AASHTO T280 CAN WITHSTAND A VERTICAL LOAD OF 800 LBS. AND A HORIZONTAL LOAD OF 400 LBS.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

CONCRETE BLOCK WILL NOT BE PERMITED FOR STRUCTURES GREATER THAN 4 FEET IN DIAMETER.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

ALL PRECAST MANHOLE UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M 199.

4" OVERHANGING BASES ARE REQUIRED FOR ALL CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPERATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

FOR ADDITIONAL CONFIGURATIONS, MAINTAIN A MINIMUM OF 12 INCHES AS MEASURED FROM THE INSIDE OF THE STRUCTURE WALL BETWEEN THE OUTSIDE PIPE WALLS OF ADJACENT PIPES. SEE DETAIL "C".

① MINIMUM WALL THICKNESS SHALL BE 4 INCHES FOR 3-FT, 5 INCHES FOR 4-FT, 6 INCHES FOR 5-FT, 7 INCHES FOR 6-FT, 8 INCHES FOR 7-FT AND 9 INCHES FOR 8-FT DIAMETER PRECAST MANHOLES.

② FOR PRECAST MANHOLES PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

③ PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER OF 48" AND LESS SHALL HAVE A MINIMUM THICKNESS OF 6". PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER LARGER THAN 48" SHALL HAVE A MINIMUM THICKNESS OF 8".

MANHOLE COVER OPENING MATRIX

MANHOLE COVER TYPE	C	ALL J'S	K	L	M
OPENING SIZE (FT)					
2 DIA.	X	X		X	
3 DIA.			X		X

PIPE MATRIX

MANHOLE SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	180° SEPARATION (IN)	90° SEPARATION (IN)
3-FT	15	12
4-FT	24	18
5-FT	36	24
6-FT	42	36
7-FT	48	36
8-FT	60	42

MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER

MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

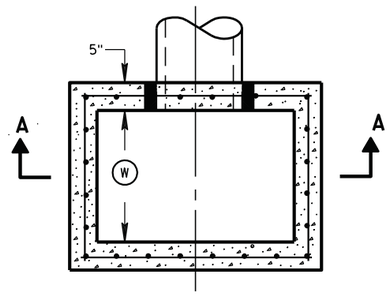
APPROVED

6/5/2012
DATE

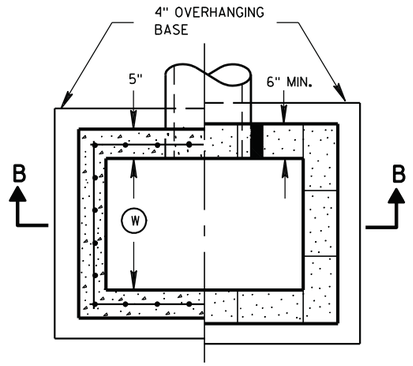
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER

FHWA

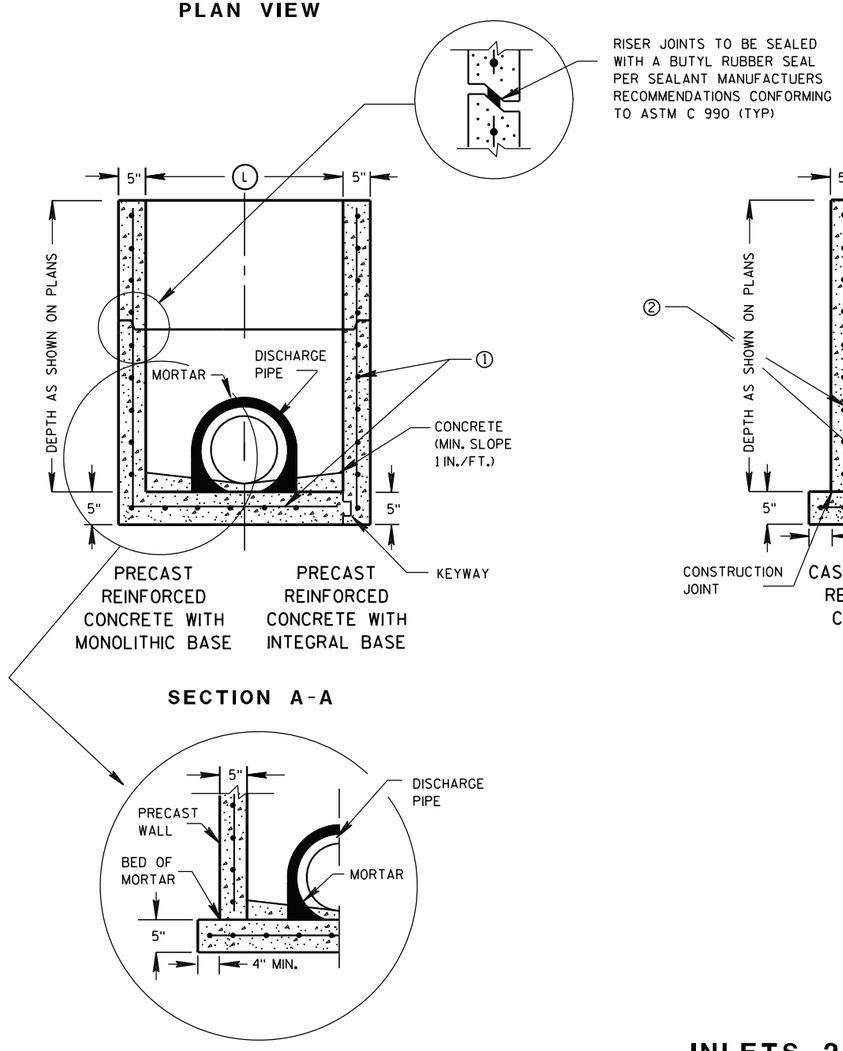
6
S.D.D. 8 B 9-1



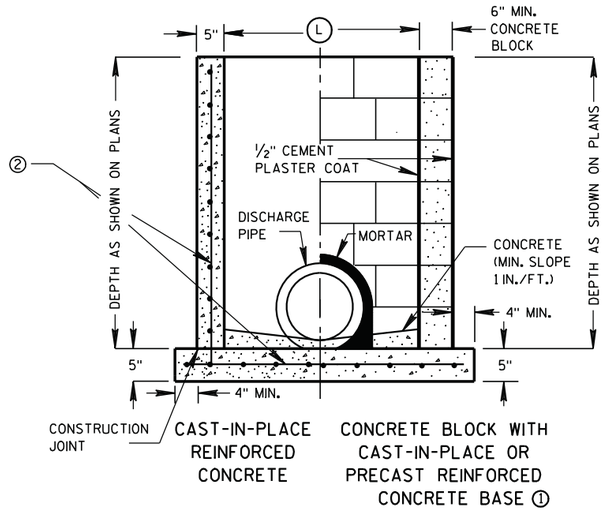
PLAN VIEW



PLAN VIEW



SECTION A-A



SECTION B-B

SEPERATE PRECAST REINFORCED CONCRETE BASE OPTION

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST INLET UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF ASTM C 913.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATES THE SIZE OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF GRANULAR BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

4" OVERHANGING BASES ARE REQUIRED FOR CAST-IN-PLACE REINFORCED CONCRETE AND CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPERATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

MAXIMUM INSIDE PIPE DIAMETER DETERMINED BY 3 INCH CLEARANCE ON EACH SIDE OF THE OUTSIDE WALL OF THE PIPE. SEE DETAIL "A". ASSUMES PIPE ENTERS PERPENDICULAR TO THE STRUCTURE.

① FOR PRECAST INLETS PROVIDE REINFORCING STEEL IN ACCORDANCE TO ASTM C 913.

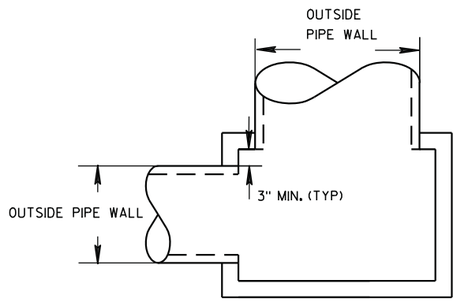
② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

INLET COVER MATRIX

INLET SIZE		INLET COVER TYPE	ALL A'S	ALL B'S	BW	F	ALL H'S	S	T	V	WM
	WIDTH (W) (FT)	LENGTH (L) (FT)									
2X2-FT	2	2	X	X				X		X	
2X2.5-FT	2	2.5			X			X	X	X	X
2X3-FT	2	3					X				
2.5X3-FT	2.5	3				X					

PIPE MATRIX

INLET SIZE	MAXIMUM INSIDE PIPE DIAMETER	
	WIDTH (IN)	LENGTH (IN)
2X2-FT	12	12
2X2.5-FT	12	18
2X3-FT	12	24
2.5X3-FT	18	24



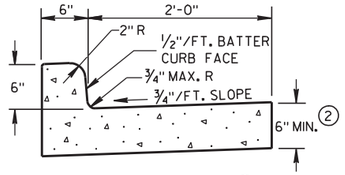
DETAIL "A"

INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT

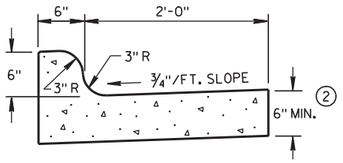
INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

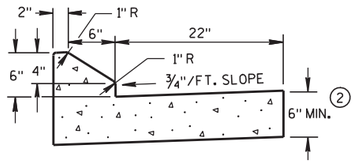
APPROVED
6/5/2012
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA



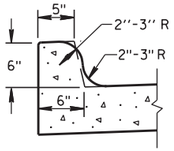
TYPES A & D (1)



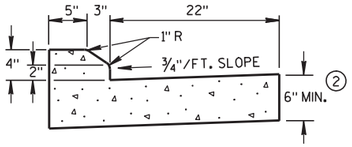
TYPES K & L (1)



6" SLOPED CURB TYPES G & J (1)

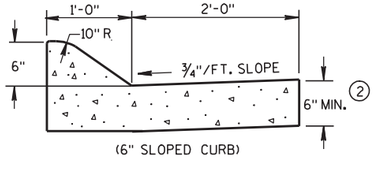


OPTIONAL CURB SHAPE
FOR TYPES K & L (1)

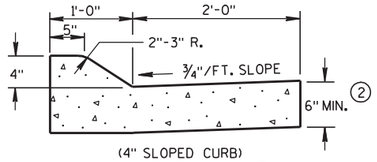


4" SLOPED CURB TYPES G & J (1)

CONCRETE CURB & GUTTER 30"

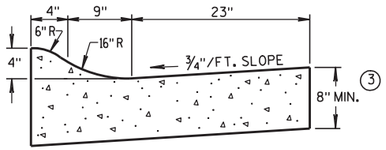


(6" SLOPED CURB)



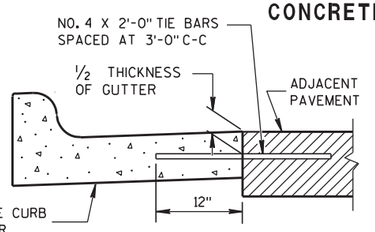
(4" SLOPED CURB)

TYPES A & D (1)

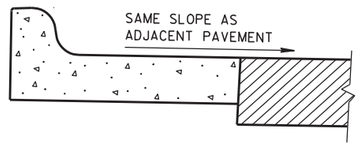


4" SLOPED CURB TYPES R & T (1) (4)

CONCRETE CURB & GUTTER 36"



TYPICAL TIE BAR LOCATION (1)



REVERSE SLOPE GUTTER (5)
(TYPICAL FOR ALL CURB & GUTTER TYPES)

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

INTEGRAL CURB & GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB & GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE. A LONGITUDINAL CONSTRUCTION JOINT IS NOT REQUIRED WITH INTEGRAL CURB AND GUTTER.

WHERE THE TRANSVERSE JOINTS IN THE PAVEMENT ARE REQUIRED TO BE SEALED, THE JOINTS IN THE INTEGRAL CURB AND GUTTER SHALL BE SEALED TO THE FACE OF CURB WITH THE SAME TYPE OF SEALANT. THE COST OF FURNISHING AND INSTALLING THIS SEALANT SHALL BE INCIDENTAL TO THE ITEM CONCRETE CURB AND GUTTER.

UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2'-0" BEHIND THE BACK OF CURBS.

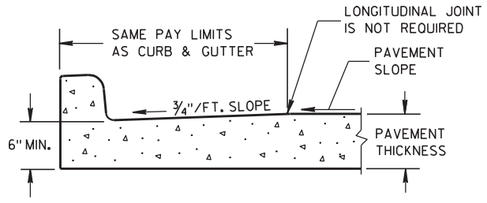
(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G, K AND R.

(2) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

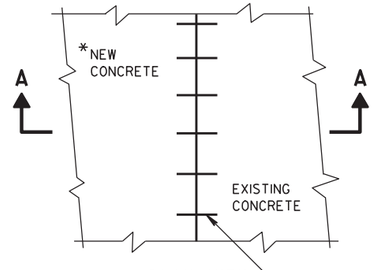
(3) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 8" MINIMUM GUTTER THICKNESS IS MAINTAINED.

(4) THE FACE OF CURB IS 6" FROM THE BACK OF CURB.

(5) WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.

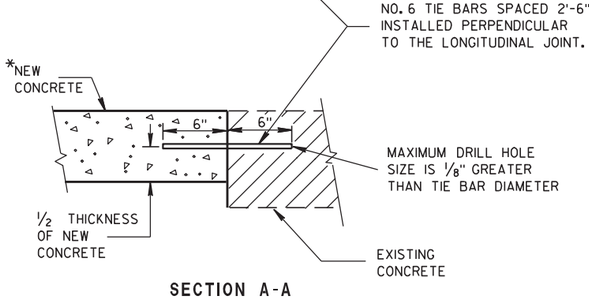


PARTIAL SECTION OF PAVEMENT
WITH INTEGRAL CURB & GUTTER



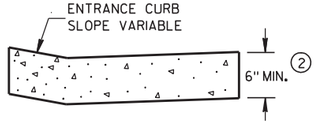
PLAN VIEW

*NEW CURB & GUTTER, SURFACE DRAINS, CONCRETE PAVEMENT OR OTHER NEW CONCRETE.

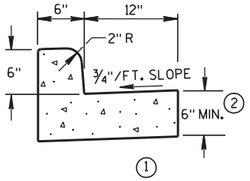


SECTION A-A

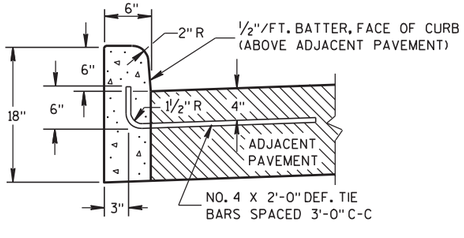
TIE BARS DRILLED
INTO EXISTING PAVEMENT



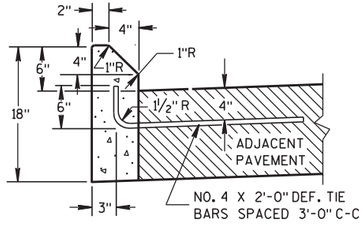
DRIVEWAY ENTRANCE CURB
(WHEN DIRECTED BY THE ENGINEER)



(1)
TYPES A & D
CONCRETE CURB & GUTTER 18"

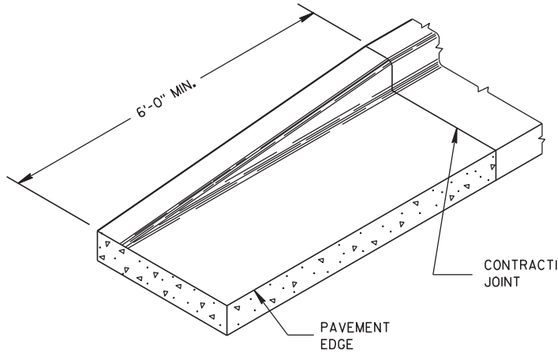


(1)
TYPES A & D



(1)
TYPES G & J

CONCRETE CURB

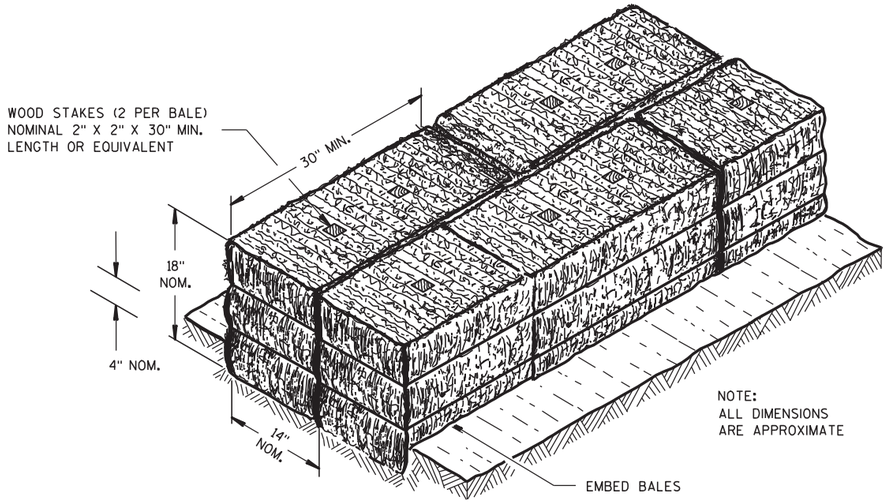


END SECTION CURB & GUTTER

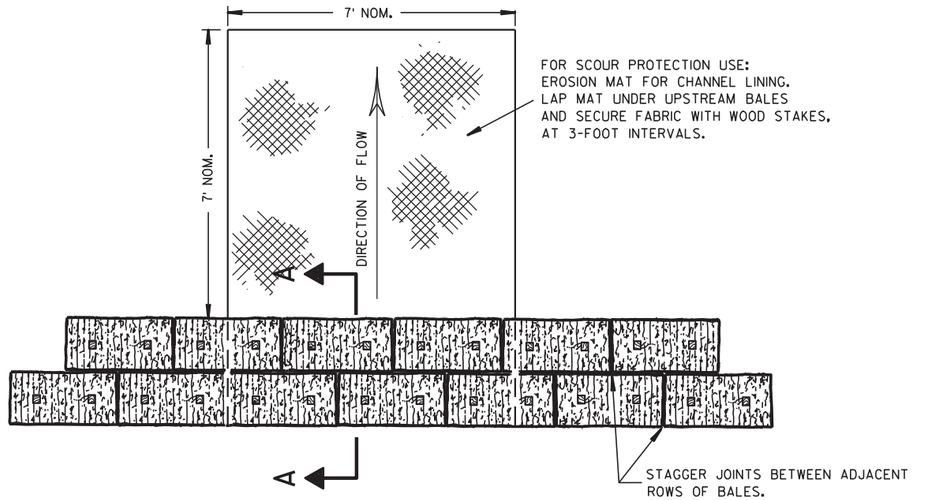
CONCRETE CURB, CONCRETE CURB & GUTTER AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

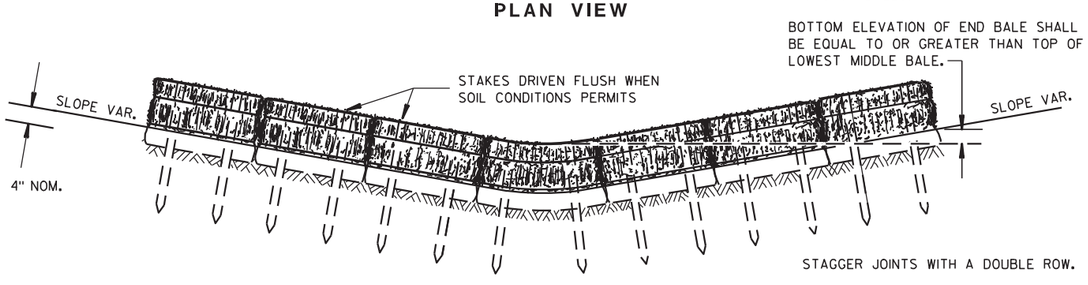
APPROVED
9/4/08 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA



SECTION A-A



PLAN VIEW



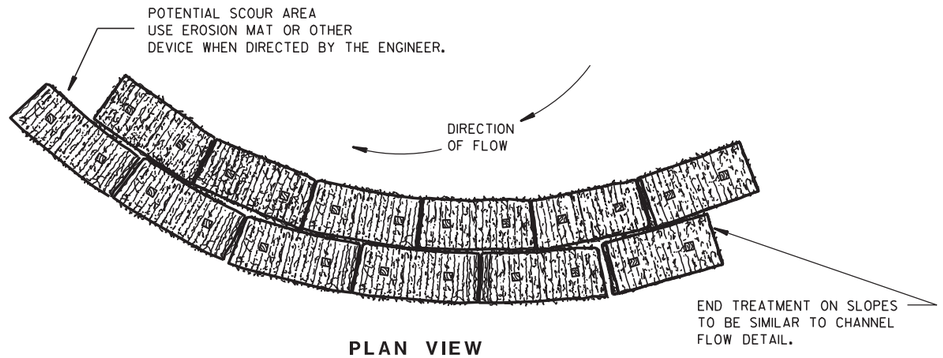
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES (1)

GENERAL NOTES

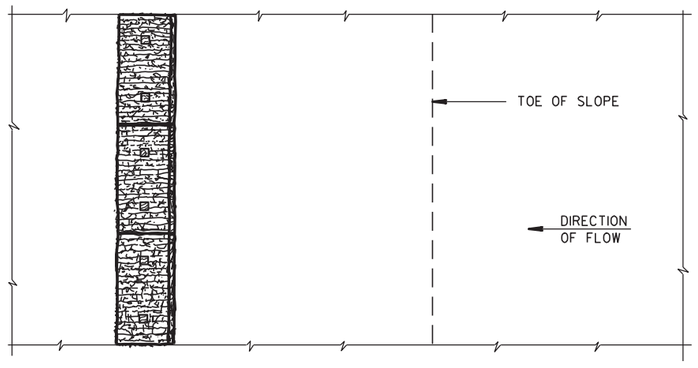
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

(1) TEMPORARY DITCH CHECKS EITHER EROSION BALES OR MANUFACTURED SHALL BE PAID FOR UNDER THE BID ITEM OF TEMPORARY DITCH CHECK. THE DEPARTMENT WILL NOT PAY FOR TEMPORARY DITCH CHECKS CONSTRUCTED OF A SINGLE ROW OF EROSION BALES.

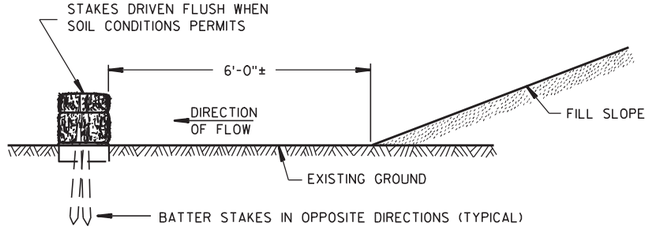


PLAN VIEW

WHEN ALTERING THE DIRECTION OF FLOW



PLAN VIEW



FRONT ELEVATION

WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

EROSION BALES FOR SHEET FLOW

TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS

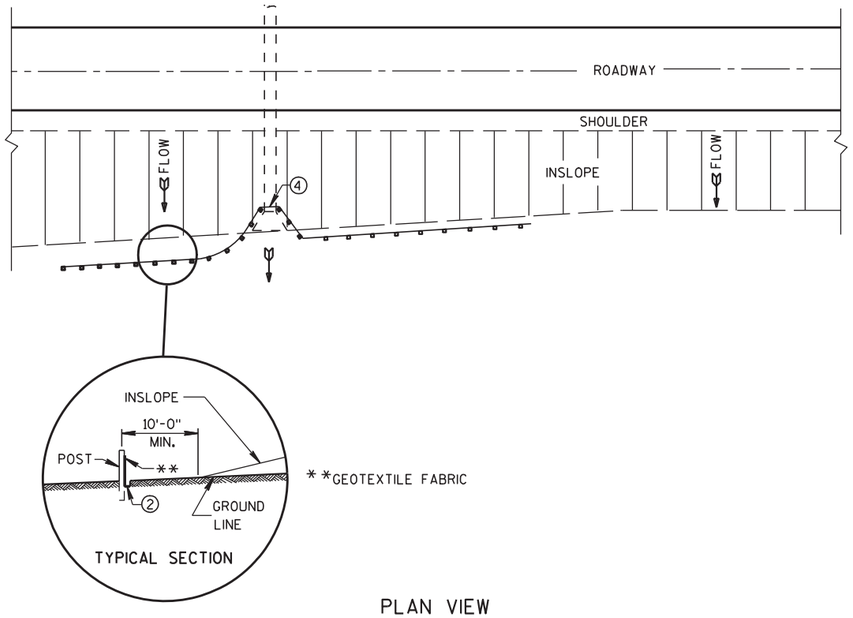
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6/04/02 — DATE

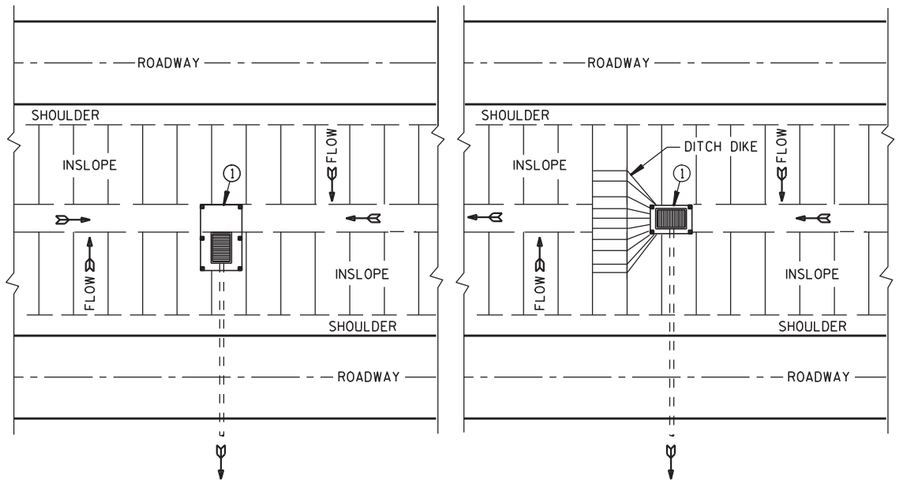
/S/ Beth Cannestra — CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



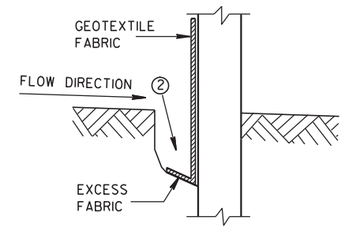
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

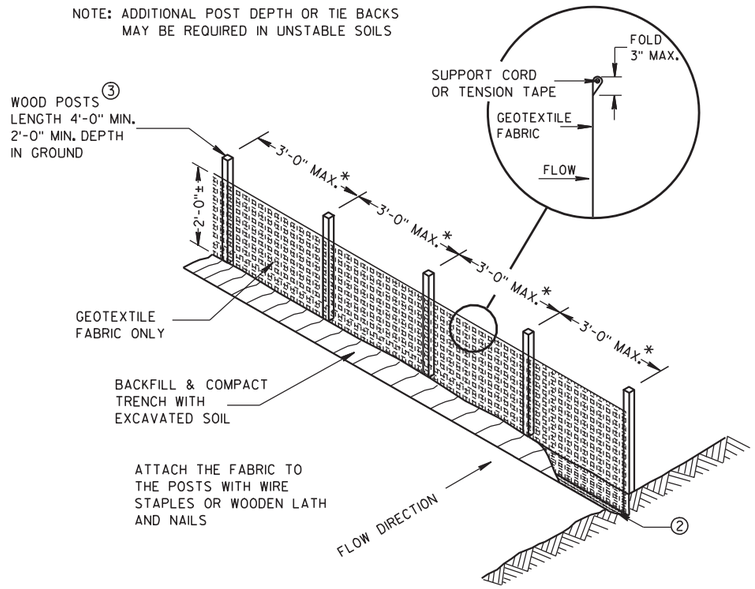
GENERAL NOTES

DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

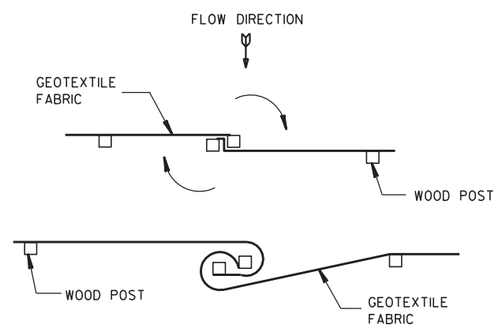
1. HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
2. FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
3. WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.
4. SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.
5. CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



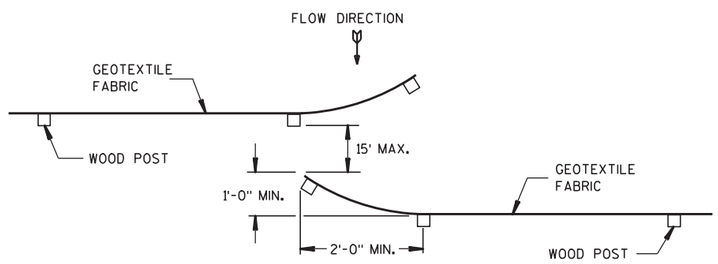
TRENCH DETAIL



SILT FENCE

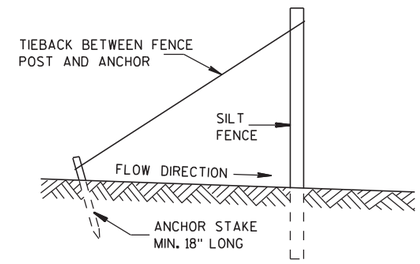


TWIST METHOD



HOOK METHOD

JOINING TWO LENGTHS OF SILT FENCE 5



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

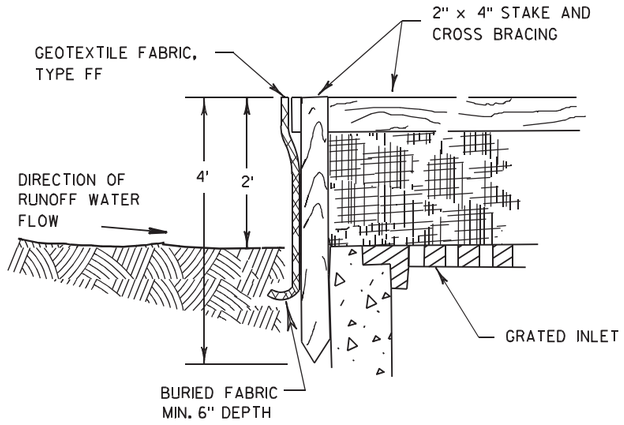
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

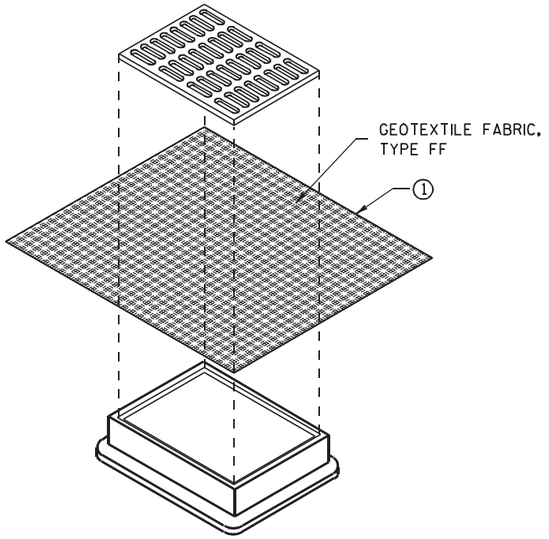
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

6 S.D.D. 8 E 9-6

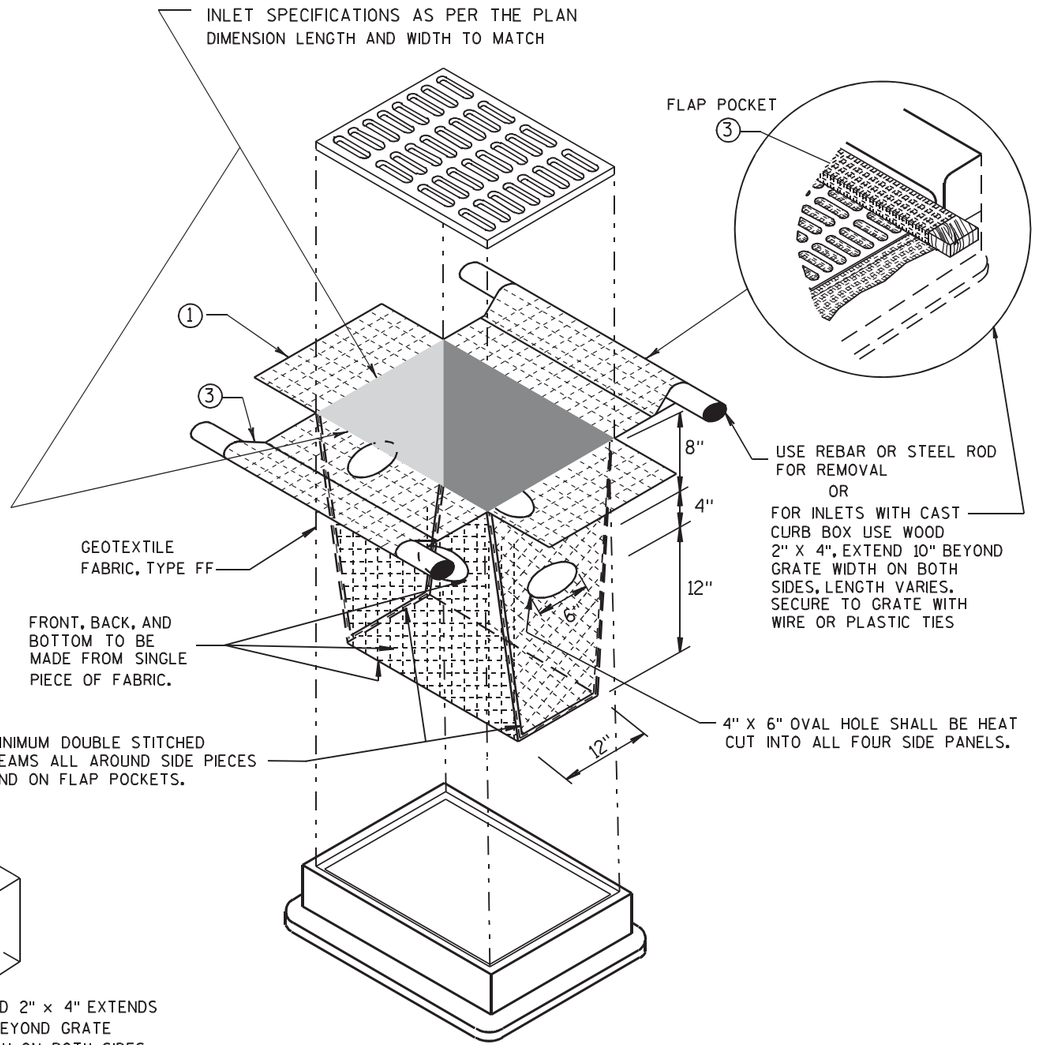
6 S.D.D. 8 E 9-6





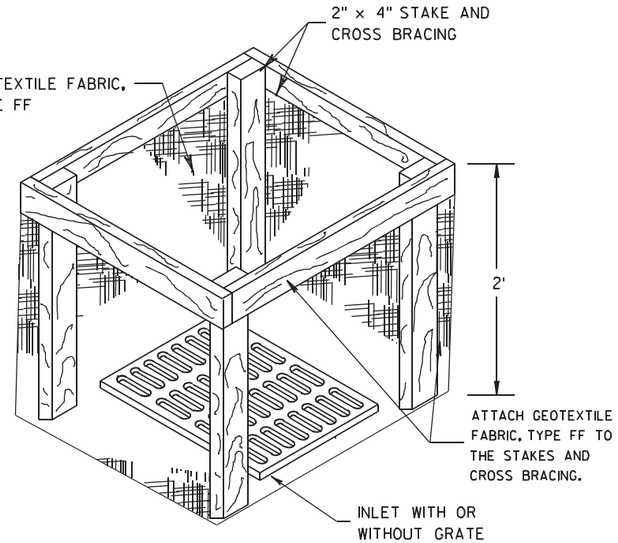
INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

(CAN BE INSTALLED IN ANY INLET WITHOUT A CURB BOX)

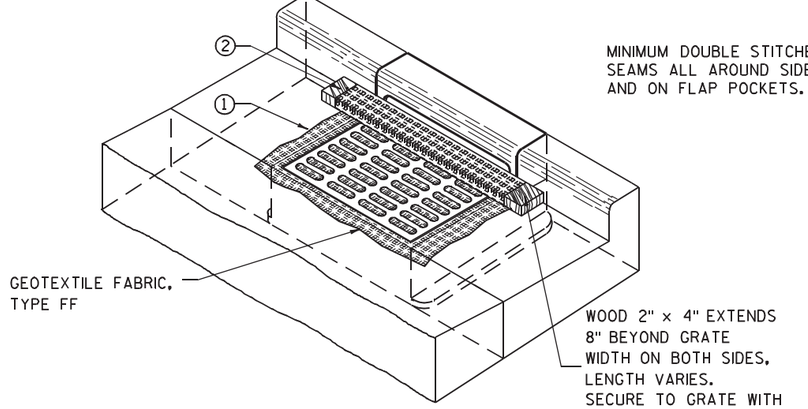


INLET PROTECTION, TYPE D

(CAN BE INSTALLED IN ANY INLET TYPE WITH
OR WITHOUT A CURB BOX AS PER NOTE ②)



INLET PROTECTION, TYPE A



INLET PROTECTION, TYPE C (WITH CURB BOX)

GENERAL NOTES

INLET PROTECTION DEVICES SHALL BE MAINTAINED OR REPLACED AT THE DIRECTION OF THE ENGINEER.

MANUFACTURED ALTERNATIVES APPROVED AND LISTED ON THE DEPARTMENT'S EROSION CONTROL PRODUCT ACCEPTABILITY LIST MAY BE SUBSTITUTED.

WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

① FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10" AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.

② FOR INLET PROTECTION, TYPE C (WITH CURB BOX), AN ADDITIONAL 18" OF FABRIC IS WRAPPED AROUND THE WOOD AND SECURED WITH STAPLES. THE WOOD SHALL NOT BLOCK THE ENTIRE HEIGHT OF THE CURB BOX OPENING.

③ FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2X4.

INSTALLATION NOTES

TYPE B & C

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

TYPE D

DO NOT INSTALL INLET PROTECTION TYPE D IN INLETS SHALLOWER THAN 30", MEASURED FROM THE BOTTOM OF THE INLET TO THE TOP OF THE GRATE.

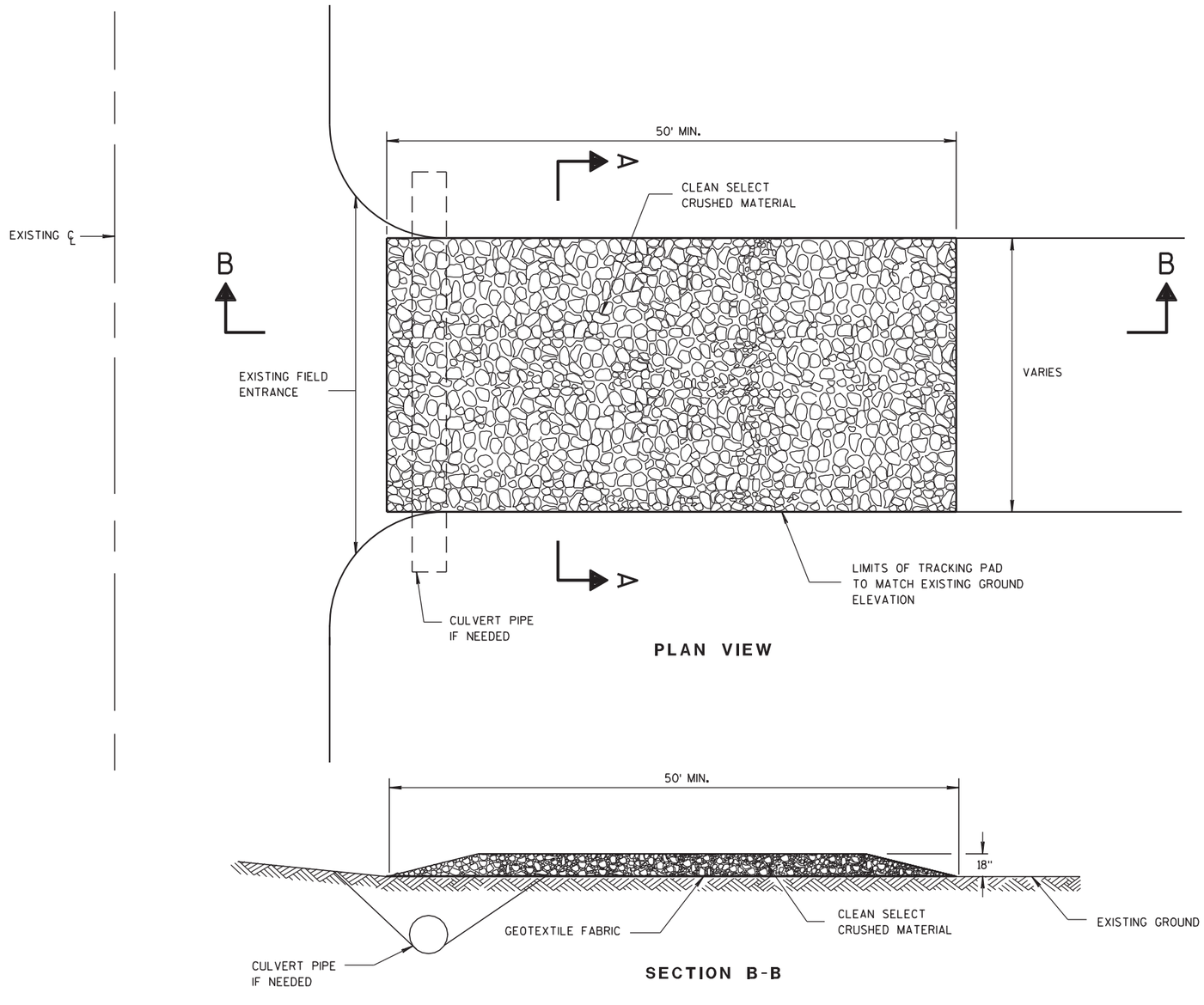
TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE BOTTOM OF THE BAG.

INLET PROTECTION
TYPE A, B, C, AND D

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/16/02
DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA



PLAN VIEW

SECTION B-B

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

TRACKING PAD SHALL BE INSPECTED DAILY. DEFICIENT AREAS SHALL BE REPAIRED OR REPLACED IMMEDIATELY.

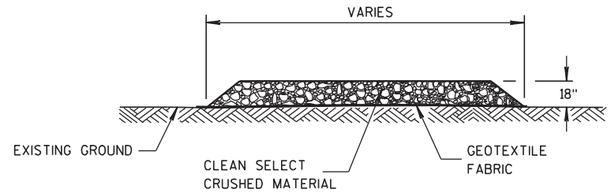
TRACKING PAD TO BE REMOVED AFTER CONSTRUCTION IS COMPLETED.

TRACKING PAD SHALL BE THE FULL WIDTH OF THE EGRESS POINT.

SURFACE WATER MUST BE PREVENTED FROM PASSING THROUGH THE TRACKING PAD. FLOWS SHALL BE DIVERTED AWAY, AROUND OR CONVEYED UNDER THE TRACKING PAD.

CULVERT PIPE OR OTHER BMP USED TO DIVERT WATER AWAY, AROUND OR UNDER THE TRACKING PAD SHALL BE DESIGNED TO CONVEY THE 2 YEAR - 24 HOUR EVENT.

THE COST OF ADDITIONAL BMP TO DIVERT WATER ARE INCIDENTAL TO THE TRACKING PAD BID ITEM.



SECTION A-A

TRACKING PAD

TRACKING PAD	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 3/24/2011 DATE	/S/ Jerry H. Zogg ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA	

METAL APRON ENDWALLS

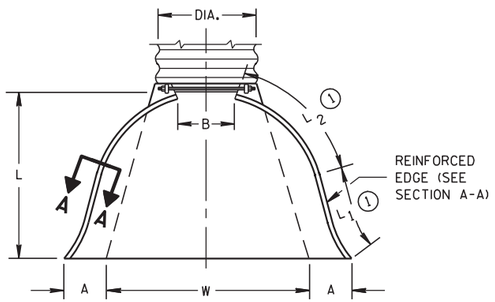
PIPE DIA. (IN.)	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4	36	2 1/2 to 1	1 Pc.
21	.064	.060	9	12	6	36	18	29 5/8	42	2 1/2 to 1	1 Pc.
24	.064	.075	10	13	6	41	18	37 1/4	48	2 1/2 to 1	1 Pc.
30	.079	.075	12	16	8	51	18	52 1/4	60	2 1/2 to 1	1 Pc.
36	.079	.105	14	19	9	60	24	59 3/4	72	2 1/2 to 1	2 Pc.
42	.109	.105	16	22	11	69	24	75 5/8	84	2 1/2 to 1	2 Pc.
48	.109	.105	18	27	12	78	24	81	90	2 1/4 to 1	3 Pc.
54	.109	.105	18	30	12	84	30	85 1/2	102	2 1/4 to 1	3 Pc.
60	.109×	.105×	18	33	12	87	—	—	114	2 to 1	3 Pc.
66	.109×	.105×	18	36	12	87	—	—	120	2 to 1	3 Pc.
72	.109×	.105×	18	39	12	87	—	—	126	2 to 1	3 Pc.
78	.109×	.105×	18	42	12	87	—	—	132	1 1/2 to 1	3 Pc.
84	.109×	.105×	18	45	12	87	—	—	138	1 1/2 to 1	3 Pc.
90	.109×	.105×	18	37	12	87	—	—	144	1 1/2 to 1	3 Pc.
96	.109×	.105×	18	35	12	87	—	—	150	1 1/2 to 1	3 Pc.

× EXCEPT CENTER PANEL SEE GENERAL NOTES

REINFORCED CONCRETE APRON ENDWALLS

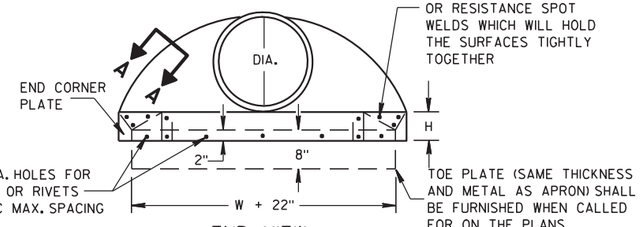
PIPE DIA. (IN.)	DIMENSIONS (Inches) T	A	B	C	D	E	G	APPROX. SLOPE
12	2	4	24	48 7/8	72 7/8	24	2	3 to 1
15	2 1/4	6	27	46	73	30	2 1/4	3 to 1
18	2 1/2	9	27	46	73	36	2 1/2	3 to 1
21	2 3/4	9	36	37 1/2	73 1/2	42	2 3/4	3 to 1
24	3	9 1/2	43 1/2	30	73 1/2	48	3	3 to 1
27	3 1/4	10 1/2	49 1/2	24	73 1/2	54	3 1/4	3 to 1
30	3 1/2	12	54	19 3/4	73 1/2	60	3 1/2	3 to 1
36	4	15	63	34 3/4	97 3/4	72	4	3 to 1
42	4 1/2	21	63	35	98	78	4 1/2	3 to 1
48	5	24	72	26	98	84	5	3 to 1
54	5 1/2	27	65	* 33 1/4 - ** 35	* 98 1/4 - ** 100	90	5 1/2	2 2/5 to 1
60	6	* 30 - ** 35	60	39	99	96	5	2 to 1
66	6 1/2	* 24 - ** 30	* 72 - ** 78	* 21 - ** 27	99	102	5 1/2	2 to 1
72	7	* 24 - ** 36	78	21	99	108	6	2 to 1
78	7 1/2	* 24 - ** 36	78	21	99	114	6 1/2	2 to 1
84	8	36	90 1/2	21	111 1/2	120	6 1/2	1 1/2 to 1
90	8 1/2	41	87 1/2	24	111 1/2	132	6 1/2	1 1/2 to 1

*MINIMUM
**MAXIMUM



PLAN VIEW

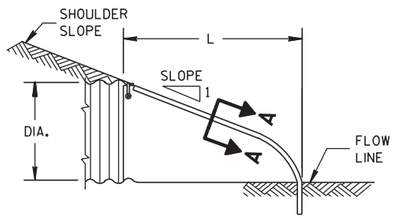
REINFORCED EDGE (SEE SECTION A-A)



END CORNER PLATES MAY BE FASTENED TO APRON PROPER BY BOLTS, RIVETS, OR RESISTANCE SPOT WELDS WHICH WILL HOLD THE SURFACES TIGHTLY TOGETHER

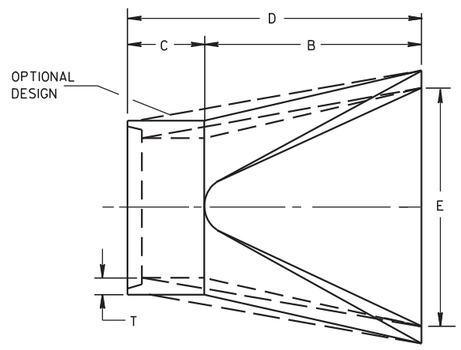
TOE PLATE (SAME THICKNESS AND METAL AS APRON) SHALL BE FURNISHED WHEN CALLED FOR ON THE PLANS

END VIEW

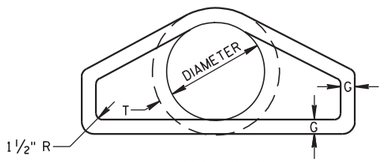


SIDE ELEVATION

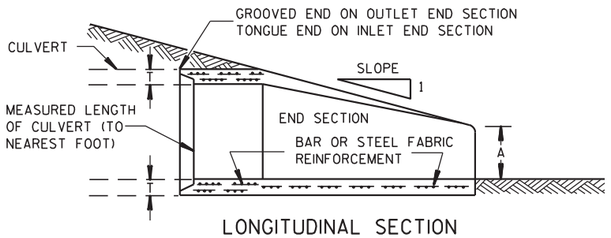
METAL ENDWALLS



PLAN

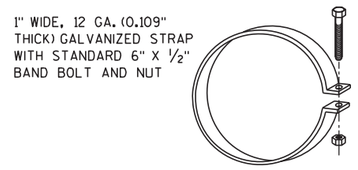


END VIEW



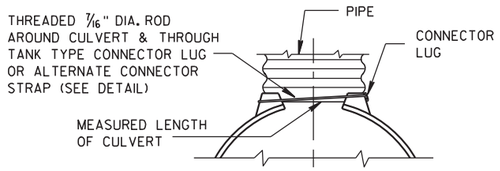
LONGITUDINAL SECTION

CONCRETE ENDWALLS

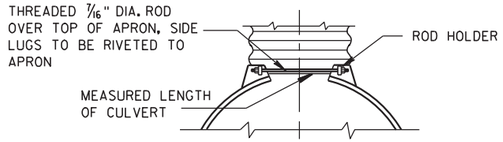


ALTERNATE FOR TYPE 1 CONNECTION

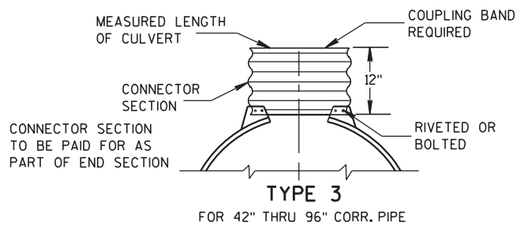
END SECTION CONNECTOR STRAP



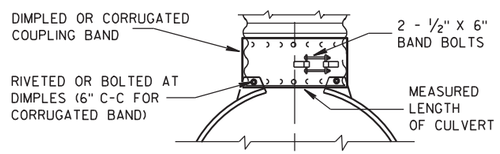
TYPE 1
FOR 12" THRU 24" CORR. PIPE



TYPE 2
FOR 30" THRU 96" CORR. PIPE



TYPE 3
FOR 42" THRU 96" CORR. PIPE



TYPE 5
ALTERNATE FOR:
ALL SIZES CORRUGATED CIRCULAR PIPE

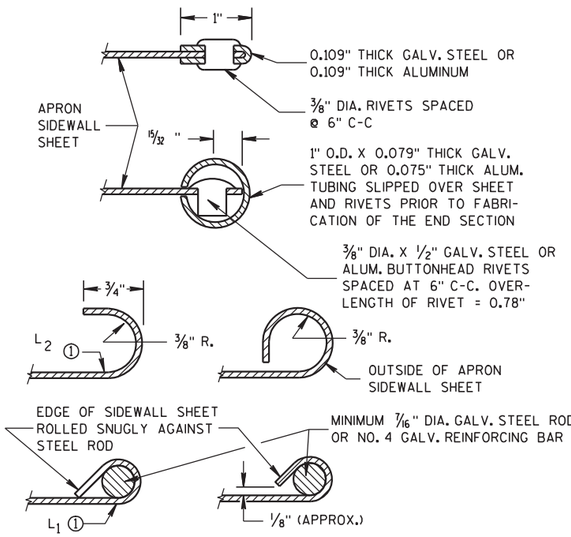
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

FOR CIRCUMFERENTIALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2, 3 OR 5 AS APPLICABLE.

FOR HELICALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2 OR 5.

FOR HELICALLY CORRUGATED PIPES WITH TWO CIRCUMFERENTIAL CORRUGATIONS AT EACH END USE ENDWALL CONNECTION DETAILS 1, 2 OR 3.

CONNECTION DETAILS



SECTION A-A

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

CONCRETE CULVERT ENDWALLS MAY NOT BE USED WITH GALVANIZED STEEL OR ALUMINUM CULVERT PIPE OR VISE VERSA. GALVANIZED STEEL OR ALUMINUM ENDWALLS SHALL NORMALLY BE INSTALLED ON CULVERT PIPE OF THE SAME METAL.

ALL THREE PIECE STEEL APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT OF THE PIPE PERIMETER.

LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 60" THROUGH 96" DIAMETER APRON ENDWALL SIZES, THE REINFORCED EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH GALVANIZED STEEL OR ALUMINUM STIFFENER ANGLES. THE ANGLES SHALL BE ATTACHED BY GALVANIZED NUTS AND BOLTS FOR STEEL UNITS AND ALUMINUM NUTS AND BOLTS FOR ALUMINUM UNITS.

WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

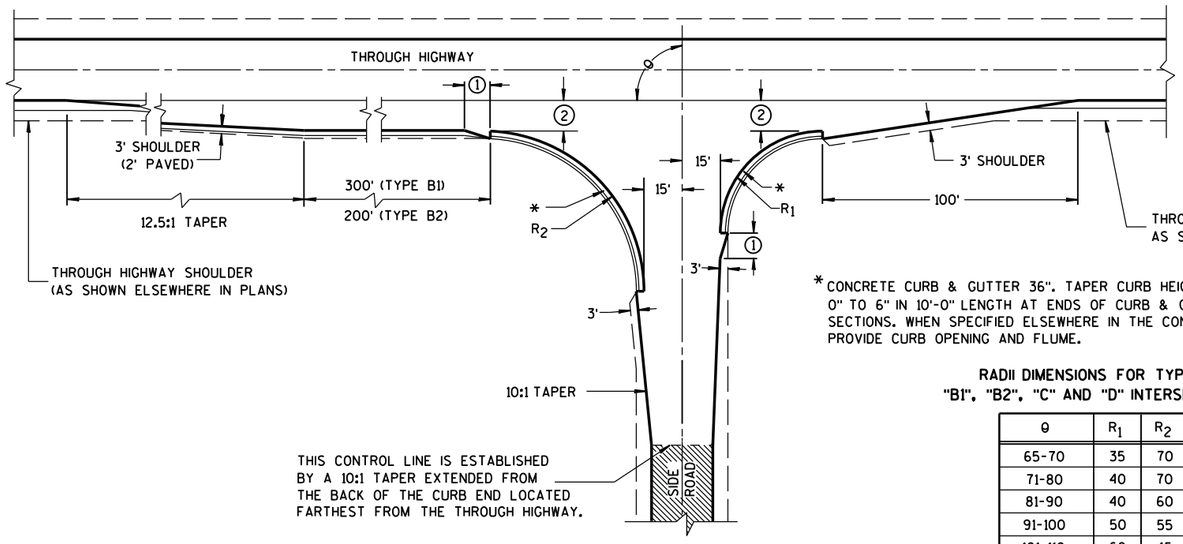
APRON ENDWALLS FOR CULVERT PIPE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/30/94 — DATE
/S/ Rory L. Rhinesmith — CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

6
S.D.D. 8 F 1-11

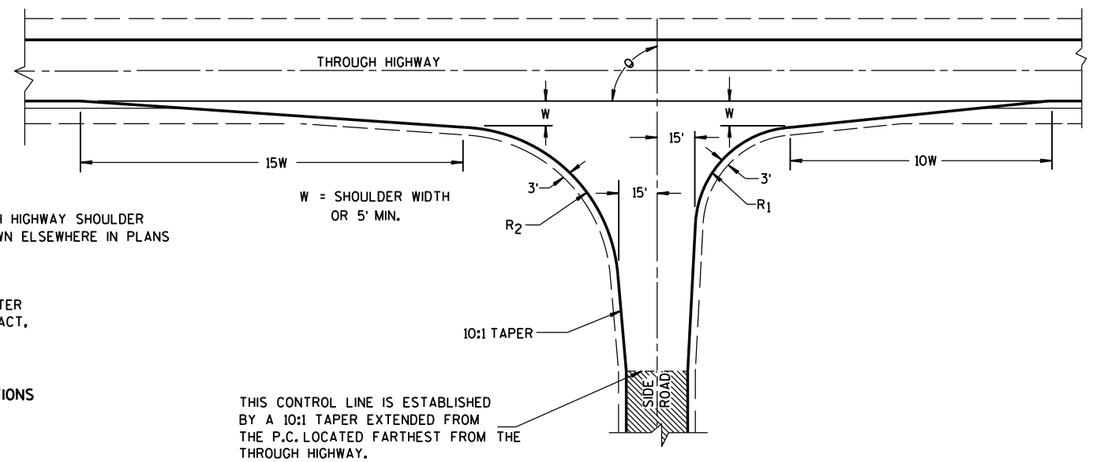


TYPE "B1" AND "B2"

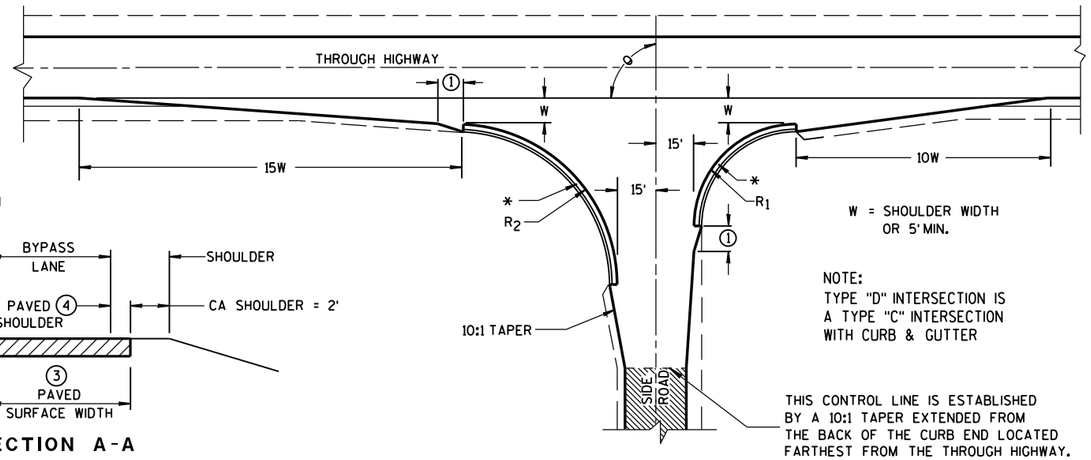
* CONCRETE CURB & GUTTER 36". TAPER CURB HEIGHT 0" TO 6" IN 10'-0" LENGTH AT ENDS OF CURB & GUTTER SECTIONS. WHEN SPECIFIED ELSEWHERE IN THE CONTRACT, PROVIDE CURB OPENING AND FLUME.

RADII DIMENSIONS FOR TYPES "B1", "B2", "C" AND "D" INTERSECTIONS

θ	R_1	R_2
65-70	35	70
71-80	40	70
81-90	40	60
91-100	50	55
101-110	60	45



TYPE "C"



TYPE "D"

GENERAL NOTES

DESIGNS MAY BE USED INTERCHANGEABLY IN COMBINATION OR SEPARATELY FOR ANY ONE COMPLETE INTERSECTION DEPENDING UPON INTERSECTION ANGLE AND SURFACING OF EACH APPROACH ROADWAY.

SIDE ROAD SURFACING NOTE

WHEN THE SIDE ROAD IS NOT PRESENTLY PAVED, PAVEMENT SHALL BE PLACED TO THE LIMITS SHOWN UNLESS OTHERWISE PROVIDED IN THE CONTRACT. WHERE THE CONSTRUCTION LIMITS ARE BEYOND THE PAVING LIMITS, CRUSHED AGGREGATE SURFACING SHALL BE PLACED BETWEEN THE PAVING LIMITS AND CONSTRUCTION LIMITS.

WHEN THE SIDE ROAD IS PRESENTLY PAVED, NEW PAVEMENT SHALL BE PLACED TO THE LIMITS OF DESIGN AS SHOWN AND BEYOND, IF NECESSARY, TO MEET EXISTING PAVEMENT.

WHEN THE SIDE ROAD IS THE CONSTRUCTION PROJECT, THE INTERSECTION SURFACING SHALL BE THE SAME AS FOR THE PROJECT.

EXISTING PAVED SURFACE

BYPASS LANE

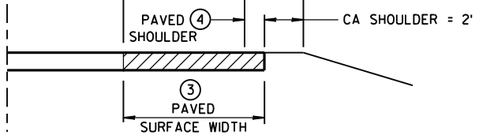
(1) 10-FT TYPICAL.

(2) 12-FT** PLUS ADDITIONAL WIDTH FOR BIKE LANE IF SHOWN ELSEWHERE IN THE PLAN.

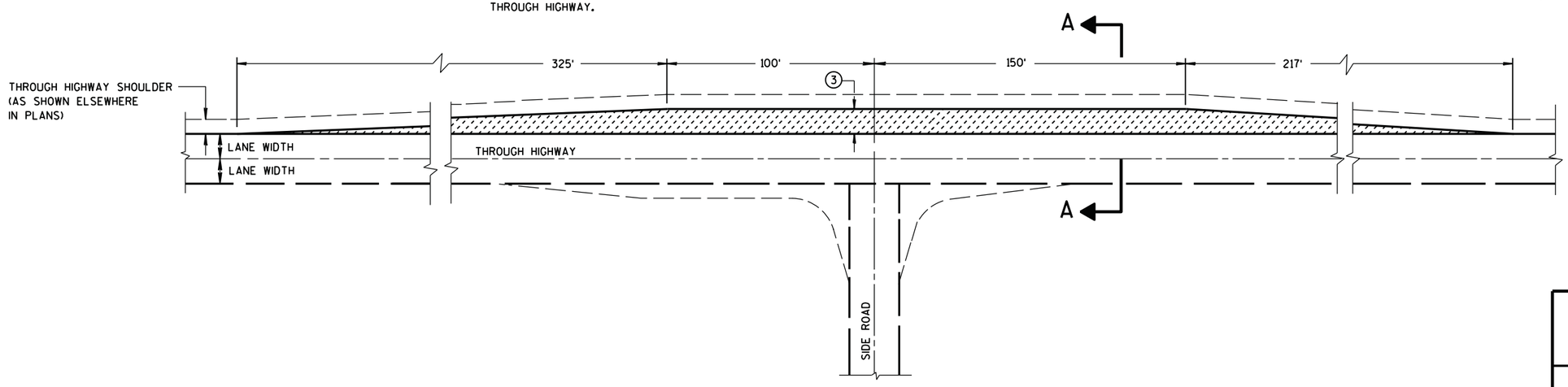
**10-FT MAY BE USED ON TYPE B2 ON RESURFACING PROJECTS IF SPECIFIED IN THE CONTRACT.

(3) BYPASS LANE PAVED SURFACE WIDTH OUTSIDE OF TRAVEL LANE
-ASPHALT = 12-FT PLUS PAVED SHOULDER WIDTH.
-PC CPNCRETE = 13-FT PLUS PAVED SHOULDER WIDTH.

(4) BYPASS LANE PAVED SHOULDER WIDTH = THE GREATER OF 1-FT OR THE PAVED SHOULDER WIDTH OF THE THROUGH HIGHWAY.



SECTION A-A
(SHOWING BYPASS LANE AND SHOULDER)

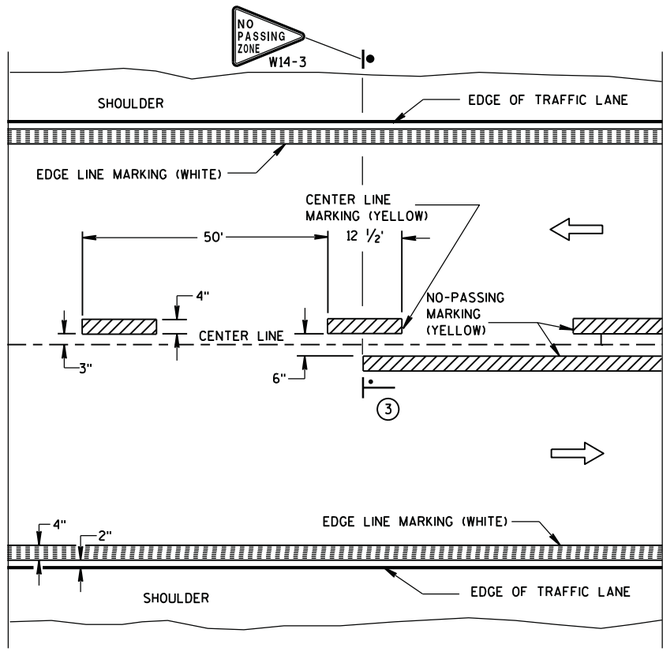


TEE INTERSECTION BYPASS LANE DETAIL

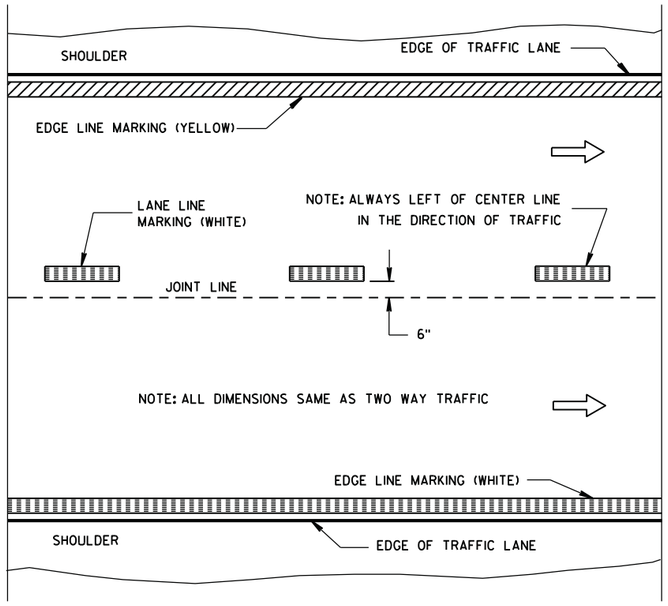
AT-GRADE SIDE ROAD INTERSECTION, TYPES "B1", "B2", "C" AND "D" AND TEE INTERSECTION BYPASS LANE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6 S.D.D. 9 A 1-13a



TWO WAY TRAFFIC



ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING

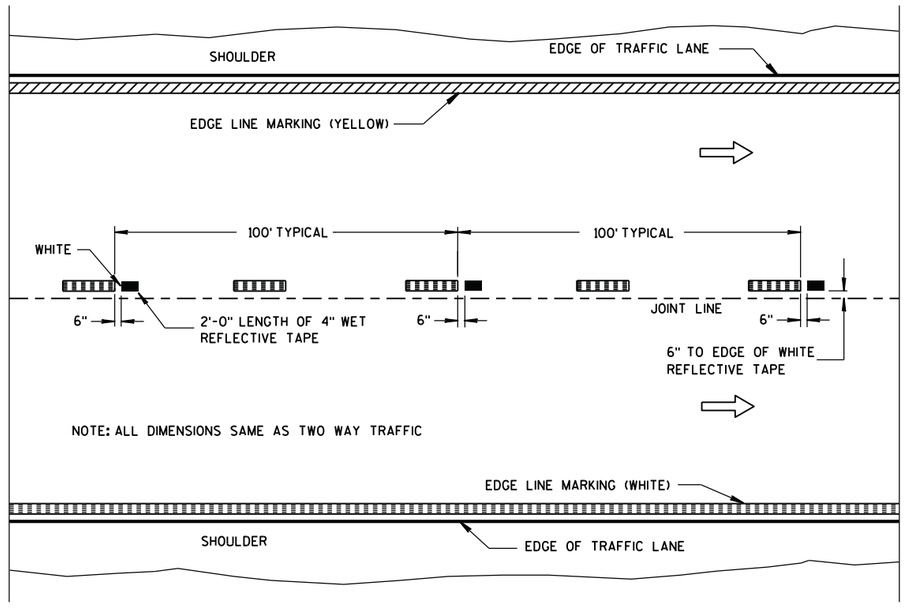
GENERAL NOTES

DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.

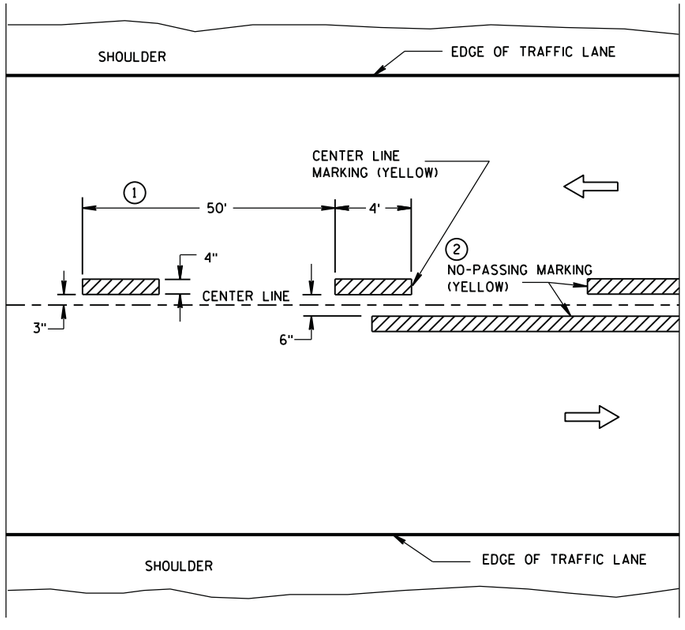
1. HALF CYCLE LENGTHS (25'±) WITH 2' MINIMUM STRIPE LENGTHS SHALL BE PROVIDED ON ROADWAYS (INCLUDING TEMPORARY TRAVELED WAYS) WITH REVERSE CURVATURE, CURVATURE OF OVER 5 DEGREES OR WHEN DIRECTED BY THE ENGINEER TO MARK UNUSUAL ALIGNMENT OF THE TRAVELED WAY.
2. NO PASSING ZONE TEMPORARY PAVEMENT MARKING IS REQUIRED TO BE PLACED, WHERE APPROPRIATE, ALONG WITH CENTERLINE TEMPORARY PAVEMENT MARKING WHEN A SAME DAY PERMANENT PAVEMENT MARKING ITEM IS INCLUDED IN THE CONTRACT.
3. NO PASSING ZONE MARKINGS ARE PLACED ACCORDING TO "T" MARKINGS. IF EXISTING NO PASSING ZONE W14-3 SIGNS ARE BEYOND 50 FEET IN EITHER DIRECTION, THE SIGNS SHALL BE MOVED TO THE "T" MARKINGS.
4. CONCRETE ONLY.

NOTE

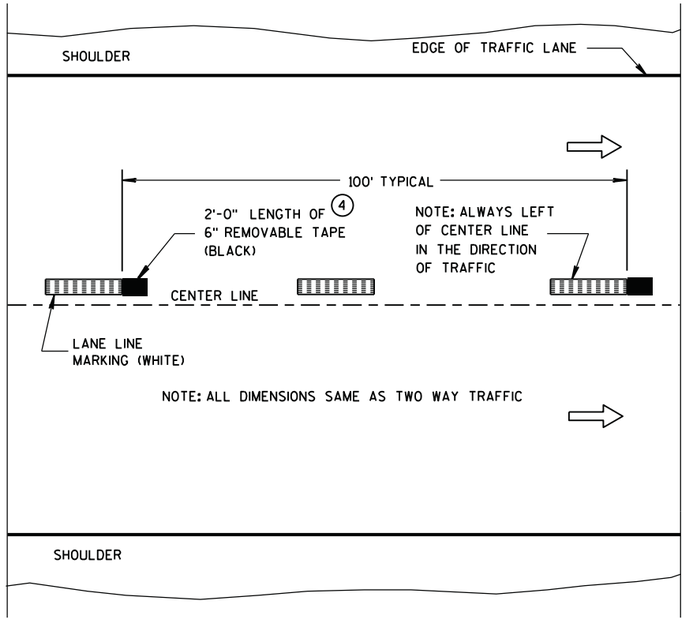
ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL



WET REFLECTIVE TAPE SUPPLEMENT TO
SPRAYED OR NON WET REFLECTIVE TAPE LANE LINE



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY (INTERMEDIATE) PAVEMENT MARKING

(SHOWS CYCLE FOR TEMPORARY CENTER LINE OR TEMPORARY LANE LINE MARKING)

LEGEND

"T" MARKING

POST MOUNTED SIGN

PAVEMENT MARKING (MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

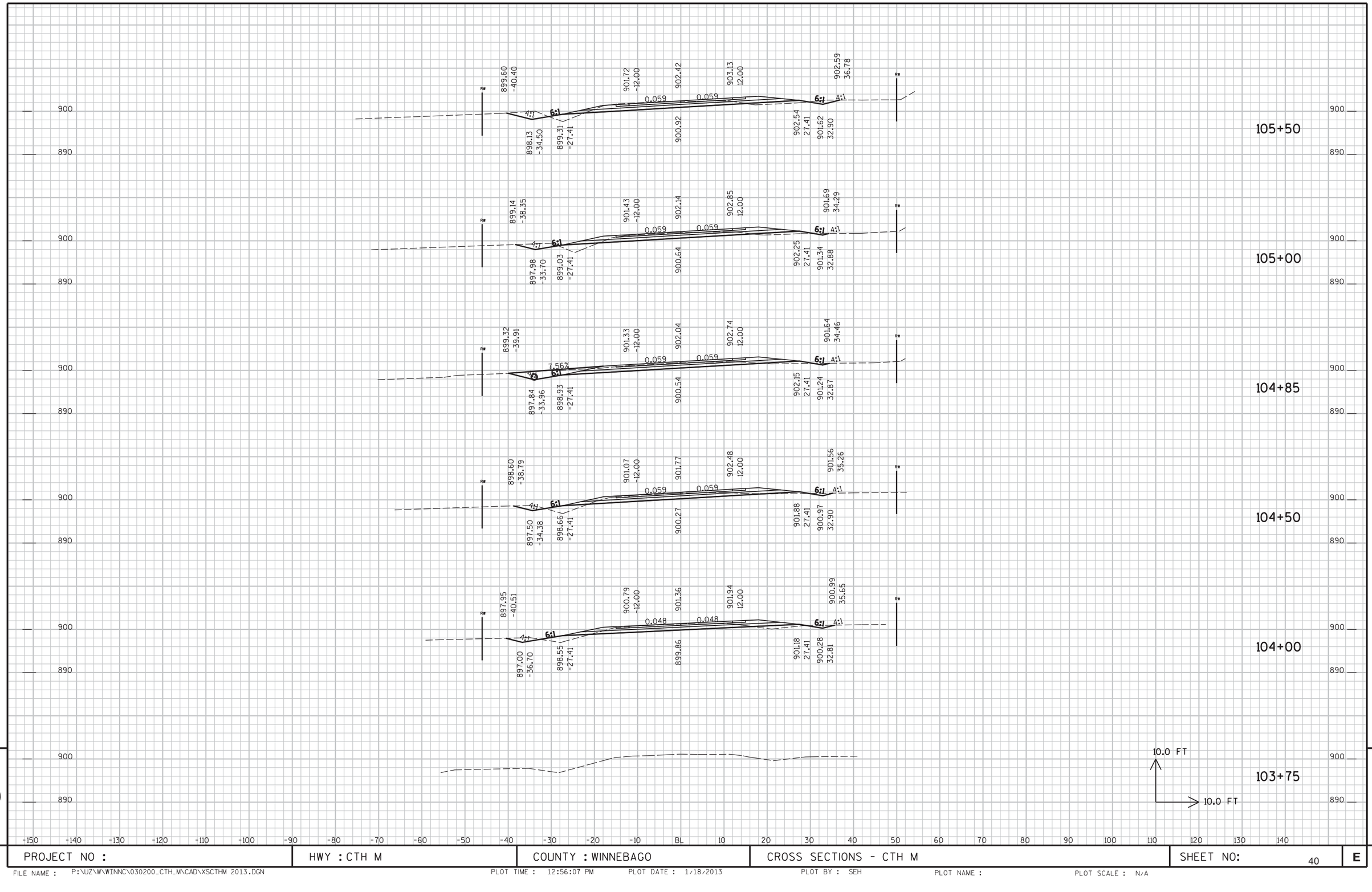
APPROVED
10-1-2012 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

6

S.D.D. 15 C 8-15a

6

S.D.D. 15 C 8-15a

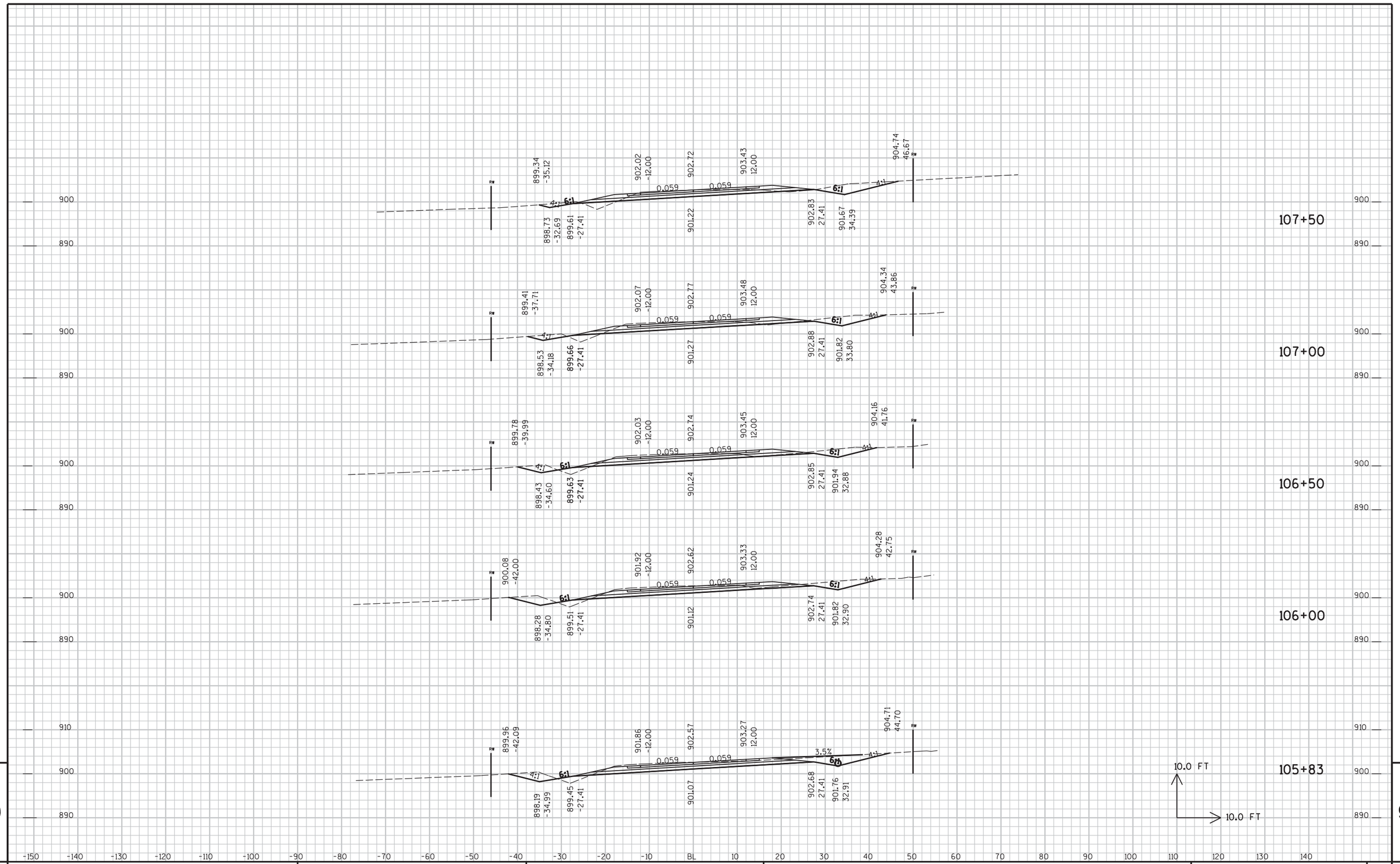


9

9

PROJECT NO :	HWY : CTH M	COUNTY : WINNEBAGO	CROSS SECTIONS - CTH M	SHEET NO: 40	E

FILE NAME : P:\UZ\W\WINNC\030200_CTH_M\CAD\XSCTHM 2013.DGN PLOT TIME : 12:56:07 PM PLOT DATE : 1/18/2013 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A

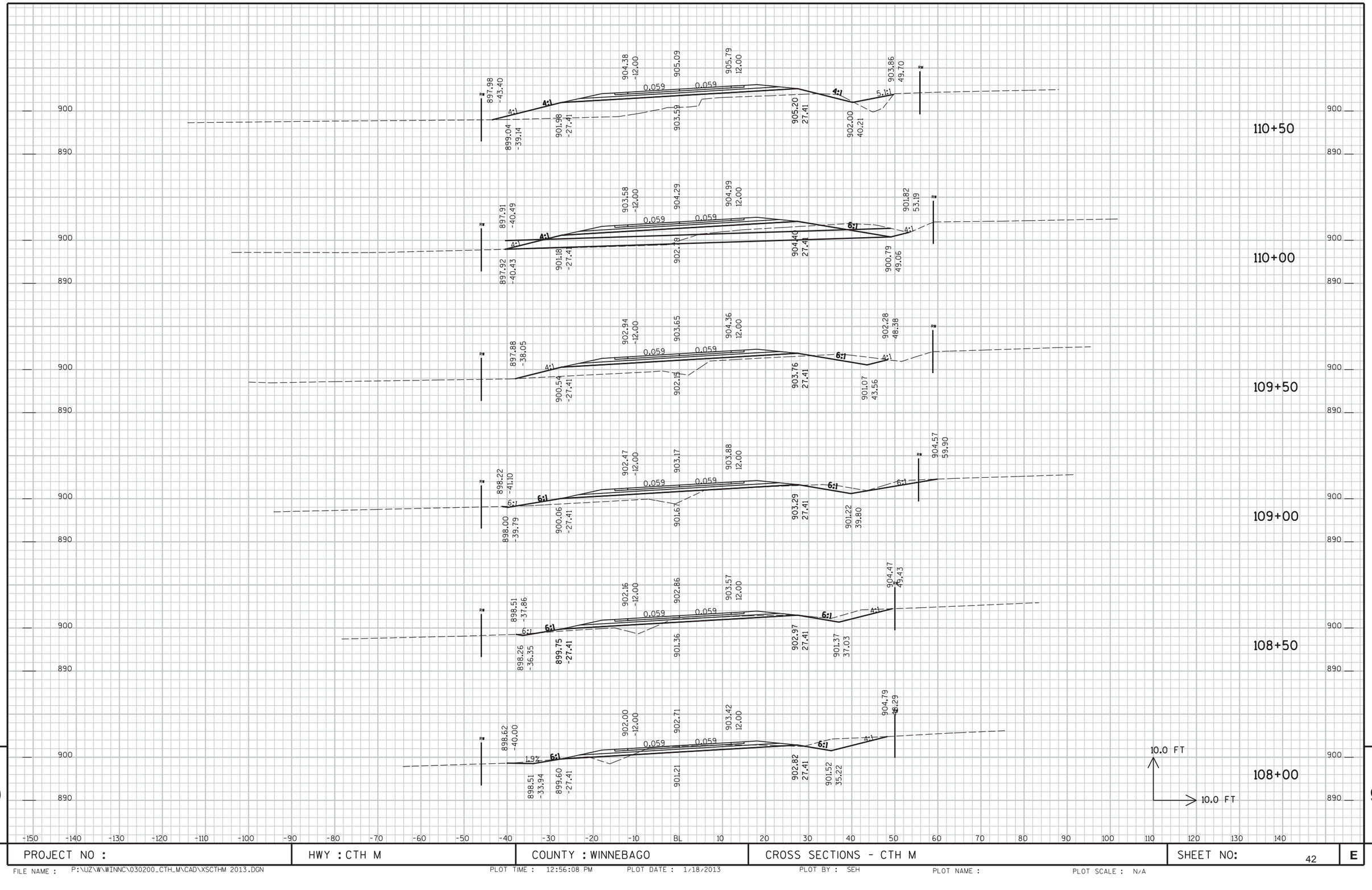


9

PROJECT NO :	HWY : CTH M	COUNTY : WINNEBAGO	CROSS SECTIONS - CTH M	SHEET NO: 41	E

9

FILE NAME : P:\UZ\W\WINNC\030200_CTH_M\CAD\XSCTHM 2013.DGN PLOT TIME : 12:56:08 PM PLOT DATE : 1/18/2013 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A

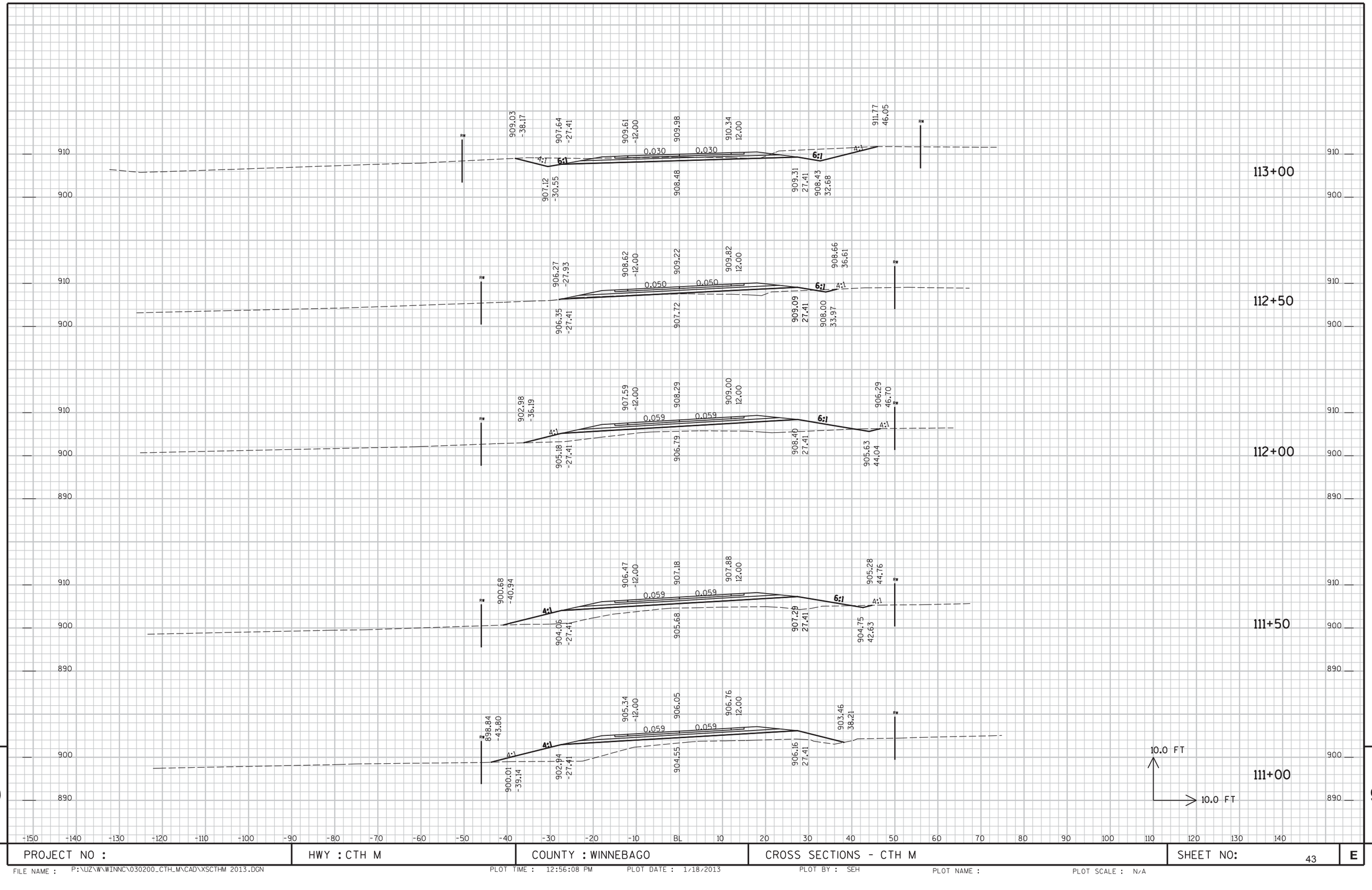


9

PROJECT NO :	HWY : CTH M	COUNTY : WINNEBAGO	CROSS SECTIONS - CTH M	SHEET NO: 42	E

FILE NAME : P:\UZ\W\WINNC\030200_CTH_M\CAD\XSCTHM 2013.DGN PLOT TIME : 12:56:08 PM PLOT DATE : 1/18/2013 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A

9



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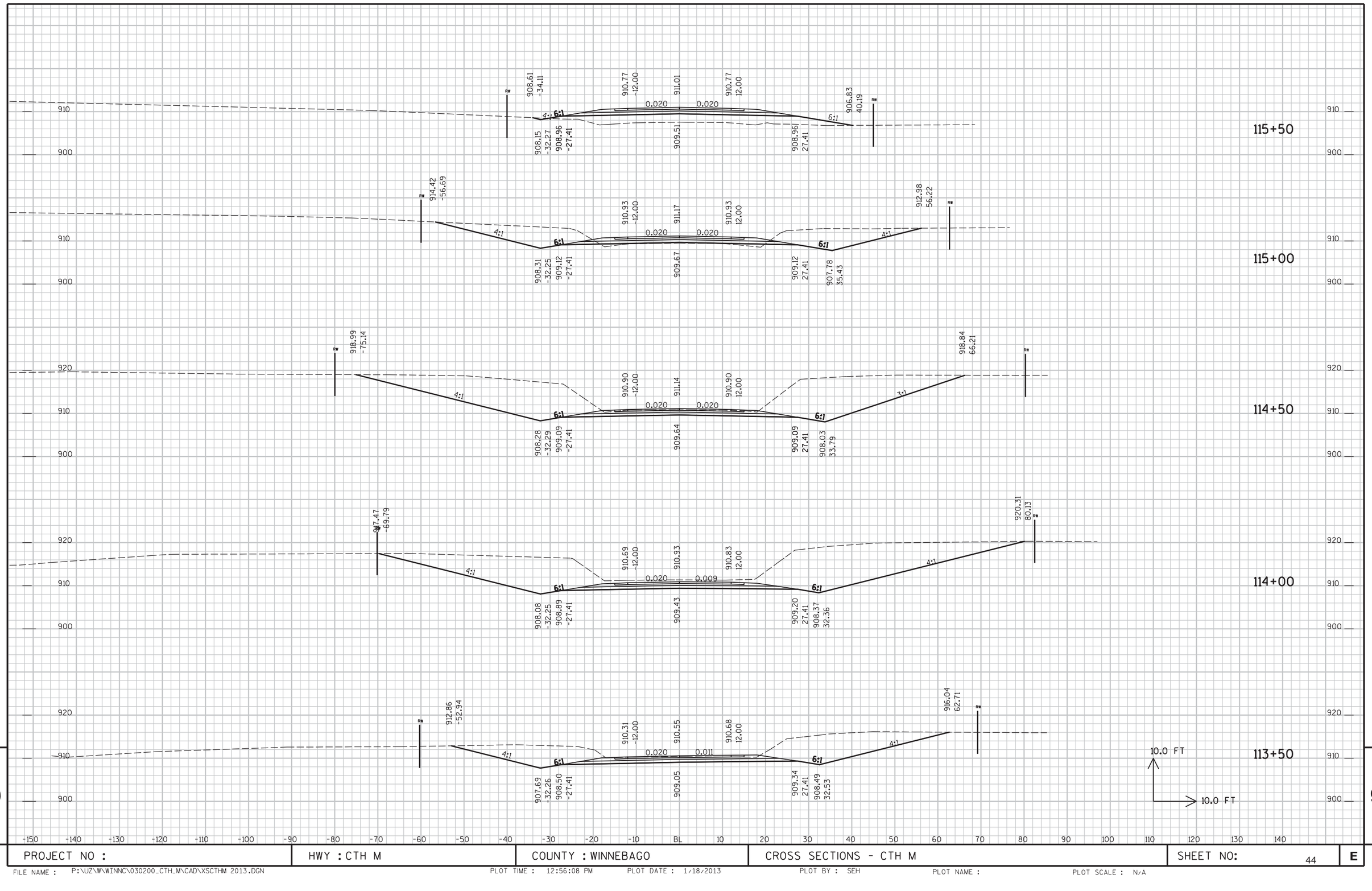
9

PROJECT NO :	HWY : CTH M	COUNTY : WINNEBAGO	CROSS SECTIONS - CTH M	SHEET NO: 43	E

FILE NAME : P:\UZ\W\WINNC\030200_CTH_M\CAD\XSCTHM 2013.DGN PLOT TIME : 12:56:08 PM PLOT DATE : 1/18/2013 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A

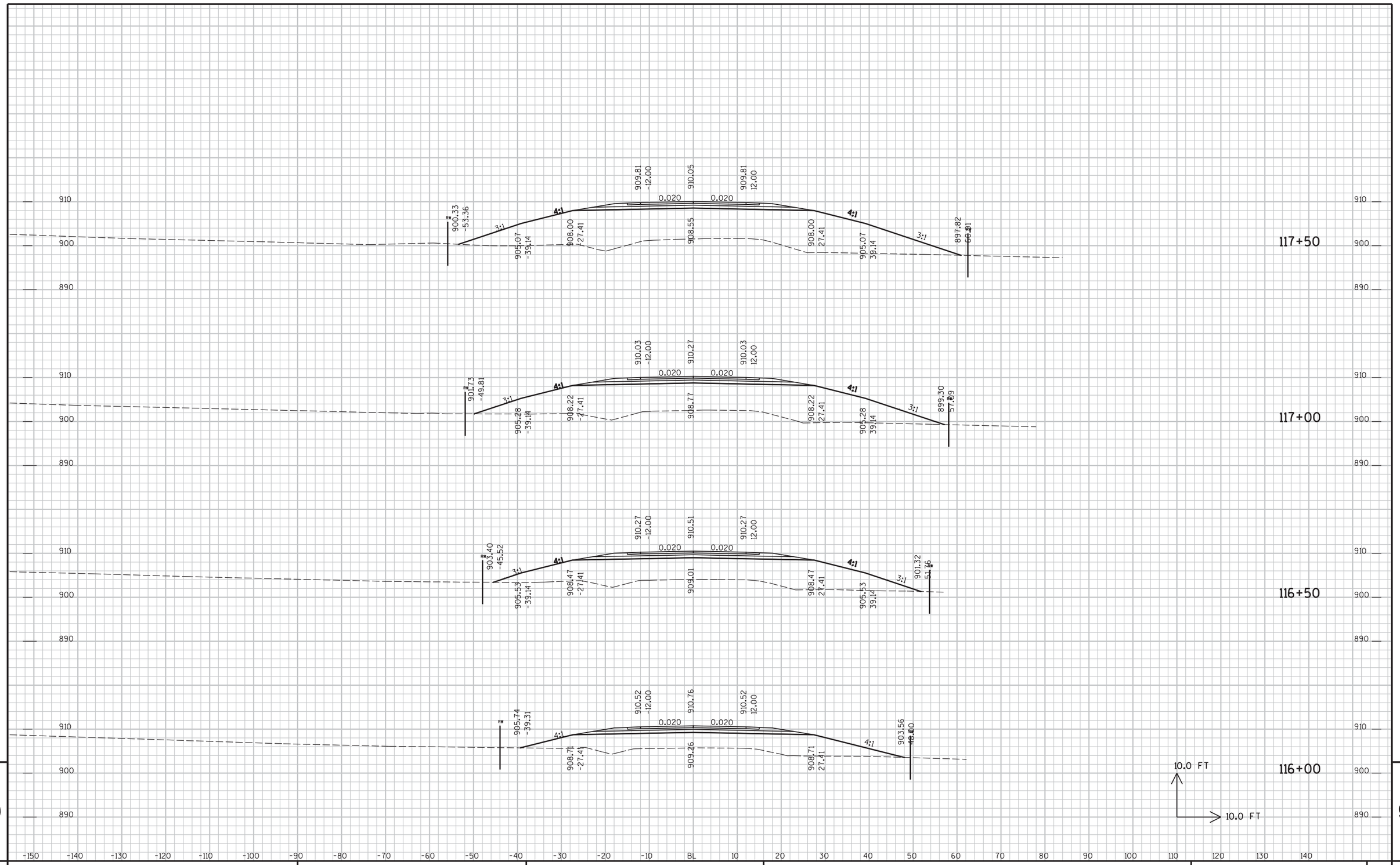


9

9

PROJECT NO :	HWY : CTH M	COUNTY : WINNEBAGO	CROSS SECTIONS - CTH M	SHEET NO: 44	E

FILE NAME : P:\UZ\W\WINNC\030200_CTH_M\CAD\XSCTHM 2013.DGN PLOT TIME : 12:56:08 PM PLOT DATE : 1/18/2013 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A



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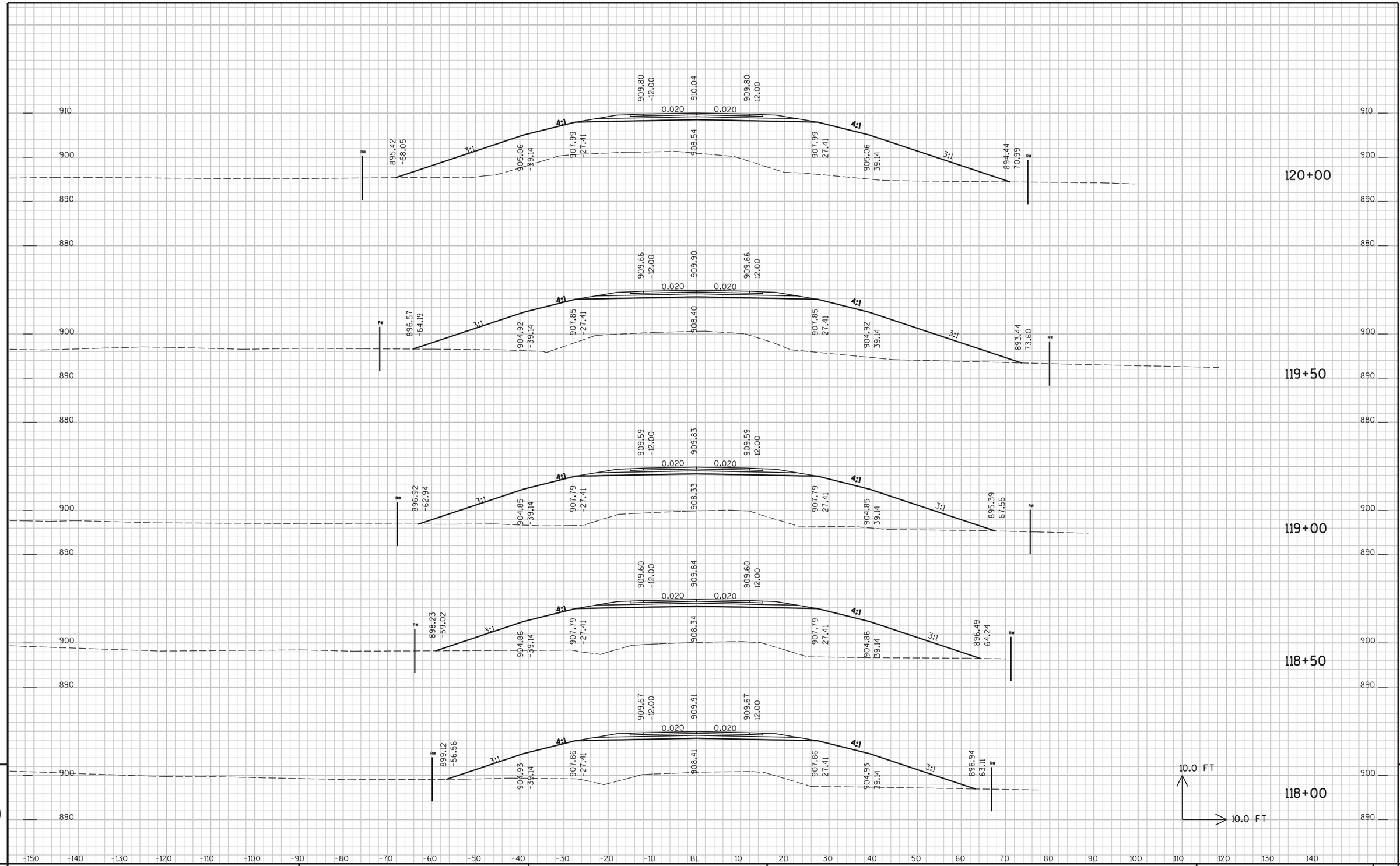
9

PROJECT NO :	HWY : CTH M	COUNTY : WINNEBAGO	CROSS SECTIONS - CTH M	SHEET NO: 45	E

FILE NAME : P:\UZ\W\WINNC\030200_CTH_M\CAD\XSCTHM 2013.DGN PLOT TIME : 12:56:08 PM PLOT DATE : 1/18/2013 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A

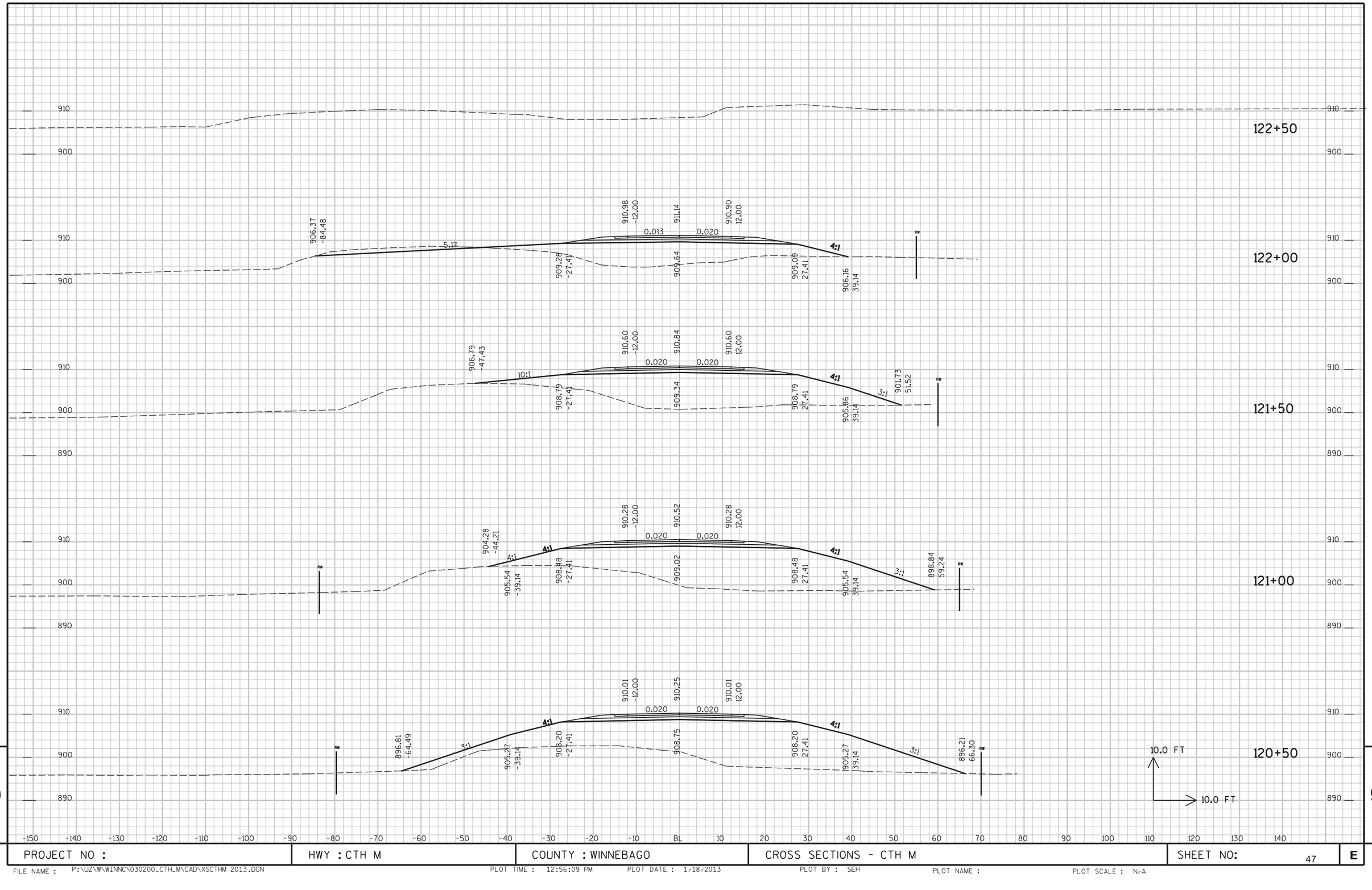


9

9

PROJECT NO :	HWY : CTH M	COUNTY : WINNEBAGO	CROSS SECTIONS - CTH M	SHEET NO: 46	E

FILE NAME : P:\UZ\W\WINNC\030200_CTH_M\CAD\XSCTHM 2013.DGN PLOT TIME : 12:56:08 PM PLOT DATE : 1/18/2013 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A

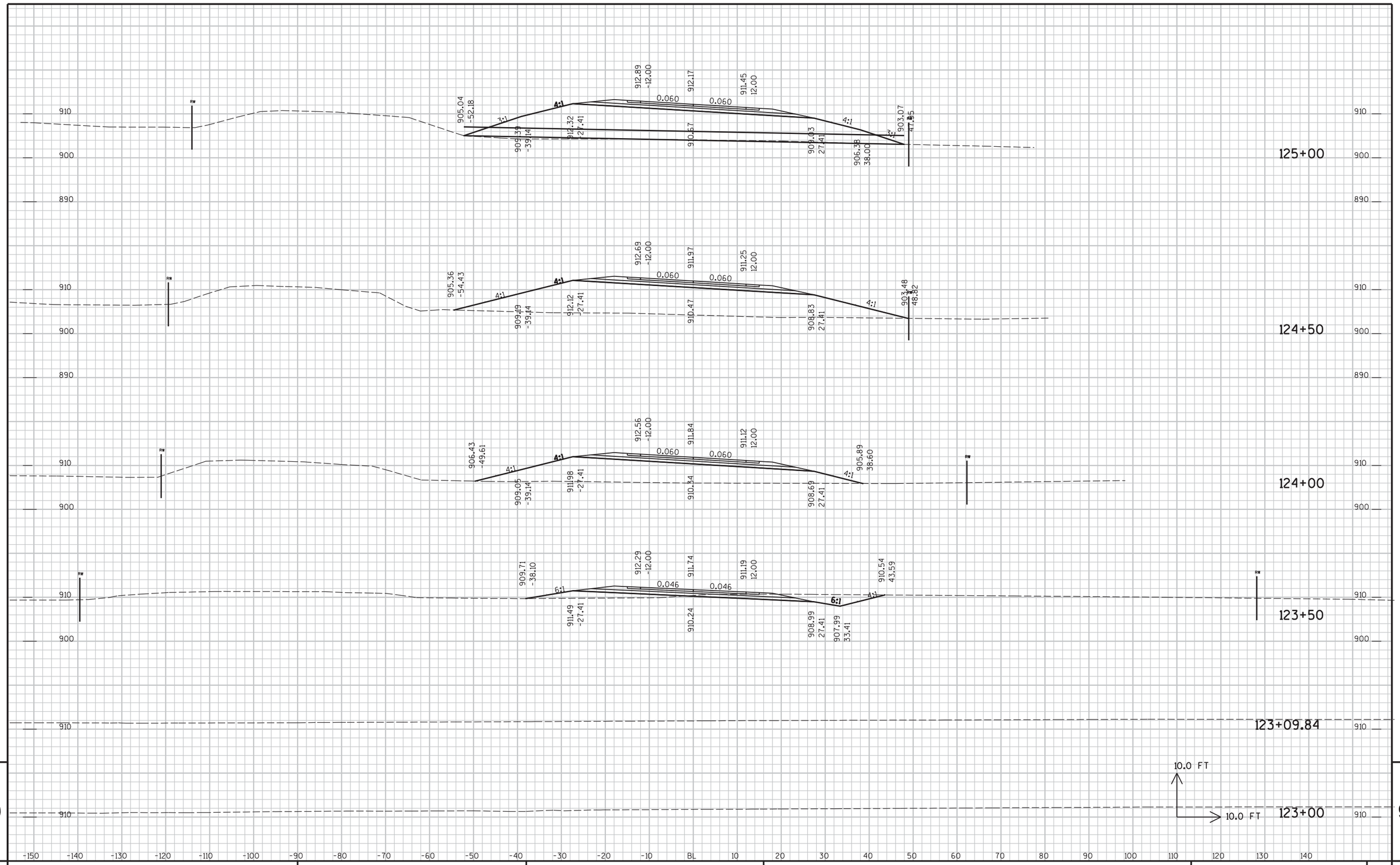


9

9

PROJECT NO :	HWY : CTH M	COUNTY : WINNEBAGO	CROSS SECTIONS - CTH M	SHEET NO: 47	E

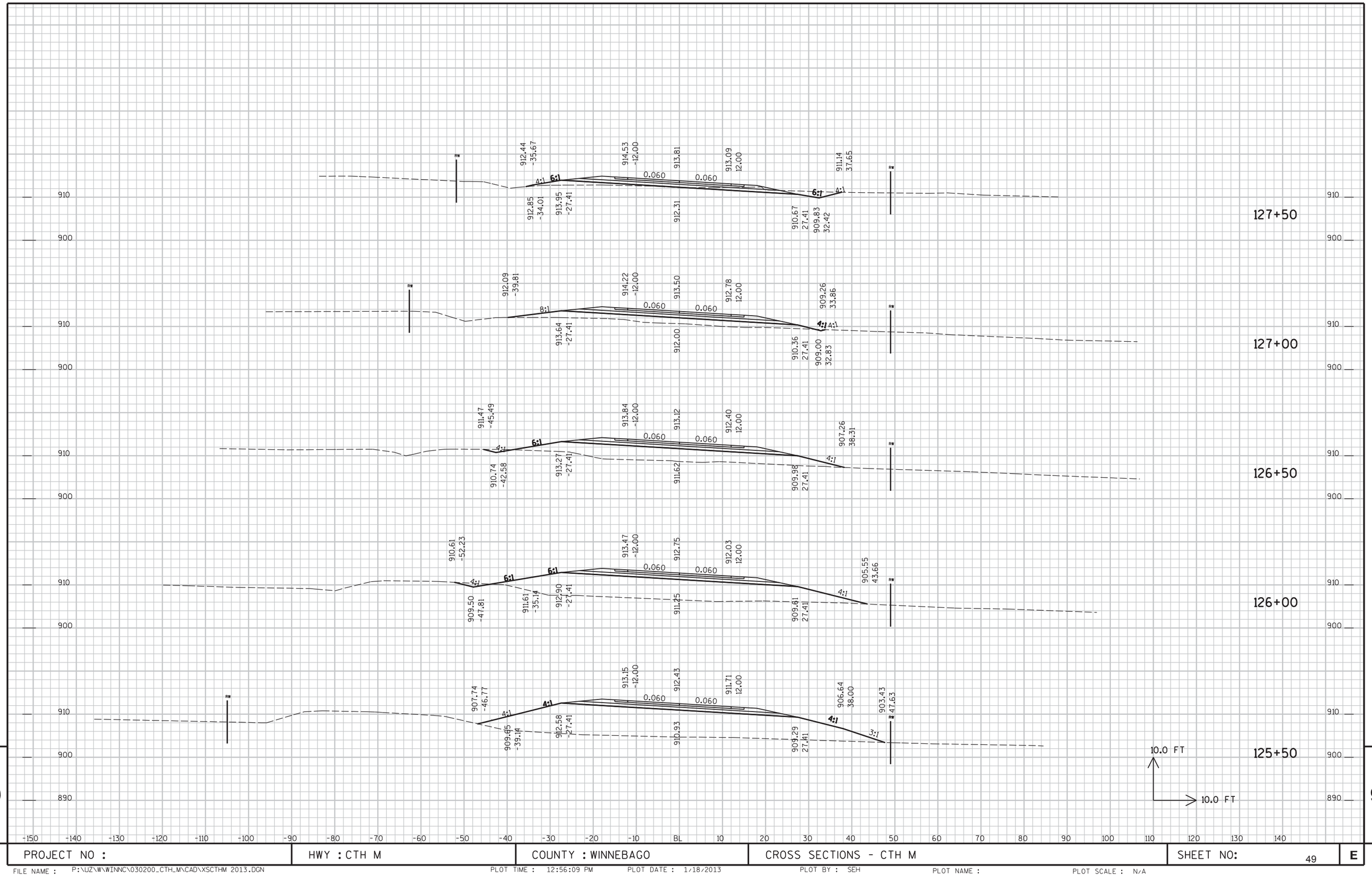
FILE NAME : P:\UZ\W\WINNC\030200_CTH_M\CAD\XSCTHM 2013.DGN PLOT TIME : 12:56:09 PM PLOT DATE : 1/18/2013 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A



9

PROJECT NO :	HWY : CTH M	COUNTY : WINNEBAGO	CROSS SECTIONS - CTH M	SHEET NO: 48	E

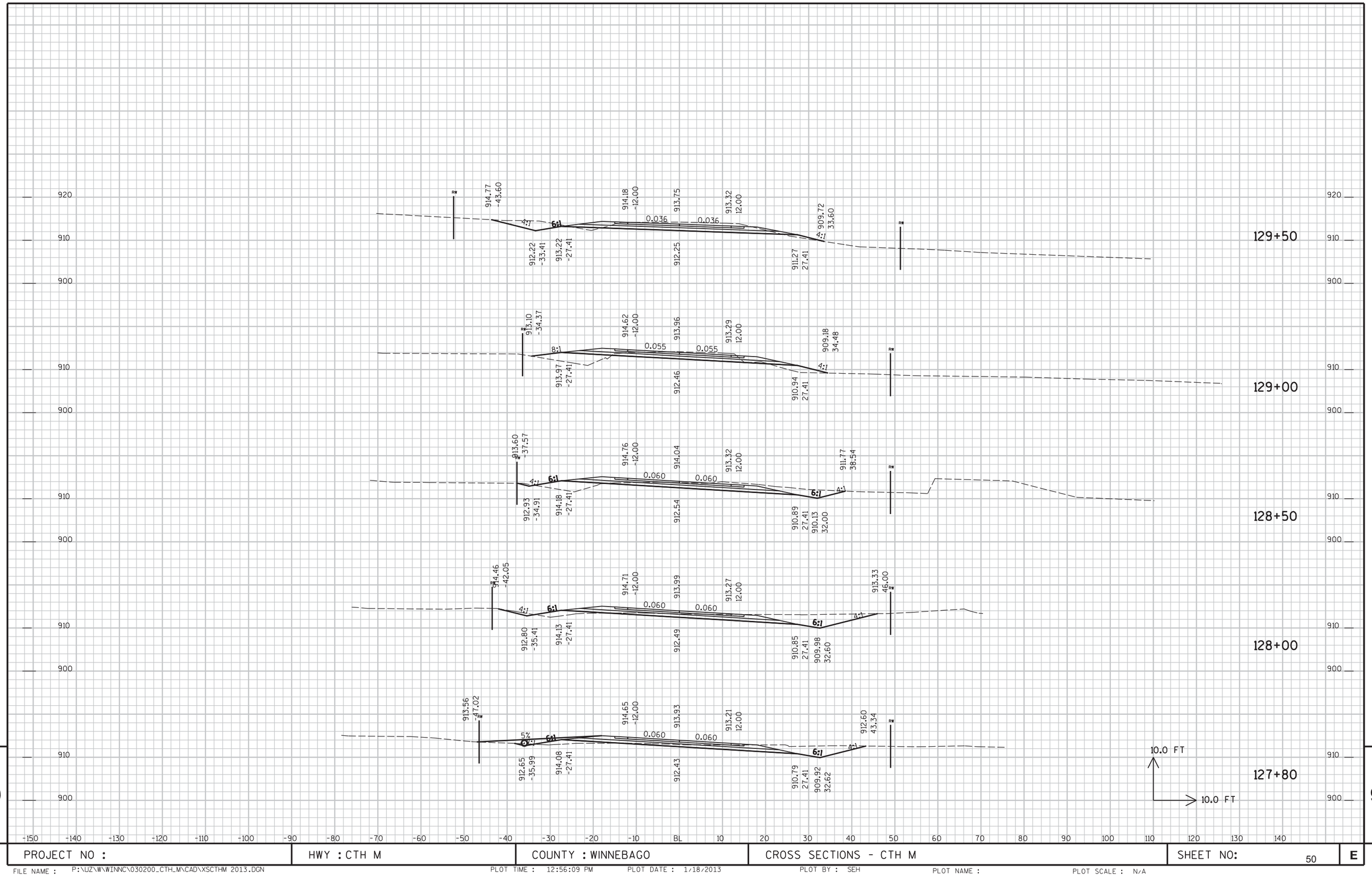
FILE NAME : P:\UZ\W\WINNC\030200_CTH_M\CAD\XSCTHM 2013.DGN PLOT TIME : 12:56:09 PM PLOT DATE : 1/18/2013 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A



9

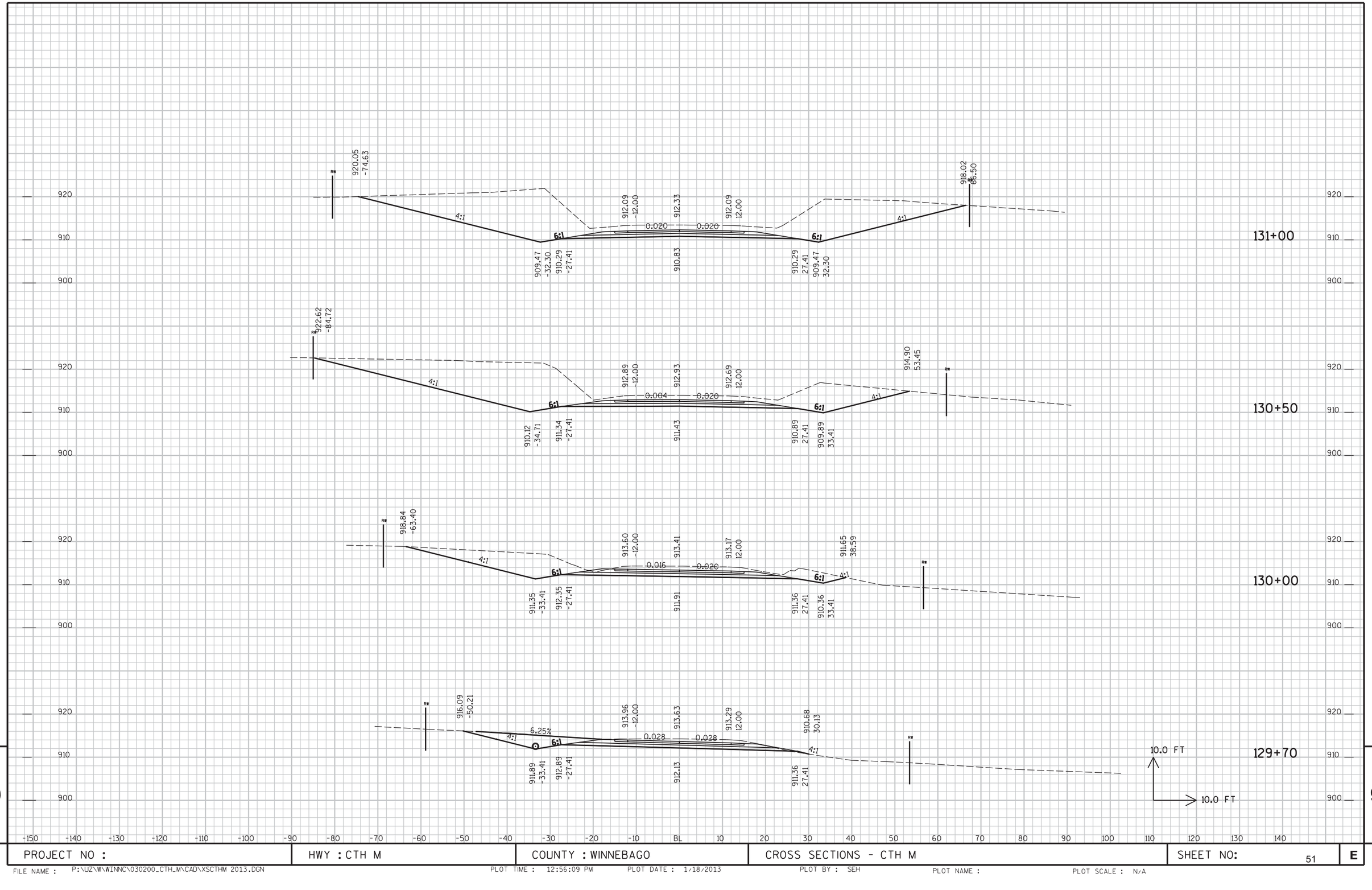
PROJECT NO :	HWY : CTH M	COUNTY : WINNEBAGO	CROSS SECTIONS - CTH M	SHEET NO: 49	E

FILE NAME : P:\UZ\W\WINNC\030200_CTH_M\CAD\XSCTHM 2013.DGN PLOT TIME : 12:56:09 PM PLOT DATE : 1/18/2013 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A



PROJECT NO :	HWY : CTH M	COUNTY : WINNEBAGO	CROSS SECTIONS - CTH M	SHEET NO: 50	E

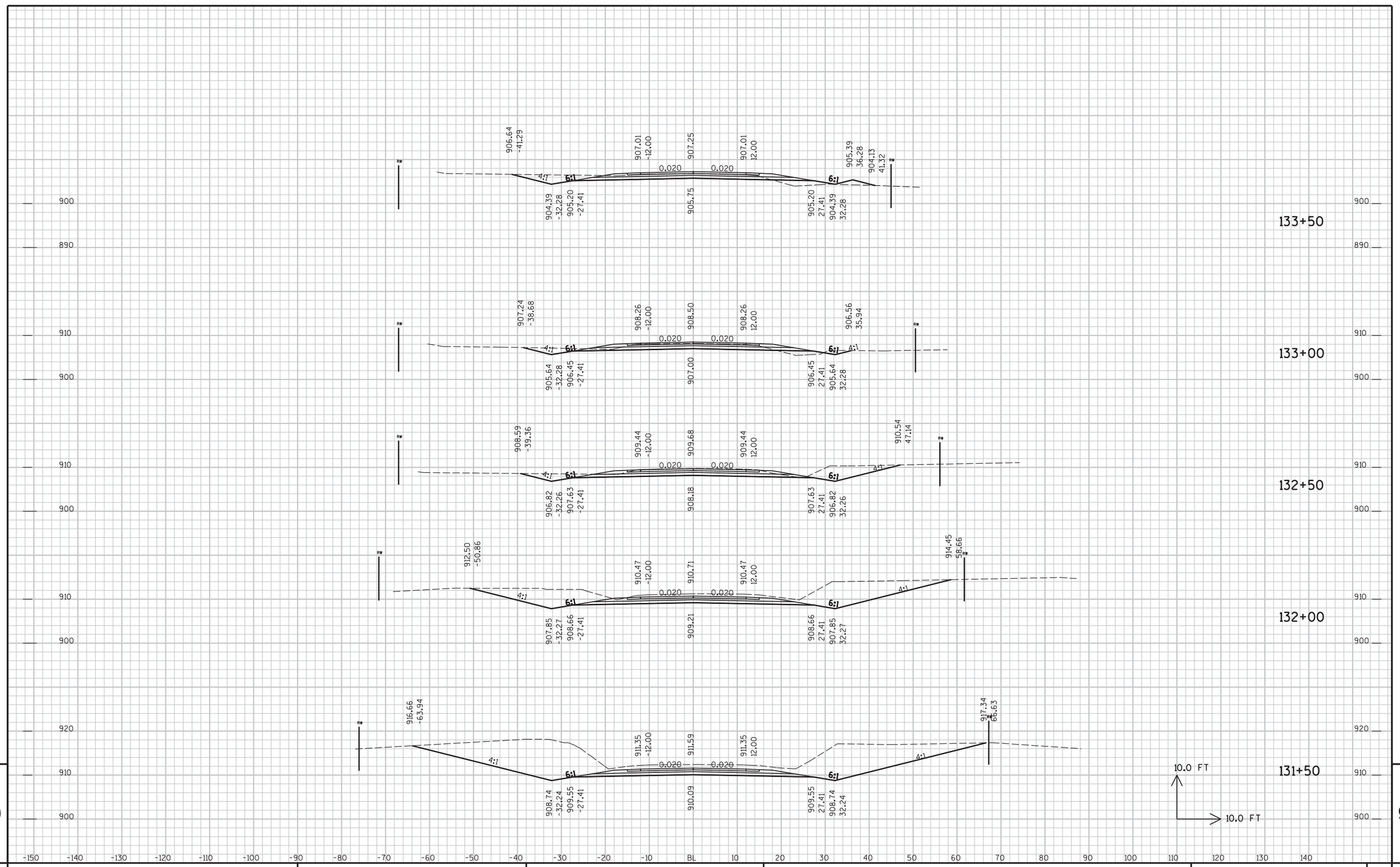
FILE NAME : P:\UZ\W\WINNC\030200_CTH_M\CAD\XSCTHM 2013.DGN PLOT TIME : 12:56:09 PM PLOT DATE : 1/18/2013 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A



9

PROJECT NO :	HWY : CTH M	COUNTY : WINNEBAGO	CROSS SECTIONS - CTH M	SHEET NO: 51	E

FILE NAME : P:\UZ\W\WINNC\030200_CTH_M\CAD\XSCTHM 2013.DGN PLOT TIME : 12:56:09 PM PLOT DATE : 1/18/2013 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A

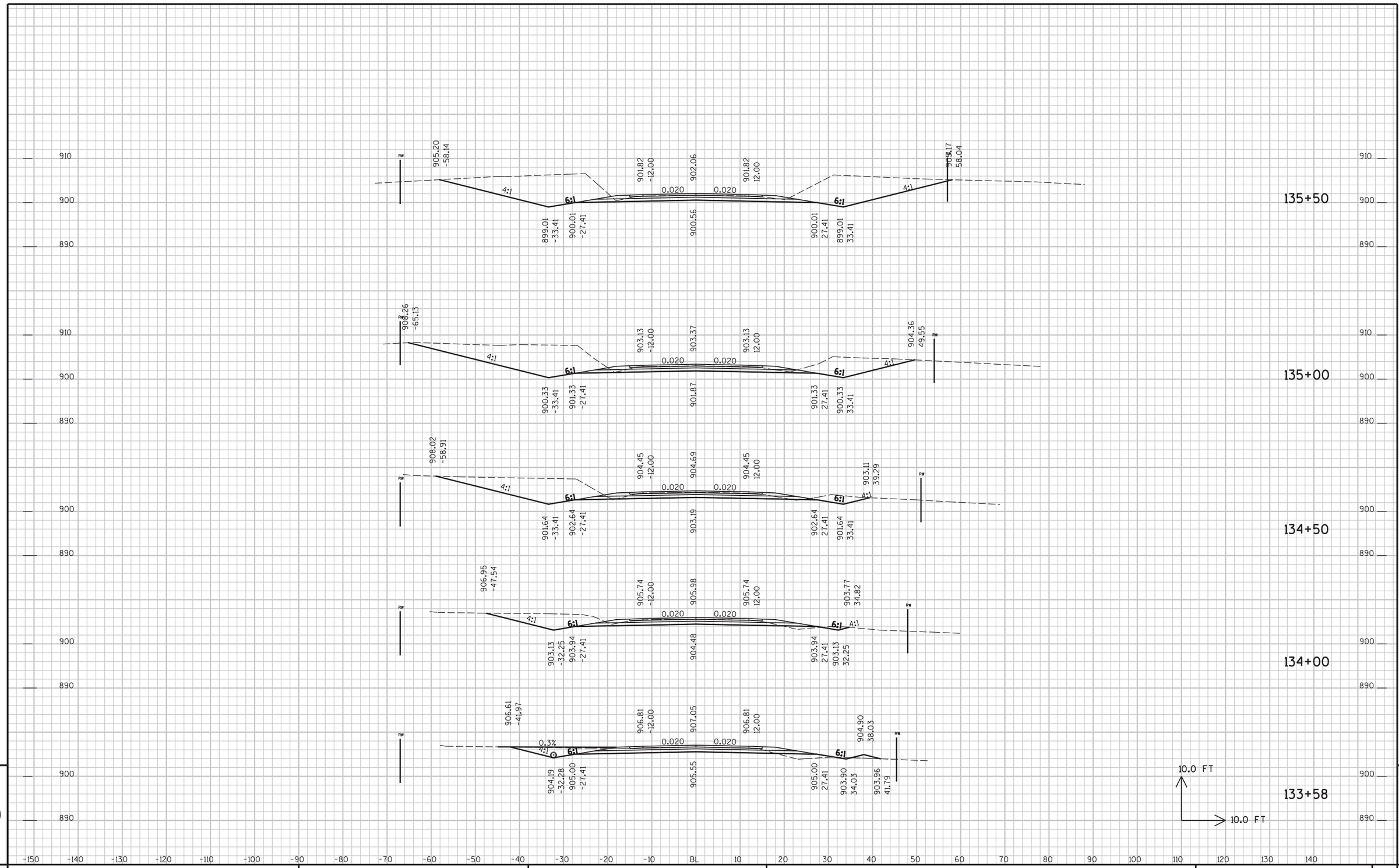


9

PROJECT NO :	HWY : CTH M	COUNTY : WINNEBAGO	CROSS SECTIONS - CTH M	SHEET NO: 52	E

FILE NAME : P:\UZ\W\WINNC\030200_CTH_M\CAD\XSCTHM 2013.DGN PLOT TIME : 12:56:10 PM PLOT DATE : 1/18/2013 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A

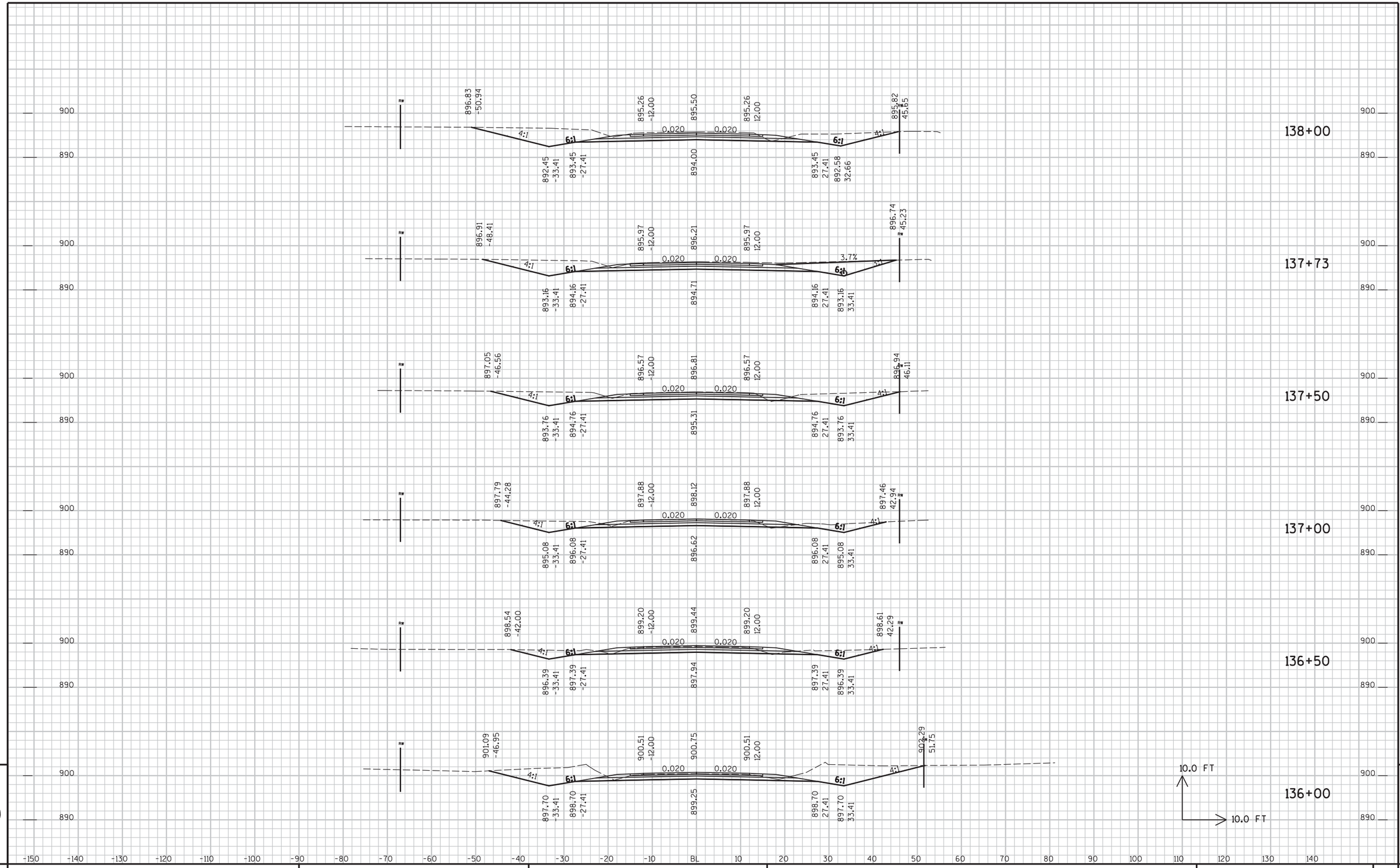
9



9

PROJECT NO :	HWY : CTH M	COUNTY : WINNEBAGO	CROSS SECTIONS - CTH M	SHEET NO: 53	E

FILE NAME : P:\UZ\W\WINNC\030200_CTH_M\CAD\XSCTHM 2013.DGN PLOT TIME : 12:56:10 PM PLOT DATE : 1/18/2013 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A

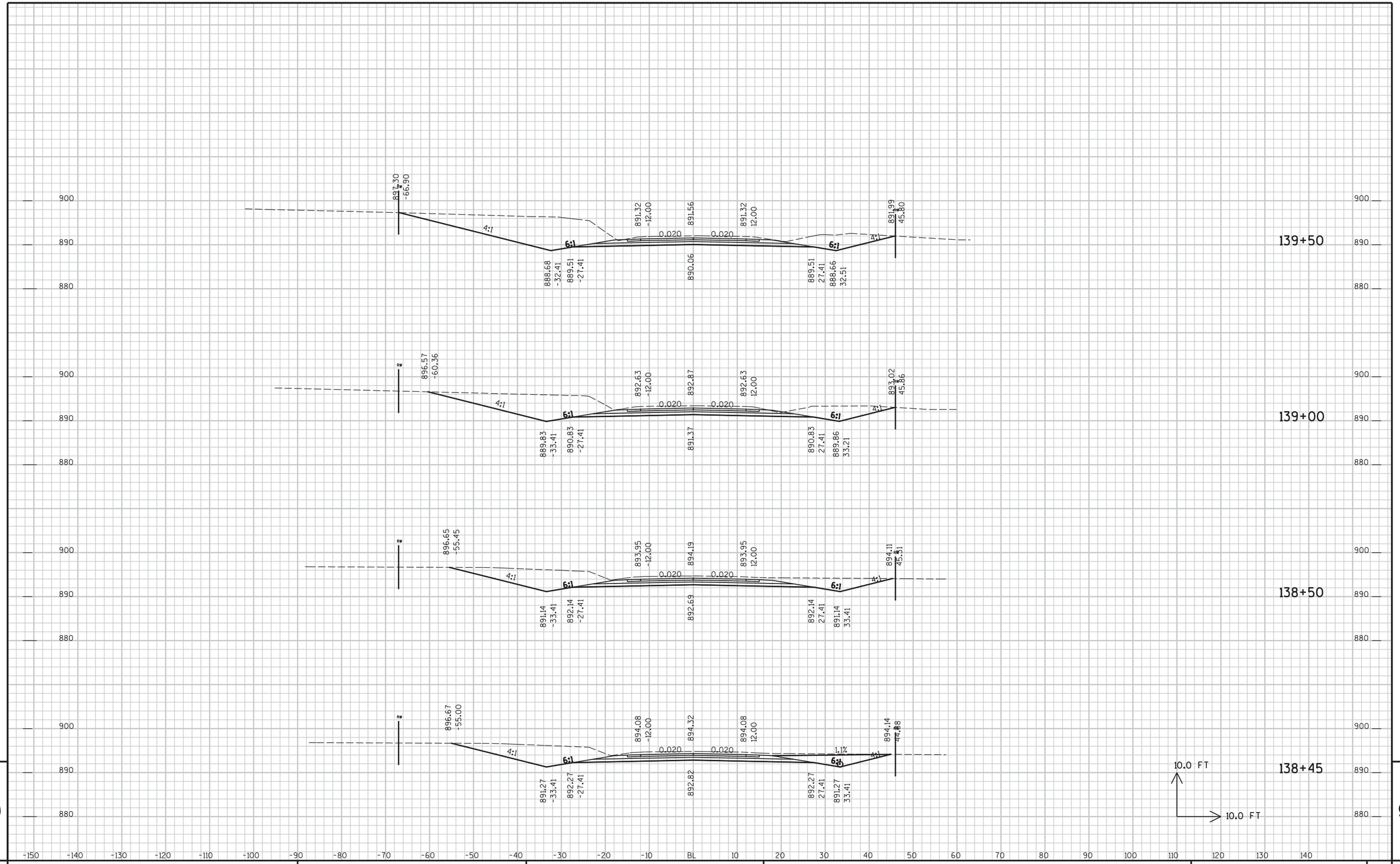


9

9

PROJECT NO :	HWY : CTH M	COUNTY : WINNEBAGO	CROSS SECTIONS - CTH M	SHEET NO: 54	E

FILE NAME : P:\UZ\W\WINNC\030200_CTH_M\CAD\XSCTHM 2013.DGN PLOT TIME : 12:56:10 PM PLOT DATE : 1/18/2013 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A

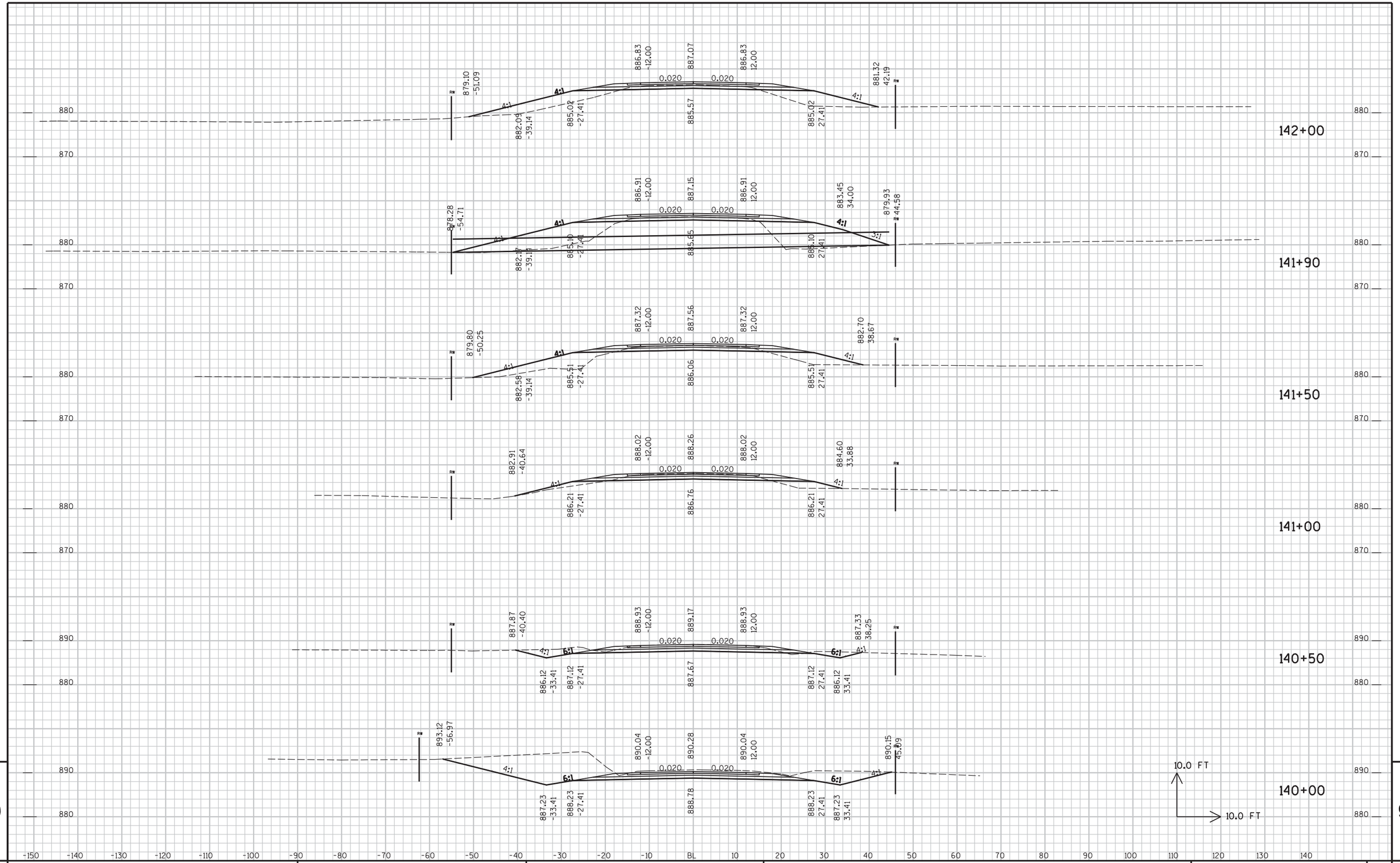


9

PROJECT NO :	HWY : CTH M	COUNTY : WINNEBAGO	CROSS SECTIONS - CTH M	SHEET NO: 55	E

FILE NAME : P:\UZ\W\WINNC\030200_CTH_M\CAD\XSCTHM 2013.DGN PLOT TIME : 12:56:10 PM PLOT DATE : 1/18/2013 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A

9

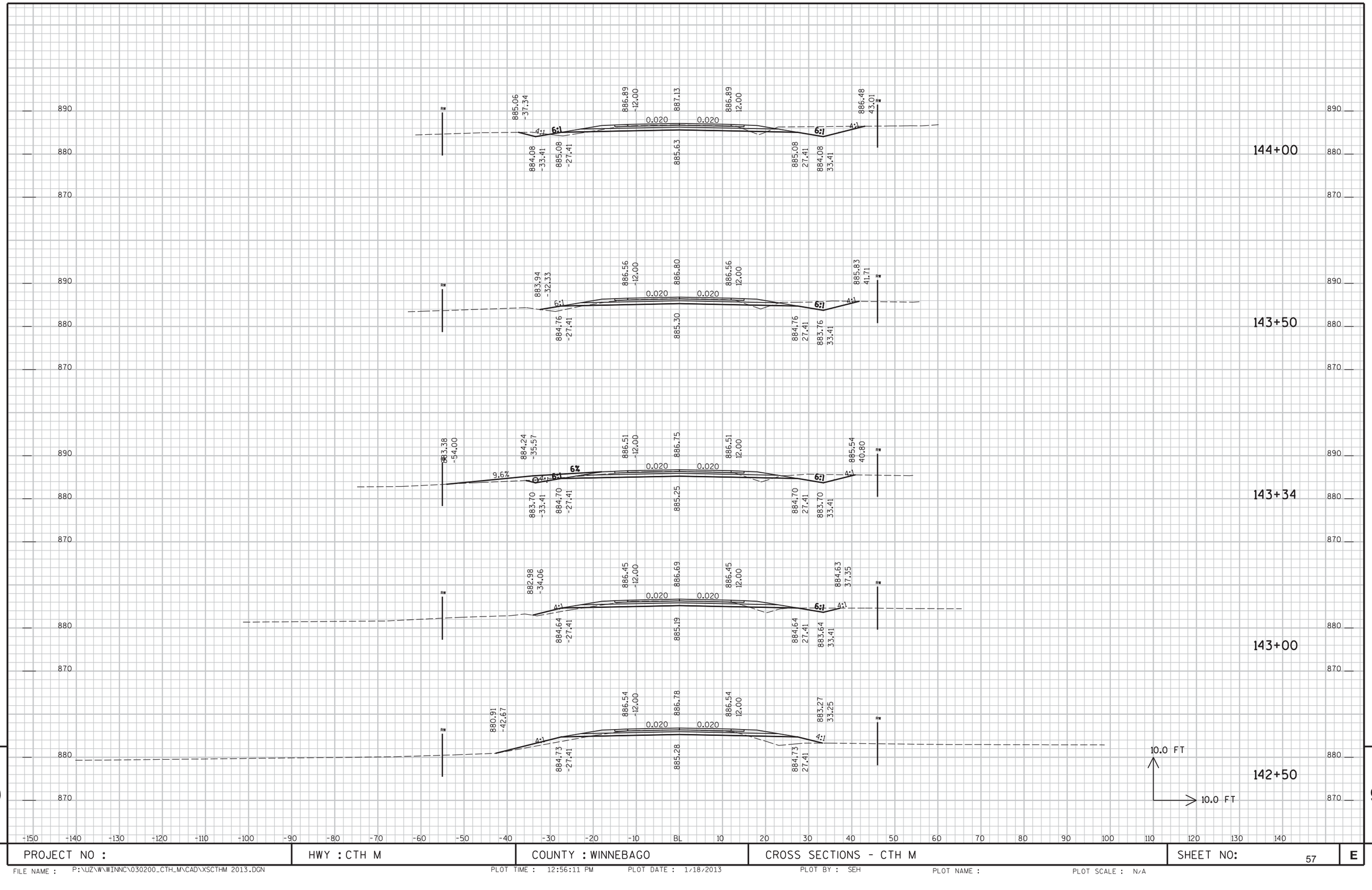


9

PROJECT NO :	HWY : CTH M	COUNTY : WINNEBAGO	CROSS SECTIONS - CTH M	SHEET NO: 56	E

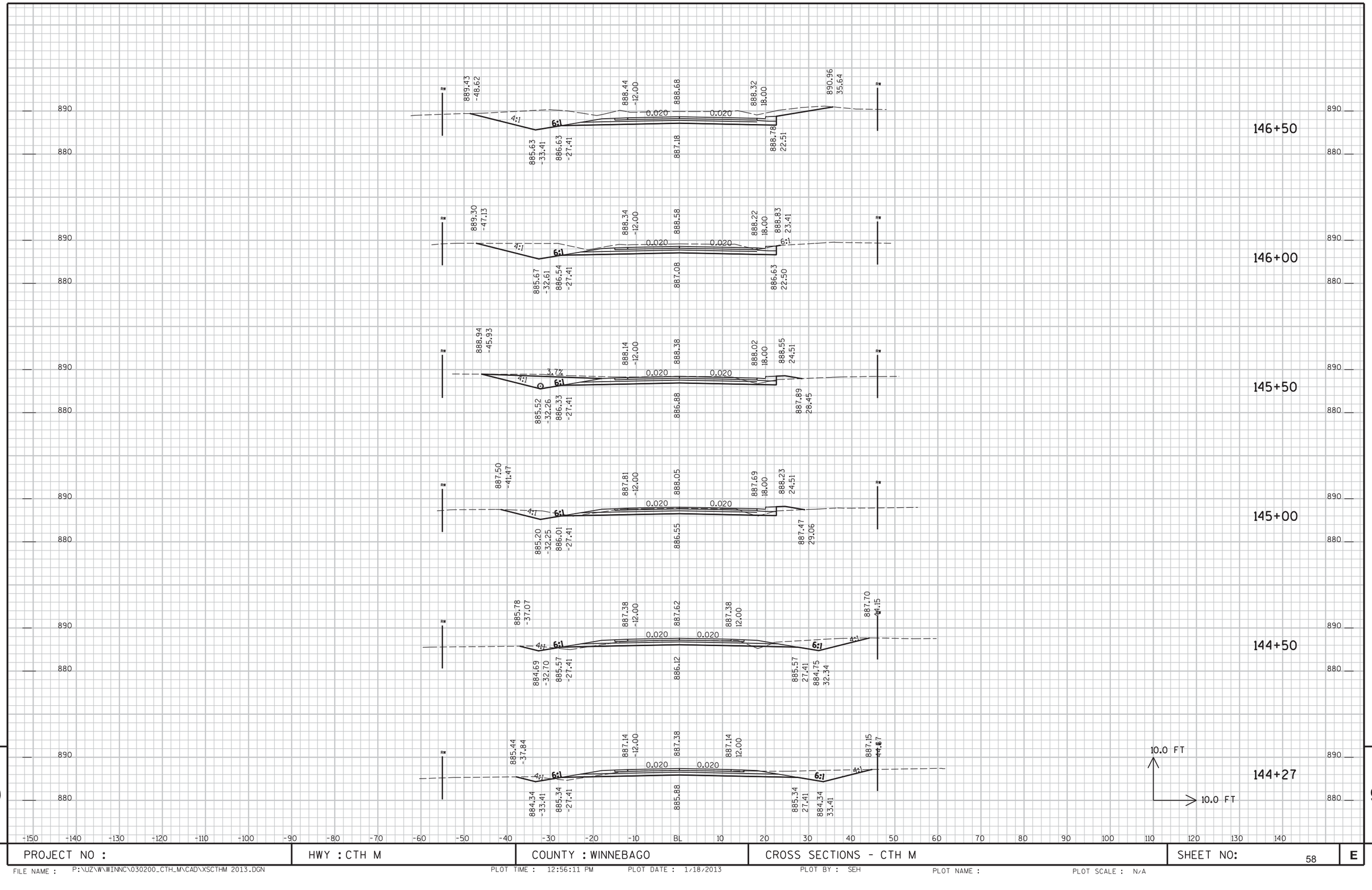
FILE NAME : P:\UZ\W\WINNC\030200_CTH_M\CAD\XSCTHM 2013.DGN PLOT TIME : 12:56:10 PM PLOT DATE : 1/18/2013 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A

9



PROJECT NO :	HWY : CTH M	COUNTY : WINNEBAGO	CROSS SECTIONS - CTH M	SHEET NO: 57	E

FILE NAME : P:\UZ\W\WINNC\030200_CTH_M\CAD\XSCTHM 2013.DGN PLOT TIME : 12:56:11 PM PLOT DATE : 1/18/2013 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A

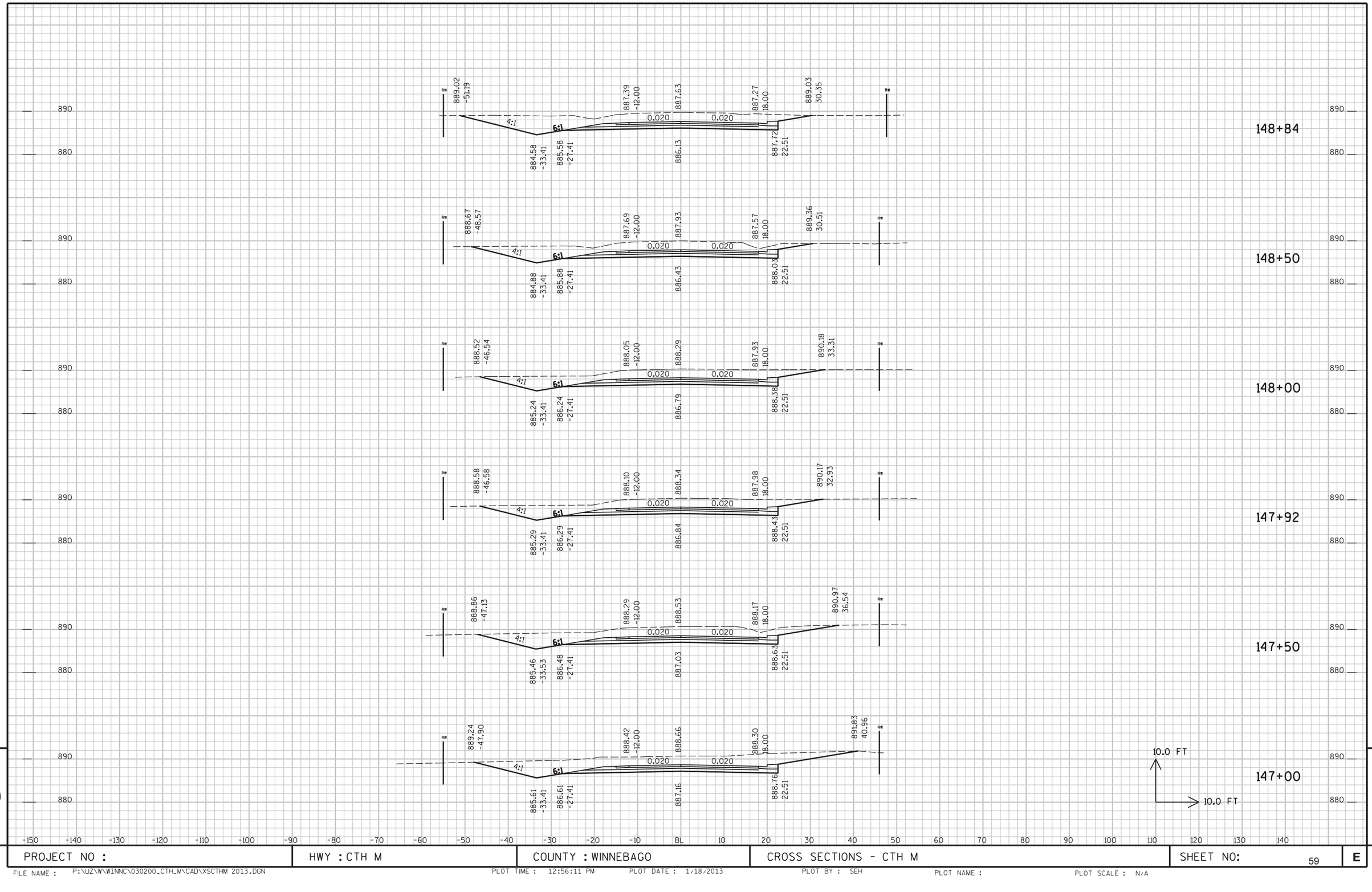


9

9

PROJECT NO :	HWY : CTH M	COUNTY : WINNEBAGO	CROSS SECTIONS - CTH M	SHEET NO: 58	E

FILE NAME : P:\UZ\W\WINNC\030200_CTH_M\CAD\XSCTHM 2013.DGN PLOT TIME : 12:56:11 PM PLOT DATE : 1/18/2013 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A



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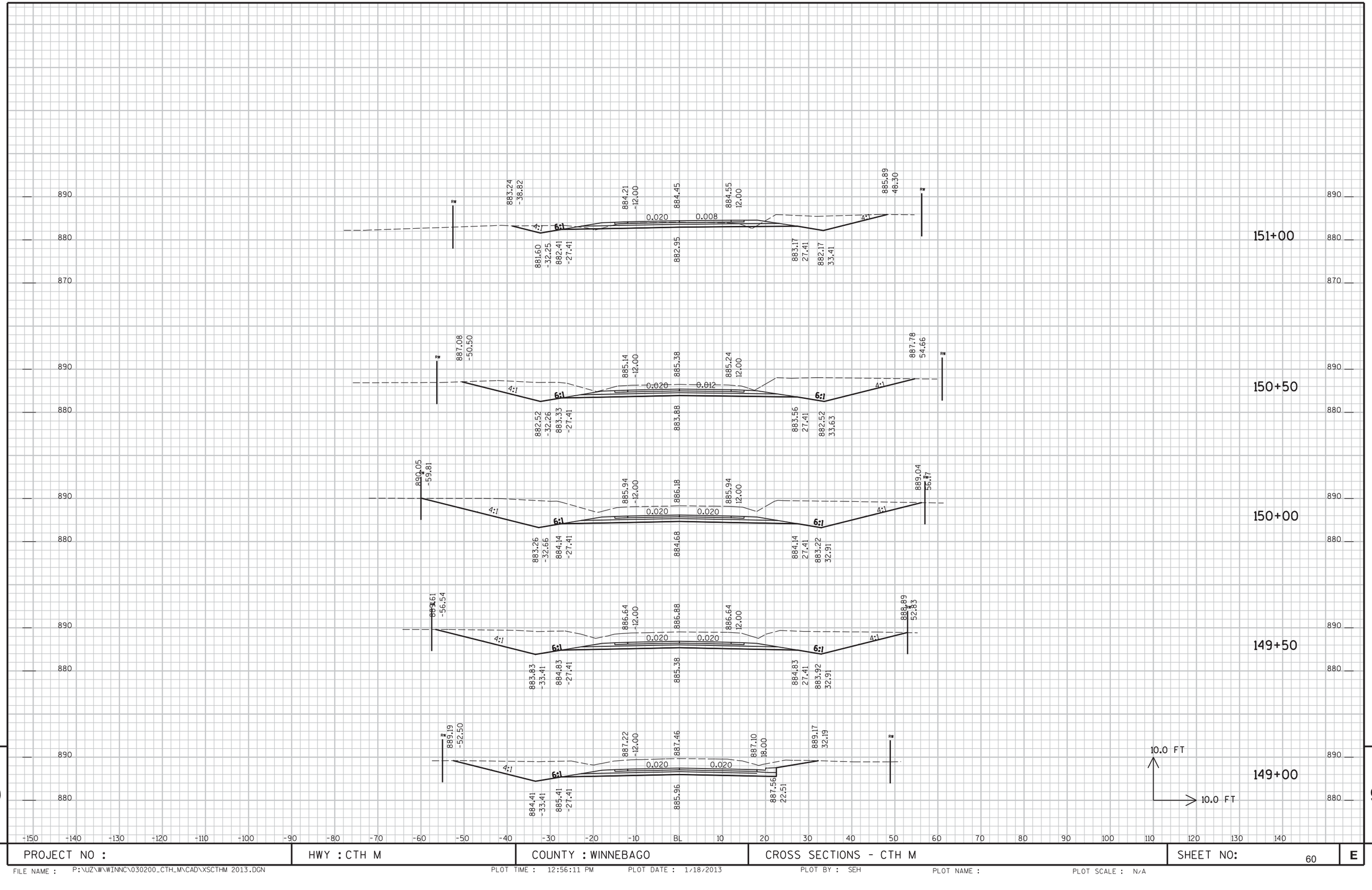
PROJECT NO :	HWY : CTH M	COUNTY : WINNEBAGO	CROSS SECTIONS - CTH M	SHEET NO: 59	E

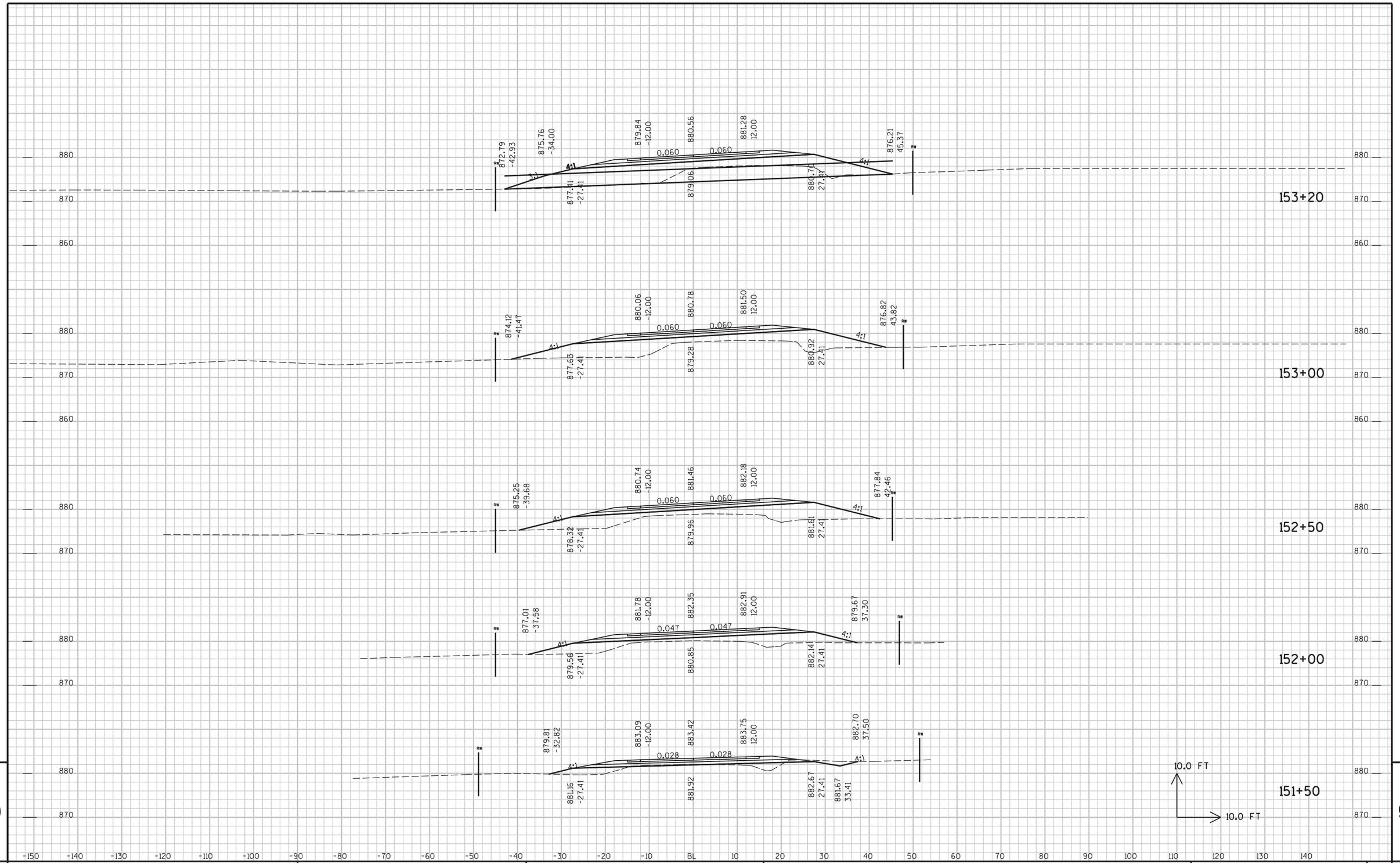
FILE NAME : P:\UZ\W\WINNC\030200_CTH_M\CAD\XSCTHM 2013.DGN PLOT TIME : 12:56:11 PM PLOT DATE : 1/18/2013 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A

9



PROJECT NO :	HWY : CTH M	COUNTY : WINNEBAGO	CROSS SECTIONS - CTH M	SHEET NO: 60 E

FILE NAME : P:\UZ\W\WINNC\030200_CTH_M\CAD\XSCTHM 2013.DGN PLOT TIME : 12:56:11 PM PLOT DATE : 1/18/2013 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A

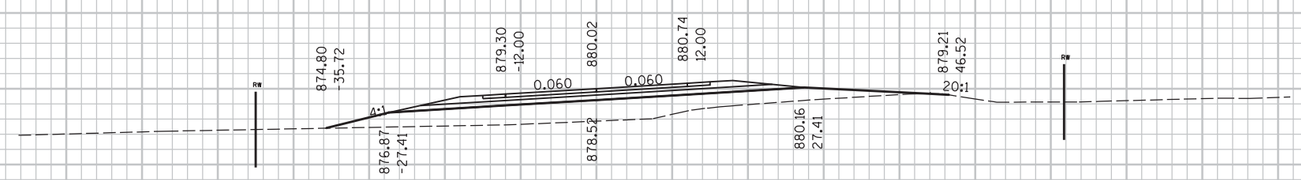


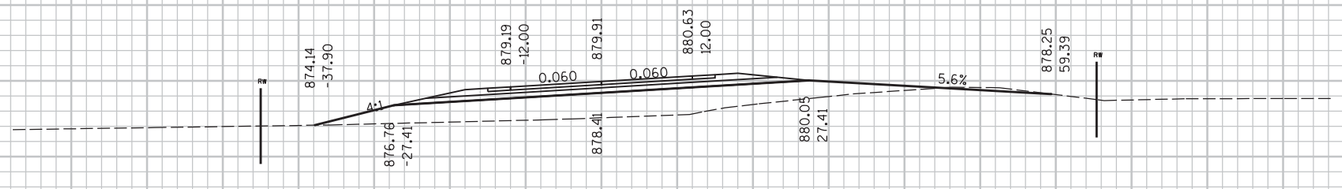
9

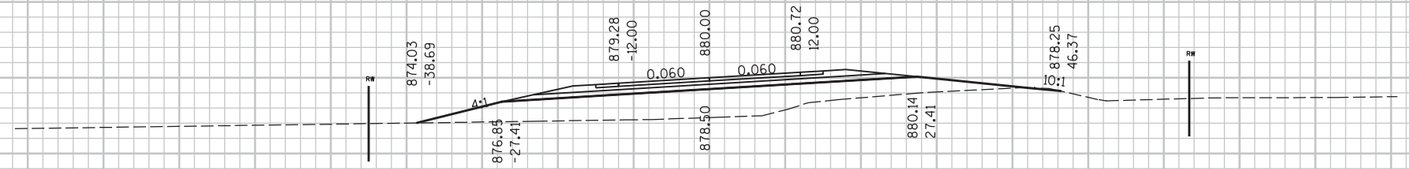
PROJECT NO :	HWY : CTH M	COUNTY : WINNEBAGO	CROSS SECTIONS - CTH M	SHEET NO: 61	E

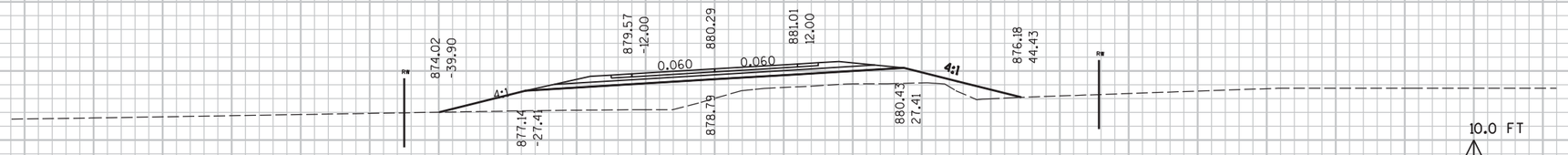
FILE NAME : P:\UZ\W\WINNC\030200_CTH_M\CAD\XSCTHM 2013.DGN PLOT TIME : 12:56:11 PM PLOT DATE : 1/18/2013 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A

9









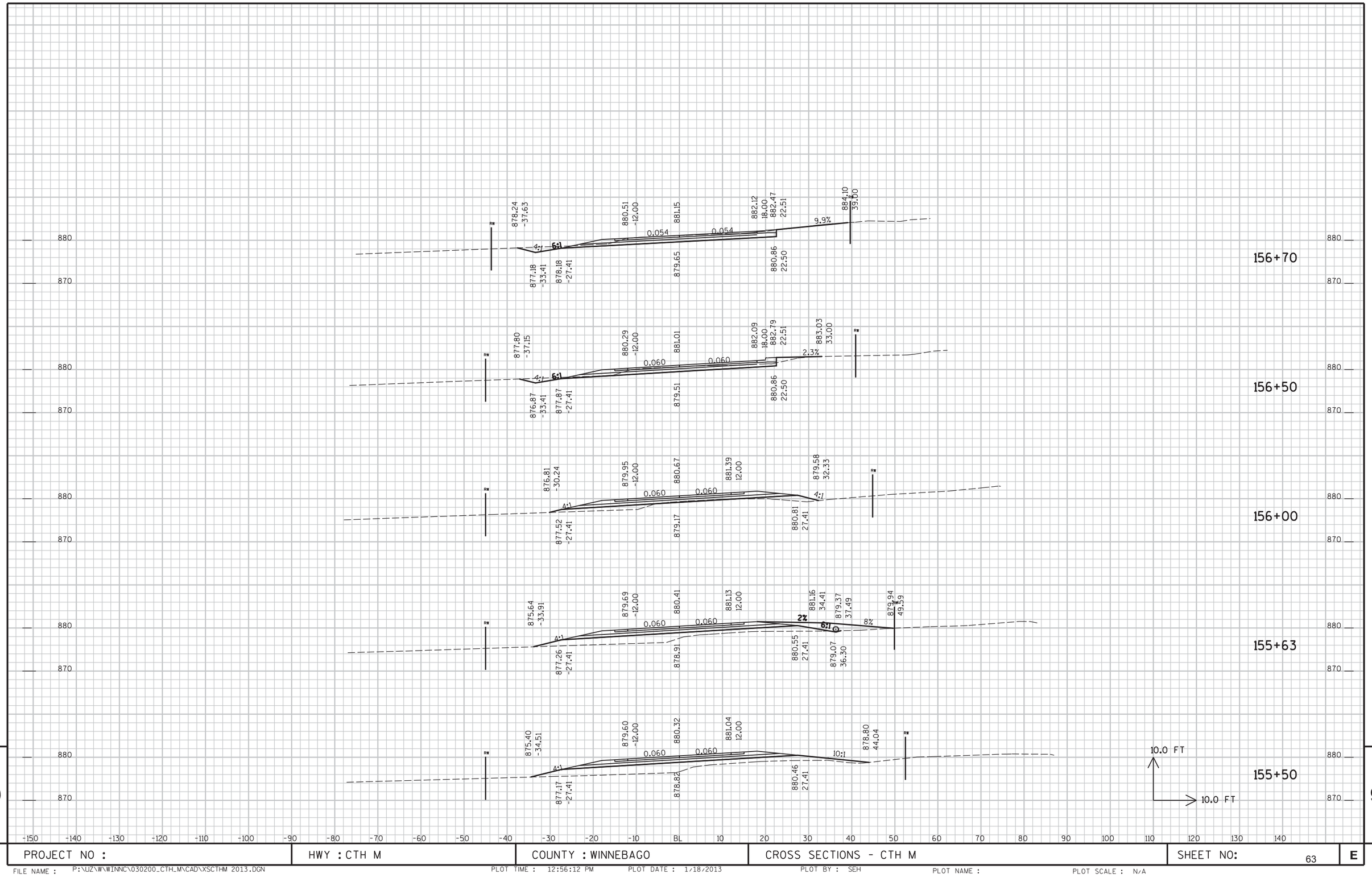
880 870 860 880 870 860 880 870 860 880 870 860 880 870 860 880 870 860

-150 -140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 BL 10 20 30 40 50 60 70 80 90 100 110 120 130 140

9 9

PROJECT NO :	HWY : CTH M	COUNTY : WINNEBAGO	CROSS SECTIONS - CTH M	SHEET NO: 62	E

FILE NAME : P:\UZ\W\WINNC\030200_CTH_M\CAD\XSCTHM 2013.DGN PLOT TIME : 12:56:12 PM PLOT DATE : 1/18/2013 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A

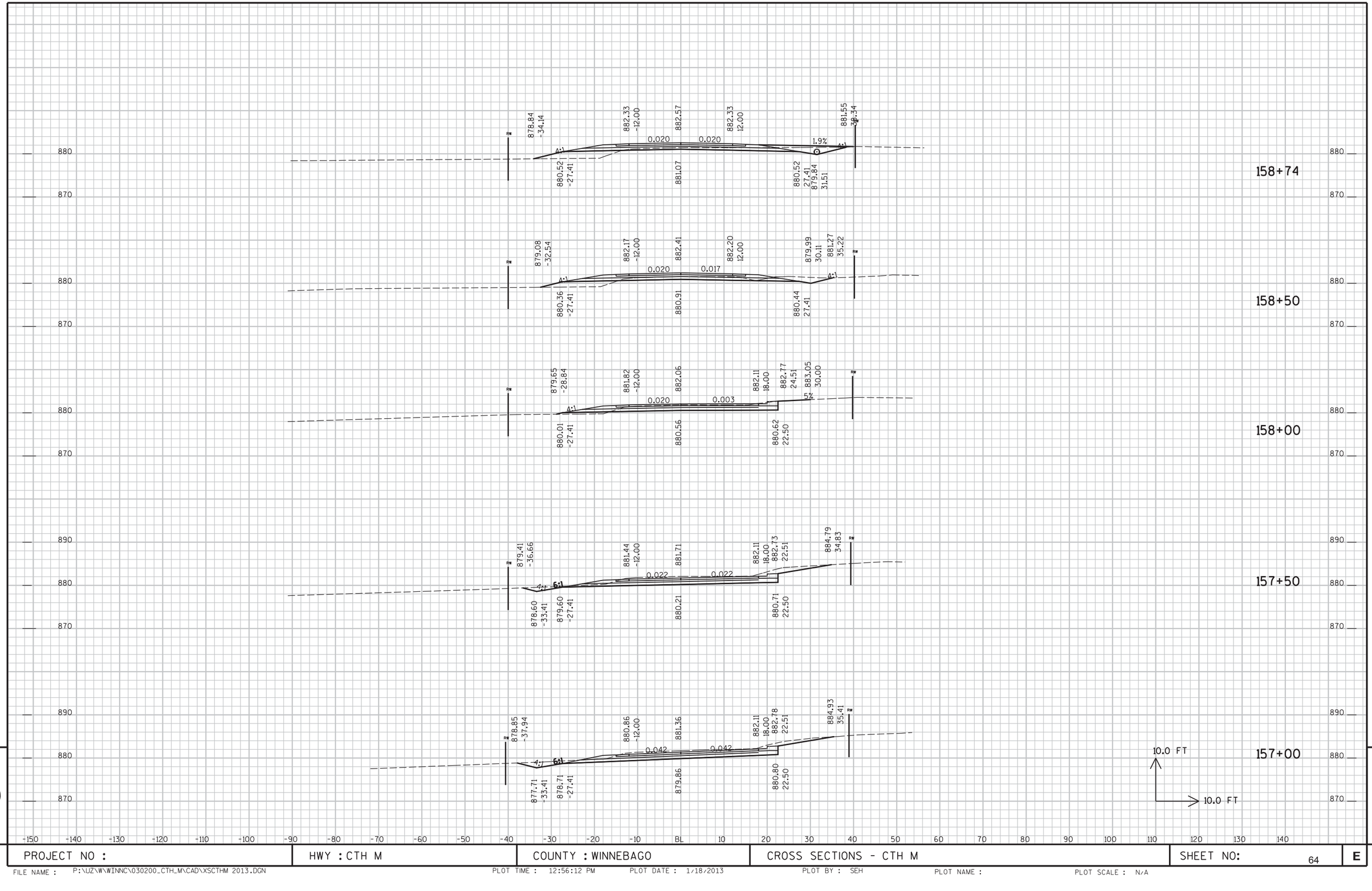


9

9

PROJECT NO :	HWY : CTH M	COUNTY : WINNEBAGO	CROSS SECTIONS - CTH M	SHEET NO: 63	E

FILE NAME : P:\UZ\W\WINNC\030200_CTH_M\CAD\XSCTHM 2013.DGN PLOT TIME : 12:56:12 PM PLOT DATE : 1/18/2013 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A



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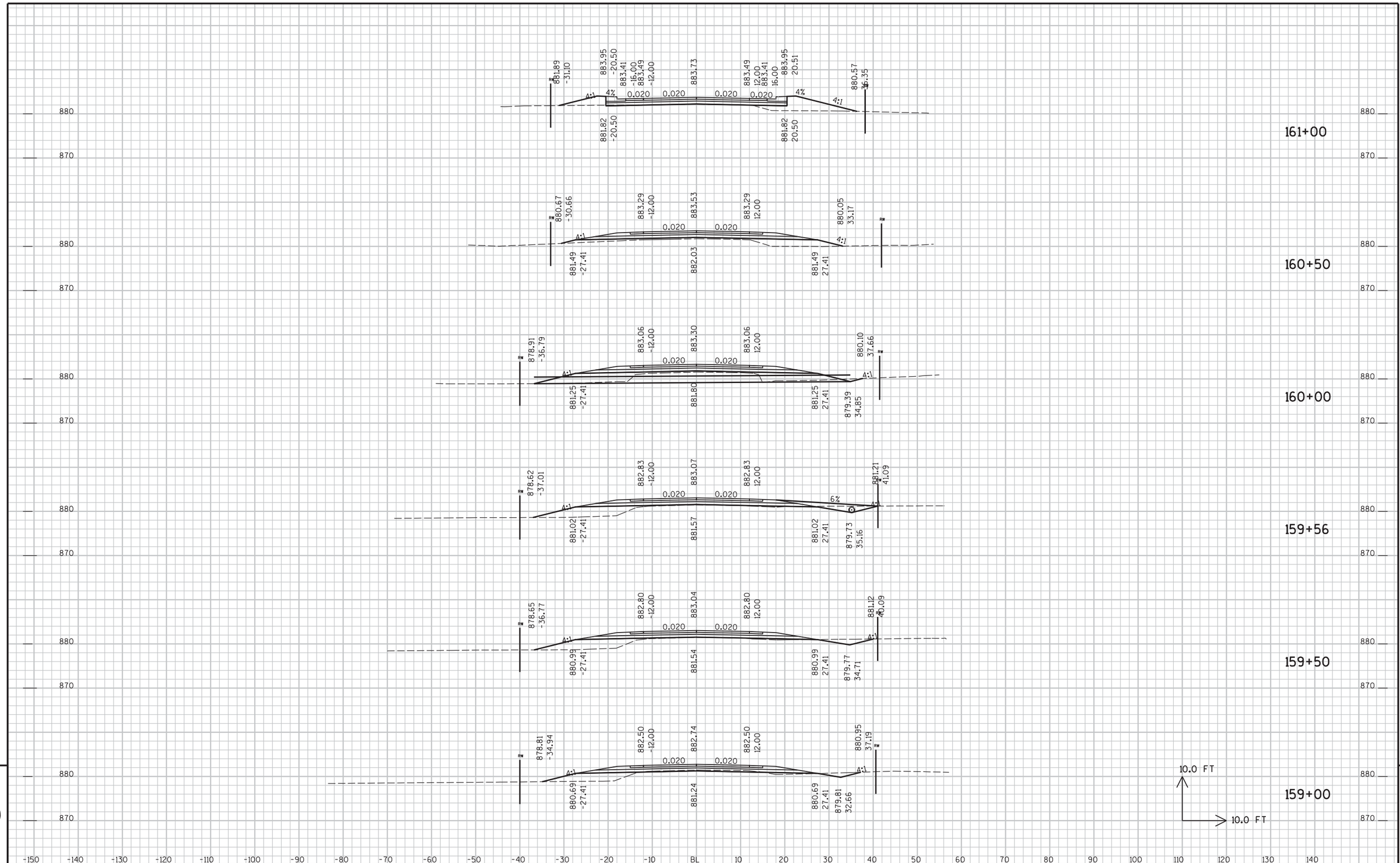
PROJECT NO :	HWY : CTH M	COUNTY : WINNEBAGO	CROSS SECTIONS - CTH M	SHEET NO: 64	E

FILE NAME : P:\UZ\W\WINNC\030200_CTH_M\CAD\XSCTHM 2013.DGN PLOT TIME : 12:56:12 PM PLOT DATE : 1/18/2013 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A

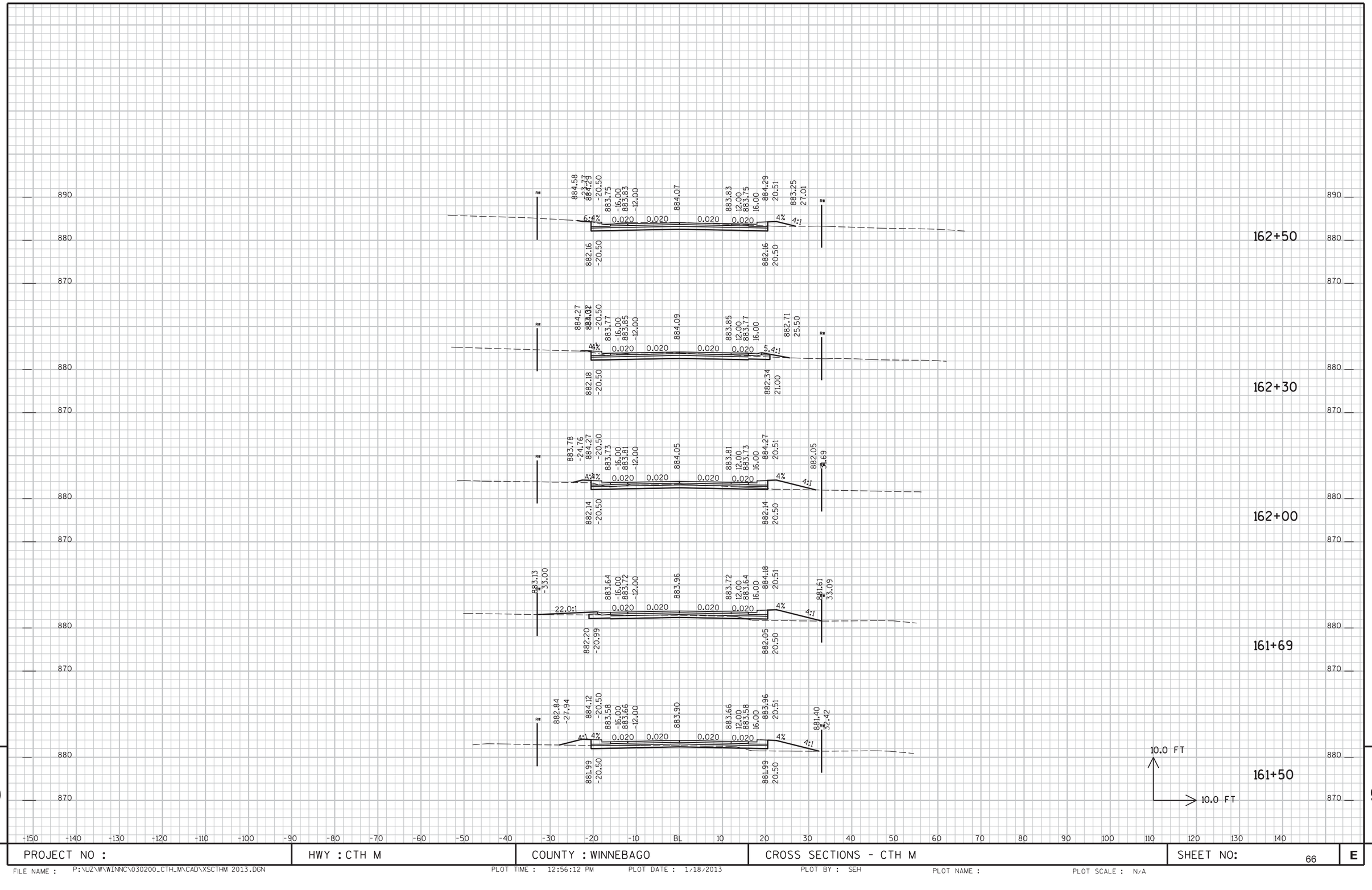


9

9

PROJECT NO :	HWY : CTH M	COUNTY : WINNEBAGO	CROSS SECTIONS - CTH M	SHEET NO: 65	E

FILE NAME : P:\UZ\W\WINNC\030200_CTH_M\CAD\XSCTHM 2013.DGN PLOT TIME : 12:56:12 PM PLOT DATE : 1/18/2013 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A

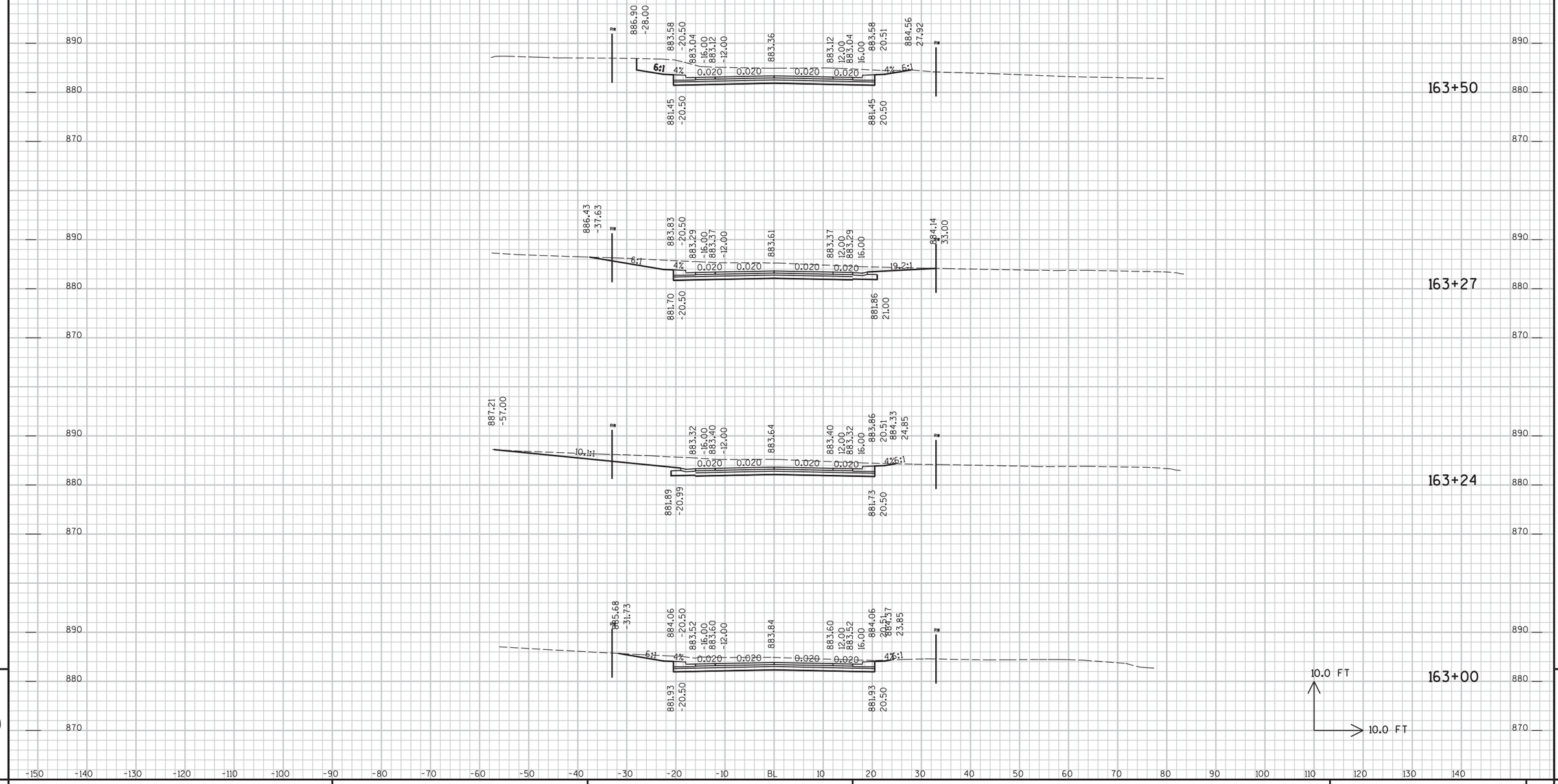


9

9

PROJECT NO :	HWY : CTH M	COUNTY : WINNEBAGO	CROSS SECTIONS - CTH M	SHEET NO: 66	E

FILE NAME : P:\UZ\W\WINNC\030200_CTH_M\CAD\XSCTHM 2013.DGN PLOT TIME : 12:56:12 PM PLOT DATE : 1/18/2013 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A



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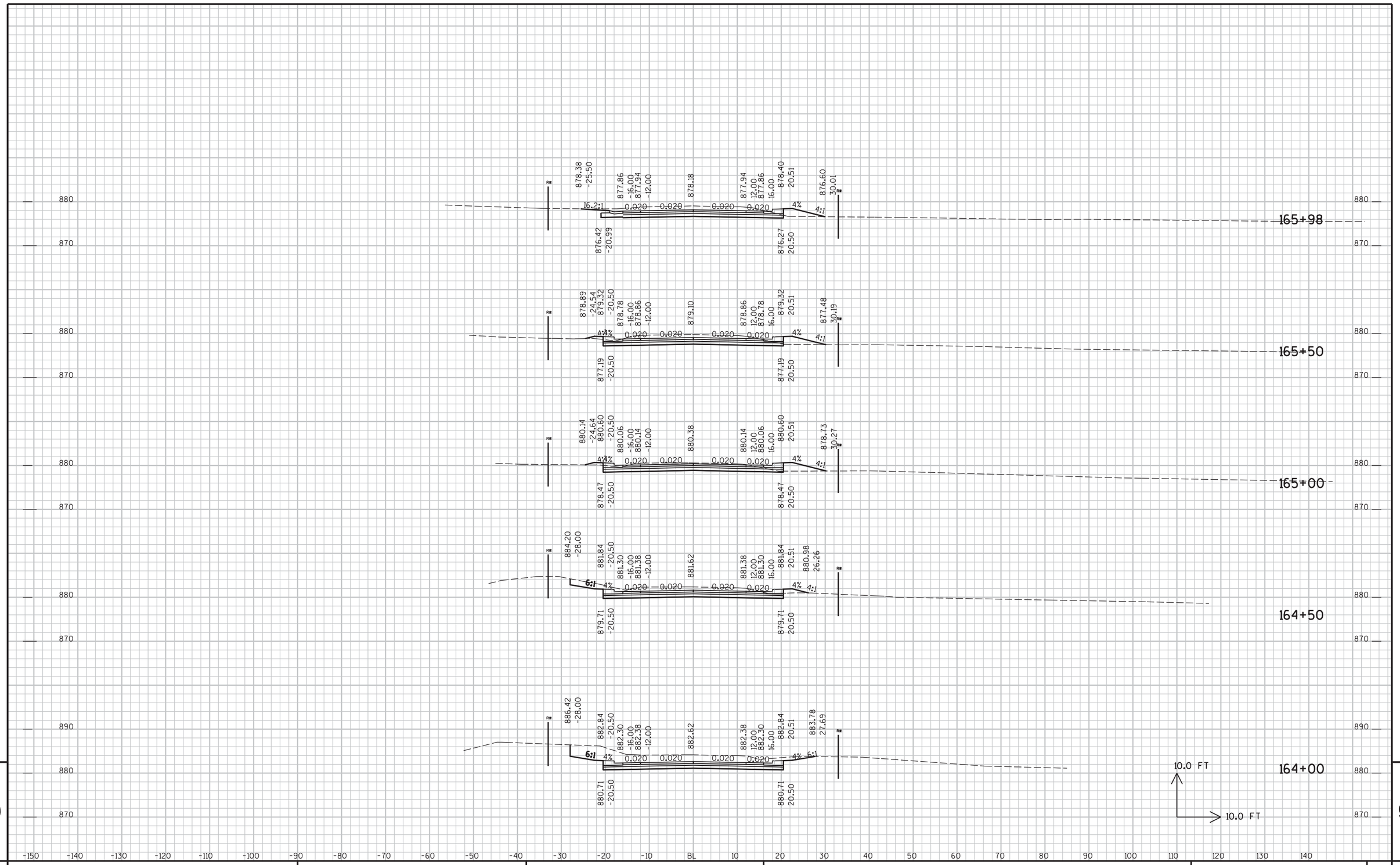
PROJECT NO :	HWY : CTH M	COUNTY : WINNEBAGO	CROSS SECTIONS - CTH M	SHEET NO: 67	E

FILE NAME : P:\UZW\WINNC\030200_CTH_M\CAD\XSCTHM 2013.DGN PLOT TIME : 12:56:12 PM PLOT DATE : 1/18/2013 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A

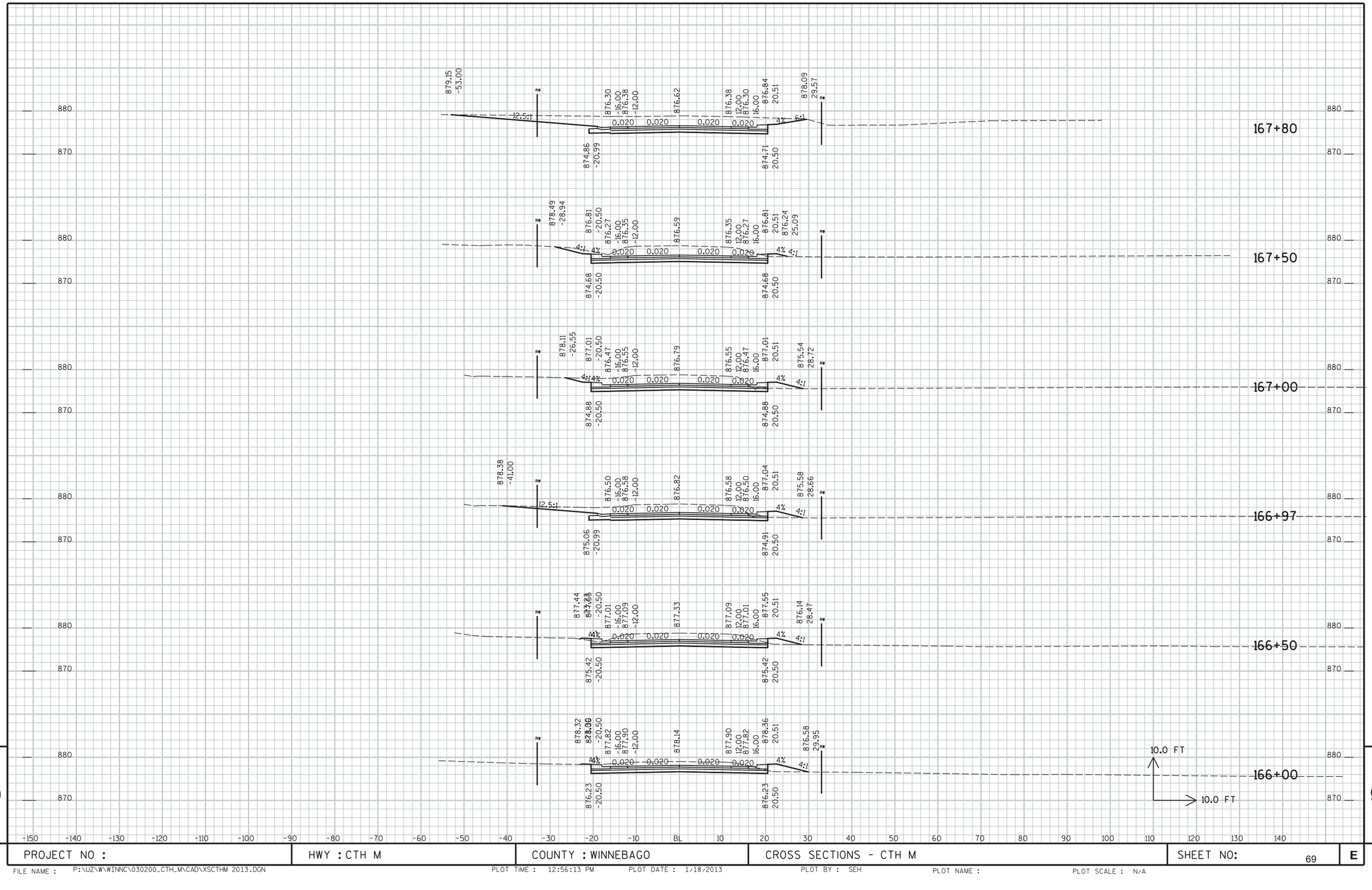


9

9

PROJECT NO :	HWY : CTH M	COUNTY : WINNEBAGO	CROSS SECTIONS - CTH M	SHEET NO: 68	E

FILE NAME : P:\UZ\W\WINNC\030200_CTH_M\CAD\XSCTHM 2013.DGN PLOT TIME : 12:56:13 PM PLOT DATE : 1/18/2013 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A

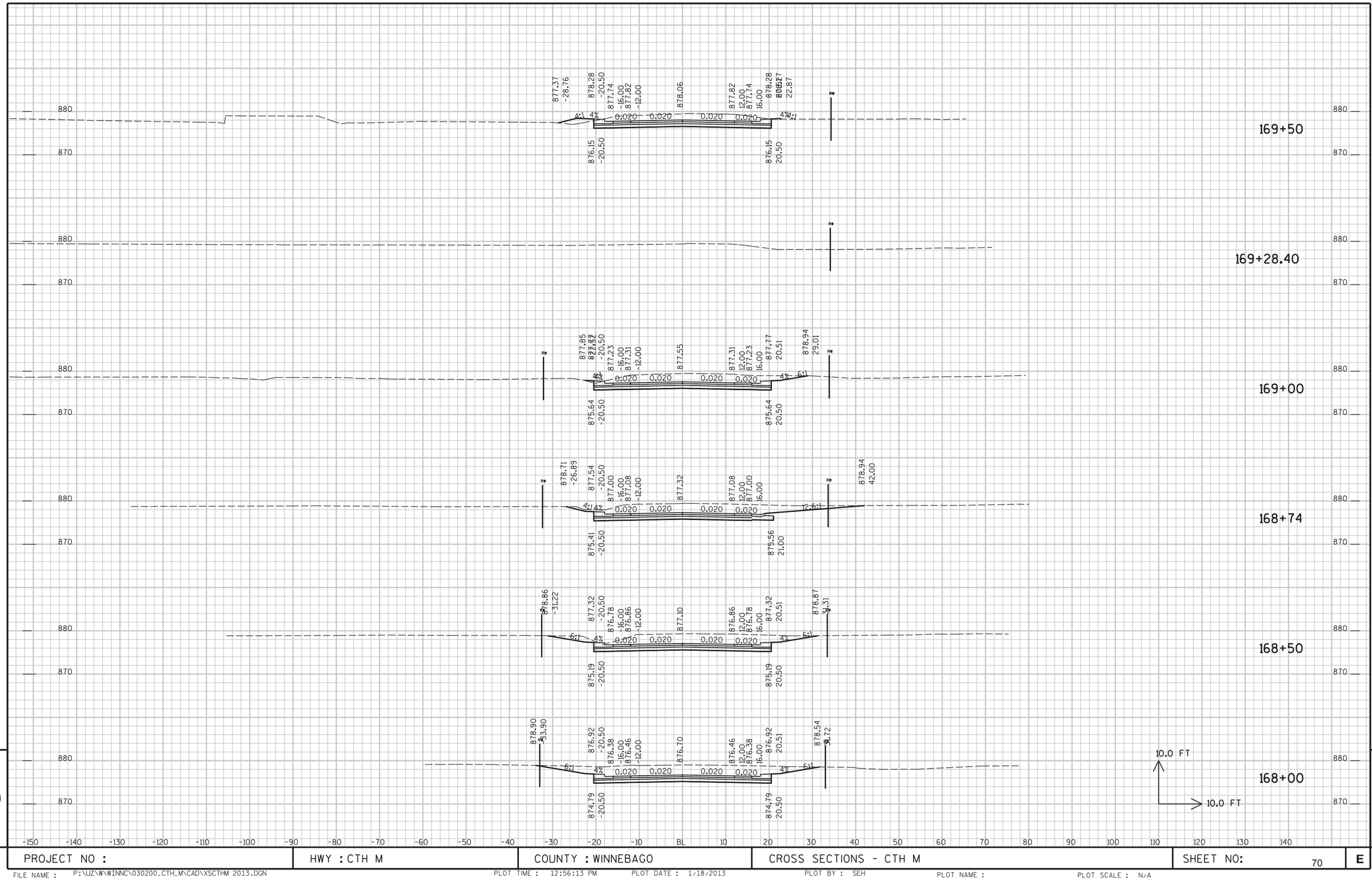


9

PROJECT NO :	HWY : CTH M	COUNTY : WINNEBAGO	CROSS SECTIONS - CTH M	SHEET NO: 69	E

FILE NAME : P:\UZ\W\WINNC\030200_CTH_M\CAD\XSCTHM 2013.DGN PLOT TIME : 12:56:13 PM PLOT DATE : 1/18/2013 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A

9

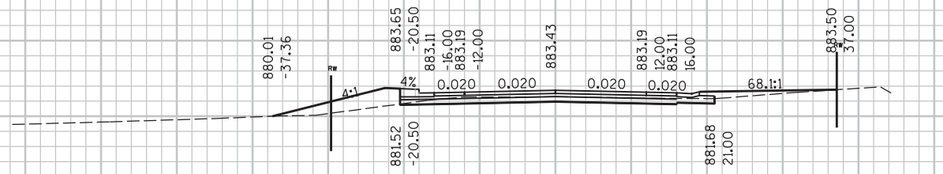


9

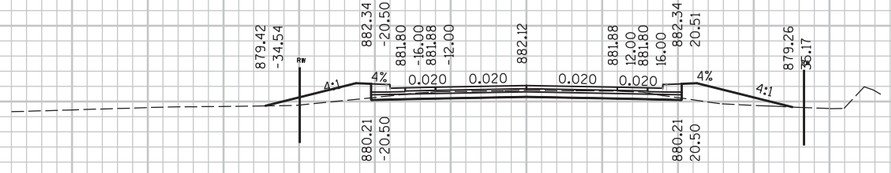
PROJECT NO :	HWY : CTH M	COUNTY : WINNEBAGO	CROSS SECTIONS - CTH M	SHEET NO: 70	E

9

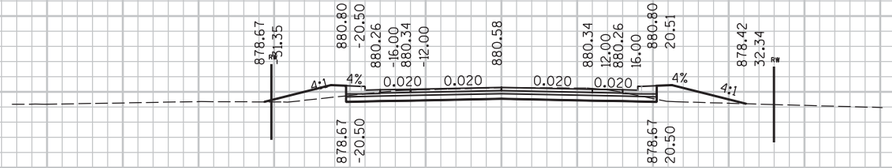
FILE NAME : P:\UZ\W\WINNC\030200_CTH_M\CAD\XSCTHM 2013.DGN PLOT TIME : 12:56:13 PM PLOT DATE : 1/18/2013 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A



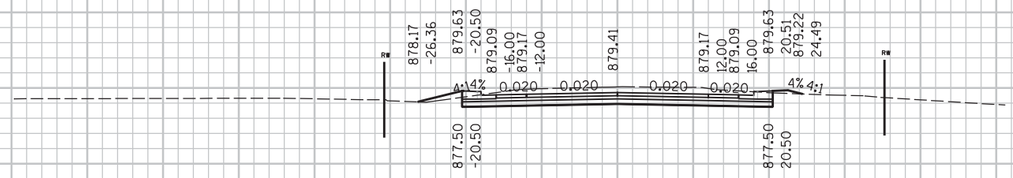
171+85



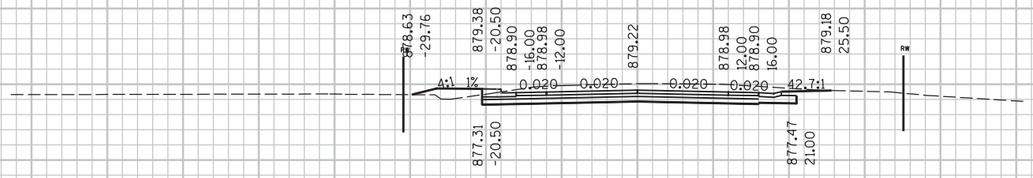
171+50



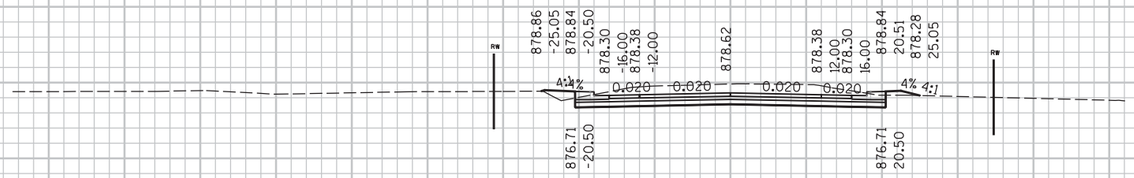
171+00



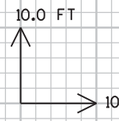
170+50



170+40



170+00



-150 -140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 BL 10 20 30 40 50 60 70 80 90 100 110 120 130 140

9

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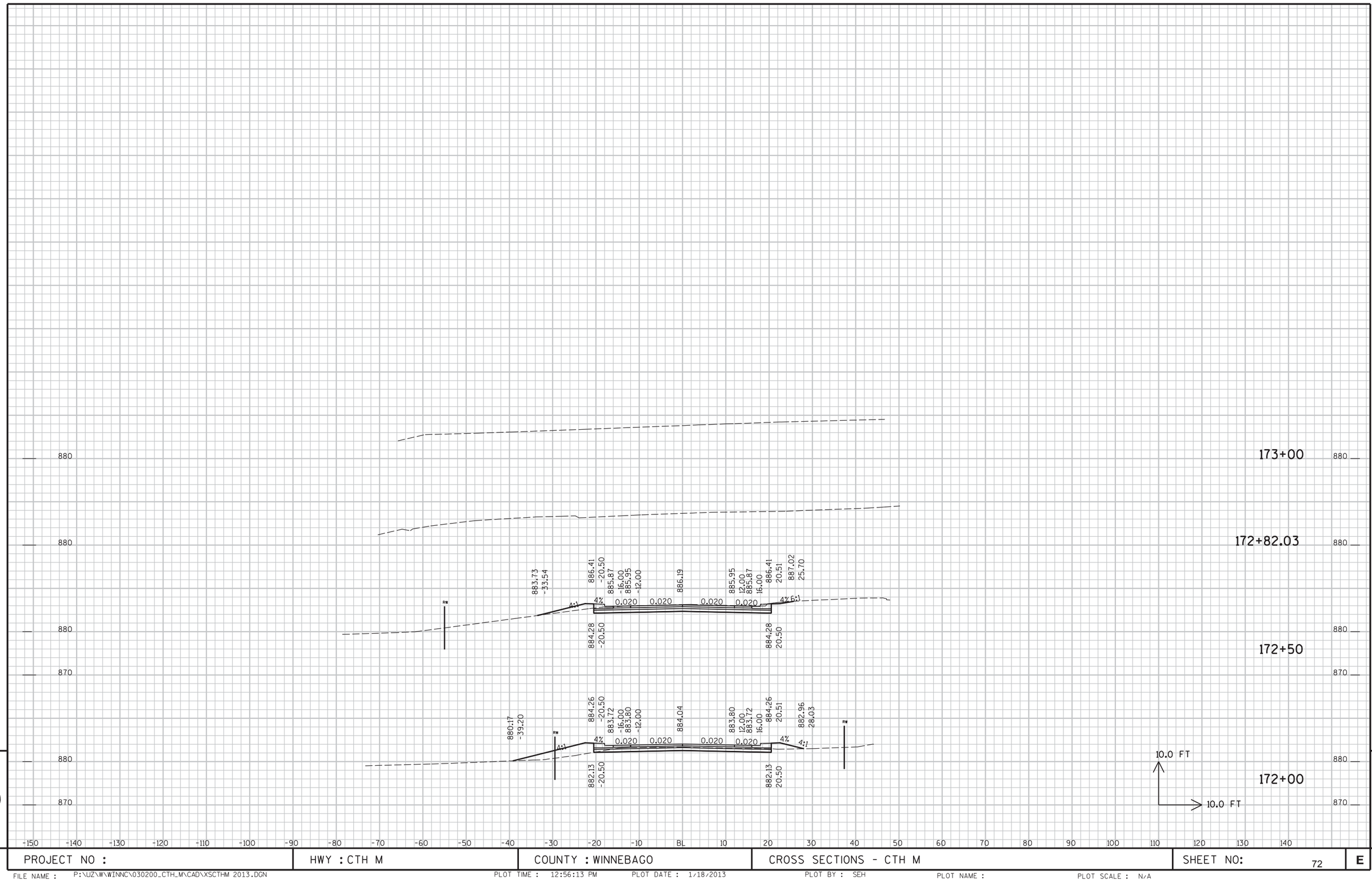
PROJECT NO :	HWY : CTH M	COUNTY : WINNEBAGO	CROSS SECTIONS - CTH M	SHEET NO: 71	E

FILE NAME : P:\UZ\W\WINNC\030200_CTH_M\CAD\XSCTHM 2013.DGN PLOT TIME : 12:56:13 PM PLOT DATE : 1/18/2013 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A



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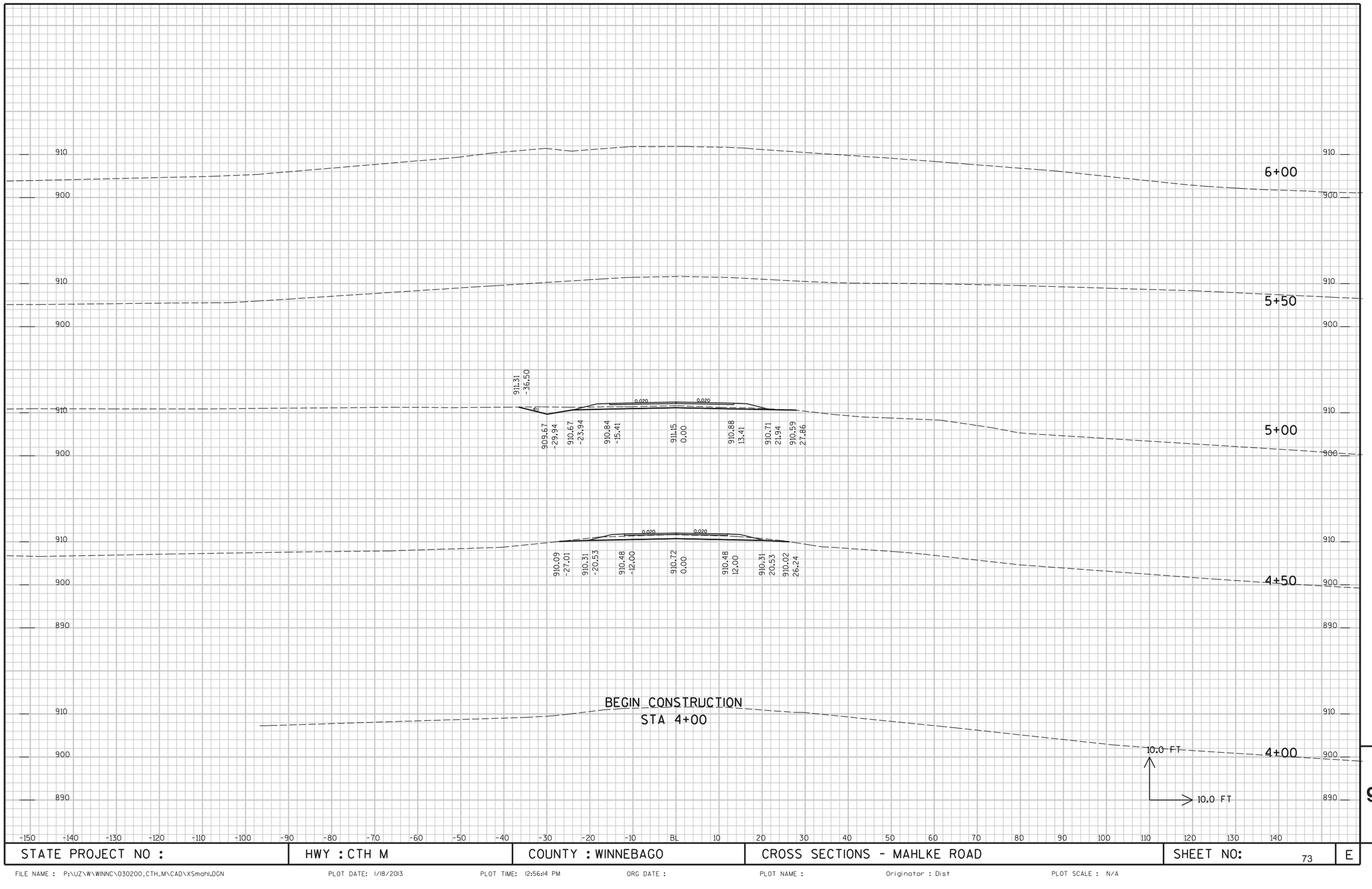
PROJECT NO :	HWY : CTH M	COUNTY : WINNEBAGO	CROSS SECTIONS - CTH M	SHEET NO: 72	E

FILE NAME : P:\UZ\W\WINNC\030200_CTH_M\CAD\XSCTHM 2013.DGN PLOT TIME : 12:56:13 PM PLOT DATE : 1/18/2013 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A

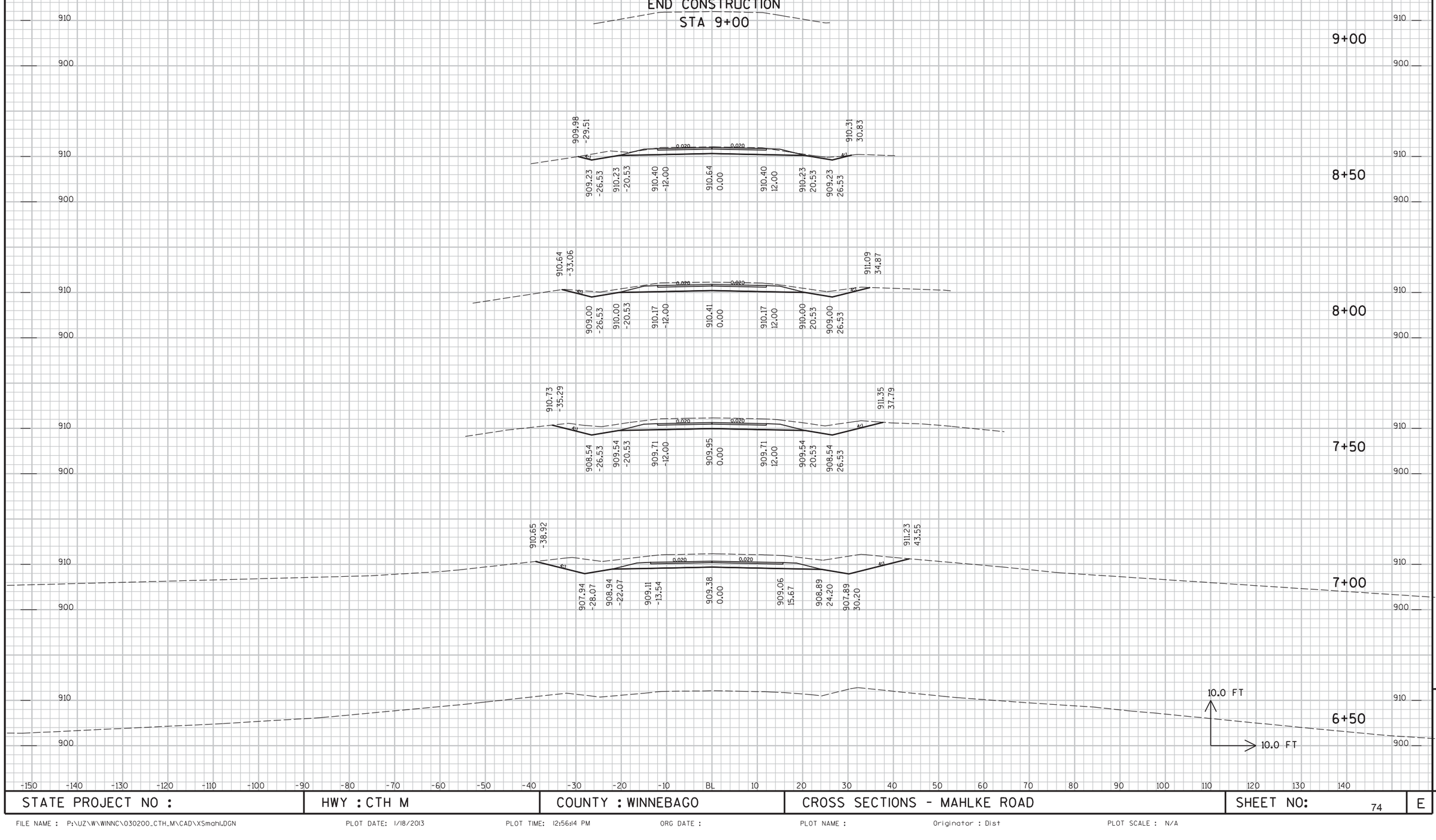


STATE PROJECT NO :	HWY : CTH M	COUNTY : WINNEBAGO	CROSS SECTIONS - MAHLKE ROAD	SHEET NO: 73	E

9

FILE NAME : P:\UZ\W\WINNC\030200_CTH_M\CAD\XSmahl.DGN PLOT DATE: 1/18/2013 PLOT TIME: 12:56:14 PM ORG DATE : PLOT NAME : Originator : Dist PLOT SCALE : N/A

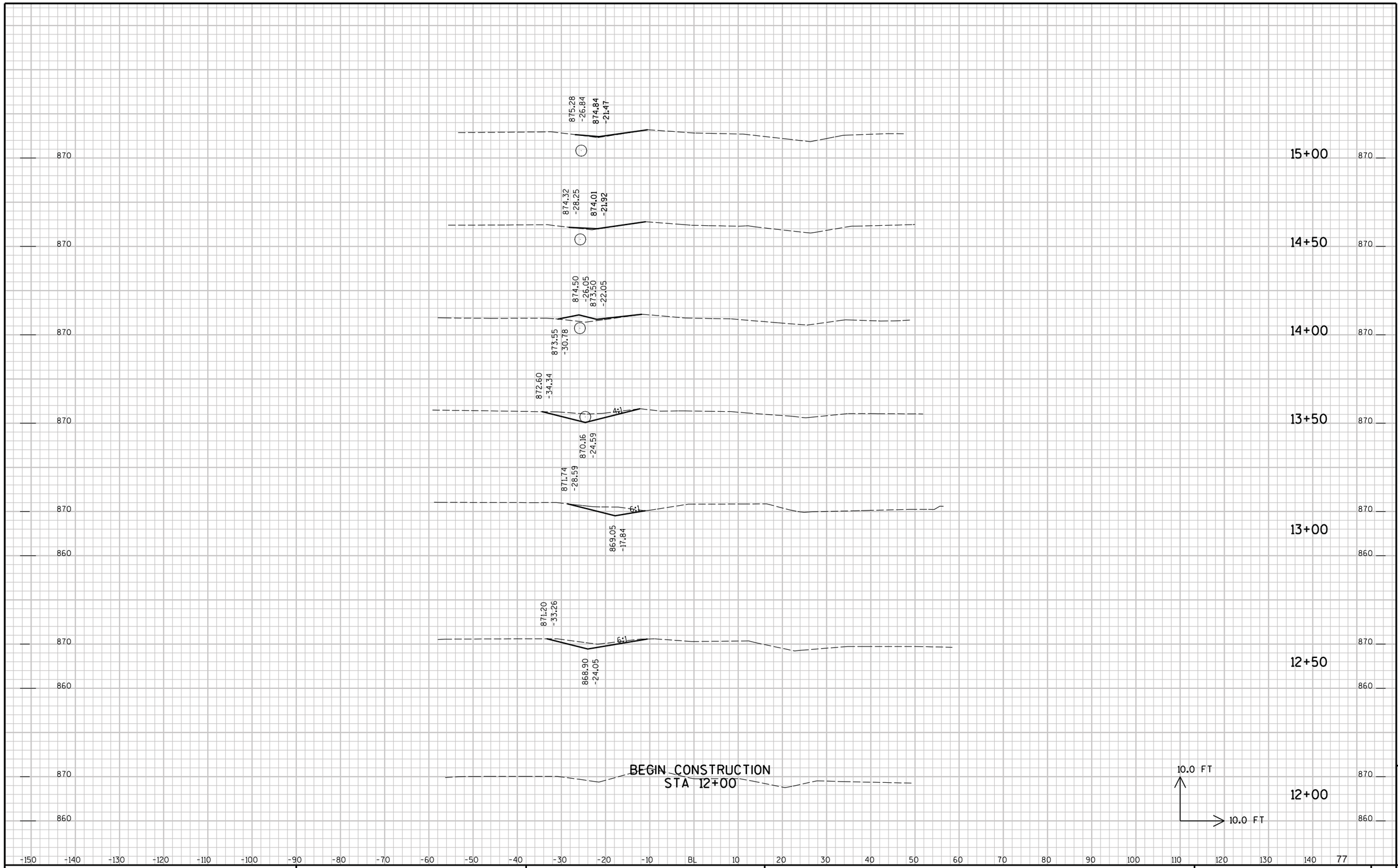
END CONSTRUCTION
STA 9+00



STATE PROJECT NO :	HWY : CTH M	COUNTY : WINNEBAGO	CROSS SECTIONS - MAHLKE ROAD	SHEET NO: 74	E

9

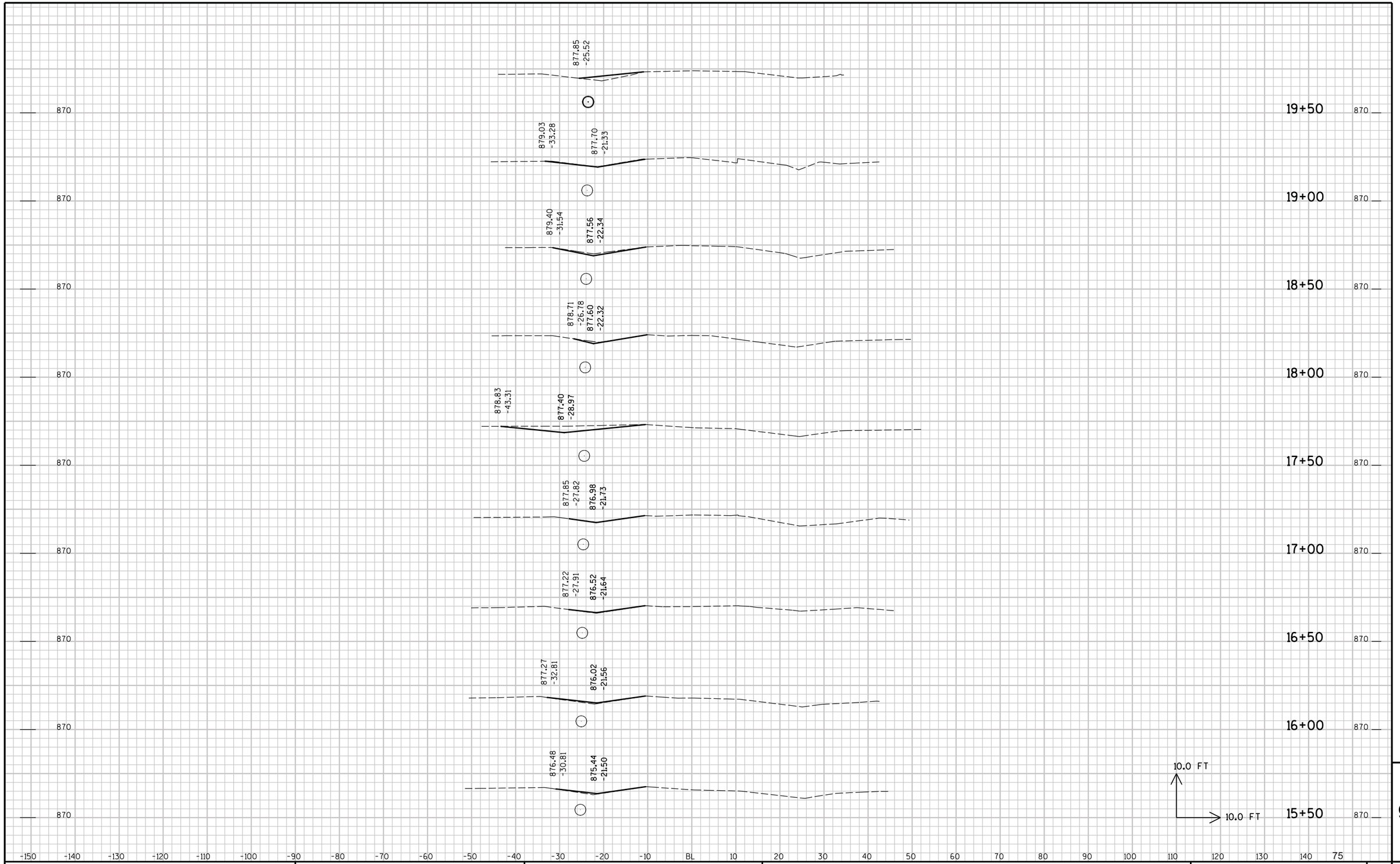
FILE NAME : P:\UZ\W\WINNC\030200_CTH_M\CAD\XSmahl.DGN PLOT DATE: 1/18/2013 PLOT TIME: 12:56:14 PM ORG DATE : PLOT NAME : Originator : Dist PLOT SCALE : N/A



STATE PROJECT NO :	HWY : CTH M	COUNTY : WINNEBAGO	CROSS SECTIONS - WEELAUNEE ROAD	SHEET NO: 75	E

9

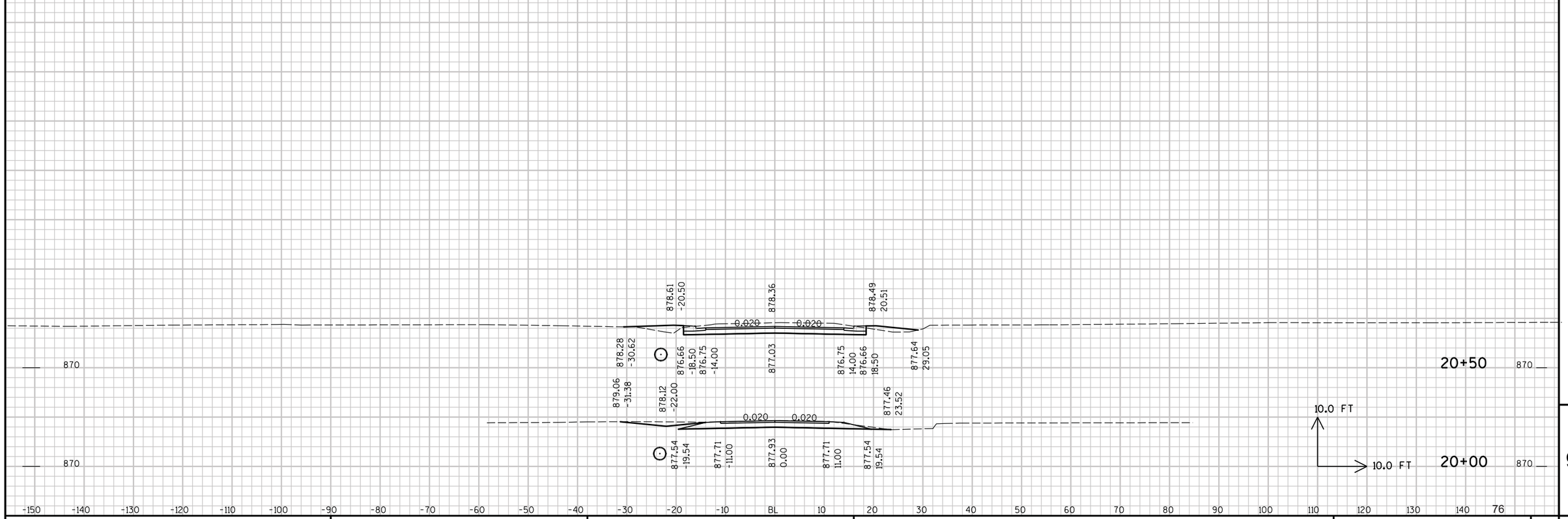
FILE NAME : P:\UZ\W\WINNC\030200_CTH_M\CAD\XSWEE00.DGN PLOT DATE: 1/18/2013 PLOT TIME: 12:56:15 PM ORG DATE : PLOT NAME : Originator : Dist PLOT SCALE : N/A



STATE PROJECT NO :	HWY : CTH M	COUNTY : WINNEBAGO	CROSS SECTIONS - WEELAUNEE ROAD	SHEET NO: 76	E

9

FILE NAME : P:\UZ\W\WINNC\030200_CTH_M\CAD\XSWEE00.DGN PLOT DATE: 1/18/2013 PLOT TIME: 12:56:14 PM ORG DATE : PLOT NAME : Originator : Dist PLOT SCALE : N/A



STATE PROJECT NO :	HWY : CTH M	COUNTY : WINNEBAGO	CROSS SECTIONS - WEELAUNEE ROAD	SHEET NO: 77	E

9

FILE NAME : P:\UZ\W\WINNC\030200_CTH_M\CAD\XSWEE00.DGN PLOT DATE: 1/18/2013 PLOT TIME: 12:56:14 PM ORG DATE : PLOT NAME : Originator : Dist PLOT SCALE : N/A