WKE AUG 2015

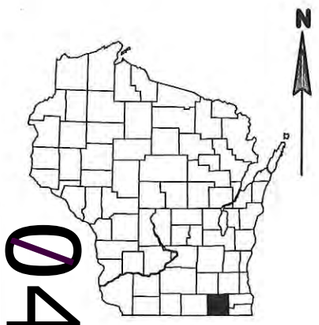
PROJECT ID: 1080-13-70

COUNTY: WALWORTH

ORDER OF SHEETS

Section No. 1 Title
Section No. 2 Typical Sections and Details
Section No. 3 Estimate of Quantities
Section No. 3 Miscellaneous Quantities
Section No. 4 Right of Way Plat
Section No. 5 Plan and Profile
Section No. 6 Standard Detail Drawings
Section No. 7 Sign Plates
Section No. 8 Structure Plans
Section No. 9 Computer Earthwork Data
Section No. 9 Cross Sections

TOTAL SHEETS = 846



STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

LAKE GENEVA-ELKHORN

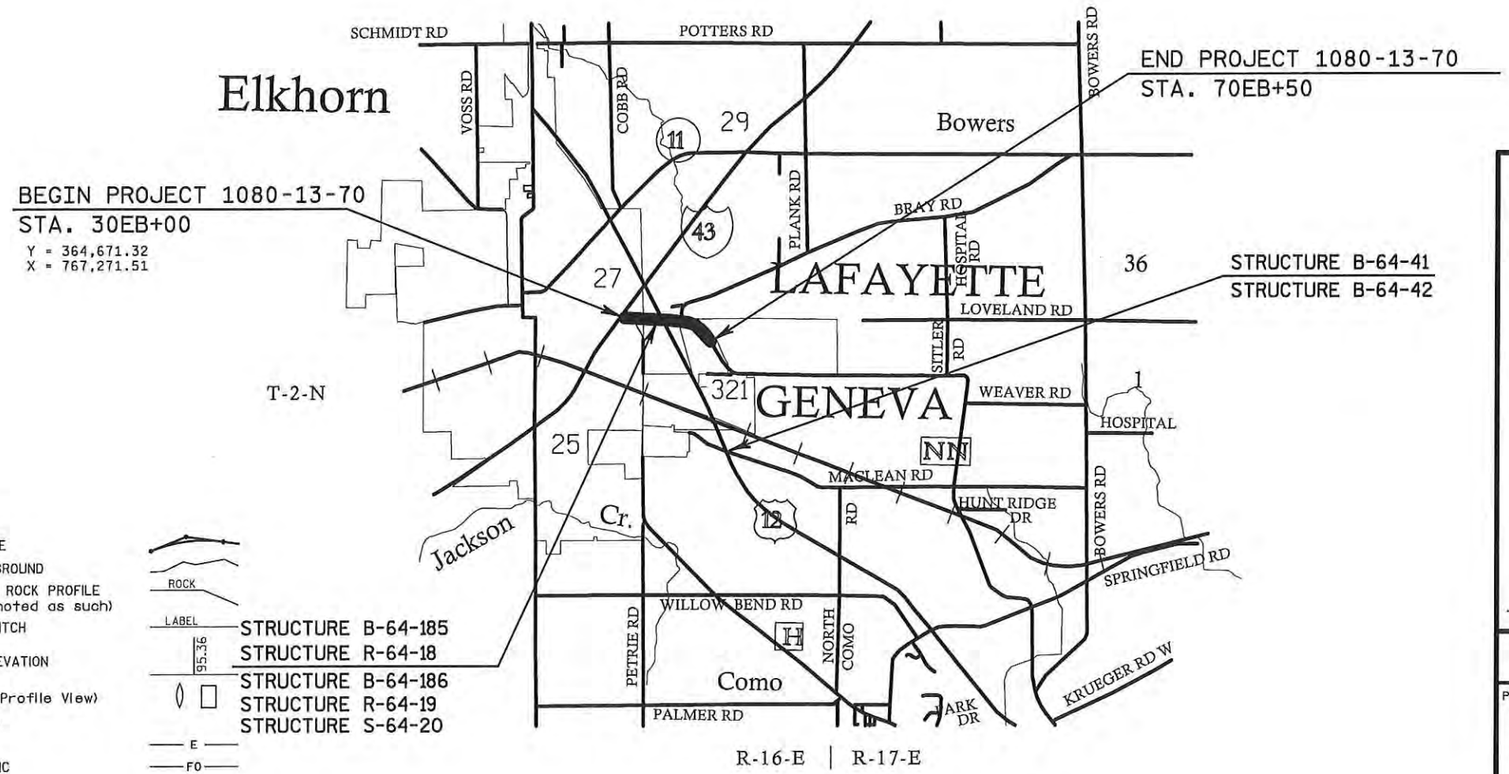
CTH NN INTERCHANGE

USH 12

WALWORTH COUNTY

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1080-13-70	WISC 2015466	1

STATE PROJECT NUMBER
1080-13-70



BEGIN PROJECT 1080-13-70
STA. 30EB+00
Y = 364,671.32
X = 767,271.51

STRUCTURE B-64-185
STRUCTURE R-64-18
STRUCTURE B-64-186
STRUCTURE R-64-19
STRUCTURE S-64-20

LAYOUT
SCALE 0 0.50 MI.

TOTAL NET LENGTH OF CENTERLINE = 0.758 MI.

COORDINATES ON THIS PLAN ARE SCALED TO THE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS), WALWORTH COUNTY, NAD 1983 (2007)

ELEVATIONS SHOWN ON THIS PLAN ARE BASED ON HARN MONUMENT 'ELKHORN GPS' WITH AN ELEVATION OF 1031.56', AND HARN MONUMENT 'LAKE GENEVA GPS' WITH AN ELEVATION OF 877.63'

DESIGN DESIGNATION CTH NN

A.A.D.T. (2012)	=	7,900
A.A.D.T. (2035)	=	9,200
D.H.V. (2035)	=	938
D.D.	=	59/41
T. -----	=	3.7%
DESIGN SPEED	=	60 MPH
ESALS	=	1,719,500

CONVENTIONAL SYMBOLS

PLAN
- CORPORATE LIMITS
- PROPERTY LINE
- LOT LINE
- LIMITED HIGHWAY EASEMENT
- EXISTING RIGHT OF WAY
- PROPOSED OR NEW R/W LINE
- SLOPE INTERCEPT
- REFERENCE LINE
- EXISTING CULVERT
- PROPOSED CULVERT (Box or Pipe)
- COMBUSTIBLE FLUIDS (CAUTION)
- MARSH AREA
- WOODED OR SHRUB AREA

PROFILE
- GRADE LINE
- ORIGINAL GROUND
- MARSH OR ROCK PROFILE (To be noted as such) (ROCK)
- SPECIAL DITCH (LABEL)
- GRADE ELEVATION (95.36)
- CULVERT (Profile View)

UTILITIES
- ELECTRIC (E)
- FIBER OPTIC (FO)
- GAS (G)
- SANITARY SEWER (SAN)
- STORM SEWER (SS)
- TELEPHONE (T)
- WATER (W)
- UTILITY PEDESTAL
- POWER POLE
- TELEPHONE POLE

ORIGINAL PLANS PREPARED BY

DAAR ENGINEERING, INC.
www.daarcorp.com
Milwaukee, WI 53202
414-225-9817

WISCONSIN
ANDREW J. SMIEJA
E-31137
WAUKESHA, WI
PROFESSIONAL ENGINEER

4/30/2015 (Date)

(Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	RA SMITH NATIONAL
Designer	DAAR ENGINEERING
Project Manager	AL GILBERTSON, P.E.
Regional Examiner	
Regional Supervisor	JANET CANNON, P.E.
C.O. Examiner	

APPROVED FOR THE DEPARTMENT

DATE 4/30/2015 (Signature)

E

GENERAL NOTES

CURVE DATA SHOWN ON THE PLAN IS "ARC DEFINITION".

THE LOCATIONS OF EXISTING OR PROPOSED UTILITIES, AS NOTED ON THE PLANS, ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.

DIMENSIONS GIVEN FOR EXISTING FEATURES SHALL BE CONSIDERED AS APPROXIMATE AND MEASURED IN FIELD FOR MATCHING PURPOSE.

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

ALL DISTURBED AREAS WITHIN THE RIGHT OF WAY THAT ARE NOT A RESULT OF CONTRACT WORK ITEMS SHALL BE FERTILIZED SEEDED AND MULCHED AT THE CONTRACTORS EXPENSE.

THE CONTRACTOR SHALL NOTIFY DIGGERS HOTLINE AND AFFECTED UTILITIES PRIOR TO THE START OF WORK. ANY LOCAL MUNICIPALITY OR PUBLIC AGENCY WHICH IS NOT A MEMBER OF DIGGERS HOTLINE MUST BE CONTACTED SEPARATELY.

TRAFFIC CONTROL DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. NO WORK MAY BEGIN UNTIL PROPER TRAFFIC CONTROL DEVICES ARE PLACED AND APPROVED BY THE ENGINEER.

RE-TOPSOIL GRADED AREAS, AS DESIGNATED BY THE ENGINEER, IMMEDIATELY AFTER GRADING IS COMPLETED WITHIN THOSE AREAS. SEED, FERTILIZE, AND MULCH/EROSION MAT TOPSOILED AREAS, AS DESIGNATED BY THE ENGINEER, WITHIN FIVE (5) CALENDAR DAYS AFTER PLACEMENT OF TOPSOIL. IF GRADED AREAS ARE LEFT EXPOSED FOR MORE THAN TEN (10) CALENDAR DAYS, SEED THOSE AREAS WITH TEMPORARY SEED.

STOCKPILE EXCESS MATERIAL OR SPOILS ON UPLAND AREAS AWAY FROM WETLANDS, FLOODPLAINS AND WATERWAYS. STOCKPILED SOIL SHALL BE PROTECTED AGAINST EROSION. IF STOCKPILED MATERIAL IS LEFT FOR MORE THAN TEN (10) CALENDAR DAYS, SEED THE STOCKPILE WITH TEMPORARY SEED.

EROSION CONTROL BMP'S ARE AT SUGGESTED LOCATIONS AND SHALL BE INSTALLED PRIOR TO THE START OF CONSTRUCTION. THE ACTUAL LOCATIONS WILL BE DETERMINED BY THE CONTRACTOR'S ECIP AND BY THE ENGINEER. EROSION CONTROL BMP'S SHALL BE MAINTAINED UNTIL PERMANENT VEGETATION IS ESTABLISHED OR UNTIL THE ENGINEER DETERMINES THAT THE BMP IS NO LONGER REQURIED.

CONTRACTOR MUST CONTACT THE PROJECT ENGINEER AND SEWRPC, AT LEAST TWO WEEKS PRIOR TO WORK NEAR ANY PUBLIC SURVEY MONUMENT.

WHEN TEMPORARY PAVEMENT MARKING REMOVABLE TAPE IS REQUIRED, IT SHALL BE CUT THROUGH ITS FULL WIDTH AND THICKNESS AT 25-FOOT INTERVALS TO CONTROL RAVELING.

ALL HMA PAVEMENT LOCATIONS SHALL BE CONSTRUCTED WITH THE FOLLOWING LAYERS AND GRADATIONS:

OTHER CONTACTS

WISDOT SE REGION
ALLEN GILBERTSON
141 NW BARSTOW
PO BOX 798
WAUKESHA, WI 53187
PHONE 262-548-8817
allen.gilbertson@dot.wi.gov

WISDNR
CRAIG WEBSTER
141 NW BARSTOW STREET, RM 180
WAUKESHA, WI 53188
PHONE 262-574-2141
FAX 262-574-2128
craig.webster@wisconsin.gov

WALWORTH COUNTY
LARRY PRICE
W4097 COUNTY ROAD NN
ELKHORN, WI 53121
PHONE 262-741-3114
FAX 262-741-3195
lprice@co.walworth.wi.us

SEWRPC
JOHN WASHBURN
W239 N1812 ROCKWOOD DRIVE
WAUKESHA, WI
PHONE 262-547-6721
FAX 262-547-1103
sewrpc@sewrpc.org

UTILITY CONTACTS

WE ENERGIES (GAS OPERATIONS)
LATROY BRUMFIELD
333 W. EVERETT ST. – A299
MILWAUKEE, WI 53203
PHONE 414-221-5617
FAX 414-221-2336
latroy.brumfield@we-energies.com

WE ENERGIES (GAS, FIELD CONTACT)
SCOTT HOLSTEIN
700 S KANE STREET
BURLINGTON, WI 53105
PHONE 262-763-1084
CELL 262-949-0490
scott.holstein@we-energies.com

CITY OF ELKHORN (ELECTRIC & WATER)
JOHN MURPHY
4000 KOOPMAN LANE
ELKHORN, WI 53121
PHONE 262-741-5129
FAX 262-741-5250
jmurphy@cityofelkhorn.org

TOM THEODORE
AT&T MOBILITY
930 NATIONAL PKWY, 4AB20-2
SCHAUMBURG, IL 60173
PHONE 847-330-7580
tt698n@att.com

CITY OF ELKHORN (WASTEWATER)
MARTIN NUSS
PO BOX 920
ELKHORN, WI 53121+0920
PHONE 262-723-2223
FAX 262-741-5135
mnuss@cityofelkhorn.org

CHARTER COMMUNICATIONS
BRANDON OPHEIM
510 BELOIT STREET
WALWORTH, WI 53184
PHONE 608-209-3195
brandon.opheim@charter.com

WE ENERGIES (ELECTRIC)
LATROY BRUMFIELD
333 W. EVERETT ST. – A299
MILWAUKEE, WI 53203
PHONE 414-221-5617
FAX 414-221-2336
latroy.brumfield@we-energies.com

STATE LONG DISTANCE TELEPHONE COMPANY
MICHAEL JOHNSON
20875 CROSSROADS CIRCLE, STE 800
WAUKESHA, WI 53186
PHONE 262-754-3052
FAX 262-717-6002
michael.johnson@tdstelecom.com

PAVEMENT LOCATION	TOTAL PAVEMENT THICKNESS	LAYERS	NOMINAL MAXIMUM SIZE GRADATION	ASPHALTIC MATERIAL
CTH NN SHOULDER RECONSTRUCTION(WITHIN PROJECT LIMITS)	3½"	3½" UPPER	12.5 mm	PG64-28P
RAMP A, AA, B, AB, C, CD , D DC	5¾"	3¾"" LOWER	19.0 mm	PG64-28P
		2" UPPER	12.5 mm	PG64-28P
SIDEROAD RECONSTRUCTION	5"	3" LOWER	19.0 mm	PG64-28P
		2" UPPER	12.5 mm	PG64-28P
CTH NN SHOULDER RECONSTRUCTION(OUTSIDE PROJECT LIMITS)	4"	4" UPPER	12.5 mm	PG64-28P
USH 12 SHOULDER AT MACLEAN ROAD	5"	3" LOWER	19.0 mm	PG64-28P
		2" UPPER	12.5 mm	PG64-28P

ORDER OF SECTION 2 SHEETS

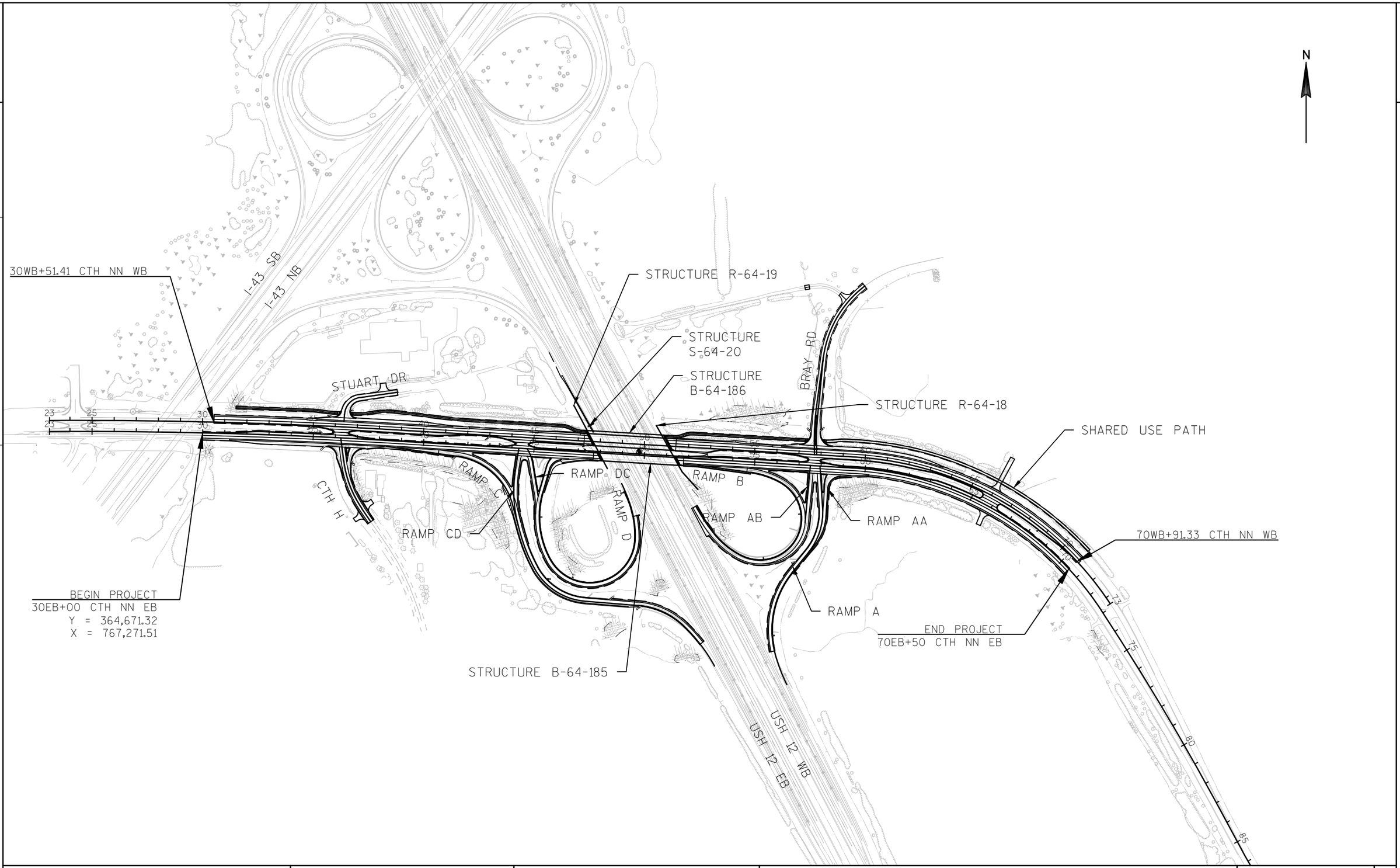
Project Overview
Typical Sections
Construction Details
Plan Details
Pavement Grades
Erosion Control
Storm Sewer Removal & Culvert Pipe Location Plan
Storm Sewer Plan
Subgrade Drainage Plan
Watermain Insulation Plan
Signing (Completed by WisDOT)
Pavement Marking
Traffic Control and Construction Staging (Completed by RA Smith)
Detour Plan (Completed by RA Smith
Fencing
Alignment

DIGGERS HOTLINE
Dial 811 or (800) 242-8511
www.DiggersHotline.com

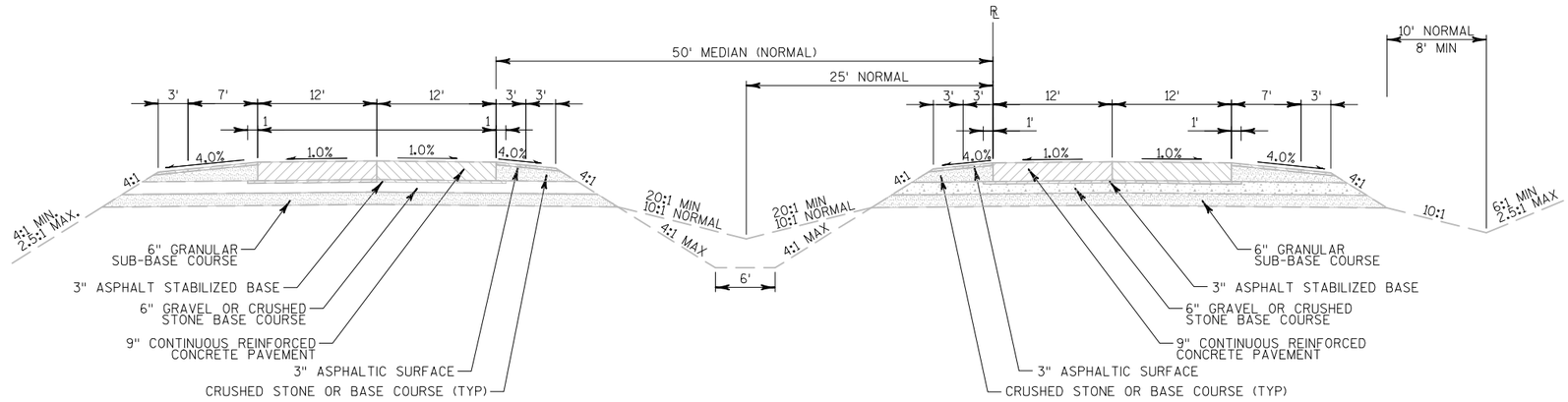
STANDARD ABBREVIATIONS

AP	ACCESS POINT	NOM	NOMINAL
AC	ACRE	NC	NORMAL CROWN
ADJ	ADJUST	N	NORTH
AECPRC	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE	Y	NORTH GRID COORDINATE
		NB	NORTHBOUND
AH	AHEAD	NO	NUMBER
AC	ASPHALT CEMENT	OPT	OPTIONAL
ASPH	ASPHALTIC	OD	OUTSIDE DIAMETER
ACP	ASPHALTIC CONCRETE PAVEMENT	PAVT	PAVEMENT
AVG	AVERAGE	PLE	PERMANENT LIMITED EASEMENT
ADT	AVERAGE DAILY TRAFFIC	PACS	PIPE ARCH CORRUGATED STEEL
BK	BACK	PT	POINT
BAD	BASE AGGREGATE DENSE	PC	POINT OF CURVATURE
BM	BENCHMARK	PI	POINT OF INTERSECTION
CB	CATCH BASIN	PT	POINT OF TANGENCY
C/L	CENTER LINE	PVC	POINT OF VERTICAL CURVE
C/L CONST	CENTER LINE CONSTRUCTION	PVI	POINT OF VERTICAL INTERSECTION
Δ	CENTRAL ANGLE OR DELTA	PVT	POINT OF VERTICAL TANGENCY
CL	CLASS	PVC	POLYVINYL CHLORIDE
CONC	CONCRETE	PCC	PORTLAND CEMENT CONCRETE
CONST	CONSTRUCTION	LB	POUND
CMCP	CORRUGATED METAL CULVERT PIPE	PSF	POUNDS PER SQUARE FOOT
CTH	COUNTY TRUNK HIGHWAY	PSI	POUNDS PER SQUARE INCH
CABC	CRUSHED AGGREGATE BASE COURSE	PE	PRIVATE ENTRANCE
CFS	CUBIC FEET PER SECOND	PGL	PROFILE GRADE LINE
CY	CUBIC YARD	PL	PROPERTY LINE
CP	CULVERT PIPE	Q100	100-YEAR FLOW RATE
CPCS	CULVERT PIPE CORRUGATED STEEL	R	RADIUS
CPRC	CULVERT PIPE REINFORCED CONCRETE	RR	RAILROAD
CPRCHE	CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL	R	RANGE
		R/L	R/L
C & G	CURB AND GUTTER	REINF	REINFORCING OR REINFORCEMENT
D	DEGREE OF CURVE	REQD	REQUIRED
DHV	DESIGN HOUR VOLUME	RT	RIGHT
DIA	DIAMETER	R/W	RIGHT-OF-WAY
DD	DIRECTIONAL DISTRIBUTION	RD	ROAD
DWY	DRIVEWAY	RDWY	ROADWAY
E	EAST	SEC	SECTION
X	EAST GRID COORDINATE	SHLDR	SHOULDER
EB	EASTBOUND	S	SOUTH
EL	ELEVATION	SB	SOUTHBOUND
ESALS	EQUIVALENT SINGLE AXLE LOADS	SQ	SQUARE
EXC	EXCAVATION	SF	SQUARE FEET
EBS	EXCAVATION BELOW SUBGRADE	SW	SIDEWALK
EXIST	EXISTING	SY	SQUARE YARD
FPS	FEET PER SECOND	SDD	STANDARD DETAIL DRAWINGS
FERT	FERTILIZE	STH	STATE TRUNK HIGHWAYS
FE	FIELD ENTRANCE	STA	STATION
FL	FLOW LINE	SS	STORM SEWER
FT	FOOT	SSPRC	STORM SEWER PIPE REINFORCED CONCRETE
GN	GRID NORTH	ST	STREET
HES	HIGH EARLY STRENGTH	STR	STRUCTURE OR STRUCTURAL
HP HW	HIGH POINT	SEC	SUPERELEVATION
HW	HIGH WATER	T	TANGENT
HMA	HOT MIX ASPHALT	TEMP	TEMPORARY
CWT	HUNDREDWEIGHT	TI	TEMPORARY INTEREST
HWD	HYDRANT	TLE	TEMPORARY LIMITED EASEMENT
INL	INLET	t	TON
ID	INSIDE DIAMETER	T	TOWN
I	INTERSECTION ANGLE	T/L	TRANSIT LINE
INV	INVERT	T	TRUCKS (PERCENT OF)
IP	IRON PIPE OR PIN	TYP	TYPICAL
JT	JOINT	USH	UNITED STATES HIGHWAY
LT	LEFT	VAR	VARIABLE
LT	LENGTH OF CURVE	V	VELOCITY OF DESIGN SPEED
LF	LINEAR FOOT	VERT	VERTICAL
LP	LOW POINT	VC	VERTICAL CURVE
LS	LUMP SUM	VOL	VOLUME
MH	MANHOLE	WM	WATERMAIN
MAX	MAXIMUM	WV	WATER VALVE
Mgal	MEGAGALLON	W	WEST
MPH	MILES PER HOUR	WB	WESTBOUND
MIN	MINIMUM	YD	YARD
MON	MONUMENT		

2



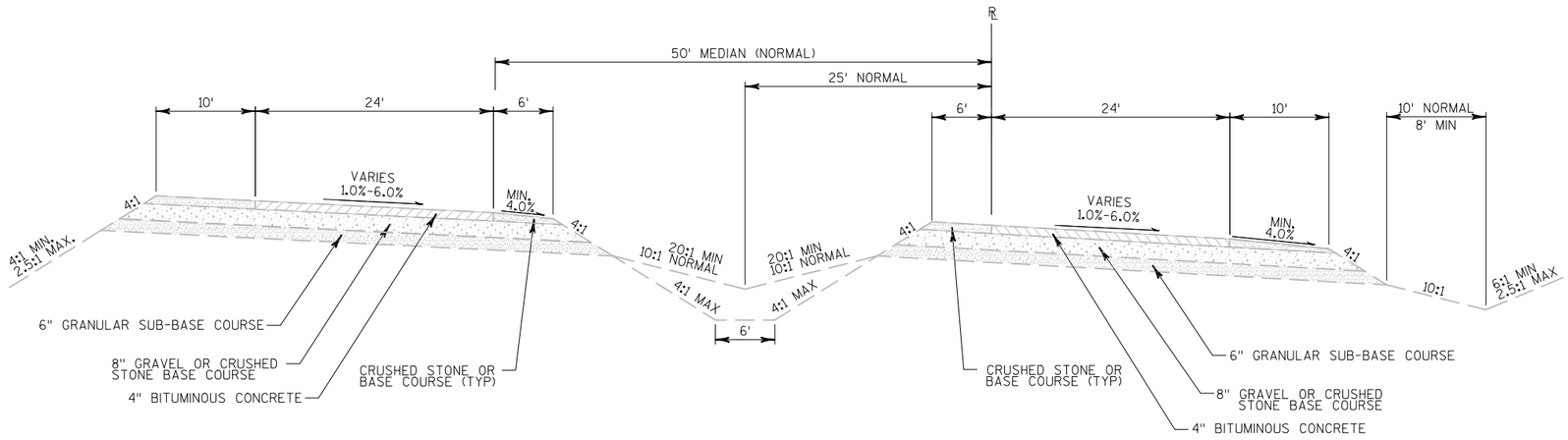
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	PROJECT OVERVIEW	SHEET 4	E



TYPICAL EXISTING SECTION
CTH NN

STA 30+00 TO STA 59+55 *

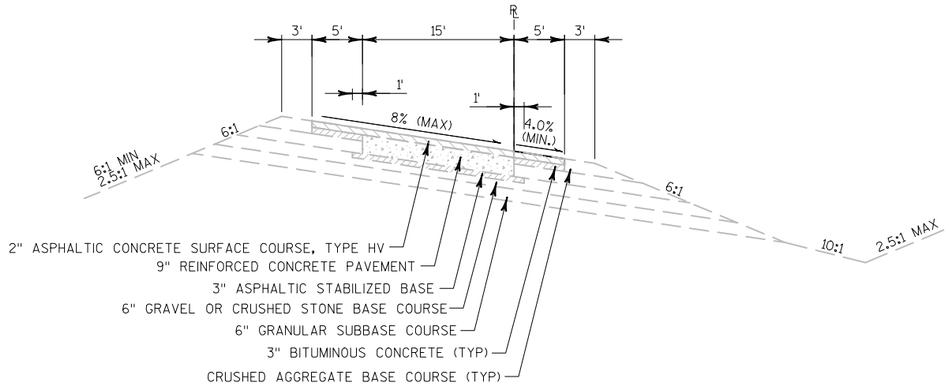
* - ASPHALTIC OVERLAY AT STRUCTURE APPROACHES (THICKNESS VARIES 0"-3") AND 100 & 120 FEET IN LENGTH.



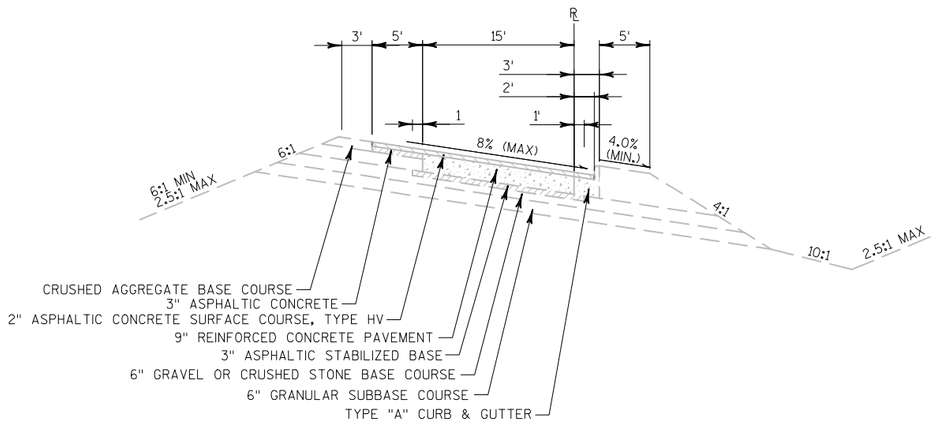
TYPICAL EXISTING SECTION
CTH NN

STA 59+55 TO STA 70+50

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	PLAN: TYPICAL SECTIONS	SHEET 5	E

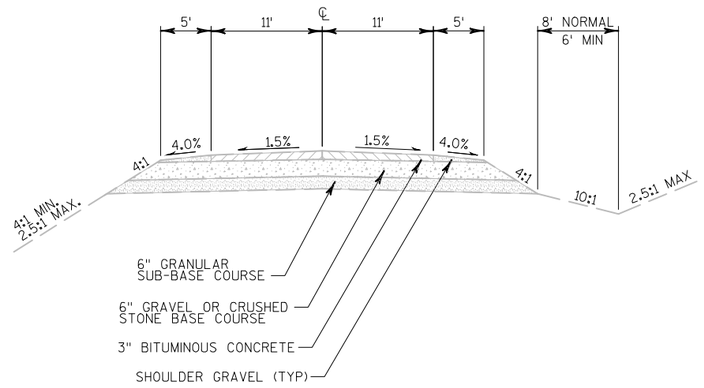


TYPICAL EXISTING SUPERELEVATED ONE-WAY RAMP SECTION (WITHOUT BARRIER CURB)

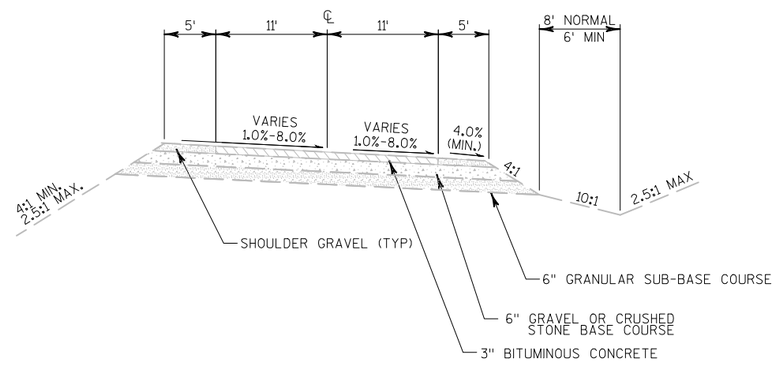


TYPICAL EXISTING SUPERELEVATED ONE-WAY RAMP SECTION (WITH BARRIER CURB)

PROJECT NO: 1080-13-70	HWY: C.TH NN	COUNTY: WALWORTH	PLAN: TYPICAL SECTIONS	SHEET 6	E

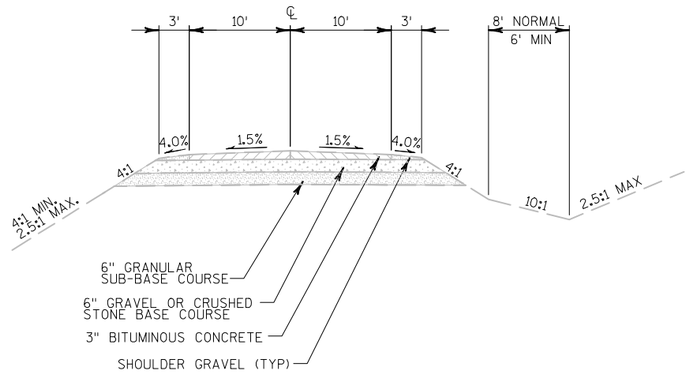


TYPICAL EXISTING SECTION BRAY ROAD

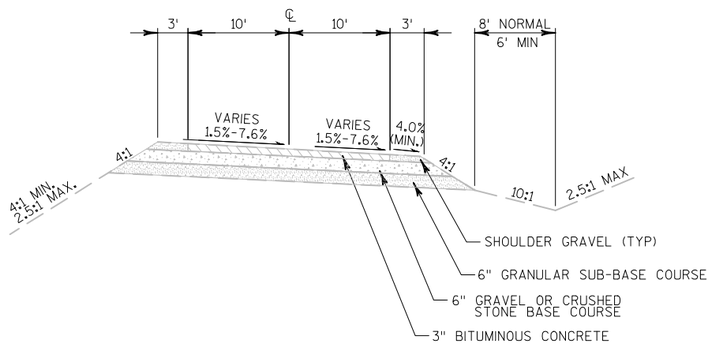


TYPICAL EXISTING SUPERELEVATED SECTION BRAY ROAD

PROJECT NO: 1080-13-70	HWY: C.TH NN	COUNTY: WALWORTH	PLAN: TYPICAL SECTIONS	SHEET 7	E

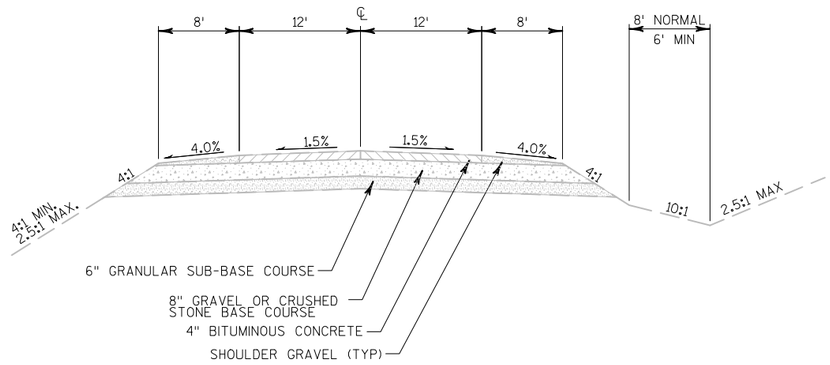


TYPICAL EXISTING SECTION STUART DRIVE

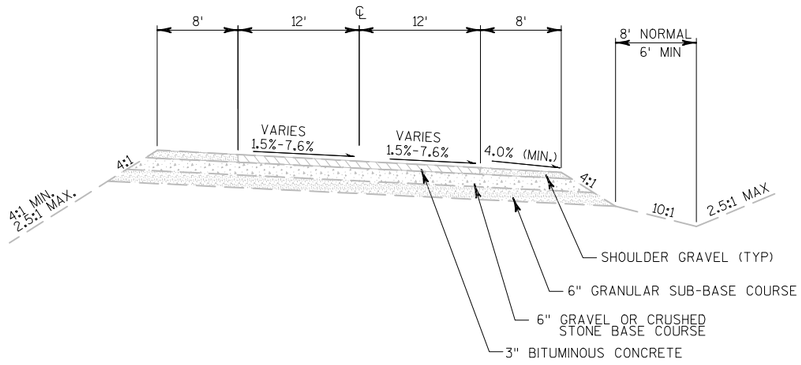


TYPICAL EXISTING SUPERELEVATED SECTION STUART DRIVE

PROJECT NO: 1080-13-70	HWY: C.TH NN	COUNTY: WALWORTH	PLAN: TYPICAL SECTIONS	SHEET 8	E

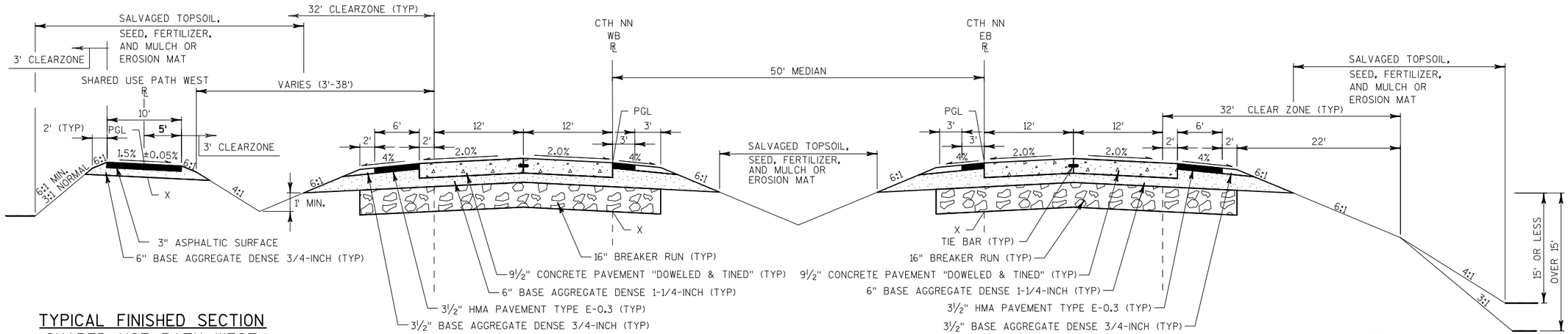


TYPICAL EXISTING SECTION CTH H

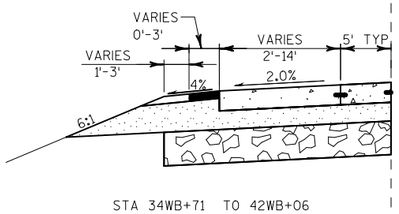


TYPICAL EXISTING SUPERELEVATED SECTION CTH H

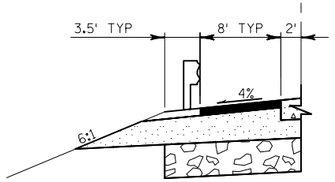
PROJECT NO: 1080-13-70	HWY: C.TH NN	COUNTY: WALWORTH	PLAN: TYPICAL SECTIONS	SHEET 9	E



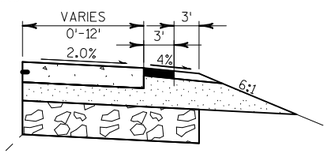
TYPICAL FINISHED SECTION
SHARED USE PATH WEST
STA 31PW+50 TO 47PW+25



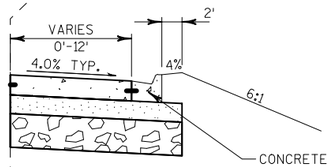
STA 34WB+71 TO 42WB+06
STA 55WB+79 TO 64WB+13



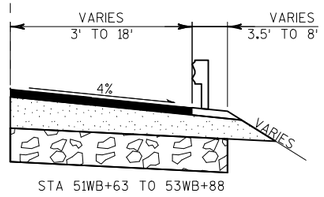
STA 45WB+95 TO 47WB+27
STA 51WB+07 TO 54WB+12



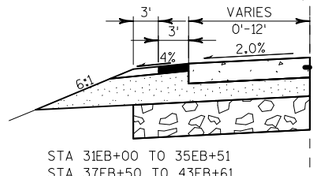
STA 37WB+14 TO 42WB+14



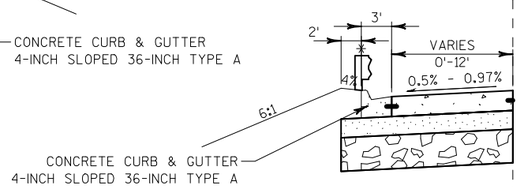
STA 35WB+00 TO 37WB+14
STA 43WB+07 TO 47WB+29
STA 56WB+53 TO 57WB+18



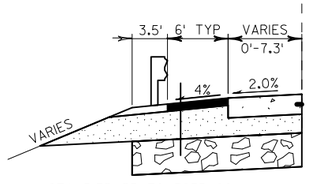
STA 51WB+63 TO 53WB+88



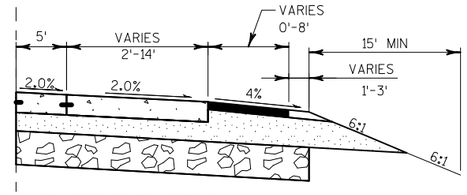
STA 31EB+00 TO 35EB+51
STA 37EB+50 TO 43EB+61
STA 52EB+90 TO 56EB+98



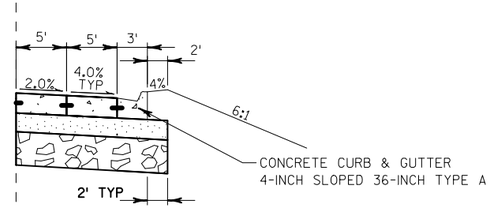
STA 35EB+51 TO 37EB+50
STA 43EB+61 TO 47EB+66
* STA 45EB+28 TO 47EB+66
STA 56EB+98 TO 57EB+97



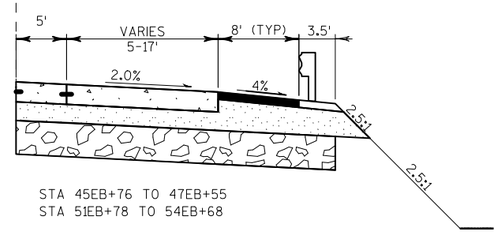
STA 51EB+53 TO 52EB+90



STA 31EB+22 TO 40EB+71
STA 44EB+29 TO 44EB+94
STA 57EB+51 TO 57EB+97



STA 44EB+94 TO 45EB+76



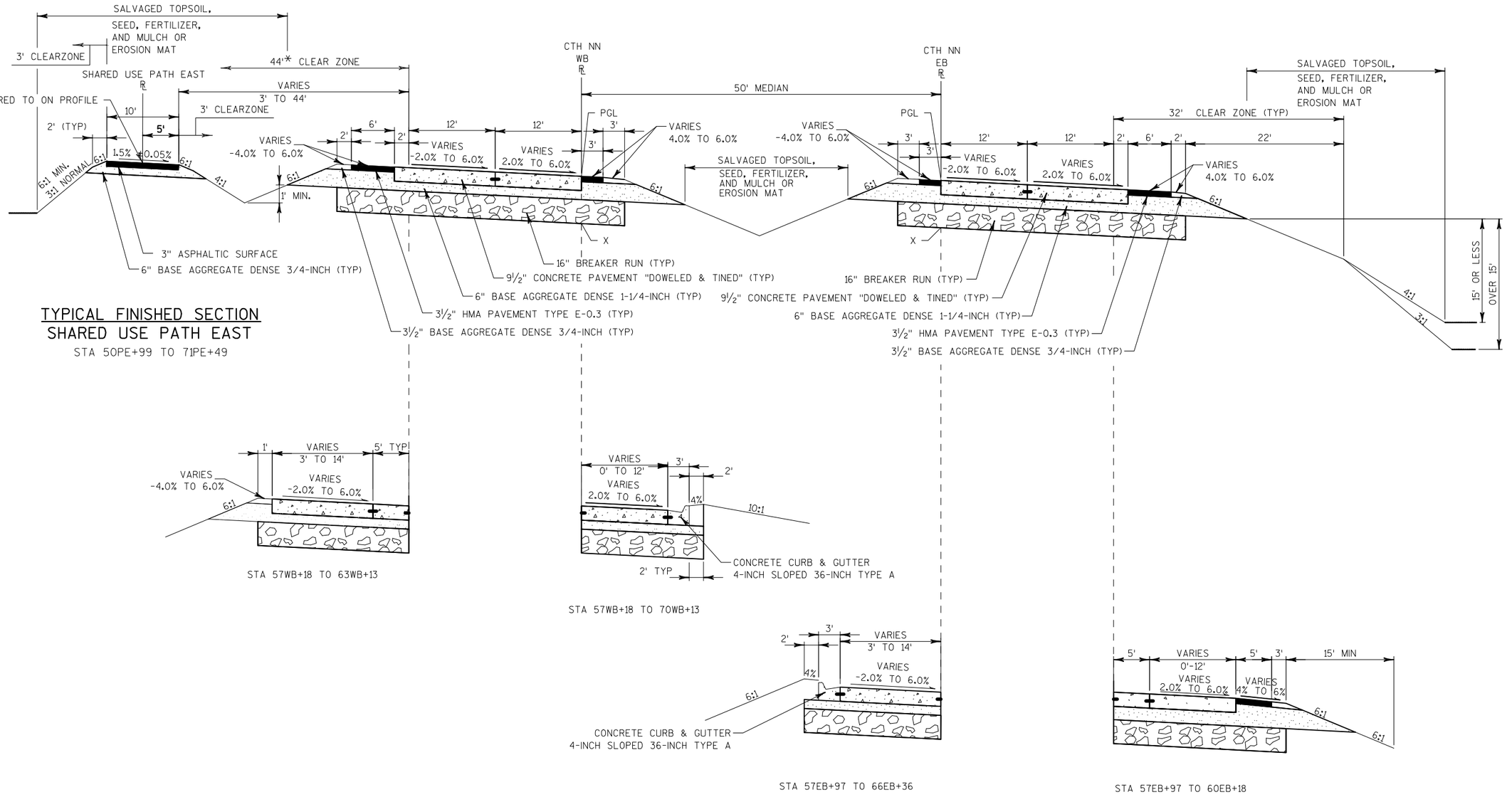
STA 45EB+76 TO 47EB+55
STA 51EB+78 TO 54EB+68

PGL = POINT REFERRED TO ON PROFILE

X = POINT REFERRED TO ON CROSS SECTIONS

TYPICAL FINISHED SECTION
CTH NN WB
STA 30WB+51 TO 57WB+18

TYPICAL FINISHED SECTION
CTH NN EB
STA 30EB+00 TO 57EB+97



STA 57WB+18 TO 63WB+13

STA 57WB+18 TO 70WB+13

STA 57EB+97 TO 66EB+36

STA 57EB+97 TO 60EB+18

TYPICAL FINISHED SECTION
SHARED USE PATH EAST
STA 50PE+99 TO 71PE+49

TYPICAL FINISHED SECTION
CTH NN WB
STA 57WB+18 TO STA 71WB+91

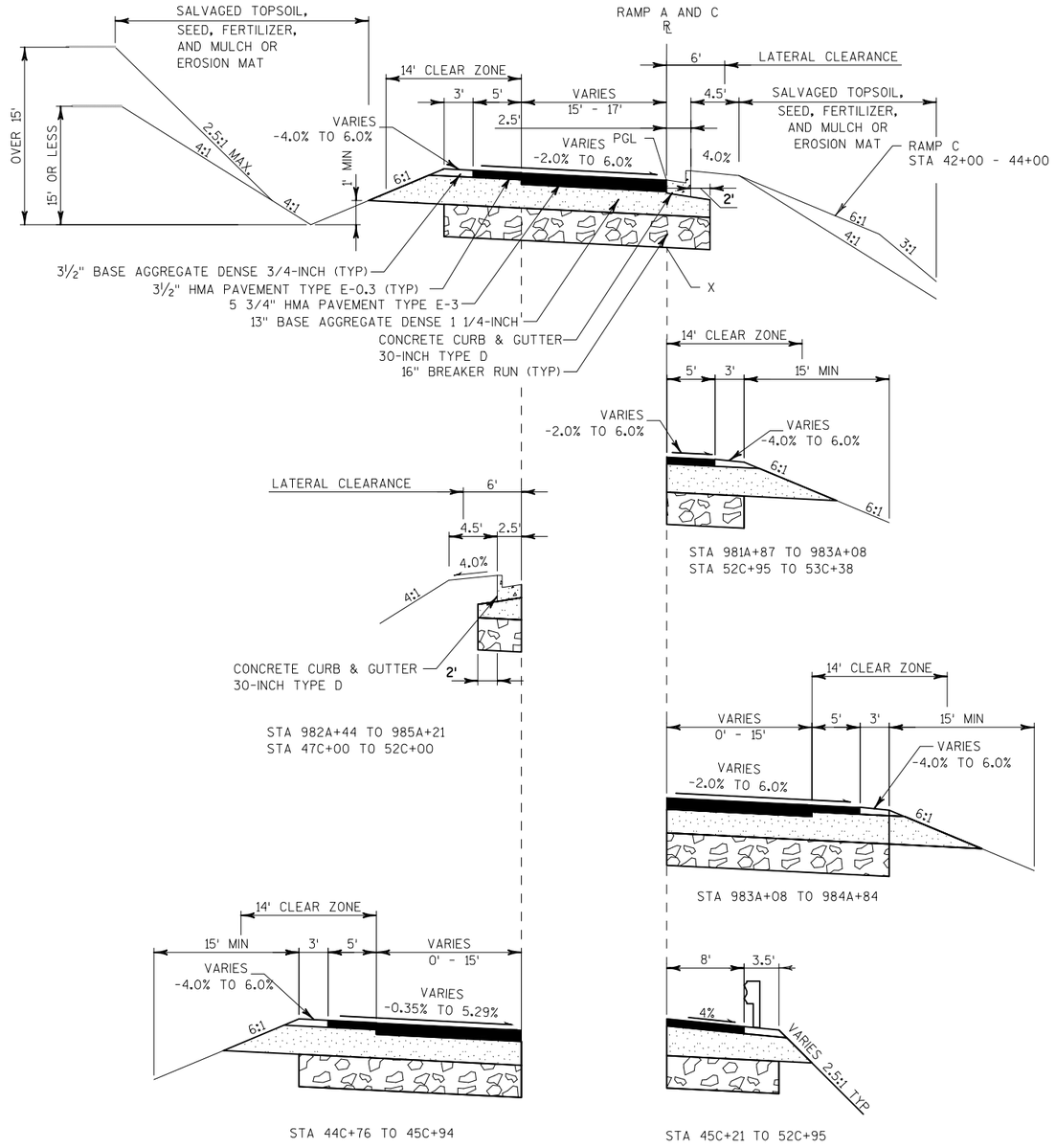
TYPICAL FINISHED SECTION
CTH NN EB
STA 57EB+97 TO STA 70EB+00

* - CLEAR ZONE OF 32' INCREASED BY A FACTOR OF 1.4 PER FDM RESULTING IN A DISTANCE OF 44 FEET DUE TO BEING ON OUTSIDE OF HORIZONTAL CURVE.

PGL = POINT REFERRED TO ON PROFILE

X = POINT REFERRED TO ON CROSS SECTIONS

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	PLAN: TYPICAL SECTIONS	SHEET 11	E



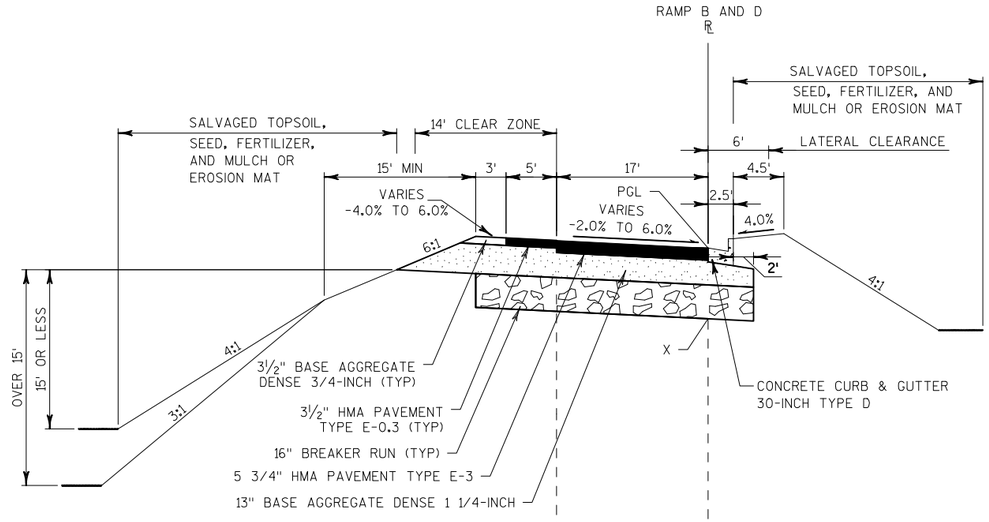
PGL = POINT REFERRED TO ON PROFILE

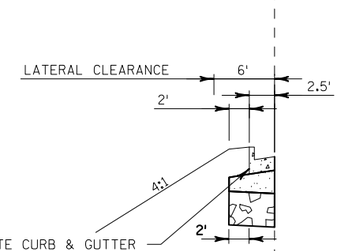
X = POINT REFERRED TO ON CROSS SECTIONS

TYPICAL FINISHED SECTION
RAMP A & C

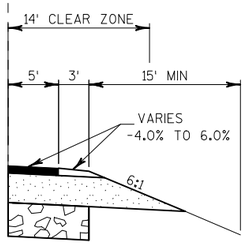
STA 978A+13 TO 986A+83
STA 40C+71 TO 56C+81

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	PLAN: TYPICAL SECTIONS	SHEET 12	E

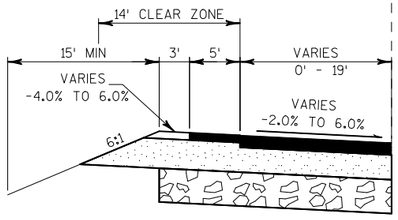




STA 29D+13 TO 30D+52



STA 54B+67 TO 54B+84
STA 63B+66 TO 65B+19
STA 29D+09 TO 30D+89

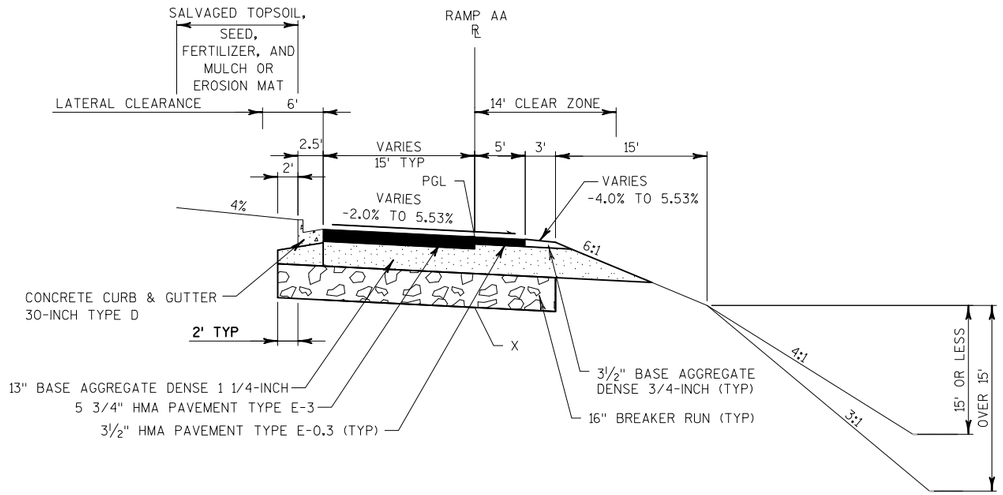


STA 58B+43 TO 61B+091
STA 28D+08 TO 28D+86

PGL = POINT REFERRED TO ON PROFILE

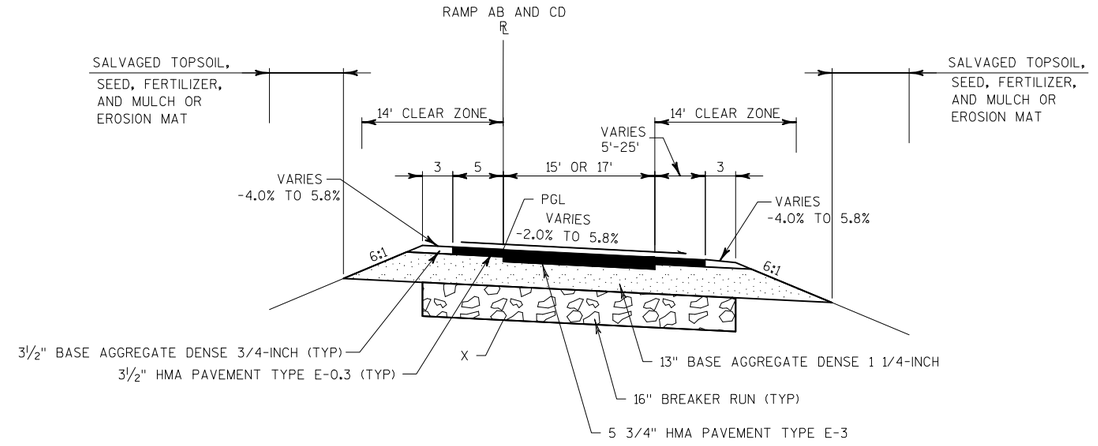
X = POINT REFERRED TO ON CROSS SECTIONS

TYPICAL FINISHED SECTION
RAMP B & D
STA 54B+67 TO 65B+19
STA 19D+57 TO 30D+89



TYPICAL FINISHED SECTION
RAMP AA

STA 984AA+92 TO 987AA+04



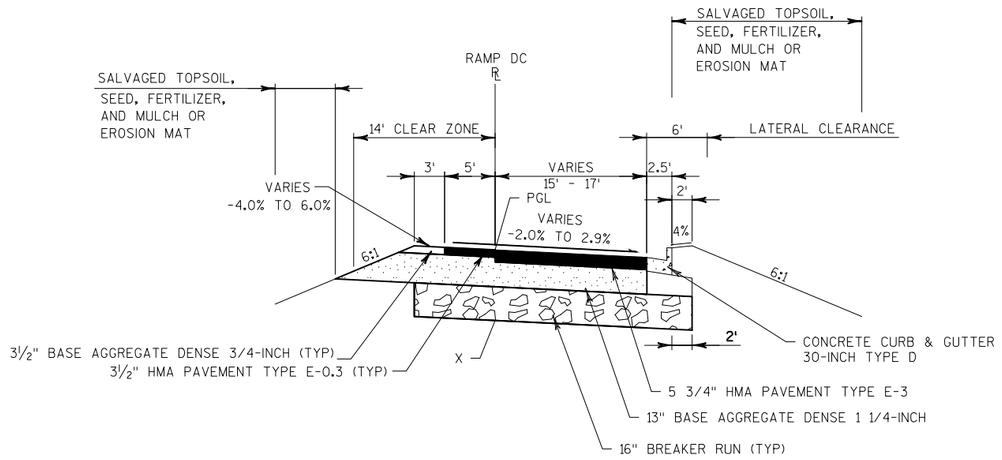
TYPICAL FINISHED SECTION
RAMP AB & CD

STA 56AB+12 TO 58AB+43
STA 42CD+82 TO 44CD+73

PGL = POINT REFERRED TO ON PROFILE

X = POINT REFERRED TO ON CROSS SECTIONS

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	PLAN: TYPICAL SECTIONS	SHEET 14	E



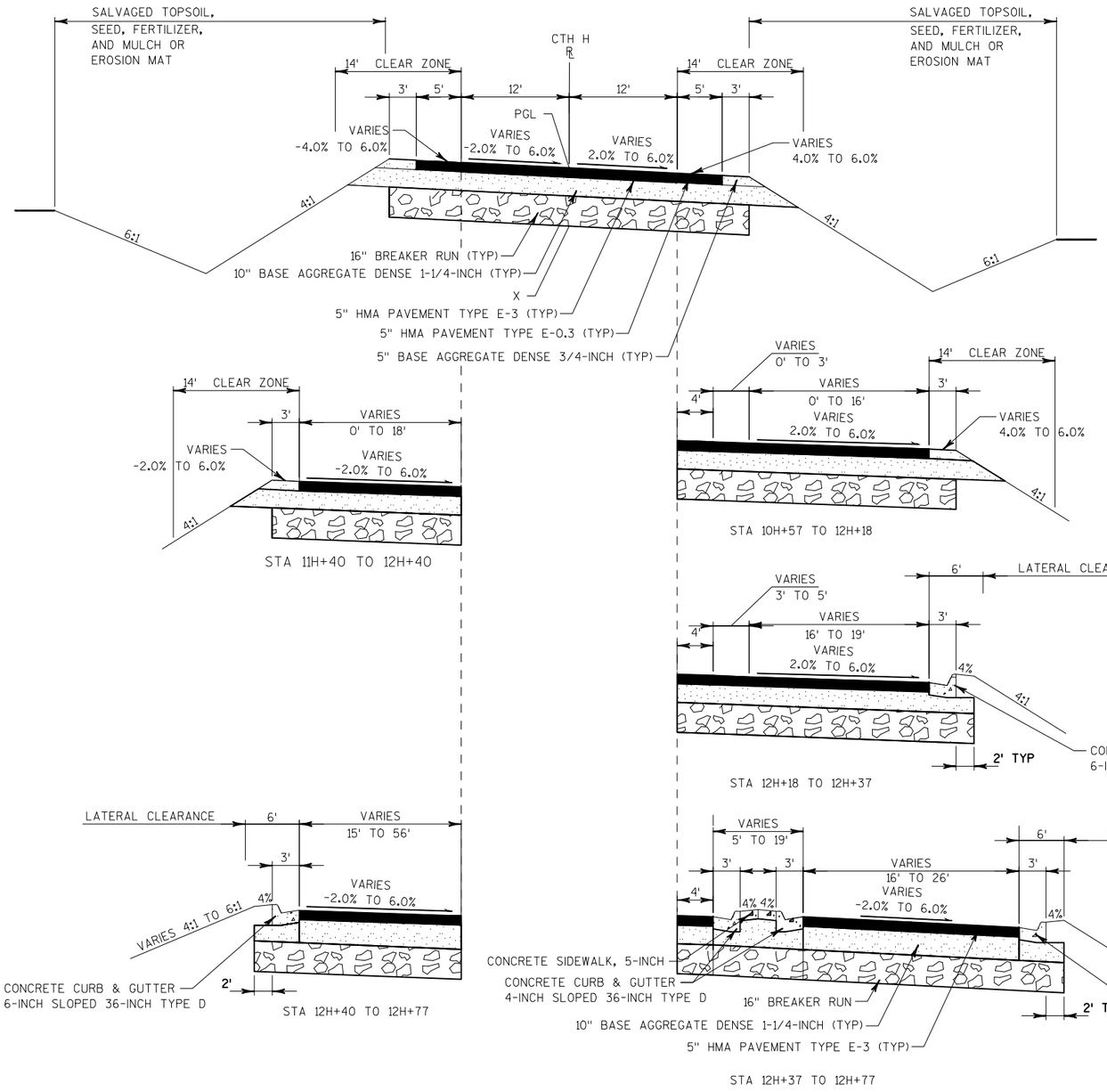
TYPICAL FINISHED SECTION
RAMP DC

STA 28DC+86 TO 30DC+74

PGL = POINT REFERRED TO ON PROFILE

X = POINT REFERRED TO ON CROSS SECTIONS

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	PLAN: TYPICAL SECTIONS	SHEET 15	E



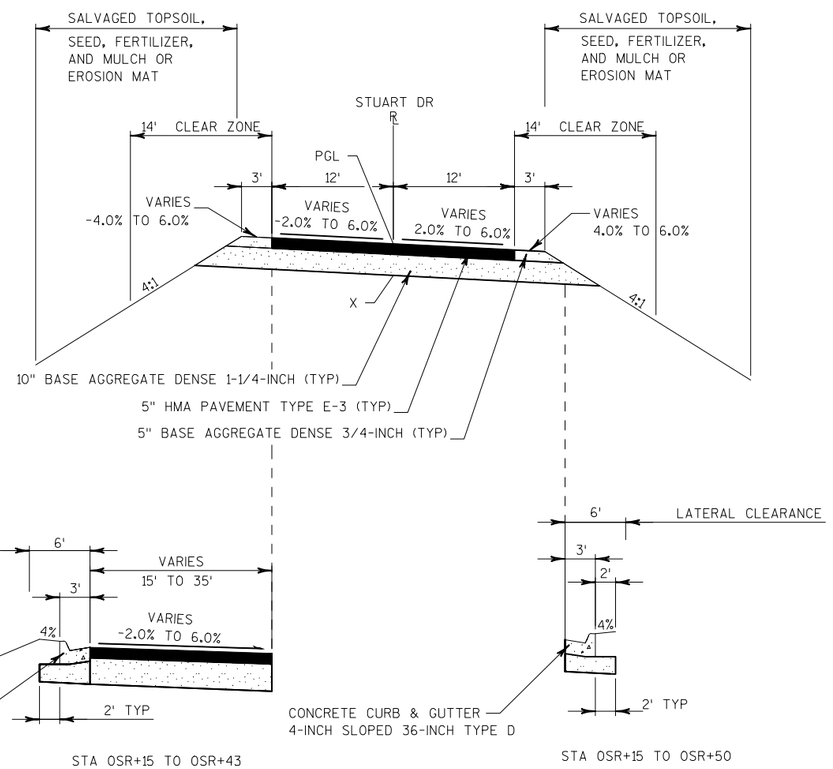
PGL = POINT REFERRED TO ON PROFILE

X = POINT REFERRED TO ON CROSS SECTIONS

TYPICAL FINISHED SECTION
CTH H

STA 9H+09 TO 12H+77

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	PLAN: TYPICAL SECTIONS	SHEET 16	E



TYPICAL FINISHED SECTION
STUART DRIVE

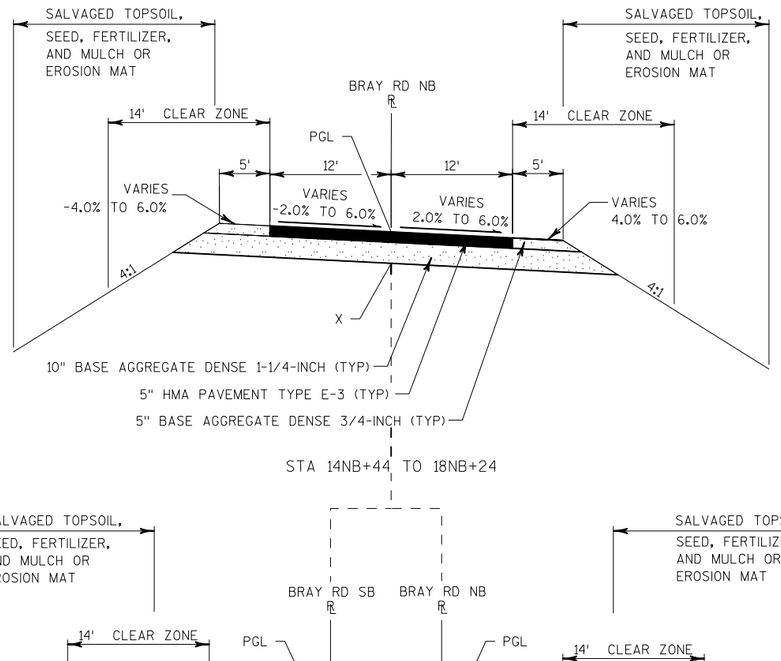
STA 0SR+10 TO 3SR+16

PGL = POINT REFERRED TO ON PROFILE

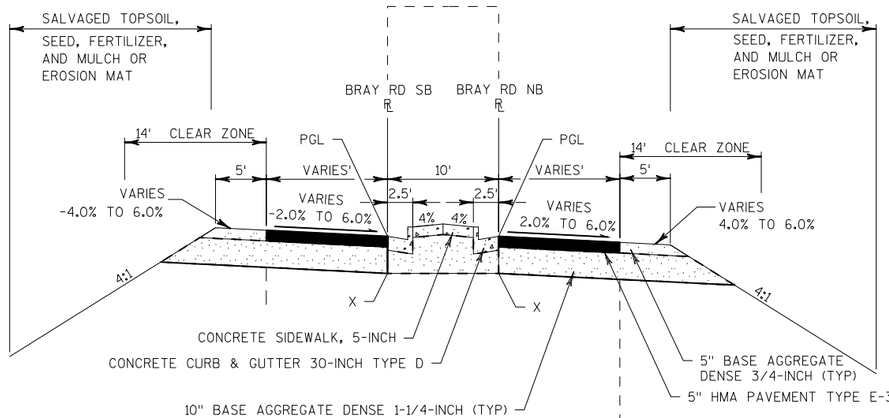
X = POINT REFERRED TO ON CROSS SECTIONS

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	PLAN: TYPICAL SECTIONS	SHEET 17	E

FILE NAME : J:±ACTIVE±SE±1080-13-00_USH12-CTH NN±C3D±10801200±SHEETSPLAN±1080-13-70±020301_TS.DWG PLOT DATE : 3/7/2014 12:03:54 PM PLOT BY : JEANNA.SCHWINN PLOT NAME : PLOT SCALE : 1 IN: 15 FT WISDOT/CADDS SHEET 42

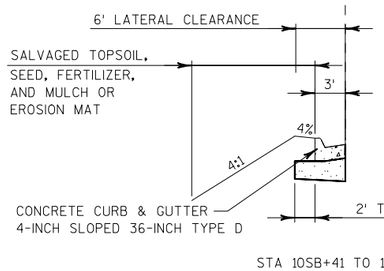


STA 14NB+44 TO 18NB+24

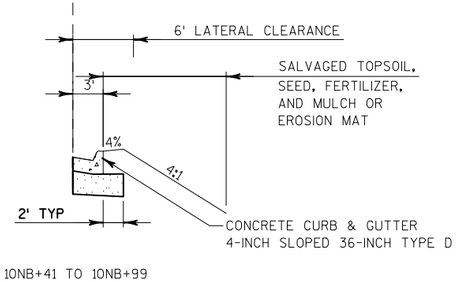


STA 10SB+41 TO 14SB+45

STA 10NB+41 TO 14NB+44



STA 10SB+41 TO 10SB+93



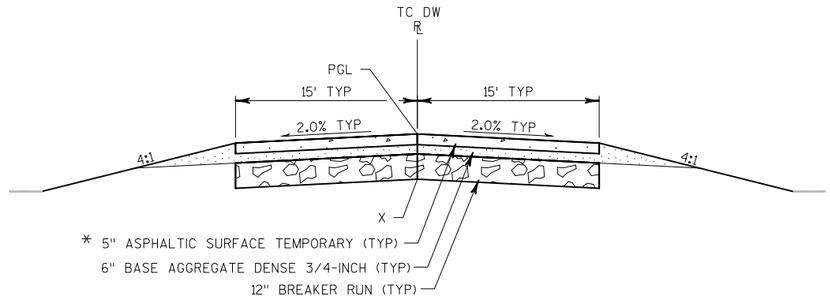
STA 10NB+41 TO 10NB+99

PGL = POINT REFERRED TO ON PROFILE

X = POINT REFERRED TO ON CROSS SECTIONS

TYPICAL FINISHED SECTION
BRAY RD
STA 10NB+41 TO 18NB+24

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	PLAN: TYPICAL SECTIONS	SHEET 18	E



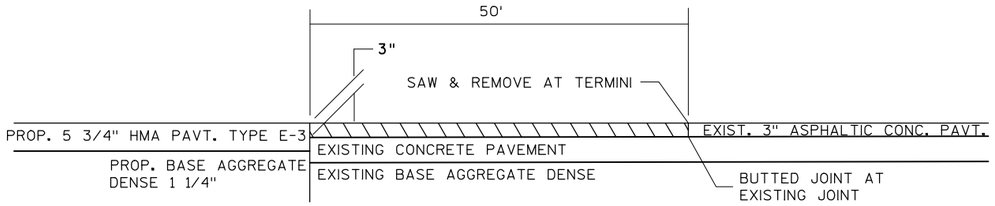
TYPICAL SECTION
TEMPORARY DRIVEWAY

STA 0+12 TO 2+84
*NO ASPHALT
STA 1+52 TO 2+84

PGL = POINT REFERRED TO ON PROFILE

X = POINT REFERRED TO ON CROSS SECTIONS

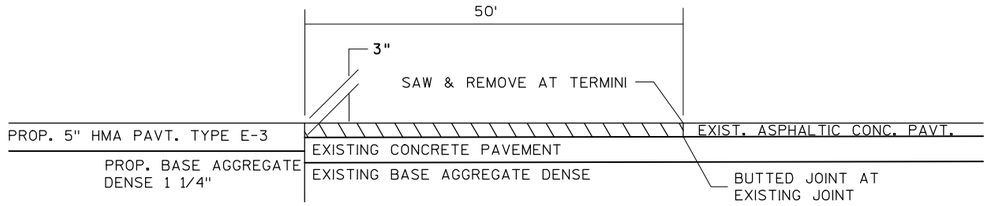
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	PLAN: TYPICAL SECTIONS	SHEET 19	E



REMOVING ASPHALTIC SURFACE BUTT JOINTS

RAMP A STA 977+63.20 TO 978+13.20
RAMP B STA 64+68.75 TO 65+18.75
RAMP C STA 56+80.70 TO 57+30.70
RAMP D STA 19+06.74 TO 19+56.74

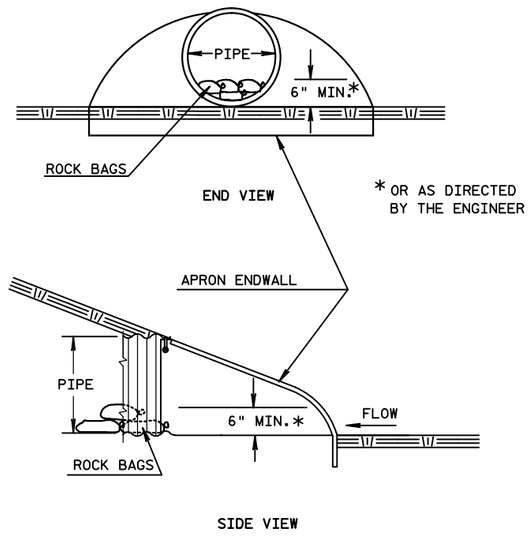
OVERLAP JOINT, BUTTED DETAIL



REMOVING ASPHALTIC SURFACE BUTT JOINTS

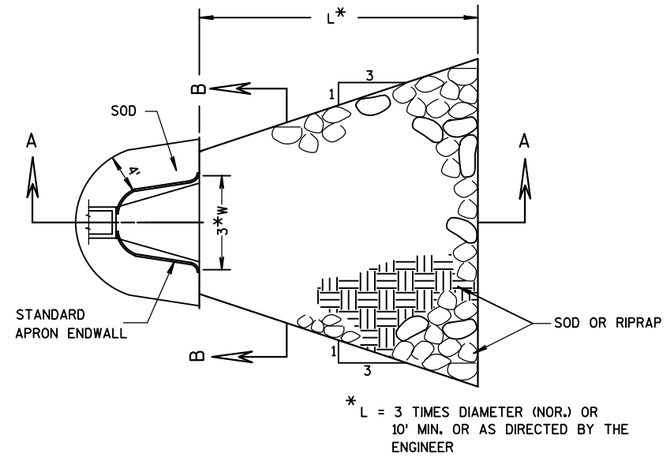
CTH H STA 8+59.29 TO 9+09.29
BRAY RD STA 3+18.43 TO 3+68.43

OVERLAP JOINT, BUTTED DETAIL

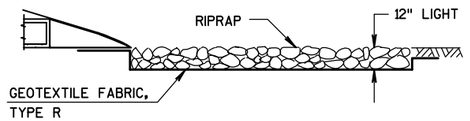


ESTIMATED BAG SIZE = 24" X 12" X 6"	
PIPE SIZE	ESTIMATED NO. OF BAGS
18"	2
24"	3
30"	5
48"	10
54"	10
60"	13
72"	16

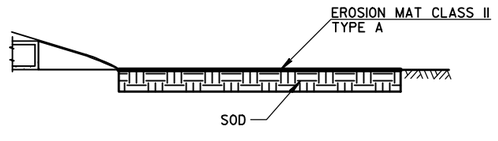
CULVERT PIPE DITCH CHECK



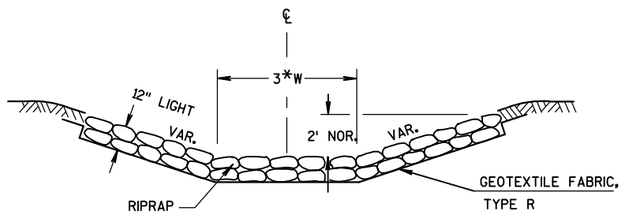
*L = 3 TIMES DIAMETER (NOR.) OR 10' MIN. OR AS DIRECTED BY THE ENGINEER



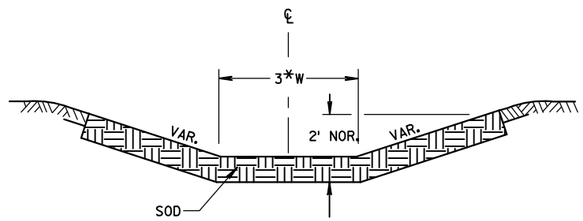
SECTION A-A



SECTION A-A



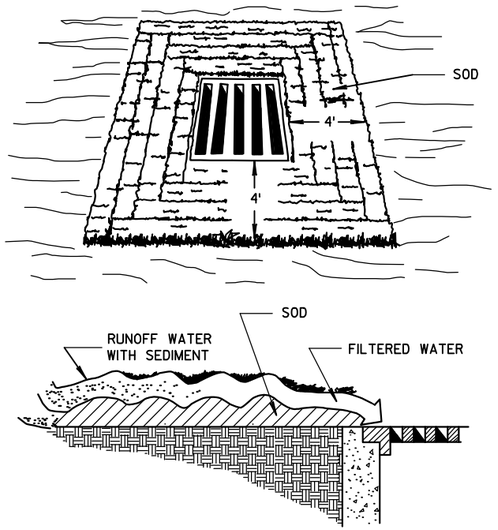
SECTION B-B



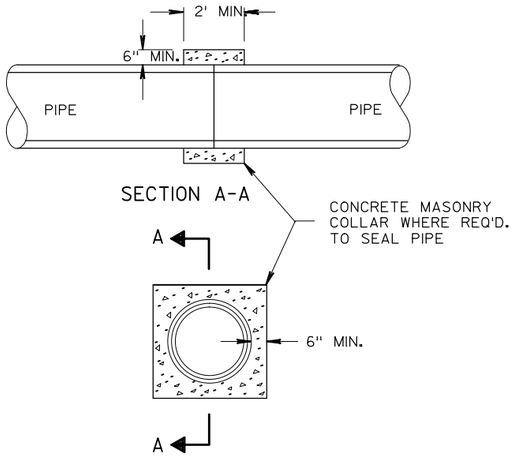
SECTION B-B

SOD OR RIPRAP LENGTH	
DIAMETER	LENGTH, L (FT)
15"	5
18"	6
24"	10
30"	15
36"	15
48"	20

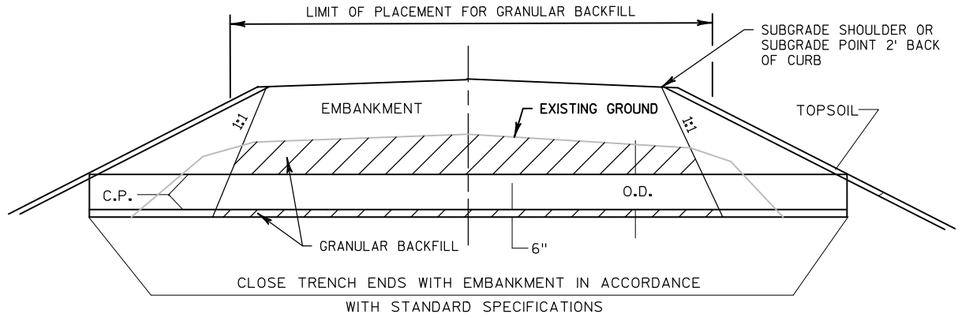
SOD REINFORCED WITH EROSION MAT CLASS II TYPE A, RIPRAP AND GEOTEXTILE FABRIC DETAIL AT APRON ENDWALLS



SOD INLET SEDIMENT FILTER

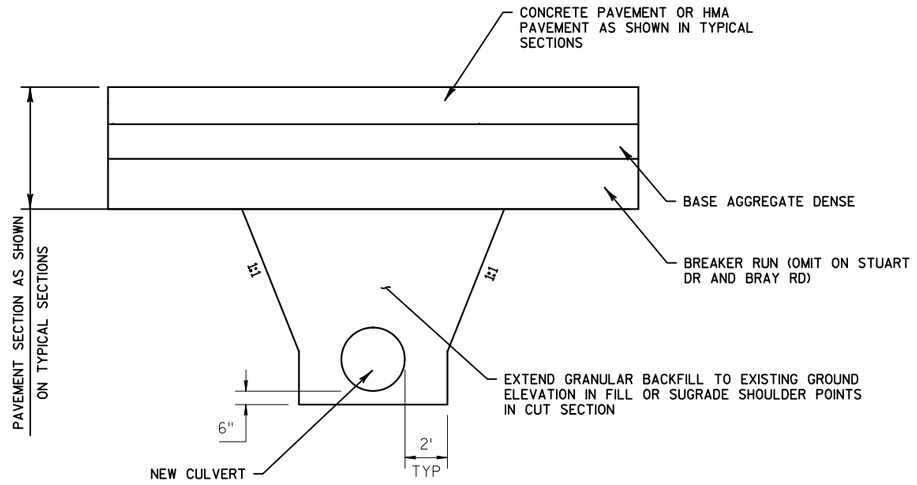


CONCRETE COLLAR DETAIL



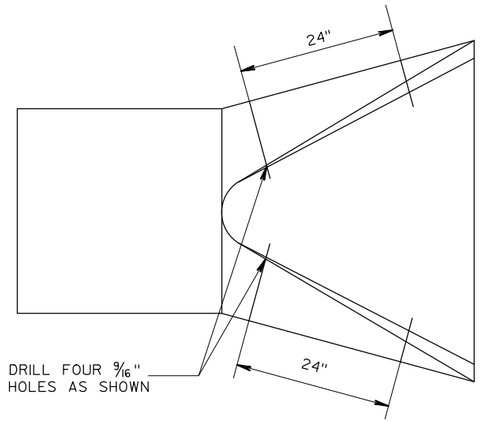
CULVERT BACKFILL DETAIL

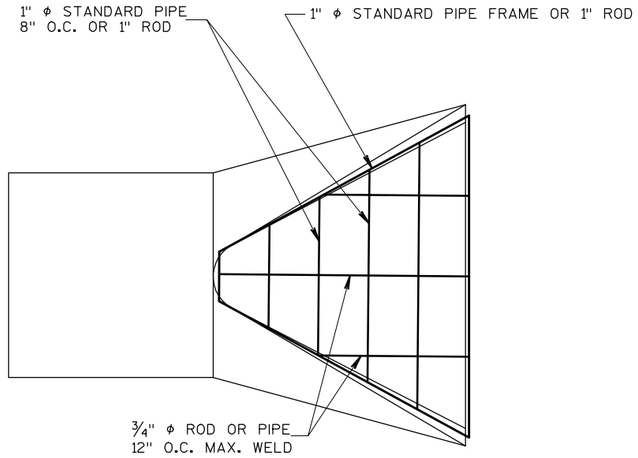
-SEE MISCELLANEOUS QUANTITIES FOR PIPES REQUIRING GRANULAR BACKFILL.
-GRANULAR BACKFILL SHALL EXTEND TO SUBGRADE SHOULDER POINTS WHEN LOCATED IN CUT SECTION.



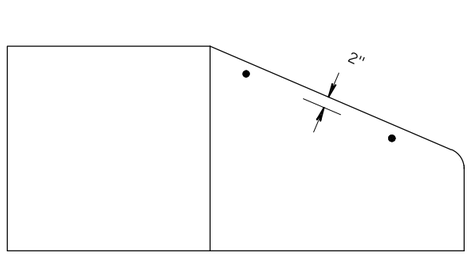
DETAIL FOR CULVERT REPLACEMENT

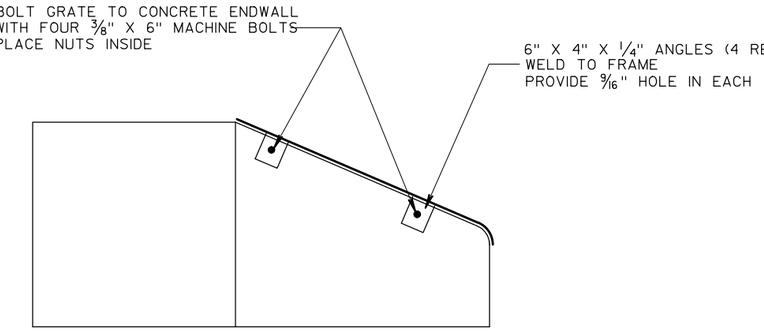
2

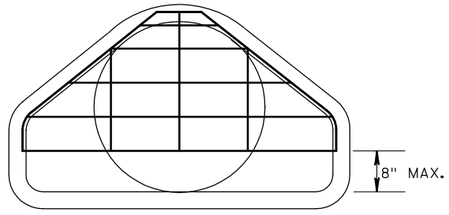




AT EACH PIPE

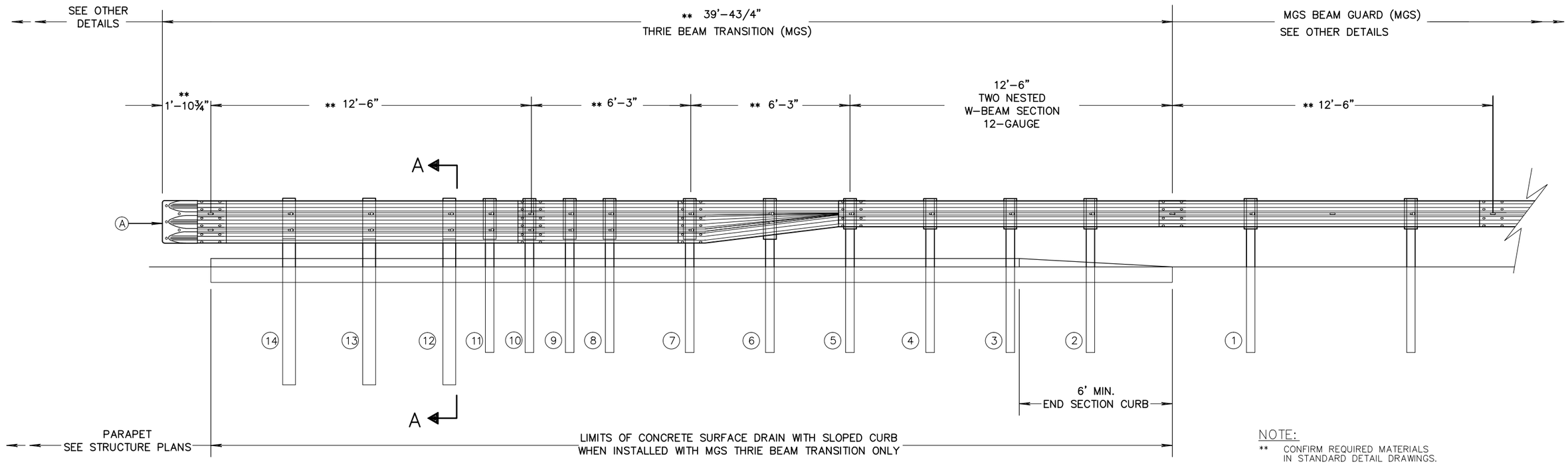






PIPE GRATE DETAIL

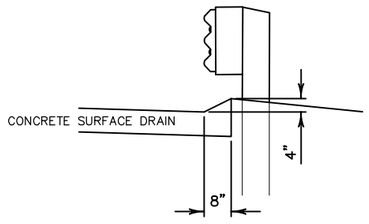
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CONSTRUCTION DETAILS	SHEET 23	E



NOTE:
** CONFIRM REQUIRED MATERIALS IN STANDARD DETAIL DRAWINGS.

MODIFIED MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)

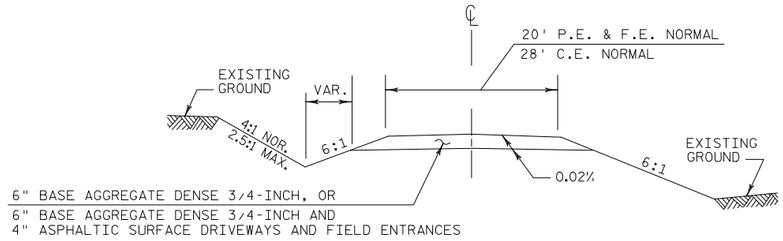
STA 47EB+31 TO 47EB+68 EB INSIDE
STA 47EB+55 TO 47EB+93 OUTSIDE
STA 47WB+08 TO 47WB+27 OUTSIDE



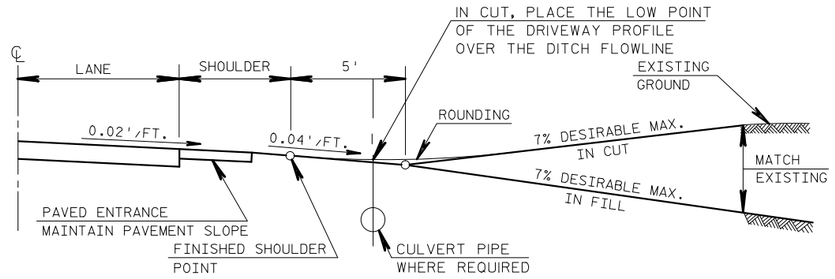
SECTION A-A

SLOPED CURB SECTION DETAIL
FOR CONCRETE SURFACE DRAINS
WITH MGS THRIE BEAM TRANSITION

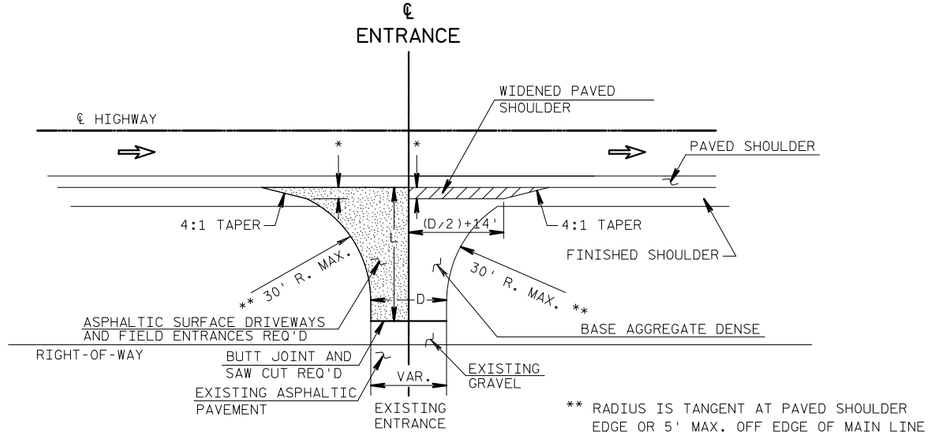
STA 47EB+31 TO 47EB+68 INSIDE
STA 47EB+55 TO 47EB+93 OUTSIDE
STA 47WB+08 TO 47WB+27 OUTSIDE



TYPICAL CROSS SECTION



PROFILE VIEW



L=VARIABLE, EXACT LENGTH TO BE DETERMINED IN THE FIELD BY THE ENGINEER. BLEND BACK ON THE ENTRANCE FAR ENOUGH TO GET A SMOOTH PROFILE.

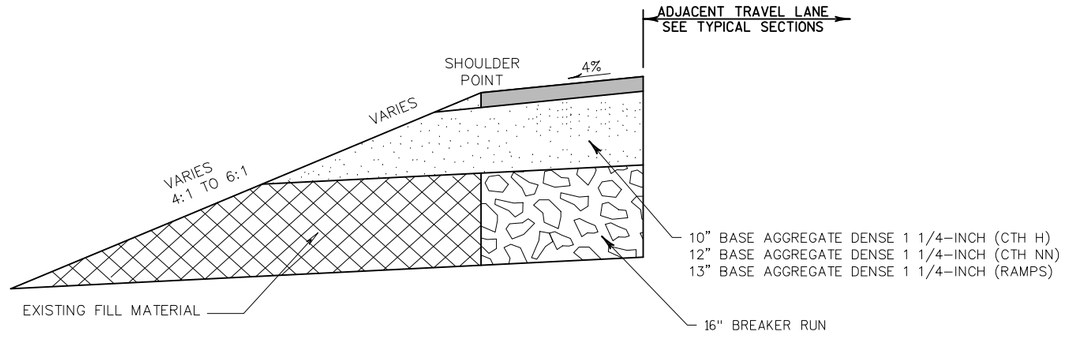
D=DRIVEWAY WIDTH
D=20'TYP.(PE's & FE's) (16'MIN.-24'MAX.)
D=28'TYP.(CE's & FARM ENT.) (24'MIN.-35'MAX.)

** RADIUS IS TANGENT AT PAVED SHOULDER EDGE OR 5' MAX. OFF EDGE OF MAIN LINE PAVEMENT WHICH EVER IS LESS.

* 3' MIN OR TO FINISHED SHOULDER WHICH EVER IS GREATER.

PLAN VIEW

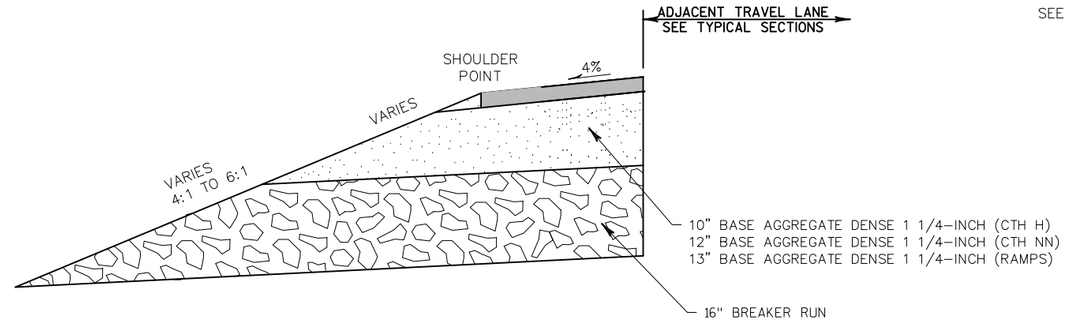
RURAL DRIVEWAY INTERSECTION DETAIL
(PE's, FE's & CE'S)



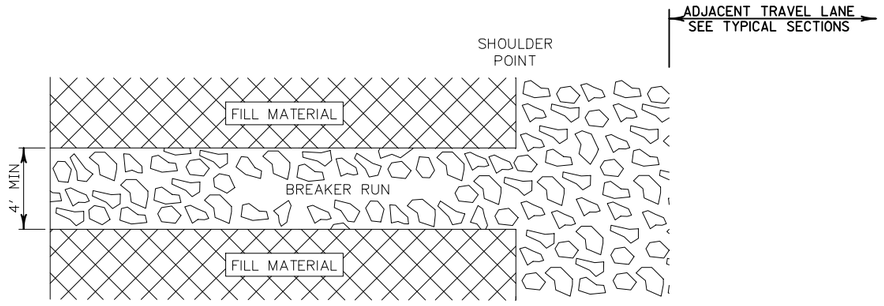
TYPICAL HALF SECTION WITHOUT RELIEF TRENCH

RELIEF TRENCH LOCATIONS

SEE SUBGRADE DRAINAGE PLAN FOR LOCATIONS AND PIPE UNDERDRAIN LOCATIONS



TYPICAL HALF SECTION WITH RELIEF TRENCH

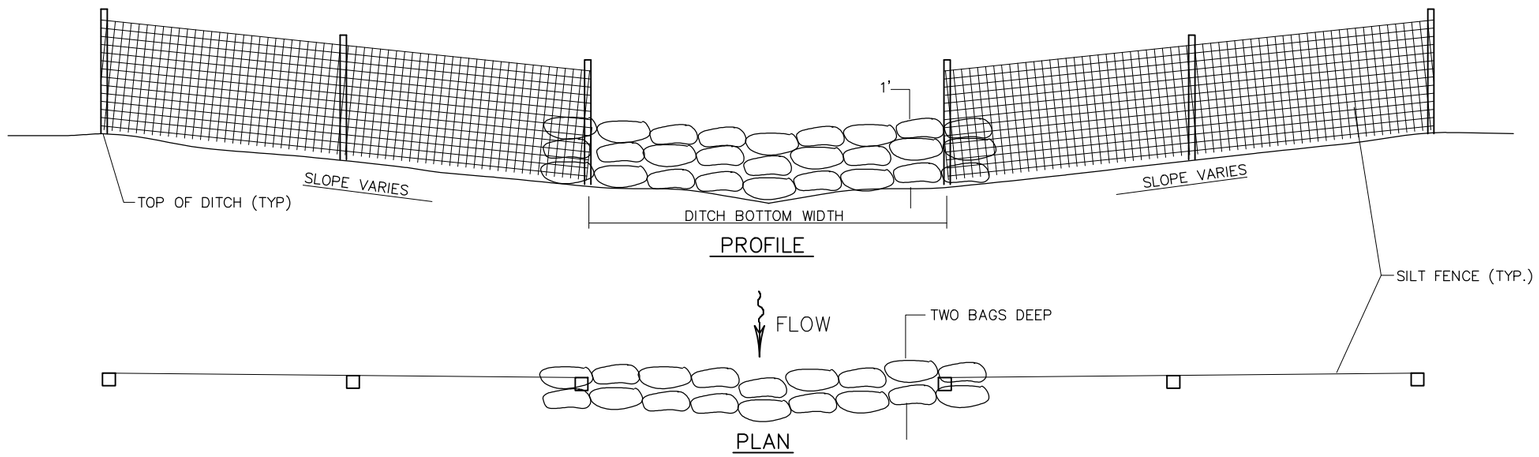


RELIEF TRENCH PLAN VIEW

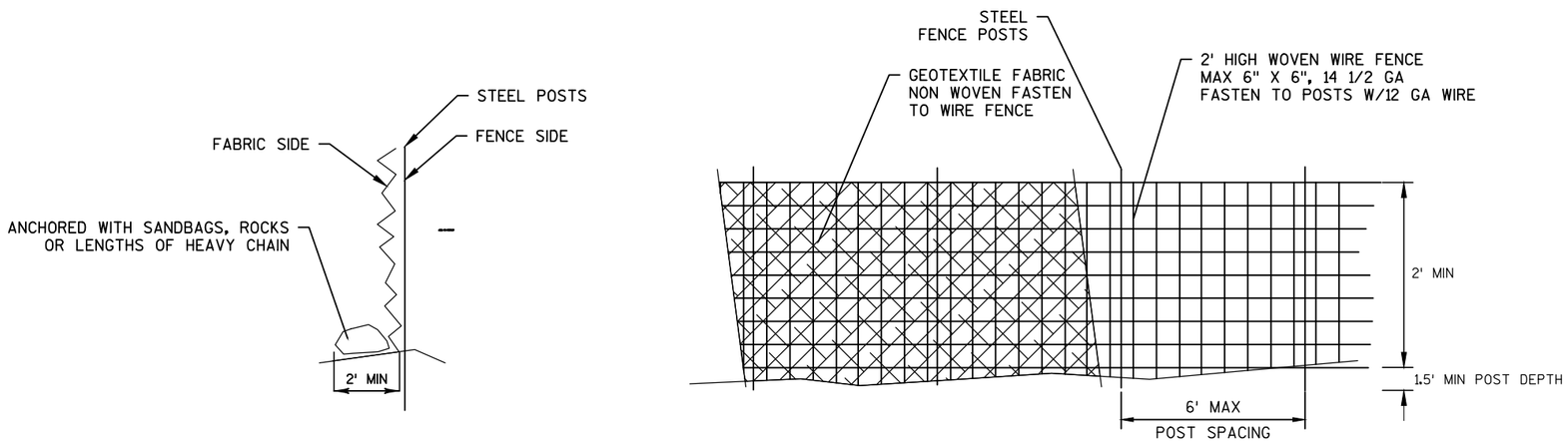
RELIEF TRENCH

NOTE: EXCAVATION FOR RELIEF TRENCHES TO BE PAID UNDER THE ITEM EXCAVATION COMMON

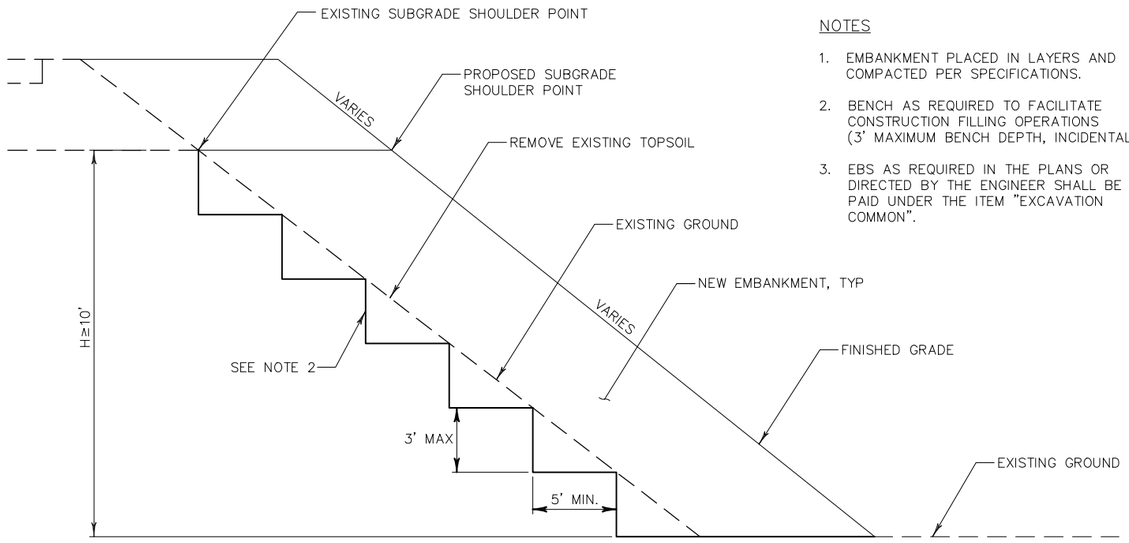
2



ROCK BAGS – SILT FENCE RELIEF



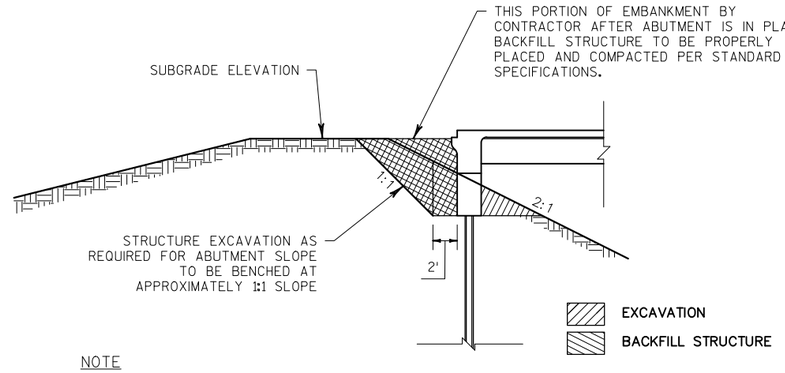
SILT FENCE HEAVY DUTY



NOTES

1. EMBANKMENT PLACED IN LAYERS AND COMPACTED PER SPECIFICATIONS.
2. BENCH AS REQUIRED TO FACILITATE CONSTRUCTION FILLING OPERATIONS (3' MAXIMUM BENCH DEPTH, INCIDENTAL).
3. EBS AS REQUIRED IN THE PLANS OR DIRECTED BY THE ENGINEER SHALL BE PAID UNDER THE ITEM "EXCAVATION COMMON".

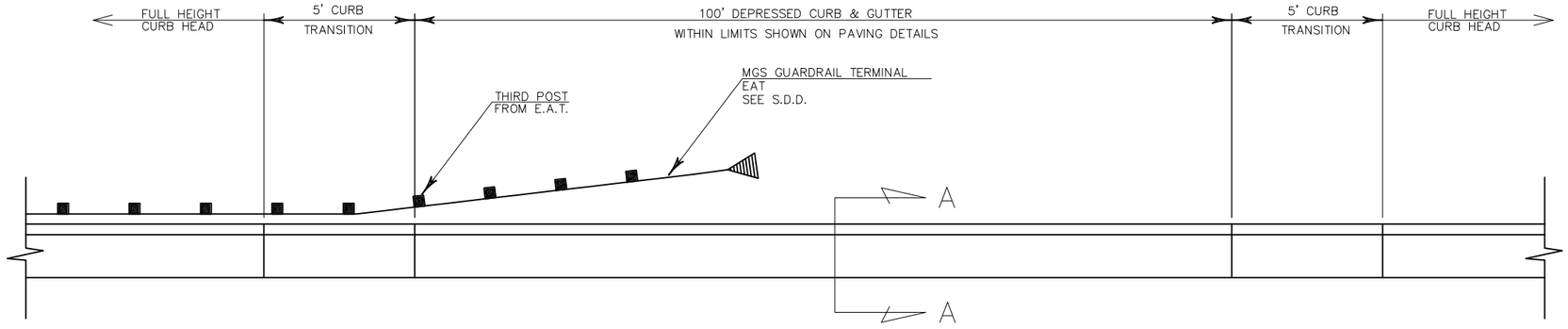
STEPPED EMBANKMENT

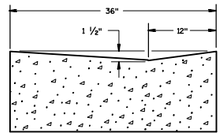


NOTE

THE EMBANKMENT CONFIGURATION SHOWN IS THE MINIMUM EMBANKMENT THAT MUST BE CONSTRUCTED PRIOR TO CONSTRUCTION OF THE ABUTMENTS.

EMBANKMENT CONSTRUCTION & BACKFILL STRUCTURE DETAIL



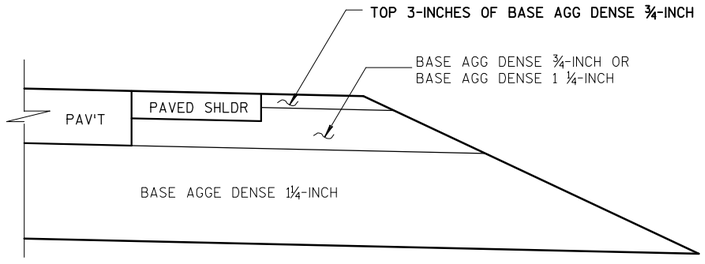


SECTION A-A
DEPRESSED CURB

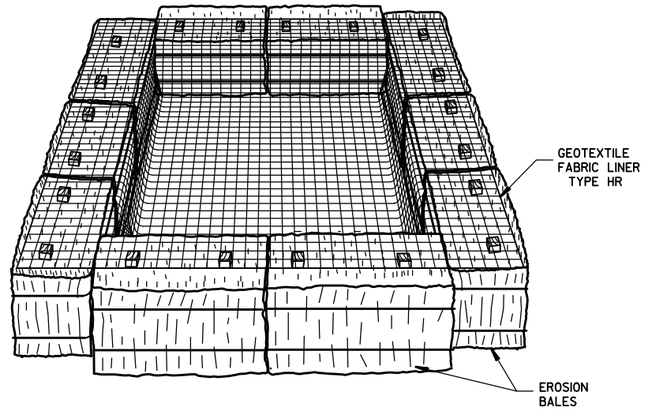
PAID FOR AS 36" CONCRETE CURB AND GUTTER TYPE A

DEPRESSED CURB HEAD AT MGS GUARDRAIL TERMINAL

STA 44EB+87 TO STA 45EB+40



BASE AGG DENSE 1 1/4-INCH REQUIRED



TEMPORARY SETTLING BASIN

(SIZE TO BE DETERMINED IN FIELD AS INDICATED BELOW:)

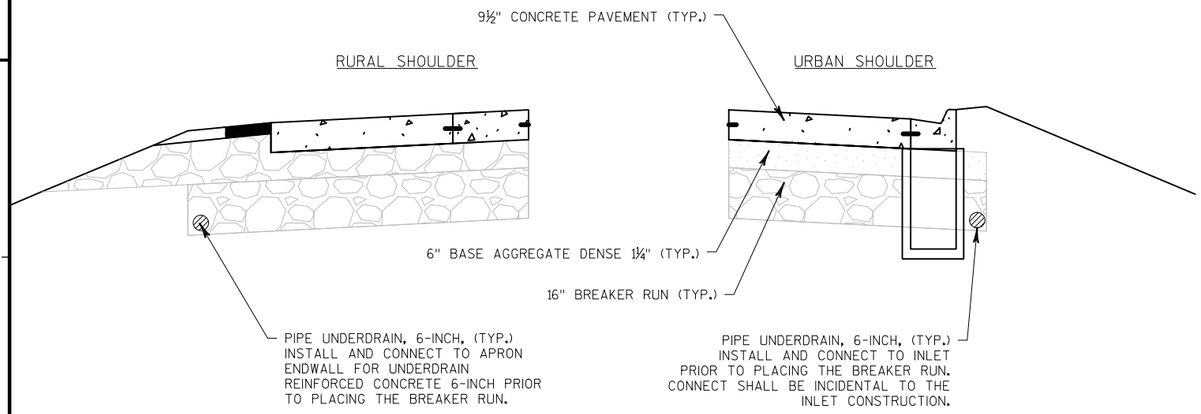
STORAGE VOLUME (C.F.) = 16 X GPM (PUMP RATE)

EXAMPLE:
CONTRACTOR INDICATES PUMP CAPABLE OF 50 GPM
HEIGHT OF BALES = 1.5 FT.

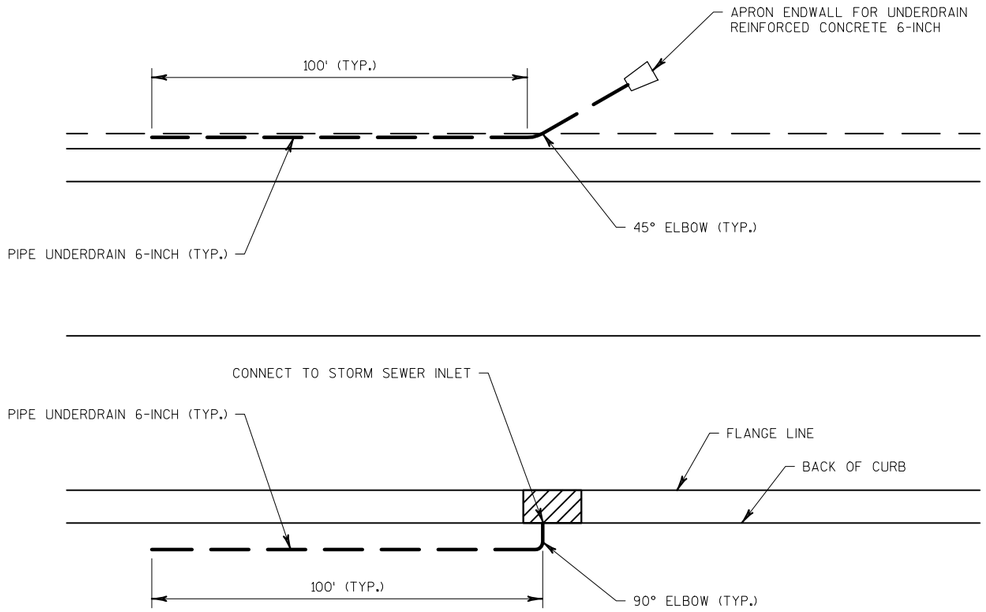
SOLUTION:
SV (C.F.) = 16 X 50
SV = 800 C.F.

$\frac{800\ C.F.}{1.5\ FT.}$ = 533 S.F.

USE A 20 FT. X 27 FT. BASIN



SECTION VIEW

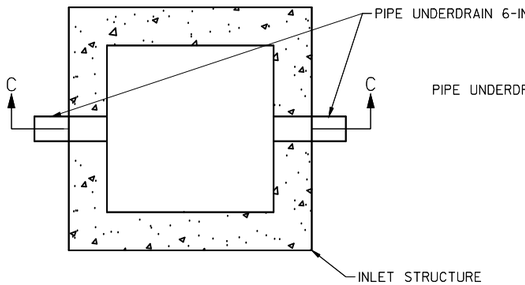


PLAN VIEW

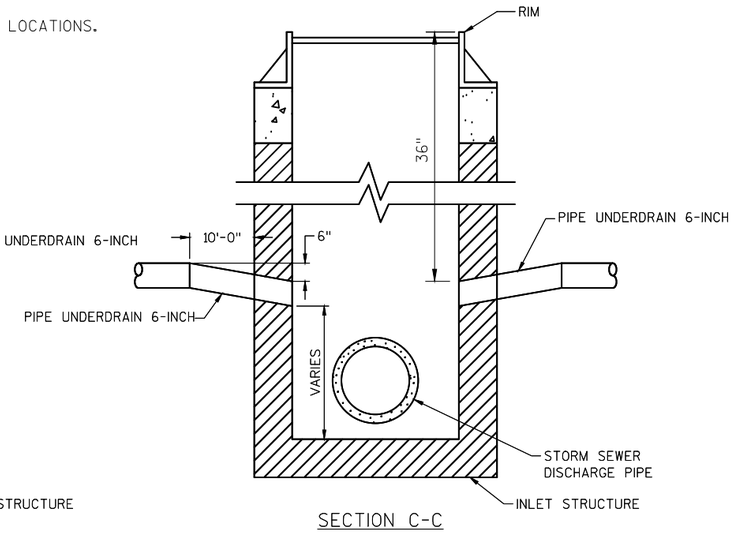
UNDERDRAIN IN BREAKER RUN

NOTES

1. CONNECTIONS TO INLETS OR MANHOLES IN MEDIAN SHALL USE PIPE UNDERDRAIN, 6-INCH.
2. PROVIDE 6" DIA. OPENINGS FOR UNDERDRAIN PIPE A MINIMUM OF 36" BELOW THE RIM ELEVATION.
3. SEE PLAN DETAILS FOR PIPE UNDERDRAIN LOCATIONS.



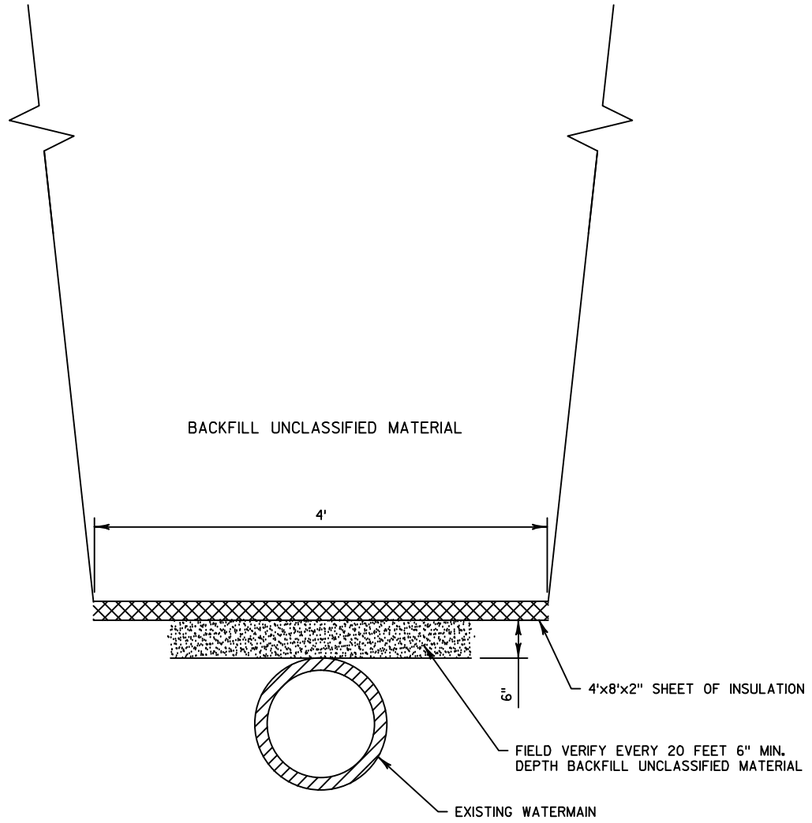
PLAN VIEW



SECTION C-C

UNDERDRAIN OUTFALL AT INLET

2



WATERMAIN INSULATION DETAIL

NOTES:
1. SEE SPECIAL PROVISIONS FOR ADDITONAL STAGING INFORMATION.
2. SEE MISCELLANEOUS QUANTITIES FOR ADDITIONAL USH 12 MACLEAN ROAD QUANTITIES.

* ASPHALTIC SHOULDER RUMBLE STRIPS ARE TO BE PLACED AFTER COMPLETION OF HIGH FRICTION SURFACE TREATMENT.

R/W

MACLEAN RD

* 5" REMOVING ASPHALTIC SURFACE MILLING (SHOULDER ONLY) REPLACE WITH 5" HMA PAVEMENT TYPE E-10 - 3' WIDE. BEGIN SHOULDER ASPHALTIC SURFACE MILLING AT THE END OF BRIDGE PARAPET.

BRIDGE (B-64-41)
HIGH FRICTION SURFACE TREATMENT
(POLYMER OVERLAY)
SEE SDD "TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATER THAN 40 M.P.H. WITH BARRIER"
(46-DRUMS, 20-WARNING LIGHTS TYPE C, 2-ARROW BOARD, 10-TRAFFIC CONTROL SIGNS)
DO NOT USE CONCRETE BARRIER TEMPORARY PRECAST

* 5" REMOVING ASPHALTIC SURFACE MILLING (SHOULDER ONLY) REPLACE WITH 5" HMA PAVEMENT TYPE E-10 - 3' WIDE. BEGIN SHOULDER ASPHALTIC SURFACE MILLING AT THE END OF BRIDGE PARAPET.
SEE SDD "TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION" (50-DRUMS, 2-BARRICADES TYPE III, 4-WARNING LIGHTS TYPE A, 16-WARNING LIGHTS TYPE C, 2-ARROW BOARD, 12-TRAFFIC CONTROL SIGNS)

3'
150'
650'
12'

USH 12 EB

* 5" REMOVING ASPHALTIC SURFACE MILLING (SHOULDER ONLY) REPLACE WITH 5" HMA PAVEMENT TYPE E-10 - 3' WIDE. BEGIN SHOULDER ASPHALTIC SURFACE MILLING AT THE END OF BRIDGE PARAPET.
SEE SDD "TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION"
(50-DRUMS, 2-BARRICADES TYPE III, 4-WARNING LIGHTS TYPE A, 16-WARNING LIGHTS TYPE C, 2-ARROW BOARD, 12-TRAFFIC CONTROL SIGNS)

* 5" REMOVING ASPHALTIC SURFACE MILLING (SHOULDER ONLY) REPLACE WITH 5" HMA PAVEMENT TYPE E-10 - 3' WIDE. BEGIN SHOULDER ASPHALTIC SURFACE MILLING AT THE END OF BRIDGE PARAPET.

916 917 918 919 920 921 922 923

USH 12 WB

BRIDGE (B-64-42)
HIGH FRICTION SURFACE TREATMENT
(POLYMER OVERLAY)
SEE SDD "TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATER THAN 40 M.P.H. WITH BARRIER"
(46-DRUMS, 20-WARNING LIGHTS TYPE C, 2-ARROW BOARD, 10-TRAFFIC CONTROL SIGNS, DO NOT USE CONCRETE BARRIER TEMPORARY PRECAST)

R/W

PROJECT NO: 1080-12-70	HWY: CTH NN	COUNTY: WALWORTH	CONSTRUCTION DETAIL AND TRAFFIC CONTROL - MACLEAN ROAD	SHEET 32	E

PLAN DETAIL LEGEND

- APO1 HMA PAVEMENT TYPE E-0.3, 3 1/2-INCH
- APO2 HMA PAVEMENT TYPE E-3, 5 3/4-INCH
- APO3 HMA PAVEMENT TYPE E-3, 5-INCH
- AGO1 BASE AGGREGATE DENSE 3/4-INCH
- AGO2 BASE AGGREGATE DENSE 1 1/4-INCH
- CGO1 CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE A
- CGO2 CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE D
- CGO3 CONCRETE CURB AND GUTTER 30-INCH TYPE D
- CGO4 CONCRETE CURB PEDSTRIAN
- CMO1 CONCRETE PAVEMENT "DOWELED & TINED", 9 1/2-INCH
- CMO2 CONCRETE MEDIAN SLOPED NOSE TYPE 1
- CMO4 CONCRETE SIDEWALK, 5-INCH
- CMO5 CONCRETE PAVEMENT APPROACH SLAB
- CMO6 CONCRETE SURFACE DRAINS
- DRO3 ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES, 4-INCH
- DWO4 AGGREGATE DRIVEWAY, BASE AGGREGATE DENSE, 6-INCH
- BGO2 MGS GUARDRAIL 3
- BGO4 MGS GUARDRAIL TERMINAL EAT
- BGO5 MGS GUARDRAIL TERMINAL TYPE 2
- BGO6 STEEL THRIE BEAM
- BGO7 STEEL THRIE BEAM BULLNOSE TERMINAL
- BGO8 MGS THRIE BEAM TRANSITION
- BGO9 STEEL PLATE BEAM GUARD CLASS A
- BG10 ANCHORAGES FOR STEEL PLATE BEAM GUARD TYPE 2
- MWO1 GUARDAIL MOW STRIP ASPHALT
- PVO1 ASPHALTIC SURFACE, 3-INCH
- SWO1 SAWING ASPHALT
- SWO2 SAWING CONCRETE

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
CP465	33+56.42	39" BERNTSEN FENO MONUMENT WITH ALUMINUM CAP, SET IN THE MEDIAN OF CTH-NN, APPROXIMATELY 275' WEST OF THE CTH-NN AND STUART DRIVE INTERSECTION.	1012.91
CP466	72+58.96	39" BERNTSEN FENO MONUMENT WITH ALUMINUM CAP, SET IN THE MEDIAN OF CTH-NN, APPROXIMATELY 1400' SOUTHEAST OF THE CTH-NN AND BRAY ROAD INTERSECTION.	1036.10
BM145	47+93.66	FOUND BRIDGE MONUMENT LOCATED AT THE SOUTHWEST CORNER OF THE CTH-NN EASTBOUND BRIDGE OVER USH-12.	1047.40
BM162	51+27.74	FOUND BRIDGE MONUMENT LOCATED AT THE NORTHEAST CORNER OF THE CTH-NN WESTBOUND BRIDGE OVER USH-12.	1052.83

NOTE:

CITY OF ELKHORN PROJECT SCHEDULED TO COINCIDE WITH INTERCHANGE RECONSTRUCTION AND EXTEND SHARED USE PATH TO THE WEST.

BEGIN CONSTRUCTION
STA 31PW+50.00

BEGIN PROJECT
STA 30EB+00.00
STA 30WB+51.41

SLOPE INTERCEPT

CTH NN WB

CTH NN EB

℄ SHARED USE PATH WEST

℄ CTH NN WB

℄ CTH NN EB

CP 465

MATCHLINE 35EB+00

CAUTION

PV01 AG01 AP01 SW02 CM01 CM06 CG01

+50.06 5.00' RT
+51.41 26.00' LT
+71.08 26.00' LT
+00.12 3.94' RT
+84.94 3.00' RT
+50.49 12.00' LT
+00.47 0.00'
+00.00 32.00' RT
+22.22 32.00' RT
+62.71 43.00' RT

32PW+00 33PW+00 34PW+00 35PW+00
30WB+00 31WB+00 32WB+00 33WB+00 34WB+00 35WB+00
30EB+00 31EB+00 32EB+00 33EB+00 34EB+00 35EB+00

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	PLAN DETAIL- CTH NN	SHEET 34	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\021201_PD_NN_PATH.DWG PLOT DATE : 4/30/2015 11:27 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:40_XREF

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
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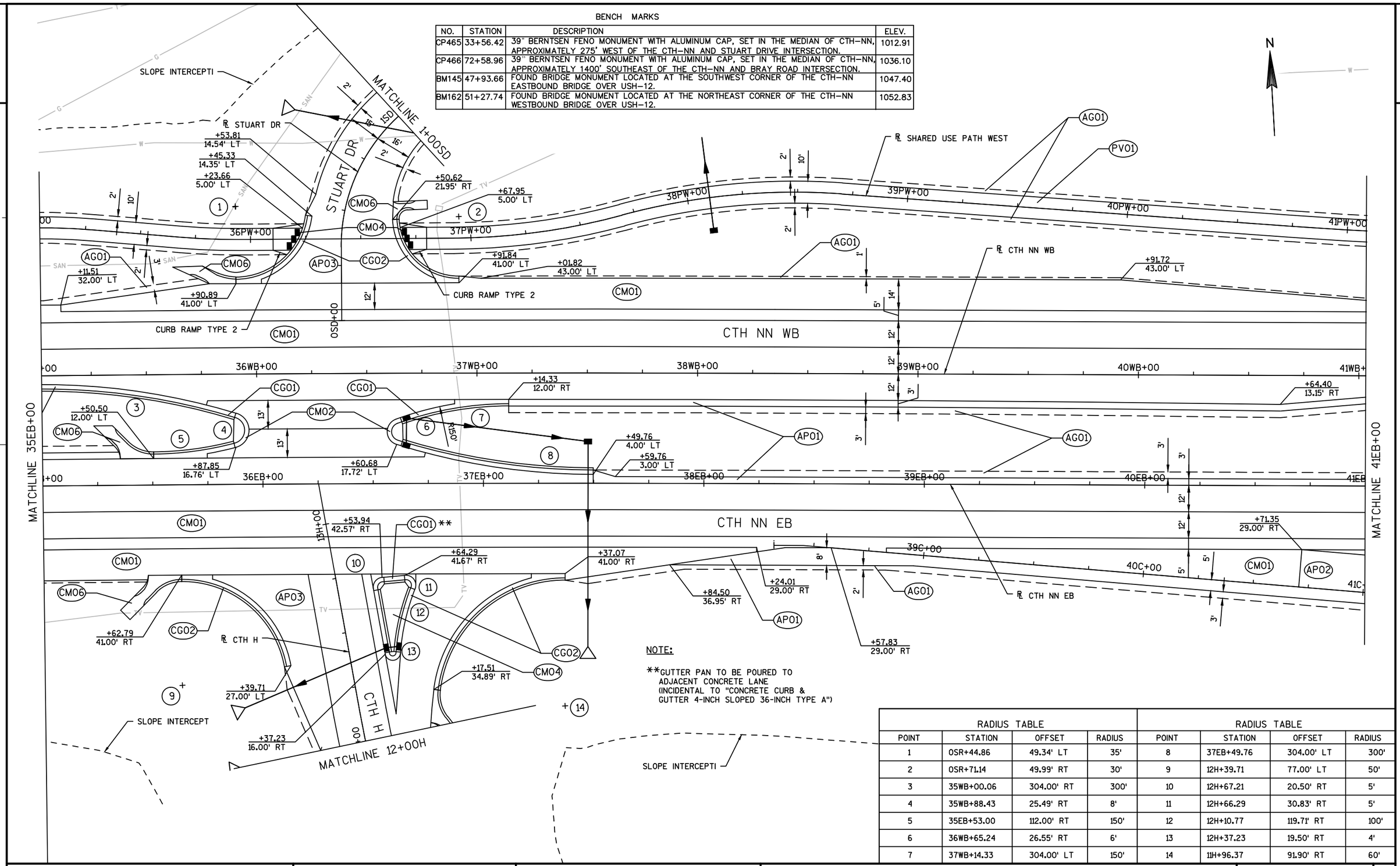


NOTE:

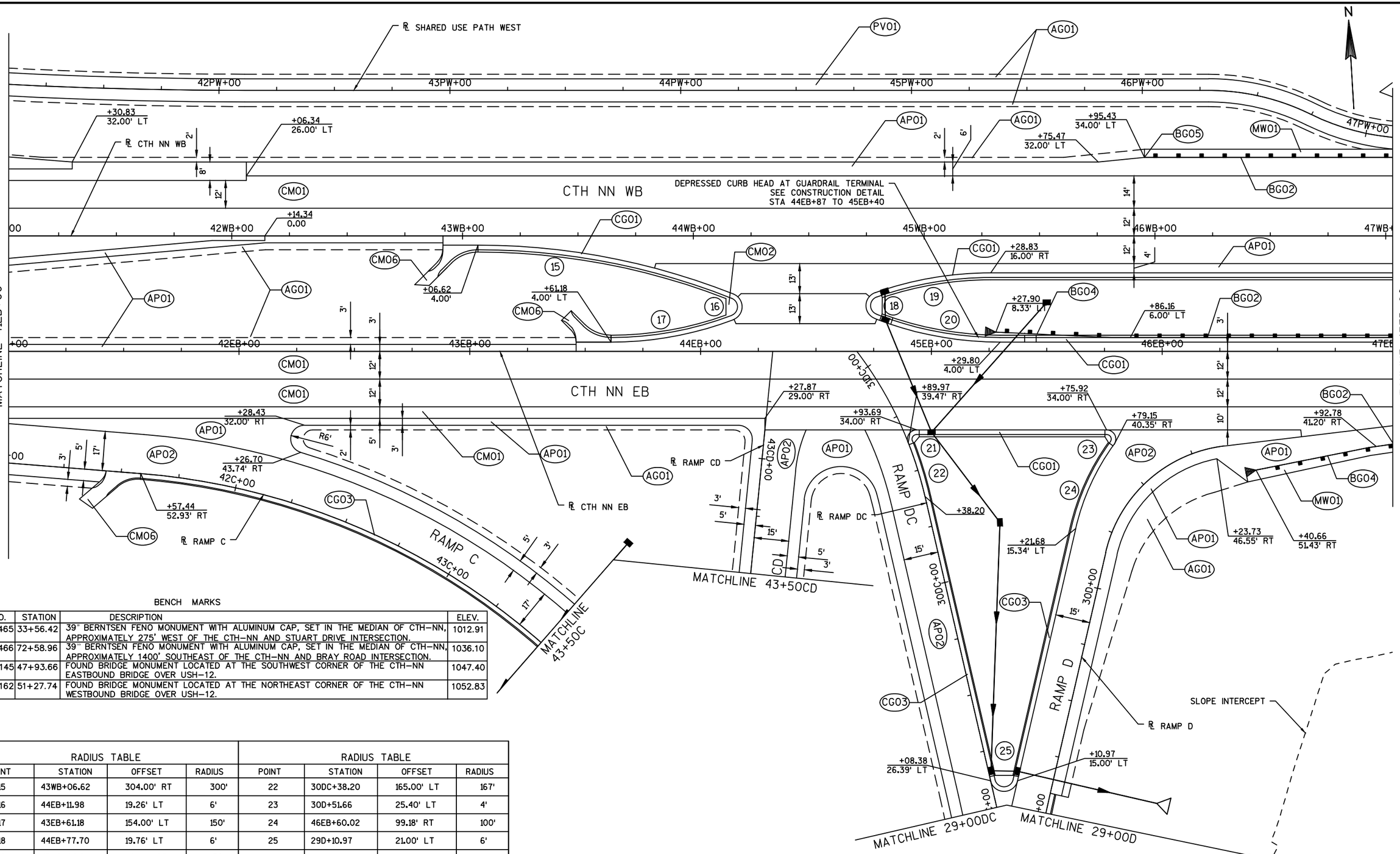
**GUTTER PAN TO BE POURED TO ADJACENT CONCRETE LANE (INCIDENTAL TO "CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE A")

RADIUS TABLE				RADIUS TABLE			
POINT	STATION	OFFSET	RADIUS	POINT	STATION	OFFSET	RADIUS
1	0SR+44.86	49.34' LT	35'	8	37EB+49.76	304.00' LT	300'
2	0SR+71.14	49.99' RT	30'	9	12H+39.71	77.00' LT	50'
3	35WB+00.06	304.00' RT	300'	10	12H+67.21	20.50' RT	5'
4	35WB+88.43	25.49' RT	8'	11	12H+66.29	30.83' RT	5'
5	35EB+53.00	112.00' RT	150'	12	12H+10.77	119.71' RT	100'
6	36WB+65.24	26.55' RT	6'	13	12H+37.23	19.50' RT	4'
7	37WB+14.33	304.00' LT	150'	14	11H+96.37	91.90' RT	60'

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	PLAN DETAIL- CTH NN	SHEET 35	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\021201_PD_NN_PATH.DWG PLOT DATE : 4/30/2015 11:27 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:40_XREF

WISDOT/CADDS SHEET 42



BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
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BM162	51+27.74	FOUND BRIDGE MONUMENT LOCATED AT THE NORTHEAST CORNER OF THE CTH-NN WESTBOUND BRIDGE OVER USH-12.	1052.83

RADIUS TABLE			
POINT	STATION	OFFSET	RADIUS
15	43WB+06.62	304.00' RT	300'
16	44EB+11.98	19.26' LT	6'
17	43EB+61.18	154.00' LT	150'
18	44EB+77.70	19.76' LT	6'
19	45WB+25.71	116.00' RT	150'
20	45EB+29.80	154.00' LT	150'
21	30DC+62.74	4.00' RT	4'

RADIUS TABLE			
POINT	STATION	OFFSET	RADIUS
22	30DC+38.20	165.00' LT	167'
23	30D+51.66	25.40' LT	4'
24	46EB+60.02	99.18' RT	100'
25	29D+10.97	21.00' LT	6'

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	PLAN DETAIL- CTH NN	SHEET 36	E

BENCH MARKS

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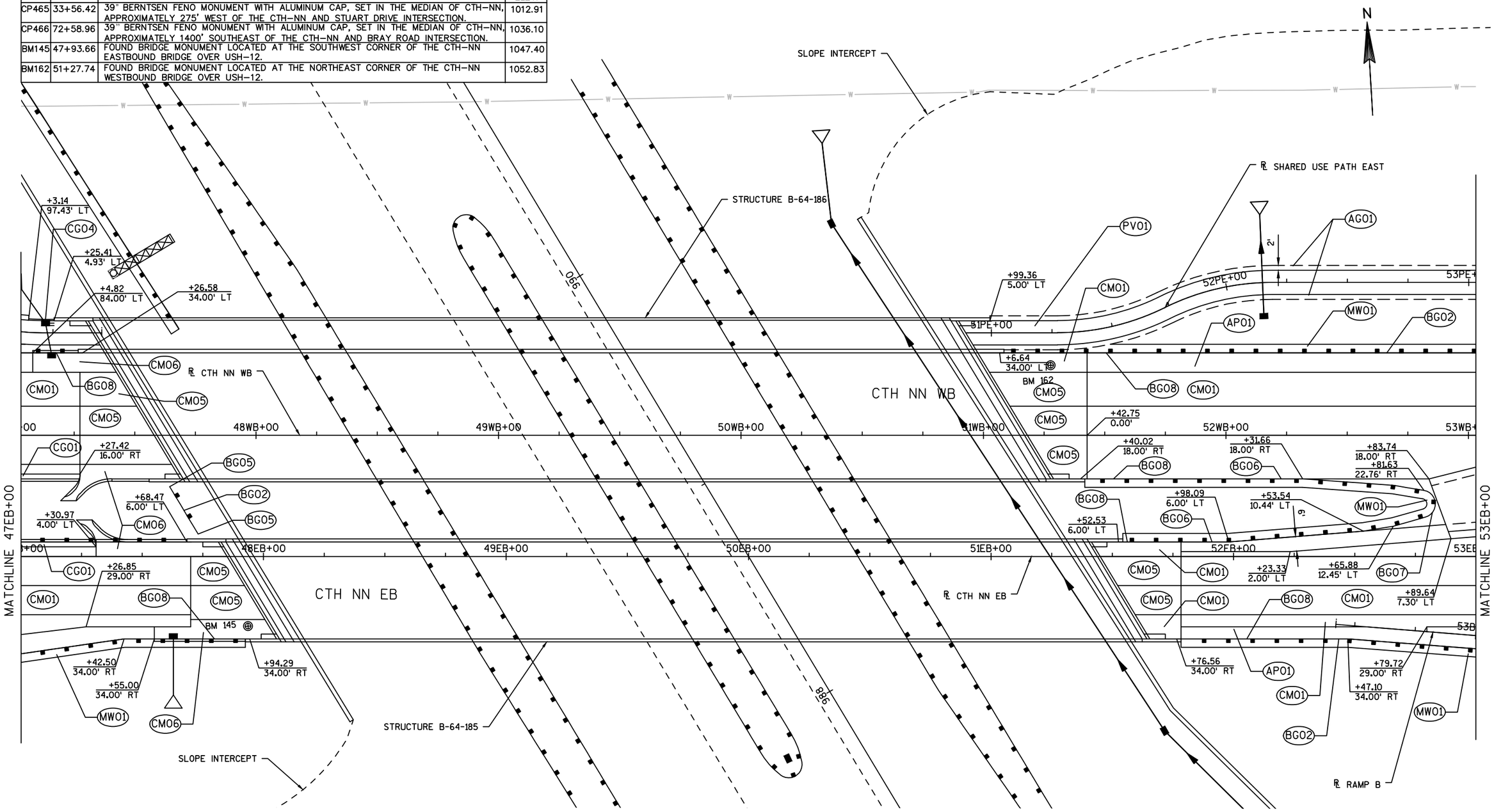


PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	PLAN DETAIL- CTH NN	SHEET 37	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\021201_PD_NN_PATH.DWG PLOT DATE : 4/30/2015 11:27 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:40_XREF

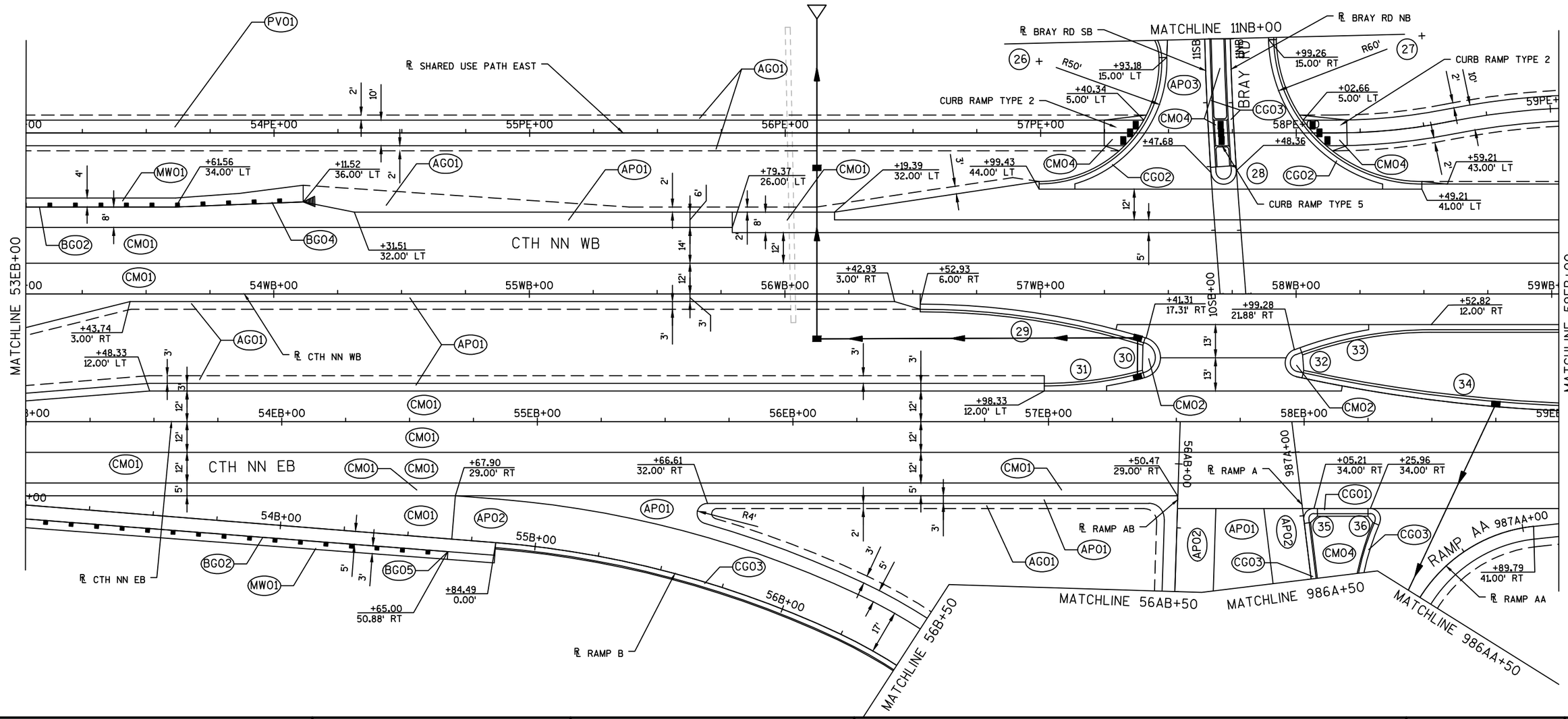
WISDOT/CADDS SHEET 42

RADIUS TABLE				RADIUS TABLE			
POINT	STATION	OFFSET	RADIUS	POINT	STATION	OFFSET	RADIUS
26	10SB+93.18	65.00' LT	50'	33	58WB+52.82	162.00' RT	150'
27	10NB+99.26	75.00' RT	60'	34	59EB+25.04	603.78' LT	600'
28	10NB+48.36	5.00' LT	5'	35	986A+73.29	4.00' RT	4'
29	56WB+52.93	304.00' RT	300'	36	986AA+60.15	34.11' RT	4'
30	57EB+35.83	25.04' LT	8'				
31	56EB+98.33	162.00' LT	150'				
32	57EB+98.13	22.98' LT	5'				

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
CP465	33+56.42	39" BERNTSEN FENO MONUMENT WITH ALUMINUM CAP, SET IN THE MEDIAN OF CTH-NN, APPROXIMATELY 275' WEST OF THE CTH-NN AND STUART DRIVE INTERSECTION.	1012.91
CP466	72+58.96	39" BERNTSEN FENO MONUMENT WITH ALUMINUM CAP, SET IN THE MEDIAN OF CTH-NN, APPROXIMATELY 1400' SOUTHEAST OF THE CTH-NN AND BRAY ROAD INTERSECTION.	1036.10
BM145	47+93.66	FOUND BRIDGE MONUMENT LOCATED AT THE SOUTHWEST CORNER OF THE CTH-NN EASTBOUND BRIDGE OVER USH-12.	1047.40
BM162	51+27.74	FOUND BRIDGE MONUMENT LOCATED AT THE NORTHEAST CORNER OF THE CTH-NN WESTBOUND BRIDGE OVER USH-12.	1052.83

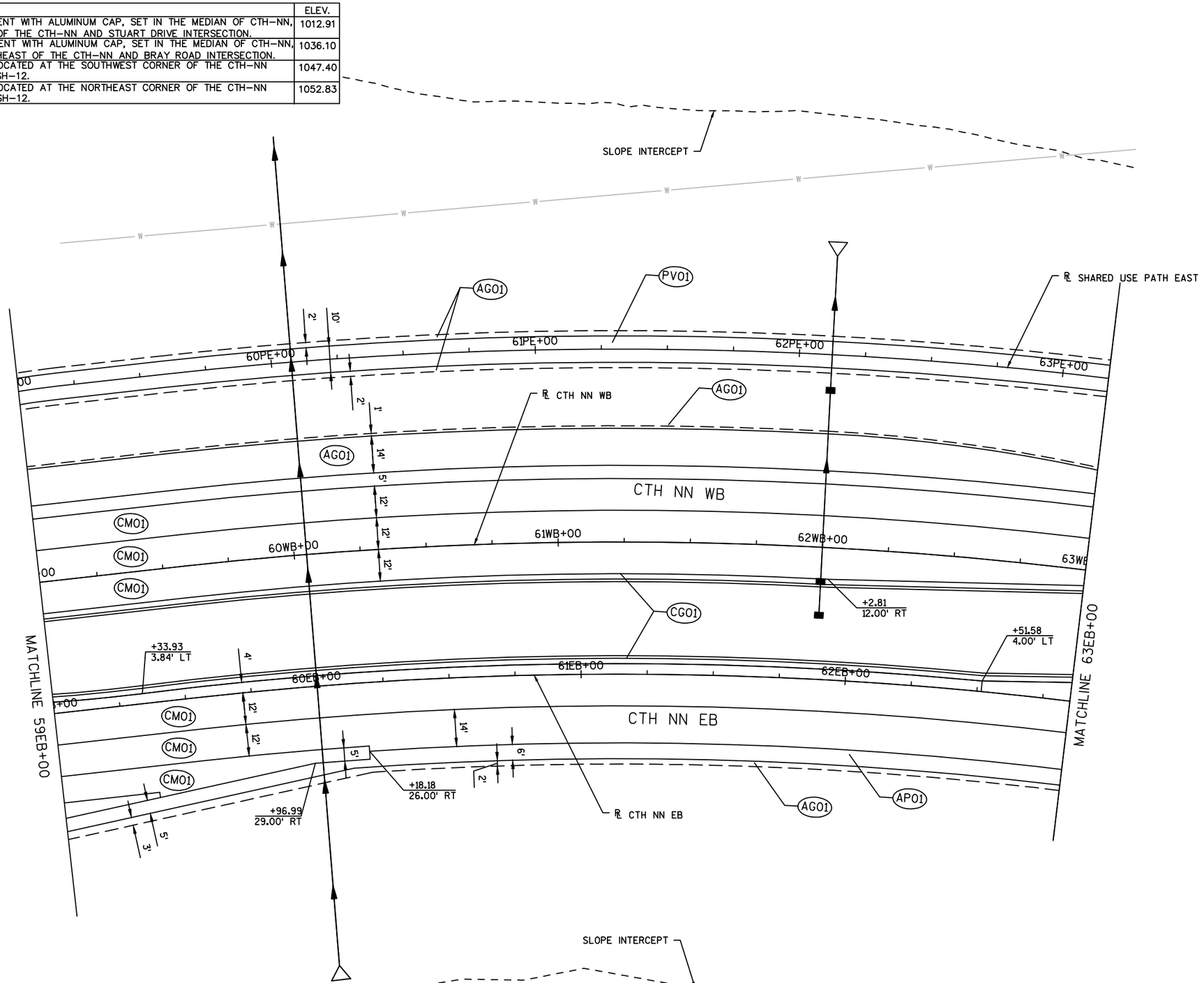
N



PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	PLAN DETAIL- CTH NN	SHEET 38	E

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
CP465	33+56.42	39" BERNTSEN FENO MONUMENT WITH ALUMINUM CAP, SET IN THE MEDIAN OF CTH-NN, APPROXIMATELY 275' WEST OF THE CTH-NN AND STUART DRIVE INTERSECTION.	1012.91
CP466	72+58.96	39" BERNTSEN FENO MONUMENT WITH ALUMINUM CAP, SET IN THE MEDIAN OF CTH-NN, APPROXIMATELY 1400' SOUTHEAST OF THE CTH-NN AND BRAY ROAD INTERSECTION.	1036.10
BM145	47+93.66	FOUND BRIDGE MONUMENT LOCATED AT THE SOUTHWEST CORNER OF THE CTH-NN EASTBOUND BRIDGE OVER USH-12.	1047.40
BM162	51+27.74	FOUND BRIDGE MONUMENT LOCATED AT THE NORTHEAST CORNER OF THE CTH-NN WESTBOUND BRIDGE OVER USH-12.	1052.83



PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	PLAN DETAIL- CTH NN	SHEET 39	E

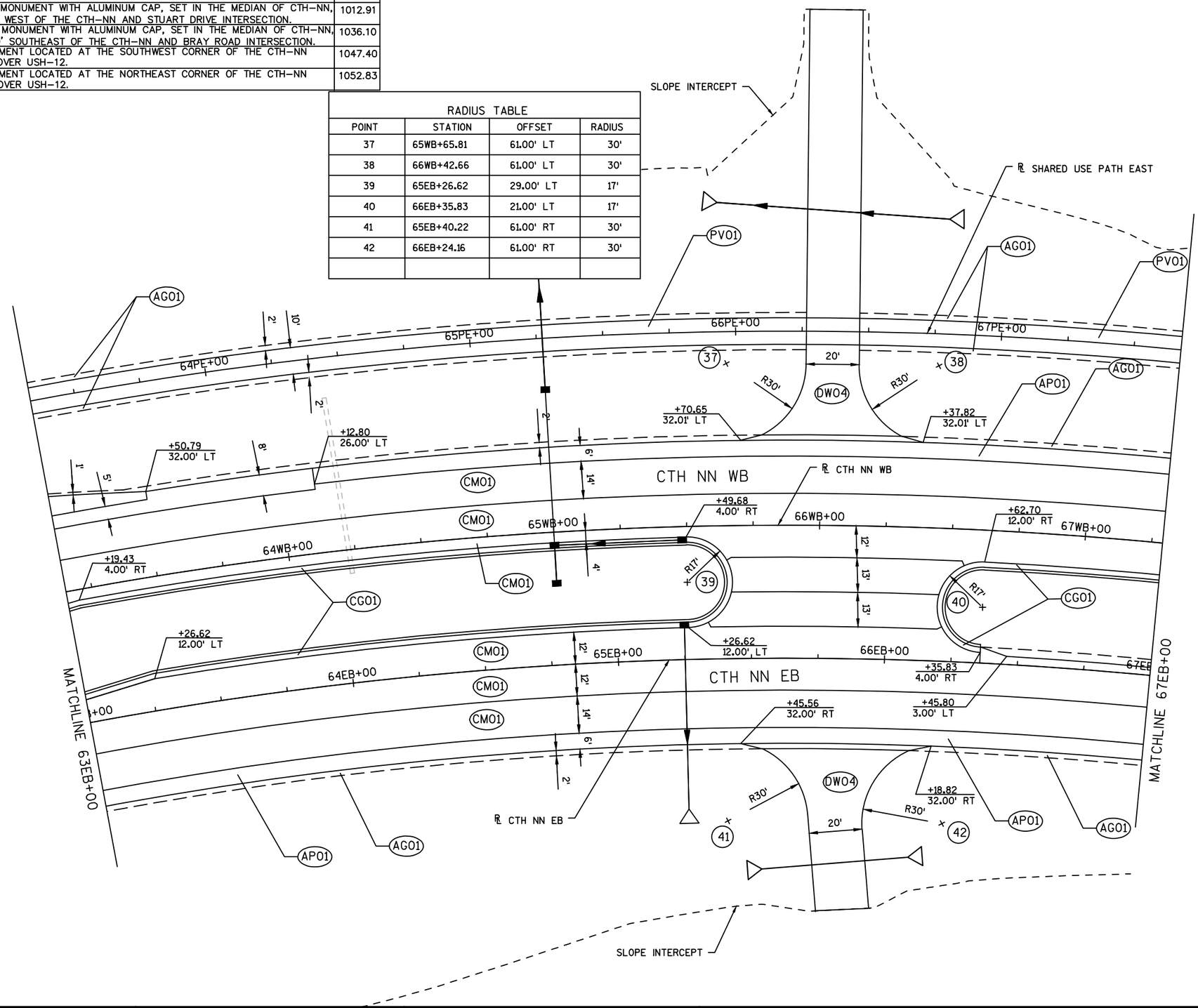
FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\021201_PD_NN_PATH.DWG PLOT DATE : 4/30/2015 11:27 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:40_XREF

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
CP465	33+56.42	39" BERNTSEN FENO MONUMENT WITH ALUMINUM CAP, SET IN THE MEDIAN OF CTH-NN, APPROXIMATELY 275' WEST OF THE CTH-NN AND STUART DRIVE INTERSECTION.	1012.91
CP466	72+58.96	39" BERNTSEN FENO MONUMENT WITH ALUMINUM CAP, SET IN THE MEDIAN OF CTH-NN, APPROXIMATELY 1400' SOUTHEAST OF THE CTH-NN AND BRAY ROAD INTERSECTION.	1036.10
BM145	47+93.66	FOUND BRIDGE MONUMENT LOCATED AT THE SOUTHWEST CORNER OF THE CTH-NN EASTBOUND BRIDGE OVER USH-12.	1047.40
BM162	51+27.74	FOUND BRIDGE MONUMENT LOCATED AT THE NORTHEAST CORNER OF THE CTH-NN WESTBOUND BRIDGE OVER USH-12.	1052.83

RADIUS TABLE

POINT	STATION	OFFSET	RADIUS
37	65WB+65.81	61.00' LT	30'
38	66WB+42.66	61.00' LT	30'
39	65EB+26.62	29.00' LT	17'
40	66EB+35.83	21.00' LT	17'
41	65EB+40.22	61.00' RT	30'
42	66EB+24.16	61.00' RT	30'

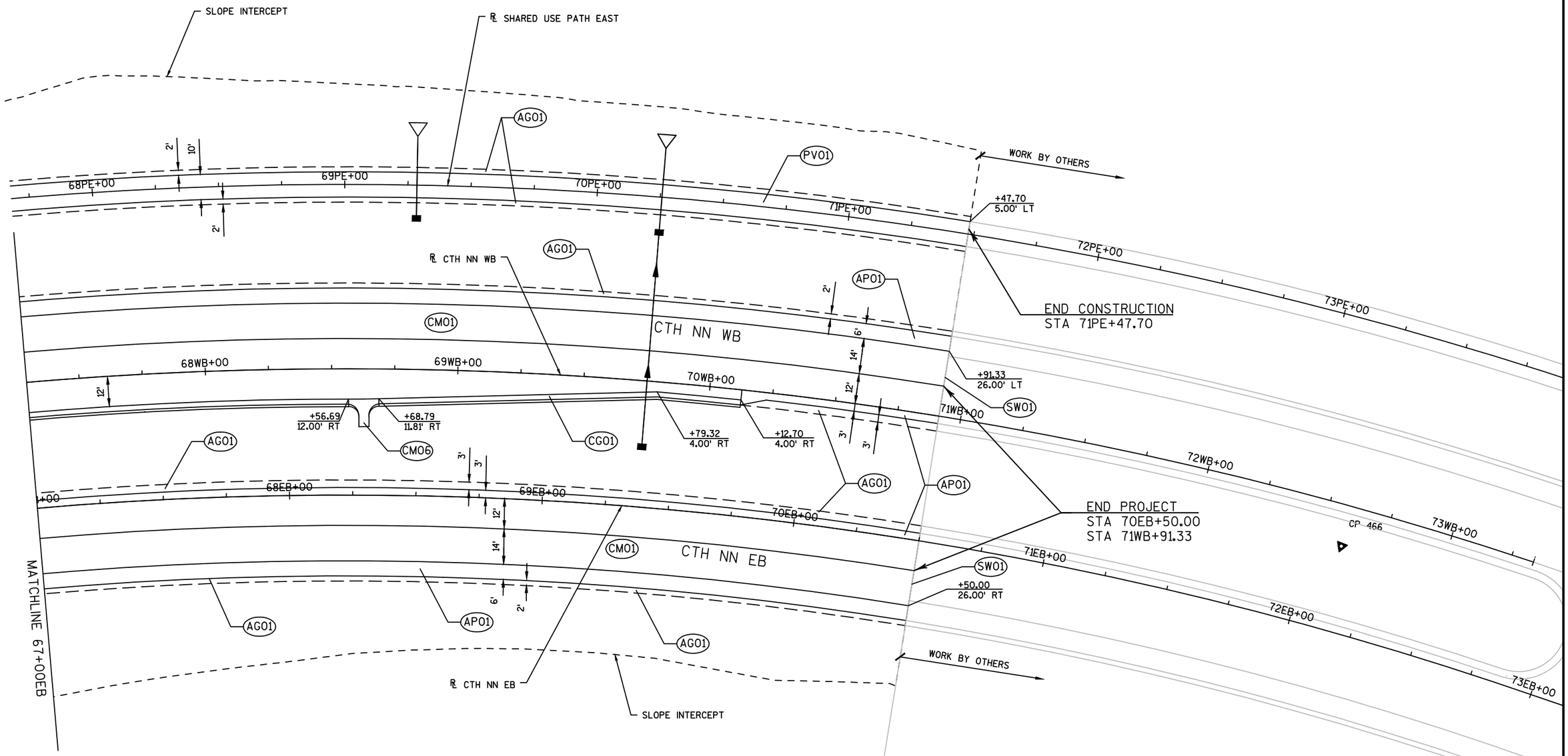


PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	PLAN DETAIL- CTH NN	SHEET 40	E

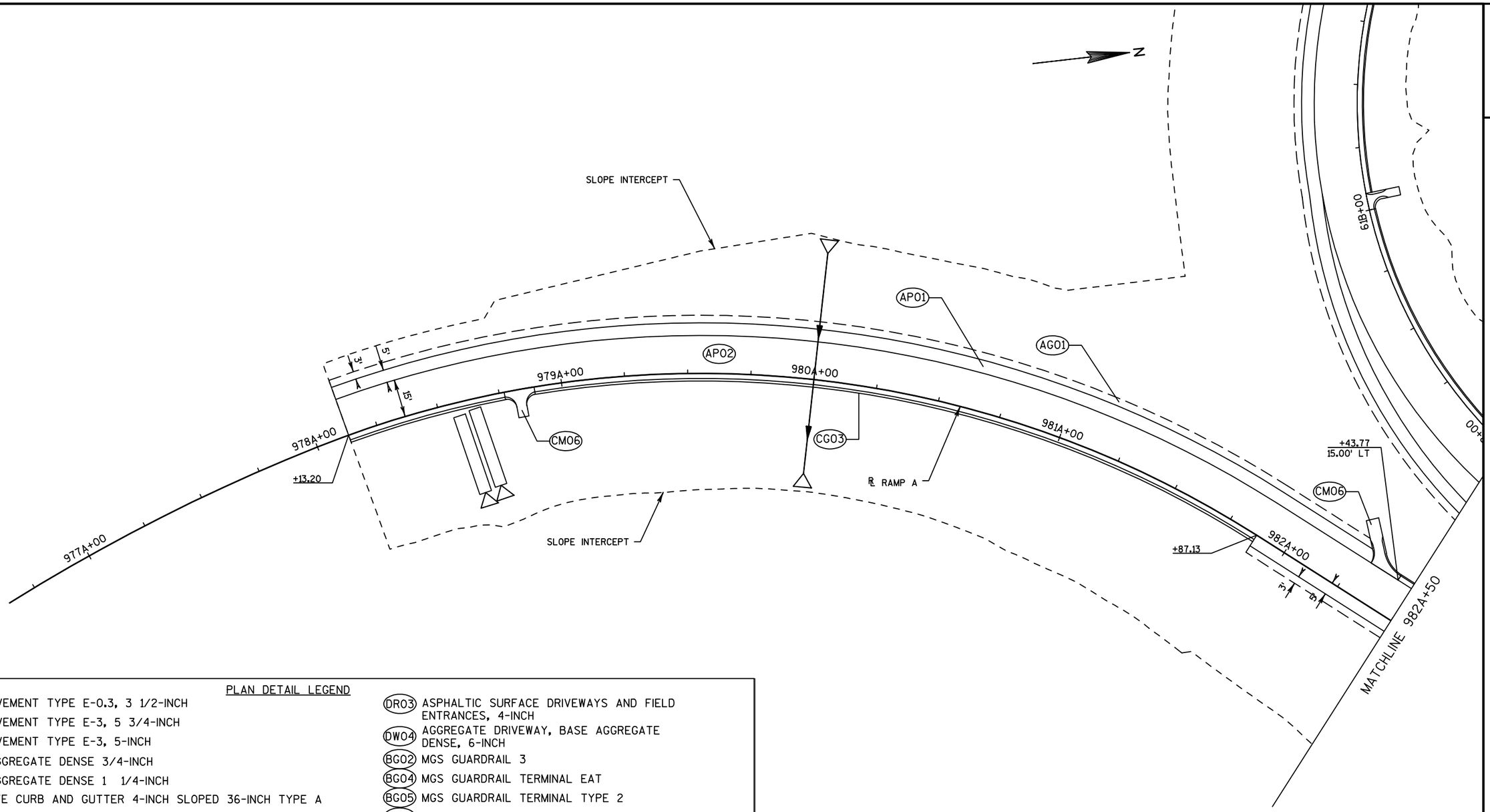
FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\021201_PD_NN_PATH.DWG PLOT DATE : 4/30/2015 11:28 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:40_XREF

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
CP465	33+56.42	39" BERNTSEN FENO MONUMENT WITH ALUMINUM CAP, SET IN THE MEDIAN OF CTH-NN, APPROXIMATELY 275' WEST OF THE CTH-NN AND STUART DRIVE INTERSECTION.	1012.91
CP466	72+58.96	39" BERNTSEN FENO MONUMENT WITH ALUMINUM CAP, SET IN THE MEDIAN OF CTH-NN, APPROXIMATELY 1400' SOUTHEAST OF THE CTH-NN AND BRAY ROAD INTERSECTION.	1036.10
BM145	47+93.66	FOUND BRIDGE MONUMENT LOCATED AT THE SOUTHWEST CORNER OF THE CTH-NN EASTBOUND BRIDGE OVER USH-12.	1047.40
BM162	51+27.74	FOUND BRIDGE MONUMENT LOCATED AT THE NORTHEAST CORNER OF THE CTH-NN WESTBOUND BRIDGE OVER USH-12.	1052.83



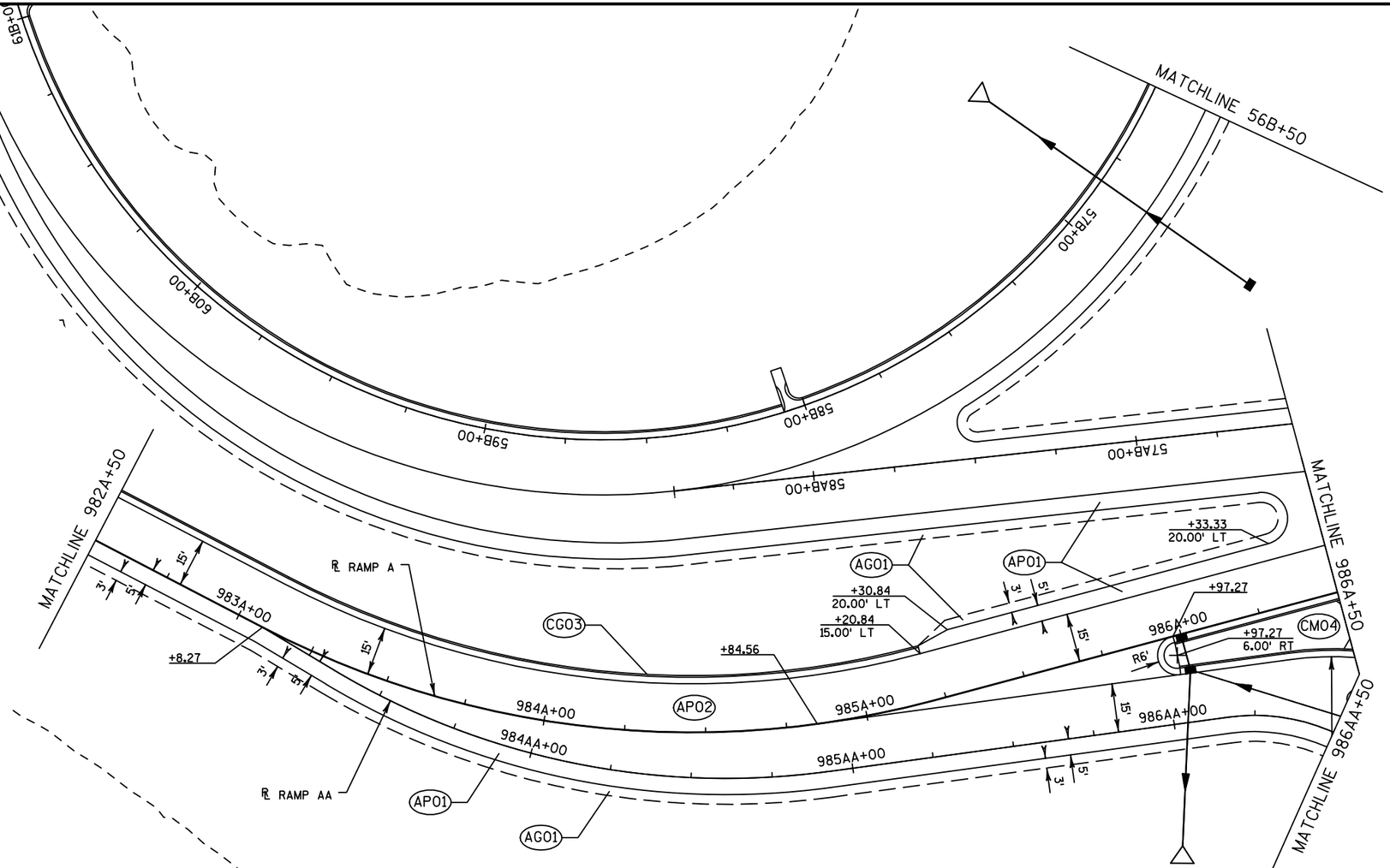
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	PLAN DETAIL- CTH NN	SHEET 41	E



PLAN DETAIL LEGEND

- (AP01) HMA PAVEMENT TYPE E-0.3, 3 1/2-INCH
- (AP02) HMA PAVEMENT TYPE E-3, 5 3/4-INCH
- (AP03) HMA PAVEMENT TYPE E-3, 5-INCH
- (AG01) BASE AGGREGATE DENSE 3/4-INCH
- (AG02) BASE AGGREGATE DENSE 1 1/4-INCH
- (CG01) CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE A
- (CG02) CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE D
- (CG03) CONCRETE CURB AND GUTTER 30-INCH TYPE D
- (CG04) CONCRETE CURB PEDSTRIAN
- (CM01) CONCRETE PAVEMENT "DOWELED & TINED", 9 1/2-INCH
- (CM02) CONCRETE MEDIAN SLOPED NOSE TYPE 1
- (CM04) CONCRETE SIDEWALK, 5-INCH
- (CM05) CONCRETE PAVEMENT APPROACH SLAB
- (CM06) CONCRETE SURFACE DRAINS
- (DR03) ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES, 4-INCH
- (DW04) AGGREGATE DRIVEWAY, BASE AGGREGATE DENSE, 6-INCH
- (BG02) MGS GUARDRAIL 3
- (BG04) MGS GUARDRAIL TERMINAL EAT
- (BG05) MGS GUARDRAIL TERMINAL TYPE 2
- (BG06) STEEL THRIE BEAM
- (BG07) STEEL THRIE BEAM BULLNOSE TERMINAL
- (BG08) MGS THRIE BEAM TRANSITION
- (BG09) STEEL PLATE BEAM GUARD CLASS A
- (BG10) ANCHORAGES FOR STEEL PLATE BEAM GUARD TYPE 2
- (MW01) GUARDAIL MOW STRIP ASPHALT
- (PV01) ASPHALTIC SURFACE, 3-INCH
- (SW01) SAWING ASPHALT
- (SW02) SAWING CONCRETE

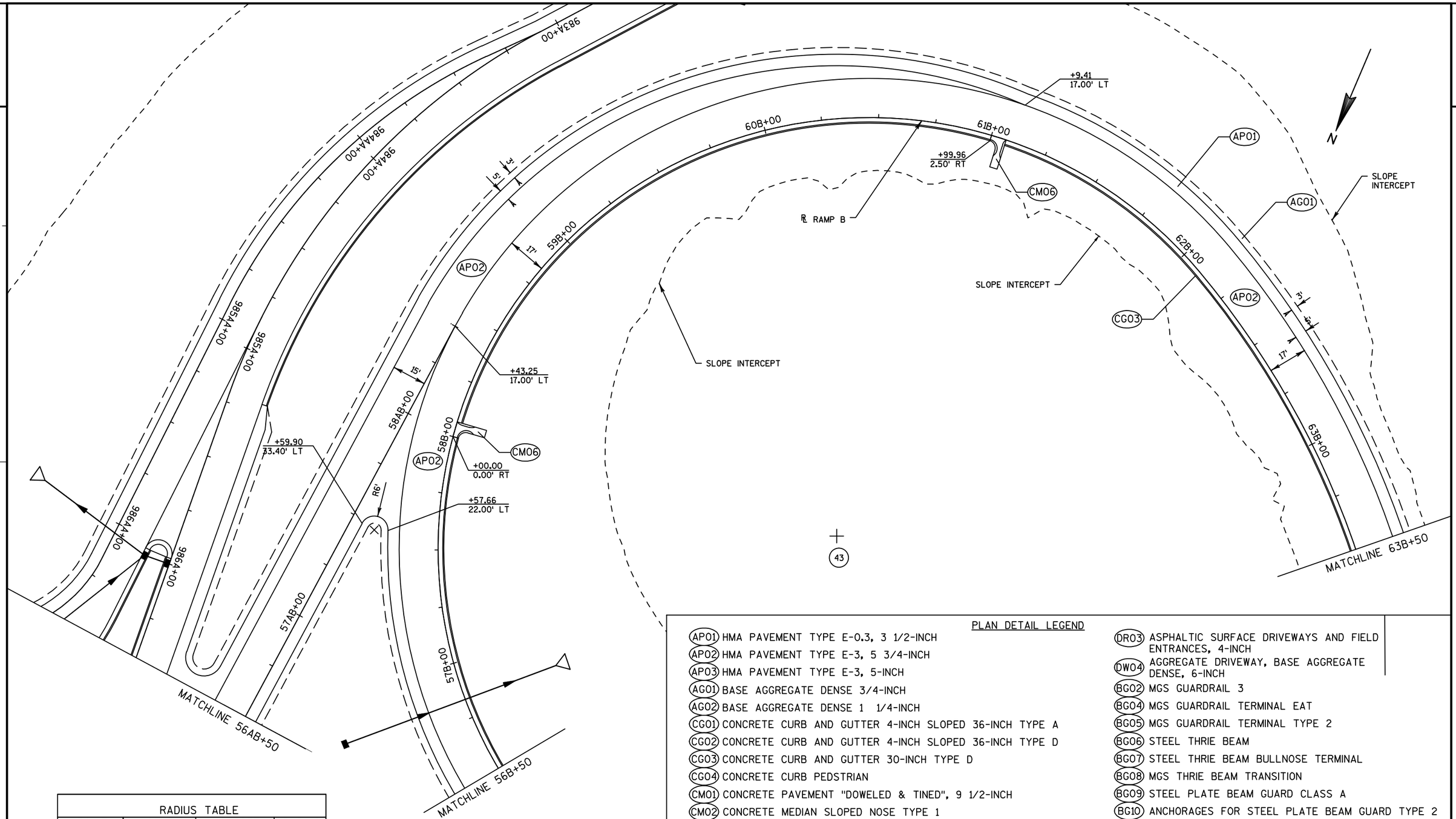
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	PLAN DETAIL- RAMP A & AA	SHEET 42	E



PLAN DETAIL LEGEND

- (AP01) HMA PAVEMENT TYPE E-0.3, 3 1/2-INCH
- (AP02) HMA PAVEMENT TYPE E-3, 5 3/4-INCH
- (AP03) HMA PAVEMENT TYPE E-3, 5-INCH
- (AG01) BASE AGGREGATE DENSE 3/4-INCH
- (AG02) BASE AGGREGATE DENSE 1 1/4-INCH
- (CG01) CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE A
- (CG02) CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE D
- (CG03) CONCRETE CURB AND GUTTER 30-INCH TYPE D
- (CG04) CONCRETE CURB PEDSTRIAN
- (CM01) CONCRETE PAVEMENT "DOWELED & TINED", 9 1/2-INCH
- (CM02) CONCRETE MEDIAN SLOPED NOSE TYPE 1
- (CM04) CONCRETE SIDEWALK, 5-INCH
- (CM05) CONCRETE PAVEMENT APPROACH SLAB
- (CM06) CONCRETE SURFACE DRAINS
- (DR03) ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES, 4-INCH
- (DW04) AGGREGATE DRIVEWAY, BASE AGGREGATE DENSE, 6-INCH
- (BG02) MGS GUARDRAIL 3
- (BG04) MGS GUARDRAIL TERMINAL EAT
- (BG05) MGS GUARDRAIL TERMINAL TYPE 2
- (BG06) STEEL THRIE BEAM
- (BG07) STEEL THRIE BEAM BULLNOSE TERMINAL
- (BG08) MGS THRIE BEAM TRANSITION
- (BG09) STEEL PLATE BEAM GUARD CLASS A
- (BG10) ANCHORAGES FOR STEEL PLATE BEAM GUARD TYPE 2
- (MW01) GUARDAIL MOW STRIP ASPHALT
- (PV01) ASPHALTIC SURFACE, 3-INCH
- (SW01) SAWING ASPHALT
- (SW02) SAWING CONCRETE

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	PLAN DETAIL- RAMP A & AA	SHEET 43	E



RADIUS TABLE			
POINT	STATION	OFFSET	RADIUS
43	58B+21.06	172.83' RT	205'

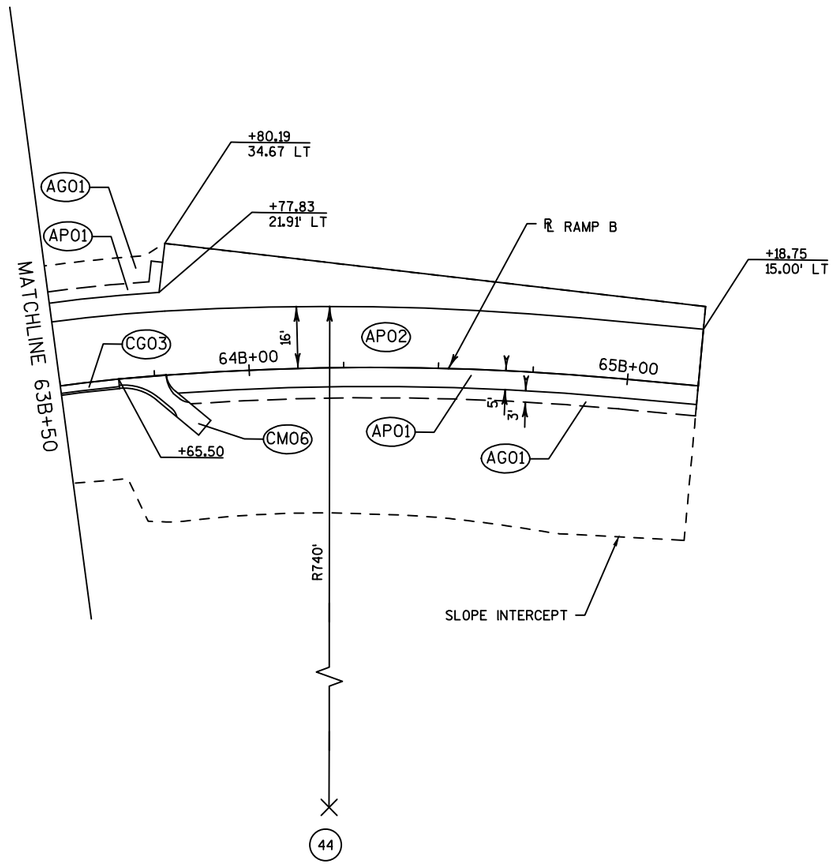
PLAN DETAIL LEGEND

- (AP01) HMA PAVEMENT TYPE E-0.3, 3 1/2-INCH
- (AP02) HMA PAVEMENT TYPE E-3, 5 3/4-INCH
- (AP03) HMA PAVEMENT TYPE E-3, 5-INCH
- (AG01) BASE AGGREGATE DENSE 3/4-INCH
- (AG02) BASE AGGREGATE DENSE 1 1/4-INCH
- (CG01) CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE A
- (CG02) CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE D
- (CG03) CONCRETE CURB AND GUTTER 30-INCH TYPE D
- (CG04) CONCRETE CURB PEDSTRIAN
- (CM01) CONCRETE PAVEMENT "DOWELED & TINED", 9 1/2-INCH
- (CM02) CONCRETE MEDIAN SLOPED NOSE TYPE 1
- (CM04) CONCRETE SIDEWALK, 5-INCH
- (CM05) CONCRETE PAVEMENT APPROACH SLAB
- (CM06) CONCRETE SURFACE DRAINS
- (DR03) ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES, 4-INCH
- (DW04) AGGREGATE DRIVEWAY, BASE AGGREGATE DENSE, 6-INCH
- (BG02) MGS GUARDRAIL 3
- (BG04) MGS GUARDRAIL TERMINAL EAT
- (BG05) MGS GUARDRAIL TERMINAL TYPE 2
- (BG06) STEEL THRIE BEAM
- (BG07) STEEL THRIE BEAM BULLNOSE TERMINAL
- (BG08) MGS THRIE BEAM TRANSITION
- (BG09) STEEL PLATE BEAM GUARD CLASS A
- (BG10) ANCHORAGES FOR STEEL PLATE BEAM GUARD TYPE 2
- (MW01) GUARDAIL MOW STRIP ASPHALT
- (PV01) ASPHALTIC SURFACE, 3-INCH
- (SW01) SAWING ASPHALT
- (SW02) SAWING CONCRETE

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	PLAN DETAIL- RAMP B & AB	SHEET 44	E

PLAN DETAIL LEGEND

- (APO1) HMA PAVEMENT TYPE E-0.3, 3 1/2-INCH
- (APO2) HMA PAVEMENT TYPE E-3, 5 3/4-INCH
- (APO3) HMA PAVEMENT TYPE E-3, 5-INCH
- (AGO1) BASE AGGREGATE DENSE 3/4-INCH
- (AGO2) BASE AGGREGATE DENSE 1 1/4-INCH
- (CGO1) CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE A
- (CGO2) CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE D
- (CGO3) CONCRETE CURB AND GUTTER 30-INCH TYPE D
- (CGO4) CONCRETE CURB PEDSTRIAN
- (CMO1) CONCRETE PAVEMENT "DOWELED & TINED", 9 1/2-INCH
- (CMO2) CONCRETE MEDIAN SLOPED NOSE TYPE 1
- (CMO4) CONCRETE SIDEWALK, 5-INCH
- (CMO5) CONCRETE PAVEMENT APPROACH SLAB
- (CMO6) CONCRETE SURFACE DRAINS
- (DRO3) ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES, 4-INCH
- (DWO4) AGGREGATE DRIVEWAY, BASE AGGREGATE DENSE, 6-INCH
- (BGO2) MGS GUARDRAIL 3
- (BGO4) MGS GUARDRAIL TERMINAL EAT
- (BGO5) MGS GUARDRAIL TERMINAL TYPE 2
- (BGO6) STEEL THRIE BEAM
- (BGO7) STEEL THRIE BEAM BULLNOSE TERMINAL
- (BGO8) MGS THRIE BEAM TRANSITION
- (BGO9) STEEL PLATE BEAM GUARD CLASS A
- (BG10) ANCHORAGES FOR STEEL PLATE BEAM GUARD TYPE 2
- (MWO1) GUARDAIL MOW STRIP ASPHALT
- (PVO1) ASPHALTIC SURFACE, 3-INCH
- (SWO1) SAWING ASPHALT
- (SWO2) SAWING CONCRETE

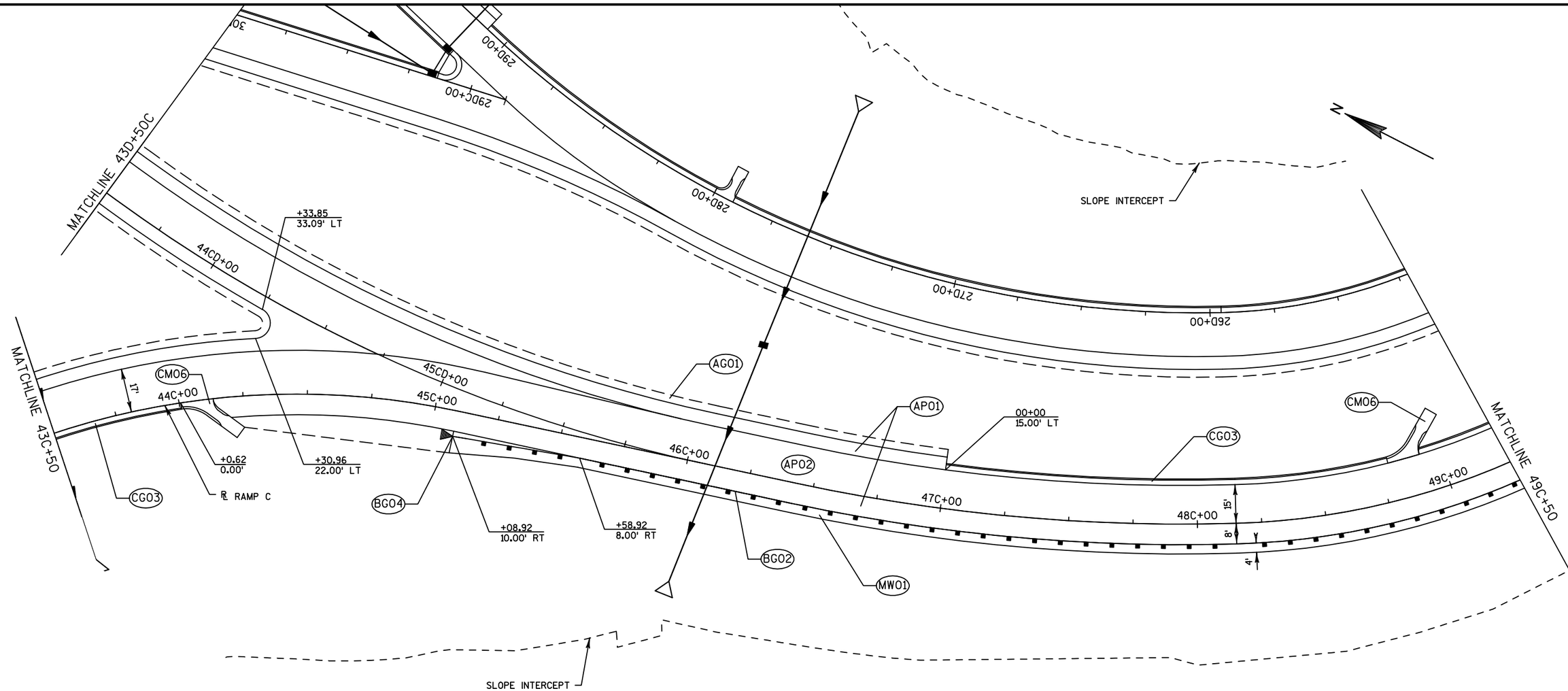


RADIUS TABLE			
POINT	STATION	OFFSET	RADIUS
44	56B+73.24	334.97' LT	740'

PROJECT NO:1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	PLAN DETAIL- RAMP B & AB	SHEET 45	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\021203_PD_B_AB.DWG PLOT DATE : 4/30/2015 11:31 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:40_XREF

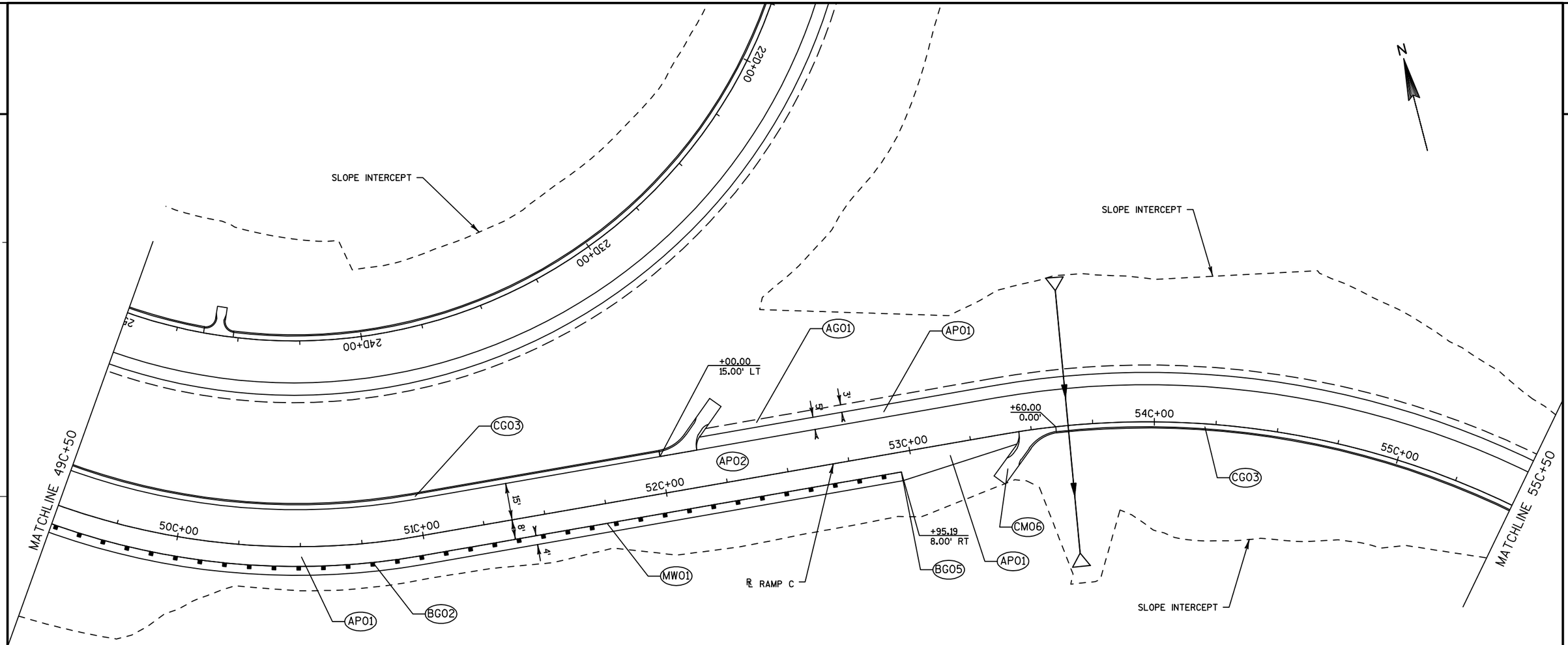
2



PLAN DETAIL LEGEND

- APO1 HMA PAVEMENT TYPE E-0.3, 3 1/2-INCH
- APO2 HMA PAVEMENT TYPE E-3, 5 3/4-INCH
- APO3 HMA PAVEMENT TYPE E-3, 5-INCH
- AGO1 BASE AGGREGATE DENSE 3/4-INCH
- AGO2 BASE AGGREGATE DENSE 1 1/4-INCH
- CGO1 CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE A
- CGO2 CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE D
- CGO3 CONCRETE CURB AND GUTTER 30-INCH TYPE D
- CGO4 CONCRETE CURB PEDSTRIAN
- CMO1 CONCRETE PAVEMENT "DOWELED & TINED", 9 1/2-INCH
- CMO2 CONCRETE MEDIAN SLOPED NOSE TYPE 1
- CMO4 CONCRETE SIDEWALK, 5-INCH
- CMO5 CONCRETE PAVEMENT APPROACH SLAB
- CMO6 CONCRETE SURFACE DRAINS
- DRO3 ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES, 4-INCH
- DWO4 AGGREGATE DRIVEWAY, BASE AGGREGATE DENSE, 6-INCH
- BGO2 MGS GUARDRAIL 3
- BGO4 MGS GUARDRAIL TERMINAL EAT
- BGO5 MGS GUARDRAIL TERMINAL TYPE 2
- BGO6 STEEL THRIE BEAM
- BGO7 STEEL THRIE BEAM BULLNOSE TERMINAL
- BGO8 MGS THRIE BEAM TRANSITION
- BGO9 STEEL PLATE BEAM GUARD CLASS A
- BG10 ANCHORAGES FOR STEEL PLATE BEAM GUARD TYPE 2
- MWO1 GUARDAIL MOW STRIP ASPHALT
- PVO1 ASPHALTIC SURFACE, 3-INCH
- SWO1 SAWING ASPHALT
- SWO2 SAWING CONCRETE

PROJECT NO:1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	PLAN DETAIL- RAMP C	SHEET 46	E

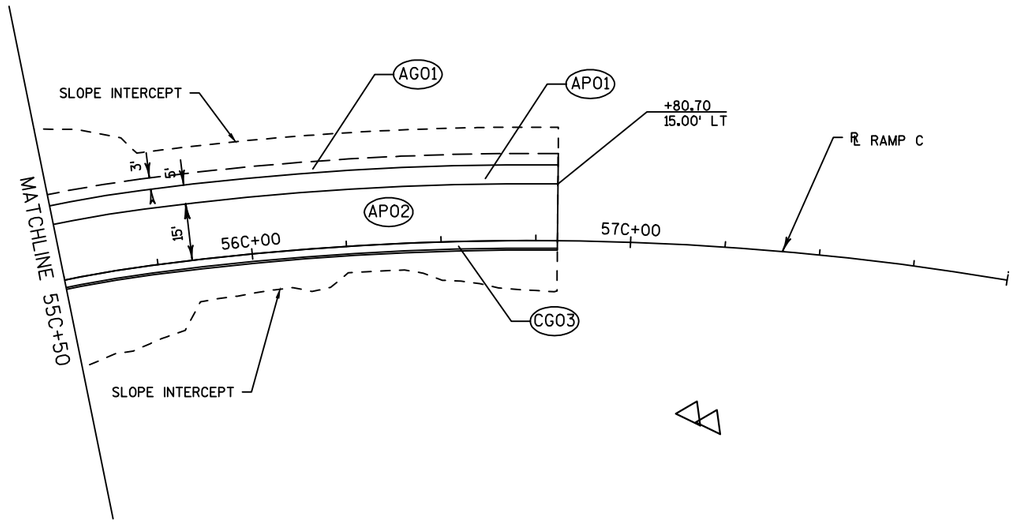


PLAN DETAIL LEGEND

- (AP01) HMA PAVEMENT TYPE E-0.3, 3 1/2-INCH
- (AP02) HMA PAVEMENT TYPE E-3, 5 3/4-INCH
- (AP03) HMA PAVEMENT TYPE E-3, 5-INCH
- (AG01) BASE AGGREGATE DENSE 3/4-INCH
- (AG02) BASE AGGREGATE DENSE 1 1/4-INCH
- (CG01) CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE A
- (CG02) CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE D
- (CG03) CONCRETE CURB AND GUTTER 30-INCH TYPE D
- (CG04) CONCRETE CURB PEDSTRIAN
- (CM01) CONCRETE PAVEMENT "DOWELED & TINED", 9 1/2-INCH
- (CM02) CONCRETE MEDIAN SLOPED NOSE TYPE 1
- (CM04) CONCRETE SIDEWALK, 5-INCH
- (CM05) CONCRETE PAVEMENT APPROACH SLAB
- (CM06) CONCRETE SURFACE DRAINS
- (DR03) ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES, 4-INCH
- (DW04) AGGREGATE DRIVEWAY, BASE AGGREGATE DENSE, 6-INCH
- (BG02) MGS GUARDRAIL 3
- (BG04) MGS GUARDRAIL TERMINAL EAT
- (BG05) MGS GUARDRAIL TERMINAL TYPE 2
- (BG06) STEEL THRIE BEAM
- (BG07) STEEL THRIE BEAM BULLNOSE TERMINAL
- (BG08) MGS THRIE BEAM TRANSITION
- (BG09) STEEL PLATE BEAM GUARD CLASS A
- (BG10) ANCHORAGES FOR STEEL PLATE BEAM GUARD TYPE 2
- (MW01) GUARDAIL MOW STRIP ASPHALT
- (PV01) ASPHALTIC SURFACE, 3-INCH
- (SW01) SAWING ASPHALT
- (SW02) SAWING CONCRETE

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	PLAN DETAIL- RAMP C	SHEET 47	E

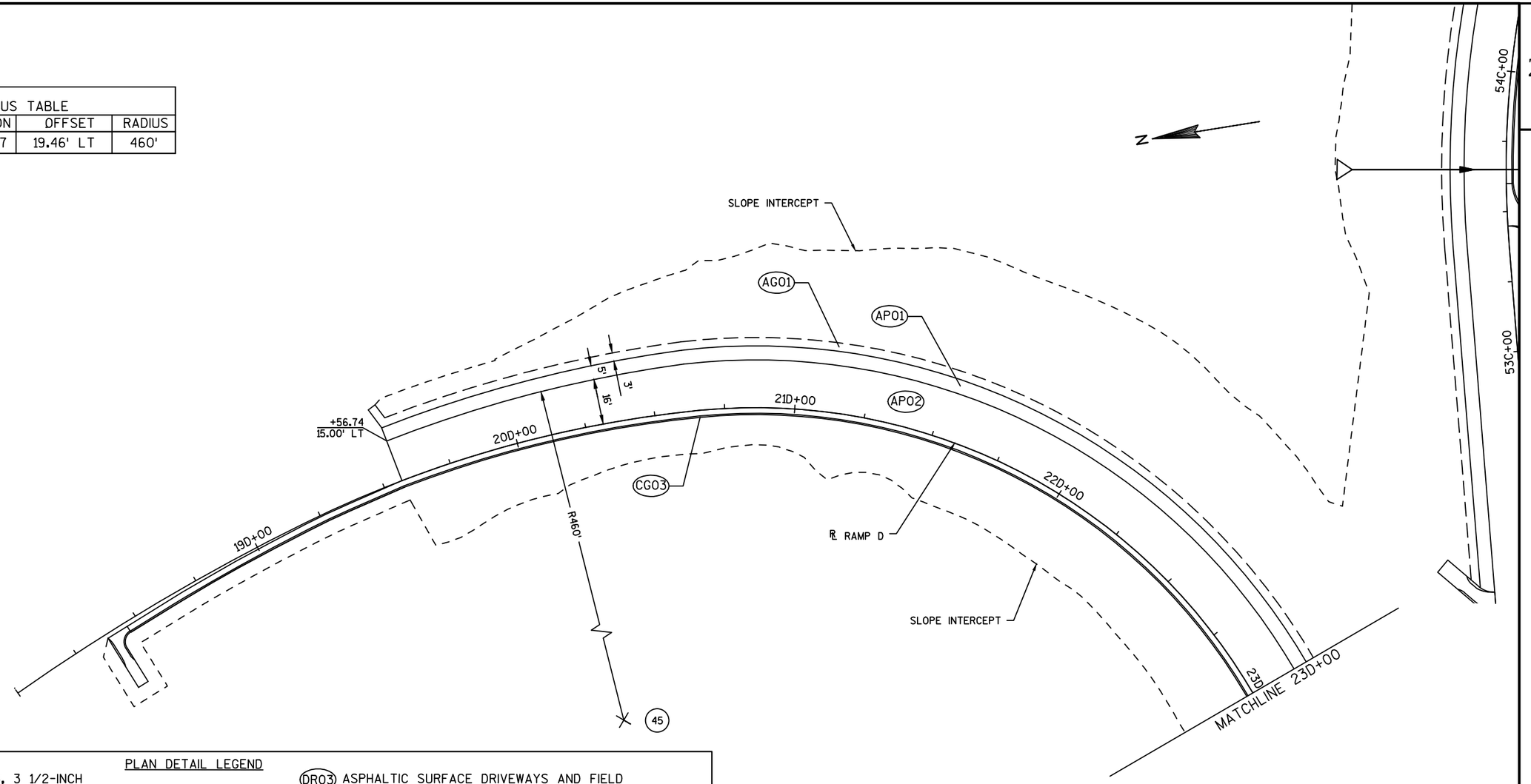
2



PLAN DETAIL LEGEND

AP01	HMA PAVEMENT TYPE E-0.3, 3 1/2-INCH
AP02	HMA PAVEMENT TYPE E-3, 5 3/4-INCH
AP03	HMA PAVEMENT TYPE E-3, 5-INCH
AG01	BASE AGGREGATE DENSE 3/4-INCH
AG02	BASE AGGREGATE DENSE 1 1/4-INCH
CG01	CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE A
CG02	CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE D
CG03	CONCRETE CURB AND GUTTER 30-INCH TYPE D
CG04	CONCRETE CURB PEDSTRIAN
CM01	CONCRETE PAVEMENT "DOWELED & TINED", 9 1/2-INCH
CM02	CONCRETE MEDIAN SLOPED NOSE TYPE 1
CM04	CONCRETE SIDEWALK, 5-INCH
CM05	CONCRETE PAVEMENT APPROACH SLAB
CM06	CONCRETE SURFACE DRAINS
DR03	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES, 4-INCH
DW04	AGGREGATE DRIVEWAY, BASE AGGREGATE DENSE, 6-INCH
BG02	MGS GUARDRAIL 3
BG04	MGS GUARDRAIL TERMINAL EAT
BG05	MGS GUARDRAIL TERMINAL TYPE 2
BG06	STEEL THRIE BEAM
BG07	STEEL THRIE BEAM BULLNOSE TERMINAL
BG08	MGS THRIE BEAM TRANSITION
BG09	STEEL PLATE BEAM GUARD CLASS A
BG10	ANCHORAGES FOR STEEL PLATE BEAM GUARD TYPE 2
MW01	GUARDAIL MOW STRIP ASPHALT
PV01	ASPHALTIC SURFACE, 3-INCH
SW01	SAWING ASPHALT
SW02	SAWING CONCRETE

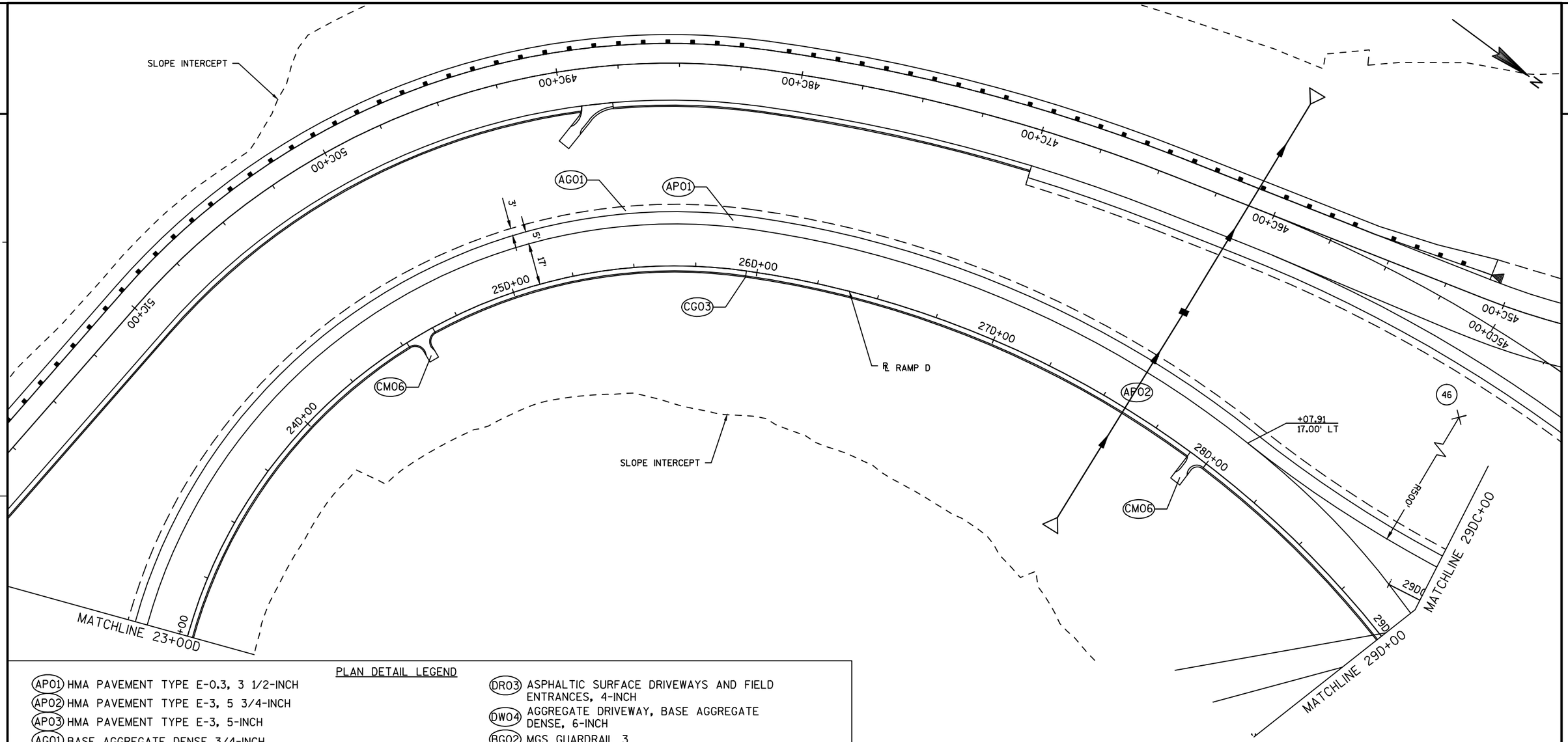
RADIUS TABLE			
POINT	STATION	OFFSET	RADIUS
45	27D+06.97	19.46' LT	460'



PLAN DETAIL LEGEND

- (AP01) HMA PAVEMENT TYPE E-0.3, 3 1/2-INCH
- (AP02) HMA PAVEMENT TYPE E-3, 5 3/4-INCH
- (AP03) HMA PAVEMENT TYPE E-3, 5-INCH
- (AG01) BASE AGGREGATE DENSE 3/4-INCH
- (AG02) BASE AGGREGATE DENSE 1 1/4-INCH
- (CG01) CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE A
- (CG02) CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE D
- (CG03) CONCRETE CURB AND GUTTER 30-INCH TYPE D
- (CG04) CONCRETE CURB PEDSTRIAN
- (CM01) CONCRETE PAVEMENT "DOWELED & TINED", 9 1/2-INCH
- (CM02) CONCRETE MEDIAN SLOPED NOSE TYPE 1
- (CM04) CONCRETE SIDEWALK, 5-INCH
- (CM05) CONCRETE PAVEMENT APPROACH SLAB
- (CM06) CONCRETE SURFACE DRAINS
- (DR03) ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES, 4-INCH
- (DW04) AGGREGATE DRIVEWAY, BASE AGGREGATE DENSE, 6-INCH
- (BG02) MGS GUARDRAIL 3
- (BG04) MGS GUARDRAIL TERMINAL EAT
- (BG05) MGS GUARDRAIL TERMINAL TYPE 2
- (BG06) STEEL THRIE BEAM
- (BG07) STEEL THRIE BEAM BULLNOSE TERMINAL
- (BG08) MGS THRIE BEAM TRANSITION
- (BG09) STEEL PLATE BEAM GUARD CLASS A
- (BG10) ANCHORAGES FOR STEEL PLATE BEAM GUARD TYPE 2
- (MW01) GUARDAIL MOW STRIP ASPHALT
- (PV01) ASPHALTIC SURFACE, 3-INCH
- (SW01) SAWING ASPHALT
- (SW02) SAWING CONCRETE

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	PLAN DETAIL- RAMP D & DC	SHEET 49	E



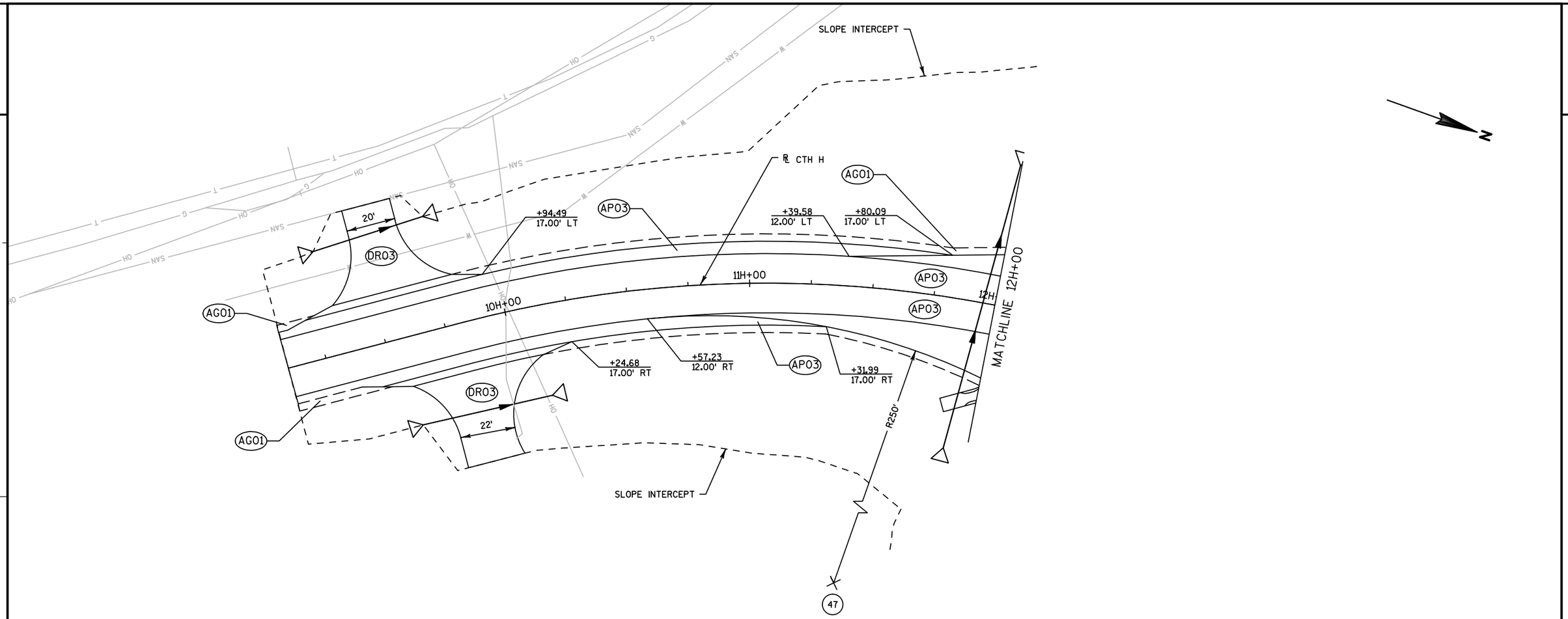
PLAN DETAIL LEGEND

- (AP01) HMA PAVEMENT TYPE E-0.3, 3 1/2-INCH
- (AP02) HMA PAVEMENT TYPE E-3, 5 3/4-INCH
- (AP03) HMA PAVEMENT TYPE E-3, 5-INCH
- (AG01) BASE AGGREGATE DENSE 3/4-INCH
- (AG02) BASE AGGREGATE DENSE 1 1/4-INCH
- (CG01) CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE A
- (CG02) CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE D
- (CG03) CONCRETE CURB AND GUTTER 30-INCH TYPE D
- (CG04) CONCRETE CURB PEDSTRIAN
- (CM01) CONCRETE PAVEMENT "DOWELED & TINED", 9 1/2-INCH
- (CM02) CONCRETE MEDIAN SLOPED NOSE TYPE 1
- (CM04) CONCRETE SIDEWALK, 5-INCH
- (CM05) CONCRETE PAVEMENT APPROACH SLAB
- (CM06) CONCRETE SURFACE DRAINS
- (DR03) ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES, 4-INCH
- (DW04) AGGREGATE DRIVEWAY, BASE AGGREGATE DENSE, 6-INCH
- (BG02) MGS GUARDRAIL 3
- (BG04) MGS GUARDRAIL TERMINAL EAT
- (BG05) MGS GUARDRAIL TERMINAL TYPE 2
- (BG06) STEEL THRIE BEAM
- (BG07) STEEL THRIE BEAM BULLNOSE TERMINAL
- (BG08) MGS THRIE BEAM TRANSITION
- (BG09) STEEL PLATE BEAM GUARD CLASS A
- (BG10) ANCHORAGES FOR STEEL PLATE BEAM GUARD TYPE 2
- (MW01) GUARDAIL MOW STRIP ASPHALT
- (PV01) ASPHALTIC SURFACE, 3-INCH
- (SW01) SAWING ASPHALT
- (SW02) SAWING CONCRETE

RADIUS TABLE

POINT	STATION	OFFSET	RADIUS
46	28D+07.91	517.00' LT	500'

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	PLAN DETAIL- RAMP D & DC	SHEET 50	E



PLAN DETAIL LEGEND

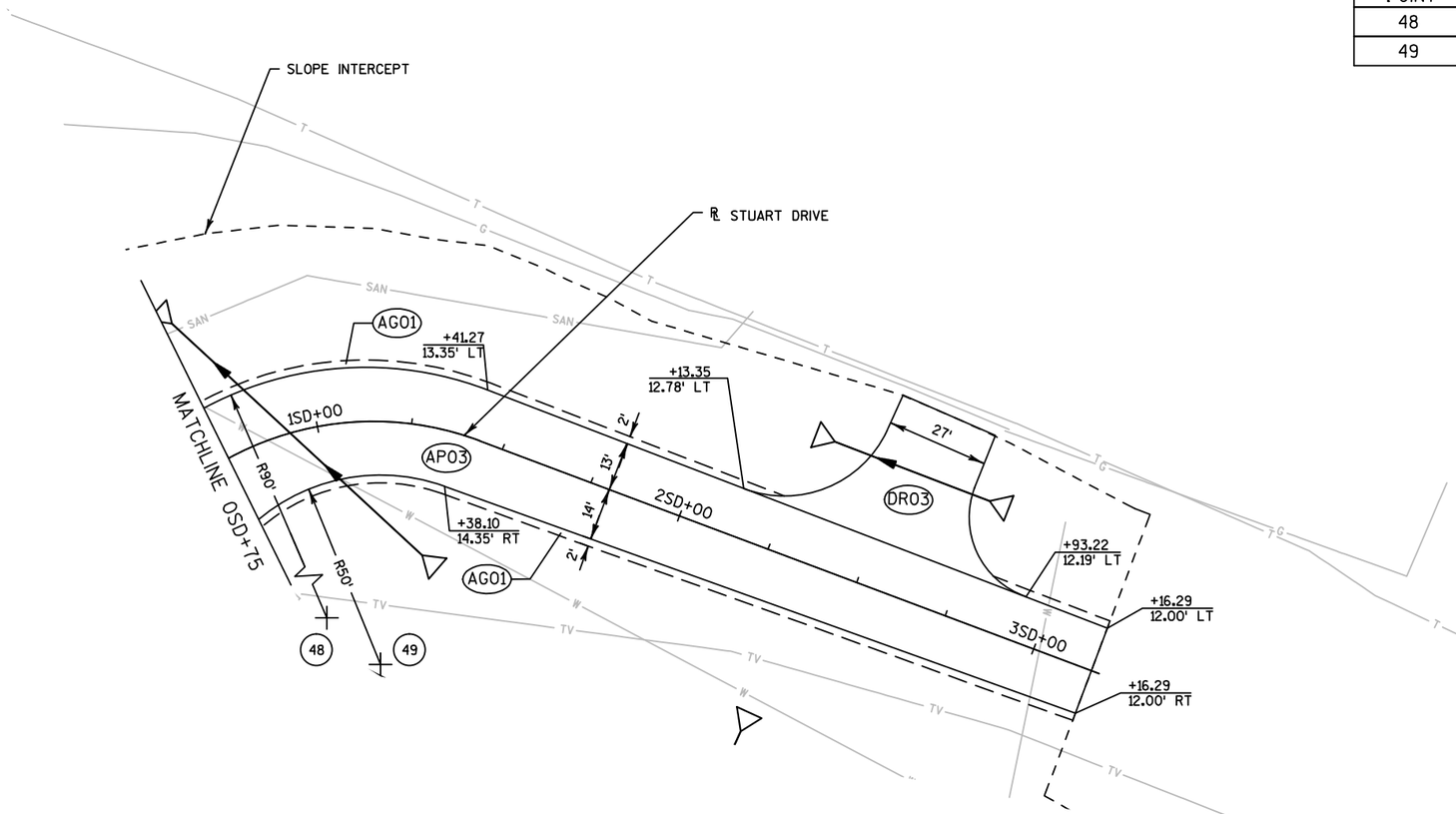
- APO1 HMA PAVEMENT TYPE E-0.3, 3 1/2-INCH
- APO2 HMA PAVEMENT TYPE E-3, 5 3/4-INCH
- APO3 HMA PAVEMENT TYPE E-3, 5-INCH
- AGO1 BASE AGGREGATE DENSE 3/4-INCH
- AGO2 BASE AGGREGATE DENSE 1 1/4-INCH
- CGO1 CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE A
- CGO2 CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE D
- CGO3 CONCRETE CURB AND GUTTER 30-INCH TYPE D
- CGO4 CONCRETE CURB PEDSTRIAN
- CMO1 CONCRETE PAVEMENT "DOWELED & TINED", 9 1/2-INCH
- CMO2 CONCRETE MEDIAN SLOPED NOSE TYPE 1
- CMO4 CONCRETE SIDEWALK, 5-INCH
- CMO5 CONCRETE PAVEMENT APPROACH SLAB
- CMO6 CONCRETE SURFACE DRAINS
- DRO3 ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES, 4-INCH
- DWO4 AGGREGATE DRIVEWAY, BASE AGGREGATE DENSE, 6-INCH
- BGO2 MGS GUARDRAIL 3
- BGO4 MGS GUARDRAIL TERMINAL EAT
- BGO5 MGS GUARDRAIL TERMINAL TYPE 2
- BGO6 STEEL THRIE BEAM
- BGO7 STEEL THRIE BEAM BULLNOSE TERMINAL
- BGO8 MGS THRIE BEAM TRANSITION
- BGO9 STEEL PLATE BEAM GUARD CLASS A
- BG10 ANCHORAGES FOR STEEL PLATE BEAM GUARD TYPE 2
- MWO1 GUARDAIL MOW STRIP ASPHALT
- PVO1 ASPHALTIC SURFACE, 3-INCH
- SWO1 SAWING ASPHALT
- SWO2 SAWING CONCRETE

RADIUS TABLE

POINT	STATION	OFFSET	RADIUS
47	10H+57.23	262.00' RT	250'

PROJECT NO:1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	PLAN DETAIL- CTH H	SHEET 51	E

RADIUS TABLE			
POINT	STATION	OFFSET	RADIUS
48	0SD+79.09	75.21' RT	90'
49	1SD+24.13	64.03' RT	50'



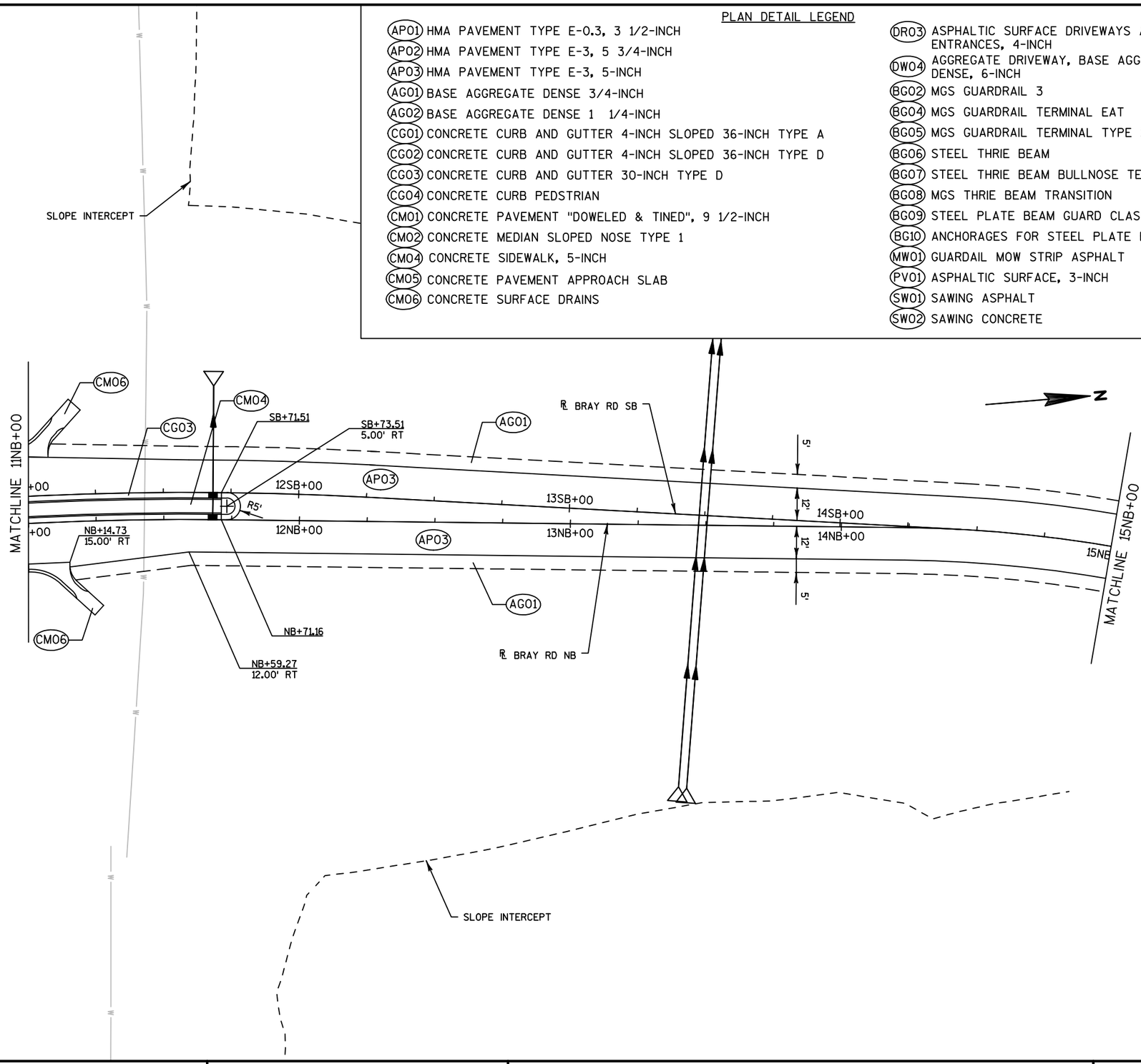
PLAN DETAIL LEGEND

- (APO1) HMA PAVEMENT TYPE E-0.3, 3 1/2-INCH
- (APO2) HMA PAVEMENT TYPE E-3, 5 3/4-INCH
- (APO3) HMA PAVEMENT TYPE E-3, 5-INCH
- (AGO1) BASE AGGREGATE DENSE 3/4-INCH
- (AGO2) BASE AGGREGATE DENSE 1 1/4-INCH
- (CGO1) CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE A
- (CGO2) CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE D
- (CGO3) CONCRETE CURB AND GUTTER 30-INCH TYPE D
- (CGO4) CONCRETE CURB PEDSTRIAN
- (CMO1) CONCRETE PAVEMENT "DOWELED & TINED", 9 1/2-INCH
- (CMO2) CONCRETE MEDIAN SLOPED NOSE TYPE 1
- (CMO4) CONCRETE SIDEWALK, 5-INCH
- (CMO5) CONCRETE PAVEMENT APPROACH SLAB
- (CMO6) CONCRETE SURFACE DRAINS
- (DRO3) ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES, 4-INCH
- (DWO4) AGGREGATE DRIVEWAY, BASE AGGREGATE DENSE, 6-INCH
- (BGO2) MGS GUARDRAIL 3
- (BGO4) MGS GUARDRAIL TERMINAL EAT
- (BGO5) MGS GUARDRAIL TERMINAL TYPE 2
- (BGO6) STEEL THRIE BEAM
- (BGO7) STEEL THRIE BEAM BULLNOSE TERMINAL
- (BGO8) MGS THRIE BEAM TRANSITION
- (BGO9) STEEL PLATE BEAM GUARD CLASS A
- (BG10) ANCHORAGES FOR STEEL PLATE BEAM GUARD TYPE 2
- (MWO1) GUARDAIL MOW STRIP ASPHALT
- (PVO1) ASPHALTIC SURFACE, 3-INCH
- (SWO1) SAWING ASPHALT
- (SWO2) SAWING CONCRETE

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	PLAN DETAIL- STUART DR	SHEET 52	E

PLAN DETAIL LEGEND

- APO1 HMA PAVEMENT TYPE E-0.3, 3 1/2-INCH
- APO2 HMA PAVEMENT TYPE E-3, 5 3/4-INCH
- APO3 HMA PAVEMENT TYPE E-3, 5-INCH
- AGO1 BASE AGGREGATE DENSE 3/4-INCH
- AGO2 BASE AGGREGATE DENSE 1 1/4-INCH
- CGO1 CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE A
- CGO2 CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE D
- CGO3 CONCRETE CURB AND GUTTER 30-INCH TYPE D
- CGO4 CONCRETE CURB PEDSTRIAN
- CMO1 CONCRETE PAVEMENT "DOWELED & TINED", 9 1/2-INCH
- CMO2 CONCRETE MEDIAN SLOPED NOSE TYPE 1
- CMO4 CONCRETE SIDEWALK, 5-INCH
- CMO5 CONCRETE PAVEMENT APPROACH SLAB
- CMO6 CONCRETE SURFACE DRAINS
- DRO3 ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES, 4-INCH
- DWO4 AGGREGATE DRIVEWAY, BASE AGGREGATE DENSE, 6-INCH
- BGO2 MGS GUARDRAIL 3
- BGO4 MGS GUARDRAIL TERMINAL EAT
- BGO5 MGS GUARDRAIL TERMINAL TYPE 2
- BGO6 STEEL THRIE BEAM
- BGO7 STEEL THRIE BEAM BULLNOSE TERMINAL
- BGO8 MGS THRIE BEAM TRANSITION
- BGO9 STEEL PLATE BEAM GUARD CLASS A
- BG10 ANCHORAGES FOR STEEL PLATE BEAM GUARD TYPE 2
- MWO1 GUARDAIL MOW STRIP ASPHALT
- PVO1 ASPHALTIC SURFACE, 3-INCH
- SWO1 SAWING ASPHALT
- SWO2 SAWING CONCRETE

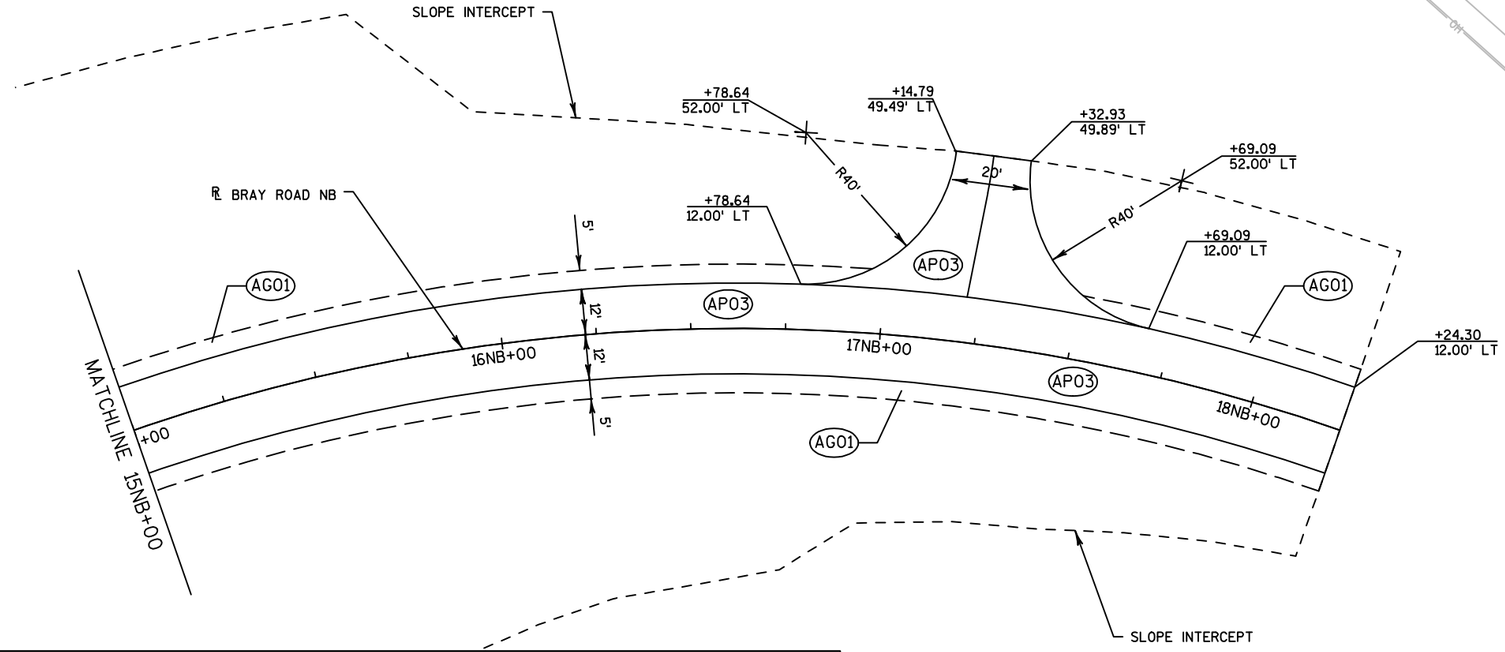


PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	PLAN DETAIL- BRAY RD	SHEET 53	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\021208_PD_ BRAY.DWG PLOT DATE : 4/30/2015 11:38 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1" = 40'_XREF_XREF

WISDOT/CADDS SHEET 42

2

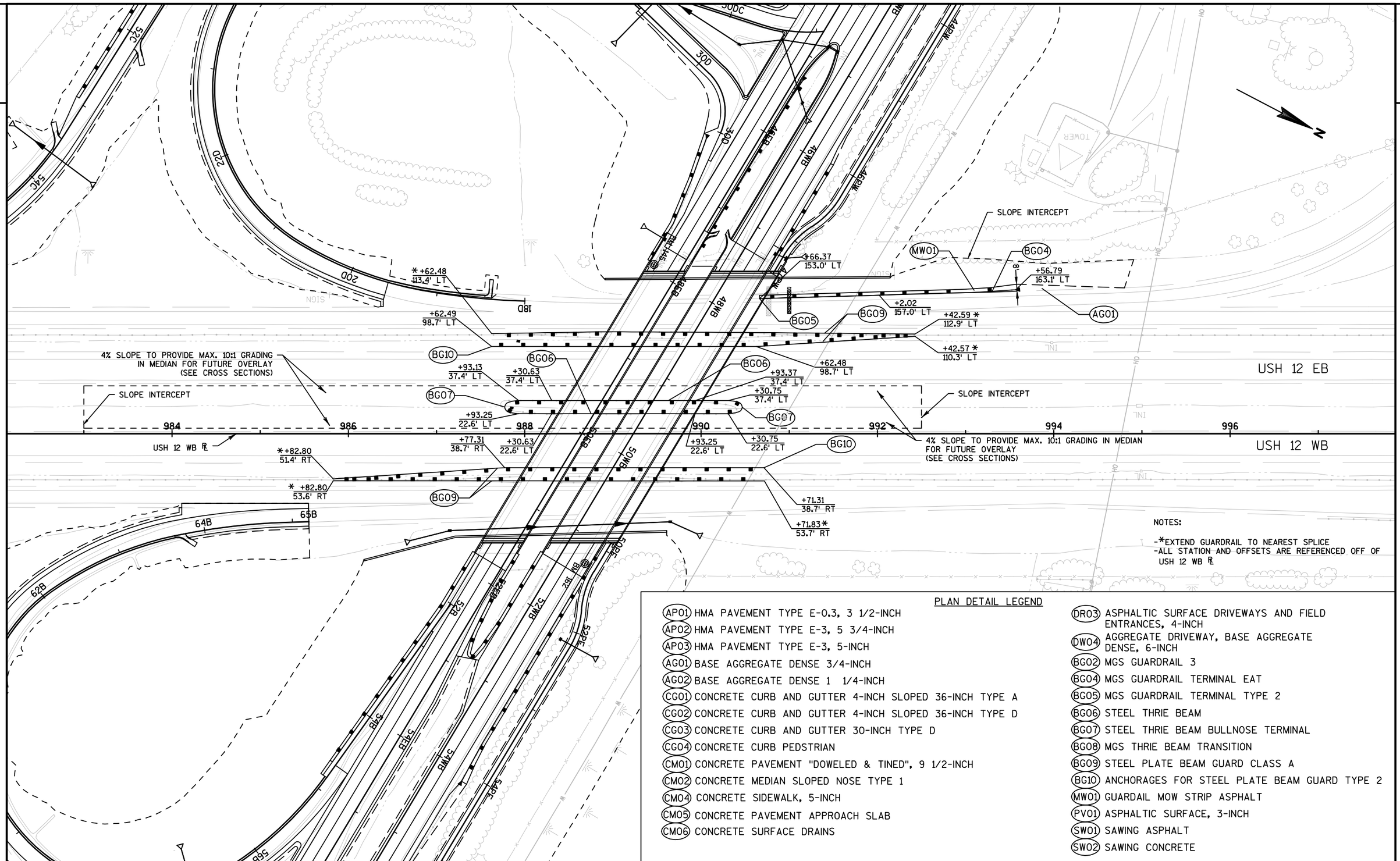


PLAN DETAIL LEGEND

- (AP01) HMA PAVEMENT TYPE E-0.3, 3 1/2-INCH
- (AP02) HMA PAVEMENT TYPE E-3, 5 3/4-INCH
- (AP03) HMA PAVEMENT TYPE E-3, 5-INCH
- (AG01) BASE AGGREGATE DENSE 3/4-INCH
- (AG02) BASE AGGREGATE DENSE 1 1/4-INCH
- (CG01) CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE A
- (CG02) CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE D
- (CG03) CONCRETE CURB AND GUTTER 30-INCH TYPE D
- (CG04) CONCRETE CURB PEDSTRIAN
- (CM01) CONCRETE PAVEMENT "DOWELED & TINED", 9 1/2-INCH
- (CM02) CONCRETE MEDIAN SLOPED NOSE TYPE 1
- (CM04) CONCRETE SIDEWALK, 5-INCH
- (CM05) CONCRETE PAVEMENT APPROACH SLAB
- (CM06) CONCRETE SURFACE DRAINS
- (DR03) ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES, 4-INCH
- (DW04) AGGREGATE DRIVEWAY, BASE AGGREGATE DENSE, 6-INCH
- (BG02) MGS GUARDRAIL 3
- (BG04) MGS GUARDRAIL TERMINAL EAT
- (BG05) MGS GUARDRAIL TERMINAL TYPE 2
- (BG06) STEEL THRIE BEAM
- (BG07) STEEL THRIE BEAM BULLNOSE TERMINAL
- (BG08) MGS THRIE BEAM TRANSITION
- (BG09) STEEL PLATE BEAM GUARD CLASS A
- (BG10) ANCHORAGES FOR STEEL PLATE BEAM GUARD TYPE 2
- (MW01) GUARDAIL MOW STRIP ASPHALT
- (PV01) ASPHALTIC SURFACE, 3-INCH
- (SW01) SAWING ASPHALT
- (SW02) SAWING CONCRETE

PROJECT NO:1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	PLAN DETAIL- BRAY RD	SHEET 54	E

2



NOTES:

-*EXTEND GUARDRAIL TO NEAREST SPLICE
-ALL STATION AND OFFSETS ARE REFERENCED OFF OF USH 12 WB ℄

PLAN DETAIL LEGEND

- APO1 HMA PAVEMENT TYPE E-0.3, 3 1/2-INCH
- APO2 HMA PAVEMENT TYPE E-3, 5 3/4-INCH
- APO3 HMA PAVEMENT TYPE E-3, 5-INCH
- AGO1 BASE AGGREGATE DENSE 3/4-INCH
- AGO2 BASE AGGREGATE DENSE 1 1/4-INCH
- CGO1 CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE A
- CGO2 CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE D
- CGO3 CONCRETE CURB AND GUTTER 30-INCH TYPE D
- CGO4 CONCRETE CURB PEDSTRIAN
- CMO1 CONCRETE PAVEMENT "DOWELED & TINED", 9 1/2-INCH
- CMO2 CONCRETE MEDIAN SLOPED NOSE TYPE 1
- CMO4 CONCRETE SIDEWALK, 5-INCH
- CMO5 CONCRETE PAVEMENT APPROACH SLAB
- CMO6 CONCRETE SURFACE DRAINS
- DRO3 ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES, 4-INCH
- DWO4 AGGREGATE DRIVEWAY, BASE AGGREGATE DENSE, 6-INCH
- BGO2 MGS GUARDRAIL 3
- BGO4 MGS GUARDRAIL TERMINAL EAT
- BGO5 MGS GUARDRAIL TERMINAL TYPE 2
- BGO6 STEEL THRIE BEAM
- BGO7 STEEL THRIE BEAM BULLNOSE TERMINAL
- BGO8 MGS THRIE BEAM TRANSITION
- BGO9 STEEL PLATE BEAM GUARD CLASS A
- BG10 ANCHORAGES FOR STEEL PLATE BEAM GUARD TYPE 2
- MWO1 GUARDAIL MOW STRIP ASPHALT
- PVO1 ASPHALTIC SURFACE, 3-INCH
- SWO1 SAWING ASPHALT
- SWO2 SAWING CONCRETE

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	PLAN DETAIL - USH 12	SHEET 55	E

2

NOTE:

CITY OF ELKHORN PROJECT SCHEDULED TO COINCIDE WITH INTERCHANGE RECONSTRUCTION AND EXTEND SHARED USE PATH TO THE WEST.

BEGIN CONSTRUCTION
STA 31PW+50
X = 767422.47
Y = 364785.81

BEGIN CONSTRUCTION
STA 31WB+51.41
Y = 364,720.11
X = 767,322.75

BEGIN PROJECT
STA 30EB+00.00
Y = 364,671.32
X = 767,271.51

SLOPE INTERCEPT

℄ SHARED USE PATH WEST

℄ CTH NN WB

CTH NN WB

℄ CTH NN EB

CTH NN EB

CP 465

MATCHLINE 35EB+00

SLOPE INTERCEPT

N

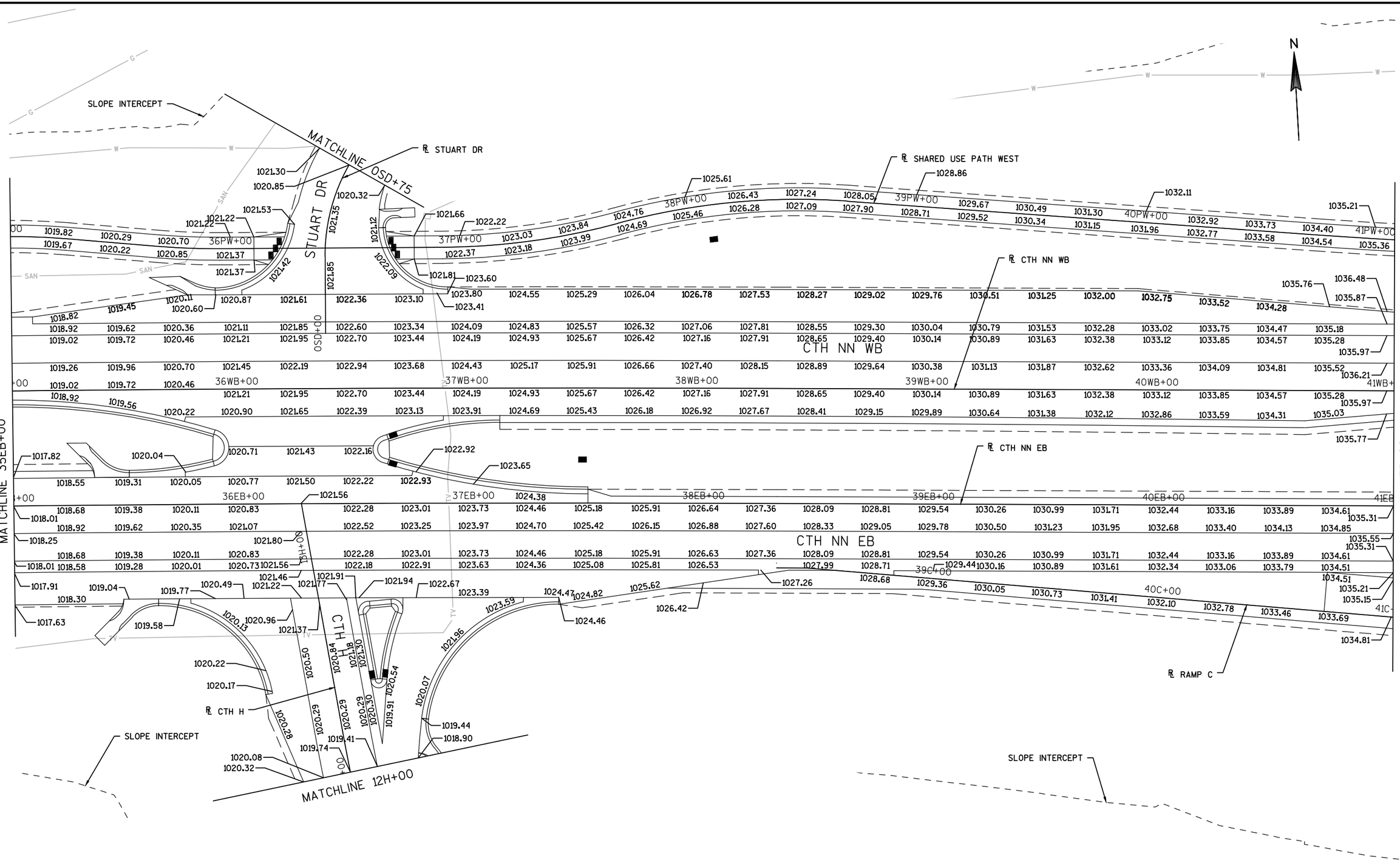
2

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	PAVEMENT GRADES- CTH NN	SHEET 56	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\021301_JD_NN_PATH.DWG PLOT DATE : 4/29/2015 11:46 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:40_XREF

WISDOT/CADDS SHEET 42

2



PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	PAVEMENT GRADES- CTH NN	SHEET 57	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\021301_JD_NN_PATH.DWG PLOT DATE : 4/29/2015 11:46 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:40_XREF

2

N

℄ SHARED USE PATH WEST

℄ CTH NN WB

CTH NN WB

CTH NN EB

℄ CTH NN EB

℄ RAMP CD

RAMP CD

℄ RAMP C

RAMP C

℄ RAMP DC

RAMP DC

℄ RAMP D

RAMP D

MATCHLINE 41EB+00

MATCHLINE 47EB+00

MATCHLINE 43CD+50

MATCHLINE 43C+50

MATCHLINE 29DC+00

MATCHLINE 29D+00

HIGH POINT
STA 43+32.53C

SLOPE INTERCEPT

SLOPE INTERCEPT

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	PAVEMENT GRADES- CTH NN	SHEET 58	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\021301_JD_NN_PATH.DWG PLOT DATE : 4/29/2015 11:46 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:40_XREF

2

N

SLOPE INTERCEPT

℄ SHARED USE PATH EAST

℄ CTH NN WB

056

1052.00

51PE+00 1052.11 1052.23 1052.44 1052.61

1052.15 1052.26 1052.38 1052.41 52PE+00 1052.46 1052.73 1052.84 1052.93 1052.93 53PE+

1052.58 1052.69 1052.78

HIGH POINT
STA 53+00.00PE
1052.81

1048.40
1048.55
1048.77
1049.05

BM 162

1052.70 1052.79 1052.86 1052.92 1052.97 1053.00

1052.60 1052.88 1052.98 1053.07 1053.14 1053.20 1053.25 1053.28

CTH NN WB

00 48WB+00 49WB+00 50WB+00 51WB+00 52WB+00 53WB+

1048.81
1048.57
1048.49

1052.64 1052.74 1052.83 1052.90 1052.96 1053.01 1053.04

MATCHLINE 47EB+00

MATCHLINE 53EB+00

1048.05

1052.79

+00 48EB+00 49EB+00 50EB+00 51EB+00 52EB+00 53EB

1048.40 1048.44 1048.79 1049.12 1048.08 1048.68 1049.03 1049.36 1048.32 1048.44 1048.79 1049.08 1048.34

1052.73 1052.76 1052.78 1052.60 1052.69 1052.77 1052.85 1052.90 1052.95 1052.84 1052.93 1053.01 1053.09 1053.14 1053.19 1052.85 1052.95 1052.56 1052.65 1052.77 1052.90 1052.67 1052.80 1052.77

CTH NN EB

BM 145

1048.08 1048.76 1048.95 1047.98 1048.69 1047.92

1052.75 1052.76 1052.85 1052.78

886

℄ CTH NN EB

℄ RAMP B

SLOPE INTERCEPT

SLOPE INTERCEPT

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	PAVEMENT GRADES- CTH NN	SHEET 59	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\021301_JD_NN_PATH.DWG PLOT DATE : 4/29/2015 11:46 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:40_XREF

2

N

SLOPE INTERCEPT

℄ SHARED USE PATH EAST

MATCHLINE 11NB+00

℄ BRAY RD SB

℄ BRAY RD NB

BRAY RD

11SB

11NB

CTH NN WB

℄ CTH NN WB

HIGH POINT
STA 53+47.68WB

HIGH POINT
STA 53+69.78

CTH NN EB

℄ CTH NN EB

℄ RAMP B

℄ RAMP AB

RAMP AB

℄ RAMP A

RAMP A

℄ RAMP AA

RAMP AA

HIGH POINT
STA 986+66.11

MATCHLINE 53EB+00

MATCHLINE 59EB+00

MATCHLINE 56AB+50

MATCHLINE 56B+50

MATCHLINE 986A+50

MATCHLINE 986AA+50

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	PAVEMENT GRADES- CTH NN	SHEET 60	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\021301_JD_NN_PATH.DWG PLOT DATE : 4/29/2015 11:46 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:40_XREF

2

N

SLOPE INTERCEPT

℄ SHARED USE PATH EAST

1049.44 1048.82 1047.37 1045.67

60PE+00 61PE+00 62PE+00 63PE+00

00 1049.71 1049.62 1049.53 1049.35 1049.23 1049.05 1048.54 1048.20 1047.80 1046.95 1046.52 1046.10 1045.25

1049.56 1049.47 1049.38 1049.29 1049.20 1049.08 1048.90 1048.67 1048.39 1048.05 1047.65 1047.22 1046.80 1046.37 1045.95 1045.52 1045.10

℄ CTH NN WB

1050.77 1050.71 1050.65 1050.56 1050.47 1050.23 1049.84 1049.43 1049.01 1048.58 1048.13 1047.67 1047.18 1046.65 1046.08 1045.48

1050.33 1050.18 1050.03 1049.86 1049.67 1049.39 1049.00 1048.59 1048.17 1047.74 1047.29 1046.83 1046.36 1045.88 1045.41 1044.94

1050.17 1049.99 1049.81 1049.60 1049.39 1049.09 1048.70 1048.29 1047.87 1047.44 1046.99 1046.53 1046.06 1045.58 1045.11 1044.64

CTH NN WB

1049.79 1049.54 1049.28 1049.00 1048.71 1048.37 1047.98 1047.57 1047.15 1046.72 1046.27 1045.81 1045.34 1044.87 1044.39 1043.92

60WB+00 61WB+00 62WB+00 63WB+00

00 1049.41 1049.08 1048.75 1048.39 1048.03 1047.65 1047.26 1046.85 1046.43 1046.00 1045.55 1045.09 1044.62 1044.15 1043.67 1043.20

1049.03 1048.63 1048.22 1047.79 1047.35 1046.93 1046.54 1046.13 1045.71 1045.28 1044.83 1044.37 1043.95 1043.55 1043.18 1042.84

℄ CTH NN EB

MATCHLINE 59EB+00

1049.91 1048.80 1047.31 1045.60 1045.14 1043.88

60EB+00 61EB+00 62EB+00 63EB+00

+00 1049.67 1049.44 1049.14 1048.98 1048.64 1048.45 1048.29 1048.09 1047.93 1047.70 1047.54 1047.15 1046.90 1046.74 1046.48 1046.32 1046.05 1045.89 1045.44 1044.98 1044.66 1044.50 1044.26 1044.02 1043.53

1049.92 1049.62 1049.31 1049.28 1048.86 1048.42 1047.97 1047.57 1047.21 1046.82 1046.43 1046.02 1045.60 1045.17 1044.72 1044.26 1043.78 1043.30

1049.69 1049.43 1048.94 1048.80 1048.40 1048.21 1047.85 1047.61 1047.31 1047.03 1046.37 1045.98 1045.59 1045.18 1044.76 1044.33 1043.88 1043.42 1042.94 1042.46 1042.81

1049.32 1046.74 1041.97

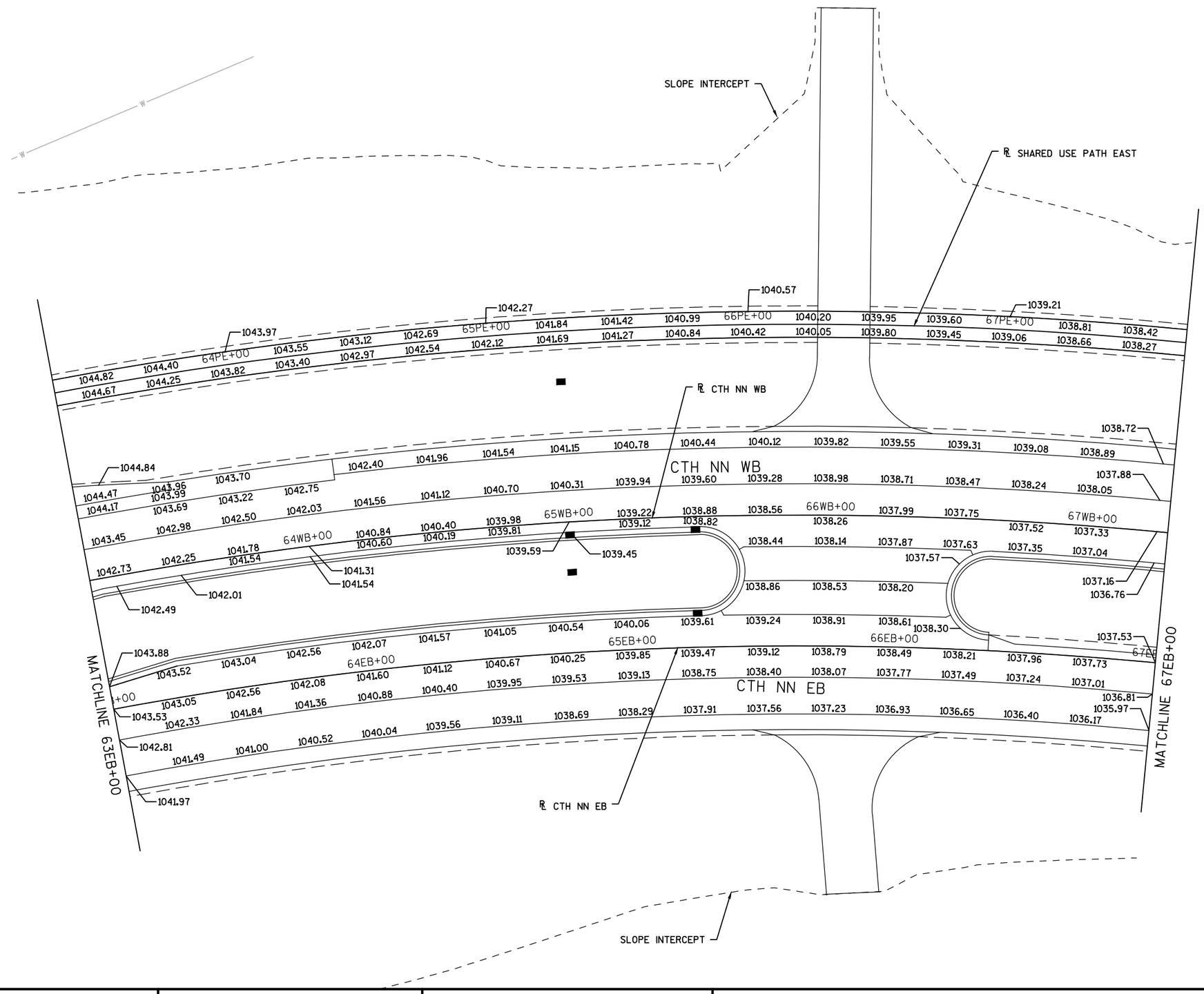
CTH NN EB

MATCHLINE 63EB+00

SLOPE INTERCEPT

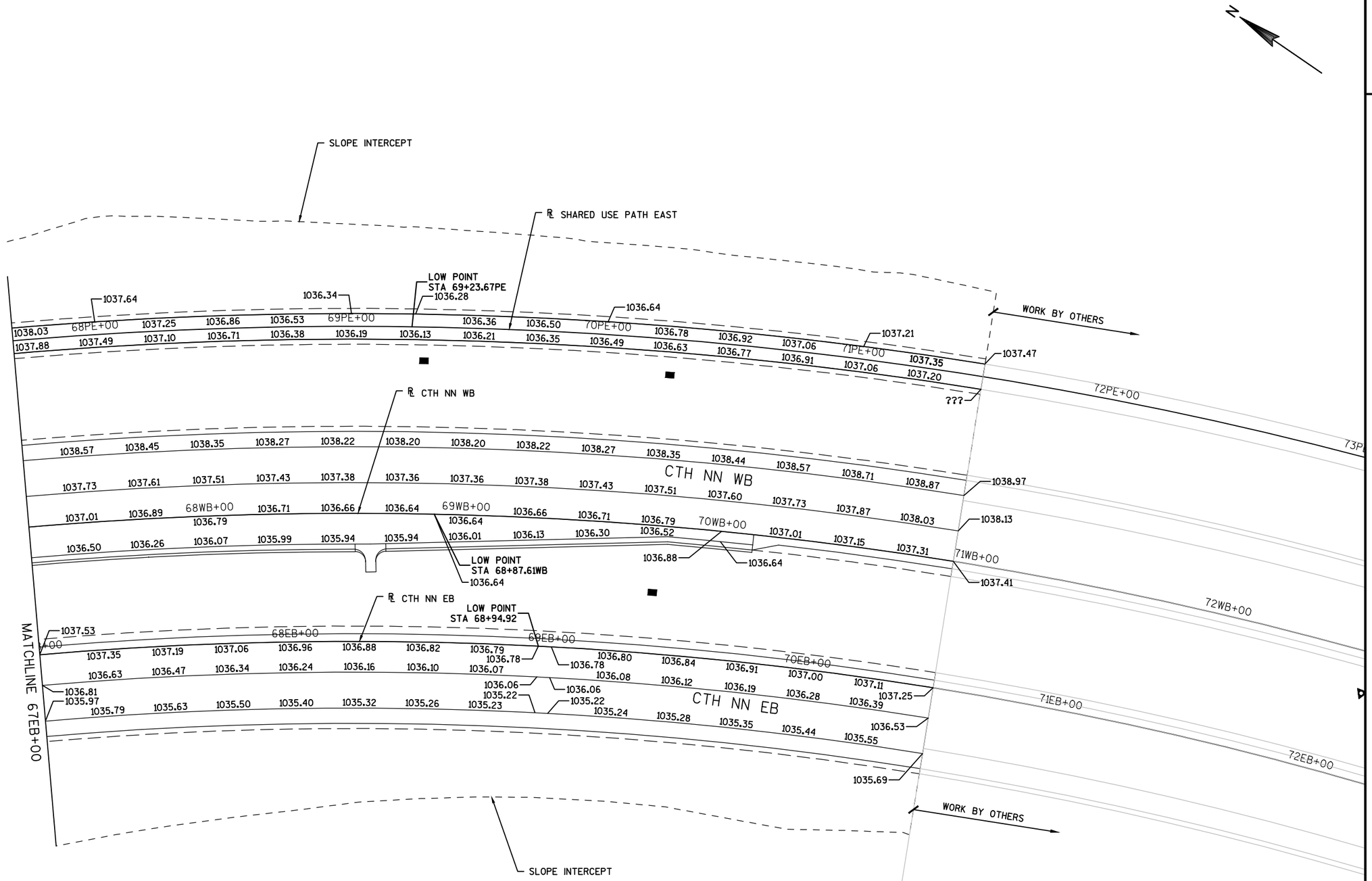
PROJECT NO:1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	PAVEMENT GRADES- CTH NN	SHEET 61	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\021301_JD_NN_PATH.DWG PLOT DATE : 4/29/2015 11:47 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:40_XREF



PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	PAVEMENT GRADES- CTH NN	SHEET 62	E

2

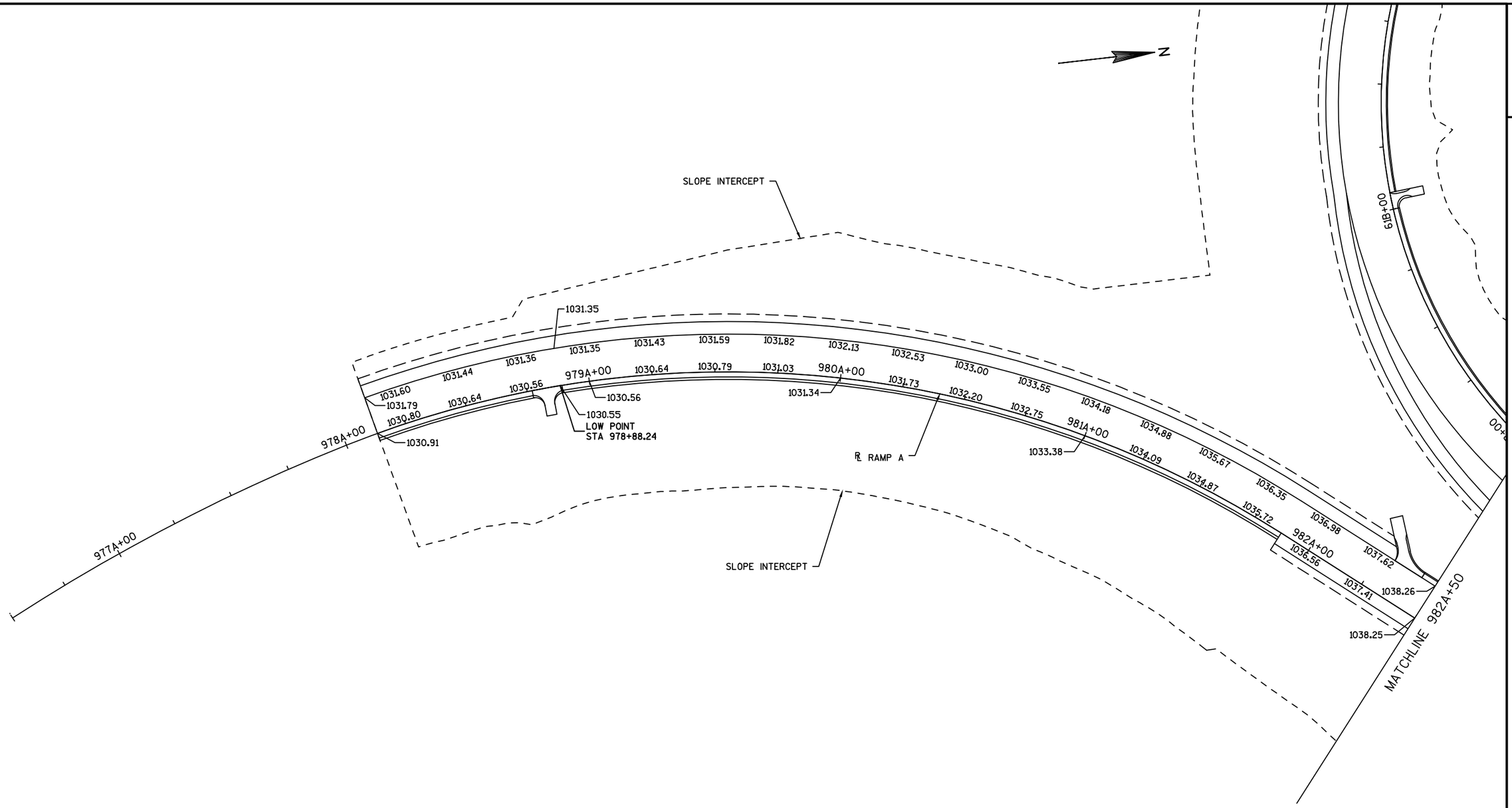


PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	PAVEMENT GRADES- CTH NN	SHEET 63	E

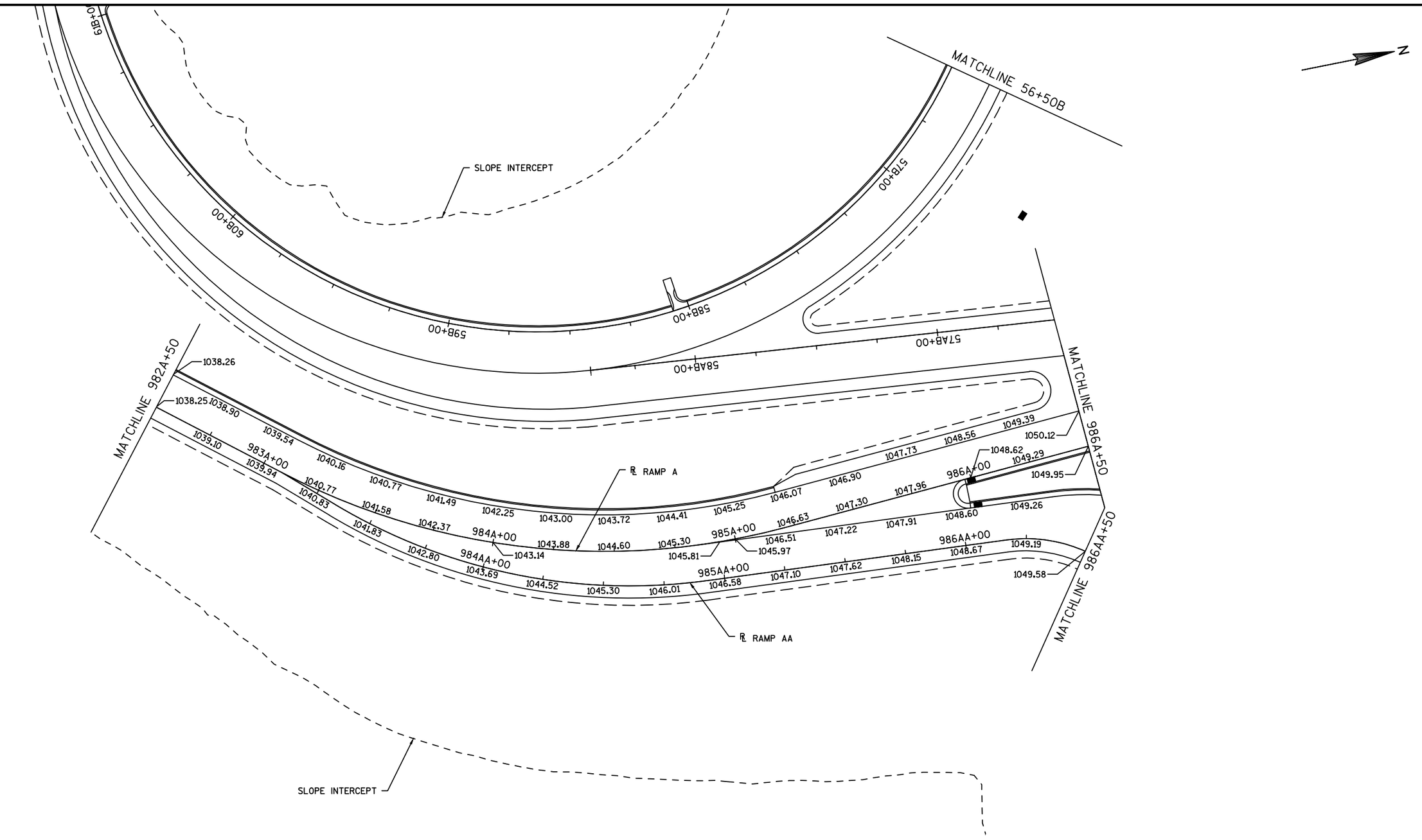
FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\021301_JD_NN_PATH.DWG PLOT DATE : 4/29/2015 11:47 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:40_XREF

WISDOT/CADDS SHEET 42

2

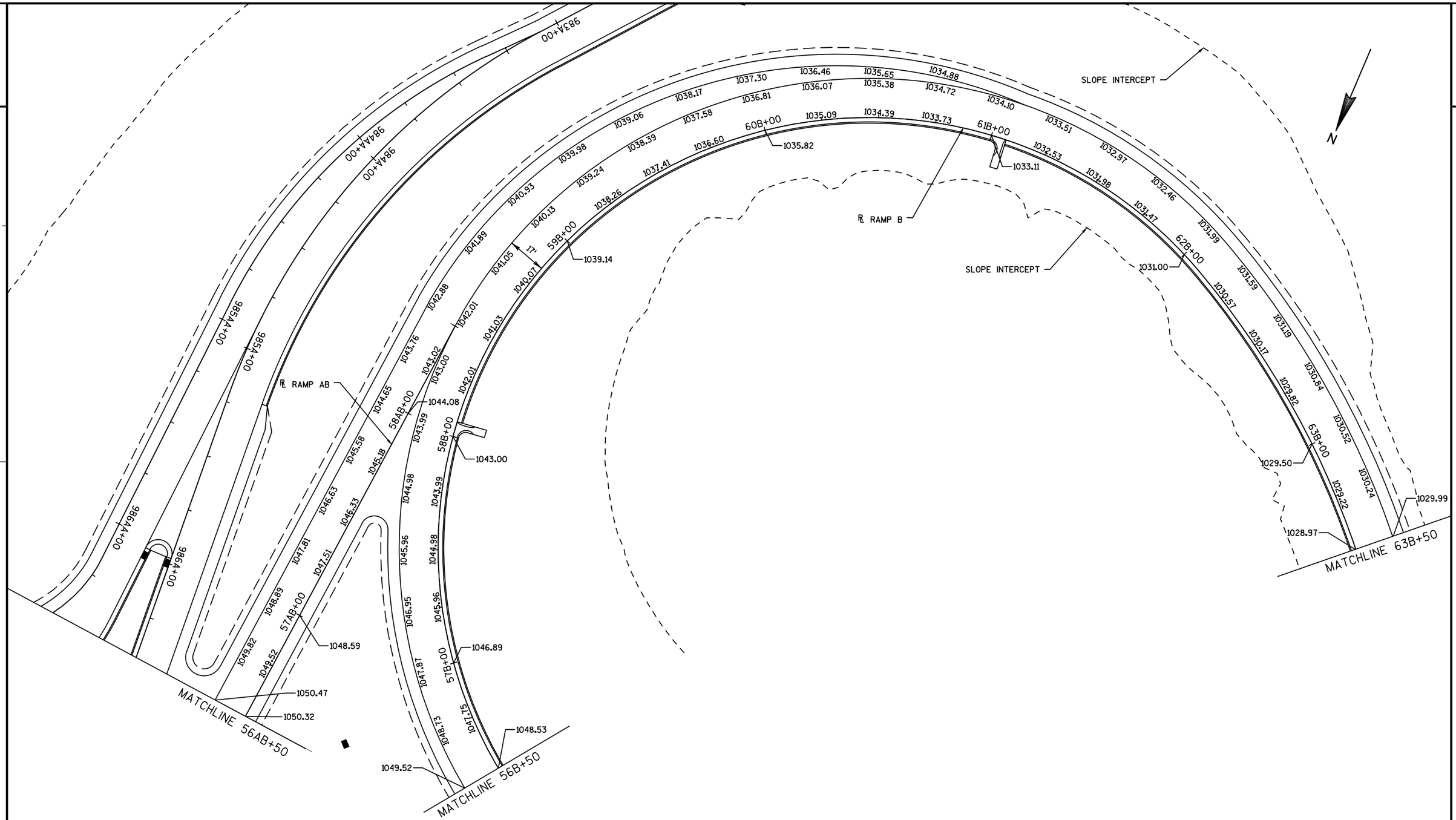


PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	PAVEMENT GRADES- RAMP A & AA	SHEET 64	E



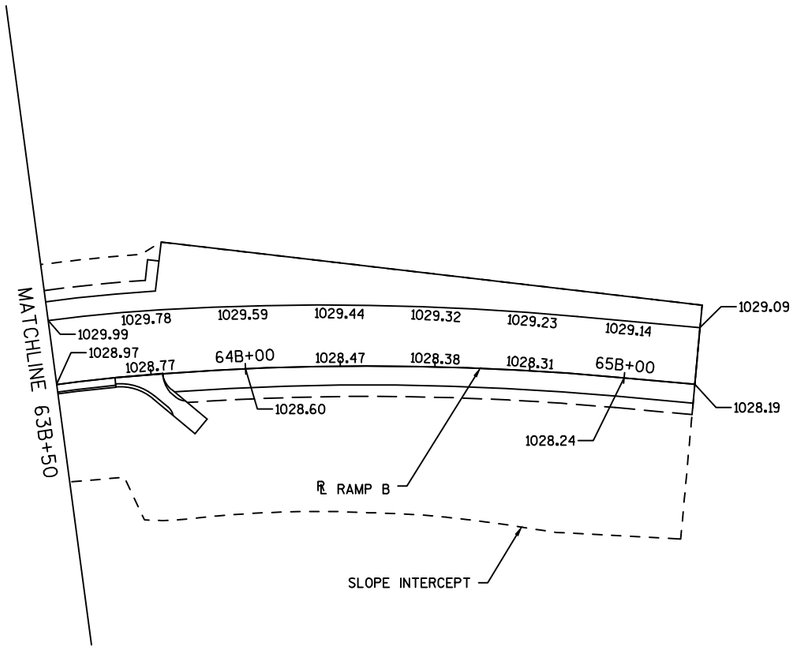
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	PAVEMENT GRADES- RAMP A & AA	SHEET 65	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\021302_JD_A_AA.DWG PLOT DATE : 4/29/2015 11:48 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:40_XREF



PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	PAVEMENT GRADES- RAMP B & AB	SHEET 66	E

2



PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	PAVEMENT GRADES- RAMP B & AB	SHEET 67	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\021303_JD_B_AB.DWG PLOT DATE : 4/29/2015 11:49 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:40_XREF

WISDOT/CADDS SHEET 42

2

PROJECT NO:1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	PAVEMENT GRADES- RAMP C & CD	SHEET	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\021304_JD_ C_CD.DWG PLOT DATE : 4/29/2015 11:51 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1" = 40'_XREF_XREF

2

N

SLOPE INTERCEPT

220+00

230+00

240+00

SLOPE INTERCEPT

RAMP C

LOW POINT
STA 53+50.79

MATCHLINE 49C+50

MATCHLINE 55C+50

1029.87 1029.65 1029.43 1029.20 1028.98 1028.82 1028.74 1028.65 1028.59 1028.54 1028.52 1028.52 1028.55 1028.60 1028.67 1028.77 1028.89 1029.03 1029.10 1029.15 1029.23 1029.32 1029.44 1029.59

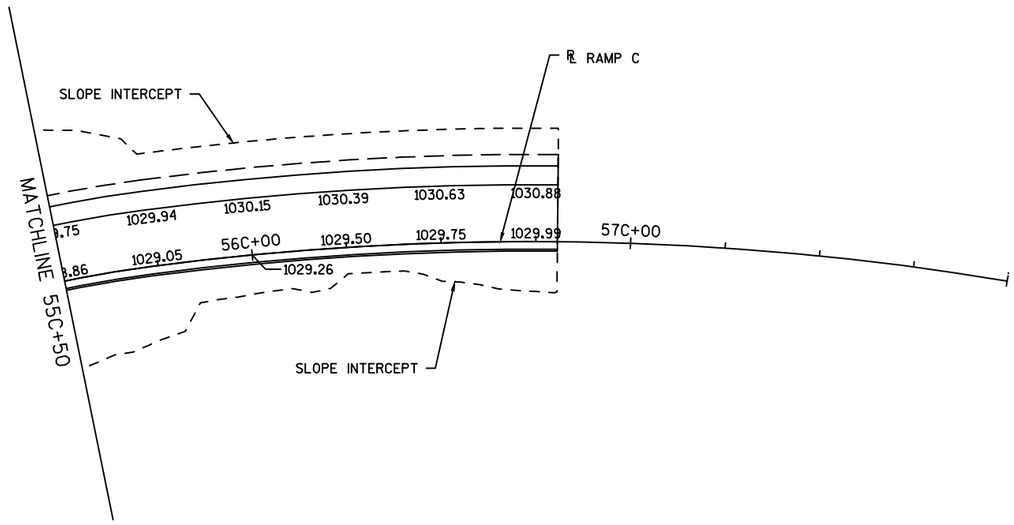
50C+00 1030.53 1030.31 1030.09 1029.86 1029.64 1029.41 51C+00 1029.19 1028.98 1028.80 1028.64 1028.50 1028.39 1028.30 52C+00 1028.23 1028.19 53C+00 1028.17 1028.17 54C+00 1028.25 1028.33 1028.42 1028.54 55C+00

1030.76

SLOPE INTERCEPT

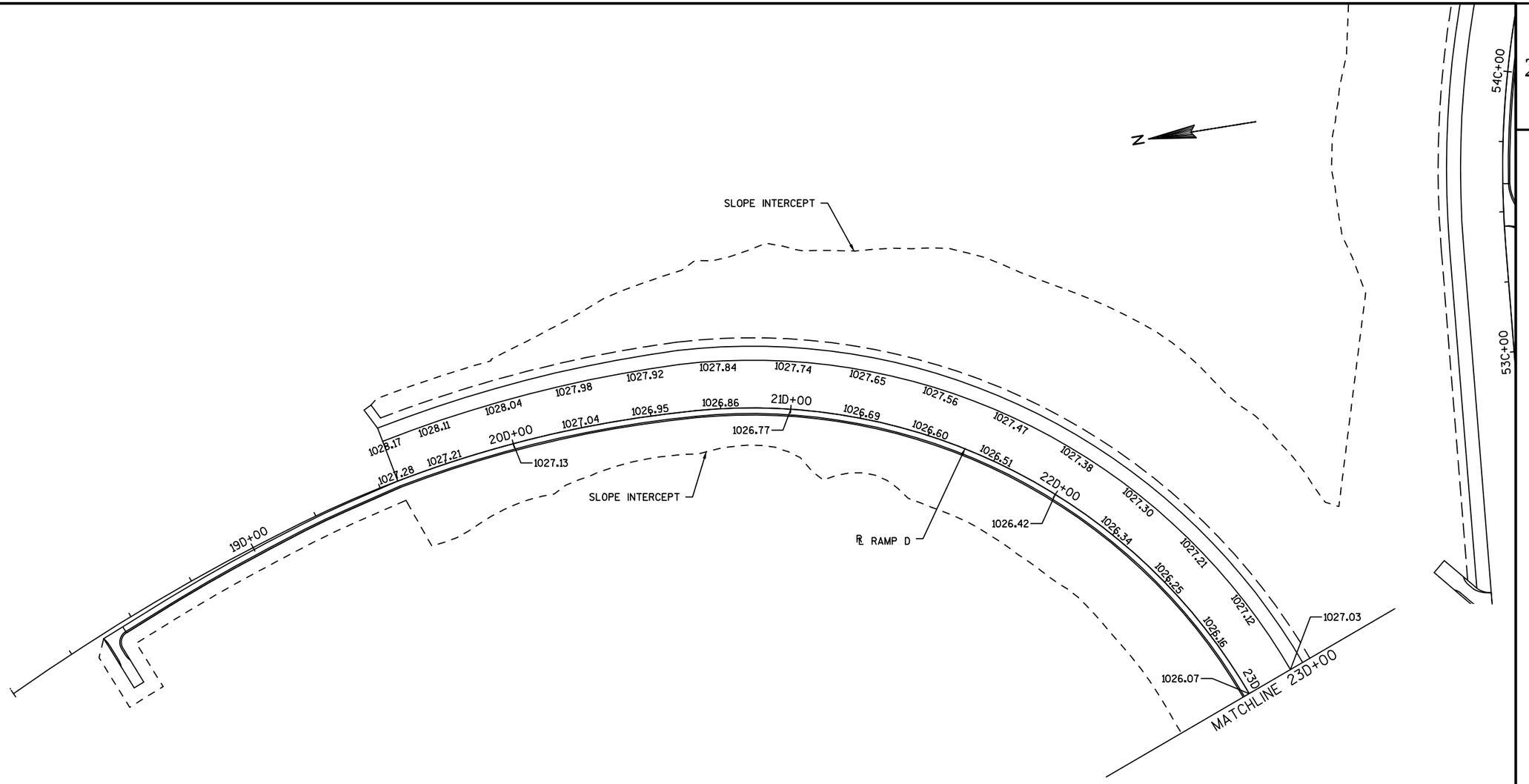
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	PAVEMENT GRADES- RAMP C	SHEET 69	E

2



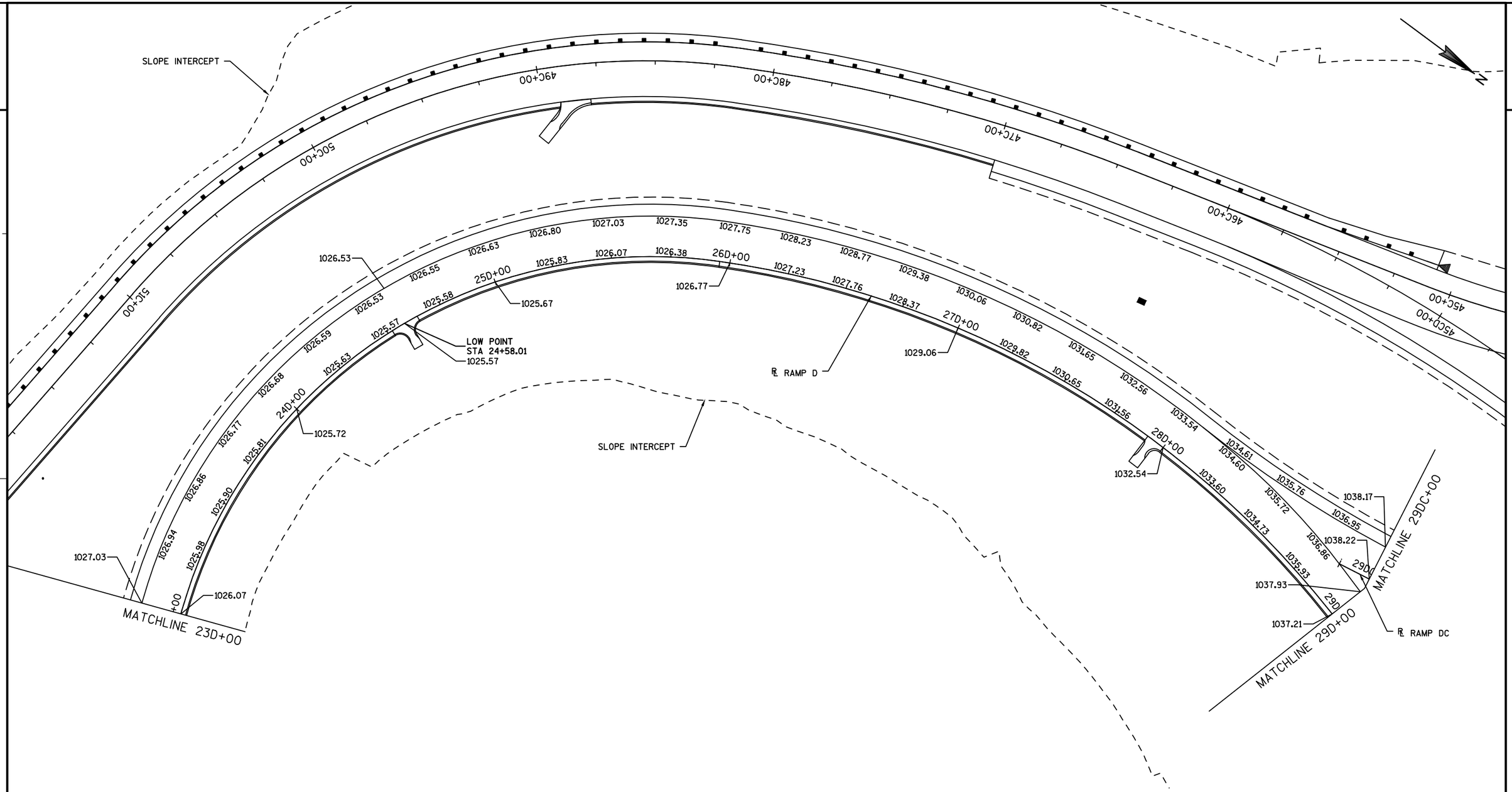
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	PAVEMENT GRADES- RAMP C	SHEET 70	E

2



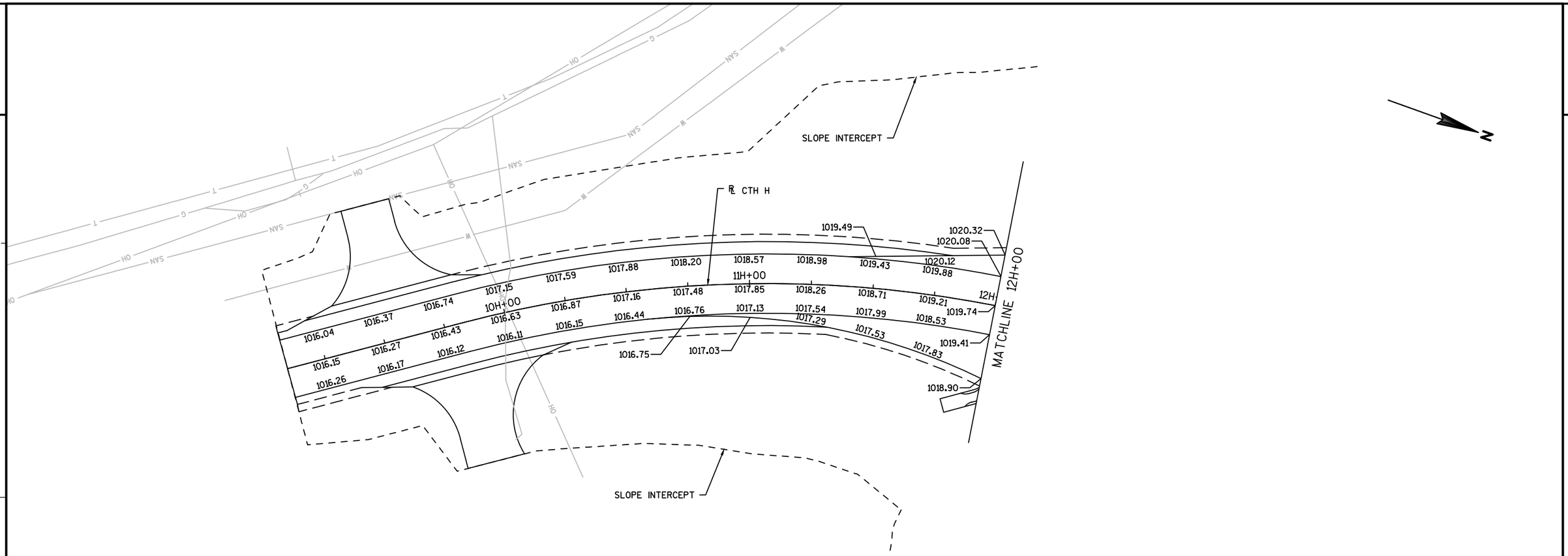
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	PAVEMENT GRADES- RAMP D & DC	SHEET 71	E

2



PROJECT NO:1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	PAVEMENT GRADES- RAMP D & DC	SHEET 72	E

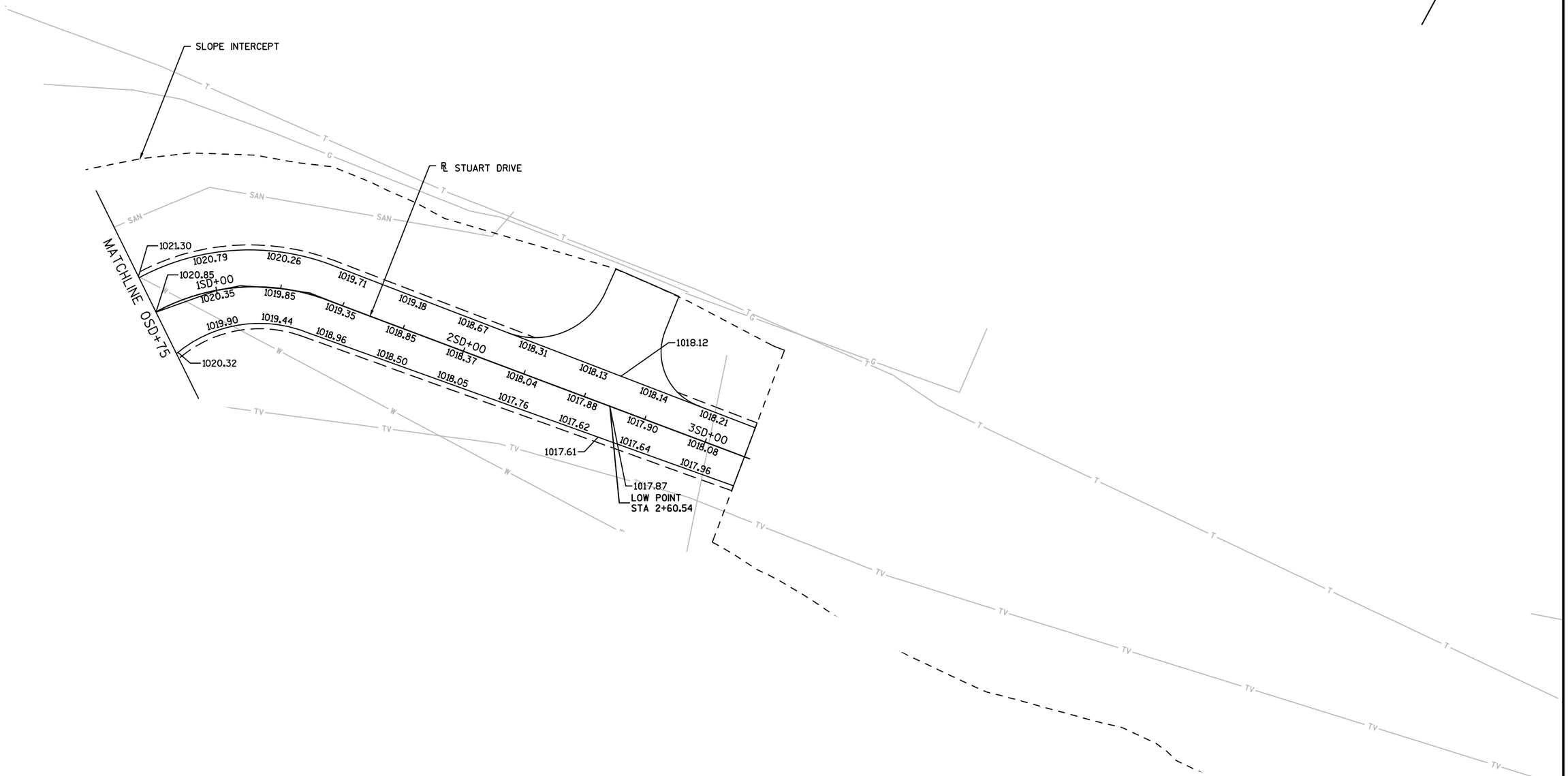
2



PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	PAVEMENT GRADES- CTH H	SHEET 73	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\021306_JD_ H.DWG PLOT DATE : 4/29/2015 11:53 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1" = 40'_XREF_XREF

2



PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	PAVEMENT GRADES- STUART DR	SHEET 74	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\021307_JD_ SR.DWG PLOT DATE : 4/29/2015 11:54 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:40_XREF

2

N

SLOPE INTERCEPT

℄ BRAY RD SB

MATCHLINE 11NB+00

1049.71 1048.96 1048.15 1047.26 1046.16 1045.10 1044.06 1043.02 1041.98 1040.94 1039.92 1039.02 1038.17 1037.32 1036.53 1035.70

+00 1049.29 1048.57 1047.77 12SB+00 1046.87 1045.90 1044.86 1043.82 13SB+00 1042.78 1041.74 1040.70 1039.68 14SB+00 1038.68 1037.68 1036.69 1035.81 15NB

1046.73 1042.72

+00 1049.81 1049.14 1048.41 1047.60 12NB+00 1045.80 1044.80 1043.76 13NB+00 1041.68 1040.64 1039.61 14NB+00 1038.59 1037.62 1036.90 1034.98

1049.24 1048.64 1047.99 1047.36 1046.49 1045.56 1044.56 1043.52 1042.48 1041.44 1040.40 1039.36 1038.24 1037.13 1036.06 1035.09

.35

1034.26

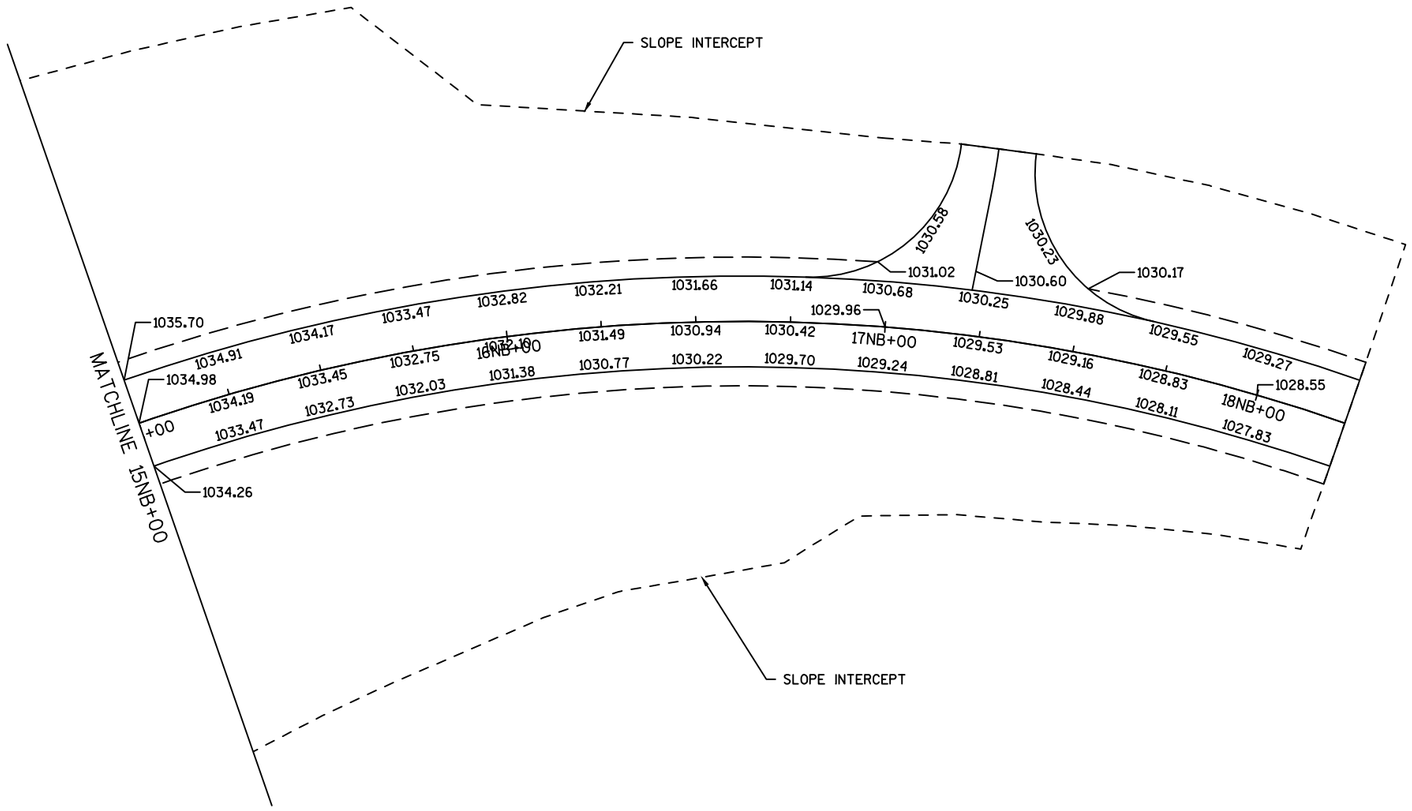
℄ BRAY RD NB

MATCHLINE 15NB+00

SLOPE INTERCEPT

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	PAVEMENT GRADES- BRAY RD	SHEET 75	E

2



PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	PAVEMENT GRADES- BRAY RD	SHEET	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\021308_JD_ BRAY.DWG PLOT DATE : 4/29/2015 11:55 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1" = 40'_XREF_XREF

NOTE:

ALL DISTURBED AREAS NOT SHOWN AS EROSION MAT OR SOD SHALL BE SEEDED, FERTILIZED, AND MULCHED.

N

WETLAND BOUNDARY

TLE

SI

℄ STUART DRIVE

℄ CTH NN WB

STUART DR 2SD

WIRE FENCE

CHAIN LINK FENCE

ASPH

CABC

30WB 32WB 34WB 36WB 38WB 40WB 42WB

30EB 32EB 34EB 36EB 38EB 40EB 42EB

30PW 32PW 34PW 36PW 38PW 40PW 42PW

A D

A C

D

TEMP. PIPE

CTH NN WB

℄ SHARED USE PATH WEST

CTH NN EB

B EX. 38C

40C

℄ RAMP C

42C

RAMP C

MATCH LINE 41EB+50

℄ CTH NN EB

CTH H

HDT

SI

EXIST R/W

℄ CTH H

PROP R/W

WETLAND BOUNDARY

LEGEND

- EROSION MAT CLASS I, TYPE B
- EROSION MAT CLASS II TYPE B
- SOD OR SOD DITCH CHECK
- SOD, REINFORCED W/ EROSION MAT CLASS II, TYPE A
- SILT FENCE
- HEAVY DUTY SILT FENCE
- EROSION BALE, BARRIER
- RIP RAP LIGHT
- INLET PROTECTION (TYPE DENOTED)
- TEMPORARY DITCH CHECK
- CULVERT PIPE DITCH CHECK
- ROCK BAGS - SILT FENCE RELIEF
- SLOPE INTERCEPT
- WETLAND BOUNDARY
- SURFACE WATER FLOW

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	EROSION CONTROL	SHEET 77	E

NOTE:

ALL DISTURBED AREAS NOT SHOWN AS EROSION MAT OR SOD SHALL BE SEEDED, FERTILIZED, AND MULCHED.

LEGEND

- EROSION MAT CLASS I, TYPE B
- EROSION MAT CLASS II TYPE B
- SOD OR SOD DITCH CHECK
- SOD, REINFORCED W/ EROSION MAT CLASS II, TYPE A
- SILT FENCE
- HEAVY DUTY SILT FENCE
- EROSION BALE, BARRIER
- RIP RAP LIGHT
- INLET PROTECTION (TYPE DENOTED)
- TEMPORARY DITCH CHECK
- CULVERT PIPE DITCH CHECK
- ROCK BAGS - SILT FENCE RELIEF
- SLOPE INTERCEPT
- WETLAND BOUNDARY
- SURFACE WATER FLOW

N

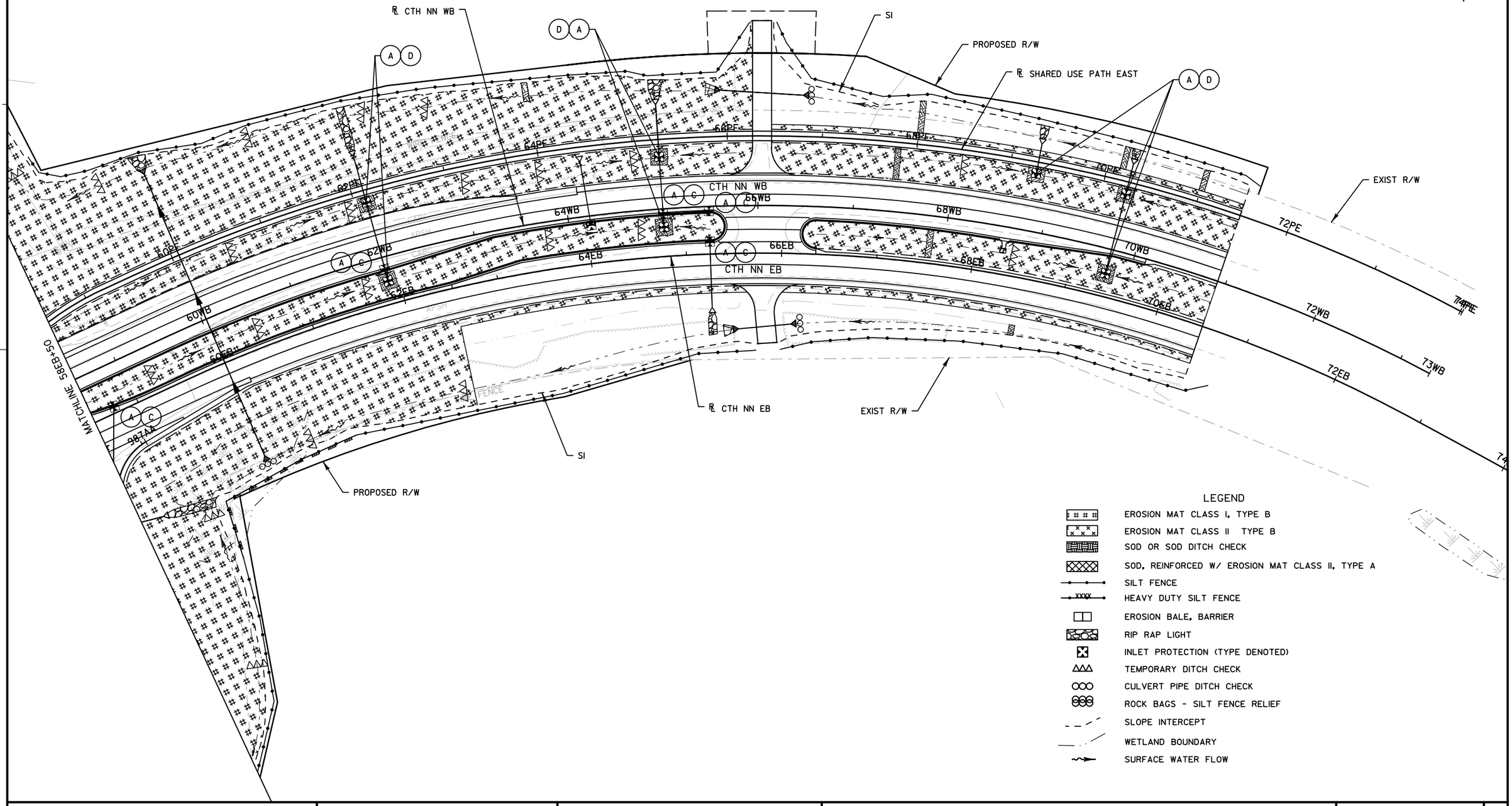
PROPSED R/W
℄ SHARED USE PATH WEST
SI
℄ CTH NN WB
PROPSED R/W
℄ SHARED USE PATH EAST
SI
CTH NN WB
TEMP. INLET
CTH NN EB
BRAY RD
MATCHLINE 43EB+50
MATCHLINE 58EB+50
RAMP CD
RAMP D
RAMP D 30D
℄ CTH NN EB
WETLAND BOUNDARY
SI
WETLAND BOUNDARY
℄ RAMP D
WETLAND BOUNDARY
℄ RAMP B
SI
56B RAMP B
RAMP AB
RAMP A
RAMP AA

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	EROSION CONTROL	SHEET 78	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\022001_EC_NNEB.DWG
LAYOUT NAME - 02
PLOT DATE : 4/28/2015 1:05 PM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1 IN:100 FT

NOTE:

ALL DISTURBED AREAS NOT SHOWN AS EROSION MAT OR SOD SHALL BE SEEDED, FERTILIZED, AND MULCHED.



LEGEND

- EROSION MAT CLASS I, TYPE B
- EROSION MAT CLASS II TYPE B
- SOD OR SOD DITCH CHECK
- SOD, REINFORCED W/ EROSION MAT CLASS II, TYPE A
- SILT FENCE
- HEAVY DUTY SILT FENCE
- EROSION BALE, BARRIER
- RIP RAP LIGHT
- INLET PROTECTION (TYPE DENOTED)
- TEMPORARY DITCH CHECK
- CULVERT PIPE DITCH CHECK
- ROCK BAGS - SILT FENCE RELIEF
- SLOPE INTERCEPT
- WETLAND BOUNDARY
- SURFACE WATER FLOW

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	EROSION CONTROL	SHEET 79	E

2

WETLAND BOUNDARY

SI

WETLAND BOUNDARY

℄ RAMP D

RAMP D

WETLAND BOUNDARY

SI

EXIST R/W

℄ RAMP C

RAMP C

WETLAND BOUNDARY

WETLAND BOUNDARY

N

WETLAND BOUNDARY

SI

℄ RAMP B

RAMP B

SI

PROPOSED R/W

SI

℄ RAMP A

RAMP A

EXIST R/W

LEGEND

- EROSION MAT CLASS I, TYPE B
- EROSION MAT CLASS II TYPE B
- SOD OR SOD DITCH CHECK
- SOD, REINFORCED W/ EROSION MAT CLASS II, TYPE A
- SILT FENCE
- HEAVY DUTY SILT FENCE
- EROSION BALE, BARRIER
- RIP RAP LIGHT
- INLET PROTECTION (TYPE DENOTED)
- TEMPORARY DITCH CHECK
- CULVERT PIPE DITCH CHECK
- ROCK BAGS - SILT FENCE RELIEF
- SLOPE INTERCEPT
- WETLAND BOUNDARY
- SURFACE WATER FLOW

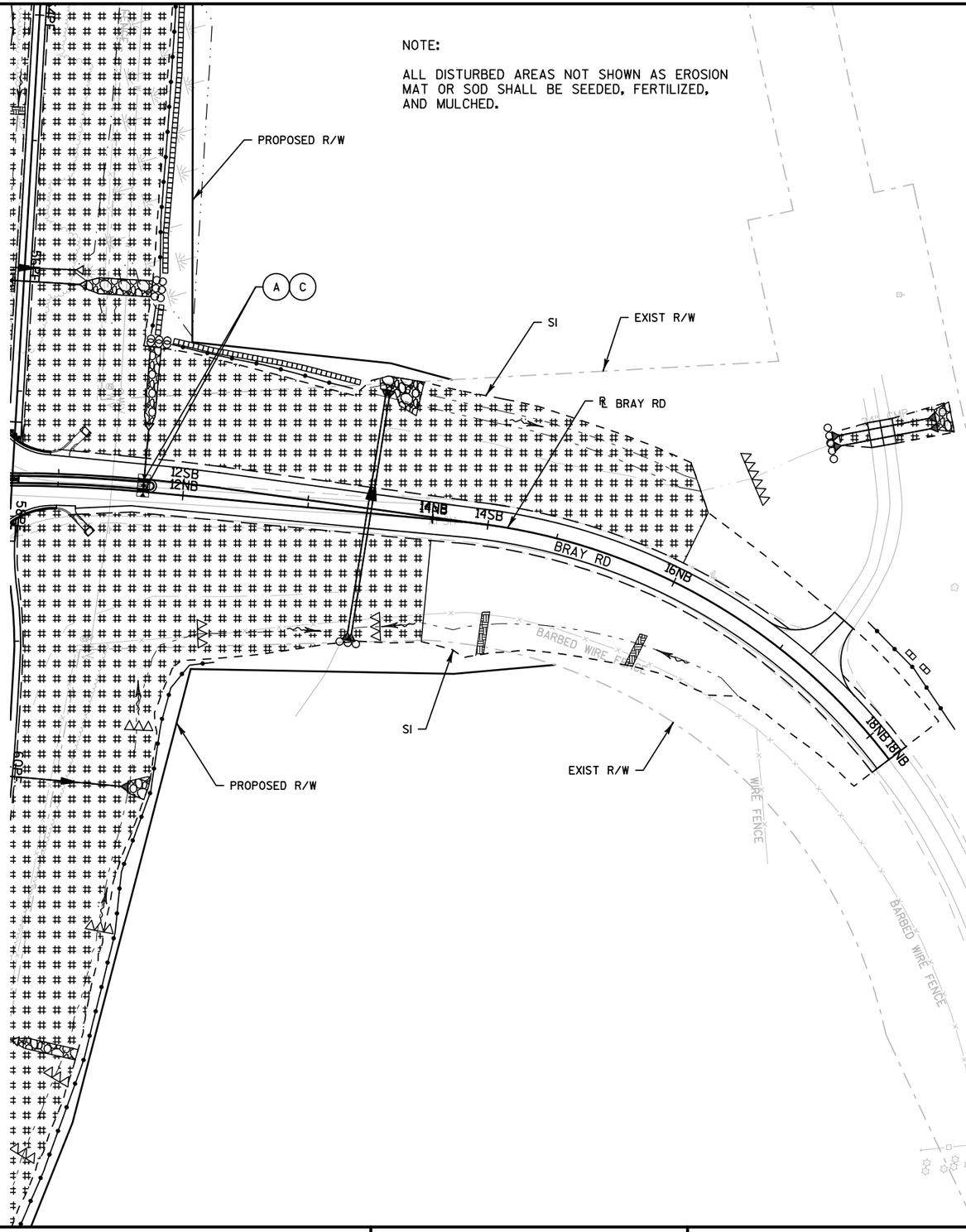
NOTE:

ALL DISTURBED AREAS NOT SHOWN AS EROSION MAT OR SOD SHALL BE SEEDED, FERTILIZED, AND MULCHED.

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	EROSION CONTROL	SHEET 80	E

NOTE:

ALL DISTURBED AREAS NOT SHOWN AS EROSION MAT OR SOD SHALL BE SEEDED, FERTILIZED, AND MULCHED.



LEGEND

- EROSION MAT CLASS I, TYPE B
- EROSION MAT CLASS II TYPE B
- SOD OR SOD DITCH CHECK
- SOD, REINFORCED W/ EROSION MAT CLASS II, TYPE A
- SILT FENCE
- HEAVY DUTY SILT FENCE
- EROSION BALE, BARRIER
- RIP RAP LIGHT
- INLET PROTECTION (TYPE DENOTED)
- TEMPORARY DITCH CHECK
- CULVERT PIPE DITCH CHECK
- ROCK BAGS - SILT FENCE RELIEF
- SLOPE INTERCEPT
- WETLAND BOUNDARY
- SURFACE WATER FLOW

N

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	EROSION CONTROL	SHEET 81	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\022002_EC.DWG
LAYOUT NAME - 05

PLOT DATE : 4/28/2015 1:08 PM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

N

104B PATH WEST STA 32+00.0
10.1' LT

104A PATH WEST STA 32+00.0
9.3' RT

TLE

WETLANDS

PROPOSED R/W

STUART DR STA 0+77.6
38.5' LT
111

STUART DR STA 1+37.3
33.5' RT
110

STUART DR STA 2+31.6
32.8' LT
113

STUART DR STA 2+75.3
32.5' LT
112

2SD

STUART DR

REMOVE 30" CMCP

REMOVE 15" CMCP

EXISTING R/W

PROPOSED R/W

SLOPE INTERCEPT

31PW 32PW 34PW 36PW 38PW 40PW 42PW 44PW

CTH NN WB

30WB 32WB 34WB 36WB 38WB 40WB 42WB 44WB

30EB 32EB 34EB 36EB 38EB 40EB 42EB 44EB

CTH NN EB

38C 40C 42C RAMP C 44C 44CD 30DC 28DC 46CD 46C D82 RAMP D

MATCHLINE 45EB+50

REMOVE 2-18" SSPRC

REMOVE 2-36" SSPRC
1 INLET

WETLANDS

SLOPE INTERCEPT

EXISTING R/W

CTH H STA 11+99.5
57.5' LT
120

REMOVE 1-36" SS
1 INLET

REMOVE 1-36" CP

CTH H

H01

PROPOSED R/W

119 CTH H STA 11+89.1
60.7' RT

SLOPE INTERCEPT

122 CTH H STA 10+12.3
37.0' RT

REMOVE 15" CMCP

REMOVE 24" CPRC

CTH H STA 9+77.5
45.6' LT
124

121 CTH H STA 9+56.3
36.1' RT

REMOVE 18" CMCP

EXISTING R/W

CTH H STA 9+31.0
43.2' LT
123

REMOVE 18" CPRC

WETLANDS

EXISTING R/W

REMOVE 2-36" SSPRC
1 INLET

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	STORM SEWER REMOVAL & CULVERT PIPE LOCATION PLAN	SHEET 82	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\022501_SS.DWG
LAYOUT NAME - 01

PLOT DATE : 4/28/2015 4:05 PM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:100_XREF

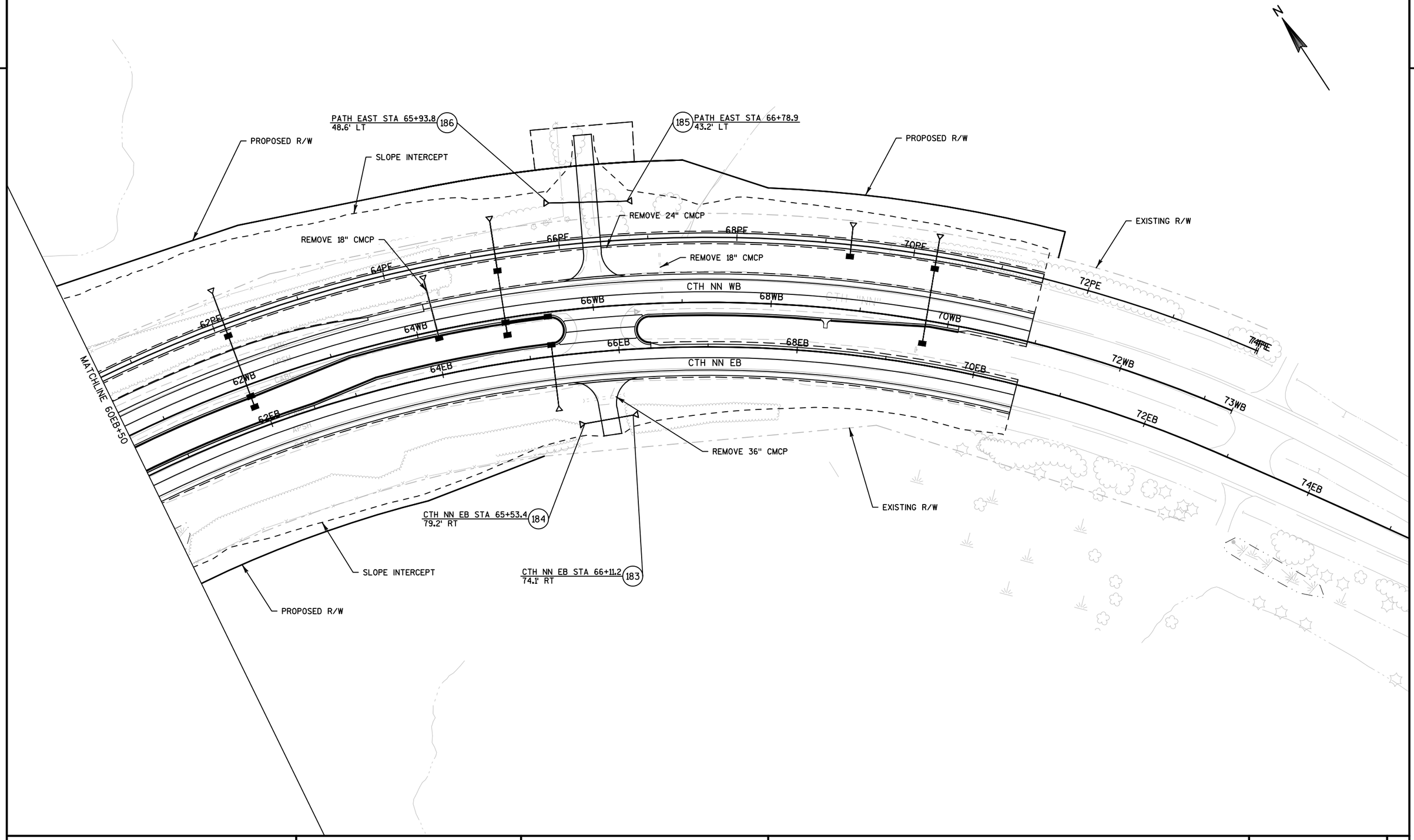
WISDOT/CADDS SHEET 42

2

PROPOSED R/W
SLOPE INTERCEPT
REMOVE 2-30" CMCP
BRAY RD NB STA 13+56.4
93.1' LT
166
BRAY RD NB STA 13+53.4
93.6' LT
164
BRAY RD NB STA 13+44.1
97.1' RT
165
BRAY RD NB STA 13+41.0
96.6' RT
163
REMOVE 12" CMCP
BRAY RD
12SB
12NB
N
PROPOSED R/W
WETLANDS
SLOPE INTERCEPT
PATH EAST STA 60+07.5
92.0' LT
172
REMOVE 3-18" SSPRC
3 INLETS
REMOVE 36" CMCP
REMOVE 12" SS
1 INLET
46PW
52PF
54PF
56PF
58PF
60PF
MATCHLINE 45EB+50
46WB
48WB
50WB
52WB
54WB
56WB
58WB
60WB
CTH NN WB
REMOVE 12" SS
1 INLET
REMOVE 12" SS
1 INLET
46EB
48EB
50EB
52EB
54EB
56EB
58EB
60EB
CTH NN EB
56AB
MATCHLINE 60EB+50
30D
886
USH 12 WB
USH 12 EB
54B
RAMP B 56B
987AA
REMOVE 18" SSPRC
1 INLET
REMOVE 4-18" SSPRC
5 INLETS
REMOVE 12" SS
1 INLET
18D
REMOVE 30" CMCP
REMOVE 18" CPRC
986A
986AA
WETLANDS
SLOPE INTERCEPT
WETLANDS
CTH NN EB STA 60+00.0
106.0' RT
171
58B
58AB
RAMP D
20D
WETLANDS
WETLANDS
EXISTING R/W
PROPOSED R/W
SLOPE INTERCEPT
984A
984AA
RAMP A 983AA
982A
RAMP B
60B
62B
64B
984
966
990
992
994
APSH
CONC
W
WV

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	STORM SEWER REMOVAL & CULVERT PIPE LOCATION PLAN	SHEET 83	E

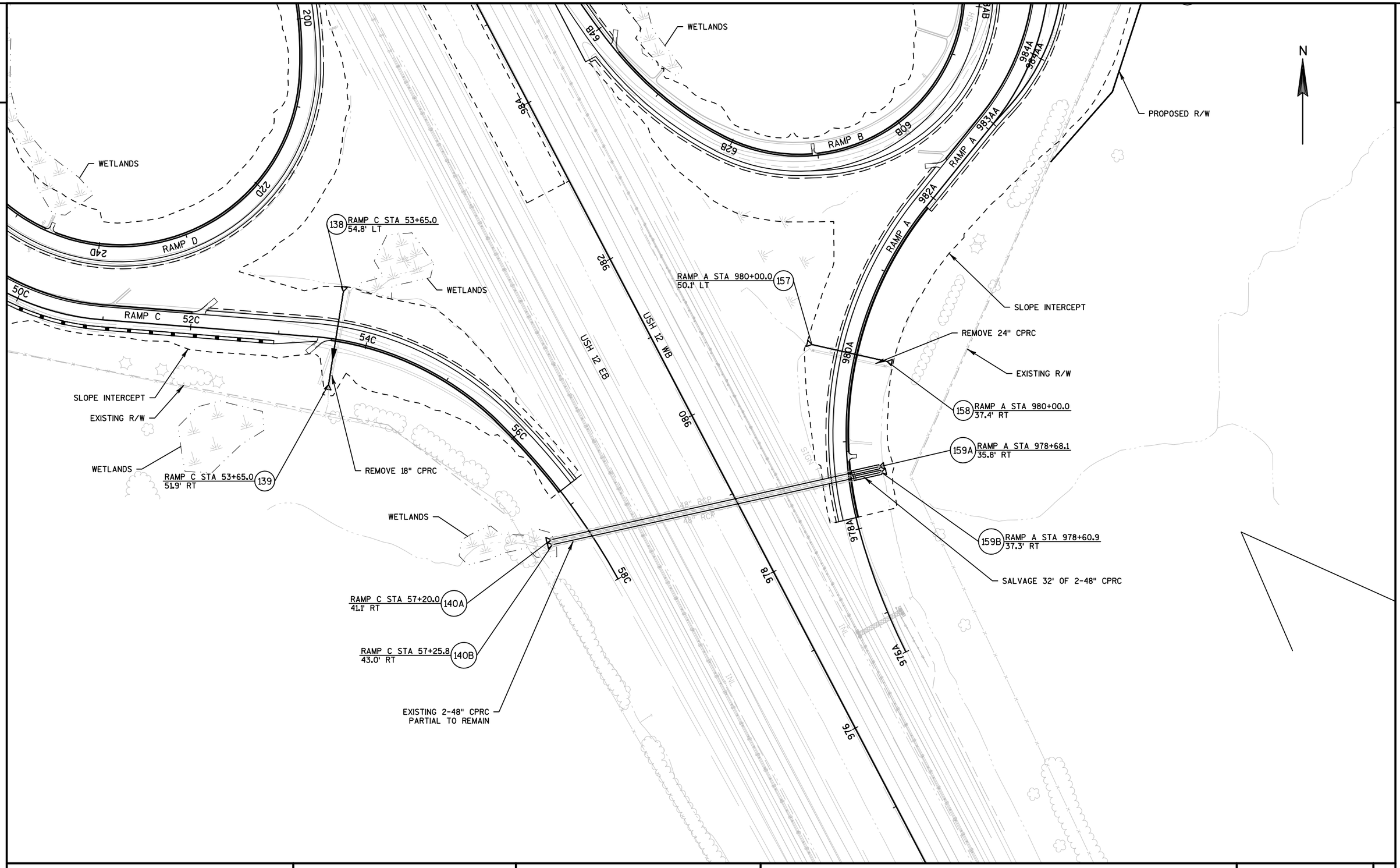
2



PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	STORM SEWER REMOVAL & CULVERT PIPE LOCATION PLAN	SHEET 84	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\022501_SS.DWG
LAYOUT NAME - 03
PLOT DATE : 4/28/2015 4:06 PM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:100_XREF
WISDOT/CADDS SHEET 42

2



PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	STORM SEWER REMOVAL & CULVERT PIPE LOCATION PLAN	SHEET 85	E

2

2

N

Stuart Dr East STA 0+65.0
38.8' LT
168

Stuart Dr East STA 0+56.6
38.7' LT
170

EXISTING R/W

Stuart Dr East STA 0+57.5
33.9' RT
169

Stuart Dr East STA 0+65.8
33.8' RT
167

STUART DRIVE

18NB 18NB

16NB

EXISTING R/W

SLOPE INTERCEPT

14SB

14NB

EXISTING R/W

PROPOSED R/W

SLOPE INTERCEPT

BRAY RD NB STA 13+56.4
93.1' LT
166

BRAY RD NB STA 13+53.4
93.6' LT
164

165 BRAY RD NB STA 13+44.1
97.1' RT

163 BRAY RD NB STA 13+41.0
96.6' RT

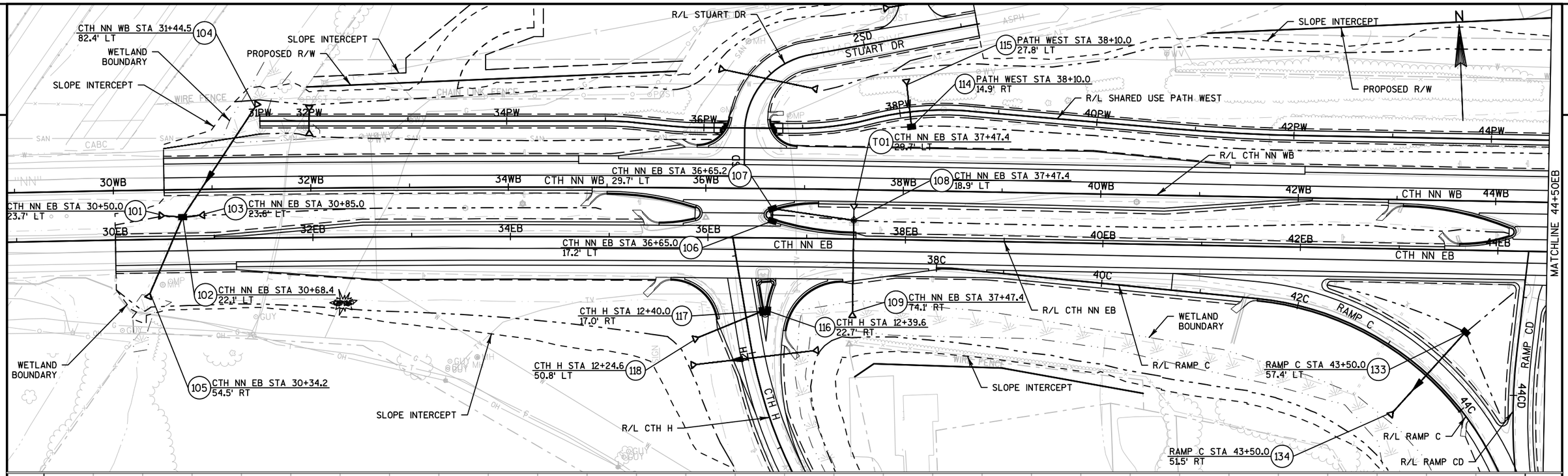
PROPOSED R/W

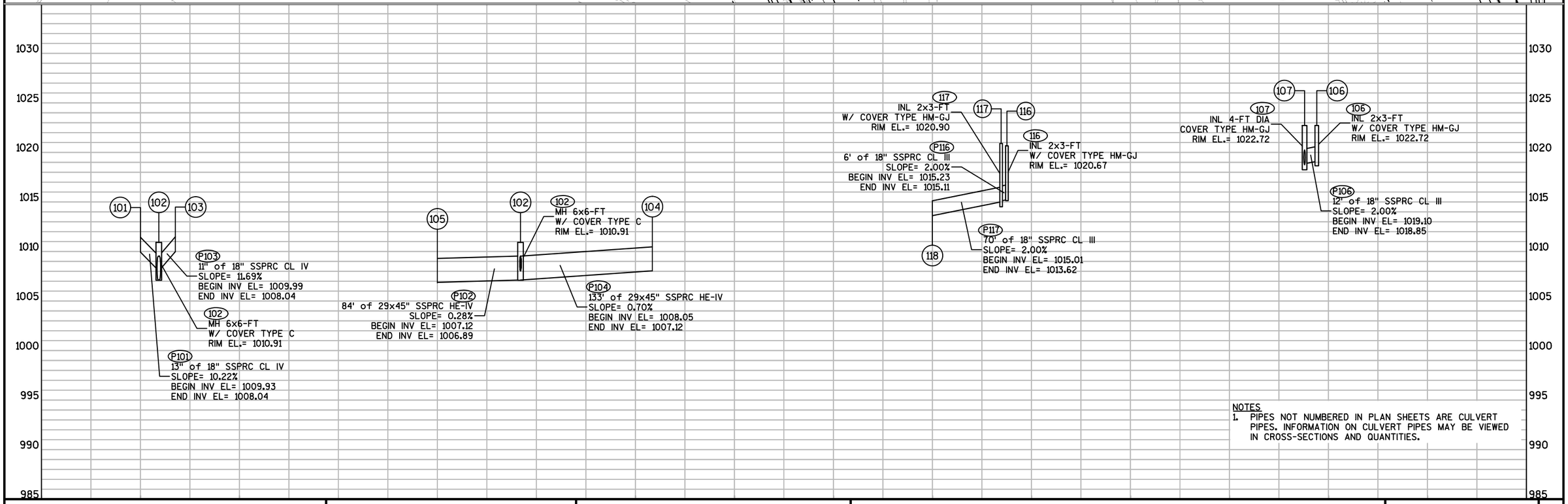
BRAY RD

GUY

OH

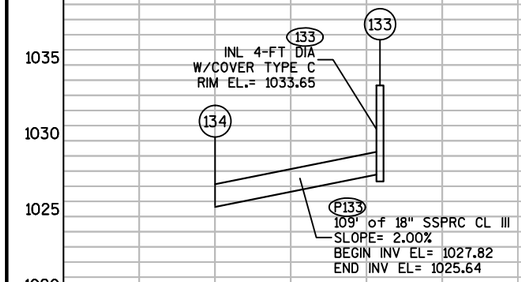
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	STORM SEWER REMOVAL & CULVERT PIPE LOCATION PLAN	SHEET 86	E

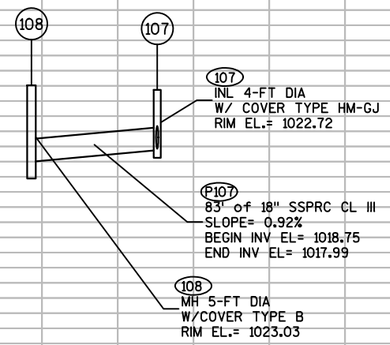


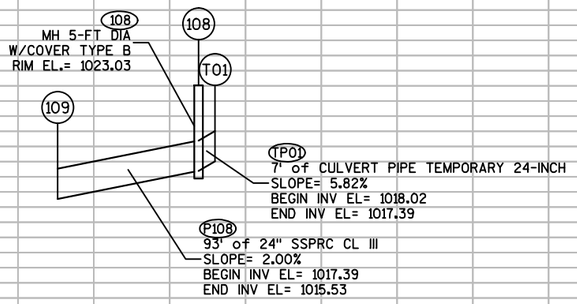


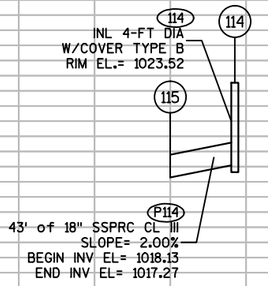
NOTES
1. PIPES NOT NUMBERED IN PLAN SHEETS ARE CULVERT PIPES. INFORMATION ON CULVERT PIPES MAY BE VIEWED IN CROSS-SECTIONS AND QUANTITIES.

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	STORM SEWER - CTH NN	SHEET 87	E





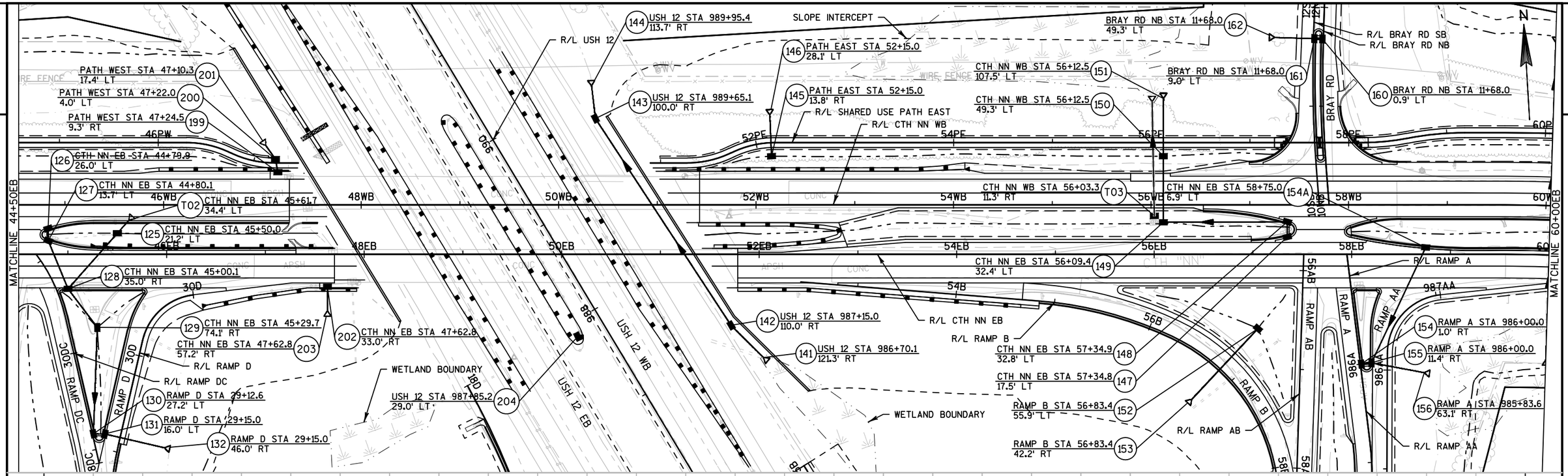


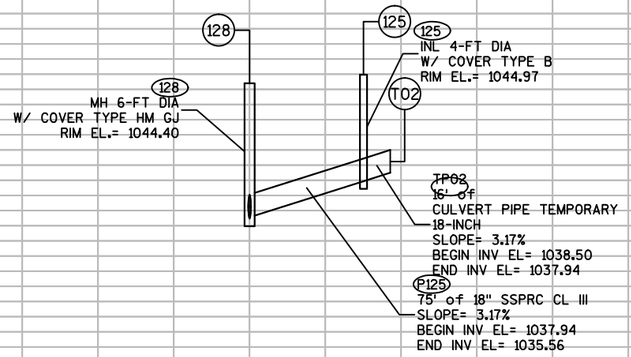


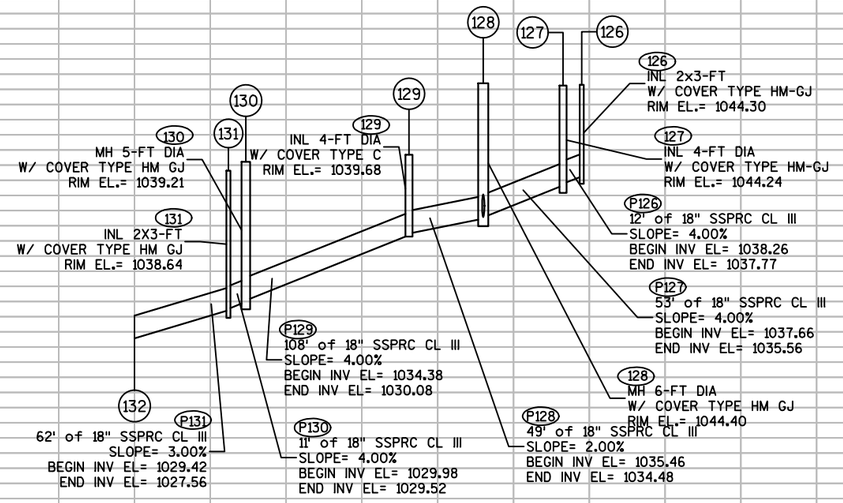
NOTES
1. PIPES NOT NUMBERED IN PLAN SHEETS ARE CULVERT PIPES. INFORMATION ON CULVERT PIPES MAY BE VIEWED IN CROSS-SECTIONS AND QUANTITIES.

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	STORM SEWER - CTH NN	SHEET 88	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\022502_SS_NN.DWG
LAYOUT NAME - 02
PLOT DATE : 4/29/2015 9:00 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:100
WISDOT/CADDS SHEET 41

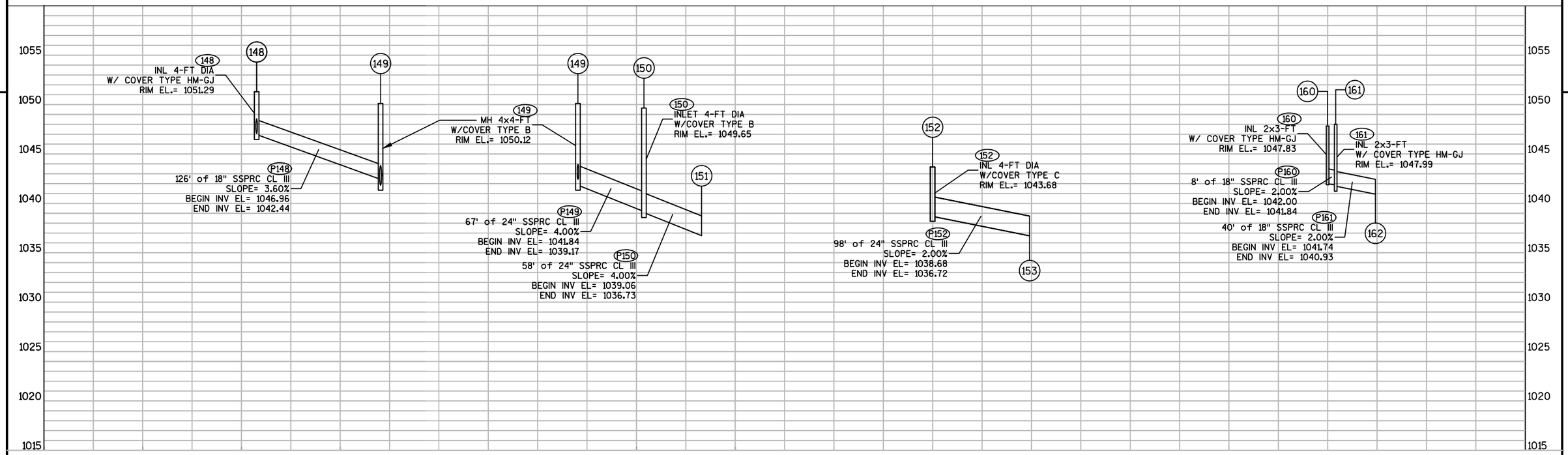






NOTES
1. PIPES NOT NUMBERED IN PLAN SHEETS ARE CULVERT PIPES. INFORMATION ON CULVERT PIPES MAY BE VIEWED IN CROSS-SECTIONS AND QUANTITIES.

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	STORM SEWER - CTH NN	SHEET 89 E



NOTES
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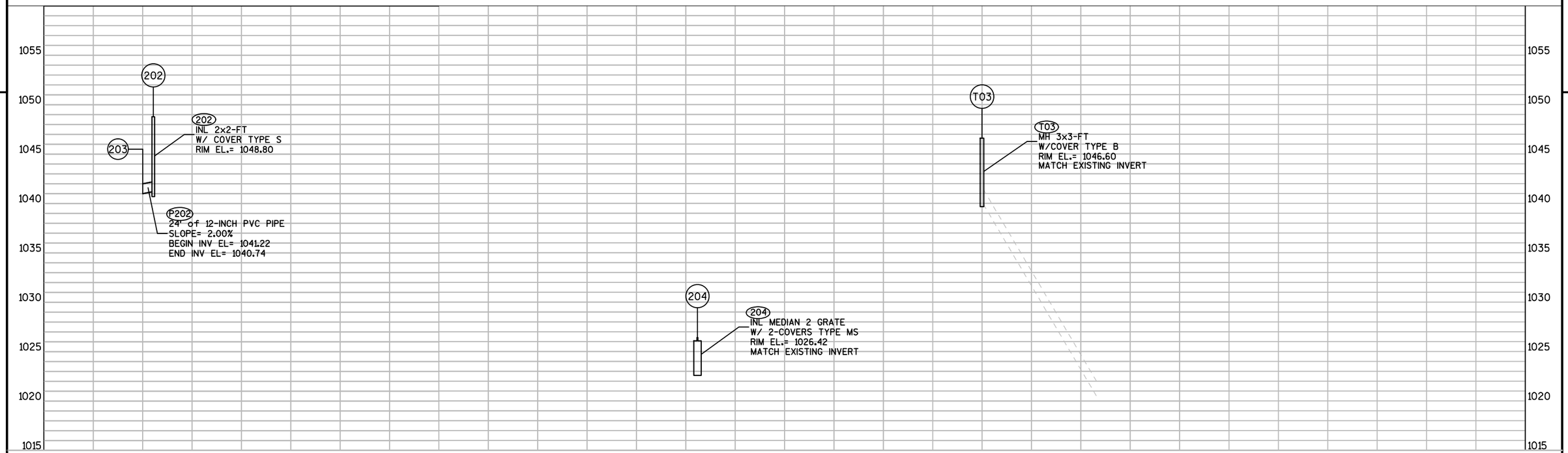
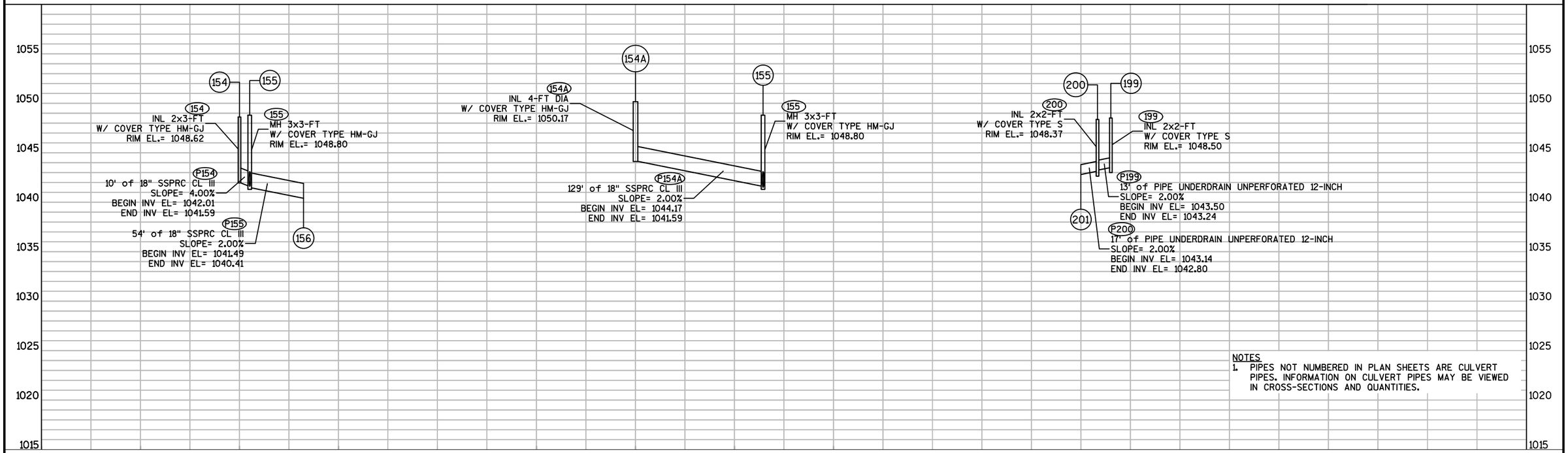
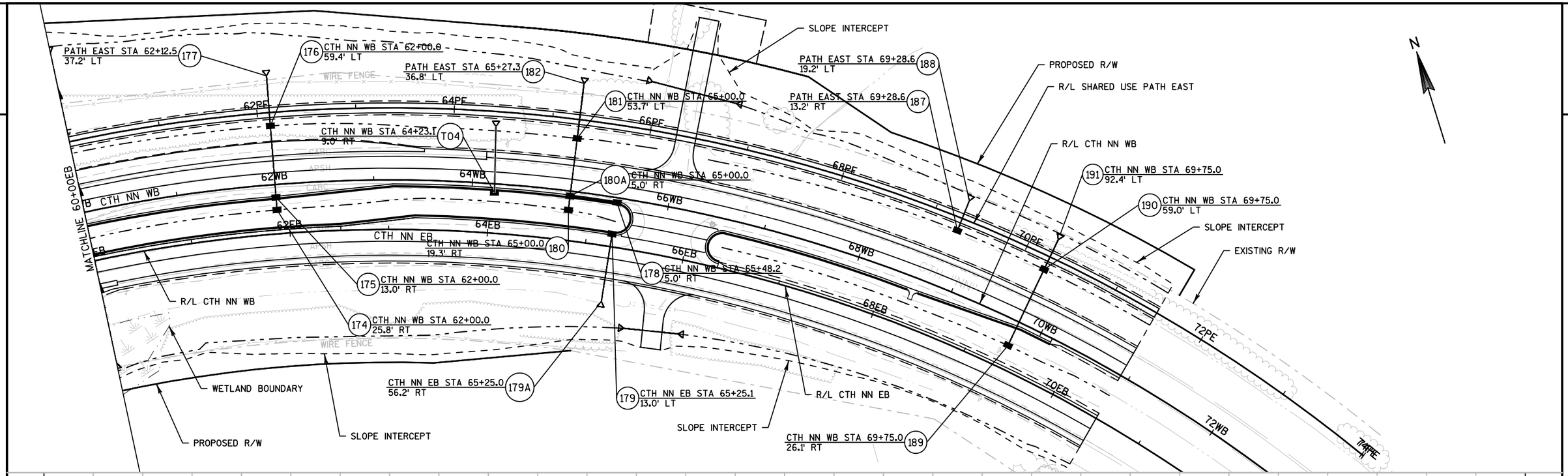




NOTES
1. PIPES NOT NUMBERED IN PLAN SHEETS ARE CULVERT PIPES. INFORMATION ON CULVERT PIPES MAY BE VIEWED IN CROSS-SECTIONS AND QUANTITIES.

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	STORM SEWER - CTH NN	SHEET 91	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\022502_SS_NN.DWG
LAYOUT NAME - 05
PLOT DATE : 4/29/2015 9:06 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:100
WISDOT/CADDS SHEET 41



NOTES
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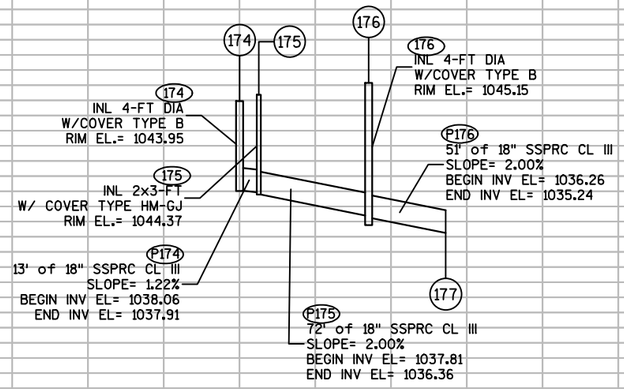
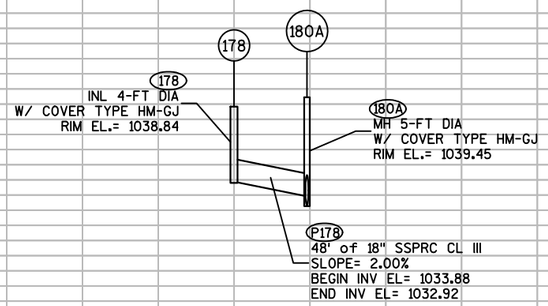
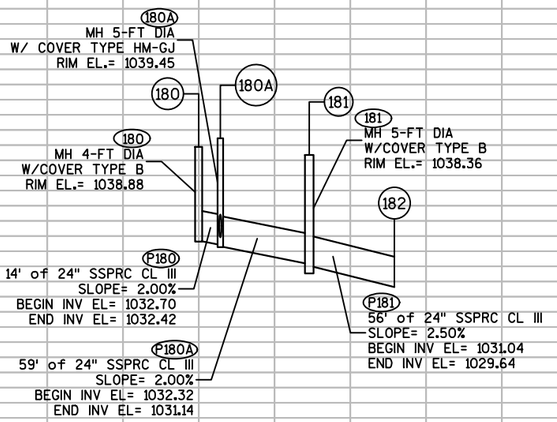
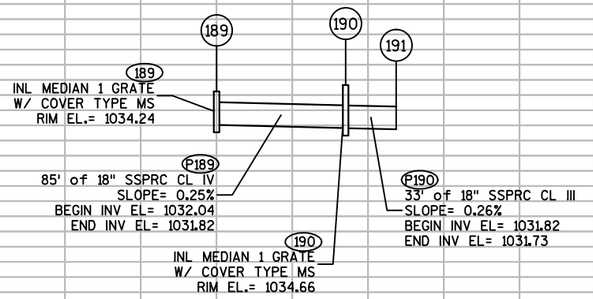


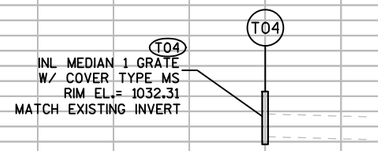




1055 1050 1045 1040 1035 1030 1025 1020 1015 1010

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	STORM SEWER - CTH NN	SHEET 92	E





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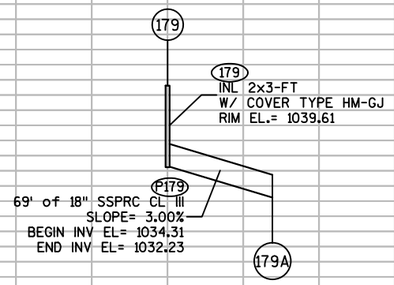
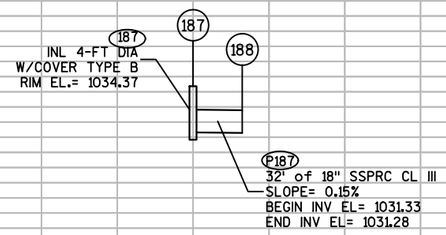
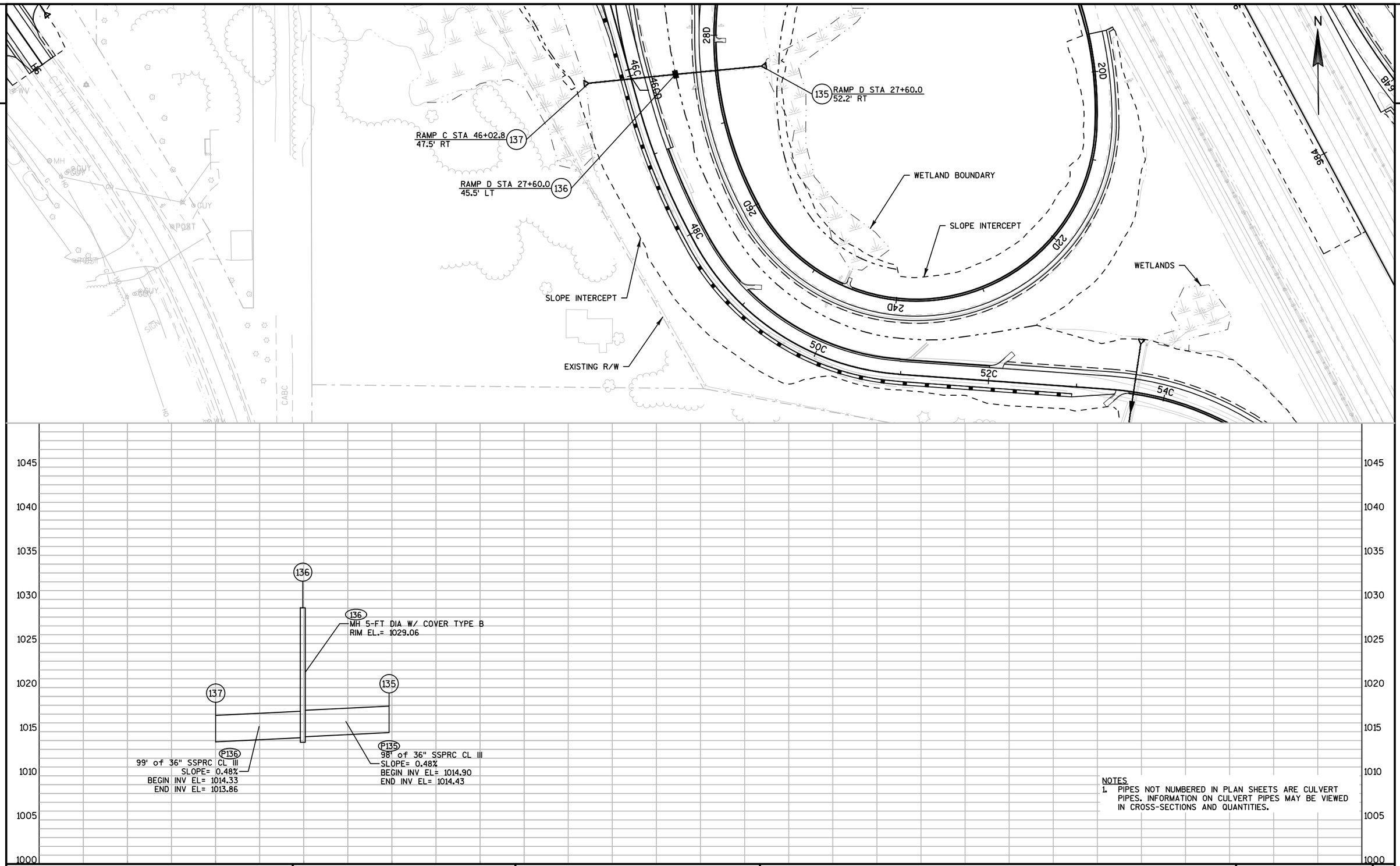




PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	STORM SEWER - CTH NN	SHEET 93	E



NOTES
1. PIPES NOT NUMBERED IN PLAN SHEETS ARE CULVERT PIPES. INFORMATION ON CULVERT PIPES MAY BE VIEWED IN CROSS-SECTIONS AND QUANTITIES.

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	STORM SEWER - RAMP D	SHEET 94	E

2

N

℄ STUART DR

SI

35R

STUART DR 2SR

℄ CTH NN WB

WIRE FENCE

CHAIN LINK FENCE

31PW

32PW

34PW

36PW

38PW

40PW

42PW

32WB+00

38WB+00

CONNECT TO STR 107

OSR

37WB+69

CTH NN WB

30WB

32WB

34WB

36WB

38WB

40WB

42WB

30EB

32EB

34EB

36EB

38EB

40EB

42EB

CONNECT TO STR 106

37EB+67

38C

CTH NN EB

40C

42C

31EB+00

33EB+50

℄ CTH NN EB

35EB+00

38EB+00

40EB+50

CTH H

H01

℄ RAMP C

RAMP C

WETLAND BOUNDARY

SI

℄ CTH H

EXIST R/W

PROP R/W

WETLAND BOUNDARY

10H+50

H01

9H+11

MATCH LINE 41EB+50

LEGEND

-RELIEF TRENCH

-PIPE UNDERDRAIN 6-INCH

-APRON ENDWALLS FOR UNDERDRAIN REINFORCED CONCRETE 6-INCH

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	SUBGRADE DRAINAGE PLAN	SHEET 95	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\022601-PU.DWG
LAYOUT NAME - 01

PLOT DATE : 4/30/2015 11:43 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

LEGEND

-RELIEF TRENCH

-PIPE UNDERDRAIN 6-INCH

-APRON ENDWALLS FOR UNDERDRAIN REINFORCED CONCRETE 6-INCH

N

PROPOSED R/W

℄ SHARED USE PATH WEST

SI

WIRE FENCE

CONNECT TO STR 126

CONNECT TO STR 127

CONNECT TO STR 128

℄ CTH NN WB

℄ CTH NN EB

CTH NN WB

CTH NN EB

CONC

APSH

44PW

46PW

47PW

48WB

50WB

44WB

46WB

45WB+88

44EB

46EB

48EB

50EB

45EB+75

45EB+81

43EB+69

30D

RAMP CD

RAMP D

30DC

44CD

44CD+00

29DC+50

29D+50

43CD+50

44C

44C+98

28DC

28D

℄ RAMP D

SI

WETLAND BOUNDARY

46C

46C+50

27D+25

MATCHLINE 27D+00

MATCHLINE 47C+00

MATCHLINE 43EB+50

PROPOSED R/W

SI

℄ CTH NN WB

℄ SHARED USE PATH EAST

WIRE FENCE

CONNECT TO STR 150

℄ BRAY RD SB/NB

BRAY RD

12SB

12NB

52PF

54PF

56PF

58PF

50PE

55WB+12

58WB+49

52WB

54WB

56WB

58WB

56WB+53

CONNECT TO STR 148

10SB

10NB

57EB+98

52EB

54EB

56EB

58EB

56EB+32

CONNECT TO STR 147

52B

54B

54EB+50

57EB+50

56B RAMP B

56A

RAMP AB

RAMP A

RAMP AA

986

986A

986AA

984

984A

984AA

18D

19D+60

20D

WETLAND BOUNDARY

MATCHLINE 21D+00

65B+16

64B

WETLAND BOUNDARY

℄ RAMP B

58B

58AB

SI

59B+50

62B+00

62B

60B

983A+10

983AA

℄ RAMP A

MATCHLINE 982A+00

MATCHLINE 58EB+50

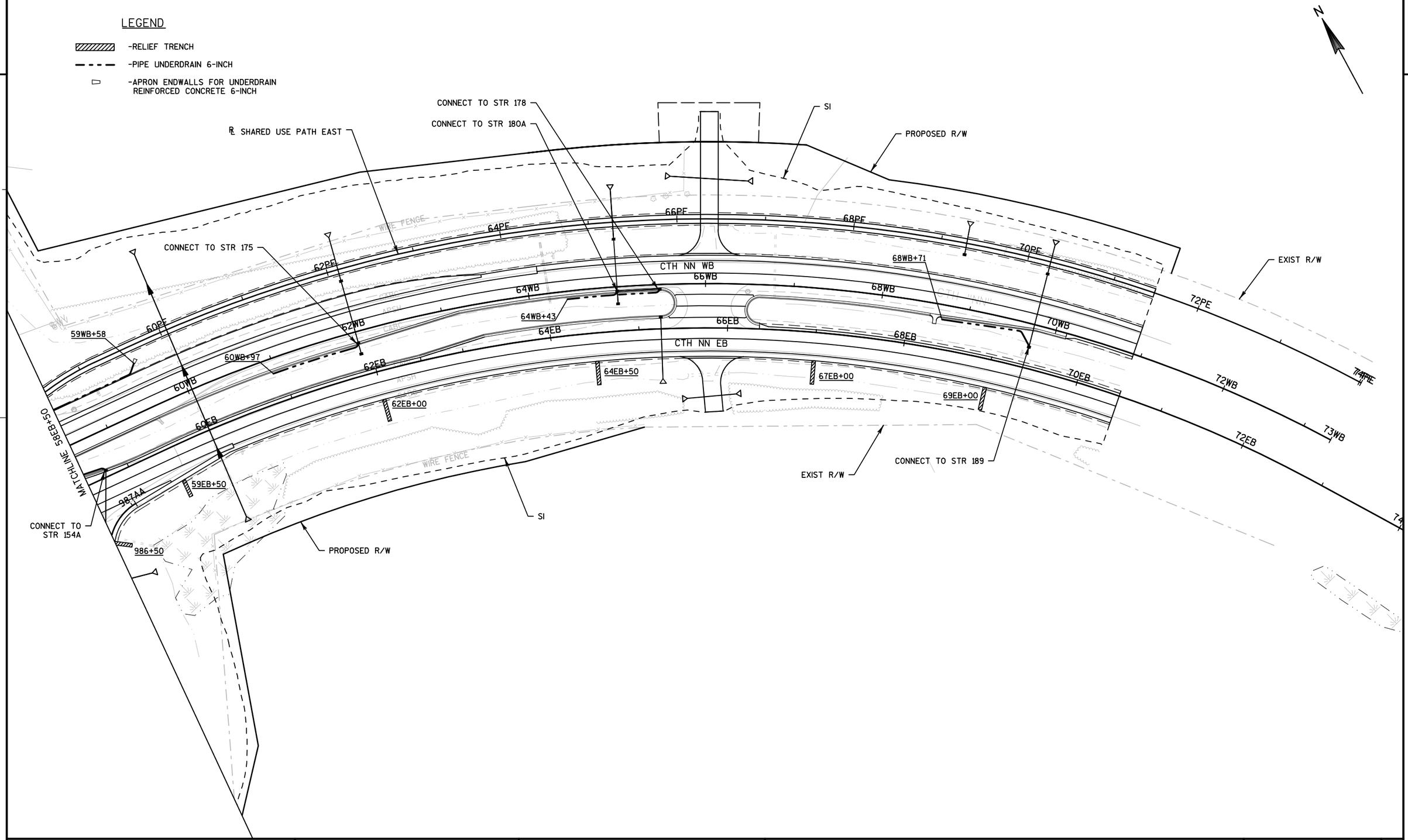
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	SUBGRADE DRAINAGE PLAN	SHEET 96	E

LEGEND

-RELIEF TRENCH

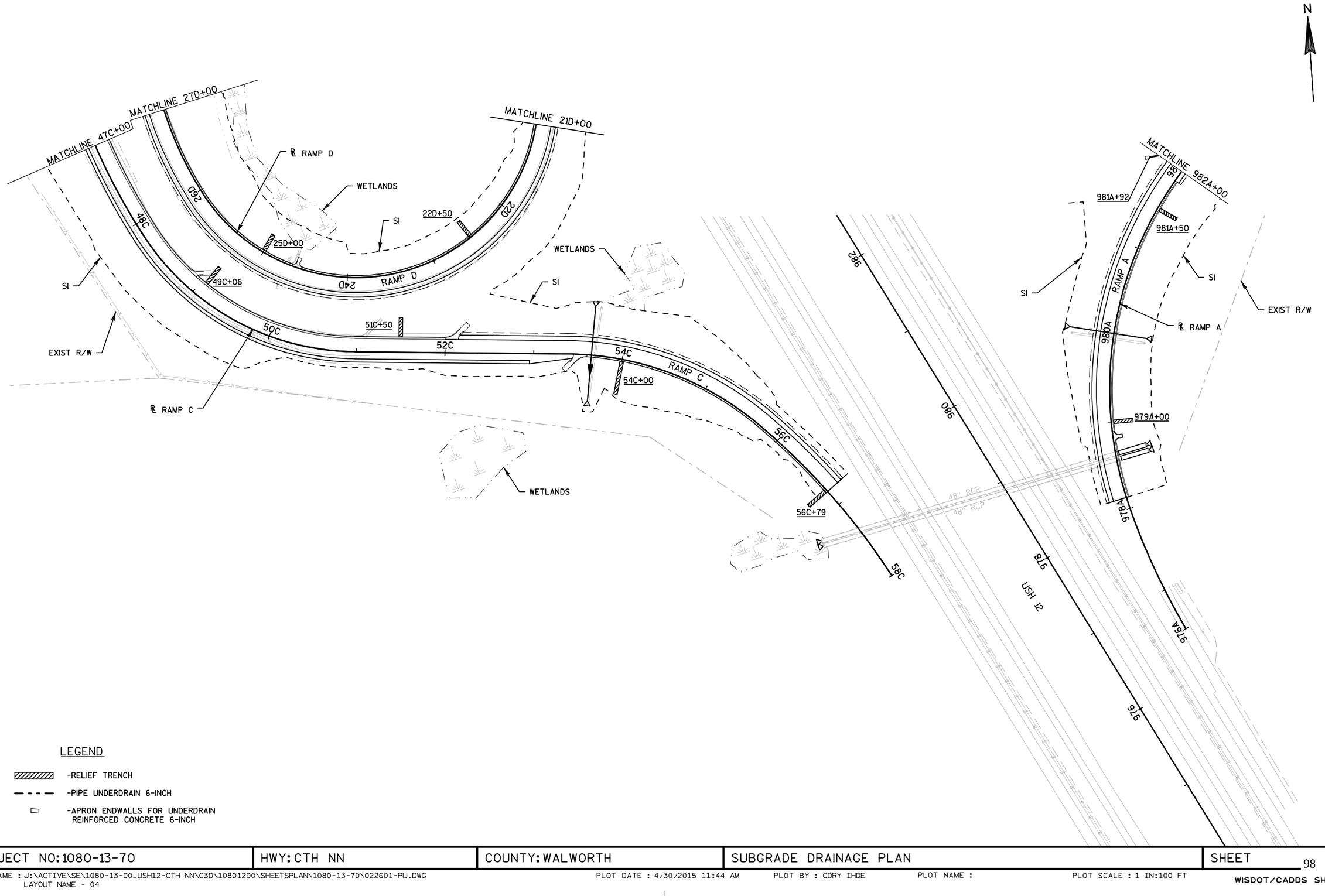
-PIPE UNDERDRAIN 6-INCH

-APRON ENDWALLS FOR UNDERDRAIN REINFORCED CONCRETE 6-INCH



PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	SUBGRADE DRAINAGE PLAN	SHEET 97	E

2



LEGEND

-RELIEF TRENCH

-PIPE UNDERDRAIN 6-INCH

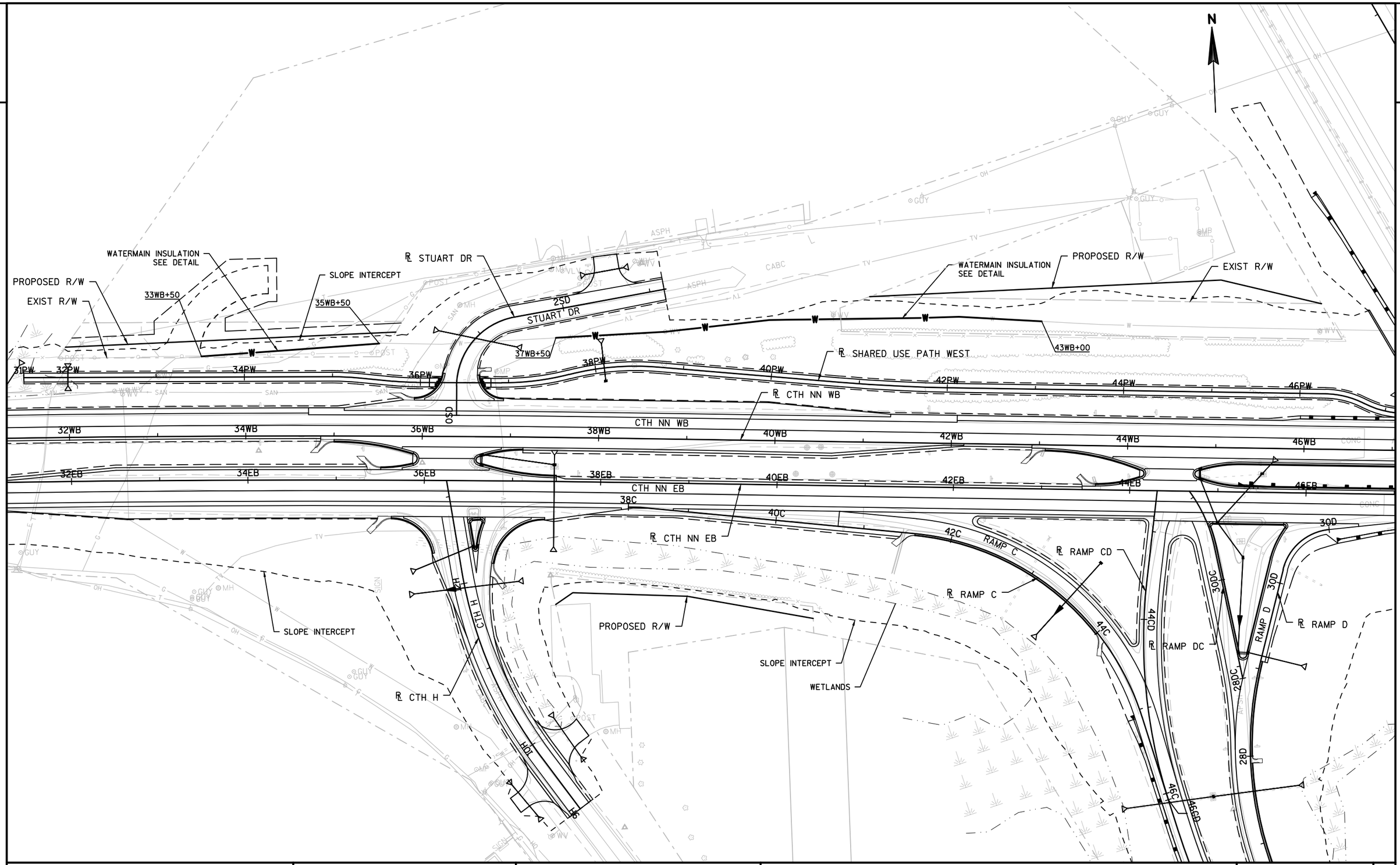
-APRON ENDWALLS FOR UNDERDRAIN REINFORCED CONCRETE 6-INCH

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	SUBGRADE DRAINAGE PLAN	SHEET 98	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\022601-PU.DWG
LAYOUT NAME - 04

PLOT DATE : 4/30/2015 11:44 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1 IN:100 FT

2



PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	WATERMAIN INSULATION PLAN	SHEET 99	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\023001-UP.DWG
LAYOUT NAME - 01

PLOT DATE : 4/29/2015 12:24 PM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- DELINEATOR - 60' SPACING
  WHITE/RIGHT YELLOW/LEFT
- XXX — DENOTES SIGN NUMBER

(XX) INDICATES SIGN SIZE

N

IH 43 SB

IH 43 NB

CTH H WB

CTH H EB

STUART RD

SIGN

MH

INL

1 REMOVE
2 W4-2R (3)

3 SPEED LIMIT 35 R2-1 (2S)

4 NO ENGINE BRAKING EXCEPT IN EMERGENCY / WITHIN CITY or VILLAGE LIMITS R10-64-F
MOVE TO NEW POST
(NOTE: PROPERTY OF CITY. DO NOT REPLACE WITH CONTRACT)

5 SPEED LIMIT 35 R2-1 (2S)

6 STOP R1-1 (3)

7 COUNTY H
8 J3-1 (2S)

9 DO NOT ENTER R5-1 (2S)

10 GATEWAY TECHNICAL COLLEGE
MOVE (PROPERTY OF WALWORTH COUNTY

11 STOP R1-1 (3)
12 STOP REMOVE

13 Elkhorn

13A D9-2 MB 6-1 JH-1 (2S) MOVE

14 SPEED LIMIT 45 R2-1 (2S)

15 COUNTY H COUNTY NN J3-2 (2S)

16 White River Trail
MOVE
(PROPERTY OF WALWORTH COUNTY
DO NOT REPLACE WITH CONTRACT)

17 R4-7(2S)

18 DO NOT ENTER R5-1 (2S)

19 EAST COUNTY NN COUNTY H J3-2 (2S)
20

21 White River Trail
MOVE
(PROPERTY OF WALWORTH COUNTY
DO NOT REPLACE WITH CONTRACT)

22 TO 43 JCT 12 JV1-1 (2S)

23 H D9-2 (2S) MB6-1 (2S) JH-1 (2S)

25 JCT COUNTY NN J1-1 (2S)

156 R4-7(2S)

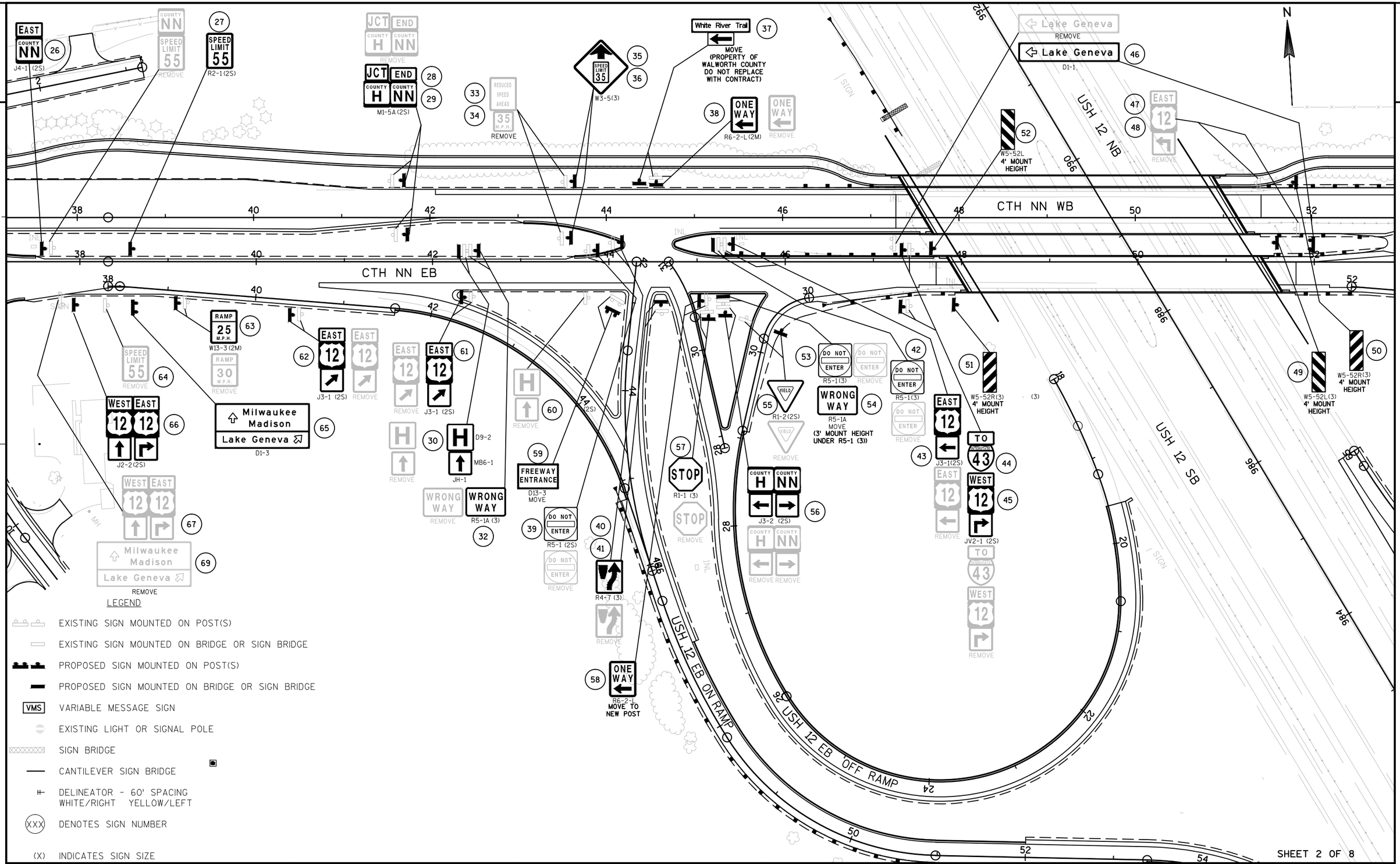
169 W11-15 (2S)
170 W16-7L (2S)
172 172A

SHEET 1 OF 8

PROJECT NO: 1080-13-70	HWY: USH 12 @ CTH NN	COUNTY: WALWORTH	PERMANENT SIGNING	SHEET 100	E

FILE NAME : N:\PDS\C3D\CAD\10801300\023201_PS.DWG PLOT DATE : 4/20/2015 10:46 AM PLOT BY : DODGE, BRIAN M PLOT NAME : PLOT SCALE : 1:100_XREF

WISDOT/CADDS SHEET 42



LEGEND

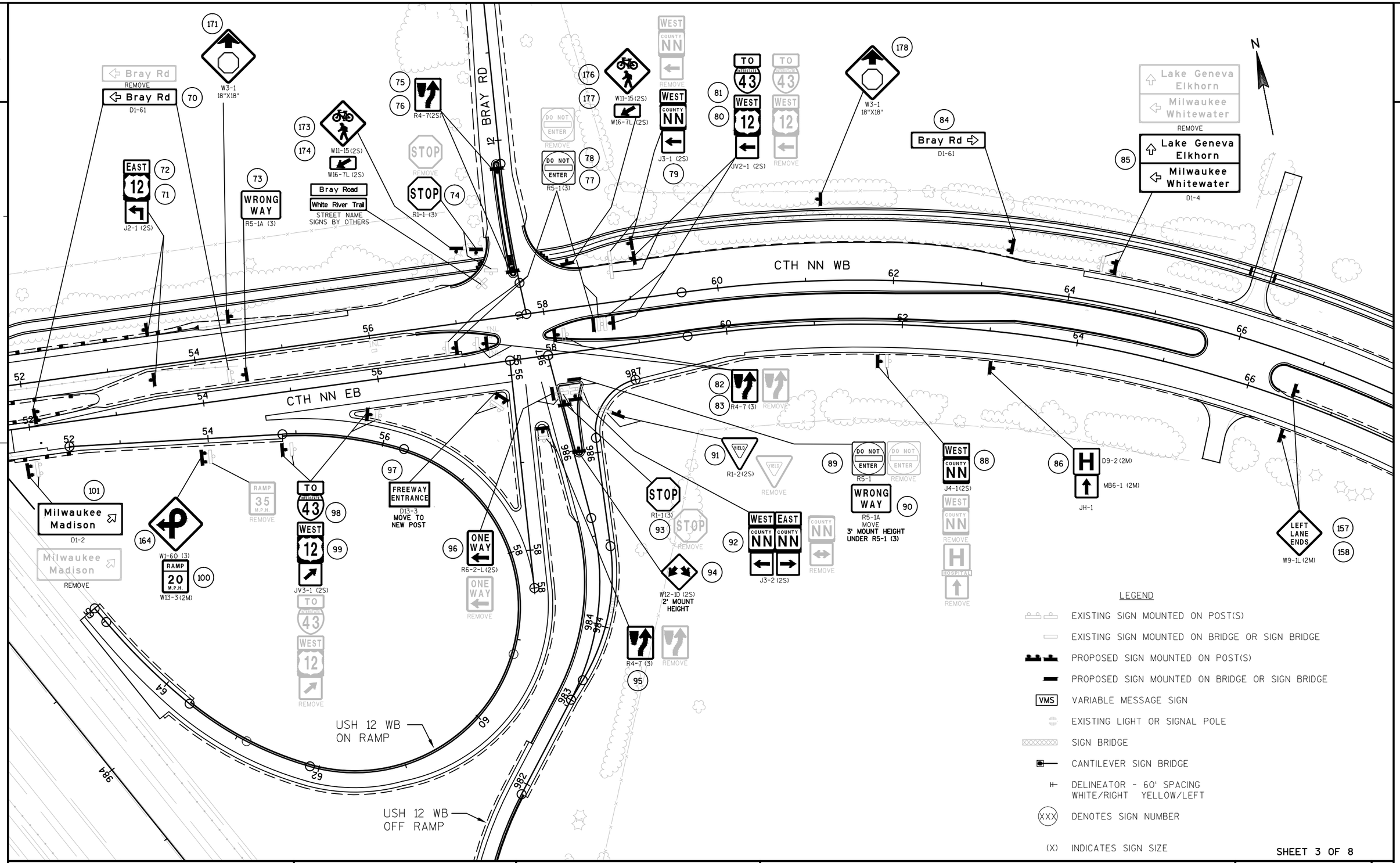
- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- DELINEATOR - 60' SPACING WHITE/RIGHT YELLOW/LEFT
- XXX — DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

SHEET 2 OF 8

PROJECT NO: 1080-13-70	HWY: USH 12 @ CTH NN	COUNTY: WALWORTH	PERMANENT SIGNING	SHEET 101	E

FILE NAME : N:\PDS\C3D\CAD\10801300\023201_PS.DWG PLOT DATE : 4/20/2015 10:46 AM PLOT BY : DODGE, BRIAN M PLOT NAME : PLOT SCALE : 1:100_XREF

WISDOT/CADDS SHEET 42



SHEET 3 OF 8

PROJECT NO:1080-13-70	HWY: USH 12 @ CTH NN	COUNTY: WALWORTH	PERMANENT SIGNING	SHEET 102	E

FILE NAME : N:\PDS\C3D\CAD\10801300\023201_PS.DWG PLOT DATE : 4/20/2015 10:46 AM PLOT BY : DODGE, BRIAN M PLOT NAME : PLOT SCALE : 1:100_XREF

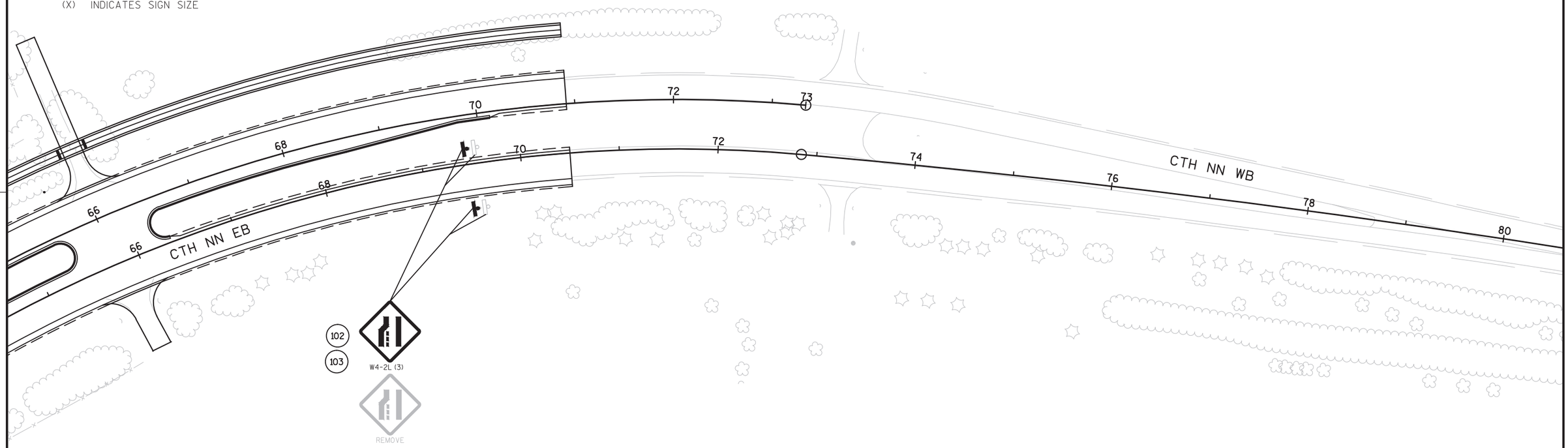
WISDOT/CADDS SHEET 42

2

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- DELINEATOR - 60' SPACING
  WHITE/RIGHT YELLOW/LEFT
- XXX — DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

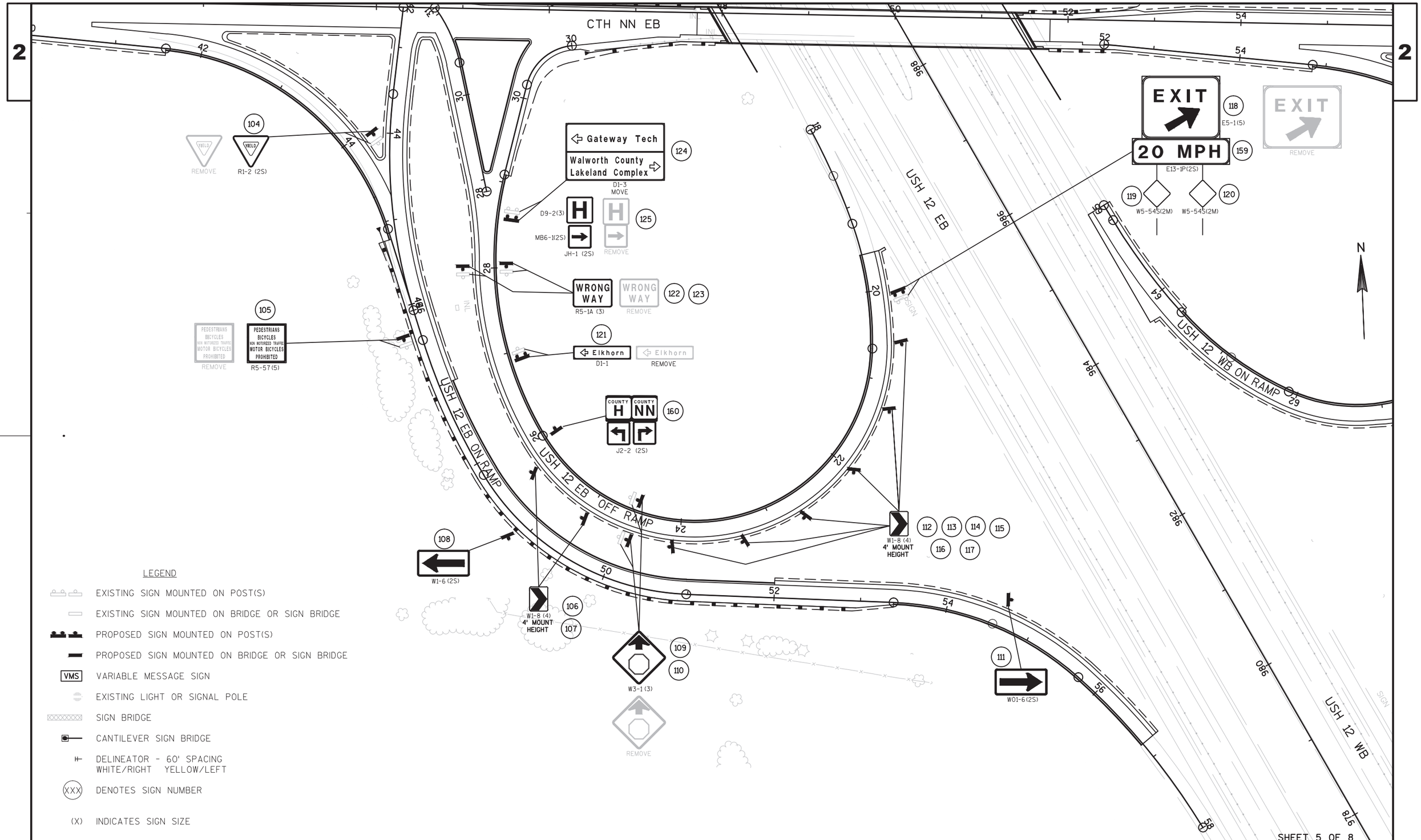


SHEET 4 OF 8

PROJECT NO: 1080-13-70	HWY: USH 12 @ CTH NN	COUNTY: WALWORTH	PERMANENT SIGNING	SHEET 103	E

FILE NAME : N:\PDS\C3D\CAD\10801300\023201_PS.DWG PLOT DATE : 1/26/2015 1:22 PM PLOT BY : DODGE, BRIAN M PLOT NAME : PLOT SCALE : 1" = 100'_XREF_XREF

WISDOT/CADDS SHEET 42



LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- DELINEATOR - 60' SPACING
  WHITE/RIGHT YELLOW/LEFT
- XXX — DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

SHEET 5 OF 8

PROJECT NO: 1080-13-70	HWY: USH 12 @ CTH NN	COUNTY: WALWORTH	PERMANENT SIGNING	SHEET 104	E

FILE NAME : N:\PDS\C3D\CAD\10801300\023201_PS.DWG
PLOT DATE : 1/26/2015 1:22 PM
PLOT BY : DODGE, BRIAN M
PLOT NAME :
PLOT SCALE : 1" = 100'_XREF_XREF
WISDOT/CADDS SHEET 42

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- DELINEATOR - 60' SPACING WHITE/RIGHT YELLOW/LEFT
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

USH 12 SB
USH 12 NB
USH 12 WB ON RAMP
USH 12 WB OFF RAMP
CTH NN WB
CTH NN EB
BRAY RD

127 128 129 W1-8 (4) 4' MOUNT HEIGHT
145 W01-6(2S)
132 133 134 W1-8 (4) 4' MOUNT HEIGHT
PEDESTRIANS BICYCLES NON MOTORIZED TRAFFIC MOTOR BICYCLES PROHIBITED REMOVE
137 PEDESTRIANS BICYCLES NON MOTORIZED TRAFFIC MOTOR BICYCLES PROHIBITED R5-57 (5)
138 YIELD REMOVE
YIELD R1-2(2S)
EXIT 147 E5-1(5)
25 MPH 161 E13-1P(2S)
148 W5-545(2M) 149 W5-545(2M)
EXIT REMOVE
146 W3-1 (3) REMOVE
162 WEST COUNTY NN EAST COUNTY NN J2-2 (2S)
EXIT 25 MPH 163 W13-2C (2M)
EXIT 35 M.P.H. REMOVE
144 Elkhorn D1-1 Elkhorn REMOVE
143 W01-6 (2S)
141 H D9-2(2M) M6-1(2M) JH-1 (2S)
H REMOVE
WRONG WAY 139 R5-1A (3)
140 WRONG WAY REMOVE

SHEET 6 OF 8

PROJECT NO:1080-13-70	HWY: USH 12 @ CTH NN	COUNTY: WALWORTH	PERMANENT SIGNING	SHEET 105 E

FILE NAME : N:\PDS\C3D\CAD\10801300\023201_PS.DWG PLOT DATE : 1/26/2015 1:22 PM PLOT BY : DODGE, BRIAN M PLOT NAME : PLOT SCALE : 1" = 100'_XREF_XREF

2

USH 12 NB

CTH NN WB

BRAY RD

USH 12 WB
ON RAMP

USH 12 WB
OFF RAMP

CTH NN EB

STOP
AHEAD
REMOVE 150
W3-1(2S)

W1-2L(2S)
35 M.P.H.
W13-1(2S)
350' FROM
START OF CURVE
167
168

NO
THRU
TRUCK
TRAFFIC
CLASS
B
HIGHWAY
151
MOVE
PROPERTY OF TOWN.
DO NOT REPLACE
WITH CONTRACT

W1-2R(2S)
35 M.P.H.
W13-1(2S)
165
166

N

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- DELINEATOR - 60' SPACING
  WHITE/RIGHT YELLOW/LEFT
- XXX — DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

SHEET 7 OF 8

PROJECT NO: 1080-13-70	HWY: USH 12 @ CTH NN	COUNTY: WALWORTH	PERMANENT SIGNING	SHEET 106	E

2

CTH NN EB

CTH NN WB

REMOVE SIGN
BRIDGE S-64-10

NEW SIGN BRIDGE
S-64-20

154

RAMP
20
M.P.H.
REMOVE

155

EXIT
20
MPH

W13-2B (2M)
MOUNT ON
UPRIGHT

USH 12 EB

USH 12 WB

990 992 994 996 998 1000 1002 1004

NN
Elkhorn

153

TYPE I SIGN
E6-1

NN
Elkhorn

REMOVE

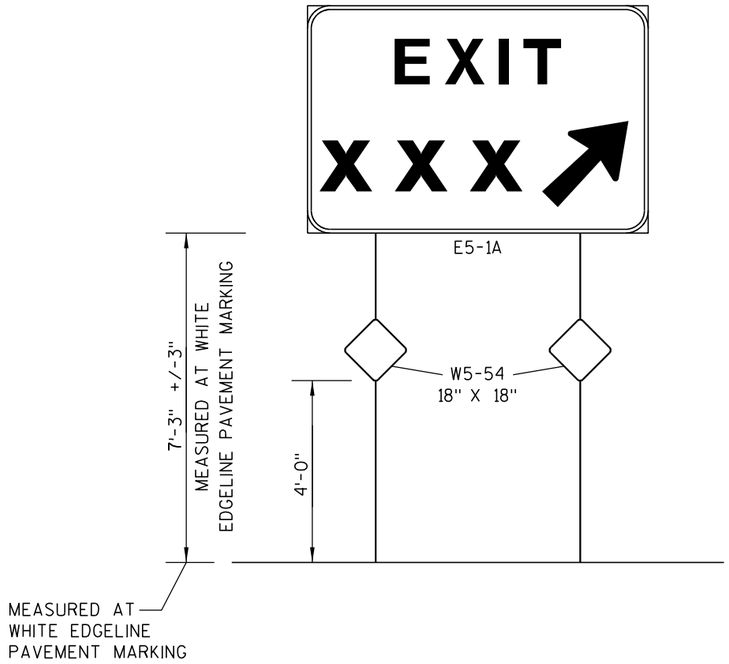
LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- DELINEATOR - 60' SPACING
  WHITE/RIGHT YELLOW/LEFT
- XXX — DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

SHEET 8 OF 8

PROJECT NO: 1080-13-70	HWY: USH 12 @ CTH NN	COUNTY: WALWORTH	PERMANENT SIGNING	SHEET 107	E

2



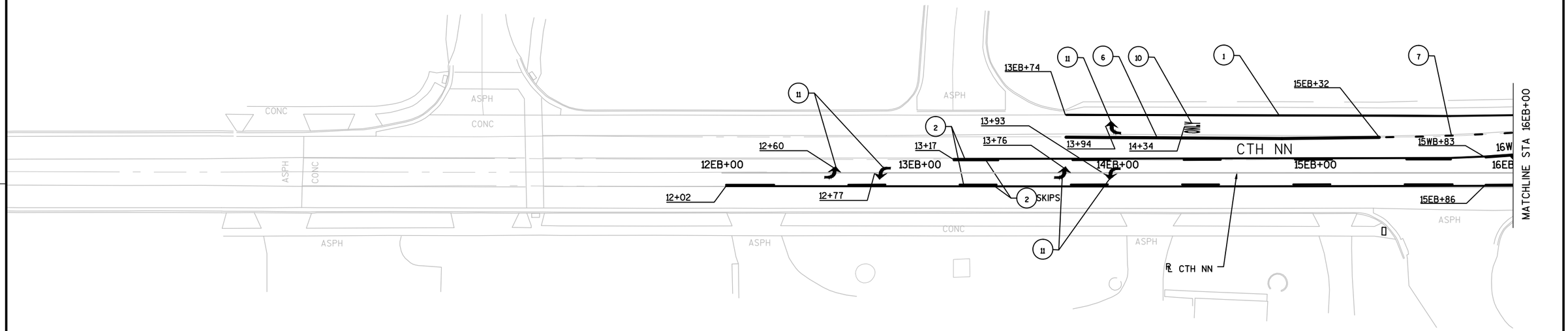
SEE STATE PLATE A4-2
FOR LOCATION LATERALLY
OF E5-1A SIGN.

EXIT GORE SIGN DETAIL

PROJECT NO: 1080-13-70	HWY: USH 12 @ CTH NN	COUNTY: WALWORTH	SIGN DETAIL - TYPE I & II SIGNS	SHEET	E

PAVEMENT MARKING LEGEND

1. PAVEMENT MARKING EPOXY 4-INCH (WHITE)
2. PAVEMENT MARKING EPOXY 4-INCH (YELLOW)
3. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE, 4-INCH (DASHED WHITE) (12.5 FT LINE 37.5 FT SKIP)
4. PAVEMENT MARKING DIAGONAL EPOXY 12-INCH (WHITE)
5. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE, 4-INCH (WHITE)
6. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE, 8-INCH (WHITE)
7. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE, 4-INCH (DASHED WHITE) (3 FT LINE 9 FT SKIP)
8. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE, 8-INCH (DASHED WHITE) (3 FT LINE 9 FT SKIP)
9. PAVEMENT MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
10. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC WORDS (WHITE)
11. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 2 (WHITE)
11A. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 5 (WHITE)
12. PAVEMENT MARKING DIAGONAL EPOXY 12-INCH (WHITE)
12A. PAVEMENT MARKING DIAGONAL EPOXY 24-INCH (WHITE)
13. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 4 (WHITE)
14. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC STOP LINE 18-INCH (WHITE)
15. PAVEMENT MARKING CURB EPOXY (YELLOW)
16. PAVEMENT MARKING ISLAND NOSE EPOXY (YELLOW)
17. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE, 4-INCH (DASHED YELLOW) (2 FT LINE 6 FT SKIP)
18. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC CROSSWALK 6-INCH (WHITE)
19. CURB RAMP DETECTABLE WARNING FIELD (YELLOW)
20. PAVEMENT MARKING OUTFALL



PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	PAVEMENT MARKING	SHEET 109	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\024501-PM.DWG
LAYOUT NAME - 01
PLOT DATE : 4/28/2015 2:25 PM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1 IN:50 FT

PAVEMENT MARKING LEGEND

1. PAVEMENT MARKING EPOXY 4-INCH (WHITE)
2. PAVEMENT MARKING EPOXY 4-INCH (YELLOW)
3. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE, 4-INCH (DASHED WHITE) (12.5 FT LINE 37.5 FT SKIP)
4. PAVEMENT MARKING DIAGONAL EPOXY 12-INCH (WHITE)
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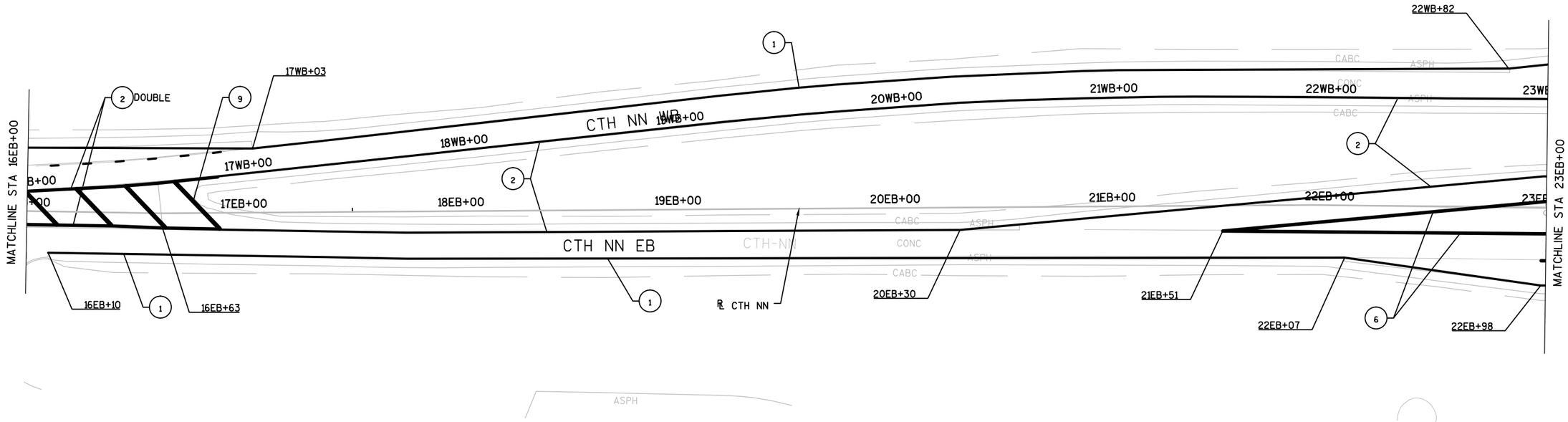
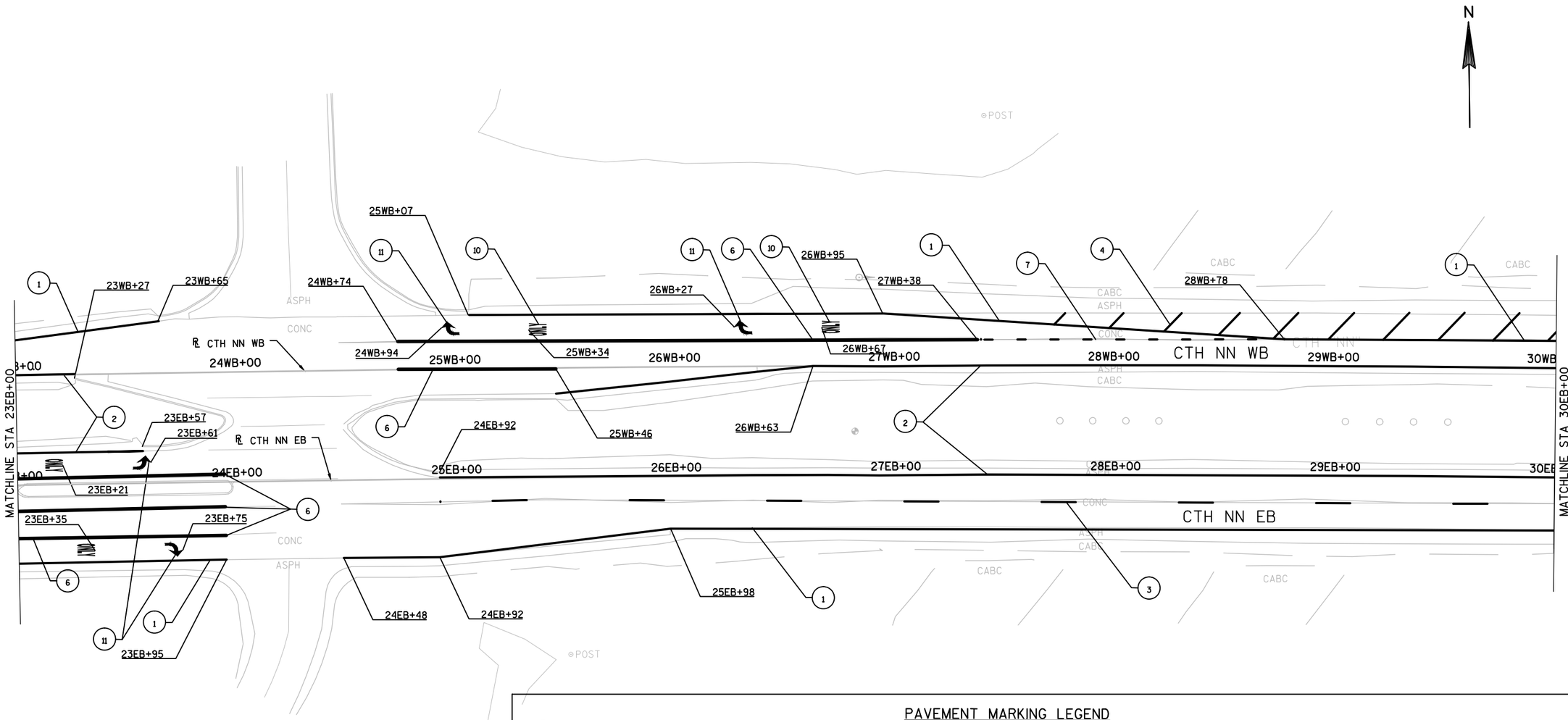
14. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC STOP LINE 18-INCH (WHITE)
15. PAVEMENT MARKING CURB EPOXY (YELLOW)
16. PAVEMENT MARKING ISLAND NOSE EPOXY (YELLOW)
17. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE, 4-INCH (DASHED YELLOW) (2 FT LINE 6 FT SKIP)
18. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC CROSSWALK 6-INCH (WHITE)
19. CURB RAMP DETECTABLE WARNING FIELD (YELLOW)
20. PAVEMENT MARKING OUTFALL



PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	PAVEMENT MARKING	SHEET 110	E

2



PAVEMENT MARKING LEGEND

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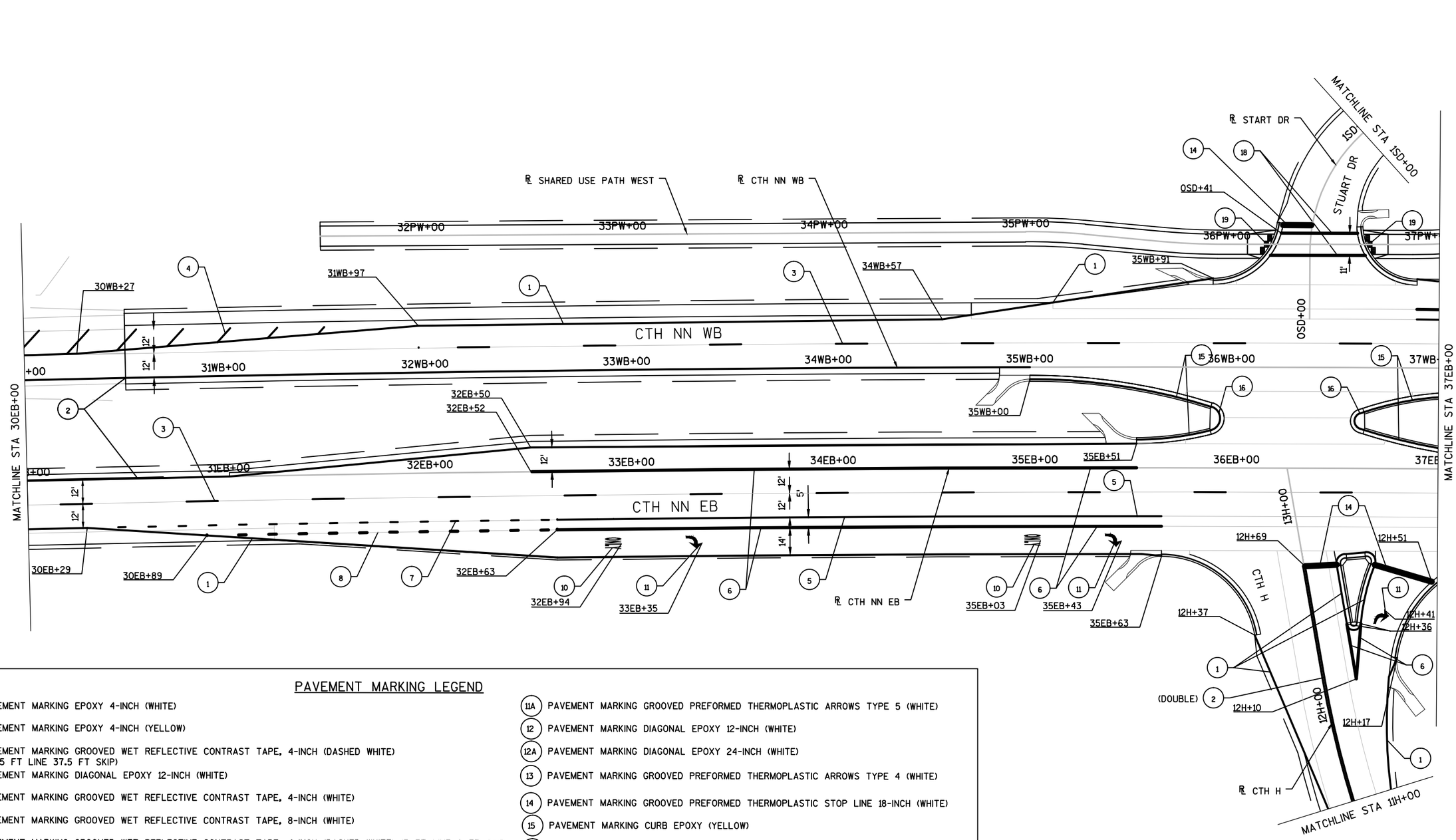
17. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE, 4-INCH (DASHED YELLOW) (2 FT LINE 6 FT SKIP)
18. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC CROSSWALK 6-INCH (WHITE)
19. CURB RAMP DETECTABLE WARNING FIELD (YELLOW)
20. PAVEMENT MARKING OUTFALL

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	PAVEMENT MARKING	SHEET 111	E

2



PAVEMENT MARKING LEGEND

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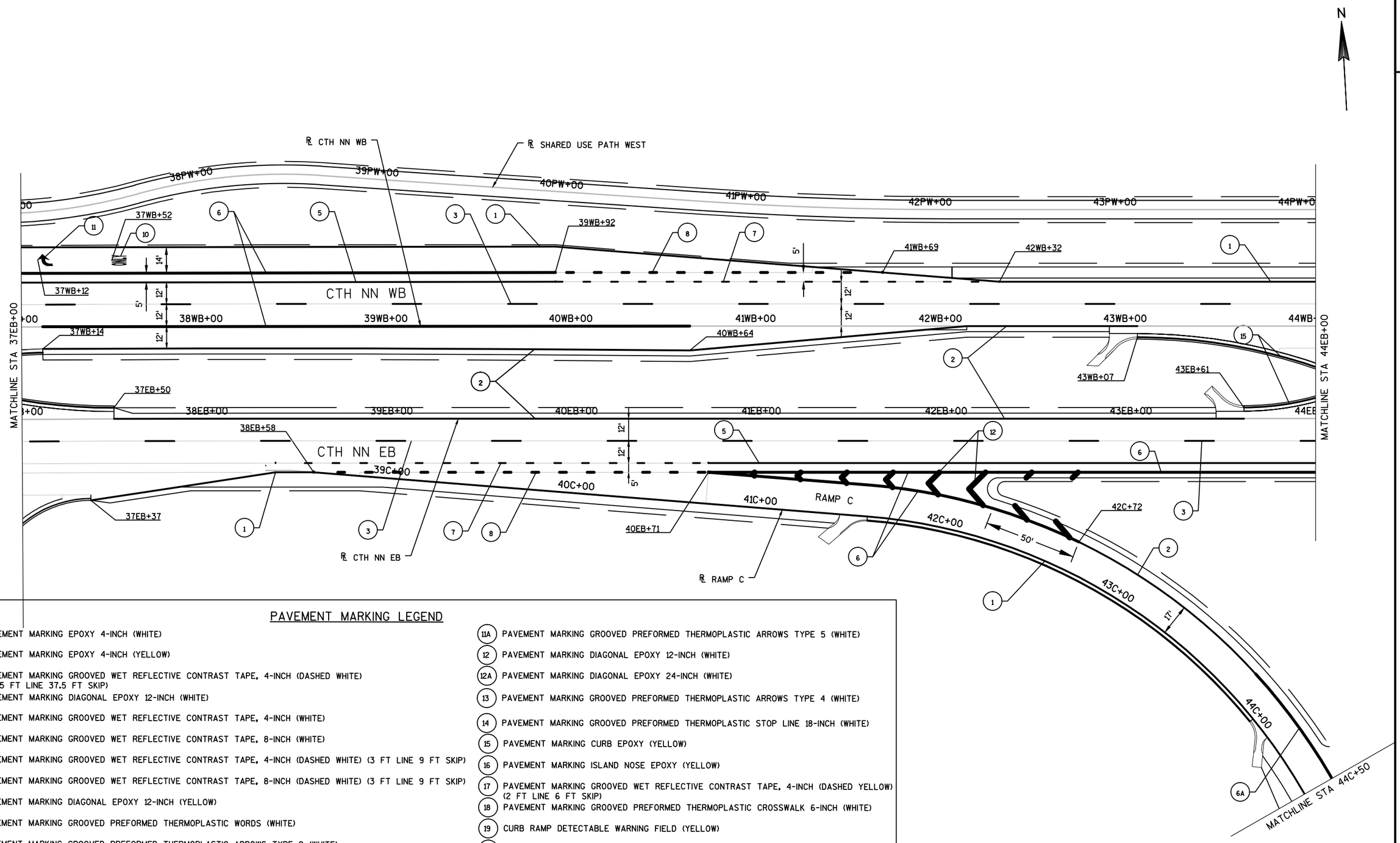
19. CURB RAMP DETECTABLE WARNING FIELD (YELLOW)
20. PAVEMENT MARKING OUTFALL

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	PAVEMENT MARKING	SHEET 112	E

2



PAVEMENT MARKING LEGEND

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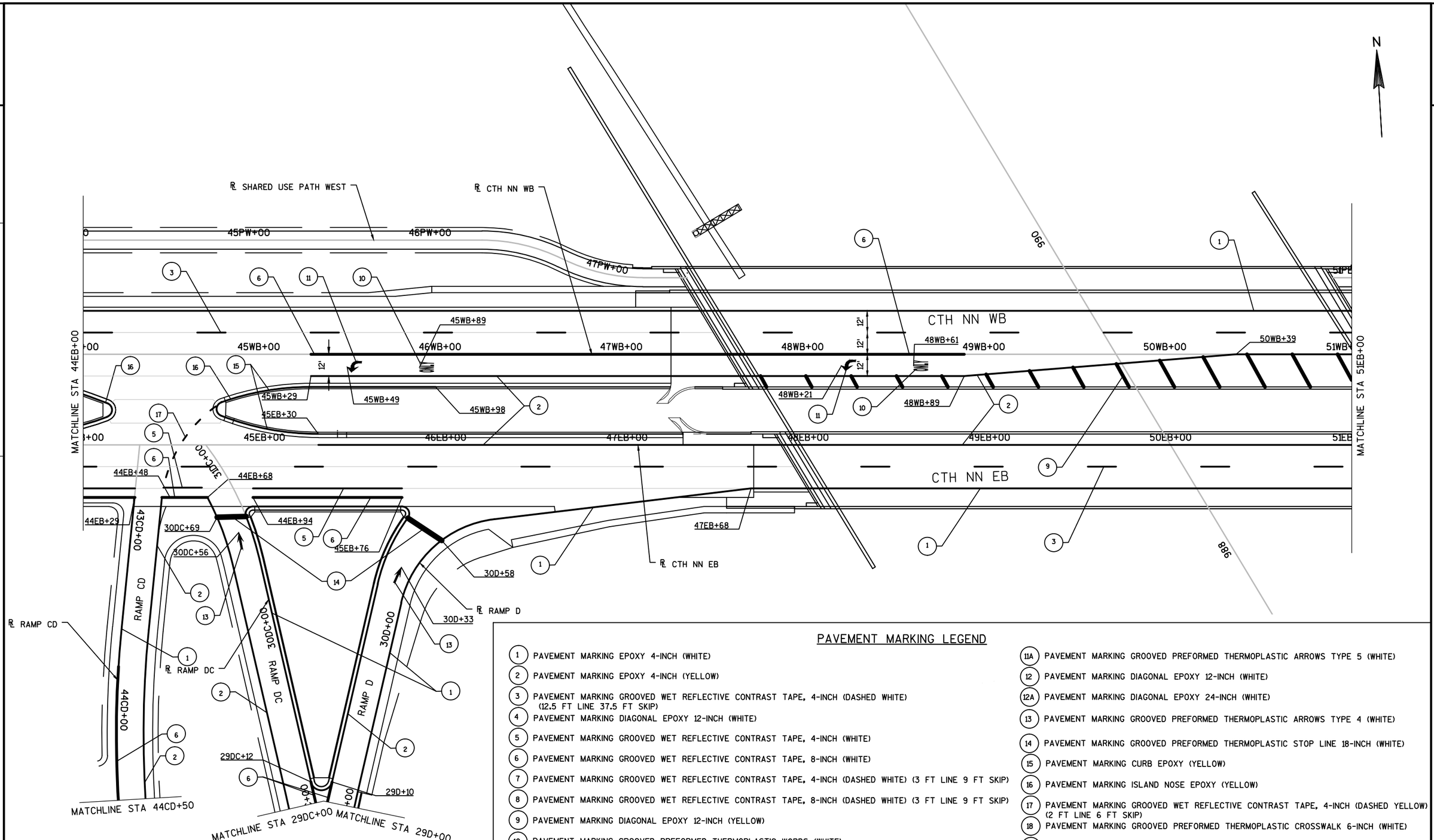
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	PAVEMENT MARKING	SHEET 113	E



PAVEMENT MARKING LEGEND

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19. CURB RAMP DETECTABLE WARNING FIELD (YELLOW)
20. PAVEMENT MARKING OUTFALL

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	PAVEMENT MARKING	SHEET 114	E

PAVEMENT MARKING LEGEND

1. PAVEMENT MARKING EPOXY 4-INCH (WHITE)
2. PAVEMENT MARKING EPOXY 4-INCH (YELLOW)
3. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE, 4-INCH (DASHED WHITE) (12.5 FT LINE 37.5 FT SKIP)
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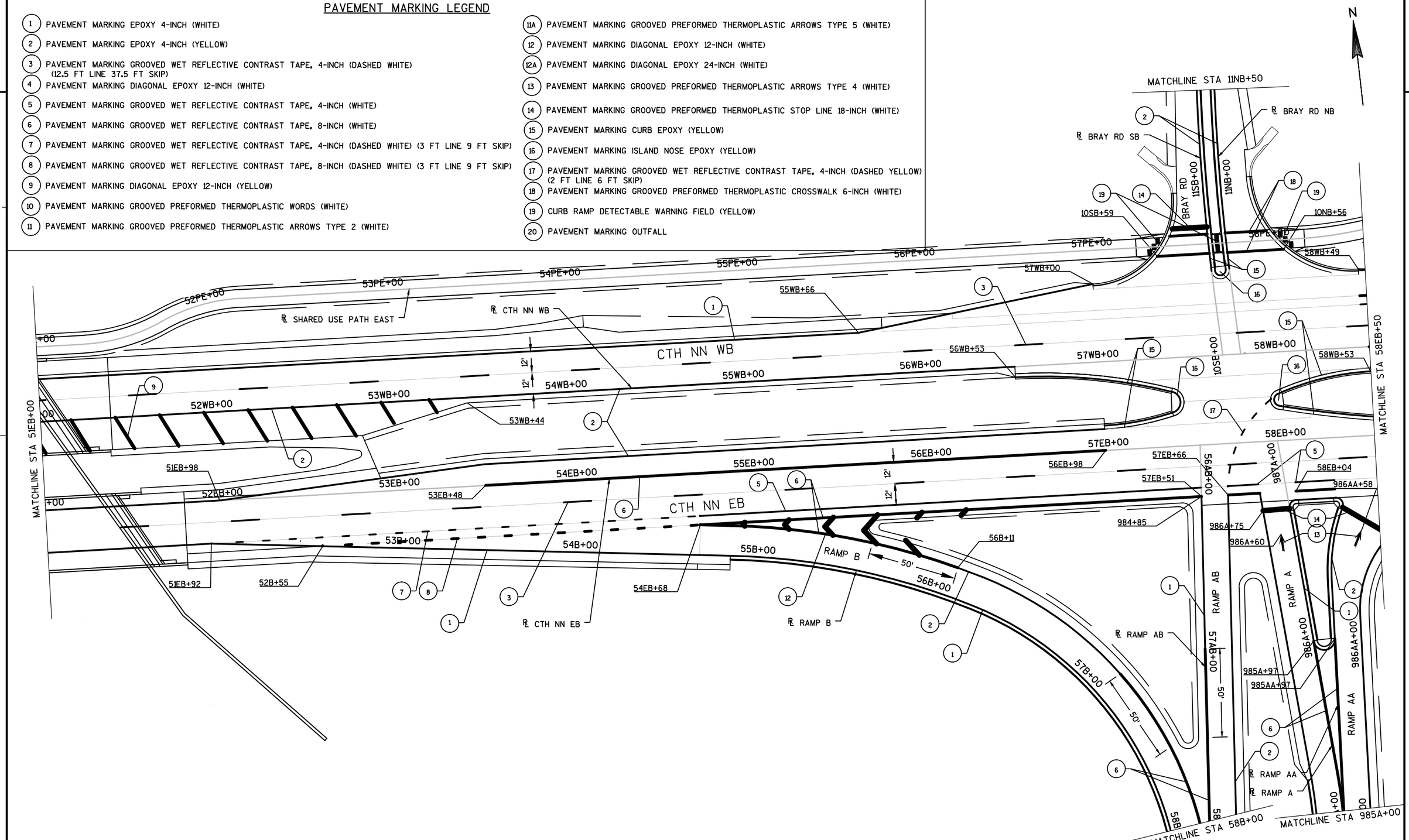
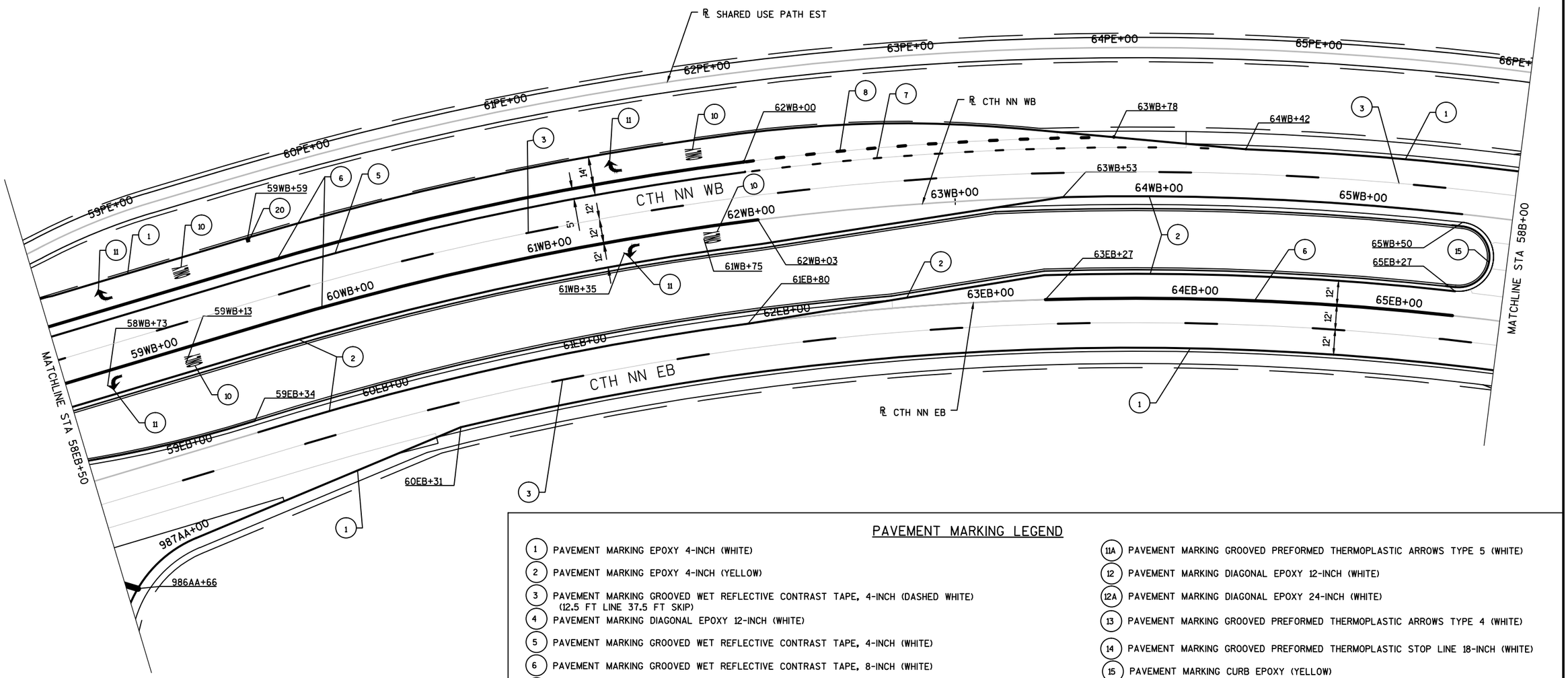
19. CURB RAMP DETECTABLE WARNING FIELD (YELLOW)
20. PAVEMENT MARKING OUTFALL



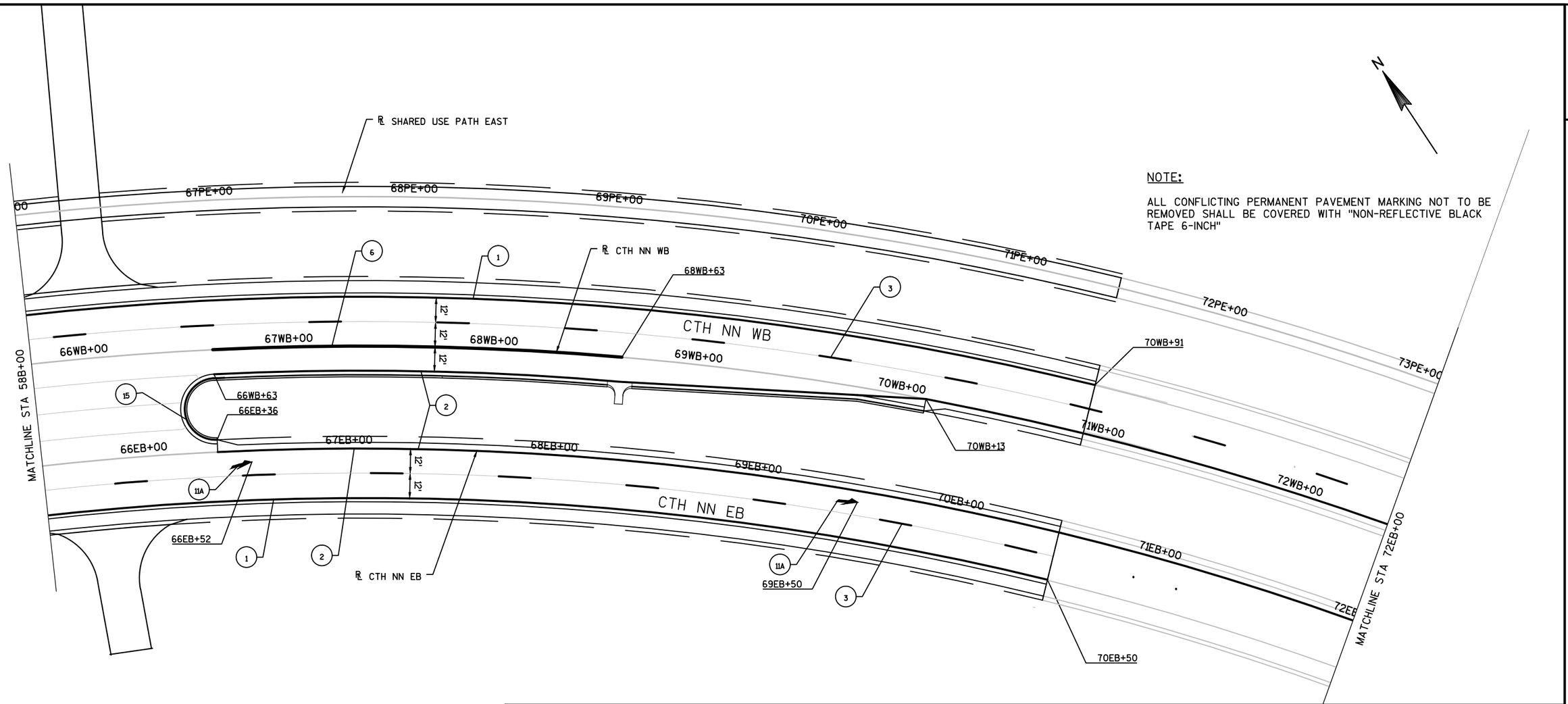
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	PAVEMENT MARKING	SHEET 115	E



PAVEMENT MARKING LEGEND

1. PAVEMENT MARKING EPOXY 4-INCH (WHITE)
2. PAVEMENT MARKING EPOXY 4-INCH (YELLOW)
3. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE, 4-INCH (DASHED WHITE) (12.5 FT LINE 37.5 FT SKIP)
4. PAVEMENT MARKING DIAGONAL EPOXY 12-INCH (WHITE)
5. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE, 4-INCH (WHITE)
6. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE, 8-INCH (WHITE)
7. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE, 4-INCH (DASHED WHITE) (3 FT LINE 9 FT SKIP)
8. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE, 8-INCH (DASHED WHITE) (3 FT LINE 9 FT SKIP)
9. PAVEMENT MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
10. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC WORDS (WHITE)
11. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 2 (WHITE)
11A. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 5 (WHITE)
12. PAVEMENT MARKING DIAGONAL EPOXY 12-INCH (WHITE)
12A. PAVEMENT MARKING DIAGONAL EPOXY 24-INCH (WHITE)
13. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 4 (WHITE)
14. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC STOP LINE 18-INCH (WHITE)
15. PAVEMENT MARKING CURB EPOXY (YELLOW)
16. PAVEMENT MARKING ISLAND NOSE EPOXY (YELLOW)
17. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE, 4-INCH (DASHED YELLOW) (2 FT LINE 6 FT SKIP)
18. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC CROSSWALK 6-INCH (WHITE)
19. CURB RAMP DETECTABLE WARNING FIELD (YELLOW)
20. PAVEMENT MARKING OUTFALL

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	PAVEMENT MARKING	SHEET 116	E



PAVEMENT MARKING LEGEND

1. PAVEMENT MARKING EPOXY 4-INCH (WHITE)
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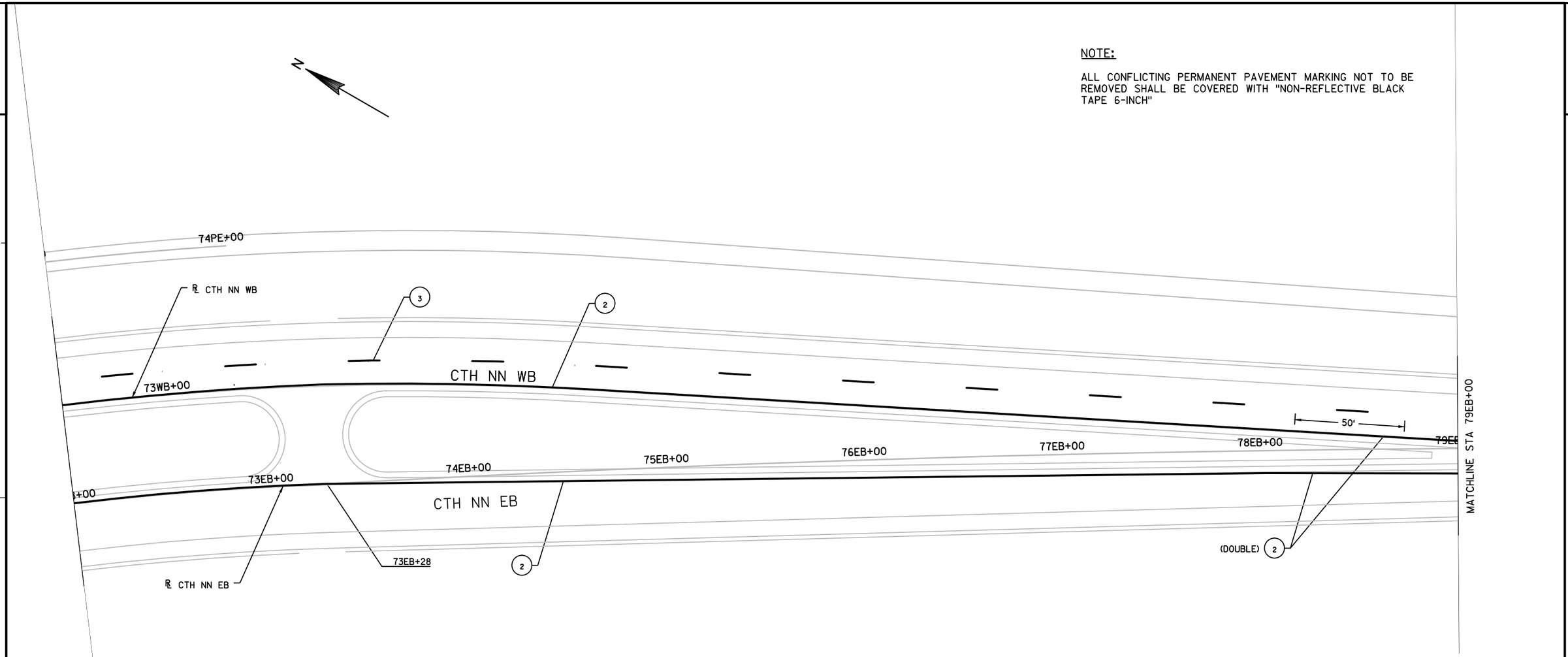
17. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE, 4-INCH (DASHED YELLOW) (2 FT LINE 6 FT SKIP)
18. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC CROSSWALK 6-INCH (WHITE)
19. CURB RAMP DETECTABLE WARNING FIELD (YELLOW)
20. PAVEMENT MARKING OUTFALL

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	PAVEMENT MARKING	SHEET 117	E

2

NOTE:

ALL CONFLICTING PERMANENT PAVEMENT MARKING NOT TO BE REMOVED SHALL BE COVERED WITH "NON-REFLECTIVE BLACK TAPE 6-INCH"



PAVEMENT MARKING LEGEND

1. PAVEMENT MARKING EPOXY 4-INCH (WHITE)
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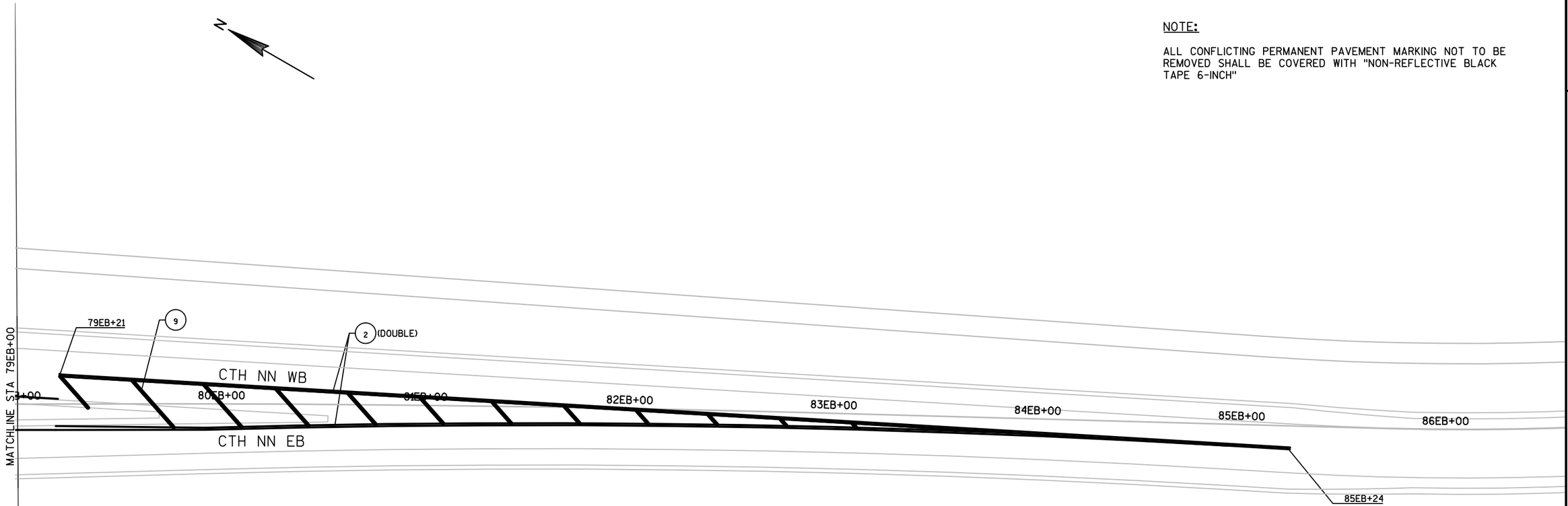
17. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE, 4-INCH (DASHED YELLOW) (2 FT LINE 6 FT SKIP)
18. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC CROSSWALK 6-INCH (WHITE)
19. CURB RAMP DETECTABLE WARNING FIELD (YELLOW)
20. PAVEMENT MARKING OUTFALL

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	PAVEMENT MARKING	SHEET 118	E

NOTE:

ALL CONFLICTING PERMANENT PAVEMENT MARKING NOT TO BE REMOVED SHALL BE COVERED WITH "NON-REFLECTIVE BLACK TAPE 6-INCH"



PAVEMENT MARKING LEGEND

1. PAVEMENT MARKING EPOXY 4-INCH (WHITE)
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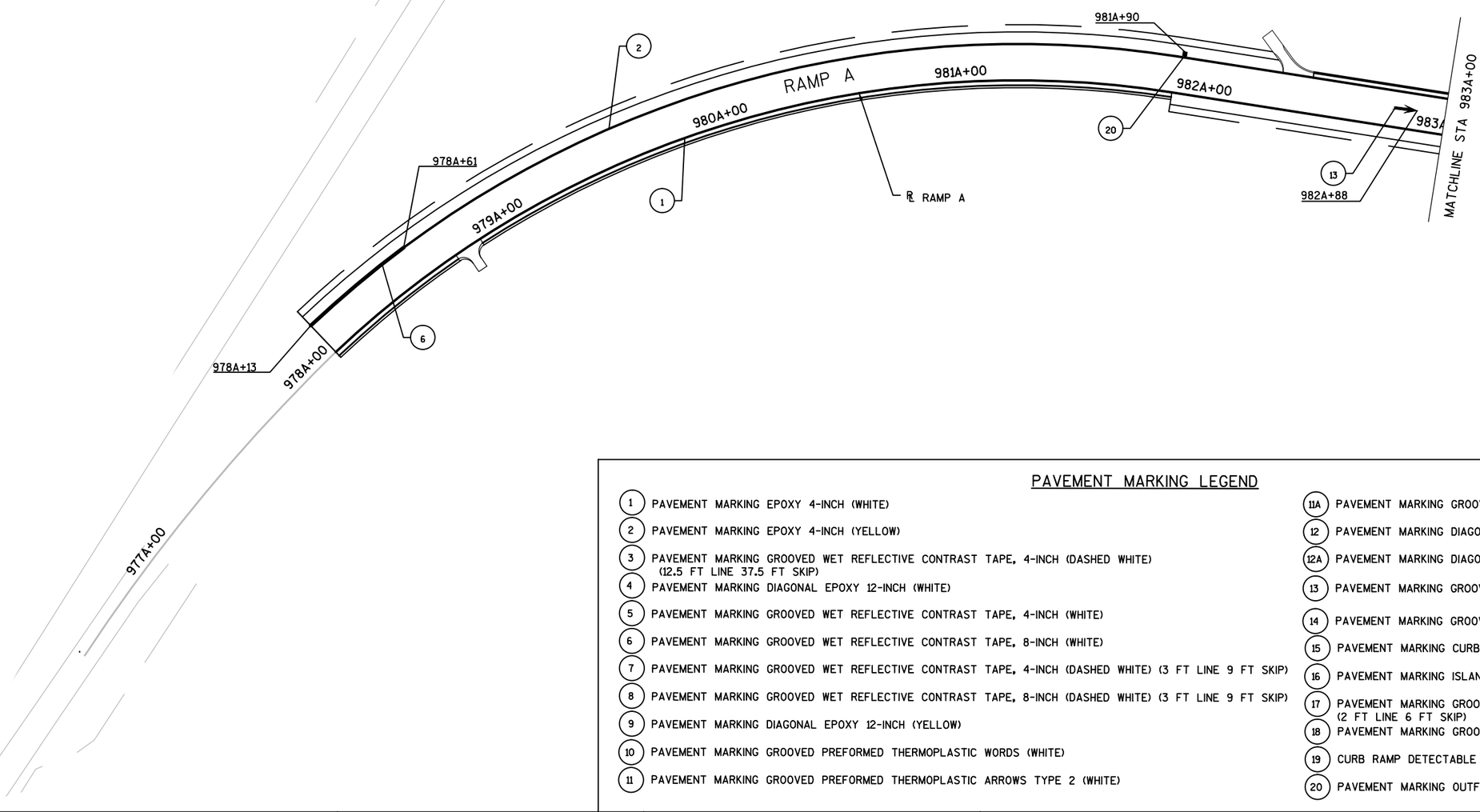
15. PAVEMENT MARKING CURB EPOXY (YELLOW)
16. PAVEMENT MARKING ISLAND NOSE EPOXY (YELLOW)
17. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE, 4-INCH (DASHED YELLOW) (2 FT LINE 6 FT SKIP)
18. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC CROSSWALK 6-INCH (WHITE)
19. CURB RAMP DETECTABLE WARNING FIELD (YELLOW)
20. PAVEMENT MARKING OUTFALL

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	PAVEMENT MARKING	SHEET 119	E



PAVEMENT MARKING LEGEND

1. PAVEMENT MARKING EPOXY 4-INCH (WHITE)
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17. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE, 4-INCH (DASHED YELLOW) (2 FT LINE 6 FT SKIP)
18. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC CROSSWALK 6-INCH (WHITE)
19. CURB RAMP DETECTABLE WARNING FIELD (YELLOW)
20. PAVEMENT MARKING OUTFALL

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	PAVEMENT MARKING - RAMP A	SHEET 120	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\024501-PM.DWG
LAYOUT NAME - 12
PLOT DATE : 4/28/2015 2:28 PM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:50
WISDOT/CADDS SHEET 42

PAVEMENT MARKING LEGEND

1. PAVEMENT MARKING EPOXY 4-INCH (WHITE)
2. PAVEMENT MARKING EPOXY 4-INCH (YELLOW)
3. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE, 4-INCH (DASHED WHITE) (12.5 FT LINE 37.5 FT SKIP)
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12A. PAVEMENT MARKING DIAGONAL EPOXY 24-INCH (WHITE)
13. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 4 (WHITE)
14. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC STOP LINE 18-INCH (WHITE)
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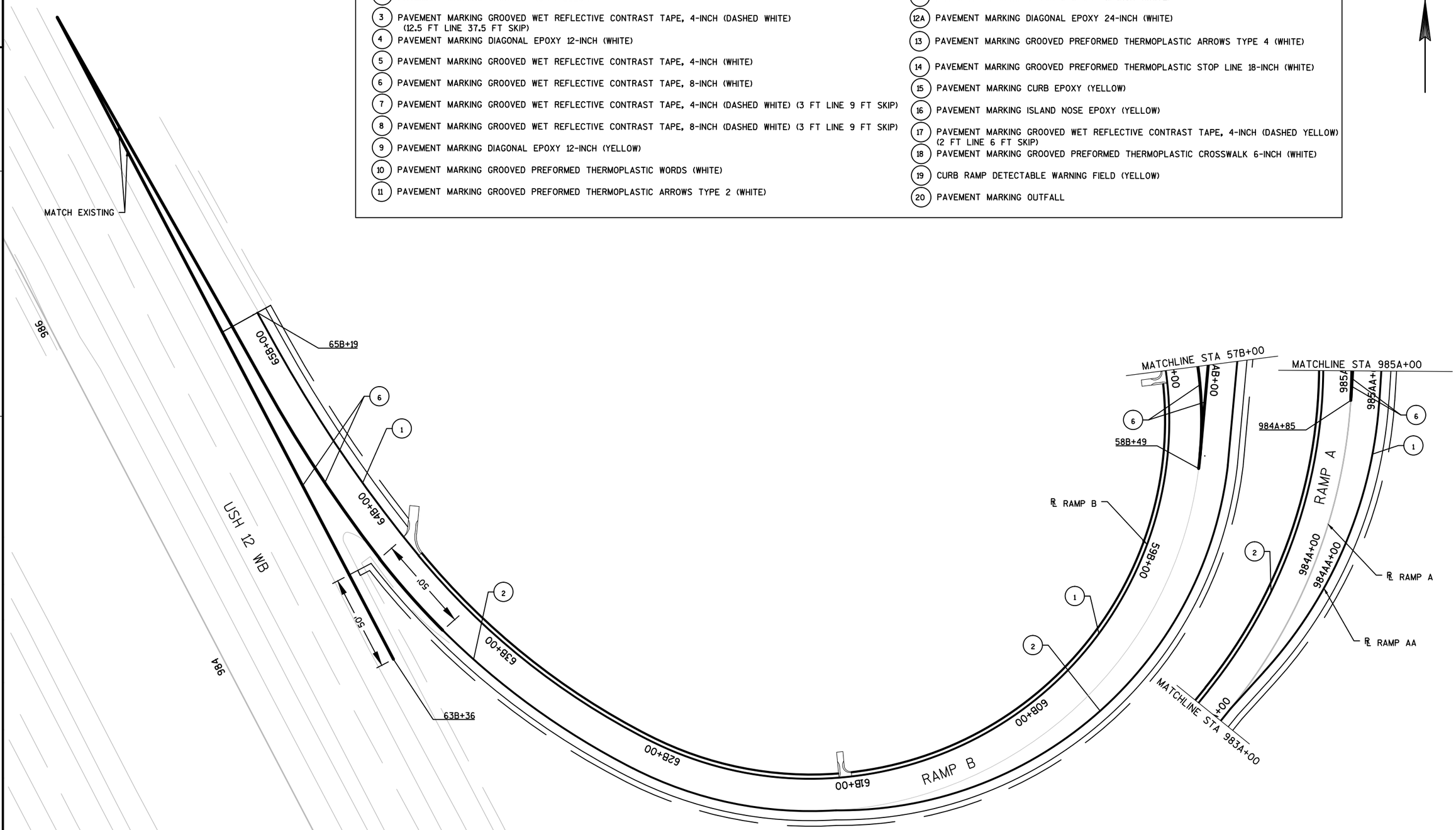
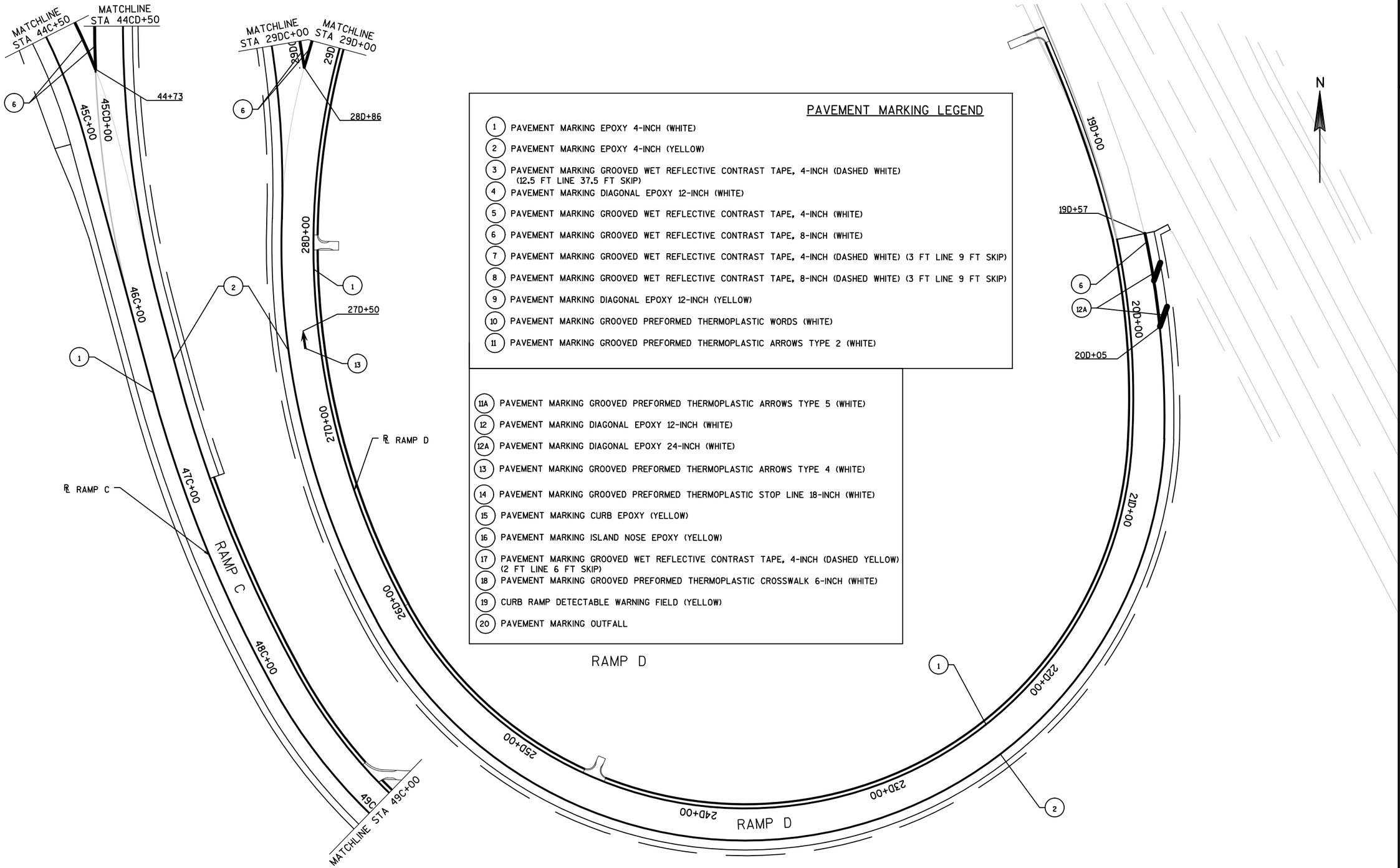
17. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE, 4-INCH (DASHED YELLOW) (2 FT LINE 6 FT SKIP)
18. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC CROSSWALK 6-INCH (WHITE)
19. CURB RAMP DETECTABLE WARNING FIELD (YELLOW)
20. PAVEMENT MARKING OUTFALL



PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	PAVEMENT MARKING - RAMP A & B	SHEET 121	E



PAVEMENT MARKING LEGEND

1. PAVEMENT MARKING EPOXY 4-INCH (WHITE)
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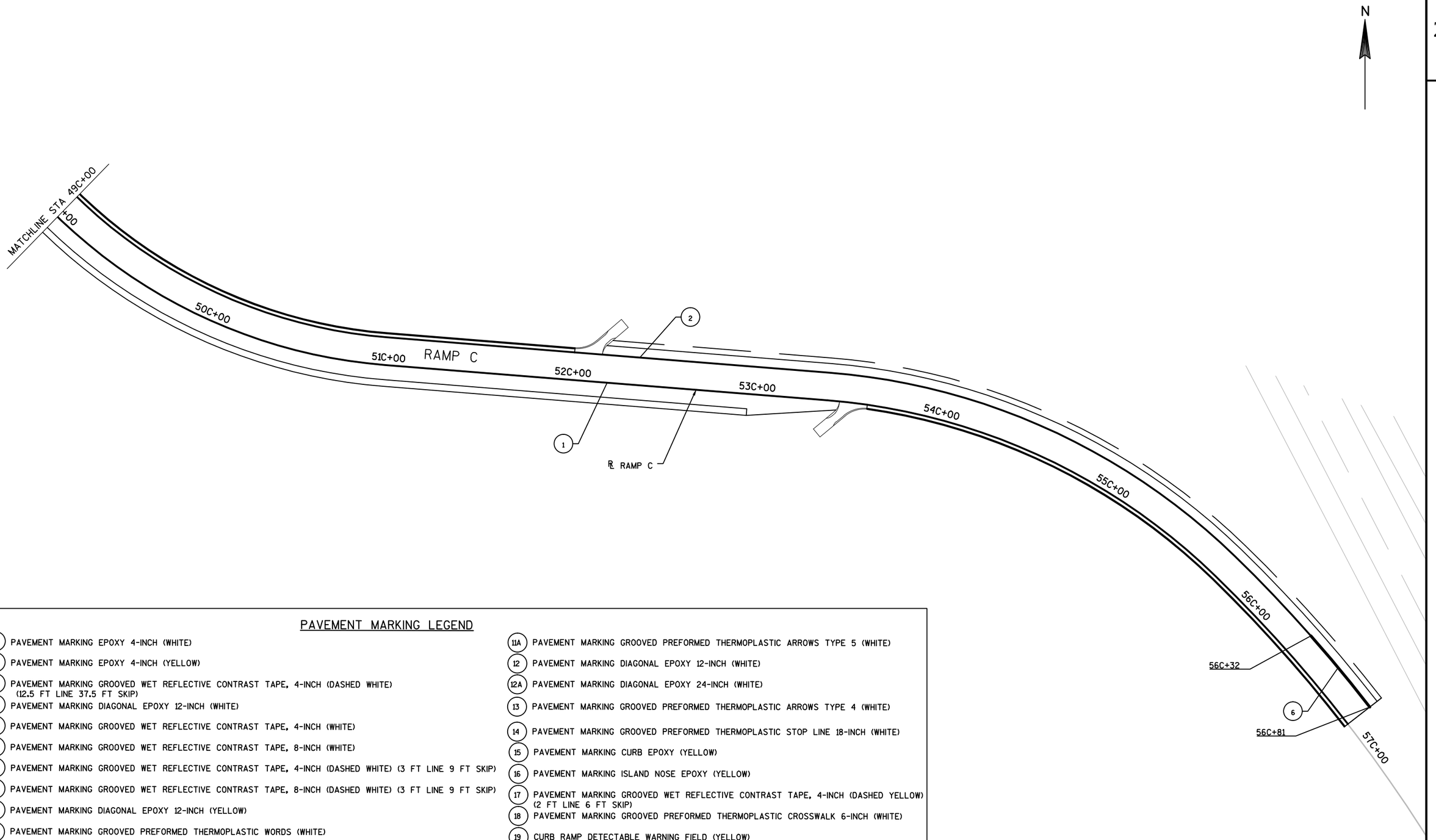
11. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 2 (WHITE)

11A. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 5 (WHITE)
12. PAVEMENT MARKING DIAGONAL EPOXY 12-INCH (WHITE)
12A. PAVEMENT MARKING DIAGONAL EPOXY 24-INCH (WHITE)
13. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 4 (WHITE)
14. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC STOP LINE 18-INCH (WHITE)
15. PAVEMENT MARKING CURB EPOXY (YELLOW)
16. PAVEMENT MARKING ISLAND NOSE EPOXY (YELLOW)
17. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE, 4-INCH (DASHED YELLOW) (2 FT LINE 6 FT SKIP)
18. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC CROSSWALK 6-INCH (WHITE)
19. CURB RAMP DETECTABLE WARNING FIELD (YELLOW)
20. PAVEMENT MARKING OUTFALL

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	PAVEMENT MARKING - RAMP C & D	SHEET 122	E

2



PAVEMENT MARKING LEGEND

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19. CURB RAMP DETECTABLE WARNING FIELD (YELLOW)
20. PAVEMENT MARKING OUTFALL

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	PAVEMENT MARKING - RAMP C	SHEET 123	E

PAVEMENT MARKING LEGEND

1. PAVEMENT MARKING EPOXY 4-INCH (WHITE)
2. PAVEMENT MARKING EPOXY 4-INCH (YELLOW)
3. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE, 4-INCH (DASHED WHITE) (12.5 FT LINE 37.5 FT SKIP)
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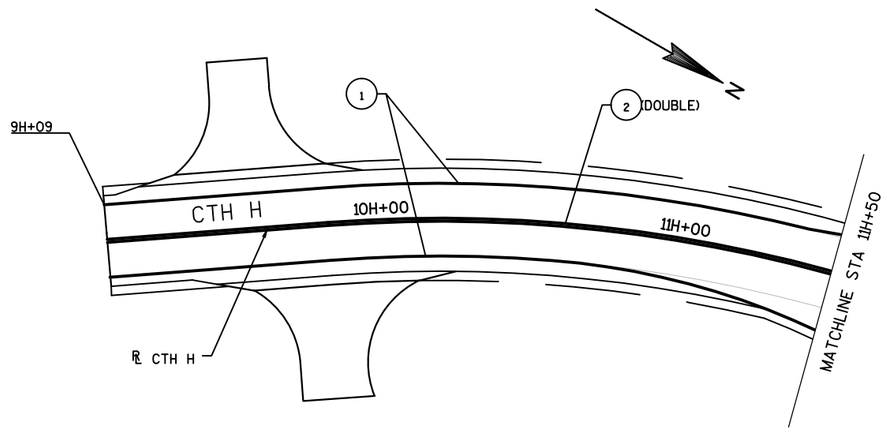
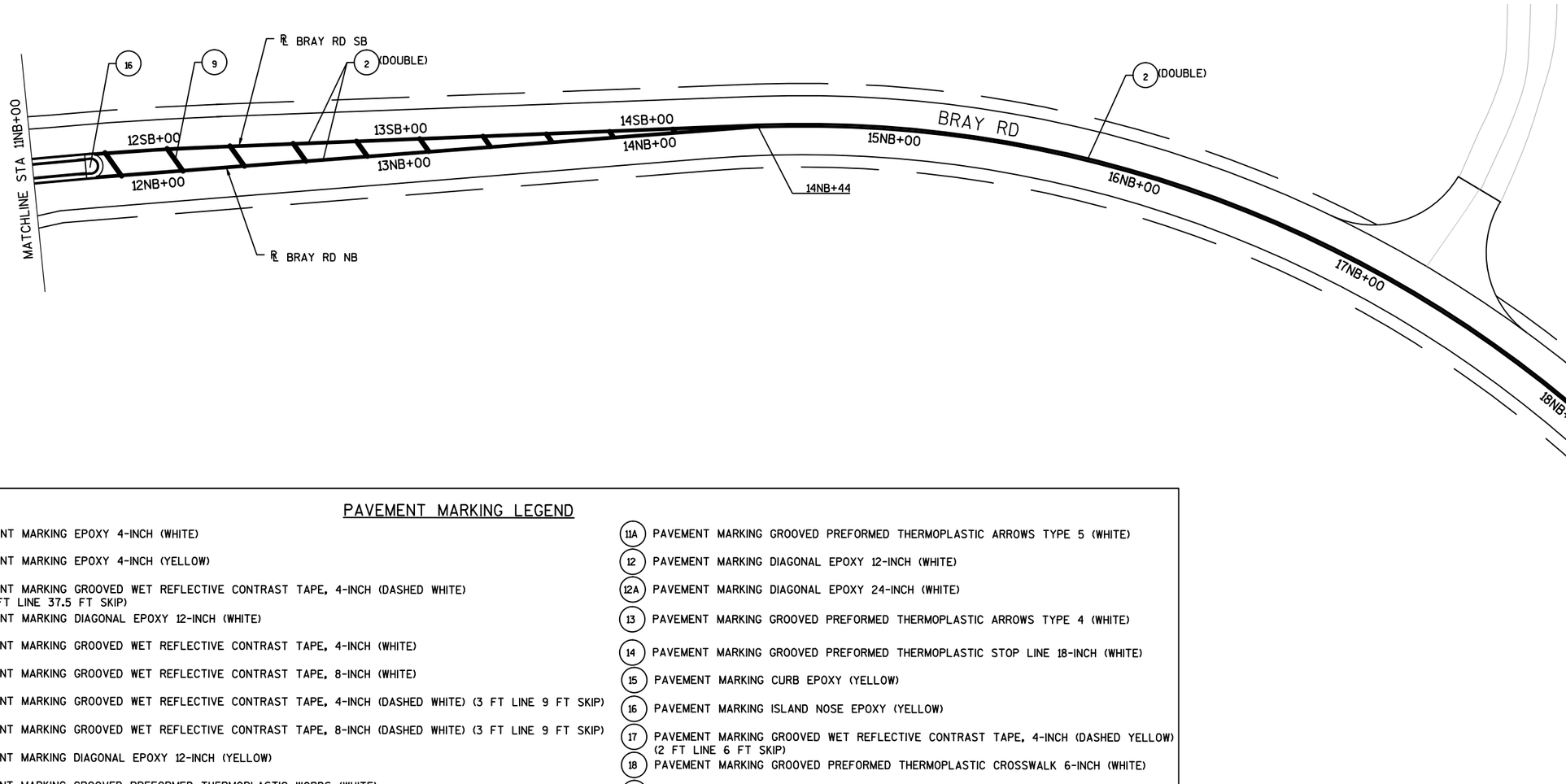
19. CURB RAMP DETECTABLE WARNING FIELD (YELLOW)
20. PAVEMENT MARKING OUTFALL



PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	PAVEMENT MARKING - CTH H	SHEET 124	E



PAVEMENT MARKING LEGEND

1. PAVEMENT MARKING EPOXY 4-INCH (WHITE)
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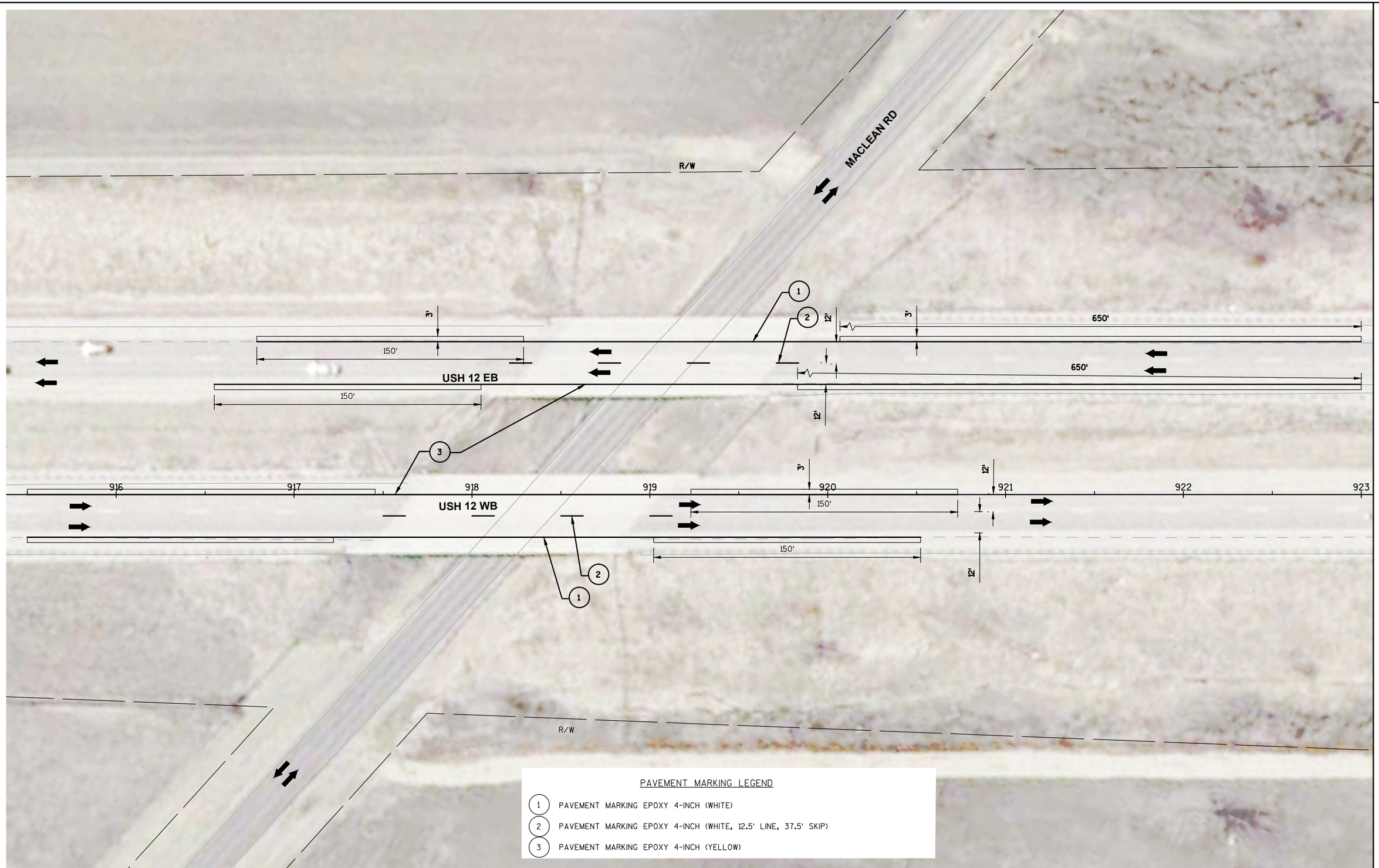
4. PAVEMENT MARKING DIAGONAL EPOXY 12-INCH (WHITE)
5. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE, 4-INCH (WHITE)
6. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE, 8-INCH (WHITE)
7. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE, 4-INCH (DASHED WHITE) (3 FT LINE 9 FT SKIP)
8. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE, 8-INCH (DASHED WHITE) (3 FT LINE 9 FT SKIP)
9. PAVEMENT MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
10. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC WORDS (WHITE)
11. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 2 (WHITE)
11A. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 5 (WHITE)
12. PAVEMENT MARKING DIAGONAL EPOXY 12-INCH (WHITE)
12A. PAVEMENT MARKING DIAGONAL EPOXY 24-INCH (WHITE)
13. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 4 (WHITE)
14. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC STOP LINE 18-INCH (WHITE)
15. PAVEMENT MARKING CURB EPOXY (YELLOW)
16. PAVEMENT MARKING ISLAND NOSE EPOXY (YELLOW)
17. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE, 4-INCH (DASHED YELLOW) (2 FT LINE 6 FT SKIP)
18. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC CROSSWALK 6-INCH (WHITE)
19. CURB RAMP DETECTABLE WARNING FIELD (YELLOW)
20. PAVEMENT MARKING OUTFALL

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	PAVEMENT MARKING - BRAY RD	SHEET 125	E

2



PAVEMENT MARKING LEGEND

1	PAVEMENT MARKING EPOXY 4-INCH (WHITE)
2	PAVEMENT MARKING EPOXY 4-INCH (WHITE, 12.5' LINE, 37.5' SKIP)
3	PAVEMENT MARKING EPOXY 4-INCH (YELLOW)

PROJECT NO: 2260-08-70	HWY: STH 11	COUNTY: RACINE	PAVEMENT MARKING - MACLEAN ROAD	SHEET	E

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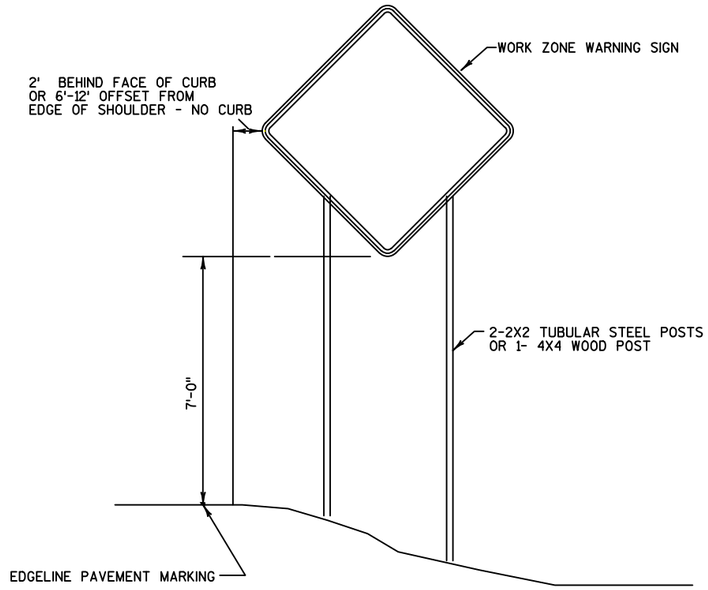
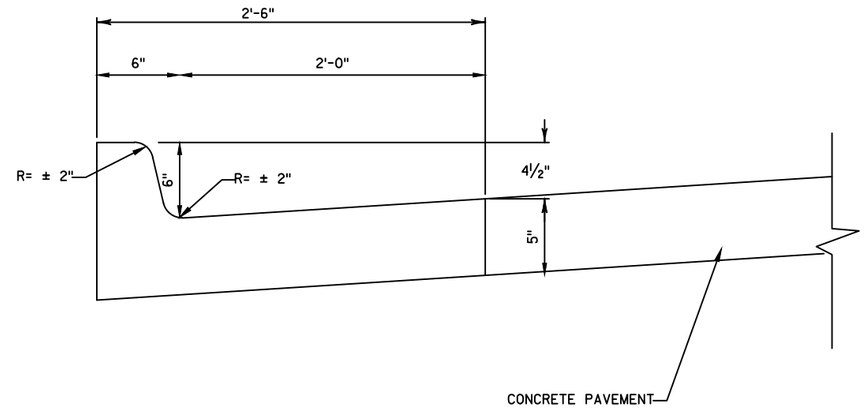


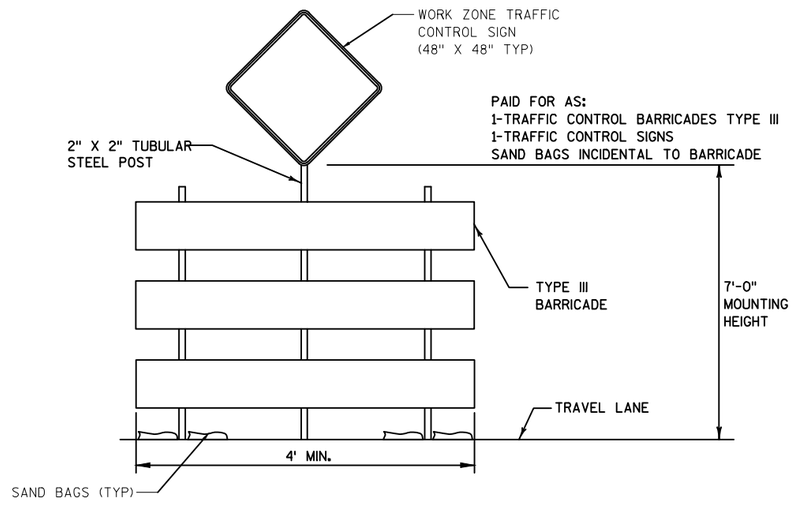
TYPICAL TEMPORARY TRAFFIC CONTROL DETAIL
MOUNTING ON FIXED SUPPORT

LONG TERM
7 DAYS OR MORE

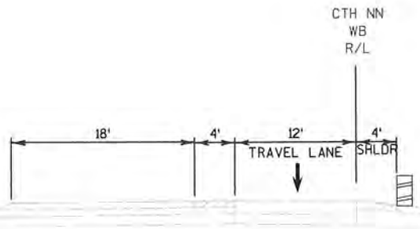


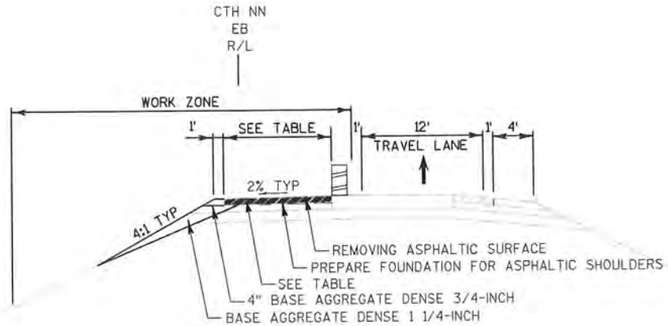
ASPHALTIC CURB

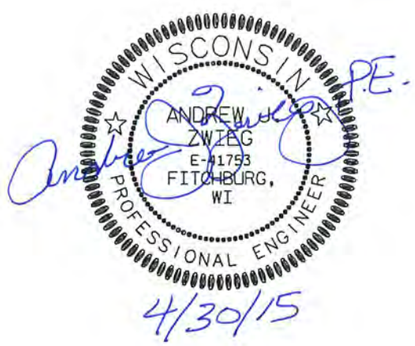
STAGE 1A
STA 35WB+27 TO STA 35WB+73



TYPICAL TEMPORARY TRAFFIC CONTROL DETAIL
MOUNTING ON TEMPORARY SUPPORT

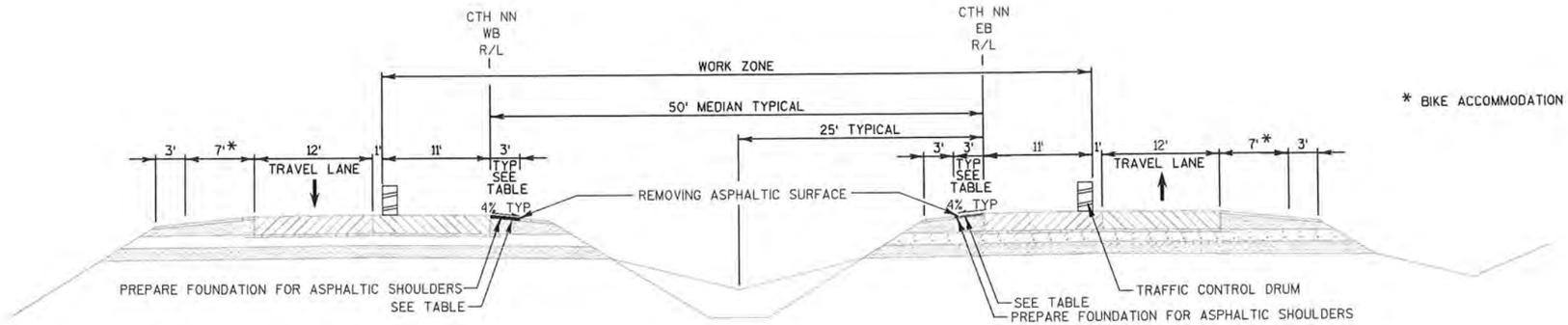






TYPICAL SECTION - STAGE 1A
CTH NN
STA 16EB+62 TO STA 24EB+00

STAGE	STATION RANGE	SHOULDER LOCATION	MATERIAL	TEMPORARY SHOULDER WIDTH
1A	16EB+62 TO 21EB+50	EB INSIDE	4" HMA TYPE E-1	11' TYP
	24EB+95 TO 30EB+00	EB INSIDE	4" HMA TYPE E-1	3' TYP
	26WB+37 TO 30WB+50	WB INSIDE	4" HMA TYPE E-1	3' TYP
	30WB+50 TO 34WB+04	WB INSIDE	3" ASPHALTIC SURFACE TEMPORARY	3' TYP
	34WB+04 TO 35WB+60	WB INSIDE	5" ASPHALTIC SURFACE TEMPORARY 5" BASE AGGREGATE DENSE 3/4-INCH	3'-12.5' VARIES
	39WB+36 TO 43WB+06	WB INSIDE	3" ASPHALTIC SURFACE TEMPORARY	3' TYP
	52WB+33 TO 54WB+64	WB INSIDE	3" ASPHALTIC SURFACE TEMPORARY	3' TYP
	54WB+64 TO 56WB+60	WB INSIDE	5" ASPHALTIC SURFACE TEMPORARY 5" BASE AGGREGATE DENSE 3/4-INCH	3'-5.5' VARIES
	60WB+55 TO 70WB+91	WB INSIDE	3" ASPHALTIC SURFACE TEMPORARY	4' TYP



* BIKE ACCOMMODATION

TYPICAL SECTION - STAGE 1A
CTH NN
STA 24EB+00 TO STA 70EB+50

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	TRAFFIC CONTROL TYPICAL SECTIONS - STAGE 1A	SHEET	E

GENERAL NOTES FOR CONSTRUCTION STAGING AND TRAFFIC CONTROL

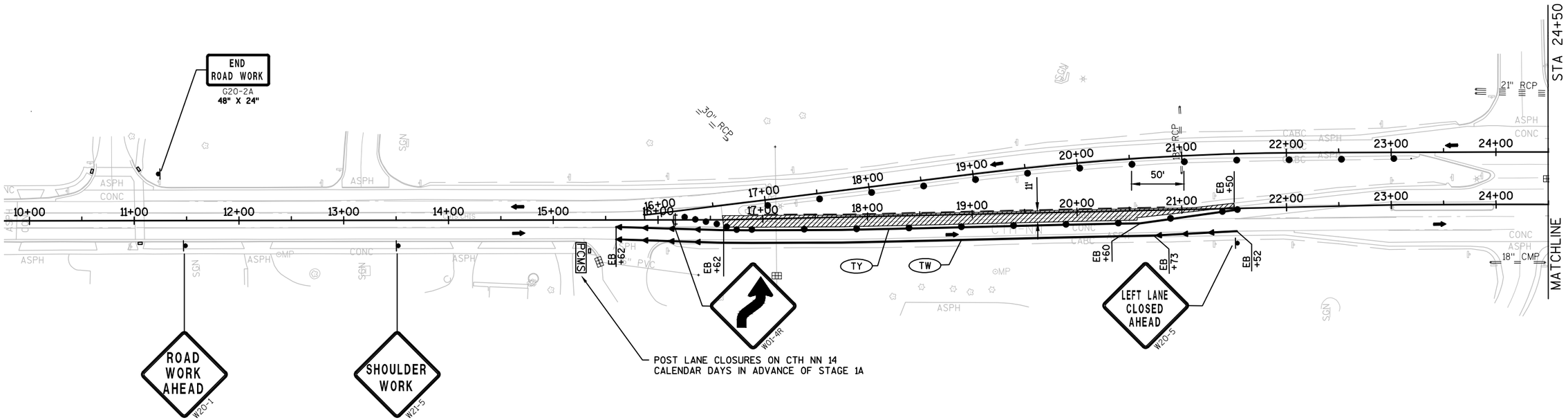
1. ALL TRAFFIC CONTROL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED IN THE PLANS.
2. "WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS REFLECTIVE ORANGE.
3. SIGN LOCATIONS ARE APPROXIMATE. THE ACTUAL LOCATION AND SPACING MAY BE ADJUSTED AS DIRECTED BY THE ENGINEER TO MEET FIELD CONDITIONS.
4. ALL SIGNS, TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE COVERED OR REMOVED AS NEEDED AND/OR AS DIRECTED BY THE ENGINEER. NO "WORKING" LIGHTS SHALL BE VISIBLE ON A COVERED OR LAID DOWN SIGN.
5. ALL EXISTING CONFLICTING PAVEMENT MARKING SHALL BE REMOVED.
6. A FLAGGER MAY BE REQUIRED WHERE CONSTRUCTION VEHICLES ENTER OR LEAVE "WORK/CLOSED" AREAS IF WARRANTED BY CONDITIONS AND/OR AS DIRECTED BY THE ENGINEER.
7. CONTRACTOR SHALL INSTALL PERMANENT SIGNS AND PERMANENT PAVEMENT MARKING WHEN APPROPRIATE DURING CONSTRUCTION STAGING AS SHOWN ON PLANS OR AS DIRECTED BY THE ENGINEER.
8. ADEQUATE TURNING PROVISION SHALL BE MAINTAINED FOR ALL VEHICLES, INCLUDING TRUCKS AS DIRECTED BY THE ENGINEER.
9. PLACE TEMPORARY RAISED PAVEMENT MARKERS THROUGH ALL CROSSOVER AND LANE SHIFTS.

LEGEND

- TRAFFIC CONTROL BARRICADE TYPE III WITH TWO TRAFFIC CONTROL WARNING LIGHTS TYPE A WITH/WITHOUT SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TRAFFIC CONTROL WARNING LIGHT TYPE C
- ARROW BOARD
- TRAFFIC CONTROL SIGN, POST MOUNTED
- TRAFFIC CONTROL SIGN, TEMPORARY SUPPORT
- FLEXIBLE TUBULAR MARKER
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- TEMPORARY RAISED PAVEMENT MARKER (ONE WAY REFLECTOR)
- DIRECTION OF TRAFFIC
- CC — CRASH CUSHION TEMPORARY
- 3" ASPHALTIC SURFACE TEMPORARY (BIKE ACCOMMODATIONS WITHIN PROJECT LIMITS)
- 5" ASPHALTIC SURFACE TEMPORARY (DRIVING LANES WITHIN PROJECT LIMITS)
- 4" HMA TYPE E-1 (SHOULDER IMPROVEMENTS OUTSIDE PROJECT LIMITS)
- 16" X 16" FLAGS (INCIDENTAL TO TRAFFIC CONTROL SIGNS)

- W — TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH (WHITE)
- Y — TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH (YELLOW)
- W8 — TEMPORARY PAVEMENT MARKING 8-INCH (WHITE)
- TW — TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE)
- TY — TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW)
- TW8 — TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (WHITE)
- TA — TEMPORARY PAVEMENT MARKING ARROWS REMOVABLE TAPE
- TWORD — TEMPORARY PAVEMENT MARKING WORDS REMOVABLE TAPE

N



PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CONSTRUCTION STAGING - STAGE 1A	SHEET 129 - E

2

LEGEND

- TRAFFIC CONTROL BARRICADE TYPE III WITH TWO TRAFFIC CONTROL WARNING LIGHTS TYPE A WITH/WITHOUT SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TRAFFIC CONTROL WARNING LIGHT TYPE C
- ARROW BOARD
- TRAFFIC CONTROL SIGN, POST MOUNTED
- TRAFFIC CONTROL SIGN, TEMPORARY SUPPORT
- FLEXIBLE TUBULAR MARKER
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- TEMPORARY RAISED PAVEMENT MARKER (ONE WAY REFLECTOR)
- DIRECTION OF TRAFFIC
- CC — CRASH CUSHION TEMPORARY
- 16" X 16" FLAGS (INCIDENTAL TO TRAFFIC CONTROL SIGNS)
- 3" ASPHALTIC SURFACE TEMPORARY (BIKE ACCOMMODATIONS WITHIN PROJECT LIMITS)
- 5" ASPHALTIC SURFACE TEMPORARY (DRIVING LANES WITHIN PROJECT LIMITS)
- 4" HMA TYPE E-1 (SHOULDER IMPROVEMENTS OUTSIDE PROJECT LIMITS)
- W — TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH (WHITE)
- Y — TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH (YELLOW)
- W8 — TEMPORARY PAVEMENT MARKING 8-INCH (WHITE)
- TW — TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE)
- TY — TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW)
- TW8 — TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (WHITE)
- TA — TEMPORARY PAVEMENT MARKING ARROWS REMOVABLE TAPE
- TWORD — TEMPORARY PAVEMENT MARKING WORDS REMOVABLE TAPE

N

W01-4L

EXISTING ARROWS AND WORDS TO BE REMOVED FOR STAGE 1A AND 1B CONSTRUCTION AND RESTORED AFTER 1B IS COMPLETE WITH EPOXY ARROWS AND WORDS

LANE CLOSED
R11-2(MOD)
48" X 30"

EXISTING PAVEMENT MARKING TO BE REMOVED FOR STAGE 1A AND 1B CONSTRUCTION AND RESTORED AFTER 1B IS COMPLETE WITH EPOXY 12-INCH

ROAD WORK AHEAD
W20-1

END ROAD WORK
G20-2A
48" X 24"

R3-8A
36"X30"

STA 24+50

MATCHLINE

STA 40+00

CTH NN

IH-43 SB

IH-43 NB

STUART DR

CTH H

ASPHALTIC CURB

LANE CLOSED
R11-2(MOD)
48" X 30"

END ROAD WORK
G20-2A
48" X 24"

LANE CLOSED
R11-2(MOD)
48" X 30"

ROAD WORK AHEAD
W20-1

PROJECT NO:1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CONSTRUCTION STAGING - STAGE 1A	SHEET 130 - E

LEGEND

- TRAFFIC CONTROL BARRICADE TYPE III WITH TWO TRAFFIC CONTROL WARNING LIGHTS TYPE A WITH/WITHOUT SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TRAFFIC CONTROL WARNING LIGHT TYPE C
- ARROW BOARD
- TRAFFIC CONTROL SIGN, POST MOUNTED
- TRAFFIC CONTROL SIGN, TEMPORARY SUPPORT
- FLEXIBLE TUBULAR MARKER
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- TEMPORARY RAISED PAVEMENT MARKER (ONE WAY REFLECTOR)
- DIRECTION OF TRAFFIC
- CC — CRASH CUSHION TEMPORARY
- 16" X 16" FLAGS (INCIDENTAL TO TRAFFIC CONTROL SIGNS)

- 3" ASPHALTIC SURFACE TEMPORARY (BIKE ACCOMMODATIONS WITHIN PROJECT LIMITS)
- 5" ASPHALTIC SURFACE TEMPORARY (DRIVING LANES WITHIN PROJECT LIMITS)
- 4" HMA TYPE E-1 (SHOULDER IMPROVEMENTS OUTSIDE PROJECT LIMITS)
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- Y — TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH (YELLOW)
- W8 — TEMPORARY PAVEMENT MARKING 8-INCH (WHITE)
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- TY — TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW)
- TW8 — TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (WHITE)
- TA — TEMPORARY PAVEMENT MARKING ARROWS REMOVABLE TAPE
- TWORD — TEMPORARY PAVEMENT MARKING WORDS REMOVABLE TAPE

N

STA 40+00

STA 55+00

MATCHLINE

MATCHLINE

CTH NN

USH 12

USH 12

RAMP C

RAMP CD

RAMP DC

RAMP D

LANE CLOSED
R11-2(MOD)
48" X 30"

LANE CLOSED
R11-2(MOD)
48" X 30"

LANE CLOSED
R11-2(MOD)
48" X 30"

ONLY ONLY
R3-8E
36"X30"

ROAD WORK AHEAD
W20-1

END ROAD WORK
G20-2A
48" X 24"

TY

TW8

TA

TWORD

WB +92

WB +05

WB +06

WB +19

WB +43

WB +41

WB +33

WB +64

12'

4'

3'

15'

25'

100'

CONC

APSH

18" RCP

36" RCP

12" CMP

15" CMP

30" CMP

15" RCP

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CONSTRUCTION STAGING - STAGE 1A	SHEET -----	E

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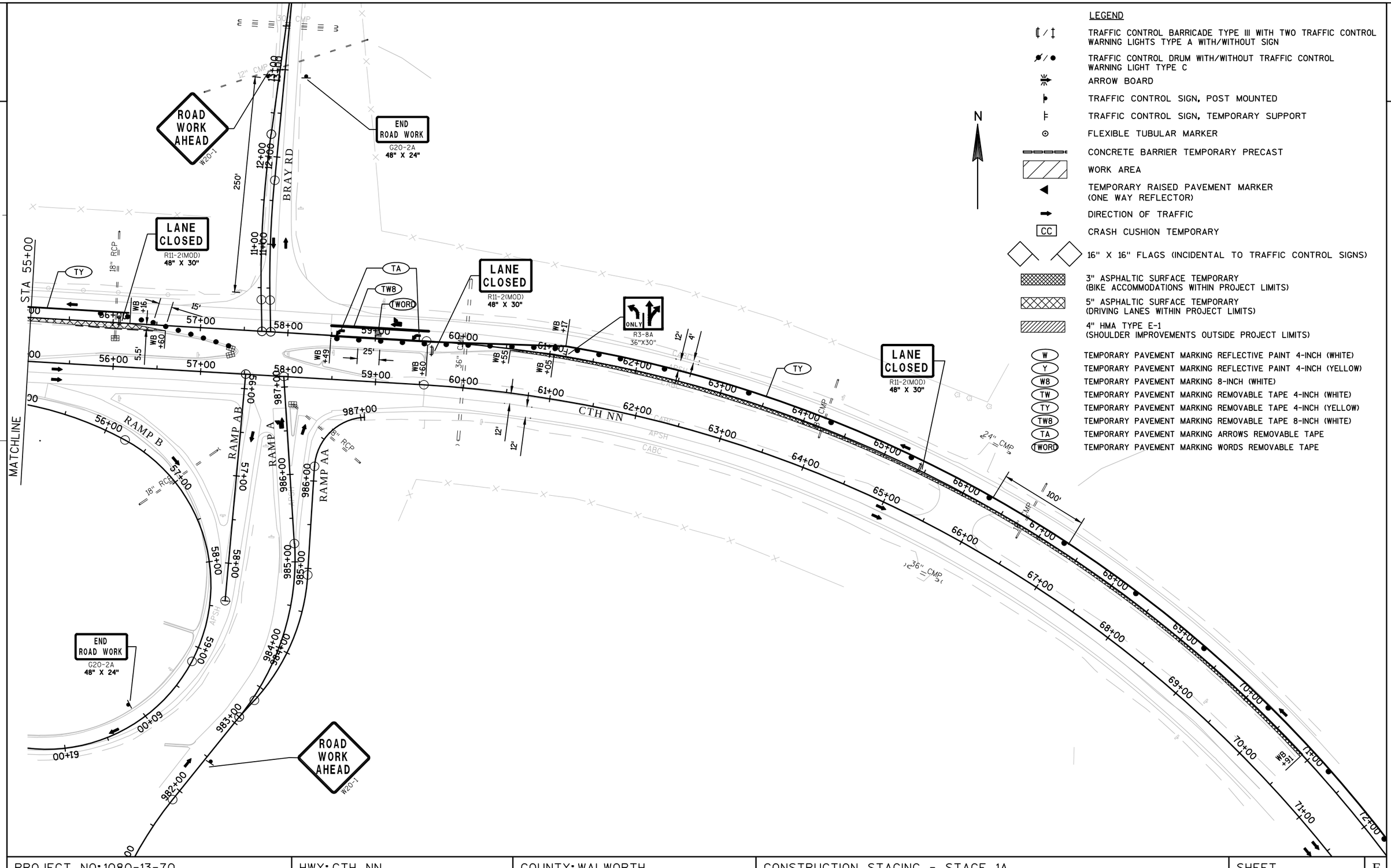

LEGEND

- TRAFFIC CONTROL BARRICADE TYPE III WITH TWO TRAFFIC CONTROL WARNING LIGHTS TYPE A WITH/WITHOUT SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TRAFFIC CONTROL WARNING LIGHT TYPE C
- ARROW BOARD
- TRAFFIC CONTROL SIGN, POST MOUNTED
- TRAFFIC CONTROL SIGN, TEMPORARY SUPPORT
- FLEXIBLE TUBULAR MARKER
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- TEMPORARY RAISED PAVEMENT MARKER (ONE WAY REFLECTOR)
- DIRECTION OF TRAFFIC
- CC — CRASH CUSHION TEMPORARY
- 16" X 16" FLAGS (INCIDENTAL TO TRAFFIC CONTROL SIGNS)
- 3" ASPHALTIC SURFACE TEMPORARY (BIKE ACCOMMODATIONS WITHIN PROJECT LIMITS)
- 5" ASPHALTIC SURFACE TEMPORARY (DRIVING LANES WITHIN PROJECT LIMITS)
- 4" HMA TYPE E-1 (SHOULDER IMPROVEMENTS OUTSIDE PROJECT LIMITS)
- W — TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH (WHITE)
- Y — TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH (YELLOW)
- W8 — TEMPORARY PAVEMENT MARKING 8-INCH (WHITE)
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- TW8 — TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (WHITE)
- TA — TEMPORARY PAVEMENT MARKING ARROWS REMOVABLE TAPE
- TWORD — TEMPORARY PAVEMENT MARKING WORDS REMOVABLE TAPE

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CONSTRUCTION STAGING - STAGE 1A	SHEET _____ E

LEGEND

- TRAFFIC CONTROL BARRICADE TYPE III WITH TWO TRAFFIC CONTROL WARNING LIGHTS TYPE A WITH/WITHOUT SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TRAFFIC CONTROL WARNING LIGHT TYPE C
- ARROW BOARD
- TRAFFIC CONTROL SIGN, POST MOUNTED
- TRAFFIC CONTROL SIGN, TEMPORARY SUPPORT
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- DIRECTION OF TRAFFIC
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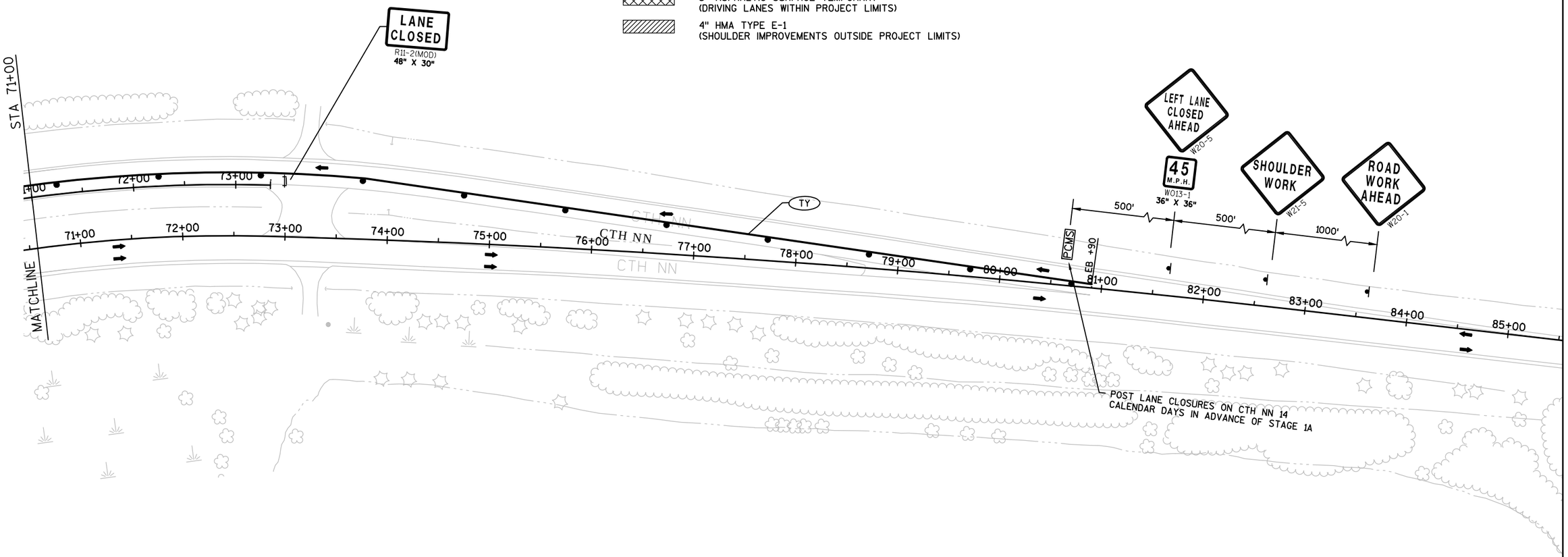
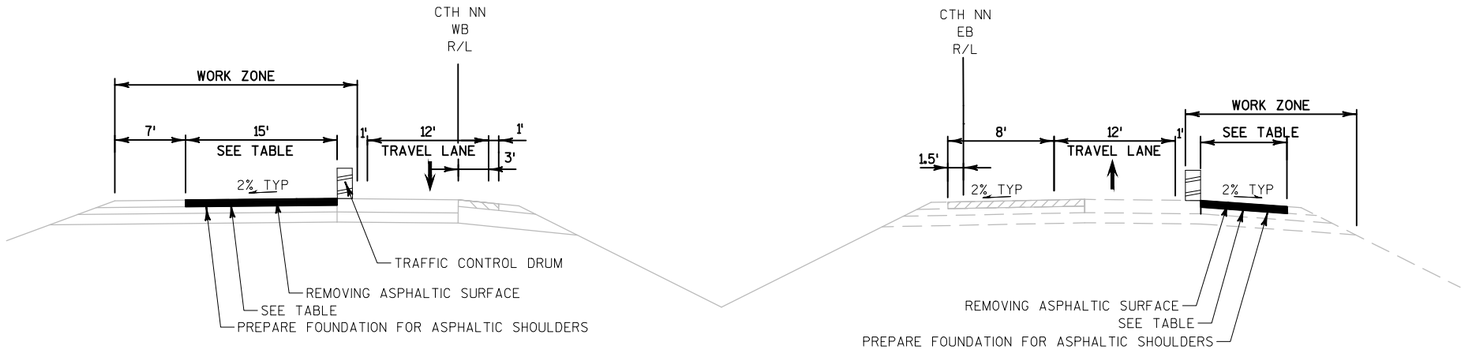


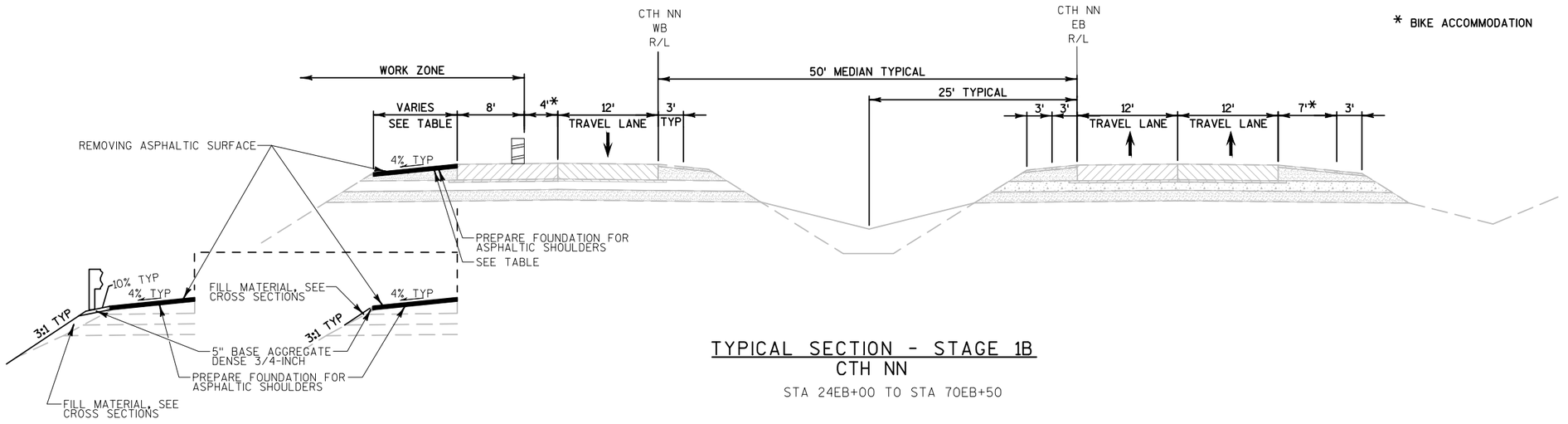
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CONSTRUCTION STAGING - STAGE 1A	SHEET -----	E



TYPICAL SECTION - STAGE 1B
CTH NN

STA 15EB+79 TO STA 24EB+00

STAGE	STATION RANGE	SHOULDER LOCATION	MATERIAL	TEMPORARY SHOULDER WIDTH
1B	15WB+79 TO 23WB+65	WB OUTSIDE	4" HMA TYPE E-1 4" BASE AGGREGATE DENSE 3/4-INCH	15' TYP
	16EB+62 TO 22EB+40	EB OUTSIDE	4" HMA TYPE E-1	7' TYP
	25WB+07 TO 30WB+50	WB OUTSIDE	4" HMA TYPE E-1	3' TYP
	30WB+50 TO 46WB+68	WB OUTSIDE	3" ASPHALTIC SURFACE TEMPORARY	3' TYP
	52WB+33 TO 57WB+41	WB OUTSIDE	5" ASPHALTIC SURFACE TEMPORARY	3'-14' VARIES
	58WB+62 TO 65WB+74	WB OUTSIDE	5" ASPHALTIC SURFACE TEMPORARY	3'-10' VARIES



STA 54WB+75 TO STA 57WB+50
SEE PLAN FOR WIDTHS

STA 58WB+75 TO STA 61WB+50

TYPICAL SECTION - STAGE 1B
CTH NN

STA 24EB+00 TO STA 70EB+50

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	TRAFFIC CONTROL TYPICAL SECTIONS - STAGE 1B	SHEET 134	E

GENERAL NOTES FOR CONSTRUCTION STAGING AND TRAFFIC CONTROL

1. ALL TRAFFIC CONTROL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED IN THE PLANS.
2. "WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS REFLECTIVE ORANGE.
3. SIGN LOCATIONS ARE APPROXIMATE. THE ACTUAL LOCATION AND SPACING MAY BE ADJUSTED AS DIRECTED BY THE ENGINEER TO MEET FIELD CONDITIONS.
4. ALL SIGNS, TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE COVERED OR REMOVED AS NEEDED AND/OR AS DIRECTED BY THE ENGINEER. NO "WORKING" LIGHTS SHALL BE VISIBLE ON A COVERED OR LAID DOWN SIGN.
5. ALL EXISTING CONFLICTING PAVEMENT MARKING SHALL BE REMOVED.
6. A FLAGGER MAY BE REQUIRED WHERE CONSTRUCTION VEHICLES ENTER OR LEAVE "WORK/CLOSED" AREAS IF WARRANTED BY CONDITIONS AND/OR AS DIRECTED BY THE ENGINEER.
7. CONTRACTOR SHALL INSTALL PERMANENT SIGNS AND PERMANENT PAVEMENT MARKING WHEN APPROPRIATE DURING CONSTRUCTION STAGING AS SHOWN ON PLANS OR AS DIRECTED BY THE ENGINEER.
8. ADEQUATE TURNING PROVISION SHALL BE MAINTAINED FOR ALL VEHICLES, INCLUDING TRUCKS AS DIRECTED BY THE ENGINEER.
9. PLACE TEMPORARY RAISED PAVEMENT MARKERS THROUGH ALL CROSSOVER AND LANE SHIFTS.

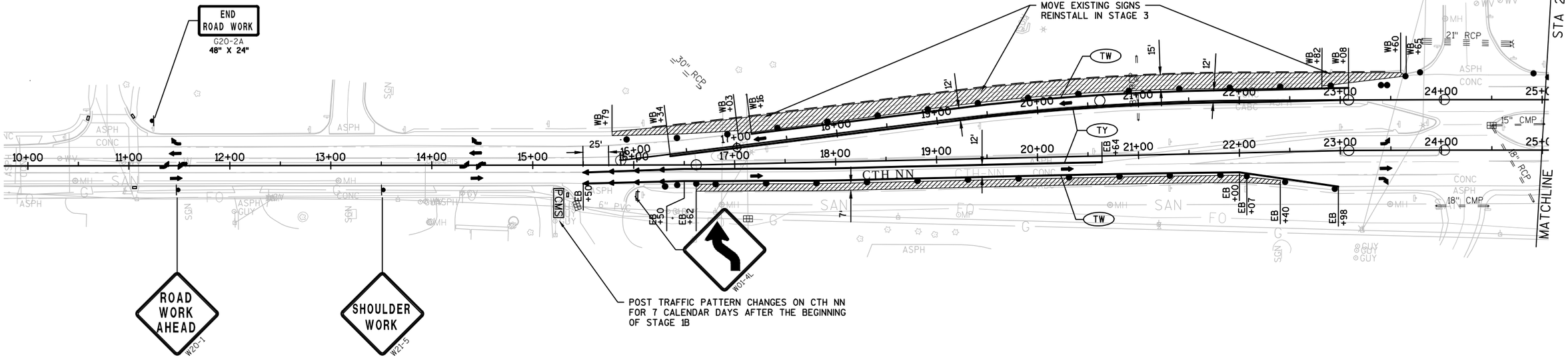
STAGE 1B NOTE:
AFTER THE COMPLETION OF STAGE 1B, REMOVE TEMPORARY PAVEMENT MARKING AND RESTORE EXISTING PAVEMENT MARKING WITH EPOXY PAVEMENT MARKING. THE PAVEMENT MARKING EPOXY WILL BE IN PLACE OVER WINTER UNTIL IT IS REMOVED DURING STAGE 2A CONSTRUCTION. SEE MISCELLANEOUS QUANTITIES FOR MORE INFORMATION.

LEGEND

- TRAFFIC CONTROL BARRICADE TYPE III WITH TWO TRAFFIC CONTROL WARNING LIGHTS TYPE A WITH/WITHOUT SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TRAFFIC CONTROL WARNING LIGHT TYPE C
- ARROW BOARD
- TRAFFIC CONTROL SIGN, POST MOUNTED
- TRAFFIC CONTROL SIGN, TEMPORARY SUPPORT
- FLEXIBLE TUBULAR MARKER
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- TEMPORARY RAISED PAVEMENT MARKER (ONE WAY REFLECTOR)
- DIRECTION OF TRAFFIC
- CC — CRASH CUSHION TEMPORARY
- 16" X 16" FLAGS (INCIDENTAL TO TRAFFIC CONTROL SIGNS)
- 3" ASPHALTIC SURFACE TEMPORARY (BIKE ACCOMMODATIONS WITHIN PROJECT LIMITS)
- 5" ASPHALTIC SURFACE TEMPORARY (DRIVING LANES WITHIN PROJECT LIMITS)
- 4" HMA TYPE E-1 (SHOULDER IMPROVEMENTS OUTSIDE PROJECT LIMITS)

- (W) TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH (WHITE)
- (Y) TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH (YELLOW)
- (W8) TEMPORARY PAVEMENT MARKING 8-INCH (WHITE)
- (TW) TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE)
- (TY) TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW)
- (TW8) TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (WHITE)
- (TA) TEMPORARY PAVEMENT MARKING ARROWS REMOVABLE TAPE
- (TWORD) TEMPORARY PAVEMENT MARKING WORDS REMOVABLE TAPE

N



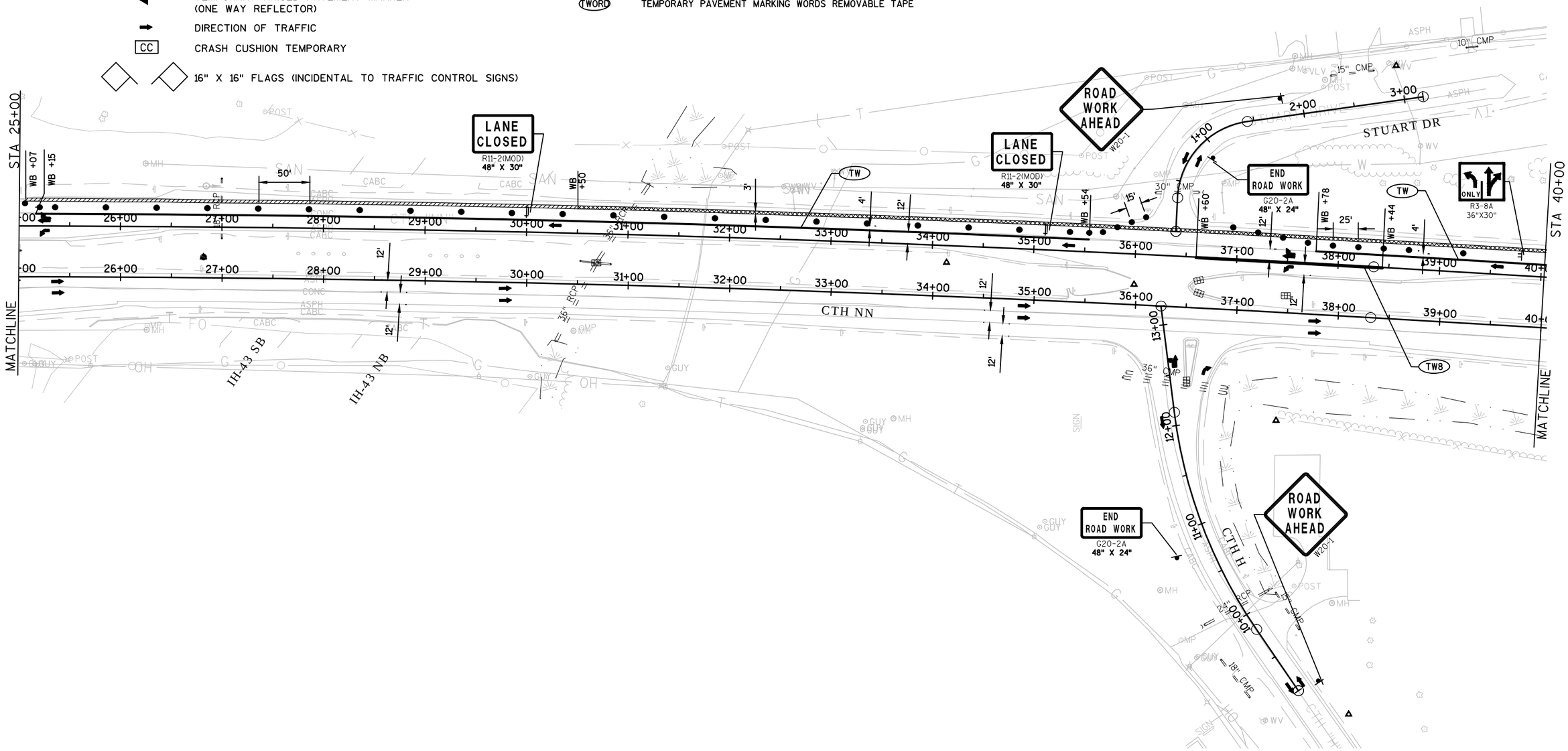
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CONSTRUCTION STAGING - STAGE 1B	SHEET 135 - E

FILE NAME : T:\1092703\CADD\CIVIL3D-NN INTERCHANGE\10801370\SHEETSPLAN\026100_ST-1B.DWG PLOT DATE : 11/13/2014 1:32 PM PLOT BY : GUILLAMA, TINA R. PLOT NAME : ----------

LEGEND

- TRAFFIC CONTROL BARRICADE TYPE III WITH TWO TRAFFIC CONTROL WARNING LIGHTS TYPE A WITH/WITHOUT SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TRAFFIC CONTROL WARNING LIGHT TYPE C
- ARROW BOARD
- TRAFFIC CONTROL SIGN, POST MOUNTED
- TRAFFIC CONTROL SIGN, TEMPORARY SUPPORT
- FLEXIBLE TUBULAR MARKER
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- TEMPORARY RAISED PAVEMENT MARKER (ONE WAY REFLECTOR)
- DIRECTION OF TRAFFIC
- CC — CRASH CUSHION TEMPORARY
- 16" X 16" FLAGS (INCIDENTAL TO TRAFFIC CONTROL SIGNS)
- 3" ASPHALTIC SURFACE TEMPORARY (BIKE ACCOMMODATIONS WITHIN PROJECT LIMITS)
- 5" ASPHALTIC SURFACE TEMPORARY (DRIVING LANES WITHIN PROJECT LIMITS)
- 4" HMA TYPE E-1 (SHOULDER IMPROVEMENTS OUTSIDE PROJECT LIMITS)
- W — TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH (WHITE)
- Y — TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH (YELLOW)
- W8 — TEMPORARY PAVEMENT MARKING 8-INCH (WHITE)
- TW — TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE)
- TY — TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW)
- TW8 — TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (WHITE)
- TA — TEMPORARY PAVEMENT MARKING ARROWS REMOVABLE TAPE
- TWORD — TEMPORARY PAVEMENT MARKING WORDS REMOVABLE TAPE

STAGE 1B NOTE:
AFTER THE COMPLETION OF STAGE 1B, REMOVE TEMPORARY PAVEMENT MARKING AND RESTORE EXISTING PAVEMENT MARKING WITH EPOXY PAVEMENT MARKING. THE PAVEMENT MARKING EPOXY WILL BE IN PLACE OVER WINTER UNTIL IT IS REMOVED DURING STAGE 2A CONSTRUCTION. SEE MISCELLANEOUS QUANTITIES FOR MORE INFORMATION.



PROJECT NO:1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CONSTRUCTION STAGING - STAGE 1B	SHEET 136 - E

LEGEND

- TRAFFIC CONTROL BARRICADE TYPE III WITH TWO TRAFFIC CONTROL WARNING LIGHTS TYPE A WITH/WITHOUT SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TRAFFIC CONTROL WARNING LIGHT TYPE C
- ARROW BOARD
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- TRAFFIC CONTROL SIGN, TEMPORARY SUPPORT
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- WORK AREA
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- DIRECTION OF TRAFFIC
- CC — CRASH CUSHION TEMPORARY
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- TWORD — TEMPORARY PAVEMENT MARKING WORDS REMOVABLE TAPE

STAGE 1B NOTE:
AFTER THE COMPLETION OF STAGE 1B, REMOVE TEMPORARY PAVEMENT MARKING AND RESTORE EXISTING PAVEMENT MARKING WITH EPOXY PAVEMENT MARKING. THE PAVEMENT MARKING EPOXY WILL BE IN PLACE OVER WINTER UNTIL IT IS REMOVED DURING STAGE 2A CONSTRUCTION. SEE MISCELLANEOUS QUANTITIES FOR MORE INFORMATION.

N

LANE CLOSED
R11-2(MOD)
48" X 30"

ONLY ONLY
R3-8E
36"X30"

END ROAD WORK
G20-2A
48" X 24"

ROAD WORK AHEAD
W20-1

CTH NN

USH 12

RAMP C

RAMP CD

RAMP DC

RAMP D

MATCHLINE

STA 40+00

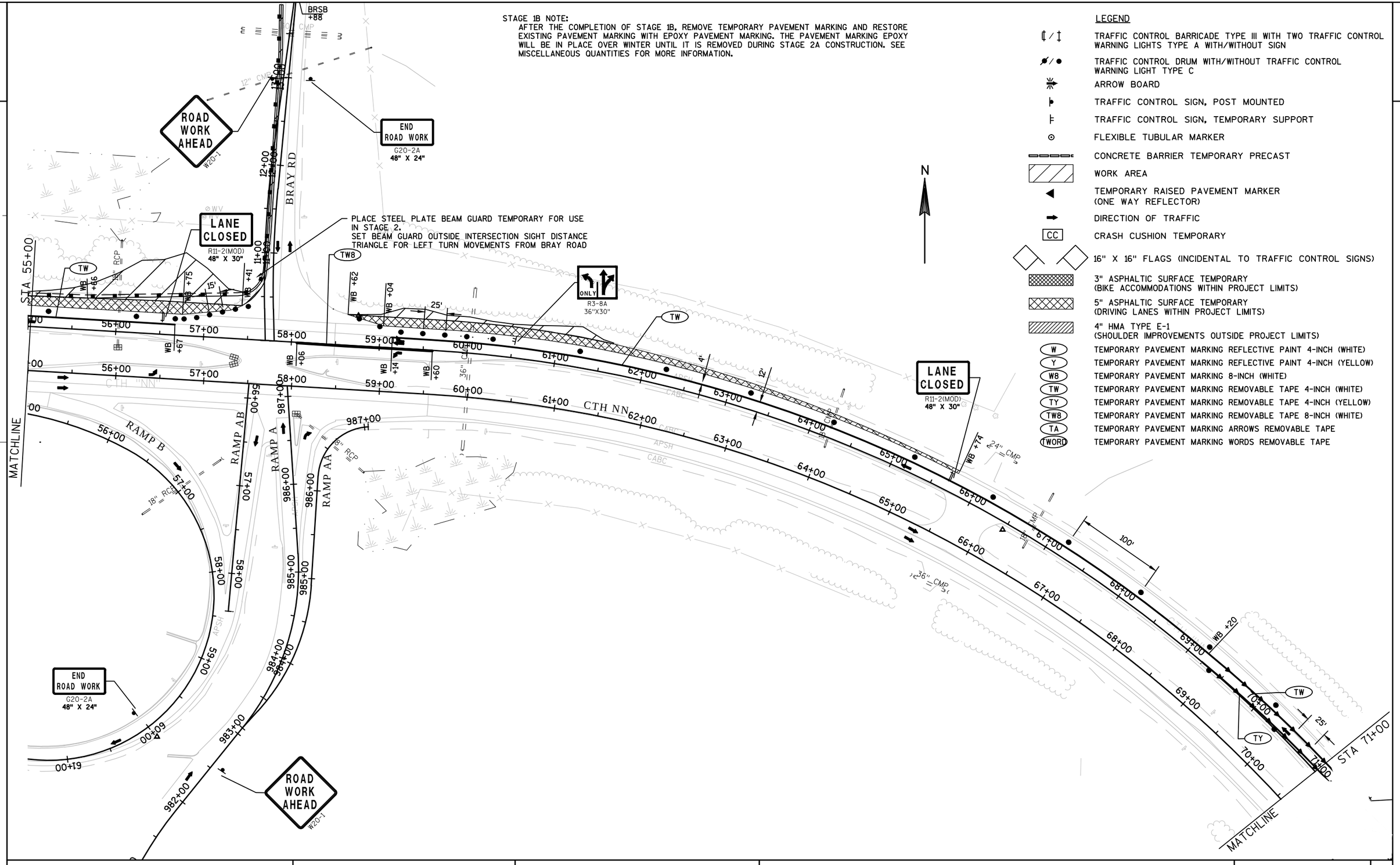
STA 55+00

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CONSTRUCTION STAGING - STAGE 1B	SHEET -----	E

FILE NAME : T:\1092703\CADD\CIVIL3D-NN INTERCHANGE\10801370\SHEETSPLAN\026102_ST-1B.DWG PLOT DATE : 11/13/2014 1:34 PM PLOT BY : GUILLAMA, TINA R. PLOT NAME : ----------

WISDOT/CAD SHEET 42

STAGE 1B NOTE:
AFTER THE COMPLETION OF STAGE 1B, REMOVE TEMPORARY PAVEMENT MARKING AND RESTORE EXISTING PAVEMENT MARKING WITH EPOXY PAVEMENT MARKING. THE PAVEMENT MARKING EPOXY WILL BE IN PLACE OVER WINTER UNTIL IT IS REMOVED DURING STAGE 2A CONSTRUCTION. SEE MISCELLANEOUS QUANTITIES FOR MORE INFORMATION.



LEGEND

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- TW8 — TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (WHITE)
- TA — TEMPORARY PAVEMENT MARKING ARROWS REMOVABLE TAPE
- TWORD — TEMPORARY PAVEMENT MARKING WORDS REMOVABLE TAPE

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CONSTRUCTION STAGING - STAGE 1B	SHEET ----- E

STAGE 1B NOTE:
AFTER THE COMPLETION OF STAGE 1B, REMOVE TEMPORARY PAVEMENT MARKING AND RESTORE EXISTING PAVEMENT MARKING WITH EPOXY PAVEMENT MARKING. THE PAVEMENT MARKING EPOXY WILL BE IN PLACE OVER WINTER UNTIL IT IS REMOVED DURING STAGE 2A CONSTRUCTION. SEE MISCELLANEOUS QUANTITIES FOR MORE INFORMATION.

LEGEND

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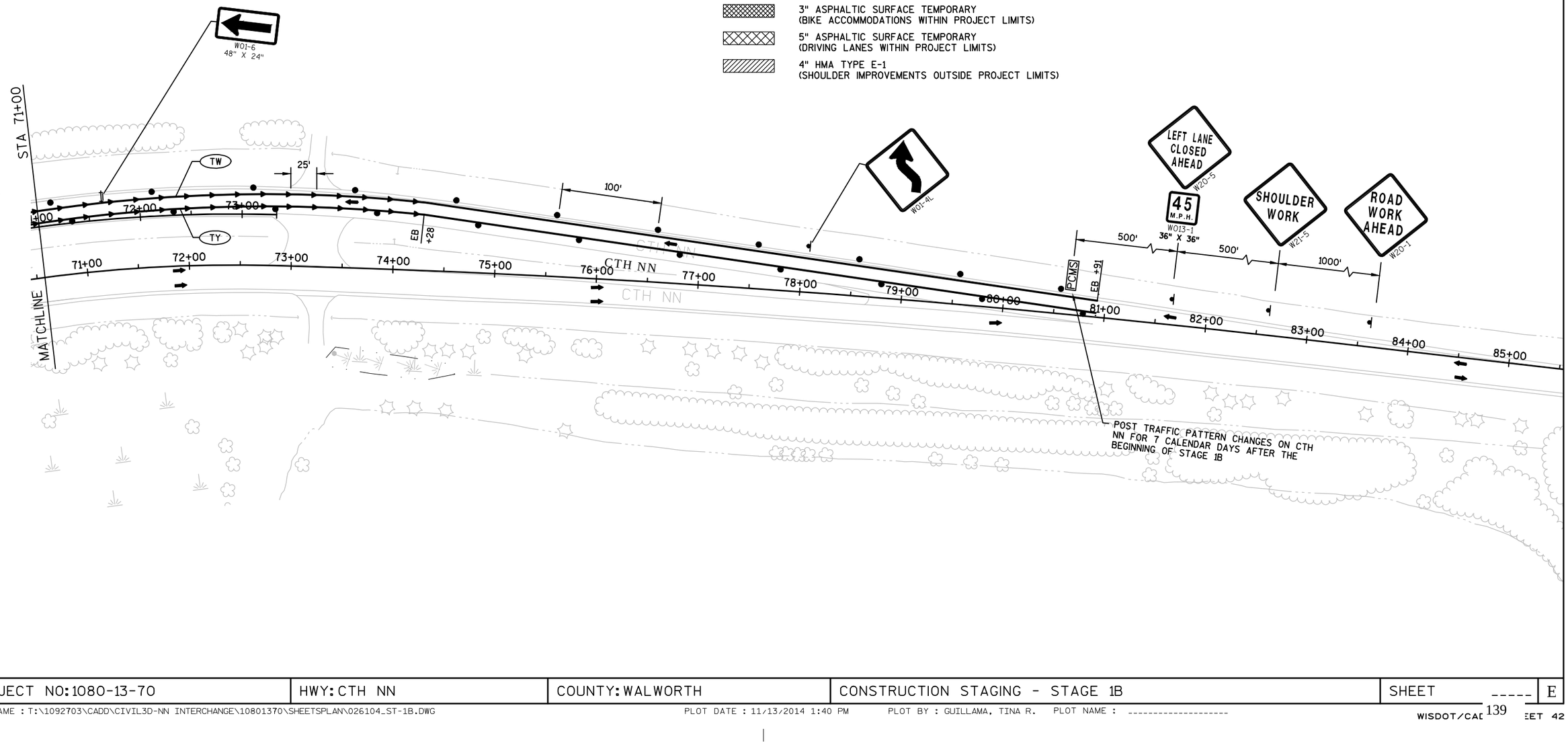
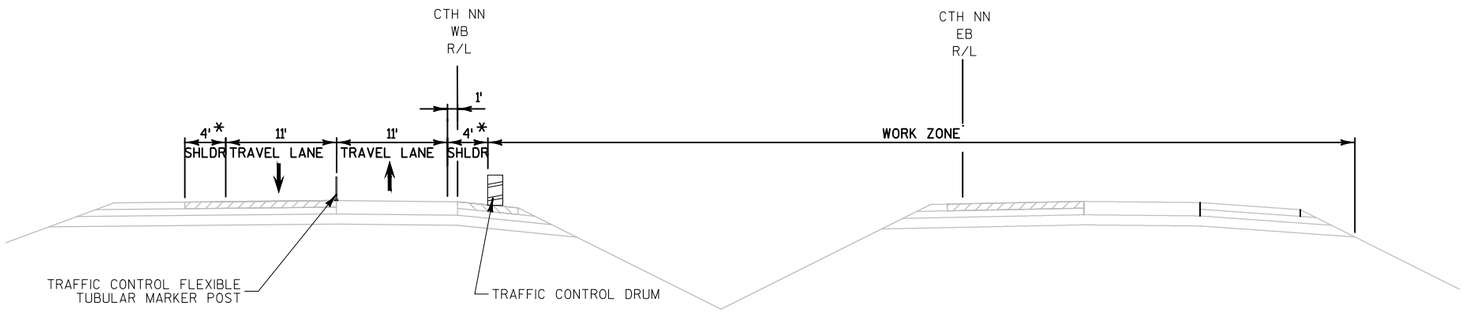
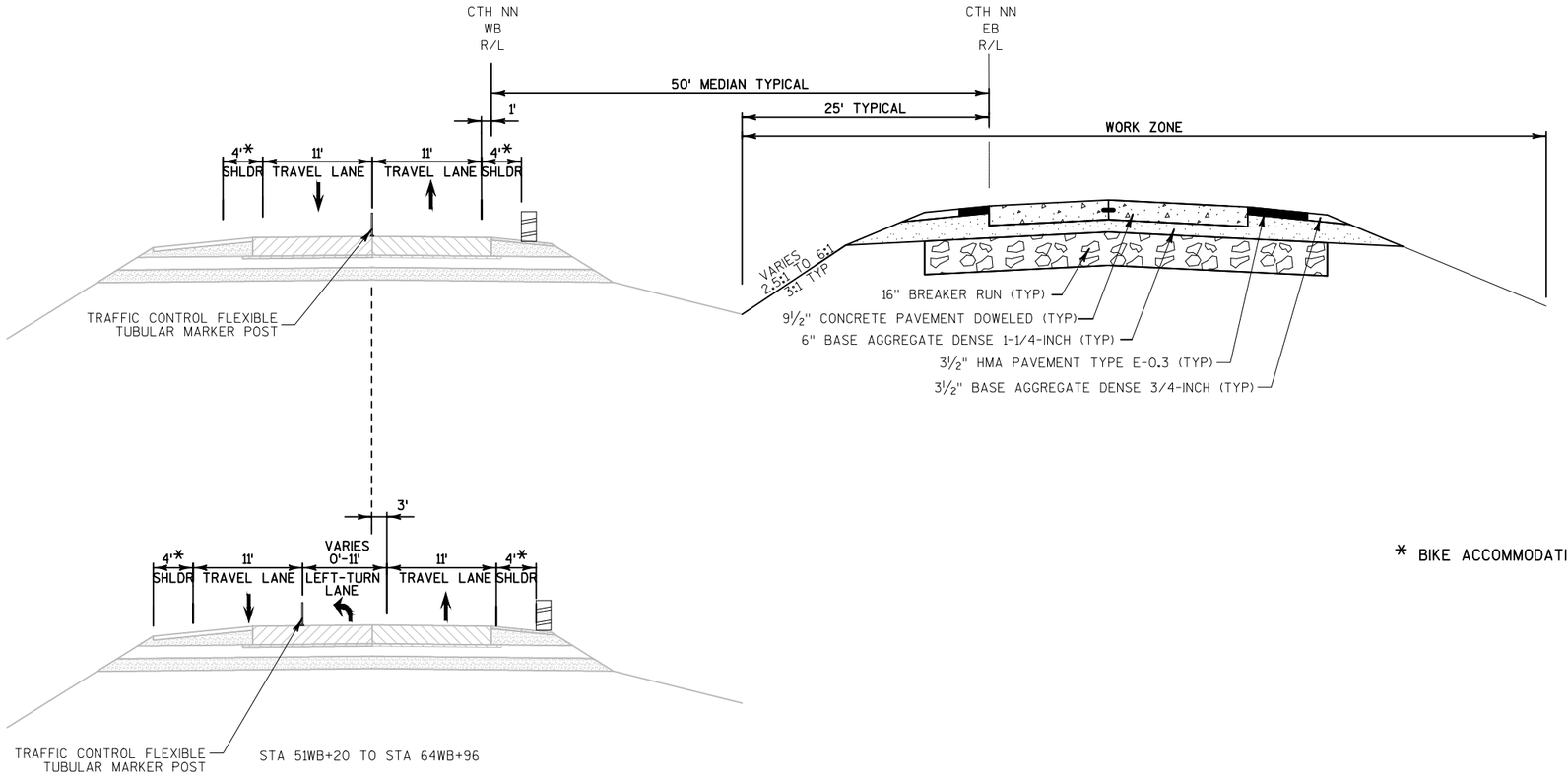


PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CONSTRUCTION STAGING - STAGE 1B	SHEET -----	E

FILE NAME : T:\1092703\CADD\CIVIL3D-NN INTERCHANGE\10801370\SHEETSPLAN\026104_ST-1B.DWG PLOT DATE : 11/13/2014 1:40 PM PLOT BY : GUILLAMA, TINA R. PLOT NAME : ----------



TYPICAL SECTION - STAGE 2A
CTH NN
STA 12EB+02 TO STA 24EB+00



* BIKE ACCOMMODATIONS

TYPICAL SECTION - STAGE 2A
CTH NN
STA 24EB+00 TO STA 70EB+50

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	TRAFFIC CONTROL TYPICAL SECTIONS - STAGE 2A	SHEET 140	E

FILE NAME : T:\1092703\CADD\CIVIL3D-NN INTERCHANGE\10801370\SHEETSPLAN\026000_TS-TRAFFIC CONTROL TYPS.DWG PLOT DATE : 11/13/2014 1:05:00 PM PLOT BY : TRG PLOT NAME : PLOT SCALE : 1 IN: 15 FT

GENERAL NOTES FOR CONSTRUCTION STAGING AND TRAFFIC CONTROL

1. ALL TRAFFIC CONTROL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED IN THE PLANS.
2. "WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS REFLECTIVE ORANGE.
3. SIGN LOCATIONS ARE APPROXIMATE. THE ACTUAL LOCATION AND SPACING MAY BE ADJUSTED AS DIRECTED BY THE ENGINEER TO MEET FIELD CONDITIONS.
4. ALL SIGNS, TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE COVERED OR REMOVED AS NEEDED AND/OR AS DIRECTED BY THE ENGINEER. NO "WORKING" LIGHTS SHALL BE VISIBLE ON A COVERED OR LAID DOWN SIGN.
5. ALL EXISTING CONFLICTING PAVEMENT MARKING SHALL BE REMOVED.
6. A FLAGGER MAY BE REQUIRED WHERE CONSTRUCTION VEHICLES ENTER OR LEAVE "WORK/CLOSED" AREAS IF WARRANTED BY CONDITIONS AND/OR AS DIRECTED BY THE ENGINEER.
7. CONTRACTOR SHALL INSTALL PERMANENT SIGNS AND PERMANENT PAVEMENT MARKING WHEN APPROPRIATE DURING CONSTRUCTION STAGING AS SHOWN ON PLANS OR AS DIRECTED BY THE ENGINEER.
8. ADEQUATE TURNING PROVISION SHALL BE MAINTAINED FOR ALL VEHICLES, INCLUDING TRUCKS AS DIRECTED BY THE ENGINEER.
9. PLACE TEMPORARY RAISED PAVEMENT MARKERS THROUGH ALL CROSSOVER AND LANE SHIFTS.

LEGEND

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- 4" HMA TYPE E-1 (SHOULDER IMPROVEMENTS OUTSIDE PROJECT LIMITS)

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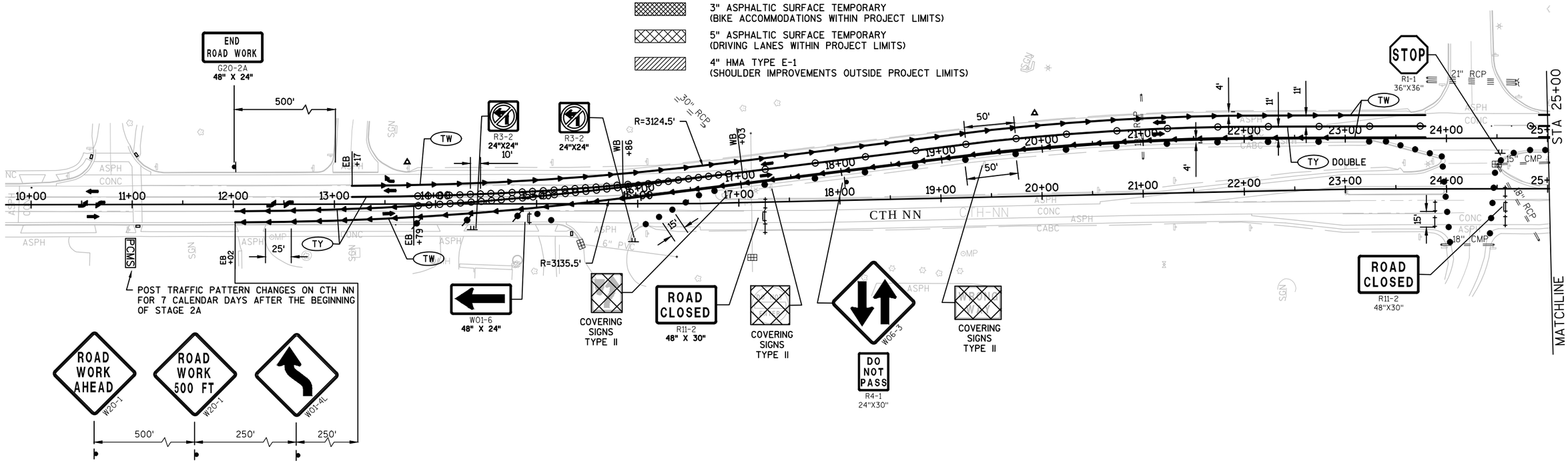

PROJECT NO:1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CONSTRUCTION STAGING - STAGE 2A	SHEET 141 - E

2

LEGEND

- TRAFFIC CONTROL BARRICADE TYPE III WITH TWO TRAFFIC CONTROL WARNING LIGHTS TYPE A WITH/WITHOUT SIGN
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- TA — TEMPORARY PAVEMENT MARKING ARROWS REMOVABLE TAPE
- TWORD — TEMPORARY PAVEMENT MARKING WORDS REMOVABLE TAPE

N

STA 25+00

STA 40+00

MATCHLINE

MATCHLINE

DO NOT PASS R4-1 24"X30" W06-3

DOUBLE TY

TW

W

Y DOUBLE

50'

WB +50

36" RCP

IH-43 SB

IH-43 NB

CTH NN

EAST M3-2 24"X12" 12 M1-4 24"X24"

COUNTY NN M1-5A 24"X24" M6-1

W01-3R 15 M.P.H. W013-1 36"X36"

WO1-6 48" X 24"

MAINTAIN ACCESS TO STUART DRIVE

STUART DR

ASPHALTIC FLUME

10" CMP

15" CMP

30" CMP

W8

WB +69

WB +00

25'

R=200'

R=215'

EB +11

EB +56

EB +63

EB +38

EB +70

13+00

12+00

11+00

10+00

CTH H

M06-2

SEE SDD BARRICADES AND SIGNS FOR MAINLINE CLOSURE, DETAIL D (1-TRAFFIC CONTROL SIGNS, 5-TYPE III BARRICADES, 10-WARNING LIGHTS TYPE A)

PROJECT NO:1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CONSTRUCTION STAGING - STAGE 2A	SHEET 142 - E

FILE NAME : T:\1092703\CADD\CIVIL3D-NN INTERCHANGE\10801370\SHEETSPLAN\026151_ST-2A.DWG PLOT DATE : 11/13/2014 1:59 PM PLOT BY : GUILLAMA, TINA R. PLOT NAME : ----------

2

LEGEND

- TRAFFIC CONTROL BARRICADE TYPE III WITH TWO TRAFFIC CONTROL WARNING LIGHTS TYPE A WITH/WITHOUT SIGN
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- DIRECTION OF TRAFFIC
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N

ROAD CLOSED
R11-2
48" X 30"

DOUBLE Y W

100'

ROAD CLOSED
R11-2
48" X 30"

50' 25'

EAST 12
MOVE EXISTING SIGN

USH 12

USH 12

W06-3
DO NOT PASS
R4-1
24"X30"

USH 12 WB/EB AND THE ADJACENT C-D ROADS SHALL BE CLOSED FOR UP TO 5 SUCCESSIVE NIGHTS FOR COMPLETE 4-SPAN BRIDGE REMOVAL. RAMPS A AND C SHALL REMAIN OPEN DURING BRIDGE REMOVAL.

BEGIN LEFT TURN LANE
R3-20L
24"X36"

STA 40+00

STA 55+00

CTH NN

CONC

ASPH

RAMP C

RAMP CD

RAMP DC

RAMP D

MATCHLINE

MATCHLINE

RAMPS D & DC CLOSED.
SEE SDD TRAFFIC CONTROL, EXIT RAMP CLOSURE
(4-TYPE III BARRICADES, 8-WARNING LIGHTS TYPE A,
20-TRAFFIC CONTROL DRUMS, 400FT-TEMPORARY
PAVEMENT MARKING 4" REMOVABLE TAPE, WHITE,
1-COVERING SIGNS TYPE II, 1-PCMS)
PLACE PCMS 10 CALENDAR DAYS PRIOR TO CLOSURE.

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CONSTRUCTION STAGING - STAGE 2A	SHEET -----	E

FILE NAME : T:\1092703\CADD\CIVIL3D-NN INTERCHANGE\10801370\SHEETSPLAN\026152_ST-2A.DWG PLOT DATE : 11/13/2014 2:05 PM PLOT BY : GUILLAMA, TINA R. PLOT NAME : ----------

2

W	TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH (WHITE)
Y	TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH (YELLOW)
W8	TEMPORARY PAVEMENT MARKING 8-INCH (WHITE)
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TWORD	TEMPORARY PAVEMENT MARKING WORDS REMOVABLE TAPE
SL	TEMPORARY PAVEMENT MARKING STOP LINE 18-INCH

LEGEND

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ROAD WORK AHEAD W20-1

END ROAD WORK G20-2A 48" X 24"

BRAY RD

STA 55+00

ONLY ONLY R3-8 36"X30"

TWORD

Y DOUBLE

W8

W

SL

TA

CTH NN

MATCHLINE

RAMP CLOSED R11-2-R 48"X30"

RAMPS B & AB CLOSED

RAMP B

RAMP AB

RAMP A

RAMP AA

STOP R1-1 36"X36"

LANE CLOSED R11-2-L 48"X30"

REMOVE EXISTING STOP SIGN

ROAD WORK AHEAD W20-1

LANE CLOSED R11-2-L 48"X30"

ROAD CLOSED R11-2 48"X30"

DO NOT PASS R4-1 24"X30" W06-3

STA 71+00

MATCHLINE

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CONSTRUCTION STAGING - STAGE 2A	SHEET ----- E

FILE NAME : T:\1092703\CADD\CIVIL3D-NN INTERCHANGE\10801370\SHEETSPLAN\026153_ST-2A.DWG PLOT DATE : 11/13/2014 2:06 PM PLOT BY : GUILLAMA, TINA R. PLOT NAME : ----------

2

LEGEND

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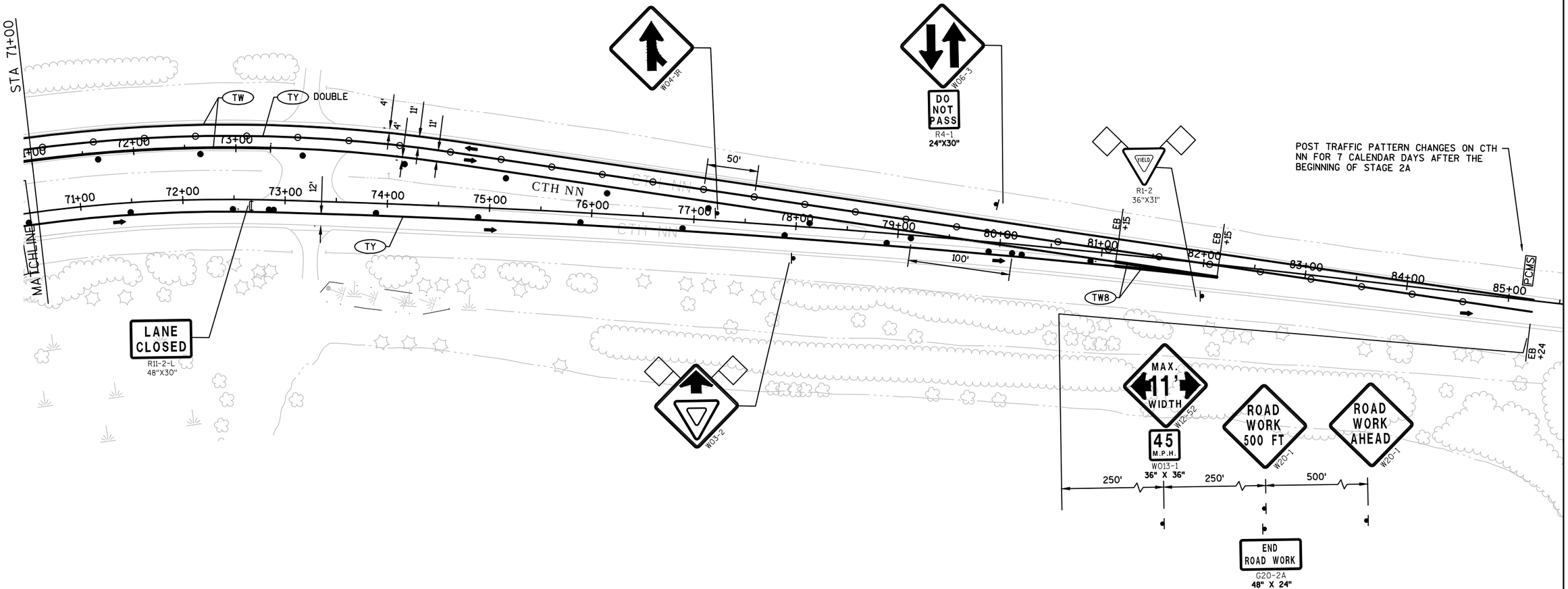
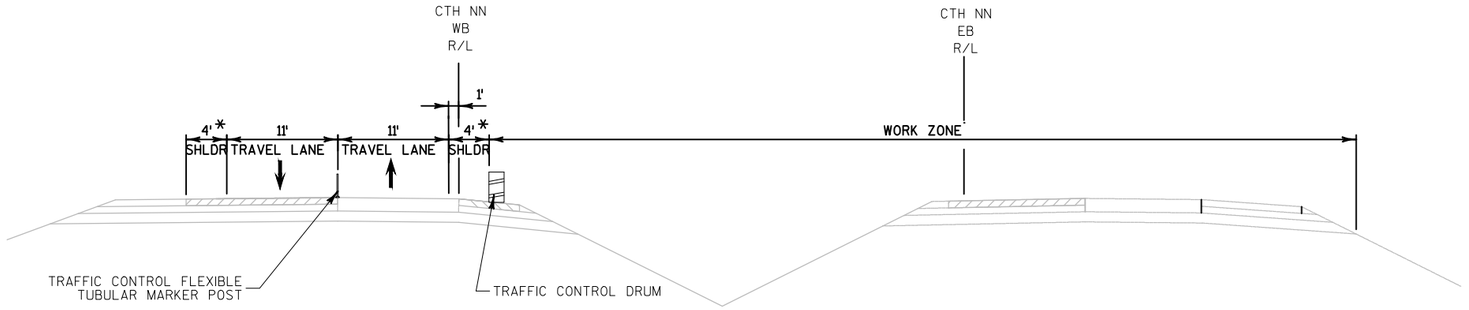
- WORK AREA
- TEMPORARY RAISED PAVEMENT MARKER (ONE WAY REFLECTOR)
- DIRECTION OF TRAFFIC
- CC — CRASH CUSHION TEMPORARY
- 16" X 16" FLAGS (INCIDENTAL TO TRAFFIC CONTROL SIGNS)

- 3" ASPHALTIC SURFACE TEMPORARY (BIKE ACCOMMODATIONS WITHIN PROJECT LIMITS)
- 5" ASPHALTIC SURFACE TEMPORARY (DRIVING LANES WITHIN PROJECT LIMITS)
- 4" HMA TYPE E-1 (SHOULDER IMPROVEMENTS OUTSIDE PROJECT LIMITS)

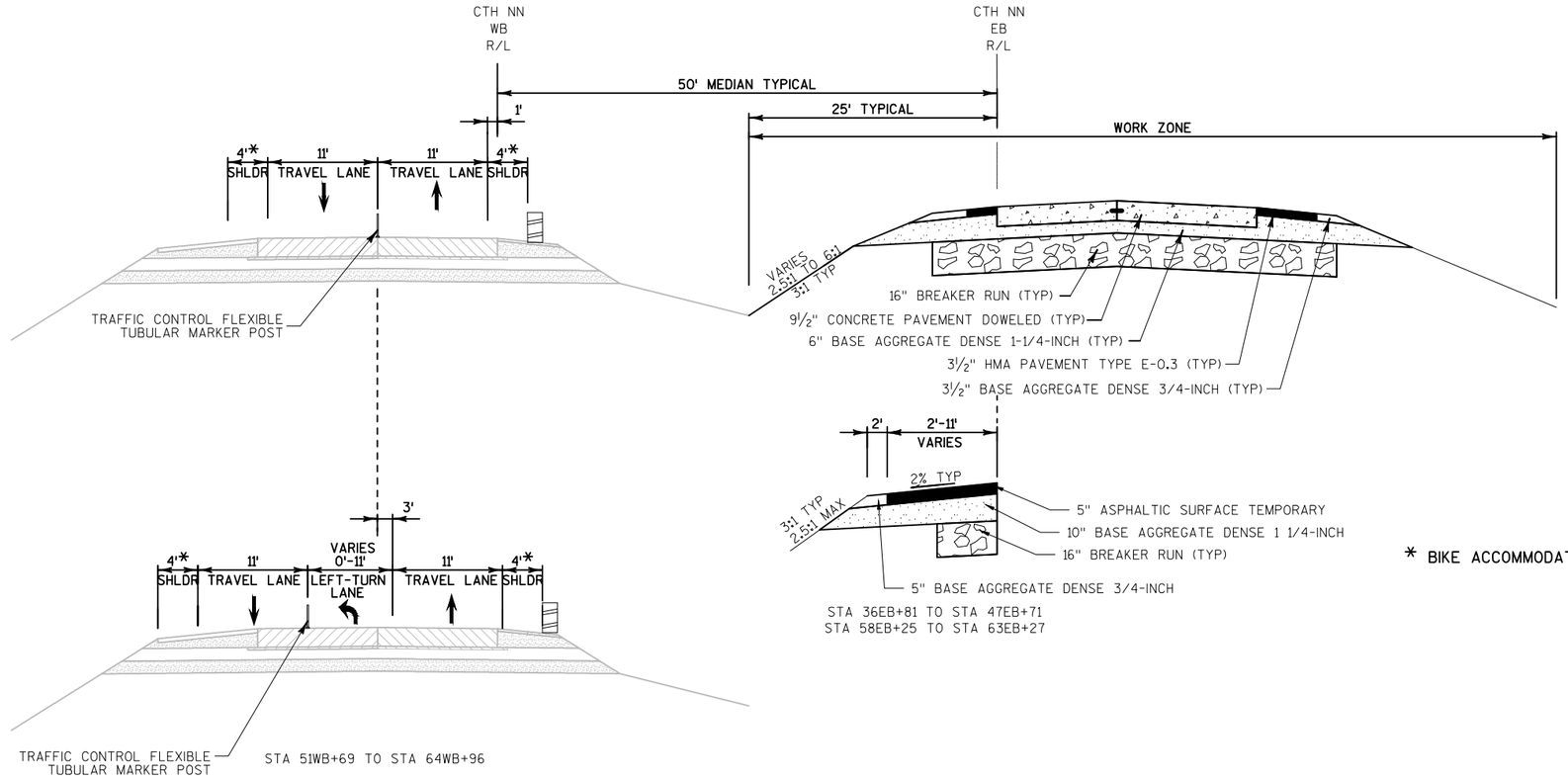
- W — TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH (WHITE)
- Y — TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH (YELLOW)
- W8 — TEMPORARY PAVEMENT MARKING 8-INCH (WHITE)
- TW — TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE)
- TY — TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW)
- TW8 — TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (WHITE)
- TA — TEMPORARY PAVEMENT MARKING ARROWS REMOVABLE TAPE
- TWORD — TEMPORARY PAVEMENT MARKING WORDS REMOVABLE TAPE



PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CONSTRUCTION STAGING - STAGE 2A	SHEET ----- E



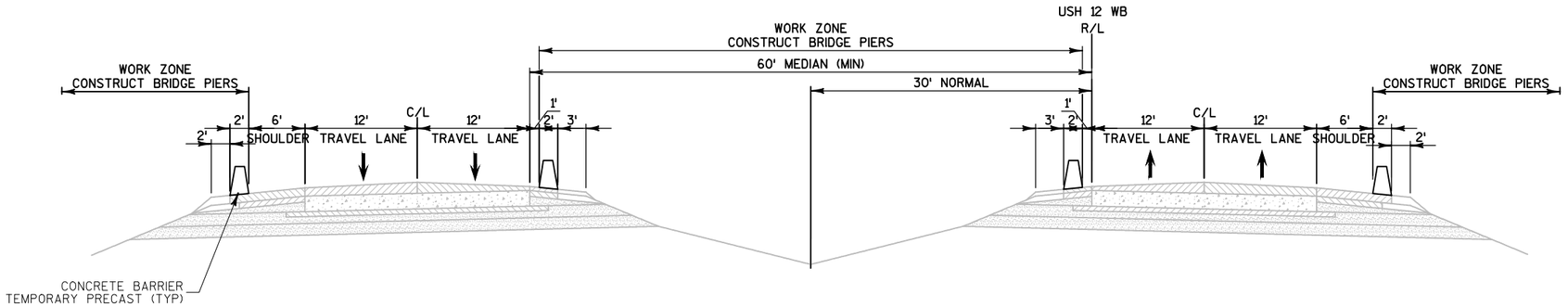
TYPICAL SECTION - STAGE 2B
CTH NN
STA 12EB+02 TO STA 24EB+00



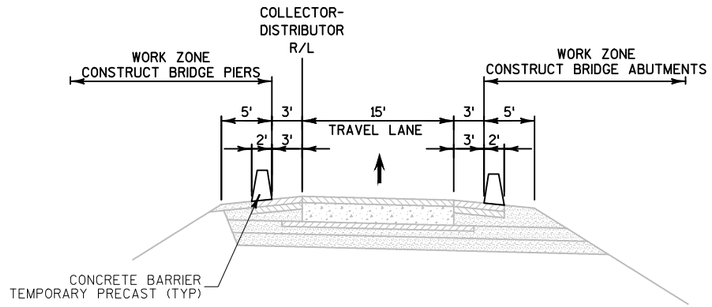
* BIKE ACCOMMODATIONS

TYPICAL SECTION - STAGE 2B
CTH NN
STA 24EB+00 TO STA 70EB+50

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	TRAFFIC CONTROL TYPICAL SECTIONS - STAGE 2B	SHEET 146	E



TYPICAL SECTION - STAGES 2B & 3
USH 12
STA 982+50 TO STA 998+00



TYPICAL SECTION - STAGES 2B & 3
COLLECTOR-DISTRIBUTOR ROADS
WESTBOUND SHOWN. EASTBOUND IS MIRRORED.

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	TRAFFIC CONTROL TYPICAL SECTIONS - STAGE 2B & 3	SHEET 147	E

GENERAL NOTES FOR CONSTRUCTION STAGING AND TRAFFIC CONTROL

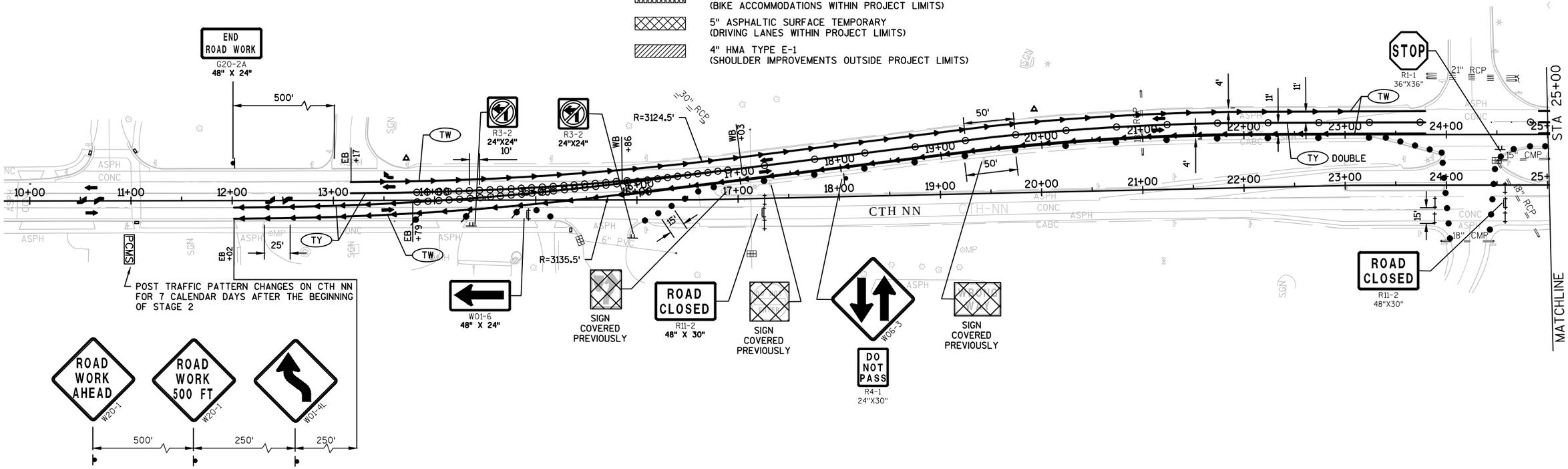
1. ALL TRAFFIC CONTROL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED IN THE PLANS.
2. "WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS REFLECTIVE ORANGE.
3. SIGN LOCATIONS ARE APPROXIMATE. THE ACTUAL LOCATION AND SPACING MAY BE ADJUSTED AS DIRECTED BY THE ENGINEER TO MEET FIELD CONDITIONS.
4. ALL SIGNS, TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE COVERED OR REMOVED AS NEEDED AND/OR AS DIRECTED BY THE ENGINEER. NO "WORKING" LIGHTS SHALL BE VISIBLE ON A COVERED OR LAID DOWN SIGN.
5. ALL EXISTING CONFLICTING PAVEMENT MARKING SHALL BE REMOVED.
6. A FLAGGER MAY BE REQUIRED WHERE CONSTRUCTION VEHICLES ENTER OR LEAVE "WORK/CLOSED" AREAS IF WARRANTED BY CONDITIONS AND/OR AS DIRECTED BY THE ENGINEER.
7. CONTRACTOR SHALL INSTALL PERMANENT SIGNS AND PERMANENT PAVEMENT MARKING WHEN APPROPRIATE DURING CONSTRUCTION STAGING AS SHOWN ON PLANS OR AS DIRECTED BY THE ENGINEER.
8. ADEQUATE TURNING PROVISION SHALL BE MAINTAINED FOR ALL VEHICLES, INCLUDING TRUCKS AS DIRECTED BY THE ENGINEER.
9. PLACE TEMPORARY RAISED PAVEMENT MARKERS THROUGH ALL CROSSOVER AND LANE SHIFTS.

LEGEND

- TRAFFIC CONTROL BARRICADE TYPE III WITH TWO TRAFFIC CONTROL WARNING LIGHTS TYPE A WITH/WITHOUT SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TRAFFIC CONTROL WARNING LIGHT TYPE C
- ARROW BOARD
- TRAFFIC CONTROL SIGN, POST MOUNTED
- TRAFFIC CONTROL SIGN, TEMPORARY SUPPORT
- FLEXIBLE TUBULAR MARKER
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- TEMPORARY RAISED PAVEMENT MARKER (ONE WAY REFLECTOR)
- DIRECTION OF TRAFFIC
- CC — CRASH CUSHION TEMPORARY
- 16" X 16" FLAGS (INCIDENTAL TO TRAFFIC CONTROL SIGNS)
- 3" ASPHALTIC SURFACE TEMPORARY (BIKE ACCOMMODATIONS WITHIN PROJECT LIMITS)
- 5" ASPHALTIC SURFACE TEMPORARY (DRIVING LANES WITHIN PROJECT LIMITS)
- 4" HMA TYPE E-1 (SHOULDER IMPROVEMENTS OUTSIDE PROJECT LIMITS)

- (W) TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH (WHITE)
- (Y) TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH (YELLOW)
- (W8) TEMPORARY PAVEMENT MARKING 8-INCH (WHITE)
- (TW) TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE)
- (TY) TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW)
- (TW8) TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (WHITE)
- (TA) TEMPORARY PAVEMENT MARKING ARROWS REMOVABLE TAPE
- (TWORD) TEMPORARY PAVEMENT MARKING WORDS REMOVABLE TAPE

N



PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CONSTRUCTION STAGING - STAGE 2B	SHEET 148 - E

LEGEND

- TRAFFIC CONTROL BARRICADE TYPE III WITH TWO TRAFFIC CONTROL WARNING LIGHTS TYPE A WITH/WITHOUT SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TRAFFIC CONTROL WARNING LIGHT TYPE C
- ARROW BOARD
- TRAFFIC CONTROL SIGN, POST MOUNTED
- TRAFFIC CONTROL SIGN, TEMPORARY SUPPORT
- FLEXIBLE TUBULAR MARKER
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- TEMPORARY RAISED PAVEMENT MARKER (ONE WAY REFLECTOR)
- DIRECTION OF TRAFFIC
- CC — CRASH CUSHION TEMPORARY
- 16" X 16" FLAGS (INCIDENTAL TO TRAFFIC CONTROL SIGNS)
- 3" ASPHALTIC SURFACE TEMPORARY (BIKE ACCOMMODATIONS WITHIN PROJECT LIMITS)
- 5" ASPHALTIC SURFACE TEMPORARY (DRIVING LANES WITHIN PROJECT LIMITS)
- 4" HMA TYPE E-1 (SHOULDER IMPROVEMENTS OUTSIDE PROJECT LIMITS)
- W — TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH (WHITE)
- Y — TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH (YELLOW)
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- TW8 — TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (WHITE)
- TA — TEMPORARY PAVEMENT MARKING ARROWS REMOVABLE TAPE
- TWORD — TEMPORARY PAVEMENT MARKING WORDS REMOVABLE TAPE

N

STA 25+00

STA 40+00

MATCHLINE

MATCHLINE

DO NOT PASS
W06-3
R4-1
24"X30"

DO NOT PASS
W06-3
R4-1
24"X30"

ROAD WORK AHEAD
W20-1

ROAD CLOSED
MAINTAIN ACCESS TO STUART DRIVE
48" X 30"

END ROAD WORK
G20-2A
48" X 24"

ROAD CLOSED
R11-2
48"X30"

DOUBLE TY

TW

W

Y DOUBLE

50'

50'

WB +50

25'

ASPHALTIC FLUME

CULVERT PIPE TEMPORARY 24-INCH AND AEW

STUART DR

CTH NN

CTH H

IH-43 SB

IH-43 NB

SEE SDD BARRICADES AND SIGNS FOR MAINLINE CLOSURE, DETAIL D (1-TRAFFIC CONTROL SIGNS, 5-TYPE III BARRICADES, 10-WARNING LIGHTS TYPE A)

PROJECT NO:1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CONSTRUCTION STAGING - STAGE 2B	SHEET 149 - E

LEGEND

- TRAFFIC CONTROL BARRICADE TYPE III WITH TWO TRAFFIC CONTROL WARNING LIGHTS TYPE A WITH/WITHOUT SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TRAFFIC CONTROL WARNING LIGHT TYPE C
- ARROW BOARD
- TRAFFIC CONTROL SIGN, POST MOUNTED
- TRAFFIC CONTROL SIGN, TEMPORARY SUPPORT
- FLEXIBLE TUBULAR MARKER
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
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- 16" X 16" FLAGS (INCIDENTAL TO TRAFFIC CONTROL SIGNS)

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- TW8 — TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (WHITE)
- TA — TEMPORARY PAVEMENT MARKING ARROWS REMOVABLE TAPE
- TWORD — TEMPORARY PAVEMENT MARKING WORDS REMOVABLE TAPE

ROAD CLOSED
R11-2
48" X 30"

SEE SDD "TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH" FOR USH 12 DURING PIER AND ABUTMENT CONSTRUCTION (16-TRAFFIC CONTROL SIGNS, 4-TEMPORARY CRASH CUSHIONS, 3100 LF-CONCRETE BARRIER TEMPORARY PRECAST).

DURING BRIDGE GIRDER PLACEMENT, 1-SPAN SHALL BE PLACED AT A TIME WITH THE OTHER 3-SPANS OPEN TO TRAFFIC UNDERNEATH. SEE SPECIAL PROVISIONS FOR MORE INFORMATION.

W06-3
DO NOT PASS
R4-1
24"X30"

CULVERT PIPE TEMPORARY 18-INCH WITH AEW

SEE SDD TRAFFIC CONTROL, EXIT RAMP CLOSURE (4-TYPE III BARRICADES, 8-WARNING LIGHTS TYPE A, 20-TRAFFIC CONTROL DRUMS, 400FT-TEMPORARY PAVEMENT MARKING 4" REMOVABLE TAPE, WHITE, 1-COVERING SIGNS TYPE II, 1-PCMS) PLACE PCMS 10 CALENDAR DAYS PRIOR TO CLOSURE.

SEE SDD "TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH" FOR USH 12 DURING PIER AND ABUTMENT CONSTRUCTION (16-TRAFFIC CONTROL SIGNS, 4-TEMPORARY CRASH CUSHIONS, 3100 LF-CONCRETE BARRIER TEMPORARY PRECAST).

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CONSTRUCTION STAGING - STAGE 2B	SHEET -----	E

FILE NAME : T:\1092703\CADD\CIVIL3D-NN INTERCHANGE\10801370\SHEETSPLAN\026202_ST-2.DWG PLOT DATE : 11/13/2014 2:18 PM PLOT BY : GUILLAMA, TINA R. PLOT NAME : ----------

2

W — TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH (WHITE)
Y — TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH (YELLOW)
W8 — TEMPORARY PAVEMENT MARKING 8-INCH (WHITE)
TW — TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE)
TY — TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW)
TW8 — TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (WHITE)
TA — TEMPORARY PAVEMENT MARKING ARROWS REMOVABLE TAPE
TWORD — TEMPORARY PAVEMENT MARKING WORDS REMOVABLE TAPE

LEGEND

- TRAFFIC CONTROL BARRICADE TYPE III WITH TWO TRAFFIC CONTROL WARNING LIGHTS TYPE A WITH/WITHOUT SIGN
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- ARROW BOARD
- TRAFFIC CONTROL SIGN, POST MOUNTED
- TRAFFIC CONTROL SIGN, TEMPORARY SUPPORT
- FLEXIBLE TUBULAR MARKER
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
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- 5" ASPHALTIC SURFACE TEMPORARY (DRIVING LANES WITHIN PROJECT LIMITS)
- 4" HMA TYPE E-1 (SHOULDER IMPROVEMENTS OUTSIDE PROJECT LIMITS)

N

PLACE TEMPORARY INLET OVER EXISTING PIPE

ROAD WORK AHEAD W20-1

END ROAD WORK G20-2A 48" X 24"

W5-52R 12" X 36"

BEGIN LEFT TURN LANE R3-20L 24"X36"

ONLY ONLY R3-8E 36"X30"

DOUBLE Y

PILING STEEL SHEET TEMPORARY AT CULVERT

CONCRETE BARRIER TEMPORARY PRECAST

R=1679'

PLACE TEMPORARY INLET OVER EXISTING PIPE

ROAD CLOSED R11-2 48" X 30"

ROAD CLOSED R11-2 48" X 30"

DO NOT PASS R4-1 24"X30"

BRAY RD

CTH NN

RAMP AB

RAMP A

RAMP AA

MATCHLINE

STA 55+00

STA 71+00

SEE SDD TRAFFIC CONTROL, EXIT RAMP CLOSURE
(4-TYPE III BARRICADES, 8-WARNING LIGHTS TYPE A,
24-TRAFFIC CONTROL DRUMS, 500FT-TEMPORARY
PAVEMENT MARKING 4" REMOVABLE TAPE, WHITE,
1-COVERING SIGNS TYPE II, 1-PCMS
PLACE PCMS 10 CALENDAR DAYS PRIOR TO CLOSURE

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CONSTRUCTION STAGING - STAGE 2B	SHEET -----	E

FILE NAME : T:\1092703\CADD\CIVIL3D-NN INTERCHANGE\10801370\SHEETSPLAN\026203_ST-2.DWG PLOT DATE : 11/13/2014 2:19 PM PLOT BY : GUILLAMA, TINA R. PLOT NAME : ----------

LEGEND

- TRAFFIC CONTROL BARRICADE TYPE III WITH TWO TRAFFIC CONTROL WARNING LIGHTS TYPE A WITH/WITHOUT SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TRAFFIC CONTROL WARNING LIGHT TYPE C
- ARROW BOARD
- TRAFFIC CONTROL SIGN, POST MOUNTED
- TRAFFIC CONTROL SIGN, TEMPORARY SUPPORT
- FLEXIBLE TUBULAR MARKER
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- TEMPORARY RAISED PAVEMENT MARKER (ONE WAY REFLECTOR)
- DIRECTION OF TRAFFIC
- CC — CRASH CUSHION TEMPORARY
- 16" X 16" FLAGS (INCIDENTAL TO TRAFFIC CONTROL SIGNS)

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- 5" ASPHALTIC SURFACE TEMPORARY (DRIVING LANES WITHIN PROJECT LIMITS)
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- Y — TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH (YELLOW)
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- TA — TEMPORARY PAVEMENT MARKING ARROWS REMOVABLE TAPE
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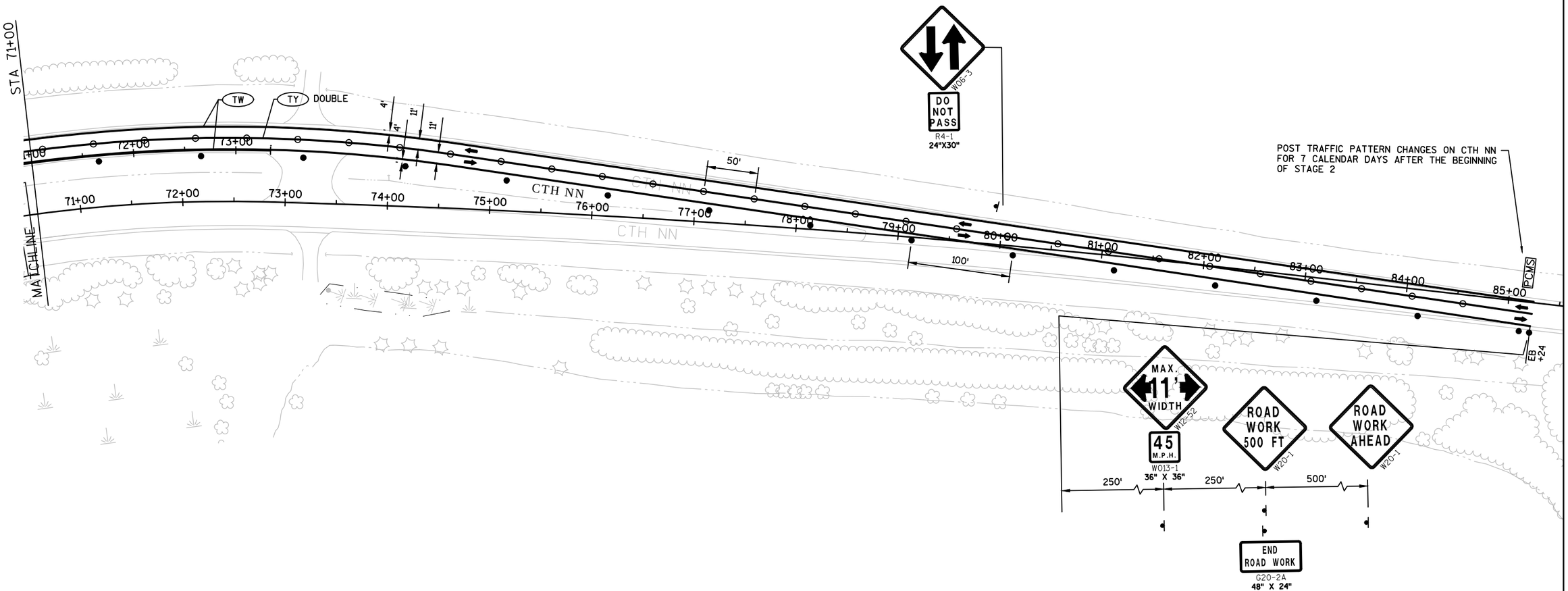
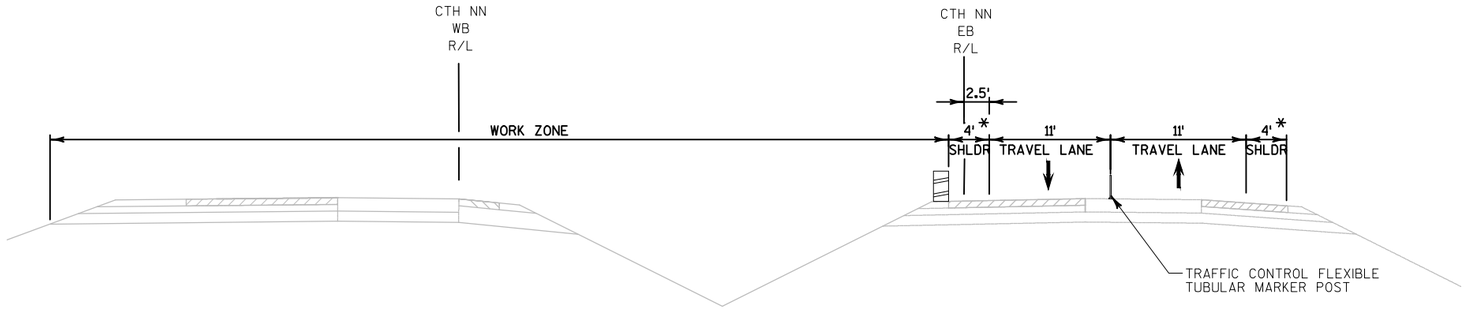


PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CONSTRUCTION STAGING - STAGE 2B	SHEET -----	E

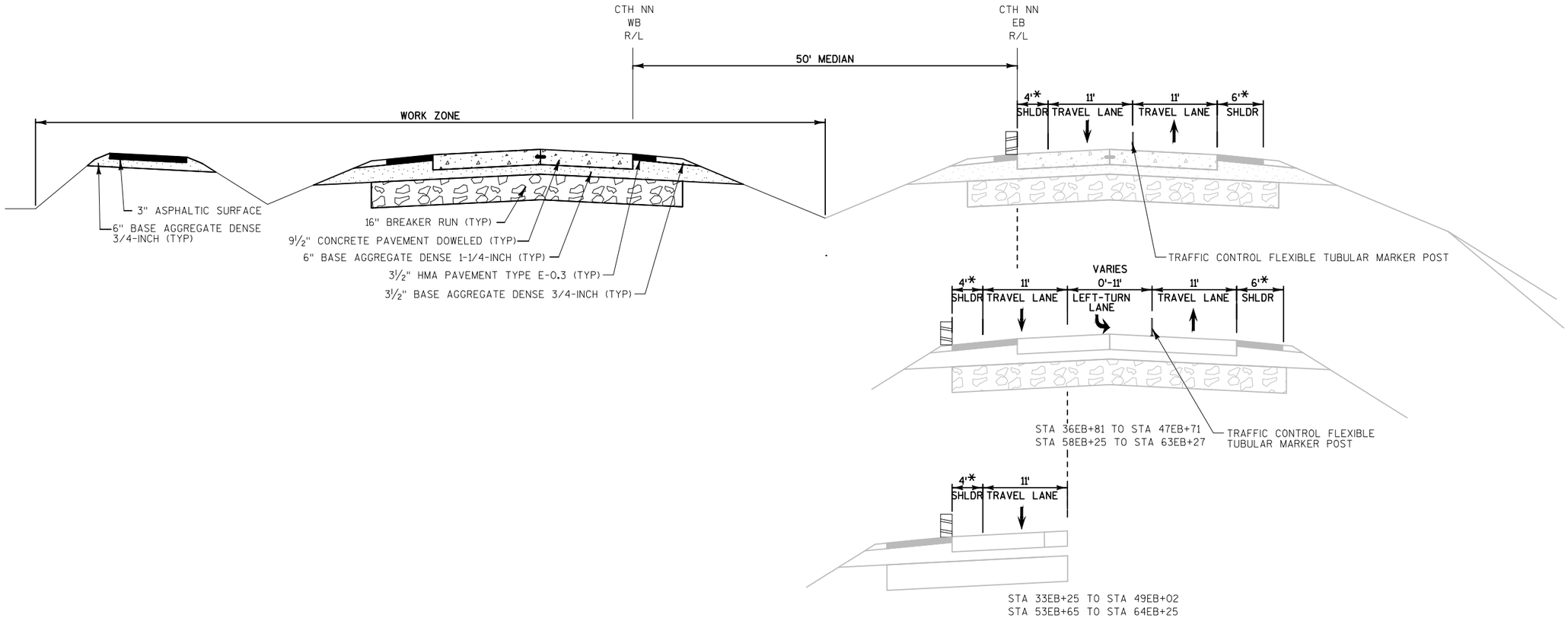
FILE NAME : T:\1092703\CADD\CIVIL3D-NN INTERCHANGE\10801370\SHEETSPLAN\026204_ST-2.DWG PLOT DATE : 11/13/2014 2:20 PM PLOT BY : GUILLAMA, TINA R. PLOT NAME : ----------

WISDOT/CAD SHEET 42



TYPICAL SECTION - STAGE 3
CTH NN
STA 13EB+75 TO STA 24EB+00

* BIKE ACCOMMODATIONS



TYPICAL SECTION - STAGE 3
CTH NN
STA 24EB+00 TO STA 70EB+50

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	TRAFFIC CONTROL TYPICAL SECTIONS - STAGE 3	SHEET 153	E

GENERAL NOTES FOR CONSTRUCTION STAGING AND TRAFFIC CONTROL

1. ALL TRAFFIC CONTROL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED IN THE PLANS.
2. "WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS REFLECTIVE ORANGE.
3. SIGN LOCATIONS ARE APPROXIMATE. THE ACTUAL LOCATION AND SPACING MAY BE ADJUSTED AS DIRECTED BY THE ENGINEER TO MEET FIELD CONDITIONS.
4. ALL SIGNS, TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE COVERED OR REMOVED AS NEEDED AND/OR AS DIRECTED BY THE ENGINEER. NO "WORKING" LIGHTS SHALL BE VISIBLE ON A COVERED OR LAID DOWN SIGN.
5. ALL EXISTING CONFLICTING PAVEMENT MARKING SHALL BE REMOVED.
6. A FLAGGER MAY BE REQUIRED WHERE CONSTRUCTION VEHICLES ENTER OR LEAVE "WORK/CLOSED" AREAS IF WARRANTED BY CONDITIONS AND/OR AS DIRECTED BY THE ENGINEER.
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8. ADEQUATE TURNING PROVISION SHALL BE MAINTAINED FOR ALL VEHICLES, INCLUDING TRUCKS AS DIRECTED BY THE ENGINEER.
9. PLACE TEMPORARY RAISED PAVEMENT MARKERS THROUGH ALL CROSSOVER AND LANE SHIFTS.

LEGEND

- TRAFFIC CONTROL BARRICADE TYPE III WITH TWO TRAFFIC CONTROL WARNING LIGHTS TYPE A WITH/WITHOUT SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TRAFFIC CONTROL WARNING LIGHT TYPE C
- ARROW BOARD
- TRAFFIC CONTROL SIGN, POST MOUNTED
- TRAFFIC CONTROL SIGN, TEMPORARY SUPPORT
- FLEXIBLE TUBULAR MARKER
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- TEMPORARY RAISED PAVEMENT MARKER (ONE WAY REFLECTOR)
- DIRECTION OF TRAFFIC
- CC — CRASH CUSHION TEMPORARY
- 16" X 16" FLAGS (INCIDENTAL TO TRAFFIC CONTROL SIGNS)
- 3" ASPHALTIC SURFACE TEMPORARY (BIKE ACCOMMODATIONS WITHIN PROJECT LIMITS)
- 5" ASPHALTIC SURFACE TEMPORARY (DRIVING LANES WITHIN PROJECT LIMITS)
- 4" HMA TYPE E-1 (SHOULDER IMPROVEMENTS OUTSIDE PROJECT LIMITS)

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- TA — TEMPORARY PAVEMENT MARKING ARROWS REMOVABLE TAPE
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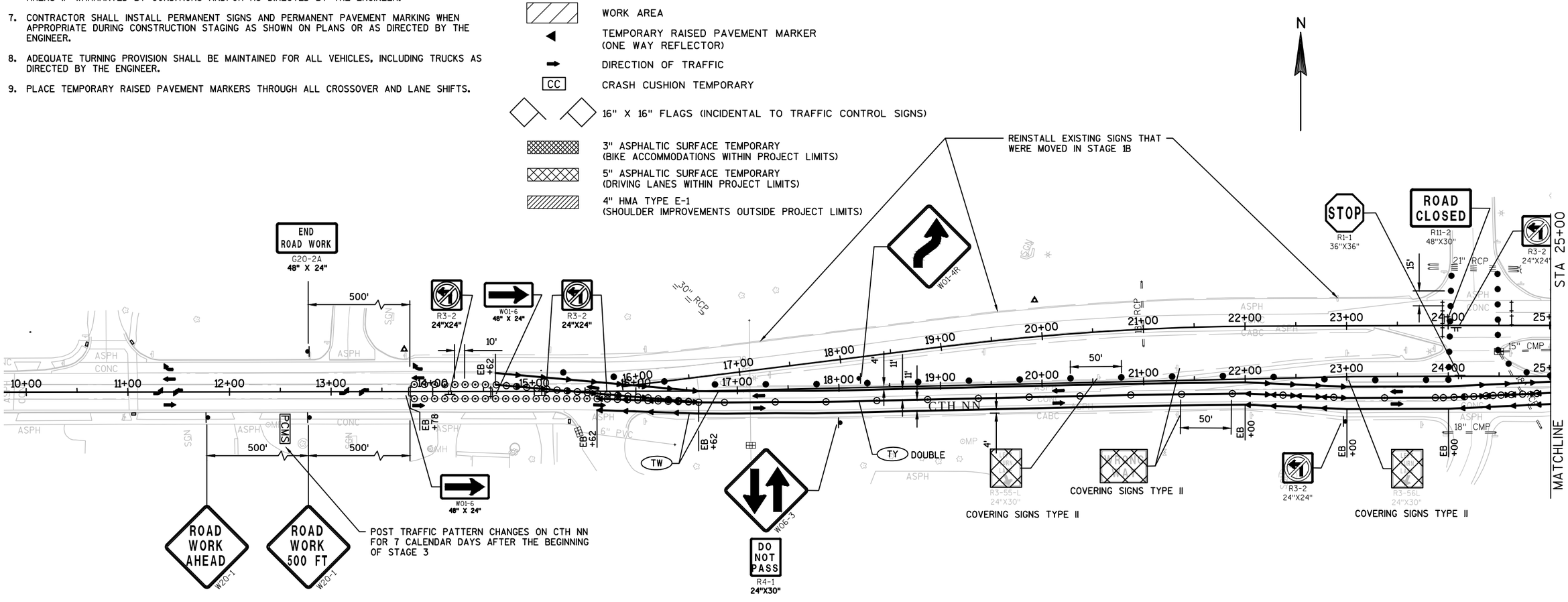

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CONSTRUCTION STAGING - STAGE 3	SHEET 154 - E

LEGEND

- TRAFFIC CONTROL BARRICADE TYPE III WITH TWO TRAFFIC CONTROL WARNING LIGHTS TYPE A WITH/WITHOUT SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TRAFFIC CONTROL WARNING LIGHT TYPE C
- ARROW BOARD
- TRAFFIC CONTROL SIGN, POST MOUNTED
- TRAFFIC CONTROL SIGN, TEMPORARY SUPPORT
- FLEXIBLE TUBULAR MARKER
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- TEMPORARY RAISED PAVEMENT MARKER (ONE WAY REFLECTOR)
- DIRECTION OF TRAFFIC
- CC — CRASH CUSHION TEMPORARY
- 16" X 16" FLAGS (INCIDENTAL TO TRAFFIC CONTROL SIGNS)

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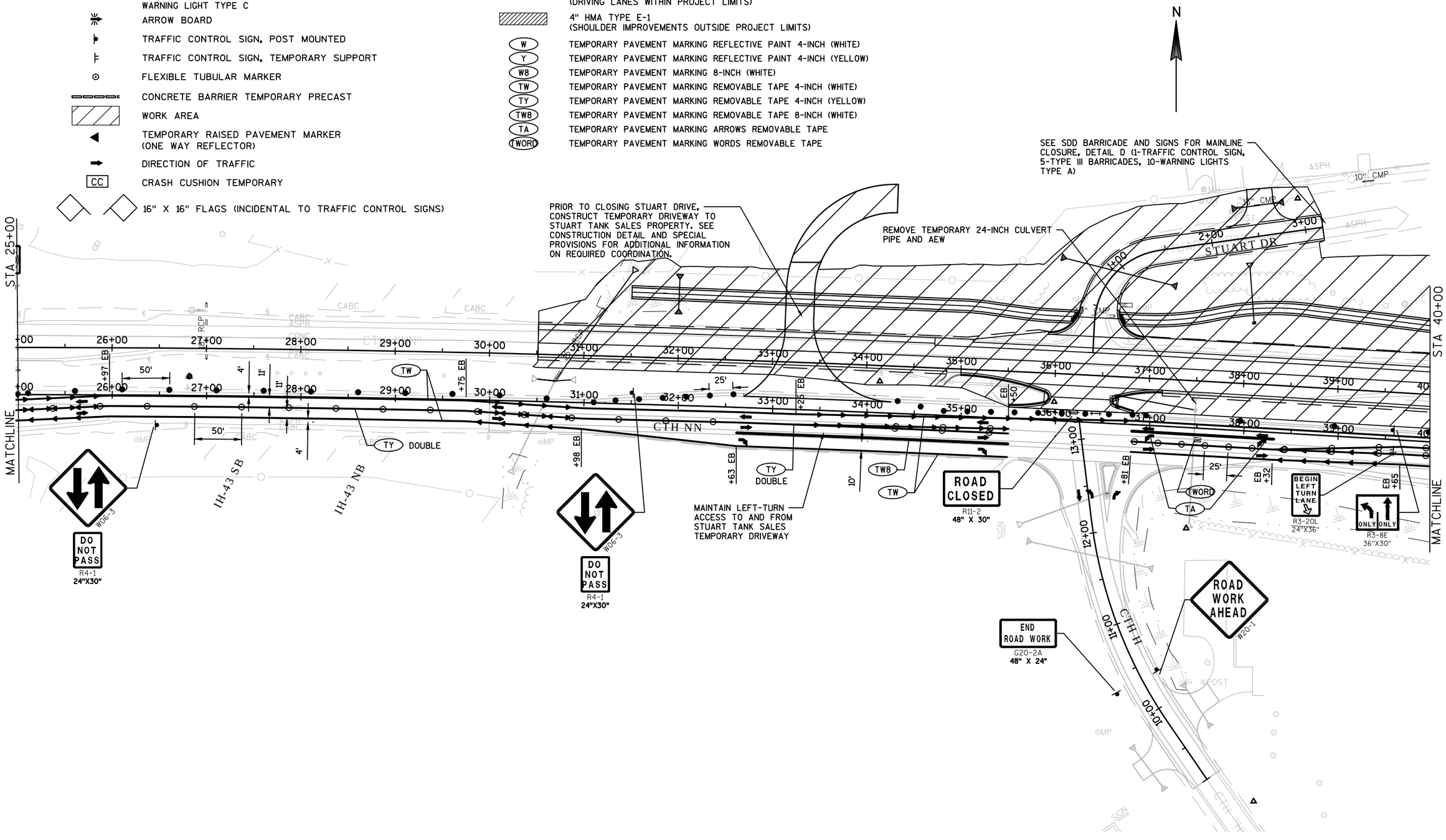

PROJECT NO:1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CONSTRUCTION STAGING - STAGE 3	SHEET 155 - E

LEGEND

- TRAFFIC CONTROL BARRICADE TYPE III WITH TWO TRAFFIC CONTROL WARNING LIGHTS TYPE A WITH/WITHOUT SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TRAFFIC CONTROL WARNING LIGHT TYPE C
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- TRAFFIC CONTROL SIGN, TEMPORARY SUPPORT
- FLEXIBLE TUBULAR MARKER
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- TEMPORARY RAISED PAVEMENT MARKER (ONE WAY REFLECTOR)
- DIRECTION OF TRAFFIC
- CC — CRASH CUSHION TEMPORARY
- 16" X 16" FLAGS (INCIDENTAL TO TRAFFIC CONTROL SIGNS)

- 3" ASPHALTIC SURFACE TEMPORARY (BIKE ACCOMMODATIONS WITHIN PROJECT LIMITS)
- 5" ASPHALTIC SURFACE TEMPORARY (DRIVING LANES WITHIN PROJECT LIMITS)
- 4" HMA TYPE E-1 (SHOULDER IMPROVEMENTS OUTSIDE PROJECT LIMITS)
- W — TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH (WHITE)
- Y — TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH (YELLOW)
- W8 — TEMPORARY PAVEMENT MARKING 8-INCH (WHITE)
- TW — TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE)
- TY — TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW)
- TW8 — TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (WHITE)
- TA — TEMPORARY PAVEMENT MARKING ARROWS REMOVABLE TAPE
- TWORD — TEMPORARY PAVEMENT MARKING WORDS REMOVABLE TAPE

N

STA 995+43 57' LT
STA 995+43 90' LT
STA 995+43 127' LT
STA 995+43 150' LT

REMOVE TEMPORARY 18-INCH PIPE AND AEW

PLACE INLET OVER EXISTING PIPE

ONLY ONLY
R3-8E
36"X30"

W06-3

DO NOT PASS
R4-1
24"X30"

+76 2' LT
+77.3 30' RT
+52 67' RT
+39 89' RT

SEE SDD "TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH" FOR USH 12 DURING PIER AND ABUTMENT CONSTRUCTION (16-TRAFFIC CONTROL SIGNS, 4-TEMPORARY CRASH CUSHIONS, 3100 LF-CONCRETE BARRIER TEMPORARY PRECAST).

STA 40+00
STA 55+00
MATCHLINE
MATCHLINE

USH 12
CTH NN
RAMP C
RAMP CD
RAMP DC
RAMP D

ROAD CLOSED
R11-2
48" X 30"

END ROAD WORK
G20-2A
48" X 24"

BEGIN LEFT TURN LANE
R3-20L
24"X36"

USH 12 WB/EB AND THE ADJACENT C-D ROADS SHALL BE CLOSED FOR UP TO 5 SUCCESSIVE NIGHTS AT THE BEGINNING OF STAGE 3 FOR COMPLETE 4-SPAN BRIDGE REMOVAL. DURING BRIDGE GIRDER PLACEMENT, 1-SPAN SHALL BE PLACED AT A TIME WITH THE OTHER 3-SPANS OPEN TO TRAFFIC UNDERNEATH. SEE SPECIAL PROVISIONS FOR MORE INFORMATION.

+05 150' LT
+85 127' LT
+61 58' LT
+69 90' LT

SEE SDD "TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH" FOR USH 12 DURING PIER AND ABUTMENT CONSTRUCTION (16-TRAFFIC CONTROL SIGNS, 4-TEMPORARY CRASH CUSHIONS, 3100 LF-CONCRETE BARRIER TEMPORARY PRECAST).

STA 982+66 3' LT
STA 982+66 30' RT
STA 982+66 67' RT
+43 3' RT

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CONSTRUCTION STAGING - STAGE 3	SHEET ----- E

LEGEND

- TRAFFIC CONTROL BARRICADE TYPE III WITH TWO TRAFFIC CONTROL WARNING LIGHTS TYPE A WITH/WITHOUT SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TRAFFIC CONTROL WARNING LIGHT TYPE C
- ARROW BOARD
- TRAFFIC CONTROL SIGN, POST MOUNTED
- TRAFFIC CONTROL SIGN, TEMPORARY SUPPORT
- FLEXIBLE TUBULAR MARKER
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- TEMPORARY RAISED PAVEMENT MARKER (ONE WAY REFLECTOR)
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- 4" HMA TYPE E-1 (SHOULDER IMPROVEMENTS OUTSIDE PROJECT LIMITS)
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- TW — TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE)
- TY — TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW)
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- TA — TEMPORARY PAVEMENT MARKING ARROWS REMOVABLE TAPE
- TWORD — TEMPORARY PAVEMENT MARKING WORDS REMOVABLE TAPE

SEE SDD BARRICADES AND SIGNS FOR MAINLINE CLOSURE, DETAILS C AND D FROM BRAY ROAD CLOSURE (6-TRAFFIC CONTROL SIGNS, 7-TYPE III BARRICADES, 14-WARNING LIGHTS TYPE A)

REMOVE TEMPORARY INLET

REMOVE TEMPORARY INLET

ROAD CLOSED R11-2 48" X 30"

ROAD WORK AHEAD W20-1

BEGIN LEFT TURN LANE R3-20L 24"X36"

ONLY ONLY R3-8E 36"X30"

DO NOT PASS R4-1 24"X30"

DO NOT PASS R4-1 24"X30"

DOUBLE TY

MATCHLINE

MATCHLINE

STA 55+00

STA 71+00

BRAY RD

CTH NN

RAMP B

RAMP AB

RAMP A

RAMP AA

R=1443'

N

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CONSTRUCTION STAGING - STAGE 3	SHEET ----- E

FILE NAME : T:\1092703\CADD\CIVIL3D-NN INTERCHANGE\10801370\SHEETSPLAN\026303_ST-3.DWG PLOT DATE : 11/13/2014 2:29 PM PLOT BY : GUILLAMA, TINA R. PLOT NAME : ----------

2

LEGEND

- TRAFFIC CONTROL BARRICADE TYPE III WITH TWO TRAFFIC CONTROL WARNING LIGHTS TYPE A WITH/WITHOUT SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TRAFFIC CONTROL WARNING LIGHT TYPE C
- ARROW BOARD
- TRAFFIC CONTROL SIGN, POST MOUNTED
- TRAFFIC CONTROL SIGN, TEMPORARY SUPPORT
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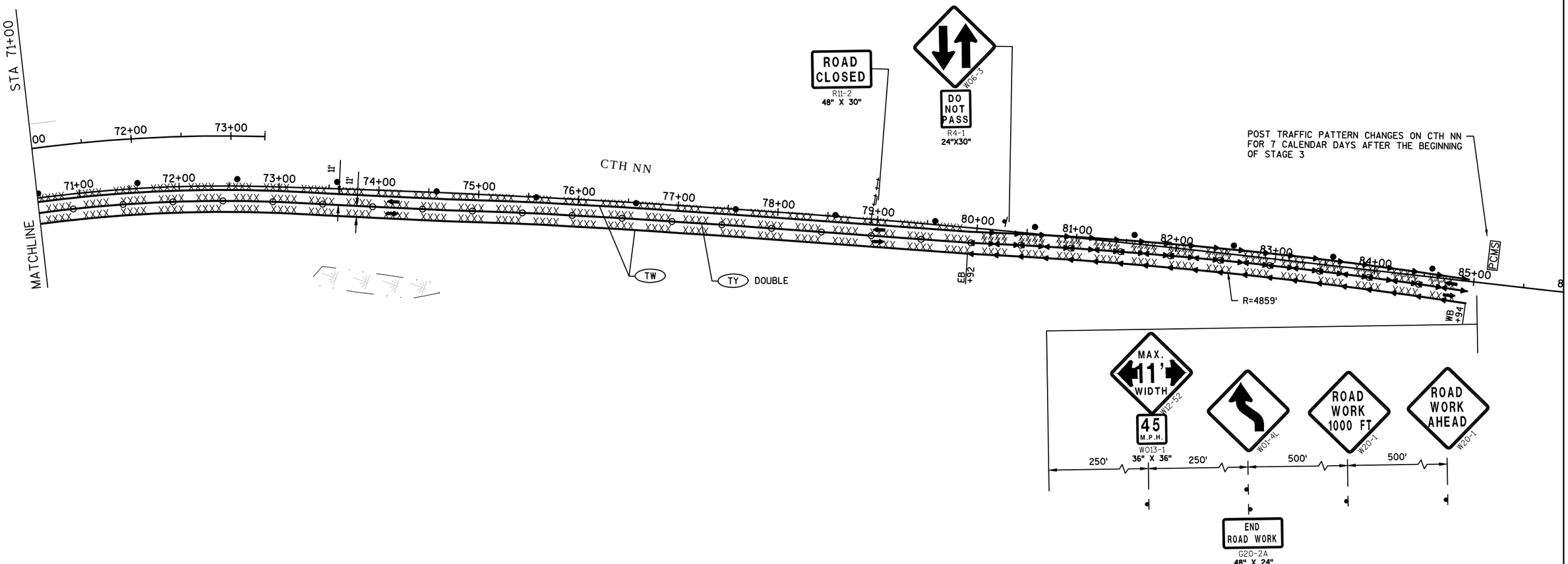
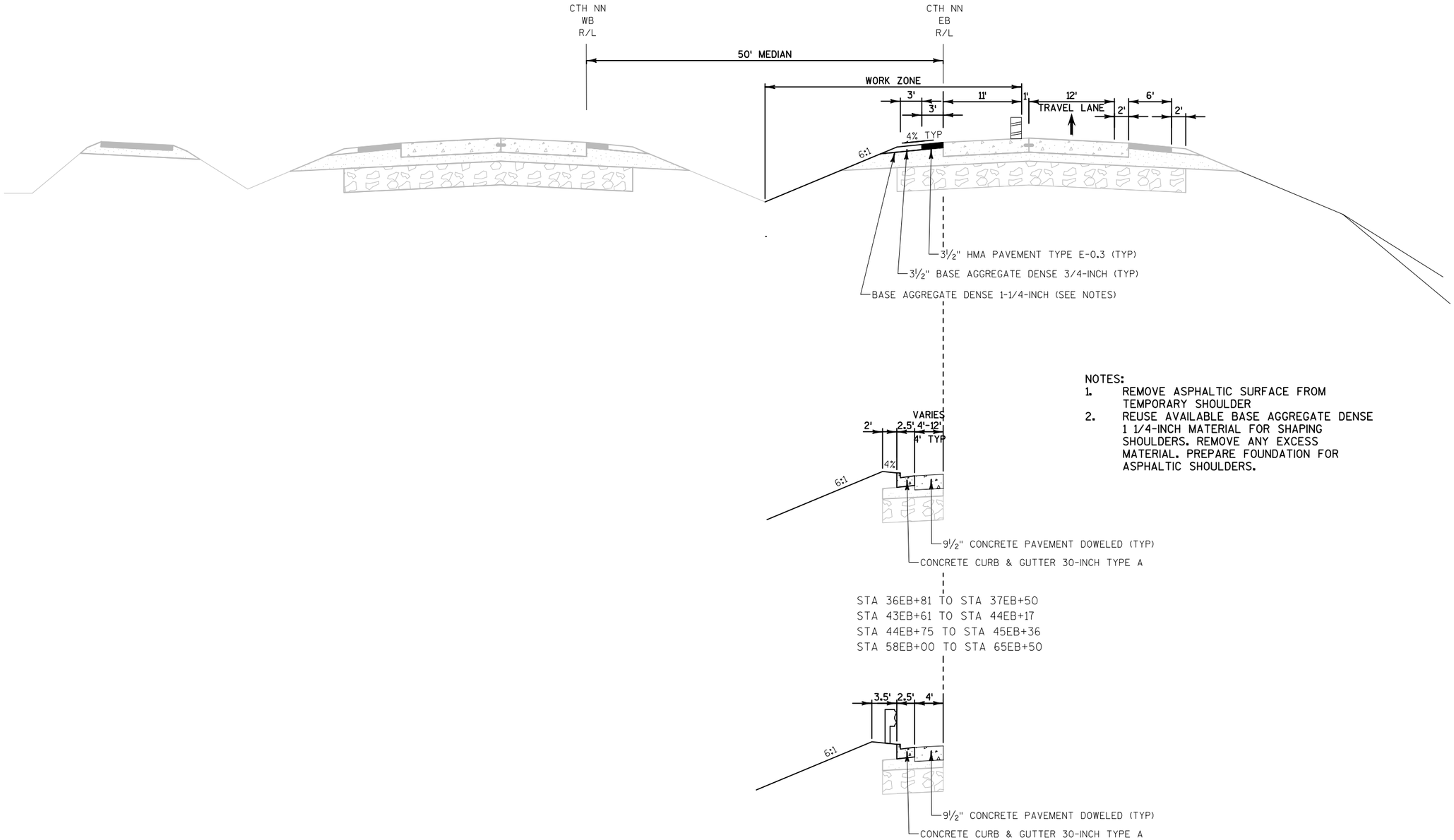
- TWORD — TEMPORARY PAVEMENT MARKING WORDS REMOVABLE TAPE



PROJECT NO:1080-13-70	HWY:CTH NN	COUNTY:WALWORTH	CONSTRUCTION STAGING - STAGE 3	SHEET -----	E



NOTES:
1. REMOVE ASPHALTIC SURFACE FROM TEMPORARY SHOULDER
2. REUSE AVAILABLE BASE AGGREGATE DENSE 1 1/4-INCH MATERIAL FOR SHAPING SHOULDERS. REMOVE ANY EXCESS MATERIAL. PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS.

TYPICAL SECTION - STAGE 4
CTH NN
STA 25EB+00 TO STA 70EB+50

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	TRAFFIC CONTROL TYPICAL SECTIONS - STAGE 4	SHEET 159	E

GENERAL NOTES FOR CONSTRUCTION STAGING AND TRAFFIC CONTROL

1. ALL TRAFFIC CONTROL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED IN THE PLANS.
2. "WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS REFLECTIVE ORANGE.
3. SIGN LOCATIONS ARE APPROXIMATE. THE ACTUAL LOCATION AND SPACING MAY BE ADJUSTED AS DIRECTED BY THE ENGINEER TO MEET FIELD CONDITIONS.
4. ALL SIGNS, TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE COVERED OR REMOVED AS NEEDED AND/OR AS DIRECTED BY THE ENGINEER. NO "WORKING" LIGHTS SHALL BE VISIBLE ON A COVERED OR LAID DOWN SIGN.
5. ALL EXISTING CONFLICTING PAVEMENT MARKING SHALL BE REMOVED.
6. A FLAGGER MAY BE REQUIRED WHERE CONSTRUCTION VEHICLES ENTER OR LEAVE "WORK/CLOSED" AREAS IF WARRANTED BY CONDITIONS AND/OR AS DIRECTED BY THE ENGINEER.
7. CONTRACTOR SHALL INSTALL PERMANENT SIGNS AND PERMANENT PAVEMENT MARKING WHEN APPROPRIATE DURING CONSTRUCTION STAGING AS SHOWN ON PLANS OR AS DIRECTED BY THE ENGINEER.
8. ADEQUATE TURNING PROVISION SHALL BE MAINTAINED FOR ALL VEHICLES, INCLUDING TRUCKS AS DIRECTED BY THE ENGINEER.
9. PLACE TEMPORARY RAISED PAVEMENT MARKERS THROUGH ALL CROSSOVER AND LANE SHIFTS.

LEGEND

- TRAFFIC CONTROL BARRICADE TYPE III WITH TWO TRAFFIC CONTROL WARNING LIGHTS TYPE A WITH/WITHOUT SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TRAFFIC CONTROL WARNING LIGHT TYPE C
- ARROW BOARD
- TRAFFIC CONTROL SIGN, POST MOUNTED
- TRAFFIC CONTROL SIGN, TEMPORARY SUPPORT
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- CONCRETE BARRIER TEMPORARY PRECAST
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- TEMPORARY RAISED PAVEMENT MARKER (ONE WAY REFLECTOR)
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- CC — CRASH CUSHION TEMPORARY
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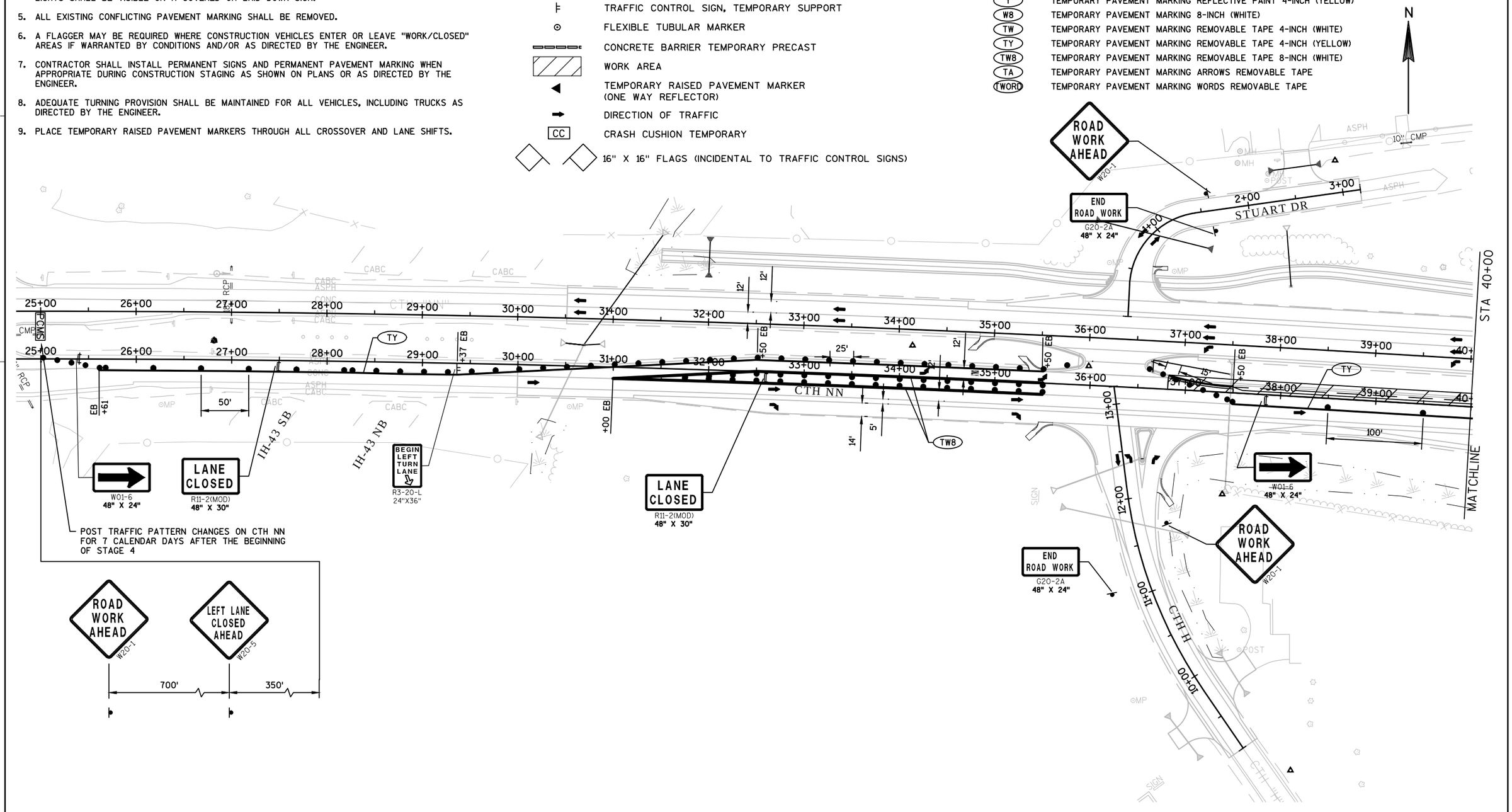
- TWORD — TEMPORARY PAVEMENT MARKING WORDS REMOVABLE TAPE



PROJECT NO:1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CONSTRUCTION STAGING - STAGE 4	SHEET 160 - E

LEGEND

- TRAFFIC CONTROL BARRICADE TYPE III WITH TWO TRAFFIC CONTROL WARNING LIGHTS TYPE A WITH/WITHOUT SIGN
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- TWORD — TEMPORARY PAVEMENT MARKING WORDS REMOVABLE TAPE

N

USH 12

CTH NN

RAMP C

RAMP CD

RAMP DC

RAMP D

STA 40+00

STA 55+00

MATCHLINE

LANE CLOSED
R11-2(MOD)
48" X 30"

BEGIN LEFT TURN LANE
R3-20-L
24"X36"

LANE CLOSED
R11-2(MOD)
48" X 30"

ROAD WORK AHEAD
W20-1

END ROAD WORK
G20-2A
48" X 24"

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CONSTRUCTION STAGING - STAGE 4	SHEET -----	E

FILE NAME : T:\1092703\CADD\CIVIL3D-NN INTERCHANGE\10801370\SHEETSPLAN\026402_ST-4.DWG PLOT DATE : 11/13/2014 2:33 PM PLOT BY : GUILLAMA, TINA R. PLOT NAME : ----------

WISDOT/CAD

2

LEGEND

- TRAFFIC CONTROL BARRICADE TYPE III WITH TWO TRAFFIC CONTROL WARNING LIGHTS TYPE A WITH/WITHOUT SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TRAFFIC CONTROL WARNING LIGHT TYPE C
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- TRAFFIC CONTROL SIGN, TEMPORARY SUPPORT
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- Y — TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH (YELLOW)
- WB — TEMPORARY PAVEMENT MARKING 8-INCH (WHITE)
- TW — TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE)
- TY — TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW)
- TWB — TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (WHITE)
- TA — TEMPORARY PAVEMENT MARKING ARROWS REMOVABLE TAPE
- TWORD — TEMPORARY PAVEMENT MARKING WORDS REMOVABLE TAPE

ROAD WORK AHEAD W20-1 — 250' — END ROAD WORK G20-2A 48" X 24"

W01-6 48" X 24"

LANE CLOSED R11-2(MOD) 48" X 30"

END ROAD WORK G20-2A 48" X 24"

ROAD WORK AHEAD W20-1

END ROAD WORK G20-2A 48" X 24"

BRAY RD — CTH NN — MATCHLINE — STA. 55+00 — RAMP A — RAMP AA — RAMP AB — RAMP B — +00 EB — EB +48

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CONSTRUCTION STAGING - STAGE 4	SHEET ----- E

FILE NAME : T:\1092703\CADD\CIVIL3D-NN INTERCHANGE\10801370\SHEETSPLAN\026403_ST-4.DWG PLOT DATE : 11/13/2014 2:34 PM PLOT BY : GUILLAMA, TINA R. PLOT NAME : ----------

NOTES

1) ALL SIGNS TO HAVE STANDARD REFLECTIVE SHEETING - REFERENCE: "WISDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION." LATEST EDITION.

2) AFTER SIGNS HAVE BEEN LOCATED IN THE FIELD, BUT BEFORE INSTALLATION, THE SIGNING AND MARKING SUPERVISOR SHALL VERIFY EACH SIGN LOCATION.

3) ALL SIGNS TO BE MOUNTED ON WOODEN POST SUPPORTS (4"X6"). THE NUMBER OF POSTS REQUIRED FOR EACH LAYOUT IS SHOWN. STEEL POSTS (2"X2") MAY BE USED FOR SIGNS ON SURFACE STREETS. SIGNS WHERE NO POSTS ARE SHOWN TO BE MOUNTED ON EXISTING SIGNS.

4) POSTS SHALL MEET THE BREAKAWAY REQUIREMENTS OF SECTON 643.2.9.1 OF THE STANDARD SPECIFICATIONS AND SIGN PLATE A4-11.

5) SIGNS ON THIS SHEET TO BE PAID UNDER THE ITEM "TRAFFIC CONTROL SIGNS FIXED MESSAGE".

6) SIGNS SHALL BE BLACK NON-REFLECTIVE MESSAGE ON ORANGE REFLECTIVE BACKGROUND UNLESS OTHERWISE NOTED.

7) ALL SIGNS SHALL HAVE CAPITAL LETTERS AND NUMERALS:
12" CAPS SHALL BE SERIES "D"
6" CAPS SHALL BE SERIES "C"

8) BEGIN XXX XX SIGNS SHALL BE SEPARATE PANELS, BUT SHALL BE CONSIDERED AS PART OF THE SIGN AND SHOULD BE REMOVED OR COVERED AFTER THEIR EFFECTIVE DATE. THE MONTH AND DAY SHALL BE AS DIRECTED BY THE ENGINEER IN THE FIELD.

9) CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO ENGINEER FOR REVIEW PRIOR TO MANUFACTURING.

10) SIGN BASE MATERIAL SHALL BE ACCORDING TO SECTION 637.2.1.2.

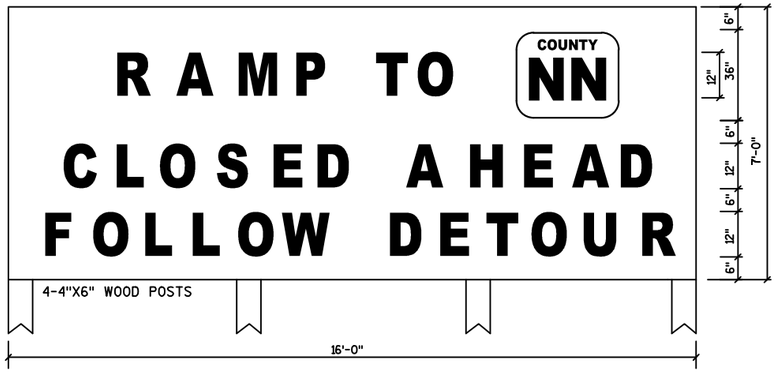
11) DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

NOTES: FIXED MESSAGE SIGNS

1) CONTRACTOR SHOULD LOCATE FIXED MESSAGE SIGNS A MINIMUM OF 400' FROM ANY EXISTING TYPE "I" SIGNS.
2) SEE FIXED MESSAGE SIGNS AND SPECIAL MESSAGE SIGN LAYOUT SHEETS FOR MORE INFORMATION.
3) COVER DETOUR SIGNING WHEN NOT IN USE. INCIDENTAL TO WORK ZONE TRAFFIC CONTROL SIGNING.
4) SIGNS TO BE PLACED 10 DAYS PRIOR TO CONSTRUCTION.

1

2



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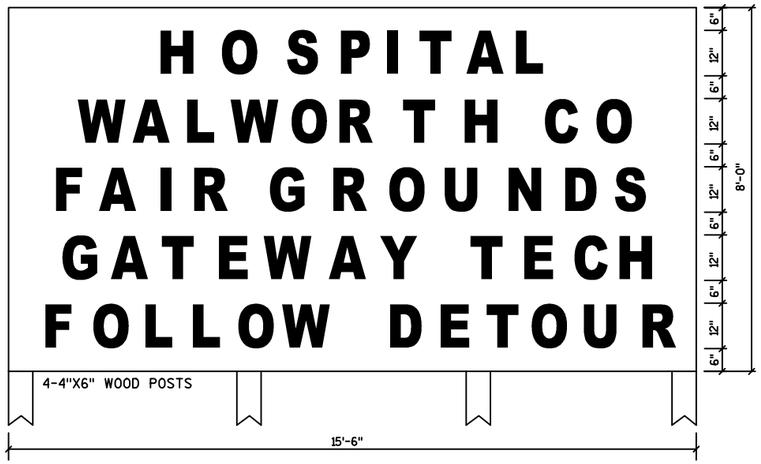

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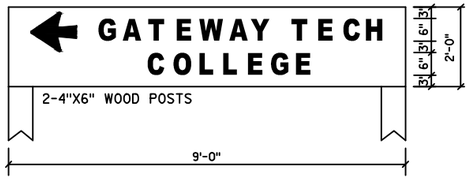

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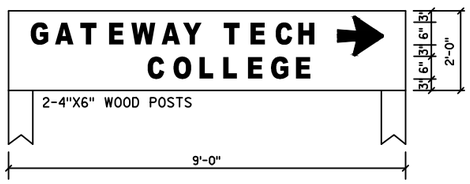
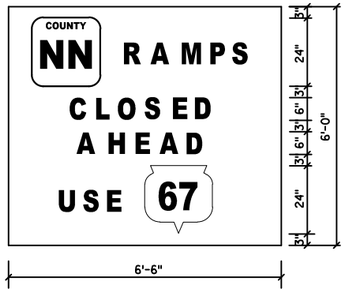


PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	TRAFFIC CONTROL SIGN DETAIL	SHEET 163	E

6



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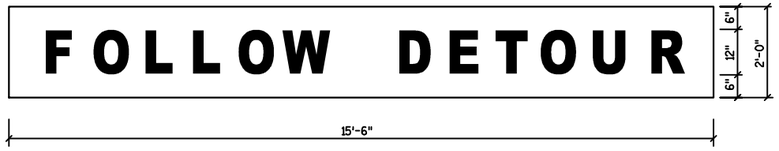

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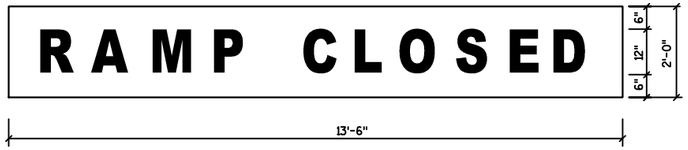


NOTES

1. ALL SIGNS TO HAVE FLUORESCENT REFLECTIVE SHEETING - REFERENCE: "WISDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION," LATEST EDITION.
2. AFTER SIGNS HAVE BEEN LOCATED IN THE FIELD, BUT BEFORE INSTALLATION, THE PROJECT ENGINEER SHALL VERIFY EACH SIGN LOCATION.
3. ALL SIGNS TO BE MOUNTED ON WOODEN POST SUPPORTS (4"X6"). THE NUMBER OF POSTS REQUIRED FOR EACH LAYOUT IS SHOWN.
4. POSTS SHALL MEET THE BREAKAWAY REQUIREMENTS OF SECTION 643.2.9.1 OF THE STANDARD SPECIFICATIONS AND SIGN PLATE A4-11.
5. SIGNS TO BE PAID UNDER THE ITEM "FIXED MESSAGE SIGNS."
6. SIGNS SHALL BE BLACK NON-REFLECTIVE MESSAGE ON ORANGE FLUORESCENT REFLECTIVE BACKGROUND PER SPEC 643 & 637.
7. ALL SIGNS SHALL HAVE CAPITAL LETTERS AND NUMERALS:
   12" CAPS SHALL BE SERIES "D" (SIGN A)
   6" CAPS SHALL BE SERIES "C" (SIGN B)
   6" CAPS SHALL BE SERIES "B" (SIGN F)
8. ALL SIGNS SHALL HAVE BORDER & RADIUS OF BORDERS AS FOLLOWS:

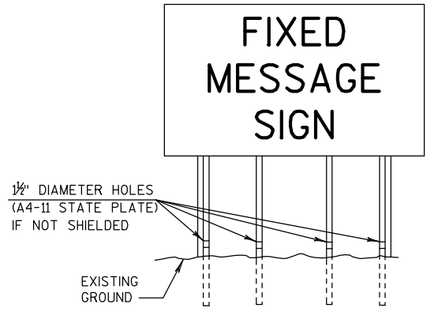
SIGN AREA	WIDTH OF BORDER
GREATER THAN 150 SQ FT	3"
60-150 SQ FT	2"
LESS THAN 60 SQ FT	1"

RADIUS SMALLEST OUTSIDE DIMENSION	CORNER RADIUS
≥ 8 FT	12"
≥ 6 FT	9"
≥ 4 FT	6"
LESS THAN 4 FT	3"

9. BEGIN XXX XX SIGNS SHALL BE SEPARATE PANELS, BUT SHALL BE CONSIDERED AS PART OF THE SIGN AND SHOULD BE REMOVED OR COVERED AFTER THEIR EFFECTIVE DATE. THE MONTH AND DAY SHALL BE AS DIRECTED BY THE ENGINEER IN THE FIELD.
10. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO ENGINEER FRO REVIEW PRIOR TO MANUFACTURING.
11. SIGN BASE MATERIAL SHALL BE ACCORDING TO SECTION 643 & 637.

NOTES: FIXED MESSAGE SIGNS

1. CONTRACTOR SHOULD LOCATE FIXED MESSAGE SIGNS A MINIMUM OF 400' FROM ANY EXISTING TYPE 'I' SIGN.
2. SEE FIXED MESSAGE SIGNS AND SPECIAL MESSAGE SIGNS LAYOUT SHEETS FOR MORE INFORMATION.
3. COVER SIGNING WHEN NOT IN USE. INCIDENTAL TO WORK ZONE TRAFFIC CONTROL SIGNING.
4. SIGNS TO BE IN PLACE 10 DAYS PRIOR TO CONSTRUCTION, UNLESS OTHERWISE NOTES.



FRONT VIEW

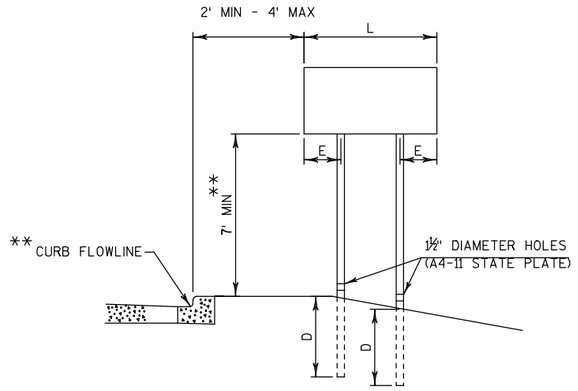
NOTES

1. SEE TRAFFIC CONTROL SHEETS FOR SIGN LOCATIONS.
2. SEE TABLES BELOW FOR REQUIRED NUMBER OF POSTS.

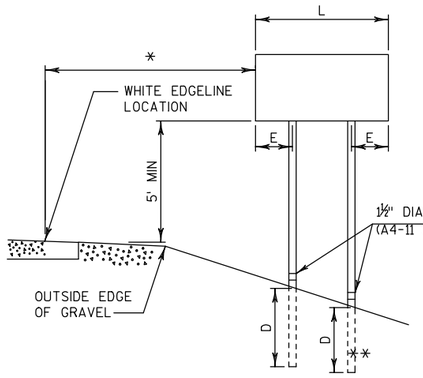
* 6' FROM EDGE OF A PAVED SHOULDER OR 12' FROM THE EDGE OF PAVEMENT (EDGE LINE LOCATION) OR 2' FROM OUTSIDE EDGE OF GRAVEL, WHICHEVER IS GREATER UNLESS DIRECTED BY PROJECT ENGINEER.

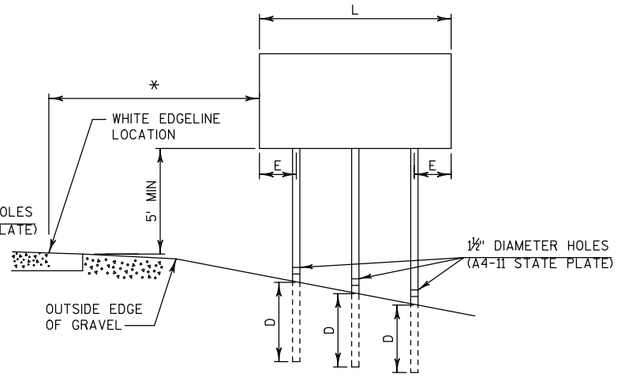
** THE EXISTENCE OF CURB AND GUTTER DOES NOT IN ITSELF MANDATE THE VERTICAL CLEARANCE ILLUSTRATED. THAT HEIGHT IS TYPICALLY MEASURED WHERE THERE IS SIDEWALK ADJACENT TO THE ROADWAY OR PARKING IS PERMITTED. IN THE ABSENCE OF SIDEWALK, VERTICAL CLEARANCE IS MEASURED FROM THE TOP OF THE CURB. IF NO SIDEWALK AND NO PARKING, VERTICAL CLEARANCE MAY BE REDUCED TO 5' MINIMUM. OFFSET OF SIGNS IS MEASURED FROM THE CURB FLOWLINE.

3. 4X6 WOOD POSTS SHALL HAVE TWO HOLES PER STATE PLATE A4-11



URBAN AREA





RURAL AREA

SIGN SHAPE OTHER THAN DIAMOND (TWO POSTS REQUIRED)	
L	E
GREATER THAN 48" LESS THAN 60"	12"
60" TO 120"	L/5

SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED)	
L	E
GREATER THAN 120" LESS THAN 168"	12"

SIGN SHAPE OTHER THAN DIAMOND (FOUR POSTS REQUIRED)	
L	E
168" AND GREATER	12"

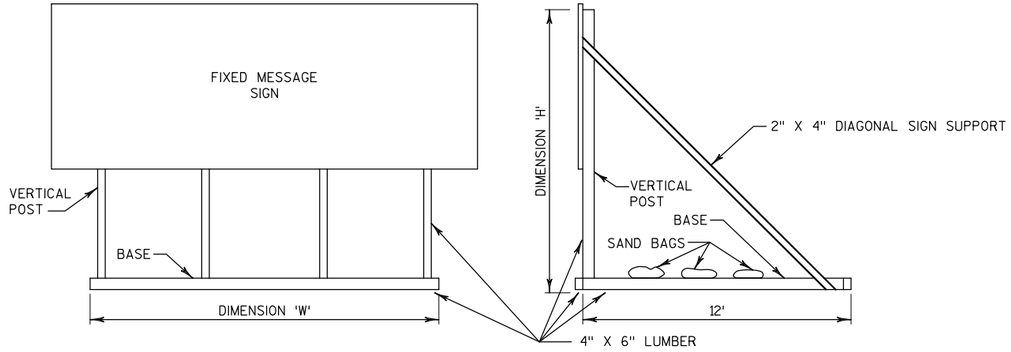
POST EMBEDMENT DEPTH

AREA OF SIGN INSTALLATION (SQ. FT.)	D (MIN)
20 OR LESS	4'
GREATER THAN 20	5'

NOTE TO DESIGNERS: SHOW POSTS ON FMS SIGN DETAILS.

POST MOUNTING DETAIL FOR TRAFFIC CONTROL FIXED MESSAGE SIGNS

2



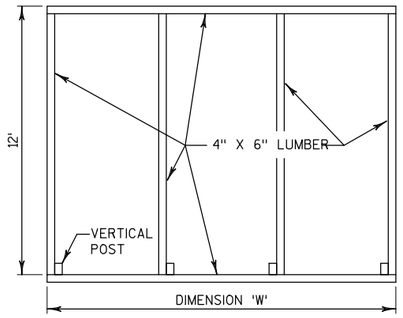
FRONT VIEW

SIDE VIEW

ANTICIPATED DIMENSIONS & POSTS REQUIRED

(FOR INFORMATION ONLY, CONTRACTOR IS TO VERIFY)

SIGN NO.	'W' (FT)	'H' (FT)	NO. OF POSTS OF HEIGHT 'H'
---	---	---	---
---	---	---	---
---	---	---	---



BASE PLAN VIEW

NOTES

1. SEE TRAFFIC CONTROL SHEETS FOR SIGN LOCATIONS.
2. TWO DIAGONAL SUPPORTS SHALL BE INCLUDED AND AFFIXED TO THE OUTSIDE SUPPORTS.
3. DIAGONAL SUPPORTS, VERTICAL POSTS AND BASE LUMBER ARE ALL INCLUDED IN THE "FIXED MESSAGE SIGN PORTABLE SUPPORT" ITEM.
4. PROVIDE AN ADEQUATE NUMBER OF SAND BAGS TO HOLD THE SIGN IN PLACE. SAND BAGS ARE INCLUDED IN THE "FIXED MESSAGE SIGN PORTABLE SUPPORT" ITEM.
5. SEE "TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS" SIGN PLATE FOR ADDITIONAL REQUIREMENTS.

101007

FIXED MESSAGE SIGN PORTABLE SUPPORT

NOTE,
THIS INSTALLATION METHOD ONLY ALLOWED
WHEN BEHIND BARRIER WALL OR GUARDRAIL
WHERE POSTS CANNONT BE INSTALLED INTO GROUND

2

LEGEND

XXXX CLOSURE

X FIXED MESSAGE SIGN NUMBER (SEE DETAIL)

TRAFFIC FLOW ARROW

EXISTING SIGN MOUNTED ON POST(S)

PROPOSED SIGN MOUNTED ON POST(S)

WORK ZONE CLOSED TO TRAFFIC

EXISTING SIGN TO BE COVERED

TRAFFIC CONTROL COVERING SIGNS TYPE I

TRAFFIC CONTROL COVERING SIGNS TYPE II

THE FOLLOWING DETOURS APPLY TO THIS SHEET:

STAGE 2A SHORT TERM USH 12 WB NIGHT-TIME CLOSURE FOR CTH NN EB BRIDGE REMOVAL.

STAGE 2A SHORT TERM USH 12 EB NIGHT-TIME CLOSURE FOR CTH NN EB BRIDGE REMOVAL.

GENERAL NOTES FOR DETOUR ROUTES:

1. SIGN LOCATIONS ARE APPROXIMATE. THE ACTUAL LOCATION AND SPACING MAY BE ADJUSTED AS DIRECTED BY THE ENGINEER TO MEET FIELD CONDITIONS.
2. ALL SIGNS, TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE DETOUR ROUTES "IN USE" SHALL BE COVERED OR REMOVED AS NEEDED AND/OR AS DIRECTED BY THE ENGINEER. NO "WORKING" LIGHTS SHALL BE VISIBLE ON A COVERED OR LAID DOWN SIGN.

WISCONSIN
ANDREW ZWIEG
E-41753
FITCHBURG, WI
PROFESSIONAL ENGINEER
Andrew Zwieg, P.E.
4/30/15

SEE SDD TRAFFIC CONTROL, TWO LANE CLOSURE ON FREEWAY OR EXPRESSWAY, SHORT-TERM (LESS THAN 24 HOURS), THE C-D ROAD IS THE 3RD LANE OF THE SDD, AND SDD BARRICADES AND SIGNS FOR MAINLINE CLOSURES DETAIL D FOR USH 12 EB MAINLINE CLOSURE (15-TRAFFIC CONTROL SIGNS, 89-DRUMS, 9-BARRICADES TYPE III, 22-WARNING LIGHTS, TYPE A, 32-WARNING LIGHTS, TYPE C, 3-ARROW BOARDS).

PLACE PCMS 10 CALENDAR DAYS PRIOR TO CLOSURE

SEE SDD TRAFFIC CONTROL, EXIT RAMP CLOSURE FOR IH-43 NB TO USE 12 EB RAMP CLOSURE (12-TRAFFIC CONTROL SIGNS, 48-DRUMS, 8-BARRICADES, TYPE III, 16-WARNING LIGHTS, TYPE A, 2-PCMS PLACE PCMS 10 CALENDAR DAYS PRIOR TO CLOSURE)

SEE SDD "BARRICADES AND SIGNS FOR MAINLINE CLOSURE DETAIL D" FOR USH 12 EB C-D ROAD CLOSURE (2-TRAFFIC CONTROL SIGNS (INCLUDE A W01-6 48"X24" SIGN), 5-BARRICADES TYPE III, 10-WARNING LIGHTS, TYPE A)

SEE SDD "BARRICADES AND SIGNS FOR MAINLINE CLOSURE DETAIL D" FOR USH 12 WB C-D ROAD CLOSURE (2-TRAFFIC CONTROL SIGNS (INCLUDE A W01-6 48"X24" SIGN), 5-BARRICADES TYPE III, 10-WARNING LIGHTS, TYPE A)

SEE SDD TRAFFIC CONTROL, TWO LANE CLOSURE ON FREEWAY OR EXPRESSWAY, SHORT-TERM (LESS THAN 24 HOURS), THE C-D ROAD IS THE 3RD LANE OF THE SDD AND SDD BARRICADES AND SIGNS FOR MAINLINE CLOSURES DETAIL D FOR USH 12 WB MAINLINE CLOSURE (15-TRAFFIC CONTROL SIGNS, 89-DRUMS, 9-BARRICADES TYPE III, 22-WARNING LIGHTS, TYPE A, 32-WARNING LIGHTS, TYPE C, 3-ARROW BOARDS).

PLACE PCMS 10 CALENDAR DAYS PRIOR TO CLOSURE

COVER WITH

(OVERNIGHT CLOSURE FOR BRIDGE REMOVAL)

Lake Geneva Elkhorn
Milwaukee Whitewater

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	DETOUR PLAN - STAGE 2A USH 12 WB & EB	SHEET -----	E

FILE NAME : T:\1092703\CADD\CIVIL3D-NN INTERCHANGE\10801370\SHEETSPLAN\027001A_DT.DWG PLOT DATE : 4/30/2015 9:07 AM PLOT BY : GUILLAMA, TINA R. PLOT NAME : ----------

2

LEGEND

XXXX CLOSURE

DETOUR ROUTE

X FIXED MESSAGE SIGN NUMBER (SEE DETAIL)

TRAFFIC FLOW ARROW

EXISTING SIGN MOUNTED ON POST(S)

PROPOSED SIGN MOUNTED ON POST(S)

WORK ZONE CLOSED TO TRAFFIC

EXISTING SIGN TO BE COVERED

TRAFFIC CONTROL COVERING SIGNS TYPE I

TRAFFIC CONTROL COVERING SIGNS TYPE II

* SEE DETOUR PLAN - STAGE 2A USH 12 WB & EB (OVERNIGHT CLOSURE FOR BRIDGE REMOVAL) FOR ADDITIONAL DETOUR SIGNING.

THE FOLLOWING DETOUR APPLIES TO THIS SHEET:

STAGE 2B LONG TERM RAMP A CLOSURE USH 12 WB TO CTH NN EB/WB.

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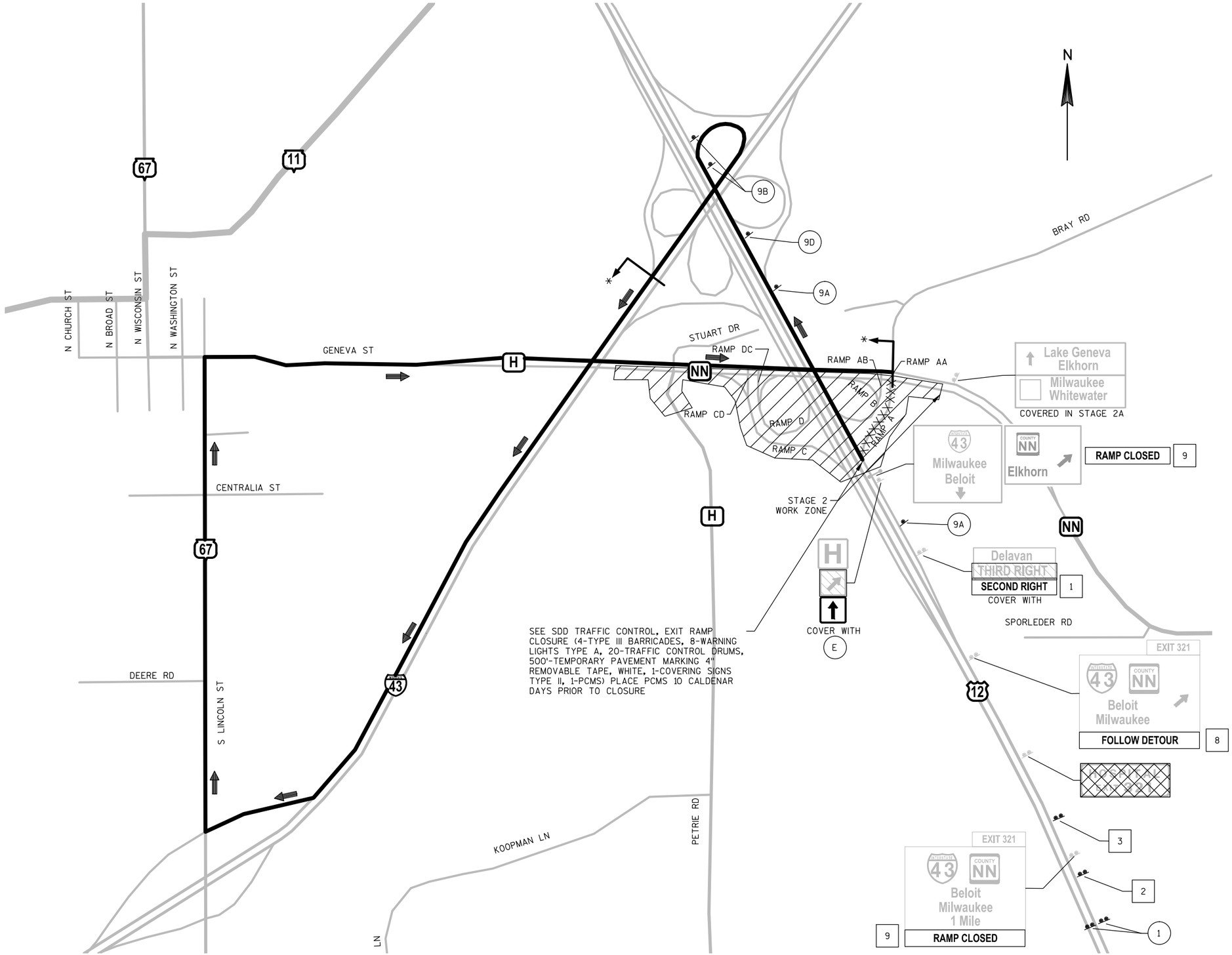


PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	DETOUR PLAN - STAGE 2B LONG TERM RAMP A CLOSURE	SHEET 168	E

2

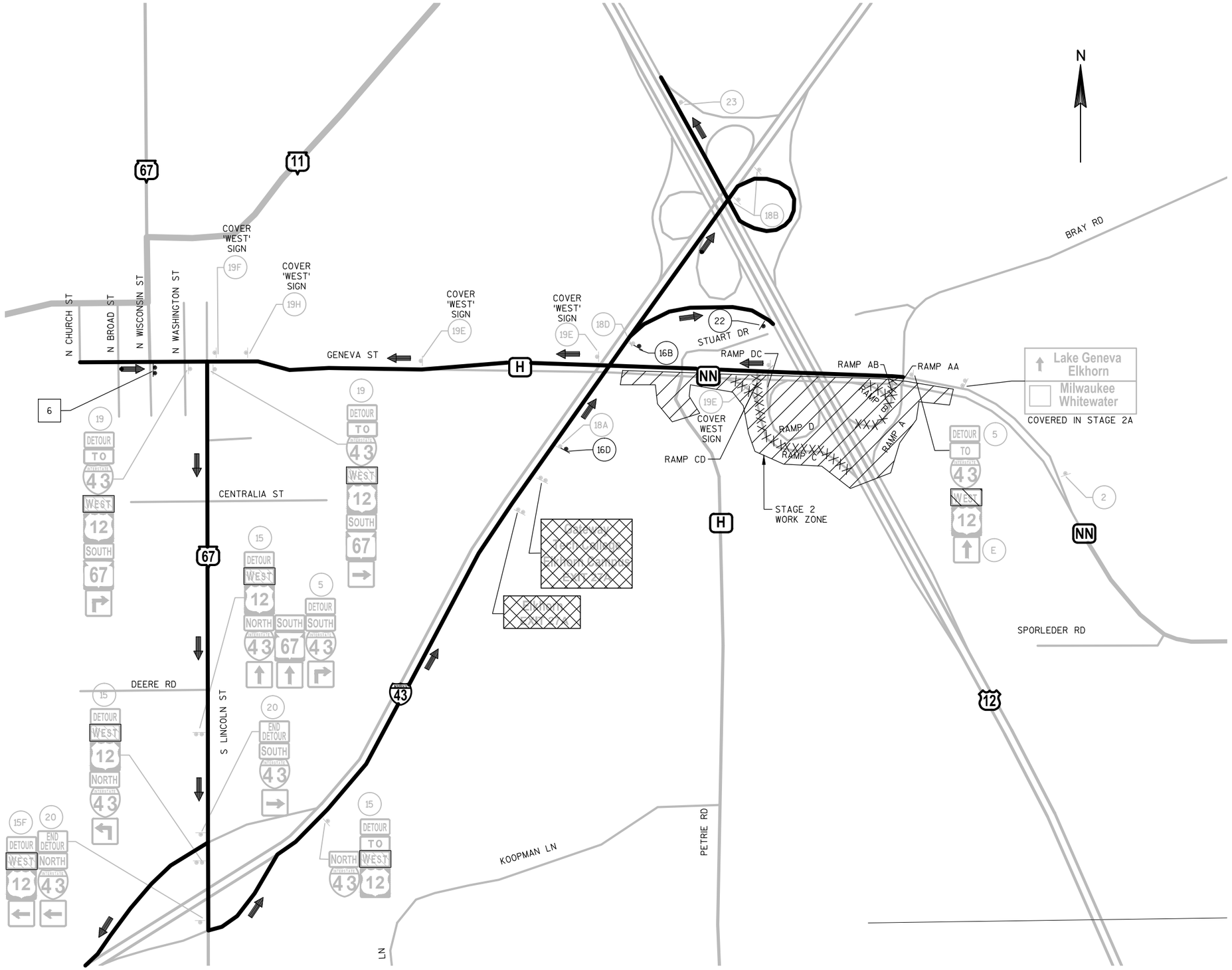
LEGEND

- XXXX — CLOSURE
- DETOUR ROUTE
- X — FIXED MESSAGE SIGN NUMBER (SEE DETAIL)
- TRAFFIC FLOW ARROW
- EXISTING SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON POST(S)
- WORK ZONE CLOSED TO TRAFFIC
- EXISTING SIGN TO BE COVERED
- TRAFFIC CONTROL COVERING SIGNS TYPE I
- TRAFFIC CONTROL COVERING SIGNS TYPE II

THE FOLLOWING DETOURS APPLY TO THIS SHEET:

STAGE 2B LONG TERM RAMP B AND C CLOSURES FOR CTH NN EB/WB TO USH 12 WB/EB.

STAGE 2B LONG TERM RAMP B CLOSURE FOR CTH NN EB/WB TO IH-43 NB/SB.



PROJECT NO:1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	DETOUR PLAN - STAGE 2B LONG TERM RAMP B & C CLOSURE	SHEET 169	E

2

2

LEGEND

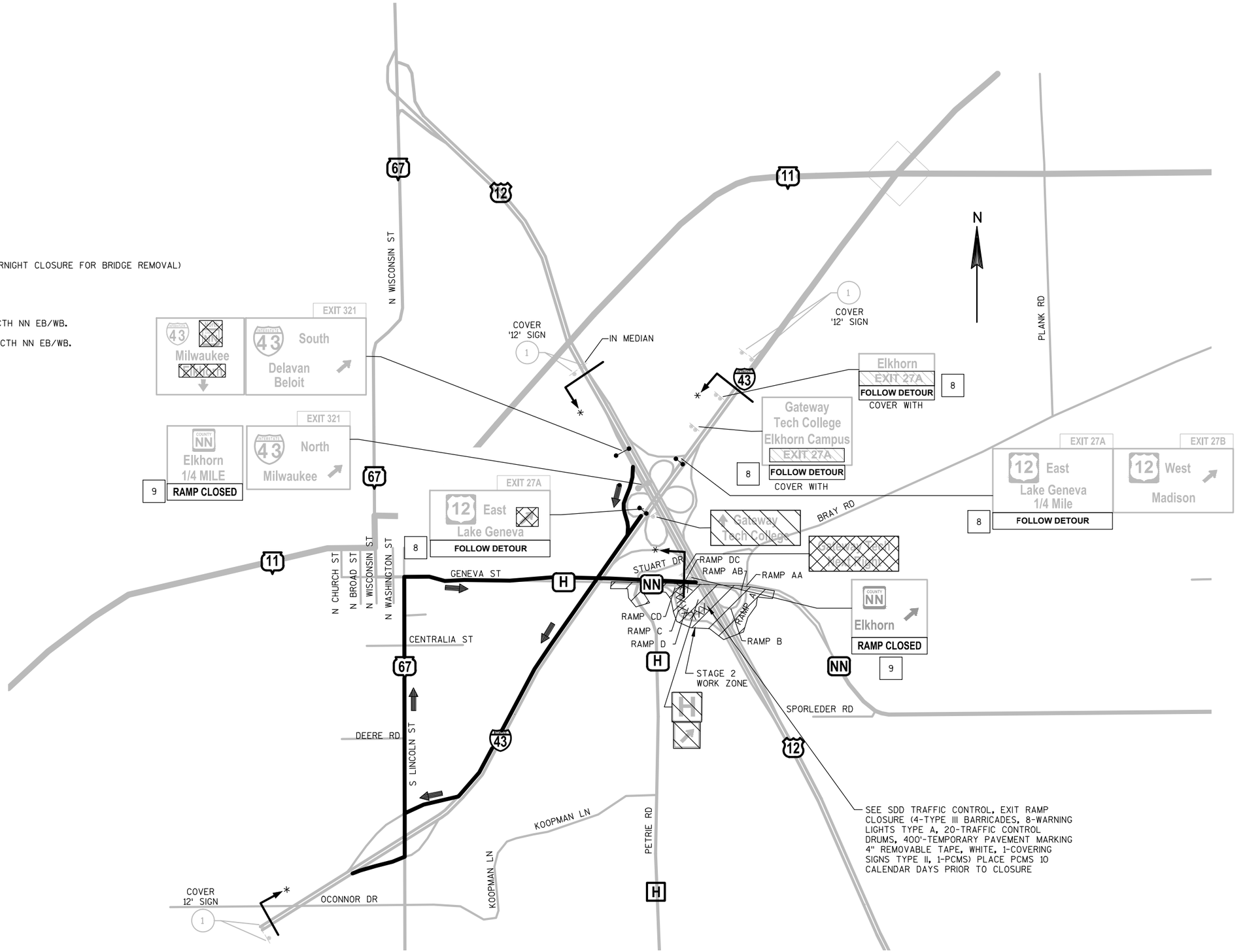
- XXXX — CLOSURE
- DETOUR ROUTE
- X — FIXED MESSAGE SIGN NUMBER (SEE DETAIL)
- TRAFFIC FLOW ARROW
- EXISTING SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON POST(S)
- WORK ZONE CLOSED TO TRAFFIC
- EXISTING SIGN TO BE COVERED
- TRAFFIC CONTROL COVERING SIGNS TYPE I
- TRAFFIC CONTROL COVERING SIGNS TYPE II

* SEE DETOUR PLAN - STAGE 2A USH 12 WB & EB (OVERNIGHT CLOSURE FOR BRIDGE REMOVAL) FOR ADDITIONAL DETOUR SIGNING.

THE FOLLOWING DETOURS APPLY TO THIS SHEET:

STAGE 2B LONG TERM RAMP D CLOSURE USH 12 EB TO CTH NN EB/WB.

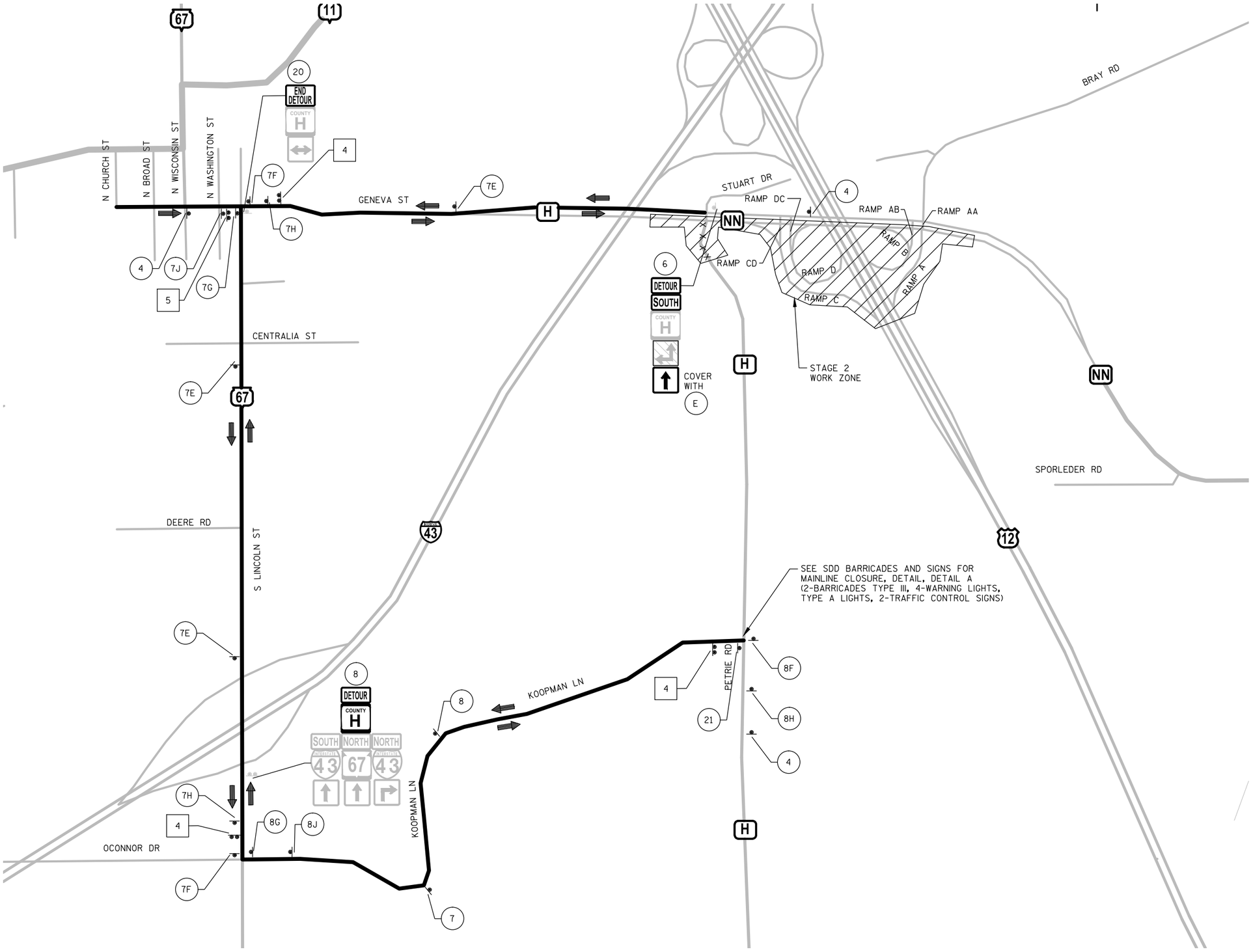
STAGE 2B LONG TERM RAMP D CLOSURE I-43 NB/SB TO CTH NN EB/WB.



PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	DETOUR PLAN - STAGE 2B LONG TERM RAMP D CLOSURE	SHEET 170	E

LEGEND

- XXXX CLOSURE
- DETOUR ROUTE
- X FIXED MESSAGE SIGN NUMBER (SEE DETAIL)
- TRAFFIC FLOW ARROW
- EXISTING SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON POST(S)
- WORK ZONE CLOSED TO TRAFFIC
- EXISTING SIGN TO BE COVERED
- TRAFFIC CONTROL COVERING SIGNS TYPE I
- TRAFFIC CONTROL COVERING SIGNS TYPE II



PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	DETOUR PLAN - STAGE 2B LONG TERM CTH H CLOSURE	SHEET 171	E

2

LEGEND

XXXX CLOSURE

X FIXED MESSAGE SIGN NUMBER (SEE DETAIL)

TRAFFIC FLOW ARROW

EXISTING SIGN MOUNTED ON POST(S)

PROPOSED SIGN MOUNTED ON POST(S)

WORK ZONE CLOSED TO TRAFFIC

EXISTING SIGN TO BE COVERED

TRAFFIC CONTROL COVERING SIGNS TYPE I

TRAFFIC CONTROL COVERING SIGNS TYPE II

THE FOLLOWING DETOURS APPLY TO THIS SHEET:

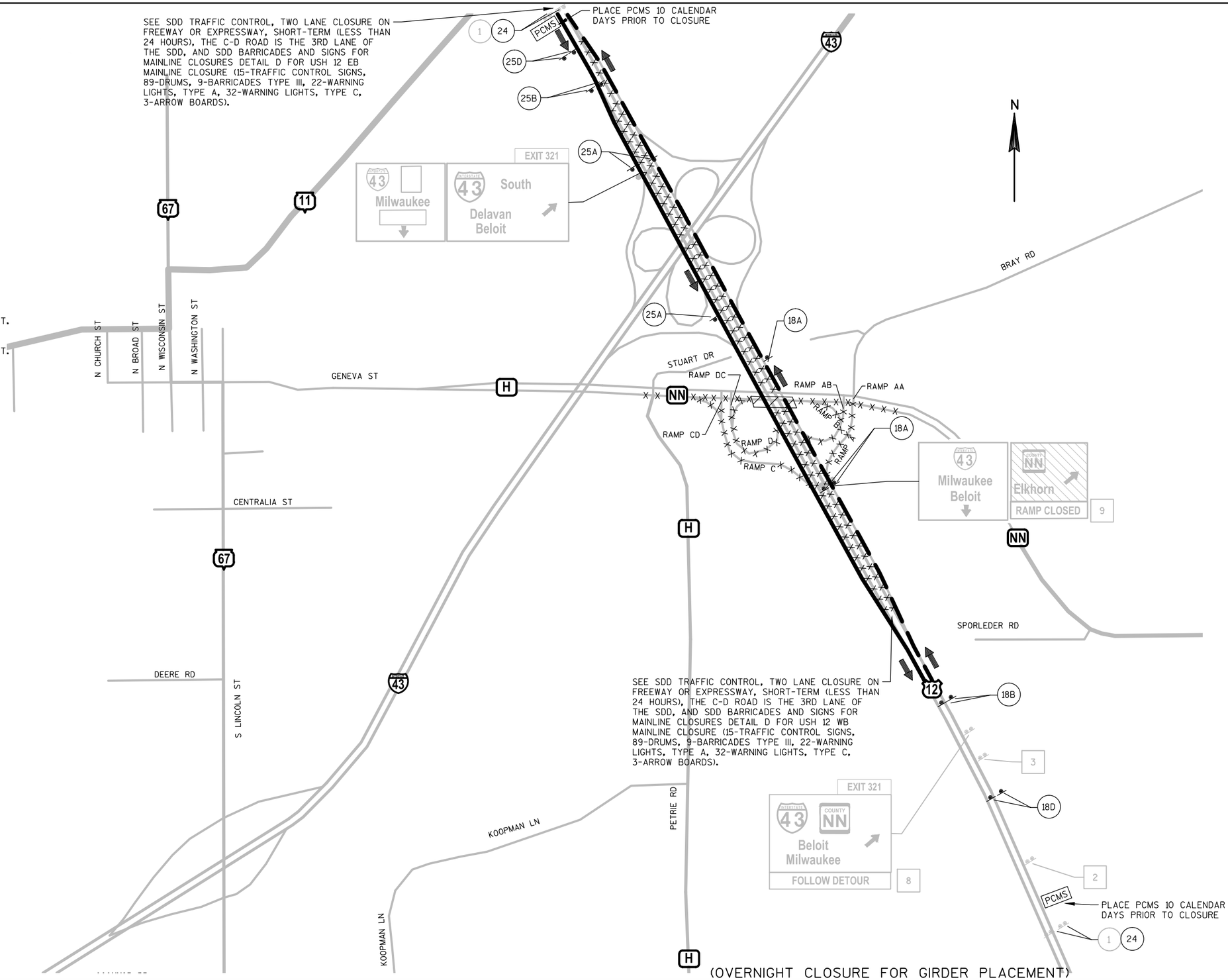
STAGE 2B SHORT TERM USH 12 EB NIGHT-TIME CLOSURE FOR CTH NN EB BRIDGE GIRDER PLACEMENT.

STAGE 2B SHORT TERM USH 12 WB NIGHT-TIME CLOSURE FOR CTH NN EB BRIDGE GIRDER PLACEMENT.

NOTE: DURING STAGE 2 CTH NN EB BRIDGE GIRDER PLACEMENT OVER USH 12, USH 12 EB AND WB TRAFFIC WILL BE DETOURED ONTO THE ADJACENT C-D ROAD. STAGGER THE USH 12 EB CLOSURE WITH THE USH 12 WB CLOSURE.

SEE SDD TRAFFIC CONTROL, TWO LANE CLOSURE ON FREEWAY OR EXPRESSWAY, SHORT-TERM (LESS THAN 24 HOURS), THE C-D ROAD IS THE 3RD LANE OF THE SDD, AND SDD BARRICADES AND SIGNS FOR MAINLINE CLOSURES DETAIL D FOR USH 12 EB MAINLINE CLOSURE (15-TRAFFIC CONTROL SIGNS, 89-DRUMS, 9-BARRICADES TYPE III, 22-WARNING LIGHTS, TYPE A, 32-WARNING LIGHTS, TYPE C, 3-ARROW BOARDS).

PLACE PCMS 10 CALENDAR DAYS PRIOR TO CLOSURE



SEE SDD TRAFFIC CONTROL, TWO LANE CLOSURE ON FREEWAY OR EXPRESSWAY, SHORT-TERM (LESS THAN 24 HOURS), THE C-D ROAD IS THE 3RD LANE OF THE SDD, AND SDD BARRICADES AND SIGNS FOR MAINLINE CLOSURES DETAIL D FOR USH 12 WB MAINLINE CLOSURE (15-TRAFFIC CONTROL SIGNS, 89-DRUMS, 9-BARRICADES TYPE III, 22-WARNING LIGHTS, TYPE A, 32-WARNING LIGHTS, TYPE C, 3-ARROW BOARDS).

(OVERNIGHT CLOSURE FOR GIRDER PLACEMENT)

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	DETOUR PLAN - STAGE 2B USH 12 WB & EB MAINLINE	SHEET 172	E

2

2

LEGEND

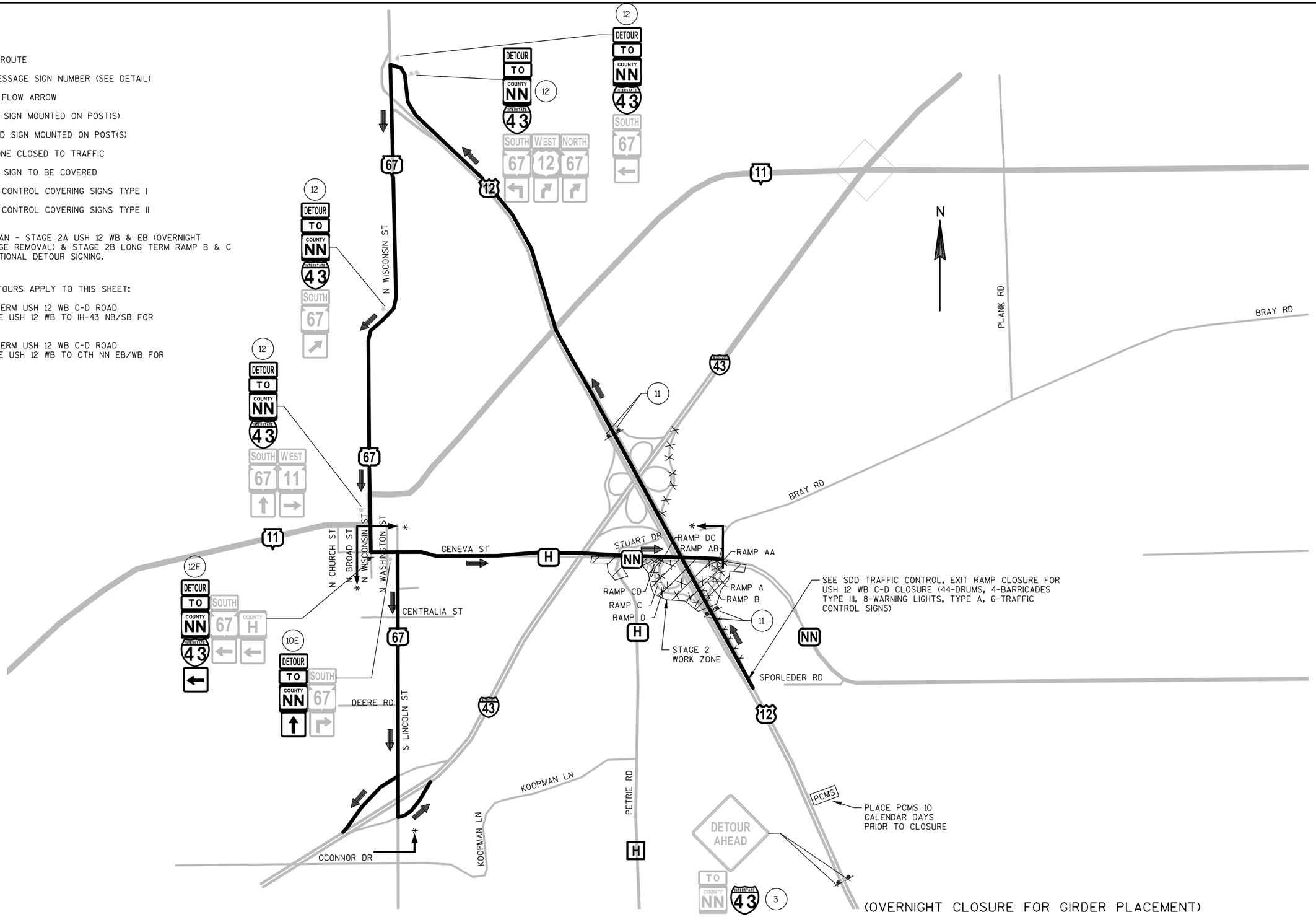
- XXXX CLOSURE
- DETOUR ROUTE
- X FIXED MESSAGE SIGN NUMBER (SEE DETAIL)
- TRAFFIC FLOW ARROW
- EXISTING SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON POST(S)
- WORK ZONE CLOSED TO TRAFFIC
- EXISTING SIGN TO BE COVERED
- TRAFFIC CONTROL COVERING SIGNS TYPE I
- TRAFFIC CONTROL COVERING SIGNS TYPE II

* SEE DETOUR PLAN - STAGE 2A USH 12 WB & EB (OVERNIGHT CLOSURE FOR BRIDGE REMOVAL) & STAGE 2B LONG TERM RAMP B & C CLOSURE FOR ADDITIONAL DETOUR SIGNING.

THE FOLLOWING DETOURS APPLY TO THIS SHEET:

STAGE 2B SHORT TERM USH 12 WB C-D ROAD
NIGHT-TIME CLOSURE USH 12 WB TO IH-43 NB/SB FOR
GIRDER PLACEMENT.

STAGE 2B SHORT TERM USH 12 WB C-D ROAD
NIGHT-TIME CLOSURE USH 12 WB TO CTH NN EB/WB FOR
GIRDER PLACEMENT.



PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	DETOUR PLAN - STAGE 2B USH 12 WB C-D ROAD	SHEET 173	E

2

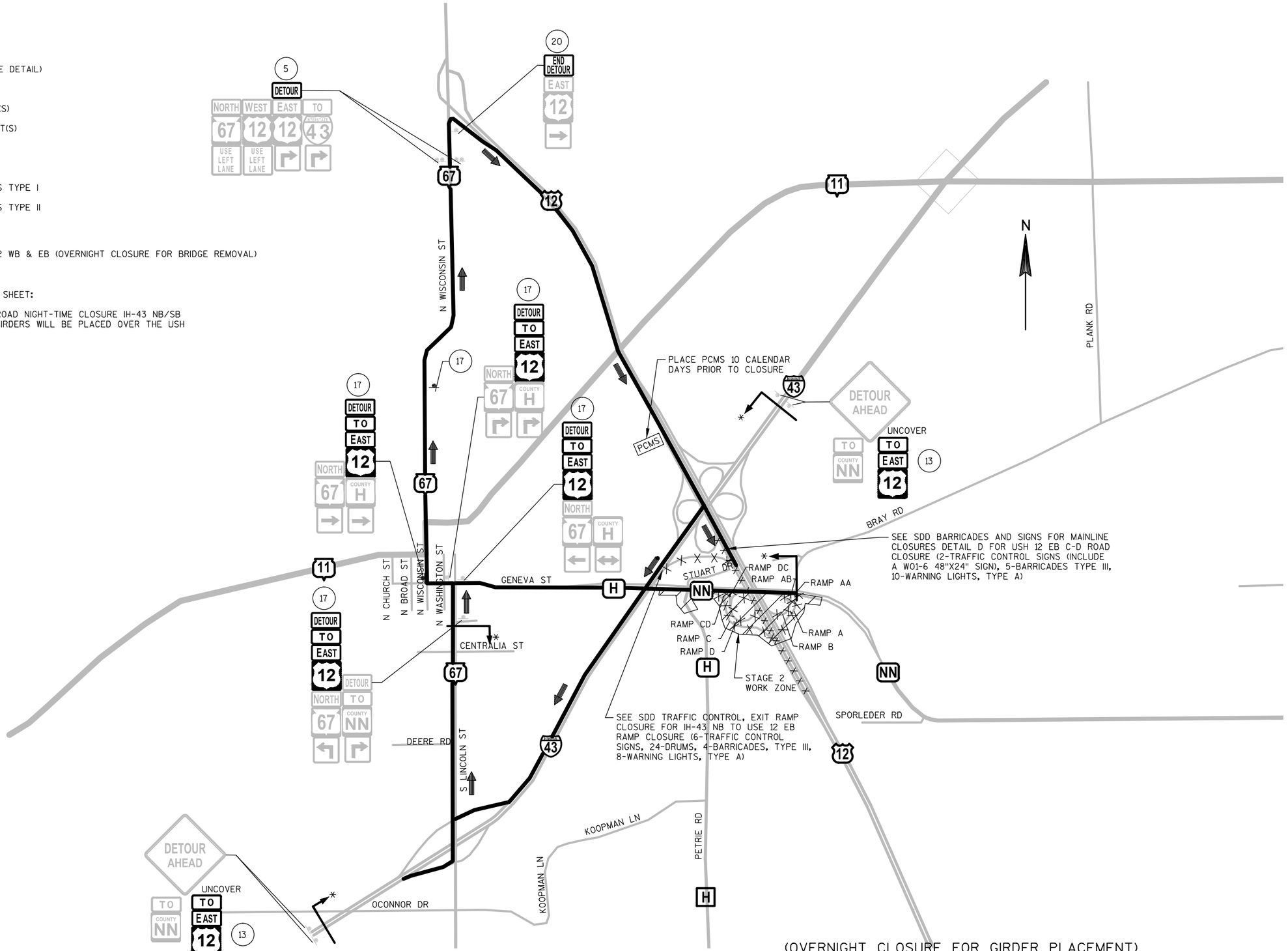
LEGEND

XXXX	CLOSURE
X	FIXED MESSAGE SIGN NUMBER (SEE DETAIL)
	TRAFFIC FLOW ARROW
/	EXISTING SIGN MOUNTED ON POST(S)
/	PROPOSED SIGN MOUNTED ON POST(S)
	WORK ZONE CLOSED TO TRAFFIC
	EXISTING SIGN TO BE COVERED
	TRAFFIC CONTROL COVERING SIGNS TYPE I
	TRAFFIC CONTROL COVERING SIGNS TYPE II

* SEE DETOUR PLAN - STAGE 2A USH 12 WB & EB (OVERNIGHT CLOSURE FOR BRIDGE REMOVAL) FOR ADDITIONAL DETOUR SIGNING.

THE FOLLOWING DETOURS APPLY TO THIS SHEET:

STAGE 2B SHORT TERM USH 12 EB C-D ROAD NIGHT-TIME CLOSURE IH-43 NB/SB TO USH 12 EB FOR GIRDER PLACEMENT. GIRDERS WILL BE PLACED OVER THE USH 12 EB C-D ROAD FOR CTH NN EB.



(OVERNIGHT CLOSURE FOR GIRDER PLACEMENT)

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	DETOUR PLAN-STAGE 2B USH 12 EB C-D ROAD	SHEET 174	E

LEGEND

XXXX CLOSURE

X FIXED MESSAGE SIGN NUMBER (SEE DETAIL)

TRAFFIC FLOW ARROW

EXISTING SIGN MOUNTED ON POST(S)

PROPOSED SIGN MOUNTED ON POST(S)

WORK ZONE CLOSED TO TRAFFIC

EXISTING SIGN TO BE COVERED

TRAFFIC CONTROL COVERING SIGNS TYPE I

TRAFFIC CONTROL COVERING SIGNS TYPE II

THE FOLLOWING DETOURS APPLY TO THIS SHEET:

STAGE 3 SHORT TERM USH 12 WB NIGHT-TIME CLOSURE FOR CTH NN WB BRIDGE REMOVAL.

STAGE 3 SHORT TERM USH 12 EB NIGHT-TIME CLOSURE FOR CTH NN WB BRIDGE REMOVAL.

SEE SDD TRAFFIC CONTROL, TWO LANE CLOSURE ON FREEWAY OR EXPRESSWAY, SHORT-TERM (LESS THAN 24 HOURS), THE C-D ROAD IS THE 3RD LANE OF THE SDD, AND SDD BARRICADES AND SIGNS FOR MAINLINE CLOSURES DETAIL D FOR USH 12 EB MAINLINE CLOSURE (15-TRAFFIC CONTROL SIGNS, 89-DRUMS, 9-BARRICADES, TYPE III, 22-WARNING LIGHTS, TYPE A, 32-WARNING LIGHTS, TYPE C, 3-ARROW BOARDS).

PLACE PCMS 10 CALENDAR DAYS PRIOR TO CLOSURE

SEE SDD TRAFFIC CONTROL, EXIT RAMP CLOSURE FOR IH-43 NB TO USE 12 EB RAMP CLOSURE (6-TRAFFIC CONTROL SIGNS, 24-DRUMS, 4-BARRICADES, TYPE III, 8-WARNING LIGHTS, TYPE A)

SEE SDD BARRICADES AND SIGNS FOR MAINLINE CLOSURES DETAIL D FOR C-D ROAD CLOSURE (2-TRAFFIC CONTROL SIGNS (INCLUDE A W01-6 48"X24" SIGN), 5-BARRICADES, TYPE III, 10-WARNING LIGHTS, TYPE A)

SEE SDD BARRICADES AND SIGNS FOR MAINLINE CLOSURES DETAIL D FOR C-D ROAD CLOSURE (2-TRAFFIC CONTROL SIGNS (INCLUDE A W01-6 48"X24" SIGN), 5-BARRICADES, TYPE III, 10-WARNING LIGHTS, TYPE A)

SEE SDD TRAFFIC CONTROL, TWO LANE CLOSURE ON FREEWAY OR EXPRESSWAY, SHORT-TERM (LESS THAN 24 HOURS), THE C-D ROAD IS THE 3RD LANE OF THE SDD, AND SDD BARRICADES AND SIGNS FOR MAINLINE CLOSURES DETAIL D FOR USH 12 WB MAINLINE CLOSURE (15-TRAFFIC CONTROL SIGNS, 89-DRUMS, 9-BARRICADES, TYPE III, 20-WARNING LIGHTS, TYPE A, 32-WARNING LIGHTS, TYPE C, 3-ARROW BOARDS).

PLACE PCMS 10 CALENDAR DAYS PRIOR TO CLOSURE

(OVERNIGHT CLOSURE FOR BRIDGE DEMOLITION)

N CHURCH ST · N BROAD ST · N WISCONSIN ST · N WASHINGTON ST · GENEVA ST · CENTRALIA ST · DEERE RD · S LINCOLN ST · OCONNOR DR · KOOPMAN LN · PETRIE RD · SPORLEDER RD · BRAY RD · STUART DR · RAMP AA · RAMP AB · RAMP BA · RAMP CD · RAMP DC · RAMP A · RAMP B · RAMP C · RAMP D

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	DETOUR PLAN - STAGE 3 USH 12 WB & EB	SHEET 175	E

2

LEGEND

XXXX CLOSURE

X FIXED MESSAGE SIGN NUMBER (SEE DETAIL)

TRAFFIC FLOW ARROW

EXISTING SIGN MOUNTED ON POST(S)

PROPOSED SIGN MOUNTED ON POST(S)

WORK ZONE CLOSED TO TRAFFIC

EXISTING SIGN TO BE COVERED

TRAFFIC CONTROL COVERING SIGNS TYPE I

TRAFFIC CONTROL COVERING SIGNS TYPE II

THE FOLLOWING DETOURS APPLY TO THIS SHEET:

STAGE 3 SHORT TERM USH 12 EB NIGHT-TIME CLOSURE FOR CTH NN WB BRIDGE GIRDER PLACEMENT.

STAGE 3 SHORT TERM USH 12 WB NIGHT-TIME CLOSURE FOR CTH NN WB BRIDGE GIRDER PLACEMENT.

NOTE: DURING STAGE 3 CTH NN WB BRIDGE GIRDER PLACEMENT OVER USH 12, USH 12 EB AND WB TRAFFIC WILL BE DETOURED ONTO THE ADJACENT C-D ROAD. STAGGER THE USH 12 EB CLOSURE WITH THE USH 12 WB CLOSURE.

SEE SDD TRAFFIC CONTROL, TWO LANE CLOSURE ON FREEWAY OR EXPRESSWAY, SHORT-TERM (LESS THAN 24 HOURS), THE C-D ROAD IS THE 3RD LANE OF THE SDD, AND SDD BARRICADES AND SIGNS FOR MAINLINE CLOSURES DETAIL D FOR USH 12 EB MAINLINE CLOSURE (15-TRAFFIC CONTROL SIGNS, 89-DRUMS, 9-BARRICADES, TYPE III, 20-WARNING LIGHTS, TYPE A, 32-WARNING LIGHTS, TYPE C, 3-ARROW BOARDS).

PLACE PCMS 10 CALENDAR DAYS PRIOR TO CLOSURE

26 PCMS 25A 25D 25B 23

EXIT 321

INTERSTATE 43 North NN Milwaukee Elkhorn

INTERSTATE 43 South Delavan Beloit

25A

N

BRAY RD

67 11 43 H NN 12

N CHURCH ST N BROAD ST N WISCONSIN ST N WASHINGTON ST

GENEVA ST

STUART DR

RAMP DC RAMP AB RAMP AA RAMP B RAMP CD RAMP D RAMP A RAMP C

18A

INTERSTATE 43 Milwaukee Beloit

COUNTY NN Elkhorn

CENTRALIA ST

DEERE RD

S LINCOLN ST

22

SPORLEDER RD

SEE SDD TRAFFIC CONTROL, TWO LANE CLOSURE ON FREEWAY OR EXPRESSWAY, SHORT-TERM (LESS THAN 24 HOURS), THE C-D ROAD IS THE 3RD LANE OF THE SDD, AND SDD BARRICADES AND SIGNS FOR MAINLINE CLOSURES DETAIL D FOR USH 12 WB MAINLINE CLOSURE (15-TRAFFIC CONTROL SIGNS, 89-DRUMS, 9-BARRICADES, TYPE III, 20-WARNING LIGHTS, TYPE A, 32-WARNING LIGHTS, TYPE C, 3-ARROW BOARDS).

18B

EXIT 321

INTERSTATE 43 COUNTY NN Beloit Milwaukee

18D

KOOPMAN LN

PETRIE RD

18A

PCMS

PLACE PCMS 10 CALENDAR DAYS PRIOR TO CLOSURE

26

(OVERNIGHT CLOSURE FOR GIRDER PLACEMENT)

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	DETOUR PLAN - STAGE 3 USH 12 WB & EB MAINLINE	SHEET 176	E

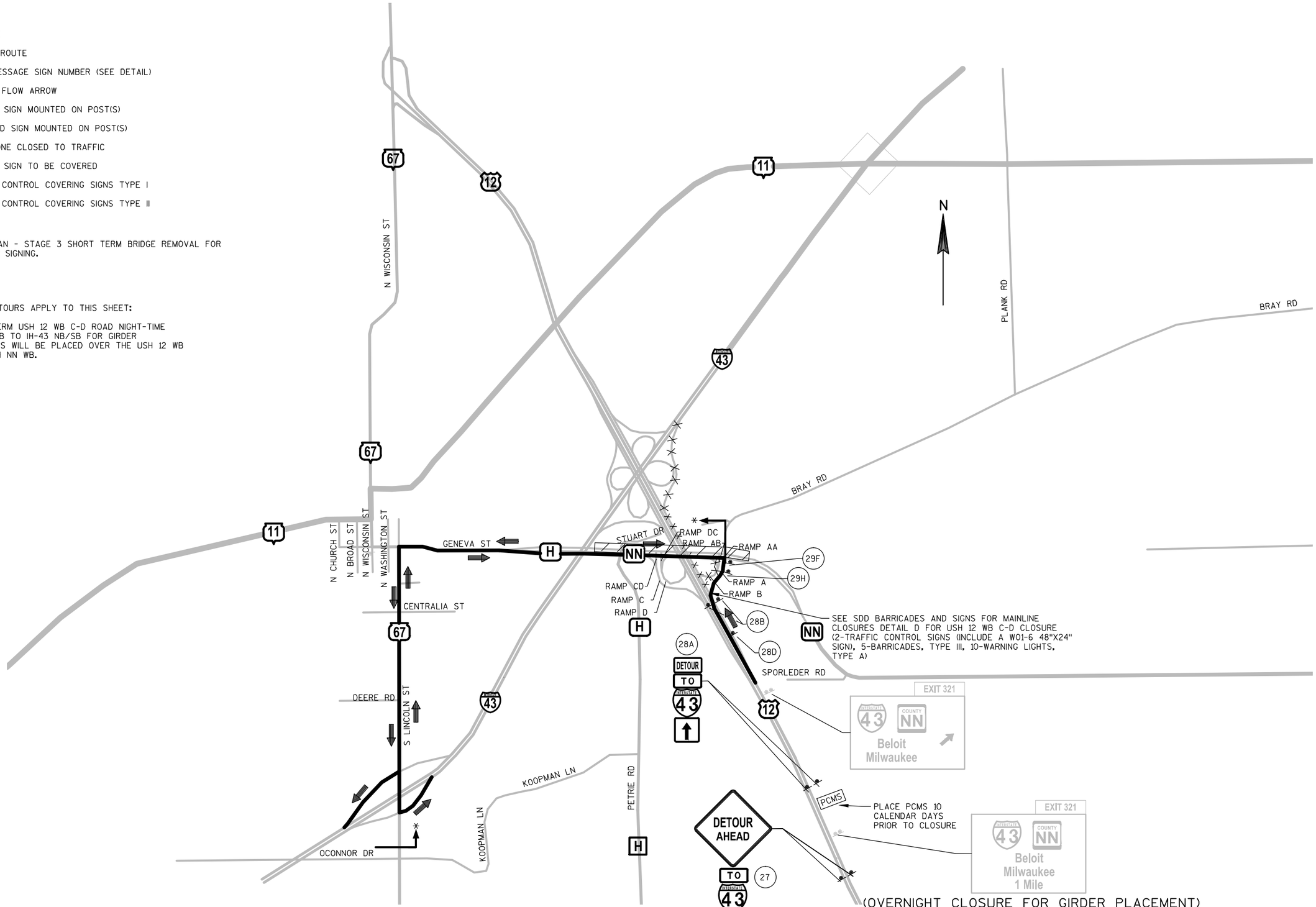
LEGEND

XXXX	CLOSURE
	DETOUR ROUTE
X	FIXED MESSAGE SIGN NUMBER (SEE DETAIL)
	TRAFFIC FLOW ARROW
	EXISTING SIGN MOUNTED ON POST(S)
	PROPOSED SIGN MOUNTED ON POST(S)
	WORK ZONE CLOSED TO TRAFFIC
	EXISTING SIGN TO BE COVERED
	TRAFFIC CONTROL COVERING SIGNS TYPE I
	TRAFFIC CONTROL COVERING SIGNS TYPE II

* SEE DETOUR PLAN - STAGE 3 SHORT TERM BRIDGE REMOVAL FOR ADDITIONAL DETOUR SIGNING.

THE FOLLOWING DETOURS APPLY TO THIS SHEET:

STAGE 3 SHORT TERM USH 12 WB C-D ROAD NIGHT-TIME CLOSURE USH 12 WB TO IH-43 NB/SB FOR GIRDER PLACEMENT. GIRDERS WILL BE PLACED OVER THE USH 12 WB C-D ROAD FOR CTH NN WB.



PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	DETOUR PLAN - STAGE 3 USH 12 WB C-D ROAD	SHEET 177 E

2

2

LEGEND

XXXX CLOSURE

DETOUR ROUTE

X FIXED MESSAGE SIGN NUMBER (SEE DETAIL)

TRAFFIC FLOW ARROW

EXISTING SIGN MOUNTED ON POST(S)

PROPOSED SIGN MOUNTED ON POST(S)

WORK ZONE CLOSED TO TRAFFIC

EXISTING SIGN TO BE COVERED

TRAFFIC CONTROL COVERING SIGNS TYPE I

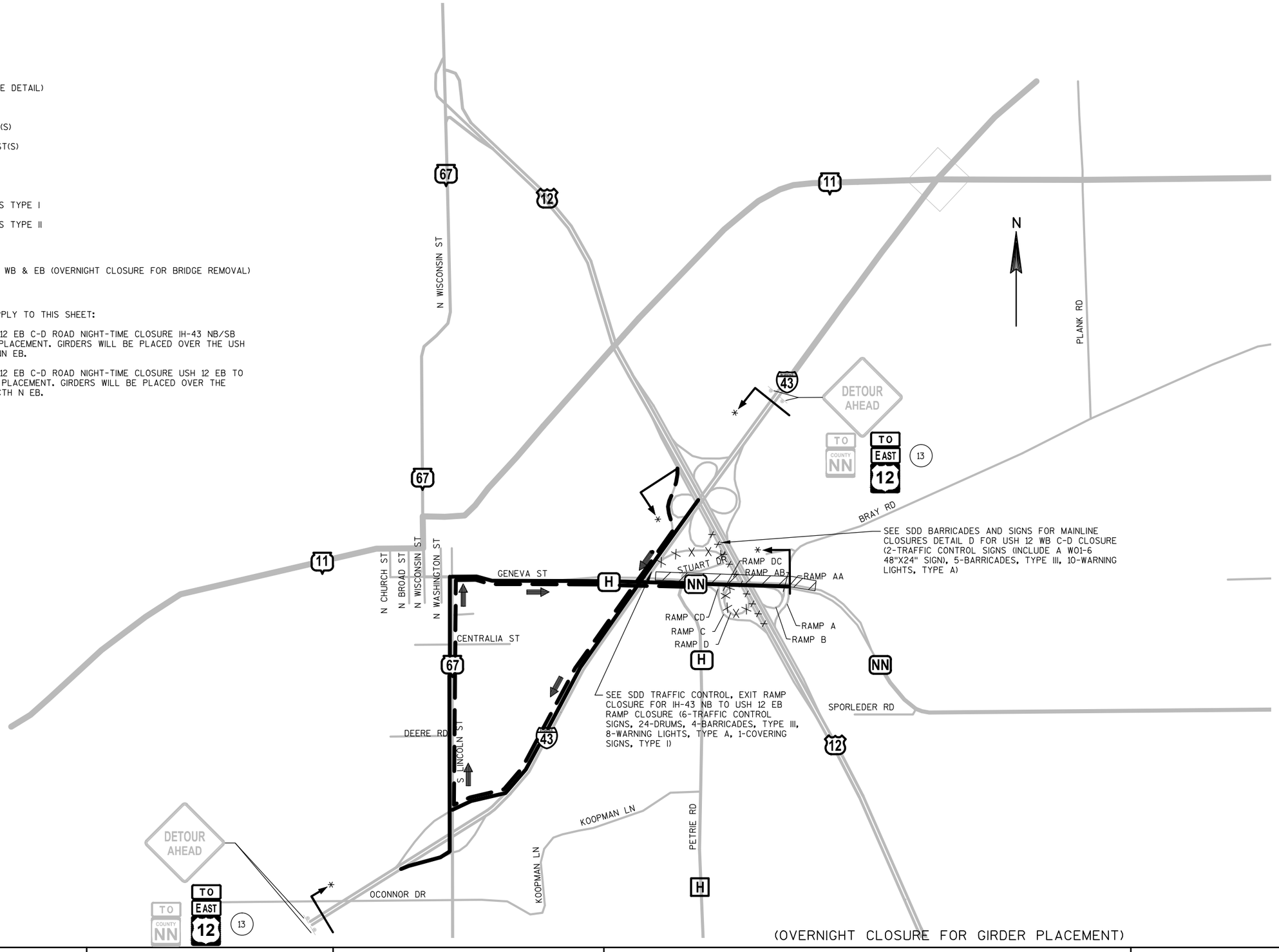
TRAFFIC CONTROL COVERING SIGNS TYPE II

* SEE DETOUR PLAN - STAGE 3 USH 12 WB & EB (OVERNIGHT CLOSURE FOR BRIDGE REMOVAL) FOR ADDITIONAL DETOUR SIGNING.

THE FOLLOWING DETOURS APPLY TO THIS SHEET:

STAGE 3 SHORT TERM USH 12 EB C-D ROAD NIGHT-TIME CLOSURE IH-43 NB/SB TO USH 12 EB FOR GIRDER PLACEMENT. GIRDERS WILL BE PLACED OVER THE USH 12 EB C-D ROAD FOR CTH NN EB.

STAGE 3 SHORT TERM USH 12 EB C-D ROAD NIGHT-TIME CLOSURE USH 12 EB TO CTH NN EB/WB FOR GIRDER PLACEMENT. GIRDERS WILL BE PLACED OVER THE USH 12 EB C-D ROAD FOR CTH N EB.



(OVERNIGHT CLOSURE FOR GIRDER PLACEMENT)

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	DETOUR PLAN - STAGE 3 USH 12 EB C-D ROAD	SHEET 178	E

2

1

TO
M4-5
36"X18"
COUNTY
NN
M1-5A
36"X36"

2

TO
M4-5
36"X18"
12
M1-4
36"X36"
INTERSTATE
43
M1-1
36"X36"

3
INTERSTATE
43
M1-1
36"X36"

4

COUNTY
H
M1-5A
24"X24"

5
DETOUR
M4-8
24" X 12"

6
DETOUR
M4-8
24" X 12"
SOUTH
M3-3
24"X12"

7
DETOUR
M4-8
24" X 12"
SOUTH
M3-3
24"X12"
COUNTY
H
M1-5A
24"X24"

8
DETOUR
M4-8
24" X 12"
NORTH
M3-1
24"X12"
COUNTY
H
M1-5A
24"X24"

9
DETOUR
M4-8
36" X 18"
TO
M4-5
36" X 18"
COUNTY
NN
M1-5A
36"X36"

10
DETOUR
M4-8
24" X 12"
TO
M4-5
24" X 12"
COUNTY
NN
M1-5A
24"X24"

11
DETOUR
M4-8
36" X 18"
TO
M4-5
36" X 18"
COUNTY
NN
M1-5A
36"X36"
INTERSTATE
43
M1-1
36"X36"

12
DETOUR
M4-8
24" X 12"
TO
M4-5
24" X 12"
COUNTY
NN
M1-5A
24"X24"
INTERSTATE
43
M1-1
24"X24"

13
TO
M4-5
36" X 18"
EAST
M3-2
36"X18"
12
M1-4
36"X36"

14
DETOUR
M4-8
36" X 18"
TO
M4-5
36" X 18"
12
M1-4
36"X36"

15
DETOUR
M4-8
24" X 12"
WEST
M3-4
24"X12"
12
M1-4
24"X24"

16
DETOUR
M4-8
36" X 18"
TO
M4-5
36" X 18"
EAST
M3-2
36"X18"
12
M1-4
36"X36"

17
DETOUR
M4-8
24" X 12"
TO
M4-5
24" X 12"
EAST
M3-2
24"X12"
12
M1-4
24"X24"

18
DETOUR
M4-8
36" X 18"
WEST
M3-4
36"X18"
12
M1-4
36"X36"

19
DETOUR
M4-8
24" X 12"
TO
M4-5
24" X 12"
INTERSTATE
43
M1-1
24"X24"
WEST
M3-4
24"X12"
12
M1-4
24"X24"

20
END
DETOUR
M4-8A
24" X 18"

21
END
DETOUR
M4-8A
24" X 18"
COUNTY
H
M1-5A
24"X24"

22
END
DETOUR
M4-8A
30" X 24"
EAST
M3-2
36"X18"
12
M1-4
36"X36"

23
END
DETOUR
M4-8A
30" X 24"
WEST
M3-4
36"X18"
12
M1-4
36"X36"

24
12
M1-4
36"X36"

25
DETOUR
M4-8
36" X 18"
EAST
M3-2
36"X18"
12
M1-4
36"X36"

26

TO
M4-5
36"X18"
12
M1-4
36"X36"

27

TO
M4-5
36"X18"
INTERSTATE
43
M1-1
36"X36"

28
DETOUR
M4-8
36" X 18"
TO
M4-5
36" X 18"
INTERSTATE
43
M1-1
36"X36"

29
DETOUR
M4-8
24" X 12"
TO
M4-5
24" X 12"
INTERSTATE
43
M1-1
24"X24"

A
M06-1
30"X30"

B
M06-2
30"X30"

C
M05-1L
30"X30"

D
M05-2R
30"X30"

E
M06-1
21"X21"

F
M06-1
21"X21"

G
M06-1
21"X21"

H
M05-1L
21"X21"

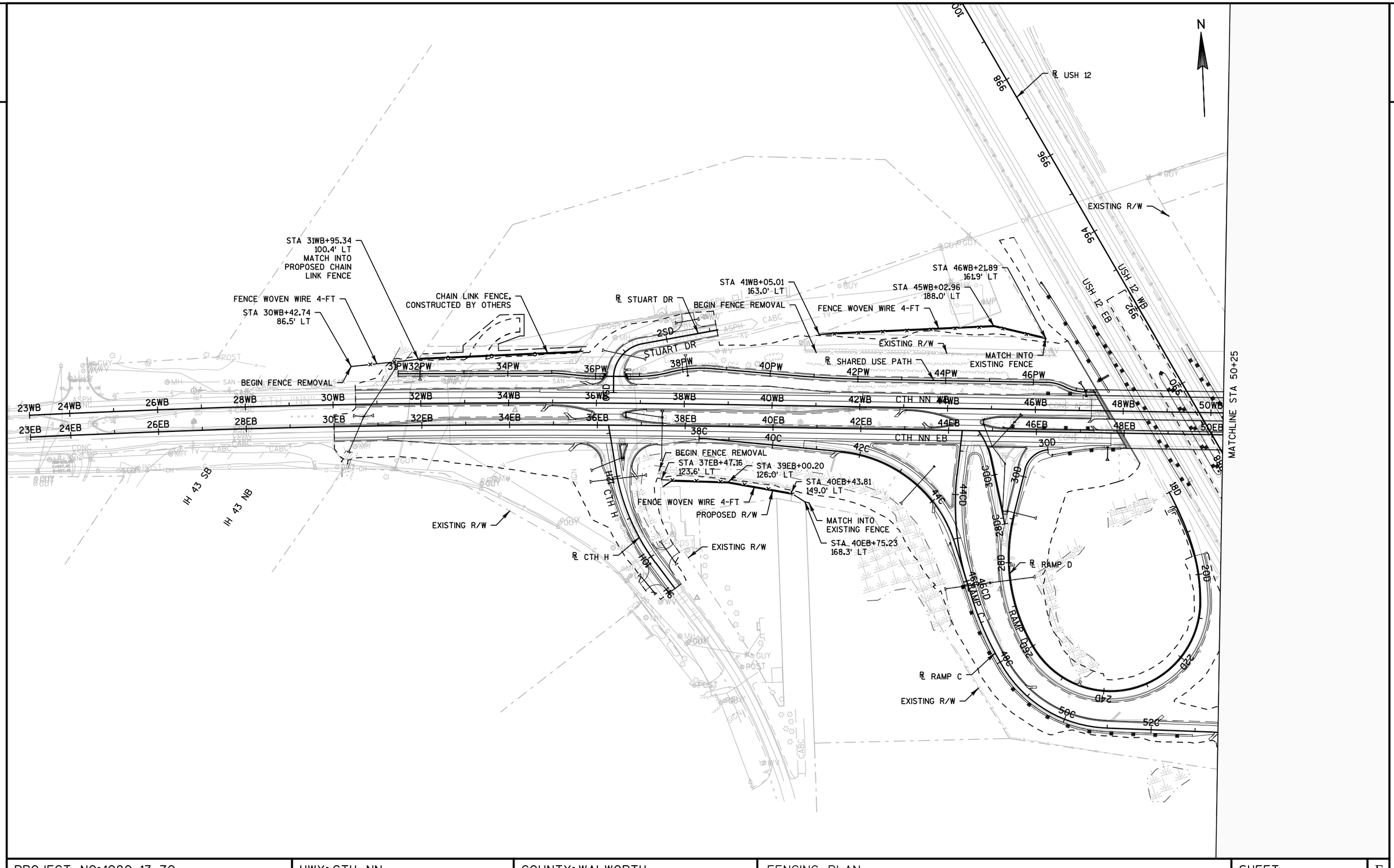
J
M05-1R
21"X21"

K
M06-2
21"X21"

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	DETOUR PLAN SIGNING	SHEET 179	E

FILE NAME : T:\1092703\CADD\CIVIL3D-NN INTERCHANGE\10801370\SHEETSPLAN\027000_DT.DWG PLOT DATE : 3/13/2015 3:41 PM PLOT BY : GUILLAMA, TINA R. PLOT NAME : ----------

2



PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	FENCING PLAN	SHEET 180	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\027101_FN.DWG
LAYOUT NAME - 01
PLOT DATE : 4/29/2015 12:27 PM
PLOT BY : CORY IHDE
PLOT NAME :
PLOT SCALE : 1 IN:200FT_XREF
WISDOT/CADDS SHEET 42

2

N

MATCH INTO EXISTING FENCE
BEGIN FENCE REMOVAL
STA 16NB+77.63
64.1' RT

℄ BRAY RD
16NB
STA 15NB+29.05
95.3' RT
PROPOSED R/W
14NB14SB
PROPOSED R/W
PROPOSED R/W
FENCE WOVEN WIRE 4-FT
STA 12NB+17.34
135.2' RT
MATCH INTO EXISTING FENCE
STA 65WB+77.84
157.2' LT
STA 66WB+31.38
156.1' LT
STA 67WB+02.99
158.0' LT
STA 62WB+47.80
171.0' LT
STA 67WB+91.00
128.0' LT
STA 65WB+45.92
128.0' LT
FENCE WOVEN WIRE 4-FT
STA 70WB+99.84
128.0' LT
STA 56WB+55.07
198.1' LT
PROPOSED R/W
FENCE WOVEN WIRE 4-FT
MATCH INTO EXISTING FENCE
BEGIN FENCE REMOVAL
STA 50WB+63.29
163.9' LT
EXISTING R/W
BRAY RD
12SB
℄ SHARED USE PATH EAST
℄ CTH NN WB
CTH NN
58PE
58WB
58EB
60PE
60WB
60EB
62PE
62WB
62EB
64PE
64WB
64EB
66PE
66WB
66EB
68PE
68WB
68EB
70PE
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72PE
72WB
72EB
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N

Y=367313.21
X=768243.61

CP 464
PI:958WB+64.01 USH 12
Y=361908.60
X=770659.30

R/L USH 12

13W+23.09 RETAINING WALL
Y=364795.75
X=768950.53

47WB+36.45 CTH NN WB, 42.26'LT
47PW+45.17 SHARED USE PATH WEST
Y=364749.43
X=767421.40

44EB+67.72 CTH NN WB
31DC+08.19 RAMP DC
Y=364599.49
X=768737.36

10W+00.00 RETAINING WALL
Y=364510.40
X=769102.06

50WB+92.83 CTH NN WB,42.26'LT
50PW+89.56 SHARED USE PATH EAST
Y=364749.43
X=767421.40

13E+46.79 RETAINING WALL
Y=364704.10
X=769321.82

3SR+18.43 STUART DR
Y=364854.55
X=768154.32

44EB+31.24 CTH NN EB
42DC+53.27 RAMP DC
Y=364601.65
X=768700.94

Y=364667.81
X=768322.24

31WB+49.16 CTH NN WB, 32.00'
31PW+50 SHARED USE PATH WEST
Y=364785.81
X=767422.47

36WB+38.72 CTH NN WB, 24.00'
0SR+00 STUART DR
Y=364721.81
X=767910.84

R/L STUART DR

R/L SHARED USE PATH WEST

23WB+08.14 CTH NN WB
Y=364726.96
X=766579.54

R/L NN WB

S87°12'31"E
N81°59'01"E
S87°40'03"E
S82°23'00"E
S86°36'18"E
S86°36'18"E 24.52'
S9°03'28"W
S82°02'18"E
N9°36'18"W
N27°58'11"W
N29°04'12"W
S42°00'08"W
N89°49'22"E
N89°49'22"E
N7°07'19"W
N34°22'44"W

CURVE SR-1
CURVE PW-1
CURVE PW-2
CURVE PW-3
CURVE PW-4
CURVE PW-5
CURVE PW-6
CURVE PW-7
CURVE WB-1
CURVE EB-1
CURVE H-1
CURVE C-1
CURVE C-2
CURVE C-3
CURVE C-4
CURVE C-5
CURVE D-1
CURVE D-2
CURVE D-3
CURVE D-4
CURVE D-5
CURVE PE-1
CURVE PE-2

25WB
25EB
30WB
30EB
35PW
35WB
35EB
40PW
40WB
40EB
40C
45PW
45WB
45EB
45CD
45C
50WB
50EB
20D
25D
30D
50C
55C

CP 465

R/L NN EB

23EB+08.14 CTH NN EB
Y=364676.96
X=766579.69

Y=364662.62
X=765664.99

36EB+25.16 CTH NN EB
13H+18.63, CTH H
Y=364648.45
X=767896.23

Y=364667.84
X=768306.29

R/L CTH H

9H+09.29 CTH H
Y=364269.69
X=768031.56

38WB+31.90 CTH NN EB, 28.00' RT
38C+31.90 RAMP C
Y=364609.19
X=768100.99

R/L RAMP C
R/L RAMP CD

28DC+85.86 RAMP CD
28D+85.86 RAMP C
Y=364250.95
X=768698.25

48C+15.09 RAMP C
Y=364057.39
X=768771.66

Y=362056.36
X=768288.11

46EB+26.89 CTH NN EB, 41.00' RT
30D+89.40 RAMP D
Y=364549.13
X=768893.83

N16°23'42"E

28DC+85.86 RAMP DC
28D+85.86 RAMP D
Y=364384.76
X=768788.53

R/L RAMP D

18D+00.00 RAMP D
Y=364440.90
X=769165.63

10E+00.00 RETAINING WALL
Y=364414.96
X=769509.86

PI:1057NB+08.04 USH 12
Y=370632.00
X=766097.82

R/L RAMP CD

BM 145

BM996
BM966
BM986
BM984
BM959

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	ALIGNMENT DETAIL	SHEET 182	E

R/L STUART DR EAST
PT
2SRE
OSRE
PI
CURVE NB-2
15NB
PI
R/L BRAY RD NB
PC
N5°24'31"E
250.37'
N7°50'55"E
R/L BRAY RD SB
PT
CURVE NB-1
PT
PI
CURVE SB-1
PI
PC
10SB
BM01
55AB
55SE
55WB
S89°36'18"E
55EB
S89°36'18"E
S89°36'18"E
55B
CURVE B-1
PCC
CURVE B-2
PC
S82°01'52"E
R/L RAMP B
PI
52EB+42.22 CTH NN EB, 28.00'RT
52B+42.22 RAMP B
Y=364525.67
X=769508.85
10E
60B
PT
CURVE B-4
65B
PI
PCC
CURVE B-3
PI
PCC
986WB
PI: 65B+18.75
Y=364339.81
X=769500.86
984WB
R/L USH 12
PI
20D
55C
CP 467
PI
CURVE AA-2
PI
57EB+95.19 CTH NN EB
987A+12.06 RAMP A
Y=364520.88
X=770062.50
58EB+89.79 CTH NN EB, RT 41.00'
987AA+04.28 RAMP AA
Y=364474.35
X=770154.50
57EB+51.54 CTH NN EB
55AB+83.44 RAMP AB
Y=364523.46
X=770018.93
PI
S5°11'56"E
N3°35'58"E
N3°39'32"E
R/L RAMP AB
PI
PT
985AA
R/L RAMP AA
CURVE A-3
PI
CURVE AA-1
58B+43.25 RAMP B, 17.00' LT
55AB+83.44 RAMP AB
Y=364264.72
X=769995.39
PC
PT
980A
CURVE A-2
PI
R/L RAMP A
PC
CURVE A-1
PI
PI: 976A+50.48
Y=363533.45
X=769912.36
R/L SHARED USE PATH EAST
65PE
CURVE PE-5
70PE
R/L NN WB
65WB
CURVE WB-2
70WB
65EB
CURVE EB-2
70EB
CURVE PE-3
CURVE PE-4
60PE
PCC
60WB
PRC
PI
PC
60EB
R/L NN EB
PT
72EB+84.40 CTH NN EB, 123.00' LT
74PE+02.22 SHARED USE PATH EAST
Y=363938.6025
X=771435.3806
PT
CP 466
72EB+84.4 CTH NN EB, 50.00' LT
73WB+33.91 CTH NN WB
Y=363898.38
X=771374.46
PCC
75EB
80EB
85EB
T 3 N R 17 E 32
Y=367309.10
X=770901.78
T 2 N R 17 E 4 5
Y=364664.58
X=773612.55
T 2 N R 17 E 32
Y=364664.01
X=770971.09
T 2 N R 17 E 5
Y=3644664.04
X=770959.71
T 2 N R 17 E 5
Y=362025.51
X=770964.62
N

2

CURVE EB-1
PI STA = 31EB+17.69
Y = 364679.46
X = 767389.24
DELTA = 3°34'20"
D = 0°15'00"
T = 714.67'
L = 1428.88'
R = 22918.31'
PC STA = 24+03.02
PT STA = 38+31.90
BACK: N89° 49' 22"E
AHEAD: S86° 36' 18"E

CURVE WB-1
PI STA = 31WB+19.25
Y = 364729.47
X = 767390.64
DELTA = 3°34'20"
D = 0°14'58"
T = 716.23'
L = 1432.00'
R = 22968.31'
PC STA = 24+03.02
PT STA = 38+35.01
BACK: N89° 49' 22"E
AHEAD: S86° 36' 18"E

CURVE PW-1
PI STA = 35PW+14.62
Y = 364770.97
X = 767786.79
DELTA = 5°35'04"
D = 19°05'55"
T = 14.63'
L = 29.24'
R = 300.00'
PC STA = 34+99.99
PT STA = 35+29.23
BACK: S87° 40' 03"E
AHEAD: S82° 04' 59"E

CURVE PW-2
PI STA = 35PW+81.96
Y = 364761.69
X = 767853.51
DELTA = 5°07'32"
D = 19°05'55"
T = 13.43'
L = 26.84'
R = 300.00'
PC STA = 35+68.54
PT STA = 35+95.37
BACK: S82° 04' 59"E
AHEAD: S87° 12' 31"E

CURVE PW-3
PI STA = 37PW+31.09
Y = 364754.43
X = 768002.48
DELTA = 14°44'39"
D = 19°05'55"
T = 38.81'
L = 77.20'
R = 300.00'
PC STA = 36+92.28
PT STA = 37+69.48
BACK: S87° 12' 31"E
AHEAD: N78° 02' 49"E

CURVE PW-4
PI STA = 38PW+20.25
Y = 364772.98
X = 768090.13
DELTA = 19°12'44"
D = 19°05'55"
T = 50.77'
L = 100.60'
R = 300.00'
PC STA = 37+69.48
PT STA = 38+70.07
BACK: N78° 02' 49"E
AHEAD: S82° 44' 26"E

CURVE PW-5
PI STA = 41PW+43.71
Y = 364731.99
X = 768411.94
DELTA = 3°51'52"
D = 2°51'53"
T = 67.47'
L = 134.89'
R = 2000.00'
PC STA = 40+76.24
PT STA = 42+11.13
BACK: S82° 44' 26"E
AHEAD: S86° 36' 18"E

CURVE PW-6
PI STA = 46PW+52.15
Y = 364701.88
X = 768919.54
DELTA = 26°19'17"
D = 57°17'45"
T = 23.38'
L = 45.94'
R = 100.00'
PC STA = 46+28.77
PT STA = 46+74.71
BACK: S86° 36' 18"E
AHEAD: S60° 17' 01"E

CURVE PW-7
PI STA = 46PW+98.09
Y = 364678.70
X = 768960.16
DELTA = 26°19'17"
D = 57°17'45"
T = 23.38'
L = 45.94'
R = 100.00'
PC STA = 46+74.71
PT STA = 47+20.65
BACK: S60° 17' 01"E
AHEAD: S86° 36' 18"E

CURVE PE-1
PI STA = 51PE+50.62
Y = 364651.14
X = 769424.69
DELTA = 26°19'17"
D = 57°17'45"
T = 23.38'
L = 45.94'
R = 100.00'
PC STA = 51+27.24
PT STA = 51+73.18
BACK: S86° 36' 18"E
AHEAD: N67° 04' 25"E

CURVE PE-2
PI STA = 51PE+96.56
Y = 364669.36
X = 769467.76
DELTA = 26°19'17"
D = 57°17'45"
T = 23.38'
L = 45.94'
R = 100.00'
PC STA = 51+73.18
PT STA = 52+19.12
BACK: N67° 04' 25"E
AHEAD: S86° 36' 18"E

CURVE H-1
PI STA = 10H+99.96
Y = 364427.05
X = 767923.89
DELTA = 27°15'25"
D = 11°48'49"
T = 117.59'
L = 230.73'
R = 485.00'
PC STA = 9+82.37
PT STA = 12+13.09
BACK: N34° 22' 44"W
AHEAD: N7° 07' 19"W

CURVE SR-1
PI STA = 0SR+99.29
Y = 364820.97
X = 767915.87
DELTA = 79°04'38"
D = 71°37'22"
T = 66.03'
L = 110.41'
R = 80.00'
PC STA = 0+33.25
PT STA = 1+43.66
BACK: N2° 54' 19"E
AHEAD: N81° 58' 57"E

CURVE C-1
PI STA = 43C+56.77
Y = 364537.55
X = 768620.91
DELTA = 66°56'12"
D = 19°05'55"
T = 198.33'
L = 350.48'
R = 300.00'
PC STA = 41+58.44
PT STA = 45+08.92
BACK: S82° 02' 18"E
AHEAD: S15° 06' 06"E

CURVE C-2
PI STA = 49C+69.38
Y = 363922.21
X = 768846.05
DELTA = 56°36'41"
D = 20°00'00"
T = 154.29'
L = 283.06'
R = 286.48'
PC STA = 48+15.09
PT STA = 50+98.15
BACK: S28° 49' 32"E
AHEAD: S85° 26' 13"E

CURVE C-3
PI STA = 54C+60.68
Y = 363881.10
X = 769361.24
DELTA = 39°36'37"
D = 16°51'06"
T = 122.44'
L = 235.05'
R = 340.00'
PC STA = 53+38.24
PT STA = 55+73.29
BACK: S85° 26' 13"E
AHEAD: S45° 49' 36"E

CURVE C-4
PI STA = 56C+87.48
Y = 363716.20
X = 769530.96
DELTA = 17°00'12"
D = 7°30'00"
T = 114.19'
L = 226.71'
R = 763.94'
PC STA = 55+73.29
PT STA = 58+00.00
BACK: S45° 49' 36"E
AHEAD: S28° 49' 24"E

CURVE CD-1
PI STA = 44CD+82.86
Y = 364374.92
X = 768664.80
DELTA = 24°09'34"
D = 9°32'57"
T = 128.41'
L = 253.00'
R = 600.00'
PC STA = 43+54.45
PT STA = 46+07.45
BACK: S9° 03' 28"W
AHEAD: S15° 06' 06"E

CURVE D-1
PI STA = 18D+59.69
Y = 364387.25
X = 769191.81
DELTA = 8°56'10"
D = 7°30'00"
T = 59.69'
L = 119.15'
R = 763.94'
PC STA = 18+00.00
PT STA = 19+19.15
BACK: S26° 00' 23"E
AHEAD: S17° 04' 14"E

CURVE D-2
PI STA = 19D+93.36
Y = 364259.23
X = 769231.11
DELTA = 20°33'25"
D = 13°59'59"
T = 74.22'
L = 146.84'
R = 409.26'
PC STA = 19+19.15
PT STA = 20+65.98
BACK: S17° 04' 14"E
AHEAD: S3° 29' 11"W

CURVE D-3
PI STA = 27D+81.91
Y = 363470.55
X = 769183.06
DELTA = 148°02'34"
D = 27°56'57"
T = 715.93'
L = 529.69'
R = 205.00'
PC STA = 20+65.98
PT STA = 25+95.67
BACK: S3° 29' 11"W
AHEAD: N28° 28' 15"W

CURVE D-4
PI STA = 27D+60.81
Y = 364245.06
X = 768763.05
DELTA = 44°51'57"
D = 14°19'26"
T = 165.14'
L = 313.22'
R = 400.00'
PC STA = 25+95.67
PT STA = 29+08.89
BACK: N28° 28' 15"W
AHEAD: N16° 23' 42"E

CURVE D-5
PI STA = 30D+58.07
Y = 364546.60
X = 768851.77
DELTA = 70°09'16"
D = 95°29'35"
T = 42.13'
L = 73.47'
R = 60.00'
PC STA = 30+15.94
PT STA = 30+89.40
BACK: N16° 23' 42"E
AHEAD: N86° 32' 58"E

CURVE DC-1
PI STA = 30DC+73.73
Y = 364570.00
X = 768757.18
DELTA = 24°18'19"
D = 34°43'29"
T = 35.53'
L = 69.99'
R = 165.00'
PC STA = 30+38.20
PT STA = 31+08.19
BACK: N9° 36' 18"W
AHEAD: N33° 54' 37"W

CURVE EB-2
PI STA = 66EB+72.00
Y = 364468.95
X = 770937.77
DELTA = 53°10'00"
D = 4°00'00"
T = 716.77'
L = 1329.16'
R = 1432.39'
PC STA = 59+55.23
PT STA = 72+84.40
BACK: S86° 36' 18"E
AHEAD: S33° 26' 18"E

CURVE WB-2
PI STA = 67WB+00.14
Y = 364517.38
X = 770965.71
DELTA = 53°10'00"
D = 3°51'54"
T = 741.79'
L = 1375.56'
R = 1482.39'
PC STA = 59+58.35
PT STA = 73+33.91
BACK: S86° 36' 18"E
AHEAD: S33° 26' 18"E

CURVE PE-3
PI STA = 58PE+37.71
Y = 364631.34
X = 770108.60
DELTA = 11°12'03"
D = 25°27'53"
T = 22.06'
L = 43.99'
R = 225.00'
PC STA = 58+15.65
PT STA = 58+59.63
BACK: S86° 36' 18"E
AHEAD: N82° 11' 39"E

CURVE PE-4
PI STA = 58PE+89.05
Y = 364638.33
X = 770159.61
DELTA = 11°12'03"
D = 19°05'55"
T = 29.42'
L = 58.65'
R = 300.00'
PC STA = 58+59.63
PT STA = 59+18.28
BACK: N82° 11' 39"E
AHEAD: S86° 36' 18"E

CURVE PE-5
PI STA = 67PE+37.24
Y = 364588.09
X = 771006.50
DELTA = 53°10'00"
D = 3°41'01"
T = 778.32'
L = 1443.30'
R = 1555.39'
PC STA = 59+58.93
PT STA = 74+02.22
BACK: S86° 36' 18"E
AHEAD: S33° 26' 18"E

CURVE A-1
PI STA = 977A+25.73
Y = 363600.77
X = 769878.74
DELTA = 11°15'06"
D = 7°32'56"
T = 74.77'
L = 149.05'
R = 759.00'
PC STA = 976+50.96
PT STA = 978+00.01
BACK: N26° 31' 54"W
AHEAD: N15° 16' 48"W

CURVE A-2
PI STA = 980A+09.43
Y = 363874.90
X = 769803.85
DELTA = 54°11'46"
D = 13°59'59"
T = 209.41'
L = 387.12'
R = 409.26'
PC STA = 978+00.01
PT STA = 981+87.13
BACK: N15° 16' 48"W
AHEAD: N38° 54' 58"E

CURVE A-3
PI STA = 984A+19.72
Y = 364218.80
X = 770081.50
DELTA = 42°30'56"
D = 20°00'00"
T = 111.45'
L = 212.58'
R = 286.48'
PC STA = 983+08.27
PT STA = 985+20.84
BACK: N38° 54' 58"E
AHEAD: N3° 35' 58"W

CURVE AA-1
PI STA = 984AA+16.44
Y = 364212.09
X = 770084.30
DELTA = 38°38'41"
D = 24°22'52"
T = 82.40'
L = 158.50'
R = 235.00'
PC STA = 983+34.04
PT STA = 984+92.54
BACK: N42° 18' 13"E
AHEAD: N3° 39' 32"E

CURVE AA-2
PI STA = 986AA+70.38
Y = 364471.79
X = 770100.90
DELTA = 83°36'57"
D = 95°29'35"
T = 53.66'
L = 87.56'
R = 60.00'
PC STA = 986+16.72
PT STA = 987+04.28
BACK: N3° 39' 32"E
AHEAD: N87° 16' 29"E

CURVE B-1
PI STA = 55B+55.28
Y = 364482.27
X = 769818.88
DELTA = 20°34'25"
D = 14°41'28"
T = 70.78'
L = 140.04'
R = 390.00'
PC STA = 54+84.49
PT STA = 56+24.53
BACK: S82° 01' 52"E
AHEAD: S61° 27' 27"E

CURVE B-2
PI STA = 200B+59.01
Y = 357551.52
X = 782561.23
DELTA = 178°30'27"
D = 30°28'35"
T = 14434.48'
L = 585.72'
R = 188.00'
PC STA = 56+24.53
PT STA = 62+10.26
BACK: S61° 27' 27"E
AHEAD: N62° 57' 00"W

CURVE B-3
PI STA = 62B+88.98
Y = 364151.66
X = 769635.63
DELTA = 23°24'26"
D = 15°04'40"
T = 78.72'
L = 155.24'
R = 380.00'
PC STA = 62+10.26
PT STA = 63+65.50
BACK: N62° 57' 00"W
AHEAD: N39° 32' 34"W

CURVE B-4
PI STA = 64B+32.13
Y = 364263.75
X = 769543.09
DELTA = 10°30'06"
D = 7°54'10"
T = 66.63'
L = 132.89'
R = 725.00'
PC STA = 63+65.50
PT STA = 64+98.38
BACK: N39° 32' 34"W
AHEAD: N29° 02' 28"W

CURVE SB-1
PI STA = 11SB+31.02
Y = 364703.45
X = 770035.11
DELTA = 8°52'57"
D = 4°41'19"
T = 94.91'
L = 189.45'
R = 1222.00'
PC STA = 10+36.11
PT STA = 12+25.55
BACK: N1° 02' 02"W
AHEAD: N7° 50' 55"E

CURVE NB-1
PI STA = 11NB+04.71
Y = 364676.54
X = 770045.55
DELTA = 6°28'45"
D = 4°43'39"
T = 68.60'
L = 137.06'
R = 1212.00'
PC STA = 10+36.11
PT STA = 11+73.16
BACK: N1° 04' 14"W
AHEAD: N5° 24' 31"E

CURVE NB-2
PI STA = 16NB+36.15
Y = 365205.77
X = 770095.66
DELTA = 47°20'40"
D = 11°48'49"
T = 212.62'
L = 400.76'
R = 485.00'
PC STA = 14+23.53
PT STA = 18+24.30
BACK: N5° 24' 31"E
AHEAD: N52° 45' 11"E

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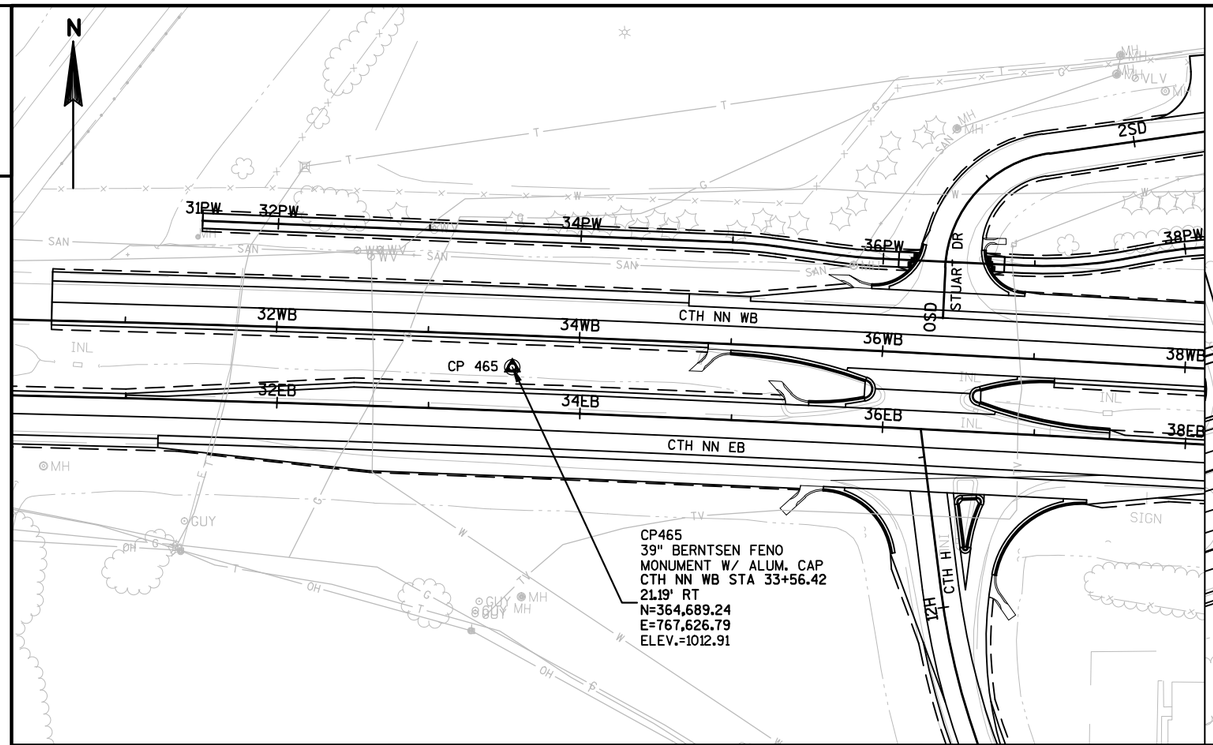
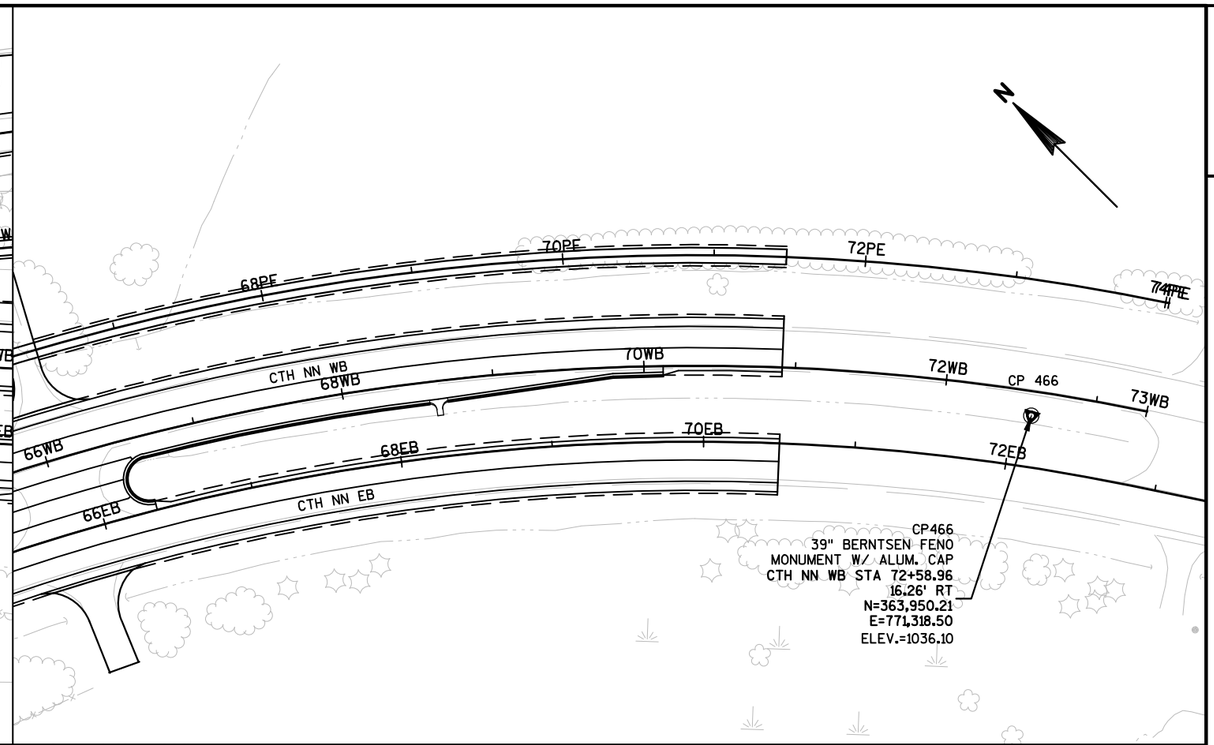
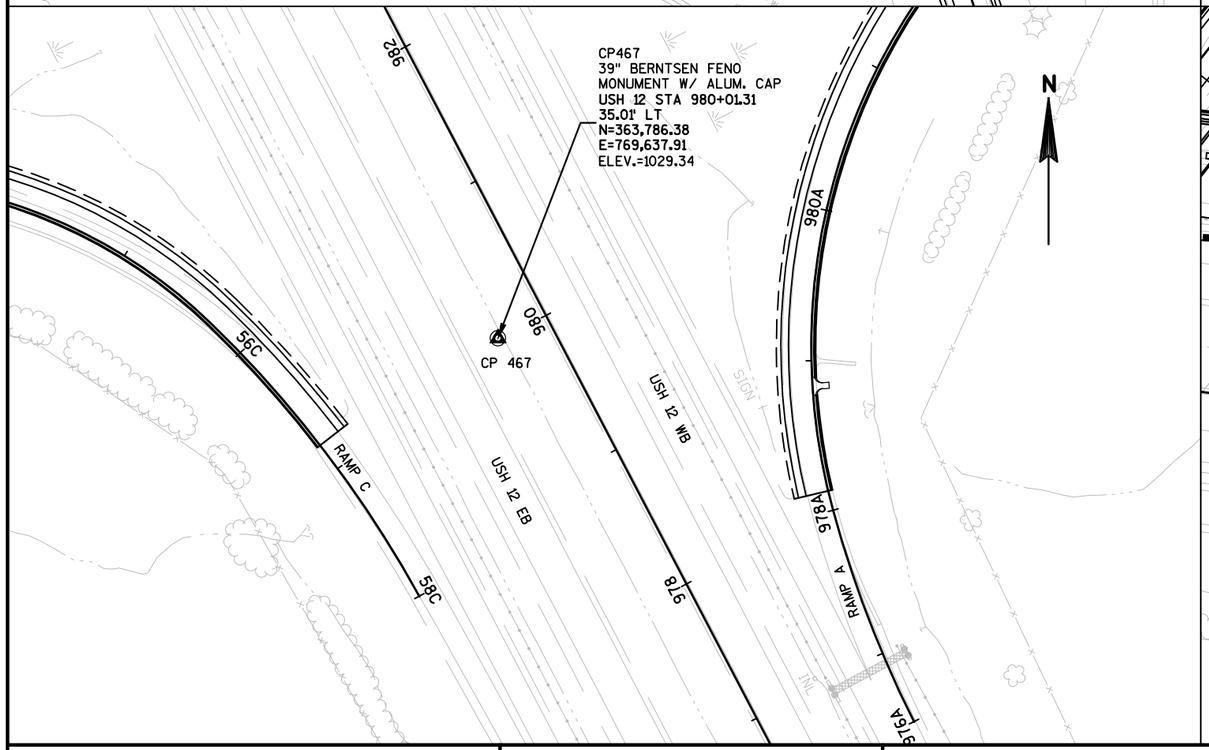
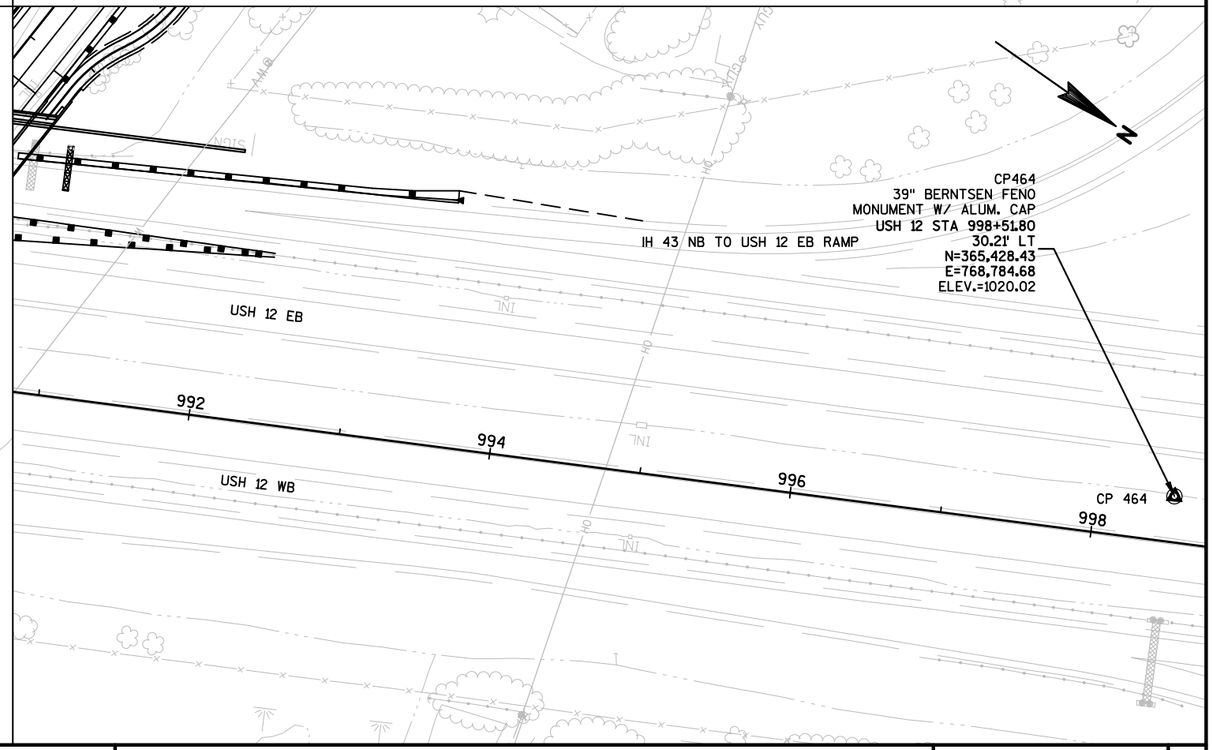
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	ALIGNMENT DETAIL	SHEET 184	E









PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	ALIGNMENT DETAIL - SURVEY CONTROL	SHEET 185	E

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CTH NN EB					
		RATE			
SUPERELEVATION DATA	STATION	INSIDE SHLDR	LANE 1	LANE 2	OUTSIDE SHLDR
END NORMAL SHOULDER	57EB+96	-4.00%	2.00%	-2.00%	-4.00%
END CROWN RUN OFF	58EB+50	---	0.00%	-2.00%	---
REVERSE CROWN	59EB+03	---	-2.00%	-2.00%	---
BEGIN FULL SUPER	60EB+08	6.00%	-6.00%	-6.00%	-6.00%
END FULL SUPER (MATCH EXISTING)	70EB+50	6.00%	-6.00%	-6.00%	-6.00%

CTH NN WB					
		RATE			
SUPERELEVATION DATA	STATION	OUTSIDE SHLDR	LANE 2	LANE 1	INSIDE SHLDR
END NORMAL SHOULDER	57WB+18	-2.00%	-2.00%	2.00%	-2.00%
END CROWN RUN OFF	57WB+98	0.00%	0.00%	2.00%	-0.60%
REVERSE CROWN	58WB+78	2.00%	2.00%	2.00%	-2.00%
BEGIN FULL SUPER	60WB+38	6.00%	6.00%	6.00%	-6.00%
END FULL SUPER (MATCH EXISTING)	71WB+92	6.00%	6.00%	6.00%	-6.00%

CTH H					
		RATE			
SUPERELEVATION DATA	STATION	LT OUTSIDE SHLDR	LT LANE (SB)	RT LANE (NB)	RT OUTSIDE SHLDR
END FULL SUPER (MATCH EXISTING)	9H+09	-4.00%	-2.00%	2.00%	2.00%
ZERO SUPER	9H+38	0.00%	0.00%	0.00%	0.00%
BEGIN FULL SUPER	10H+24	6.00%	6.00%	-6.00%	-6.00%
END FULL SUPER	11H+72	6.00%	6.00%	-6.00%	-6.00%
ZERO SUPER	12H+25	0.00%	0.00%	0.00%	0.00%
END CROWN RUN OFF	13H+02	0.00%	0.00%	2.44%	---
REVERSE CROWN	12H+54	---	-3.38%	3.38%	---

STUART DRIVE					
		RATE			
SUPERELEVATION DATA	STATION	LT OUTSIDE SHLDR	LT LANE (SB)	RT LANE (NB)	RT OUTSIDE SHLDR
REVERSE CROWN	0SD+17	---	-2.98%	2.98%	---
ZERO SUPER	0SD+41	0.00%	0.00%	0.00%	0.00%
BEGIN FULL SUPER	0SD+65	3.00%	3.00%	-3.00%	-4.00%
END FULL SUPER	1SD+15	3.00%	3.00%	-3.00%	-4.00%
REVERSE CROWN	2SD+43	-4.00%	2.00%	-2.00%	-4.00%
BEGIN FULL SUPER (MATCH EXISTING)	3SD+17	-4.00%	0.30%	-0.30%	-6.00%

BRAY ROAD					
		RATE			
SUPERELEVATION DATA	STATION	LT OUTSIDE SHLDR	LT LANE (SB)	RT LANE (NB)	RT OUTSIDE SHLDR
REVERSE CROWN	10NB+46	0.46%	0.46%	-0.46%	0.46%
BEGIN FULL SUPER	11NB+09	3.20%	3.20%	-3.20%	-4.00%
END FULL SUPER	12NB+01	3.20%	3.20%	-3.20%	-4.00%
REMOVE ADVERSE CROWN	12NB+29	2.00%	2.00%	-2.00%	-4.00%
MAINTAIN REVERSE CROWN	13NB+82	2.00%	2.00%	-2.00%	-4.00%
BEGIN FULL SUPER	14NB+65	6.00%	6.00%	-6.00%	-6.00%
END FULL SUPER (MATCH EXISTING)	18NB+24	6.00%	6.00%	-6.00%	-6.00%

RAMP A				
		RATE		
SUPERELEVATION DATA	STATION	LT INSIDE SHLDR	RAMP A	RT OUTSIDE SHLDR
BEGIN FULL SUPER (MATCH EXISTING)	978A+13	5.90%	5.90%	---
BEGIN FULL SUPER	978A+24	5.30%	5.30%	
END FULL SUPER	981A+55	5.30%	5.30%	
ZERO SUPER	982A+51	0.00%	0.00%	0.00%
BEGIN FULL SUPER	983A+58	---	-5.90%	---
END FULL SUPER	984A+76	---	-5.90%	---
REVERSE CROWN	985A+65	-4.00%	-2.00%	2.00%
ZERO SUPER	986A+09	0.00%	0.00%	0.00%
REVERSE CROWN	986A+35	---	1.14%	---

RAMP B				
		RATE		
SUPERELEVATION DATA	STATION	LT INSIDE SHLDR	RAMP B	RT OUTSIDE SHLDR
REVERSE CROWN	54B+67	3.28%	3.28%	-4.00%
BEGIN FULL SUPER	55B+23	6.00%	6.00%	-6.00%
END FULL SUPER	56B+18	6.00%	6.00%	---
BEGIN FULL SUPER	56B+23	5.80%	5.80%	---
END FULL SUPER	62B+11	5.80%	5.80%	-5.80%
BEGIN FULL SUPER	62B+16	6.00%	6.00%	-6.00%

RAMP C				
		RATE		
SUPERELEVATION DATA	STATION	LT INSIDE SHLDR	RAMP C	RT OUTSIDE SHLDR
REVERSE CROWN	41C+16	---	2.00%	-4.00%
BEGIN FULL SUPER	41C+93	5.80%	5.80%	---
END FULL SUPER	44C+74	5.80%	5.80%	---
ZERO SUPER	45C+87	0.00%	0.00%	0.00%
BEGIN FULL SUPER	46C+69	-4.20%	-4.20%	4.20%
END FULL SUPER	47C+90	---	-4.20%	4.20%
BEGIN FULL SUPER	48C+51	---	-5.90%	5.90%
END FULL SUPER	50C+62	-5.90%	-5.90%	5.90%
ZERO SUPER	52C+21	0.00%	0.00%	0.00%
BEGIN FULL SUPER	53C+83	6.00%	6.00%	---
END FULL SUPER	55C+29	6.00%	6.00%	---
BEGIN FULL SUPER	56C+17	5.90%	5.90%	---
END FULL SUPER (MATCH EXISTING)	57C+56	5.90%	5.90%	---

RAMP D				
		RATE		
SUPERELEVATION DATA	STATION	LT INSIDE SHLDR	RAMP D	RT OUTSIDE SHLDR
BEGIN FULL SUPER (MATCH EXISTING)	19D+57	5.87%	5.87%	---
END FULL SUPER	20D+28	5.87%	5.87%	---
BEGIN FULL SUPER	20D+98	5.65%	5.65%	---
END FULL SUPER	25D+63	5.65%	5.65%	---
BEGIN FULL SUPER	26D+34	5.90%	5.90%	---
END FULL SUPER	28D+71	---	5.90%	---
REVERSE CROWN	29D+69	---	2.00%	-4.00%

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DATE 29JUN15 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1080-13-70 QUANTITY
0010	201.0105	Clearing	STA	74.000	74.000
0020	201.0205	Grubbing	STA	74.000	74.000
0030	203.0100	Removing Small Pipe Culverts	EACH	20.000	20.000
0040	203.0200	Removing Old Structure (station) 01. 47+91.25	LS	1.000	1.000
0050	203.0200	Removing Old Structure (station) 02. 47+64.33	LS	1.000	1.000
0060	203.0200	Removing Old Structure (station) 04. 990+76.73	LS	1.000	1.000
0070	203.0210.S	Abatement of Asbestos Containing Material (structure) 01. B-64-0045	LS	1.000	1.000
0080	203.0210.S	Abatement of Asbestos Containing Material (structure) 02. B-64-0062	LS	1.000	1.000
0090	203.0225.S	Debris Containment (structure) 01. B-64-0045	LS	1.000	1.000
0100	203.0225.S	Debris Containment (structure) 02. B-64-0062	LS	1.000	1.000
0110	204.0100	Removing Pavement	SY	28,100.000	28,100.000
0120	204.0115	Removing Asphaltic Surface Butt Joints	SY	620.000	620.000
0130	204.0125	Removing Asphaltic Surface Milling	TON	1,175.000	1,175.000
0140	204.0150	Removing Curb & Gutter	LF	230.000	230.000
0150	204.0165	Removing Guardrail	LF	1,420.000	1,420.000
0160	204.0170	Removing Fence	LF	3,960.000	3,960.000
0170	204.0180	Removing Delineators and Markers	EACH	80.000	80.000
0180	204.0190	Removing Surface Drains	EACH	13.000	13.000
0190	204.0195	Removing Concrete Bases	EACH	2.000	2.000
0200	204.0220	Removing Inlets	EACH	22.000	22.000
0210	204.0245	Removing Storm Sewer (size) 01. 12-INCH	LF	171.000	171.000
0220	204.0245	Removing Storm Sewer (size) 02. 18-INCH	LF	929.000	929.000
0230	204.0245	Removing Storm Sewer (size) 03. 24-INCH	LF	11.000	11.000
0240	204.0245	Removing Storm Sewer (size) 04. 30-INCH	LF	329.000	329.000
0250	204.0245	Removing Storm Sewer (size) 05. 36-INCH	LF	477.000	477.000
0260	205.0100	Excavation Common	CY	40,295.000	40,295.000
0270	206.1000	Excavation for Structures Bridges (structure) 01. B-64-0045	LS	1.000	1.000
0280	206.1000	Excavation for Structures Bridges (structure) 02. B-64-0186	LS	1.000	1.000
0290	208.0100	Borrow	CY	295,441.000	295,441.000
0300	209.0100	Backfill Granular	CY	1,460.000	1,460.000
0310	210.0100	Backfill Structure	CY	953.000	953.000
0320	211.0400	Prepare Foundation for Asphaltic Shoulders	STA	88.000	88.000
0330	213.0100	Finishing Roadway (project) 01. 1080-13-70	EACH	1.000	1.000
0340	305.0110	Base Aggregate Dense 3/4-Inch	TON	7,750.000	7,750.000
0350	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	41,970.000	41,970.000
0360	305.0410	Aggregate Detours	TON	100.000	100.000
0370	311.0110	Breaker Run	TON	50,600.000	50,600.000
0380	415.0095	Concrete Pavement 9 1/2-Inch	SY	31,335.000	31,335.000
0390	415.0410	Concrete Pavement Approach Slab	SY	345.000	345.000
0400	416.0610	Drilled Tie Bars	EACH	72.000	72.000
0410	416.0620	Drilled Dowel Bars	EACH	32.000	32.000
0420	416.1010	Concrete Surface Drains	CY	84.000	84.000
0430	440.4410.S	Incentive IRI Ride	DOL	6,206.000	6,206.000
0440	455.0140	Asphaltic Material PG64-28P	TON	425.000	425.000
0450	455.0605	Tack Coat	GAL	1,008.000	1,008.000

DATE 29JUN15 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1080-13-70 QUANTITY
0460	460.1100	HMA Pavement Type E-0.3	TON	1,865.000	1,865.000
0470	460.1101	HMA Pavement Type E-1	TON	710.000	710.000
0480	460.1103	HMA Pavement Type E-3	TON	4,815.000	4,815.000
0490	460.1110	HMA Pavement Type E-10	TON	320.000	320.000
0500	460.2000	Incentive Density HMA Pavement	DOL	4,840.000	4,840.000
0510	460.4000	HMA Cold Weather Paving	TON	540.000	540.000
0520	465.0105	Asphaltic Surface	TON	650.000	650.000
0530	465.0115	Asphaltic Surface Detours	TON	100.000	100.000
0540	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	100.000	100.000
0550	465.0125	Asphaltic Surface Temporary	TON	847.000	847.000
0560	465.0310	Asphaltic Curb	LF	47.000	47.000
0570	465.0315	Asphaltic Flumes	SY	9.000	9.000
0580	465.0400	Asphaltic Shoulder Rumble Strips	LF	3,200.000	3,200.000
0590	501.1000.S	Ice Hot Weather Concreting	LB	18,098.000	18,098.000
0600	502.0100	Concrete Masonry Bridges	CY	2,413.000	2,413.000
0610	502.3100	Expansion Device (structure) 01. B-64-0185	LS	1.000	1.000
0620	502.3100	Expansion Device (structure) 02. B-64-0186	LS	1.000	1.000
0630	502.3200	Protective Surface Treatment	SY	4,175.000	4,175.000
0640	502.3210.S	Pigmented Protective Surface Treatment	SY	901.000	901.000
0650	503.0146	Prestressed Girder Type I 45W-Inch	LF	4,212.000	4,212.000
0660	504.0900	Concrete Masonry Endwalls	CY	16.000	16.000
0670	505.0405	Bar Steel Reinforcement HS Bridges	LB	46,400.000	46,400.000
0680	505.0605	Bar Steel Reinforcement HS Coated	LB	494,800.000	494,800.000
0690	506.2605	Bearing Pads Elastomeric Non-Laminated	EACH	72.000	72.000
0700	506.2610	Bearing Pads Elastomeric Laminated	EACH	24.000	24.000
0710	506.4000	Steel Diaphragms (structure) 01. B-64-0185	EACH	32.000	32.000
0720	506.4000	Steel Diaphragms (structure) 02. B-64-0186	EACH	48.000	48.000
0730	509.5100.S	Polymer Overlay	SY	1,244.000	1,244.000
0740	511.1200	Temporary Shoring (structure) 01. B-64-0185	SF	1,240.000	1,240.000
0750	512.1000	Piling Steel Sheet Temporary	SF	205.000	205.000
0760	513.2050.S	Railing Pipe	LF	671.000	671.000
0770	513.4090	Railing Tubular Screening (structure) 02. B-64-0186	LS	1.000	1.000
0780	516.0500	Rubberized Membrane Waterproofing	SY	73.000	73.000
0790	520.4018	Culvert Pipe Temporary 18-Inch	LF	16.000	16.000
0800	520.4024	Culvert Pipe Temporary 24-Inch	LF	7.000	7.000
0810	520.8000	Concrete Collars for Pipe	EACH	2.000	2.000
0820	521.1012	Apron Endwalls for Culvert Pipe Steel 12-Inch	EACH	2.000	2.000
0830	521.1018	Apron Endwalls for Culvert Pipe Steel 18-Inch	EACH	1.000	1.000
0840	521.1024	Apron Endwalls for Culvert Pipe Steel 24-Inch	EACH	1.000	1.000
0850	522.0124	Culvert Pipe Reinforced Concrete Class III 24-Inch	LF	271.000	271.000
0860	522.0130	Culvert Pipe Reinforced Concrete Class III 30-Inch	LF	90.000	90.000

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DATE 29JUN15 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1080-13-70 QUANTITY
0870	522.0136	Culvert Pipe Reinforced Concrete Class III 36-Inch	LF	126.000	126.000
0880	522.0315	Culvert Pipe Reinforced Concrete Class IV 15-Inch	LF	20.000	20.000
0890	522.0318	Culvert Pipe Reinforced Concrete Class IV 18-Inch	LF	109.000	109.000
0900	522.0324	Culvert Pipe Reinforced Concrete Class IV 24-Inch	LF	43.000	43.000
0910	522.0330	Culvert Pipe Reinforced Concrete Class IV 30-Inch	LF	358.000	358.000
0920	522.0336	Culvert Pipe Reinforced Concrete Class IV 36-Inch	LF	321.000	321.000
0930	522.0348	Culvert Pipe Reinforced Concrete Class IV 48-Inch	LF	119.000	119.000
0940	522.1015	Apron Endwalls for Culvert Pipe Reinforced Concrete 15-Inch	EACH	2.000	2.000
0950	522.1018	Apron Endwalls for Culvert Pipe Reinforced Concrete 18-Inch	EACH	19.000	19.000
0960	522.1024	Apron Endwalls for Culvert Pipe Reinforced Concrete 24-Inch	EACH	12.000	12.000
0970	522.1030	Apron Endwalls for Culvert Pipe Reinforced Concrete 30-Inch	EACH	4.000	4.000
0980	522.1036	Apron Endwalls for Culvert Pipe Reinforced Concrete 36-Inch	EACH	8.000	8.000
0990	522.1048	Apron Endwalls for Culvert Pipe Reinforced Concrete 48-Inch	EACH	2.000	2.000
1000	523.0529	Apron Endwalls for Culvert Pipe Reinforced Concrete Horizontal Elliptical 29x45-Inch	EACH	2.000	2.000
1010	524.0148	Culvert Pipe Salvaged 48-Inch	LF	64.000	64.000
1020	550.1120	Piling Steel HP 12-Inch X 53 Lb	LF	29,240.000	29,240.000
1030	601.0411	Concrete Curb & Gutter 30-Inch Type D	LF	4,391.000	4,391.000
1040	601.0551	Concrete Curb & Gutter 4-Inch Sloped 36-Inch Type A	LF	3,089.000	3,089.000
1050	601.0553	Concrete Curb & Gutter 4-Inch Sloped 36-Inch Type D	LF	493.000	493.000
1060	601.0600	Concrete Curb Pedestrian	LF	22.000	22.000
1070	602.0410	Concrete Sidewalk 5-Inch	SF	2,270.000	2,270.000
1080	602.0505	Curb Ramp Detectable Warning Field Yellow	SF	90.000	90.000
1090	603.8000	Concrete Barrier Temporary Precast Delivered	LF	8,430.000	8,430.000
1100	603.8125	Concrete Barrier Temporary Precast Installed	LF	8,430.000	8,430.000
1110	604.0400	Slope Paving Concrete	SY	132.000	132.000
1120	606.0100	Riprap Light	CY	435.000	435.000
1130	608.0318	Storm Sewer Pipe Reinforced Concrete Class III 18-Inch	LF	1,436.000	1,436.000
1140	608.0324	Storm Sewer Pipe Reinforced Concrete Class III 24-Inch	LF	445.000	445.000
1150	608.0330	Storm Sewer Pipe Reinforced Concrete Class III 30-Inch	LF	320.000	320.000
1160	608.0336	Storm Sewer Pipe Reinforced Concrete Class III 36-Inch	LF	196.000	196.000
1170	608.0418	Storm Sewer Pipe Reinforced Concrete Class IV 18-Inch	LF	110.000	110.000

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DATE 29JUN15 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1080-13-70 QUANTITY
1180	610.0429	Storm Sewer Pipe Reinforced Concrete Horizontal Elliptical Class HE-IV 29x45-Inch	LF	217.000	217.000
1190	611.0606	Inlet Covers Type B	EACH	13.000	13.000
1200	611.0612	Inlet Covers Type C	EACH	6.000	6.000
1210	611.0630	Inlet Covers Type HM-GJ	EACH	20.000	20.000
1220	611.0642	Inlet Covers Type MS	EACH	5.000	5.000
1230	611.0651	Inlet Covers Type S	EACH	3.000	3.000
1240	611.2005	Manholes 5-FT Diameter	EACH	6.000	6.000
1250	611.2006	Manholes 6-FT Diameter	EACH	1.000	1.000
1260	611.2033	Manholes 3x3-FT	EACH	3.000	3.000
1270	611.2044	Manholes 4x4-FT	EACH	1.000	1.000
1280	611.2066	Manholes 6x6-FT	EACH	1.000	1.000
1290	611.3004	Inlets 4-FT Diameter	EACH	17.000	17.000
1300	611.3220	Inlets 2x2-FT	EACH	3.000	3.000
1310	611.3230	Inlets 2x3-FT	EACH	11.000	11.000
1320	611.3901	Inlets Median 1 Grate	EACH	3.000	3.000
1330	611.3902	Inlets Median 2 Grate	EACH	1.000	1.000
1340	611.8120.S	Cover Plates Temporary	EACH	5.000	5.000
1350	611.9800.S	Pipe Grates 01. 12-INCH	EACH	1.000	1.000
1360	611.9800.S	Pipe Grates 02. 15-INCH	EACH	2.000	2.000
1370	611.9800.S	Pipe Grates 03. 18-INCH	EACH	7.000	7.000
1380	611.9800.S	Pipe Grates 04. 24-INCH	EACH	4.000	4.000
1390	611.9800.S	Pipe Grates 05. 30-INCH	EACH	4.000	4.000
1400	611.9800.S	Pipe Grates 06. 36-INCH	EACH	1.000	1.000
1410	611.9800.S	Pipe Grates 07. 29x45-INCH	EACH	1.000	1.000
1420	612.0106	Pipe Underdrain 6-Inch	LF	1,237.000	1,237.000
1430	612.0206	Pipe Underdrain Unperforated 6-Inch	LF	180.000	180.000
1440	612.0212	Pipe Underdrain Unperforated 12-Inch	LF	54.000	54.000
1450	612.0406	Pipe Underdrain Wrapped 6-Inch	LF	1,183.000	1,183.000
1460	612.0806	Apron Endwalls for Underdrain Reinforced Concrete 6-Inch	EACH	2.000	2.000
1470	612.0902.S	Insulation Board Polystyrene (inch) 01. 2-INCH	SY	334.000	334.000
1480	614.0115	Anchorages for Steel Plate Beam Guard Type 2	EACH	2.000	2.000
1490	614.0150	Anchor Assemblies for Steel Plate Beam Guard	EACH	8.000	8.000
1500	614.0220	Steel Thrie Beam Bullnose Terminal	EACH	3.000	3.000
1510	614.0230	Steel Thrie Beam	LF	354.000	354.000
1520	614.0305	Steel Plate Beam Guard Class A	LF	1,939.000	1,939.000
1530	614.0360	Steel Plate Beam Guard Temporary	LF	612.000	612.000
1540	614.0396	Guardrail Mow Strip Asphalt	SY	948.000	948.000
1550	614.0905	Crash Cushions Temporary	EACH	18.000	18.000
1560	614.2300	MGS Guardrail 3	LF	1,948.000	1,948.000
1570	614.2500	MGS Thrie Beam Transition	LF	301.000	301.000
1580	614.2610	MGS Guardrail Terminal EAT	EACH	6.000	6.000
1590	614.2620	MGS Guardrail Terminal Type 2	EACH	10.000	10.000
1600	616.0100	Fence Woven Wire (height) 01. 4-FOOT	LF	4,250.000	4,250.000
1610	618.0100	Maintenance And Repair of Haul Roads (project) 01. 1080-13-70	EACH	1.000	1.000
1620	619.1000	Mobilization	EACH	1.000	1.000
1630	620.0300	Concrete Median Sloped Nose	SF	860.000	860.000
1640	623.0200	Dust Control Surface Treatment	SY	85,600.000	85,600.000
1650	624.0100	Water	MGAL	860.000	860.000

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DATE 29JUN15 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1080-13-70 QUANTITY
1660	625.0500	Salvaged Topsoil	SY	142,500.000	142,500.000
1670	627.0200	Mulching	SY	79,000.000	79,000.000
1680	628.1104	Erosion Bales	EACH	820.000	820.000
1690	628.1504	Silt Fence	LF	10,550.000	10,550.000
1700	628.1520	Silt Fence Maintenance	LF	10,550.000	10,550.000
1710	628.1905	Mobilizations Erosion Control	EACH	15.000	15.000
1720	628.1910	Mobilizations Emergency Erosion Control	EACH	8.000	8.000
1730	628.2004	Erosion Mat Class I Type B	SY	115,000.000	115,000.000
1740	628.2021	Erosion Mat Class II Type A	SY	275.000	275.000
1750	628.2023	Erosion Mat Class II Type B	SY	1,350.000	1,350.000
1760	628.6510	Soil Stabilizer Type B	ACRE	5.000	5.000
1770	628.7005	Inlet Protection Type A	EACH	60.000	60.000
1780	628.7010	Inlet Protection Type B	EACH	10.000	10.000
1790	628.7015	Inlet Protection Type C	EACH	35.000	35.000
1800	628.7020	Inlet Protection Type D	EACH	25.000	25.000
1810	628.7504	Temporary Ditch Checks	LF	1,820.000	1,820.000
1820	628.7555	Culvert Pipe Checks	EACH	35.000	35.000
1830	628.7560	Tracking Pads	EACH	8.000	8.000
1840	628.7570	Rock Bags	EACH	900.000	900.000
1850	629.0210	Fertilizer Type B	CWT	125.000	125.000
1860	630.0130	Seeding Mixture No. 30	LB	2,600.000	2,600.000
1870	630.0200	Seeding Temporary	LB	1,700.000	1,700.000
1880	630.0300	Seeding Borrow Pit	LB	500.000	500.000
1890	631.0300	Sod Water	MGAL	30.000	30.000
1900	631.1000	Sod Lawn	SY	860.000	860.000
1910	633.0100	Delineator Posts Steel	EACH	96.000	96.000
1920	633.0500	Delineator Reflectors	EACH	96.000	96.000
1930	633.1000	Delineator Brackets	EACH	96.000	96.000
1940	633.5200	Markers Culvert End	EACH	57.000	57.000
1950	634.0618	Posts Wood 4x6-Inch X 18-FT	EACH	95.000	95.000
1960	634.0622	Posts Wood 4x6-Inch X 22-FT	EACH	13.000	13.000
1970	634.0816	Posts Tubular Steel 2x2-Inch X 16-FT	EACH	41.000	41.000
1980	636.0100	Sign Supports Concrete Masonry	CY	10.000	10.000
1990	636.1000	Sign Supports Steel Reinforcement HS	LB	1,130.000	1,130.000
2000	637.1220	Signs Type I Reflective SH	SF	98.000	98.000
2010	637.2210	Signs Type II Reflective H	SF	951.405	951.405
2020	637.2230	Signs Type II Reflective F	SF	434.250	434.250
2030	638.2102	Moving Signs Type II	EACH	14.000	14.000
2040	638.2601	Removing Signs Type I	EACH	1.000	1.000
2050	638.2602	Removing Signs Type II	EACH	84.000	84.000
2060	638.3000	Removing Small Sign Supports	EACH	95.000	95.000
2070	641.1200	Sign Bridge Cantilevered (structure) 01. S-64-20	LS	1.000	1.000
2080	642.5201	Field Office Type C	EACH	1.000	1.000
2090	643.0100	Traffic Control (project) 01. 1080-13-70	EACH	1.000	1.000
2100	643.0300	Traffic Control Drums	DAY	56,000.000	56,000.000
2110	643.0420	Traffic Control Barricades Type III	DAY	11,460.000	11,460.000
2120	643.0500	Traffic Control Flexible Tubular Marker Posts	EACH	550.000	550.000
2130	643.0600	Traffic Control Flexible Tubular Marker Bases	EACH	550.000	550.000
2140	643.0705	Traffic Control Warning Lights Type A	DAY	22,925.000	22,925.000
2150	643.0715	Traffic Control Warning Lights Type C	DAY	2,730.000	2,730.000

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LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1080-13-70 QUANTITY
2160	643.0800	Traffic Control Arrow Boards	DAY	150.000	150.000
2170	643.0900	Traffic Control Signs	DAY	23,400.000	23,400.000
2180	643.0910	Traffic Control Covering Signs Type I	EACH	14.000	14.000
2190	643.0920	Traffic Control Covering Signs Type II	EACH	33.000	33.000
2200	643.1000	Traffic Control Signs Fixed Message	SF	668.000	668.000
2210	643.1050	Traffic Control Signs PCMS	DAY	395.000	395.000
2220	643.2000	Traffic Control Detour (project) 01. 1080-13-70	EACH	1.000	1.000
2230	643.3000	Traffic Control Detour Signs	DAY	39,000.000	39,000.000
2240	645.0120	Geotextile Fabric Type HR	SY	500.000	500.000
2250	645.0130	Geotextile Fabric Type R	SY	1,170.000	1,170.000
2260	646.0106	Pavement Marking Epoxy 4-Inch	LF	56,402.000	56,402.000
2270	646.0126	Pavement Marking Epoxy 8-Inch	LF	750.000	750.000
2280	646.0600	Removing Pavement Markings	LF	34,850.000	34,850.000
2290	646.0805.S	Pavement Marking Outfall	EACH	2.000	2.000
2300	646.0841.S	Pavement Marking Grooved Wet Reflective Contrast Tape 4-Inch	LF	4,478.000	4,478.000
2310	646.0843.S	Pavement Marking Grooved Wet Reflective Contrast Tape 8-Inch	LF	7,375.000	7,375.000
2320	646.0900.S	Pavement Marking Late Season	LF	17,079.000	17,079.000
2330	647.0166	Pavement Marking Arrows Epoxy Type 2	EACH	2.000	2.000
2340	647.0356	Pavement Marking Words Epoxy	EACH	2.000	2.000
2350	647.0456	Pavement Marking Curb Epoxy	LF	1,185.000	1,185.000
2360	647.0606	Pavement Marking Island Nose Epoxy	EACH	8.000	8.000
2370	647.0726	Pavement Marking Diagonal Epoxy 12-Inch	LF	1,451.000	1,451.000
2380	647.0746	Pavement Marking Diagonal Epoxy 24-Inch	LF	50.000	50.000
2390	647.0955	Removing Pavement Markings Arrows	EACH	4.000	4.000
2400	647.0965	Removing Pavement Markings Words	EACH	4.000	4.000
2410	649.0200	Temporary Pavement Marking Reflective Paint 4-Inch	LF	17,690.000	17,690.000
2420	649.0400	Temporary Pavement Marking Removable Tape 4-Inch	LF	74,010.000	74,010.000
2430	649.0701	Temporary Pavement Marking 8-Inch	LF	170.000	170.000
2440	649.0801	Temporary Pavement Marking Removable Tape 8-Inch	LF	3,650.000	3,650.000
2450	649.1200	Temporary Pavement Marking Stop Line Removable Tape 18-Inch	LF	150.000	150.000
2460	649.1700	Temporary Pavement Marking Arrows	EACH	2.000	2.000
2470	649.1800	Temporary Pavement Marking Arrows Removable Tape	EACH	16.000	16.000
2480	649.1900	Temporary Pavement Marking Words	EACH	1.000	1.000
2490	649.2000	Temporary Pavement Marking Words Removable Tape	EACH	8.000	8.000
2500	649.2100	Temporary Raised Pavement Markers	EACH	529.000	529.000
2510	650.4000	Construction Staking Storm Sewer	EACH	73.000	73.000
2520	650.4500	Construction Staking Subgrade	LF	19,684.000	19,684.000
2530	650.5000	Construction Staking Base	LF	11,494.000	11,494.000
2540	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	5,145.000	5,145.000
2550	650.6000	Construction Staking Pipe Culverts	EACH	19.000	19.000
2560	650.6500	Construction Staking Structure Layout (structure) 01. B-64-0185	LS	1.000	1.000
2570	650.6500	Construction Staking Structure Layout (structure) 02. B-64-0186	LS	1.000	1.000
2580	650.6500	Construction Staking Structure Layout (structure) 03. R-64-18	LS	1.000	1.000

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DATE 29JUN15 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1080-13-70 QUANTITY
2590	650.6500	Construction Staking Structure Layout (structure) 04. R-64-19	LS	1.000	1.000
2600	650.6500	Construction Staking Structure Layout (structure) 05. S-64-20	LS	1.000	1.000
2610	650.7000	Construction Staking Concrete Pavement	LF	9,400.000	9,400.000
2620	650.9910	Construction Staking Supplemental Control (project) 01. 1080-13-70	LS	1.000	1.000
2630	650.9920	Construction Staking Slope Stakes	LF	19,684.000	19,684.000
2640	690.0150	Sawing Asphalt	LF	148.000	148.000
2650	690.0250	Sawing Concrete	LF	116.000	116.000
2660	715.0415	Incentive Strength Concrete Pavement	DOL	9,505.000	9,505.000
2670	715.0502	Incentive Strength Concrete Structures	DOL	14,478.000	14,478.000
2680	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	4,000.000	4,000.000
2690	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	6,000.000	6,000.000
2700	SPV.0060	Special 01. GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 2	EACH	21.000	21.000
2710	SPV.0060	Special 02. GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 4	EACH	6.000	6.000
2720	SPV.0060	Special 03. GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 5	EACH	2.000	2.000
2730	SPV.0060	Special 04. GROOVED PREFORMED THERMOPLASTIC WORD	EACH	14.000	14.000
2740	SPV.0060	Special 05. SECTION CORNER MONUMENTS SPECIAL	EACH	2.000	2.000
2750	SPV.0060	Special 06. SAND BAGS	EACH	500.000	500.000
2760	SPV.0090	Special 01. GROOVED PREFORMED THERMOPLASTIC STOP LINE 18-INCH	LF	160.000	160.000
2770	SPV.0090	Special 02. GROOVED PREFORMED THERMOPLASTIC CROSSWALK 6-INCH	LF	195.000	195.000
2780	SPV.0090	Special 03. REMOVING EXISTING TIMBER PILING	LF	2,320.000	2,320.000
2790	SPV.0090	Special 04. HEAVY DUTY SILT FENCE	LF	1,600.000	1,600.000
2800	SPV.0090	Special 05. TEMPORARY PAVEMENT MARKING NON-REFLECTIVE BLACK TAPE 6-INCH	LF	500.000	500.000
2810	SPV.0105	Special 01. CONCRETE PAVEMENT JOINT LAYOUT	LS	1.000	1.000
2820	SPV.0165	Special 01. WALL CONCRETE PANEL MECHANICALLY STABALIZED EARTH LRFD/QMP **P**	SF	6,975.000	6,975.000
2830	SPV.0165	Special 02. TEMP WALL WIRE FACED MECHANICALLY STABILIZED EARTH LRFD/QMP **P**	SF	1,033.000	1,033.000

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CTH NN AT USH 12 EARTHWORK SUMMARY

Division Category 0010	From/To Station	Location	Common Excavation (1) (item # 205.0100) Cut (2)	Common Excavation (1) (item # 205.0100) EBS Excavation (3)	Salvaged/ Unusable Pavement Material (4)	Available Material (5)	Reduced EBS in Fill (6) Factor 0.80	Expanded EBS Backfill (7) Factor 1.20	Unexpanded Fill	Expanded Fill (8) Factor 1.20	Mass Ordinate +/- (9)	Waste	Borrow (item #208.0100)	Comment:
STAGE 1	STA 16+62 to 21+52	CTH NN EB	0	0	0	0	0	0	117	140	-140	0	140	
	STA 54+75 to 65+63	CTH NN WB	152	0	0	152	0	0	200	240	-88	0	88	
Stage 1 Subtotal			152	0	0	152	0	0	317	381	-229	0	229	
STAGE 2	STA 30+00 to 75+50	CTH NN EB	8,927	446	2,788	6,139	357	535	55,367	66,440	-60,836	0	60,836	
	STA 978+13 to 986+83	Ramp A & AB	2,533	127	659	1,874	102	152	8,272	9,926	-8,205	0	8,205	
	STA 54+67 to 65+19	Ramp B & BA	2,041	102	1,086	955	82	122	13,885	16,662	-15,829	0	15,829	
	STA 40+71 to 56+81	Ramp C & CD	6,189	309	1,495	4,694	247	371	30,162	36,195	-31,871	0	31,871	
	STA 19+60 to 30+78	Ramp D & DC	4,486	224	1,368	3,118	179	269	12,402	14,882	-12,033	0	12,033	
	STA 9+09 to 12+74	CTH H	1,502	75	715	787	60	90	2,556	3,067	-2,370	0	2,370	
	STA 983+00 to 989+00	USH 12 MEDIAN	0	0	0	0	0	0	716	859	-859	0	859	
Stage 2 Subtotal			25,677	1,283	8,111	17,566	1,026	1,540	123,358	148,030	-132,003	0	132,003	
STAGE 3	STA 30+51 to 70+91	CTH NN WB	5,252	263	2,356	2,896	210	316	40,747	48,896	-46,316	0	40,747	
	STA 31+50 to 47+00	Path West	1,588	159	0	1,588	127	191	30,527	36,632	-35,235	0	35,235	
	STA 51+00 to 71+49	Path East	1,413	141	0	1,413	113	169	53,981	64,777	-63,534	0	63,534	
	STA 0+19 to 3+13	Stuart Drive W	364	18	186	177	14	22	1,484	1,781	-1,625	0	1,625	
	STA 10+41 to 18+24	Bray Road	2,213	111	953	1,260	89	133	18,903	22,684	-21,557	0	21,557	
	STA 989+00 to 992+50	USH 12 Median	0	0	0	0	0	0	313	375	-375	0	375	
	STA 991+00 to 994+75	USH 12 Guardrail	6	0	0	6	0	0	117	141	-135	0	135	
Stage 3 Subtotal			10,835	692	3,496	7,339	554	830	146,072	175,286	-168,777	0	163,209	
STAGE 4	STA 35+50 to 65+26	CTH NN EB	1,655	0	188	1,468	0	0	231	277	1,190	1,190	0	
Stage 4 Subtotal			1,655	0	188	1,468	0	0	231	277	1,190	1,190	0	
Grand Total			38,320	1,975	11,795	26,525	1,580	2,370	269,979	323,975	-299,819	1,190	295,441	
		Total Common Exc	40,295											

1) Common Excavation is the sum of the Cut and EBS Excavation columns. Item number 205.0100
2) Salvaged/Unsuable Pavement Material is included in Cut.
3) EBS Excavation is undistributed and to be backfilled with Borrow (Item #208.0100); EBS considered to be waste and is 5% of the total Common Excavation
4) Salvaged/Unusable Pavement Material (Asphalt pavement not to be used in fill.)
5) Available Material = Cut - Salvaged/Unusuable Pavement Material
6) Reduced EBS in Fill - Excavated EBS material is usuable in Fills outside the 1:1 slope. EBS in Fill Reduction factor = 0.8
7) Expanded EBS Backfill - This is to be filled with Borrow material. EBS Backfill Factor = 1.2. Item number 208.0100
8) Expanded Fill. Factor = 1.2

Expanded Fill = (Unexpanded Fill) * Fill Factor

9) The Mass Ordinate + or - Qty calculated for the Division. Plus quantity indicates an excess of material within the Division. Minus indicates a shortage of material within the Division.

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CLEARING & GRUBBING

LOCATION	STATION	TO	STATION	OFFSET	201.0105 CLEARING STA	201.0205 GRUBBING STA
CATEGORY 0010						
STAGE 2B						
CTH NN EB	30+00	-	31+00	RT	1	1
	37+00	-	40+00	RT	3	3
	60+00	-	68+00	RT	8	8
	70+00	-	71+00	RT	1	1
RAMP C	40+00	-	51+00	RT	11	11
RAMP A	982+00	-	986+00	RT	4	4
			STAGE 2B SUBTOTALS		28	28
STAGE 3						
CTH NN WB	31+00	-	48+00	LT	17	17
	50+00	-	57+00	LT	7	7
	59+00	-	68+00	LT	9	9
	69+00	-	71+00	LT	2	2
BRAY RD	12+00	-	17+00	RT	5	5
	11+00	-	17+00	LT	6	6
			STAGE 3 SUBTOTALS		46	46
				TOTALS	**74**	**74**

REMOVALS

LOCATION	STATION	TO	STATION	204.0100 REMOVING PAVEMENT SY	204.0115 REMOVING ASPHALTIC SURFACE BUTT JOINTS SY	204.0150 REMOVING CURB & GUTTER LF	204.0190 REMOVING SURFACE DRAINS EACH
CATEGORY 0010							
STAGE 2B							
CTH NN EB	30EB+50	-	59EB+55	9,200	--	--	3
RAMP A	982A+44	-	988A+90	1,500	85	--	2
RAMP AA	984AA+93	-	987AA+63	300	--	--	--
RAMP B	55B+16	-	65B+19	2,200	90	--	2
RAMP AB	56AB+07	-	58AB+25	400	--	--	--
RAMP C	42C+11	-	47C+56	2,800	85	--	2
RAMP CD	42CD+25	-	44CD+73	300	--	--	--
RAMP D	1989D+57	-	2000D+94	2,300	90	120	1
RAMP DC	998DC+86	-	000DC+75	300	--	--	--
CTH H	8H+59	-	9H+09	--	135	110	
			STAGE 2B SUBTOTALS	19,300	485	230	10
STAGE 3							
CTH NN WB	30WB+51	-	59WB+55	8,800	--	--	3
BRAY RD	3BR+18	-	3BR+68	--	135	--	--
			TOTALS	**28,100**	**620**	**230**	**13**

REMOVING DELINEATORS

LOCATION	204.0180 REMOVING DELINEATORS AND MARKERS EACH
CATEGORY 0010	
STAGE 2B	
RAMP A	11
RAMP B	17
RAMP C	32
RAMP D	20
TOTAL	**80**

3

REMOVING GUARDRAIL

LOCATION	STATION	TO	STATION	OFFSET	204.0165 REMOVING GUARDRAIL LF
CATEGORY 0010					
STAGE 2B					
CTH NN EB	40+14	-	40+53	RT	40
	46+10	-	47+71	LT	160
	46+93	-	47+91	RT	100
	47+44	-	47+66	LT	30
RAMP C	45+23	-	47+55	RT	230
			STAGE 2B SUBTOTAL		560
STAGE 3					
CTH NN WB	51+31	-	56+90	LT	560
	51+51	-	54+48	RT	300
USH 12	958+83		992+43	--	2,490
			STAGE 3 SUBTOTAL		860
				TOTAL	**1,420**

REMOVING FENCE

LOCATION	STATION	TO	STATION	OFFSET	204.0170 REMOVING FENCE LF
CATEGORY 0010					
STAGE 2B					
CTH NN EB	37+41.38EB	-	40+85.00EB	RT	370
	59+53.22EB	-	65+14.91EB	RT	520
RAMP A	983+07.39A	-	985+85.77A	RT	360
			STAGE 2B SUBTOTAL		1,250
STAGE 3					
CTH NN WB	30+42.74WB	-	32+01.02WB	LT	170
	40+98.86WB	-	46+16.67WB	LT	610
	50+58.18WB	-	57+04.23WB	LT	680
	59+08.89WB	-	65+66.28WB	LT	710
BRAY RD	11+21.6NB	-	16+89.13NB	RT	540
			STAGE 3 SUBTOTAL		2,710
				TOTAL	**3,960**

REMOVING CONCRETE BASES

LOCATION	STATION	OFFSET	204.0195 REMOVING CONCRETE BASES EACH
CATEGORY 0010			
STAGE 2			
CTH H	12H+09	LT	1
	12H+21	LT	1
		TOTAL	**2**

REMOVING STORM SEWER

LOCATION	STATION	OFFSET	TO	STATION	OFFSET	**203.0100** REMOVING SMALL CULVERTS	**204.0220** REMOVING INLETS	**204.0245.01** REMOVING STORM SEWER 12-INCH	**204.0245.02** REMOVING STORM SEWER 18-INCH	**204.0245.03** REMOVING STORM SEWER 24-INCH	**204.0245.04** REMOVING STORM SEWER 30-INCH	**204.0245.05** REMOVING STORM SEWER 36-INCH
						EACH	EACH	LF	LF	LF	LF	LF
CATEGORY 0010												
STAGE 2B												
CTH NN	30+28EB	RT	-	30+83EB	LT	--	1	--	25	--	--	85
CTH NN	36+61EB	LT	-	37+47EB	RT	--	3		178	--	--	--
CTH NN	44+85EB	LT	-	46+20EB	RT	--	5	--	275	--	--	--
CTH NN	47+57EB	LT	-	47+87EB	LT	--	1	17	--	--	--	--
CTH NN	47+90EB	RT	-	--	--	--	1	82	--	--	--	--
CTH NN	56+00EB	LT	-	57+33EB	LT	--	3	--	140	--	--	--
CTH NN	65+58EB	RT	-	65+99EB	RT	1	--	--	--	--	--	--
RAMP A	979+94A	RT	-	979+94A	LT	1	--	--	--	--	--	--
RAMP A	986+08A	RT	-	986+80A	RT	--	1	--	102	--	--	--
RAMP B	56+92B	RT	-	57+01B	LT	1	--	--	--	--	--	--
RAMP C	42+95C	LT	-	42+98C	RT	1	--	--	--	--	--	--
RAMP C	46+01C	RT	-	46+39C	LT	--	1	--	--	--	--	199
RAMP C	53+66C	RT	-	53+71	LT	1	--	--	--	--	--	--
CTH H	9+31H	LT	-	9+77H	LT	1	--	--	--	--	--	--
CTH H	9+58H	RT	-	10+03H	RT	1	--	--	--	--	--	--
CTH H	10+09H	RT	-	10+12H	LT	1	--	--	--	--	--	--
CTH H	12+25H	RT	-	12+53H	LT	1	--	--	--	--	--	--
CTH H	12+29H	RT	-	12+60H	LT	--	1	--	--	--	--	101
STUART RD	0+36SR	LT	-	0+42SR	RT	1	--	--	--	--	--	--
STUART RD	2+31SR	LT	-	2+74SR	LT	1	--	--	--	--	--	--
USH 12	986+70	RT	-	987+12	RT	1	--	--	--	--	--	--
USH 12	986+70	RT	-	989+95	RT	--	--	--	--	--	329	--
USH 12	987+85	LT	-	--	--	--	1	--	--	--	--	--
				STAGE 2B SUBTOTALS		12	18	99	720	--	329	385
STAGE 3												
CTH NN	30+69WB	RT	-	31+21WB	LT	--	--	--	--	--	--	92
CTH NN	47+27WB	LT	-	--	--	--	1	59	--	--	--	--
CTH NN	47+45WB	RT	-	--	--	--	1	13	--	--	--	--
CTH NN	56+03WB	RT	-	56+03WB	LT	--	1	--	122	--	--	--
CTH NN	64+19WB	LT	-	64+23WB	RT	1	--	--	--	--	--	--
CTH NN	65+87WB	LT	-	66+25WB	RT	1	--	--	--	--	--	--
CTH NN	66+76WB	LT	-	66+79WB	RT	1	--	--	--	--	--	--
CTH NN	37+47EB	LT	-	--	--	--	--	--	--	11	--	--
CTH NN	45+50EB	LT	-	45+62EB	LT	--	--	--	18	--	--	--
CTH NN	64+23WB	RT	-	--	--	--	1	--	69	--	--	--
BRAY RD	12+65BR	LT	-	13+43BR	RT	1	--	--	--	--	--	--
BRAY RD	13+46BR	LT	-	13+50BR	RT	1	--	--	--	--	--	--
BRAY RD	13+50BR	LT	-	13+55BR	RT	1	--	--	--	--	--	--
STUART RD EAST	0+56SDE	LT	-	0+57SDE	RT	1	--	--	--	--	--	--
STUART RD EAST	0+61SDE	LT	-	0+62SDE	RT	1	--	--	--	--	--	--
				STAGE 3 SUBTOTALS		8	4	72	209	11	--	92
				TOTALS		**20**	**22**	**171**	**929**	**11**	**329**	**477**

BACKFILL GRANULAR

LOCATION		209.0100 BACKFILL GRANULAR CY
CATEGORY 0010		
STAGE 2B		
CTH NN EB	PIPE P102	20
CTH H	PIPE P119	25
RAMP C	PIPE P135	195
RAMP C	PIPE P136	135
RAMP C	PIPE P138	45
RAMP A	PIPE P157	30
CTH NN EB/WB	PIPE P171	500
STAGE 2B SUBTOTAL		950
STAGE 3		
CTH NN WB	PIPE P104	20
STUART DRIVE	PIPE P110	10
BRAY RD	PIPE P163	200
BRAY RD	PIPE P165	200
STUART DR EAST	PIPE P167	40
STUART DR EAST	PIPE P169	40
STAGE 3 SUBTOTAL		510
TOTAL		**1,460**

AGGREGATE ITEMS

LOCATION	305.0110* BASE AGGREGATE DENSE 3/4-INCH TON	305.0120* BASE AGGREGATE DENSE 1 1/4-INCH TON	311.0110 BREAKER RUN TON	623.0200 DUST CONTROL SURFACE TREATMENT SY	624.0100 WATER MGAL
CATEGORY 0010					
STAGE 2B					
CTH NN EB	870	6,600	13,700	20,200	120
RAMP A	190	2,500	1,900	3,500	50
RAMP AA	70	750	700	1,100	20
RAMP B	275	3,550	2,900	4,900	60
RAMP AB	85	800	660	1,200	20
RAMP C	370	5,150	4,100	7,100	90
RAMP CD	80	630	550	900	20
RAMP D	290	3,750	2,950	5,200	70
RAMP DC	45	620	440	900	10
CTH H	55	1,400	1,700	2,500	30
CTH NN EB DWY	65	---	---	---	---
CTH H DWY	95	---	---	---	---
STAGE 2B SUBTOTALS	2,490	25,750	29,600	47,500	490
STAGE 3					
CTH NN WB	880	8,250	16,400	24,400	140
CTH NN WB DWY	140	---	---	---	---
STUART DR	50	850	---	1,500	20
STUART DR DWY	50	---	---	---	---
BRAY ROAD	240	2,450	---	4,400	50
BRAY RD DWY	80	---	---	---	---
STAGE 3 SUBTOTALS	1,440	11,550	16,400	30,300	210
STAGE 4					
MEDIAN EB	135	750	1,050	---	20
UNDISTRIBUTED QTY	485	3,850	3,550	7,800	140
CATEGORY 0010 TOTALS	**4,550**	**41,900**	**50,600**	**85,600**	**860**
CATEGORY 0020					
SHARED USE PATH	2,800	---	---	---	---
CATEGORY 0020 TOTALS	**2,800**	**0**	**0**	**0**	**0**
PROJECT TOTALS	**7,350**	**41,900**	**50,600**	**85,600**	**860**

*ADDITIONAL QUANTITIES LISTED ELSEWHERE

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CONCRETE ITEMS

LOCATION	415.0095 CONCRETE PAVEMENT 9 1/2-INCH SY	415.0410 CONCRETE PAVEMENT APPROACH SLAB SY	440.4410.S INCENTIVE IRI RIDE DOL	715.0415 INCENTIVE STRENGTH CONCRETE PAVEMENT DOL	SPV.0105.01 CONCRETE PAVEMENT JOINT LAYOUT LS
CATEGORY 0010					
STAGE 2B					
CTH NN EB	14,150	140	3,069	4,287	---
STAGE 3					
CTH NN WB	16,750	205	3,137	5,087	---
STAGE 4					
MEDIAN EB	435	---	---	131	---
TOTALS	**31,335**	**345**	**6,206**	**9,505**	**1**

DRILLED TIE AND DOWEL BARS

LOCATION	STATION	TO	STATION	416.0610 DRILLED TIE BARS EACH	416.0620 DRILLED DOWEL BARS EACH
CATEGORY 0010					
STAGE 2B					
CTH NN	30+00EB			16	16
RAMP D	18+37.63D	-	19+56.74D	48	--
STAGE 3					
CTH NN	30+51WB			8	16
			TOTALS	**72**	**32**

CONCRETE SURFACE DRAINS

LOCATION	STATION	OFFSET	416.1010 CONCRETE SURFACE DRAINS CY
CATEGORY 0010			
STAGE 2B			
CTH NN EB	35EB+63	RT	3
	47EB+31	RT	10
CTH H	12H+18	RT	3
RAMP C	41C+58	RT	2
	44+01	RT	2
	48C+78	LT	2
	52C+00	LT	3
	53C+60	RT	3
RAMP D	18D+46	RT	2
	24D+58	RT	2
	27D+96	RT	2
RAMP B	58B+00	RT	2
	61B+00	RT	2
	63B+66	RT	2
RAMP A	978A+83	RT	2
	982A+44	LT	2
	STAGE 2B SUBTOTAL		44
STAGE 3			
CTH NN WB	35WB+00	RT	2
	35WB+91	LT	2
	43WB+07	RT	2
	47WB+27	RT	10
	68WB+63	RT	2
STUART DRIVE	0SD+51	RT	2
BRAY RD	10BRN+93	LT	2
	10BRN+99	RT	2
	STAGE 3 SUBTOTAL		24
STAGE 4			
CTH NN EB	35EB+43	LT	2
	43EB+61	LT	2
	47EB+37	LT	12
	STAGE 4 SUBTOTAL		16
		TOTAL	**84**

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ASPHALTIC ITEMS

LOCATION	455.0140* ASPHALTIC MATERIAL PG64-28P TON	455.0605* TACK COAT GAL	460.1100 HMA PAVEMENT TYPE E-0.3 TON	460.1103 HMA PAVEMENT TYPE E-3 TON	460.2000* INCENTIVE DENSITY HMA PAVEMENT DOL	460.4000* HMA COLD WEATHER PAVING TON	465.0105 ASPHALTIC SURFACE TON	465.0120 ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES TON
CATEGORY 0010								
STAGE 2B					--			
CTH NN EB	20	--	360	--	240	--	--	--
RAMP A	56	90	105	910	650	--	--	--
RAMP AA	8	30	40	100	90	--	--	--
RAMP B	17	120	190	115	200	--	--	--
RAMP AB	44	30	65	740	520	--	--	--
RAMP C	58	150	320	735	680	--	--	--
RAMP CD	32	20	55	525	380	--	--	--
RAMP D	19	120	150	190	220	--	--	--
RAMP DC	9	20	30	130	110	--	--	--
CTH H	27	40	70	415	320	--	--	70
STAGE 2B SUBTOTALS	290	620	1,385	3,860	3410	0	0	70
STAGE 3								
CTH NN WB	24	--	440	--	290	110	--	--
STUART DR	15	30	--	280	180	70	--	30
BRAY ROAD	37	70	--	675	440	170	--	--
STAGE 3 SUBTOTALS	76	100	440	955	910	350	0	30
STAGE 4								
MEDIAN EB	2	--	40	--	30	10	--	--
CATEGORY 0010 TOTALS	**368**	**720**	**1865**	**4815**	**4350**	**360**	**0**	**100**
CATEGORY 0020								
SHARED USE PATH	--	--	--	--	--	--	650	--
CATEGORY 0020 TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**650**	**0**
PROJECT TOTALS	**368**	**720**	**1,865**	**4,815**	**4,350**	**360**	**650**	**100**

*ADDITIONAL QUANTITIES LISTED ELSEWHERE

TEMPORARY PAVEMENT ITEMS

LOCATION	STA	OFFSET	TO	STA	OFFSET	204.0125* REMOVING ASPHALTIC SURFACE MILLING TON	211.0400 PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS STA	305.0110* BASE AGGREGATE DENSE 3/4-INCH TON	305.0120* BASE AGGREGATE DENSE 1 1/4-INCH TON	455.0140* ASPHALTIC MATERIAL PG64-28P TON	460.1101 HMA PAVEMENT TYPE E-1 TON	460.2000* INCENTIVE DENSITY HMA DOL	460.4000* HMA COLD WEATHER PAVING TON	465.0125 ASPHALTIC SURFACE TEMPORARY 3-INCH TON	465.0125 ASPHALTIC SURFACE TEMPORARY 5-INCH TON
CATEGORY 0010															
STAGE 1A															
CTH NN EB	16+62EB	LT	-	21+52EB	LT	88	5	20	70	7	120	80	30	--	--
	24+95EB	LT	-	30+00EB	LT	30	5	--	--	3	40	30	10	--	--
CTH NN WB	26+37WB	RT	-	35+73WB	RT	67	10	12	--	2	35	30	10	22	36
	39+36WB	RT	-	43+06WB	RT	21	4	--	--	--	--	--	--	21	--
	52+33WB	RT	-	56+60WB	RT	30	5	8	--	--	--	--	--	14	27
	60+55WB	RT	-	70+91WB	RT	62	11	--	--	--	--	--	--	62	--
				STAGE 1A SUBTOTALS		**298**	**40**	**40**	**70**	**12**	**195**	**140**	**50**	**119**	**63**
STAGE 1B											--				
CTH NN EB	16+62EB	RT	-	22+40EB	RT	73	6	--	--	6	100	70	25	--	--
CTH NN WB	15+79WB	LT	-	23+60WB	LT	188	8	95	--	14	255	170	65	--	--
	25+07WB	LT	-	46+68WB	LT	120	22	--	--	9	160	110	40	--	--
	52+33WB	LT	-	57+41WB	LT	83	5	65	--	--	--	--	--	--	139
	58+62WB	LT	-	65+74WB	LT	93	7	75	--	--	--	--	--	--	155
				STAGE 1B SUBTOTALS		**557**	**48**	**235**	**--**	**29**	**515**	**350**	**130**	**--**	**294**
STAGE 2B											--				
CTH NN EB	36+81EB	LT	-	47+71EB	LT	--	--	85	--	--	--	--	--	--	262
	58+25EB	LT	-	63+27EB	LT	--	--	40	--	--	--	--	--	--	109
				STAGE 2B SUBTOTALS		**--**	**--**	**125**	**--**	**--**	**--**	**--**	**--**	**--**	**371**
				TOTALS		**855**	**88**	**400**	**70**	**41**	**710**	**490**	**180**	**847**	

*ADDITIONAL QUANTITIES LISTED ELSEWHERE

TEMPORARY ASPHALTIC ITEMS

CATEGORY 0010	465.0310 ASPHALTIC CURB LF	465.0315 ASPHALTIC FLUMES SY
STAGE 1A	47	---
STAGE 1B	---	---
STAGE 2A	---	---
STAGE 2B	---	9
STAGE 3	---	---
STAGE 4	---	---
TOTALS	**47**	**9**

MAINTAINING DETOURS

LOCATION	305.0410 AGGREGATE DETOURS TON	465.0115 ASPHALTIC SURFACE DETOURS TON
CATEGORY 0010		
PROJECT	100	100
TOTAL	**100**	**100**

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ICE HOT WEATHER CONCRETING

LOCATION	501.1000.S ICE HOT WEATHER CONCRETING EACH
CATEGORY 0100	
STRUCTURE B-64-185	6,968
CATEGORY 0100 TOTAL	**6,968**
CATEGORY 0110	
STRUCTURE B-64-186	11,130
CATEGORY 0110 TOTAL	**11,130**
PROJECT TOTALS	**18,098**

CONCRETE COLLARS

LOCATION	STATION	OFFSET	FROM PIPE NUMBER	TO PIPE NUMBER	520.8000 CONCRETE COLLARS FOR PIPE EACH	REMARKS
CATEGORY 0010						
STAGE 2B						
CTH NN EB	37+47	18.9 LT	TP01	P108	1	CONCRETE COLLARS CONNECT
CTH NN EB	45+50	21.2 LT	TP02	P125	1	TEMPORARY PIPE TO PERMANENT PIPE
				TOTAL	**2**	

3

PIPE UNDERDRAIN

LOCATION	STATION	TO	STATION	OFFSET	612.0106 PIPE UNDERDRAIN 6-INCH LF	612.0206 PIPE UNDERDRAIN UNPERFORATED 6-INCH LF	612.0806 APRON ENDWALLS FOR UNDERDRAIN REINFORCED CONCRETE 6-INCH EACH
CATEGORY 0010							
STAGE 2B							
CTH NN EB	45EB+00	-	45EB+75	RT	75	--	--
RAMP A	981A+92	-	983A+10	LT	100	30	1
			STAGE 2B SUBTOTALS		175	30	1
STAGE 3							
CTH NN WB	36WB+70	-	37WB+69	RT	100	--	--
	44WB+85	-	45WB+88	RT	100	--	--
	55WB+12	-	56WB+13	LT	100	15	--
	56WB+53	-	57WB+36	RT	85	--	--
	58WB+49	-	59WB+58	LT	100	15	1
	60WB+97	-	62WB+00	RT	100	--	--
	64WB+43	-	65WB+48	RT	100	--	--
			STAGE 3 SUBTOTALS		685	30	1
STAGE 4							
CTH NN EB	36EB+65	-	37EB+67	LT	100	--	--
	44EB+80	-	45EB+81	LT	100	--	--
	56EB+32	-	57EB+35	LT	100	--	--
	57EB+98	-	58EB+75	LT	77	--	--
			STAGE 4 SUBTOTALS		377	0	0
				TOTALS	**1,237**	**60**	**2**

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CULVERT PIPE SUMMARY

STAGE	PIPE NUMBER	INLET END STR	INLET END STATION	INLET END OFFSET	INLET END ELEV	DISCHARGE END STR	DISCHARGE END STATION	DISCHARGE END OFFSET	DISCHARGE END ELEV	SLOPE	520.4018 CULVERT PIPE TEMPORARY 18-INCH LF	520.4024 CULVERT PIPE TEMPORARY 24-INCH LF	522.0124 CULVERT PIPE REINFORCED CONCRETE CLASS III 24-INCH LF	522.0130 CULVERT PIPE REINFORCED CONCRETE CLASS III 30-INCH LF	522.0136 CULVERT PIPE REINFORCED CONCRETE CLASS III 36-INCH LF	522.0315 CULVERT PIPE REINFORCED CONCRETE CLASS IV 15-INCH LF	522.0318 CULVERT PIPE REINFORCED CONCRETE CLASS IV 18-INCH LF	522.0324 CULVERT PIPE REINFORCED CONCRETE CLASS IV 24-INCH LF	522.0330 CULVERT PIPE REINFORCED CONCRETE CLASS IV 30-INCH LF	522.0336 CULVERT PIPE REINFORCED CONCRETE CLASS IV 36-INCH LF	522.0348 CULVERT PIPE REINFORCED CONCRETE CLASS IV 48-INCH LF	524.0148 CULVERT PIPE SALVAGED 48-INCH LF	JOINT TIES[1] EACH	650.6000 CONSTRUCTION STAKING PIPE CULVERTS EACH
CATEGORY 0010																								
STAGE 2B	P119	119	11+89.1H	68.8 RT	1010.32	120	11+99.5H	65.6 LT	1009.82	0.42%	--	--	--	--	--	--	--	--	--	--	119	--	12	1
	P121	121	9+56.3H	36.1 RT	1011.79	122	10+12.3H	37.0 RT	1011.37	0.77%	--	--	--	--	--	--	42	--	--	--	--	--	12	1
	P123	123	9+31.0H	43.2 LT	1011.75	124	9+77.5H	45.6 LT	1011.09	1.41%	--	--	--	--	--	--	35	--	--	--	--	--	12	1
	P138	138	53+65.0C	54.8 LT	1019.28	139	53+65.0C	51.9 RT	1018.08	1.13%	--	--	107	--	--	--	--	--	--	--	--	--	12	1
	P157	157	980+00.0A	50.1 LT	1024.11	158	980+00.0A	37.4 RT	1023.08	1.18%	--	--	88	--	--	--	--	--	--	--	--	--	12	1
	P159A	159A	978+68.1A	35.8 RT	1022.67	140A	57+20.0C	41.10 RT	1022.33	1.06%	--	--	--	--	--	--	--	--	--	--	--	32	8	1
	P159B	159B	978+60.9A	37.3 RT	1022.30	140B	57+25.8C	43.00 RT	1022.00	0.96%	--	--	--	--	--	--	--	--	--	--	--	32	8	1
	P171	171	60+00.0EB	106.0 RT	1025.52	172	60+07.8PE	90.0 LT	1022.88	0.82%	--	--	--	--	--	--	--	--	--	321	--	--	6	1
	P183	183	66+11.2EB	74.1 RT	1029.64	184	65+53.4EB	79.2 RT	1029.50	0.19%	--	--		--	--	--	--	43	--	--	--	--	12	1
	TP01	T01	37+47.4EB	29.8 LT	1018.02	108	37+47.4EB	29.8 LT	1017.39	5.82%	--	7	--	--	--	--	--	--	--	--	--	--	--	1
	TP02	T02	45+61.7EB	34.4 LT	1038.50	125	45+50.0EB	21.2 LT	1037.94	3.17%	16	--	--	--	--	--	--	--	--	--	--	--	--	1
										STAGE 2B SUBTOTALS	16	7	195	--	--	--	77	43	--	321	119	64	94	11
STAGE 3	P104A	104A	32+00.0PW	9.3 RT	1010.57	104B	32+00.0PW	10.1 LT	1010.47	0.50%	--	--	--	--	--	20	--	--	--	--	--	--	12	1
	P110	110	1+37.4SR	33.5 RT	1014.11	111	0+77.6	38.5 LT	1013.26	0.94%	--	--	--	90	--	--	--	--	--	--	--	--	12	1
	P112	112	2+75.3SR	32.5 LT	1015.49	113	2+31.6SR	32.8 LT	1015.12	0.85%	--	--	--	--	--	--	32	--	--	--	--	--	12	1
	P163	163	13+41.0NB	96.6 RT	1020.07	164	13+53.4NB	93.6 LT	1018.45	0.85%	--	--	--	--	--	--	--	--	179	--	--	--	8	1
	P165	165	13+44.1NB	97.1 RT	1020.07	166	13+56.4NB	93.1 LT	1018.45	0.85%	--	--	--	--	--	--	--	--	179	--	--	--	8	1
	P167	167	0+65.8SRE	33.80 RT	1016.48	168	0+65.0SRE	38.8 LT	1015.73	1.03%	--	--	--	--	63	--	--	--	--	--	--	--	12	1
	P169	169	0+57.5SRE	33.90 RT	1016.48	170	0+56.6SRE	38.7 LT	1015.73	1.03%	--	--	--	--	63	--	--	--	--	--	--	--	12	1
	P185	185	66+80.0PE	43.2 LT	1029.99	186	65+93.8PE	48.6 LT	1029.57	0.62%	--	--	76	--	--	--	--	--	--	--	--	--	12	1
										STAGE 3 SUBTOTALS	--	--	76	90	126	20	32	--	358	--	--	--	88	8
										TOTALS	**16**	**7**	**271**	**90**	**126**	**20**	**109**	**43**	**358**	**321**	**119**	**64**	**182**	**19**

NOTES

1) JOINT TIES FOR CONCRETE PIPE SHALL BE PROVIDED AT ALL CONCRETE APRON ENDWALLS. APRON ENDWALLS SHALL BE TIED FOR THE LAST THREE JOINTS AT PIPE ENDS. THE COST OF THESE TIES SHALL BE INCIDENTAL TO THE COST OF THE PIPE.
2) STATIONS AND OFFSETS ARE TO THE (THEORETICAL) FLANGE FOR CURB INLETS, CENTER OF STRUCTURES, OR TO THE END OF PIPE.
3) LENGTH OF APRON ENDWALLS ARE NOT INCLUDED IN CULVERT PIPE LENGTHS.

CULVERT & STORM SEWER ENDWALL SUMMARY

STAGE	STRUCTURE NUMBER	STATION	OFFSET FEET	522.1015 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 15-INCH EACH	522.1018 18-INCH EACH	522.1024 24-INCH EACH	522.1030 30-INCH EACH	522.1036 36-INCH EACH	522.1048 48-INCH EACH	523.0529 HE 29 X 45 EACH	521.1012 APRON ENDWALLS FOR CULVERT PIPE STEEL 12-INCH EACH	521.1018 18-INCH EACH	521.1024 24-INCH EACH	504.0900 CONCRETE MASONRY ENDWALLS CY	633.5200 MARKERS CULVERT END EACH	650.4000* CONSTRUCTION STAKING STORM SEWER EACH
CATEGORY 0010																
STAGE 2B	101	30+50.0EB	23.7 RT	--	1	--	--	--	--	--	--	--	--	--	1	1
	103	30+85.0EB	23.6 LT	--	1	--	--	--	--	--	--	--	--	--	1	1
	105	30+34.2EB	54.5 RT	--	--	--	--	--	--	1	--	--	--	--	1	1
	109	37+47.4EB	74.1 RT	--	--	1	--	--	--	--	--	--	--	--	1	1
	118	12+24.6H	50.8 LT	--	1	--	--	--	--	--	--	--	--	--	1	1
	119	11+89.1H	60.7 RT	--	--	--	--	--	1	--	--	--	--	--	1	--
	120	11+99.5H	57.5 LT	--	--	--	--	--	1	--	--	--	--	--	1	--
	121	9+56.3H	36.1 RT	--	1	--	--	--	--	--	--	--	--	--	1	--
	122	10+12.3H	37.0 RT	--	1	--	--	--	--	--	--	--	--	--	1	--
	123	9+31.0H	43.2 LT	--	1	--	--	--	--	--	--	--	--	--	1	--
	124	9+77.5H	45.6 LT	--	1	--	--	--	--	--	--	--	--	--	1	--
	132	29+15.0D	46.0 RT	--	1	--	--	--	--	--	--	--	--	--	1	1
	134	43+50.0C	51.5 RT	--	1	--	--	--	--	--	--	--	--	--	1	1
	135	27+60.0D	60.4 RT	--	--	--	--	1	--	--	--	--	--	--	1	1
	137	46+01.4C	55.6 RT	--	--	--	--	1	--	--	--	--	--	--	1	1
	138	53+65.0C	54.8 LT	--	--	1	--	--	--	--	--	--	--	--	1	--
	139	53+65.0C	51.9 RT	--	--	1	--	--	--	--	--	--	--	--	1	--
	140A & B	57+22.9C	42.1 RT	--	--	--	--	--	--	--	--	--	--	5	1	--
	141	986+70.1	121.3 RT	--	--	--	1	--	--	--	--	--	--	--	1	1
	144	989+95.4	113.7 RT	--	--	--	1	--	--	--	--	--	--	--	1	1
	153	56+83.4B	42.2 RT	--	--	1	--	--	--	--	--	--	--	--	1	1
	156	985+83.6A	63.1 RT	--	1	--	--	--	--	--	--	--	--	--	1	1
	157	980+00.0A	50.1 LT	--	--	1	--	--	--	--	--	--	--	--	1	--
	158	980+00.0A	37.4 RT	--	--	1	--	--	--	--	--	--	--	--	1	--
	159A & B	978+64.5A	36.6 RT	--	--	--	--	--	--	--	--	--	--	5	1	--
	171	60+00.0EB	106.0 RT	--	--	--	--	1	--	--	--	--	--	--	1	--
	179A	65+25.0EB	56.2 RT	--	1	--	--	--	--	--	--	--	--	--	1	1
	183	66+11.2EB	74.1 RT	--	--	1	--	--	--	--	--	--	--	--	1	--
	184	65+53.4EB	79.2 RT	--	--	1	--	--	--	--	--	--	--	--	1	--
	203	47+62.8EB	57.2 RT	--	--	--	--	--	--	--	1	--	--	--	1	1
	T01	37+47.4EB	29.7 LT	--	--	--	--	--	--	--	--	--	1	--	1	1
	T02	45+61.7EB	34.4 LT	--	--	--	--	--	--	--	--	1	--	--	1	1
	STAGE 2B SUBTOTALS			--	11	8	2	3	2	1	1	1	1	10	32	17

NOTES

1) STATIONS AND OFFSETS ARE TO THE END OF PIPE.

* ADDITIONAL QUANTITIES LISTED ELSEWHERE

* CONTINUED ON NEXT PAGE *

* CONTINUED FROM PREVIOUS PAGE *

CULVERT & STORM SEWER ENDWALL SUMMARY

STAGE	STRUCTURE NUMBER	STATION	OFFSET FEET	522.1015 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 15-INCH EACH	522.1018 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 18-INCH EACH	522.1024 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 24-INCH EACH	522.1030 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 30-INCH EACH	522.1036 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 36-INCH EACH	522.1048 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 48-INCH EACH	523.0529 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE HE 29 X 45 EACH	521.1012 APRON ENDWALLS FOR CULVERT PIPE STEEL 12-INCH EACH	521.1018 APRON ENDWALLS FOR CULVERT PIPE STEEL 18-INCH EACH	521.1024 APRON ENDWALLS FOR CULVERT PIPE STEEL 24-INCH EACH	504.0900 CONCRETE MASONRY ENDWALLS CY	633.5200 MARKERS CULVERT END EACH	650.4000* CONSTRUCTION STAKING STORM SEWER EACH
CATEGORY 0010																
STAGE 3	104	31+44.5WB	82.4 LT	--	--	--	--	--	--	1	--	--	--	--	1	1
	104A	32+00.0PW	9.36 RT	1	--	--	--	--	--	--	--	--	--	--	1	--
	104B	32+00.0PW	10.1 LT	1	--	--	--	--	--	--	--	--	--	--	1	--
	110	1+37.3SR	33.5 RT	--	--	--	1	--	--	--	--	--	--	--	1	--
	111	0+77.6SR	38.5 LT	--	--	--	1	--	--	--	--	--	--	--	1	--
	112	2+75.3SR	32.5 LT	--	1	--	--	--	--	--	--	--	--	--	1	--
	113	2+31.6SR	32.8 LT	--	1	--	--	--	--	--	--	--	--	--	1	--
	115	38+10.0PW	27.8 LT	--	1	--	--	--	--	--	--	--	--	--	1	1
	146	52+15.0PE	28.1 LT	--	1	--	--	--	--	--	--	--	--	--	1	1
	151	56+12.5WB	107.5 LT	--	--	1	--	--	--	--	--	--	--	--	1	1
	162	11+68.0NB	49.3 LT	--	1	--	--	--	--	--	--	--	--	--	1	1
	163 & 165	13+42.6NB	96.9 RT	--	--	--	--	--	--	--	--	--	--	3	1	--
	164 & 166	13+54.9NB	93.3 LT	--	--	--	--	--	--	--	--	--	--	3	1	--
	167	0+65.8SRE	33.8 RT	--	--	--	--	1	--	--	--	--	--	--	1	--
	168	0+65.0SRE	38.8 LT	--	--	--	--	1	--	--	--	--	--	--	1	--
	169	0+57.5SRE	33.9 RT	--	--	--	--	1	--	--	--	--	--	--	1	--
	170	0+56.6SRE	38.7 LT	--	--	--	--	1	--	--	--	--	--	--	1	--
	172	60+07.8PE	90.0 LT	--	--	--	--	1	--	--	--	--	--	--	1	--
	177	62+12.5PE	37.2 LT	--	1	--	--	--	--	--	--	--	--	--	1	1
	182	65+27.3PE	36.8 LT	--	--	1	--	--	--	--	--	--	--	--	1	1
	185	66+80.0PE	43.2 LT	--	--	1	--	--	--	--	--	--	--	--	1	--
	186	65+93.8PE	48.6 LT	--	--	1	--	--	--	--	--	--	--	--	1	--
	188	69+28.6PE	19.2 LT	--	1	--	--	--	--	--	--	--	--	--	1	1
	191	69+75.0PE	92.4 LT	--	1	--	--	--	--	--	--	--	--	--	1	1
	201	47+10.3PW	17.4 LT	--	--	--	--	--	--	--	1	--	--	--	1	1
		STAGE 3 SUBTOTALS		2	8	4	2	5	--	1	1	--	--	6	25	10
		TOTALS		**2**	**19**	**12**	**4**	**8**	**2**	**2**	**2**	**1**	**1**	**16**	**57**	**27**

NOTES

1) STATIONS AND OFFSETS ARE TO THE END OF PIPE.

* ADDITIONAL QUANTITIES LISTED ELSEWHERE

CONCRETE ITEMS

LOCATION	STATION	TO	STATION	OFFSET	601.0411 CONCRETE CURB & GUTTER 30-INCH TYPE D LF	601.0551 CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE A LF	601.0553 CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE D LF	601.0600 CONCRETE CURB PEDESTRIAN LF	602.0410 CONCRETE SIDEWALK 5-INCH SF	620.0300 CONCRETE MEDIAN SLOPED NOSE TYPE1 SF
CATEGORY 0010										
STAGE 2B										
CTH H	12H+17	-	12H+58	RT	--	--	87	--	--	--
	12H+37	-	12H+67	SPLITTER ISLAND	--	--	71	--	210	70
	12H+40	-	12H+89	LT	--	--	70	--	--	--
RAMP C	41C+58	-	44C+01	RT	240	--	--	--	--	--
	47C+00	-	52C+00	LT	480	--	--	--	--	--
	53C+60	-	56C+80	RT	319	--	--	--	--	--
RAMP DC	29DC+11	-	30DC+66	SPLITTER ISLAND	151	--	--	--	--	--
RAMP D	18D+45	-	29D+08	RT	1,035	--	--	--	--	--
	29D+10	-	30D+66	SPLITTER ISLAND	265	--	--	--	--	120
	---	-	---	SPLITTER ISLAND	--	82	--	--	--	--
RAMP B	54B+85	-	63B+66	RT	873	--	--	--	--	--
RAMP A	978A+13	-	981A+87	RT	360	--	--	--	--	--
	982A+43	-	985A+20	LT	265	--	--	--	--	--
	985A+91	-	986A+76	SPLITTER ISLAND	76	22	--	--	1,030	105
RAMP AA	985AA+91	-	986AA+61	SPLITTER ISLAND	75	--	--	--	--	--
	STAGE 2B SUBTOTALS				4,139	104	228	--	1,240	295
STAGE 3										
CTH NN WB	35WB+00	-	35WB+96	RT	--	93	--	--	--	85
	36WB+60	-	37WB+14	RT	--	53	--	--	--	70
	43WB+06	-	44WB+21	RT	--	114	--	--	--	70
	44WB+74	-	47WB+27	RT	--	249	--	--	--	70
	47WB+03	-	47WB+25	LT	--	--	--	22	--	--
	56WB+53	-	57WB+47	RT	--	90	--	--	--	85
	57WB+96	-	65WB+66	RT	--	793	--	--	--	65
	66WB+45	-	68WB+65	RT	--	240	--	--	--	--
	68WB+68	-	70WB+12	RT	--	144	--	--	--	--
STUART DRIVE	0SR+17	-	0SR+45	LT	--	--	48	--	--	--
	0SR+17	-	0SR+51	RT	--	--	43	--	--	--
BRAY RD	10BRN+35	-	10BRN+99	RT	--	--	93	--	--	--
	10BRN+43	-	11BRN+78	LT-MEDIAN	125	--	--	--	--	60
	10BRS+46	-	10BRS+93	LT	--	--	81	--	--	--
	10BRS+43	-	11BRS+78	RT-MEDIAN	126	--	--	--	600	60
	STAGE 3 SUBTOTALS				251	1,776	265	22	600	565
STAGE 4										
CTH NN EB	35EB+50	-	35EB+88	LT	--	37	--	--	--	--
	36EB+63	-	37EB+50	LT	--	88	--	--	--	--
	43EB+61	-	44EB+11	LT	--	52	--	--	--	--
	44EB+78	-	47EB+31	LT	--	260	--	--	--	--
	56EB+98	-	57EB+37	LT	--	40	--	--	--	--
	57EB+99	-	65EB+50	LT	--	732	--	--	--	--
	STAGE 4 SUBTOTALS				--	1,209	--	--	--	--
	CATEGORY 0010 TOTALS				**4,391**	**3,089**	**493**	**22**	**1,840**	**860**
CATEGORY 0020										
SHARED USE PATH	STUART DRIVE			---	--	--	--	--	200	--
	BRAY ROAD			---	--	--	--	--	230	--
	CATEGORY 0020 TOTALS				**--**	**--**	**--**	**--**	**430**	**--**

3

STORM SEWER SUMMARY

STAGE	PIPE NUMBER	INLET END STR	INLET END STATION	INLET END FEET	INLET END ELEV	DISCHARGE END STR	DISCHARGE END STATION	DISCHARGE END FEET	DISCHARGE END ELEV	SLOPE	612.0212 PIPE UNDERDRAIN UNPERFORATED 12-INCH LF	608.0318 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 18-INCH LF	608.0324 CLASS III 24-INCH LF	608.0330 CLASS III 30-INCH LF	608.0336 CLASS III 36-INCH LF	608.0418 CLASS IV 18-INCH LF	610.0429 HORIZONTAL ELLIPTICAL CLASS HE-IV 29X45-INCH LF	JOINT TIES[1] EACH
CATEGORY 0010																		
STAGE 2B	P101	101	30+50.0EB	23.7 LT	1009.93	102	30+68.4EB	22.1 LT	1008.04	10.22%	--	--	--	--	--	13	--	6
	P103	103	30+85.0EB	23.6 LT	1009.99	102	30+68.4EB	22.1 LT	1008.04	11.69%	--	--	--	--	--	11	--	6
	P102	102	30+68.4EB	22.1 LT	1007.12	105	30+34.2EB	54.5 RT	1006.89	0.28%	--	--	--	--	--	--	84	6
	P108	108	37+47.4EB	18.9 LT	1017.39	109	37+47.4EB	74.1 RT	1015.53	2.00%	--	--	93	--	--	--	--	6
	P116	116	12+39.6H	22.7 RT	1015.23	117	12+40.0H	17.0 RT	1015.11	2.00%	--	6	--	--	--	--	--	--
	P117	117	12+40.0H	17.0 RT	1015.01	118	12+24.6H	50.8 LT	1013.62	2.00%	--	70	--	--	--	--	--	6
	P125	125	45+50.0EB	21.2 LT	1037.94	128	45+00.1EB	35.0 RT	1035.56	3.17%	--	75	--	--	--	--	--	--
	P127	127	44+80.1EB	13.7 LT	1037.66	128	45+00.1EB	35.0 RT	1035.56	4.00%	--	53	--	--	--	--	--	--
	P128	128	45+00.1EB	35.0 RT	1035.46	129	45+29.7EB	74.1 RT	1034.48	2.00%	--	49	--	--	--	--	--	--
	P129	129	45+29.7EB	74.1 RT	1034.38	130	29+12.6D	27.2 LT	1030.08	4.00%	--	108	--	--	--	--	--	--
	P130	130	29+12.6D	27.2 LT	1029.98	131	29+15.0D	16.0 LT	1029.52	4.00%	--	11	--	--	--	--	--	--
	P131	131	29+15.0D	16.0 LT	1029.42	132	29+15.0D	46.0 RT	1027.56	3.00%	--	62	--	--	--	--	--	6
	P133	133	43+50.0C	57.4 LT	1027.82	134	43+50.0C	51.5 RT	1025.64	2.00%	--	109	--	--	--	--	--	6
	P135	135	27+60.0D	52.2 RT	1014.90	136	27+60.0D	45.5 LT	1014.43	0.48%	--	--	--	--	98	--	--	6
	P136	136	27+60.0D	45.5 LT	1014.33	137	46+02.8D	47.5 RT	1013.86	0.48%	--	--	--	--	98	--	--	6
	P141	141	986+70.1	121.3 RT	1020.00	142	987+15.0	110.0 RT	1019.67	0.71%	--	--	--	41	--	--	--	6
	P142	142	987+15.0	110.0 RT	1019.57	143	989+65.1	110.0 RT	1017.80	0.71%	--	--	--	251	--	--	--	--
	P143	143	989+65.1	100.0 RT	1017.70	144	989+95.4	113.7 RT	1017.46	0.71%	--	--	--	28	--	--	--	6
	P152	152	56+83.4B	55.9 LT	1038.68	153	56+83.4B	42.2 RT	1036.72	2.00%	--	--	98	--	--	--	--	6
	P154	154	986+00.0A	1.0 RT	1042.01	155	986+00.0A	11.4 RT	1041.59	4.00%	--	10	--	--	--	--	--	--
	P154A	154A	58+75.0EB	6.9 LT	1044.17	155	986+00.0A	11.4 RT	1041.59	2.00%	--	129	--	--	--	--	--	--
	P155	155	986+00.0A	11.4 RT	1041.49	156	985+83.6A	63.1 RT	1040.41	2.00%	--	54	--	--	--	--	--	6
	P179	179	65+25.1EB	13.0 LT	1034.31	179A	65+25.0EB	56.2 RT	1032.23	3.00%	--	69	--	--	--		--	--
	P202	202	47+62.8EB	33.0 RT	1041.22	203	47+62.8EB	57.2 RT	1040.74	2.00%	24	--	--	--	--	--	--	--
										STAGE 2B SUBTOTALS	24	805	191	320	196	24	84	

NOTES

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2) STATIONS AND OFFSETS ARE TO THE (THEORETICAL) FLANGE FOR CURB INLETS, CENTER OF STRUCTURES, OR TO THE END OF PIPE.
3) PIPE LENGTHS ARE MEASURED TO AND FROM CENTER OF STRUCTURE.

* CONTINUED ON NEXT PAGE *

CONTINUED FROM PREVIOUS PAGE

STORM SEWER SUMMARY

		INLET END				DISCHARGE END					612.0212	608.0318	608.0324	608.0330	608.0336	608.0418	610.0429	
											PIPE UNDERDRAIN UNPERFORATED	STORM SEWER PIPE REINFORCED CONCRETE						JOINT TIES[1]
												CLASS III				CLASS IV	HORIZONTAL ELLIPTICAL CLASS HE-IV	
STAGE	PIPE NUMBER	STR	STATION	FEET	ELEV	STR	STATION	FEET	ELEV	SLOPE	12-INCH	18-INCH	24-INCH	30-INCH	36-INCH	18-INCH	29X45-INCH	
											LF	LF	LF	LF	LF	LF	LF	EACH
CATEGORY 0010																		
STAGE 3	P104	104	31+44.5WB	82.4 LT	1008.05	102	30+68.4EB	22.1 LT	1007.12	0.70%	--	--	--	--	--	--	133	6
	P106	106	36+65.0EB	17.2 LT	1019.10	107	36+65.2EB	29.7 LT	1018.85	2.00%	--	13	--	--	--	--	--	--
	P107	107	36+65.2EB	29.7 LT	1018.75	108	37+47.4EB	18.9 LT	1017.99	0.92%	--	83	--	--	--	--	--	--
	P114	114	38+10.0PW	14.9 RT	1018.13	115	38+10.0PW	27.8 LT	1017.27	2.00%	--	43	--	--	--	--	--	6
	P126	126	44+79.9EB	26.0 LT	1038.26	127	44+80.1EB	13.7 LT	1037.77	4.00%	--	12	--	--	--	--	--	--
	P145	145	52+15.0PE	13.8 RT	1044.63	146	52+15.0PE	28.1 LT	1043.80	2.00%	--	42	--	--	--	--	--	6
	P147	147	57+34.8EB	17.5 LT	1047.67	148	57+34.9EB	32.8 LT	1047.06	4.00%	--	15	--	--	--	--	--	--
	P148	148	57+34.9EB	32.8 LT	1046.96	149	56+09.4EB	32.4 LT	1042.44	3.60%	--	126	--	--	--	--	--	--
	P149	149	56+09.4EB	32.4 LT	1041.84	150	56+12.5WB	49.3 LT	1039.17	4.00%	--	--	67	--	--	--	--	--
	P150	150	56+12.5WB	49.3 LT	1039.06	151	56+12.5WB	107.5 LT	1036.73	4.00%	--	--	58	--	--		--	6
	P160	160	11+68.0NB	0.9 LT	1042.00	161	11+68.0NB	9.0 LT	1041.84	2.00%	--	8	--	--	--	--	--	--
	P161	161	11+68.0NB	9.0 LT	1041.74	162	11+68.0NB	49.3 LT	1040.93	2.00%	--	40	--	--	--	--	--	6
	P174	174	62+00.0WB	25.8 RT	1038.06	175	62+00.0WB	13.0 RT	1037.91	1.22%	--	13	--	--	--	--	--	--
	P175	175	62+00.0WB	13.0 RT	1037.81	176	62+00.0WB	59.4 LT	1036.36	2.00%	--	72	--	--	--	--	--	--
	P176	176	62+00.0WB	59.4 LT	1036.26	177	62+12.5PE	37.2 LT	1035.24	2.00%	--	51	--	--	--	--	--	6
	P178	178	65+48.2WB	5.0 RT	1033.88	180A	65+00.0WB	5.0 RT	1032.92	2.00%	--	48	--	--	--	--	--	--
	P180	180	65+00.0WB	19.3 RT	1032.70	180A	65+00.0WB	5.0 RT	1032.42	2.00%	--	--	14	--	--	--	--	--
	P180A	180A	65+00.0WB	5.0 RT	1032.32	181	65+00.0WB	53.7 LT	1031.14	2.00%	--	--	59	--	--	--	--	--
	P181	181	65+00.0WB	53.7 LT	1031.04	182	65+27.3PE	36.8 LT	1029.64	2.50%	--	--	56	--	--	--	--	6
	P187	187	69+28.6PE	13.2 RT	1031.33	188	69+28.6PE	19.2 LT	1031.28	0.15%	--	32	--	--	--	--	--	6
	P189	189	69+75.0WB	26.1 RT	1032.04	190	69+75.0WB	59.0 LT	1031.82	0.25%	--	--	--	--	--	86	--	--
	P190	190	69+75.0WB	59.0 LT	1031.82	191	69+75.0WB	92.4 LT	1031.73	0.26%	--	33	--	--	--	--	--	6
	P199	199	47+24.5PW	9.3 RT	1043.50	200	47+22.0PW	4.0 LT	1043.24	2.00%	13	--	--	--	--	--	--	--
	P200	200	47+22.0PW	4.0 LT	1043.14	201	47+10.3PW	17.4 LT	1042.80	2.00%	17	--	--	--	--	--	--	--
										STAGE 3 SUBTOTALS	30	631	254	--	--	86	133	
										TOTALS	**54**	**1,436**	**445**	**320**	**196**	**110**	**217**	

NOTES

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2) STATIONS AND OFFSETS ARE TO THE (THEORETICAL) FLANGE FOR CURB INLETS, CENTER OF STRUCTURES, OR TO THE END OF PIPE.
3) PIPE LENGTHS ARE MEASURED TO AND FROM CENTER OF STRUCTURE.

3

STORM SEWER STRUCTURE SUMMARY

STAGE	STR NO	STATION	OFFSET FEET	RIM/FLANGE ELEV.	INVERT ELEV.	STR. DEPTH	611.2033 MANHOLES 3x3-FT EACH	611.2044 MANHOLES 4x4-FT EACH	611.2005 MANHOLES 5-FT DIAMETER EACH	611.2006 MANHOLES 6-FT DIAMETER EACH	611.2066 MANHOLES 6x6-FT EACH	611.3004 INLETS 4-FT DIAMETER EACH	611.3220 INLETS 2X2-FT EACH	611.3230 INLETS 2X3-FT EACH	611.3901 INLETS MEDIAN 1 GRATE EACH	611.3902 INLETS MEDIAN 2 GRATE EACH	611.0606 INLET COVERS TYPE B EACH	611.0612 INLET COVERS TYPE C EACH	611.0630 INLET COVERS TYPE HM-GJ EACH	611.0642 INLET COVERS TYPE MS EACH	611.0651 INLET COVERS TYPE S EACH	611.8120.S COVER PLATES TEMPORARY EACH	650.4000* CONSTRUCTION STAKING STORM SEWER EACH	REMARKS
CATEGORY 0010																								
STAGE 2B	102	30+68.4EB	22.1 LT	1010.91	1007.12	2.93	--	--	--	--	1	--	--	--	--	--	--	1	--	--	--	--	1	
	116	12+39.6H	22.7 RT	1020.67	1015.23	4.65	--	--	--	--	--	--	--	1	--	--	--	--	1	--	--	--	1	
	117	12+40.0H	17.0 RT	1020.90	1015.01	5.10	--	--	--	--	--	--	--	1	--	--	--	--	1	--	--	--	1	
	128	45+00.1EB	35.0 RT	1044.40	1035.46	8.15	--	--	--	1	--	--	--	--	--	--	--	--	1	--	--	--	1	
	129	45+29.7EB	74.1 LT	1039.68	1034.38	4.27	--	--	--	--	--	1	--	--	--	--	--	1	--	--	--	--	1	
	130	29+12.6D	27.2 LT	1039.21	1029.98	8.44	--	--	1	--	--	--	--	--	--	--	--	--	1	--	--	--	1	
	131	29+15.0D	16.0 LT	1038.64	1029.42	8.43	--	--	--	--	--	--	--	1	--	--	--	--	1	--	--	--	1	
	133	43+50.0C	57.4 LT	1033.65	1027.82	4.80	--	--	--	--	--	1	--	--	--	--	--	1	--	--	--	--	1	
	136	27+60.0D	45.5 LT	1029.06	1014.33	14.56	--	--	1	--	--	--	--	--	--	--	1	--	--	--	--	--	1	
	142	987+15.0	110.0 RT	1029.24	1019.57	8.72	--	--	1	--	--	--	--	--	--	--	--	1	--	--	--	--	1	
	143	989+95.1	100.0 RT	1026.63	1017.70	7.99	--	--	1	--	--	--	--	--	--	--	--	1	--	--	--	--	1	
	152	56+83.4B	55.9 LT	1043.68	1038.68	4.01	--	--	--	--	--	1	--	--	--	--	--	1	--	--	--	--	1	
	154A	58+75.0EB	6.9 LT	1050.17	1044.17	5.21	--	--	--	--	--	1	--	--	--	--	--	--	1	--	--	1	1	INSTALL COVER IN ST 4
	154	986+00.0A	1.0 RT	1048.62	1042.01	5.82	--	--	--	--	--	--	--	1	--	--	--	--	1	--	--	--	1	
	155	986+00.0A	11.4 RT	1048.80	1041.49	6.52	1	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--	1	
	179	65+25.1EB	13.0 LT	1039.61	1034.31	4.51	--	--	--	--	--	--	--	1	--	--	--	--	1	--	--	1	1	INSTALL COVER IN ST 4
	202	47+62.8EB	33.0 RT	1048.80	1041.22	6.58	--	--	--	--	--	--	1	--	--	--	--	--	--	--	1	--	1	
	204	987+85.2	29.0 LT	1026.42	1023.00	3.63	--	--	--	--	--	--	--	--	--	1	--	--	--	2	--	--	1	MATCH INVERT
	T03	56+03.30WB	11.3 RT	1046.60	1040.16	6.19	1	--	--	--	--	--	--	--	--	--	1	--	--	--	--	--	1	ELEVATIONS TO EX.
	T04	64+23.1WB	9.0 RT	1032.31	1029.33	3.19	--	--	--	--	--	--	--	--	1	--	--	--	--	1	--	--	1	PIPES
				STAGE 2B SUBTOTALS			2	--	4	1	1	4	1	5	1	1	2	6	9	3	1	2	20	

NOTES

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2) RIM ELEVATIONS ARE GIVEN AT THE FLANGE LINE FOR CURB INLETS, CENTER OF STRUCTURE FOR MANHOLE COVERS, AND CENTER OF TYPE B, C, & HM-GJ INLETS.
3) STRUCTURE DEPTH EQUALS RIM ELEVATION MINUS LOWEST INVERT PLUS PIPE THICKNESS MINUS CASTING HEIGHT MINUS ADJUSTMENT RING.
   ADJUSTMENT RING DEPTH NOT INCLUDED WHERE TYPE MS INLET COVERS ARE USED.
   - CASTING HEIGHT EQUALS 0.67 FT FOR TYPE B COVERS; 0.74 FT FOR TYPE C COVERS; 0 FT FOR TYPE MS COVERS (PER SDD); 0.50 FT FOR TYPE HM-GJ COVERS.
   - ADJUSTMENT RING HEIGHT EQUALS 0.5 FT.

* ADDITIONAL QUANTITIES FOUND ELSEWHERE

* CONTINUED ON NEXT PAGE *

CONTINUED FROM PREVIOUS PAGE

STORM SEWER STRUCTURE SUMMARY

STAGE	STR NO	STATION	OFFSET FEET	RIM/FLANGE ELEV.	INVERT ELEV.	STR. DEPTH	611.2033 MANHOLES 3x3-FT EACH	611.2044 MANHOLES 4x4-FT EACH	611.2005 MANHOLES 5-FT DIAMETER EACH	611.2006 MANHOLES 6-FT DIAMETER EACH	611.2066 MANHOLES 6x6-FT EACH	611.3004 INLETS 4-FT DIAMETER EACH	611.3220 INLETS 2X2-FT EACH	611.3230 INLETS 2X3-FT EACH	611.3901 INLETS MEDIAN 1 GRATE EACH	611.3902 INLETS MEDIAN 2 GRATE EACH	611.0606 INLET COVERS TYPE B EACH	611.0612 INLET COVERS TYPE C EACH	611.0630 INLET COVERS TYPE HM-GJ EACH	611.0642 INLET COVERS TYPE MS EACH	611.0651 INLET COVERS TYPE S EACH	611.8120.S COVER PLATES TEMPORARY EACH	650.4000* CONSTRUCTION STAKING STORM SEWER EACH	REMARKS
CATEGORY 0010																								
STAGE 3	106	36+65.0EB	17.2 LT	1022.72	1019.10	2.83	--	--	--	--	--	--	--	1	--	--	--	--	1	--	--	1	1	INSTALL COVER IN ST 4
	107	36+65.2EB	29.7 LT	1022.72	1018.75	3.18	--	--	--	--	--	1	--	--	--	--	--	--	1	--	--	--	1	
	108	37+47.4EB	18.9 LT	1023.03	1017.39	5.39	1	--	1	--	--	--	--	--	--	--	1	--	--	--	--	--	1	
	114	38+10.0PW	14.9 RT	1023.52	1018.13	5.10	--	--	--	--	--	1	--	--	--	--	1	--	--	--	--	--	1	
	125	45+50.0EB	21.2 LT	1044.97	1037.94	6.74	--	--	--	--	--	1	--	--	--	--	1	--	--	--	--	--	1	
	126	44+79.9EB	26.0 LT	1044.30	1038.26	5.25	--	--	--	--	--	--	--	1	--	--	--	--	1	--	--	--	1	
	127	44+80.1EB	13.7 LT	1044.24	1037.66	5.79	--	--	--	--	--	1	--	--	--	--	--	--	1	--	--	1	1	INSTALL COVER IN ST 4
	145	52+15.0PE	13.8 RT	1050.63	1044.63	5.71	--	--	--	--	--	1	--	--	--	--	1	--	--	--	--	--	1	
	147	57+34.8EB	17.5 LT	1051.46	1047.67	3.00	--	--	--	--	--	--	--	1	--	--	--	--	1	--	--	1	1	INSTALL COVER IN ST 4
	148	57+34.9EB	32.8 LT	1051.29	1046.96	3.54	--	--	--	--	--	1	--	--	--	--	--	--	1	--	--	--	1	
	149	56+09.4EB	32.4 LT	1050.12	1041.84	8.03	--	1	--	--	--	--	--	--	--	--	1	--	--	--	--	--	1	
	150	56+12.5WB	49.3 LT	1049.65	1039.06	10.34	--	--	--	--	--	1	--	--	--	--	1	--	--	--	--	--	1	
	160	11+68.0NB	0.9 LT	1047.83	1042.00	5.04	--	--	--	--	--	--	--	1	--	--	--	--	1	--	--	--	1	
	161	11+68.0NB	9.0 LT	1047.99	1041.74	5.46	--	--	--	--	--	--	--	1	--	--	--	--	1	--	--	--	1	
	174	62+00.0WB	25.8 RT	1043.95	1038.06	5.60	--	--	--	--	--	1	--	--	--	--	1	--	--	--	--	--	1	
	175	62+00.0WB	13.0 RT	1044.37	1037.81	5.77	--	--	--	--	--	--	--	1	--	--	--	--	1	--	--	--	1	
	176	62+00.0WB	59.4 LT	1045.15	1036.26	8.60	--	--	--	--	--	1	--	--	--	--	1	--	--	--	--	--	1	
	178	65+48.2WB	5.0 RT	1038.84	1033.88	4.17	--	--	--	--	--	1	--	--	--	--	--	--	1	--	--	--	1	
	180	65+00.0WB	19.3 LT	1038.88	1032.70	5.93	--	--	--	--	--	1	--	--	--	--	1	--	--	--	--	--	1	
	180A	65+00.0WB	5.0 RT	1039.45	1032.32	6.38	--	--	1	--	--	--	--	--	--	--	--	--	1	--	--	--	1	
	181	65+00.0WB	53.7 LT	1038.36	1031.04	7.07	--	--	--	--	--	1	--	--	--	--	1	--	--	--	--	--	1	
	187	69+28.6PE	13.2 RT	1034.37	1031.33	2.75	--	--	--	--	--	1	--	--	--	--	1	--	--	--	--	--	1	
	189	69+75.0WB	26.1 RT	1034.24	1032.04	2.41	--	--	--	--	--	--	--	--	1	--	--	--	--	1	--	--	1	NO SLOPE COVER
	190	69+75.0WB	59.0 LT	1034.66	1031.82	3.05	--	--	--	--	--	--	--	--	1	--	--	--	--	1	--	--	1	NO SLOPE COVER
	199	47+24.5PW	9.3 RT	1048.50	1043.50	4.00	--	--	--	--	--	--	1	--	--	--	--	--	--	--	1	--	1	
	200	47+22.0PW	4.0 LT	1048.37	1043.14	4.23	--	--	--	--	--	--	1	--	--	--	--	--	--	--	1	--	1	
				STAGE 3 SUBTOTALS			1	1	2	--	--	13	2	6	2	--	11	--	11	2	2	3	26	
				TOTALS			**3**	**1**	**6**	**1**	**1**	**17**	**3**	**11**	**3**	**1**	**13**	**6**	**20**	**5**	**3**	**5**	**46**	

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   - CASTING HEIGHT EQUALS 0.67 FT FOR TYPE B COVERS; 0.74 FT FOR TYPE C COVERS; 0 FT FOR TYPE MS COVERS (PER SDD); 0.50 FT FOR TYPE HM-GJ & S COVERS.
   - ADJUSTMENT RING HEIGHT EQUALS 0.5 FT.

* ADDITIONAL QUANTITIES FOUND ELSEWHERE

3

PIPE GRADES

STAGE	STRUCTURE NUMBER	STATION	OFFSET FEET		611.9800.S.01 PIPE GRATES 12-INCH EACH	611.9800.S.02 PIPE GRATES 15-INCH EACH	611.9800.S.03 PIPE GRATES 18-INCH EACH	611.9800.S.04 PIPE GRATES 24-INCH EACH	611.9800.S.05 PIPE GRATES 30-INCH EACH	611.9800.S.06 PIPE GRATES 36-INCH EACH	611.9800.S.07 PIPE GRATES 29x45-INCH EACH
CATEGORY 0010											
STAGE 2B											
	101	30+50.0EB	23.7	RT	--	--	1	--	--	--	--
	103	30+85.0EB	23.6	LT	--	--	1	--	--	--	--
	141	986+70.1	121.3	RT	--	--	--	--	1	--	--
	144	989+95.4	113.7	RT	--	--	--	--	1	--	--
		STAGE 2B SUBTOTALS			--	--	2	--	2	--	--
STAGE 3											
	104	31+44.5WB	82.4	LT	--	--	--	--	--	--	1
	104A	32+00.0PW	9.4	RT	--	1	--	--	--	--	--
	104B	32+00.0PW	10.1	LT	--	1	--	--	--	--	--
	110	1+37.3SR	33.5	RT	--	--	--	--	1	--	--
	111	0+77.6SR	38.5	LT	--	--	--	--	1	--	--
	115	38+10.0PW	27.8	LT	--	--	1	--	--	--	--
	146	52+15.0PE	28.1	LT	--	--	1	--	--	--	--
	151	56+12.5WB	107.5	LT	--	--	--	1	--	--	--
	172	60+07.8PE	90.0	LT	--	--	--	--	--	1	--
	177	62+12.5PE	37.2	LT	--	--	1	--	--	--	--
	182	65+27.3PE	36.8	LT	--	--	--	1	--	--	--
	185	66+80.0PE	43.2	LT	--	--	--	1	--	--	--
	186	65+93.8PE	48.6	LT	--	--	--	1	--	--	--
	188	69+28.6PE	19.2	LT	--	--	1	--	--	--	--
	191	69+75.0PE	92.4	LT	--	--	1	--	--	--	--
	201	47+10.3PW	17.4	LT	1	--	--	--	--	--	--
		STAGE 3 SUBTOTALS			1	2	5	4	2	1	1
		TOTALS			**1**	**2**	**7**	**4**	**4**	**1**	**1**

3

GUARDRAIL SUMMARY

LOCATION	STATION	TO	STATION	OFFSET	614.0115 ANCHORAGES FOR STEEL PLATE BEAM GUARD TYPE 2 EACH	614.0220 STEEL THRIE BEAM BULL NOSE TERMINAL EACH	614.0230 STEEL THRIE BEAM LF	614.0305 STEEL PLATE BEAM GUARD CLASS A LF	614.0360 STEEL PLATE BEAM GUARD TEMPORARY LF	614.0396 GUARDRAIL MOW STRIP ASPHALT SY	614.2300 MGS GUARDRAIL 3 LF	614.2500 MGS THRIE BEAM TRANSITION LF	614.2610 MGS GUARDRAIL TERMINAL EAT EACH	614.2620 MGS GUARDRAIL TERMINAL TYPE 2 EACH	COMMENTS
CATEGORY 0100															
STAGE 1B															
CTH NN WB	54+74.50WB	-	57+40.27WB	LT	--	--	--	--	267	--	--	--	--	--	
BRAY RD	10+51.99NB	-	13+81.79NB	LT	--	--	--	--	345	--	--	--	--	--	
			STAGE 1B SUBTOTALS		--	--	--	--	612	--	--	--	--	--	
STAGE 2B															
CTH NN EB	46+40.66EB	-	47+94.29EB	RT	--	--	--	--	--	63	65	40	1	--	
	45+27.90EB	-	47+70.26EB	LT	--	--	--	--	--	--	150	40	1	--	
	51+76.56EB	-	54+65.00EB	RT	--	--	--	--	--	106	250	40	--	1	
	51+52.53EB	-	52+83.19EB	LT	---	1	7	--	--	130	--	40	--	--	NON-STANDARD THRIE BEAM LENGTH
RAMP C	45+08.92C	-	52+95.19C	RT	--	--	--	--	--	329	744	--	1	1	
			STAGE 2B SUBTOTALS		--	1	7	--	--	628	1,209	160	3	2	
STAGE 3															
CTH NN WB	51+06.64WB	-	54+11.52WB	LT	--	--	--	--	--	126	213	40	1	--	
	45+95.43WB	-	47+28.58WB	LT	--	--	--	--	--	44	113	21	--	1	
	47+64.00WB	-	47+76.00WB	RT	--	--	--	--	--	--	25	--	--	2	
	51+40.02WB	-	52+86.27WB	RT	--	--	22	--	--	--	--	40	--	--	NON-STANDARD THRIE BEAM LENGTH
USH 12	984+82.80	-	990+71.83	RT	--	--	--	--	--	--	--	--	--	1	
	984+82.80	-	990+71.31	RT	1	--	--	490	--	--	--	--	--	1	
	987+62.49	-	992+42.57	LT	--	--	--	489	--	--	--	--	--	1	
	987+62.48	-	992+42.59	LT	1	--	--	480	--	--	--	--	--	1	
	987+77.42	-	990+46.58	LT	--	2	325	480	--	--	--	--	--	--	
	990+66.37	-	993+56.80	LT	--	--	--	--	--	150	238	--	1	1	
			STAGE 3 SUBTOTALS		2	2	347	1,939	--	320	589	101	2	8	
STAGE 4															
CTH NN EB	45+27.90	-	47+70.26	LT	--	--	--	--	--	--	150	40	1	--	
			STAGE 4 SUBTOTALS		--	--	--	--	--	--	150	40	1	--	
			TOTALS		**2**	**3**	**354**	**1,939**	**612**	**948**	**1,948**	**301**	**6**	**10**	

WATERMAIN INSULATION

LOCATION	STATION	TO	STATION	OFFSET	612.0902.S INSULATION BOARD POLYSTYRENE, 2-INCH SY
CATEGORY 0010					
STAGE 3					
CTH NN	33+50	-	35+50	LT	89
CTH NN	37+50	-	43+00	LT	245
TOTALS					**334**

FENCING SUMMARY

LOCATION	STATION	TO	STATION	OFFSET	616.0100 FENCE WOVEN WIRE (4-FT) LF
CATEGORY 0010					
STAGE 2B					
CTH NN EB	37+47EB	-	40+85EB	RT	370
	59+54EB	-	65+15EB	RT	520
RAMP A	983+07A	-	985+61A	RT	340
			STAGE 2B SUBTOTAL		1,230
STAGE 3					
CTH NN WB	30+43WB	-	32+01WB	LT	170
	41+05WB	-	46+17WB	LT	540
	50+58WB	-	56+55WB	LT	610
	59+11WB	-	65+78WB	LT	750
	66+31WB	-	71+00WB	LT	520
BRAY RD	12+17NB	-	16+89NB	RT	430
			STAGE 3 SUBTOTAL		3,020
				TOTAL	**4,250**

TEMPORARY SEDIMENTATION BASIN

LOCATION	628.1104* EROSION BALES EACH	645.0120 GEOTEXTILE FABRIC TYPE HR SY
CATEGORY 0010		
PROJECT		
UNDISTRIBUTED	150	500
TOTALS	**150**	**500**

NOTE: EXACT LOCATIONS AND SIZE TO BE DETERMINED IN THE FIELD
* ADDITIONAL QUANTITIES LISTED ELSEWHERE

EROSION CONTROL SUMMARY

LOCATION	STATION	TO	STATION	606.0100 RIPRAP LIGHT CY	628.1104* EROSION BALES EACH	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF	628.1905 MOBILIZATIONS EROSION CONTROL EACH	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL EACH	628.2004 EROSION MAT CLASS I TYPE B SY	628.2021 EROSION MAT CLASS II TYPE A SY	628.2023 EROSION MAT CLASS II TYPE B SY	628.6510 SOIL STABILIZER TYPE B ACRE
CATEGORY 0010													
STAGE 1A & B													
CTH NN EB & WB	30+00	-	70+92	---	---	---	---	---	---	---	---	---	---
STAGE 2B													
CTH NN EB	30+00	-	70+50	52	120	900	900	---	---	9,250	30	---	---
CTH H	9+09	-	13+19	15	---	---	---	---	---	730	30	---	---
RAMP C	40+50	-	56+81	45	40	1,600	1,600	---	---	11,050	5	---	---
RAMP D	19+57	-	39+89	21	---	850	850	---	---	2,350	---	460	---
RAMP B	55+75	-	65+19	27	---	625	625	---	---	6,850	15	---	---
RAMP A	978+13	-	986+50	21	---	825	825	---	---	4,200	30	590	---
USH 12	983+00	-	989+00	---	---	---	---	---	---	3,400	---	---	---
	STAGE 2B SUBTOTALS			181	160	4,800	4,800	---	---	37,830	110	1,050	---
STAGE 3													
CTH NN WB	30+50	-	70+92	120	300	3,350	3,350	---	---	39,100	50	---	---
STUART DR	0+00	-	3+18	5	---	---	---	---	---	---	5	---	---
BRAY RD	10+00	-	18+24	24	75	265	265	---	---	7,550	45	---	---
STUART DR E.	0+00	-	2+58	15	---	---	---	---	---	150	---	---	---
USH 12	989+00	-	992+50	---	---	---	---	---	---	1,850	---	---	---
UNDISTRIBUTED	---	-	---	---	---	---	---	---	---	---	---	---	1.5
	STAGE 3 SUBTOTALS			164	375	3,615	3,615	---	---	48,650	100	---	1.5
STAGE 4													
CTH NN EB	30+00	-	70+50	2	---	---	---	---	---	5,600	---	---	---
UNDISTRIBUTED				88	135	2,135	2,135	15	8	22,920	65	300	3.5
			TOTALS	**435**	**670**	**10,550**	**10,550**	**15**	**8**	**115,000**	**275**	**1,350**	**5**

* ADDITIONAL QUANTITIES LISTED ELSEWHERE

3

EROSION CONTROL SUMMARY CONTINUED

ROADWAY	STATION	TO	STATION	628.7005 INLET PROTECTION TYPE A EACH	628.7010 INLET PROTECTION TYPE B EACH	628.7015 INLET PROTECTION TYPE C EACH	628.7020 INLET PROTECTION TYPE D EACH	628.7504 TEMPORARY DITCH CHECKS LF	628.7555 CULVERT PIPE CHECKS EACH	628.7560 TRACKING PADS EACH	628.7570 ROCK BAGS EACH	631.0300 SOD WATER MGAL	631.1000 SOD LAWN SY	645.0130 GEOTEXTILE FABRIC TYPE R SY	SPV.0060.06 SAND BAGS EACH	SPV.0090.04 HEAVY DUTY SILT FENCE LF
CATEGORY 0010																
STAGE 1A & B																
CTH NN EB & WB	30+00	-	70+92	---	4	---	---	---	---	---	---	---	---	---	---	---
STAGE 2B											---					
CTH NN EB	30+00	-	70+50	4	---	3	1	60	4	---	---	3	100	130	---	150
CTH H	9+09	-	13+19	2	---	2	---	30	3	---	---	1	30	40	---	---
RAMP C	40+50	-	56+81	2	---	---	2	---	1	---	290	3	90	120	---	400
RAMP D	19+57	-	39+89	3	---	3	---	165	1	---	50	1	25	55	---	325
RAMP B	55+75	-	65+19	2	---	---	2	30	---	---	240	1	25	75	---	325
RAMP A	978+13	-	986+50	2	---	2	---	225	3	---	---	1	30	59	---	65
USH 12	983+00	-	989+00	3	2	---	3	---	1	---	---	1	10	---	---	---
STAGE 2B SUBTOTALS				18	2	10	8	510	13	---	580	11	310	479	---	1,265
STAGE 3																
CTH NN WB	30+50	-	70+92	22	---	10	12	720	6	---	195	7	290	335	---	---
STUART DR	0+00	-	3+18	---	---	---	---	15	2	---	---	1	5	15	---	---
BRAY RD	10+00	-	18+24	2	---	2	---	60	3	---	50	2	45	60	---	---
STUART DR E.	0+00	-	2+58	---	---	---	---	---	2	---	---	---	---	40	---	---
USH 12	989+00	-	992+50	---	---	---	---	---	---	---	---	---	---	---	---	---
STAGE 3 SUBTOTALS				24	---	12	12	795	13	---	245	10	340	450	---	---
STAGE 4																
CTH NN EB	30+00	-	70+50	4	---	4	---	150	---	---	---	1	40	4	---	---
UNDISTRIBUTED				14	4	9	5	365	9	8	75	8	170	237	500	335
			TOTALS	**60**	**10**	**35**	**25**	**1,820**	**35**	**8**	**900**	**30**	**860**	**1,170**	**500**	**1,600**

* ADDITIONAL QUANTITIES LISTED ELSEWHERE

3

RESTORATION

LOCATION	STATION	TO	STATION	625.0500 SALVAGED TOPSOIL SY	627.0200* MULCHING SY	629.0210* FERTILIZER TYPE B CWT	630.0130 SEEDING MIXTURE NO. 30 LB	630.0200 SEEDING TEMPORARY LB
CATEGORY 0010								
STAGE 1A & B								
CTH NN EB & WB	30+00	-	70+92	600	600	1	---	20
STAGE 2B								---
CTH NN EB	30+00	-	70+50	16,200	6,920	11	295	150
CTH H	9+09	-	13+19	2,800	2,040	2	55	28
RAMP C	40+50	-	56+81	14,900	3,845	10	270	135
RAMP D	19+57	-	39+89	7,250	4,900	5	135	68
RAMP B	55+75	-	65+19	12,300	5,435	8	225	115
RAMP A	978+13	-	986+50	6,550	2,320	5	120	60
USH 12	983+00	-	989+00	3,400	---	3	65	33
	STAGE 2B SUBTOTALS			63,400	25,460	44	1,165	588
STAGE 3								
CTH NN WB	30+50	-	70+92	42,200	3,050	27	760	380
STUART RD	0+00	-	3+18	1,100	1,095	1	20	10
BRAY RD	10+00	-	18+24	13,800	6,205	9	250	125
USH 12	989+00	-	994+91	2,750	900	2	50	25
	STAGE 3 SUBTOTALS			59,850	11,250	39	1,080	540
STAGE 4								
CTH NN MEDIAN	30+00	-	70+50	5,600	---	4	105	53
UNDISTRIBUTED	---		---	13,050	4,190	12	250	500
			TOTALS	**142,500**	**41,500**	**100**	**2,600**	**1,700**

* ADDITIONAL QUANTITIES LISTED ELSEWHERE

BORROW PIT RESTORATION

LOCATION	627.0200* MULCHING SY	629.0210* FERTILIZER TYPE B LB	630.0300 SEEDING BORROW PIT LB
CATEGORY 0010			
PROJECT			
UNDISTRIBUTED	37,500	25	500
TOTALS	**37,500**	**25**	**500**

* ADDITIONAL QUANTITIES LISTED ELSEWHERE

3

DELINEATORS

LOCATION	STATION	TO	STATION	OFFSET	633.0100 DELINEATOR POSTS STEEL EACH	633.0500 DELINEATOR REFLECTORS WHITE EACH	633.0500 DELINEATOR REFLECTORS YELLOW EACH	633.1000 DELINEATOR BRACKETS EACH	COMMENTS
CATEGORY 0010									
STAGE 2B									
RAMP A	978+13A	-	981+88A	LT	7	--	7	7	55' SPACING
	983+34A	-	984+93A	RT	5	5	--	5	35' SPACING
RAMP B	55+64B	-	65+19B	LT	28	--	28	28	35' SPACING
RAMP C	42+24C	-	44+32C	LT	5	--	5	5	50' SPACING
	46+43C	-	50+99C	RT	12	12	--	12	40' SPACING
	53+38C	-	56+81C	LT	7	--	7	7	50' SPACING
RAMP D	19+56D	-	30+60D	LT	32	--	32	32	35' SPACING
				TOTALS	**96**	**96**		**96**	

TRAFFIC CONTROL ITEMS

CATEGORY 0010	** ESTIMATED DURATION	512.1000 PILING STEEL SHEET TEMPORARY SF	603.8000 CONCRETE BARRIER TEMPORARY PRECAST DELIVERED LF	603.8125 CONCRETE BARRIER TEMPORARY PRECAST INSTALLED LF	614.0905 CRASH CUSHION TEMPORARY EACH	643.0300* DRUMS ** EACH	DAYS	643.0420* BARRICADES TYPE III ** EACH	DAYS	643.0500 FLEXIBLE TUBULAR MARKER POSTS EACH	643.0600 FLEXIBLE TUBULAR MARKER BASES EACH	643.0705* WARNING LIGHTS TYPE A ** EACH	DAYS	643.0715* WARNING LIGHTS TYPE C ** EACH	DAYS	643.0900* SIGNS ** EACH	DAYS	643.0920* COVERING SIGNS TYPE II ** NUMBER OF CYCLES EACH	** NUMBER OF SIGNS	643.1050* SIGNS PORTABLE CHANGEABLE MESSAGE ** EACH	DAYS
STAGE 1A	10 DAYS	---	---	---	---	170	1,700	14	140	---	---	28	280	0	0	33	330	---	---	2	28
STAGE 1B	10 DAYS	---	---	---	---	139	1,390	10	100	---	---	20	200	0	0	28	280	3	1	2	14
STAGE 2A	12 DAYS	---	390	390	2	248	2,980	34	410	207	207	68	820	3	36	93	1,120	3	1	2	14
STAGE 2B	90 DAYS	205	6200	6200	10	197	17,730	40	3,600	---	---	80	7,200	3	270	72	6,480	---	---	4	34
STAGE 3	104 DAYS	---	150	150	2	126	13,100	39	4,060	231	231	78	8,110	0	0	87	9,050	---	---	4	34
STAGE 4	24 DAYS	---	---	---	---	187	4,490	10	240	---	---	20	480	0	0	23	550	---	---	1	7
UNDISTRIBUTED			1690	1690	4	---	10,360	---	2,150	112	112	---	4,310	2	94	84	4,490	2	---	4	34
TOTALS	**250 DAYS**	**205**	**8,430**	**8,430**	**18**		**51,750**		**10,700**	**550**	**550**		**21,400**		**400**		**22,300**	**8**			**165**

* ADDITIONAL QUANTITIES LISTED ELSEWHERE
** FOR INFORMATION ONLY

FIXED MESSAGE SIGNS

CATEGORY 0010 SIGN NUMBER	CODE	** SIGN SIZE W X H (FT) X (FT)	643.1000 TRAFFIC CONTROL SIGNS FIXED MESSAGE SF
1	---	14 X 2	28
2	---	16 X 7	112
3	---	15.5 X 8	124
4	---	9 X 2	18
5	---	9 X 2	18
6	---	6.5 X 6	39
7	---	19 X 11	209
8	---	15.5 X 2	93
9	---	13.5 X 2	27
		TOTAL	**668**

** FOR INFORMATION ONLY

3

DETOURS

CATEGORY 0010 DETOUR ROUTES	ESTIMATED DURATION **		643.0300* DRUMS ** EACH	643.0300* DRUMS ** DAYS	643.0420* BARRICADES TYPE III ** EACH	643.0420* BARRICADES TYPE III ** DAYS	643.0705* WARNING LIGHTS TYPE A ** EACH	643.0705* WARNING LIGHTS TYPE A ** DAYS	643.0715* WARNING LIGHTS TYPE C ** EACH	643.0715* WARNING LIGHTS TYPE C ** DAYS	643.0800* ARROW BOARDS ** EACH	643.0800* ARROW BOARDS ** DAYS	643.0900* TRAFFIC CONTROL SIGNS ** EACH	643.0900* TRAFFIC CONTROL SIGNS ** DAYS	643.3000 TRAFFIC CONTROL DETOUR SIGNS ** EACH	643.3000 TRAFFIC CONTROL DETOUR SIGNS ** DAYS
STAGE 2A USH 12 WB & EB (OVERNIGHT CLOSURE FOR BRIDGE REMOVAL)	5	DAYS	202	1,010	32	160	64	320	64	320	6	30	46	230	398	1,990
STAGE 2B LONG TERM RAMP A CLOSURE	90	DAYS	0	0	0	0	0	0	0	0	0	0	0	0	76	6,840
STAGE 2B LONG TERM RAMP B & C CLOSURE	90	DAYS	0	0	0	0	0	0	0	0	0	0	0	0	78	7,020
STAGE 2B LONG TERM RAMP D CLOSURE	90	DAYS	0	0	0	0	0	0	0	0	0	0	0	0	55	4,950
STAGE 2B LONG TERM CTH H CLOSURE	90	DAYS	0	0	2	180	4	360	8	720	0	0	2	180	72	6,480
STAGE 2B USH 12 WB & EB MAINLINE (OVERNIGHT CLOSURE FOR GIRDER PLACEMENT)	2	DAYS	178	356	18	36	36	72	64	128	6	12	30	60	317	634
STAGE 2B USH12 WB C-D ROAD (OVERNIGHT CLOSURE FOR GIRDER PLACEMENT)	1	DAYS	44	44	4	4	8	8	0	0	0	0	6	6	303	303
STAGE 2B USH12 EB C-D ROAD (OVERNIGHT CLOSURE FOR GIRDER PLACEMENT)	1	DAYS	24	24	9	9	18	18	0	0	0	0	8	8	313	313
STAGE 3 USH 12 WB & EB (OVERNIGHT CLOSURE FOR BRIDGE REMOVAL)	5	DAYS	202	1,010	32	160	64	320	64	320	6	30	40	200	398	1,990
STAGE 3 USH 12 WB & EB MAINLINE (OVERNIGHT CLOSURE FOR GIRDER PLACEMENT)	2	DAYS	178	356	18	36	36	72	64	128	6	12	30	60	88	176
STAGE 3 USH12 WB C-D ROAD (OVERNIGHT CLOSURE FOR GIRDER PLACEMENT)	1	DAYS	0	0	5	5	10	10	0	0	0	0	2	2	135	135
STAGE 3 USH12 EB C-D ROAD (OVERNIGHT CLOSURE FOR GIRDER PLACEMENT)	1	DAYS	24	24	9	9	18	18	0	0	0	0	8	8	244	244
UNDISTRIBUTED	---	DAYS	---	726	---	151	---	302	---	434	---	36	---	196	---	7925
TOTALS				**3,550**		**750**		**1,500**		**2,050**		**120**		**950**		**39,000**

* ADDITIONAL QUANTITIES LISTED ELSEWHERE
** FOR INFORMATION ONLY
*** PLACE SIGNS PORTABLE CHANGEABLE MESSAGE 10 DAYS PRIOR TO CLOSURES.

DETOURS CONTINUED

CATEGORY 0010 DETOUR ROUTES	ESTIMATED DURATION **		643.1050* SIGNS PORTABLE CHANGEABLE MESSAGE ** EACH	643.1050* SIGNS PORTABLE CHANGEABLE MESSAGE ** DAYS	643.0910* TRAFFIC CONTROL COVERING SIGNS TYPE I ** EACH	643.0910* TRAFFIC CONTROL COVERING SIGNS TYPE I ** NUMBER OF CYCLES	643.0910* TRAFFIC CONTROL COVERING SIGNS TYPE I ** NUMBER OF SIGNS	643.0920* TRAFFIC CONTROL COVERING SIGNS TYPE II ** EACH	643.0920* TRAFFIC CONTROL COVERING SIGNS TYPE II ** NUMBER OF CYCLES	643.0920* TRAFFIC CONTROL COVERING SIGNS TYPE II ** NUMBER OF SIGNS
STAGE 2A USH 12 WB & EB (OVERNIGHT CLOSURE FOR BRIDGE REMOVAL)	5	DAYS	6	60	0	0	0	2	1	2
STAGE 2B LONG TERM RAMP A CLOSURE	90	DAYS	0	0	1	1	1	0	0	0
STAGE 2B LONG TERM RAMP B & C CLOSURE	90	DAYS	0	0	2	1	2	1	1	1
STAGE 2B LONG TERM RAMP D CLOSURE	90	DAYS	0	0	1	1	1	12	1	12
STAGE 2B LONG TERM CTH H CLOSURE	90	DAYS	0	0	0	0	0	0	0	0
STAGE 2B USH 12 WB & EB MAINLINE (OVERNIGHT CLOSURE FOR GIRDER PLACEMENT)	2	DAYS	2	20	0	0	0	0	0	0
STAGE 2B USH12 WB C-D ROAD (OVERNIGHT CLOSURE FOR GIRDER PLACEMENT)	1	DAYS	1	10	0	0	0	0	0	0
STAGE 2B USH12 EB C-D ROAD (OVERNIGHT CLOSURE FOR GIRDER PLACEMENT)	1	DAYS	1	10	0	0	0	0	0	0
STAGE 3 USH 12 WB & EB (OVERNIGHT CLOSURE FOR BRIDGE REMOVAL)	5	DAYS	5	50	0	0	0	0	0	0
STAGE 3 USH 12 WB & EB MAINLINE (OVERNIGHT CLOSURE FOR GIRDER PLACEMENT)	2	DAYS	2	20	0	0	0	0	0	0
STAGE 3 USH12 WB C-D ROAD (OVERNIGHT CLOSURE FOR GIRDER PLACEMENT)	1	DAYS	1	10	0	0	0	0	0	0
STAGE 3 USH12 EB C-D ROAD (OVERNIGHT CLOSURE FOR GIRDER PLACEMENT)	1	DAYS	0	0	0	0	0	0	0	0
UNDISTRIBUTED	---	DAYS	---	50	10	---	---	10	---	---
TOTALS				**230**	**14**			**25**		

* ADDITIONAL QUANTITIES LISTED ELSEWHERE
** FOR INFORMATION ONLY

TEMPORARY WINTER PAVEMENT MARKING

CATEGORY 0010	646.0106* PAVEMENT MARKING EPOXY 4-INCH WHITE LF	646.0106* PAVEMENT MARKING EPOXY 4-INCH YELLOW LF	646.0126 PAVEMENT MARKING EPOXY 8-INCH EACH	647.0726* PAVEMENT MARKING DIAGONAL EPOXY 12-INCH EACH	647.0166 PAVEMENT MARKING ARROWS EPOXY TYPE 2 EACH	647.0356 PAVEMENT MARKING WORDS EPOXY EACH
STAGE 1A	---	---	---	---	---	---
STAGE 1B**	7,230	5,640	750	310	2	2
STAGE 2A	---	---	---	---	---	---
STAGE 2B	---	---	---	---	---	---
STAGE 3	---	---	---	---	---	---
STAGE 4	---	---	---	---	---	---
SUBTOTALS	7,230	5,640	750	310	2	2
TOTALS	**12,870**		**750**	**310**	**2**	**2**

* ADDITIONAL QUANTITIES LISTED ELSEWHERE

REMOVE TEMPORARY PAVEMENT MARKING AND RESTORE EXISTING PAVEMENT MARKING WITH EPOXY PAVEMENT MARKING. THE PAVEMENT MARKING EPOXY WILL BE IN PLACE OVER WINTER UNTIL IT IS REMOVED DURING STAGE 2A CONSTRUCTION.

TEMPORARY PAVEMENT MARKING PAINT

CATEGORY 0010	646.0600* REMOVING PAVEMENT MARKINGS LF	647.0955 REMOVING PAVEMENT MARKINGS ARROWS EACH	647.0965 REMOVING PAVEMENT MARKINGS WORDS EACH	649.0200 REFLECTIVE PAINT 4-INCH WHITE LF	649.0200 REFLECTIVE PAINT 4-INCH YELLOW LF	649.0701 8-INCH WHITE LF	649.1700 ARROWS WHITE EACH	649.1900 WORDS WHITE EACH
STAGE 1A	3,740	2	2	---	---	---	---	---
STAGE 1B	3,520	---	---	---	---	---	---	---
STAGE 2A	16,950	2	2	8,380	9,310	170	2	1
STAGE 2B	---	---	---	---	---	---	---	---
STAGE 3	6,540	---	---	---	---	---	---	---
STAGE 4	---	---	---	---	---	---	---	---
SUBTOTALS	30,750	4	4	8,380	9,310	170	2	1
TOTALS	**30,750**	**4**	**4**	**17,690**		**170**	**2**	**1**

* ADDITIONAL QUANTITIES LISTED ELSEWHERE

TEMPORARY PAVEMENT MARKING REMOVABLE TAPE

CATEGORY 0010	649.0400* 4-INCH WHITE LF	649.0400* 4-INCH YELLOW LF	649.0801 8-INCH WHITE LF	649.1200 STOP LINE 18-INCH LF	649.1800 ARROWS EACH	649.2000 WORDS EACH	649.2100 TEMPORARY RAISED PAVEMENT MARKERS WHITE EACH	649.2100 TEMPORARY RAISED PAVEMENT MARKERS YELLOW EACH
STAGE 1A	600	6,030	400		6	3	7	4
STAGE 1B	6,520	2,420	510	---	---	---	26	26
STAGE 2A	5,840	7,310	200	---	---	---	117	41
STAGE 2B	410	---	---	---	---	---	---	---
STAGE 3	13,620	13,310	640	20	6	3	165	143
STAGE 4	---	3,390	1,900	---	4	2	---	---
UNDISTRIBUTED	---	---	---	130	---	---	---	---
SUBTOTALS	26,990	32,460	3,650	150	16	8	315	214
TOTALS	**59,450**		**3,650**	**150**	**16**	**8**	**529**	

TEMPORARY PAVEMENT MARKING TAPE

LOCATION	SPV.0090.05 TEMPORARY PAVEMENT MARKING NON-REFLECTIVE BLACK TAPE 6-INCH LF
CATEGORY 0010	
PROJECT	
UNDISTRIBUTED	500
TOTALS	**500**

3

PERMANENT PAVEMENT MARKING

CATEGORY 0010

			GROOVED WET REFLECTIVE CONTRAST TAPE											DIAGONAL EPOXY			GROOVED PREFORMED THERMOPLASTIC				
			646.0106*		**646.0805.S**	**646.0841.S***				**646.0843.S**		**646.0900.S**	**647.0456**	**647.0606**	**647.0726***		**647.0746**	**SPV.0060.01**	**SPV.0060.02**	**SPV.0060.03**	**SPV.0060.04**	**SPV.0090.01**
			EPOXY 4-INCH		OUTFALL	4-INCH				8-INCH			CURB	ISLAND	12-INCH		24-INCH	ARROWS	ARROWS	ARROWS	WORDS	STOP LINE
						12.5-FT LINE	3-FT LINE	2-FT LINE		3-FT LINE			EPOXY	NOSE				TYPE 2	TYPE 4	TYPE 5		18-INCH
						37.5-FT SKIP	9-FT SKIP	6-FT SKIP		9-FT SKIP		LATE		EPOXY								
			WHITE	YELLOW	WHITE	WHITE	WHITE	WHITE	YELLOW	WHITE	WHITE	SEASON	YELLOW	YELLOW	WHITE	YELLOW	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE
LOCATION	STATION	STATION	LF	LF	EACH	LF	LF	LF	LF	LF	LF	LF	LF	EACH	LF	LF		EACH	EACH	EACH	EACH	LF
STAGE 2B																						
CTH H	-	-	705	720	--	--	--	--	--	60	--	--	--	--	--	--	--	1	--	--	--	45
RAMP A/AA	-	-	930	945	1	--	--	--	--	280	--	--	--	--	--	--	--	--	3	--	--	45
RAMP B/AB	-	-	1,135	845	--	--	--	--	--	1,190	--	--	--	--	--	--	--	--	--	--	--	--
RAMP C/CD	-	-	1,700	1,520	--	--	--	--	--	400	--	--	--	--	--	--	--	--	--	--	--	--
RAMP D/DC	-	-	1,380	1,305	--	--	--	--	--	100	--	--	--	--	--	--	50	--	3	--	--	35
STAGE 2B SUBTOTALS			11,185		1	0	0	0	0	2,030	0	0	0	0	0	0	50	1	6	0	0	125
STAGE 3																						
CTH NN WB	13+17	- 23+65	1,220	1,120	--	--	--	--	--	160	--	--	--	--	--	--	--	1	--	--	1	--
	24+25	- 30+51	550	510	--	--	--	36	--	336	--	--	--	--	145	--	--	2	--	--	2	--
	30+51	- 36+25	550	450	--	--	100	--	--	--	--	--	90	--	55	--	--	--	--	--	--	--
	36+25	- 44+40	750	600	--	300	200	60	--	650	45	--	155	--	--	--	--	--	--	--	--	--
	44+40	- 57+65	1,260	1,125	--	--	338	--	--	360	--	--	135	--	--	350	--	2	--	--	2	--
	57+65	- 66+00	755	700	1	350	213	60	--	700	45	--	75	--	--	--	--	4	--	--	4	--
	66+00	- 79+21	495	1,317	--	--	338	--	--	200	--	--	25	--	--	--	--	--	--	--	--	--
BRAY RD	-	-	--	2,000	--	--	--	--	--	--	--	--	250	--	--	55	--	--	--	--	--	20
STUART DR	-	-	--	--	--	--	--	--	--	--	--	--	--	2	--	--	--	--	--	--	--	15
STAGE 3 SUBTOTALS			13,402		1	650	1,189	156	--	2,406	90	0	730	2	200	405	--	9	--	--	9	35
STAGE 4																						
CTH NN EB	12+02	- 24+25	790	1,360	--	--	--	--	--	575	--	--	--	--	--	110	--	6	--	--	2	--
	24+25	- 30+00	555	510	--	--	138	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	30+00	- 36+25	525	510	--	300	150	57	--	600	42	--	40	1	--	--	--	2	--	--	2	--
	36+25	- 44+40	335	610	--	360	200	54	--	410	51	--	140	2	150	--	--	--	--	--	--	--
	44+40	- 57+65	875	1,170	--	390	325	69	14	715	51	--	90	2	90	--	--	--	--	--	--	--
	57+65	- 66+00	740	595	--	45	213	--	16	245	--	--	160	1	--	--	--	--	--	--	--	--
	66+00	- 85+24	450	3,535	--	--	113	--	--	--	--	--	25	--	--	186	--	--	--	--	2	--
CTH NN WB	12+30	- 24+25	995	1,290	--	--	--	39	--	160	--	--	--	--	--	--	--	3	--	--	1	--
STAGE 4 SUBTOTALS			14,845		0	1,095	1,139	219	30	2,705	144	0	455	6	240	296	0	11	0	2	5	0
UNDISTRIBUTED QUANTITY			--		--			--			--	17,079	--	--		--	--	--	--	--	--	--
TOTALS			**39,432**		**2**			**4,478**			**7,375**	**17,079**	**1,185**	**8**		**1,141**	**50**	**21**	**6**	**2**	**14**	**160**

* ADDITIONAL QUANTITIES LISTED ELSEWHERE

CONSTRUCTION STAKING

LOCATION	650.4500 SUBGRADE LF	650.5000 BASE LF	650.5500 CURB GUTTER AND CURB & GUTTER LF	650.7000 CONCRETE PAVEMENT LF	650.9920 SLOPE STAKES LF	650.6500 STRUCTURES LS	650.9910 SUPLLEMENTAL CONTROL (1080-13-70) LS
CATEGORY 0010							
STAGE 2B							
CTH NN EB	4,050	--	--	4,050	4,050	--	--
RAMP A	900	900	725	--	900	--	--
RAMP AA	400	400	75	--	400	--	--
RAMP B	1,280	1,280	875	--	1,280	--	--
RAMP AB	260	260	--	--	260	--	--
RAMP C	1,850	1,850	1,185	--	1,850	--	--
RAMP CD	355	355	--	--	355	--	--
RAMP D	1,135	1,135	1,385	--	1,135	--	--
RAMP DC	225	225	150	--	225	--	--
CTH H	410	410	230	--	410	--	--
STAGE 2B SUBTOTALS	10,865	6,815	4,625	4,050	10,865	--	--
STAGE 3							
CTH NN WB	4,140	--	--	4,140	4,140	--	--
PATH EAST	1,544	1,544	--	--	1,544	--	--
PATH WEST	1,990	1,990	--	--	1,990	--	--
STUART DR	320	320	95	--	320	--	--
BRAY RD	825	825	425	--	825	--	--
STAGE 3 SUBTOTALS	8,819	4,679	520	4,140	8,819	--	--
STAGE 4							
CTH NN EB	--	--		1,210	--	--	--
STAGE 4 SUBTOTALS	--	--	--	1,210	--	--	--
CATEGORY 0010 TOTALS	**19,684**	**11,494**	**5,145**	**9,400**	**19,684**	**--**	**1**
CATEGORY 0100							
STAGE 2B							
B-64-185	--	--	--		--	1	--
CATEGORY 0100 TOTAL	**--**	**--**	**--**	**--**	**--**	**1**	**--**
CATEGORY 0110							
STAGE 3							
B-64-186	--	--	--	--	--	1	--
CATEGORY 0110 TOTAL	**--**	**--**	**--**	**--**	**--**	**1**	**--**
CATEGORY 0120							
STAGE 2B & 3							
R-64-18	--	--	--	--	--	1	--
CATEGORY 0120 TOTAL	**--**	**--**	**--**	**--**	**--**	**1**	**--**
CATEGORY 0130							
STAGE 2B & 3							
R-64-19	--	--	--	--	--	1	--
CATEGORY 0130 TOTAL	**--**	**--**	**--**	**--**	**--**	**1**	**--**
CATEGORY 0140							
STAGE 3							
S-64-20	--	--	--	--	--	1	--
CATEGORY 0140 TOTAL	**--**	**--**	**--**	**--**	**--**	**1**	**--**

SAWING

LOCATION	STATION	690.0150 SAWING ASPHALT LF	690.0250 SAWING CONCRETE LF
CATEGORY 0010			
STAGE 2			
CTH NN	30EB+00	10	24
	70EB+50	--	34
RAMP A	977A+63	20	--
RAMP B	65B+19	21	--
RAMP C	57C+31	20	--
RAMP D	19D+06	21	--
CTH H	8H+59	24	
STAGE 2 SUBTOTALS		116	58
STAGE 3	30WB+51	10	24
	71WB+91	--	34
BRAY RD	3BR+68	22	--
STAGE 2 SUBTOTALS		32	58
TOTALS		**148**	**116**

CROSSWALKS

LOCATION	SPV.0090.02 GROOVED PREFORMED THERMOPLASTIC CROSSWALK 6-INCH WHITE LF	602.0505 CURB RAMP DETECTABLE WARNING FIELD YELLOW SF
CATEGORY 0020		
STAGE 3		
SHARED USE PATH / BRAY RD	110	54
SHARED USE PATH / STUART DR	85	36
TOTALS	**195**	**90**

SECTION CORNER MONUMENTS

LOCATION	SPV.0060.05 SECTION CORNER MONUMENTS SPECIAL EACH
CATEGORY 0010	
PROJECT	
CTH NN	2
TOTALS	**2**

USH 12 AT MACLEAN ROAD ROADWAY

CATEGORY 0030	204.0125* REMOVING ASPHALTIC SURFACE MILLING TON	455.0140* ASPHALTIC MATERIAL PG64-28P TON	455.0605* TACK COAT GAL	460.1110 HMA PAVEMENT TYPE E-10 TON	465.0400 ASPHALTIC SHOULDER RUMBLE STRIP LF	646.0106* PAVEMENT MARKING EPOXY 4-INCH WHITE LF	646.0106* PAVEMENT MARKING EPOXY 4-INCH YELLOW LF
***USH 12 AT MACLEAN ROAD							
STAGE 1A	160	8	144	160	---	---	---
STAGE 1B	160	8	144	160	---	---	---
STAGE 2A	---	---	---	---	1,600	---	2,000
STAGE 2B	---	---	---	---	1,600	2,100	---
TOTALS	**320**	**16**	**288**	**320**	**3,200**	**4,100**	

* ADDITIONAL QUANTITIES LISTED ELSEWHERE

*** QUANTITIES ARE FOR HIGH FRICTION SURFACE TREATMENT APPLICATION AT USH 12 & MACLEAN ROAD. STAGES ARE INDEPENDENT OF THOSE SHOWN FOR THE CTH NN INTERCHANGE RECONSTRUCTION.

USH 12 AT MACLEAN ROAD TEMPORARY MARKINGS

CATEGORY 0030	646.0600* REMOVING PAVEMENT MARKINGS LF	649.0400* TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH WHITE LF	649.0400* TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH YELLOW LF
*** USH 12 AT MACLEAN ROAD			
STAGE 1A	2000	1600	---
STAGE 1B	2100	---	1,600
STAGE 2A		3680	2,000
STAGE 2B		2000	3,680
SUBTOTALS	4,100	7,280	7,280
TOTALS	**4,100**	**14,560**	

* ADDITIONAL QUANTITIES LISTED ELSEWHERE

*** QUANTITIES ARE FOR HIGH FRICTION SURFACE TREATMENT APPLICATION AT USH 12 & MACLEAN ROAD. STAGES ARE INDEPENDENT OF THOSE SHOWN FOR THE CTH NN INTERCHANGE RECONSTRUCTION.

3

USH 12 AT MACLEAN ROAD TRAFFIC CONTROL

CATEGORY 0030	ESTIMATED DURATION **	643.0300* DRUMS ** EACH	643.0300* DRUMS DAYS	643.0420* BARRICADES TYPE III ** EACH	643.0420* BARRICADES TYPE III DAYS	643.0705* WARNING LIGHTS TYPE A ** EACH	643.0705* WARNING LIGHTS TYPE A DAYS	643.0715* WARNING LIGHTS TYPE C ** EACH	643.0715* WARNING LIGHTS TYPE C DAYS	643.0800* ARROW BOARDS ** EACH	643.0800* ARROW BOARDS DAYS	643.0900* SIGNS ** EACH	643.0900* SIGNS DAYS
***USH 12 AT MACLEAN ROAD													
STAGE 1A	1 DAYS	100	100	4	4	8	10	32	32	4	4	24	20
STAGE 1B	1 DAYS	100	100	4	4	8	10	32	32	4	4	24	20
STAGE 2A	2 DAYS	92	180	---	---	---	---	40	80	4	8	20	40
STAGE 2B	2 DAYS	92	180	---	---	---	---	40	80	4	8	20	40
UNDISTRIBUTED		96	140	2	2	4	5	36	56	4	6	22	30
TOTALS	**6 DAYS**		**700**		**10**		**25**		**280**		**30**		**150**

* ADDITIONAL QUANTITIES LISTED ELSEWHERE

** FOR INFORMATION ONLY

*** QUANTITIES ARE FOR HIGH FRICTION SURFACE TREATMENT APPLICATION AT USH 12 & MACLEAN ROAD. STAGES ARE INDEPENDENT OF THOSE SHOWN FOR THE CTH NN INTERCHANGE RECONSTRUCTION.

SIGN NO.	SIGN CODE & SIZE	SIGN TYPE	SIGN MESSAGE	TYPE II SIGN SIZE W [IN.] x H [IN.]	637.2210 SIGNS TYPE II REFLC H [SF]	637.2230 SIGNS TYPE II REFLC F [SF]	638.2602 REM SIGNS TYPE II [EA]	638.3000 REM SMALL SIGN SUP [EA]	634.0618 WOOD POSTS 4"X 6"x18' [EA]	634.0622 WOOD POSTS 4"X6"X22' [EA]	634.0816 TUBULAR STEEL POSTS 2"X2"X16' [EA]	638.2102 MOVE SIGNS TYPE II [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION	TYPE I SIGN SIZE W [FT.] x H [FT.]	637.1220 SIGNS TYPE I REFLC SH [SF]	638.2601 REM SIGNS TYPE I [EA]
1	W4-2(3)	II	--	36 x 36	--	9.000	1	1	--	--	1	--	--	--	-- x --	--	--
2	W4-2(3)	II	--	36 x 36	--	9.000	1	1	--	--	1	--	--	--	-- x --	--	--
3	R2-1(2S)	II	35 MPH	24 x 30	5.000	--	1	1	--	--	1	--	--	--	-- x --	--	--
4	R10-64F	--	--	-- x --	--	--	--	--	--	--	1	1	--	PROPERTY OF CITY	-- x --	--	--
5	R2-1(2S)	II	35 MPH	24 x 30	5.000	--	1	1	--	--	1	--	--	--	-- x --	--	--
6	R1-1(3)	II	--	36 x 36	7.460	--	1	1	--	--	1	--	--	--	-- x --	--	--
7	J3-1(2S)	II	--	24 x 45	7.500	--	1	1	--	--	1	--	--	--	-- x --	--	--
	M1-5A		CTH H	24 x 24													
	M6-6L		--	21 x 21													
8	J3-1(2S)	II	--	24 x 45	7.500	--	1	1	--	--	1	--	--	--	-- x --	--	--
	M1-5A		CTH H	24 x 24													
	M6-6L		--	21 x 21													
9	R5-1(2S)	II	--	30 x 30	6.250	--	1	1	--	--	1	--	--	--	-- x --	--	--
10	--	--	GATEWAY TECHNICAL COLLEGE	-- x --	--	--	--	--	--	--	--	1	9	BACK OF SIGN #9	-- x --	--	--
11	R1-1(3)	II	--	36 x 36	7.460	--	1	1	--	--	1	--	--	--	-- x --	--	--
12	R1-1(3)	II	--	36 x 36	7.460	--	1	1	--	--	1	--	--	--	-- x --	--	--
13	--	--	[A] ELKHORN	-- x --	--	--	--	--	--	--	1	1	--	MOVE TO NEW POST	-- x --	--	--
13A	D9-2	--	HOSPITAL	-- x --	--	--	--	1	--	--	1	1	--	MOVE TO NEW POST	-- x --	--	--
	MB6-1	--	ARROW	-- x --	--	--	--	--	--	--	--	--	--	--	-- x --	--	--
14	R2-1(2S)	II	45 MPH	24 x 30	5.000	--	1	1	--	--	1	--	--	--	-- x --	--	--
15	J3-2(2S)	II	--	48 x 45	15.000	--	1	1	--	--	1	--	--	--	-- x --	--	--
	M1-5A		CTH H	24 x 24													
	M6-1		--	21 x 21													
	M1-5A		CTH NN	24 x 24													
	M6-1		--	21 x 21													
16	--	--	WHITE RIVER TRAIL	-- x --	--	--	--	--	--	--	1	1	--	MOVE TO NEW POST	-- x --	--	--
			ARROW	-- x --	--	--	--	--	--	--	--	--	--	--	-- x --	--	--
17	R4-7(2S)	II	--	24 x 30	5.000	--	1	1	--	--	1	--	--	--	-- x --	--	--
18	R5-1(2S)	II	--	30 x 30	6.250	--	--	--	--	--	--	--	19	BACK OF SIGN #19	-- x --	--	--
19	J3-2(2S)	II	--	48 x 57	19.000	--	1	1	--	--	1	--	--	--	-- x --	--	--
	M3-2		--	24 x 12													
	M1-5A		CTH NN	24 x 24													
	M6-1		--	21 x 21													
	M1-5A		CTH H	24 x 24													
	M6-1		--	21 x 21													
20	J3-2(2S)	II	--	48 x 57	19.000	--	1	1	--	--	2	--	--	--	-- x --	--	--
	M3-2		--	24 x 12													
	M1-5A		CTH NN	24 x 24													
	M6-1		--	21 x 21													
	M1-5A		CTH H	24 x 24													
	M6-1		--	21 x 21													

3

SIGN NO.	SIGN CODE & SIZE	SIGN TYPE	SIGN MESSAGE	TYPE II SIGN SIZE W [IN.] x H [IN.]	637.2210 SIGNS TYPE II REFLC H [SF]	637.2230 SIGNS TYPE II REFLC F [SF]	638.2602 REM SIGNS TYPE II [EA]	638.3000 REM SMALL SIGN SUP [EA]	634.0618 WOOD POSTS 4"X 6"x18' [EA]	634.0622 WOOD POSTS 4"X6"X22' [EA]	634.0816 TUBULAR STEEL POSTS 2"X2"X16' [EA]	638.2102 MOVE SIGNS TYPE II [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION	TYPE I SIGN SIZE W [FT.] x H [FT.]	637.1220 SIGNS TYPE I REFLC SH [SF]	638.2601 REM SIGNS TYPE I [EA]
21	--	--	WHITE RIVER TRAIL	-- x --	--	--	--	--	--	--	1	1	--	--	-- x --	--	--
			ARROW		--	--	--	--	--	--	--	--	--	--			
22	JV1-1(2S)	II	--	24 x 96	16.000	--	1	1	--	1	--	--	--	--	-- x --	--	--
	MB4-5		--	24 x 12													
	M1-1		IH 43	24 x 24													
	M2-1		--	21 x 15													
	M1-4		USH 12	24 x 24													
	M6-1		--	21 x 21													
23	JH-1(2S)	II	--	24 x 45	7.500	--	1	1	--	--	1	--	--	--	-- x --	--	--
	D9-2		--	24 x 24													
	MB6-1		--	21 x 21													
24	*NOT USED*	--	--	-- x --	--	--	--	--	--	--	--	--	--	--	-- x --	--	--
25	J1-1(2S)	II	--	24 x 39	6.500	--	1	1	--	--	1	--	--	--	-- x --	--	--
	M2-1		--	21 x 15													
	M1-5A		CTH NN	24 x 24													
26	J4-1(2S)	II	--	24 x 36	6.000	--	1	1	--	--	1	--	--	--	-- x --	--	--
	M3-2		--	24 x 12													
	M1-5A		CTH NN	24 x 24													
27	R2-1(2S)	II	55 MPH	24 x 30	5.000	--	--	--	--	--	1	--	--	--	-- x --	--	--
28	J1-2(2S)	II	--	48 x 39	13.000	--	1	1	--	--	1	--	--	--	-- x --	--	--
	M2-1		--	21 x 15													
	M1-5A		CTH H	24 x 24													
	M4-6		--	24 x 12													
	M1-5A		CTH NN	24 x 24													
29	J1-2(2S)	II	--	48 x 39	13.000	--	1	1	--	--	1	--	--	--	-- x --	--	--
	M2-1		--	21 x 15													
	M1-5A		CTH H	24 x 24													
	M4-6		--	24 x 12													
	M1-5A		CTH NN	24 x 24													
30	JH-1(2S)	II	--	24 x 45	7.500	--	1	1	1	--	--	--	--	--	-- x --	--	--
	D9-2		--	24 x 24													
	MB6-1		--	21 x 21													
31	*NOT USED*	--	--	-- x --	--	--	--	--	--	--	--	--	--	--		--	--
32	R5-1A(3)	II	--	42 x 30	8.750	--	1	--	--	--	--	--	30	BACK OF SIGN #30	-- x --	--	--
33	--	--	REDUCED SPEED AHEAD	-- x --	--	--	1	1	--	--	--	--	--	--	-- x --	--	--
			35 MPH		--	--	--	--	--	--	--	--	--	--			
34	--	--	REDUCED SPEED AHEAD	-- x --	--	--	1	1	--	--	--	--	--	--	-- x --	--	--
			35 MPH		--	--	--	--	--	--	--	--	--	--		--	--
35	W3-5(3)	II	--	36 x 36	--	9.000	--	--	1	--	--	--	--	--	-- x --	--	--
36	W3-5(3)	II	--	36 x 36	--	9.000	--	--	1	--	--	--	--	--	-- x --	--	--
37	--	--	WHITE RIVER TRAIL	-- x --	--	--	--	--	--	--	1	1	--	MOVE TO NEW POST	-- x --	--	--
			ARROW		--	--	--	--	--	--	--	--	--	--			

SIGN NO.	SIGN CODE & SIZE	SIGN TYPE	SIGN MESSAGE	TYPE II SIGN SIZE W [IN.] x H [IN.]	637.2210 SIGNS TYPE II REFLC H [SF]	637.2230 SIGNS TYPE II REFLC F [SF]	638.2602 REM SIGNS TYPE II [EA]	638.3000 REM SMALL SIGN SUP [EA]	634.0618 WOOD POSTS 4"X 6"x18' [EA]	634.0622 WOOD POSTS 4"X6"X22' [EA]	634.0816 TUBULAR STEEL POSTS 2"X2"X16' [EA]	638.2102 MOVE SIGNS TYPE II [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION	TYPE I SIGN SIZE W [FT.] x H [FT.]	637.1220 SIGNS TYPE I REFLC SH [SF]	638.2601 REM SIGNS TYPE I [EA]
38	R6-2L(2M)	II	--	30 x 36	7.500	--	1	1	1	--	--	--	--	--	-- x --	--	--
39	R5-1(3)	II	--	36 x 36	9.000	--	1	1	1	--	--	--	--	--	-- x --	--	--
40	R4-7(3)	II	--	36 x 48	12.000	--	1	1	1	--	--	--	--	--	-- x --	--	--
41	R4-7(3)	II	--	36 x 48	12.000	--	1	1	1	--	--	--	--	--	-- x --	--	--
42	R5-1(3)	II	--	36 x 36	9.000	--	--	--	--	--	--	--	43	BACK OF SIGN #43	-- x --	--	--
43	J3-1(2S)	II	--	24 x 57	9.500	--	1	1	1	--	--	--	--	--	-- x --	--	--
	M3-2		--	24 x 12													
	M1-4		USH 12	24 x 24													
	M6-1		--	21 x 21													
44	JV2-1(2S)	II	--	24 x 93	15.500	--	1	1	1	--	--	--	--	--	-- x --	--	--
	MB4-5		--	24 x 12													
	M1-1		IH 43	24 x 24													
	M3-4		--	24 x 12													
	M1-4		USH 12	24 x 24													
	M5-1R		--	21 x 21													
45	JV2-1(2S)	II	--	24 x 93	15.500	--	1	1	1	--	--	--	--	--	-- x --	--	--
	MB4-5		--	24 x 12													
	M1-1		IH 43	24 x 24													
	M3-4		--	24 x 12													
	M1-4		USH 12	24 x 24													
	M5-1R		--	21 x 21													
46	D1-1	II	[A] LAKE GENEVA	114 x 21	16.625	--	1	2	2	--	--	--	--	--	-- x --	--	--
47	J2-1	--	--	-- x --	--	--	1	1	--	--	--	--	--	--	-- x --	--	--
48	J2-1	--	--	-- x --	--	--	1	1	--	--	--	--	--	--	-- x --	--	--
49	W5-52L(3)	II	--	18 x 54	--	6.750	--	--	1	--	--	--	--	4' MOUNTING HEIGHT	-- x --	--	--
50	W5-52R(3)	II	--	18 x 54	--	6.750	--	--	1	--	--	--	--	4' MOUNTING HEIGHT	-- x --	--	--
51	W5-52R(3)	II	--	18 x 54	--	6.750	--	--	1	--	--	--	--	4' MOUNTING HEIGHT	-- x --	--	--
52	W5-52L(3)	II	--	18 x 54	--	6.750	--	--	1	--	--	--	--	4' MOUNTING HEIGHT	-- x --	--	--
53	R5-1(3)	II	--	36 x 36	9.000	--	1	--	--	--	--	--	56	BACK OF SIGN #56	-- x --	--	--
54	R5-1A	--	--	-- x --	--	--	--	--	--	--	--	1	56	3' MOUNTING HEIGHT BELOW R5-1	-- x --	--	--
55	R1-2(2S)	II	--	36 x 31	3.880	--	1	1	1	--	--	--	--	--	-- x --	--	--
56	J3-2(2S)	II	--	48 x 45	15.000	--	1	1	1	--	--	--	--	--	-- x --	--	--
	M1-5A		CTH H	24 x 24													
	M6-1		--	21 x 21													
	M1-5A		CTH NN	24 x 24													
	M6-1		--	21 x 21													
57	R1-1(3)	II	--	36 x 36	7.460	--	1	1	1	--	--	--	--	--	-- x --	--	--
58	R6-2L	--	--	-- x --	--	--	--	--	1	--	--	1	--	--	-- x --	--	--
59	D13-3	--	--	-- x --	--	--	--	2	2	--	--	1	--	--	-- x --	--	--
60	D9-2	--	--	-- x --	--	--	1	1	--	--	--	--	--	--	-- x --	--	--
	--	--	HOSPITAL	-- x --	--	--	--	--	--	--	--	--	--		-- x --	--	--
	MB6-1	--	--	-- x --	--	--	--	--	--	--	--	--	--		-- x --	--	--

SIGN NO.	SIGN CODE & SIZE	SIGN TYPE	SIGN MESSAGE	TYPE II SIGN SIZE W [IN.] x H [IN.]	637.2210 SIGNS TYPE II REFLC H [SF]	637.2230 SIGNS TYPE II REFLC F [SF]	638.2602 REM SIGNS TYPE II [EA]	638.3000 REM SMALL SIGN SUP [EA]	634.0618 WOOD POSTS 4"X 6"x18' [EA]	634.0622 WOOD POSTS 4"X6"X22' [EA]	634.0816 TUBULAR STEEL POSTS 2"X2"X16' [EA]	638.2102 MOVE SIGNS TYPE II [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION	TYPE I SIGN SIZE W [FT.] x H [FT.]	637.1220 SIGNS TYPE I REFLC SH [SF]	638.2601 REM SIGNS TYPE I [EA]
61	J3-1(2S)	II	--	24 x 57	9.500	--	1	1	1	--	--	--	--	--	-- x --	--	--
	M3-2		--	24 x 12													
	M1-4		USH 12	24 x 24													
	M6-2		--	21 x 21													
62	J3-1(2S)	II	--	24 x 57	9.500	--	1	1	1	--	--	--	--	--	-- x --	--	--
	M3-2		--	24 x 12													
	M1-4		USH 12	24 x 24													
	M6-2		--	21 x 21													
63	W13-3(2M)	II	25 MPH	24 x 30	--	5.000	1	1	1	--	--	--	--	--	-- x --	--	--
64	R2-1	--	--	-- x --	--	--	1	1	--	--	--	--	--	--	-- x --	--	--
65	D1-3	II	[A] MILWAUKEE MADISON LAKE GENEVA [A]	114 x 54	42.750	--	--	--	2	--	--	--	--	--	-- x --	--	--
66	J2-2(2S)	II	--	48 x 57	19.000	--	--	--	1	--	--	--	--	--	-- x --	--	--
	M3-4		--	24 x 12													
	M1-4		USH 12	24 x 24													
	M6-1		--	21 x 21													
	M3-2		--	24 x 12													
	M1-4		USH 12	24 x 24													
	M5-1R		--	21 x 21													
67	J2-1	--	--	-- x --	--	--	1	2	--	--	--	--	--	--	-- x --	--	--
	J2-1																
	D1-3		MILW/MADISON/LAKE GENEVA														
68	*NOT USED*	--	--	-- x --	--	--	--	--	--	--	--	--	--	--	-- x --	--	--
69	*NOT USED*	--	--	-- x --	--	--	--	--	--	--	--	--	--	--	-- x --	--	--
70	D1-61	II	[A] BRAY RD	84 x 18	10.500	--	1	2	2	--	--	--	--	--	-- x --	--	--
71	J2-1(2S)	II	--	24 x 57	9.500	--	--	--	1	--	--	--	--	--	-- x --	--	--
	M3-2		--	24 x 12													
	M1-4		USH 12	24 x 24													
	M5-1L		--	21 x 21													
72	J2-1(2S)	II	--	24 x 57	9.500	--	--	--	1	--	--	--	--	--	-- x --	--	--
	M3-2		--	24 x 12													
	M1-4		USH 12	24 x 24													
	M5-1L		--	21 x 21													
73	R5-1A(3)	II	--	42 x 30	8.750	--	--	--	1	--	--	--	--	--	-- x --	--	--
74	R1-1(3)	II	--	36 x 36	7.460	--	1	1	--	--	1	--	--	--	-- x --	--	--
75	R4-7(2S)	II	--	24 x 30	5.000	--	--	--	--	--	1	--	--	--	-- x --	--	--
76	R4-7(2S)	II	--	24 x 30	5.000	--	--	--	--	--	1	--	--	--	-- x --	--	--
77	R5-1(3)	II	--	36 x 36	9.000	--	1	1	1	--	--	--	--	--	-- x --	--	--
78	R5-1(3)	II	--	36 x 36	9.000	--	--	--	1	--	--	--	81	BACK OF SIGN #81	-- x --	--	--

SIGN NO.	SIGN CODE & SIZE	SIGN TYPE	SIGN MESSAGE	TYPE II SIGN SIZE W [IN.] x H [IN.]	637.2210 SIGNS TYPE II REFLC H [SF]	637.2230 SIGNS TYPE II REFLC F [SF]	638.2602 REM SIGNS TYPE II [EA]	638.3000 REM SMALL SIGN SUP [EA]	634.0618 WOOD POSTS 4"X 6"x18' [EA]	634.0622 WOOD POSTS 4"X6"X22' [EA]	634.0816 TUBULAR STEEL POSTS 2"X2"X16' [EA]	638.2102 MOVE SIGNS TYPE II [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION	TYPE I SIGN SIZE W [FT.] x H [FT.]	637.1220 SIGNS TYPE I REFLC SH [SF]	638.2601 REM SIGNS TYPE I [EA]
79	J3-1(2S)	II	--	24 x 57	9.500	--	1	1	1	--	--	--	--	--	-- x --	--	--
	M3-4		--	24 x 12													
	M1-5A		CTH NN	24 x 24													
	M6-1		--	21 x 21													
80	J3-1(2S)	II	--	24 x 93	15.500	--	1	1	--	1	--	--	--	--	-- x --	--	--
	MB4-5		--	24 x 12													
	M1-1		IH 43	24 x 24													
	M3-4		--	24 x 12													
	M1-4		USH 12	24 x 24													
	M6-1		--	21 x 21													
81	J3-1(2S)	II	--	24 x 93	15.500	--	1	1	--	1	--	--	--	--	-- x --	--	--
	MB4-5		--	24 x 12													
	M1-1		IH 43	24 x 24													
	M3-4		--	24 x 12													
	M1-4		USH 12	24 x 24													
	M6-1		--	21 x 21													
82	R4-7(3)	II	--	36 x 48	12.000	--	1	1	1	--	--	--	--	--	-- x --	--	--
83	R4-7(3)	II	--	36 x 48	12.000	--	1	1	1	--	--	--	--	--	-- x --	--	--
84	D1-61	II	BRAY RD [A]	84 x 18	10.500	--	--	--	2	--	--	--	--	--	-- x --	--	--
85	D1-4	II	[A] LAKE GENEVA ELKHORN [A] MILWAUKEE WHITEWATER	114 x 66	52.250	--	1	2	2	--	--	--	--	--	-- x --	--	--
86	JH-1(2S)	II	--	24 x 45	7.500	--	--	--	--	--	1	--	--	--	-- x --	--	--
	D9-2		--	24 x 24													
	MB6-1		--	21 x 21													
87	*NOT USED*		--	-- x --	--	--	--	--	--	--	--	--	--	--	-- x --	--	--
88	J4-1(2S)	II	--	24 x 36	6.000	--	1	1	--	--	1	--	--	--	-- x --	--	--
	M3-4		--	24 x 12													
	M1-5A		CTH NN	24 x 24													
89	R5-1(3)	II	--	36 x 36	9.000	--	--	--	--	--	--	--	92	BACK OF SIGN #92	-- x --	--	--
90	R5-1A	--	--	-- x --	--	--	--	--	--	--	--	1	92	3' MOUNTING HEIGHT BELOW R5-1	-- x --	--	--
91	R1-2(2S)	II	--	36 x 31	3.880	--	1	1	1	--	--	--	--	--	-- x --	--	--
92	J3-1(2S)	II	--	48 x 57	19.000	--	1	1	1	--	--	--	--	--	-- x --	--	--
	M3-4		--	24 x 12													
	M1-5A		CTH NN	24 x 24													
	M6-1		--	21 x 21													
	M3-2		--	24 x 12													
	M1-5A		CTH NN	24 x 24													
	M6-1		--	21 x 21													

SIGN NO.	SIGN CODE & SIZE	SIGN TYPE	SIGN MESSAGE	TYPE II SIGN SIZE W [IN.] x H [IN.]	637.2210 SIGNS TYPE II REFLC H [SF]	637.2230 SIGNS TYPE II REFLC F [SF]	638.2602 REM SIGNS TYPE II [EA]	638.3000 REM SMALL SIGN SUP [EA]	634.0618 WOOD POSTS 4"X 6"x18' [EA]	634.0622 WOOD POSTS 4"X6"X22' [EA]	634.0816 TUBULAR STEEL POSTS 2"X2"X16' [EA]	638.2102 MOVE SIGNS TYPE II [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION	TYPE I SIGN SIZE W [FT.] x H [FT.]	637.1220 SIGNS TYPE I REFLC SH [SF]	638.2601 REM SIGNS TYPE I [EA]
93	R1-1(3)	II	--	36 x 36	7.460	--	1	1	1	--	--	--	--	--	-- x --	--	--
94	W12-1D(2S)	II	--	24 x 24	--	4.000	--	--	1	--	--	--	--	2' MOUNT HEIGHT	-- x --	--	--
95	R4-7(3)	II	--	36 x 48	12.000	--	1	1	1	--	--	--	--	--	-- x --	--	--
96	R6-2L(2S)	II	--	24 x 30	5.000	--	1	--	1	--	--	--	--	--	-- x --	--	--
97	D13-3	--	--	-- x --	--	--	--	2	2	--	--	1	--	--	-- x --	--	--
98	JV3-1(2S)	II	--	24 x 93	15.500	--	1	1	--	1	--	--	--	--	-- x --	--	--
	MB4-5		--	24 x 12													
	M1-1		IH 43	24 x 24													
	M3-4		--	24 x 12													
	M1-4		USH 12	24 x 24													
	M6-2		--	21 x 21													
99	JV3-1(2S)	II	--	24 x 93	15.500	--	1	1	--	1	--	--	--	--	-- x --	--	--
	MB4-5		--	24 x 12													
	M1-1		IH 43	24 x 24													
	M3-4		--	24 x 12													
	M1-4		USH 12	24 x 24													
	M6-2		--	21 x 21													
100	W13-3(2M)	II	20 MPH	24 x 30	--	5.000	1	1	--	2	--	--	--	--	-- x --	--	--
101	D1-2	II	MILWAUKEE [A] MADISON	96 x 36	24.000	--	1	2	2	--	--	--	--	--	-- x --	--	--
102	W4-2L(3)	II	--	36 x 36	--	9.000	1	1	--	--	1	--	--	--	-- x --	--	--
103	W4-2L(3)	II	--	36 x 36	--	9.000	1	1	--	--	1	--	--	--	-- x --	--	--
104	R1-2(2S)	II	--	36 x 31	3.880	--	1	1	1	--	--	--	--	--	-- x --	--	--
105	R5-57(5)	II	--	36 x 36	9.000	--	1	1	1	--	--	--	--	--	-- x --	--	--
106	W1-8(4)	II	--	30 x 36	--	7.500	--	--	1	--	--	--	--	4' MOUNTING HEIGHT	-- x --	--	--
107	W1-8(4)	II	--	30 x 36	--	7.500	--	--	1	--	--	--	--	4' MOUNTING HEIGHT	-- x --	--	--
108	W1-6(2S)	II	--	48 x 24	--	8.000	--	--	1	--	--	--	--	--	-- x --	--	--
109	W3-1(3)	II	--	36 x 36	--	9.000	1	1	1	--	--	--	--	--	-- x --	--	--
110	W3-1(3)	II	--	36 x 36	--	9.000	1	1	1	--	--	--	--	--	-- x --	--	--
111	W1-6(2S)	II	--	48 x 24	--	8.000	--	--	1	--	--	--	--	--	-- x --	--	--
112	W1-8(4)	II	--	30 x 36	--	7.500	--	--	1	--	--	--	--	4' MOUNTING HEIGHT	-- x --	--	--
113	W1-8(4)	II	--	30 x 36	--	7.500	--	--	1	--	--	--	--	4' MOUNTING HEIGHT	-- x --	--	--
114	W1-8(4)	II	--	30 x 36	--	7.500	--	--	1	--	--	--	--	4' MOUNTING HEIGHT	-- x --	--	--
115	W1-8(4)	II	--	30 x 36	--	7.500	--	--	1	--	--	--	--	4' MOUNTING HEIGHT	-- x --	--	--
116	W1-8(4)	II	--	30 x 36	--	7.500	--	--	1	--	--	--	--	4' MOUNTING HEIGHT	-- x --	--	--
117	W1-8(4)	II	--	30 x 36	--	7.500	--	--	1	--	--	--	--	4' MOUNTING HEIGHT	-- x --	--	--
118	E5-1(5)	II	--	72 x 60	30.000	--	1	2	--	2	--	--	--	--	-- x --	--	--
119	W5-54(2M)	II	--	18 x 18	--	2.250	--	--	--	--	--	--	118	--	-- x --	--	--
120	W5-54(2M)	II	--	18 x 18	--	2.250	--	--	--	--	--	--	118	--	-- x --	--	--
121	D1-1	II	[A] ELKHORN	66 x 15	6.875	--	1	2	2	--	--	--	--	--	-- x --	--	--
122	R5-1A(3)	II	--	42 x 30	8.750	--	1	1	1	--	--	--	--	--	-- x --	--	--
123	R5-1A(3)	II	--	42 x 30	8.750	--	1	1	1	--	--	--	--	--	-- x --	--	--

3

SIGN NO.	SIGN CODE & SIZE	SIGN TYPE	SIGN MESSAGE	TYPE II SIGN SIZE W [IN.] x H [IN.]	637.2210 SIGNS TYPE II REFLC H [SF]	637.2230 SIGNS TYPE II REFLC F [SF]	638.2602 REM SIGNS TYPE II [EA]	638.3000 REM SMALL SIGN SUP [EA]	634.0618 WOOD POSTS 4"X 6"x18' [EA]	634.0622 WOOD POSTS 4"X6"X22' [EA]	634.0816 TUBULAR STEEL POSTS 2"X2"X16' [EA]	638.2102 MOVE SIGNS TYPE II [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION	TYPE I SIGN SIZE W [FT.] x H [FT.]	637.1220 SIGNS TYPE I REFLC SH [SF]	638.2601 REM SIGNS TYPE I [EA]
124	D1-3	--	[A] GATEWAY TECH WALWORTH COUNTY [A] LANKLAND COMPLEX	-- x --	--	--	--	2	2	--	--	1	--	--	-- x --	--	--
125	JH-1(2S) D9-2 MB6-1	II	-- -- --	24 x 45 24 x 24 21 x 21	7.500	--	1	--	--	--	--	--	124	--	-- x --	--	--
126	*NOT USED*	--		-- x --	--	--	--	--	--	--	--	--	--	--	-- x --	--	--
127	W1-8(4)	II	--	30 x 36	--	7.500	--	--	1	--	--	--	--	4' MOUNTING HEIGHT	-- x --	--	--
128	W1-8(4)	II	--	30 x 36	--	7.500	--	--	1	--	--	--	--	4' MOUNTING HEIGHT	-- x --	--	--
129	W1-8(4)	II	--	30 x 36	--	7.500	--	--	1	--	--	--	--	4' MOUNTING HEIGHT	-- x --	--	--
130	*NOT USED*	--	--	-- x --	--	--	--	--	--	--	--	--	--	--	-- x --	--	--
131	*NOT USED*	--	--	-- x --	--	--	--	--	--	--	--	--	--	--	-- x --	--	--
132	W1-8(4)	II	--	30 x 36	--	7.500	--	--	1	--	--	--	--	4' MOUNTING HEIGHT	-- x --	--	--
133	W1-8(4)	II	--	30 x 36	--	7.500	--	--	1	--	--	--	--	4' MOUNTING HEIGHT	-- x --	--	--
134	W1-8(4)	II	--	30 x 36	--	7.500	--	--	1	--	--	--	--	4' MOUNTING HEIGHT	-- x --	--	--
135	*NOT USED*	--	--	-- x --	--	--	--	--	--	--	--	--	--	--	-- x --	--	--
136	*NOT USED*	--	--	-- x --	--	--	--	--	--	--	--	--	--	--	-- x --	--	--
137	R5-57(5)	II	--	36 x 36	9.000	--	1	1	1	--	--	--	--	--	-- x --	--	--
138	R1-2(2S)	II	--	36 x 31	3.880	--	1	1	1	--	--	--	--	--	-- x --	--	--
139	R5-1A(3)	II	--	42 x 30	8.750	--	1	1	1	--	--	--	--	--	-- x --	--	--
140	R5-1A(3)	II	--	42 x 30	8.750	--	1	1	1	--	--	--	--	--	-- x --	--	--
141	JH-1(2S) D9-2 MB6-1	II	 -- --	24 x 45 24 x 24 21 x 21	7.500	--	--	--	--	--	--	--	140	BACK OF SIGN #140	-- x --	--	--
142	*NOT USED*	--															
143	W1-6(2S)	II	--	48 x 24	--	8.000	--	--	1	--	--	--	--	--	-- x --	--	--
144	D1-1	II	[A] ELKHORN	66 x 15	6.875	--	1	2	2	--	--	--	--	--	-- x --	--	--
145	W1-6(2S)	II	--	48 x 24	--	8.000	--	--	1	--	--	--	--	--	-- x --	--	--
146	W3-1(3)	II	--	36 x 36	--	9.000	1	1	1	--	--	--	--	--	-- x --	--	--
147	E5-1(5)	II	--	72 x 60	30.000	--	1	2	--	2	--	--	--	--	-- x --	--	--
148	W5-54(2M)	II	--	18 x 18	--	2.250	--	--	--	--	--	--	147	--	-- x --	--	--
149	W5-54(2M)	II	--	18 x 18	--	2.250	--	--	--	--	--	--	147	--	-- x --	--	--
150	W3-1(3)	II	--	36 x 36	--	9.000	1	1	--	--	1	--	--	--	-- x --	--	--
151	--	--	NO THRU TRUCK TRAFFIC CLASS B HIGHWAY	-- x --	--	--	--	--	--	--	1	1	--	MOVE TO NEW POST	-- x --	--	--
152	*NOT USED*	--		-- x --	--	--	--	--	--	--	--	--	--	--	-- x --	--	--
153	E6-1	I	[NN] ELKHORN [A]	-- x --	--	--	--	--	--	--	--	--	--	INSTALL ON S-64-20 I-BEAMS INCIDENTAL	14 x 7	98.000	1

SIGN NO.	SIGN CODE & SIZE	SIGN TYPE	SIGN MESSAGE	TYPE II SIGN SIZE W [IN.]	x	H [IN.]	637.2210 SIGNS TYPE II REFLC H [SF]	637.2230 SIGNS TYPE II REFLC F [SF]	638.2602 REM SIGNS TYPE II [EA]	638.3000 REM SMALL SIGN SUP [EA]	634.0618 WOOD POSTS 4"X 6"x18' [EA]	634.0622 WOOD POSTS 4"X6"X22' [EA]	634.0816 TUBULAR STEEL POSTS 2"X2"X16' [EA]	638.2102 MOVE SIGNS TYPE II [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION	TYPE I SIGN SIZE W [FT.]	x	H [FT.]	637.1220 SIGNS TYPE I REFLC SH [SF]	638.2601 REM SIGNS TYPE I [EA]
154	W13-3	II	--	--	x	--	--	--	1	--	--	--	--	--	--	--	--	x	--	--	--
155	W13-2B(2M)	II	--	48	x	90	--	30.000	--	--	--	--	--	--	--	MOUNT ON UPRIGHT	--	x	--	--	--
156	R4-7(2S)	II	--	24	x	30	5.000	--	--	--	--	--	--	--	8	BACK OF SIGN #8 - SHEET 1 OF 8	--	x	--	--	--
157	W9-1L(2M)	II	--	36	x	36	--	9.000	--	--	--	--	1	--	--	SHEET 3 OF 8	--	x	--	--	--
158	W9-1L(2M)	II	--	36	x	36	--	9.000	--	--	--	--	1	--	--	SHEET 3 OF 8	--	x	--	--	--
159	E13-1P(2S)	II	20 MPH	72	x	24	--	12.000	--	--	--	--	--	--	118	SHEET 5 OF 8	--	x	--	--	--
160	J2-2(2S)	II	--	48	x	45	15.000	--	--	--	1	--	--	--	--	SHEET 5 OF 8	--	x	--	--	--
	M1-5A		CTH H	24	x	24															
	M5-1L		--	21	x	21															
	M1-5A		CTH NN	24	x	24															
	M5-1R		--	21	x	21															
161	E13-1P(2S)	II	25 MPH	72	x	24	--	12.000	--	--	--	--	--	--	147	SHEET 6 OF 8	--	x	--	--	--
162	J2-2(2S)	II	--	48	x	57	19.000	--	--	--	1	--	--	--	--	SHEET 6 OF 8	--	x	--	--	--
	M3-4		--	24	x	12															
	M1-5A		CTH NN	24	x	24															
	M5-1L		--	21	x	21															
	M3-2		--	24	x	12															
	M1-5A		CTH NN	24	x	24															
	M5-1R		--	21	x	21															
163	W13-2C(2M)	II	25 MPH	48	x	90	--	30.000	--	--	--	2	--	--	--	SHEET 6 OF 8	--	x	--	--	--
164	W1-60(3)	II	--	36	x	36	--	9.000	--	--	--	--	--	--	100	SHEET 3 OF 8	--	x	--	--	--
165	W1-2R(2S)	II	--	30	x	30	--	6.250	--	--	--	--	1	--	--	SHEET 7 OF 8	--	x	--	--	--
166	W13-1(2S)	II	35 MPH	18	x	18	--	2.250	--	--	--	--	--	--	165	SHEET 7 OF 8	--	x	--	--	--
167	W1-2L(2S)	II	--	30	x	30	--	6.250	--	--	--	--	1	--	--	SHEET 7 OF 8	--	x	--	--	--
168	W13-1(2S)	II	35 MPH	18	x	18	--	2.250	--	--	--	--	--	--	167	SHEET 7 OF 8	--	x	--	--	--
169	W11-15(2S)	II	--	30	x	30	--	6.250	--	--	1	--	--	--	--	SHEET 1 OF 8	--	x	--	--	--
170	W16-7L(2S)	II	--	24	x	12	--	2.000	--	--	--	--	--	--	169	SHEET 1 OF 8	--	x	--	--	--
171	W3-1	II	--	18	x	18	--	2.250	--	--	1	--	--	--	--	SHEET 3 OF 8	--	x	--	--	--
172	W11-15 (2S)	II	--	30	x	30	6.250	--	--	--	1	--	--	--	--	SHEET 1 OF 8	--	x	--	--	--
172A	W16-7L(2S)	II	--	24	x	12	2.000	--	--	--	--	--	--	--	172	SHEET 1 OF 8	--	x	--	--	--
173	W11-15(2S)	II	--	30	x	30	--	6.250	--	--	1	--	--	--	--	SHEET 3 OF 8	--	x	--	--	--
174	W16-7L(2S)	II	--	24	x	12	--	2.000	--	--	--	--	--	--	173	SHEET 3 OF 8	--	x	--	--	--
175	NOT USED	--	--	--	x	--	-	--	--	--	--	--	--	--	--	--	--	x	--	--	--
176	W11-15(2S)	II	--	30	x	30	--	6.250	--	--	1	--	--	--	--	SHEET 3 OF 8	--	x	--	--	--
177	W16-7L(2S)	II	--	24	x	12	--	2.000	--	--	--	--	--	--	--	SHEET 3 OF 8	--	x	--	--	--
178	W3-1	II	--	18	x	18	--	2.250	--	--	1	--	--	--	--	SHEET 3 OF 8	--	x	--	--	--
TOTALS							951.405	434.250	84	95	95	13	41	14						98.000	1

CAB D SLIDE 180

TRANSPORTATION PROJECT PLAT NO: 1080-13-20 4.01
AMENDMENT NO: 1

AMENDS PARCEL 1 OF TPP 1080-13-20-4.01, RECORDED AS DOCUMENT 884764.
THAT PART OF THE SE ¼ OF THE SE 1/4 OF SECTION 31, TOWN 3 NORTH, RANGE 17 EAST, AND THAT PART OF THE NE ¼ OF THE NE 1/4 OF SECTION 6, TOWN 2 NORTH, RANGE 17 EAST, ALL IN THE CITY OF ELKHORN, WISCONSIN; THAT PART OF NW 1/4 OF THE NW 1/4 OF SECTION 5, TOWN 2 NORTH, RANGE 17 EAST, TOWN OF GENEVA; AND THAT PART OF THE SW 1/4 OF THE SW 1/4 OF SECTION 32, TOWN 3 NORTH RANGE 17 EAST, TOWN OF LAFAYETTE, ALL IN WALWORTH COUNTY, WISCONSIN.

RELOCATION ORDER USH 12 CTH NN OVERPASS, WALWORTH COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3), 84.09, AND 84.30 WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1080-13-20 4.01
AMENDMENT NO: 1

Doc # 888704
Recorded
July 25, 2014 2:04 PM
FILED
DONNA R PRUESS
REGISTER OF DEEDS
WALWORTH COUNTY, WI
Fee Amount: $25.00
Total Pages: 1

SCHEDULE OF LANDS & INTERESTS REQUIRED

NOTE:OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND INTERESTS TO THE DEPARTMENT OF TRANSPORTATION.

PARCEL NUMBER	OWNER	INTERESTS REQUIRED	R/W REQUIRED (ACRES) NEW	EXISTING	TOTAL	T.L.E. TEMP ACRES	P.L.E. PERM ACRES
1	HO BUILDING CORP	FEE,TLE	0.82	×	0.82	0.25	×
2	SIRIUS REAL ESTATE INVESTORS	FEE	0.08	×	0.08	×	×

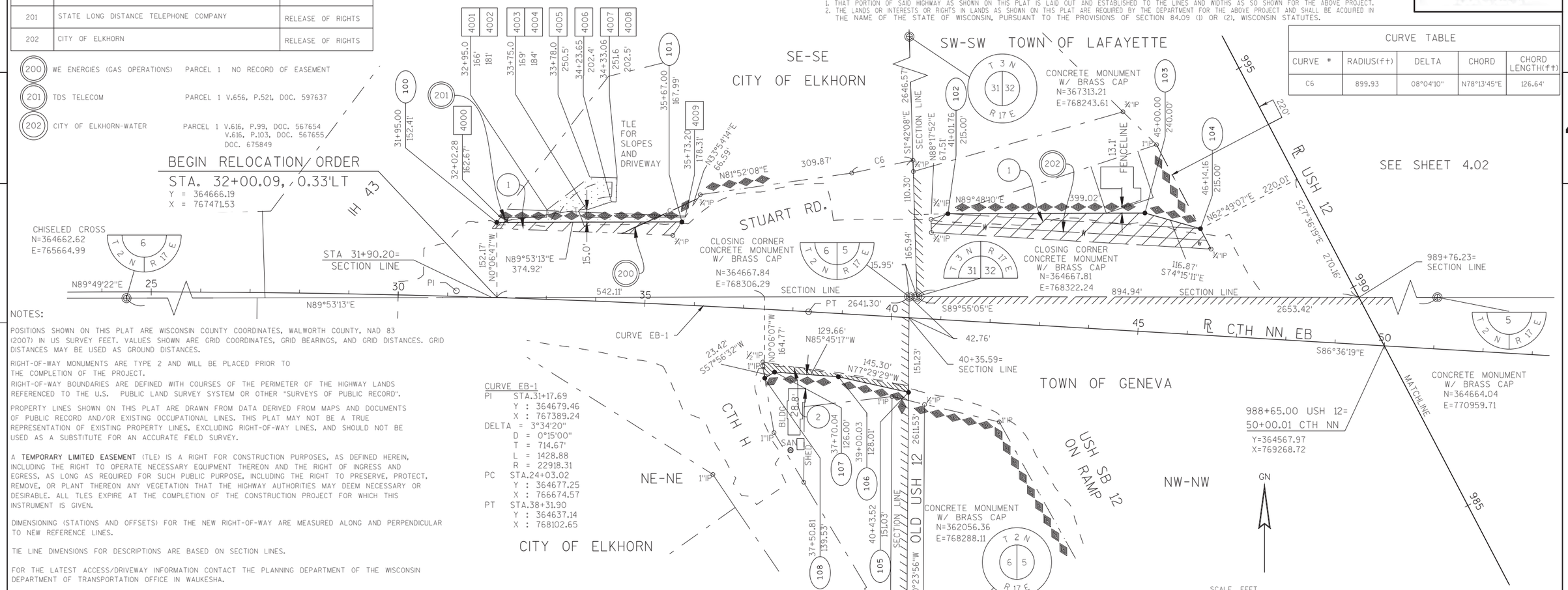
UTILITY SCHEDULE & INTERESTS REQUIRED

UTILITY NUMBER	OWNER	INTERESTS REQUIRED
200	WE ENERGIES (GAS OPERATIONS)	RELEASE OF RIGHTS
201	STATE LONG DISTANCE TELEPHONE COMPANY	RELEASE OF RIGHTS
202	CITY OF ELKHORN	RELEASE OF RIGHTS

HWY	BASIS OF EXISTING R/W	YEAR	WIDTH
USH 12/CTH NN	PROJECT TO4-1 (22)	1973	VARIES
STUART RD	PROJECT TO4-1 (22)	1973	VARIES
CTH H	PROJECT TO4-1 (22)	1973	VARIES
OLD USH 12	TOWN ROAD RECORD	1842	66'

CURVE TABLE				
CURVE #	RADIUS(ft)	DELTA	CHORD	CHORD LENGTH(ft)
C6	899.93	08°04'10"	N78°13'45"E	126.64'

200 WE ENERGIES (GAS OPERATIONS) PARCEL 1 NO RECORD OF EASEMENT
201 TDS TELECOM PARCEL 1 V.656, P.521, DOC. 597637
202 CITY OF ELKHORN-WATER PARCEL 1 V.616, P.99, DOC. 567654 V.616, P.103, DOC. 567655 DOC. 675849



NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, WALWORTH COUNTY, NAD 83 (2007) IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 AND WILL BE 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 SYSTEM OR OTHER "SURVEYS OF PUBLIC RECORD".

PROPERTY LINES SHOWN ON THIS PLAT ARE DRAWN FROM DATA DERIVED FROM MAPS AND DOCUMENTS OF PUBLIC RECORD AND/OR EXISTING OCCUPATIONAL LINES. THIS PLAT MAY NOT BE A TRUE REPRESENTATION OF EXISTING PROPERTY LINES, EXCLUDING RIGHT-OF-WAY LINES, AND SHOULD NOT BE USED AS A SUBSTITUTE FOR AN ACCURATE FIELD SURVEY.

A **TEMPORARY LIMITED EASEMENT** (TLE) IS A RIGHT FOR CONSTRUCTION PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON AND THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM NECESSARY OR DESIRABLE. ALL TLES EXPIRE AT THE COMPLETION OF THE CONSTRUCTION PROJECT FOR WHICH THIS INSTRUMENT IS GIVEN.

DIMENSIONING (STATIONS AND OFFSETS) FOR THE NEW RIGHT-OF-WAY ARE MEASURED ALONG AND PERPENDICULAR TO NEW REFERENCE LINES.

TIE LINE DIMENSIONS FOR DESCRIPTIONS ARE BASED ON SECTION LINES.

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION CONTACT THE PLANNING DEPARTMENT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN WAUKESHA.

CONVENTIONAL ABBREVIATIONS

ACCESS POINT/ DRIVEWAY CONNECTION	AP	RELEASE OF RIGHTS	ROR
ACCESS RIGHTS	AR	REMAINING	REM.
ACRES	AC.	RIGHT-OF-WAY	R/W
AND OTHERS	ET.AL.	SECTION	SEC.
CENTERLINE	C/L	STATION	STA.
CERTIFIED SURVEY MAP	CSM	TEMPORARY LIMITED EASEMENT	TLE
CORNER	COR.	VOLUME	V.
DOCUMENT	DOC.		
EASEMENT	EASE.		
HIGHWAY EASEMENT	H.E.		
LAND CONTRACT	LC		
MONUMENT	MON.		
PAGE	P.		
PERMANENT LIMITED EASEMENT	PLE		
PROPERTY LINE	PL		
RECORDED AS	(100')		
REFERENCE LINE	R/L		

CURVE DATA

LONG CHORD	LCH		
LONG CHORD BEARING	LCB		
RADIUS	R		
DEGREE OF CURVE	D		
CENTRAL ANGLE OR DELTA	DELTA		
LENGTH OF CURVE	L		
TANGENT	TAN		

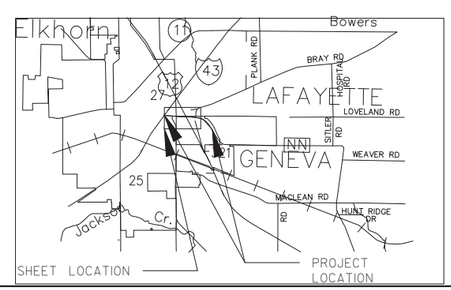
CONVENTIONAL SYMBOLS

FOUND IRON PIPE/PIN — I.P. (1" UNLESS NOTED)
R/W MONUMENT — ● (SET)
R/W STANDARD — ▲ (SET)
SIGN — ISIGN
SECTION CORNER MONUMENT
SECTION CORNER SYMBOL
FEE (HATCH VARIES)
TEMPORARY LIMITED EASEMENT
PERMANENT LIMITED EASEMENT
R/W BOUNDARY POINT — RWB20
PARCEL NUMBER — 02
SIGN NUMBER (OFF PREMISE) — 21-1
BUILDING

PROPOSED R/W LINE
EXISTING H.E. LINE
PROPERTY LINE
LOT & TIE LINES
SLOPE INTERCEPTS
CORPORATE LIMITS
ACCESS CONTROL (BY PREVIOUS ACQUISITION/CONTROL)
NO ACCESS (BY ACQUISITION)
NO ACCESS (BY STATUTORY AUTHORITY)
SECTION LINE
QUARTER LINE
SIXTEENTH LINE
EXISTING CENTERLINE
PROPOSED REFERENCE LINE
PARALLEL OFFSET

CONVENTIONAL UTILITY SYMBOLS

	NON COMPENSABLE	COMPENSABLE
WATER	W	
GAS	G	
TELEPHONE	T	
OVERHEAD TRANSMISSION LINES ELECTRIC	OH	
CABLE TELEVISION	E	
FIBER OPTIC	TV	
SANITARY SEWER	FO	
STORM SEWER	SAN	
	SS	
POWER POLE		
TELEPHONE POLE		
TELEPHONE PEDESTAL		
LIGHT POLE		
GUY POLE		
SIGN		



THIS IS A COPY. ORIGINAL DOCUMENT IS AT THE WALWORTH COUNTY REGISTER OF DEEDS.

DAAR
www.daarcorp.com
325 E. CHICAGO ST. SUITE 500
MILWAUKEE, WISCONSIN 53202
PHONE: (414)935-4350

I, ERIC E. LINDAAS, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 1080-13-20 - 4.01 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

(SIGNATURE) _____ DATE: 7/21/2014
(PRINTED NAME) ERIC E. LINDAAS
(REGISTRATION NUMBER) RLS 8-2919

WISCONSIN ERIC E LINDAAS S-2919 MCFARLAND WI LAND SURVEYOR

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.
(SIGNATURE) _____ DATE: 7/21/2014
(PRINTED NAME) ROBERT L DUFFECK PE

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\RW\10801370\PLAT\040101_RP_TEMP DWY_22X34.DWG PLOT DATE : 7/21/2014 10:16 AM PLOT BY : JEANNA SCHWINN PLOT NAME : PLOT SCALE : 1 IN: 200 FT

CONST. 1080-13-70 R/W 1080-13-20 4.01 AMENDMENT NO. 1

TRANSPORTATION PROJECT PLAT NO: 1080-13-20 4.02

THAT PART OF THE SW 1/4 OF THE SW 1/4 AND THE SE 1/4 OF THE SW 1/4 AND THE SW 1/4 OF THE SE 1/4 OF SECTION 32, TOWN 3 NORTH, RANGE 17 EAST, ALL IN THE TOWN OF LAFAYETTE; THAT PART OF NE 1/4 OF THE NW 1/4 OF SECTION 5, TOWN 2 NORTH, RANGE 17 EAST, TOWN OF GENEVA AND THAT PART OF NW 1/4 OF THE NE 1/4 OF SECTION 5, TOWN 2 NORTH, RANGE 17 EAST, CITY OF ELKHORN, ALL IN WALWORTH COUNTY, WISCONSIN.

RELOCATION ORDER USH 12 CTH NN OVERPASS, WALWORTH COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3) AND 84.09, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1080-13-20 4.02
AMENDMENT NO:___

1080-13-20 4.02 IN DS

Doc # 884765
Recorded
May 14, 2014 11:30 AM
DONNA R PRUESS
REGISTER OF DEEDS
WALWORTH COUNTY, WI
Fee Amount: $25.00
Total Pages: 1

SCHEDULE OF LANDS & INTERESTS REQUIRED

NOTE:OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND INTERESTS TO THE DEPARTMENT OF TRANSPORTATION.

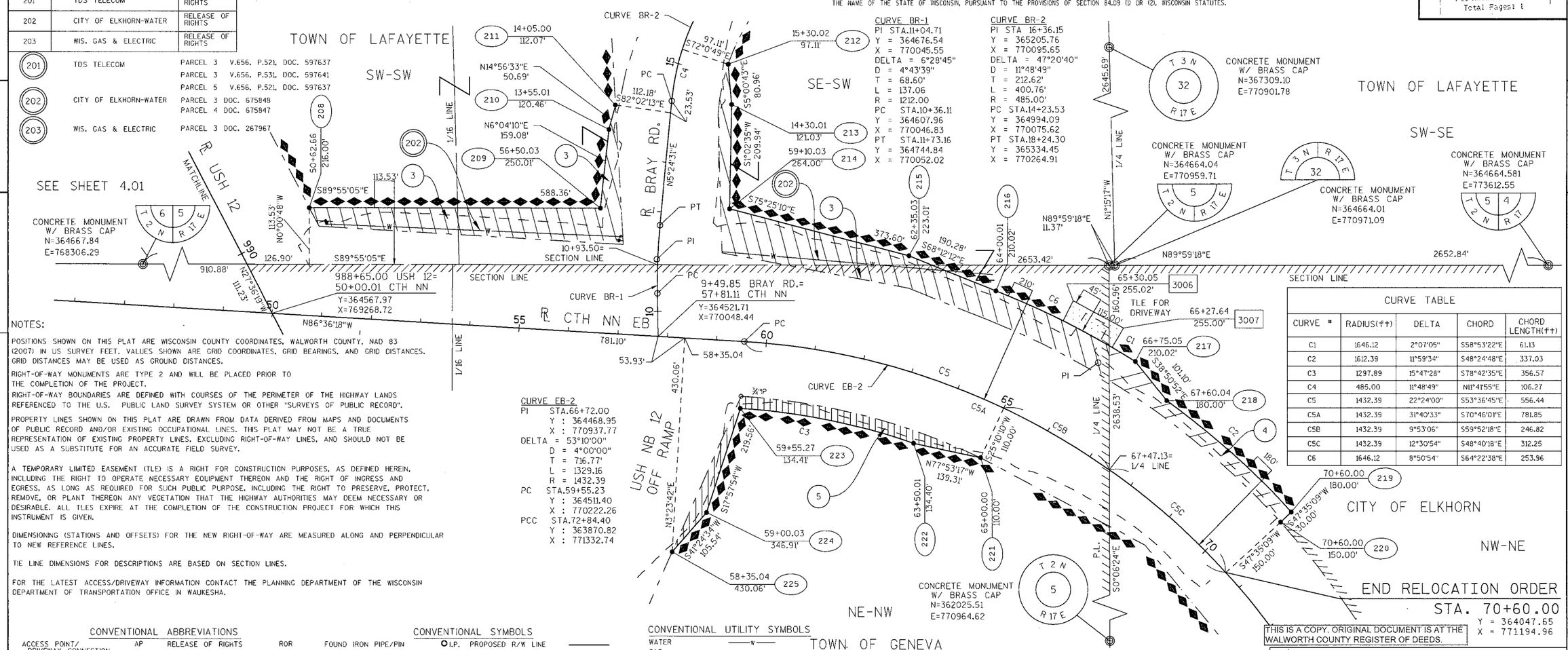
PARCEL NUMBER	OWNER	INTERESTS REQUIRED	R/W REQUIRED (ACRES) NEW	EXISTING	TOTAL	T.L.E. TEMP ACRES	P.L.E. PERM ACRES
3	BRAY FAMILY TRUST	FEE,TLE	2.33	x	2.33	0.10	x
4	SOUTHEAST CROSSROADS LLC	FEE,TLE	0.39	x	0.39	0.02	x
5	LARRY M SIMON	FEE	0.39	x	0.39	x	x

UTILITY SCHEDULE & INTERESTS REQUIRED

UTILITY NUMBER	OWNER	INTERESTS REQUIRED
201	TDS TELECOM	RELEASE OF RIGHTS
202	CITY OF ELKHORN-WATER	RELEASE OF RIGHTS
203	WIS. GAS & ELECTRIC	RELEASE OF RIGHTS

(201)	TDS TELECOM	PARCEL 3 V.656, P.521, DOC. 597637
		PARCEL 3 V.656, P.531, DOC. 597641
		PARCEL 5 V.656, P.521, DOC. 597637
(202)	CITY OF ELKHORN-WATER	PARCEL 3 DOC. 675848
		PARCEL 4 DOC. 675847
(203)	WIS. GAS & ELECTRIC	PARCEL 3 DOC. 267967

HWY	BASIS OF EXISTING R/W	YEAR	WIDTH
USH 12/CTH NN	PROJECT 1004-1 (22)	1973	VARIES
BRAY RD	PROJECT 1004-1 (22)	1973	VARIES



CURVE TABLE

CURVE #	RADIUS(ft)	DELTA	CHORD	CHORD LENGTH(ft)
C1	1646.12	2°07'05"	S58°53'22"E	61.13
C2	1612.39	11°59'34"	S48°24'48"E	337.03
C3	1297.89	15°47'28"	S78°42'35"E	356.57
C4	485.00	11°48'49"	N11°41'55"E	106.27
C5	1432.39	22°24'00"	S53°36'45"E	556.44
C5A	1432.39	31°40'33"	S70°46'01"E	781.85
C5B	1432.39	9°53'06"	S59°52'18"E	246.82
C5C	1432.39	12°30'54"	S48°40'18"E	312.25
C6	1646.12	8°50'54"	S64°22'38"E	253.96

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, WALWORTH COUNTY, NAD 83 (2007) IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

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A TEMPORARY LIMITED EASEMENT (TLE) IS A RIGHT FOR CONSTRUCTION PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON AND THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM NECESSARY OR DESIRABLE. ALL TLES EXPIRE AT THE COMPLETION OF THE CONSTRUCTION PROJECT FOR WHICH THIS INSTRUMENT IS GIVEN.

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TIE LINE DIMENSIONS FOR DESCRIPTIONS ARE BASED ON SECTION LINES.

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION CONTACT THE PLANNING DEPARTMENT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN WAUKESHA.

CONVENTIONAL ABBREVIATIONS

ACCESS POINT/ DRIVEWAY CONNECTION	AP	RELEASE OF RIGHTS	ROR
ACCESS RIGHTS	AR	REMAINING	REM.
ACRES	AC.	RIGHT-OF-WAY	R/W
AND OTHERS	ET.AL.	SECTION	SEC.
CENTERLINE	C/L	STATION	STA.
CERTIFIED SURVEY MAP	CSM	TEMPORARY LIMITED EASEMENT	TLE
CORNER	COR.	VOLUME	V.
DOCUMENT	DOC.		
EASEMENT	EASE.		
HIGHWAY EASEMENT	H.E.		
LAND CONTRACT	LC		
MONUMENT	MON.		
PAGE	P.		
PERMANENT LIMITED EASEMENT	PLE		
PROPERTY LINE	PL		
RECORDED AS	(100')		
REFERENCE LINE	R/L		

CURVE DATA

LONG CHORD	LCH
LONG CHORD BEARING	LCB
RADIUS	R
DEGREE OF CURVE	D
CENTRAL ANGLE OR DELTA	DELTA
LENGTH OF CURVE	L
TANGENT	TAN

CONVENTIONAL SYMBOLS

FOUND IRON PIPE/PIN	O I.P. (I" UNLESS NOTED)	PROPOSED R/W LINE	
		EXISTING H.E. LINE	
R/W MONUMENT	●(SET)	PROPERTY LINE	
R/W STANDARD	▲(SET)	LOT & TIE LINES	
SIGN	(SIGN	SLOPE INTERCEPTS	
SECTION CORNER MONUMENT		CORPORATE LIMITS	
SECTION CORNER SYMBOL		ACCESS CONTROL (BY PREVIOUS ACQUISITION/CONTROL)	
FEE (HATCH VARIES)		NO ACCESS (BY ACQUISITION)	
TEMPORARY LIMITED EASEMENT		NO ACCESS (BY STATUTORY AUTHORITY)	
PERMANENT LIMITED EASEMENT		SECTION LINE	
R/W BOUNDARY POINT	PWB20	QUARTER LINE	
PARCEL NUMBER	(2)	SIXTEENTH LINE	
SIGN NUMBER (OFF PREMISE)	21-1	EXISTING CENTERLINE	
BUILDING		PROPOSED REFERENCE LINE	
		PARALLEL OFFSET	

CONVENTIONAL UTILITY SYMBOLS

	NON COMPENSABLE	COMPENSABLE
WATER	W	
GAS	G	
TELEPHONE	T	
OVERHEAD TRANSMISSION LINES ELECTRIC	OH	
CABLE TELEVISION	TV	
FIBER OPTIC	FO	
SANITARY SEWER	SAN	
STORM SEWER	SS	
POWER POLE		
TELEPHONE POLE		
TELEPHONE PEDESTAL		
LIGHT POLE		
GUY POLE		
SIGN		

END RELOCATION ORDER

STA. 70+60.00
Y = 364047.65
X = 771194.96

THIS IS A COPY. ORIGINAL DOCUMENT IS AT THE WALWORTH COUNTY REGISTER OF DEEDS.

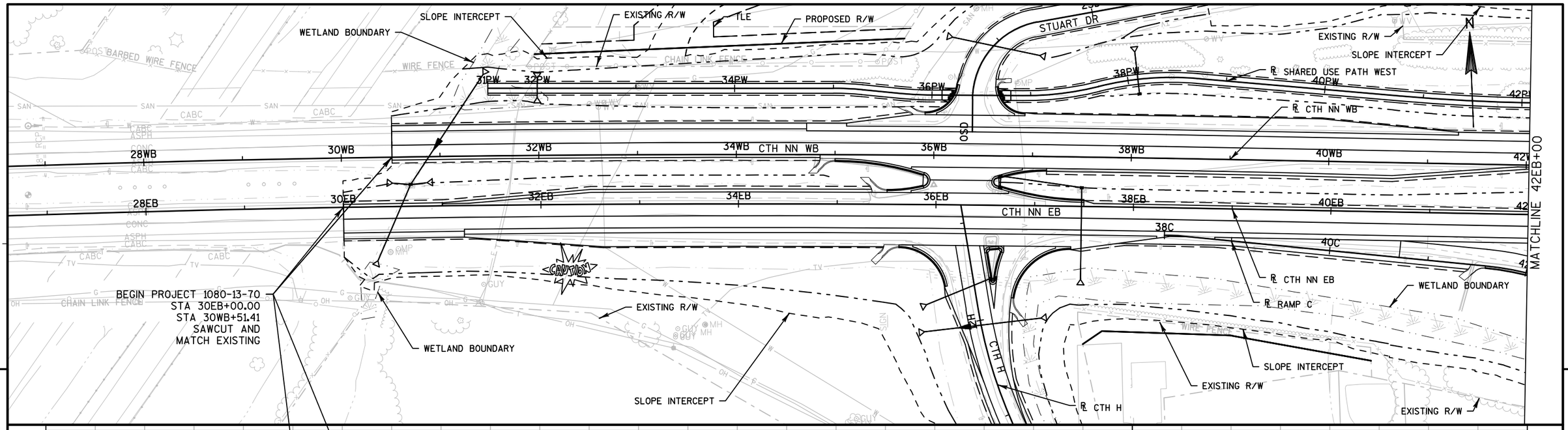
DAAR
www.daarcorp.com
325 E. CHICAGO ST. SUITE 500
MILWAUKEE, WISCONSIN 53202
PHONE: (414)935-4350

I, ERIC E. LINDAAS, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 1080-13-20 - 4.01 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

(SIGNATURE) _____ DATE: 04/24/2014
(PRINTED NAME) ERIC E. LINDAAS
(REGISTRATION NUMBER) RLS 8-2919

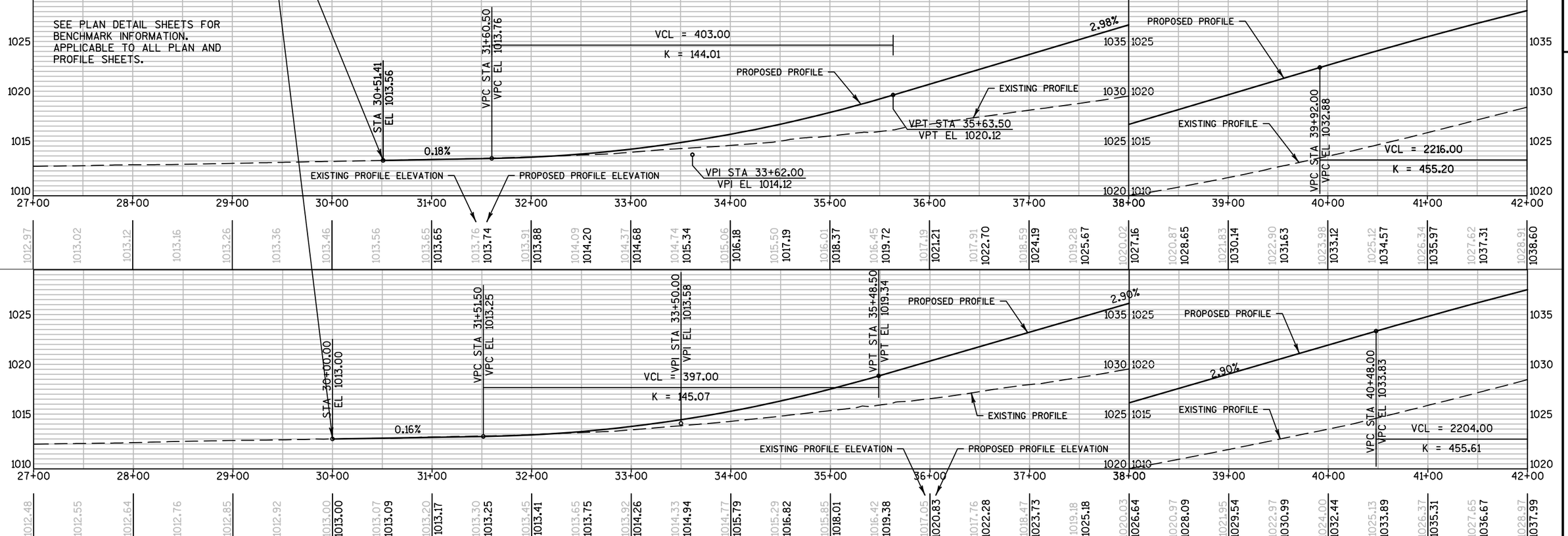
WISCONSIN ERIC E LINDAAS 8-2919 McFARLAND WI LAND SURVEYOR

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.
(SIGNATURE) _____ DATE: 5/09/2014
(PRINTED NAME) ROBERT L DUFFECK, PLS

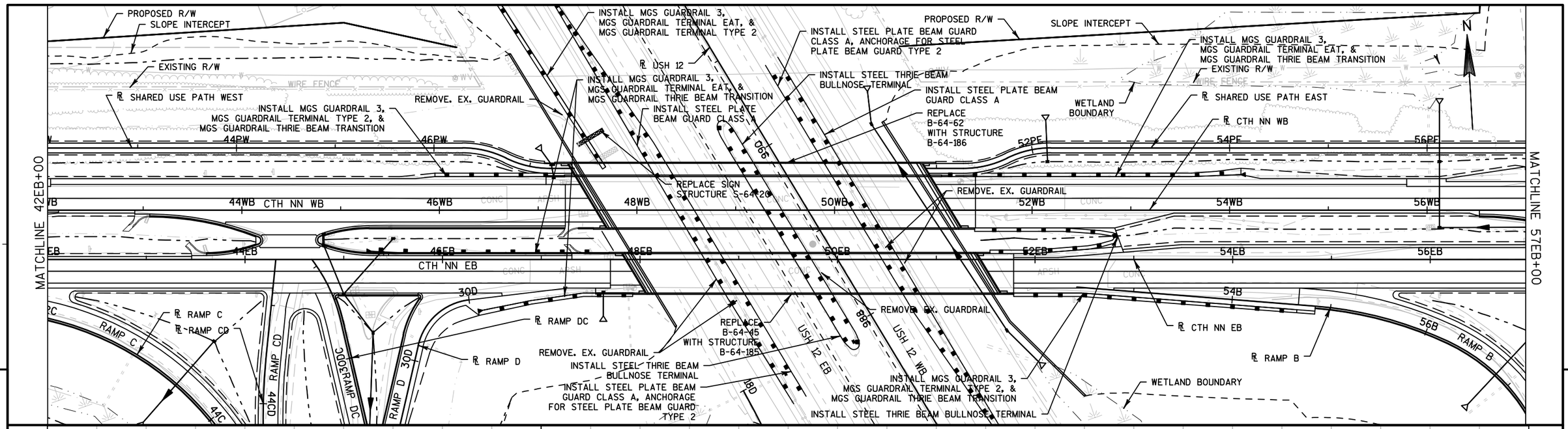


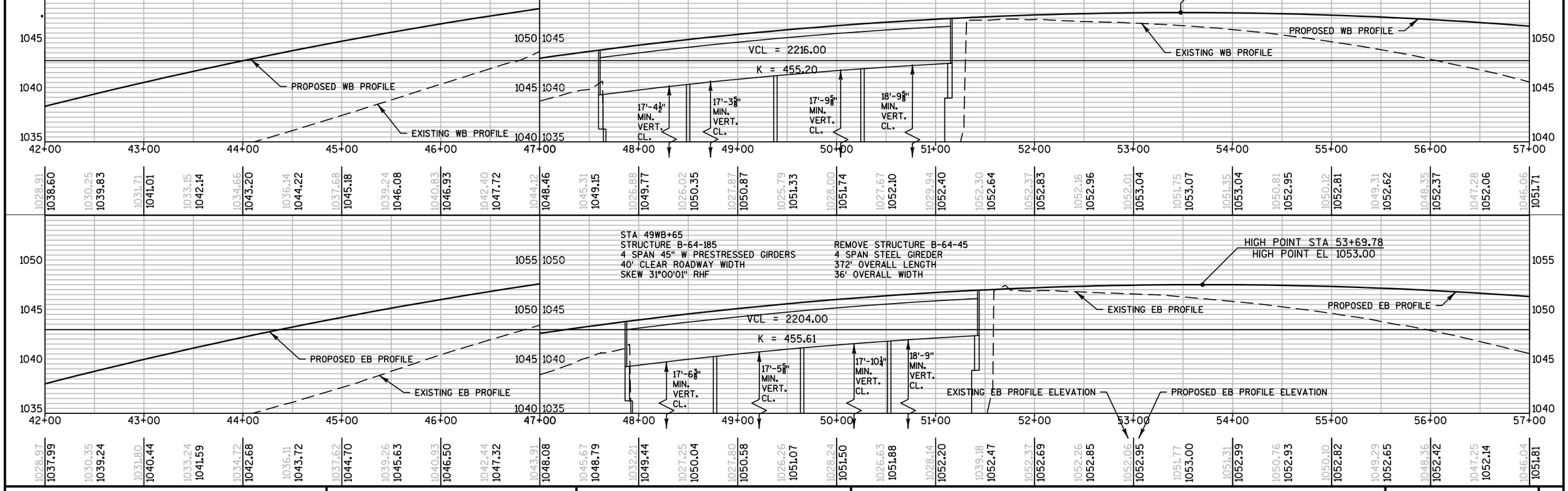
5

SEE PLAN DETAIL SHEETS FOR BENCHMARK INFORMATION. APPLICABLE TO ALL PLAN AND PROFILE SHEETS.



PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	PLAN AND PROFILE: CTH NN	SHEET 231	E





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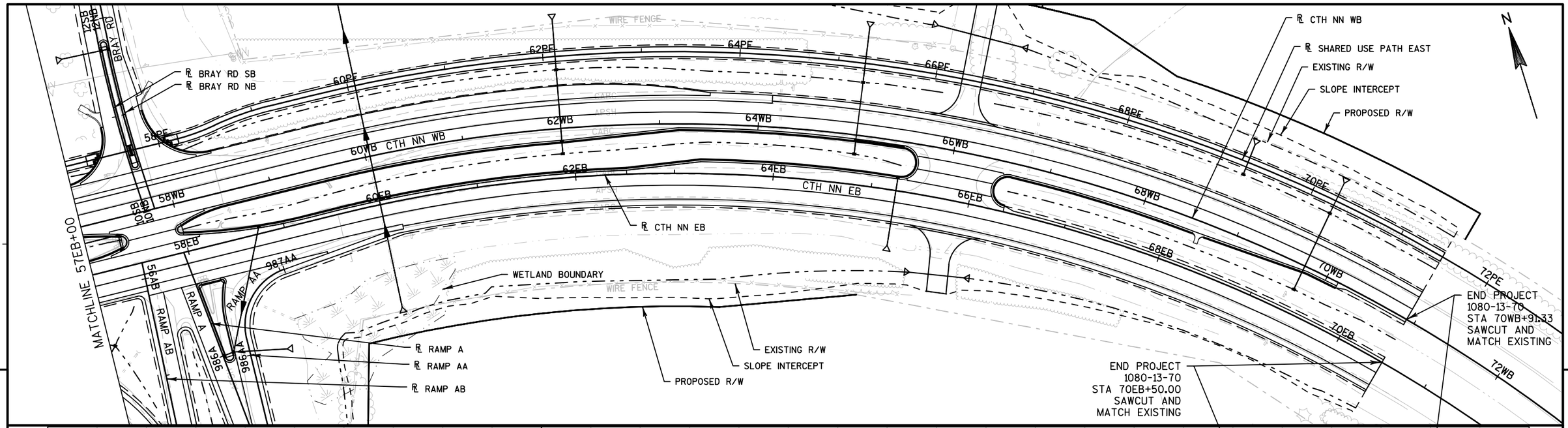
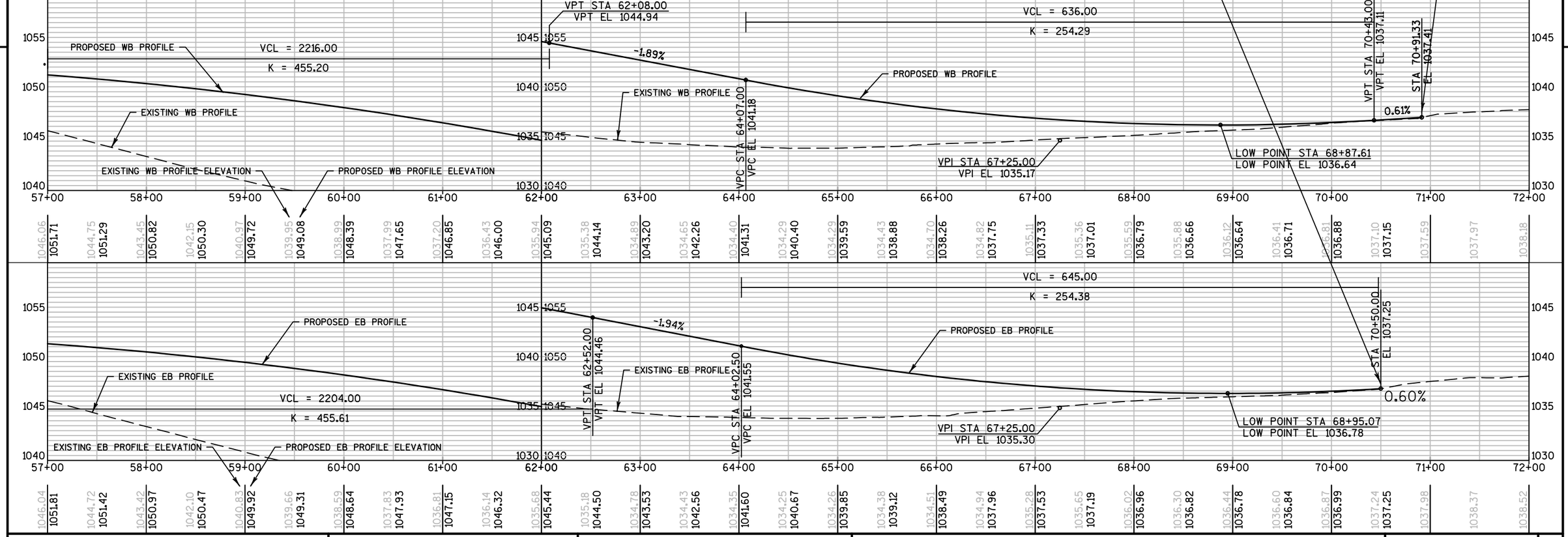




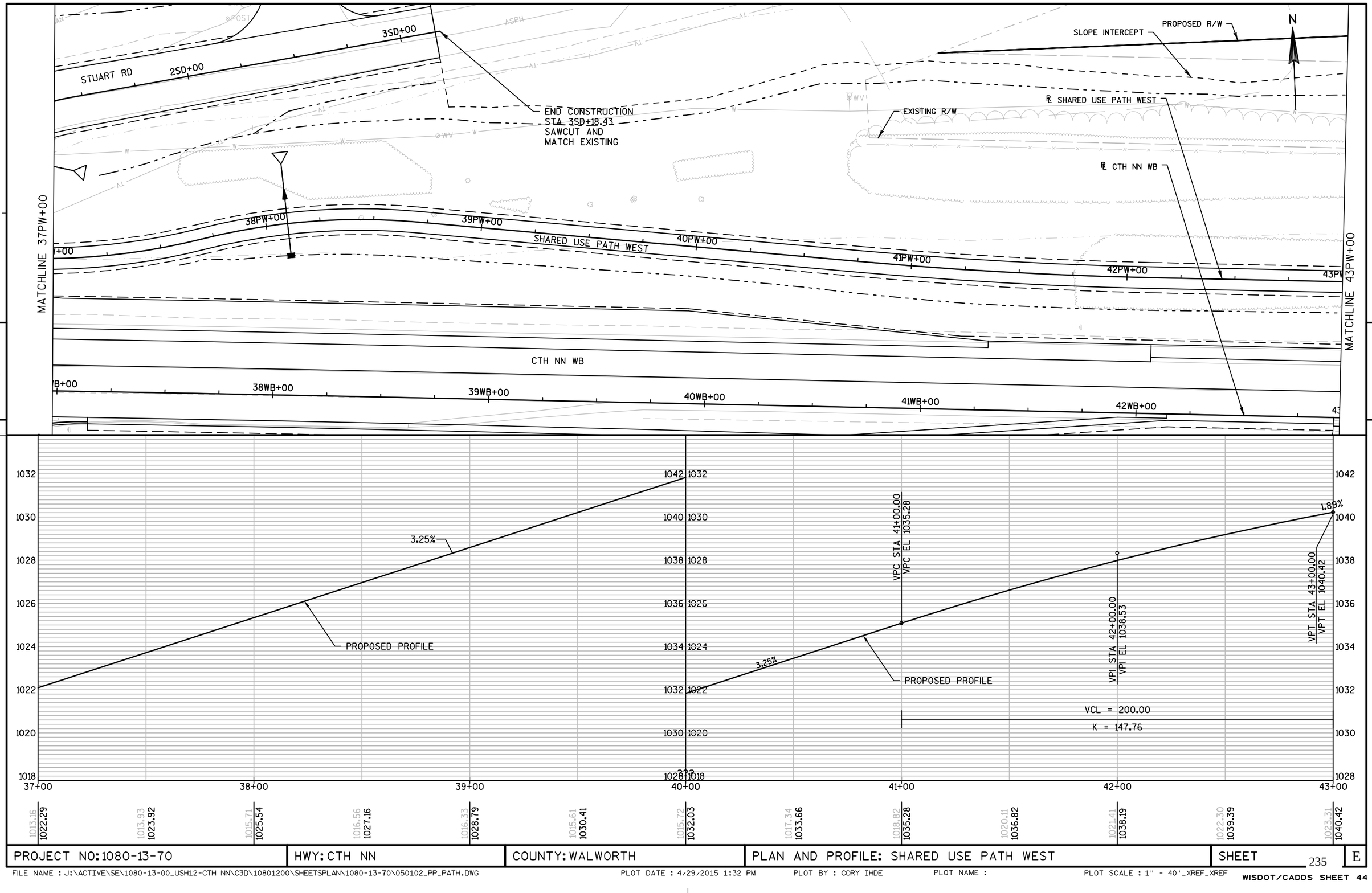
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	PLAN AND PROFILE: CTH NN	SHEET 233 E

℄ SHARED USE PATH WEST
WETLAND BOUNDARY
SLOPE INTERCEPT
EXISTING R/W
TLE
PROPOSED R/W
℄ STUART DR
WIRE FENCE
CHAIN LINK FENCE
POST
SHARED USE PATH WEST
STUART DR
CTH NN WB
32PW+00
33PW+00
34PW+00
35PW+00
36PW+00
37PW
15D+00
05D+00
31WB+00
32WB+00
33WB+00
34WB+00
35WB+00
36WB+00
37W
MATCHLINE 37PW+00
BEGIN CONSTRUCTION
STA 31PW+50.00
PROPOSED PATH WILL MATCH
WORK BY OTHERS.
℄ CTH NN WB
31EB+00
32EB+00
5
5

STA 31+50.00
EL 1012.00
STA 36+06.00
EL 1021.41
STA 36+23.03
EL 1021.54
STA 36+40.99
EL 1021.61
STA 36+67.37
EL 1021.59
STA 36+84.00
EL 1021.77
STA 36+21.53
EL 1021.57
STA 36+24.53
EL 1021.57
STA 36+65.87
EL 1021.62
STA 36+68.81
EL 1021.62
-2.00%
2.00%
-2.00%
2.08%
3.25%
1.00%
0.24%
0.04%
1.00%
2.06%
PROPOSED PROFILE
EXISTING PROFILE
EXISTING PROFILE ELEVATION
PROPOSED PROFILE ELEVATION
1024
1022
1020
1018
1016
1014
1012
1010
31+00
32+00
33+00
34+00
35+00
36+00
37+00

1010.14 1012.00	1011.99 1013.03	1012.17 1014.06	1011.46 1015.10	1012.42 1016.13
1012.97 1017.16	1013.06 1018.19	1013.22 1019.23	1013.21 1020.26	1012.59 1021.29
1016.82 1021.61	1013.16 1022.29			

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	PLAN AND PROFILE: SHARED USE PATH WEST	SHEET 234 E



PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	PLAN AND PROFILE: SHARED USE PATH WEST	SHEET 235	E

PROPOSED R/W

SLOPE INTERCEPT

EXISTING R/W

WIRE FENCE

℄ SHARED USE PATH WEST

MATCHLINE 43PW+00

SHARED USE PATH WEST

℄ CTH NN WB

CTH NN WB

END CONSTRUCTION
STA 47PW+34.44

USH 12 EB

USH 12 WB

℄ USH 12

N

5

5

VPT STA 43+00.00
VPT EL 1040.42

1.89%

PROPOSED PROFILE

STA 47+34.44
EL 1048.65

EXISTING PROFILE

EXISTING PROFILE ELEVATION

PROPOSED PROFILE ELEVATION

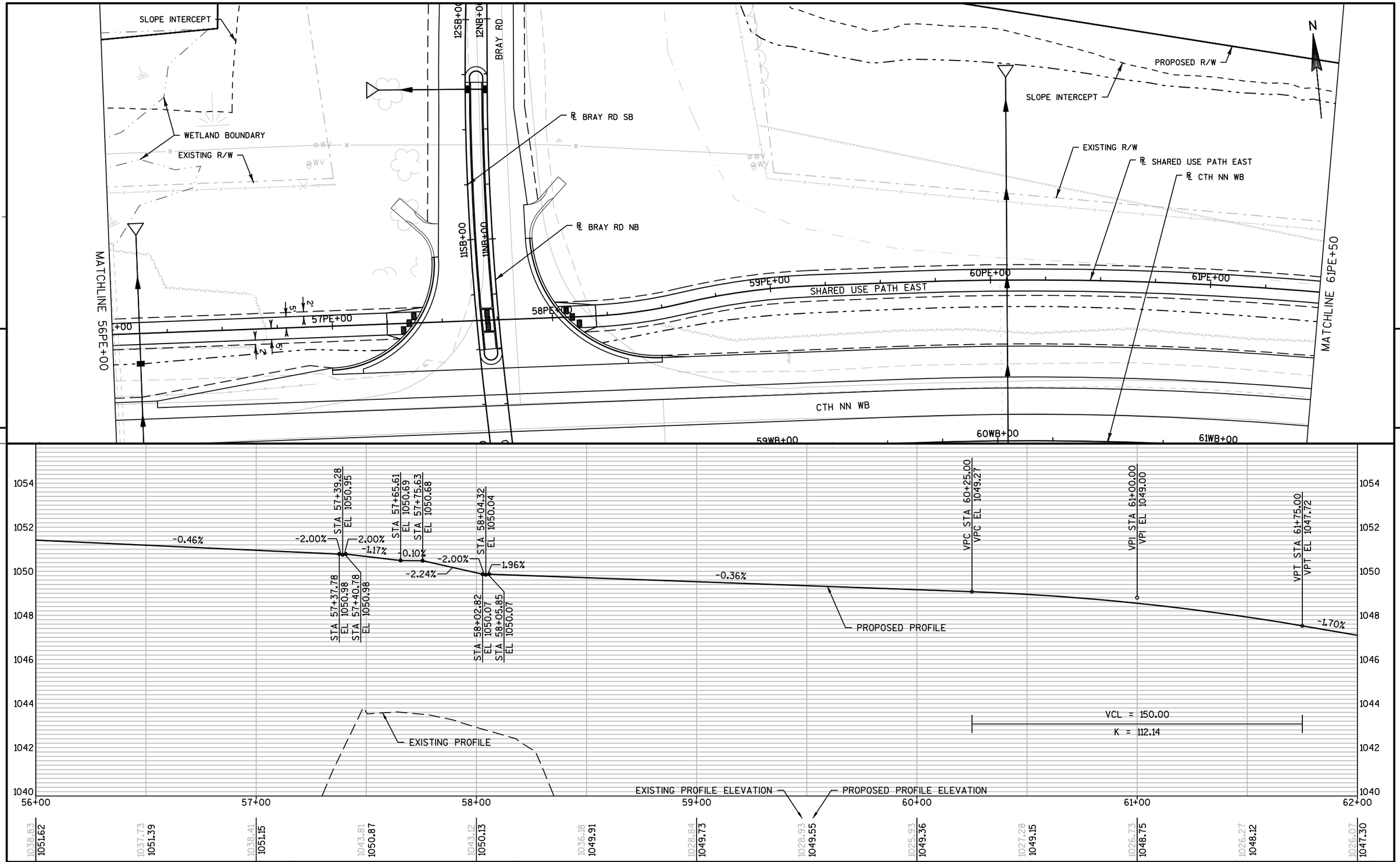
43+00	44+00	45+00	46+00	47+00	48+00	49+00
1023.31	1024.02	1025.00	1026.45	1028.56	1028.89	1031.48	1033.75	1040.04
1040.42	1041.37	1042.32	1043.26	1044.21	1045.16	1046.10	1047.05	1048.00

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	PLAN AND PROFILE: SHARED USE PATH WEST	SHEET 236	E

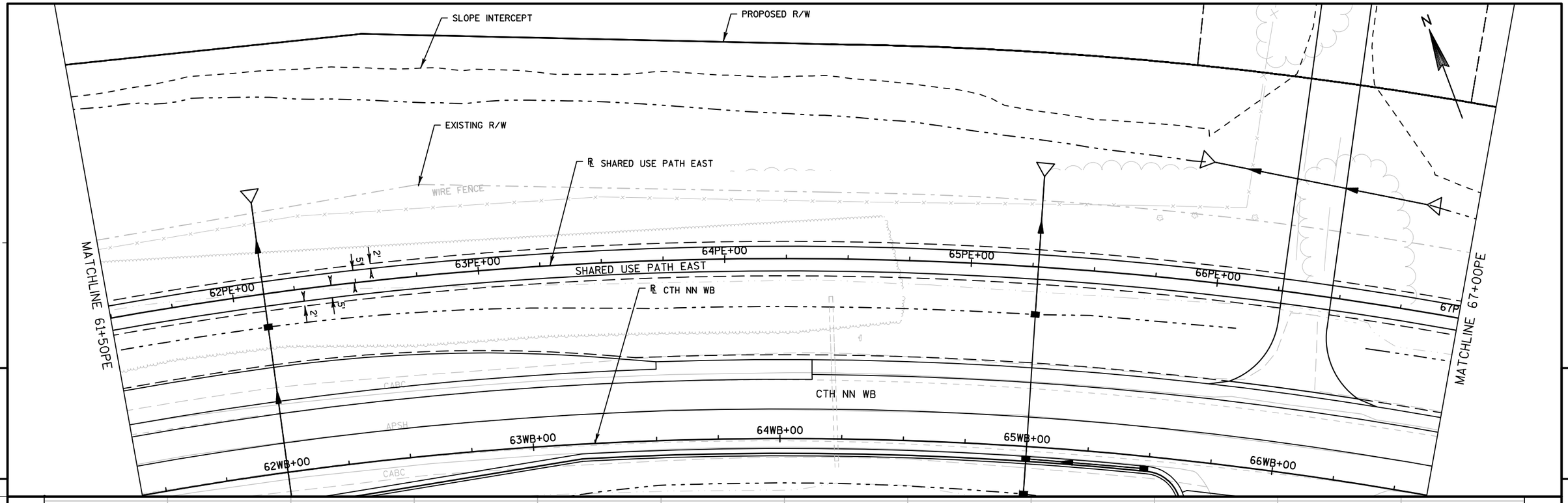
PROPOSED R/W
EXISTING R/W
SLOPE INTERCEPT
WETLAND BOUNDARY
WIRE FENCE
℄ SHARED USE PATH EAST
℄ CTH NN WB
END CONSTRUCTION
STA 50PE+89.56
SHARED USE PATH EAST
MATCHLINE 56PE+00
CTH NN WB
APSH
CONC
50PE+00
51PE+00
52PE+00
53PE+00
54PE+00
55PE+00
56PE
50WB+00
51WB+00
52WB+00
53WB+00
54WB+00
5'
2'
N
0.46%
-0.46%
PROPOSED PROFILE
EXISTING PROFILE
STA 50+89.56
EL 1052.02
VPC STA 52+50.00
VPC EL 1052.77
VPI STA 53+00.00
VPI EL 1053.00
VPT STA 53+50.00
VPT EL 1052.77
VCL = 100.00
K = 108.14
EXISTING PROFILE ELEVATION
PROPOSED PROFILE ELEVATION
1052
1050
1048
1046
1044
1042
1040
1038
50+00
51+00
52+00
53+00
54+00
55+00
56+00
1039.45 1052.07
1048.72 1052.31
1042.19 1052.54
1041.24 1052.77
1041.40 1052.88
1041.37 1052.77
1041.24 1052.54
1040.90 1052.31
1040.46 1052.08
1039.50 1051.85
1038.83 1051.62

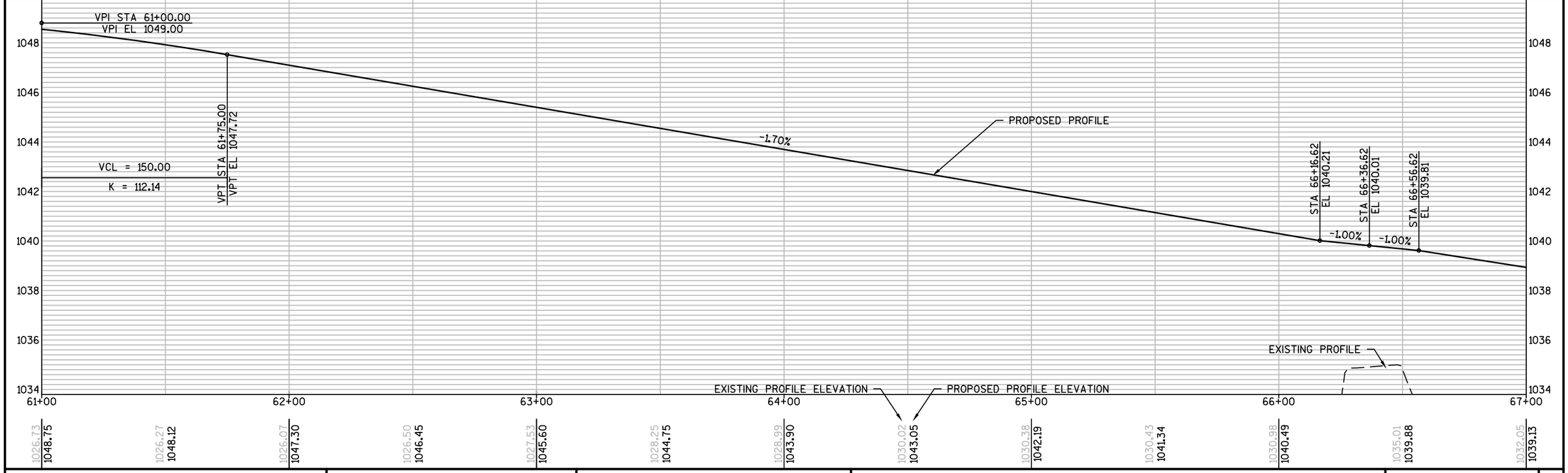
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	PLAN AND PROFILE: SHARED USE PATH EAST	SHEET 237	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\050102_PP_PATH.DWG
PLOT DATE : 4/29/2015 1:33 PM
PLOT BY : CORY IHDE
PLOT NAME :
PLOT SCALE : 1" = 40'_XREF_XREF
WISDOT/CADDS SHEET 44



PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	PLAN AND PROFILE: SHARED USE PATH EAST	SHEET 238	E

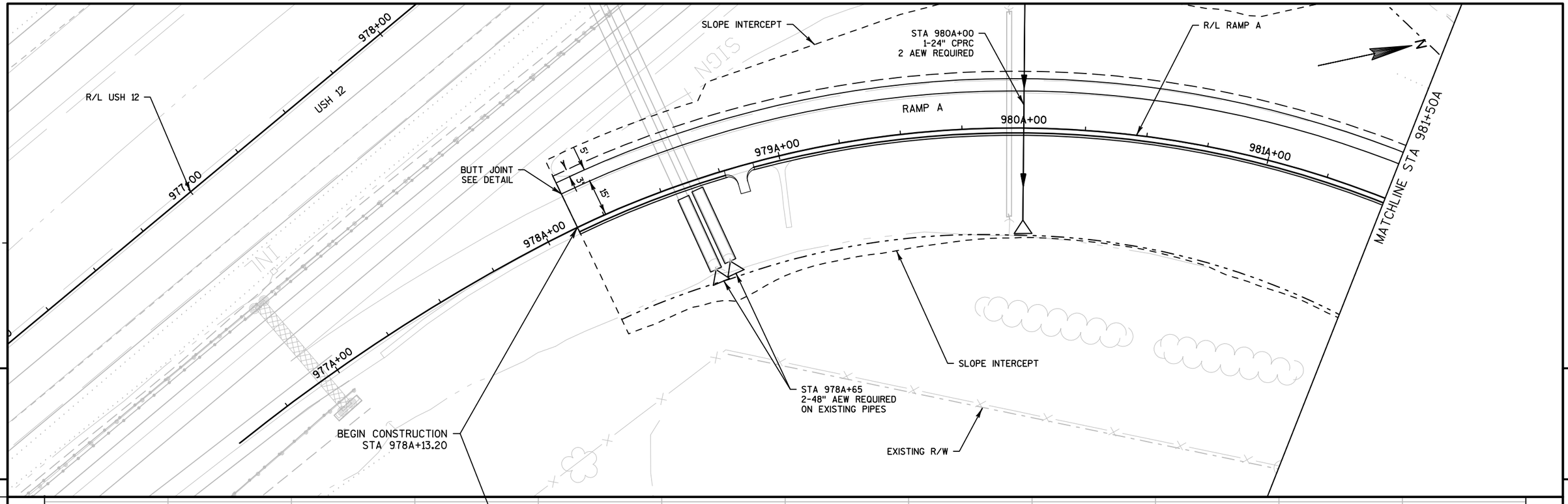


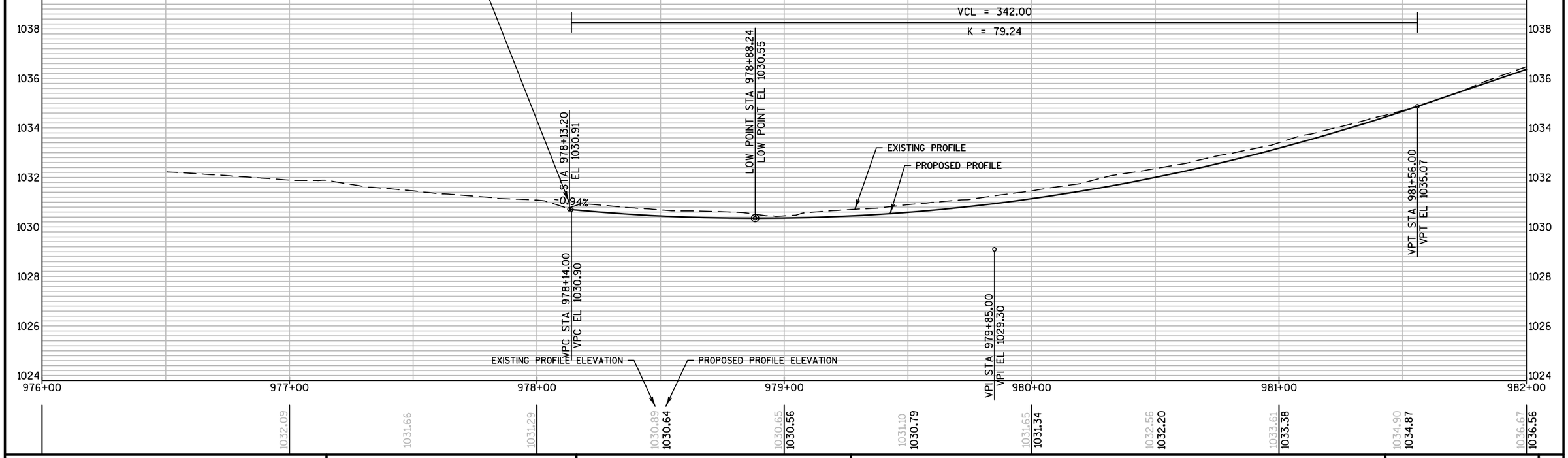


PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	PLAN AND PROFILE: SHARED USE PATH EAST	SHEET 239 E

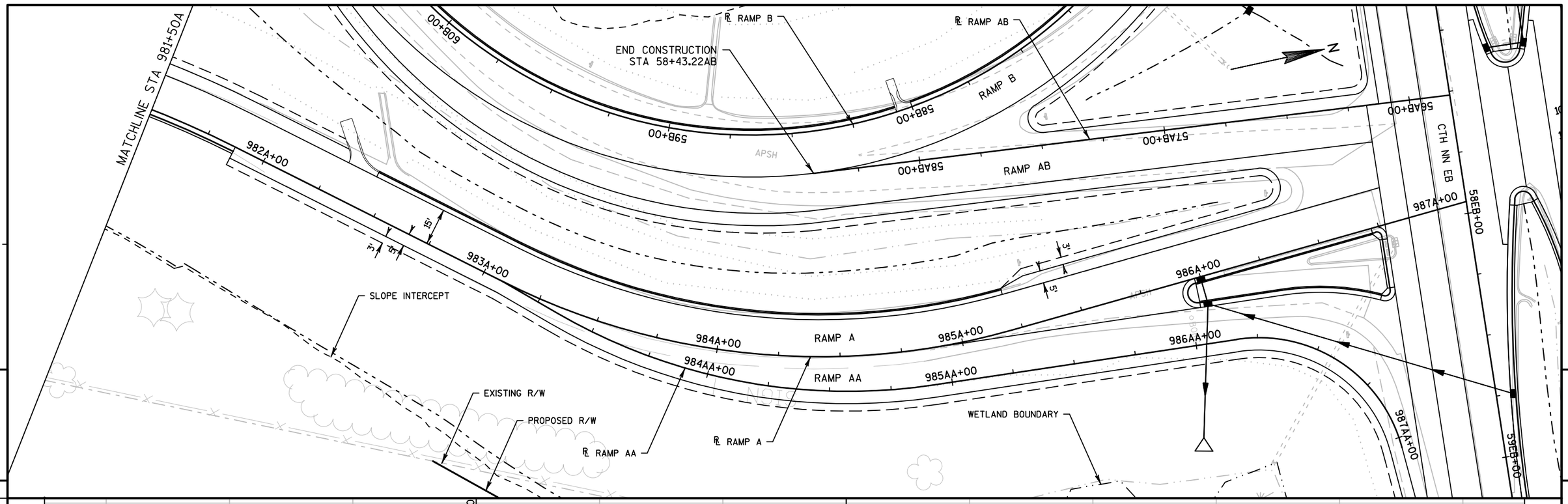
SLOPE INTERCEPT
PROPOSED R/W
EXISTING R/W
℄ SHARED USE PATH EAST
℄ CTH NN WB
N
MATCHLINE 67+00PE
SHARED USE PATH EAST
68PE+00
69PE+00
70PE+00
71PE+00
72PE+00
2%
5%
5%
2%
CTH NN WB
67WB+00
68WB+00
69WB+00
70WB+00
71WB+00
72WB+00
END PROJECT 1080-13-70
STA 70+91.33WB
SAWCUT AND
MATCH EXISTING
END CONSTRUCTION
STA 7PE+47.70
PROPOSED PATH WILL
MATCH WORK BY
OTHERS.
5
5
VCL = 100.00
K = 46.93
-1.00%
-1.00%
-1.57%
0.57%
STA 66+16.62
EL 1040.21
STA 66+36.62
EL 1040.01
STA 66+56.62
EL 1039.81
PROPOSED PROFILE
VPC STA 68+50.00
VPC EL 1036.78
VPI STA 69+00.00
VPI EL 1036.00
VPT STA 69+50.00
VPT EL 1036.28
STA 7+47.70
EL 1037.40
EXISTING PROFILE
1042
1040
1038
1036
1034
1032
1030
1028
66+00
67+00
68+00
69+00
70+00
71+00
72+00
EXISTING PROFILE ELEVATION
PROPOSED PROFILE ELEVATION
1030.98 1040.49
1035.01 1039.88
1032.05 1039.13
1031.38 1038.35
1032.15 1037.57
1032.31 1036.78
1032.70 1036.27
1033.08 1036.28
1033.24 1036.57
1033.46 1036.85
1033.98 1037.13
1035.15
1035.52

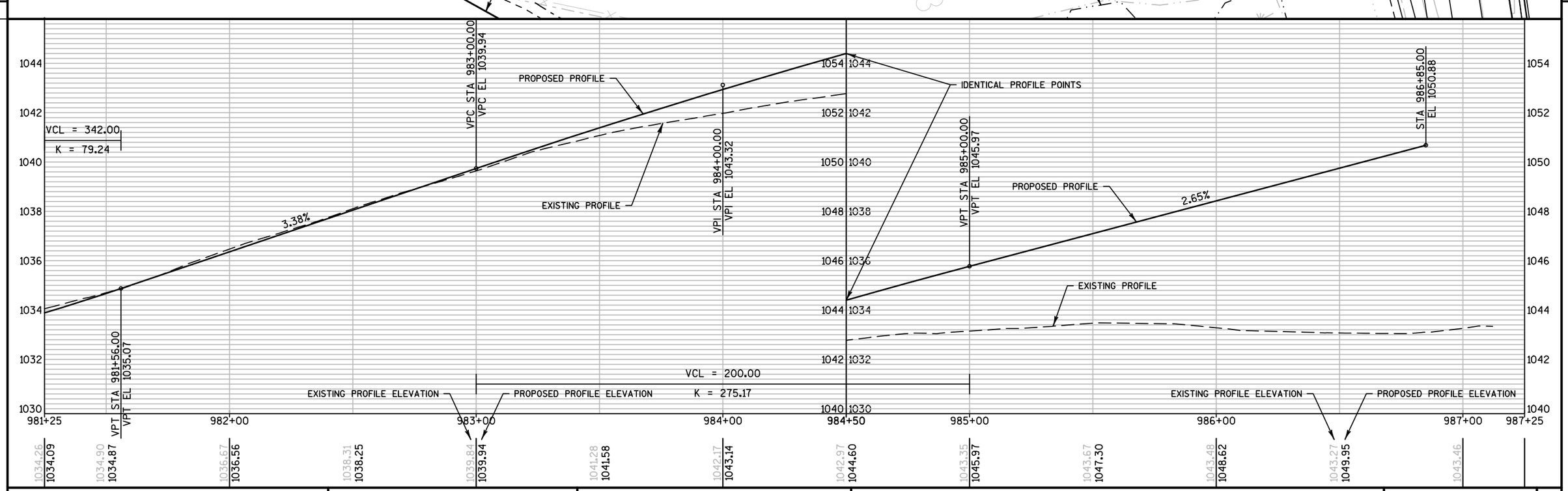
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	PLAN AND PROFILE: SHARED USE PATH EAST	SHEET 240	E



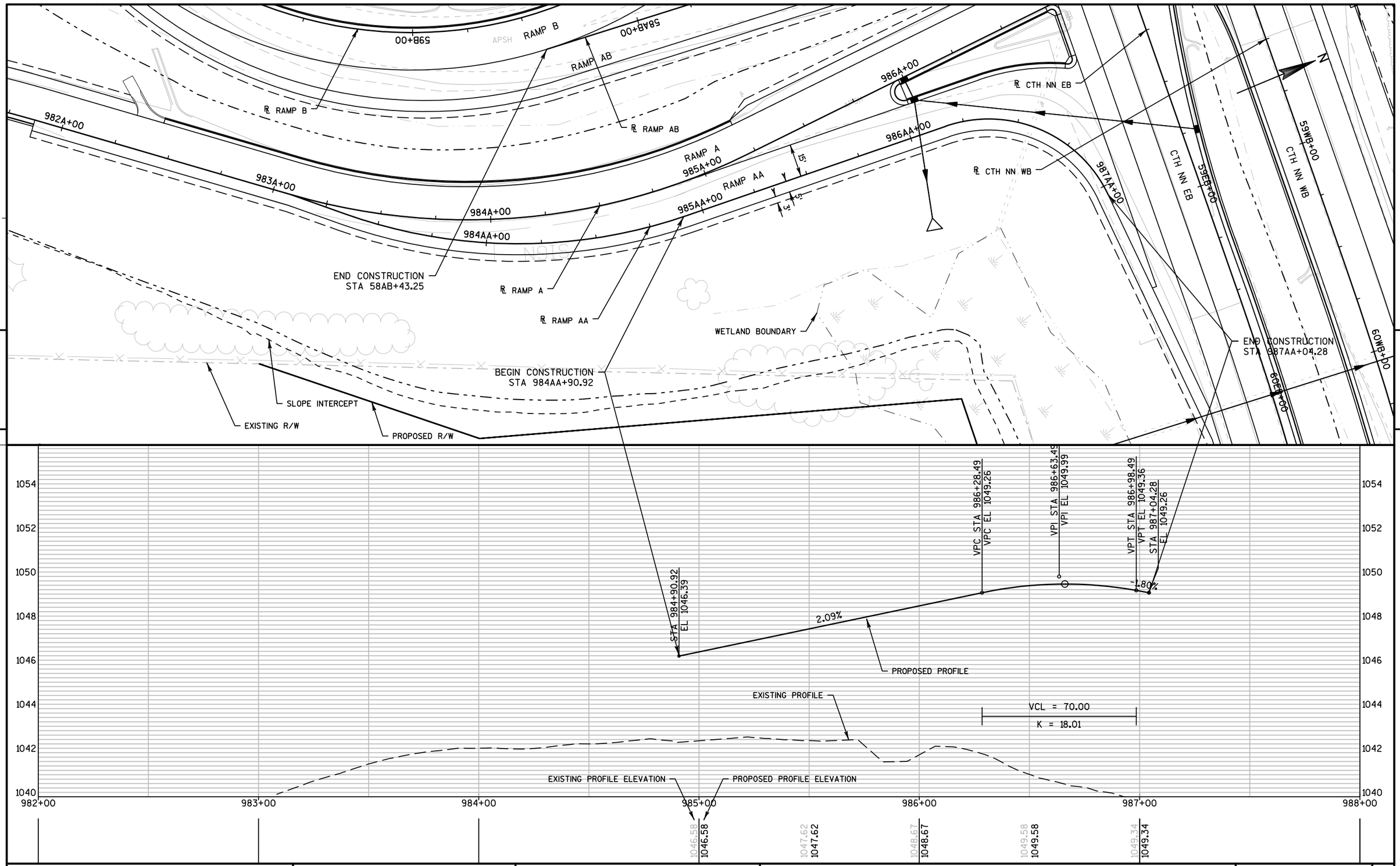


PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	PLAN AND PROFILE: RAMP A	SHEET 241	E

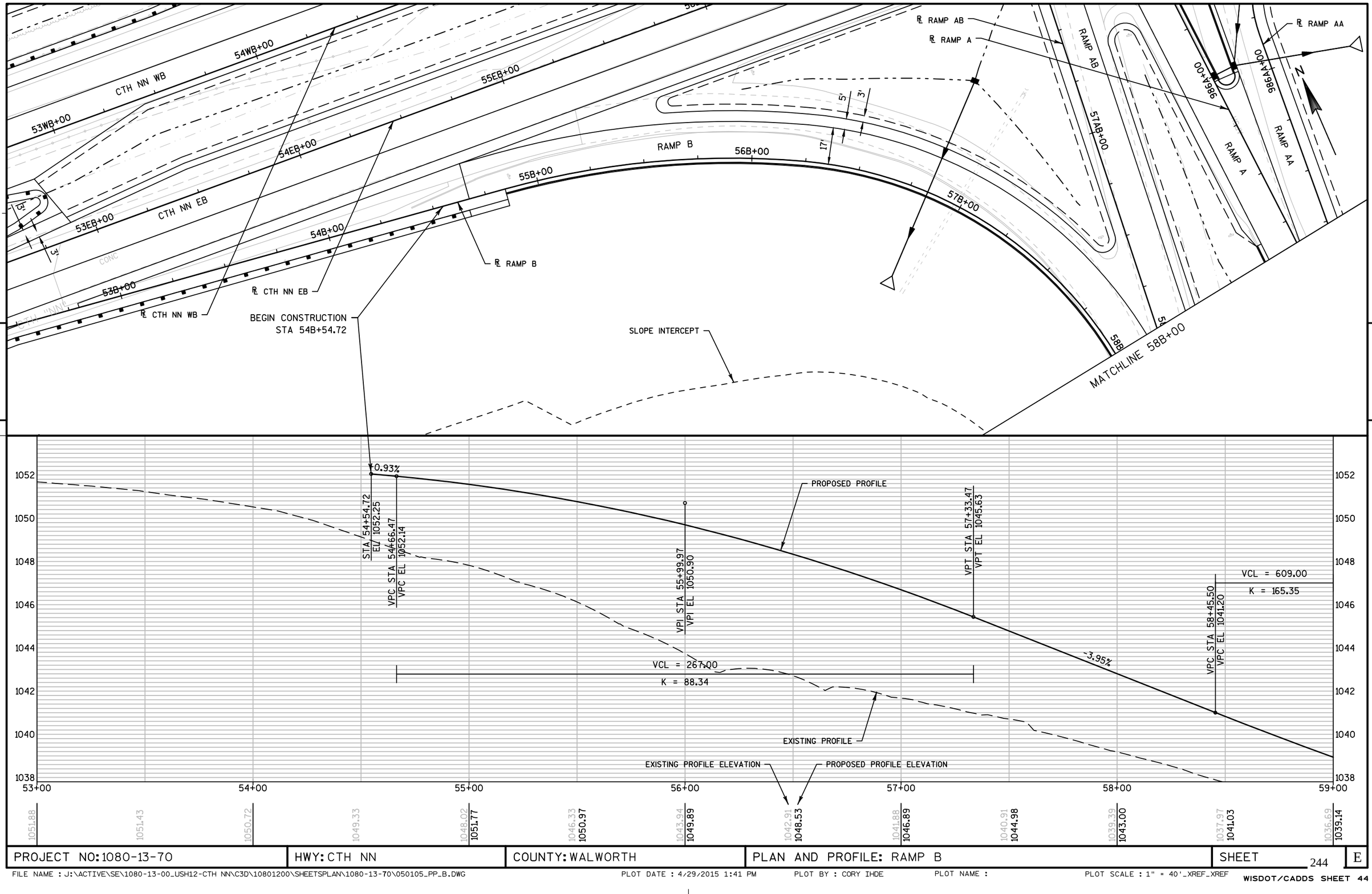




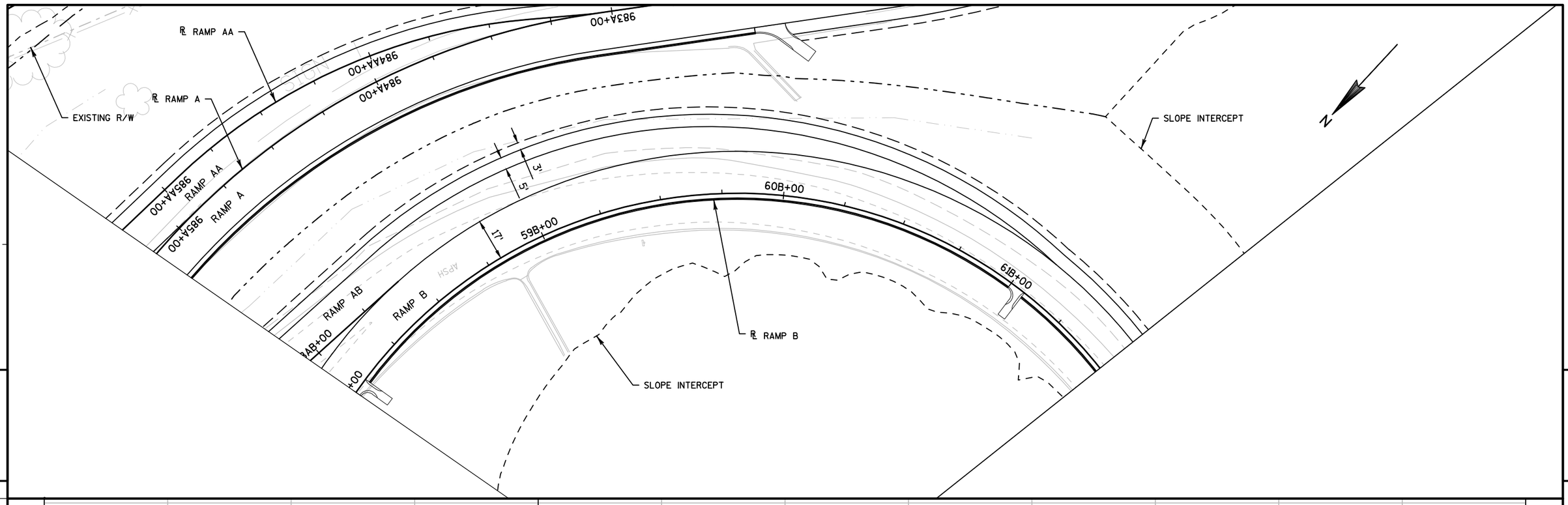
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	PLAN AND PROFILE: RAMP A	SHEET 242	E

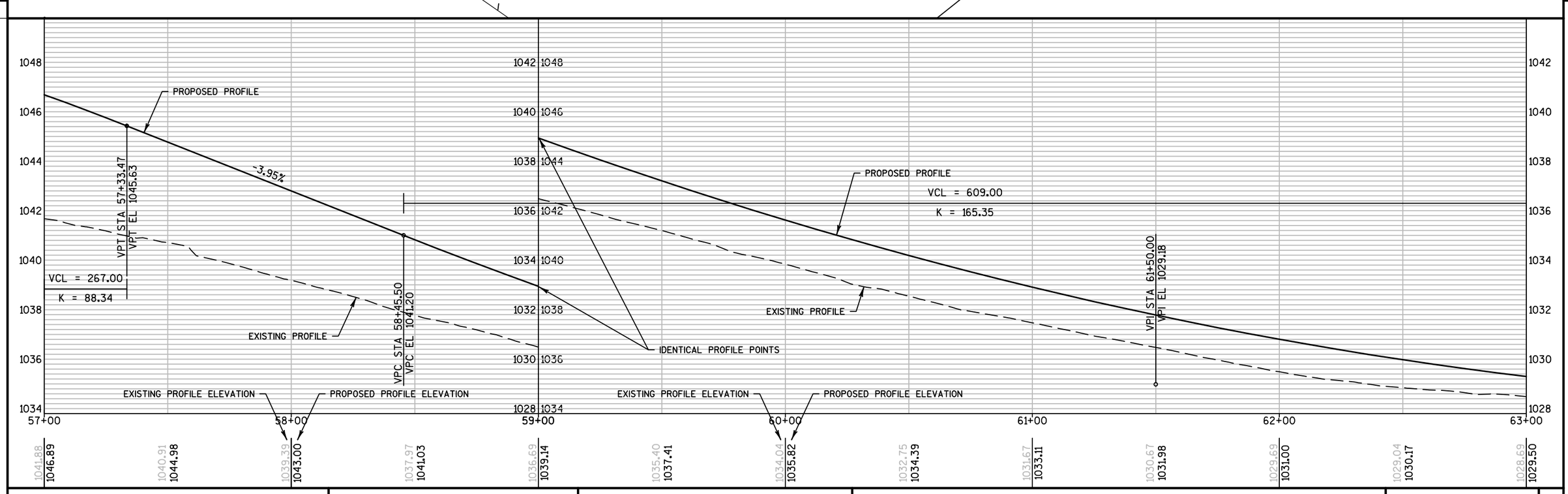


PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	PLAN AND PROFILE: RAMP AA	SHEET 243 E



PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	PLAN AND PROFILE: RAMP B	SHEET 244 E





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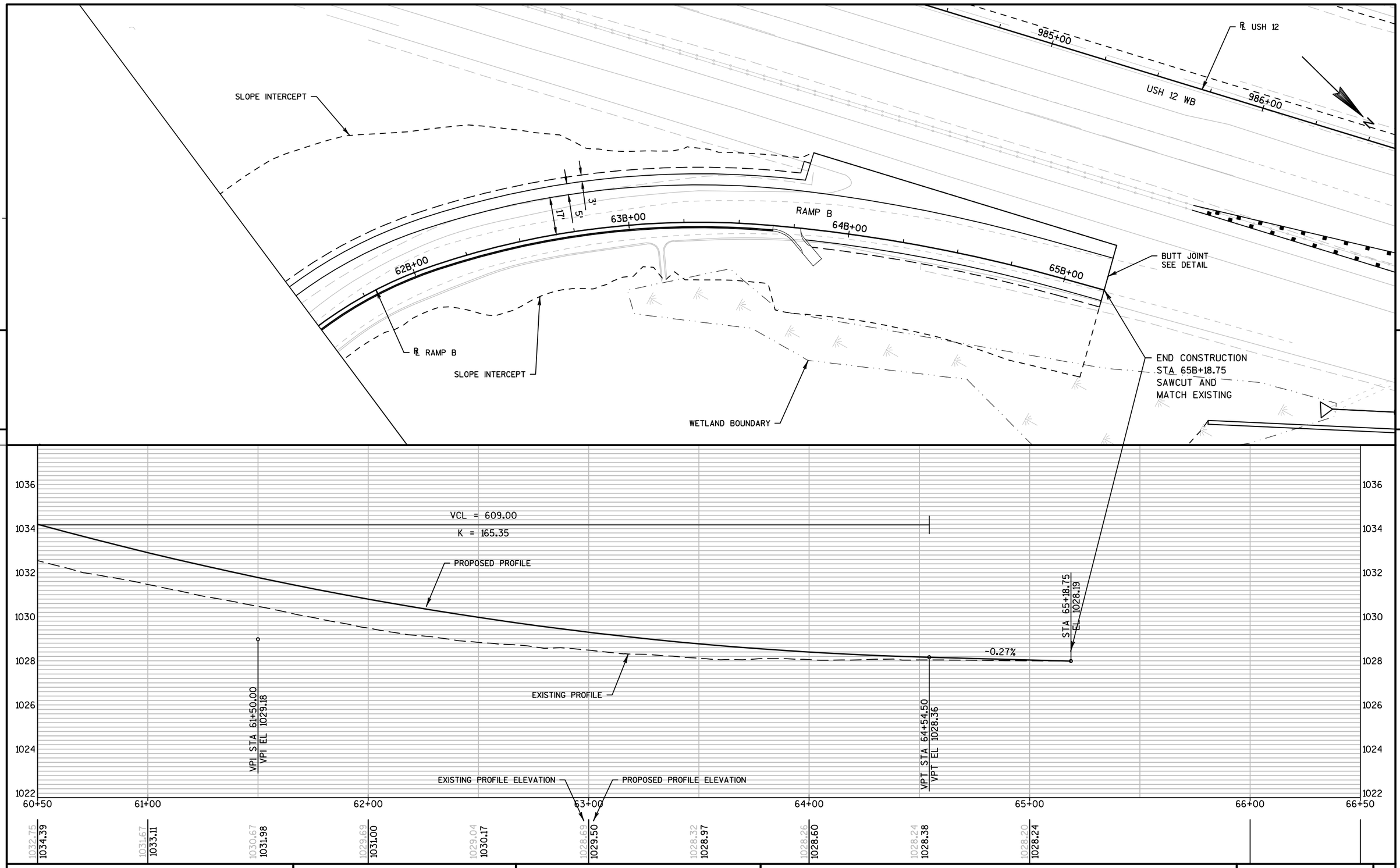

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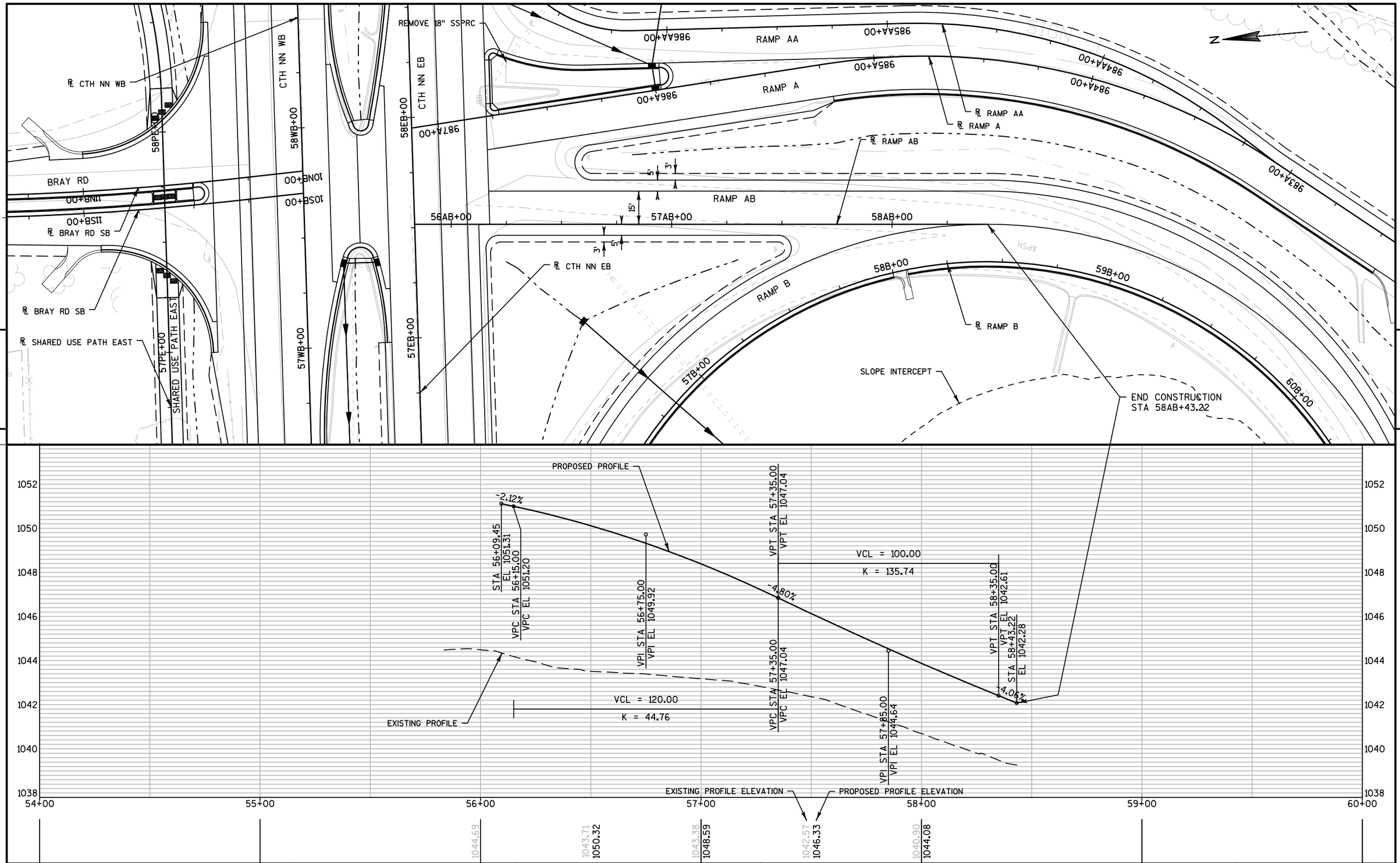
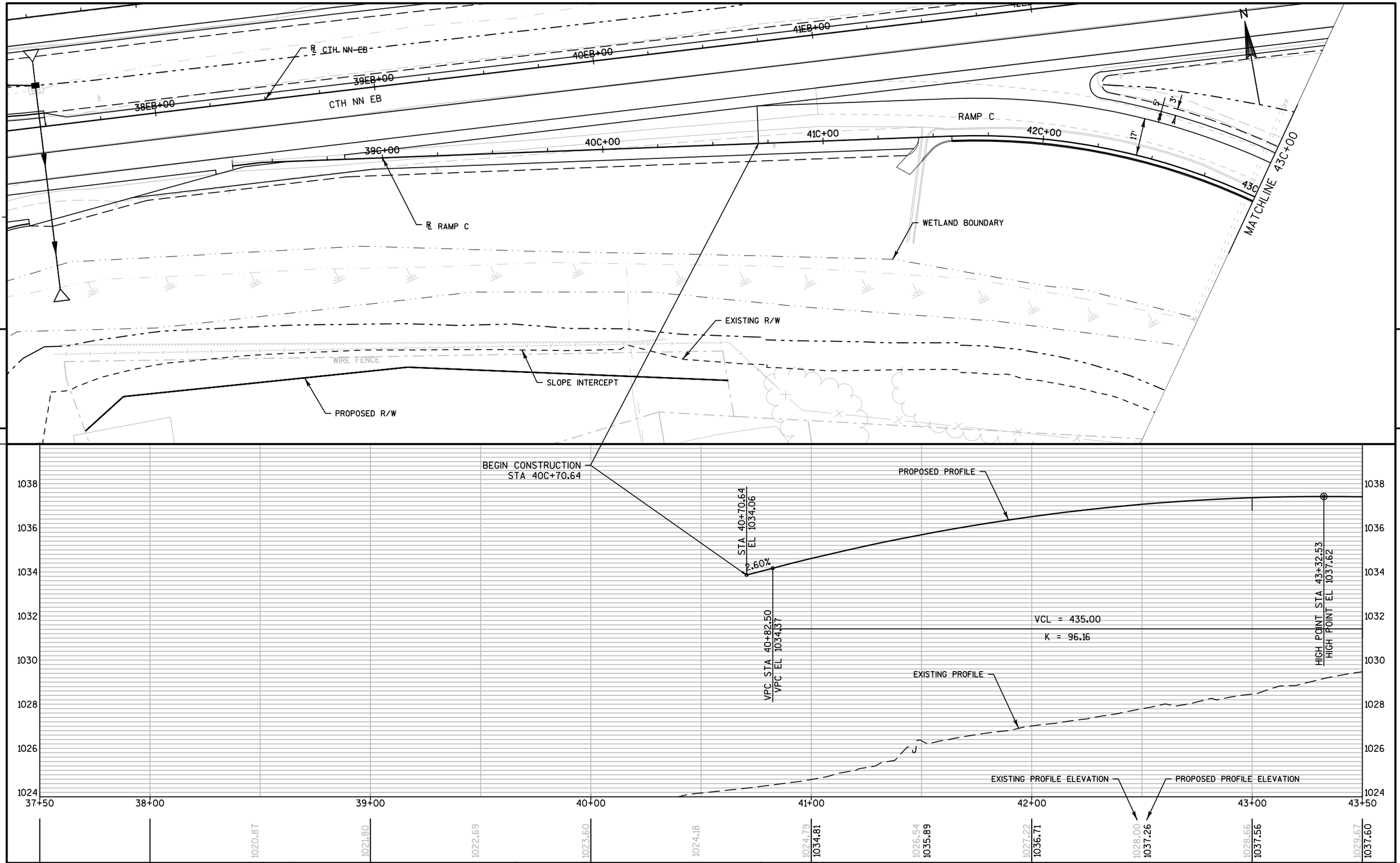
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	PLAN AND PROFILE: RAMP B	SHEET 246	E



PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	PLAN AND PROFILE: RAMP AB	SHEET 247	E



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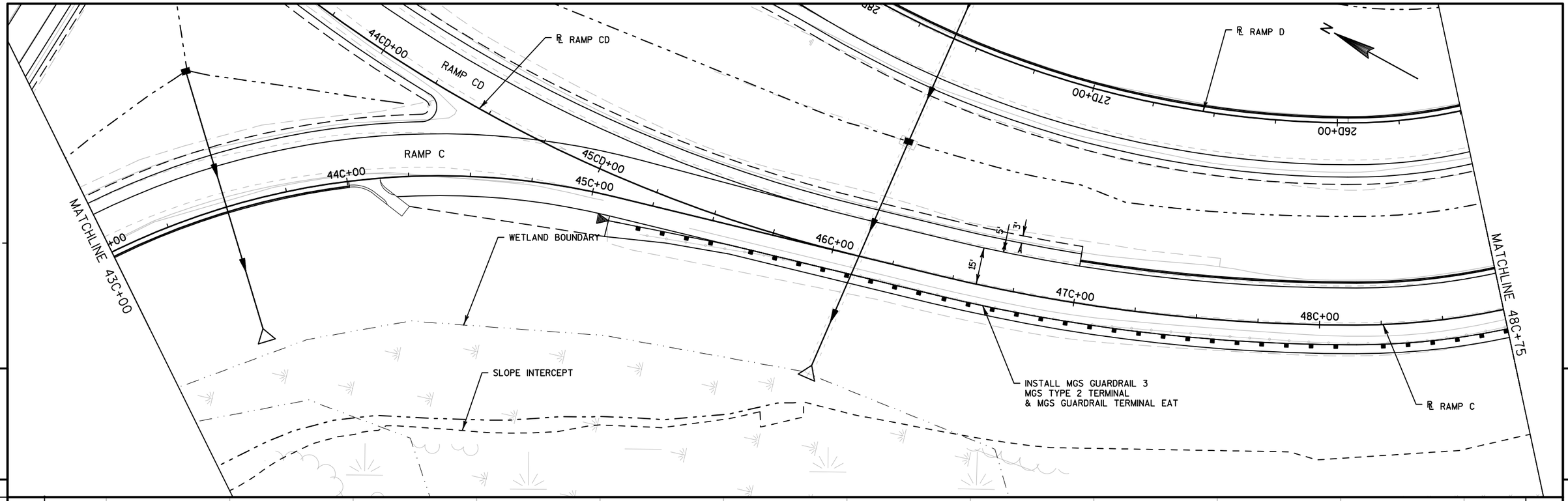
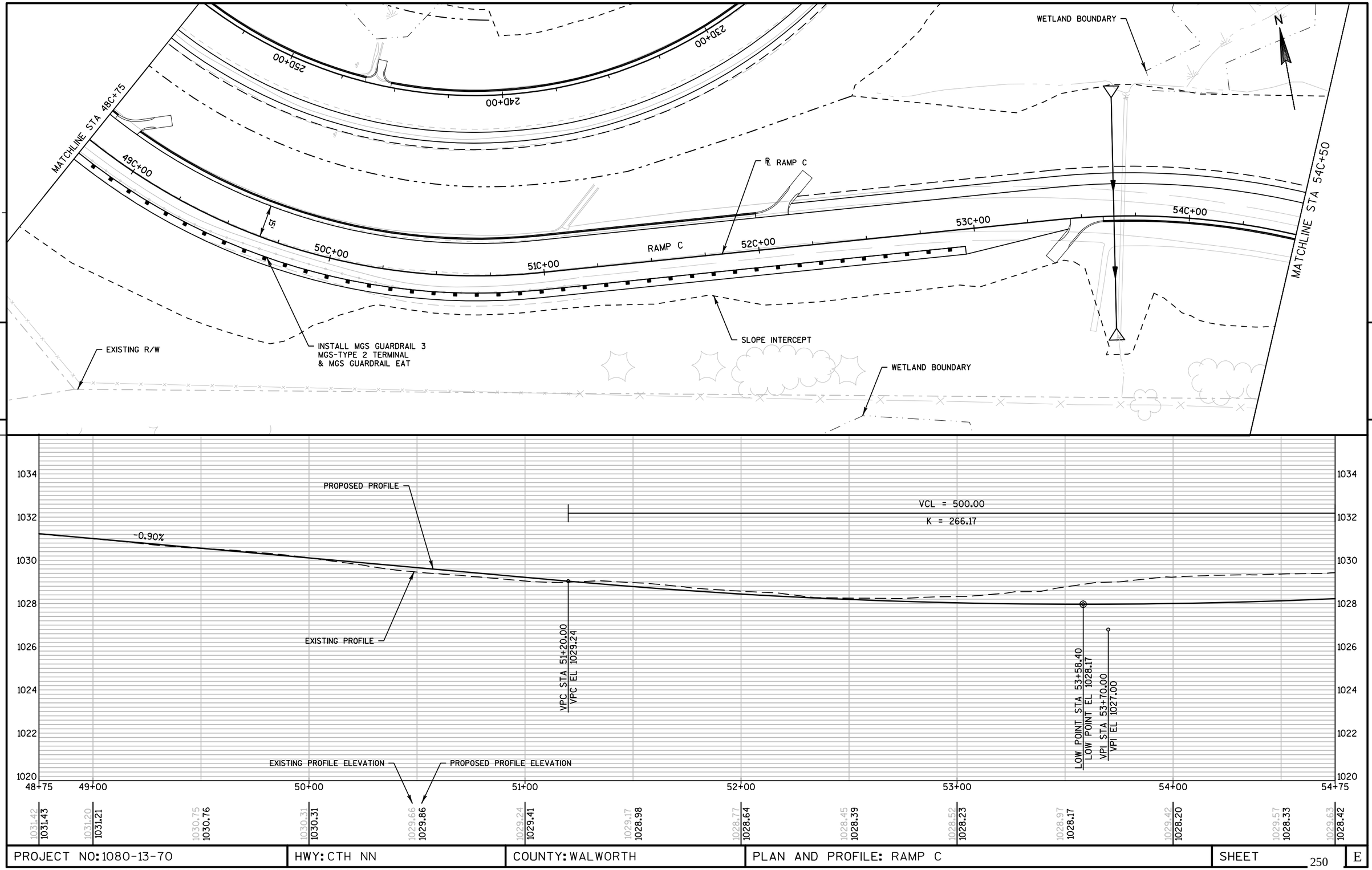
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	PLAN AND PROFILE: RAMP C	SHEET 248	E



PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	PLAN AND PROFILE: RAMP C	SHEET 249	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\050107_PP_C.DWG PLOT DATE : 4/29/2015 1:46 PM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:40_XREF

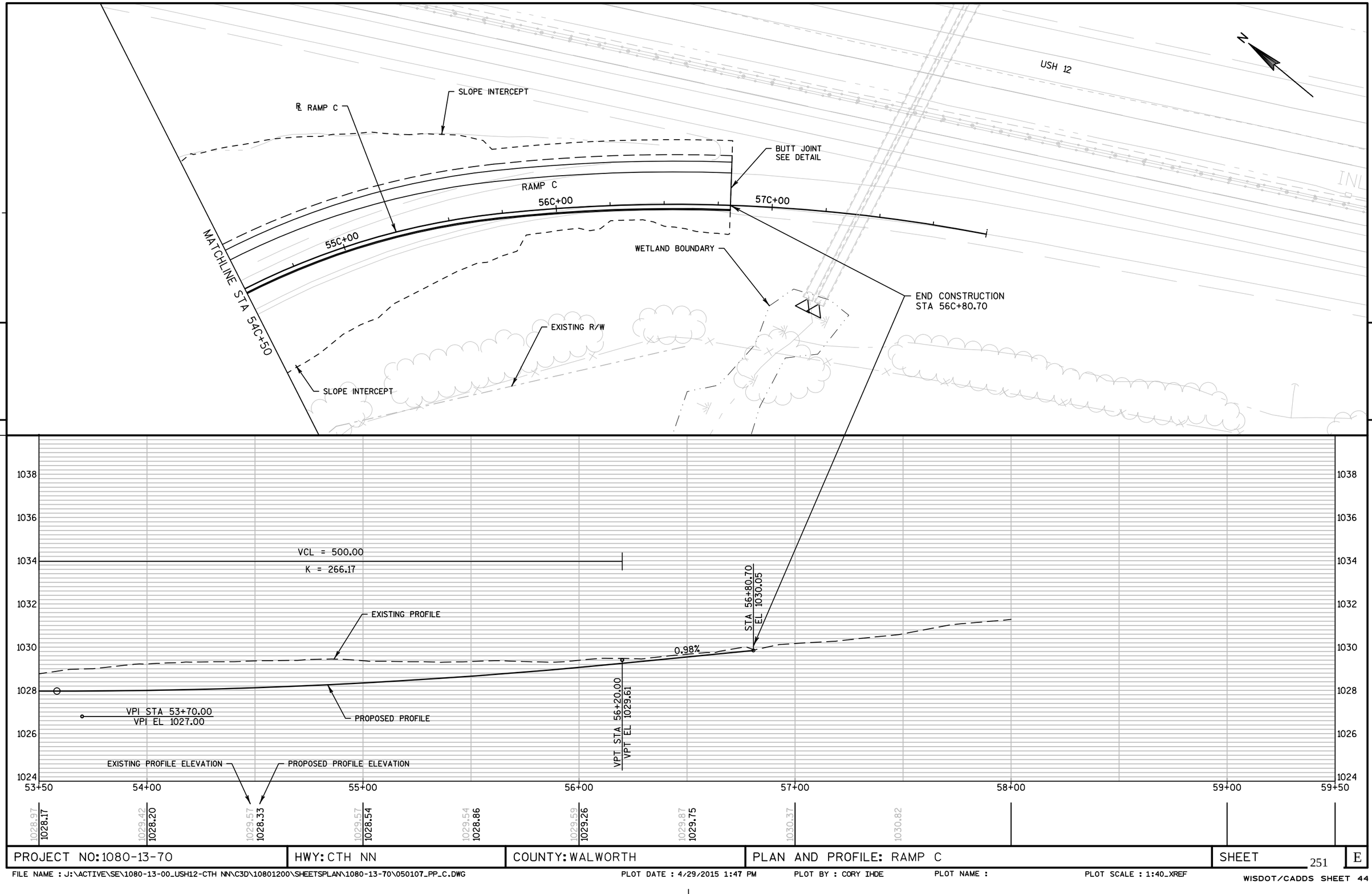
WISDOT/CADDS SHEET 44



PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	PLAN AND PROFILE: RAMP C	SHEET 250	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\050107_PP_C.DWG PLOT DATE : 4/29/2015 1:47 PM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:40_XREF

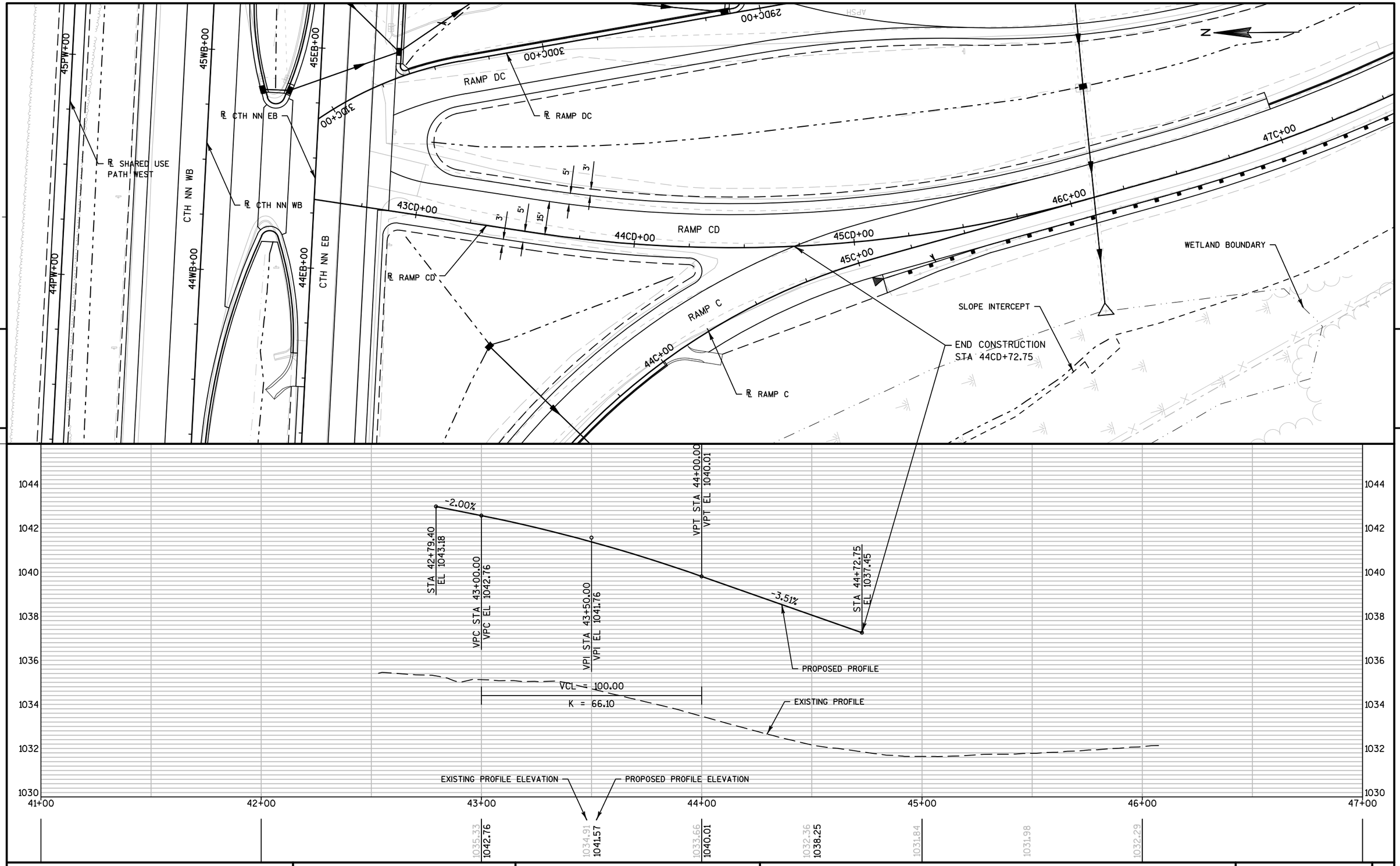
WISDOT/CADDS SHEET 44



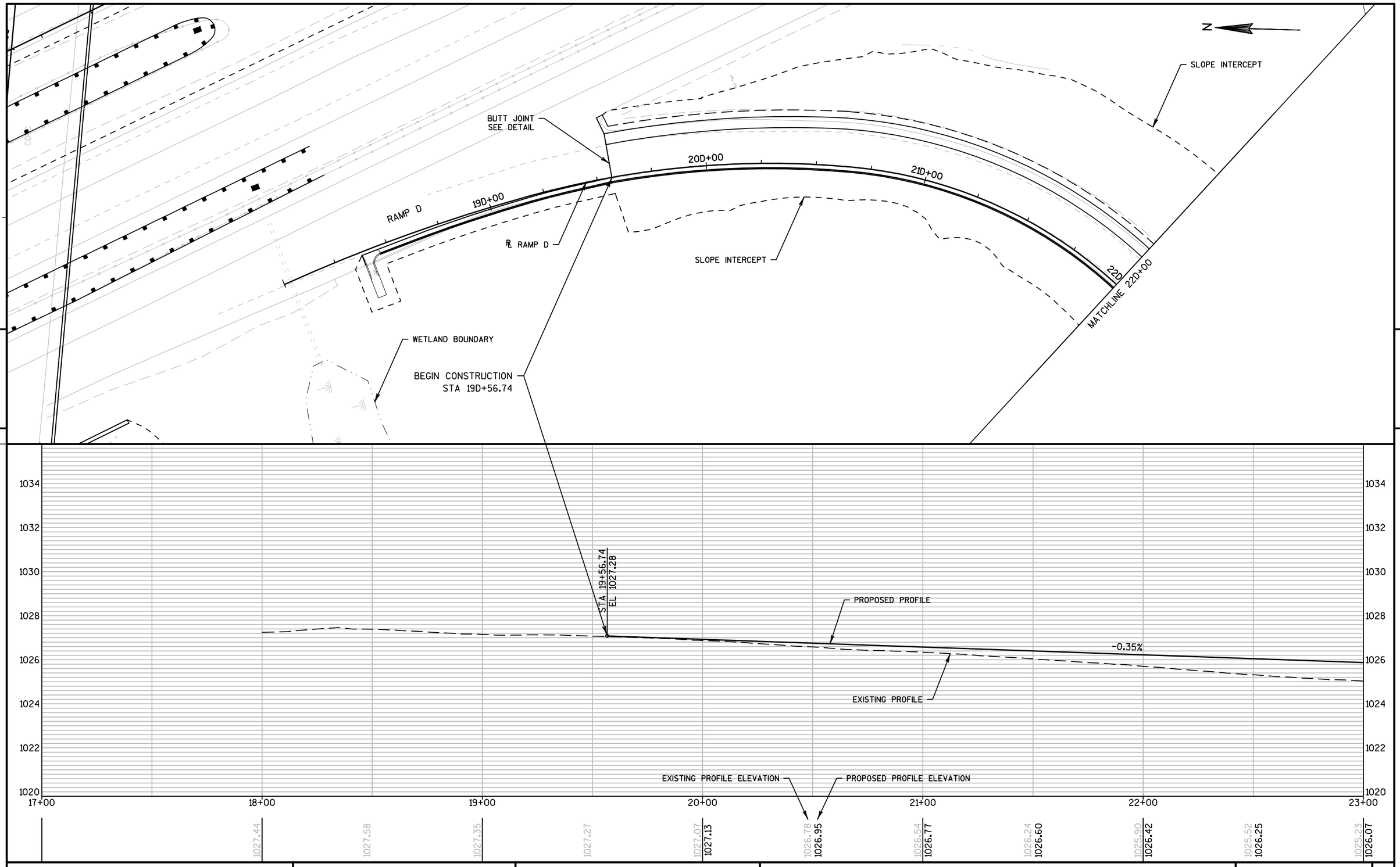
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	PLAN AND PROFILE: RAMP C	SHEET 251	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\050107_PP_C.DWG PLOT DATE : 4/29/2015 1:47 PM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:40_XREF

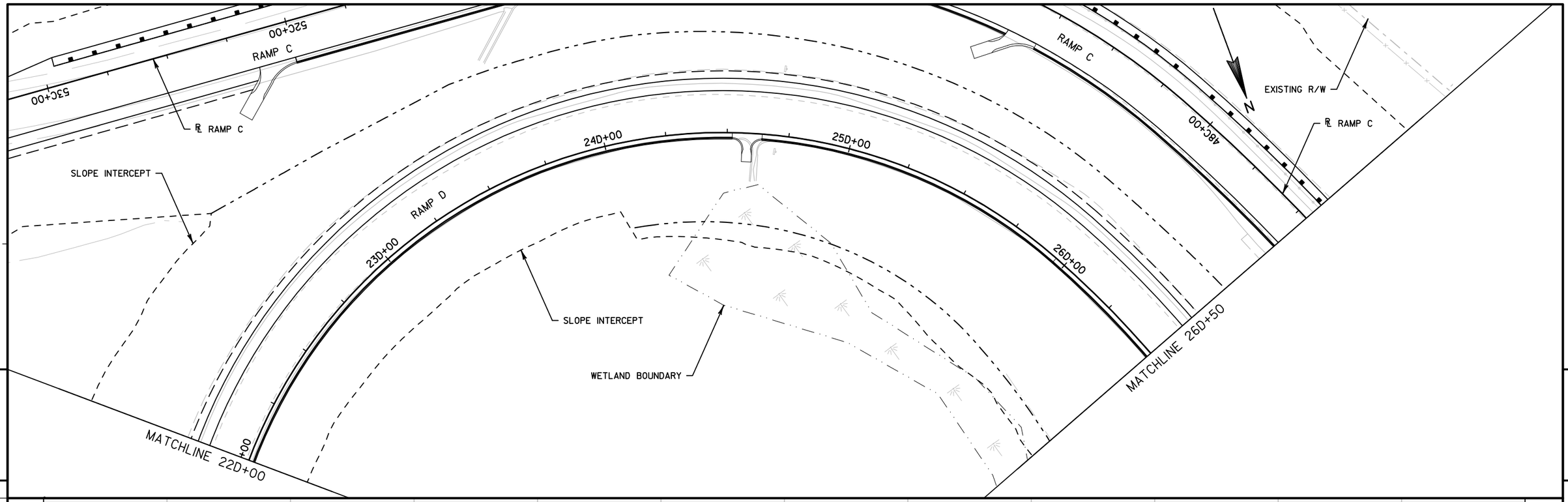
WISDOT/CADDS SHEET 44

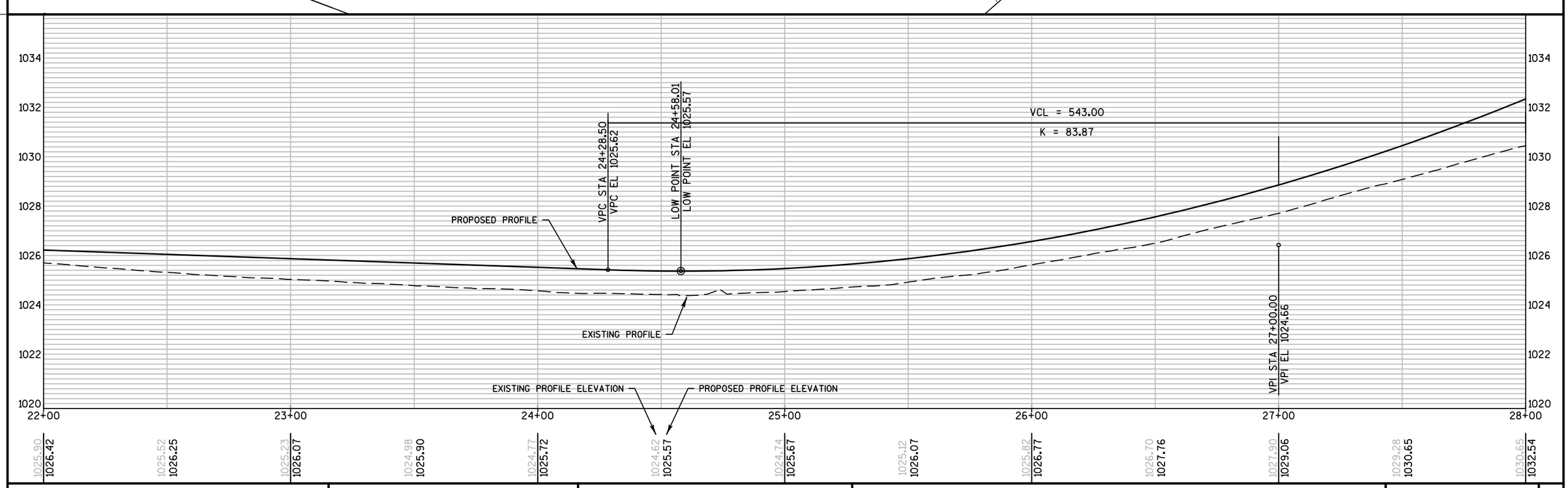


PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	PLAN AND PROFILE: RAMP CD	SHEET 252	E

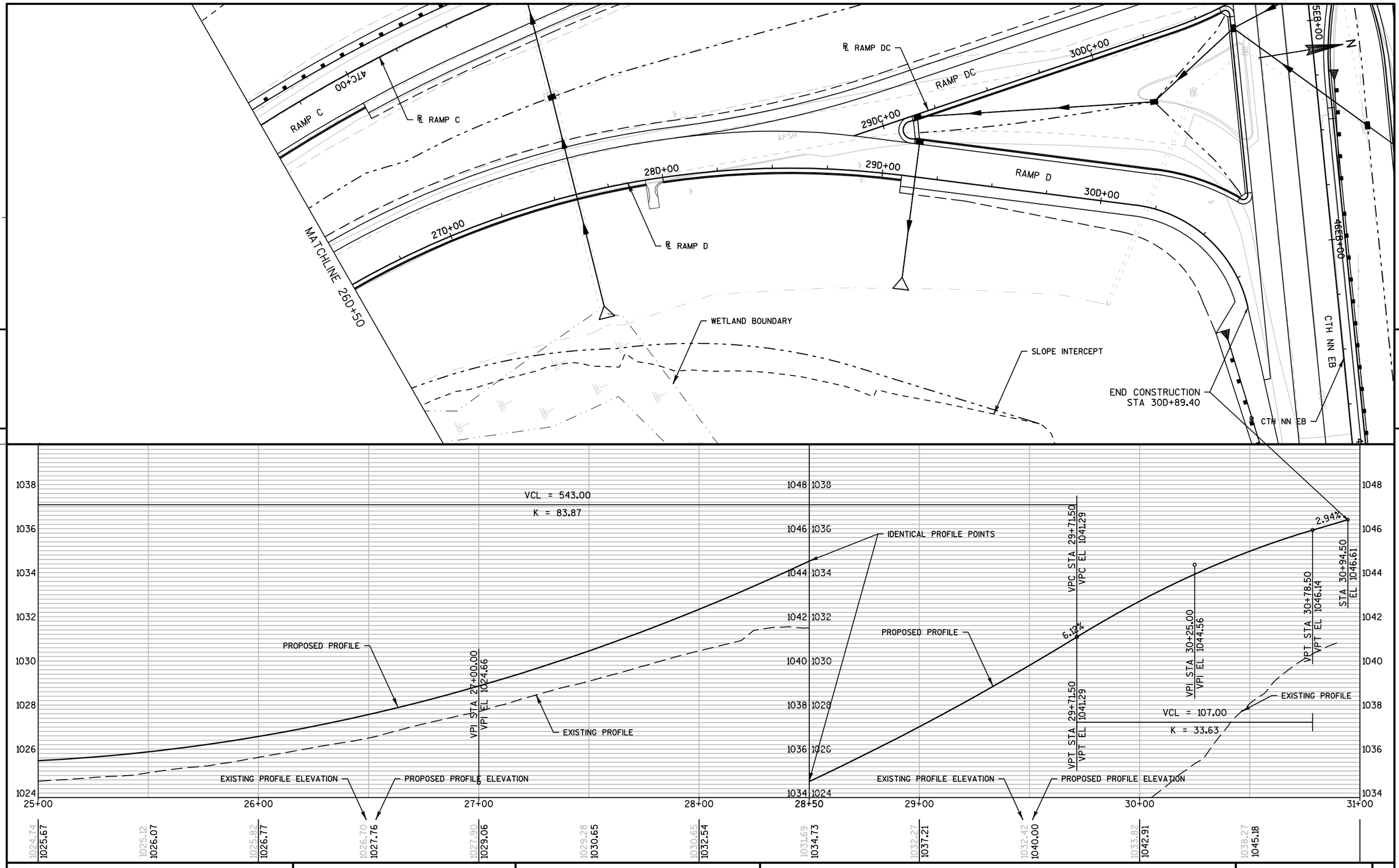


PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	PLAN AND PROFILE: RAMP D	SHEET 253	E





PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	PLAN AND PROFILE: RAMP D	SHEET 254	E



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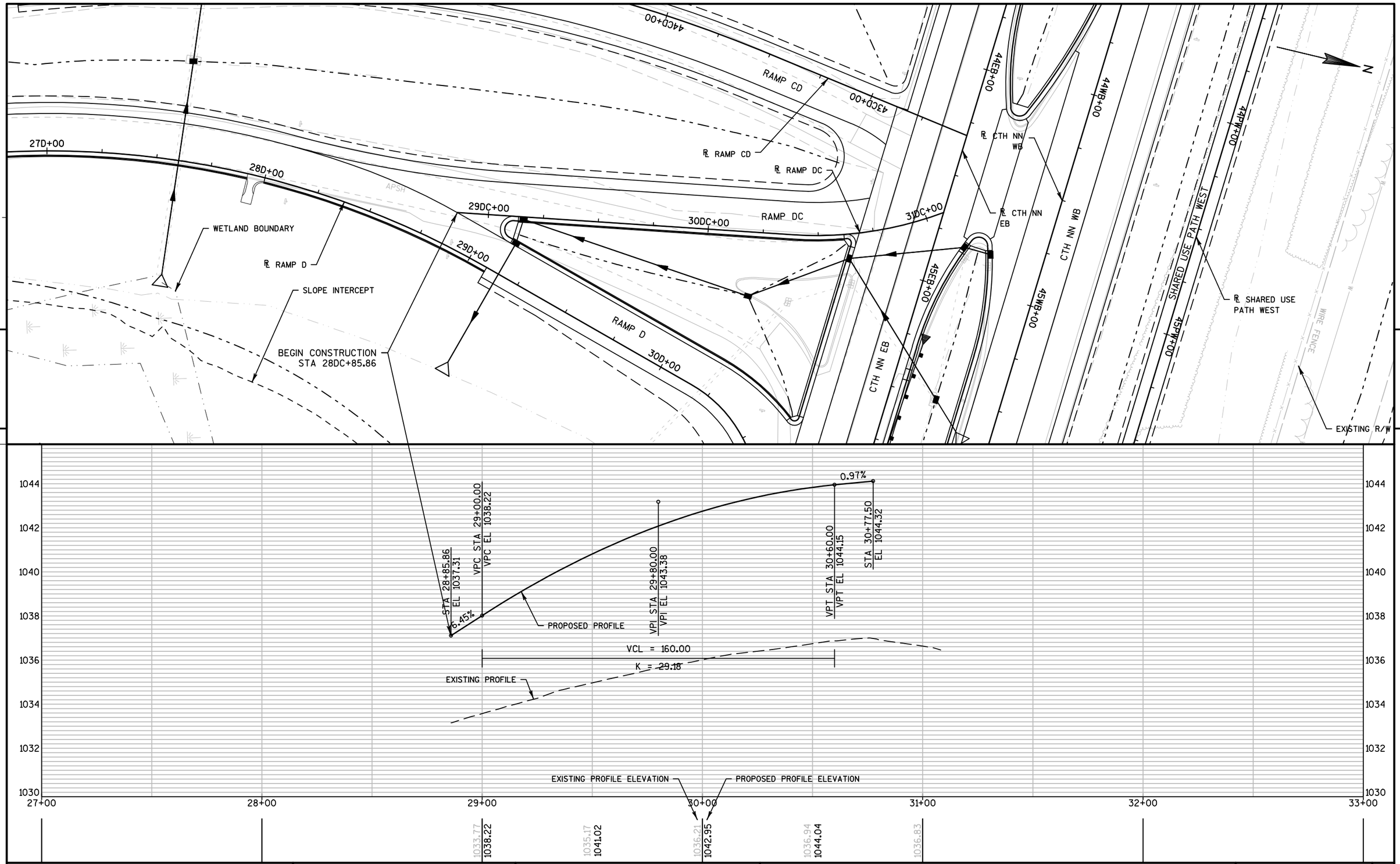


PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	PLAN AND PROFILE: RAMP DC	SHEET 256	E

EXISTING R/W

BUTT JOINT
SEE DETAIL

REMOVE CONCRETE BASES

SLOPE INTERCEPT

℄ CTH H

10H+00

11H+00

12H+00

CTH H

5'

3'

12'

12'

3'

5'

4'

EXISTING R/W

BEGIN CONSTRUCTION
STA 9H+04.27
SAWCUT AND
MATCH EXISTING

SLOPE INTERCEPT

WETLAND BOUNDARY

℄ CTH NN EB

13H+00

CTH NN EB

5

5

1028
1026
1024
1022
1020
1018
1016
1014

VCL = 284.00
K = 149.70

VPT STA 11+96.00
VPT EL 1019.65

STA 12+76.99
EL 1021.43

2.20%

PROPOSED PROFILE

VPI STA 10+54.00
VPI EL 1016.53

STA 9+04.27
EL 1016.08

VPC STA 9+12.00
VPC EL 1016.11

0.30%

EXISTING PROFILE

EXISTING PROFILE ELEVATION

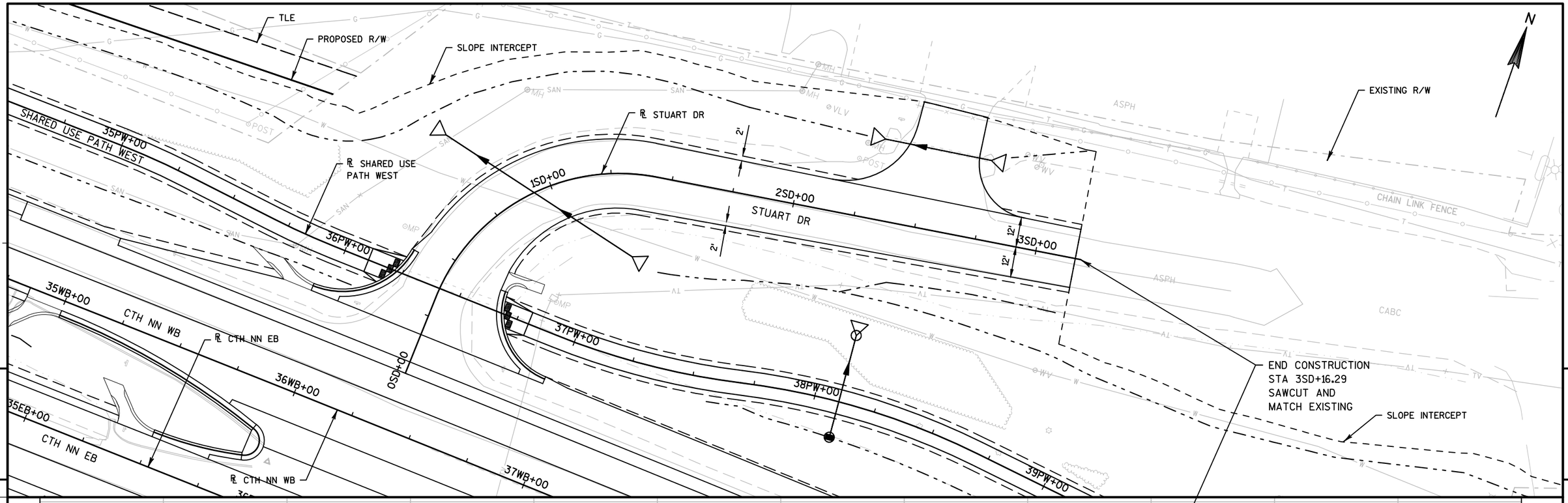
PROPOSED PROFILE ELEVATION

7+00 8+00 9+00 10+00 11+00 12+00 13+00

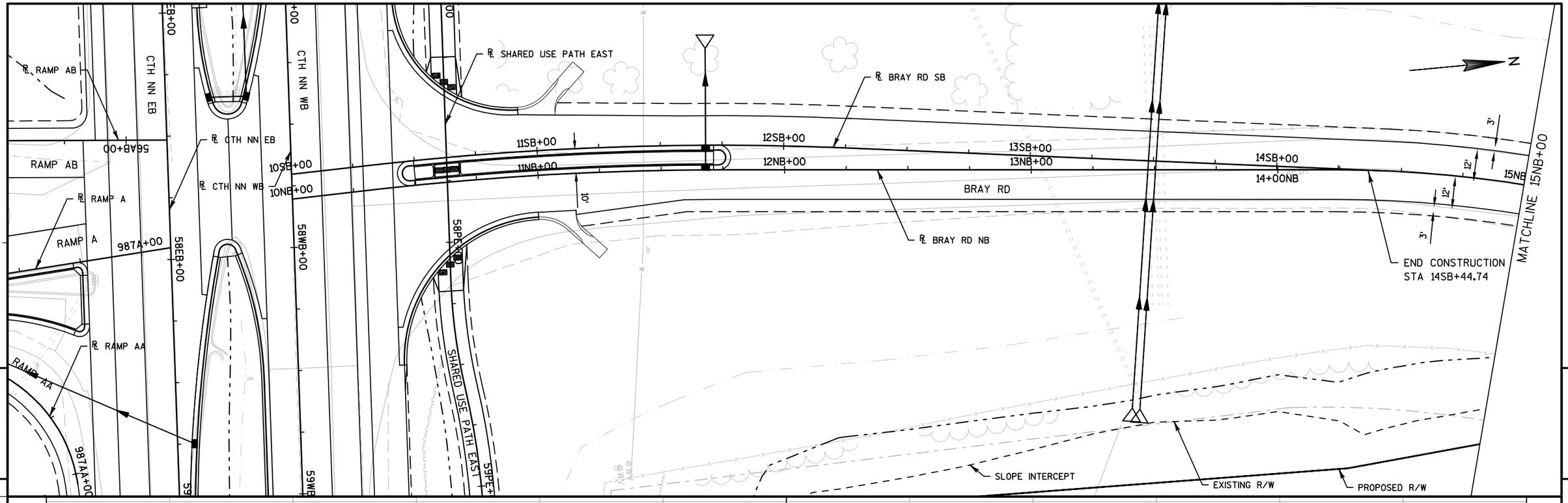
1016.06 1016.27 | 1016.21 1016.63 | 1016.44 1017.16 | 1016.68 1017.85 | 1016.91 1018.71 | 1017.00 1019.74 | 1017.35 1020.84 | 1017.48

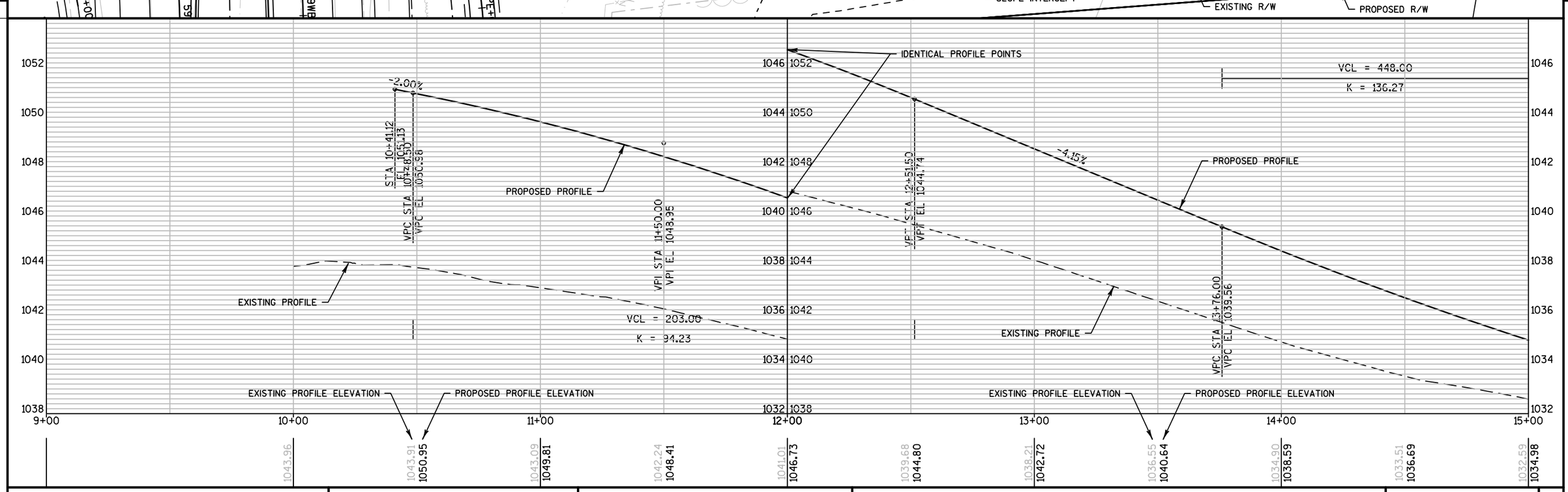
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	PLAN AND PROFILE: CTH H	SHEET 257	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\050111_PP_H.DWG PLOT DATE : 4/29/2015 1:56 PM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:40_XREF

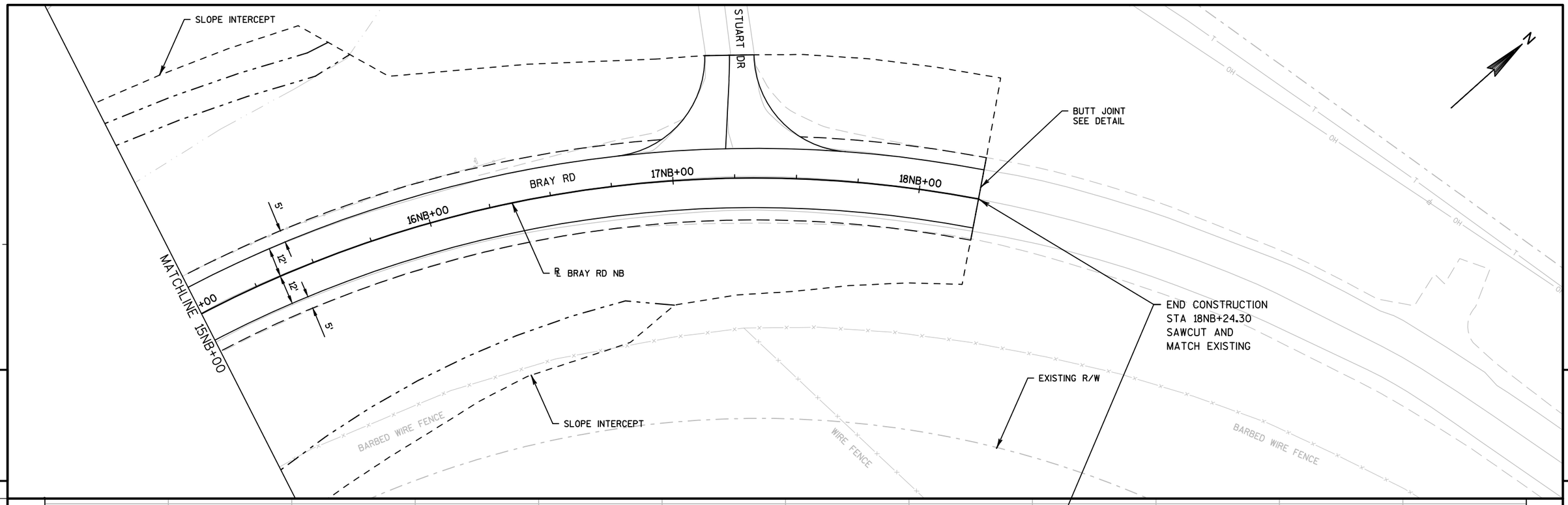


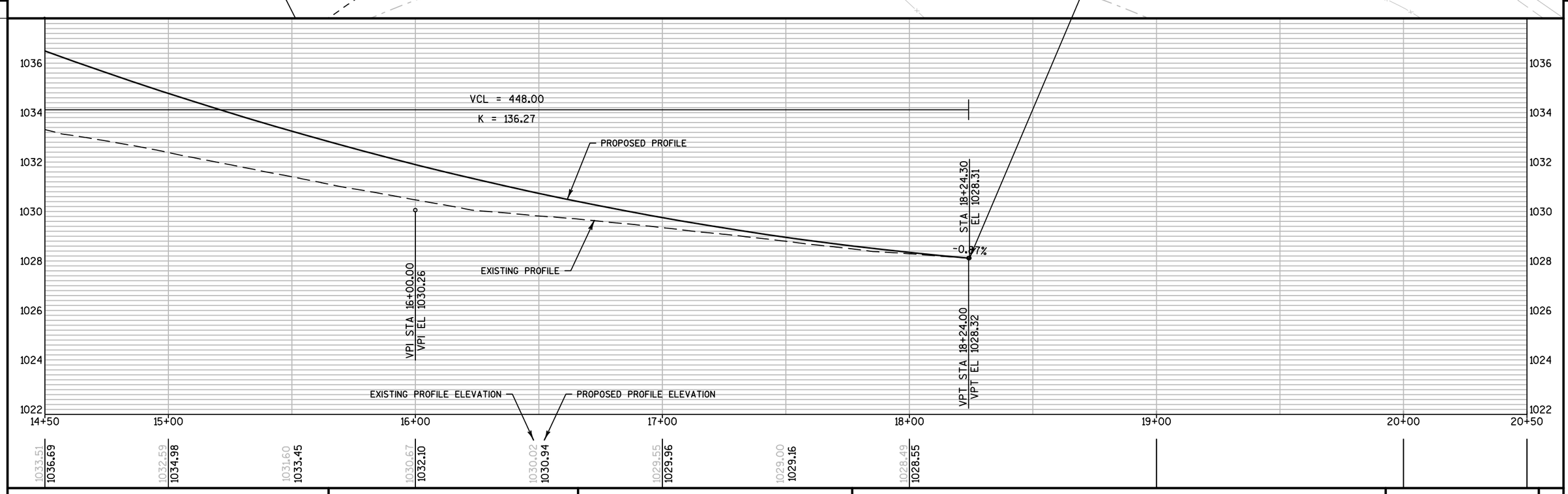
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	PLAN AND PROFILE: STUART DRIVE	SHEET 258	E



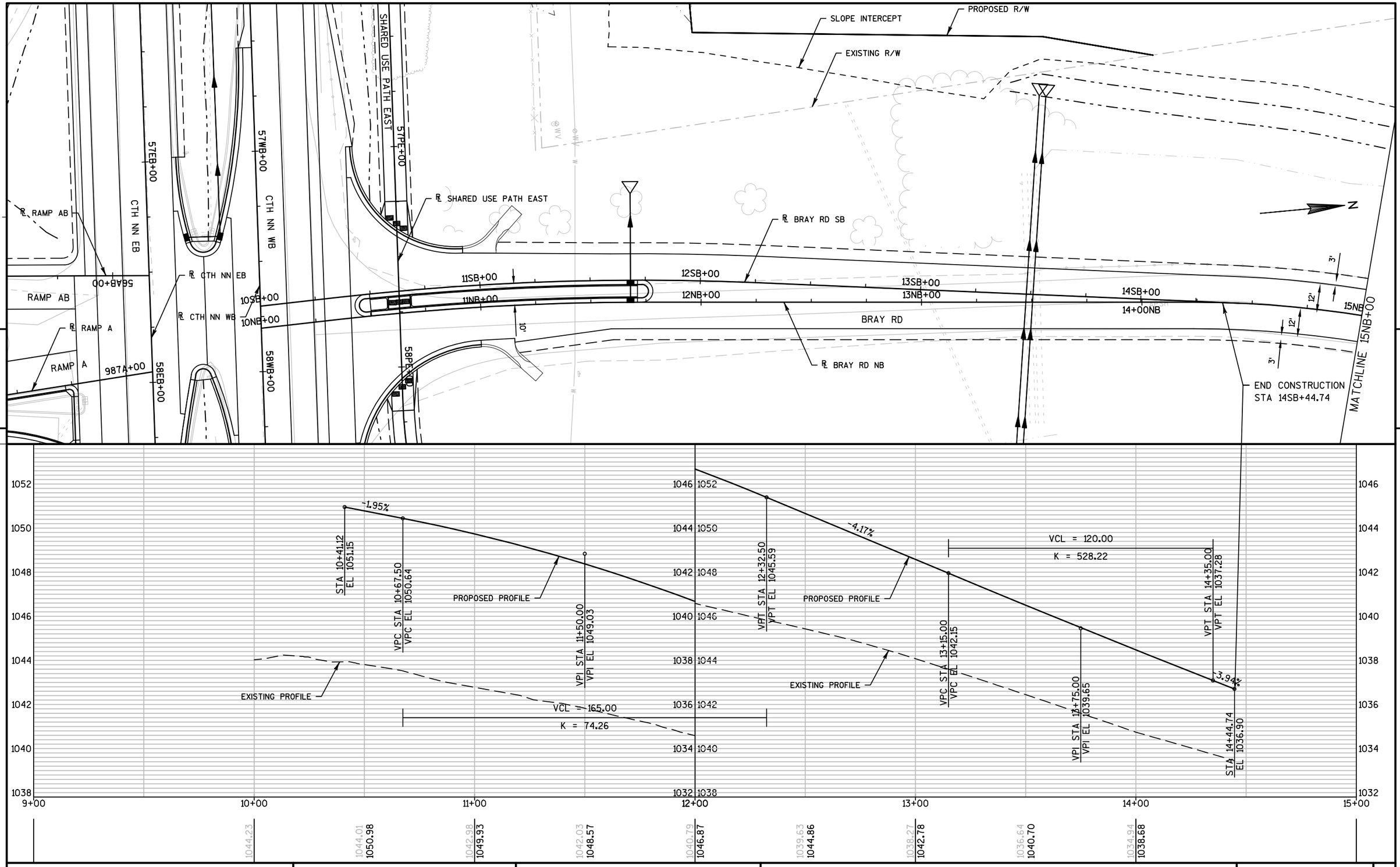


PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	PLAN AND PROFILE: BRAY ROAD NB	SHEET 259	E



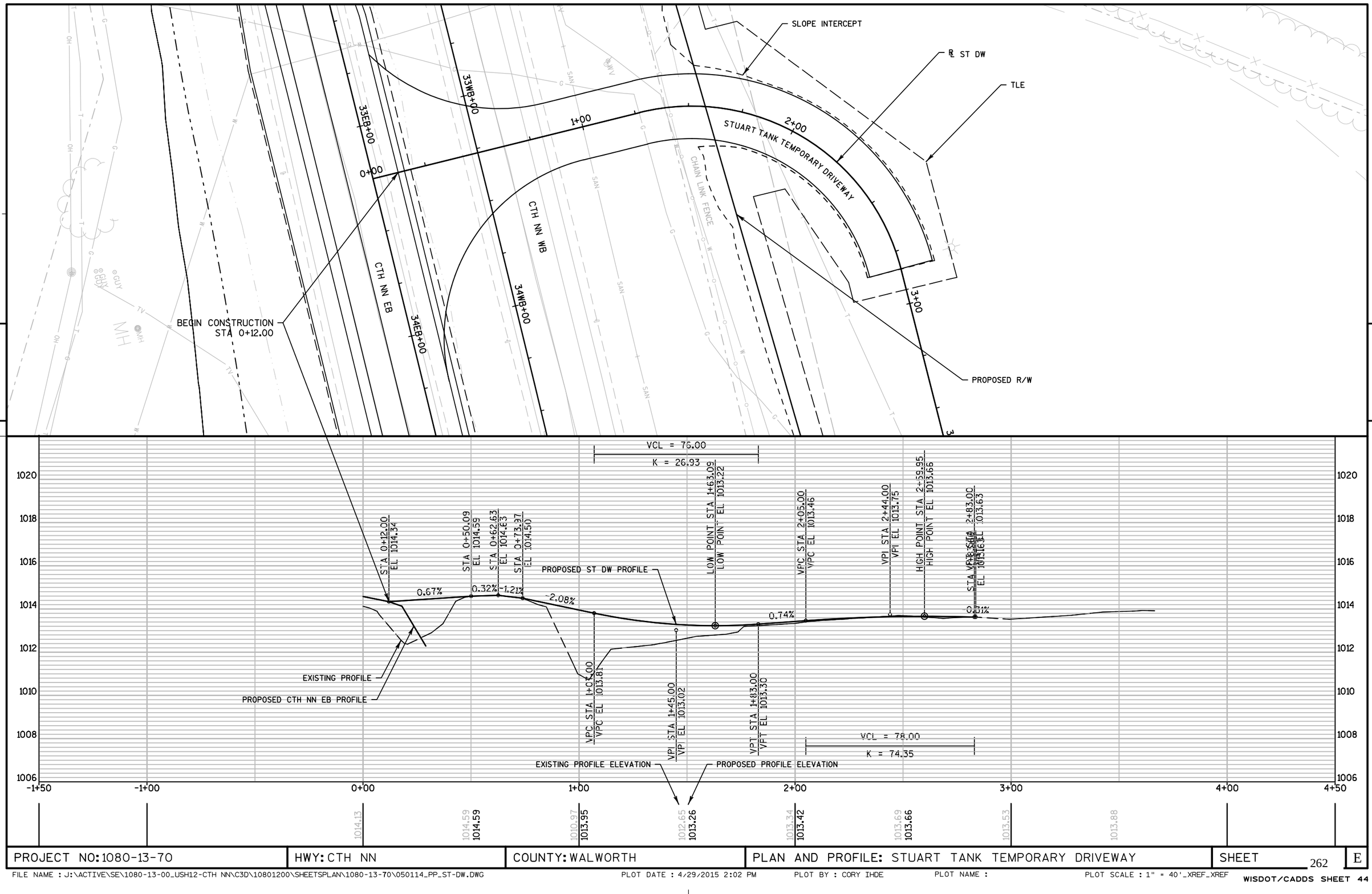


PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	PLAN AND PROFILE: BRAY ROAD NB	SHEET 260	E



PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	PLAN AND PROFILE: BRAY ROAD SB	SHEET 261	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\050113_PP_BRAY.DWG PLOT DATE : 4/29/2015 2:00 PM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1" = 40'_XREF_XREF



PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	PLAN AND PROFILE: STUART TANK TEMPORARY DRIVEWAY	SHEET 262	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\050114_PP_ST-DW.DWG PLOT DATE : 4/29/2015 2:02 PM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1" = 40'_XREF_XREF

Standard Detail Drawing List

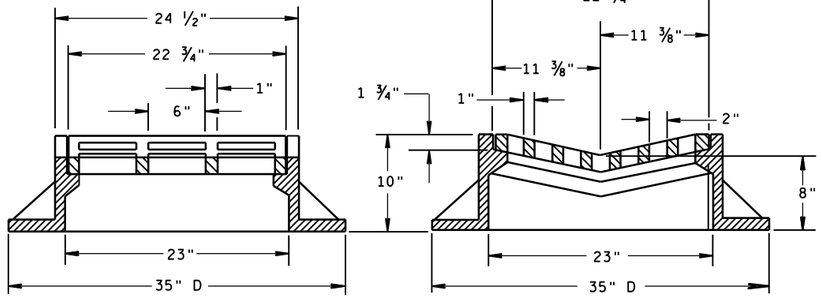
08A05-19B	INLET COVERS TYPE B, B-A, C, MS, MS-A, & WM
08A05-19C	INLET COVERS TYPE F, HM, HM-S, S, T, V, HM-GJ, & HM-GJ-S
08B09-01	MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER
08B10-01	MANHOLES 3X3-FT, 4X4-FT, 5X5-FT AND 6X6-FT
08C06-01	INLETS 3-FT AND 4-FT DIAMETER
08C07-01	INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT
08C08-01	INLETS MEDIAN 1 AND 2 GRATE
08D01-17	CONCRETE CURB, CONCRETE CURB AND GUTTER AND TIES
08D02-06	CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES
08D03-06	CONCRETE SURFACE DRAINS DROP INLET TYPE AT STRUCTURES
08D04-05	CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES
08D05-15A	CURB RAMPS TYPES 1 AND 1-A
08D05-15B	CURB RAMPS TYPES 2 AND 3
08D05-15C	CURB RAMPS TYPES 4A AND 4A1
08D05-15D	CURB RAMPS TYPE 4B AND 4B1
08D05-15E	CURB RAMPS TYPES 5, 6, 7A, 7B & 8
08D15-04A	EDGEDRAIN OUTLET AND OUTFALL MARKERS
08E04-02	SOD OR MASONRY AND SOD DITCH CHECKS
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
08E14-01	TRACKING PAD
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
08F02-01	APRON ENDWALLS FOR PIPE ARCH AND ELLIPTICAL PIPE
08F04-07	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
08F05-01	CLASS "B" BEDDING FOR CULVERT PIPE OR STORM SEWER
08F06-04	REINFORCED CONCRETE APRON ENDWALL FOR PIPE UNDERDRAIN
08F10-01	CONCRETE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH
11B02-02	CONCRETE MEDIAN NOSE
12A03-10	NAME PLATE (STRUCTURES)
12A04-03	STRUCTURE IDENTIFICATION PLAQUES, RAMP GATES, SIGN BRIDGES & OVERHEAD SIGN SUPPORTS & TRAFFIC SIGNALS
13A03-05	CONCRETE PAVEMENT SHOULDERS
13A05-05A	SHOULDER RUMBLE STRIP, MILLING
13A05-05B	SHOULDER RUMBLE STRIP, MILLING
13B02-07A	CONCRETE BRIDGE APPROACH
13C01-17	CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES
13C11-11A	RURAL DOWELED CONCRETE PAVEMENT
13C11-11B	RURAL DOWELED CONCRETE PAVEMENT
13C18-02A	CONCRETE PAVEMENT JOINTING
13C18-02B	CONCRETE PAVEMENT STEEL REINFORCEMENT
13C18-02C	CONCRETE PAVEMENT JOINT TIES
13C18-02D	CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES
14B07-14A	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-14B	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-14C	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-14D	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-14E	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-14F	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-14G	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-14H	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B08-01A	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B08-01B	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B08-01C	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B08-01D	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B08-01E	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B15-08A	STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATION & ELEMENTS
14B15-08B	STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATION & ELEMENTS
14B15-08C	STEEL PLATE BEAM GUARD, CLASS "A", INSTALLATION & ELEMENTS
14B16-04A	ANCHORAGE FOR STEEL PLATE BEAM GUARD TYPE 2
14B16-04B	ANCHORAGE FOR STEEL PLATE BEAM GUARD TYPE 2
14B18-06A	STEEL PLATE BEAM GUARD, CLASS "A" (AT BRIDGES, OBSTACLES AND SIDEROADS/DRIVEWAYS)
14B26-03A	STEEL THRIE BEAM BULLNOSE TERMINAL
14B26-03B	STEEL THRIE BEAM BULLNOSE TERMINAL
14B26-03C	STEEL THRIE BEAM BULLNOSE TERMINAL
14B26-03D	STEEL THRIE BEAM BULLNOSE TERMINAL
14B26-03E	STEEL THRIE BEAM BULLNOSE TERMINAL
14B28-03	GUARDRAIL MOW STRIP
14B29-01	SAFETY EDGE

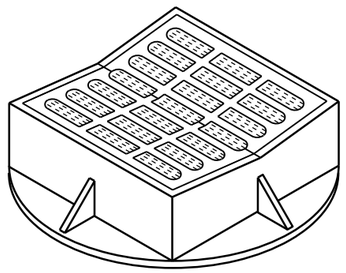
6

Standard Detail Drawing List

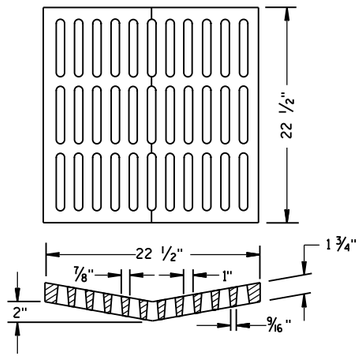
14B42-03A	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-03B	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-03C	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B44-02A	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-02B	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-02C	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B45-03A	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03B	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03C	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03D	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B47-02A	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B47-02B	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B47-02C	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
15A02-08	DELINEATOR POST, DELINEATOR, AND DELINEATOR BRACKET WITH REFLECTIVE SHEETING
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B	FLEXIBLE MARKER POST FOR CULVERT END
15A06-02	DELINEATOR LAYOUT
15B01-08A	FENCE WOVEN WIRE
15B01-08B	FENCE WOVEN WIRE
15C02-05A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-05B	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-05C	DETOUR SIGNING FOR MAINLINE CLOSURES
15C03-02	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C07-12B	PAVEMENT MARKING WORDS
15C07-12C	PAVEMENT MARKING ARROWS
15C08-16A	PAVEMENT MARKING (MAINLINE)
15C08-16B	PAVEMENT MARKING (INTERSECTIONS)
15C08-16E	PAVEMENT MARKING (LEFT TURN LANE)
15C08-16F	PAVEMENT MARKING (ISLANDS)
15C11-05	FLEXIBLE TUBULAR MARKER POST, ANCHOR & BASES
15C18-03	MEDIAN ISLAND MARKING
15C21-05	SIGNING AND MARKING FOR TWO LANE TO FOUR LANE DIVIDED TRANSITIONS
15C27-01	DOUBLE ARROW WARNING SIGN PLACEMENT
15C29-03A	BICYCLE LANE MARKING
15C31-01A	PAVEMENT MARKING (RAMPS AND GORES)
15C33-01	STOP LINE AND CROSSWALK PAVEMENT MARKING
15D03-02	TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATER THAN 40 M.P.H. WITH BARRIER
15D06-03	TRAFFIC CONTROL, TWO LANE TWO WAY OPERATION
15D16-02	TRAFFIC CONTROL, EXIT RAMP CLOSURE
15D20-03	TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY
15D21-03	TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE
15D27-02	TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH
15D29-03	TRAFFIC CONTROL, VEHICLE ENTRANCE/EXIT OR HAUL ROAD
15D38-01A	TEMPORARY TRAFFIC CONTROL FIXED MESSAGE SIGNS
16A01-06	LANDMARK REFERENCE MONUMENTS AND COVERS

6



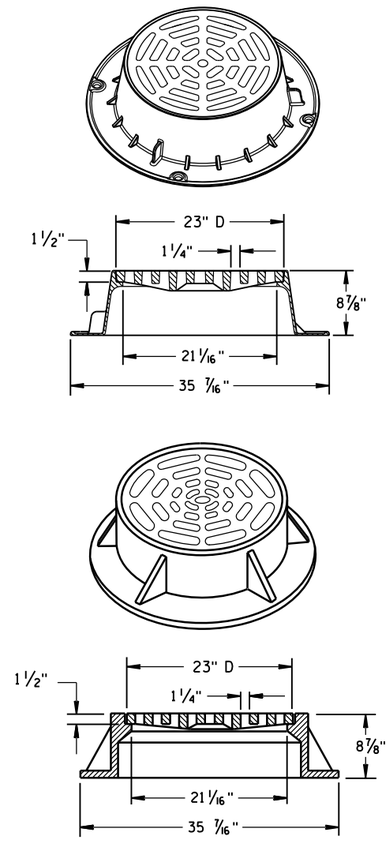


TYPE "B"



ALTERNATIVE GRATE FOR TYPE "B" COVER

USE WHERE PEDESTRIAN OR BICYCLE TRAFFIC IS POSSIBLE.
NOTED AS TYPE B-A ON THE DRAINAGE TABLE



TYPE "C"

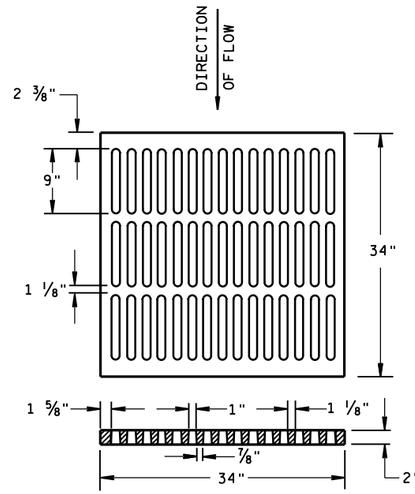
NOTE: EITHER CASTING IS ACCEPTABLE

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.

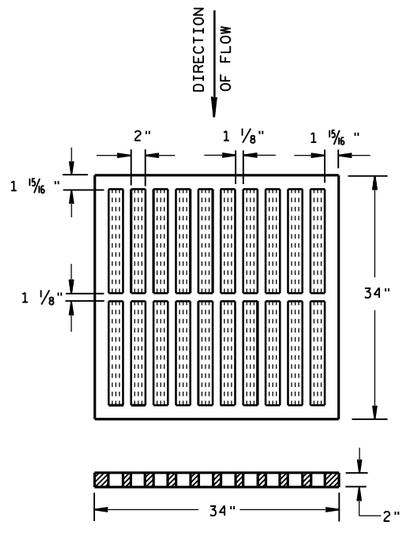
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

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



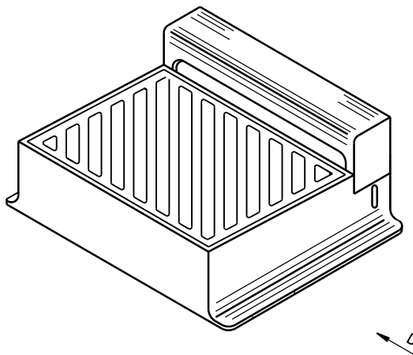
ALTERNATIVE TYPE "MS"

USE WHERE PEDESTRIAN OR BICYCLE TRAFFIC IS PERMITTED
NOTED AS TYPE MS-A ON THE DRAINAGE TABLE

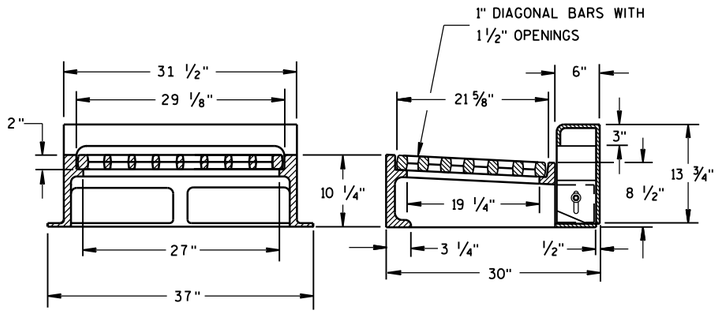


TYPE "MS"

USE ON FREEWAYS AND EXPRESSWAYS
NOTED AS TYPE MS ON DRAINAGE TABLE



DIAGONAL SLOTS, SHALL BE ORIENTED TO THE DIRECTION OF FLOW AS ILLUSTRATED. GRATES ARE MANUFACTURED TO BE REVERSIBLE.



NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

TYPE "WM"

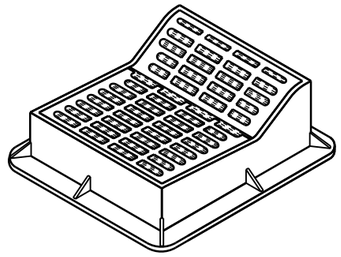
INLET COVERS TYPE B, B-A, C, MS, MS-A, & WM

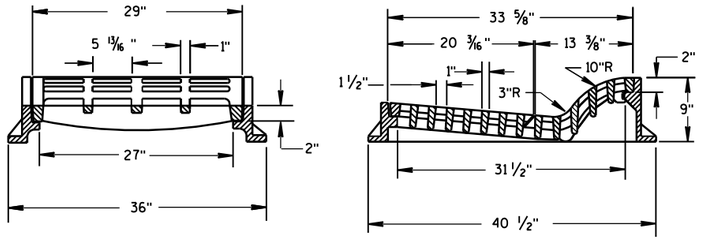
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/27/2013 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

6

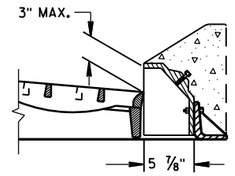
S.D.D. 8 A 5-19b





TYPE "F"

USE WITH TYPES A & D CONCRETE CURB & GUTTER, 36 INCH.



ALTERNATIVE CURB BOX FOR TYPE "HM" COVER

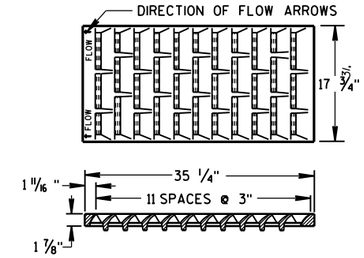
USE WITH TYPES G & J CONCRETE CURB & GUTTER, 30 INCH
NOTED AS TYPE HM-GJ ON DRAINAGE TABLE

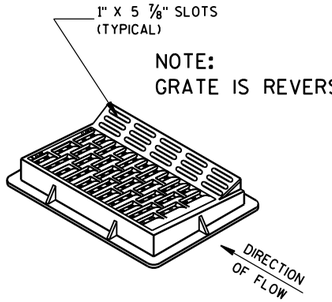
NOTE:
SPECIAL GRATE FOR THE
TYPE "H" COVER MAY ALSO BE
USED FOR THE TYPE "HM-GJ" COVER
NOTED AS TYPE HM-GJ-S ON DRAINAGE TABLE

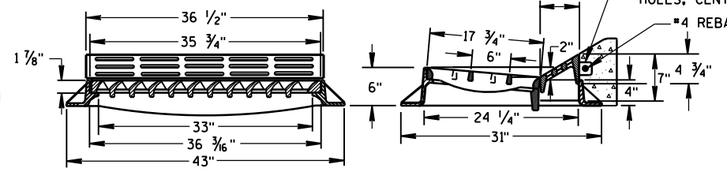
GENERAL NOTES

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



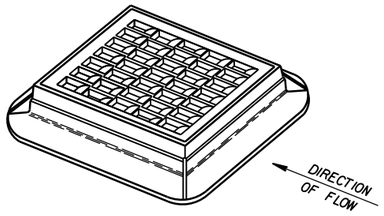


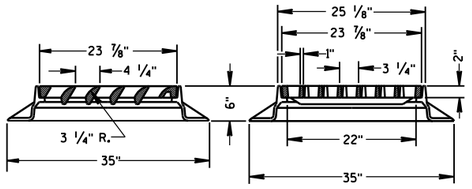


TYPE "HM"

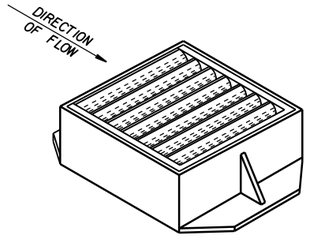
USE WITH TYPES A & D CONCRETE CURB & GUTTER, 36 INCH.

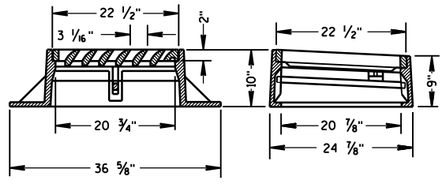
NOTE:
SPECIAL GRATE FOR THE
TYPE "H" COVER MAY ALSO BE
USED FOR THE TYPE "HM" COVER
NOTED AS TYPE HM-S ON DRAINAGE TABLE



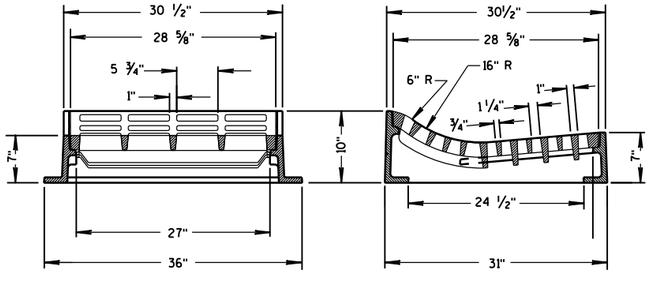


TYPE "S"



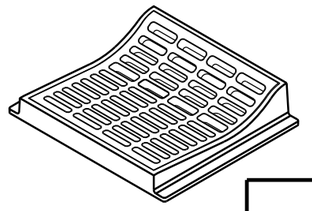


TYPE "V"



TYPE "T"

USE WITH TYPES R & T CONCRETE CURB & GUTTER, 36 INCH.



INLET COVERS
TYPE F, HM, HM-S, S, T, V, HM-GJ, & HM-GJ-S

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/27/2013
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER

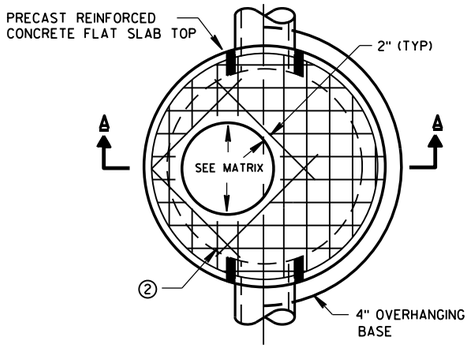
FHWA

6

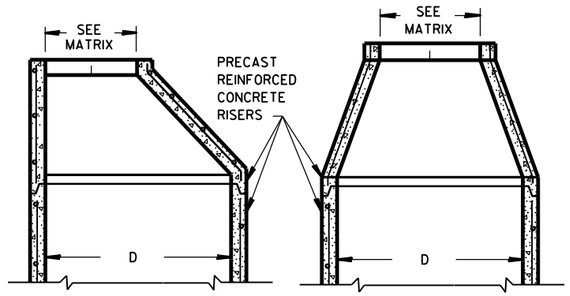
S.D.D. 8 A 5-19c

6

S.D.D. 8 A 5-19c

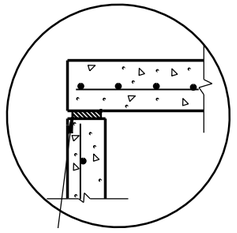


PLAN VIEW CIRCULAR OPENING

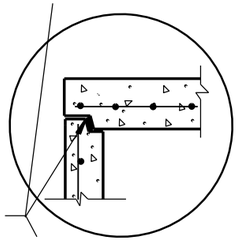


OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP

OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP

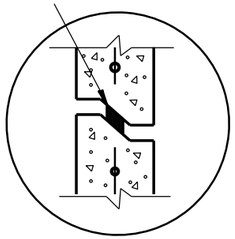


TOP WITH PLAIN END JOINT



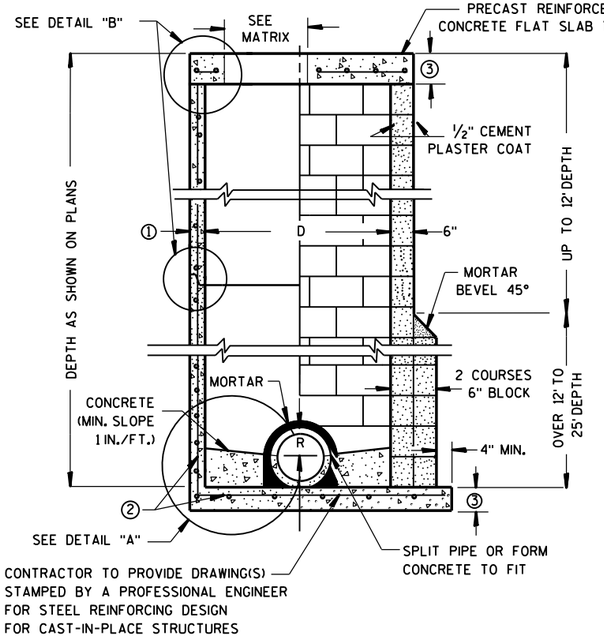
JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C990 (TYP)

TOP WITH TONGUE AND GROOVE JOINT



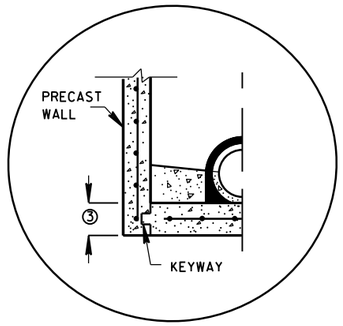
RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B"

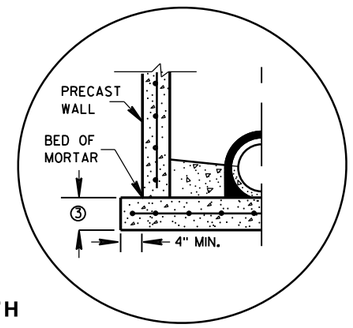


PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

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

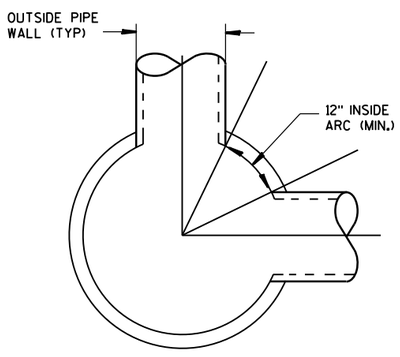


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION



SEPARATE 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 SEPARATE 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

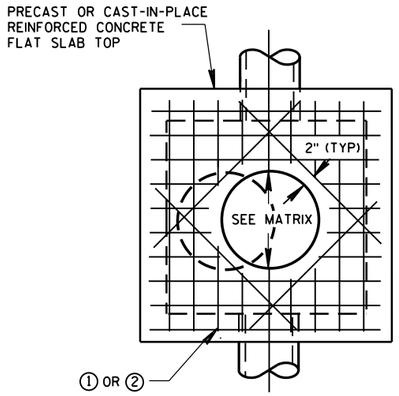
MANHOLE SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	180° SEPARATION (IN)	90° SEPARATION (IN)
3-FT	15	12
4-FT	24	18
5-FT	36	24
6-FT	42	36
7-FT	48	36
8-FT	60	42

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

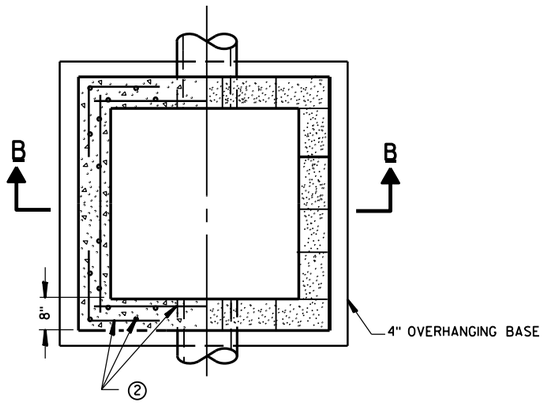
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

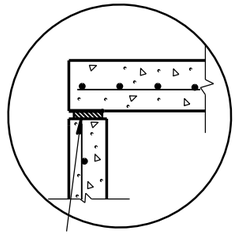
6
S.D.D. 8 B 9-1



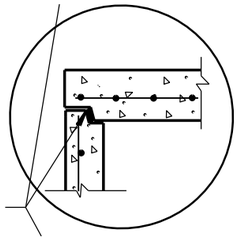
PLAN VIEW
CIRCULAR OPENING



SECTION A-A
PLAN VIEW

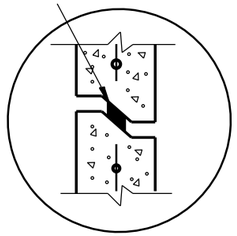


TOP WITH PLAIN END JOINT



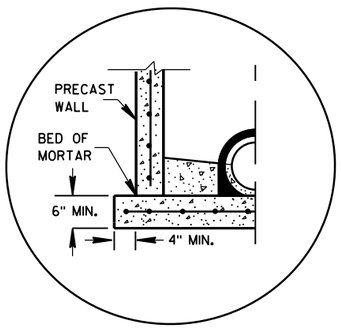
JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C 990 (TYP)

TOP WITH TONGUE AND GROOVE JOINT



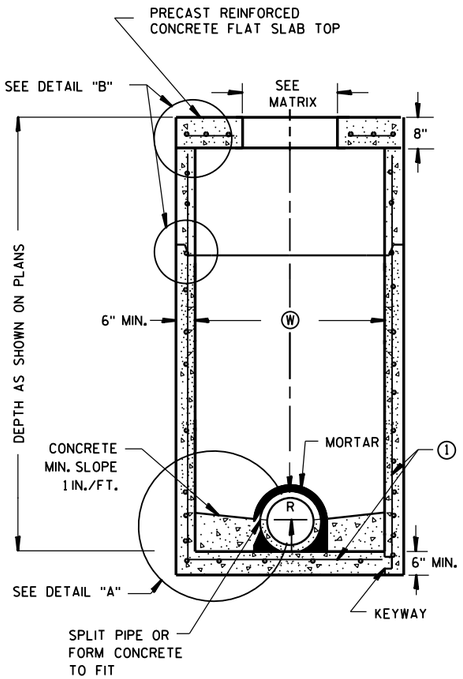
RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B"

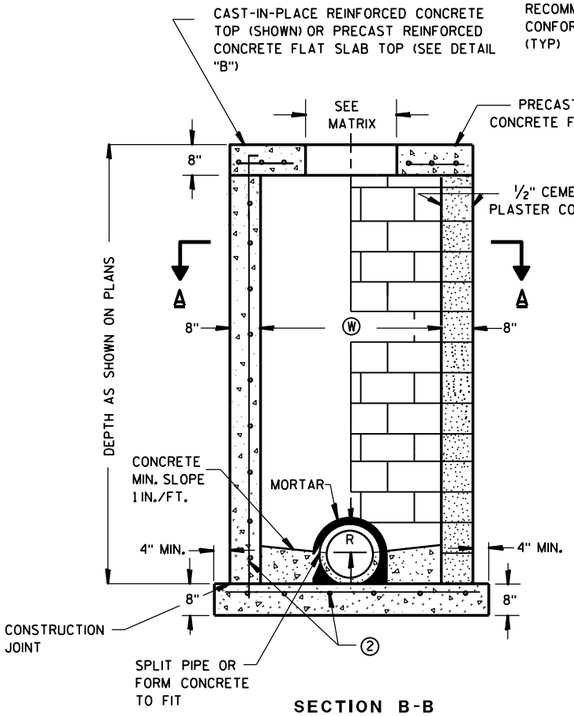


SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"



PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE



SECTION B-B

PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE

CAST-IN-PLACE REINFORCED CONCRETE

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

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 FLAT SLAB TOPS MAY BE USED ON CONCRETE BLOCK STRUCTURES. THE TOPS SHALL BE INSTALLED ON A BED OF MORTAR.

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 INCH 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 WIDTH.

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 ASTM C 913.

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

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

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

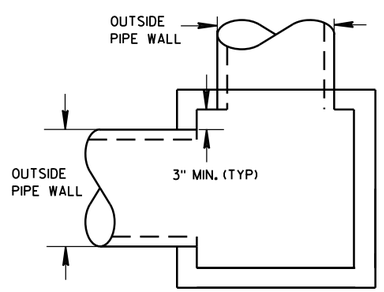
② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

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	
	WIDTH (W) (IN)	LENGTH (L) (IN)
3X3-FT	24	24
4X4-FT	30	30
5X5-FT	42	42
6X6-FT	54	54



DETAIL "C"

SQUARE MANHOLES W/ FLAT TOP

MANHOLES 3X3-FT, 4X4-FT, 5X5-FT AND 6X6-FT

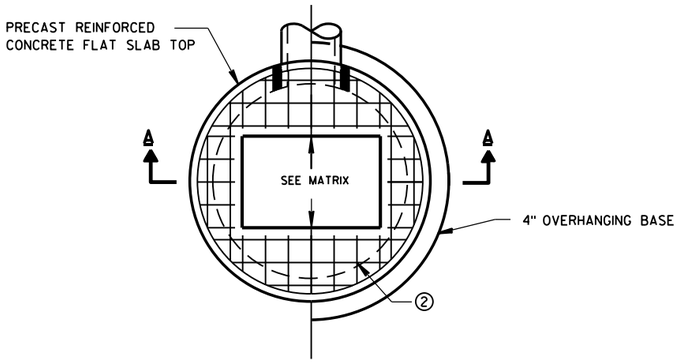
MANHOLES 3X3-FT, 4X4-FT 5X5-FT AND 6X6-FT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

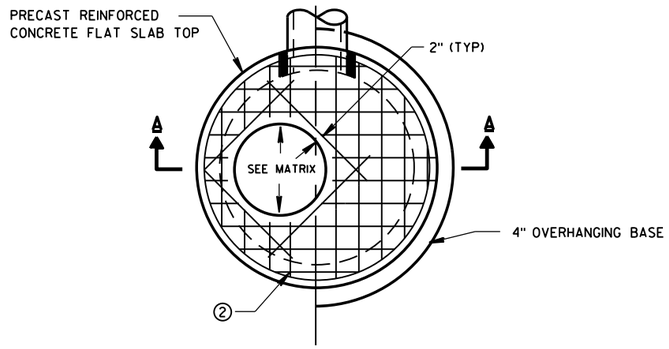
APPROVED
6/5/2012
DATE
/S/ Jerry H. Zoda
ROADWAY STANDARDS ENGINEER
FHWA

6

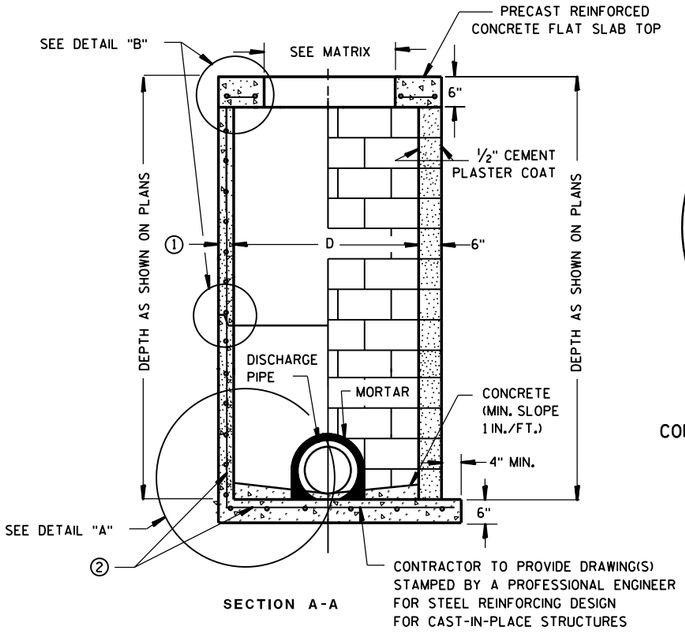
S.D.D. 8 B 10-1



PLAN VIEW RECTANGULAR OPENING



PLAN VIEW CIRCULAR OPENING

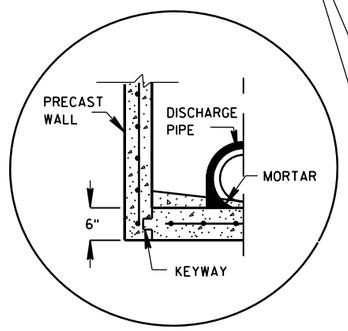


SECTION A-A

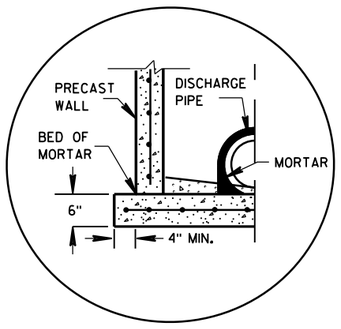
PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

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

CIRCULAR INLETS W/ FLAT TOP

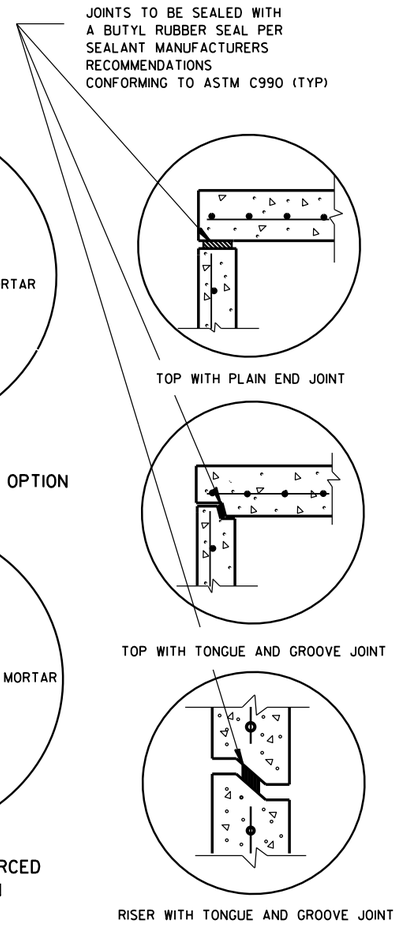


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"



DETAIL "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.

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 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.

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

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M199.

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

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

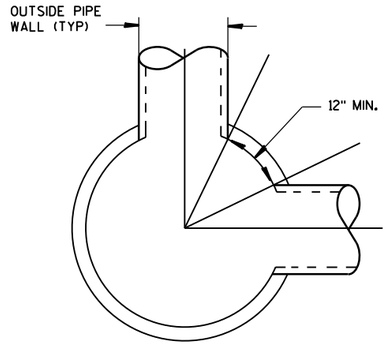
FOR ADDITIONAL CONFIGURATIONS, MAINTAIN A MINIMUM OF 12 INCHES AS MEASURED FROM THE INSIDE OF THE STRUCTURE WALL BETWEEN THE OUTSIDE PIPE WALLS OF ADJACENT PIPES. SEE DETAIL "C".

① MINIMUM WALL THICKNESS SHALL BE 4-IN FOR 3-FT DIAMETER AND 5-IN FOR 4-FT DIAMETER PRECAST INLETS.

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

INLET COVER OPENING MATRIX

	INLET COVER TYPE	ALL A'S	ALL B'S	BW	C	F	ALL H'S	S	T	V	WM	Z
INLET SIZE	OPENING SIZE (FT)											
3-FT	2 DIA.				X							X
	2X2	X	X					X		X		
4-FT	2 DIA.				X							X
	2X2	X	X					X		X		
	2X2.5			X				X	X	X	X	
	2X3						X					
	2.5X3					X						



DETAIL "C"

PIPE MATRIX

INLET SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	180° SEPARATION (IN)	90° SEPARATION (IN)
3-FT	15	12
4-FT	24	18

INLETS 3-FT AND 4-FT DIAMETER

STATE OF WISCONSIN
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6/5/2012
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

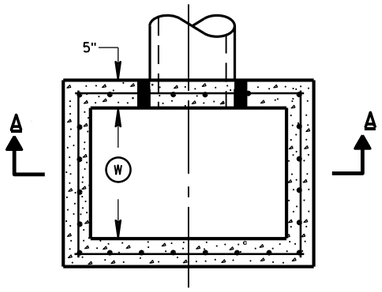
INLETS 3-FT AND 4-FT DIAMETER

6

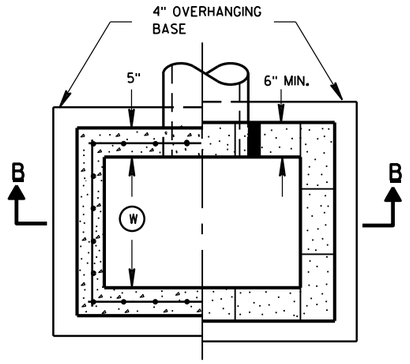
S.D.D. 8 C 6-1

6

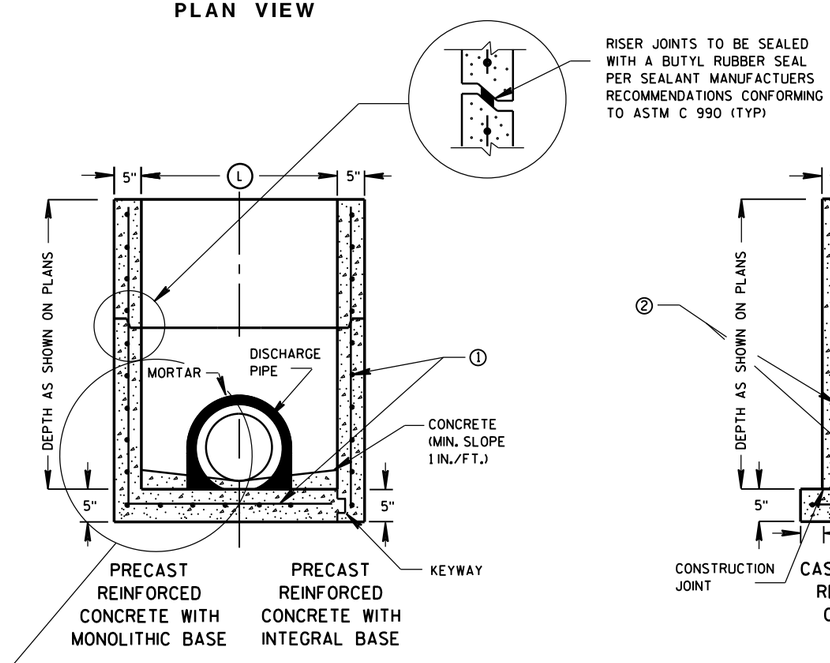
S.D.D. 8 C 6-1



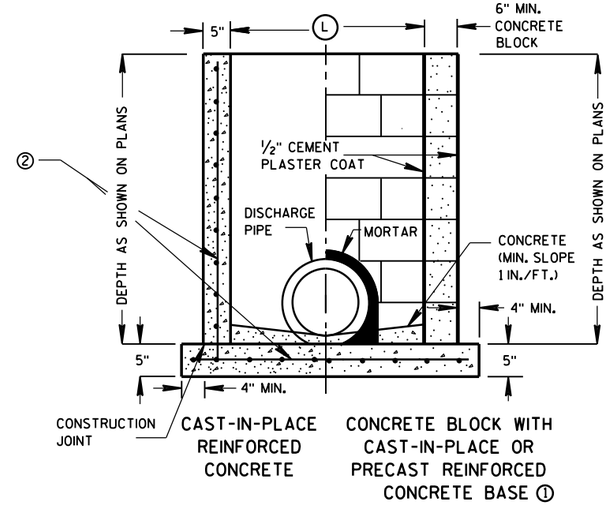
PLAN VIEW



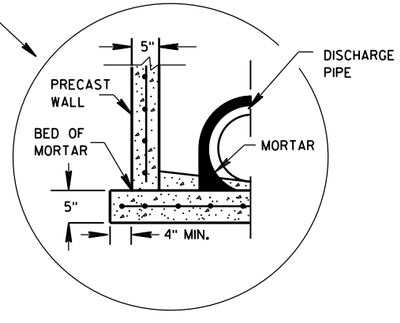
PLAN VIEW



SECTION A-A



SECTION B-B



SEPARATE 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 SEPARATE 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.

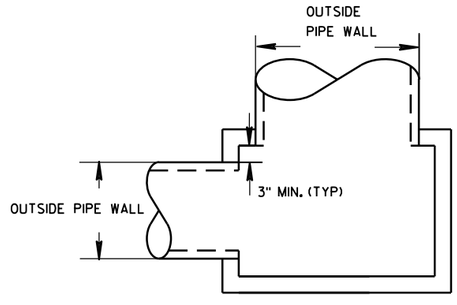
② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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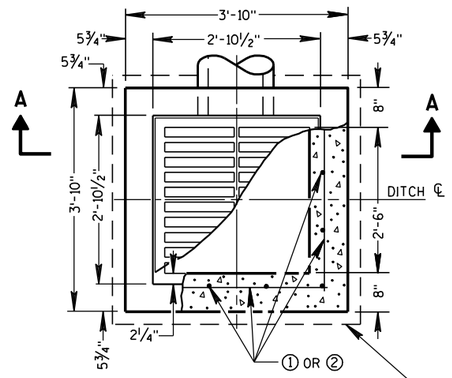
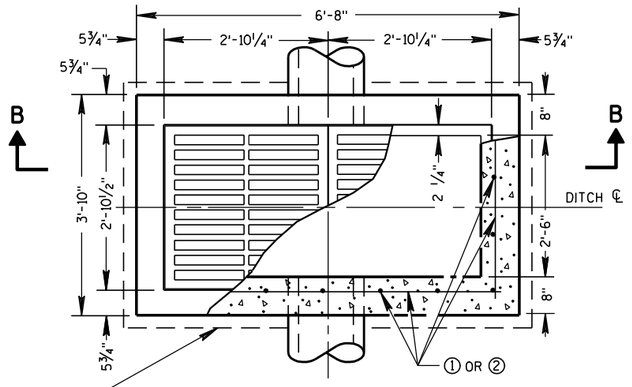
S.D.D. 8 C 7-1

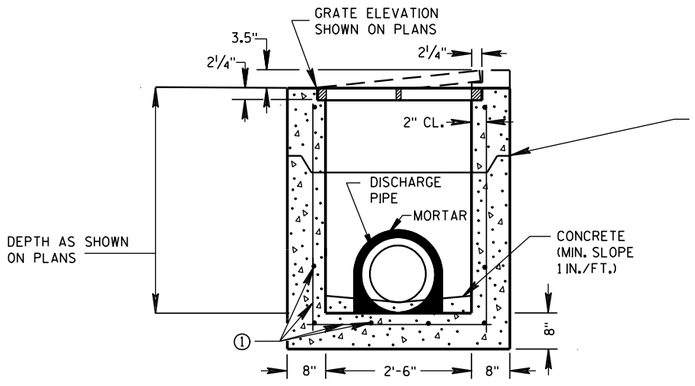


PLAN VIEW

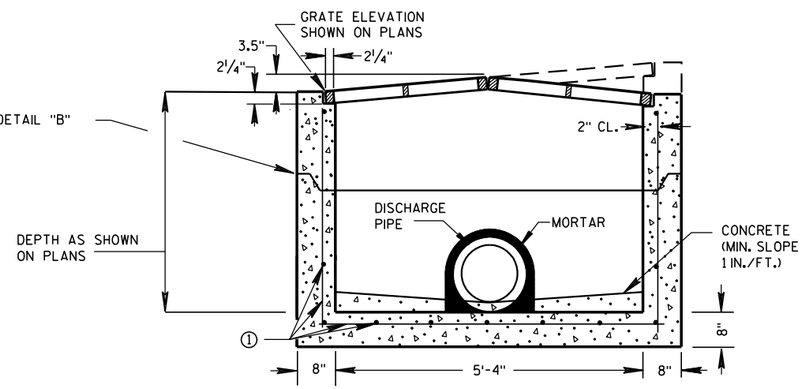


PLAN VIEW

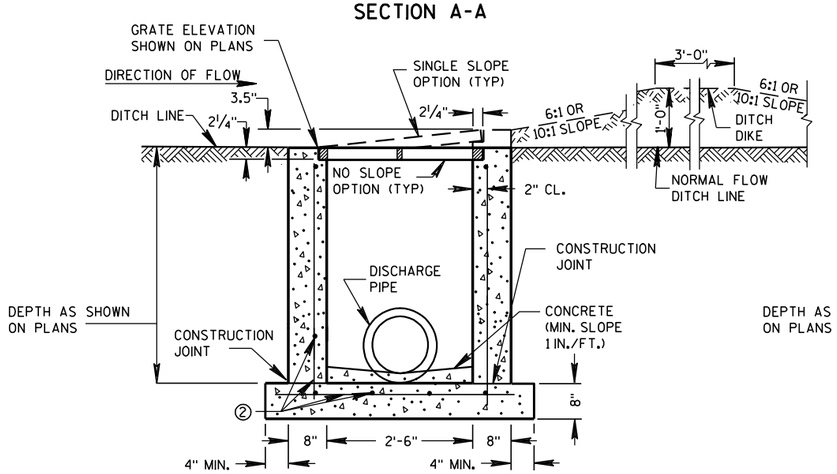
4" OVERHANGING BASE ON REINFORCED CAST-IN-PLACE CONCRETE INLETS



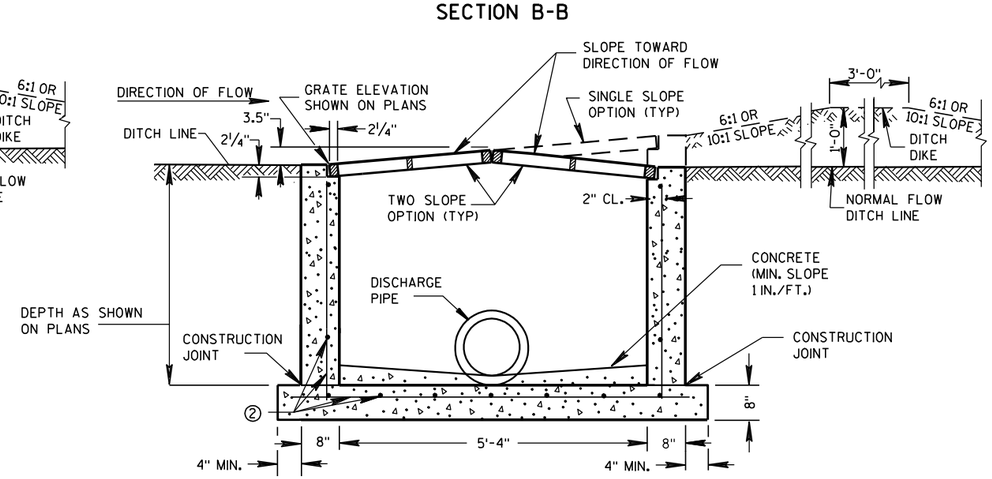
PRECAST REINFORCED CONCRETE SECTION A-A



PRECAST REINFORCED CONCRETE SECTION B-B



REINFORCED CAST-IN-PLACE CONCRETE SECTION A-A



REINFORCED CAST-IN-PLACE CONCRETE SECTION B-B

INLETS MEDIAN 1 GRATE

INLETS MEDIAN 2 GRATE

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 INLETS WHICH MAY INCLUDE PRECAST REINFORCED CONCRETE INLETS, SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL MEDIAN INLETS ARE DESIGNATED ON THE PLANS AS "INLETS, 1G-MS", ETC. THE FIRST NUMBER AND LETTER DESIGNATE THE TYPE OF STRUCTURE, AND THE FOLLOWING LETTERS DESIGNATE THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

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.

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

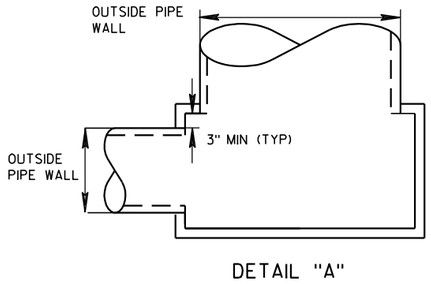
MAXIMUM INSIDE PIPE DIAMETER DETERMINED BY 3" CLEARANCE ON EACH SIDE OF THE OUTSIDE WALL OF THE PIPE. SEE DETAIL "A". ASSUMES PIPE ENTERS PERPENDICULAR TO THE STRUCTURE.

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.

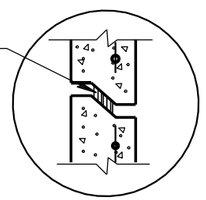
PIPE MATRIX

	MAXIMUM INSIDE PIPE DIAMETER	
INLET SIZE	WIDTH (IN)	LENGTH (IN)
1 GRATE	18	18
2 GRATE	18	42



DETAIL "A"

JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C 990 (TYP)



DETAIL "B"

INLETS MEDIAN 1 AND 2 GRATE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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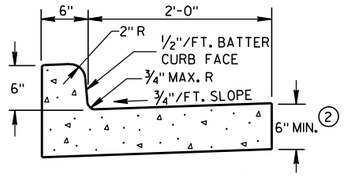
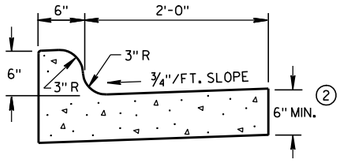
6

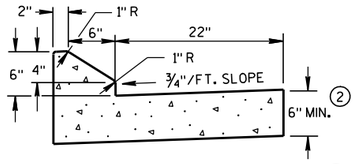
S.D.D. 8 C 8-1



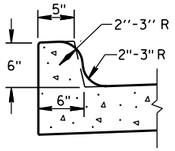
TYPES A & D (1)



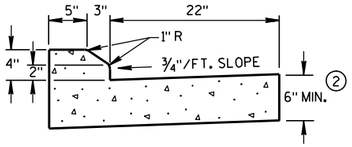
TYPES K & L (1)



6" SLOPED CURB TYPES G & J (1)

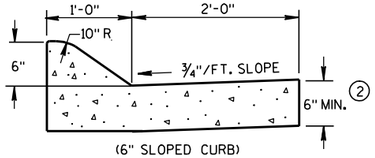


OPTIONAL CURB SHAPE FOR TYPES K & L (1)

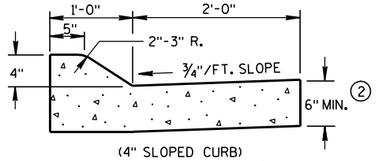


4" SLOPED CURB TYPES G & J (1)

CONCRETE CURB & GUTTER 30"

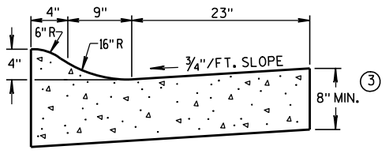


(6" SLOPED CURB)



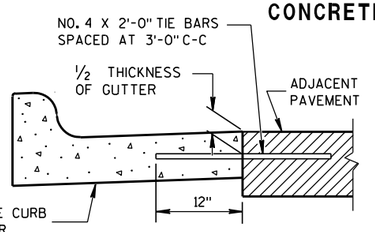
(4" SLOPED CURB)

TYPES A & D (1)

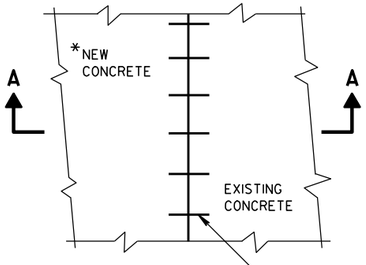


4" SLOPED CURB TYPES R & T (1) (4)

CONCRETE CURB & GUTTER 36"

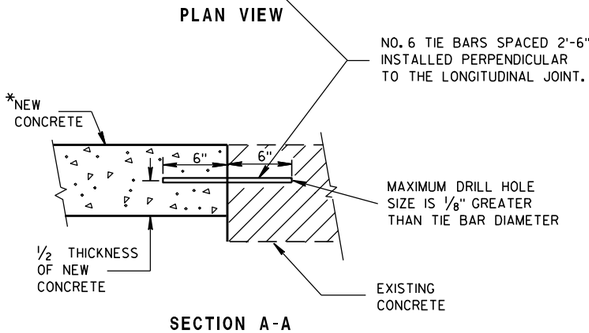


TYPICAL TIE BAR LOCATION (1)



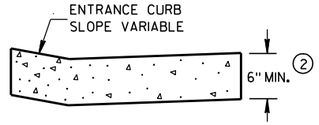
*NEW CURB & GUTTER, SURFACE DRAINS, CONCRETE PAVEMENT OR OTHER NEW CONCRETE.

PLAN VIEW



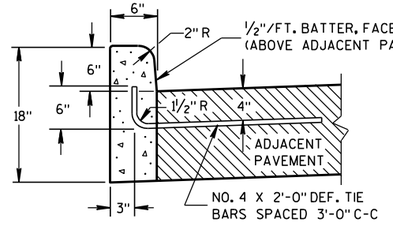
SECTION A-A

TIE BARS DRILLED INTO EXISTING PAVEMENT



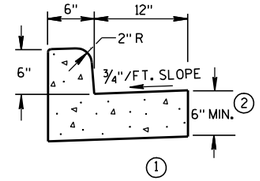
DRIVEWAY ENTRANCE CURB

(WHEN DIRECTED BY THE ENGINEER)



(1)

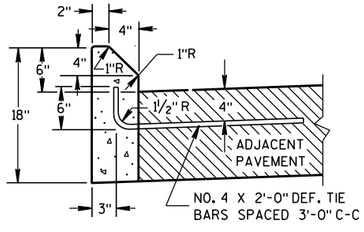
TYPES A & D



(1)

TYPES A & D

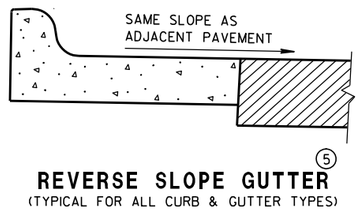
CONCRETE CURB & GUTTER 18"



(1)

TYPES G & J

CONCRETE CURB



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.

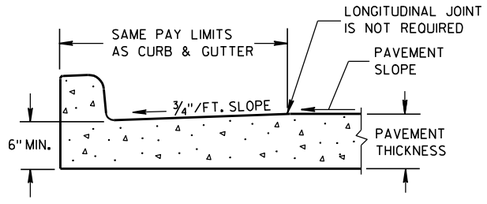
(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G, K AND R.

(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.

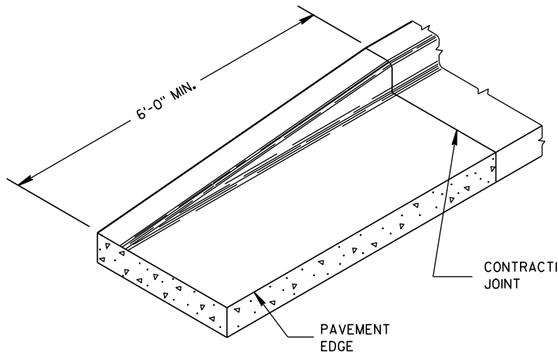
(3) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 8" MINIMUM GUTTER THICKNESS IS MAINTAINED.

(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



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. [illegible]
ROADWAY STANDARDS ENGINEER

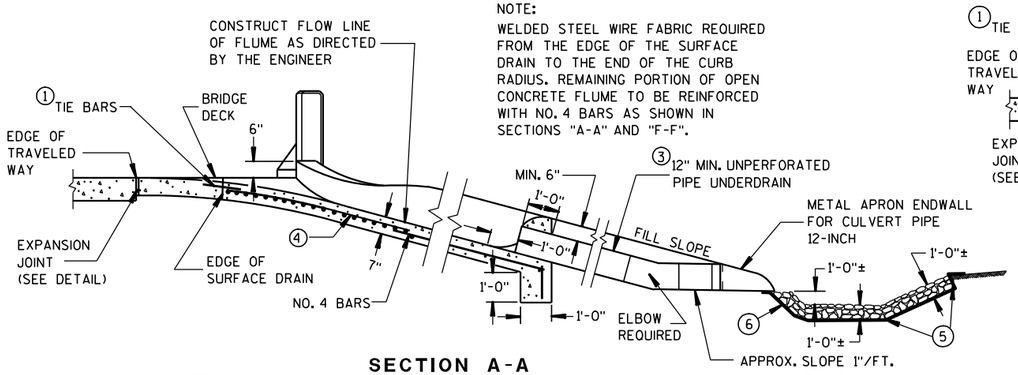
FHWA ENT

6

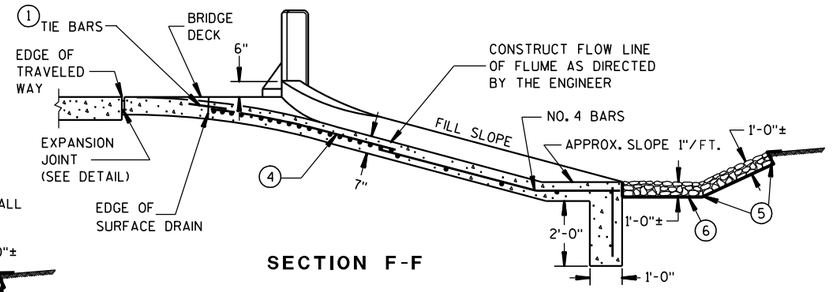
S.D.D. 8 D 1-17

6

S.D.D. 8 D 1-17



SECTION A-A



SECTION F-F

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.

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

(1) NO. 4 X 2'-0" TIE BARS SPACED AT 3'-0" CENTERS TO BE USED ONLY WHEN ADJACENT TO P.C. CONCRETE.

(2) NO. 4 X 2'-0" TIE BARS SPACED AT 12" CENTERS TO BE PLACED BY BRIDGE CONTRACTOR, OR DRILLED TIE BARS PLACED AS DIRECTED BY THE ENGINEER.

(3) PIPE UNDERDRAIN MAY BE ANY OF THE MATERIALS LISTED IN SECTION 612.2 OF THE STANDARD SPECIFICATIONS EXCEPT DRAIN TILE.

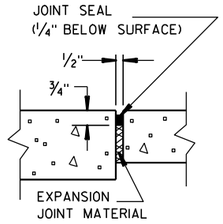
(4) MINIMUM REINFORCEMENT SHALL BE 6" X 6" - W4.0 X W4.0 OR NO. 3 BARS LONGITUDINAL AND TRANSVERSE SPACING 12" C-C.

(5) LIMITS OF ADDITIONAL RIPRAP WHEN SPECIAL DITCH IS REQUIRED.

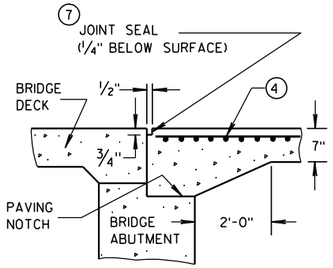
(6) GEOTEXTILE FABRIC, TYPE 'R"

(7) HOT POURED SEALANT UNLESS OTHERWISE SPECIFIED.

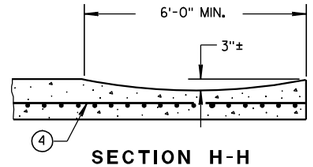
(8) THIS DIMENSION MAY VARY DEPENDING ON THE SPACING OF POSTS FOR THE STEEL PLATE BEAM GUARD. THE TYPICAL LOCATION FOR THE SURFACE DRAIN IS WHERE THE POST SPACING WIDENS TO 3'-1½".



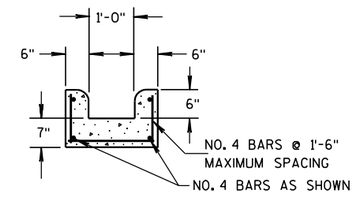
EXPANSION JOINT DETAIL



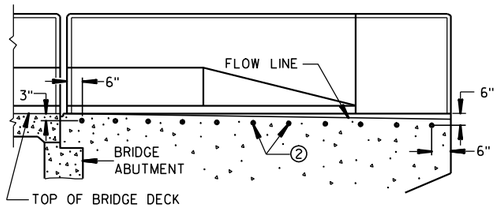
SECTION D-D



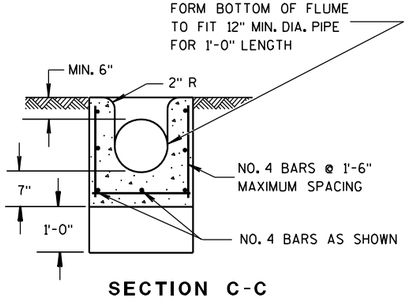
SECTION H-H



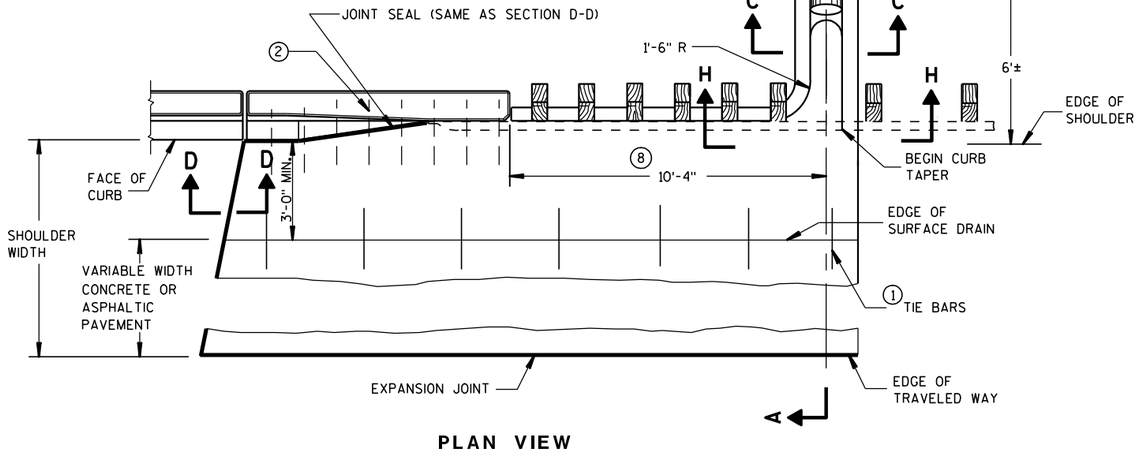
SECTION E-E



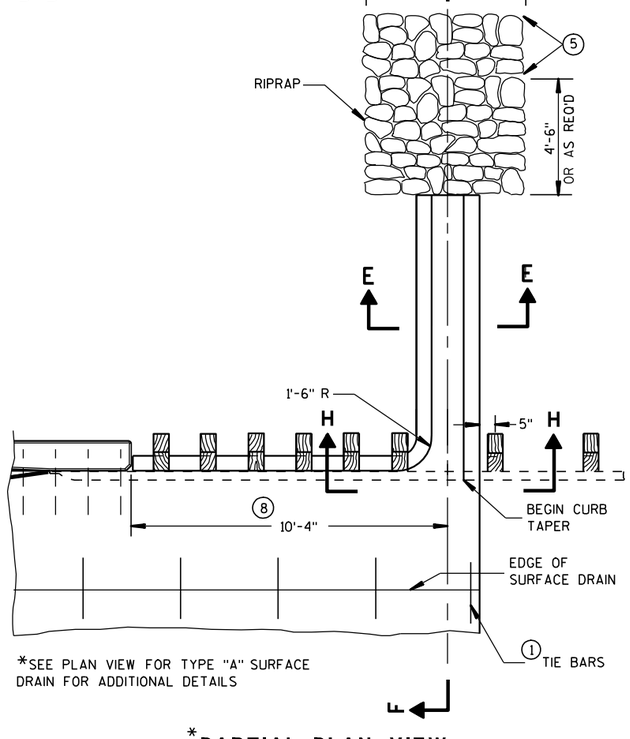
LOCATION OF TIE BARS IN WINGWALL



SECTION C-C



PLAN VIEW
SURFACE DRAIN WITH PIPE
TYPE "A"



*SEE PLAN VIEW FOR TYPE "A" SURFACE DRAIN FOR ADDITIONAL DETAILS

*PARTIAL PLAN VIEW
SURFACE DRAIN WITHOUT PIPE
TYPE "B"

CONCRETE SURFACE DRAINS
FLUME TYPE
AT STRUCTURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
9/4/08
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER
273
FHWA

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S.D.D. 8 D 2-6

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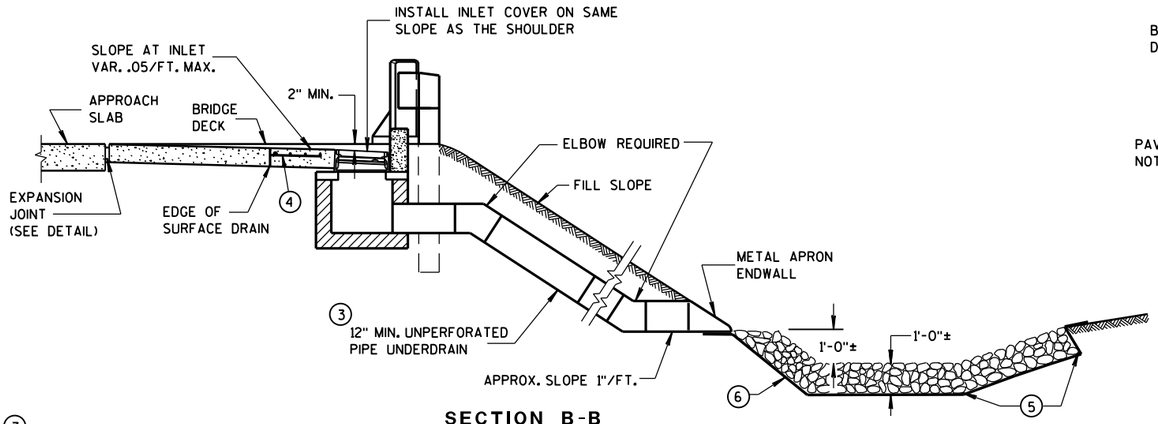
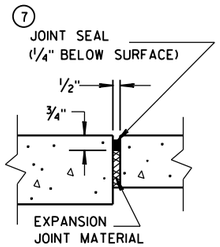
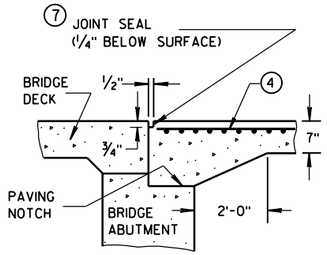
S.D.D. 8 D 2-6



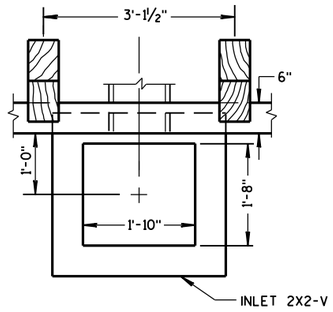
SECTION B-B



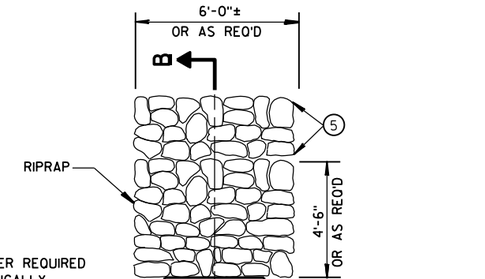
EXPANSION JOINT DETAIL

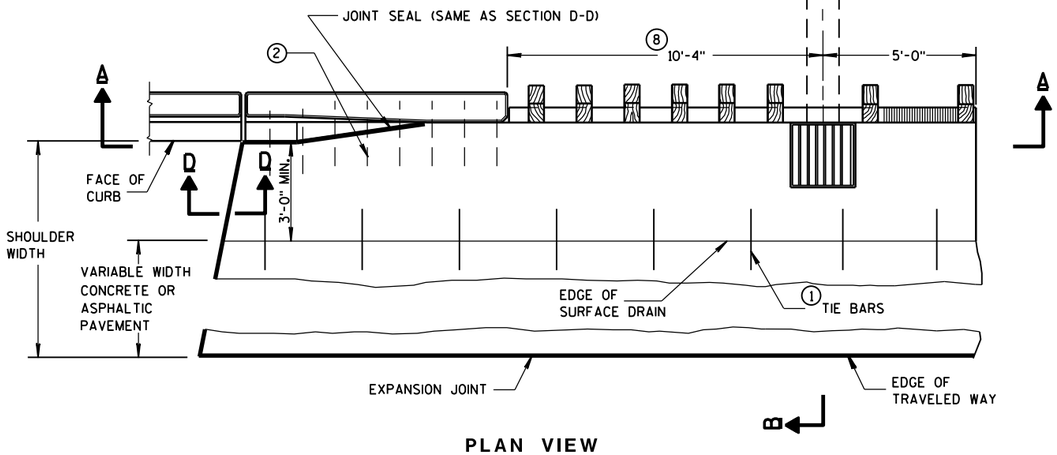


SECTION D-D

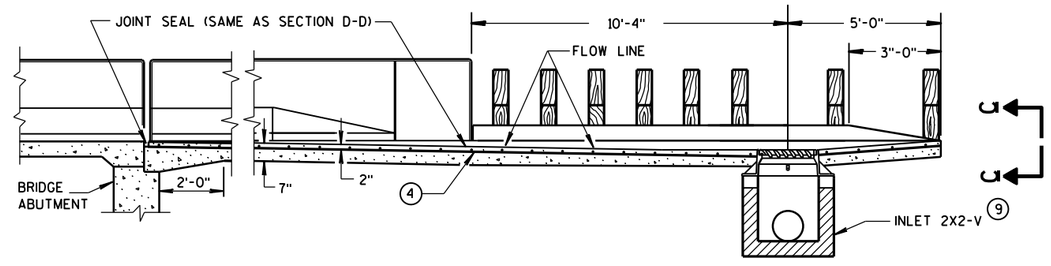


PLAN VIEW

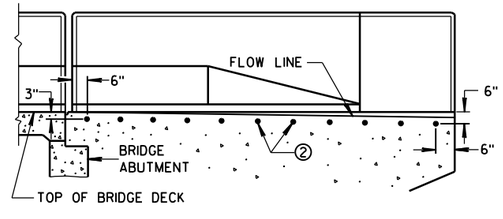




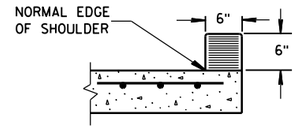
PLAN VIEW



SECTION A-A



LOCATION OF TIE BARS IN WINGWALL



SECTION C-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.

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

(1) NO. 4 X 2'-0" TIE BARS SPACED AT 3'-0" CENTERS TO BE USED ONLY WHEN ADJACENT TO P.C. CONCRETE.

(2) NO. 4 X 2'-0" TIE BARS SPACED AT 12" CENTERS TO BE PLACED BY BRIDGE CONTRACTOR, OR DRILLED TIE BARS PLACED AS DIRECTED BY THE ENGINEER.

(3) THE PIPE UNDERDRAIN MAY BE ANY ONE OF THE SIX MATERIALS LISTED IN THE STANDARD SPECIFICATIONS SECTION 612.2 EXCEPT DRAIN TILE.

(4) MINIMUM REINFORCEMENT SHALL BE 6" X 6" - W4.0 X W4.0 OR NO. 3 BARS LONGITUDINAL AND TRANSVERSE SPACING 12" C-C.

(5) LIMITS OF ADDITIONAL RIPRAP WHEN SPECIAL DITCH IS REQUIRED.

(6) GEOTEXTILE FABRIC, TYPE 'R'

(7) HOT POURED SEALANT UNLESS OTHERWISE SPECIFIED.

(8) THIS DIMENSION MAY VARY DEPENDING ON THE SPACING OF POSTS FOR THE STEEL PLATE BEAM GUARD. THE TYPICAL LOCATION FOR THE SURFACE DRAIN IS WHERE THE POST SPACING WIDENS TO 3'-1½".

(9) SEE CURRENT STANDARD DETAIL DRAWINGS 8A5 AND 8C7 FOR DETAILS.

CONCRETE SURFACE DRAINS DROP INLET TYPE AT STRUCTURES

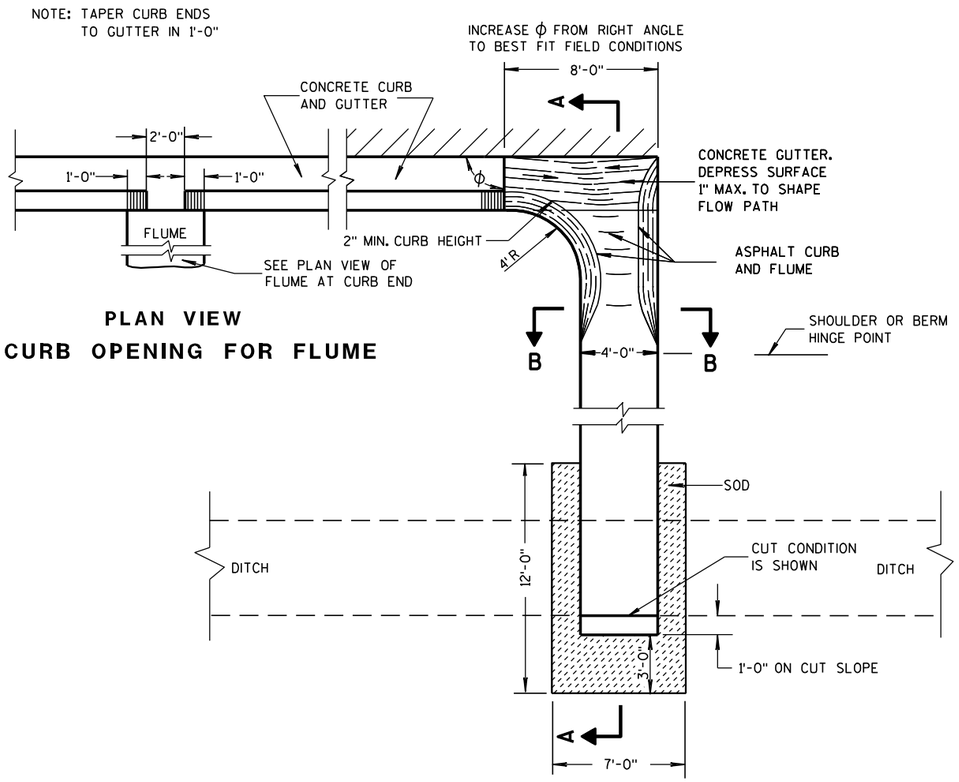
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

6

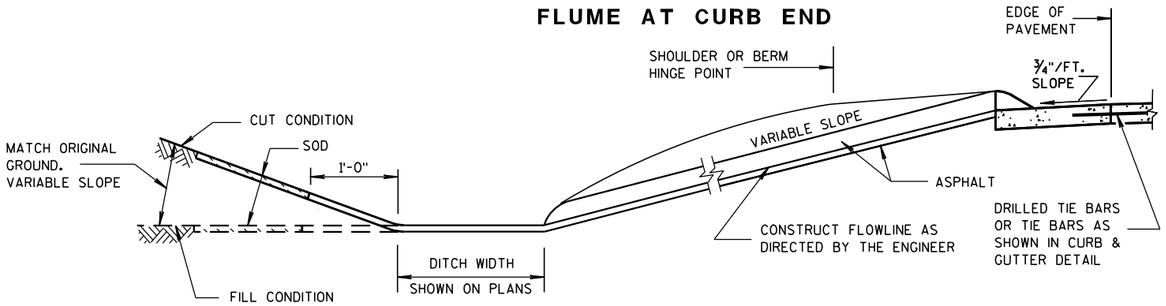
S.D.D. 8 D 3-6

ASPHALTIC FLUME

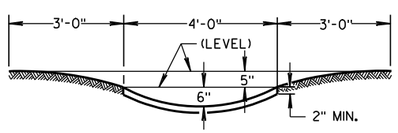


PLAN VIEW
CURB OPENING FOR FLUME

PLAN VIEW
FLUME AT CURB END



SECTION A-A



SECTION B-B

GENERAL NOTES

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

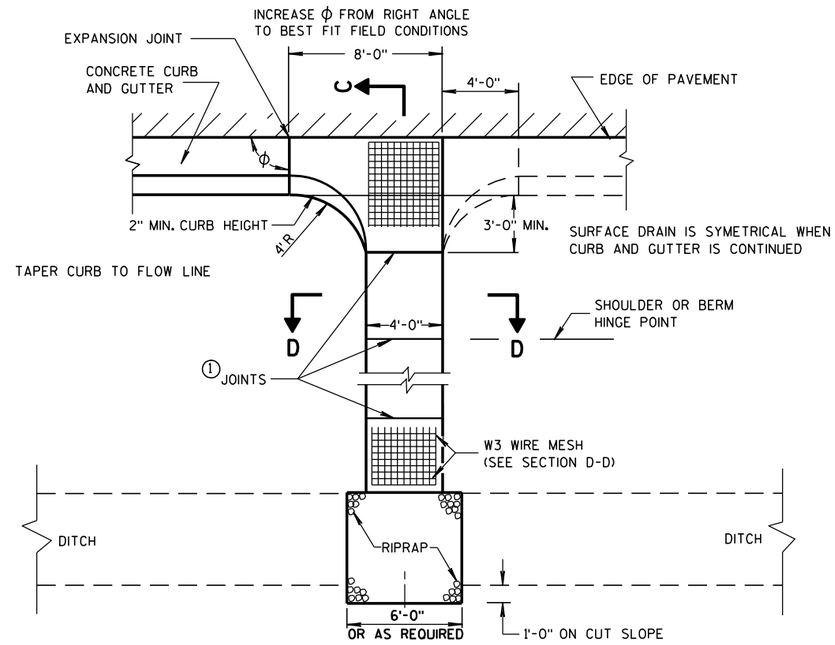
WELDED STEEL WIRE FABRIC SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

① JOINTS SHALL BE $\frac{1}{8}$ TO $\frac{1}{4}$ INCH WIDE BY $1\frac{1}{2}$ INCHES DEEP AND SPACED AT UNIFORM INTERVALS OF APPROXIMATELY 4 FEET.

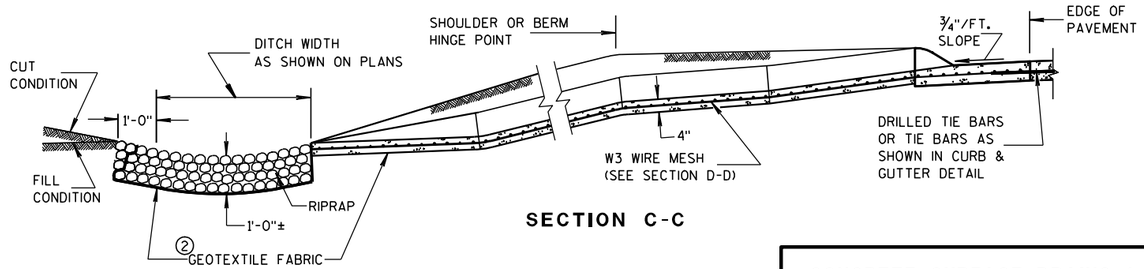
② GEOTEXTILE FABRIC TYPE "R" SHALL UNDERLAY THE FULL LENGTH AND WIDTH OF THE CONCRETE SURFACE DRAIN AND RIPRAP.

③ CONCRETE SURFACE DRAIN WITHOUT CURB AND GUTTER MAY BE USED ON BACKSLOPES WHEN SPECIFIED

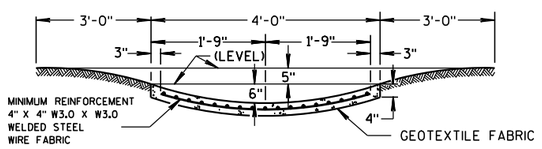
③ CONCRETE SURFACE DRAIN



PLAN VIEW



SECTION C-C



SECTION D-D

CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
9-4-08 DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER
275
MENT
FHWA

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S.D.D. 8 D 4-5

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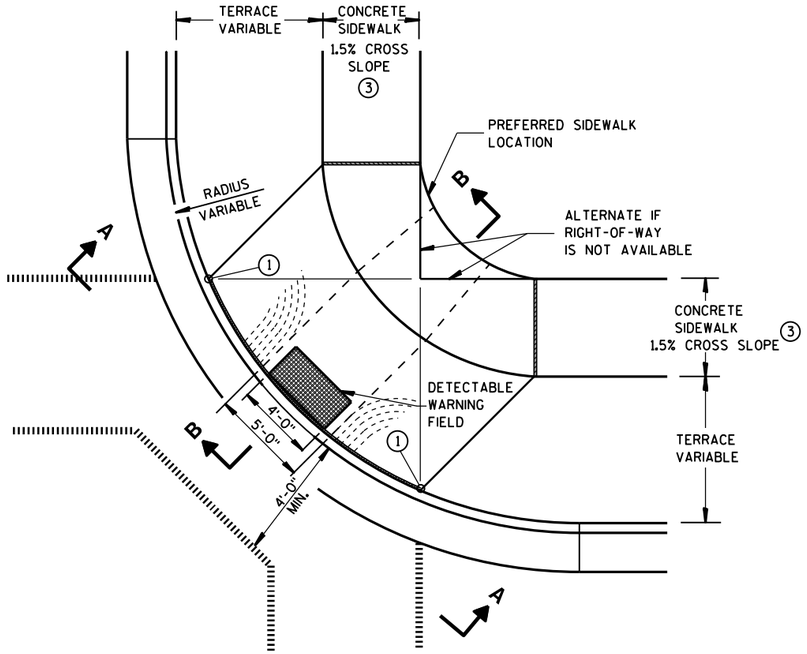
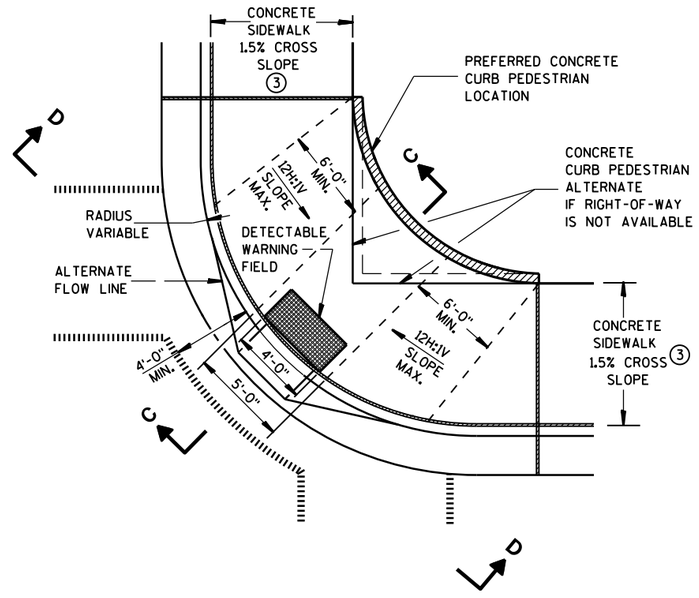
S.D.D. 8 D 4-5



PLAN VIEW

TYPE 1 RAMP

(CENTER OF CORNER RADIUS)



PLAN VIEW

TYPE 1-A RAMP

(NO TERRACE)

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.

RAMPS SHALL BE BUILT AT 12H:1V OR FLATTER. WHEN NECESSARY, THE SIDEWALK ELEVATION MAY BE LOWERED TO MEET THE HIGH POINT ON THE RAMP.

TYPE 1 RAMPS SHALL HAVE A NORMAL SIDEWALK APRON AND CURB ON BOTH SIDES OF RAMP.

DETECTABLE WARNING FIELD SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS "CURB RAMP DETECTABLE WARNING FIELD". THE CONCRETE PEDESTRIAN CURB, IF NEEDED, SHALL BE MEASURED AND PAID BY THE LINEAL FOOT AS "CONCRETE CURB PEDESTRIAN". CONCRETE SIDEWALK IN THE CURB RAMP AREA SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS CONCRETE SIDEWALK, INCLUDING THE AREA UNDER THE DETECTABLE WARNING FIELD.

SELECT CURB RAMP DETECTABLE WARNING FIELD MATERIALS AND DEVICES FROM THE DEPARTMENT'S APPROVED MATERIALS LIST. THE COLOR OF THE DETECTABLE WARNING FIELD IS SPECIFIED ELSEWHERE AND IS INCIDENTAL TO THE BID ITEM OF "CURB RAMP DETECTABLE WARNING FIELD".

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

SURFACE TEXTURE OF THE RAMP SHALL BE OBTAINED BY COARSE BROOMING TRANSVERSE TO THE SLOPE OF THE RAMP.

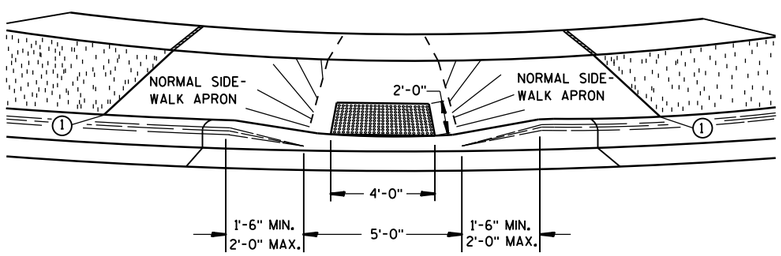
① THIS POINT IS AN EXTENSION OF OUTSIDE EDGE OF APPROACHING SIDEWALK WHERE IT MEETS THE BACK OF CONCRETE CURB.

② GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. PROVIDE DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLAG INTERFACE.

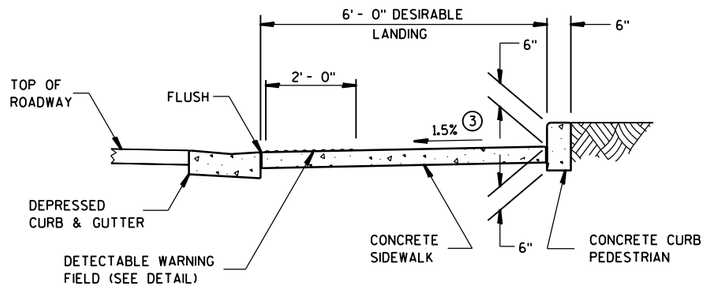
③ ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

LEGEND

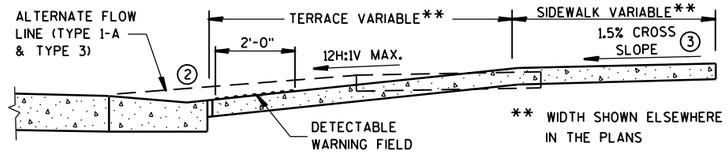
- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT



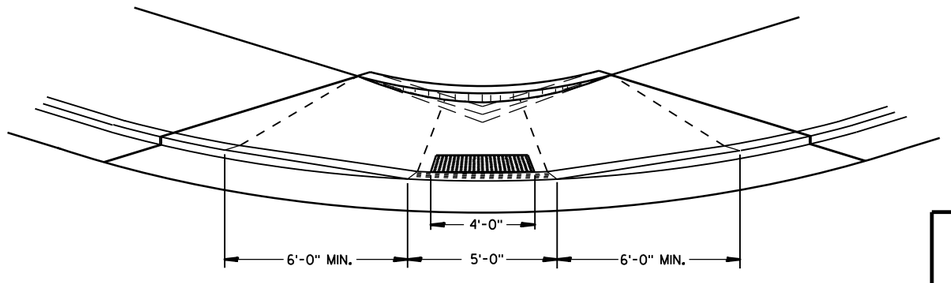
VIEW A-A



SECTION C-C



SECTION B-B



VIEW D-D

CURB RAMPS TYPES 1 AND 1-A

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

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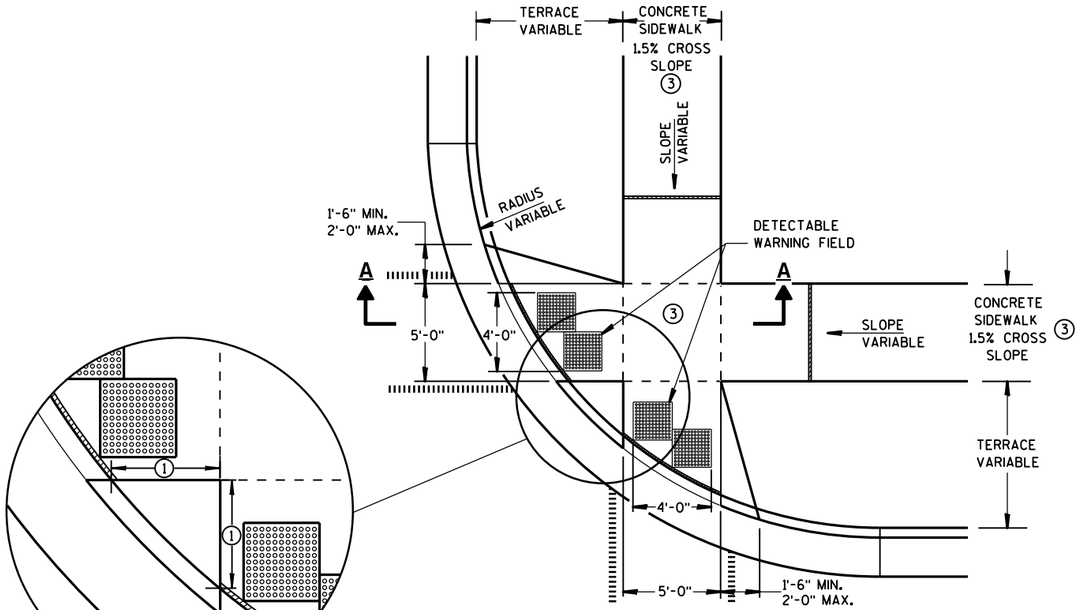
S.D.D. 8 D 5-15a

6

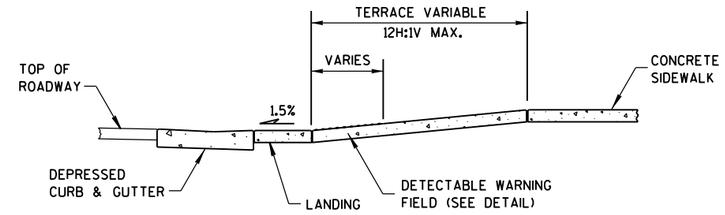
S.D.D. 8 D 5-15a



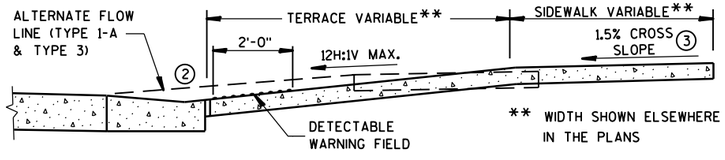
PLAN VIEW

TYPE 2 RAMP

(ON LINE WITH SIDEWALK)



SECTION A-A



SECTION B-B

GENERAL NOTES

USE THE TYPE 3 RAMP ONLY WHEN A TYPE 1 OR TYPE 2 CANNOT BE ACHIEVED BECAUSE OF FIELD CONDITIONS.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

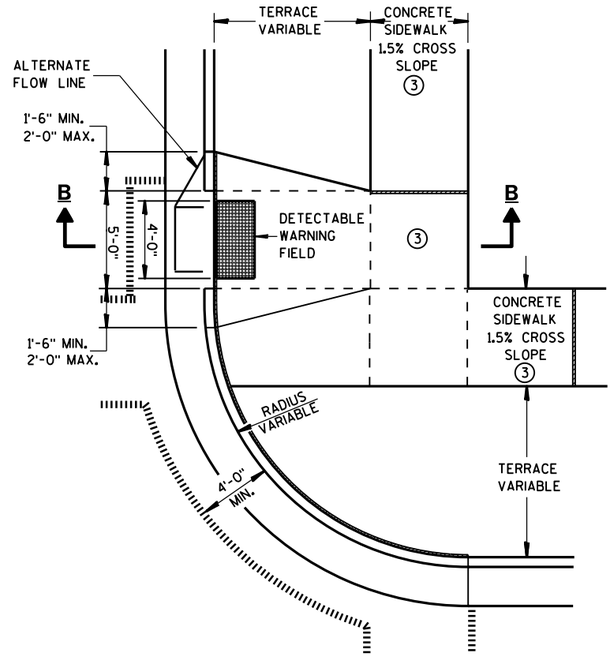
① WHEN THIS DISTANCE IS LESS THAN 6'-0" IT MAY BE DIFFICULT TO ACHIEVE A 12H:1V SLOPE, OR FLATTER, ON THE RAMP. REDUCE CURB HEIGHT IN TRIANGLE AREA TO ACHIEVE 12H:1V SLOPE, OR FLATTER, ON RAMP. 2" MINIMUM CURB HEIGHT.

② GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. PROVIDE DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLAG INTERFACE.

③ ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

LEGEND

- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT



PLAN VIEW

TYPE 3 RAMP

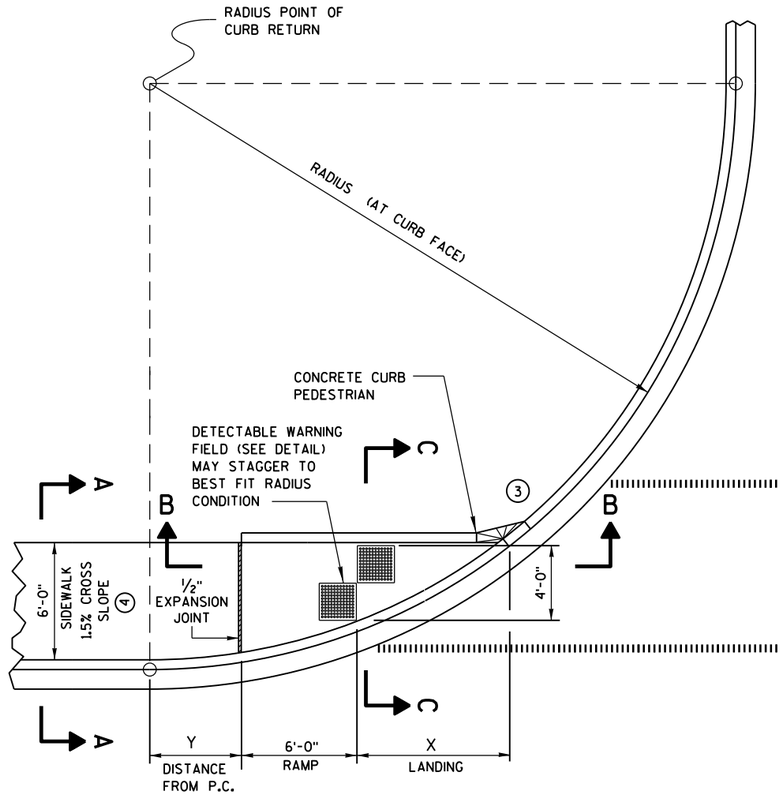
(OUTSIDE OF CROSSWALK AREA)

CURB RAMPS TYPES 2 AND 3

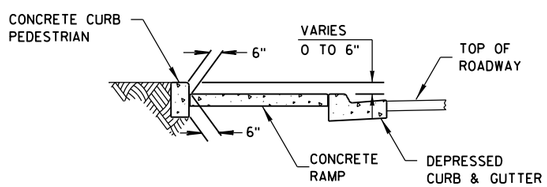
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

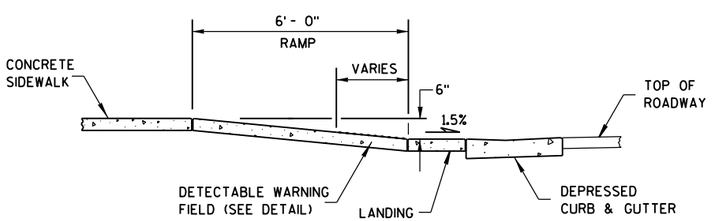
S.D.D. 8 D 5-15b



CURB RAMP TYPE 4A
PLAN VIEW



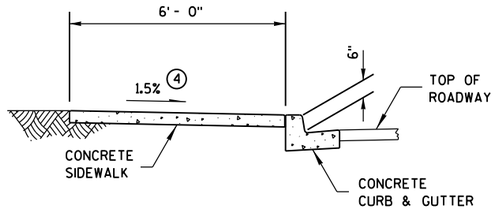
SECTION C-C FOR TYPE 4A



SECTION B-B FOR TYPE 4A

RADIUS (AT CURB FACE)	X	Y
20 FEET	6'-1¾"	2'-7¼"
30 FEET	7'-11¾"	4'-8¼"
40 FEET	9'-5¼"	6'-5"
50 FEET	10'-8¾"	7'-11¼"
60 FEET	11'-10¼"	9'-3½"

INTERMEDIATE RADII CAN BE INTERPOLATED



SECTION A-A FOR TYPE 4A

GENERAL NOTES

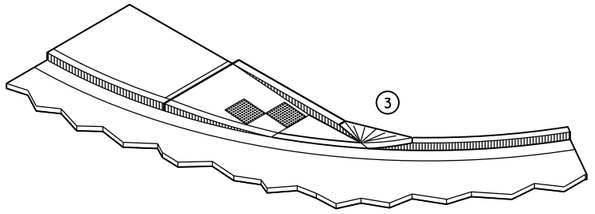
AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

RAMP SLOPES SHALL NOT BE STEEPER THAN 12:1.

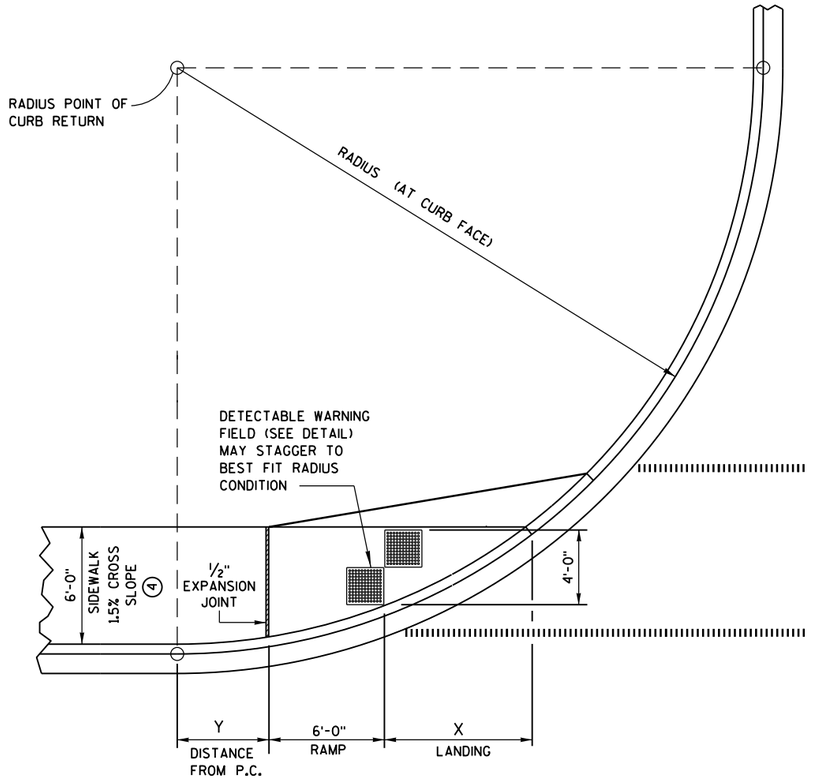
DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(3) INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS.) DO NOT MARK TRANSITION NOSE.

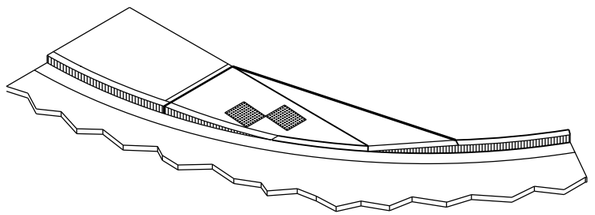
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.



ISOMETRIC VIEW FOR TYPE 4A



CURB RAMP TYPE 4A1
PLAN VIEW



ISOMETRIC VIEW FOR TYPE 4A1

LEGEND

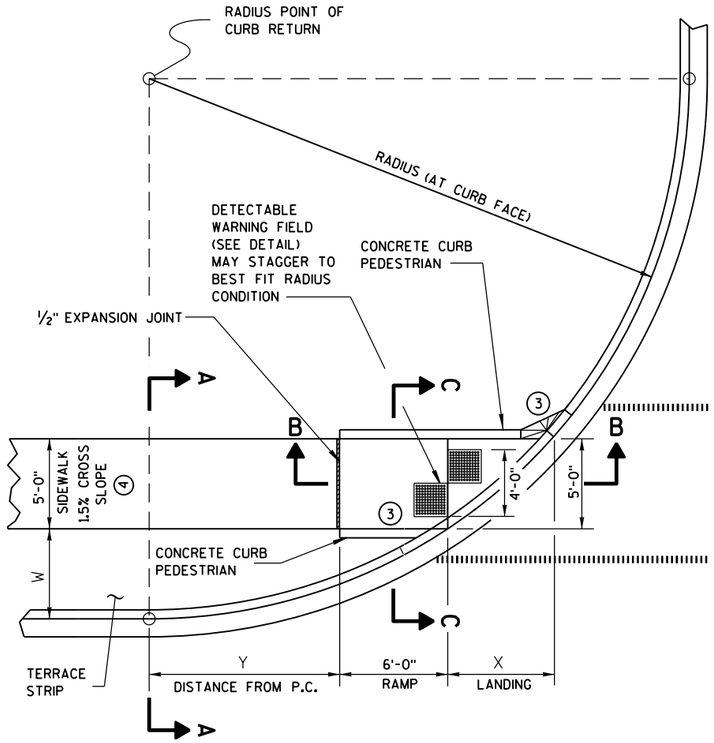
- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS
TYPES 4A AND 4A1

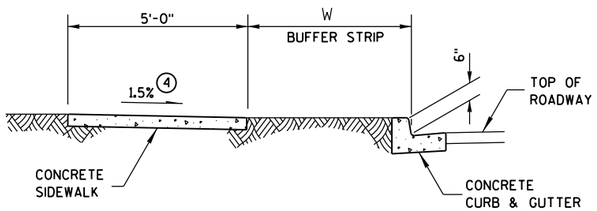
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

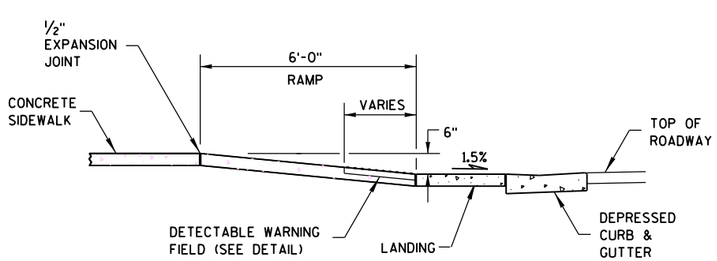
S.D.D. 8 D 5-15c



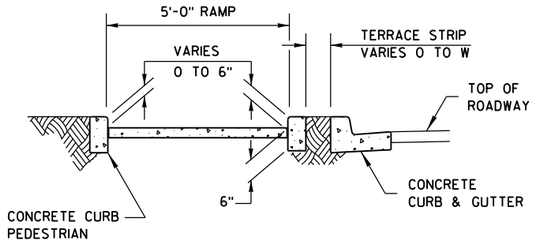
CURB RAMP TYPE 4B
PLAN VIEW



SECTION A-A FOR TYPE 4B



SECTION B-B FOR TYPE 4B



SECTION C-C FOR TYPE 4B

LEGEND

½" EXPANSION JOINT-SIDEWALK

CONTRACTION JOINT FIELD LOCATED

PAVEMENT MARKING CROSSWALK (WHITE)

RADIUS (AT CURB FACE)	W = 3'-0"		W = 4'-0"		W = 5'-0"		W = 6'-0"		W = 7'-0"	
	X	Y	X	Y	X	Y	X	Y	X	Y
20 FEET	5'-5½"	4'-6½"	4'-8½"	6'-0"	4'-1"	7'-2¾"	3'-7"	8'-3½"	3'-1½"	9'-2½"
30 FEET	7'-3¾"	7'-1"	6'-5½"	8'-11½"	5'-9¼"	10'-7"	5'-2½"	12'-0"	4'-8¾"	13'-3¼"
40 FEET	8'-9½"	9'-2½"	7'-10"	11'-5¼"	7'-1"	13'-4½"	6'-5¾"	15'-¾"	5'-11½"	16'-7¼"
50 FEET	10'-¾"	11'-¾"	9'-¼"	13'-7¼"	8'-2½"	15'-9½"	7'-6½"	17'-9"	6'-11¾"	19'-6¼"
60 FEET	11'-2½"	12'-8¾"	10'-¾"	15'-6½"	9'-2¼"	17'-11¾"	8'-5¾"	20'-1¾"	7'-10½"	22'-1½"

INTERMEDIATE RADII CAN BE INTERPOLATED

GENERAL NOTES

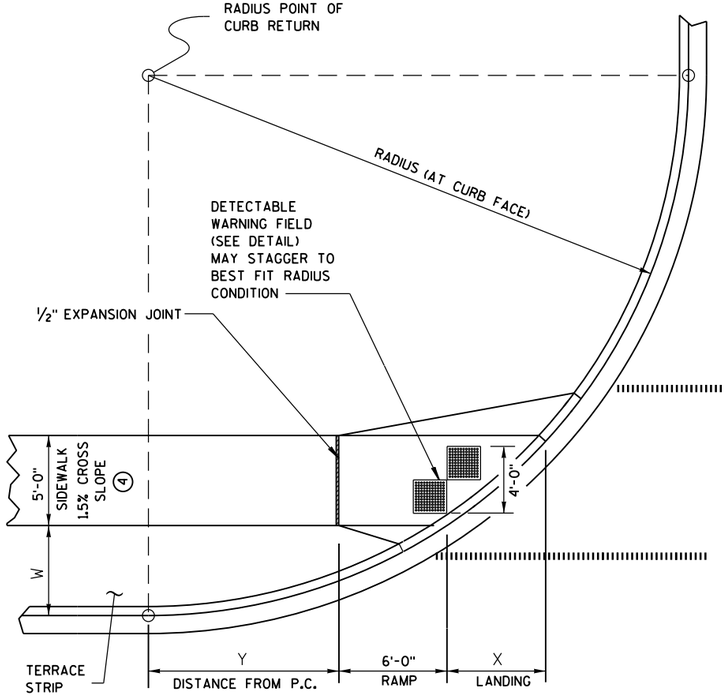
AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

RAMP SLOPES SHALL NOT BE STEEPER THAN 12:1.

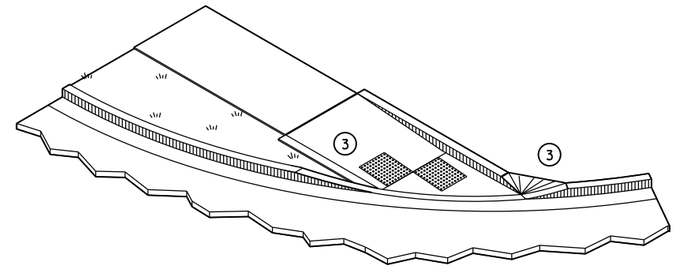
DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(3) INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS.) DO NOT MARK TRANSITION NOSE.

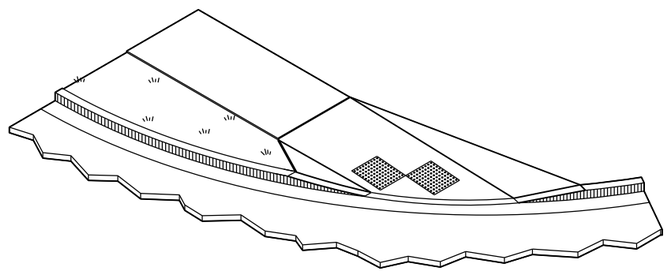
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.



CURB RAMP TYPE 4B1
PLAN VIEW



ISOMETRIC VIEW FOR TYPE 4B



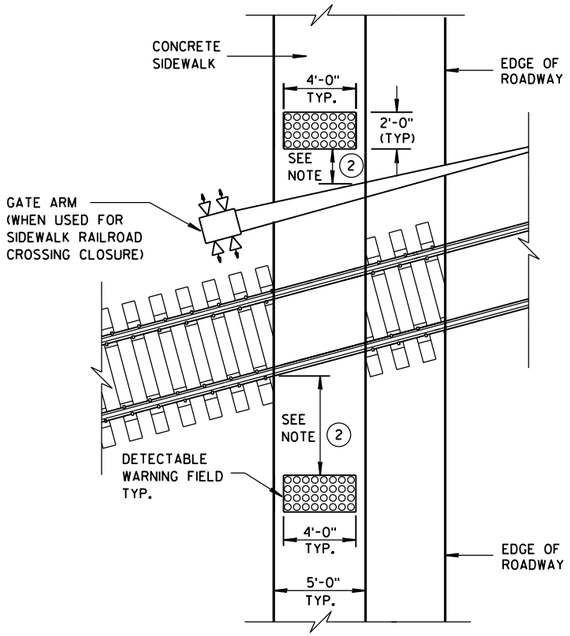
ISOMETRIC VIEW FOR TYPE 4B1

CURB RAMPS TYPE 4B AND 4B1

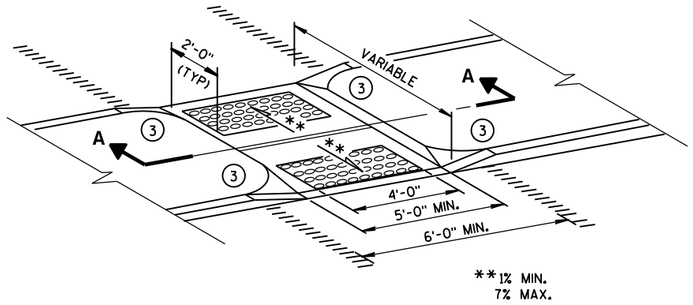
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

S.D.D. 8 D 5-15d



TYPE 8
DETECTABLE WARNINGS AT RAILROAD CROSSING



MEDIAN ISLAND
NON-ELEVATED CROSSING
TYPE 5

GENERAL NOTES

SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

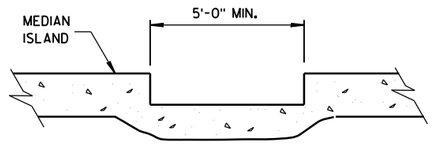
DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(1) SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.

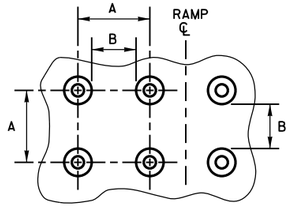
(2) THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO A RAILROAD CROSSING SHALL BE 1.5 FEET ± 0.1' FROM THE FACE OF THE GATE ARM IF THE GATE ARM EXTENDS ACROSS THE SIDEWALK. WHERE THERE IS NO PEDESTRIAN GATE, THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO THE RAILROAD CROSSING SHALL BE 15 FEET FROM THE NEAREST RAIL.

(3) INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS.) DO NOT MARK TRANSITION NOSE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.



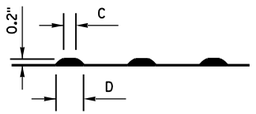
SECTION A-A



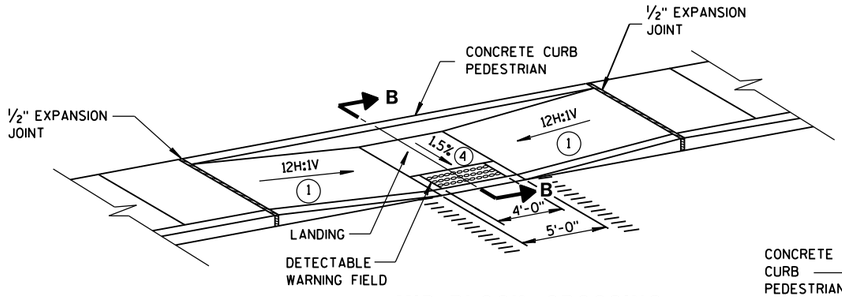
PLAN VIEW

	MIN.	MAX.
A	1.6"	2.4"
B	0.65"	1.5"
C	*	*
D	0.9"	1.4"

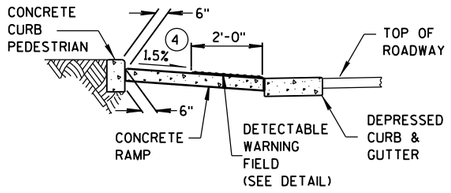
* THE C DIMENSION IS 50% TO 65% OF THE D DIMENSION.



ELEVATION VIEW

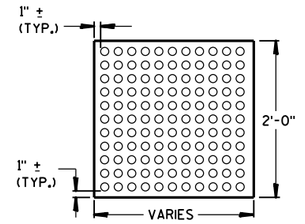


MID-BLOCK CROSSING
TYPE 7A



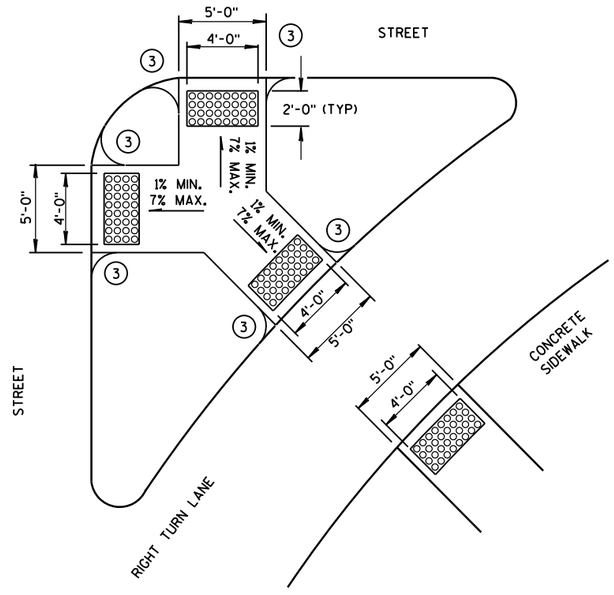
SECTION B-B

TRUNCATED DOMES
DETECTABLE WARNING PATTERN DETAIL

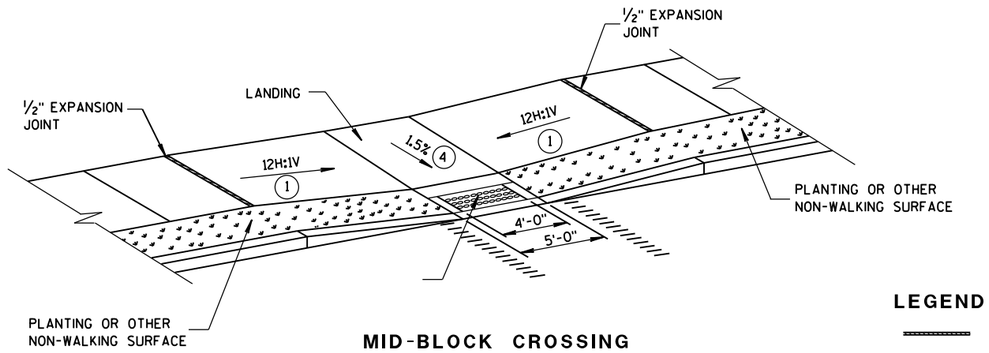


PLAN VIEW

DETECTABLE WARNING FIELD (TYPICAL)



TYPE 6
DETECTABLE WARNING AT ISLANDS



MID-BLOCK CROSSING
TYPE 7B

NOTE: THESE PARALLEL AND PARALLEL/PERPENDICULAR CURB RAMPS MAY BE USED AT INTERSECTIONS AND MID BLOCK LOCATIONS.

LEGEND

- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS
TYPES 5, 6, 7A, 7B & 8

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
2-6-2013 DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

6

S.D.D. 8 D 5-15e

6

S.D.D. 8 D 5-15e

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) UNPERFORATED PIPE UNDERDRAIN AND FITTINGS FURNISHED FOR OUTFALL PIPE SHALL MEET THE REQUIREMENTS OF ONE OF THE FOLLOWING SPECIFICATIONS:

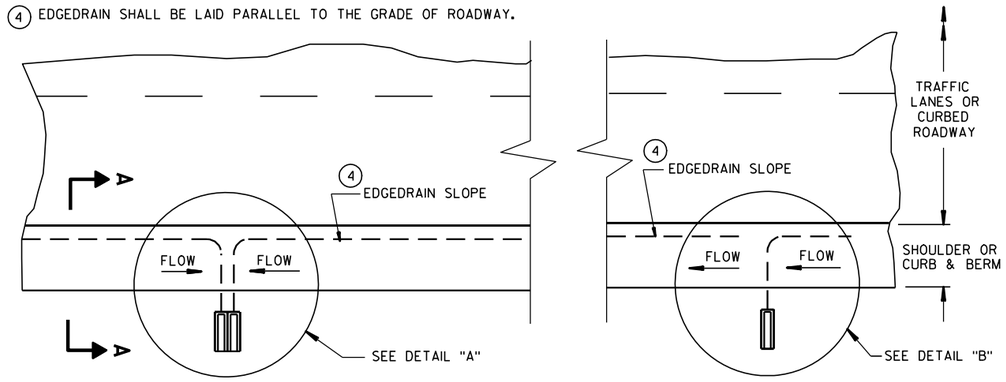
POLYVINYL CHLORIDE (PVC) PLASTIC DRAIN, WASTE, AND VENT PIPE AND FITTINGS, ASTM D 2665, SCHEDULE 40 PVC.

TYPE PSM POLYVINYL CHLORIDE (PVC) SEWER PIPE AND FITTINGS, ASTM D 3034, SDR 23.5 PVC SEWER PIPE.

(2) MAXIMUM SPACING OF EDGEDRAIN OUTLETS SHALL BE 250 FEET UNLESS OTHERWISE SPECIFIED IN THE CONTRACT OR DIRECTED BY THE ENGINEER.

(3) EDGEDRAIN SHALL BE CONNECTED TO INLETS REGARDLESS OF FLOW DIRECTION FOR DRAINAGE AND MAINTENANCE ACCESS.

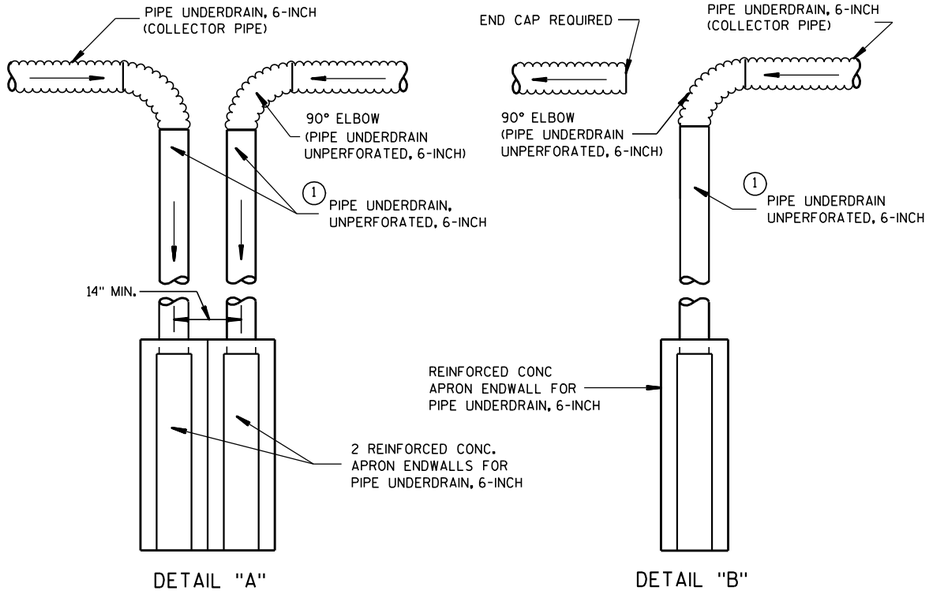
(4) EDGEDRAIN SHALL BE LAID PARALLEL TO THE GRADE OF ROADWAY.



PLAN VIEW

ROADWAY WITH SHOULDERS OR CURBS

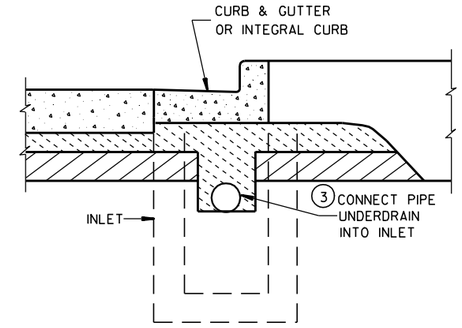
(EDGEDRAIN OUTLETS TO ROADSIDE) (2)



DETAIL "A"
TO BE USED AT LOW POINT LOCATIONS

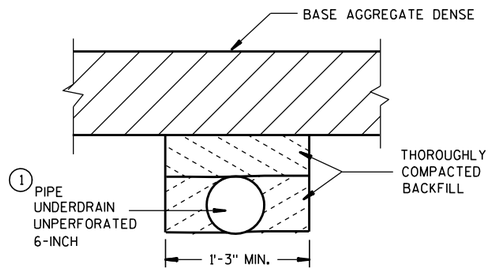
DETAIL "B"
TO BE USED AT INTERMEDIATE LOCATIONS

TYPICAL DRAIN OUT DETAILS



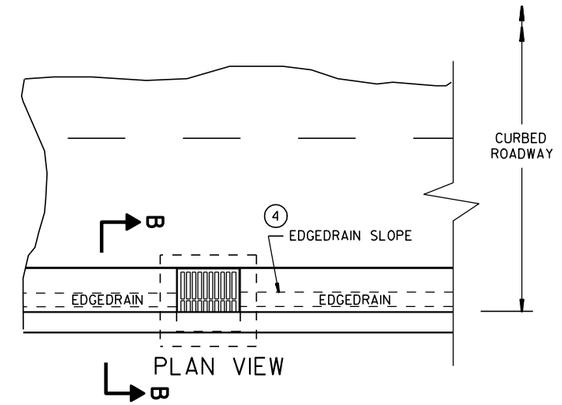
SECTION B-B

URBAN CROSS SECTION



SECTION C-C

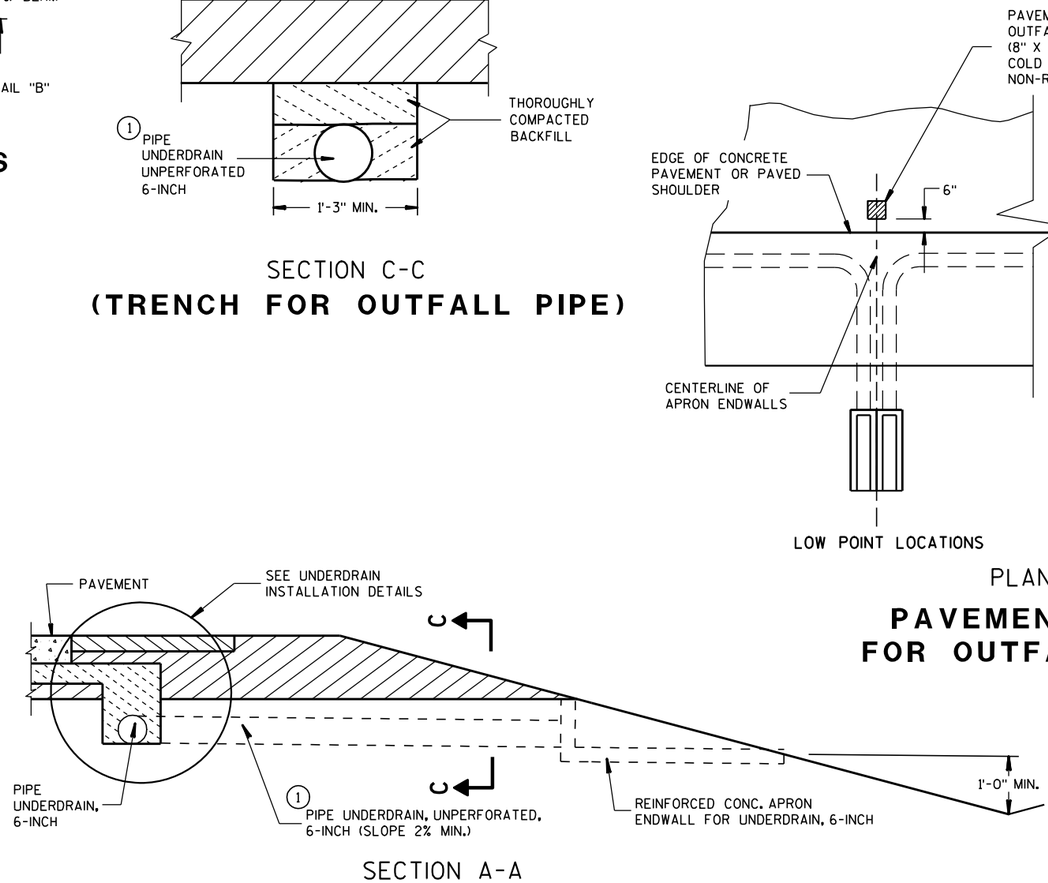
(TRENCH FOR OUTFALL PIPE)



PLAN VIEW

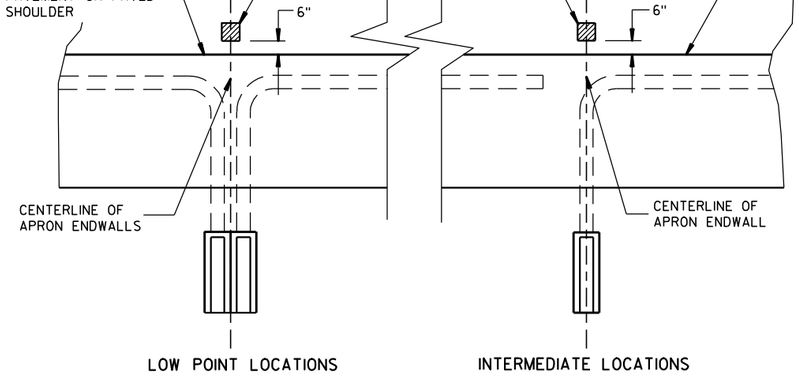
ROADWAY WITH CURBS

(EDGEDRAIN CONNECTS INTO INLET STRUCTURE)



SECTION A-A

RURAL CROSS SECTION



PLAN VIEW

PAVEMENT MARKING FOR OUTFALL MARKERS

EDGEDRAIN OUTLET AND OUTFALL MARKERS

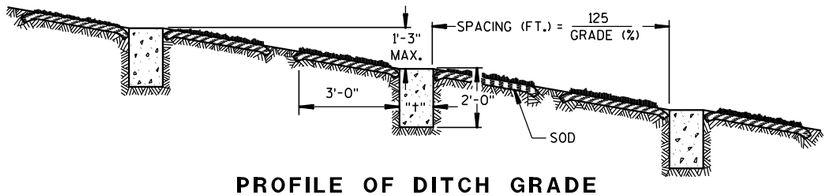
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

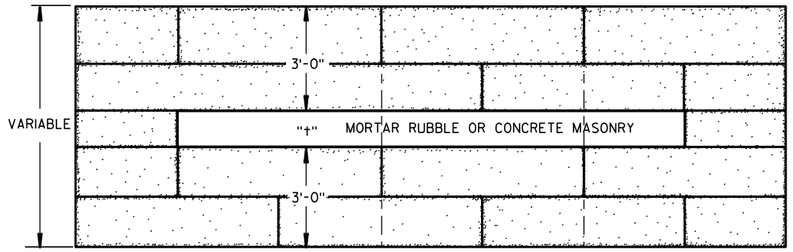
S.D.D. 8 D 15-4a

6

S.D.D. 8 D 15-4a

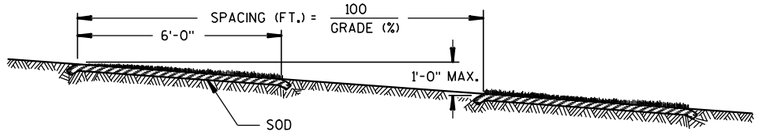


PROFILE OF DITCH GRADE

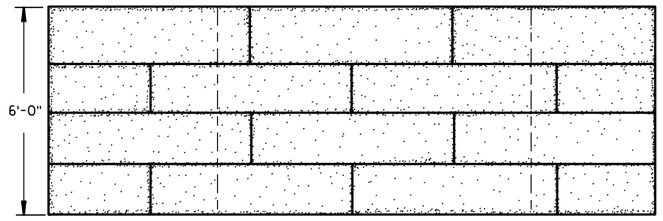


PLAN VIEW SHOWING MASONRY AND SOD

"+" - MASONRY THICKNESS SHALL BE 0'-9" FOR CONCRETE AND 1'-0" FOR MORTAR RUBBLE.



PROFILE OF DITCH GRADE



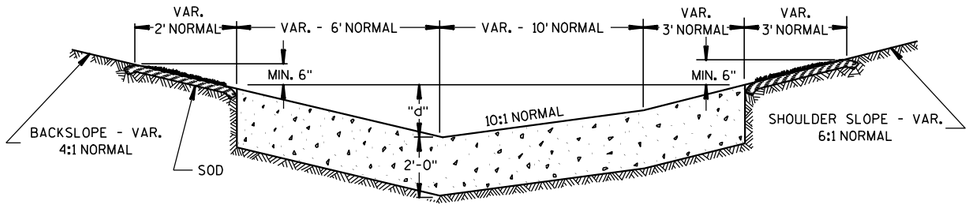
PLAN VIEW SHOWING SOD

GENERAL NOTES

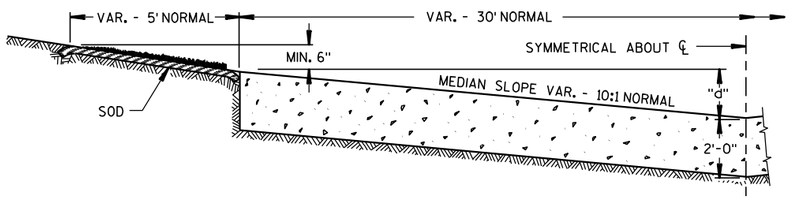
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

ALTERNATE DESIGNS FOR DITCH CHECKS, OF THE MATERIAL OR COMBINATION OF MATERIALS SHOWN HEREON, MAY BE USED UPON WRITTEN PERMISSION OF THE ENGINEER.

SOD STRIPS FOR DITCH CHECKS MAY BE PLACED EITHER TRANSVERSELY OR LONGITUDINALLY TO THE DIRECTION OF WATER FLOW.



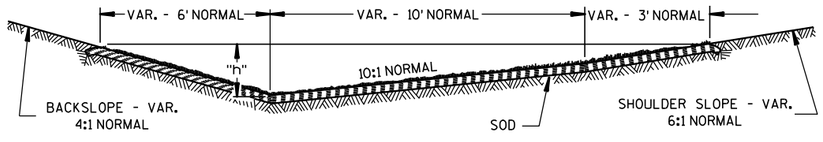
SIDE DITCH CROSS SECTION



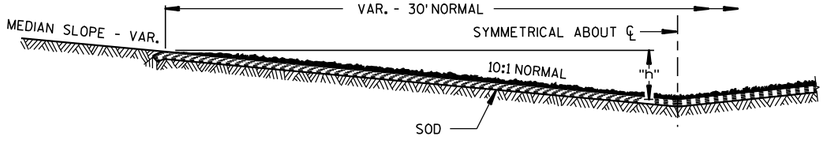
MEDIAN DITCH CROSS SECTION

"d" - THE MINIMUM DEPTH OF THE MASONRY PORTION OF THE DITCH CHECKS SHALL BE EQUAL TO THE MAXIMUM DEPTH OF FLOW. THE NORMAL "d" WILL BE 1'-6".

MASONRY AND SOD DITCH CHECKS



SIDE DITCH CROSS SECTION



MEDIAN DITCH CROSS SECTION

"h" - THE MINIMUM HEIGHT OF DITCH TO BE SODDED SHALL BE EQUAL TO THE MAXIMUM DEPTH OF FLOW PLUS 6". THE NORMAL "h" WILL BE 1'-6".

SOD DITCH CHECKS

SOD OR MASONRY AND SOD DITCH CHECKS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

9/7/71 — DATE

/S/ L.C. Harris — ACTING CHIEF DESIG

FHWA

6

S.D.D. 8 E 4-2

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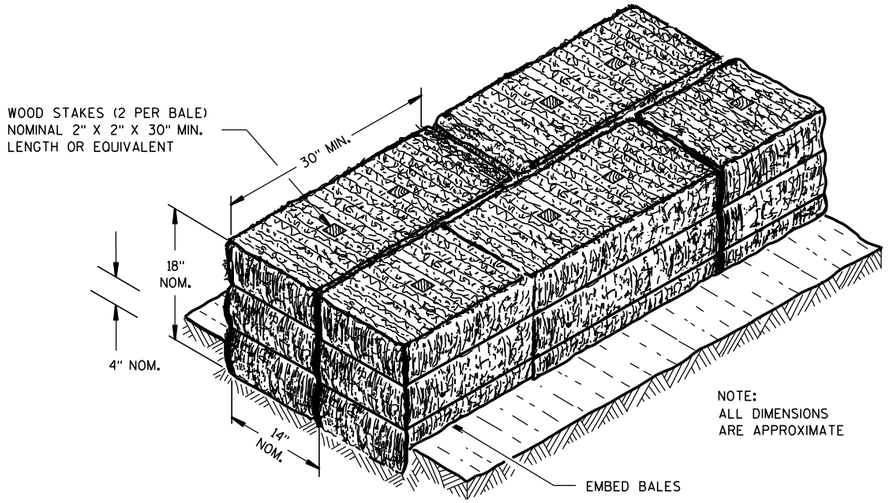
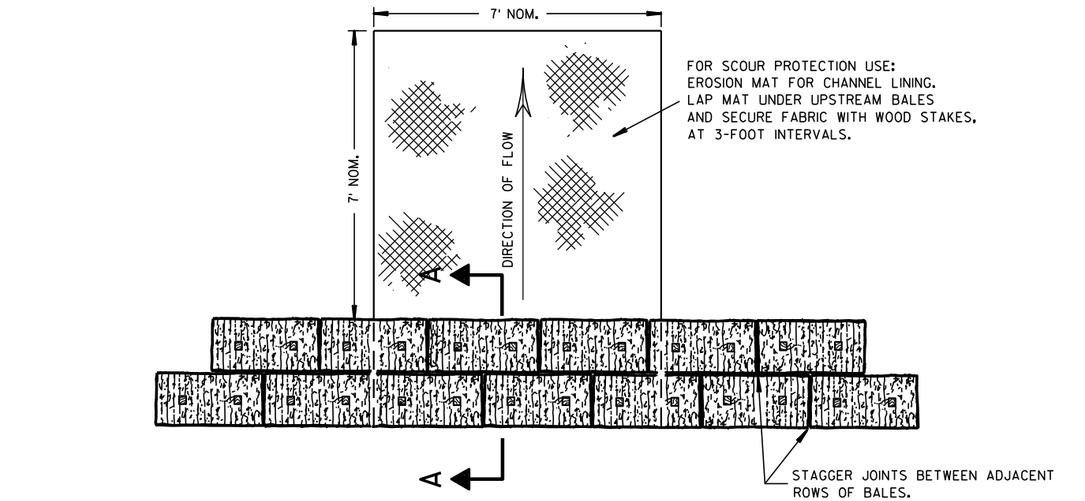
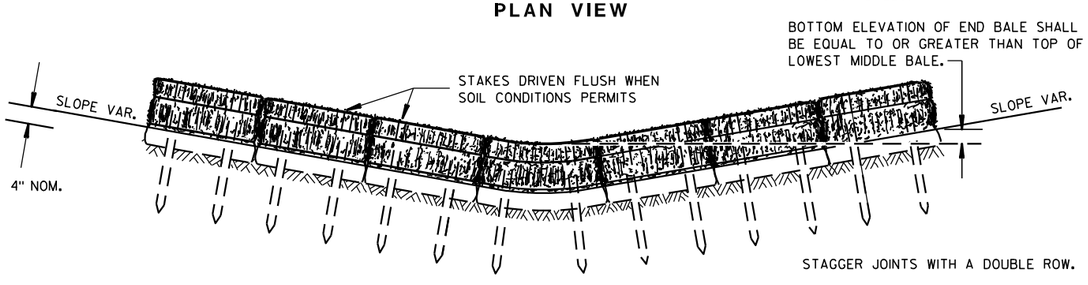
S.D.D. 8 E 4-2



SECTION A-A



PLAN VIEW



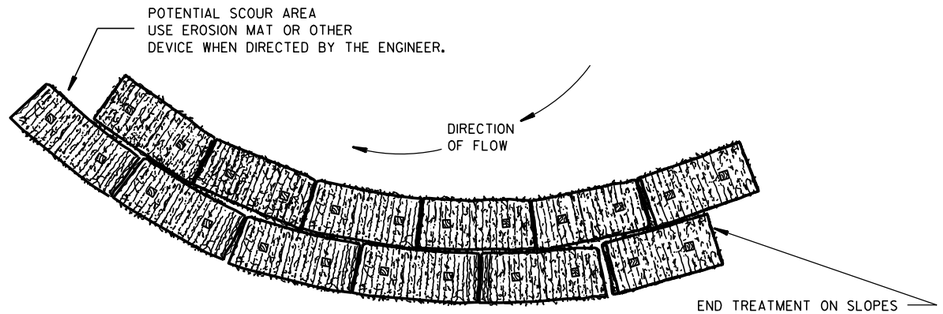
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES ①

GENERAL NOTES

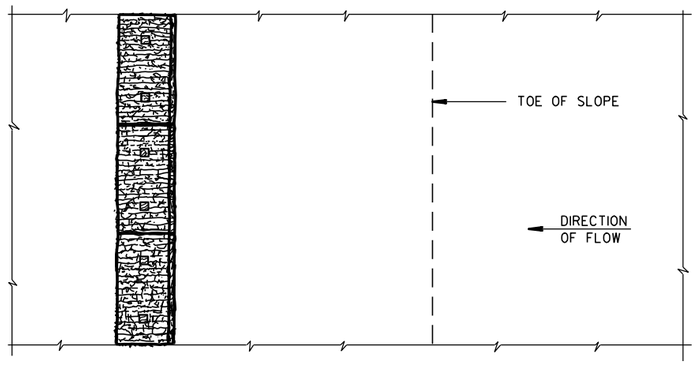
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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.

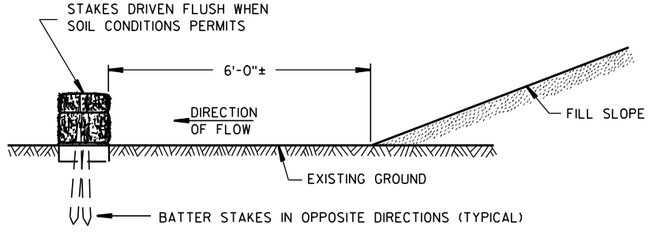


PLAN VIEW

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

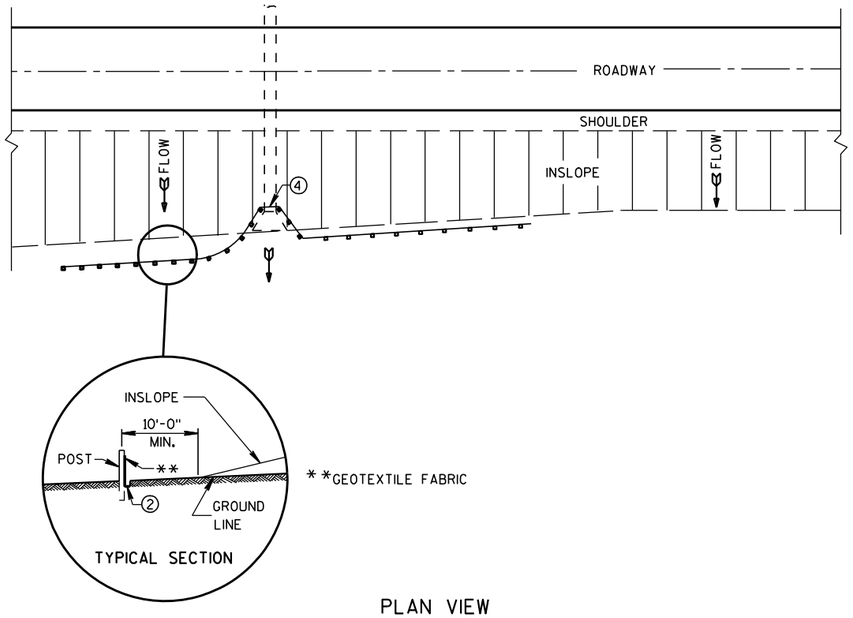
APPROVED
6/04/02 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6

S.D.D. 8 E 8-3

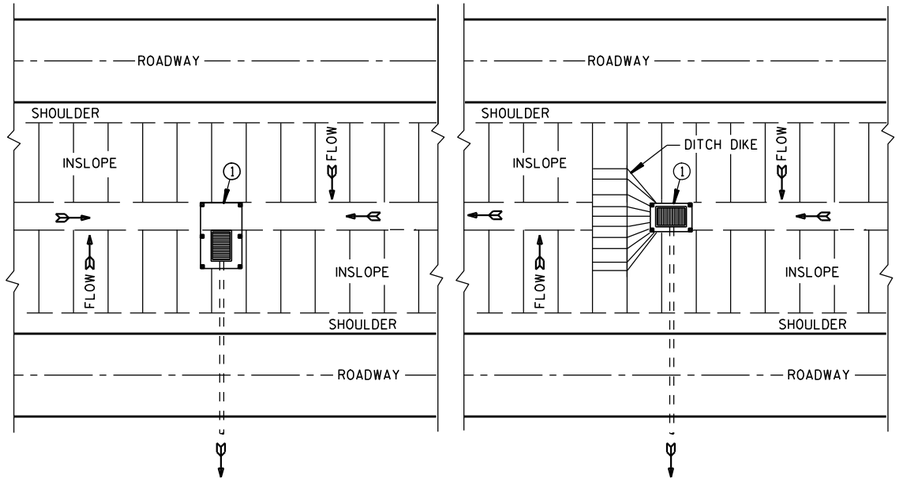
6

S.D.D. 8 E 8-3



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



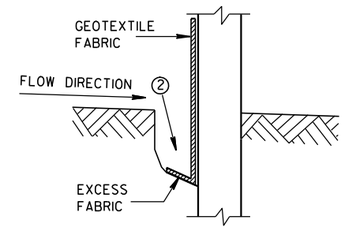
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

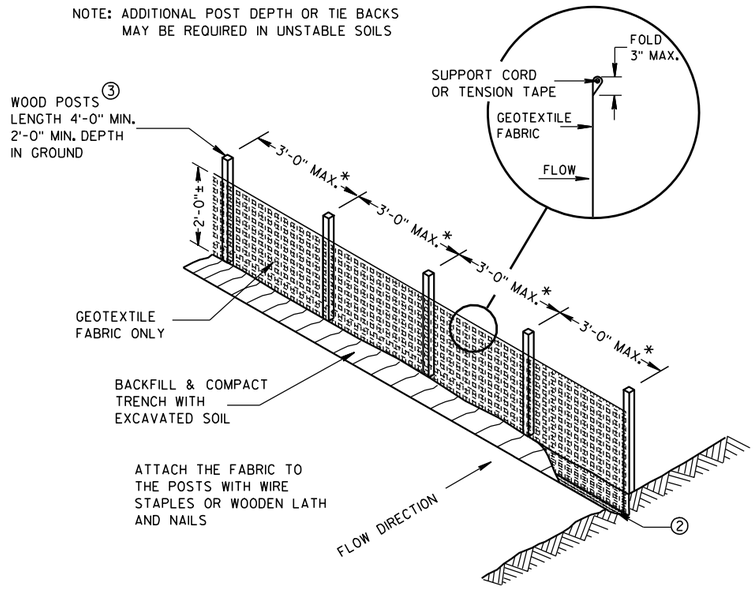
GENERAL NOTES

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

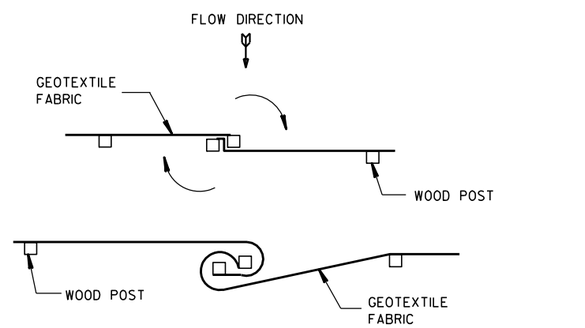
1. HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
2. FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
3. WOOD POSTS SHALL 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.



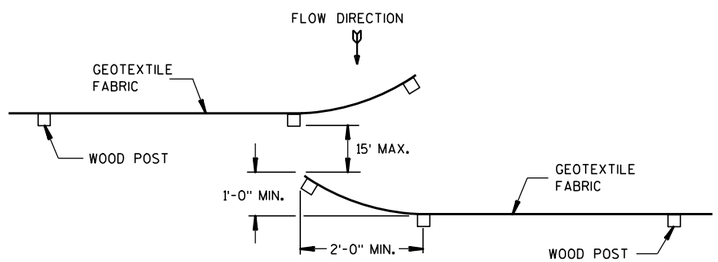
TRENCH DETAIL



SILT FENCE

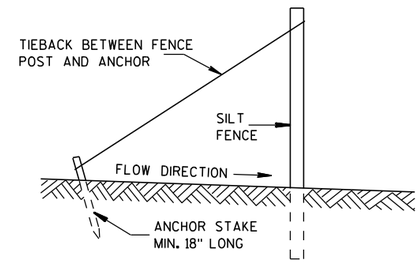


TWIST METHOD



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

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S.D.D. 8 E 9-6

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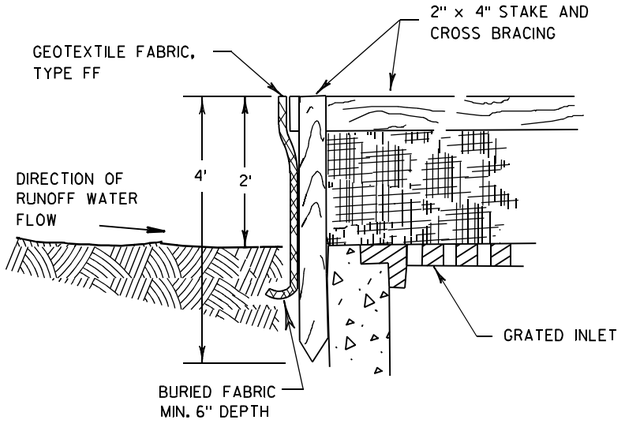
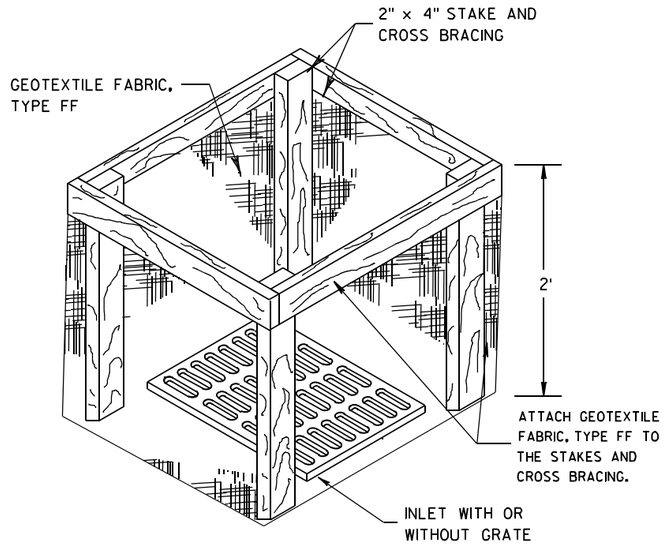
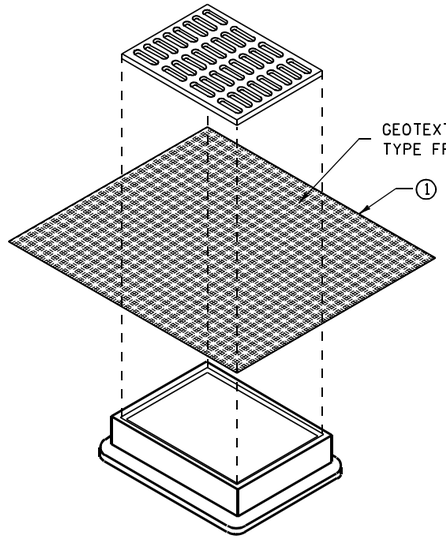
S.D.D. 8 E 9-6



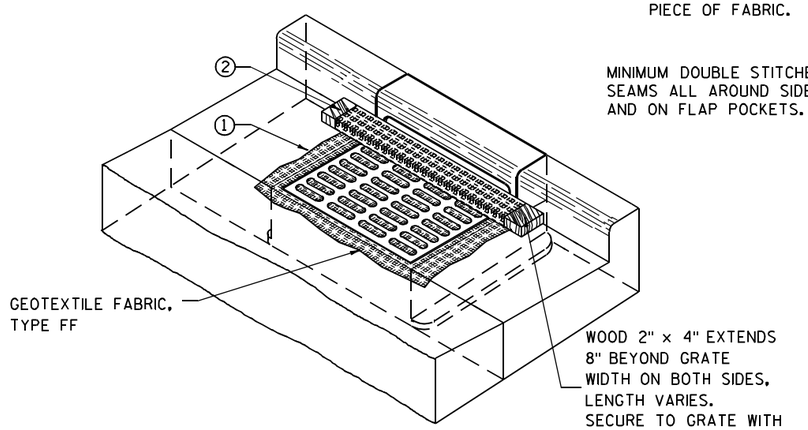


INLET PROTECTION, TYPE A

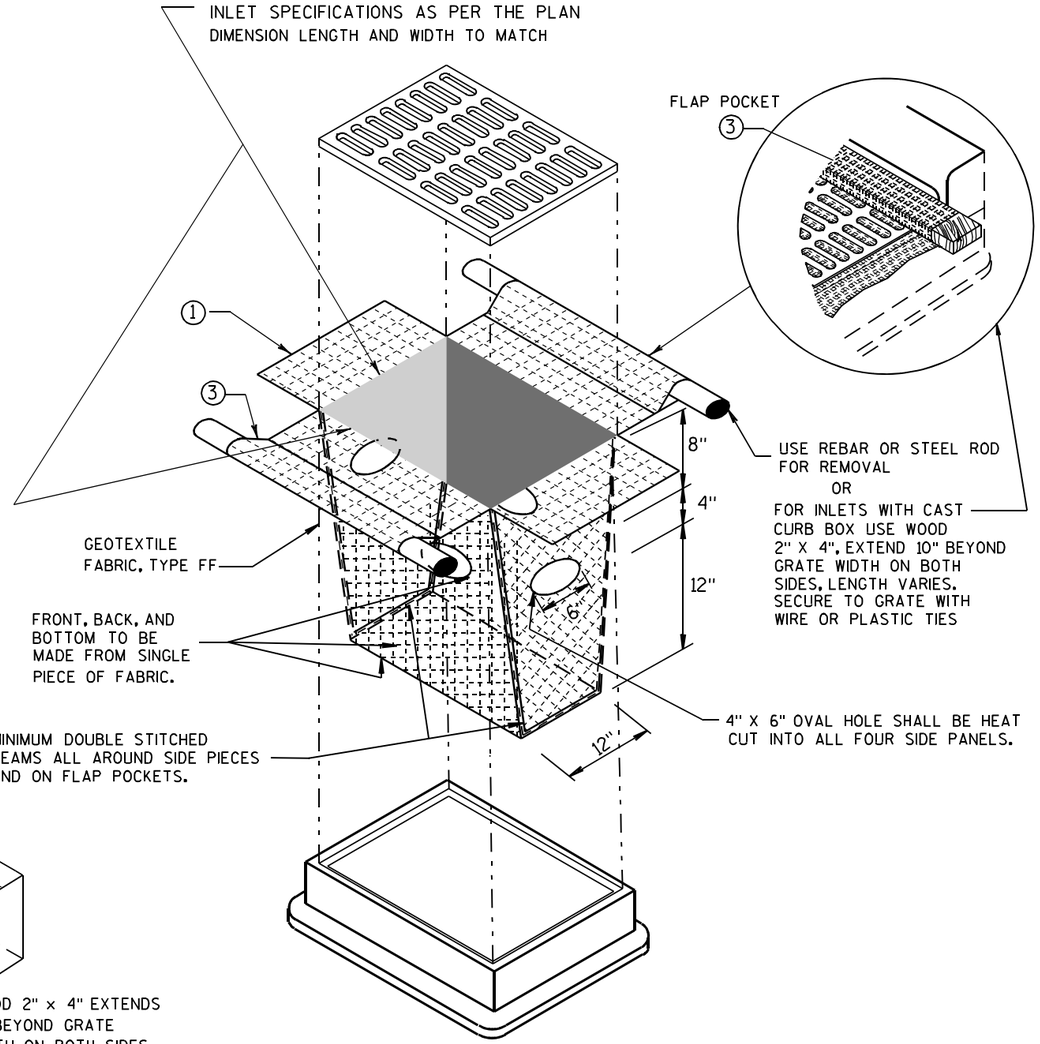


INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

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



INLET PROTECTION, TYPE C (WITH CURB BOX)



INLET PROTECTION, TYPE D

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

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

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S.D.D. 8 E 10-2

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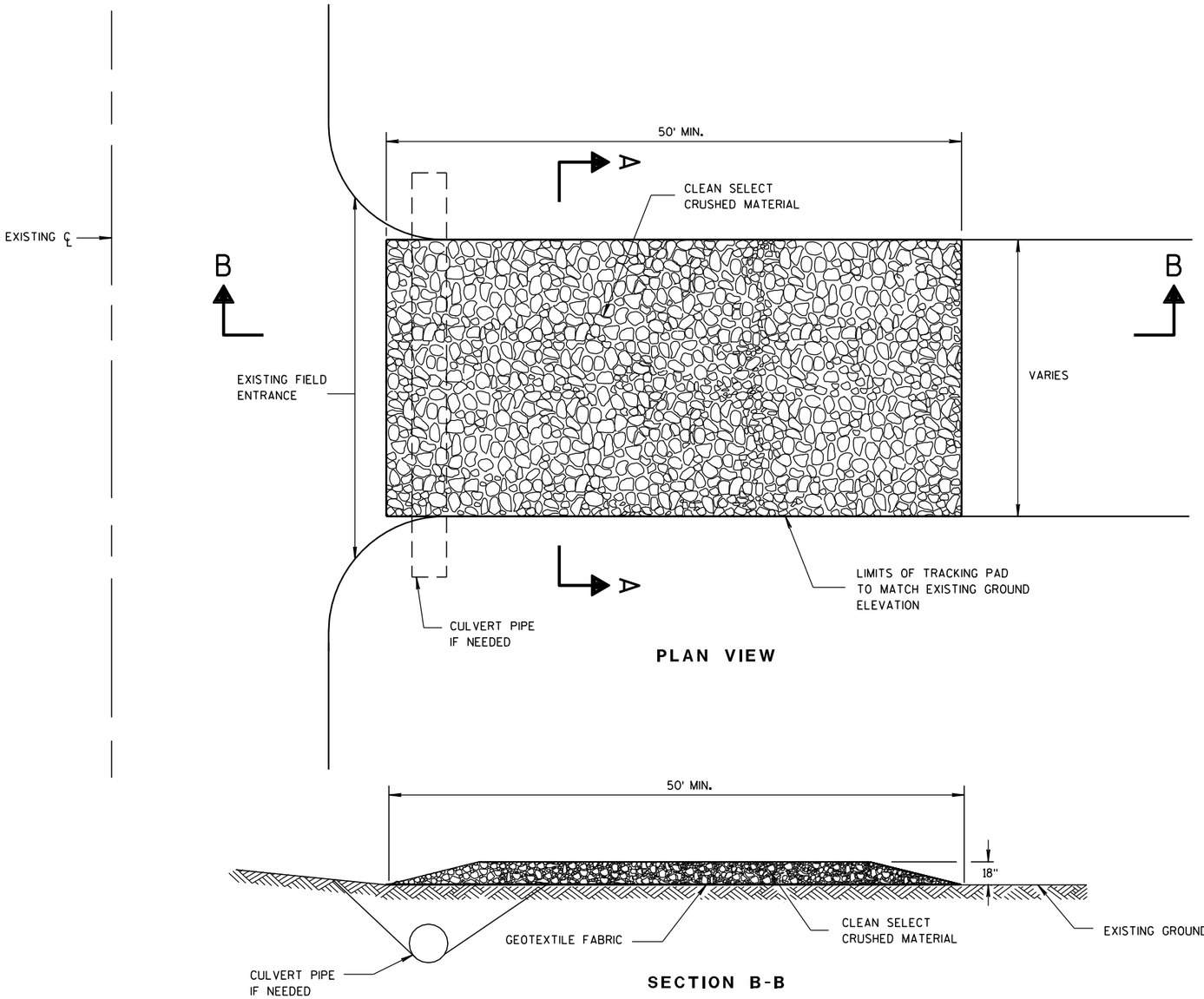
S.D.D. 8 E 10-2



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.

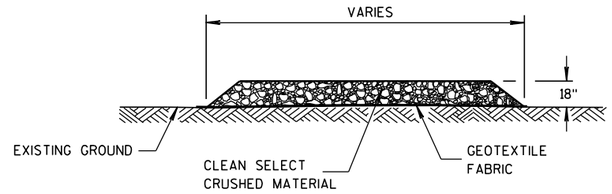
TRACKING PAD TO BE REMOVED AFTER CONSTRUCTION IS COMPLETED.

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 FHWA	/S/ Jerry H. Zoda ROADWAY STANDARDS ENGINEER

6

S.D.D. 8 E 14-1

6

S.D.D. 8 E 14-1

METAL APRON ENDWALLS

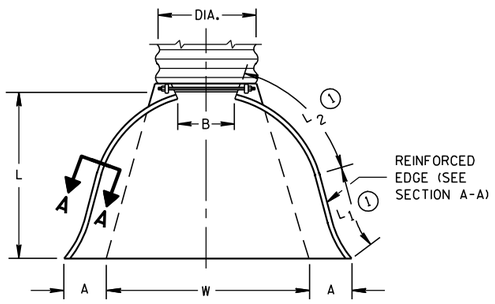
PIPE DIA. (IN.)	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4	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

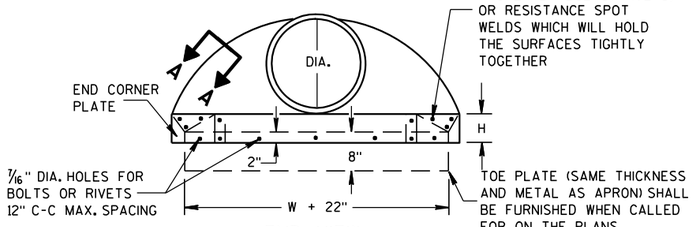
REINFORCED CONCRETE APRON ENDWALLS

PIPE DIA. (IN.)	DIMENSIONS (Inches) T	A	B	C	D	E	G	APPROX. SLOPE
12	2	4	24	48 7/8	72 1/8	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

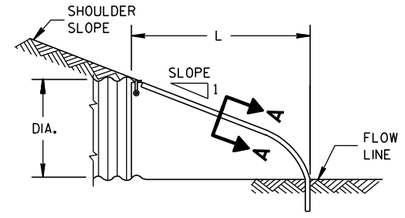
*MINIMUM
**MAXIMUM



PLAN VIEW

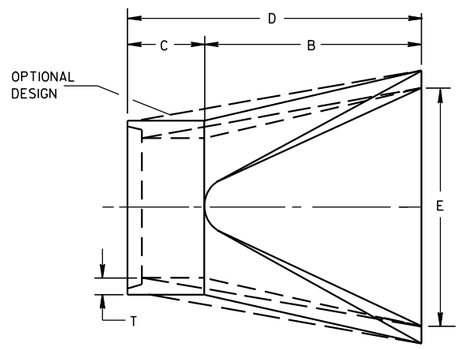


END VIEW

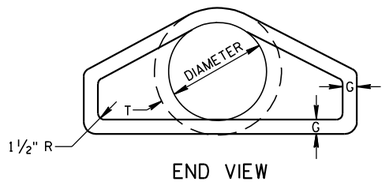


SIDE ELEVATION

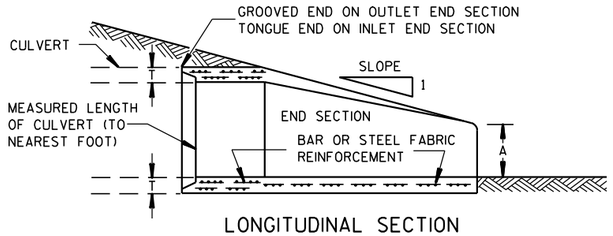
METAL ENDWALLS



PLAN

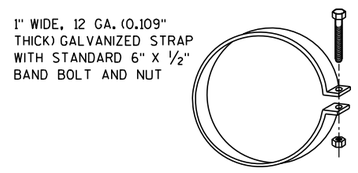


END VIEW



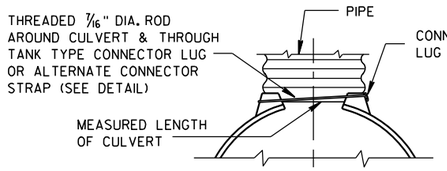
LONGITUDINAL SECTION

CONCRETE ENDWALLS

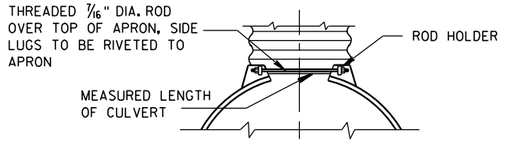


ALTERNATE FOR TYPE 1 CONNECTION

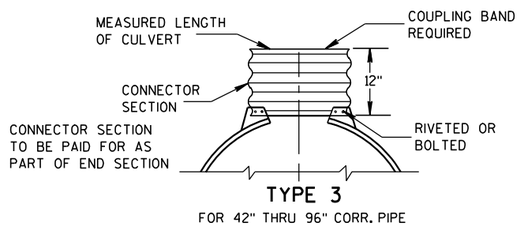
END SECTION CONNECTOR STRAP



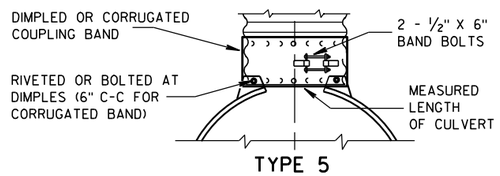
TYPE 1
FOR 12" THRU 24" CORR. PIPE



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

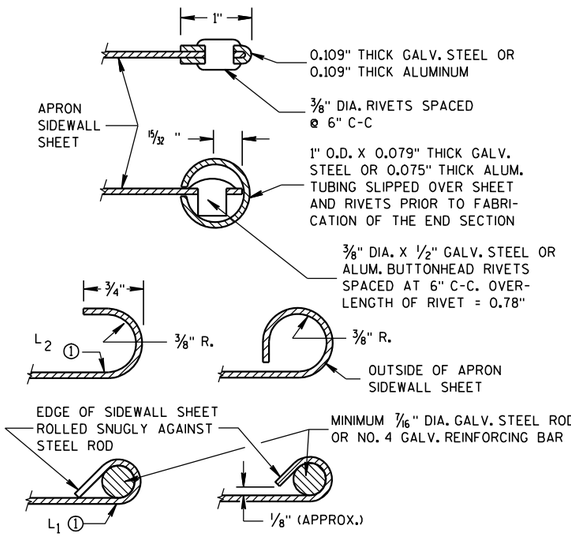
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

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.

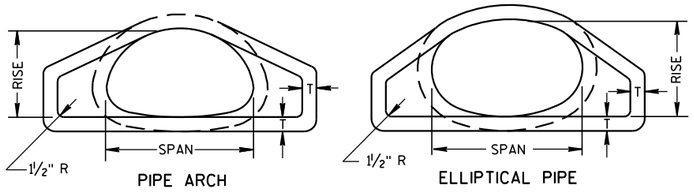
APRON ENDWALLS FOR CULVERT PIPE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

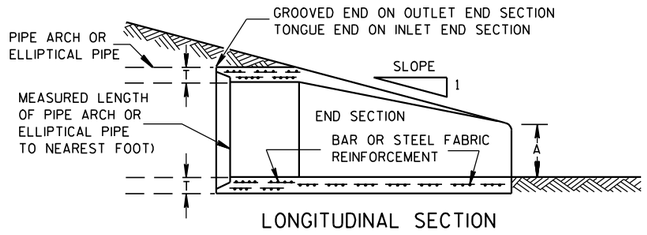
APPROVED
11/30/94 DATE
/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOP 287 NEER
FHWA

6

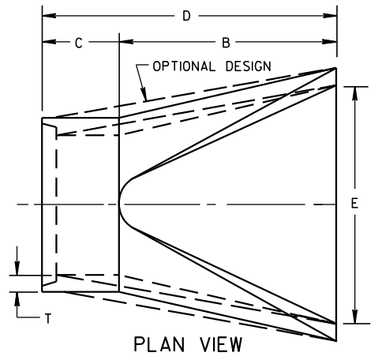
S.D.D. 8 F 1-11



END VIEW

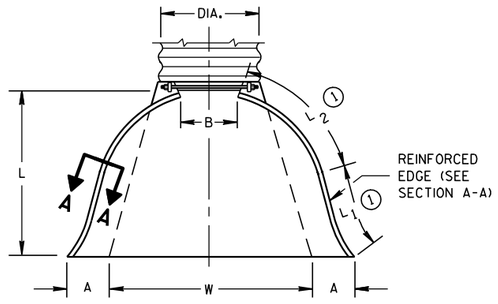


LONGITUDINAL SECTION

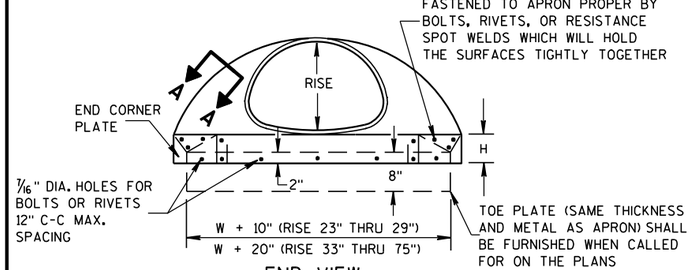


PLAN VIEW

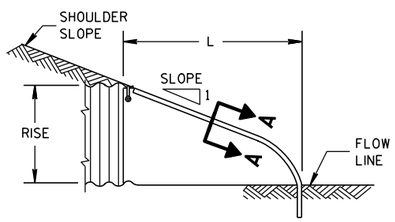
CONCRETE ENDWALLS



PLAN VIEW

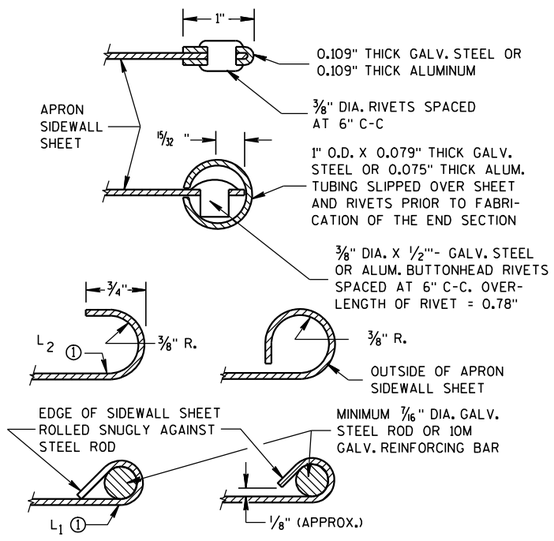


END VIEW



SIDE ELEVATION

METAL ENDWALLS



SECTION A-A

2- 2/3" X 1/2" CORRUGATIONS

EQUIV. DIA. (Inches)	(Inches) SPAN	(Inches) RISE	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
15	17	13	.064	.060	7	9	6	19	14	16	30	2½ to 1	1 Pc.
18	21	15	.064	.060	7	10	6	23	14	19⅜	36	2½ to 1	1 Pc.
21	24	18	.064	.060	8	12	6	28	18	21¾	42	2½ to 1	1 Pc.
24	28	20	.064	.060	9	14	6	32	18	27½	48	2½ to 1	1 Pc.
30	35	24	.079	.075	10	16	6	39	18	37⅝	60	2½ to 1	1 Pc.
36	42	29	.079	.075	12	18	8	46	24	45⅜	75	2½ to 1	1 Pc.
42	49	33	.109	.105	13	21	9	53	24	54¾	85	2½ to 1	2 Pc.
48	57	38	.109	.105	18	26	12	63	24	68	90	2½ to 1	3 Pc.
54	64	43	.109	.105	18	30	12	70	24	72¾	102	2¼ to 1	3 Pc.
60	71	47	.109*	.105*	18	33	12	77	30	82¼	114	2¼ to 1	3 Pc.
66	77	52	.109*	.105*	18	36	12	77	—	—	126	2 to 1	3 Pc.
72	83	57	.109*	.105*	18	39	12	77	—	—	138	2 to 1	3 Pc.

3" X 1" CORRUGATIONS

EQUIV. DIA. (Inches)	(Inches) SPAN	(Inches) RISE	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
48	53	41	.109	.105	18	26	12	63	24	72¾	90	2½ to 1	2 Pc.
54	60	46	.109	.105	18	30	12	70	30	82¼	102	2 to 1	2 Pc.
60	66	51	.109*	.105*	18	33	12	77	—	—	114	1½ to 1	3 Pc.
66	73	55	.109*	.105*	18	36	12	77	—	—	126	1½ to 1	3 Pc.
72	81	59	.109*	.105*	18	39	12	77	—	—	138	2 to 1	3 Pc.
78	87	63	.109*	.105*	22	38	12	77	—	—	148	1½ to 1	3 Pc.
84	95	67	.109*	.105*	22	34	12	77	—	—	162	1½ to 1	3 Pc.
90	103	71	.109*	.105*	22	38	12	77	—	—	174	1½ to 1	3 Pc.
96	112	75	.109*	.105*	24	40	12	77	—	—	174	1½ to 1	3 Pc.

NOTE: ALL SPLICES TO BE LAP RIVETED OR BOLTED.

* EXCEPT CENTER PANEL SEE GENERAL NOTES

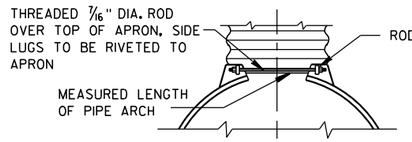
REINFORCED CONCRETE PIPE ARCH

EQUIV. DIA. (Inches)	DIMENSIONS (Inches) ** SPAN	** RISE	T	A	B	C	D	E	APPROX. SLOPE
24	29	18	3	8½	39	33	72	48	3 to 1
30	36	22	3½	9½	50	46	96	60	3 to 1
36	44	27	4	11⅛	60	36	96	72	3 to 1
42	51	31	4½	15 13/16	60	36	96	78	3 to 1
48	58	36	5	21	60	36	96	84	3 to 1
54	65	40	5½	25½	60	36	96	90	3 to 1
60	73	45	6	31	60	36	96	96	3 to 1
72	88	54	7	31	60	39	99	120	2 to 1
84	102	62	8	28½	83	19	102	144	2 to 1

REINFORCED CONCRETE ELLIPTICAL PIPE

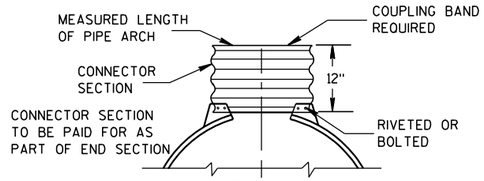
EQUIV. DIA. (Inches)	DIMENSIONS (Inches) ** SPAN	** RISE	T	A	B	C	D	E	APPROX. SLOPE
24	30	19	3¼	8½	39	33	72	48	3 to 1
30	38	24	3¾	9½	54	18	72	60	3 to 1
36	45	29	4½	11⅛	60	24	84	72	2½ to 1
42	53	34	5	15¾	60	36	96	78	2½ to 1
48	60	38	5½	21	60	36	96	84	2½ to 1
54	68	43	6	25½	60	36	96	90	2½ to 1
60	76	48	6½	30	60	36	96	96	2½ to 1

**NOMINAL SIZE



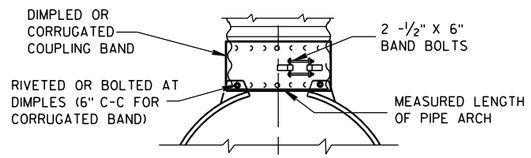
TYPE 2

FOR 17" X 13" THRU 112" X 75" PIPE ARCH



TYPE 3

FOR 64" X 43" THRU 112" X 75" PIPE ARCH



TYPE 5

ALTERNATE FOR:

ALL SIZES CORRUGATED PIPE ARCHES

NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL, AND CORRUGATED BAND FITS INSIDE ENDWALL.

CONNECTION DETAILS

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

ALL THREE PIECE STEEL APRON ENDWALLS FOR 66" X 51" PIPE ARCH AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 66" X 51" PIPE ARCH 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 ARCH 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 77" X 52" THROUGH 112" X 75" 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 ARCH SIZES UP TO 73" X 55" A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR PIPE ARCH AND ELLIPTICAL 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 2-1

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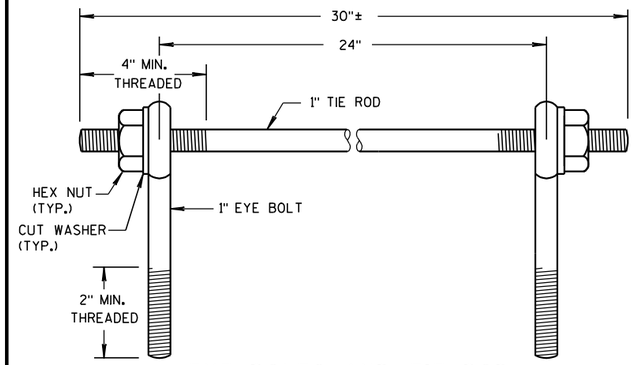
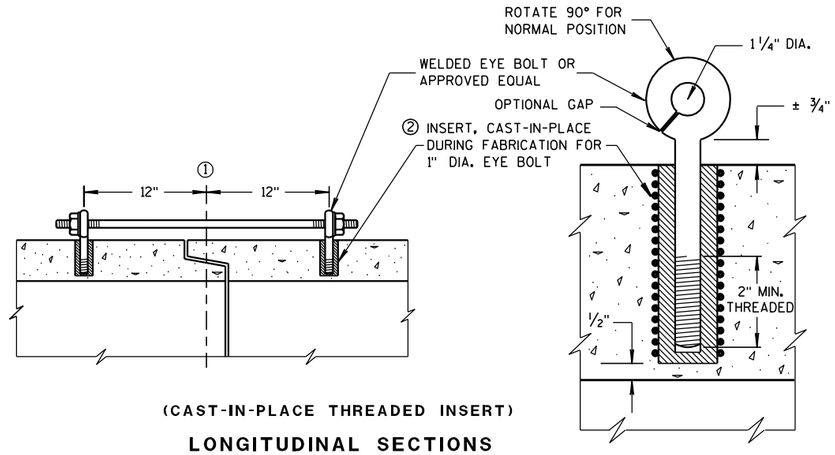
S.D.D. 8 F 2-1



EYE BOLTS AND TIE ROD



(CAST-IN-PLACE THREADED INSERT)

LONGITUDINAL SECTIONS

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 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 APPLICABLE SPECIAL PROVISIONS.

CONCRETE CULVERT AND STORM SEWER PIPE SHALL BE TIED TOGETHER IN THE MANNER ILLUSTRATED BY THIS DETAIL AT LOCATIONS DESIGNATED IN THE STANDARD SPECIFICATIONS AND THE PLAN. THE CONTRACTOR MAY USE EITHER ALTERNATE 1, 2 OR 3 FOR DRAINAGE STRUCTURES. ONLY ALTERNATE 1 AND 3 MAY BE USED FOR CATTLE PASSES, UNLESS OTHERWISE STATED IN THE CONTRACT. THE MATERIALS, FABRICATION AND WORK NECESSARY TO TIE THE PIPE BY THIS DETAIL WILL BE CONSIDERED INCIDENTAL TO THE PIPE AND APRON ENDWALLS IF REQUIRED.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR JOINT TIES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

JOINT TIES TO BE HOT-DIP GALVANIZED PER ASTM A 153.

① ℄ OF TONGUE AND GROOVE OR BELL AND SPIGOT JOINTS.

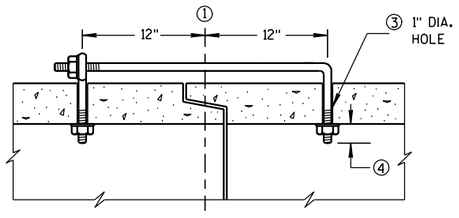
② THE INSIDE OF THE THREADED INSERTS SHALL BE CLEAN TO ALLOW THE INSERTION OF THREADED EYE BOLTS.

③ HOLES SHALL BE CAST-IN-PLACE OR DRILLED 12 INCHES FROM ℄ OF TONGUE AND GROOVE.

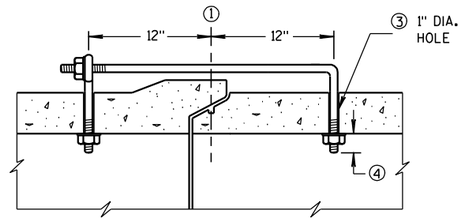
④ BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 2 INCHES.

⑤ OPENING TO BE ROD DIAMETER PLUS 1 INCH.

⑥ LENGTH ADEQUATE TO EXTEND TO WITHIN 1/2 INCH OF THE INNER SURFACE OF THE PIPE.



(TONGUE & GROOVE PIPE)

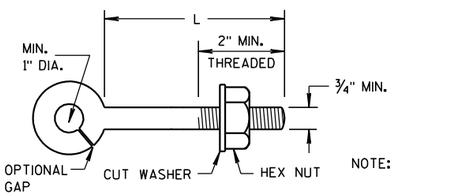


(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

EYE BOLT DIMENSION TABLE

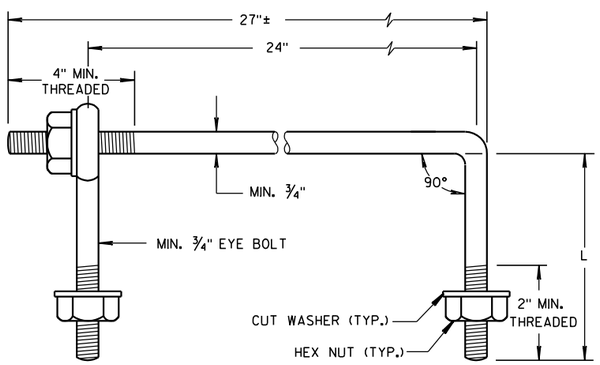
PIPE SIZE	L = LENGTH	
	TONGUE & GROOVE PIPE	MODIFIED BELL PIPE
18" TO 24"	4 1/2"	6 1/4"
30"	5"	7"
36"	5 1/2"	7"
42"	6"	
48"	6 1/2"	
60"	7 1/2"	
66"	8"	



NOTE:

EYE BOLT

NOTE: TWO EYE BOLTS MAY BE USED WITH A 30" LONG THREADED ROD IN LIEU OF THE 90° BENT TIE ROD.



EYE BOLT AND TIE ROD

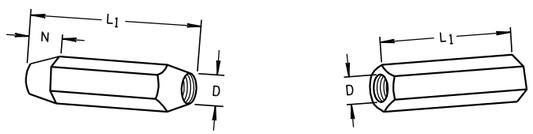
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 2)

ADJUSTABLE TIE ROD TABLE

PIPE DIAMETER	TIE ROD DIAMETER	D	L_1	N
12-60	5/8	5/8	5	1/2
66-84	3/4	3/4	5	1/2
90-108	1	1	7	1 7/16

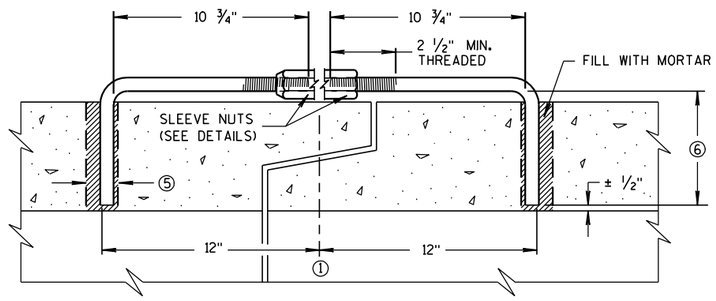
DIMENSIONS SHOWN ARE IN INCHES



TAPERED PLAIN

RIGHT AND LEFT THREADS

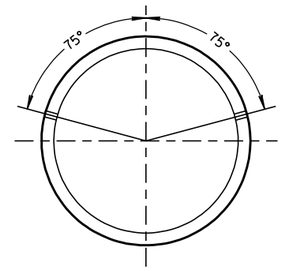
SLEEVE NUTS



LONGITUDINAL SECTION

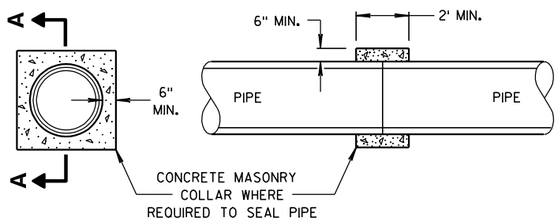
(JOINT TIES FOR 12" TO 108" DIA. CONCRETE PIPE)

ADJUSTABLE TIE ROD (ALTERNATE NO. 3)



PLACEMENT OF (2) CAST-IN-PLACE INSERTS OR HOLES DURING FABRICATION FOR PIPE SECTIONS REQUIRING TIE RODS

TRANSVERSE SECTION



SECTION A-A

CONCRETE COLLAR DETAIL

JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/5/2012 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
289
FHWA

6

S.D.D. 8 F 4-7

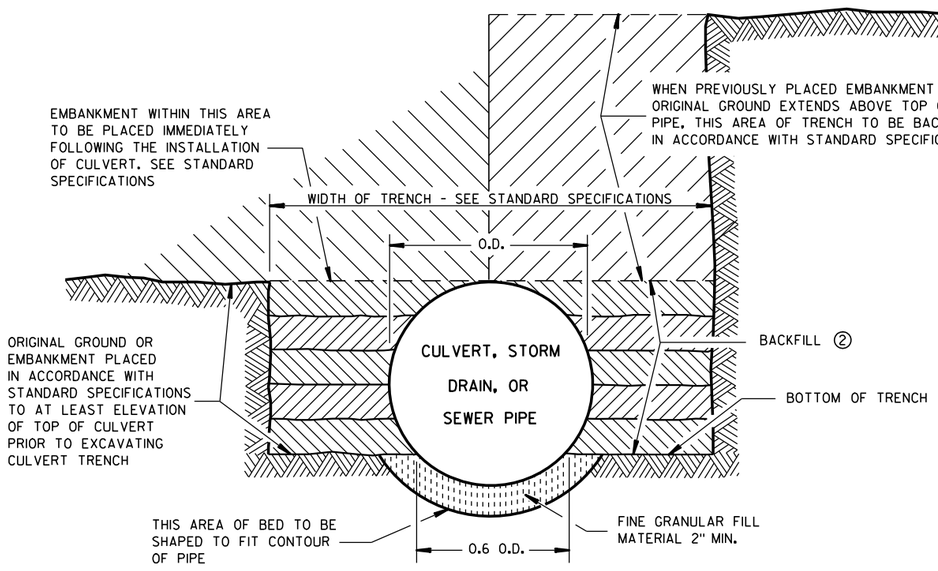
GENERAL NOTES

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

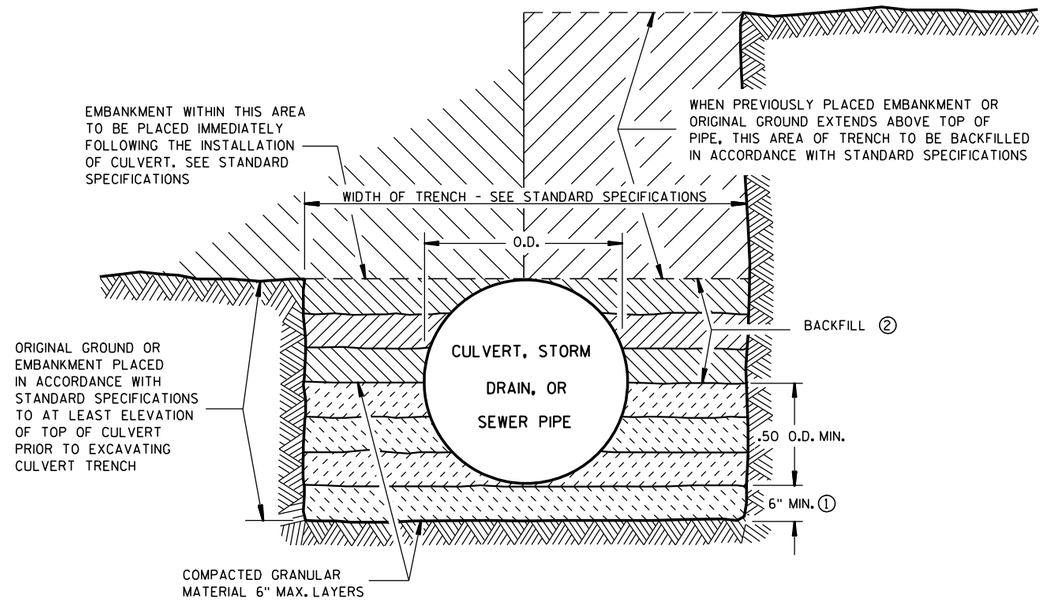
THE SHAPED SUBGRADE WITH GRANULAR FOUNDATION IS AN EQUAL ALTERNATE TO THE GRANULAR FOUNDATION EXCEPT WHERE ROCK IS ENCOUNTERED.

① WHERE ROCK, HARD PAN OR FRAGMENTED MATERIAL IS ENCOUNTERED, THE TRENCH SHALL BE EXCAVATED BELOW THE BOTTOM OF THE PIPE AN AMOUNT EQUAL TO ½ INCH PER FOOT OF PROPOSED EMBANKMENT ABOVE THE TOP OF THE PIPE, BUT NOT LESS THAN 6 INCHES.

② TRENCH SHALL BE BACKFILLED AS REQUIRED BY STANDARD SPECIFICATIONS; SECTION 520 FOR PIPE CULVERTS AND SECTION 607 FOR STORM SEWERS.



SHAPED SUBGRADE WITH GRANULAR FOUNDATION



GRANULAR FOUNDATION

CLASS "B" BEDDING

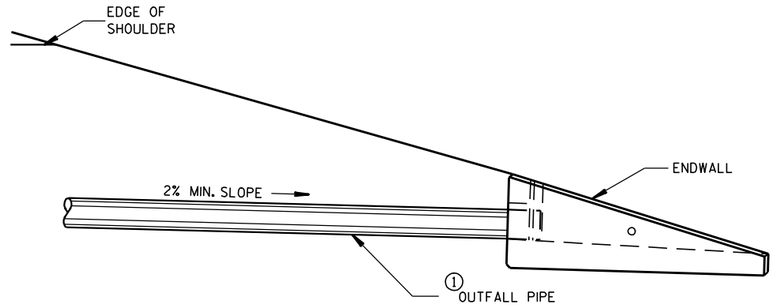
CLASS "B" BEDDING FOR CULVERT PIPE OR STORM SEWER	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
4/7/83 DATE	/S/ D. L. Strand STATE DESIGN ENGINEER
FHWA	HWYS

6

S.D.D. 8 F 5-1

DIMENSIONS IN INCHES											
PIPE DIA.	A	B	C	D	E	F	G	H	J	L	Z
**4	6	12	5 1/4	9	8	32	36	11	2 3/8	6 1/2	4
6	8	14	7 1/4	11	10	42	44	13	3 5/8	8 1/2	6

**APRON ENDWALL FOR 6 INCH DIAMETER PIPE MAY BE SUBSTITUTED FOR THIS SIZE PROVIDED THE HOLE IN THE HEADWALL IS SIZED AND LOCATED TO CONFORM TO THE 4 INCH DIAMETER PIPE DIMENSIONS (C & J)



INSTALLATION 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.

ALTERNATIVE DESIGNS WHICH PROVIDE EQUIVALENT CAPACITY AND STRENGTH MAY BE USED WHEN APPROVED BY THE ENGINEER. ENDWALL MAY BE EITHER PRECAST OR CAST-IN-PLACE CONCRETE.

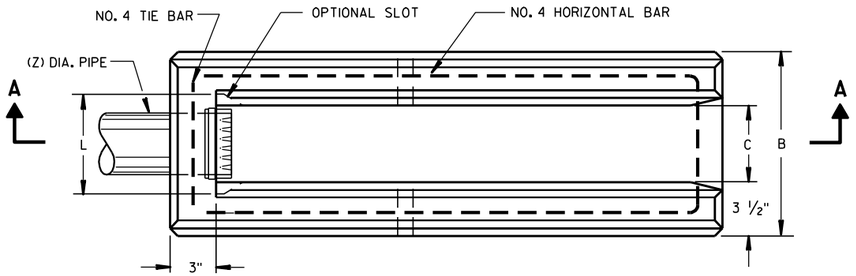
THE UNDERDRAIN PIPE SHALL BE FULLY INSERTED AND SEALED INTO THE ENDWALL WITH CEMENT MORTAR PRIOR TO BACKFILLING AROUND THE STRUCTURE.

THE UPPERMOST POINT OF THE ENDWALL SHALL BE PLACED FLUSH WITH THE ROADWAY SLOPE. ADJACENT EMBANKMENT SLOPES SHALL BE SHAPED TO FIT THE SIDES AND TOE OF THE ENDWALL. EXACT PLACEMENT OF THE OUTFALL PIPE AND ENDWALL SHALL BE DETERMINED BY THE ENGINEER TO MATCH THE ELEVATIONS AND FLOW DIRECTION OF THE ROADSIDE DITCH.

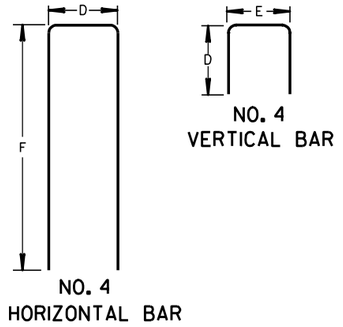
① THE OUTFALL PIPE UNDERDRAIN AND FITTINGS SHALL CONFORM TO THE REQUIREMENTS OF THE SPECIFICATION FOR POLY (VINYL CHORIDE) (PVC) PLASTIC DRAIN, WASTE AND VENT PIPE AND FITTINGS, ASTM DESIGNATION: D 2665, SCHEDULE 40 PVC OR THE STANDARD SPECIFICATION FOR TYPE PSM POLY (VINYL CHORIDE) (PVC) SEWER PIPE AND FITTINGS, ASTM DESIGNATION: D 3034, TYPE PSM SDR 23.5 PVC SEWER PIPE, ALL JOINTS SHALL BE SOLVENT WELDED.

THE OUTFALL PIPE INCLUDING ALL FITTINGS AND THE RODENT SHIELD SHALL BE MEASURED AND PAID FOR AS PIPE UNDERDRAIN UNPERFORATED.

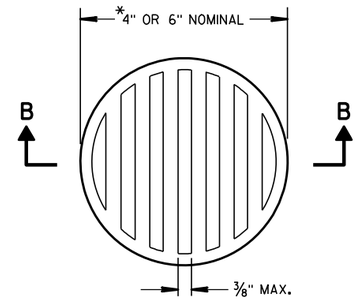
② THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE OUTFALL PIPE. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH STAINLESS STEEL SHEET METAL SCREWS.

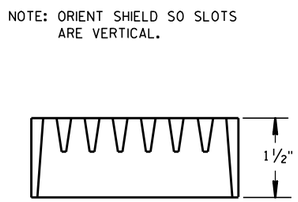


PLAN VIEW



BAR STEEL REINFORCEMENT DETAILS

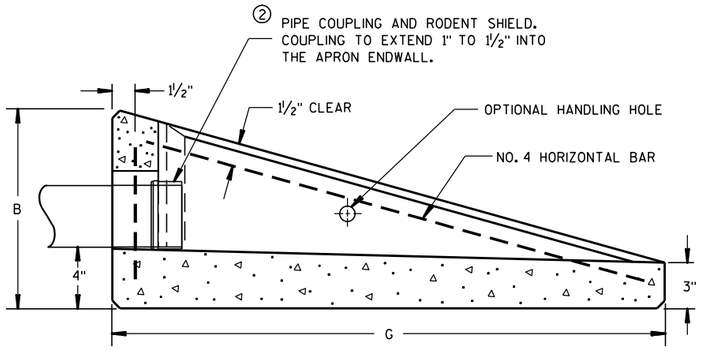




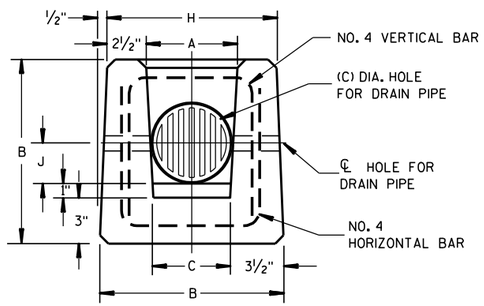
SECTION B-B

② RODENT SHIELD

*NOTE: DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING.



SECTION A-A



END VIEW

CONCRETE APRON ENDWALL FOR UNDERDRAIN

REINFORCED CONCRETE APRON ENDWALL FOR PIPE UNDERDRAIN

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
3/10/98 DATE
/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6

S.D.D. 8 F 6-4

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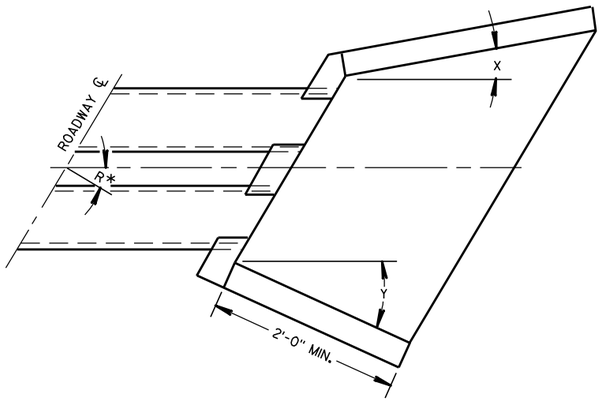
S.D.D. 8 F 6-4



WINGWALL ANGLE DETAILS

INLET			OUTLET		
R*	X	Y	R*	X	Y
0 - 7°	30°	30°	0 - 15°	15°	15°
8 - 22°	25°	"	16 - 45°	10°	"
23 - 37°	20°	"	46 - 75°	5°	"
38 - 52°	15°	"	OVER 75°	0°	"
53 - 67°	10°	"			
68 - 82°	5°	"			
OVER 82°	0°	"			

*R = NUMBER OF DEGREES RIGHT OR LEFT HAND FORWARD

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.

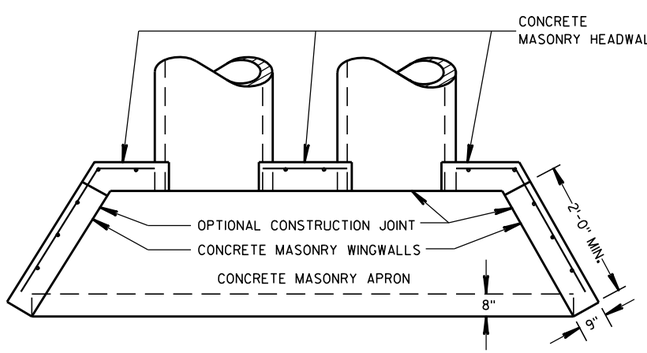
FILL SLOPES FLATTER THAN 2 ½:1 SHALL BE WARPED TO MEET THE TOP OF THE WINGWALLS.

ALL STEEL REINFORCEMENT AND WELDED STEEL WIRE FABRIC SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE NOTED.

(1) MINIMUM REINFORCEMENT SHALL BE 6" X 6" - W4.0 X W4.0 OR NO. 3 BARS SPACED 12" C-C IN BOTH DIRECTIONS.

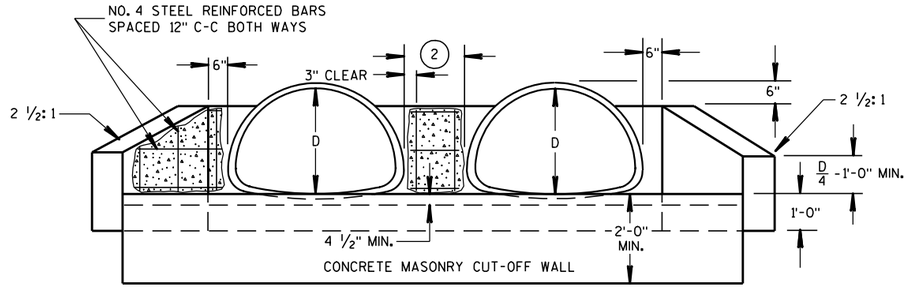
(2) THE SPACE BETWEEN PIPES SHALL BE AS FOLLOWS:

DIAMETER OR SPAN	SPACE
UP TO AND INCLUDING 48"	2'-0"
OVER 48" TO 72"	½ DIA. OR SPAN
OVER 72"	3'-0"



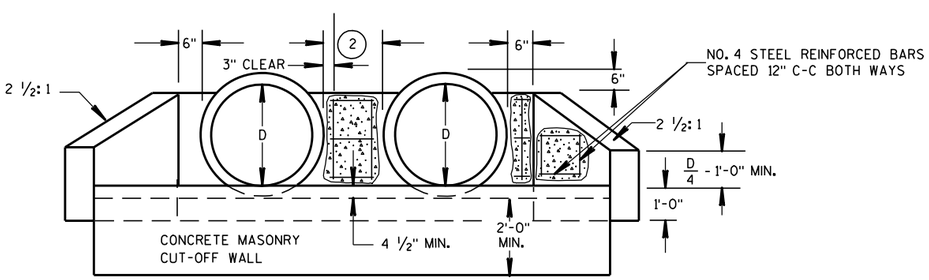
PLAN VIEW

CULVERT PIPE AND PIPE ARCH



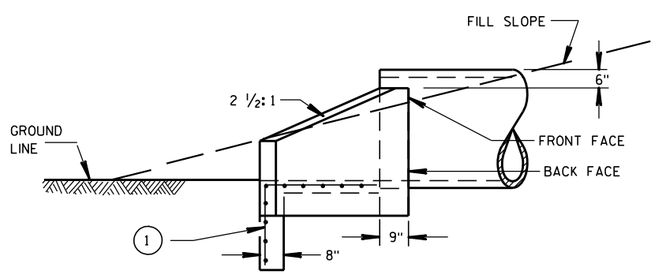
END ELEVATION

PIPE ARCH



END ELEVATION

CULVERT PIPE



SIDE ELEVATION

CULVERT PIPE AND PIPE ARCH

CONCRETE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

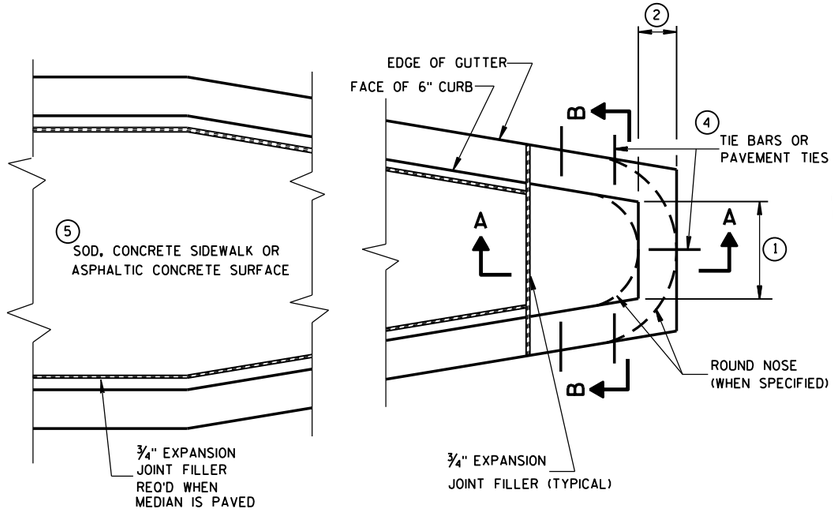
9/14/98 DATE

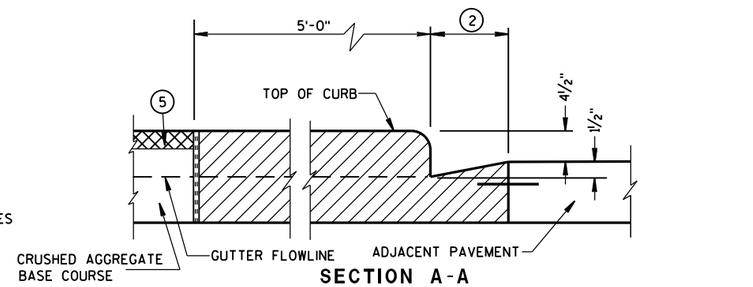
/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOPMENT ENGINEER

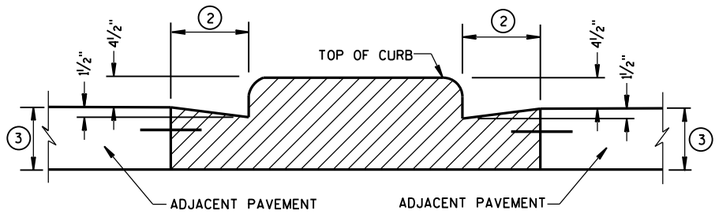
FHWA

6

S.D.D. 8 F 10-1







CONCRETE MEDIAN BLUNT NOSE 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.

(1) SEE PLAN FOR MEDIAN NOSE WIDTH AND RADIUS (FOR ROUND NOSE ALTERNATE).

(2) WIDTH OF GUTTER TO MATCH EXISTING ADJACENT GUTTER OR AS SPECIFIED ELSEWHERE IN THE PLAN.

(3) DEPTH EQUAL TO ADJACENT PAVEMENT. ADJACENT PAVEMENT STRUCTURE DETAILS ARE SHOWN ON THE PLAN. TYPICAL OPTIONS ARE:

(1) NEW OR EXISTING CONCRETE PAVEMENT.

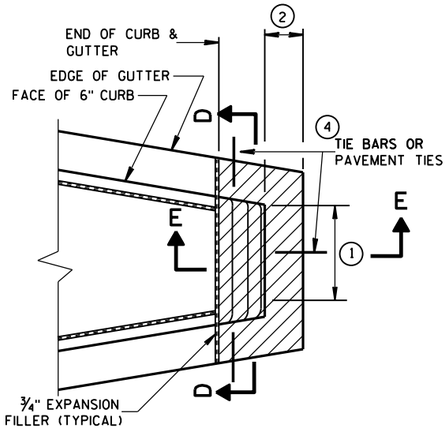
(2) ASPHALTIC CONCRETE PAVEMENT OVER NEW OR EXISTING CONCRETE BASE COURSE.

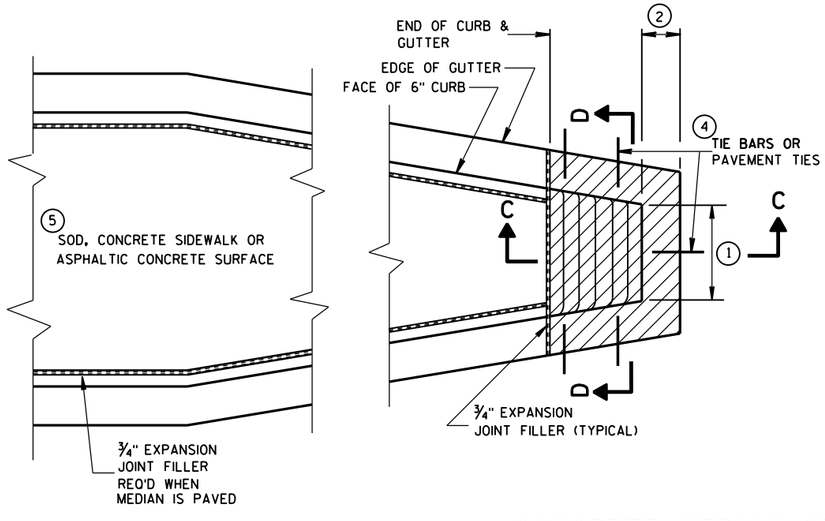
(3) ASPHALTIC CONCRETE PAVEMENT OVER CRUSHED AGGREGATE BASE COURSE.

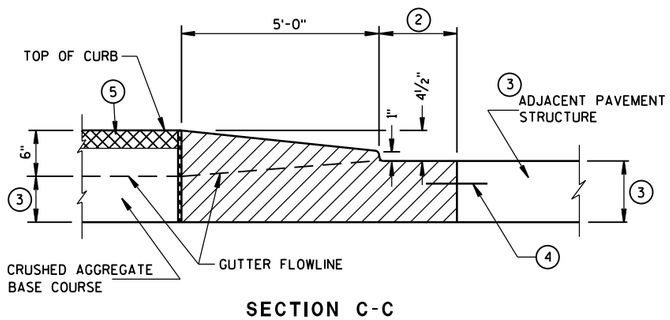
(4) TIE BARS OR PAVEMENT TIES REQUIRED IN NEW CONCRETE PAVEMENT OR CONCRETE BASE COURSE. TIE BARS SHALL BE NO. 4 X 2'-0" SPACED AT 2'-0" C-C.

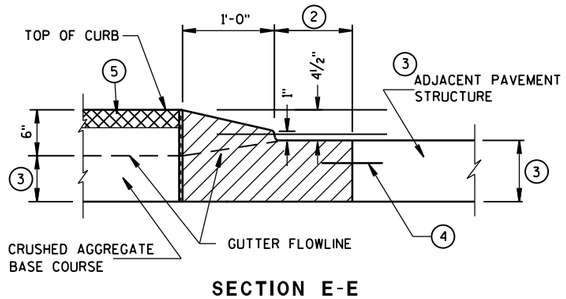
PAVEMENT TIES REQUIRED IN EXISTING CONCRETE BASE COURSE. PAVEMENT TIES SHALL BE NO. 6 X 1'-0" SPACED AT 3'-0" C-C INSTALLED ON A HORIZONTAL SKEW OF 6:1. THE DIRECTION OF SKEW SHALL ALTERNATE AFTER EVERY ONE OR TWO BARS.

(5) SURFACE TYPE AND DETAILS ARE SHOWN ELSEWHERE IN THE PLAN.



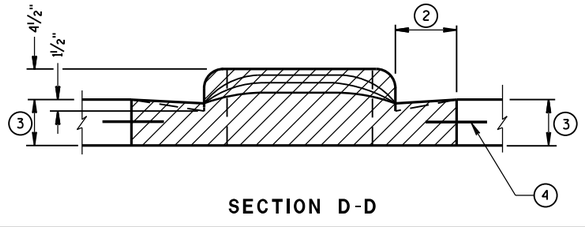






CONCRETE MEDIAN SLOPED NOSE TYPE 2

CONCRETE MEDIAN SLOPED NOSE TYPE 1



CONCRETE MEDIAN NOSE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/8/2006
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER
293
FHWA

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S.D.D. 11 B 2-2

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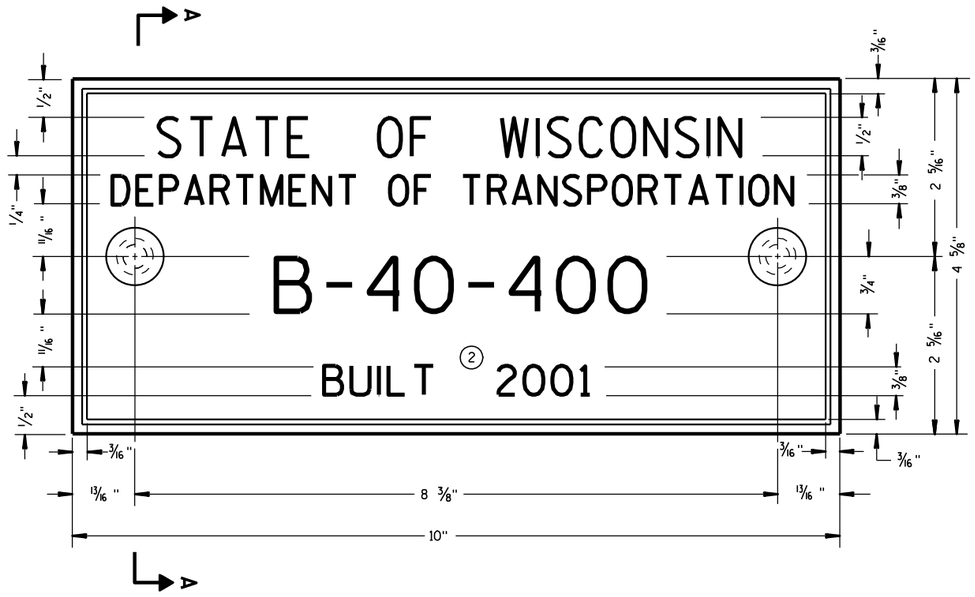
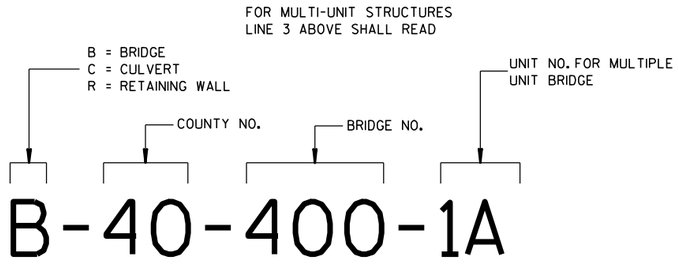
S.D.D. 11 B 2-2



TYPICAL NAME PLATE
(BRIDGES, CULVERTS, AND RETAINING WALLS)



NUMBERING DESIGNATION
MULTI-UNIT STRUCTURES

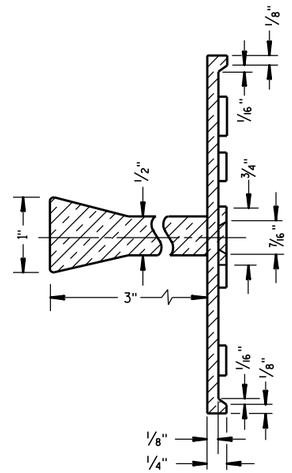
GENERAL NOTES

NAME PLATES TO BE INSTALLED ON BRIDGES, CULVERTS, AND RETAINING WALLS SHALL CONFORM TO THE REQUIREMENTS OF SECTION 502.3.11 OF THE STANDARD SPECIFICATIONS.

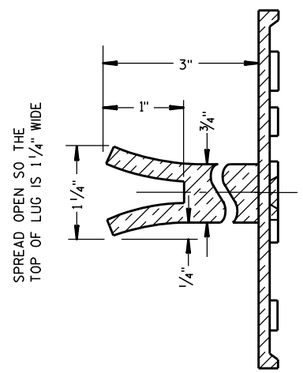
THE BRIDGE NUMBER AND YEAR BUILT SHOWN ON THIS DRAWING ARE EXAMPLES ONLY. SEE CONSTRUCTION PLANS FOR INDIVIDUAL NUMBERING AND YEAR BUILT.

(1) EPOXY RESIN SHALL BE FROM AN APPROVED MANUFACTURER AND USED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

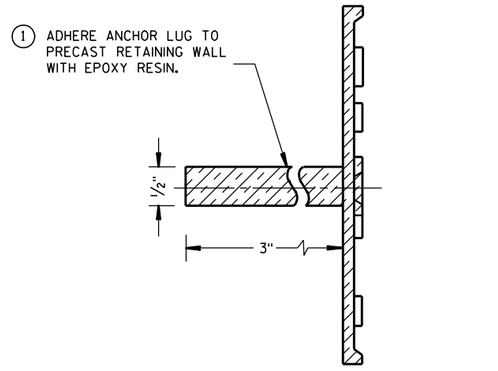
(2) REHABILITATION OF AN EXISTING STRUCTURE SHOULD USE THE DATE OF ORIGINAL STRUCTURE CONSTRUCTION.



SECTION A-A



ALTERNATE LUG



ALTERNATE LUG
(FOR ATTACHMENT TO PRECAST STRUCTURES)

NAME PLATE (STRUCTURES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

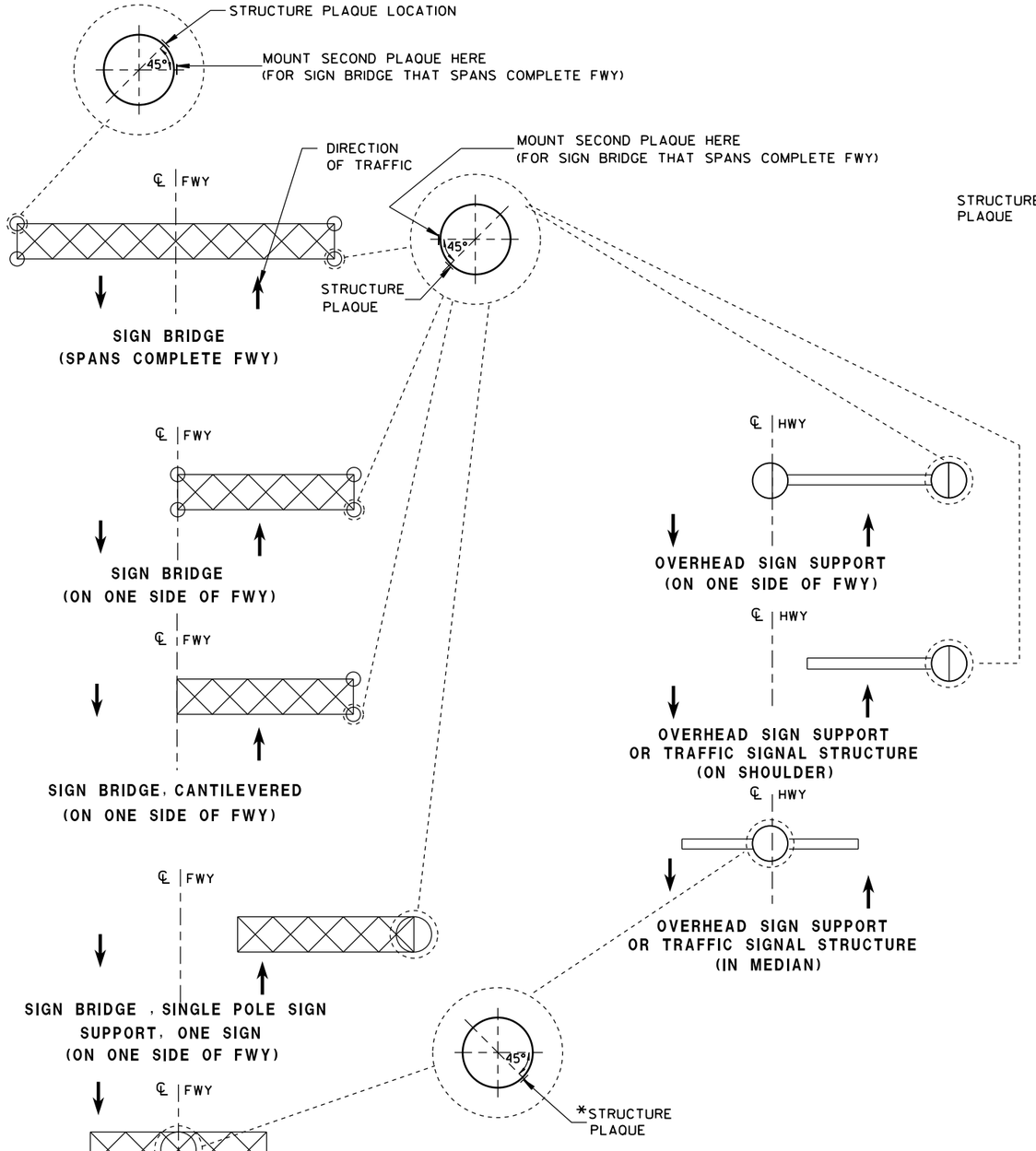
3/26/10 DATE

/S/ Scot Beck -- CHIEF STRUCTURAL DEVELOP ENGINEER

FHWA

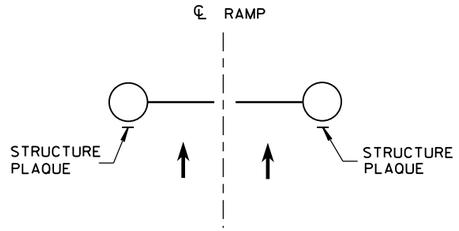
6

S.D.D. 12 A 3-10

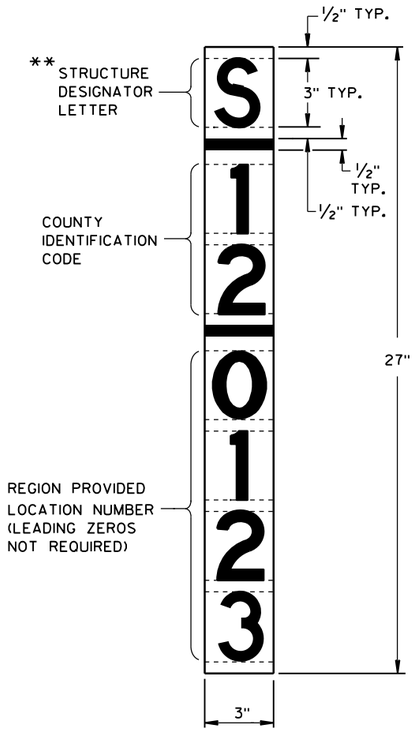


LOCATION OF RAMP GATE, SIGN BRIDGE, OVERHEAD SIGN SUPPORT & TRAFFIC SIGNAL STRUCTURE PLAQUES

* WHEN SIGNS OR GATES FACE TRAFFIC IN ONE DIRECTION, THE PLAQUE SHALL FACE TRAFFIC IN THE SAME DIRECTION. WHEN SIGNS OR GATES ARE FACING TRAFFIC IN BOTH DIRECTIONS, THE PLAQUE SHALL FACE TRAFFIC IN THE CARDINAL DIRECTION.



RAMP GATE
(ACROSS FWY ON-RAMP)



** LETTER "G" UTILIZED FOR RAMP GATES. LETTER "S" UTILIZED FOR SIGN BRIDGES, OVERHEAD SIGN SUPPORTS, AND TRAFFIC SIGNALS.

RAMP GATE, SIGN BRIDGE, OVERHEAD SIGN SUPPORT AND TRAFFIC SIGNAL STRUCTURE PLAQUE FOR SIGN BRIDGES AND OVERHEAD SIGN SUPPORT WHICH ARE NOT STRUCTURE MOUNTED

GENERAL NOTES

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

PLAQUES SHALL BE INCIDENTAL TO ALL NEW INSTALLATIONS.

IF THE PROPOSED SIGN BRIDGE OR OVERHEAD SIGN SUPPORT IS REPLACING AN EXISTING SIGN BRIDGE OR OVERHEAD SIGN SUPPORT, A NEW IDENTIFICATION PLAQUE WILL BE REQUIRED.

FASTEN TOP, CENTER AND BOTTOM OF PLAQUE TO POLE OR OTHER LOCATION AS FOLLOWS:

GALVANIZED STEEL SHAFT - 3 STAINLESS STEEL POP RIVETS

A588 STEEL SHAFT - SHIM FOR DRAINAGE WITH STAINLESS WASHERS; FASTEN WITH STAINLESS SELF-TAPPING SCREWS

ALUMINUM SHAFTS - 3 ALUMINUM POP RIVETS

MOUNTING HEIGHT SHALL BE APPROXIMATELY 5.0' ABOVE CURB OR SHOULDER. ADJUST IF IT IS KNOWN THAT REQUIRED TRAFFIC SIGNS WILL OBSTRUCT.

PLAQUE MATERIALS:

BASE - SHEET ALUMINUM, 0.060" THICK.

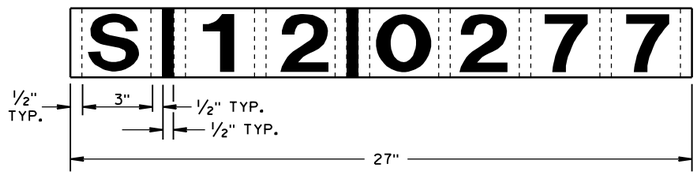
FACE - WHITE, SELF-ADHESIVE VINYL SHEETING, NON-RETROREFLECTIVE

LINES - BLACK, ½" WIDE, SELF-ADHESIVE

CHARACTERS:- BLACK, SELF ADHESIVE, SERIES "D", SIZE AS SHOWN.

FOR SIGN BRIDGES, STRUCTURE MOUNTED, THE STRUCTURE PLAQUE SHALL BE MOUNTED HORIZONTALLY AS SHOWN ON THE DRAWING. THE STRUCTURE PLAQUE SHALL BE MOUNTED HORIZONTALLY TO THE BACK OF THE SIGN, BETWEEN THE ALUMINUM EXTRUSIONS, NEAR THE TOP LEFT HAND CORNER OF THE SIGN. THE BASE MATERIAL SHALL BE OMITTED AND THE FACE ADHERED DIRECTLY TO THE ALUMINUM SURFACE. PRIOR TO ADHERING THE MATERIAL, THE ALUMINUM SURFACE SHALL BE SMOOTH, CLEAN AND DRY.

WHERE SIGN BRIDGE ILLUMINATION IS PROVIDED, THE STRUCTURE MUST ALSO HAVE A SIGN BRIDGE CIRCUIT PLAQUE AS SHOWN IN THE ELECTRICAL DETAILS.



IDENTIFICATION PLAQUE FOR SIGN BRIDGE, STRUCTURE MOUNTED

STRUCTURE IDENTIFICATION PLAQUES, RAMP GATES, SIGN BRIDGES, OVERHEAD SIGN SUPPORTS, & TRAFFIC SIGNALS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

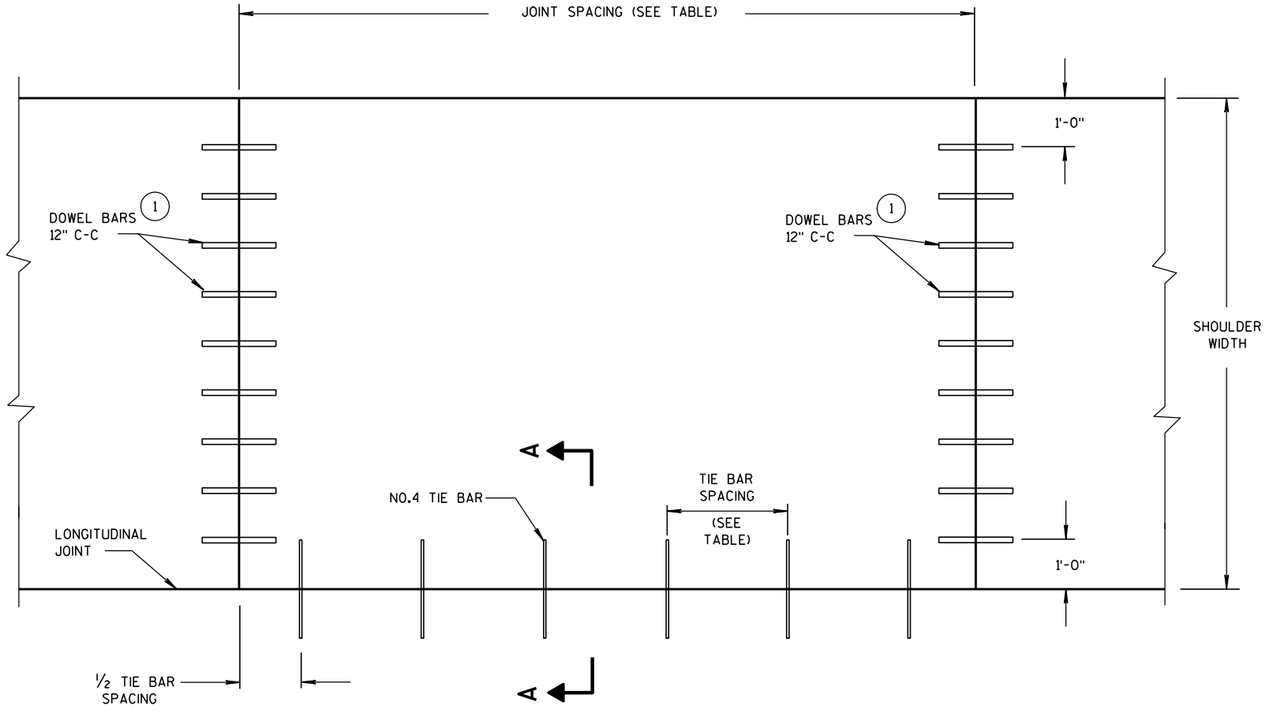
APPROVED
12/4/2012 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

6

S.D.D. 12 A 4-3

6

S.D.D. 12 A 4-3



PLAN VIEW

CONCRETE PAVEMENT SHOULDER

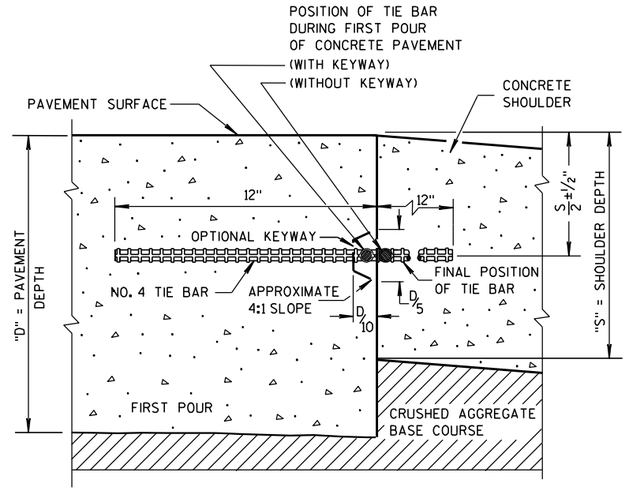
GENERAL NOTES

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.

TRANSVERSE JOINT DETAILS ARE SHOWN ELSEWHERE IN THE PLAN.

FINISH THE SHOULDER PAVEMENT CONFORMING TO SUBSECTION 415.3.8 OF THE STANDARD SPECIFICATIONS.

TIE BARS SHALL CONFORM TO SUBSECTION 505.2.4 OF THE STANDARD SPECIFICATIONS.



SECTION A-A

LONGITUDINAL CONSTRUCTION JOINT

PAVEMENT TYPE OF TRAFFIC LANES	TIE BAR SPACING	SHOULDER JOINT SPACING
NON-REINFORCED	30"	MATCH JOINT SPACING OF ADJACENT TRAFFIC LANE
CONTINUOUSLY REINFORCED	30"	15' FOR 6' TO 10' WIDE SHOULDERS
CONTINUOUSLY REINFORCED	36"	12' FOR 3' WIDE SHOULDERS

(1) PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER	CONTRACTION JOINT SPACING
5 ½", 6", 6 ½"	NONE	12'
7", 7 ½"	1"	14'
8", 8 ½"	1 ¼"	15'
9", 9 ½"	1 ¼"	15'
10" & ABOVE	1 ½"	15'

FOR DOWELED CONCRETE SHOULDERS WITH TRAPEZOIDAL CROSS SECTIONS, CHOSE THE APPROPRIATE DOWEL BAR DIAMETER BASED ON THE SMALLER PAVEMENT DEPTH (LIKELY THE OUTSIDE EDGE OF THE SHOULDER). IF USING BASKETS, USE BASKETS FOR THE AVERAGE THICKNESS OF THE CROSS SECTION.

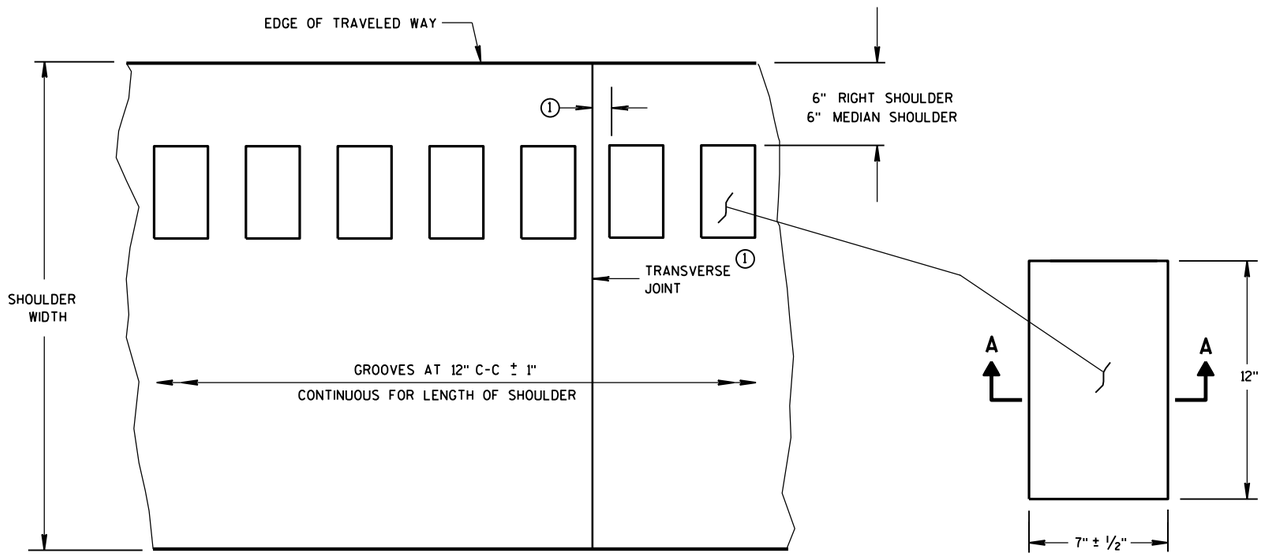
CONCRETE PAVEMENT SHOULDERS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8/15/2011 — DATE
/S/ Deb Bischoff — PAVEMENT POLICY & D — INEER
FHWA

6

S.D.D. 13 A 3-5



PLAN VIEW
SHOULDER WITH GROOVES

PLAN VIEW
(SINGLE GROOVE)

PLACEMENT DETAIL FOR MILLED RUMBLE STRIP

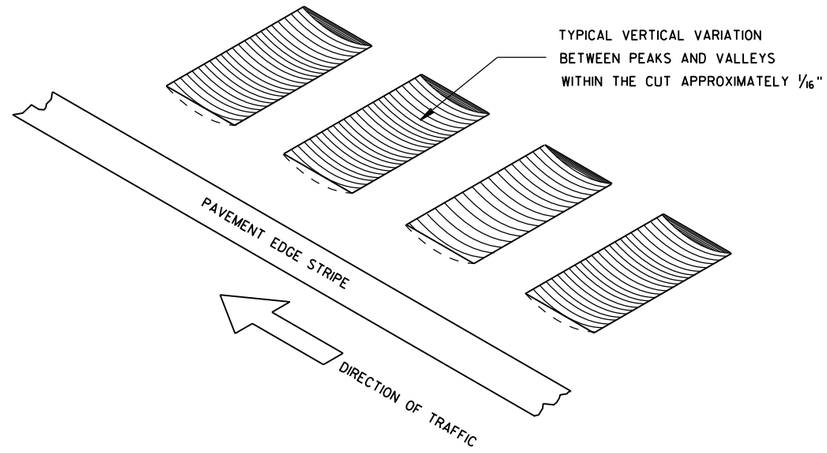
GENERAL NOTES

DETAILS OF CONSTRUCTION SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

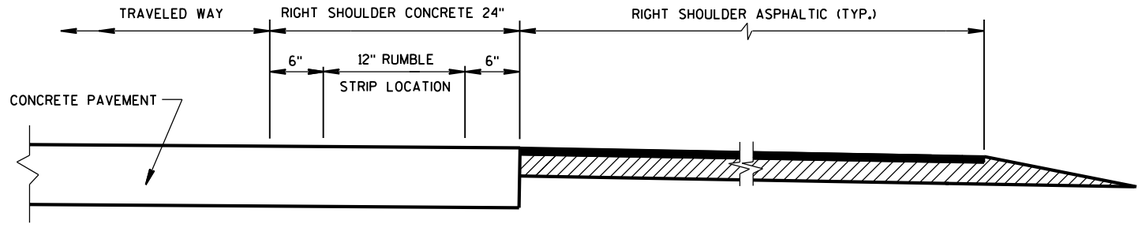
RUMBLE STRIPS ON EXPRESSWAYS

DO NOT INSTALL RUMBLE STRIPS ACROSS SIDE ROAD INTERSECTIONS, COMMERCIAL DRIVEWAYS, PRIVATE DRIVEWAYS OR ADJACENT TO RIGHT TURN LANES, LEFT TURN LANES, TURN LANE TAPERS, BRIDGE DECKS, BRIDGE APPROACHES, OR 100 FEET IN ADVANCE OF RAILROAD CROSSING. THE ATTACHED STANDARD DETAIL DRAWING SHOWS THE LOCATION OF THE RUMBLE STRIPS AT INTERCHANGE AREAS.

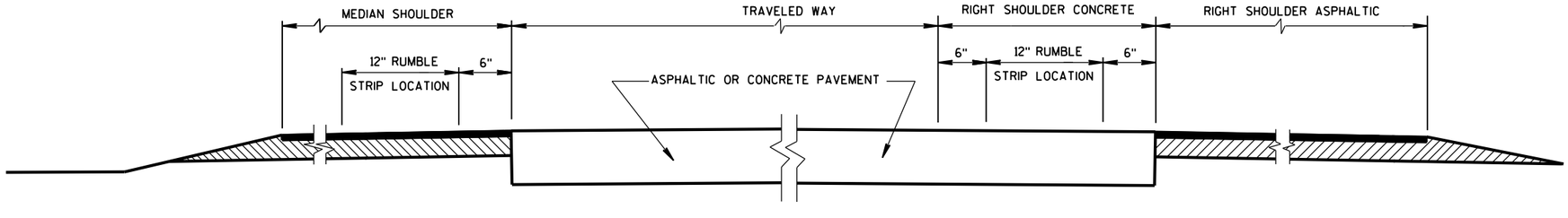
(1) CONCRETE PAVEMENT - RUMBLE STRIPS SHALL BE A MINIMUM OF 6" AWAY FROM TRANSVERSE JOINTS.



ISOMETRIC



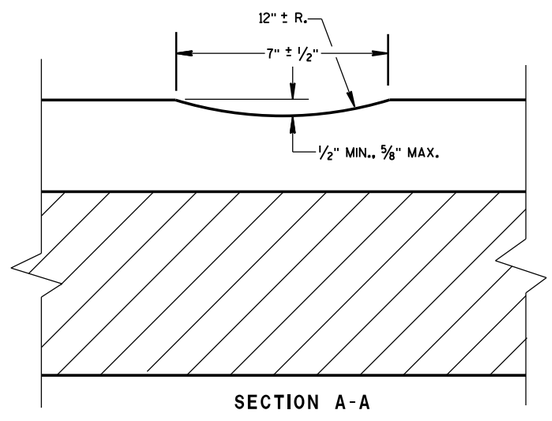
SECTION VIEW
CONCRETE PAVEMENT EXTENDS INTO RIGHT SHOULDER)



SECTION VIEW

TYPICAL LOCATIONS OF SHOULDER RUMBLE STRIPS IN RURAL DIVIDED HIGHWAYS

(ONE ROADWAY IS SHOWN)



SECTION A-A

SHOULDER RUMBLE STRIP, MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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S.D.D. 13 A 5-5a

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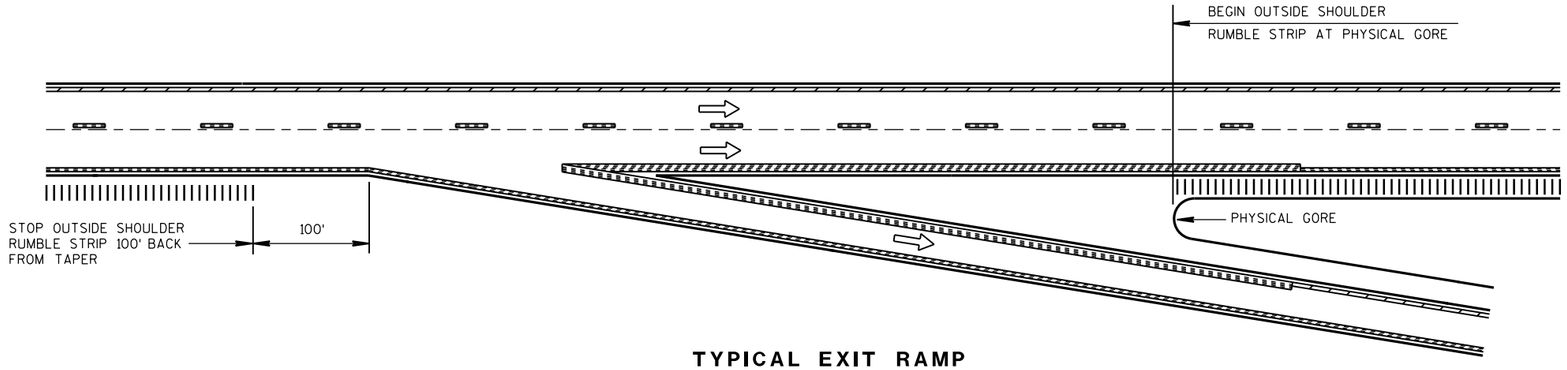
S.D.D. 13 A 5-5a



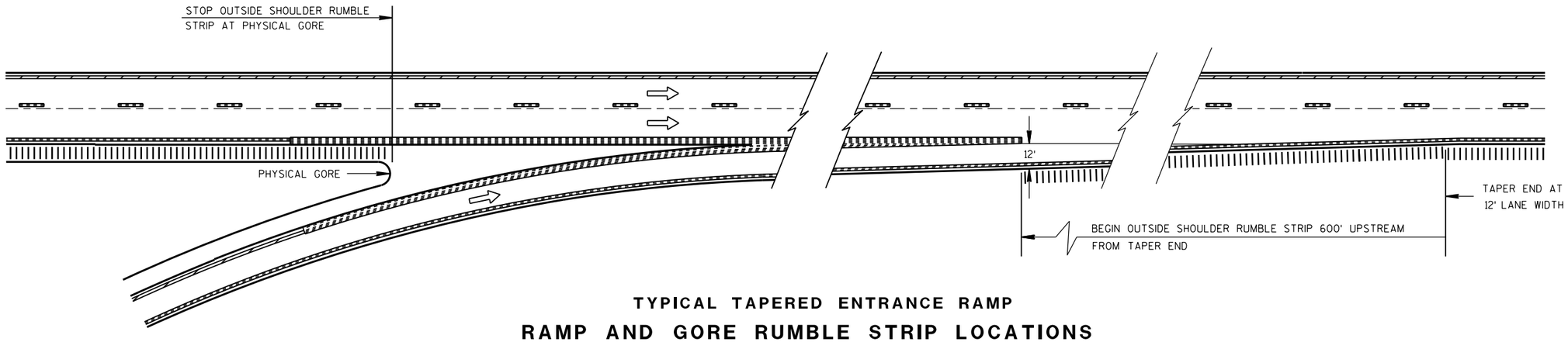
TYPICAL EXIT RAMP

NOTES:

NO RUMBLE STRIP ON EXIT, DIRECTIONAL, OR ENTRANCE RAMPS, EXCEPT NEAR THE ENTRANCE TAPER END AND ALONG THE PARALLEL RAMP AREA AS SHOWN.

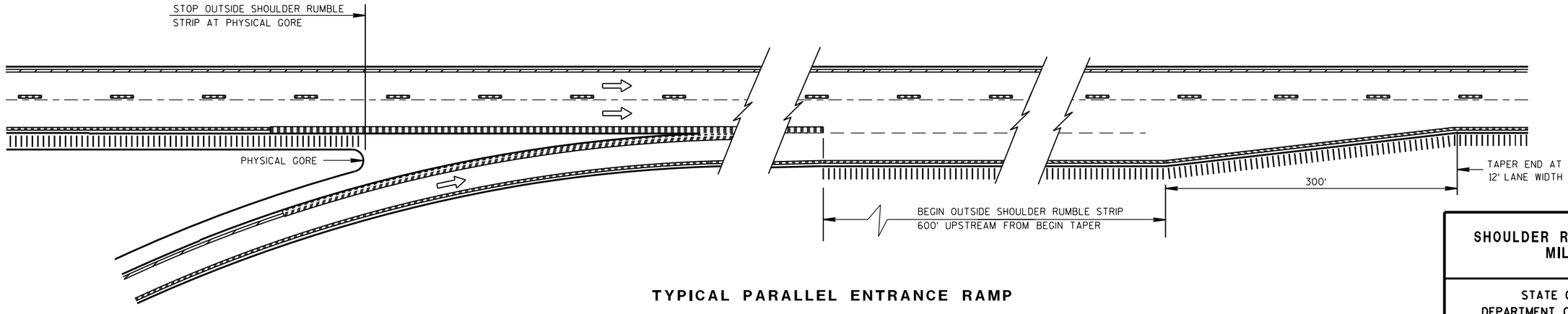
PAVEMENT MARKING DETAILS AND SPECIFICATIONS ARE PROVIDED ELSEWHERE IN THE CONTRACT.

NOTE:
ARROW SYMBOL (⇨)
SHOWS DIRECTION OF TRAVEL



TYPICAL TAPERED ENTRANCE RAMP

RAMP AND GORE RUMBLE STRIP LOCATIONS



TYPICAL PARALLEL ENTRANCE RAMP

RAMP AND GORE RUMBLE STRIP LOCATIONS

SHOULDER RUMBLE STRIP, MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

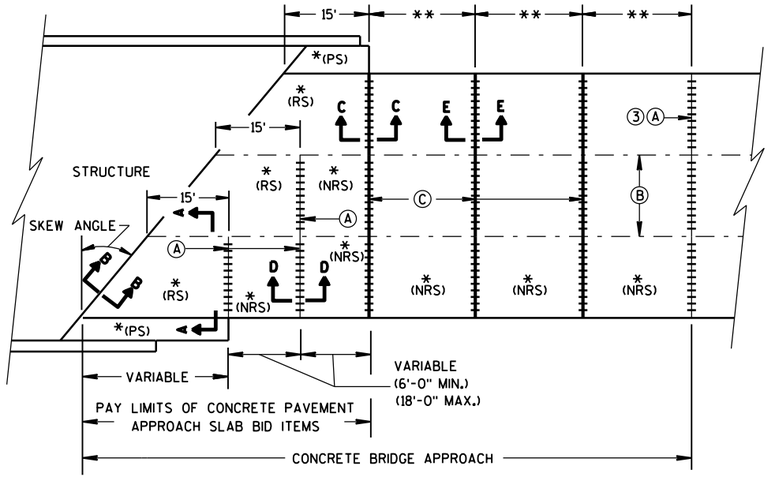
12/17/2012
DATE

/S/ Jerry H. Zoga
ROADWAY STANDARDS ENGINEER

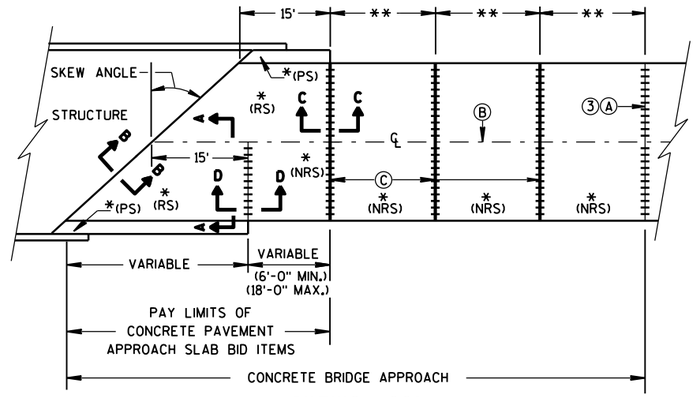
FHWA

6

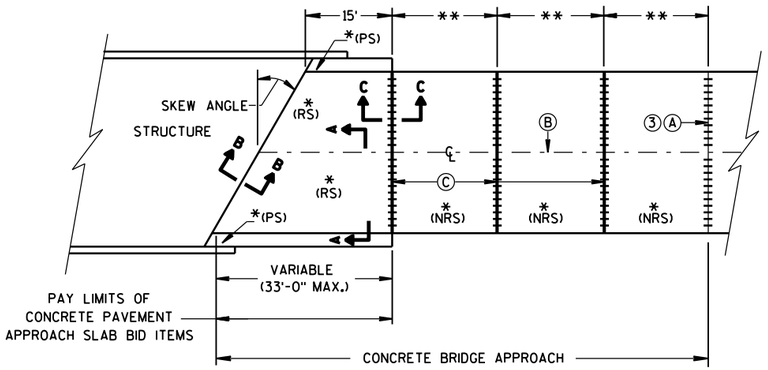
S.D.D. 13 A 5-5b



SKEWED APPROACH
(PAVEMENT MORE THAN 2 LANES)



SKEWS >30°
(PAVEMENT WIDTH ≤30')



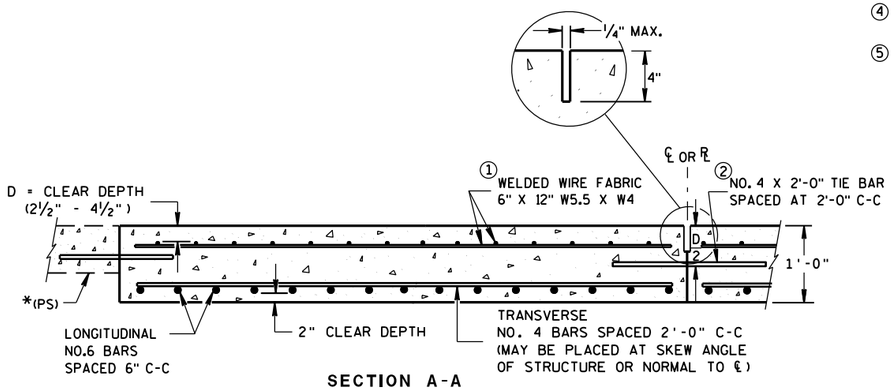
SKEWS ≤30°
(PAVEMENT WIDTH ≤30')

APPROACH SLAB AND ADJACENT PAVEMENT

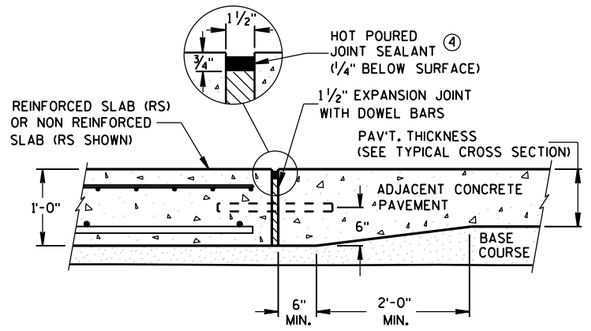
*(RS) = REINFORCED CONCRETE SLAB
*(PS) = PAVED CONCRETE SHOULDER: CONCRETE PAVEMENT, OR CONCRETE SURFACE DRAIN (SEE DETAILS ELSEWHERE IN THE PLAN)
*(NRS) = NON-REINFORCED CONCRETE SLAB

**STANDARD TRANSVERSE JOINT SPACING (SEE SDD 13C4, SDD 13C11, & SDD 13C13)
***STANDARD DOWEL BAR DIAMETER (SEE SDD 13C11, & SDD 13C13)

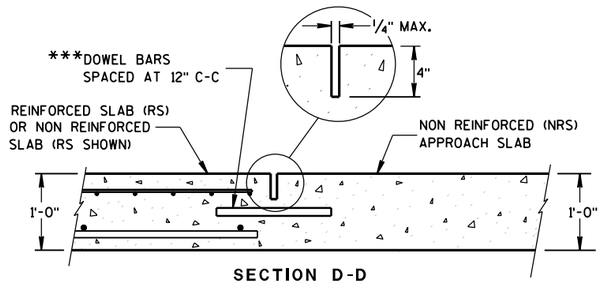
(A) STANDARD CONTRACTION JOINT NORMAL TO ℄ OR ℄
(B) STANDARD LONGITUDINAL JOINT AND TIE BARS.
(C) 1½" EXPANSION JOINT WITH DOWEL BARS NORMAL TO ℄ OR ℄



SECTION A-A
REINFORCEMENT POSITIONING DETAIL



SECTION C-C
TRANSITION DETAIL
APPROACH SLAB TO ADJACENT PAVEMENT



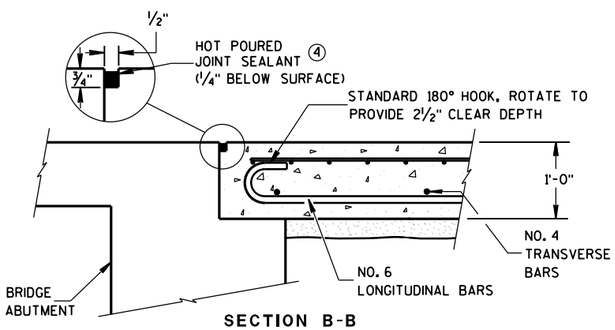
SECTION D-D
CONTRACTION JOINT

GENERAL NOTES

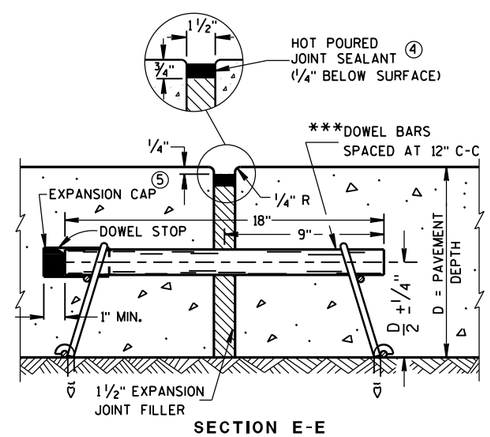
THE CONTRACTOR MAY SPLICE NO. 6 BARS IN THE APPROACH SLAB FOR SKEWED STRUCTURES ONLY. STAGGER SPLICES WITH A MAXIMUM OF ONE SPLICE PER BAR. THE LENGTH OF LAP IS 20 INCHES.

TACK WELD DOWEL BARS TO THE BASKETS ON ALTERNATE ENDS.

1. THE CONTRACTOR MAY USE NO. 4 BARS SPACED AT 2'-0" C-C IN BOTH THE LONGITUDINAL AND TRANSVERSE DIRECTIONS FOR TOP REINFORCEMENT AS AN ALTERNATIVE TO THE WELDED WIRE FABRIC.
2. THE CONTRACTOR MAY OMIT TIE BARS BETWEEN REINFORCED SLABS WHERE SLAB REINFORCEMENT BARS EXTEND ACROSS THE CENTERLINE OR REFERENCE LINE.
3. DO NOT DOWEL A CONTRACTION JOINT THAT ABUTS AN HMA PAVEMENT.
4. USE A JOINT SEALANT MEETING THE REQUIREMENTS OF ASTM D6690.
5. PLACE EXPANSION CAP ON THE END OF THE DOWEL THAT IS NOT TACK WELDED TO THE BASKET. DO NOT FORCE DOWEL BAR PAST THE DOWEL STOP.



SECTION B-B
BEND DETAIL
BOTTOM REINFORCEMENT



SECTION E-E
EXPANSION JOINT

CONCRETE BRIDGE APPROACH

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2014 — DATE
/S/ Deb Bischoff — PAVEMENT POLICY & DE
EER
FHWA

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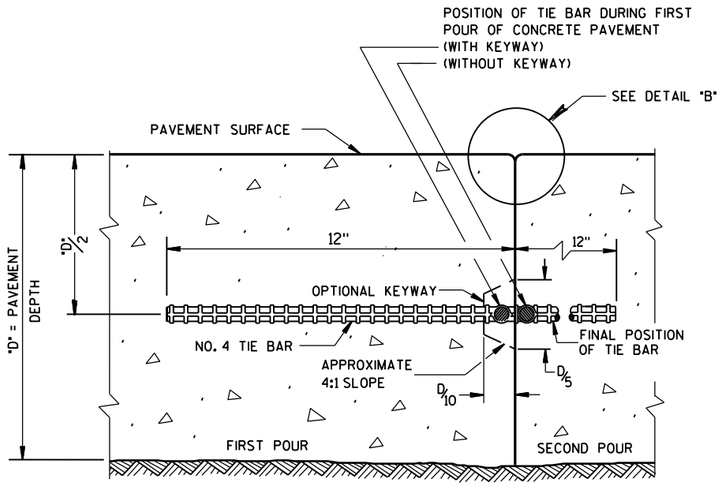
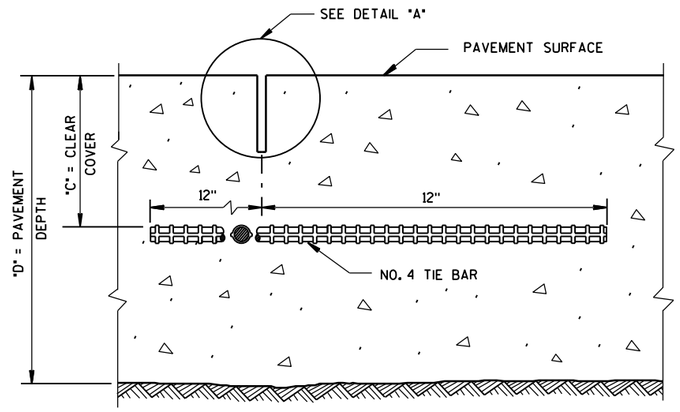
S.D.D. 13 B 2-7a



CONSTRUCTION JOINT



SAWED JOINT

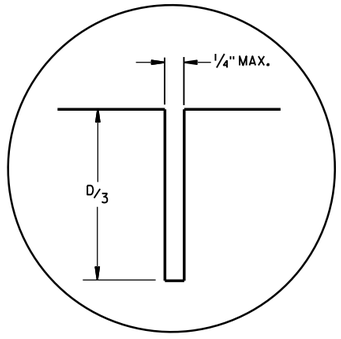
GENERAL NOTES

DO NOT SEAL OR FILL LONGITUDINAL JOINTS.

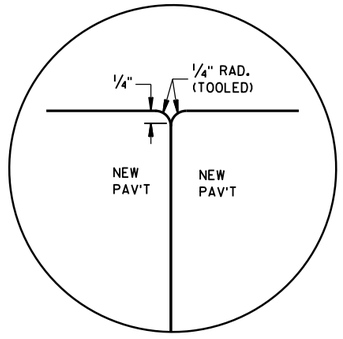
CREATE A LONGITUDINAL JOINT FOR PAVEMENT WIDTHS GREATER THAN 15 FEET.

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

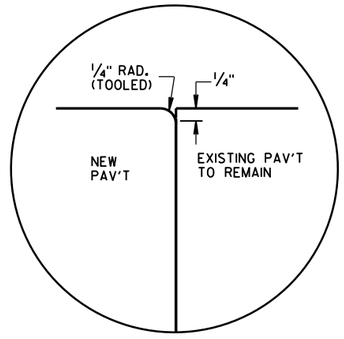
(1) ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.



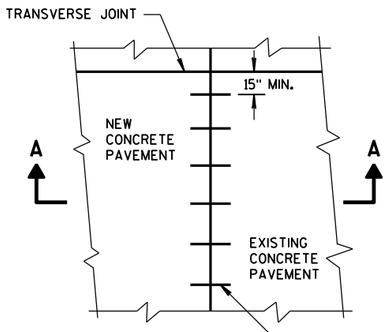
DETAIL "A"



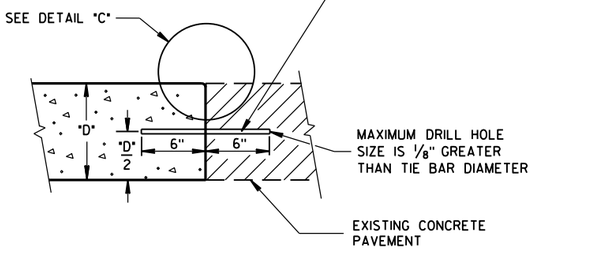
DETAIL "B"



DETAIL "C"



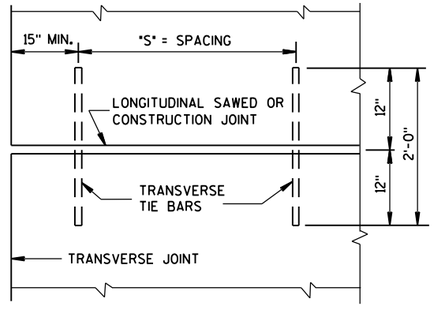
PLAN VIEW



SECTION A-A
LONGITUDINAL CONSTRUCTION JOINT TIE BARS ANCHORED INTO EXISTING PAVEMENT

TIE BAR TABLE

PAVEMENT DEPTH "D"	CLEAR COVER "C"	MAXIMUM TIE BAR SPACING "S"	
		PAVEMENT WIDTH	
		24' OR 26'	≥30'
6, 6 1/2"	3"±1/2"	48"	42"
7, 7 1/2"	3 1/4"±1"	45"	36"
8, 8 1/2"	3 3/4"±1"	39"	30"
9, 9 1/2"	4 1/4"±1"	33"	27"
10, 10 1/2"	4 3/4"±1"	30"	24"
11, 11 1/2"	5 1/4"±1"	27"	21"
12"	5 3/4"±1"	24"	21"



PLAN VIEW
SHOWING LOCATION OF TIE BARS

CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
9/2014 DATE
/S/ Deb Bischoff
PAVEMENT POLICY & DE ENGINEER
FHWA

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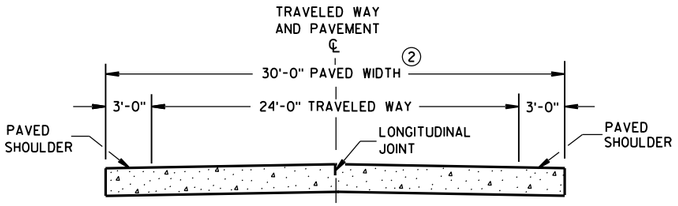
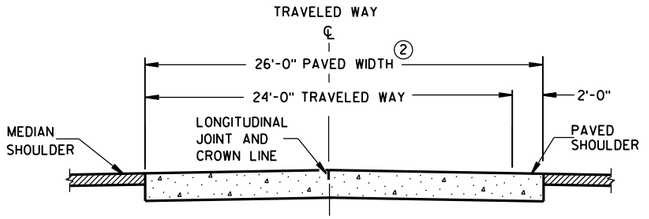
S.D.D. 13 C 1-17

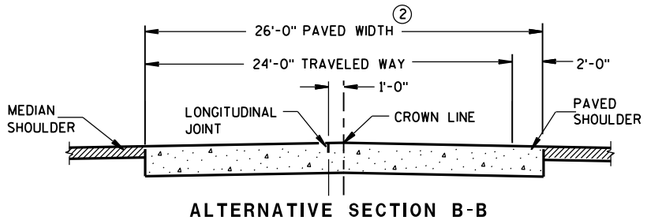


SECTION A-A ①

TWO-LANE TWO-WAY HIGHWAY



SECTION B-B



ALTERNATIVE SECTION B-B ①

DIVIDED HIGHWAY

GENERAL NOTES

CONTRACTION JOINTS

CONSTRUCT TRANSVERSE CONTRACTION JOINTS NORMAL TO THE CENTERLINE. SHOW THE LOCATION OF CONTRACTION JOINTS THROUGH INTERSECTIONS ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

DO NOT SEAL OR FILL CONTRACTION JOINTS.

INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

FOR PAVEMENT SLABS OF VARYING WIDTHS, LOCATE THE OUTER MOST DOWEL BAR SO THAT THE CENTER OF THE BAR IS A MINIMUM OF 6 INCHES AND A MAXIMUM OF 18 INCHES FROM THE FREE EDGE OF PAVEMENT.

CONSTRUCTION JOINTS

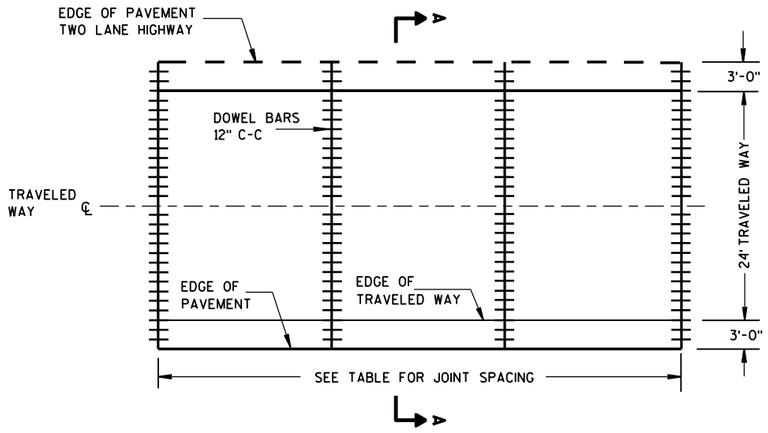
LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO CONTRACTION JOINTS.

① REFER TO TYPICAL CROSS SECTIONS FOR ADDITIONAL DETAILS.

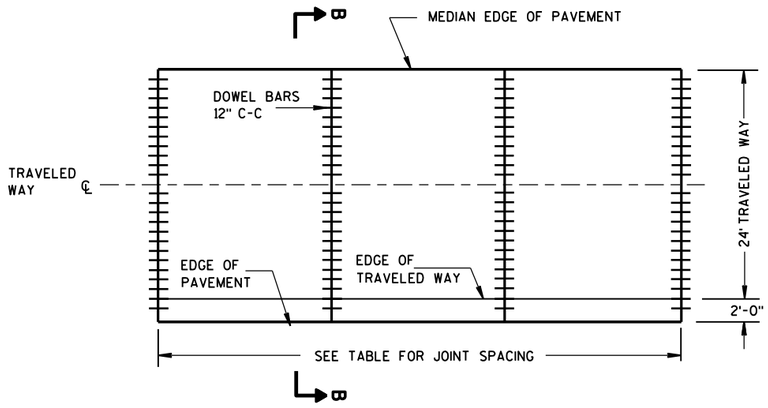
② MEASURE THE ENTIRE PAVED WIDTH INCLUDING THE PORTION(S) LABELED PAVED SHOULDER AS CONCRETE PAVEMENT.

PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER	CONTRACTION JOINT SPACING
5 ½", 6", 6 ½"	NONE	12'
7", 7 ½"	1"	14'
8", 8 ½"	1 ¼"	15'
9", 9 ½"	1 ¼"	15'
10" & ABOVE	1 ½"	15'



CONTRACTION JOINT LAYOUT
FOR TWO-LANE TWO-WAY HIGHWAY



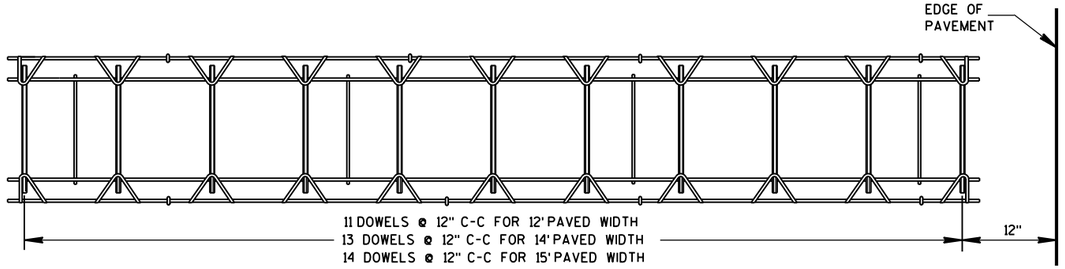
CONTRACTION JOINT LAYOUT
FOR DIVIDED HIGHWAY

RURAL DOWELED
CONCRETE PAVEMENT

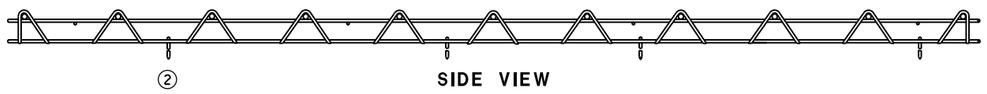
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

S.D.D. 13 C 11-11a



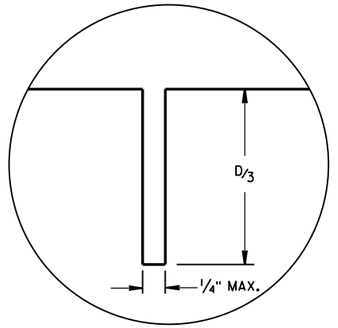
PLAN VIEW



SIDE VIEW

(NORMAL TO CENTERLINE)

CONTRACTION JOINT DOWEL ASSEMBLY ①



JOINT DETAIL

GENERAL NOTES

① OBTAIN THE ENGINEER'S APPROVAL FOR THE USE OF ALTERNATIVE DESIGNS OF THE DOWEL ASSEMBLY. USE MECHANICAL DOWEL BAR INSERTERS OR DOWEL ASSEMBLIES WHEN CONSTRUCTING CONTRACTION JOINTS.

② SECURE BASKETS WITH ANCHORS TO HOLD DOWEL BARS IN THE CORRECT POSITION AND ALIGNMENT. TYPE, LOCATION, NUMBER AND LENGTH OF ANCHORS ARE DEPENDENT UPON FIELD CONDITIONS.

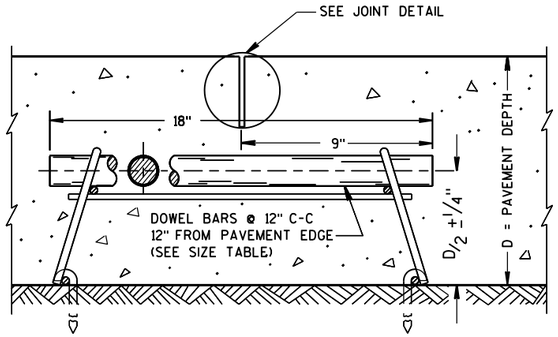
③ FORM OR SAW CONSTRUCTION JOINTS. PROVIDE A 1/4-INCH RADIUS AT FORMED JOINTS.

④ PROVIDE A SMOOTH VERTICAL FACE FOR THE ENTIRE DEPTH OF THE PAVEMENT WHEN FORMING CONSTRUCTION JOINTS.

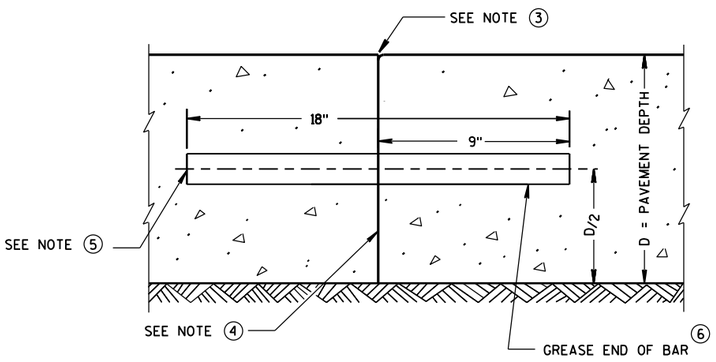
⑤ INSTALL DOWEL BARS AT CONSTRUCTION JOINTS BY FORMING OR DRILLING. INSTALL FORMED DOWEL BARS 12 INCHES C-C AND 12 INCHES FROM PAVEMENT EDGE. REMOVE EXCESS CONCRETE FROM THE FREE END OF THE DOWEL BAR IF DOWEL BARS ARE FORMED THROUGH A HEADER BOARD. INSTALL DRILLED DOWEL BARS ACCORDING TO *DRILLED DOWEL BAR CONSTRUCTION JOINT* DETAIL.

⑥ APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.

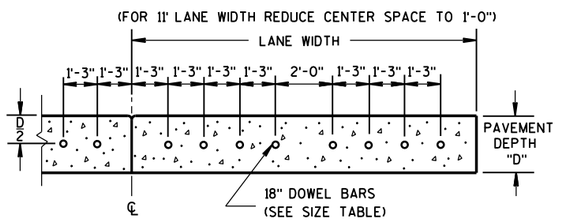
⑦ ANCHOR DOWEL BARS INTO DRILLED HOLES WITH AN EPOXY. MAXIMUM DRILLED HOLE SIZE IS 1/8-INCH GREATER THAN DOWEL BAR DIAMETER, 9 INCHES IN LENGTH.



DOWELED CONTRACTION JOINT



TRANSVERSE CONSTRUCTION JOINT



DRILLED DOWEL BAR CONSTRUCTION JOINT ⑦

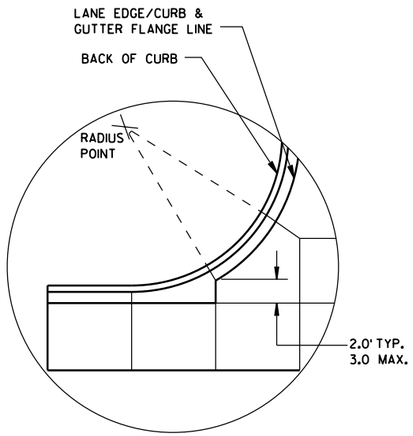
RURAL DOWELED CONCRETE PAVEMENT	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
5/3/2013 DATE	/S/ Deb Bischoff PAVEMENT POLICY & DE ENGINEER
FHWA	

6

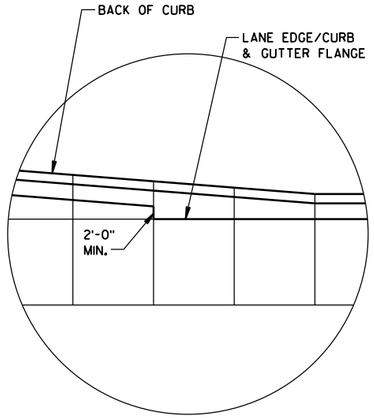
S.D.D. 13 C 11-11b

6

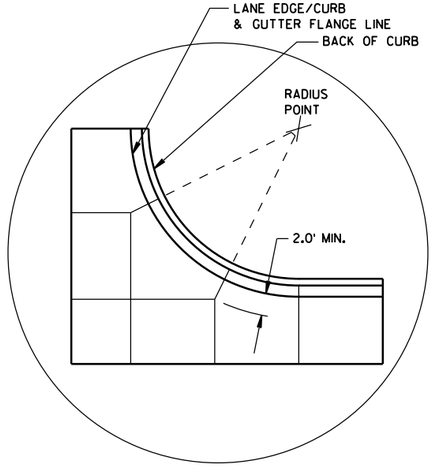
S.D.D. 13 C 11-11b



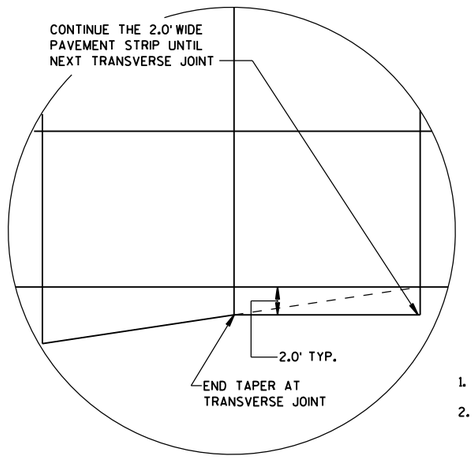
DETAIL "A"



DETAIL "B"



DETAIL "C"



DETAIL "D"

GENERAL NOTES

THE PRIMARY ROADWAY CONTROLS THE TRANSVERSE JOINT PATTERN.

ALIGN NEW JOINTS WITH EXISTING JOINTS OR CRACKS.

CONSTRUCT TRANSVERSE JOINTS PERPENDICULAR TO THE ROADWAY.

ADJUST TRANSVERSE JOINTS TO ALIGN WITH UTILITY FIXTURES (E.G. MANHOLES AND INLETS) IN THE PAVEMENT STRUCTURE WHEN POSSIBLE. WATER VALVES DO NOT REQUIRE JOINT ADJUSTMENT.

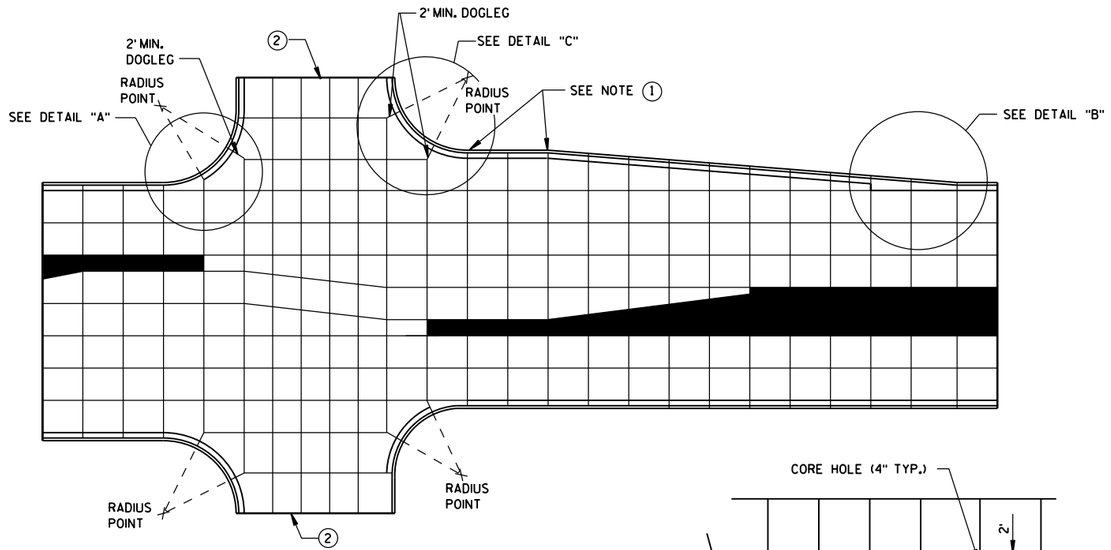
AVOID SLABS LESS THAN 2 FEET WIDE OR GREATER THAN 15 FEET WIDE.

SEE TABLE FOR TRANSVERSE JOINT SPACING. JOINT SPACING SPECIFIED IS MAXIMUM AND ACTUAL SPACING CAN BE ADJUSTED TO ACCOMMODATE INTERSECTIONS.

AVOID ANGLES LESS THAN 60° BY DOGLEGGING JOINTS THROUGH CURVE RADIUS POINTS. USE 90° ANGLES WHEN POSSIBLE.

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

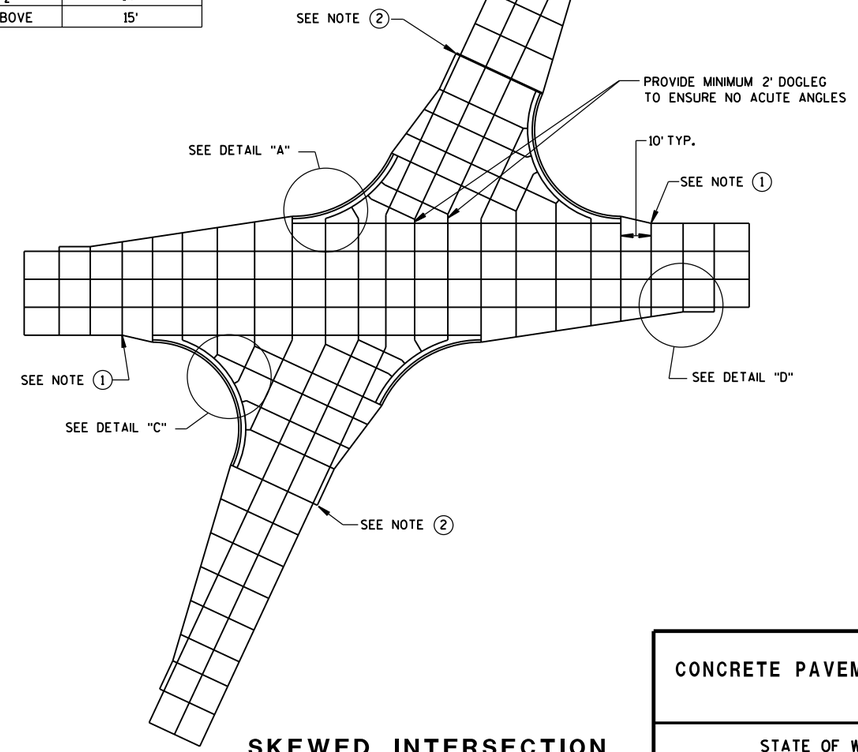
1. PROVIDE TRANSVERSE JOINTS AT ALL PAVEMENT WIDTH CHANGES.
2. CONSTRUCT DOWELED EXPANSION JOINT ON THE SIDE ROAD OF AN INTERSECTION IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH. ALIGN EXPANSION JOINT WITH EDGE OF RADIUS.
3. THE ENGINEER MAY APPROVE SLIGHT VARIATIONS FROM THESE JOINTING DETAILS.



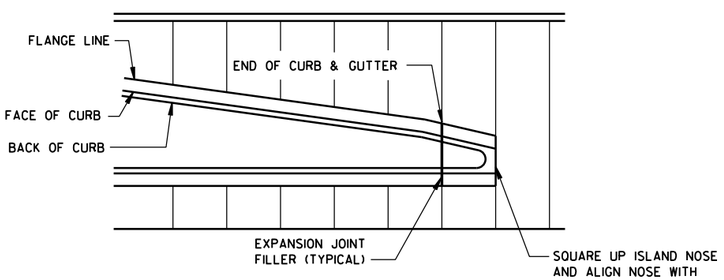
STANDARD INTERSECTION

PAVEMENT DEPTH AND JOINT SPACING TABLE

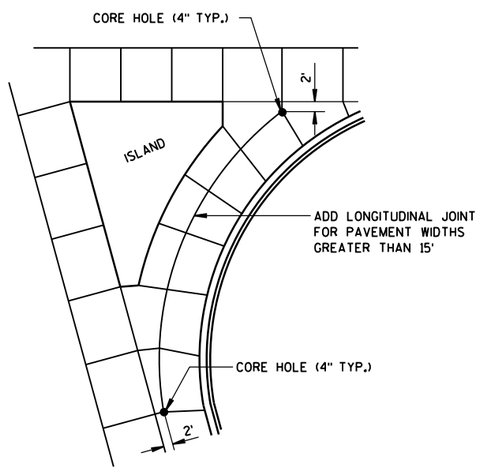
PAVEMENT DEPTH (D)	CONTRACTION JOINT SPACING
6", 6½"	12'
7", 7½"	14'
8" & ABOVE	15'



SKEWED INTERSECTION



APPROACH TO MEDIAN



LARGE RIGHT TURN

CONCRETE PAVEMENT JOINTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

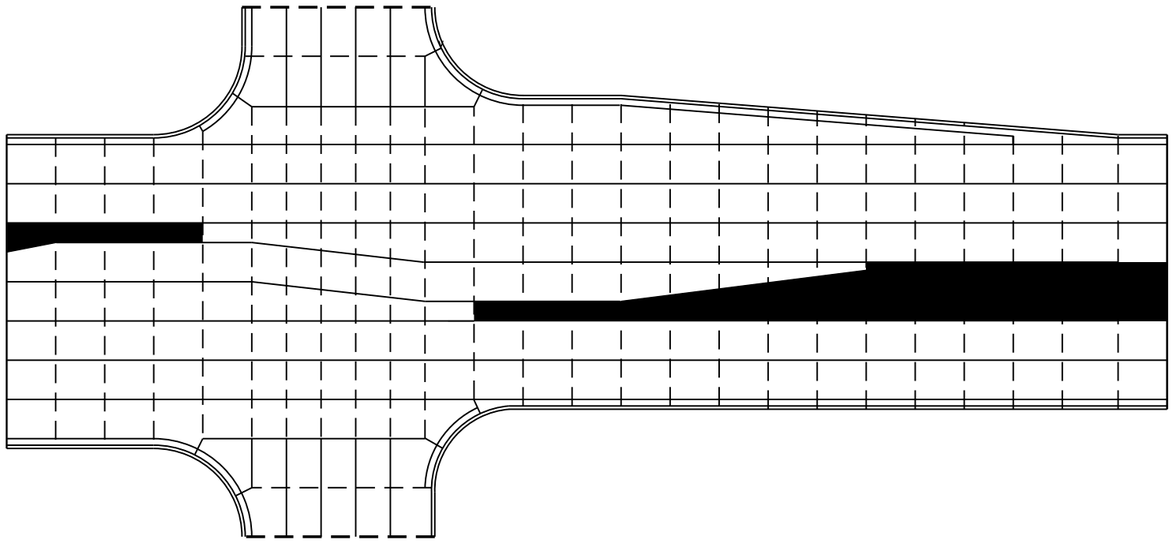
6
S.D.D. 13 C 18-2a

LEGEND

POTENTIAL DOWELED EXPANSION JOINT

DOWELED JOINT

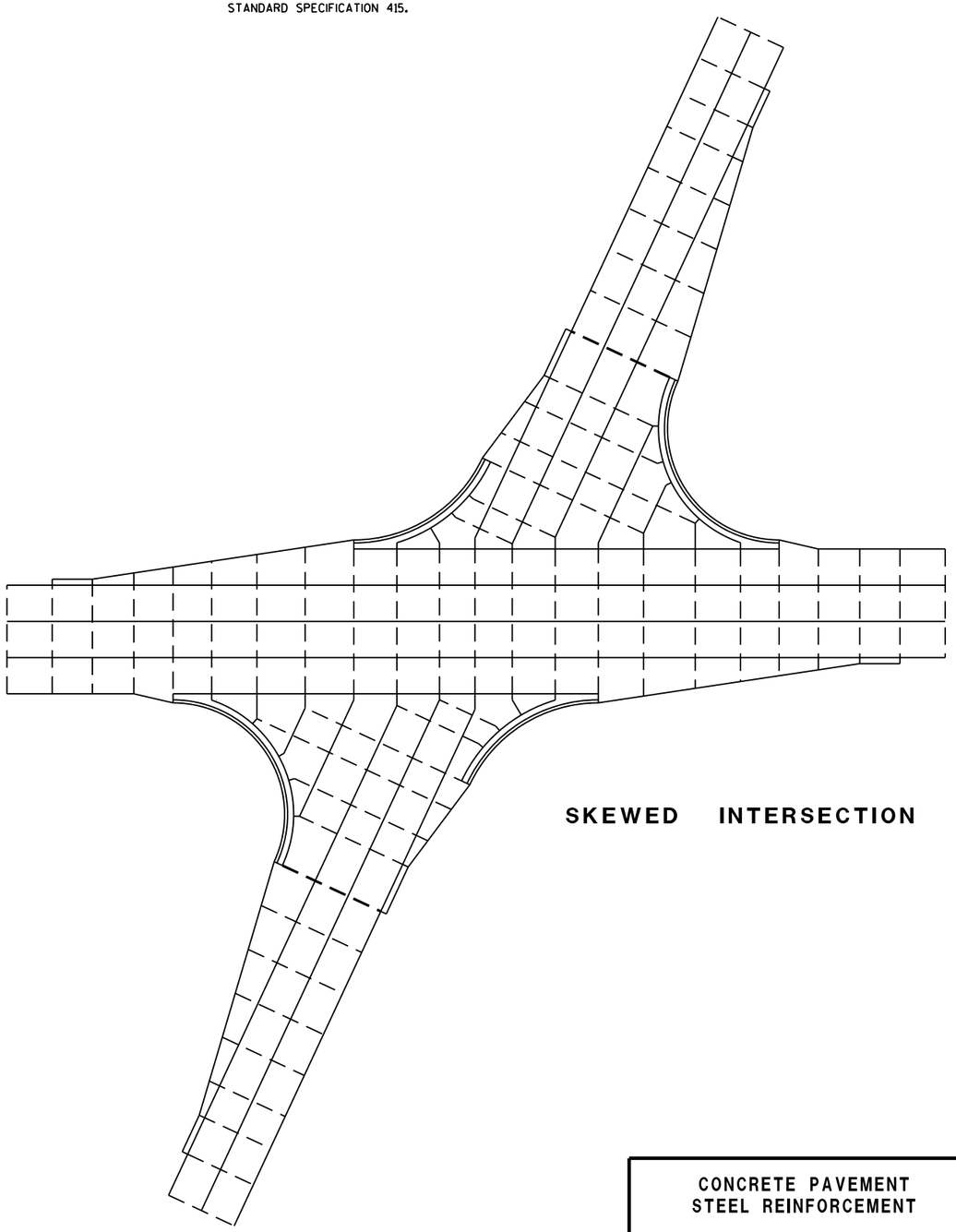
TIED JOINT



STANDARD INTERSECTION

GENERAL NOTES

USE AN EXPANSION JOINT FILLER MEETING THE REQUIREMENTS OF STANDARD SPECIFICATION 415.



SKEWED INTERSECTION

6

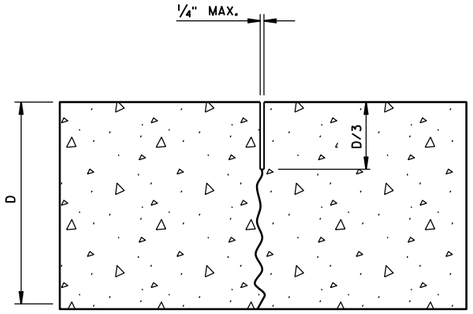
S.D.D. 13 C 18-2b

CONCRETE PAVEMENT
STEEL REINFORCEMENT

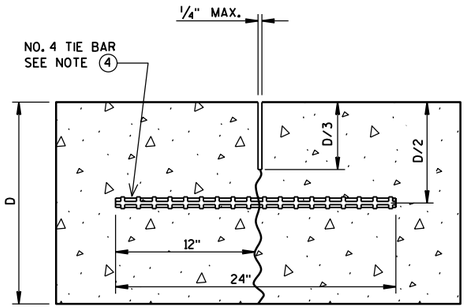
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

S.D.D. 13 C 18-2b



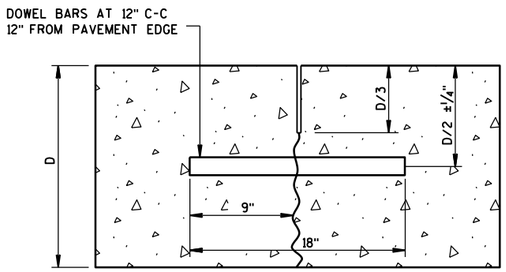
UNDOWELED-TRANSVERSE



TIED LONGITUDINAL

GENERAL NOTES

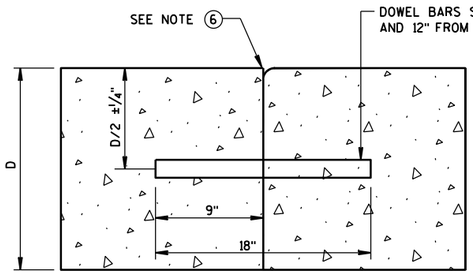
1. USE DOWELED EXPANSION JOINTS ON SIDE ROADS AT INTERSECTIONS (TO ISOLATE THE SIDE ROAD FROM THE THROUGH STREET) IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH.
2. SPACE CONTRACTION JOINTS IN ACCORDANCE WITH 13C4, 13C11 OR 13C13.
3. LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO CONTRACTION JOINTS.
4. SPACE TIE BARS AT LONGITUDINAL CONSTRUCTION OR CONTRACTION JOINTS IN ACCORDANCE WITH SDD 13C1.
5. CONSTRUCTION JOINTS CAN BE FORMED OR SAWED.
6. IF JOINT IS FORMED, PROVIDE A 1/4-INCH RADIUS.



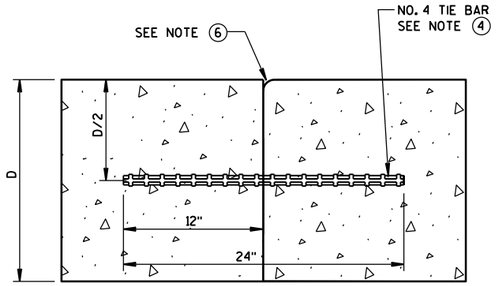
DOWELED-TRANSVERSE

CONTRACTION JOINTS

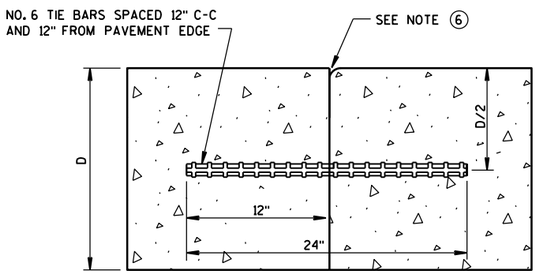
SEE NOTE (2)



DOWELED TRANSVERSE

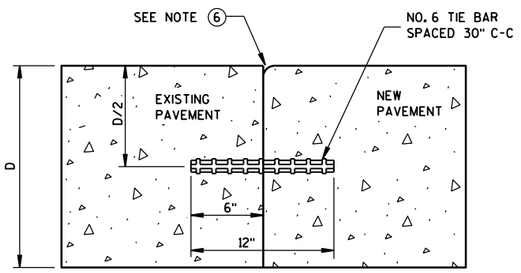


TIED LONGITUDINAL



TIED TRANSVERSE

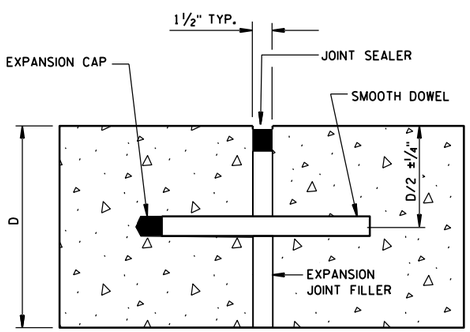
(FOR USE ON NON-DOWELED PAVEMENTS ONLY)



TIED LONGITUDINAL TO EXISTING

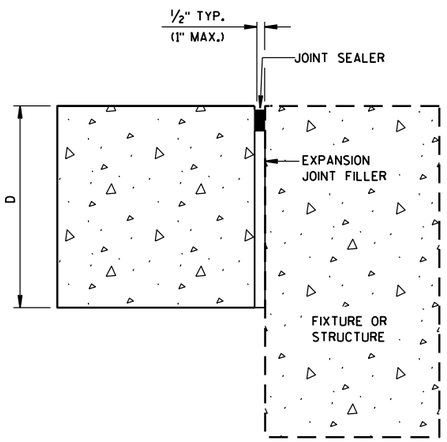
CONSTRUCTION JOINTS

SEE NOTE (5)



DOWELED-TRANSVERSE

SEE NOTE (1)



UNTIED-LONGITUDINAL

EXPANSION JOINTS

CONCRETE PAVEMENT
JOINT TYPES

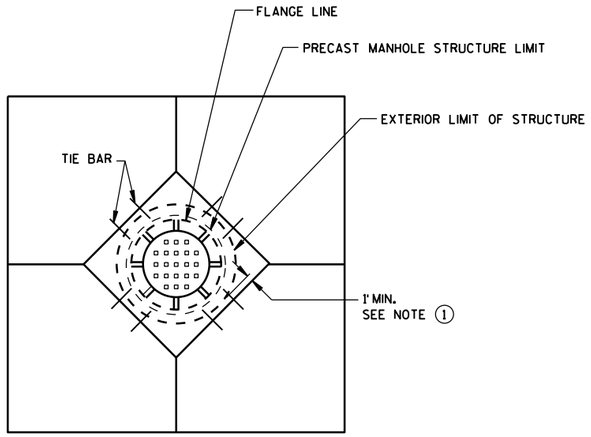
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

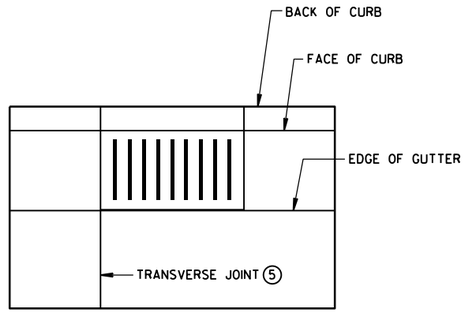
S.D.D. 13 C 18-2c

6

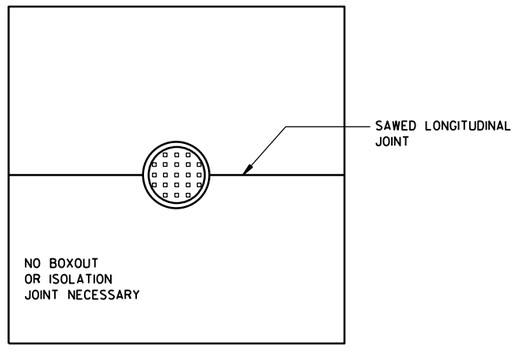
S.D.D. 13 C 18-2c



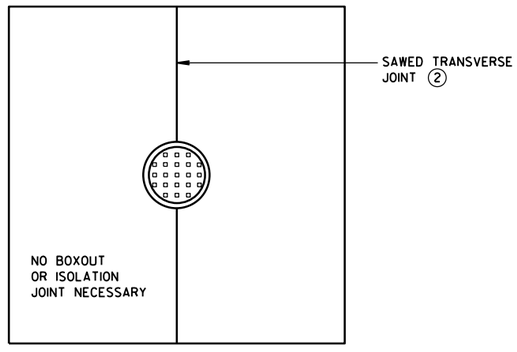
DIAGONAL MANHOLE BOXOUT FOR CONSTRUCTION JOINTS



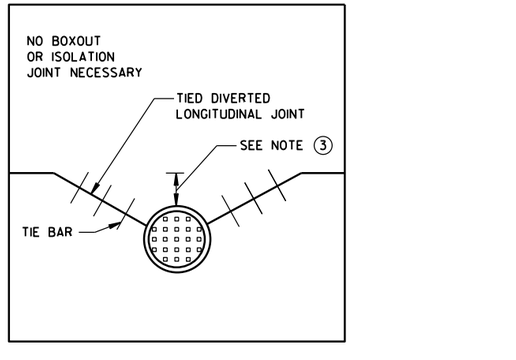
INLET WITH TRANSVERSE JOINT



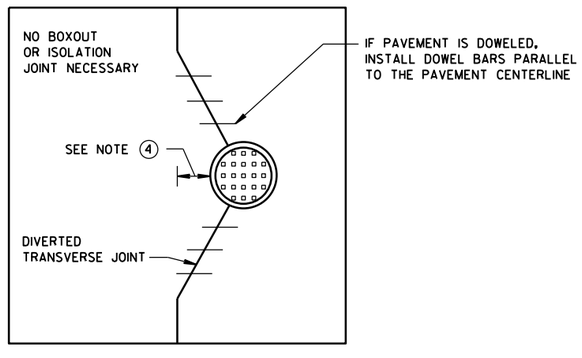
MANHOLE WITH LONGITUDINAL JOINT



MANHOLE WITH TRANSVERSE JOINT



MANHOLE WITH DIVERTED LONGITUDINAL CONTRACTION JOINT



MANHOLE WITH DIVERTED TRANSVERSE CONTRACTION JOINT

GENERAL NOTES

(1) USE BOXOUTS WHEN UTILITY STRUCTURE IS IN THE PATH OF CONSTRUCTION JOINTS. PROVIDE A 1-FOOT MINIMUM CLEARANCE BETWEEN THE EXTERIOR LIMIT OF THE STRUCTURE TO THE DIAMOND BOXOUT.

(2) ADJUST TRANSVERSE JOINT TO INTERSECT MANHOLE IF POSSIBLE.

(3) IF DISTANCE BETWEEN THE LONGITUDINAL JOINT AND THE EDGE OF MANHOLE IS 2 FEET OR LESS, DIVERT THE LONGITUDIAL JOINT AT A 2:1 TAPER RATE TO THE CENTER OF THE MANHOLE. IF THE DISTANCE IS GREATER THAN 2 FEET, DO NOT DIVERT THE JOINT AND SAW AS NORMAL. PLACE REBAR REINFORCEMENT AROUND THE MANHOLE.

(4) IF DISTANCE FROM THE EDGE OF THE MANHOLE TO THE NEAREST TRANSVERSE JOINT IS 4 FEET OR LESS, REDIRECT JOINT TO INTERSECT THE CENTER OF THE MANHOLE. IF DISTANCE IS GREATER THAN 4 FEET, DO NOT DIVERT THE JOINT AND SAW AS NORMAL. PLACE REBAR REINFORCEMENT AROUND THE MANHOLE.

(5) ALIGN TRANSVERSE JOINT WITH ONE EDGE OF INLET WHEN PRACTICAL.

CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

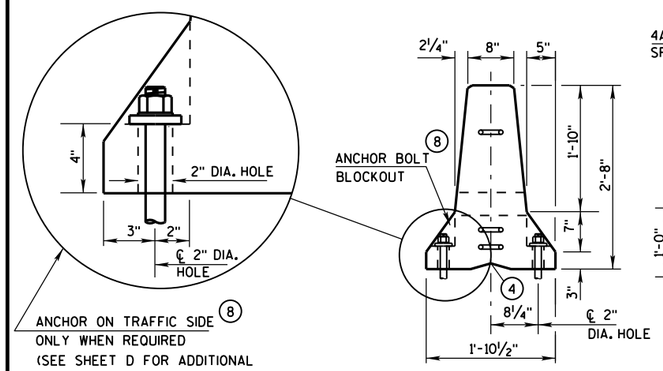
APPROVED

5-3-2013	/S/ Deb Bischoff	
DATE	PAVEMENT POLICY & DE	NEER

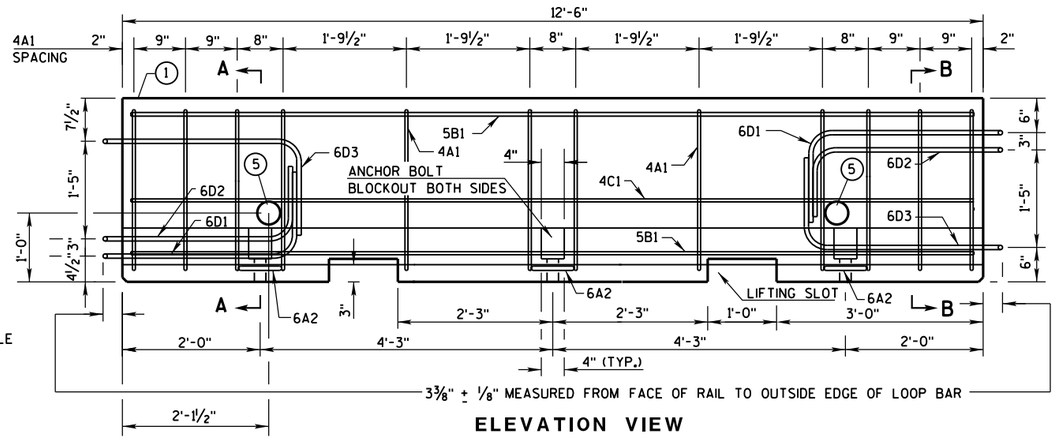
FHWA

6

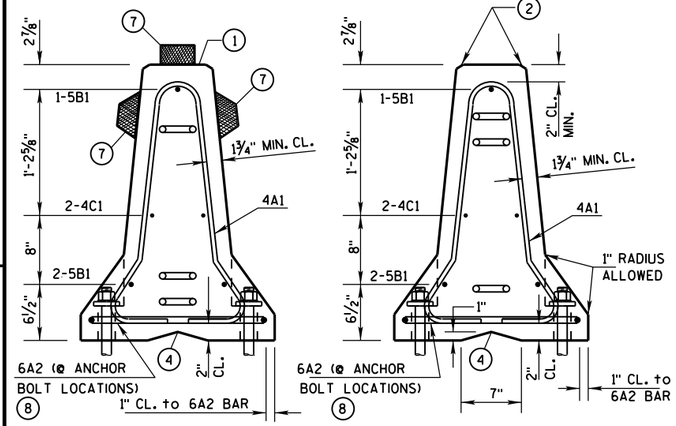
S.D.D. 13 C 18-2d



END VIEW

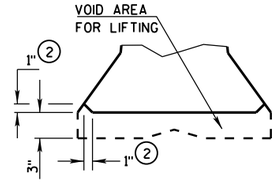


ELEVATION VIEW

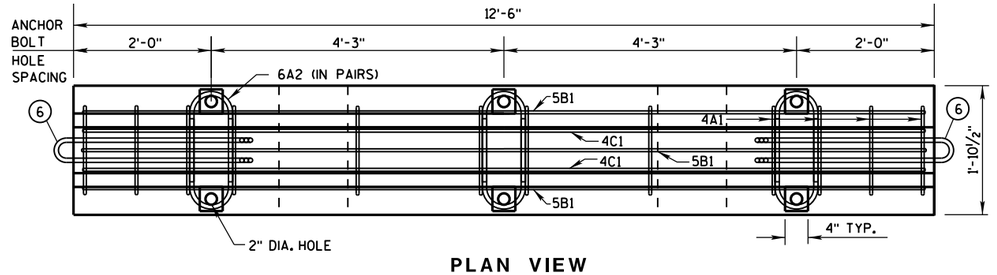


SECTION A-A
(STIRRUP PLACEMENT)

SECTION B-B
(STIRRUP PLACEMENT)

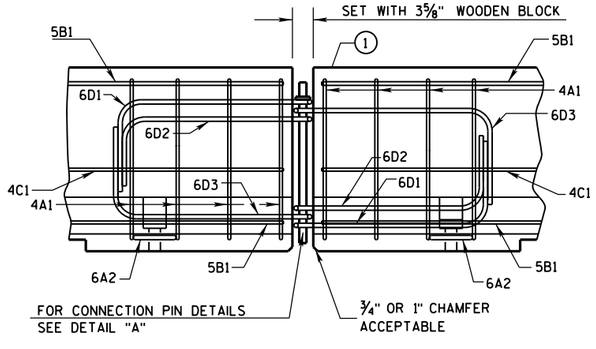


DETAIL "B"
LIFTING SLOT DETAIL

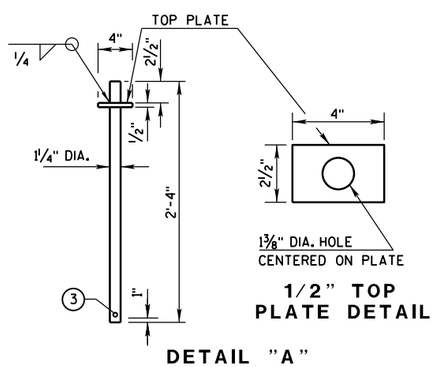


PLAN VIEW

DETAILS OF BARRIER SECTION

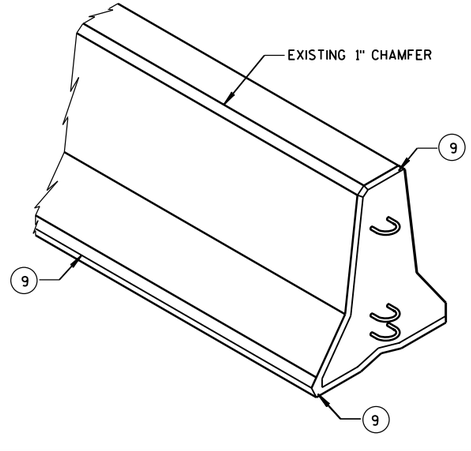


DETAILS OF BARRIER CONNECTION



1/2" TOP
PLATE DETAIL

DETAIL "A"
CONNECTION PIN
(A36 STEEL (10.9 LB EACH))



GENERAL NOTES

THESE GENERAL NOTES APPLY TO SHEETS 14B7-14(a) THRU 14B7-14(h).

DO NOT INTERMIX CONCRETE BARRIER TEMPORARY PRCAST, 12'-6" (CBTP12.5) WITH OTHER TEMPORARY CONCRETE BARRIERS.

USE ASTM A-615, GRADE 60, DEFORMED STEEL BARS FOR BARS 4A1, 6A2, 5B1 AND 4C1 IN THE BARRIER SECTION AND FOR 4V1, 4V2, 4V3, 4V4, 4V5, 4V6, 4F1, 4F2 AND 5F3 IN THE BARRIER TAPER SECTION.

LOOP BARS 6D1, 6D2 AND 6D3 SHALL BE ¾" SMOOTH STEEL BARS WITH A MINIMUM YIELD STRENGTH OF 60 KSI, A TENSILE STRENGTH OF NOT LESS THAN 1.25 TIMES THE YIELD STRENGTH BUT A MINIMUM OF 80 KSI, A MINIMUM 14% ELONGATION IN 8 INCHES AND PASSING A 180 DEGREE BEND TEST USING A 3-½" PIN BEND DIAMETER FOR BEND TESTS. THE LOOPS SHALL BE INSTALLED WITHIN ⅛" OF THE PLAN DIMENSION.

CONSTRUCT LIFTING SLOTS AS SPECIFIED ON THE PLANS TO FACILITATE THE DRAINAGE OF WATER AFTER INSTALLATION.

PLACE BARRIER ON A PAVED SURFACE. REMOVE ALL LOOSE DIRT AND SAND FROM THE ROADWAY SURFACE PRIOR TO PLACEMENT OF THE BARRIER.

INSTALL MECHANICAL OR EPOXY ANCHORS PER MANUFACTURER'S RECOMMENDATIONS. PROVIDE MANUFACTURER'S INFORMATION TO PROJECT ENGINEER.

(1) MARK ONE END OF EACH BARRIER PERMANENTLY BY FORMING INTO THE BARRIER THE FOLLOWING INFORMATION:
- a. TYPE: WI CBTP
- b. MANUFACTURER
- c. DATE MANUFACTURED (MONTH AND YEAR)

(2) 1" CHAMFER TO PREVENT SPALLING.

(3) A ⅜" HOLE IN THE CONNECTION PIN, AT THE LOCATION SHOWN, IS ACCEPTABLE, BUT NOT REQUIRED..

(4) "V" NOTCH IS OPTIONAL.

(5) THE 4" DIAMETER, 11 GAUGE STEEL, ROUND MECHANICAL TUBING SLEEVE FOR LIFTING (OPTIONAL).

(6) NEVER USE LOOP BARS (6D1, 6D2 OR 6D3) TO LIFT, MOVE OR REPOSITION THE BARRIER.

(7) USE DELINEATORS CONFORMING TO SECTION 633 OF THE STANDARD SPECIFICATIONS. CONTRACTOR MAY USE ALTERNATE SHAPES AND HOUSING. INSTALL DELINEATORS ACCORDING TO MANUFACTURES INSTRUCTION. INSTALL YELLOW REFLECTORS WHEN BARRIER IS LOCATED TO THE LEFT OF TRAFFIC AND WHITE REFLECTORS WHEN BARRIER IS LOCATED TO THE RIGHT OF TRAFFIC. SPACE DELINEATORS A MAXIMUM OF 25 FEET APART. PROVIDE TOP MOUNTED DELINEATORS IN ADDITION TO THE SIDE MOUNTED DELINEATORS ON ALL BARRIER INSTALLATIONS LOCATED ON A CURVED ALIGNMENT LONGER THAN 200 FEET AND ON BARRIERS USED TO SEPARATE OPPOSING TRAFFIC.

(8) SEE SHEET D FOR ANCHORING CRITERIA.

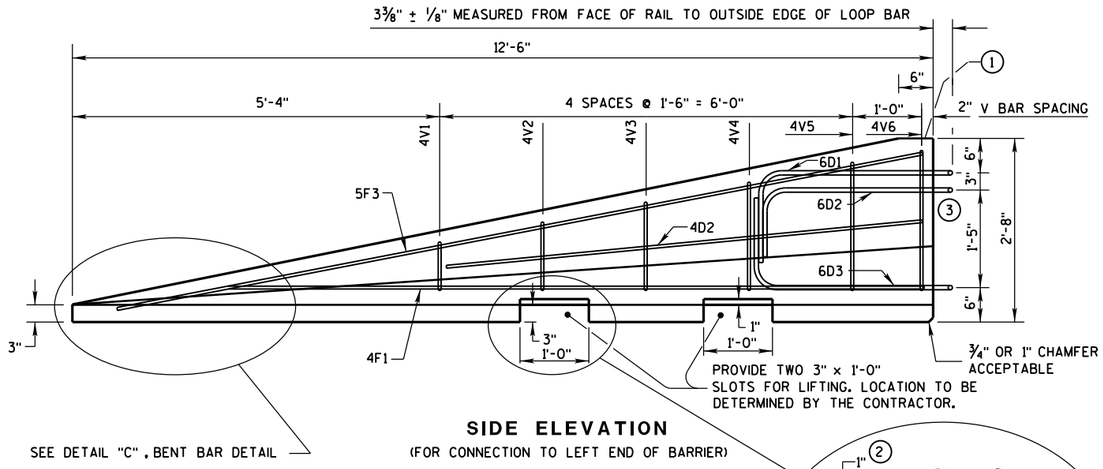
(9) 1" CHAMFER OPTIONAL.

CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"

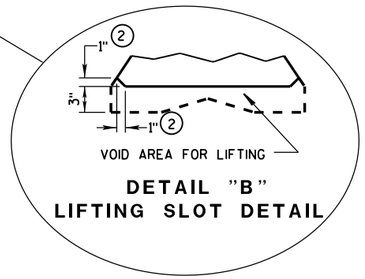
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

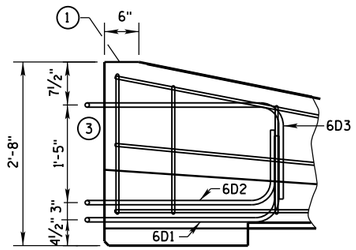
S.D.D. 14 B 7-14a



SIDE ELEVATION
(FOR CONNECTION TO LEFT END OF BARRIER)



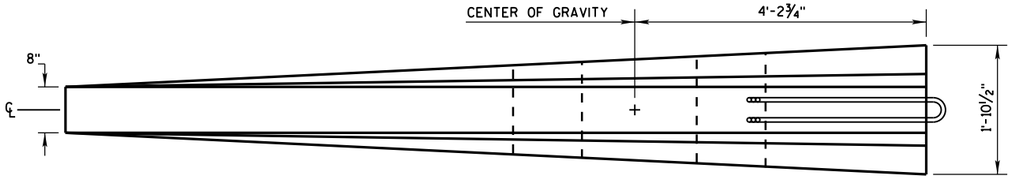
DETAIL "B"
LIFTING SLOT DETAIL



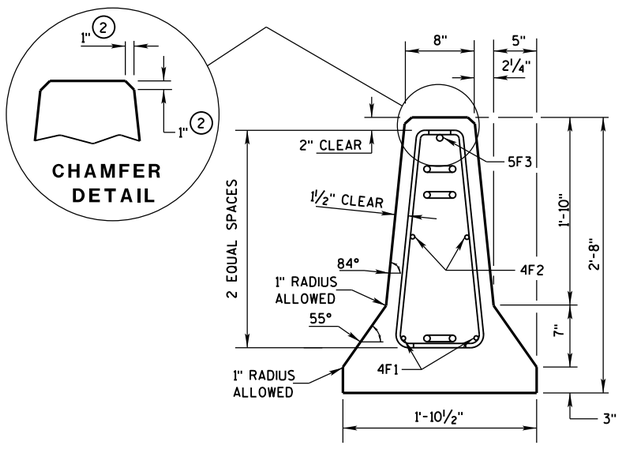
SIDE ELEVATION
LOOP BAR ASSEMBLY INVERTED
FOR OPPOSITE END.
(FOR CONNECTION TO RIGHT END OF BARRIER)

GENERAL NOTES

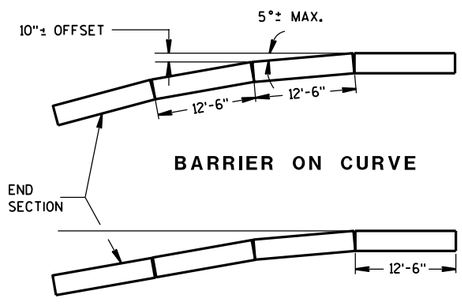
1. MARK ONE END OF EACH BARRIER PERMANENTLY BY FORMING INTO THE BARRIER THE FOLLOWING INFORMATION:
   a. TYPE WICBTP
   b. MANUFACTURER
   c. DATE MANUFACTURED (MONTH AND YEAR)
2. 1" CHAMFER TO PREVENT SPALLING.
3. NEVER USE LOOP BARS (6D1, 6D2 OR 6D3) TO LIFT, MOVE OR REPOSITION THE BARRIER.



PLAN VIEW



END SECTION **FRONT ELEVATION**



BARRIER ON CURVE

FLARE AT BARRIER END

POSTED SPEED, (MPH)	FLARE RATE
40 OR LESS	6:1
45 OR GREATER	8:1

DETAILS OF BARRIER TAPER SECTION

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

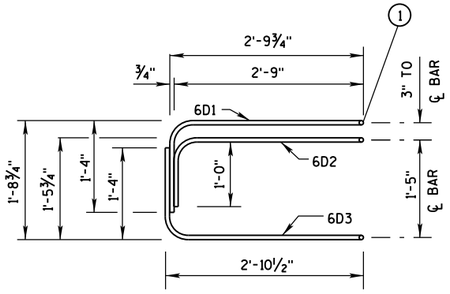
6

S.D.D. 14 B 7-14b

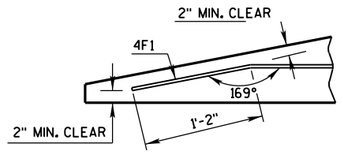
BARRIER TAPER SECTION BILL OF MATERIALS

(PER 12'-6" BARRIER TAPER SECTION)

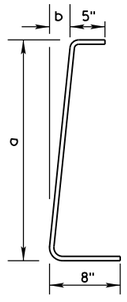
BAR	BAR SIZE	NO. OF BARS	LENGTH FT.
4V1	4	2	1'-11"
4V2	4	2	2'-2"
4V3	4	2	2'-6"
4V4	4	2	2'-9"
4V5	4	2	3'-2"
4V6	4	2	3'-4"
4F1	4	2	12'-0"
4F2	4	2	7'-6"
5F3	5	1	11'-9"
LOOP ASSEMBLY			
6D1	6	1	8'-5"
6D2	6	1	7'-7"
6D3	6	1	8'-6"



ELEVATION
LOOP BAR ASSEMBLY



DETAIL "C"
BENT BAR DETAIL



BAR	a	b
V1	10"	1"
V2	1'-1"	1¼"
V3	1'-5"	1⅝"
V4	1'-8"	1⅞"
V5	2'-0½"	2⅜"
V6	2'-3"	2¾"

4V BARS
2 AT EACH SIZE REQUIRED
FOR STIRRUP ASSEMBLY

TAPER BARRIER SECTION

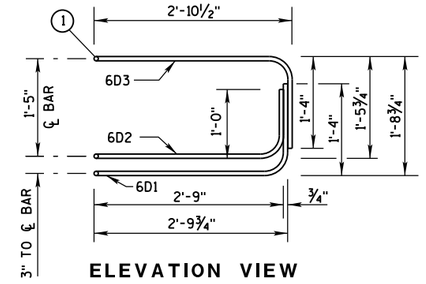
GENERAL NOTES

(1) NEVER USE LOOP BARS (6D1, 6D2 OR 6D3) TO LIFT, MOVE OR REPOSITION THE BARRIER.

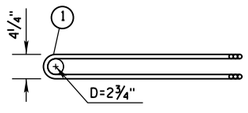
BARRIER SECTION BILL OF MATERIALS

(PER 12'-6" BARRIER SECTION)

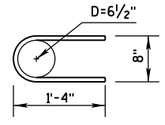
BAR	BAR SIZE	NO. OF BARS	LENGTH FT.
4A1	4	12	6'-0"
6A2	6	6	2'-11"
5B1	5	3	12'-2"
4C1	4	2	12'-2"
LOOP ASSEMBLY			
6D1	6	2	8'-5"
6D2	6	2	7'-7"
6D3	6	2	8'-6"



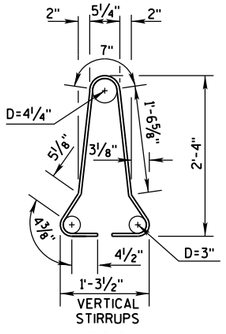
ELEVATION VIEW



PLAN VIEW
LOOP BAR ASSEMBLY
(MARKED END SHOWN, INVERT FOR OTHER END)



6A2



4A1

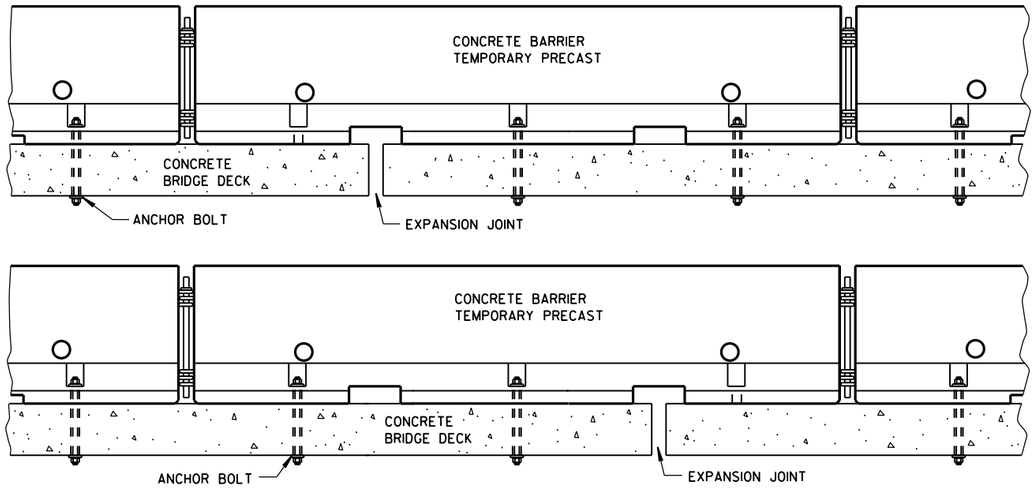
BARRIER SECTION

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

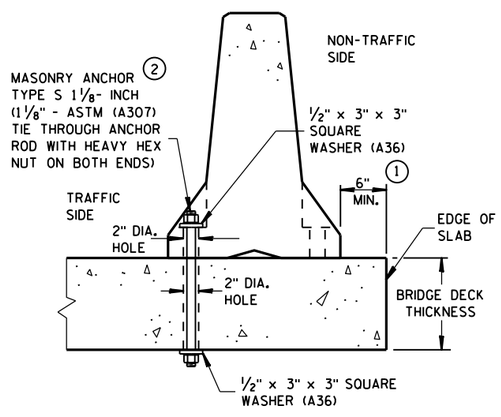
6

S.D.D. 14 B 7-14c



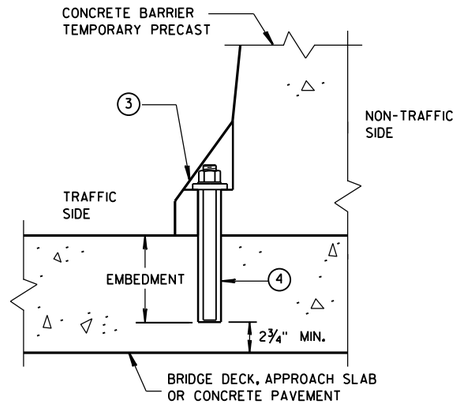
TREATMENT AT BRIDGE DECK EXPANSION JOINTS

(NO SINGLE CONCRETE BARRIER SECTION SHALL BE ANCHORED TO BOTH THE BRIDGE DECK AND THE APPROACH SLAB. ALL ANCHOR BOLT LOCATIONS SHALL BE ANCHORED TO THE DECK IN ACCORDANCE WITH THE DETAIL. NO MORE THAN ONE ANCHOR BOLT SHALL BE ELIMINATED FROM A BARRIER SECTION WHEN SPANNING AN EXPANSION JOINT.)



THROUGH BOLTED ANCHOR INSTALLATION ON BRIDGE DECK

(DO NOTUSE ON CONCRETE BRIDGE DECK WITH ASPHALT OVERLAY)



REMOVABLE ADHESIVE BONDED ANCHOR INSTALLATION ON CONCRETE BRIDGE DECK, CONCRETE APPROACH SLAB, OR CONCRETE PAVEMENT ②

(DO NOT USE ON CONCRETE WITH AN ASPHALTIC OVERLAY)

GENERAL NOTES

① CONCRETE BARRIER TEMPORARY PRECAST, 12'-6" SHALL BE ANCHORED IF:
THE DISTANCE TO A 2 FOOT OR GREATER DROPOFF THAT IS STEEPER THAN 3H : 1V, FOR EXAMPLE THE EDGE OF A BRIDGE DECK OR A DROPOFF AT THE EDGE OF PAVEMENT, IS LESS THAN 4 FEET FROM THE SIDE OF THE BARRIER CLOSEST TO THE DROPOFF AND THE POSTED SPEED IS 45 MPH OR GREATER, OR

THE DISTANCE TO A 2 FOOT OR GREATER DROPOFF THAT IS STEEPER THAN 3H : 1V, FOR EXAMPLE THE EDGE OF A BRIDGE DECK OR A DROPOFF AT THE EDGE OF PAVEMENT. IS LESS THAN 2 FEET FROM THE SIDE OF THE BARRIER CLOSEST TO THE DROPOFF AND THE POSTED SPEED IS 40 MPH OR LESS.

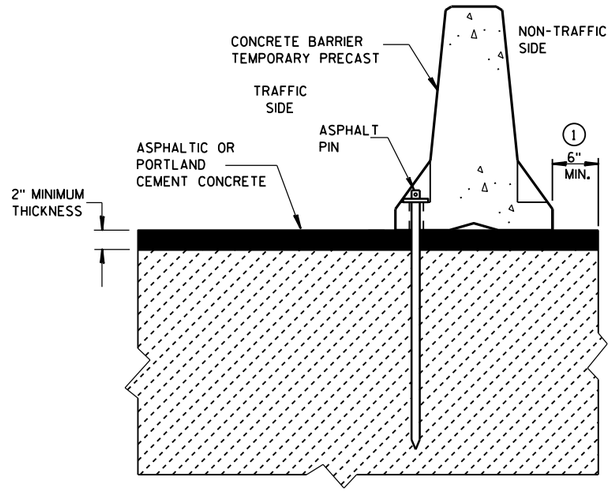
② ANCHORING IS INCIDENTAL TO CONCRETE BARRIER TEMPORARY PRECAST.

WITH THE APPROVAL OF THE ENGINEER, REMOVABLE ADHESIVE BONDED (EPOXY) ANCHOR BOLT INSTALLATION MAY BE USED IN LIEU OF THROUGH BOLTED ANCHOR INSTALLATION. THE ADHESIVE BONDED ANCHOR BOLT MUST BE REMOVABLE. USE ASTM (A307) MASONRY ANCHORS TYPE S 1⅛-INCH, EMBEDDED TO A DEPTH SUFFICIENT TO DEVELOP THE ULTIMATE CAPACITY OF THE ANCHOR BOLT AND PROVIDE DOCUMENTATION TO CONFIRM THIS.

UPON REMOVAL OR RELOCATION OF THE BARRIER UNITS, REMOVE ALLANCHOR BOLTS AND COMPLETELY FILL IN THE REMAINING HOLES IN CONCRETE BRIDGE DECKS, CONCRETE APPROACH SLABS AND CONCRETE PAVEMENTS THAT ARE TO REMAIN, WITH A NON-SHRINK COMMERICAL GROUT OR EPOXY MATERIAL IDENTIFIED ON THE CURRENT WISDOT APPROVED PRODUCTS LIST.

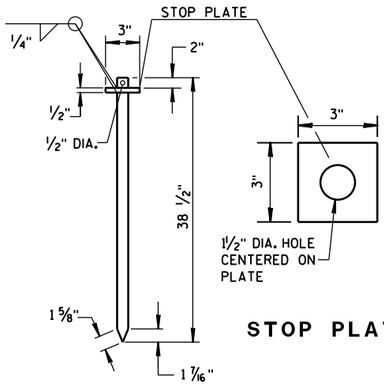
③ 1⅛" DIAMENTER A307 THREADED ROD, ½" X 3" X 3" SQUARE PLATE WASHER WITH ASTM A36 STEEL, ASTM A563A HEAVY HEX NUT.

④ ADHESIVE ANCHORS WITH A MINIMUM BOND STRENGTH OF 1,800 PSI AND 5¼" EMBEDMENT. SEE 603.2 AND 603.3.1.2 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR MORE INFORMATION ON ADHESIVE ANCHORS.



STAKE DOWN INSTALLATION FOR ASPHALTIC OR PORTLAND CEMENT CONCRETE SURFACE

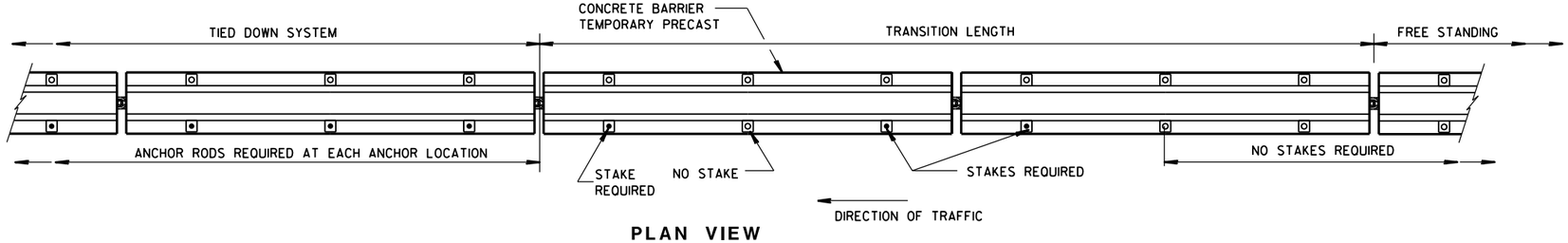
(STAKING IS INCIDENTAL TO CONCRETE BARRIER TEMPORARY PRECAST)



STOP PLATE

ASPHALT PIN

(ASTM A36 STEEL)



PLAN VIEW

FREE STANDING TRANSITION TO TIED-DOWN SYSTEM

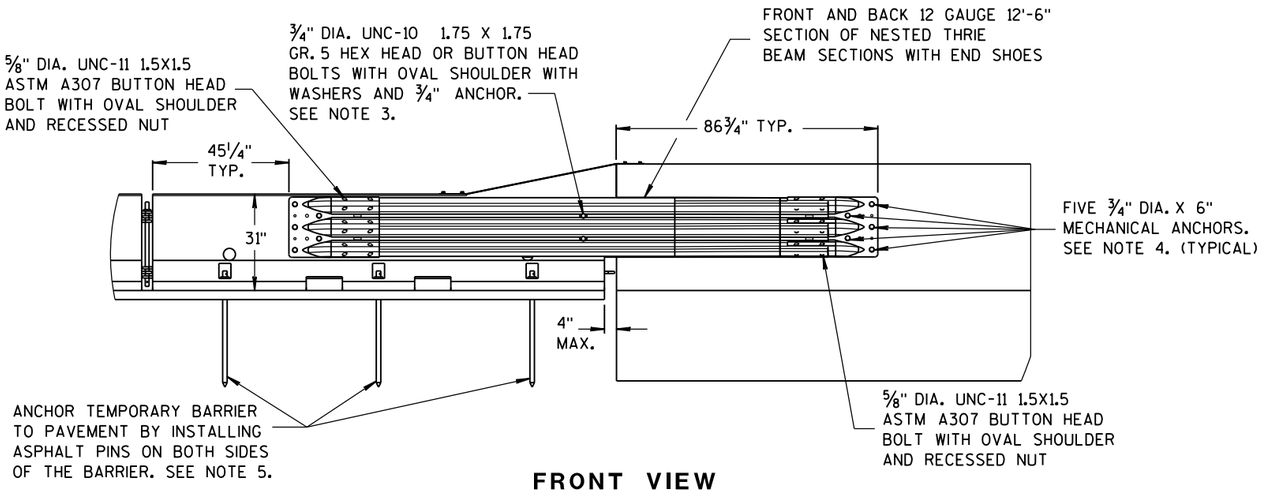
(PLACE TRANSITION IN A TANGENT SECTION OF BARRIER PARALLEL TO THE ROADWAY. IF TRANSITION OCCURS ON STRUCTURAL SLAB, ANCHOR AS SHOWN.)

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

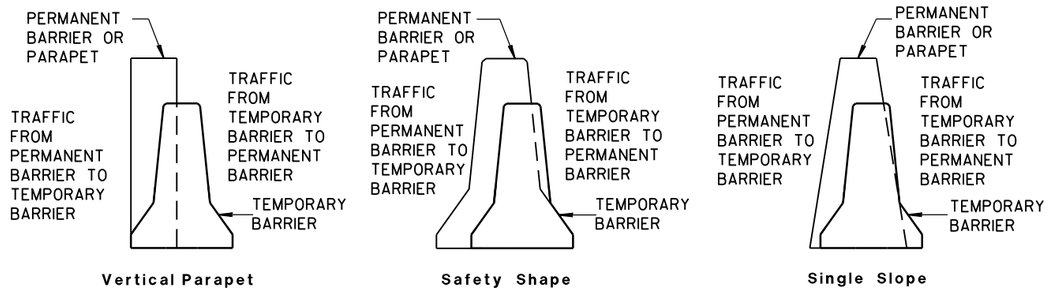
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

S.D.D. 14 B 7-14d



FRONT VIEW



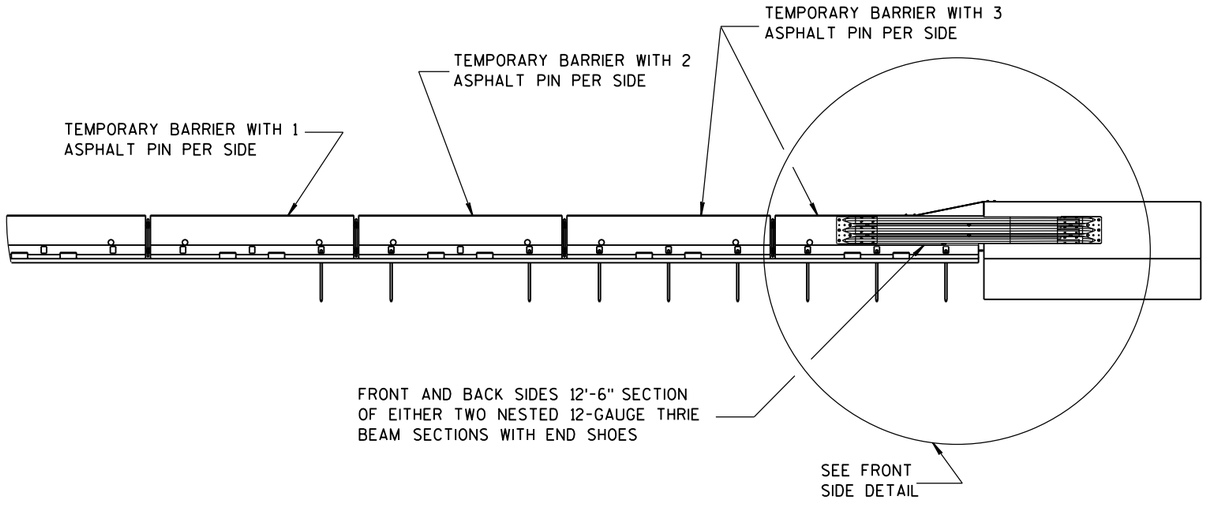
TEMPORARY BARRIER PLACEMENT FOR BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM

NOTES

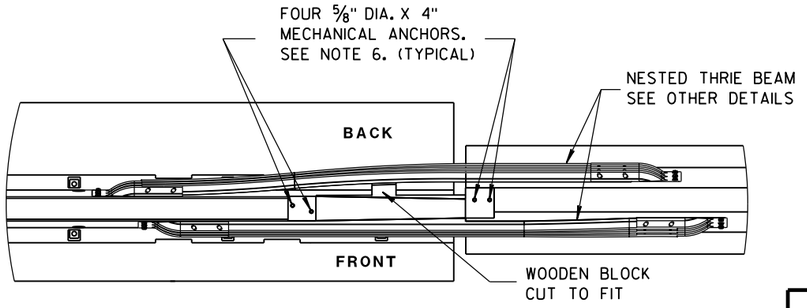
NESTED THRIE BEAM IS REQUIRED ON BOTH SIDES OF THE TEMPORARY BARRIER FOR ALL INSTALLATIONS.

1. CAP END PLATE PLACED FLUSH WITH UPSTREAM END OF PERMANENT BARRIER OR PARAPET.
2. THRIE BEAM PIECES ARE OFFSET 15 1/4" TO PREVENT INTERFERENCE FROM THE ANCHORS ON OPPOSING SIDES.
3. MINIMUM MECHANICAL OR EPOXY ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 9.48 KIPS AND ULTIMATE SHEAR LOAD 10.48 KIPS.
4. MINIMUM MECHANICAL OR EPOXY ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 17.9 KIPS AND ULTIMATE SHEAR LOAD 21.96 KIPS.
5. MAY BE USED ON CONCRETE OR ASPHALT PAVEMENTS. ASPHALT OPTION SHOWN. FOR CONCRETE OPTION SEE OTHER DETAILS.
6. MINIMUM MECHANICAL OR EPOXY ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 12.14 KIPS AND ULTIMATE SHEAR LOAD 17.5 KIPS.

BACK VIEW



FRONT VIEW



PLAN VIEW

BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

6
S.D.D. 14 B 7-14e

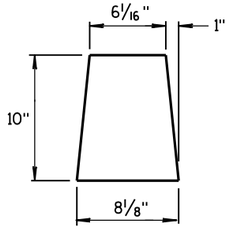
GUSSET 1

GUSSET 2

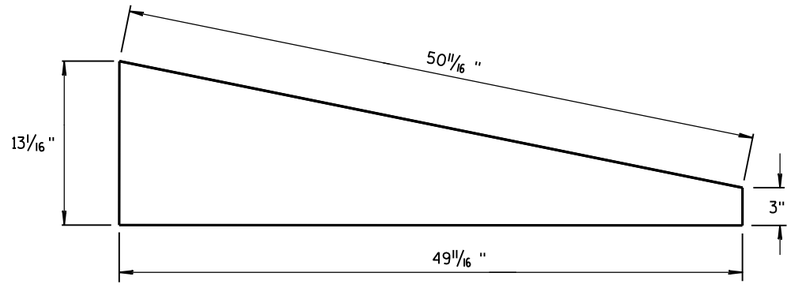
GUSSET 3

GUSSET 4

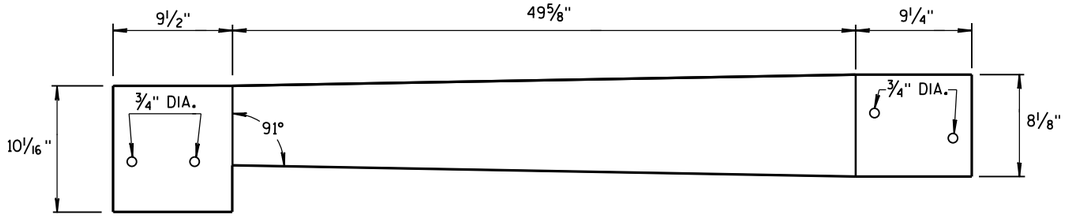
GUSSETS

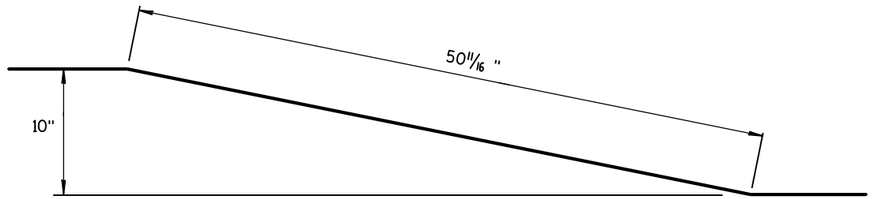


END PLATE

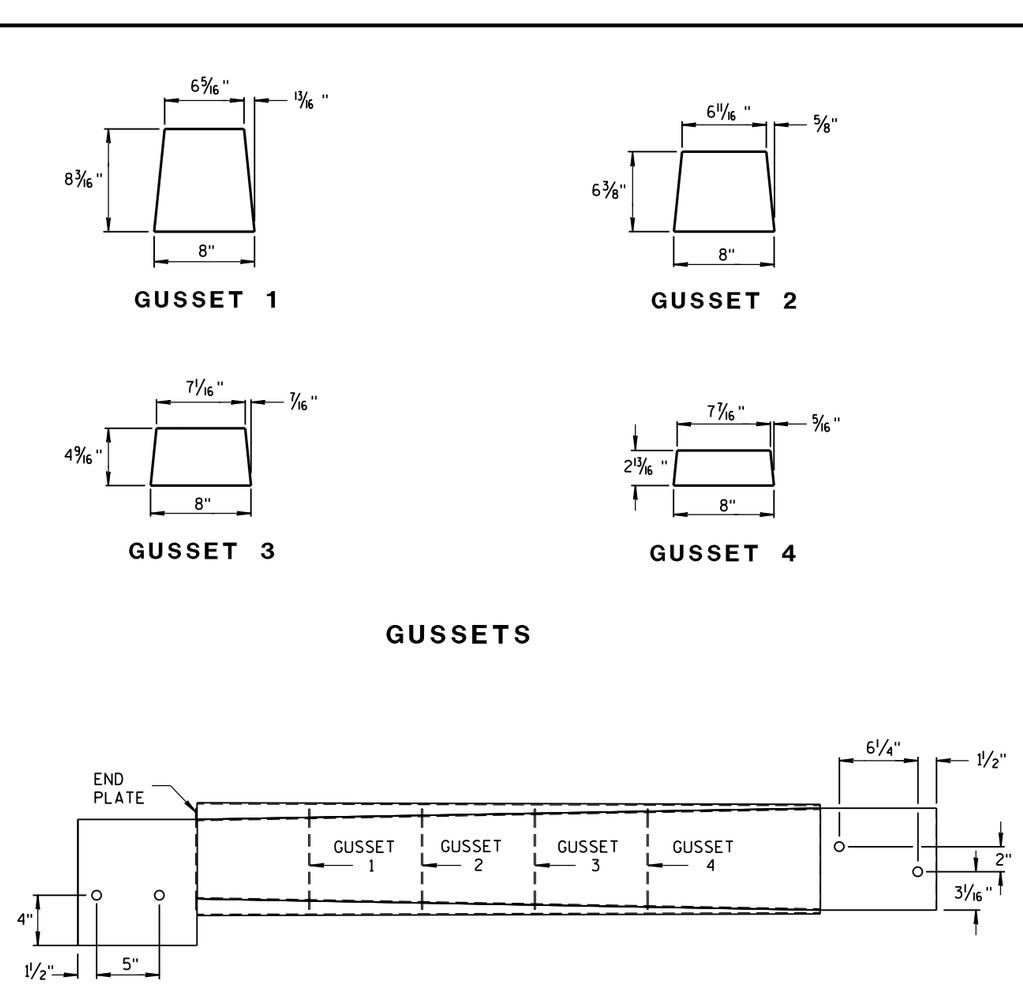


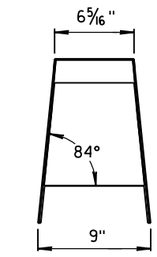
SIDE PLATE





TOP PLATE





SECTION C-C

SIDE, TOP AND END PLATES FOR CAP FROM TEMPORARY CONCRETE BARRIER TO 42" PERMANENT CONCRETE BARRIER

SIDE PLATES, TOP PLATE, END PLATE AND GUSSETS ARE 12 GAUGE ASTM A36 GALVANIZED STEEL.

NOTES

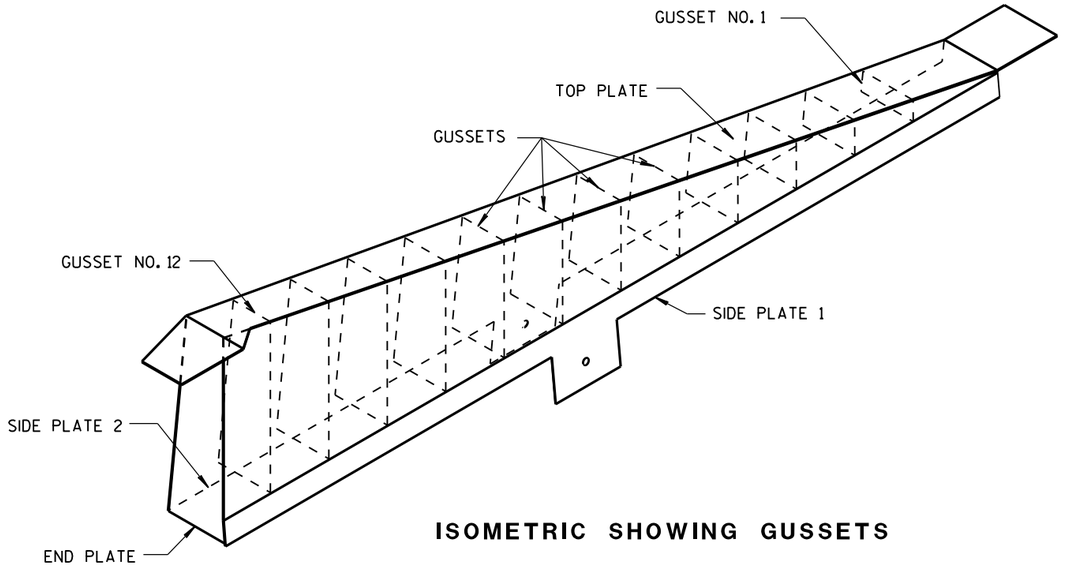
1. FOUR GUSSETS AND END PLATE ARE STITCH WELDED ON THREE SIDES.
2. TWO TRIANGULAR SIDE PLATES ARE STITCH WELDED TO TOP PLATE, END PLATE, AND GUSSETS.

CAP DETAILS FOR TEMPORARY CONCRETE BARRIER TO 42" PERMANENT CONCRETE BARRIER

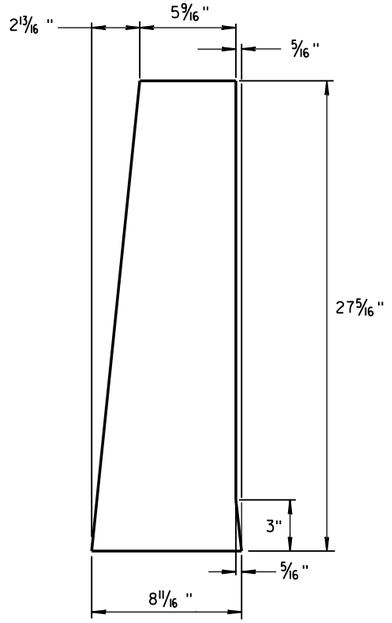
CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6
S.D.D. 14 B 7-14f

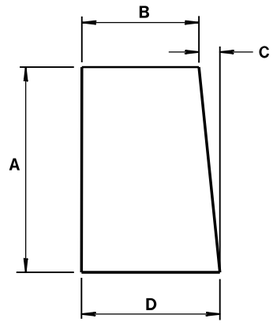


ISOMETRIC SHOWING GUSSETS



END PLATE

1/8" STEEL PLATE



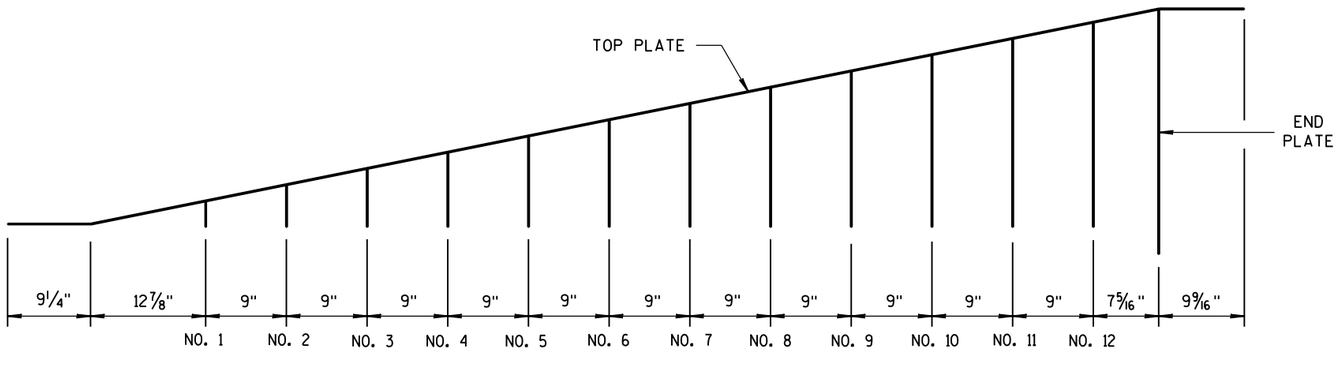
GUSSETS 1 - 12

ALL GUSSETS 1/8" STEEL PLATE

GUSSET DIMENSIONS				
GUSSET NO.	A	B	C	D
1	2 7/8"	7 3/4"	1/4"	8
2	4 11/16 "	7 9/16 "	1/2"	8
3	6 1/2"	7 3/8"	11/16 "	8 1/16 "
4	8 5/16 "	7 3/16 "	7/8"	8 1/16 "
5	10 1/8"	7"	1 1/16 "	8 1/16 "
6	11 15/16 "	6 13/16 "	1 1/4"	8 1/16 "
7	13 3/4"	6 5/8"	1 7/16 "	8 1/16 "
8	15 9/16 "	6 7/16 "	1 9/16 "	8 1/16 "
9	17 3/8"	6 1/4"	1 13/16 "	8 1/16 "
10	19 3/16 "	6 1/16 "	1 15/16 "	8 1/16 "
11	21"	5 7/8"	2 3/16 "	8 1/16 "
12	22 13/16 "	5 11/16 "	2 5/16 "	8 1/16 "

SIDE PLATES, TOP PLATE, END PLATE AND GUSSETS ARE 12 GAUGE ASTM A36 STEEL AND GALVANIZED.

GUSSETS AND END PLATE ARE STITCH WELDED ON 3 SIDES. TWO TRIANGULAR SIDE PLATES ARE STITCH WELDED TO TOP PLATE, END PLATE AND GUSSETS.



GUSSET LOCATION

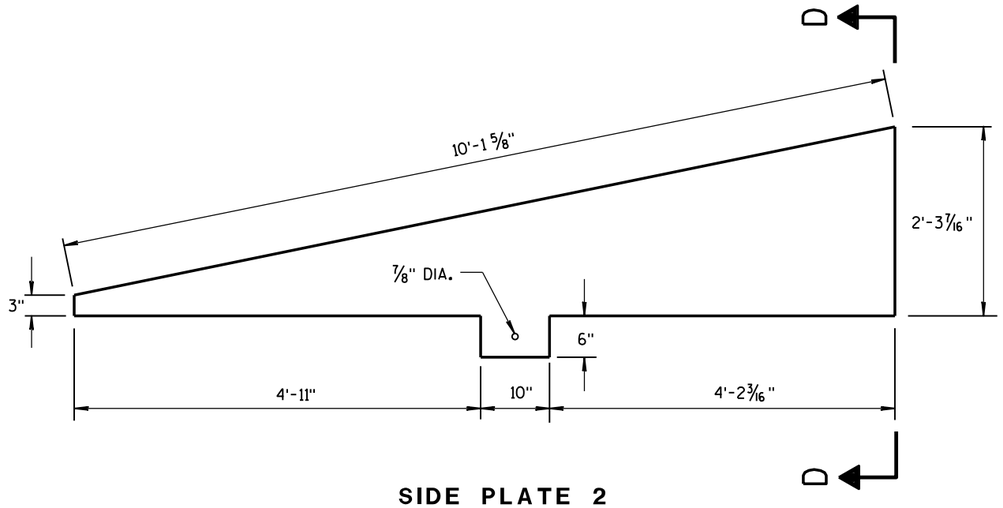
CAP DETAILS FOR TEMPORARY CONCRETE BARRIER TO 56" PERMANENT CONCRETE BARRIER

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

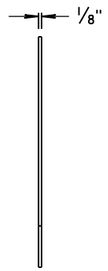
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

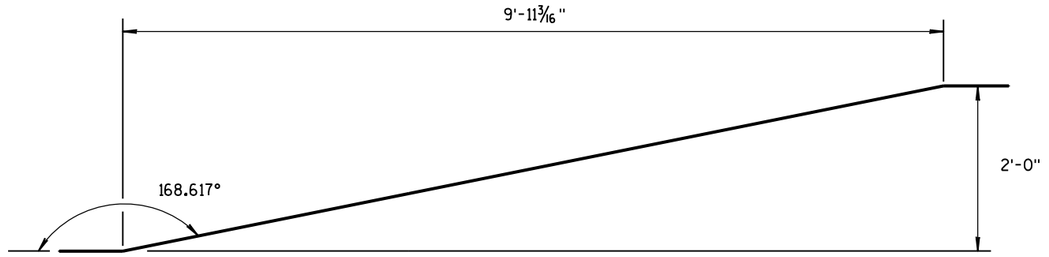
S.D.D. 14 B 7-14g



SIDE PLATE 2

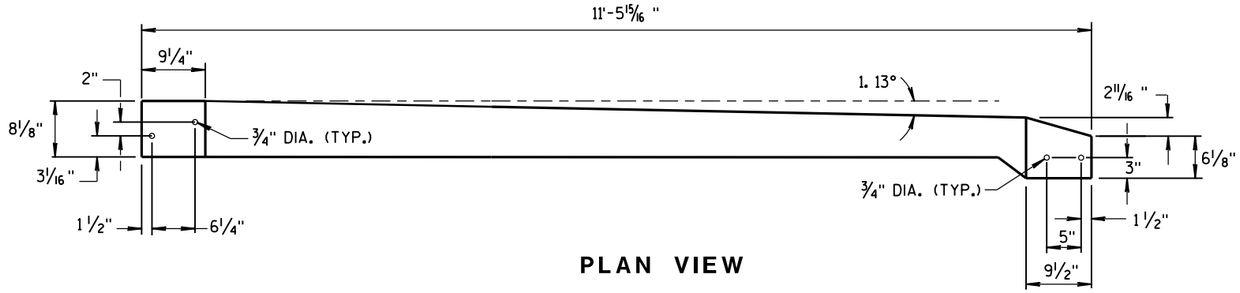


END VIEW



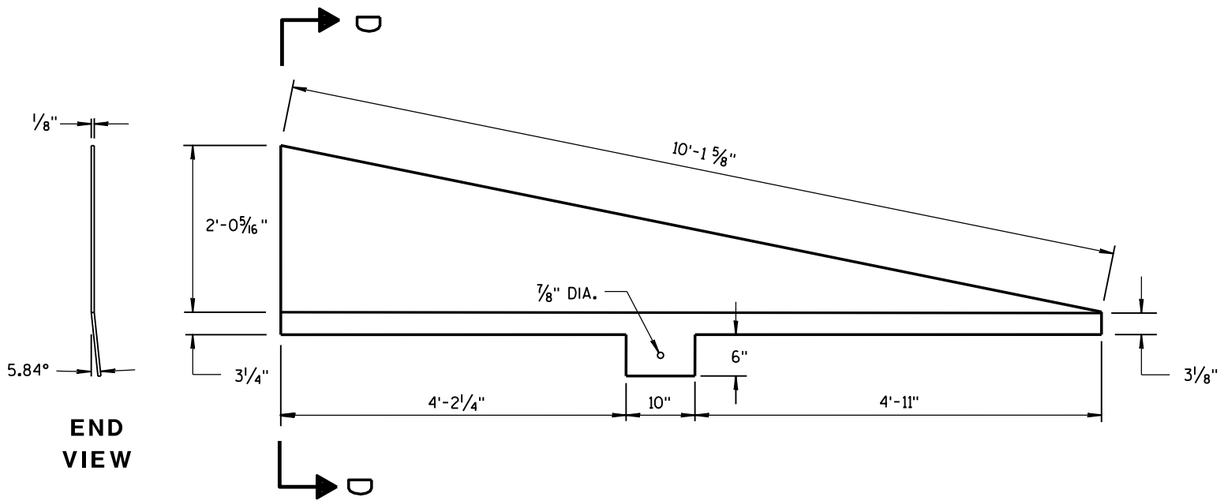
SIDE VIEW

TOP PLATE



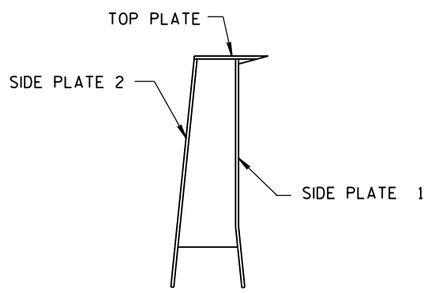
PLAN VIEW

TOP PLATE



END VIEW

SIDE PLATE 1



SECTION D-D

CAP DETAILS FOR TEMPORARY CONCRETE BARRIER TO 56" PERMANENT CONCRETE BARRIER

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2014 — DATE
/S/ Jerry H. Zoaa — ROADWAY STANDARD DEVELOPMENT ENGINEER
FHWA

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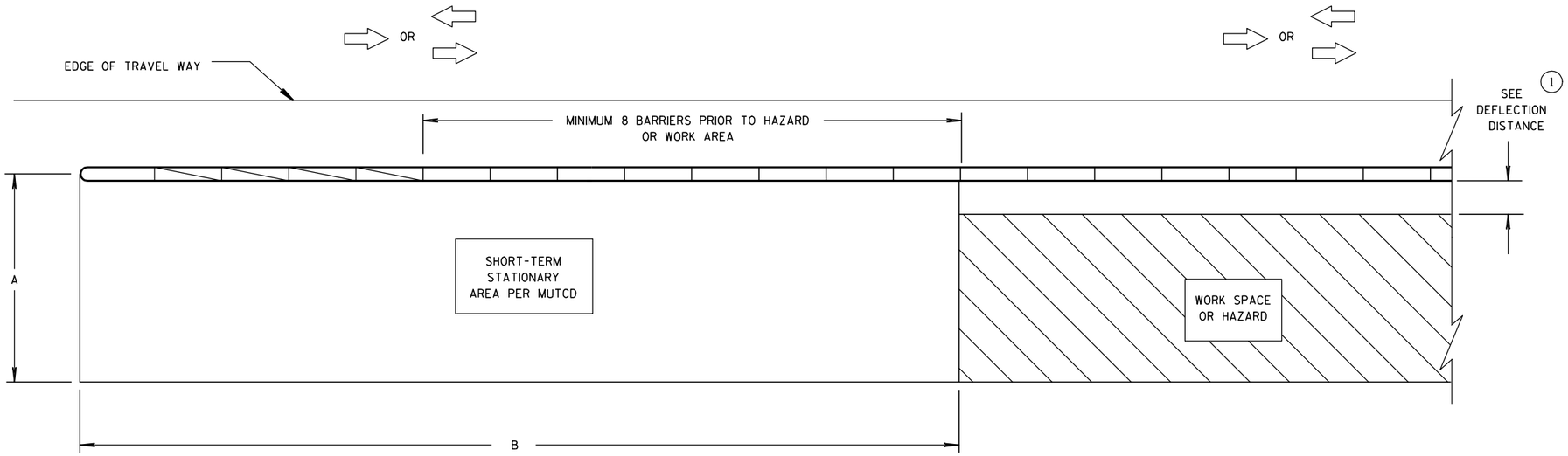
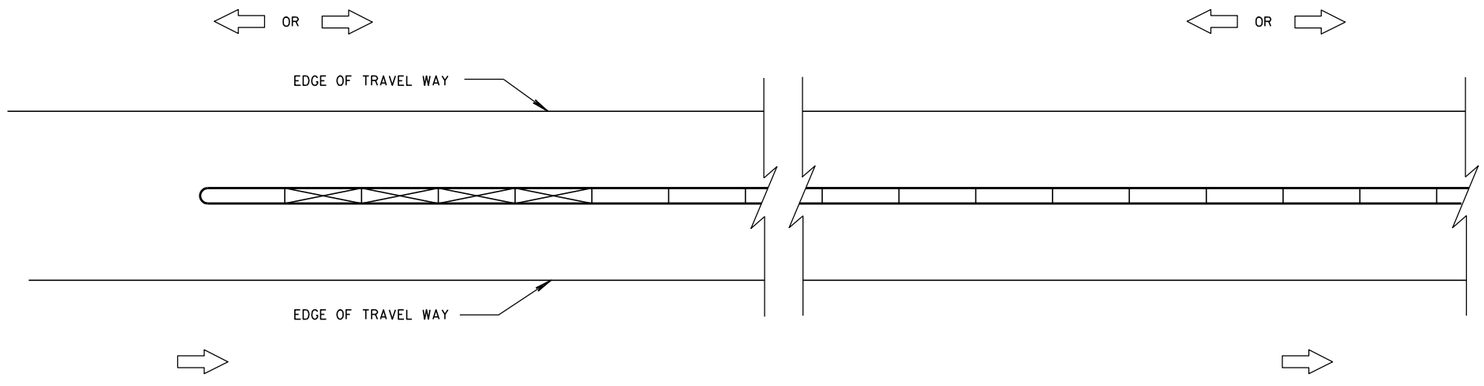
S.D.D. 14 B 7-14h

6

S.D.D. 14 B 7-14h



CRASH CUSHION/SAND BARREL ARRAY AND TEMPORARY BARRIER INSTALLATION FOR TRAFFIC ON ONE SIDE OF BARRIER



CRASH CUSHION/SAND BARREL ARRAY AND TEMPORARY BARRIER INSTALLATION FOR TRAFFIC ON BOTH SIDES OF BARRIER

DIMENSION A TABLE (2)

FACILITY	POSTED SPEED MPH	DIMENSION A	
		MIN. FT	MAX. FT
FREEWAY/EXPRESSWAY	ALL	15	20
NON-FREEWAY/EXPRESSWAY	GREATER THAN OR EQUAL TO 45	10	15
NON-FREEWAY/EXPRESSWAY	LESS THAN 45	8	10
AADT LESS THAN 1,500	ALL	8	10

DIMENSION B TABLE (2)

POSTED SPEEDS MPH	DIMENSION B FT
20	115
25	155
30	200
35	250
40	305
45	360
50	425
55	495
60	570
65	645

LEGEND

DIRECTION OF TRAVEL

CRASH CUSHION OR SAND BARREL ARRAY

SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS

SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS

3 PINS PLACED ON TRAFFIC SIDE OF BARRIER

PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET

FREE STANDING TEMPORARY BARRIER

GENERAL NOTES

SEE STANDARD DETAIL DRAWING 14B7 FOR MORE INFORMATION.

DETAILS PROVIDE A GENERAL LAYOUT OF TEMPORARY CONCRETE BARRIER, CRASH CUSHIONS, SAND BARREL ARRAYS AND TIE DOWN TRANSITIONS. DETAILS PROVIDED MAY NOT FIT ALL POSSIBLE SITUATIONS OR SITE CONDITIONS. SEE OTHER SECTIONS OF THE CONTRACT OR PROJECT ENGINEER FOR MORE DETAILS.

ADDITIONAL TEMPORARY BARRIER MAY BE REQUIRED TO PROTECT TRAVELING PUBLIC FROM HAZARDS, CONTRACTOR'S OPERATIONS OR TO CONTROL TRAFFIC.

TEMPORARY BARRIER MAY BE REQUIRED TO BE ANCHORED TO PAVEMENT OR BRIDGE DECK.

FOR DETAILS ON CRASH CUSHION OR SAND BARREL ARRAYS SEE OTHER SECTIONS OF THE PLAN AND MANUFACTURE'S DETAILS.

SLOPES LEADING TO TEMPORARY BARRIER, CRASH CUSHION OR SAND BARREL ARRAY ARE 10:1 OR LESS.

(1) FOR DEFLECTION INFORMATION SEE STANDARD DETAIL DRAWING 14B7.

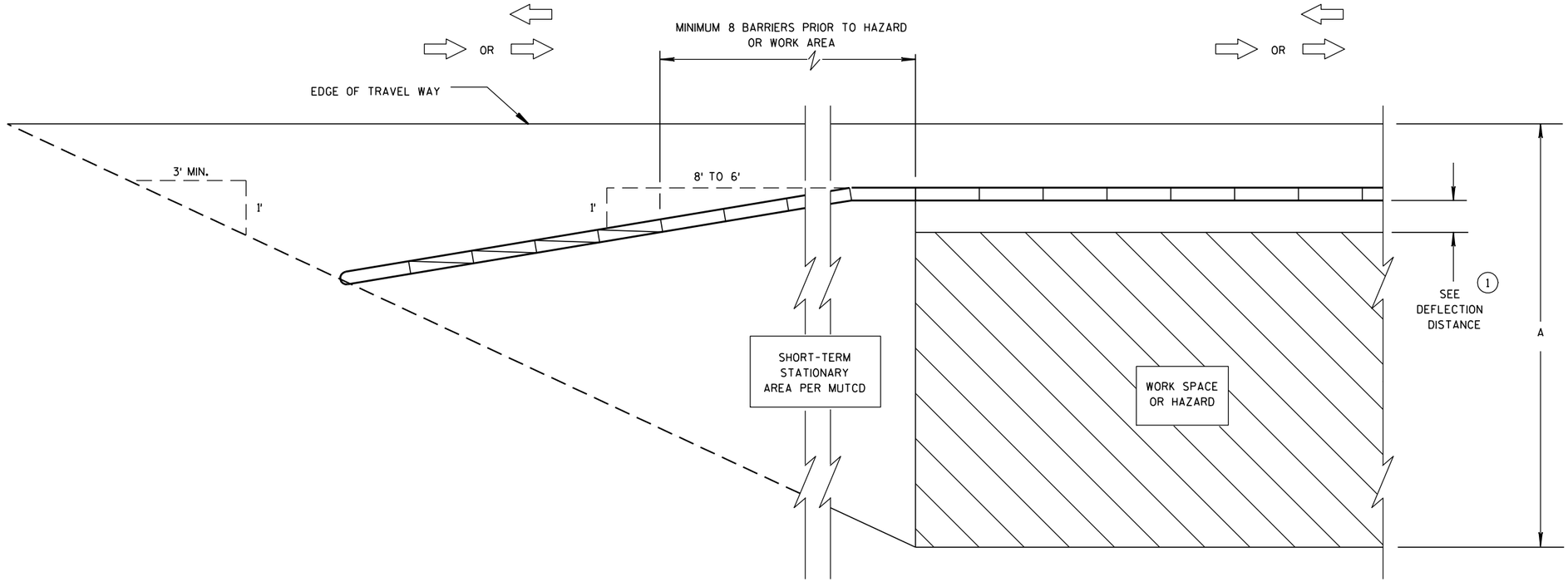
(2) VALUES PROVIDED MAY NOT FIT ALL POSSIBLE SITUATIONS OR SITE CONDITIONS. SEE OTHER SECTIONS OF THE CONTRACT OR PROJECT ENGINEER FOR MORE DETAILS.

CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS

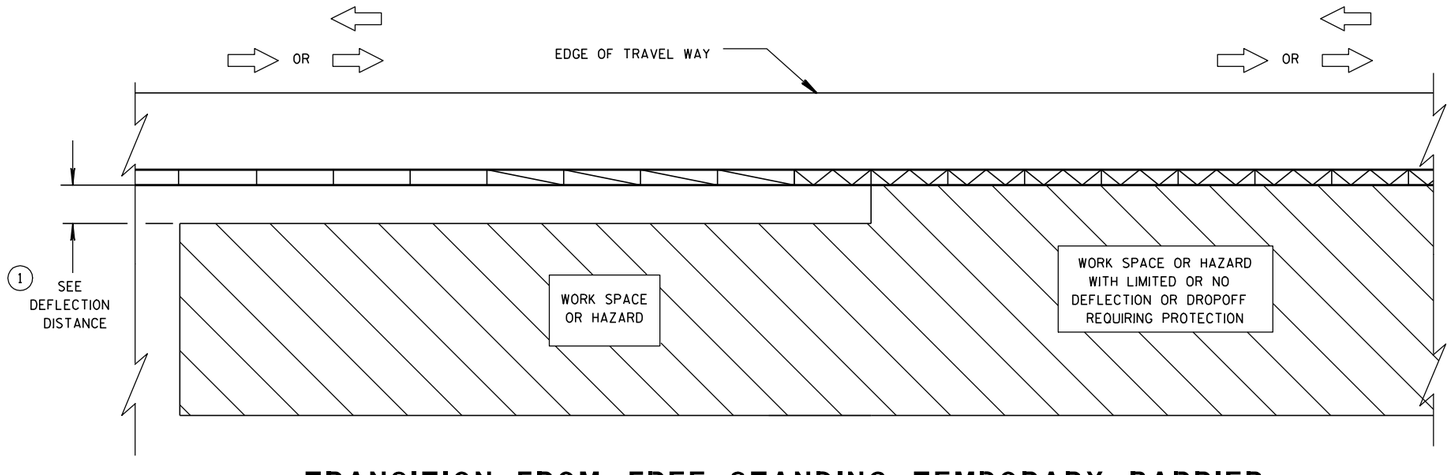
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

S.D.D. 14 B 8-1a



CRASH CUSHION/SAND BARREL ARRAY AND TEMPORARY BARRIER INSTALLATION FOR TRAFFIC ON ONE SIDE - FLARED INSTALLATION



TRANSITION FROM FREE STANDING TEMPORARY BARRIER TO ANCHORED BARRIER

LEGEND

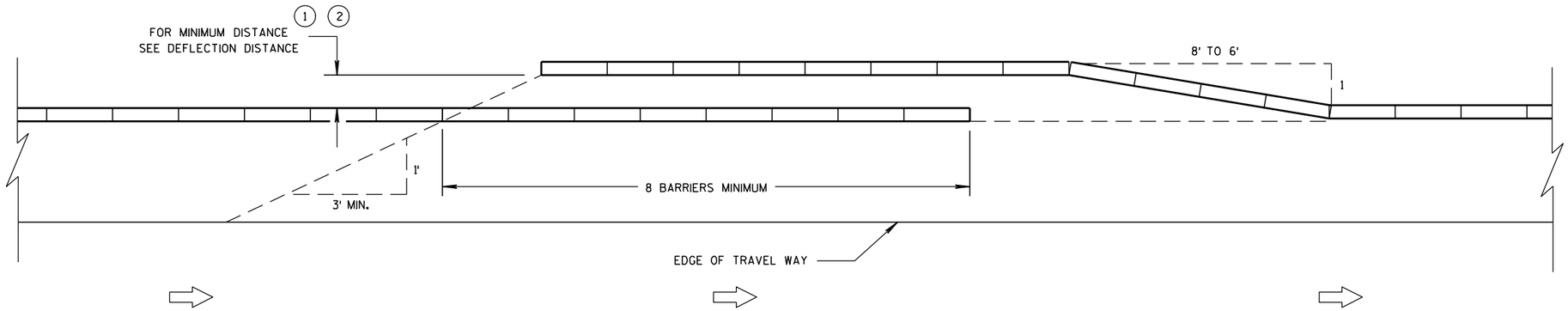
- DIRECTION OF TRAVEL
- CRASH CUSHION OR SAND BARREL ARRAY
- SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS
- SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS
- 3 PINS PLACED ON TRAFFIC SIDE OF BARRIER
- PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET
- FREE STANDING TEMPORARY BARRIER

CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS

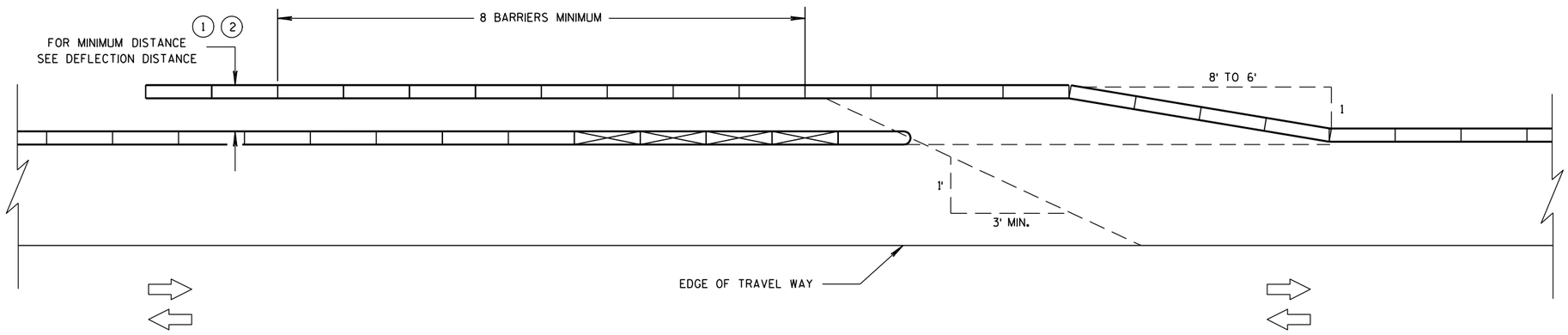
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

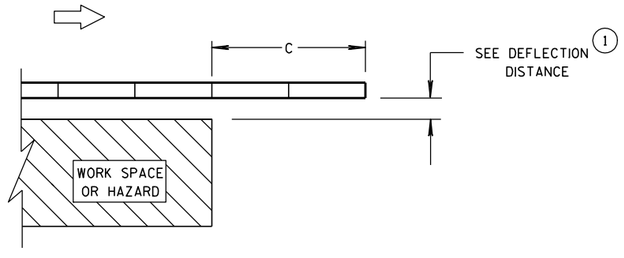
S.D.D. 14 B 8-1b



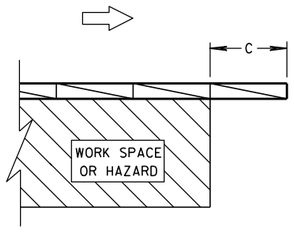
TEMPORARY BARRIER OVERLAP - ONE-WAY TRAFFIC



TEMPORARY BARRIER OVERLAP - TWO-WAY TRAFFIC



ENDING TEMPORARY BARRIER DOWNSTREAM - UNANCHORED



ENDING TEMPORARY BARRIER DOWNSTREAM - ANCHORED

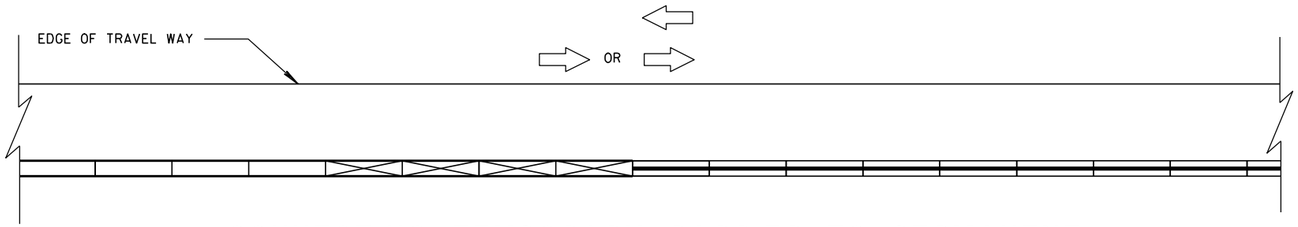
LEGEND

- DIRECTION OF TRAVEL
- CRASH CUSHION OR SAND BARREL ARRAY
- SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS
- SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS
- 3 PINS PLACED ON TRAFFIC SIDE OF BARRIER
- PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET
- FREE STANDING TEMPORARY BARRIER

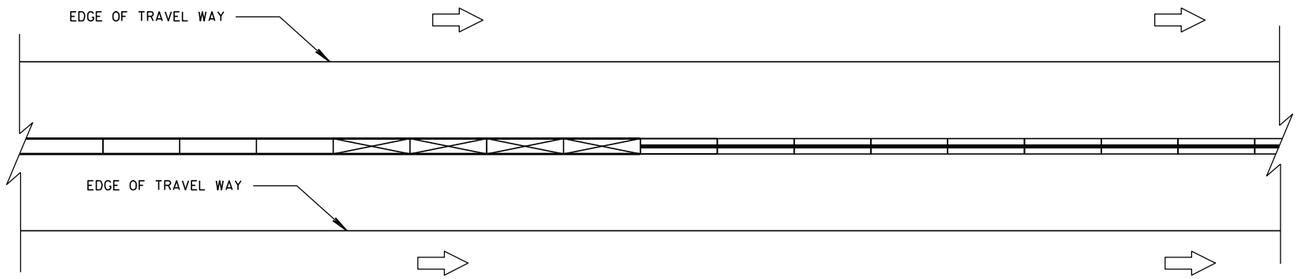
CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
S.D.D. 14 B 8-1c



CONNECTING TEMPORARY BARRIER TO PERMANENT
CONCRETE BARRIER-TRAFFIC ON ONE SIDE



CONNECTING TEMPORARY BARRIER TO PERMANENT
CONCRETE BARRIER-TRAFFIC ON BOTH SIDES

LEGEND

DIRECTION OF TRAVEL

CRASH CUSHION OR
SAND BARREL ARRAY

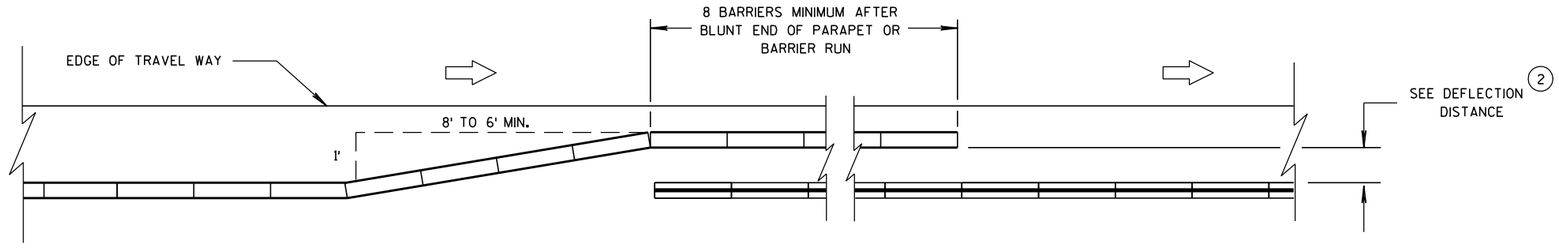
SEE FREE STANDING TRANSITION
TO TIED-DOWN SYSTEM DETAILS

SEE BI-DIRECTIONAL TRANSITION
TO TIED-DOWN SYSTEM DETAILS

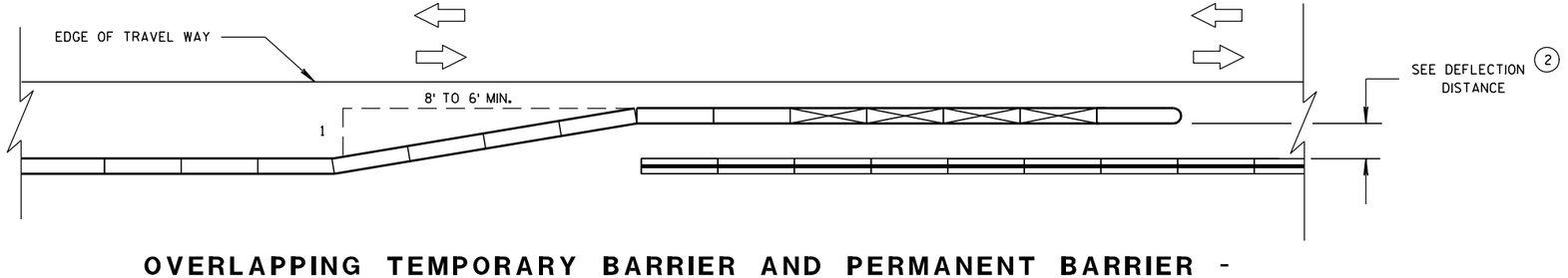
3 PINS PLACED ON
TRAFFIC SIDE OF BARRIER

PERMANENT CONCRETE BARRIER
OR CONCRETE PARAPET

FREE STANDING TEMPORARY
BARRIER



OVERLAPPING TEMPORARY BARRIER AND PERMANENT BARRIER -
ONE WAY TRAFFIC



OVERLAPPING TEMPORARY BARRIER AND PERMANENT BARRIER -
TWO WAY TRAFFIC

CRASH CUSHION/SAND BARREL
ARRAY AND OTHER TEMPORARY
BARRIER LAYOUT DETAILS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO...

6
S.D.D. 14 B 8-1d

LEGEND

DIRECTION OF TRAVEL

CRASH CUSHION OR SAND BARREL ARRAY

SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS

SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS

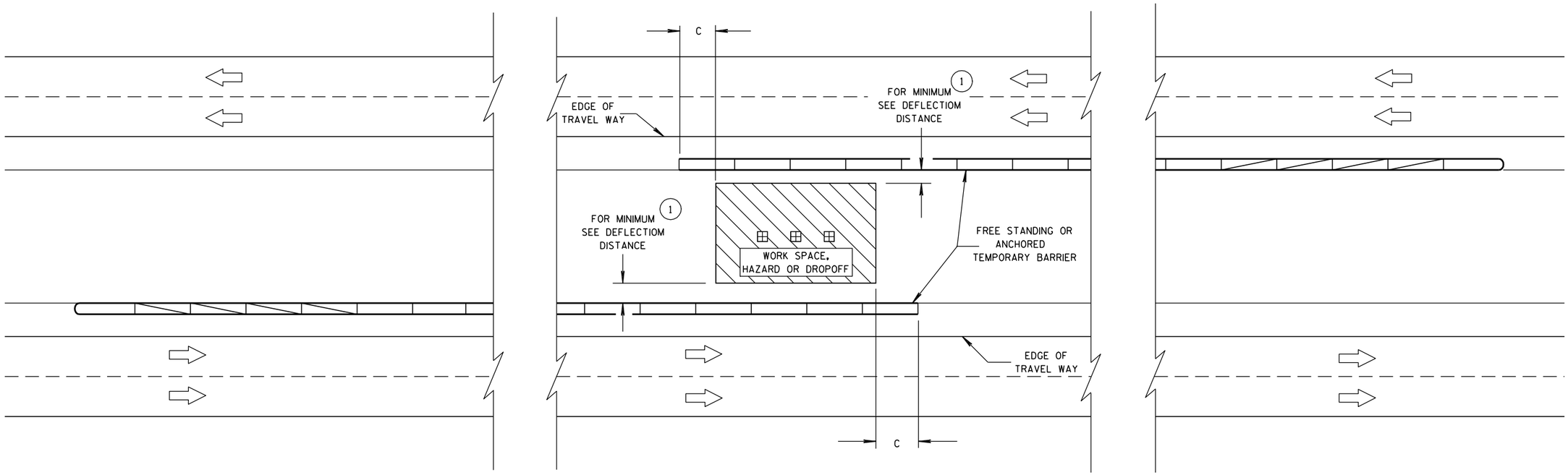
3 PINS PLACED ON TRAFFIC SIDE OF BARRIER

PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET

FREE STANDING TEMPORARY BARRIER

DIMENSION C TABLE (2)

AVAILABLE DEFLECTION DISTANCE	MINIMUM LENGTH OF BARRIER BEYOND HAZARD FT
GREATER THAN 8'	12.5
LESS THAN OR EQUAL TO 8' BUT GREATER THAN 4'	50
LESS THAN OR EQUAL TO 4'	100



CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8/31/2012
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINNER

FHWA

6
S.D.D. 14 B 8-1e

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) W6 X 9 OR W6 X 8.5 STEEL POSTS AND NOTCHED PLASTIC BLOCKOUTS ARE ACCEPTABLE ALTERNATIVES FOR 6" X 8" WOOD POSTS WITH WOOD OR PLASTIC BLOCKOUTS. USE APPROVED NOTCHED PLASTIC BLOCKOUTS WITH STEEL POSTS. APPROVED PLASTIC BLOCKOUT DESIGNS MAY VARY FROM THIS TYPICAL DETAIL WHEN USED IN CONJUNCTION WITH STEEL POSTS.

DO NOT MIX STEEL POSTS AND WOOD POSTS IN A SINGLE INSTALLATION.

(2) USE STRUCTURAL STEEL POSTS CONFORMING TO ASTM A 36. GALVANIZED POSTS ACCORDING TO AASHTO M 111. EITHER SET THE POSTS IN DRILLED HOLES OR DRIVE TO GRADE. REMOVE MUSHROOMING CAUSED BY DRIVING AND REPAIR DAMAGED SPELTER COATING ON GALVANIZED POSTS.

(3) INSTALL STEEL POSTS WITH HOLES ON APPROACHING TRAFFIC SIDE.

(4) USE EITHER WOOD OR APPROVED PLASTIC BLOCKOUTS ON WOOD POSTS.

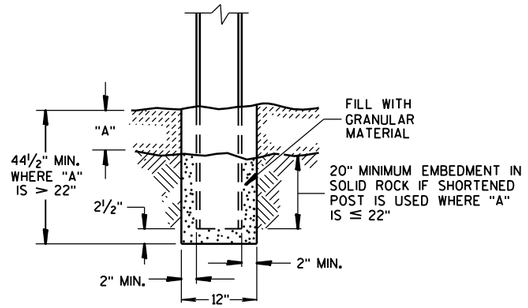
(5) IF THE DISTANCE FROM BACK OF POST TO SHOULDER HINGE POINT IS LESS THAN 2 FEET INSTALL LONGER POST AT HALF POST SPACING, W BEAM (LHW).

(6) IF ROCK IS ENCOUNTERED DURING EXCAVATION, THE ENGINEER MAY APPROVE USING A 12 INCH DIAMETER POST HOLE EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE APPROXIMATELY 2½ INCHES DEEP. CUT THE POSTS TO LENGTH AND PLACE IN YHE HOLE. BACKFILL WITH MATERIAL EXCAVATED FROM THE HOLE AND COMPACT ADEQUATEY.

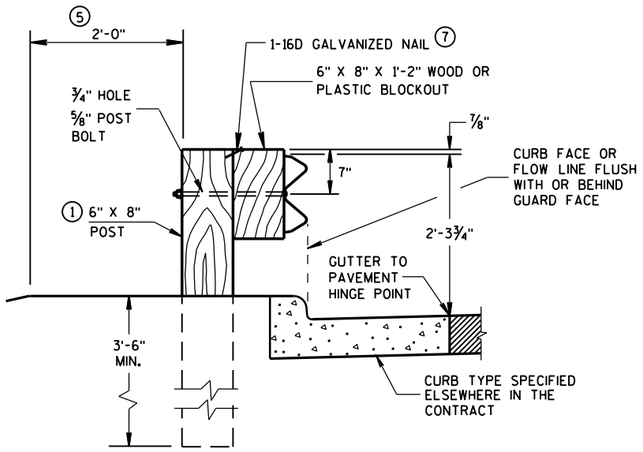
(7) WHEN USING STEEL POSTS AND WOOD BLOCKOUTS INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

INSTALL BEAM GUARD SECTIONS AND ALL NECESSARY HARDWARE ACCORDING TO THE APPLICABLE PLAN AND CURRENT STANDARD AND SUPPLEMENTAL SPECIFICATIONS.

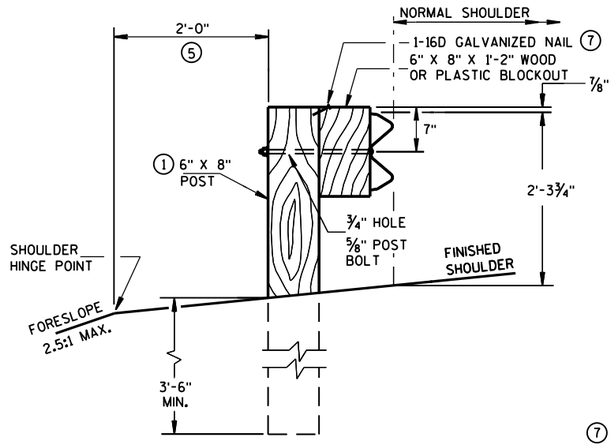
ALL DIMENSIONS ARE SUBJECT TO MANUFACTURER'S TOLERANCES EXCEPT WHERE ALLOWABLE TOLERANCES ARE SHOWN.



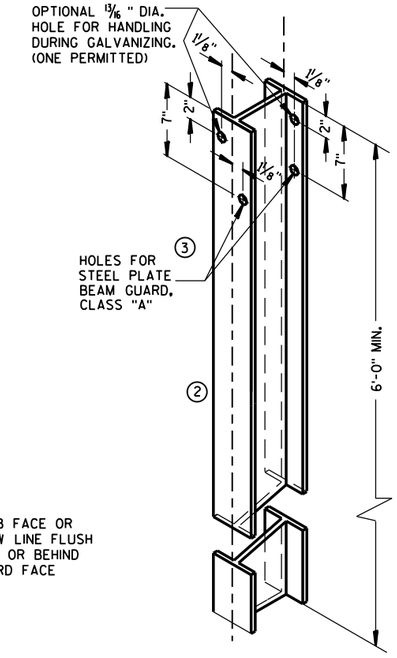
END VIEW
SETTING STEEL OR WOOD POST IN ROCK (6)



END VIEW
LOCATED ALONG A CURBED ROADWAY

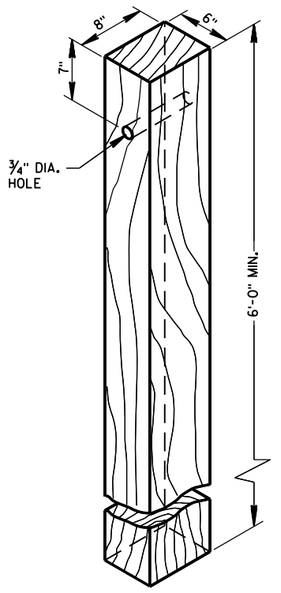


END VIEW
LOCATED ALONG A ROADWAY SHOULDER
STANDARD INSTALLATION

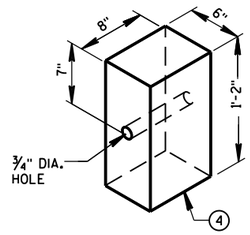


STEEL POST &
HOLE PUNCHING DETAIL
(W6 X 9) (1)

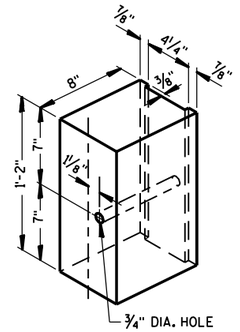
ALL HOLES 13/16" DIAMETER EXCEPT AS NOTED



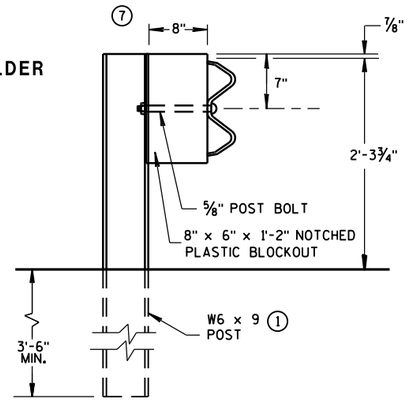
WOOD POST
(6"X8") NOMINAL



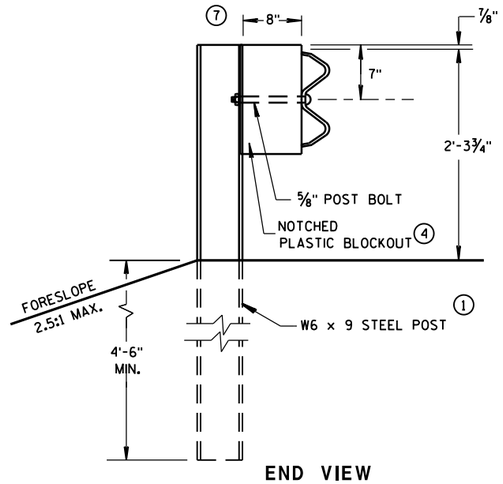
WOOD OR PLASTIC
BLOCKOUT FOR
WOOD POSTS



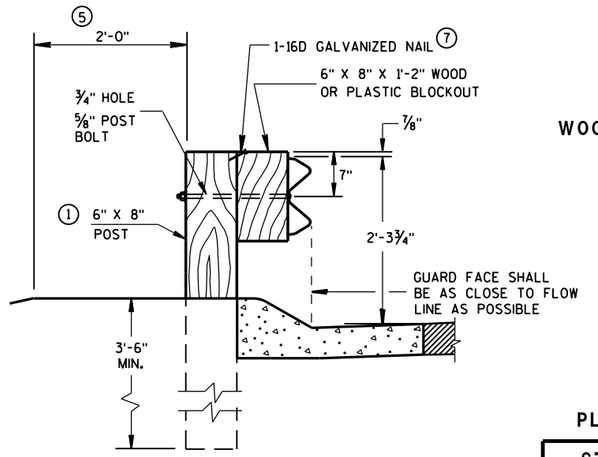
TYPICAL NOTCHED (1)
PLASTIC BLOCKOUT
FOR STEEL POSTS



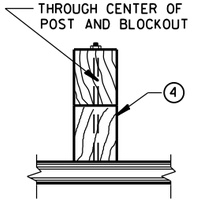
END VIEW
STEEL POST & NOTCHED
PLASTIC BLOCKOUT ALTERNATIVE
STANDARD INSTALLATION



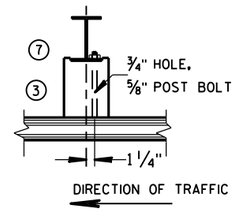
END VIEW
LONGER POST AT HALF
POST SPACING W BEAM
(LHW)



END VIEW
LOCATED ALONG A
MOUNTABLE CURBED ROADWAY



PLAN VIEW
WOOD POST, BLOCKOUT & BEAM



PLAN VIEW
STEEL POST, NOTCHED
PLASTIC BLOCKOUT & BEAM

STEEL PLATE BEAM GUARD,
CLASS "A"
INSTALLATION & ELEMENTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR 320

TYPICAL INSTALLATION OF STEEL PLATE BEAM GUARD

6

S.D.D. 14 B 15-8a

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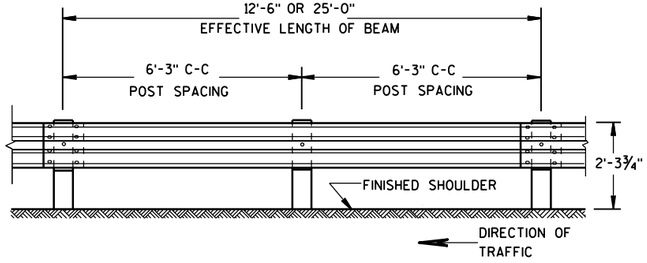
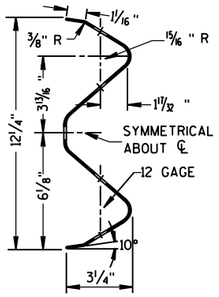
S.D.D. 14 B 15-8a

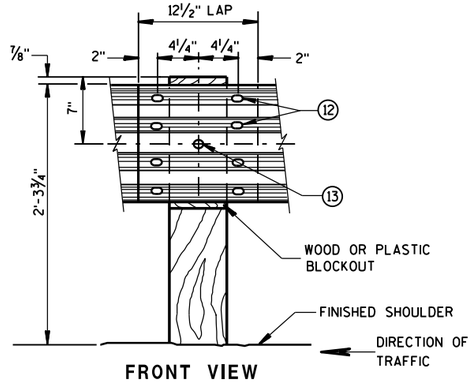


FRONT VIEW

POST SPACING STANDARD INSTALLATION



SECTION THRU W BEAM



FRONT VIEW

BEAM SPLICE AT WOOD POST AND POST MOUNTING DETAIL

GENERAL NOTES

(8) PROVIDE SILVER REFLECTIVE SHEETING ON ALL REFLECTORS EXCEPT THOSE LOCATED ALONG THE LEFT EDGE OF ONE-WAY ROADWAYS, WHICH SHALL BE PROVIDED WITH YELLOW REFLECTIVE SHEETING. SHEETING IS TYPE H. SEE STANDARD SPECIFICATION 637.

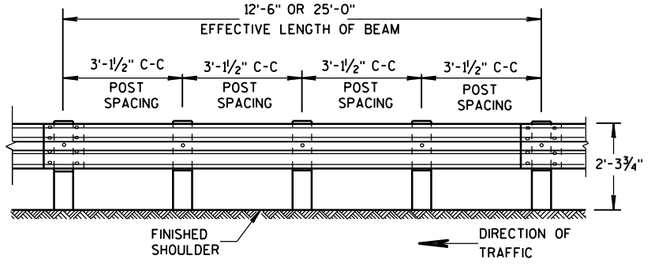
(9) DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

(10) REVERSE EVERY OTHER REFLECTOR FOR 2-WAY VISIBILITY. THE CONTRACTOR MAY FURNISH TWO-SIDED REFLECTORS IN LIEU OF ONE-SIDED REFLECTORS.

(11) PROVIDE AN ANGLE OF BEND OF 90° ± 1° FOR TWO-SIDED REFLECTORS.

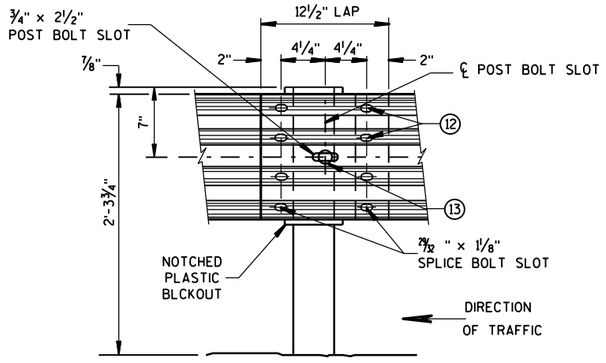
(12) 8 -⅝" ϕ X 2" BUTTON HEAD BOLTS WITH OVAL SHOULDERS & RECESS NUTS.

(13) ⅝" DIA. BUTTON HEAD BOLT AND RECESS NUT WITH ⅝" DIA. F844 FLAT WASHER UNDER NUT.



FRONT VIEW

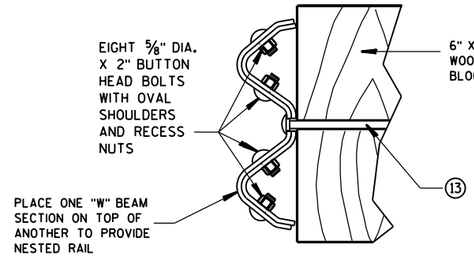
POST SPACING FOR LONGER POST AT HALF POST SPACING W BEAM (LHW)



FRONT VIEW

BEAM SPLICE AT STEEL POST

TYPICAL SPLICING DETAILS OF STEEL PLATE BEAM GUARD

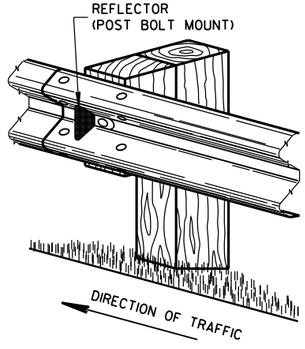


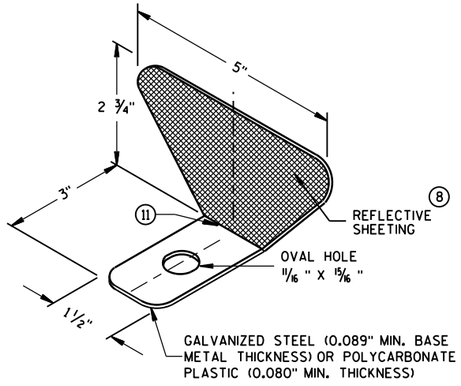
NESTED W BEAM (NW)

USE ALL OTHER STANDARD BEAM GUARD DETAILS FOR CONSTRUCTING NESTED W BEAM (NW)

REFLECTOR SPACING (9)

	BEAM GUARD LENGTH	REFLECTOR SPACING	NO. SURFACES REFLECTORIZED	MIN. NO. REFLECTORS
ONE WAY TRAFFIC	< 200' > 200'	50' C-C 100' C-C	1 1	3
TWO WAY TRAFFIC	< 200' > 200'	25' C-C 50' C-C	1 (10) 1	6
TWO WAY TRAFFIC	< 200' > 200'	50' C-C 100' C-C	2 2 (11)	3



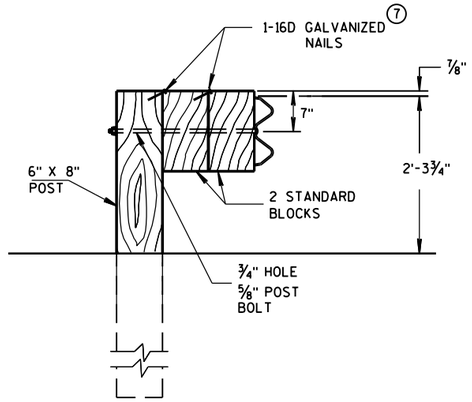


ONE SIDED REFLECTOR DETAIL AND TYPICAL INSTALLATION (8)

STEEL PLATE BEAM GUARD,
CLASS "A",
INSTALLATION & ELEMENTS

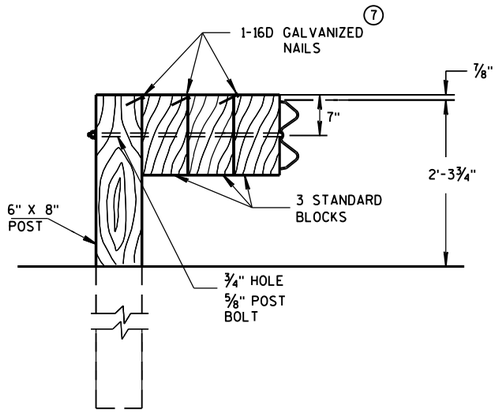
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6
S.D.D. 14 B 15-8b



DETAIL FOR DOUBLE BLOCKS

THE NUMBER OF DOUBLE BLOCK POSTS WITHIN A BARRIER RUN IS UNLIMITED

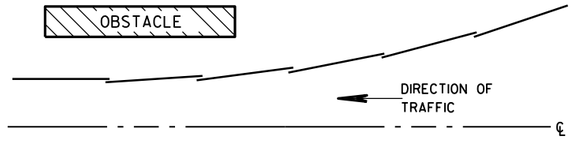


DETAIL FOR TRIPLE BLOCKS

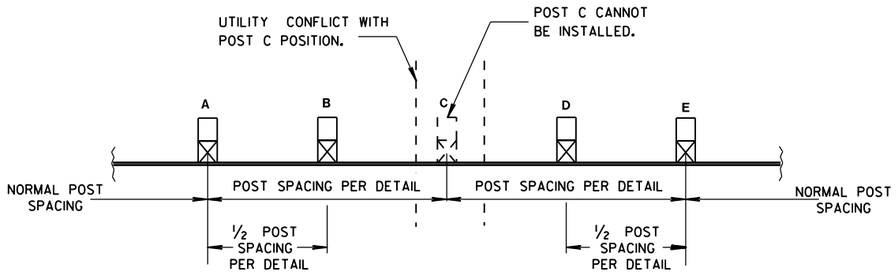
TRIPLE BLOCK DETAIL IS LIMITED TO ONE LOCATION WITHIN A BEAM GUARD RUN.

NOTES: USE DOUBLE OR TRIPLE BLOCKS WHEN UNDERGROUND OBSTACLES PREVENT THE POST FROM BEING INSTALLED.

DO NOT USE EXTRA BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.



PLAN VIEW
BEAM LAPPING DETAIL



POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION

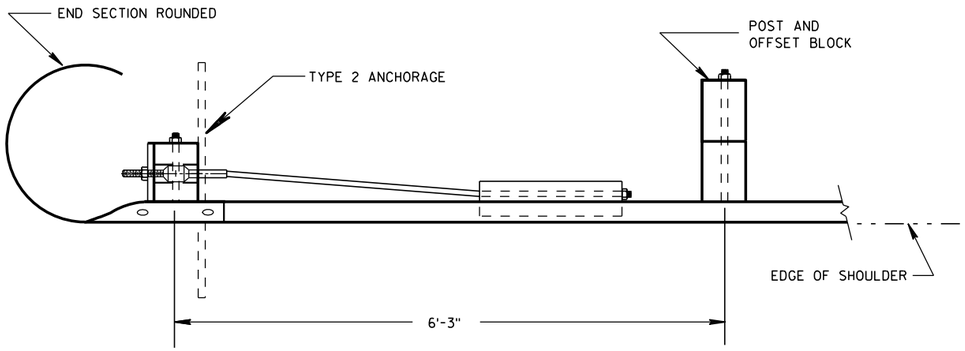
STEEL PLATE BEAM GUARD, CLASS "A", INSTALLATION & ELEMENTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

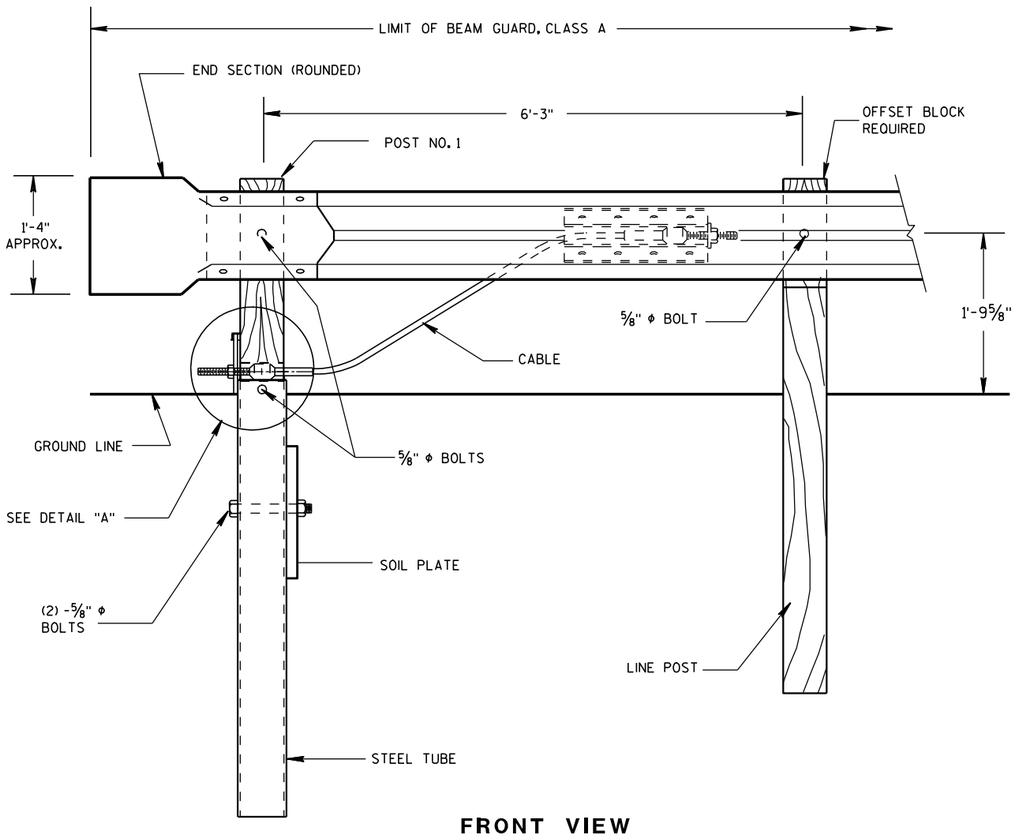
APPROVED
June 2014 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

6

S.D.D. 14 B 15-8c



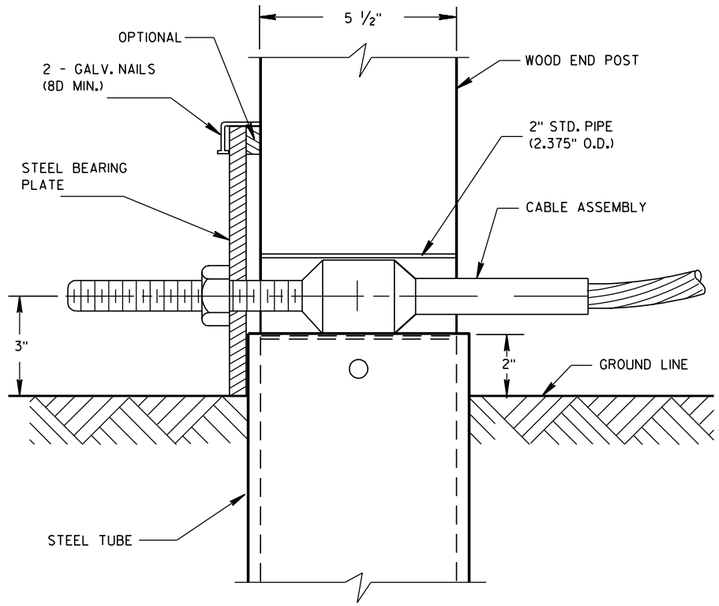
PLAN VIEW



FRONT VIEW

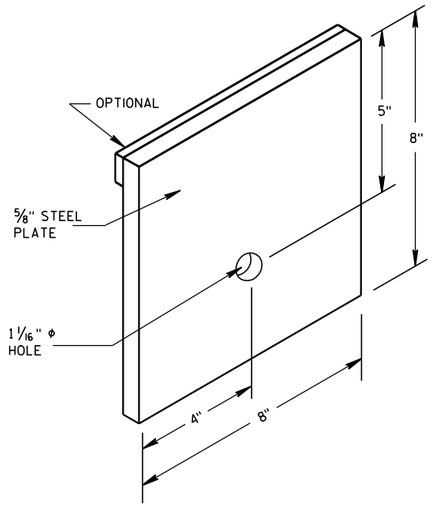
END TREATMENT WITH TYPE 2 ANCHORAGE

(USE ON ONE-WAY ROADWAYS ONLY - DEPARTING END)



DETAIL "A"

POST NO. 1

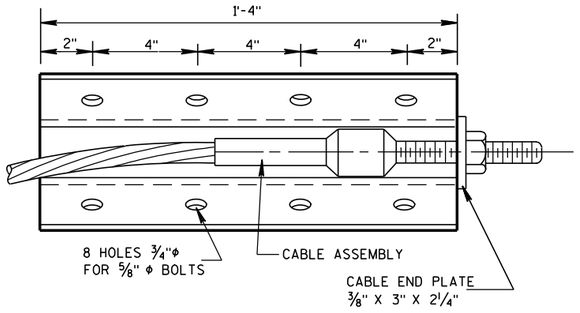


STEEL BEARING PLATE

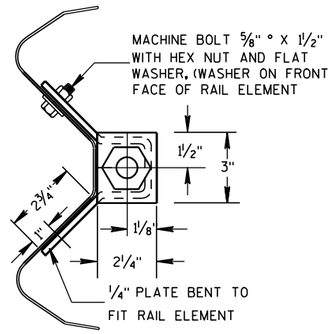
ANCHORAGE FOR STEEL
PLATE BEAM GUARD
TYPE 2

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
S.D.D. 14 B 16-4a

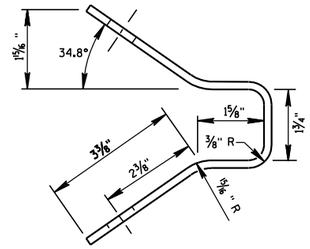


FRONT VIEW

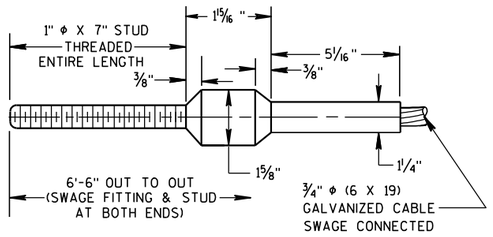


END VIEW

ANCHOR PLATE DETAIL



END VIEW OF BRACKET



CABLE ASSEMBLY

CABLE, SWAGE FITTING, STUD AND NUT SHALL DEVELOP A MINIMUM BREAKING STRENGTH OF 40,000 LB (TIGHTEN UNTIL TAUT)

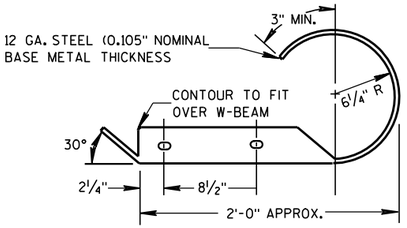
GENERAL NOTES

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

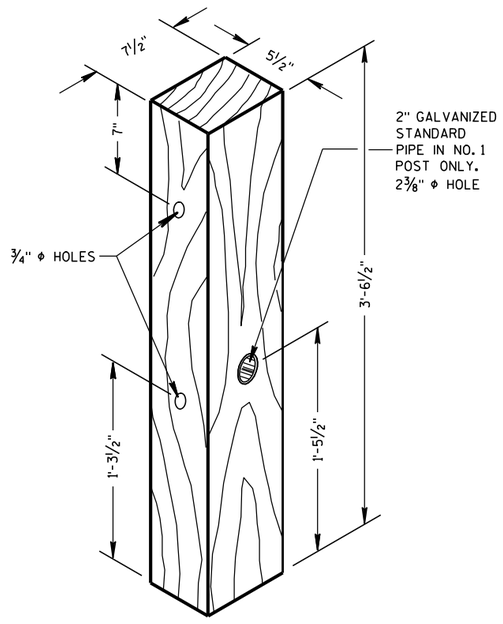
STRUCTURAL TUBING SHALL CONFORM TO THE REQUIREMENTS OF ASTM A-500 GRADE B OR ASTM A-501.

POST NO. 1 SHALL BE WOOD BREAKAWAY POST INSERTED AND BOLTED INTO STEEL TUBE.

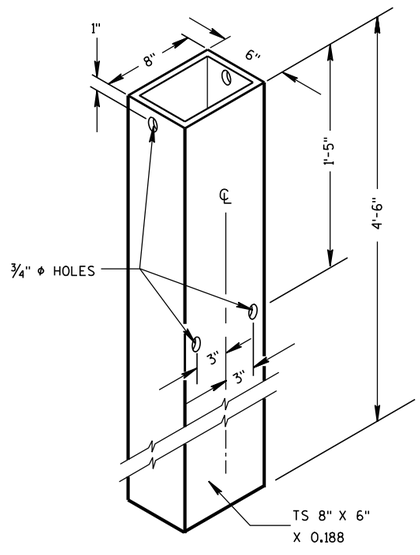
TYPE 2 ANCHORAGE SHALL CONSIST OF A STEEL TUBE, SOIL PLATE WOOD BREAKAWAY POST, BEARING PLATE, ANCHOR PLATE, CABLE ASSEMBLY AND ALL ASSOCIATED HARDWARE, ALL STEEL PARTS SHALL BE GALVANIZED.



PLAN VIEW

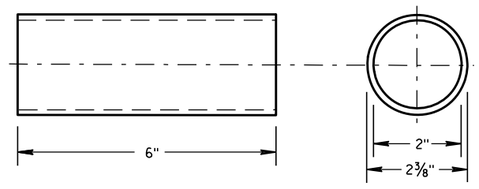


WOOD BREAKAWAY POST



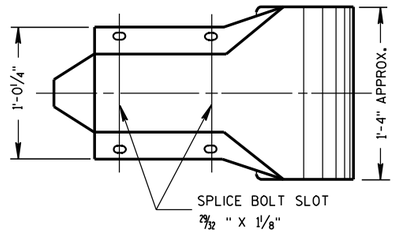
STEEL TUBE

STEEL TUBE SHALL CONFORM TO REQUIREMENTS OF ASTM A500

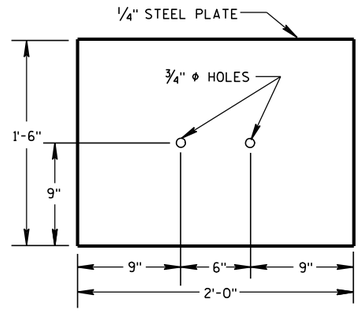


BREAKAWAY TERMINAL POST SLEEVE

GALVANIZED STANDARD STRENGTH STEEL PIPE, ASTM 53 GRADE "B"



FRONT VIEW
W BEAM END SECTION ROUNDED



SOIL PLATE

ANCHORAGE FOR STEEL PLATE BEAM GUARD TYPE 2

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8/21/2007 DATE
/S/ Jerry H. [illegible]
ROADWAY STANDARDS ENGINEER
324
FHWA

6

S.D.D. 14 B 16-4b

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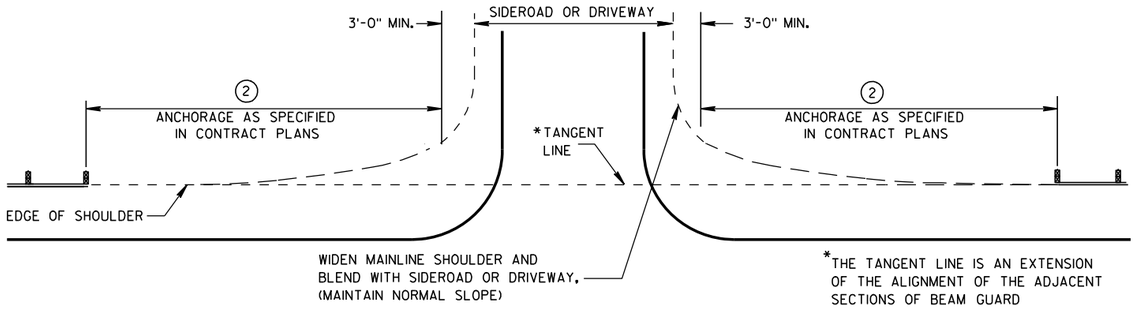
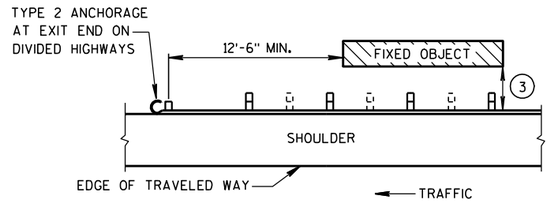
S.D.D. 14 B 16-4b



BEAM GUARD AT SIDEROADS OR DRIVEWAYS



BEAM GUARD AT OBSTACLES EXIT END - ONE WAY TRAFFIC

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE PERTINENT STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

W6 X 9 OR W6 X 8.5 STEEL POSTS WITH NOTCHED PLASTIC BLOCKOUTS ARE ACCEPTABLE ALTERNATIVES FOR 6" X 8" WOOD POSTS WITH WOOD OR PLASTIC BLOCKOUTS. USE APPROVED NOTCHED PLASTIC BLOCKOUTS WITH STEEL POSTS.

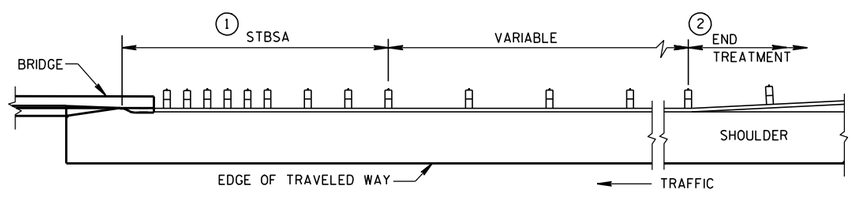
THE LOCATIONS AND LENGTHS OF BEAM GUARD ARE SHOWN ELSEWHERE IN THE PLAN.

(1) STEEL THRIE BEAM STRUCTURAL APPROACH (STBSA) - SEE CURRENT SDD 14B20.

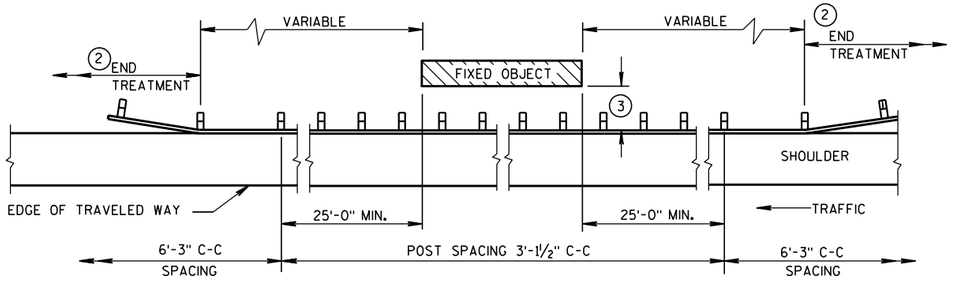
(2) USE AN APPROVED END TREATMENT FOR THE TRAFFIC APPROACH SIDE OF BRIDGE/OBSTACLES. USE TYPE 2 ANCHORAGE ONLY AT THE DOWNSTREAM ENDS OF BEAM GUARD LOCATED ALONG ROADWAYS WITH ONE WAY TRAFFIC.

(3)

MINIMUM LATERAL DISTANCE FROM FACE OF BEAM GUARD TO FIXED OBJECT	POST SPACING
3'-6"	3' - 1½"
4'-6"	6' - 3"

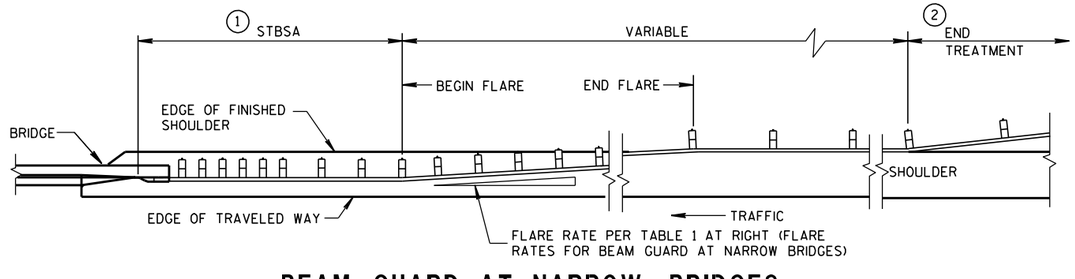


BEAM GUARD AT FULL WIDTH BRIDGES



BEAM GUARD AT OBSTACLES - TWO WAY TRAFFIC

(RAIL TO OBSTACLE CLEARANCE 3'-6" TO 4'-6")



BEAM GUARD AT NARROW BRIDGES
(FLARED TO SHOULDER EDGE, THEN PARALLEL TO ROADWAY)

TABLE 1
FLARE RATES FOR BEAM GUARD AT NARROW BRIDGES

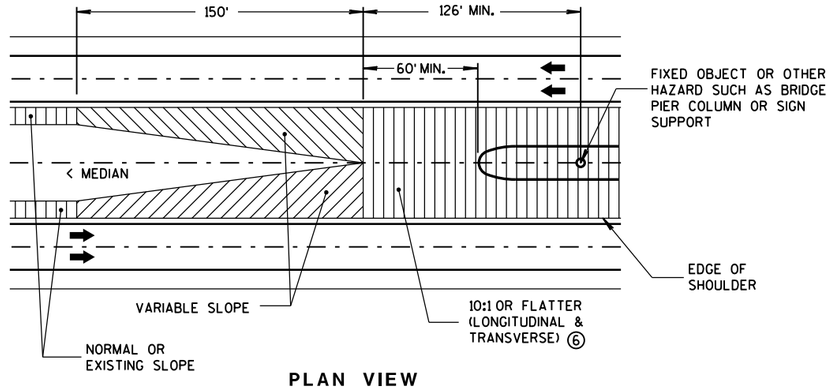
POSTED SPEED (MPH)	FLARE RATE
25	13:1
30	15:1
35	16:1
40	18:1
45	21:1
50	24:1
55	26:1
65	30:1

STEEL PLATE BEAM GUARD CLASS "A" AT BRIDGES, OBSTACLES AND SIDEROADS/DRIVEWAYS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

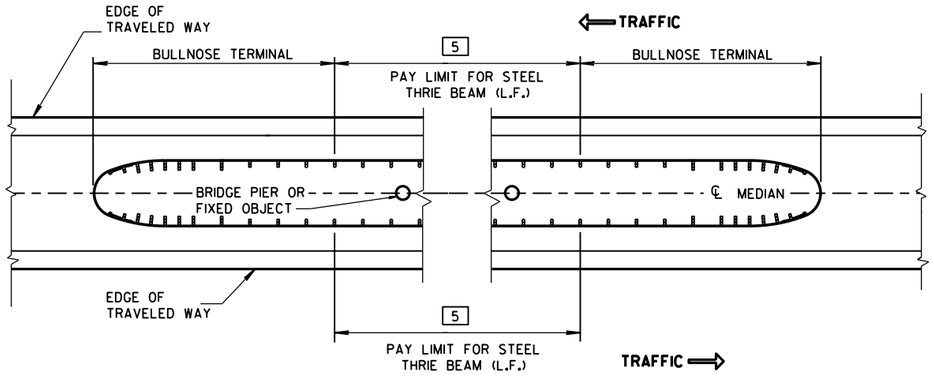
APPROVED
8-21-07 DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

6
S.D.D. 14 B 18-6a

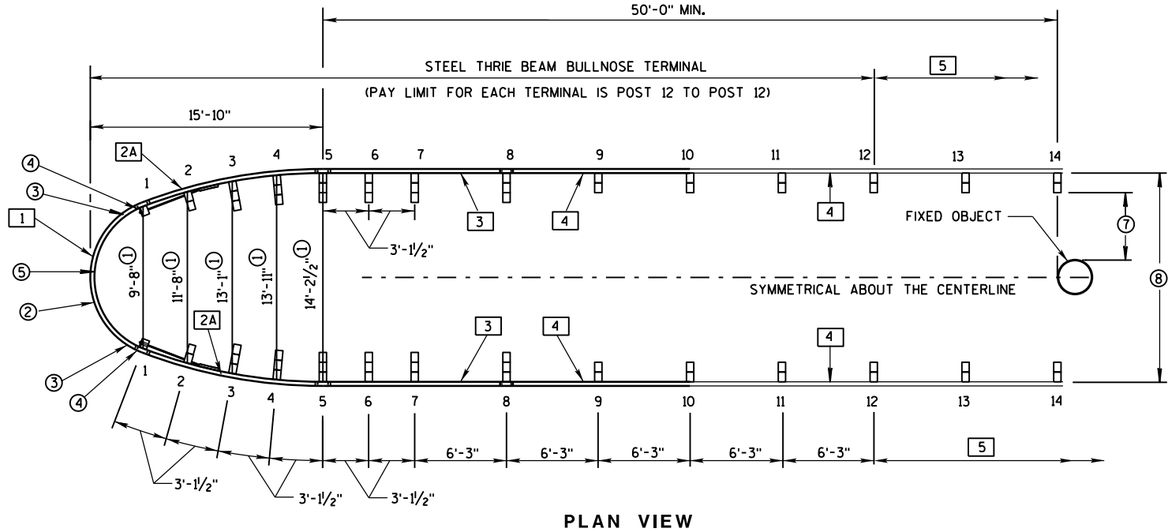


PLAN VIEW

GRADING AT BULLNOSE
(ALL INSTALLATIONS)

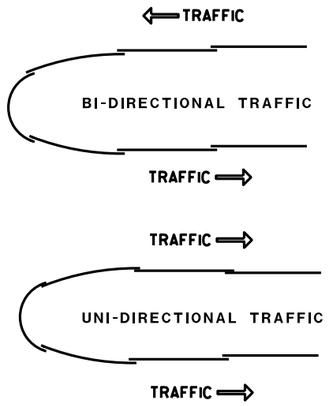


MEDIAN HAZARD PROTECTION PAY LIMITS



PLAN VIEW

TYPICAL BULLNOSE LAYOUT



LAPPING DETAIL
(ALL INSTALLATIONS)

GENERAL NOTES

SEE STANDARD DETAIL DRAWINGS 14 B 26a-e.

PUNCHING, DRILLING, CUTTING OR WELDING IS NOT PERMITTED ON ANY GALVANIZED THRIE BEAM ACCESSORY OR TERMINAL ACCESSORY.

OTHER ANCHOR CABLE ASSEMBLIES HAVING 40,000 LBS. MIN. BREAKING STRENGTH MAY BE USED.

FOR POSTS 2 THROUGH 14, IF POST CANNOT BE INSTALLED AT SPECIFIED LOCATION 1 EXTRA STANDARD WOOD BLOCK MAY BE ADDED.

THE USE OF STEEL POSTS ON THE BULLNOSE IS NOT ALLOWED.

BOLTS AND ALL NECESSARY HARDWARE SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A 153.

ALL THRIE BEAM SHALL BE 12-GAUGE.

IF ROCK IS ENCOUNTERED, REMOVE ROCK TO FULL DEPTH OF POST PLUS 2½" AND 12" DIAMETER AROUND POST. SEE SDD 14B15 OR SDD 14B42 FOR MORE INFORMATION.

1. SLOTTED THRIE BEAM RAIL NO. 1. (POST 1 TO POST 1)
2A. SLOTTED THRIE BEAM RAIL NO. 2A. (POST 1 TO POST 5)
3. SLOTTED THRIE BEAM RAIL NO. 3. (POST 5 TO POST 8)
4. UNBENT STANDARD THRIE-BEAM RAIL NO.4. (POST 8 TO POST 10 & POST 10 TO POST 12)
5. BEYOND POST 12: CONSTRUCT STEEL THRIE BEAM - USE UNBENT STANDARD THRIE BEAM RAIL NO. 5.

① DIMENSIONS ARE FROM BACK OF RAIL TO BACK OF RAIL WHERE RAIL IS BOLTED TO POST OR BLOCK.

② U-BOLT CABLE CLIPS (3 PER CABLE) SPACED OUT ON NOSE, TO HOLD CABLE TO BACKSIDE OF THE RAIL.

③ NOSE CABLE W/SWAGGED END BUTTONS.

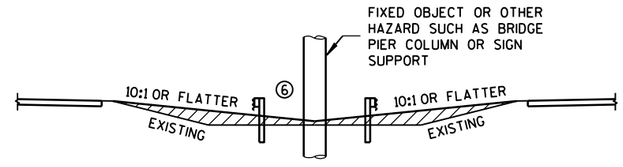
④ NOSE CABLE ANCHOR PLATE (BACKSIDE OF SPLICE).

⑤ THE SLACK IN THE NOSE CABLES SHALL BE EVENLY DISTRIBUTED BETWEEN THE CABLE CLIP FASTENERS AND POST NO. 1 ON EITHER SIDE OF THE NOSE.

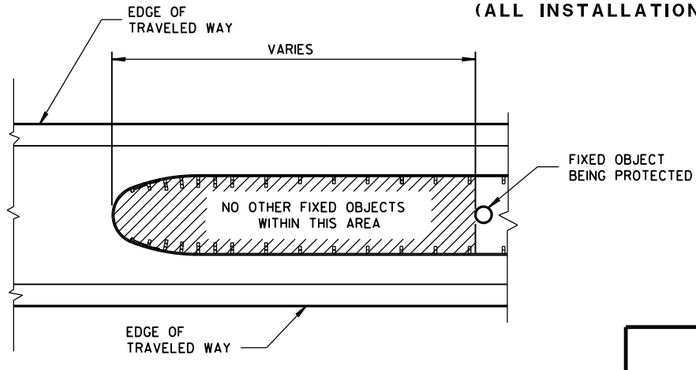
⑥ PROVIDE SUITABLE DRAINAGE WHEN MEDIAN GRADING IMPEDES NORMAL FLOW.

⑦ 2'-6" MINIMUM LATERAL DISTANCE BETWEEN BACK OF POST AND FACE OF FIXED OBJECT.

⑧ MAXIMUM WIDTH OF SYSTEM IS 14'-2½" MEASURED FROM BACK OF RAIL TO BACK OF RAIL WHERE RAIL IS BOLTED TO A POST OR BLOCK.



MEDIAN GRADING SECTION
(ALL INSTALLATIONS)

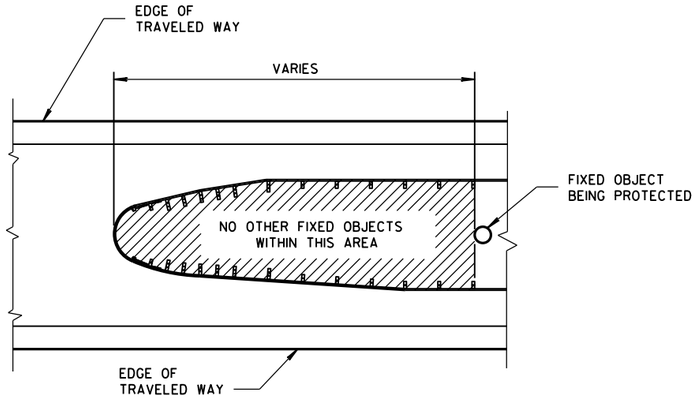


HAZARD FREE AREA INSIDE BULLNOSE

STEEL THRIE BEAM BULLNOSE TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

6
S.D.D. 14 B 26-3a



HAZARD FREE
AREA INSIDE BULLNOSE

GENERAL NOTES

SEE STANDARD DETAIL DRAWINGS 14 B 26a-e.

FOR POSTS 2 THROUGH 14, IF POST CANNOT BE INSTALLED AT SPECIFIED LOCATION 1 EXTRA STANDARD WOOD BLOCK MAY BE ADDED.

[1] SLOTTED THRIE BEAM RAIL NO. 1. (POST 1 TO POST 1)

[2A] SLOTTED THRIE BEAM RAIL NO. 2A, (POST 1 TO POST 5)

[2B] SLOTTED THRIE BEAM RAIL NO. 2B, (POST 1 TO POST 5)

[3] SLOTTED THRIE BEAM RAIL NO. 3. (POST 5 TO POST 8)

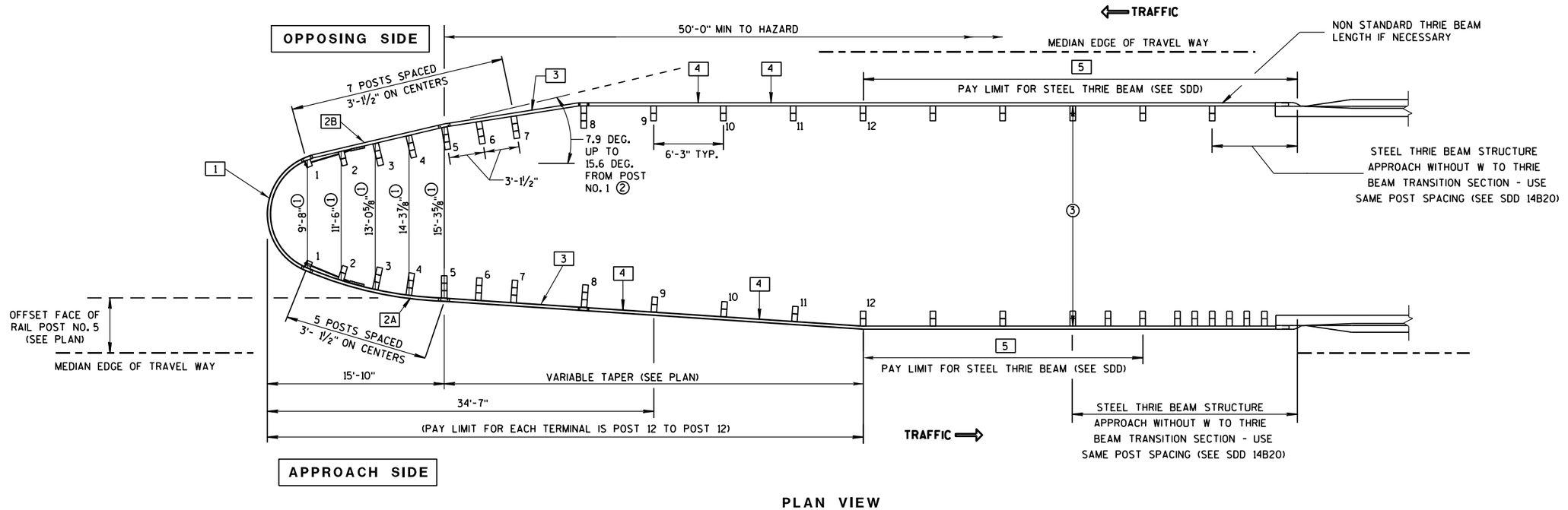
[4] UNBENT STANDARD THRIE-BEAM RAIL NO. 4, (POST 8 TO POST 10 & POST 10 TO POST 12)

[5] BEYOND POST 12: CONSTRUCT STEEL THRIE BEAM - USE UNBENT STANDARD THRIE BEAM RAIL NO. 5.

① DIMENSIONS ARE FROM BACK OF RAIL TO BACK OF RAIL WHERE RAIL IS BOLTED TO POST.

② TAPER BEGINNING AT POST NO. 1 MUST CONTINUE TO POST NO. 5. PAST POST NO. 5 TAPER MAY END OR BE EXTENDED UP TO 15.6 DEGREES TO FIT VARIABLE MEDIAN WIDTHS. (SEE PLAN)

③ FOR MEDIANS WIDER THAN 14'-2½" MEASURED FROM BACK OF RAIL TO BACK OF RAIL WHERE RAIL IS BOLTED TO A POST OR BLOCK.



PLAN VIEW

WIDENED BULLNOSE DESIGN

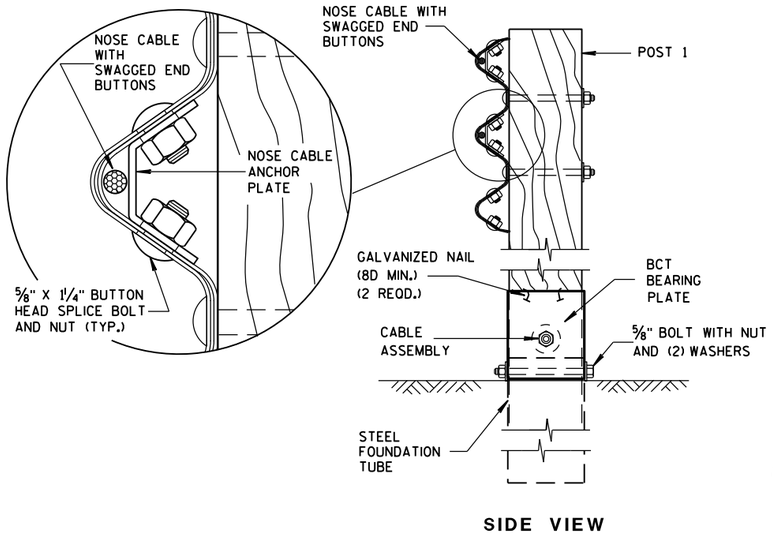
(INSTALLATION AT TWIN BRIDGES WITH BI-DIRECTIONAL TRAFFIC SHOWN)

STEEL THRIE BEAM
BULLNOSE TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

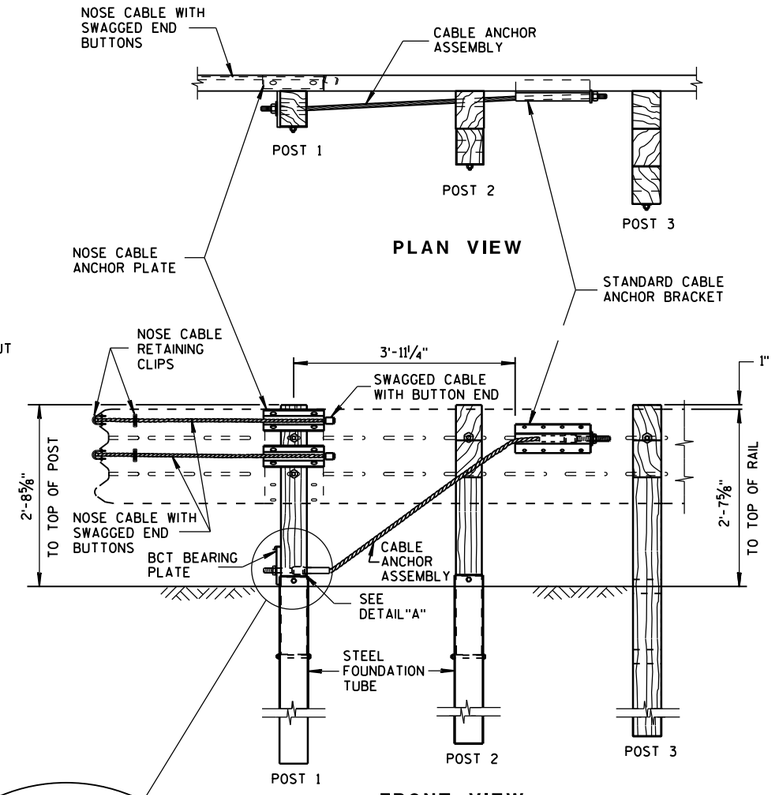
6

S.D.D. 14 B 26-3b



SIDE VIEW

NOSE CABLE ASSEMBLY AT POST NO. 1



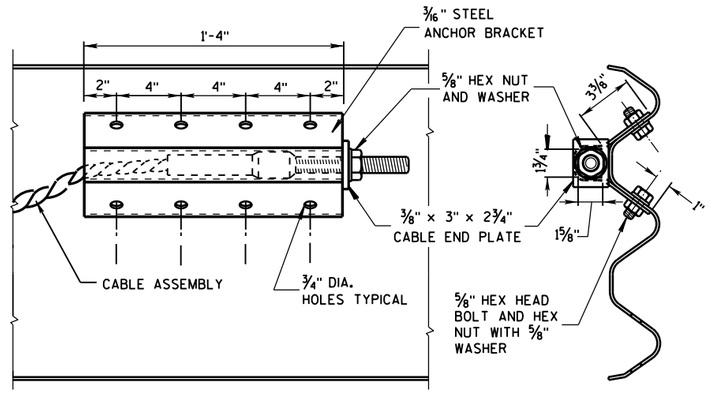
PLAN VIEW

FRONT VIEW

NOSE CABLE ANCHOR AND STANDARD BRACKET ASSEMBLY

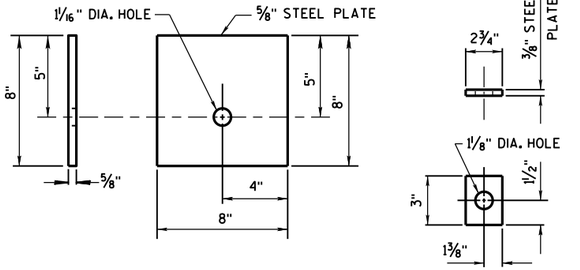
GENERAL NOTES

SEE STANDARD DETAIL DRAWINGS 14 B 26a-e.



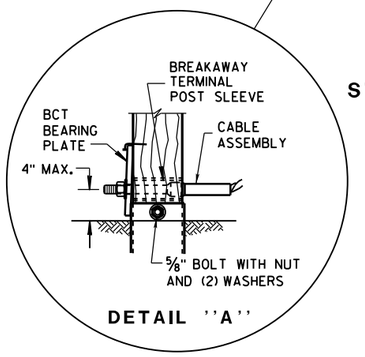
FRONT VIEW END VIEW

DETAILS OF CABLE ANCHOR BRACKET

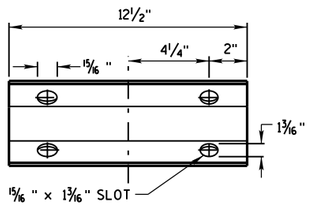


BCT BEARING PLATE

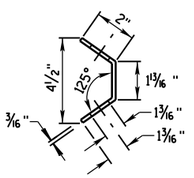
CABLE END PLATE



DETAIL ''A''



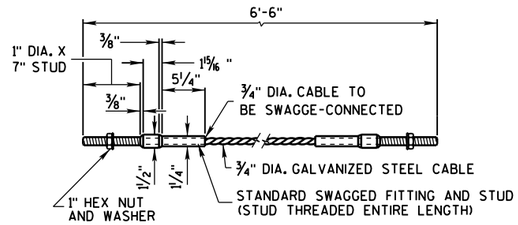
ELEVATION VIEW



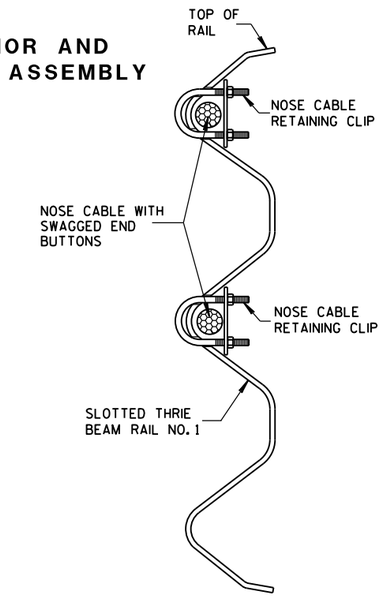
END VIEW

NOSE CABLE ANCHOR PLATE

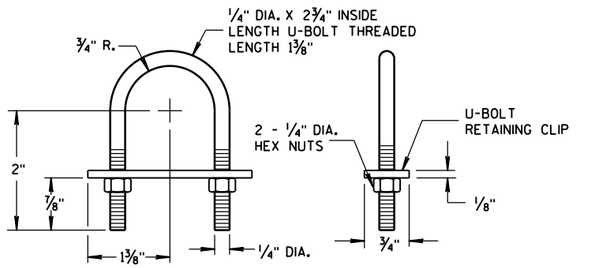
NOTE: 12 1/2" x 5 13/16" x 3/16" STEEL PLATE (A306)



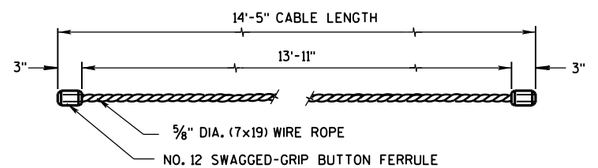
DETAILS OF CABLE ANCHOR ASSEMBLY



PLACEMENT OF NOSE CABLE RETAINING CLIP



NOSE CABLE RETAINING CLIP



NOSE CABLE WITH SWAGGED END BUTTONS

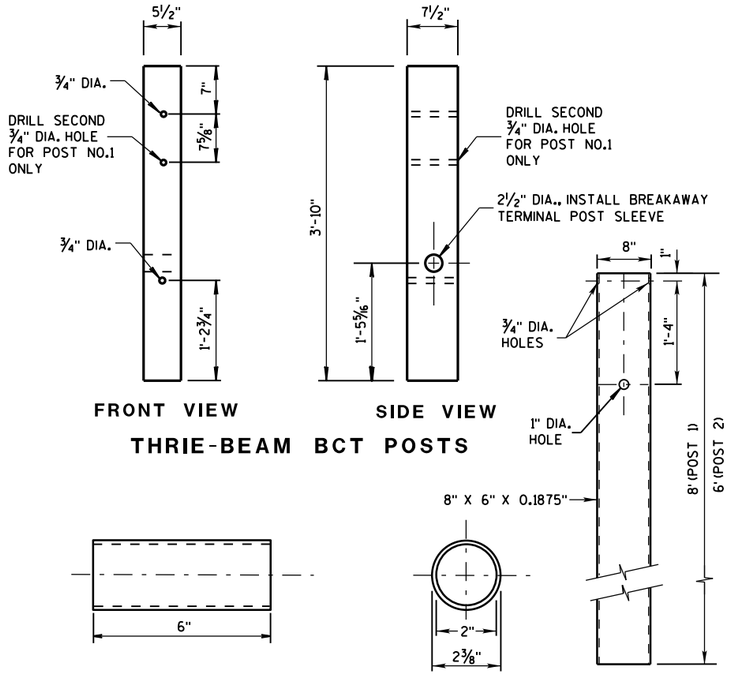
TO PULL OFF SWAGGED GRIP BUTTON FERRULE FROM WIRE ROPE REQUIRES A FORCE EQUAL TO 98% OF THE WIRE ROPE'S BREAKING STRENGHT.

STEEL THRIE BEAM BULLNOSE TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

S.D.D. 14 B 26-3c

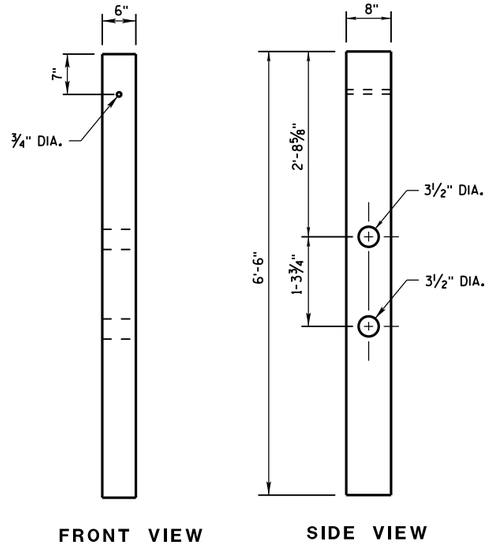


FRONT VIEW SIDE VIEW

THRIE-BEAM BCT POSTS

BREAKAWAY TERMINAL POST SLEEVE

STEEL FOUNDATION TUBE

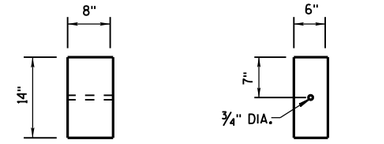


FRONT VIEW SIDE VIEW

THRIE-BEAM CRT WOOD POSTS

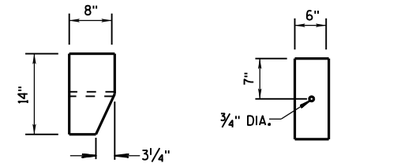
GENERAL NOTES

SEE STANDARD DETAIL DRAWINGS 14 B 26a-e.



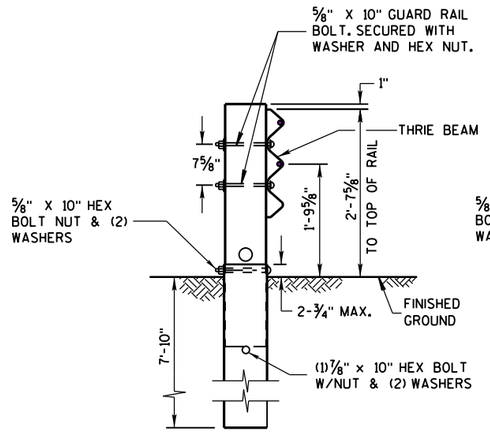
SIDE VIEW FRONT VIEW

STANDARD WOOD BLOCK



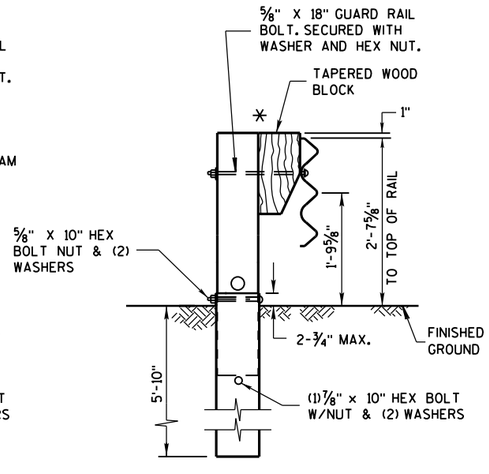
SIDE VIEW FRONT VIEW

TAPERED WOOD BLOCK



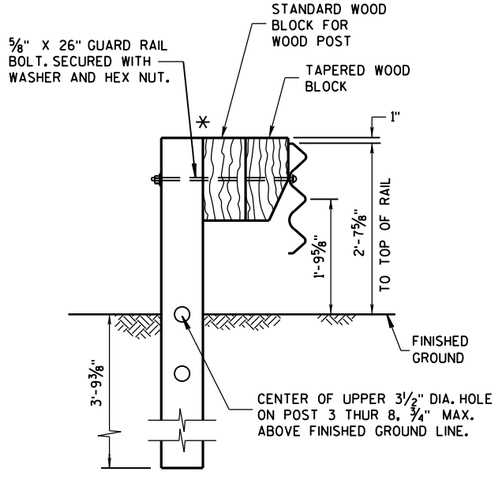
THRIE-BEAM BCT POST
(WITH 8'-0" FOUNDATION TUBE)

POST NO. 1



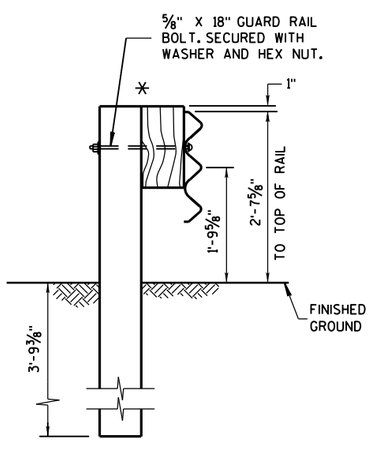
THRIE-BEAM BCT POST
(WITH 6'-0" FOUNDATION TUBE AND 1'-2" TAPERED BLOCK)

POST NO. 2



THRIE-BEAM CRT POST
(6'-6" LONG POST WITH 1'-2" BLOCK AND 1'-2" TAPERED BLOCK)

POST NO. 3,4,5,6,7, & 8



THRIE-BEAM POST
(6'-6" LONG POST WITH 1'-2" BLOCK)

POST NO. 9,10,11,& 12
(ALSO USE FOR STEEL THRIE BEAM BEYOND POST 12)

* IF NEEDED DUE TO AN UNDERGROUND OBSTACLE ADD 1 ADDITIONAL STANDARD BLOCKOUT TO POST.

STEEL THRIE BEAM BULLNOSE TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR 329

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S.D.D. 14 B 26-3d

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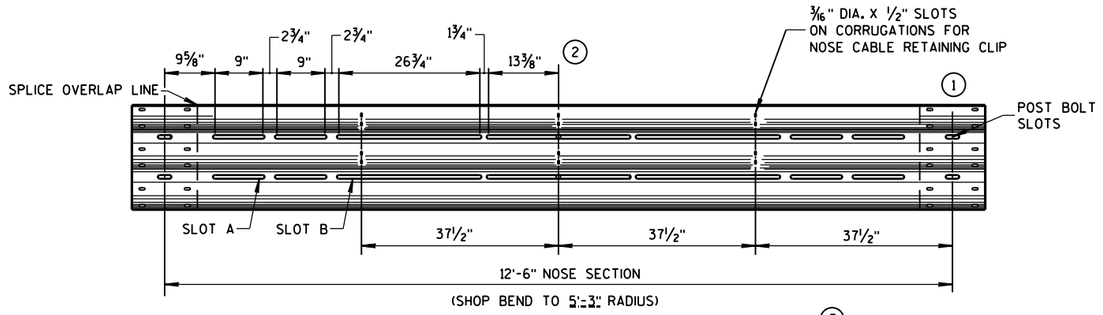
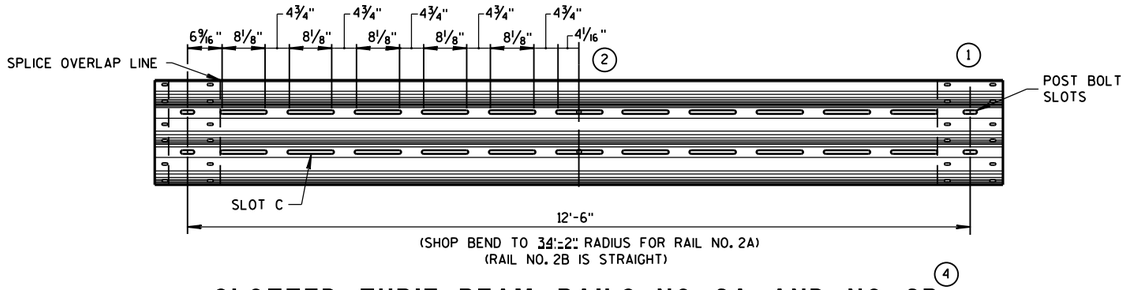
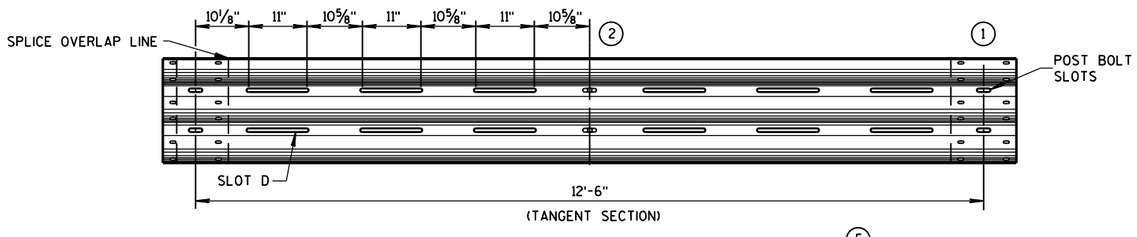


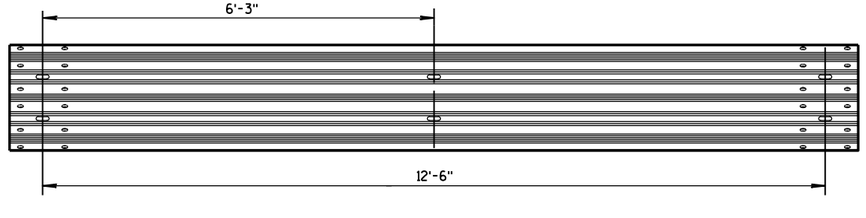
SLOTTED THRIE BEAM RAIL NO. 1 (3)



SLOTTED THRIE BEAM RAILS NO. 2A AND NO. 2B (4)



SLOTTED THRIE BEAM RAIL NO. 3 (5)



UNBENT STANDARD THRIE BEAM RAIL NO. 4 AND NO. 5

GENERAL NOTES

SEE STANADRD DETAIL DRAWINGS 14 B 26a-e.

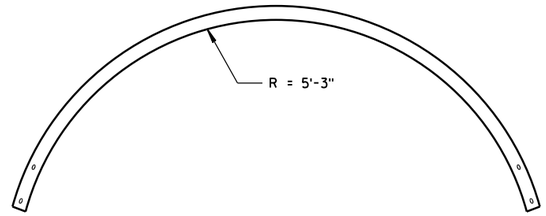
(1) SLOTTED THRIE BEAM RAIL DIMENSIONS SHOWN ARE BEFORE BENDING TO THE RADIUS SHOWN.

(2) SLOT SIZE AND SPACING SYMMETRIC.

(3) SLOTTED THRIE BEAM RAIL NO. 1, 12'-6", SHOP BEND TO R=5'-3".

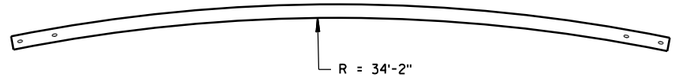
(4) SLOTTED THRIE BEAM RAIL NO. 2A, 12'-6", SHOP BEND TO R=34'-2".
SLOTTED THRIE BEAM RAIL NO. 2B, 12'-6", RAIL IS STRAIGHT.

(5) SLOTTED THRIE BEAM RAIL NO. 3, 12'-6", TANGENT.



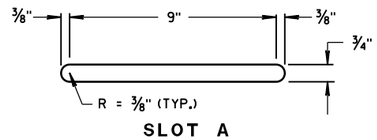
PLAN VIEW

SLOTTED THRIE BEAM RAIL NO. 1

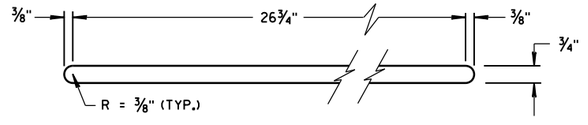


PLAN VIEW

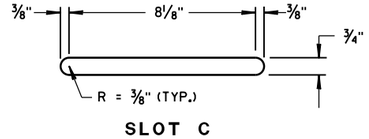
SLOTTED THRIE BEAM RAIL NO. 2A



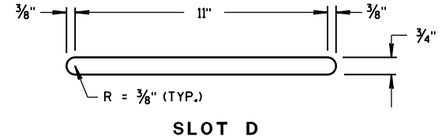
SLOT A



SLOT B



SLOT C



SLOT D

SLOT DETAILS

STEEL THRIE BEAM
BULLNOSE TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2014 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
NT
FHWA

6

S.D.D. 14 B 26-3e

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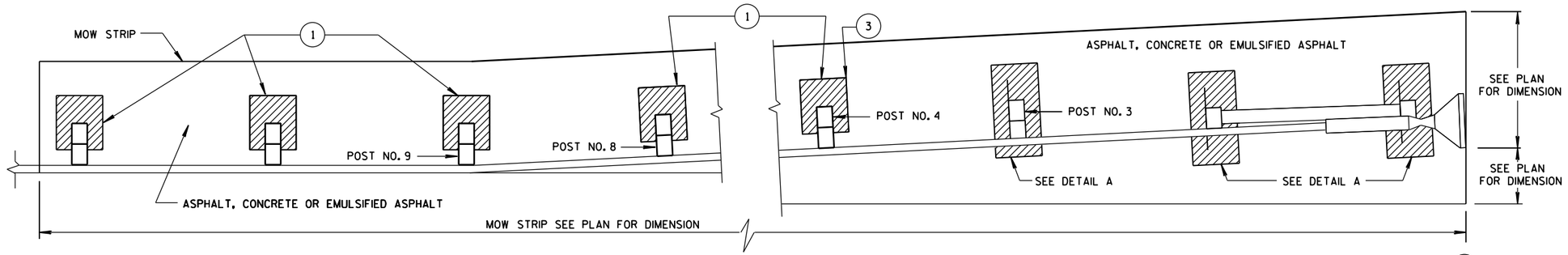
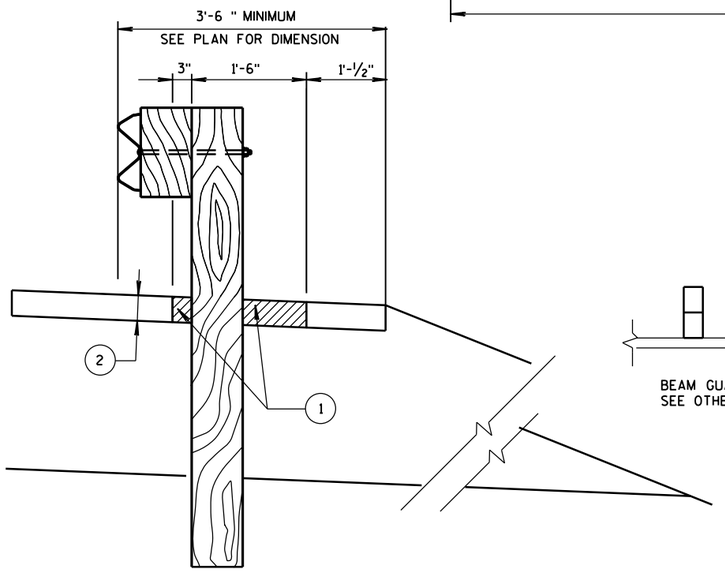
S.D.D. 14 B 26-3e

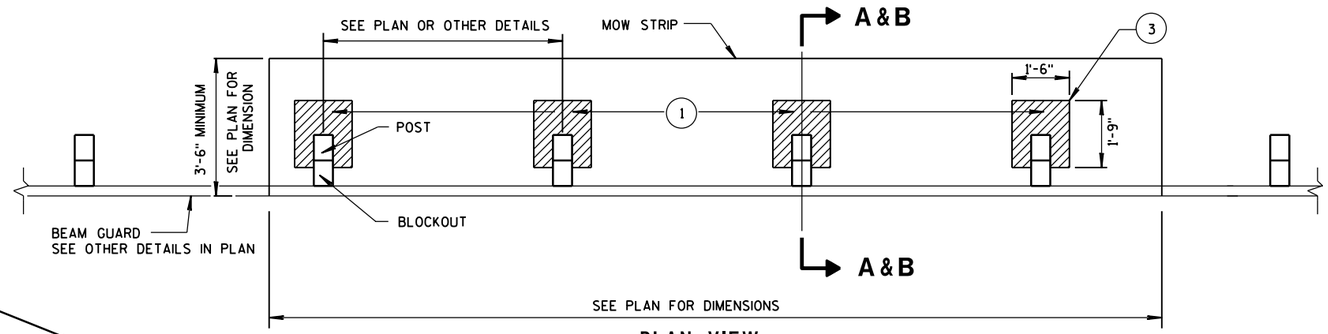


PLAN VIEW

MOW STRIP LAYOUT FOR ENERGY ABORBING TERMINAL

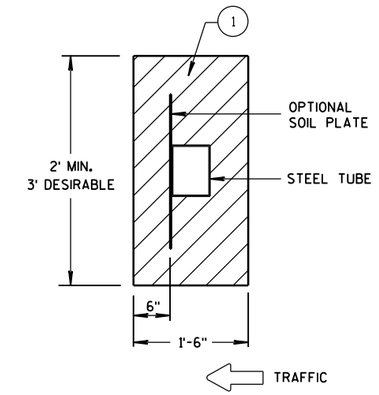


SECTION A-A

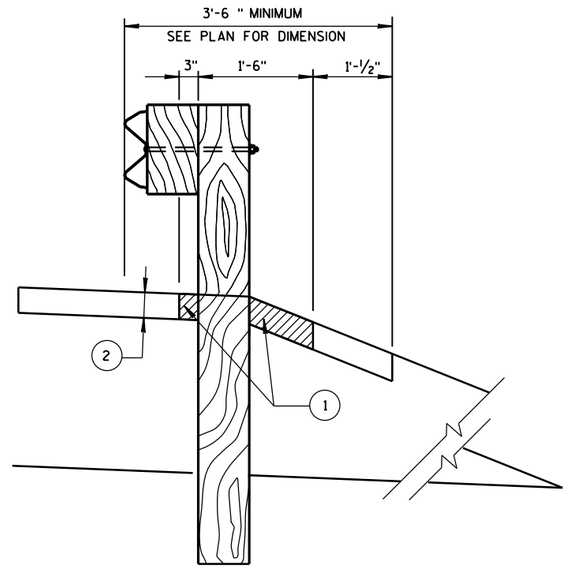


PLAN VIEW

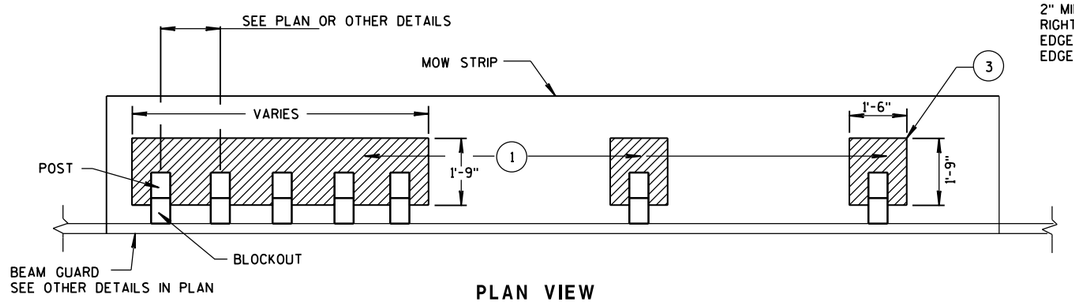
MOW STRIP FOR TYPICAL BLOCKOUT LAYOUT



DETAIL A

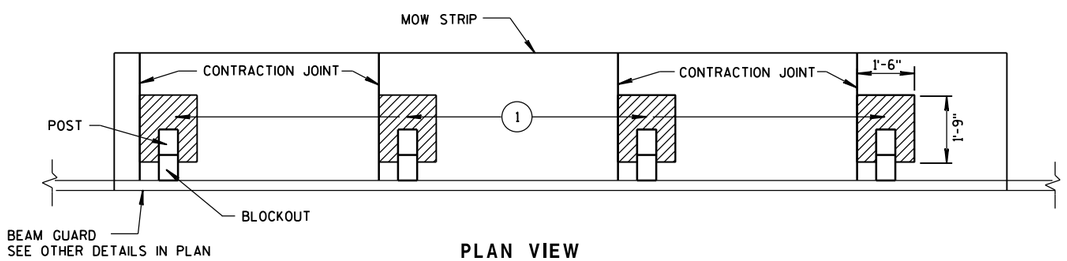


SECTION B-B



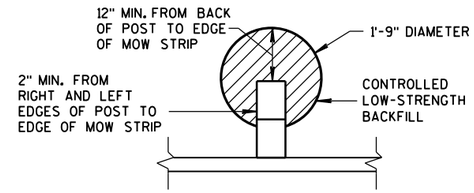
PLAN VIEW

MOW STRIP FOR TIGHT SPACING LAYOUT



PLAN VIEW

JOINT PLACEMENT FOR CONCRETE MOW STRIP



ALTERNATIVE HMA
MOW STRIP DESIGN

(1) CONTROLLED LOW-STRENGTH BACKFILL OR EMULSIFIED ASPHALT.

(2) DEPTH OF MOW STRIP:
ASPHALT - 4"
CONCRETE - 4"
EMULSIFIED ASPHALT - 1" OR LESS

(3) FOR EMULSIFIED ASPHALT MOW STRIP LEAVE OUTS NOT REQUIRED. (TYPICAL FOR ALL POSTS.)

GUARDRAIL MOW STRIP

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2014
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER
331
NT
FHWA

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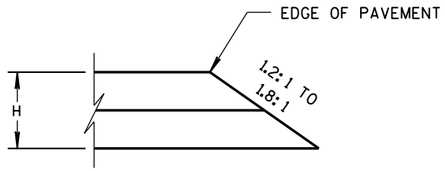
S.D.D. 14 B 28-3

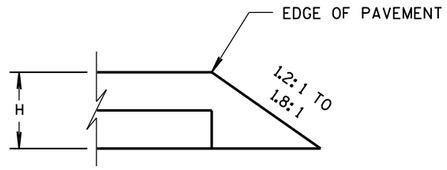
6

S.D.D. 14 B 28-3



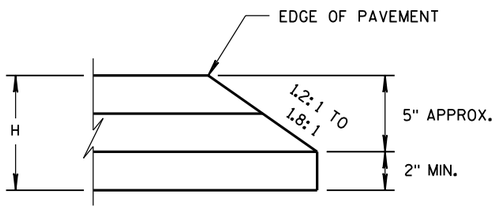
CONSTRUCTED WITH FINAL TWO LAYERS

FOR H 5" OR LESS



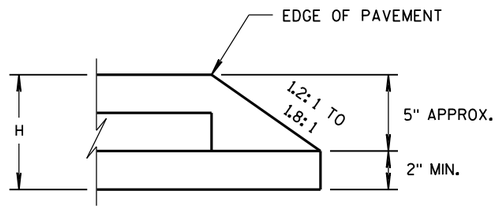
CONSTRUCTED WITH FINAL LAYER

FOR H 5" OR LESS



CONSTRUCTED WITH FINAL TWO LAYERS

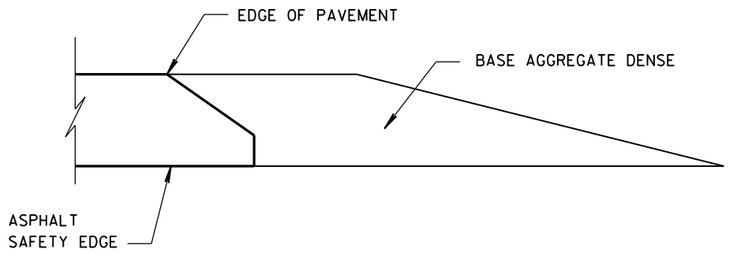
FOR H GREATER THAN 5"



CONSTRUCTED WITH FINAL LAYER

FOR H GREATER THAN 5"

HMA PAVEMENT AND HMA OVERLAYS



FINISHED SHOULDER AGGREGATE PLACEMENT

6

6

S.D.D. 14 B 29-1

S.D.D. 14 B 29-1

SAFETY EDGE SM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

11/30/2012
DATE

/S/ Jerry H. Zoda
ROADWAY STANDARDS DEVELOPMENT ENGINEER

FHWA

GENERAL NOTES

(1) WOOD OR STEEL POSTS (w6X9 OR w6X8.5) MAY BE USED. DO NOT INTERMIX WOOD AND STEEL POSTS. INSTALL STEEL POSTS WITH HOLES ON APPROACHING TRAFFIC SIDE.

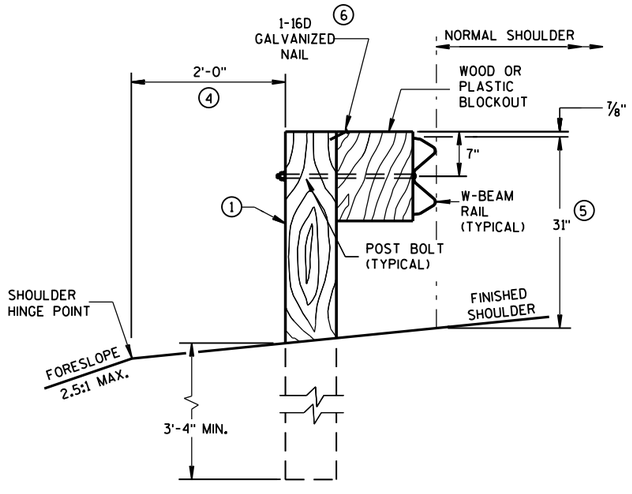
(2) USE WOOD OR APPROVED PLASTIC BLOCKOUTS. WOOD BLOCKOUTS MAY BE CONSTRUCTED OUT OF TWO OR MORE WOOD BLOCKOUTS. SEE ALTERNATE WOOD BLOCKOUT DETAIL. DIMENSIONS OF APPROVED PLASTIC BLOCKOUTS MAY VARY.

(3) IF ROCK IS ENCOUNTERED DURING EXCAVATION, PROVIDE A HOLE 12 INCHES IN DIAMETER EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE APPROXIMATELY 2½ INCHES OF GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE. CUT THE POSTS THE TO LENGTH AMD INSTALL. BACKFILL WITH EXCAVATED MATERIAL AND COMPACT. BACKFILL IS TO BE FREE OF LARGE ROCKS.

(4) WHEN THE DISTANCE FROM BACK OF POST TO SHOULDER HINGE POINT IS LESS THAN 2 FEET INSTALL LONGER POST AT HALF POST SPACING (K).

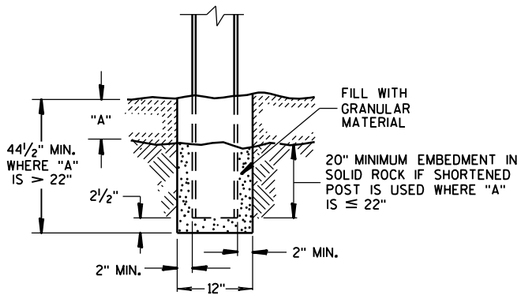
(5) FOR NEW MGS INSTALLATION TOP OF W-BEAM RAIL TOLERANCE IS ± 1". FOR EXISTING MGS INSTALLATION TOP OF W-BEAM IS BETWEEN 27¾" TO 32".

(6) WHEN USING STEEL POST AND WOOD BLOCKOUTS INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.



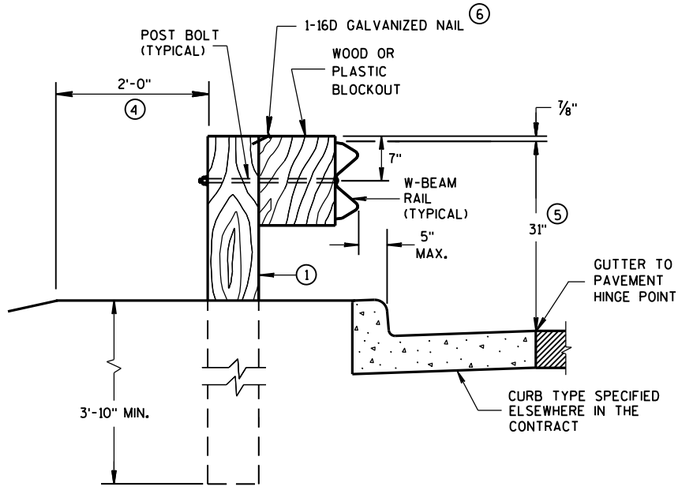
END VIEW

LOCATED ALONG A ROADWAY SHOULDER
STANDARD INSTALLATION



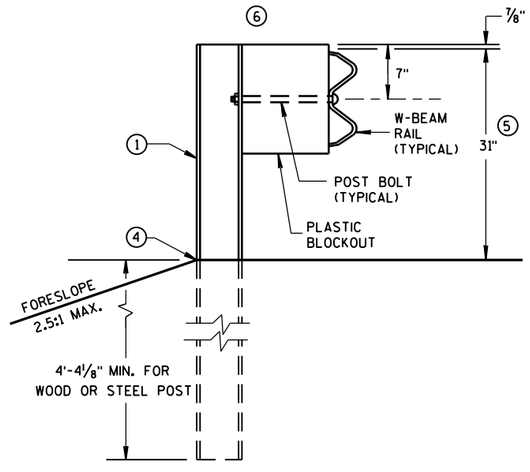
END VIEW

SETTING STEEL OR WOOD POST IN ROCK (3)



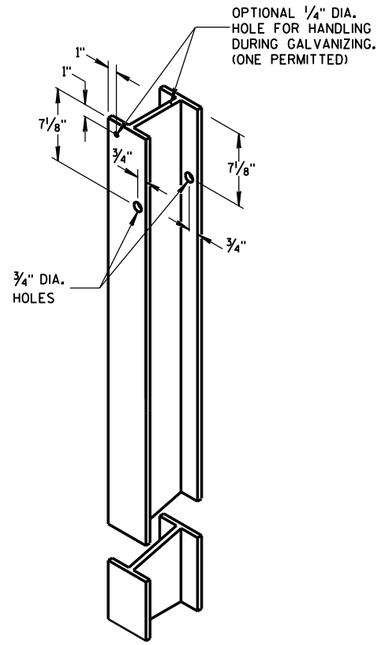
END VIEW

LOCATED ALONG A CURBED ROADWAY

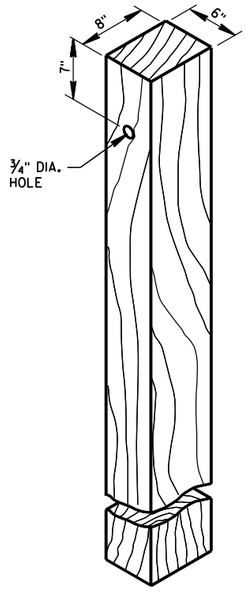


END VIEW

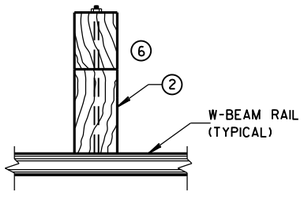
MGS LONGER POST AT HALFPOST SPACING W BEAM (K)



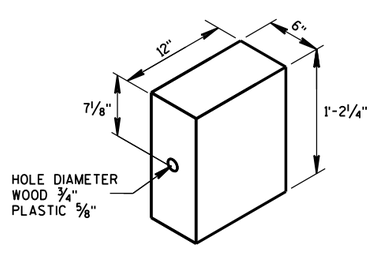
STEEL POST &
HOLE PUNCHING DETAIL
(w6X9) (1)



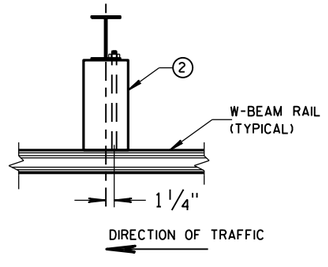
WOOD POST
(6" X 8") NOMINAL (1)



PLAN VIEW
WOOD POST,
BLOCKOUT & BEAM



WOOD OR
PLASTIC BLOCKOUT (2)



PLAN VIEW
STEEL POST,
PLASTIC BLOCKOUT & BEAM

MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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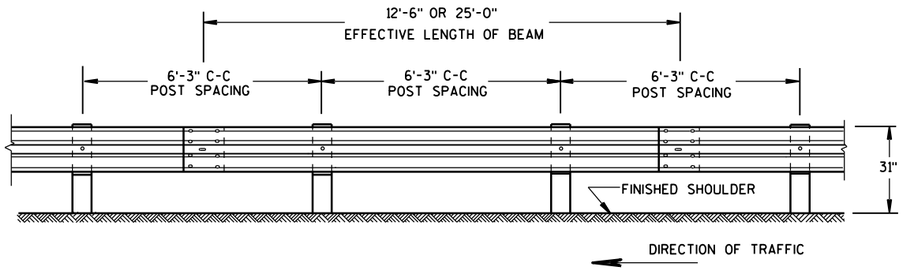
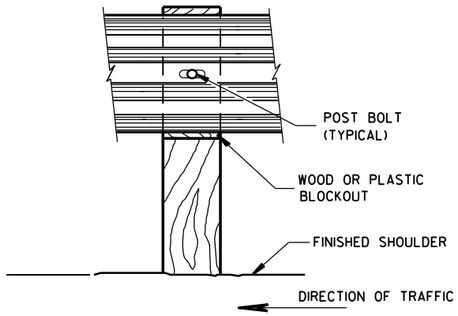
S.D.D. 14 B 42-3a



FRONT VIEW

POST SPACING STANDARD INSTALLATION



FRONT VIEW AT WOOD POST

GENERAL NOTES

(7) PROVIDE SILVER REFLECTIVE SHEETING ON ALL REFLECTORS EXCEPT THOSE LOCATED ALONG THE LEFT EDGE OF ONE-WAY ROADWAYS, WHICH SHALL BE PROVIDED WITH YELLOW REFLECTIVE SHEETING. SHEETING IS TYPE H. SEE STANDARD SPECIFICATION 637.

(8) DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL. RAIL SPLICE LOCATIONS ARE THE ONLY ACCEPTABLE LOCATIONS FOR REFLECTORS.

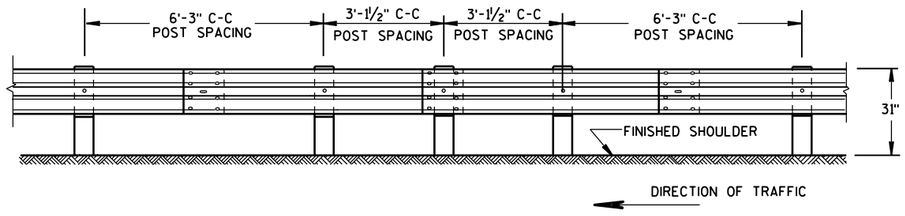
(9) REVERSE EVERY OTHER REFLECTOR FOR 2-WAY VISIBILITY. THE CONTRACTOR MAY FURNISH TWO-SIDED REFLECTORS IN LIEU OF ONE-SIDED REFLECTORS.

(10) PROVIDE AN ANGLE OF BEND OF 90° ± 1° FOR TWO-SIDED REFLECTORS.

(11) 25 FEET OF HALF POST SPACING IS REQUIRED ON APPROACH AND DEPARTURE ENDS OF QUARTER POST SPACING.

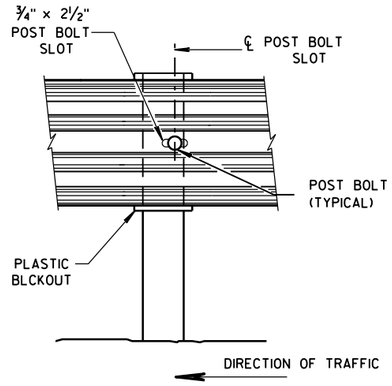
POST BOLTS ARE A 5/8" DIAMETER ASTM A307 GUARDRAIL BOLT. A POST BOLT REQUIRES 5/8" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT AND 5/8" DIAMETER F844 FLAT WASHER. POST BOLTS MAY BE LONGER IF MULTIPLE BLOCKOUTS ARE BEING USED.

GUARD RAIL SPLICE BOLTS ARE A 5/8" DIAMETER ASTM A307 GUARDRAIL HEAD BOLT. A GUARDRAIL SPLICE BOLT REQUIRES 5/8" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT.

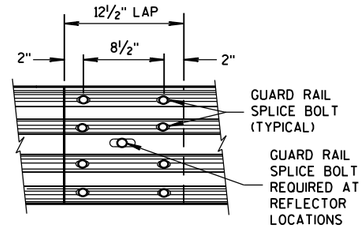


FRONT VIEW

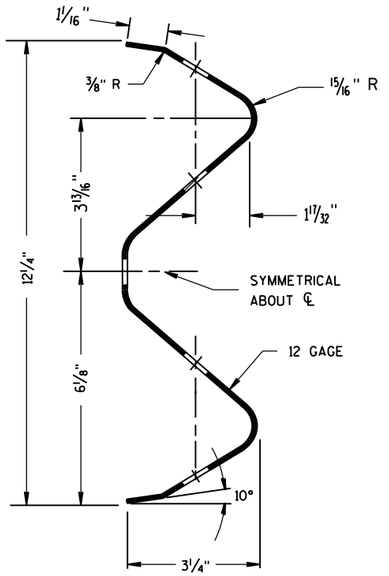
HALF POST SPACING (HS) AND HALF POST SPACING WITH LONGER POSTS (K)



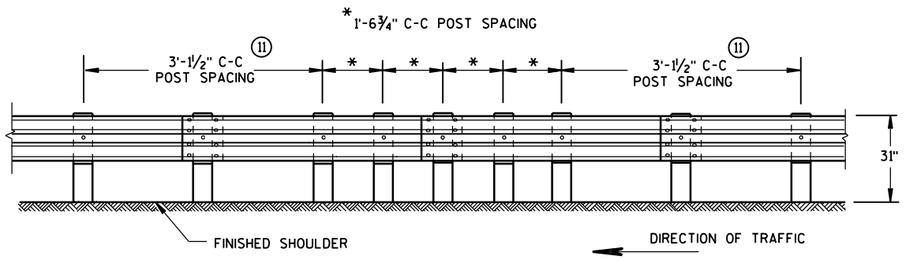
FRONT VIEW AT STEEL POST



FRONT VIEW
MID-SPAN BEAM SPLICE

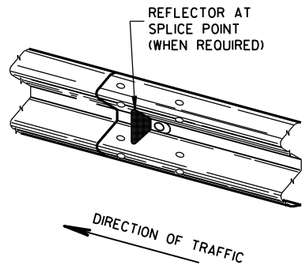


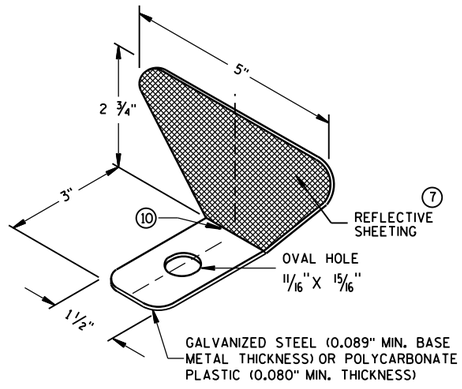
SECTION THRU W-BEAM RAIL



FRONT VIEW

QUARTER POST SPACING (QS)





ONE SIDED REFLECTOR DETAIL AND TYPICAL INSTALLATION (7)

REFLECTOR SPACING (8)

	BEAM GUARD LENGTH	REFLECTOR SPACING	NO. SURFACES REFLECTORIZED	MIN. NO. REFLECTORS
ONE WAY TRAFFIC	< 200'	50' C-C	1	3
	> 200'	100' C-C	1	
TWO WAY TRAFFIC	< 200'	25' C-C	1 (9)	6
	> 200'	50' C-C	1	
TWO WAY TRAFFIC	< 200'	50' C-C	2	3
	> 200'	100' C-C	2 (10)	

MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

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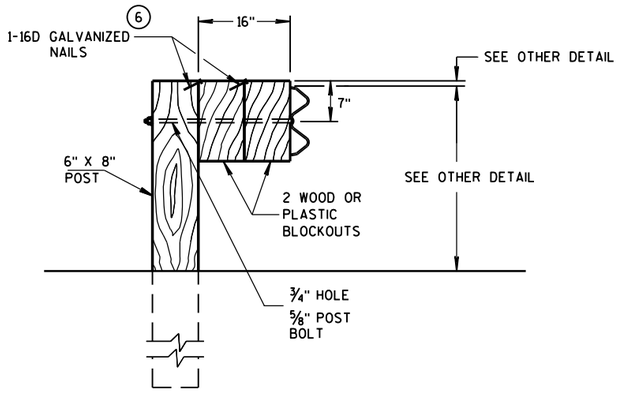
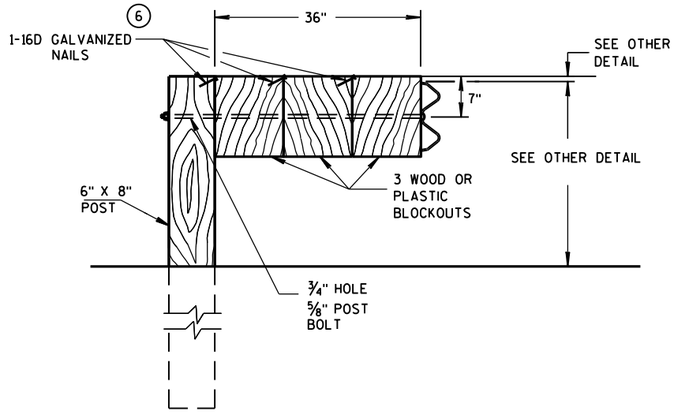
S.D.D. 14 B 42-3b



DETAIL FOR 16" BLOCKOUT DEPTH

IT IS ACCEPTABLE TO USE BLOCKOUTS UP TO 16" DEEP TO INCREASE THE POST OFFSET TO AVOID UNDERGROUND OBSTACLES. THERE IS NO LIMIT TO THE NUMBER OF POSTS THAT CAN HAVE ADDITIONAL BLOCKOUTS UP TO 16" DEEP.

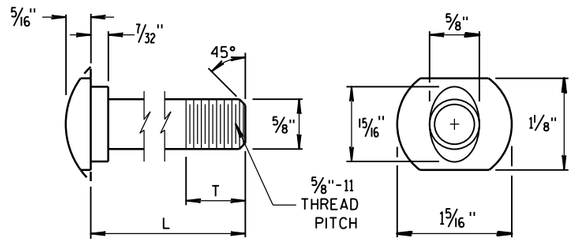


DETAIL FOR 36" BLOCKOUT DEPTH

NOTES: UNDER SPECIAL CIRCUMSTANCES, SUCH AS AVOIDING OBSTACLES THAT ARE NOT RELOCATED, IT IS ACCEPTABLE TO INSTALL ADDITIONAL BLOCKOUTS TO OBTAIN UP TO 36" DEPTH FOR ONE OR TWO POSTS IN A SECTION OF GUARDRAIL.

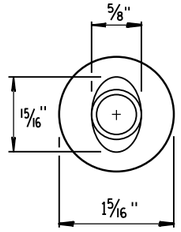
DO NOT USE 16" OR 36" BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.

NOTE: 1. ALL FILLETS SHALL HAVE A MINIMUM RADIUS OF 1/16".
2. IF THE BOLT EXTENDS MORE THAN 1/4" FROM THE NUT THE BOLT SHOULD BE TRIMMED BACK.

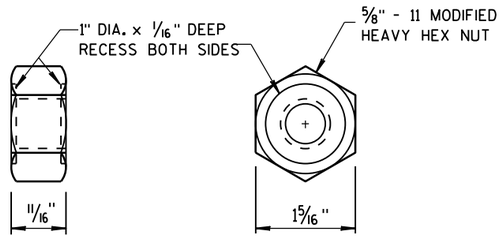


POST BOLT TABLE

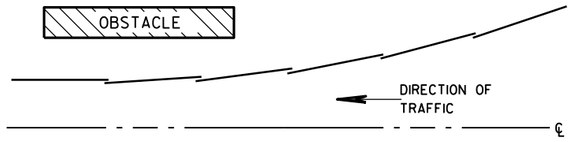
L	T (MIN.)
1 1/4"	1 1/8"
2"	1 3/4"
10"	4"
14"	4 1/16"
18"	4"
21"	4 1/16"
25"	4"



ALTERNATE BOLT HEAD

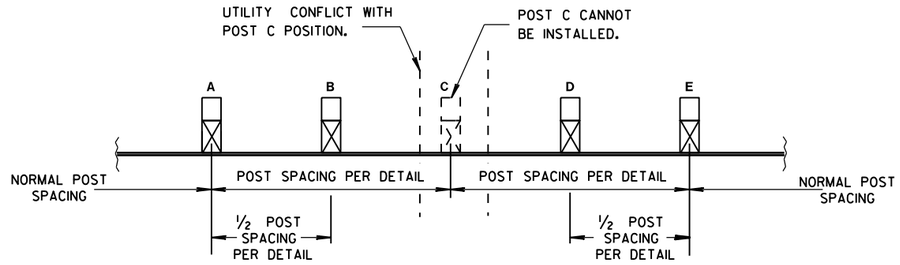


POST BOLT AND RECESS NUT

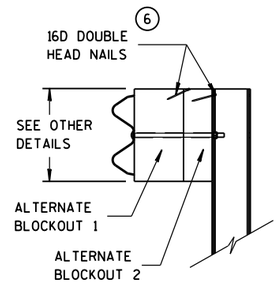


PLAN VIEW

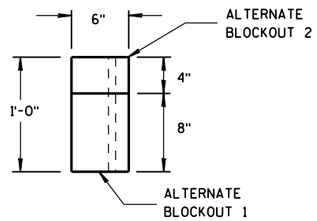
BEAM LAPPING DETAIL



POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION



SIDE VIEW



TOP VIEW

ALTERNATE WOOD BLOCKOUT DETAIL

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2014
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER
FHWA

6
S.D.D. 14 B 42-3c

GENERAL NOTES

(A) THE SLOPE IN THE AREA BOUNDED BY THE GRADELINE, THE HINGE POINT LINE (HPL), AND THE CLEAR ZONE LIMITS (CZL) SHALL BE 4:1 OR FLATTER.

(B) AFTER FINAL ASSEMBLY, RECHECK CABLE TO BE SURE IT IS TAUT AND HAS NOT RELAXED.

(C) DIFFERENT MANUFACTURES REQUIRE DIFFERENT PERFORATED W-BEAM RAIL END PANELS. SEE MANUFACTURES INFORMATION.

(D) THE TOP OF THE STEEL TUBE ON POST 1 AND POST 2 SHALL NOT BE MORE THAN 3" ABOVE THE FINISH GROUND ELEVATION.

(F) ATTACH ALUMINUM SHEET TO E.A.T. HEAD USING 4 STAINLESS STEEL SELF-TAPPING SCREWS. ONE SCREW PER CORNER.

(G) ½" DIAMETER X 3" LONG LAG BOLT AND WASHER.

(H) HARDWARE VARIES BETWEEN DIFFERENT MANUFACTURES. SEE MANUFACTURE'S DRAWING FOR INFORMATION.

(I) DIMENSIONS MAY VARY. SEE MANUFACTURE'S INFORMATION.

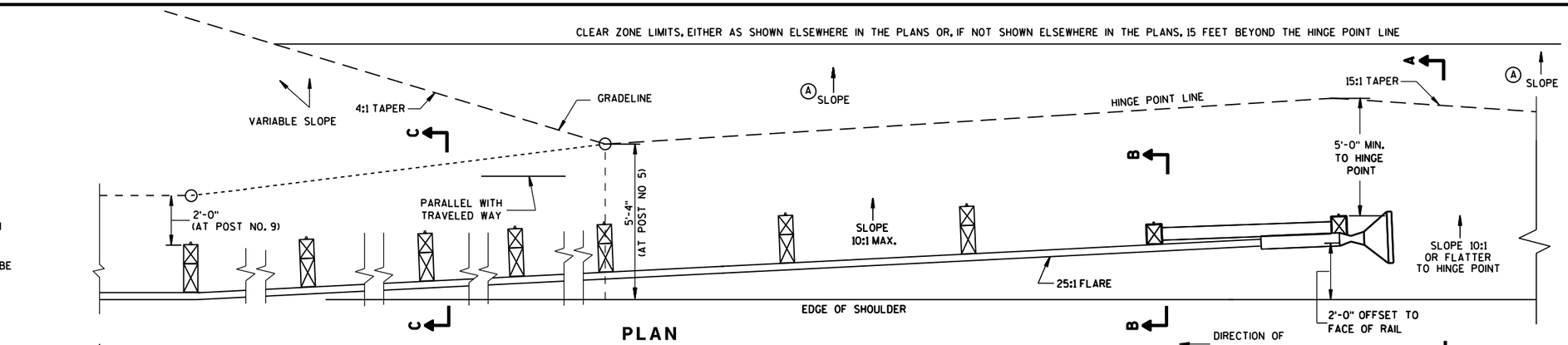
SEE SDD 14B42 FOR MORE INFORMATION.

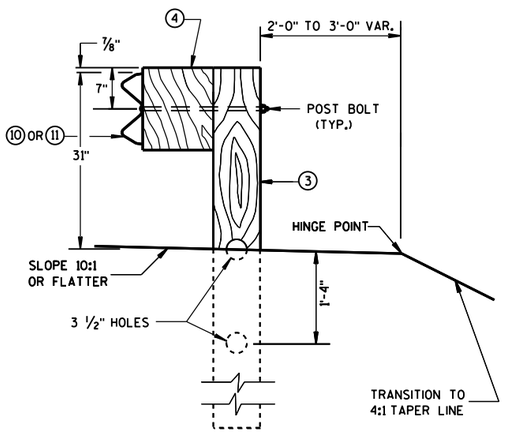
* DO NOT ATTACH BLOCKOUTS TO POSTS 1 AND 2.

DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

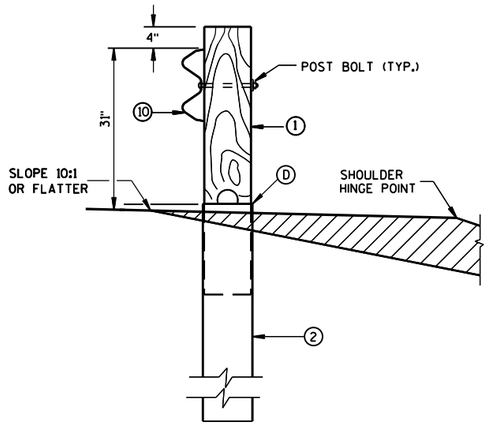
W-BEAM RAIL SPLICES ARE LOCATED AT POST NUMBER 3, AND BETWEEN POST 5 AND 6, BETWEEN POSTS 7 AND 8, AND MIDDLE OF THE SPAN AFTER POST 9.

THE CENTER OF THE UPPER 3½" DIAMETER HOLE ON POST NUMBER 3 THROUGH POST 9 IS TO BE FLUSH WITH THE GROUND LINE UP TO A MAXIMUM OF 2" ABOVE GROUND LINE.

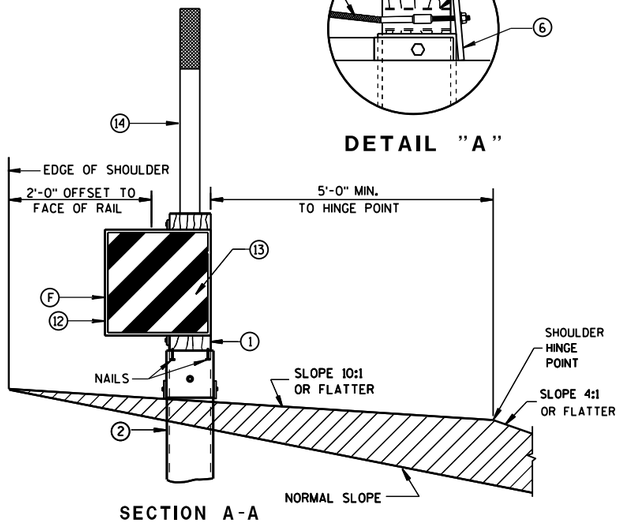




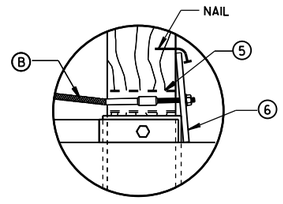
SECTION C-C
TYPICAL AT POST NOS. 3-9



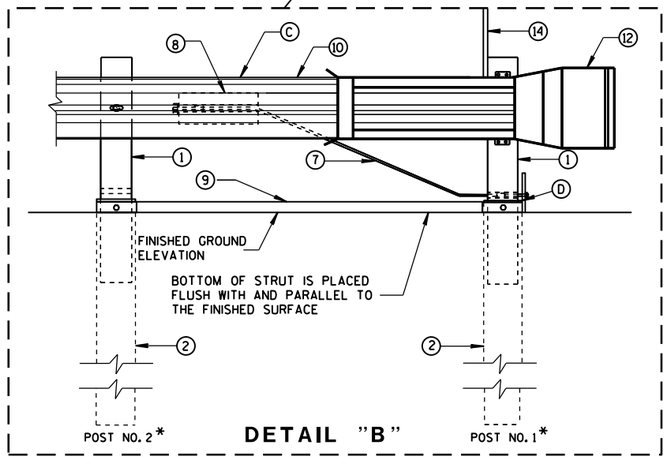
SECTION B-B
TYPICAL AT POST NO. 2*



SECTION A-A
TYPICAL AT POST NO. 1*



DETAIL "A"



DETAIL "B"

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

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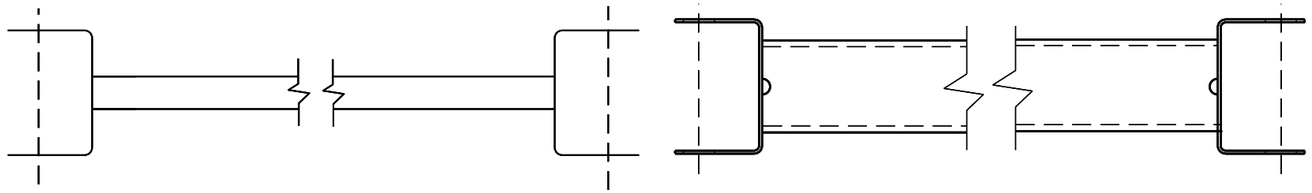
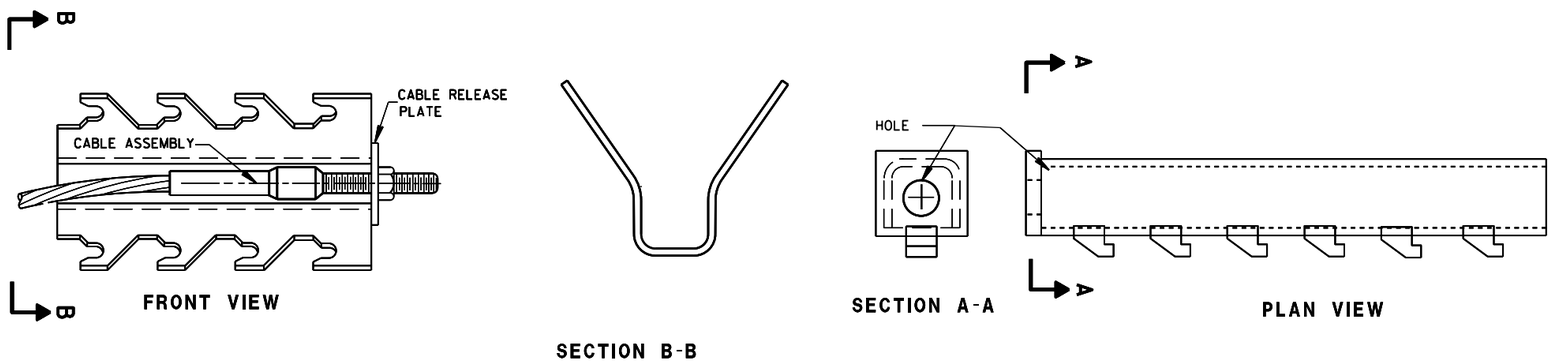
S.D.D. 14 B 44-2a



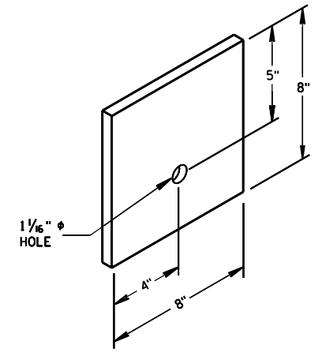
GENERIC GROUND STRUT (9) (H)

BILL OF MATERIALS

PART NO.	DESCRIPTION MATERIALS PROVIDED BY MGS EAT MANUFACTURER. SEE MANUFACTURER'S DETAILS FOR MORE INFORMATION.
(1)	WOOD BREAKAWAY POST
(2)	6" X 8" X 0.188", 6'-0" LONG FOUNDATION TUBE AT POSTS 1 AND 2
(3)	WOOD CRT
(4)	WOOD BLOCKOUT
(5)	PIPE SLEEVE
(6)	BEARING PLATE
(7)	BCT CABLE ASSEMBLY
(8)	ANCHOR CABLE BOX
(9)	GROUND STRUT
(10)	PERFORATED W-BEAM RAIL END PANEL, 12'-6" LONG.
(11)	STANDARD W-BEAM RAIL. MULTIPLE SECTIONS REQUIRED. SECTIONS VARY IN LENGTH.
(12)	END SECTION EAT
(13)	0.040" ALUMINUM SHEET WITH REFLECTIVE SHEETING TYPE F PER SECTION 637 OF THE STANDARD SPECIFICATIONS
(14)	EAT MARKER POST - YELLOW (SEE APPROVED PRODUCTS LIST)



GENERIC ANCHOR CABLE BOX (8) (H)



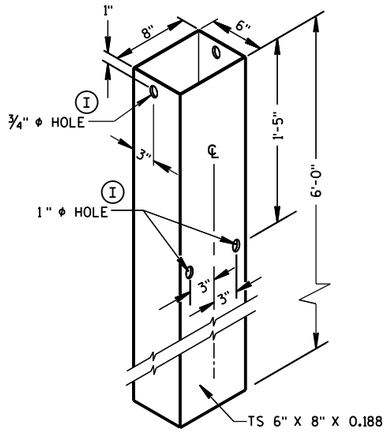
BEARING PLATE (6)

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

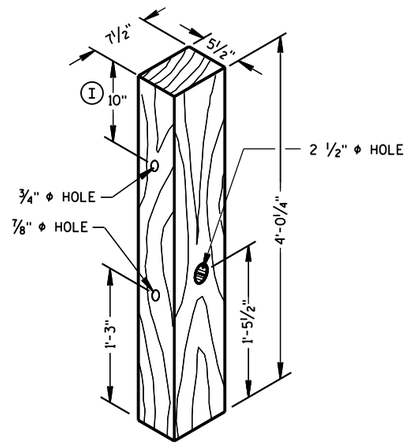
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

S.D.D. 14 B 44-2b

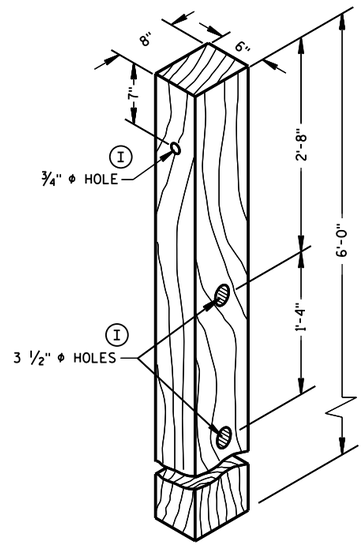


FOUNDATION TUBE (2)



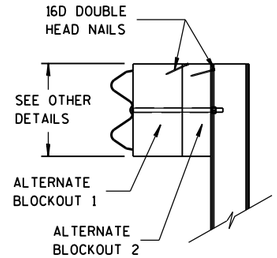
POSTS NUMBER 1 AND 2

WOOD BREAKAWAY POST (1)

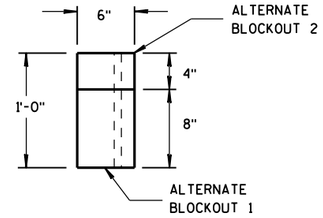


POSTS NUMBER 3-9

WOOD CRT POST (3)

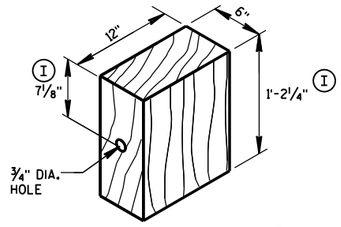


SIDE VIEW



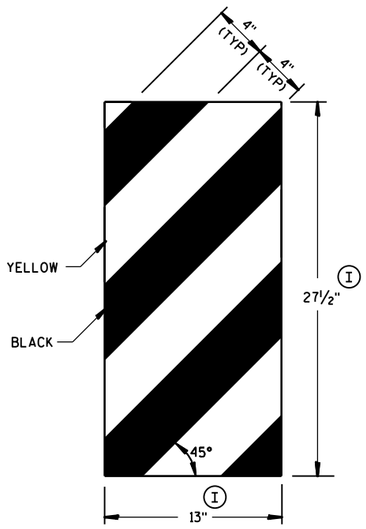
TOP VIEW

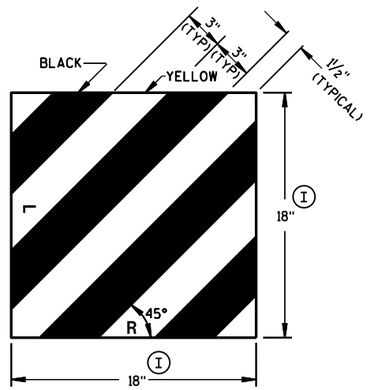
ALTERNATE WOOD BLOCKOUT DETAIL



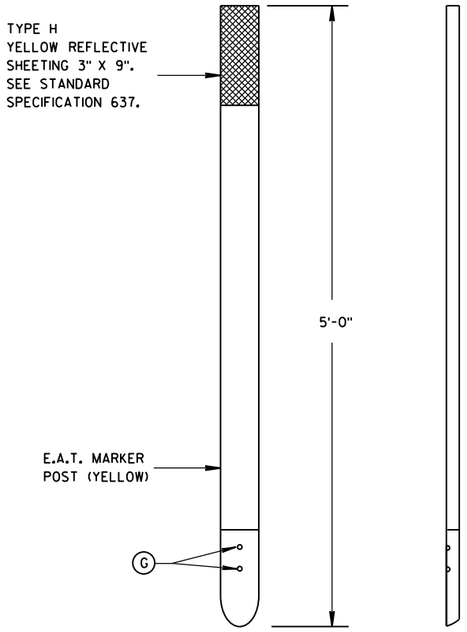
WOOD BLOCKOUT (4)

REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2





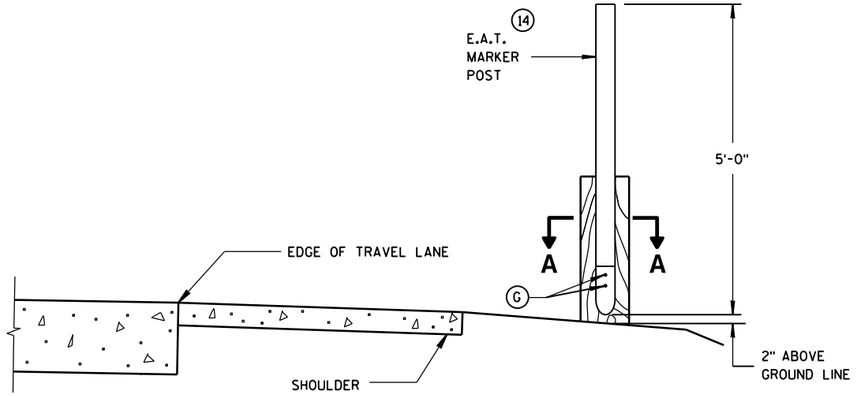
GENERIC REFLECTIVE SHEETING (13) (H)



FRONT VIEW

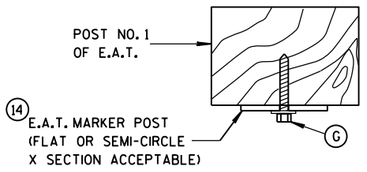
SIDE VIEW

E.A.T. MARKER POST (14)



TYPICAL INSTALLATION OF E.A.T. MARKER POST BACKSIDE OF POST NO. 1

(E.A.T. AND RAIL REMOVED FOR CLARITY)



SECTION A-A

MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)

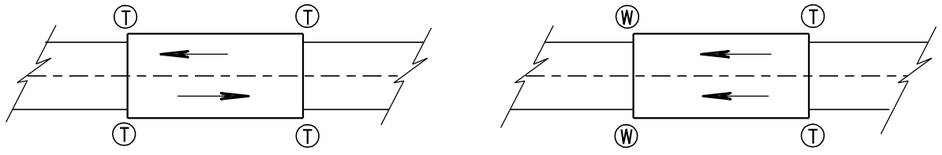
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2014
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER

FHWA

6

S.D.D. 14 B 44-2c



TWO WAY TRAFFIC

ONE WAY TRAFFIC

Ⓣ THRIE BEAM CONNECTION

Ⓦ W-BEAM CONNECTION WHEN REQUIRED

TYPICAL LOCATIONS OF THRIE BEAM AND W-BEAM CONNECTIONS TO BRIDGE

GENERAL NOTES

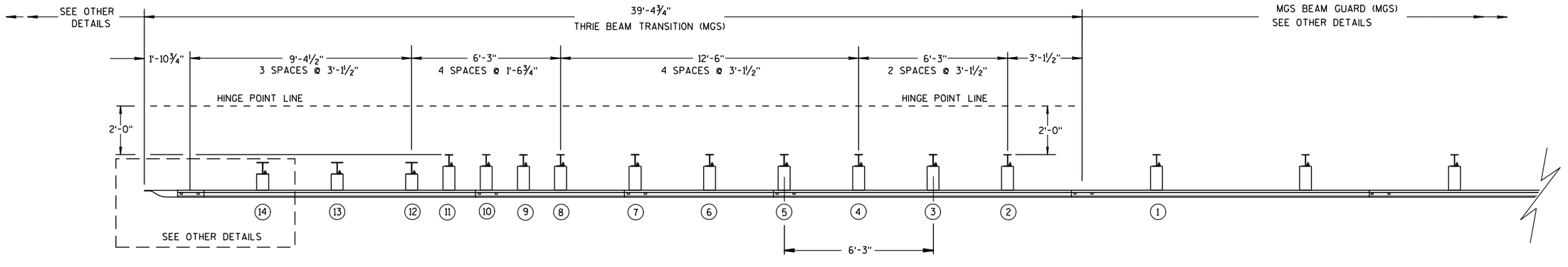
BOLT THE THRIE BEAM TO ALL POSTS AND BLOCKOUTS. DRILL OR PUNCH BOLT HOLES IN THE BEAM IF THE POST SPACING IS LESS THAN 6'-3.

IF ROCK IS ENCOUNTERED, REMOVE ROCK TO FULL DEPTH OF POST PLUS 2½", AND 12" DIAMETER AROUND POST. SEE 14B42 FOR MORE DETAILS.

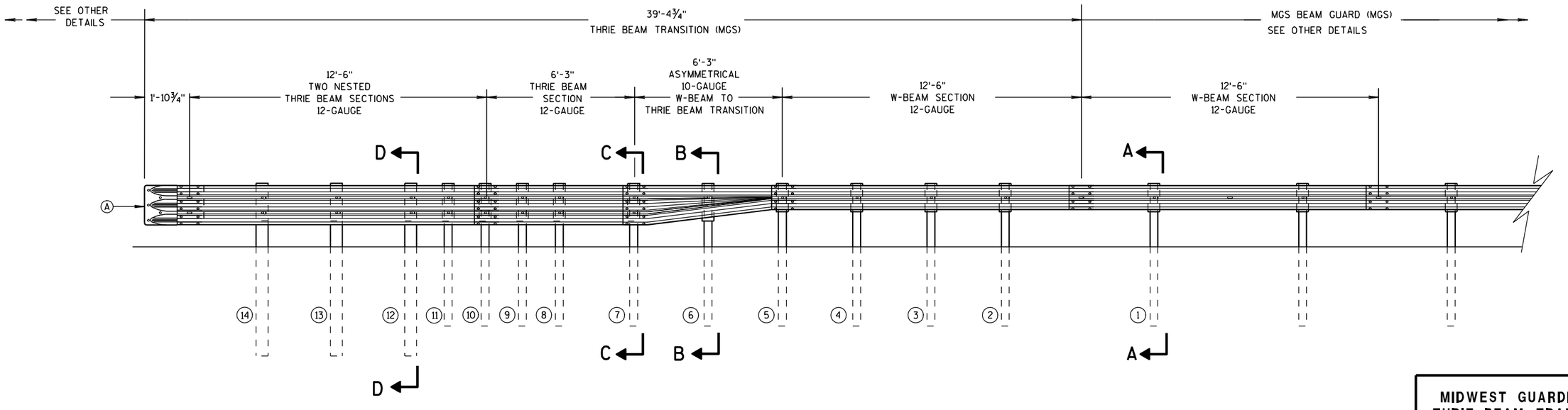
TRANSITION USES STEEL POSTS ONLY.

SEE STANDARD DETAIL DRAWING 14 B 42 FOR MORE INFORMATION.

Ⓐ BRIDGE RAILING TYPE "W" DOES NOT REQUIRE A TERMINAL CONNECTOR.



PLAN VIEW



ELEVATION VIEW

MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION

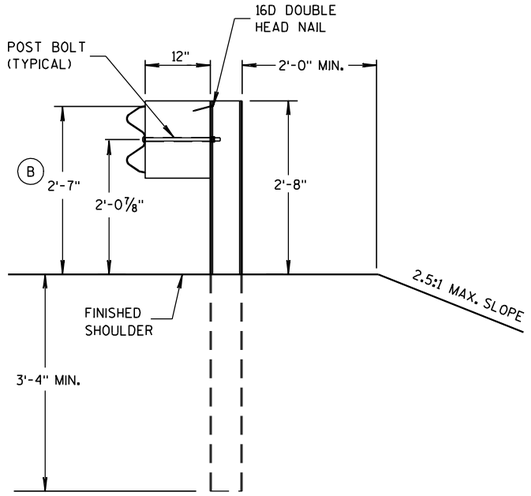
MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
S.D.D. 14 B 45-3a

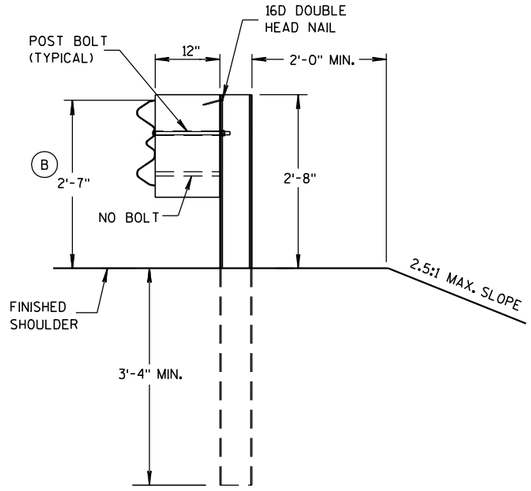
GENERAL NOTES

(B) TOLERANCE FOR TOP OF W-BEAM RAIL IS ± 1".



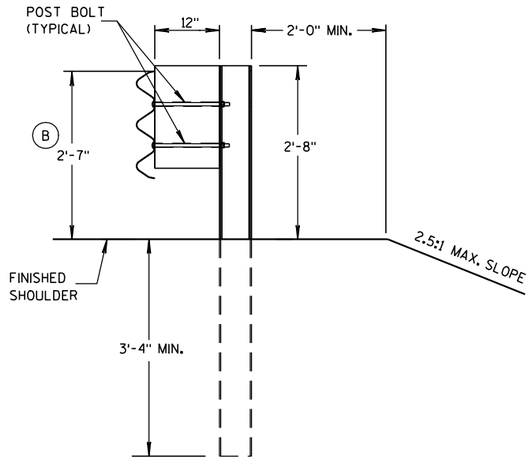
SECTION A-A

POSTS 1-5



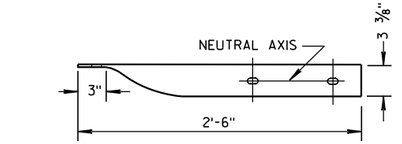
SECTION B-B

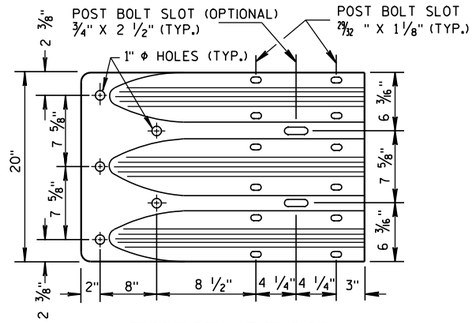
POST 6



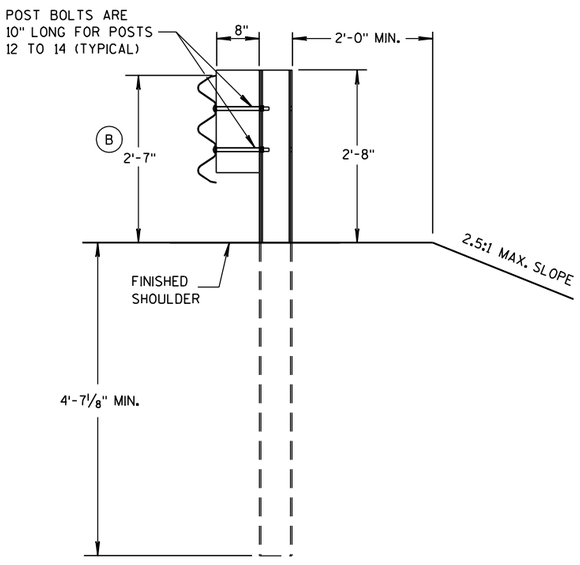
SECTION C-C

POSTS 7-11





THRIE BEAM TERMINAL CONNECTOR



SECTION D-D

POSTS 12-14

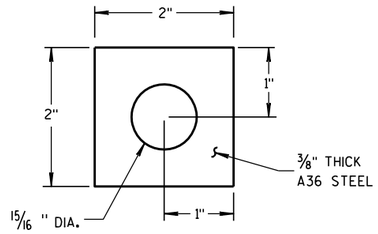
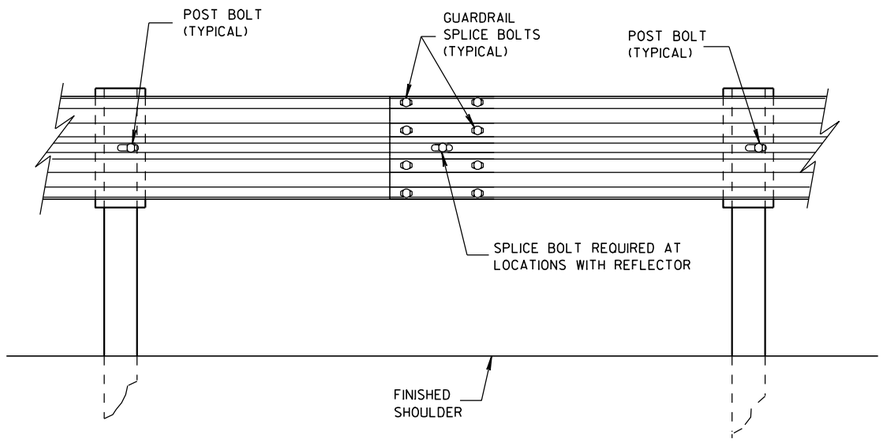
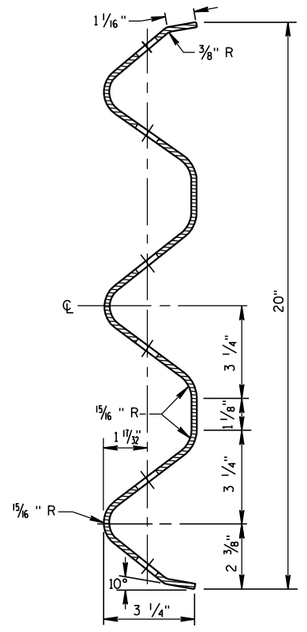


PLATE WASHER DETAIL



SPLICE DETAIL



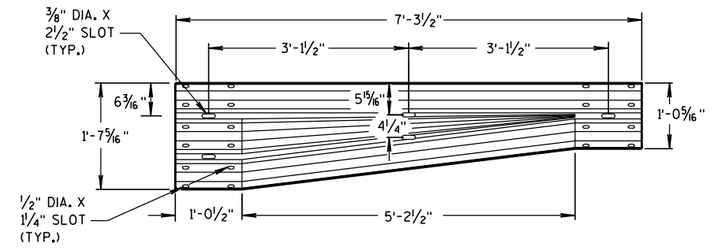
SECTION THRU THRIE BEAM RAIL ELEMENT

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

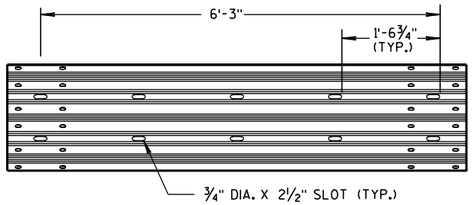
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

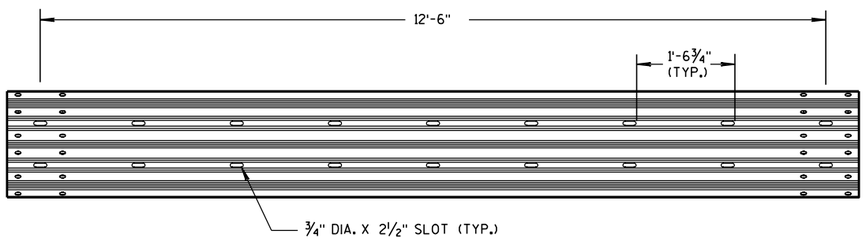
S.D.D. 14 B 45-3b



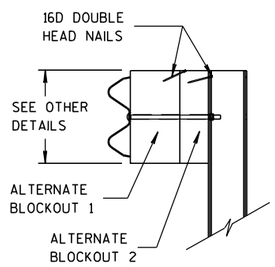
W-BEAM TO THRIE BEAM TRANSITION SECTION



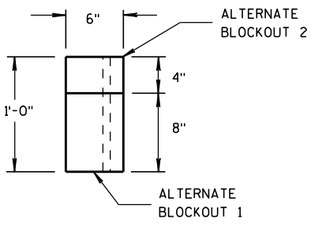
6'-3" THRIE BEAM SECTION



12'-6" THRIE BEAM SECTION

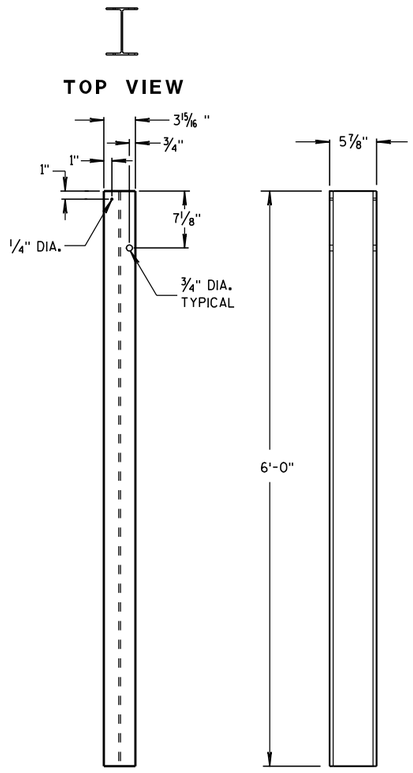


SIDE VIEW

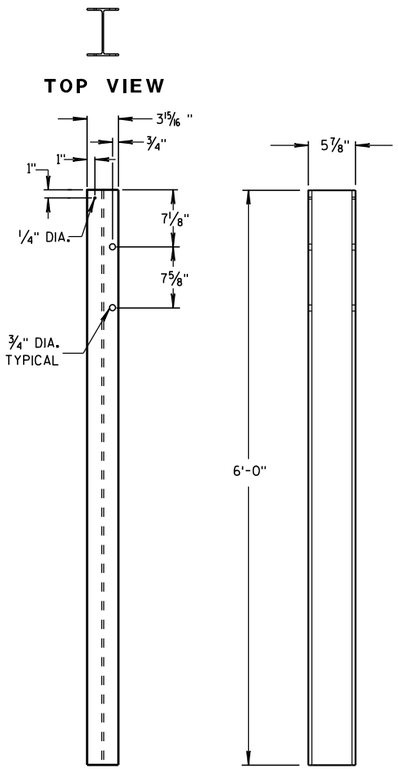


TOP VIEW

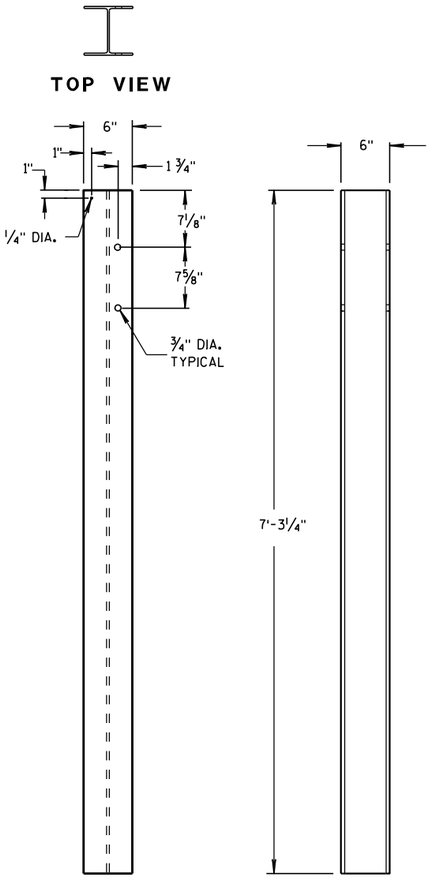
ALTERNATE WOOD BLOCKOUT DETAIL



STEEL POSTS 1-5

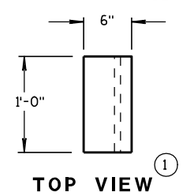


STEEL POSTS 6-11

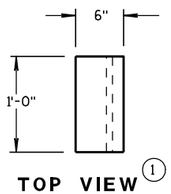


STEEL POSTS 12-14

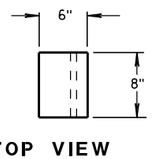
1 WOOD BLOCKS MAY BE CONSTRUCTED OUT OF 2 WOOD BLOCKS. SEE ALTERNATE WOOD BLOCK DETAIL.



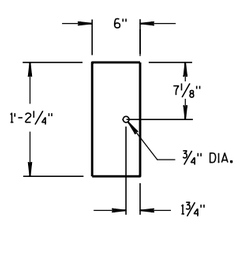
TOP VIEW (1)



TOP VIEW (1)

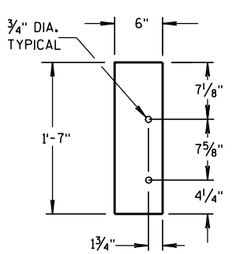


TOP VIEW



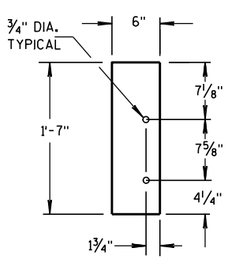
FRONT VIEW

BLOCKOUT POSTS 1-5



FRONT VIEW

BLOCKOUT POSTS 6-11



FRONT VIEW

BLOCKOUT POSTS 12-14

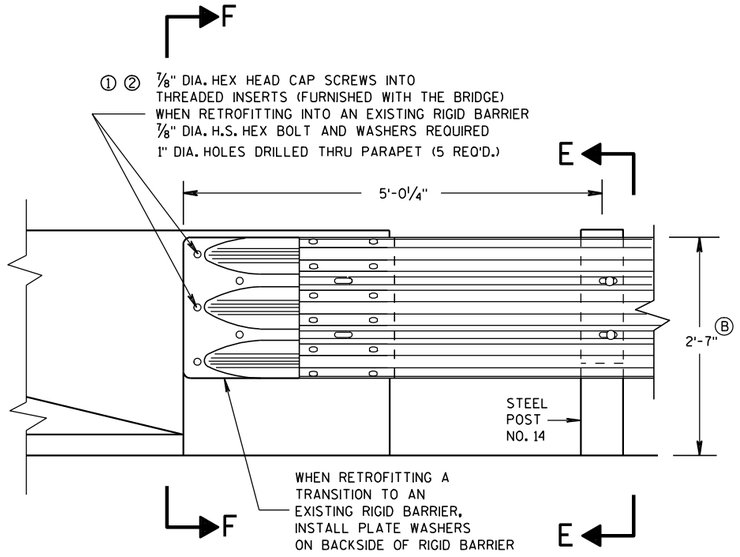
STEEL POST SIZES

POST NUMBER	SECTION TYPE	LENGTH
1	W6x9	72"
2	W6x9	72"
3	W6x9	72"
4	W6x9	72"
5	W6x9	72"
6	W6x9	72"
7	W6x9	72"
8	W6x9	72"
9	W6x9	72"
10	W6x9	72"
11	W6x9	72"
12	W6x15	87 1/8"
13	W6x15	87 1/8"
14	W6x15	87 1/8"

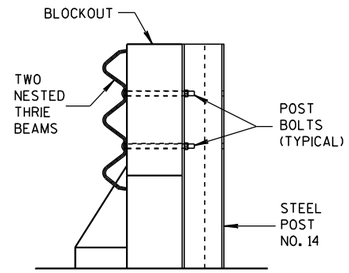
MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
S.D.D. 14 B 45-3c



FRONT VIEW



SECTION E-E

GENERAL NOTES

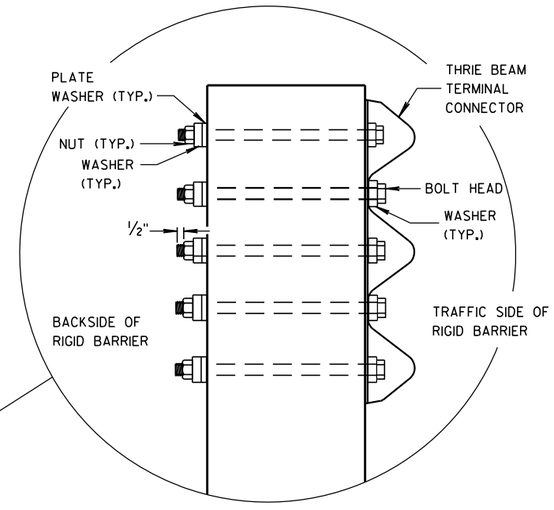
THESE ARE TYPICAL CONNECTION DETAILS. ADJUST THE POSTION OF CONNECTIONS TO EXISTING BRIDGES TO FIT THE ACTUAL BRIDGE AND SITE DIMENSIONS.

① DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

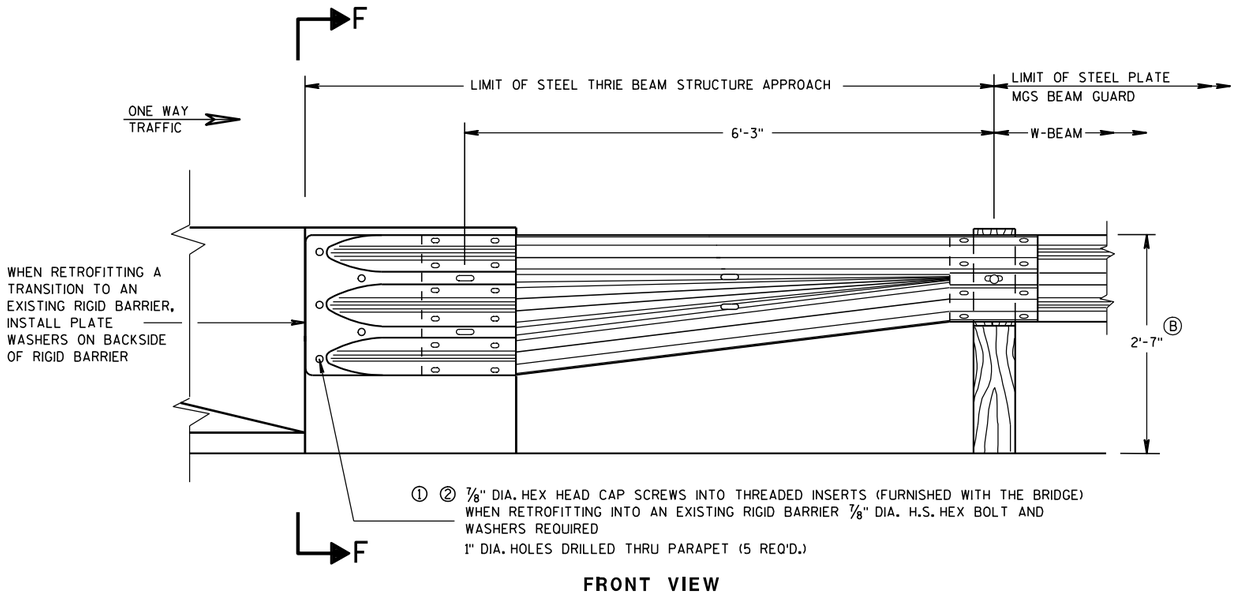
② BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X 5/8" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.

③ THE RECESS FOR A W-BEAM CONNECTION, WHICH EXISTS ON SOME PARAPETS OF THIS TYPE, SHALL BE FILLED WITH A TREATED TIMBER BLOCKOUT. BLOCKOUT SIZE IS 1'-6" X 2'-0" X 3 1/2".

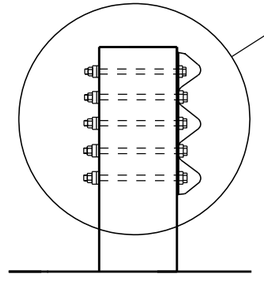
Ⓑ TOLERANCE FOR TOP OF BEAM IS ± 1".



THRIE BEAM CONNECTION TO BRIDGE PARAPET WITH SQUARE ENDS



FRONT VIEW



SECTION F-F

W BEAM TRANSITION AND CONNECTION TO BRIDGE PARAPETS WITH SQUARE ENDS

(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8/31/2012 — DATE

/S/ Jerry H. [illegible] — ROADWAY STANDARDS ENGINEER

FHWA

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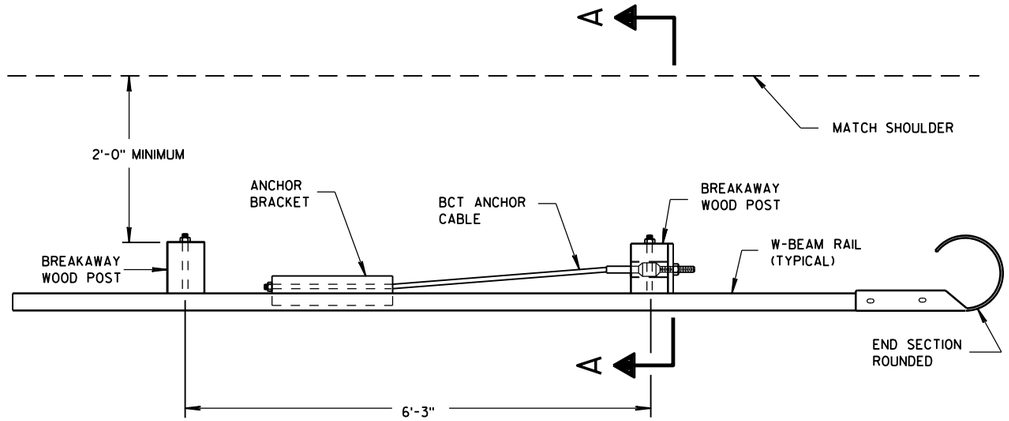
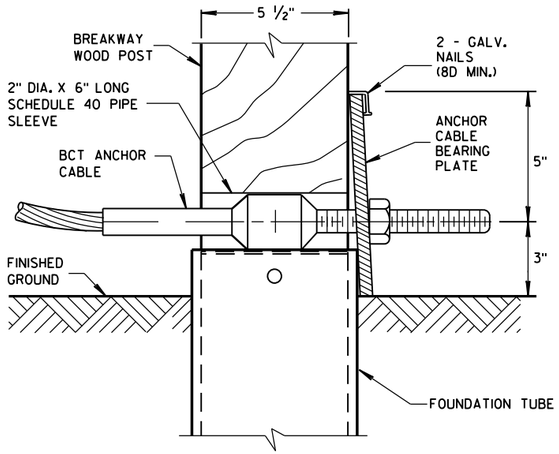
S.D.D. 14 B 45-3d



PLAN VIEW



DETAIL A

POST NO. 1
GROUNG STRUT NOT SHOWN FOR CLARITY.

GENERAL NOTES

SEE SDD 14 B 42 FOR MORE INFORMATION.

END SECTION BOLTS AND NUTS HAVE THE SAME MATERIAL REQUIREMENTS AS SPLICE BOLTS.

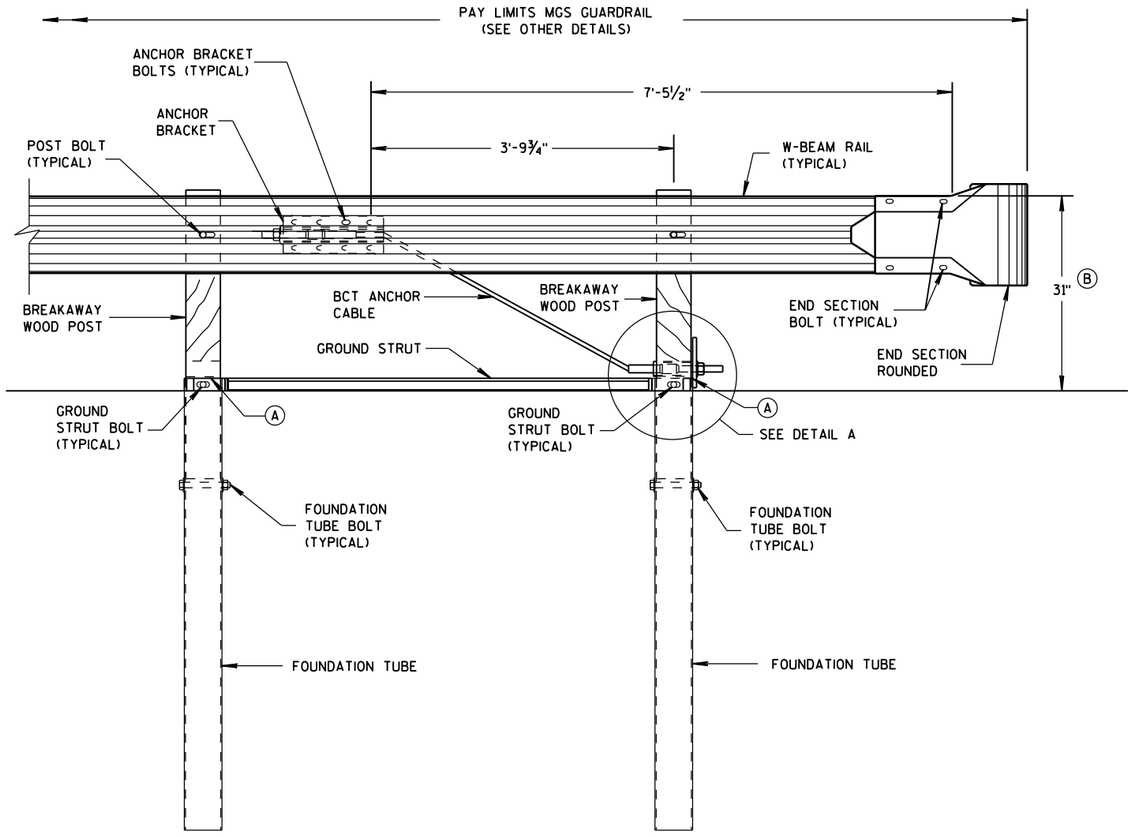
FOUNDATION TUBE BOLTS ARE ⅞" DIAMETER ASTM A307 HEX HEAD BOLT. FOUNDATION TUBE BOLTS REQUIRE ASTM A563 A NUT AND TWO ASTM F844 ⅞" DIAMETER FLAT WASHERS. INSTALL ONE WASHER UNDER BOLT HEAD AND ONE WASHER UNDER NUT.

ANCHOR BRACKET AND GROUND STRUT BOLTS ARE A ⅝" DIAMETER ASTM A307 HEX HEAD BOLT. ANCHOR BRACKET BOLTS REQUIRE ASTM A563 A NUT AND TWO ASTM F844 ⅝" DIAMETER FLAT WASHERS. INSTALL ONE WASHER UNDER BOLT HEAD AND ONE WASHER UNDER NUT.

W-BEAM END SECTION ROUNDED HAS THE SAME MATERIAL PROPERTIES AS STANDARD STEEL RAIL.

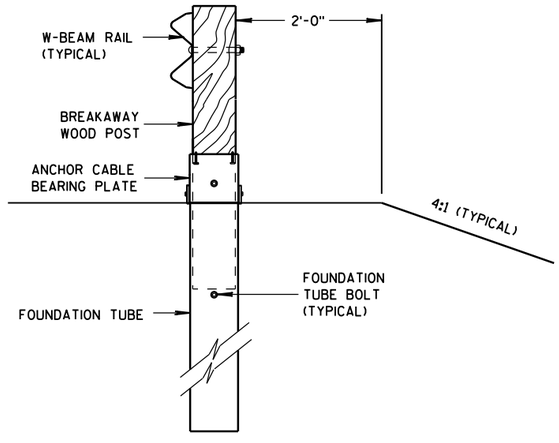
(A) TOP OF FOUNDATION TUBE SHALL BE NO MORE THAN 3" ABOVE FINISHED GROUND.

(B) FOR NEW CONSTRUCTION TOP OF RAIL IS 31" ± 1".
FOR EXISTING INSTALLATIONS TOP OF RAIL IS BETWEEN 27¾" TO 32" ± 1".

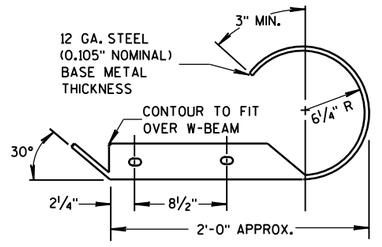


FRONT VIEW

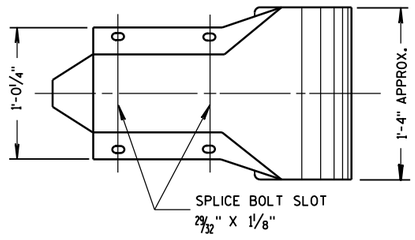
END RAIL DETAIL



SECTION A-A



PLAN VIEW



FRONT VIEW

W BEAM END SECTION ROUNDED

MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

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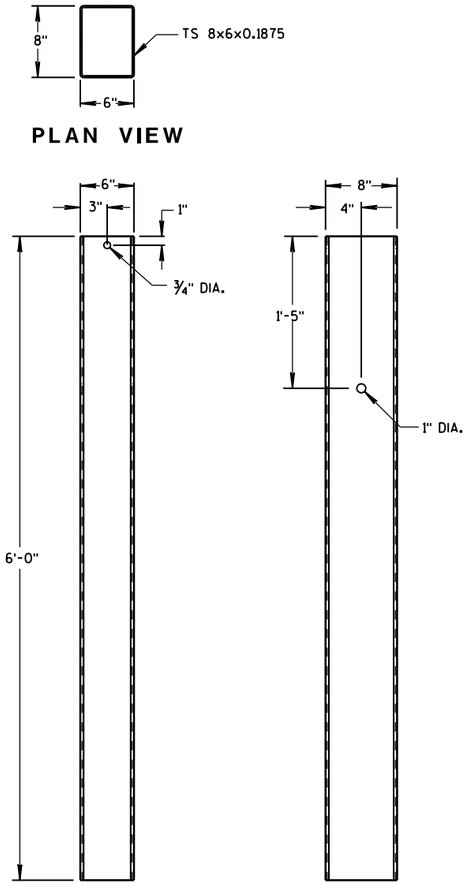
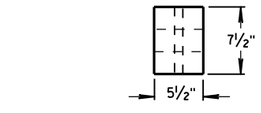
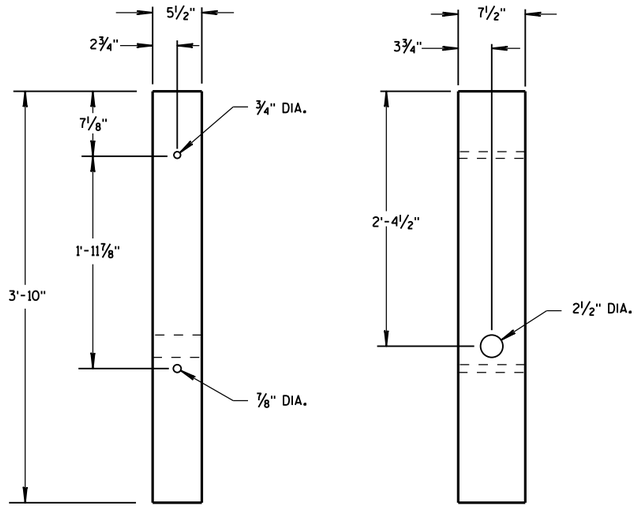
S.D.D. 14 B 47-2a



FOUNDATION TUBE

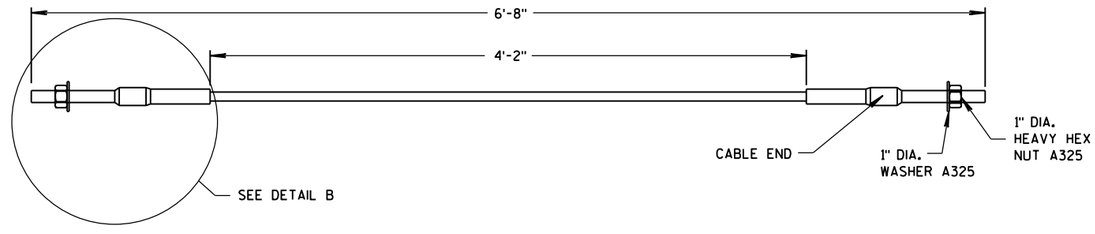




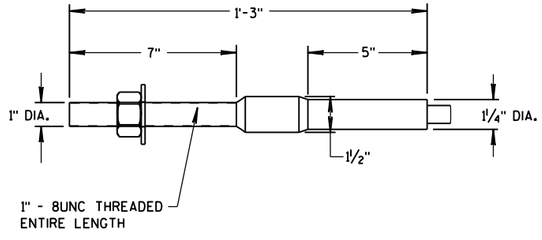
BREAKAWAY WOOD POST

GENERAL NOTES

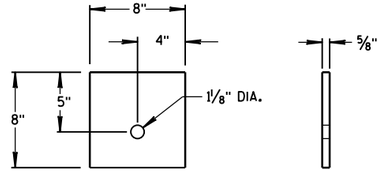
BCT ANCHOR CABLE IS A ¾" DIAMETER 6X19 IWRC IPS GALVANIZED WIRE ROPE. THE SWAGED FITTINGS AND STUD ARE REQUIRED. END FITTING SHALL BE MACHINED FROM HOT-ROLLED CARBON STEEL CONFORMING TO ASTM A576 GRADE 1035 AND GALVANIZED ACCORDING TO ASTM A123. TREADED STUD SHALL CONFORM TO ASTM A325 OR SAE GRADE 5. MINIMUM BREAKING STRENGTH OF WIRE ROPE IS 43,000 LB. WIRE ROPE IS TO BE TAUT.



BCT ANCHOR CABLE



DETAIL B



ANCHOR CABLE
BEARING PLATE

MIDWEST GUARDRAIL
SYSTEM (MGS) TYPE 2 TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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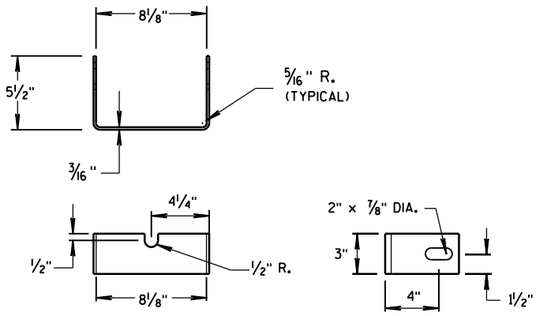
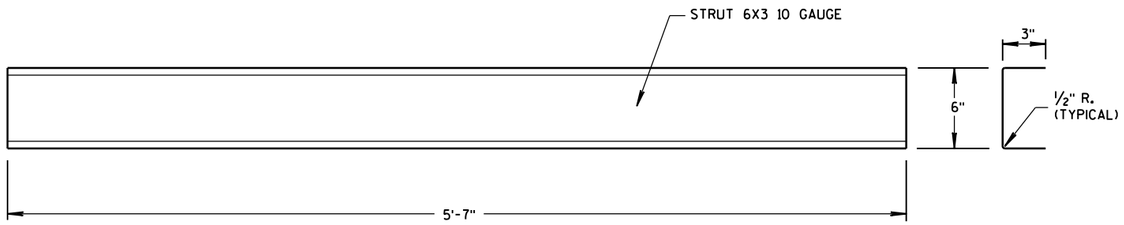
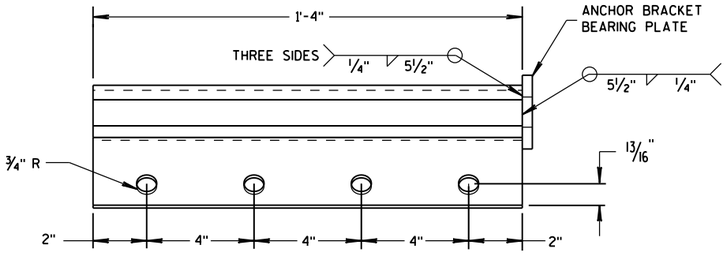
S.D.D. 14 B 47-2b

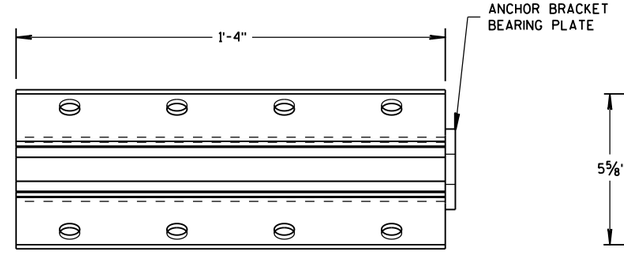


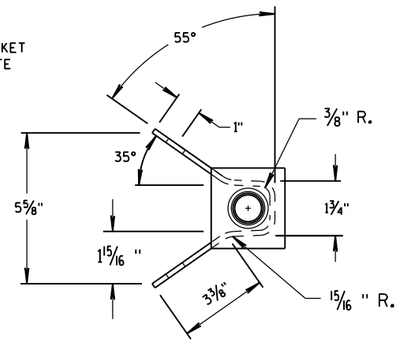
YOKE DETAIL



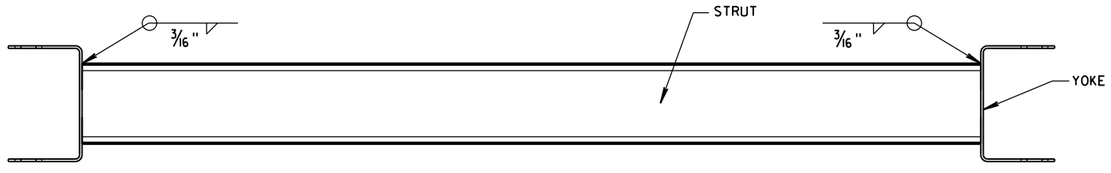
STRUT DETAIL



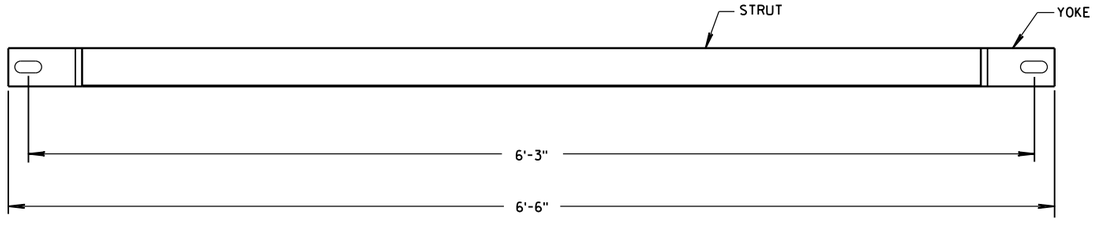




ANCHOR BRACKET

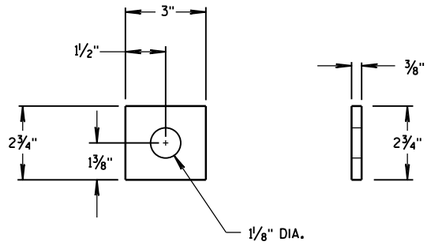


PLAN VIEW



FRONT VIEW

GROUND STRUT DETAIL



ANCHOR BRACKET BEARING PLATE

MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2014
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER
FHWA

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S.D.D. 14 B 47-2c

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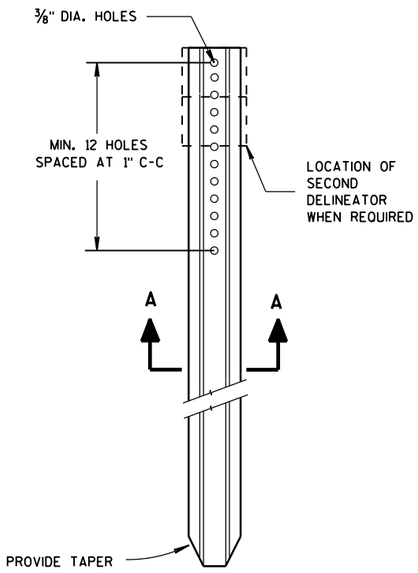
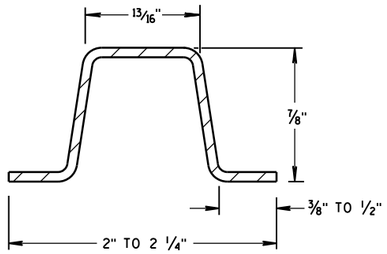
S.D.D. 14 B 47-2c

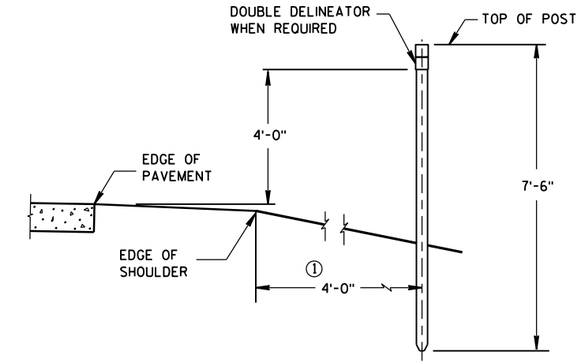


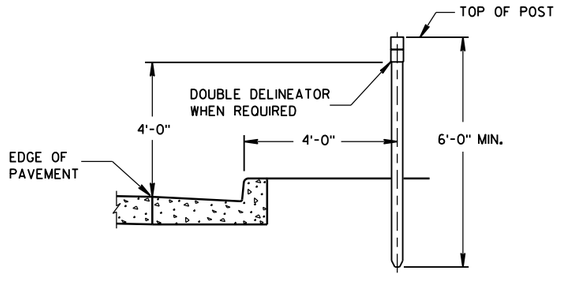
DELINEATOR POST



SECTION A-A

WEIGHT 1.12 LBS PER FT. ± 0.1 LB.



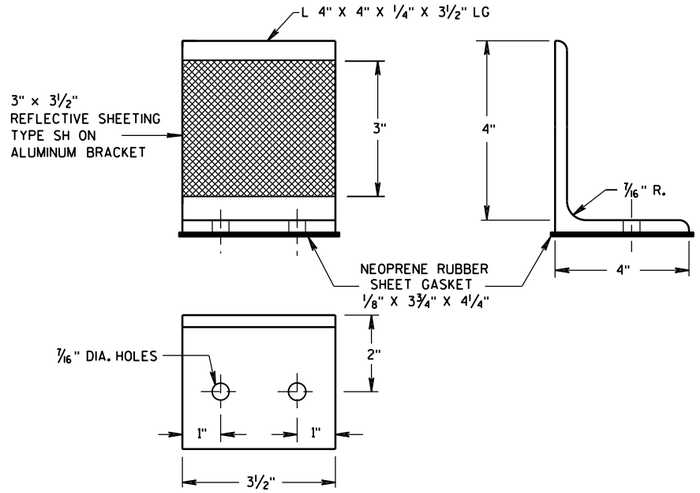


TYPICAL INSTALLATIONS OF DELINEATOR POSTS

GENERAL NOTES

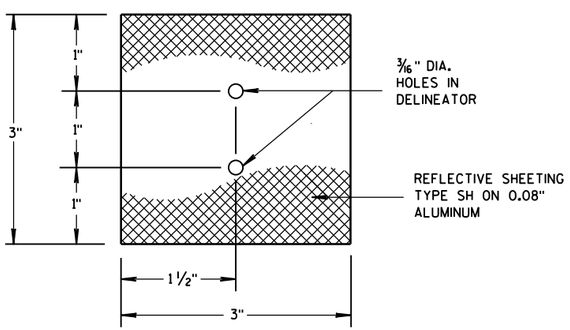
DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

① DELINEATORS SHALL BE PLACED AT A CONSTANT DISTANCE FROM THE EDGE OF THE SHOULDER FOR THE LENGTH OF THE INSTALLATION.

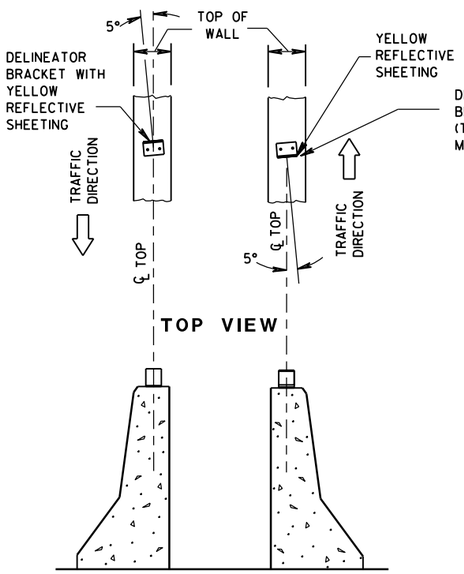


DELINEATOR BRACKET

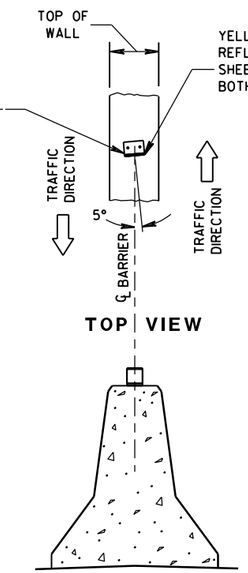
MOUNTING DETAIL FOR DELINEATOR



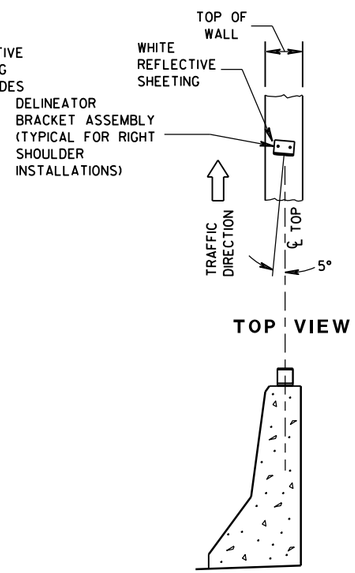
3"x 3" DELINEATOR



DOUBLE BARRIERS IN MEDIAN

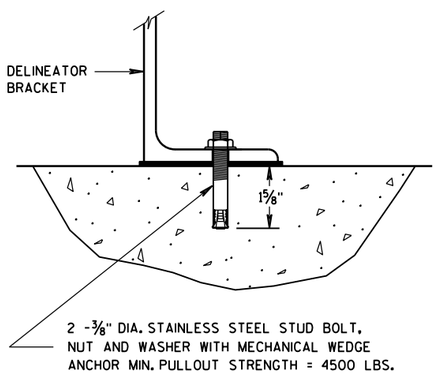


MEDIAN BARRIER



BARRIER LOCATED TO RT. OF TRAFFIC FLOW

LOCATION AND AIMING DETAILS FOR DELINEATOR BRACKETS MOUNTED ON CONCRETE BARRIERS



DELINEATOR BRACKET MOUNTING DETAIL

DELINEATOR POST, DELINEATOR, AND DELINEATOR BRACKET WITH REFLECTIVE SHEETING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7/2013 — DATE
/S/ Travis Feltes — STATE TRAFFIC E
FHWA

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S.D.D. 15 A 2-8

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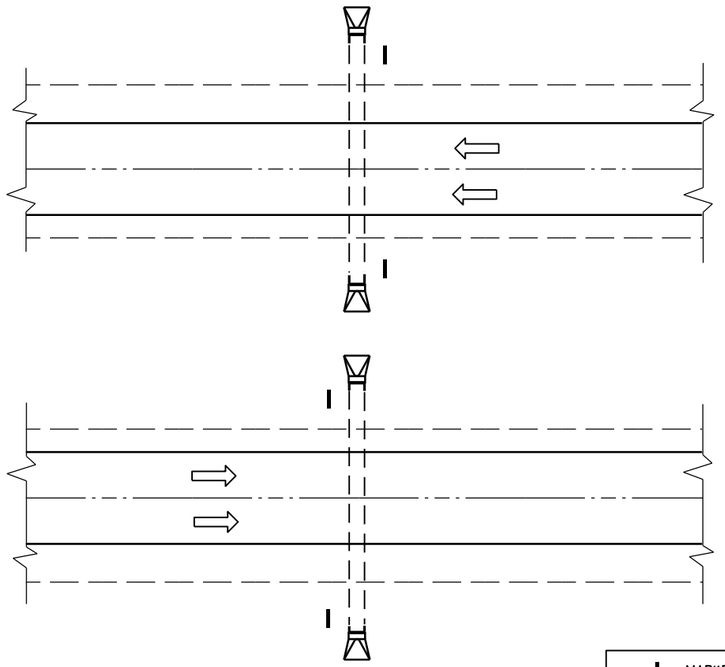
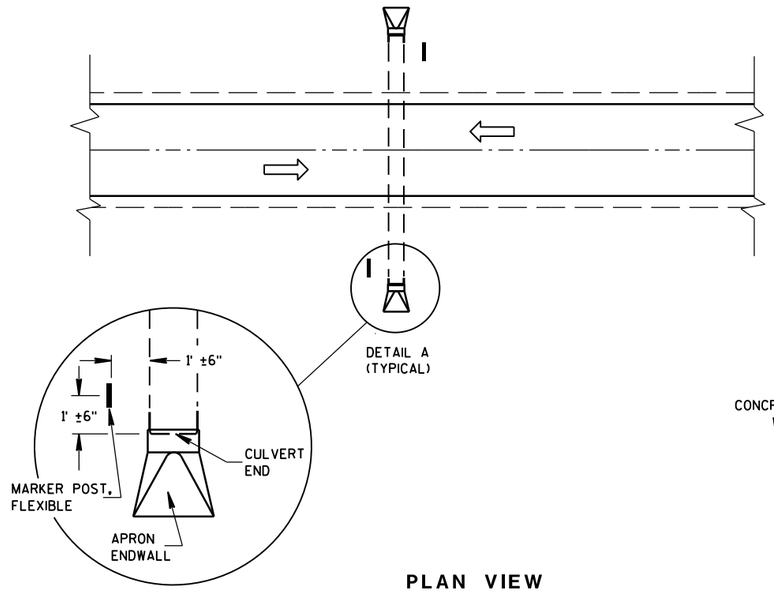
S.D.D. 15 A 2-8



PLAN VIEW

DIVIDED HIGHWAY



DETAIL A
(TYPICAL)

PLAN VIEW

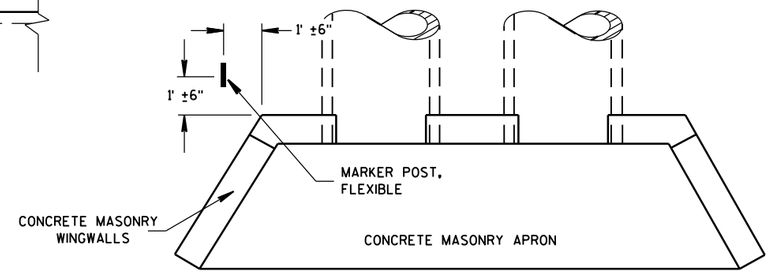
UNDIVIDED HIGHWAY

MARKER POST, FLEXIBLE

DIRECTION OF TRAFFIC FLOW

GENERAL NOTES

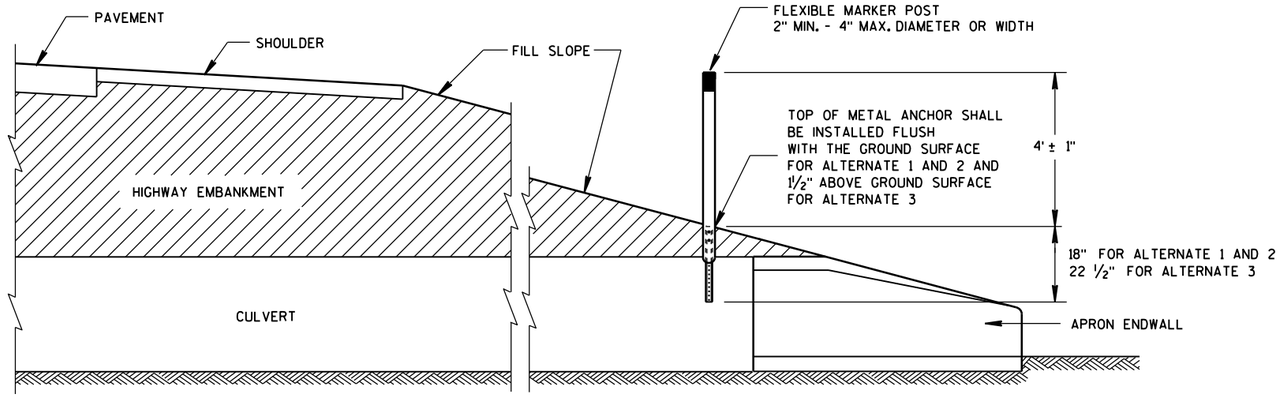
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.



PLAN VIEW

CONCRETE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH

FLEXIBLE MARKER POST LOCATION



CROSS SECTION

FLEXIBLE MARKER POST

FLEXIBLE MARKER POST FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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S.D.D. 15 A 3-2a

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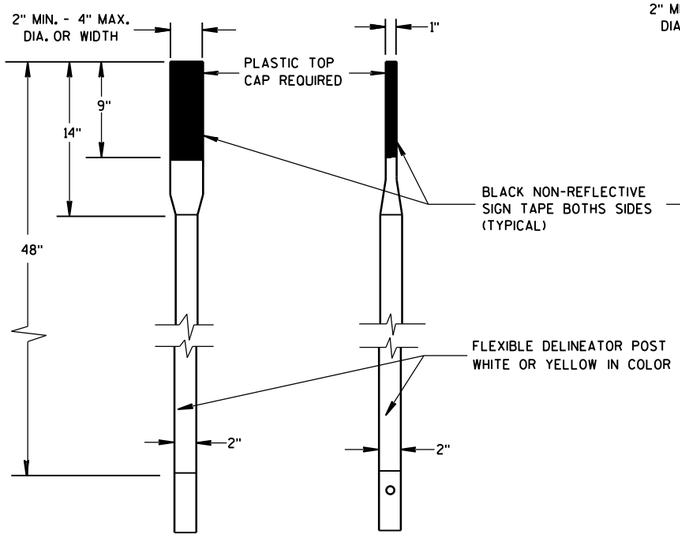
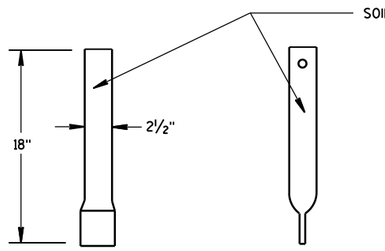
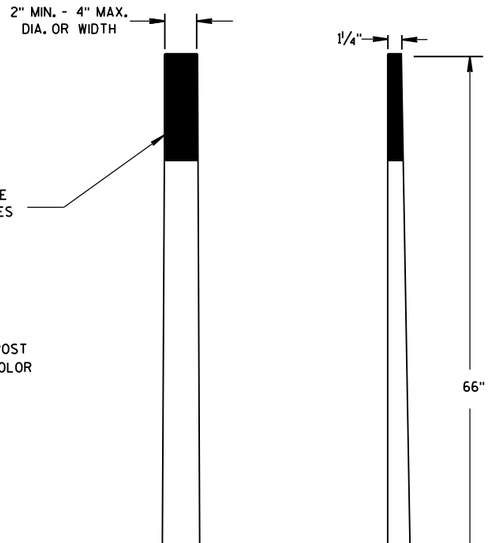
S.D.D. 15 A 3-2a





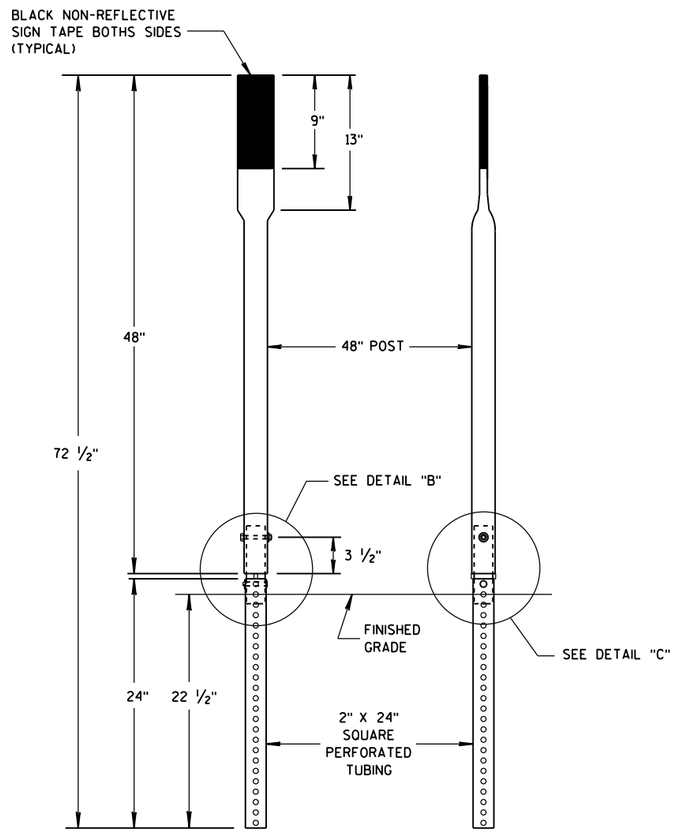
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

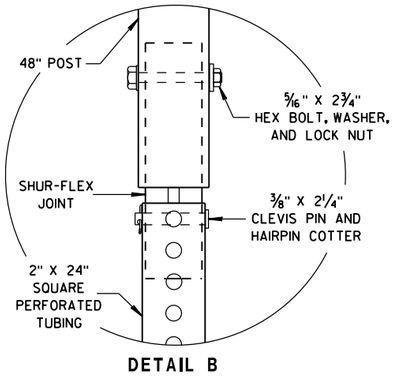
ALTERNATE 2



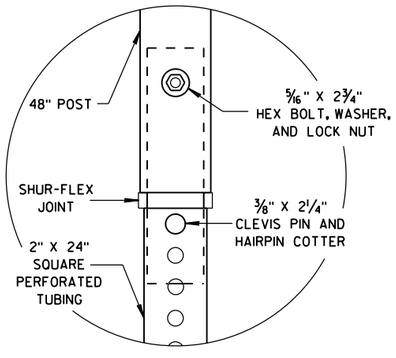
FRONT VIEW SIDE VIEW

ALTERNATE 3

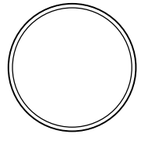
FLEXIBLE MARKER POSTS



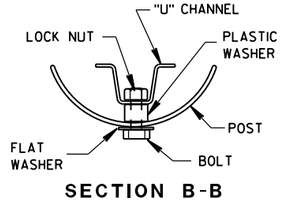
DETAIL B



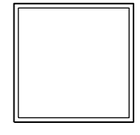
DETAIL C



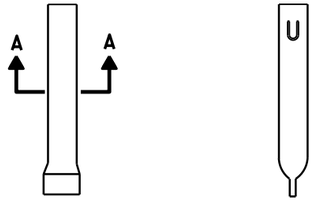
SECTION A-A



SECTION B-B

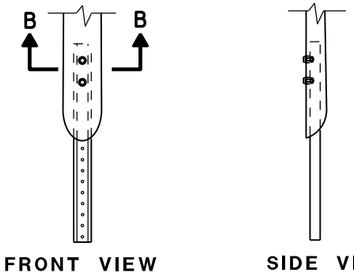


SECTION C-C



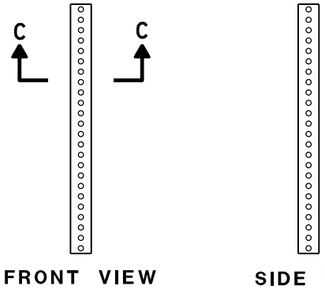
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

ALTERNATE 2



FRONT VIEW SIDE VIEW

ALTERNATE 3

FLEXIBLE MARKER POST ANCHORS

FLEXIBLE MARKER POST
FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

6

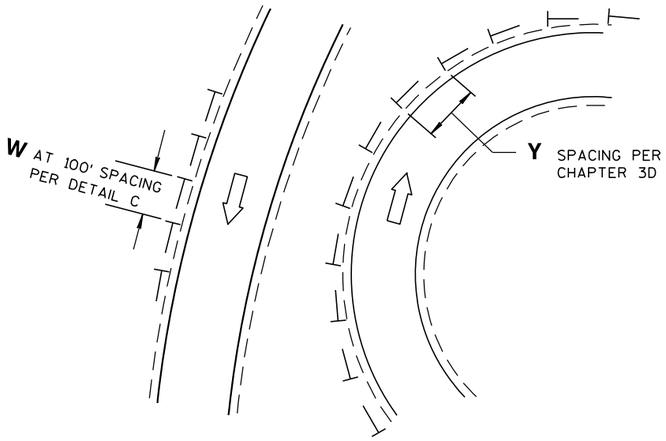
S.D.D. 15 A 3-2b

6

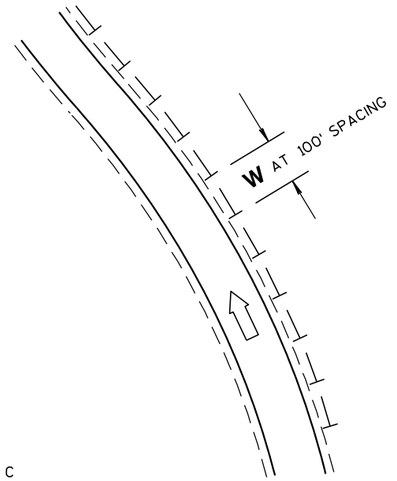
S.D.D. 15 A 3-2b

GENERAL NOTES

* USE DOUBLE DELINEATOR ALONG ACCELERATION-DECELERATION LANES AND TAPERS. USE SINGLE DELINEATOR WHEN RAMP PAVEMENT IS FULL WIDTH.



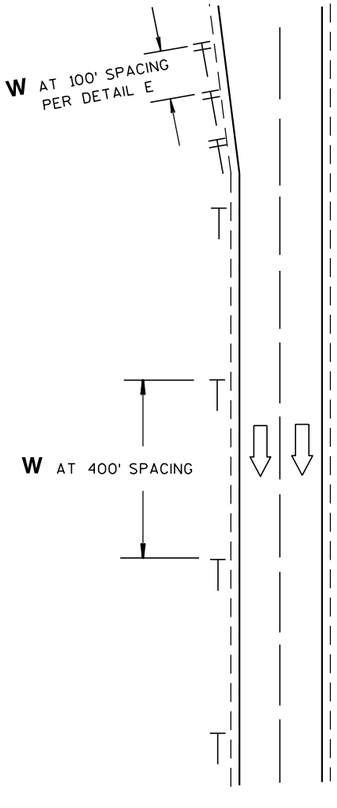
DETAIL A
DELINEATOR LAYOUT AT CURVED RAMP



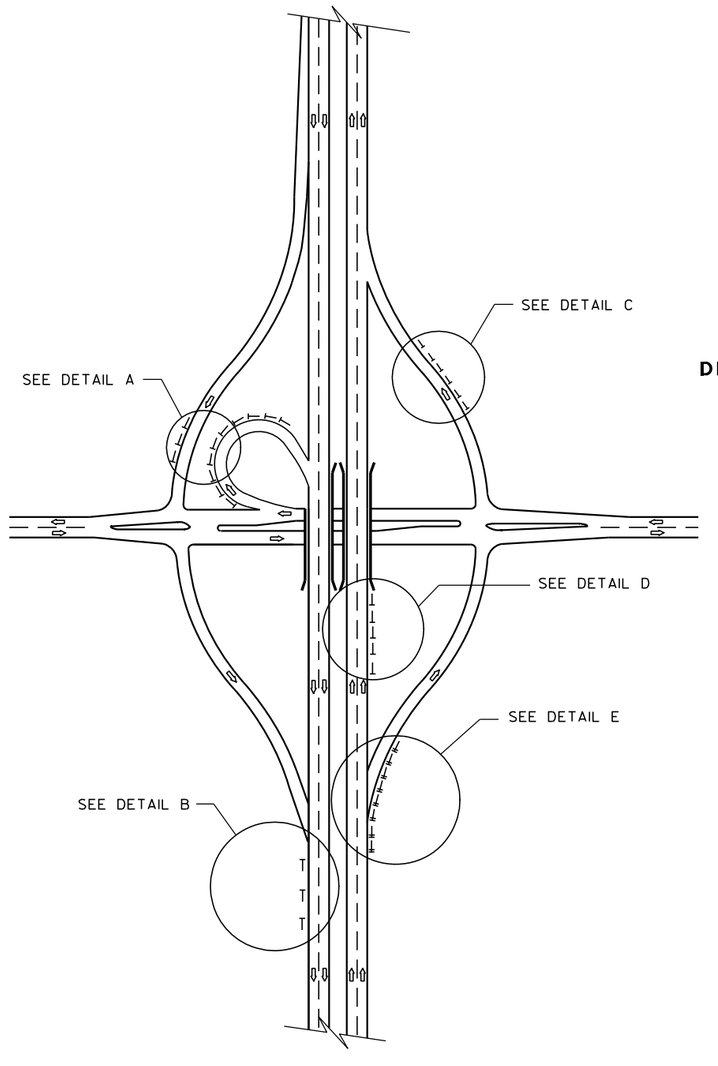
DETAIL C
DELINEATOR LAYOUT ALONG RAMP

LEGEND

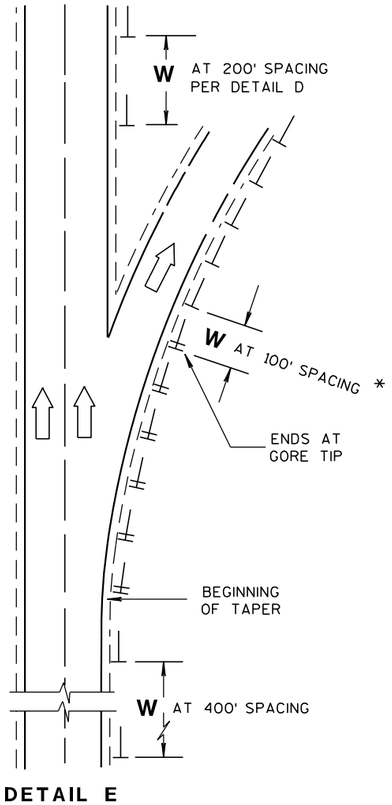
- DIRECTION OF TRAFFIC FLOW
- SINGLE DELINEATOR
- DOUBLE DELINEATOR
- W — WHITE
- Y — YELLOW



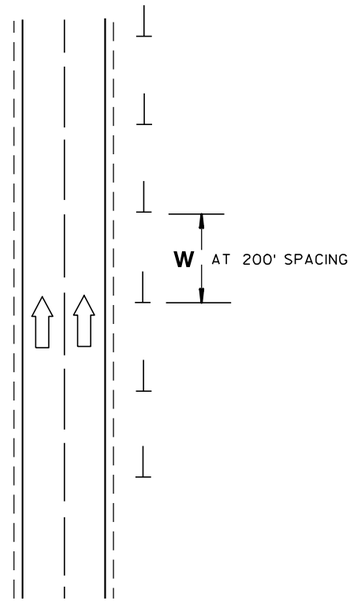
DETAIL B
DELINEATOR LAYOUT ALONG MAINLINE



DELINEATOR LAYOUT



DETAIL E
DELINEATOR LAYOUT FOR ACCELERATION - DECELERATION LANES AND TAPERS AT RAMPS



DETAIL D
DELINEATOR LAYOUT BETWEEN INTERCHANGE RAMPS

DELINEATOR LAYOUT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
2/5/09 DATE
/S/ Thomas N. Nothdurft STATE TRAFFIC ENGINEER
FHWA

6

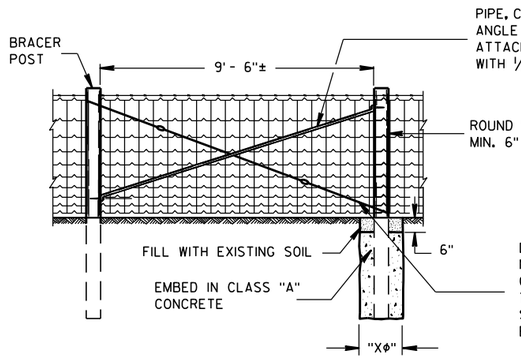
S.D.D. 15 A 6-2

6

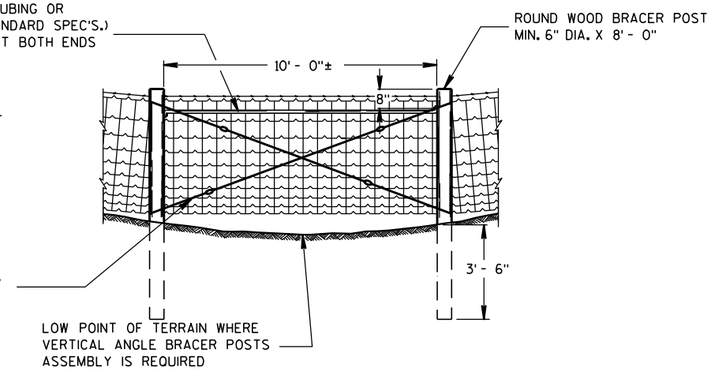
S.D.D. 15 A 6-2

NOTE: PULL OR STRETCHER POST ASSEMBLIES SHALL BE PLACED MIDWAY BETWEEN END POSTS AND CORNER POSTS WHERE A RUN OF FENCE EXCEEDS 660' BUT IS LESS THAN 1,320'. FOR RUNS OF FENCE IN EXCESS OF 1,320' MAXIMUM SPACING OF PULL OR STRETCHER POST ASSEMBLIES SHALL BE 660'± C-C.

ILLUSTRATION SHOWS POSITION OF STANDARD STEEL BRACE, DOUBLE STRAND GALVANIZED WIRE, AND THE POST TO BE EMBEDDED IN CONCRETE WHEN WIRE FENCE IS INSTALLED FROM LEFT TO RIGHT. THE BRACES SHALL BE POSITIONED ON THE OPPOSITE DIAGONALS AND THE OPPOSITE POST SHALL BE EMBEDDED IN CONCRETE WHEN WIRE FENCE IS INSTALLED FROM RIGHT TO LEFT.



PULL OR STRETCHER POSTS ASSEMBLY



VERTICAL ANGLE BRACER POSTS ASSEMBLY

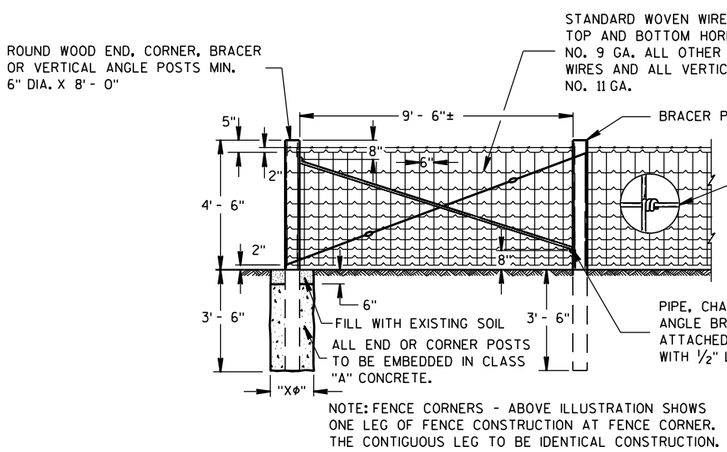
GENERAL NOTES

"XΦ" = DIAMETER OF THE POST PLUS 12".

FENCE STAPLES SHOULD NEVER BE DRIVEN VERTICALLY INTO WOOD POSTS (WITH BOTH LEGS PARALLEL WITH THE WOOD GRAIN). DOING SO CAN SEPARATE THE GRAIN AND SIGNIFICANTLY REDUCE THE HOLDING POWER. ROTATING THE STAPLES SLIGHTLY OFF VERTICAL STRADDLES THE GRAIN AND PROVIDES MORE RESISTANCE TO PULL-OUT.

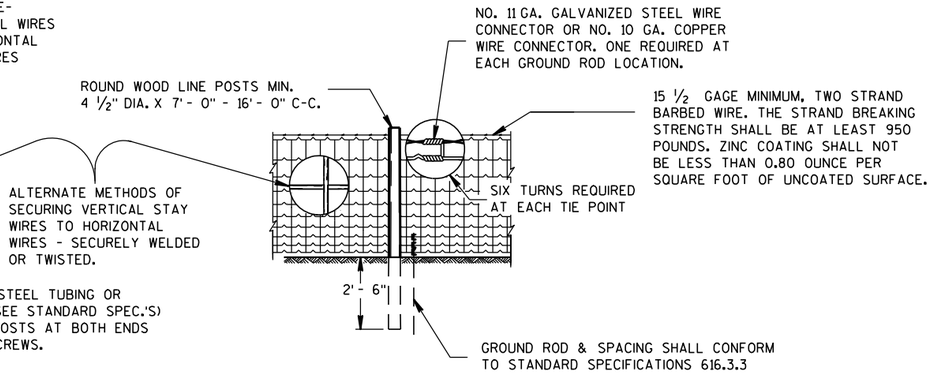
DO NOT STAPLE WIRE TIGHT TO THE LINE POSTS. ALLOW MOVEMENT OF WIRE FOR EXPANSION AND CONTRACTION. STAPLE ARRANGEMENT SHALL BE THE SAME FOR ALL OTHER POSTS EXCEPT THAT THEY SHALL BE DRIVEN TIGHT TO POSTS. ALL STAPLES SHALL BE 2" X 9 GAGE AND SHALL BE MANUFACTURED FROM GALVANIZED WIRE OR HOT DIP GALVANIZED AFTER FORMING. STAPLES SHALL HAVE SLASH-CUT POINTS.

FENCE SHALL BE LOCATED 3'-0" INSIDE THE RIGHT OF WAY LINE UNLESS OTHERWISE INDICATED ON THE PLANS.



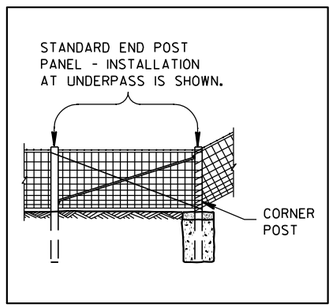
NOTE: FENCE CORNERS - ABOVE ILLUSTRATION SHOWS ONE LEG OF FENCE CONSTRUCTION AT FENCE CORNER. THE CONTIGUOUS LEG TO BE IDENTICAL CONSTRUCTION.

END OR CORNER POSTS ASSEMBLY

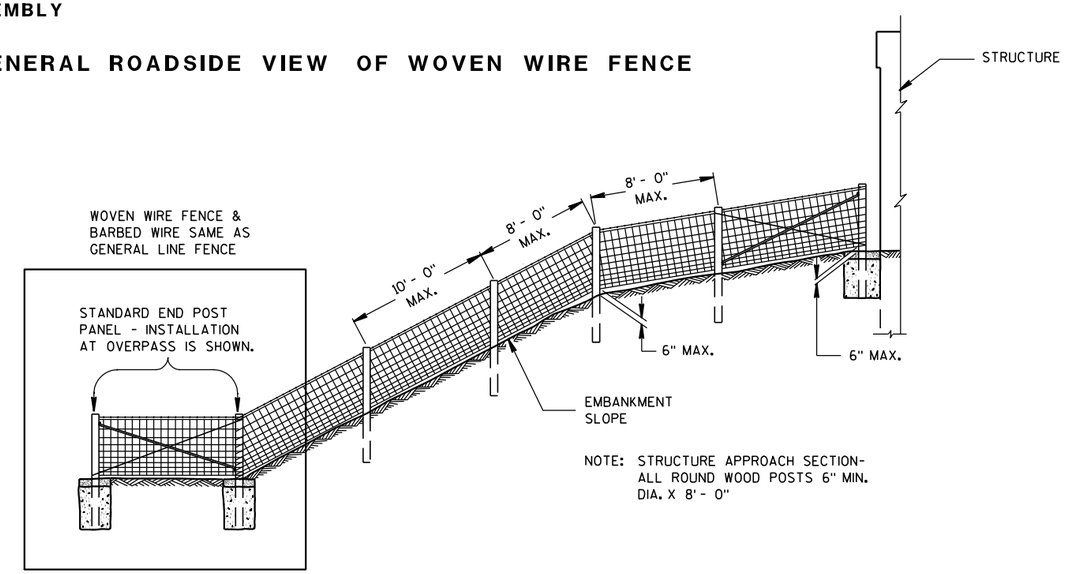


LINE FENCE CONSTRUCTION

GENERAL ROADSIDE VIEW OF WOVEN WIRE FENCE



ALTERNATE FENCE DESIGN AT STRUCTURE



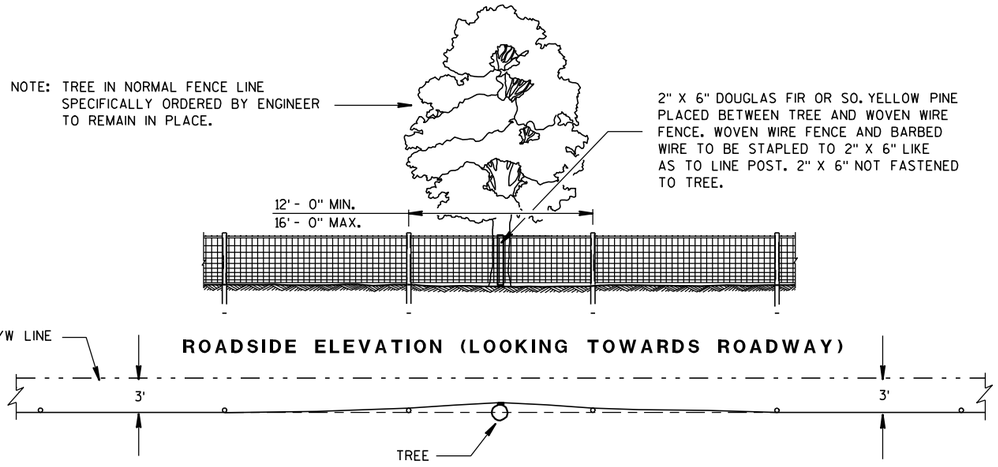
FENCE DESIGN AT STRUCTURE APPROACH

FENCE WOVEN WIRE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

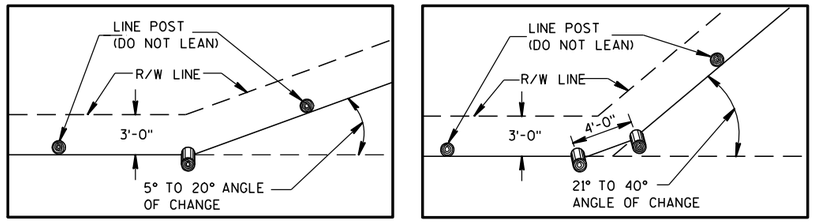
6

S.D.D. 15 B 1-8a



PLAN VIEW

FENCE DESIGN AT TREES REMAINING IN NORMAL FENCE LINE



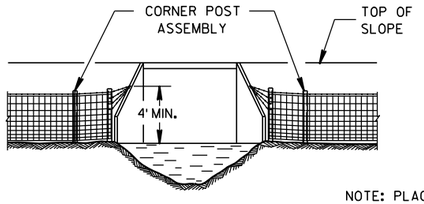
PLAN VIEW
SINGLE POST CORNER

PLAN VIEW
DOUBLE POST CORNER

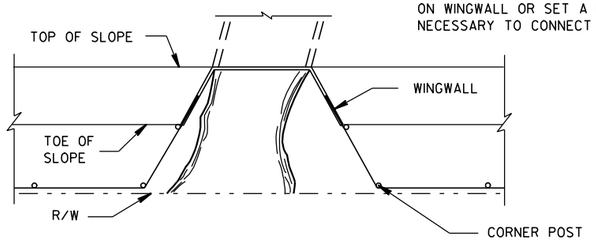
RIGHT OF WAY LINE CHANGE 40° AND LESS

NOTE: SINGLE AND DOUBLE POSTS SHALL BE A MIN. 6" DIA. X 8'-0" WITH A LEAN OF 4" TOWARD THE OUTSIDE OF THE CURVE.

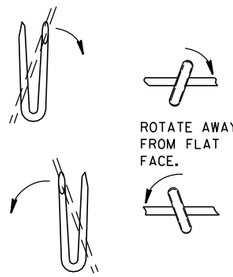
WHEN THE RIGHT OF WAY LINE CHANGE IS MORE THAN 40° USE THE CORNER OR STRETCHER POSTS ASSEMBLY.



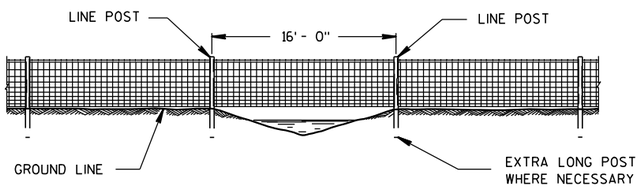
NOTE: PLACE A MINIMUM OF 4 STRANDS OF BARBED WIRE, 6" MAXIMUM CENTERS IN FAN SHAPE CONNECTED TO AN EYE BOLT ON WINGWALL OR SET A LONE POST WHEN NECESSARY TO CONNECT BARBED WIRE.



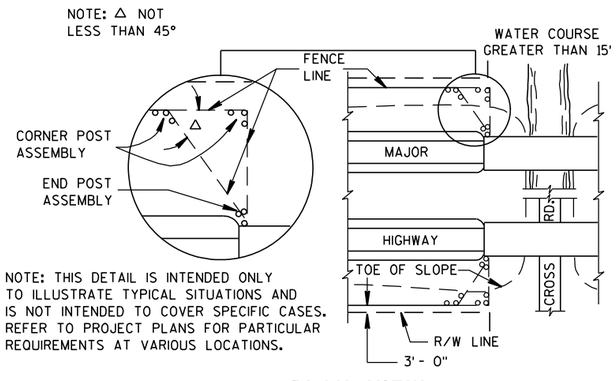
FENCE INSTALLATION TO WINGWALLS



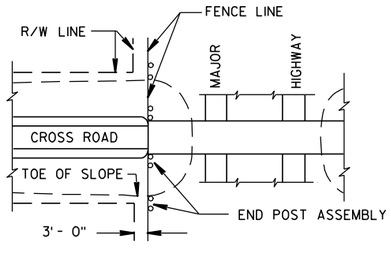
LINE POST



FENCE CONSTRUCTION OVER STREAM COURSES OF 15 FT. OR LESS IN WIDTH

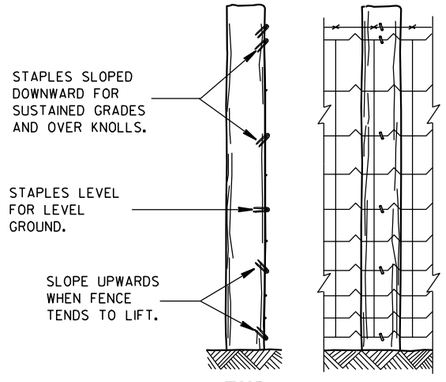


PLAN VIEW
MAJOR HIGHWAY OVERPASS OR STREAM COURSE CROSSING OF GREATER THAN 15 FT. IN WIDTH



PLAN VIEW
MAJOR HIGHWAY UNDERPASS

NOTE: WHEN POSTS ARE DRIVEN THE SMALL END SHALL BE DOWN.



END ELEVATION **FARM SIDE ELEVATION**

FENCE MOUNTING DETAIL

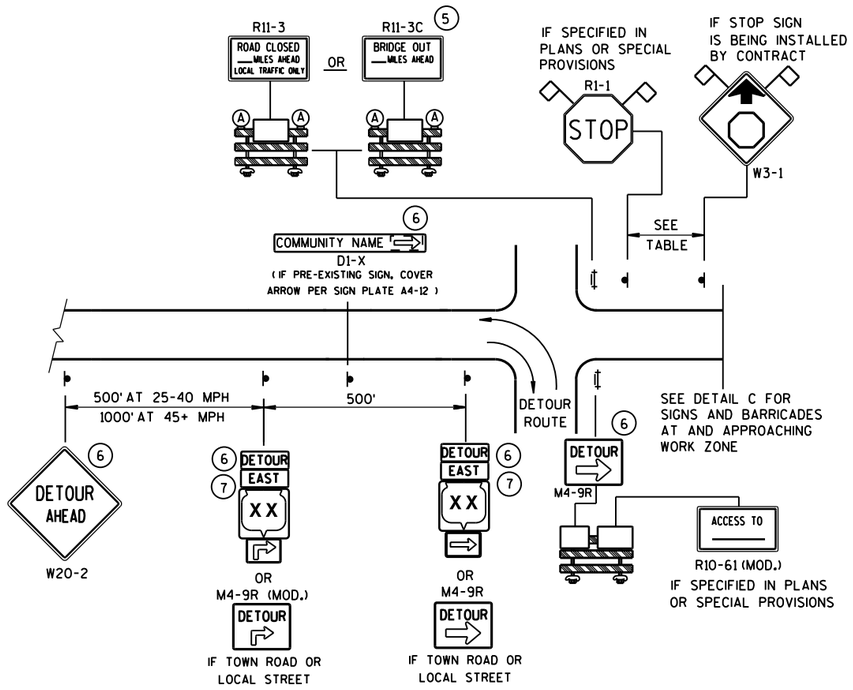
FENCE LOCATION AT STRUCTURES

FENCE WOVEN WIRE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

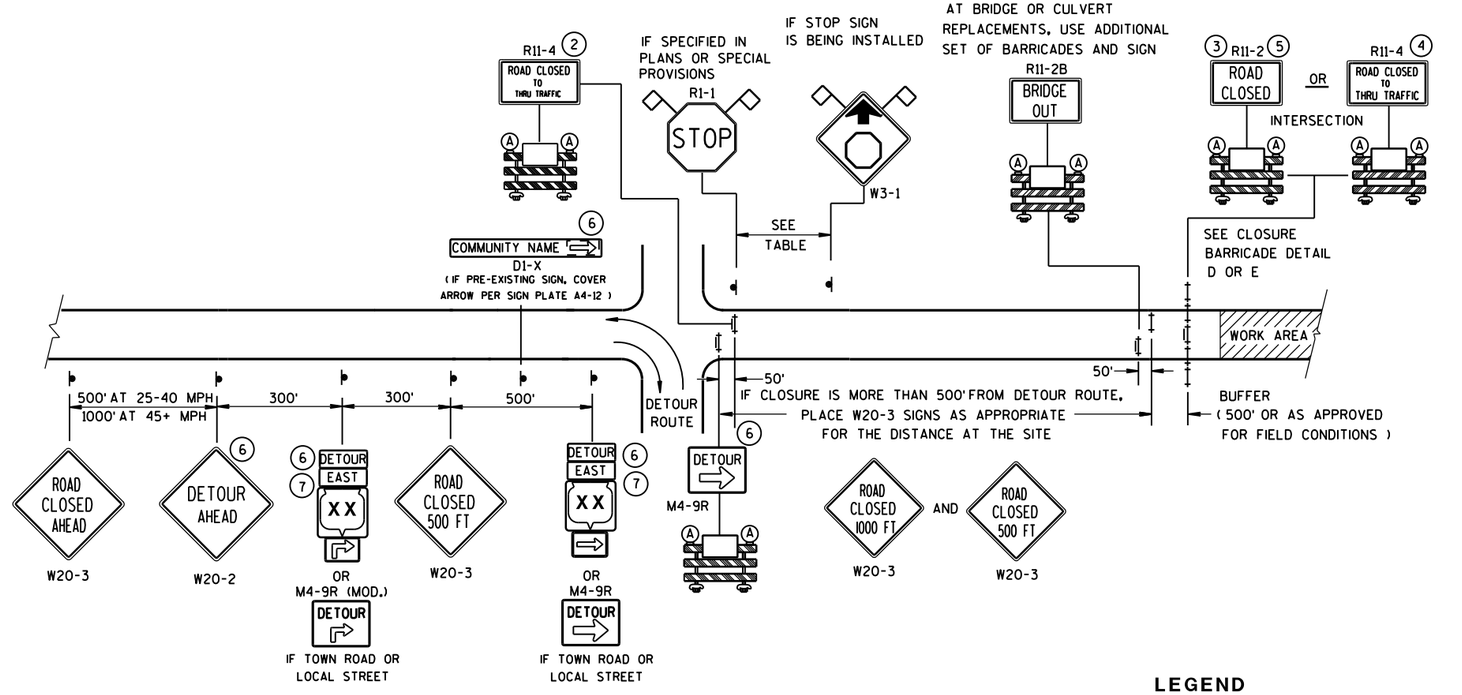
APPROVED
4/4/2008 DATE
/S/ Jerry H. Z---
ROADWAY STANDARDS ENGINEER
351
FHWA

6
S.D.D. 15 B 1-8b



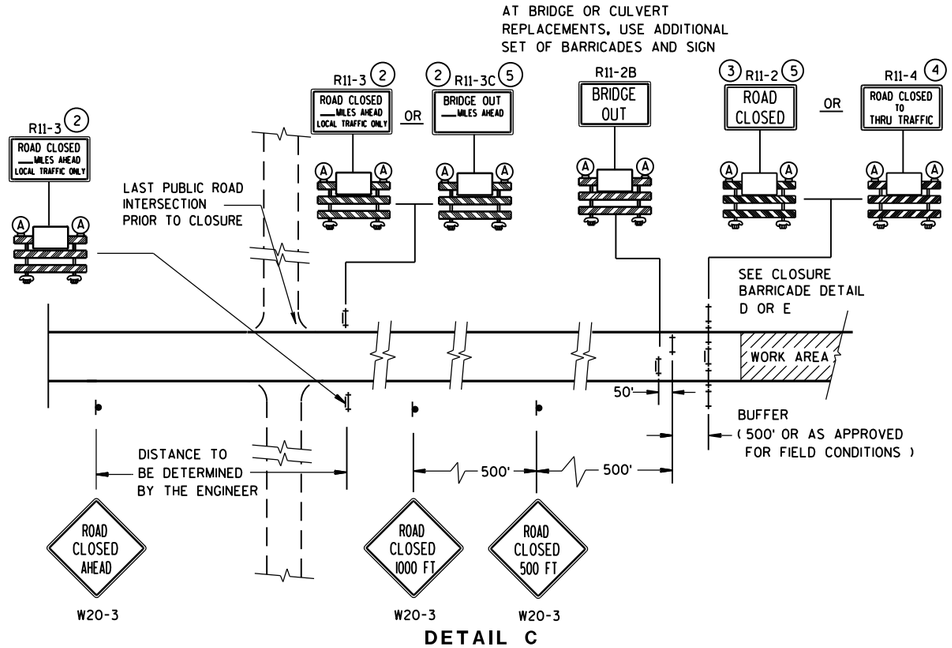
DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE GREATER THAN ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE LESS THAN ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR

SPEED LIMIT (MPH)	"STOP AHEAD" ADVANCE WARNING DISTANCE (FT)
25	200
30	200
35	350
40	350
45	500
50	550
55	750

SEE SDD 15C2-SHEET "**b**"
FOR GENERAL NOTES
AND FOOTNOTES (1) THROUGH (7)

LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- (A) TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA
- DETOUR / EAST — M4-8 / M3-X
- XX — M1-4; COUNTY XX — M1-5A; XX — M1-6
- M05-1 OR M06-1
- FLAGS, 16" X 16" MIN., (ORANGE)

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

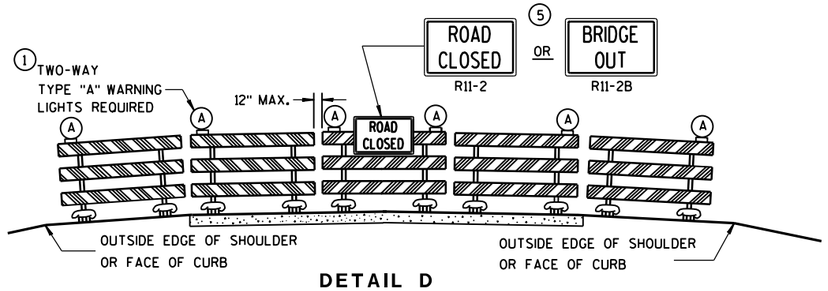
8/2013 — DATE

/S/ Travis Feltes — STATE TRAFFIC ENGINEER

FHWA

6

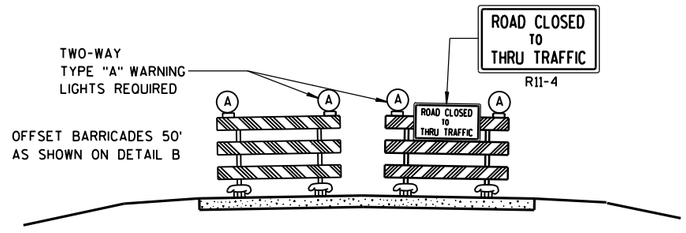
S.D.D. 15 C 2-5a



DETAIL D

ROAD CLOSURE BARRICADE DETAIL

APPROACH VIEW



DETAIL E

LANE CLOSURE BARRICADE DETAIL

APPROACH VIEW

SEE SDD 15C2-SHEET "**a**" FOR LEGEND

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND BARRICADES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION OR, FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL D FOR FULL ROAD CLOSURES.

TYPE "A" LOW-INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE R11-2, R11-3, M4-9, R11-4 AND R10-61 SIGNS PLACED ON BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE OR BOTTOM RAILS.

"WO AND "MO" SIGNS ARE THE SAME AS "W" AND "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
- R11-2 SHALL BE 48" X 30".
- R11-3, R11-4 AND R10-61 SHALL BE 60" X 30".
- M4-9 SHALL BE 30" X 24".
- M3-X SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS.)
- M4-8 SHALL BE 24" X 12". (30" X 15" IF NEEDED TO MATCH EXISTING SIGNS.)
- M1-4, M1-5A, AND M1-6 SHALL BE 24" X 24". (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS.)
- M05-1 AND M06-1 SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS.)
- D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.
- R1-1 SHALL BE 36" X 36".

(1) TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND A MINIMUM OF ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN (APPROX. 8-FOOT LIGHT SPACING).

(2) THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT INTERSECTION.

(3) FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL D.

(4) FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT, SEE LANE CLOSURE BARRICADE DETAIL E.

(5) FOR BRIDGE OR CULVERT REPLACEMENTS, SUBSTITUTE "BRIDGE OUT" INSTEAD OF "ROAD CLOSED" ON R11-2 AND R11-3 SIGNS.

(6) INSTALL DETOUR AND COMMUNITY GUIDE SIGNS AND ARROWS ONLY IF SPECIFIED IN THE CONTRACT. IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. MODIFY EXISTING SIGNS WHERE POSSIBLE. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. IF DETOUR SIGNS ARE BEING INSTALLED BY OTHERS, PLACE THE CONTRACTED TRAFFIC CONTROL SIGNS TO ALLOW FOR PLACEMENT OF ALL WARNING, DETOUR AND GUIDE SIGNS AS SHOWN.

(7) "EAST" CARDINAL DIRECTION MARKERS AND RIGHT TURN ARROWS ARE SHOWN. USE OTHER CARDINAL DIRECTIONS AND ARROWS AS APPROPRIATE.

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

8/2013 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

6

S.D.D. 15 C 2-5b

THIS DRAWING PROVIDES GENERAL GUIDANCE ON TYPICAL DETOUR SIGN LAYOUT AND SPACING. SEE PROJECT DETOUR SIGNING SHEETS FOR SPECIFIC DETAILS FOR EACH PROJECT.

GENERAL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. MODIFY EXISTING SIGNS WHERE POSSIBLE.

THE SPACING BETWEEN TRAFFIC CONTROL AND DETOUR SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE", SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

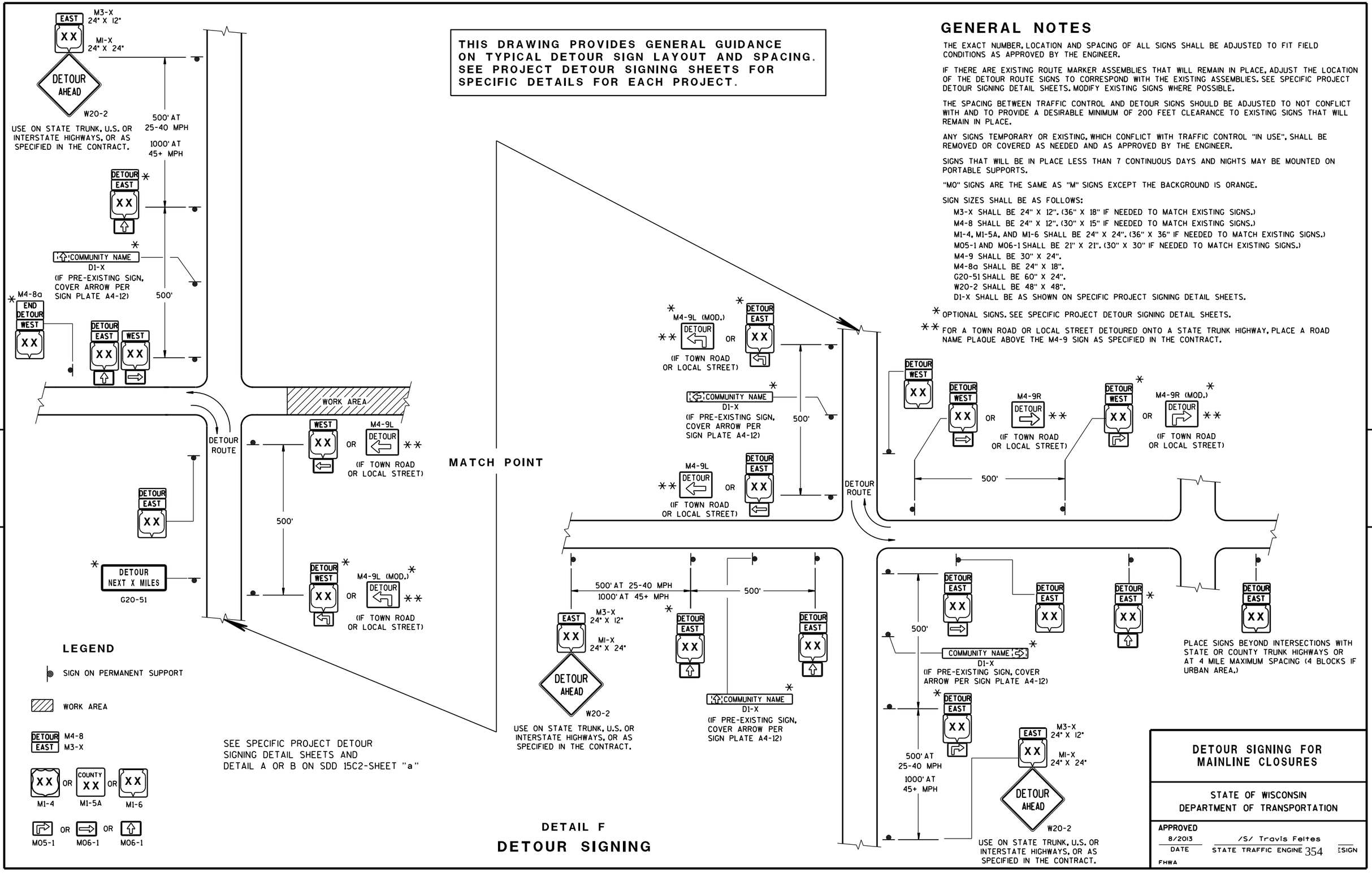
"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

SIGN SIZES SHALL BE AS FOLLOWS:

- M3-X SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS.)
- M4-8 SHALL BE 24" X 12". (30" X 15" IF NEEDED TO MATCH EXISTING SIGNS.)
- M1-4, M1-5A, AND M1-6 SHALL BE 24" X 24". (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS.)
- MO5-1 AND MO6-1 SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS.)
- M4-9 SHALL BE 30" X 24".
- M4-8a SHALL BE 24" X 18".
- G20-51 SHALL BE 60" X 24".
- W20-2 SHALL BE 48" X 48".
- D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.

* OPTIONAL SIGNS. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS.

** FOR A TOWN ROAD OR LOCAL STREET DETOURED ONTO A STATE TRUNK HIGHWAY, PLACE A ROAD NAME PLAQUE ABOVE THE M4-9 SIGN AS SPECIFIED IN THE CONTRACT.



DETAIL F

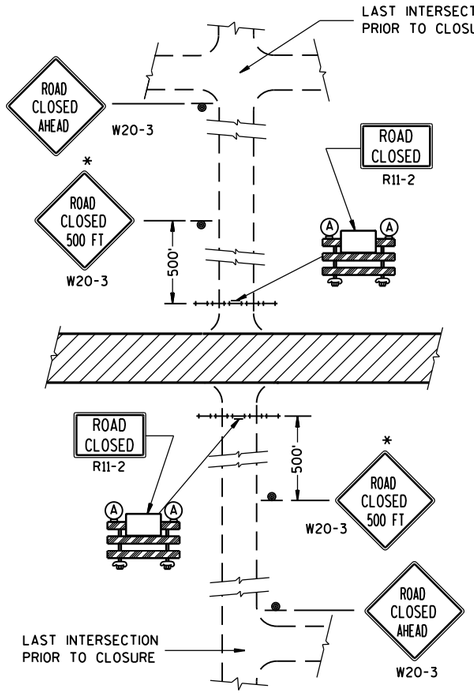
DETOUR SIGNING

DETOUR SIGNING FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

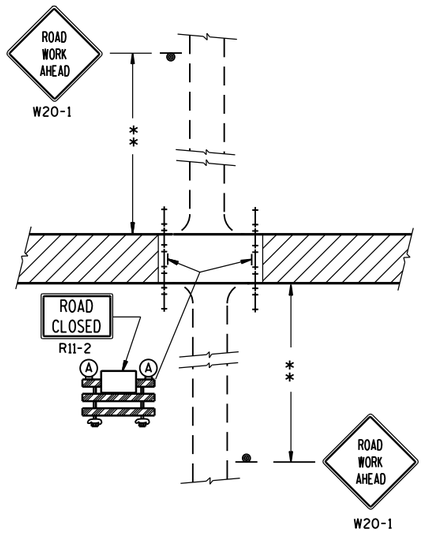
APPROVED
8/2013 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

6
S.D.D. 15 C 2-5c



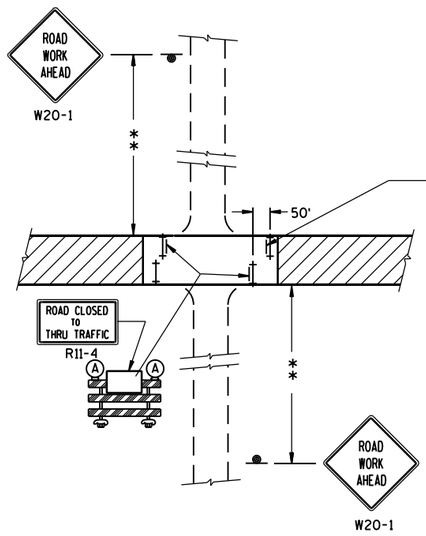
DETAIL 1

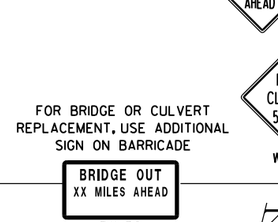
(NO ACCESS TO PROJECT)



DETAIL 2

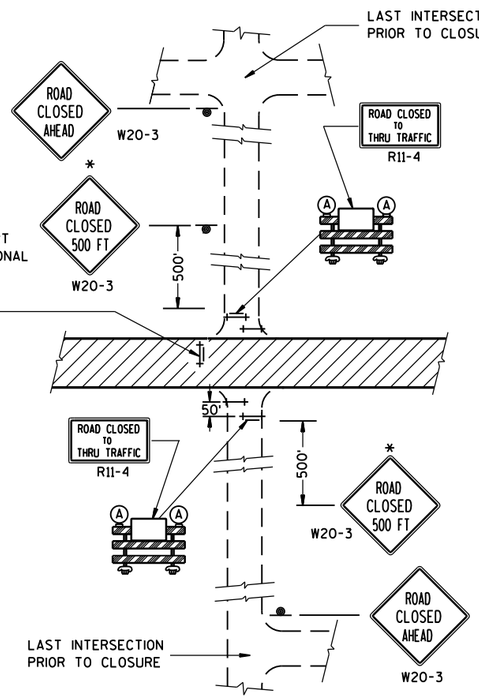
(PUBLIC CROSS-TRAFFIC MAINTAINED. NO ACCESS TO PROJECT).





DETAIL 3

(PUBLIC CROSS-TRAFFIC MAINTAINED. CONTRACTOR, LOCAL BUSINESS AND RESIDENT ACCESS).



DETAIL 4

(CONTRACTOR, LOCAL BUSINESS AND RESIDENT ACCESS TO PROJECT)

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND BARRICADES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

IF A "STOP" SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY "STOP" SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS RE-ESTABLISHED.

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION OR, FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL D FOR FULL ROAD CLOSURES.

TYPE "A" LOW-INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE R11-2, R11-3 AND R11-4 SIGNS PLACED ON BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE OR BOTTOM RAILS.

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
R11-2 SHALL BE 48" X 30".
R11-4 AND R11-3 SHALL BE 60" X 30".

*OMIT THE "ROAD CLOSED 500 FT." SIGN IF THE LAST INTERSECTION IS 500 FT. OR LESS FROM THE WORK ZONE.

**500' MAX. OR AT LAST INTERSECTION WHICHEVER IS CLOSER.

LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- (A) TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA

BARRICADES AND SIGNS FOR SIDEROAD CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8/2013 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

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S.D.D. 15 C 3-2

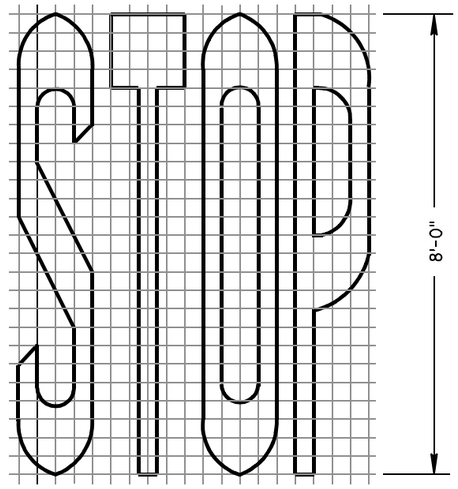
6

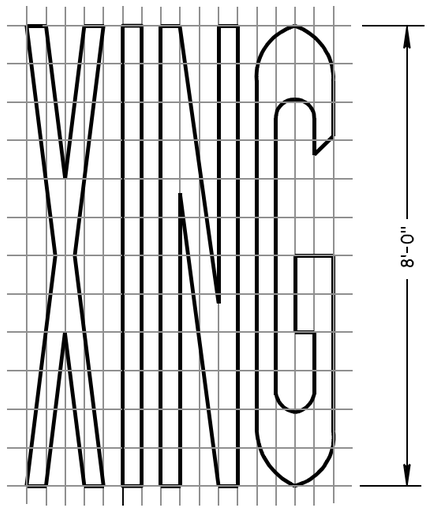
S.D.D. 15 C 3-2

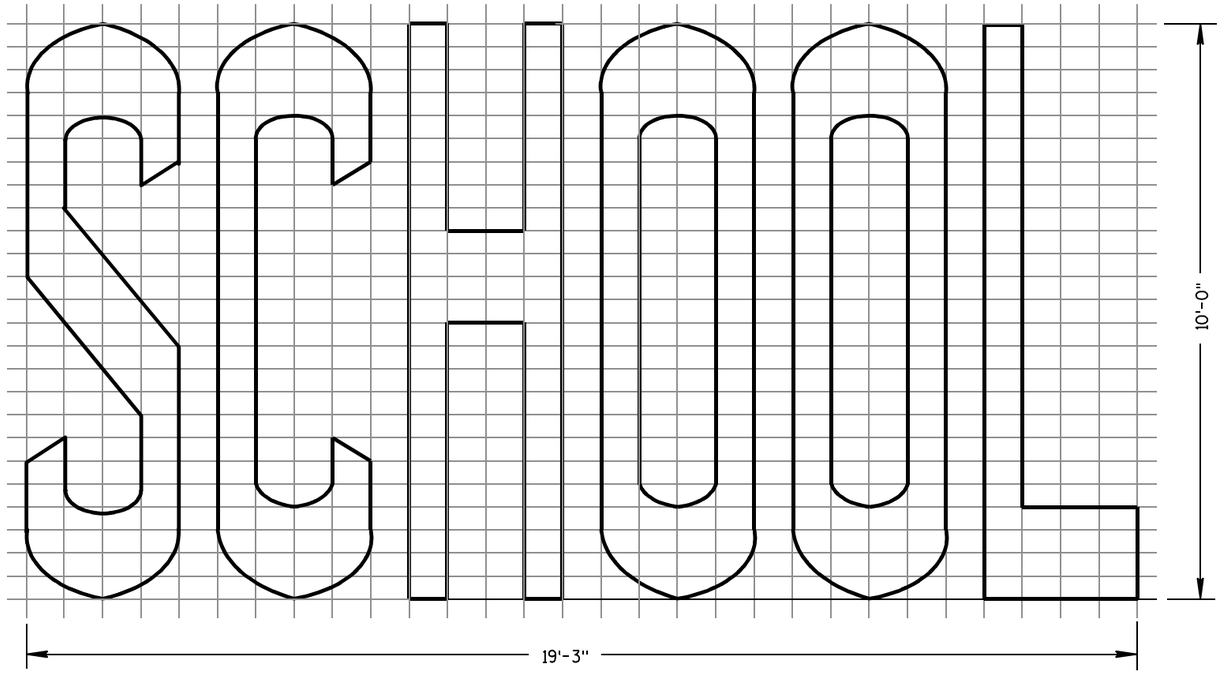
GENERAL NOTES

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

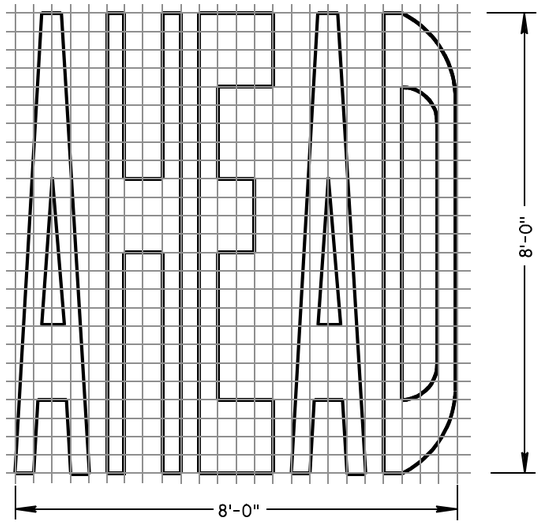
ALL LETTERS, ARROWS AND SYMBOLS SHALL BE IN CONFORMANCE WITH REQUIREMENTS INCLUDED IN "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKING" BOOK BY THE FEDERAL HIGHWAY ADMINISTRATION. ALL LETTERS, ARROWS AND SYMBOLS SHALL BE WHITE AND REFLECTORIZED. SMALL DIFFERENCES IN DIMENSIONS WITHIN THE TOLERANCES OF THAT BOOK ARE ACCEPTABLE.

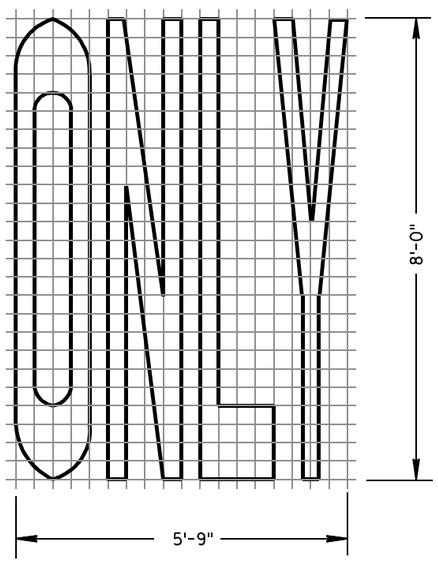


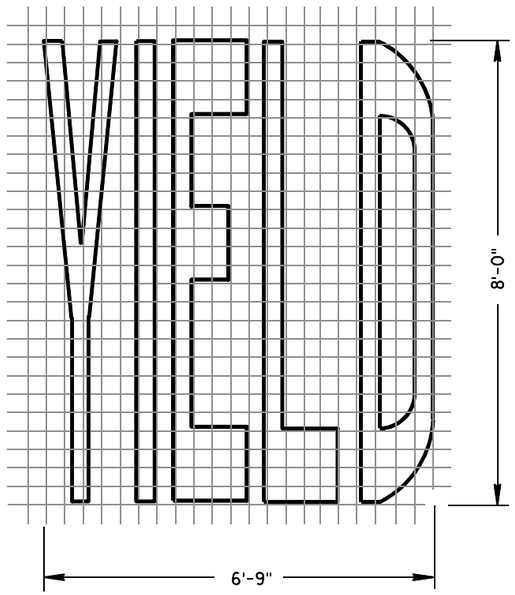


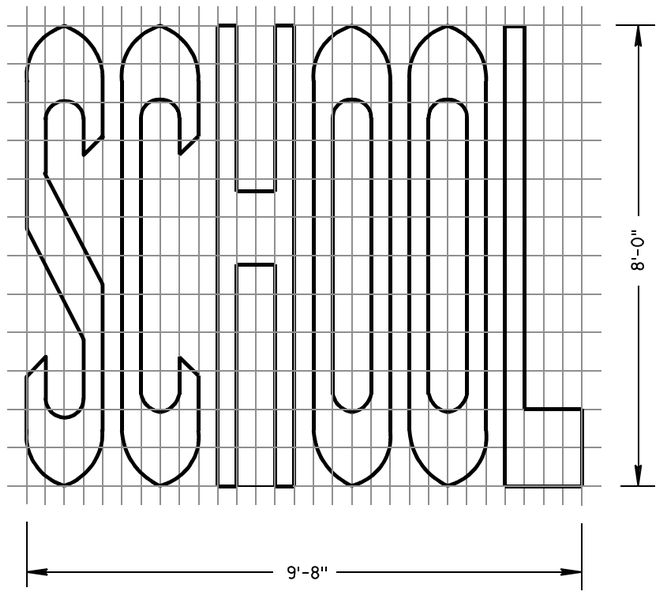


TWO-LANE









SINGLE-LANE

PAVEMENT MARKING WORDS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7-1-11 DATE — /S/ Thomas N. Nothohm STATE TRAFFIC ENGINEER

FHWA

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S.D.D. 15 C 7-12b

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S.D.D. 15 C 7-12b

GENERAL NOTES

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

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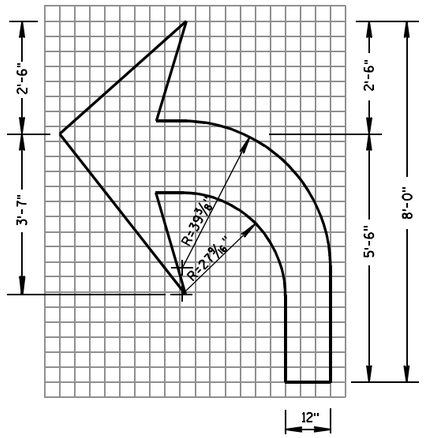
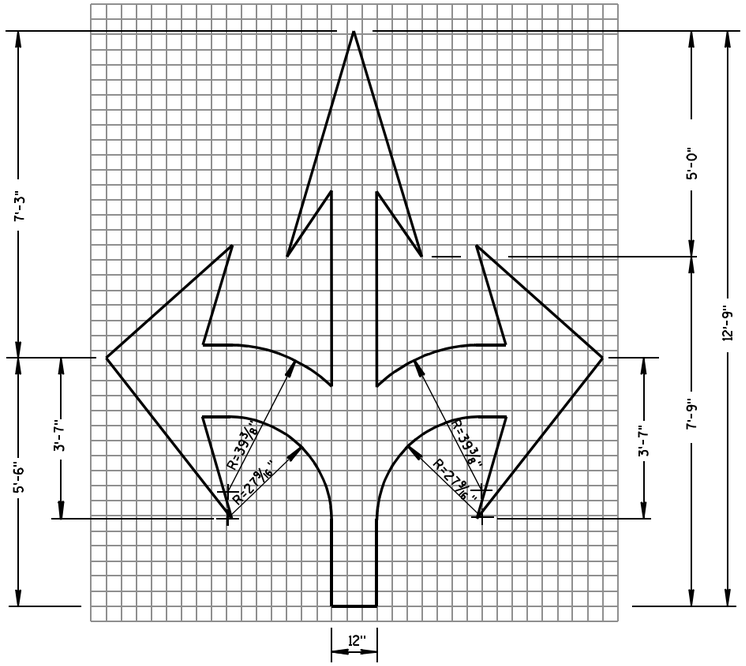
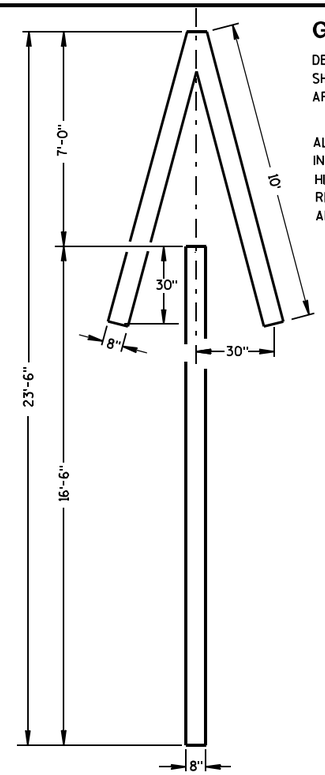


TYPE 2



TYPE 6



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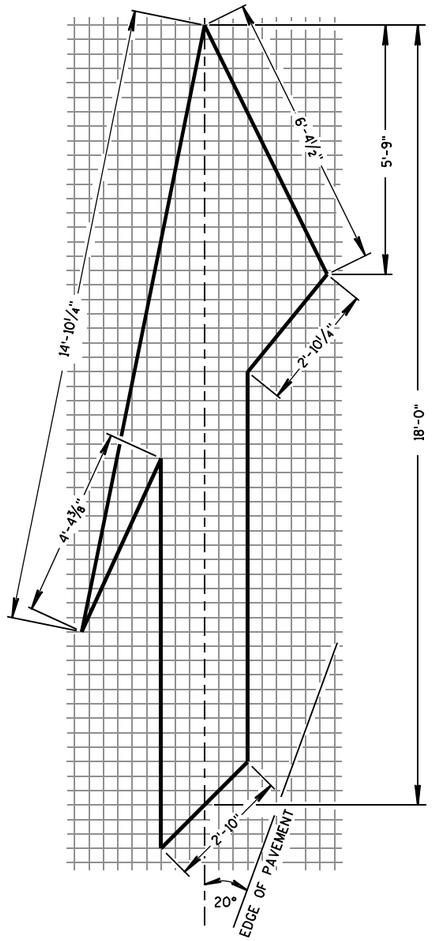
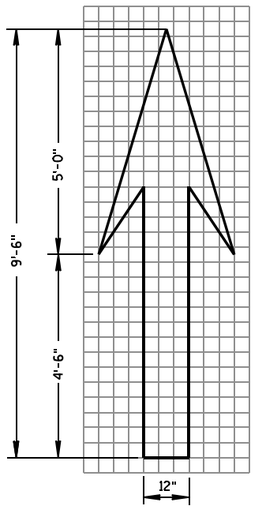
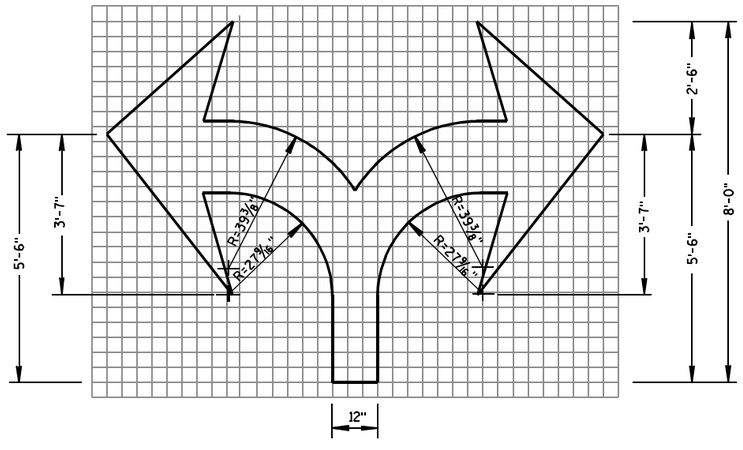


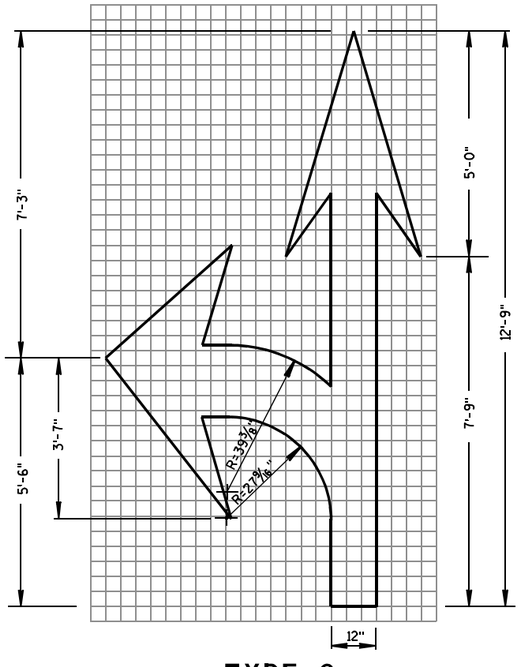
TYPE 5 LANE DROP ARROW



TYPE 1



TYPE 7



TYPE 3

PAVEMENT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7/1/11 — DATE

/S/ Thomas N. Nothdurft — STATE TRAFFIC ENGINEER

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S.D.D. 15 C 7-12c

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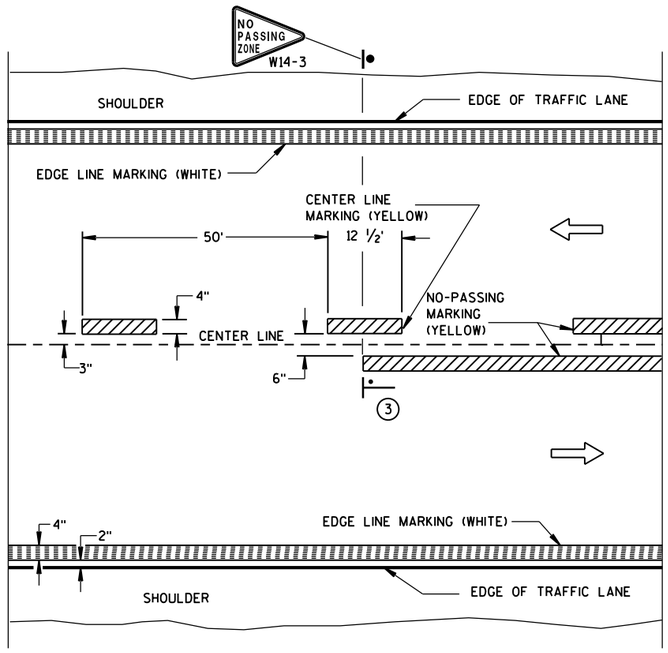
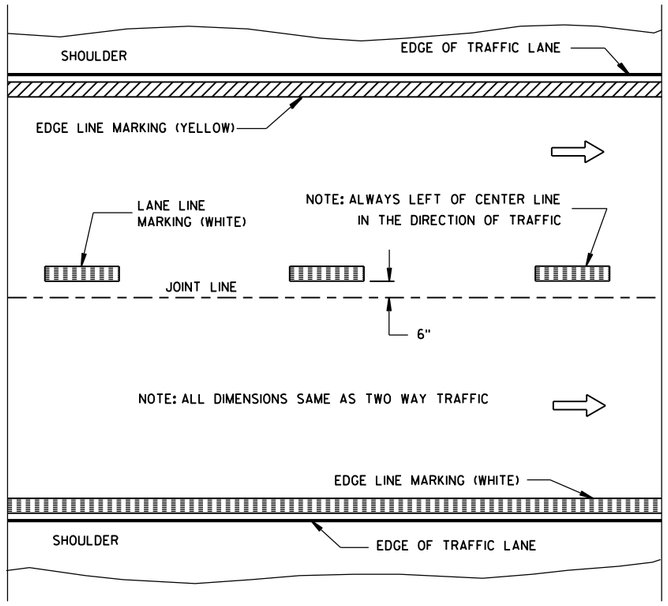
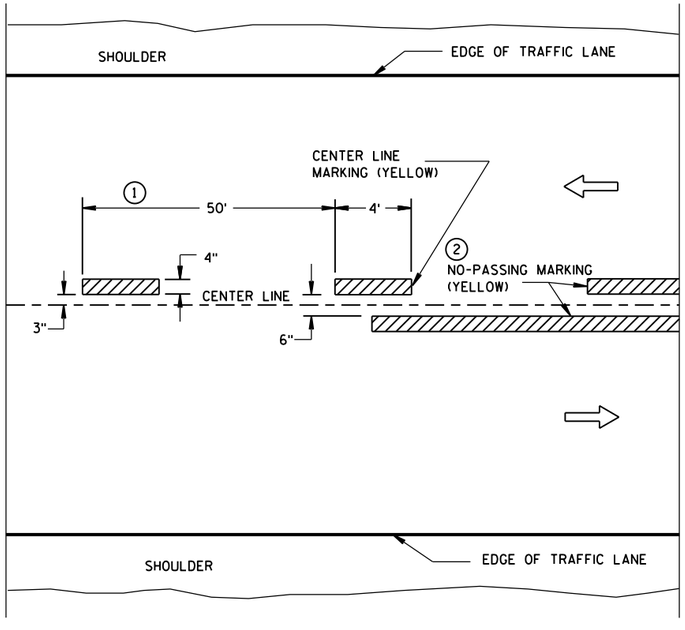


TWO WAY TRAFFIC

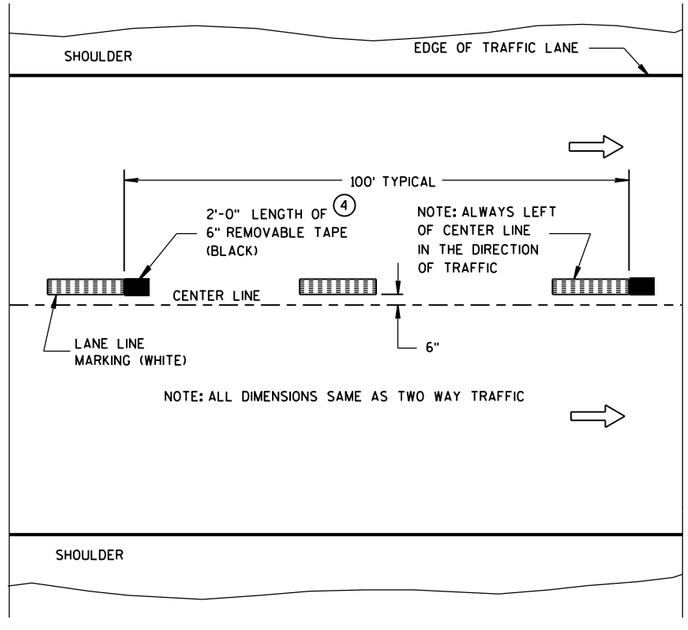


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY (INTERMEDIATE) PAVEMENT MARKING

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

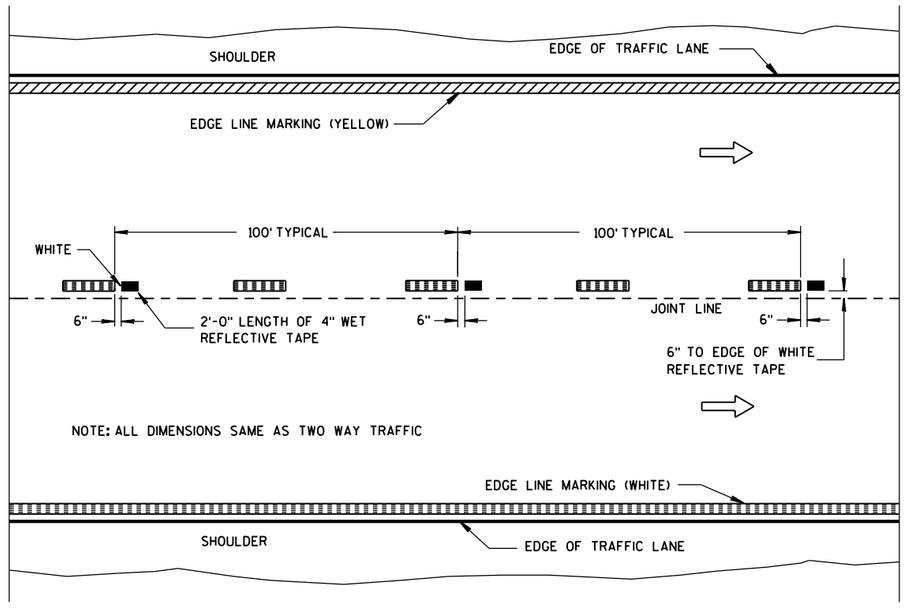
GENERAL NOTES

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

LEGEND

"T" MARKING

POST MOUNTED SIGN

PAVEMENT MARKING (MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
5-13-2013 DATE
/S/ Travis Feltes STATE TRAFFIC E
FHWA

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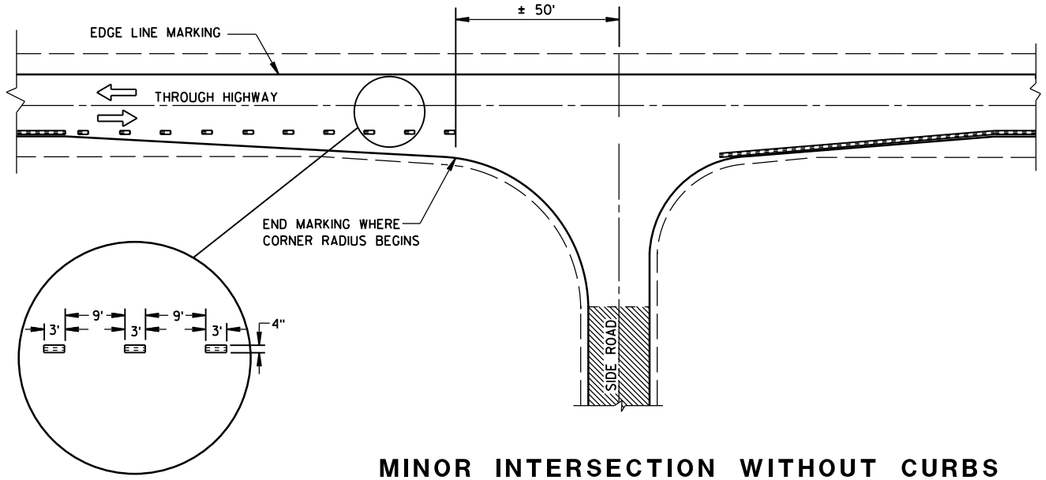
S.D.D. 15 C 8-16a

6

S.D.D. 15 C 8-16a



MINOR INTERSECTION WITHOUT CURBS

GENERAL NOTES

EDGE LINES SHALL BE OMITTED THROUGH INTERSECTIONS. EDGE LINES SHALL BE CONTINUED THROUGH DRIVEWAYS.

(1) WHEN DISTANCE "A" IS LESS THAN 250 FEET, OMIT LANE LINE.

(2) WHEN DISTANCE "B" IS LESS THAN 100 FEET, OMIT CHANNELIZING LANE LINE.

(3) ALTERNATIVE MARKING SHALL BE PROVIDED WHEN SPECIFIED IN THE CONTRACT. TYPICAL SITUATIONS WHERE THIS MARKING MAY BE REQUIRED ARE WHERE THE INTERSECTION IS ON A SHARP HORIZONTAL CURVE OR CREST VERTICAL CURVE IN AN UNLIGHTED AREA SUCH THAT THE EDGE LINE MAY BE MISLEADING TO THE MOTORIST OR DISAPPEAR FROM SIGHT.

(4) THE EDGE LINE IN THE TAPER AREAS OF THE BYPASS LANE AND THE BYPASS LANE SHALL BE LOCATED 1-FOOT FROM EDGE OF PAVEMENT TO THE OUTSIDE EDGE OF EDGE LINE.

(5) BARRIER LINE ENDS AT SIDE ROAD PAVEMENT/SURFACE EDGE EXTENSION.

(6) BARRIER LINE STARTS 500 FEET PRIOR TO THE BYPASS TAPER.

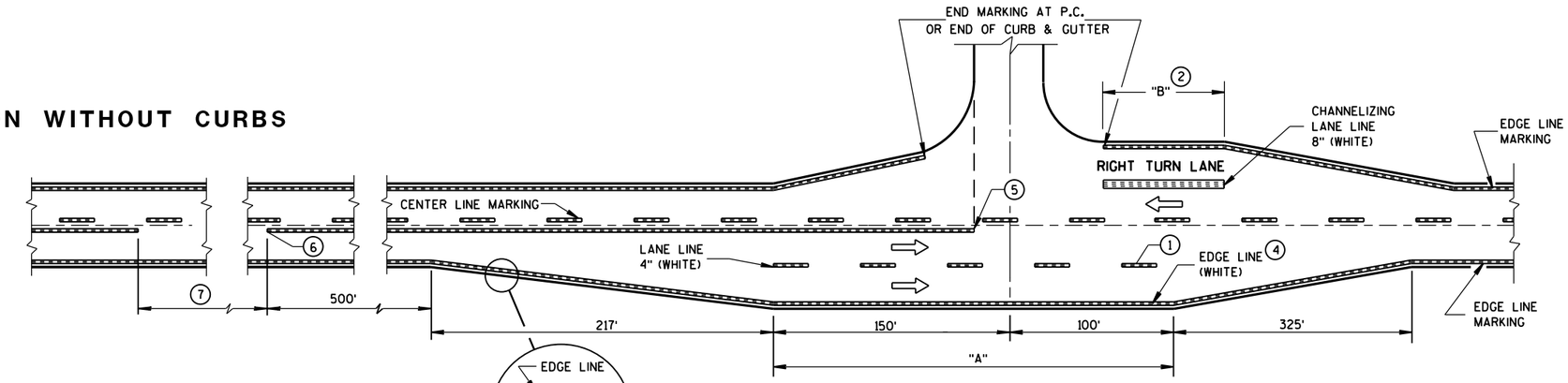
(7) IF THE DISTANCE BETWEEN 2 SUCCESSIVE NO-PASSING ZONES IS LESS THAN THE MINIMUM DISTANCE BETWEEN ZONES, CONNECT THE 2 ZONES.

(8) 3' LINE 9' GAP, EXCEPT RETRACE THE EXISTING LINE - GAP PATTERN WHERE EXISTING MARKINGS ARE IN PLACE.

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL

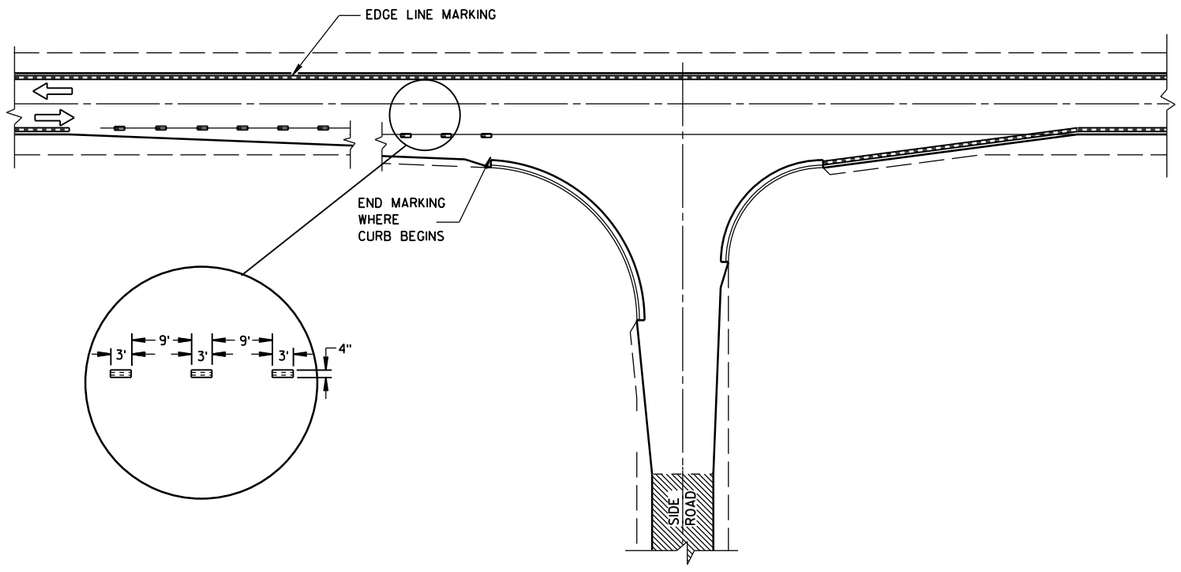
(7)

POSTED SPEED (MPH)	MINIMUM DISTANCE BETWEEN ZONES (FEET)
25 - 30	528
35 - 40	528
45 - 50	686
55	792



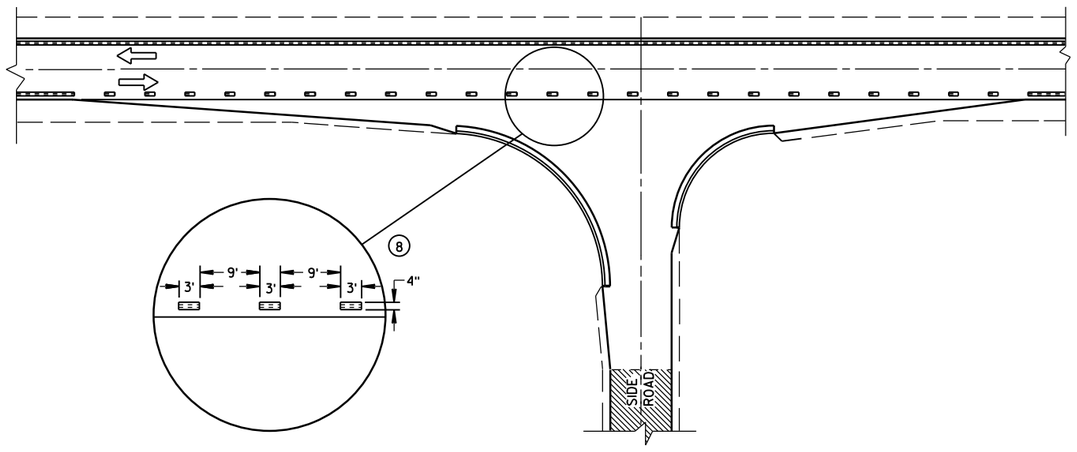
MAJOR INTERSECTIONS

(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANES)



MINOR INTERSECTION WITH CURBS

(TYPICAL MARKING)



MINOR INTERSECTION WITH CURBS

(3) (FOR SPECIAL CONDITIONS AS SPECIFIED)

PAVEMENT MARKING
(INTERSECTIONS)

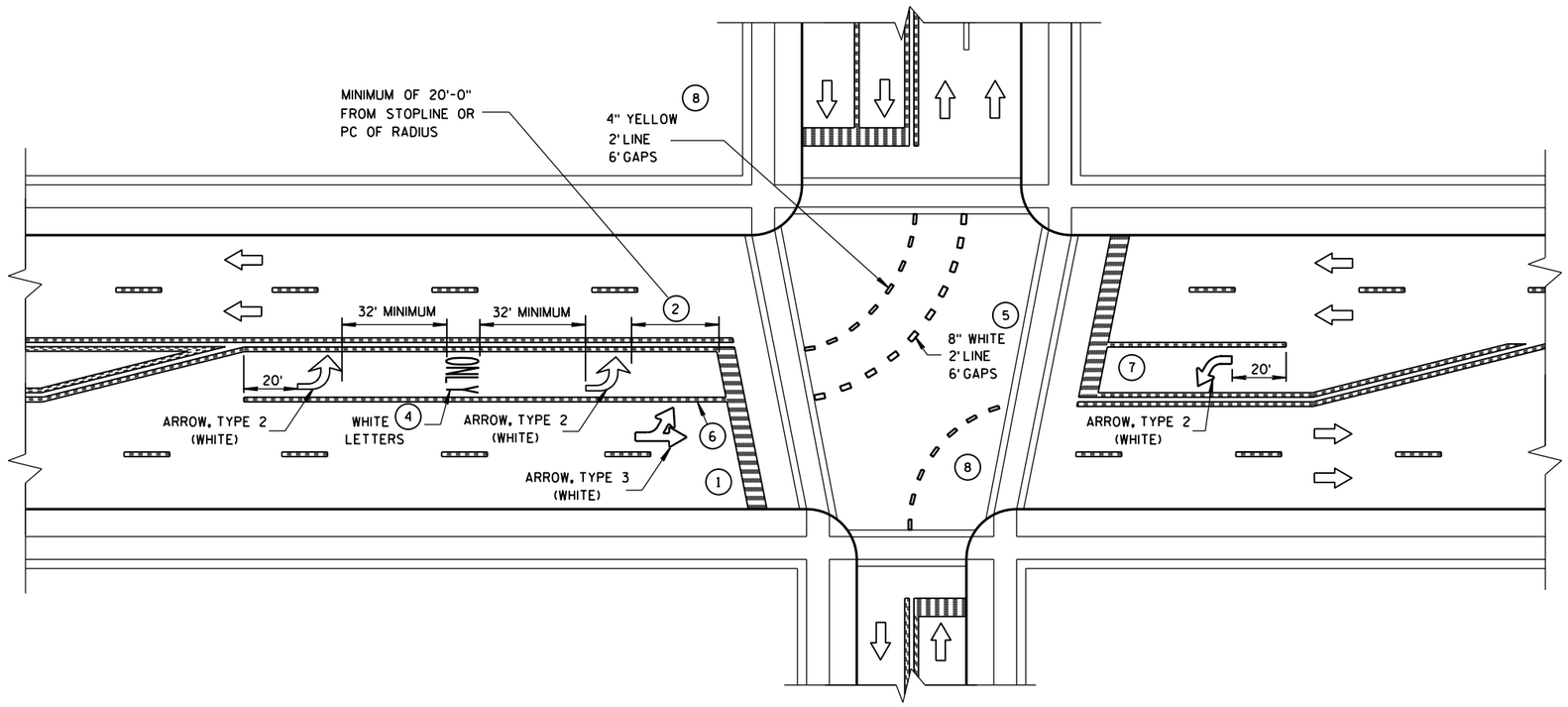
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR 359

6

S.D.D. 15 C 8-16b

6

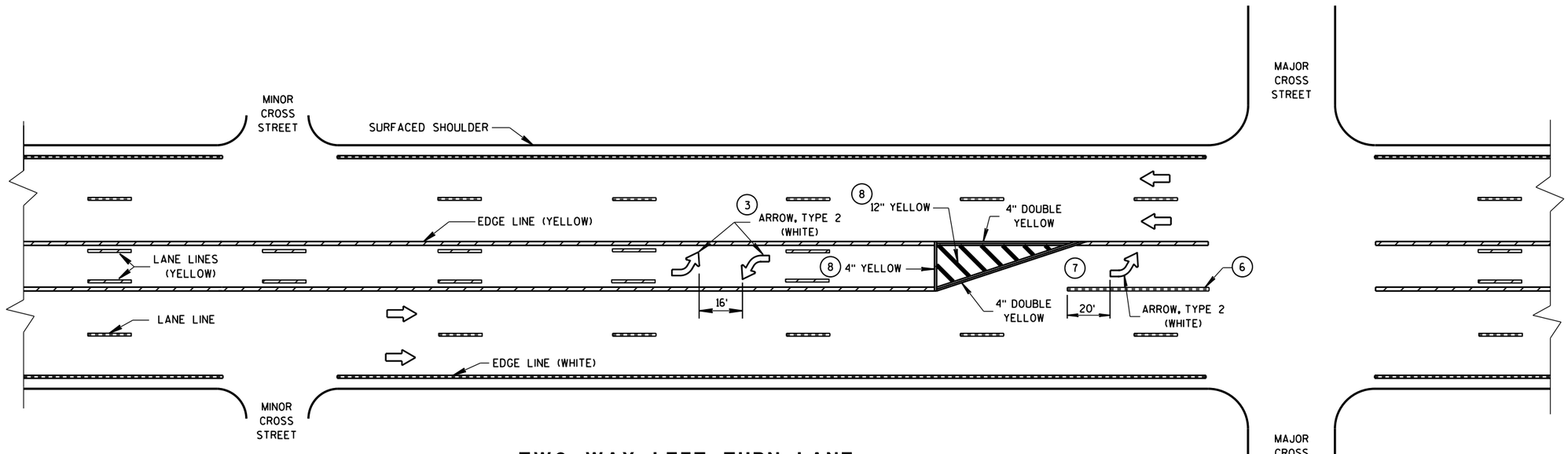
S.D.D. 15 C 8-16b



GENERAL NOTES

1. STOP BAR IS REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT.
2. DISTANCE MAY BE ADJUSTED TO ACCOMODATE SHORT LEFT TURN LANES. AS APPROVED BY THE ENGINEER.
3. A SET OF ARROWS IS REQUIRED EVERY 400 FEET OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.
4. ADD EXTRA SETS OF ONE ARROW AND ONE ONLY PER 160 FEET OR WHEN ON A CURVE.
5. 8" WHITE WITH 2' LINE 6' GAPS FOR DUAL TURN LANE.
6. 8" WHITE
7. ADD SECOND ARROW WHEN TURN BAY IS GREATER THAN OR EQUAL TO 108 FEET.
8. REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT.

NOTE:
ARROW SYMBOL (⇨)
SHOWS DIRECTION OF TRAVEL



TWO WAY LEFT TURN LANE

PAVEMENT MARKING (LEFT TURN LANE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO...

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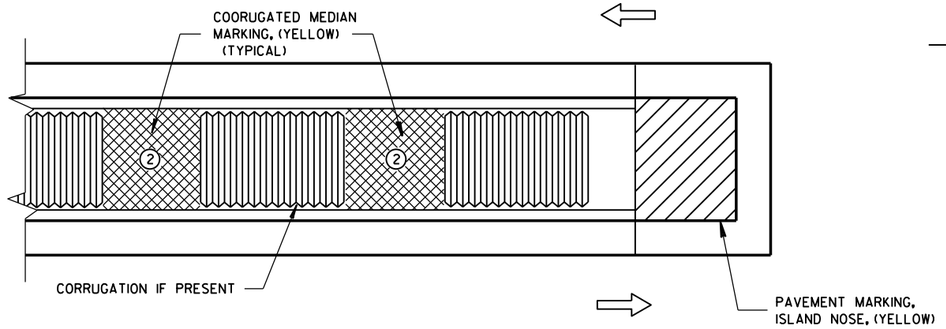
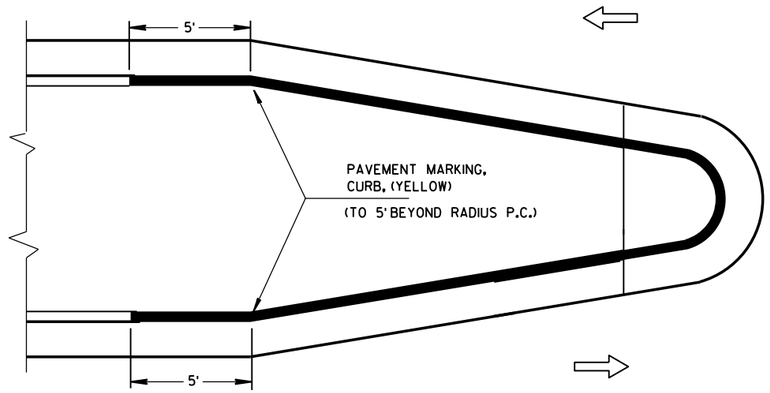
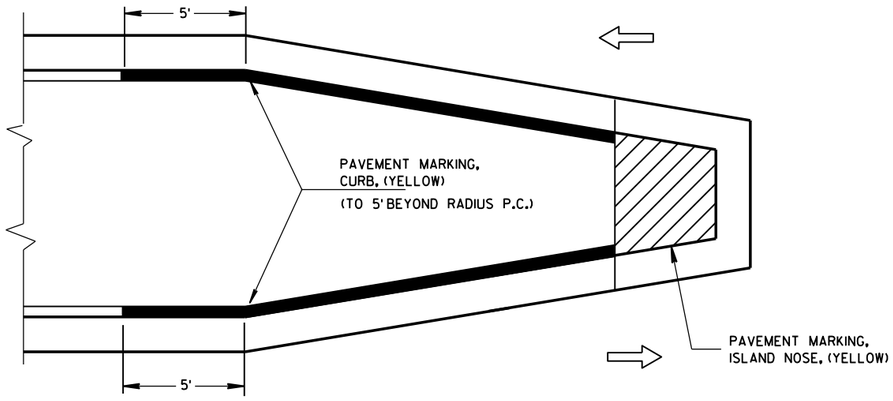
S.D.D. 15 C 8-16e



MEDIAN ISLAND WITH SQUARE BLUNT NOSE

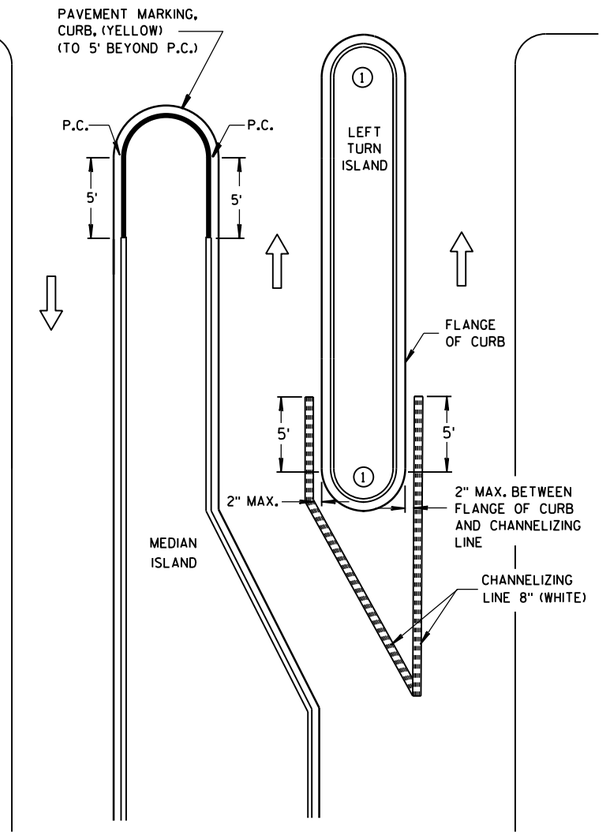


MEDIAN ISLAND WITH ROUND BLUNT NOSE



MEDIAN ISLAND WITH SLOPED NOSE

TYPICAL PLACEMENT OF PAVEMENT MARKING ON MEDIAN ISLANDS

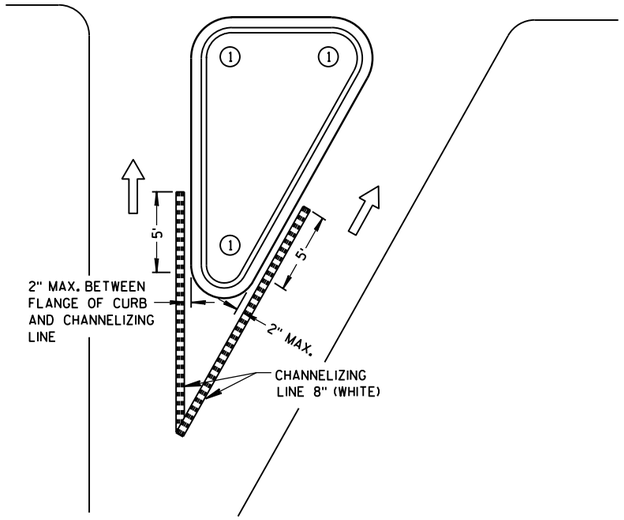


LEFT TURN & MEDIAN ISLAND

GENERAL NOTES

1. DO NOT MARK CURB NOSES THAT SEPARATE LANES OF TRAFFIC TRAVELING IN THE SAME DIRECTION.

2. WHEN CONCRETE CORRUGATED MEDIAN IS CONSTRUCTED TO SEPARATE TRAFFIC OPERATING IN THE OPPOSING DIRECTION YELLOW PAVEMENT MARKING SHALL BE APPLIED TO THE FLAT PORTION OF THE CONCRETE CORRUGATED MEDIAN. THE ITEM OF PAVEMENT MARKING, CONCRETE CORRUGATED MEDIAN, WILL BE MEASURED IN PLACE AND AND ACCEPTED IN ACCORDANCE WITH THE CONTRACT AND PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE FOOT.



RIGHT TURN ISLAND

LEGEND

- ISLAND NOSE MARKING
- CURB MARKING
- CORRUGATED MEDIAN MARKING
- DIRECTION OF TRAVEL

PAVEMENT MARKING
(ISLANDS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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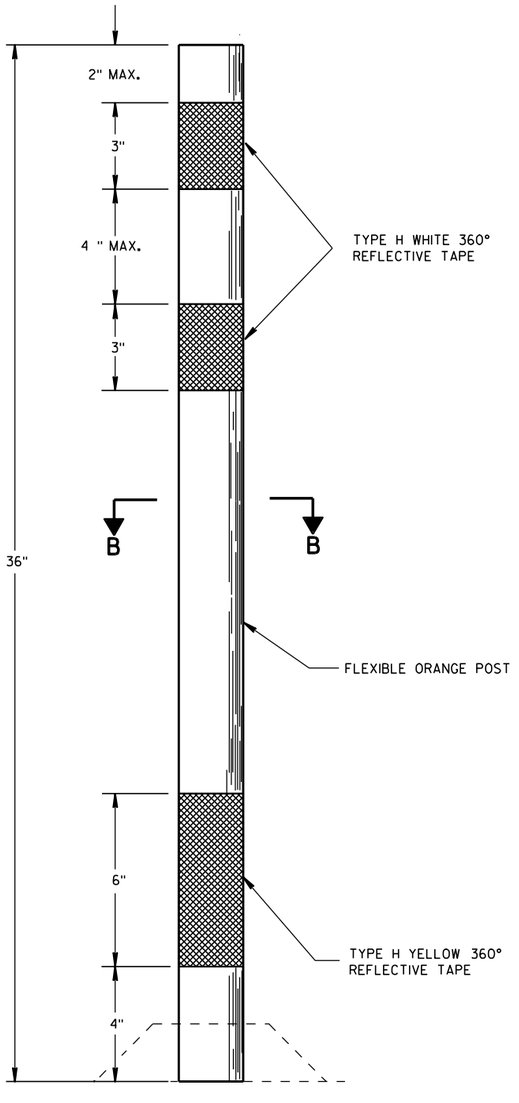
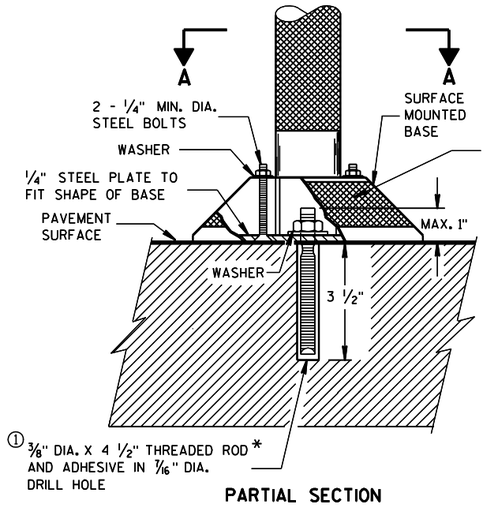
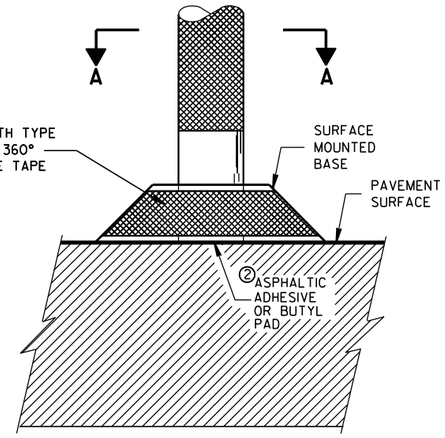


FLEXIBLE TUBULAR MARKER POST



PARTIAL SECTION TO SHOW BOLTS



POST BASES ON NEW OR EXISTING PAVEMENT

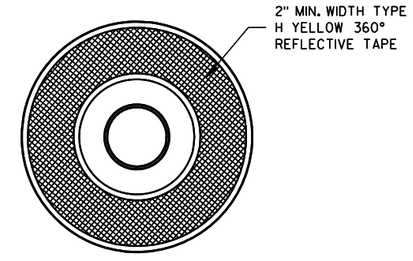
GENERAL NOTES

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

SURFACE MOUNTED BASES SHALL BE FURNISHED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS TO BE COMPATIBLE WITH FLEXIBLE TUBULAR MARKER POSTS TO A SIZE AND SHAPE THAT WILL PROVIDE A STABLE POST FOUNDATION WHEN SECURED TO THE PAVEMENT.

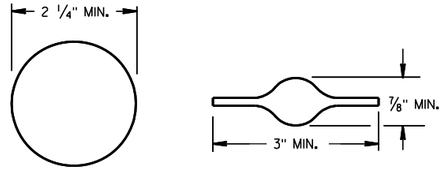
① THREADED ROD SHALL BE MACHINED DOWN TO 0.280 INCH DIA. 1 1/4 INCHES FROM THE TOP.

② THE ASPHALTIC ADHESIVE OR BUTYL PAD FURNISHED SHALL BE IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.



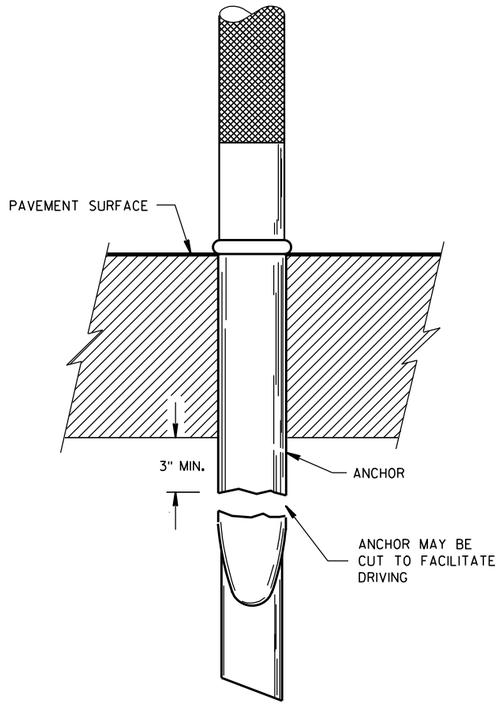
SECTION A-A

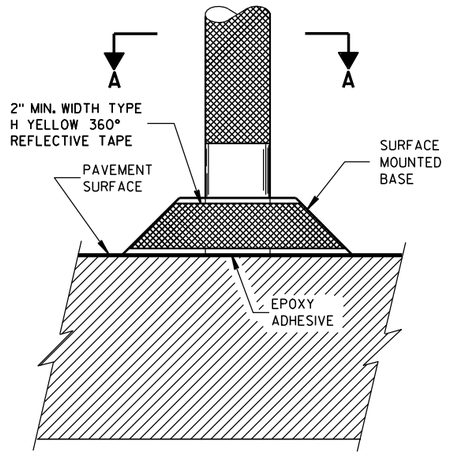
SURFACE MOUNTED BASE



SECTION B-B

ALTERNATIVE SHAPES





POST ANCHOR AND BASE ON PAVEMENT WHICH WILL BE REMOVED

FLEXIBLE TUBULAR MARKER POST, ANCHOR & BASES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

2/17/94 DATE

/S/ Chester J. [illegible] DIRECTOR, OFFICE O

FHWA

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S.D.D. 15 C 11-5

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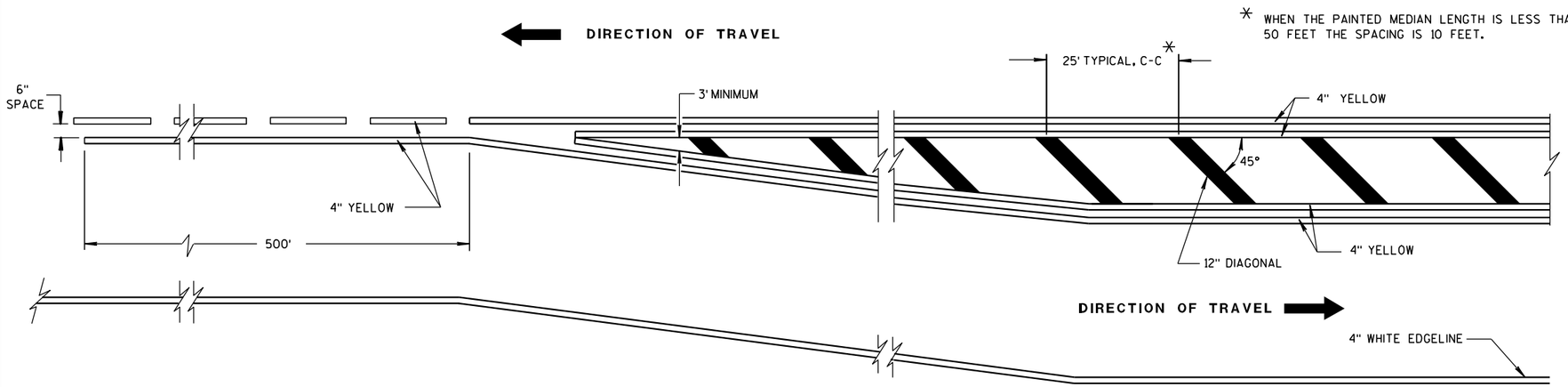
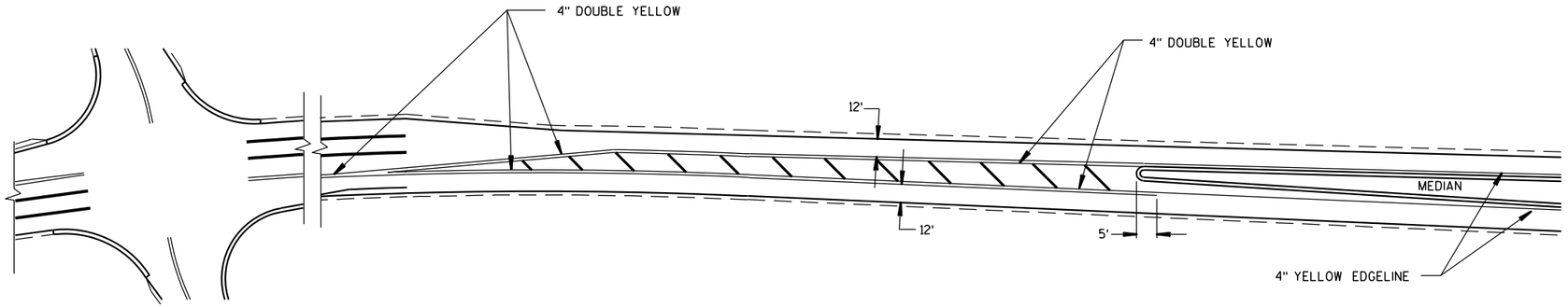
S.D.D. 15 C 11-5



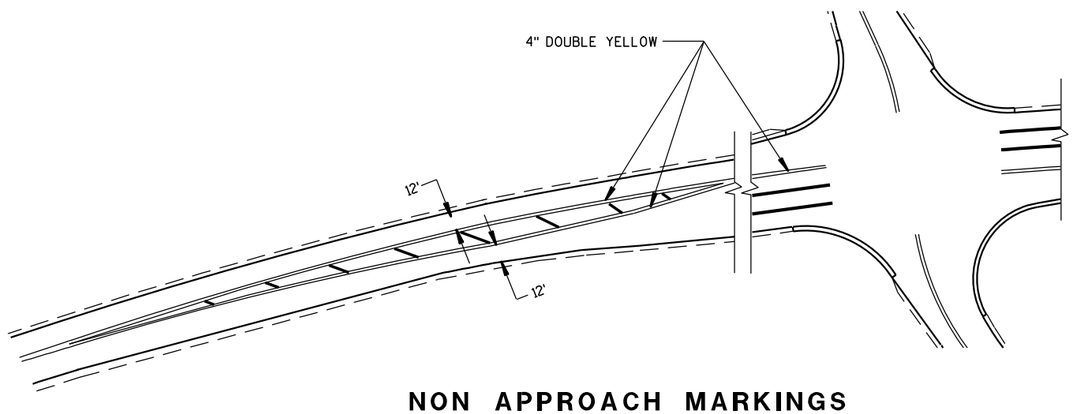
MEDIAN ISLAND DETAIL

GENERAL NOTE

DIAGONALS ARE OPTIONAL WHEN PAINTED ISLAND IS LESS THAN 6 FEET AT WIDEST POINT.



APPROACH MARKINGS FOR OTHER MEDIAN TYPES



NON APPROACH MARKINGS

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S.D.D. 15 C 18-3

S.D.D. 15 C 18-3

MEDIAN ISLAND MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

2-5-09 DATE

/S/ Thomas N. Nothohm
STATE TRAFFIC ENGINEER

FHWA

GENERAL NOTES

SIGNING AND MARKING IS SHOWN AS TYPICAL PLACEMENT. FIELD CONDITIONS MAY DICTATE CHANGES IN SIGNING AND MARKING PLACEMENT.

A DISTANCE DEPENDENT ON SPEED (SEE TABLE)

(1) WRONG WAY PREVENTION SIGNS ARE DISCUSSED IN T G M 2-15-12

(2) REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT

SYMBOLS

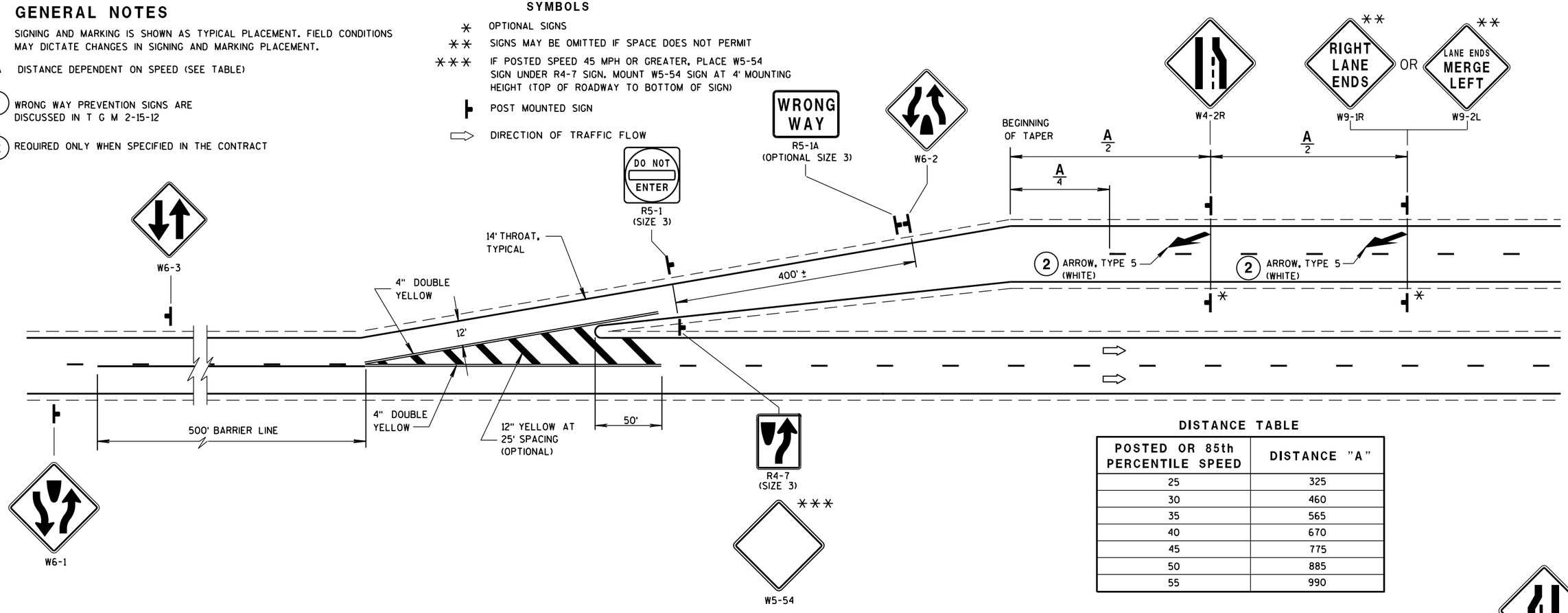
* OPTIONAL SIGNS

** SIGNS MAY BE OMITTED IF SPACE DOES NOT PERMIT

*** IF POSTED SPEED 45 MPH OR GREATER, PLACE W5-54 SIGN UNDER R4-7 SIGN. MOUNT W5-54 SIGN AT 4' MOUNTING HEIGHT (TOP OF ROADWAY TO BOTTOM OF SIGN)

POST MOUNTED SIGN

DIRECTION OF TRAFFIC FLOW



DISTANCE TABLE

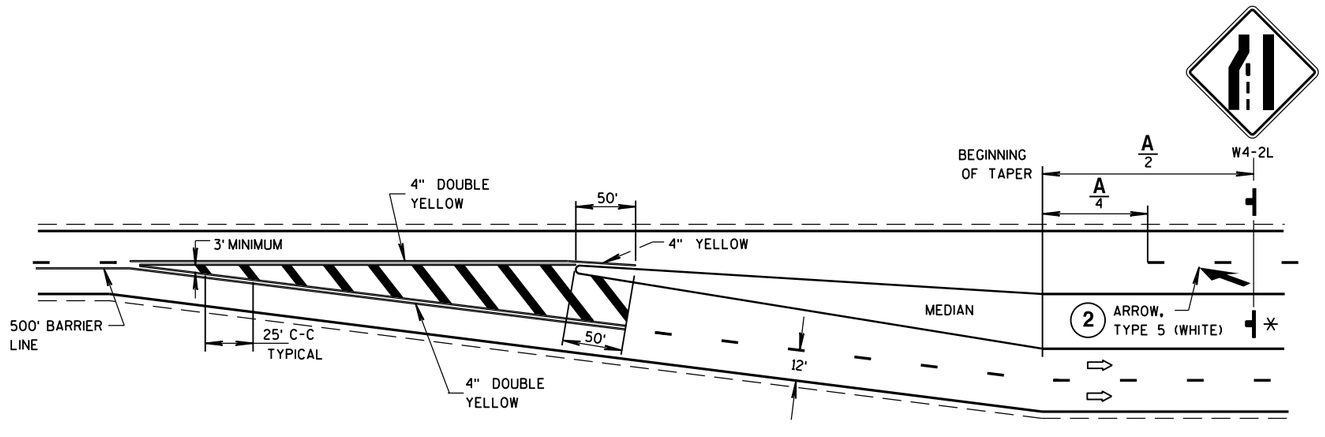
POSTED OR 85th PERCENTILE SPEED	DISTANCE "A"
25	325
30	460
35	565
40	670
45	775
50	885
55	990

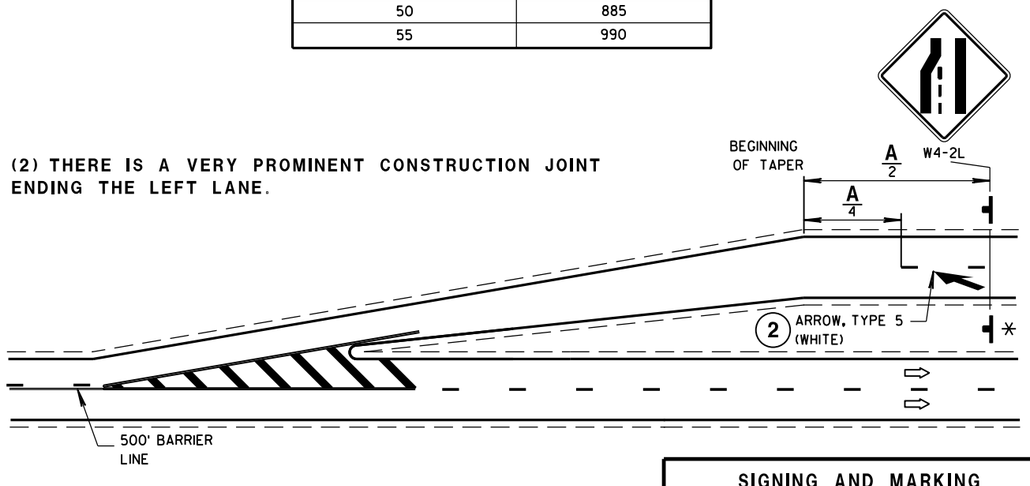
USE W4-2L IF :

(1) THE LEFT LANE IS PUSHED TO THE RIGHT:

OR

(2) THERE IS A VERY PROMINENT CONSTRUCTION JOINT ENDING THE LEFT LANE.





SIGNING AND MARKING
TWO LANE TO FOUR LANE DIVIDED TRANSITIONS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

5/3/2013 DATE

/S/ Travis Feltes
STATE TRAFFIC EN

FHWA

S.D.D. 15 C 21-5

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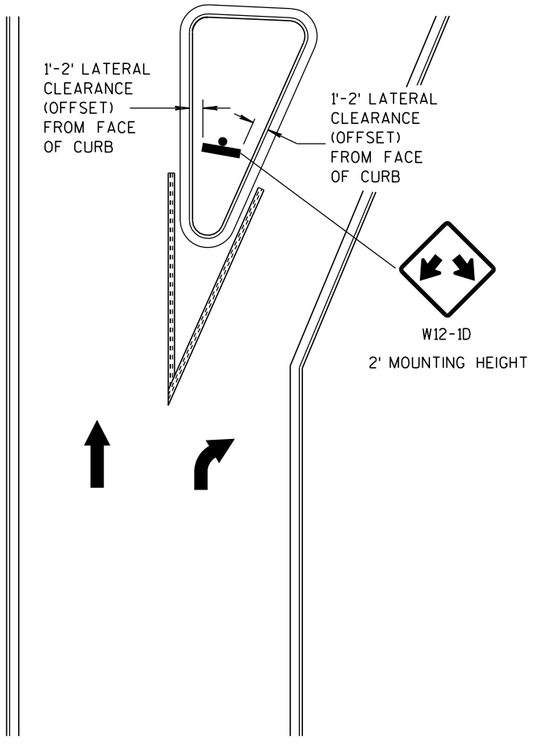
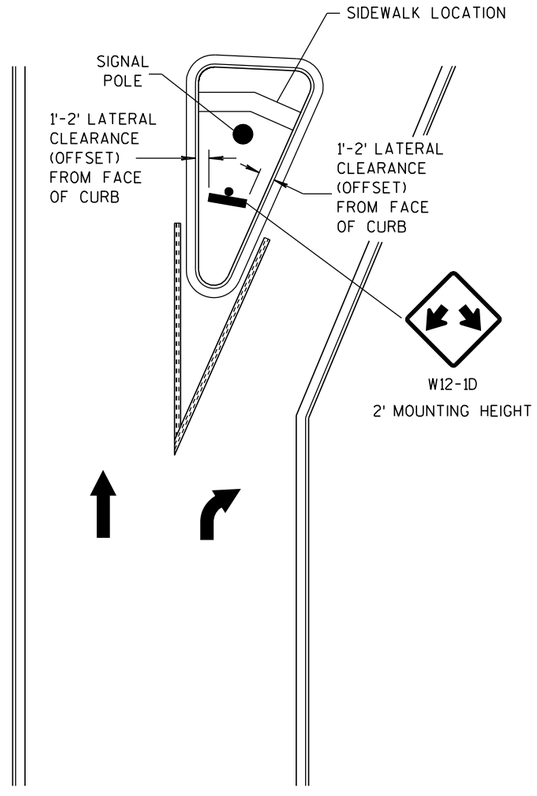
GENERAL NOTE

APPLIES TO ISLANDS AT LEFT TURNS AT ONE WAY ROADWAYS AS WELL.

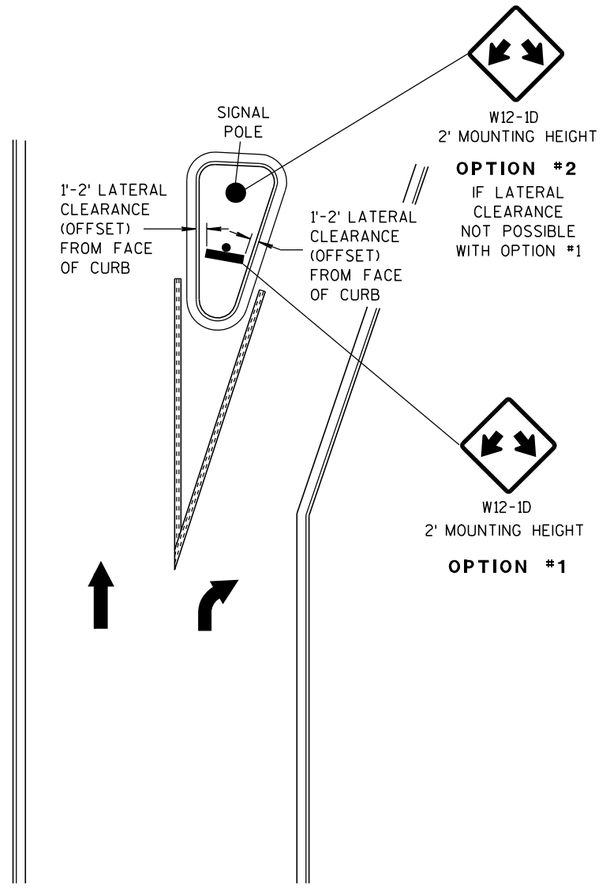
SEE MISCELLANEOUS QUANTITIES FOR SIGN SIZE.



LARGE RIGHT TURN ISLAND



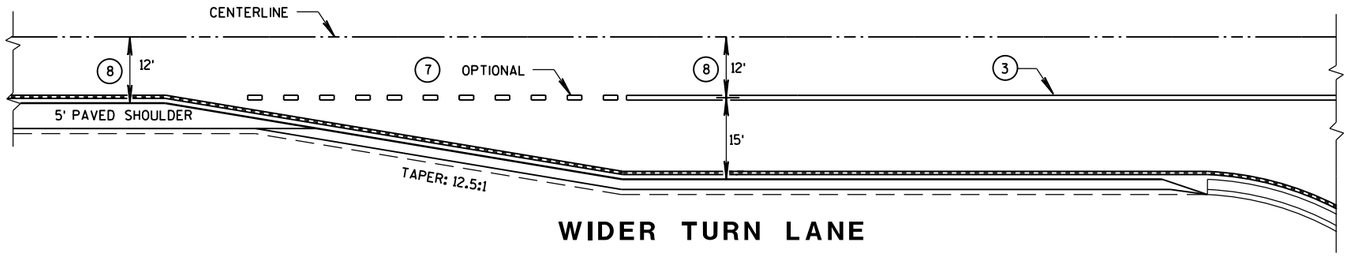
LARGE RIGHT TURN ISLAND
WITH SIGNAL POLE



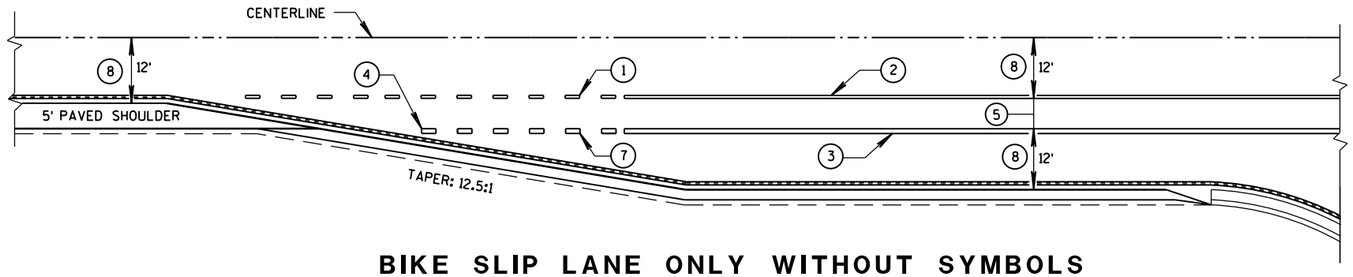
SMALL RIGHT TURN ISLAND

DOUBLE ARROW WARNING SIGN PLACEMENT

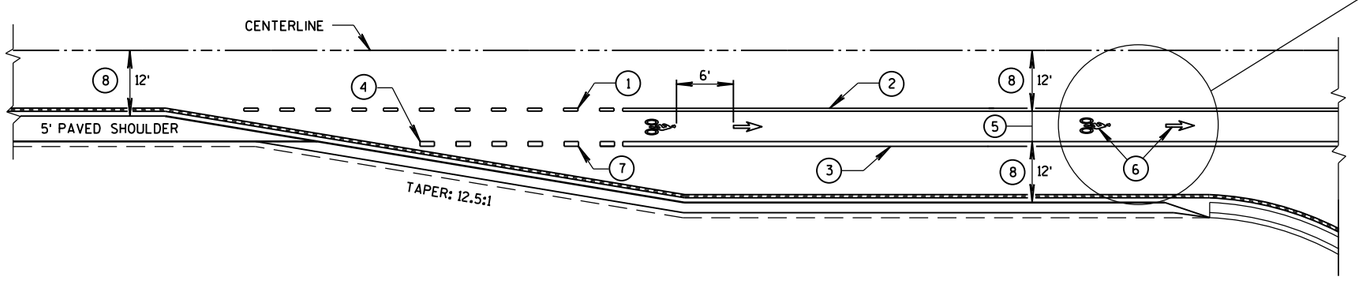
DOUBLE ARROW WARNING SIGN PLACEMENT	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
10-22-08 DATE	/S/ Thomas N. Nothem STATE TRAFFIC ENGINEER 365 IGN
FHWA	



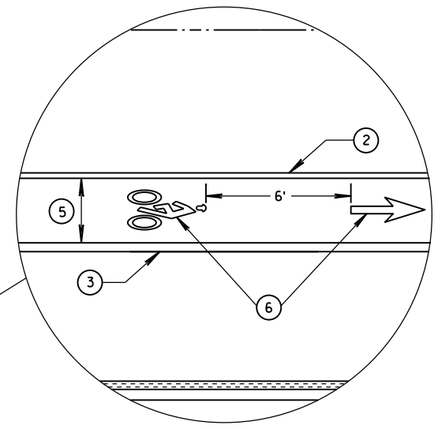
WIDER TURN LANE



BIKE SLIP LANE ONLY WITHOUT SYMBOLS



BIKE LANE WITH SYMBOLS



GENERAL NOTES

1. 3' LINE, 9' GAP - 4-INCH WIDE, WHITE.
2. 4-INCH, WHITE.
3. 8-INCH, WHITE.
4. IF SIGNED AND/OR MARKED AS A BICYCLE FACILITY INCLUDE SECOND LINE OF LINE-SPACE MARKING, OTHERWISE DO NOT.
5. BIKE ACCOMMODATION FOR CONCRETE PAVEMENT IS 5' WIDE.
   BIKE ACCOMMODATION FOR ASPHALT PAVEMENT IS A MINIMUM OF 4', 5' AT ≥ 45 MPH.
6. REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT.
7. 3' LINE, 9' GAP - 8-INCH WIDE, WHITE.
8. REFER TO CONTRACT PLANS.

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S.D.D. 15 C 29-3a

BICYCLE LANE MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

4/30/2013
DATE

/S/ Travis Feltes
STATE TRAFFIC E

FHWA

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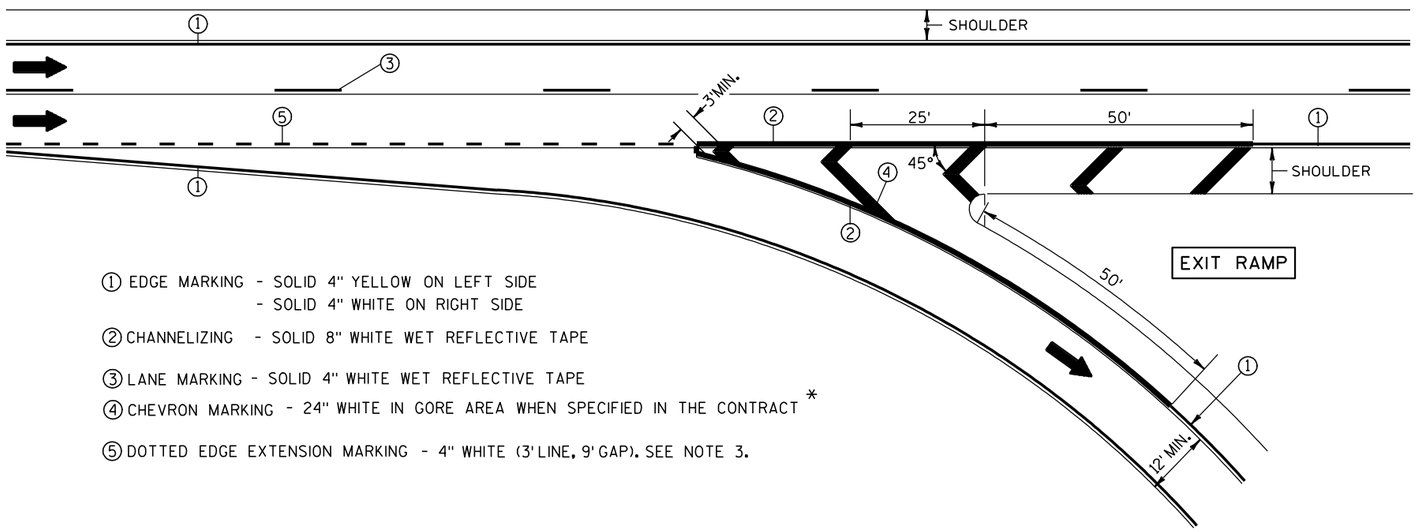
S.D.D. 15 C 29-3a



① EDGE MARKING - SOLID 4" YELLOW ON LEFT SIDE
- SOLID 4" WHITE ON RIGHT SIDE

② CHANNELIZING - SOLID 8" WHITE WET REFLECTIVE TAPE

③ LANE MARKING - SOLID 4" WHITE WET REFLECTIVE TAPE

④ CHEVRON MARKING - 24" WHITE IN GORE AREA WHEN SPECIFIED IN THE CONTRACT *

⑤ DOTTED EDGE EXTENSION MARKING - 4" WHITE (3' LINE, 9' GAP). SEE NOTE 3.

NOTES:

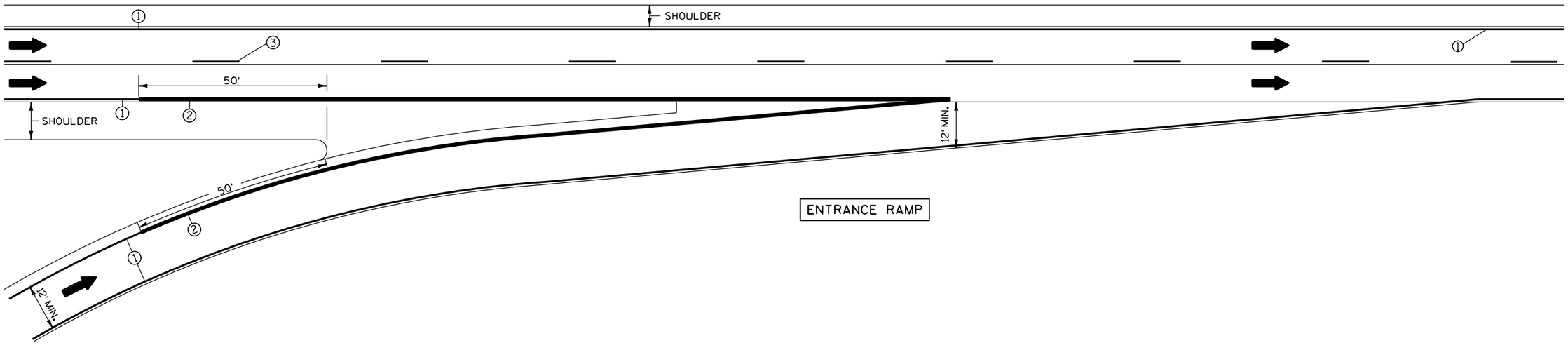
1. ARROWS SHOWN ON THIS MARKING PLAN DESIGNATE TRAFFIC FLOW, AND SHALL NOT BE TAKEN AS PROPOSED PAVEMENT MARKINGS.

2. PLACE WHITE EDGE OF TAPE 6" LEFT FROM JOINT.

3. 3' LINE 9' GAP, EXCEPT RETRACE THE EXISTING LINE-GAP PATTERN WHERE EXISTING MARKINGS ARE IN PLACE.

4. RETRACE EXISTING DIAGONAL MARKINGS.

* REFER TO DESIGN NOTES.



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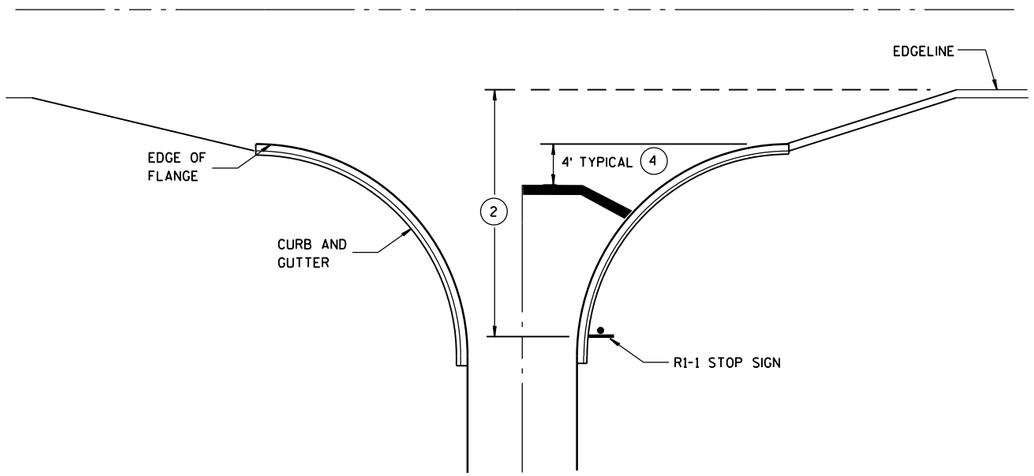
S.D.D. 15 C 31-1a

PAVEMENT MARKING
(RAMPS AND GORES)

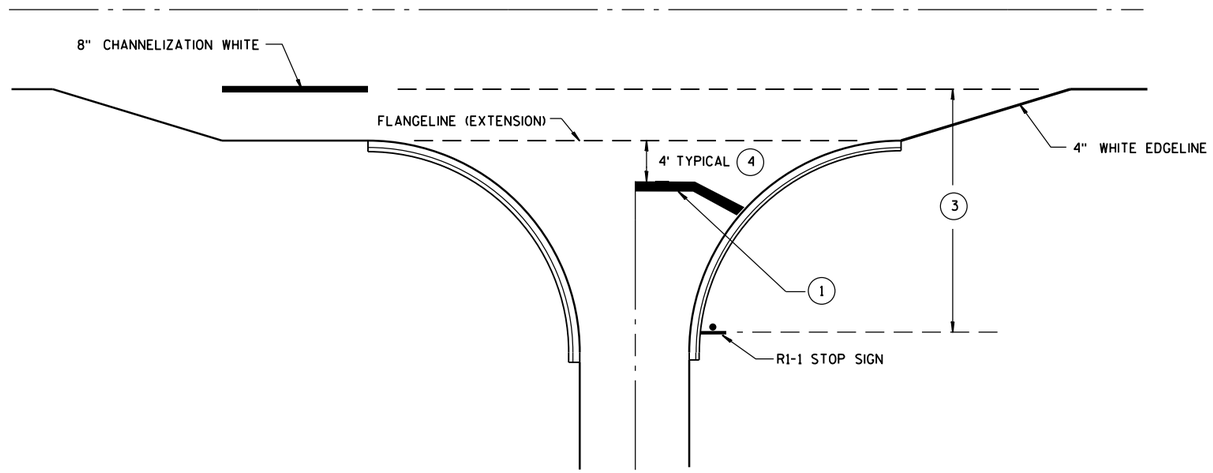
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

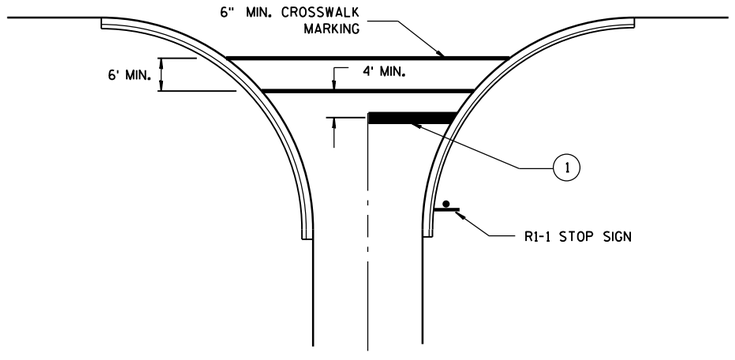
S.D.D. 15 C 31-1a



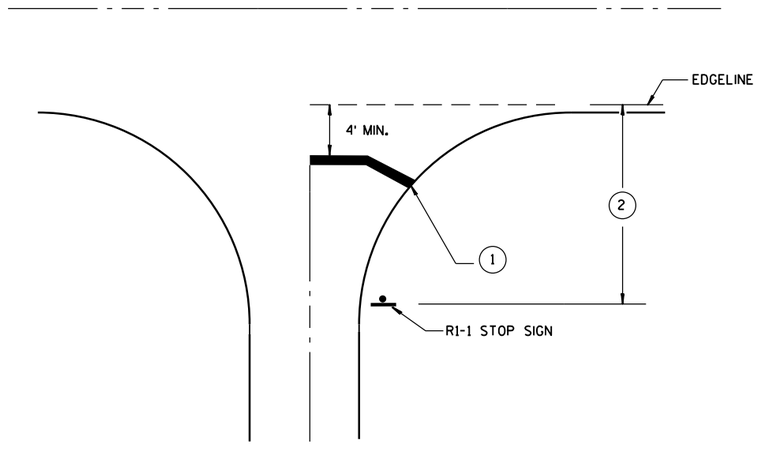
TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER



TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH RIGHT TURN LANE



TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH CROSSWALK MARKING



TYPICAL STOP LINE PAVEMENT MARKING WITHOUT CURB AND GUTTER

GENERAL NOTES

1. 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE PROJECT ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
2. IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGELINE THAN NO STOP LINE IS REQUIRED.
3. IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGELINE EXTENSION THAN NO STOP LINE IS REQUIRED.
4. MOVE CLOSER TO EDGE OF TRAVEL LANE AS NEEDED FOR VISIBILITY AND SIGHT LINES.

STOP LINE AND CROSSWALK PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

4/30/2013
DATE

/S/ Travis Feltes
STATE TRAFFIC E

FHWA

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S.D.D. 15 C 33-1

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL DRUM
- FLASHING ARROW BOARD
- REMOVING PAVEMENT MARKING
- CONCRETE BARRIER TEMPORARY PRECAST
- DIRECTION OF TRAFFIC
- WORK AREA

W057-52
36"x24"

INSTALL ON EACH APPROACH AT THE CLOSEST INTERSECTION WITH A STATE OR COUNTY TRUNK HIGHWAY, OR AS DIRECTED BY THE ENGINEER. WIDTH ON SIGN TO BE APPROX. 1 FOOT LESS THAN AVAILABLE WIDTH (OMIT IF AVAILABLE WIDTH IS MORE THAN 16 FEET).

LOCATED 500 FEET IN ADVANCE OF R2-1 SIGN AND 500 FEET BEYOND THE "ROAD WORK 1 MILE" SIGN.

R2-1
48"x60"
(BLACK AND WHITE)

IF THE REGULATORY SPEED HAS BEEN REDUCED, A SPEED LIMIT SIGN SHALL BE LOCATED 1500 FEET BEYOND THE END OF THE ACCELERATION LANE OF EACH ENTRANCE RAMP. THERE SHOULD BE A SPEED LIMIT SIGN INCORPORATED A MINIMUM OF EVERY 2 OR 3 MILES.

* INCLUDE RESUME SPEED LIMIT SIGN A MINIMUM OF 200 FEET (500 FEET DESIRABLE) AFTER END ROAD WORK SIGNS.

GENERAL NOTES

THIS LANE CLOSURE IS TYPICAL FOR CLOSING RIGHT LANE - REVERSE FOR CLOSING LEFT LANE.

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED OR AS APPROVED BY THE ENGINEER.

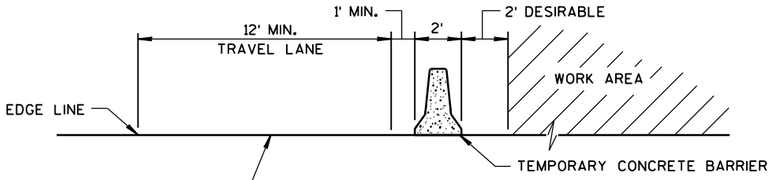
(1) CONSIDER ROADWAY GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUM TAPER.

FOR A LANE CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

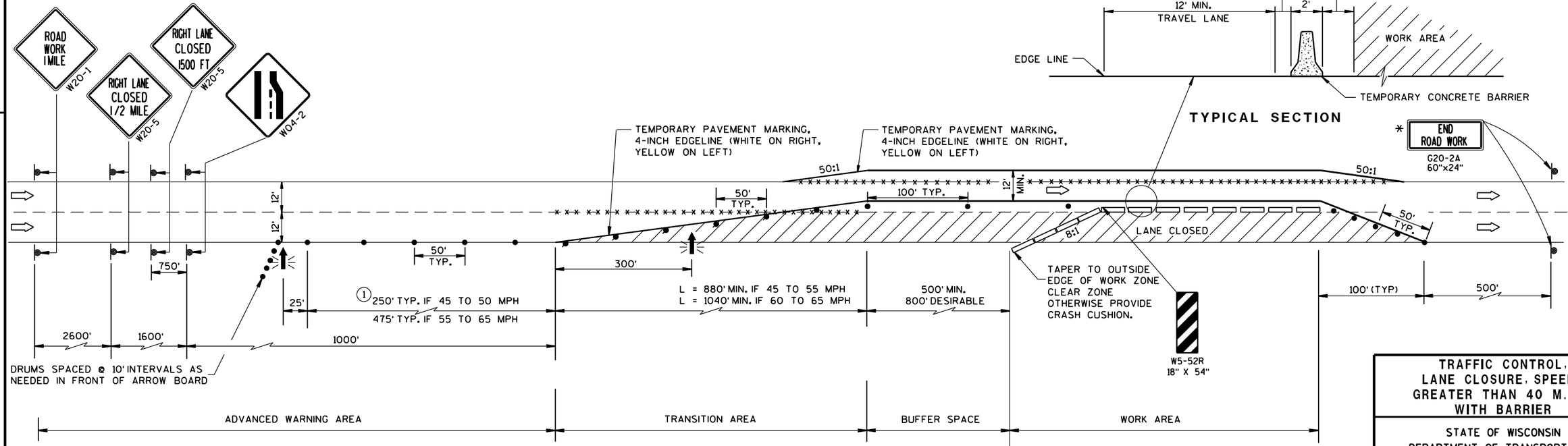
REMOVE PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE CLOSURE OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP OR INTERSECTION. THE LANE CLOSURE MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE 1/2 THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.



TYPICAL SECTION



TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATER THAN 40 M.P.H. WITH BARRIER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8/2013 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER — SIGN
FHWA

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S.D.D. 15 D 3-2

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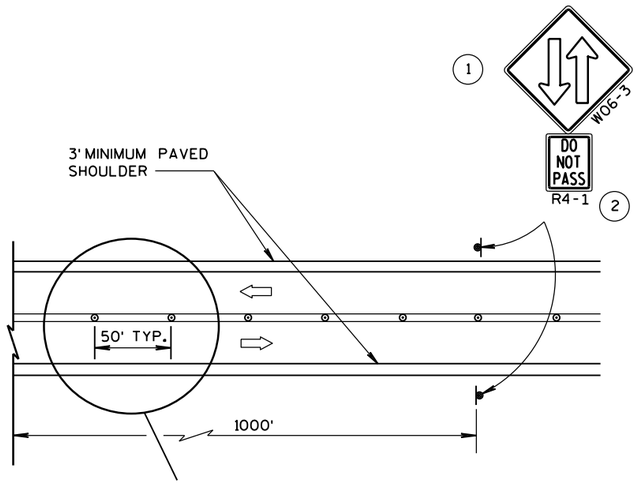
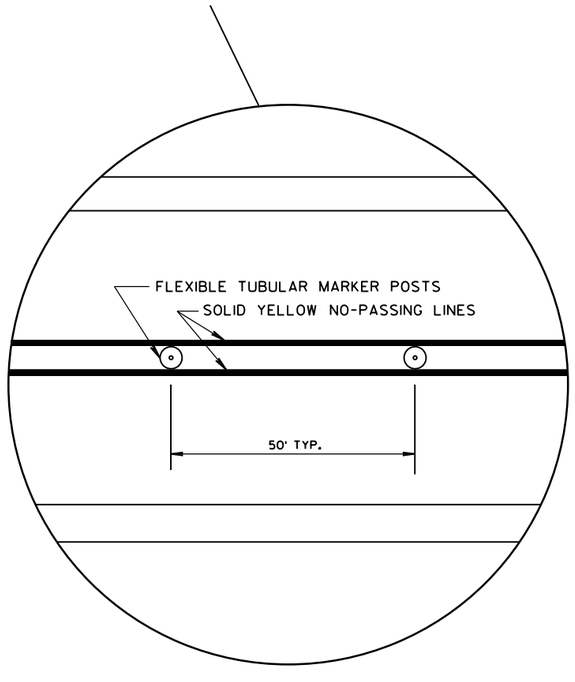
S.D.D. 15 D 3-2



TWO LANE, TWO WAY OPERATION



LEGEND

- SIGN ON PERMANENT SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- DIRECTION OF TRAFFIC

GENERAL NOTES

ALL SIGNS ARE 48"x48" UNLESS OTHERS NOTED.

"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON "COVERED" OR "DOWNED" SIGNS.

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET, (500 FEET DESIRABLE) DISTANCE TO EXISTING SIGNS.

A SINGLE ROW OF FLEXIBLE TUBULAR MARKERS ON CENTERLINE EXTEND FOR THE ENTIRE LENGTH OF TWO-WAY TRAFFIC AT 50-FOOT SPACING.

COVER EXISTING CENTERLINE STRIPE WITH TEMPORARY PAVEMENT MARKING, 4-INCH DOUBLE YELLOW.

(1)

W057-51
48"x24"

R4-1 (2)

THE W06-3 WITH THE W057-51 SHALL BE LOCATED 200 FEET BEYOND THE END OF THE ACCELERATION LANE OF EACH ENTRANCE RAMP AND/OR 500 FEET BEYOND ANY SIDEROAD. THE W06-3 WITH THE R4-1 SHALL BE LOCATED 1000 FEET BEYOND THE W06-3 AND THE W057-51 AND THE SIGNS SHALL BE ALTERNATED WITH ONE MILE INTERVALS BETWEEN W06-3 SIGNS.

(2) CONVENTIONAL: 24"x30"
FREEWAY AND EXPRESSWAY: 36"x48"

TRAFFIC CONTROL, TWO LANE TWO WAY OPERATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8/2013 DATE
/S/ Travis Feltes STATE TRAFFIC ENGINEER
SIGN
FHWA

6

S.D.D. 15 D 6-3

LEGEND

TYPE III BARRICADE

TYPE III BARRICADE WITH ATTACHED SIGN

TRAFFIC CONTROL DRUM

SIGN ON PERMANENT SUPPORT

TYPE "A" WARNING LIGHT (FLASHING)

DIRECTION OF TRAFFIC

GENERAL NOTES

THIS RAMP CLOSURE DETAIL IS TYPICAL FOR CLOSING A RIGHT SIDE EXIT RAMP. FOR A LEFT SIDE EXIT RAMP, REVERSE THE TRAFFIC CONTROL.

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

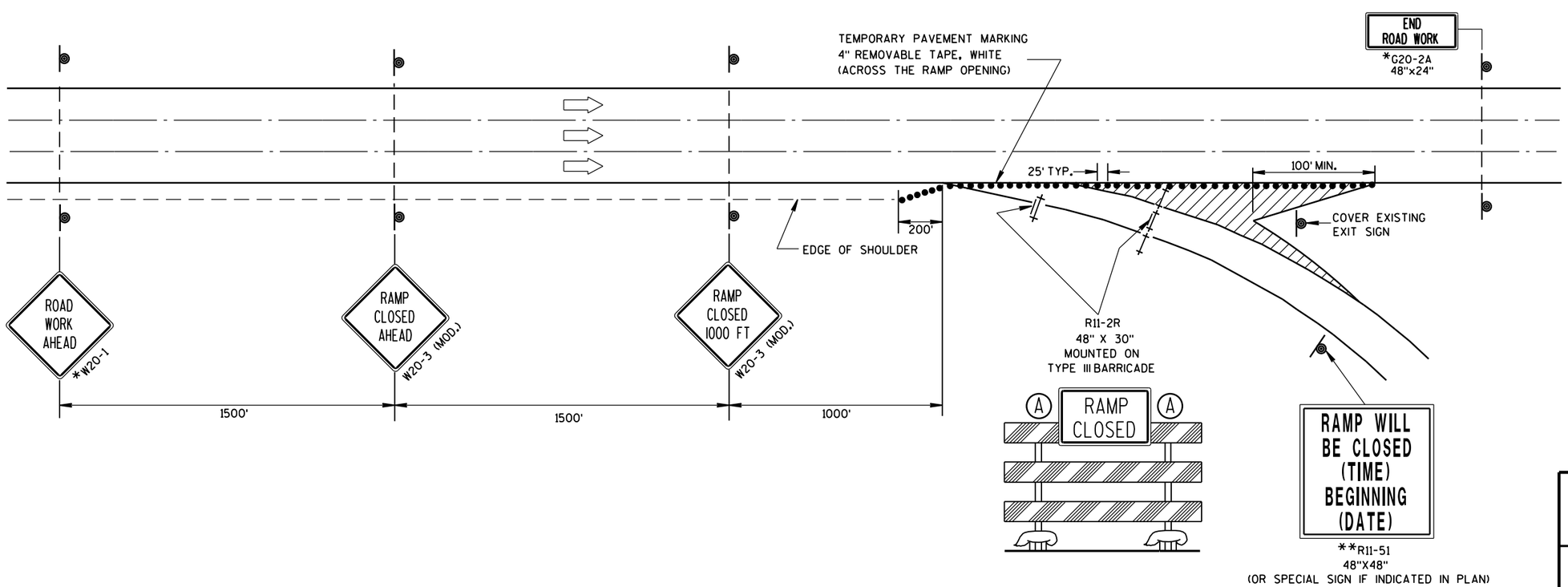
PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF RAMP CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

WORK AREAS WITH A DROPOFF ALONG THE EDGE OF AN OPEN TRAVEL LANE SHALL BE LEVELED WITH TEMPORARY FILL WHEN THE CONTRACTOR IS NOT WORKING ADJACENT TO THE TRAVEL LANE. DRUMS SHALL BE PLACED ENTIRELY OUTSIDE THE TRAVEL LANE, ALLOWING THE FULL UNOBSTRUCTED LANE WIDTH, WHEN THE WORK IS NOT IN PROGRESS.

WHERE MEDIAN BARRIER IS IN PLACE, SIGNS SHOWN ON LEFT SIDE OF ROADWAY MAY BE OMITTED FOR RIGHT SIDE RAMP CLOSURES OF LESS THAN 12-HOUR DURATION.

*W20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE RAMP CLOSURE IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT.

** PLACE "RAMP WILL BE CLOSED" SIGN 10 CALENDAR DAYS PRIOR TO CLOSURE OR AS DIRECTED BY THE ENGINEER. SEE WISCONSIN STANDARD SIGN PLATES FOR SIGN LAYOUT.



TRAFFIC CONTROL,
EXIT RAMP CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8/2013
DATE

/S/ Travis Feltes
STATE TRAFFIC ENGINEER

DESIGN

FHWA

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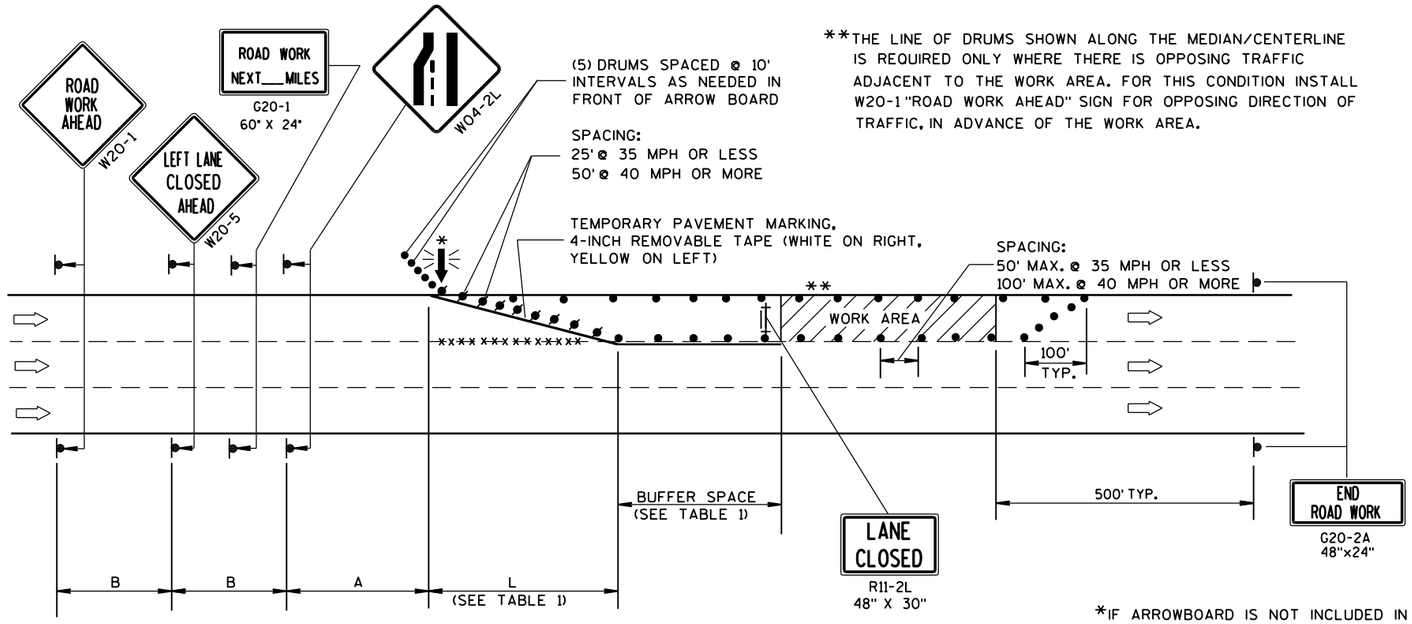
S.D.D. 15 D 16-2



B=400' AT 25-30 MPH
700' AT 35-40 MPH
1000' AT 45-55 MPH

A=200' AT 25-30 MPH
350' AT 35-40 MPH
500' AT 45-55 MPH

(PLACE BARRICADE AND SIGN APPROX. EVERY 1000' ACROSS THE CLOSED LANE)

*IF ARROWBOARD IS NOT INCLUDED IN MISCELLANEOUS QUANTITIES, SUBSTITUTE A TYPE III BARRICADE WITH W01-6 SIGN IN THE LANE CLOSURE TAPER.

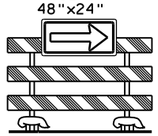


TABLE 1
TAPER AND BUFFER SPACE FOR 12' LANE WIDTH

S	L	BUFFER SPACE
25	125'	55'
30	180'	85'
35	245'	120'
40	320'	170'
45	540'	220'
50	600'	280'
55	660'	335'

FOR LANE WIDTH OTHER THAN 12':

L = WS AT 45 MPH OR GREATER

$L = \frac{WS^2}{60}$ AT 40 MPH OR LESS

L = TAPER LENGTH IN FEET

S = NON-CONSTRUCTION SPEED LIMIT (MPH)

W = WIDTH OF LANE CLOSURE

LEGEND

- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL DRUM
- FLASHING ARROW BOARD
- DIRECTION OF TRAFFIC
- REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)
- WORK AREA

GENERAL NOTES

THIS LANE CLOSURE DETAIL IS TYPICAL FOR CLOSING THE LEFT LANE. FOR A RIGHT LANE CLOSURE, REVERSE THE TRAFFIC CONTROL.

THIS DETAIL MAY BE USED FOR ROADWAYS WITH EITHER TWO OR THREE LANES IN EACH DIRECTION.

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" SIGNS MAY BE USED IF APPROVED BY DISTRICT TRAFFIC UNIT.

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

ON UNDIVIDED ROADWAYS, OMIT THE SIGNS SHOWN ON LEFT SIDE OF ROAD.

W20-1, G20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE LANE CLOSURE IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT.

OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROWBOARDS SO THE APPROACHING DRIVER HAS A CLEAR VIEW OF THE ARROWBOARDS AND LANE CLOSURE DRUMS.

PLACE THE ARROWBOARD AS CLOSE AS POSSIBLE TO THE BEGINNING OF THE LANE CLOSURE TAPER, PREFERABLY ON THE SHOULDER OR TERRACE.

CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION OR, FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Feb. 2015 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

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S.D.D. 15 D 20-3

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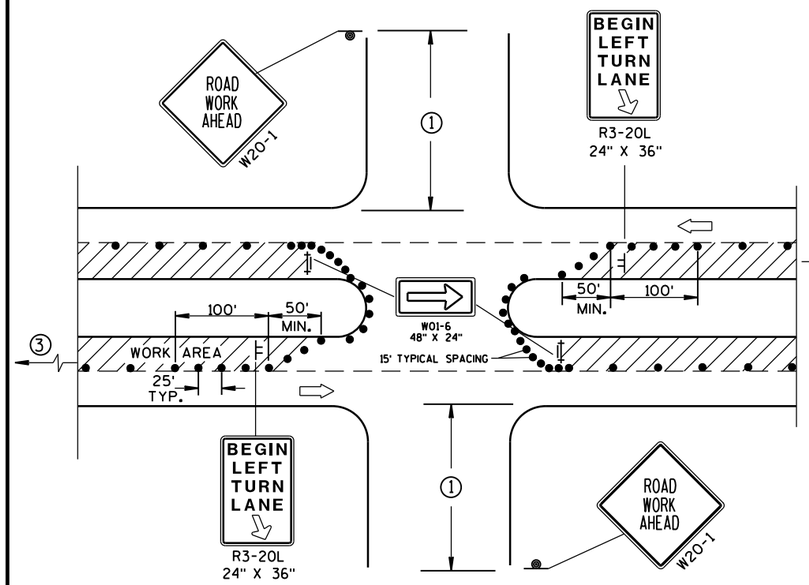
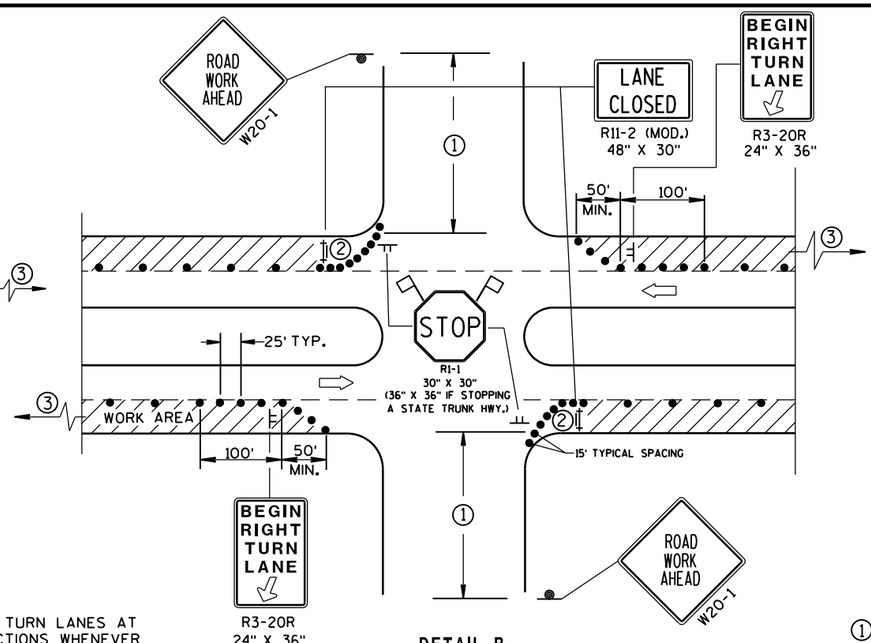


DETAIL A

FOR LEFT LANE CLOSURE AT INTERSECTION OR MEDIAN OPENING

PROVIDE TURN LANES AT INTERSECTIONS WHENEVER STAGING OF WORK ALLOWS. TAPER AND TURN LANE LENGTHS BASED ON FIELD CONDITIONS AS APPROVED BY THE ENGINEER.



DETAIL B

FOR RIGHT LANE CLOSURE AT INTERSECTION

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" SIGNS MAY BE USED IF APPROVED BY DISTRICT TRAFFIC UNIT.

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

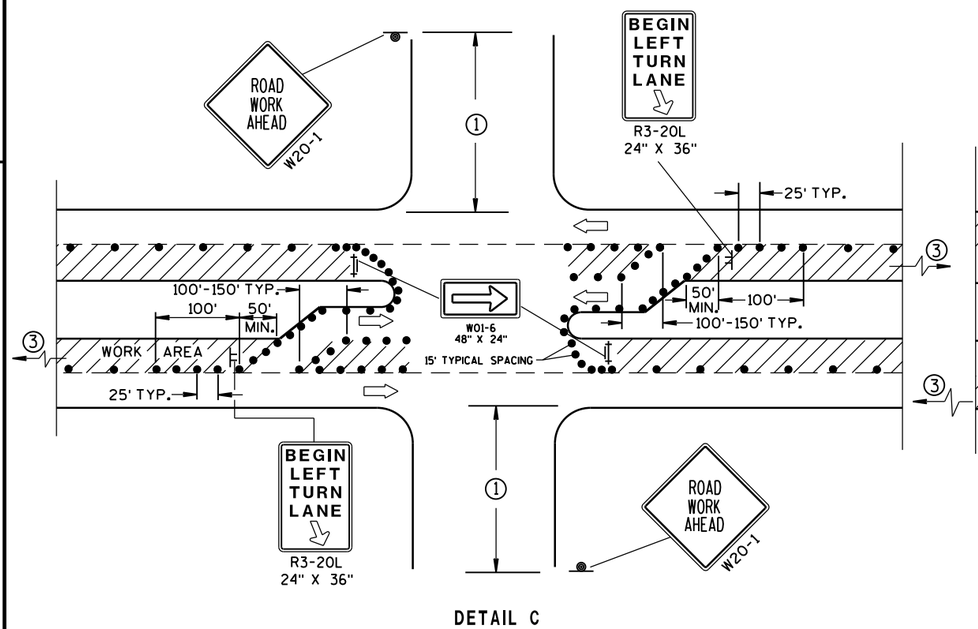
CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION OR, FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

① 500' TYPICAL OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.
350' IF 35-40 MPH.
200' IF 25-30 MPH.

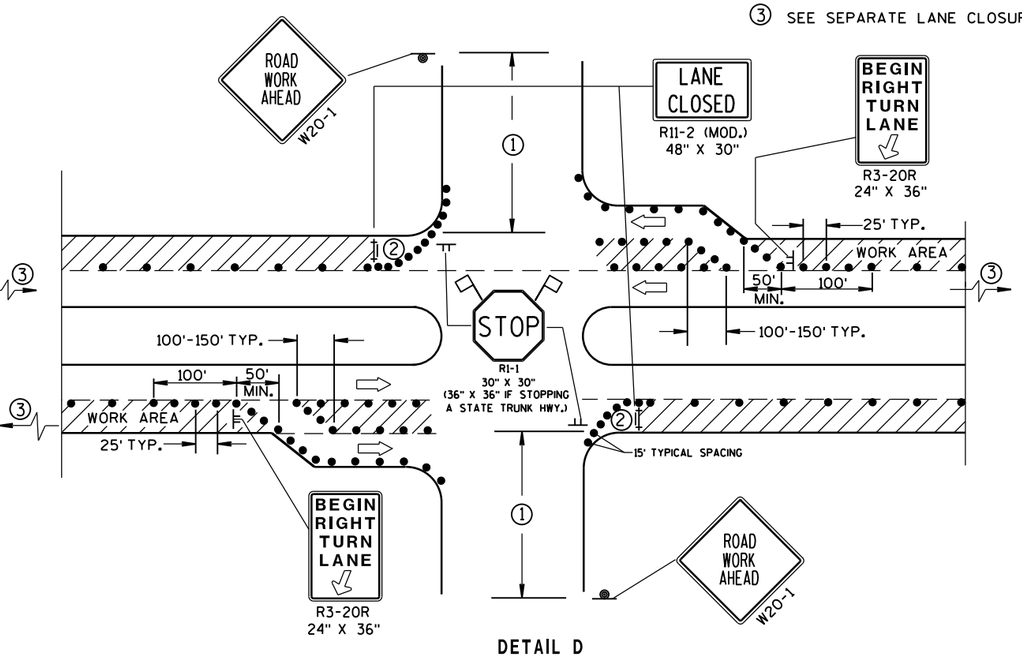
② ALSO USE BARRICADE AND 15-FOOT TYPICAL DRUM SPACING AT COMMERCIAL DRIVEWAYS.

③ SEE SEPARATE LANE CLOSURE DETAIL FOR ADDITIONAL TRAFFIC CONTROL.



DETAIL C

FOR LEFT LANE CLOSURE AT INTERSECTION OR MEDIAN OPENING (WITH LEFT TURN BAY OPEN)



DETAIL D

FOR RIGHT LANE CLOSURE AT INTERSECTION (WITH RIGHT TURN BAY OPEN)

LEGEND

- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT (5' MIN. MOUNTING HEIGHT)
- TYPE III BARRICADE WITH ATTACHED SIGN AND TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- FLAGS, 16" X 16" MIN., (ORANGE)
- WORK AREA

TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Nov. 2014 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

6

S.D.D. 15 D 21-3

LEGEND

- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC
- FLASHING ARROW BOARD
- WORK AREA

GENERAL NOTES

THIS DETAIL IS TYPICAL FOR CLOSING THE RIGHT SHOULDER. FOR CLOSING THE LEFT SHOULDER, REVERSE THE TRAFFIC CONTROL.

THIS DETAIL MAY BE USED FOR DIVIDED ROADWAYS WITH ANY NUMBER OF TRAVEL LANES.

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

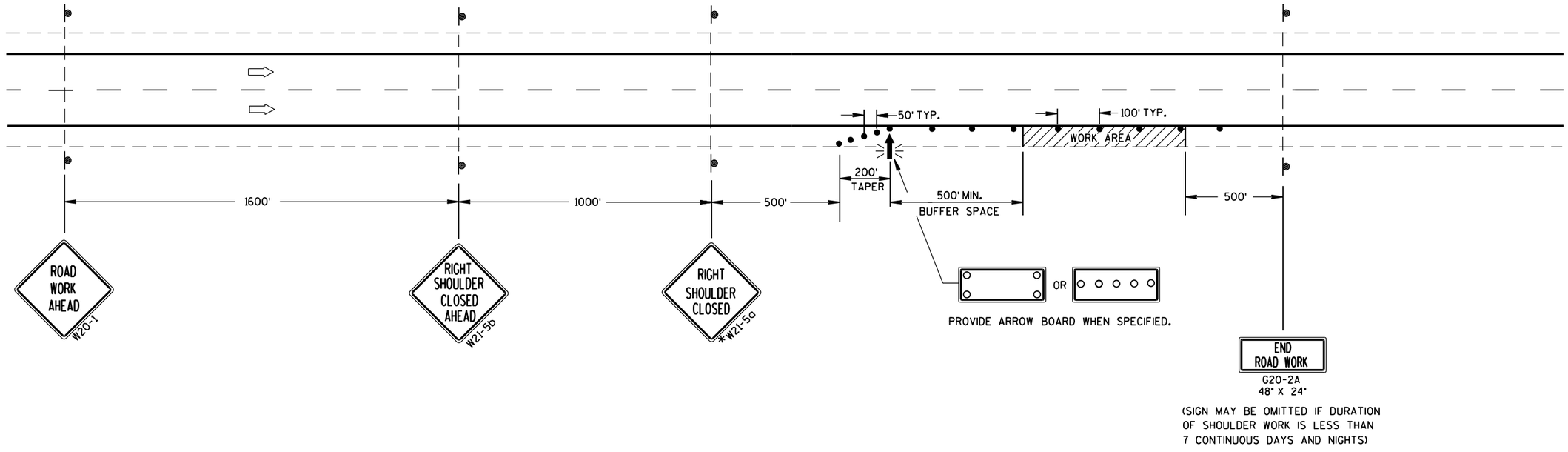
SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

CHANNELIZING DEVICES PLACED ADJACENT TO THE WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

WHEN A RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.

*FOR SHORT DURATION SHOULDER WORK OF LESS THAN ONE HOUR, THE W21-5a SIGN MAY BE OMITTED.



TRAFFIC CONTROL SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8/2013 — DATE

/S/ Travis Feltes — STATE TRAFFIC ENGINEER

FHWA

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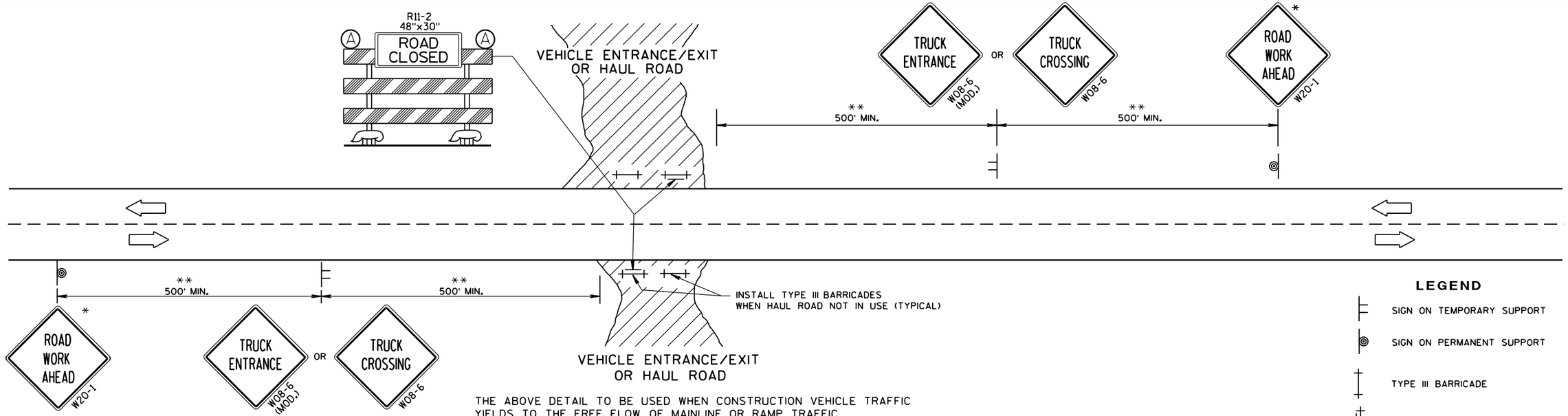


THE ABOVE DETAIL TO BE USED WHEN CONSTRUCTION VEHICLE TRAFFIC YIELDS TO THE FREE FLOW OF MAINLINE OR RAMP TRAFFIC

LEGEND

- SIGN ON TEMPORARY SUPPORT
- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF
- (A) TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS, DEVICES AND FLAGGERS SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

WHEN ACTIVITY REFLECTED BY THE SIGN IS NOT CURRENTLY TAKING PLACE, THE HIGHWAY SHALL BE RESTORED TO NORMAL CONDITION AND THE SIGNS SHALL BE REMOVED, COVERED OR TURNED AWAY FROM TRAFFIC.

WHEN A SIDE ROAD OR RAMP INTERSECTS WITHIN THE ADVANCE SIGNING AREA, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.

* THESE SIGNS ARE TO BE USED ONLY WHEN VEHICLE ENTRANCE/EXIT CONDITIONS ARE SEPARATED BY MORE THAN 2 MILES FROM PREVIOUS WORK AREA OR SIGNING OR AS DIRECTED BY THE ENGINEER.

** 500 FEET SHOWN IS FOR ROADWAYS WITH A NON-CONSTRUCTION REGULATORY SPEED LIMIT OF 45 MPH OR MORE. FOR 35-40 MPH, USE 350 FEET. FOR 25-30 MPH, USE 200 FEET. USE 1000 FEET/1500 FEET FOR EXPRESSWAY/FREEWAY.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

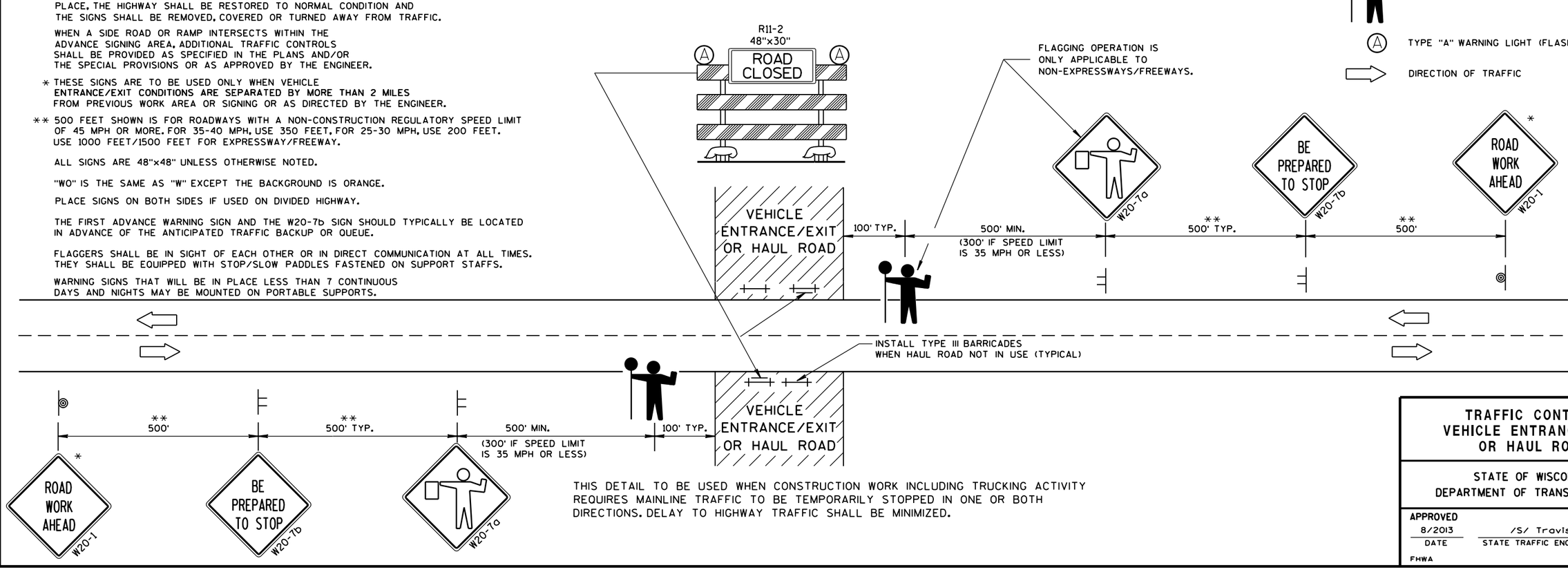
"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

PLACE SIGNS ON BOTH SIDES IF USED ON DIVIDED HIGHWAY.

THE FIRST ADVANCE WARNING SIGN AND THE W20-7b SIGN SHOULD TYPICALLY BE LOCATED IN ADVANCE OF THE ANTICIPATED TRAFFIC BACKUP OR QUEUE.

FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS.

WARNING SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.



THIS DETAIL TO BE USED WHEN CONSTRUCTION WORK INCLUDING TRUCKING ACTIVITY REQUIRES MAINLINE TRAFFIC TO BE TEMPORARILY STOPPED IN ONE OR BOTH DIRECTIONS. DELAY TO HIGHWAY TRAFFIC SHALL BE MINIMIZED.

TRAFFIC CONTROL, VEHICLE ENTRANCE/EXIT OR HAUL ROAD

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8/2013 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

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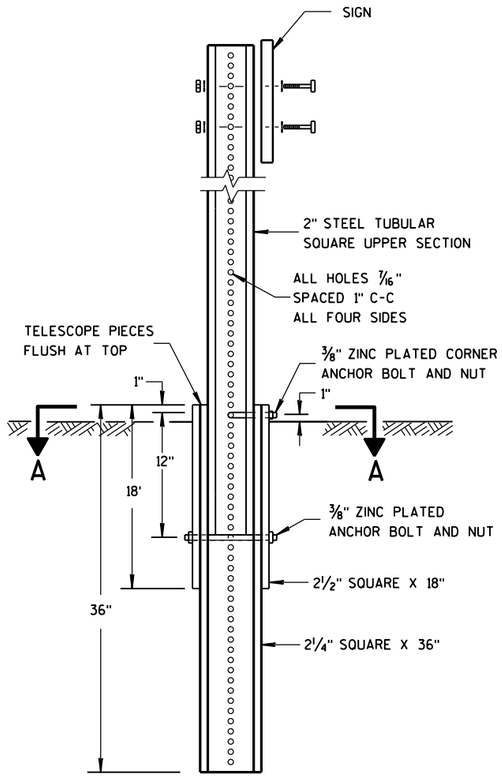
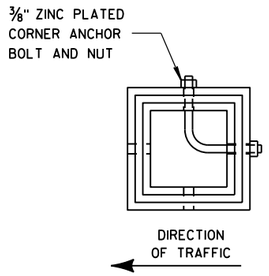
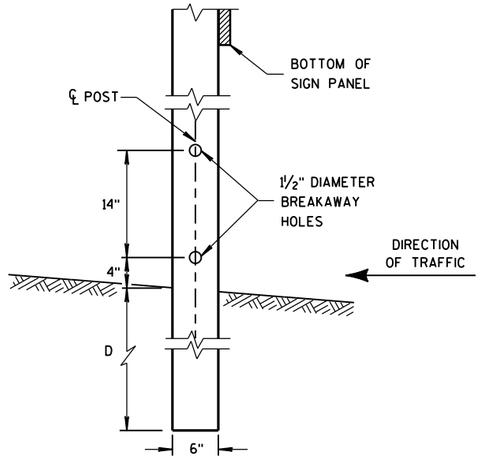


DETAIL OF TUBULAR STEEL SIGN POST



SECTION A-A



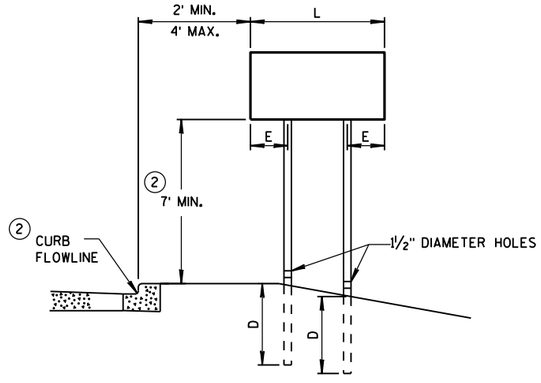
4"x6" WOOD POST MODIFICATION

GENERAL NOTES

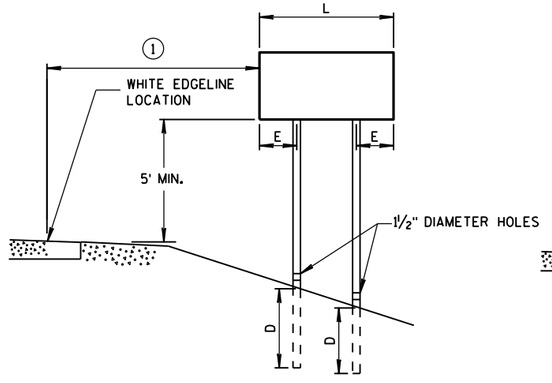
(1) 6 FEET FROM THE EDGE OF PAVEMENT (EDGE LINE LOCATION) UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER. LATERAL OFFSET SHOULD BE ADJUSTED TO AVOID THE DITCH FLOWLINE.

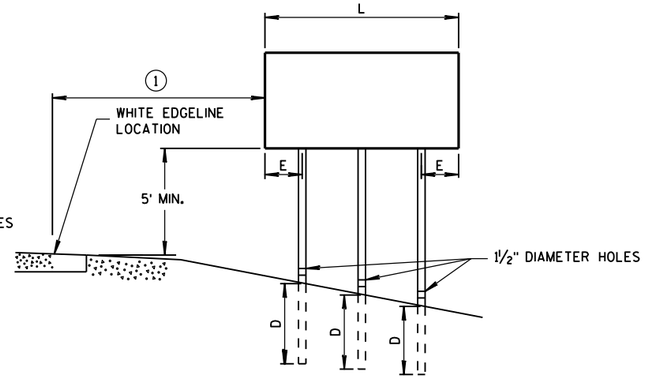
(2) THE EXISTENCE OF CURB AND GUTTER DOES NOT IN ITSELF MANDATE THE VERTICAL CLEARANCE ILLUSTRATED. THAT HEIGHT IS TYPICALLY MEASURED WHERE THERE IS SIDEWALK ADJACENT TO THE ROADWAY OR PARKING IS PERMITTED. IN THE ABSENCE OF SIDEWALK, VERTICAL CLEARANCE IS MEASURED FROM THE TOP OF THE CURB. IF NO SIDEWALK AND NO PARKING, VERTICAL CLEARANCE MAY BE REDUCED TO 5 FOOT MINIMUM. OFFSET OF SIGNS IS MEASURED FROM THE CURB FLOWLINE.

(3) FOR SIGNS REQUIRING 4 POSTS, SPACE INTERMEDIATE POSTS EVENLY.



URBAN AREA





RURAL AREA

POST MOUNTING DETAIL FOR TEMPORARY TRAFFIC CONTROL FIXED MESSAGE SIGNS

TUBULAR STEEL POSTS

AREA OF SIGN INSTALLATION (SQ. FT.)	NUMBER OF REQUIRED TUBULAR STEEL POSTS
9 OR LESS	1
GREATER THAN 9 LESS THAN OR EQUAL TO 18	2
GREATER THAN 18 LESS THAN OR EQUAL TO 27	3

SIGNS WIDER THAN 3 FEET OR LARGER THAN 9 SQ. FT. SHALL BE MOUNTED ON MULTIPLE POSTS (SEE ABOVE TABLE).

SIGNS LARGER THAN 27 SQ. FT. SHALL NOT BE MOUNTED ON TUBULAR STEEL POSTS.

WOOD POST EMBEDMENT DEPTH

AREA OF SIGN INSTALLATION (SQ. FT.)	D (MIN)
20 OR LESS	4'
GREATER THAN 20	5'

4" X 6" WOOD POST

POST SPACING REQUIREMENTS		NUMBER OF WOOD POSTS REQUIRED
L	E	
48" OR LESS AND LESS THAN 20 SQ. FT.	-	1
LESS THAN 60"	12"	2
60" TO 120"	L/5	2
GREATER THAN 120" LESS THAN 168"	12"	3
168" AND GREATER	12"	4

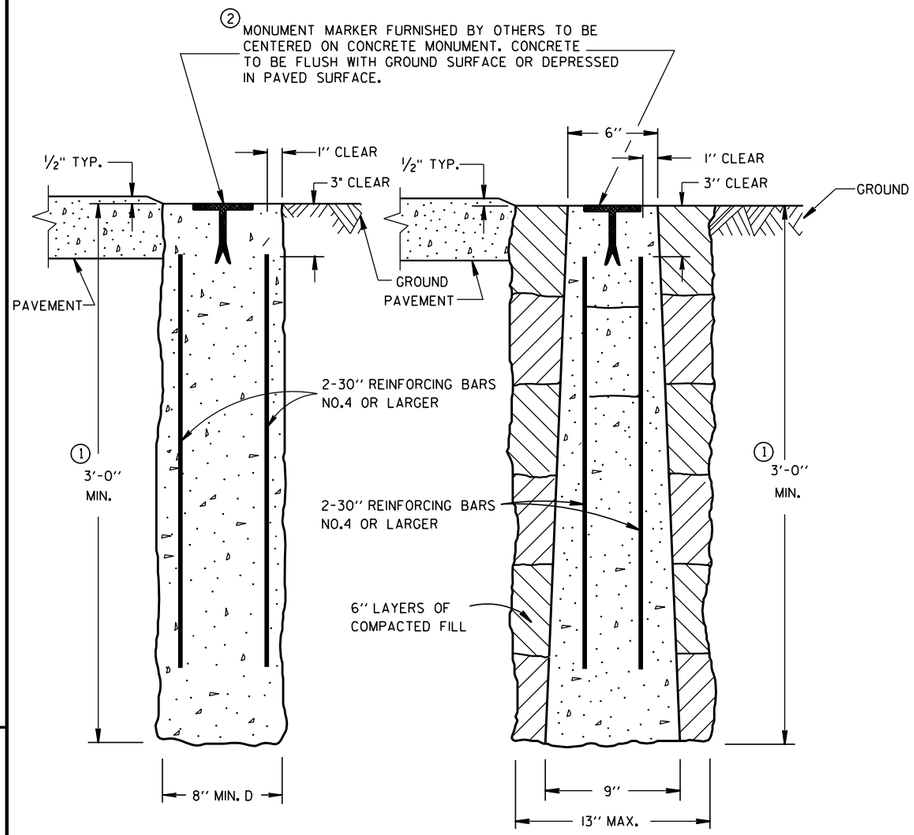
SEE NOTE (3)

TEMPORARY TRAFFIC CONTROL FIXED MESSAGE SIGNS

STATE OF WISCONSIN DEPARTMENT OF TRANSPOR

6

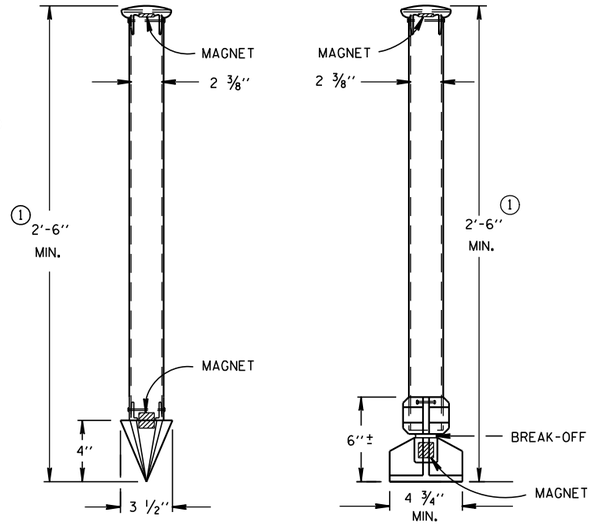
S.D.D. 15 D 38-1a



CAST-IN-PLACE PRECAST

CONCRETE MONUMENTS

TYPE A



TYPE C DRIVE-IN MONUMENT

TYPE D BREAK-OFF MONUMENT

ALUMINUM MONUMENTS

(INCLUDES MARKER)

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.

DETAILED DRAWINGS OF PROPOSED ALTERNATE DESIGNS FOR METAL MONUMENTS OR MONUMENT COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

INSTALLED METAL MONUMENTS MUST BE EASILY DETECTED WITH A DIP NEEDLE. INSERT PERMANENT MAGNETS SHALL BE ATTACHED NEAR THE TOP AND BOTTOM OF THOSE MONUMENTS CONSTRUCTED OF A METAL ALLOY WHICH IS NOT ATTRACTIVE TO A DIP NEEDLE.

THE CAST IRON MONUMENT COVER SHALL BE A "NON-ROCKING" TYPE. ADJUSTMENT OF THE COVER TO GRADE MAY BE ACCOMPLISHED BY THE USE OF MORTAR AND BRICK, OR BY EITHER PRECAST OR CAST-IN-PLACE REINFORCED CONCRETE GRADE RINGS.

MONUMENTS SHALL BE LOCATED AND PLACED AT THE DIRECTION OF THE ENGINEER.

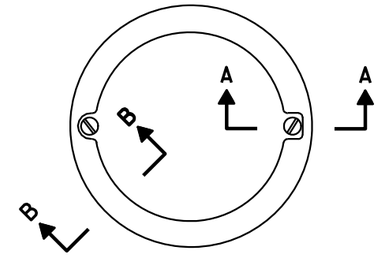
ALUMINUM MONUMENTS AND MONUMENT COVERS SHALL BE MADE FROM AN ALUMINUM AND MAGNESIUM ALLOY AS DETERMINED BY THE MANUFACTURER.

THE MONUMENT COVERS DETAILED ON THIS DRAWING ARE NOT EQUAL ALTERNATES. MONUMENT COVERS SHALL BE CAST IRON UNLESS ALUMINUM IS SPECIFIED ELSEWHERE IN THE CONTRACT.

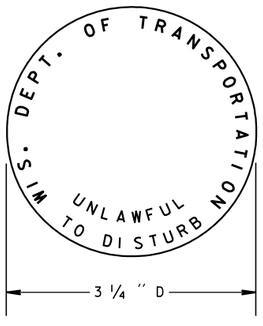
MONUMENT SHALL BE CAST-IN-PLACE CONCRETE UNLESS PRECAST CONCRETE OR ALUMINUM MONUMENTS ARE SPECIFIED IN THE CONTRACT OR PERMITTED BY THE ENGINEER.

① MINIMUM LENGTH SHALL BE 4'-0" FOR MONUMENTS INSTALLED IN PAVED AREAS.

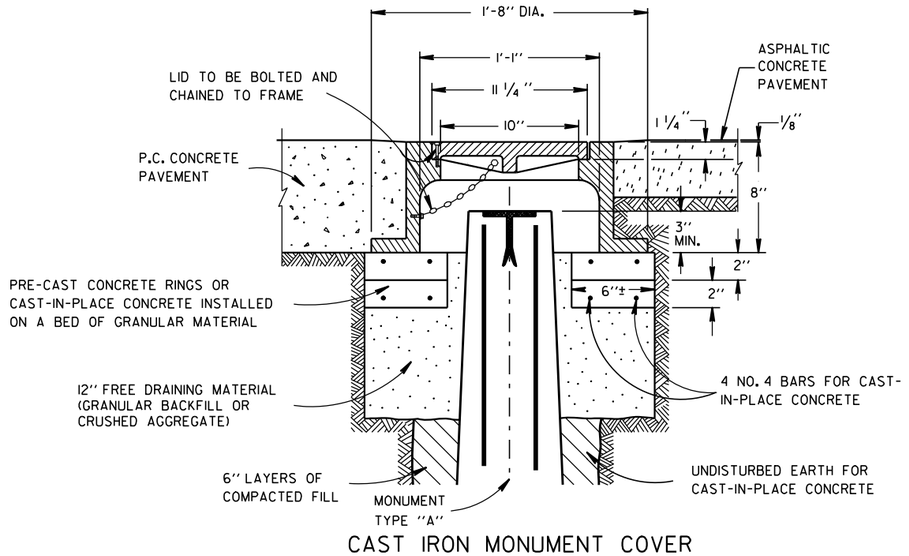
② AN OFFICIAL COUNTY MONUMENT MARKER SUPPLIED BY A COUNTY MAY BE REQUIRED FOR SOME SECTION CORNERS AND WITNESS MONUMENTS INSTEAD OF THIS WIS DOT MARKER.



TOP VIEW

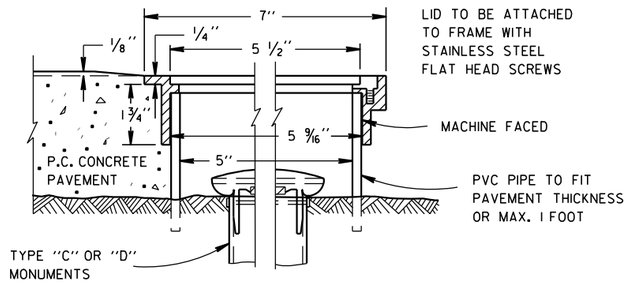


② WIS DOT MONUMENT MARKER LOGO FOR TYPES "A", "C" & "D"



CAST IRON MONUMENT COVER

(APPROXIMATE WEIGHT - 95 LBS.)



SECTION B-B SECTION A-A

ALUMINUM MONUMENT COVER

(APPROXIMATE WEIGHT 2 LBS)

(FOR CONCRETE PAVEMENT ONLY)

LANDMARK REFERENCE MOUNMENTS AND COVERS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

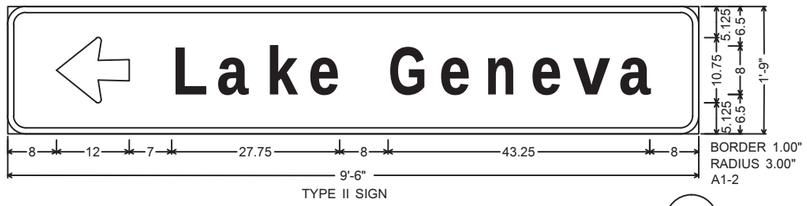
APPROVED

9/22/1999 DATE

/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOPMENT ENGINEER

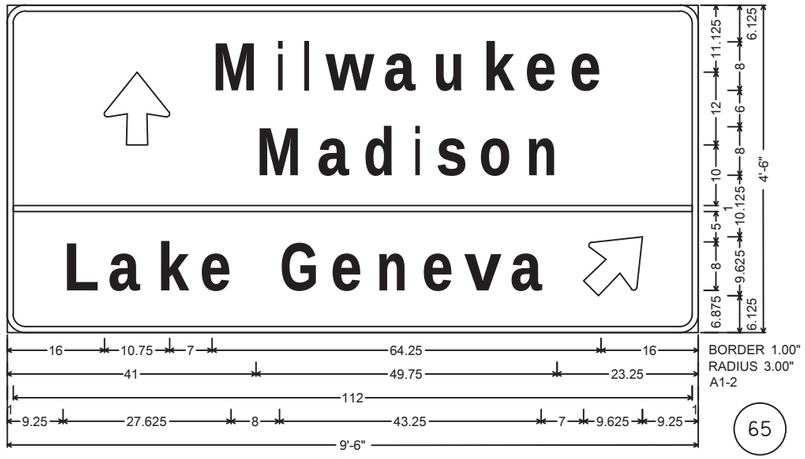
FHWA

6
S.D.D. 16 A 1-6



TYPE II SIGN

46

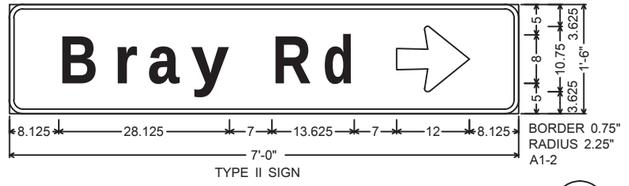


TYPE II SIGN

65

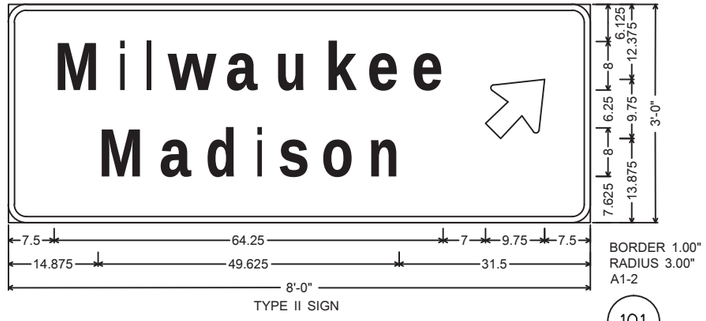
TYPE II SIGN

70



TYPE II SIGN

84



TYPE II SIGN

101

GENERAL NOTES:

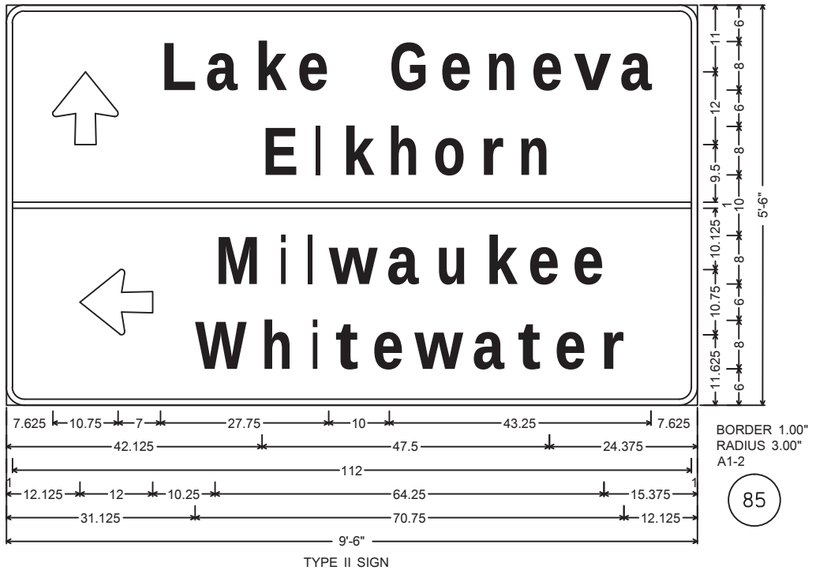
1. DETAILS OF CONSTRUCTION, MATERIALS, AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE PLANS.
2. UNLESS OTHERWISE NOTED, ALL SIGNS SHOWN ON THIS SHEET ARE "SIGNS, TYPE II".
3. UNLESS OTHERWISE NOTED, TYPE II SIGNS ON THIS SHEET SHALL HAVE "TYPE H REFLECTIVE SHEETING" AND "TYPE H MESSAGE MATERIAL". TYPE I SIGNS SHALL HAVE "TYPE SH REFLECTIVE SHEETING".
4. UNLESS OTHERWISE NOTED, ALL SIGNS SHOWN ON THIS SHEET SHALL HAVE A GREEN BACKGROUND AND WHITE MESSAGE.
5. TYPE II SIGNS ALL UPPERCASE MESSAGE (EXCEPT ON SHIELDS OR WHERE OTHERWISE NOTED) SHALL BE "SERIES E". ALL LOWERCASE MESSAGE WITH AN INITIAL UPPERCASE LETTER SHALL BE "SERIES E".
6. TYPE I SIGNS ALL UPPERCASE MESSAGE (EXCEPT ON SHIELDS OR WHERE OTHERWISE NOTED) SHALL BE "SERIES E MODIFIED". ALL LOWER CASE MESSAGE WITH AN INITIAL UPPERCASE LETTER SHALL BE "SERIES E MODIFIED". ALL CAP WORDS ARE "SERIES E".
7. UNLESS OTHERWISE NOTED, ALL SIGNS SHOWN ON THIS SHEET SHALL HAVE "TYPE A" OR "TYPE C" ARROWS AS SHOWN. SEE THE STANDARD SIGN PLATES FOR FURTHER DETAILS.
8. SEE THE STANDARD SIGN PLATES FOR FURTHER DETAILS ON ROUTE MARKER SHIELDS.
9. THE SIGN NUMBER IS DENOTED IN THE CIRCLE NEAR EACH DETAIL.
10. NUMBER FRACTIONS FOR INTERCHANGE SEQUENCE SIGNS SHALL BE "SERIES E" PER PLATES A11-7 AND A11-10.
11. DO NOT SCALE.

PROJECT NO: 1080-13-70	HWY: USH 12 & CTH NN	COUNTY: WALWORTH	SIGN DETAIL - TYPE I & II SIGNS	SHEET 378	E

FILE NAME : N:\PDS\C3D\CAD\10801300\070101_MS.DWG
LAYOUT NAME - 070101_MS
PLOT DATE : 1/12/2015 7:02 AM
PLOT BY : DODGE, BRIAN M
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET

TYPE II SIGN

121 144

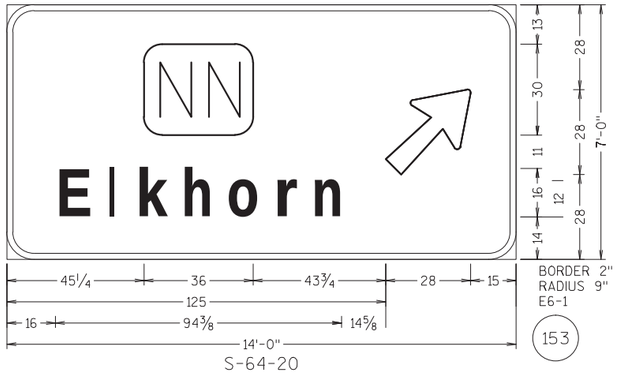


85

TYPE II SIGN

GENERAL NOTES:

1. DETAILS OF CONSTRUCTION, MATERIALS, AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE PLANS.
2. UNLESS OTHERWISE NOTED, ALL SIGNS SHOWN ON THIS SHEET ARE "SIGNS, TYPE II".
3. UNLESS OTHERWISE NOTED, TYPE II SIGNS ON THIS SHEET SHALL HAVE "TYPE H REFLECTIVE SHEETING" AND "TYPE H MESSAGE MATERIAL". TYPE I SIGNS SHALL HAVE "TYPE SH REFLECTIVE SHEETING".
4. UNLESS OTHERWISE NOTED, ALL SIGNS SHOWN ON THIS SHEET SHALL HAVE A GREEN BACKGROUND AND WHITE MESSAGE.
5. TYPE II SIGNS ALL UPPERCASE MESSAGE (EXCEPT ON SHIELDS OR WHERE OTHERWISE NOTED) SHALL BE "SERIES E". ALL LOWERCASE MESSAGE WITH AN INITIAL UPPERCASE LETTER SHALL BE "SERIES E".
6. TYPE I SIGNS ALL UPPERCASE MESSAGE (EXCEPT ON SHIELDS OR WHERE OTHERWISE NOTED) SHALL BE "SERIES E MODIFIED". ALL LOWER CASE MESSAGE WITH AN INITIAL UPPERCASE LETTER SHALL BE "SERIES E MODIFIED". ALL CAP WORDS ARE "SERIES E".
7. UNLESS OTHERWISE NOTED, ALL SIGNS SHOWN ON THIS SHEET SHALL HAVE "TYPE A" OR "TYPE C" ARROWS AS SHOWN. SEE THE STANDARD SIGN PLATES FOR FURTHER DETAILS.
8. SEE THE STANDARD SIGN PLATES FOR FURTHER DETAILS ON ROUTE MARKER SHIELDS.
9. THE SIGN NUMBER IS DENOTED IN THE CIRCLE NEAR EACH DETAIL.
10. NUMBER FRACTIONS FOR INTERCHANGE SEQUENCE SIGNS SHALL BE "SERIES E" PER PLATES A11-7 AND A11-10.
11. DO NOT SCALE.



153

S-64-20

TYPE I SIGN

SHEET 2 OF 2

PROJECT NO: 1080-13-70	HWY: USH 12 & CTH NN	COUNTY: WALWORTH	SIGN DETAIL - TYPE I & II SIGNS	SHEET 379	E

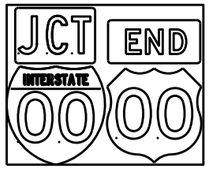
FILE NAME : N:\PDS\C3D\CAD\10801300\070101_MS.DWG
LAYOUT NAME - 070102_MS

PLOT DATE : 1/12/2015 7:02 AM PLOT BY : DODGE, BRIAN M PLOT NAME : PLOT SCALE : 1 IN:50 FT

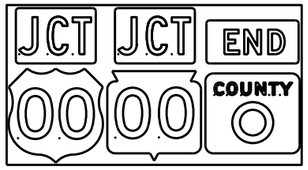
WISDOT/CADDS SHEET

TYPICAL ASSEMBLIES

J1-1

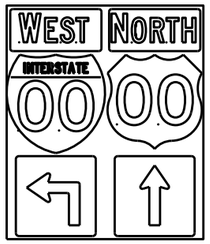


J1-2

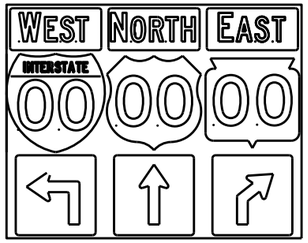


J1-3

J2-1



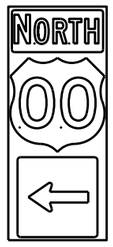
J2-2



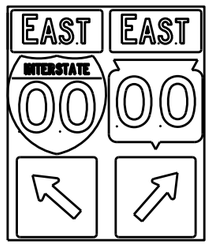
J2-3

JV

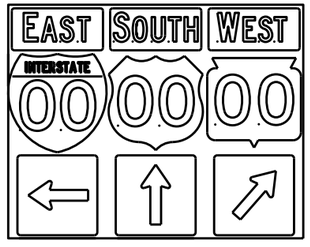
(Typical Vertical J-Assembly
See Note 10 and 11)



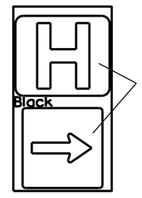
J3-1



J3-2



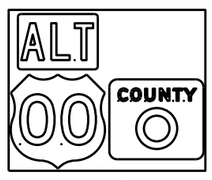
J3-3



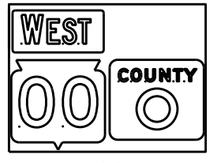
Blue Background

JH-1

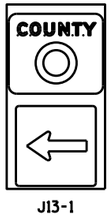
J4-1



J4-2



J4-2



J13-1

J12-1

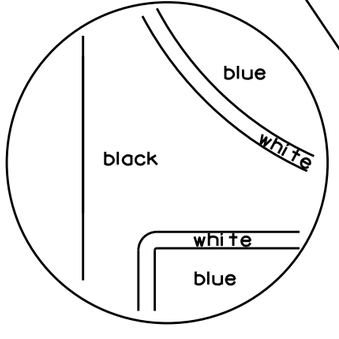
J32-1

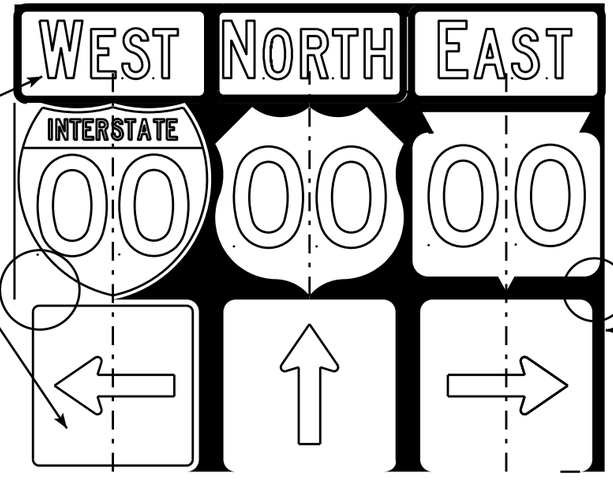
J33-1

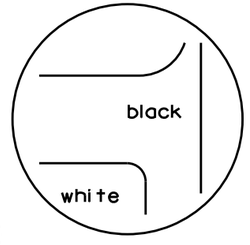
J23-1

J22-1

[blue background with interstate]







[black background]

NOTES

1. Signs are Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Black Non-reflective
   Message - see Note 5
3. Message Series - See Note 5
4. Corners shall be square or rounded if base material is plywood. If base material is metal the corners shall be rounded.
5. The colors and message spacing on each marker shall be according to the applicable route marker panel specifications.
6. Certain marker heads require the component pieces to be the same color. As an example, all the components used with an M1-1 Interstate marker shall be blue.
7. Single panel j-assemblies shall only be used with route marker shields that are same size. If the route marker shields are different size use multiple piece component.
8. Route assemblies that have 24 inch route shields and have dimensions greater than 48 inches (both vertical and horizontal) shall have one horizontal splice between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 inches or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
9. Route assemblies that have 36 inch shields and have dimensions greater than 48 inchs (both vertical and horizontal) shall have two horizontal splices. One horizontal splice shall be between the cardinal direction and route shields and the other horizontal splice shall be between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
10. All Vertical J Assemblies are given a Sign Code of JV
11. For JV Assemblies that have a mixture of Interstate and non Interstate shields, arrows and cardinals shall be white on blue.

ROUTE MARKERS & COMPONENTS
IN TYPICAL ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

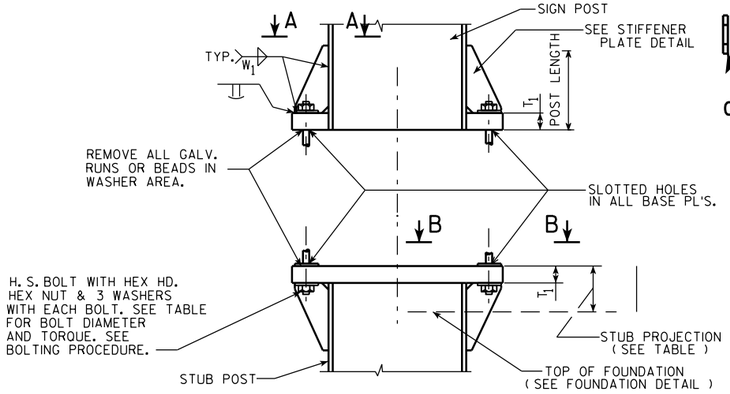
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/06/14 PL... A2-1S.8

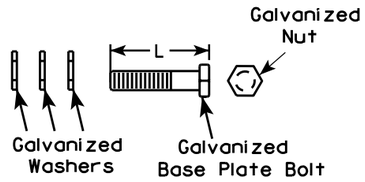
PROJECT NO: | SHEET NO: E

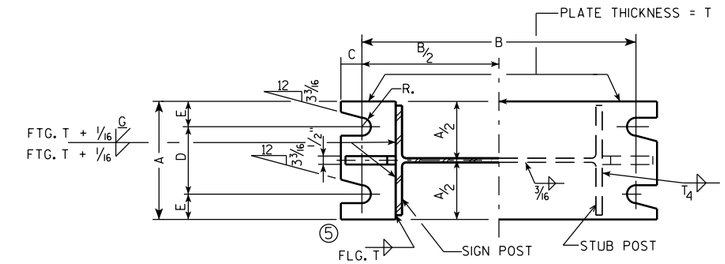
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A21S.DGN PLOT DATE : 06-FEB-2014 14:10 PLOT BY : mscsja PLOT NAME :

WISDOT/CADDS SHEET 42

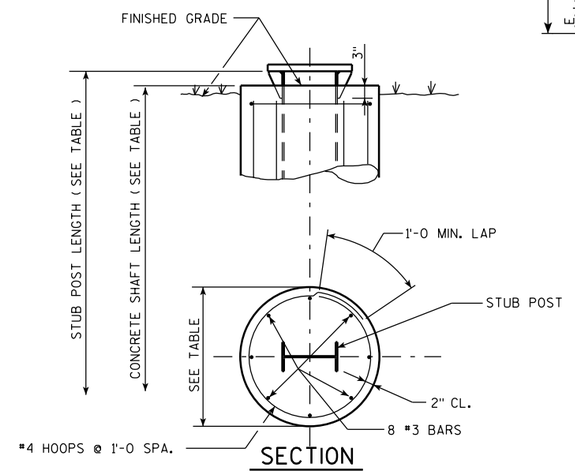


SIGN POST AND STUB POST ELEVATION

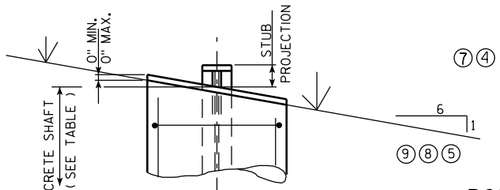




SECTION A-A SECTION B-B



SECTION



SHAFT PLACEMENT

⑦④

⑨⑧⑤

DESIGN DATA

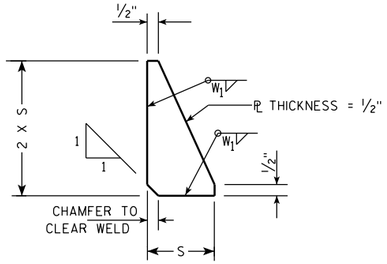
WIND PRESSURE = 75 M.P.H.
WIND COMPONENTS - NORMAL = 1.0 TRANSVERSE = 0.0
ICE LOAD = 3 P.S.F.

GROUP LOADS	PERCENT OF ALLOWABLE STRESS
1. DEAD	100
2. DEAD & WIND	140
3. DEAD, ICE & 1/2 WIND[4]	140 [4]25 P.S.F. MIN.

ALLOWABLE SOIL PRESSURE = 1 1/2 T / SQ. FT.
WIND LOAD WAS APPLIED TO THE AREA OF THE SIGN AND TO THE SUPPORTING MEMBERS.
ICE LOAD WAS APPLIED TO ONE FACE OF THE SIGN AND AROUND THE SURFACE OF THE SUPPORTING MEMBERS.

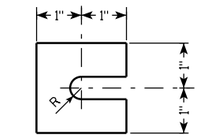
GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.
DESIGN CONFORMS WITH A.A.S.H.T.O. SPECIFICATIONS 1985.
ALL POSTS, POST STUBS & ATTACHMENTS SHALL BE A.S.T.M. A709 GRADE 50.
⑨ THE POST, BASE PLATES, UPPER SIX INCHES OF STUB POST FLANGE SPLICE PLATE AND FUSE PLATE SHALL BE GALVANIZED AFTER FABRICATION.
H.S. BOLTS, WASHERS & NUTS SHALL BE A325 GALVANIZED WHEN POSTS, POST STUBS AND ATTACHMENTS ARE A709 GRADE 50 AND GALVANIZED.



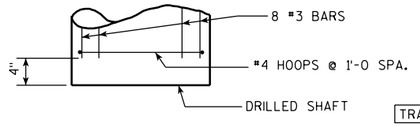
STIFFENER PLATE DETAIL

(SEE TABLE FOR DIMENSIONS)



FURNISH 2 @ .012" ± THICK AND 2 @ .032" ± THICK SHIMS PER POST. SHIMS SHALL BE FABRICATED FROM BRASS SHIM STOCK OR STRIP CONFORMING TO A.S.T.M.- B36.

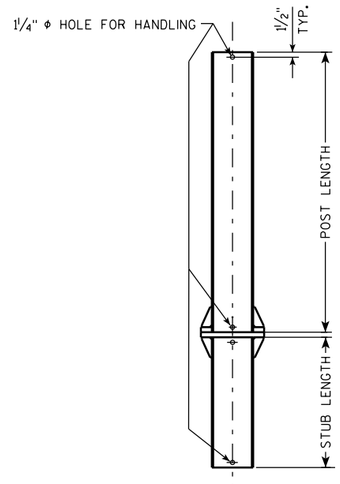
SHIM DETAIL



FOUNDATION DETAIL

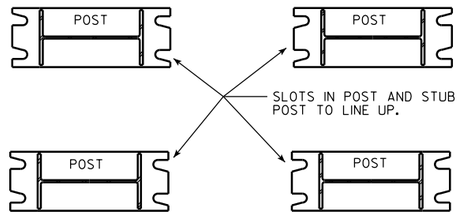
QUANTITIES FOR 1 FOOTING		
	CONC. MASONRY C.Y.	REINF. STEEL LBS.
A	0.6	34
B	0.8	49
C	0.9	50
D	0.9	56
⑦ E	1.0	62

REINF.	TYPE	#3	#4
	A	8 @ 4'-5	5 @ 6'-3
	B	8 @ 6'-5	7 @ 6'-3
	C	8 @ 6'-11	7 @ 6'-3
	D	8 @ 7'-5	8 @ 6'-3
⑦	E	8 @ 7'-11	9 @ 6'-3



POST DETAIL

TRAFFIC →



POST ON THE RIGHT POST ON THE LEFT

POST SLOT ORIENTATION ⑦

BOLTING PROCEDURE - BASE CONNECTION

1. ASSEMBLE SIGN POST TO STUB POST WITH BOLTS AND ONE OF THE FLAT WASHERS ON EACH BOLT BETW. PLATES.
2. SHIM AS REQ'D. TO PLUMB POST.
3. PRIOR TO BOLT TIGHTENING LUBRICATE BASE CONNECTION BOLTS WITH BEESWAX OR OTHER HIGH-WAX LUBRICANT.
4. TIGHTEN ALL BOLTS THE MAXIMUM POSSIBLE WITH 12" OR 15" WRENCH TO BED WASHERS & SHIMS AND TO CLEAN BOLT THREADS, THEN LOOSEN EACH BOLT IN TURN AND RETIGHTEN IN A SYSTEMATIC ORDER TO THE PRESCRIBED TORQUE. (SEE TABLE)
5. BURR THREADS AT JUNCTION WITH NUT USING A CENTER PUNCH TO PREVENT NUT LOOSENING.

NOTE:
TIGHTEN THE HIGH STRENGTH BOLTS TO THE TORQUE SHOWN. DO NOT OVERTIGHTEN.

	BASE CONNECTION DATA TABLE													FOUNDATION DATA				②
L	X	TYPE	DIMENSION / POST SIZE	BOLT SIZE & TORQUE	A	B	C	D	E	T_1	T_4	W_1	R	S	STUB LENGTH	STUB PROJECTION	SHAFT DIAMETER	SHAFT LENGTH	K
3 3/4	④	A	W10"X12.0 #/FT.	3/4" Φ @ 75#-FT.	5 1/4"	1'-0 3/8	7/8"	3 1/2"	7/8"	1"	3/16"	5/16"	13/32"	2 1/8"	3'-6	3"	2'-0 Φ	5'-0	76.0# ④
4 3/4	④	B	W12"X16.0 #/FT.	7/8" Φ @ 85#-FT.	5 1/2"	1'-4 1/4	1"	3 1/2"	1"	1 1/4"	1/4"	5/16"	15/32"	3"	5'-6	3"	2'-0 Φ	7'-0	146.5# ④
5		C	W12"X19.0 #/FT.	7/8" Φ @ 85#-FT.	5 1/2"	1'-4 1/4	1"	3 1/2"	1"	1 1/2"	5/16"	5/16"	15/32"	3"	6'-0	3"	2'-0 Φ	7'-6	182.1#
5		D	W12"X22.0 #/FT.	7/8" Φ @ 85#-FT.	5 1/2"	1'-4 1/4	1"	3 1/2"	1"	1 1/2"	3/8"	5/16"	15/32"	3"	6'-6	3"	2'-0 Φ	8'-0	210.5#
5	③	E	W12"X26.0 #/FT.	1" Φ @ 90#-FT.	7"	1'-4 1/4	1 1/4"	4"	1 1/2"	1 1/2"	3/8"	5/16"	11/32"	3"	7'-0	3"	2'-0 Φ	8'-6	293.0# ③

① ⑥ ①

STRUCTURAL CARBON STEEL PAY WTS. (1 POST) = K+ (POST LENGTH X POST WT.)
" K " INCLUDES STUB, BASE PLATES, STIFFS., BOLTS, AND WASHERS.

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 6/30/14 PLATE NO. A3-1.15

NO.	DATE	REVISION
⑩	1-21-14	LUBRICATION OF BASE BOLTS
⑨	4-26-11	REMOVE NON-GALVANIZED
⑧	10-30-96	NOT GALVANIZED/GALVANIZED
⑦	10-30-92	QUANT., A588 EXCEPT., ADD SLOT VIEW
⑥	8-24-87	BASE CONN. WELD
⑤	10-13-81	BASE CONN. WELD & FUSE PL WASHERS
④	10-19-79	POST A & B, A572 GR. 50, & K
②	11-28-78	"K" ③ 4-23-79 TYPE "E"
①	5-4-78	T_1 , T_2 & W_1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

TYPE A, B, C, D, & E

CONST. SPEC. 2011	DRAWN BY JPH	PLANS CK'D.

FTG. & SIGN SUPPORT DETAILS GROUND MOUNT BREAK-AWAY SIGNS

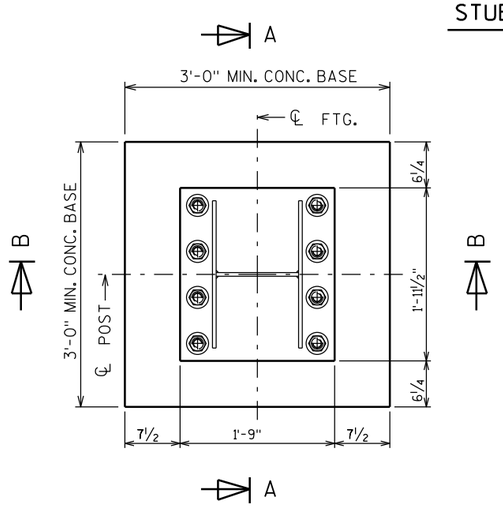
SHEET 381

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

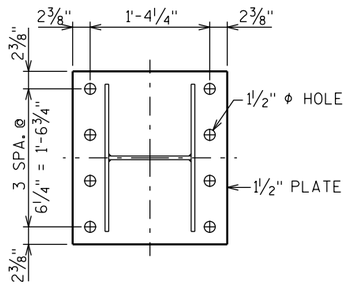
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A31.DGN PLOT DATE : 30-JUN-2014 10:43 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 5.351066:1.000000

WISDOT/CADDS SHEET 42

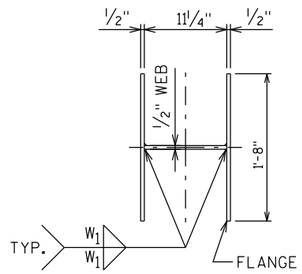
STUB AND MASONRY ANCHOR DETAILS



STUB SECTION



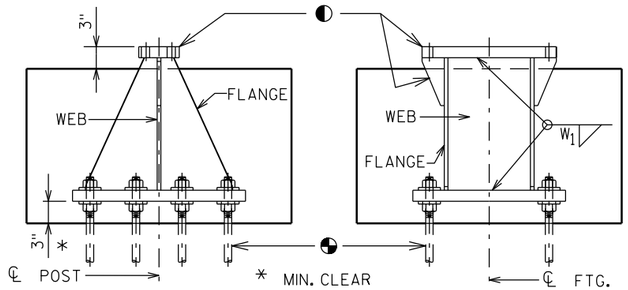
BASE PLATE



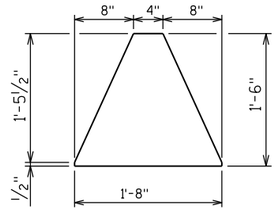
STUB

◐ SEE PLATE NO. A3-1 FOR DETAILS

◒ MASONRY ANCHORS TYPE S 1¼-INCHES (ADHESIVE). ALLOWABLE PULL OUT CAPACITY 14,995 KIPS. EMBED 1'-3" IN ROCK.



SECTION A SECTION B



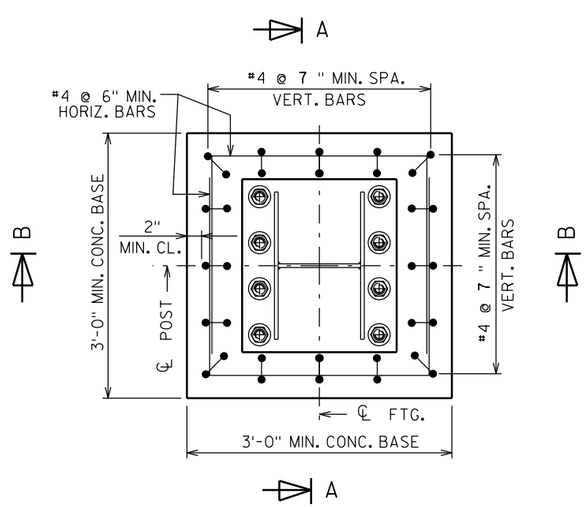
FLANGE

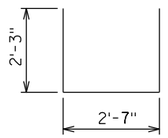
GENERAL NOTES

1. Quantities per Base:
   - REINFORCING BAR STEEL = 62 LBS
   - CONCRETE = 0.6 C.Y.
   - STEEL WEIGHT = 335 LBS
2. All materials, except anchor rod, nuts and washers, are to be A.S.T.M. A709 grade 50. All materials to be galvanized after fabrication.
3. If the contractor encounters rock before reaching the footing depth, per the A3-1 Sign Detail, determine the pull-out capacity of a test adhesive anchor installed in the rock. If the test result equals or exceeds the pull-out capacity of 14,995 KIPS, the contractor may install the breakaway stub for rock, according to this detail.

CONCRETE BASE AND REINFORCING STEEL DETAILS

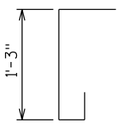
CONCRETE BASE SECTION





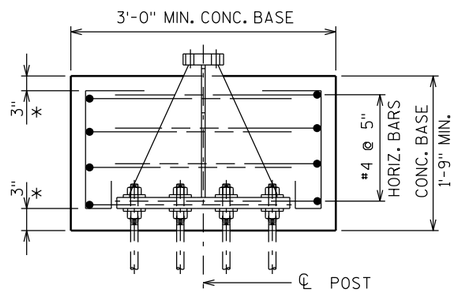
HORIZONTAL BAR

8 BARS @ 6'-11" LENGTH



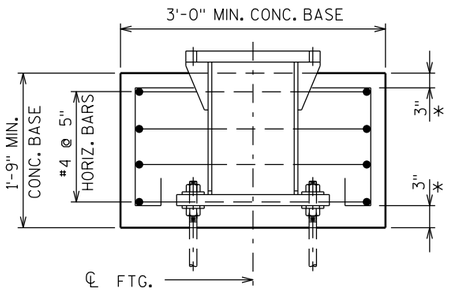
VERTICAL BARS

16 BARS @ 2'-4" LENGTH
MAY BE PLACED IN SKEW
FOR CLEARANCE NEED



SECTION A

* MIN. CLEAR



SECTION B

ALTERNATE BREAK-AWAY BASE ON ROCK
A3-1M

WISCONSIN DEPT OF TRANSPORTATION

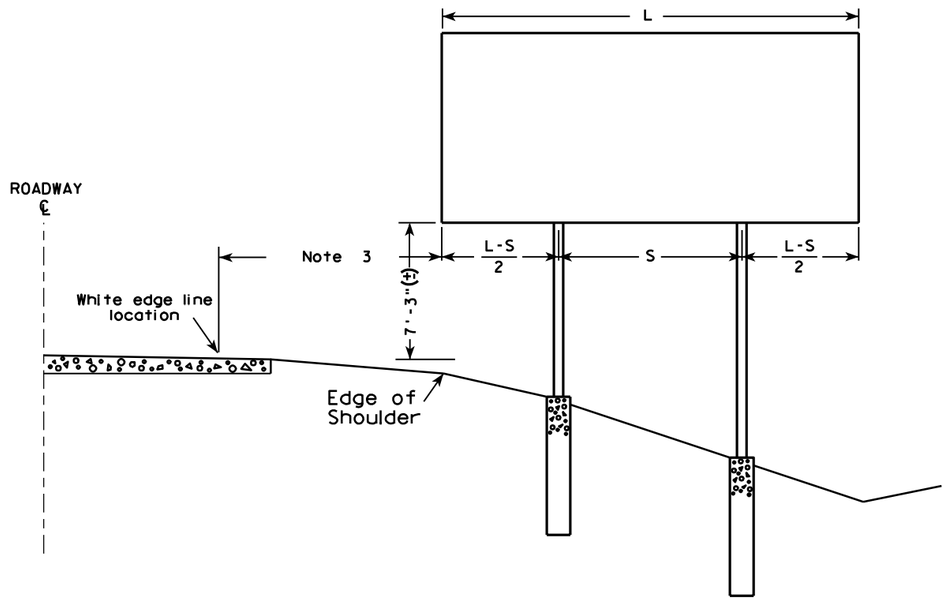
APPROVED Matthew R Rauch for State Traffic Engineer

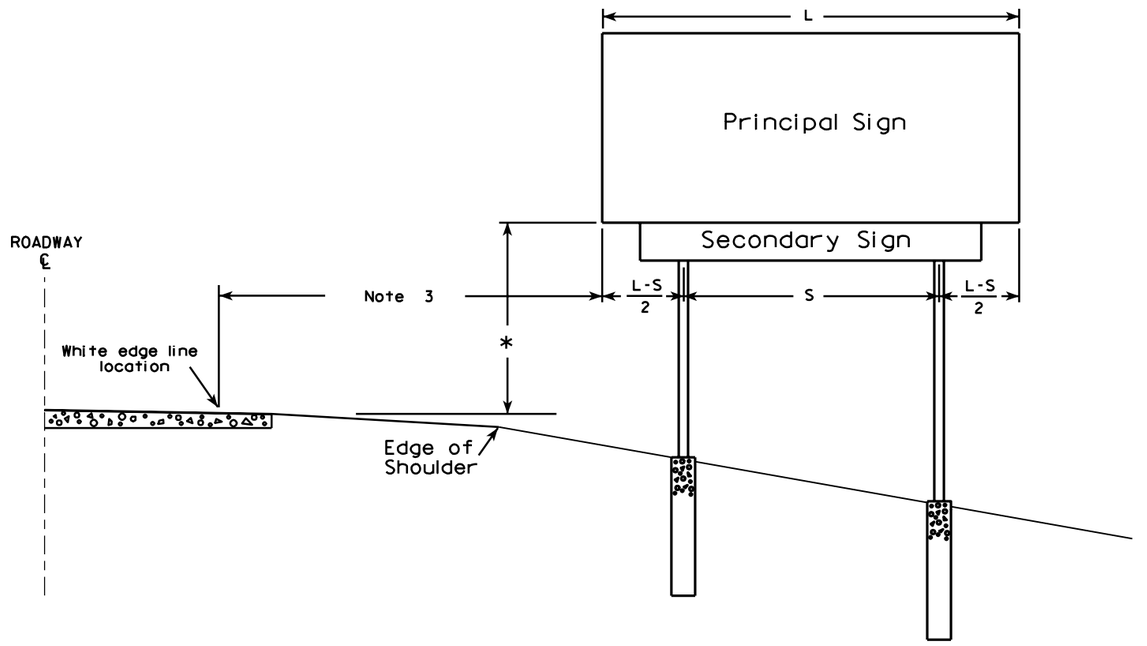
DATE 2/06/2014 PLAN A3-1M.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A31M.DGN PLOT DATE : 10-MAR-2014 15:16 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 1.556674:1.000000

WISDOT/CADDS SHEET 42





GENERAL NOTES

1. For a 2 post installation, S equals 3L/5, but shall not be less than 9 ft.
2. For a 3 post installation, S equals 5L/7, but shall not be less than 18 ft., and the space between any two posts shall not be less than 9 ft.
3. Unless noted in the plan, the sign offset distance shall be a minimum of 17'-6", desirable 30'-0".
4. The (±) tolerance shown on this sheet is 3 in.
5. The vertical sign height clearance detailed is measured from the bottom of the sign to the near edge of pavement.
6. Post lengths shown in the miscellaneous quantities are estimated lengths. The contractor shall verify post lengths at the time of final grading.
7. Refer to the Traffic Guidelines Manual for further guidance on minimum vertical clearance requirements.

* Clearance is 8'-3"(±) when the secondary sign is 3 ft. or less in height. For secondary signs larger than 3 ft., the clearance to the bottom of the secondary sign shall be 5'-3"(±).

7

7

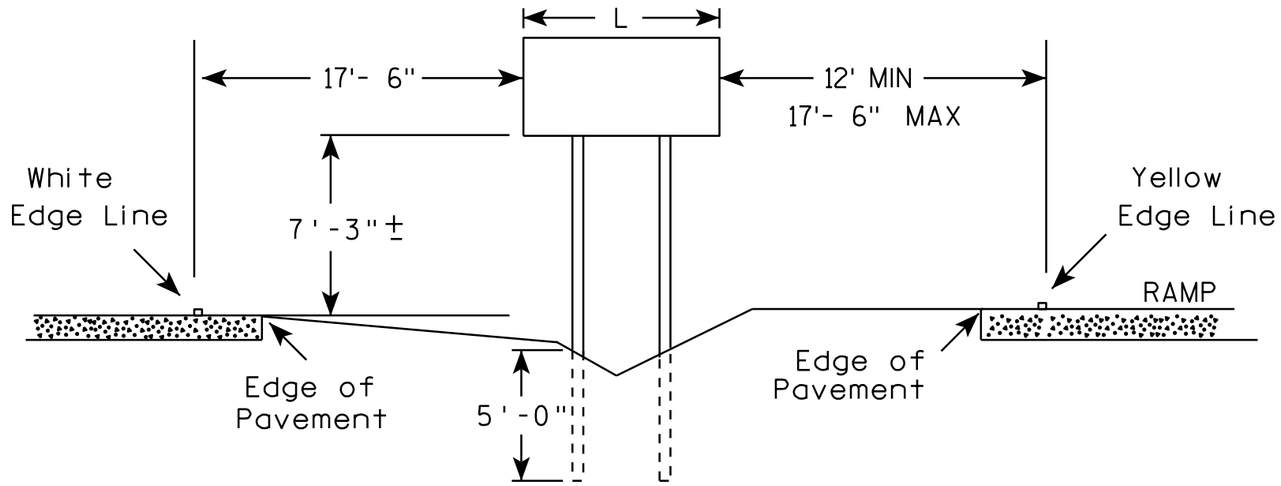
TYPICAL INSTALLATION
OF TYPE I SIGNS

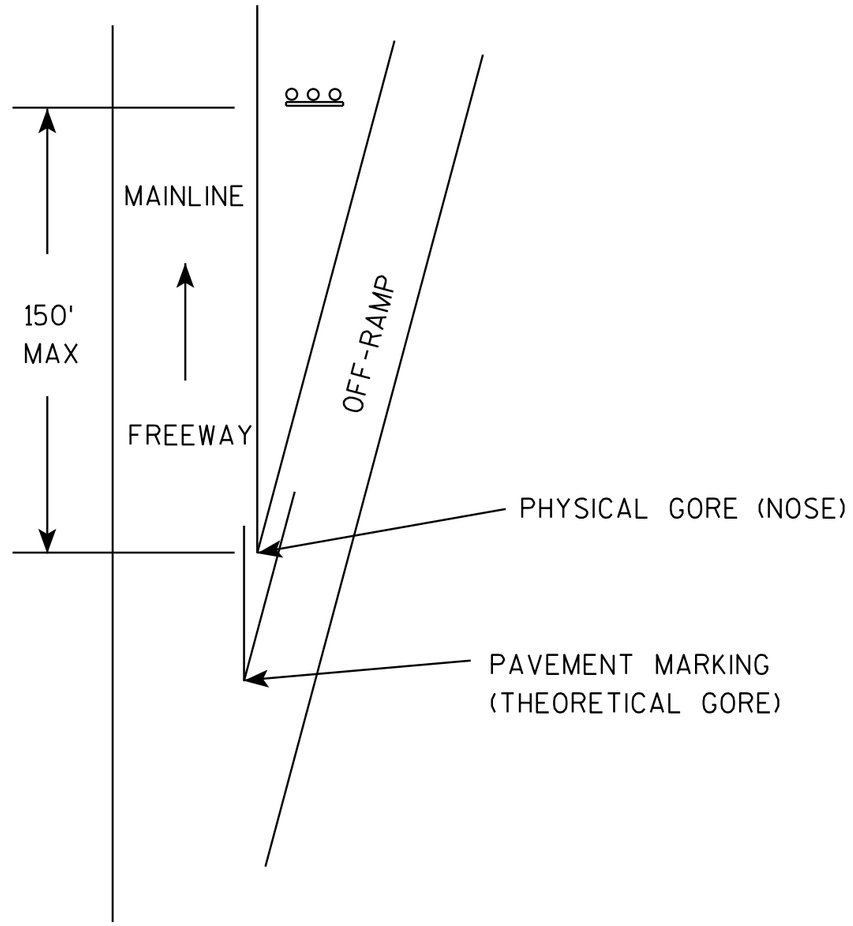
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/02/08 PLATE NO. A4-1.9

PROJECT NO:				SHEET NO: 383	E





GENERAL NOTES

1. The 150 foot distance from the physical gore (where pavement ends) will normally provide the offsets as shown.
2. If roadway geometrics permit, the sign may be closer than the 150 foot distance as long as the offsets are maintained.
3. At no time shall the location be greater than 150 feet. If the normal offsets cannot be maintained, they can be reduced to 6 feet from the edge of the paved shoulder (both freeway and ramp).
4. The offset from edge of sign to the yellow edge line on the ramp is shown as a minimum of 12 feet and a maximum of 17 feet, 6 inches. Preference is adhering to the maximum rather than the minimum dimension.
5. When L is equal to or exceeds 10 feet, use 3 posts as per A4-4.
6. The (∓) tolerance for the mounting height is 3 inches.

TYPICAL INSTALLATION OF TYPE II SIGNS ON WOOD POSTS IN GORE

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

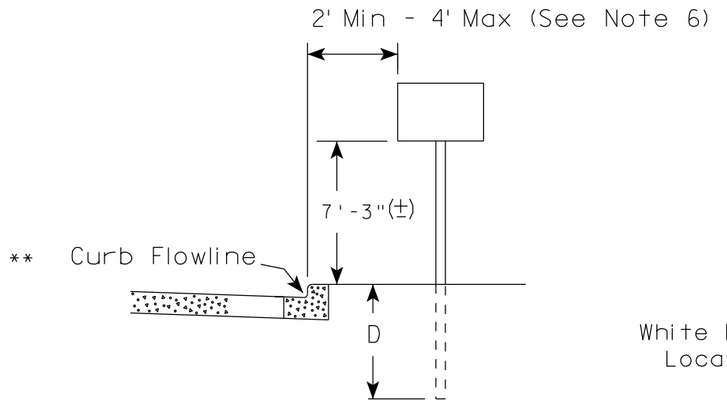
DATE 2/06/14 PLATE A4-2.3

PROJECT NO: | SHEET NO: E

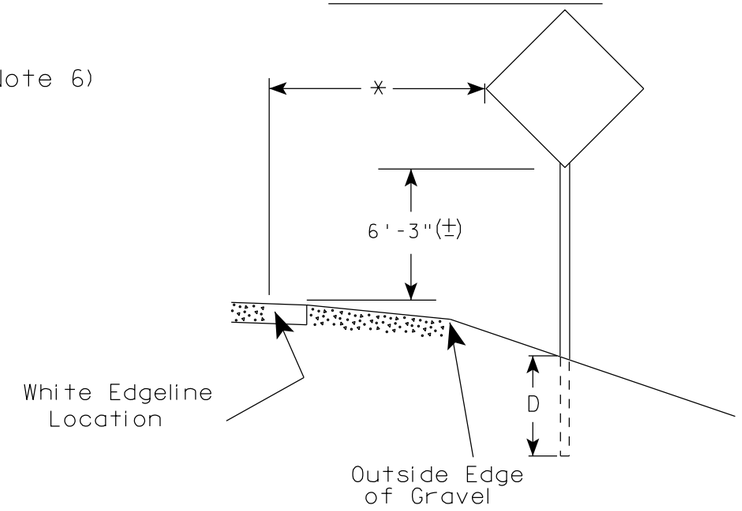
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A42.DGN PLOT DATE : 06-FEB-2014 12:36 PLOT BY : mscsja

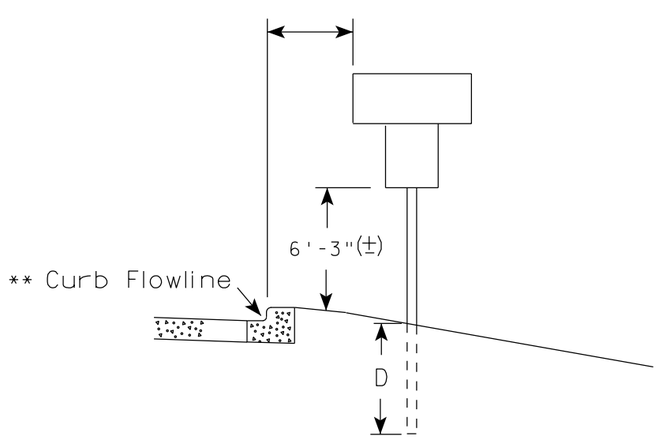
WISDOT/CADDS SHEET 42

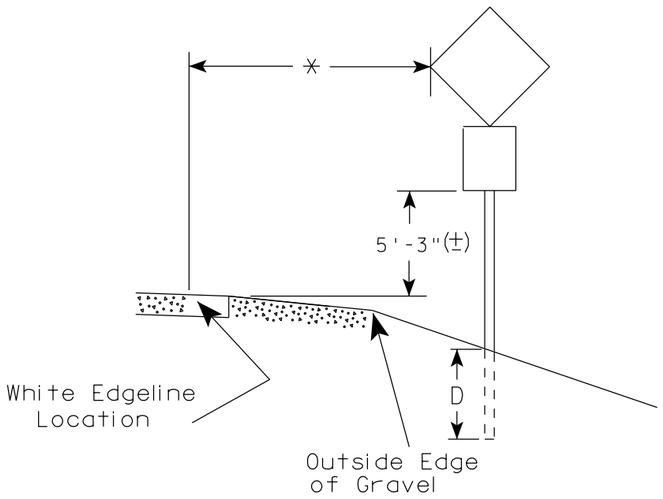
URBAN AREA



RURAL AREA (See Note 2)







GENERAL NOTES

1. Signs wider than 4 feet, 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on barrier wall, see A4-10 sign plate.
3. For expressways and freeways, mounting height is 7'- 3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
4. Minimum mounting height for J assemblies (A2-1S) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
5. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±).
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. The (±) tolerance for mounting height is 3 inches.
8. Folding signs shall be mounted at a height of 5'-3" (±) or as directd by the Engineer.
9. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±).

POST EMBEDMENT DEPTH

Area of Sign Installation (Sq.Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

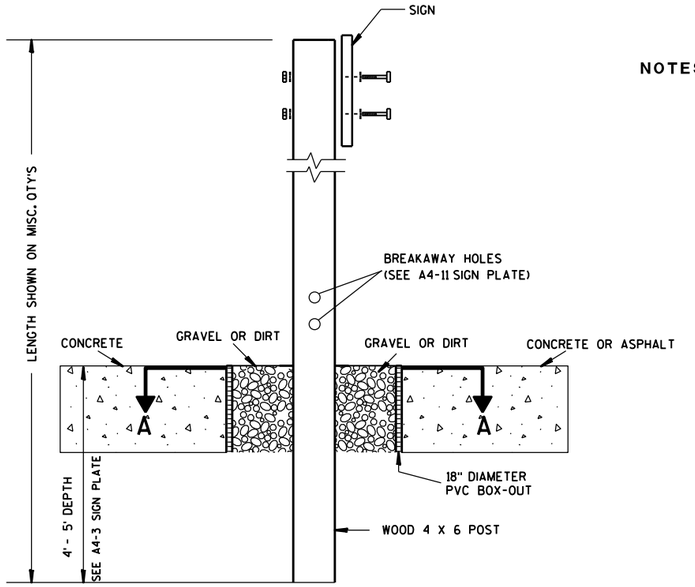
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/12/14 PLATE NO. A4-3.19

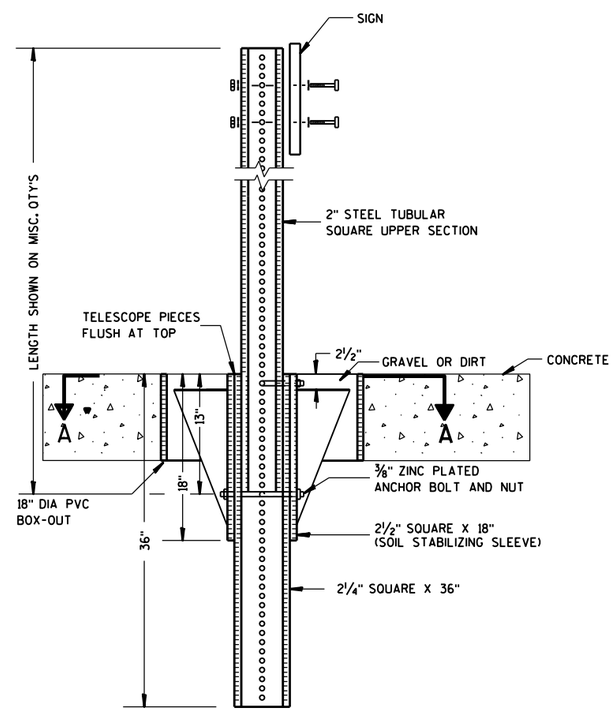
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



ELEVATION VIEW

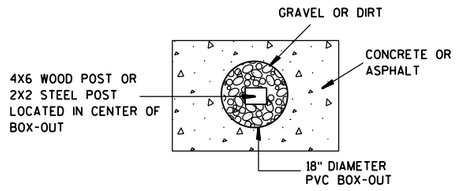
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

NOTES:
1. ALL MATERIAL TO BE APPROVED BY ENGINEER PRIOR TO INSTALLATION
2. SEE SIGN PLATE A4-8 FOR SIGN HARDWARE REQUIREMENTS
3. 18 INCH X 18 INCH SQUARE BOX-OUTS MAY BE USED FOR INSTALLATIONS IN EXISTING CONCRETE OR ASPHALT LOCATIONS.



ELEVATION VIEW

DETAIL OF STEEL 2 X 2 SIGN POST IN BOX-OUT



PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST BOX-OUTS A4-3B

WISCONSIN DEPT OF TRANSPORTATION

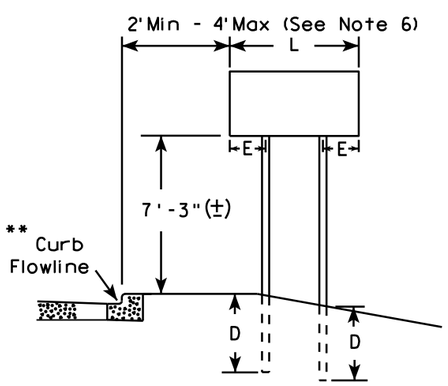
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/27/14 PLATE NO. A4-3B.1

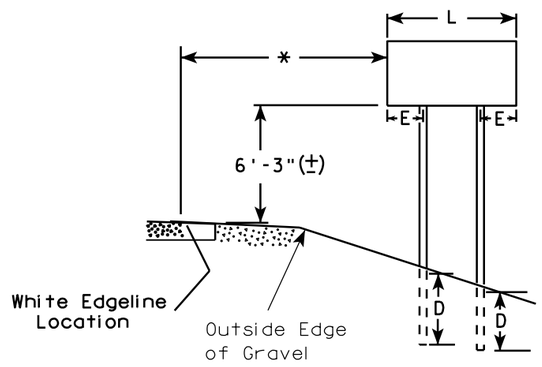
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

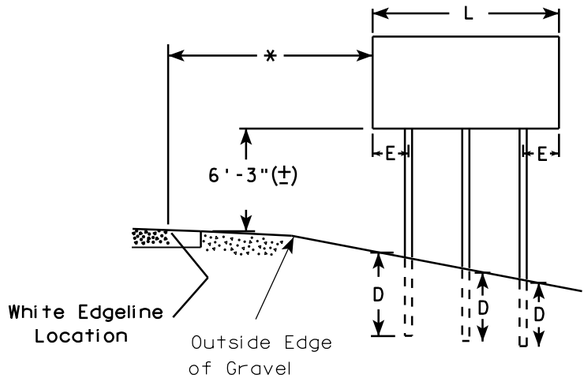
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A43B.DGN PLOT DATE : 27-JAN-2014 09:48 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000 WISDOT/CADDS SHEET 42

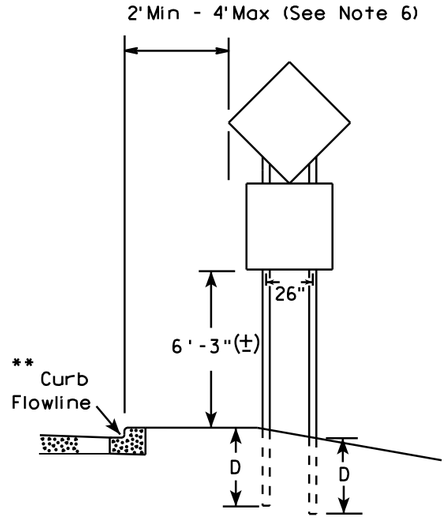
URBAN AREA



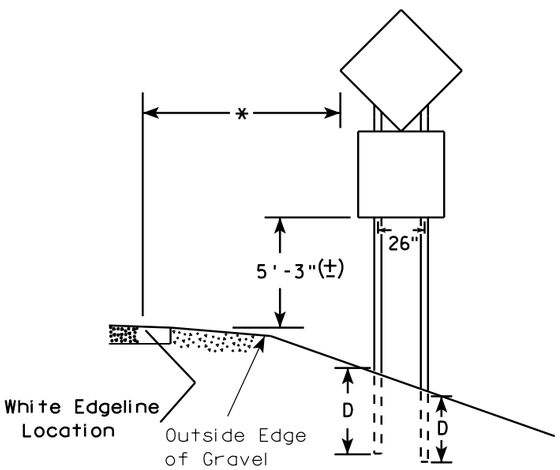
RURAL AREA (See Note 3)







48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

GENERAL NOTES

1. For 3 or 4 post installations, individual post spacing shall be greater than 3'-6".
2. See tables below for required number of posts.
3. For expressways and freeways, mounting height is 7'-3" (±) or 6'-3" (±) depending upon existence of sub-sign.
4. The (±) tolerance for mounting height is 3 inches.
5. Minimum mounting height for J assemblies (A2-1S) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. Folding signs shall be mounted at a height of 5'-3" (±) or as directed by the engineer.
8. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4"-3" (±).

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

*** See A4-3 sign plate for signs 4' or less in width or less than 20 S.F. in area.

SIGN SHAPE OTHER THAN DIAMOND (TWO POSTS REQUIRED)	
L	E
Greater than 48" Less than 60"	12"
60" to 120"	L/5

***

SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED)	
L	E
Greater than 120" less than 168"	12"

SIGN SHAPE OTHER THAN DIAMOND (FOUR POSTS REQUIRED)	
L	E
168" and greater	12"

POST EMBEDMENT DEPTH

Area of Sign Installation (Sq. Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

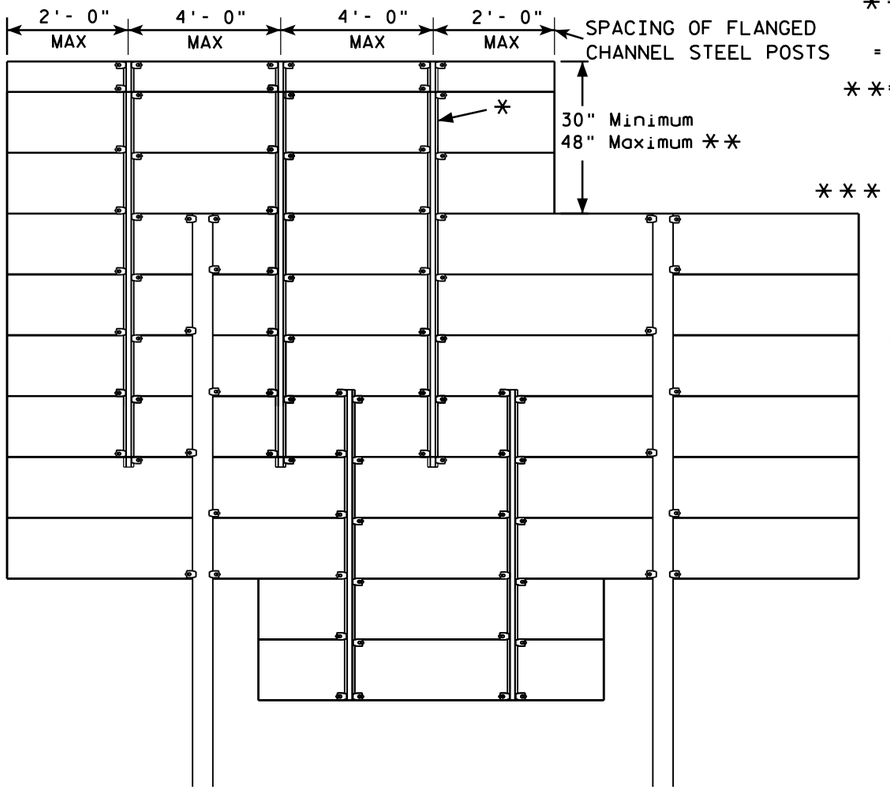
DATE 11/12/14 PLATE NO. A4-4 13

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A44.DGN PLOT DATE : 12-NOV-2014 14:01 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 107.021305:1.000000

WISDOT/CADDS SHEET 42

GROUND MOUNTED SIGN

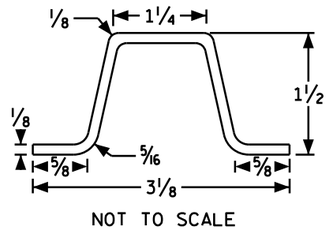


*=2.00 lb/ft FLANGED CHANNEL, MIN. YIELD STRENGTH = 60,000 PSI (GRADE 60) GALVANIZED

**=FOR 48" HEIGHT PANELS ON OVERHEAD STRUCTURES, ENTIRE SIGN SHALL BE CENTERED VERTICALLY ABOUT THE DEPTH OF THE TRUSS.

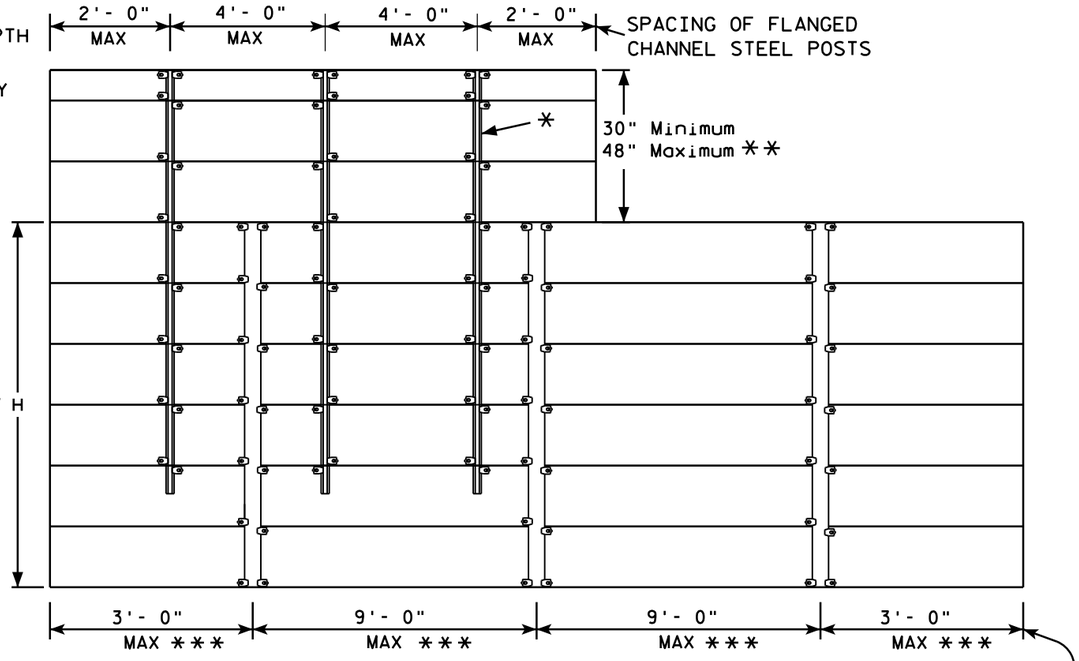
*** THESE SPACING DISTANCES SHALL ONLY BE USED WHEN THE MAIN SIGN HAS A MAXIMUM HEIGHT (DIMENSION H) OF 16 FT OR LESS. FOR SIGNS WITH A HEIGHT OF GREATER THAN 16 FT, STRUCTURAL CALCULATIONS SHALL BE PERFORMED.

FLANGE CHANNEL DETAIL



NOT TO SCALE

SIGN BRIDGE MOUNTED SIGN



SPACING OF ALUMINUM SIGN SUPPORTS
5" X 3.5" X 3.7 LBS./ft.

GENERAL NOTES

1. Flanged channel steel posts shall conform to size and material above, and shall be considered as incidental to other items in the contract.
2. Number of Flanged channel steel supports varies with length of panel and shall be spaced as shown:

   PANEL LENGTH 8'-0" OR LESS = 2 CHANNELS
   PANEL LENGTH 9'- 0" - 12'- 0" = 3 CHANNELS
   PANEL LENGTH 13'- 0" OR MORE = 4 CHANNELS

   If the flanged channel steel posts can not be horizontally spaced as shown, they can be moved so as to securely hold the sign.
3. The EXIT NUMBER PANEL shall normally be positioned above the guide sign aligned with the right edge of the guide sign. If the guide sign indicates a left exit, the EXIT NUMBER PANEL shall be aligned with the left edge of the guide sign.
4. If the bolt holes in the top panel (EXIT NUMBER), or sub panel (NEXT EXIT) line up with holes in main sign panel, stitch bolts shall be used in addition to the channels.
5. Provide post clips for each sign as shown. (Please note the differences between a ground mounted versus Sign bridge mounted sign as far as number of clips required on the main supports or beams)
6. Structural steel sign supports shall extend to the top of the main signs, as shown on the above details.

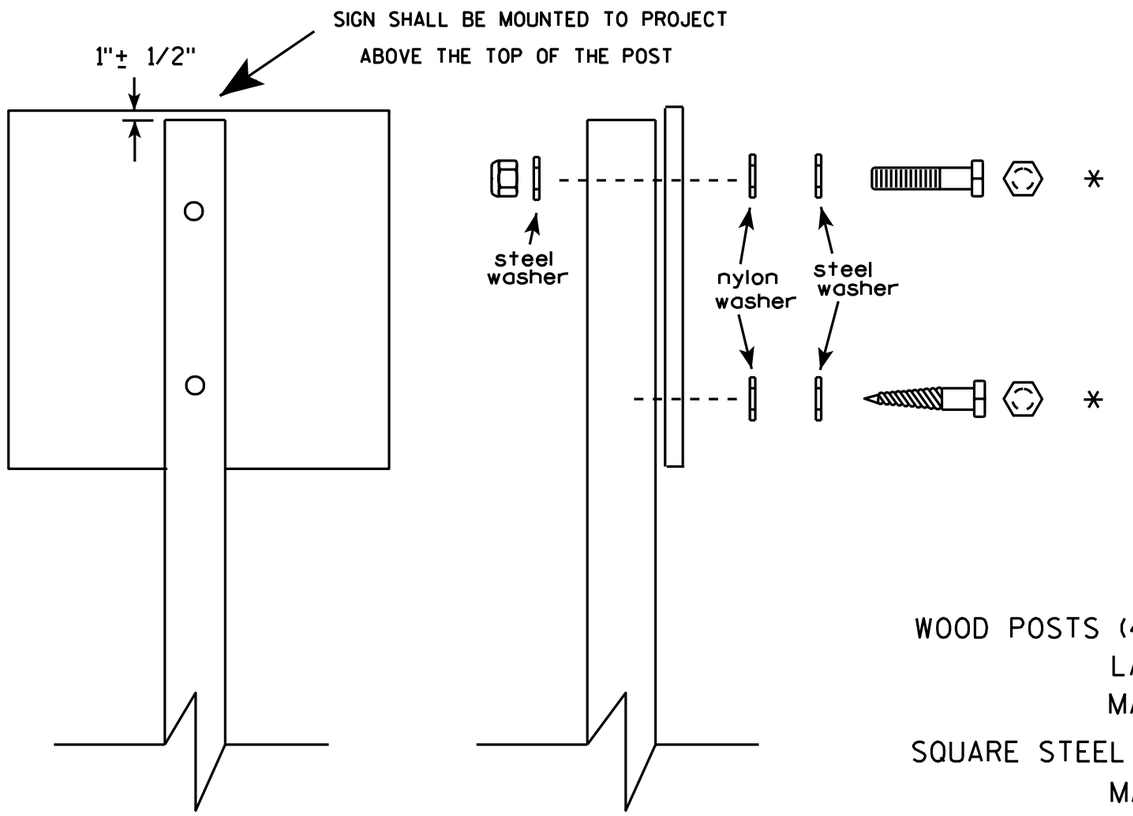
ATTACHMENT OF GUIDE SIGNS TO SUPPORTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/05/13 PLAT 388 A4-6.12

PROJECT NO: | SHEET NO: E



Nuts, bolts and lags used for mounting signs shall have hexagonal heads and shall be either :

a. Hot dip galvanized in accordance with ASTM Designation: A 153, Class D, or SC 3

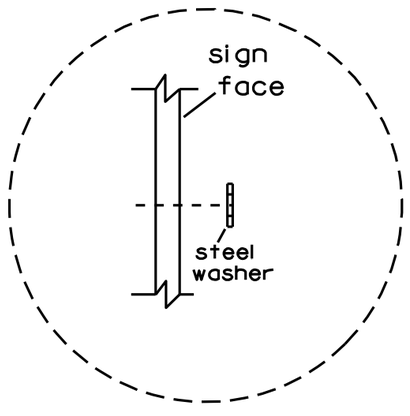
b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

Threads on bolts and nuts shall be manufactured with sufficient allowance for the cadmium plate or galvanized coating to permit the nuts to run freely on the bolts.

WOOD POSTS (4" x 4" or 4" x 6")
LAG SCREWS - 3/8" X 3"
MACHINE BOLTS - 5/16" X 6-1/2" or 7" Length w/ nuts

SQUARE STEEL POSTS (2" x 2")
MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts
RIVETS - 9/32 " (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL
O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH

WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON for all Type H signs.



Washer Placement when Sign Has Other Than Type H or Type F Face

* Two different fastening systems are shown for illustration purposes. On any individual sign, either one or the other system shall be used. Actual number of fasteners per sign varies with the sign area, but normally there are two. For a single post installation, all signs greater than 9 sq. ft. require the use of 3 fasteners.

ATTACHMENT OF SIGNS TO POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/23/10 PLATE NO. A4-8.7

7

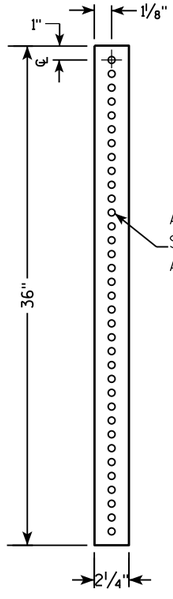
7

PROJECT NO:

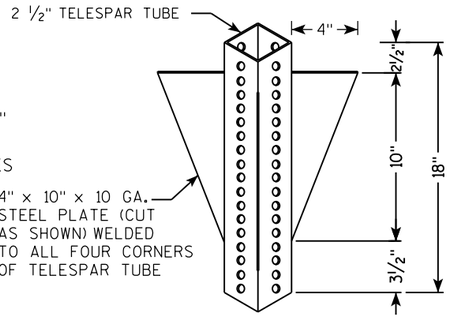
SHEET NO: 389 E

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

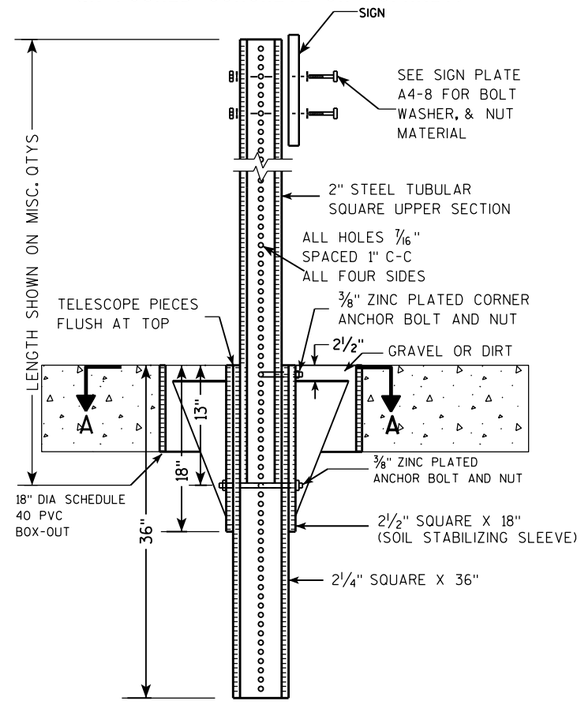
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



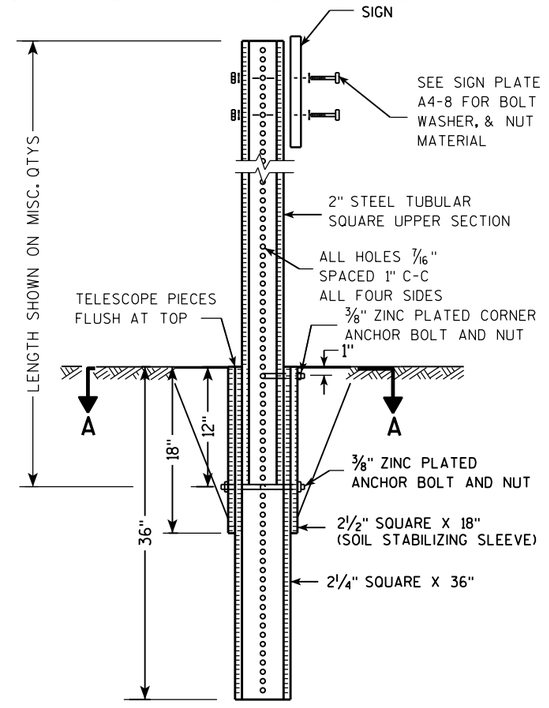
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

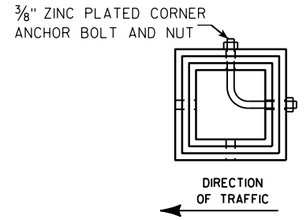


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



DETAIL OF TUBULAR STEEL SIGN POST
(IN LOCATIONS OTHER THAN POURED CONCRETE OR ASPHALT)





SECTION A-A

Area of Sign Installation (Sq. Ft.)	Number of Required Posts
9 or less	1
Greater than 9 less than or equal to 18	2
Greater than 18 less than or equal to 27	3

Signs wider than 3 feet or larger than 9 sq. ft shall be mounted on multiple posts (see above table).

TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

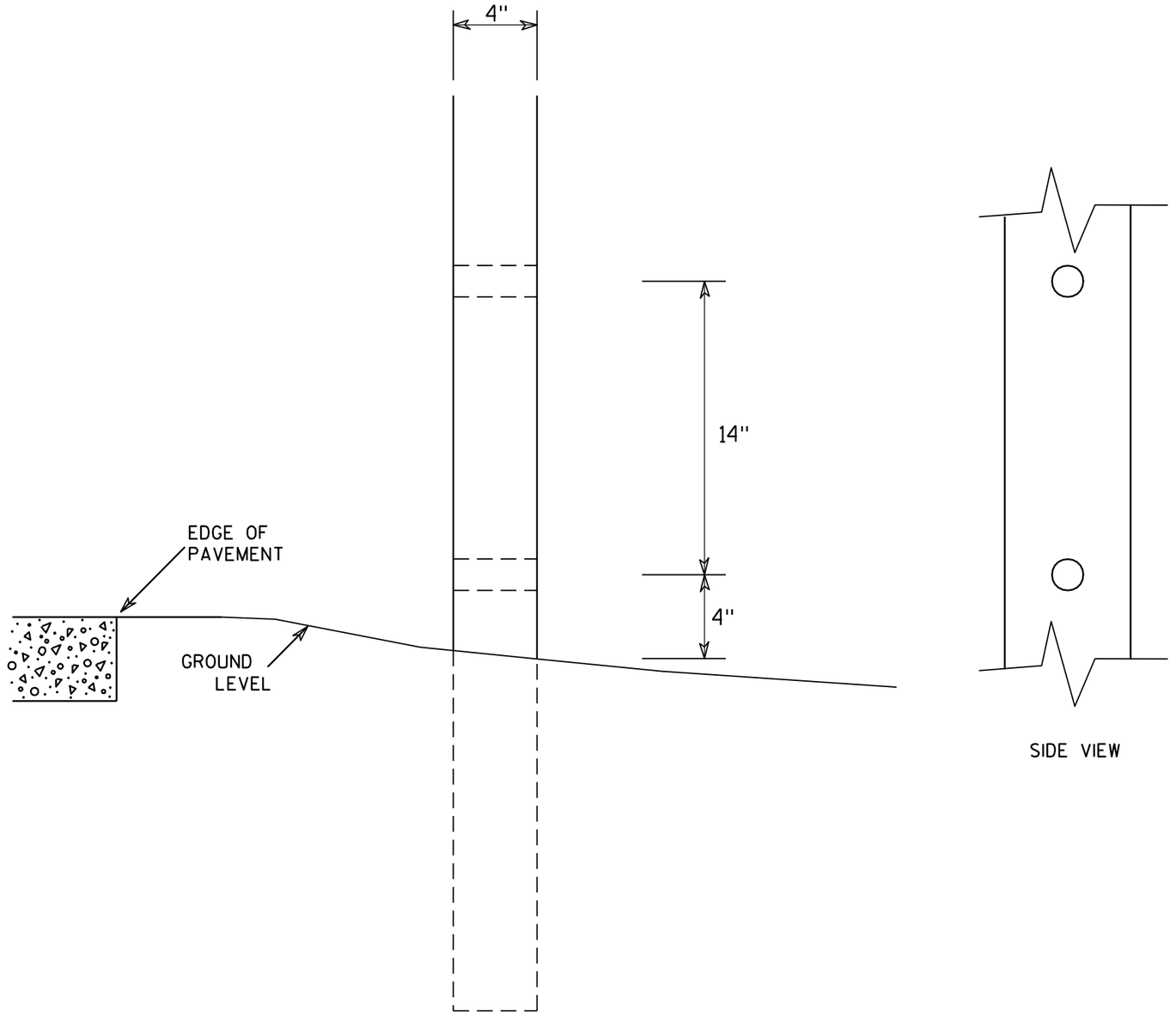
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE 390 A4-9.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A49.DGN PLOT DATE : 05-FEB-2015 17:09 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000

WISDOT/CADDS SHEET 42



SIDE VIEW

GENERAL NOTES

1. All 4 x 6 Wood Posts shall be modified by having two 1½" diameter holes drilled perpendicular to the roadway centerline.

4 X 6 WOOD POST MODIFICATIONS

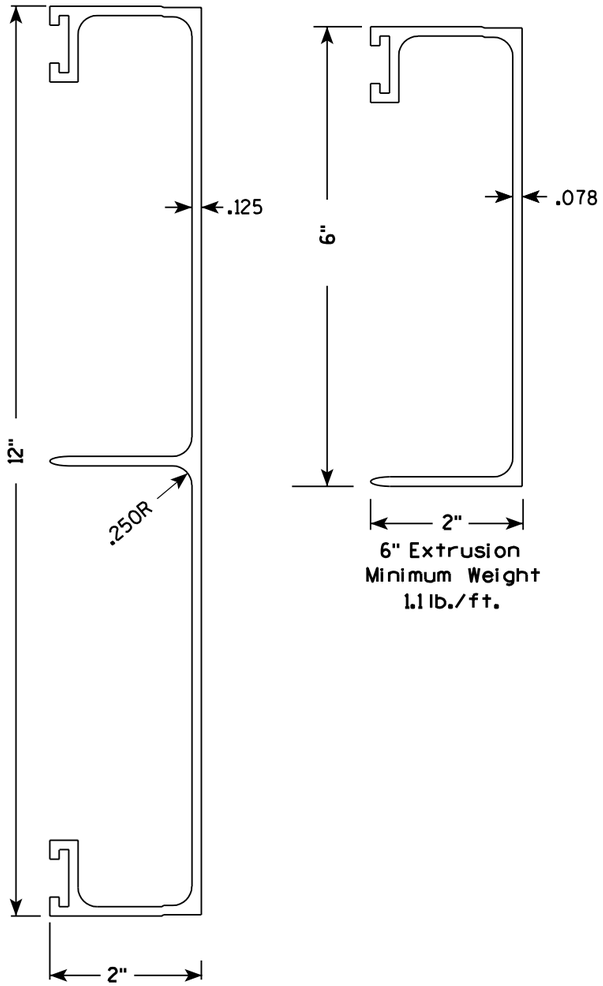
WISCONSIN DEPT OF TRANSPORTATION

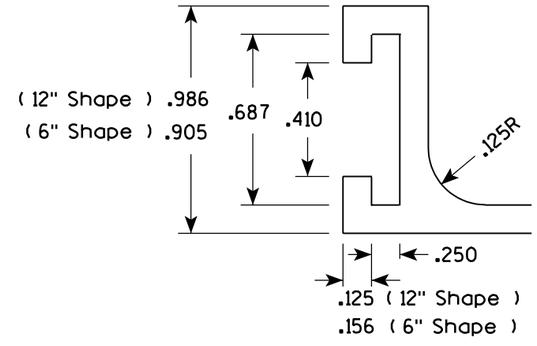
APPROVED Chester J Spang for State Traffic Engineer

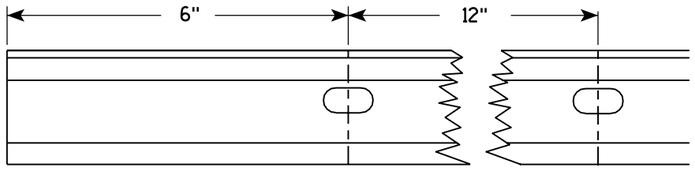
DATE 3/27/97 PLATE NO. A4-11.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 391	E

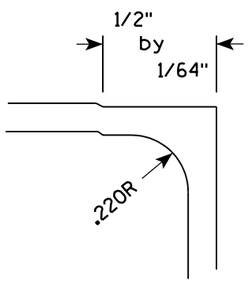
Extruded Shape







Punch 7/16" x 7/8" oval holes beginning 6" in from end of extrusion 12" CC on both edges of 6" and 12" panels.

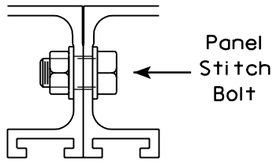


Hardware

STITCH BOLT, WASHER & NUT

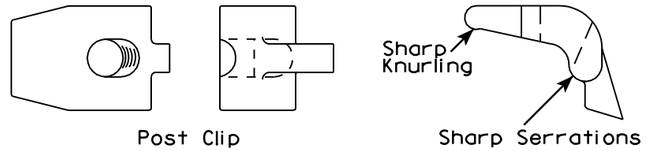
The hardware includes:

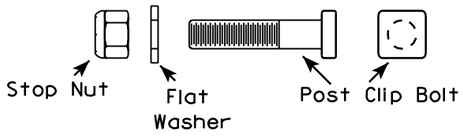
3/8 " - 16 X 3/4 " Economy Bolt 2024-T4 alloy
3/8 " - Stainless steel stop nut
3/8" X .064 Flat Washers, Alclad 2024-T4 alloy



POST CLIP, POST CLIP BOLT, WASHER & NUT

Post Clip shall be Alum. Alloy 356-T6
Post Clip Bolt shall be Stainless Steel.
Flat washer shall be 3/8" X .091, Stainless Steel.
Stop nut shall be stainless steel.





NOTES

1. The contractor may select any brand of extrusion that conforms to the illustrations or meets with the approval of the engineer, but all extrusions used on this contract shall be of the same brand.
2. Panel Stitch Bolts shall be used to assemble adjacent panels. Maximum stitch bolt spacing shall be 24" C-C, and a minimum of 4 bolts shall be used to connect any two extrusions.
3. Post Clips shall be used to attach the sign panel to the sign support.

ALUMINUM EXTRUSIONS FOR TYPE I SIGNS

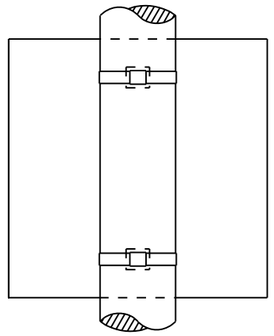
WISCONSIN DEPT OF TRANSPORTATION

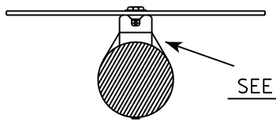
APPROVED Chester J Spang
for State Traffic Engineer

DATE 11/18/99 PLATE NO. A5-2.9

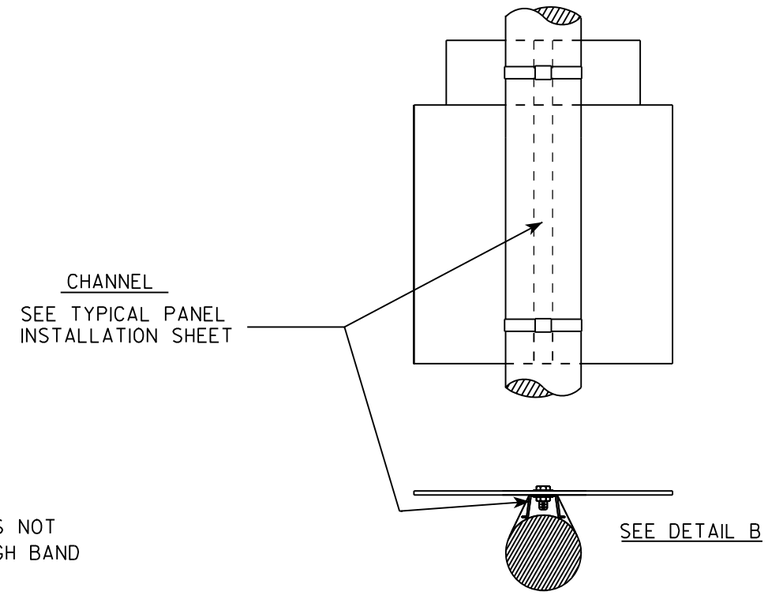
BANDING

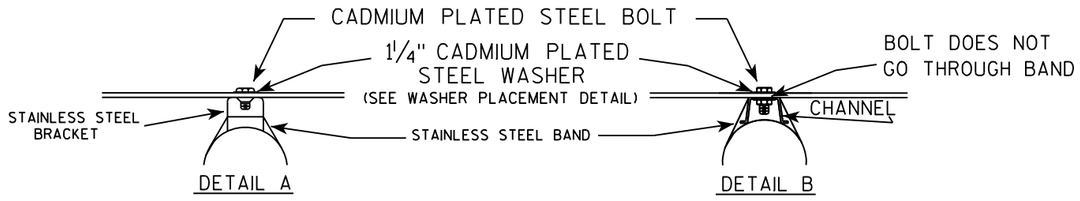
SINGLE SIGN



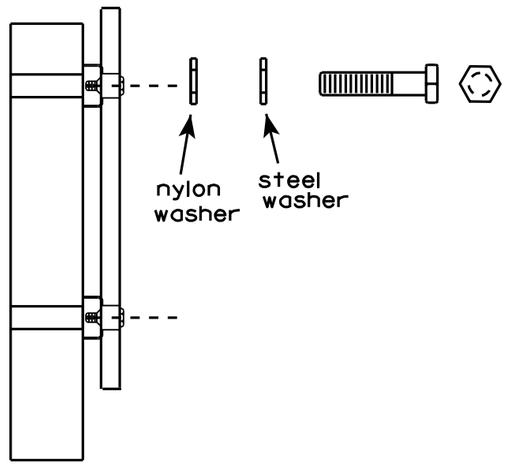


"J" ASSEMBLY





WASHER PLACEMENT



WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

GENERAL NOTES

1. Any sign over 3 feet in width shall use the V-Block banding method. See A5-10 standard plate.
2. Signs 3 feet or greater in height shall have three bracket bands installed. Signs less than 3 feet in height shall have two bracket bands installed.
3. Banding and assembly bracket shall be stainless steel. All bands shall be 3/4" in width and 0.025" thickness.

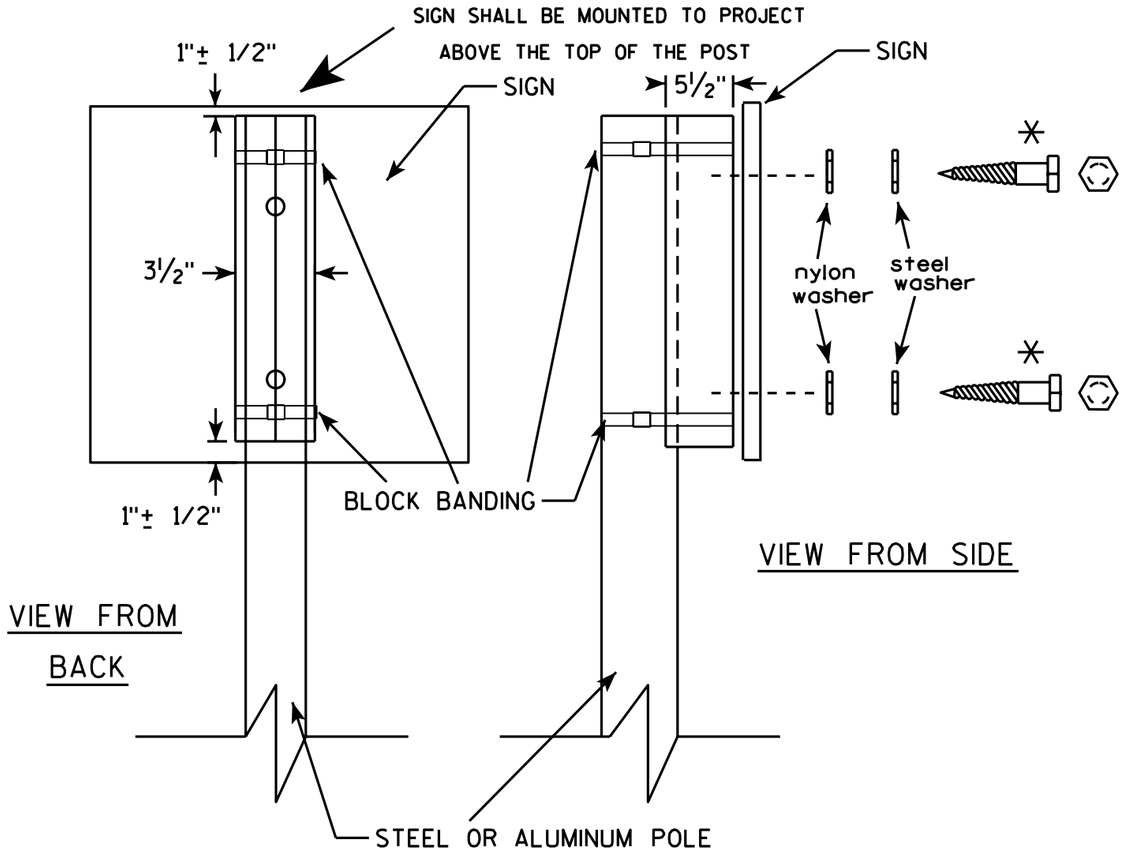
STANDARD SIGN
SIGN BANDING DETAILS

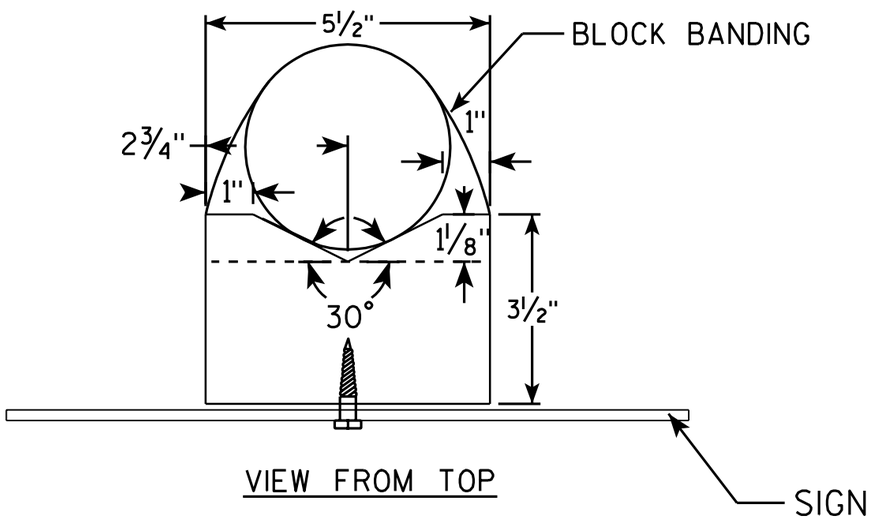
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/16/13 PLATE NO. A5-9.3

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 393	E





GENERAL NOTES

1. WOOD 4"X6" POST MATERIAL SHALL CONFORM TO 507.2.2 OF THE WisDOT STANDARD SPECIFICATIONS
2. BLOCK BANDING AND CLIPS SHALL BE STAINLESS STEEL, ¾" WIDTH AND 0.025" THICKNESS
3. SIGNS 3' OR GREATER IN HEIGHT SHALL UTILIZE 3 BLOCK BANDS. SIGNS UNDER 3' IN HEIGHT SHALL UTILIZE 2 BLOCK BANDS
4. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH THE SIGN AREA, BUT NORNALLY THERE ARE TWO. FOR SIGNS GREATER THAN 9 S.F. 3 FASTENERS SHALL BE USED.
5. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
   a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D, or
   b. Cadmium plated in accordance with ASTM Designation : B 766 TYPE 3, Class 12, or
   c. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.
6. ALL BOLTS SHALL HAVE HEXAGONAL HEADS.
7. STEEL WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X 1/16"
8. NYLON WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X .080 FOR TYPE H OR TYPE F FACE SIGN

✳ LAG BOLTS SHALL BE ⅜" X 2½"

BLOCK BANDING DETAIL (V-BLOCK OPTION)

WISCONSIN DEPT OF TRANSPORTATION

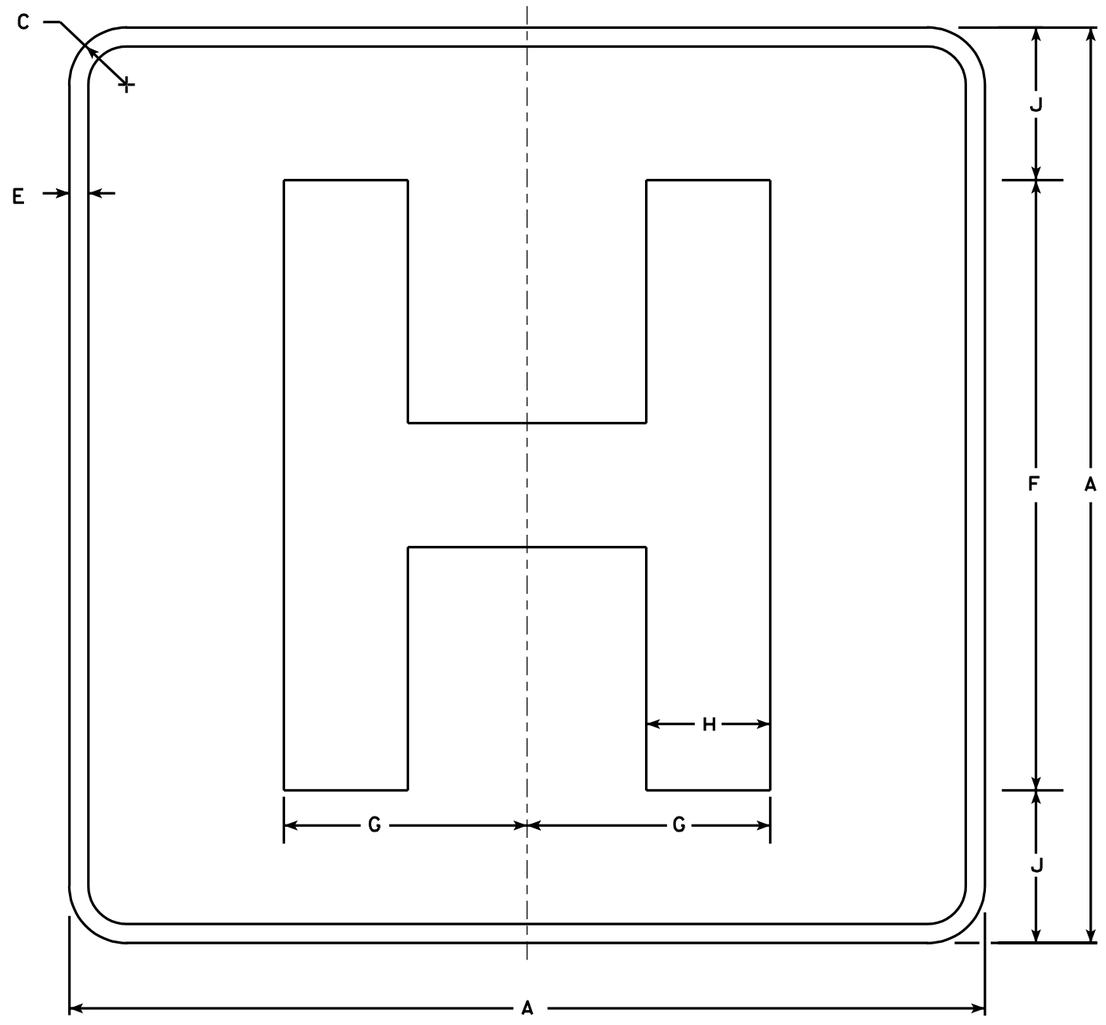
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/12/07 PLATE NO. A5-10.1

PROJECT NO:

SHEET NO: 394 E

FILE NAME : C:\Users\Projects\tr_stdplate\A510.dgn PLOT DATE : 06-AUG-2007 13:37 PLOT BY : ditjph
WISDOT/CADDS SHEET 42



D9-2

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Blue
   Message - White - Type H Reflective
3. Message Series - E Modified
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

Metric equivalent for this sign is:

SIZE	
1	450 mmX 450 mm
2	600 mmX 600 mm
3	900 mmX 900 mm
4	X
5	X

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18		1 1/8		1/2	12	4 3/4	2 3/8		3																	4.0
2	24		1 1/2		1/2	16	6 3/8	3 1/4		4																	4.0
3	36		2 1/4		3/4	24	9 1/2	4 7/8		6																	9.0
4																											
5																											

STANDARD SIGN
D9-2

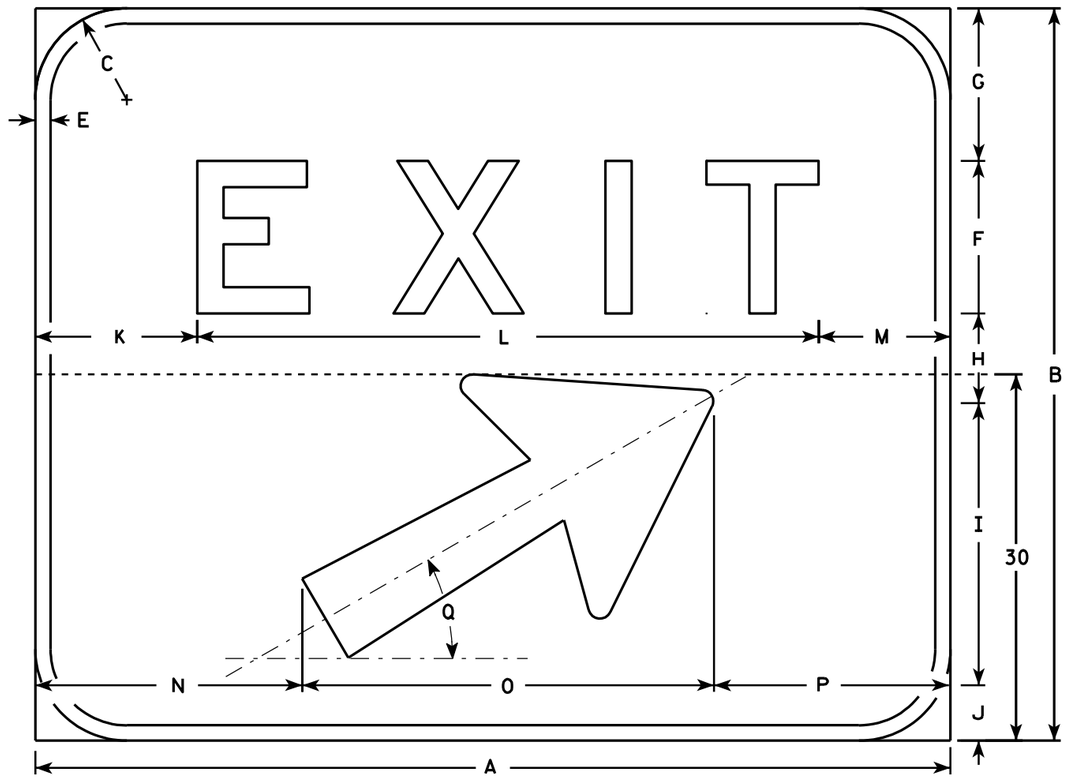
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spong for State Traffic Engineer

DATE 1/15/02 PLATE NO. D9-2.4

PROJECT NO:

SHEET NO: 395 E



E5-1

NOTES

1. Sign is Type II - Type H reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Green
   Message - White (Type H reflective)
3. Message Series - E
4. Corners may be square or rounded but borders shall be rounded as shown.
5. Base material for this sign shall be plywood and shall be split into two seperate pieces for the 72 x 60 size as shown on the detail by the dashed line (----------).
6. Arrow is Type "A" from sign plate A1-1.
7. As per the Standard Spec's, this sign shall not have a vertical joint.

Metric equivalent for this sign is:

SIZE	
1	
2	
3	
4	1500 mm X 1200 mm
5	1800 mm X 1500 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1																												
2																												
3																												
4	60	48	6		1	10	10	5 7/8	18 1/2	3 5/8	10 5/8	40 3/4	8 5/8	17 1/2	27	15 1/2	30°										20.0	1.80
5	72	60	6		1	12	12	10	18 1/2	7 1/2	13 1/4	48 1/2	10 1/4	23 1/2	27	21 1/2	30°										30.0	2.70

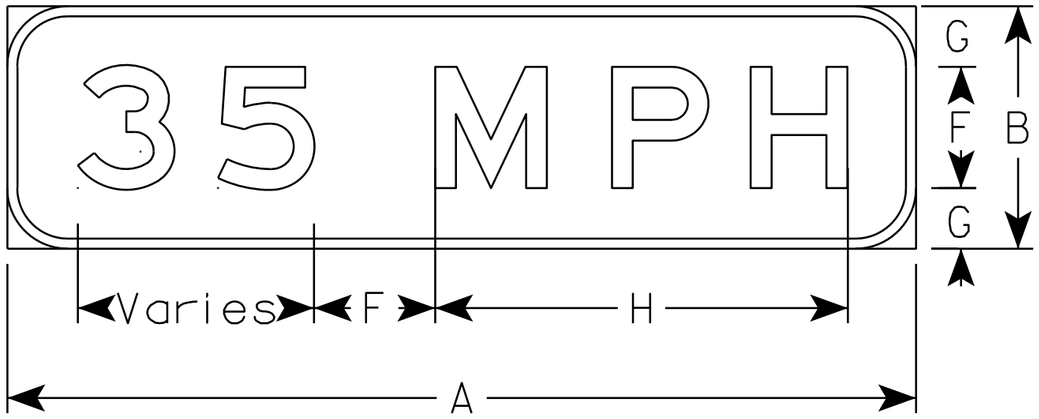
STANDARD SIGN
E5 - 1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang for State Traffic Engineer

DATE 6/22/00 PLATE NO. E5-1.8

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 396 | E



E13-1P

NOTES

1. Panel is - Type F reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - E
4. The panel shown on this plate is for use with E5-1A.
5. Width, Radius and Border thickness shall match the E5-1A.
6. Substitute appropriate numerals and adjust placement to achieve proper balance.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	VARIES	24				12	6	40 7/8																			VARIES
2M																											
3																											
4																											
5																											

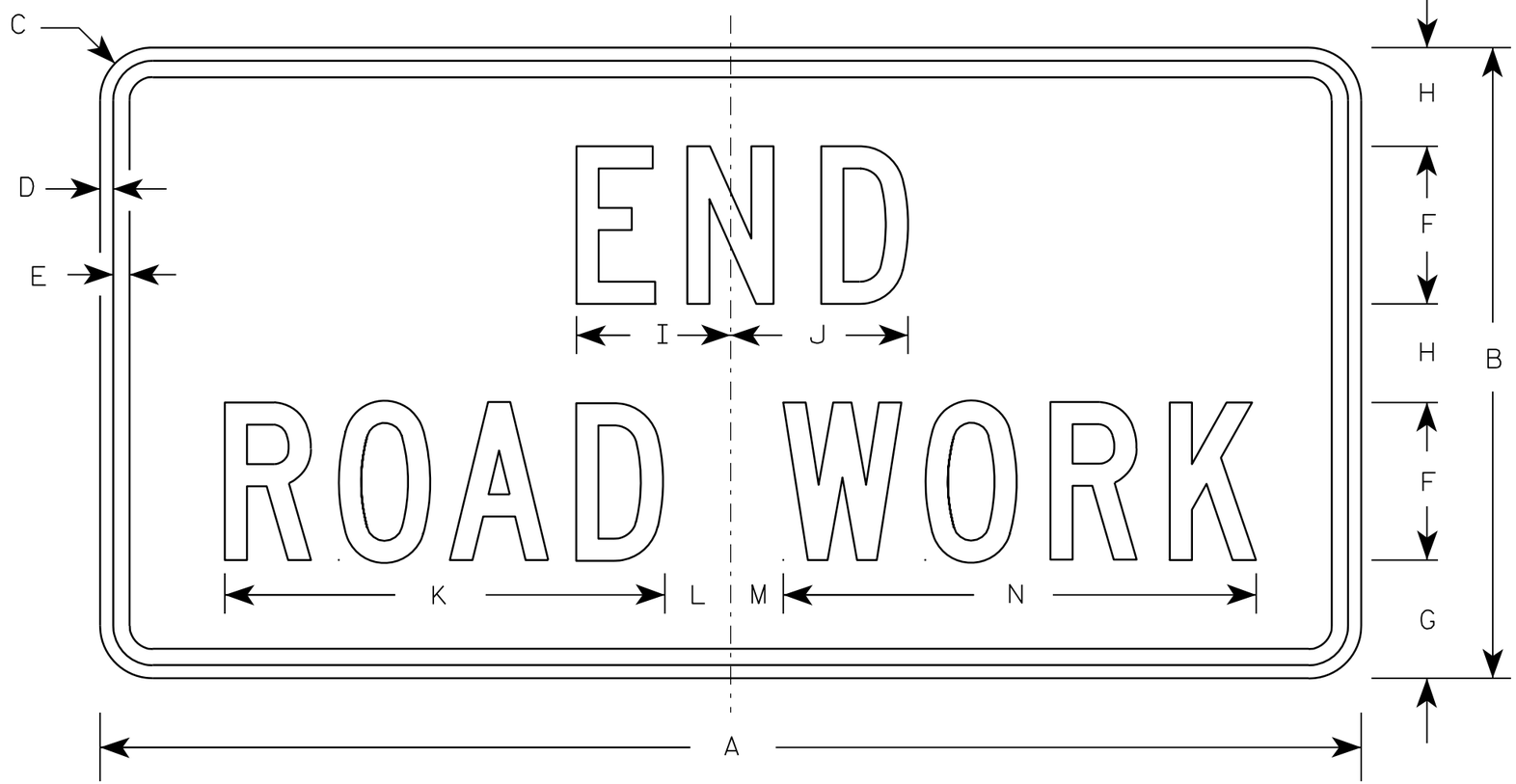
STANDARD SIGN
E13-1P

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/5/2012 PLATE NO. E13-1P.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 397	E



G20-2A

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

Metric equivalent for this sign is:

SIZE	
1	900 mm X 450 mm
2	1200 mm X 600 mm
3	1200 mm X 600 mm
4	1200 mm X 600 mm
5	1200 mm X 600 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1	36	18	1 1/8	3/8	1/2	4	3 3/4	2 1/2	4 1/8	4 1/8	11 1/8	2	1	12 1/8													4.5	0.41
2	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
3	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
4	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
5	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72

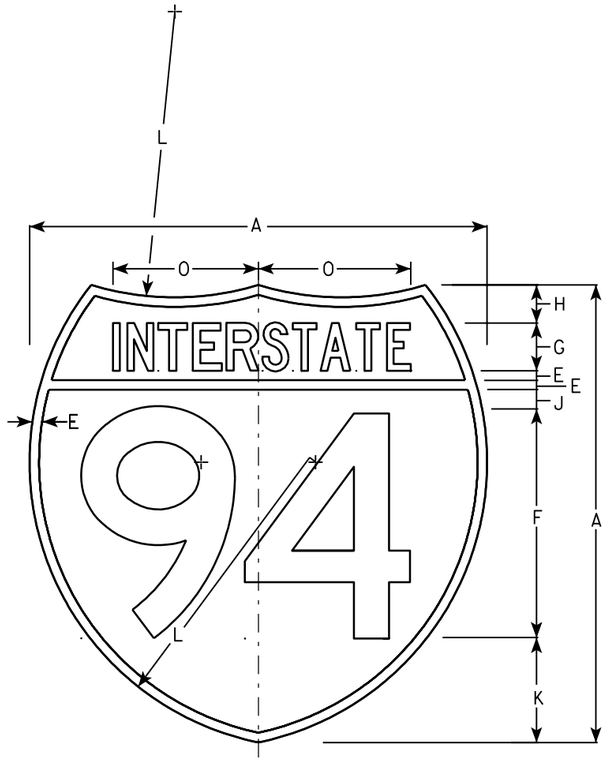
STANDARD SIGN
G20-2A

WISCONSIN DEPT OF TRANSPORTATION

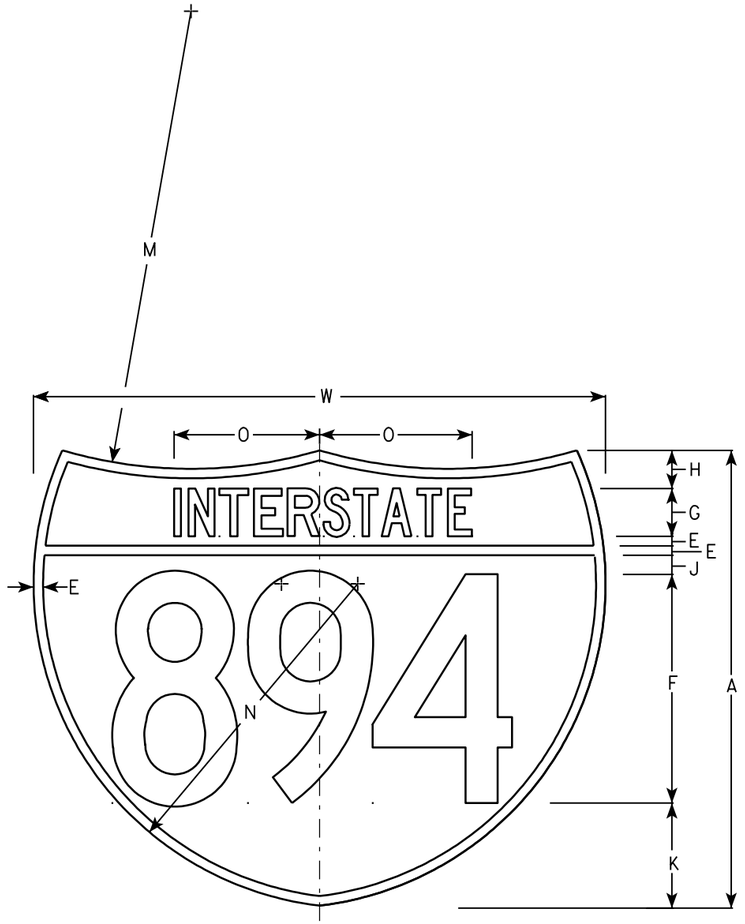
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/30/09 PLATE NO. G20-2A.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 398	E



M1-1



M1-1A

NOTES

1. Sign is Type II - See Note 6 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Top Red - Bottom Blue (See Note 6)
   Message - White - See Note 6
3. Message Series - See note 5
4. Substitute appropriate numerals & ajust spacing as per plate A10-1.
5. M1-1 - Numerals - D
   Interstate - C
   M1-1A - All copy - C
6. Permanent Signs
   Message - Type H Reflective
   Detour or other temporary signs
   Background - Reflective
   Message - Reflective

Metric equivalent for these signs are:

SIZE	M1-1	SIZE	M1-1A
1			
2	600 mm X 600 mm	2	600 mm X 750 mm
3	900 mm X 900 mm	3	900 mm X 1125 mm
4	900 mm X 900 mm	4	900 mm X 1125 mm
5	900 mm X 900 mm	5	900 mm X 1125 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	M1-1 Area sq. ft.	M1-1A Area sq. ft.	M1-1 Area m2	M1-1A Area m2
1																													
2	24				1/2	12	2 1/2	2		1	5 1/2	15	24	17	7 7/8								30			3.13	3.91	.36	.46
3	36				3/4	18	3 3/4	3		1 1/2	8 1/4	22 1/2	36	25 1/2	11 3/4								45			7.03	8.79	.81	1.05
4	36				3/4	18	3 3/4	3		1 1/2	8 1/4	22 1/2	36	25 1/2	11 3/4								45			7.03	8.79	.81	1.05
5	36				3/4	18	3 3/4	3		1 1/2	8 1/4	22 1/2	36	25 1/2	11 3/4								45			7.03	8.79	.81	1.05

INTERSTATE ROUTE MARKER
M1-1 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

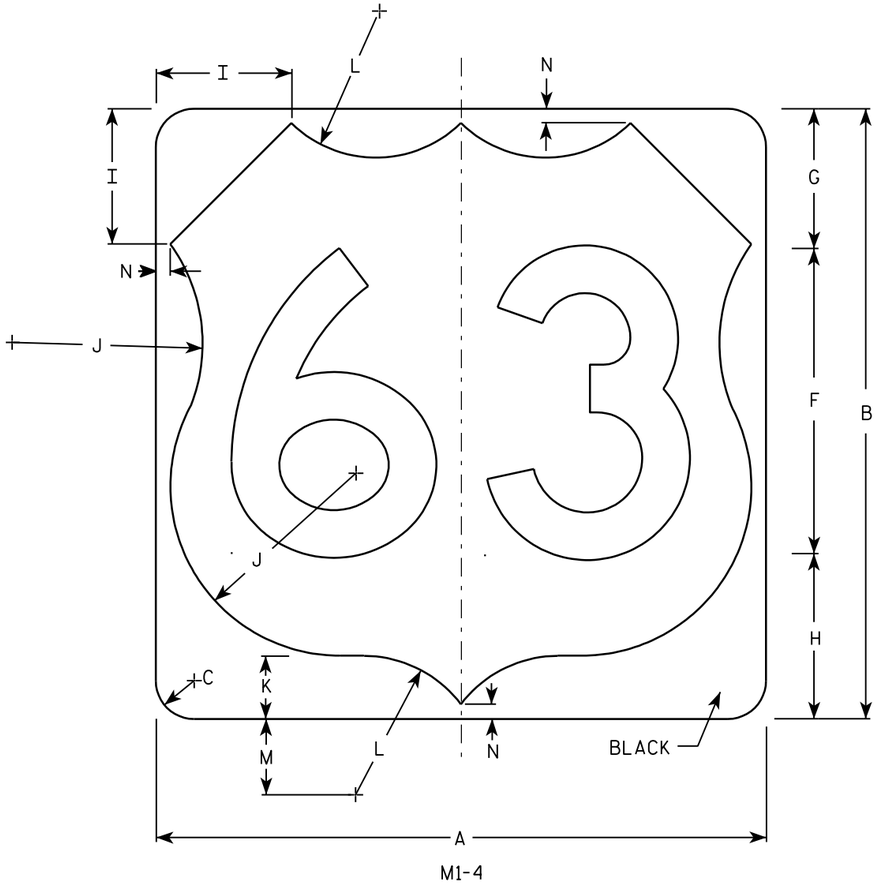
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 08/23/05 PLATE NO. M1-1.8

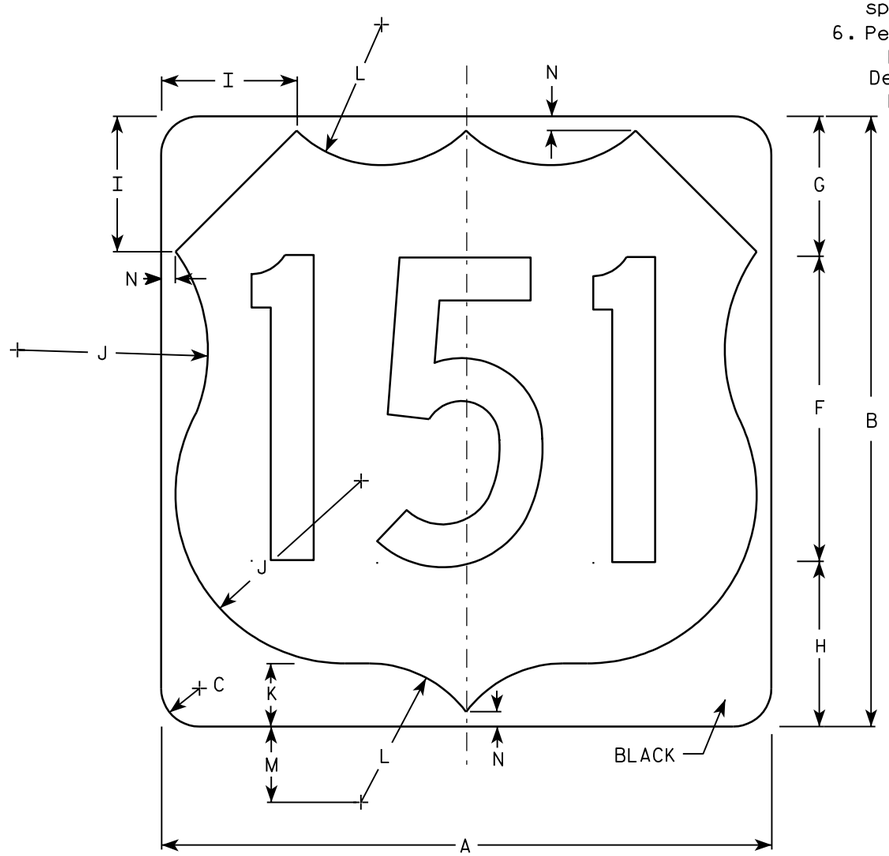
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 399	E

NOTES

1. Sign is Type II - See Note 6 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White & Black - See Note 6
   Message - Black
3. Message Series - See note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and adjust spacing as per Plate A10-1.
6. Permanent Signs
   Background - Type H Reflective
   Detour or other temporary signs
   Background - Reflective



M1-4



M1-4

Metric equivalent for this sign is:

SIZE	
1	
2	600 mm X 600 mm
3	900 mm X 900 mm
4	900 mm X 900 mm
5	900 mm X 900 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1																												
2	24	24	1 1/2			12	5 1/2	6 1/2	5	7 1/2	2 1/2	5 1/2	3	1/2													4.0	.36
3	36	36	2 1/4			18	8 1/4	9 1/4	7 1/4	11 1/4	3 3/4	8 1/4	4 1/2	3/4													9.0	.81
4	36	36	2 1/4			18	8 1/4	9 1/4	7 1/4	11 1/4	3 3/4	8 1/4	4 1/2	3/4													9.0	.81
5	36	36	2 1/4			18	8 1/4	9 1/4	7 1/4	11 1/4	3 3/4	8 1/4	4 1/2	3/4													9.0	.81

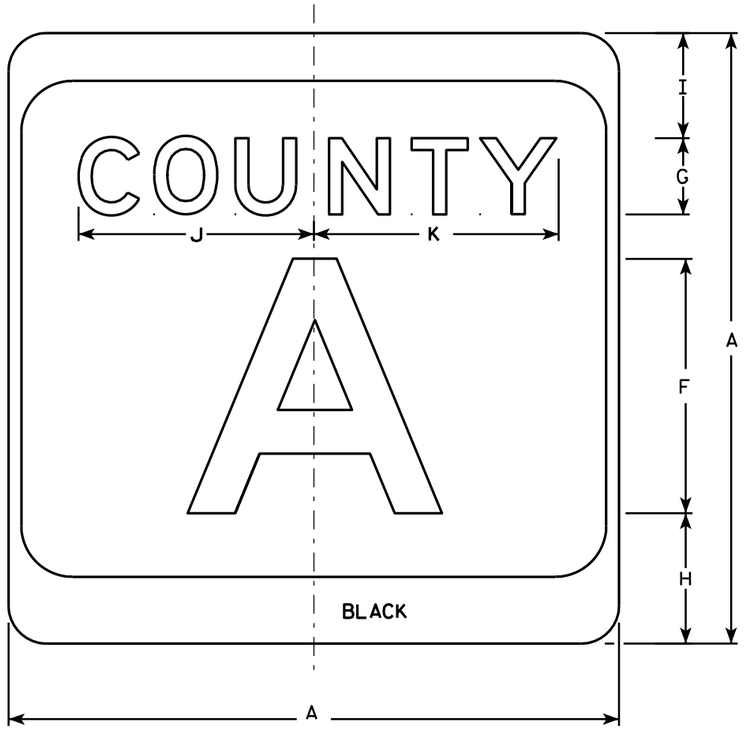
USH MARKER
M1-4 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

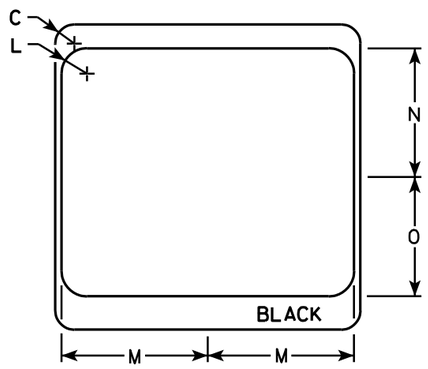
APPROVED Matthew R Rauch
for State Traffic Engineer

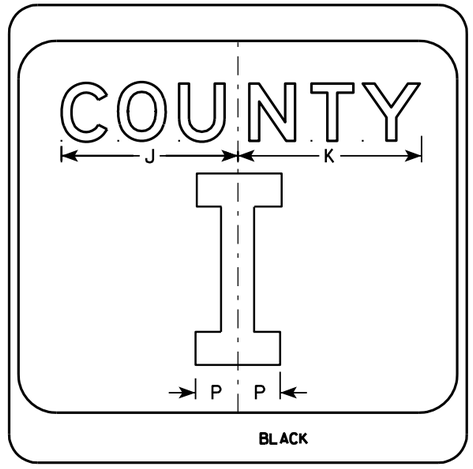
DATE 08/25/05 PLATE NO. M1-4.9

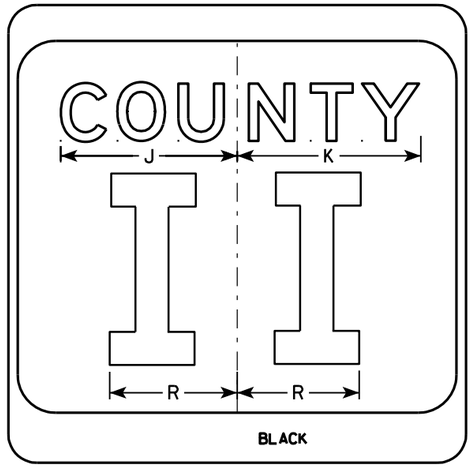
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 400 | E



M1-5A







NOTES

1. Sign is Type II - see Note 7 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White & Black - See Note 7
   Message - Black
3. Message Series - see Note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Message Series E for 1 letter.
   Message Series D for 2 letters unless message is too big then Series C.
   Message Series C for 3 letters unless message is too big then Series B.
6. Substitute appropriate letters & optically center to achieve proper balance.
7. Permanent Signs
   Background - Type H Reflective
   Detour or temporary Signs
   Background - Reflective

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24		1 1/2			10	3	5 1/8	4 1/8	9 1/4	9 5/8	2	11 1/2	10 1/8	9 3/8	2 1/4		6 5/8									4.0
3	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0
4	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0
5	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0

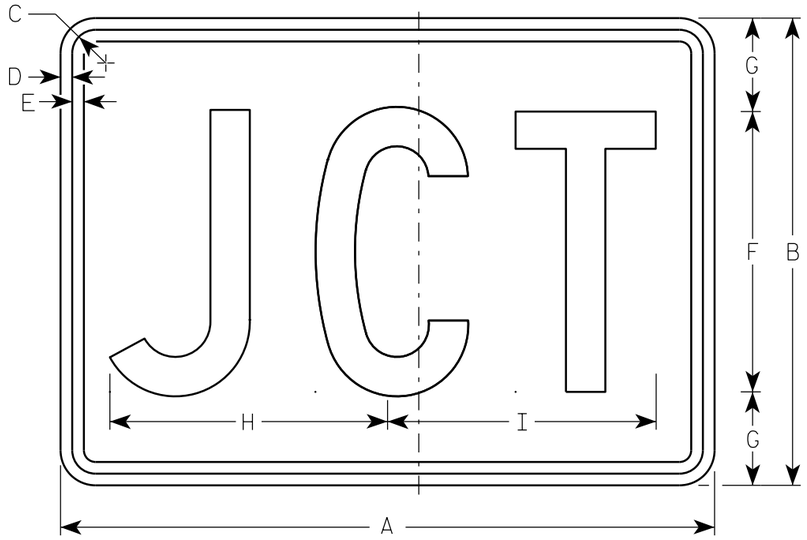
CTH MARKER
M1-5A FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

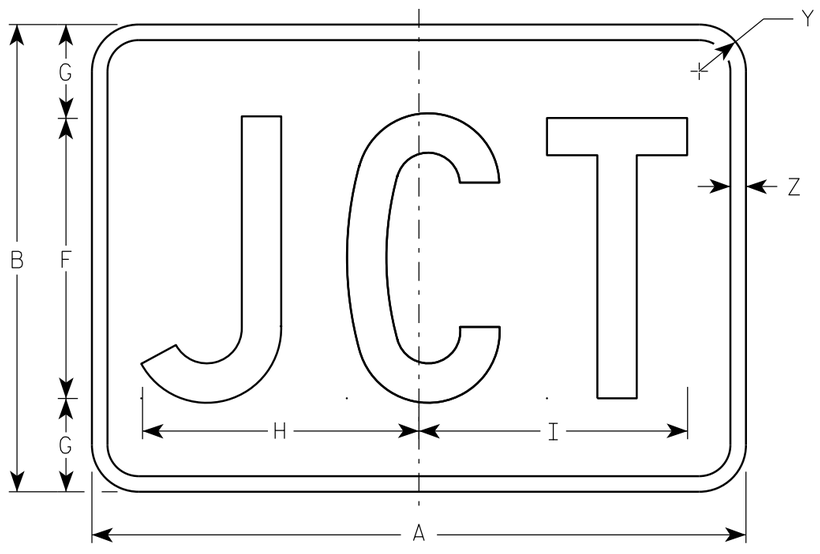
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/27/11 PLATE NO. M1-5A.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 401	E



M2-1
MK2-1
MM2-1
MN2-1
MR2-1



MB2-1

NOTES

1. Sign is Type II - Type H
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M2-1 Background - White
   Message - Black
   MB2-1 Background - Blue
   Message - White
   MK2-1 Background - Green
   Message - White
   MM2-1 Background - White
   Message - Green
   MN2-1 Background - Brown
   Message - White
   MR2-1 Background - Brown
   Message - Yellow

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21	15	1 1/8	3/8	3/8	9	3	8 7/8	8 5/8																1 1/2	1/2	2.20
3	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40
4	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40
5	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40

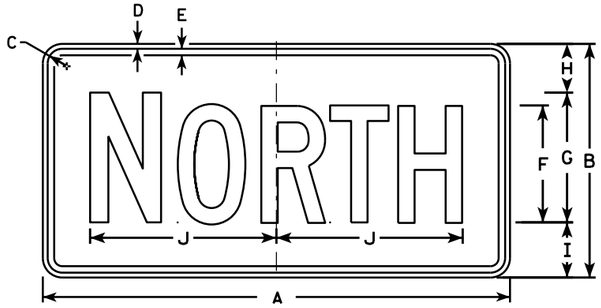
STANDARD SIGN
M2-1

WISCONSIN DEPT OF TRANSPORTATION

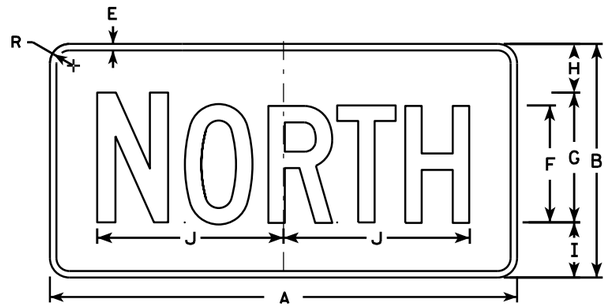
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 6/30/14 PLATE 402 12-1.11

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

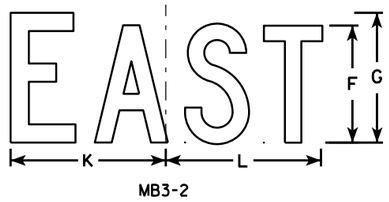


M3-1
MK3-1
MM3-1
MN3-1

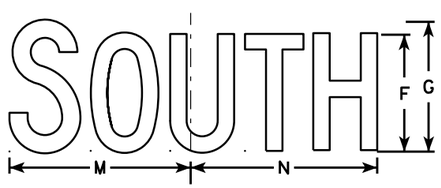


MB3-1

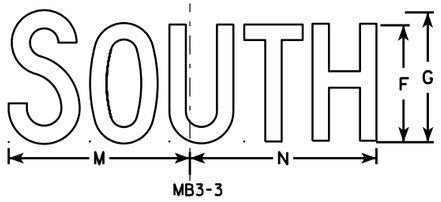
M3-2
MK3-2
MM3-2
MN3-2



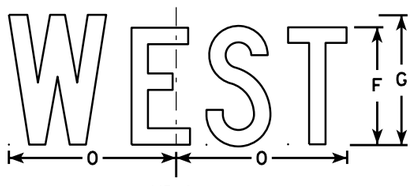
MB3-2



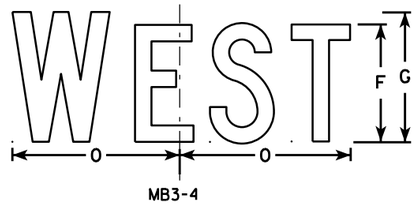
M3-3
MK3-3
MM3-3
MN3-3



MB3-3



M3-4
MK3-4
MM3-4
MN3-4



MB3-4

NOTES

1. All Signs Type II - Type H
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M3-1 thru M3-4 Background - White
   Message - Black
   MB3-1 thru MB3-4 Background - Blue
   Message - White
   MK3-1 thru MK3-4 Background - Green
   Message - White
   MM3-1 thru MM3-4 Background - White
   Message - Green
   MN3-1 thru MN3-4 Background - Brown
   Message - White
6. Note the first letter of each direction is larger than the remainder of the message.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/8	3/8	3/8	6	7	2 1/4	2 3/4	10 1/4	7 7/8	8 3/8	10 1/4	9 3/4	8 3/4			1 1/2									2.00
3	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5
4	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5
5	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5

STANDARD SIGNS
M3-1 thur M3-4
SERIES

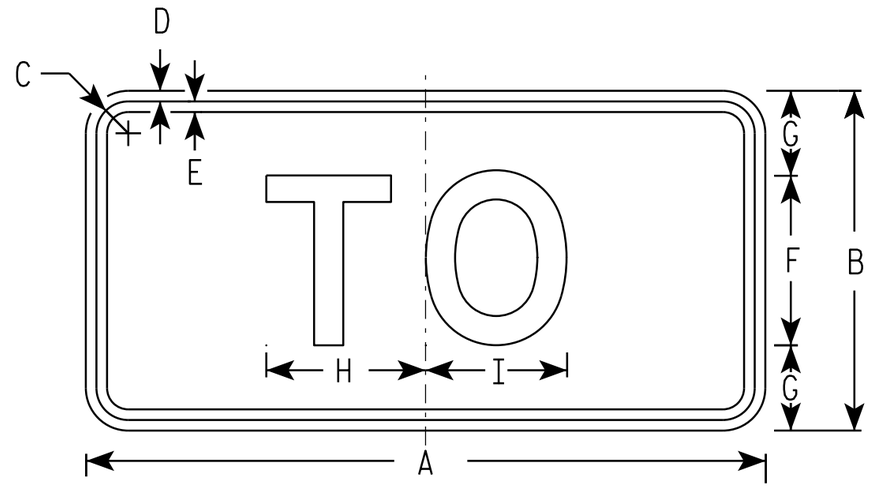
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

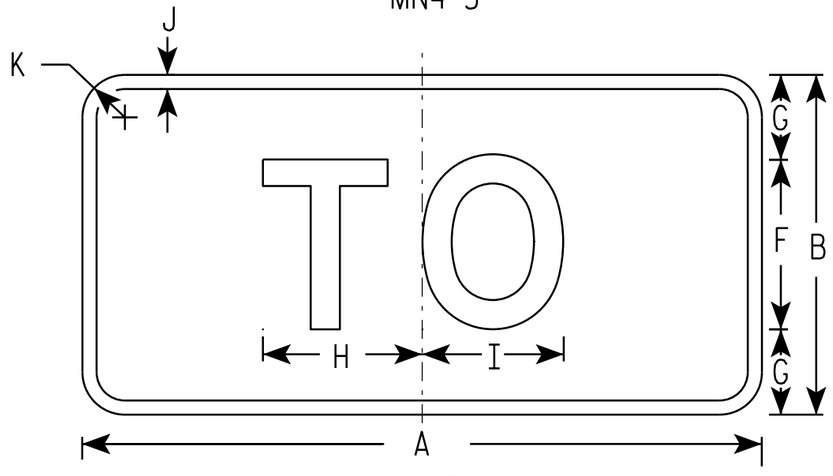
DATE 6/30/14 PLATE NO M3-1.13

PROJECT NO: | HWY: | COUNTY: | | SHEET NO: E

7



M4-5
MK4-5
MM4-5
MN4-5



MB4-5

NOTES

1. Sign is Type II - Type H
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M4-5 Background - White
   Message - Black

   MB4-5 Background - Blue
   Message - White

   MK4-5 Background - Green
   Message - White

   MM4-5 Background - White
   Message - Green

   MN4-5 Background - Brown
   Message - White

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/8	3/8	3/8	6	3	5 3/8	5 1/4	1/2	1 1/2																2.00
3	36	18	1 3/8	3/8	1/2	9	4 1/2	8 1/4	8 3/8	1/2	1 1/2																4.5
4	36	18	1 3/8	3/8	1/2	9	4 1/2	8 1/4	8 3/8	1/2	1 1/2																4.5
5	36	18	1 3/8	3/8	1/2	9	4 1/2	8 1/4	8 3/8	1/2	1 1/2																4.5

STANDARD SIGN
M4-5

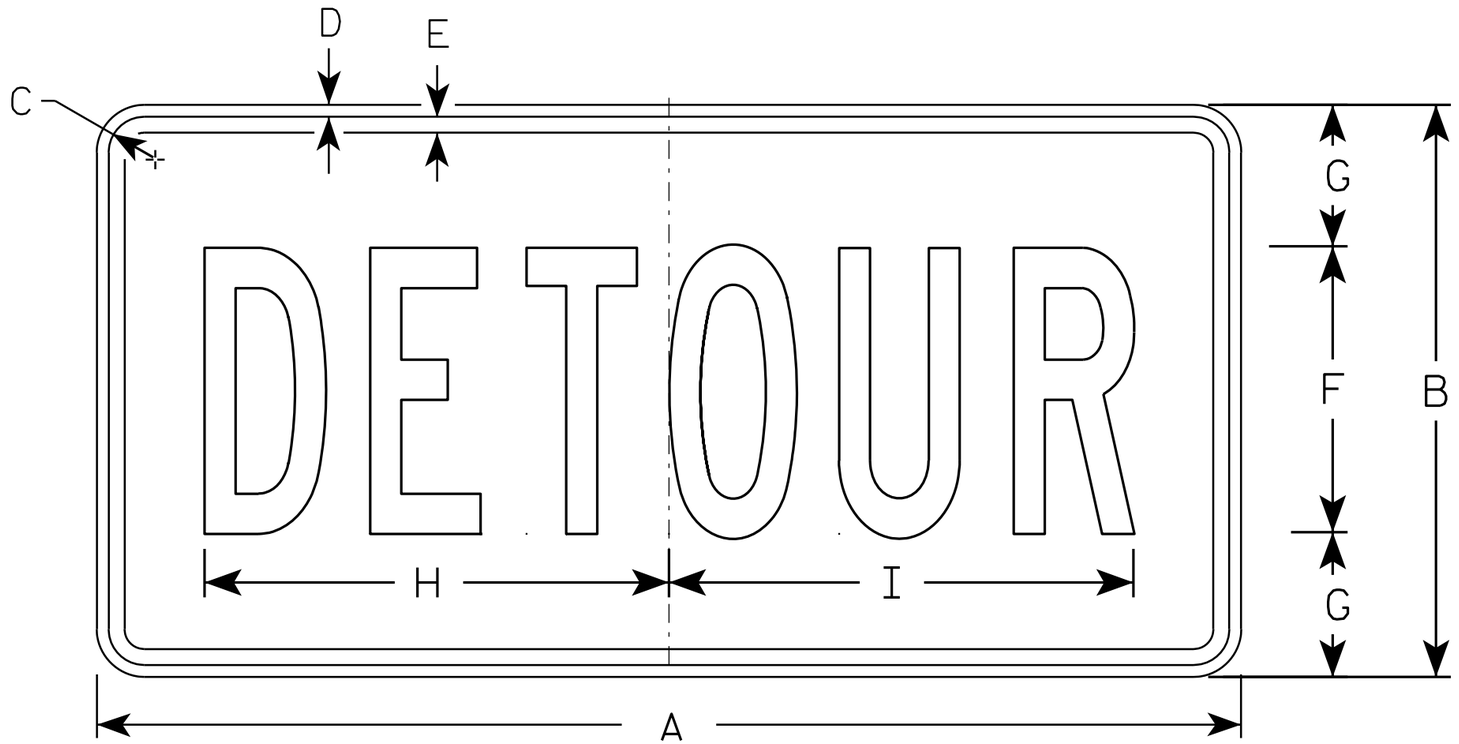
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/30/14 PLATE M4-5.7

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\M45.DGN PLOT DATE : 30-JUN-2014 12:48 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 5.351066:1.000000
WISDOT/CADDS SHEET 42



M4-8

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - B
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/8	3/8	3/8	6	3	10	10 1/4																		2.0
3	36	18	1 1/8	3/8	1/2	9	4 1/2	14 5/8	14 1/2																		4.5
4																											
5																											

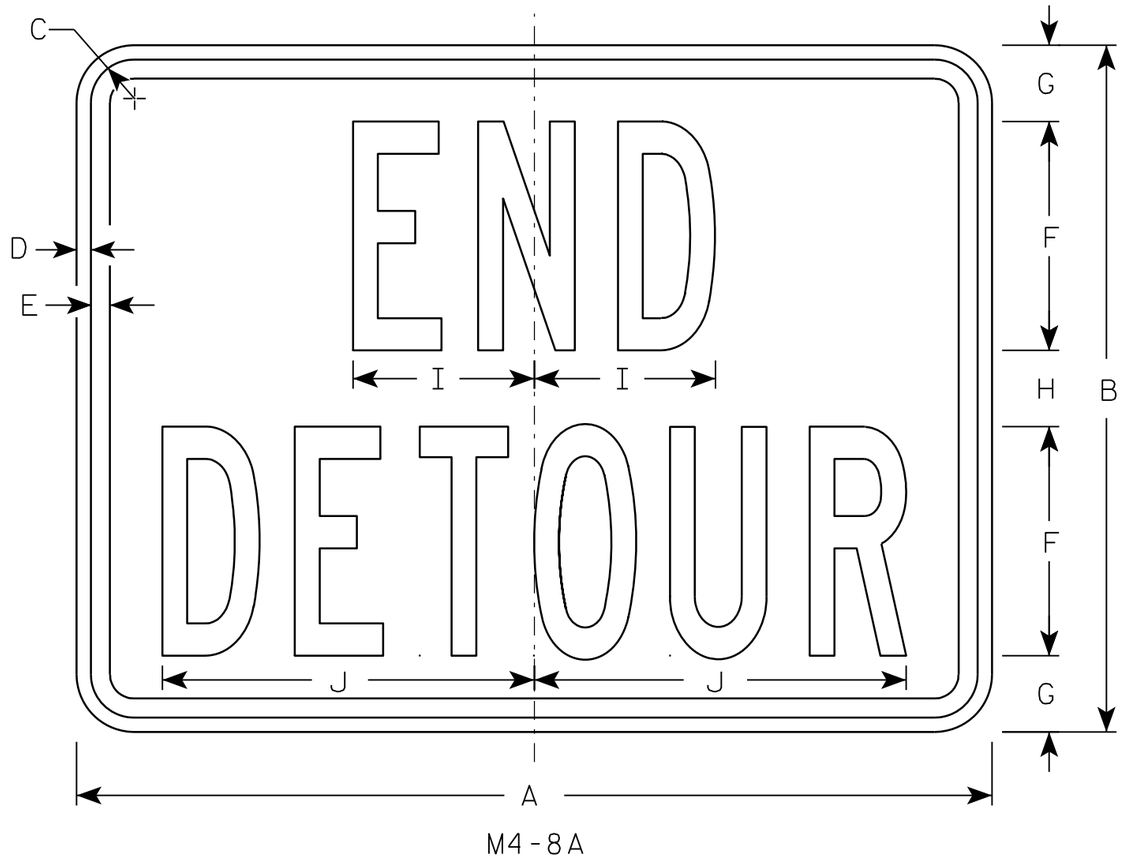
STANDARD SIGN
M4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/10/10 PLATE NO. M4-8.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 405	E



M4-8A

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - B
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	18	1 1/8	3/8	1/2	6	2	2	4 3/4	9 3/4																	3.0
3	30	24	1 1/8	3/8	1/2	8	2 1/2	3	6 3/4	13																	5.0
4																											
5																											

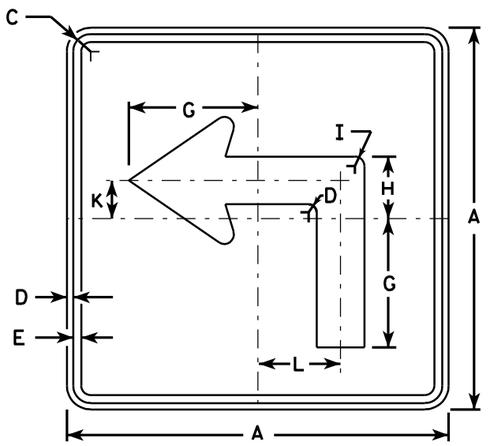
STANDARD SIGN
M4-8A

WISCONSIN DEPT OF TRANSPORTATION

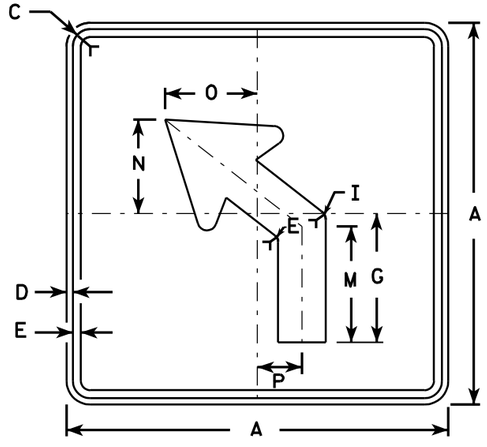
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/9/11 PLATE NO. M4-8A.2

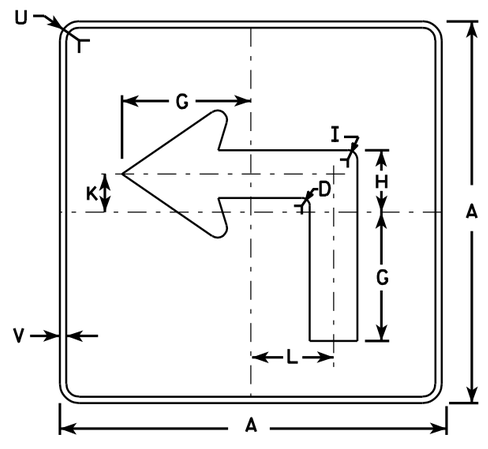
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 406	E



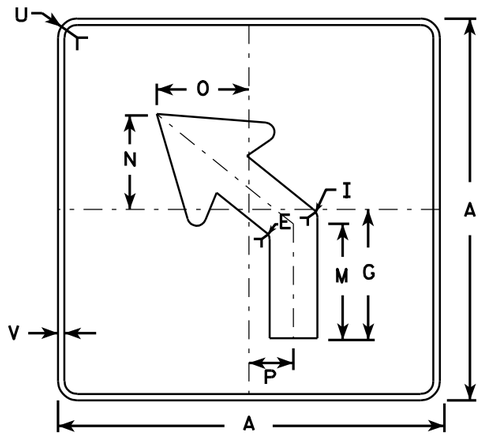
M5-1L
MK5-1L
MM5-1L
MO5-1L
MP5-1L
MR5-1L



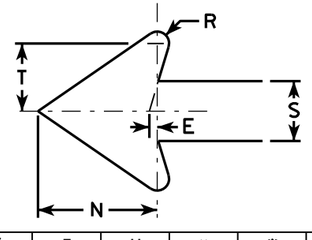
M5-2L
MK5-2L
MM5-2L
MO5-2L
MP5-2L
MR5-2L



MB5-1L
MG5-1L
MN5-1L



MB5-2L
MG5-2L
MN5-2L



NOTES

1. Signs are Type II - See Note 4 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M5-1 and M5-2 Background - White - Type H Reflective
   Message - Black
   MB5-1 and MB5-2 Background - Blue
   Message - White - Type H Reflective
   MG5-1 and MG5-2 Background - Green
   Message - White - Type H Reflective
   MK5-1 and MK5-2 Background - Green
   Message - White Type H Reflective
   MM5-1 and MM5-2 Background - White - Type H Reflective
   Message - Green
   MN5-1 and MN5-2 Background - Brown
   Message - White - Type H Reflective
   MO5-1 and MO5-2 Background - Orange - Type F Reflective
   Message - Black
   MP5-1 and MP5-2 Background - White - Type H Reflective
   Message - Blue
   MR5-1 and MR5-2 Background - Brown
   Message - Yellow - Type H Reflective
5. M5-1R same as M5-1L except arrow points right.
6. M5-2R same as M5-2L except arrow tilts right.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21		1 1/8	3/8	3/8		7	3 3/8	5/8		2 1/8	4 1/2	6 3/8	5 1/4	5	2 1/2		1/2	2 5/8	3	1 1/2	1/2					3.06
3	30		1 3/8	1/2	5/8		10 1/8	4 1/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25
4	30		1 3/8	1/2	5/8		10 1/8	4 1/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25
5	30		1 3/8	1/2	5/8		10 1/8	4 1/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25

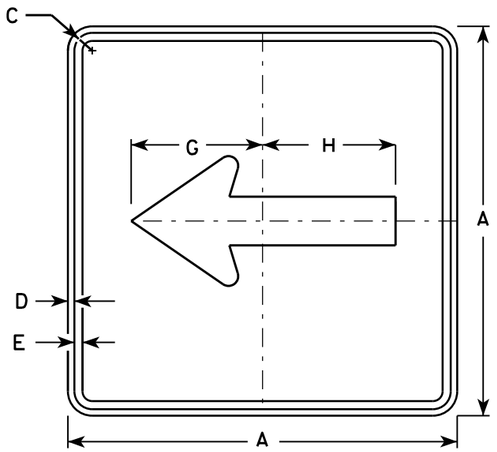
STANDARD SIGN
M5-1 & M5-2

WISCONSIN DEPT OF TRANSPORTATION

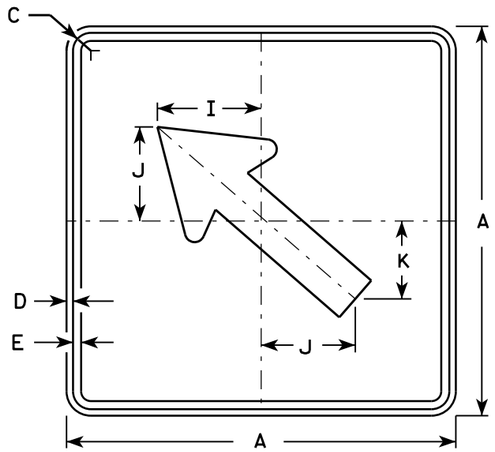
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/29/13 PLATE NO. M5-1.12

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 407 | E



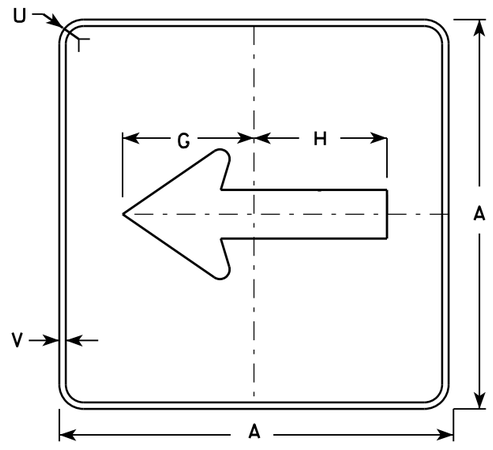
M6-1
MK6-1
MM6-1
MN6-1
MO6-1
MP6-1
MR6-1



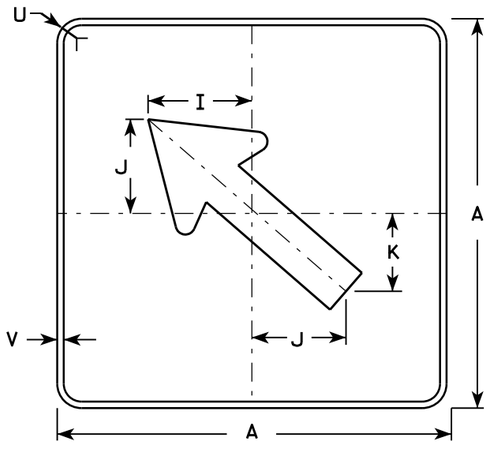
M6-2
MK6-2
MM6-2
MN6-2
MO6-2
MP6-2
MR6-2

NOTES

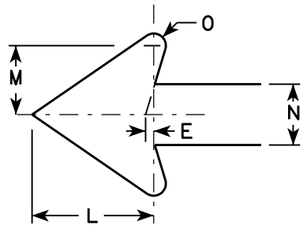
1. Signs are Type II - Type H except as Shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-1 and M6-2 Background - White
   Message - Black
   MB6-1 and MB6-2 Background - Blue
   Message - White
   MG6-1 and MG6-2 Background - Green
   Message - White
   MK6-1 and MK6-2 Background - Green
   Message - White
   MM6-1 and MM6-2 Background - White
   Message - Green
   MN6-1 and MN6-2 Background - Brown
   Message - White
   MO6-1 and MO6-2 Background - Orange - Type F Reflective
   Message - Black
   MP6-1 and MP6-2 Background - White
   Message - Blue
   MR6-1 and MR6-2 Background - Brown
   Message - Yellow



MB6-1



MB6-2



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21		1 1/8	3/8	3/8		7 1/2	7 1/8	5 5/8	5	4 1/4	5 1/4	3	2 5/8	1/2						1 1/2	1/2						3.06
3	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2						6.25
4	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2						6.25
5	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2						6.25

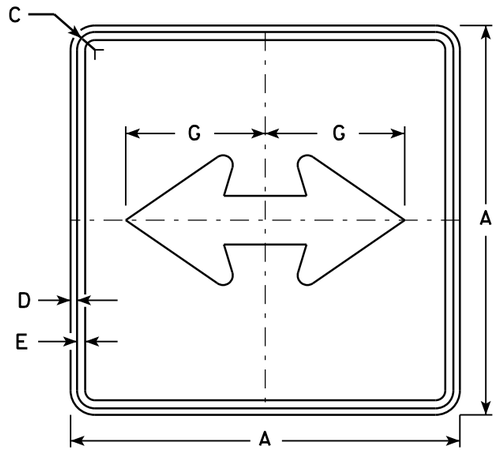
STANDARD SIGN M6-1 & M6-2 SERIES

WISCONSIN DEPT OF TRANSPORTATION

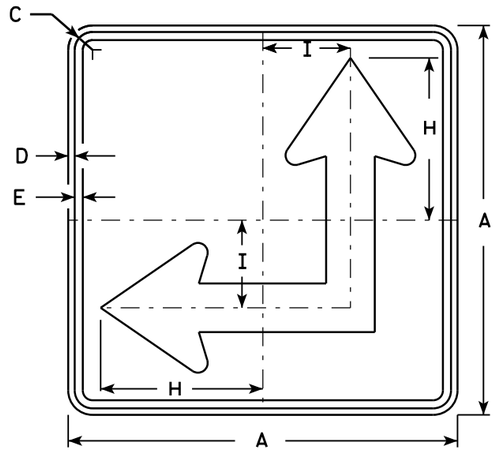
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/03/14 PLATE 408 M6-1.14

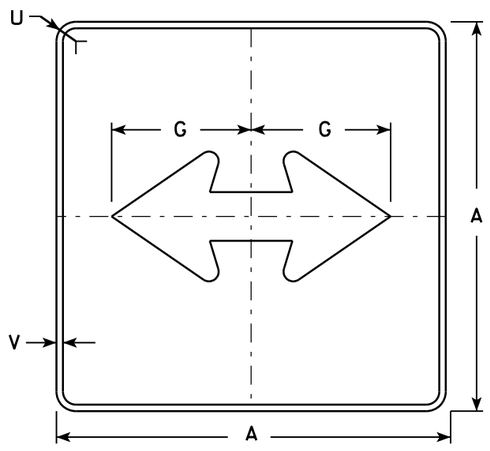
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



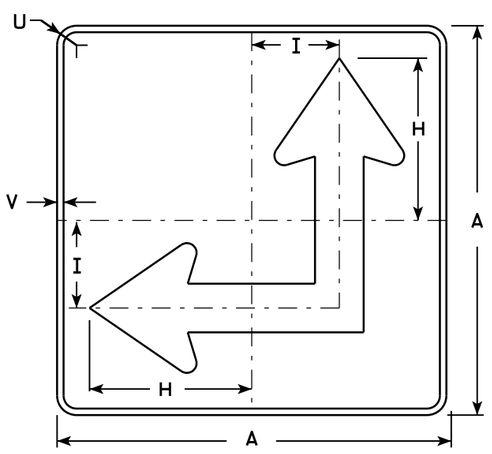
M6-4
MK6-4
MM6-4
MN6-4
MO6-4
MP6-4
MR6-4



M6-6
MK6-6
MM6-6
MN6-6
MO6-6
MP6-6
MR6-6



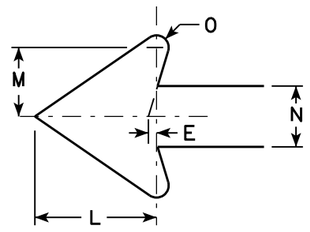
MB6-4



MB6-6

NOTES

1. Signs are Type II - Type H except as Shown
2. Color:
   Background - See Note 4
   Message - See Note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-4 and M6-6 Background - White
   Message - Black
   MB6-4 and MB6-6 Background - Blue
   Message - White
   MK6-4 and MK6-6 Background - Green
   Message - White
   MM6-4 and MM6-6 Background - White
   Message - Green
   MN6-4 and MN6-6 Background - Brown
   Message - White
   MO6-4 and MO6-6 Background - Orange - Type F Reflective
   Message - Black
   MP6-4 and MP6-6 Background - White
   Message - Blue
   MR6-4 and MR6-6 Background - Brown
   Message - Yellow
5. M6-6R same as M6-6L except arrow points ahead and right.



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21		1 1/8	3/8	3/8		7 1/2	8 3/4	4 1/4			5 1/4	3	2 5/8	1/2						1 1/2	1/2					3.06
3	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25
4	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25
5	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25

STANDARD SIGN M6-4 & M6-6 SERIES

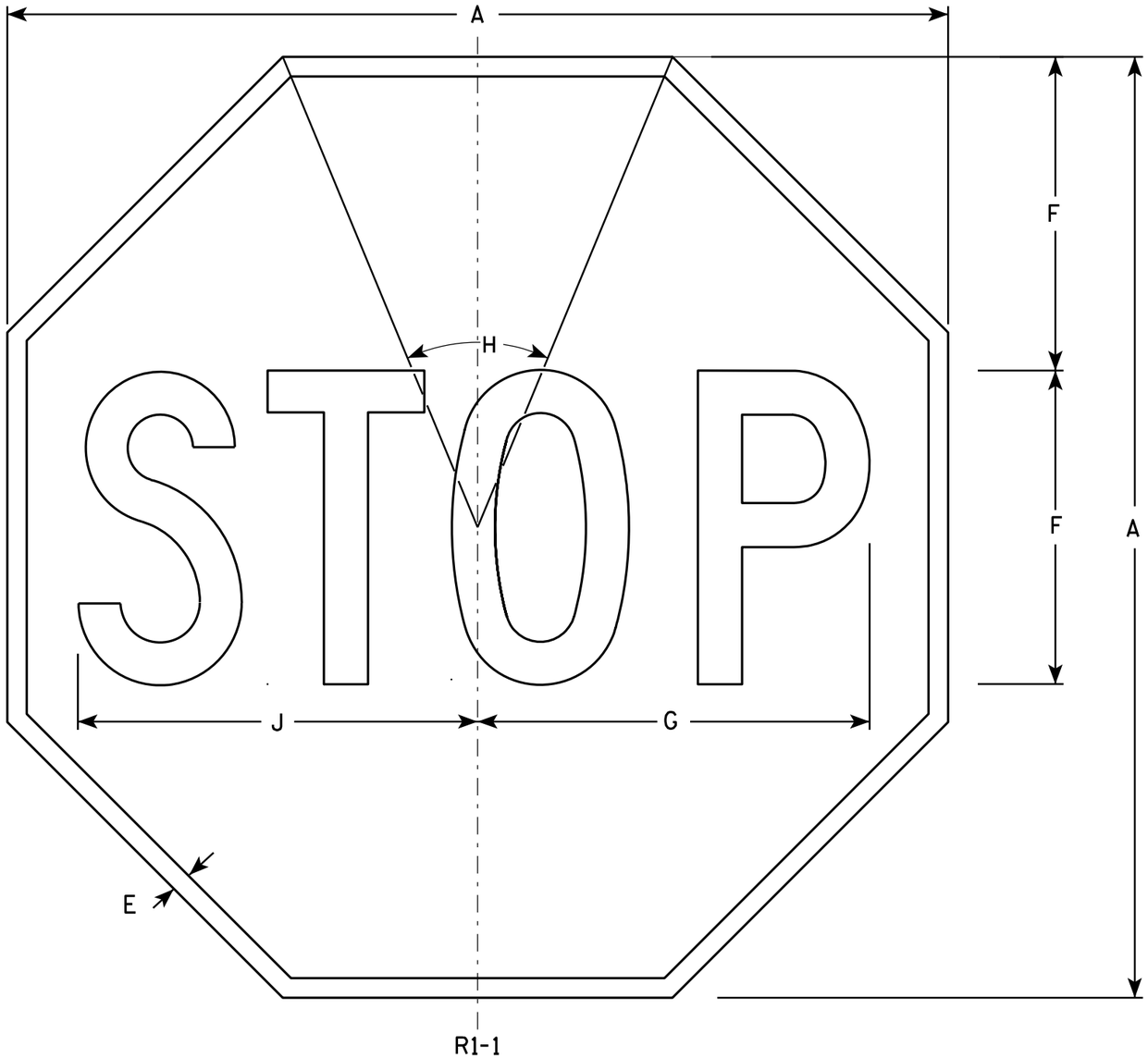
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 7/03/14 PLATE M6-4.9

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\M64.DGN PLOT DATE : 03-JUL-2014 14:56 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 11.675051:1.000000 WISDOT/CADDS SHEET 42



NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Red
   Message - White
3. Message Series - C

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24				3/8	8	10	45°		10 1/4																	3.31
2S	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2M	36				3/4	12	15	45°		15 3/8																	7.46
3	36				3/4	12	15	45°		15 3/8																	7.46
4	48				1	16	20	45°		20 1/2																	13.25
5	48				1	16	20	45°		20 1/2																	13.25
6	18				3/8	6	7 3/4	45°		7 3/4																	1.86
7	12				1/4	4	5	45°		5 1/8																	0.78

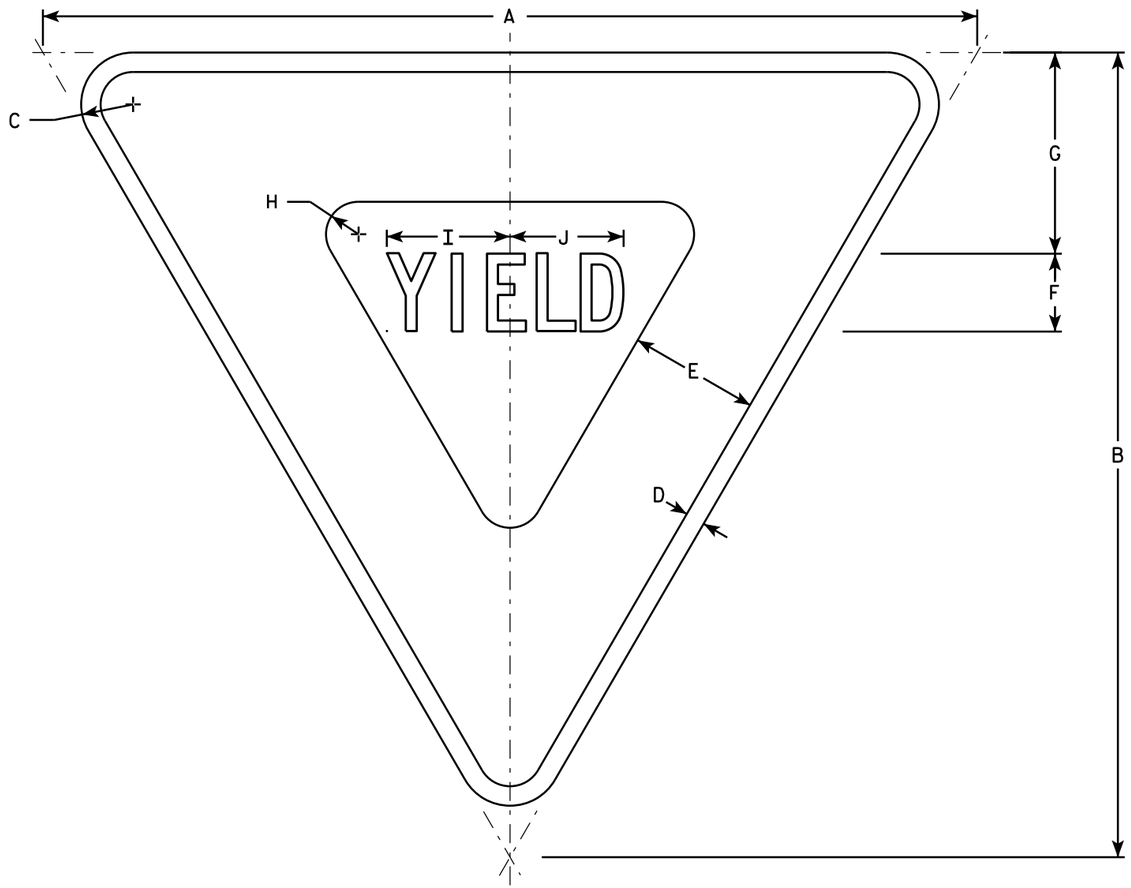
STANDARD SIGN
R1-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/03/10 PLATE NO. R1-1.12

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 410	E



R1-2

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. The border strip and word message are reflectorized red.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30	26	1 1/2	5/8	4	2 1/2	6 3/8	7/8	4	3 5/8																	2.71
2S	36	31	2	3/4	5	3	7 3/4	1 1/4	4 3/4	4 3/8																	3.88
2M	48	42	3	1	6	4	9 3/4	2	6 1/4	5 7/8																	7.00
3	48	42	3	1	6	4	9 3/4	2	6 1/4	5 7/8																	7.00
4	48	42	3	1	6	4	9 3/4	2	6 1/4	5 7/8																	7.00
5	60	52	3	1 1/2	8	5	13	2 1/2	7 7/8	7 1/4																	10.83
6																											
7	18	15 1/2	1	3/8	2 1/2	1 1/2	3 7/8	5/8	2 3/8	2 1/4																	0.97

STANDARD SIGN
R1-2

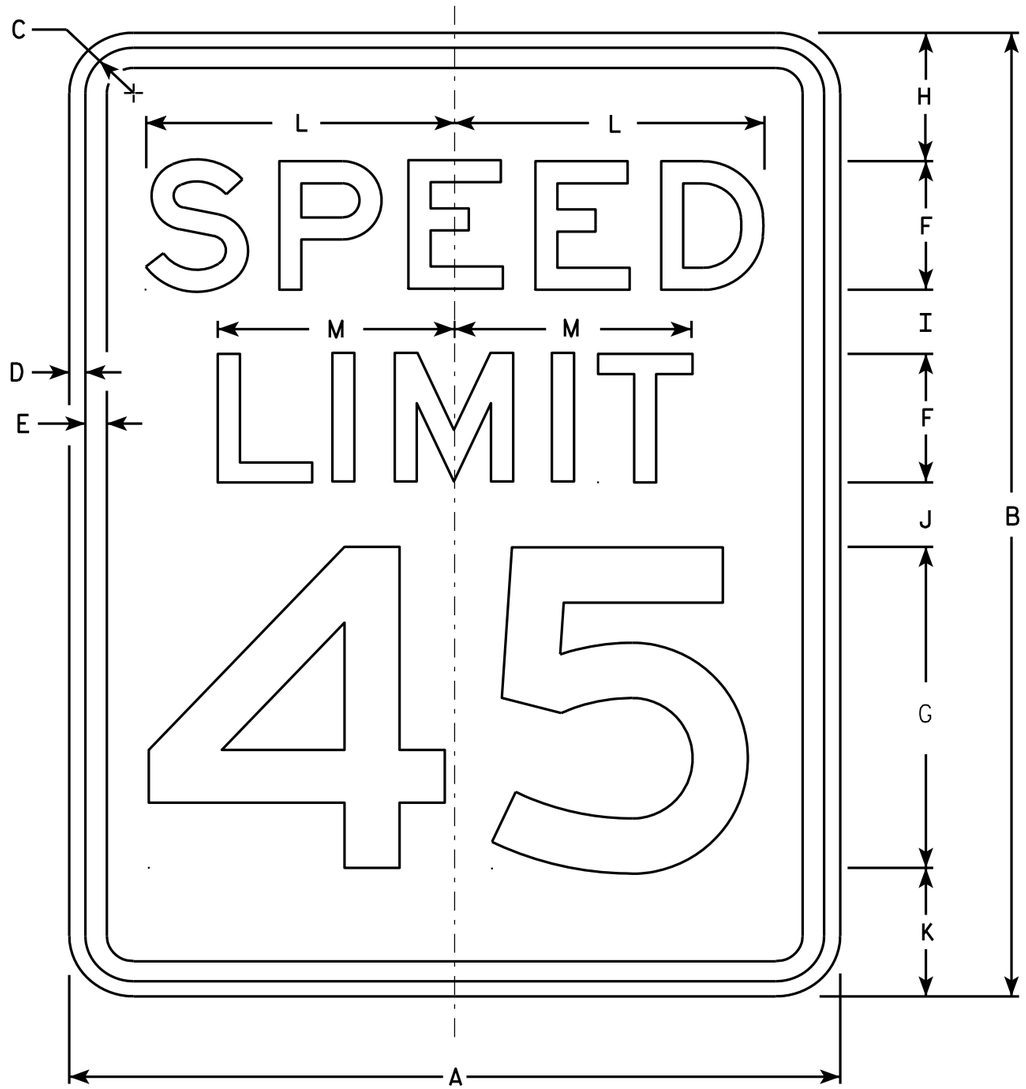
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/13/14 PLATE R1-2.12

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\R12.DGN PLOT DATE : 13-OCT-2014 15:12 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 5.837526:1.000000
WISDOT/CADDS SHEET 42



R2-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and optically adjust spacing to achieve proper balance.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18	24	1 1/8	3/8	1/2	3	8	3	2	2	3	7 1/4	5 1/2														3.0
2S	24	30	1 1/8	3/8	1/2	4	10	3	2 1/4	3 3/8	3 3/8	9 5/8	7 3/8														5.0
2M	30	36	1 3/8	1/2	5/8	5	12	5	2 1/2	2 1/2	4	12	9 1/4														7.5
3	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
4	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
5	48	60	2 1/4	3/4	1	8	20	6	4 1/2	6 3/4	6 3/4	19 1/4	14 5/8														20.0

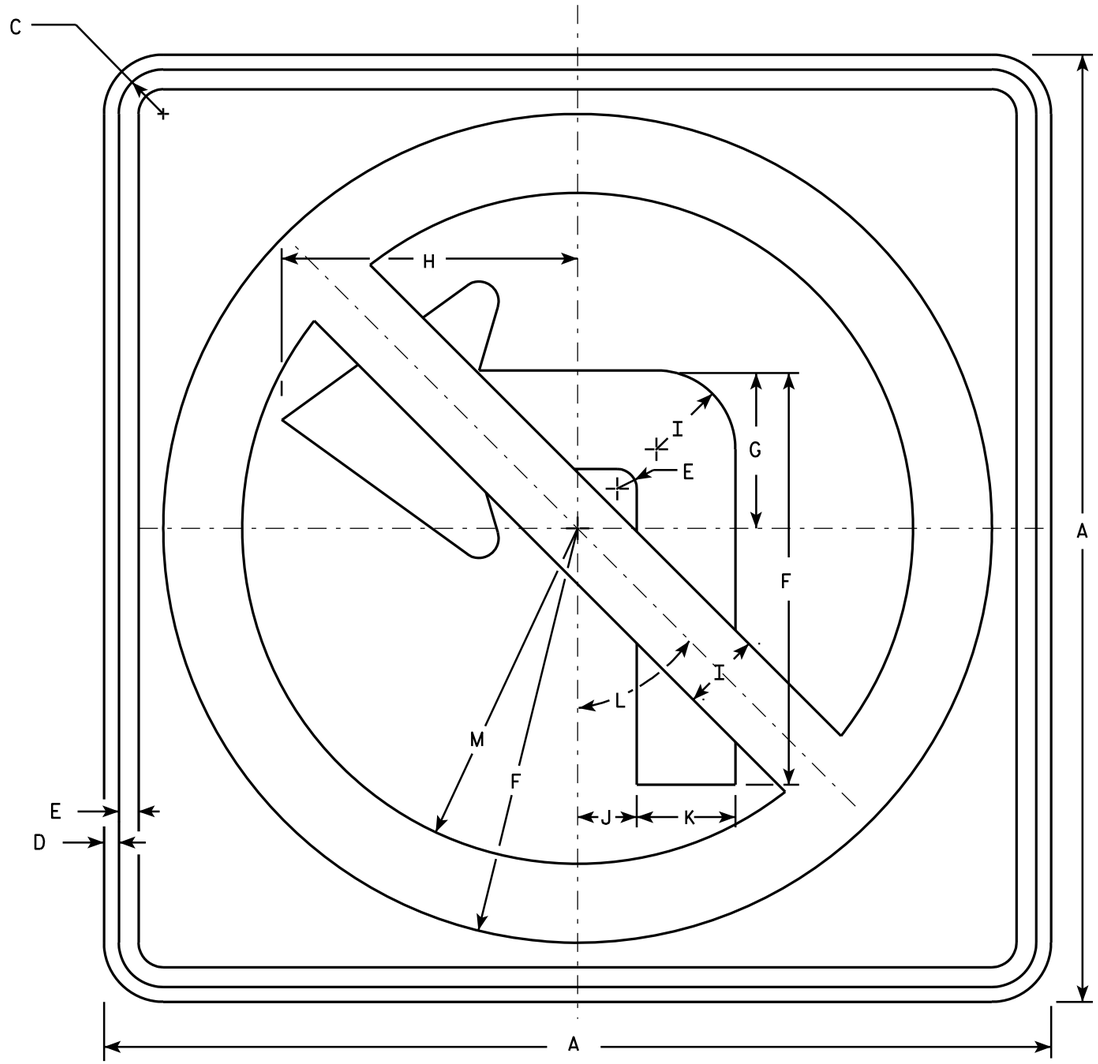
STANDARD SIGN
R2-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/26/10 PLATE NO. R2-1.13

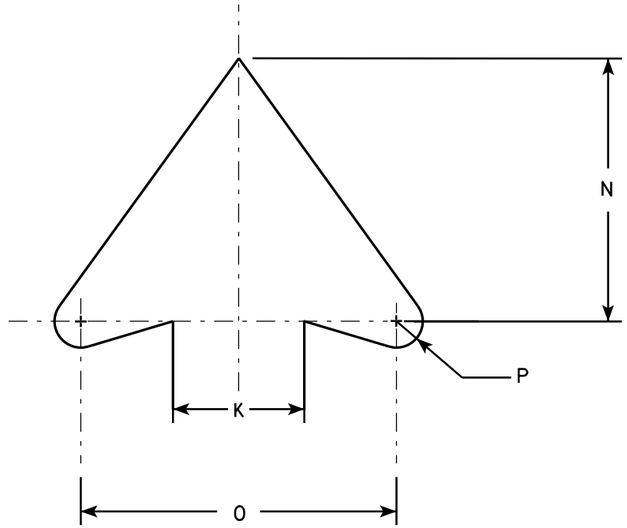
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 412	E



R3-2

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. Border & Arrow are non reflective black, the circle with diagonal bar is reflective red.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45°	8 1/2	5	6	1/2											4.0
2S	24		1 1/8	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45°	8 1/2	5	6	1/2											4.0
2M	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4											9.0
3	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4											9.0
4	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4											9.0
5	48		2 1/4	3/4	1	21	8	15	4	3	5	45°	17	10	12	1											16.0

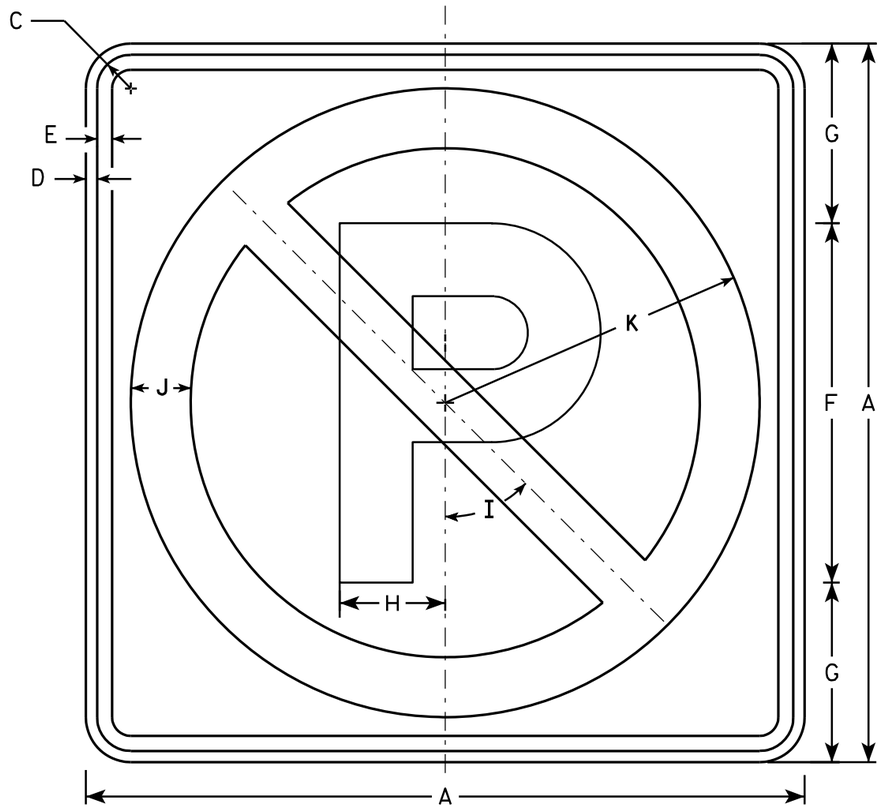
STANDARD SIGN
R3-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/08/10 PLATE NO. R3-2.10

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 413	E



R3-8A

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. Border & Letter P are non reflective black, the circle with diagonal bar is reflective red.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24		1 1/8	3/8	1/2	12	6	3 1/2	45°	2	10 1/2																4.0
2M	24		1 1/8	3/8	1/2	12	6	3 1/2	45°	2	10 1/2																4.0
3																											
4																											
5																											

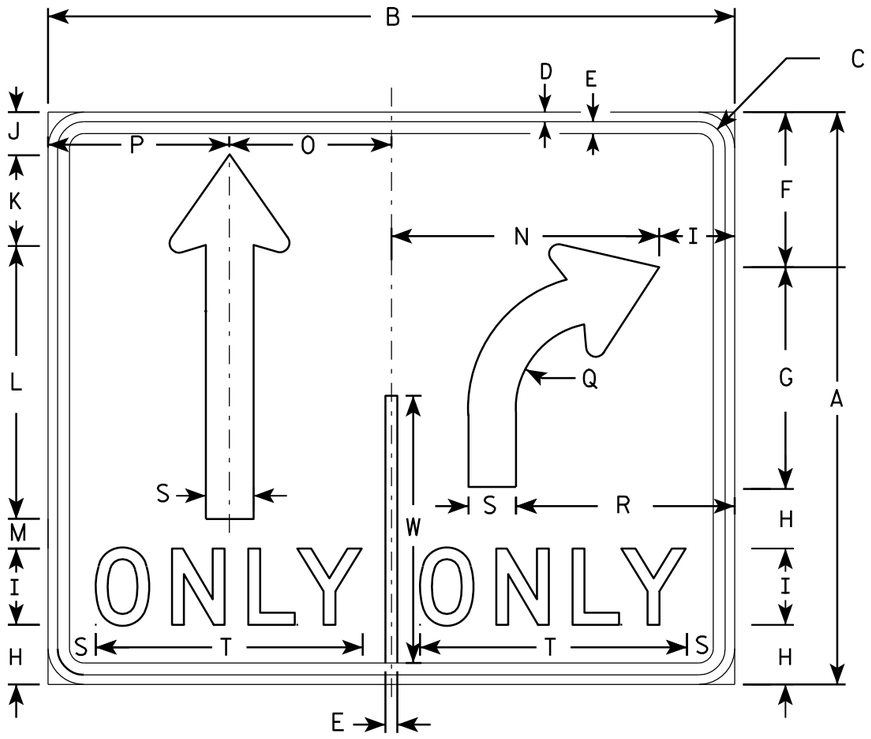
STANDARD SIGN
R3-8A

WISCONSIN DEPT OF TRANSPORTATION

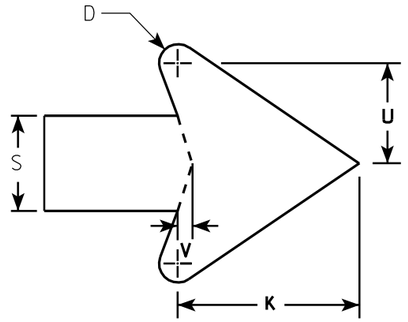
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/01/12 PLATE NO. R3-8A.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 414	E



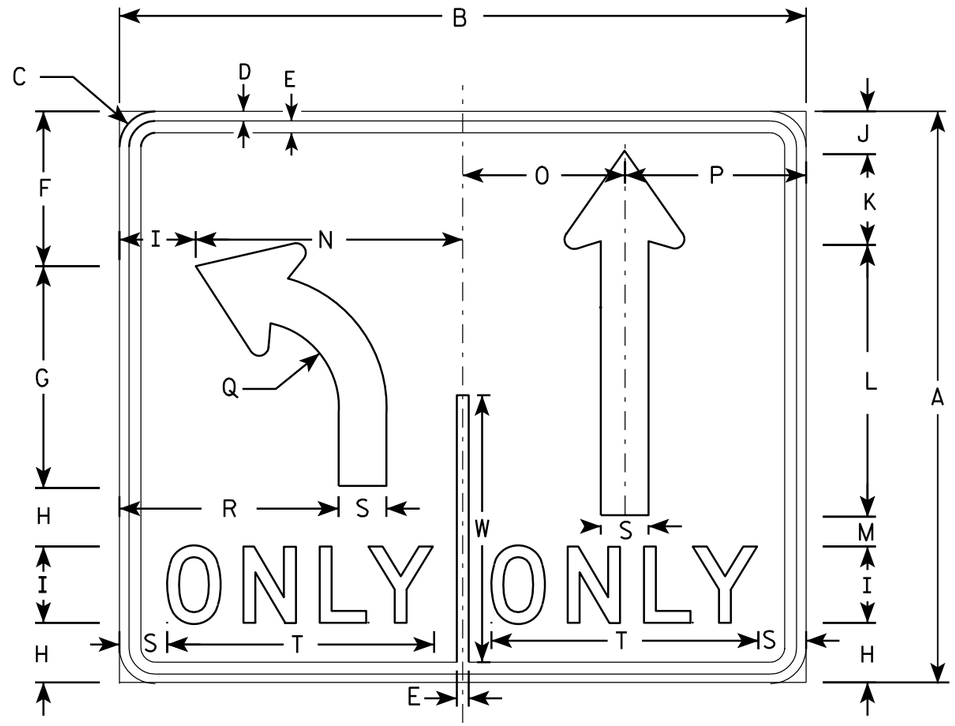
R3-8D



ARROW DETAIL

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - WHITE
   Message - BLACK
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



R3-8E

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	36	1 3/8	1/2	5/8	8 1/8	11 5/8	3 1/8	4	2 1/4	4 3/4	14 1/4	1 5/8	14	8 1/2	9 1/2	4 1/2	11 1/2	2 1/2	14	2 5/8	3/8	14				7.5
2M	30	36	1 3/8	1/2	5/8	8 1/8	11 5/8	3 1/8	4	2 1/4	4 3/4	14 1/4	1 5/8	14	8 1/2	9 1/2	4 1/2	11 1/2	2 1/2	14	2 5/8	3/8	14				7.5
3																											
4	48	54	2 1/4	3/4	1	13 1/4	18 1/2	5 1/8	6	3 1/2	7 1/8	21 1/2	4 3/4	21	12 3/4	14 1/4	7 1/4	17 1/8	3 3/4	20 5/8	4	5/8	22 3/8				18.0
5	48	54	2 1/4	3/4	1	13 1/4	18 1/2	5 1/8	6	3 1/2	7 1/8	21 1/2	4 3/4	21	12 3/4	14 1/4	7 1/4	17 1/8	3 3/4	20 5/8	4	5/8	22 3/8				18.0

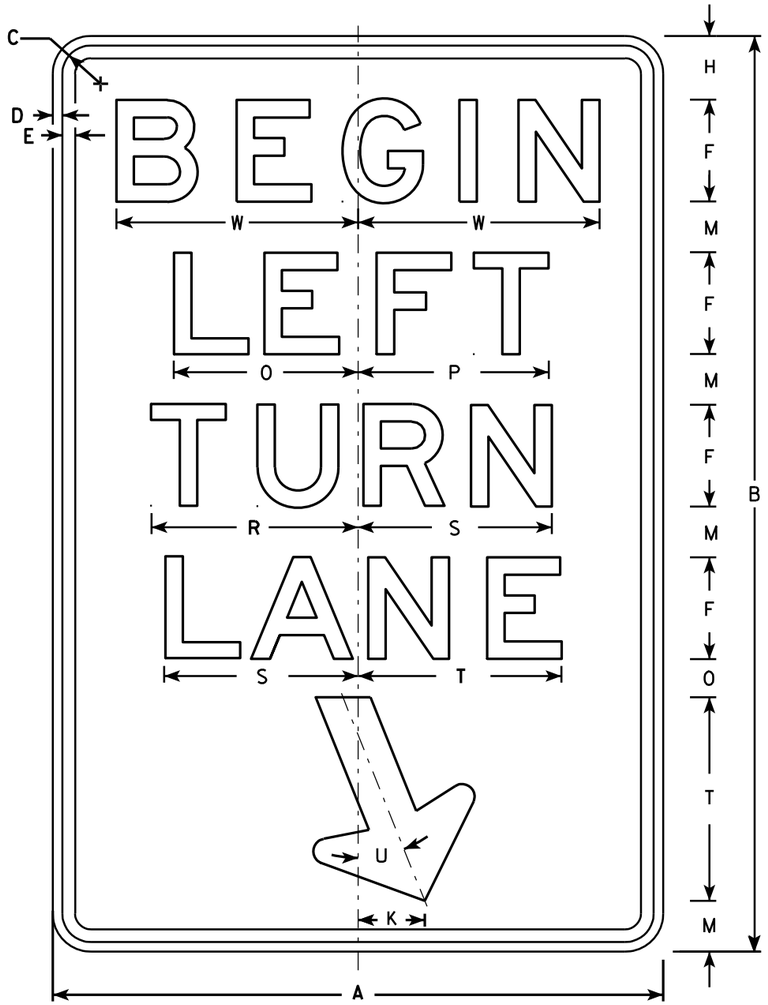
STANDARD SIGN
R3-8D & R3-8E

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/2011 PLATE NO. R3-8D.2

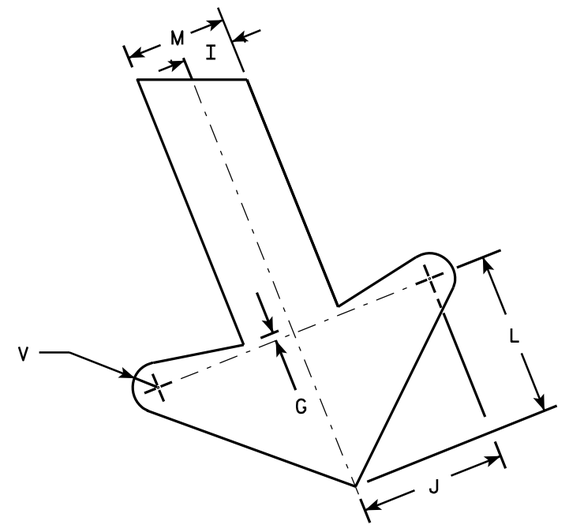
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 415	E



R3-20L

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	7 1/4	7 1/2		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
2M	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	7 1/4	7 1/2		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
3	36	54	1 3/4	1/2	5/8	6	3/8	3 3/4	1 1/2	4 1/4	4	4 7/8	3	2 1/4	10 7/8	11 1/4		12 1/4	11 1/2	12	22°	3/4	13 1/4				13.5
4																											
5																											

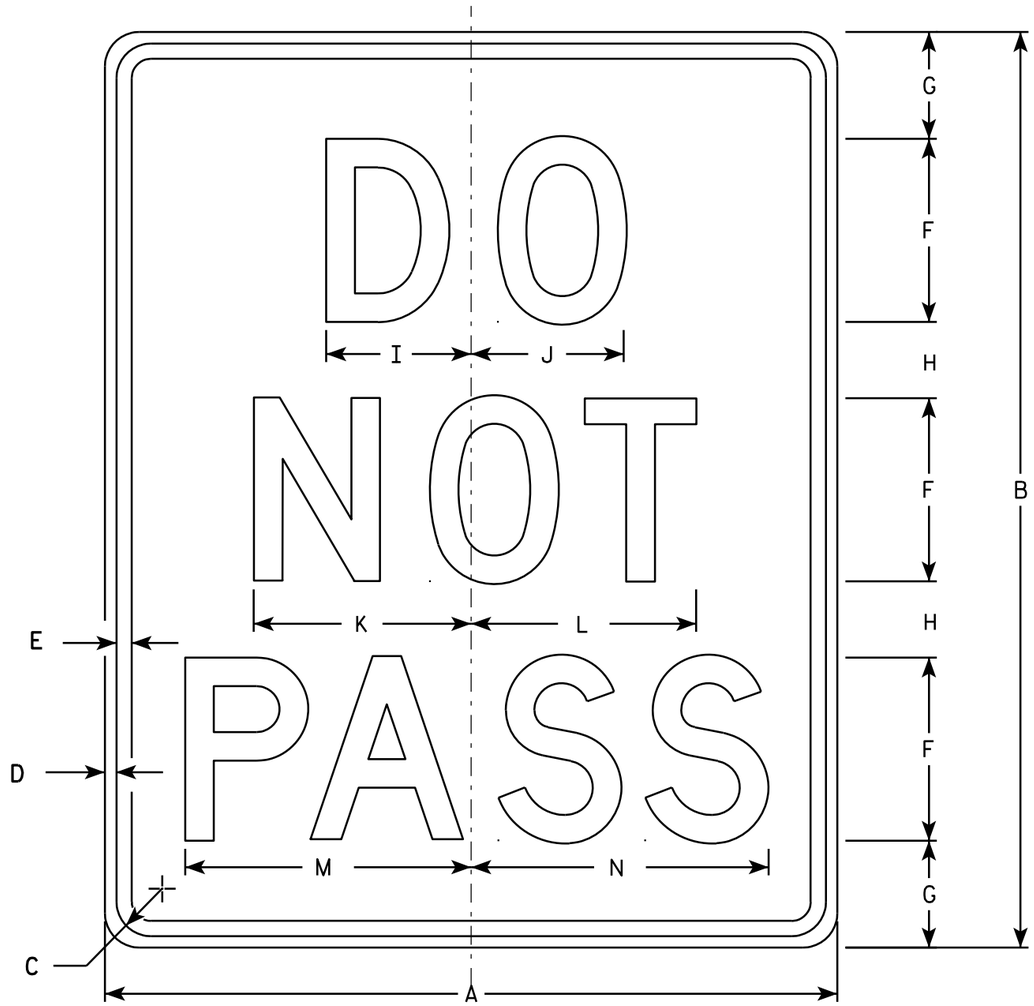
STANDARD SIGN
R3-20L

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/18/10 PLATE NO. R3-20L.7

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 416 | E



R4-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18	24	1 1/8	3/8	1/2	4	3 1/2	2 1/2	3 1/8	3 1/4	4 3/4	4 7/8	6 1/4	6 1/2													3.0
2S	24	30	1 1/8	3/8	1/2	6	3 1/2	2 1/2	4 3/4	5	7 1/8	7 3/8	9 3/8	9 3/4													5.0
2M	24	30	1 1/8	3/8	1/2	6	3 1/2	2 1/2	4 3/4	5	7 1/8	7 3/8	9 3/8	9 3/4													5.0
3																											
4	36	48	1 5/8	5/8	3/4	8	7	5	6 1/4	6 5/8	9 1/2	9 3/4	12 1/2	13													12.0
5	48	60	2 1/4	3/4	1	10	8	7	7 3/4	8 3/8	11 7/8	12 1/4	15 5/8	16 1/4													20.0

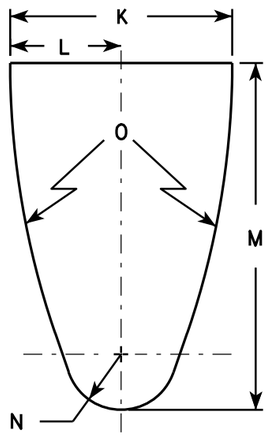
STANDARD SIGN
R4-1

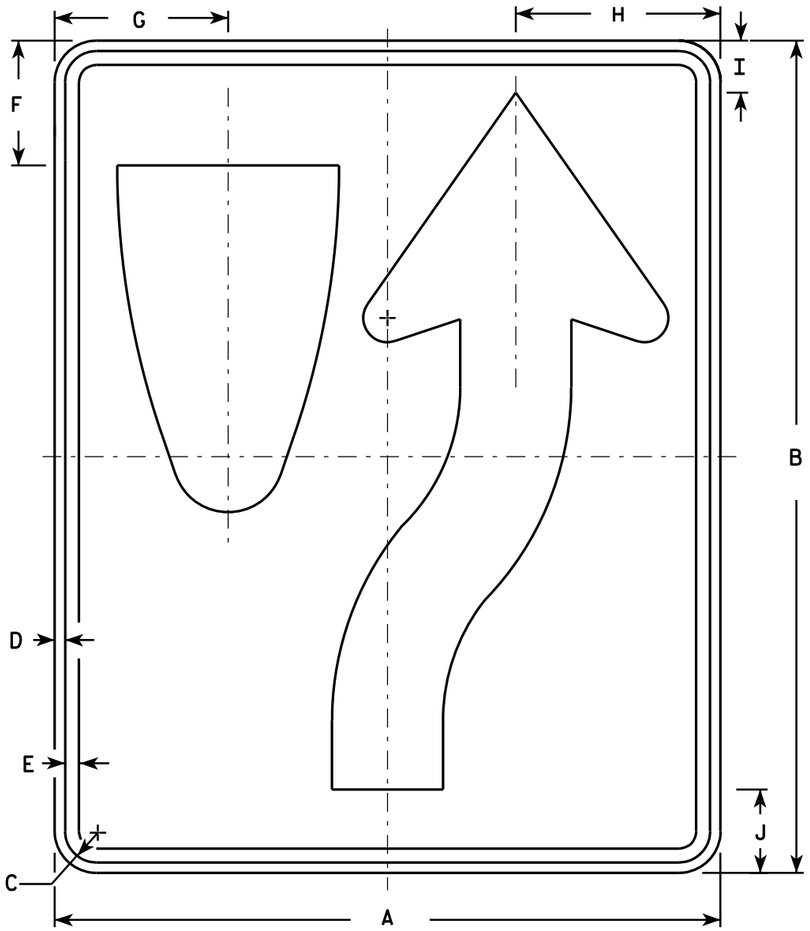
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/25/2011 PLATE NO. R4-1.7

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 417 | E

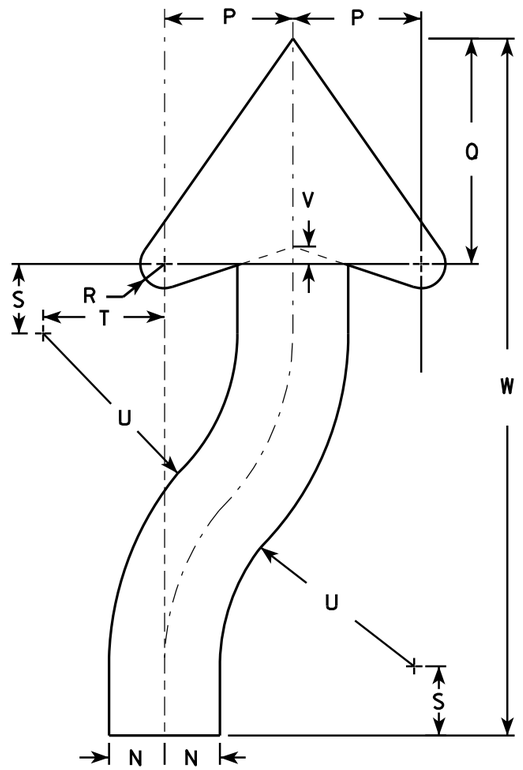




R4-7

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition. material is plywood but borders shall be rounded
2. Color:
   Background - White
   Message - Black
3. Corners may be square or rounded when base as shown. When base material is metal, the corners and borders shall be rounded.
4. R4-8 is the same as R4-7 except Legend is reversed.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18	24	1 1/8	3/8	1/2	3 3/8	4 3/4	5 1/2	1 3/8	2 1/4	6	3	9 3/8	1 1/2	22 1/2	3 1/2	6 1/8	5/8	1 7/8	3 1/4	6 3/4	1/2	20 3/8				3.0
2S	24	30	1 1/8	3/8	1/2	4 1/2	6 1/4	7 3/8	1 7/8	3	8	4	12 1/2	2	30	4 5/8	8 1/8	7/8	2 1/2	4 3/8	9	5/8	25 1/8				5.0
2M	24	30	1 1/8	3/8	1/2	4 1/2	6 1/4	7 3/8	1 7/8	3	8	4	12 1/2	2	30	4 5/8	8 1/8	7/8	2 1/2	4 3/8	9	5/8	25 1/8				5.0
3	36	48	1 3/4	1/2	5/8	6 3/4	9 3/8	11 1/8	2 7/8	4 1/2	12	6	18 3/4	3	45	6 7/8	12 1/4	1 1/4	3 3/4	6 5/8	13 1/2	1	40 3/4				12.0
4	36	48	1 3/4	1/2	5/8	6 3/4	9 3/8	11 1/8	2 7/8	4 1/2	12	6	18 3/4	3	45	6 7/8	12 1/4	1 1/4	3 3/4	6 5/8	13 1/2	1	40 3/4				12.0
5	48	60	2 1/4	3/4	1	9	12 1/2	14 3/4	3 3/4	6	16	8	25	4	60	9 1/4	16 1/4	1 5/8	5	8 3/4	18	1 1/4	50 1/4				20.0

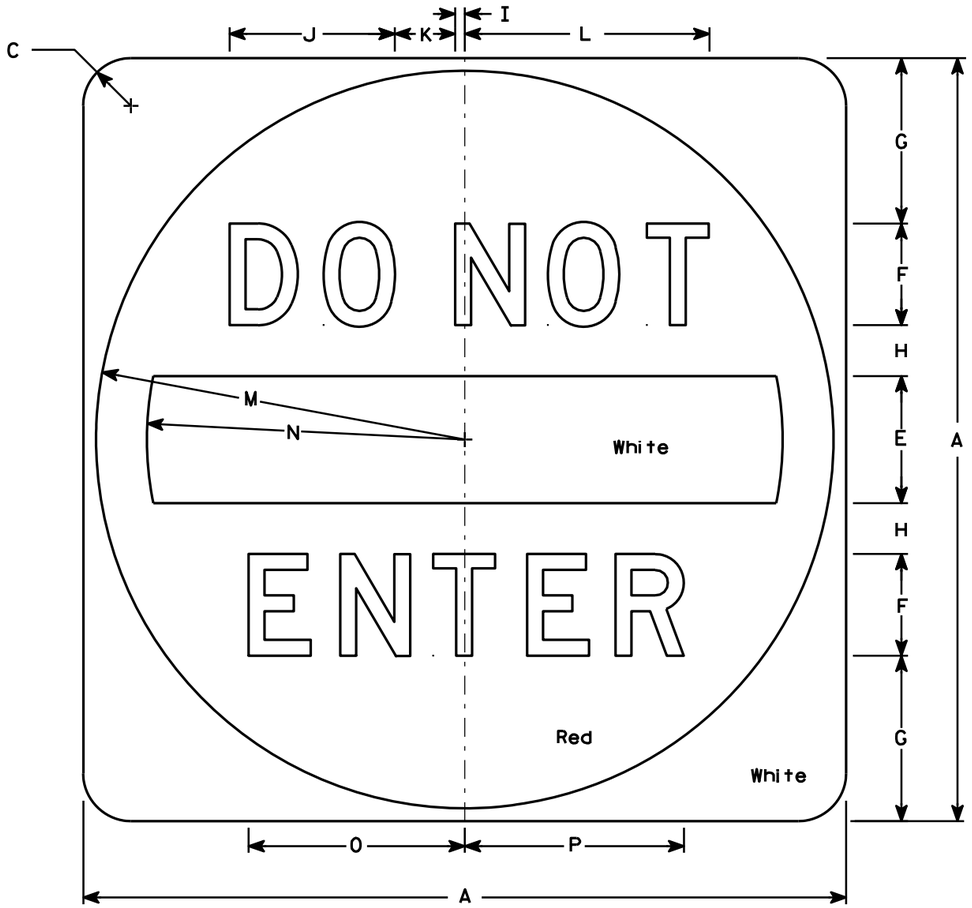
STANDARD SIGN
R4-7 & R4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 3/25/2011 PLATE NO. R4-7.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 418	E



R5-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - See detail
   Message - White - Type H Reflective
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but when base material is metal, the cornors shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30		1 7/8		5	4	6 1/2	2	3/8	6 1/2	2 3/8	9 5/8	14 1/2	12 1/2	8 1/2	8 5/8											6.26
2M	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0
3	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0
4	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0
5	48		3		8	6	11	3	5/8	9 3/4	3 5/8	14 1/2	23 1/2	20	12 3/4	12 7/8											16.0

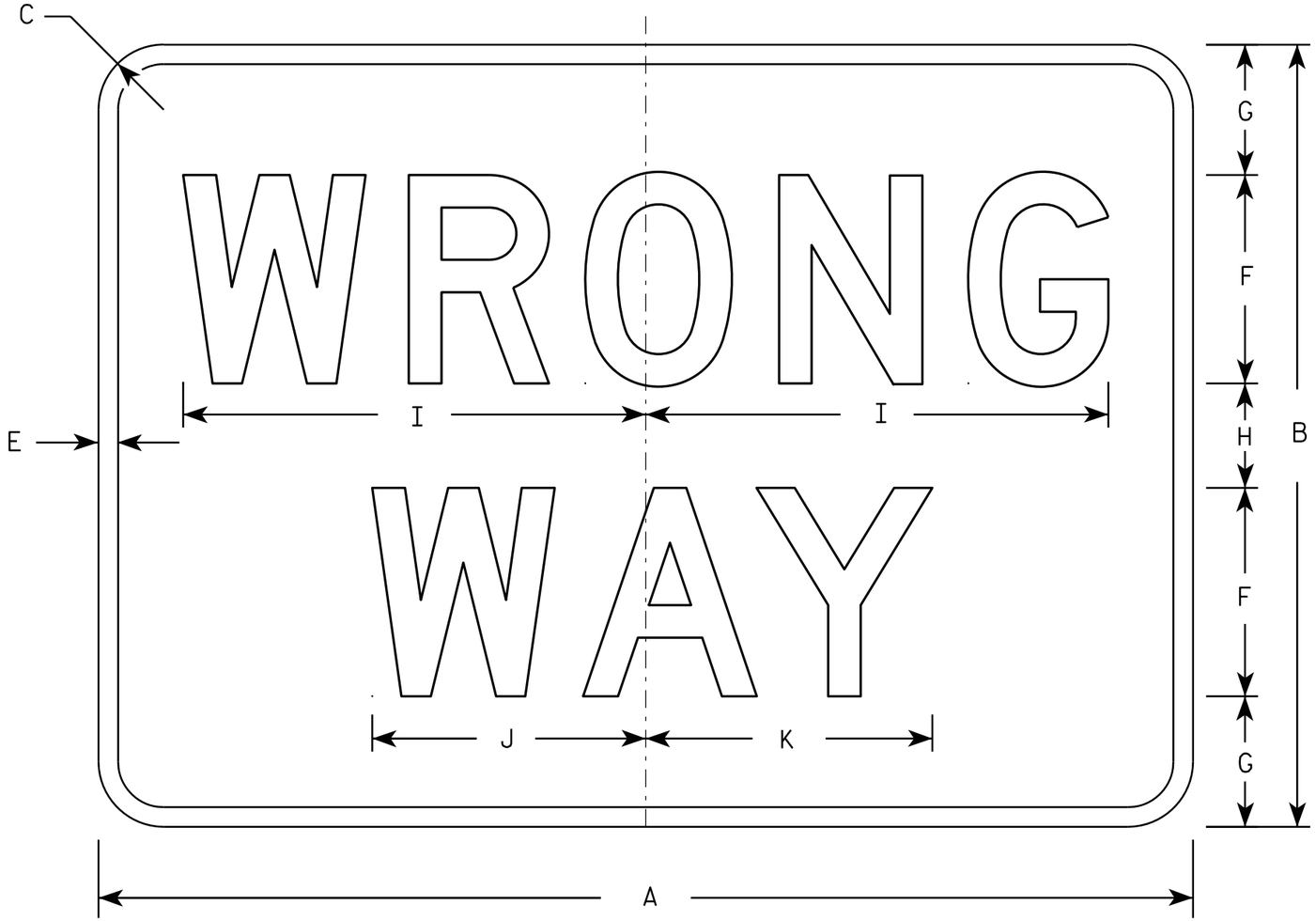
STANDARD SIGN
R5-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/17/10 PLATE NO. R5-1.15

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 419 | E



R5-1A

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Red
   Message - White
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30	18	1 1/2		1/2	5	3	2	11	6 1/2	6 7/8																3.75
2S	36	24	2		5/8	6	4 1/2	3	13 1/4	7 7/8	8 1/4																6.00
2M	42	30	2 1/2		3/4	8	5	4	17 3/4	10 1/2	11																8.75
3	42	30	2 1/2		3/4	8	5	4	17 3/4	10 1/2	11																8.75
4	42	30	2 1/2		3/4	8	5	4	17 3/4	10 1/2	11																8.75
5	42	30	2 1/2		3/4	8	5	4	17 3/4	10 1/2	11																8.75

STANDARD SIGN
R5-1A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/17/10 PLATE NO. R5-1A.2

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 420 | E

R5-57

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - Lines 1, 2, and 5 are Series C.
   Lines 3 and 4 are Series B.
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S																											
2M																											
3																											
4	36		1 5/8	5/8	3/4	4	3	2	3 1/2	14 1/4	14 7/8	11	11 1/2	4 3/4	1 3/4	9		1 3/8	10	11	2 1/2	1 3/4	15 1/2	13	13 5/8		9.0
5	36		1 5/8	5/8	3/4	4	3	2	3 1/2	14 1/4	14 7/8	11	11 1/2	4 3/4	1 3/4	9		1 3/8	10	11	2 1/2	1 3/4	15 1/2	13	13 5/8		9.0

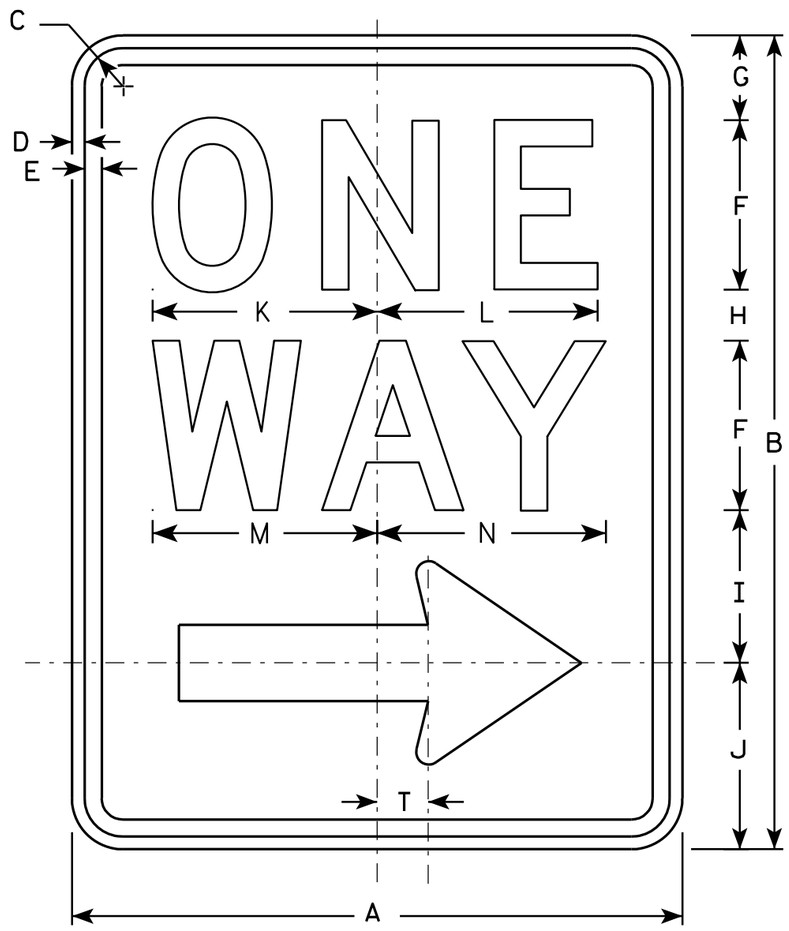
STANDARD SIGN
R5-57

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/29/2011 PLATE NO. R5-57.10

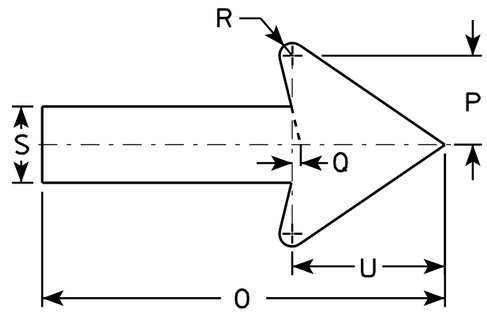
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 421	E



R6-2R

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. R6-2L same as R6-2R except arrow points to the left.



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
1	18	24	1 1/8	3/8	1/2	5	2 1/2	1 1/2	4 1/2	5 1/2	6 5/8	6 1/2	6 5/8	6 3/4	11 7/8	2 5/8	1/4	3/8	2 1/4	1 1/2	4 1/2					
2S	24	30	1 1/8	3/8	1/2	6	3	2 1/2	5 1/2	7	8 1/8	8 1/8	8 1/2	8 5/8	16	3 1/2	3/8	1/2	3	2	6					
2M	30	36	1 3/8	1/2	5/8	8	2 1/2	2 5/8	6 7/8	8	10 1/2	10 1/2	11 1/4	11 1/4	20	4 3/8	1/2	5/8	3 3/4	2 1/2	7 1/2					
3	36	48	1 7/8	1/2	5/8	10	5 1/4	3 1/4	9	10 1/2	12 3/4	12 3/4	13 1/4	13 1/2	24	5 5/8	1/2	3/4	4 3/4	3	9					
4	36	48	1 7/8	1/2	5/8	10	5 1/4	3 1/4	9	10 1/2	12 3/4	12 3/4	13 1/4	13 1/2	24	5 5/8	1/2	3/4	4 3/4	3	9					
5																										

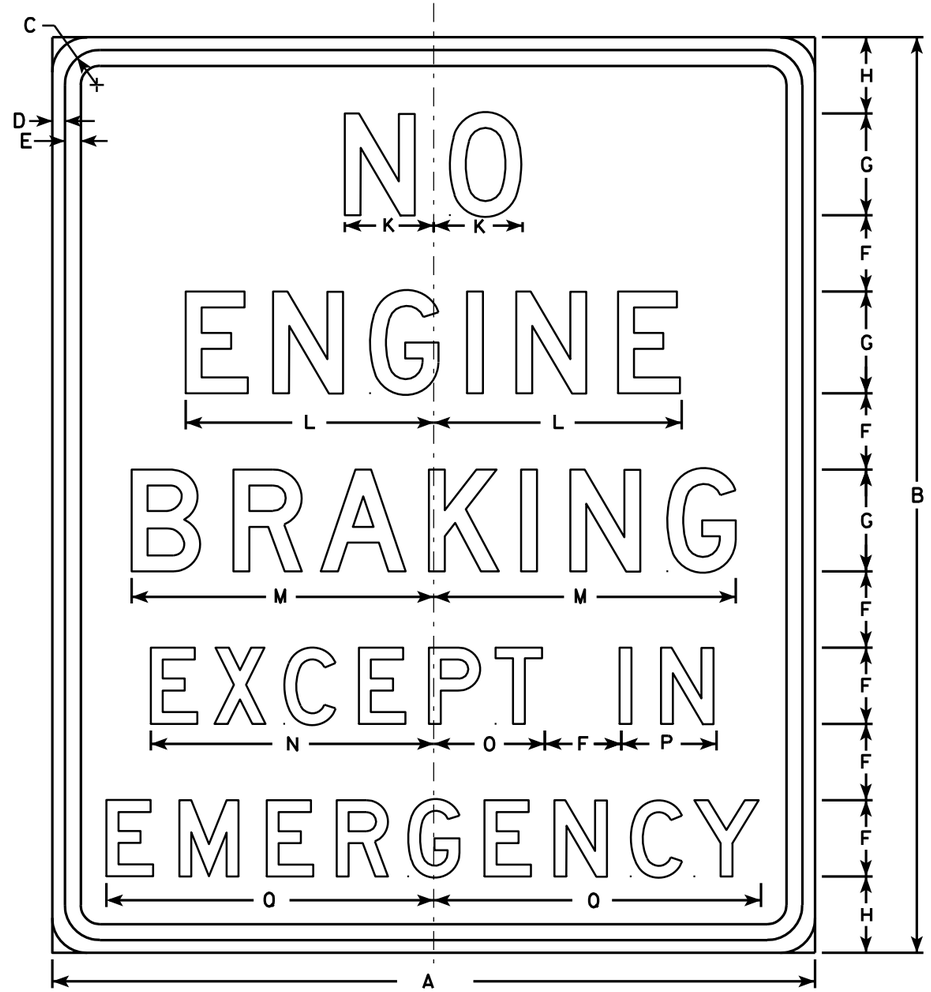
STANDARD SIGN
R6-2 R&L

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/2/10 PLATE NO. R6-2.8

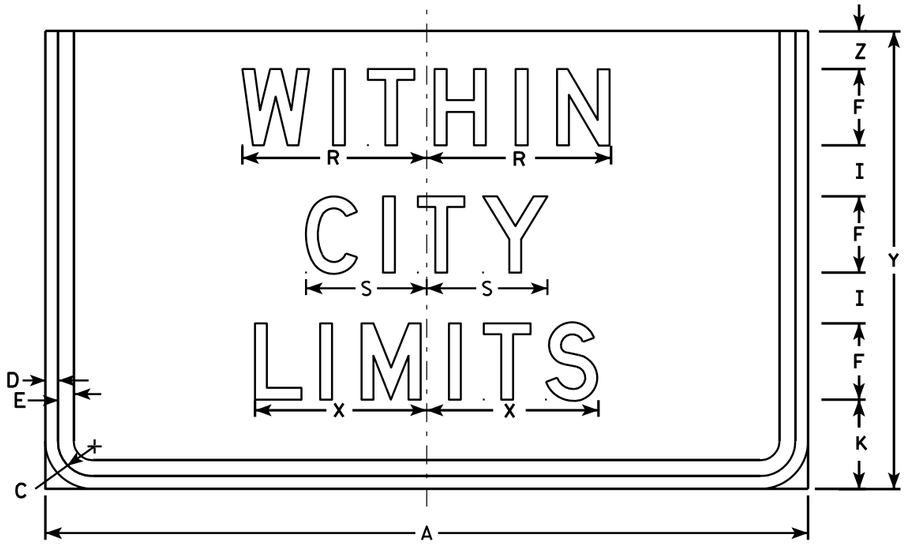
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 422	E



R10-64

NOTES

1. Signs are Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - D See note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Line 2 of R10-64F is Series C for "TOWNSHIP" Only



R10-64F

Area sq. ft.
3.75
7.0

VILLAGE
V
V

TOWNSHIP
U
U

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30	36	1 3/8	1/2	5/8	3	4	3	2		3 1/2	9 3/4	11 7/8	11 1/8	4 3/8	3 3/4	12 7/8	7 1/4	4 3/4		8 1/4	8 3/4	5/8	6 3/4	18	1 1/2	7.5
2S	30	36	1 3/8	1/2	5/8	3	4	3	2		3 1/2	9 3/4	11 7/8	11 1/8	4 3/8	3 3/4	12 7/8	7 1/4	4 3/4		8 1/4	8 3/4	5/8	6 3/4	18	1 1/2	7.5
2M	30	36	1 3/8	1/2	5/8	3	4	3	2		3 1/2	9 3/4	11 7/8	11 1/8	4 3/8	3 3/4	12 7/8	7 1/4	4 3/4		8 1/4	8 3/4	5/8	6 3/4	18	1 1/2	7.5
3	42	48	1 3/8	1/2	5/8	4	5	4 1/2	3		4	12 1/4	14 7/8	14 1/8	5 1/4	4 3/4	16 1/4	9	6		11	11 1/4	1 1/2	8 1/2	24	2	14.0
4																											
5																											

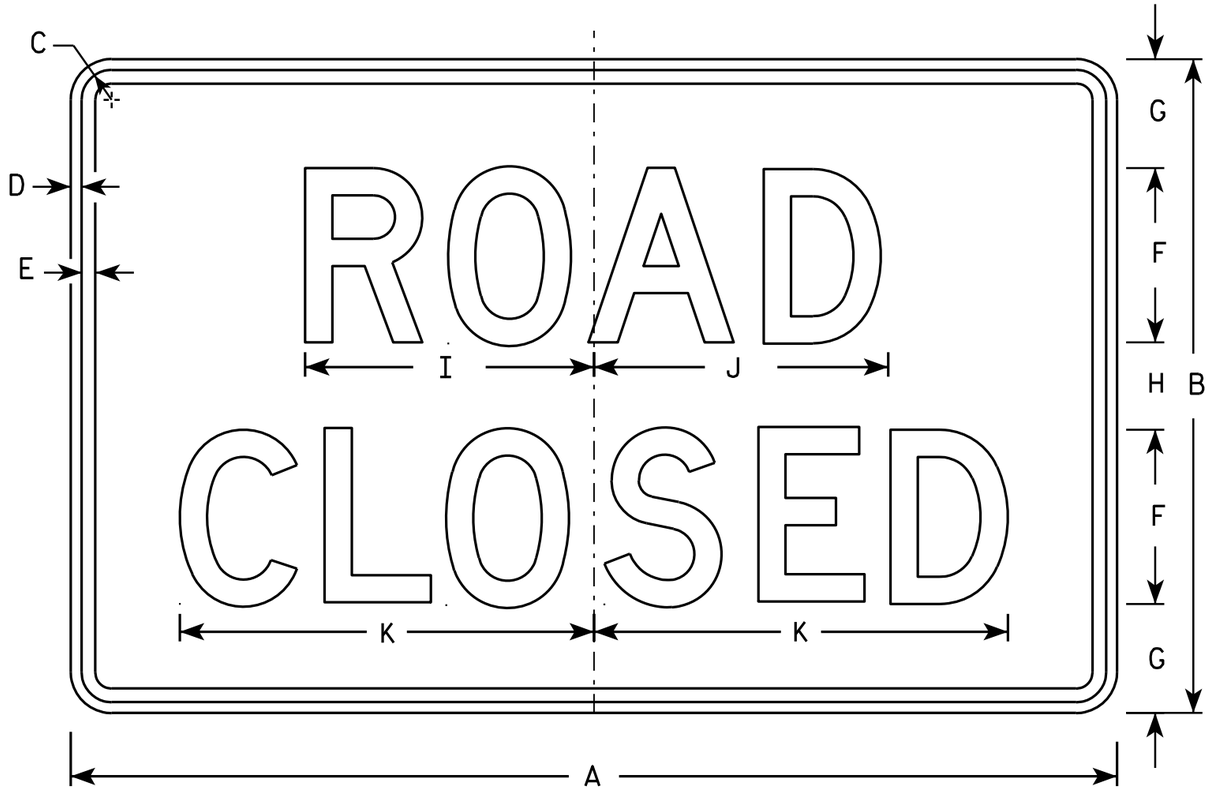
STANDARD SIGN
R10-64 & R10-64F

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/4/11 PLATE NO. R10-64.7

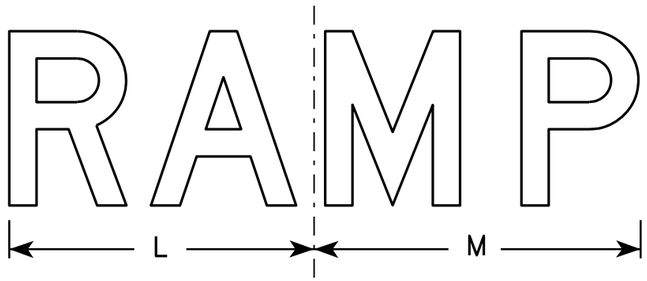
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 423	E



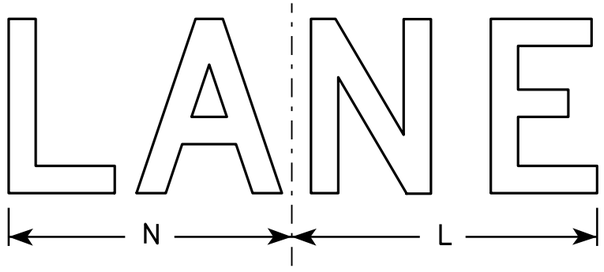
R11-2

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Modify the message as required.



R11-2R



R11-2L

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													10.0
2M	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													10.0
3	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													10.0
4	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													10.0
5	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													10.0

STANDARD SIGN
R11-2

WISCONSIN DEPT OF TRANSPORTATION

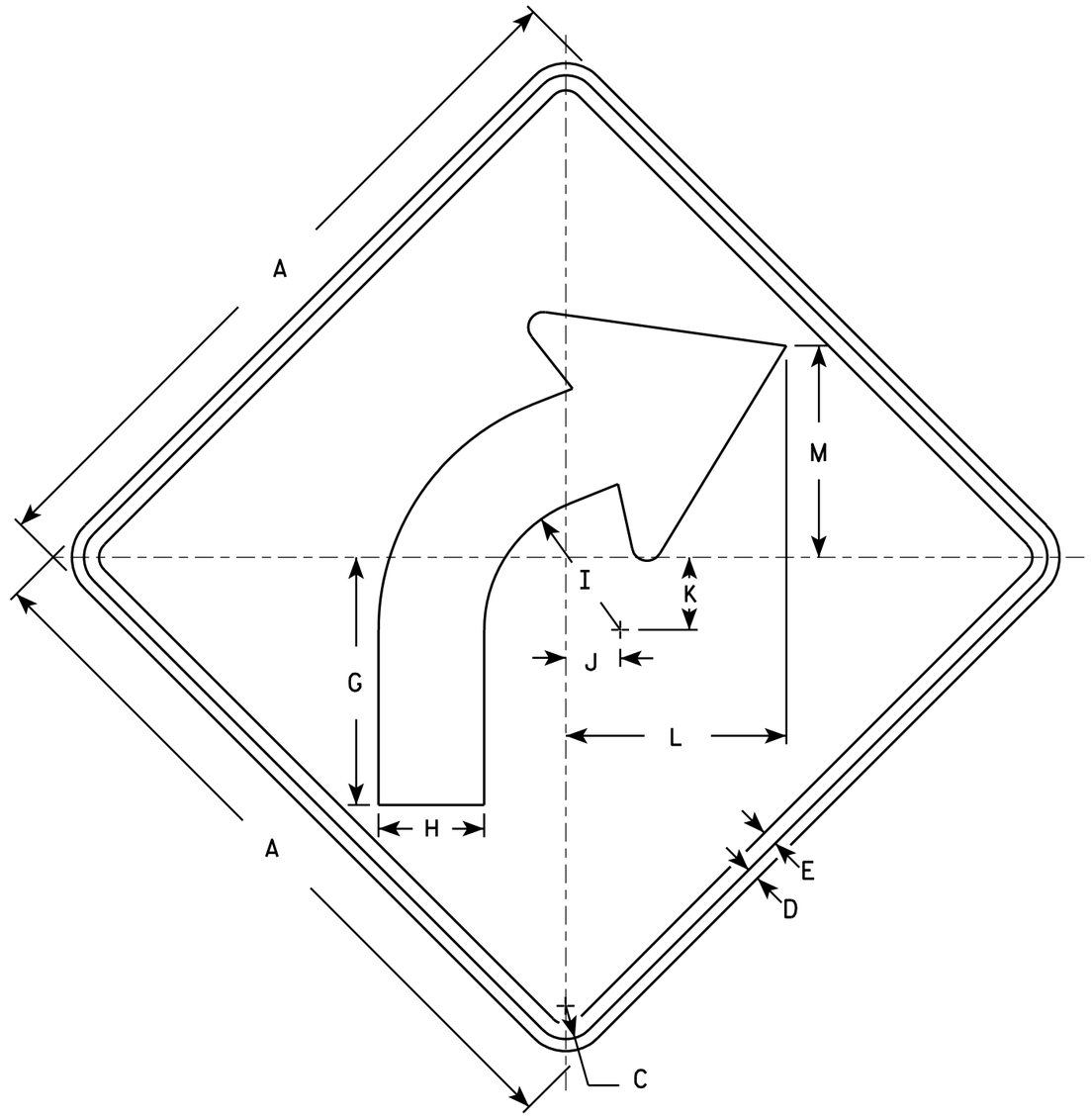
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/1/11 PLATE NO. R11-2.10

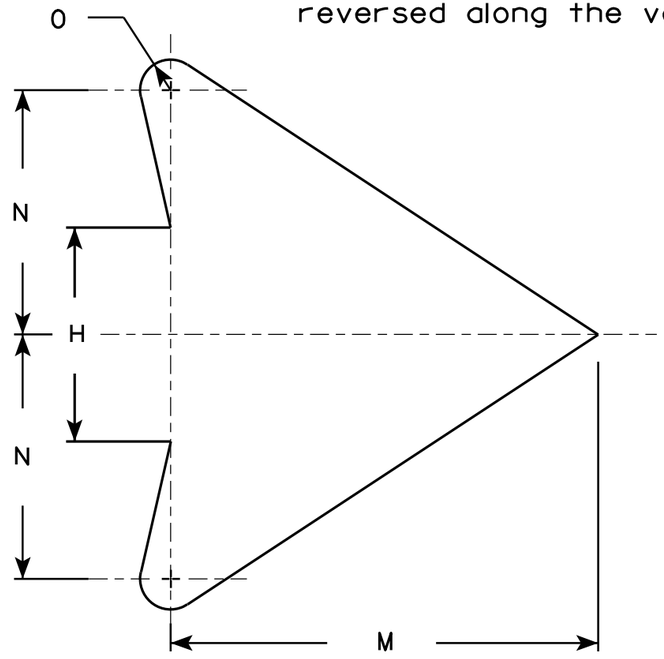
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 424	E

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W1-2L is the same as W1-2R except the arrow is reversed along the vertical centerline.



W1-2R



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2		8 1/4	3 1/2	4 1/2	1 3/4	2 3/8	7 1/4	7	4	1/2												4.0
2S	30		1 3/8	1/2	5/8		10 1/4	4 3/8	5 5/8	2 1/4	3	9 1/8	8 3/4	5	5/8												6.25
2M	36		1 5/8	5/8	3/4		12 3/8	5 1/4	6 3/4	2 5/8	3 1/2	10 7/8	10 1/2	6	3/4												9.0
3	36		1 5/8	5/8	3/4		12 3/8	5 1/4	6 3/4	2 5/8	3 1/2	10 7/8	10 1/2	6	3/4												9.0
4	36		1 5/8	5/8	3/4		12 3/8	5 1/4	6 3/4	2 5/8	3 1/2	10 7/8	10 1/2	6	3/4												9.0
5	48		2 1/4	3/4	1		16 1/2	7	9	3 1/2	4 5/8	14 1/2	14	8	1												16.0

STANDARD SIGN
W1-2

WISCONSIN DEPT OF TRANSPORTATION

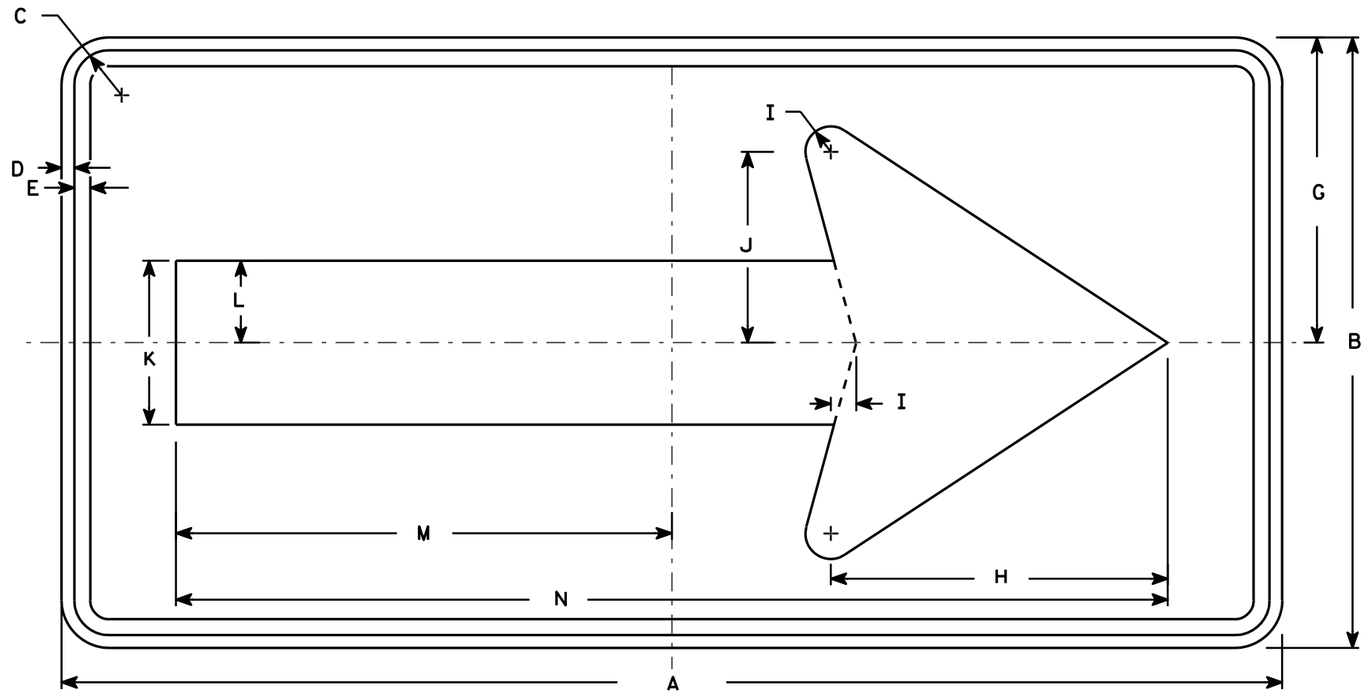
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/15/12 PLATE NO. W1-2.10

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 425	E

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



W1-6

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	18	1 1/8	3/8	3/8		9	10	3/4	5 5/8	4 3/4	2 3/8	14 5/8	29 1/4													4.5
2S	48	24	1 3/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
2M	48	24	1 3/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
3	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
4	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
5	96	48	2 1/4	3/4	1		24	26 1/2	2	15	13	6 1/2	39	78													32.0

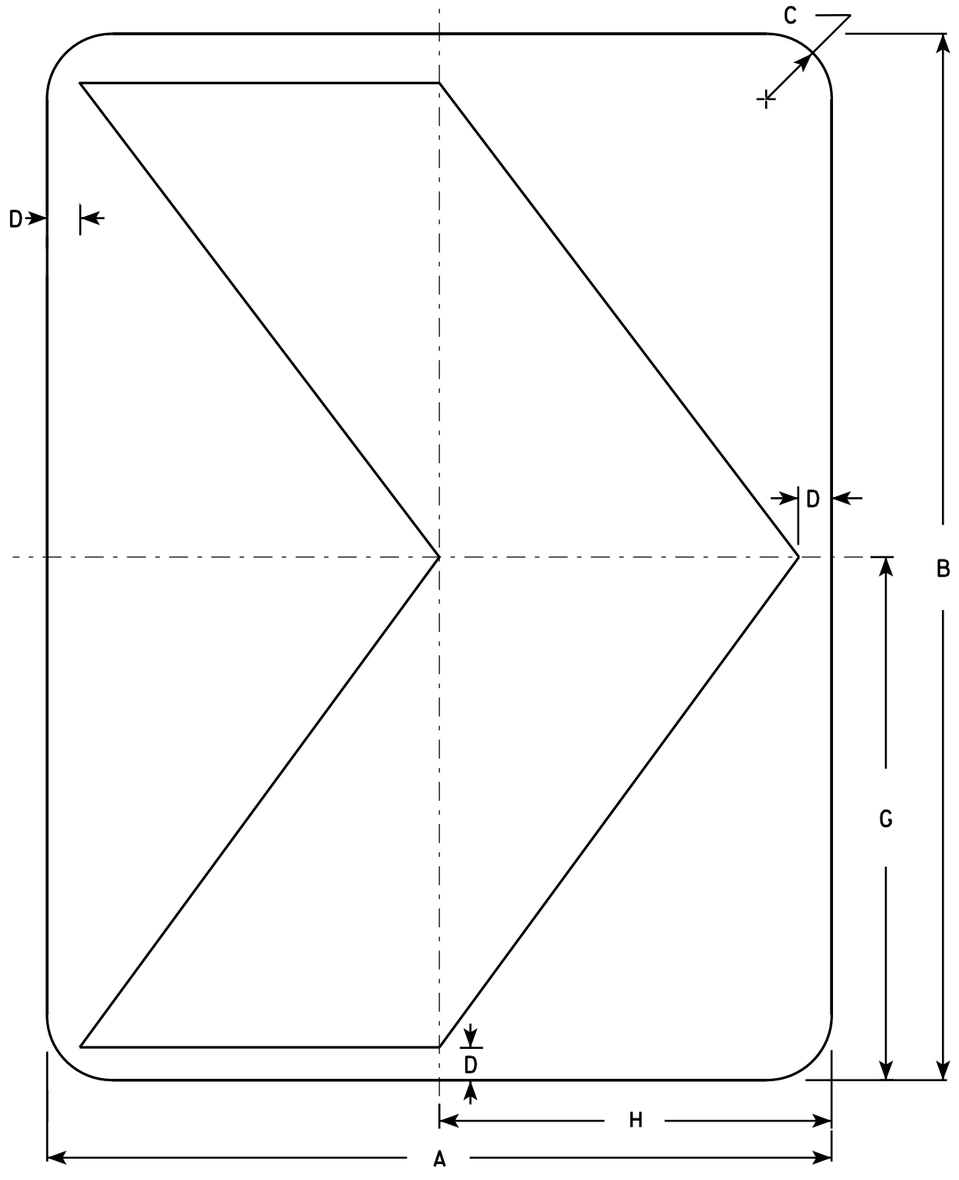
STANDARD SIGN
W1-6

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W1-6.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 426



W1-8

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	12	18	1 ½	½			9	6																			1.5
2S	18	24	1 ½	¾			12	9																			3.0
2M	18	24	1 ½	¾			12	9																			3.0
3	24	30	1 ½	1			15	12																			5.0
4	30	36	1 ⅞	1 ¼			18	15																			7.5
5	36	48	2 ¼	1 ½			24	18																			12.0

STANDARD SIGN
W1-8

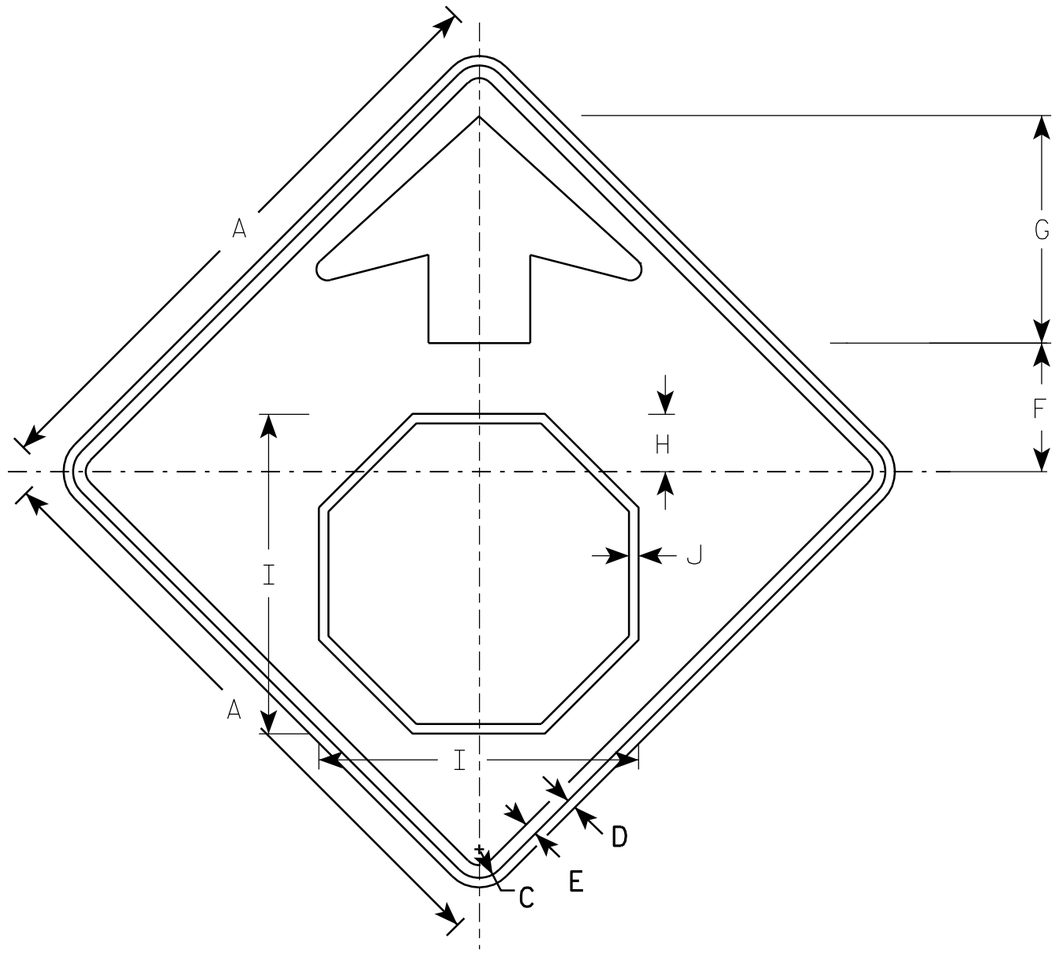
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W1-8.6

PROJECT NO:

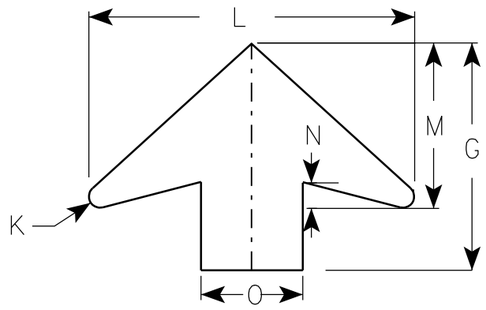
SHEET NO: 427 E



W3-1

NOTES

1. All Signs Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - YELLOW
   Arrow & Border - BLACK
   Stop Symbol - WHITE BORDER ON RED BACKGROUND



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8	6 1/4	11 1/4	2 7/8	15 3/4	1/2	1/2	16	8	1 1/4	5												6.25
2S	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0
2M	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0
3	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0
4	48		2 1/4	3/4	1	10	17 7/8	4 1/2	25 1/8	3/4	7/8	25 5/8	13	2	8												16.0
5	48		2 1/4	3/4	1	10	17 7/8	4 1/2	25 1/8	3/4	7/8	25 5/8	13	2	8												16.0

STANDARD SIGN
W3-1

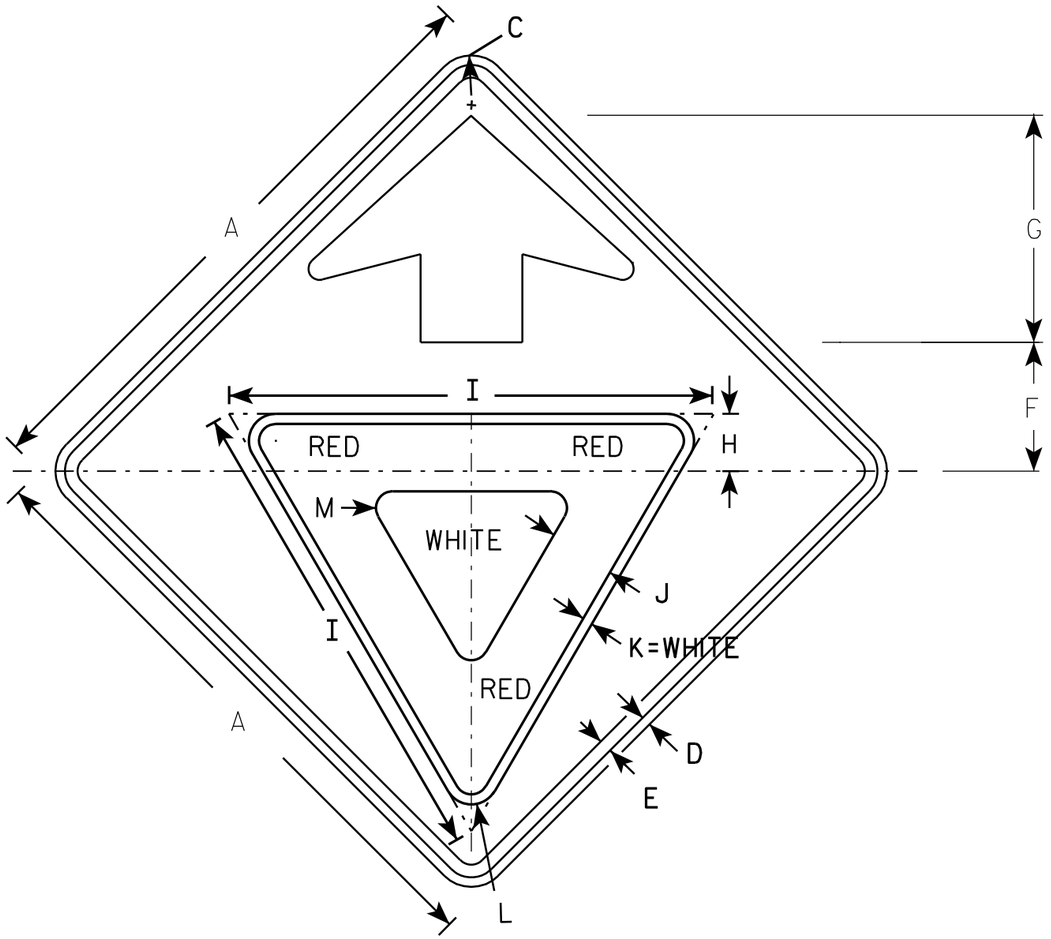
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W3-1.12

PROJECT NO:

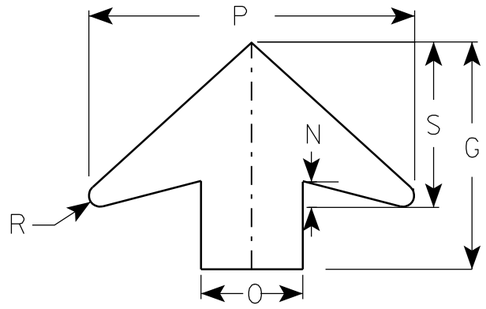
SHEET NO: 428 E



W3-2

NOTES

1. All Signs Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - YELLOW
   Arrow & Border - BLACK
   Yield Symbol - WHITE BORDER ON RED BACKGROUND



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8	6 1/4	11 1/4	3	25	3 3/8	1/2	1 3/8	7/8	1 1/4	5	16		1/2	8								6.25
2S	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 3/8	28	3 3/4	5/8	1 1/2	1	1 5/8	6	19 1/4		5/8	9 3/4								9.0
2M	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 3/8	28	3 3/4	5/8	1 1/2	1	1 5/8	6	19 1/4		5/8	9 3/4								9.0
3	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 3/8	28	3 3/4	5/8	1 1/2	1	1 5/8	6	19 1/4		5/8	9 3/4								9.0
4	48		2 1/4	3/4	1	10	17 7/8	4 1/2	38	5	3/4	2 1/8	1 3/8	2	8	25 5/8		7/8	13								16.0
5	48		2 1/4	3/4	1	10	17 7/8	4 1/2	38	5	3/4	2 1/8	1 3/8	2	8	25 5/8		7/8	13								16.0

STANDARD SIGN
W3-2

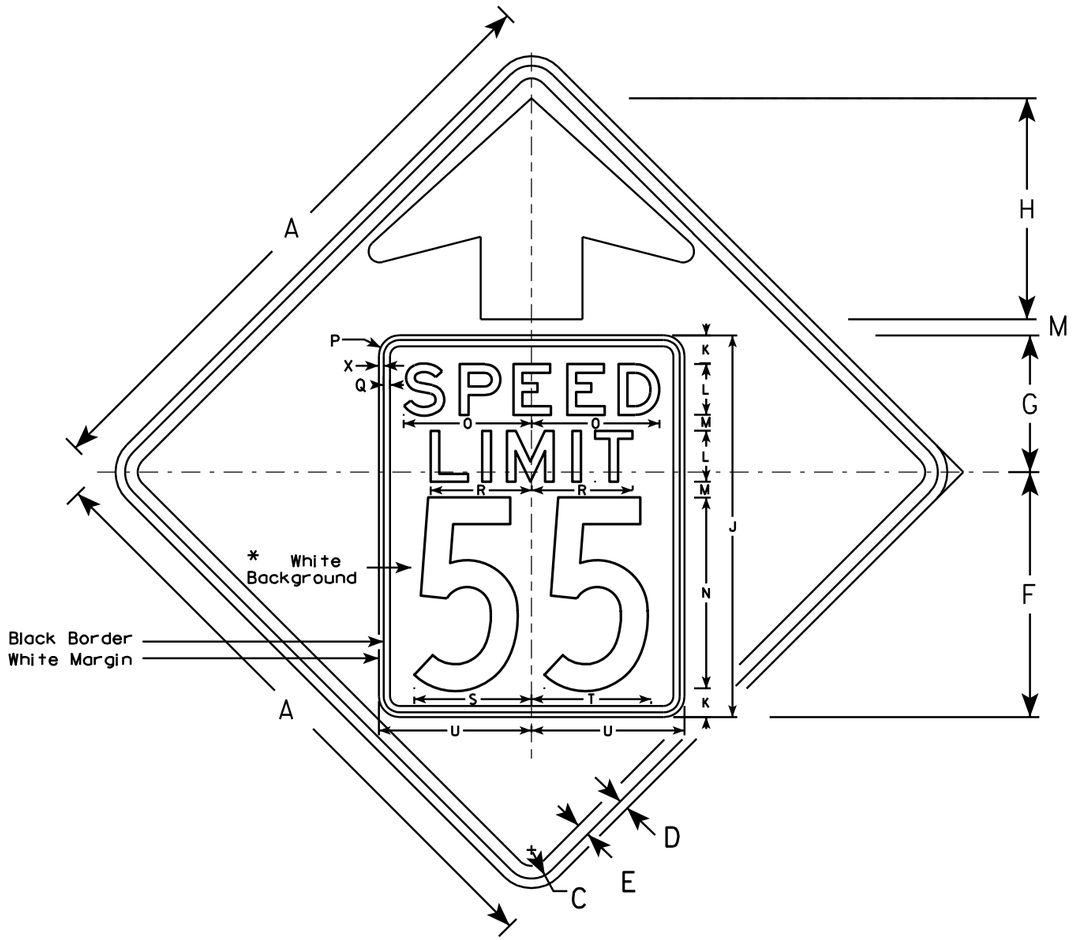
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W3-2..9

PROJECT NO:

SHEET NO: 429 E

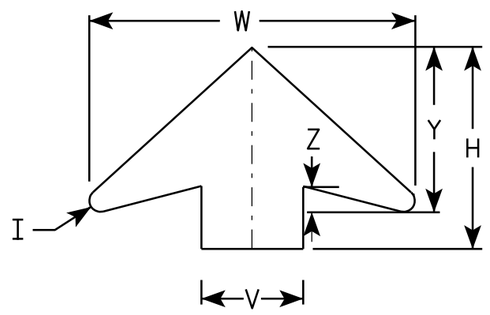


W3-5

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color: *
   Background - YELLOW*
   Message - BLACK
3. Message Series - C for numbers Series E for wording
4. Substitute appropriate numerals and optically adjust spacing to achieve proper balance

*Speed Limit Sign shall have a White Background



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	36		1 5/8	5/8	3/4	14 1/2	9 1/2	11 1/2	5/8	24	2	3	1	12	7 1/8	1 1/2	3/8	5 3/4	7 1/4	7 1/8	9	6	19 1/4	3/8	9 3/4	1 5/8	9.0
2M	36		1 5/8	5/8	3/4	14 1/2	9 1/2	11 1/2	5/8	24	2	3	1	12	7 1/8	1 1/2	3/8	5 3/4	7 1/4	7 1/8	9	6	19 1/4	3/8	9 3/4	1 5/8	9.0
3	36		1 5/8	5/8	3/4	14 1/2	9 1/2	11 1/2	5/8	24	2	3	1	12	7 1/8	1 1/2	3/8	5 3/4	7 1/4	7 1/8	9	6	19 1/4	3/8	9 3/4	1 5/8	9.0
4	48		2 1/4	3/4	1	19 1/4	10 3/4	17 3/8	7/8	30	2 1/4	4	1 1/4	15	10	1 5/8	1/2	8	9 1/4	9 3/8	12	8	25 5/8	3/8	13	2	16.0
5	48		2 1/4	3/4	1	19 1/4	10 3/4	17 3/8	7/8	30	2 1/4	4	1 1/4	15	10	1 5/8	1/2	8	9 1/4	9 3/8	12	8	25 5/8	3/8	13	2	16.0

STANDARD SIGN
W3-5

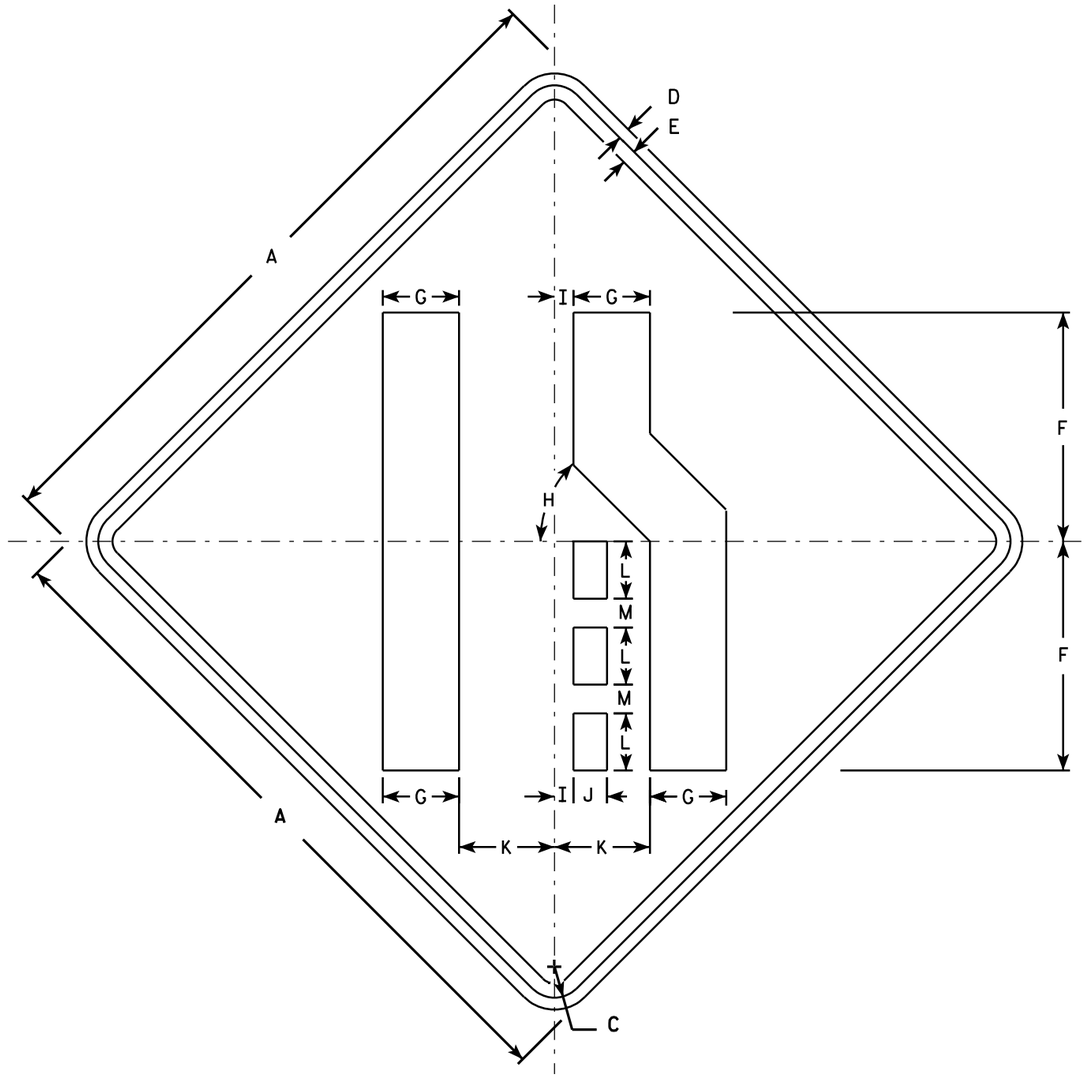
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/29/12 PLATE NO. W3-5.5

PROJECT NO:

SHEET NO: 430 E



W4-2R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W4-2L is the same as W4-2R except the symbol is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8	10	3 3/8	45°	7/8	1 1/2	4 1/4	2 1/2	1 1/4														6.25
2S	36		1 5/8	5/8	3/4	12	4	45°	1	1 3/4	5	3	1 1/2														9.0
2M	36		1 5/8	5/8	3/4	12	4	45°	1	1 3/4	5	3	1 1/2														9.0
3	36		1 5/8	5/8	3/4	12	4	45°	1	1 3/4	5	3	1 1/2														9.0
4	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
5	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0

STANDARD SIGN
W4-2

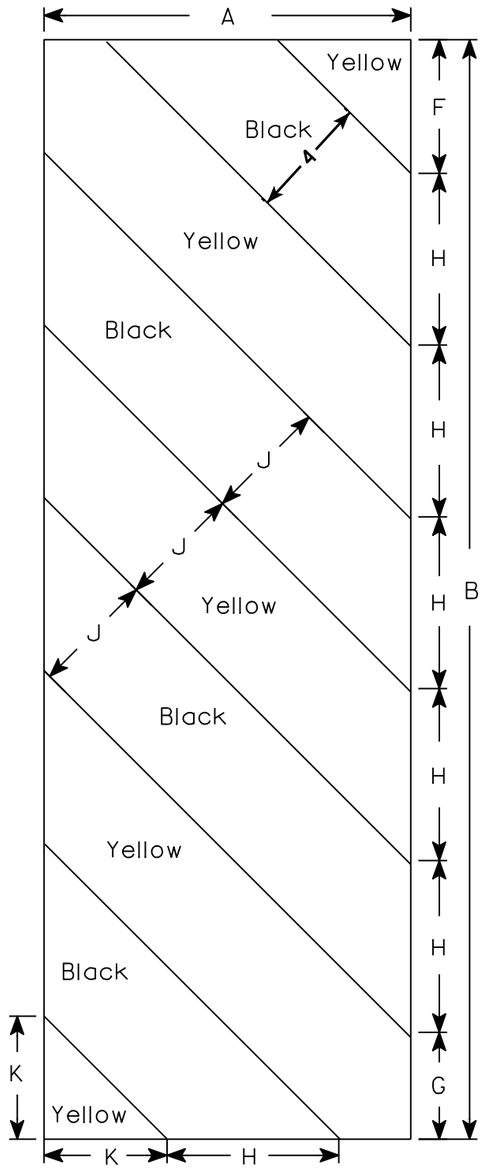
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

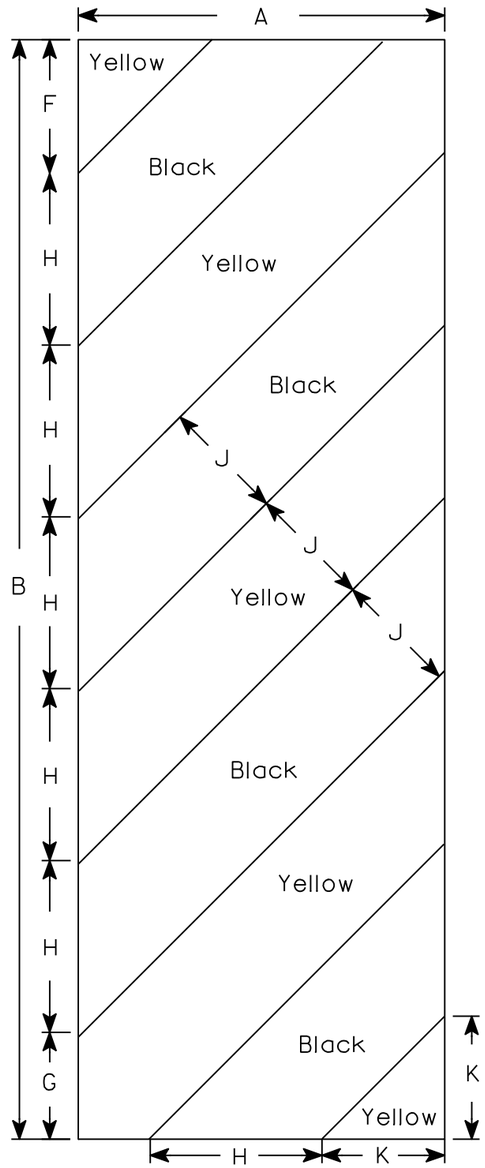
DATE 3/12/13 PLATE NO. W4-2.14

PROJECT NO:

SHEET NO: 431 E



W5-52L



W5-52R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. Alternate colors of stripes as shown.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	12	36				4 3/8	3 1/2	5 5/8	45°	4	4																3.0
2M	12	36				4 3/8	3 1/2	5 5/8	45°	4	4																3.0
3	18	54				6	5 1/2	8 1/2	45°	6	6 9/16																6.75
4																											
5																											

STANDARD SIGN

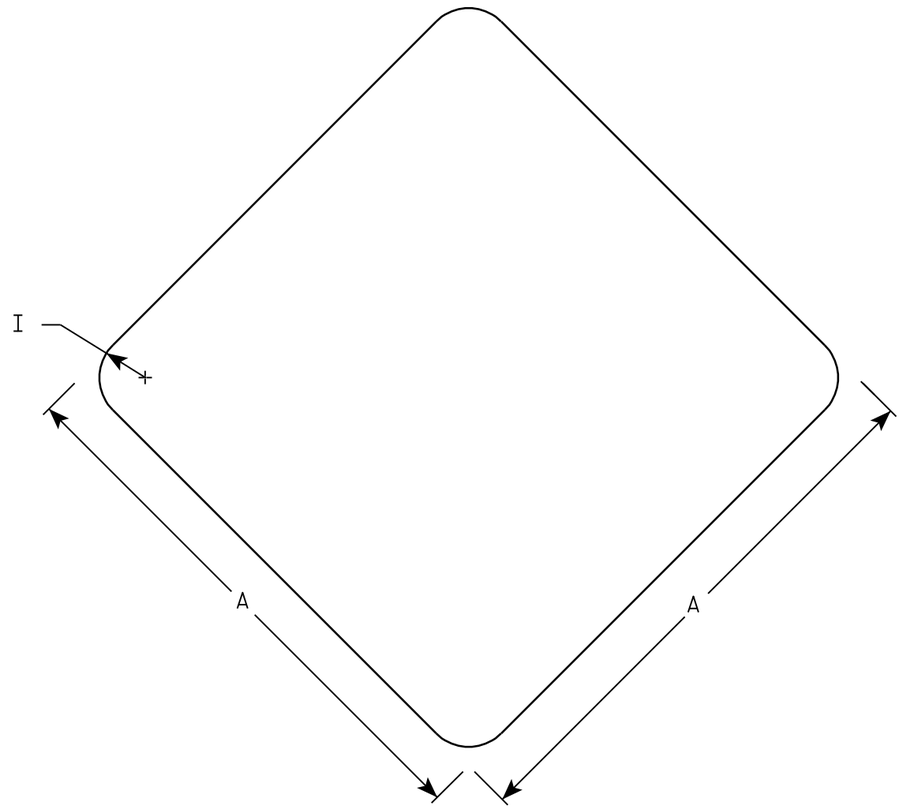
W5-52L & W5-52R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/29/12 PLATE NO. W5-52.9

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 432 | E



W5-54

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
3. Corners may be square or rounded when base material is plywood. When base material is metal the corners shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	12								1																		1.0
2S	18								1 ½																		2.25
2M	18								1 ½																		2.25
3																											
4																											
5																											

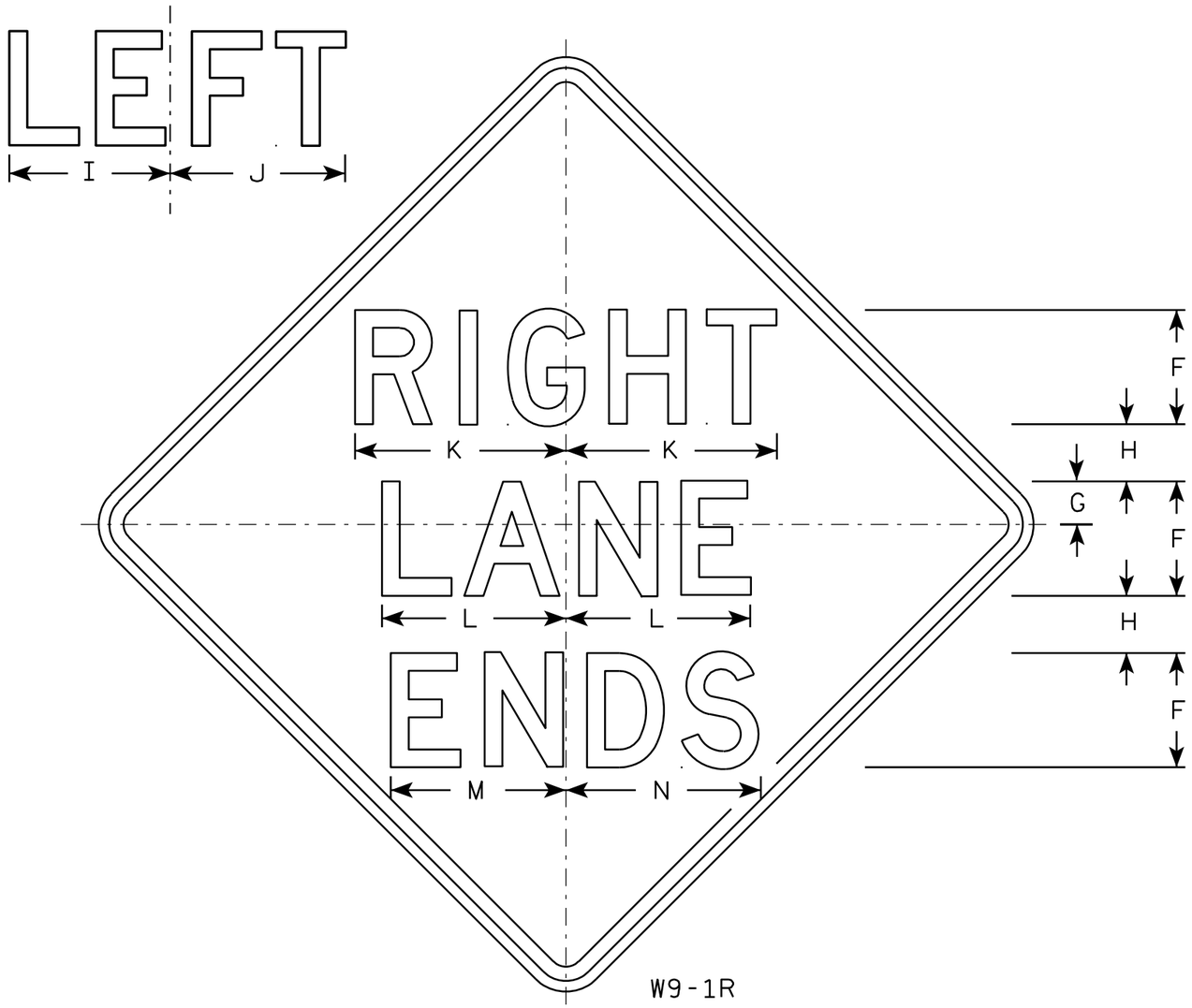
STANDARD SIGN
W5-54

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/3/10 PLATE NO. W5-54.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 433	E



W9-1R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. W9-1L same as W9-1R except the word Left replaces Right.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8	5	1 1/2	2 1/2	7 1/8	7 5/8	9 1/4	8 1/8	7 5/8	8 5/8													6.25
2S	36		1 5/8	5/8	3/4	6	2	3	8 1/2	9 1/8	11	9 3/4	9	10 3/8													9.0
2M	36		1 5/8	5/8	3/4	6	2	3	8 1/2	9 1/8	11	9 3/4	9	10 3/8													9.0
3	36		1 5/8	5/8	3/4	6	2	3	8 1/2	9 1/8	11	9 3/4	9	10 3/8													9.0
4	36		1 5/8	5/8	3/4	6	2	3	8 1/2	9 1/8	11	9 3/4	9	10 3/8													9.0
5	48		2 1/4	3/4	1	8	3	4	11 1/4	12 1/4	14 3/4	12 7/8	12 1/4	13 5/8													16.0

STANDARD SIGN
W9-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 03/18/13 PLATE NO. W9-1.8

PROJECT NO:

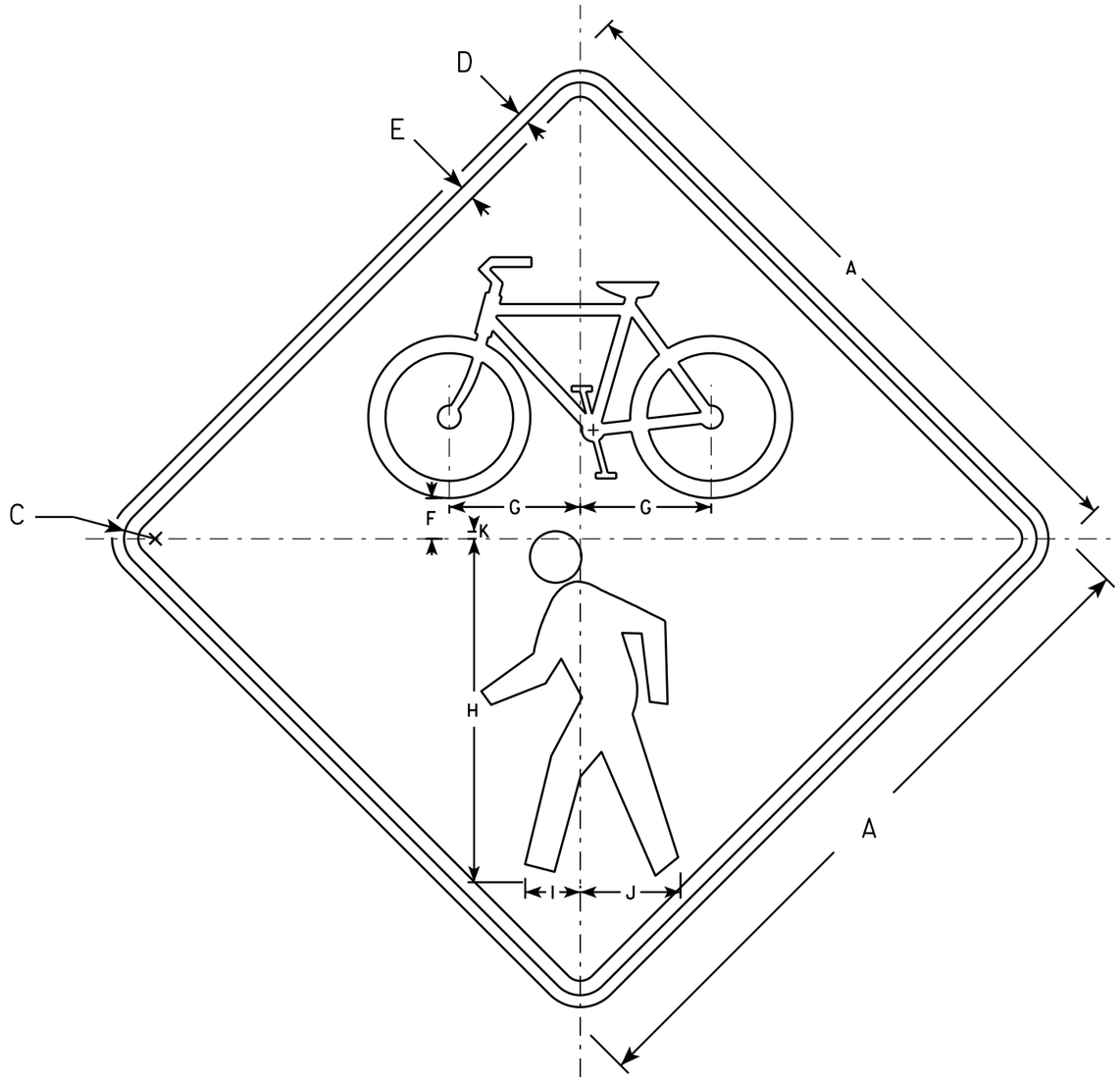
SHEET NO: 434 E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W91.DGN PLOT DATE : 18-MAR-2013 11:42 PLOT BY : mscsja

WISDOT/CADDS SHEET 42

7

7



W11-15

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	1 3/8	4 5/8	12	1 7/8	3 1/2	1/4																4.0
2S	30		1 3/8	1/2	5/8	1 3/4	5 3/4	15	2 3/8	4 3/8	3/8																6.25
2M	36		1 5/8	5/8	3/4	2 1/8	6 7/8	18	2 7/8	5 1/4	3/8																9.0
3	36		1 5/8	5/8	3/4	2 1/8	6 7/8	18	2 7/8	5 1/4	3/8																16.0
4	48		2 1/4	3/4	1	2 7/8	9 1/8	24	3 7/8	7	1/2																16.0
5																											

STANDARD SIGN
W11-15

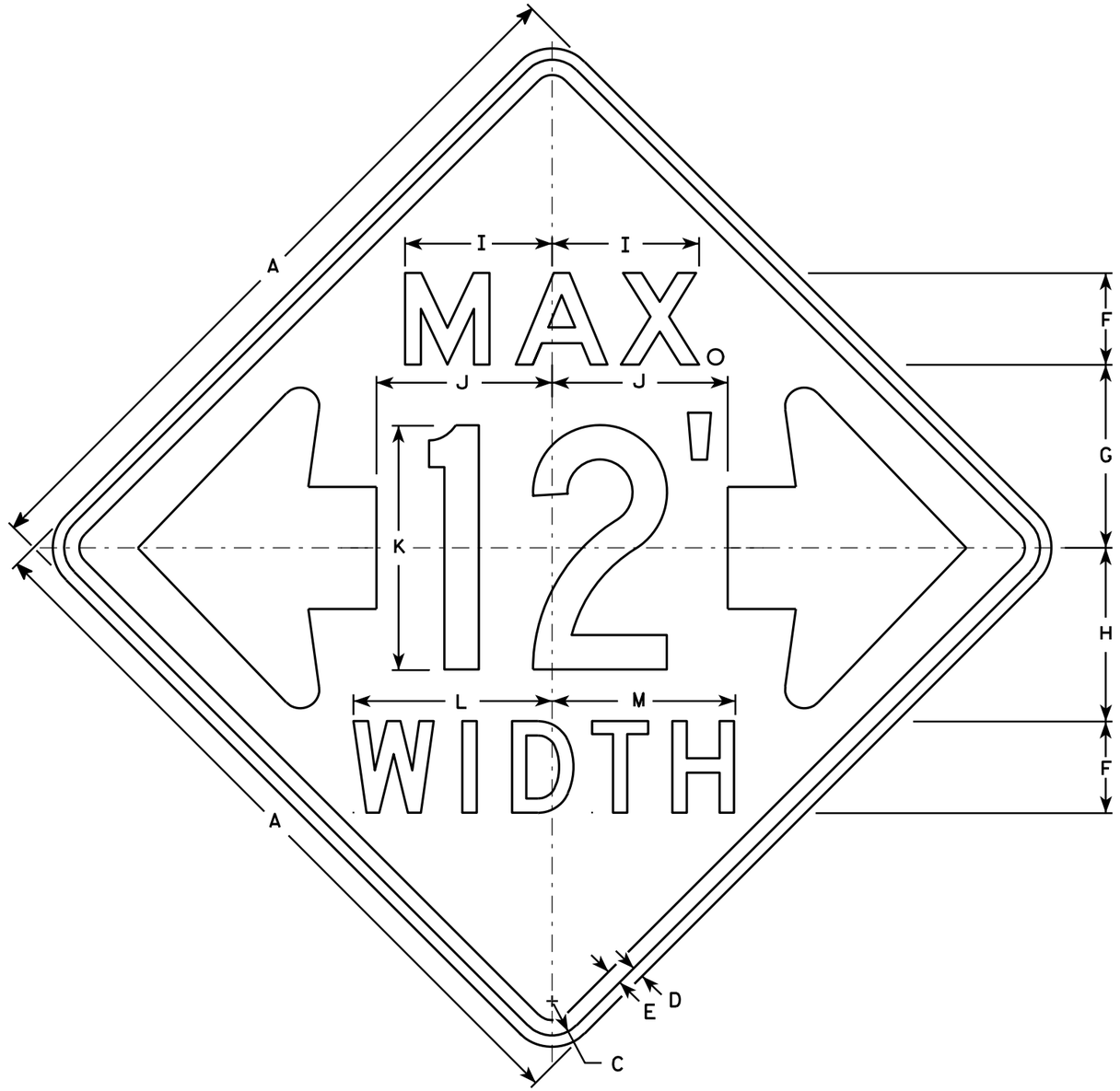
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 2/13/14 PLATE NO. W11-15.4

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

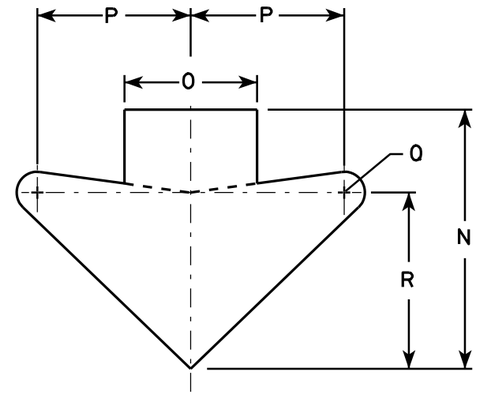
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W1115.DGN PLOT DATE : 13-FEB-2014 10:54 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 7.783368:1.000000
WISDOT/CADDS SHEET 42



W12-52

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - See note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. The top line is series E, the numerals are series C, and the bottom line is series D.
6. Substitute appropriate numerals and adjust spacing as required.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48		2 1/4	3/4	1	6	12	11 3/8	9 5/8	11 1/2	16	13	12	15 5/8	8	9 1/4	1 1/4	10 5/8									16.0
2M	48		2 1/4	3/4	1	6	12	11 3/8	9 5/8	11 1/2	16	13	12	15 5/8	8	9 1/4	1 1/4	10 5/8									16.0
3																											
4																											
5																											

STANDARD SIGN
W12-52

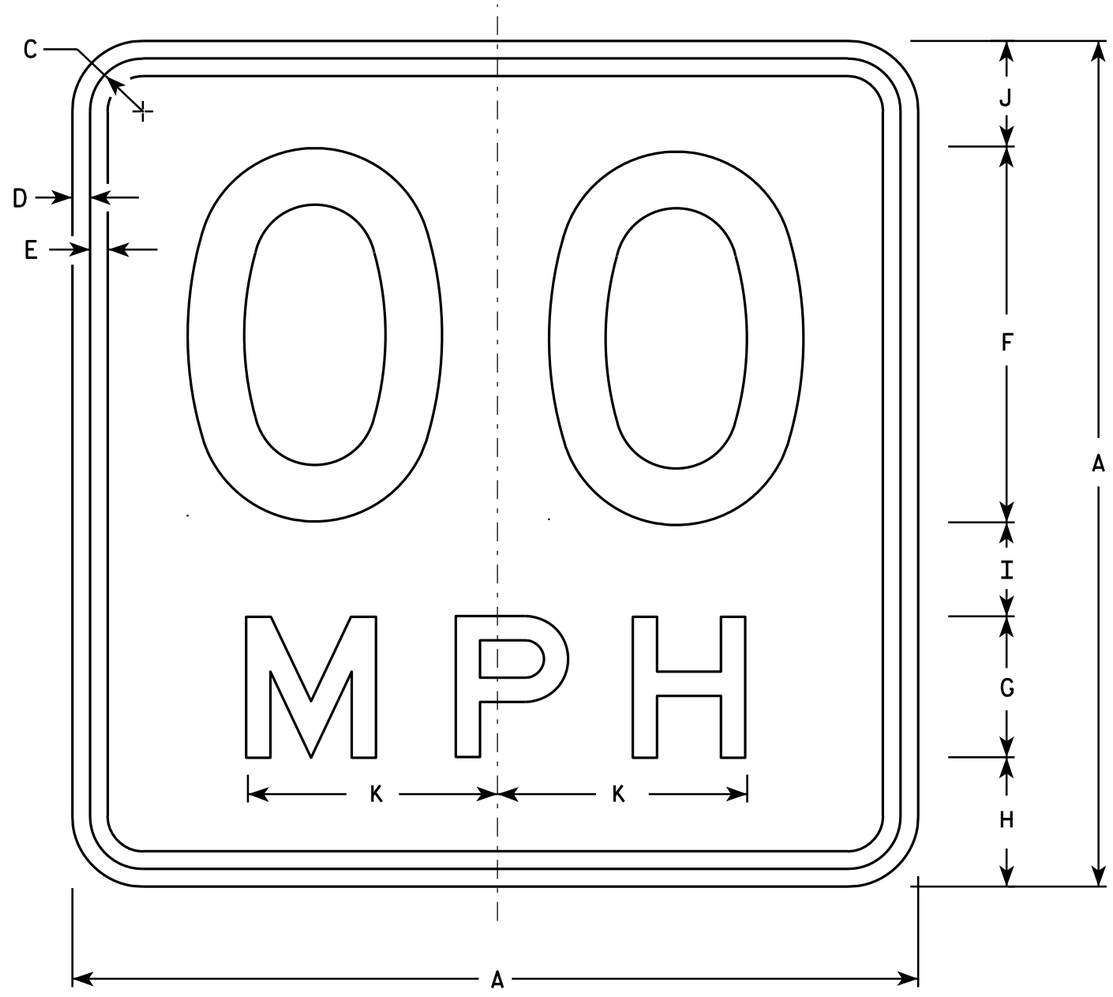
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/16/11 PLATE NO. W12-52.7

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 436 | E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\W1252.DGN PLOT DATE : 16-MAR-2011 14:45 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 9.137199:1.000000
WISDOT/CADDS SHEET 42



W13-1

* For 30" x 30" Warning Signs, use 18" x 18" W13-1 signs.
For 36" x 36" Warning Signs, use 24" x 24" W13-1 signs.

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - See Note 6
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and optically space about centerline to achieve proper balance.
6. Line 1 is Series D
   Line 2 is Series E

	SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
	1	18		1 1/8	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25
*	2S	18		1 1/8	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25
*	2M	18		1 1/8	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25
	3	24		1 1/8	3/8	1/2	10	4	4	2 3/4	3 1/4	6 5/8																4.00
	4	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00
	5	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00

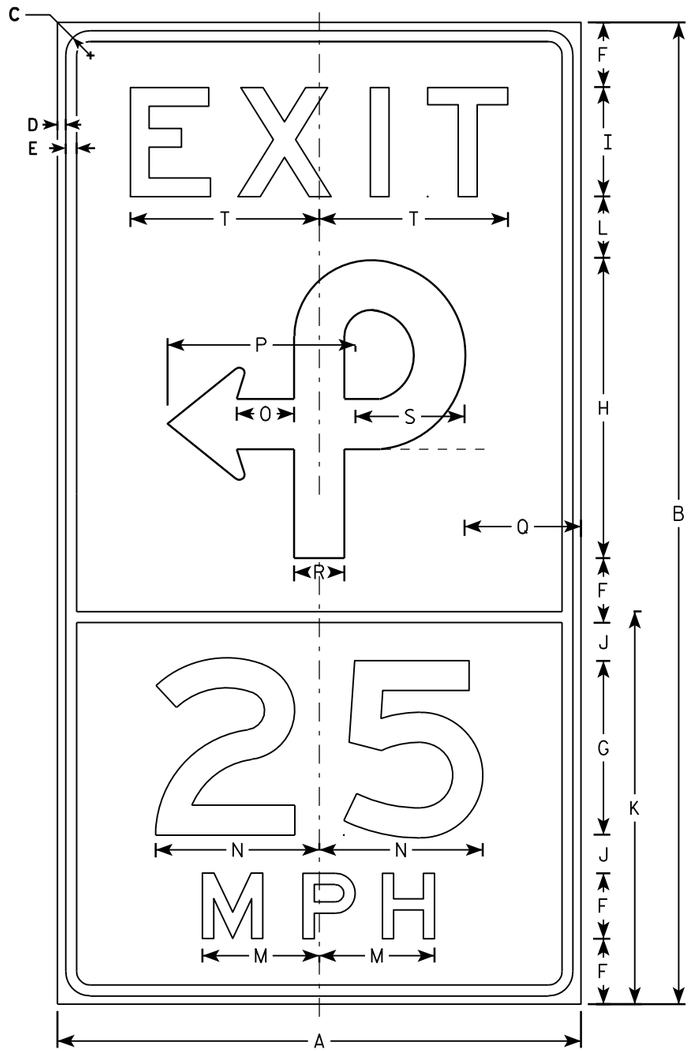
STANDARD SIGN
W13-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 5/31/12 PLATE NO. W13-1.16

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 437 | E



W13-2B

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	90	2 1/4	3/4	1	6	16	27 1/2	10	3 1/2	36	5 1/2	10 3/4	15	5 1/4	17 1/4	10 3/4	4 5/8	10	17 3/8							30
2M	48	90	2 1/4	3/4	1	6	16	27 1/2	10	3 1/2	36	5 1/2	10 3/4	15	5 1/4	17 1/4	10 3/4	4 5/8	10	17 3/8							30
3																											
4																											
5																											

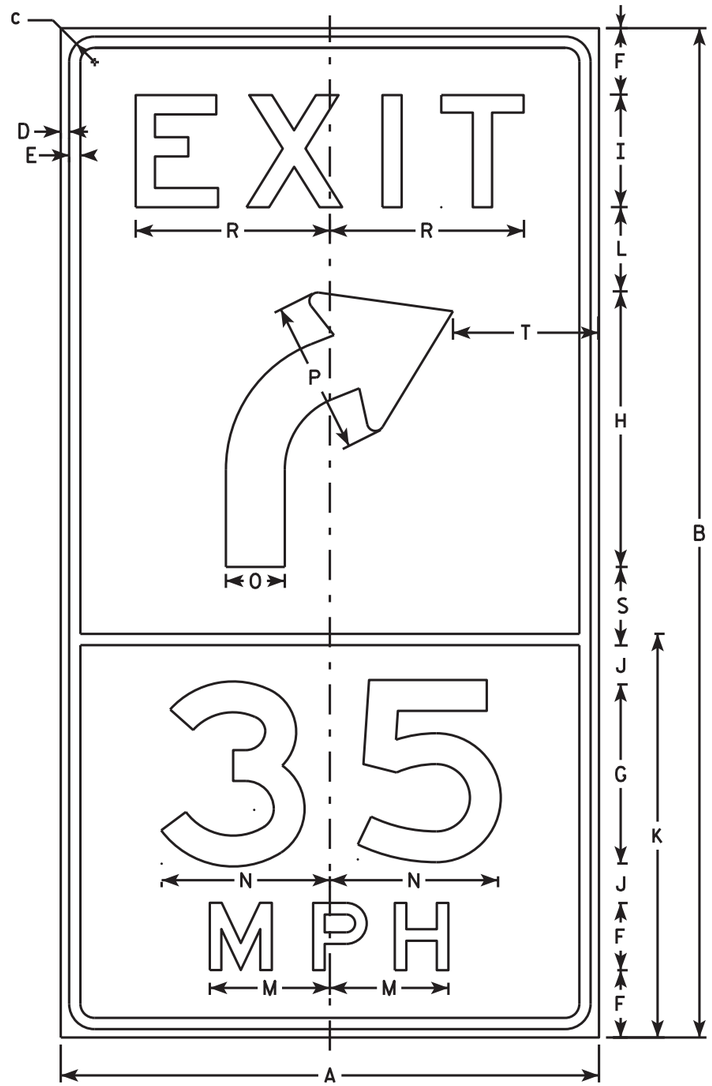
STANDARD SIGN
W13-2B

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/31/12 PLATE NO. W13-2B.3

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 438 | E



W13-2C

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	90	2 1/4	3/4	1	6	16	24 5/8	10	3 1/2	36	7 1/2	10 3/4	15	5 1/4	13 5/8	12	17 3/8	7	13							30
2M	48	90	2 1/4	3/4	1	6	16	24 5/8	10	3 1/2	36	7 1/2	10 3/4	15	5 1/4	13 5/8	12	17 3/8	7	13							30
3																											
4																											
5																											

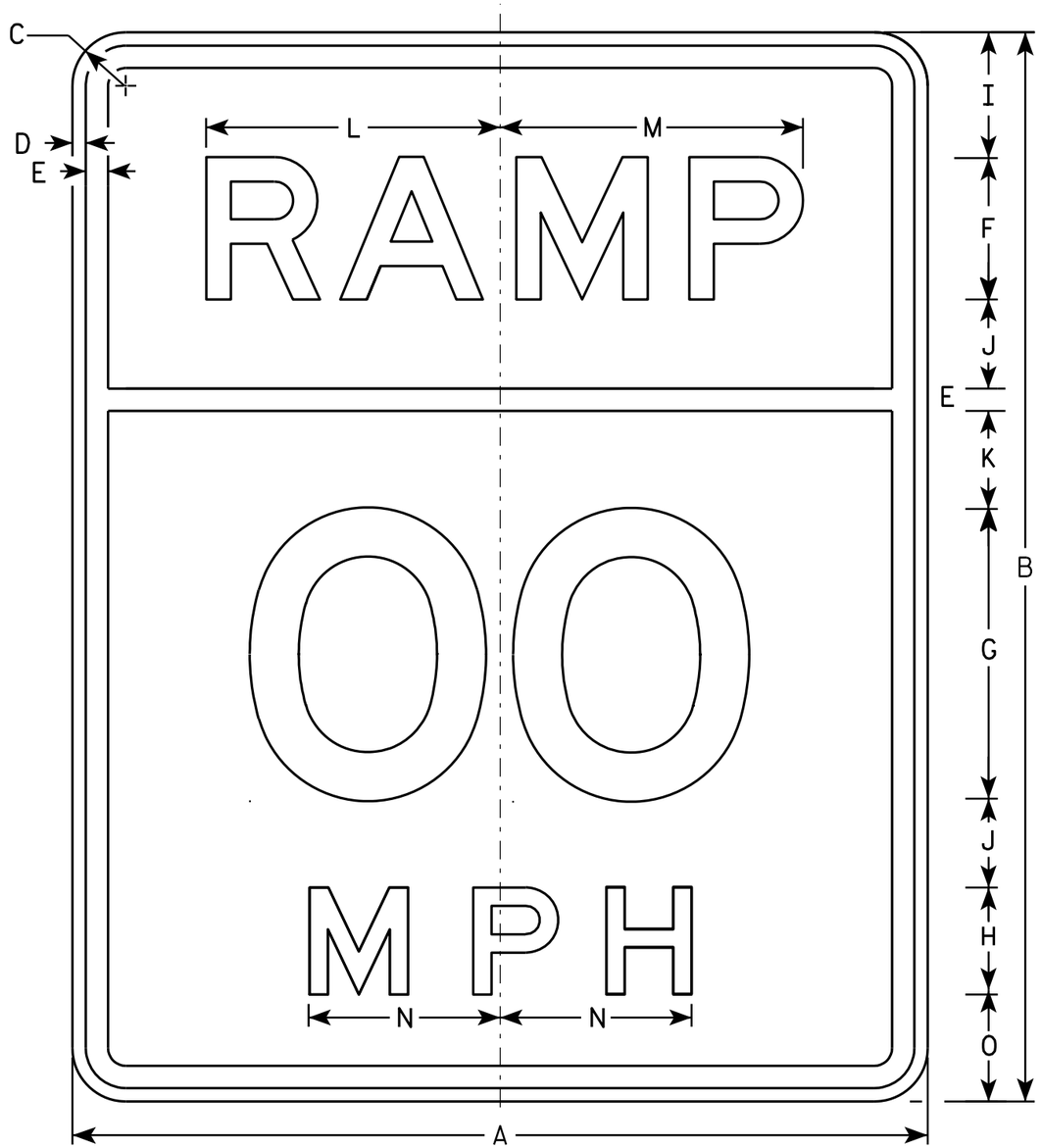
STANDARD SIGN
W13-2C

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/12/13 PLATE NO. W13-2C.4

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E



W13-3

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and optically space about centerline to achieve proper balance.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24	30	1 1/8	3/8	5/8	4	8	3	3 1/2	2 1/2	2 7/8	8 1/4	8 1/2	5 3/8	3												5.0
2S	24	30	1 1/8	3/8	5/8	4	8	3	3 1/2	2 1/2	2 7/8	8 1/4	8 1/2	5 3/8	3												5.0
2M	24	30	1 1/8	3/8	5/8	4	8	3	3 1/2	2 1/2	2 7/8	8 1/4	8 1/2	5 3/8	3												5.0
3																											
4	36	48	1 5/8	5/8	7/8	6	12	4	6	4 1/8	5 1/8	13 1/2	13 5/8	7 1/8	6												12.0
5	48	60	2 1/4	3/4	1 1/4	8	16	6	7	5	5 3/4	16 1/2	17	10 5/8	6												20.0

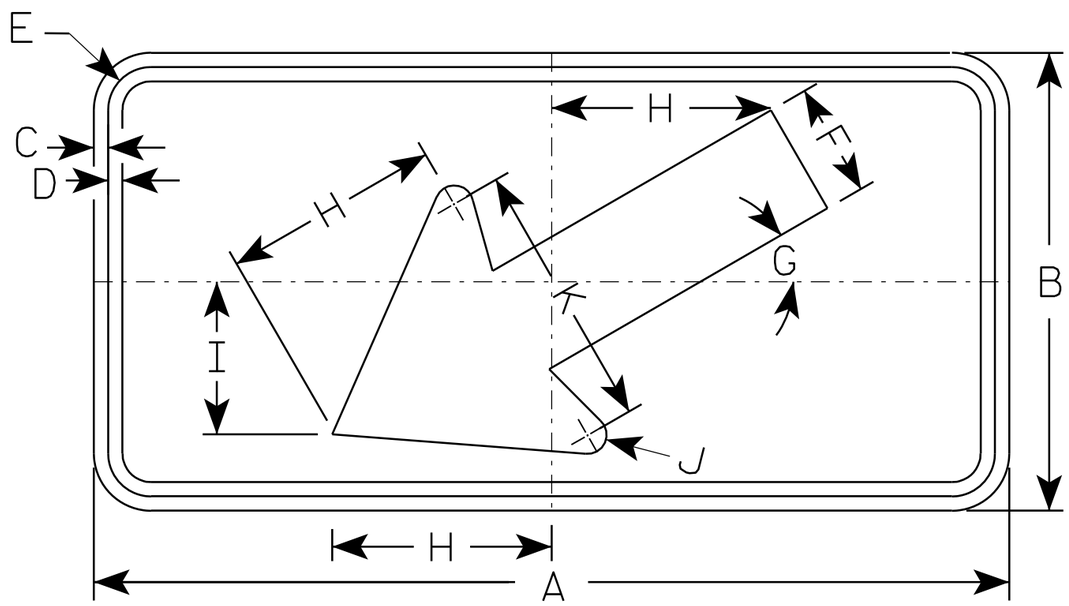
STANDARD SIGN
W13-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/13/13 PLATE NO. W13-3.9

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 440 | E



W16-7L

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W16-7R is the same as W16-L except the arrow is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	12	3/8	3/8	1 1/8	3	30°	5 3/4	4	1/2	7																2.0
2M	30	18	3/8	1/2	1 1/8	4 1/2	30°	8 1/2	6	5/8	10 1/4																3.75
3	30	18	3/8	1/2	1 1/8	4 1/2	30°	8 1/2	6	5/8	10 1/4																3.75
4																											8
5																											8

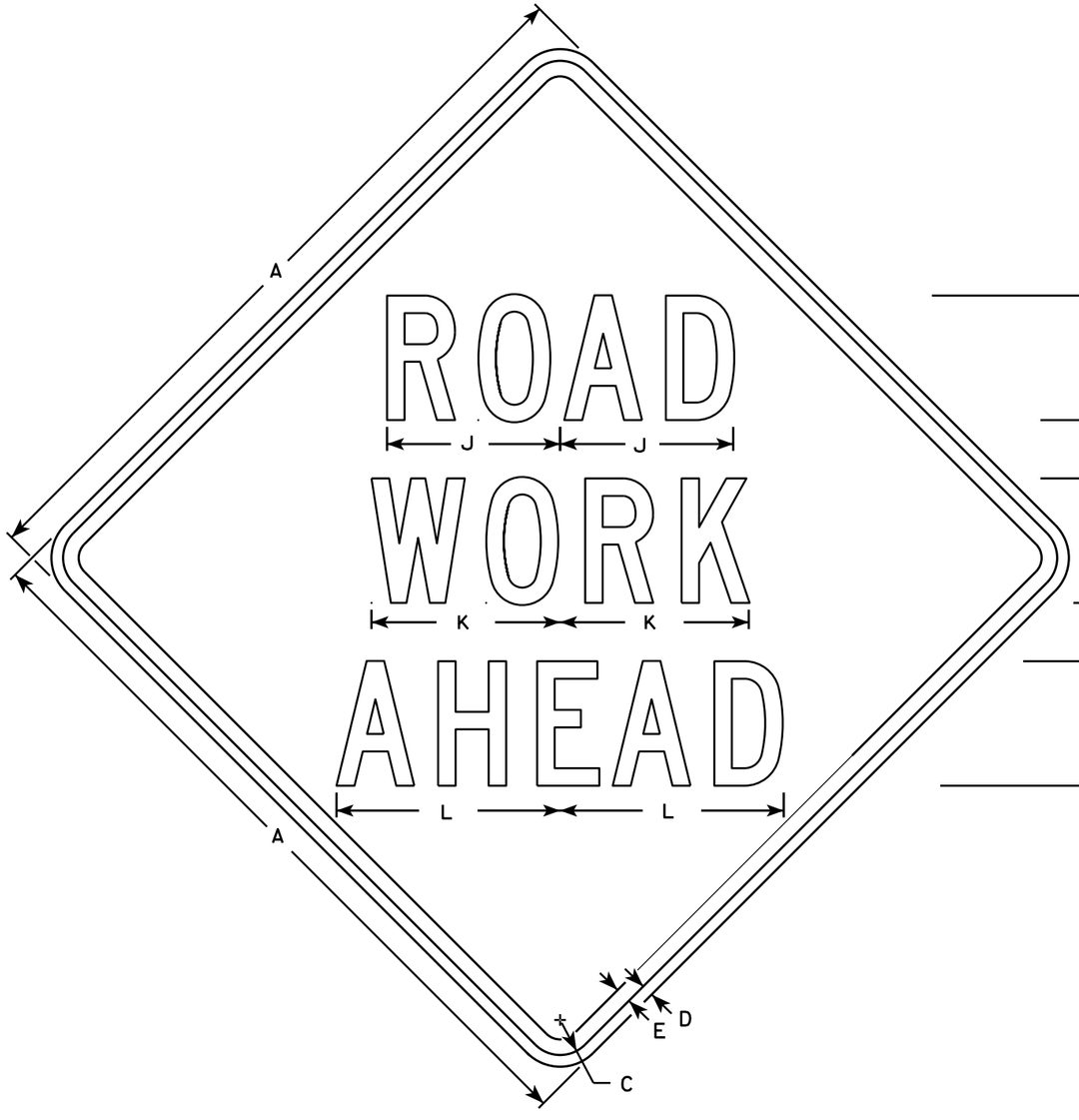
STANDARD SIGN
W16-7

WISCONSIN DEPT OF TRANSPORTATION

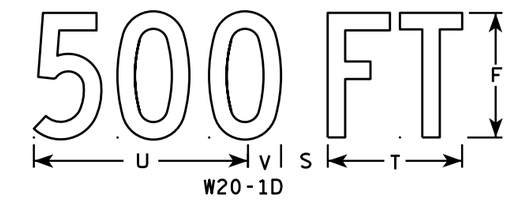
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/02/10 PLATE NO. W16-7.5

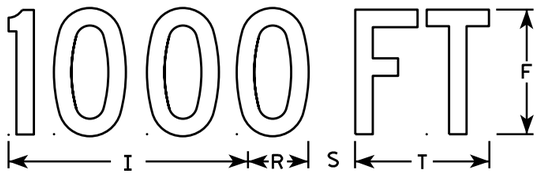
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 441	E



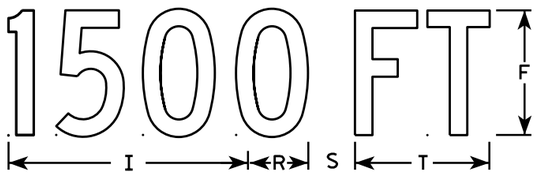
W20-1A



W20-1D



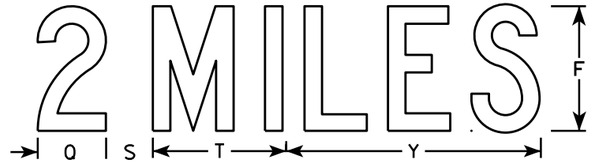
W20-1C



W20-1B

W20-1G

W20-1F



W20-1E

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 3/8	1/2	5/8	5	2 5/8	3 1/4	10 1/8	7	7 5/8	8 7/8	1 1/8	4 1/2	3 1/2	9		2 1/2	2 1/4	5 5/8	9	1 3/8	8	1 3/4	10 3/4	6	9.0
2S	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
2M	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
3	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
4	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
5	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0

STANDARD SIGN
W20-1A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

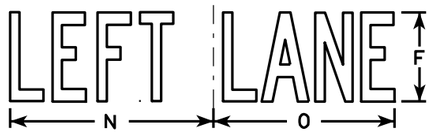
State Traffic Engineer

DATE 5/07/15 PLATE NO. W20-1.10

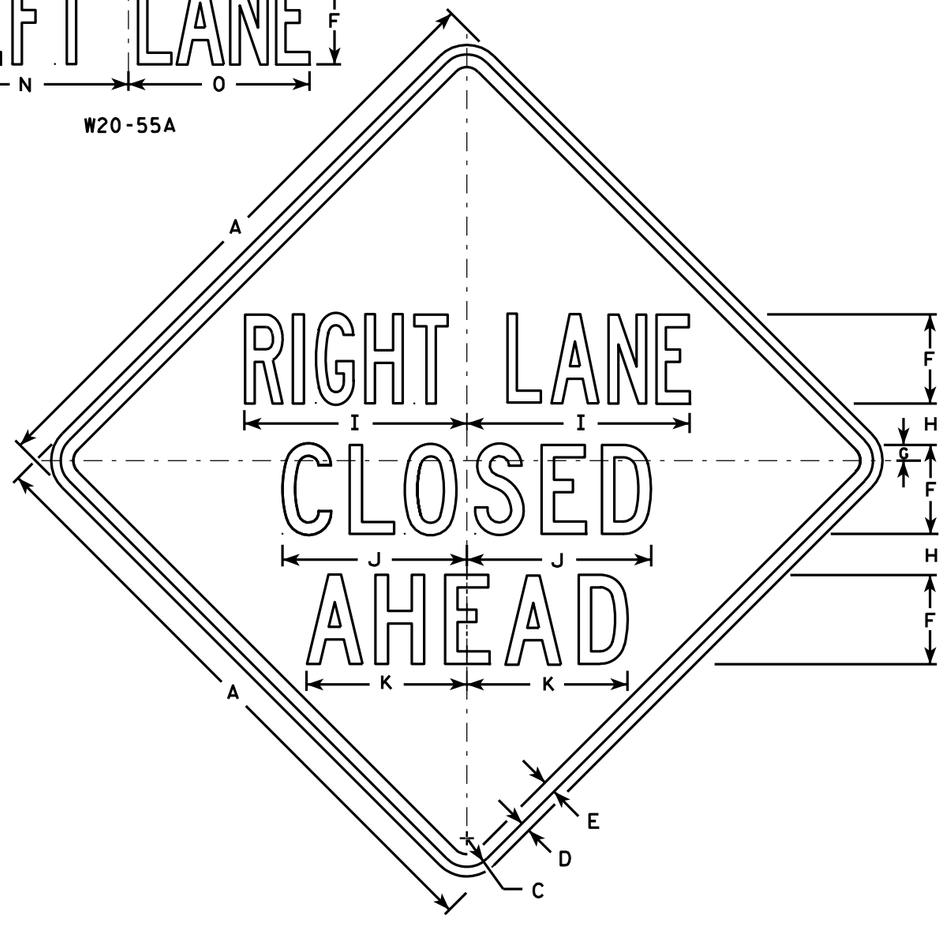
PROJECT NO:

SHEET NO: E

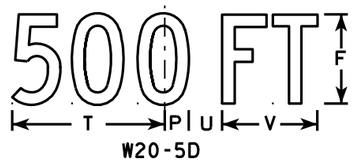
W20-56A



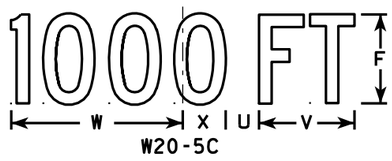
W20-55A



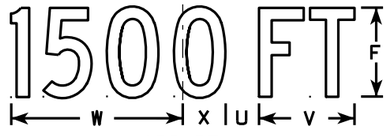
W20-5A



W20-5D



W20-5C



W20-5B

W20-5G

W20-5F

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - See Note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. " _____ LANE" is Series B.
   All other copy is Series C.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	6	1 5/8	5/8	3/4	5	1/8	2 1/2	13 1/8	10 3/4	9 1/2	14 1/4	13 5/8	12	12	1 3/8	1 1/8	4 1/2	3 1/2	9	1 1/8	5 5/8	10 1/8	2 1/2	1 3/4	8	9.0
2S	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
2M	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
3	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
4	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
5	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0

STANDARD SIGN
W20-5A, B, C, D, F & G

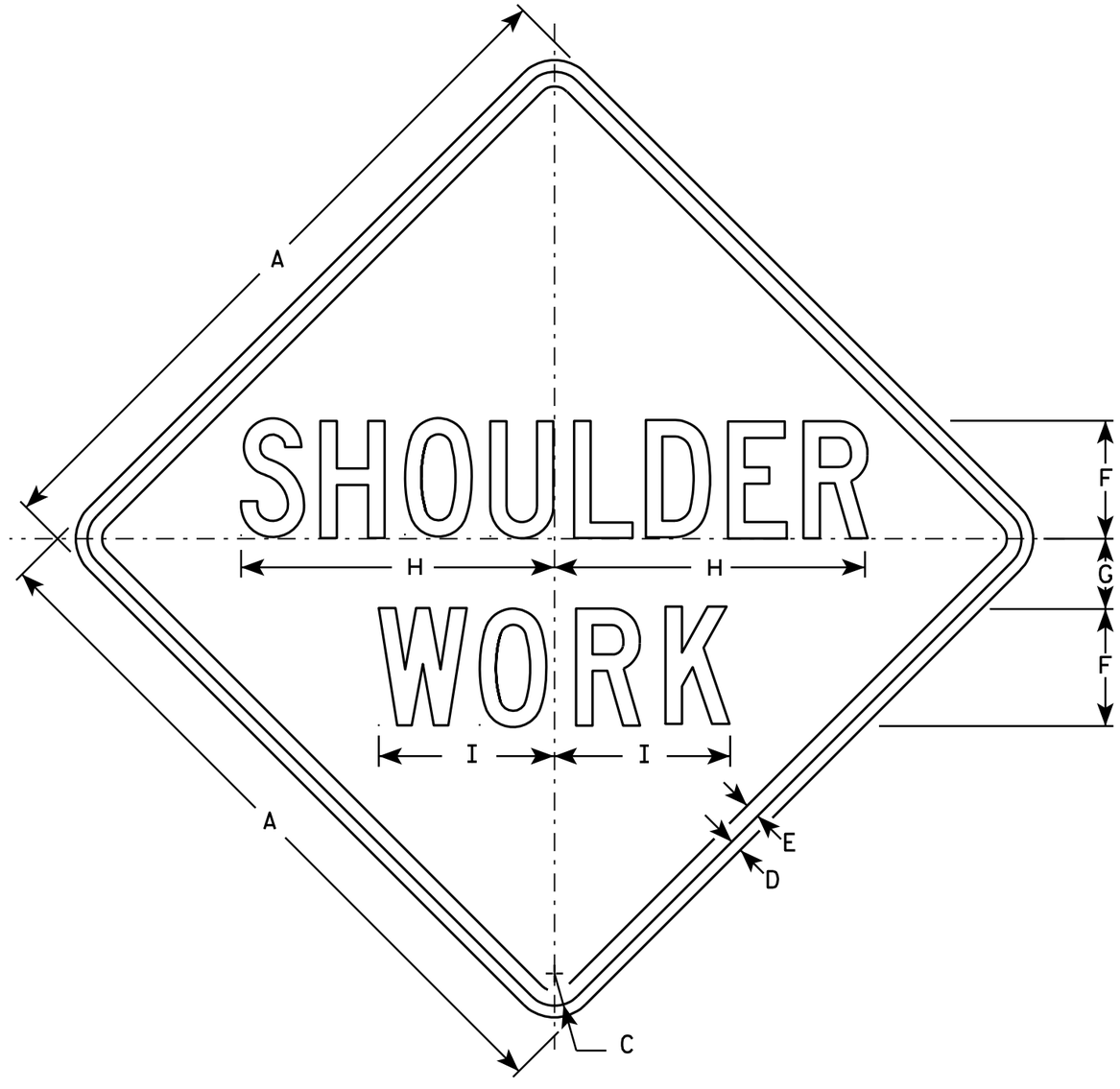
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-5.11

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 443	E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\W205.DGN PLOT DATE : 18-MAR-2011 12:15 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 11.918087:1.000000
WISDOT/CADDS SHEET 42



W21-5

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	4	2 1/2	10 3/4	6																		4.0
2S	30		1 3/8	1/2	5/8	5	3	13 3/8	7 1/2																		6.25
2M	30		1 3/8	1/2	5/8	5	3	13 3/8	7 1/2																		6.25
3	36		1 5/8	5/8	3/4	6	3 1/2	16	9																		9.0
4	48		2 1/4	3/4	1	8	5	21 3/8	11 1/4																		16.0
5	48		2 1/4	3/4	1	8	5	21 3/8	11 1/4																		16.0

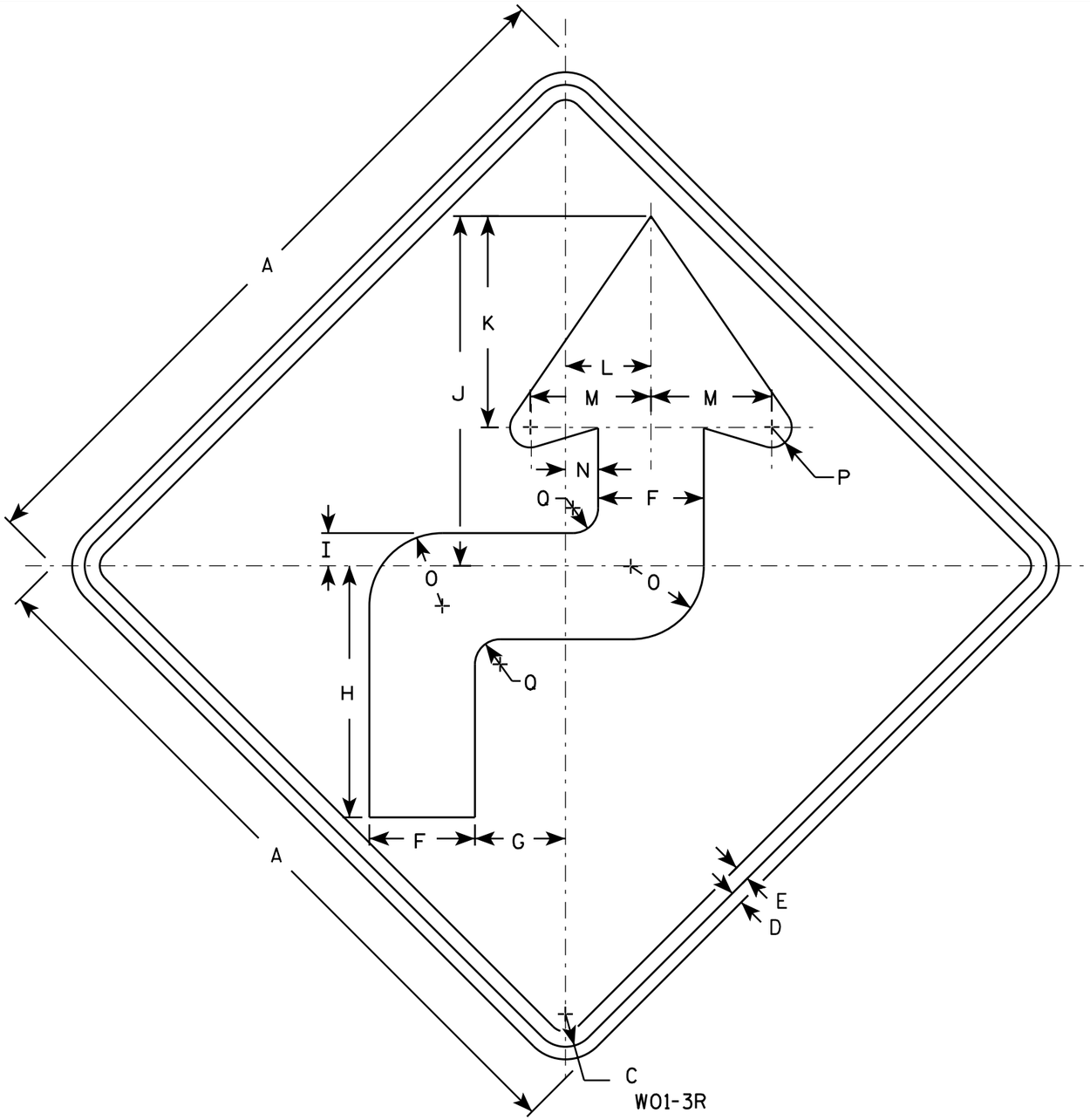
STANDARD SIGN
W21-5

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/21/11 PLATE NO. W21-5.5

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 444	E



NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W01-3L is the same as W01-3R except the arrow is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	5 1/4	4 1/2	12 1/2	1 5/8	17 3/8	10 1/2	4 1/4	6	1 5/8	3 5/8	1	1 1/4										9.0
2S	48		2 1/4	3/4	1	7	6	16 5/8	2 1/4	23 1/4	14	5 5/8	8	2 1/8	4 7/8	1 1/4	1 5/8										16.0
2M	48		2 1/4	3/4	1	7	6	16 5/8	2 1/4	23 1/4	14	5 5/8	8	2 1/8	4 7/8	1 1/4	1 5/8										16.0
3	48		2 1/4	3/4	1	7	6	16 5/8	2 1/4	23 1/4	14	5 5/8	8	2 1/8	4 7/8	1 1/4	1 5/8										16.0
4	48		2 1/4	3/4	1	7	6	16 5/8	2 1/4	23 1/4	14	5 5/8	8	2 1/8	4 7/8	1 1/4	1 5/8										16.0
5	48		2 1/4	3/4	1	7	6	16 5/8	2 1/4	23 1/4	14	5 5/8	8	2 1/8	4 7/8	1 1/4	1 5/8										16.0

STANDARD SIGN
W01-3

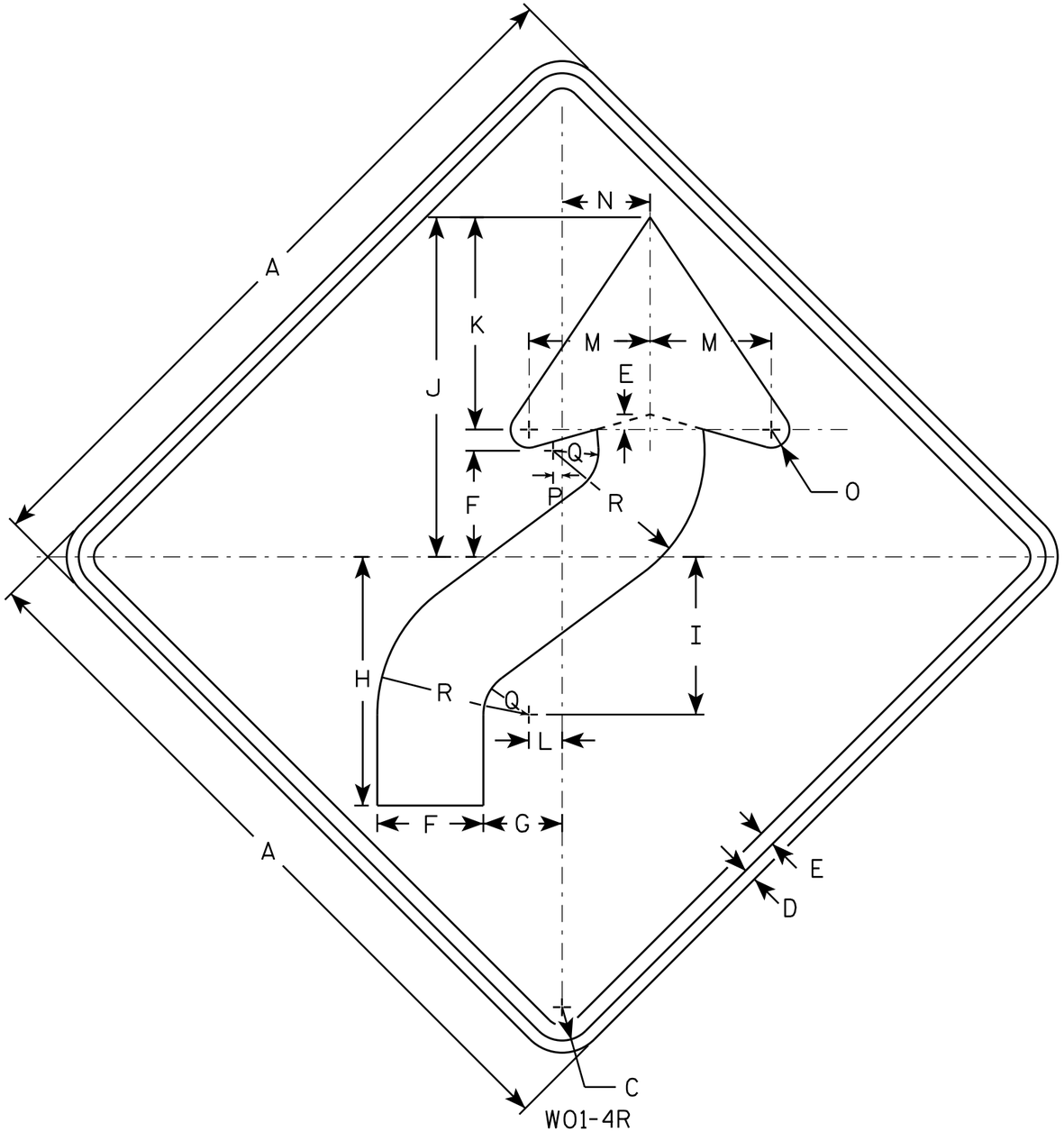
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/18/13 PLATE W01-3.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W013.DGN PLOT DATE : 28-FEB-2014 11:35 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 6.567217:1.000000 WISDOT/CADDS SHEET 42



W01-4R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W01-4L is the same as W01-4R except the arrow is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	5 1/4	4	12 3/8	7 7/8	16 7/8	10 1/2	1 5/8	6	4 1/2	1	1/2	2 1/4	7 1/2									9.0
2S	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
2M	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
3	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
4	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
5	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0

STANDARD SIGN
W01-4

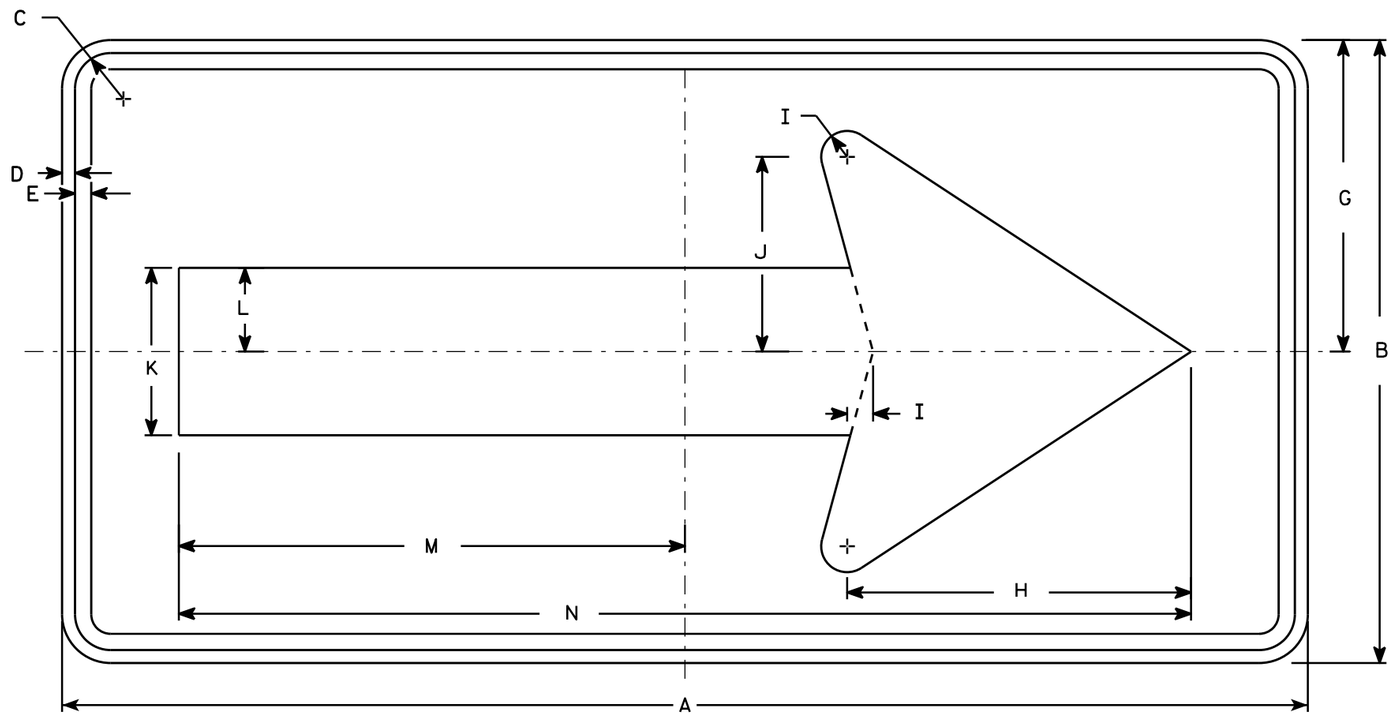
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/18/13 PLATE NO W01-4.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W014.DGN PLOT DATE : 28-FEB-2014 11:35 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 6.755110:1.000000 WISDOT/CADDS SHEET 42



W01-6

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	24	1 3/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
2M	48	24	1 3/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
3	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
4	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
5	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5

STANDARD SIGN
W01-6

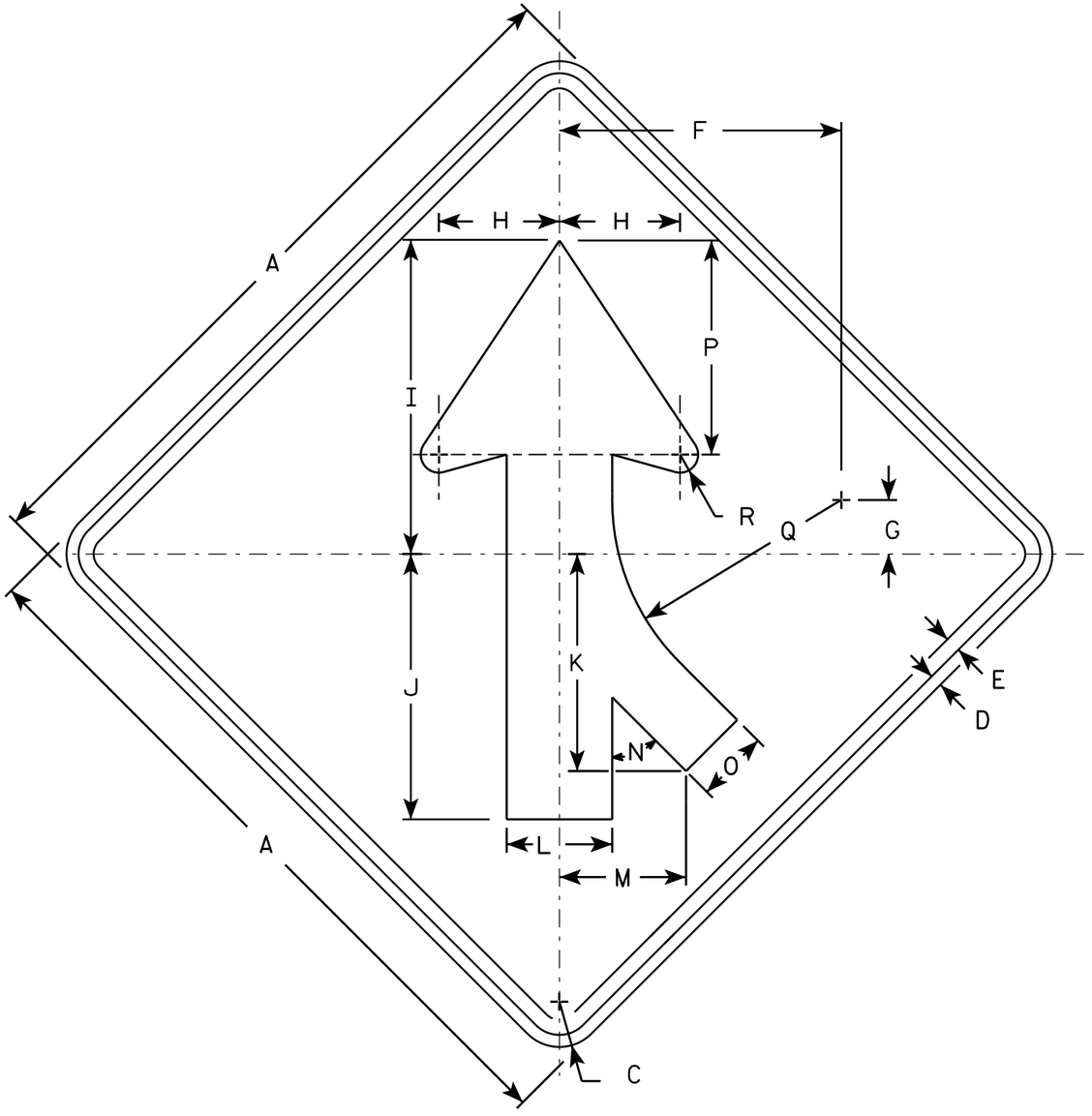
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/18/13 PLATE NO. W01-6.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W016.DGN PLOT DATE : 28-FEB-2014 11:37 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 5.837526:1.000000 WISDOT/CADDS SHEET 42



W04-1R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W4-1L is the same as W4-1R except the arrow is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	14	2 3/4	6	15 3/4	13 1/4	10 1/4	5 1/4	6 3/8	45°	3 5/8	10 5/8	11 3/8	7/8									9.0
2S	48		2 1/4	3/4	1	18 3/4	3 5/8	8	20 1/2	17 1/2	14 3/8	7	8 3/8	45°	4 3/4	14 1/4	15 1/4	1 1/4									16.0
2M	48		2 1/4	3/4	1	18 3/4	3 5/8	8	20 1/2	17 1/2	14 3/8	7	8 3/8	45°	4 3/4	14 1/4	15 1/4	1 1/4									16.0
3	48		2 1/4	3/4	1	18 3/4	3 5/8	8	20 1/2	17 1/2	14 3/8	7	8 3/8	45°	4 3/4	14 1/4	15 1/4	1 1/4									16.0
4	48		2 1/4	3/4	1	18 3/4	3 5/8	8	20 1/2	17 1/2	14 3/8	7	8 3/8	45°	4 3/4	14 1/4	15 1/4	1 1/4									16.0
5	48		2 1/4	3/4	1	18 3/4	3 5/8	8	20 1/2	17 1/2	14 3/8	7	8 3/8	45°	4 3/4	14 1/4	15 1/4	1 1/4									16.0

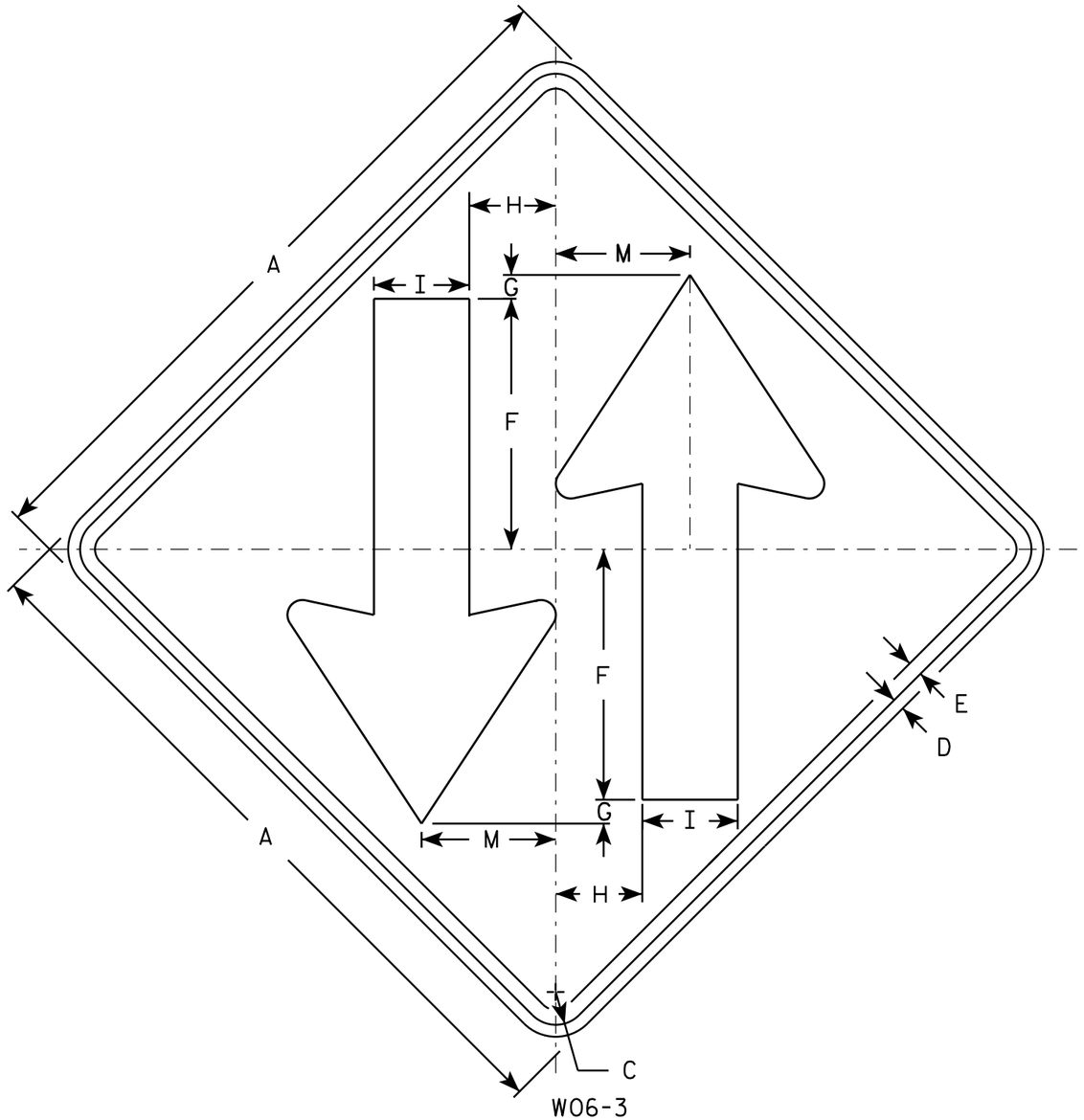
STANDARD SIGN
W04-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/20/13 PLATE NO. W04-1.1

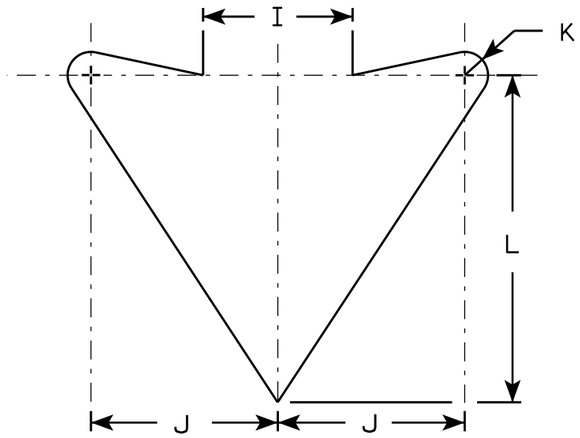
PROJECT NO: | HWY: | COUNTY: | SHEET NO: E



W06-3

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	12	1	4 1/4	5	6	3/4	10 1/2	6 3/4														9.0
2S	48		2 1/4	3/4	1	15 1/2	1	6	6	8	1	14	9														16.0
2M	48		2 1/4	3/4	1	15 1/2	1	6	6	8	1	14	9														16.0
3	48		2 1/4	3/4	1	15 1/2	1	6	6	8	1	14	9														16.0
4	48		2 1/4	3/4	1	15 1/2	1	6	6	8	1	14	9														16.0
5	48		2 1/4	3/4	1	15 1/2	1	6	6	8	1	14	9														16.0

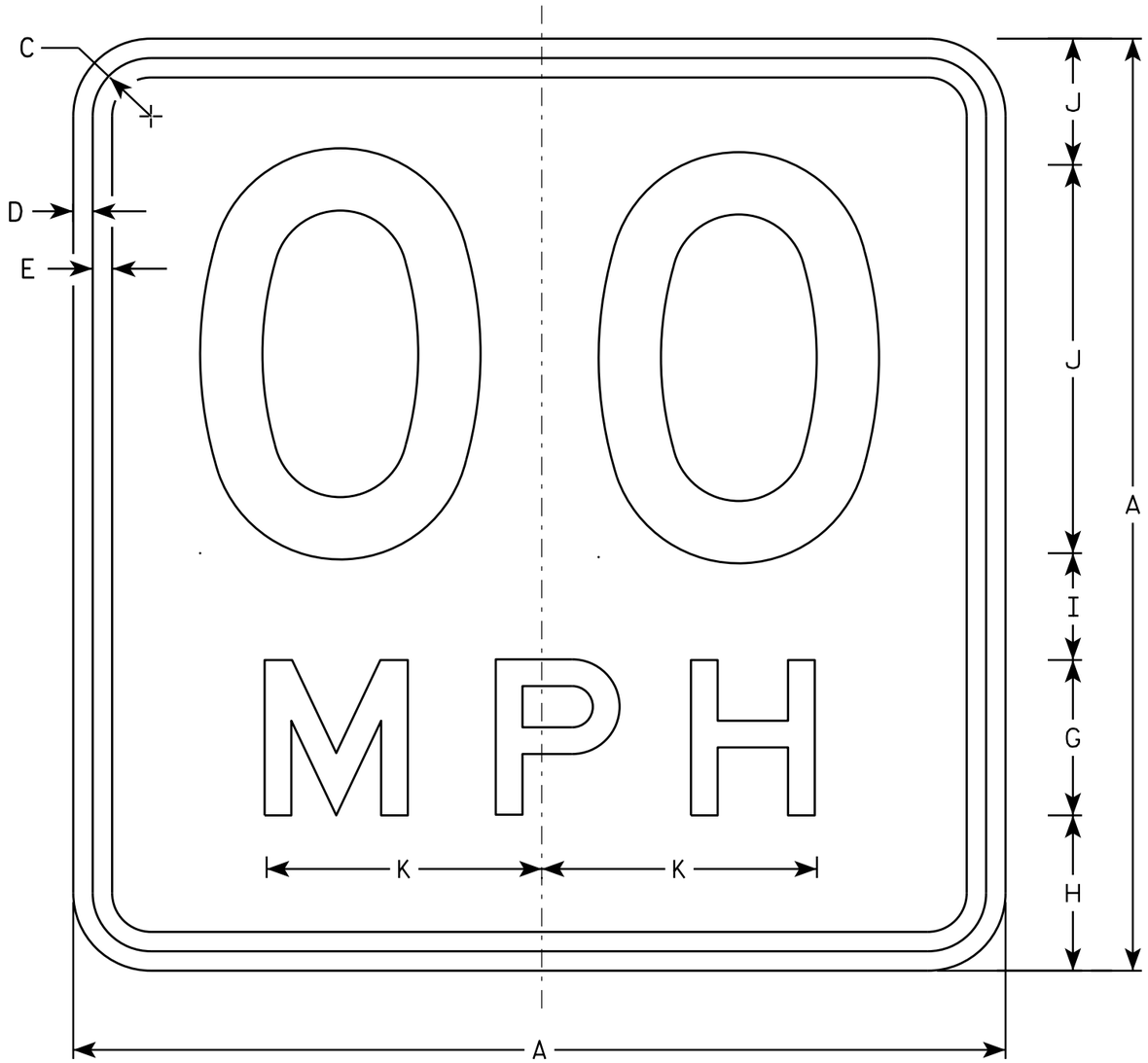
STANDARD SIGN
W06-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/20/13 PLATE 449 W06-3.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E



W013-1

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - See Note 6
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and optically space about centerline to achieve proper balance.
6. Line 1 is Series D
   Line 2 is Series E

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	10	4	4	2 3/4	3 1/4	7 1/8																4.00
2S	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00
2M	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00
3	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00
4	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00
5	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00

STANDARD SIGN
W013-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

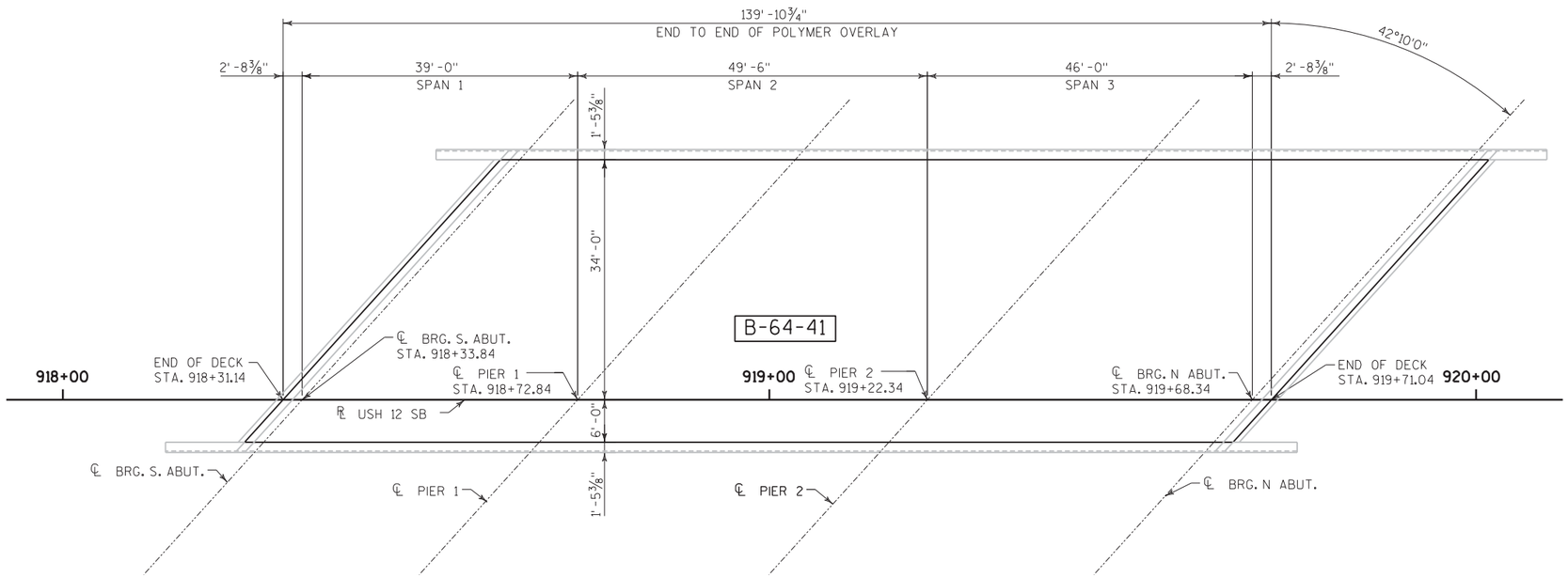
DATE 11/21/13 PLATE 450 W013-1.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

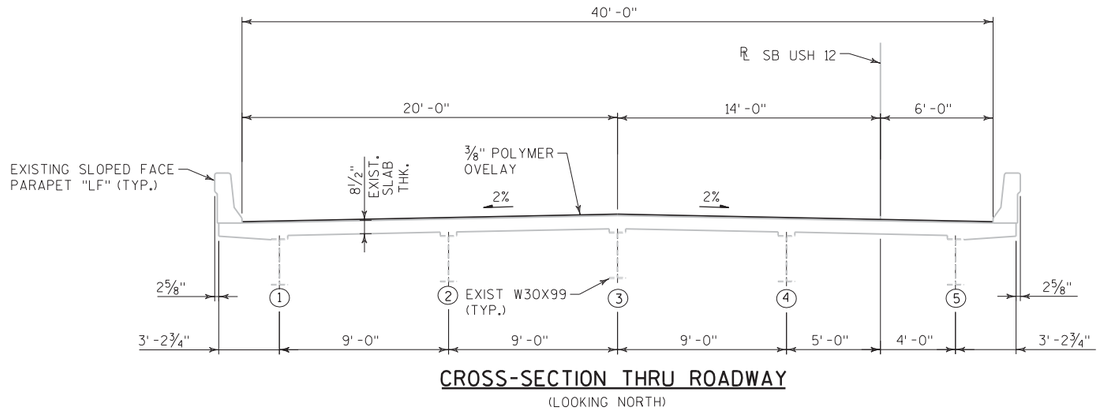
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W0131.DGN PLOT DATE : 02-DEC-2013 13:55 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 3.794391:1.000000
WISDOT/CADDS SHEET 42

STATE PROJECT NUMBER

1080-13-70



PLAN



CROSS-SECTION THRU ROADWAY

(LOOKING NORTH)

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLAN AND DECK REPLACEMENT PLANS DATED 2/18/2000.

THE PROPOSED REHABILITATION INCLUDES PLACEMENT OF POLYMER OVERLAY.

DESIGN DATA

LIVE LOAD:

INVENTORY RATING FACTOR HS-14
OPERATING RATING FACTOR HS-24
WIS-SPV RATING ..... 125 KIPS

WISCONSIN
ANN C. THIELMANN
E-42457
MADISON
WI
PROFESSIONAL ENGINEER
4/17/2015

BENCH MARKS		
STATION	DESCRIPTION	ELEVATION
917+48	DISK IN S.E. WINGWALL B-64-42 - 34'RT.	1027.07

TOTAL ESTIMATED QUANTITIES

BID ITEM NO.	BID ITEM	UNITS	QUANTITY
509.5100.S	POLYMER OVERLAY	SY	622

LIST OF DRAWINGS

1. GENERAL PLAN, CROSS-SECTION & QUANTITIES

BUREAU OF STRUCTURES:
WILLIAM DREHER (608) 266-8489
CONSULTANT CONTACT:
ANN THIELMANN (608)-229-1414

NO.	DATE	REVISION	BY

DAAR ENGINEERING, INC.
www.daarcorp.com
Madison, WI 53703
608-249-8340

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher NK 06/22/15
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE B-64-41

USH 12 SB OVER MACLEAN RD

COUNTY	TOWN
WALWORTH	GENEVA

DESIGN SPEC. REHABILITATION N/A

DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
ACT	SJG	AMD	ACT

GENERAL PLAN, CROSS-SECTION & QUANTITIES

SHEET 1 OF 1

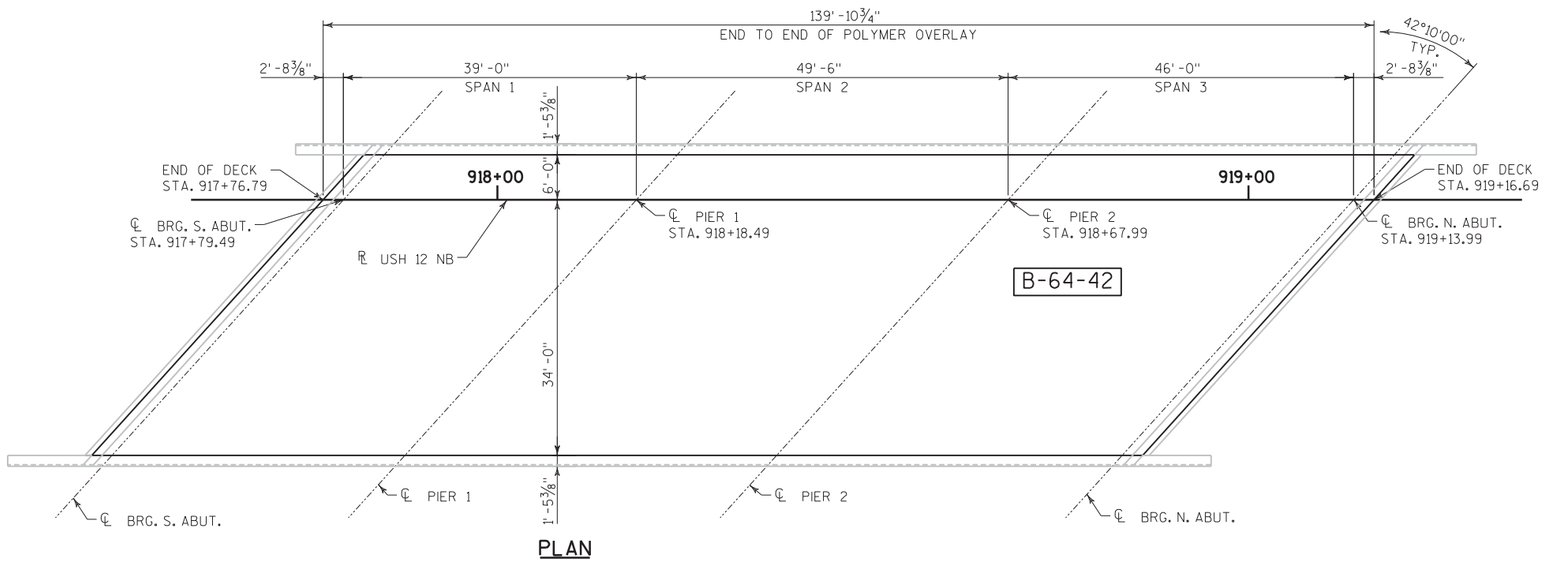
451

8

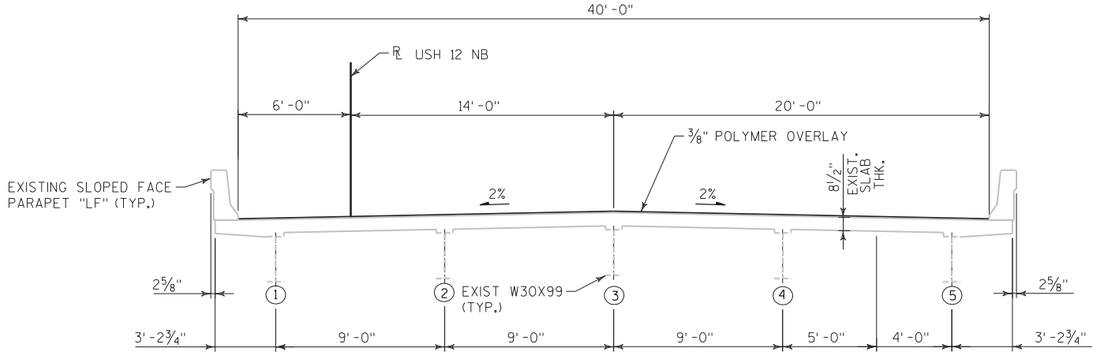
8

STATE PROJECT NUMBER

1080-13-70



PLAN



CROSS-SECTION THRU ROADWAY

(LOOKING NORTH)

BENCH MARKS

STATION	DESCRIPTION	ELEVATION
917+48	DISK IN S.E. WINGWALL B-64-42 - 34'RT.	1027.07

TOTAL ESTIMATED QUANTITIES

BID ITEM NO.	BID ITEM	UNITS	QUANTITY
509.5100.S	POLYMER OVERLAY	SY	622

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS AND DECK REPLACEMENT PLANS DATED 2/18/2000.

THE PROPOSED REHABILITATION INCLUDES PLACEMENT OF POLYMER OVERLAY.

DESIGN DATA

LIVE LOAD:

INVENTORY RATING FACTOR HS-14
OPERATING RATING FACTOR HS-24
WIS-SPV RATING ..... 125 KIPS

WISCONSIN
ANN C. THIELMANN
E-42457
MADISON
WI
PROFESSIONAL ENGINEER
4/17/2015

LIST OF DRAWINGS

1. GENERAL PLAN CROSS-SECTION & QUANTITIES

BUREAU OF STRUCTURES:
WILLIAM DREHER (608) 266-8489

CONSULTANT CONTACT:
ANN THIELMANN (608)-229-1414

NO.	DATE	REVISION	BY

DAAR ENGINEERING, INC.
www.daarcorp.com
Madison, WI 53703
608-249-8340

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher NK 06/22/15
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE B-64-42

USH 12 NB OVER MACLEAN RD

COUNTY	TOWN
WALWORTH	GENEVA

DESIGN SPEC.
REHABILITATION N/A

DESIGNED BY	ACT	DESIGN CK'D.	SJG	DRAWN BY	AMD	PLANS CK'D.	ACT

GENERAL PLAN, CROSS-SECTION & QUANTITIES

SHEET 1 OF 1

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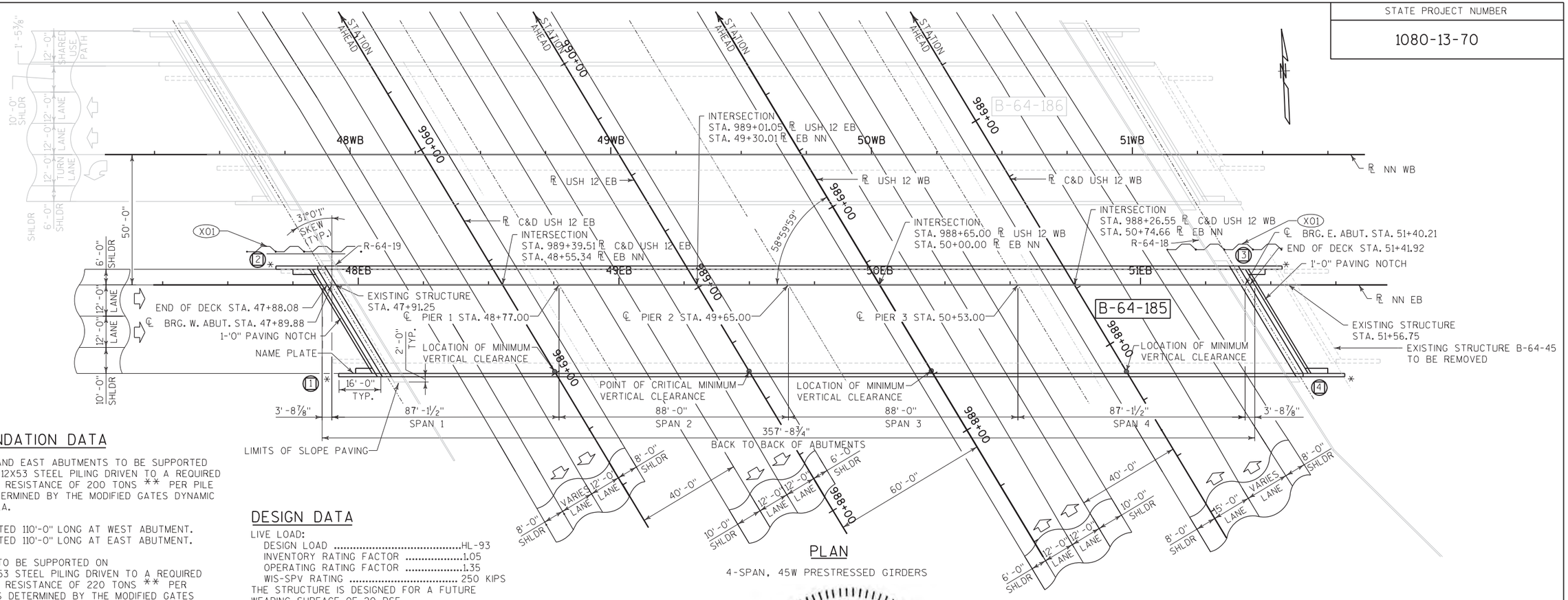
4/17/2015

STATE PROJECT NUMBER
1080-13-70



PLAN

4-SPAN, 45W PRESTRESSED GIRDERS

FOUNDATION DATA

WEST AND EAST ABUTMENTS TO BE SUPPORTED ON HP 12X53 STEEL PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 200 TONS ** PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA.

ESTIMATED 110'-0" LONG AT WEST ABUTMENT.
ESTIMATED 110'-0" LONG AT EAST ABUTMENT.

PIERS TO BE SUPPORTED ON HP 12X53 STEEL PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 220 TONS ** PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA.

ESTIMATED 115'-0" LONG AT PIER 1
ESTIMATED 115'-0" LONG AT PIER 2
ESTIMATED 115'-0" LONG AT PIER 3

**THE FACTORED AXIAL RESISTANCE OF PILES IN COMPRESSION USED FOR DESIGN IS THE REQUIRED DRIVING RESISTANCE MULTIPLIED BY A RESISTANCE FACTOR OF 0.5 USING MODIFIED GATES TO DETERMINE DRIVEN PILE CAPACITY.

EXISTING ABUTMENT PILING SHALL BE CUT-OFF AT THE BOTTOM OF WALL ELEVATION FOR R-64-18 AND R-64-19. THIS WORK TO BE INCLUDED IN THE "REMOVING OLD STRUCTURE" BID ITEM.

DESIGN DATA

LIVE LOAD:
- DESIGN LOAD HL-93
- INVENTORY RATING FACTOR 1.05
- OPERATING RATING FACTOR 1.35
- WIS-SPV RATING ..... 250 KIPS

THE STRUCTURE IS DESIGNED FOR A FUTURE WEARING SURFACE OF 20 PSF.

MATERIAL PROPERTIES:
- CONCRETE MASONRY
  - SUPERSTRUCTURE .....f'c=4,000 PSI
  - ALL OTHER .....f'c=3,500 PS
- HIGH STRENGTH BAR STEEL
- REINFORCEMENT GRADE 60 .....fy=60,000 PSI

45W-INCH PRESTRESSED GIRDERS
- CONCRETE MASONRY .....f'c=8,000 PSI
- PRESTRESSING STRANDS = 0.6 INCH DIA. WITH ULTIMATE TENSILE STRENGTH OF 270,000 PSI

LEGEND

* PROVIDE FOR THRIE BEAM GUARD RAIL ATTACHMENT

⬭ INDICATES WING NUMBER

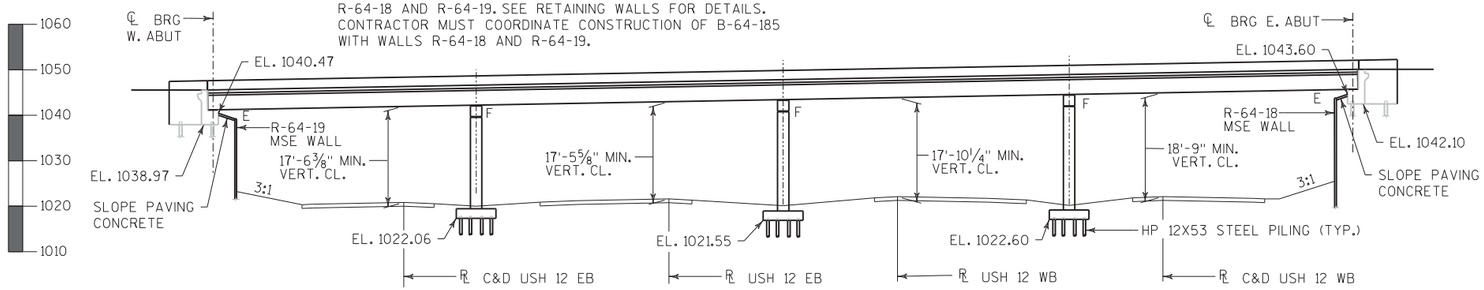
(X01) TEMPORARY SHORING REQUIRED. TEMPORARY WALL WIRE FACED MSE INSTALLED DURING CONSTRUCTION OF WALLS R-64-18 AND R-64-19. SEE RETAINING WALLS FOR DETAILS. CONTRACTOR MUST COORDINATE CONSTRUCTION OF B-64-185 WITH WALLS R-64-18 AND R-64-19.

TRAFFIC DATA:

USH 12
A.D.T. = 16600 (2015)
A.D.T. = 23500 (2035)
R.D.S. = 70 M.P.H.

CTH NN
A.D.T. = 8100 (2015)
A.D.T. = 9200 (2035)
R.D.S. = 60 M.P.H.

WISCONSIN
ANN C. THIELMANN
E-42457
MADISON
WI
PROFESSIONAL ENGINEER
6/12/2015



ELEVATION
(NORMAL TO USH 12)

LIST OF DRAWINGS

1. GENERAL PLAN & ELEVATION
2. CROSS-SECTION & QUANTITIES
3. SUBSURFACE EXPLORATION
4. WEST ABUTMENT
5. WEST ABUTMENT DETAILS
6. ABUTMENT WING WALL #1
7. ABUTMENT WING WALL #2
8. EAST ABUTMENT
9. EAST ABTUTMENT DETAILS
10. ABUTMENT WING WALL #3
11. ABUTMENT WING WALL #4
12. PIER 1
13. PIER 2
14. PIER 3
15. PIER DETAILS
16. 45W" PRESTRESSED GIRDER - 1
17. 45W" PRESTRESSED GIRDER - 2
18. STEEL DIAPHRAGMS
19. SUPERSTRUCTURE
20. SUPERSTRUCTURE CROSS-SECTION
21. SUPERSTRUCTURE BILL OF BARS
22. SUPERSTRUCTURE DETAILS
23. SINGLE SLOPE PARAPET 32SS
24. ELASTOMERIC BEARINGS
25. STRIP SEAL EXPANSION JOINT DETAILS
26. COVER PLATE DETAILS

BUREAU OF STRUCTURES:
WILLIAM DREHER (608) 266-8489

CONSULTANT CONTACT:
ANN THIELMANN (608)-229-1414

NO.	DATE	REVISION	BY

DAAR ENGINEERING, INC.
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Madison, WI 53703
608-249-8340

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher 6/12/15
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE B-64-185

EB CTH 'NN' OVER USH 12

COUNTY	TOWN
WALWORTH	GENEVA

DESIGN SPEC. AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS

DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
ACT	SJG	AMD	SJG

GENERAL PLAN AND ELEVATION

SHEET 1 OF 26

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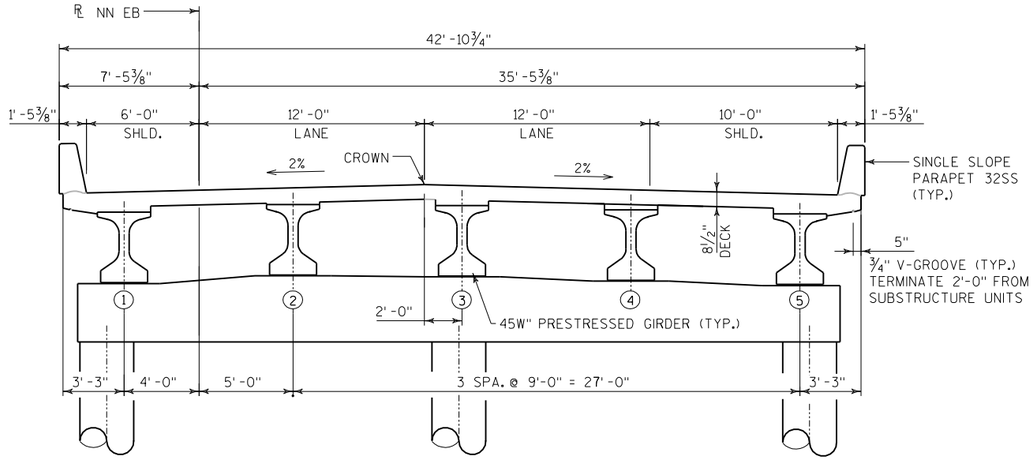
6/5/2015

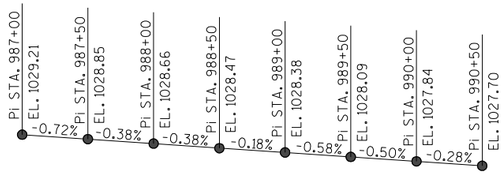
STATE PROJECT NUMBER

1080-13-70

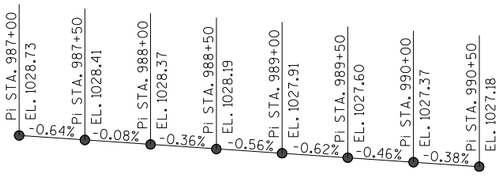


TYPICAL SECTION

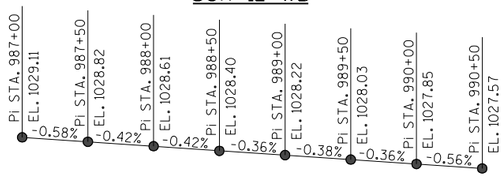
45W" PRESTRESSED CONCRETE GIRDER
(LOOKING EAST)



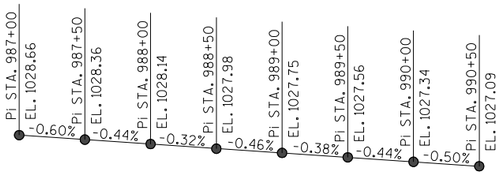
EXISTING PROFILE GRADE LINE USH 12 WB



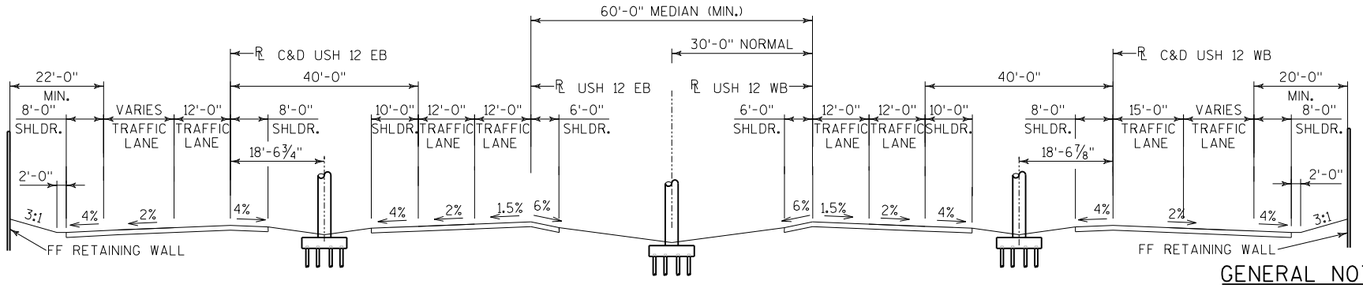
EXISTING PROFILE GRADE LINE "C&D" USH 12 WB



EXISTING PROFILE GRADE LINE USH 12 EB



EXISTING PROFILE GRADE LINE "C&D" USH 12 EB



TYPICAL SECTION THRU USH 12

(LOOKING NORTH)

TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEMS	UNIT	WEST ABUT.	PIER 1	PIER 2	PIER 3	EAST ABUT.	SUPER.	TOTALS
203.0200	REMOVING OLD STRUCTURE STA. 47+91.25	LS	-	-	-	-	-	-	1
203.0210.S	ABATEMENT OF ASBESTOS CONTAINING MATERIAL B-64-0045	LS	-	-	-	-	-	-	1
203.0225.S	DEBRIS CONTAINMENT B-64-0045	LS	-	-	-	-	-	-	1
206.1000	EXCAVATION FOR STRUCTURE, BRIDGES B-64-0185	LS	-	-	-	-	-	-	1
210.0100	BACKFILL STRUCTURE	CY	208	-	-	-	206	-	414
502.0100 *	CONCRETE MASONRY BRIDGES	CY	81	73	74	73	83	546	929
502.3100	EXPANSION DEVICE B-64-0185	LS	-	-	-	-	-	1	1
502.3200	PROTECTIVE SURFACE TREATMENT	SY	-	-	-	-	-	1573	1573
502.3210.S	PIGMENTED PROTECTIVE SURFACE TREATMENT	SY	-	-	-	-	-	291	291
503.0146	PRESTRESSED GIRDER TYPE I 45W-INCH	LF	-	-	-	-	-	1755	1755
505.0405 *	BAR STEEL REINFORCEMENT HS BRIDGES	LB	3300	3380	3380	3380	3300	-	16740
505.0605 *	BAR STEEL REINFORCEMENT HS COATED BRIDGES	LB	4450	12820	13080	13010	4490	140280	188130
506.2605	BEARING PADS ELASTOMERIC NON-LAMINATED	EACH	-	10	10	10	-	-	30
506.2610	BEARING PADS ELASTOMERIC LAMINATED	EACH	5	-	-	-	5	-	10
506.4000	STEEL DIAPHRAGMS B-64-0185	EACH	-	-	-	-	-	32	32
511.1200	TEMPORARY SHORING B-64-0185	SF	390	-	-	-	850	-	1240
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	11	-	-	-	11	-	22
550.1120	PILING STEEL HP 12-INCH X 53 LB	LF	990	3105	3105	3105	990	-	11295
604.0400	SLOPE PAVING CONCRETE	SY	23	-	-	-	22	-	45
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	114	-	-	-	114	-	228
614.0150	ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD	EACH	2	-	-	-	2	-	4
SPV.0090	REMOVING EXISTING TIMBER PILING	LF	-	160	720	280	-	-	1160
	NON-BID ITEMS								
	FILLER	SIZE							½" & ¾"

* THE CONCRETE AND REINFORCEMENT OF THE PARAPET ON THE WINGWALLS ARE INCLUDED IN THE ABUTMENT QUANTITIES. SUPERSTRUCTURE QUANTITIES INCLUDE THE CONCRETE AND REINFORCEMENT OF THE PARAPET ON THE DECK.

BENCH MARKS

NO.	DESCRIPTION	ELEVATION
BM 145	BRIDGE MONUMENT AT THE SOUTHWEST CORNER OF THE EASTBOUND CTH "NN" BRIDGE	1047.44
BM 162	BRIDGE MONUMENT AT THE NORTHEAST CORNER OF THE WESTBOUND CTH "NN" BRIDGE	1052.85

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

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

ALL DIMENSIONS ARE IN FEET AND INCHES. ALL STATIONS AND ELEVATIONS ARE IN FEET.

THE FIRST DIGIT OF A THREE DIGIT AND THE FIRST TWO DIGITS OF A FOUR DIGIT BAR MARK SIGNIFIES THE BAR SIZE.

AT THE BACKFACE OF ABUTMENT ALL VOLUME WHICH CANNOT BE PLACED BEFORE ABUTMENT CONSTRUCTION AND IS NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH STRUCTURE BACKFILL.

EXPANSION ABUTMENTS TO BE BACKFILLED TO A MINIMUM OF THE BEAM SEAT ELEVATION PRIOR TO PLACING GIRDERS.

THE EXISTING GROUND LINE SHALL BE USED AS THE UPPER LIMITS OF EXCAVATION FOR STRUCTURES.

THE EXISTING STRUCTURE, B-64-45, IS A FOUR SPAN STEEL GIRDER BRIDGE WITH AN OVERALL WIDTH OF 36'-0" AND AN OVERALL LENGTH OF 371'-8¾" AND IS TO BE REMOVED.

PROTECTIVE SURFACE TREATMENT SHALL BE APPLIED TO THE ENTIRE ROADWAY DECK.

PIGMENTED PROTECTIVE SURFACE TREATMENT SHALL BE APPLIED TO THE FRONT FACES AND TOPS OF THE PARAPETS.

BEVEL EXPOSED EDGES OF CONCRETE ¾" UNLESS NOTED OTHERWISE.

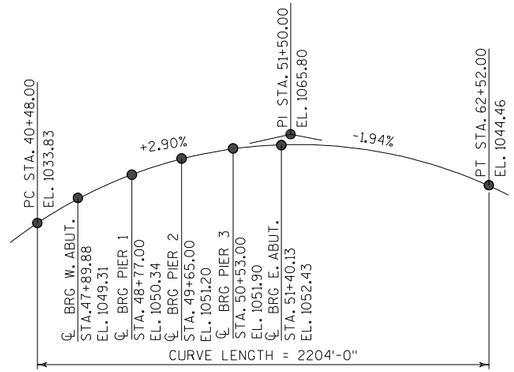
ELASTOMERIC BEARING PADS NEED NOT BE INDIVIDUALLY MOLDED PROVIDED THE CUT EDGES ARE SMOOTH AND TRUE.

THE HAUNCH CONCRETE QUANTITY IS BASED ON THE AVERAGE HAUNCH SHOWN ON THE PRESTRESSED GIRDER DETAILS SHEET.

THE QUANTITY FOR BACKFILL STRUCTURE, BID ITEM 210.0100, IS CALCULATED BASED ON THE APPLICABLE FIGURES 12.6-1 AND 12.6-2 IN THE WISCONSIN DEPARTMENT OF TRANSPORTATION BRIDGE MANUAL.

MSE REINFORCEMENT STRIPS ATTACHED TO ABUTMENTS ARE TO BE DESIGNED BY THE WALL MANUFACTURER.

MSE REINFORCEMENT STRIPS AND CONNECTION OF THE STRIPS TO THE ABUTMENT ARE INCLUDED IN THE QUANTITIES FOR R-64-0018 AT THE EAST ABUTMENT AND R-64-0019 AT THE WEST ABUTMENT.



PROFILE GRADE LINE CTH 'NN' EB

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-64-185

DRAWN BY AMD | PLANS CK'D. SJG

CROSS-SECTION & QUANTITIES

SHEET 2 OF 26

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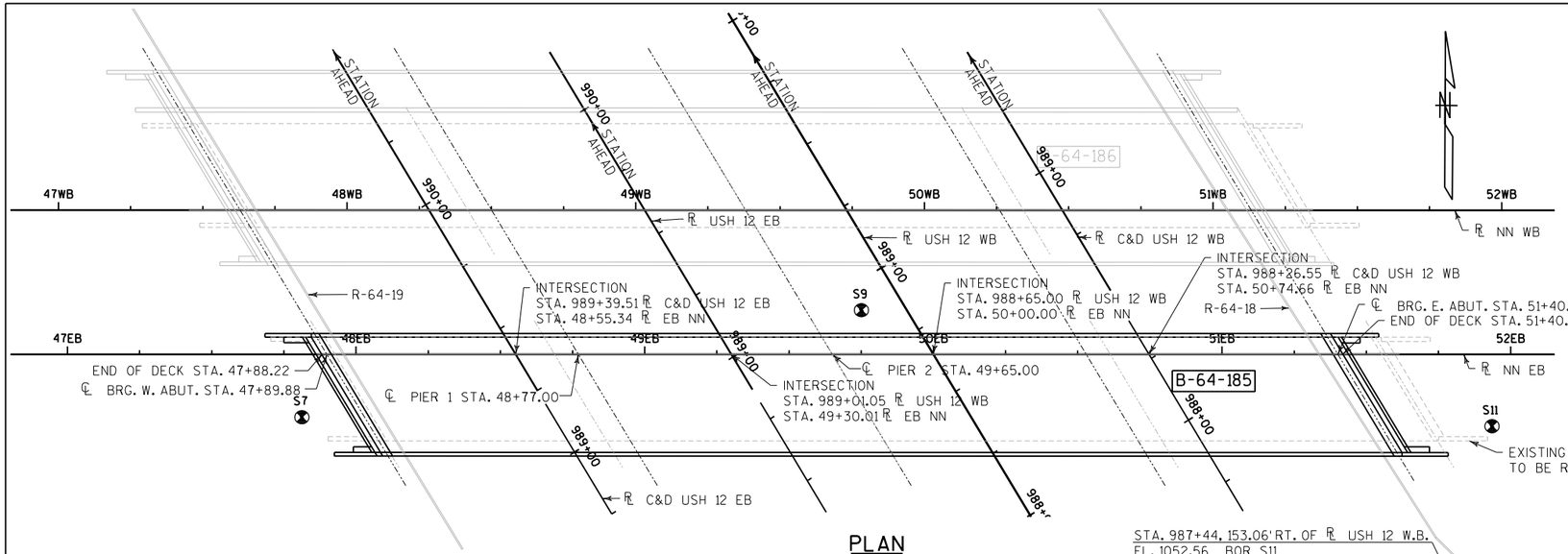


PLAN

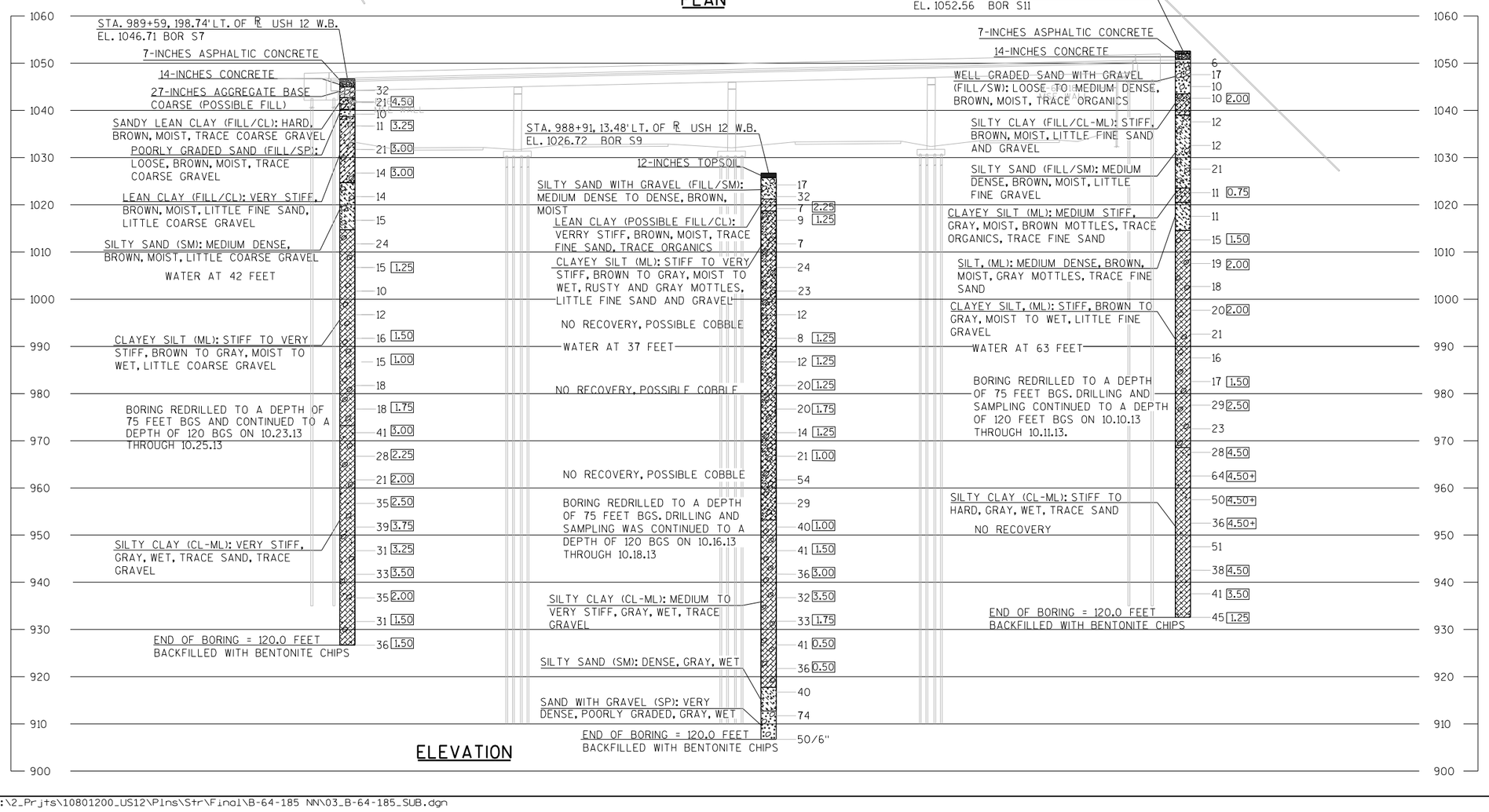
NOTES:

THE SUBSURFACE INFORMATION PRESENTED HEREIN IS AN ABBREVIATED VERSION OF THE INFORMATION PRESENTED IN THE GEOTECHNICAL ENGINEERING REPORT. REVIEW THE APPROPRIATE GEOTECHNICAL REPORT AND SOIL BORING LOGS FOR ADDITIONAL SUBSURFACE INFORMATION.

DENOTES SOIL BORING LOCATION

SOIL BORINGS COMPLETED BY:
HIMALAYAN CONSULTANTS, L.L.C.

SOIL BORINGS TAKEN:
S7 - NOVEMBER 20, 2012
S9 - NOVEMBER 16, 2012
CONTINUED OCTOBER 16, 2013
TO OCTOBER 18, 2013
S11 - NOVEMBER 19, 2012
CONTINUED OCTOBER 10, 2013
TO OCTOBER 11, 2013



ELEVATION

STATE PROJECT NUMBER

1080-13-70

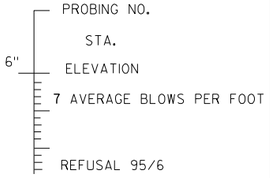
ABBREVIATIONS

F — FINE M — MEDIUM C — COARSE
WS — WEATHERED SO — SOUND

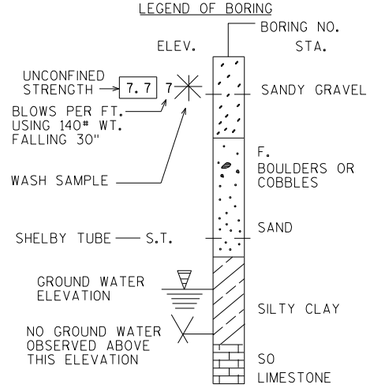
MATERIAL SYMBOLS

TOPSOIL, SILT, SANDSTONE, SAND, PEAT, LIMESTONE, GRAVEL, CLAY, IGNEOUS ROCK

LEGEND OF PROBING



LEGEND OF BORING



UNLESS OTHERWISE SPECIFIED, THE BLOWS PER FOOT AT THE LOCATIONS INDICATED ARE BASED ON DRIVING A 2" O.D. X 1.4" I.D. SPLIT SPOON SAMPLER WITH A 140# HAMMER HAVING A FREE FALL OF 30". THE BLOW COUNT IS TAKEN IN UNDISTURBED SOIL IMMEDIATELY BELOW A CASED OR OPEN HOLE ELIMINATING SIDE FRICTION ON THE DRIVE PIPE.

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

TO OBTAIN RELATIVE DATA CONCERNING THE CHARACTER OF MATERIAL IN AND UPON WHICH THE FOUNDATION MIGHT BE BUILT, BORINGS AND/OR SOUNDINGS WERE MADE AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING. THE DATA PRESENTED HEREIN REPRESENTS THE FINDINGS OF THE SUBSURFACE EXPLORATIONS MADE. HOWEVER, BECAUSE THE DEPTHS INVESTIGATED ARE LIMITED AND THE AREA OF THE BORINGS AND/OR SOUNDINGS IS VERY SMALL IN RELATION TO THE ENTIRE AREA, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT CONDITIONS BELOW THE DEPTHS INVESTIGATED OR THAT THE CLASSIFICATION OF MATERIAL ENCOUNTERED IN THESE INVESTIGATIONS IS NECESSARILY TYPICAL OF THE ENTIRE SITE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-64-185

DRAWN BY AMD | PLANS CK'D. SJG

SUBSURFACE EXPLORATION

SHEET 3 OF 26

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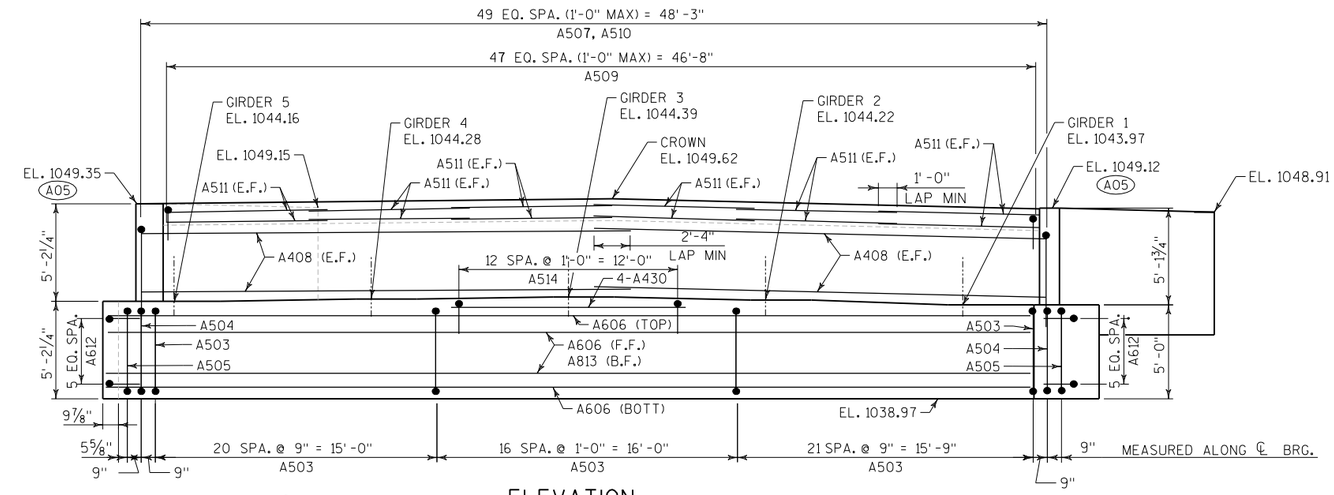
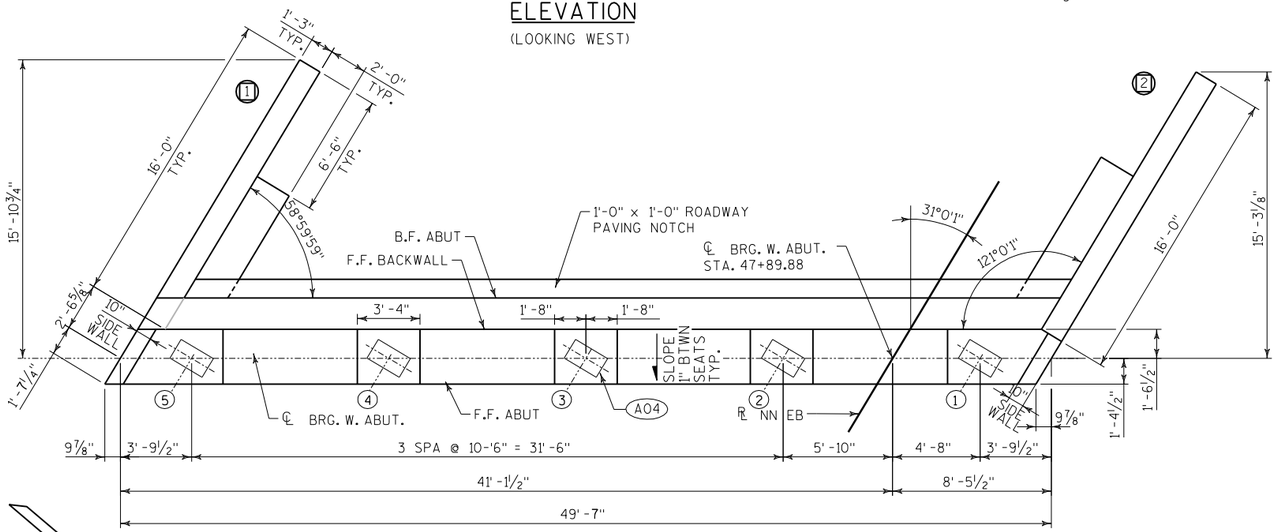
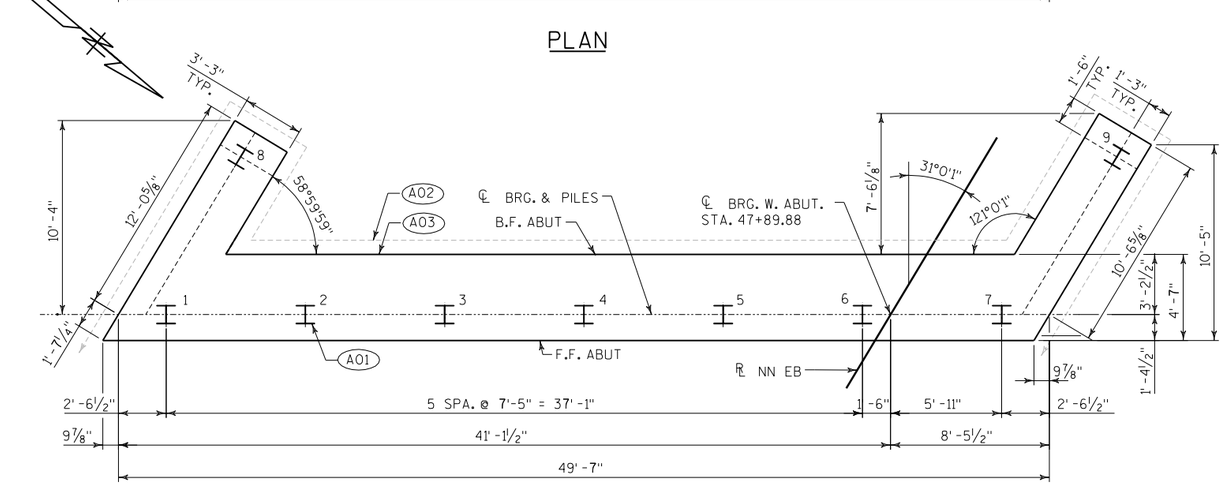


ELEVATION

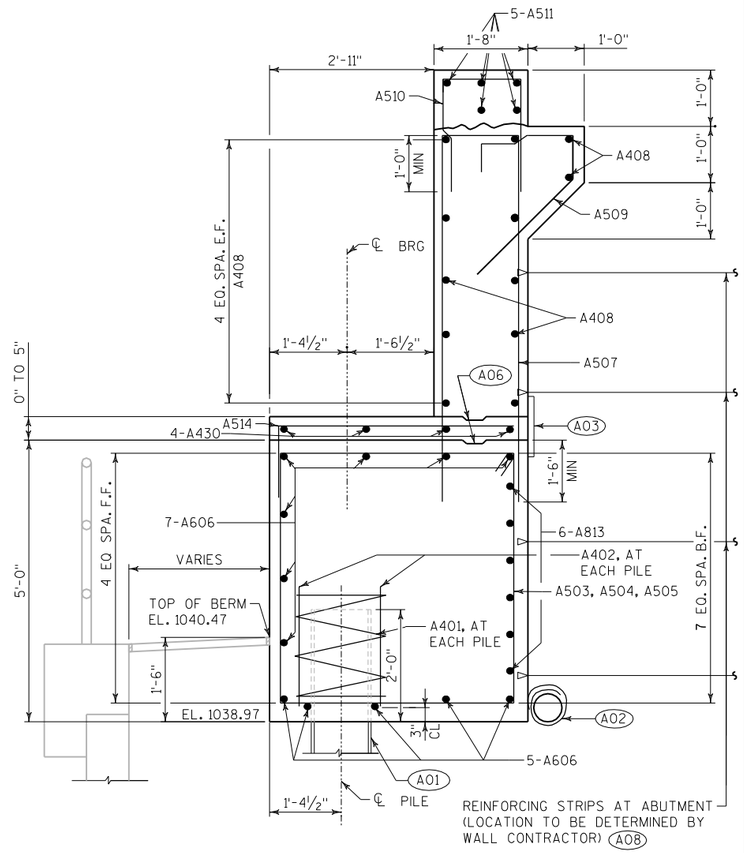
(LOOKING WEST)



PLAN



PILE PLAN



SECTION THRU BODY

LEGEND:

(A01) ABUTMENTS TO BE SUPPORTED ON HP 12X53 STEEL PILING DRIVEN TO A REQUIRED RESISTANCE OF 200 TONS PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC EQUATION. ESTIMATED 110'-0" LONG.

(A02) PIPE UNDERDRAIN WRAPPED, 6-INCH. SLOPE 0.5% MIN TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT END AND CAP UPPER END. THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THE DETAIL SHOWN ON SHEET 5. THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE OUTFALL PIPE. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH (2) TWO OR MORE NO. 10X1-INCH STAINLESS SHEET METAL SCREWS AND SHALL BE INCLUDED IN BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".

(A03) 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS AT BACKFACE.

(A04) 2½" X 1'-2" X 2'-0" LAMINATED ELASTOMERIC BEARING PAD.

(A05) TOP OF WING ELEVATION IS GIVEN AT FRONT FACE OF BACK WALL.

(A06) KEYED CONSTRUCTION JOINT BY BEVELED 2" X 6".

(A08) REINFORCING STRIPS SHALL BE DESIGNED TO RESIST A NONFACTORED SUPERSTRUCTURE LONGITUDINAL HORIZONTAL LINE LOAD OF 1.45 K/LF OF ABUTMENT IN ADDITION TO THE LIVE LOAD SURCHARGE AND EARTH PRESSURE ON THE BACK OF ABUTMENT.

SEE SHEET 5 FOR PILE SPLICE DETAIL.

SEE SHEET 21 FOR BEARING PAD DETAIL.

SEE SHEET 21 FOR BILL OF BARS AND BENDING DIAGRAMS.

(X) INDICATES GIRDER NUMBER.

⬡ INDICATES WING WALL NUMBER.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-64-185

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WEST ABUTMENT

SHEET 4 OF 26

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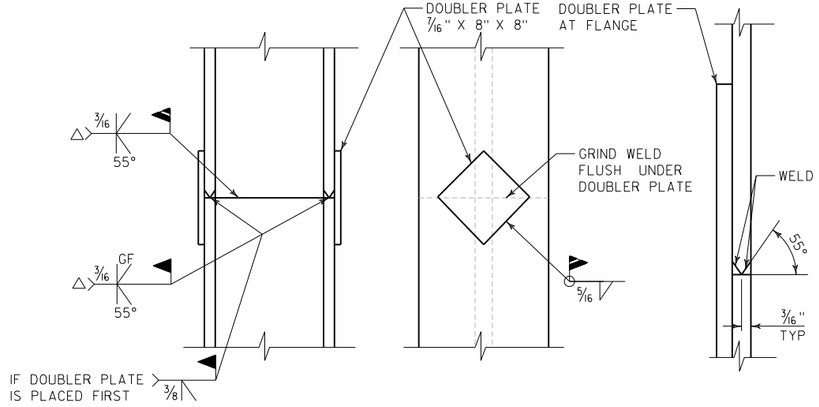
5/29/2015

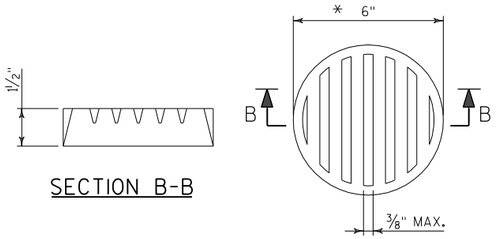


HP 12X53 PILE SPLICE DETAIL

△ SEE HP WELD DETAIL

'HP' WELD DETAIL

FLANGE SHOWN,
WEB SIMILAR



SECTION B-B

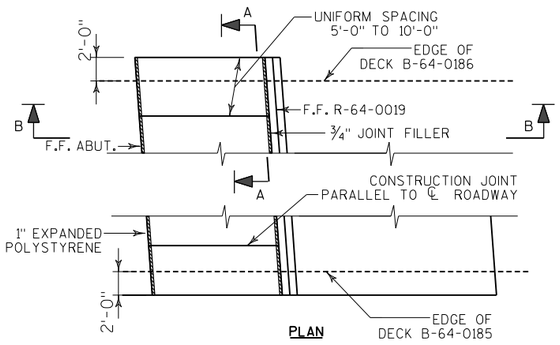
RODENT SHIELD

* DIMENSIONS ARE APPROXIMATE, THE GRATE IS SIZED TO FIT INTO PIPE COUPLING. ORIENT SHIELD SO SLOTS ARE VERTICAL.

NOTES

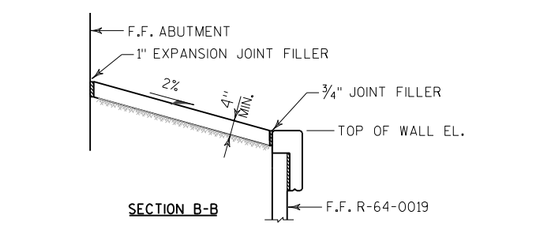
SEE SHEET 4 FOR ABUTMENT PLAN AND ELEVATION.

SEE SHEET 21 FOR BEARING PAD DETAIL.



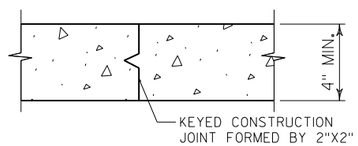
PLAN

SLOPE PAVING SELECT CRUSHED MATERIAL DETAILS



SECTION B-B

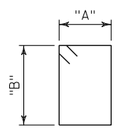
SECTION A-A



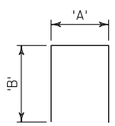
CONSTRUCTION JOINT DETAIL

BILL OF BARS

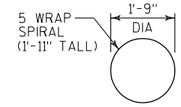
BAR MARK	COAT	NO REQ'D	LENGTH	BENT	BAR SERIES	LOCATION	
A401	-	7	28'-0"	X	-	ABUTMENT PILES - 1 PER PILE	VERTICAL
A402	-	14	2'-3"	-	-	ABUTMENT PILES - 2 PER PILE	VERTICAL
A503	-	58	18'-3"	X	-	ABUTMENT BODY STIRRUPS	VERTICAL
A504	-	2	15'-7"	X	-	ABUTMENT BODY STIRRUPS - ENDS	VERTICAL
A505	-	2	13'-1"	X	-	ABUTMENT BODY STIRRUPS - ENDS	VERTICAL
A606	-	12	49'-2"	-	-	ABUTMENT BODY F.F., TOP & BOTT.	HORIZONTAL
A507	X	50	11'-11"	X	-	ABUTMENT BACKWALL	VERTICAL
A408	X	24	25'-4"	-	-	ABUTMENT BACKWALL	HORIZONTAL
A509	X	48	5'-9"	X	-	ABUTMENT BACKWALL	VERTICAL
A510	X	50	5'-1"	X	-	ABUTMENT BACKWALL	VERTICAL
A511	X	30	8'-7"	-	-	ABUTMENT BACKWALL	HORIZONTAL
A612	-	12	10'-7"	X	-	ABUTMENT BODY ENDS	HORIZONTAL
A813	-	6	49'-2"	-	-	ABUTMENT BODY B.F.	HORIZONTAL
A514	-	13	5'-10"	X	-	ABUTMENT BODY TOP	HORIZONTAL
A515	X	10	15'-11"	X	-	WING WALL 1	VERTICAL
A516	X	5	12'-8"	-	-	WING WALL 1 (FF)	HORIZONTAL
A617	X	11	11'-5"	-	-	WING WALL 1 (BF)	HORIZONTAL
A518	X	7	12'-6"	X	-	WING WALL 1 (TOP)	VERTICAL
A519	X	18	14'-8"	X	-	WING WALL 1 & 2 (TOP)	VERTICAL
A620	X	4	15'-8"	-	-	WING WALL 1 & 2 (TOP)	HORIZONTAL
A421	X	10	7'-9"	-	-	WING WALL 1 & 2 (TOP)	HORIZONTAL
A422	X	22	15'-8"	-	-	WING WALL 1 & 2 (TOP)	HORIZONTAL
A423	X	5	4'-6"	-	-	WING WALL 1 - SIDE WALL	HORIZONTAL
A424	X	8	5'-2"	-	-	WING WALL 1 & 2 - SIDE WALL	VERTICAL
A525	X	10	15'-7"	X	-	WING WALL 2	VERTICAL
A626	X	11	10'-7"	-	-	WING WALL 2 (BF)	HORIZONTAL
A527	X	5	11'-10"	-	-	WING WALL 2 (FF)	HORIZONTAL
A528	X	7	12'-8"	X	-	WING WALL 2 (TOP)	VERTICAL
A429	X	5	3'-9"	-	-	WING WALL 2 - SIDEWALL	HORIZONTAL
A430	-	4	12'-6"	-	-	ABUTMENT BODY TOP	HORIZONTAL



BAR MARK	DIM. A	DIM. B
A503	4'-3"	4'-7"
A504	2'-11"	4'-7"
A505	1'-8"	4'-7"
A515	2'-11"	4'-9"
A525	2'-11"	4'-7"



BAR MARK	DIM. A	DIM. B
A507	1'-4"	5'-5"
A510	1'-4"	2'-0"
A514	4'-0"	1'-0"
A518	11"	5'-11"
A519	11"	7'-0"
A528	11"	6'-0"



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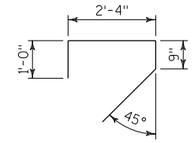

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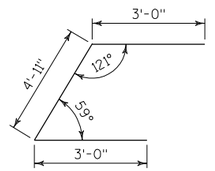

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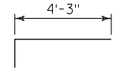

A430

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-64-185

DRAWN BY AMD | PLANS CK'D. SJG

WEST ABUTMENT DETAILS

SHEET 5 OF 26

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STATE PROJECT NUMBER

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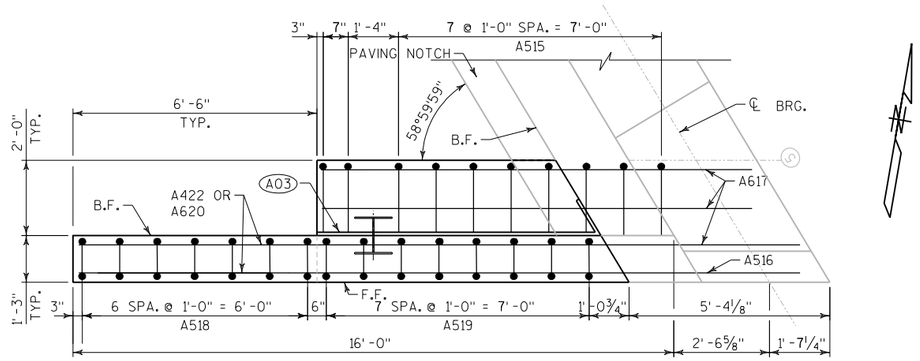
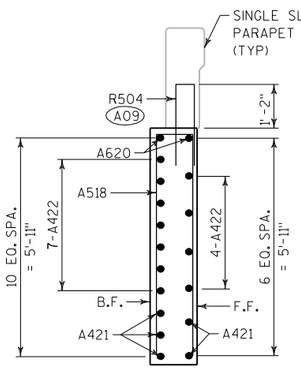
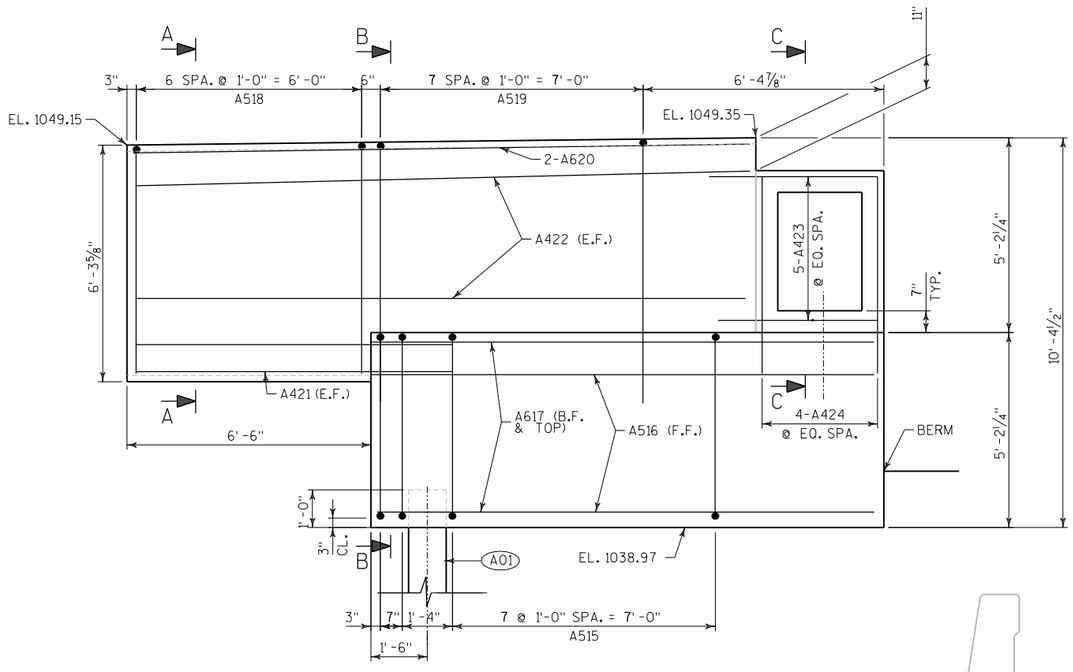


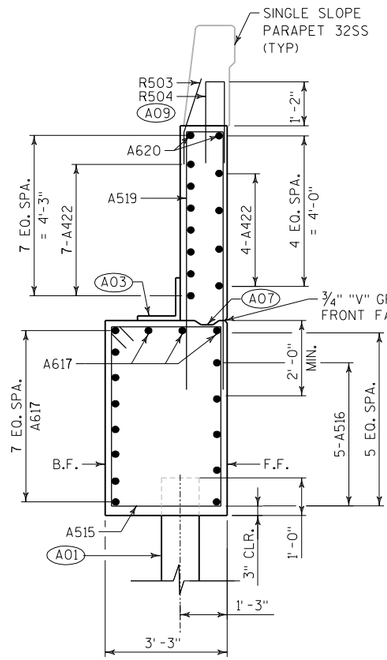
WING 1 PLAN



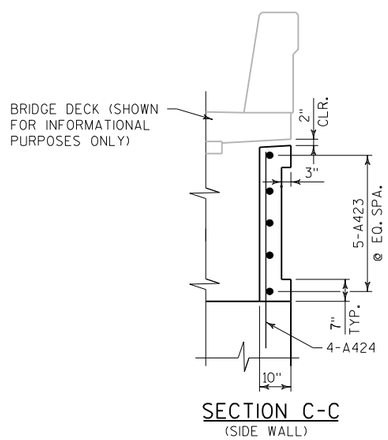
SECTION A-A



WING 1 ELEVATION
(FRONT FACE)



SECTION B-B



SECTION C-C
(SIDE WALL)

LEGEND

(A01) ABUTMENTS TO BE SUPPORTED ON HP 12X53 STEEL PILING DRIVEN TO A REQUIRED RESISTANCE OF 200 TONS PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC EQUATION. ESTIMATED 110'-0" LONG.

(A03) 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS AT BACKFACE.

(A07) OPTIONAL CONSTRUCTION JOINT FORMED BY 2" X 6" KEYWAY WITH MEMBRANE ON BACK FACE.

(X) INDICATES GIRDER NUMBER.

(A09) SEE SHEET 23 FOR ADDTIONAL PARAPET REINFORCMENT DETAILS.

NOTES

SEE SHEET 5 FOR BILL OF BARS AND BENDS

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-64-185

DRAWN BY AMD | PLANS CK'D. SJG

ABUTMENT
WING WALL #1

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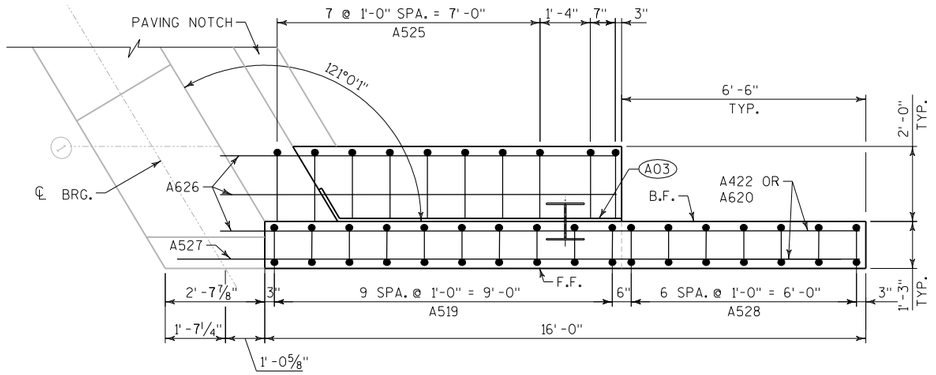
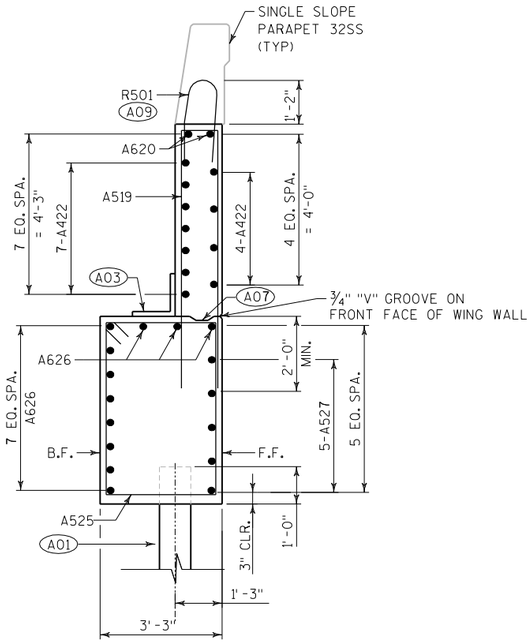
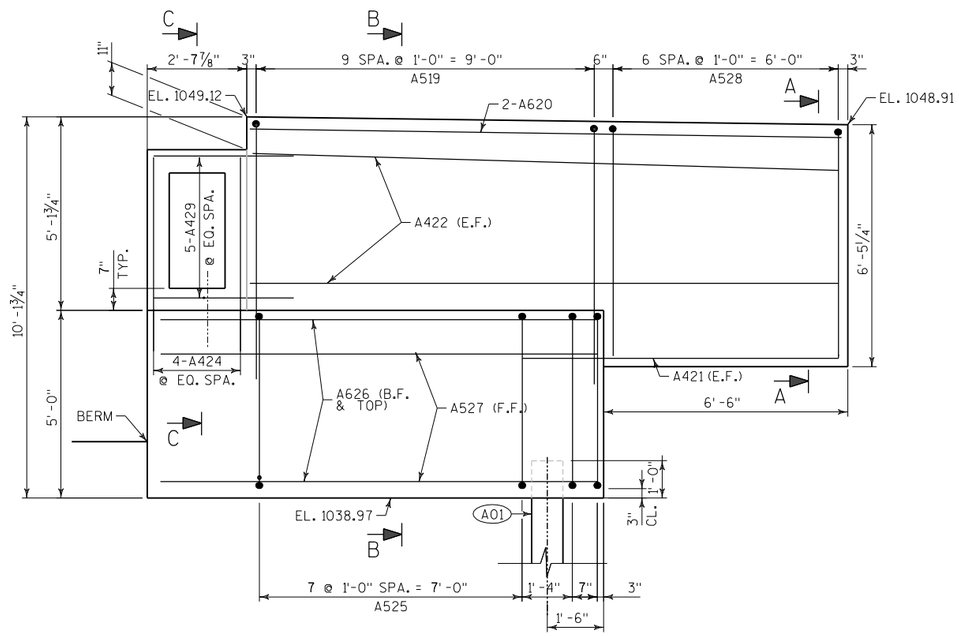


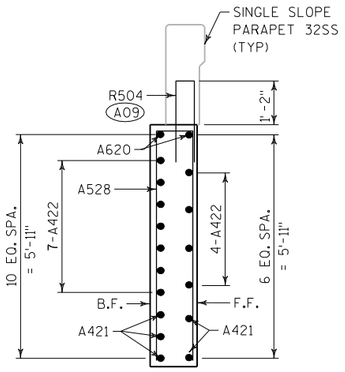
WING 2 PLAN



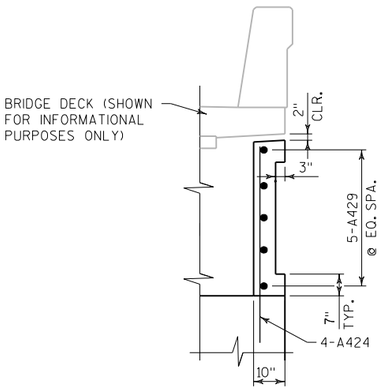
SECTION B-B



WING 2 ELEVATION
(FRONT FACE)



SECTION A-A



SECTION C-C
(SIDE WALL)

LEGEND

(A01) ABUTMENTS TO BE SUPPORTED ON HP 12X53 STEEL PILING DRIVEN TO A REQUIRED RESISTANCE OF 200 TONS PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC EQUATION. ESTIMATED 110'-0" LONG.

(A03) 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS AT BACKFACE.

(A07) OPTIONAL CONSTRUCTION JOINT FORMED BY 2" X 6" KEYWAY WITH MEMBRANE ON BACK FACE.

(X) INDICATES GIRDER NUMBER.

(A09) SEE SHEET 23 FOR ADDTIONAL PARAPET REINFORCMENT DETAILS.

NOTES

SEE SHEET 5 FOR BILL OF BARS AND BENDS

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-64-185

DRAWN BY AMD | PLANS CK'D. SJG

ABUTMENT
WING WALL #2

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STATE PROJECT NUMBER

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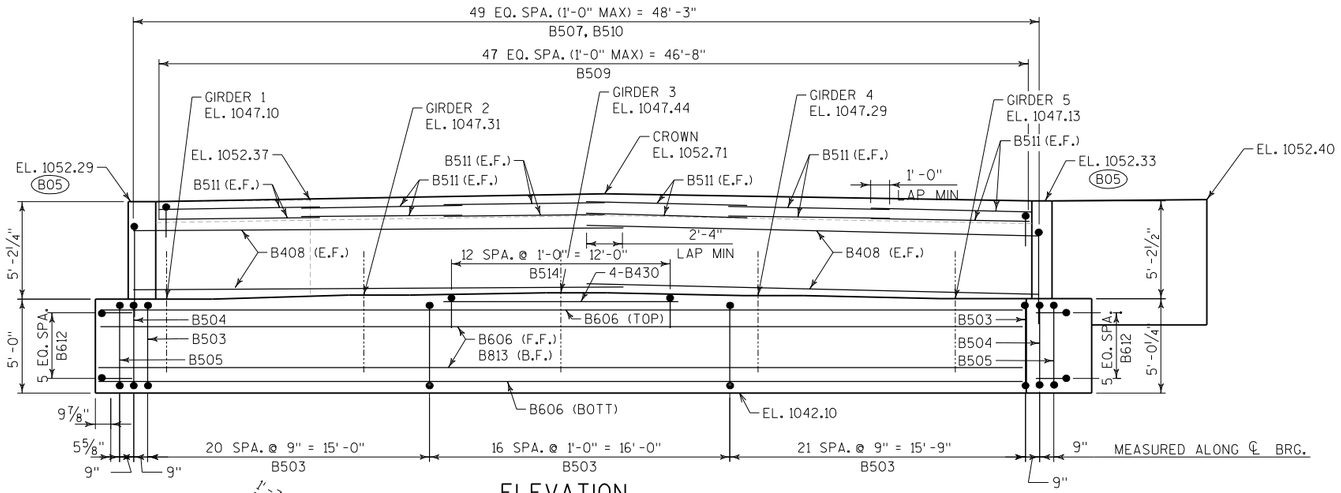
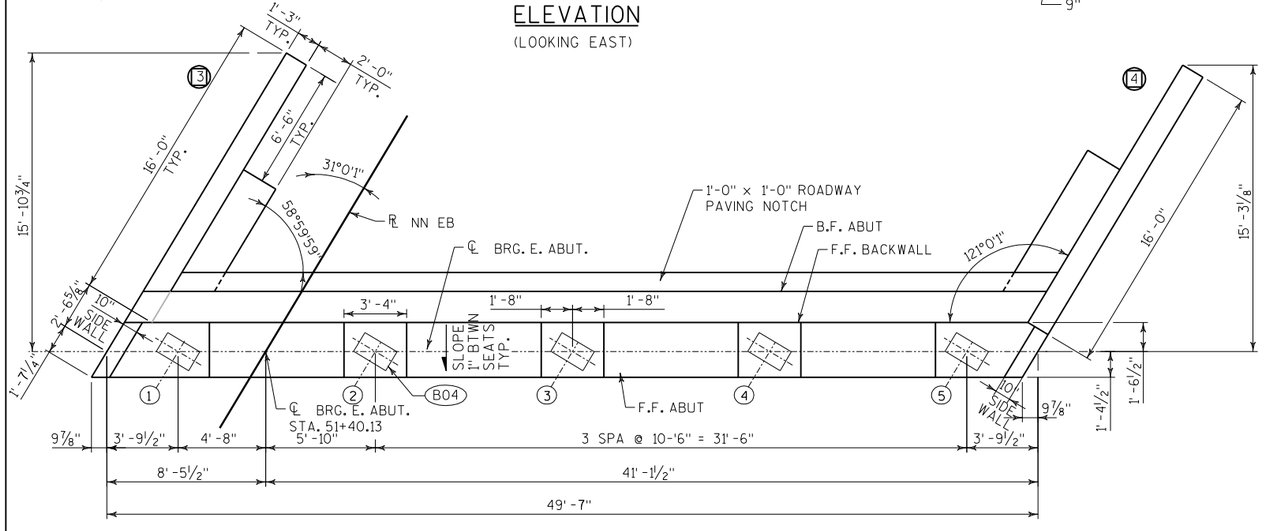
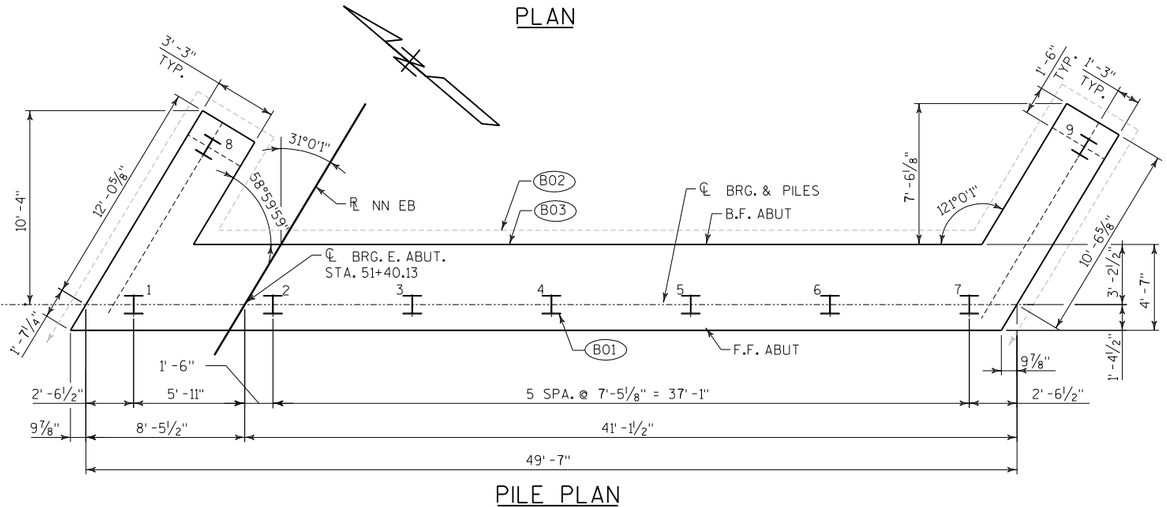


ELEVATION

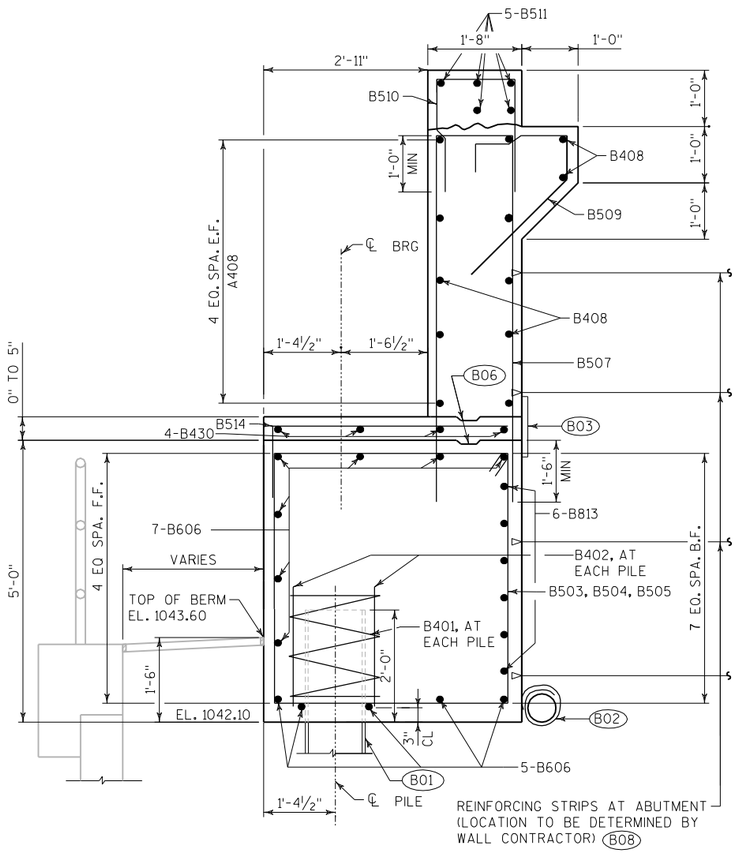
(LOOKING EAST)



PLAN



PILE PLAN



SECTION THRU BODY

LEGEND:

(B01) ABUTMENTS TO BE SUPPORTED ON HP 12X53 STEEL PILING DRIVEN TO A REQUIRED RESISTANCE OF 200 TONS PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC EQUATION. ESTIMATED 110'-0" LONG.

(B02) PIPE UNDERDRAIN WRAPPED, 6-INCH. SLOPE 0.5% MIN TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT END AND CAP UPPER END. THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THE DETAIL SHOWN ON SHEET 5. THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE OUTFALL PIPE. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH (2) TWO OR MORE NO. 10X1-INCH STAINLESS SHEET METAL SCREWS AND SHALL BE INCLUDED IN BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".

(B03) 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS AT BACKFACE.

(B04) 2½" X 1'-2" X 2'-0" LAMINATED ELASTOMERIC BEARING PAD.

(B05) TOP OF WING ELEVATION IS GIVEN AT FRONT FACE OF BACK WALL.

(B06) KEYED CONSTRUCTION JOINT BY BEVELED 2" X 6".

(B08) REINFORCING STRIPS SHALL BE DESIGNED TO RESIST A NONFACTORED SUPERSTRUCTURE LONGITUDINAL HORIZONTAL LINE LOAD OF 1.45 K/LF OF ABUTMENT IN ADDITION TO THE LIVE LOAD SURCHARGE AND EARTH PRESSURE ON THE BACK OF ABUTMENT.

SEE SHEET 5 FOR PILE SPLICE DETAIL.

SEE SHEET 21 FOR BEARING PAD DETAIL.

SEE SHEET 9 FOR BILL OF BARS AND BENDING DIAGRAMS.

(X) INDICATES GIRDER NUMBER.

⬡ INDICATES WING WALL NUMBER.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-64-185

DRAWN BY AMD | PLANS CK'D. SJG

EAST ABUTMENT

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STATE PROJECT NUMBER

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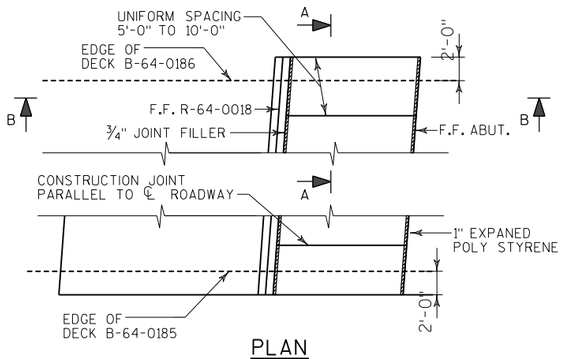
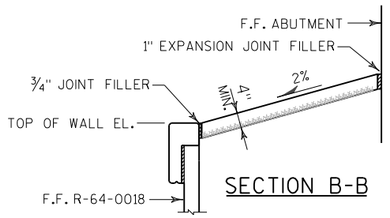
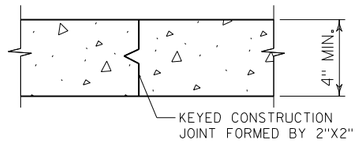


PLAN

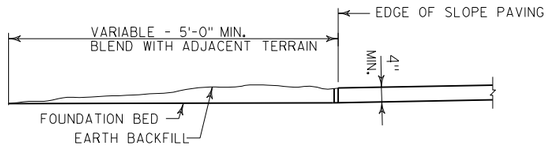
SLOPE PAVING DETAILS



SECTION B-B



CONSTRUCTION JOINT DETAIL



SECTION A-A

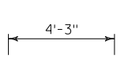
NOTES

SEE SHEET 9 FOR ABUTMENT PLAN AND ELEVATION.

SEE SHEET 21 FOR BEARING PAD DETAIL.

BILL OF BARS

BAR MARK	COAT	NO REQ'D	LENGTH	BENT	BAR SERIES	LOCATION	
B401	-	7	28'-0"	X	-	ABUTMENT PILES - 1 PER PILE	VERTICAL
B402	-	14	2'-3"	-	-	ABUTMENT PILES - 2 PER PILE	VERTICAL
B503	-	58	18'-3"	X	-	ABUTMENT BODY STIRRUPS	VERTICAL
B504	-	2	15'-7"	X	-	ABUTMENT BODY STIRRUPS - ENDS	VERTICAL
B505	-	2	13'-1"	X	-	ABUTMENT BODY STIRRUPS - ENDS	VERTICAL
B606	-	12	49'-2"	-	-	ABUTMENT BODY - F.F., TOP & BOTT.	HORIZONTAL
B507	X	50	11'-11"	X	-	ABUTMENT BACKWALL	VERTICAL
B408	X	24	25'-1"	-	-	ABUTMENT BACKWALL	HORIZONTAL
B509	X	48	5'-9"	X	-	ABUTMENT BACKWALL	VERTICAL
B510	X	50	5'-1"	X	-	ABUTMENT BACKWALL	VERTICAL
B511	X	30	8'-7"	-	-	ABUTMENT BACKWALL	HORIZONTAL
B612	-	12	10'-7"	X	-	ABUTMENT BODY ENDS	HORIZONTAL
B813	-	6	49'-2"	-	-	ABUTMENT BODY - B.F.	HORIZONTAL
B514	-	13	5'-10"	X	-	ABUTMENT BODY - TOP	HORIZONTAL
B515	X	20	15'-7"	X	-	WING WALL 3 & 4	VERTICAL
B516	X	5	12'-8"	-	-	WING WALL 3 (FF)	HORIZONTAL
B617	X	11	11'-5"	-	-	WING WALL 3 (BF)	HORIZONTAL
B518	X	7	12'-6"	X	-	WING WALL 3 (TOP)	VERTICAL
B519	X	8	14'-10"	X	-	WING WALL 3 (TOP)	VERTICAL
B620	X	4	15'-8"	-	-	WING WALL 3 & 4 (TOP)	HORIZONTAL
B421	X	8	7'-9"	-	-	WING WALL 3 & 4 (TOP)	HORIZONTAL
B422	X	26	15'-8"	-	-	WING WALL 3 & 4 (TOP)	HORIZONTAL
B423	X	5	4'-6"	-	-	WING WALL 3 - SIDE WALL	HORIZONTAL
B424	X	8	5'-3"	-	-	WING WALL 3 & 4 - SIDE WALL	VERTICAL
B425	X	5	3'-9"	-	-	WING WALL 4 - SIDE WALL	HORIZONTAL
B626	X	11	10'-7"	-	-	WING WALL 4 (BF)	HORIZONTAL
B527	X	5	11'-10"	-	-	WING WALL 4 (FF)	HORIZONTAL
B528	X	10	15'-0"	X	-	WING WALL 4 (TOP)	VERTICAL
B529	X	7	13'-0"	X	-	WING WALL 4 (TOP)	VERTICAL
B430	-	4	12'-6"	-	-	ABUTMENT BODY - TOP	HORIZONTAL



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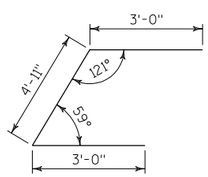
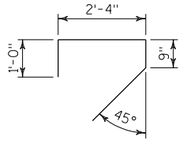


B612



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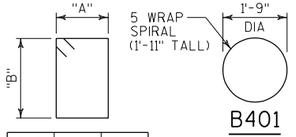
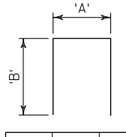


B401

BAR MARK	DIM. A	DIM. B
B503	4'-3"	4'-7"
B504	2'-11"	4'-7"
B505	1'-8"	4'-7"
B515	2'-11"	4'-7"



BAR MARK	DIM. A	DIM. B
B507	1'-4"	5'-5"
B510	1'-4"	2'-0"
B514	4'-0"	1'-0"
B518	11"	5'-11"
B519	11"	7'-1"
B528	11"	7'-2"
B529	11"	6'-2"

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-64-185

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EAST ABUTMENT DETAILS

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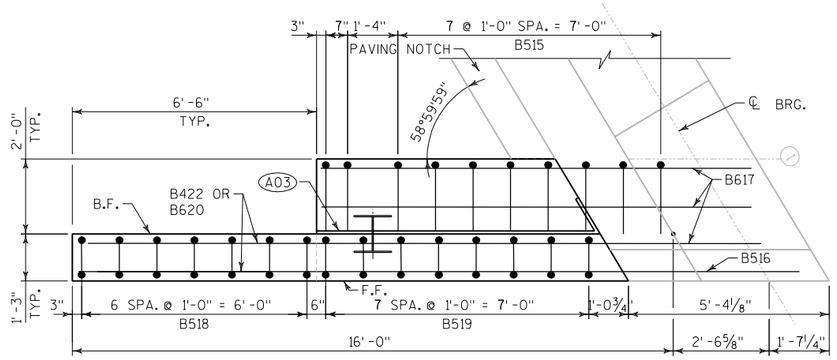
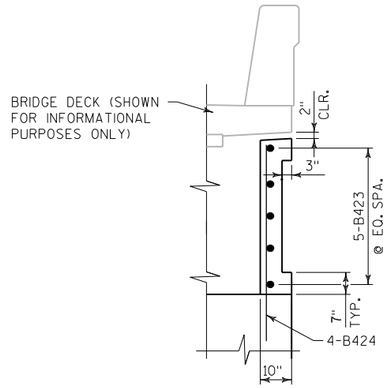
5/29/2015

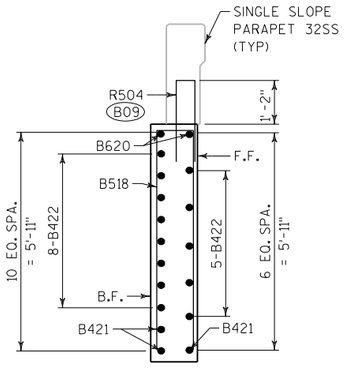
STATE PROJECT NUMBER
1080-13-70



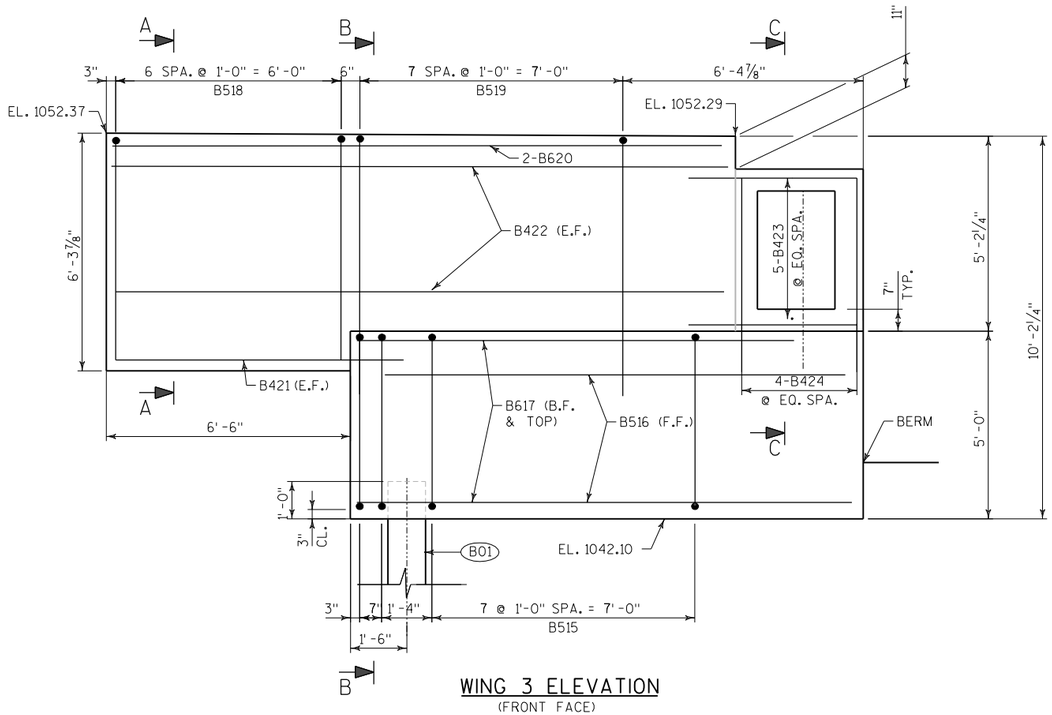
WING 3 PLAN



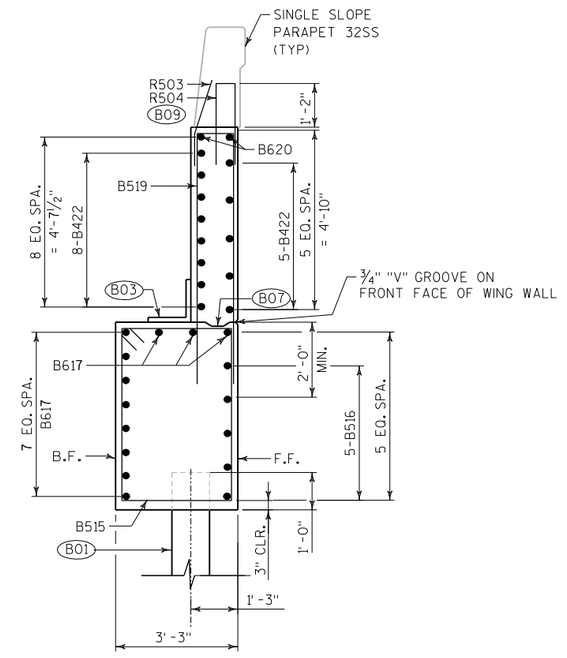
SECTION C-C
(SIDE WALL)



SECTION A-A



WING 3 ELEVATION
(FRONT FACE)



SECTION B-B

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LEGEND

(B01) ABUTMENT TO BE SUPPORTED ON HP 12X53 STEEL PILING DRIVEN TO A REQUIRED RESISTANCE OF 190 TONS PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC EQUATION. ESTIMATED 110'-0" LONG.

(B03) 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS AT BACKFACE.

(B07) OPTIONAL CONSTRUCTION JOINT FORMED BY 2" X 6" KEYWAY WITH MEMBRANE ON BACK FACE.

(X) INDICATES GIRDER NUMBER.

(B09) SEE SHEET 23 FOR ADDTIONAL PARAPET REINFORCMENT DETAILS.

NOTES

SEE SHEET 9 FOR BILL OF BARS AND BENDS

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-64-185

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ABUTMENT
WING WALL #3

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STATE PROJECT NUMBER

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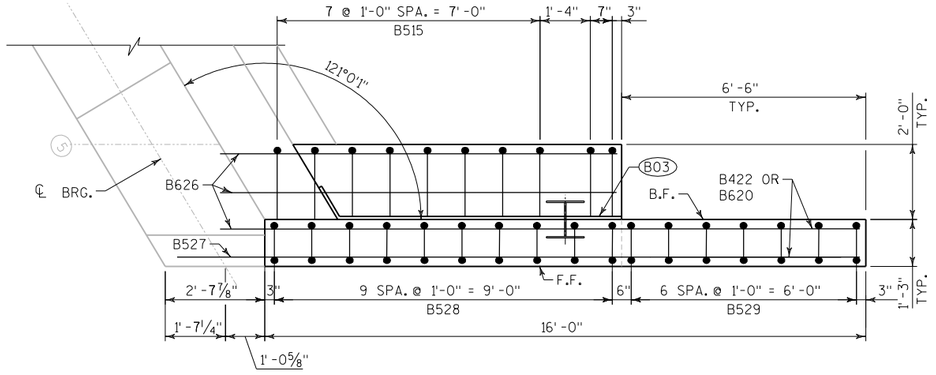
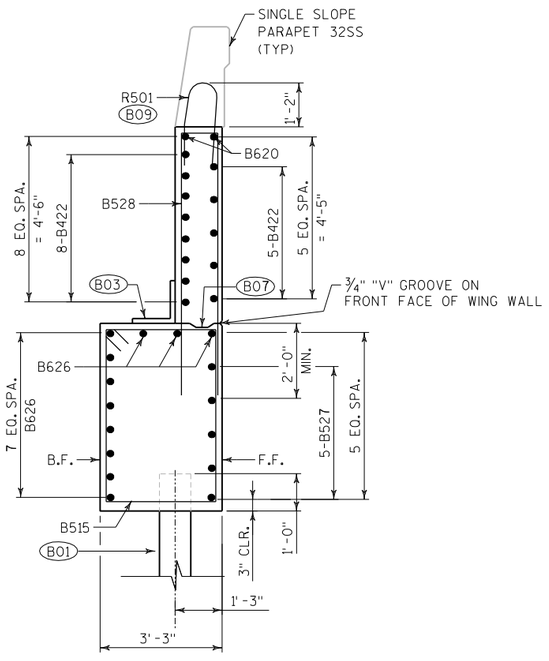
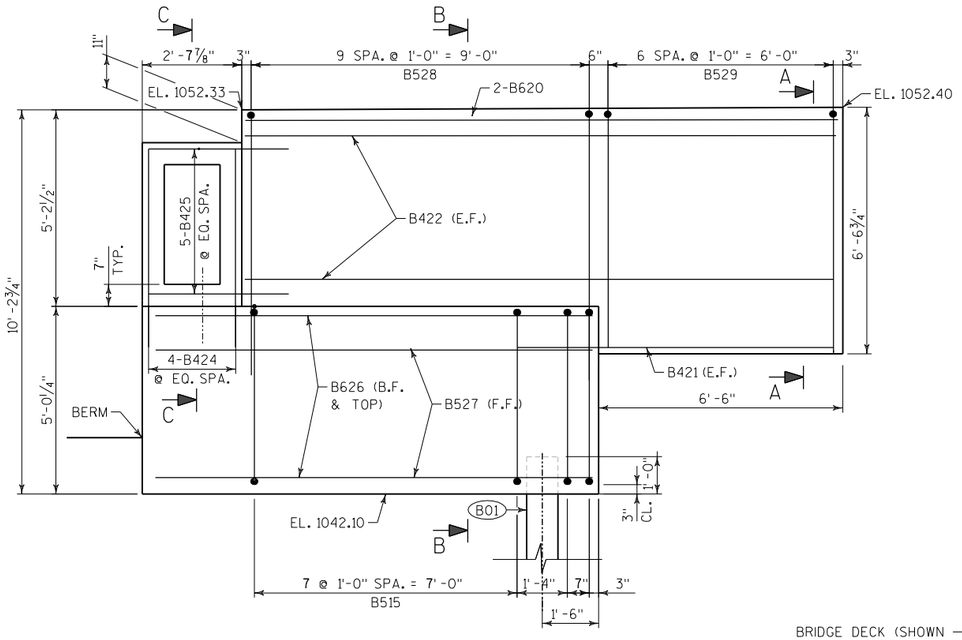


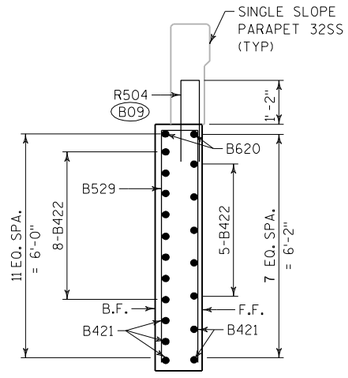
WING 4 PLAN



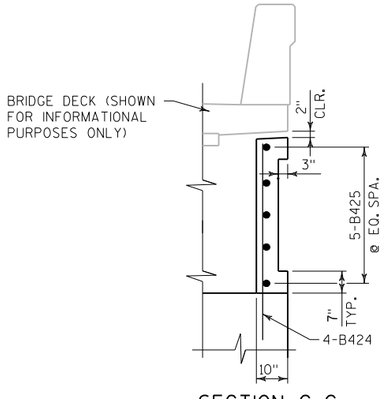
SECTION B-B



WING 4 ELEVATION
(FRONT FACE)



SECTION A-A



SECTION C-C
(SIDE WALL)

LEGEND

(B01) ABUTMENTS TO BE SUPPORTED ON HP 12X53 STEEL PILING DRIVEN TO A REQUIRED RESISTANCE OF 190 TONS PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC EQUATION. ESTIMATED 110'-0" LONG.

(B03) 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS AT BACKFACE.

(B07) OPTIONAL CONSTRUCTION JOINT FORMED BY 2" X 6" KEYWAY WITH MEMBRANE ON BACK FACE.

(X) INDICATES GIRDER NUMBER.

(B09) SEE SHEET 23 FOR ADDTIONAL PARAPET REINFORCMENT DETAILS.

NOTES

SEE SHEET 9 FOR BILL OF BARS AND BENDS

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-64-185

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ABUTMENT
WING WALL #4

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5/30/2015

STATE PROJECT NUMBER
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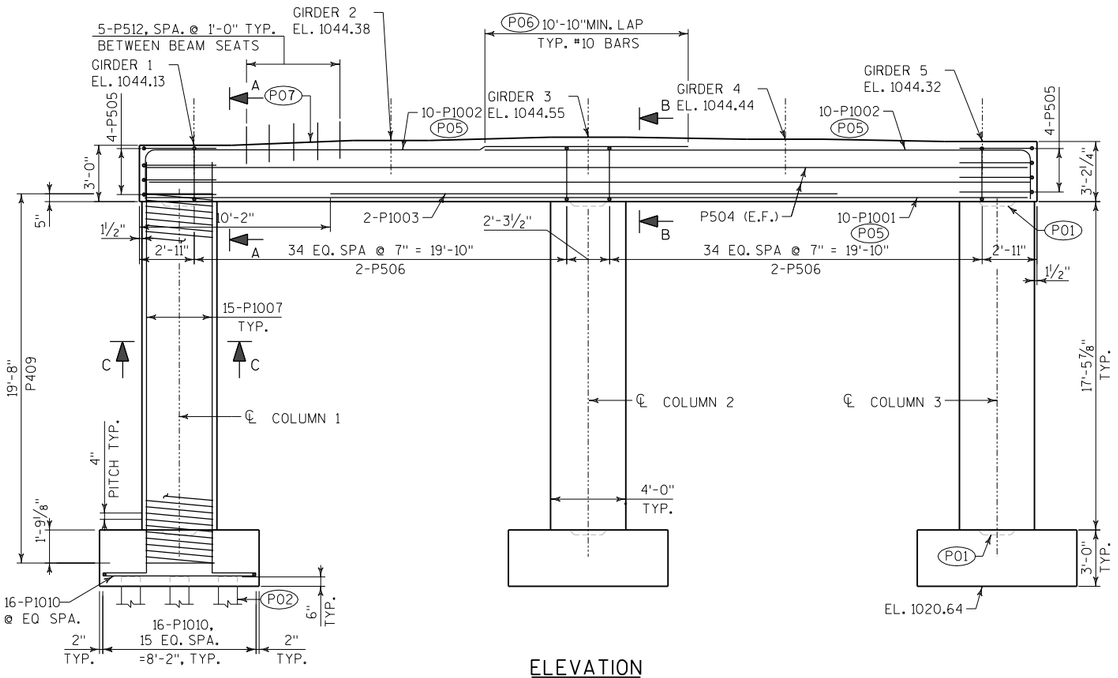
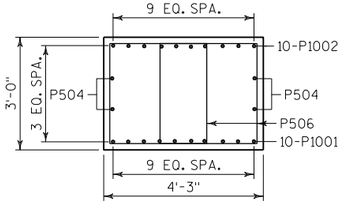
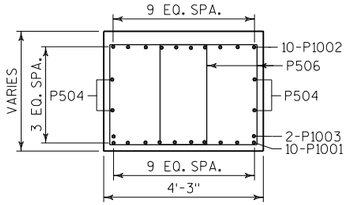


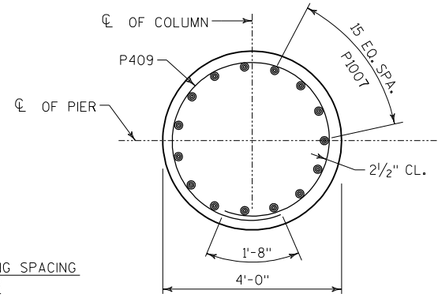
ELEVATION
(LOOKING EAST)



SECTION A-A



SECTION B-B



SECTION C-C

LEGEND

(P01) KEYED CONSTRUCTION JOINT FORMED BY SURFACED BEVELED 1'-3" X 1'-3" X 2", TYPICAL TOP AND BOTTOM OF ALL COLUMNS.

(P02) PIER TO BE SUPPORTED ON HP 12X53 STEEL PILING DRIVEN TO A REQUIRED RESISTANCE OF 220 TONS PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC EQUATION. ESTIMATED 115'-0" LONG.

(P03) ELEVATIONS ARE GIVEN AT THE TOP OF THE CONCRETE AT THE INTERSECTION OF THE ℄ GIRDER AND ℄ PIER.

(P05) OFFSET BARS AT ENDS OF PIER CAP AS REQUIRED TO MAINTAIN EDGE CLEARANCES.

(P06) LAPS SHOWN ARE MINIMUM LENGTH & LOCATION OF LAPS WILL VARY BASED ON VARIABLE EXTENSIONS OF BARS INTO RADIUS OF PIER CAP.

(P07) 2" X 6" BEVELED KEYWAY BETWEEN BEAM SEATS.

(P08) ½" THICK ELASTOMERIC BEARING PAD. SEE 'SUPERSTRUCTURE DETAILS' SHEET FOR DETAILS.

(P09) P512 BARS @ 1'-0" CTRS. BETWEEN BEAM SEATS. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-0" INTO CONCRETE)

NOTES

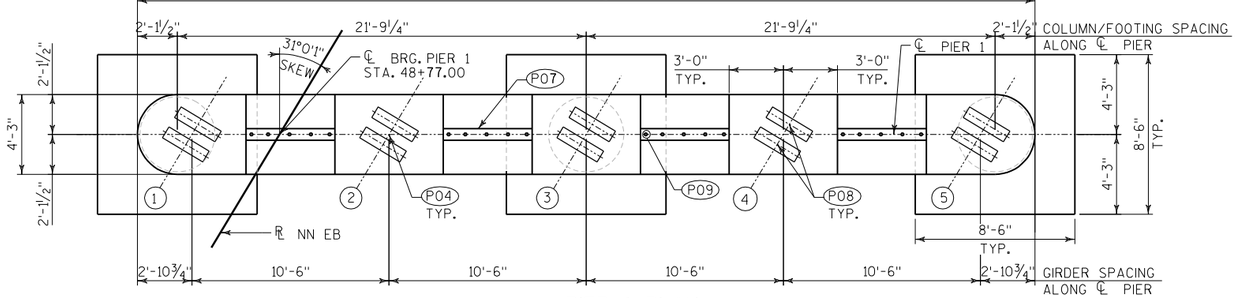
PARTIAL ZINC OR PLASTIC BULKHEAD MAY BE USED AS ALTERNATE CONSTRUCTION JOINT. WITH THE PERMISSION OF THE ENGINEER, AT THE CONTRACTOR'S EXPENSE.

VERTICAL CONSTRUCTION JOINT KEYWAY IS NOT REQUIRED WHEN USING ALTERNATE CONSTRUCTION JOINT.

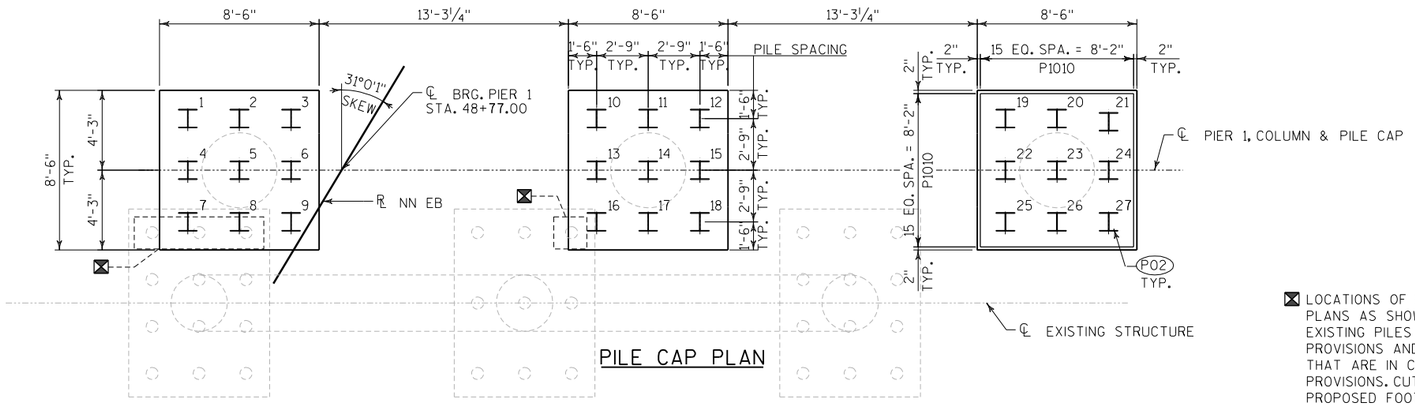
CARE IS TO BE USED IN CASTING CONCRETE AROUND BULKHEAD TO PREVENT DISLOCATION OR MISALIGNMENT OF THE BULKHEAD.

SEE SHEET 5 FOR PILE SPLICE DETAIL.

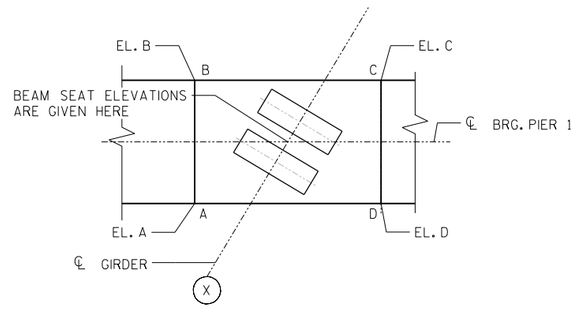
SEE SHEET 15 FOR BILL OF BARS.



PIER 1 PLAN



PILE CAP PLAN



SEAT ELEVATION CORRECTIONS*

* VALUES ARE IN FEET. ADD THESE VALUES TO THE SEAT ELEVATIONS TO OBTAIN ELEVATIONS OF POINTS A, B, C, & D.

GIRDER	EL. A	EL. B	EL. C	EL. D
1 - 5	-0.02	0.00	0.05	0.00

☒ LOCATIONS OF EXISTING TIMBER PILES ARE APPROXIMATED, AND BASED ON ORIGINAL PLANS AS SHOWN. AFTER THE EXISTING FOOTING IS REMOVED, DETERMINE WHICH EXISTING PILES ARE TO BE BASED ON SPACING CRITERIA GIVEN IN THE SPECICAL PROVISIONS AND AS DIRECTED BY THE ENGINEER. REMOVE EXISTING TIMBER PILES THAT ARE IN CONFLICT WITH NEW PILES IN ACCORDANCE WITH THE SPECIAL PROVISIONS. CUT OFF ALL REMAINING EXISTING TIMBER PILES 6" BELOW BOTTOM OF PROPOSED FOOTING.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-64-185

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PIER 1

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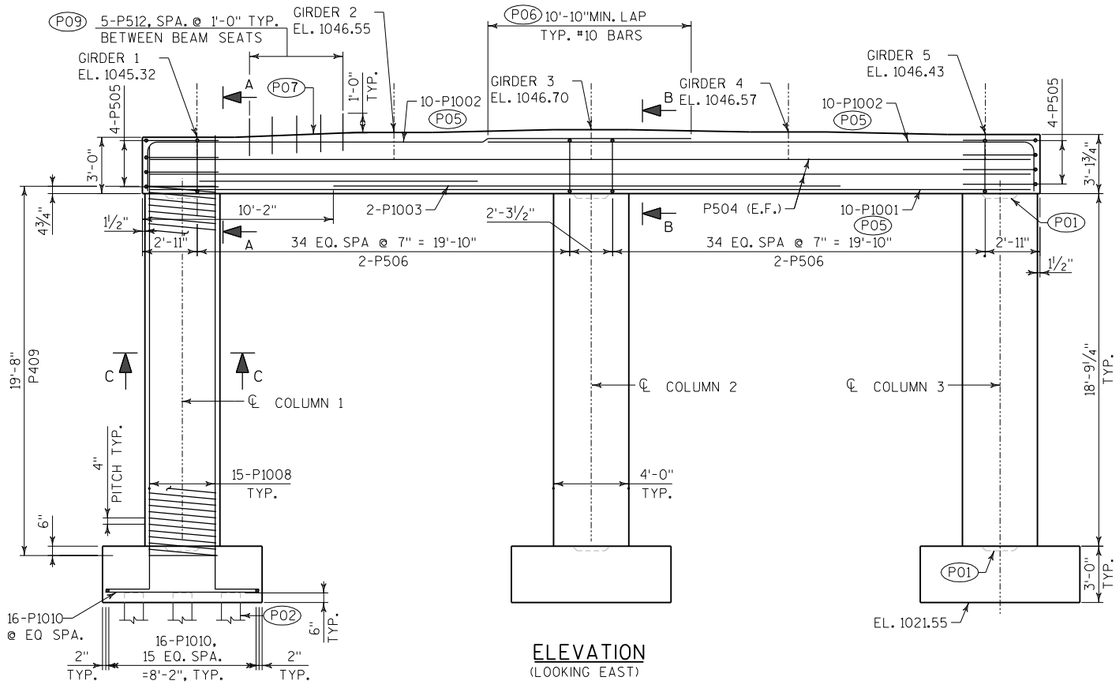
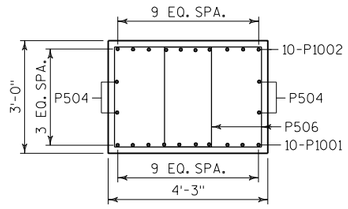
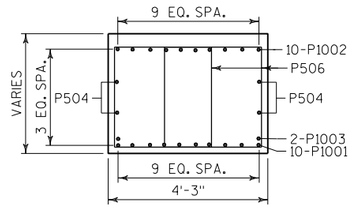


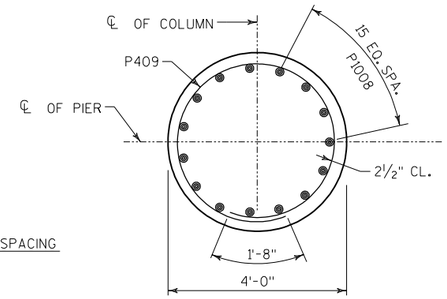
ELEVATION
(LOOKING EAST)



SECTION A-A



SECTION B-B



SECTION C-C

LEGEND

(P01) KEYED CONSTRUCTION JOINT FORMED BY SURFACED BEVELED 1'-3" X 1'-3" X 2", TYPICAL TOP AND BOTTOM OF ALL COLUMNS.

(P02) PIER TO BE SUPPORTED ON HP 12X53 STEEL PILING DRIVEN TO A REQUIRED RESISTANCE OF 210 TONS PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC EQUATION. ESTIMATED 115'-0" LONG.

(P04) ELEVATIONS ARE GIVEN AT THE TOP OF THE CONCRETE AT THE INTERSECTION OF THE ℄ GIRDER AND ℄ PIER.

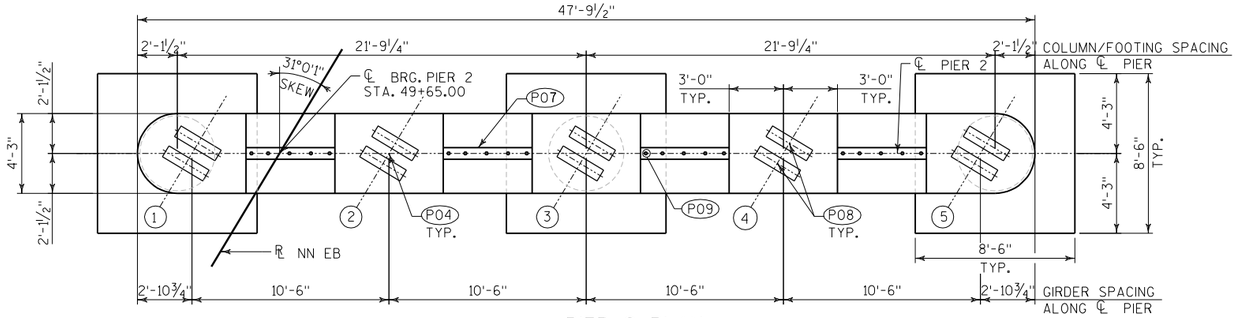
(P05) OFFSET BARS AT ENDS OF PIER CAP AS REQUIRED TO MAINTAIN EDGE CLEARANCES.

(P06) LAPS SHOWN ARE MINIMUM LENGTH & LOCATION OF LAPS WILL VARY BASED ON VARIABLE EXTENSIONS OF BARS INTO RADIUS OF PIER CAP.

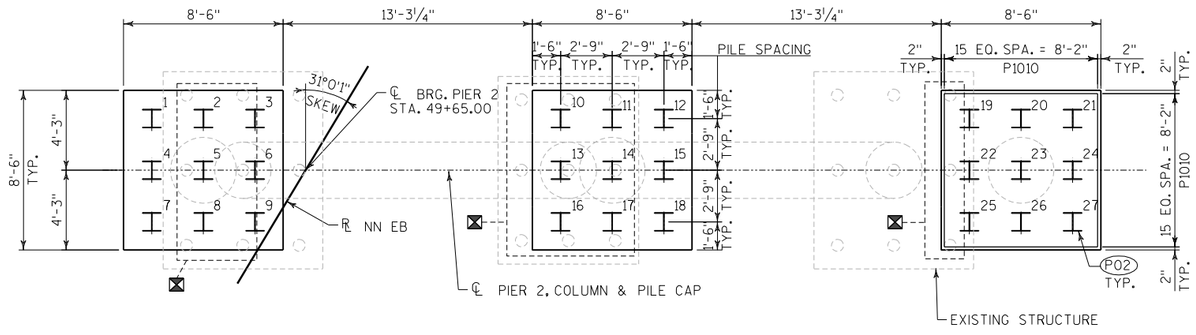
(P07) 2" X 6" BEVELED KEYWAY BETWEEN BEAM SEATS.

(P08) ½" THICK ELASTOMERIC BEARING PAD, SEE 'SUPERSTRUCTURE DETAILS' SHEET FOR DETAILS.

(P09) P512 BARS @ 1'-0" CTRS. BETWEEN BEAM SEATS. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-0" INTO CONCRETE)



PIER 2 PLAN



PILE CAP PLAN

NOTES

PARTIAL ZINC OR PLASTIC BULKHEAD MAY BE USED AS ALTERNATE CONSTRUCTION JOINT. WITH THE PERMISSION OF THE ENGINEER, AT THE CONTRACTOR'S EXPENSE.

VERTICAL CONSTRUCTION JOINT KEYWAY IS NOT REQUIRED WHEN USING ALTERNATE CONSTRUCTION JOINT.

CARE IS TO BE USED IN CASTING CONCRETE AROUND BULKHEAD TO PREVENT DISLOCATION OR MISALIGNMENT OF THE BULKHEAD.

SEE SHEET 5 FOR PILE SPLICE DETAIL.

SEE SHEET 15 FOR BILL OF BARS.

☒ LOCATIONS OF EXISTING TIMBER PILES ARE APPROXIMATED, AND BASED ON ORIGINAL PLANS AS SHOWN. AFTER THE EXISTING FOOTING IS REMOVED, DETERMINE WHICH EXISTING PILES ARE TO BE BASED ON SPACING CRITERIA GIVEN IN THE SPECICAL PROVISIONS AND AS DIRECTED BY THE ENGINEER. REMOVE EXISTING TIMBER PILES THAT ARE IN CONFLICT WITH NEW PILES IN ACCORDANCE WITH THE SPECIAL PROVISIONS. CUT OFF ALL REMAINING EXISTING TIMBER PILES 6" BELOW BOTTOM OF PROPOSED FOOTING.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-64-185

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PIER 2

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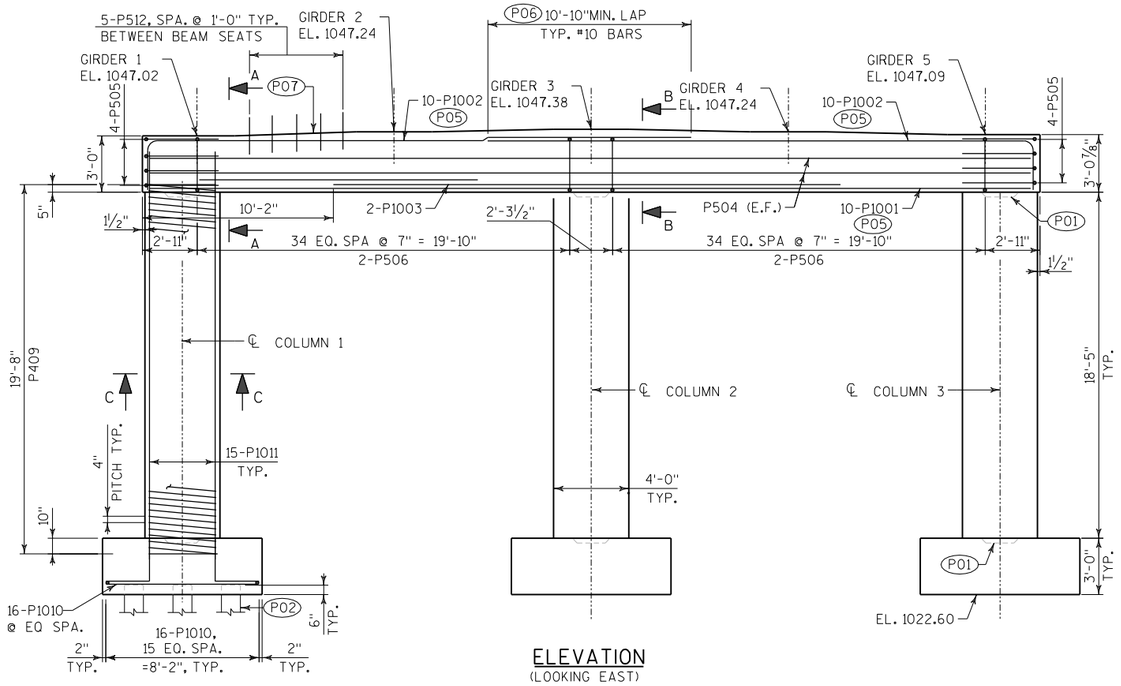
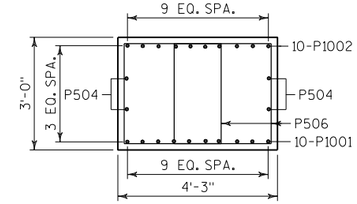
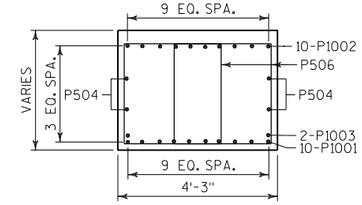
STATE PROJECT NUMBER
1080-13-70



ELEVATION
(LOOKING EAST)



SECTION A-A



SECTION B-B

LEGEND

(P01) KEYED CONSTRUCTION JOINT FORMED BY SURFACED BEVELED 1'-3" X 1'-3" X 2", TYPICAL TOP AND BOTTOM OF ALL COLUMNS.

(P02) PIER TO BE SUPPORTED ON HP 12X53 STEEL PILING DRIVEN TO A REQUIRED RESISTANCE OF 210 TONS PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC EQUATION. ESTIMATED 115'-0" LONG.

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(P05) OFFSET BARS AT ENDS OF PIER CAP AS REQUIRED TO MAINTAIN EDGE CLEARANCES.

(P06) LAPS SHOWN ARE MINIMUM LENGTH & LOCATION OF LAPS WILL VARY BASED ON VARIABLE EXTENSIONS OF BARS INTO RADIUS OF PIER CAP.

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(P08) ½" THICK ELASTOMERIC BEARING PAD. SEE 'SUPERSTRUCTURE DETAILS' SHEET FOR DETAILS.

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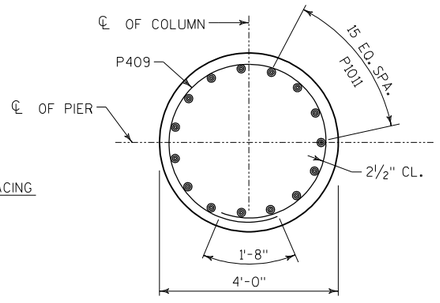


SECTION C-C

NOTES

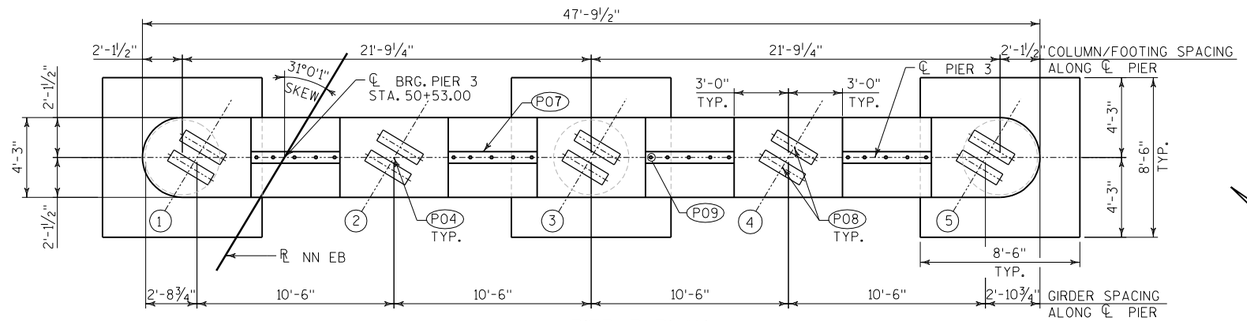
PARTIAL ZINC OR PLASTIC BULKHEAD MAY BE USED AS ALTERNATE CONSTRUCTION JOINT. WITH THE PERMISSION OF THE ENGINEER, AT THE CONTRACTOR'S EXPENSE.

VERTICAL CONSTRUCTION JOINT KEYWAY IS NOT REQUIRED WHEN USING ALTERNATE CONSTRUCTION JOINT.

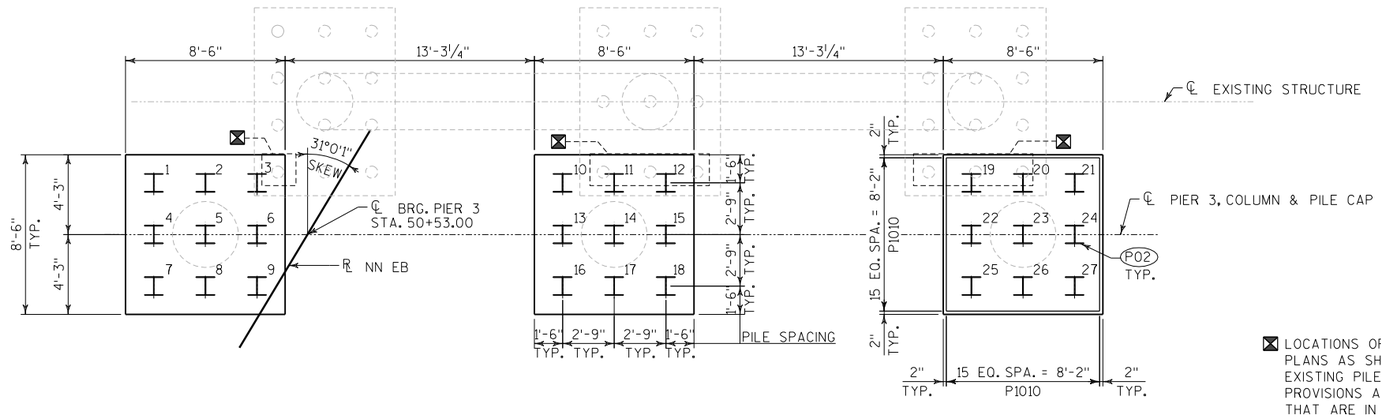
CARE IS TO BE USED IN CASTING CONCRETE AROUND BULKHEAD TO PREVENT DISLOCATION OR MISALIGNMENT OF THE BULKHEAD.

SEE SHEET 5 FOR PILE SPLICE DETAIL.

SEE SHEET 15 FOR BILL OF BARS.



PIER 3 PLAN



PILE CAP PLAN

☒ LOCATIONS OF EXISTING TIMBER PILES ARE APPROXIMATED, AND BASED ON ORIGINAL PLANS AS SHOWN. AFTER THE EXISTING FOOTING IS REMOVED, DETERMINE WHICH EXISTING PILES ARE TO BE BASED ON SPACING CRITERIA GIVEN IN THE SPECICAL PROVISIONS AND AS DIRECTED BY THE ENGINEER. REMOVE EXISTING TIMBER PILES THAT ARE IN CONFLICT WITH NEW PILES IN ACCORDANCE WITH THE SPECIAL PROVISIONS. CUT OFF ALL REMAINING EXISTING TIMBER PILES 6" BELOW BOTTOM OF PROPOSED FOOTING.

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PIER 3

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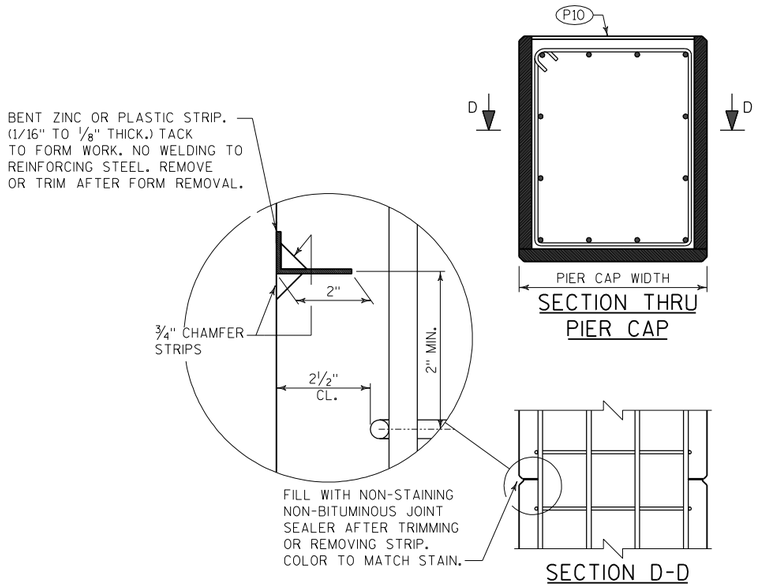


SECTION THRU PIER CAP

SECTION D-D

ALTERNATE CONSTRUCTION JOINT AT PIER CAP

ALTERNATE CONSTRUCTION JOINT NOTES

PARTIAL ZINC OR PLASTIC BULKHEAD MAY BE USED AS ALTERNATE CONSTRUCTION JOINT, WITH THE PERMISSION OF THE ENGINEER, AT THE CONTRACTOR'S EXPENSE.

VERTICAL CONSTRUCTION JOINT KEYWAY IS NOT REQUIRED WHEN USING ALTERNATE CONSTRUCTION JOINT.

CARE IS TO BE USED IN CASTING CONCRETE AROUND BULKHEAD TO PREVENT DISLOCATION OR MISALIGNMENT OF THE BULKHEAD.

(P10) USE A JOINT TOOL TO CONSTRUCT A CONTRACTION JOINT APPROXIMATELY 1/2" DEEP.

BILL OF BARS

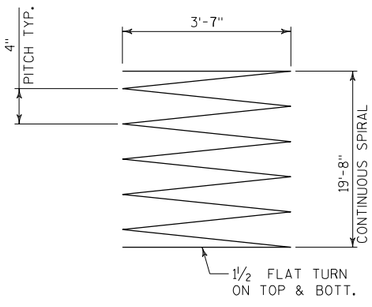
BAR MARK	COAT	PIER 1	PIER 2	PIER 3	TOTAL NO. REQ'D	LENGTH	BENT	BAR SERIES ⚠	LOCATION	
P1001	X	10	10	10	30	45'-6"	-	X	CAP - BOTT	HORIZONTAL
P1002	X	20	20	20	60	30'-5"	X	-	CAP - TOP	HORIZONTAL
P1003	X	2	2	2	6	27'-6"	-	-	CAP - BOTT	HORIZONTAL
P504	X	4	4	4	12	43'-6"	-	-	CAP - SIDES	HORIZONTAL
P505	X	8	8	8	24	9'-8"	X	-	CAP - STIRRUPS, ENDS	HORIZONTAL
P506	X	140	140	140	420	11'-1"	X	-	CAP - STIRRUPS	VERTICAL
P1007	X	45	-	-	45	24'-3"	X	-	COLUMN	VERTICAL
P1008	X	-	45	-	45	25'-7"	X	-	COLUMN	VERTICAL
P409	X	3	3	3	9	690'-2"	X	-	COLUMN - STIRRUP	HORIZONTAL
P1010	-	96	96	96	288	8'-2"	-	-	PILE CAP	HORIZONTAL
P1011	X	-	-	45	45	25'-3"	X	-	COLUMN	HORIZONTAL
P512	X	20	20	20	60	2'-0"	-	-	CAP - DOWEL BARS	VERTICAL

⚠ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

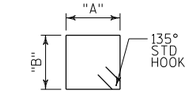
BAR SERIES TABLE

BUNDLE AND TAG EACH SERIES SEPARATELY

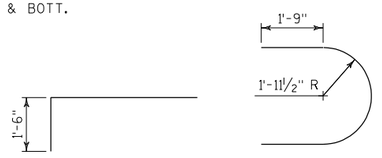
BAR MARK	NO. REQ'D	LENGTH
P1001	6 SERIES OF 5	43'-6" TO 47'-1"



P409



MARK	"A"	"B"
P506	2'-7"	2'-8"



P1002

P505

P1007, P1008, P1011

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PIER DETAILS

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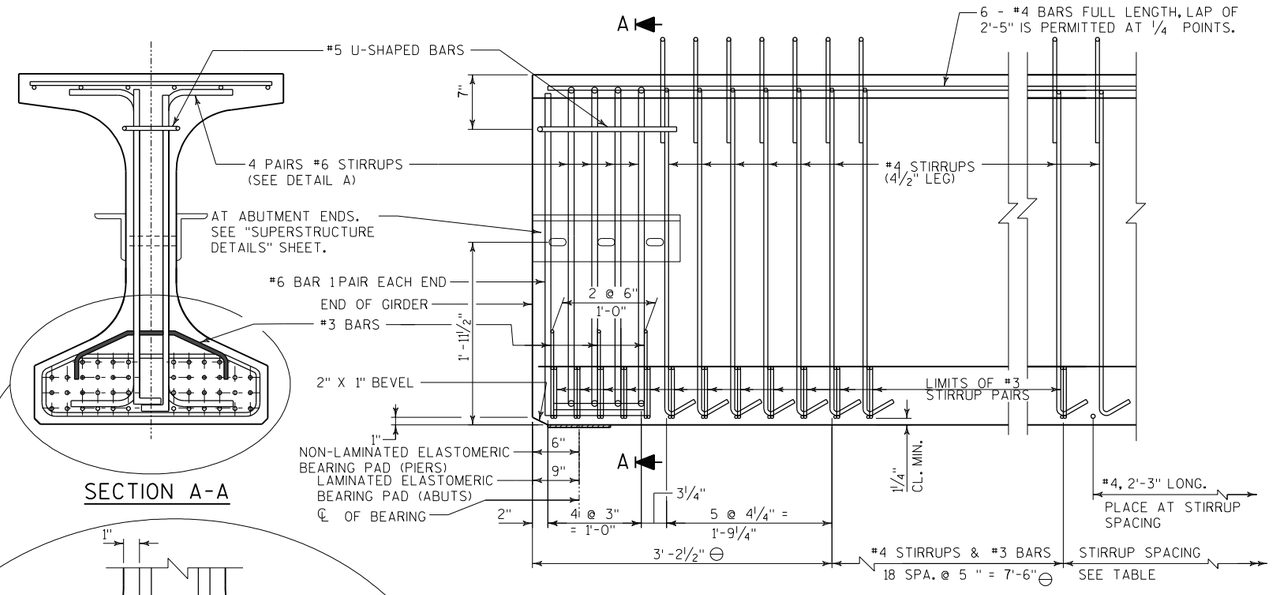


SECTION A-A

GIRDER NOTES

THE GIRDERS SHALL BE PROVED WITH A SUITABLE LIFTING DEVICE FOR HANDLING AND ERECTING THE GIRDERS.

ALL GIRDERS SHALL BE CAST FULL LENGTH AS SHOWN.

STRANDS SHALL BE FLUSH WITH END OF GIRDER. FOR GIRDER ENDS EMBEDDED COMPLETELY IN CONCRETE, END OF STRANDS SHALL BE COATED WITH NON-BITUMINOUS JOINT SEALER. FOR GIRDER ENDS THAT ARE FINALLY EXPOSED, COAT THE GIRDER ENDS, EXPOSED STRAND ENDS AND ALL NON-BONDING SURFACES WITHIN 2 FEET OF THE GIRDER ENDS WITH A NON-PIGMENTED EPOXY CONFORMING TO AASHTO M-235 TYPE III, GRADE 2, CLASS B OR C. THE EPOXY SHALL BE APPLIED AT LEAST 3 DAYS AFTER MOIST CURING HAS CEASED AND PRIOR TO THE APPLICATION OF THE SEALER.

DO NOT APPLY CONCRETE SEALER TO SURFACES RECEIVING APPLICATION OF CONCRETE STAINING.

TOP OF GIRDER TO BE ROUGH FLOATED AND BROOMED TRANSVERSELY FOR BONDING TO THE SLAB, EXCEPT THE OUTSIDE 8" OF GIRDER, WHICH SHALL RECEIVE A SMOOTH FINISH. AN APPROVED CONCRETE SEALER SHALL BE APPLIED TO ALL SMOOTH SURFACES INCLUDING THE OUTSIDE 8" OF THE TOP FLANGE.

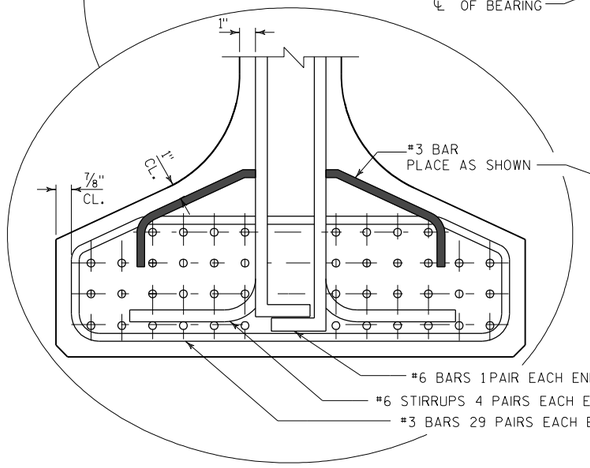
SPACING SHOWN FOR #4 STIRRUPS IS FOR GRADE 60 REINFORCEMENT.

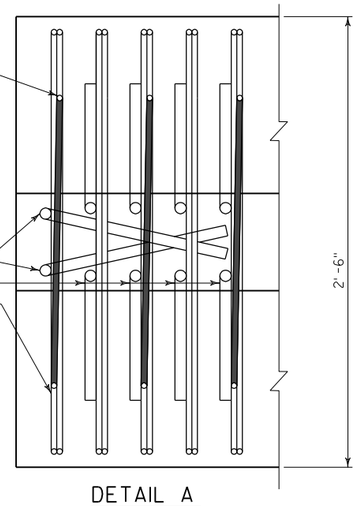
AN ALTERNATE EQUIVALENT OF WELDED WIRE FABRIC (WWF) ASTM A497 MAY BE SUBSTITUTED FOR THE STIRRUP REINFORCEMENT SHOWN, UPON APPROVAL OF THE STRUCTURES DEVELOPMENT SECTION.

ALL ITEMS SHOWN SHALL BE INCLUDED IN THE BID ITEM "PRESTRESSED GIRDER TYPE I 45W-INCH."

⊖ DETAIL TYPICAL AT EACH END

FOR DIAPHRAGM INSERT & CONNECTION DETAILS SEE "STEEL DIAPHRAGM" SHEET.





GIRDER END

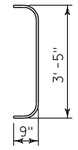
DETAIL A
BOTTOM FLANGE

GIRDER DATA

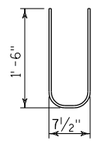
SPAN NO.	GIRDER NO.	GIRDER LENGTH "L"	DEAD LOAD DEFL. (IN.) 1/10	2/10	3/10	4/10	5/10	CONC. STRGTH. f'c (P.S.I.)	"P" (IN.)	DIA. OF STRAND (IN.)	DRAPED PATTERN TOTAL NO. OF STRANDS	f'ci (P.S.I.) *	(IN.) "A"	"B" MIN.	"B" MAX.	"C"
1	1	87'-9"	0.3	0.6	0.8	1.0	1.0	8000	7	0.6	26	6000	41	13.25	16.25	4
	2-4	87'-9"	0.3	0.7	1.0	1.1	1.2	8000	7	0.6	26	6000	41	13.25	16.25	4
	5	87'-9"	0.3	0.6	0.8	1.0	1.0	8000	7	0.6	26	6000	41	13.25	16.25	4
2	1	87'-9"	0.3	0.6	0.8	1.0	1.0	8000	7	0.6	26	6000	41	13.25	16.25	4
	2-4	87'-9"	0.3	0.7	0.9	1.1	1.2	8000	7	0.6	26	6000	41	13.25	16.25	4
	5	87'-9"	0.3	0.6	0.8	1.0	1.0	8000	7	0.6	26	6000	41	13.25	16.25	4
3	1	87'-9"	0.3	0.6	0.8	1.0	1.0	8000	7	0.6	26	6000	41	13.25	16.25	4
	2-4	87'-9"	0.3	0.7	0.9	1.1	1.2	8000	7	0.6	26	6000	41	13.25	16.25	4
	5	87'-9"	0.3	0.6	0.8	1.0	1.0	8000	7	0.6	26	6000	41	13.25	16.25	4
4	1	87'-9"	0.3	0.6	0.8	1.0	1.0	8000	7	0.6	26	6000	41	13.25	16.25	4
	2-4	87'-9"	0.3	0.7	1.0	1.1	1.2	8000	7	0.6	26	6000	41	13.25	16.25	4
	5	87'-9"	0.3	0.6	0.8	1.0	1.0	8000	7	0.6	26	6000	41	13.25	16.25	4

* MINIMUM CYLINDER STRENGTH OF CONCRETE @ TIME OF TRANSFER OF PRESTRESS FORCE.

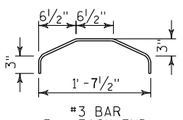
#6 BAR
2 @ EACH END



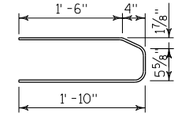
#6 BAR
8 @ EACH END



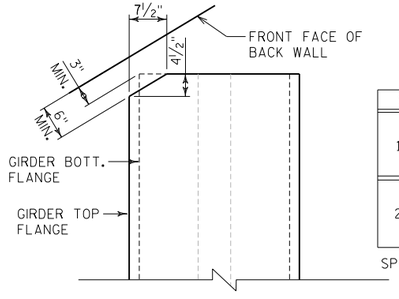
#5 BAR
1 @ EACH END



#3 BAR
3 @ EACH END
(EPOXY COATED)



#3 BAR
29 PAIR EACH END
(EPOXY COATED)

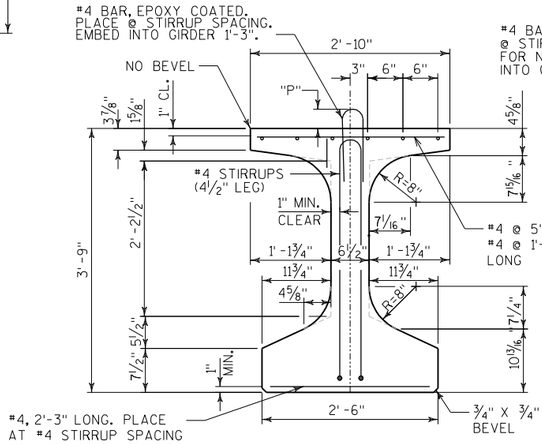


FORM OUT TOP FLANGE
DETAIL @ ABUTMENT ENDS

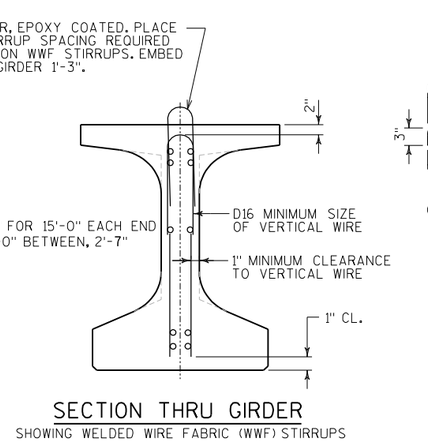
STIRRUP SPACING

SPAN	LOCATION	BAR SIZE	SPACING
1 & 4	FROM END TO 10'-8 1/2"	AS SHOWN	AS SHOWN
	FROM 10'-8 1/2" TO 29'-3"	#4	8"
	FROM 29'-3" TO MIDSPAN	#4	12"
2 & 3	FROM END TO 10'-8 1/2"	AS SHOWN	AS SHOWN
	FROM 10'-8 1/2" TO 29'-3"	#4	8"
	FROM 29'-3" TO MIDSPAN	#4	10"

SPACING IS SYMMETRIC ABOUT MIDSPAN OF GIRDER



SECTION THRU GIRDER
STRANDS NOT SHOWN



SECTION THRU GIRDER
SHOWING WELDED WIRE FABRIC (WWF) STIRRUPS

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-64-185

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45W" PRESTRESSED GIRDER - 1

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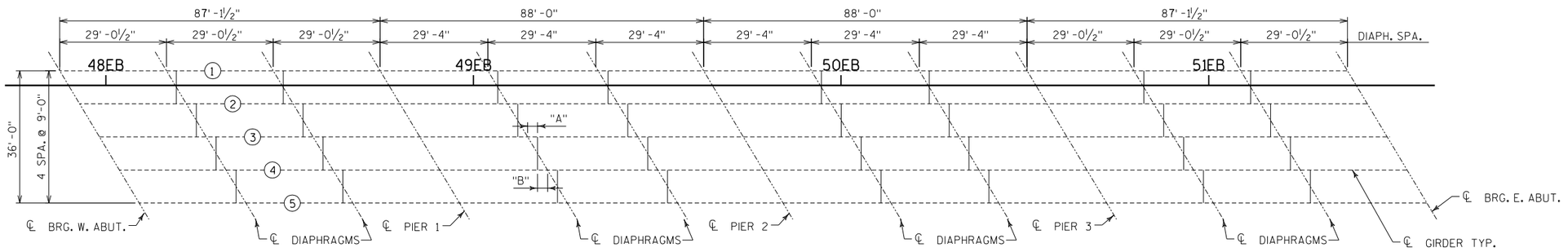
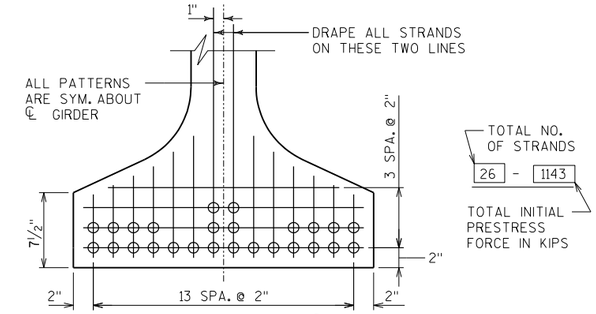


FRAMING PLAN

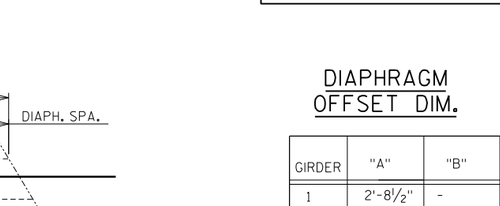
DIAPHRAGM OFFSET DIM.

GIRDER	"A"	"B"
1	2'-8½"	-
2-4	2'-8½"	2'-8½"
5	-	2'-8½"

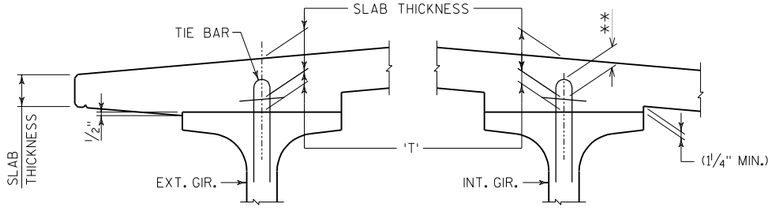


TYP. STRAND PATTERN @ ℄ OF SPAN

0.6" DIA. STRANDS



DRAPED STRAND PROFILE



SLAB HAUNCH DETAIL

IF 1¼" MINIMUM HAUNCH HEIGHT AT EDGE OF GIRDER CANNOT BE MAINTAINED, THE GRADE LINE MAY BE REVISED BY THE ENGINEER AT THE OPTION OF THE CONTRACTOR. THE PLAN SLAB THICKNESS SHALL BE HELD. NOTIFY THE STRUCTURES SECTION IF THE GRADE LINE IS RAISED FROM THE PLAN PROFILE BY MORE THAN ½" OR,

** IF 3" MINIMUM DECK EMBEDMENT OF TIE BAR CANNOT BE OBTAINED.

TO DETERMINE 'T', ELEV. OF TOP OF GIR'S. AT ℄ OF SUBSTRUCTURE UNITS & AT 1/10 POINTS OF EACH SPAN SHALL BE TAKEN. THEN FOLLOW THIS PROCESS:

TOP OF DECK ELEV. AT FINAL GRADE
- TOP OF GIRDER ELEVATION
+ DEAD LOAD DEFLECTION
- SLAB THICKNESS
= HAUNCH HEIGHT 'T'

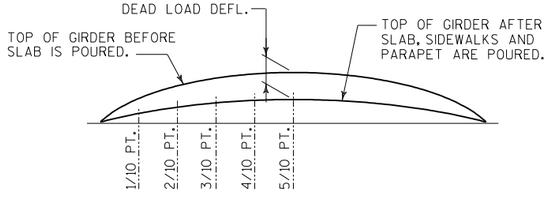
NOTE: AN AVERAGE HAUNCH ('T') OF 2.76" WAS USED IN THE QUANTITY "CONCRETE MASONRY BRIDGES"

* THE THEORETICAL INITIAL CAMBER VALUE AT THE TIME OF STRAND RELEASE AT MIDSPAN MULTIPLIED BY A FACTOR OF 1.4 TO ACCOUNT FOR CAMBER GROWTH FROM THE TIME OF STRAND RELEASE TO JOBSITE PLACEMENT.

SPAN	CAMBER (IN.) *
1	2.35
2	2.35
3	2.35
4	2.35

THESE VALUES ARE NOT TO BE USED IN DETERMINING 'T', USE ACTUAL GIRDER SHOTS.

THESE VALUES ARE FOR INFORMATIONAL PURPOSES ONLY.



DEAD LOAD DEFLECTION DIAGRAM

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DEPARTMENT OF TRANSPORTATION

STRUCTURE B-64-185

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45W" PRESTRESSED GIRDER - 2

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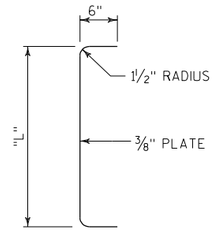
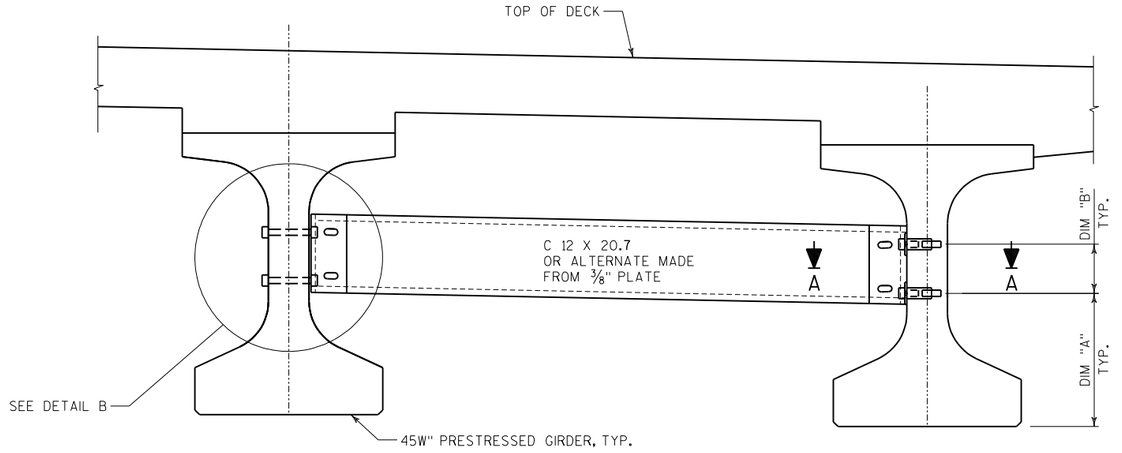
TABLE

GIRDER HEIGHT	DIM "A"	DIM "B"	DIM "L"	* DIM "X"
45W"	1'-9 1/8"	8 7/8"	1'-0 1/2"	2 3/4"

* DIM "X" = 2 1/2" FOR ALTERNATE PLATE DIAPHRAGM.



SECTION THRU ALTERNATE DIAPHRAGM



INTERIOR GIRDER

EXTERIOR GIRDER

NOTES

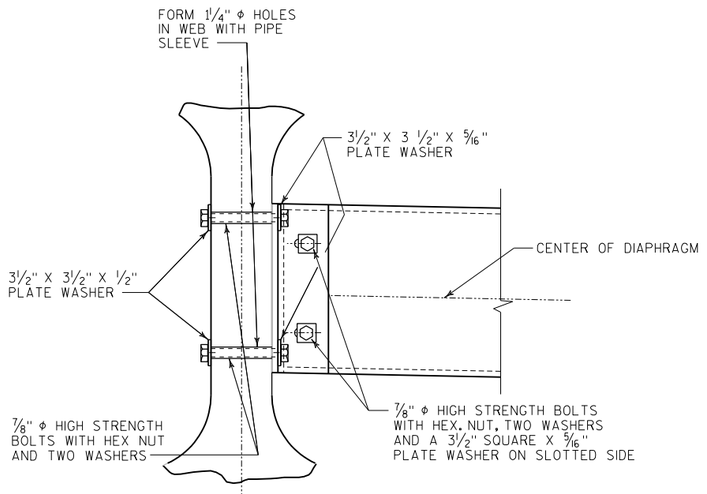
ALL DIAPHRAGM MATERIAL NOT EMBEDDED IN THE CONCRETE GIRDER SHALL BE PAID FOR AT THE UNIT PRICE BID FOR "STEEL DIAPHRAGMS B-64-185", EACH.

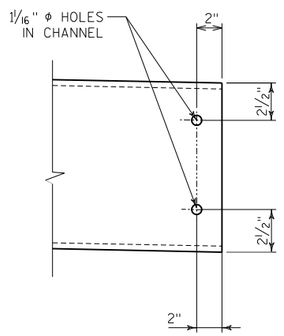
EACH DIAPHRAGM BETWEEN GIRDERS SHALL CONSTITUTE ONE UNIT.

ALL DIAPHRAGM STRUCTURAL STEEL SHALL BE ASTM A709 GRADE 36. ALL BOLTS, NUTS AND WASHERS SHALL BE ASTM A325 TYPE 1.

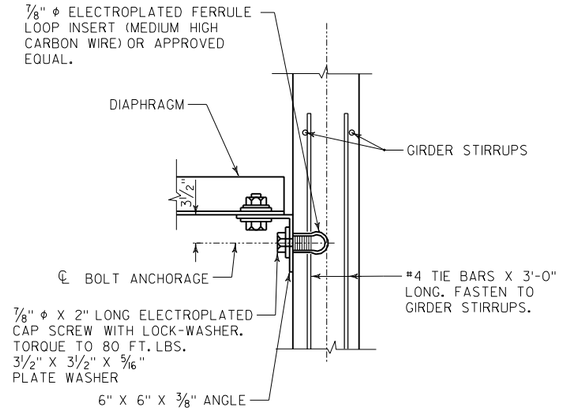
ALL DIAPHRAGM STRUCTURAL STEEL SHOWN SHALL BE HOT-DIPPED GALVANIZED. ALL BOLTS, NUTS AND WASHERS SHALL BE HOT-DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A153 CLASS C. GALVANIZED NUTS SHALL BE TAPPED OVERSIZE IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM A563 AND SHALL MEET THE REQUIREMENTS OF SUPPLEMENTARY REQUIREMENT S1 OF ASTM A563. LUBRICANT AND TEST FOR COATED NUTS.

PART TRANSVERSE SECTION AT DIAPHRAGM



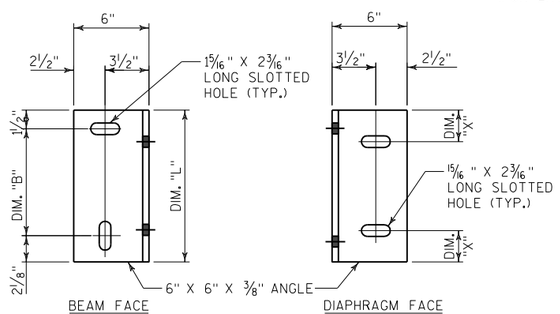


DETAIL B



SECT. A-A

(FOR EXTERIOR ATTACHMENT)



DIAPHRAGM SUPPORT

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-64-185

DRAWN BY AMD | PLANS CK'D. SJG

STEEL DIAPHRAGMS

SHEET 18 OF 26

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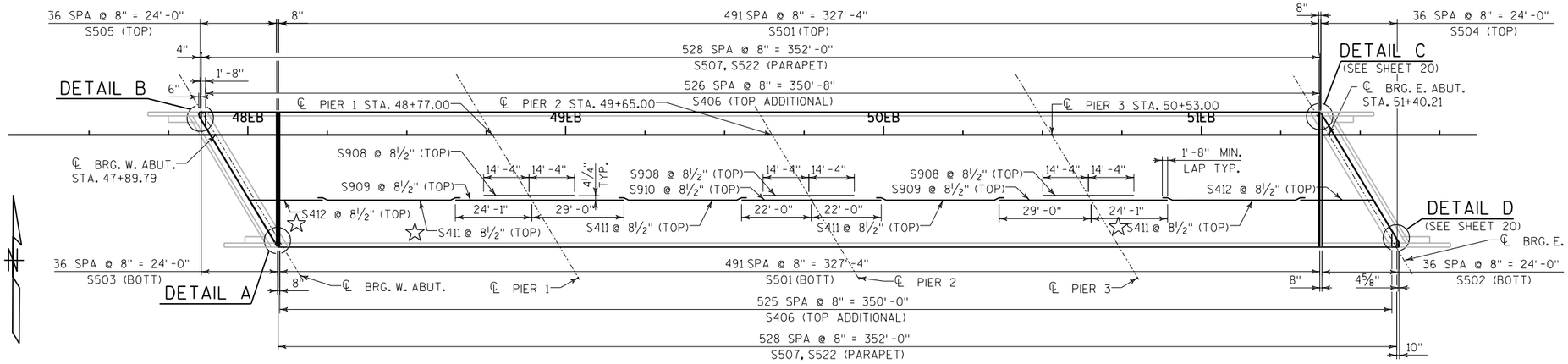
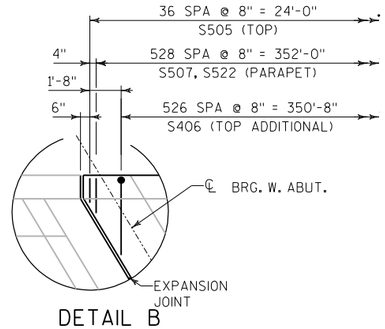
5/29/2015

STATE PROJECT NUMBER

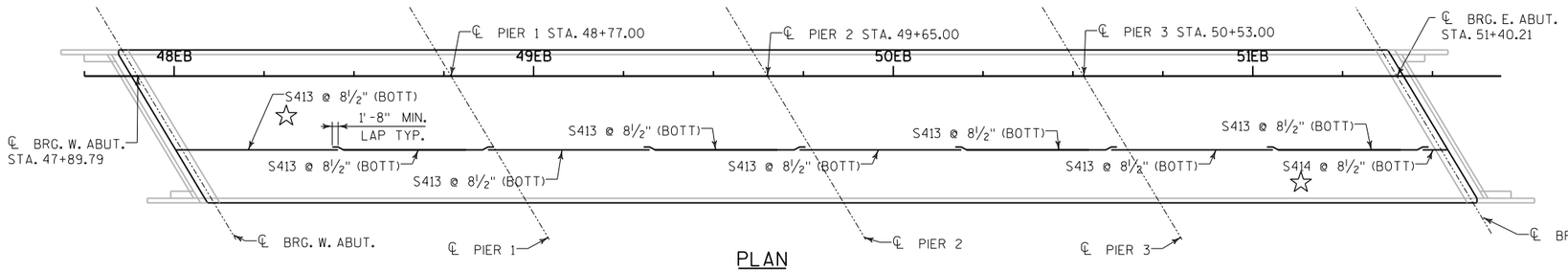
1080-13-70



PLAN



DETAIL B



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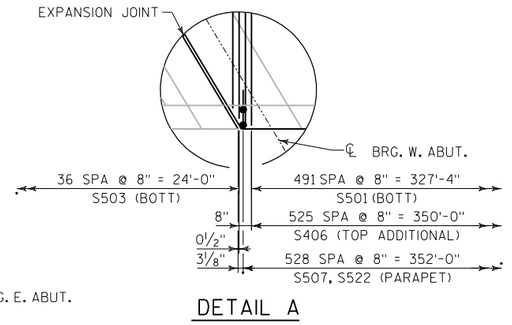

DETAIL A

TOP OF DECK ELEVATIONS

LOCATION	W. ABUT.	SPAN 1									PIER 1	SPAN 2									PIER 2	SPAN 3									PIER 3
		0.1 PT.	0.2 PT.	0.3 PT.	0.4 PT.	0.5 PT.	0.6 PT.	0.7 PT.	0.8 PT.	0.9 PT.		0.1 PT.	0.2 PT.	0.3 PT.	0.4 PT.	0.5 PT.	0.6 PT.	0.7 PT.	0.8 PT.	0.9 PT.		0.1 PT.	0.2 PT.	0.3 PT.	0.4 PT.	0.5 PT.	0.6 PT.	0.7 PT.	0.8 PT.	0.9 PT.	
FF PARAPET	1049.15	1049.26	1049.37	1049.47	1049.58	1049.68	1049.79	1049.89	1049.99	1050.08	1050.18	1050.27	1050.37	1050.46	1050.55	1050.64	1050.72	1050.81	1050.89	1050.97	1051.05	1051.13	1051.21	1051.28	1051.35	1051.43	1051.50	1051.56	1051.63	1051.69	1051.76
G1	1049.20	1049.31	1049.42	1049.53	1049.63	1049.74	1049.84	1049.94	1050.04	1050.14	1050.23	1050.33	1050.42	1050.51	1050.60	1050.69	1050.78	1050.86	1050.94	1051.02	1051.10	1051.18	1051.26	1051.33	1051.40	1051.48	1051.54	1051.61	1051.68	1051.74	1051.80
PLG EB	1049.31	1049.42	1049.53	1049.64	1049.74	1049.85	1049.95	1050.05	1050.15	1050.24	1050.34	1050.43	1050.52	1050.62	1050.70	1050.79	1050.88	1050.96	1051.04	1051.13	1051.20	1051.28	1051.36	1051.43	1051.50	1051.57	1051.64	1051.71	1051.78	1051.84	1051.90
G2	1049.45	1049.56	1049.67	1049.77	1049.88	1049.98	1050.08	1050.18	1050.28	1050.38	1050.47	1050.56	1050.66	1050.75	1050.84	1050.92	1051.01	1051.09	1051.17	1051.25	1051.33	1051.41	1051.48	1051.56	1051.63	1051.70	1051.77	1051.83	1051.90	1051.96	1052.02
CROWN	1049.64	1049.75	1049.86	1049.96	1050.07	1050.17	1050.27	1050.37	1050.47	1050.56	1050.66	1050.75	1050.84	1050.93	1051.02	1051.10	1051.19	1051.27	1051.35	1051.43	1051.51	1051.58	1051.66	1051.73	1051.80	1051.87	1051.94	1052.00	1052.07	1052.13	1052.19
G3	1049.62	1049.73	1049.83	1049.94	1050.04	1050.14	1050.24	1050.34	1050.44	1050.53	1050.63	1050.72	1050.81	1050.90	1050.99	1051.07	1051.16	1051.24	1051.32	1051.40	1051.48	1051.55	1051.63	1051.70	1051.77	1051.84	1051.91	1051.97	1052.04	1052.10	1052.16
G4	1049.51	1049.61	1049.72	1049.82	1049.93	1050.03	1050.13	1050.22	1050.32	1050.41	1050.51	1050.60	1050.69	1050.78	1050.86	1050.95	1051.03	1051.11	1051.19	1051.27	1051.35	1051.42	1051.49	1051.56	1051.63	1051.70	1051.77	1051.83	1051.89	1051.96	1052.02
G5	1049.39	1049.50	1049.60	1049.71	1049.81	1049.91	1050.01	1050.10	1050.20	1050.29	1050.38	1050.47	1050.56	1050.65	1050.73	1050.82	1050.90	1050.98	1051.06	1051.14	1051.21	1051.28	1051.36	1051.43	1051.50	1051.56	1051.63	1051.69	1051.75	1051.81	1051.87
FF PARAPET	1049.37	1049.47	1049.58	1049.68	1049.78	1049.88	1049.98	1050.08	1050.17	1050.26	1050.35	1050.44	1050.53	1050.62	1050.71	1050.79	1050.87	1050.95	1051.03	1051.11	1051.18	1051.25	1051.33	1051.40	1051.46	1051.53	1051.60	1051.66	1051.72	1051.78	1051.84

LOCATION	PIER 3	SPAN 4									E. ABUT.
		0.1 PT.	0.2 PT.	0.3 PT.	0.4 PT.	0.5 PT.	0.6 PT.	0.7 PT.	0.8 PT.	0.9 PT.	
FF PARAPET	1051.76	1051.82	1051.88	1051.93	1051.99	1052.04	1052.09	1052.14	1052.19	1052.24	1052.29
G1	1051.80	1051.86	1051.92	1051.98	1052.04	1052.09	1052.14	1052.19	1052.24	1052.29	1052.33
PLG EB	1051.90	1051.96	1052.02	1052.08	1052.13	1052.18	1052.24	1052.28	1052.33	1052.38	1052.42
G2	1052.02	1052.08	1052.14	1052.19	1052.25	1052.30	1052.35	1052.40	1052.45	1052.50	1052.54
CROWN	1052.19	1052.25	1052.31	1052.36	1052.41	1052.47	1052.52	1052.56	1052.61	1052.66	1052.70
G3	1052.16	1052.22	1052.27	1052.33	1052.38	1052.43	1052.48	1052.53	1052.58	1052.62	1052.67
G4	1052.02	1052.07	1052.13	1052.18	1052.23	1052.28	1052.33	1052.38	1052.43	1052.47	1052.51
G5	1051.87	1051.93	1051.98	1052.03	1052.09	1052.13	1052.18	1052.23	1052.27	1052.32	1052.36
FF PARAPET	1051.84	1051.89	1051.95	1052.00	1052.05	1052.10	1052.15	1052.19	1052.24	1052.28	1052.32

LEGEND

☆ ALTERNATE/REVERSE BARS S411 & S412 TOP MAT BAR PATTERN AND BARS S413 & S414 BOTTOM MAT BAR PATTERN TO RANDOMIZE SPLICE LOCATIONS.

NOTES

1. TRANSVERSE BAR STEEL REINFORCEMENT (S501) AND PARAPET REINFORCEMENT (S507) SHALL BE PLACED PERPENDICULAR TO GIRDERS.
2. THE BOTTOM TRANSVERSE BAR STEEL REINFORCEMENT SHALL BE SUPPORTED BY CONTINUOUS BAR CHAIRS WITH A CENTER TO CENTER SPACING NOT TO EXCEED 4'-0". ONE LINE OF CONTINUOUS BAR CHAIRS SHALL BE PLACED NEAR EACH EDGE OF SLAB TO SUPPORT THE ENDS OF THE BOTTOM TRANSVERSE BAR STEEL.
3. THE TOP LONGITUDINAL BAR STEEL REINFORCEMENT SHALL BE SUPPORTED BY CONTINUOUS BAR CHAIRS IN TRANSVERSE DIRECTION ON 4'-0" CENTERS.
4. SEE SHEET 21 FOR BILL OF BARS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-64-185

DRAWN BY AMD | PLANS CK'D. SJG

SUPERSTRUCTURE

SHEET 19 OF 26

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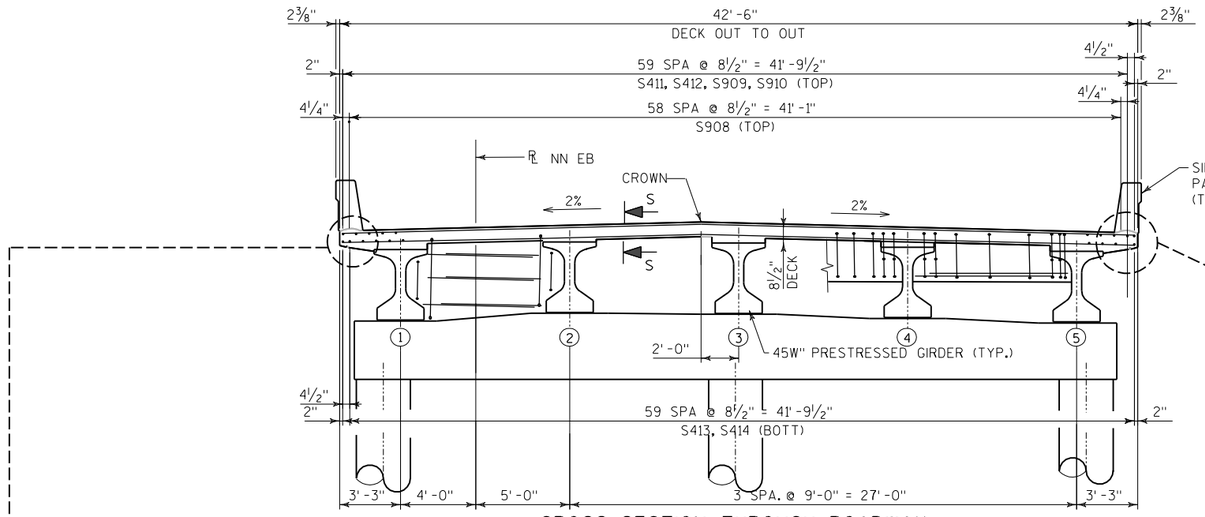
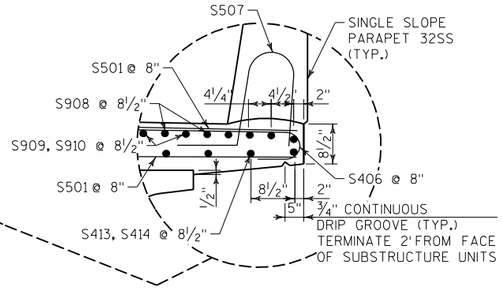
5/29/2015

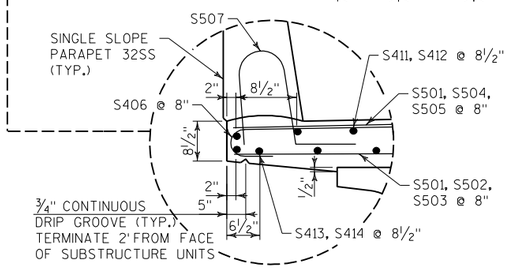
STATE PROJECT NUMBER
1080-13-70



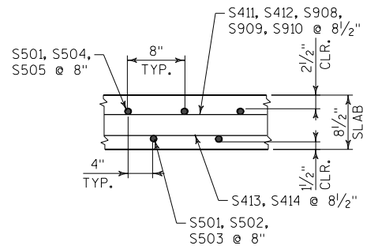
CROSS-SECTION THROUGH ROADWAY
(LOOKING EAST)



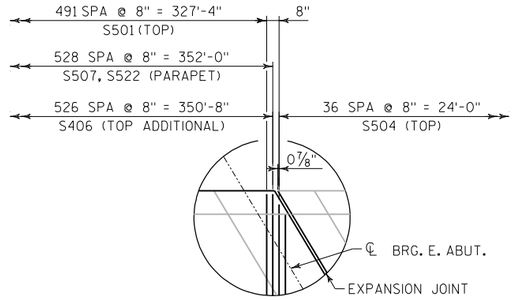
AT PIER



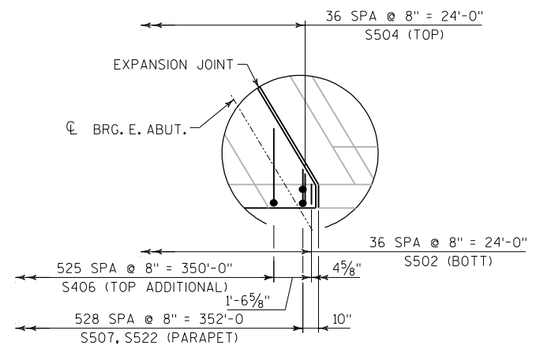
AT MIDSPAN



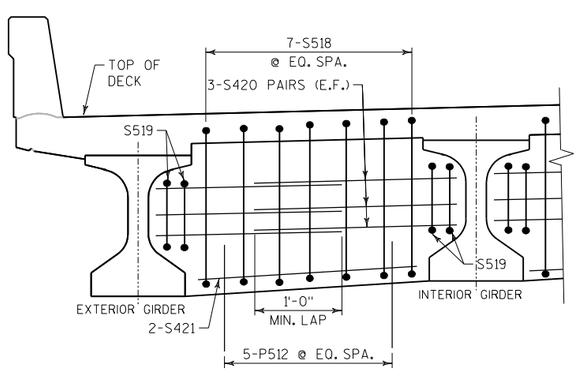
SECTION S-S



DETAIL C
(SEE SHEET 19)

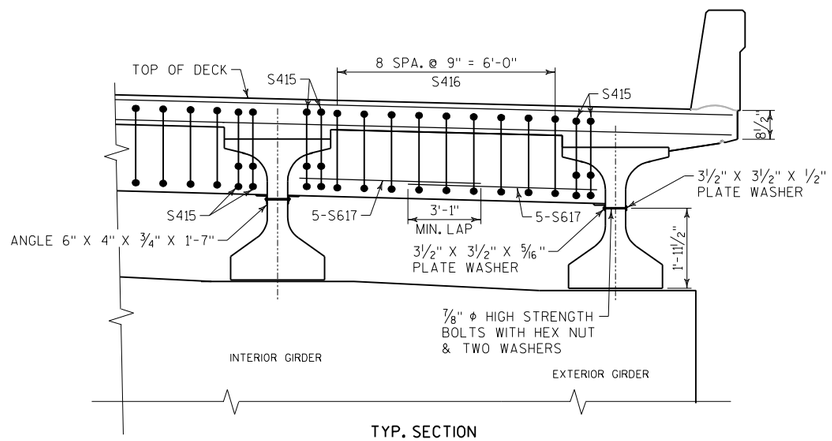


DETAIL D
(SEE SHEET 19)



TYP. SECTION

PIER DIAPHRAGM DETAILS
(SEE SHEET 22 FOR ADDITIONAL DETAILS)



TYP. SECTION

ABUTMENT DIAPHRAGM DETAILS
(SEE SHEET 22 FOR ADDITIONAL DETAILS)

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-64-185

DRAWN BY AMD | PLANS CK'D. SJG

SUPERSTRUCTURE CROSS-SECTION

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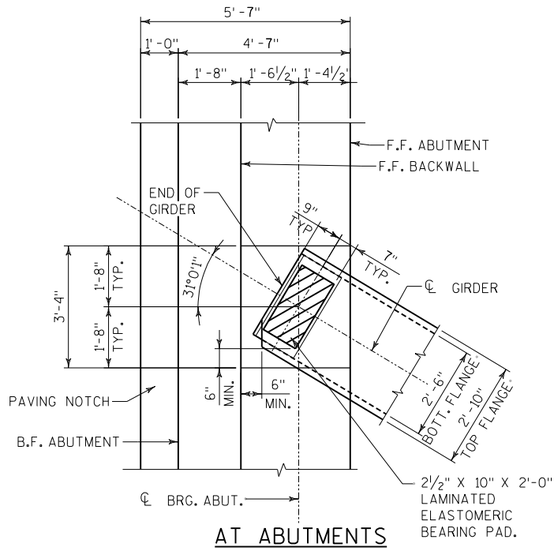
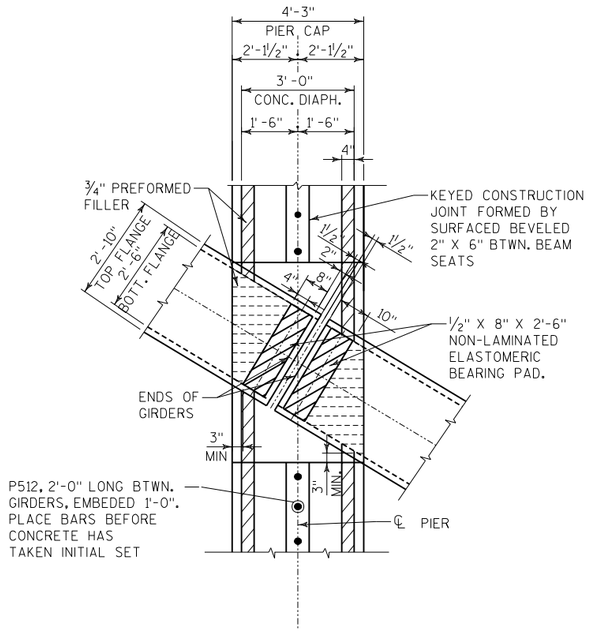


AT ABUTMENTS



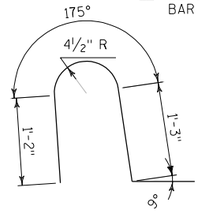
AT PIERS

BEARING PAD DETAILS

BILL OF BARS

BAR MARK	COAT	NO REQ'D	LENGTH	BENT	BAR SERIES ⚠	LOCATION	
S501	X	984	42'-2"	-	-	SLAB - TOP & BOTT	TRANSVERSE
S502	X	37	21'-1"	-	X	SLAB - BOTT EAST END	TRANSVERSE
S503	X	37	21'-10"	-	X	SLAB - BOTT WEST END	TRANSVERSE
S504	X	37	21'-8"	-	X	SLAB - TOP EAST END	TRANSVERSE
S505	X	37	21'-3"	-	X	SLAB - TOP WEST END	TRANSVERSE
S406	X	1053	4'-7"	X	-	SLAB - TOP	TRANSVERSE
S507	X	1058	4'-5"	X	-	PARAPET	VERTICAL
S908	X	177	28'-8"	-	-	SLAB - TOP OVER PIERS	LONGITUDINAL
S909	X	122	53'-1"	-	-	SLAB - TOP OVER PIER 1 & 3	LONGITUDINAL
S910	X	61	44'-0"	-	-	SLAB - TOP OVER PIER 2	LONGITUDINAL
S411	X	244	40'-4"	-	-	SLAB - TOP	LONGITUDINAL
S412	X	122	24'-0"	-	-	SLAB - TOP	LONGITUDINAL
S413	X	488	45'-0"	-	-	SLAB - BOTT	LONGITUDINAL
S414	X	61	7'-0"	-	-	SLAB - BOTT	LONGITUDINAL
S415	X	32	6'-0"	X	-	ABUT DIAPHRAGM - GIRDER STIRRUPS	VERTICAL
S416	X	72	7'-1"	X	-	ABUT DIAPHRAGM - STIRRUPS	VERTICAL
S617	X	80	6'-3"	-	-	ABUT DIAPHRAGM - BTWN GIRDERS	HORIZONTAL
S518	X	84	12'-7"	X	-	PIER DIAPHRAGM - STIRRUPS	VERTICAL
S519	X	48	11'-1"	X	-	PIER DIAPHRAGM - GIRDER STIRRUPS	VERTICAL
S420	X	144	5'-3"	-	-	PIER DIAPHRAGM - BTWN GIRDERS	HORIZONTAL
S421	X	24	7'-2"	-	-	PIER DIAPHRAGM - BTWN GIRDERS BOTT.	HORIZONTAL
S522	X	1058	5'-0"	X	-	PARAPET	VERTICAL
S523	X	84	52'-4"	-	-	PARAPET	HORIZONTAL
S424	X	16	10'-2"	-	-	EXPANSION JOINTS, BTWN GIRDERS	HORIZONTAL

⚠ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.



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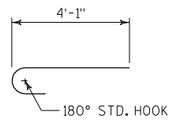

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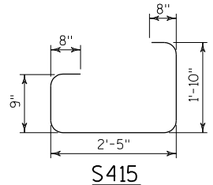

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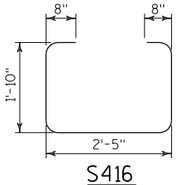

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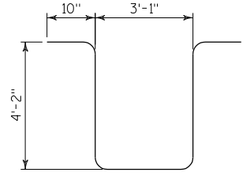

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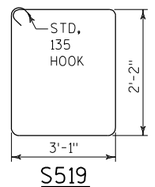

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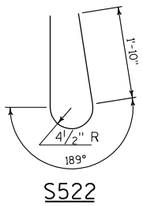

S522

BAR SERIES TABLE

BUNDLE AND TAG EACH SERIES SEPARATELY

BAR MARK	NO. REQ'D	LENGTH
S502	1 SERIES OF 37	1'-1" TO 41'-0"
S503	1 SERIES OF 37	1'-10" TO 41'-9"
S504	1 SERIES OF 37	1'-8" TO 41'-7"
S505	1 SERIES OF 37	1'-3" TO 41'-3"

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-64-185

DRAWN BY AMD | PLANS CK'D. SJG

SUPERSTURCTURE BILL OF BARS

SHEET 21 OF 26

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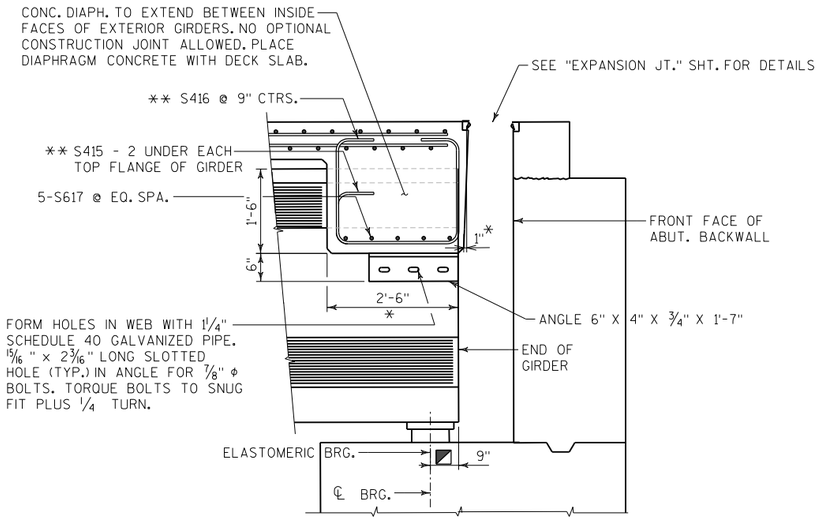
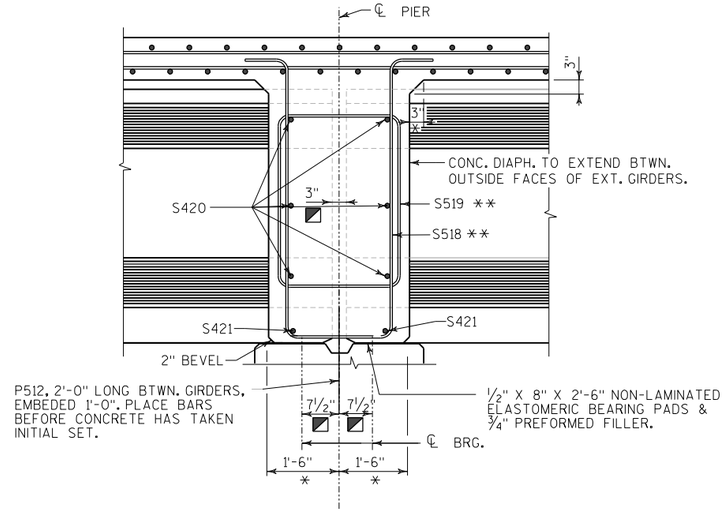
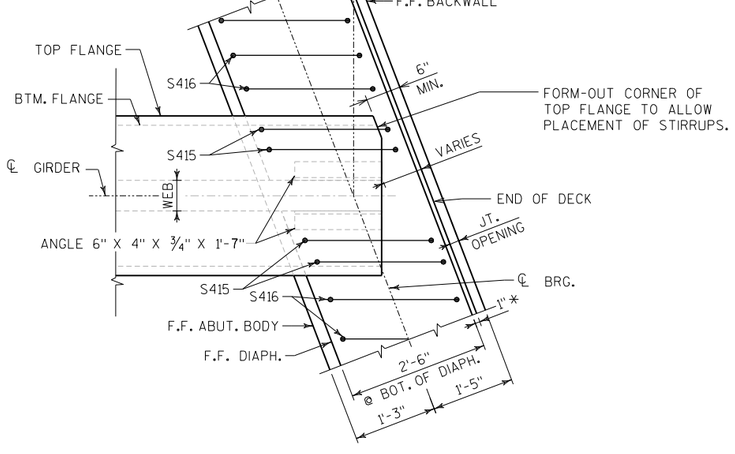
1080-13-70



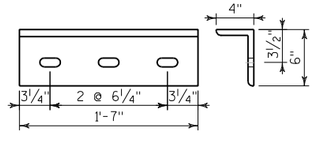
PART LONGIT. SECTION ABUTMENT DIAPHRAGM



AT PIER DIAPHRAGM



TOP VIEW OF DIAPHRAGM (EXPANSION END)



ANGLE

LEGEND

* DIMENSION IS TAKEN NORMAL TO ℄ SUBSTRUCTURE UNITS.

** BARS PLACED PARALLEL TO GIRDERS SPACING PERPENDICULAR TO ℄ GIRDERS

▨ DIMENSION ARE PARALLEL TO THE GIRDER

NOTES

DIAPHRAGM SUPPORT ANGLES SHALL BE ASTM A709 GRADE 36. ALL BOLTS, NUT AND WASHERS SHALL BE ASTM A325 TYPE 1.

ALL SUPPORT ANGLES SHALL BE HOT-DIPPED GALVANIZED. ALL BOLTS, NUTS AND WASHERS SHALL BE HOT-DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A153 CLASS C. GALVANIZED NUTS SHALL BE TAPPED OVERSIZED IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM A563 AND SHALL MEET THE REQUIREMENTS OF SUPPLEMENTARY REQUIREMENT S1 OF ASTM A563, LUBRICANT AND TEST FOR COATED NUTS.

ALL DIAPHRAGM SUPPORT HARDWARE SHALL BE INCIDENTAL TO "CONCRETE MASONRY BRIDGES".

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DEPARTMENT OF TRANSPORTATION

STRUCTURE B-64-185

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SUPERSTRUCTURE DETAILS

SHEET 22 OF 26

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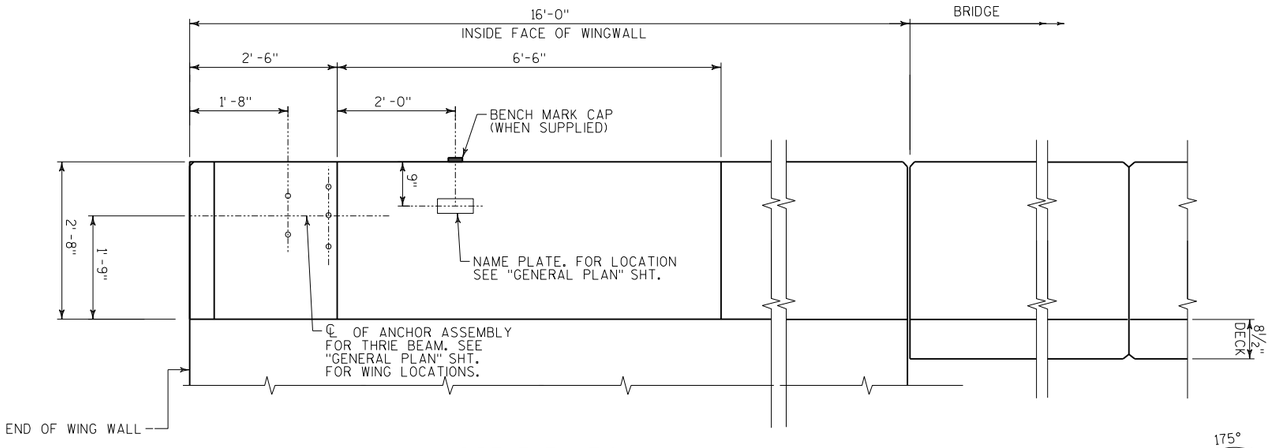
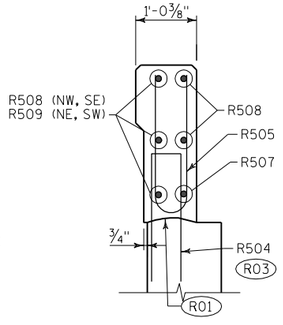
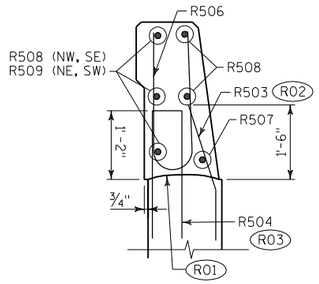


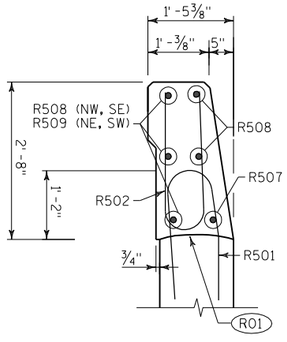
INSIDE ELEVATION



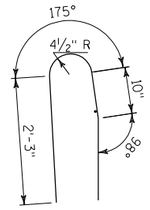
SECTION A



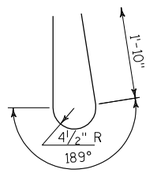
SECTION B



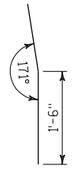
SECTION C



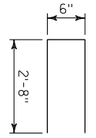
R501



R502



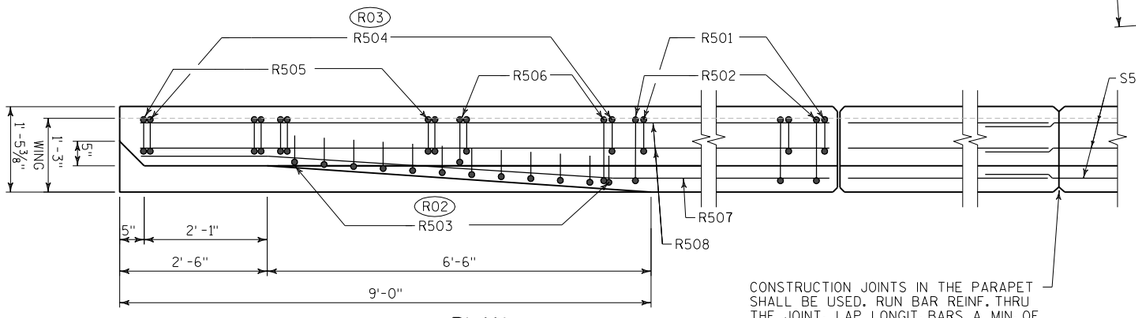
R503



R504

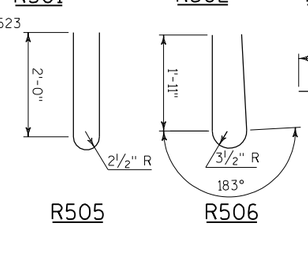
BILL OF BARS

BAR MARK	COAT	NO REQ'D	LENGTH	BENT	BAR SERIES	LOCATION
R501	X	44	5'-10"	X	-	PARAPET VERTICAL
R502	X	44	5'-0"	X	-	PARAPET VERTICAL
R503	X	48	3'-0"	X	-	PARAPET VERTICAL
R504	X	68	5'-7"	X	-	PARAPET VERTICAL
R505	X	44	4'-9"	X	-	PARAPET VERTICAL
R506	X	24	4'-10"	X	-	PARAPET VERTICAL
R507	X	4	15'-5"	X	-	PARAPET HORIZONTAL
R508	X	14	15'-8"	-	-	PARAPET HORIZONTAL
R509	X	6	16'-3"	-	-	PARAPET - OUTSIDE EDGE NE/SW

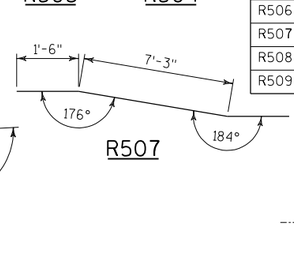


PLAN

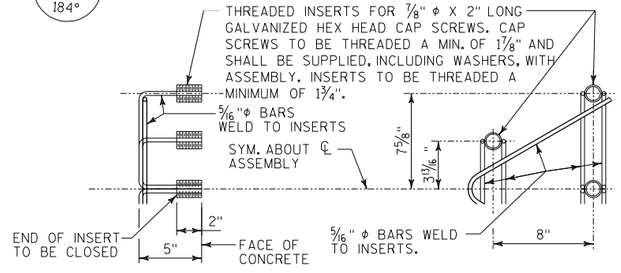
CONSTRUCTION JOINTS IN THE PARAPET SHALL BE USED. RUN BAR REINF. THRU THE JOINT. LAP LONGIT. BARS A MIN. OF 1'-9". DEFINE CONST. JOINT WITH A ¾" 'V'-GROOVE.



R505 R506



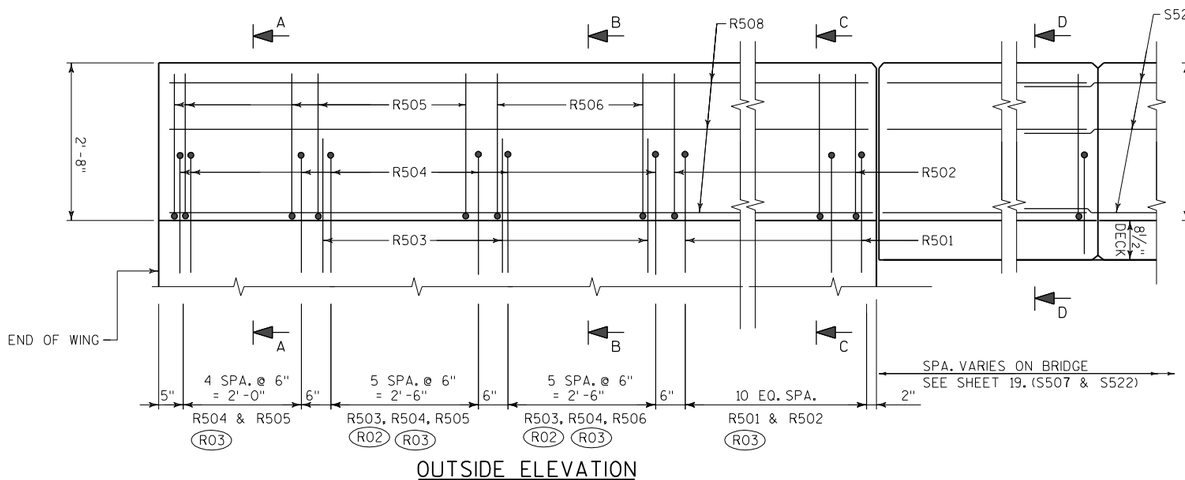
R507



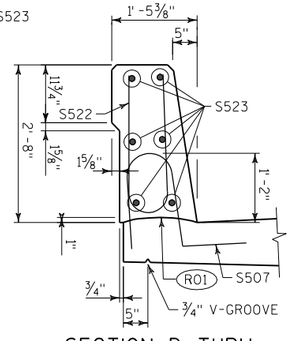
DETAIL OF ANCHOR ASSEMBLY

NOTE: HEX HEAD CAP SCREWS & WASHERS TO BE GALVANIZED IN ACCORDANCE WITH AASHTO M232 CLASS C.

ASSEMBLY SHALL BE BID ITEM "ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD", EACH.



OUTSIDE ELEVATION



SECTION D THRU PARAPET ON BRIDGE

SEE SHEET 19 FOR REBAR SPACING ON BRIDGE. SEE SHEET 21 FOR BILL OF BARS.

NOTES

(R01) CONST. JOINT - STRIKE OFF AS SHOWN.

(R02) R503 BARS MAY BE PLACED AFTER THE CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLASE. USE CARE TO PLACE R503 BARS CORRECTLY ALONG TRANSITION OF PARPAPET.

(R03) R501 AND R504 BARS TO BE TIED TO THE WING STEEL BEFORE WING IS POURED.

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STRUCTURE B-64-185

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SINGLE SLOPE PARAPET 32SS

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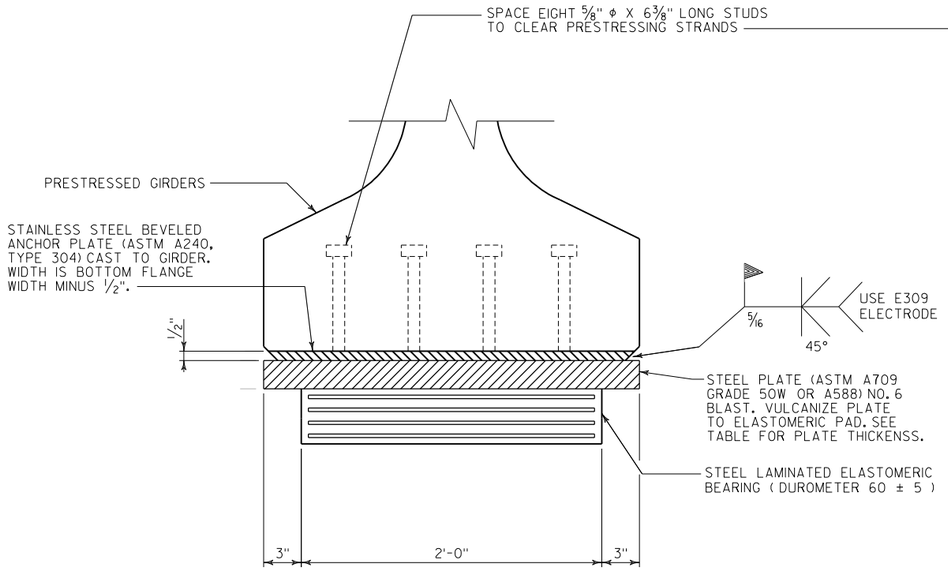
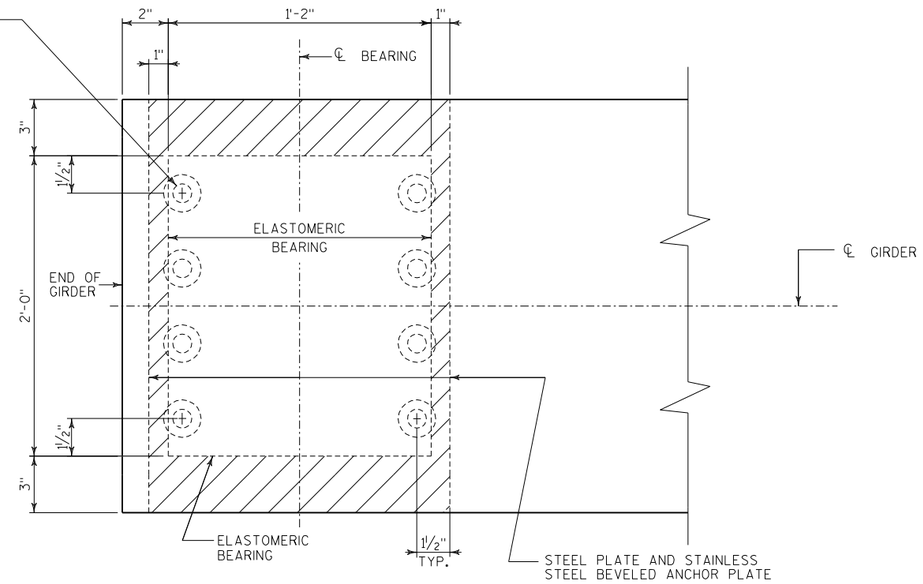
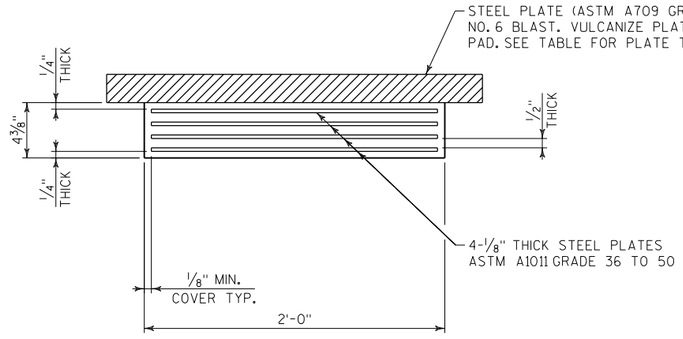


END VIEW



PLAN VIEW

	TOP PLATE THICKNESS (INCHES)			
GIRDER	W. ABUTMENT		E. ABUTMENT	
	WEST BEARING		EAST BEARING	
	WEST END	EAST END	WEST END	EAST END
1	1.50	1.71	1.50	1.50
2-4	1.50	1.70	1.50	1.50
5	1.50	1.71	1.50	1.50



SECTION THRU ELASTOMERIC BEARING

TO BE USE AT THE ABUTMENTS

NOTES

BEARINGS SHALL NOT BE PLACED AT A TEMPERATURE GREATER THAN 85° F.

ALL MATERIAL USED FOR BEARINGS SHALL BE PAID FOR AT THE UNIT PRICE BID FOR "BEARING PADS ELASTOMERIC LAMINATED", EACH.

ALL STRUCTURAL STEEL BEARING PLATES SHALL BE FLAT ROLLED WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT AND VERTICAL.

ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUTS.

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ELASTOMERIC BEARINGS

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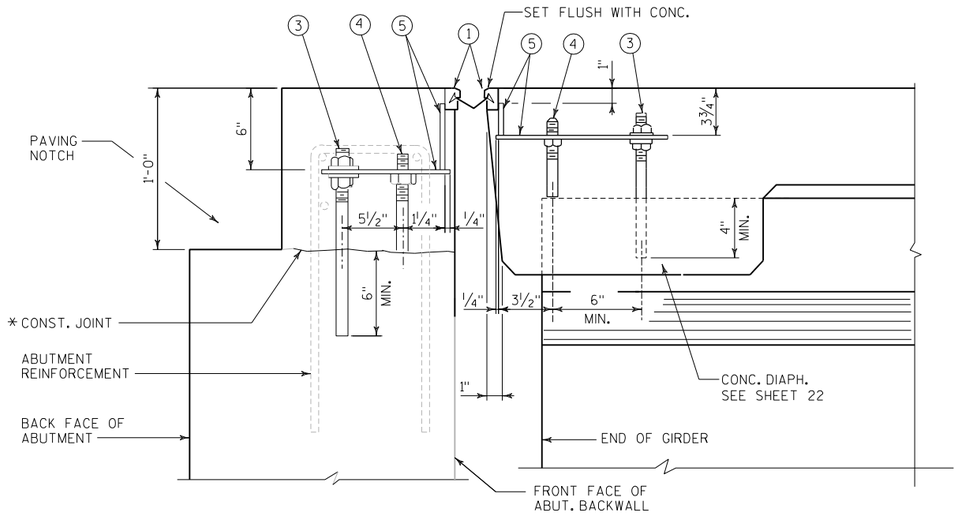
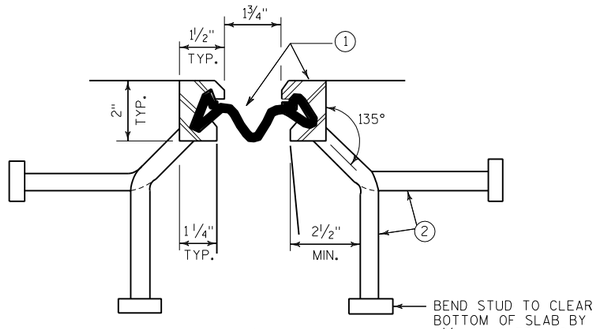


TYPICAL SECTION THRU JOINT

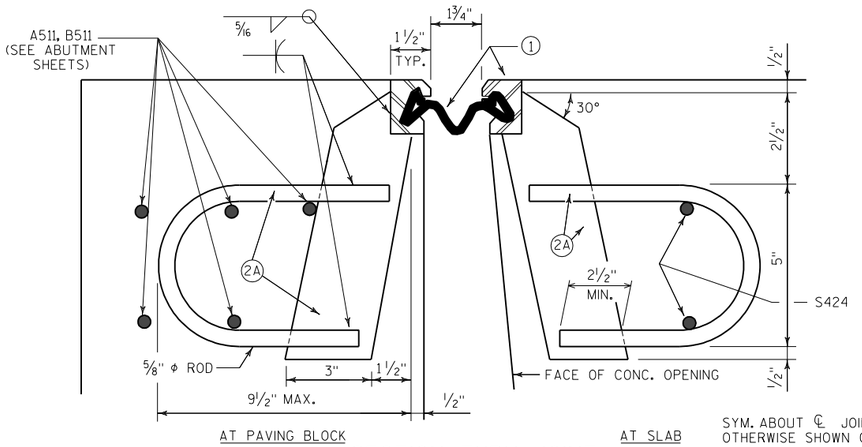
NORMAL TO ℄ SUBSTRUCTURE

* POUR CONC. ABOVE THIS JOINT AFTER SUPERSTRUCTURE IS IN PLACE. STRIKE OF AND LEAVE ROUGH.



SECTION THRU JOINT

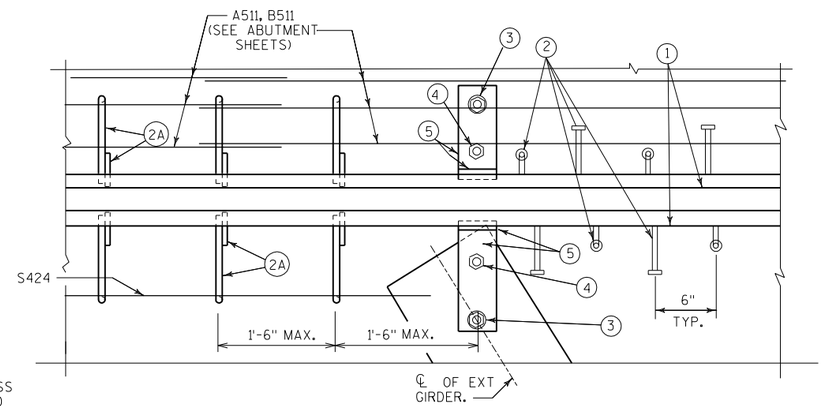
EXTERIOR GIRDER TO EDGE OF SLAB & AT PARAPETS, MEDIANS & SIDEWALKS



SECTION THRU JOINT

ROADWAY TRAFFIC AREA BETWEEN EXTERIOR GIRDERS.

SYM. ABOUT ℄ JOINT UNLESS OTHERWISE SHOWN OR NOTED



PART PLAN

LEGEND

1. NEOPRENE STRIP SEAL (4-INCH) & STEEL EXTRUSIONS.
2. STUDS ⅝" ϕ × 6⅜" LONG AT 6" ALTERNATE CENTERS. WELD TO EXTRUSIONS & BEND AS SHOWN AFTER WELDING.

2A. ½" THICK ANCHOR PLATE WITH ⅝" ϕ ROD (OR ALTERNATE STRIP SEAL ANCHOR). WELD ROD TO ANCHOR PLATE, WELD ANCHOR PL. TO NO. 1 AT 1'-6" CTRS. BETWEEN GIRDERS.

3. ¾" ϕ THREADED ROD WITH 2 NUTS AND WASHERS. FOR PRESTRESSED GIRDERS FIELD SET ON ℄ OF GIRDER. FOR STEEL GIRDERS WELD THREADED ROD TO TOP FLANGE OR ATTACH BY BOLTING THRU FLANGE. ON ABUTMENT SIDE GROUT THREADED ROD INTO FIELD DRILLED HOLES IN ABUTMENT BACKWALL AS SHOWN.
4. ¾" ϕ THREADED ROD WITH NUT. TACK WELD NUT TO NO. 5.
5. FABRICATE SUPPORT FROM 3" × ½" BAR AS SHOWN OR EQUIVALENT. ONE PER GIRDER PER SIDE. SHOP OR FIELD WELD TO NO. 1. IF FIELD WELDED, COVER WELDED AREAS WITH EPOXY-COATING MATERIAL. PROVIDE 1½" ϕ HOLE FOR NO. 3 & 1" ϕ HOLE FOR NO. 4.

REFER TO SHEET 26

6. GALVANIZED PLATE ⅜" × 10½" × 2'-0" LONG WITH HOLES FOR NO. 7. BEND AS SHOWN.
7. ¾" ϕ × 1½" STAINLESS STEEL SOCKET FLAT HEAD SCREWS WITH ANTI-SEIZE LUBRICANT. RECESS 1/16" BELOW PLATE SURFACE.
8. ¾" ϕ × 4" GALVANIZED HEX HEAD BOLT. BEND 45°.
9. ¾" ϕ × 2¼" GALVANIZED THREADED COUPLING.
10. 1" X 5" SLOTTED CSK. HOLE FOR NO. 7. SLOT PARALLEL TO DIRECTION OF MOVEMENT.

NOTES

ONE FIELD SPLICE PERMITTED IN STEEL EXTRUSIONS. IF USED, DETAILS SHALL BE SUBMITTED FOR APPROVAL. NO SPLICING PERMITTED IN NEOPRENE STRIP SEAL.

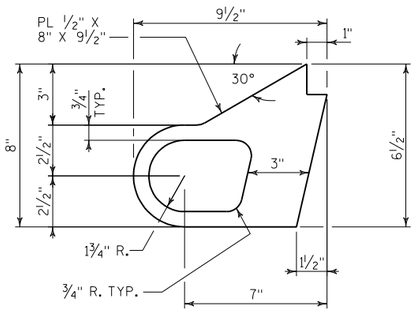
AFTER FABRICATION, BUT BEFORE SHIPMENT, STRAIGHTEN STEEL EXTRUSIONS SUCH THAT THEY SHALL BE FREE FROM WARP, TWIST & SWEEP.

FABRICATOR SHALL PROVIDE MEANS OF KEEPING GALVANIZED EXTRUSIONS CLEAN & SMOOTH DURING SHIPMENT AND PRIOR TO APPLYING LUBRICANT ADHESIVE FOR NEOPRENE GLAND INSTALLATION.

SANDBLAST PLATES & EXTRUSIONS AFTER FABRICATION IN ACCORDANCE WITH SSPC SP. #6 "COMMERCIAL BLAST CLEANING". AFTER BLAST CLEANING, THE PLATES, SUPPORTS & EXTRUSIONS SHALL BE HOT DIPPED GALVANIZED.

ANCHOR SYSTEM NO. 8 & NO. 9 SHALL CONFORM TO ASTM A307 & SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A153 CLASS C & D.

STRIP SEAL EXPANSION JOINT ASSEMBLY, INCLUDING ANCHOR STUDS & HARDWARE WILL BE PAID FOR AT THE LUMP SUM PRICE BID FOR "EXPANSION DEVICE B-64-0185".



ALTERNATE STRIP SEAL ANCHOR

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STRIP SEAL EXPANSION JOINT DETAILS

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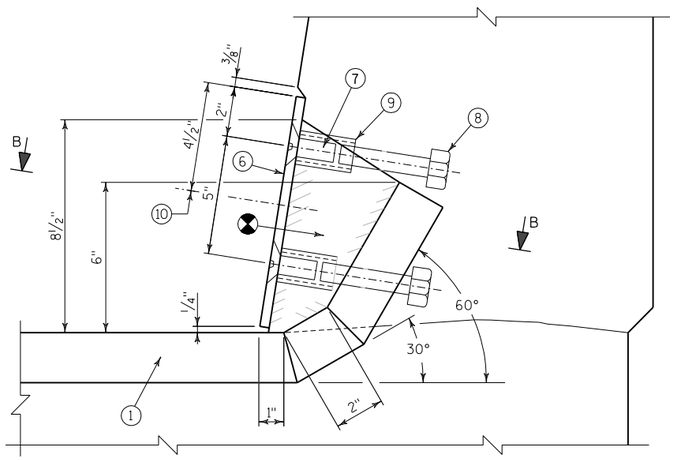
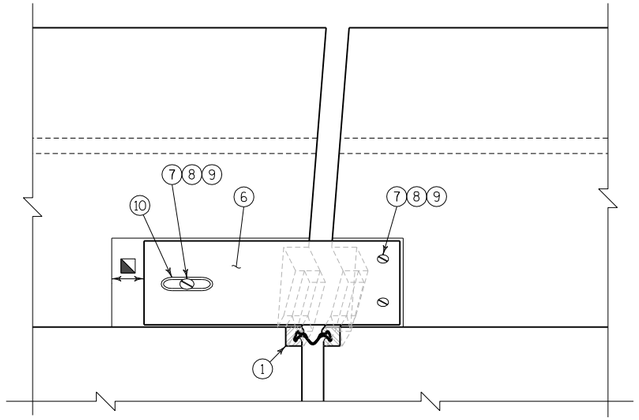
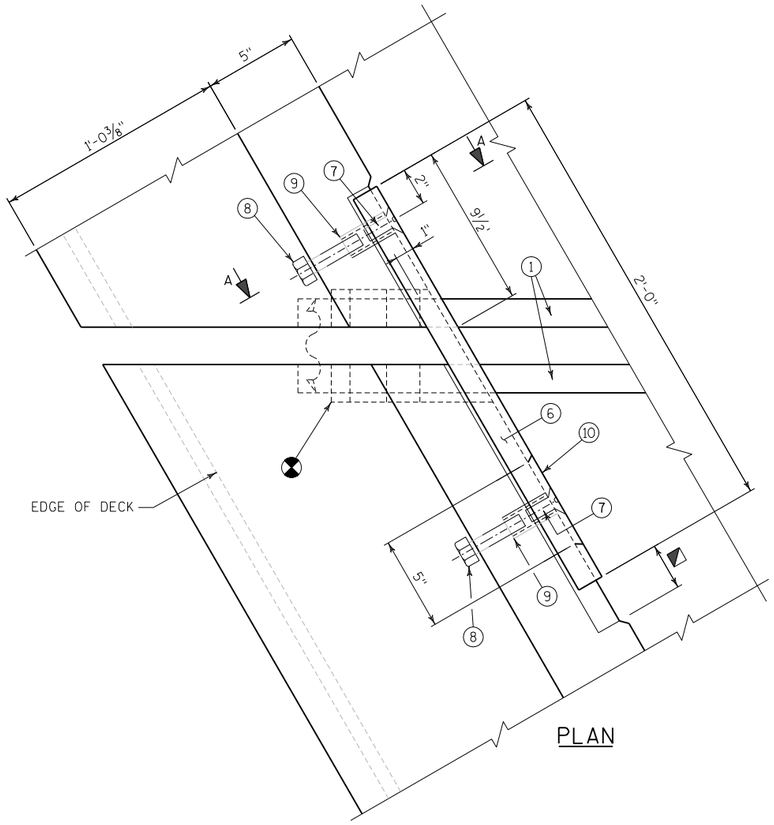


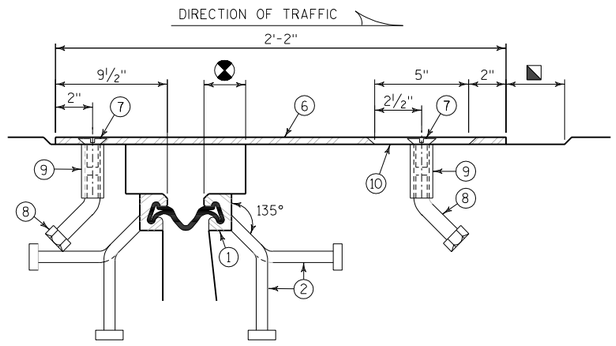
SECTION A-A



VIEW OF PARAPET PLATE FROM ROADWAY



PLAN



SECTION B-B

BLOCK OUT CONCRETE 2" EACH SIDE OF JOINT OPENING.

JOINT OPENING DIMENSION ALONG SKEW PLUS 1/2".

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COVER PLATE DETAILS

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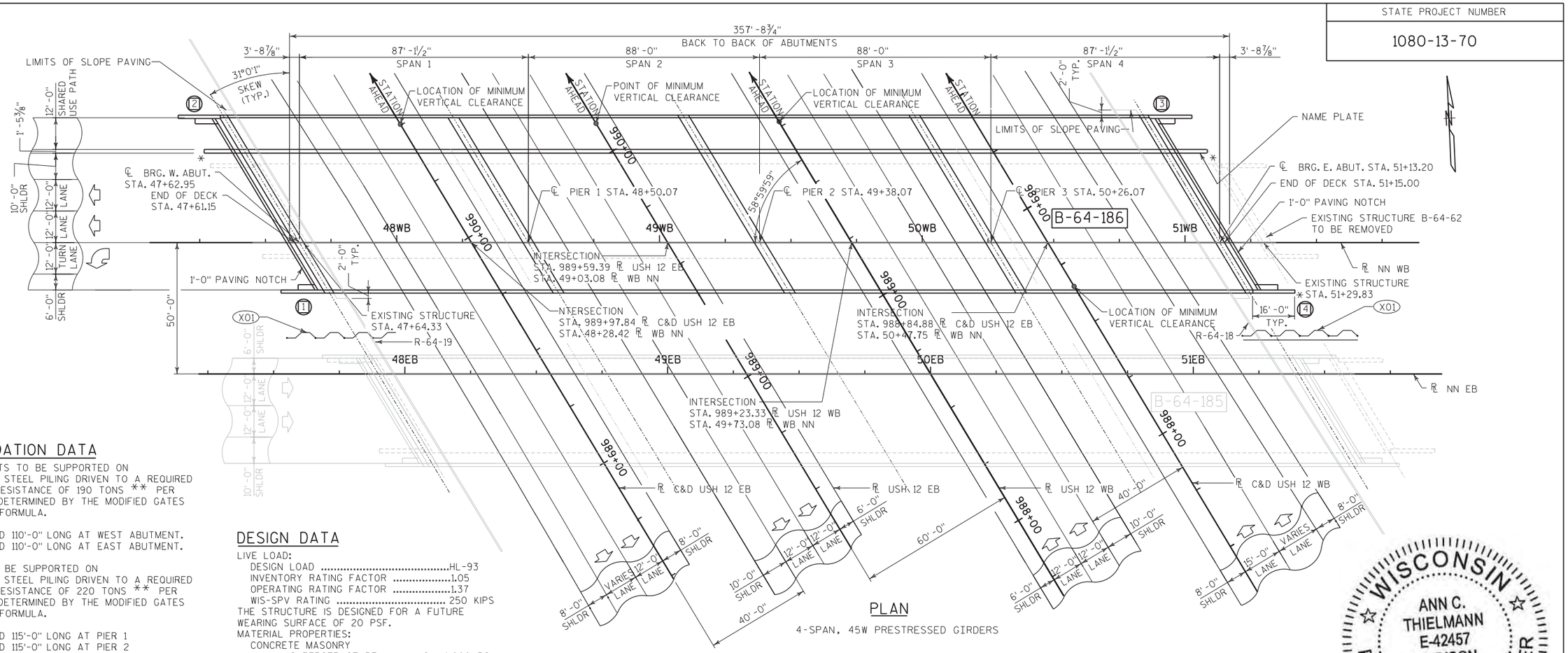


PLAN

4-SPAN, 45W PRESTRESSED GIRDERS

FOUNDATION DATA

ABUTMENTS TO BE SUPPORTED ON HP 12X53 STEEL PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 190 TONS ** PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA.

ESTIMATED 110'-0" LONG AT WEST ABUTMENT.
ESTIMATED 110'-0" LONG AT EAST ABUTMENT.

PIERS TO BE SUPPORTED ON HP 12X53 STEEL PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 220 TONS ** PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA.

ESTIMATED 115'-0" LONG AT PIER 1
ESTIMATED 115'-0" LONG AT PIER 2
ESTIMATED 115'-0" LONG AT PIER 3

**THE FACTORED AXIAL RESISTANCE OF PILES IN COMPRESSION USED FOR DESIGN IS THE REQUIRED DRIVING RESISTANCE MULTIPLIED BY A RESISTANCE FACTOR OF 0.5 USING MODIFIED GATES TO DETERMINE DRIVEN PILE CAPACITY.

EXISTING ABUTMENT PILING SHALL BE CUT-OFF AT THE BOTTOM OF WALL ELEVATION FOR R-64-18 AND R-64-19. THIS WORK TO BE INCLUDED IN THE "REMOVING OLD STRUCTURE" BID ITEM.

DESIGN DATA

LIVE LOAD:
- DESIGN LOAD HL-93
- INVENTORY RATING FACTOR 1.05
- OPERATING RATING FACTOR 1.37
- WIS-SPV RATING ..... 250 KIPS

THE STRUCTURE IS DESIGNED FOR A FUTURE WEARING SURFACE OF 20 PSF.

MATERIAL PROPERTIES:
- CONCRETE MASONRY
  - SUPERSTRUCTURE ..... f'c=4,000 PSI
  - ALL OTHER ..... f'c=3,500 PS
- HIGH STRENGTH BAR STEEL
  - REINFORCEMENT GRADE 60 ..... fy=60,000 PSI
- 45W-INCH PRESTRESSED GIRDERS
  - CONCRETE MASONRY ..... f'c=8,000 PSI
  - PRESTRESSING STRANDS = 0.6 INCH DIA. WITH ULTIMATE TENSILE STRENGTH OF 270,000 PSI

LEGEND

① INDICATES WING NUMBER

* ANCHOR ASSEMBLIES FOR THRIE BEAM GUARD RAIL ATTACHMENT

(X01) TEMPORARY SHORING REQUIRED, SEE STRUCTURE B-64-0185 FOR QUANTITIES. TEMPORARY WALL WIRE FACED MSE INSTALLED DURING CONSTRUCTION OF WALLS R-64-18 AND R-64-19. SEE RETAINING WALLS FOR DETAILS. CONTRACTOR MUST COORDINATE CONSTRUCTION OF B-64-186 WITH WALLS R-64-18 AND R-64-19.

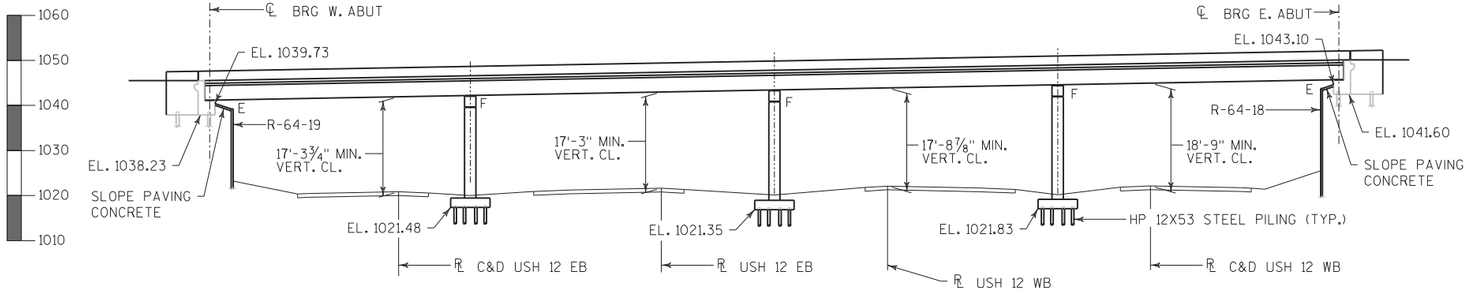
TRAFFIC DATA:

USH 12
A.D.T. = 16600 (2015)
A.D.T. = 23500 (2035)
R.D.S. = 70 M.P.H.

CTH NN
A.D.T. = 8100 (2015)
A.D.T. = 9200 (2035)
R.D.S. = 60 M.P.H.

LIST OF DRAWINGS

1. GENERAL PLAN & ELEVATION
2. CROSS-SECTION & QUANTITIES
3. PROFILE GRADE LINES
4. SUBSURFACE EXPLORATION
5. WEST ABUTMENT
6. WEST ABUTMENT DETAILS
7. ABUTMENT WING WALL #1
8. ABUTMENT WING WALL #2
9. EAST ABUTMENT
10. EAST ABTUTMENT DETAILS
11. ABUTMENT WING WALL #3
12. ABUTMENT WING WALL #4
13. PIER 1
14. PIER 2
15. PIER 3
16. PIER DETAILS
17. 45W" PRESTRESSED GIRDER - 1
18. 45W" PRESTRESSED GIRDER - 2
19. STEEL DIAPHRAGMS
20. SUPERSTRUCTURE - 1
21. SUPERSTRUCTURE - 2
22. SUPERSTRUCTURE CROSS-SECTION
23. SUPERSTRUCTURE BILL OF BARS
24. SUPERSTRUCTURE DETAILS
25. SINGLE SLOPE PARAPET 32SS
26. PARAPET 32SS FOOTING
27. VERTICAL FACE PARAPET "A"
28. ORNAMENTAL PROTECTIVE SCREENING
29. ELASTOMERIC BEARINGS
30. STRIP SEAL EXPANSION JOINT DETAILS
31. COVER PLATE DETAILS



ELEVATION

(NORMAL TO USH 12)

BUREAU OF STRUCTURES:
WILLIAM DREHER (608) 266-8489
CONSULTANT CONTACT:
ANN THIELMANN (608) 229-1414

WISCONSIN
ANN C. THIELMANN
E-42457
MADISON
WI
PROFESSIONAL ENGINEER
6/5/15

NO.	DATE	REVISION	BY

DAAR ENGINEERING, INC.
www.daarcorp.com
Madison, WI 53703
608-249-8340

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher SDR 06/11/15
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE B-64-186

WB CTH 'NN' OVER USH 12

COUNTY	TOWN
WALWORTH	GENEVA

DESIGN SPEC. AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS

DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
ACT	SJG	AMD	SJG

GENERAL PLAN & ELEVATION

SHEET 1 OF 31

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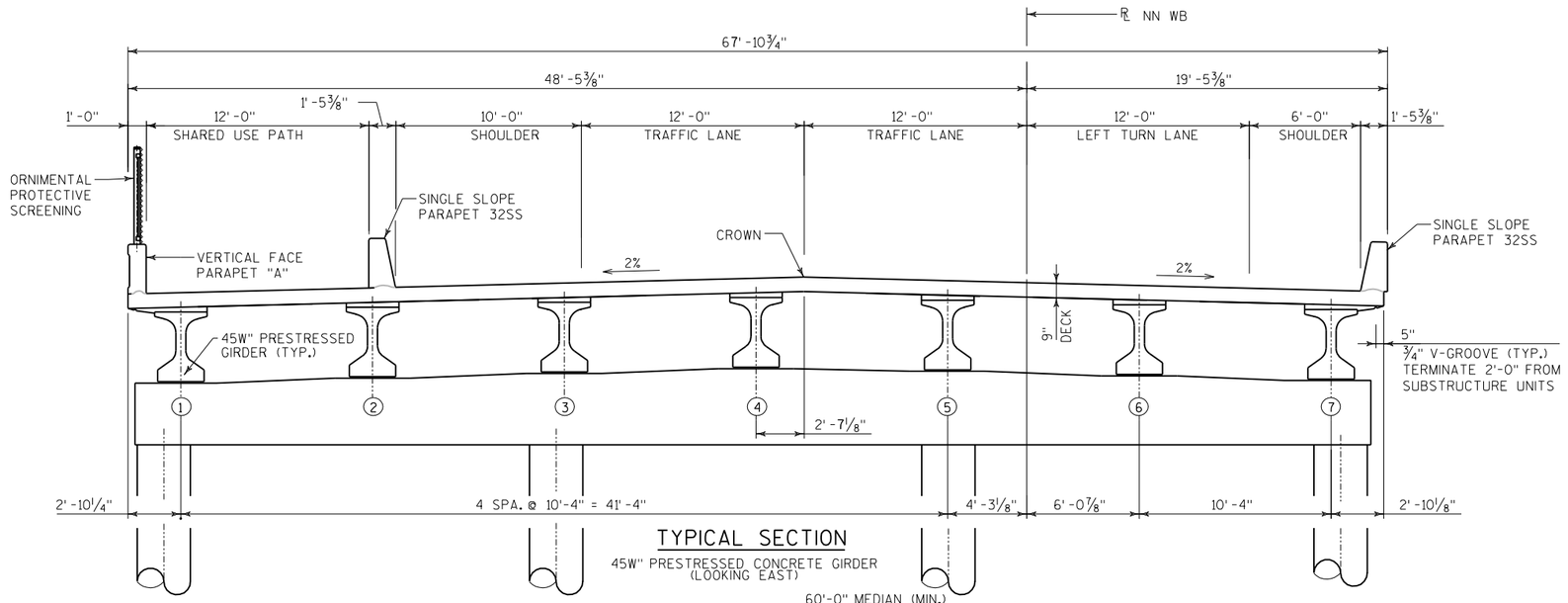
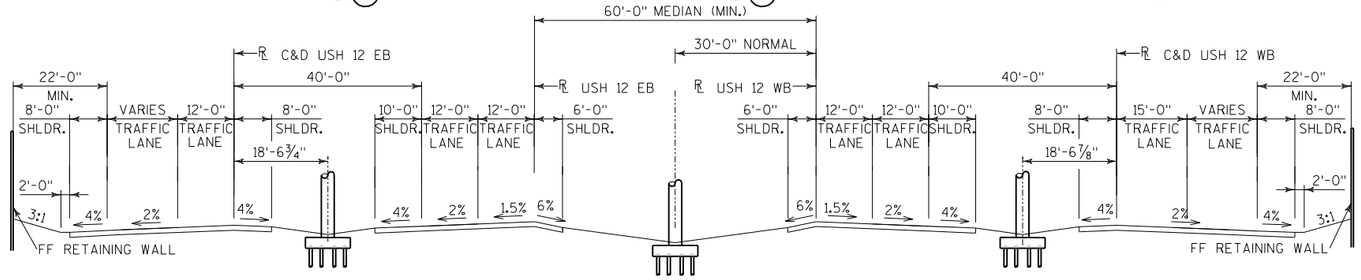
6/5/2015

STATE PROJECT NUMBER
1080-13-70



TYPICAL SECTION

45W" PRESTRESSED CONCRETE GIRDER
(LOOKING EAST)



TYPICAL SECTION THRU USH 12

(LOOKING NORTH)

TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEMS	UNIT	WEST ABUT.	PIER 1	PIER 2	PIER 3	EAST ABUT.	SUPER.	TOTALS
203.0200	REMOVING OLD STRUCTURE STA. 47+64.33	LS	-	-	-	-	-	-	1
203.0210.S	ABATEMENT OF ASBESTOS CONTAINING MATERIAL B-64-0062	LS	-	-	-	-	-	-	1
203.0225.S	DEBRIS CONTAINMENT B-64-0062	LS	-	-	-	-	-	-	1
206.1000	EXCAVATION FOR STRUCTURE, BRIDGES B-64-0186	LS	-	-	-	-	-	-	1
210.0100 *	BACKFILL STRUCTURE	CY	271	-	-	-	268	-	539
502.0100	CONCRETE MASONRY BRIDGES	CY	126	120	122	122	124	869	1484
502.3100	EXPANSION DEVICE B-64-0186	LS	-	-	-	-	-	-	1
502.3200	PROTECTIVE SURFACE TREATMENT	SY	-	-	-	-	-	2602	2602
502.3210.S	PIGMENTED PROTECTIVE SURFACE TREATMENT	SY	-	-	-	-	-	610	610
503.0146	PRESTRESSED GIRDER TYPE I 45W-INCH	LF	-	-	-	-	-	2457	2457
505.0405 *	BAR STEEL REINFORCEMENT HS BRIDGES	LB	5730	6070	6070	6070	5720	-	29660
505.0605 *	BAR STEEL REINFORCEMENT HS COATED BRIDGES	LB	4760	22180	22420	22420	5450	229440	306670
506.2605	BEARING PADS ELASTOMERIC NON-LAMINATED	EACH	-	14	14	14	-	-	42
506.2610	BEARING PADS ELASTOMERIC LAMINATED	EACH	7	-	-	-	7	-	14
506.4000	STEEL DIAPHRAGMS B-64-0186	EACH	-	-	-	-	-	48	48
513.4090	RAILING TUBULAR SCREENING B-64-0186	LS	-	-	-	-	-	-	1
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	18	-	-	-	17	-	35
550.1120	PILING STEEL HP 12-INCH X 53 LB	LF	1210	5175	5175	5175	1210	-	17945
604.0400	SLOPE PAVING CONCRETE	SY	29	-	-	-	57	-	87
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	142	-	-	-	142	-	284
614.0150	ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD	EACH	2	-	-	-	2	-	4
SPV.0090	REMOVING EXISTING TIMBER PILING	LF	-	360	720	80	-	-	1160
	NON-BID ITEMS								
	FILLER	SIZE							½" & ¾"

* THE CONCRETE OF THE PARAPET ON THE WINGWALLS ARE INCLUDED IN THE ABUTMENT QUANTITIES. SUPERSTRUCTURE QUANTITIES INCLUDE THE CONCRETE AND REINFORCEMENT OF THE PARAPET ON THE DECK. THE REINFORCEMENT OF THE PARAPET ON THE WINGWALLS ARE INCLUDED IN THE SUPERSTRUCTURE QUANTITIES. SUPERSTRUCTURE QUANTITIES INCLUDE THE CONCRETE AND REINFORCEMENT OF THE PARAPET ON THE DECK AND THE PARAPET FOOTINGS.

BENCH MARKS

NO.	DESCRIPTION	ELEVATION
BM 145	BRIDGE MONUMENT AT THE SOUTHWEST CORNER OF THE EASTBOUND CTH "NN" BRIDGE	1047.44
BM 162	BRIDGE MONUMENT AT THE NORTHEAST CORNER OF THE WESTBOUND CTH "NN" BRIDGE	1052.85

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

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

ALL DIMENSIONS ARE IN FEET AND INCHES. ALL STATIONS AND ELEVATIONS ARE IN FEET.

THE FIRST DIGIT OF A THREE DIGIT AND THE FIRST TWO DIGITS OF A FOUR DIGIT BAR MARK SIGNIFIES THE BAR SIZE.

AT THE BACKFACE OF ABUTMENT ALL VOLUME WHICH CANNOT BE PLACED BEFORE ABUTMENT CONSTRUCTION AND IS NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH STRUCTURE BACKFILL.

EXPANSION ABUTMENTS TO BE BACKFILLED TO A MINIMUM OF THE BEAM SEAT ELEVATION PRIOR TO PLACING GIRDERS.

THE EXISTING GROUND LINE SHALL BE USED AS THE UPPER LIMITS OF EXCAVATION FOR STRUCTURES.

THE EXISTING STRUCTURE, B-64-62, IS A FOUR SPAN STEEL GIRDER BRIDGE WITH AN OVERALL WIDTH OF 36'-0" AND AN OVERALL LENGTH OF 371'-8¾" AND IS TO BE REMOVED.

PROTECTIVE SURFACE TREATMENT SHALL BE APPLIED TO THE ENTIRE ROADWAY DECK AND SIDEWALK.

PIGMENTED PROTECTIVE SURFACE TREATMENT SHALL BE APPLIED TO THE FRONT FACES AND TOPS OF THE PARAPETS.

BEVEL EXPOSED EDGES OF CONCRETE ¾" UNLESS NOTED OTHERWISE.

ELASTOMERIC BEARING PADS NEED NOT BE INDIVIDUALLY MOLDED PROVIDED THE CUT EDGES ARE SMOOTH AND TRUE.

THE HAUNCH CONCRETE QUANTITY IS BASED ON THE AVERAGE HAUNCH SHOWN ON THE PRESTRESSED GIRDER DETAILS SHEET.

THE QUANTITY FOR BACKFILL STRUCTURE, BID ITEM 210.0100, IS CALCULATED BASED ON THE APPLICABLE FIGURES 12.6-1 AND 12.6-2 IN THE WISCONSIN DEPARTMENT OF TRANSPORTATION BRIDGE MANUAL.

MSE REINFORCEMENT STRIPS ATTACHED TO ABUTMENTS ARE TO BE DESIGNED BY THE WALL MANUFACTURER.

MSE REINFORCEMENT STRIPS AND CONNECTION OF THE STRIPS TO THE ABUTMENT ARE INCLUDED IN THE QUANTITIES FOR R-64-0018 AT THE EAST ABUTMENT AND R-64-0019 AT THE WEST ABUTMENT.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-64-186

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CROSS-SECTION & QUANTITIES

SHEET 2 OF 31

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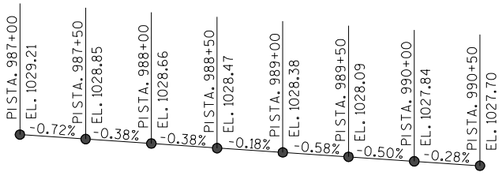
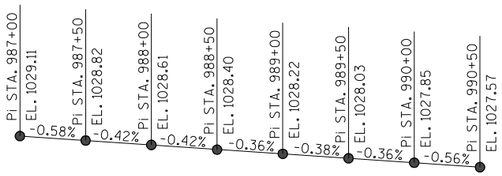
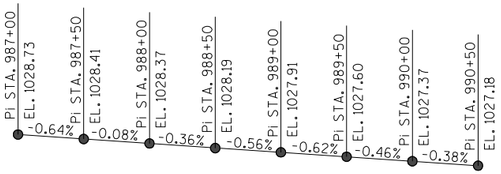


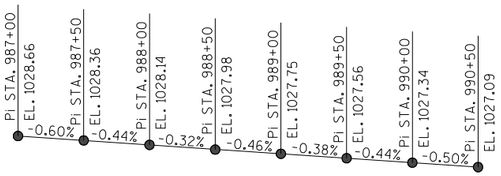
EXISTING PROFILE GRADE LINE
USH 12 WB



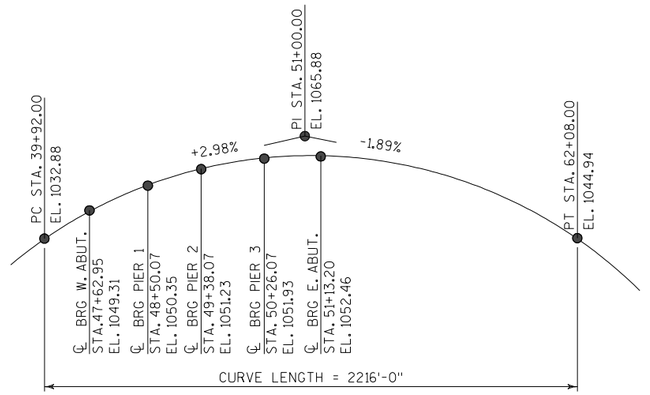
EXISTING PROFILE GRADE LINE
USH 12 EB



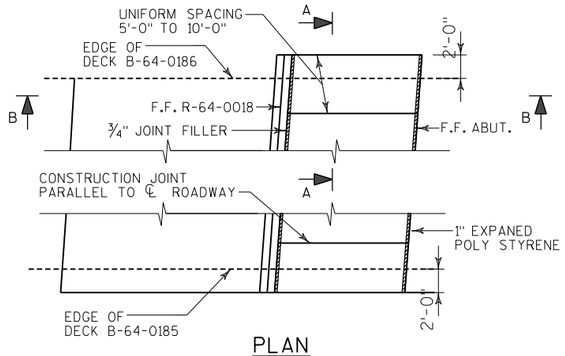
EXISTING PROFILE GRADE LINE
"C&D" USH 12 WB



EXISTING PROFILE GRADE LINE
"C&D" USH 12 EB

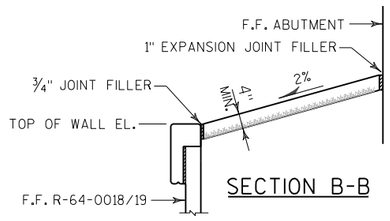


PROFILE GRADE
LINE CTH 'NN' WB

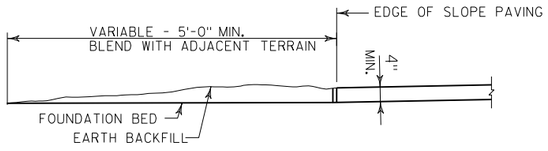


PLAN

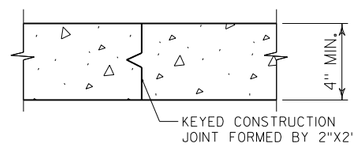
SLOPE PAVING DETAILS
SIMILAR AT EACH RETAINING WALL



SECTION B-B



SECTION A-A



CONSTRUCTION JOINT DETAIL

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STRUCTURE B-64-186

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PROFILE
GRADE LINES

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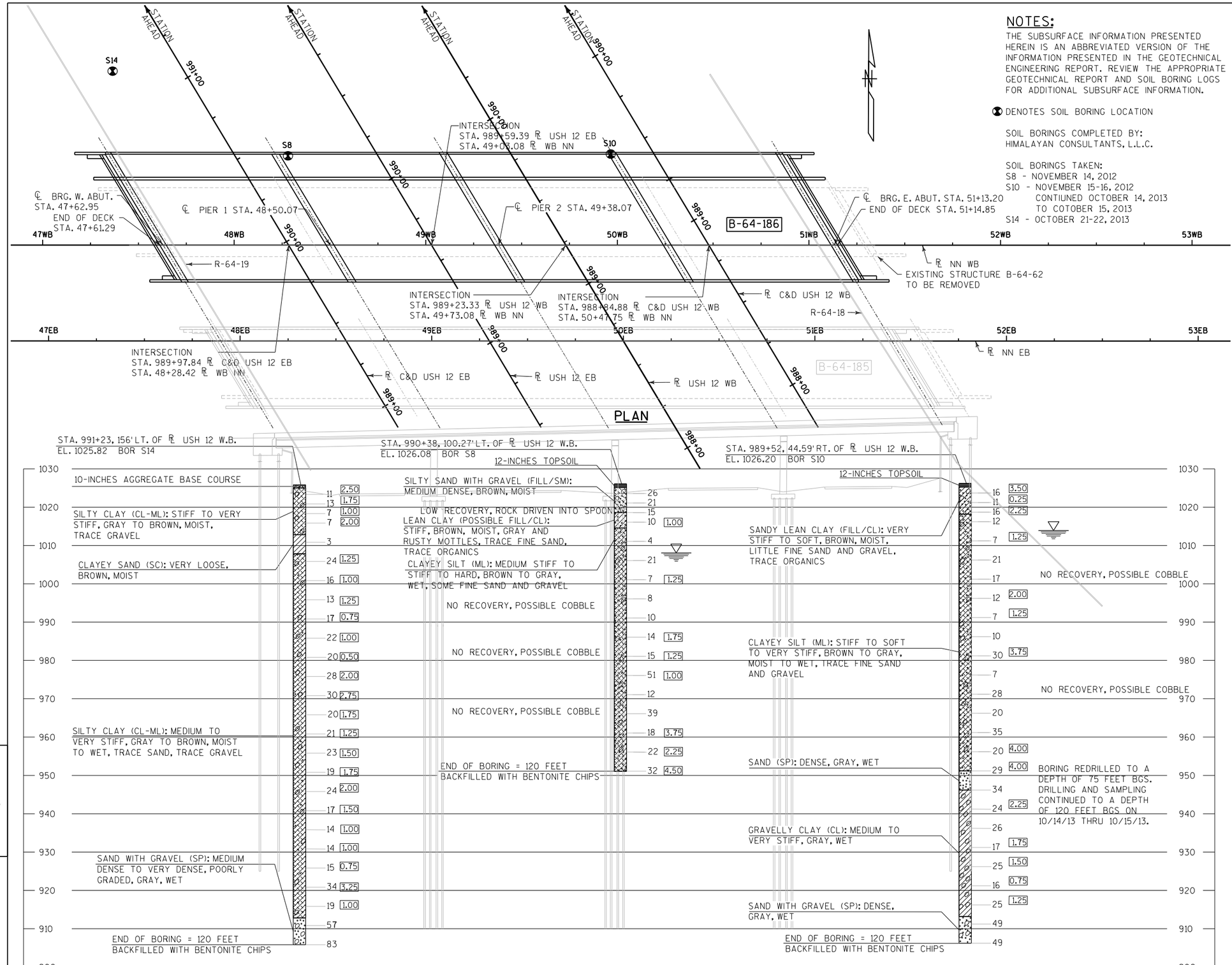

NOTES:

THE SUBSURFACE INFORMATION PRESENTED HEREIN IS AN ABBREVIATED VERSION OF THE INFORMATION PRESENTED IN THE GEOTECHNICAL ENGINEERING REPORT. REVIEW THE APPROPRIATE GEOTECHNICAL REPORT AND SOIL BORING LOGS FOR ADDITIONAL SUBSURFACE INFORMATION.

⊗ DENOTES SOIL BORING LOCATION

SOIL BORINGS COMPLETED BY:
HIMALAYAN CONSULTANTS, L.L.C.

SOIL BORINGS TAKEN:
S8 - NOVEMBER 14, 2012
S10 - NOVEMBER 15-16, 2012 CONTIUNED OCTOBER 14, 2013 TO COTOBER 15, 2013
S14 - OCTOBER 21-22, 2013

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ABBREVIATIONS

F — FINE M — MEDIUM C — COARSE
WS — WEATHERED SO — SOUND

MATERIAL SYMBOLS

TOPSOIL, SILT, SANDSTONE
SAND, PEAT, LIMESTONE
GRAVEL, CLAY, IGNEOUS ROCK

LEGEND OF PROBING

95/6=95 BLOWS FOR 6" PENETRATION
PROBING TAKEN WITH A 350# WT. FALLING 18" ON A 2" O.D. POINT.

PROBING NO.
STA.
ELEVATION
7 AVERAGE BLOWS PER FOOT
REFUSAL 95/6

LEGEND OF BORING

BORING NO.
ELEV. STA.
UNCONFINED STRENGTH — 7.7 7
BLOWS PER FT. USING 140# WT. FALLING 30"
WASH SAMPLE
SHELBY TUBE — S.T.
GROUND WATER ELEVATION
NO GROUND WATER OBSERVED ABOVE THIS ELEVATION
SANDY GRAVEL
F. BOULDERS OR COBBLES
SAND
SILTY CLAY
SO LIMESTONE

UNLESS OTHERWISE SPECIFIED, THE BLOWS PER FOOT AT THE LOCATIONS INDICATED ARE BASED ON DRIVING A 2" O.D. X 1.4" I.D. SPLIT SPOON SAMPLER WITH A 140# HAMMER HAVING A FREE FALL OF 30". THE BLOW COUNT IS TAKEN IN UNDISTURBED SOIL IMMEDIATELY BELOW A CASED OR OPEN HOLE ELIMINATING SIDE FRICTION ON THE DRIVE PIPE.

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

TO OBTAIN RELATIVE DATA CONCERNING THE CHARACTER OF MATERIAL IN AND UPON WHICH THE FOUNDATION MIGHT BE BUILT, BORINGS AND/OR SOUNDINGS WERE MADE AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING. THE DATA PRESENTED HEREIN REPRESENTS THE FINDINGS OF THE SUBSURFACE EXPLORATIONS MADE. HOWEVER, BECAUSE THE DEPTHS INVESTIGATED ARE LIMITED AND THE AREA OF THE BORINGS AND/OR SOUNDINGS IS VERY SMALL IN RELATION TO THE ENTIRE AREA, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT CONDITIONS BELOW THE DEPTHS INVESTIGATED OR THAT THE CLASSIFICATION OF MATERIAL ENCOUNTERED IN THESE INVESTIGATIONS IS NECESSARILY TYPICAL OF THE ENTIRE SITE.

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STRUCTURE B-64-186

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SUBSURFACE EXPLORATION

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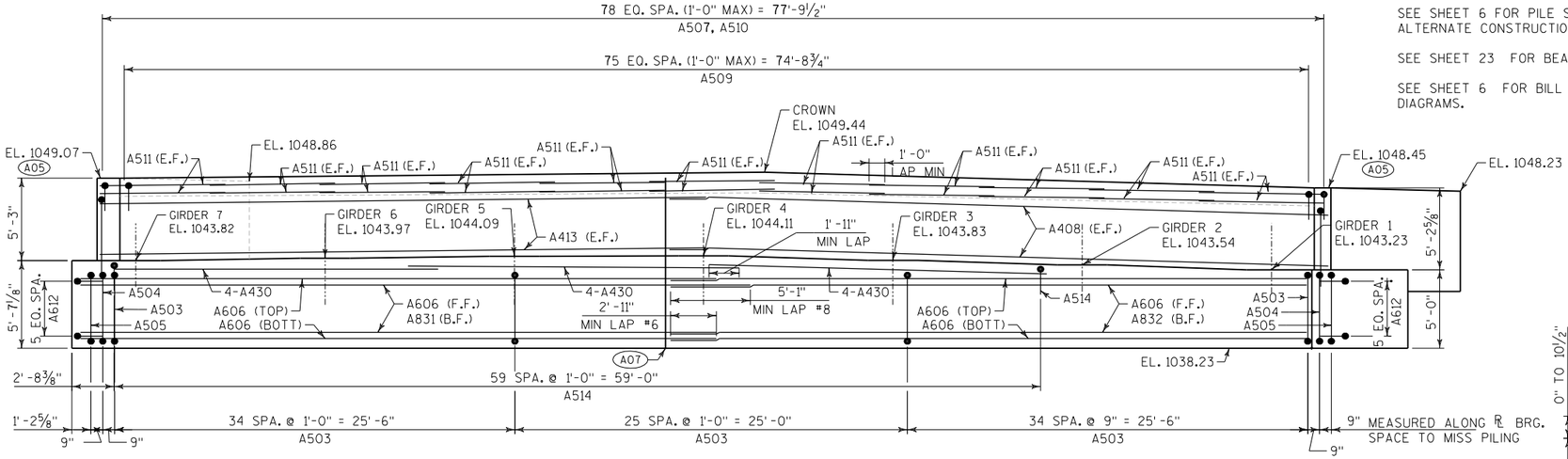
NOTES:

SEE SHEET 6 FOR PILE SPLICE DETAIL AND ALTERNATE CONSTRUCTION JOINT.

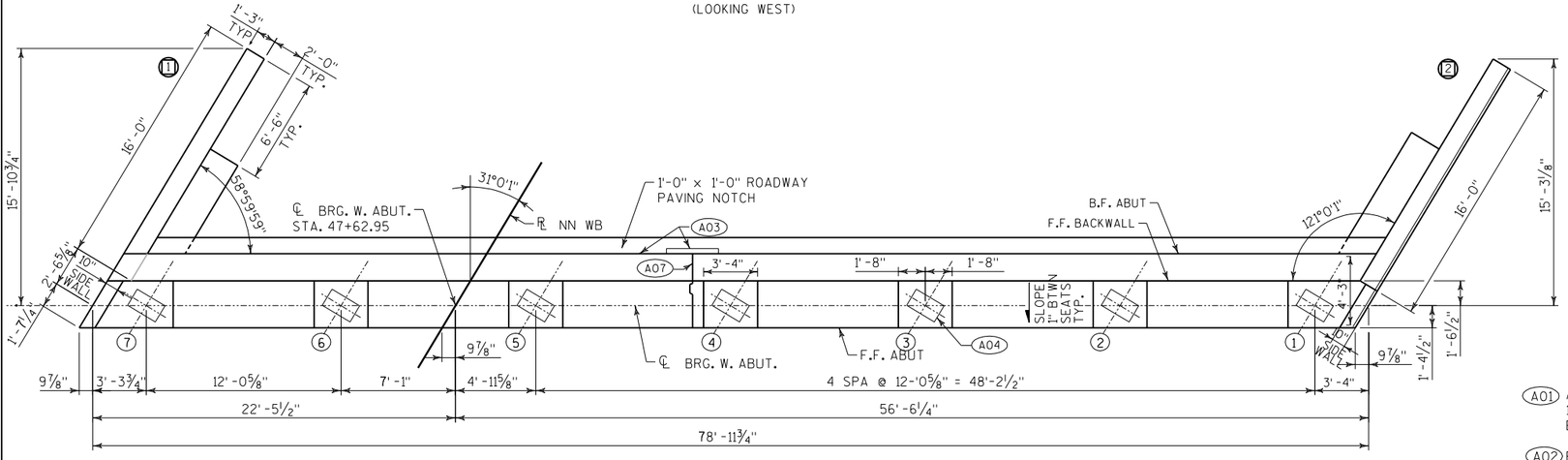
SEE SHEET 23 FOR BEARING PAD DETAIL.

SEE SHEET 6 FOR BILL OF BARS AND BENDING DIAGRAMS.

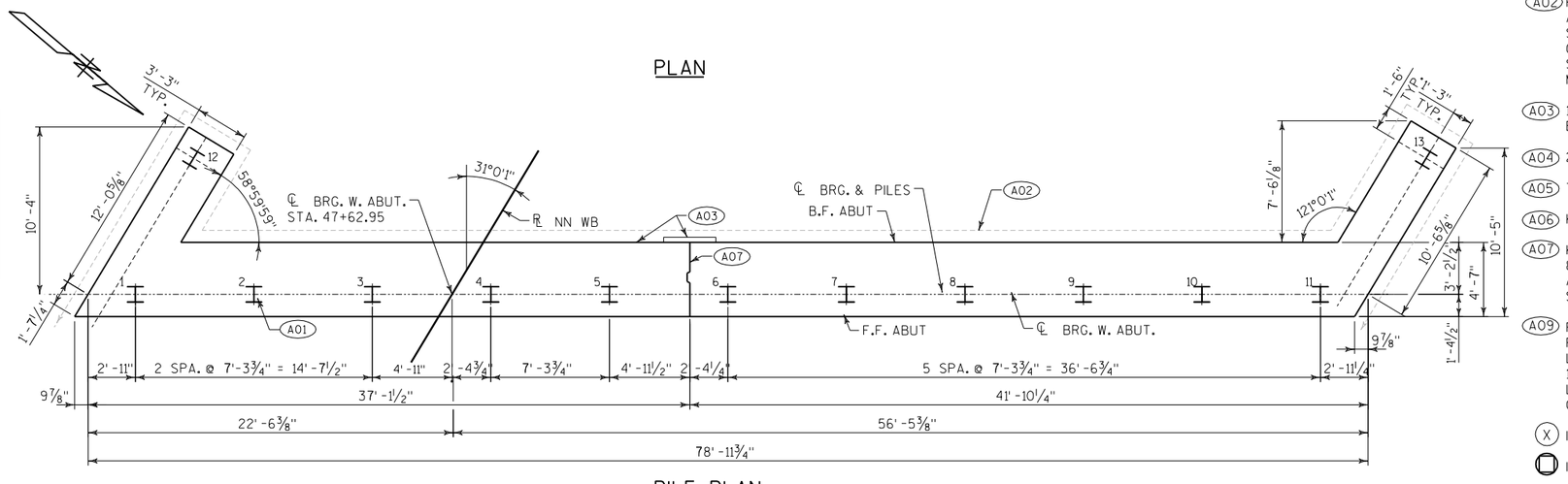


ELEVATION

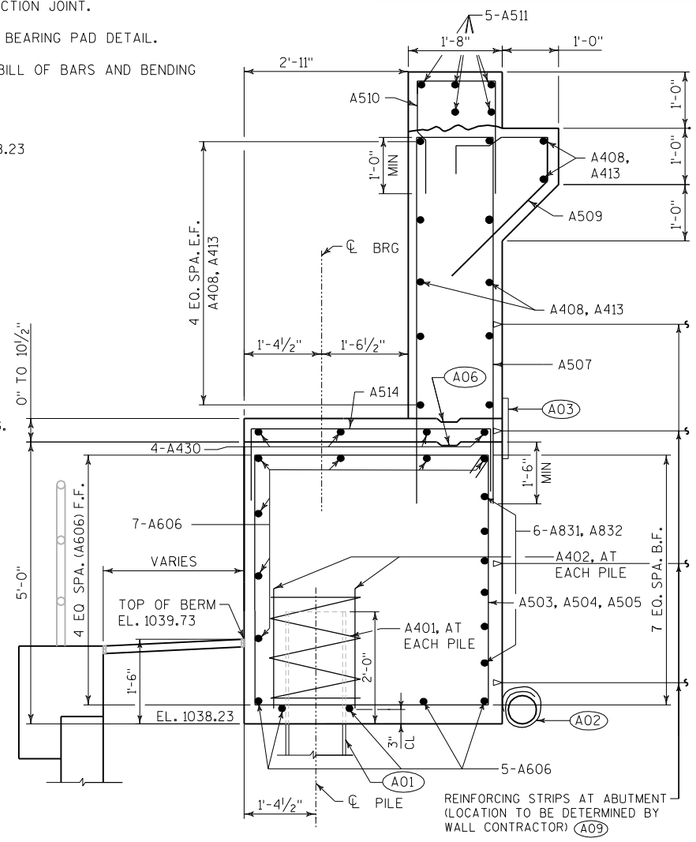
(LOOKING WEST)



PLAN



PILE PLAN



SECTION THRU BODY

LEGEND:

(A01) ABUTMENTS TO BE SUPPORTED ON HP 12X53 STEEL PILING DRIVEN TO A REQUIRED RESISTANCE OF 190 TONS PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC EQUATION. ESTIMATED 110'-0" LONG.

(A02) PIPE UNDERDRAIN WRAPPED, 6-INCH. SLOPE 0.5% MIN TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT END AND CAP UPPER END. THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THE DETAIL SHOWN ON SHEET 6. THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE OUTFALL PIPE. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH (2) TWO OR MORE NO. 10X1-INCH STAINLESS SHEET METAL SCREWS AND SHALL BE INCLUDED IN BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".

(A03) 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS AT BACKFACE.

(A04) 2½" X 1'-2" X 2'-0" LAMINATED ELASTOMERIC BEARING PAD.

(A05) TOP OF WING ELEVATION IS GIVEN AT FRONT FACE OF BACK WALL.

(A06) KEYED CONSTRUCTION JOINT BY BEVELED 2" X 6".

(A07) KEYED CONST. JOINT FORMED BY BEVELED 2" X 8" WITH ¾" V-GROOVE. SEE SHEET 6 FOR ALTERNATIVE CONST. JOINT DETAIL. RUN BAR STEEL THRU JOINT.

(A09) REINFORCING STRIPS SHALL BE DESIGNED TO RESIST A NONFACTORED SUPERSTRUCTURE LONGITUDINAL HORIZONTAL LINE LOAD OF 1.68 K/LF OF ABUTMENT IN ADDITION TO THE LIVE LOAD SURCHARGE AND EARTH PRESSURE ON THE BACK OF ABUTMENT.

(X) INDICATES GIRDER NUMBER.

⬡ INDICATES WING WALL NUMBER.

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WEST ABUTMENT

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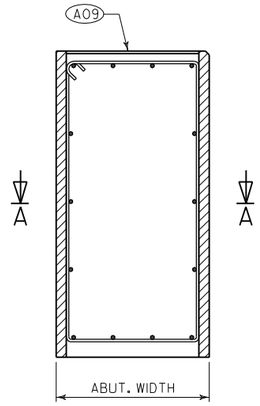
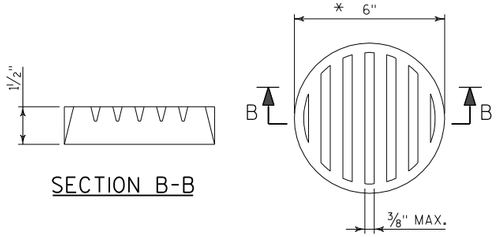
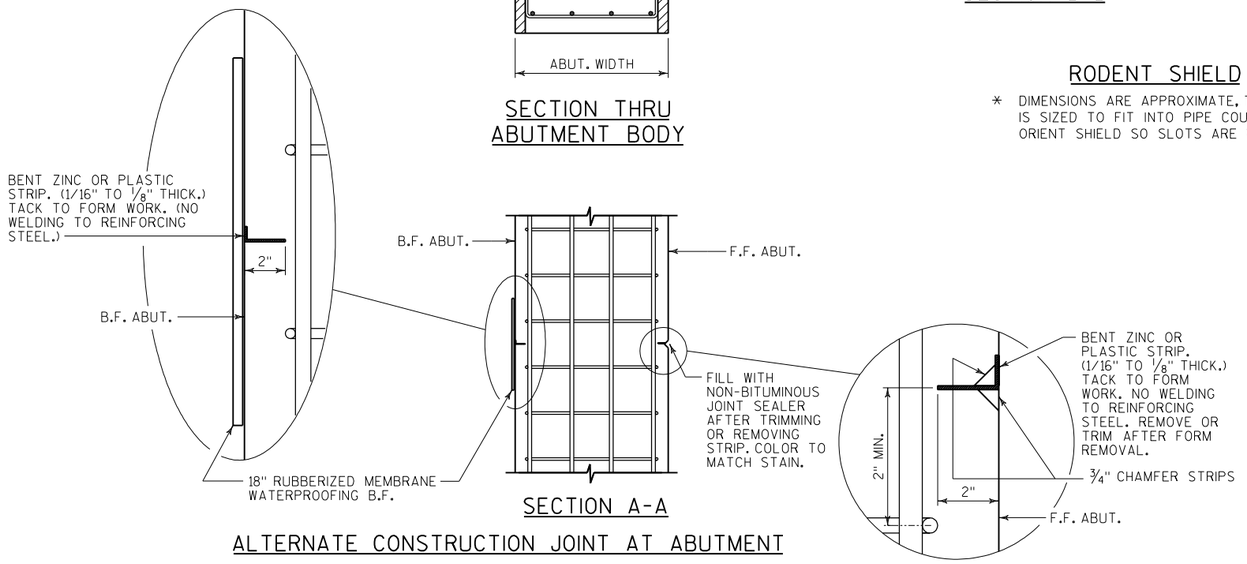


SECTION THRU ABUTMENT BODY



RODENT SHIELD

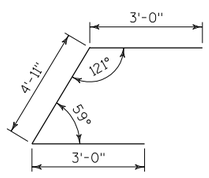
* DIMENSIONS ARE APPROXIMATE, THE GRATE IS SIZED TO FIT INTO PIPE COUPLING. ORIENT SHIELD SO SLOTS ARE VERTICAL.



ALTERNATE CONSTRUCTION JOINT AT ABUTMENT

BILL OF BARS

BAR MARK	COAT	NO REQ'D	LENGTH	BENT	BAR SERIES	LOCATION	
A401	-	11	28'-0"	X	-	ABUTMENT PILES - 1 PER PILE	VERTICAL
A402	-	22	2'-3"	-	-	ABUTMENT PILES - 2 PER PILE	VERTICAL
A503	-	94	18'-3"	X	-	ABUTMENT BODY STIRRUPS	VERTICAL
A504	-	2	15'-9"	X	-	ABUTMENT BODY STIRRUPS - ENDS	VERTICAL
A505	-	2	13'-3"	X	-	ABUTMENT BODY STIRRUPS - ENDS	VERTICAL
A606	-	24	40'-9"	-	-	ABUTMENT BODY (F.F., TOP & BOTT.)	HORIZONTAL
A507	X	79	11'-9"	X	-	ABUTMENT BACKWALL	VERTICAL
A408	X	12	42'-4"	-	-	ABUTMENT BACKWALL	HORIZONTAL
A509	X	76	5'-9"	X	-	ABUTMENT BACKWALL	VERTICAL
A510	X	79	5'-1"	X	-	ABUTMENT BACKWALL	VERTICAL
A511	X	55	8'-1"	-	-	ABUTMENT BACKWALL	HORIZONTAL
A612	-	12	10'-7"	X	-	ABUTMENT BODY ENDS	HORIZONTAL
A413	X	12	38'-7"	-	-	ABUTMENT BACKWALL	HORIZONTAL
A514	-	60	7'-5"	X	-	ABUTMENT BODY STIRRUPS	VERTICAL
A515	X	10	16'-9"	X	-	WING WALL 1	VERTICAL
A516	X	5	19'-2"	-	-	WING WALL 1 (FF)	HORIZONTAL
A617	X	11	10'-6"	-	-	WING WALL 1 (BF)	HORIZONTAL
A518	X	7	12'-10"	X	-	WING WALL 1 (TOP)	VERTICAL
A519	X	18	14'-10"	X	-	WING WALL 1 & 2 (TOP)	VERTICAL
A620	X	4	15'-8"	-	-	WING WALL 1 & 2 (TOP)	HORIZONTAL
A421	X	8	8'-6"	-	-	WING WALL 1 & 2 (TOP)	HORIZONTAL
A422	X	24	15'-8"	-	-	WING WALL 1 & 2 (TOP)	HORIZONTAL
A423	X	5	4'-6"	-	-	WING WALL 1 - SIDE WALL	HORIZONTAL
A424	X	8	5'-4"	-	-	WING WALL 1 & 2 - SIDE WALL	VERTICAL
A525	X	10	15'-7"	X	-	WING WALL 2	VERTICAL
A626	X	11	10'-10"	-	-	WING WALL 2 (BF)	HORIZONTAL
A527	X	5	17'-11"	-	-	WING WALL 2 (FF)	HORIZONTAL
A528	X	7	12'-10"	X	-	WING WALL 2 (TOP)	VERTICAL
A429	X	5	3'-6"	-	-	WING WALL 2 - SIDE WALL	HORIZONTAL
A430	-	12	21'-1"	-	-	ABUTMENT BODY	HORIZONTAL
A831	-	6	42'-11"	-	-	ABUTMENT BODY - SOUTH END (B.F.)	HORIZONTAL
A832	-	6	40'-9"	-	-	ABUTMENT BODY - NORTH END (B.F.)	HORIZONTAL



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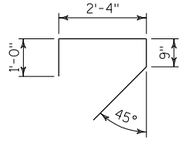

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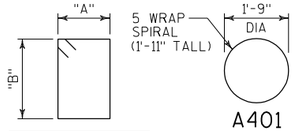
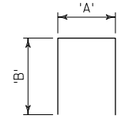
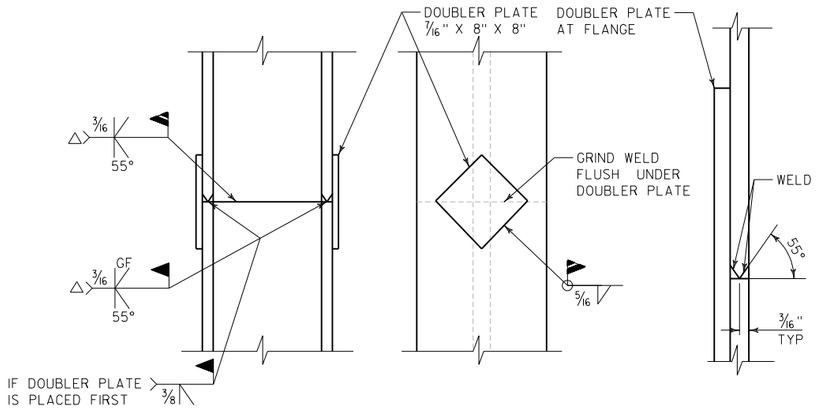


A401

BAR MARK	DIM. A	DIM. B
A503	4'-3"	4'-7"
A504	3'-0"	4'-7"
A505	1'-9"	4'-7"
A515	2'-11"	5'-2"
A525	2'-11"	4'-7"



BAR MARK	DIM. A	DIM. B
A507	1'-4"	5'-4"
A510	1'-4"	2'-0"
A514	4'-0"	1'-10"
A518	11"	6'-1"
A519	11"	7'-1"
A528	11"	6'-1"



HP 12X53 PILE SPLICE DETAIL

△ SEE HP WELD DETAIL

'HP' WELD DETAIL

FLANGE SHOWN, WEB SIMILAR

LEGEND & NOTES

SEE SHEET 5 FOR ABUTMENT PLAN AND ELEVATION.

SEE SHEET 23 FOR BEARING PAD DETAIL.

(A09) USE A JOINT TOOL TO CONSTRUCT A CONTRACTION JOINT APPROXIMATELY ½" DEEP.

PARTIAL ZINC OR PLASTIC BULKHEAD MAY BE SUED AS ALTERNATE CONSTRUCTION JOINT, WITH THE PERMISSION OF THE ENGINEER, AT THE CONTRACTOR'S EXPENSE.

VERTICAL CONSTRUCTION JOINT KEYWAY IS NOT REQUIRED WHEN USING ALTERNATIVE CONSTRUCTION JOINT.

CARE IS TO BE USED IN CASTING CONCRETE AROUND BULKHEAD TO PREVENT DISLOCATION OR MISALIGNMENT OF THE BULKHEAD.

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WEST ABUTMENT DETAILS

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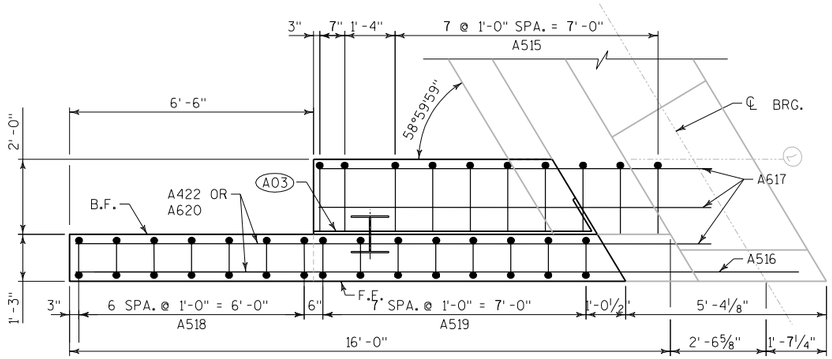
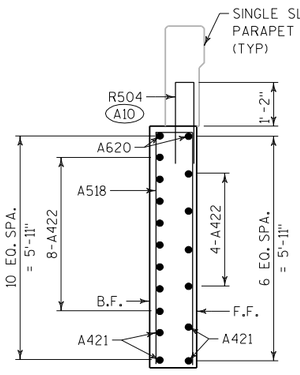
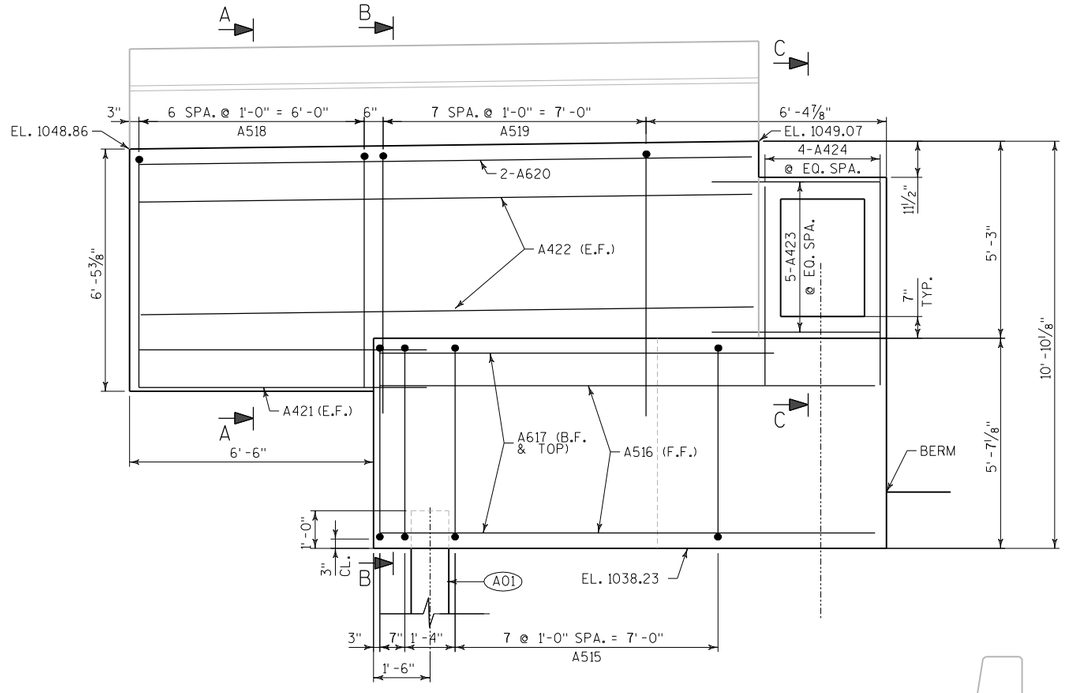


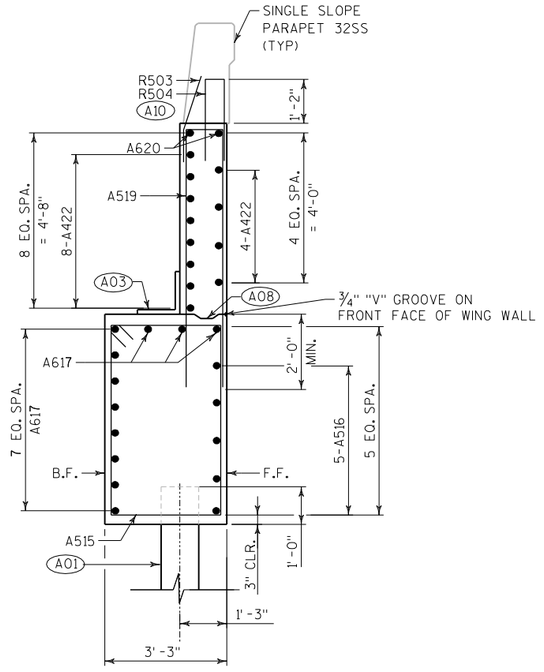
WING 1 PLAN



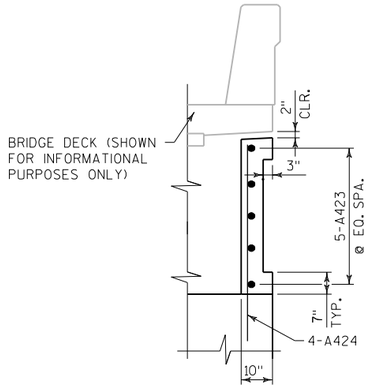
SECTION A-A



WING 1 ELEVATION
(FRONT FACE)



SECTION B-B



SECTION C-C
(SIDE WALL)

LEGEND

(A01) ABUTMENTS TO BE SUPPORTED ON HP 12X53 STEEL PILING DRIVEN TO A REQUIRED RESISTANCE OF 190 TONS PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC EQUATION. ESTIMATED 110'-0" LONG.

(A03) 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS AT BACKFACE.

(A08) OPTIONAL CONSTRUCTION JOINT FORMED BY 2" X 6" KEYWAY WITH MEMBRANE ON BACK FACE.

(X) INDICATES GIRDER NUMBER.

(A10) SEE SHEET 25 FOR ADDTIONAL PARAPET REINFORCMENT DETAILS.

NOTES

SEE SHEET 6 FOR BILL OF BARS AND BENDS

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-64-186

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ABUTMENT
WING WALL #1

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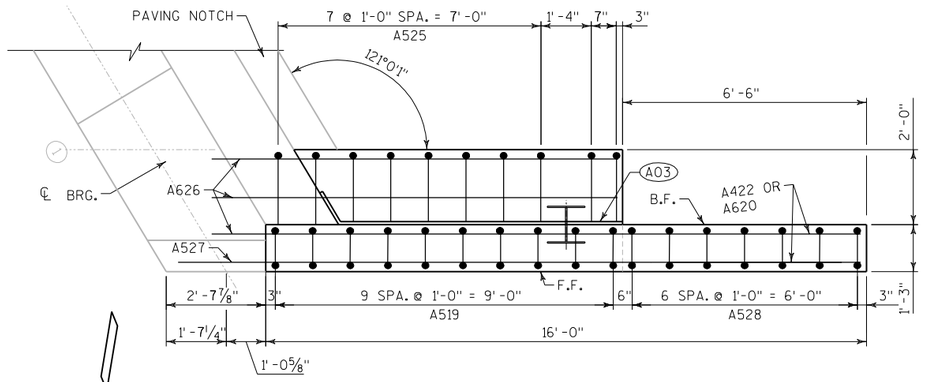
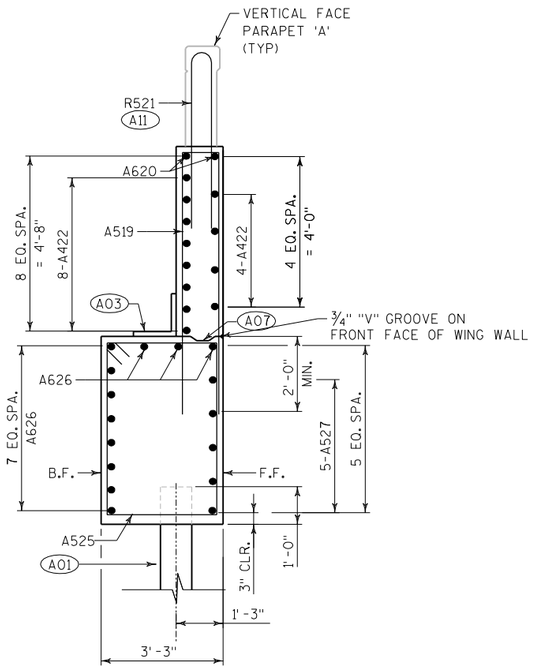
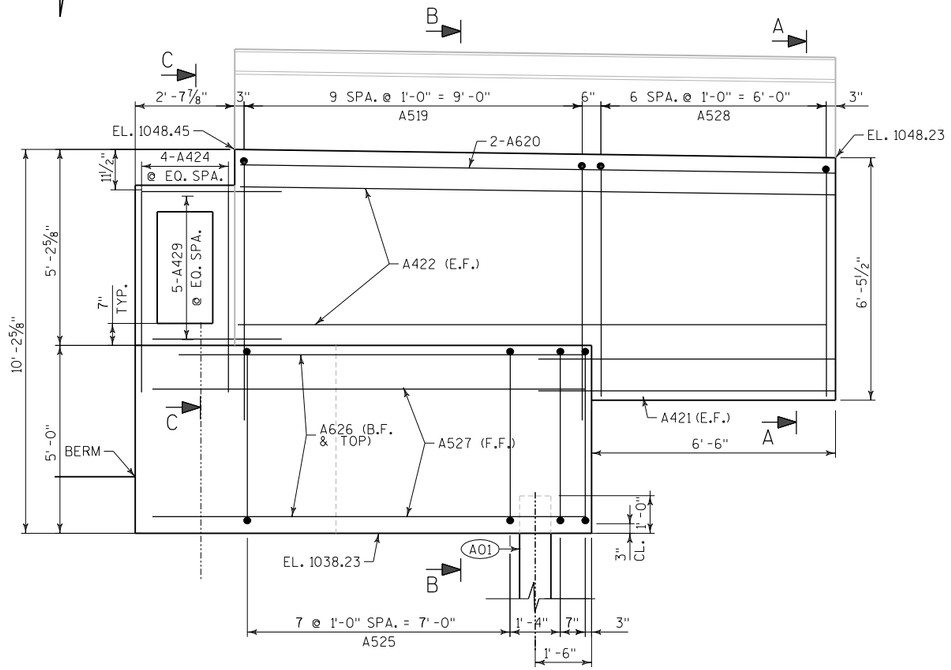


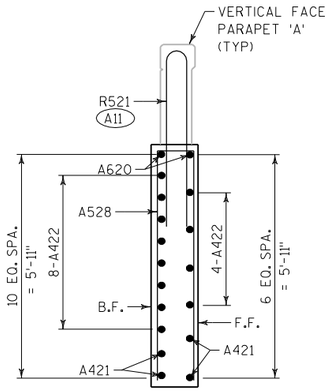
WING 2 PLAN



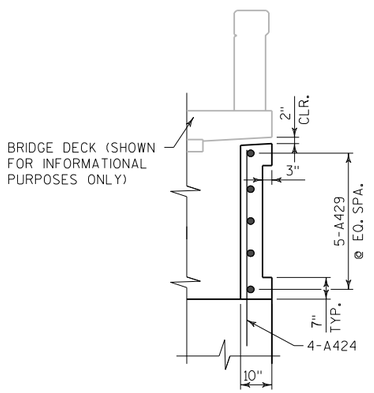
SECTION B-B



WING 2 ELEVATION
(FRONT FACE)



SECTION A-A



SECTION C-C
(SIDE WALL)

LEGEND

(A01) ABUTMENTS TO BE SUPPORTED ON HP 12X53 STEEL PILING DRIVEN TO A REQUIRED RESISTANCE OF 190 TONS PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC EQUATION. ESTIMATED 110'-0" LONG.

(A03) 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS AT BACKFACE.

(A07) OPTIONAL CONSTRUCTION JOINT FORMED BY 2" X 6" KEYWAY WITH MEMBRANE ON BACK FACE.

(X) INDICATES GIRDER NUMBER.

(A11) SEE SHEET 27 FOR ADDTIONAL PARAPET REINFORCMENT DETAILS.

NOTES

SEE SHEET 6 FOR BILL OF BARS AND BENDS

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-64-186

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ABUTMENT
WING WALL #2

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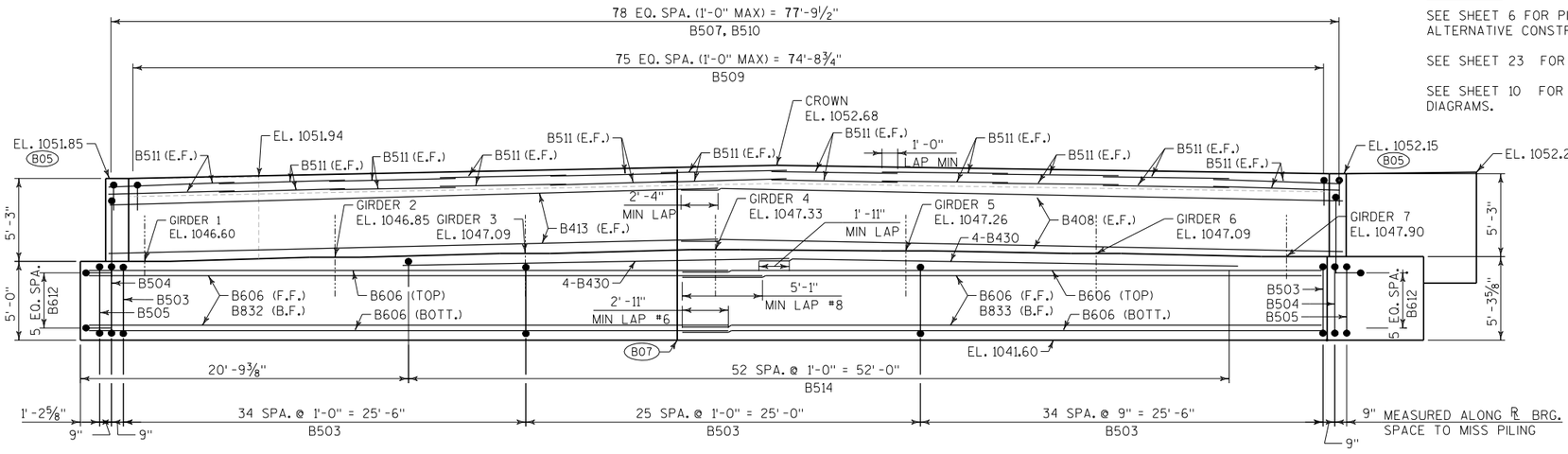
NOTES:

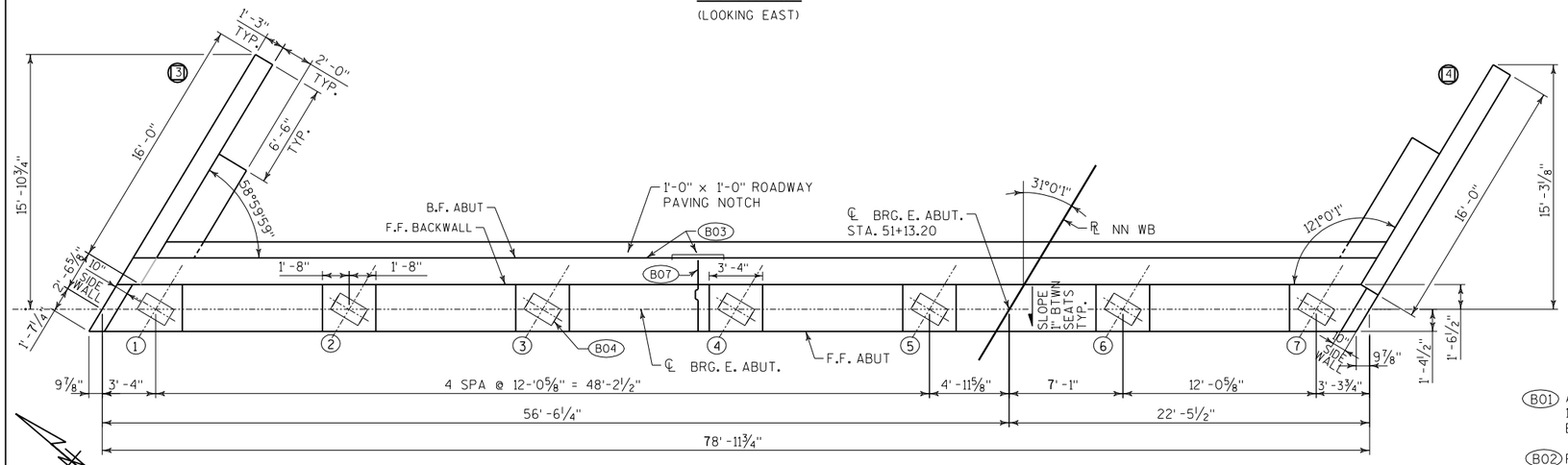
SEE SHEET 6 FOR PILE SPLICE DETAIL AND ALTERNATIVE CONSTRUCTION JOINT.

SEE SHEET 23 FOR BEARING PAD DETAIL.

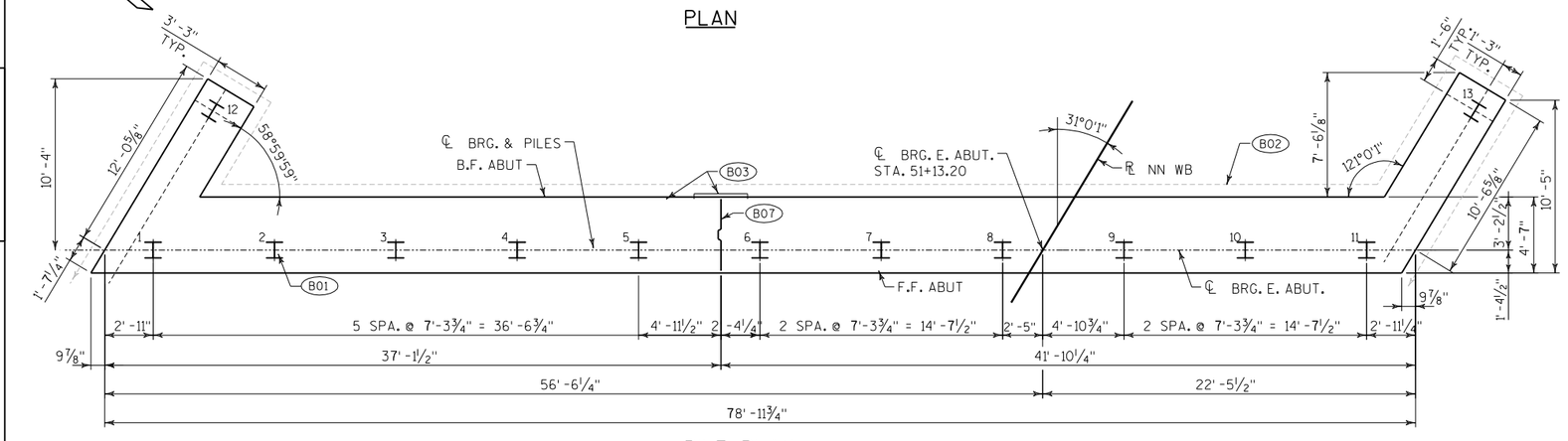
SEE SHEET 10 FOR BILL OF BARS AND BENDING DIAGRAMS.



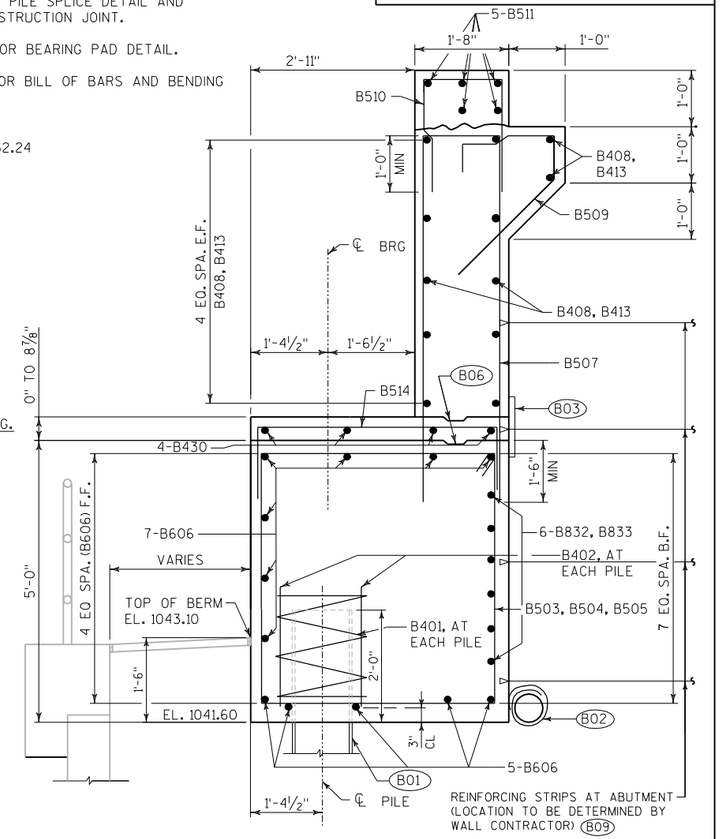
ELEVATION
(LOOKING EAST)



PLAN



PILE PLAN



SECTION THRU BODY

LEGEND:

(B01) ABUTMENTS TO BE SUPPORTED ON HP 12X53 STEEL PILING DRIVEN TO A REQUIRED RESISTANCE OF 190 TONS PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC EQUATION. ESTIMATED 110'-0" LONG.

(B02) PIPE UNDERDRAIN WRAPPED, 6-INCH. SLOPE 0.5% MIN TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT END AND CAP UPPER END. THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THE DETAIL SHOWN ON SHEET 6. THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE OUTFALL PIPE. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH (2) TWO OR MORE NO. 10X1-INCH STAINLESS SHEET METAL SCREWS AND SHALL BE INCLUDED IN BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".

(B03) 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS AT BACKFACE.

(B04) 2½" X 1'-2" X 2'-0" LAMINATED ELASTOMERIC BEARING PAD.

(B05) TOP OF WING ELEVATION IS GIVEN AT FRONT FACE OF BACK WALL.

(B06) KEYED CONSTRUCTION JOINT BY BEVELED 2" X 6".

(B07) KEYED CONST. JOINT FORMED BY BEVELED 2" X 8" WITH ¾" V-GROOVE. SEE SHEET 6 FOR ALTERNATIVE CONST. JOINT DETAIL. RUN BAR STEEL THRU JOINT.

(B09) REINFORCING STRIPS SHALL BE DESIGNED TO RESIST A NONFACTORED SUPERSTRUCTURE LONGITUDINAL HORIZONTAL LINE LOAD OF 1.68 K/LF OF ABUTMENT IN ADDITION TO THE LIVE LOAD SURCHARGE AND EARTH PRESSURE ON THE BACK OF ABUTMENT.

(X) INDICATES GIRDER NUMBER.

⬡ INDICATES WING WALL NUMBER.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
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STRUCTURE B-64-186

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EAST ABUTMENT

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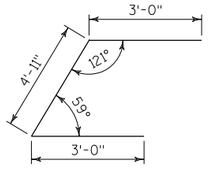
NOTES

SEE SHEET 9 FOR ABUTMENT PLAN AND ELEVATION.

SEE SHEET 23 FOR BEARING PAD DETAIL.

BILL OF BARS

BAR MARK	COAT	NO REQ'D	LENGTH	BENT	BAR SERIES	LOCATION	
B401	-	11	28'-0"	X	-	ABUTMENT PILES - 1 PER PILE	VERTICAL
B402	-	22	2'-3"	-	-	ABUTMENT PILES - 2 PER PILE	VERTICAL
B503	-	94	17'-9"	X	-	ABUTMENT BODY STIRRUPS	VERTICAL
B504	-	2	15'-7"	X	-	ABUTMENT BODY STIRRUPS - ENDS	VERTICAL
B505	-	2	13'-1"	X	-	ABUTMENT BODY STIRRUPS - ENDS	VERTICAL
B606	-	24	40'-9"	-	-	ABUTMENT BODY (F.F., TOP & BOTT.)	HORIZONTAL
B507	X	79	12'-3"	X	-	ABUTMENT BACKWALL	VERTICAL
B408	X	24	42'-4"	-	-	ABUTMENT BACKWALL	HORIZONTAL
B509	X	76	5'-9"	X	-	ABUTMENT BACKWALL	VERTICAL
B510	X	79	5'-1"	X	-	ABUTMENT BACKWALL	VERTICAL
B511	X	55	8'-1"	-	-	ABUTMENT BACKWALL	HORIZONTAL
B612	-	12	10'-4"	X	-	ABUTMENT BODY ENDS	HORIZONTAL
B413	X	24	38'-7"	-	-	ABUTMENT BACKWALL	HORIZONTAL
B514	-	53	7'-5"	X	-	ABUTMENT BODY	VERTICAL
B515	X	10	15'-7"	X	-	WING WALL 3	VERTICAL
B516	X	5	19'-2"	-	-	WING WALL 3 (FF)	HORIZONTAL
B617	X	11	10'-0"	-	-	WING WALL 3 (BF)	HORIZONTAL
B518	X	7	12'-4"	X	-	WING WALL 3 (TOP)	VERTICAL
B519	X	8	14'-6"	X	-	WING WALL 3 (TOP)	VERTICAL
B620	X	4	15'-8"	-	-	WING WALL 3 & 4 (TOP)	HORIZONTAL
B421	X	8	7'-9"	-	-	WING WALL 3 & 4 (TOP)	HORIZONTAL
B422	X	26	15'-8"	-	-	WING WALL 3 & 4 (TOP)	HORIZONTAL
B423	X	5	4'-0"	-	-	WING WALL 3 - SIDE WALL	HORIZONTAL
B424	X	8	5'-3"	-	-	WING WALL 3 & 4 - SIDE WALL	VERTICAL
B425	X	5	3'-6"	-	-	WING WALL 4 - SIDE WALL	HORIZONTAL
B626	X	11	10'-10"	-	-	WING WALL 4 (BF)	HORIZONTAL
B527	X	5	18'-1"	-	-	WING WALL 4 (FF)	HORIZONTAL
B528	X	10	14'-6"	X	-	WING WALL 4 (TOP)	VERTICAL
B529	X	7	12'-10"	X	-	WING WALL 4 (TOP)	VERTICAL
B430	-	12	27'-6"	-	-	ABUTMENT BODY	HORIZONTAL
B531	X	10	16'-1"	X	-	WING WALL 4	VERTICAL
B832	-	6	42'-11"	-	-	ABUTMENT BODY - NORTH END (B.F.)	HORIZONTAL
B833	-	6	40'-9"	-	-	ABUTMENT BODY - SOUTH END (B.F.)	HORIZONTAL



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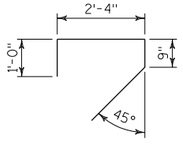

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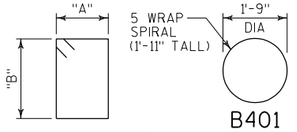
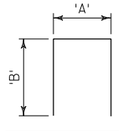


B401

BAR MARK	DIM. A	DIM. B
B503	4'-3"	4'-7"
B504	3'-0"	4'-7"
B505	1'-9"	4'-7"
B515	2'-11"	4'-7"
B531	2'-11"	4'-10"



BAR MARK	DIM. A	DIM. B
B507	1'-4"	5'-7"
B510	1'-4"	2'-0"
B514	4'-0"	1'-10"
B518	11"	6'-0"
B519	11"	7'-2"
B528	11"	7'-1"
B529	11"	6'-3"

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-64-186

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EAST ABUTMENT DETAILS

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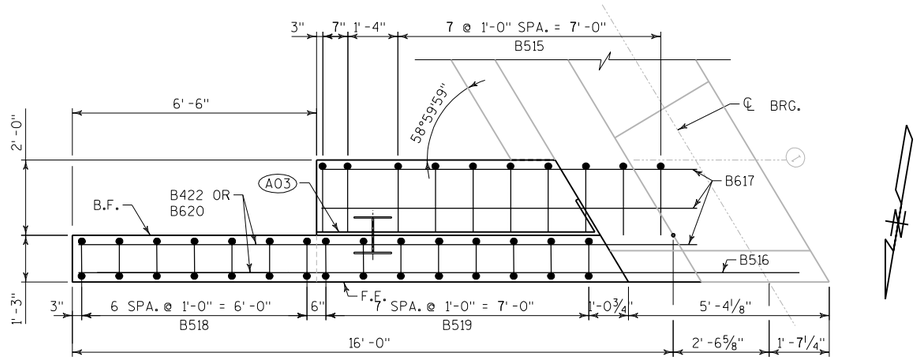
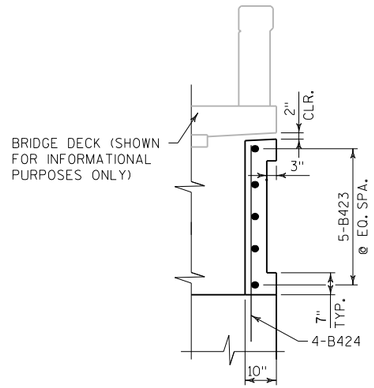
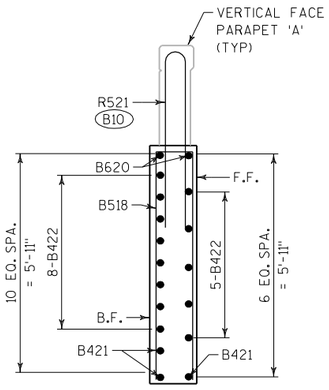


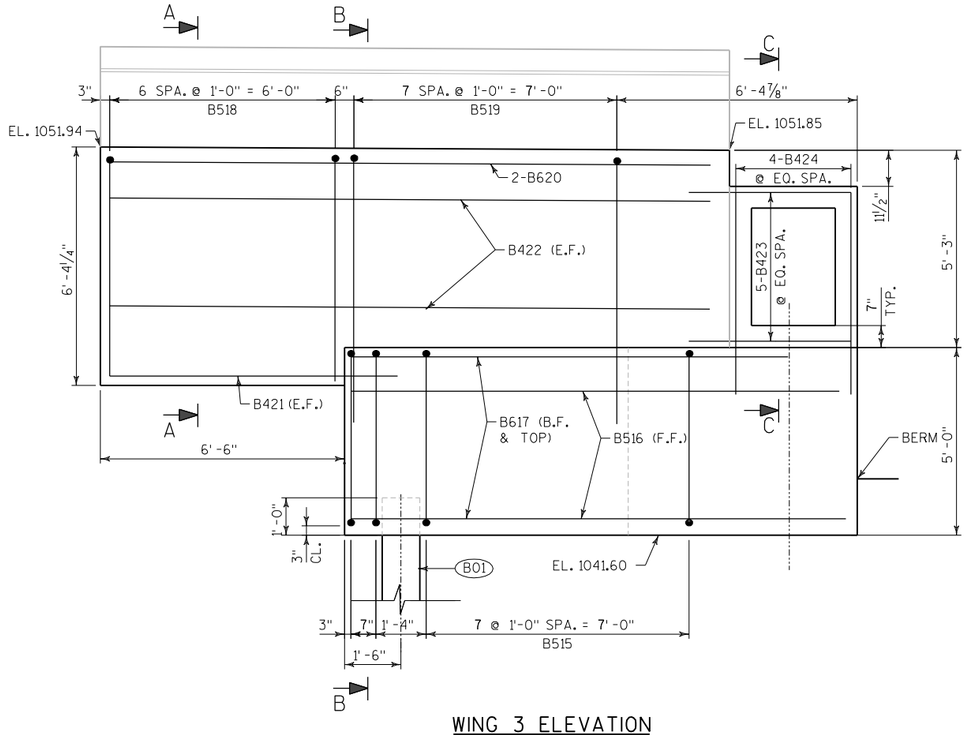
WING 3 PLAN



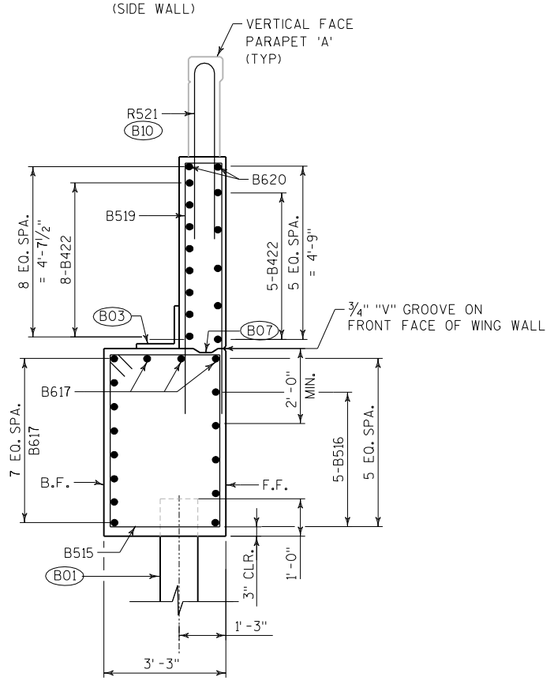
SECTION C-C
(SIDE WALL)



SECTION A-A



WING 3 ELEVATION
(FRONT FACE)



SECTION B-B

LEGEND

(B01) ABUTMENT TO BE SUPPORTED ON HP 12X53 STEEL PILING DRIVEN TO A REQUIRED RESISTANCE OF 190 TONS PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC EQUATION. ESTIMATED 110'-0" LONG.

(B03) 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS AT BACKFACE.

(B07) OPTIONAL CONSTRUCTION JOINT FORMED BY 2" X 6" KEYWAY WITH MEMBRANE ON BACK FACE.

(X) INDICATES GIRDER NUMBER.

(B10) SEE SHEET 27 FOR ADDTIONAL PARAPET REINFORCMENT DETAILS.

NOTES

SEE SHEET 10 FOR BILL OF BARS AND BENDS

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-64-186

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ABUTMENT
WING WALL #3

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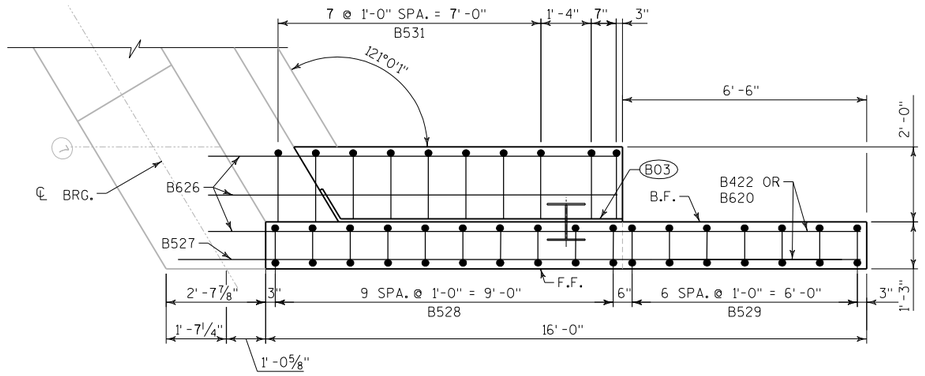
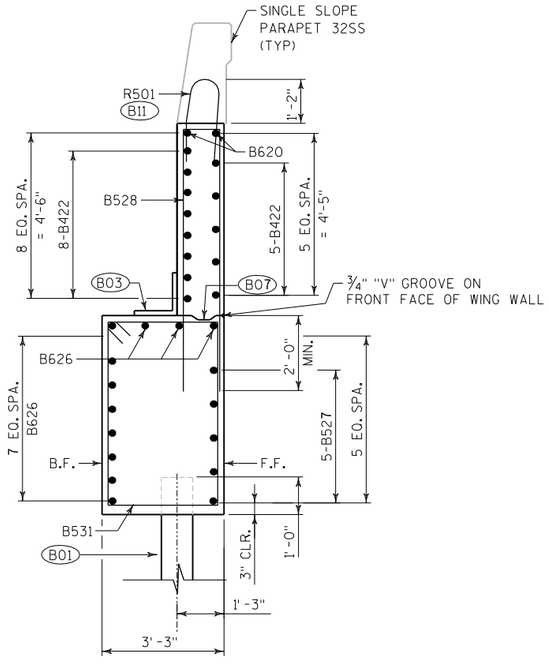
5/31/2015

STATE PROJECT NUMBER

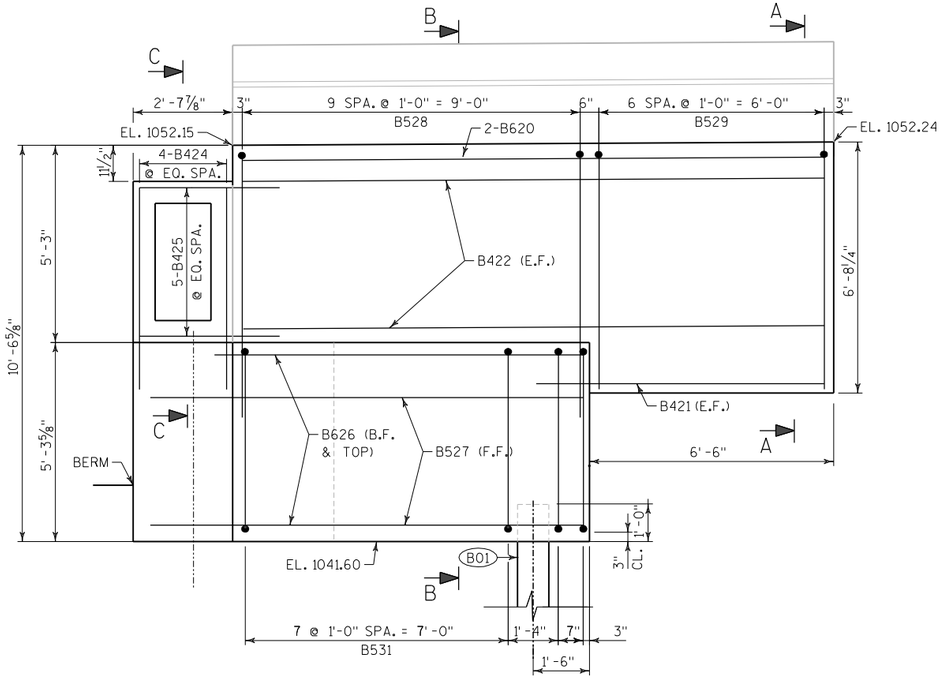
1080-13-70



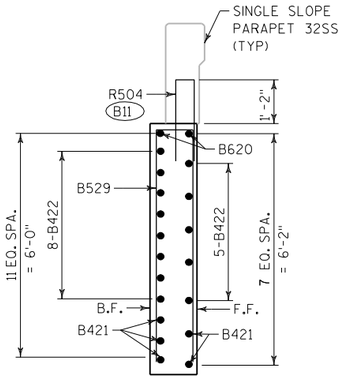
WING 4 PLAN



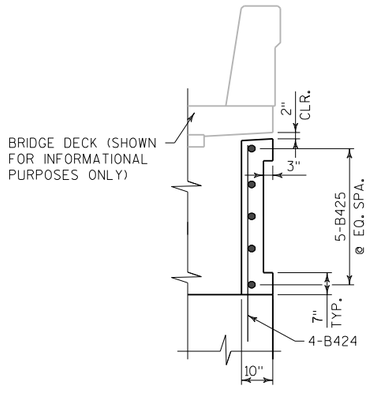
SECTION B-B



WING 4 ELEVATION
(FRONT FACE)



SECTION A-A



SECTION C-C
(SIDE WALL)

LEGEND

(B01) ABUTMENTS TO BE SUPPORTED ON HP 12X53 STEEL PILING DRIVEN TO A REQUIRED RESISTANCE OF 190 TONS PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC EQUATION. ESTIMATED 110'-0" LONG.

(B03) 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS AT BACKFACE.

(B07) OPTIONAL CONSTRUCTION JOINT FORMED BY 2" X 6" KEYWAY WITH MEMBRANE ON BACK FACE.

(X) INDICATES GIRDER NUMBER.

(B11) SEE SHEET 25 FOR ADDTIONAL PARAPET REINFORCMENT DETAILS.

NOTES

SEE SHEET 10 FOR BILL OF BARS AND BENDS

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-64-186

DRAWN BY AMD | PLANS CK'D. SJG

ABUTMENT
WING WALL #4

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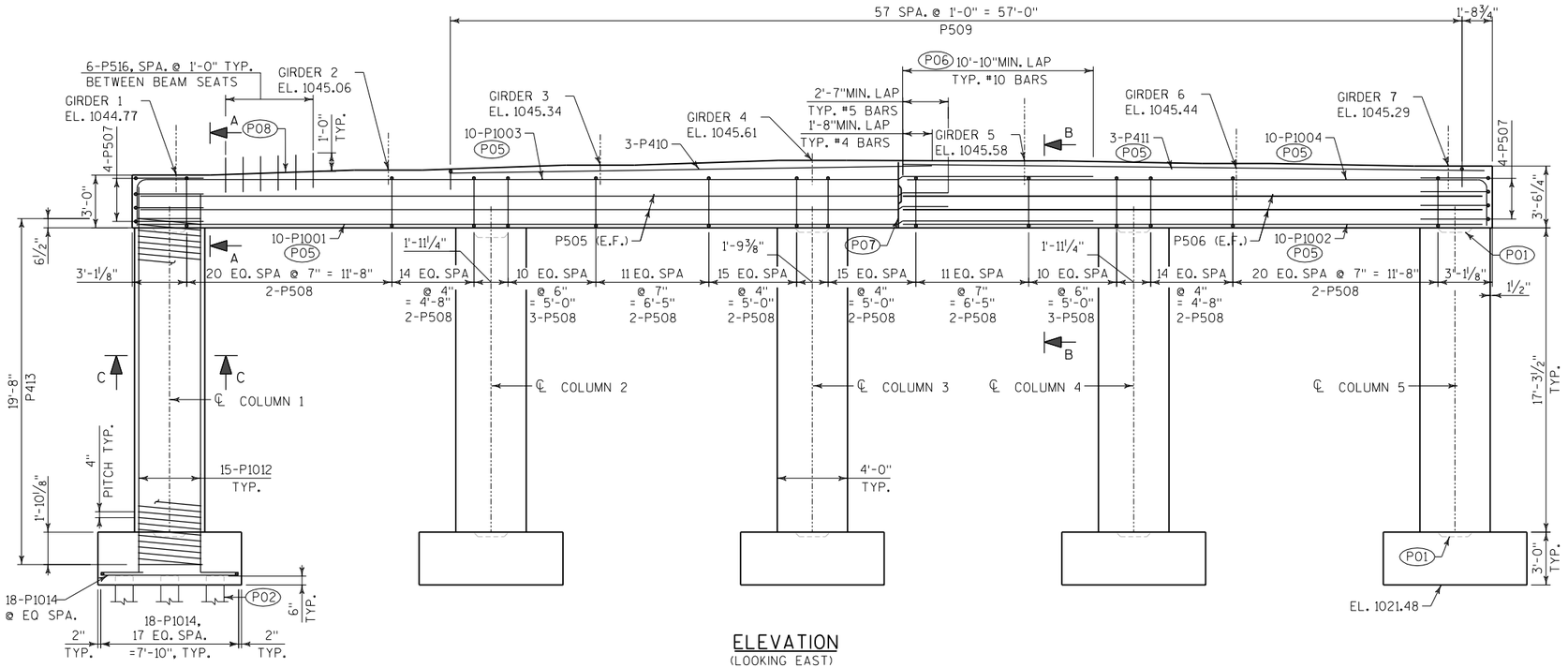
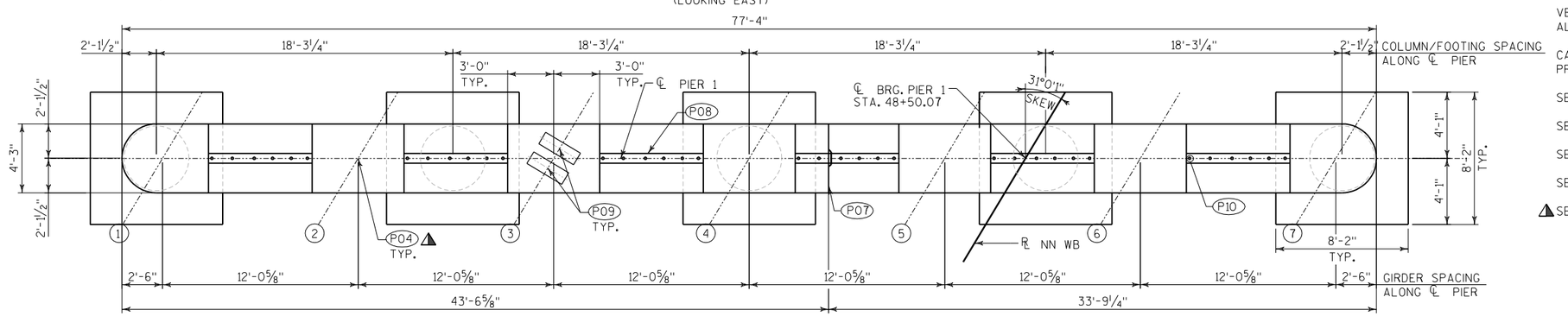
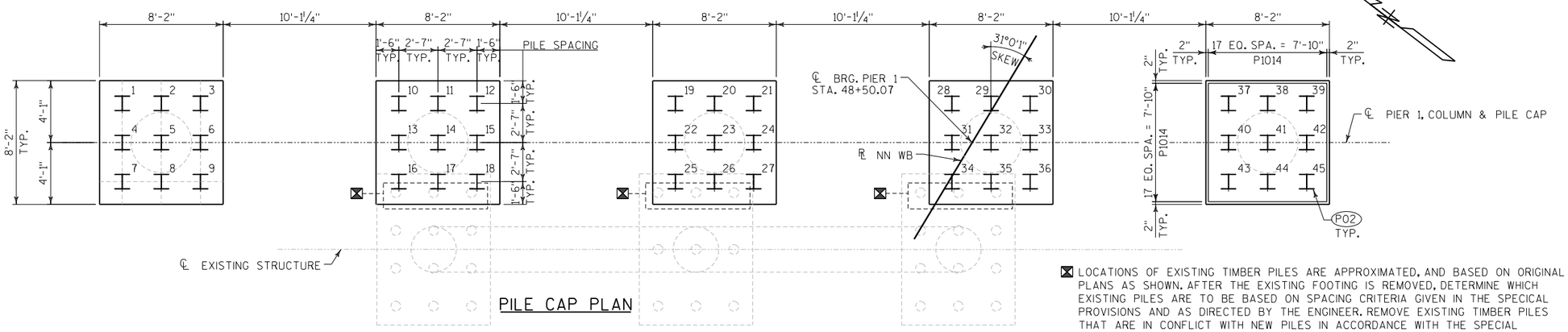
STATE PROJECT NUMBER
1080-13-70



ELEVATION
(LOOKING EAST)



PIER 1 PLAN



PILE CAP PLAN

⊠ LOCATIONS OF EXISTING TIMBER PILES ARE APPROXIMATED, AND BASED ON ORIGINAL PLANS AS SHOWN. AFTER THE EXISTING FOOTING IS REMOVED, DETERMINE WHICH EXISTING PILES ARE TO BE BASED ON SPACING CRITERIA GIVEN IN THE SPECICAL PROVISIONS AND AS DIRECTED BY THE ENGINEER. REMOVE EXISTING TIMBER PILES THAT ARE IN CONFLICT WITH NEW PILES IN ACCORDANCE WITH THE SPECIAL PROVISIONS. CUT OFF ALL REMAINING EXISTING TIMBER PILES 6" BELOW BOTTOM OF PROPOSED FOOTING.

LEGEND

(P01) KEYED CONSTRUCTION JOINT FORMED BY SURFACED BEVELED 1'-3" X 1'-3" X 2", TYPICAL TOP AND BOTTOM OF ALL COLUMNS.

(P02) PIER TO BE SUPPORTED ON HP 12X53 STEEL PILING DRIVEN TO A REQUIRED RESISTANCE OF 220 TONS PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC EQUATION. ESTIMATED 115'-0" LONG.

(P04) ELEVATIONS ARE GIVEN AT THE TOP OF THE CONCRETE AT THE INTERSECTION OF THE ℄ GIRDER AND ℄ PIER.

(P05) OFFSET BARS AT ENDS OF PIER CAP AS REQUIRED TO MAINTAIN EDGE CLEARANCES.

(P06) LAPS SHOWN ARE MINIMUM LENGTH & LOCATION OF LAPS WILL VARY BASED ON VARIABLE EXTENSIONS OF BARS INTO RADIUS OF PIER CAP.

(P07) VERT. CONST. JOINT FORMED BY SURFACED BEVELED 2" X 6" X 2'-6" KEYWAY

(P08) 2" X 6" BEVELED KEYWAY BETWEEN BEAM SEATS.

(P09) ½" THICK ELASTOMERIC BEARING PAD. SEE 'SUPERSTRUCTURE DETAILS' SHEET FOR DETAILS.

(P10) P516 BARS @ 1'-0" CTRS. BETWEEN BEAM SEATS. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-0" INTO CONCRETE)

NOTES

PARTIAL ZINC OR PLASTIC BULKHEAD MAY BE USED AS ALTERNATE CONSTRUCTION JOINT. WITH THE PERMISSION OF THE ENGINEER, AT THE CONTRACTOR'S EXPENSE.

VERTICAL CONSTRUCTION JOINT KEYWAY IS NOT REQUIRED WHEN USING ALTERNATE CONSTRUCTION JOINT.

CARE IS TO BE USED IN CASTING CONCRETE AROUND BULKHEAD TO PREVENT DISLOCATION OR MISALIGNMENT OF THE BULKHEAD.

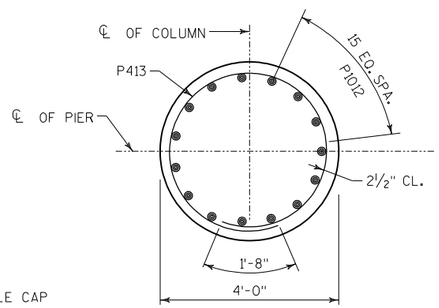
SEE SHEET 6 FOR PILE SPLICE DETAIL.

SEE SHEET 16 FOR BILL OF BARS.

SEE SHEET 16 FOR SECTIONS A-A & B-B.

SEE SHEET 16 FOR ALTERNATE CONSTRUCTION JOINT.

⚠ SEE SHEET 16 FOR SEAT ELEVATION CORRECTIONS.



SECTION C-C

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-64-186

DRAWN BY AMD | PLANS CK'D. SJG

PIER 1

SHEET 13 OF 31

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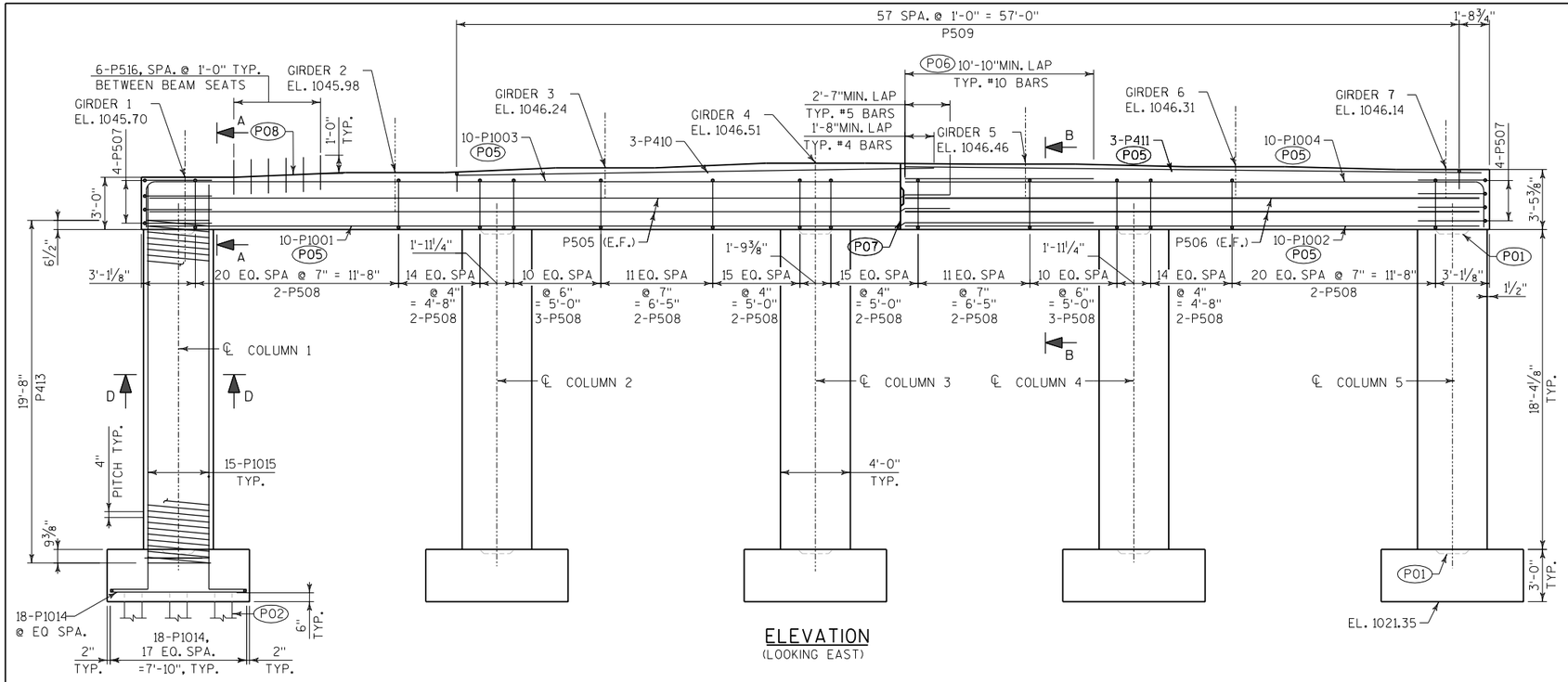
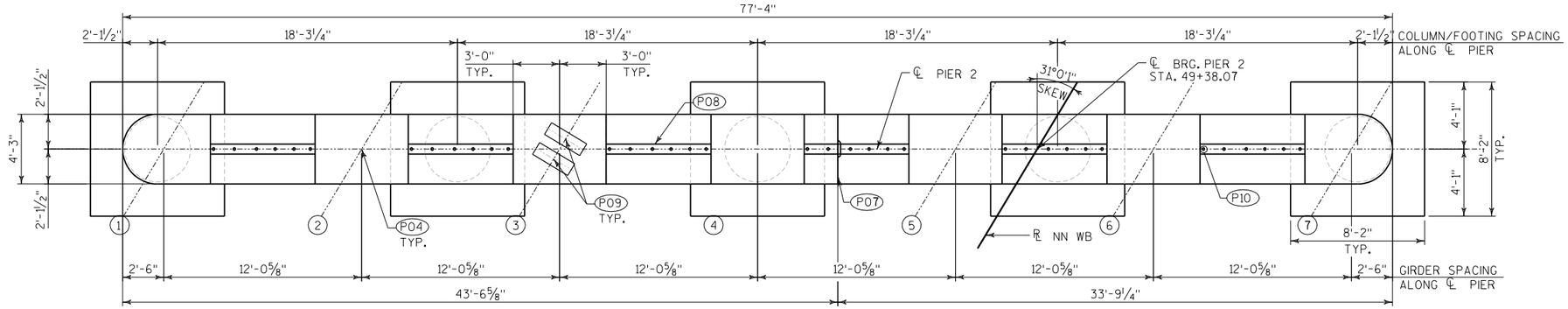
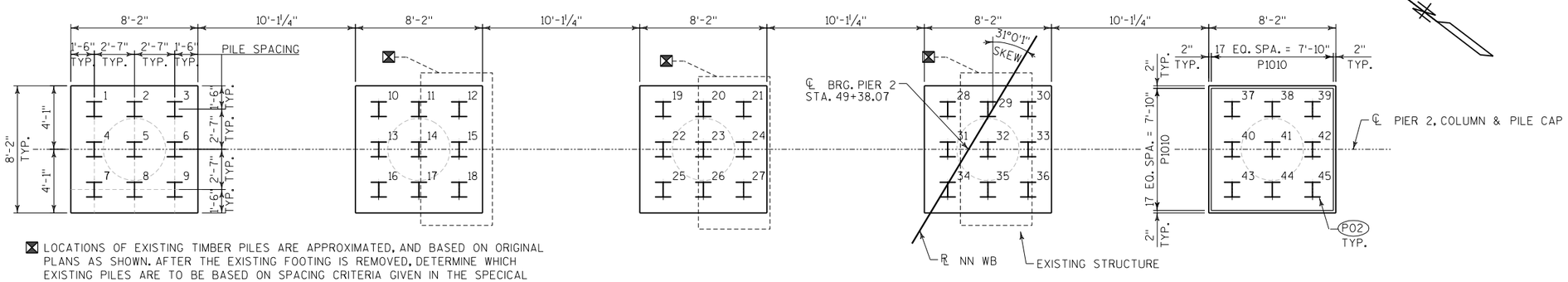
STATE PROJECT NUMBER
1080-13-70



ELEVATION
(LOOKING EAST)



PIER 2 PLAN



☒ LOCATIONS OF EXISTING TIMBER PILES ARE APPROXIMATED, AND BASED ON ORIGINAL PLANS AS SHOWN. AFTER THE EXISTING FOOTING IS REMOVED, DETERMINE WHICH EXISTING PILES ARE TO BE BASED ON SPACING CRITERIA GIVEN IN THE SPECICAL PROVISIONS AND AS DIRECTED BY THE ENGINEER. REMOVE EXISTING TIMBER PILES THAT ARE IN CONFLICT WITH NEW PILES IN ACCORDANCE WITH THE SPECIAL PROVISIONS. CUT OFF ALL REMAINING EXISTING TIMBER PILES 6" BELOW BOTTOM OF PROPOSED FOOTING.

PILE CAP PLAN

LEGEND

(P01) KEYED CONSTRUCTION JOINT FORMED BY SURFACED BEVELED 1'-3" X 1'-3" X 2", TYPICAL TOP AND BOTTOM OF ALL COLUMNS.

(P02) PIER TO BE SUPPORTED ON HP 12X53 STEEL PILING DRIVEN TO A REQUIRED RESISTANCE OF 220 TONS PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC EQUATION. ESTIMATED 115'-0" LONG.

(P04) ELEVATIONS ARE GIVEN AT THE TOP OF THE CONCRETE AT THE INTERSECTION OF THE ℄ GIRDER AND ℄ PIER.

(P05) OFFSET BARS AT ENDS OF PIER CAP AS REQUIRED TO MAINTAIN EDGE CLEARANCES.

(P06) LAPS SHOWN ARE MINIMUM LENGTH & LOCATION OF LAPS WILL VARY BASED ON VARIABLE EXTENSIONS OF BARS INTO RADIUS OF PIER CAP.

(P07) VERT. CONST. JOINT FORMED BY SURFACED BEVELED 2" X 6" X 2'-6" KEYWAY

(P08) 2" X 6" BEVELED KEYWAY BETWEEN BEAM SEATS.

(P09) ½" THICK ELASTOMERIC BEARING PAD, SEE 'SUPERSTRUCTURE DETAILS' SHEET FOR DETAILS.

(P10) P516 BARS @ 1'-0" CTRS. BETWEEN BEAM SEATS. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-0" INTO CONCRETE)

NOTES

PARTIAL ZINC OR PLASTIC BULKHEAD MAY BE USED AS ALTERNATE CONSTRUCTION JOINT. WITH THE PERMISSION OF THE ENGINEER, AT THE CONTRACTOR'S EXPENSE.

VERTICAL CONSTRUCTION JOINT KEYWAY IS NOT REQUIRED WHEN USING ALTERNATE CONSTRUCTION JOINT.

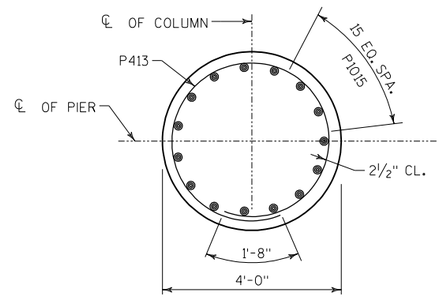
CARE IS TO BE USED IN CASTING CONCRETE AROUND BULKHEAD TO PREVENT DISLOCATION OR MISALIGNMENT OF THE BULKHEAD.

SEE SHEET 6 FOR PILE SPLICE DETAIL.

SEE SHEET 16 FOR BILL OF BARS.

SEE SHEET 16 FOR SECTIONS A-A & B-B.

SEE SHEET 16 FOR ALTERNATE CONSTRUCTION JOINT



SECTION D-D

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-64-186

DRAWN BY	AMD	PLANS CK'D.	SJG

PIER 2

SHEET 14 OF 31

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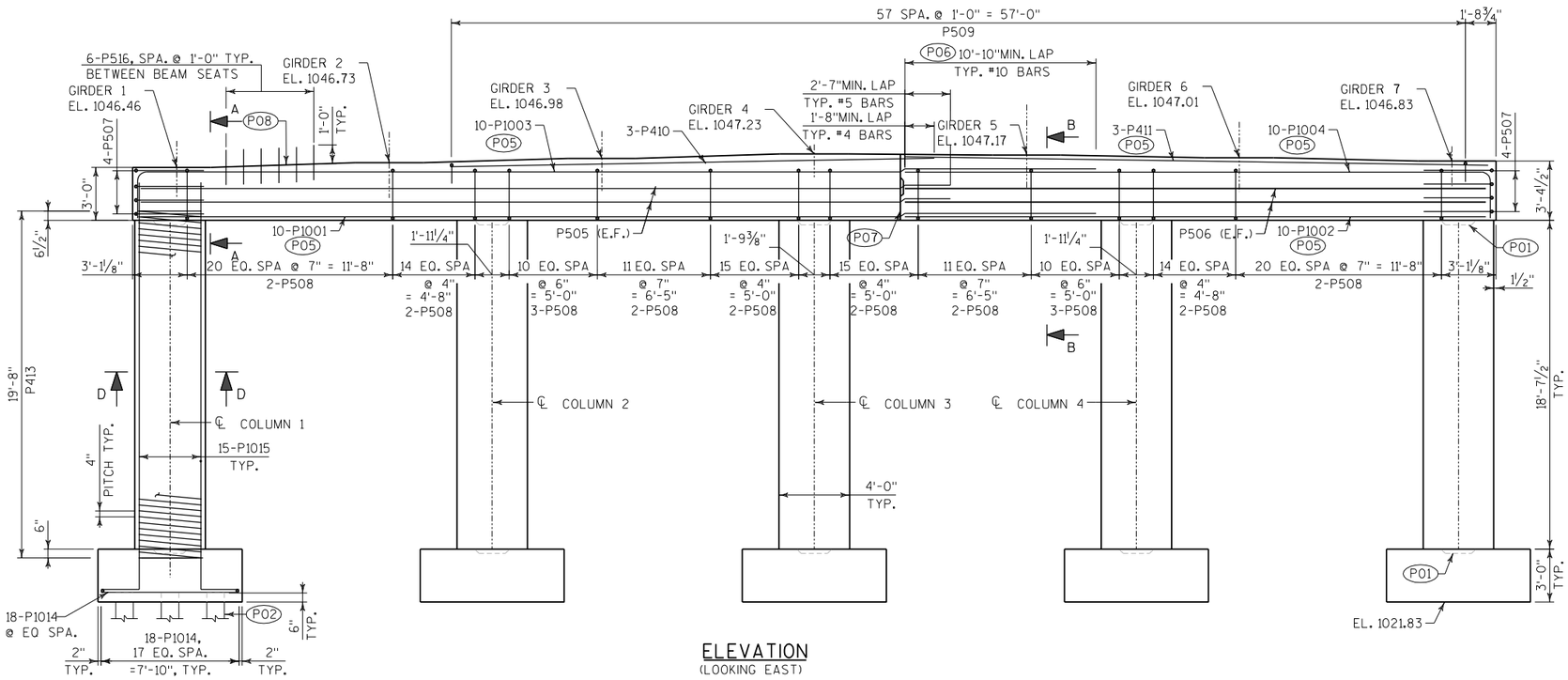
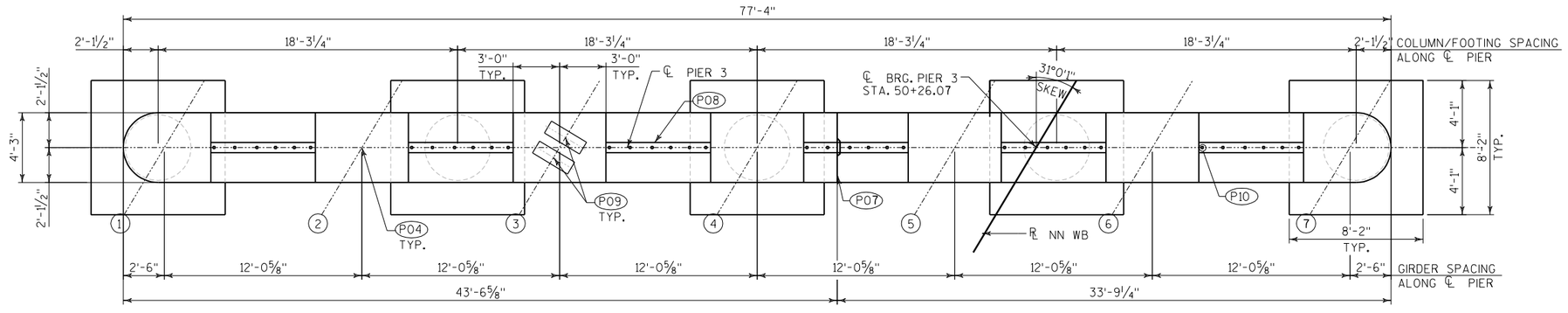
6/5/2015

STATE PROJECT NUMBER
1080-13-70

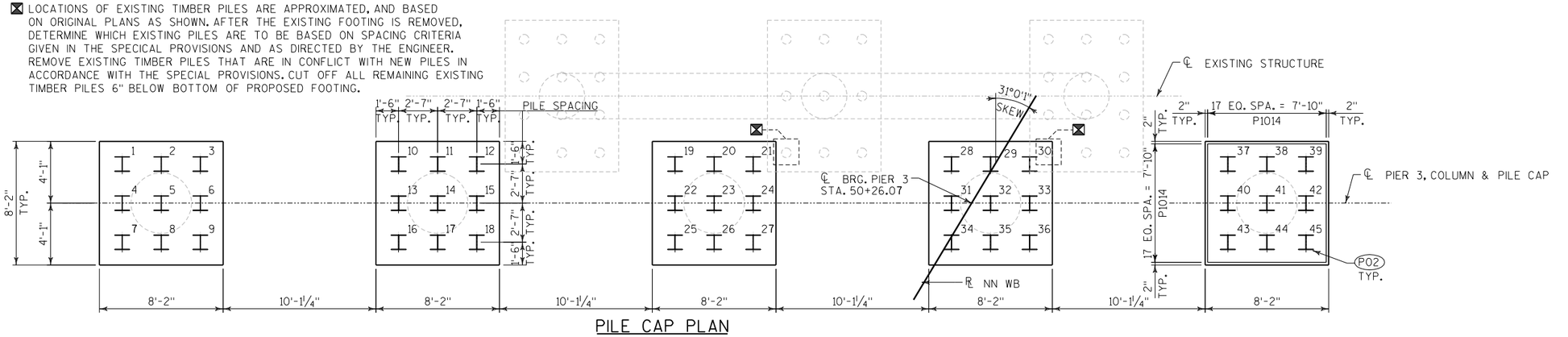


ELEVATION
(LOOKING EAST)



PIER 3 PLAN

☒ LOCATIONS OF EXISTING TIMBER PILES ARE APPROXIMATED, AND BASED ON ORIGINAL PLANS AS SHOWN. AFTER THE EXISTING FOOTING IS REMOVED, DETERMINE WHICH EXISTING PILES ARE TO BE BASED ON SPACING CRITERIA GIVEN IN THE SPECICAL PROVISIONS AND AS DIRECTED BY THE ENGINEER. REMOVE EXISTING TIMBER PILES THAT ARE IN CONFLICT WITH NEW PILES IN ACCORDANCE WITH THE SPECIAL PROVISIONS. CUT OFF ALL REMAINING EXISTING TIMBER PILES 6" BELOW BOTTOM OF PROPOSED FOOTING.



PILE CAP PLAN

LEGEND

(P01) KEYED CONSTRUCTION JOINT FORMED BY SURFACED BEVELED 1'-3" X 1'-3" X 2", TYPICAL TOP AND BOTTOM OF ALL COLUMNS.

(P02) PIER TO BE SUPPORTED ON HP 12X53 STEEL PILING DRIVEN TO A REQUIRED RESISTANCE OF 220 TONS PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC EQUATION. ESTIMATED 115'-0" LONG.

(P04) ELEVATIONS ARE GIVEN AT THE TOP OF THE CONCRETE AT THE INTERSECTION OF THE ℄ GIRDER AND ℄ PIER.

(P05) OFFSET BARS AT ENDS OF PIER CAP AS REQUIRED TO MAINTAIN EDGE CLEARANCES.

(P06) LAPS SHOWN ARE MINIMUM LENGTH & LOCATION OF LAPS WILL VARY BASED ON VARIABLE EXTENSIONS OF BARS INTO RADIUS OF PIER CAP.

(P07) VERT. CONST. JOINT FORMED BY SURFACED BEVELED 2" X 6" X 2'-6" KEYWAY

(P08) 2" X 6" BEVELED KEYWAY BETWEEN BEAM SEATS.

(P09) ½" THICK ELASTOMERIC BEARING PAD, SEE 'SUPERSTRUCTURE DETAILS' SHEET FOR DETAILS.

(P10) P516 BARS @ 1'-0" CTRS. BETWEEN BEAM SEATS. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-0" INTO CONCRETE)

NOTES

PARTIAL ZINC OR PLASTIC BULKHEAD MAY BE USED AS ALTERNATE CONSTRUCTION JOINT. WITH THE PERMISSION OF THE ENGINEER, AT THE CONTRACTOR'S EXPENSE.

VERTICAL CONSTRUCTION JOINT KEYWAY IS NOT REQUIRED WHEN USING ALTERNATE CONSTRUCTION JOINT.

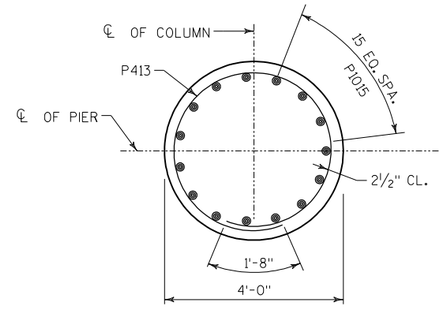
CARE IS TO BE USED IN CASTING CONCRETE AROUND BULKHEAD TO PREVENT DISLOCATION OR MISALIGNMENT OF THE BULKHEAD.

SEE SHEET 6 FOR PILE SPLICE DETAIL.

SEE SHEET 16 FOR BILL OF BARS.

SEE SHEET 16 FOR SECTIONS A-A & B-B.

SEE SHEET 16 FOR ALTERNATE CONSTRUCTION JOINT



SECTION D-D

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-64-186

DRAWN BY AMD | PLANS CK'D. SJG

PIER 3

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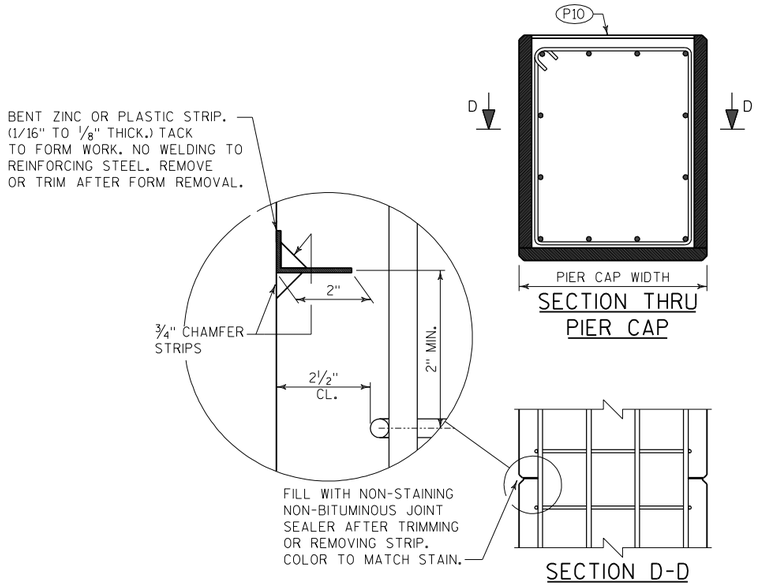
6/5/2015



ALTERNATE CONSTRUCTION JOINT AT PIER CAP

ALTERNATE CONSTRUCTION JOINT NOTES

PARTIAL ZINC OR PLASTIC BULKHEAD MAY BE USED AS ALTERNATE CONSTRUCTION JOINT, WITH THE PERMISSION OF THE ENGINEER, AT THE CONTRACTOR'S EXPENSE.

VERTICAL CONSTRUCTION JOINT KEYWAY IS NOT REQUIRED WHEN USING ALTERNATE CONSTRUCTION JOINT.

CARE IS TO BE USED IN CASTING CONCRETE AROUND BULKHEAD TO PREVENT DISLOCATION OR MISALIGNMENT OF THE BULKHEAD.

(P10) USE A JOINT TOOL TO CONSTRUCT A CONTRACTION JOINT APPROXIMATELY 1/2" DEEP.

BILL OF BARS

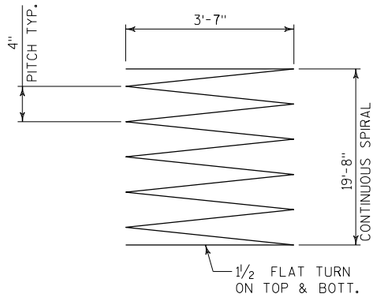
BAR MARK	COAT	PIER 1	PIER 2	PIER 3	TOTAL NO. REQ'D	LENGTH	BENT	BAR SERIES ⚠	LOCATION	
P1001	X	10	10	10	30	53'-7"	-	X	CAP - BOTT (N. END)	HORIZONTAL
P1002	X	10	10	10	30	32'-6"	-	X	CAP - BOTT (S. END)	HORIZONTAL
P1003	X	10	10	10	30	54'-10"	X	X	CAP - TOP (N. END)	HORIZONTAL
P1004	X	10	10	10	30	33'-9"	X	X	CAP - TOP (S. END)	HORIZONTAL
P505	X	4	4	4	12	44'-6"	-	-	CAP - SIDES (N. END)	HORIZONTAL
P506	X	4	4	4	12	31'-8"	-	-	CAP - SIDES (S. END)	HORIZONTAL
P507	X	8	8	8	24	9'-8"	X	-	CAP - STIRRUPS, ENDS	HORIZONTAL
P508	X	310	310	310	930	10'-5"	X	-	CAP - STIRRUPS	VERTICAL
P509	X	58	58	58	174	6'-11"	X	-	CAP	VERTICAL
P410	X	3	3	3	9	28'-8"	-	-	CAP TOP (N. END)	HORIZONTAL
P411	X	3	3	3	9	23'-11"	-	-	CAP TOP (S. END)	HORIZONTAL
P1012	X	75	-	-	75	24'-1"	X	-	COLUMN	VERTICAL
P413	X	5	5	5	15	690'-2"	X	-	COLUMN - STIRRUP	HORIZONTAL
P1014	-	180	180	180	540	7'-10"	-	-	PILE CAP	HORIZONTAL
P1015	X	-	75	75	150	24'-10"	X	-	COLUMN	VERTICAL
P516	X	36	36	36	108	7'-10"	-	-	CAP - DOWEL BARS	VERTICAL
P407	X									

⚠ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

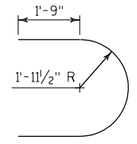
BAR SERIES TABLE

BUNDLE AND TAG EACH SERIES SEPARATELY

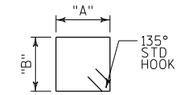
BAR MARK	NO. REQ'D	LENGTH
P1001	6 SERIES OF 5	52'-9" TO 54'-5"
P1002	6 SERIES OF 5	31'-7" TO 33'-4"
P1003	6 SERIES OF 5	54'-0" TO 55'-8"
P1004	6 SERIES OF 5	32'-10" TO 34'-7"



P413

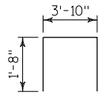


P507



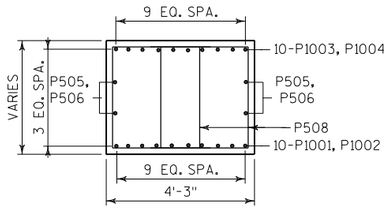
MARK	"A"	"B"
P508	2'-4"	2'-7"

P1003, P1004

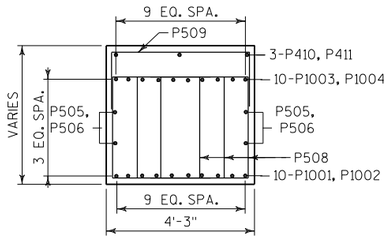


P509

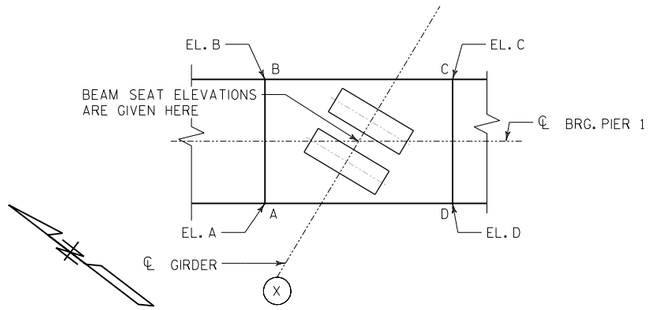
P1012, P1015



SECTION A-A



SECTION B-B



SEAT ELEVATION CORRECTIONS*

* VALUES ARE IN FEET. ADD THESE VALUES TO THE SEAT ELEVATIONS SHOWN ON SHEET 13, PIER 1 TO OBTAIN ELEVATIONS OF POINTS A, B, C, & D.

GIRDER	EL. A	EL. B	EL. C	EL. D
1	-0.02	0.00	0.06	0.00
2 - 7	-0.02	0.00	0.05	0.00

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-64-186

DRAWN BY AMD | PLANS CK'D. SJG

PIER DETAILS

SHEET 16 OF 31

494

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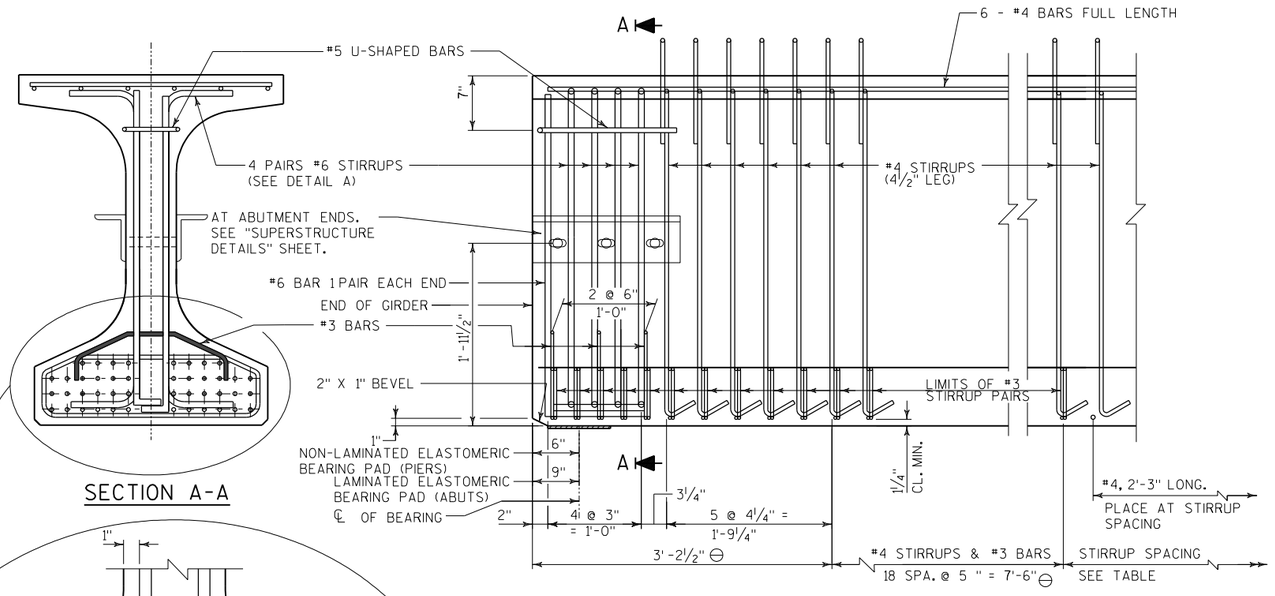
8

STATE PROJECT NUMBER
1080-13-70



SECTION A-A

GIRDER NOTES

THE GIRDERS SHALL BE PROVED WITH A SUITABLE LIFTING DEVICE FOR HANDLING AND ERECTING THE GIRDERS.

ALL GIRDERS SHALL BE CAST FULL LENGTH AS SHOWN.

STRANDS SHALL BE FLUSH WITH END OF GIRDER. FOR GIRDER ENDS EMBEDDED COMPLETELY IN CONCRETE, END OF STRANDS SHALL BE COATED WITH NON-BITUMINOUS JOINT SEALER. FOR GIRDER ENDS THAT ARE FINALLY EXPOSED, COAT THE GIRDER ENDS, EXPOSED STRAND ENDS AND ALL NON-BONDING SURFACES WITHIN 2 FEET OF THE GIRDER ENDS WITH A NON-PIGMENTED EPOXY CONFORMING TO AASHTO M-235 TYPE III, GRADE 2, CLASS B OR C. THE EPOXY SHALL BE APPLIED AT LEAST 3 DAYS AFTER MOIST CURING HAS CEASED AND PRIOR TO THE APPLICATION OF THE SEALER.

DO NOT APPLY CONCRETE SEALER TO SURFACES RECEIVING APPLICATION OF CONCRETE STAINING.

TOP OF GIRDER TO BE ROUGH FLOATED AND BROOMED TRANSVERSELY FOR BONDING TO THE SLAB, EXCEPT THE OUTSIDE 8" OF GIRDER, WHICH SHALL RECEIVE A SMOOTH FINISH. AN APPROVED CONCRETE SEALER SHALL BE APPLIED TO ALL SMOOTH SURFACES INCLUDING THE OUTSIDE 8" OF THE TOP FLANGE.

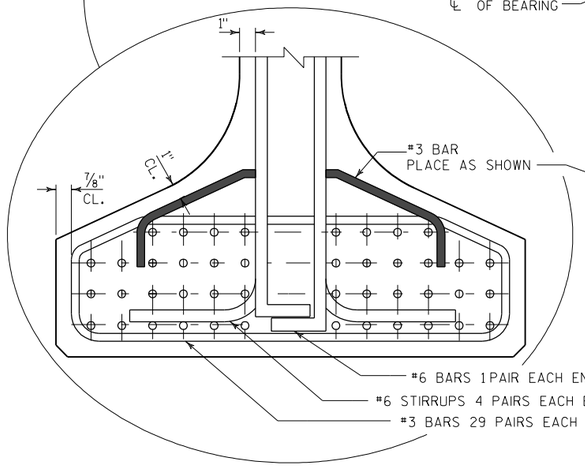
SPACING SHOWN FOR #4 STIRRUPS IS FOR GRADE 60 REINFORCEMENT.

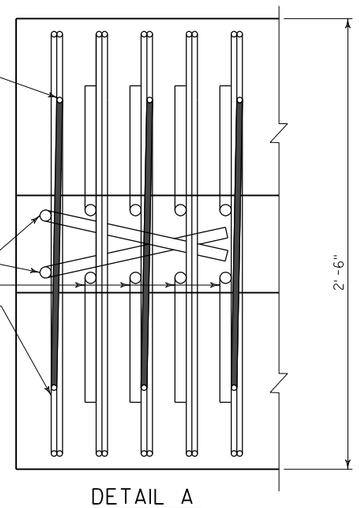
AN ALTERNATE EQUIVALENT OF WELDED WIRE FABRIC (WWF) ASTM A497 MAY BE SUBSTITUTED FOR THE STIRRUP REINFORCEMENT SHOWN, UPON APPROVAL OF THE STRUCTURES DEVELOPMENT SECTION.

ALL ITEMS SHOWN SHALL BE INCLUDED IN THE BID ITEM "PRESTRESSED GIRDER TYPE I45W-INCH."

⊖ DETAIL TYPICAL AT EACH END

FOR DIAPHRAGM INSERT & CONNECTION DETAILS SEE "STEEL DIAPHRAGM" SHEET.





GIRDER END

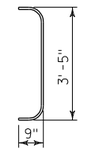
DETAIL A
BOTTOM FLANGE

GIRDER DATA

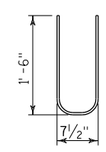
SPAN NO.	GIRDER NO.	GIRDER LENGTH "L"	DEAD LOAD DEFL. (IN.) 1/10	2/10	3/10	4/10	5/10	CONC. STRGTH. f'c (P.S.I.)	"P" (IN.)	DIA. OF STRAND (IN.)	DRAPED PATTERN TOTAL NO. OF STRANDS	f'ci (P.S.I.) *	(IN.) "A"	"B" MIN.	"B" MAX.	"C"
1	1	87'-9"	0.3	0.6	0.9	1.0	1.1	8000	7	0.6	28	6000	41	13.25	16.25	4
	2-4	87'-9"	0.4	0.8	1.1	1.3	1.3	8000	7	0.6	28	6000	41	13.25	16.25	4
	5	87'-9"	0.3	0.6	0.9	1.0	1.1	8000	7	0.6	28	6000	41	13.25	16.25	4
2	1	87'-9"	0.3	0.6	0.9	1.0	1.1	8000	7	0.6	28	6000	41	13.25	16.25	4
	2-4	87'-9"	0.4	0.8	1.1	1.3	1.3	8000	7	0.6	28	6000	41	13.25	16.25	4
	5	87'-9"	0.3	0.6	0.9	1.0	1.1	8000	7	0.6	28	6000	41	13.25	16.25	4
3	1	87'-9"	0.3	0.6	0.9	1.0	1.1	8000	7	0.6	28	6000	41	13.25	16.25	4
	2-4	87'-9"	0.4	0.8	1.1	1.3	1.3	8000	7	0.6	28	6000	41	13.25	16.25	4
	5	87'-9"	0.3	0.6	0.9	1.0	1.1	8000	7	0.6	28	6000	41	13.25	16.25	4
4	1	87'-9"	0.3	0.6	0.9	1.0	1.1	8000	7	0.6	28	6000	41	13.25	16.25	4
	2-4	87'-9"	0.4	0.8	1.1	1.3	1.3	8000	7	0.6	28	6000	41	13.25	16.25	4
	5	87'-9"	0.3	0.6	0.9	1.0	1.1	8000	7	0.6	28	6000	41	13.25	16.25	4

* MINIMUM CYLINDER STRENGTH OF CONCRETE @ TIME OF TRANSFER OF PRESTRESS FORCE.

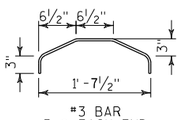
#6 BAR
2 @ EACH END



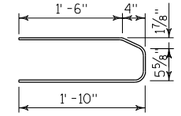
#6 BAR
8 @ EACH END



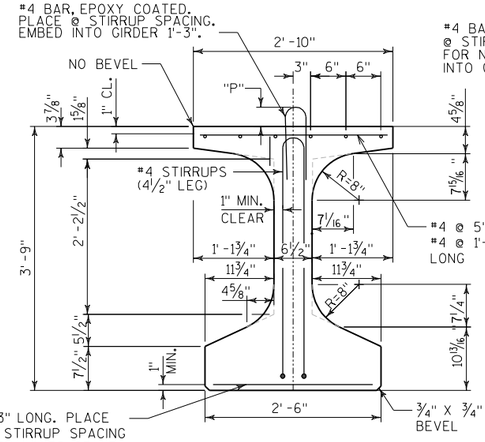
#5 BAR
1 @ EACH END



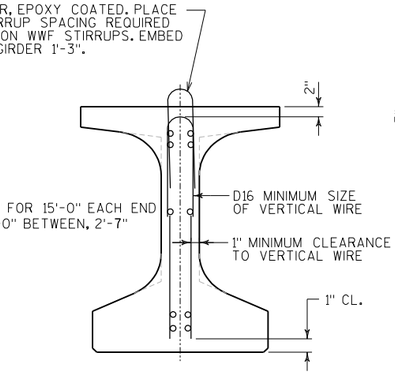
#3 BAR
3 @ EACH END
(EPOXY COATED)



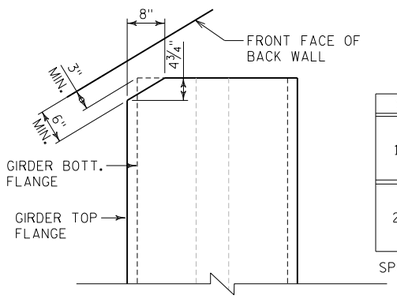
#3 BAR
29 PAIR EACH END
(EPOXY COATED)



SECTION THRU GIRDER
STRANDS NOT SHOWN



SECTION THRU GIRDER
SHOWING WELDED WIRE FABRIC (WWF) STIRRUPS



FORM OUT TOP FLANGE
DETAIL @ ABUTMENT ENDS

STIRRUP SPACING

SPAN	LOCATION	BAR SIZE	MAX. SPACING
1 & 4	FROM END TO 10'-8½"	AS SHOWN	AS SHOWN
	FROM 10'-8½" TO 29'-3"	#4	8"
	FROM 29'-3" TO MIDSPAN	#4	10"
2 & 3	FROM END TO 10'-8½"	AS SHOWN	AS SHOWN
	FROM 10'-8½" TO 29'-3"	#4	7"
	FROM 29'-3" TO MIDSPAN	#4	10"

SPACING IS SYMMETRIC ABOUT MIDSPAN OF GIRDER

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-64-186

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45W" PRESTRESSED GIRDER - 1

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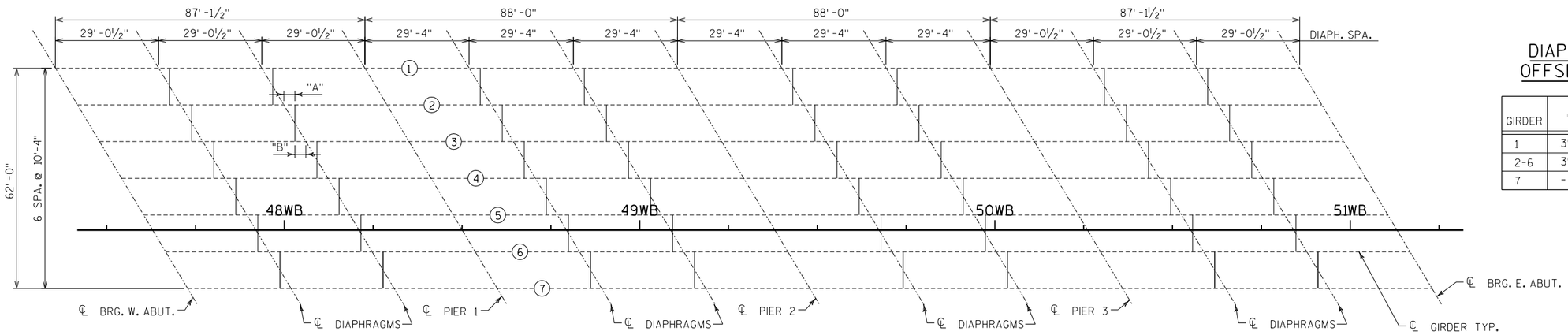
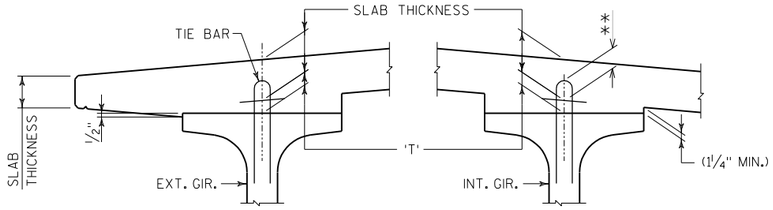


FRAMING PLAN

DIAPHRAGM OFFSET DIM.

GIRDER	"A"	"B"
1	3'-1¼"	-
2-6	3'-1¼"	3'-1¼"
7	-	3'-1¼"



SLAB HAUNCH DETAIL

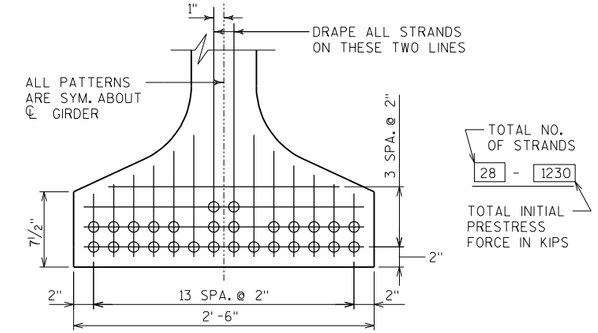
IF 1¼" MINIMUM HAUNCH HEIGHT AT EDGE OF GIRDER CANNOT BE MAINTAINED, THE GRADE LINE MAY BE REVISED BY THE ENGINEER AT THE OPTION OF THE CONTRACTOR, THE PLAN SLAB THICKNESS SHALL BE HELD. NOTIFY THE STRUCTURES SECTION IF THE GRADE LINE IS RAISED FROM THE PLAN PROFILE BY MORE THAN ½" OR,

** IF 3" MINIMUM DECK EMBEDMENT OF TIE BAR CANNOT BE OBTAINED.

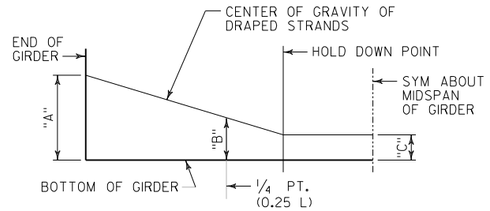
TO DETERMINE 'T', ELEV. OF TOP OF GIR'S. AT ℄ OF SUBSTRUCTURE UNITS & AT 1/10 POINTS OF EACH SPAN SHALL BE TAKEN. THEN FOLLOW THIS PROCESS:

TOP OF DECK ELEV. AT FINAL GRADE
\- TOP OF GIRDER ELEVATION
\+ DEAD LOAD DEFLECTION
\- SLAB THICKNESS
= HAUNCH HEIGHT 'T'

NOTE: AN AVERAGE HAUNCH ('T') OF 2.80" WAS USED IN THE QUANTITY "CONCRETE MASONRY BRIDGES"



TYP. STRAND PATTERN @ ℄ OF SPAN
0.6" DIA. STRANDS



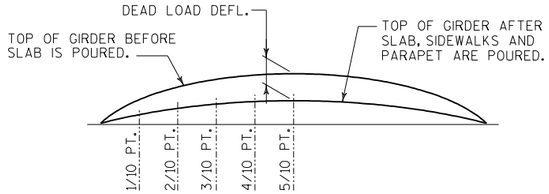
DRAPED STRAND PROFILE

* THE THEORETICAL INITIAL CAMBER VALUE AT THE TIME OF STRAND RELEASE AT MIDSPAN MULTIPLIED BY A FACTOR OF 1.4 TO ACCOUNT FOR CAMBER GROWTH FROM THE TIME OF STRAND RELEASE TO JOBSITE PLACEMENT.

SPAN	CAMBER (IN.) *
1	2.59
2	2.60
3	2.60
4	2.59

THESE VALUES ARE NOT TO BE USED IN DETERMINING 'T', USE ACTUAL GIRDER SHOTS.

THESE VALUES ARE FOR INFORMATIONAL PURPOSES ONLY.



DEAD LOAD DEFLECTION DIAGRAM

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-64-186

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45W" PRESTRESSED GIRDER - 2

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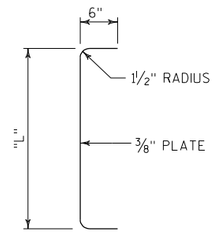
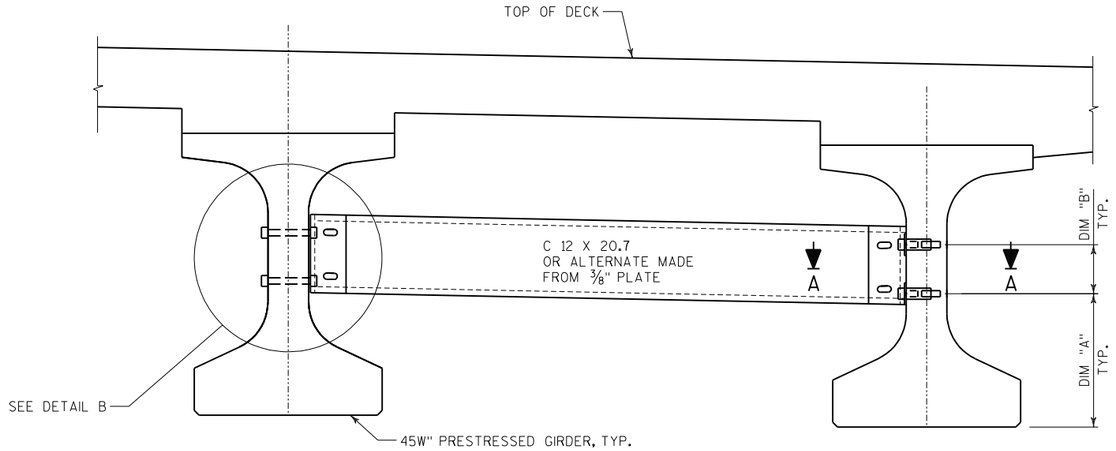
TABLE

GIRDER HEIGHT	DIM "A"	DIM "B"	DIM "L"	* DIM "X"
45W"	1'-9 1/8"	8 7/8"	1'-0 1/2"	2 3/4"

* DIM "X" = 2 1/2" FOR ALTERNATE PLATE DIAPHRAGM.



SECTION THRU ALTERNATE DIAPHRAGM



PART TRANSVERSE SECTION AT DIAPHRAGM

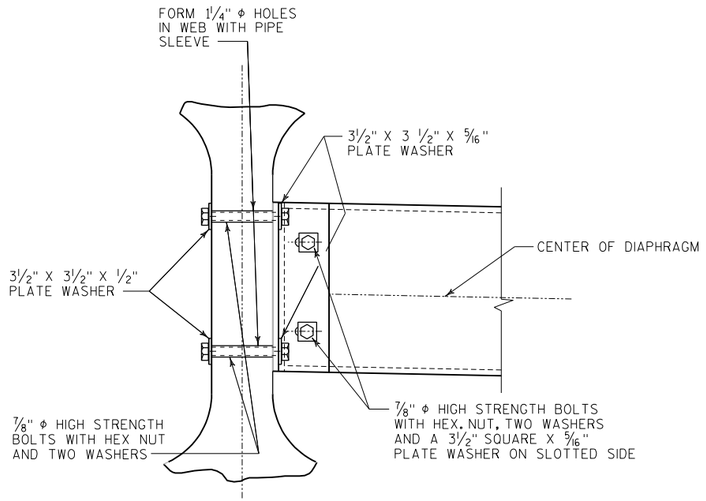
NOTES

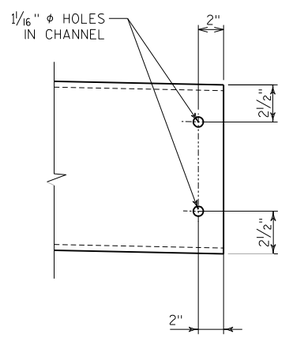
ALL DIAPHRAGM MATERIAL NOT EMBEDDED IN THE CONCRETE GIRDER SHALL BE PAID FOR AT THE UNIT PRICE BID FOR "STEEL DIAPHRAGMS B-64-186", EACH.

EACH DIAPHRAGM BETWEEN GIRDERS SHALL CONSTITUTE ONE UNIT.

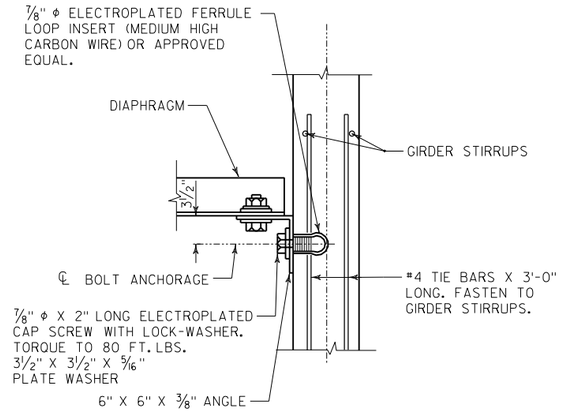
ALL DIAPHRAGM STRUCTURAL STEEL SHALL BE ASTM A709 GRADE 36. ALL BOLTS, NUTS AND WASHERS SHALL BE ASTM A325 TYPE 1.

ALL DIAPHRAGM STRUCTURAL STEEL SHOWN SHALL BE HOT-DIPPED GALVANIZED. ALL BOLTS, NUTS AND WASHERS SHALL BE HOT-DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A153 CLASS C. GALVANIZED NUTS SHALL BE TAPPED OVERSIZE IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM A563 AND SHALL MEET THE REQUIREMENTS OF SUPPLEMENTARY REQUIREMENT S1 OF ASTM A563. LUBRICANT AND TEST FOR COATED NUTS.



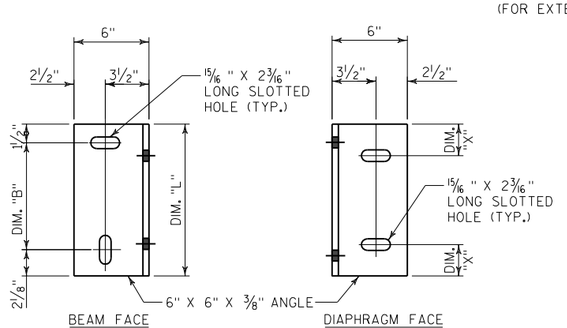


DETAIL B



SECT. A-A

(FOR EXTERIOR ATTACHMENT)



DIAPHRAGM SUPPORT

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-64-186

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STEEL DIAPHRAGMS

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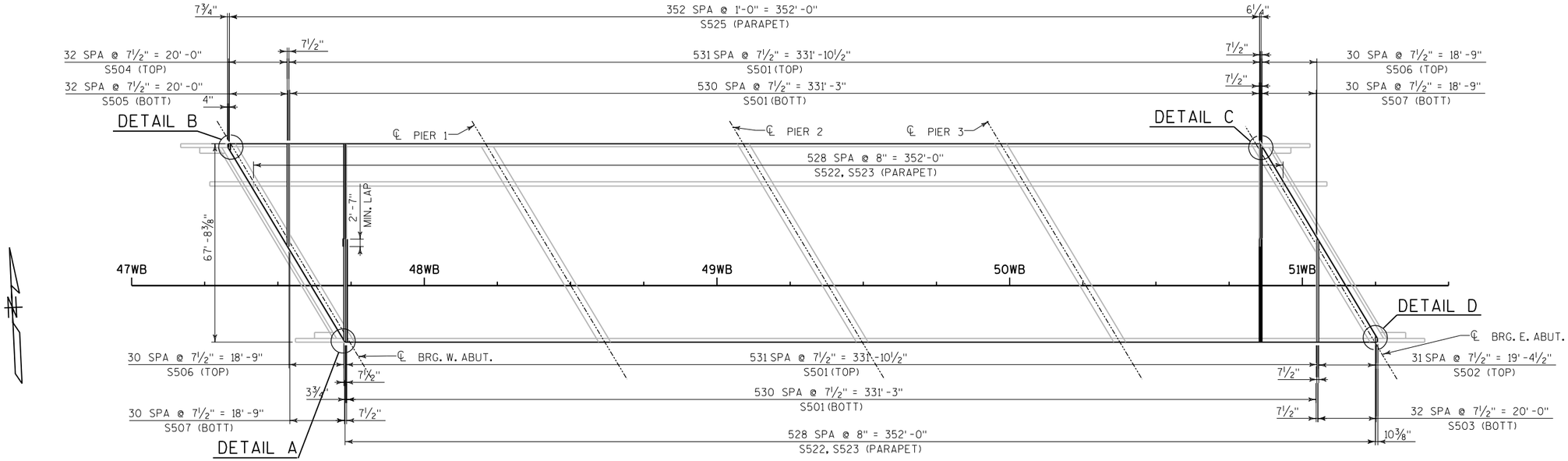
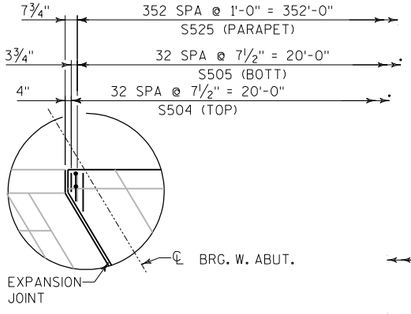
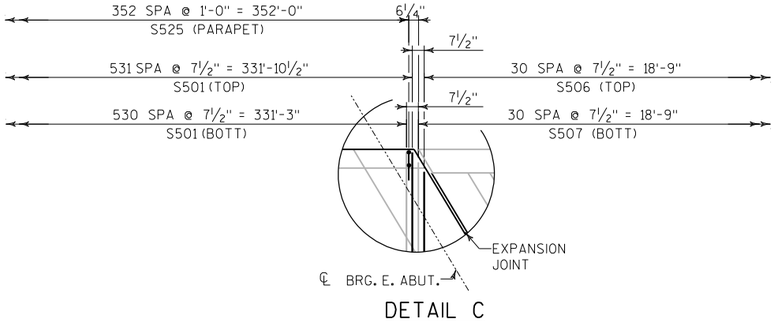
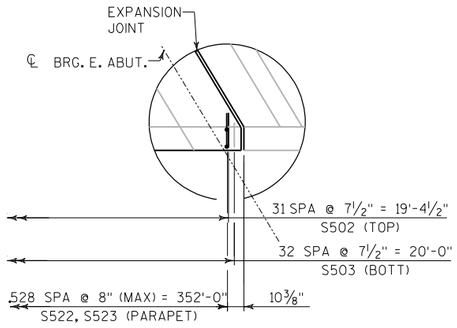




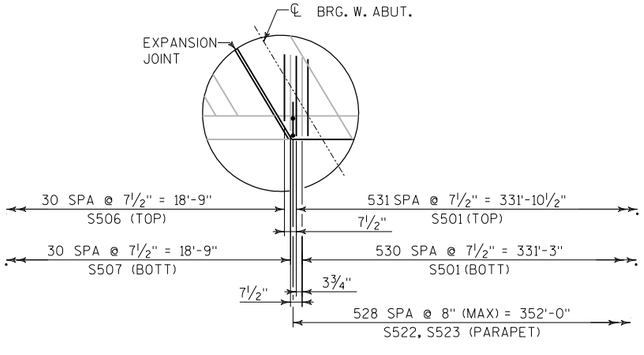
DETAIL B



DETAIL C



DETAIL D



DETAIL A

NOTES

THE TOP LONGITUDINAL BAR STEEL REINFORCEMENT SHALL BE SUPPORTED BY CONTINUOUS BAR CHAIRS IN TRANSVERSE DIRECTION ON 4'-0" CENTERS.

SEE SHEET 23 FOR BILL OF BARS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
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STRUCTURE B-64-186

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SUPERSTRUCTURE-1

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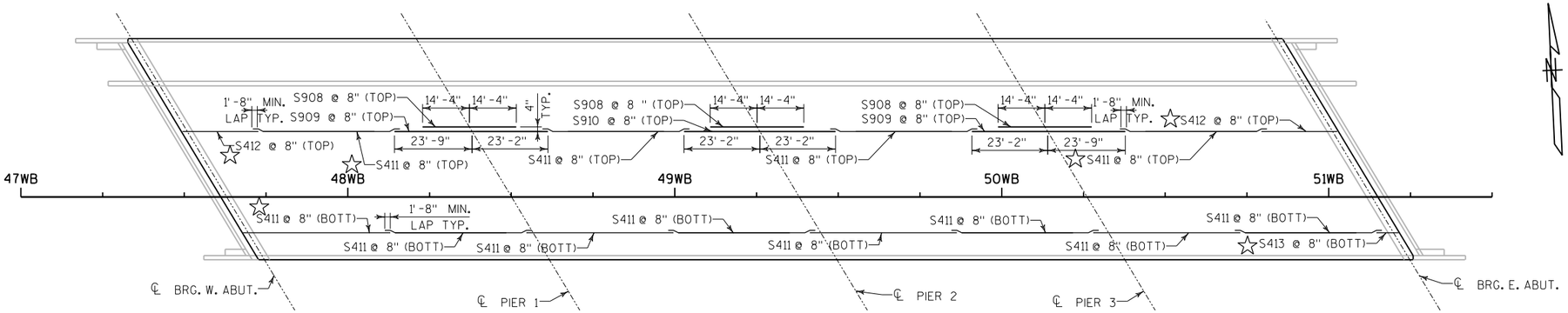


TOP OF DECK ELEVATIONS

LOCATION	W. ABUT.	SPAN 1									PIER 1	SPAN 2									PIER 2	SPAN 3									PIER 3
		0.1 PT.	0.2 PT.	0.3 PT.	0.4 PT.	0.5 PT.	0.6 PT.	0.7 PT.	0.8 PT.	0.9 PT.		0.1 PT.	0.2 PT.	0.3 PT.	0.4 PT.	0.5 PT.	0.6 PT.	0.7 PT.	0.8 PT.	0.9 PT.		0.1 PT.	0.2 PT.	0.3 PT.	0.4 PT.	0.5 PT.	0.6 PT.	0.7 PT.	0.8 PT.	0.9 PT.	
N PARA	1048.47	1048.59	1048.70	1048.81	1048.92	1049.03	1049.14	1049.25	1049.35	1049.46	1049.56	1049.66	1049.76	1049.86	1049.95	1050.05	1050.14	1050.23	1050.32	1050.41	1050.49	1050.58	1050.66	1050.74	1050.82	1050.89	1050.97	1051.04	1051.11	1051.18	1051.25
G1	1048.52	1048.64	1048.75	1048.86	1048.98	1049.09	1049.19	1049.30	1049.40	1049.51	1049.61	1049.71	1049.81	1049.91	1050.00	1050.10	1050.19	1050.28	1050.37	1050.45	1050.54	1050.62	1050.70	1050.78	1050.86	1050.94	1051.02	1051.09	1051.16	1051.23	1051.30
G2	1048.81	1048.93	1049.04	1049.15	1049.26	1049.37	1049.48	1049.58	1049.68	1049.79	1049.89	1049.99	1050.08	1050.18	1050.27	1050.37	1050.46	1050.55	1050.63	1050.72	1050.80	1050.89	1050.97	1051.05	1051.12	1051.20	1051.27	1051.35	1051.42	1051.49	1051.55
PARA	1048.85	1048.96	1049.07	1049.19	1049.30	1049.40	1049.51	1049.62	1049.72	1049.82	1049.92	1050.02	1050.12	1050.21	1050.31	1050.40	1050.49	1050.58	1050.67	1050.75	1050.84	1050.92	1051.00	1051.08	1051.16	1051.23	1051.31	1051.38	1051.45	1051.52	1051.58
G3	1049.10	1049.21	1049.33	1049.44	1049.55	1049.65	1049.76	1049.86	1049.96	1050.06	1050.16	1050.26	1050.36	1050.45	1050.55	1050.64	1050.73	1050.82	1050.90	1050.99	1051.07	1051.15	1051.23	1051.31	1051.38	1051.46	1051.53	1051.60	1051.67	1051.74	1051.81
G4	1049.39	1049.50	1049.61	1049.72	1049.83	1049.93	1050.04	1050.14	1050.24	1050.34	1050.44	1050.54	1050.63	1050.73	1050.82	1050.91	1051.00	1051.08	1051.17	1051.25	1051.33	1051.41	1051.49	1051.57	1051.64	1051.72	1051.79	1051.86	1051.93	1051.99	1052.06
CROWN	1049.46	1049.57	1049.68	1049.79	1049.90	1050.01	1050.11	1050.21	1050.31	1050.41	1050.51	1050.61	1050.70	1050.79	1050.89	1050.98	1051.06	1051.15	1051.24	1051.32	1051.40	1051.48	1051.56	1051.63	1051.71	1051.78	1051.85	1051.92	1051.99	1052.06	1052.12
G5	1049.37	1049.48	1049.59	1049.69	1049.80	1049.91	1050.01	1050.11	1050.21	1050.31	1050.41	1050.50	1050.60	1050.69	1050.78	1050.87	1050.96	1051.04	1051.13	1051.21	1051.29	1051.37	1051.44	1051.52	1051.59	1051.67	1051.74	1051.80	1051.87	1051.94	1052.00
PLG WB	1049.31	1049.42	1049.53	1049.64	1049.75	1049.85	1049.95	1050.06	1050.15	1050.25	1050.35	1050.44	1050.54	1050.63	1050.72	1050.81	1050.90	1050.98	1051.06	1051.15	1051.23	1051.30	1051.38	1051.46	1051.53	1051.60	1051.67	1051.74	1051.80	1051.87	1051.93
G6	1049.24	1049.35	1049.46	1049.56	1049.67	1049.77	1049.88	1049.98	1050.07	1050.17	1050.27	1050.36	1050.45	1050.55	1050.64	1050.72	1050.81	1050.89	1050.98	1051.06	1051.14	1051.21	1051.29	1051.36	1051.44	1051.51	1051.58	1051.64	1051.71	1051.77	1051.84
G7	1049.11	1049.22	1049.33	1049.43	1049.54	1049.64	1049.74	1049.84	1049.94	1050.03	1050.13	1050.22	1050.31	1050.40	1050.49	1050.58	1050.66	1050.75	1050.83	1050.91	1050.99	1051.06	1051.14	1051.21	1051.28	1051.35	1051.42	1051.48	1051.55	1051.61	1051.67
S PARA	1049.09	1049.20	1049.31	1049.41	1049.52	1049.62	1049.72	1049.82	1049.92	1050.01	1050.11	1050.20	1050.29	1050.38	1050.47	1050.55	1050.64	1050.72	1050.80	1050.88	1050.96	1051.04	1051.11	1051.19	1051.26	1051.33	1051.39	1051.46	1051.52	1051.59	1051.65

LOCATION	PIER 3	SPAN 4									E. ABUT.
		0.1 PT.	0.2 PT.	0.3 PT.	0.4 PT.	0.5 PT.	0.6 PT.	0.7 PT.	0.8 PT.	0.9 PT.	
N PARA	1051.25	1051.32	1051.38	1051.45	1051.51	1051.57	1051.63	1051.68	1051.74	1051.79	1051.84
G1	1051.30	1051.36	1051.43	1051.49	1051.55	1051.61	1051.67	1051.73	1051.78	1051.83	1051.88
G2	1051.55	1051.62	1051.68	1051.74	1051.80	1051.86	1051.92	1051.97	1052.02	1052.08	1052.13
PARA	1051.58	1051.65	1051.71	1051.77	1051.83	1051.89	1051.95	1052.00	1052.05	1052.11	1052.16
G3	1051.81	1051.87	1051.93	1051.99	1052.05	1052.11	1052.16	1052.22	1052.27	1052.32	1052.37
G4	1052.06	1052.12	1052.18	1052.24	1052.30	1052.35	1052.41	1052.46	1052.51	1052.56	1052.61
CROWN	1052.12	1052.18	1052.24	1052.30	1052.36	1052.41	1052.47	1052.52	1052.57	1052.62	1052.67
G5	1052.00	1052.06	1052.12	1052.18	1052.23	1052.29	1052.34	1052.39	1052.44	1052.49	1052.54
PLG WB	1051.93	1051.99	1052.05	1052.11	1052.17	1052.22	1052.27	1052.32	1052.37	1052.42	1052.46
G6	1051.84	1051.90	1051.96	1052.01	1052.07	1052.12	1052.17	1052.22	1052.27	1052.32	1052.36
G7	1051.67	1051.73	1051.79	1051.84	1051.90	1051.95	1052.00	1052.05	1052.10	1052.14	1052.19
S PARA	1051.65	1051.71	1051.76	1051.82	1051.87	1051.92	1051.97	1052.02	1052.07	1052.12	1052.16

LEGEND

☆ ALTERNATE/REVERSE BARS S411 & S412 TOP MAT BAR PATTERN AND BARS S411 & S413 BOTTOM MAT BAR PATTERN TO RANDOMIZE SPLICE LOCATIONS.

NOTES

TRANSVERSE BAR STEEL REINFORCEMENT (S501) AND PARAPET REINFORCEMENT (S522) SHALL BE PLACED PERPENDICULAR TO GIRDERS.

THE BOTTOM TRANSVERSE BAR STEEL REINFORCEMENT SHALL BE SUPPORTED BY CONTINUOUS BAR CHAIRS WITH A CENTER TO CENTER SPACING NOT TO EXCEED 4'-0". ONE LINE OF CONTINUOUS BAR CHAIRS SHALL BE PLACED NEAR EACH EDGE OF SLAB TO SUPPORT THE ENDS OF THE BOTTOM TRANSVERSE BAR STEEL.

THE TOP LONGITUDINAL BAR STEEL REINFORCEMENT SHALL BE SUPPORTED BY CONTINUOUS BAR CHAIRS IN TRANSVERSE DIRECTION ON 4'-0" CENTERS.

SEE SHEET 23 FOR BILL OF BARS.

NO.	DATE	REVISION	BY

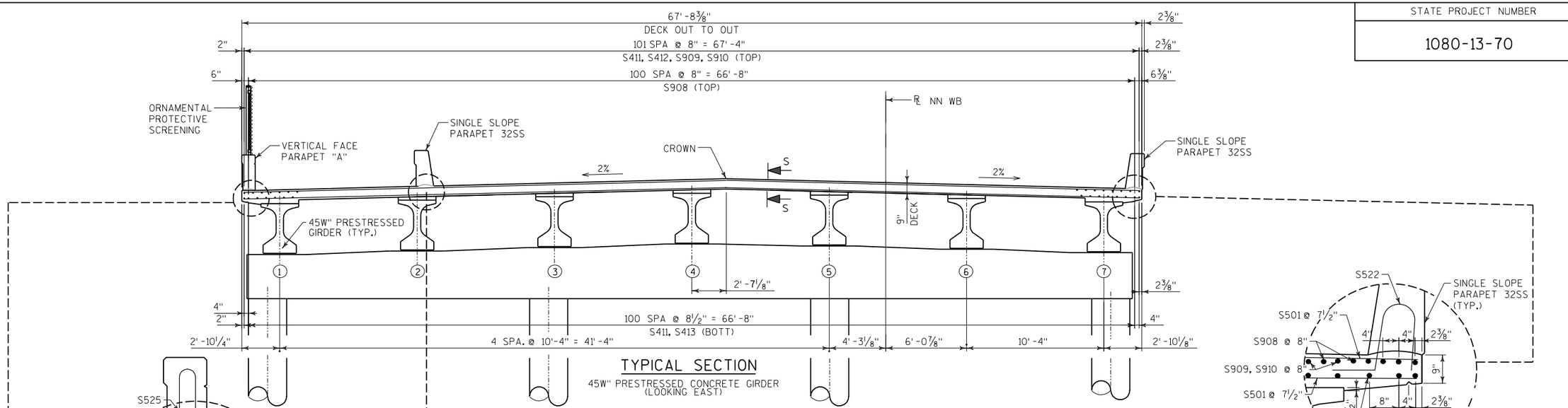
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-64-186

DRAWN BY AMD | PLANS CK'D. SJG

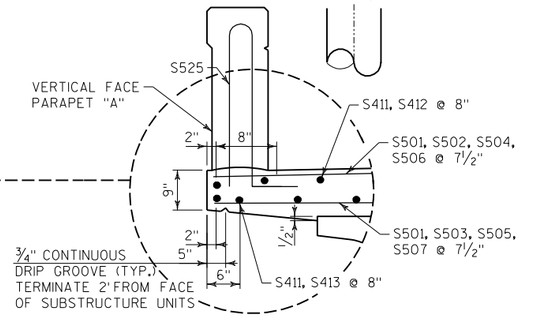
SUPERSTRUCTURE-2

STATE PROJECT NUMBER
1080-13-70

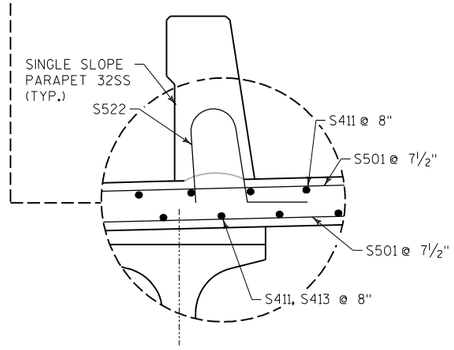


TYPICAL SECTION

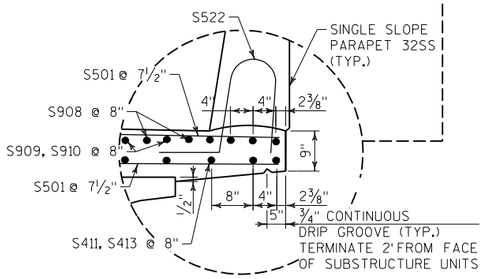
45W" PRESTRESSED CONCRETE GIRDER
(LOOKING EAST)



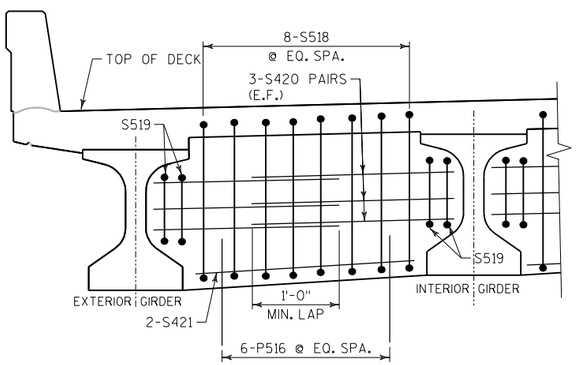
AT ABUTMENT



AT MIDSPAN



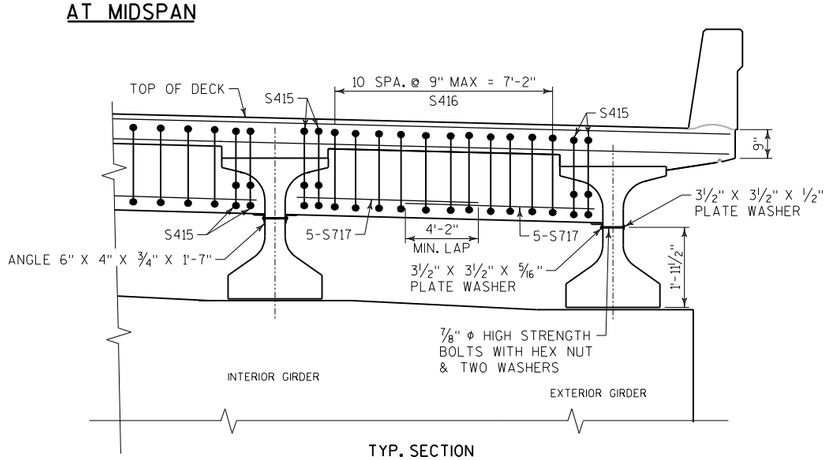
AT PIER



TYP. SECTION

PIER DIAPHRAGM DETAILS

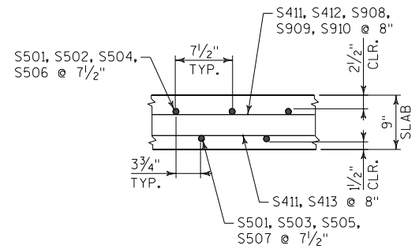
(SEE SHEET 24 FOR ADDITIONAL DETAILS)



TYP. SECTION

ABUTMENT DIAPHRAGM DETAILS

(SEE SHEET 24 FOR ADDITIONAL DETAILS)



SECTION S-S

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-64-186

DRAWN BY AMD | PLANS CK'D. SJG

SUPERSTRUCTURE CROSS-SECTION

SHEET 22 OF 31

500

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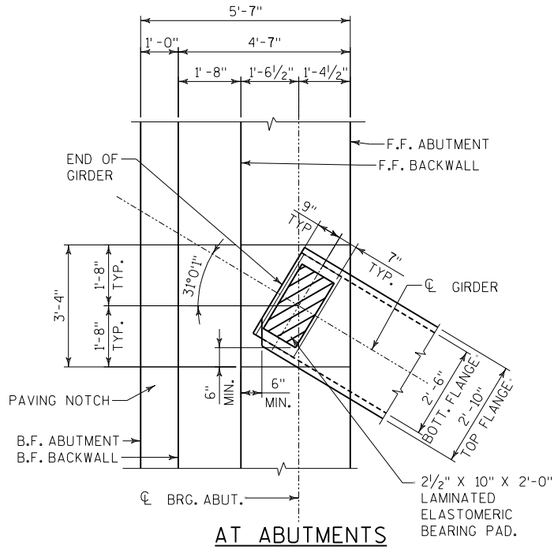
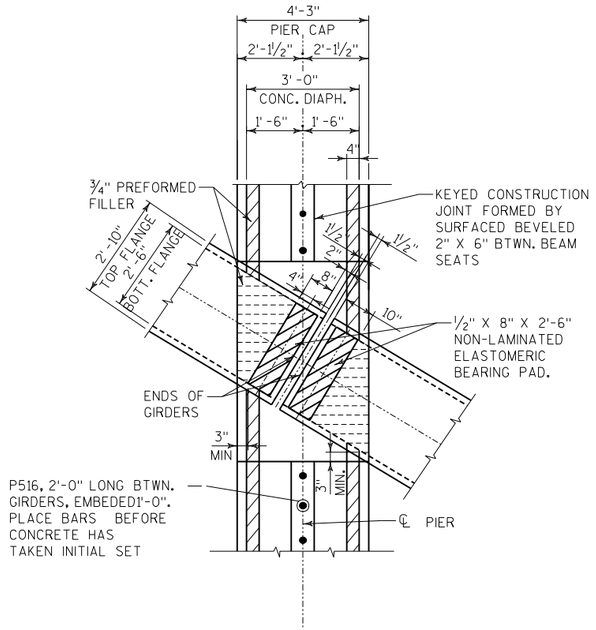
STATE PROJECT NUMBER

1080-13-70



AT ABUTMENTS



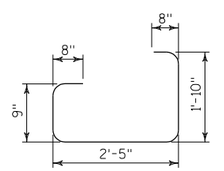
AT PIERS

BEARING PAD DETAILs

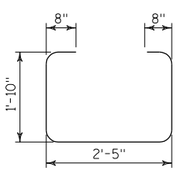
BILL OF BARS

BAR MARK	COAT	NO REQ'D	LENGTH	BENT	BAR SERIES ⚠	LOCATION	
S501	X	2126	35'-0"	-	-	SLAB - TOP & BOTT	TRANSVERSE
S502	X	32	18'-0"	-	X	SLAB - TOP SE CORNER	TRANSVERSE
S503	X	33	18'-0"	-	X	SLAB - BOTT SE CORNER	TRANSVERSE
S504	X	33	17'-8"	-	X	SLAB - TOP NW CORNER	TRANSVERSE
S505	X	33	18'-2"	-	X	SLAB - BOTT NW CORNER	TRANSVERSE
S506	X	62	18'-7"	-	X	SLAB - TOP NE/SW CORNER	TRANSVERSE
S507	X	62	19'-1"	-	X	SLAB - BOTT NE/SW CORNER	TRANSVERSE
S908	X	303	28'-8"	-	-	SLAB - TOP OVER PIERS	LONGITUDINAL
S909	X	204	46'-11"	-	-	SLAB - TOP OVER PIER 1 & 3	LONGITUDINAL
S910	X	102	46'-4"	-	-	SLAB - TOP OVER PIER 2	LONGITUDINAL
S411	X	1232	45'-0"	-	-	SLAB - TOP & BOTT	LONGITUDINAL
S412	X	204	23'-2"	-	-	SLAB - TOP	LONGITUDINAL
S413	X	103	7'-0"	-	-	SLAB - BOTT	LONGITUDINAL
-	-	-	-	-	-	-	-
S415	X	48	6'-0"	X	-	ABUT DIAPHRAGM - GIRDER STIRRUPS	VERTICAL
S416	X	132	7'-1"	X	-	ABUT DIAPHRAGM - STIRRUPS	VERTICAL
S717	X	120	7'-7"	-	-	ABUT DIAPHRAGM - BTWN GIRDERS	HORIZONTAL
S518	X	144	12'-7"	X	-	PIER DIAPHRAGM - STIRRUPS	VERTICAL
S519	X	72	10'-9"	X	-	PIER DIAPHRAGM - GIRDER STIRRUPS	VERTICAL
S420	X	216	6'-0"	-	-	PIER DIAPHRAGM - BTWN GIRDERS	HORIZONTAL
S421	X	36	8'-4"	-	-	PIER DIAPHRAGM - BTWN GIRDERS BOTT.	HORIZONTAL
S522	X	1058	4'-5"	X	-	PARAPET - MIDDLE & S. EDGE	VERTICAL
S523	X	1058	5'-0"	X	-	PARAPET - MIDDLE & S. EDGE	VERTICAL
S524	X	84	52'-0"	-	-	PARAPET - MIDDLE & S. EDGE	HORIZONTAL
S525	X	353	6'-8"	-	-	PARAPET - N. EDGE	VERTICAL
S426	X	42	51'-9"	X	-	PARAPET - N. EDGE	HORIZONTAL
S427	X	24	11'-8"	-	-	EXPANSION JOINTS, BTWN GIRDERS	HORIZONTAL

⚠ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.



S415



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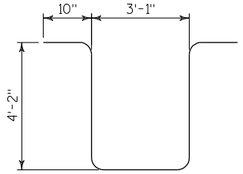

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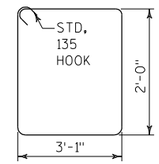

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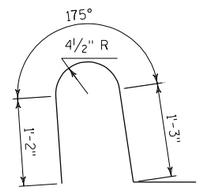

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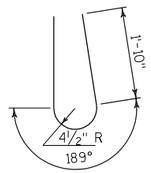

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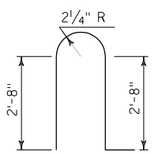

S525

BAR SERIES TABLE

BUNDLE AND TAG EACH SERIES SEPARATELY

BAR MARK	NO. REQ'D	LENGTH
S502	1 SERIES OF 32	1'-10" TO 34'-1"
S503	1 SERIES OF 33	1'-4" TO 34'-7"
S504	1 SERIES OF 33	1'-0" TO 34'-4"
S505	1 SERIES OF 33	1'-6" TO 34'-10"
S506	2 SERIES OF 31	3'-0" TO 34'-2"
S507	2 SERIES OF 31	3'-6" TO 34'-8"

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-64-186

DRAWN BY AMD | PLANS CK'D. SJG

SUPERSTURCTURE BILL OF BARS

SHEET 23 OF 31

501

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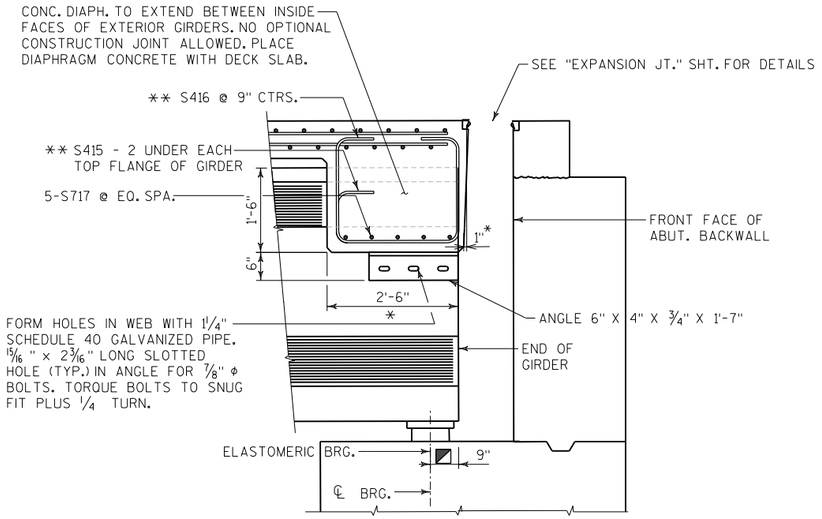
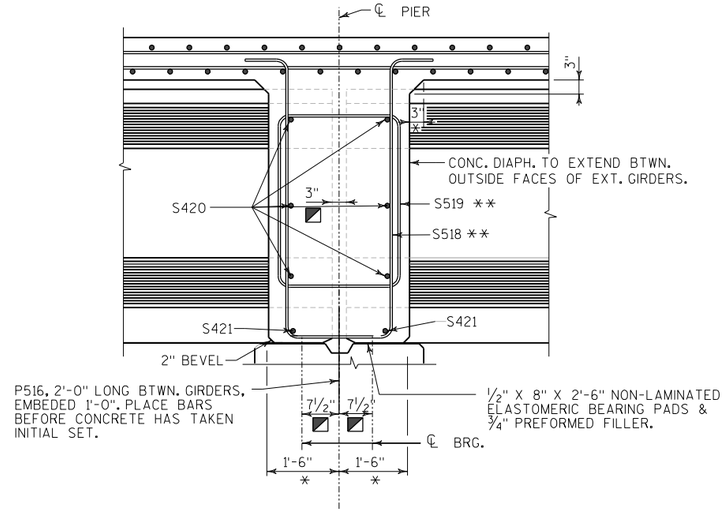
6/1/2015



PART LONGIT. SECTION ABUTMENT DIAPHRAGM



AT PIER DIAPHRAGM

TOP VIEW OF DIAPHRAGM (EXPANSION END)

ANGLE

LEGEND

* DIMENSION IS TAKEN NORMAL TO ℄ SUBSTRUCTURE UNITS.

** BARS PLACED PARALLEL TO GIRDERS SPACING PERPENDICULAR TO ℄ GIRDERS

▨ DIMENSION IS TAKEN PARALLEL TO ℄ GIRDER

NOTES

DIAPHRAGM SUPPORT ANGLES SHALL BE ASTM A709 GRADE 36. ALL BOLTS, NUT AND WASHERS SHALL BE ASTM A325 TYPE 1.

ALL SUPPORT ANGLES SHALL BE HOT-DIPPED GALVANIZED. ALL BOLTS, NUTS AND WASHERS SHALL BE HOT-DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A153 CLASS C. GALVANIZED NUTS SHALL BE TAPPED OVERSIZED IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM A563 AND SHALL MEET THE REQUIREMENTS OF SUPPLEMENTARY REQUIREMENT S1 OF ASTM A563, LUBRICANT AND TEST FOR COATED NUTS.

ALL DIAPHRAGM SUPPORT HARDWARE SHALL BE INCIDENTAL TO "CONCRETE MASONRY BRIDGES".

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NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-64-186

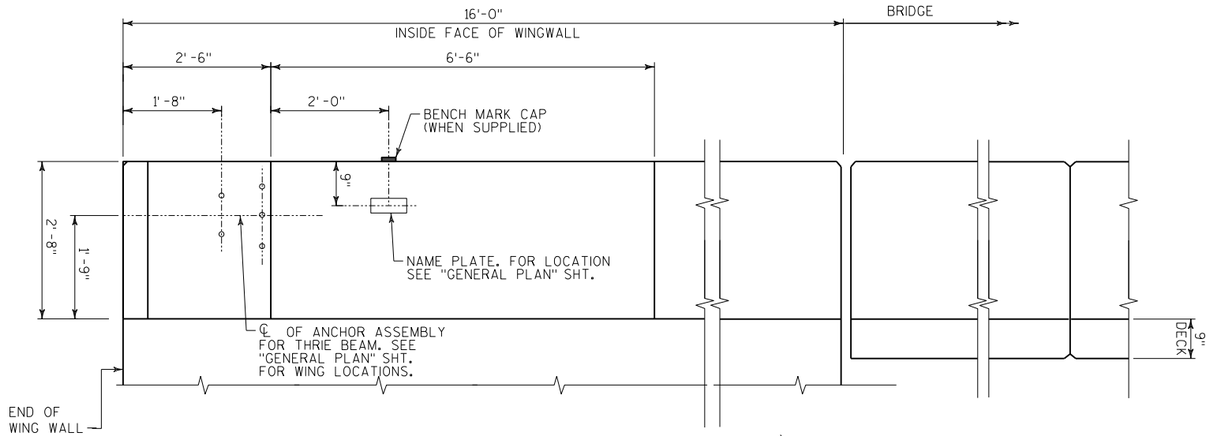
DRAWN BY AMD | PLANS CK'D. SJG

SUPERSTRUCTURE DETAILS

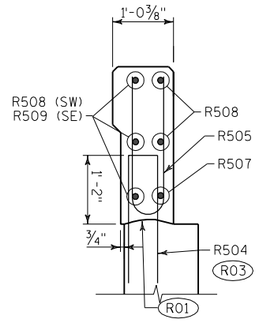
SHEET 24 OF 31

502

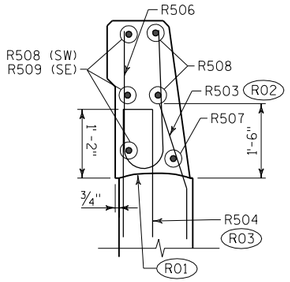
STATE PROJECT NUMBER
1080-13-70



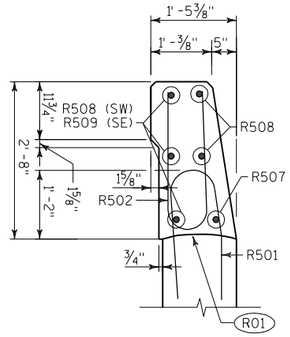
INSIDE ELEVATION



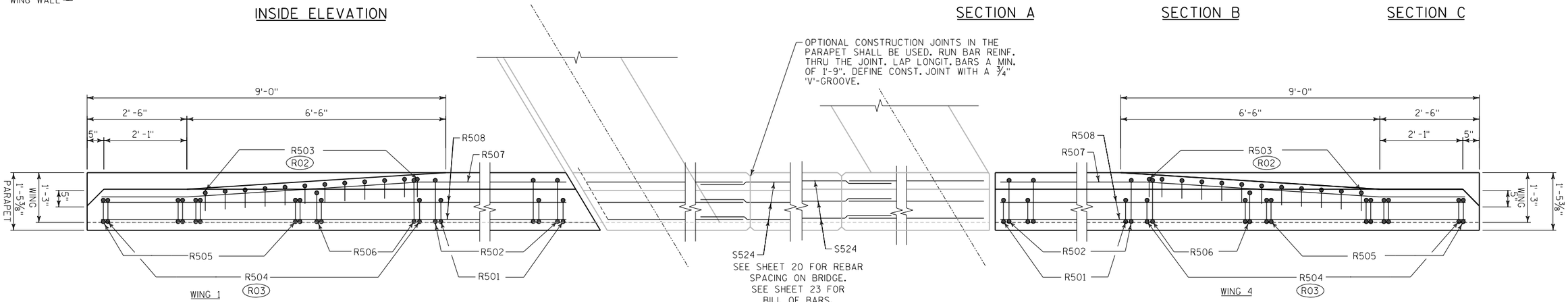
SECTION A

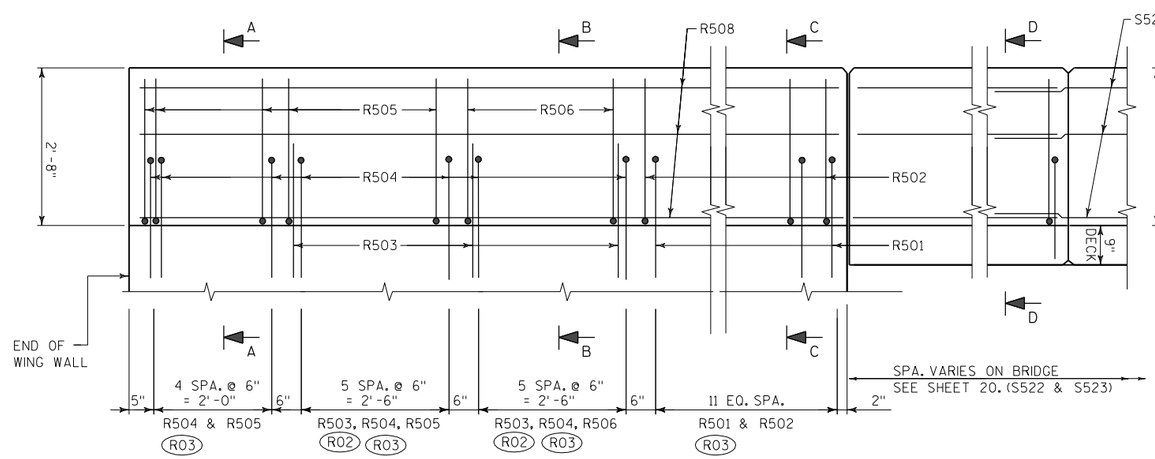


SECTION B

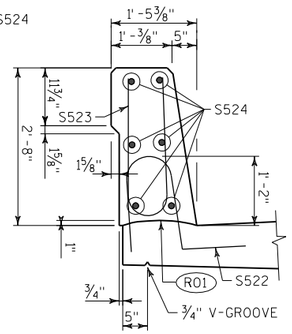


SECTION C



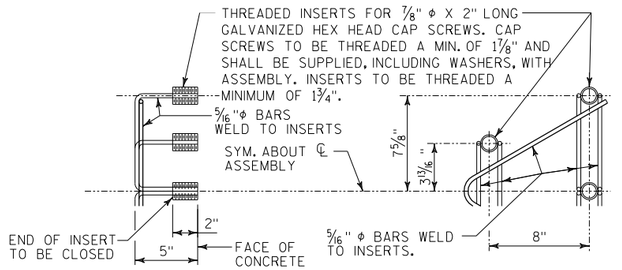


OUTSIDE ELEVATION



SECTION D THRU PARAPET ON BRIDGE

SEE SHEET 20 FOR REBAR SPACING ON BRIDGE. SEE SHEET 23 FOR BILL OF BARS.



DETAIL OF ANCHOR ASSEMBLY

NOTE: HEX HEAD CAP SCREWS & WASHERS TO BE GALVANIZED IN ACCORDANCE WITH AASHTO M232 CLASS C.

ASSEMBLY SHALL BE BID ITEM "ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD", EACH.

NOTES

(R01) CONST. JOINT - STRIKE OFF AS SHOWN.

(R02) R503 BARS MAY BE PLACED AFTER THE CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLASE. USE CARE TO PLACE R503 BARS CORRECTLY ALONG TRANSITION OF PARPAPET.

(R03) R501 AND R504 BARS TO BE TIED TO THE WING STEEL BEFORE WING IS POURED.

SEE SHEET 26 FOR BILL OF BARS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-64-186

DRAWN BY AMD | PLANS CK'D. SJG

SINGLE SLOPE PARAPET 32SS

SHEET 25 OF 31

503

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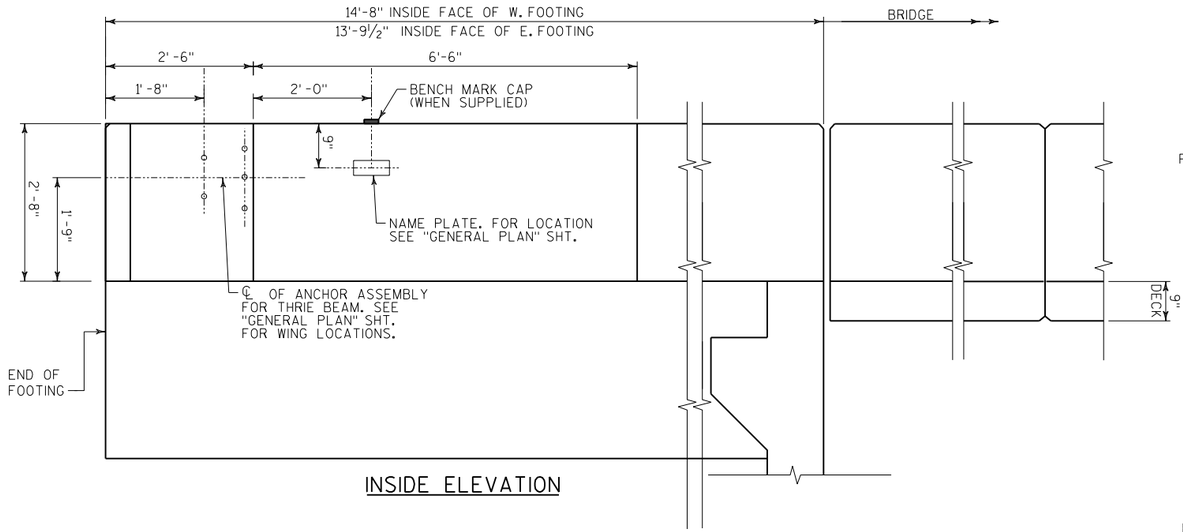
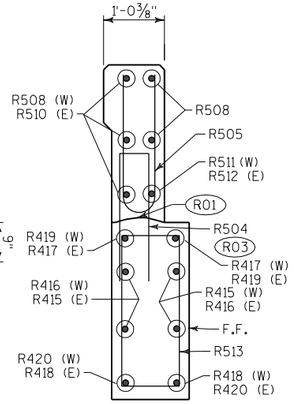
6/1/2015

STATE PROJECT NUMBER

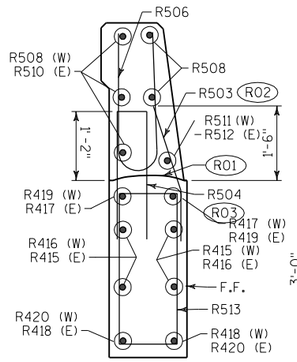
1080-13-70



INSIDE ELEVATION



SECTION A



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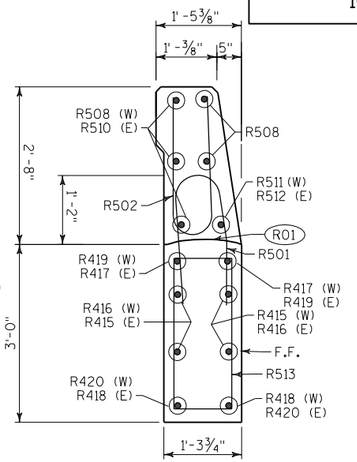

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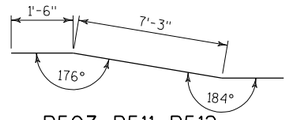
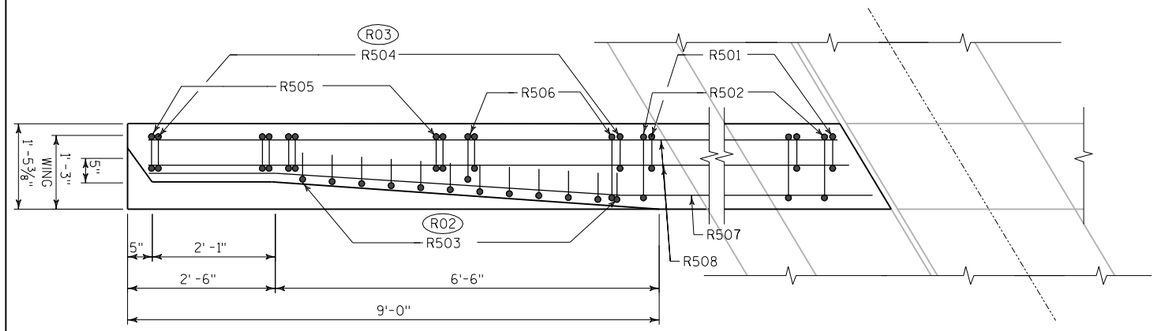
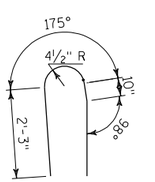


R507, R511, R512



PLAN



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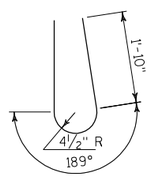

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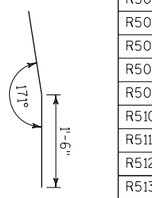

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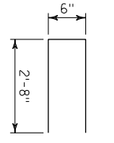

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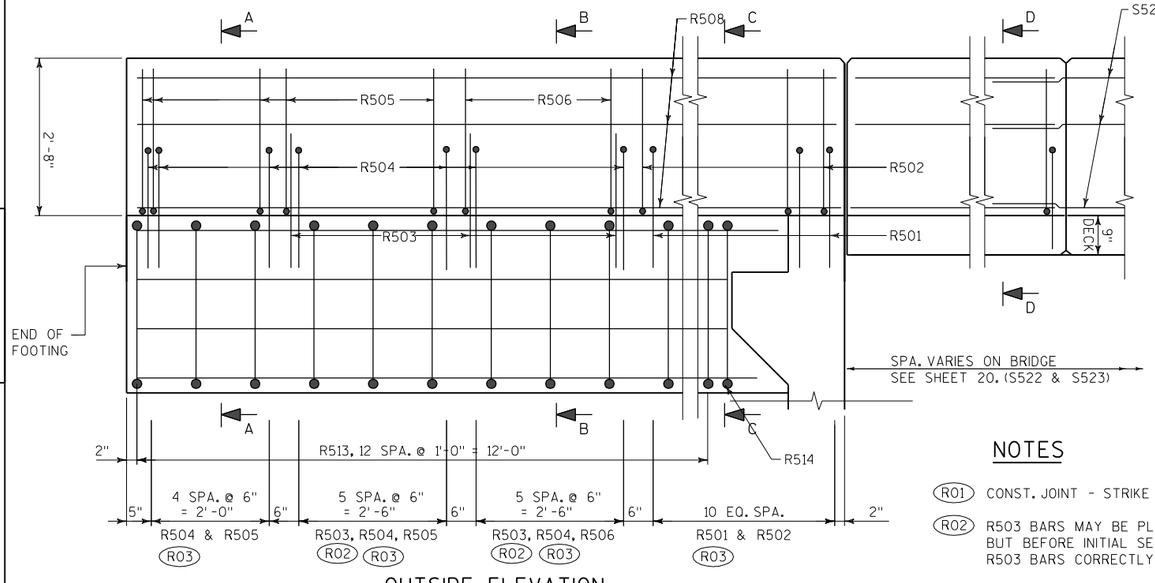
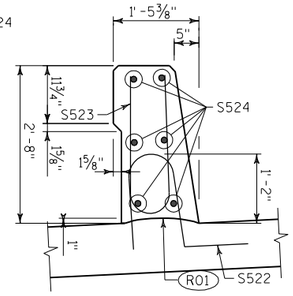


OUTSIDE ELEVATION



SECTION D THRU PARAPET ON BRIDGE

SEE SHEET 20 FOR REBAR SPACING ON BRIDGE. SEE SHEET 23 FOR BILL OF BARS.

NOTES

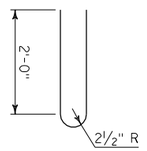
(R01) CONST. JOINT - STRIKE OFF AS SHOWN.

(R02) R503 BARS MAY BE PLACED AFTER THE CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLASE. USE CARE TO PLACE R503 BARS CORRECTLY ALONG TRANSITION OF PARPAPET.

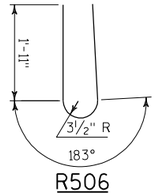
(R03) R501 AND R504 BARS TO BE TIED TO THE WING STEEL BEFORE WING IS POURED.

BILL OF BARS

BAR MARK	COAT	NO REQ'D	LENGTH	BENT	BAR SERIES	LOCATION	
R501	X	46	5'-10"	X	-	32SS PARAPET ON WINGS & FTGS	VERTICAL
R502	X	46	5'-0"	X	-	32SS PARAPET ON WINGS & FTGS	VERTICAL
R503	X	48	3'-0"	X	-	32SS PARAPET ON WINGS & FTGS	VERTICAL
R504	X	68	5'-7"	X	-	32SS PARAPET ON WINGS & FTGS	VERTICAL
R505	X	24	4'-9"	X	-	32SS PARAPET ON WINGS & FTGS	VERTICAL
R506	X	24	4'-10"	X	-	32SS PARAPET ON WINGS & FTGS	VERTICAL
R507	X	14	15'-5"	X	-	32SS PARAPET ON WINGS	HORIZONTAL
R508	X	14	15'-8"	-	-	32SS PARAPET ON WINGS & FTGS	HORIZONTAL
R509	X	3	16'-3"	-	-	32SS PARAPET ON WINGS	HORIZONTAL
R510	X	3	16'-1"	-	-	32SS PARAPET ON FTGS	HORIZONTAL
R511	X	1	15'-9"	X	-	32SS PARAPET ON E. FTG	HORIZONTAL
R512	X	1	15'-3"	X	-	32SS PARAPET ON W. FTG	HORIZONTAL
R513	X	26	7'-7"	X	-	FTGS	VERTICAL
R514	X	2	7'-11"	X	-	FTGS	VERTICAL
R415	X	4	12'-11"	-	-	FTG - EAST F.F. & WEST B.F. - MIDDLE	HORIZONTAL
R416	X	4	12'-4	-	-	FTG - EAST B.F. & WEST F.F. - MIDDLE	HORIZONTAL
R417	X	2	14'-1"	-	-	FTG - EAST B.F. & WEST F.F. - TOP	HORIZONTAL
R418	X	2	13'-8"	-	-	FTG - EAST B.F. & WEST F.F. - BOTT.	HORIZONTAL
R419	X	2	13'-6"	-	-	FTG - EAST F.F. & WEST B.F. - TOP	HORIZONTAL
R420	X	2	13'-1"	-	-	FTG - EAST F.F. & WEST B.F. - BOTT.	HORIZONTAL
R421	X	40	9'-5"	X	-	'A' PARAPET ON WINGS	VERTICAL
R422	X	6	15'-8"	-	-	'A' PARAPET ON WING NW E.F.	HORIZONTAL
R423	X	3	16'-2"	-	-	'A' PARAPET ON WING NE OUTSIDE EDGE	HORIZONTAL
R424	X	3	15'-11"	-	-	'A' PARAPET ON WING NE INSIDE EDGE	HORIZONTAL



R505



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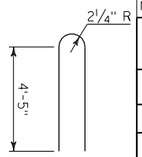

R521

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-64-186

DRAWN BY AMD | PLANS CK'D. SJG

PARAPET 32SS FOOTING

SHEET 26 OF 31

504

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6/1/2015

STATE PROJECT NUMBER
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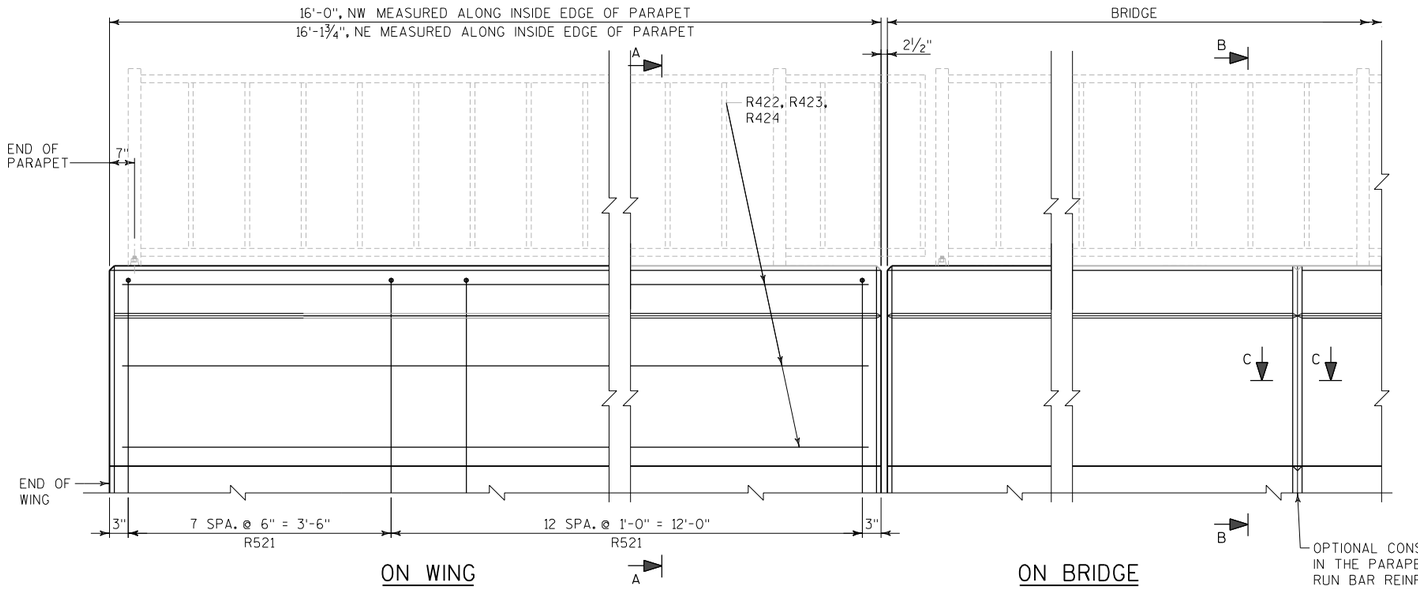
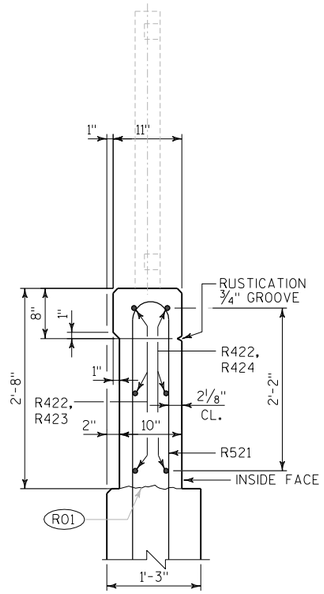
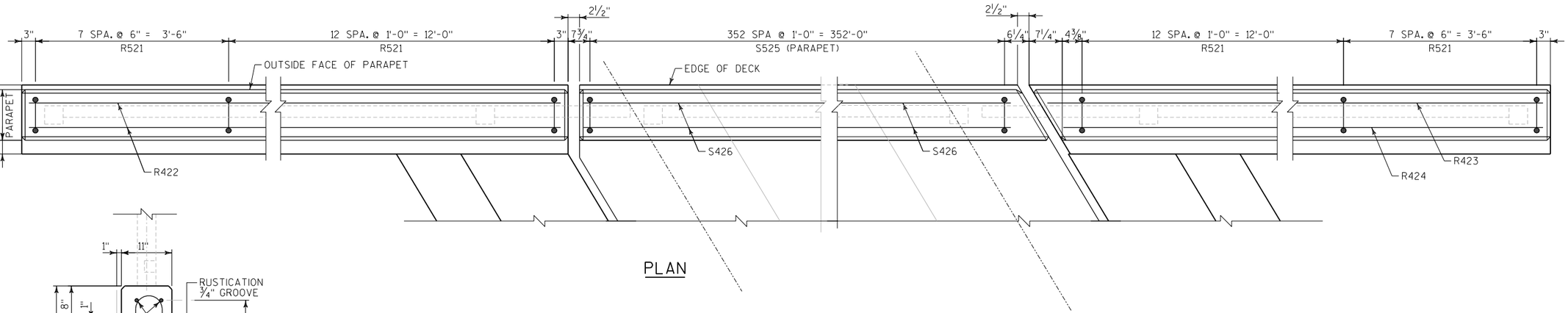


INSIDE ELEVATION

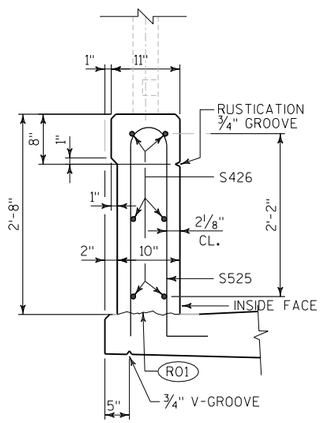


SECTION A-A

SEE SHEET 26 FOR BILL OF BARS.

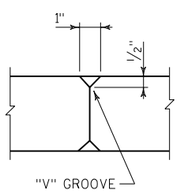


PLAN



SECTION B-B THRU PARAPET ON BRIDGE

SEE SHEET 20 FOR REBAR SPACING ON BRIDGE.
SEE SHEET 23 FOR BILL OF BARS.



SECTION C-C

NOTES

(R01) CONST. JOINT - STRIKE OFF AS SHOWN.

SEE SHEET 26 FOR BILL OF BARS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-64-186

DRAWN BY AMD | PLANS CK'D. SJG

VERTICAL FACE PARAPET 'A'

SHEET 27 OF 31

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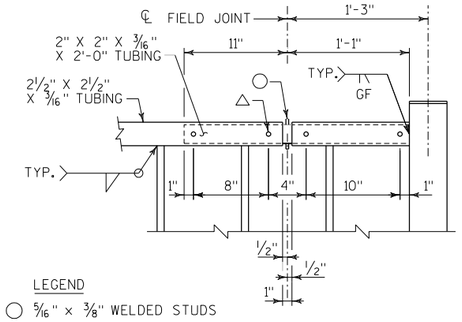
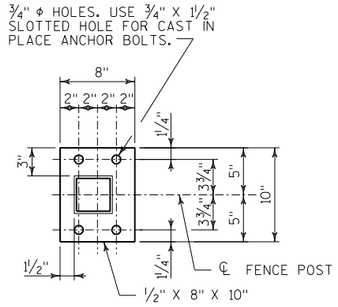


LEGEND

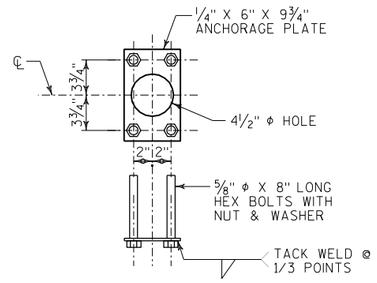
○ 5/16" × 3/8" WELDED STUDS

△ WELD BEAD ON EACH SIDE OF TUBE. GRIND BEADS SO THAT SLEEVE FITS FREELY INSIDE THE 2½" × 2½" TUBE.

RAILING EXPANSION JOINT DETAIL



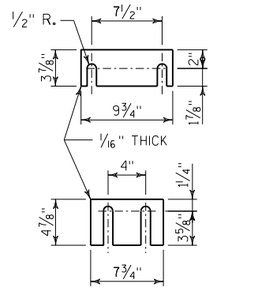
BASE PLATE



ANCHORAGE DETAIL

⅝" CAST-IN-PLACE ANCHOR BOLTS. MASONRY ANCHORS MAY BE SUBSTITUTED FOR C.I.P. ANCHOR BOLTS. ANCHORAGE PLATE NOT REQUIRED WHEN TYPE S ANCHORS ARE USED.

MASONRY ANCHOR TYPE S ⅝-INCH. EMBED 7" IN CONCRETE.



SHIM PLATE DETAILS

TWO SHIMS OF EACH SIZE REQUIRED PER POST

NOTES

POST BASE PLATES SHALL BE FLAT WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT AND VERTICAL. ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUT.

RAILS AND POSTS TO BE ASTM A500, GRADE B. BASE PLATES AND SHIMS TO BE ASTM A709, GRADE 36. ALL GALVANIZED AFTER FABRICATION.

ANCHORAGES SHALL BE ACCURATELY PLACED TO PROVIDE CORRECT ALIGNMENT OF RAILING. SET POSTS NORMAL TO GRADE.

ALL POST SPA. ARE TAKEN HORIZ. ALONG CENTER LINE OF RAILING AT BASE OF POST.

SHIMS SHALL BE USED UNDER BASE PLATES WHERE REQUIRED FOR ALIGNMENT.

CAULK AROUND PERIMETER OF BASE PLATES AND FILL PORTION OF SLOTTED HOLES AROUND ANCHOR BOLTS WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER.

CUT BOTTOM OF POST TO MAKE VERTICAL IN TRANSVERSE DIRECTION.

ANCHOR BOLTS, NUTS AND WASHERS SHALL BE EITHER STAINLESS STEEL OR ASTM 307. IF 307 IS USED, ANCHOR BOLTS, NUTS, AND WASHERS SHALL BE GALVANIZED.

RAILING TO BE PAINTED AND FENCE FABRIC AND TIES TO BE VINYL COATED. FEDERAL COLOR NO. 27038 (BLACK).

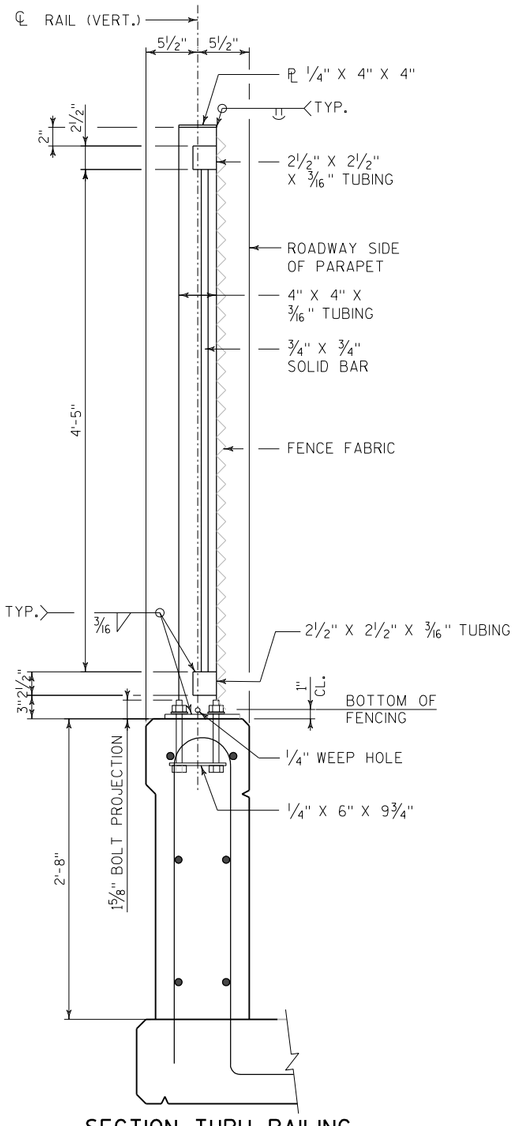
BID ITEM SHALL BE "RAILING TUBULAR SCREENING B-64-0186" WHICH SHALL INCLUDE ALL ITEMS SHOWN.

RAILING SHALL BE FABRICATED IN LENGTHS THAT INCLUDE NOT MORE THAN 3 POSTS.

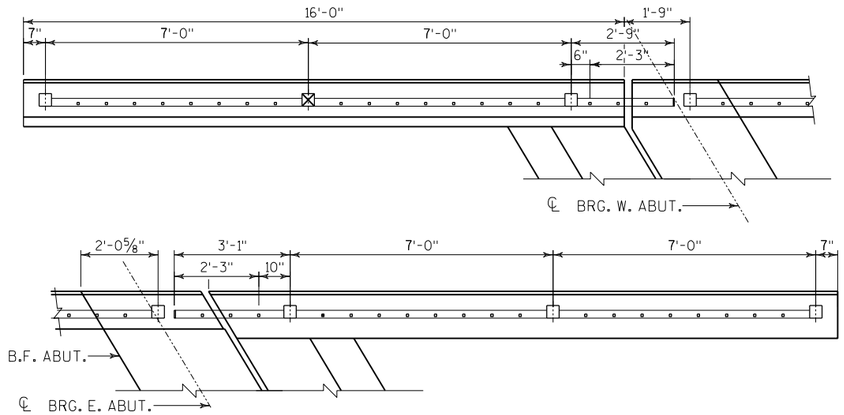
VENT HOLES SHALL BE DRILLED IN MEMBERS AS REQUIRED TO FACILITATE GALVANIZING.

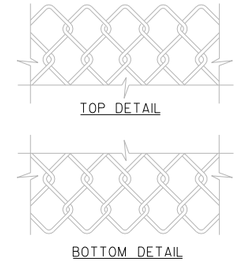
ALL MATERIAL SHALL BE GALVANIZED AFTER FABRICATION. PRIOR TO GALVANIZING ALL STEEL RAILING POSTS AND STEEL TUBING SHALL BE GIVEN A #6 BLAST CLEANING BY SSPC SPECIFICATIONS. PAINT OVER GALVANIZING WITH APPROVED TIE COAT AND TOPCOAT.

THE END OF THE FABRIC SHALL BE ATTACHED TO THE POST BY MEANS OF A TENSION BAR THREADED THROUGH THE END LOOPS OF THE FABRIC AND SECURED TO THE POST WITH CLAMPS & BOLT. THE FABRIC SHALL BE STRETCHED TO REMOVE ALL SLACK.



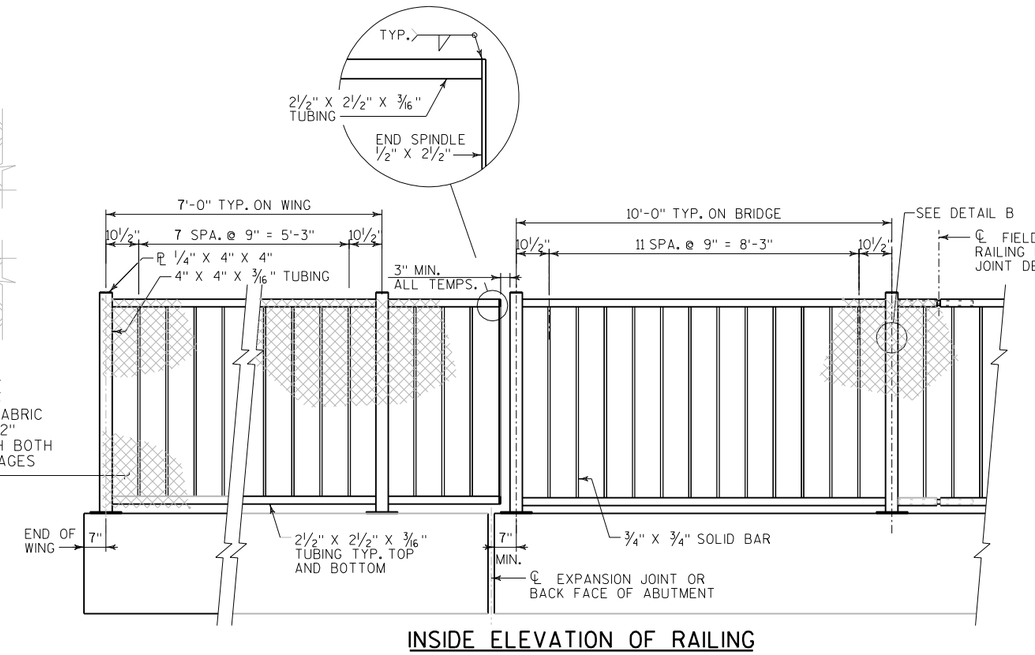
SECTION THRU RAILING



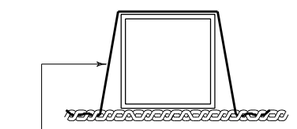


FENCE FABRIC

5'-0" VINYL COATED FENCE FABRIC WOVEN OF 9-GAUGE WIRE IN 2" DIAMOND PATTERN MESH WITH BOTH THE TOP AND BOTTOM SELVAGES KNUCKLED.

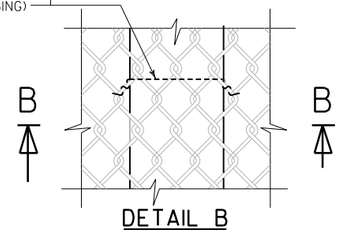


INSIDE ELEVATION OF RAILING



SECTION B-B

FABRIC TIE @ 1'-0" MAX. SPA. (TYP. RAIL POSTS & HORIZ. TUBING)



DETAIL B

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-64-186

DRAWN BY AMD | PLANS CK'D. SJG

ORNAMENTAL PROTECTIVE SCREENING

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6/1/2015

STATE PROJECT NUMBER

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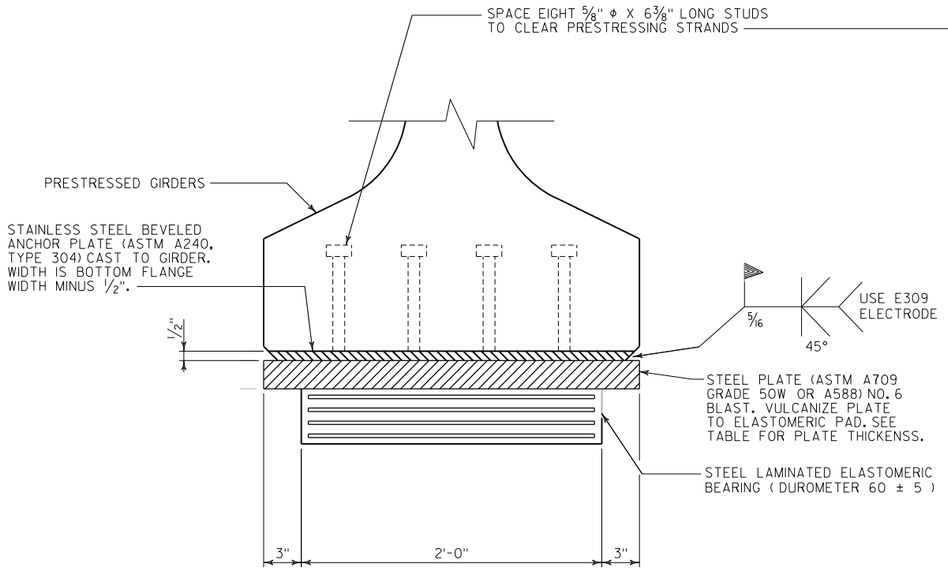
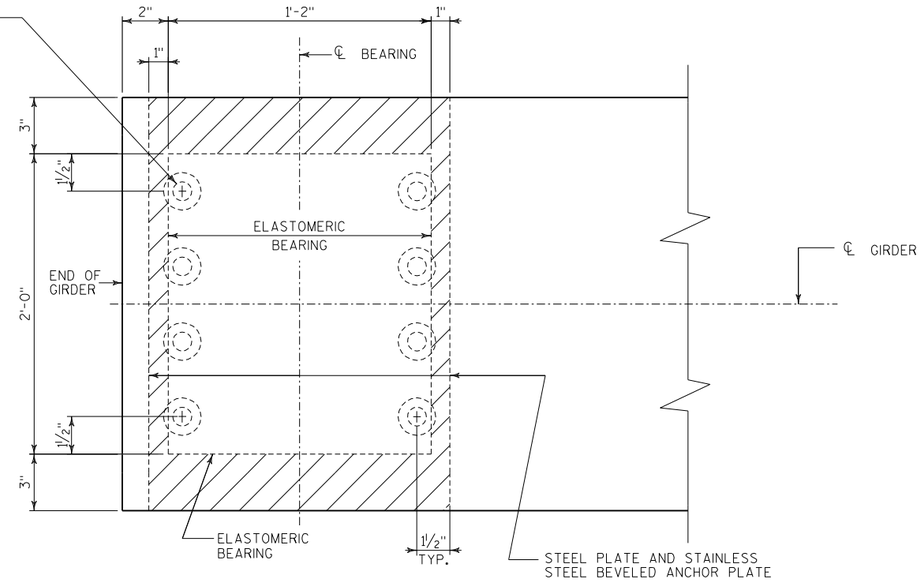
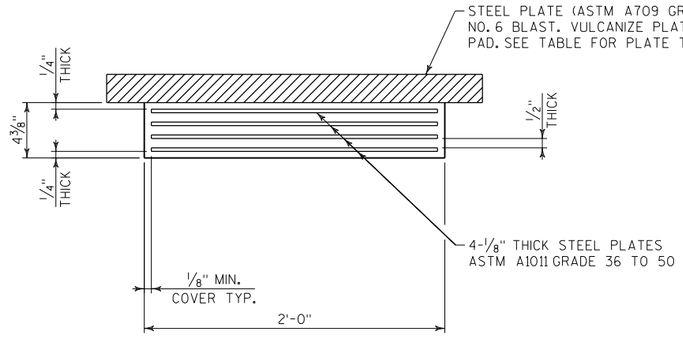


END VIEW



PLAN VIEW



SECTION THRU ELASTOMERIC BEARING

TO BE USE AT THE ABUTMENTS

TOP PLATE THICKNESS (INCHES)				
GIRDER	W. ABUTMENT		E. ABUTMENT	
	WEST BEARING		EAST BEARING	
	WEST END	EAST END	WEST END	EAST END
1	1.5	1.79	1.50	1.50
2-6	1.5	1.77	1.50	1.50
7	1.5	1.79	1.50	1.50

NOTES

BEARINGS SHALL NOT BE PLACED AT A TEMPERATURE GREATER THAN 85° F.

ALL MATERIAL USED FOR BEARINGS SHALL BE PAID FOR AT THE UNIT PRICE BID FOR "BEARING PADS ELASTOMERIC LAMINATED", EACH.

ALL STRUCTURAL STEEL BEARING PLATES SHALL BE FLAT ROLLED WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT AND VERTICAL.

ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUTS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-64-186

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ELASTOMERIC BEARINGS

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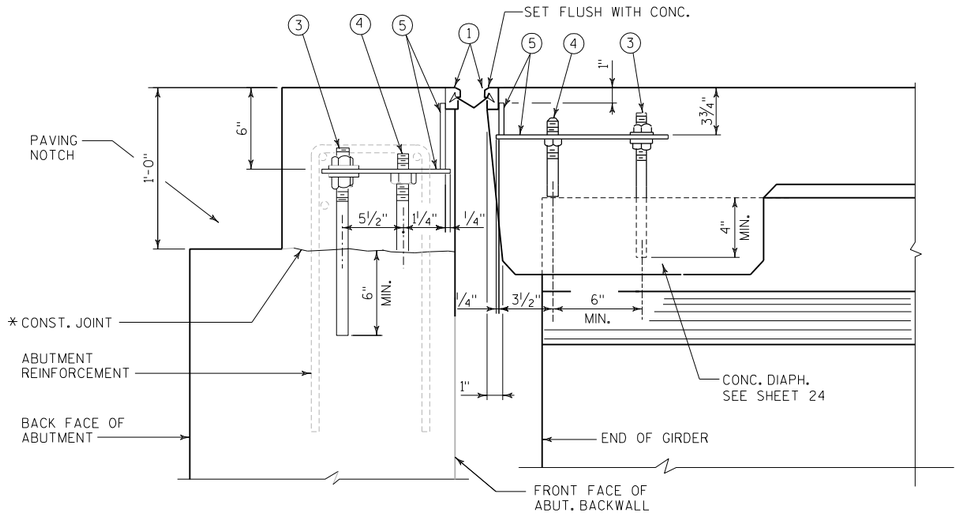
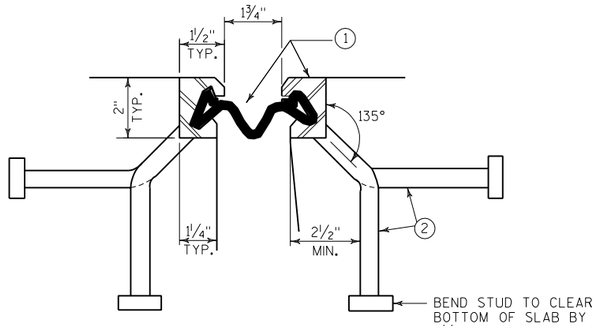
STATE PROJECT NUMBER
1080-13-70



TYPICAL SECTION THRU JOINT

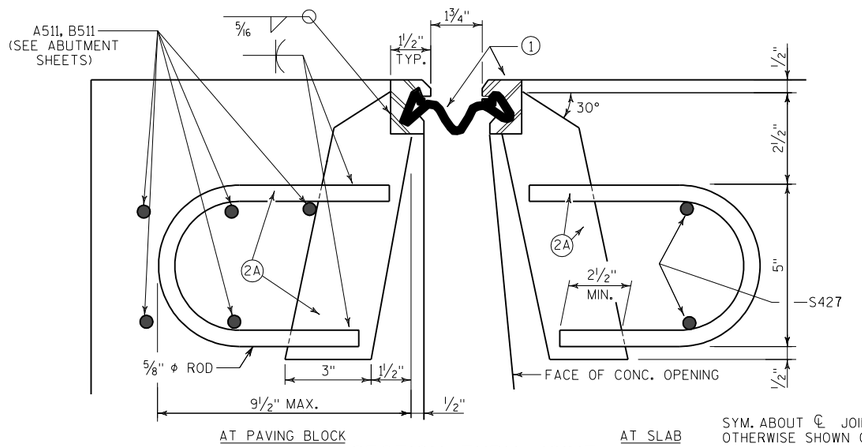
NORMAL TO ℄ SUBSTRUCTURE

* POUR CONC. ABOVE THIS JOINT AFTER SUPERSTRUCTURE IS IN PLACE. STRIKE OF AND LEAVE ROUGH.



SECTION THRU JOINT

EXTERIOR GIRDER TO EDGE OF SLAB & AT PARAPETS, MEDIANS & SIDEWALKS

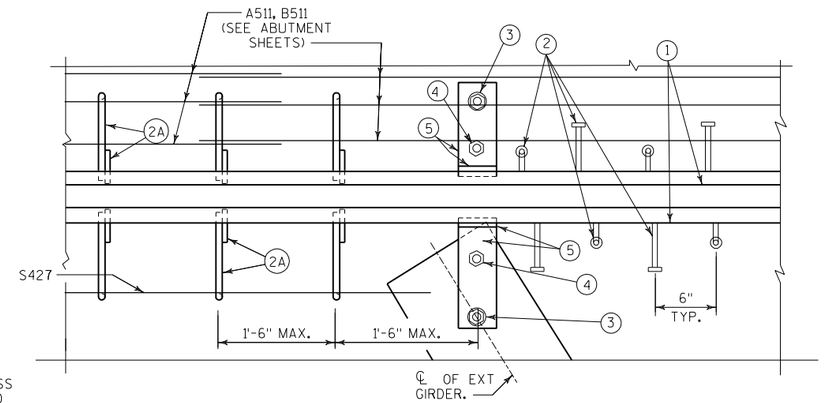


AT PAVING BLOCK AT SLAB

SECTION THRU JOINT

ROADWAY TRAFFIC AREA BETWEEN EXTERIOR GIRDERS.

SYM. ABOUT ℄ JOINT UNLESS OTHERWISE SHOWN OR NOTED



PART PLAN

LEGEND

1. NEOPRENE STRIP SEAL (4-INCH) & STEEL EXTRUSIONS.
2. STUDS ⅝" ϕ × 6⅜" LONG AT 6" ALTERNATE CENTERS. WELD TO EXTRUSIONS & BEND AS SHOWN AFTER WELDING.

2A. ½" THICK ANCHOR PLATE WITH ⅝" ϕ ROD (OR ALTERNATE STRIP SEAL ANCHOR). WELD ROD TO ANCHOR PLATE, WELD ANCHOR PL. TO NO. 1 AT 1'-6" CTRS. BETWEEN GIRDERS.

3. ¾" ϕ THREADED ROD WITH 2 NUTS AND WASHERS. FOR PRESTRESSED GIRDERS FIELD SET ON ℄ OF GIRDER. FOR STEEL GIRDERS WELD THREADED ROD TO TOP FLANGE OR ATTACH BY BOLTING THRU FLANGE. ON ABUTMENT SIDE GROUT THREADED ROD INTO FIELD DRILLED HOLES IN ABUTMENT BACKWALL AS SHOWN.
4. ¾" ϕ THREADED ROD WITH NUT. TACK WELD NUT TO NO. 5.
5. FABRICATE SUPPORT FROM 3" × ½" BAR AS SHOWN OR EQUIVALENT. ONE PER GIRDER PER SIDE. SHOP OR FIELD WELD TO NO. 1. IF FIELD WELDED, COVER WELDED AREAS WITH EPOXY-COATING MATERIAL. PROVIDE 1½" ϕ HOLE FOR NO. 3 & 1" ϕ HOLE FOR NO. 4.
6. GALVANIZED PLATE ⅜" × 10½" × 2'-0" LONG WITH HOLES FOR NO. 7. BEND AS SHOWN.
7. ¾" ϕ × 1½" STAINLESS STEEL SOCKET FLAT HEAD SCREWS WITH ANTI-SEIZE LUBRICANT. RECESS 1/16" BELOW PLATE SURFACE.
8. ¾" ϕ × 4" GALVANIZED HEX HEAD BOLT. BEND 45°.
9. ¾" ϕ × 2¼" GALVANIZED THREADED COUPLING.
10. 1" X 5" XLOTTED CSK. HOLE FOR NO. 7. SLOT PARALLEL TO DIRECTION OF MOVEMENT.

REFER TO SHEET 31

NOTES

ONE FIELD SPLICE PERMITTED IN STEEL EXTRUSIONS. IF USED, DETAILS SHALL BE SUBMITTED FOR APPROVAL. NO SPLICING PERMITTED IN NEOPRENE STRIP SEAL.

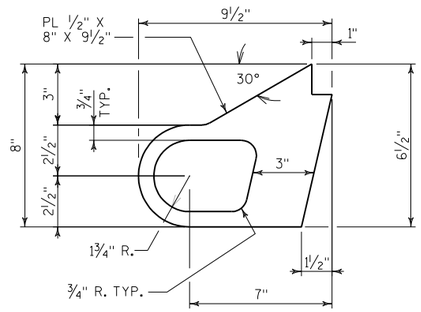
AFTER FABRICATION, BUT BEFORE SHIPMENT, STRAIGHTEN STEEL EXTRUSIONS SUCH THAT THEY SHALL BE FREE FROM WARP, TWIST & SWEEP.

FABRICATOR SHALL PROVIDE MEANS OF KEEPING GALVANIZED EXTRUSIONS CLEAN & SMOOTH DURING SHIPMENT AND PRIOR TO APPLYING LUBRICANT ADHESIVE FOR NEOPRENE GLAND INSTALLATION.

SANDBLAST PLATES & EXTRUSIONS AFTER FABRICATION IN ACCORDANCE WITH SSPC SP. #6 "COMMERCIAL BLAST CLEANING". AFTER BLAST CLEANING, THE PLATES, SUPPORTS & EXTRUSIONS SHALL BE HOT DIPPED GALVANIZED.

ANCHOR SYSTEM NO. 8 & NO. 9 SHALL CONFORM TO ASTM A307 & SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A153 CLASS C & D.

STRIP SEAL EXPANSION JOINT ASSEMBLY, INCLUDING ANCHOR STUDS & HARDWARE WILL BE PAID FOR AT THE LUMP SUM PRICE BID FOR "EXPANSION DEVICE B-64-0186".



ALTERNATE STRIP SEAL ANCHOR

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-64-186

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STRIP SEAL EXPANSION JOINT DETAILS

SHEET 30 OF 31

508

8

8

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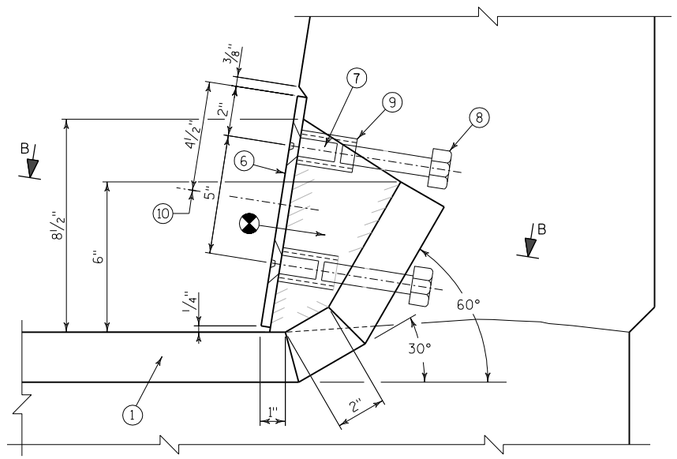
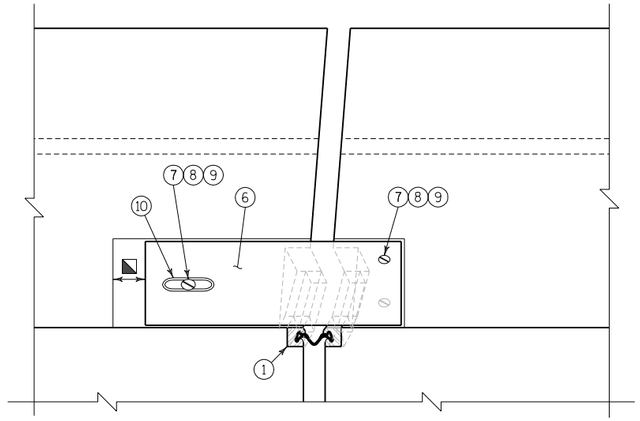
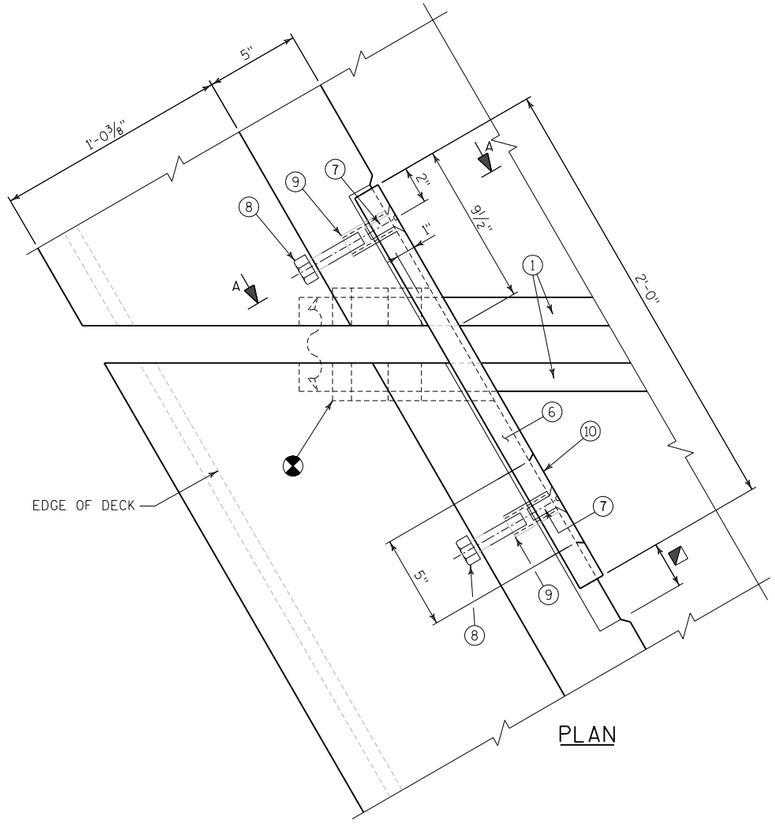


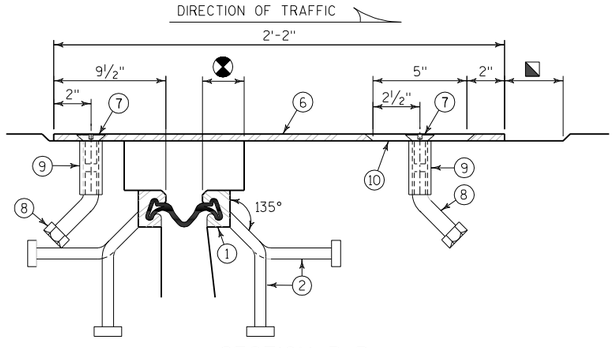
SECTION A-A



VIEW OF PARAPET PLATE FROM ROADWAY



PLAN



SECTION B-B

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8

BLOCK OUT CONCRETE 2" EACH SIDE OF JOINT OPENING.

JOINT OPENING DIMENSION ALONG SKEW PLUS 1/2".

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DEPARTMENT OF TRANSPORTATION

STRUCTURE B-64-186

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COVER PLATE DETAILS

SHEET 31 OF 31

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5/31/2015

STATE PROJECT NUMBER

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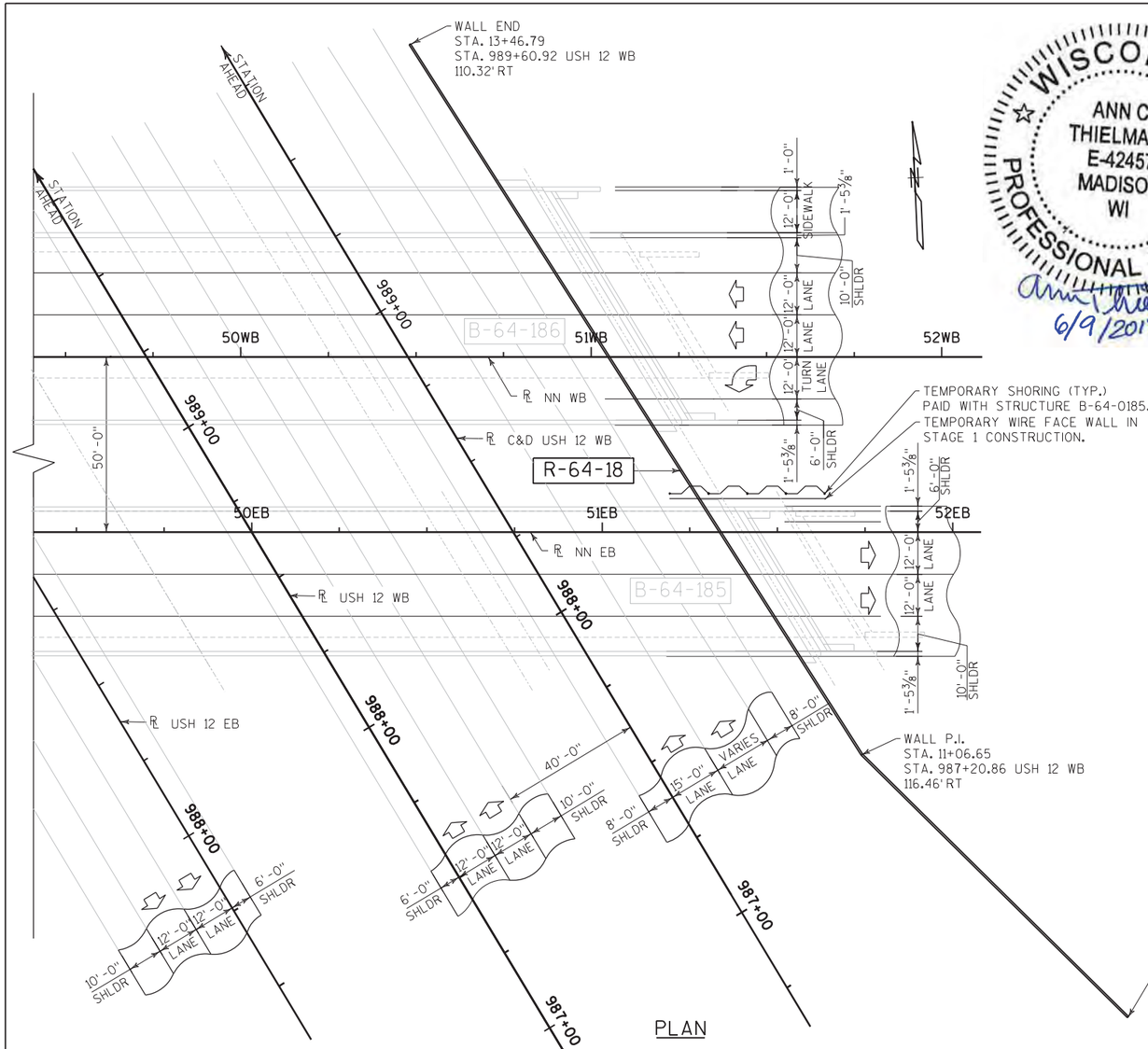
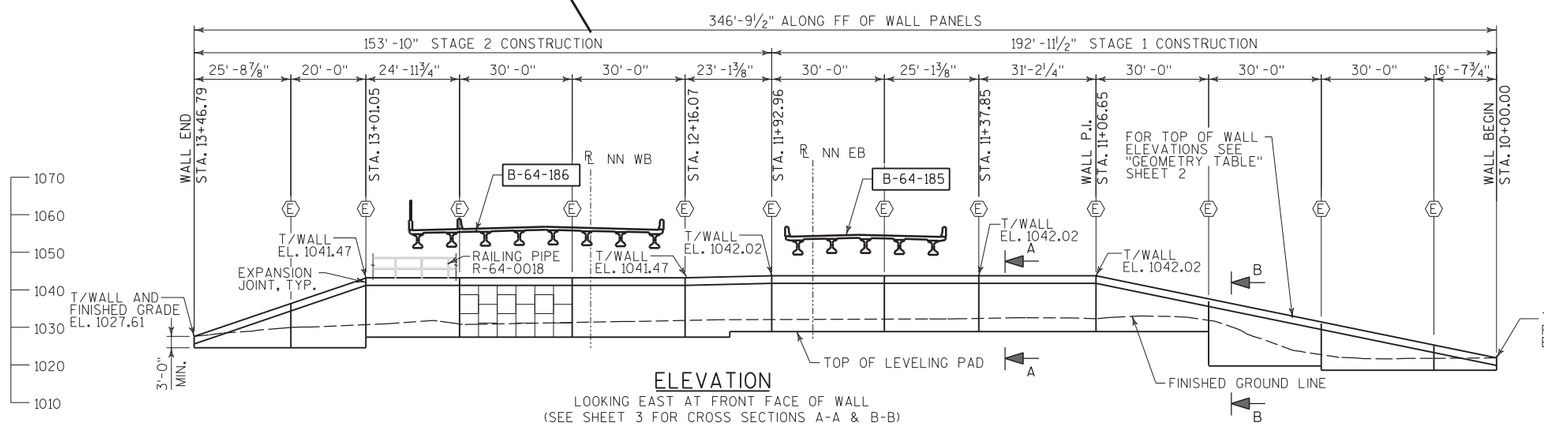


PLAN



ELEVATION

LOOKING EAST AT FRONT FACE OF WALL
(SEE SHEET 3 FOR CROSS SECTIONS A-A & B-B)

WISCONSIN
ANN C. THIELMANN
E-42457
MADISON
WI
PROFESSIONAL ENGINEER
6/9/2015

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

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

ALL BAR STEEL REINFORCEMENT IN CAST-IN-PLACE CONCRETE IS TO BE EPOXY COATED.

BEVEL ALL EXPOSED EDGES OF CONCRETE ¾" UNLESS NOTED OTHERWISE.

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 "WALL CONCRETE PANEL MECHANICALLY STABILIZED EARTH LRFD/OMP".

PLANS, ELEVATIONS, AND DETAILS SHOWN ON THESE DRAWINGS ARE INTENDED TO 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 IS TO BE DESIGNED USING THE ELEVATIONS GIVEN IN THE GEOMETRY TABLE ON SHEET 2.

THE MAXIMUM VALUE OF THE ANGLE OF INTERNAL FRICTION OF THE WALL BACKFILL MATERIAL IN THE REINFORCED ZONE SHALL BE ASSUMED TO BE 30° WITHOUT CERTIFIED TEST VALUES.

JOINT FILLER SHALL CONFORM TO THE REQUIREMENTS OF A.A.S.H.T.O. DESIGNATION M 153, TYPE I, II OR III OR A.A.S.H.T.O. DESIGNATION M 213.

THE PLAN QUANTITY FOR THE ITEM "WALL CONCRETE PANEL MECHANICALLY STABILIZED EARTH LRFD/OMP" IS BASED ON A WALL HEIGHT MEASURED FROM THE TOP OF THE LEVELING PAD TO THE TOP OF WALL. THE TOP OF LEVELING PAD IS ASSUMED TO BE A CONSTANT 3'-0" BELOW FINISHED GRADE.

THE CONTRACTOR MUST COORDINATE CONSTRUCTION OF THIS WALL WITH CONSTRUCTION OF THE EAST ABUTMENTS OF BRIDGES B-64-185 AND B-64-186.

ALL WALL STATIONS ARE ALONG THE ℄ FOR R-64-18 ALONG THE FRONT FACE OF WALL (UNLESS SHOWN OTHERWISE).

ROADWAY STATION AND OFFSET DATA REFERENCES THE USH 12 WB ALIGNMENT.

THE EXISTING GROUND LINE IS THE UPPER LIMIT OF EXCAVATION OF STRUCTURES.

DESIGN DATA

LIVE LOAD
LIVE LOAD SURCHARGE _____ 240 P.S.F.

MATERIAL PROPERTIES
CONCRETE MASONRY COPING _____ f'c = 3,500 PSI
PRECAST CONRETE WALL PANELS _____ f'c = 4,000 PSI
BAR STEEL REINFORCEMNT _____ fy = 60,000 PSI

DESIGN FOR RETAINING WALL TO PROVIDE FOR FINISHED GRADE SLOPED BEHIND WALL AS SHOWN, AND ANY EARTH LOAD SURCHARGES NOT CARRIED BY THE ABUTMENT(S).

LIST OF DRAWINGS:

1. GENERAL PLAN & ELEVATION
2. GEOMETRY TABLE, CROSS SECTION & QUANTITIES
3. WALL DETAILS
4. RAILING PIPE DETAIL
5. SUBSURFACE EXPLORATION

LEGEND

Ⓔ EXPANSION JOINT IN COPING

TRAFFIC DATA:

USH 12

A.D.T. = ... 16600 (2015)
A.D.T. = ... 23500 (2035)
R.D.S. = 70 M.P.H.

CTH NN

A.D.T. = ... 8100 (2015)
A.D.T. = ... 9200 (2035)
R.D.S. = 60 M.P.H.

DESIGN CONTACTS

BUREAU OF STRUCTURES:
WILLIAM DREHER
(608) 266-8489
CONSULTANT CONTACT:
ANN THIELMANN
(608) 229-1414

NO.	DATE	REVISION	BY

DAAR ENGINEERING, INC.
www.daareng.com
Madison, WI 53783
608-249-0140

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher SDR 06/11/15
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE R-64-0018

COUNTY	VILLAGE
WALWORTH	GENEVA

DESIGN SPEC. AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS

DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
ACT	SJG	TRW	SJG

GENERAL PLAN AND ELEVATION

SHEET 1 OF 5

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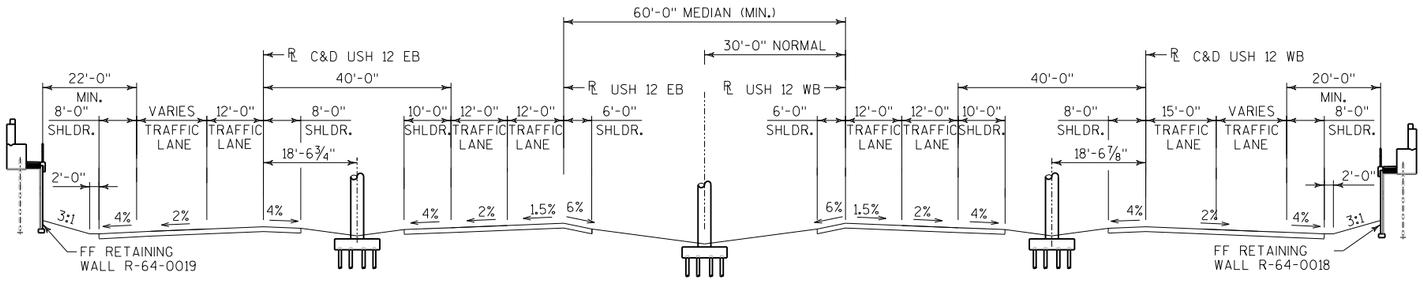
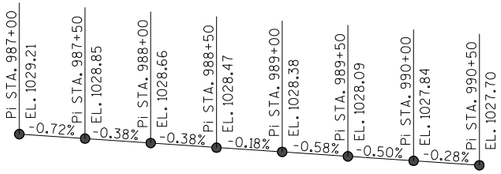
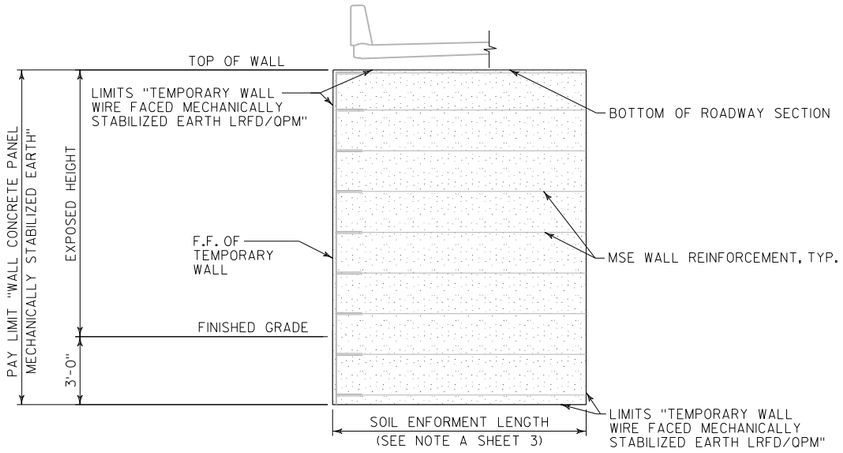


TYPICAL SECTION THRU USH 12

(LOOKING NORTH)

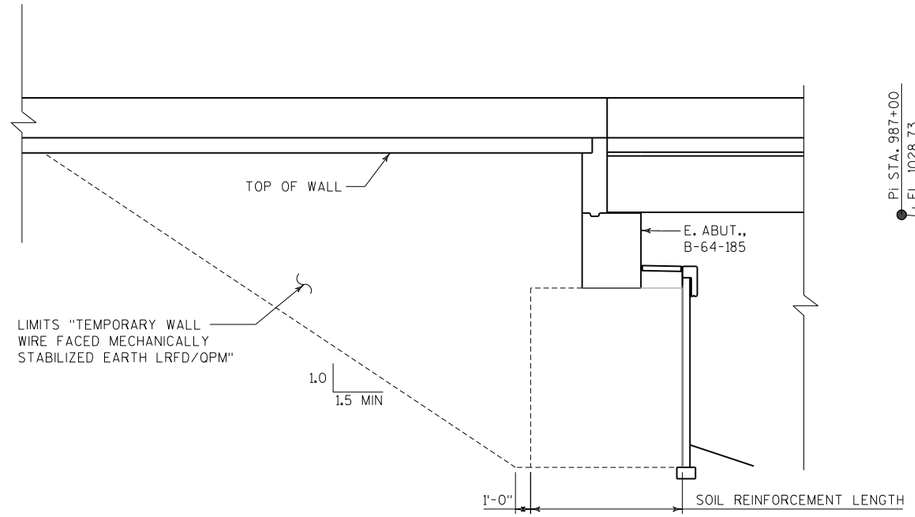


EXISTING PROFILE GRADE LINE USH 12 WB



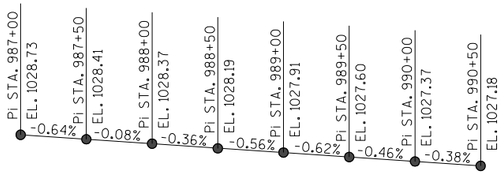
TYPICAL SECTION - TEMPORARY WALL

(LOOKING EAST)



ELEVATION AT TEMPORARY WALL

(LOOKING SOUTH)



EXISTING PROFILE GRADE LINE "C&D" USH 12 WB

TOTAL ESTIMATED QUANTITIES

BID - ITEM NUMBER	BID - ITEM	UNITS	QUANTITY
513.2050.S	RAILING PIPE	LF	347
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	8
*612.0206	PIPE UNDERDRAIN UNPERFORATED 6-INCH	LF	60
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	347
SPV.0165.01	WALL CONCRETE PANEL MECHANICALLY STABILIZED EARTH LRFD/QMP	SF	4175
SPV.0165.02	TEMPORARY WALL WIRE FACE MECHANICALLY STABILIZED EARTH LRFD/QMP	SF	709
	NON BID - ITEM		
	PREFORMED FILLER	SIZE	¾" & 1"
	EXPANDED POLYSTYRENE	SIZE	1"

* UNPERFORATED PIPE SHOULD BE USED BEYOND THE WALL LIMITS

BENCH MARKS

NO.	DESCRIPTION	ELEVATION
BM 145	BRIDGE MONUMENT AT THE SOUTHWEST CORNER OF THE EASTBOUND CTH "NN" BRIDGE	1047.44
BM 162	BRIDGE MONUMENT AT THE NORTHEAST CORNER OF THE WESTBOUND CTH "NN" BRIDGE	1052.85

WALL EXTERNAL STABILITY EVALUATION

DIMENSIONS	EVALUATED LOCATION
WALL STA.	12+93.99
BORING USED	S-11
WALL HEIGHT[1] (FEET)	14.93
EXPOSED WALL HEIGHT (FEET)	11.93
MINIMUM LENGTH OF REINFORCEMENT[2] (FEET)	20
LENGTH OF REIN. / WALL HEIGHT	1.34
CAPACITY TO DEMAND RATIO (CDR)	
SLIDING (CDR>1.0)	1.02
ECCENTRICITY (CDR>1.0)	1.30
OVERALL STABILITY (CDR>1.0)	1.01
BEARING RESISTANCE (CDR>1.0)	1.07
FACTORED BEARING RESISTANCE (PSF)	6000

NOTES:
1. WALL HEIGHT SHOWS ONLY THE CONTROLLING SECTION AND INCLUDES MIN. 3.0 FEET OF EMBEDMENT.
2. THE LENGTH OF REINFORCEMENT IS THE MINIMUM REQUIRED LENGTH FOR THE CONTROLLING SECTION.

FINAL DESIGN FOR INTERNAL STABILITY, EXTERNAL SLIDING & ECCENTRICITY AT OTHER WALL STATIONS IS THE RESPONSIBILITY OF THE CONTRACTOR'S WALL DESIGNER.

SOIL PARAMETERS

SOIL ZONE AND ELEVATION (FT)	SOIL DESCRIPTION	MOIST SOIL UNIT WEIGHT (PCF)	COHESION, C (PSF)	INTERNAL ANGLE OF FRICTION (DEGREES)
RETAINED FILL TOW EL. 1043.11	SANDS AND SILTY CLAYS (FILL)	120	0	29
FOUNDATION SOILS FOOTING EL. 1026.54-1027.68	SILTY SANDS (FILL)	125	0	34

GEOMETRY TABLE

WALL STATION	USH12 WB STATION	OFFSET TO F.F. WALL	TOP OF WALL	FINISHED GROUND
10+00.00	986+17.57	142.97 RT	1022.68	1021.86
11+06.65	987+20.86	116.46 RT	1042.02	1032.34
11+37.84	987+52.05	115.66 RT	1042.02	1032.37
11+92.96	988+07.14	114.25 RT	1042.02	1032.08
12+16.07	988+30.25	113.66 RT	1041.47	1031.85
13+01.05	989+15.20	111.49 RT	1041.47	1030.04
13+46.79	989+60.92	110.32 RT	1027.61	1027.61

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-64-0018

DRAWN BY AMD | PLANS CK'D. SJG

GEOMETRY TABLE, CROSS-SECTION, & QUANTITIES

SHEET 2 OF 5

511

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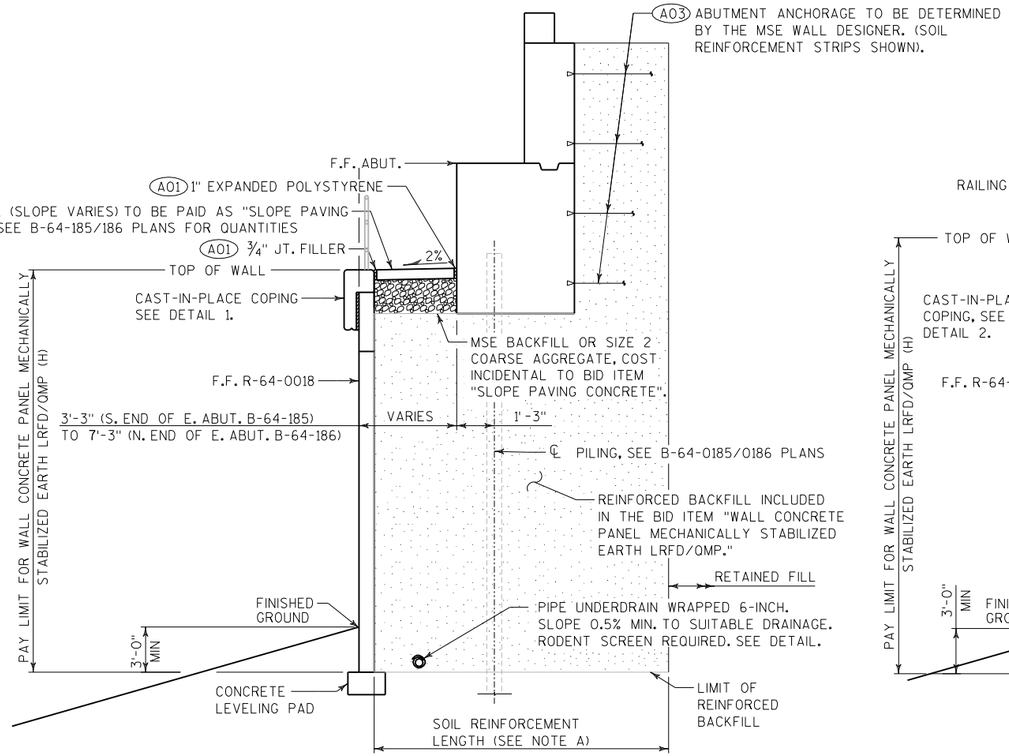
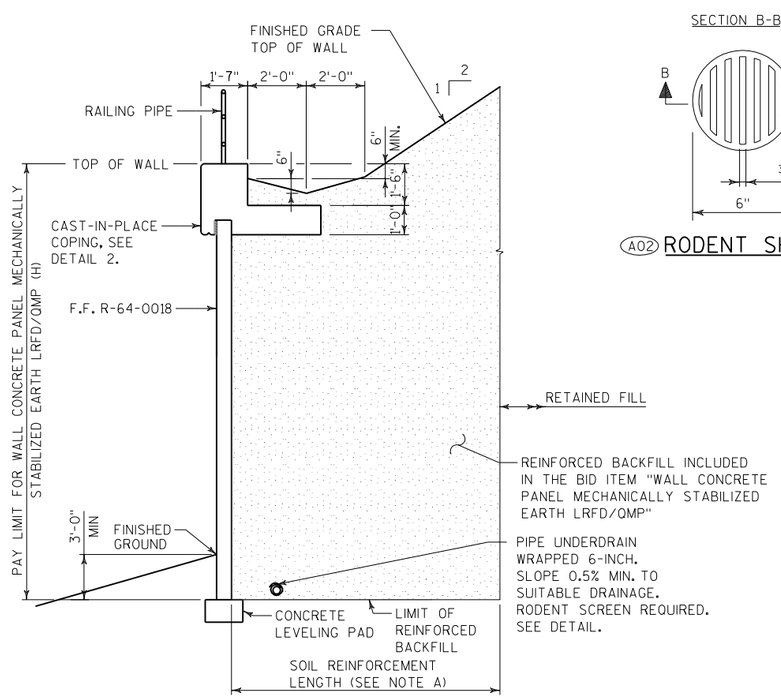


TYPICAL WALL SECTION A-A

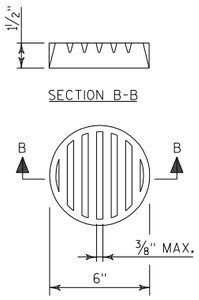
(LOOKING NORTH AT EAST ABUTMENT STA. 11+37.85 TO 13+01.05)

NOTE A:
SEE SAFETY FACTOR TABLE ON SHEET 2 FOR MINIMUM LENGTH OF MSE WALL REINFORCING STRIPS. SOIL REINFORCEMENT MUST EXTEND A MINIMUM OF 3.0 FEET BEYOND THE FAILURE PLANE FOR INTERNAL STABILITY AS DEFINED BY AASHTO SPECIFICATIONS.

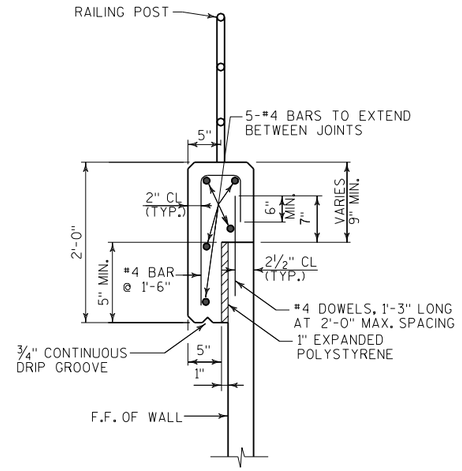


SECTION B-B

(LOOKING NORTH)



A02 RODENT SHIELD



CAST-IN-PLACE CONCRETE COPING DETAIL 1

(NOTE: COPING CONCRETE AND REINFORCEMENT INCLUDED IN THE BID ITEM "WALL CONCRETE PANEL MECHANICALLY STABILIZED EARTH LRFD/QMP.")

NOTES

A01 SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES OF FILLER AND EXPANDED POLYSTYRENE WITH NON-STAINING, GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE.

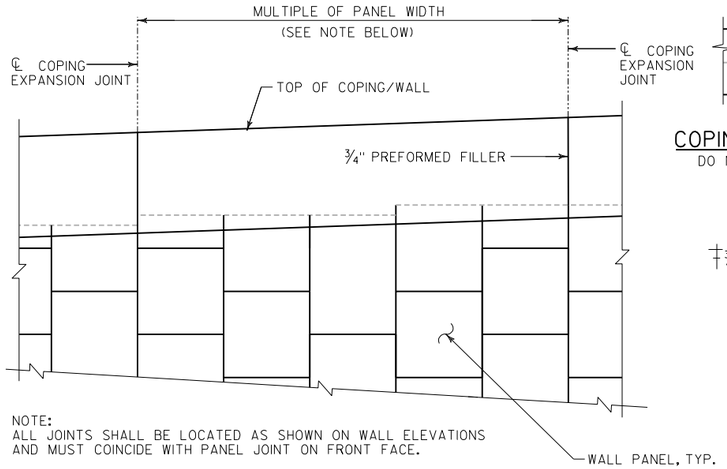
EXPANSION ABUTMENTS TO BE BACKFILLED TO A MINIMUM OF THE BEAM SEAT ELEVATION PRIOR TO PLACING GIRDERS.

A02 DIMENSIONS ARE APPROXIMATE, GRATE TO BE SIZED TO FIT INTO A PIPE COUPLING. ORIENT RODENT SHIELD SO SLOTS ARE VERTICAL. COST OF RODENT SHIELD AND ALL FITTINGS TO BE INCLUDED IN THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH." THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL . THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE OUTFALL PIPE. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH STAINLESS STEEL SHEET METAL SCREWS.

A03 UNFACTORED SUPERSTRUCTURE LATERAL LINE LOAD TRANSFERRED TO THE ABUTMENT ARE TAKEN TO BE KIPS PER FOOT OF ABUTMENT LENGTH. THE VALUES ARE TO BE USED FOR THE DESIGN OF THE ABUTMENT ANCHORAGE BY THE MSE MANUFACTURER (MSE SYSTEM, DEAD MAN ANCHOR, OTHER). THE FOLLOWING LOADS FROM THE SUPERSTRUCTURE IN ADDITION TO THE LIVE LOAD SURCHARGE AND EARTH PRESSURE ON THE BACK OF THE ABUTMENT:

UNFACTORED LOADS B-64-185	UNFACTORED LOADS B-64-186
BR = 0.71 KLF	BR = 0.74 KLF
WS = 0.30 KLF	WS = 0.19 KLF
WL = 0.12 KLF	WL = 0.08 KLF
TU = 0.32 KLF	TU = 0.67 KLF

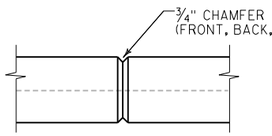
ABUTMENT ANCHORAGE (REINFORCING STRIPS AND CONNECTION TO ABUTMENT) ARE TO BE PAID UNDER THE BID ITEM "WALL CONCRETE PANEL MECHANICALLY STABILIZED EARTH LRFD/QMP."



NOTE:
ALL JOINTS SHALL BE LOCATED AS SHOWN ON WALL ELEVATIONS AND MUST COINCIDE WITH PANEL JOINT ON FRONT FACE.

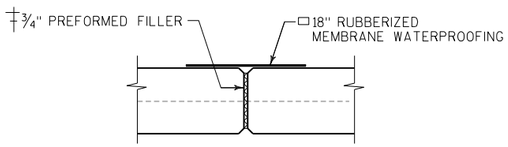
COPING PARTIAL ELEVATION

(LOOKING AT F.F. OF WALL)



COPING CONTRACTION JOINT

DO NOT RUN BAR STEEL THRU JOINT.

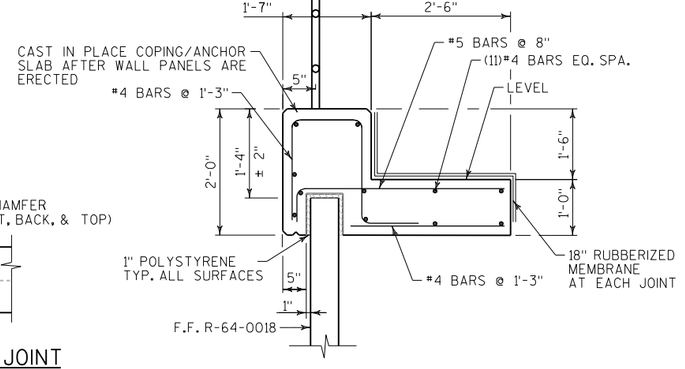


COPING EXPANSION JOINT

DO NOT RUN BAR STEEL THRU JOINT.

SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONC.)

MEMBRANE WATERPROOFING TO EXTEND FROM TOP OF COPING TO 6" BELOW TOP OF PANELS.



CAST-IN-PLACE CONCRETE COPING DETAIL 2

(NOTE: COPING CONCRETE AND REINFORCEMENT INCLUDED IN THE BID ITEM "WALL CONCRETE PANEL MECHANICALLY STABILIZED EARTH LRFD/QMP.")

NO.	DATE	REVISION	BY

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DEPARTMENT OF TRANSPORTATION

STRUCTURE R-64-0018

DRAWN BY AMD | PLANS CK'D. SJG

WALL DETAILS

SHEET 3 OF 5

512

8

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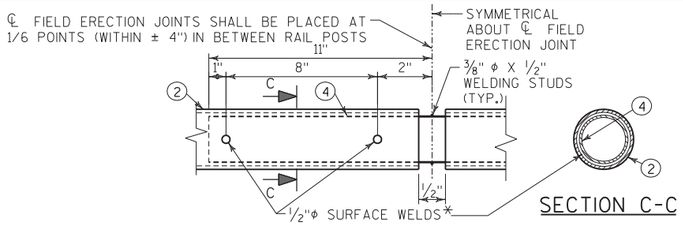
6/9/2015

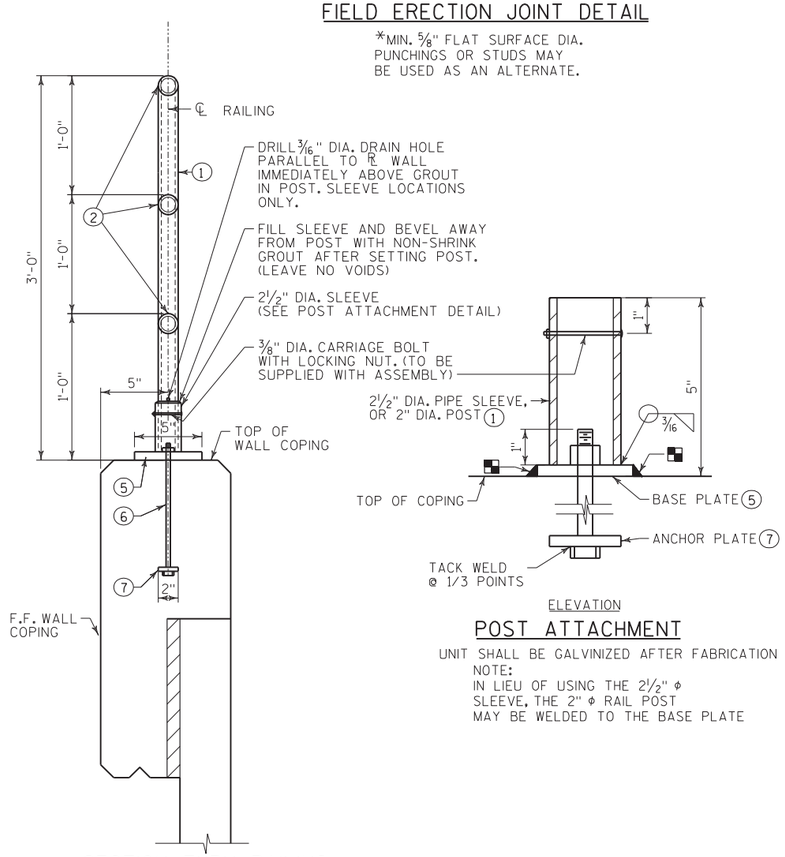
STATE PROJECT NUMBER

1080-13-70



FIELD ERECTION JOINT DETAIL

*MIN. 5/8" FLAT SURFACE DIA. PUNCHINGS OR STUDS MAY BE USED AS AN ALTERNATE.



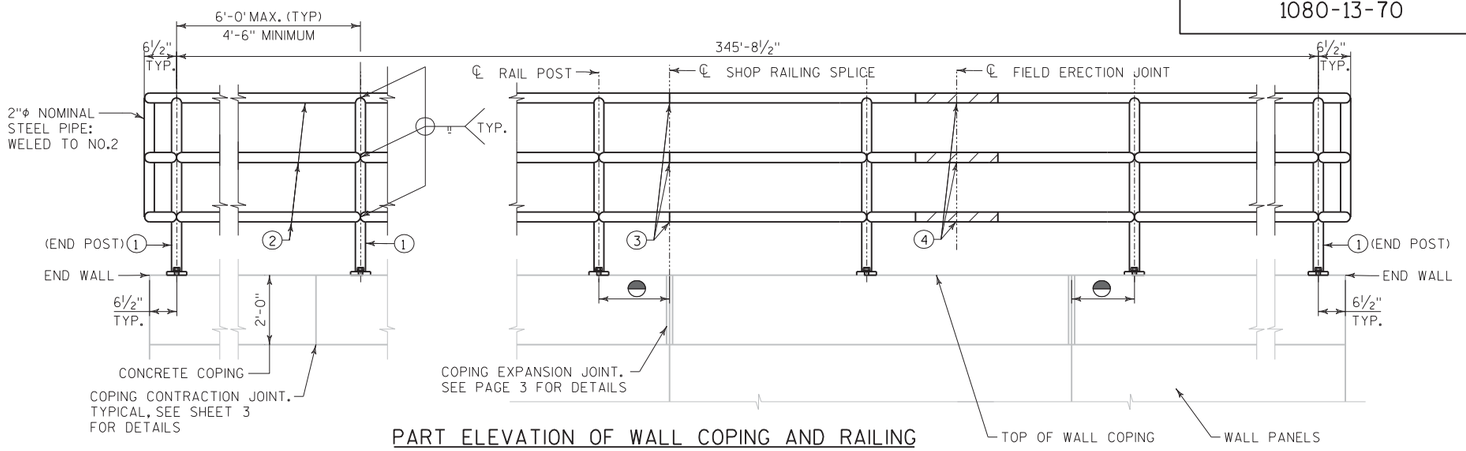
SECTION THRU RAILING

ELEVATION

POST ATTACHMENT

UNIT SHALL BE GALVINIZED AFTER FABRICATION

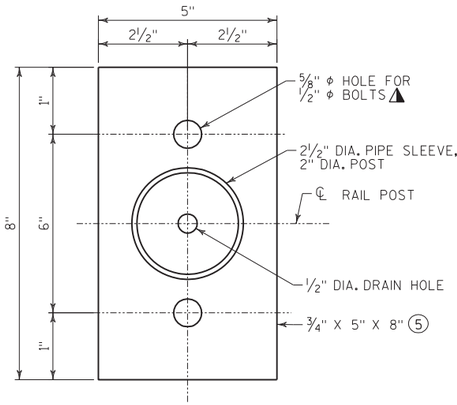
NOTE:
IN LIEU OF USING THE 2 1/2" ϕ SLEEVE, THE 2" ϕ RAIL POST MAY BE WELDED TO THE BASE PLATE



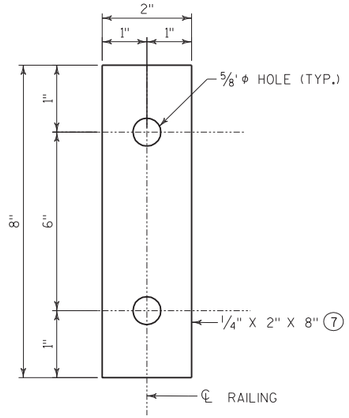
PART ELEVATION OF WALL COPING AND RAILING

(LOOKING EAST AT FRONT FACE OF WALL)

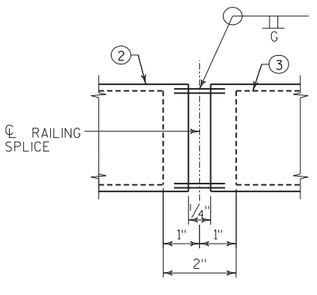
1'-0" MIN. DISTANCE REQUIRED BETWEEN THE ℄ OF COPING JOINTS (BOTH EXPANSION AND CONTRACTION JOINTS AND THE ℄ OF RAIL POSTS



BASE PLATE

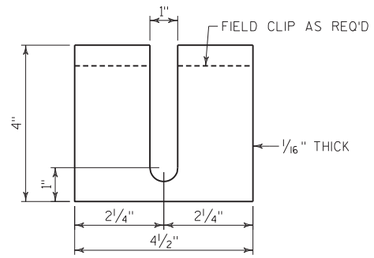


ANCHOR PLATE



SHOP RAILING SPLICE DETAIL

(LOCATION MUST BE SHOWN ON THE SHOP DRAWINGS)



POST SHIM DETAIL

SHIMS REQUIRED ONLY WHEN POSTS ARE WELDED TO BASE PLATES. PROVIDE 4 SHIMS PER POST.

LEGEND

1. 2" DIA. NOMINAL STEEL FOR POSTS: CUT BOTTOM OF POST TO MATCH TOP OF CONCRETE. POSTS ARE TO BE SET VERTICAL.
2. 2" DIA. NOMINAL STEEL PIPE FOR RAILS: WELD TO NO.1
3. 1 1/2" DIA. PIPE SLEEVE FOR NO. 2. PROVIDE "SLIDING FIT" WITH A MINIMUM OUT TO OUT DIMENSION OF 2 1/16".
4. 1 1/2" DIA. PIPE SLEEVE X 1'-10" LONG FOR NO. 2. PROVIDE 1/2" DIA. SURFACE WELDS ON ALL SIDES AS SHOWN GRIND WELDS TO FIT FREE INTO I.D. OF NO. 2. PROVIDE 3/8" DIA. X 1/2" WELDING SUTDS ON TOP AND BOTTOM SURFACES AT CENTERLINE.
5. PLATE 3/4" X 5" X 8", WITH 5/8" DIA. HOLE FOR ANCHOR BOLTS NO. 6. WELD TO NO. 1. OR PIPE SLEEVE AS SHOWN.
6. 1/2" DIA. X 6 3/8" LONG HEX BOLTS (GALVANIZED) WITH NUT AND WASHER. 2 REQ'D PER POST. THREAD 3" AND PLACE NORMAL TO PLATE NO. 5. CHAMFER TOP OF BOLTS BEFORE THREADING. TYPE S, 1/2" CONCRETE MASONRY ANCHORS MAY BE SUBSTITUTED FOR 1/2" BOLTS. ANCHOR PLATE NOT REQUIRED WHEN TYPE S ANCHORS ARE USED. SEE NOTE ☆
- ☆ 1/2" DIA. CONCRETE MASONRY ANCHORS, TYPS "S", 6" MIN. EMBEDMENT (EPOXY ANCHORED) INTO CONCRETE AND MINIUM PULLOUT CAPACITY OF 10 KIPS. ANCHOR, WASHER, AND NUT SHALL BE GALVANIZED.
7. 1/4" X 2" X 8" FLAT BAR, WITH 5/8" DIA. HOLES FOR ANCHOR BOLTS NO. 6.

GENERAL NOTES

BID ITEM SHALL BE "RAILING PIPE" WHICH INCLUDES ALL ITEMS SHOWN, INCLUDING GALVANING AND COATING.

RAILING SHALL BE FABRICATED IN LENGTHS THAT INCLUDE 3 OR 4 POSTS.

FIELD ERECTION JOINTS MUST BE PLACED IN BETWEEN RAIL POSTS WHERE THERE IS ALSO A CONCRETE COPING EXPANSION JOINT IN BETWEEN RAIL POSTS.

POST BASE PLATES SHALL BE FLAT WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT AND VERTICAL. ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUT.

ALL MATERIALS EXCEPT ANCHOR DETAIL (NO. 7) SHALL BE GALVANIZED AFTER FABRICATION. PRIOR TO GALVANIZING, ALL STEEL RAILING POSTS AND STEEL TUBING SHALL BE GIVEN A NO. 6 BLAST CLEANING BY S.S.P.C SPECIFICATIONS. AFTER GALVANIZING, EPOXY COAT. COLOR SHALL BE FEDERAL COLOR NO. 27038 (BLACK).

DRILL DRAIN HOLES PRIOR TO GALVANIZING.

ALL MATERIALS USED IN FABRICATION SHALL BE MADE FROM MATERIALS CONFORMING TO A.S.T.M. DESIGNATION A709 GRADE 36 UNLESS NOTED OTHERWISE.

STEEL POST SHIMS MAY BE USED UNDER POSTS WHERE REQ'D FOR ALIGNMENT.

ALL RAILS, POSTS AND SLEEVES ARE STANDARD WEIGHT PIPE, SCHEDULE 40.

PLACE ALL NUTS OUTSIDE OF POSTS.

ANCHORAGES SHALL BE ACCURATELY PLACED TO PROVIDE CORRECT ALIGNMENT OF RAILING SET OF NORMAL GRADE.

CAULK AROUND PERIMETER OF BASE PLATES AND FILL PORTION OF SLOTTED HOLES AROUND ANCHOR BOLTS IN POST SHIMS AND BASE PLATES WITH NON-STAINING, BLACK, NON-BITUMINOUS JOINT SEALER.

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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-64-0018

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RAILING PIPE DETAIL

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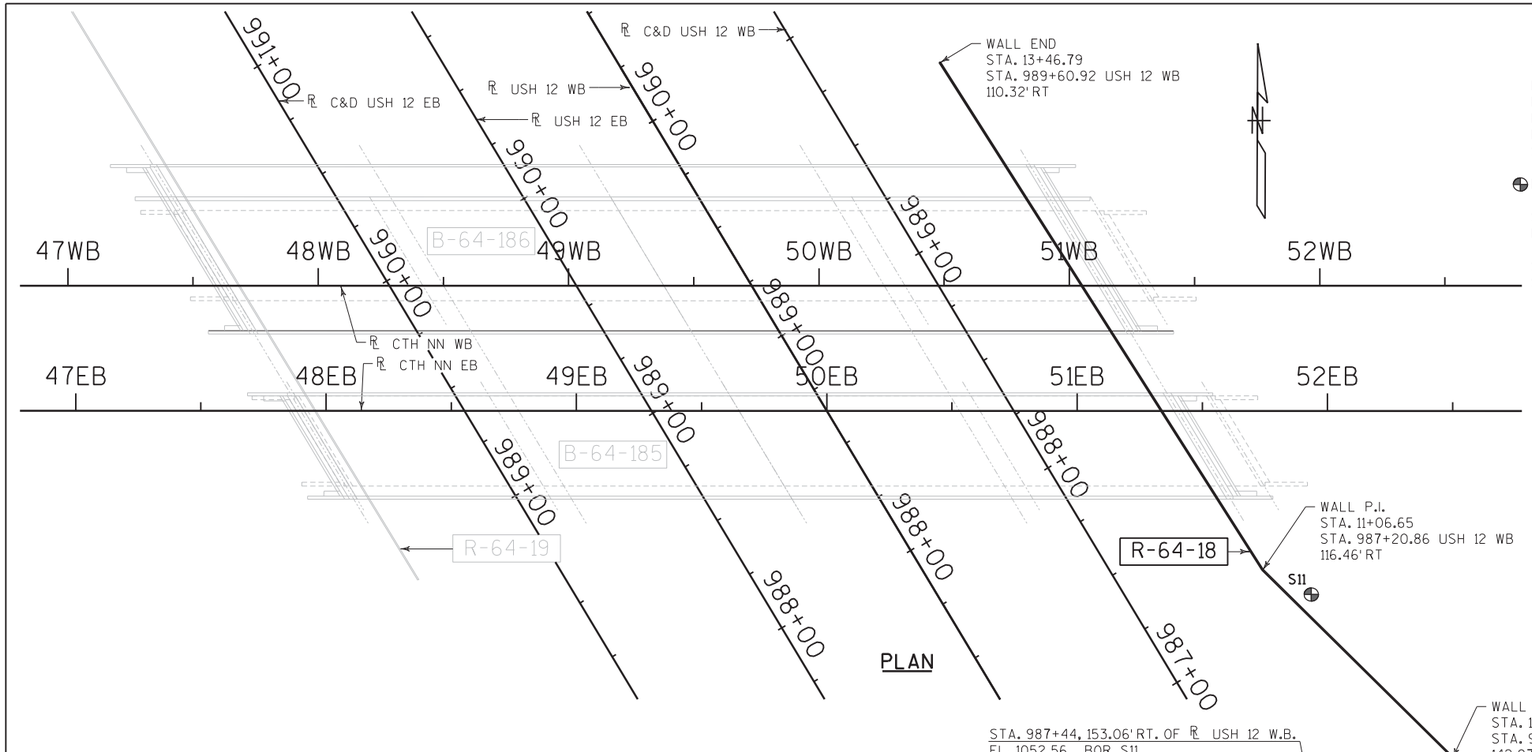
5/5/2015



PLAN

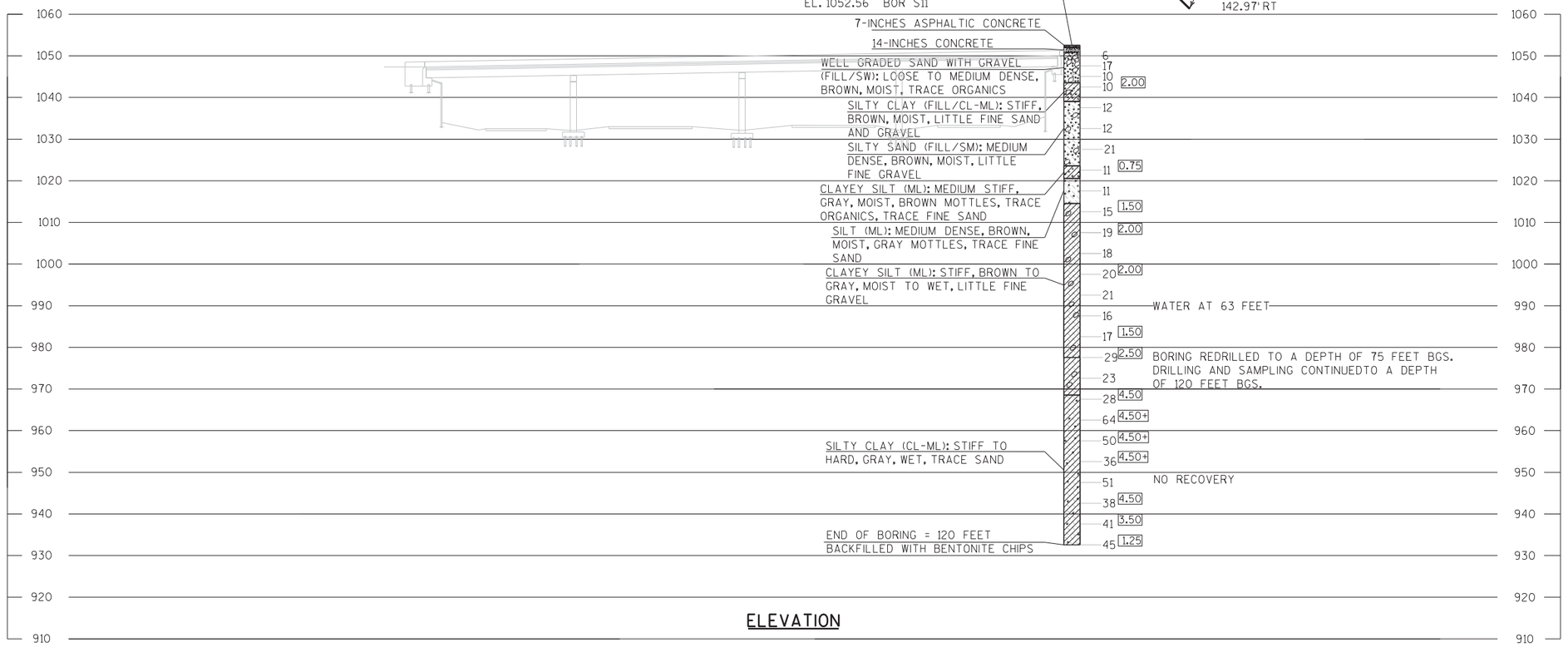
NOTES:

THE SUBSURFACE INFORMATION PRESENTED HEREIN IS AN ABBREVIATED VERSION OF THE INFORMATION PRESENTED IN THE GEOTECHNICAL ENGINEERING REPORT. REVIEW THE APPROPRIATE GEOTECHNICAL REPORT AND SOIL BORING LOGS FOR ADDITIONAL SUBSURFACE INFORMATION.

⊕ DENOTES SOIL BORING LOCATION

SOIL BORINGS COMPLETED BY:
HIMALAYAN CONSULTANTS, L.L.C.

SOIL BORINGS TAKEN:
S11 - NOVEMBER 19, 2012



ELEVATION

STATE PROJECT NUMBER

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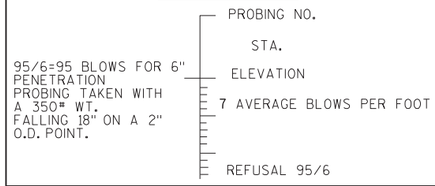
ABBREVIATIONS

F — FINE M — MEDIUM C — COARSE
WS — WEATHERED SO — SOUND

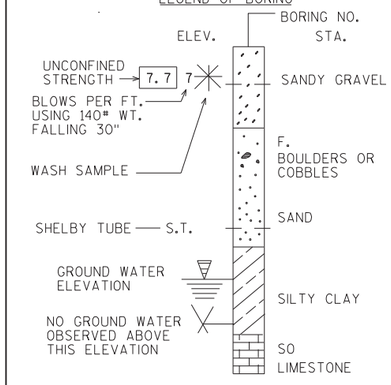
MATERIAL SYMBOLS

TOPSOIL, SILT, SANDSTONE
SAND, PEAT, LIMESTONE
GRAVEL, CLAY, IGNEOUS ROCK

LEGEND OF PROBING



LEGEND OF BORING



UNLESS OTHERWISE SPECIFIED, THE BLOWS PER FOOT AT THE LOCATIONS INDICATED ARE BASED ON DRIVING A 2" O.D. X 1.4" I.D. SPLIT SPOON SAMPLER WITH A 140# HAMMER HAVING A FREE FALL OF 30". THE BLOW COUNT IS TAKEN IN UNDISTURBED SOIL IMMEDIATELY BELOW A CASED OR OPEN HOLE ELIMINATING SIDE FRICTION ON THE DRIVE PIPE.

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

TO OBTAIN RELATIVE DATA CONCERNING THE CHARACTER OF MATERIAL IN AND UPON WHICH THE FOUNDATION MIGHT BE BUILT, BORINGS AND/OR SOUNDINGS WERE MADE AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING. THE DATA PRESENTED HEREIN REPRESENTS THE FINDINGS OF THE SUBSURFACE EXPLORATIONS MADE. HOWEVER, BECAUSE THE DEPTHS INVESTIGATED ARE LIMITED AND THE AREA OF THE BORINGS AND/OR SOUNDINGS IS VERY SMALL IN RELATION TO THE ENTIRE AREA, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT CONDITIONS BELOW THE DEPTHS INVESTIGATED OR THAT THE CLASSIFICATION OF MATERIAL ENCOUNTERED IN THESE INVESTIGATIONS IS NECESSARILY TYPICAL OF THE ENTIRE SITE.

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STRUCTURE R-64-0018

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SUBSURFACE EXPLORATION

SHEET 5 OF 5

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5/4/2015

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GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

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

ALL BAR STEEL REINFORCEMENT IN CAST-IN-PLACE CONCRETE IS TO BE EPOXY COATED.

BEVEL ALL EXPOSED EDGES OF CONCRETE ¾" UNLESS NOTED OTHERWISE.

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 "WALL CONCRETE PANEL MECHANICALLY STABILIZED EARTH LRFD/QMP".

PLANS, ELEVATIONS, AND DETAILS SHOWN ON THESE DRAWINGS ARE INTENDED TO 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 IS TO BE DESIGNED USING THE ELEVATIONS GIVEN IN THE GEOMETRY TABLE ON SHEET 2.

THE MAXIMUM VALUE OF THE ANGLE OF INTERNAL FRICTION OF THE WALL BACKFILL MATERIAL IN THE REINFORCED ZONE SHALL BE ASSUMED TO BE 30° WITHOUT CERTIFIED TEST VALUES.

JOINT FILLER SHALL CONFORM TO THE REQUIREMENTS OF A.A.S.H.T.O. DESIGNATION M 153, TYPE I, II OR III OR A.A.S.H.T.O. DESIGNATION M 213.

THE PLAN QUANTITY FOR THE ITEM "WALL CONCRETE PANEL MECHANICALLY STABILIZED EARTH LRFD/QMP" IS BASED ON A WALL HEIGHT MEASURED FROM THE TOP OF THE LEVELING PAD TO THE TOP OF WALL. THE TOP OF LEVELING PAD IS ASSUMED TO BE A CONSTANT 1'-6" BELOW FINISHED GRADE.

THE CONTRACTOR MUST COORDINATE CONSTRUCTION OF THIS WALL WITH CONSTRUCTION OF THE WEST ABUTMENTS OF BRIDGES B-64-185 AND B-64-186.

ALL WALL STATIONS ARE ALONG THE ℄ FOR R-64-19 ALONG THE FRONT FACE OF WALL (UNLESS SHOWN OTHERWISE).

ROADWAY STATION AND OFFSET DATA REFERENCES THE USH 12 EB ALIGNMENT.

THE EXISTING GROUND LINE IS THE UPPER LIMIT OF EXCAVATION FOR STRUCTURES.

DESIGN DATA

LIVE LOAD
LIVE LOAD SURCHARGE _____ 240 P.S.F.

MATERIAL PROPERTIES
CONCRETE MASONRY COPING _____ f'c = 3,500 PSI
PRECAST CONRETE WALL PANELS _____ f'c = 4,000 PSI
BAR STEEL REINFORCEMNT_____ fy = 60,000 PSI

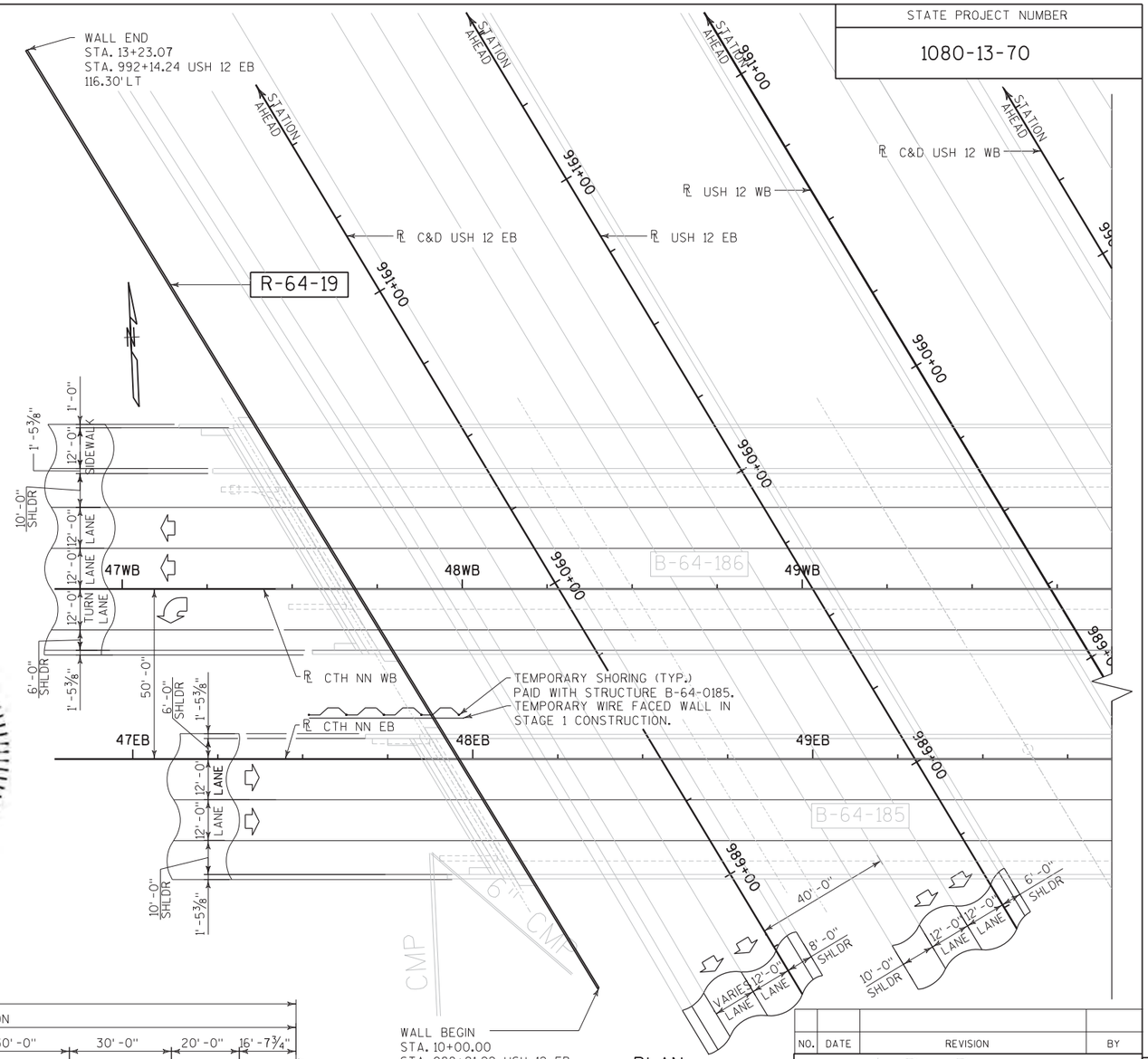
DESIGN FOR RETAINING WALL TO PROVIDE FOR FINISHED GRADE SLOPED BEHIND WALL AS SHOWN, AND ANY EARTH LOAD SURCHARGES NOT CARRIED BY THE ABUTMENT(S).

TRAFFIC DATA:

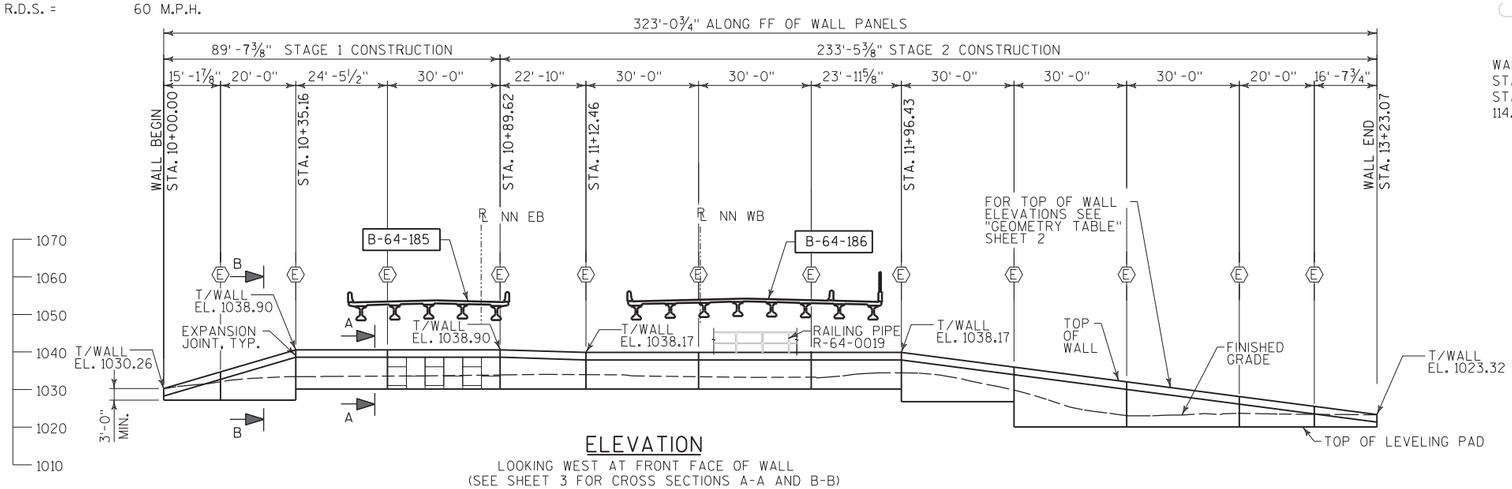
USH 12
A.D.T. = ... 16600 (2015)
A.D.T. = ... 23500 (2035)
R.D.S. = 70 M.P.H.

CTH NN
A.D.T. = ... 8100 (2015)
A.D.T. = ... 9200 (2035)
R.D.S. = 60 M.P.H.

WISCONSIN
ANN C. THIELMANN
E-42457
MADISON
WI
PROFESSIONAL ENGINEER
6/9/2015



PLAN



ELEVATION
LOOKING WEST AT FRONT FACE OF WALL
(SEE SHEET 3 FOR CROSS SECTIONS A-A AND B-B)

LIST OF DRAWINGS:

1. GENERAL PLAN & ELEVATION
2. GEOMETRY TABLE, CROSS SECTION & QUANTITIES
3. WALL DETAILS
4. PIPE RAILING DETAIL
5. SUBSURFACE EXPLORATION

LEGEND

(E) EXPANSION JOINT IN COPING

DESIGN CONTACTS

BUREAU OF STRUCTURES:
WILLIAM DREHER
(608) 266-8489
CONSULTANT CONTACT:
ANN THIELMANN
(608) 229-1414

NO.	DATE	REVISION	BY

DAAR ENGINEERING, INC.
www.daarcorp.com
Madison, WI 53703
608-249-8340

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher SDR 06/11/15
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE R-64-0019

COUNTY	VILLAGE
WALWORTH	GENEVA

DESIGN SPEC.
AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS

DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
ACT	SJG	AMD	SJG

GENERAL PLAN AND ELEVATION

SHEET 1 OF 5
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6/9/2015

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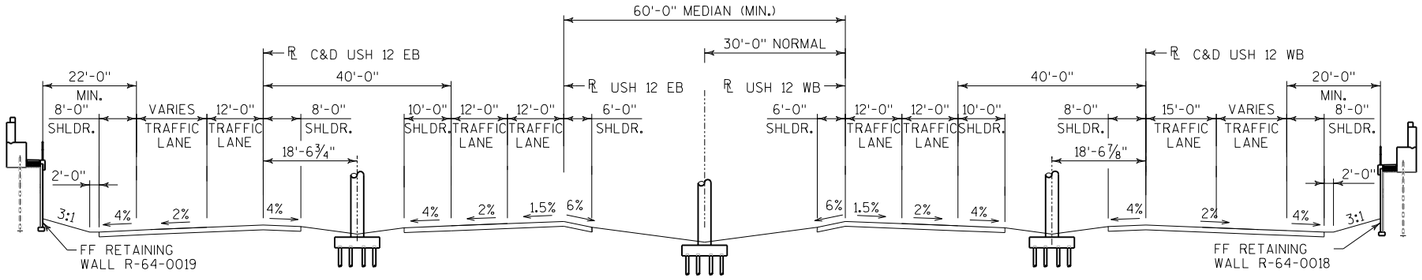
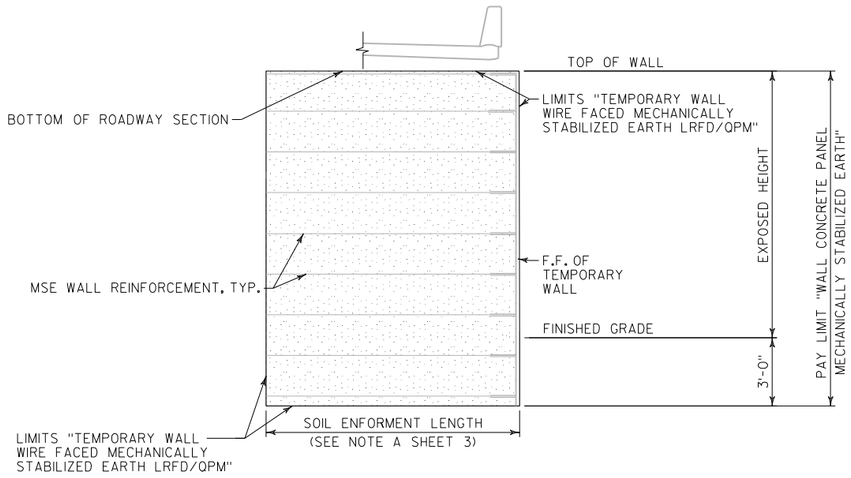


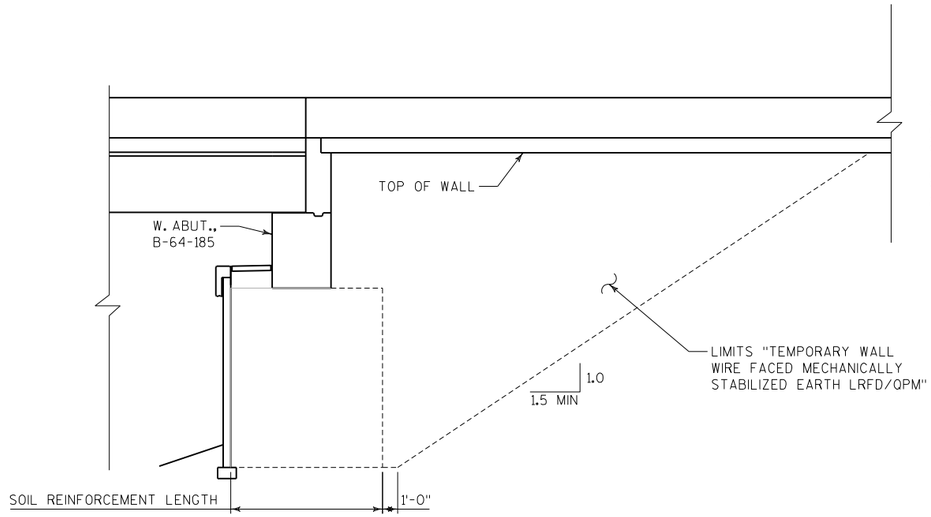
TYPICAL SECTION THRU USH 12

(LOOKING NORTH)



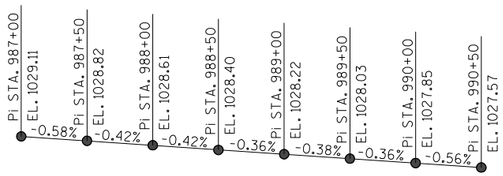
TYPICAL SECTION - TEMPORARY WALL

(LOOKING WEST)

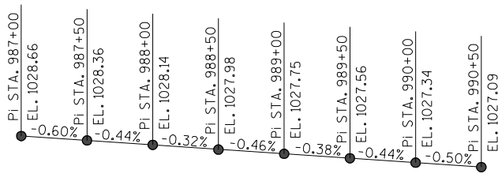


ELEVATION AT TEMPORARY WALL

(LOOKING SOUTH)



EXISTING PROFILE GRADE LINE
USH 12 EB



EXISTING PROFILE GRADE LINE
"C&D" USH 12 EB

TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID - ITEM	UNITS	QUANTITY
513.2050.S	RAILING PIPE	LF	324
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	8
*612.0206	PIPE UNDERDRAIN UNPERFORATED 6-INCH	LF	60
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	324
SPV.0165.01	WALL CONCRETE PANEL MECHANICALLY STABILIZED EARTH LRFD/QMP	SF	2800
SPV.0165.02	TEMPORARY WALL WIRE FACE MECHANICALLY STABILIZED EARTH LRFD/QMP	SF	324
	NON BID - ITEM		
	PREFORMED FILLER	SIZE	¾" & 1"
	EXPANDED POLYSTYRENE	SIZE	1"

* UNPERFORATED PIPE SHOULD BE USED BEYOND THE WALL LIMITS

BENCH MARKS

NO.	DESCRIPTION	ELEVATION
BM 145	BRIDGE MONUMENT AT THE SOUTHWEST CORNER OF THE EASTBOUND CTH "NN" BRIDGE	1047.44
BM 162	BRIDGE MONUMENT AT THE NORTHEAST CORNER OF THE WESTBOUND CTH "NN" BRIDGE	1052.85

WALL EXTERNAL STABILITY EVALUATION

DIMENSIONS	EVALUATED LOCATION
WALL STA.	10+68.91
BORING USED	S-7
WALL HEIGHT[1] (FEET)	9.94
EXPOSED WALL HEIGHT (FEET)	6.94
MINIMUM LENGTH OF REINFORCEMENT[2] (FEET)	20
LENGTH OF REIN. / WALL HEIGHT	2.01
CAPACITY TO DEMAND RATIO (CDR)	
SLIDING (CDR>1.0)	1.13
ECCENTRICITY (CDR>1.0)	2.08
OVERALL STABILITY (CDR>1.0)	1.01
BEARING RESISTANCE (CDR>1.0)	1.16
FACTORED BEARING RESISTANCE (PSF)	5000

NOTES:
1. WALL HEIGHT SHOWS ONLY THE CONTROLLING SECTION AND INCLUDES MIN. 3.0 FEET OF EMBEDMENT.
2. THE LENGTH OF REINFORCEMENT IS THE MINIMUM REQUIRED LENGTH FOR THE CONTROLLING SECTION.

FINAL DESIGN FOR INTERNAL STABILITY, EXTERNAL SLIDING & ECCENTRICITY AT OTHER WALL STATIONS IS THE RESPONSIBILITY OF THE CONTRACTOR'S WALL DESIGNER.

SOIL PARAMETERS

SOIL ZONE AND ELEVATION (FT)	SOIL DESCRIPTION	MOIST SOIL UNIT WEIGHT (PCF)	COHESION, C (PSF)	INTERNAL ANGLE OF FRICTION (DEGREES)
RETAINED FILL TOW EL. 1040.56	SANDS AND LEAN CLAYS (FILL)	120	0	29
FOUNDATION SOILS FOOTING EL. 1029.94-1030.12	LEAN CLAYS (FILL)	125	250	32

GEOMETRY TABLE

WALL STATION	USH12 EB STATION	OFFSET TO F.F. WALL	TOP OF WALL	FINISHED GROUND
10+00.00	988+91.22	114.24 LT	1030.26	1030.26
10+35.16	989+26.38	114.47 LT	1038.90	1033.44
10+89.62	989+80.84	114.81 LT	1038.90	1033.91
11+12.46	990+03.68	114.96 LT	1038.17	1033.97
11+96.42	990+87.65	115.49 LT	1038.17	1034.44
13+23.07	992+14.24	116.30 LT	1023.32	1023.85

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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-64-0019

DRAWN BY AMD | PLANS CK'D. SJG

GEOMETRY TABLE, CROSS-SECTION, & QUANTITIES

SHEET 2 OF 5

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6/5/2015

STATE PROJECT NUMBER
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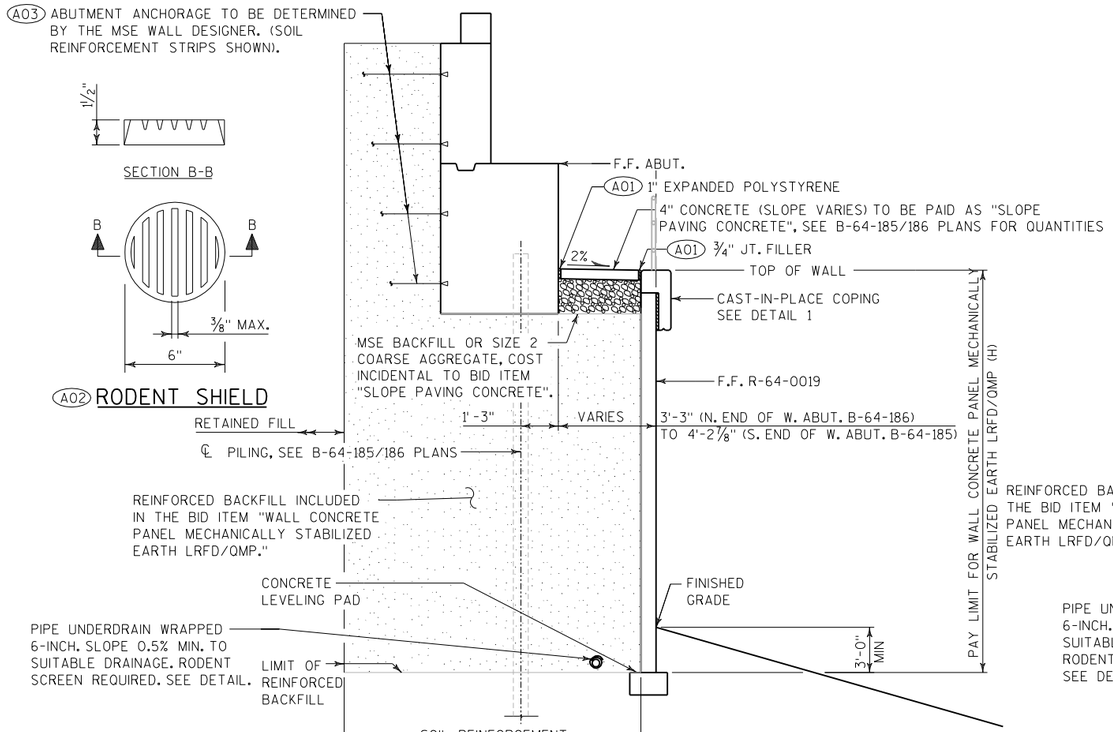
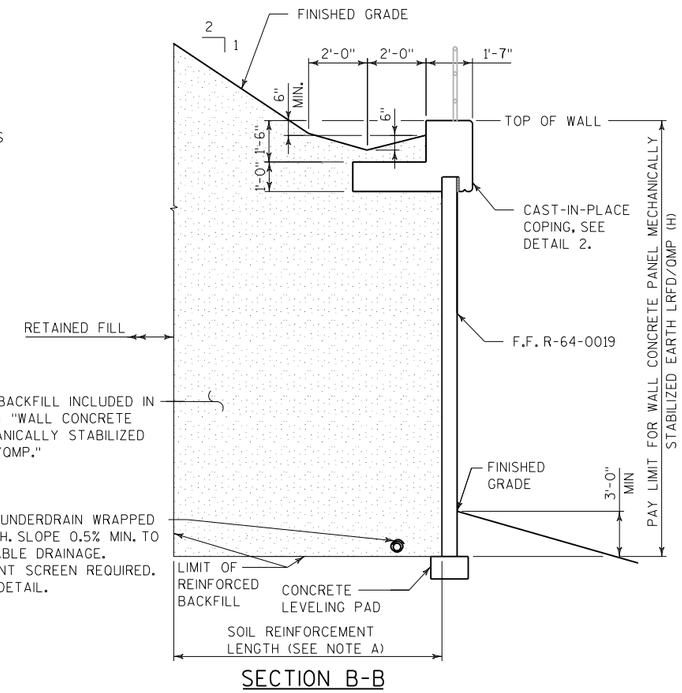


TYPICAL WALL SECTION A-A

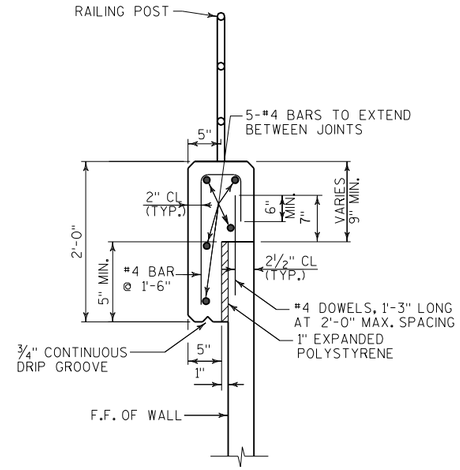
(LOOKING NORTH AT WEST ABUTMENT STA. 10+35.15 TO 11+96.42)

NOTE A:
SEE SAFETY FACTOR TABLE ON SHEET 2 FOR MINIMUM LENGTH OF MSE WALL REINFORCING STRIPS. SOIL REINFORCEMENT MUST EXTEND A MINIMUM OF 3.0 FEET BEYOND THE FAILURE PLANE FOR INTERNAL STABILITY AS DEFINED BY AASHTO SPECIFICATIONS.



SECTION B-B

(LOOKING NORTH)



CAST-IN-PLACE CONCRETE COPING DETAIL 1

(NOTE: COPING CONCRETE AND REINFORCEMENT INCLUDED IN THE BID ITEM "WALL CONCRETE PANEL MECHANICALLY STABILIZED EARTH LRFD/QMP.")

CAST-IN-PLACE CONCRETE COPING DETAIL 2

(NOTE: COPING CONCRETE AND REINFORCEMENT INCLUDED IN THE BID ITEM "WALL CONCRETE PANEL MECHANICALLY STABILIZED EARTH LRFD/QMP.")

NOTES

A01 SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES OF FILLER AND EXPANDED POLYSTYRENE WITH NON-STAINING, GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE.

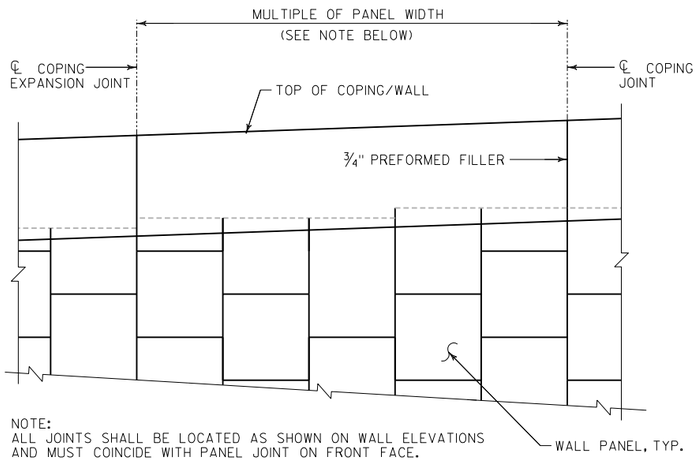
EXPANSION ABUTMENTS TO BE BACKFILLED TO A MINIMUM OF THE BEAM SEAT ELEVATION PRIOR TO PLACING GIRDERS.

A02 DIMENSIONS ARE APPROXIMATE, GRATE TO BE SIZED TO FIT INTO A PIPE COUPLING. ORIENT RODENT SHIELD SO SLOTS ARE VERTICAL. COST OF RODENT SHIELD AND ALL FITTINGS TO BE INCLUDED IN THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH." THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL . THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE OUTFALL PIPE. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH STAINLESS STEEL SHEET METAL SCREWS.

A03 UNFACTORED SUPERSTRUCTURE LATERAL LINE LOAD TRANSFERRED TO THE ABUTMENT ARE TAKEN TO BE KIPS PER FOOT OF ABUTMENT LENGTH. THE VALUES ARE TO BE USED FOR THE DESIGN OF THE ABUTMENT ANCHORAGE BY THE MSE MANUFACTURER (MSE SYSTEM, DEAD MAN ANCHOR, OTHER). THE FOLLOWING LOADS FROM THE SUPERSTRUCTURE IN ADDITION TO THE LIVE LOAD SURCHARGE AND EARTH PRESSURE ON THE BACK OF THE ABUTMENT:

UNFACTORED LOADS B-64-185	UNFACTORED LOADS B-64-186
BR = 0.71 KLF	BR = 0.74 KLF
WS = 0.30 KLF	WS = 0.19 KLF
WL = 0.12 KLF	WL = 0.08 KLF
TU = 0.32 KLF	TU = 0.67 KLF

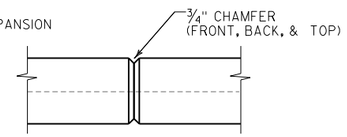
ABUTMENT ANCHORAGE (REINFORCING STRIPS AND CONNECTION TO ABUTMENT) ARE TO BE PAID UNDER THE BID ITEM "WALL CONCRETE PANEL MECHANICALLY STABILIZED EARTH LRFD/QMP."



NOTE:
ALL JOINTS SHALL BE LOCATED AS SHOWN ON WALL ELEVATIONS AND MUST COINCIDE WITH PANEL JOINT ON FRONT FACE.

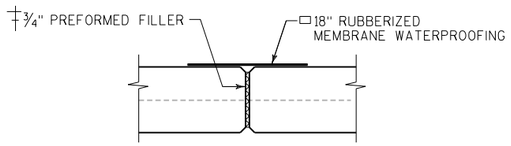
COPING PARTIAL ELEVATION

(LOOKING AT F.F. OF WALL)



COPING CONTRACTION JOINT

DO NOT RUN BAR STEEL THRU JOINT.



COPING EXPANSION JOINT

DO NOT RUN BAR STEEL THRU JOINT.

¾" PREFORMED FILLER - SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONC.)

18" RUBBERIZED MEMBRANE WATERPROOFING - MEMBRANE WATERPROOFING TO EXTEND FROM TOP OF COPING TO 6" BELOW TOP OF PANELS.

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WALL DETAILS

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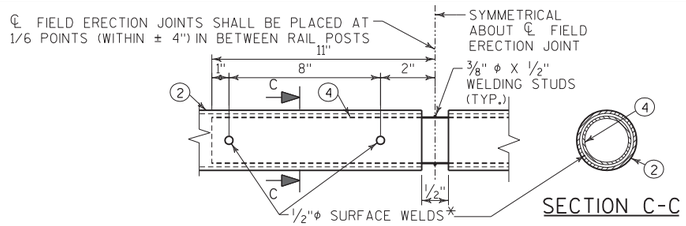
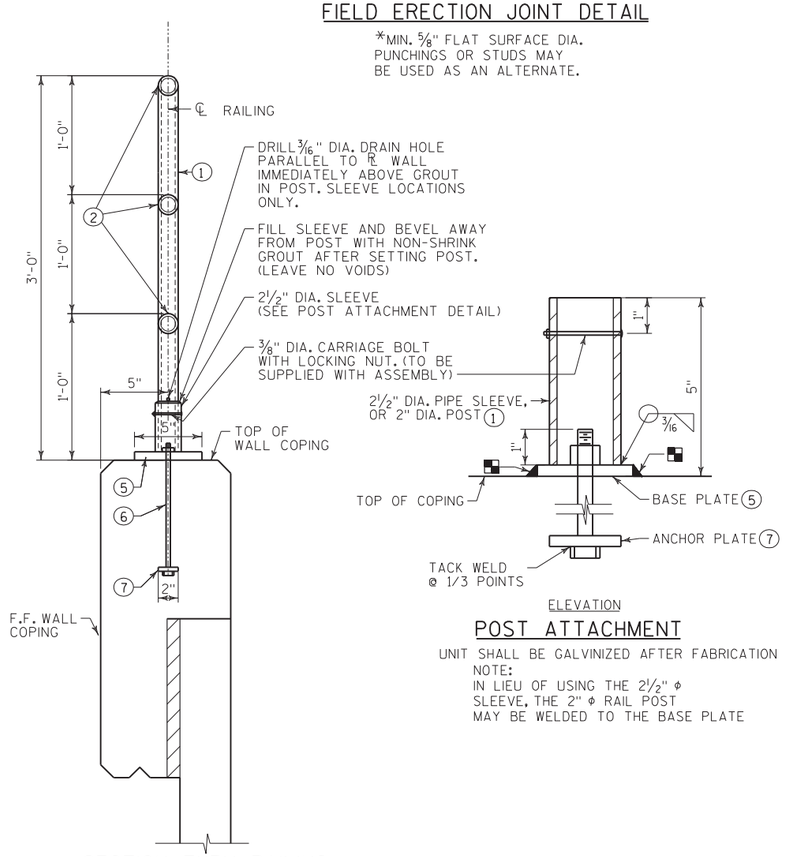


FIELD ERECTION JOINT DETAIL

*MIN. ⅝" FLAT SURFACE DIA. PUNCHINGS OR STUDS MAY BE USED AS AN ALTERNATE.



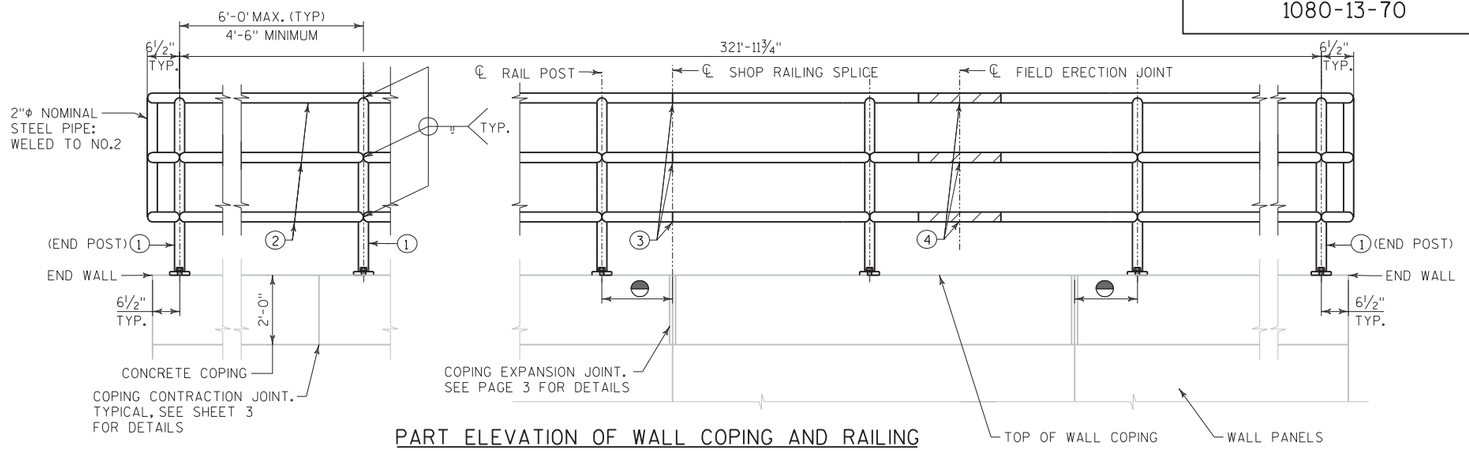
SECTION THRU RAILING

ELEVATION

POST ATTACHMENT

UNIT SHALL BE GALVINIZED AFTER FABRICATION

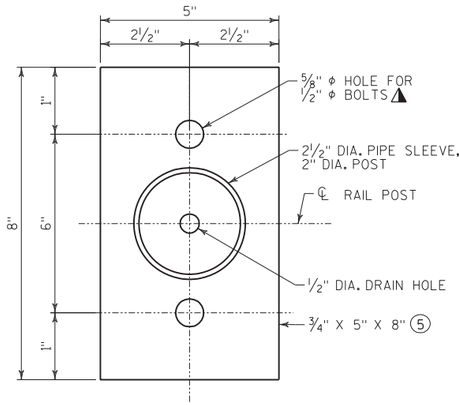
NOTE:
IN LIEU OF USING THE 2½" ϕ SLEEVE, THE 2" ϕ RAIL POST MAY BE WELDED TO THE BASE PLATE



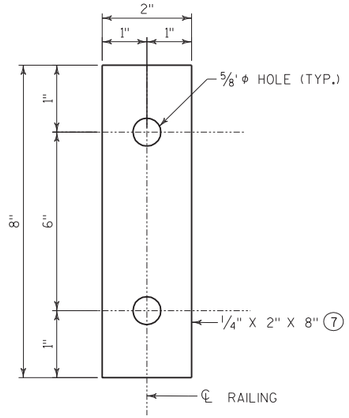
PART ELEVATION OF WALL COPING AND RAILING

(LOOKING EAST AT FRONT FACE OF WALL)

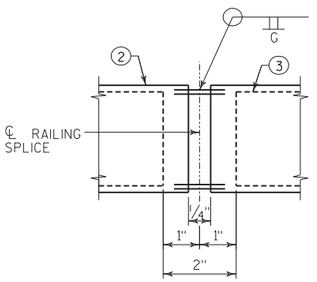
1'-0" MIN. DISTANCE REQUIRED BETWEEN THE ℄ OF COPING JOINTS (BOTH EXPANSION AND CONTRACTION JOINTS AND THE ℄ OF RAIL POSTS



BASE PLATE

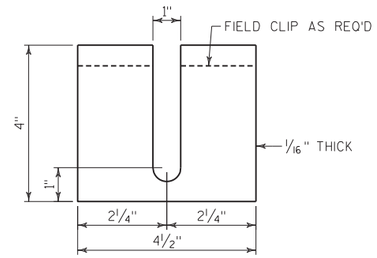


ANCHOR PLATE



SHOP RAILING SPLICE DETAIL

(LOCATION MUST BE SHOWN ON THE SHOP DRAWINGS)



POST SHIM DETAIL

SHIMS REQUIRED ONLY WHEN POSTS ARE WELDED TO BASE PLATES. PROVIDE 4 SHIMS PER POST.

LEGEND

(1) 2" DIA. NOMINAL STEEL FOR POSTS: CUT BOTTOM OF POST TO MATCH TOP OF CONCRETE. POSTS ARE TO BE SET VERTICAL.

(2) 2" DIA. NOMINAL STEEL PIPE FOR RAILS: WELD TO NO.1

(3) 1½" DIA. PIPE SLEEVE FOR NO. 2. PROVIDE "SLIDING FIT" WITH A MINIMUM OUT TO OUT DIMENSION OF 2 1/16".

(4) 1½" DIA. PIPE SLEEVE X 1'-10" LONG FOR NO. 2. PROVIDE ½" DIA. SURFACE WELDS ON ALL SIDES AS SHOWN GRIND WELDS TO FIT FREE INTO I.D. OF NO. 2. PROVIDE ⅜" DIA. X ½" WELDING SUTDS ON TOP AND BOTTOM SURFACES AT CENTERLINE.

(5) PLATE ¾" X 5" X 8", WITH ⅝" DIA. HOLE FOR ANCHOR BOLTS NO. 6. WELD TO NO. 1. OR PIPE SLEEVE AS SHOWN.

(6) ½" DIA. X 6⅜" LONG HEX BOLTS (GALVANIZED) WITH NUT AND WASHER. 2 REQ'D PER POST. THREAD 3" AND PLACE NORMAL TO PLATE NO. 5. CHAMFER TOP OF BOLTS BEFORE THREADING. TYPE S, ½" CONCRETE MASONRY ANCHORS MAY BE SUBSTITUTED FOR ½" BOLTS. ANCHOR PLATE NOT REQUIRED WHEN TYPE S ANCHORS ARE USED. SEE NOTE ☆

☆ ½" DIA. CONCRETE MASONRY ANCHORS, TYPS "S", 6" MIN. EMBEDMENT (EPOXY ANCHORED) INTO CONCRETE AND MINIUM PULLOUT CAPACITY OF 10 KIPS. ANCHOR, WASHER, AND NUT SHALL BE GALVANIZED.

(7) ¼" X 2" X 8" FLAT BAR, WITH ⅝" DIA. HOLES FOR ANCHOR BOLTS NO. 6.

GENERAL NOTES

BID ITEM SHALL BE "RAILING PIPE" WHICH INCLUDES ALL ITEMS SHOWN, INCLUDING GALVANING AND COATING.

RAILING SHALL BE FABRICATED IN LENGTHS THAT INCLUDE 3 OR 4 POSTS.

FIELD ERECTION JOINTS MUST BE PLACED IN BETWEEN RAIL POSTS WHERE THERE IS ALSO A CONCRETE COPING EXPANSION JOINT IN BETWEEN RAIL POSTS.

POST BASE PLATES SHALL BE FLAT WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT AND VERTICAL. ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUT.

ALL MATERIALS EXCEPT ANCHOR DETAIL (NO. 7) SHALL BE GALVANIZED AFTER FABRICATION. PRIOR TO GALVANIZING, ALL STEEL RAILING POSTS AND STEEL TUBING SHALL BE GIVEN A NO. 6 BLAST CLEANING BY S.S.P.C SPECIFICATIONS. AFTER GALVANIZING, EPOXY COAT. COLOR SHALL BE FEDERAL COLOR NO. 27038 (BLACK).

DRILL DRAIN HOLES PRIOR TO GALVANIZING.

ALL MATERIALS USED IN FABRICATION SHALL BE MADE FROM MATERIALS CONFORMING TO A.S.T.M. DESIGNATION A709 GRADE 36 UNLESS NOTED OTHERWISE.

STEEL POST SHIMS MAY BE USED UNDER POSTS WHERE REQ'D FOR ALIGNMENT.

ALL RAILS, POSTS AND SLEEVES ARE STANDARD WEIGHT PIPE, SCHEDULE 40.

PLACE ALL NUTS OUTSIDE OF POSTS.

ANCHORAGES SHALL BE ACCURATELY PLACED TO PROVIDE CORRECT ALIGNMENT OF RAILING SET OF NORMAL GRADE.

CAULK AROUND PERIMETER OF BASE PLATES AND FILL PORTION OF SLOTTED HOLES AROUND ANCHOR BOLTS IN POST SHIMS AND BASE PLATES WITH NON-STAINING, BLACK, NON-BITUMINOUS JOINT SEALER.

NO.	DATE	REVISION	BY

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STRUCTURE R-64-0019

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RAILING PIPE DETAIL

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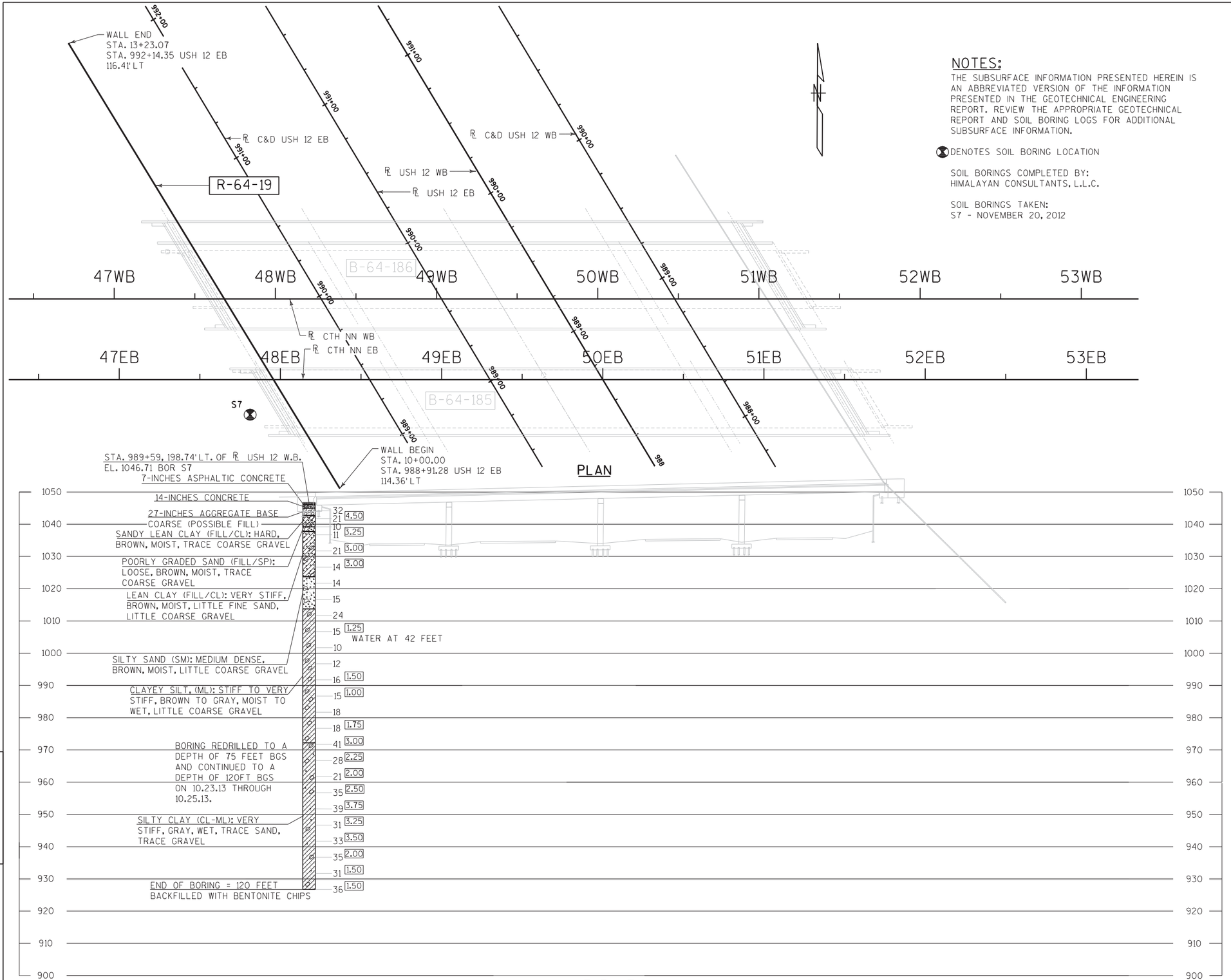

NOTES:

THE SUBSURFACE INFORMATION PRESENTED HEREIN IS AN ABBREVIATED VERSION OF THE INFORMATION PRESENTED IN THE GEOTECHNICAL ENGINEERING REPORT. REVIEW THE APPROPRIATE GEOTECHNICAL REPORT AND SOIL BORING LOGS FOR ADDITIONAL SUBSURFACE INFORMATION.

⊗ DENOTES SOIL BORING LOCATION

SOIL BORINGS COMPLETED BY:
HIMALAYAN CONSULTANTS, L.L.C.

SOIL BORINGS TAKEN:
S7 - NOVEMBER 20, 2012

STATE PROJECT NUMBER

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ABBREVIATIONS

F — FINE M — MEDIUM C — COARSE
WS — WEATHERED SO — SOUND

MATERIAL SYMBOLS

TOPSOIL, SILT, SANDSTONE, SAND, PEAT, LIMESTONE, GRAVEL, CLAY, IGNEOUS ROCK

LEGEND OF PROBING

95/6=95 BLOWS FOR 6" PENETRATION PROBING TAKEN WITH A 350# WT. FALLING 18" ON A 2" O.D. POINT.

PROBING NO.
STA.
ELEVATION
7 AVERAGE BLOWS PER FOOT
REFUSAL 95/6

LEGEND OF BORING

BORING NO.
ELEV.
STA.
UNCONFINED STRENGTH → 7.7 7
BLOWS PER FT. USING 140# WT. FALLING 30"
WASH SAMPLE
SHELBY TUBE — S.T.
GROUND WATER ELEVATION
NO GROUND WATER OBSERVED ABOVE THIS ELEVATION
SANDY GRAVEL
F. BOULDERS OR COBBLES
SAND
SILTY CLAY
SO LIMESTONE

UNLESS OTHERWISE SPECIFIED, THE BLOWS PER FOOT AT THE LOCATIONS INDICATED ARE BASED ON DRIVING A 2" O.D. X 1.4" I.D. SPLIT SPOON SAMPLER WITH A 140# HAMMER HAVING A FREE FALL OF 30". THE BLOW COUNT IS TAKEN IN UNDISTURBED SOIL IMMEDIATELY BELOW A CASED OR OPEN HOLE ELIMINATING SIDE FRICTION ON THE DRIVE PIPE.

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

TO OBTAIN RELATIVE DATA CONCERNING THE CHARACTER OF MATERIAL IN AND UPON WHICH THE FOUNDATION MIGHT BE BUILT, BORINGS AND/OR SOUNDINGS WERE MADE AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING. THE DATA PRESENTED HEREIN REPRESENTS THE FINDINGS OF THE SUBSURFACE EXPLORATIONS MADE. HOWEVER, BECAUSE THE DEPTHS INVESTIGATED ARE LIMITED AND THE AREA OF THE BORINGS AND/OR SOUNDINGS IS VERY SMALL IN RELATION TO THE ENTIRE AREA, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT CONDITIONS BELOW THE DEPTHS INVESTIGATED OR THAT THE CLASSIFICATION OF MATERIAL ENCOUNTERED IN THESE INVESTIGATIONS IS NECESSARILY TYPICAL OF THE ENTIRE SITE.

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SUBSURFACE EXPLORATION

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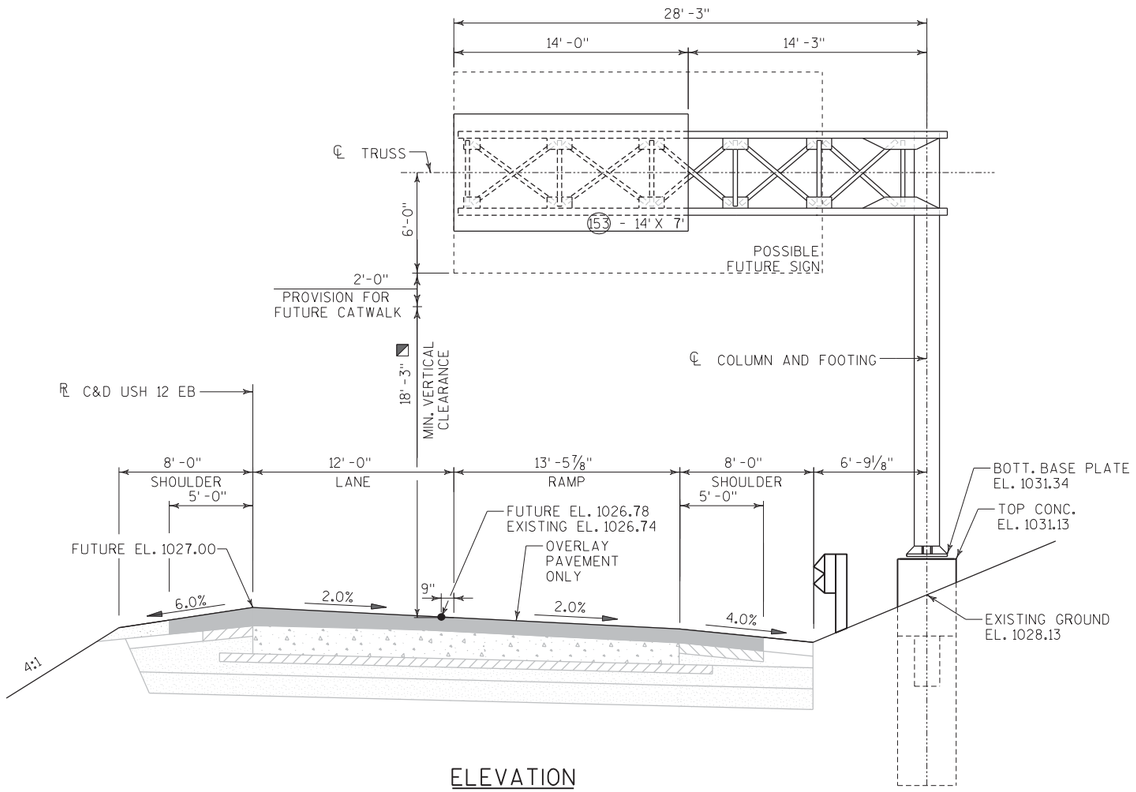

ELEVATION

S-64-20
STA 991+00.00 C&D USH 12 EB
LOOKING SOUTH (DOWN STATION)
AT FRONT FACE OF SIGN

WISCONSIN
ANN C. THIELMANN
E-42457
MADISON
WI
PROFESSIONAL ENGINEER
Ann Thiel
6/18/2015

DESIGN DATA

DESIGN SIGN AREA: 264 SF
MAX. SIGN DEPTH: 12.0 FT

DESIGNED ACCORDING TO A.A.S.H.T.O. "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINARIES AND TRAFFIC SIGNALS", 6TH EDITION, 2013.

DEAD LOAD - WT. OF SIGN, SUPPORTING STRUCTURE, AND FUTURE WALKWAY, LIGHTS AND RAILING.

LIVE LOAD - SINGLE LINE LOAD OF 500 LBS. DISTRIBUTED OVER 2'-0" OF CATWALK.

ICE LOAD - 3 P.S.F. TO 1 FACE OF SIGN & AROUND SURFACE OF MEMBERS.

WIND PRESSURE - 90 M.P.H. (3-SECOND GUST SPEED) TO SIGN AREA & EXPOSED MEMBERS.

WIND COMPONENTS	NORMAL	TRANSVERSE
COMBINATION 1	1.0	0.2
COMBINATION 2	0.6	0.3

GROUP LOADS	% OF ALLOWABLE STRESS
1. DEAD	100
2. DEAD + WIND	133
3. DEAD + ICE + ½WIND	133

NOTE: WIND LOAD FOR GROUP 3 LOADING SHALL NOT BE LESS THAN 25 P.S.F.

ALLOWABLE DESIGN STRESSES

CONCRETE MASONRY — f'c=3,500 P.S.I.
HIGH STRENGTH BAR STEEL REINFORCEMENT, GRADE 60 — fy=60,000 P.S.I.
CHORDS & COLUMN (INCLD. HANDHOLE) — API-5L-X42 — fy=42,000 P.S.I.
STRUCTURAL ANGLES — A.S.T.M. A709 GRADE 36 — fy=36,000 P.S.I.
PLATES & BARS — A.S.T.M. A709 GRADE 36 — fy=36,000 P.S.I.
ANCHOR BOLTS — A.S.T.M. F1554 GRADE 55 — fy=55,000 P.S.I.
HIGH STRENGTH BOLTS - A325 — fy=92,000 P.S.I.
STRUCTURAL MEMBERS GALVANIZED A123
HARDWARE GALVANIZED — A153 CLASS C

FOUNDATION DATA

ALLOWABLE SOIL BEARING PRESSURE = 2 TONS/SF

TOTAL ESTIMATE OF QUANTITIES

BID ITEM NUMBER	BID ITEM	UNIT	QUANTITY
203.0200	REMOVING OLD STRUCTURE (STA. 990+76.73)	LS	1
636.0100	SIGN SUPPORTS CONCRETE MASONRY	CY	10
636.1000	SIGN SUPPORTS STEEL REINFORCEMENT HS	LB	1130
◑ 641.1200	SIGN BRIDGE CANTILEVERED S-64-20	LS	1

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

ALL REINFORCING BARS ARE ENGLISH. THE FIRST DIGIT OF A THREE DIGIT BAR MARK OR THE FIRST TWO DIGITS OF A FOUR DIGIT BAR MARK SIGNIFY THE BAR SIZE.

SIGN BRIDGE IDENTIFICATION PLAQUES SHALL BE CONSIDERED INCIDENTAL TO SIGN BRIDGES.

CENTER SIGNS VERTICALLY ON TRUSS.

ALL BOLTED CONNECTIONS SHALL BE MADE WITH ¾" Φ A325 BOLTS, GALVANIZED ASTM A153, CLASS C, AND MADE WITH DTI WASHERS.

ELEVATIONS ARE IN FEET UNLESS OTHERWISE SHOWN OR NOTED.

ALTERNATE DESIGNS ARE NOT ALLOWED.

ROADWAY CONSTRUCTION IS FOR OVERLAY ONLY. CONTRACTOR SHALL FIELD VERIFY ALL ELEVATIONS AND CLEARANCES TO ENSURE CORRECT PLACEMENT AND FABRICATION OF STRUCTURE AND FOUNDATION ELEMENTS.

THE EXISTING STRUCTURE, S-64-10, IS A CANTILEVER SIGN BRIDGE WITH AN OVERALL LENGTH OF 30'-0" AND SIGN AREA OF 98 SF AND IS TO BE REMOVED.

LEGEND

◪ VERTICAL CLEARANCE TO ACCOUNT FOR MAXIMUM SIGN DEPTH, 1'-0" BEYOND THE END OF THE TRUSS, PLUS 2'-0" FUTURE CATWALK, WITH 18'-3" CLEARANCE TO BOTTOM OF FUTURE CATWALK.

◑ LUMP SUM PAY ITEM INCLUDES HORIZONTAL TRUSS, VERTICAL STEEL COLUMNS, AND ANCHORAGE ASSEMBLIES.

LIST OF DRAWINGS

1. SIGN BRIDGE LAYOUT
2. FOOTING DETAILS
3. GALVANIZED STEEL CANTILEVER SIGN TRUSS
4. SIGN TRUSS DETAILS
5. HANDHOLE DETAILS
6. SUBSURFACE EXPLORATION

STRUCTURES DESIGN CONTACTS

BRIDGE OFFICE:
WILLIAM DREHER (608) 266-8489
CONSULTANT:
ANN THIELMANN (608) 229-1414

NO.	DATE	REVISION	BY

DAAR ENGINEERING, INC.
www.daarcorp.com
Madison, WI 53703
608-249-8140

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
ACCEPTED William C. Dreher NK 06/22/15
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE S-64-20

SIGN BRIDGE AT STA. 991+00 C&D USH 12 EB

COUNTY: WALWORTH
TOWN: LAKE GENEVA

DESIGN SPEC.
AASHTO SIGN SPEC. 6TH ED. 2013

DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
ACT	SJG	AMD	SJG

SIGN BRIDGE LAYOUT

SHEET 1 OF 6

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6/18/2015

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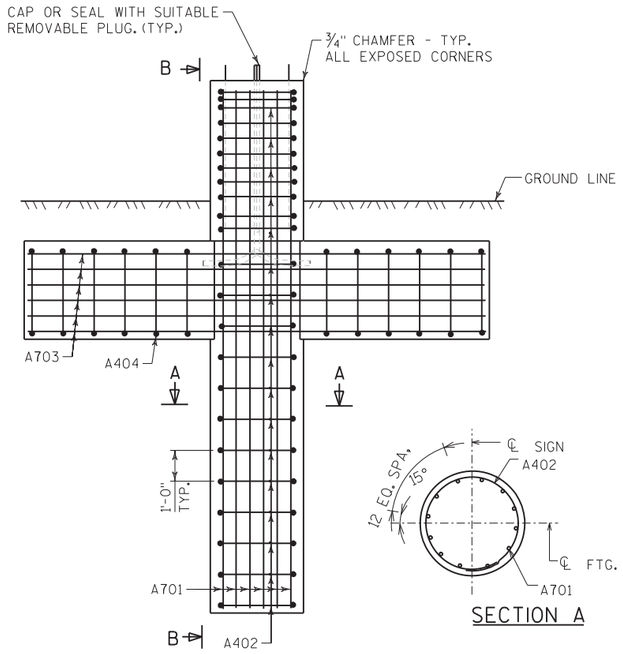
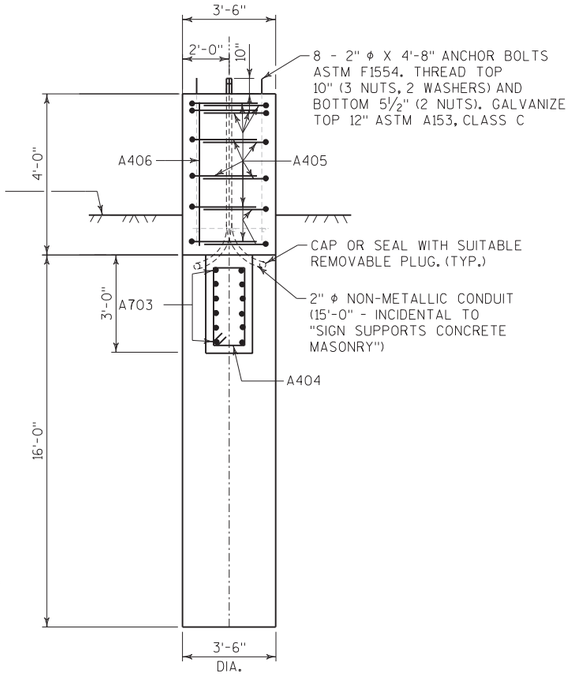


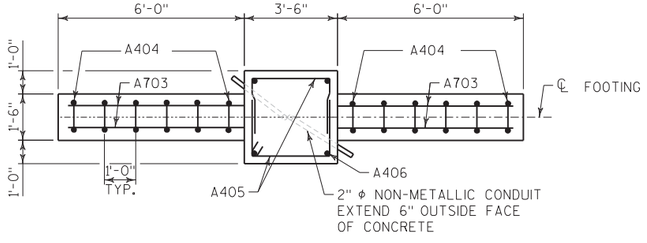
ELEVATION

PLACE A701 BARS TO MISS ANCHOR BOLTS

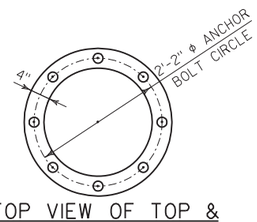
SECTION A



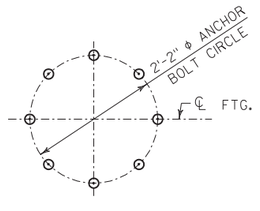
SECTION B



PLAN



TOP VIEW OF TOP & BOTTOM TEMPLATES

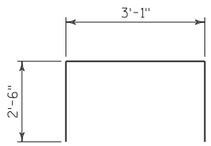


ANCHOR BOLT DETAILS

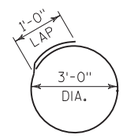
NOTE:
THE FIRST OR FIRST TWO DIGITS OF A BAR MARK SIGNIFIES THE BAR SIZE.

BILL OF BARS

BAR MARK	COAT	NO. REQ'D	LENGTH	BENT	BAR SERIES	LOCATION
A701	-	12	20'-0"	-	-	FOOTING - COLUMN/TOP
A402	-	20	10'-6"	X	-	FOOTING - COLUMN/TOP
A703	-	12	15'-0"	-	-	FOOTING - WINGS
A404	-	12	7'-6"	X	-	FOOTING - WINGS
A405	-	10	7'-11"	X	-	FOOTING - TOP
A406	-	4	3'-6"	-	-	FOOTING - TOP - COLUMNS



A405



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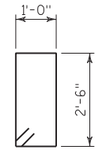

A404
(STIRRUP)

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 3" CLEAR UNLESS DETAILED OTHERWISE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE S-64-20

DRAWN BY AMD | PLANS CK'D. SJG

FOOTING DETAILS

SHEET 2 OF 6

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STATE PROJECT NUMBER

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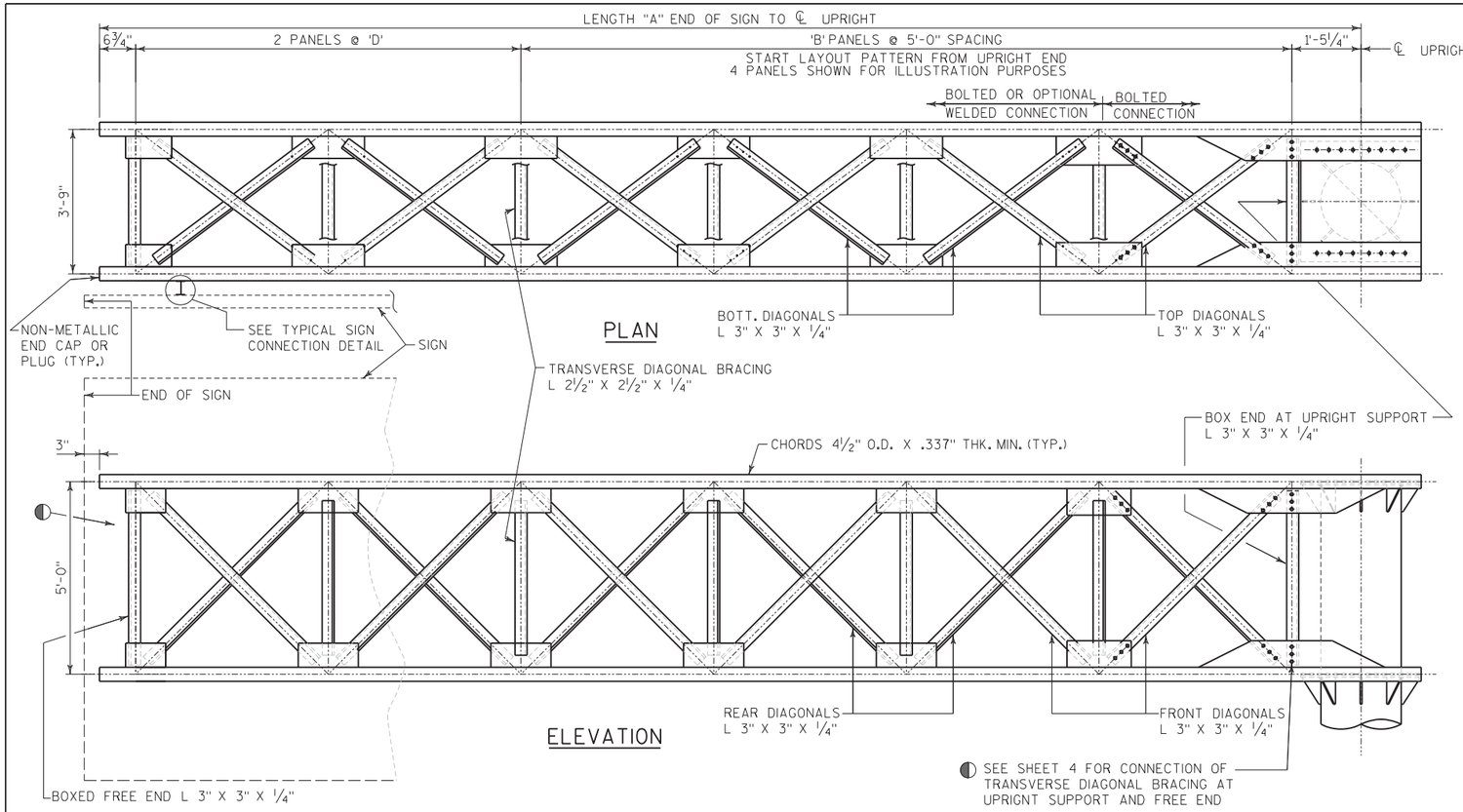
GENERAL NOTES

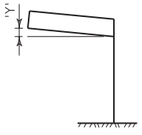
DRAWINGS SHALL NOT BE SCALED.

PREFABRICATE CAMBER INTO THE HORIZONTAL SUPPORT PROVIDING AN AMOUNT "Y" AT END OF TRUSS SHOWN IN "CAMBER DIAGRAM". DO NOT RAKE VERTICAL UPRIGHT BY ADJUSTMENT OF LEVELING NUTS.

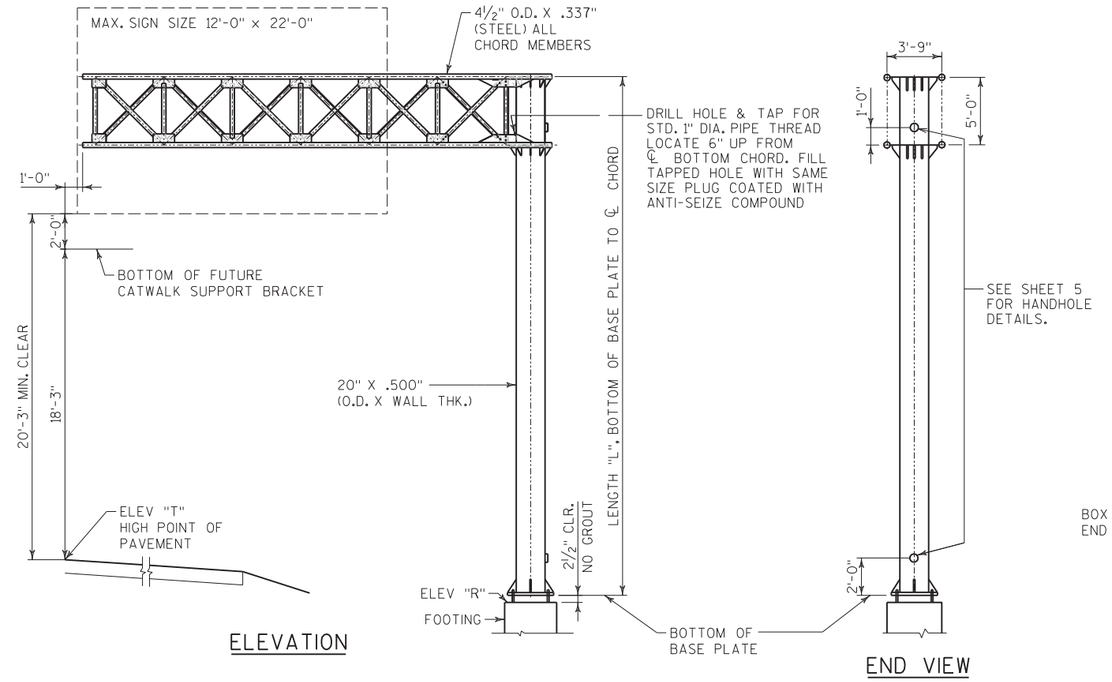
SEE GENERAL NOTES ON SHEET 1 FOR ADDTIONAL INFORMATION.

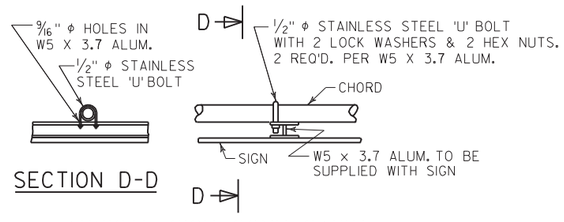


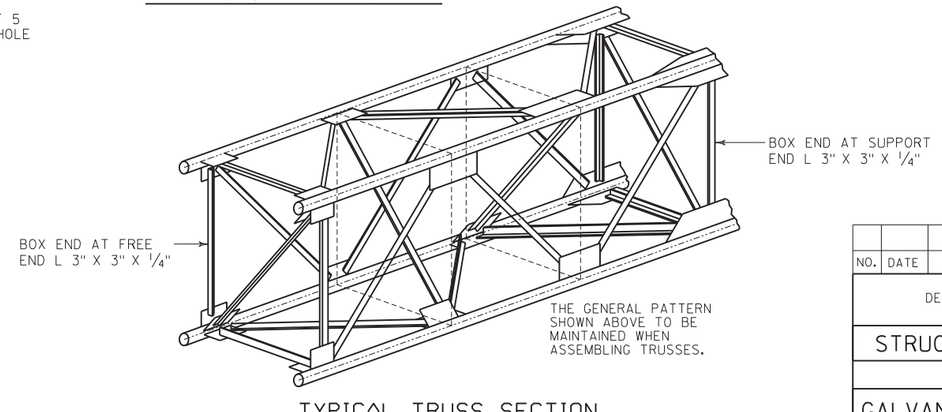
STRUCTURE	"A"	"L"	"B"	"D"	"Y"	ELEV "R"	ELEV "T"
S-64-20	28'-0"	24'-2⅛"	3	5'-6"	2½"	1031.13	1026.76



CAMBER DIAGRAM







NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE S-64-20

DRAWN BY AMD | PLANS CK'D. SJG

GALVANIZED STEEL CANTILEVER SIGN TRUSS

SHEET 3 OF 6

522

8

8

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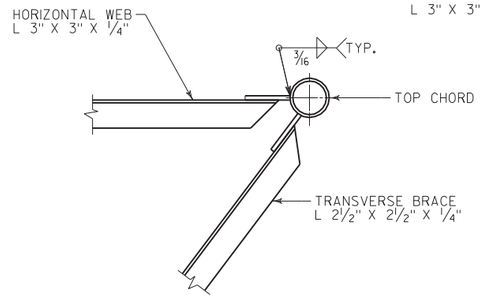
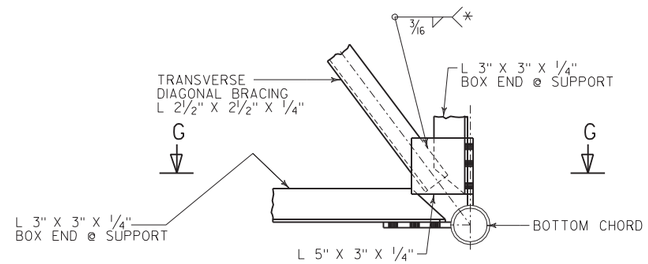
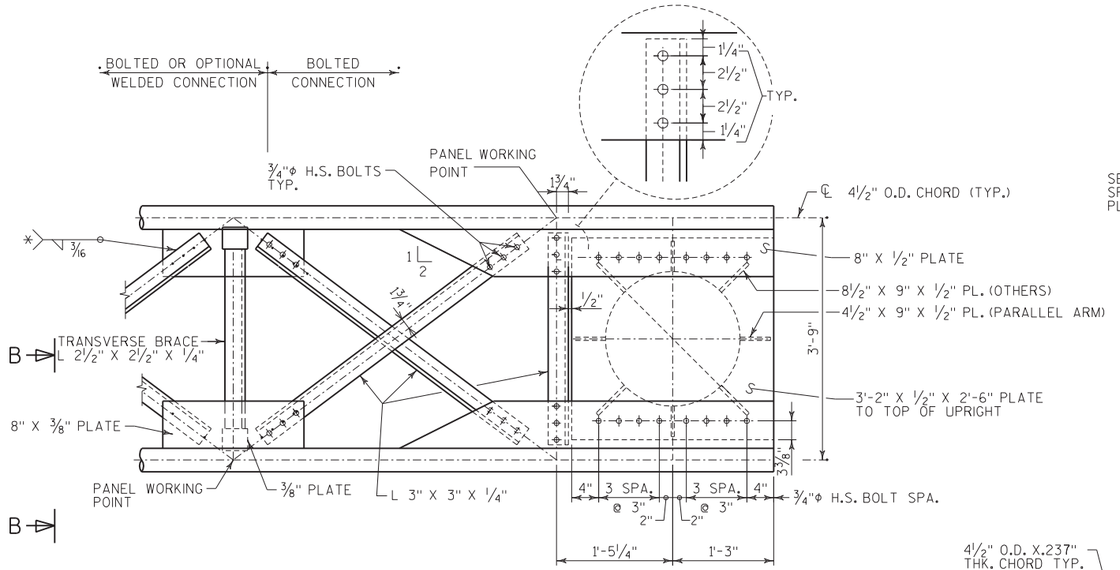
* ANGLE	WELD LENGTH (MIN.)
L 2½" X 2½" X ¼"	7"
L 3" X 3" X ¼"	8"



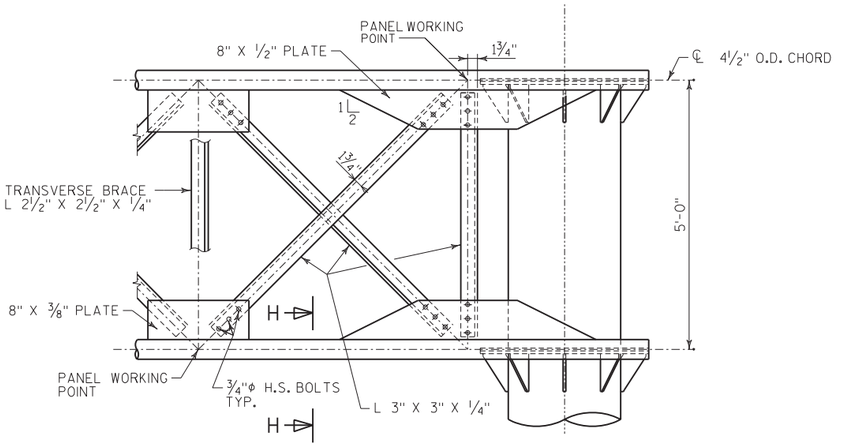
SECTION B-B



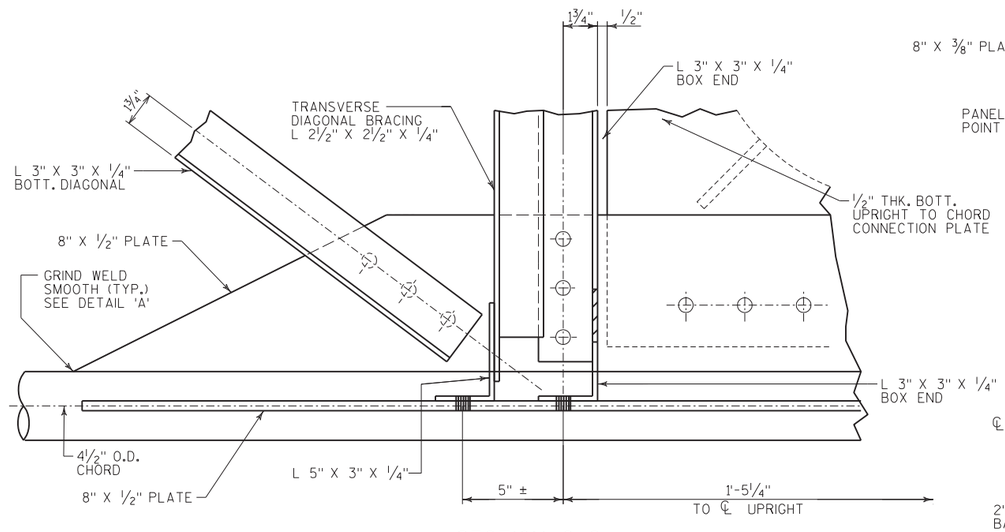
SECTION H-H



PLAN TRUSS TO UPRIGHT

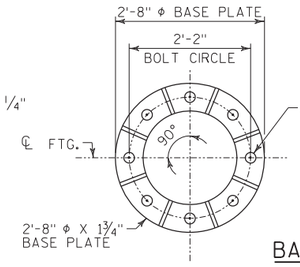


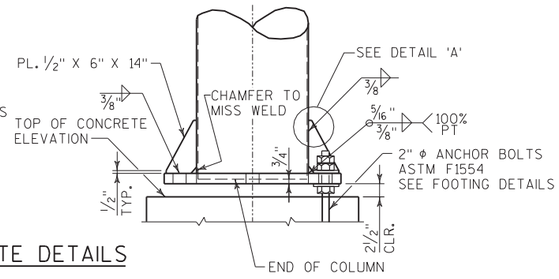
ELEVATION TRUSS TO UPRIGHT



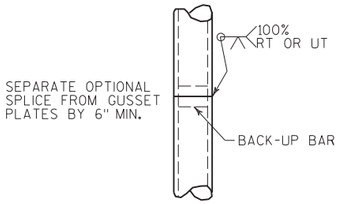
SECTION G-G

(LOOKING DOWN @ BOTT. HORIZ. PLANE @ FRONT CHORD)

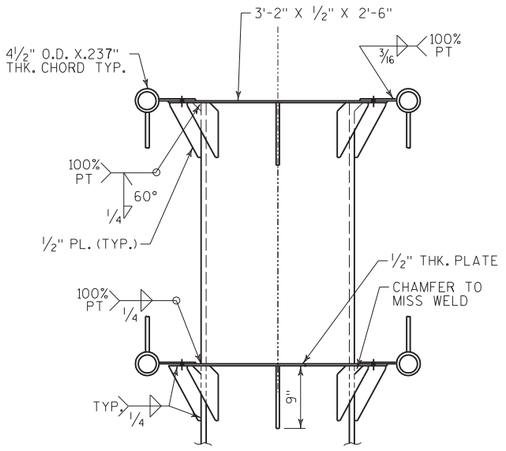




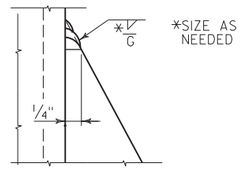
BASE PLATE DETAILS



OPTIONAL COLUMN OR CHORD SPLICE DETAIL



END VIEW
TRUSS TO UPRIGHT



DETAIL 'A'

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE S-64-20

DRAWN BY	AMD	PLANS CK'D.	SJG

SIGN TRUSS DETAILS

SHEET 4 OF 6

523

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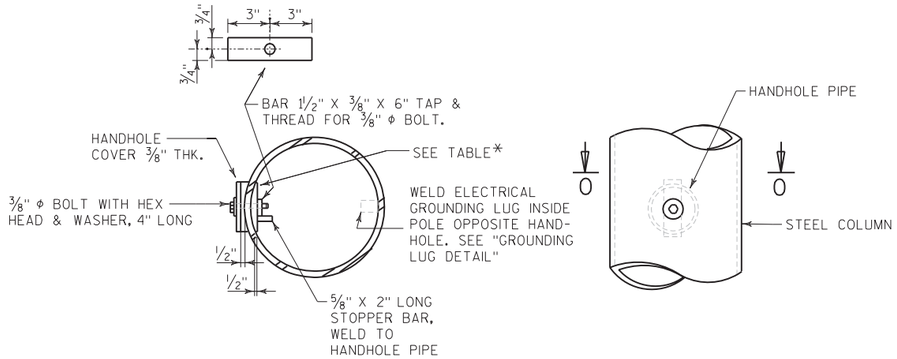
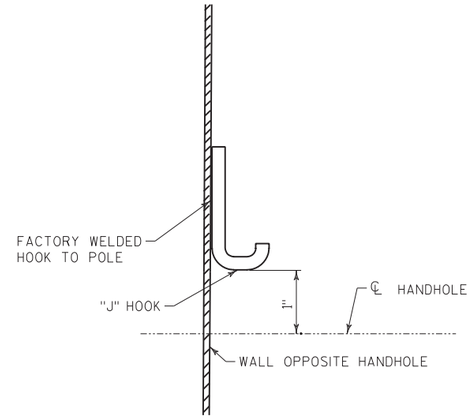


SECTION 'O'

HANDHOLE DETAILS

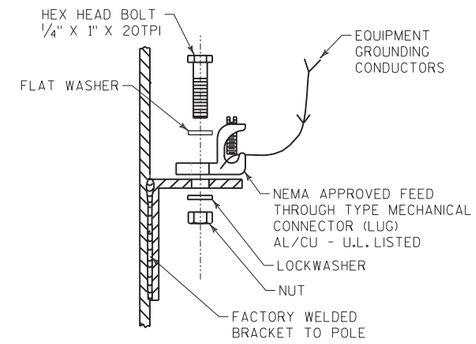
HANDHOLE NOTES

HANDHOLES SHALL BE LOCATED IN ONE COLUMN OF THE SIGN BRIDGE STRUCTURE IF ELECTRICALLY OPERATED DEVICES ARE INSTALLED ON/IN THE STRUCTURE IN THE FUTURE. COLUMNS WITH HANDHOLES SHALL BE NEAR THE ELECTRICAL SERVICE. THE CONTRACTOR SHALL VERIFY THE LOCATION OF THE FUTURE ELECTRICAL SERVICE ENTRANCE WITH THE DISTRICT TRAFFIC SECTION PRIOR TO FABRICATION OF THE SIGN BRIDGE COLUMNS AND MEMBERS. CONDUIT (AS REQ'D.) SHALL BE LOCATED, PLACED AND SIZED AS SHOWN ON THE ELECTRICAL PLAN DETAIL SHEETS.



TYPICAL "J" HOOK LOCATION

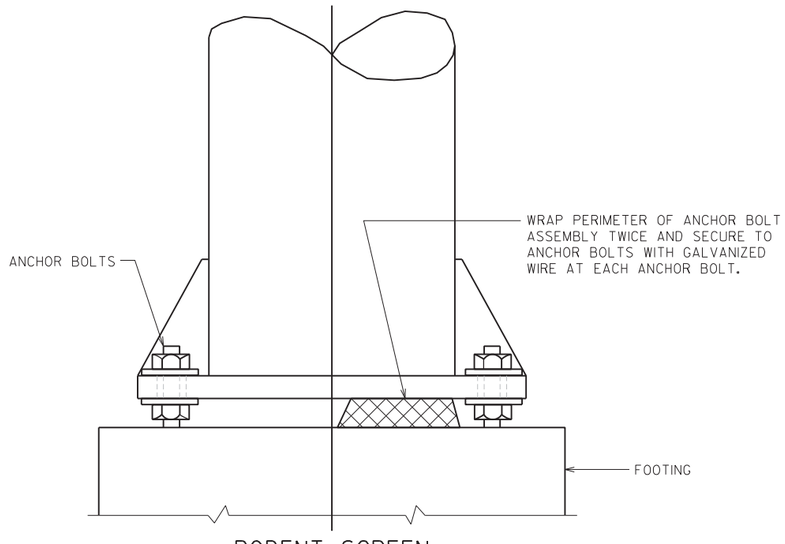
THE "J" HOOK SHALL BE FACTORY WELDED TO THE INSIDE OF ALL COLUMNS CONTAINING ELECTRICAL WIRING. THE "J" HOOK SHALL BE ATTACHED ABOVE THE CENTERLINE OF THE UPPER HANDHOLE AND MOUNTED DIRECTLY OPPOSITE THE HANDHOLE AS SHOWN IN THE DRAWING.



GROUNDING LUG DETAIL

NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL

*	COLUMN SIZE O.D. X THK.	HANDHOLE PIPE O.D. X MIN. THK.
	UP TO AND INCLD. 16" X .375"	5.562" X .500"
	GREATER THAN 16" X .375" TO AND INCLD. 24" X .562"	6.625" X .562"



RODENT SCREEN

(ONLY REQ'D. WHEN ELECTRICAL DEVICES ARE INSTALLED)

8

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NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE S-64-20

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HANDHOLE DETAILS

SHEET 5 OF 6

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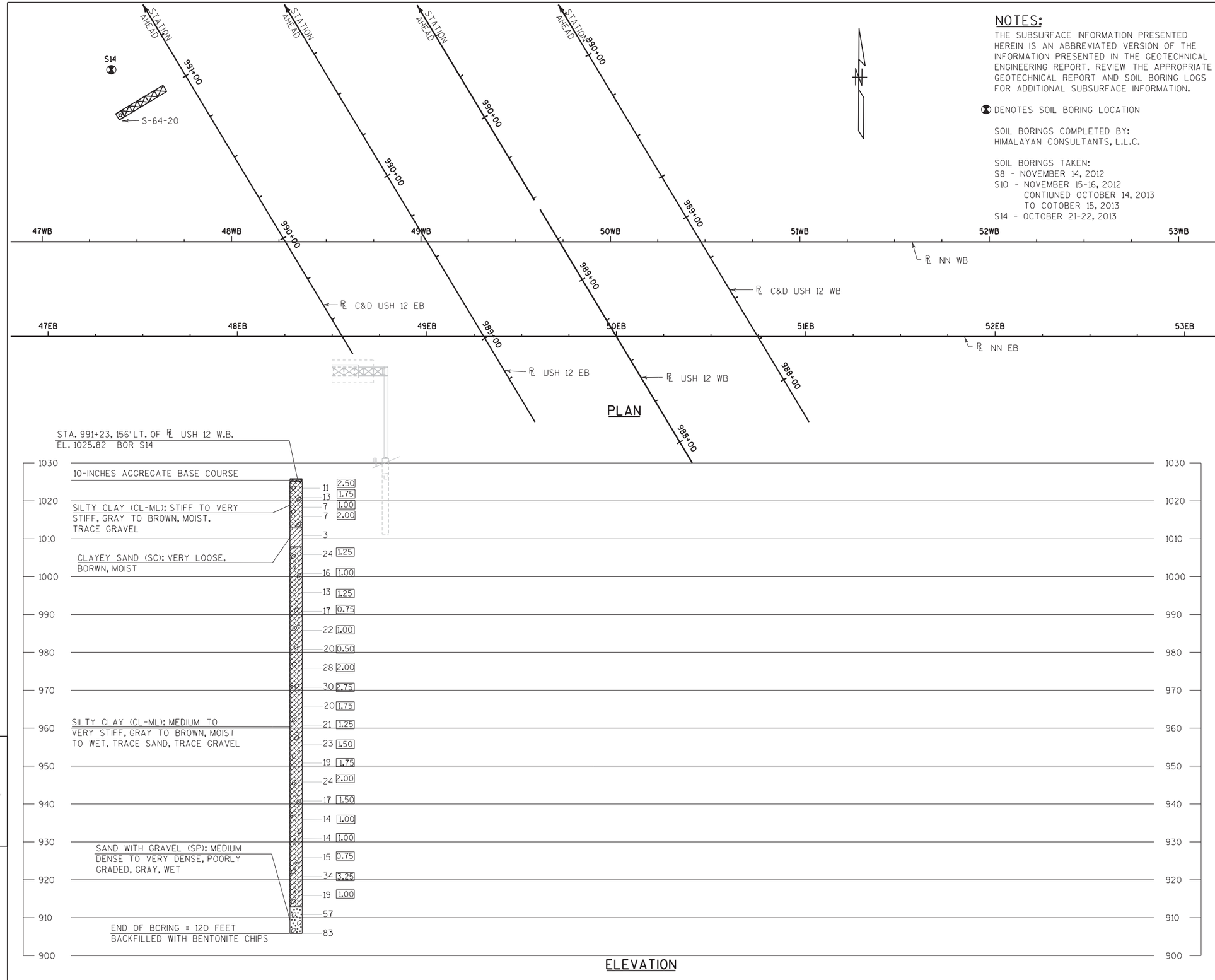

NOTES:

THE SUBSURFACE INFORMATION PRESENTED HEREIN IS AN ABBREVIATED VERSION OF THE INFORMATION PRESENTED IN THE GEOTECHNICAL ENGINEERING REPORT. REVIEW THE APPROPRIATE GEOTECHNICAL REPORT AND SOIL BORING LOGS FOR ADDITIONAL SUBSURFACE INFORMATION.

⊗ DENOTES SOIL BORING LOCATION

SOIL BORINGS COMPLETED BY:
HIMALAYAN CONSULTANTS, L.L.C.

SOIL BORINGS TAKEN:
S8 - NOVEMBER 14, 2012
S10 - NOVEMBER 15-16, 2012
CONTIUNED OCTOBER 14, 2013
TO COTOBER 15, 2013
S14 - OCTOBER 21-22, 2013

STATE PROJECT NUMBER

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ABBREVIATIONS

F — FINE M — MEDIUM C — COARSE
WS — WEATHERED SO — SOUND

MATERIAL SYMBOLS

TOPSOIL, SILT, SANDSTONE, SAND, PEAT, LIMESTONE, GRAVEL, CLAY, IGNEOUS ROCK

LEGEND OF PROBING

95/6=95 BLOWS FOR 6" PENETRATION
PROBING TAKEN WITH A 350# WT FALLING 18" ON A 2" O.D. POINT.

PROBING NO.
STA.
ELEVATION
7 AVERAGE BLOWS PER FOOT
REFUSAL 95/6

LEGEND OF BORING

BORING NO.
ELEV.
STA.
UNCONFINED STRENGTH → 7.7 7
BLOWS PER FT. USING 140# WT. FALLING 30"
WASH SAMPLE
SHELBY TUBE — S.T.
GROUND WATER ELEVATION
NO GROUND WATER OBSERVED ABOVE THIS ELEVATION
SANDY GRAVEL
F. BOULDERS OR COBBLES
SAND
SILTY CLAY
SO. LIMESTONE

UNLESS OTHERWISE SPECIFIED, THE BLOWS PER FOOT AT THE LOCATIONS INDICATED ARE BASED ON DRIVING A 2" O.D. X 1.4" I.D. SPLIT SPOON SAMPLER WITH A 140# HAMMER HAVING A FREE FALL OF 30". THE BLOW COUNT IS TAKEN IN UNDISTURBED SOIL IMMEDIATELY BELOW A CASED OR OPEN HOLE ELIMINATING SIDE FRICTION ON THE DRIVE PIPE.

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

TO OBTAIN RELATIVE DATA CONCERNING THE CHARACTER OF MATERIAL IN AND UPON WHICH THE FOUNDATION MIGHT BE BUILT, BORINGS AND/OR SOUNDINGS WERE MADE AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING. THE DATA PRESENTED HEREIN REPRESENTS THE FINDINGS OF THE SUBSURFACE EXPLORATIONS MADE. HOWEVER, BECAUSE THE DEPTHS INVESTIGATED ARE LIMITED AND THE AREA OF THE BORINGS AND/OR SOUNDINGS IS VERY SMALL IN RELATION TO THE ENTIRE AREA, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT CONDITIONS BELOW THE DEPTHS INVESTIGATED OR THAT THE CLASSIFICATION OF MATERIAL ENCOUNTERED IN THESE INVESTIGATIONS IS NECESSARILY TYPICAL OF THE ENTIRE SITE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE S-64-20

DRAWN BY AMD | PLANS CK'D. SJG

SUBSURFACE EXPLORATION

SHEET 6 OF 6

525

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6/12/2015

CTH NN WB STAGE 1

STATION	Real Station	Distance	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)		Mass Ordinate
			Cut	Salvaged/ Unusable Pavement Material	Fill	EBS	Cut	Salvaged/ Unusable Pavement Material	Fill	EBS	Cut 1.00	Expanded Fill 1.20	Note 9
54+75	5,475	--	4	--	--	--	--	--	--	--	--	--	--
55+00	5,500	25	4	--	--	--	4	--	--	--	4	--	4
55+25	5,525	25	4	--	--	--	4	--	--	--	7	--	7
55+50	5,550	25	4	--	2	--	4	--	1	--	11	1	10
55+75	5,575	25	4	--	5	--	4	--	3	--	15	5	10
56+00	5,600	25	4	--	14	--	4	--	9	--	19	16	3
56+25	5,625	25	4	--	28	--	4	--	19	--	22	39	-17
56+50	5,650	25	4	--	54	--	4	--	38	--	26	84	-59
56+75	5,675	25	4	--	80	--	4	--	62	--	30	159	-129
57+00	5,700	25	4	--	26	--	4	--	49	--	33	218	-184
57+25	5,725	25	6	--	3	--	5	--	13	--	38	234	-196
57+38	5,738	13	12	--	--	--	4	--	1	--	42	235	-193
58+75	5,875	138	2	--	--	--	36	--	--	--	78	235	-157
59+00	5,900	25	5	--	--	--	3	--	--	--	81	235	-154
59+25	5,925	25	4	--	1	--	4	--	0	--	85	235	-150
59+50	5,950	25	5	--	--	--	4	--	0	--	89	236	-146
59+75	5,975	25	4	--	--	--	4	--	--	--	94	236	-142
60+00	6,000	25	3	--	1	--	3	--	0	--	97	236	-140
60+25	6,025	25	3	--	--	--	3	--	0	--	100	237	-137
60+50	6,050	25	3	--	--	--	3	--	--	--	102	237	-135
60+75	6,075	25	3	--	--	--	3	--	--	--	105	237	-132
61+00	6,100	25	3	--	1	--	3	--	0	--	108	238	-130
61+25	6,125	25	3	--	2	--	3	--	1	--	111	239	-129
61+50	6,150	25	3	--	--	--	3	--	1	--	113	240	-127
61+75	6,175	25	3	--	--	--	3	--	--	--	116	240	-124
62+00	6,200	25	3	--	--	--	3	--	--	--	119	240	-121
62+25	6,225	25	3	--	--	--	3	--	--	--	122	240	-119
62+50	6,250	25	3	--	--	--	3	--	--	--	125	240	-116
62+75	6,275	25	3	--	--	--	3	--	--	--	127	240	-113
63+00	6,300	25	3	--	--	--	3	--	--	--	130	240	-110
63+25	6,325	25	3	--	--	--	3	--	--	--	133	240	-107
63+50	6,350	25	3	--	--	--	3	--	--	--	136	240	-105
63+75	6,375	25	2	--	--	--	2	--	--	--	138	240	-102
64+00	6,400	25	2	--	--	--	2	--	--	--	140	240	-100
64+25	6,425	25	2	--	--	--	2	--	--	--	142	240	-99
64+50	6,450	25	2	--	--	--	2	--	--	--	144	240	-97
64+75	6,475	25	2	--	--	--	2	--	--	--	144	240	-95
65+00	6,500	25	2	--	--	--	2	--	--	--	144	240	-93
65+25	6,525	25	2	--	--	--	2	--	--	--	150	240	-91
65+50	6,550	25	2	--	--	--	2	--	--	--	164	240	-89
65+63	6,563	13	2	--	--	--	1	--	--	--	175	240	-88
						TOTALS	152	--	200	--			

CTH NN EB STAGE 2

STATION	Real Station	Distance	AREA (SF) Cut	AREA (SF) Salvaged/ Unusable Pavement Material	AREA (SF) Fill	AREA (SF) EBS	Incremental Vol (CY) (Unadjusted) Cut	Incremental Vol (CY) (Unadjusted) Salvaged/ Unusable Pavement Material	Incremental Vol (CY) (Unadjusted) Fill	Incremental Vol (CY) (Unadjusted) EBS	Cumulative Vol (CY) Cut 1.00	Cumulative Vol (CY) Expanded Fill 1.20	Mass Ordinate Note 9
30+00	3,000	--	128	18	0	--	--	--	--	--	--	--	--
30+50	3,050	50	134	18	10	--	243	33	9	--	243	11	198
31+00	3,100	50	116	18	20	--	231	33	28	--	474	44	363
31+50	3,150	50	128	18	21	--	226	33	38	--	700	90	510
32+00	3,200	50	143	20	34	--	251	35	51	--	951	151	665
32+50	3,250	50	146	24	44	--	268	41	72	--	1,219	238	805
33+00	3,300	50	144	26	51	--	269	46	88	--	1,487	343	921
33+50	3,350	50	135	26	62	--	258	48	105	--	1,745	469	1,006
34+00	3,400	50	128	27	81	--	244	49	132	--	1,989	628	1,042
34+50	3,450	50	124	27	107	--	233	50	174	--	2,222	837	1,016
35+00	3,500	50	125	27	144	--	231	50	232	--	2,453	1,116	918
35+50	3,550	50	154	31	190	--	258	54	309	--	2,711	1,487	751
36+00	3,600	50	52	50	85	--	191	75	255	--	2,902	1,792	561
36+50	3,650	50	57	51	127	--	101	94	196	--	3,003	2,028	333
37+00	3,700	50	25	25	190	--	76	70	294	--	3,079	2,380	-13
37+50	3,750	50	69	18	580	--	87	40	713	--	3,166	3,236	-822
38+00	3,800	50	43	18	619	--	104	33	1,110	--	3,269	4,568	-2,084
38+50	3,850	50	44	19	707	--	81	34	1,228	--	3,350	6,041	-3,511
39+00	3,900	50	49	21	795	--	86	37	1,391	--	3,436	7,710	-5,130
39+50	3,950	50	55	23	890	--	96	41	1,560	--	3,532	9,582	-6,947
40+00	4,000	50	37	24	999	--	85	44	1,749	--	3,618	11,681	-9,004
40+50	4,050	50	65	26	1,099	--	94	46	1,943	--	3,712	14,012	-11,287
41+00	4,100	50	28	28	414	--	86	50	1,401	--	3,798	15,693	-12,932
41+50	4,150	50	17	17	419	--	42	42	771	--	3,840	16,619	-13,858
42+00	4,200	50	17	17	418	--	31	31	775	--	3,871	17,549	-14,788
42+50	4,250	50	17	17	503	--	31	31	853	--	3,903	18,572	-15,811
43+00	4,300	50	17	17	602	--	31	31	1,023	--	3,934	19,800	-17,039
43+50	4,350	50	19	19	668	--	33	33	1,176	--	3,968	21,211	-18,450
44+00	4,400	50	31	30	500	--	46	45	1,081	--	4,014	22,509	-19,747
44+50	4,450	50	50	48	288	--	75	72	730	--	4,089	23,384	-20,620
45+00	4,500	50	32	30	343	--	76	72	584	--	4,165	24,086	-21,317
45+50	4,550	50	25	22	424	--	53	48	710	--	4,218	24,938	-22,165
46+00	4,600	50	25	20	214	--	46	39	591	--	4,264	25,647	-22,866
46+50	4,650	50	24	19	920	--	45	36	1,050	--	4,309	26,907	-24,117
47+00	4,700	50	18	18	648	--	39	34	1,452	--	4,348	28,649	-25,854
47+50	4,750	50	17	17	322	--	32	32	898	--	4,381	29,727	-26,932
47+85	4,785	35	18	18	185	--	23	23	328	--	4,403	30,121	-27,326
					SUBTOTALS		**4,403**	**1,609**	**25,101**	**--**			

CTH NN EB STAGE 2

STATION	Real Station	Distance	AREA (SF) Cut	AREA (SF) Salvaged/ Unusable Pavement Material	AREA (SF) Fill	AREA (SF) EBS	Incremental Vol (CY) (Unadjusted) Cut	Incremental Vol (CY) (Unadjusted) Salvaged/ Unusable Pavement Material	Incremental Vol (CY) (Unadjusted) Fill	Incremental Vol (CY) (Unadjusted) EBS	Cumulative Vol (CY) Cut 1.00	Cumulative Vol (CY) Expanded Fill 1.20	Mass Ordinate Note 9
51+45	5,145	--	--	--	293	--	--	--	--	--	4,403	30,121	-27,326
51+50	5,150	5	--	--	315	--	--	--	56	--	4,403	30,188	-27,393
52+00	5,200	50	117	19	81	--	108	18	367	--	4,512	30,628	-27,742
52+50	5,250	50	112	20	383	--	212	36	430	--	4,724	31,143	-28,082
53+00	5,300	50	104	22	493	--	200	39	811	--	4,924	32,117	-28,894
53+50	5,350	50	91	23	560	--	181	42	975	--	5,104	33,287	-29,925
54+00	5,400	50	69	25	633	--	148	44	1,105	--	5,252	34,612	-31,147
54+50	5,450	50	32	28	693	--	94	49	1,228	--	5,346	36,085	-32,576
55+00	5,500	50	29	29	62	--	56	53	699	--	5,402	36,924	-33,411
55+50	5,550	50	23	23	97	--	48	48	147	--	5,450	37,101	-33,588
56+00	5,600	50	27	27	163	--	46	46	241	--	5,497	37,390	-33,877
56+50	5,650	50	27	27	257	--	50	50	389	--	5,547	37,857	-34,344
57+00	5,700	50	34	30	341	--	56	53	554	--	5,603	38,521	-35,004
57+50	5,750	50	55	49	234	--	82	73	532	--	5,686	39,160	-35,634
58+00	5,800	50	45	42	336	--	93	84	528	--	5,778	39,793	-36,259
58+50	5,850	50	33	31	362	--	72	68	646	--	5,850	40,569	-37,030
59+00	5,900	50	27	26	1,108	--	56	53	1,361	--	5,906	42,202	-38,660
59+50	5,950	50	35	24	1,144	--	57	46	2,085	--	5,963	44,704	-41,152
60+00	6,000	50	22	8	1,186	--	53	30	2,157	--	6,016	47,293	-43,717
60+50	6,050	50	17	8	1,114	--	36	15	2,130	--	6,052	49,849	-46,252
61+00	6,100	50	33	8	1,015	--	46	15	1,971	--	6,099	52,214	-48,586
61+50	6,150	50	70	8	950	--	95	15	1,819	--	6,194	54,398	-50,688
62+00	6,200	50	85	8	862	--	144	15	1,678	--	6,337	56,411	-52,573
62+50	6,250	50	96	8	784	--	168	15	1,524	--	6,505	58,240	-54,249
63+00	6,300	50	110	8	726	--	191	15	1,398	--	6,696	59,918	-55,751
63+50	6,350	50	138	8	656	--	230	15	1,280	--	6,925	61,453	-57,072
64+00	6,400	50	128	8	556	--	246	15	1,122	--	7,172	62,800	-58,187
64+50	6,450	50	97	8	435	--	208	15	918	--	7,380	63,901	-59,094
65+00	6,500	50	63	8	338	--	148	15	716	--	7,528	64,760	-59,820
65+50	6,550	50	68	13	228	--	121	19	524	--	7,650	65,389	-60,347
66+00	6,600	50	33	23	77	--	94	33	282	--	7,743	65,728	-60,626
66+50	6,650	50	29	8	107	--	57	29	170	--	7,800	65,932	-60,802
67+00	6,700	50	33	8	62	--	57	15	156	--	7,858	66,120	-60,947
67+50	6,750	50	46	8	44	--	73	15	98	--	7,931	66,238	-61,006
68+00	6,800	50	65	8	28	--	103	15	67	--	8,034	66,318	-60,998
68+50	6,850	50	79	8	19	--	133	15	44	--	8,167	66,370	-60,932
69+00	6,900	50	91	8	12	--	157	15	29	--	8,325	66,404	-60,824
69+50	6,950	50	101	8	7	--	178	15	18	--	8,502	66,425	-60,682
70+00	7,000	50	118	8	3	--	203	15	9	--	8,705	66,437	-60,505
70+50	7,050	50	122	8	0	--	222	15	3	--	8,927	66,440	-60,301
						SUBTOTALS	**4,524**	**1,180**	**30,266**	**--**			
						TOTALS	**8,927**	**2,788**	**55,367**	**--**			

RAMP A & RAMP AA													
			AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)		
STATION	Real Station	Distance	Cut	Salvaged/ Unusable Pavement Material	Fill	EBS	Cut	Salvaged/ Unusable Pavement Material	Fill	EBS	Cut 1.00	Expanded Fill 1.20	Mass Ordinate Note 9
978+13	97,813	--	111	17	--	--	--	--	--	--	--	--	--
978+50	97,850	37	120	17	--	--	157	23	--	--	157	--	134
978+64	97,864	14	117	17	3	--	60	9	1	--	217	1	184
979+00	97,900	36	104	17	10	--	149	23	9	--	366	11	300
979+50	97,950	50	115	17	4	--	203	31	13	--	569	27	456
980+00	98,000	50	109	17	25	--	207	31	27	--	776	59	599
980+50	98,050	50	108	17	25	--	201	31	46	--	977	115	713
981+00	98,100	50	108	18	39	--	200	32	59	--	1,177	186	810
981+50	98,150	50	88	18	73	--	181	33	104	--	1,358	310	833
982+00	98,200	50	96	19	45	--	170	34	109	--	1,529	441	838
982+50	98,250	50	81	18	62	--	164	34	99	--	1,693	560	849
983+00	98,300	50	78	17	90	--	147	32	141	--	1,840	729	795
983+50	98,350	50	83	16	190	--	149	31	259	--	1,989	1,040	602
984+00	98,400	50	67	18	306	--	139	31	459	--	2,128	1,591	159
984+50	98,450	50	37	18	396	--	96	33	650	--	2,224	2,371	-558
985+00	98,500	50	18	18	65	--	51	33	427	--	2,275	2,884	-1,053
985+50	98,550	50	20	20	80	--	35	35	134	--	2,310	3,045	-1,214
986+00	98,600	50	21	21	133	--	38	38	197	--	2,348	3,281	-1,451
986+50	98,650	50	22	22	134	--	40	40	247	--	2,388	3,578	-1,747
986+83	98,683	33	23	23	91	--	27	27	137	--	2,415	3,742	-1,911
					RAMP A SUBTOTALS		**2,415**	**585**	**3,118**	**--**			
984+91	98,491		14	0	425	--	--	--	--	--	--	--	--
985+00	98,500	9	13	0	434	--	4	--	139	--	4	167	-163
985+50	98,550	50	12	2	502	--	23	2	867	--	28	1,207	-1,181
986+00	98,600	50	10	10	660	--	20	11.1	1,076	--	48	2,498	-2,463
986+50	98,650	50	23	23	780	--	31	31	1,333	--	78	4,098	-4,063
987+00	98,700	50	17	9	932	--	37	30	1,585	--	115	6,000	-5,958
987+04	98,704	4	9	9	1,019	--	2	1	153	--	118	6,184	-6,141
					RAMP AA SUBTOTALS		**118**	**75**	**5,153**	**--**			
					TOTALS		**2,533**	**659**	**8,272**	**--**			

RAMP B & RAMP AB													
			AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)		
STATION	Real Station	Distance	Cut	Salvaged/ Unusable Pavement Material	Fill	EBS	Cut	Salvaged/ Unusable Pavement Material	Fill	EBS	Cut 1.00	Expanded Fill 1.20	Mass Ordinate Note 9
54+67	5,467	--	10	- -	612	--	--	--	--	--	--	--	--
55+00	5,500	33	3	- -	819	--	8	--	867	--	8	1,040	-1,032
55+50	5,550	50	20	20	855	--	21	19	1,550	--	29	2,900	-2,889
56+00	5,600	50	20	20	913	--	37	37	1,637	--	66	4,864	-4,854
56+50	5,650	50	20	20	821	--	37	37	1,606	--	103	6,791	-6,780
57+00	5,700	50	20	20	706	--	37	37	1,414	--	140	8,488	-8,477
57+50	5,750	50	20	20	443	--	37	37	1,064	--	177	9,764	-9,754
58+00	5,800	50	20	20	247	--	37	37	639	--	214	10,531	-10,520
58+50	5,850	50	39	36	214	--	55	52	427	--	269	11,043	-11,030
59+00	5,900	50	40	32	122	--	73	63	311	--	342	11,417	-11,393
59+50	5,950	50	39	29	88	--	73	56	194	--	415	11,650	-11,610
60+00	6,000	50	36	26	110	--	69	51	183	--	485	11,870	-11,811
60+50	6,050	50	35	22	188	--	66	44	276	--	550	12,201	-12,121
61+00	6,100	50	36	20	207	--	66	39	366	--	616	12,640	-12,533
61+50	6,150	50	41	20	185	--	71	37	363	--	688	13,075	-12,934
62+00	6,200	200	43	20	129	--	283	160	1,213	--	768	13,326	-13,144
62+50	6,250	50	50	20	68	--	86	37	182	--	854	13,545	-13,314
63+00	6,300	50	57	20	21	--	99	37	82	--	953	13,644	-13,351
63+50	6,350	50	76	21	17	--	123	38	35	--	1,076	13,686	-13,308
64+00	6,400	50	108	18	18	--	170	36	32	--	1,246	13,725	-13,212
64+50	6,450	50	100	19	11	--	193	34	27	--	1,439	13,757	-13,086
65+00	6,500	50	96	19	10	--	181	35	19	--	1,620	13,780	-12,963
65+19	6,519	19	95	19	11	--	66	13	7	--	1,687	13,789	-12,919
					RAMP B SUBTOTALS		**1,889**	**937**	**12,495**	**--**			
56+12	5,612	--	17	17	142	--							
56+50	5,650	38	17	17	324	--	24	24	324	--	24	388	-388
57+00	5,700	50	18	18	189	--	32	32	475	--	56	958	-958
57+50	5,750	50	18	18	110	--	33	33.3	277	--	89	1,291	-1,291
58+00	5,800	50	18	18	87	--	33	33	182	--	123	1,510	-1,510
58+43	5,843	43	18	15	77	--	29	26	131	--	151	1,667	-1,665
					RAMP AB SUBTOTALS		**151**	**149**	**1,389**	**--**			
					TOTALS		**2,041**	**1,086**	**13,885**	**--**			

RAMP C & RAMP CD

STATION	Real Station	Distance	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)		Mass Ordinate
			Cut	Salvaged/ Unusable Pavement Material	Fill	EBS	Cut	Salvaged/ Unusable Pavement Material	Fill	EBS	Cut 1.00	Expanded Fill 1.20	Note 9
40+71	4,071		39	--	709	--	--	--	--	--	--	--	--
41+00	4,100	29	39	--	760	--	42	--	797	--	42	956	-914
41+50	4,150	50	37	--	777	--	70	--	1,423	--	113	2,664	-2,552
42+00	4,200	50	38	--	844	--	69	--	1,501	--	182	4,465	-4,283
42+50	4,250	50	34	--	850	--	67	--	1,569	--	249	6,348	-6,099
43+00	4,300	50	29	--	978	--	58	--	1,693	--	307	8,379	-8,072
43+50	4,350	50	37	21	994	--	61	19	1,826	--	368	10,570	-10,221
44+00	4,400	50	30	20	843	--	62	38	1,701	--	430	12,611	-12,238
44+50	4,450	50	28	19	685	--	54	36	1,415	--	484	14,309	-13,918
45+00	4,500	50	41	34	782	--	64	49	1,358	--	548	15,939	-15,533
45+50	4,550	50	26	22	468	--	62	52	1,157	--	610	17,328	-16,912
46+00	4,600	50	30	18	173	--	52	37	594	--	662	18,040	-17,610
46+50	4,650	50	55	18	94	--	79	33	247	--	740	18,336	-17,861
47+00	4,700	50	68	18	39	--	114	33	123	--	854	18,484	-17,928
47+50	4,750	50	97	18	25	--	153	33	59	--	1,007	18,555	-17,880
48+00	4,800	50	100	18	24	--	182	33	45	--	1,190	18,610	-17,785
48+50	4,850	650	74	17	56	--	1,181	383	11,788	--	1,363	18,611	-17,631
49+00	4,900	50	76	17	49	--	139	31	97	--	1,502	18,727	-17,640
49+50	4,950	50	76	17	17	--	141	31	61	--	1,643	18,801	-17,604
50+00	5,000	50	74	17	15	--	139	31	30	--	1,782	18,836	-17,532
50+50	5,050	50	74	18	10	--	137	32	23	--	1,919	18,864	-17,455
51+00	5,100	50	75	18	10	--	138	33	19	--	2,057	18,886	-17,373
51+50	5,150	50	90	18	11	--	153	33	19	--	2,210	18,909	-17,277
52+00	5,200	50	98	18	18	--	174	33	27	--	2,384	18,942	-17,168
52+50	5,250	50	105	18	25	--	188	33	40	--	2,572	18,989	-17,061
53+00	5,300	50	119	18	5	--	207	33	28	--	2,779	19,023	-16,921
53+50	5,350	50	112	18	24	--	214	33	27	--	2,993	19,055	-16,772
53+65	5,365	165	126	18	40	--	684	110	137	--	3,068	19,106	-16,758
54+00	5,400	35	140	19	48	--	172	24	57	--	3,241	19,174	-16,678
54+50	5,450	50	143	17	52	--	262	33	93	--	3,503	19,286	-16,560
55+00	5,500	50	130	17	26	--	253	31	72	--	3,756	19,372	-16,426
55+50	5,550	50	114	18	3	--	226	32	27	--	3,981	19,404	-16,265
56+00	5,600	50	101	17	--	--	199	32	3	--	4,181	19,408	-16,101
56+50	5,650	50	95	17	--	--	181	31	--	--	4,362	19,408	-15,951
56+81	5,681	31	90	17	6	--	105	19	3	--	4,467	19,412	-15,869
					RAMP C SUBTOTALS		**6,084**	**1,390**	**28,058**	**--**			
42+82	4,282		16	16	105	--	--	--	--	--	--	--	--
43+00	4,300	18	17	17	325	--	11	11	140	--	11	167	-167
43+50	4,350	50	17	17	462	--	31	31	729	--	42	1,042	-1,042
44+00	4,400	50	17	17	323	--	31	31.5	727	--	74	1,914	-1,914
44+50	4,450	50	17	17	227	--	31	31	509	--	105	2,525	-2,525
					RAMP CD SUBTOTALS		**105**	**105**	**2,104**	**--**			
					TOTALS		**6,189**	**1,495**	**30,162**	**--**			

RAMP D & RAMP DC

STATION	Real Station	Distance	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)		Mass Ordinate
			Cut	Salvaged/ Unusable Pavement Material	Fill	EBS	Cut	Salvaged/ Unusable Pavement Material	Fill	EBS	Cut 1.00	Expanded Fill 1.20	Note 9
19+60	1,960	--	94	20	7	--	--	--	--	--	--	--	--
20+00	2,000	40	90	20	6	--	136	30	10	--	136	12	95
20+50	2,050	50	90	20	14	--	167	37	19	--	303	34	203
21+00	2,100	50	90	20	28	--	167	37	39	--	470	80	285
21+50	2,150	50	88	20	56	--	165	37	78	--	634	174	320
22+00	2,200	50	82	20	58	--	157	37	106	--	792	300	314
22+50	2,250	50	74	20	53	--	144	37	103	--	936	424	298
23+00	2,300	50	69	20	39	--	132	37	85	--	1,069	526	291
23+50	2,350	50	64	20	40	--	123	37	73	--	1,192	614	289
24+00	2,400	50	62	20	41	--	117	37	75	--	1,309	704	279
24+50	2,450	50	75	20	34	--	127	37	69	--	1,435	787	285
25+00	2,500	50	80	20	29	--	144	37	58	--	1,579	857	322
25+50	2,550	50	87	20	28	--	155	37	53	--	1,734	920	376
26+00	2,600	50	93	21	33	--	167	38	56	--	1,900	988	437
26+50	2,650	50	79	21	54	--	159	39	81	--	2,059	1,085	461
27+00	2,700	50	67	20	56	--	135	38	102	--	2,195	1,207	436
27+50	2,750	650	53	20	142	--	1,828	485	1,188	--	2,298	1,506	203
28+00	2,800	50	47	21	244	--	93	38	357	--	2,390	1,935	-172
28+50	2,850	50	34	21	416	--	75	39	611	--	2,465	2,669	-869
29+00	2,900	50	32	19	585	--	61	37	927	--	2,526	3,781	-1,957
29+50	2,950	50	23	21	945	--	51	37	1,417	--	2,577	5,481	-3,643
30+00	3,000	50	21	21	1,257	--	41	39	2,039	--	2,618	7,927	-6,088
30+50	3,050	50	22	22	754	--	40	40	1,862	--	2,658	10,162	-8,322
30+78	3,078	28	15	12	1,145	--	19	18	988	--	2,677	11,348	-9,507
					RAMP D SUBTOTALS		**4,402**	**1,284**	**10,395**	**--**			
29+00	2,900	--	--	--	173	--	--	--	--	--	--	--	--
29+50	2,950	50	5	5	321	--	5	5	457	--	5	549	-549
30+00	3,000	50	20	20	412	--	23	23	679	--	28	1,363	-1,363
30+50	3,050	50	23	23	297	--	40	39.8	656	--	68	2,151	-2,151
30+74	3,074	24	13	13	182	--	16	16	214	--	84	2,408	-2,408
					RAMP DC SUBTOTALS		**84**	**84**	**2,006**	**--**			
					TOTALS		**4,486**	**1,368**	**12,402**	**--**			

CTH H													
			AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)		
STATION	Real Station	Distance	Cut	Salvaged/ Unusable Pavement Material	Fill	EBS	Cut	Salvaged/ Unusable Pavement Material	Fill	EBS	Cut 1.00	Expanded Fill 1.20	Mass Ordinate Note 9
9+09	909	--	97	35	8	--	--	--	--	--	--	--	--
9+50	950	41	97	35	24	--	146	53	24	--	146	29	64
9+75	975	25	101	34	18	--	92	32	19	--	238	52	101
10+00	1,000	25	86	34	51	--	87	31	32	--	324	91	118
10+50	1,050	50	85	34	46	--	158	63	90	--	482	198	105
11+00	1,100	50	90	36	73	--	162	65	110	--	644	331	70
11+51	1,151	51	146	40	124	--	221	71	184	--	865	552	-1
12+00	1,200	50	183	76	316	--	302	139	579	--	1,167	1,247	-534
12+50	1,250	50	76	139	820	--	240	199	1,052	--	1,407	2,509	-1,756
12+74	1,274	24	139	--	230	--	95	62	465	--	1,502	3,067	-2,280
						TOTALS	1,502	715	2,556	--			

CTH NN WB STAGE 3

STATION	Real Station	Distance	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)		Mass Ordinate
			Cut	Salvaged/ Unusable Pavement Material	Fill	EBS	Cut	Salvaged/ Unusable Pavement Material	Fill	EBS	Cut 1.00	Expanded Fill 1.20	Note 9
30+51	3,051	--	113	18	--	--	--	--	--	--	--	--	--
31+00	3,100	49	119	18	--	--	209	32	--	--	209	--	176
31+50	3,150	50	112	18	19	--	214	33	18	--	423	21	336
32+00	3,200	50	113	18	8	--	208	33	25	--	631	51	481
32+50	3,250	50	105	18	8	--	202	33	15	--	833	69	632
33+00	3,300	50	95	18	7	--	185	33	14	--	1,018	86	767
33+50	3,350	50	79	18	9	--	161	33	15	--	1,179	103	877
34+00	3,400	50	57	18	19	--	126	33	26	--	1,305	134	938
34+50	3,450	50	34	18	35	--	84	33	50	--	1,389	194	929
35+00	3,500	50	23	21	51	--	53	36	80	--	1,442	290	850
35+50	3,550	50	26	26	88	--	45	44	129	--	1,487	444	698
36+00	3,600	50	28	28	90	--	50	50	165	--	1,537	642	500
36+50	3,650	50	28	28	147	--	52	52	219	--	1,589	906	237
37+00	3,700	50	28	28	325	--	52	52	437	--	1,641	1,430	-288
37+50	3,750	50	27	27	363	--	51	51	637	--	1,692	2,194	-1,052
38+00	3,800	50	27	27	522	--	50	50	819	--	1,742	3,178	-2,036
38+50	3,850	50	27	27	595	--	50	50	1,034	--	1,792	4,419	-3,277
39+00	3,900	50	23	23	622	--	46	46	1,127	--	1,838	5,771	-4,629
39+50	3,950	50	19	19	630	--	39	39	1,159	--	1,877	7,162	-6,020
40+00	4,000	50	18	18	631	--	34	34	1,168	--	1,912	8,563	-7,421
40+50	4,050	50	18	18	610	--	33	33	1,149	--	1,945	9,942	-8,800
41+00	4,100	50	18	18	579	--	33	33	1,101	--	1,978	11,263	-10,121
41+50	4,150	50	18	18	563	--	33	33	1,057	--	2,012	12,532	-11,390
42+00	4,200	50	18	18	553	--	33	33	1,033	--	2,045	13,772	-12,630
42+50	4,250	50	18	18	551	--	33	33	1,022	--	2,078	14,999	-13,857
43+00	4,300	50	19	19	547	--	34	34	1,017	--	2,112	16,219	-15,077
43+50	4,350	50	37	24	563	--	52	40	1,028	--	2,164	17,452	-16,298
44+00	4,400	50	26	26	505	--	58	46	989	--	2,223	18,639	-17,473
44+50	4,450	50	26	26	452	--	48	48	886	--	2,271	19,702	-18,536
45+00	4,500	50	26	26	439	--	48	48	825	--	2,319	20,692	-19,526
45+50	4,550	50	26	26	392	--	48	48	769	--	2,367	21,616	-20,449
46+00	4,600	50	26	26	335	--	48	48	673	--	2,415	22,423	-21,257
46+50	4,650	50	25	25	280	--	47	47	569	--	2,462	23,107	-21,941
47+00	4,700	50	22	22	201	--	44	44	445	--	2,506	23,641	-22,475
47+50	4,750	50	18	18	114	--	37	37	292	--	2,543	23,991	-22,825
47+58	4,758	8	18	18	50	--	5	5	24	--	2,548	24,020	-22,854
					SUBTOTALS		**2,548**	**1,382**	**20,017**	**---**			

CTH NN WB STAGE 3

STATION	Real Station	Distance	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)		Mass Ordinate
			Cut	Salvaged/ Unusable Pavement Material	Fill	EBS	Cut	Salvaged/ Unusable Pavement Material	Fill	EBS	Cut 1.00	Expanded Fill 1.20	Note 9
51+18	5,118	--	17	17	277	--	--	--	--	--	2,548	24,020	-22,854
51+50	5,150	32	94	17	49	--	66	20	192	--	2,614	24,251	-23,040
52+00	5,200	50	87	18	25	--	168	32	69	--	2,781	24,334	-22,987
52+50	5,250	50	72	18	40	--	147	33	60	--	2,929	24,406	-22,945
53+00	5,300	50	62	18	44	--	124	33	78	--	3,053	24,499	-22,948
53+50	5,350	50	49	18	48	--	103	33	85	--	3,156	24,601	-22,980
54+00	5,400	50	33	18	70	--	76	33	109	--	3,231	24,732	-23,069
54+50	5,450	50	23	18	73	--	52	33	132	--	3,283	24,891	-23,209
55+00	5,500	50	18	18	88	--	38	33	149	--	3,321	25,070	-23,384
55+50	5,550	50	18	18	123	--	33	33	195	--	3,355	25,305	-23,618
56+00	5,600	50	18	18	169	--	33	33	270	--	3,388	25,629	-23,942
56+50	5,650	50	22	22	225	--	37	37	365	--	3,425	26,067	-24,380
57+00	5,700	50	24	24	214	--	43	43	406	--	3,468	26,555	-24,868
57+50	5,750	50	24	24	320	--	44	44	494	--	3,512	27,148	-25,461
58+00	5,800	50	34	23	319	--	54	44	592	--	3,566	27,858	-26,161
58+50	5,850	50	23	23	485	--	53	43	744	--	3,619	28,751	-27,044
59+00	5,900	50	22	22	642	--	42	42	1,044	--	3,660	30,004	-28,297
59+50	5,950	50	22	22	670	--	41	41	1,215	--	3,701	31,461	-29,754
60+00	6,000	50	11	11	711	--	31	31	1,279	--	3,731	32,996	-31,289
60+50	6,050	50	9	9	726	--	19	19	1,331	--	3,750	34,592	-32,885
61+00	6,100	50	8	8	724	--	16	16	1,343	--	3,766	36,204	-34,497
61+50	6,150	50	8	8	723	--	15	15	1,340	--	3,781	37,811	-36,104
62+00	6,200	50	8	8	715	--	15	15	1,331	--	3,795	39,409	-37,702
62+50	6,250	50	8	8	686	--	15	15	1,297	--	3,810	40,966	-39,259
63+00	6,300	50	8	8	628	--	15	15	1,217	--	3,825	42,426	-40,719
63+50	6,350	50	8	8	496	--	15	15	1,041	--	3,840	43,675	-41,968
64+00	6,400	50	8	8	436	--	15	15	863	--	3,855	44,710	-43,003
64+50	6,450	50	8	8	385	--	15	15	760	--	3,869	45,622	-43,915
65+00	6,500	50	8	8	332	--	15	15	664	--	3,884	46,419	-44,712
65+50	6,550	50	20	8	240	--	26	15	530	--	3,910	47,055	-45,337
66+00	6,600	50	21	10	100	--	38	17	315	--	3,948	47,432	-45,693
66+50	6,650	50	24	8	107	--	42	17	192	--	3,990	47,662	-45,898
67+00	6,700	50	16	8	116	--	37	15	206	--	4,027	47,910	-46,124
67+50	6,750	50	40	8	97	--	52	15	197	--	4,079	48,147	-46,323
68+00	6,800	50	67	8	72	--	99	15	156	--	4,178	48,335	-46,427
68+50	6,850	50	88	8	67	--	144	15	129	--	4,321	48,489	-46,452
69+00	6,900	50	101	8	51	--	175	15	109	--	4,496	48,620	-46,423
69+50	6,950	50	104	8	44	--	190	15	88	--	4,686	48,726	-46,354
70+00	7,000	50	107	8	38	--	195	15	76	--	4,881	48,817	-46,265
70+50	7,050	50	105	8	16	--	196	15	50	--	5,078	48,877	-46,143
70+91	7,091	41	123	8	5	--	175	12	16	--	5,252	48,896	-46,000
						SUBTOTALS	2,704	974	20,730	--			
						TOTALS	5,252	2,356	40,747	--			

SHARED USE PATH WEST

STATION	Real Station	Distance	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)		Mass Ordinate
			Cut	Salvaged/ Unusable Pavement Material	Fill	EBS	Cut	Salvaged/ Unusable Pavement Material	Fill	EBS	Cut 1.00	Expanded Fill 1.20	Note 9
31+50	3,150	--	11	--	19	--	--	--	--	--	--	--	--
32+00	3,200	50	24	--	15	--	32	--	31	--	32	38	-5
32+50	3,250	50	19	--	39	--	40	--	50	--	72	98	-26
33+00	3,300	50	9	--	80	--	26	--	110	--	98	230	-132
33+50	3,350	50	4	--	96	--	12	--	163	--	110	426	-315
34+00	3,400	50	14	--	119	--	17	--	199	--	127	664	-538
34+50	3,450	50	12	--	159	--	24	--	257	--	151	973	-822
35+00	3,500	50	14	--	183	--	24	--	317	--	175	1,353	-1,178
35+50	3,550	50	25	--	190	--	36	--	345	--	211	1,768	-1,557
36+00	3,600	50	--	--	244	--	23	--	402	--	234	2,250	-2,016
36+18	3,618	18	--	--	112	--	--	--	120	--	234	2,394	-2,160
						SUBTOTALS	**234**	**--**	**1,995**	**--**			
36+75	3,675	--	--	--	277	--	--	--	--	--	--	--	--
37+00	3,700	25	--	--	205	--	--	--	220	--	--	265	-265
37+50	3,750	50	8	--	237	--	7	--	409	--	7	756	-748
38+00	3,800	50	7	--	302	--	14	--	499	--	21	1,355	-1,333
38+50	3,850	50	8	--	370	--	14	--	622	--	35	2,101	-2,066
39+00	3,900	50	27	--	432	--	32	--	743	--	68	2,992	-2,925
39+50	3,950	50	39	--	498	--	61	--	861	--	129	4,026	-3,897
40+00	4,000	50	47	--	560	--	80	--	980	--	208	5,201	-4,993
40+50	4,050	50	62	--	650	--	101	--	1,120	--	309	6,546	-6,236
41+00	4,100	50	48	--	747	--	102	--	1,294	--	411	8,098	-7,687
41+50	4,150	50	47	--	823	--	88	--	1,454	--	499	9,842	-9,343
42+00	4,200	50	39	--	876	--	80	--	1,573	--	579	11,730	-11,151
42+50	4,250	50	28	--	937	--	62	--	1,679	--	641	13,745	-13,104
43+00	4,300	50	33	--	984	--	56	--	1,779	--	697	15,879	-15,182
43+50	4,350	50	75	--	1,031	--	100	--	1,866	--	797	18,118	-17,321
44+00	4,400	50	77	--	1,069	--	141	--	1,944	--	938	20,451	-19,513
44+50	4,450	50	67	--	1,093	--	133	--	2,002	--	1,071	22,853	-21,782
45+00	4,500	50	77	--	1,075	--	133	--	2,007	--	1,205	25,262	-24,058
45+50	4,550	50	34	--	1,128	--	103	--	2,040	--	1,307	27,710	-26,403
46+00	4,600	50	6	--	1,084	--	37	--	2,048	--	1,344	30,168	-28,823
46+50	4,650	50	2	--	967	--	7	--	1,899	--	1,352	32,447	-31,095
47+00	4,700	50	--	--	645	--	2	--	1,493	--	1,354	34,238	-32,884
						SUBTOTALS	**1,354**	**--**	**28,532**	**--**			
						TOTALS	**1,588**	**--**	**30,527**	**--**			

SHARED USE PATH EAST

STATION	Real Station	Distance	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)		Mass Ordinate
			Cut	Salvaged/ Unusable Pavement Material	Fill	EBS	Cut	Salvaged/ Unusable Pavement Material	Fill	EBS	Cut 1.00	Expanded Fill 1.20	Note 9
51+00	5,100	--	--	--	795	--	--	--	--	--	--	--	0
51+50	5,150	50	--	--	638	--	--	--	1,327	--	--	1,592	-1592
52+00	5,200	50	--	--	1,169	--	--	--	1,673	--	--	3,600	-3600
52+50	5,250	50	--	--	1,287	--	--	--	2,274	--	--	6,329	-6329
53+00	5,300	50	--	--	1,293	--	--	--	2,389	--	--	9,196	-9196
53+50	5,350	50	--	--	1,280	--	--	--	2,382	--	--	12,054	-12054
54+00	5,400	50	--	--	1,264	--	--	--	2,356	--	--	14,881	-14881
54+50	5,450	50	--	--	1,278	--	--	--	2,354	--	--	17,706	-17706
55+00	5,500	50	--	--	1,291	--	--	--	2,379	--	--	20,560	-20560
55+50	5,550	50	--	--	1,305	--	--	--	2,404	--	--	23,444	-23444
56+00	5,600	50	--	--	1,350	--	--	--	2,458	--	--	26,394	-26394
56+50	5,650	50	--	--	1,256	--	--	--	2,413	--	--	29,290	-29290
57+00	5,700	50	--	--	862	--	--	--	1,961	--	--	31,643	-31643
57+25	5,725	25	--	--	373	--	--	--	572	--	--	32,329	-32329
					SUBTOTAL		**--**	**--**	**26,941**	**--**			

SHARED USE PATH EAST

STATION	Real Station	Distance	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)		Mass Ordinate
			Cut	Salvaged/ Unusable Pavement Material	Fill	EBS	Cut	Salvaged/ Unusable Pavement Material	Fill	EBS	Cut 1.00	Expanded Fill 1.20	Note 9
58+16	5,816	--	--	--	189	--							0
58+50	5,850	34	--	--	787	--	--	--	618	--	--	742	-742
59+00	5,900	50	42	--	1,333	--	39	--	1,963	--	39	3,097	-3058
59+50	5,950	50	66	--	1,192	--	100	--	2,338	--	139	5,903	-5764
60+00	6,000	50	85	--	1,208	--	140	--	2,222	--	279	8,569	-8291
60+08	6,008	8	80	--	1,213	--	24	--	348	--	302	8,986	-8684
60+50	6,050	42	28	--	1,198	--	84	--	1,886	--	387	11,250	-10863
61+00	6,100	50	12	--	1,171	--	37	--	2,194	--	424	13,882	-13458
61+50	6,150	50	16	--	1,107	--	26	--	2,109	--	450	16,413	-15963
62+00	6,200	50	30	--	1,025	--	43	--	1,974	--	492	18,782	-18290
62+50	6,250	50	41	--	899	--	66	--	1,781	--	558	20,920	-20362
63+00	6,300	50	33	--	748	--	69	--	1,525	--	627	22,750	-22123
63+50	6,350	50	41	--	682	--	69	--	1,324	--	695	24,339	-23644
64+00	6,400	50	46	--	604	--	81	--	1,191	--	776	25,768	-24992
64+50	6,450	50	59	--	513	--	97	--	1,034	--	873	27,009	-26136
65+00	6,500	50	47	--	438	--	98	--	881	--	971	28,066	-27094
65+50	6,550	50	37	--	378	--	78	--	756	--	1,049	28,972	-27923
66+00	6,600	50	--	--	297	--	34	--	625	--	1,083	29,722	-28639
66+37	6,637	37	--	--	71	--	--	--	252	--	1,083	30,025	-28942
66+50	6,650	13	--	--	72	--	--	--	34	--	1,083	30,066	-28983
67+00	6,700	50	32	--	216	--	30	--	267	--	1,113	30,386	-29273
67+50	6,750	50	8	--	205	--	37	--	390	--	1,150	30,854	-29704
68+00	6,800	50	22	--	148	--	28	--	327	--	1,178	31,246	-30068
68+50	6,850	50	23	--	105	--	42	--	234	--	1,219	31,527	-30308
69+00	6,900	50	23	--	74	--	43	--	166	--	1,262	31,726	-30464
69+50	6,950	50	20	--	64	--	40	--	128	--	1,302	31,879	-30578
70+00	7,000	50	15	--	69	--	32	--	123	--	1,334	32,027	-30693
70+50	7,050	50	12	--	72	--	25	--	131	--	1,359	32,184	-30825
71+00	7,100	50	14	--	66	--	24	--	128	--	1,383	32,337	-30954
71+47	7,147	47	20	--	40	--	30	--	92	--	1,413	32,448	-31035
						SUBTOTALS	**1,413**	**--**	**27,040**	**--**			
						TOTALS	**1,413**	**--**	**53,981**	**--**			

STUART DRIVE WEST

STATION	Real Station	Distance	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)		Mass Ordinate
			Cut	Salvaged/ Unusable Pavement Material	Fill	EBS	Cut	Salvaged/ Unusable Pavement Material	Fill	EBS	Cut 1.00	Expanded Fill 1.20	Note 9
0+19	19	--	--	--	410	--	--	--	--	--	--	--	--
0+50	50	31	--	--	271	--	--	--	385	--	--	462	-462
1+00	100	50	11	--	248	--	10	--	481	--	10	1,039	-1,028
1+50	150	50	40	30	155	--	47	28	373	--	57	1,486	-1,457
2+00	200	50	34	27	48	--	69	53	188	--	126	1,712	-1,666
2+50	250	50	58	25	7	--	85	48	51	--	211	1,773	-1,691
3+00	300	50	71	25	--	--	119	46	6	--	331	1,781	-1,625
3+13	313	13	72	24	--	--	33	11	--	--	364	1,781	-1,603
						TOTALS	364	186	1,484	--			

BRAY ROAD

STATION	Real Station	Distance	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)		Mass Ordinate
			Cut	Salvaged/ Unusable Pavement Material	Fill	EBS	Cut	Salvaged/ Unusable Pavement Material	Fill	EBS	Cut 1.00	Expanded Fill 1.20	Note 9
10+41	1,041	--	107	107	615	--	--	--	--	--	--	--	--
10+50	1,050	9	84	84	1,038	--	30	30	263	--	30	316	-316
11+00	1,100	50	34	34	894	--	109	109	1,789	--	140	2,463	-2,463
11+50	1,150	50	28	28	1,641	--	57	57	2,347	--	197	5,279	-5,279
12+00	1,200	50	123	27	1,494	--	140	51	2,903	--	337	8,763	-8,674
12+50	1,250	50	111	26	1,243	--	217	49	2,534	--	554	11,804	-11,547
13+00	1,300	50	87	26	1,016	--	183	48	2,092	--	737	14,314	-13,922
13+50	1,350	50	82	26	982	--	156	48	1,850	--	893	16,534	-16,034
14+00	1,400	50	107	28	698	--	175	50	1,556	--	1,068	18,400	-17,775
14+50	1,450	50	118	30	584	--	208	54	1,187	--	1,277	19,825	-19,045
15+00	1,500	50	105	28	422	--	206	54	931	--	1,483	20,943	-20,010
15+50	1,550	50	92	28	294	--	182	52	663	--	1,666	21,738	-20,675
16+00	1,600	50	48	28	155	--	130	52	416	--	1,795	22,237	-21,096
16+50	1,650	50	42	29	66	--	83	53	205	--	1,879	22,483	-21,311
17+00	1,700	50	53	37	24	--	88	61	83	--	1,967	22,583	-21,384
17+25	1,725	25	78	76	32	--	61	52	26	--	2,027	22,614	-21,407
17+50	1,750	25	52	35	19	--	60	51	24	--	2,087	22,642	-21,427
18+00	1,800	50	42	27	10	--	87	57	27	--	2,174	22,674	-21,429
18+24	1,824	24	47	28	8	--	39	24	8	--	2,213	22,684	-21,424
						TOTALS	2,213	953	18,903	--			

CTH NN EB STAGE 4

STATION	Real Station	Distance	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)		Mass Ordinate Note 9
			Cut	Salvaged/ Unusable Pavement Material	Fill	EBS	Cut	Salvaged/ Unusable Pavement Material	Fill	EBS	Cut 1.00	Expanded Fill 1.20	
35+50	3,550	--	13	--	2	--	--	--	--	--	--	--	--
35+87	3,587	37	7	--	1		14		2	--	14	2	11
36+63	3,663	0	15	--	--	--	--	--	--	--	14	2	11
36+80	3,680	17	14	--	--	--	9	--	--	--	23	2	21
36+82	3,682	2	45	3	--	--	2	0	--	--	25	2	23
37+00	3,700	18	35	3	1	--	27	2	0	--	52	3	47
37+50	3,750	50	29	3	3	--	59	6	4	--	111	7	96
38+00	3,800	50	29	3	2	--	54	6	5	--	165	13	139
38+50	3,850	50	29	3	1	--	54	6	3	--	218	16	184
39+00	3,900	50	29	3	1	--	54	6	2	--	272	18	229
39+50	3,950	50	30	3	1	--	55	6	2	--	327	21	276
40+00	4,000	50	30	3	1	--	56	6	2	--	382	23	324
40+50	4,050	50	30	3	1	--	56	6	2	--	438	25	372
41+00	4,100	50	30	3	1	--	56	6	2	--	493	27	420
41+50	4,150	50	30	3	2	--	56	6	3	--	549	31	466
42+00	4,200	50	30	3	5	--	56	6	6	--	605	38	509
42+50	4,250	50	30	3	6	--	56	6	10	--	660	51	546
43+00	4,300	50	30	3	5	--	56	6	10	--	716	63	584
43+50	4,350	50	33	4	2	--	58	6	6	--	774	71	628
44+00	4,400	50	37	4	2	--	65	7	4	--	839	75	681
44+10	4,410	10	45	1	--	--	14	1	0	--	853	76	694
44+82	4,482	0	45	4	--	--	--	--	--	--	853	76	694
45+00	4,500	18	32	5	2	--	26	3	1	--	880	76	717
45+50	4,550	50	24	5	2	--	52	9	4	--	931	81	755
46+00	4,600	50	24	5	2	--	44	9	4	--	976	85	785
46+50	4,650	50	24	4	2	--	44	8	4	--	1,020	90	817
47+00	4,700	50	24	3	3	--	44	6	5	--	1,065	95	850
47+50	4,750	50	24	2	3	--	44	5	6	--	1,109	102	883
47+68	4,768	18	16	2	--	--	14	1	1	--	1,123	103	894
						SUBTOTALS	**1,123**	**126**	**86**	**--**			

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CTH NN EB STAGE 4

STATION	Real Station	Distance	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)		Mass Ordinate
			Cut	Salvaged/ Unusable Pavement Material	Fill	EBS	Cut	Salvaged/ Unusable Pavement Material	Fill	EBS	Cut 1.00	Expanded Fill 1.20	Note 9
57+00	5,700	--	13	--	4	--	--	--	--	--	--	--	--
57+38	5,738	38	5	--	2	--	13	--	4	--	13	5	8
58+00	5,800	0	15	--	--	--	--	--	--	--	13	5	8
58+25	5,825	25	13	5	2	--	13	2	1	--	26	6	17
58+50	5,850	25	35	5	2	--	22	5	2	--	48	8	33
59+00	5,900	50	25	5	1	--	56	9	3	--	103	12	75
59+50	5,950	50	25	4	1	--	46	8	2	--	150	14	111
60+00	6,000	50	24	4	1	--	45	7	2	--	195	16	147
60+50	6,050	50	23	4	2	--	44	7	3	--	239	20	180
61+00	6,100	50	23	3	3	--	43	6	5	--	281	25	210
61+50	6,150	50	23	3	5	--	43	6	7	--	324	34	238
62+00	6,200	50	23	2	6	--	43	5	10	--	366	46	264
62+50	6,250	50	23	2	7	--	43	4	12	--	409	61	289
63+00	6,300	50	11	--	9	--	31	2	15	--	440	78	300
63+26	6,326	26	11	--	10	--	11	--	9	--	451	89	300
63+50	6,350	24	11	--	9	--	10	--	8	--	461	100	300
64+00	6,400	50	11	--	9	--	20	--	17	--	481	120	300
64+50	6,450	50	11	--	8	--	20	--	16	--	502	138	302
65+00	6,500	50	12	--	5	--	21	--	12	--	523	153	308
65+26	6,526	26	8	--	32	--	10	--	18	--	532	174	297
						SUBTOTALS	**532**	**62**	**145**	**--**			
						TOTALS	**1,655**	**188**	**231**	**--**			

USH 12 BULLNOSE GRADING STAGE 2

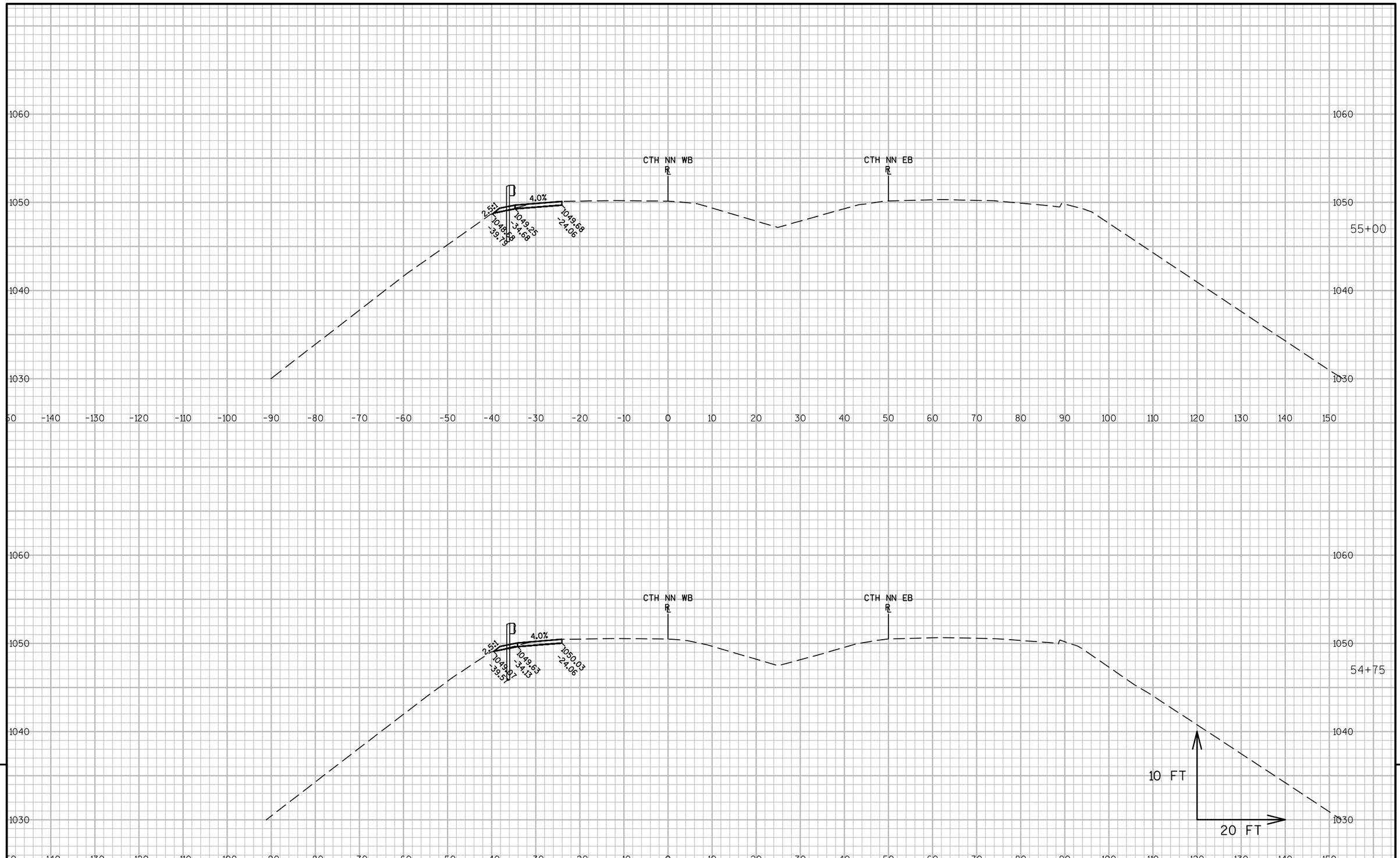
STATION	Real Station	Distance	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)		Mass Ordinate
			Cut	Salvaged/ Unusable Pavement Material	Fill	EBS	Cut	Salvaged/ Unusable Pavement Material	Fill	EBS	Cut 1.00	Expanded Fill 1.20	Note 9
983+00	98,300	--	--	--	19	--	--	--	--	--	--	--	--
984+00	98,400	100	--	--	22	--	--		76	--	--	91	-91
985+00	98,500	100	--	--	30	--	--	--	96	--	--	207	-207
985+67	98,567	67	--	--	35	--	--	--	81	--	--	303	-303
986+00	98,600	33	--	--	41	--	--	--	46	--	--	359	-359
987+00	98,700	100	--	--	44	--	--	--	157	--	--	548	-548
987+81	98,781	81	--	--	30	--	--	--	111	--	--	681	-681
987+93	98,793	12	--	--	31	--	--	--	14	--	--	698	-698
988+41	98,841	48	--	--	37	--	--	--	60	--	--	770	-770
989+00	98,900	59	--	--	31	--	--	--	74	--	--	859	-859
						TOTALS	**--**	**--**	**716**	**--**			

USH 12 BULLNOSE GRADING STAGE 3

STATION	Real Station	Distance	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)		Mass Ordinate
			Cut	Salvaged/ Unusable Pavement Material	Fill	EBS	Cut	Salvaged/ Unusable Pavement Material	Fill	EBS	Cut 1.00	Expanded Fill 1.20	Note 9
989+00	98,900	--	--	--	31	--	--	--	--	--	--	--	--
990+00	99,000	100	--	--	17	--	--	--	89	--	--	107	-107
990+31	99,031	31	--	--	17	--	--	--	25	--	--	30	-30
990+43	99,043	12	--	--	17	--	--	--	8	--	--	39	-39
991+00	99,100	57	--	--	25	--	--	--	44	--	--	92	-92
992+00	99,200	100	--	--	31	--	--	--	104	--	--	217	-217
992+50	99,250	50	--	--	16	--	--	--	44	--	--	269	-269
						TOTALS	**--**	**--**	**313**	**--**			

USH 12 GUARDRAIL GRADING STRUCTURE S-64-20

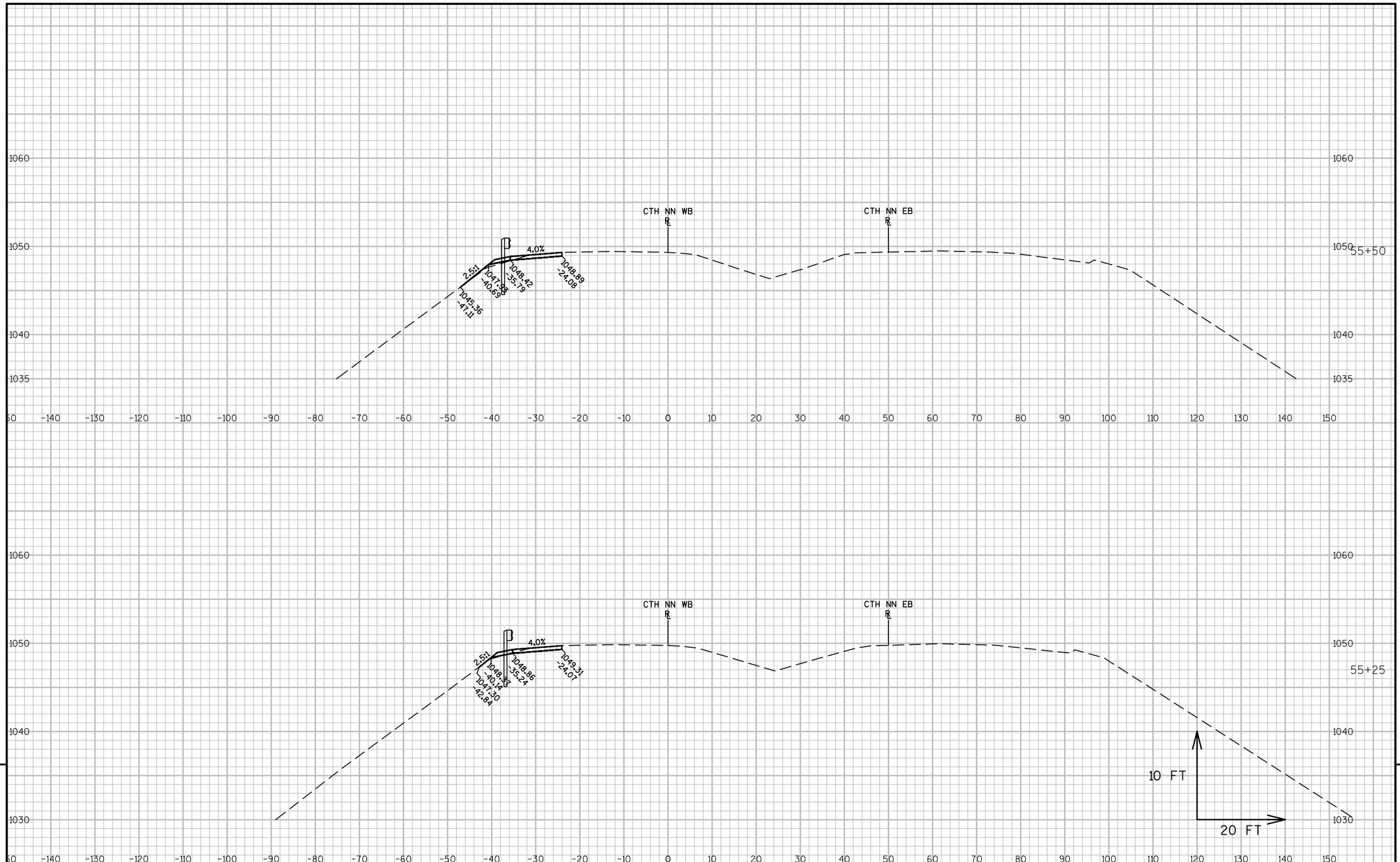
STATION	Real Station	Distance	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)		Mass Ordinate
			Cut	Salvaged/ Unusable Pavement Material	Fill	EBS	Cut	Salvaged/ Unusable Pavement Material	Fill	EBS	Cut 1.00	Expaned Fill 1.20	Note 9
991+00	99,100	--	--	--	3	--	--	--	--	--	--	--	--
992+00	99,200	100	--	--	2	--	--	--	9	--	--	11	-11
993+04	99,304	104	--	--	24	--	--	--	37	--	--	45	-45
993+29	99,329	25	--	--	19	--	--	--	20	--	--	69	-69
993+54	99,354	25	--	--	17	--	--	--	17	--	--	89	-89
994+00	99,400	46	--	--	7	--	--	--	20	--	--	113	-113
994+75	99,475	75	4	--	3	--	6	--	14	--	6	130	-124
						TOTALS	6	--	117	--			



PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN WB STAGE 1	SHEET 544	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090201_XS1_NN.DWG
LAYOUT NAME - 01

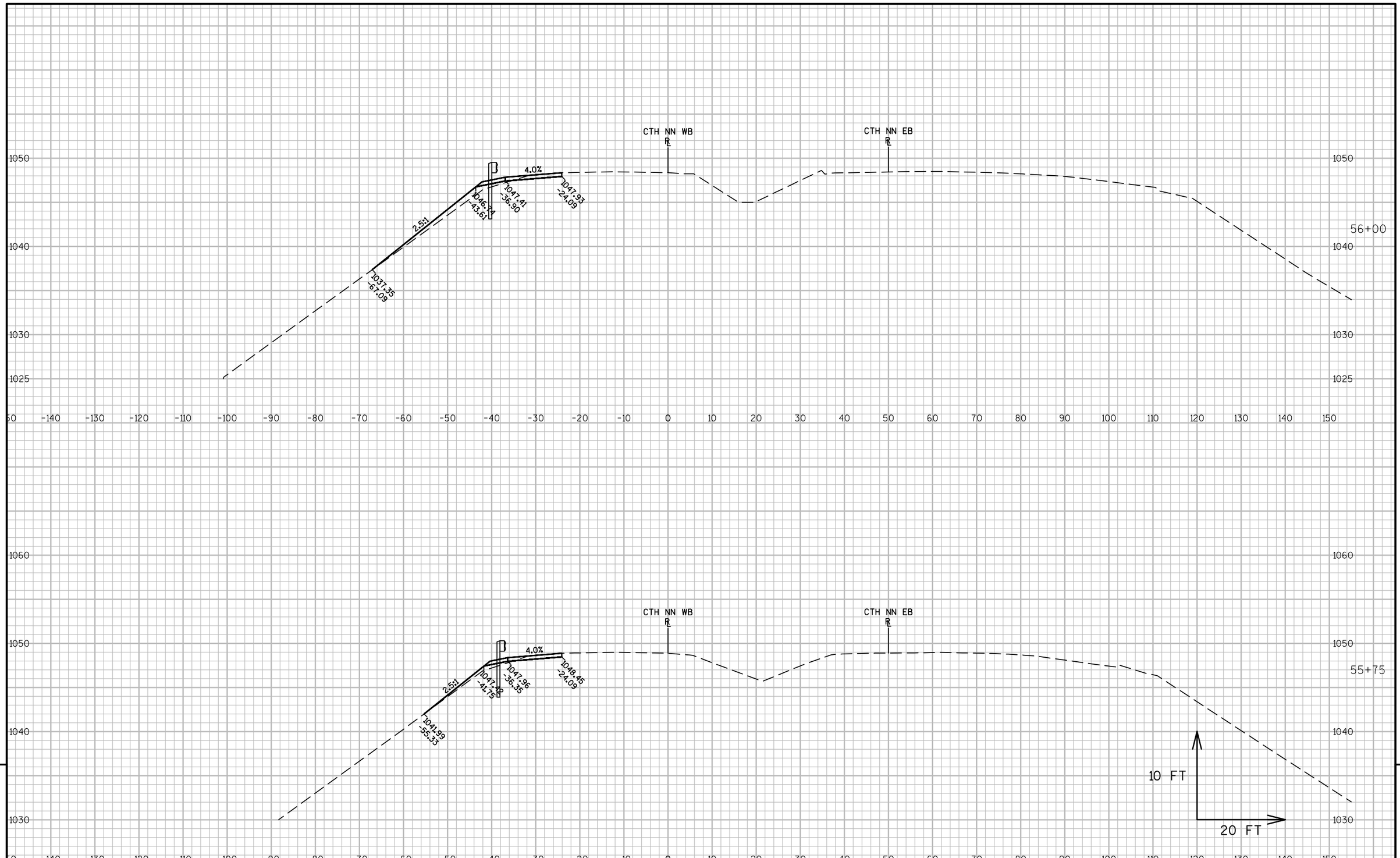
PLOT DATE : 3/11/2015 3:36 PM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1" = 20'_XREF_XREF



PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN WB STAGE 1	SHEET 545	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090201_XS1_NN.DWG
LAYOUT NAME - 02

PLOT DATE : 3/11/2015 3:36 PM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1" = 20'_XREF_XREF



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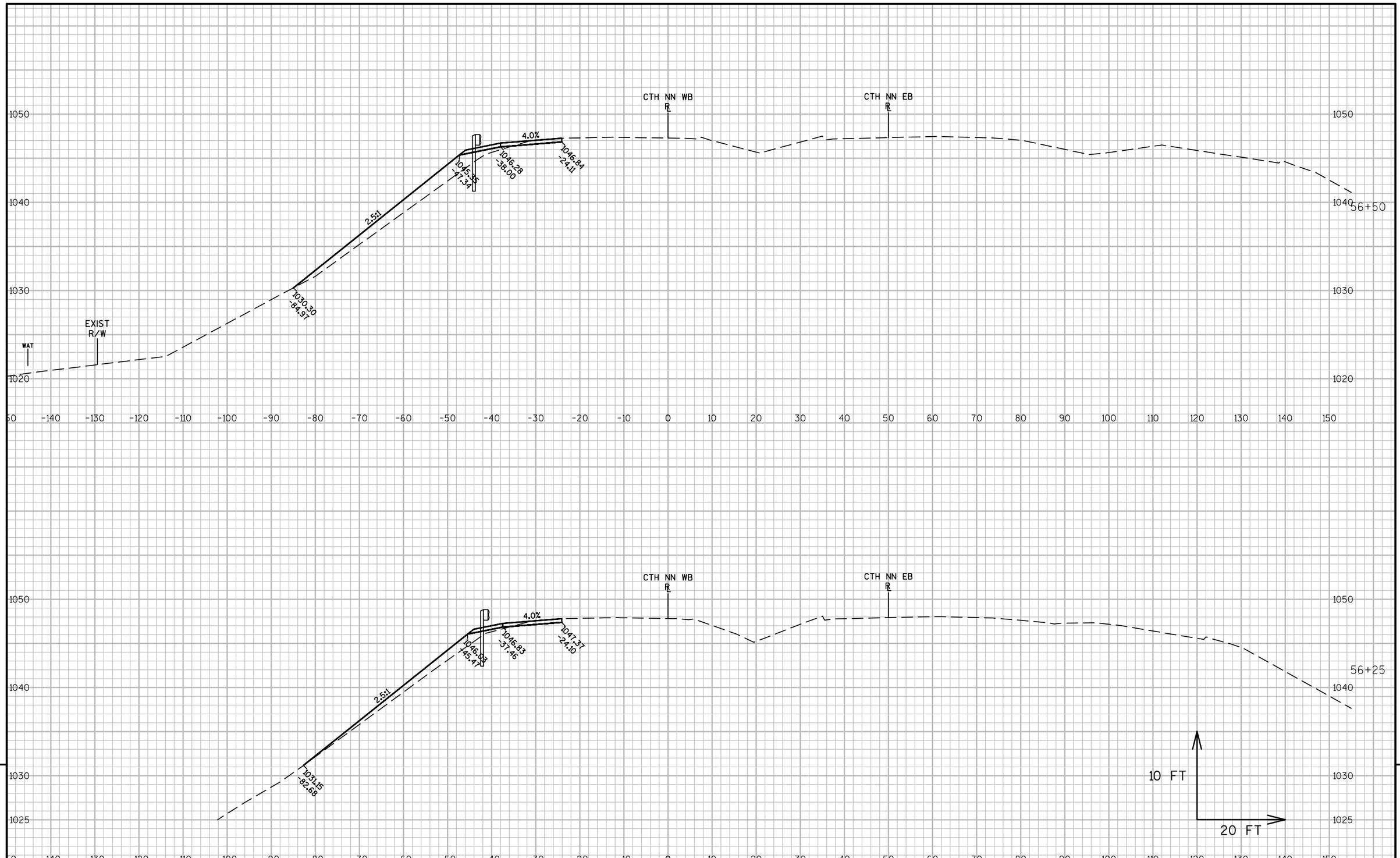
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN WB STAGE 1	SHEET 546	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090201_XS1_NN.DWG
LAYOUT NAME - 03
PLOT DATE : 3/11/2015 3:36 PM
PLOT BY : CORY IHDE
PLOT NAME :
PLOT SCALE : 1" = 20'_XREF_XREF
WISDOT/CADDS SHEET 49

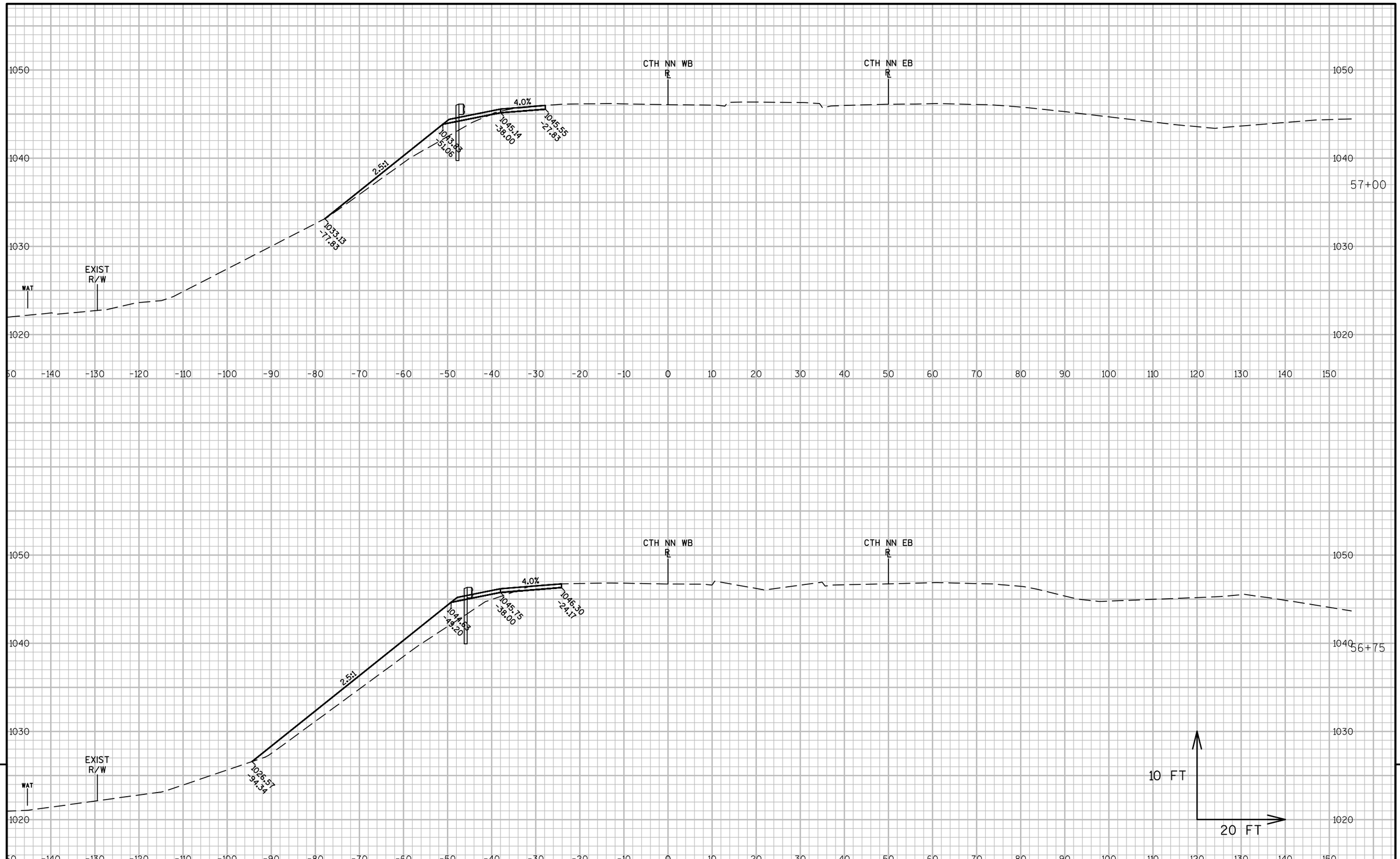


PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN WB STAGE 1	SHEET 547 E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090201_XS1_NN.DWG
LAYOUT NAME - 04

PLOT DATE : 3/11/2015 3:36 PM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1" = 20'_XREF_XREF

WISDOT/CADDS SHEET 49



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PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN WB STAGE 1	SHEET 548	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090201_XS1_NN.DWG
LAYOUT NAME - 05

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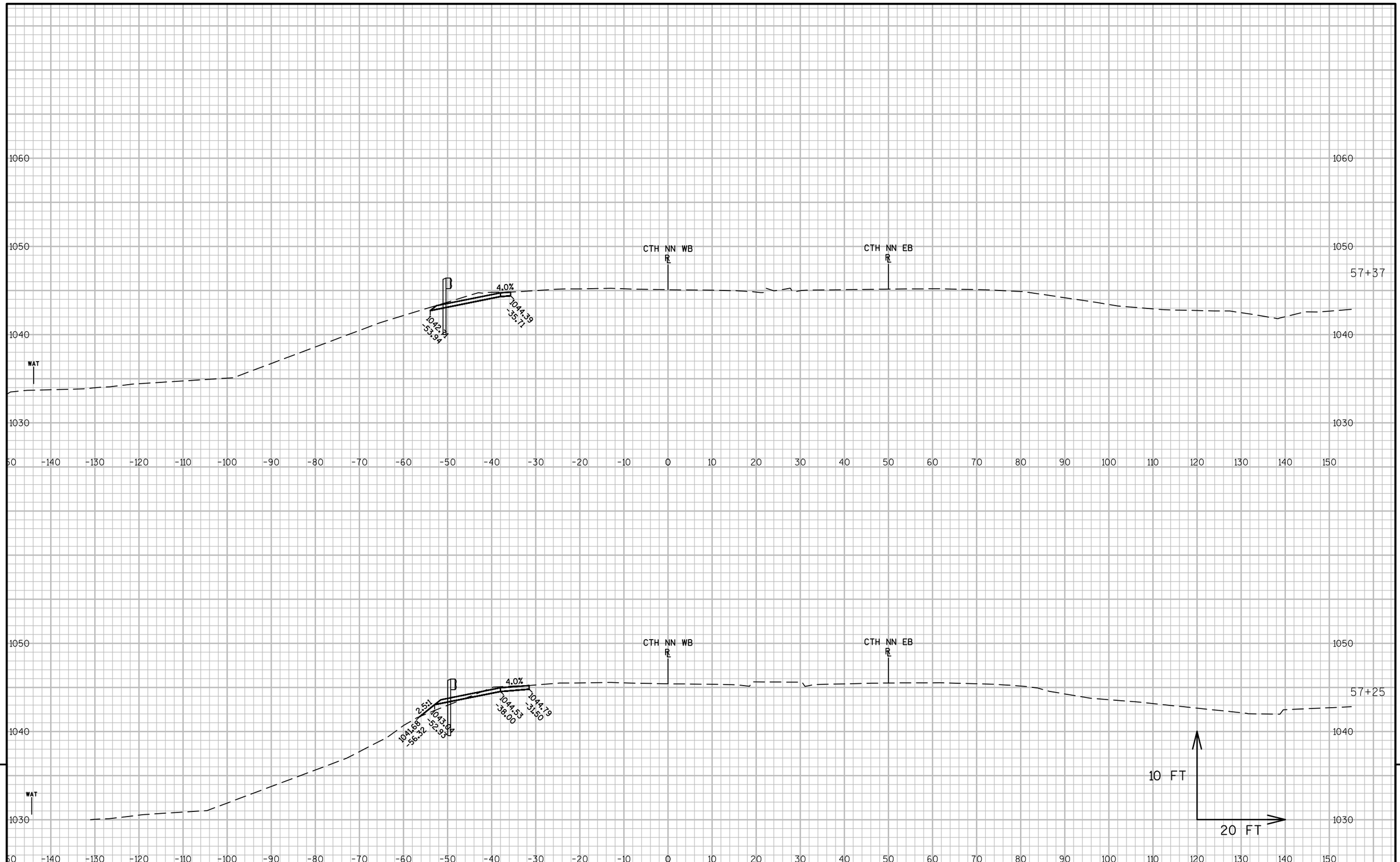

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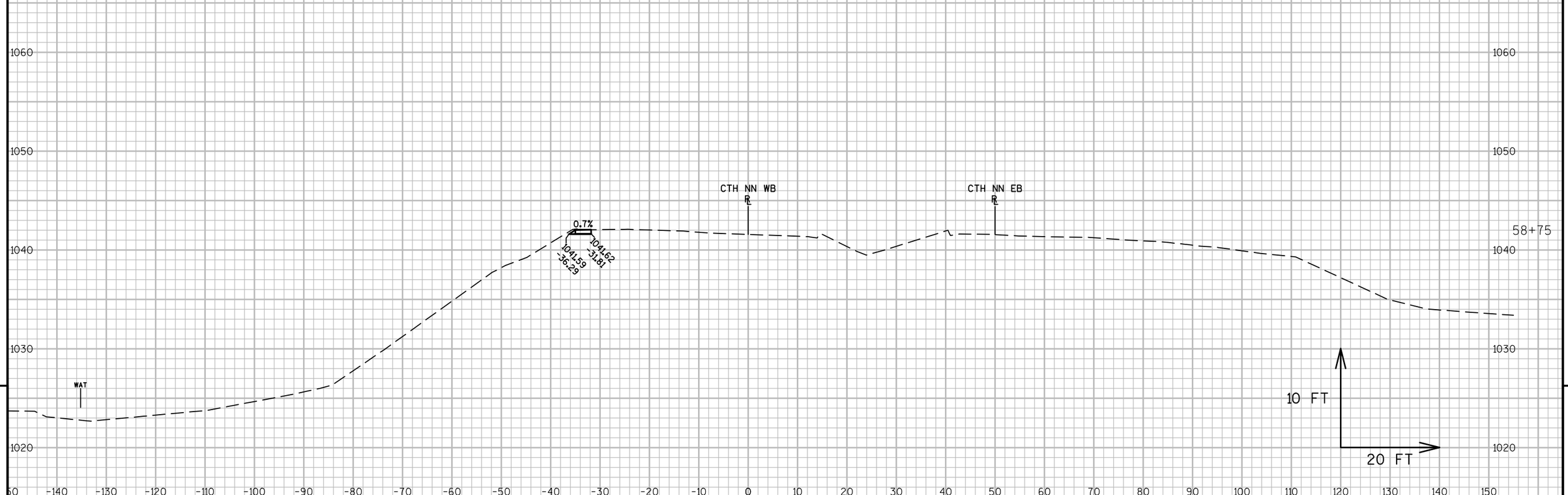
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN WB STAGE 1	SHEET 549	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090201_XS1_NN.DWG
LAYOUT NAME - 06
PLOT DATE : 3/11/2015 3:36 PM
PLOT BY : CORY IHDE
PLOT NAME :
PLOT SCALE : 1" = 20'_XREF_XREF
WISDOT/CADDS SHEET 49



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PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN WB STAGE 1	SHEET 550	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090201_XS1_NN.DWG
LAYOUT NAME - 07

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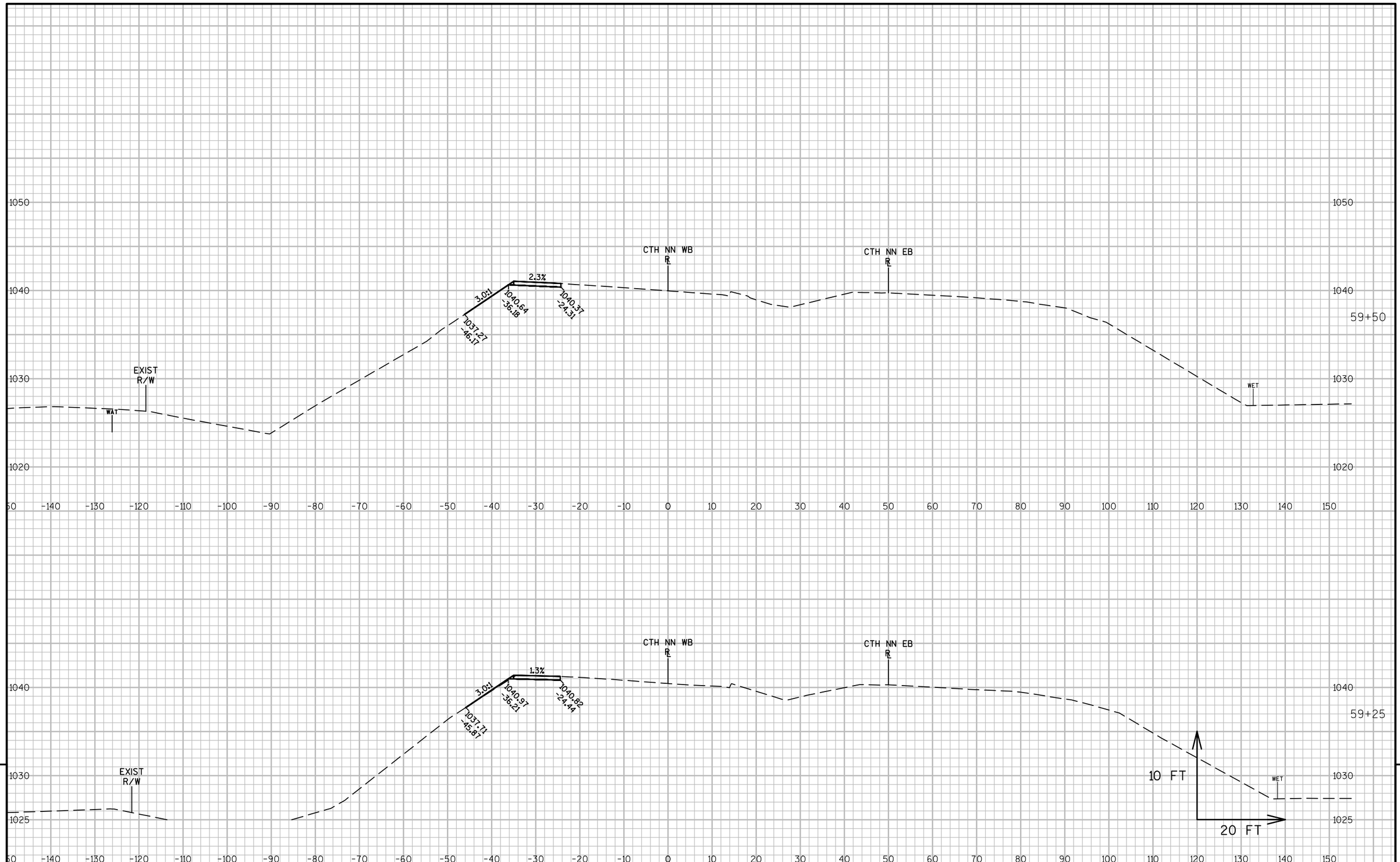

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PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN WB STAGE 1	SHEET 551	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090201_XS1_NN.DWG
LAYOUT NAME - 08

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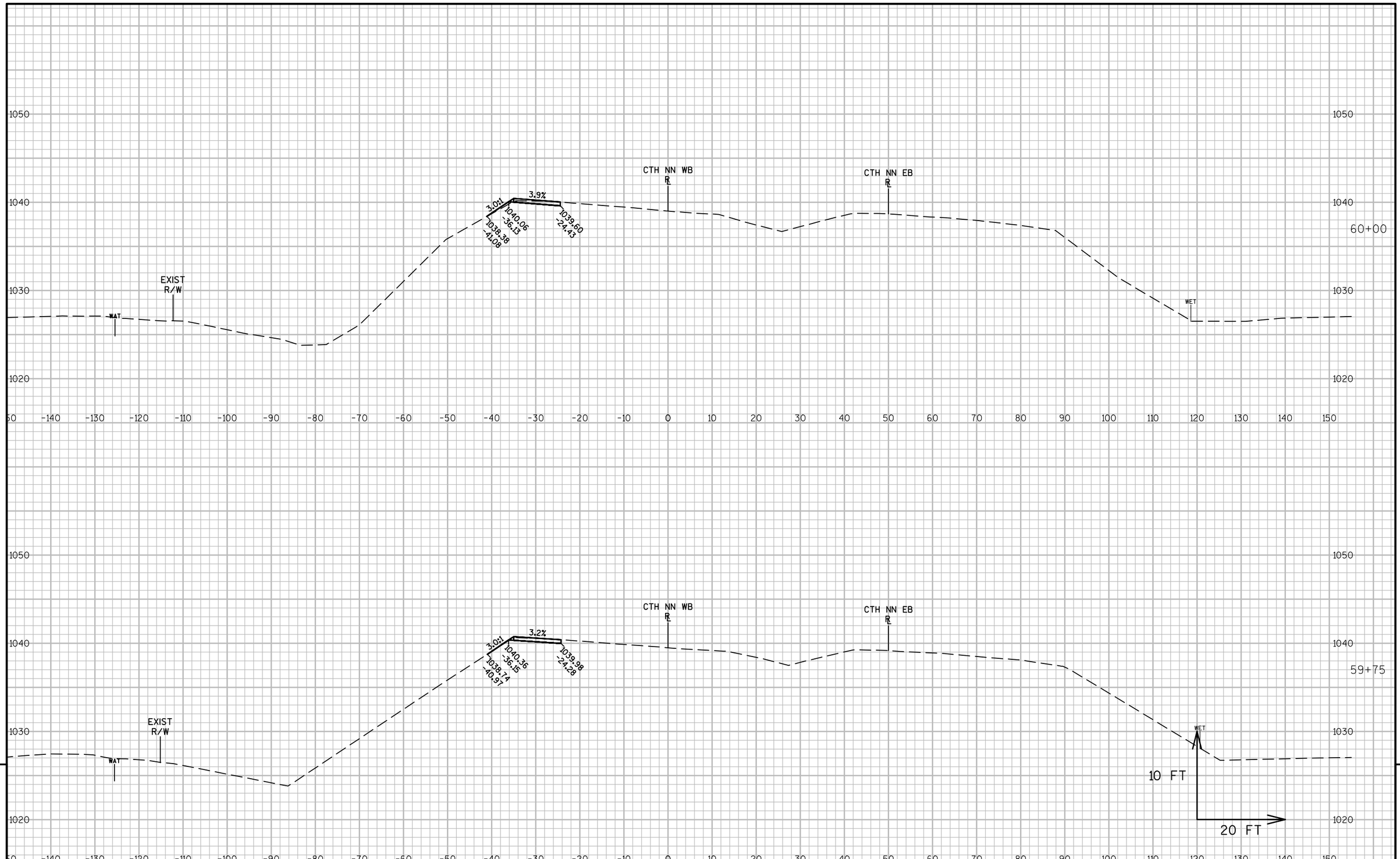

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PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN WB STAGE 1	SHEET 552	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090201_XS1_NN.DWG
LAYOUT NAME - 09

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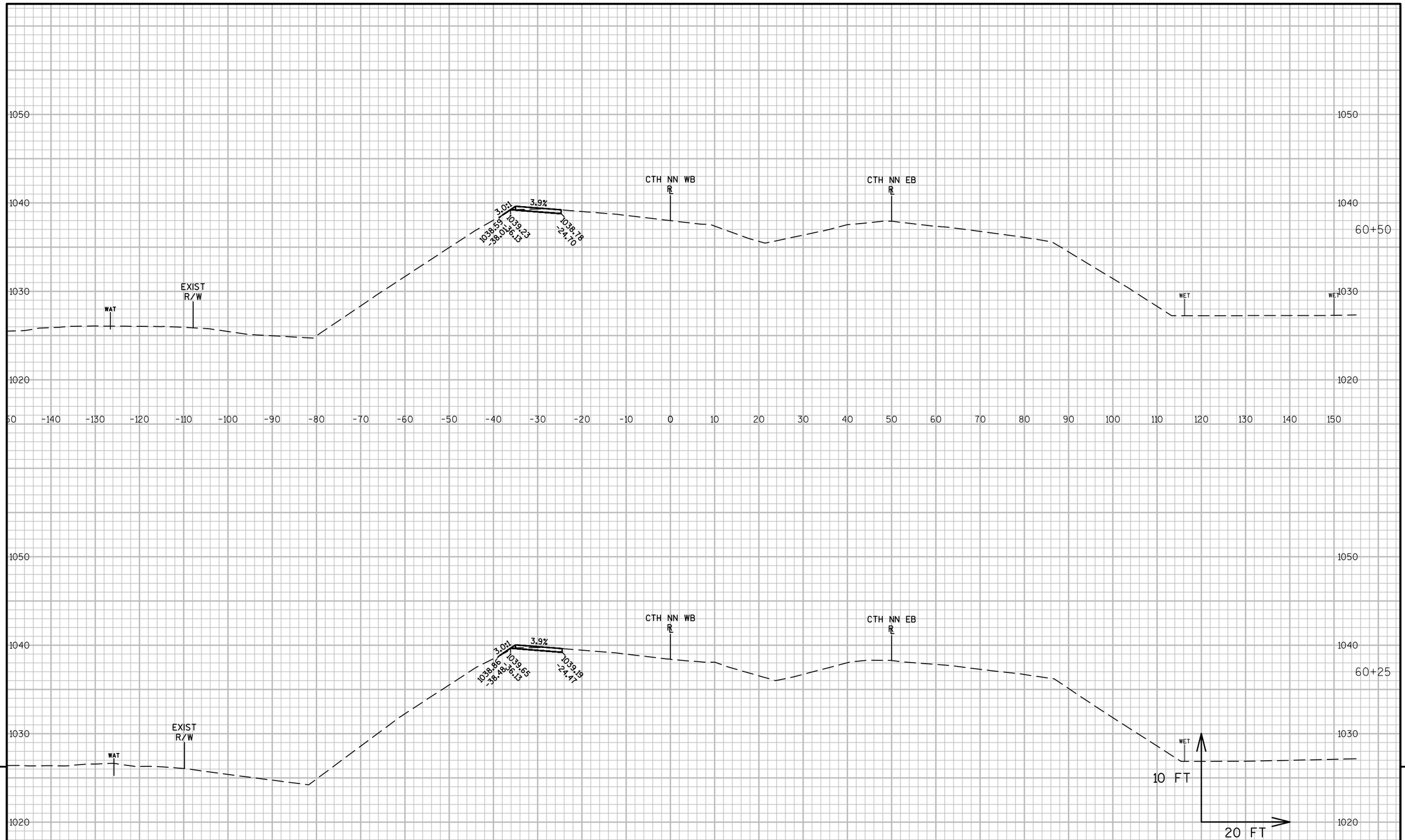
WISDOT/CADDS SHEET 49



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PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN WB STAGE 1	SHEET 553	E

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LAYOUT NAME - 10

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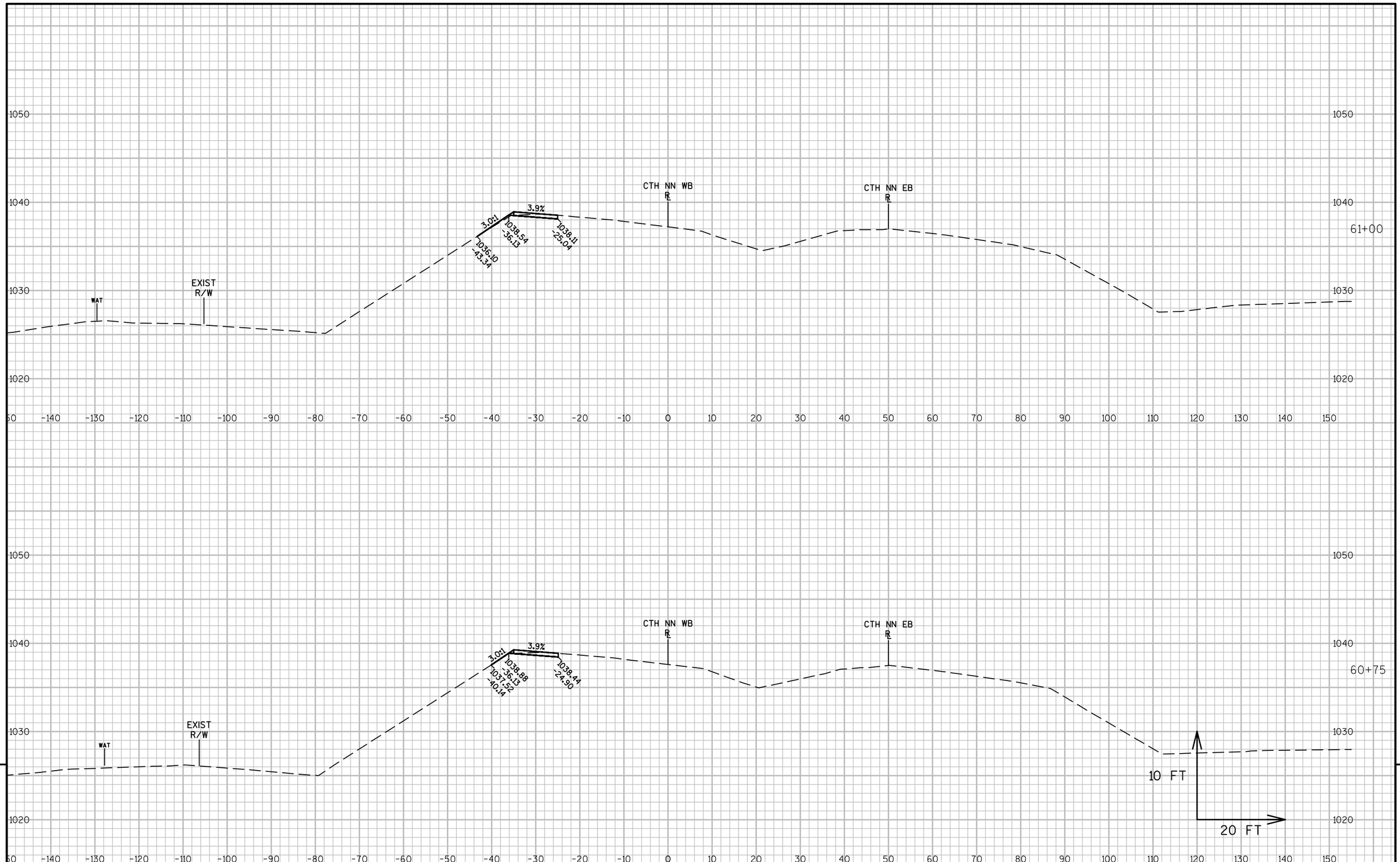

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PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN WB STAGE 1	SHEET 554	E

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LAYOUT NAME - 11
PLOT DATE : 3/11/2015 3:36 PM
PLOT BY : CORY IHDE
PLOT NAME :
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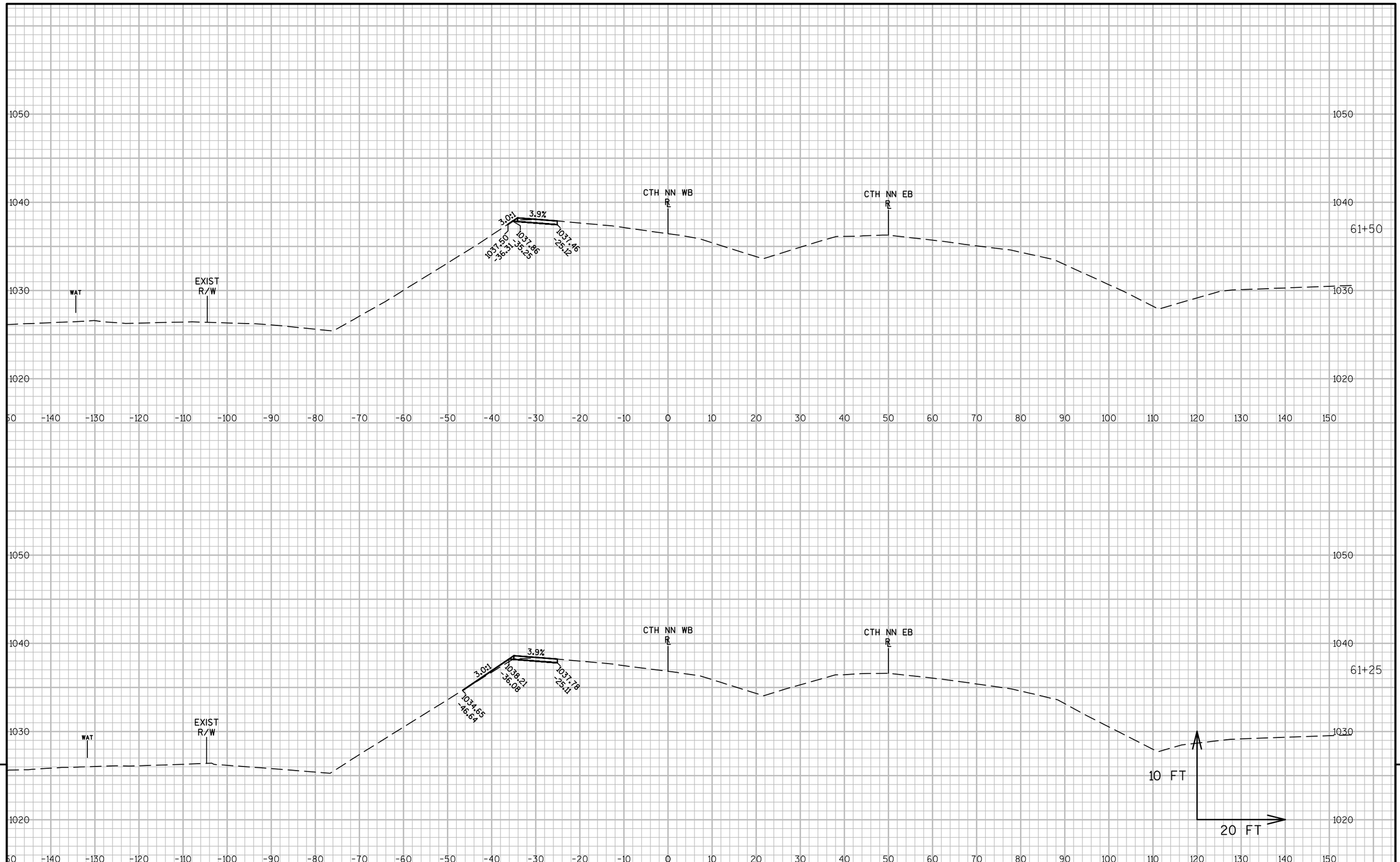

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PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN WB STAGE 1	SHEET 555	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090201_XS1_NN.DWG
LAYOUT NAME - 12

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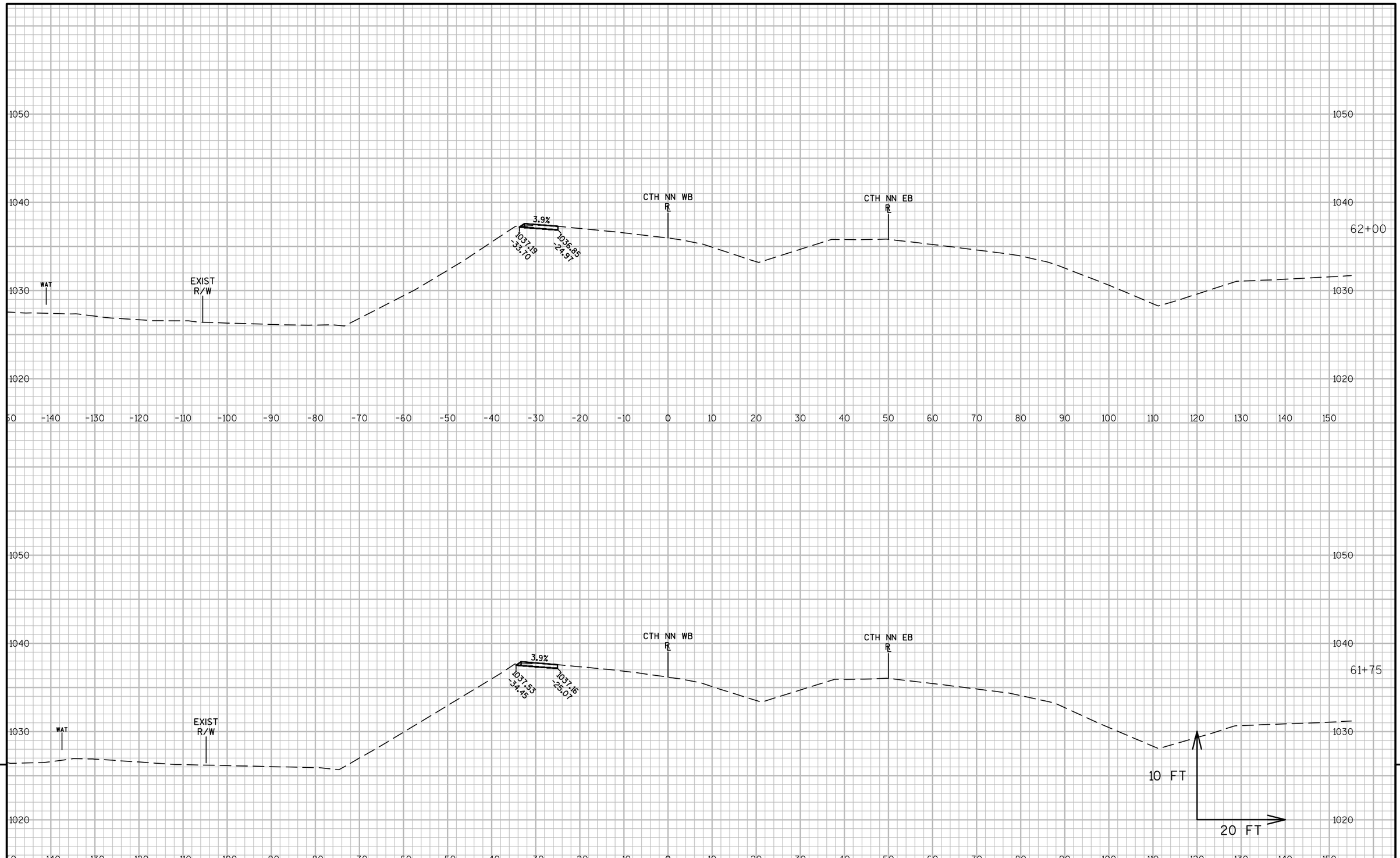
WISDOT/CADDS SHEET 49



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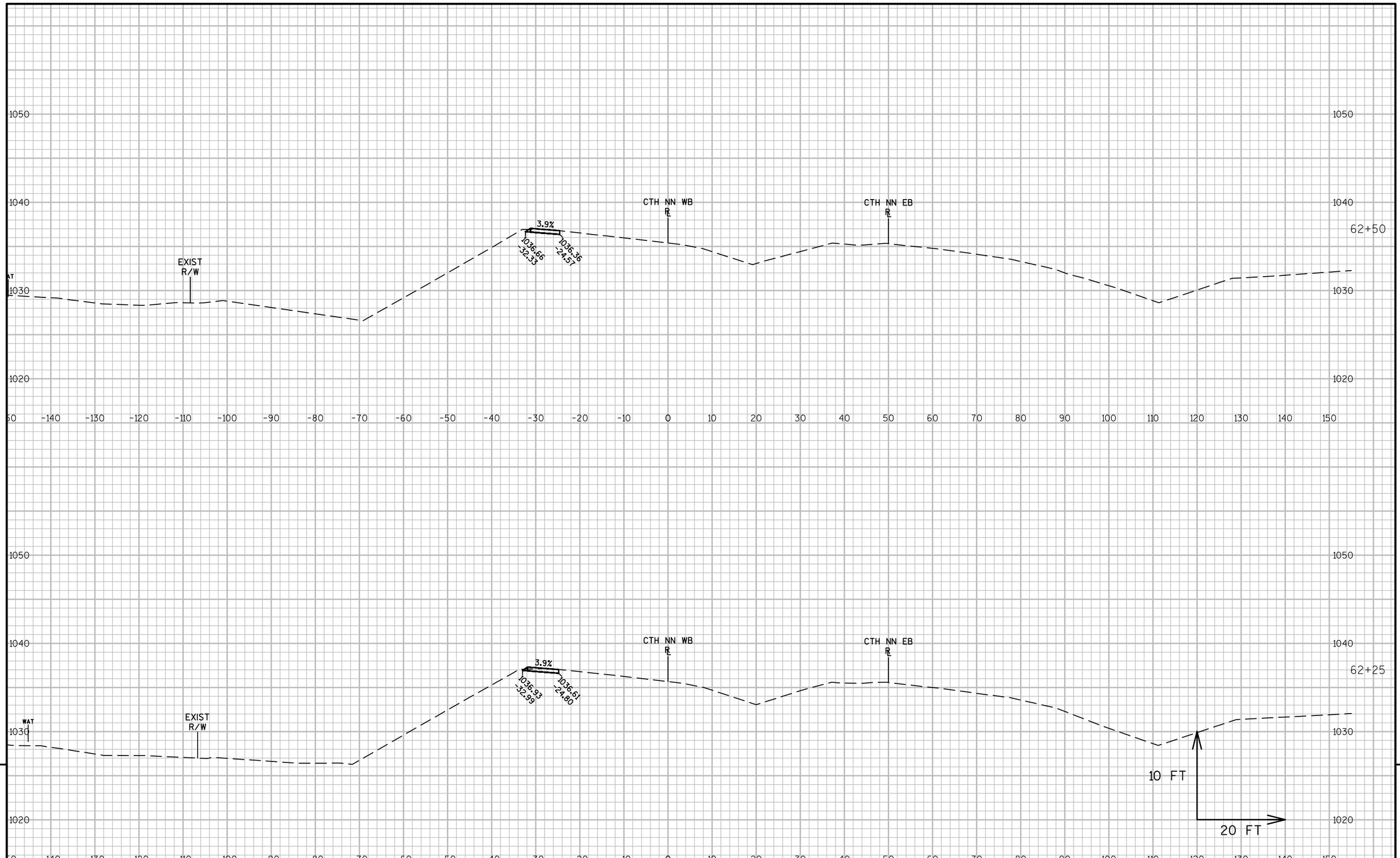
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN WB STAGE 1	SHEET 556	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090201_XS1_NN.DWG
LAYOUT NAME - 13
PLOT DATE : 3/11/2015 3:37 PM
PLOT BY : CORY IHDE
PLOT NAME :
PLOT SCALE : 1" = 20'_XREF_XREF
WISDOT/CADDS SHEET 49



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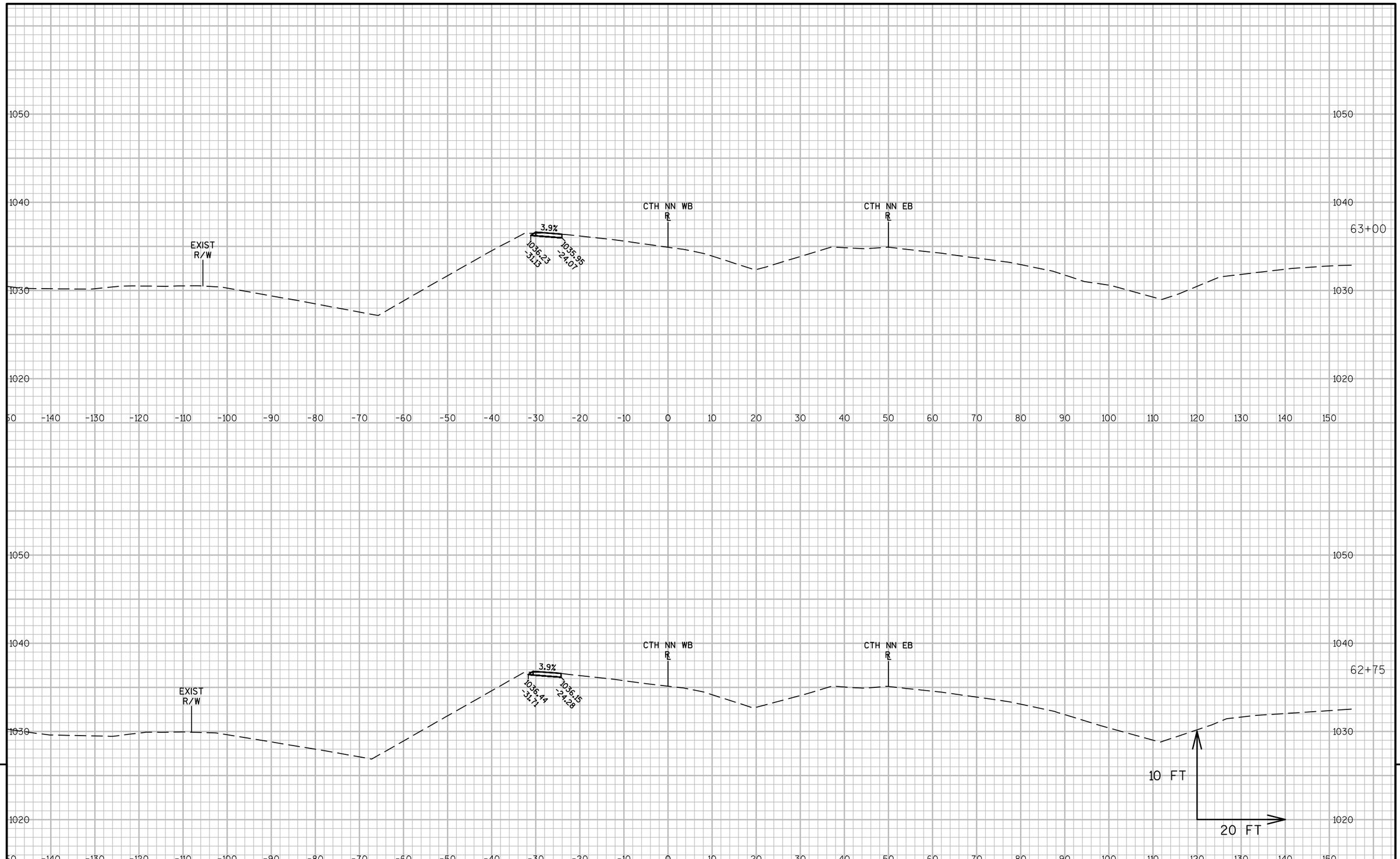
9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN WB STAGE 1	SHEET 557	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090201_XS1_NN.DWG
LAYOUT NAME - 14

PLOT DATE : 3/11/2015 3:37 PM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1" = 20'_XREF_XREF



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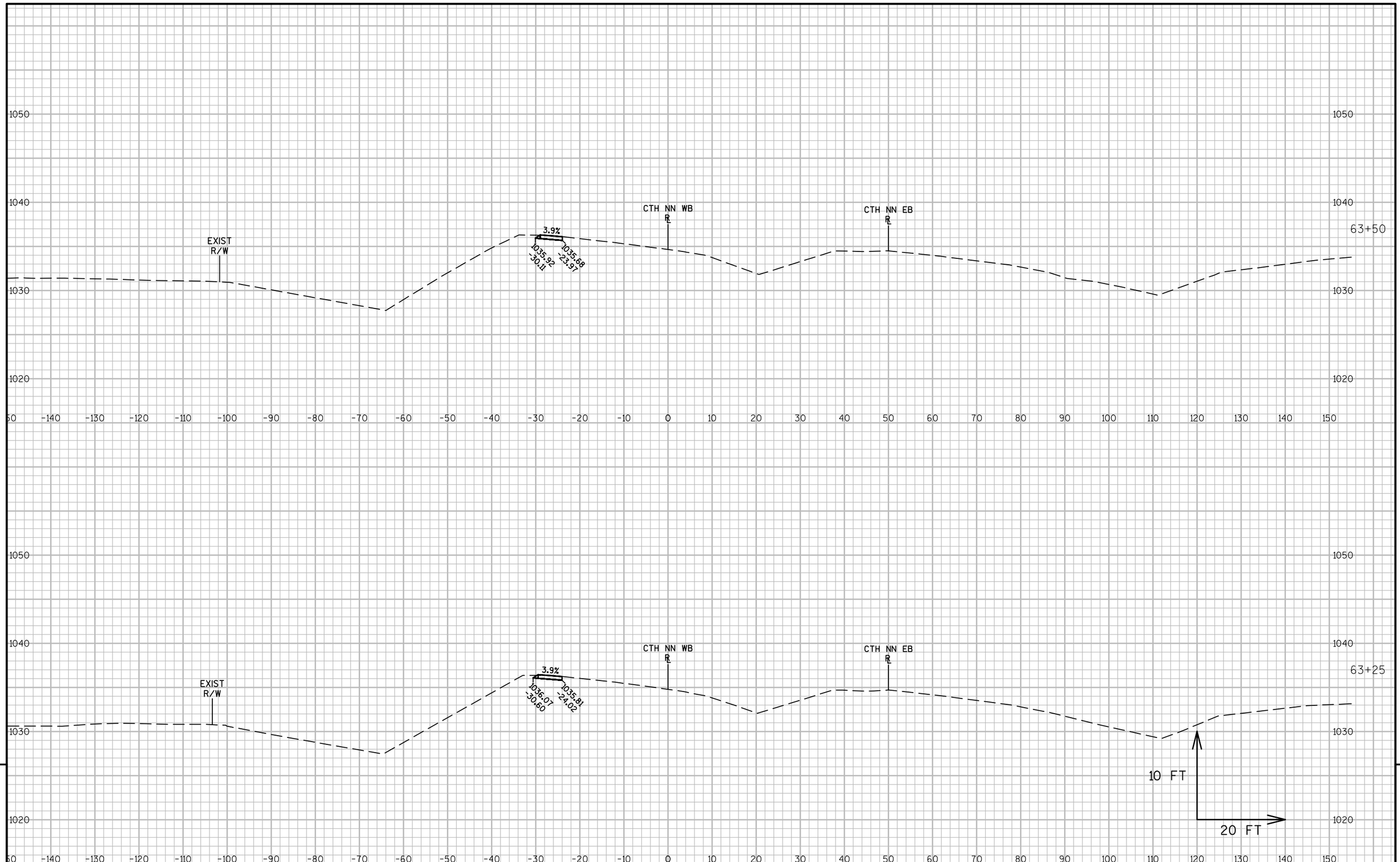
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN WB STAGE 1	SHEET 558	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090201_XS1_NN.DWG
LAYOUT NAME - 15

PLOT DATE : 3/11/2015 3:37 PM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1" = 20'_XREF_XREF

WISDOT/CADDS SHEET 49



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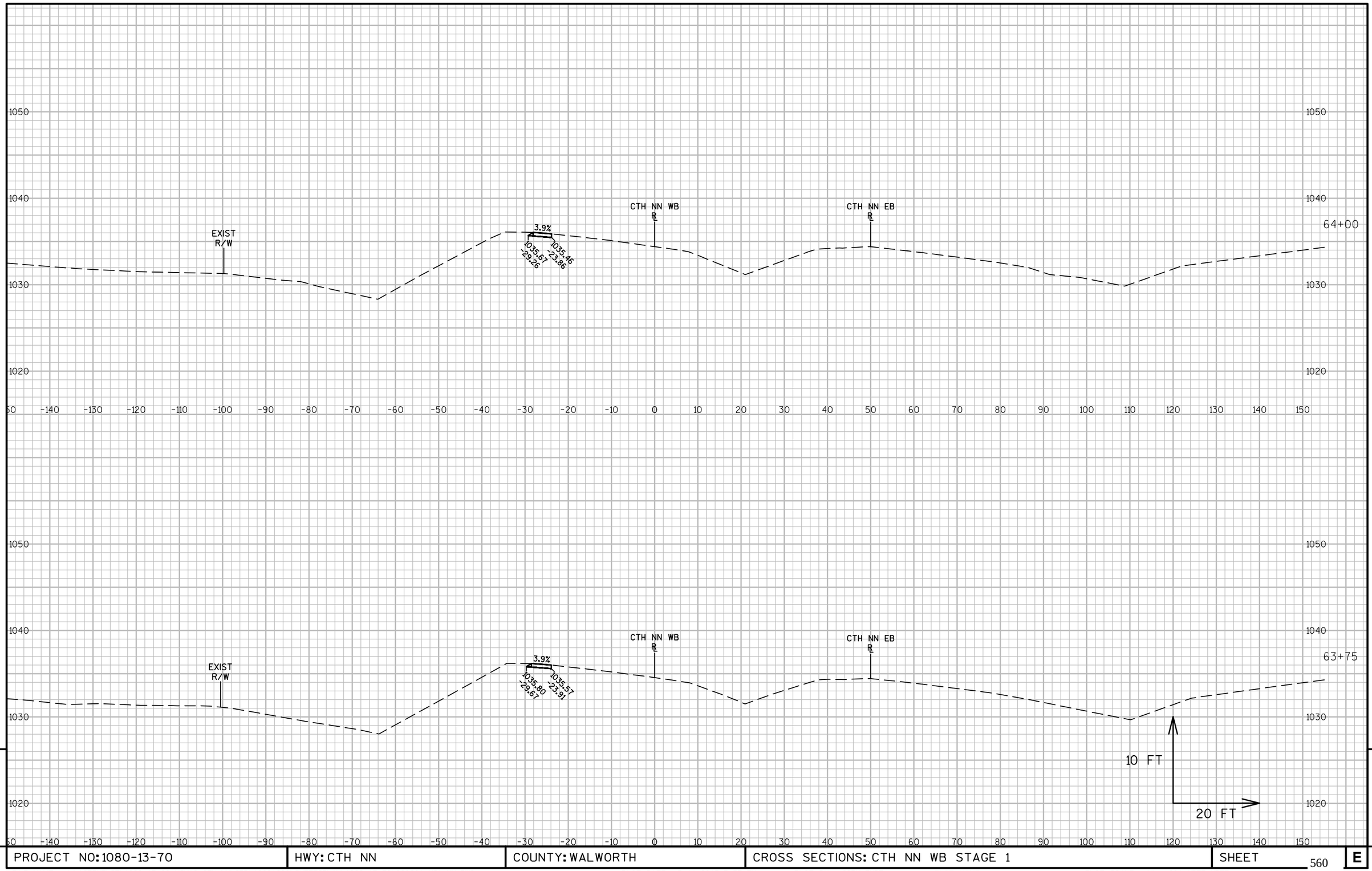
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN WB STAGE 1	SHEET 559	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090201_XS1_NN.DWG
LAYOUT NAME - 16

PLOT DATE : 3/11/2015 3:37 PM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1" = 20'_XREF_XREF



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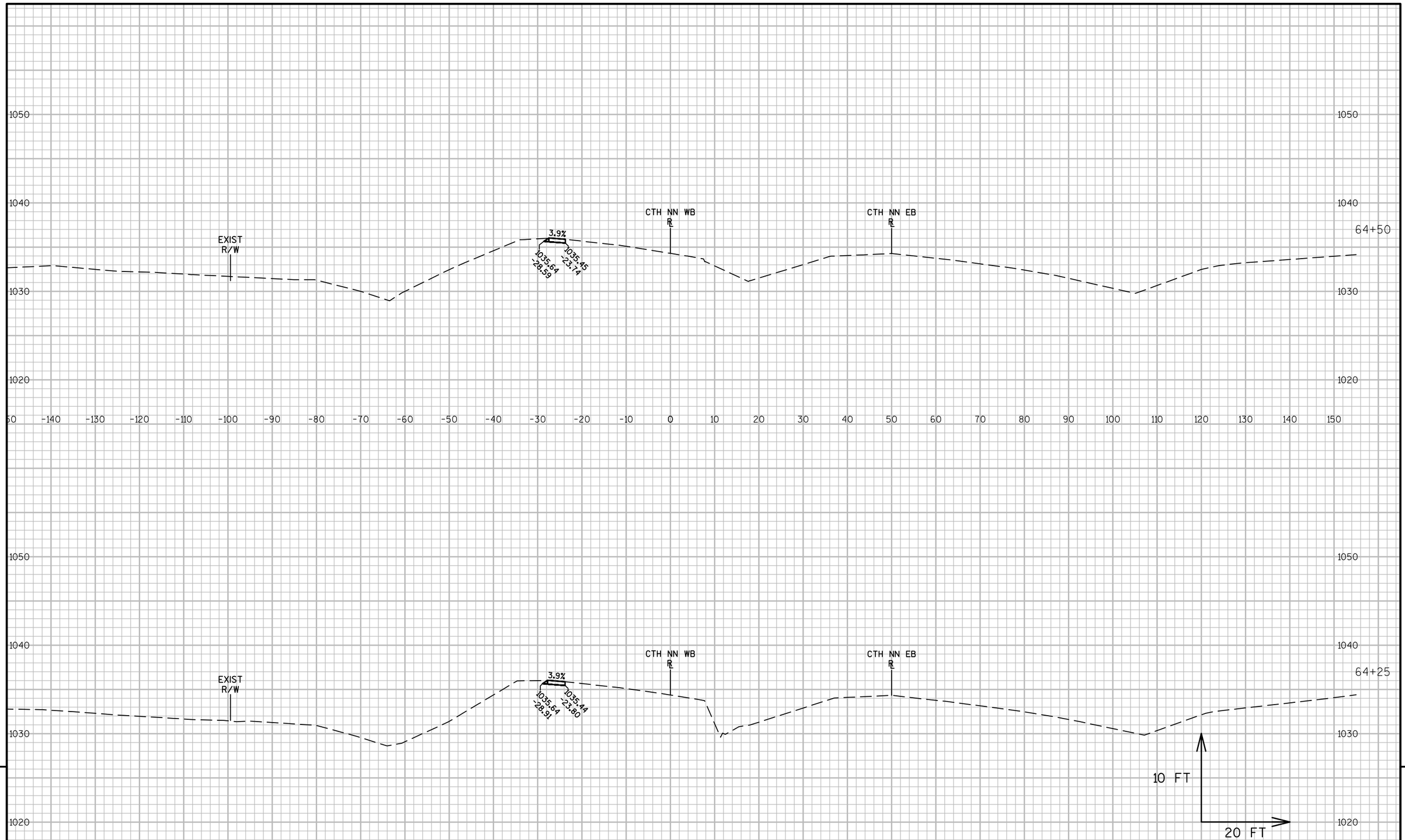
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN WB STAGE 1	SHEET 560	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090201_XS1_NN.DWG
LAYOUT NAME - 17

PLOT DATE : 3/11/2015 3:37 PM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1" = 20'_XREF_XREF



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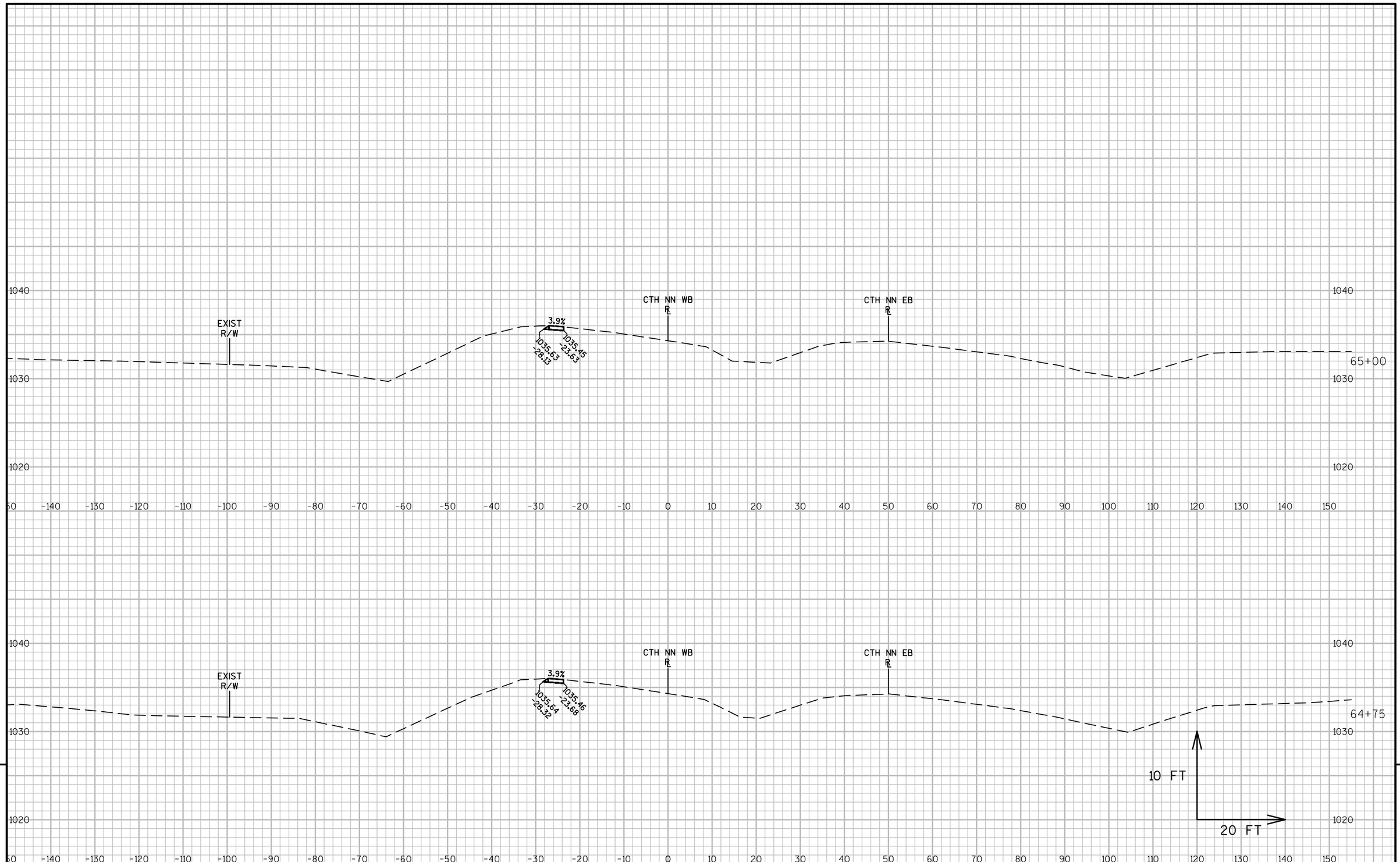
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN WB STAGE 1	SHEET 561	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090201_XS1_NN.DWG
LAYOUT NAME - 18

PLOT DATE : 3/11/2015 3:37 PM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1" = 20'_XREF_XREF



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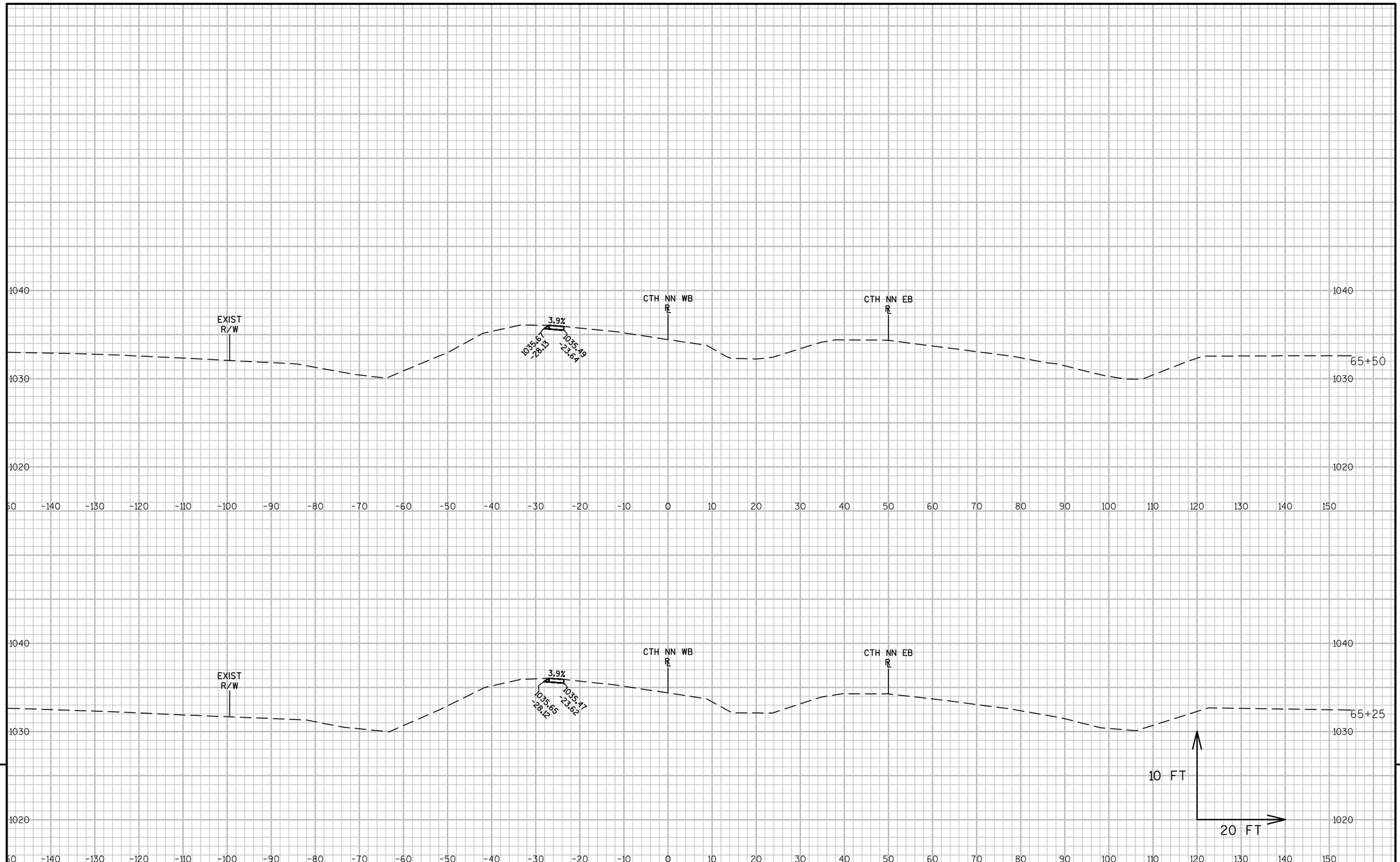
9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN WB STAGE 1	SHEET 562	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090201_XS1_NN.DWG
LAYOUT NAME - 19
PLOT DATE : 3/11/2015 3:37 PM
PLOT BY : CORY IHDE
PLOT NAME :
PLOT SCALE : 1" = 20'_XREF_XREF
WISDOT/CADDS SHEET 49



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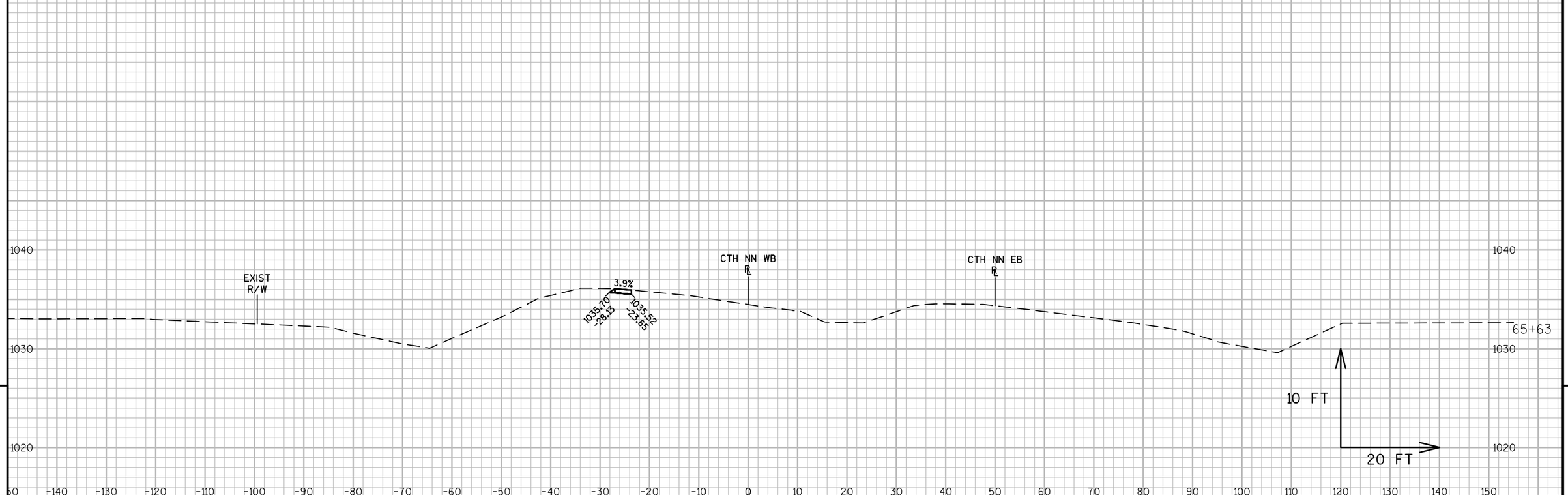
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN WB STAGE 1	SHEET 563	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090201_XS1_NN.DWG
LAYOUT NAME - 20

PLOT DATE : 3/11/2015 3:37 PM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1" = 20'_XREF_XREF



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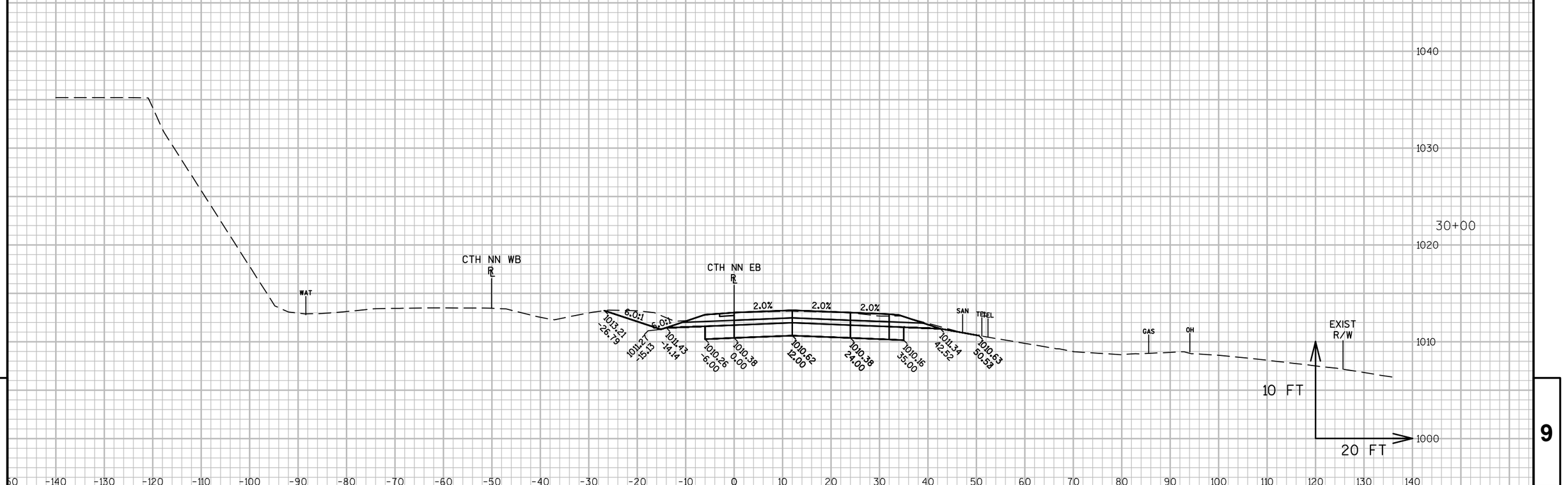
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN WB STAGE 1	SHEET 564	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090201_XS1_NN.DWG
LAYOUT NAME - 21

PLOT DATE : 3/11/2015 3:37 PM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1" = 20'_XREF_XREF



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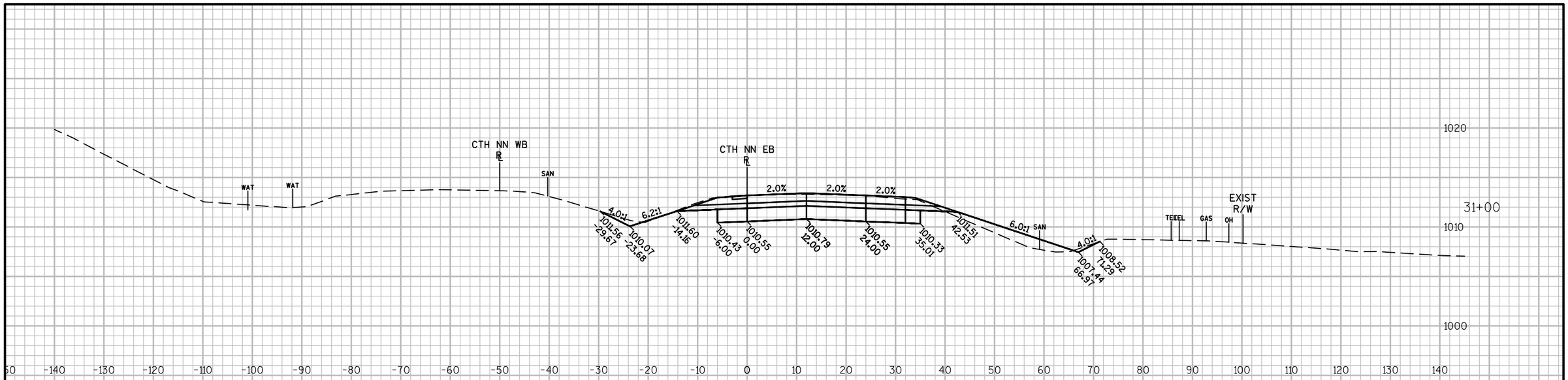
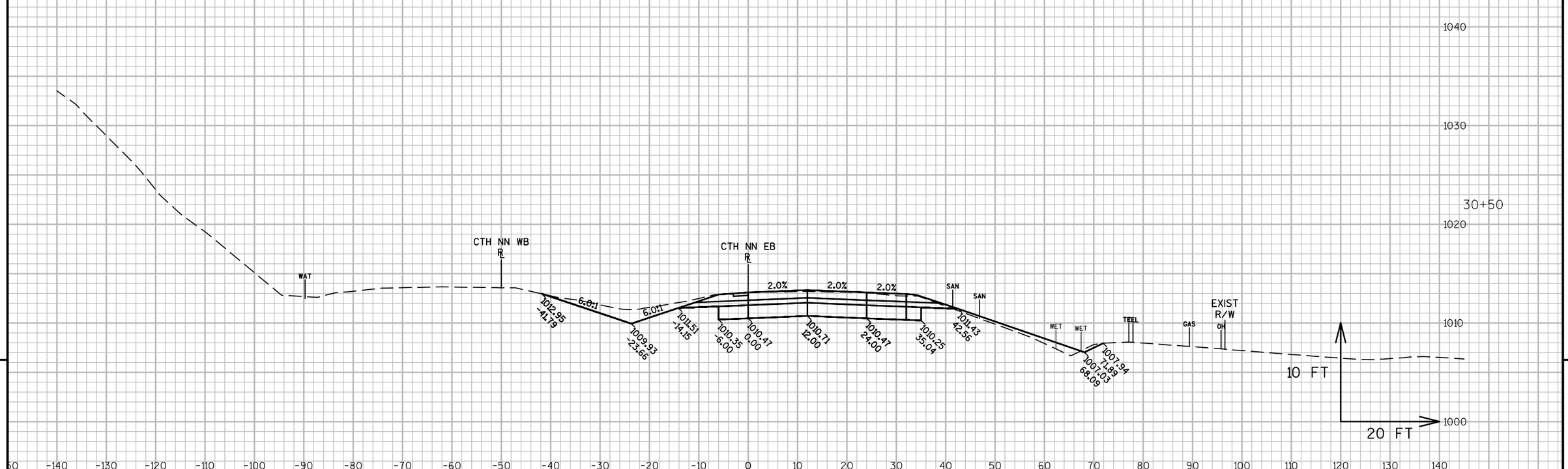
9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN EB STAGE 2	SHEET 565	E

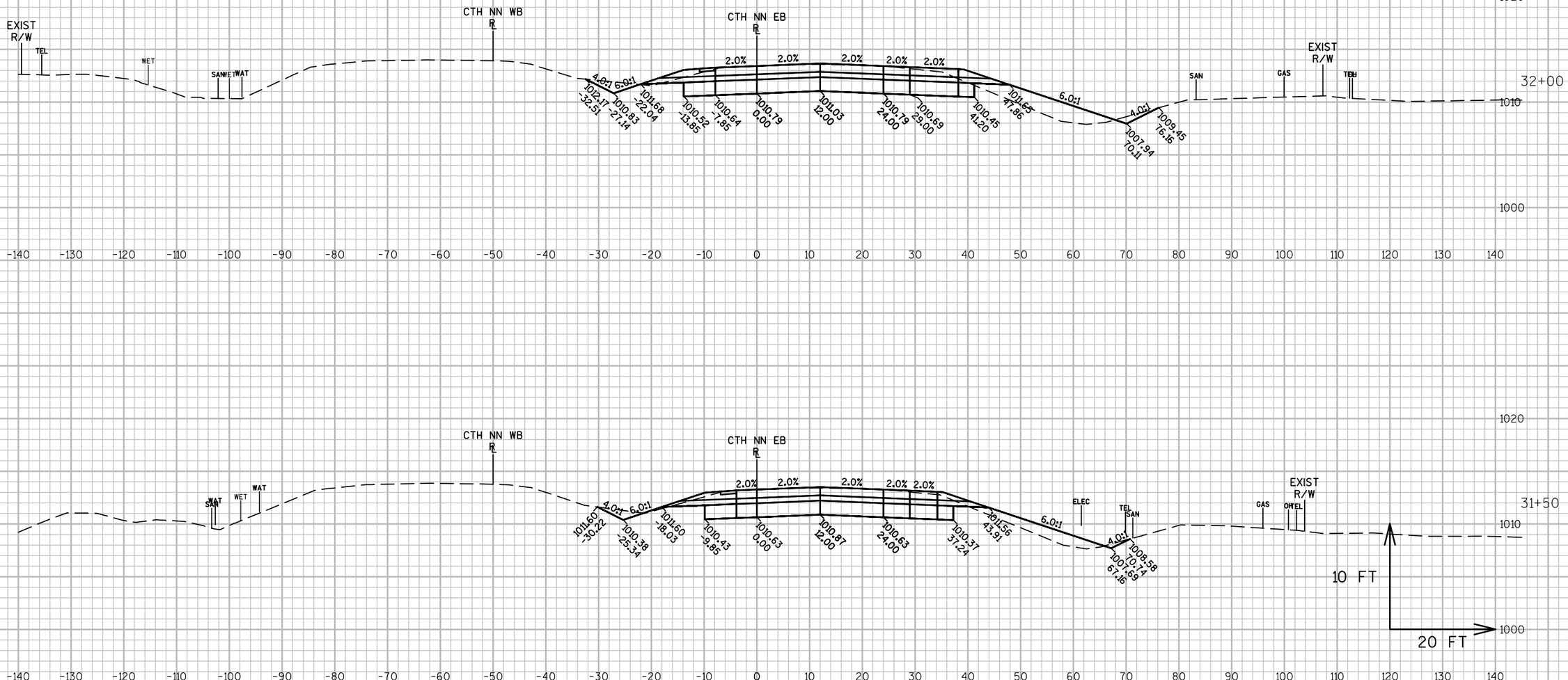
FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090202_XS2_NN.DWG
LAYOUT NAME - 01
PLOT DATE : 4/22/2015 11:41 AM
PLOT BY : CORY IHDE
PLOT NAME :
PLOT SCALE : 1" = 20'_XREF_XREF
WISDOT/CADDS SHEET 49





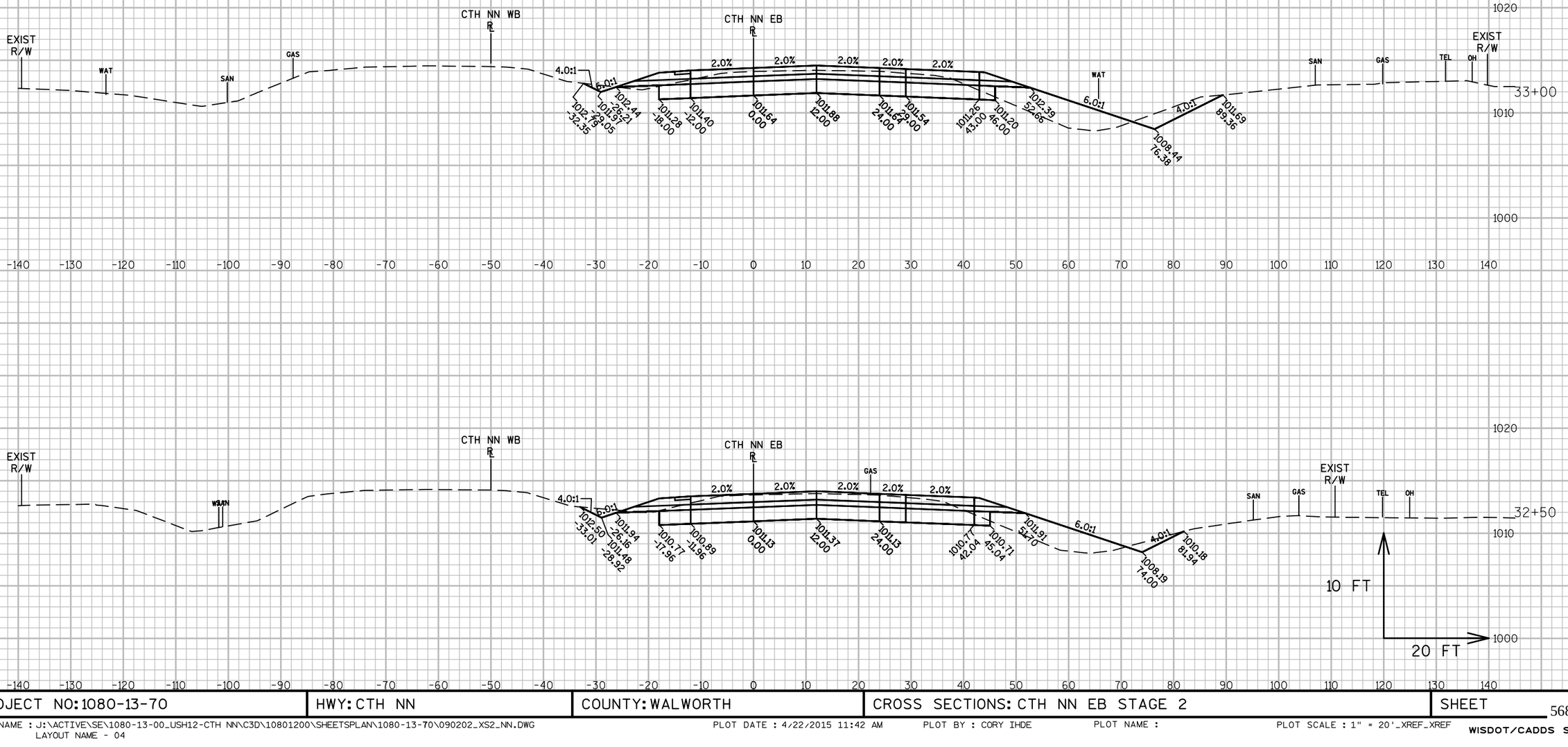
9 9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN EB STAGE 2	SHEET 566	E



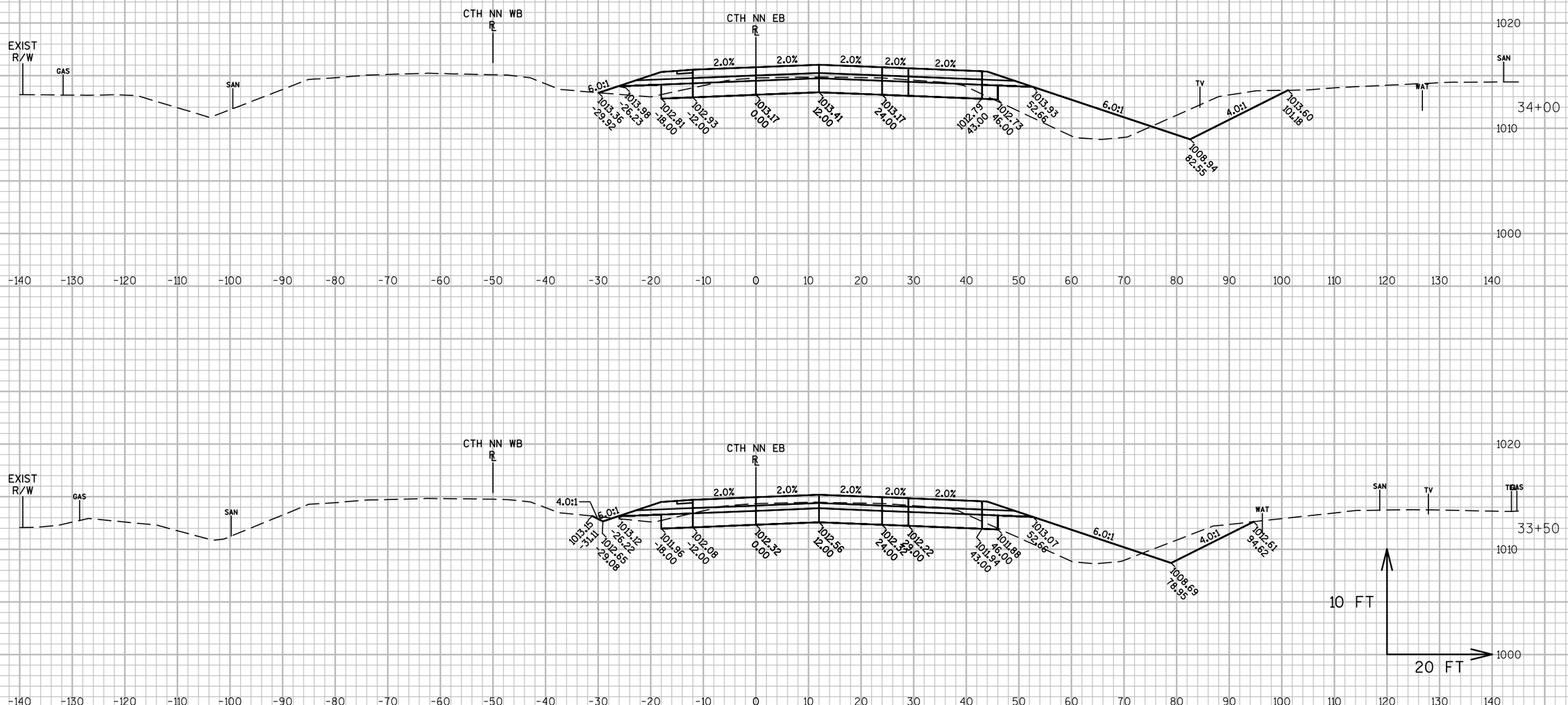
9 9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN EB STAGE 2	SHEET 567 E



PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN EB STAGE 2	SHEET 568 E

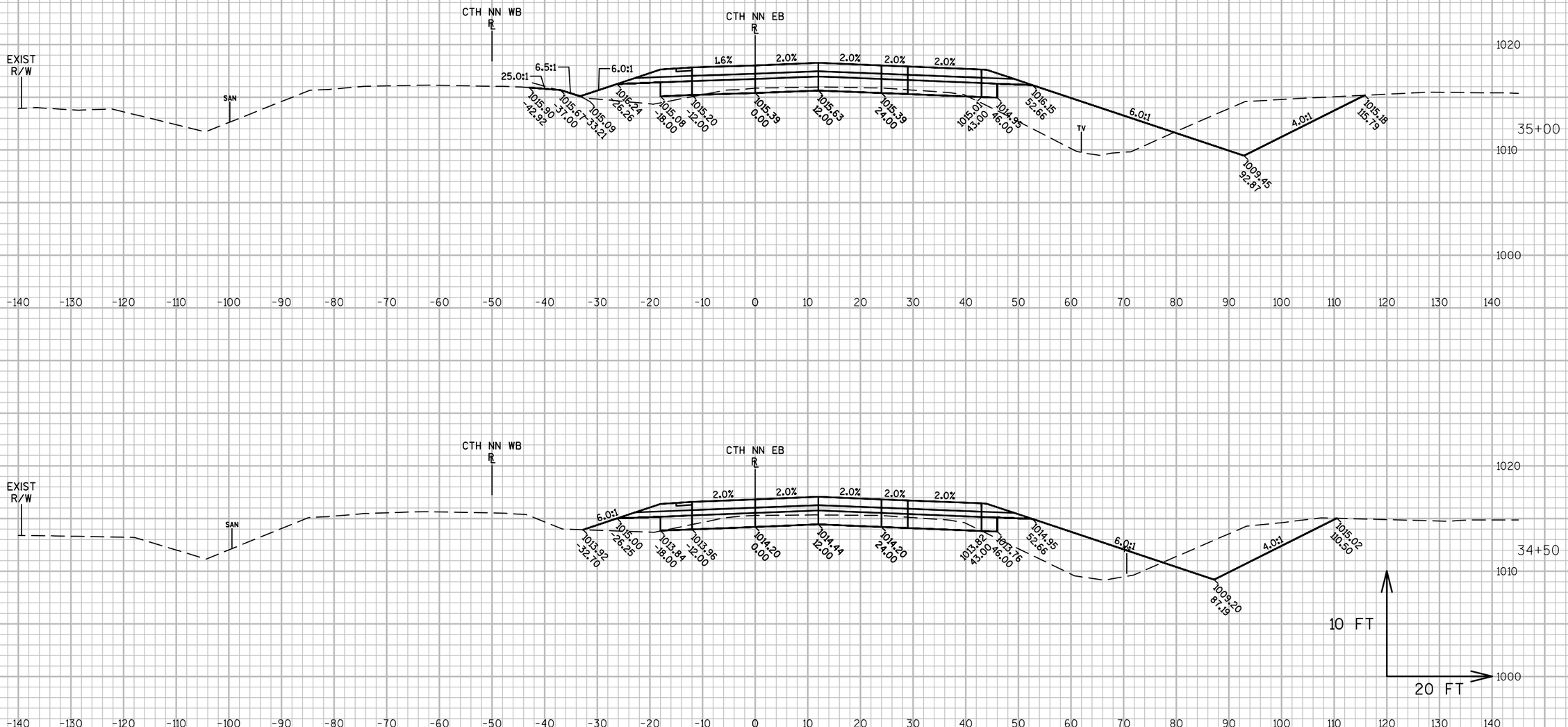
FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090202_XS2_NN.DWG
LAYOUT NAME - 04
PLOT DATE : 4/22/2015 11:42 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1" = 20'_XREF_XREF
WISDOT/CADDS SHEET 49



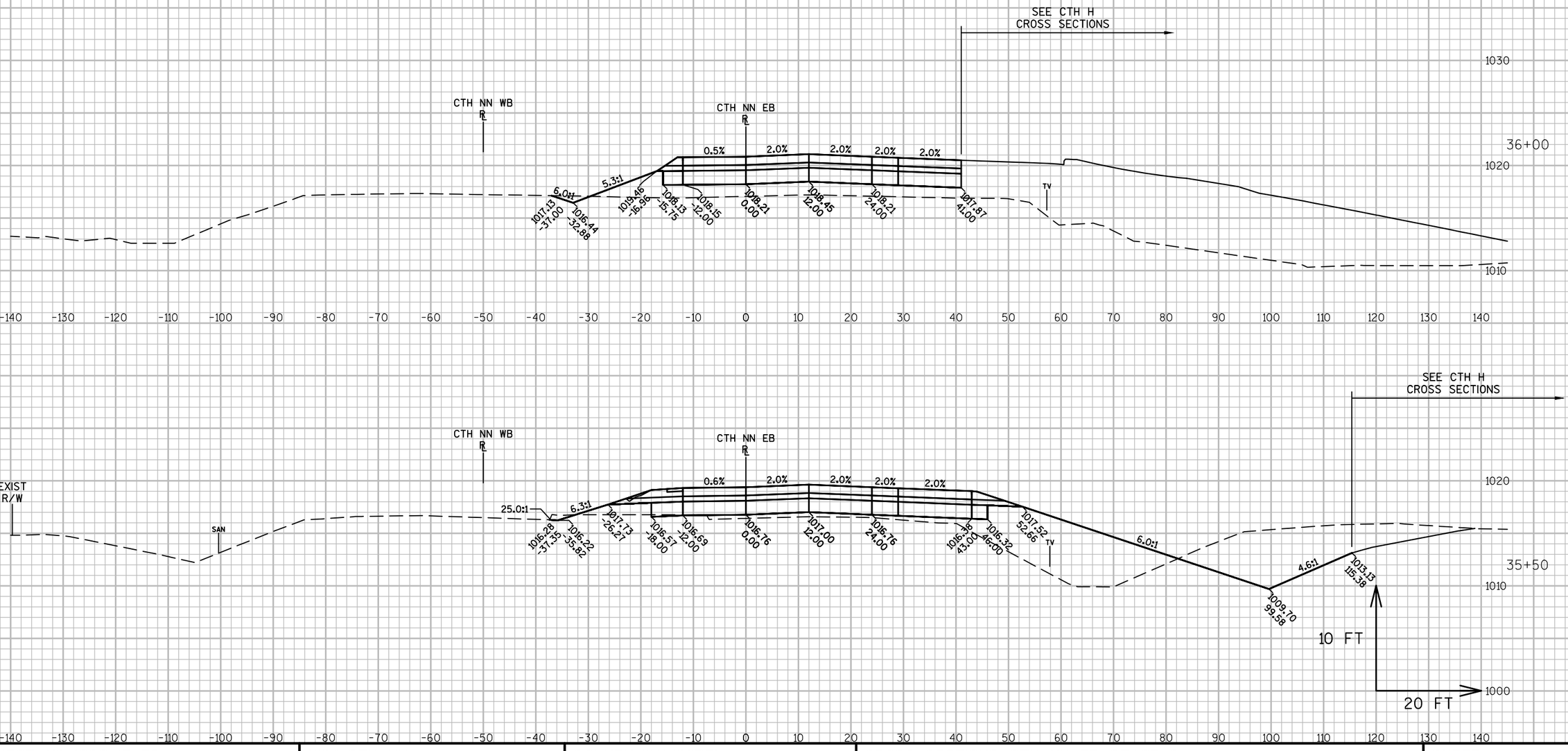
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN EB STAGE 2	SHEET 569 E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090202_XS2_NN.DWG
LAYOUT NAME - 05

PLOT DATE : 4/22/2015 11:42 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1" = 20'_XREF_XREF



PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN EB STAGE 2	SHEET 570	E

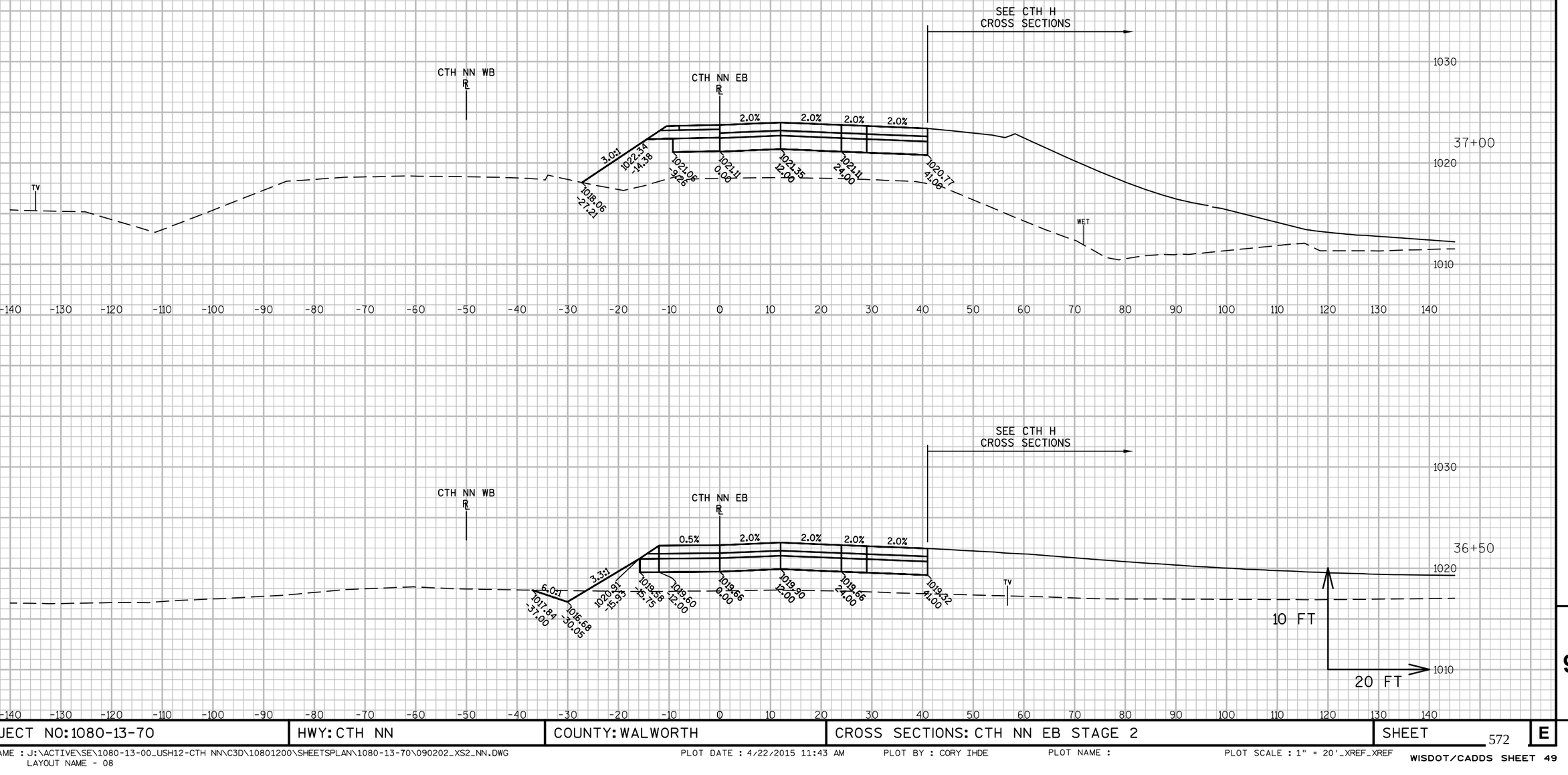


9 9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN EB STAGE 2	SHEET 571	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090202_XS2_NN.DWG
LAYOUT NAME - 07

PLOT DATE : 4/22/2015 11:42 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1" = 20'_XREF_XREF



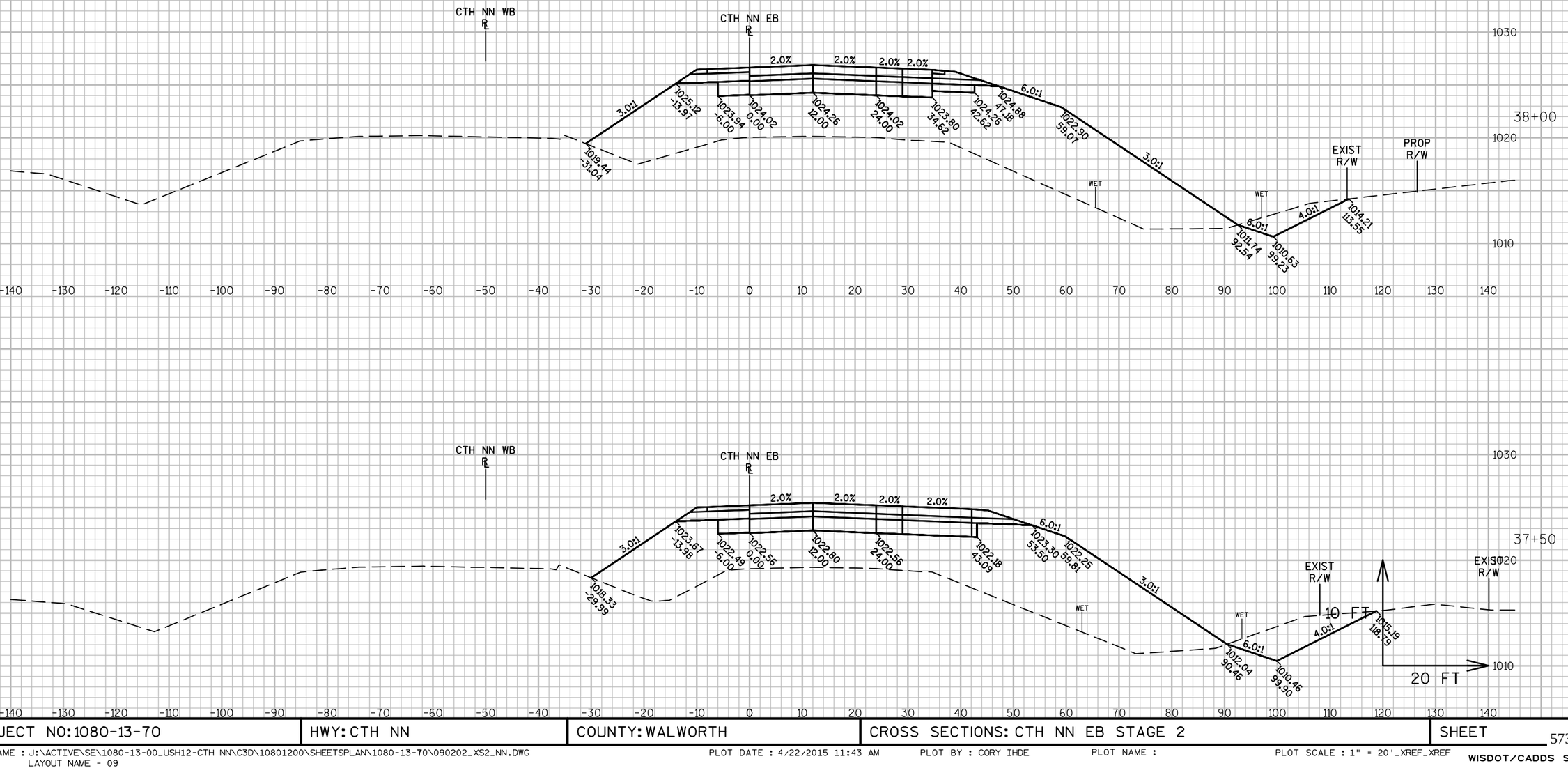
9 9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN EB STAGE 2	SHEET 572	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090202_XS2_NN.DWG
LAYOUT NAME - 08

PLOT DATE : 4/22/2015 11:43 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1" = 20'_XREF_XREF

WISDOT/CADDS SHEET 49



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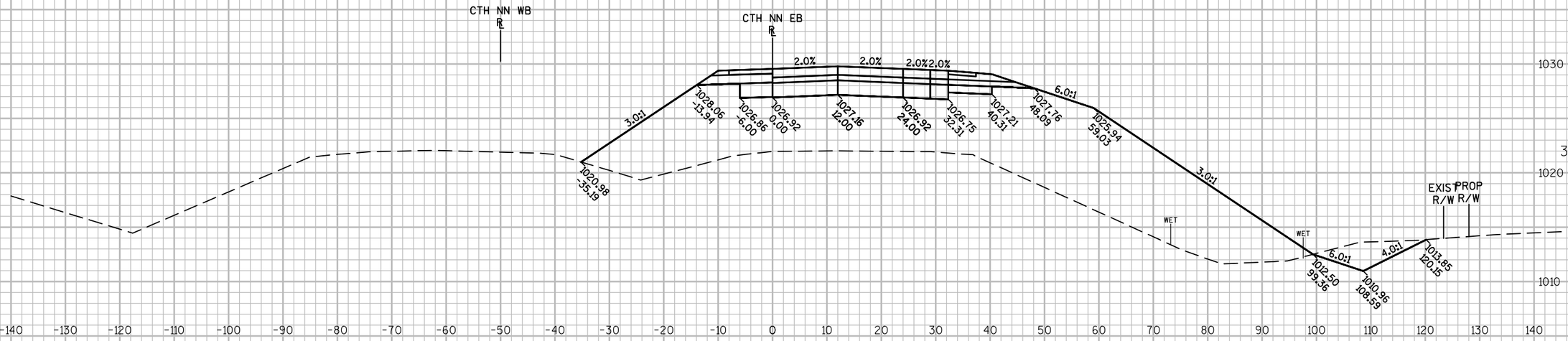
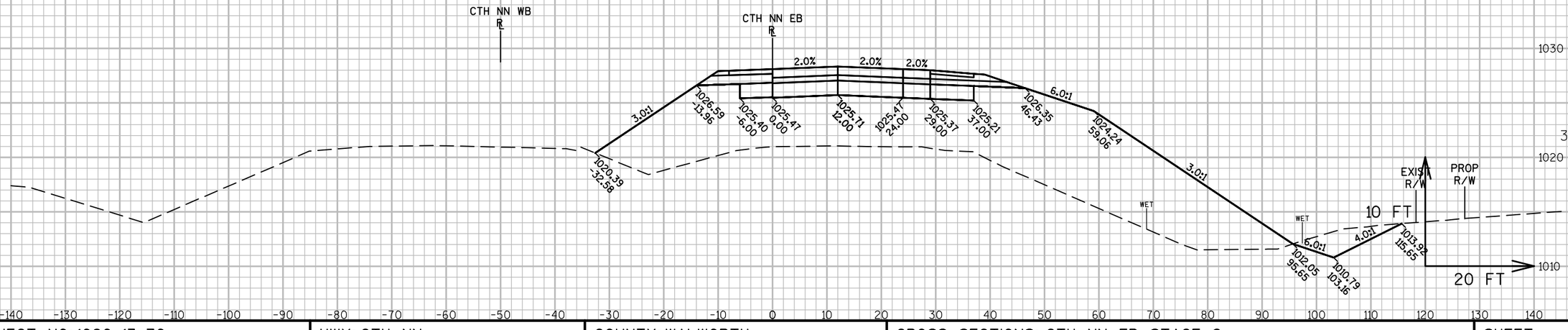
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN EB STAGE 2	SHEET 573	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090202_XS2_NN.DWG
LAYOUT NAME - 09

PLOT DATE : 4/22/2015 11:43 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1" = 20'_XREF_XREF

WISDOT/CADDS SHEET 49





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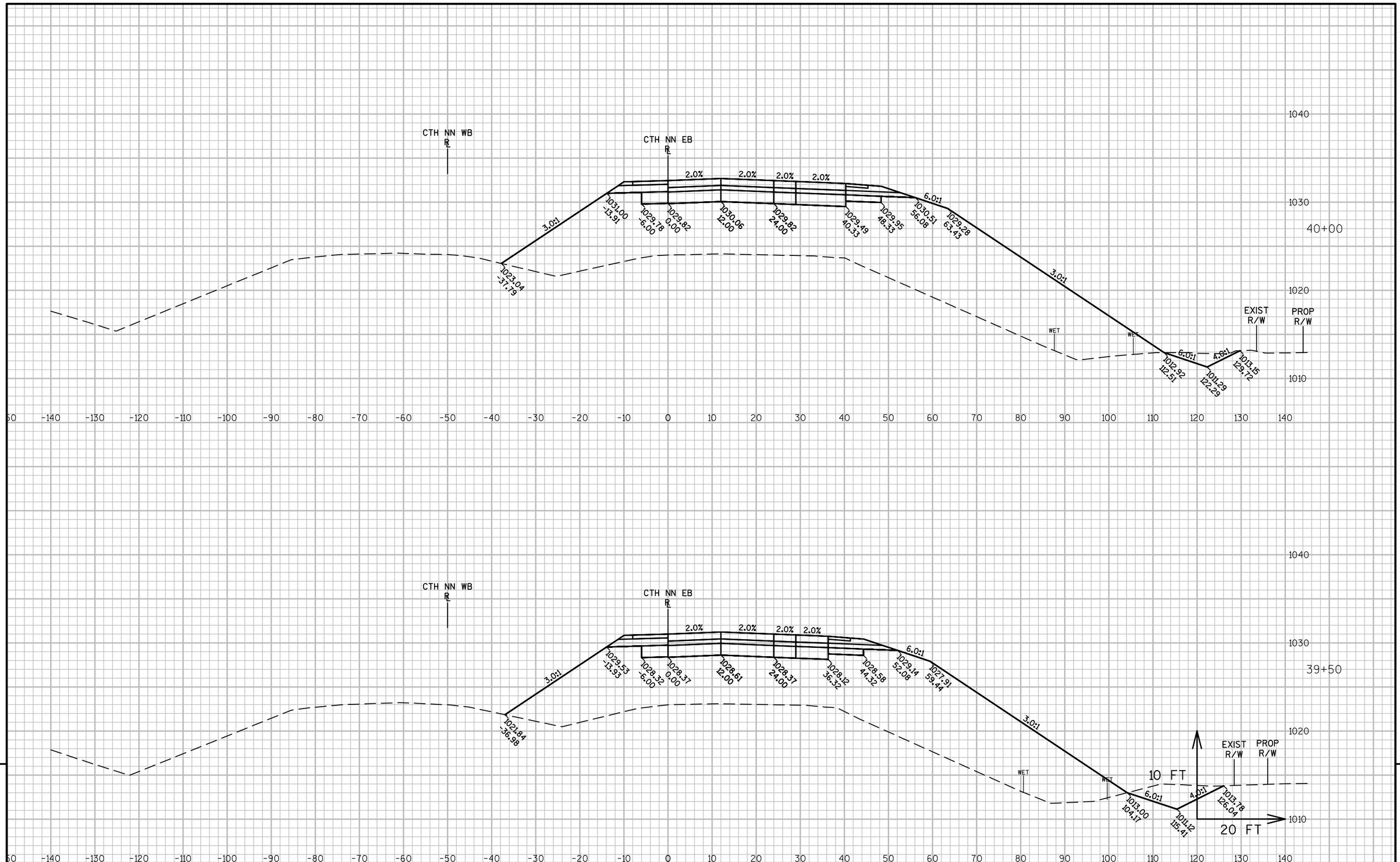
9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN EB STAGE 2	SHEET 574	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090202_XS2_NN.DWG
LAYOUT NAME - 10

PLOT DATE : 4/22/2015 11:43 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1" = 20'_XREF_XREF

WISDOT/CADDS SHEET 49



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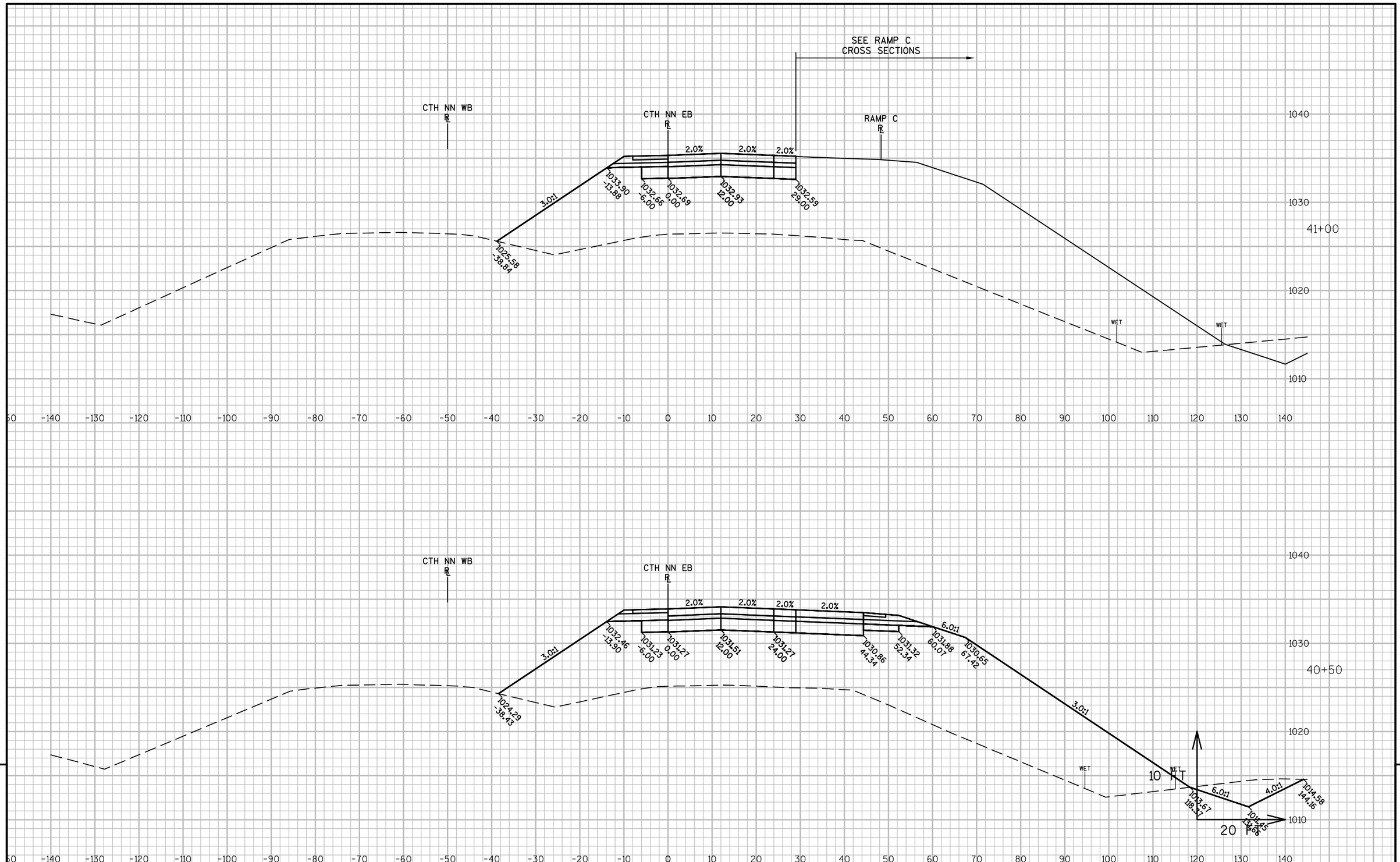
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN EB STAGE 2	SHEET 575	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090202_XS2_NN.DWG
LAYOUT NAME - 11

PLOT DATE : 4/22/2015 11:43 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1" = 20'_XREF_XREF

WISDOT/CADDS SHEET 49



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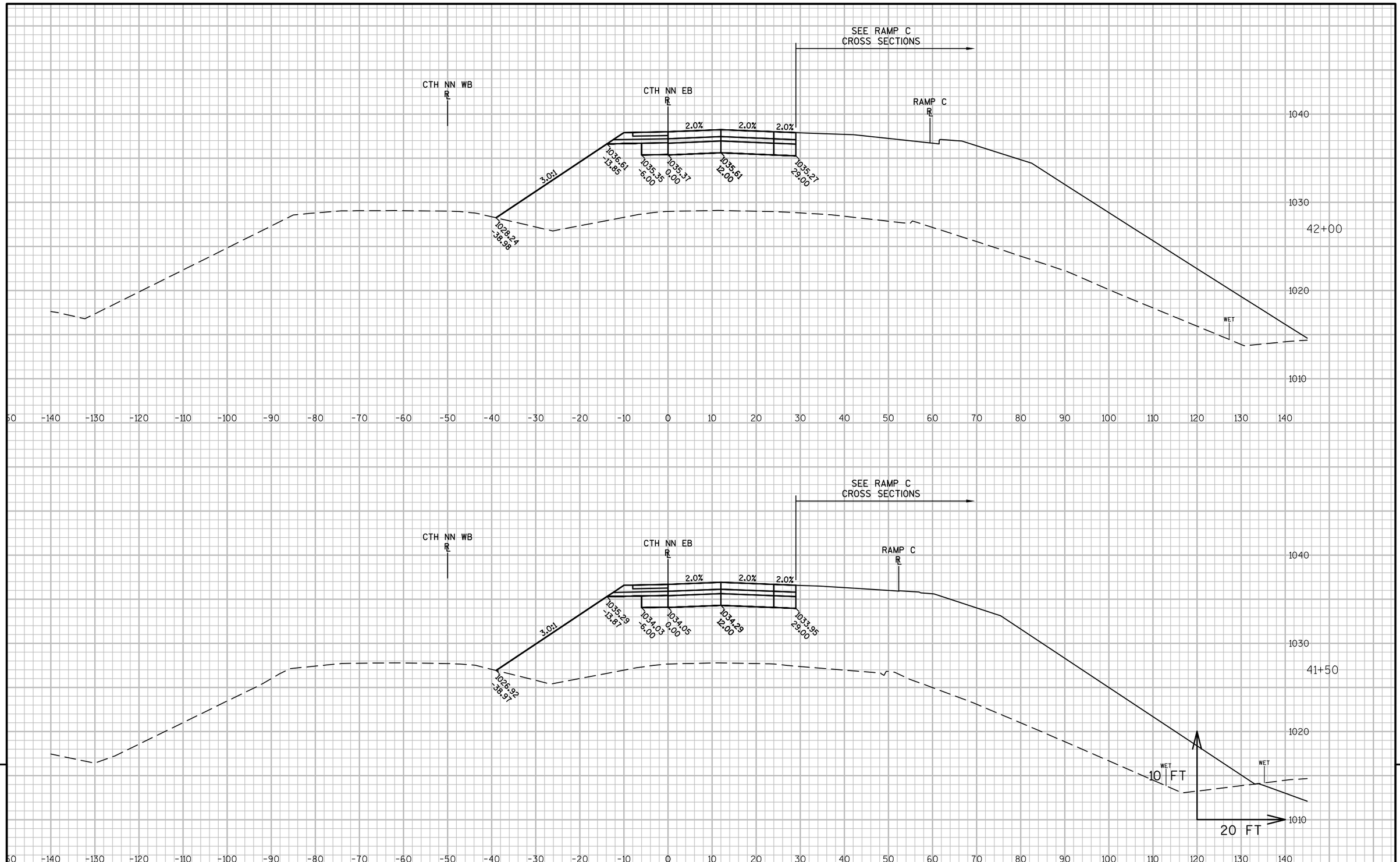
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN EB STAGE 2	SHEET 576	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090202_XS2_NN.DWG
LAYOUT NAME - 12
PLOT DATE : 4/22/2015 11:44 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1" = 20'_XREF_XREF
WISDOT/CADDS SHEET 49



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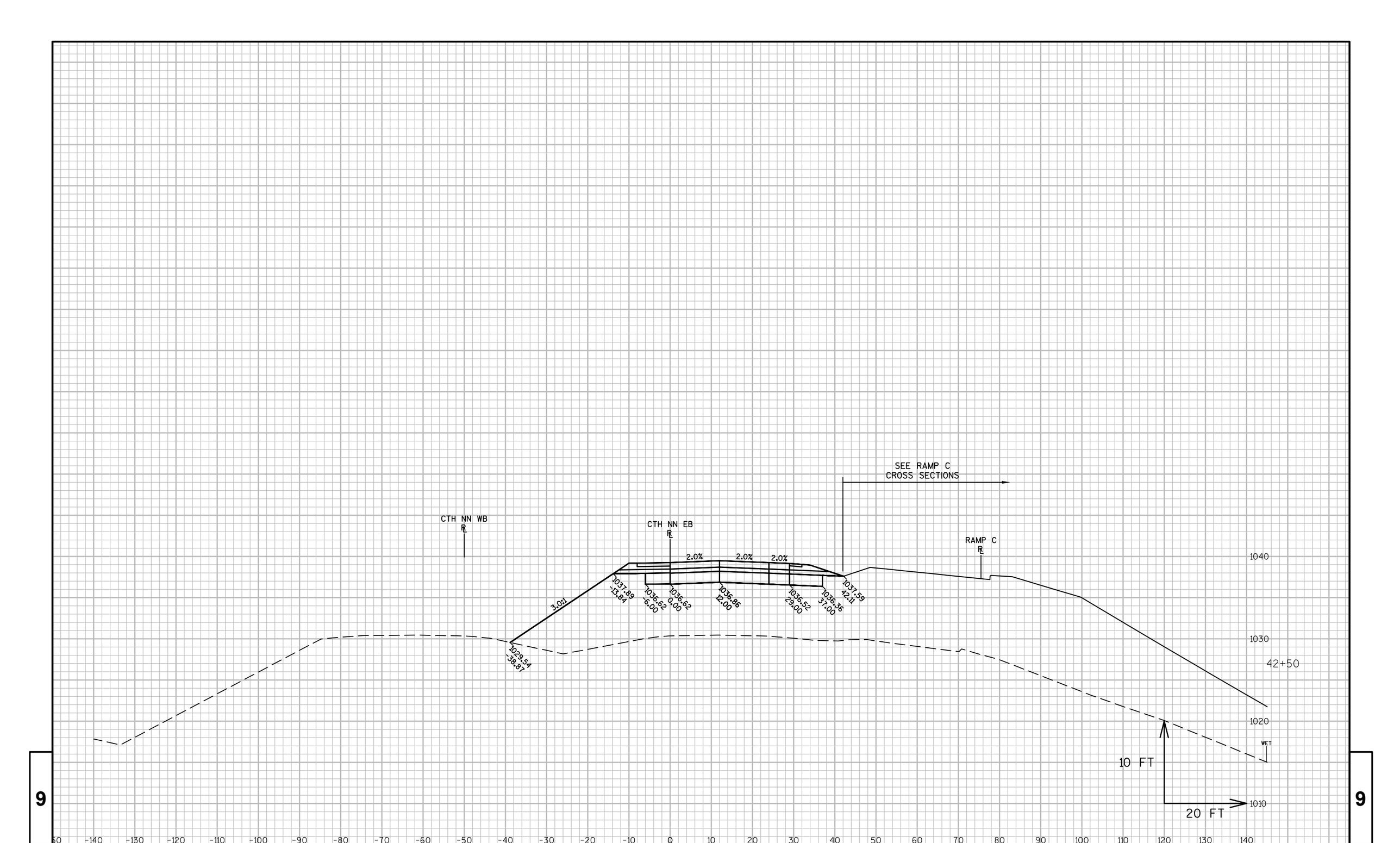
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN EB STAGE 2	SHEET 577	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090202_XS2_NN.DWG
LAYOUT NAME - 13
PLOT DATE : 4/22/2015 11:44 AM
PLOT BY : CORY IHDE
PLOT NAME :
PLOT SCALE : 1" = 20'_XREF_XREF
WISDOT/CADDS SHEET 49



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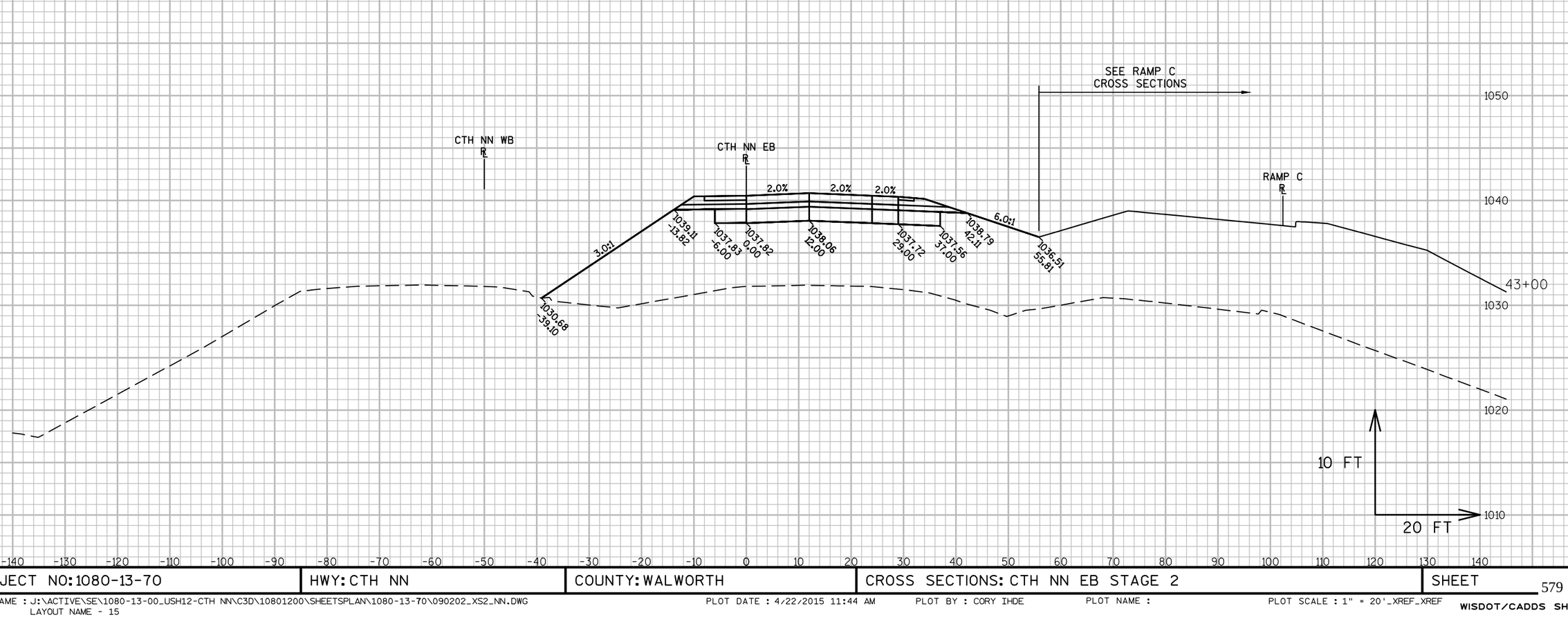
9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN EB STAGE 2	SHEET 578	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090202_XS2_NN.DWG
LAYOUT NAME - 14
PLOT DATE : 4/22/2015 11:44 AM
PLOT BY : CORY IHDE
PLOT NAME :
PLOT SCALE : 1" = 20'_XREF_XREF
WISDOT/CADDS SHEET 49



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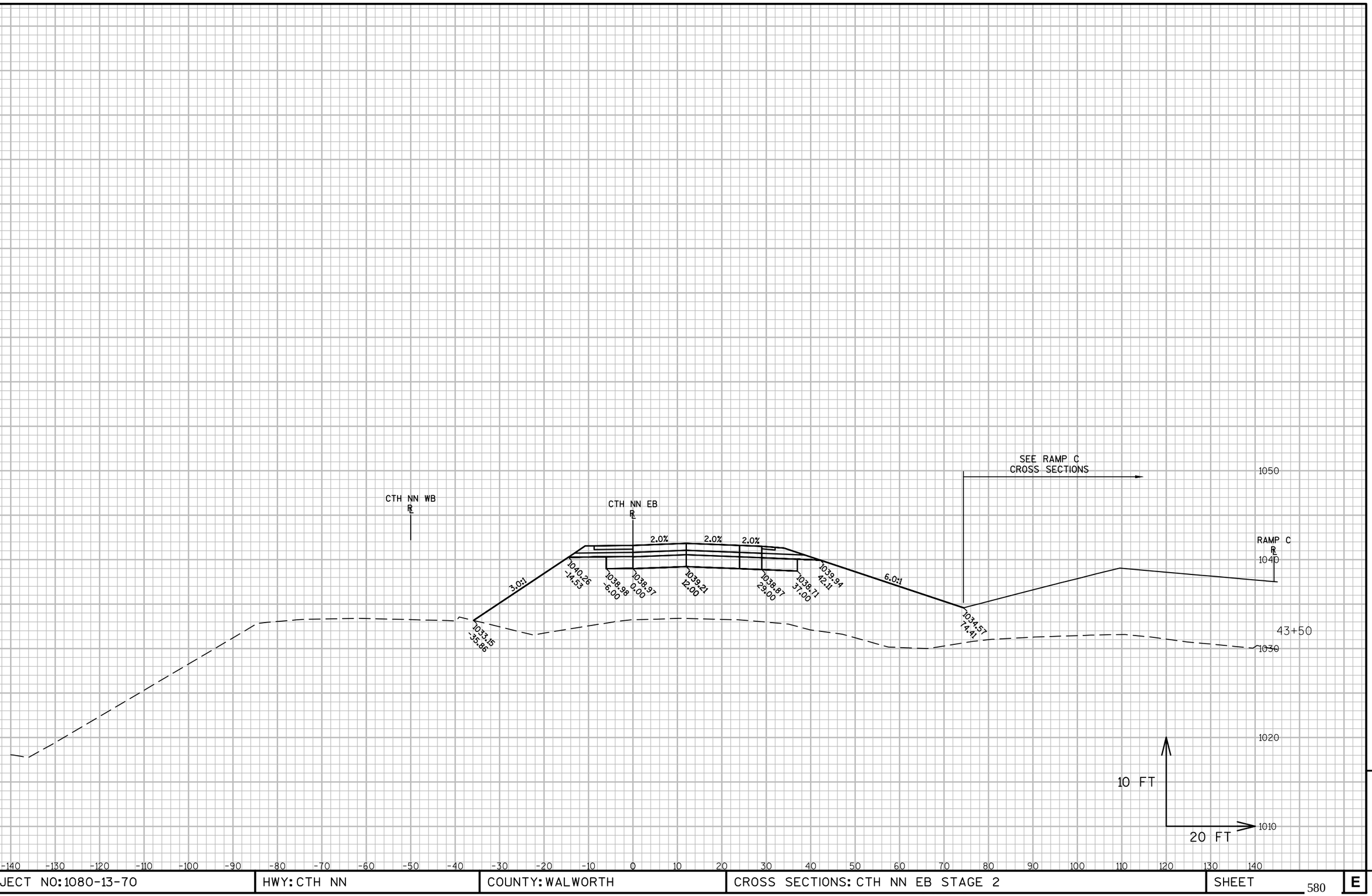
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN EB STAGE 2	SHEET 579	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090202_XS2_NN.DWG
LAYOUT NAME - 15
PLOT DATE : 4/22/2015 11:44 AM
PLOT BY : CORY IHDE
PLOT NAME :
PLOT SCALE : 1" = 20'_XREF_XREF



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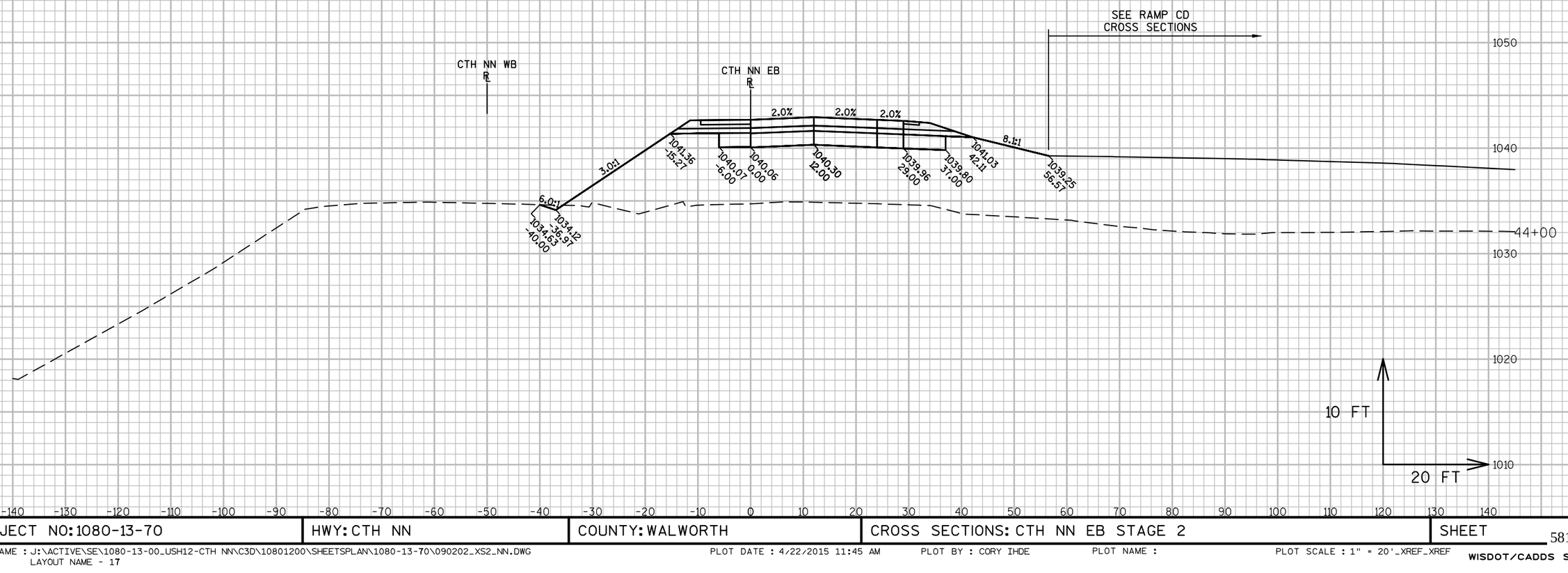
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN EB STAGE 2	SHEET 580	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090202_XS2_NN.DWG
LAYOUT NAME - 16
PLOT DATE : 4/22/2015 11:45 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1" = 20'_XREF_XREF
WISDOT/CADDS SHEET 49



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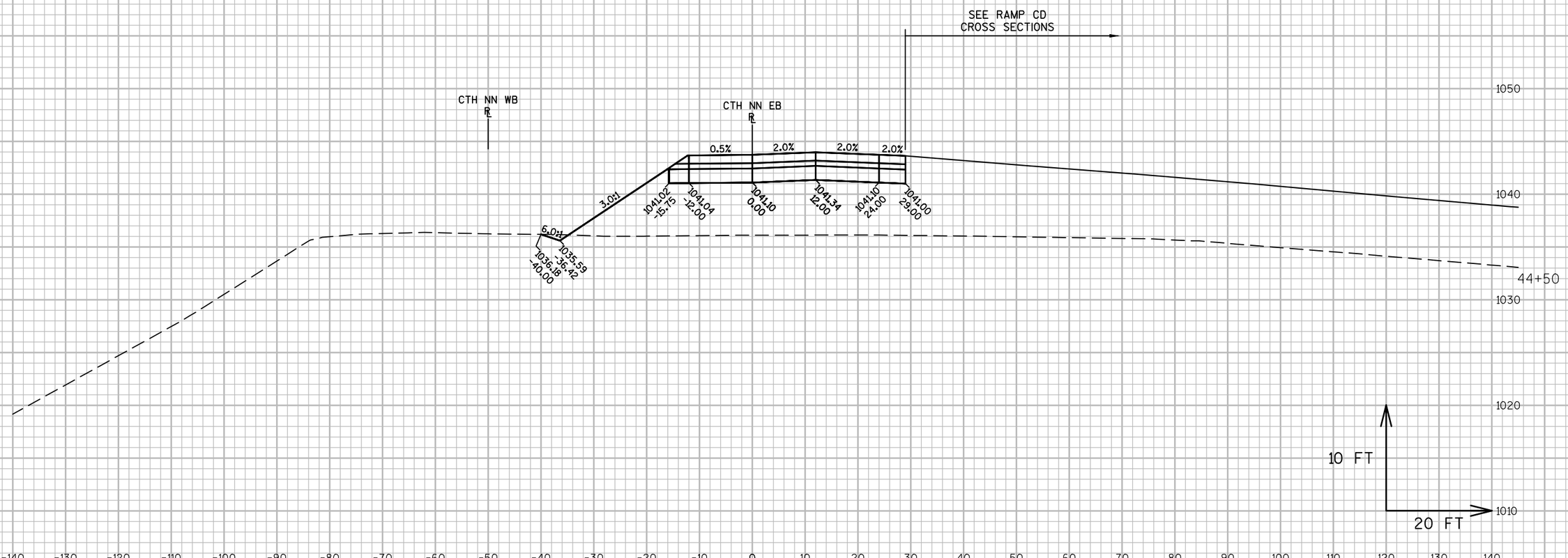
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN EB STAGE 2	SHEET 581	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090202_XS2_NN.DWG
LAYOUT NAME - 17
PLOT DATE : 4/22/2015 11:45 AM
PLOT BY : CORY IHDE
PLOT NAME :
PLOT SCALE : 1" = 20'_XREF_XREF
WISDOT/CADDS SHEET 49



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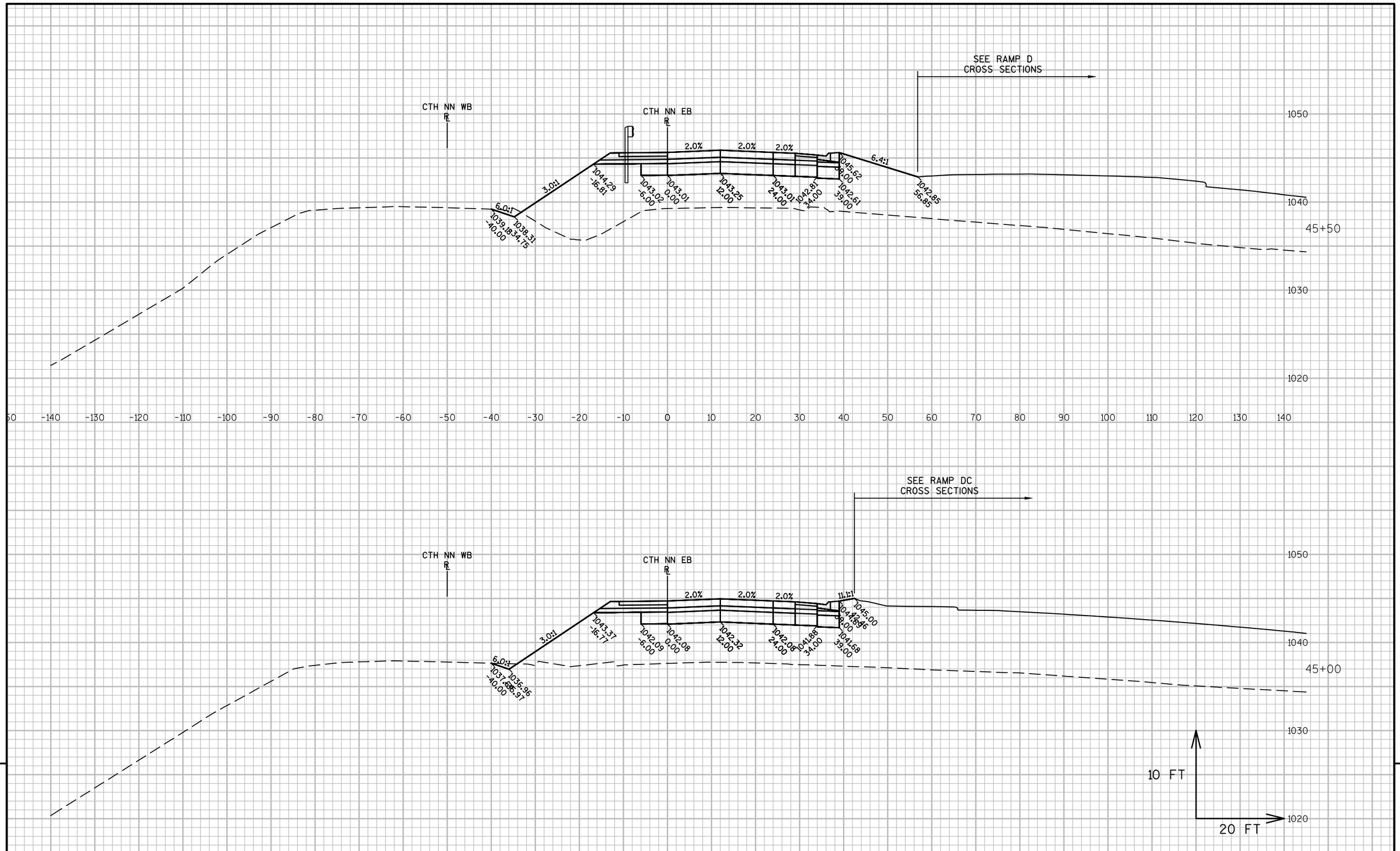
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN EB STAGE 2	SHEET 582	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090202_XS2_NN.DWG
LAYOUT NAME - 18
PLOT DATE : 4/22/2015 11:45 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1" = 20'_XREF_XREF
WISDOT/CADDS SHEET 49



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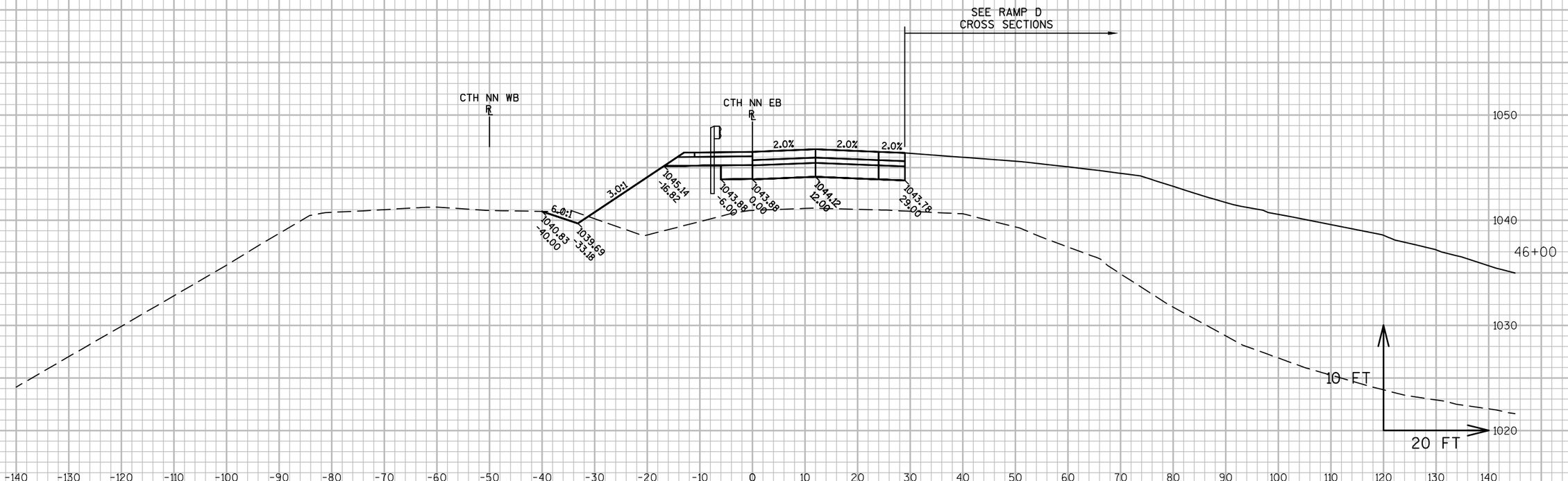
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN EB STAGE 2	SHEET 583	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090202_XS2_NN.DWG
LAYOUT NAME - 19
PLOT DATE : 4/22/2015 11:45 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1" = 20'_XREF_XREF
WISDOT/CADDS SHEET 49



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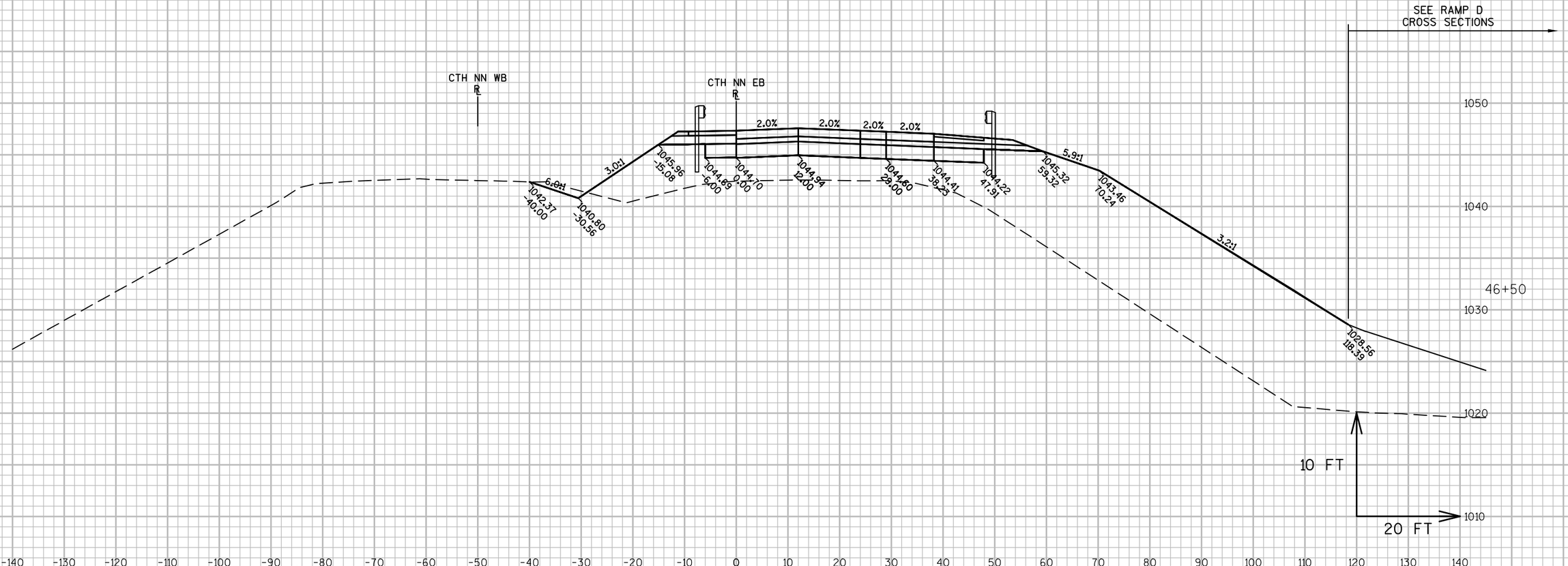
9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN EB STAGE 2	SHEET 584	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090202_XS2_NN.DWG
LAYOUT NAME - 20
PLOT DATE : 4/22/2015 11:46 AM
PLOT BY : CORY IHDE
PLOT NAME :
PLOT SCALE : 1" = 20'_XREF_XREF
WISDOT/CADDS SHEET 49



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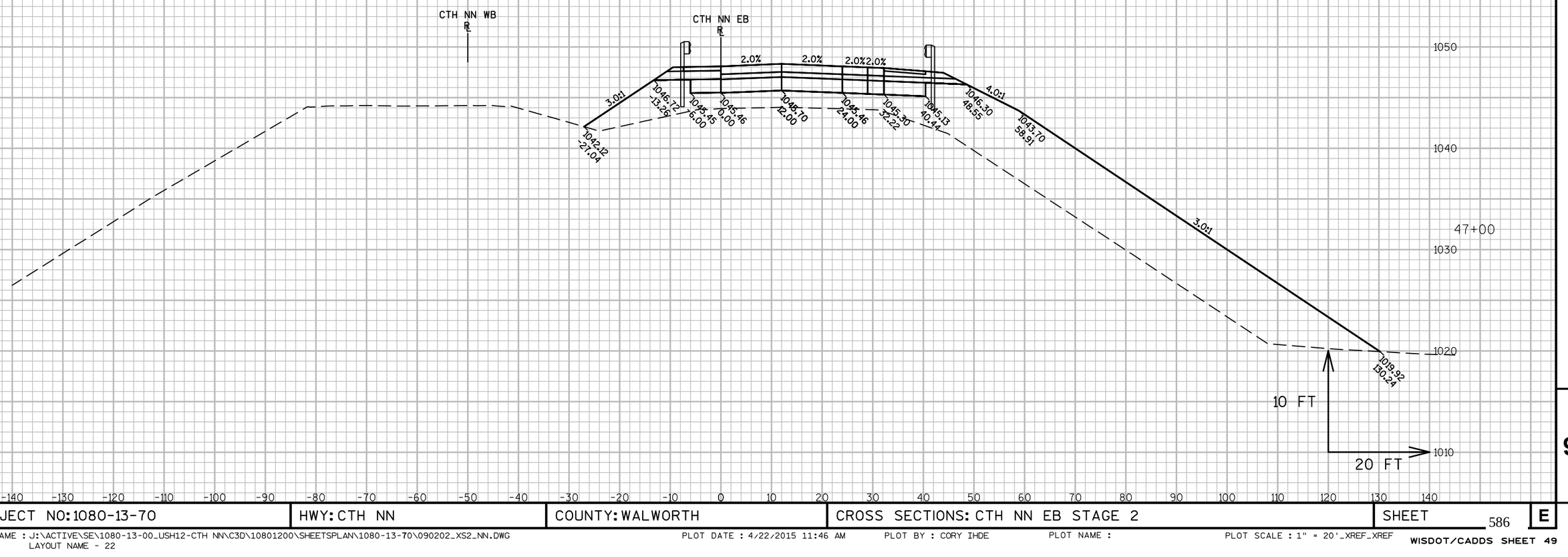
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN EB STAGE 2	SHEET 585	E



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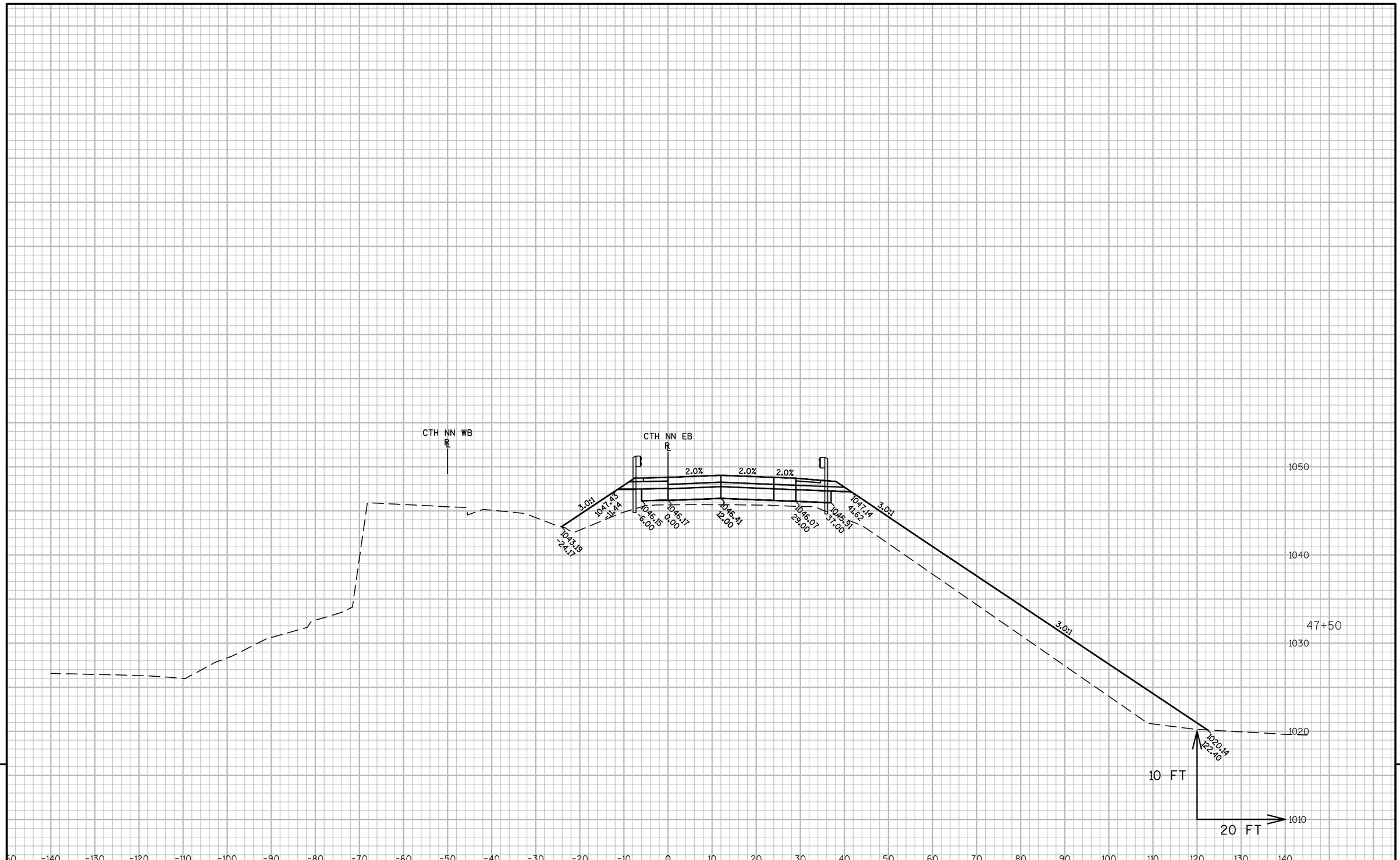
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN EB STAGE 2	SHEET 586	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090202_XS2_NN.DWG
LAYOUT NAME - 22

PLOT DATE : 4/22/2015 11:46 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1" = 20'_XREF_XREF

WISDOT/CADDS SHEET 49



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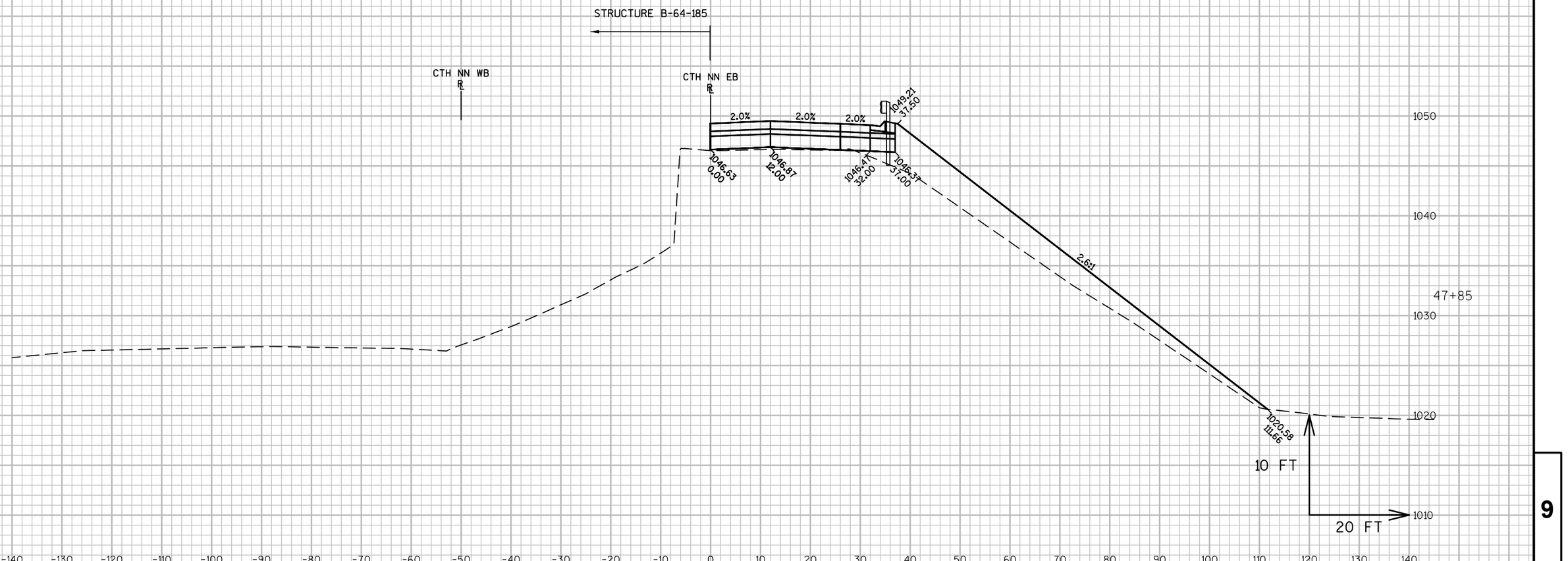
9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN EB STAGE 2	SHEET 587	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090202_XS2_NN.DWG
LAYOUT NAME - 23

PLOT DATE : 4/22/2015 11:46 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1" = 20'_XREF_XREF

WISDOT/CADDS SHEET 49



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PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN EB STAGE 2	SHEET 588	E

STRUCTURE B-64-185

CTH NN WB
℄

CTH NN EB
℄

1.9%

6.0:1

1049.69
-7.25

1049.83
0.00

1047.19
-31.99

51+45

10 FT

20 FT

1060
1050
1040
1030
1020

-150 -140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140

9

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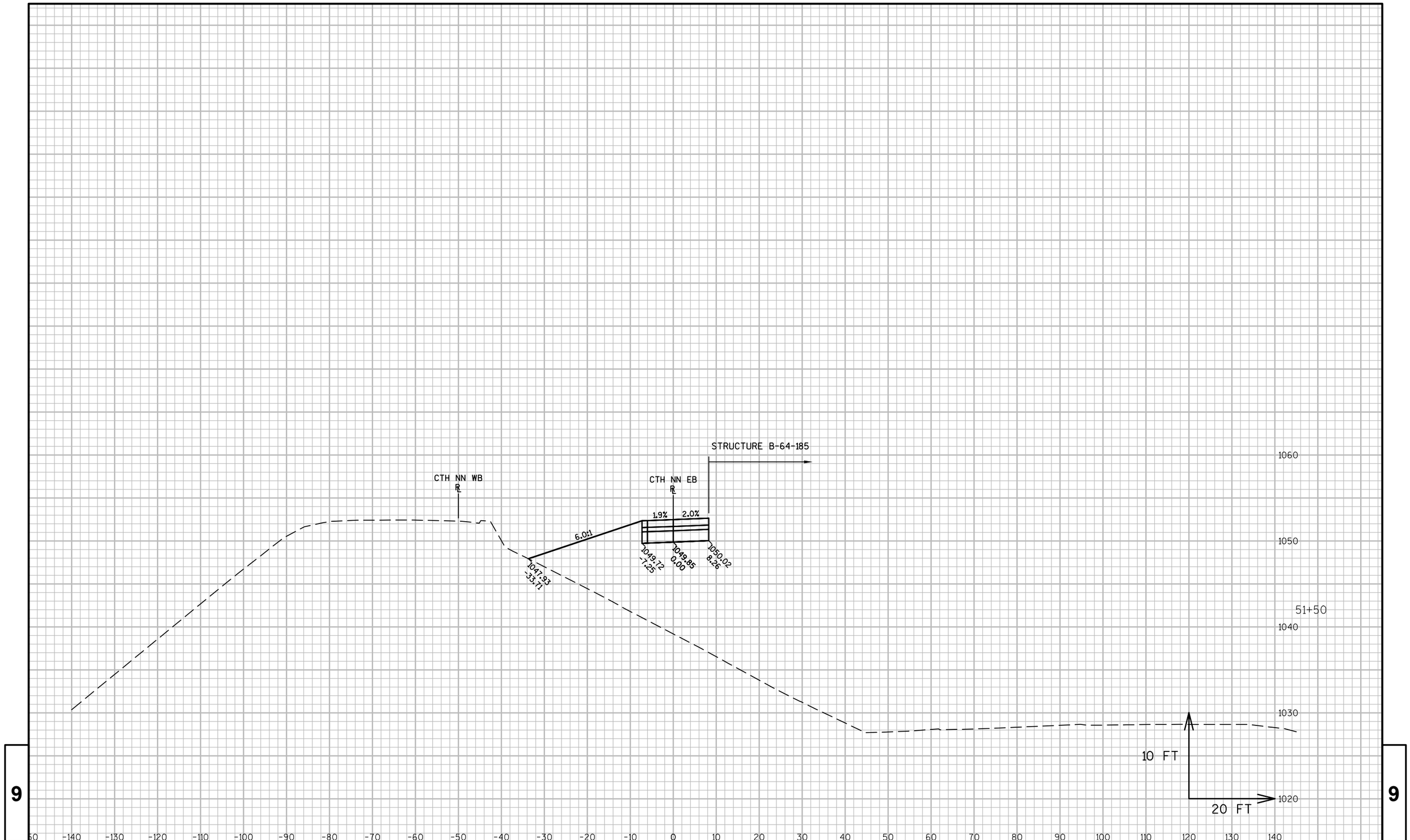
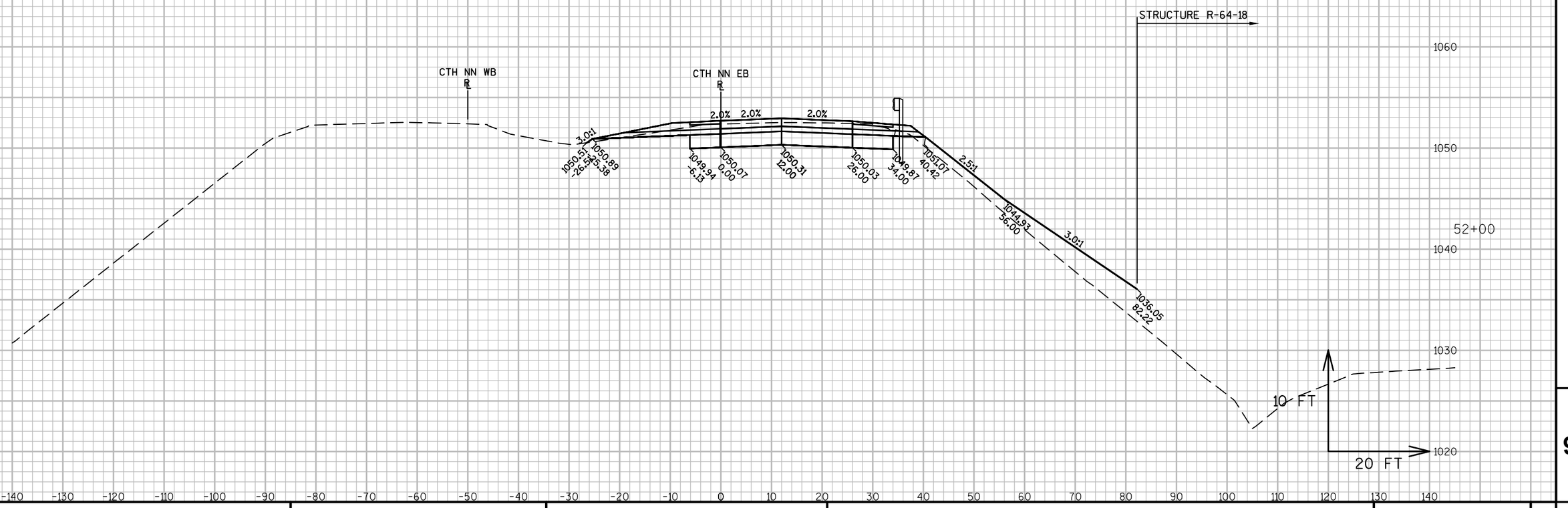
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN EB STAGE 2	SHEET 589	E



PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN EB STAGE 2	SHEET 590 E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090202_XS2_NN.DWG
LAYOUT NAME - 26

PLOT DATE : 4/22/2015 11:47 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1" = 20'_XREF_XREF



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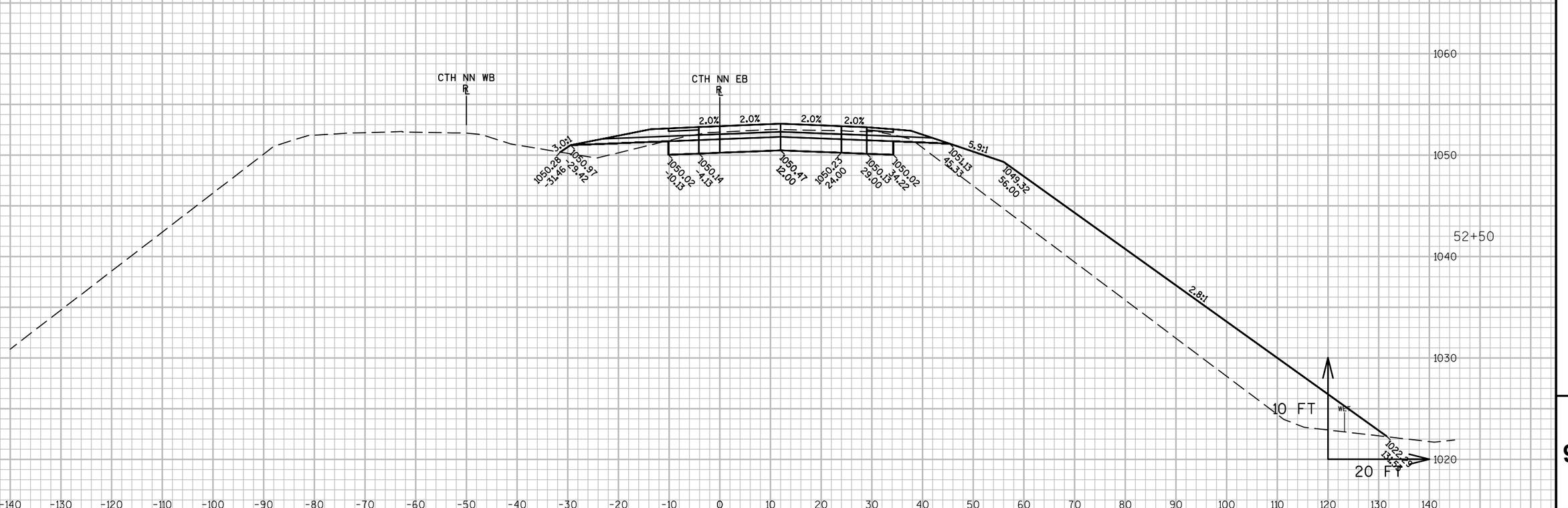
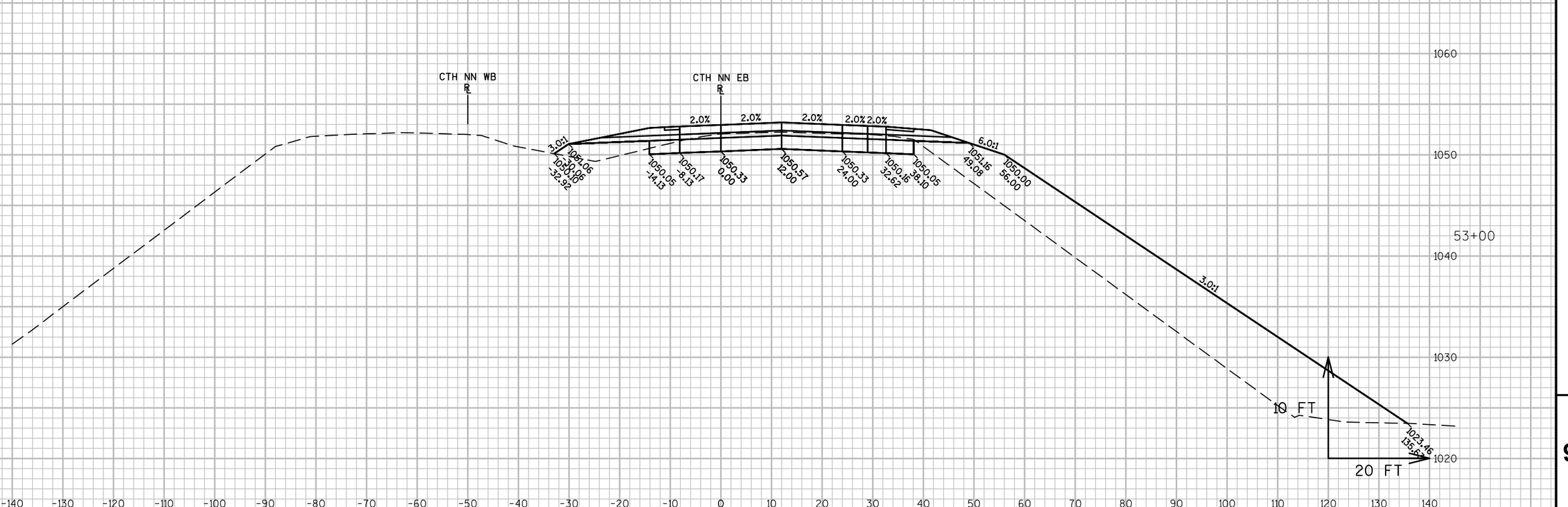
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN EB STAGE 2	SHEET 591	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090202_XS2_NN.DWG
LAYOUT NAME - 27

PLOT DATE : 4/22/2015 11:47 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1" = 20'_XREF_XREF



PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN EB STAGE 2	SHEET 592	E

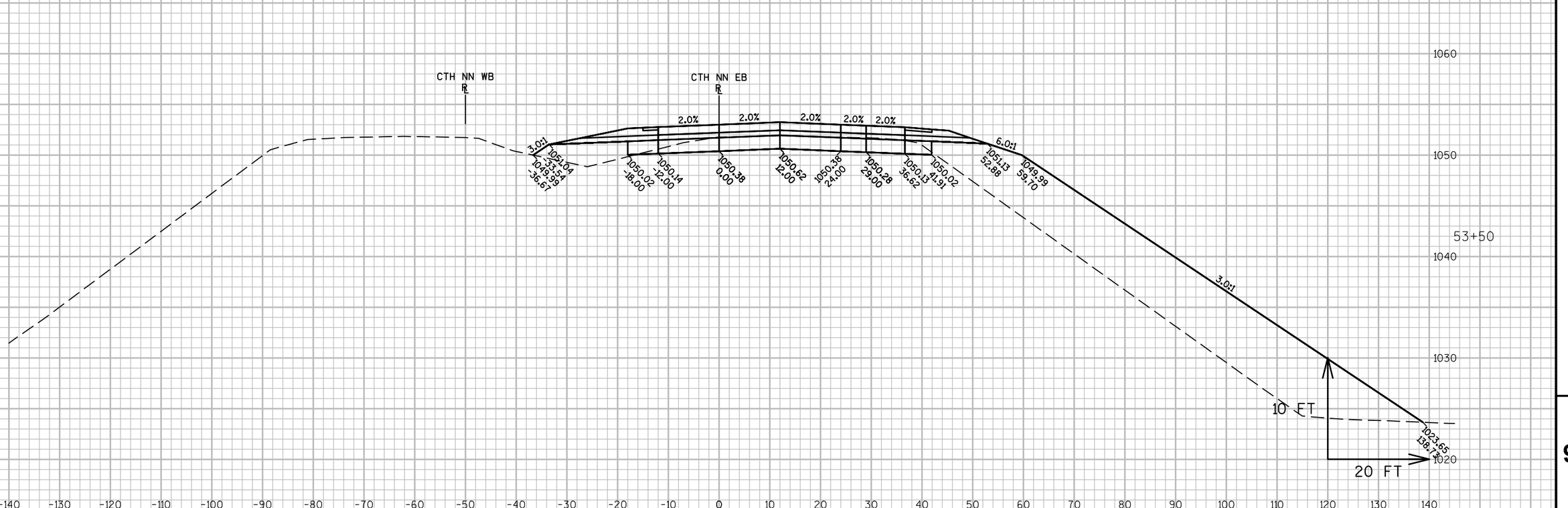


9 9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN EB STAGE 2	SHEET 593	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090202_XS2_NN.DWG
LAYOUT NAME - 29

PLOT DATE : 4/22/2015 11:48 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1" = 20'_XREF_XREF



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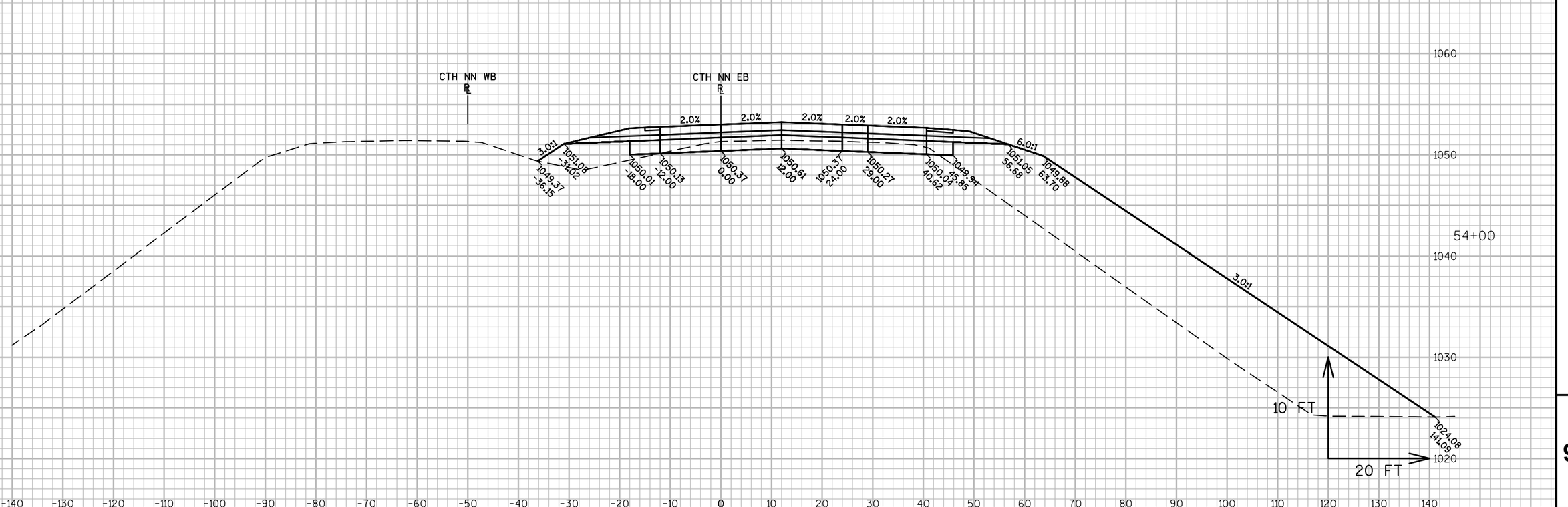
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN EB STAGE 2	SHEET 594	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090202_XS2_NN.DWG
LAYOUT NAME - 30
PLOT DATE : 4/22/2015 11:48 AM
PLOT BY : CORY IHDE
PLOT NAME :
PLOT SCALE : 1" = 20'_XREF_XREF
WISDOT/CADDS SHEET 49



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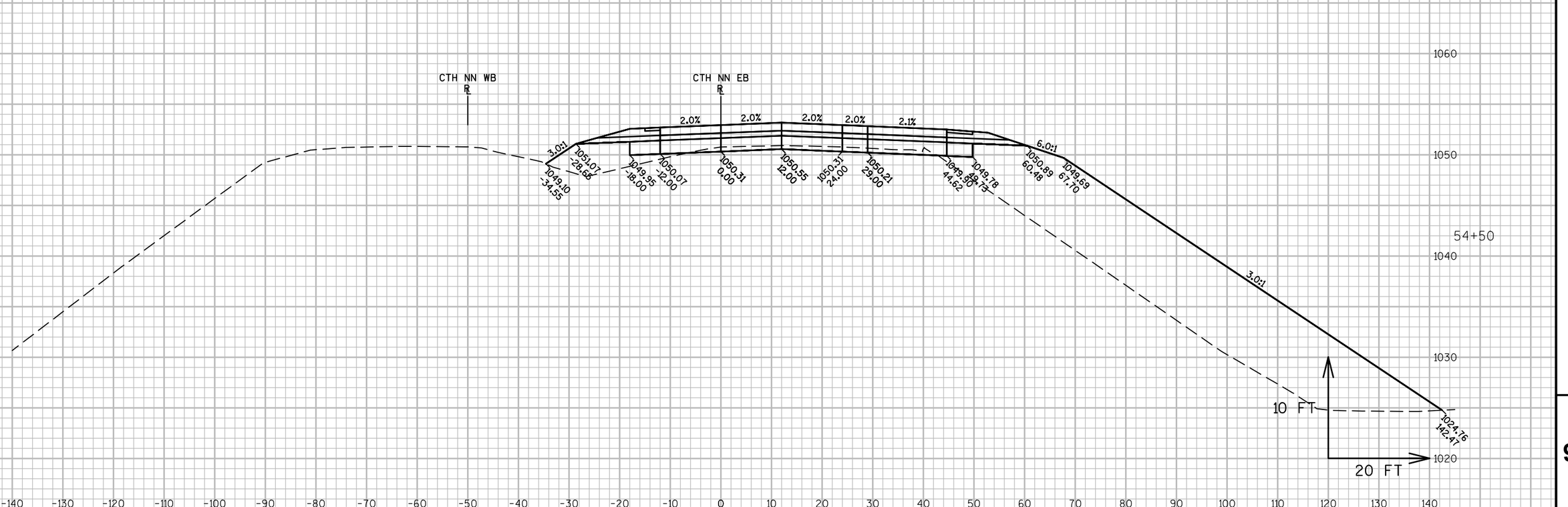
9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN EB STAGE 2	SHEET 595	E

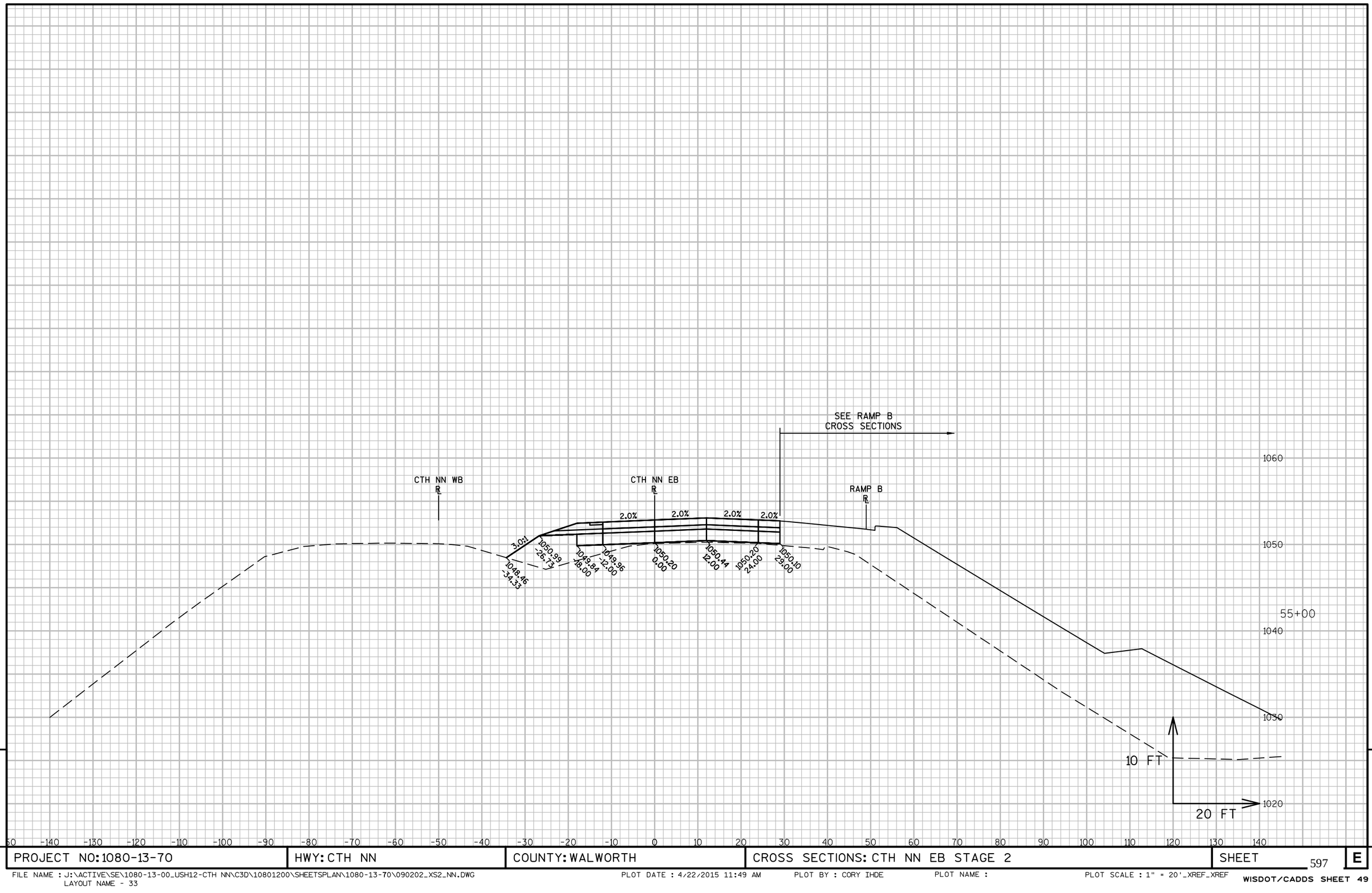
FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090202_XS2_NN.DWG
LAYOUT NAME - 31
PLOT DATE : 4/22/2015 11:48 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1" = 20'_XREF_XREF
WISDOT/CADDS SHEET 49



9 9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN EB STAGE 2	SHEET 596 E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090202_XS2_NN.DWG
LAYOUT NAME - 32
PLOT DATE : 4/22/2015 11:49 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1" = 20'_XREF_XREF
WISDOT/CADDS SHEET 49



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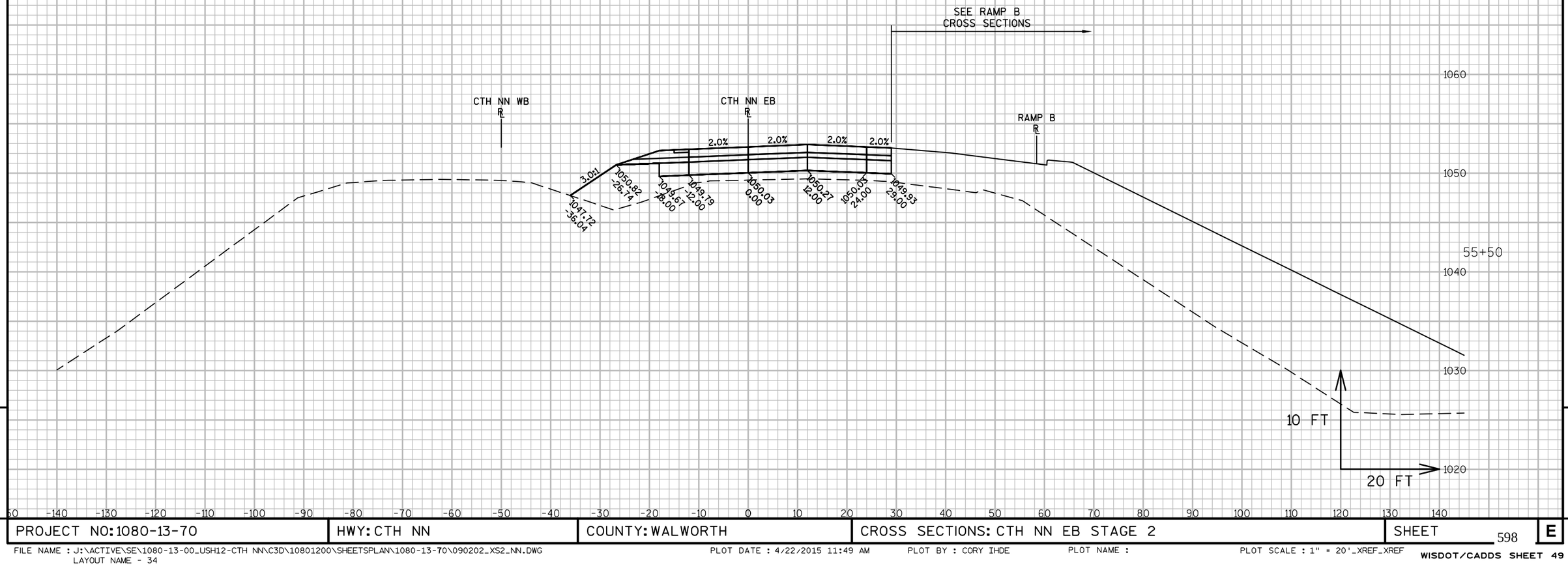
9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN EB STAGE 2	SHEET 597	E



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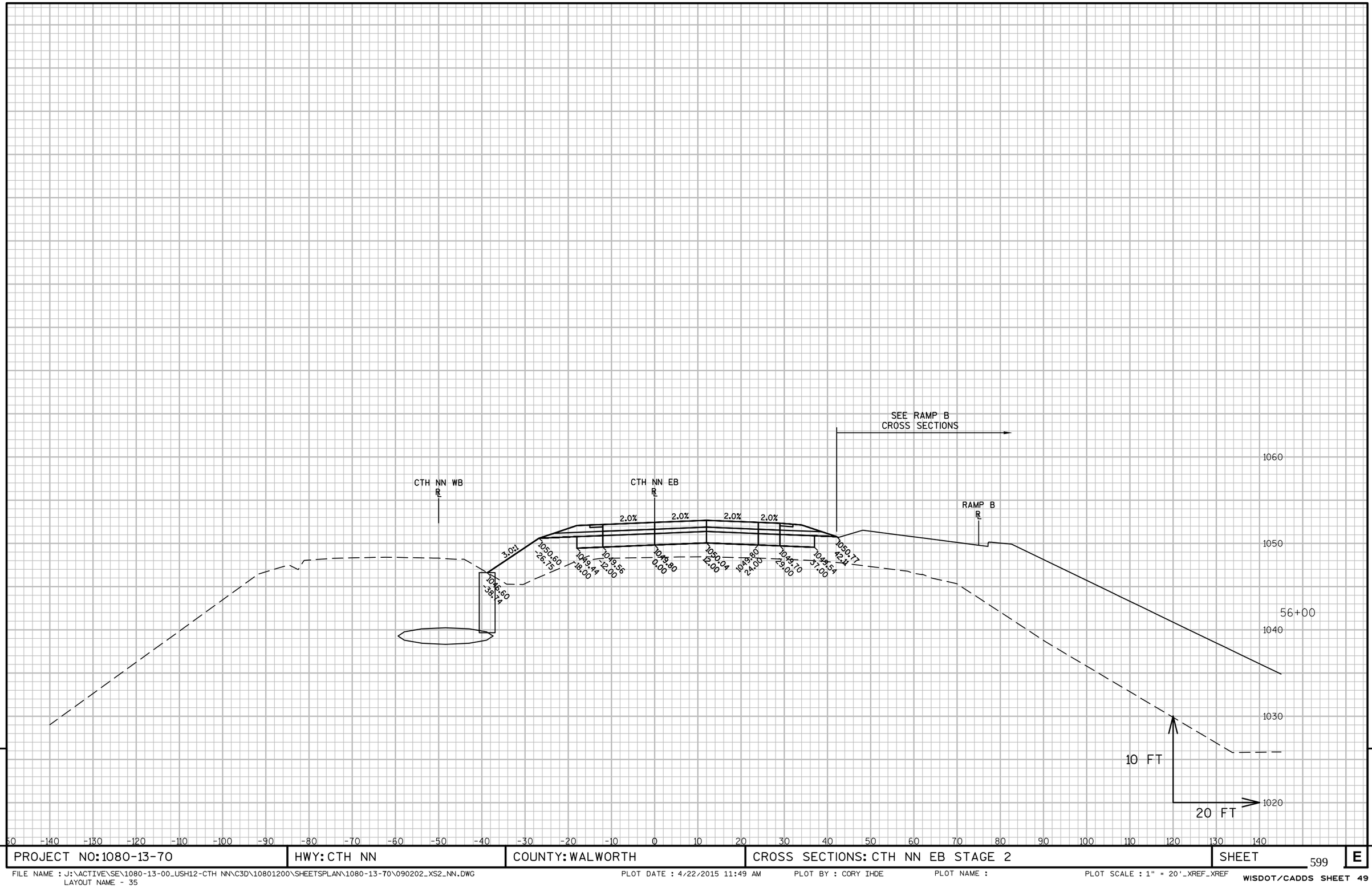
9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN EB STAGE 2	SHEET 598	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090202_XS2_NN.DWG
LAYOUT NAME - 34
PLOT DATE : 4/22/2015 11:49 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1" = 20'_XREF_XREF
WISDOT/CADDS SHEET 49



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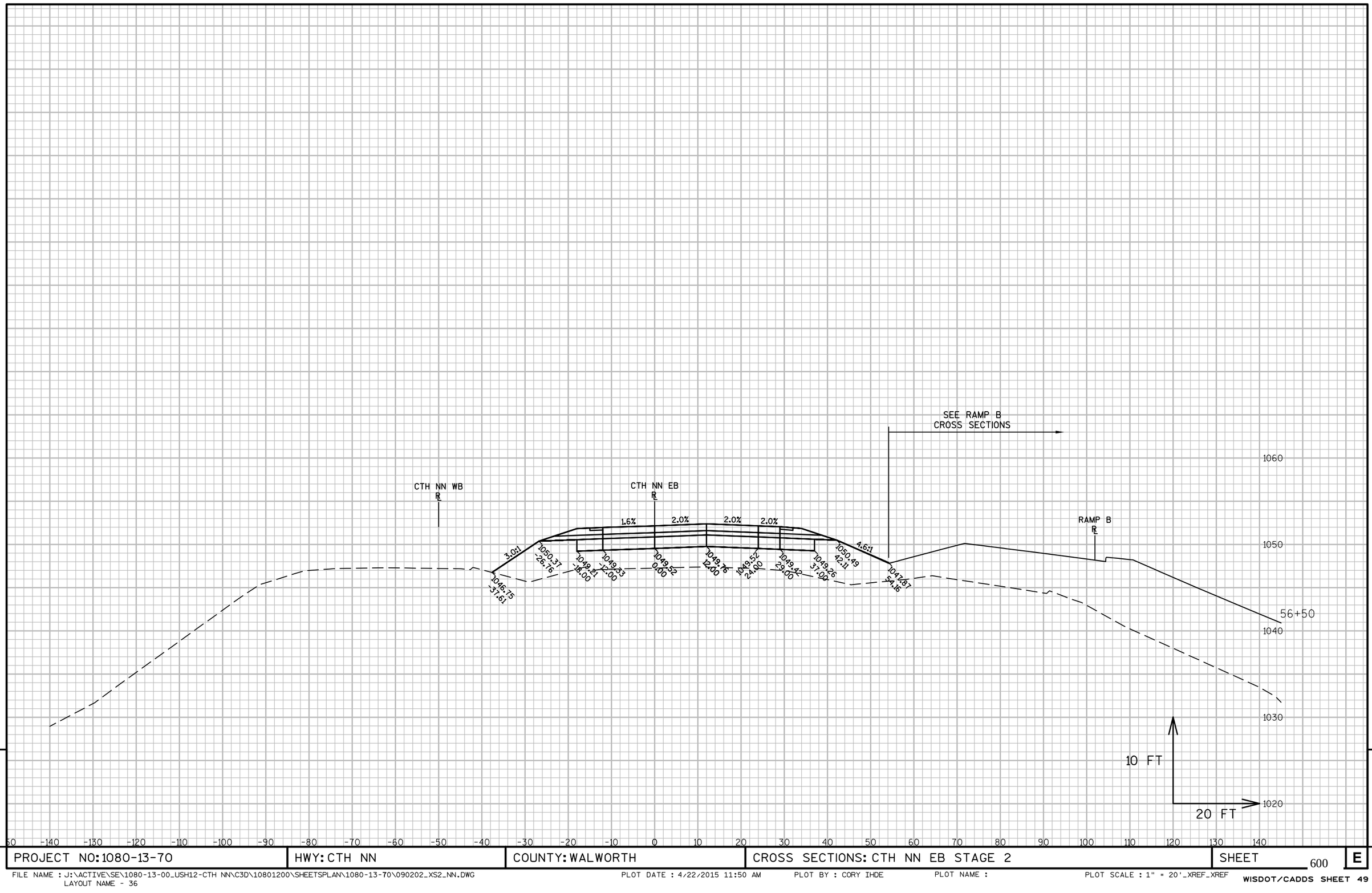
9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN EB STAGE 2	SHEET 599	E



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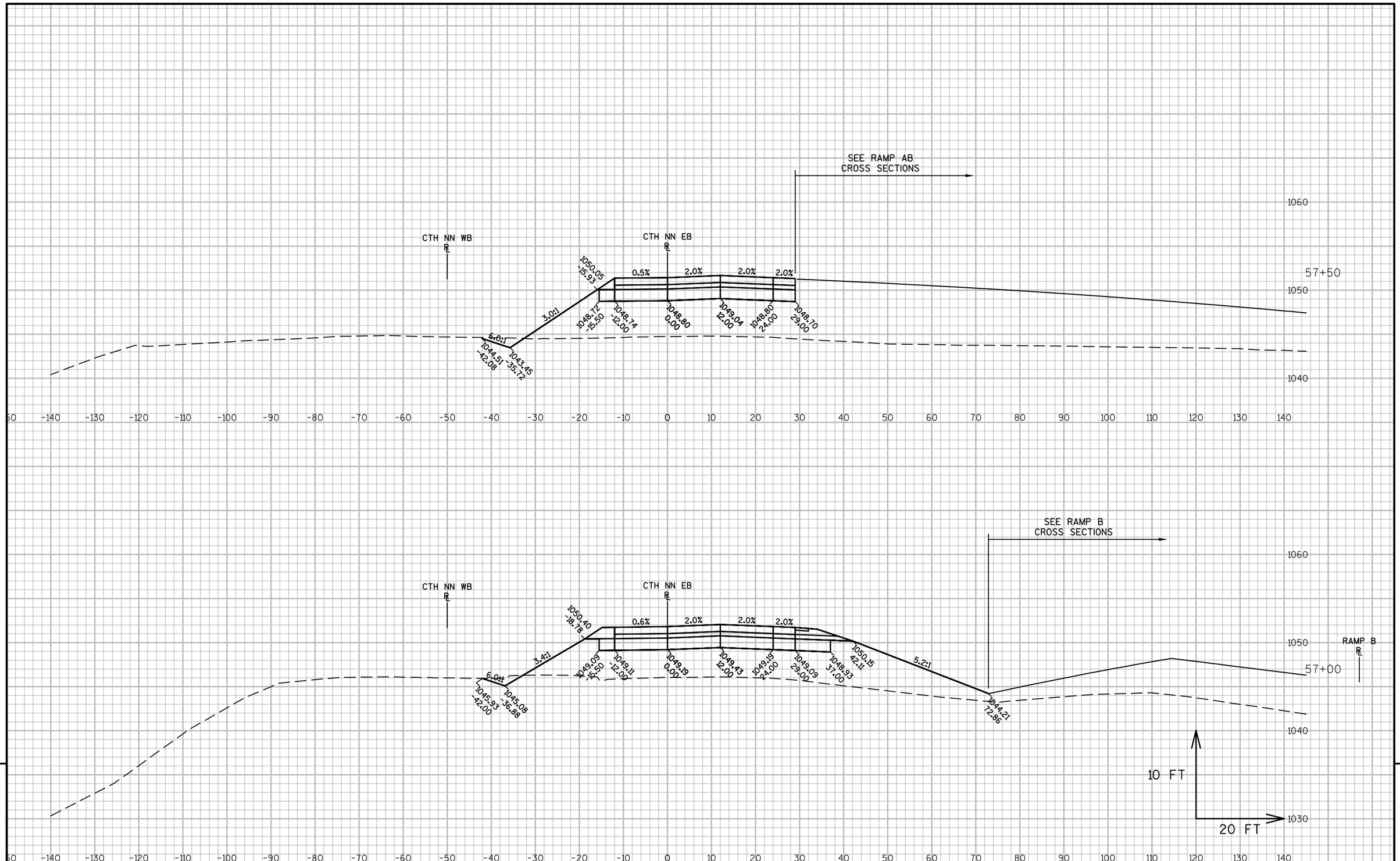
9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN EB STAGE 2	SHEET 600	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090202_XS2_NN.DWG
LAYOUT NAME - 36
PLOT DATE : 4/22/2015 11:50 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1" = 20'_XREF_XREF
WISDOT/CADDS SHEET 49



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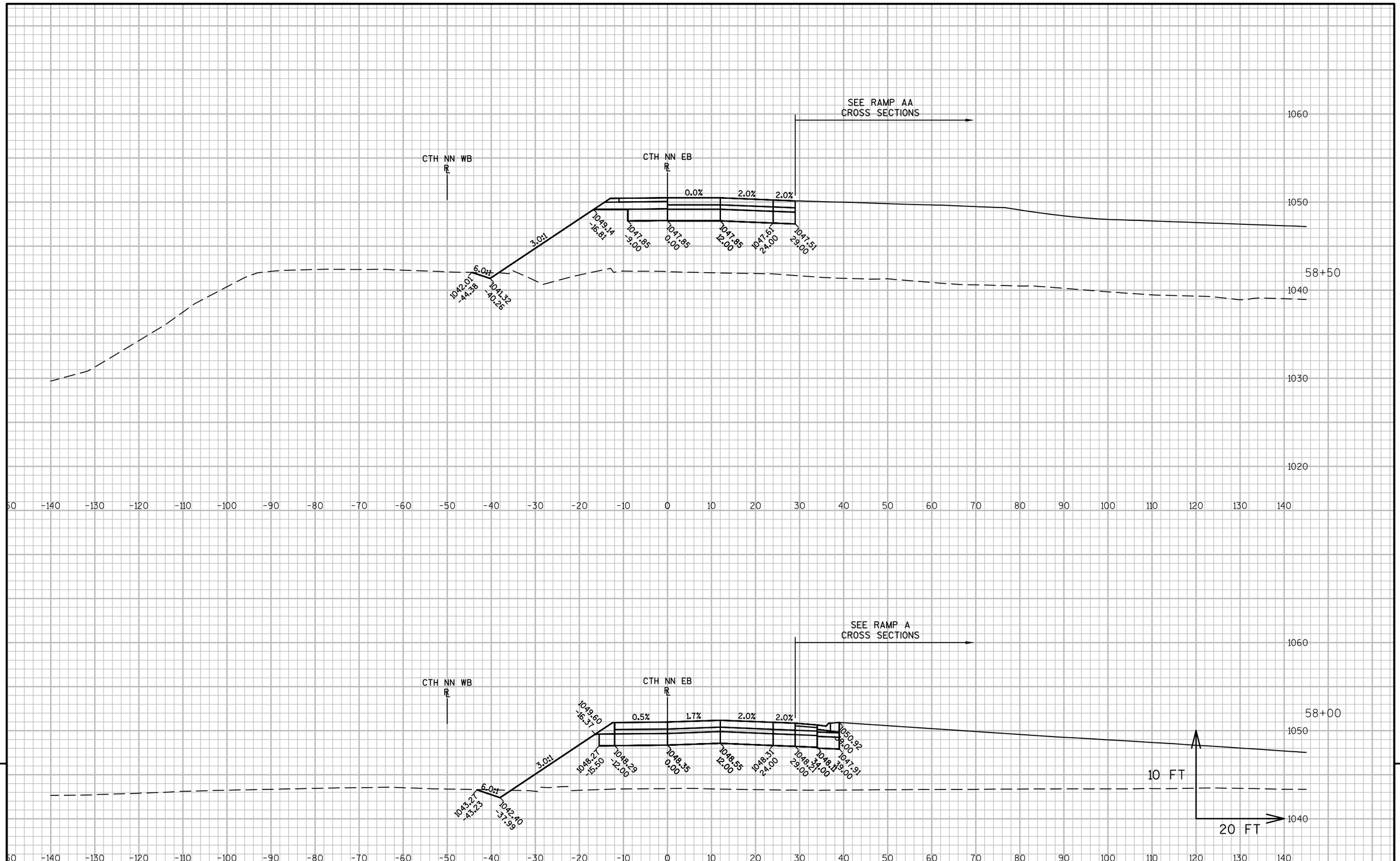
9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN EB STAGE 2	SHEET 601	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090202_XS2_NN.DWG
LAYOUT NAME - 37

PLOT DATE : 4/22/2015 11:50 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1" = 20'_XREF_XREF



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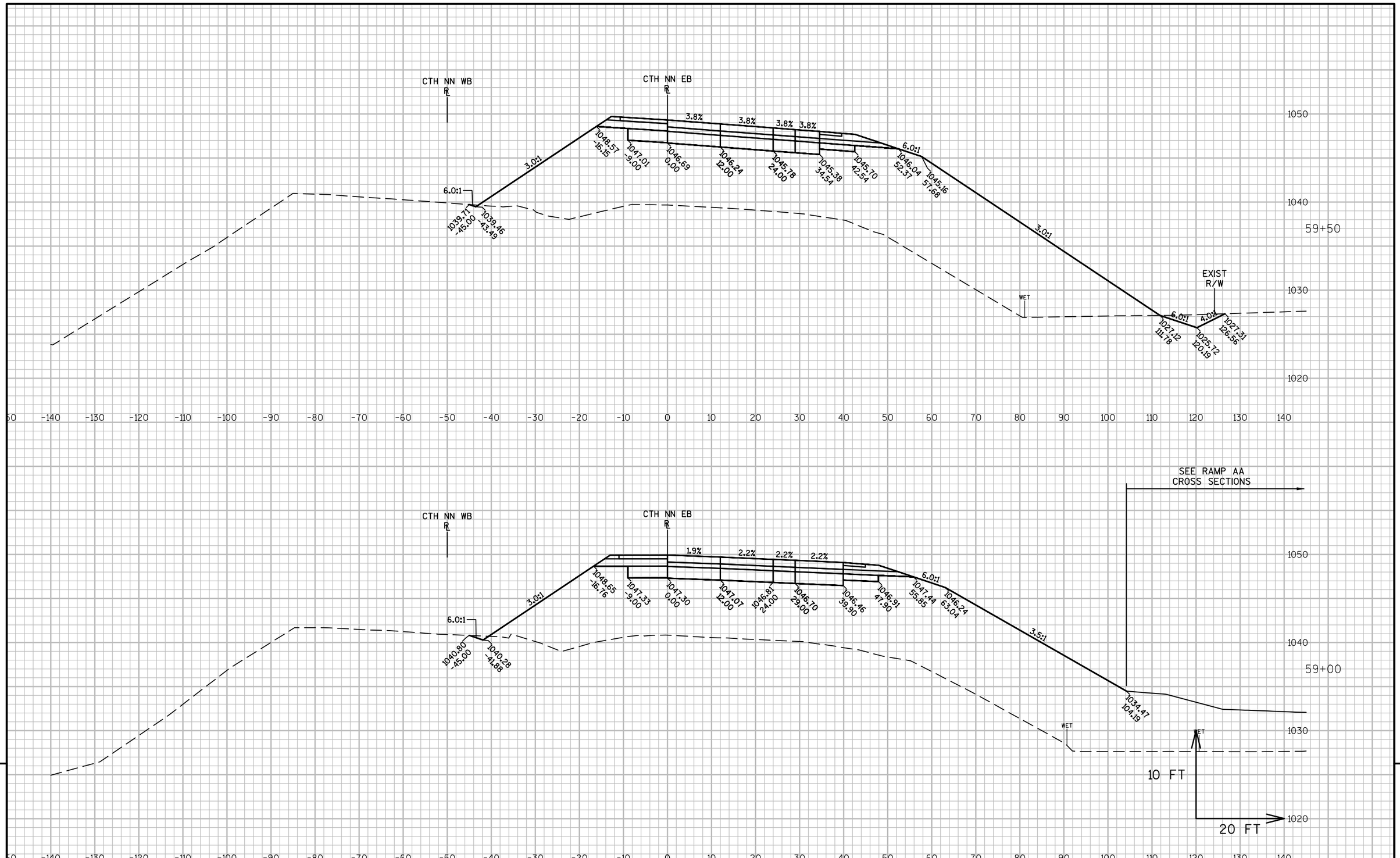
9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN EB STAGE 2	SHEET 602	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090202_XS2_NN.DWG
LAYOUT NAME - 38
PLOT DATE : 4/22/2015 11:50 AM
PLOT BY : CORY IHDE
PLOT NAME :
PLOT SCALE : 1" = 20'_XREF_XREF
WISDOT/CADDS SHEET 49



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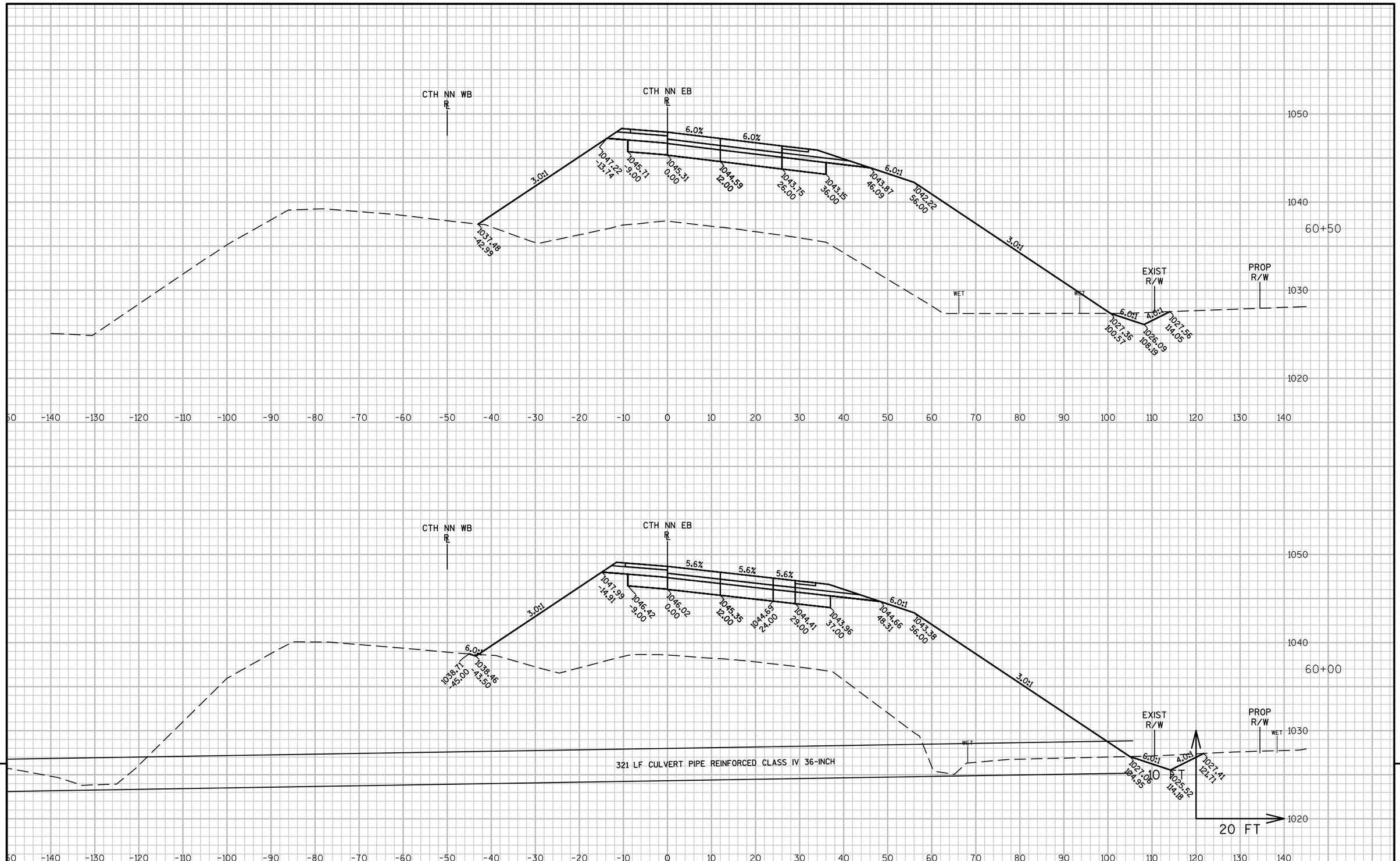
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN EB STAGE 2	SHEET 603 E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090202_XS2_NN.DWG
LAYOUT NAME - 39
PLOT DATE : 4/22/2015 11:50 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1" = 20'_XREF_XREF
WISDOT/CADDS SHEET 49



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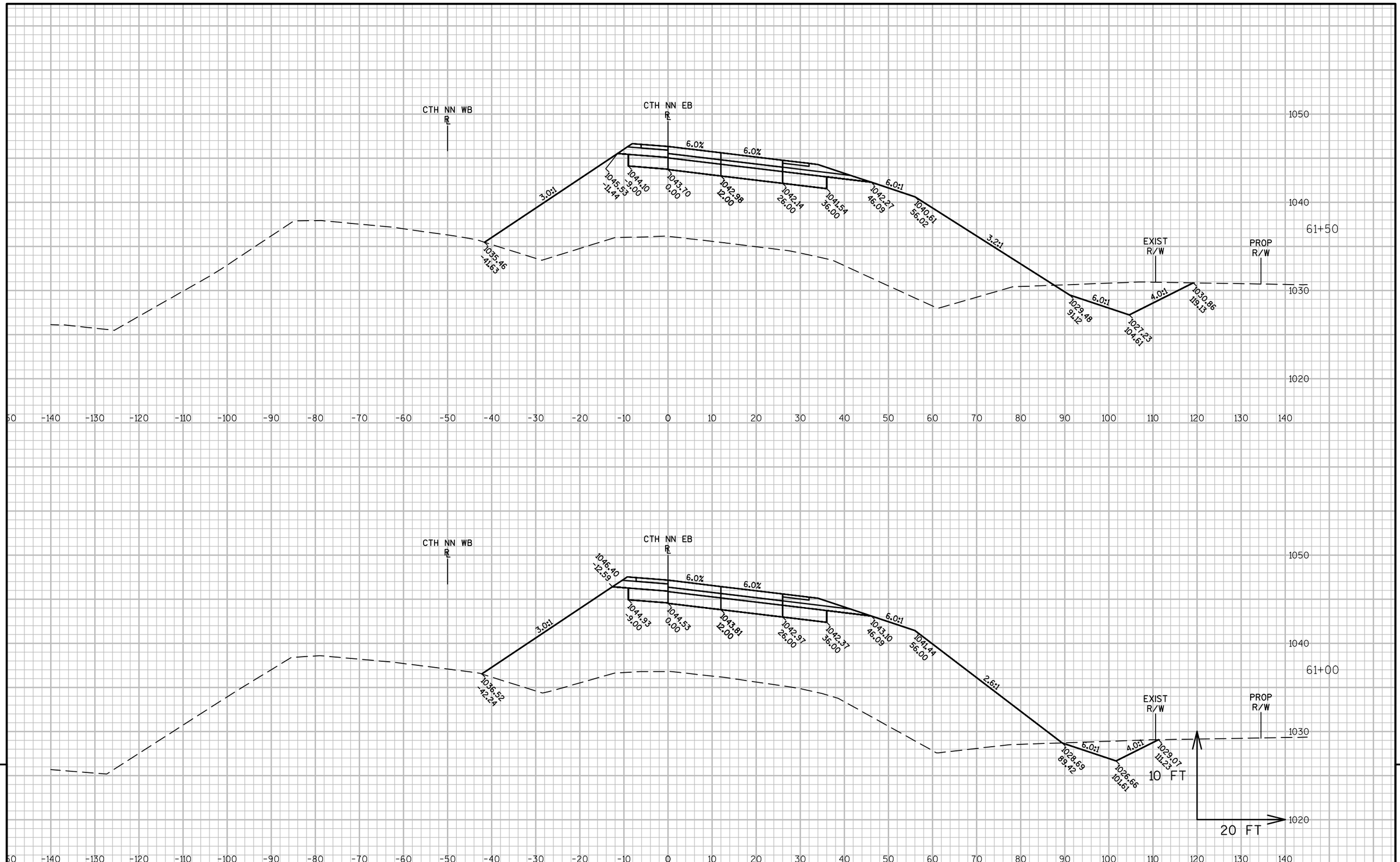
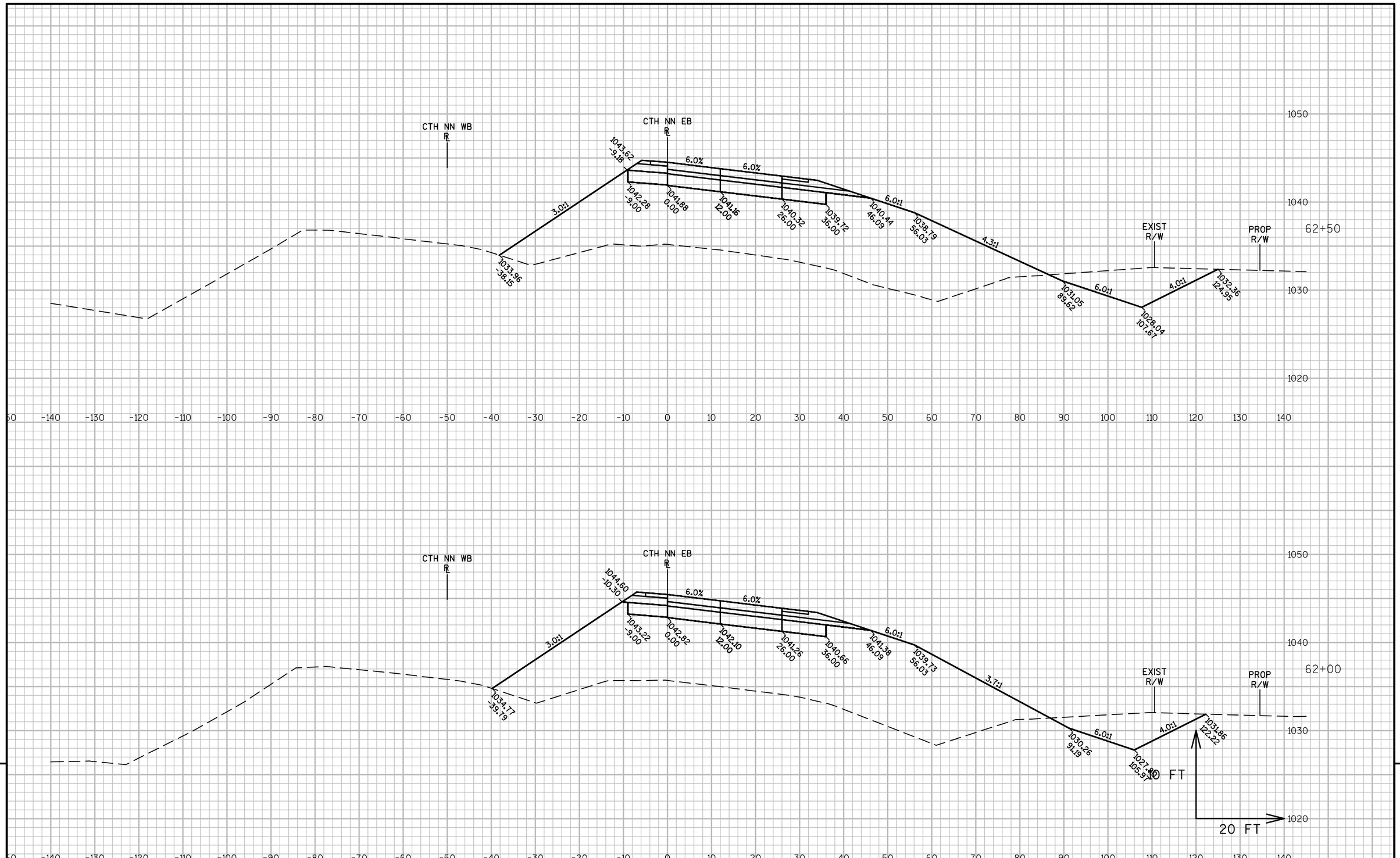
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN EB STAGE 2	SHEET 604	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090202_XS2_NN.DWG
LAYOUT NAME - 40
PLOT DATE : 4/22/2015 11:51 AM
PLOT BY : CORY IHDE
PLOT NAME :
PLOT SCALE : 1" = 20'_XREF_XREF
WISDOT/CADDS SHEET 49



PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN EB STAGE 2	SHEET 605	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090202_XS2_NN.DWG
LAYOUT NAME - 41
PLOT DATE : 4/22/2015 11:51 AM
PLOT BY : CORY IHDE
PLOT NAME :
PLOT SCALE : 1" = 20'_XREF_XREF
WISDOT/CADDS SHEET 49



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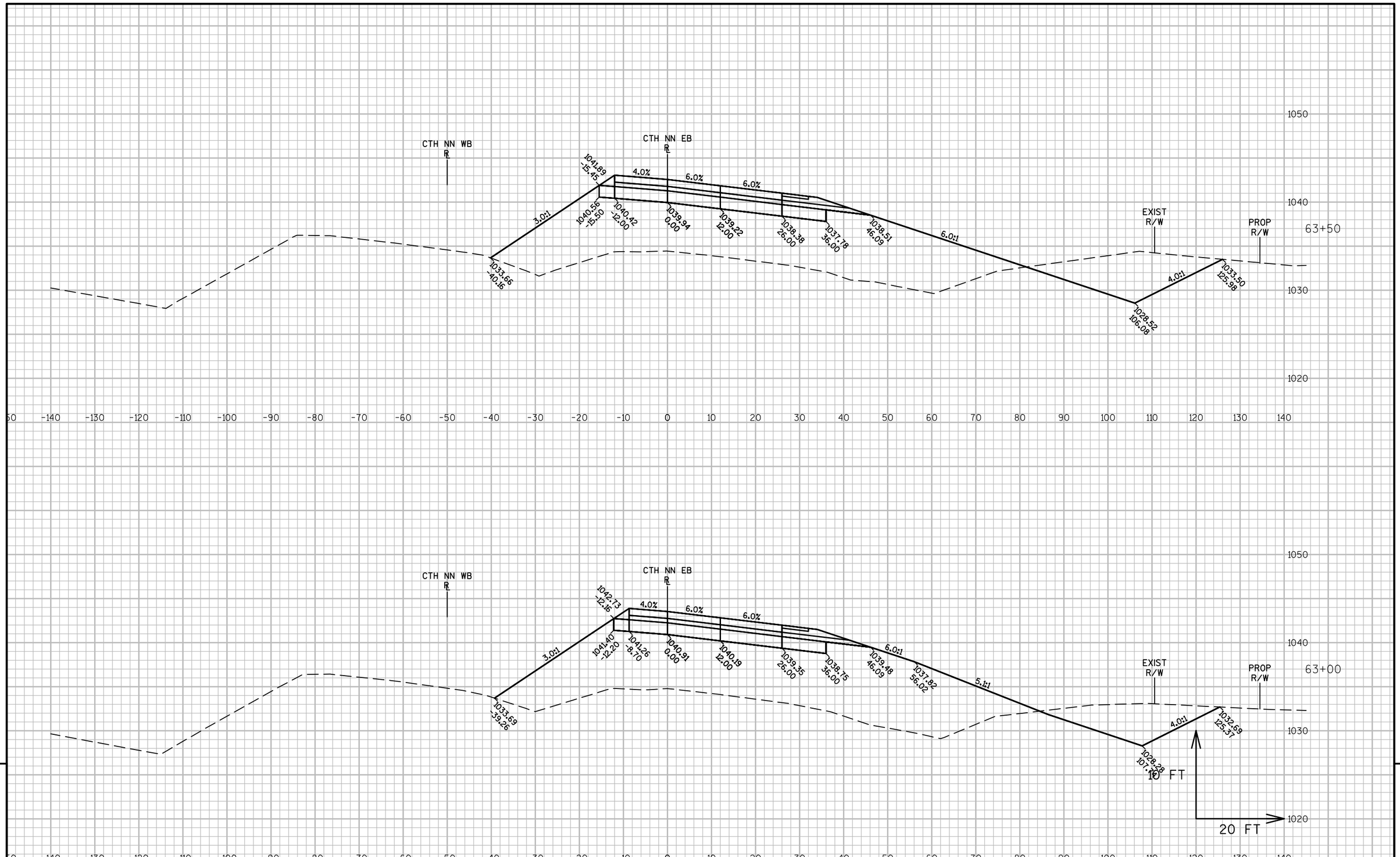
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN EB STAGE 2	SHEET 606	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090202_XS2_NN.DWG
LAYOUT NAME - 42

PLOT DATE : 4/22/2015 11:51 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1" = 20'_XREF_XREF

WISDOT/CADDS SHEET 49



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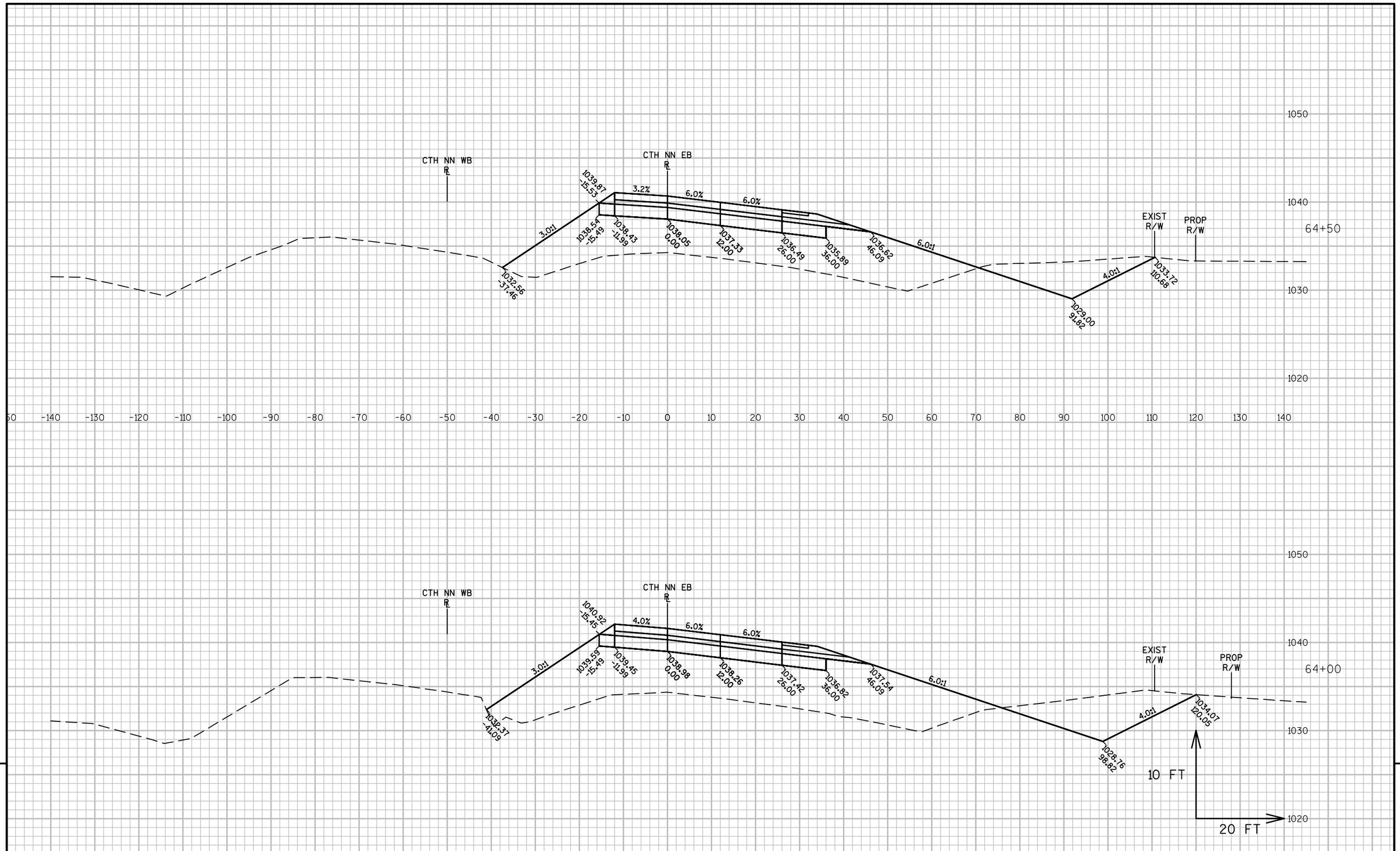
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN EB STAGE 2	SHEET 607	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090202_XS2_NN.DWG
LAYOUT NAME - 43
PLOT DATE : 4/22/2015 11:51 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1" = 20'_XREF_XREF
WISDOT/CADDS SHEET 49



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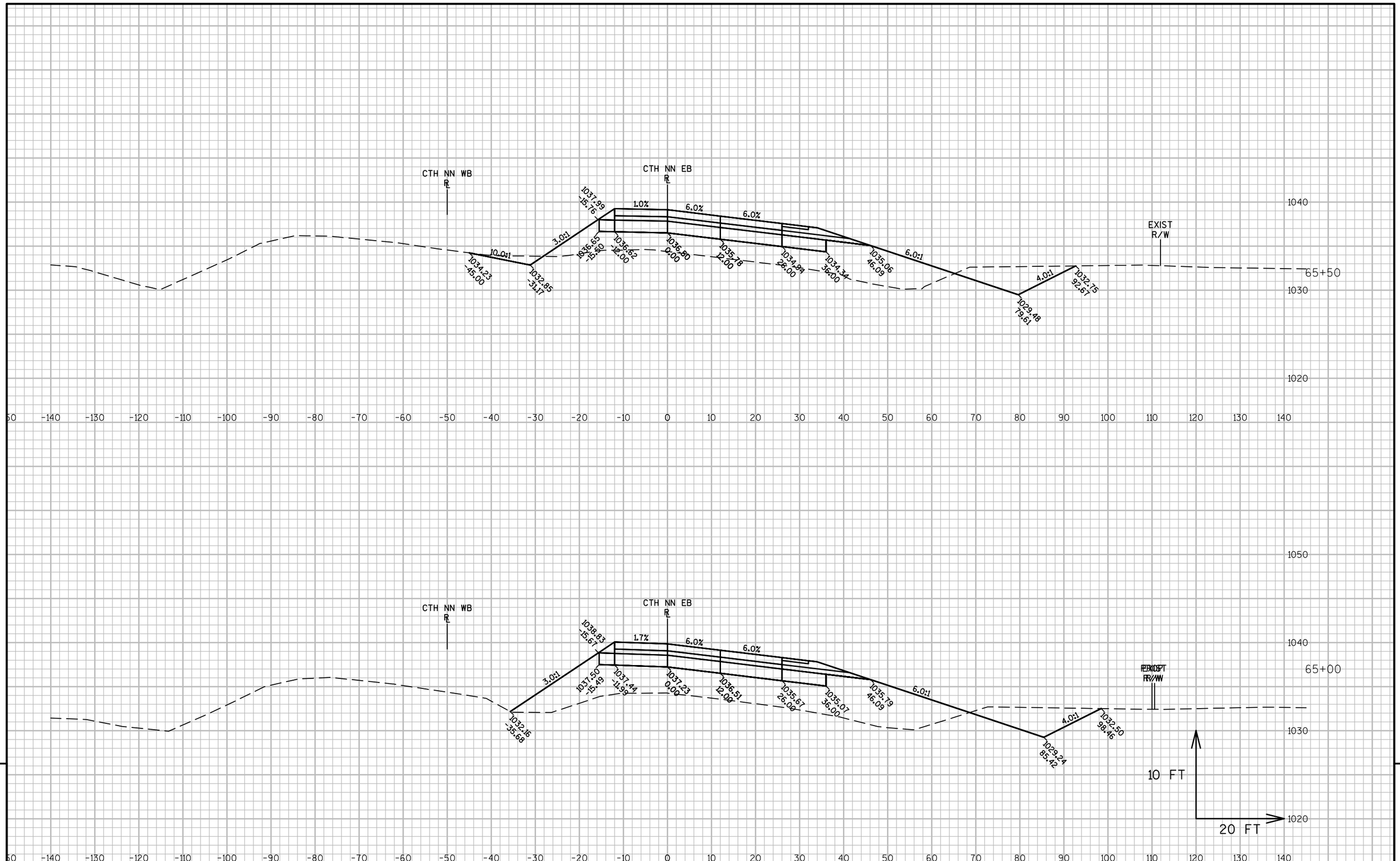
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN EB STAGE 2	SHEET 608	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090202_XS2_NN.DWG
LAYOUT NAME - 44

PLOT DATE : 4/22/2015 11:52 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1" = 20'_XREF_XREF



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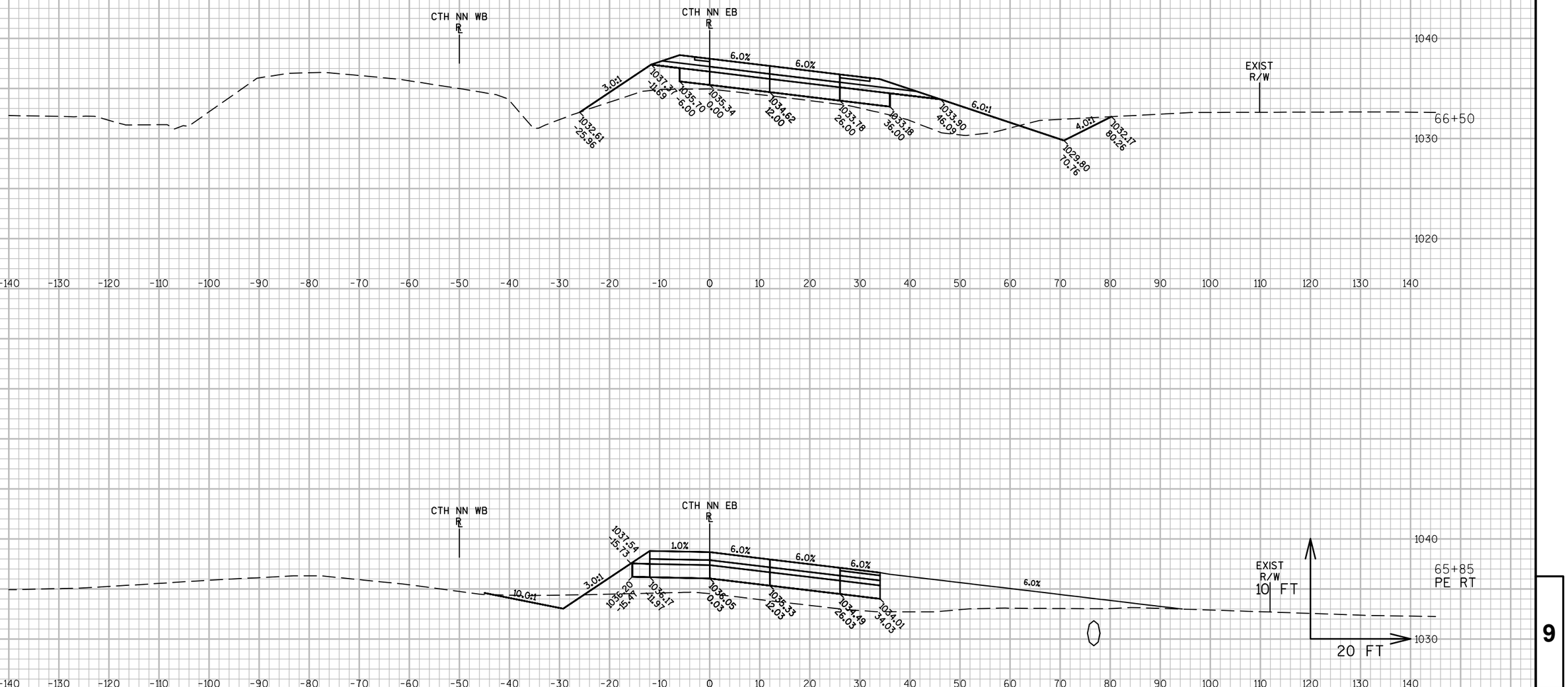
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN EB STAGE 2	SHEET 609	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090202_XS2_NN.DWG
LAYOUT NAME - 45

PLOT DATE : 4/22/2015 11:52 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1" = 20'_XREF_XREF

WISDOT/CADDS SHEET 49



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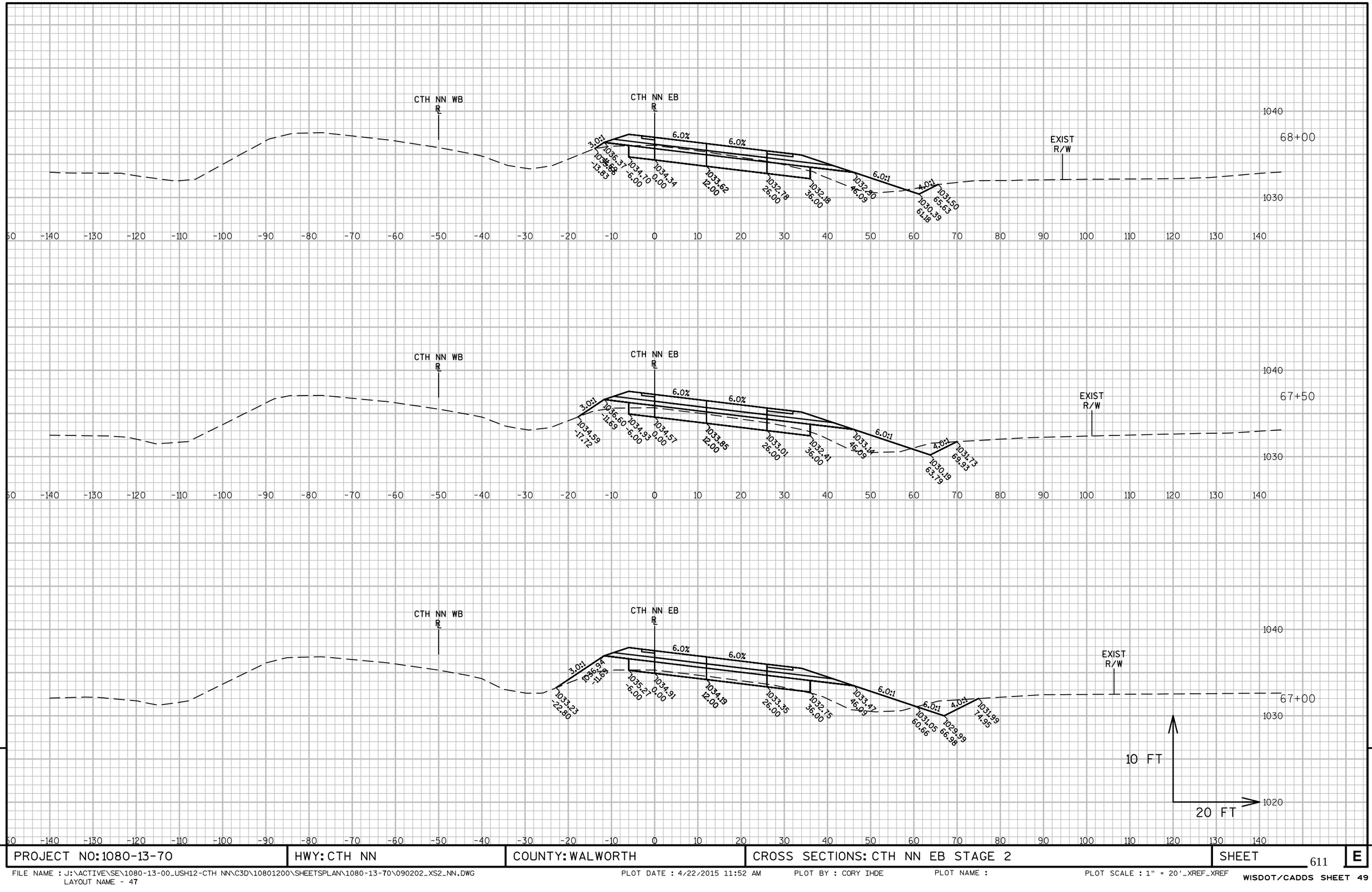
9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN EB STAGE 2	SHEET 610	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090202_XS2_NN.DWG
LAYOUT NAME - 46

PLOT DATE : 4/22/2015 11:52 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1" = 20'_XREF_XREF

WISDOT/CADDS SHEET 49



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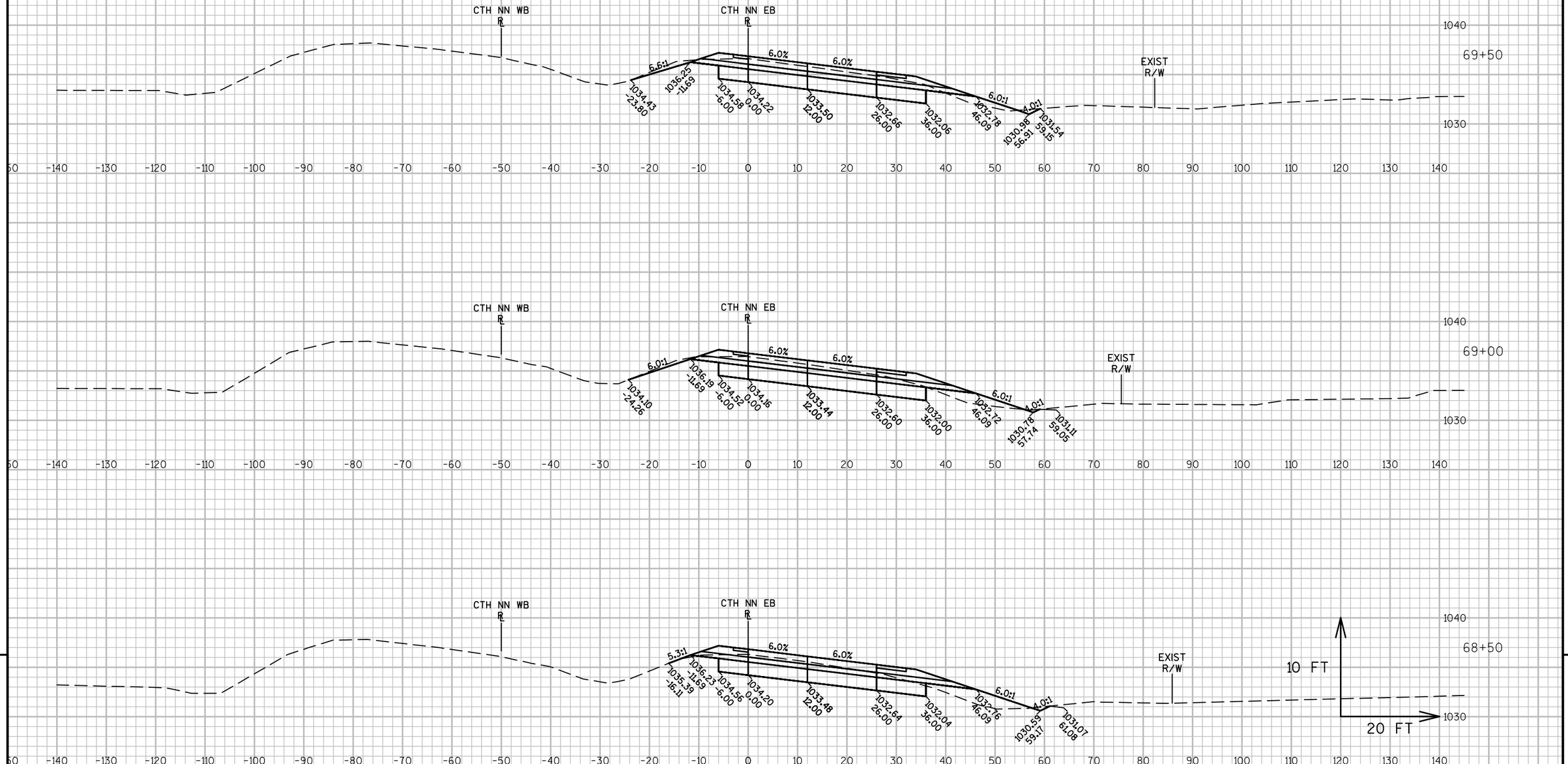
9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN EB STAGE 2	SHEET 611	E

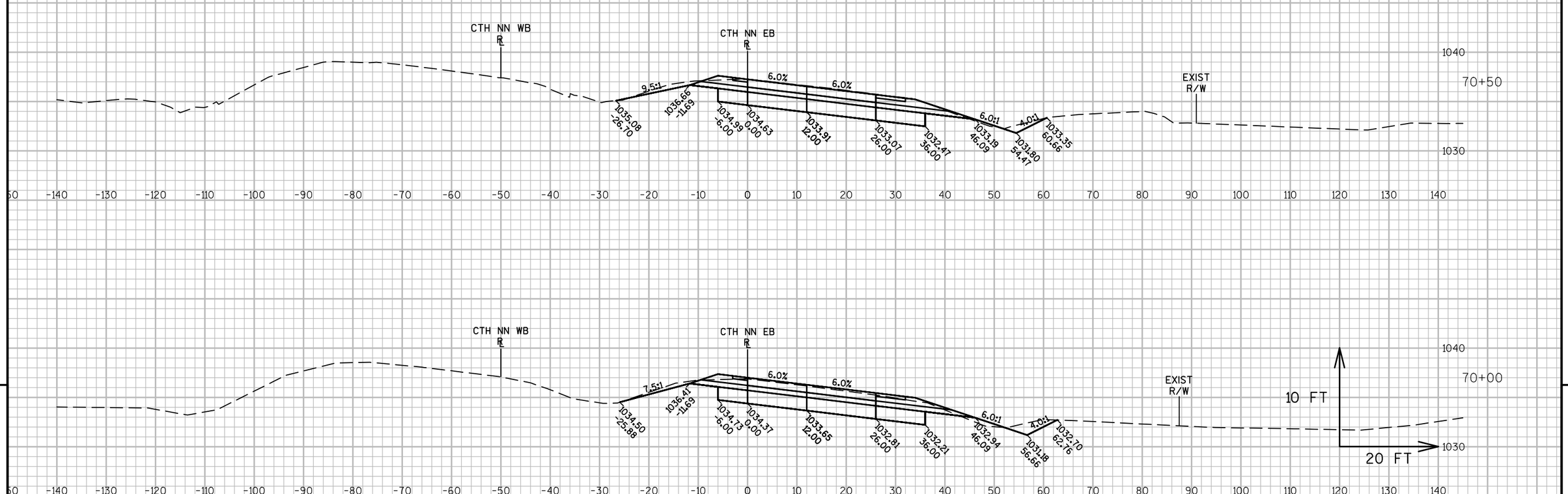
FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090202_XS2_NN.DWG
LAYOUT NAME - 47

PLOT DATE : 4/22/2015 11:52 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1" = 20'_XREF_XREF

WISDOT/CADDS SHEET 49



PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN EB STAGE 2	SHEET 612 E



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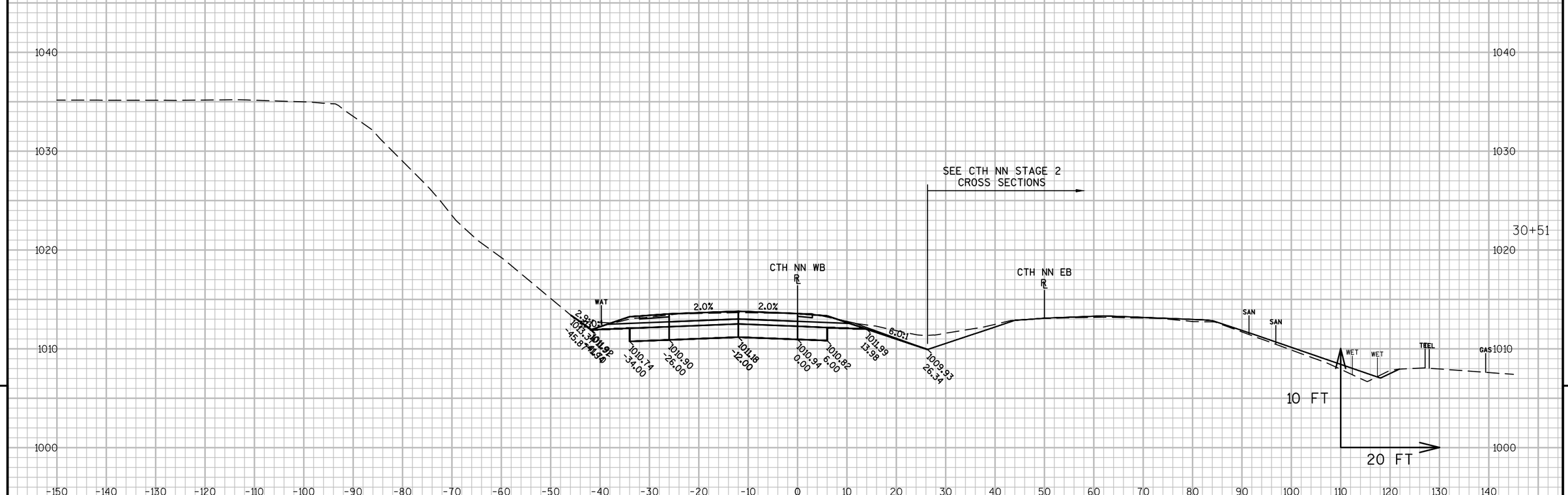
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN EB STAGE 2	SHEET 613	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090202_XS2_NN.DWG
LAYOUT NAME - 49

PLOT DATE : 4/22/2015 11:53 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1" = 20'_XREF_XREF

WISDOT/CADDS SHEET 49



9

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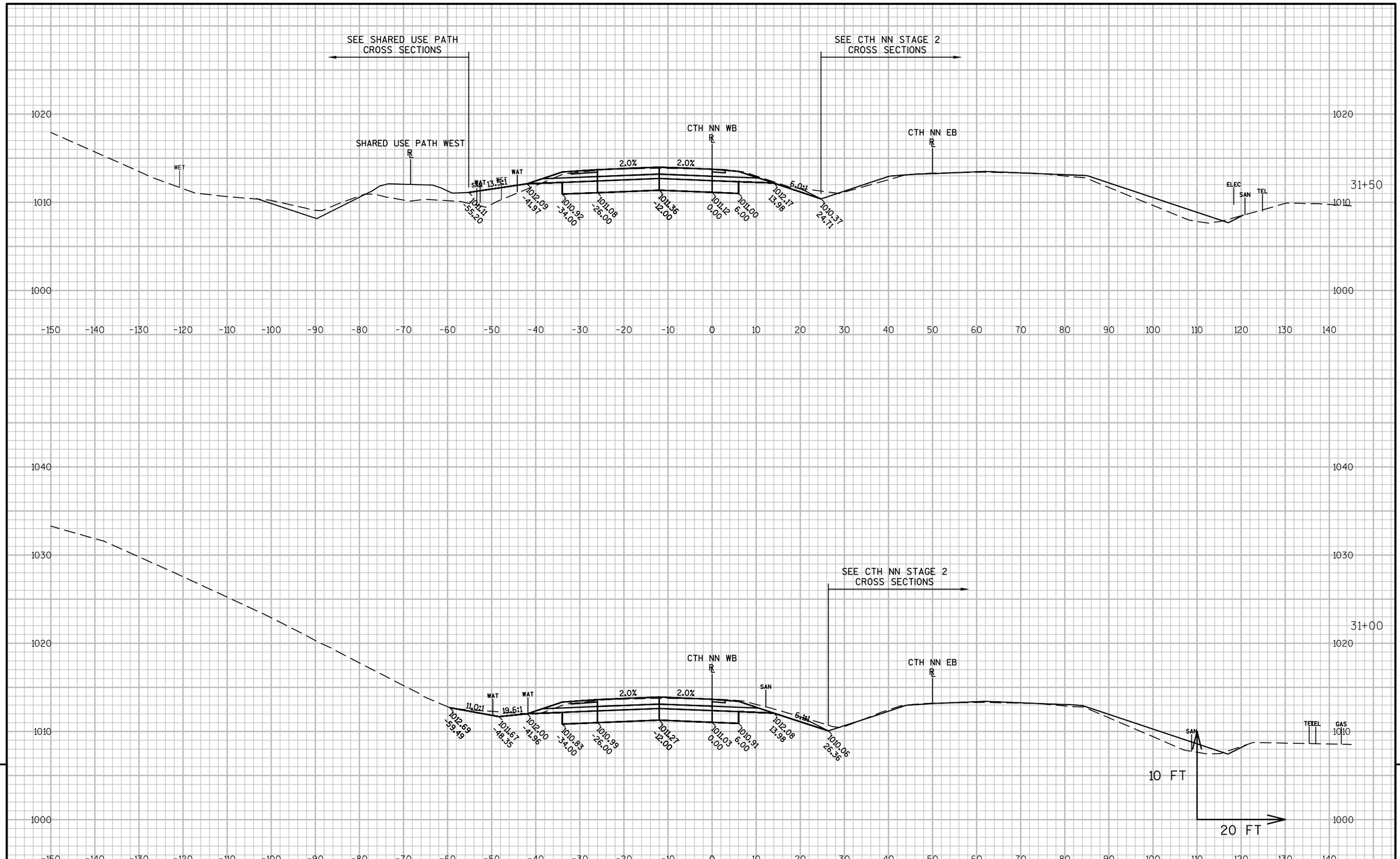
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN WB STAGE 3	SHEET 614	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090203_XS3_NN.DWG
LAYOUT NAME - 01
PLOT DATE : 4/29/2015 7:34 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:20_XREF
WISDOT/CADDS SHEET 49

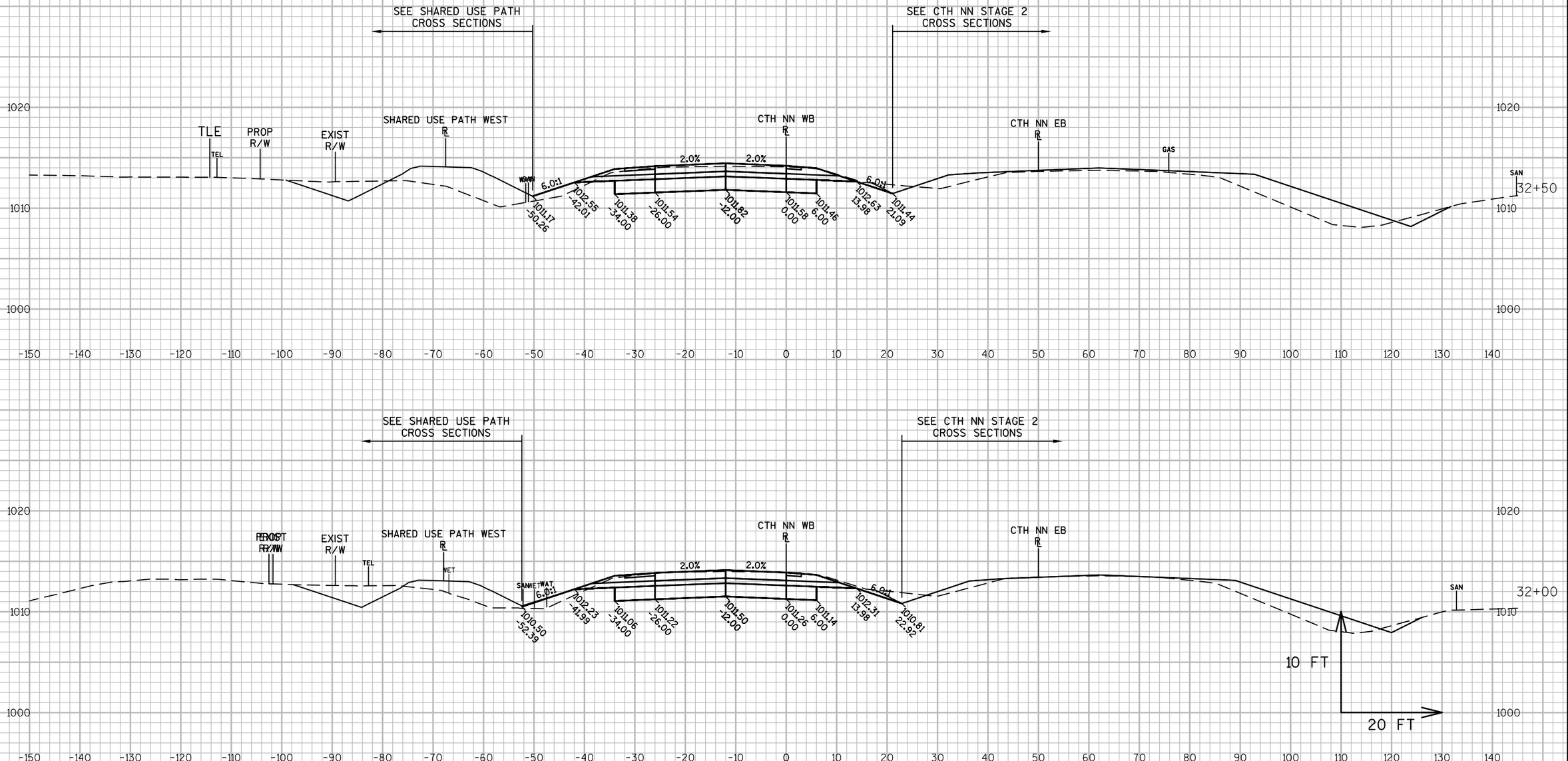


PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN WB STAGE 3	SHEET 615 E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090203_XS3_NN.DWG
LAYOUT NAME - 02

PLOT DATE : 4/29/2015 7:34 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:20_XREF

WISDOT/CADDS SHEET 49

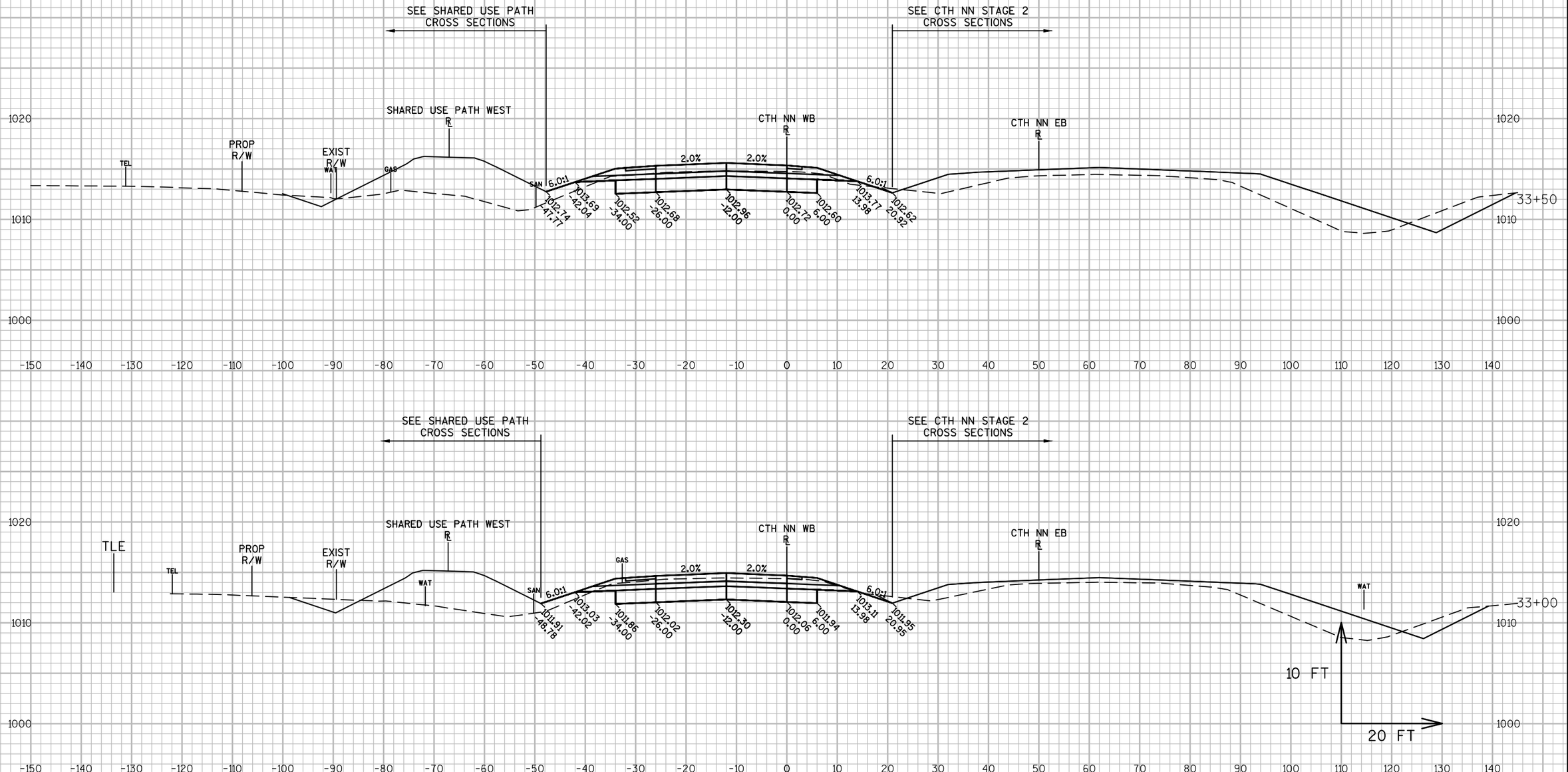


PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN WB STAGE 3	SHEET 616 E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090203_XS3_NN.DWG
LAYOUT NAME - 03

PLOT DATE : 4/29/2015 7:35 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:20_XREF

WISDOT/CADDS SHEET 49

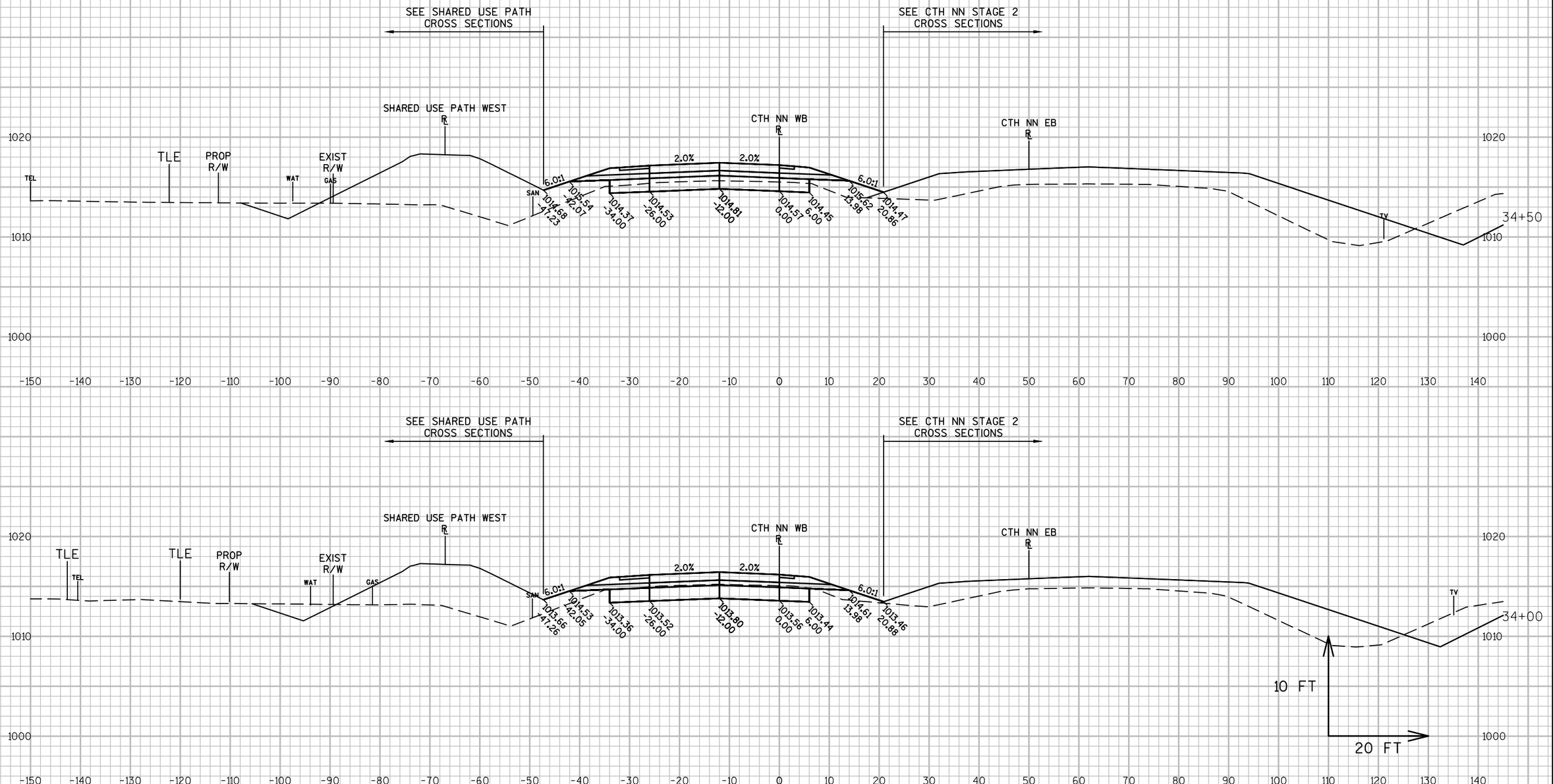


PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN WB STAGE 3	SHEET 617 E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090203_XS3_NN.DWG
LAYOUT NAME - 04

PLOT DATE : 4/29/2015 7:35 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:20_XREF

WISDOT/CADDS SHEET 49

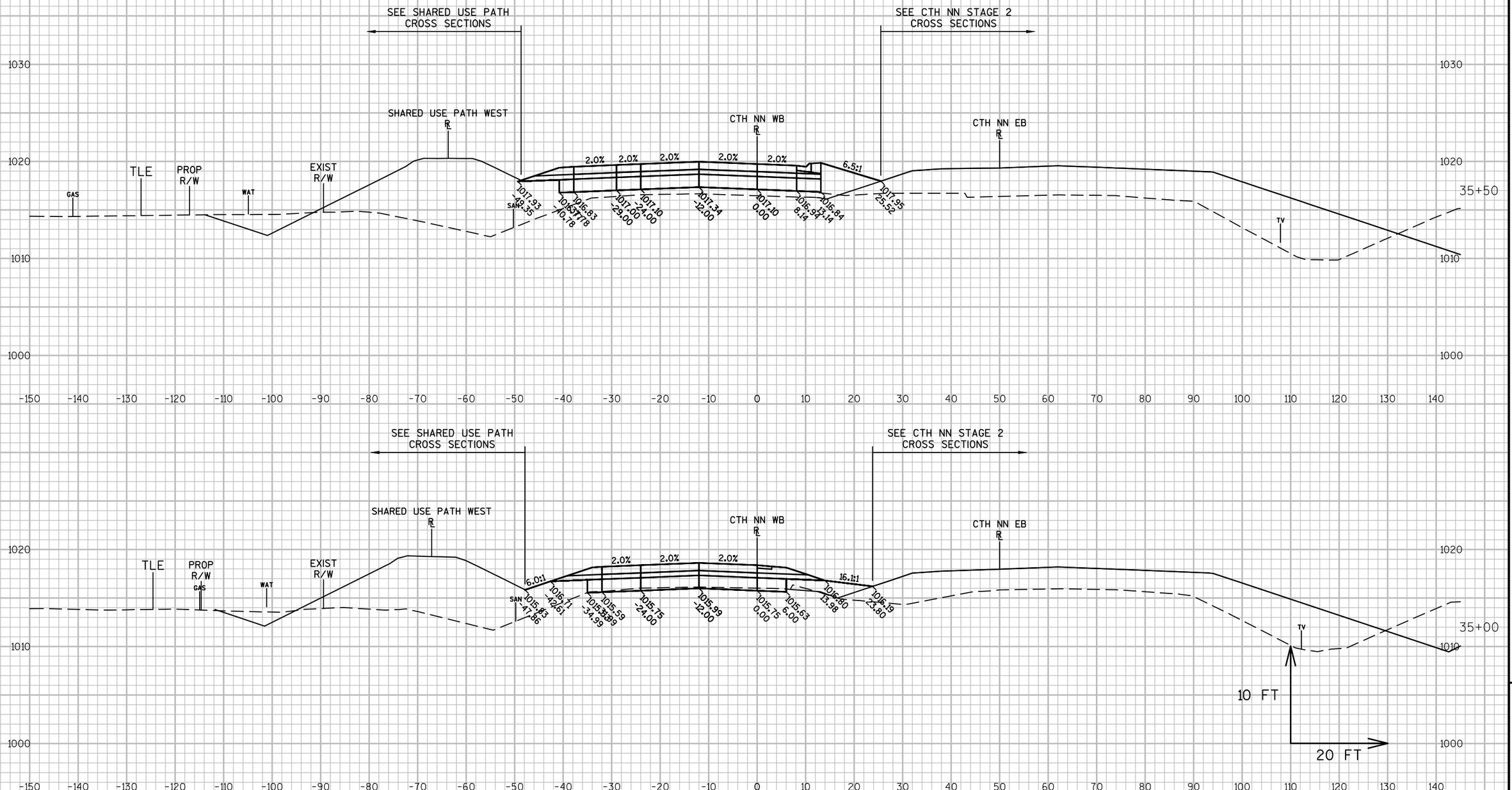


PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN WB STAGE 3	SHEET 618 E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090203_XS3_NN.DWG
LAYOUT NAME - 05

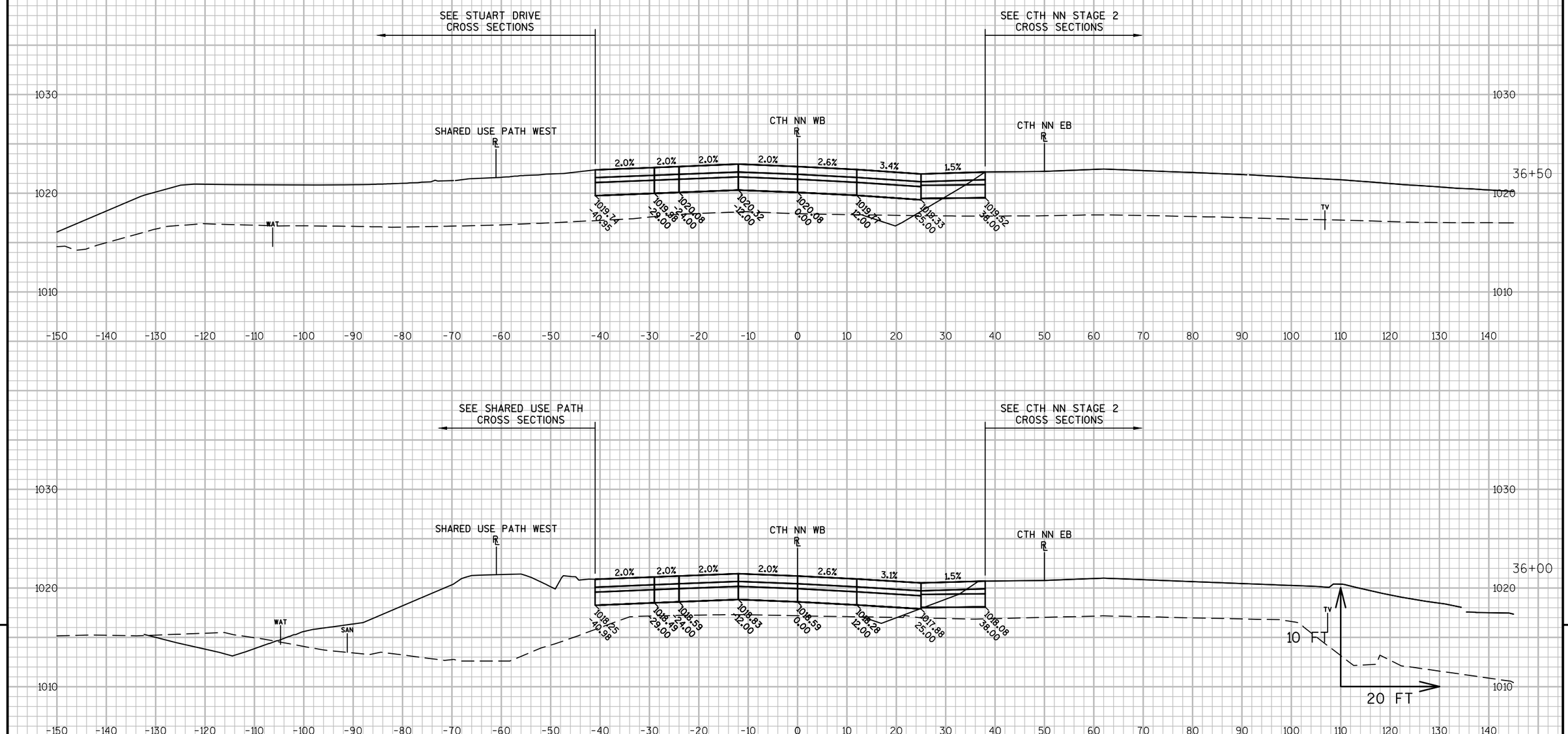
PLOT DATE : 4/29/2015 7:35 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:20_XREF

WISDOT/CADDS SHEET 49



PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN WB STAGE 3	SHEET 619 E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090203_XS3_NN.DWG
LAYOUT NAME - 06
PLOT DATE : 4/29/2015 7:35 AM
PLOT BY : CORY IHDE
PLOT NAME :
PLOT SCALE : 1:20_XREF
WISDOT/CADDS SHEET 49

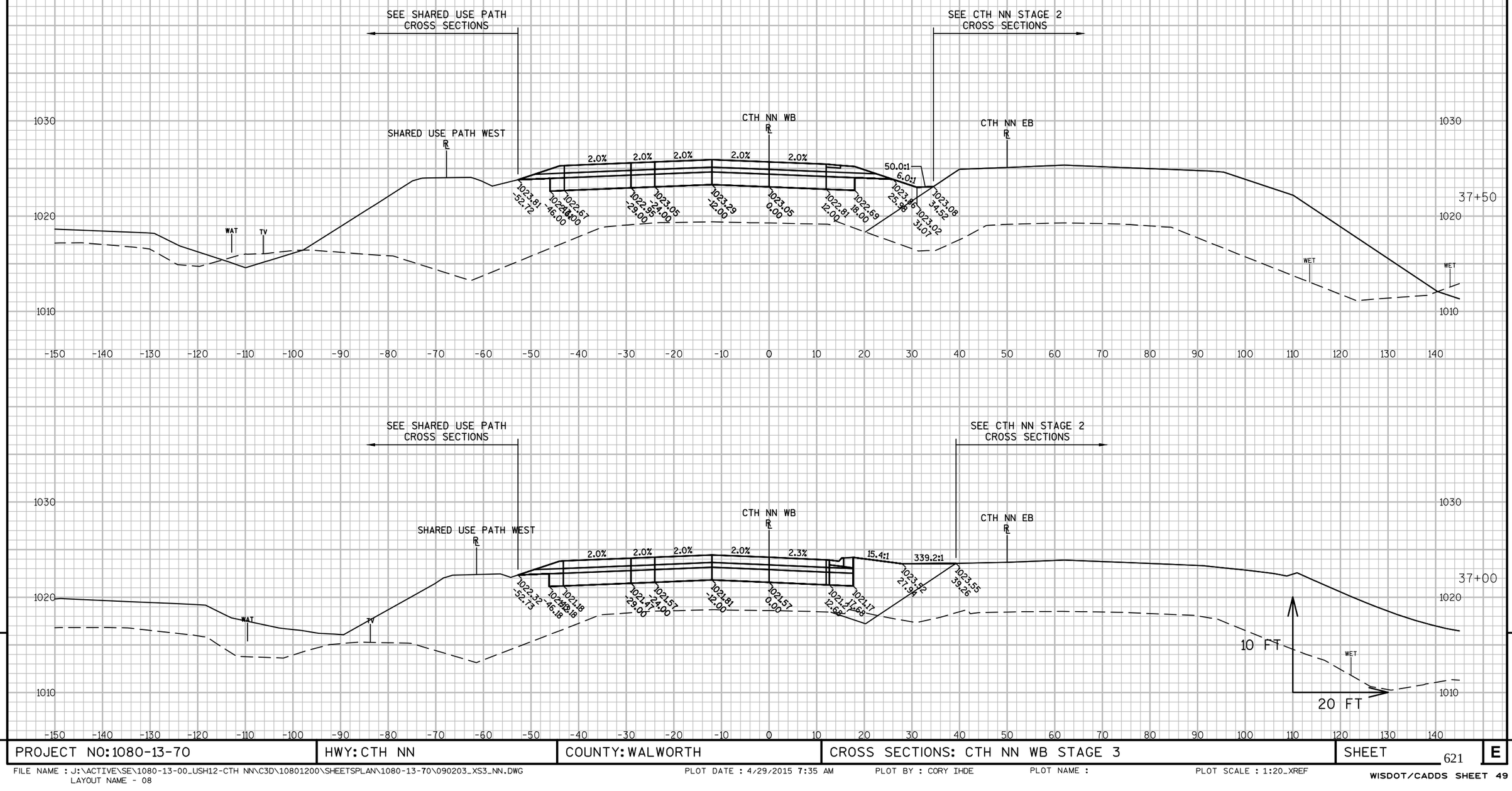


PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN WB STAGE 3	SHEET 620	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090203_XS3_NN.DWG
LAYOUT NAME - 07

PLOT DATE : 4/29/2015 7:35 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:20_XREF

WISDOT/CADDS SHEET 49

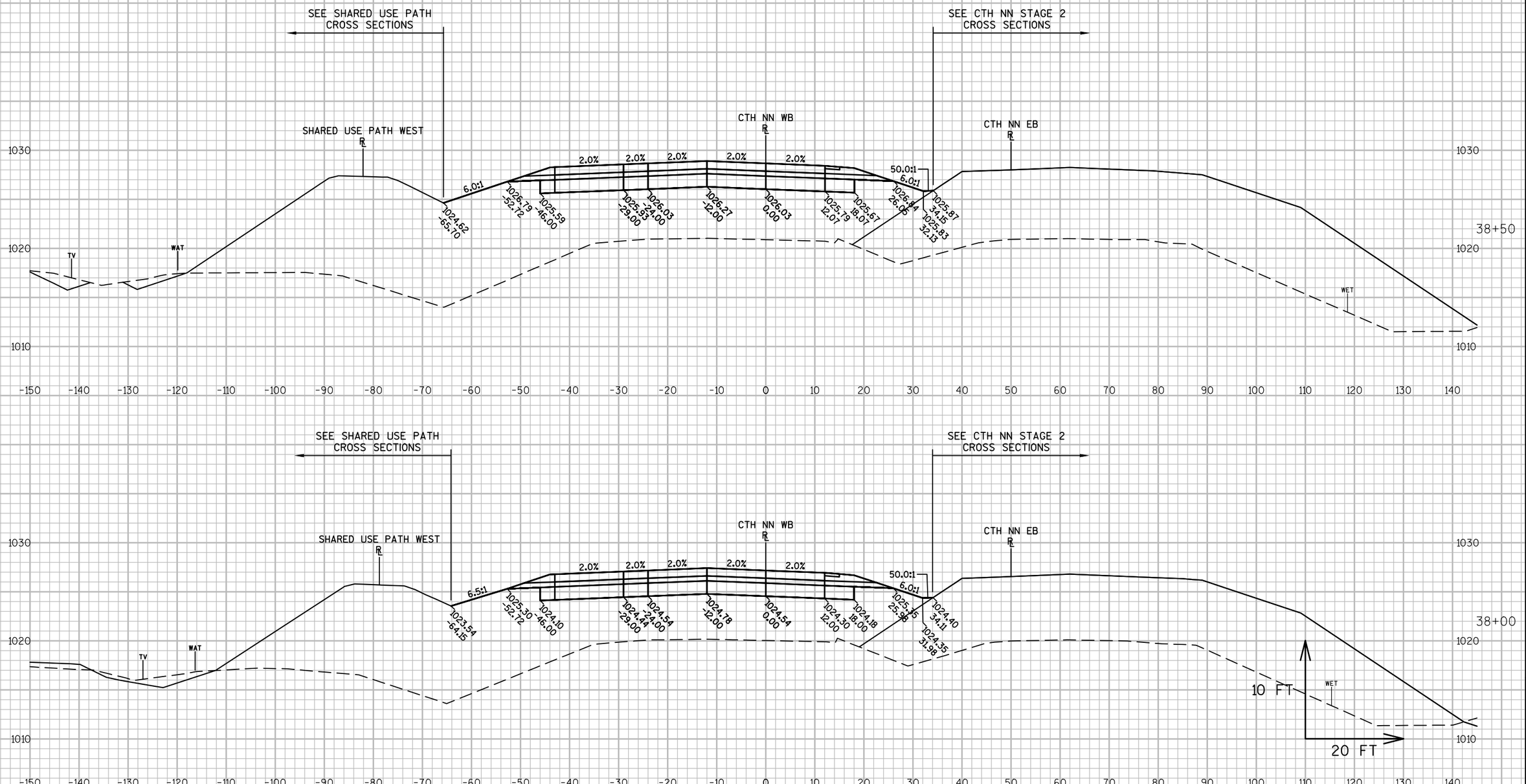


PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN WB STAGE 3	SHEET 621	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090203_XS3_NN.DWG
LAYOUT NAME - 08

PLOT DATE : 4/29/2015 7:35 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:20_XREF

WISDOT/CADDS SHEET 49



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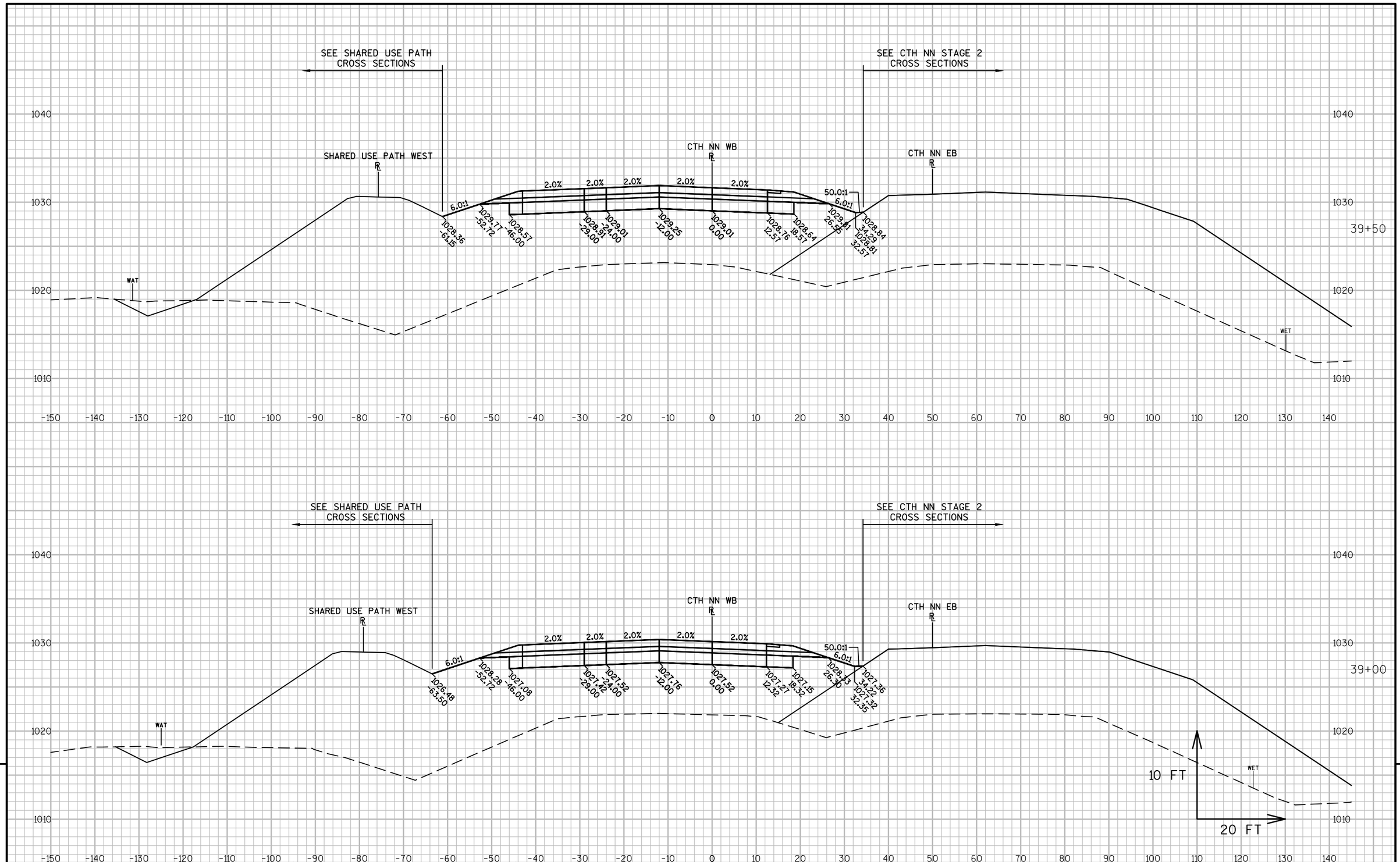
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN WB STAGE 3	SHEET 622	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090203_XS3_NN.DWG
LAYOUT NAME - 09

PLOT DATE : 4/29/2015 7:36 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:20_XREF

WISDOT/CADDS SHEET 49

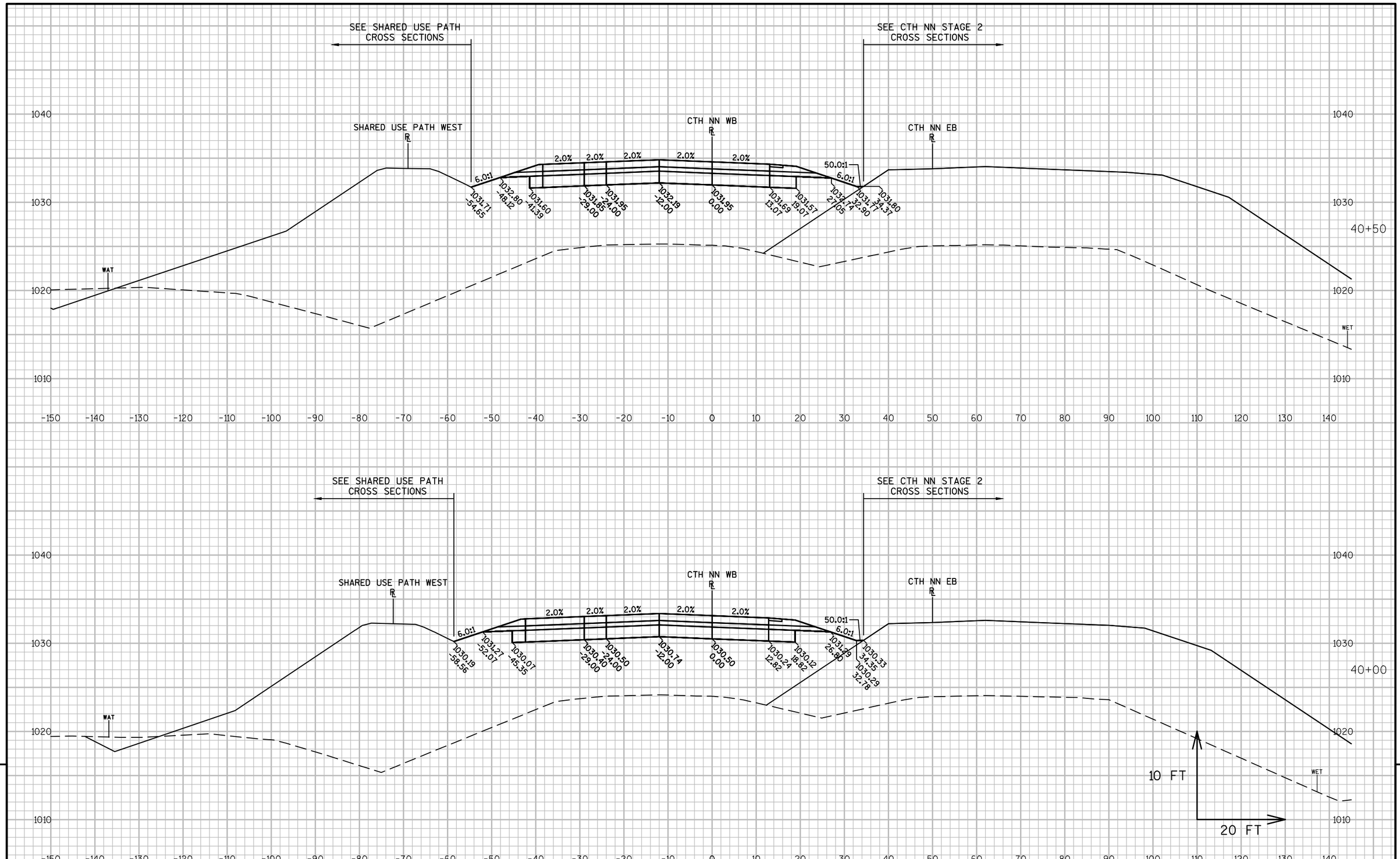


PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN WB STAGE 3	SHEET 623 E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090203_XS3_NN.DWG
LAYOUT NAME - 10

PLOT DATE : 4/29/2015 7:36 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:20_XREF

WISDOT/CADDS SHEET 49



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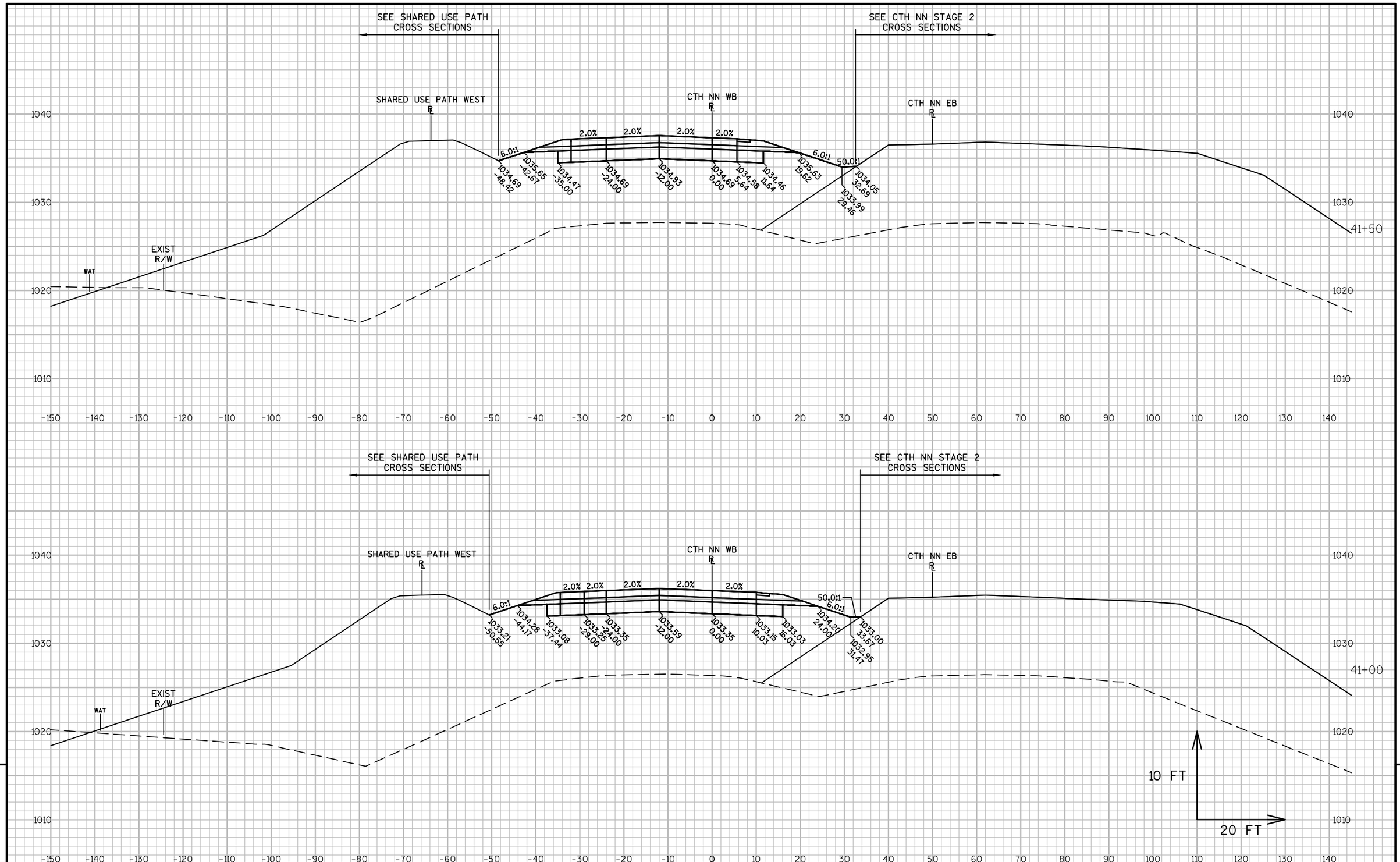
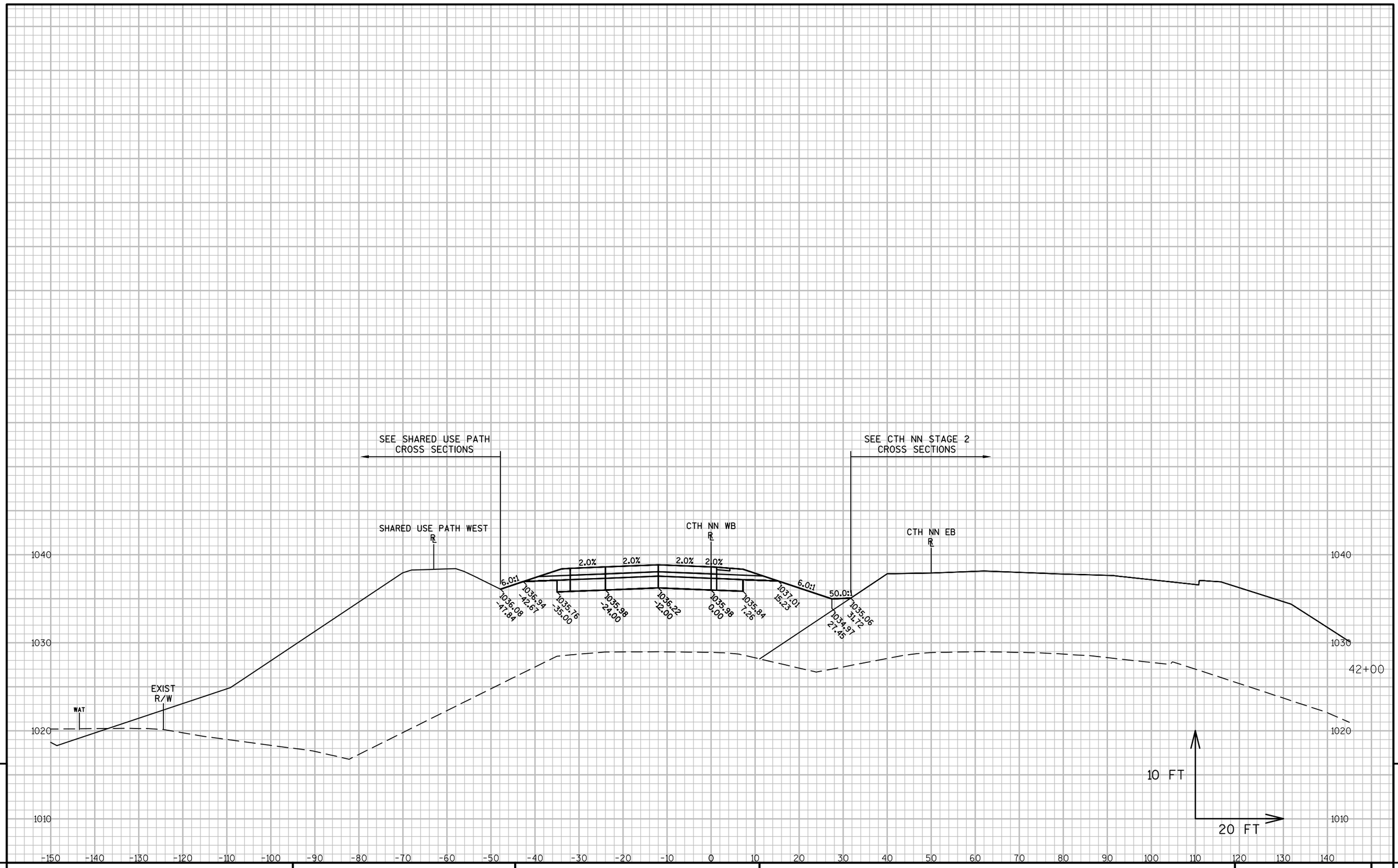
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN WB STAGE 3	SHEET 624	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090203_XS3_NN.DWG
LAYOUT NAME - 11
PLOT DATE : 4/29/2015 7:36 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:20_XREF
WISDOT/CADDS SHEET 49



PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN WB STAGE 3	SHEET 625 E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090203_XS3_NN.DWG
LAYOUT NAME - 12
PLOT DATE : 4/29/2015 7:36 AM
PLOT BY : CORY IHDE
PLOT NAME :
PLOT SCALE : 1:20_XREF
WISDOT/CADDS SHEET 49

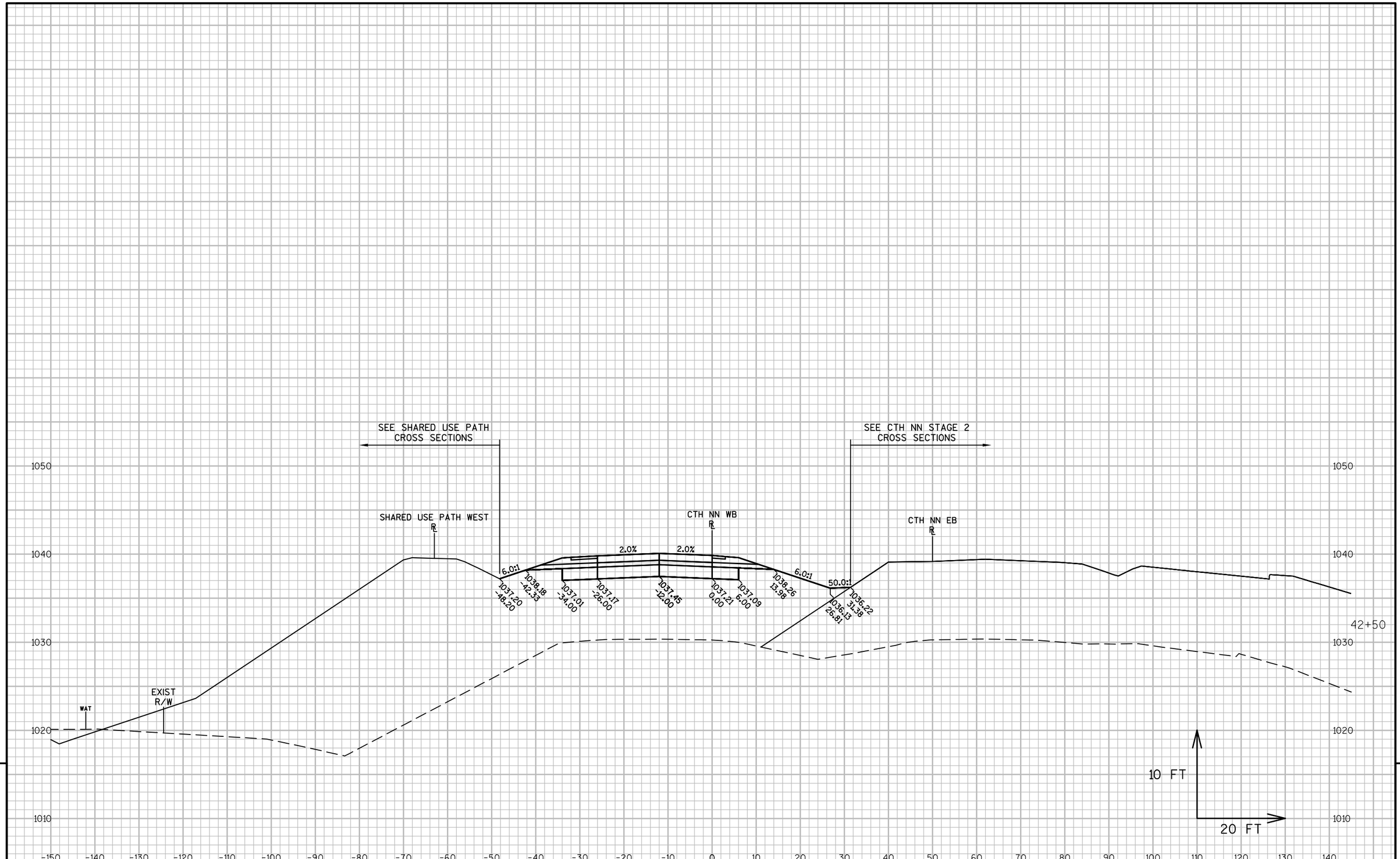


9

9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN WB STAGE 3	SHEET 626	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090203_XS3_NN.DWG
LAYOUT NAME - 13
PLOT DATE : 4/29/2015 7:36 AM
PLOT BY : CORY IHDE
PLOT NAME :
PLOT SCALE : 1:20_XREF
WISDOT/CADDS SHEET 49



9 9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN WB STAGE 3	SHEET 627	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090203_XS3_NN.DWG
LAYOUT NAME - 14
PLOT DATE : 4/29/2015 7:36 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:20_XREF
WISDOT/CADDS SHEET 49

SEE SHARED USE PATH CROSS SECTIONS

SEE CTH NN STAGE 2 CROSS SECTIONS

SHARED USE PATH WEST
℄

CTH NN WB
℄

CTH NN EB
℄

2.0%

2.0%

6.0:1

8.7:1

50.0:1

1038.31
-48.60

1038.36
-42.34

1038.19
-34.00

1038.35
-26.00

1038.63
-12.00

1038.39
0.00

1038.27
6.00

1038.44
13.98

1037.77
32.40

1037.71
29.06

WAT

EXIST R/W

43+00

1050

1040

1030

1020

1010

10 FT

20 FT

-150 -140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140

9

9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN WB STAGE 3	SHEET 628	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090203_XS3_NN.DWG
LAYOUT NAME - 15

PLOT DATE : 4/29/2015 7:37 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:20_XREF

WISDOT/CADDS SHEET 49

SEE SHARED USE PATH CROSS SECTIONS

SEE CTH NN STAGE 2 CROSS SECTIONS

SHARED USE PATH WEST

CTH NN WB

CTH NN EB

2.0% 2.0% 2.0%

6.0:1 6.3:1 3.6:1

1039.37 -49.03
1040.48 -42.36
1039.32 -34.00
1039.48 -26.00
1039.76 -12.00
1039.52 0.00
1039.37 7.15
1039.27 12.15
1039.24 31.37
1041.46 39.33

EXIST R/W

WAT

43+50

10 FT

20 FT

1050 1040 1030 1020 1010

-150 -140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140

9

9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN WB STAGE 3	SHEET 629	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090203_XS3_NN.DWG
LAYOUT NAME - 16

PLOT DATE : 4/29/2015 7:37 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:20_XREF

SEE SHARED USE PATH CROSS SECTIONS

SEE CTH NN STAGE 2 CROSS SECTIONS

SHARED USE PATH WEST

CTH NN WB

CTH NN EB

2.0% 2.0% 2.0% 2.0% 7.0:1 16.4:1 6.0:1

1040.39 -49.33 | 1041.55 -42.37 | 1040.38 -34.00 | 1040.54 -26.00 | 1040.82 -12.00 | 1040.58 0.00 | 1040.34 12.00 | 1040.23 18.90 | 1040.11 23.90 | 1042.10 34.00 | 1042.56 38.58

EXIST R/W

WAT

44+00

10 FT

20 FT

1050 1040 1030 1020 1010

-150 -140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140

9

9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN WB STAGE 3	SHEET 630	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090203_XS3_NN.DWG
LAYOUT NAME - 17

PLOT DATE : 4/29/2015 7:37 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:20_XREF

WISDOT/CADDS SHEET 49

SEE SHARED USE PATH CROSS SECTIONS

SEE CTH NN STAGE 2 CROSS SECTIONS

SHARED USE PATH WEST
℄

CTH NN WB
℄

CTH NN EB
℄

2.0% 2.0% 2.0% 3.8% 0.5%

6.0:1

1041.38 -49.49
1042.56 -42.39
1041.40 -34.00
1041.56 -26.00
1041.84 -12.00
1041.60 0.00
1041.36 12.00
1040.90 24.00
1040.97 38.00

44+50

EXIST R/W

WAT

1050
1040
1030
1020
1010

-150 -140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140

10 FT

20 FT

9

9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN WB STAGE 3	SHEET 631	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090203_XS3_NN.DWG
LAYOUT NAME - 18

PLOT DATE : 4/29/2015 7:37 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:20_XREF

WISDOT/CADDS SHEET 49

SEE SHARED USE PATH CROSS SECTIONS

SEE CTH NN STAGE 2 CROSS SECTIONS

SHARED USE PATH WEST
℄

CTH NN WB
℄

CTH NN EB
℄

2.0% 2.0% 2.0% 2.0%

6.0:1 36.9:1 11.9:1

1042.33 -49.53
1043.52 -42.41
1042.36 -34.00
1042.52 -26.00
1042.80 -12.00
1042.56 0.00
1042.32 12.00
1042.18 18.80
1042.08 25.80
1045.24 29.45
1044.58 37.08

EXIST R/W

WAT

1050
1040
1030
1020
1010

45+00

-150 -140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140

10 FT

20 FT

9

9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN WB STAGE 3	SHEET 632	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090203_XS3_NN.DWG
LAYOUT NAME - 19

PLOT DATE : 4/29/2015 7:37 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:20_XREF

WISDOT/CADDS SHEET 49

SEE SHARED USE PATH CROSS SECTIONS

SEE CTH NN STAGE 2 CROSS SECTIONS

SHARED USE PATH WEST

CTH NN WB

CTH NN EB

2.0% 2.0% 2.0% 2.0% 7.3:1 15.9:1 6.0:1

1043.25 -49.43 | 1044.42 -42.42 | 1043.26 -34.00 | 1043.42 -26.00 | 1043.70 -12.00 | 1043.46 0.00 | 1043.22 16.00 | 1043.04 21.00 | 1044.99 28.76 | 1045.50 37.00

EXIST R/W

WAT

45+50

10 FT

20 FT

1050 1040 1030 1020 1010

-150 -140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140

9

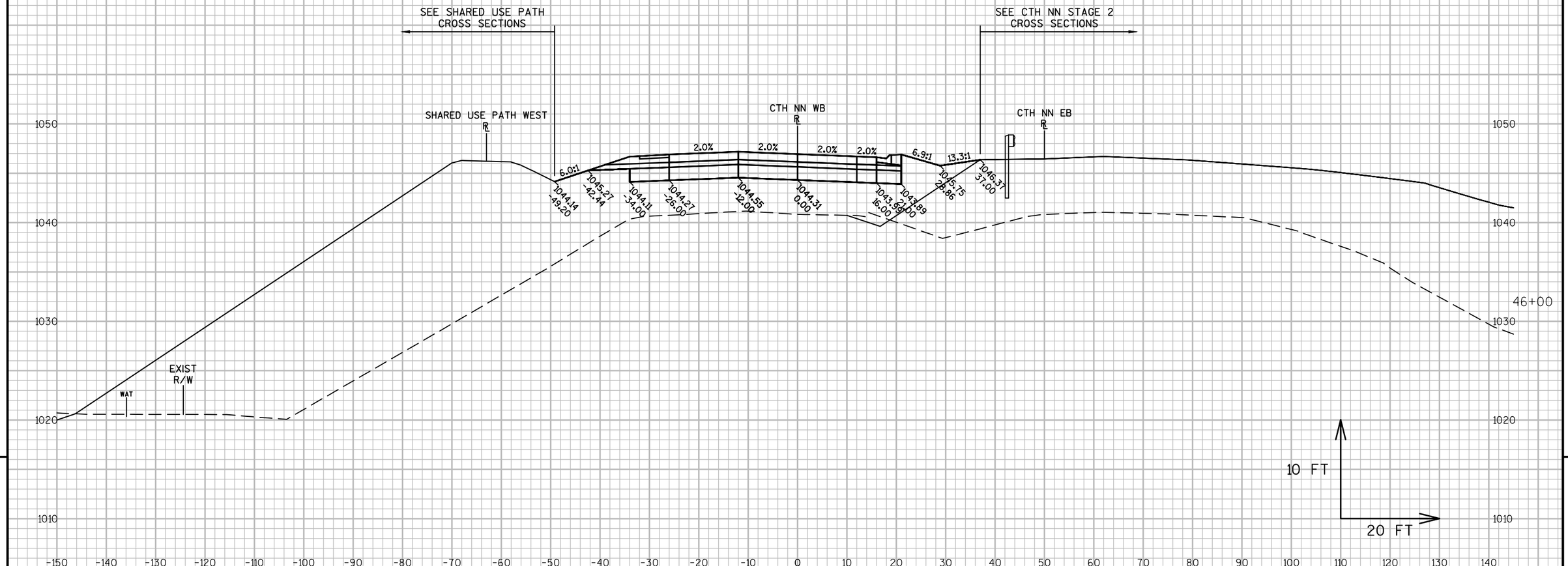
9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN WB STAGE 3	SHEET 633 E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090203_XS3_NN.DWG
LAYOUT NAME - 20

PLOT DATE : 4/29/2015 7:37 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:20_XREF

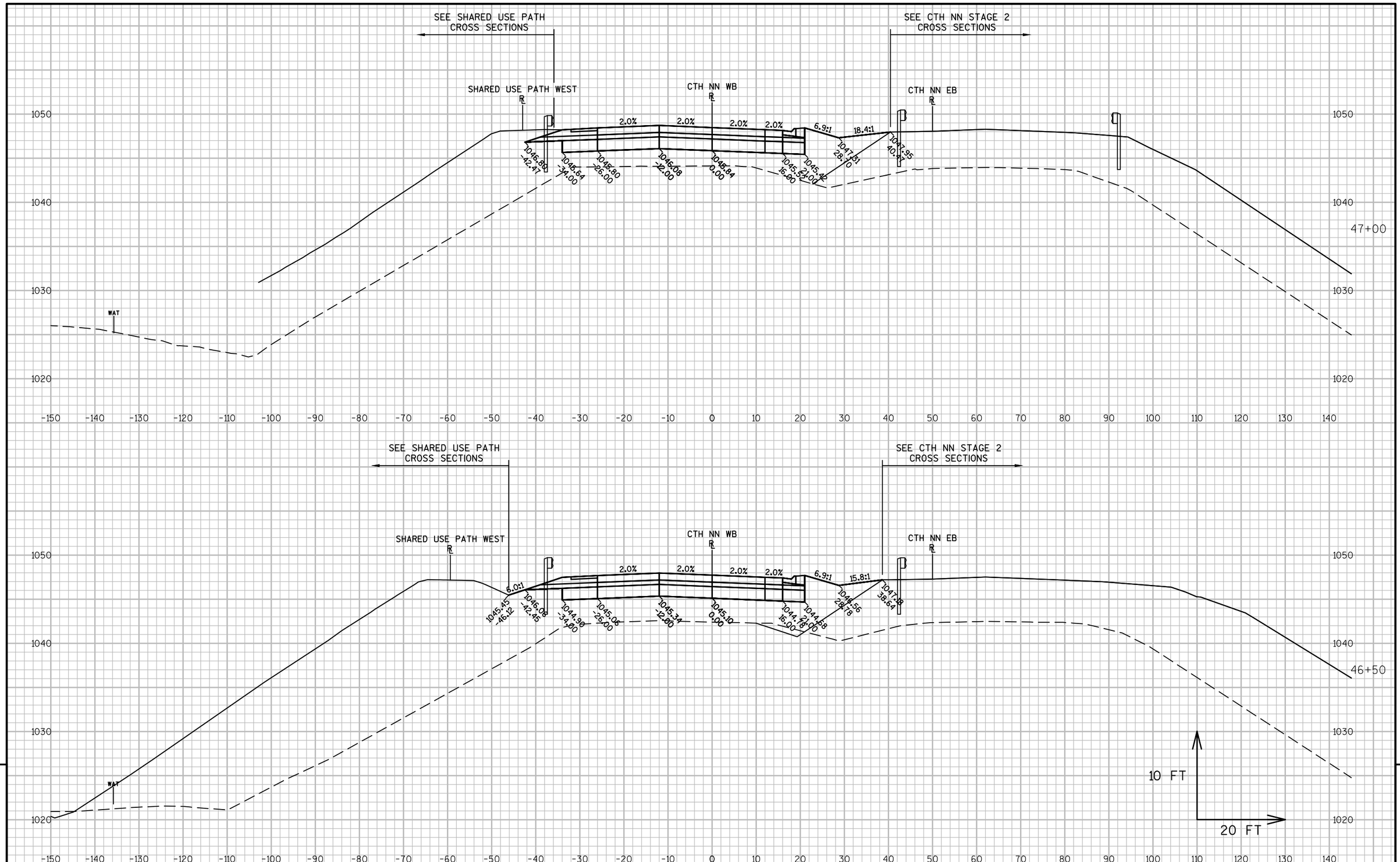
WISDOT/CADDS SHEET 49



9 9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN WB STAGE 3	SHEET 634	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090203_XS3_NN.DWG
LAYOUT NAME - 21
PLOT DATE : 4/29/2015 7:38 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:20_XREF
WISDOT/CADDS SHEET 49



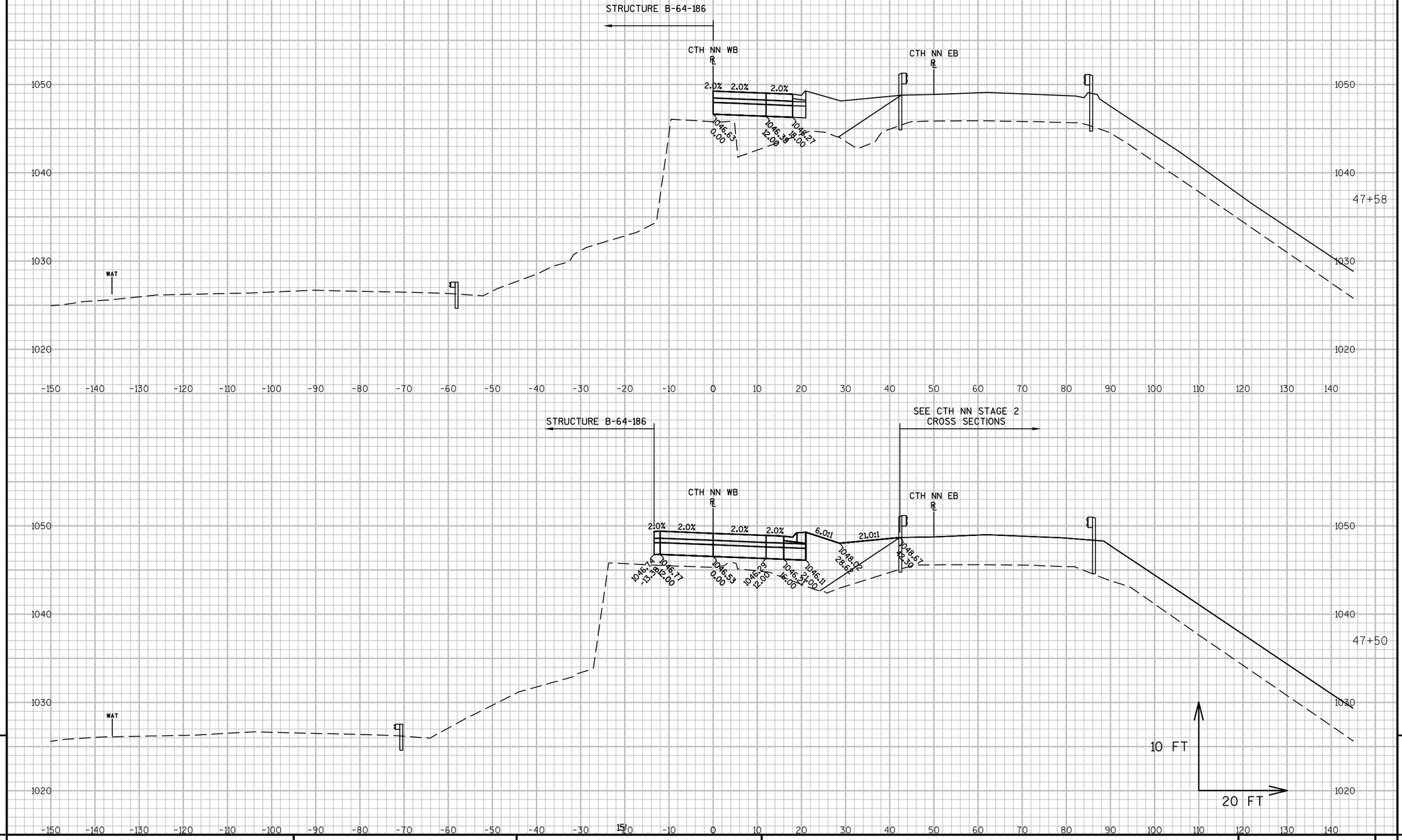
9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN WB STAGE 3	SHEET 635	E

9

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090203_XS3_NN.DWG
LAYOUT NAME - 22

PLOT DATE : 4/29/2015 7:38 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:20_XREF



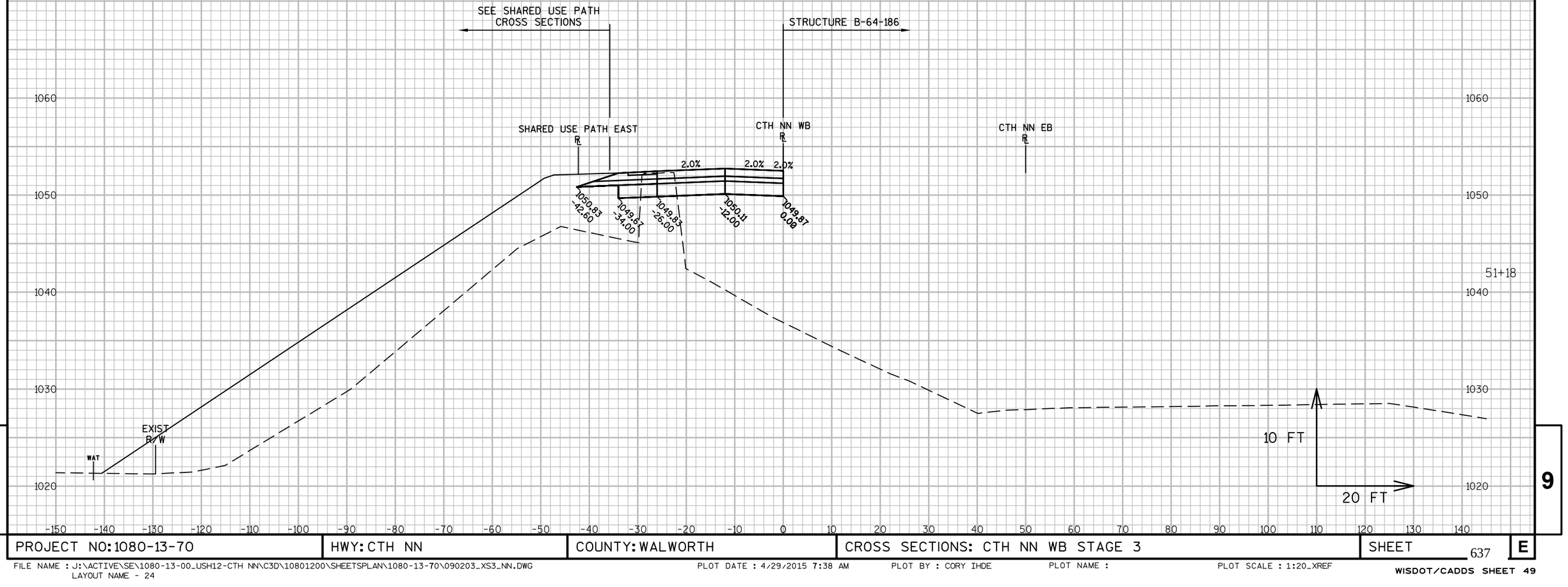
9

9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN WB STAGE 3	SHEET 636	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090203_XS3_NN.DWG
LAYOUT NAME - 23

PLOT DATE : 4/29/2015 7:38 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:20_XREF



9

9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN WB STAGE 3	SHEET 637	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090203_XS3_NN.DWG
LAYOUT NAME - 24
PLOT DATE : 4/29/2015 7:38 AM
PLOT BY : CORY IHDE
PLOT NAME :
PLOT SCALE : 1:20_XREF
WISDOT/CADDS SHEET 49

SEE SHARED USE PATH CROSS SECTIONS

SEE CTH NN STAGE 2 CROSS SECTIONS

SHARED USE PATH EAST
℄

CTH NN WB
℄

CTH NN EB
℄

2.0%

2.0%

1050.98
-42.61

1049.82
-34.00

1049.98
-26.00

1050.26
-12.00

1050.02
0.00

1049.90
6.00

1050.28
30.50

1050.80
27.36

EXIST
R/W

WAT

10 FT

20 FT

51+50

1060
1050
1040
1030
1020

-150 -140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140

9

9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN WB STAGE 3	SHEET 638	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090203_XS3_NN.DWG
LAYOUT NAME - 25

PLOT DATE : 4/29/2015 7:38 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:20_XREF

WISDOT/CADDS SHEET 49

SEE SHARED USE PATH CROSS SECTIONS

SEE CTH NN STAGE 2 CROSS SECTIONS

SHARED USE PATH EAST

CTH NN WB

CTH NN EB

2.0%

2.0%

6.0:1

1050.78 -47.97
1051.10 -46.06
1050.01 -34.00
1050.17 -26.00
1050.45 -12.00
1050.21 0.00
1050.09 6.00
1050.89 32.25

EXIST R/W

WAT

52+00

10 FT

20 FT

1060
1050
1040
1030
1020

-150 -140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140

9

9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN WB STAGE 3	SHEET 639	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090203_XS3_NN.DWG
LAYOUT NAME - 26

PLOT DATE : 4/29/2015 7:38 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:20_XREF

SEE SHARED USE PATH CROSS SECTIONS

SEE CTH NN STAGE 2 CROSS SECTIONS

SHARED USE PATH EAST

CTH NN WB

CTH NN EB

2.0%

2.0%

8.0:1

1050.75 -49.00

1051.23 -46.08

1050.14 -34.00

1050.30 -26.00

1050.58 -12.00

1050.34 0.00

1050.22 6.00

1051.03 32.25

EXIST R/W

WAT

52+50

10 FT

20 FT

1060

1050

1040

1030

1020

1010

-150 -140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140

9

9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN WB STAGE 3	SHEET 640	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090203_XS3_NN.DWG
LAYOUT NAME - 27

PLOT DATE : 4/29/2015 7:39 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:20_XREF

SEE SHARED USE PATH CROSS SECTIONS

SEE CTH NN STAGE 2 CROSS SECTIONS

SHARED USE PATH EAST
℄

CTH NN WB
℄

CTH NN EB
℄

2.0%

2.0%

6.8:1

1050.90 -48.22

1051.11 -46.10

1050.22 -34.00

1050.38 -26.00

1050.66 -12.00

1050.42 0.00

1050.30 6.00

1051.18 28.90

EXIST R/W

WAT

WET

WET

53+00

10 FT

20 FT

1060

1050

1040

1030

1020

1010

-150 -140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140

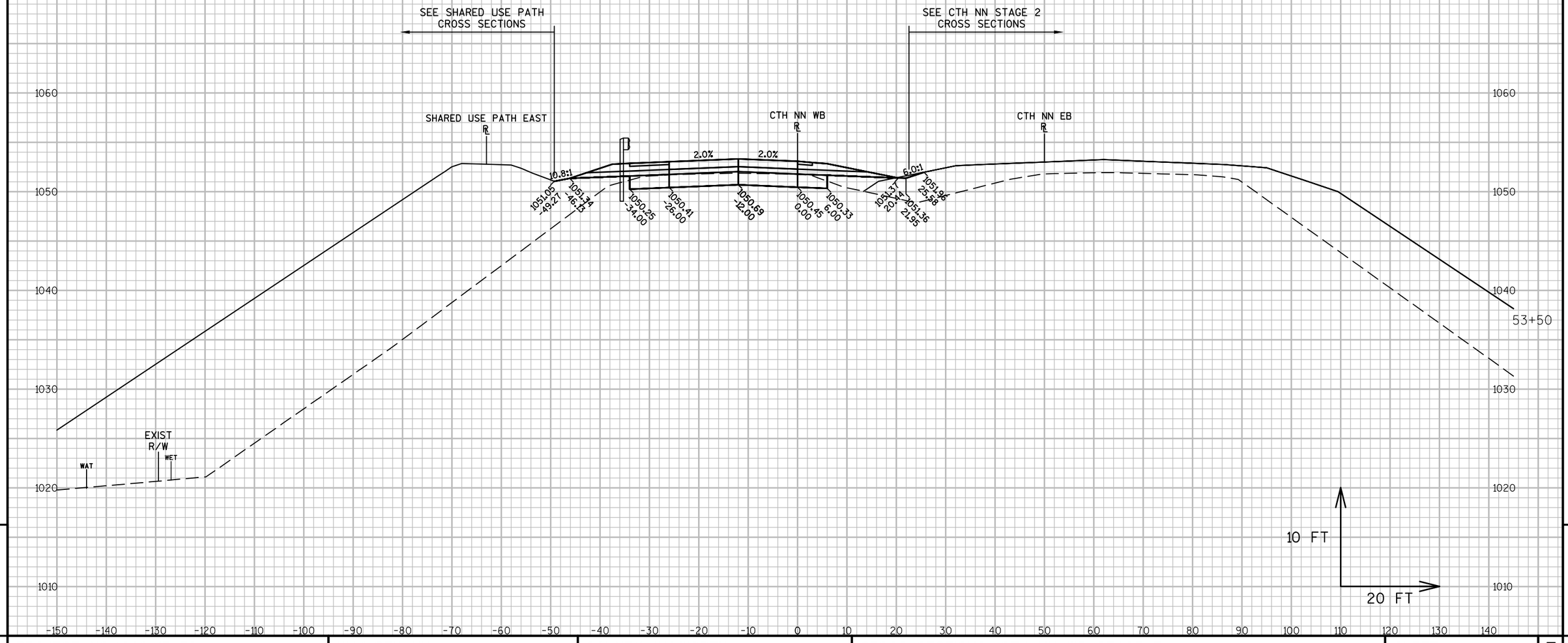
9

9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN WB STAGE 3	SHEET 641	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090203_XS3_NN.DWG
LAYOUT NAME - 28

PLOT DATE : 4/29/2015 7:39 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:20_XREF



PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN WB STAGE 3	SHEET 642	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090203_XS3_NN.DWG
LAYOUT NAME - 29

PLOT DATE : 4/29/2015 7:39 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:20_XREF

WISDOT/CADDS SHEET 49

SEE SHARED USE PATH CROSS SECTIONS

SEE CTH NN STAGE 2 CROSS SECTIONS

SHARED USE PATH EAST
℄

CTH NN WB
℄

CTH NN EB
℄

2.0%

2.0%

40.4:1

6.0:1

1051.20
-51.30

1051.23
-45.71

1050.22
-34.00

1050.38
-26.00

1050.66
-12.00

1050.42
0.00

1050.30
6.00

1050.35
18.00

1051.19
19.76

1052.12
27.72

EXIST
R/W

WAT

WET

1060

1050

1040

1030

1020

1010

54+00

10 FT

20 FT

-150 -140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140

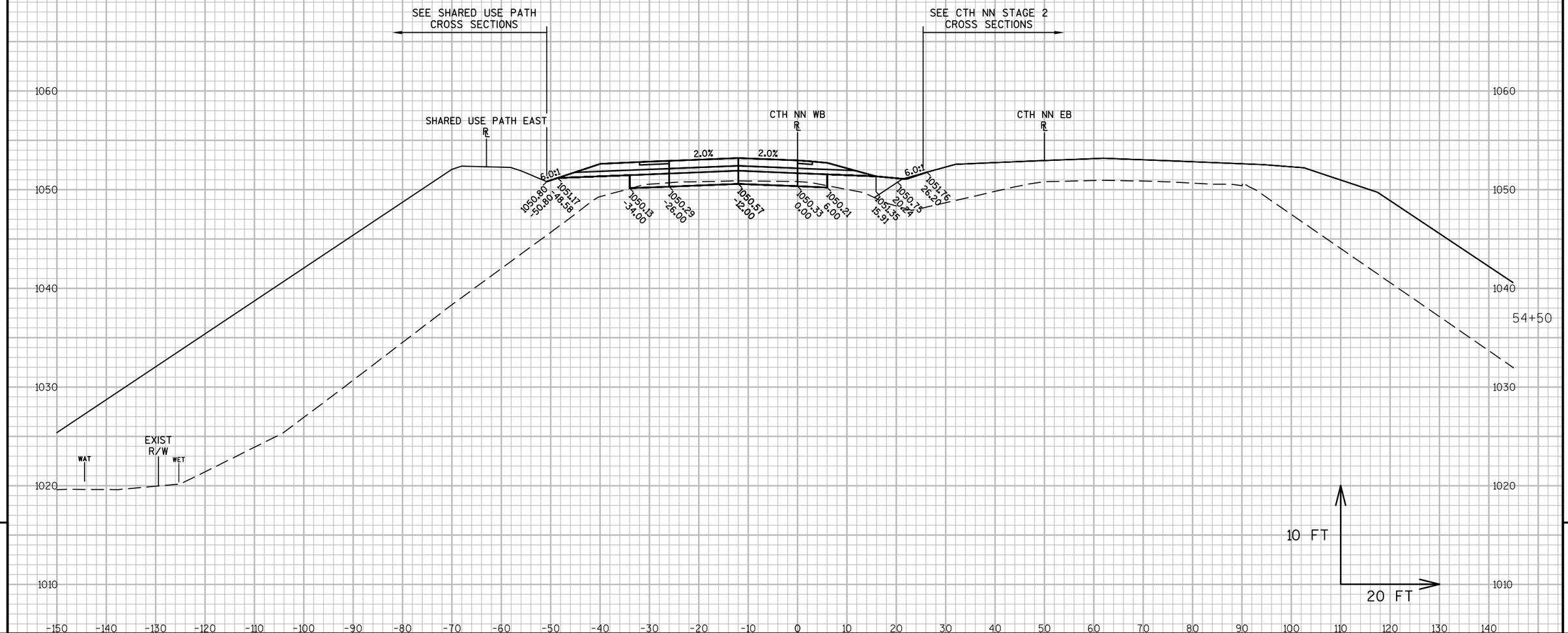
9

9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN WB STAGE 3	SHEET 643	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090203_XS3_NN.DWG
LAYOUT NAME - 30

PLOT DATE : 4/29/2015 7:39 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:20_XREF

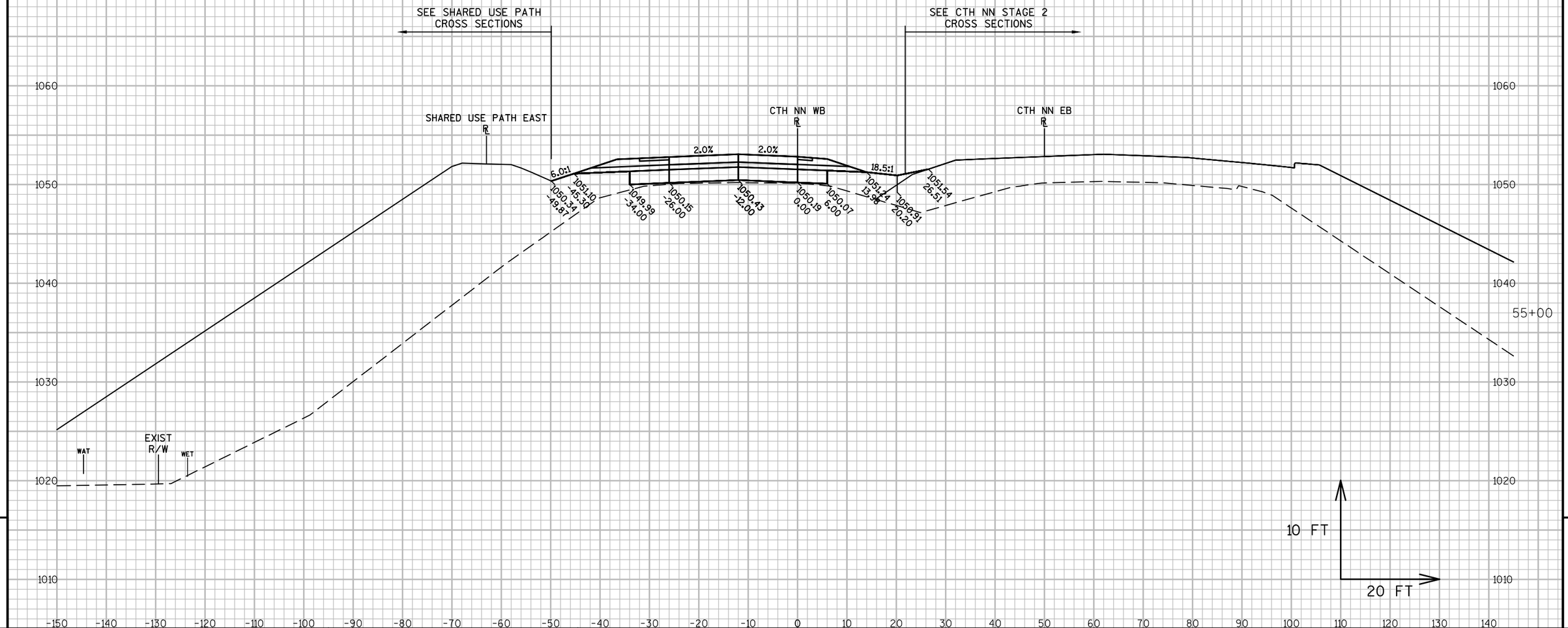


9

9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN WB STAGE 3	SHEET 644	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090203_XS3_NN.DWG
LAYOUT NAME - 31
PLOT DATE : 4/29/2015 7:39 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:20_XREF
WISDOT/CADDS SHEET 49

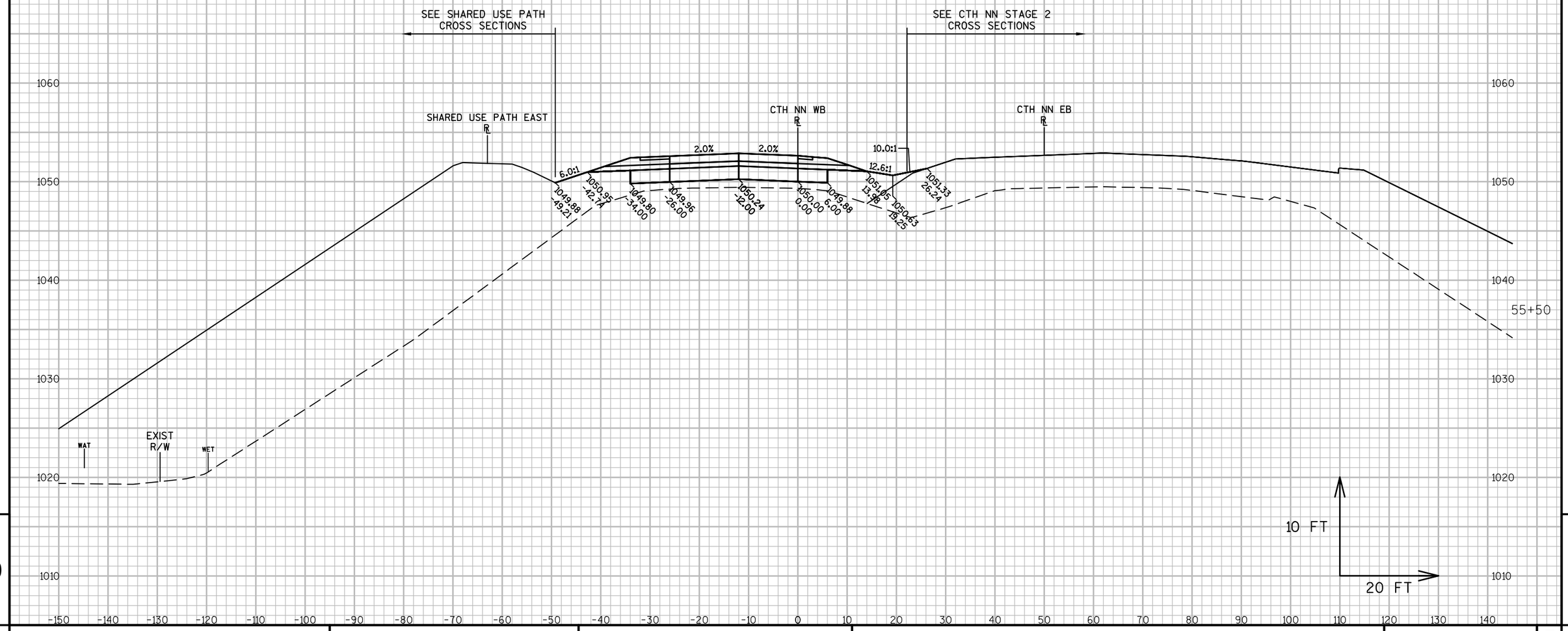


PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN WB STAGE 3	SHEET 645	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090203_XS3_NN.DWG
LAYOUT NAME - 32

PLOT DATE : 4/29/2015 7:39 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:20_XREF

WISDOT/CADDS SHEET 49



9

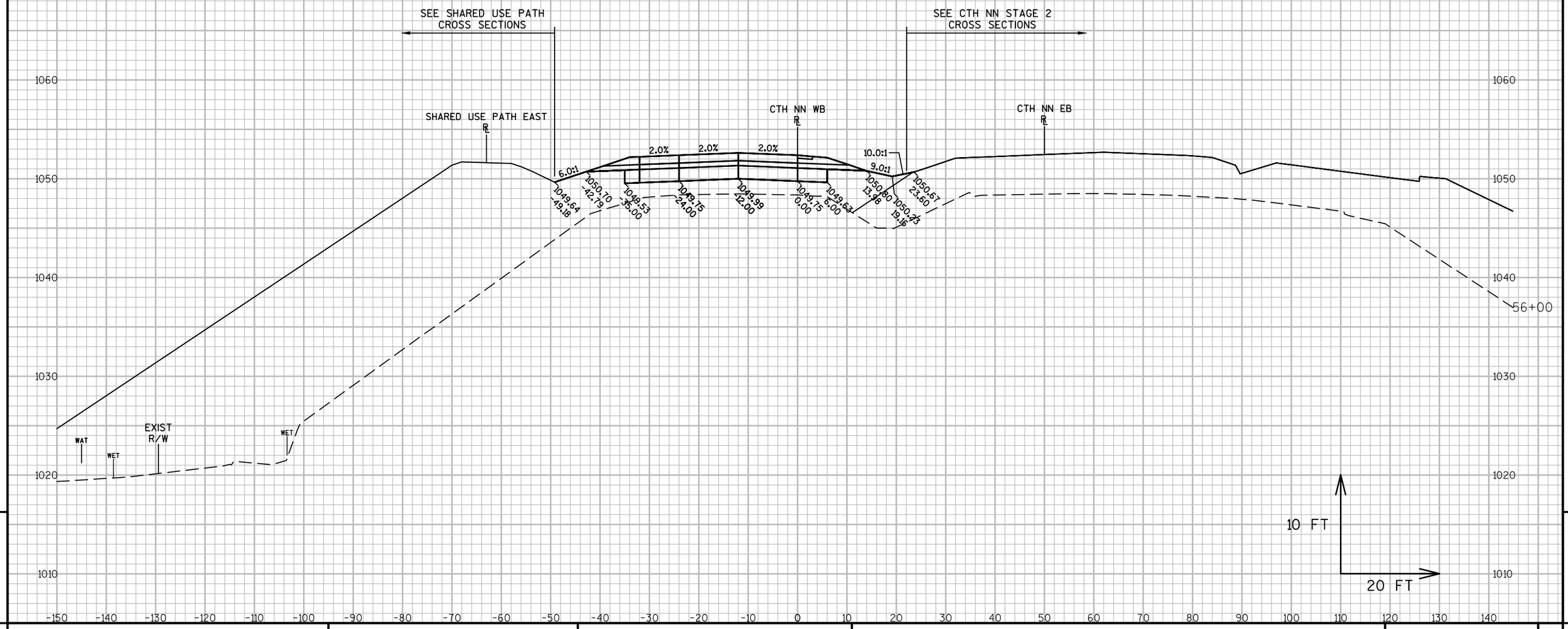
9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN WB STAGE 3	SHEET 646	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090203_XS3_NN.DWG
LAYOUT NAME - 33

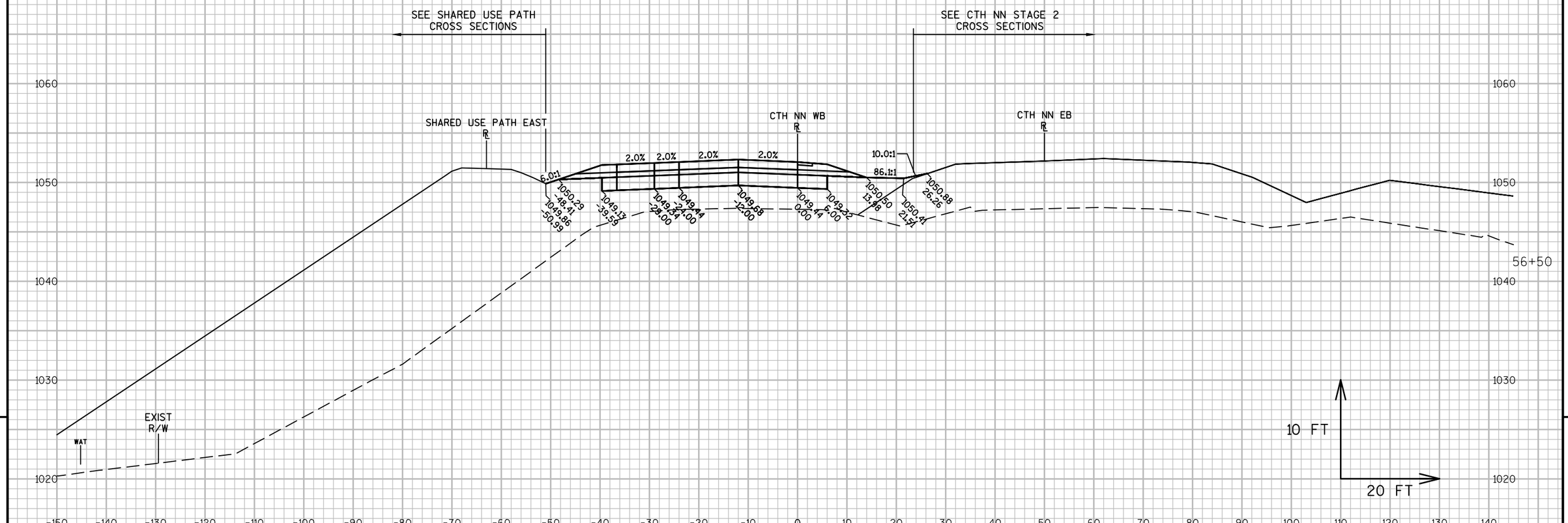
PLOT DATE : 4/29/2015 7:40 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:20_XREF

WISDOT/CADDS SHEET 49



PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN WB STAGE 3	SHEET 647 E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090203_XS3_NN.DWG
LAYOUT NAME - 34
PLOT DATE : 4/29/2015 7:40 AM
PLOT BY : CORY IHDE
PLOT NAME :
PLOT SCALE : 1:20_XREF
WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN WB STAGE 3	SHEET 648	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090203_XS3_NN.DWG
LAYOUT NAME - 35

PLOT DATE : 4/29/2015 7:40 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:20_XREF

WISDOT/CADDS SHEET 49

SEE SHARED USE PATH CROSS SECTIONS

SEE CTH NN STAGE 2 CROSS SECTIONS

SHARED USE PATH EAST
℄

CTH NN WB
℄

CTH NN EB
℄

2.0% 2.0% 2.0% 2.0% 2.0% 8.7:1

1048.75 -41.00

1049.09 -29.00

1049.09 -22.00

1049.33 -12.00

1049.09 0.00

1048.93 7.72

1048.85 12.72

1050.78 24.93

1060
1050
1040
1030
1020

EXIST R/W

WAT

57+00

10 FT

20 FT

-150 -140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140

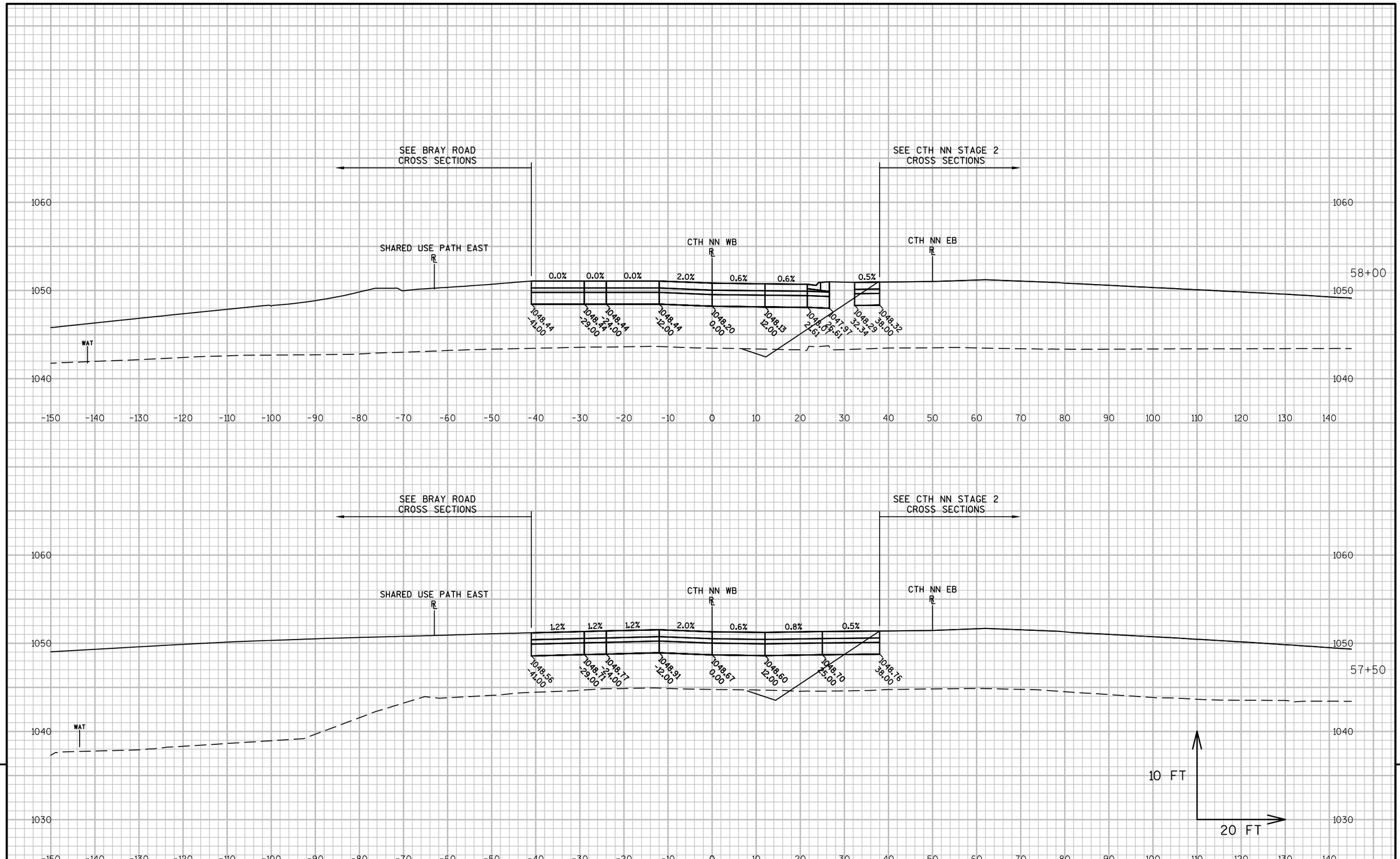
9

9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN WB STAGE 3	SHEET 649	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090203_XS3_NN.DWG
LAYOUT NAME - 36

PLOT DATE : 4/29/2015 7:40 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:20_XREF



9

9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN WB STAGE 3	SHEET 650	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090203_XS3_NN.DWG
LAYOUT NAME - 37

PLOT DATE : 4/29/2015 7:40 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:20_XREF

SEE SHARED USE PATH CROSS SECTIONS

SEE CTH NN STAGE 2 CROSS SECTIONS

SHARED USE PATH EAST
℄

CTH NN WB
℄

CTH NN EB
℄

1.0% 1.0% 1.0% 2.0% 1.3% 1.3% 11.8:1 10.1:1

1048.82 -54.46
1049.65 -51.29
1048.25 -43.92
1048.28 -46.92
1048.09 -29.00
1048.04 -24.00
1047.92 -12.00
1047.68 0.00
1047.52 12.00
1047.42 17.05
1048.52 21.72
1050.44 37.00

58+50

WAT

10 FT

20 FT

1060 1050 1040 1030 1020

-150 -140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140

9

9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN WB STAGE 3	SHEET 651	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090203_XS3_NN.DWG
LAYOUT NAME - 38

PLOT DATE : 4/29/2015 7:40 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:20_XREF

WISDOT/CADDS SHEET 49

SEE SHARED USE PATH CROSS SECTIONS

SEE CTH NN STAGE 2 CROSS SECTIONS

SHARED USE PATH EAST

CTH NN WB

CTH NN EB

6.0:1

2.5%

11.5:1

5.5:1

1048.13 -50.26

1049.17 -30.72

1048.46 -24.00

1048.19 -20.00

1047.84 -29.00

1047.71 -24.00

1047.40 -12.00

1047.40 0.00

1046.13 12.00

1045.67 13.00

1046.60 29.72

1049.93 31.00

59+00

WAT

WET

10 FT

20 FT

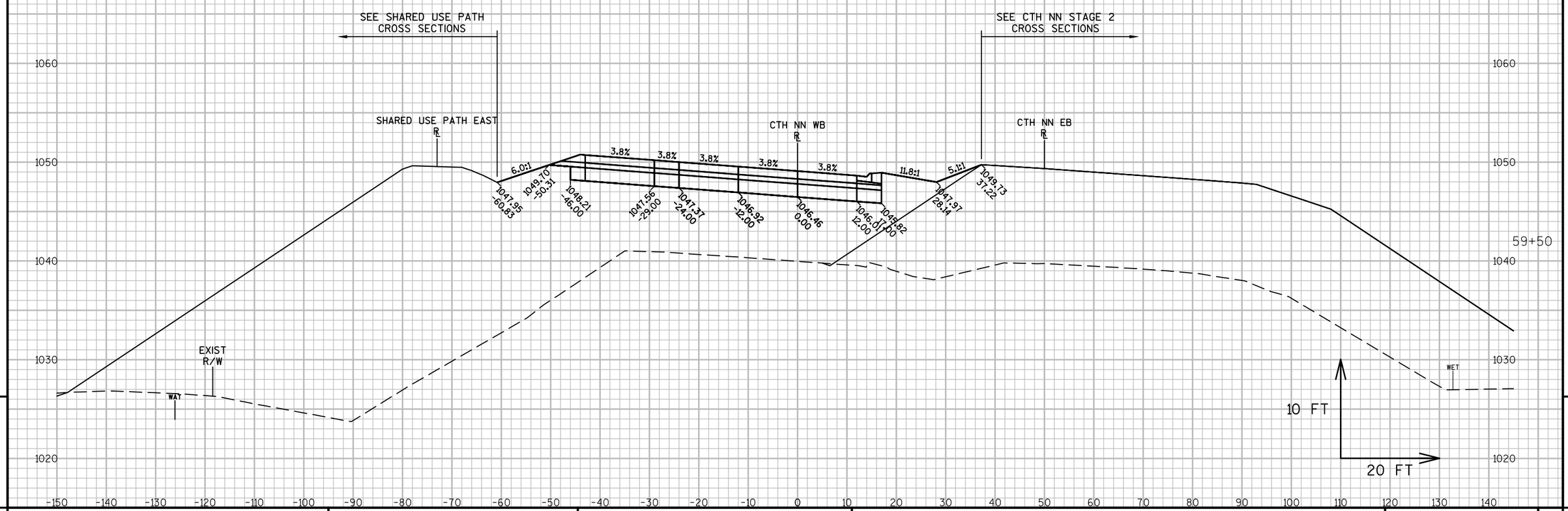
1060 1050 1040 1030 1020

-150 -140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140

9

9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN WB STAGE 3	SHEET 652	E



9

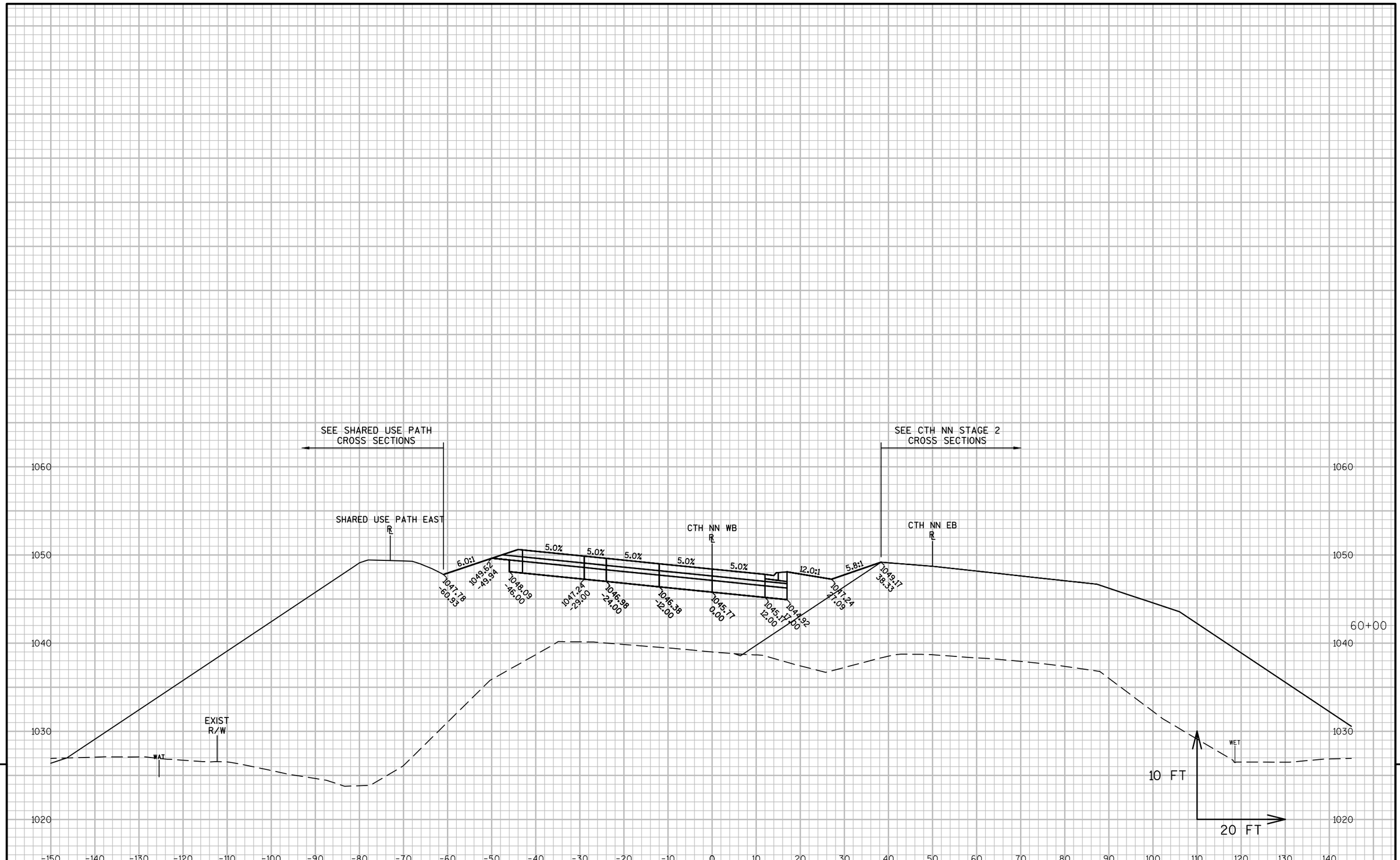
9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN WB STAGE 3	SHEET 653	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090203_XS3_NN.DWG
LAYOUT NAME - 40

PLOT DATE : 4/29/2015 7:41 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:20_XREF

WISDOT/CADDS SHEET 49

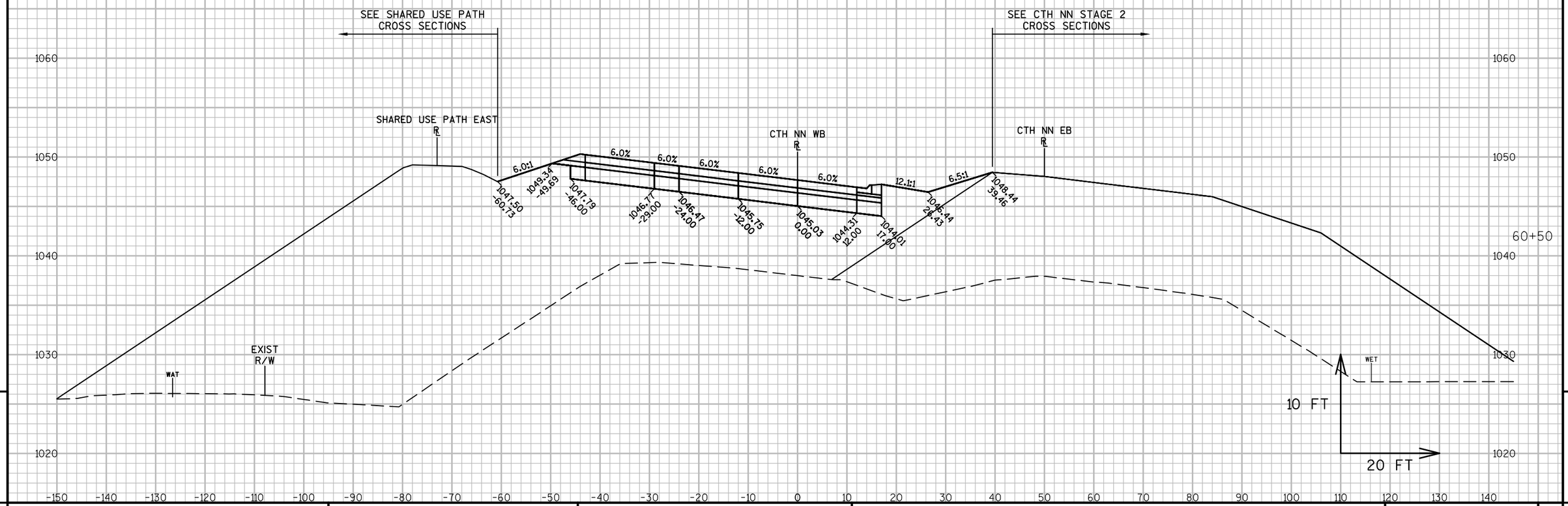


9

9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN WB STAGE 3	SHEET 654	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090203_XS3_NN.DWG
LAYOUT NAME - 41
PLOT DATE : 4/29/2015 7:41 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:20_XREF
WISDOT/CADDS SHEET 49



9

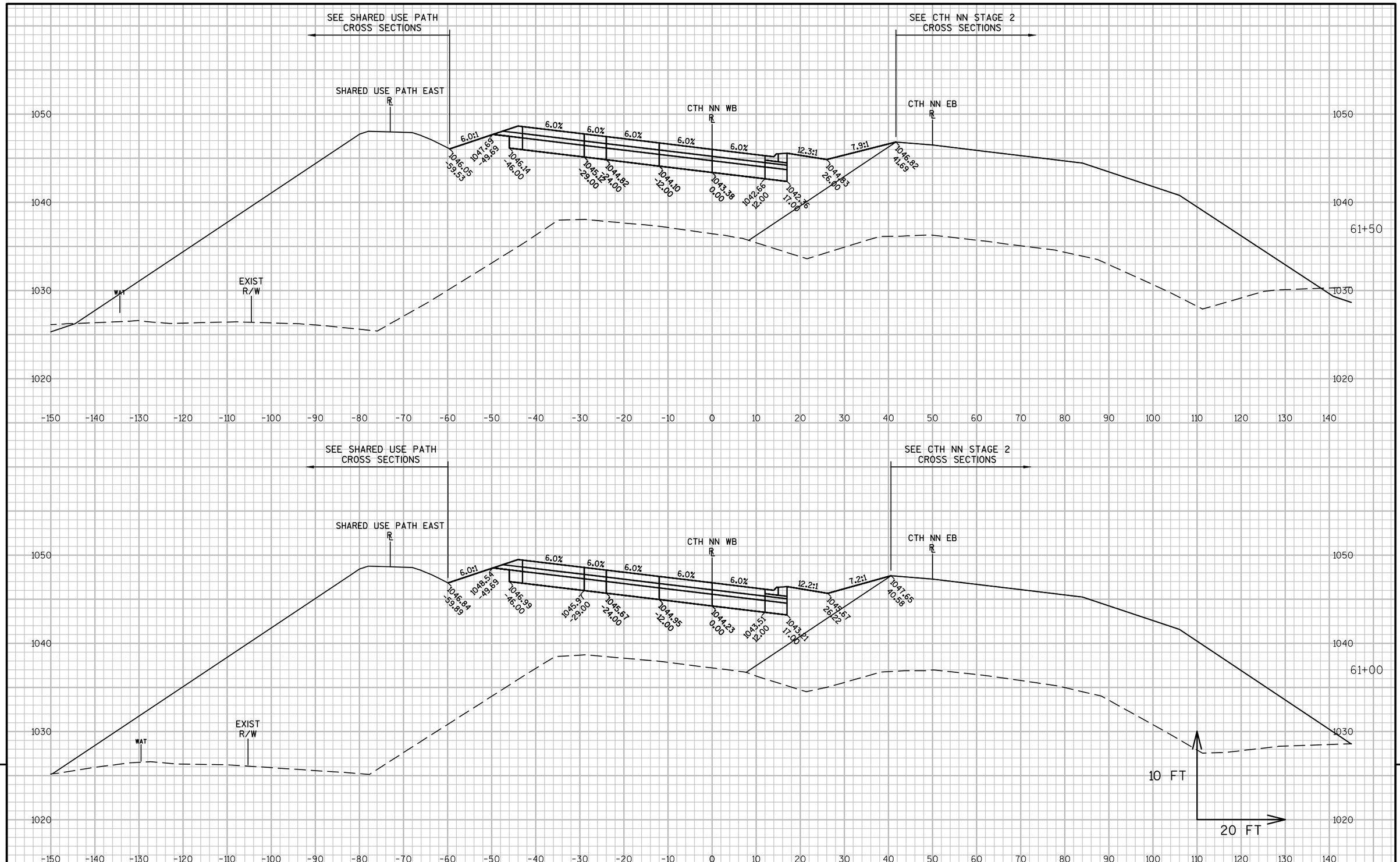
9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN WB STAGE 3	SHEET 655	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090203_XS3_NN.DWG
LAYOUT NAME - 42

PLOT DATE : 4/29/2015 7:41 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:20_XREF

WISDOT/CADDS SHEET 49



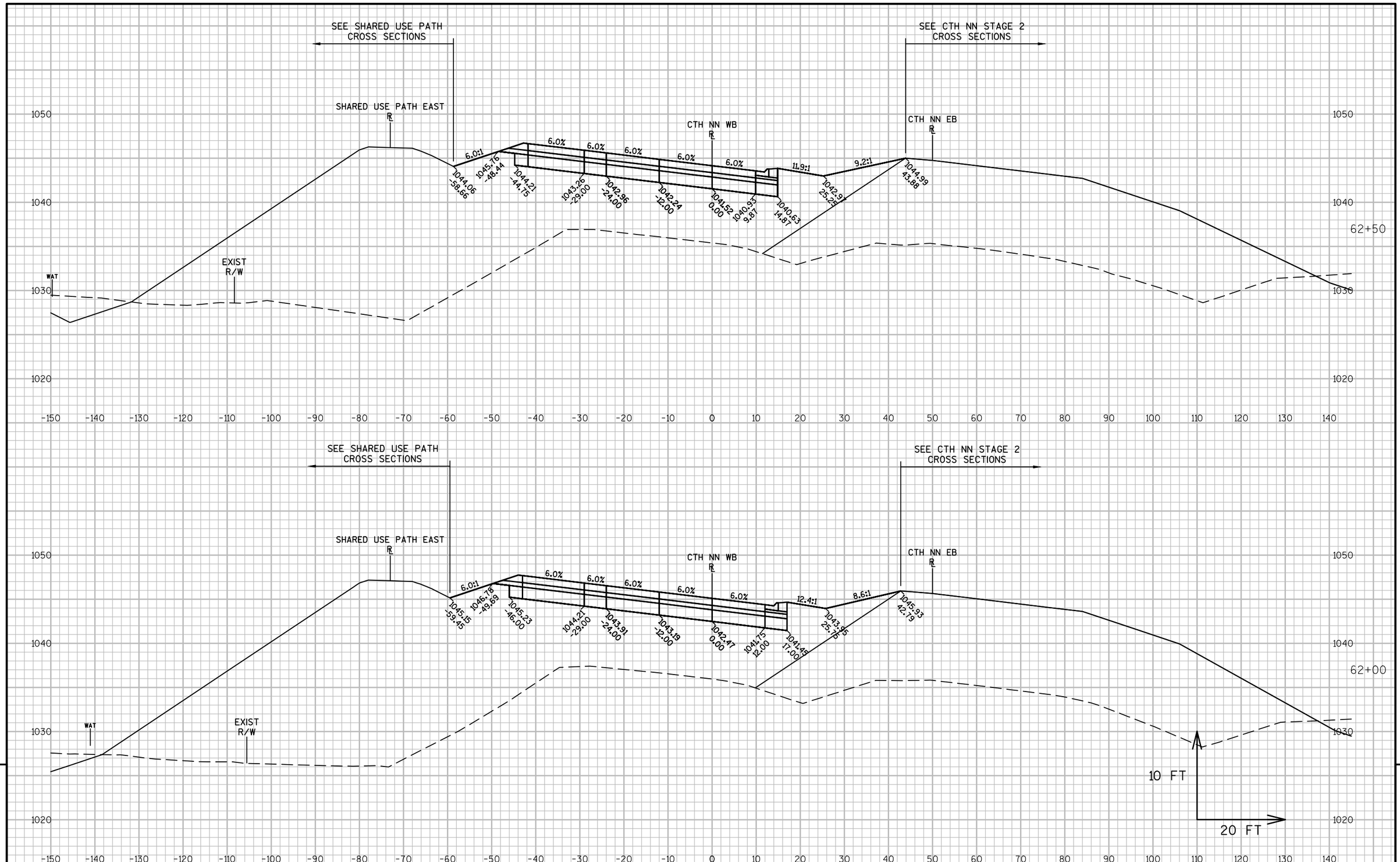
9

9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN WB STAGE 3	SHEET 656	E

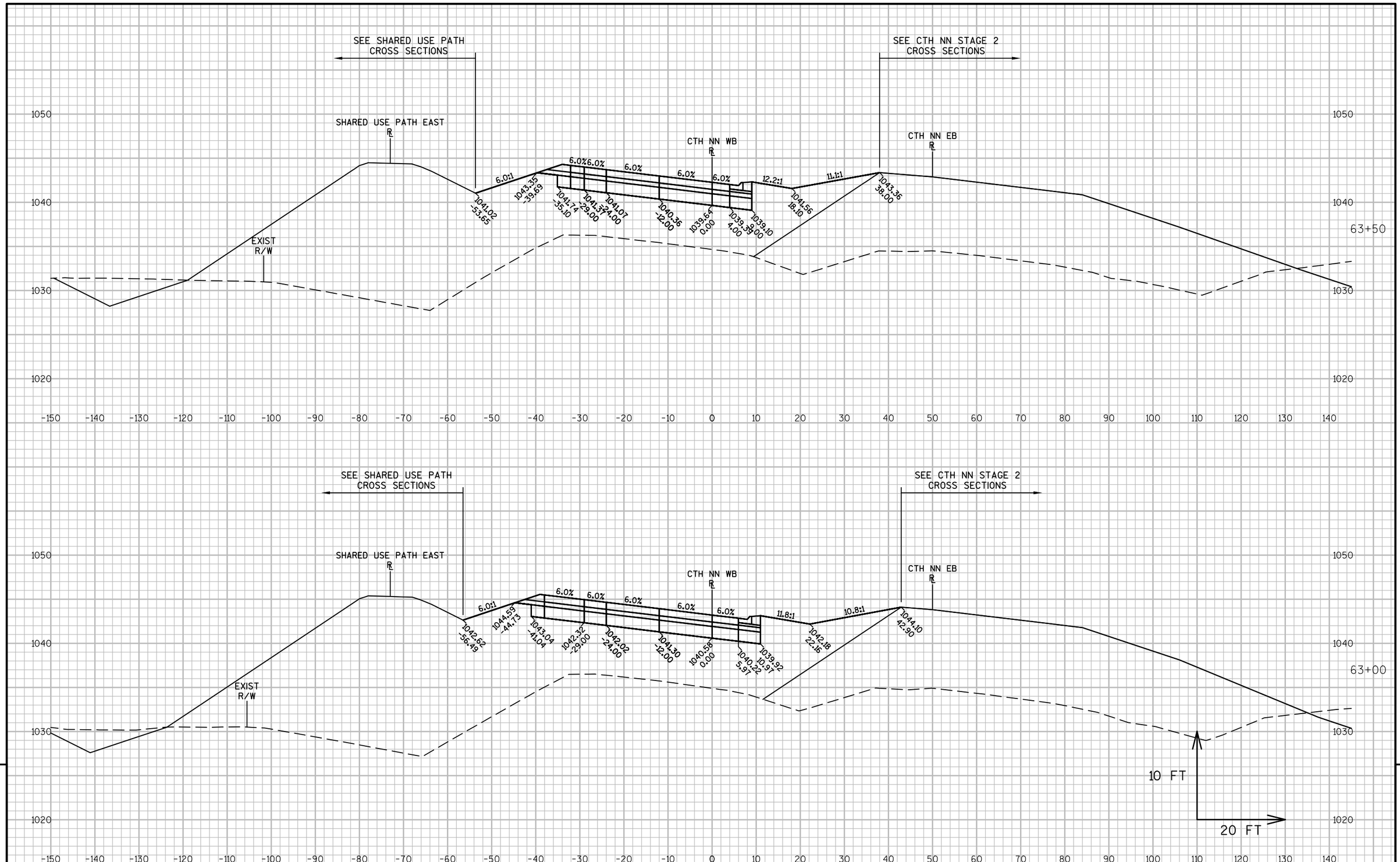
FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090203_XS3_NN.DWG
LAYOUT NAME - 43

PLOT DATE : 4/29/2015 7:41 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:20_XREF



PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN WB STAGE 3	SHEET 657 E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090203_XS3_NN.DWG
LAYOUT NAME - 44
PLOT DATE : 4/29/2015 7:41 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:20_XREF
WISDOT/CADDS SHEET 49



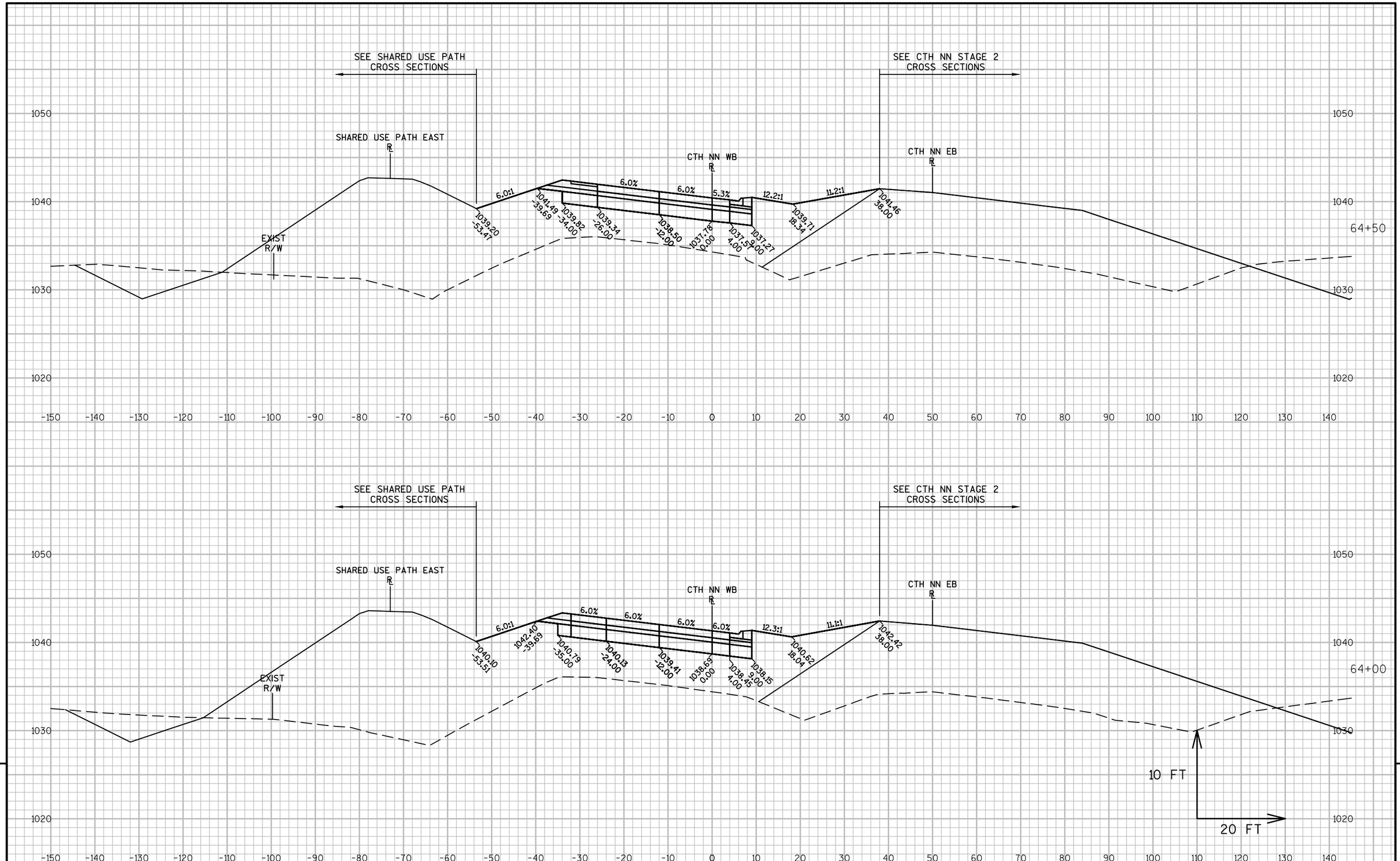
9

9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN WB STAGE 3	SHEET 658	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090203_XS3_NN.DWG
LAYOUT NAME - 45

PLOT DATE : 4/29/2015 7:42 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:20_XREF



9

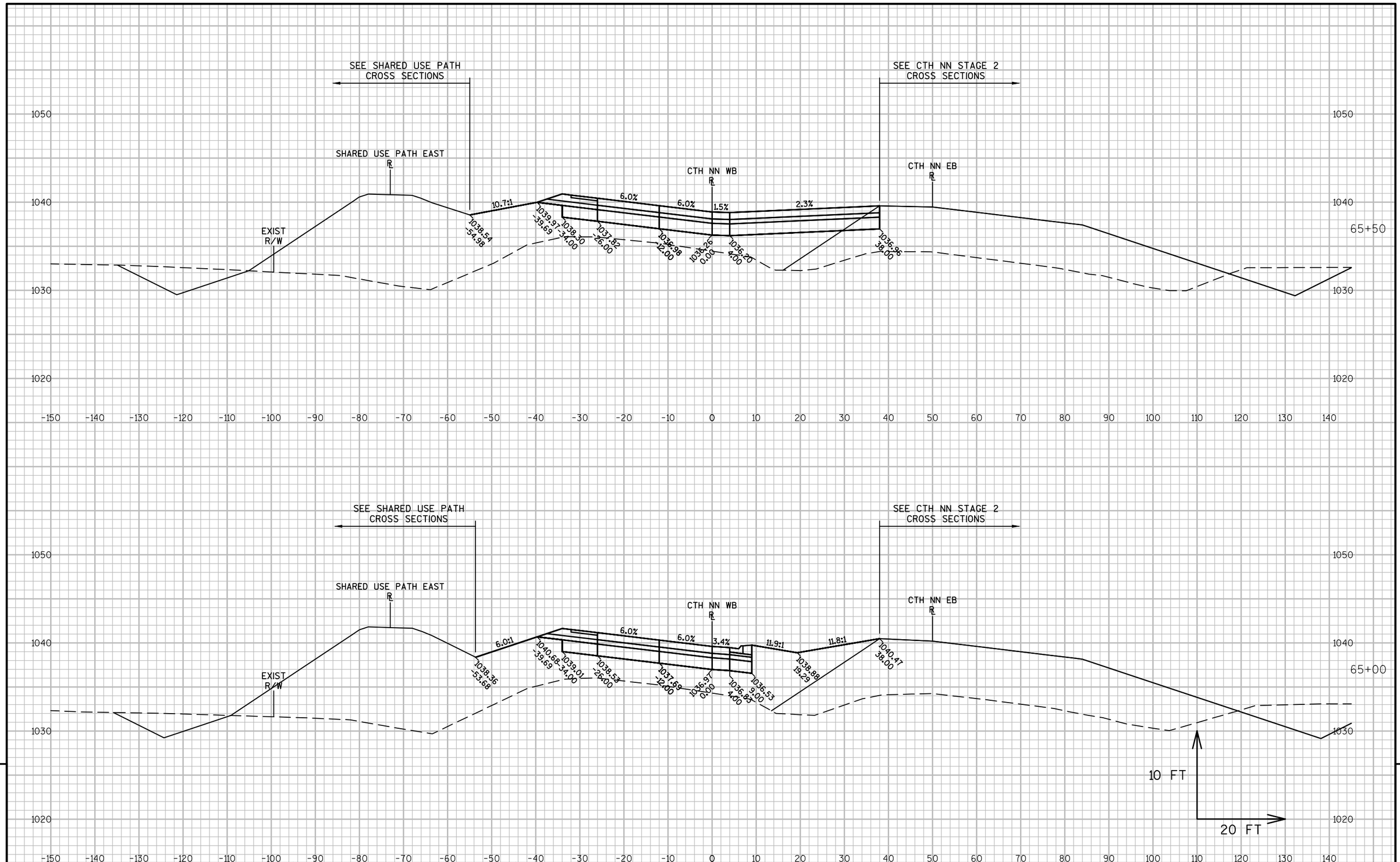
9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN WB STAGE 3	SHEET 659	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090203_XS3_NN.DWG
LAYOUT NAME - 46

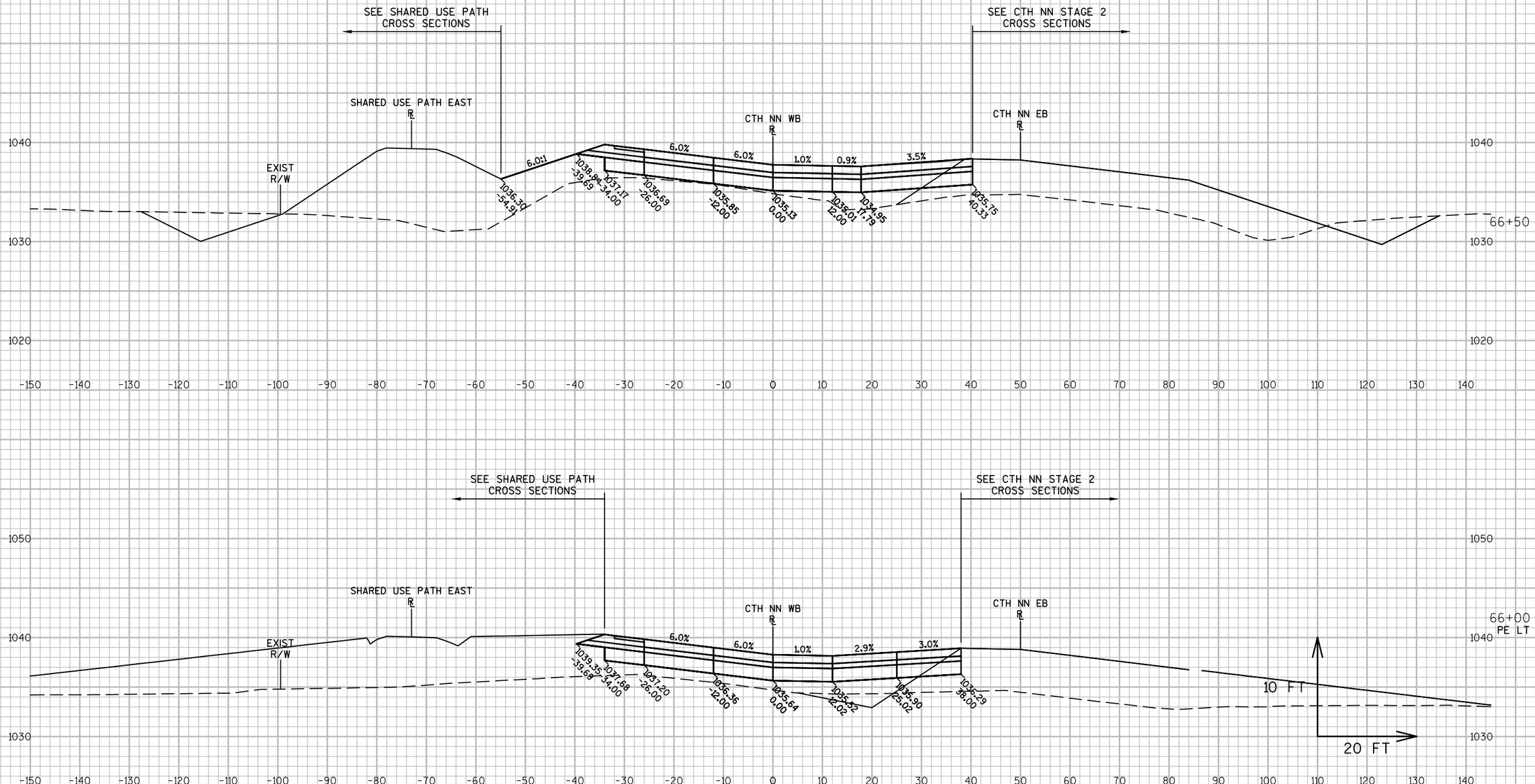
PLOT DATE : 4/29/2015 7:42 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:20_XREF

WISDOT/CADDS SHEET 49



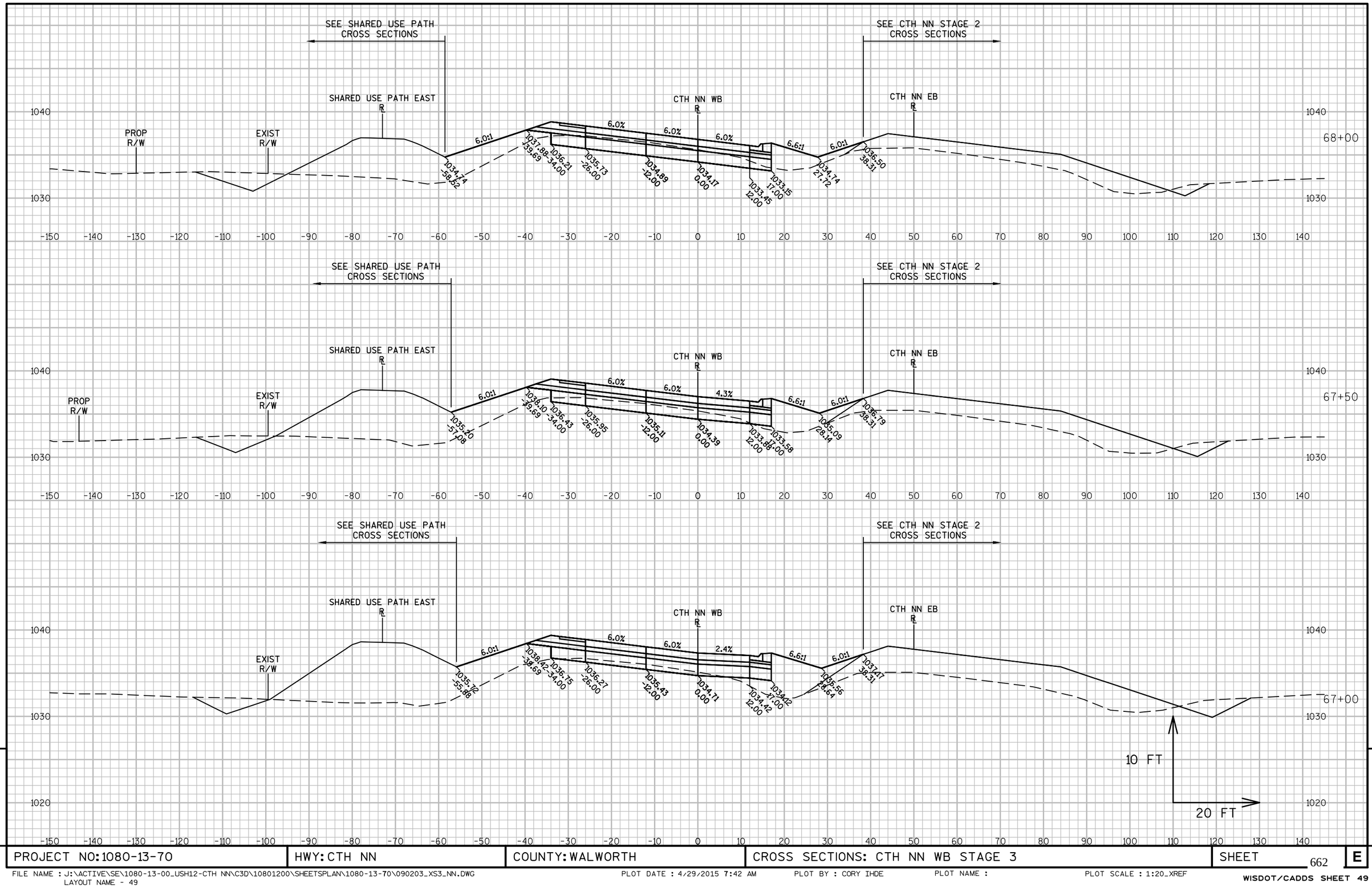
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN WB STAGE 3	SHEET 660 E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090203_XS3_NN.DWG
LAYOUT NAME - 47
PLOT DATE : 4/29/2015 7:42 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:20_XREF
WISDOT/CADDS SHEET 49



PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN WB STAGE 3	SHEET 661 E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090203_XS3_NN.DWG
LAYOUT NAME - 48
PLOT DATE : 4/29/2015 7:42 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:20_XREF
WISDOT/CADDS SHEET 49

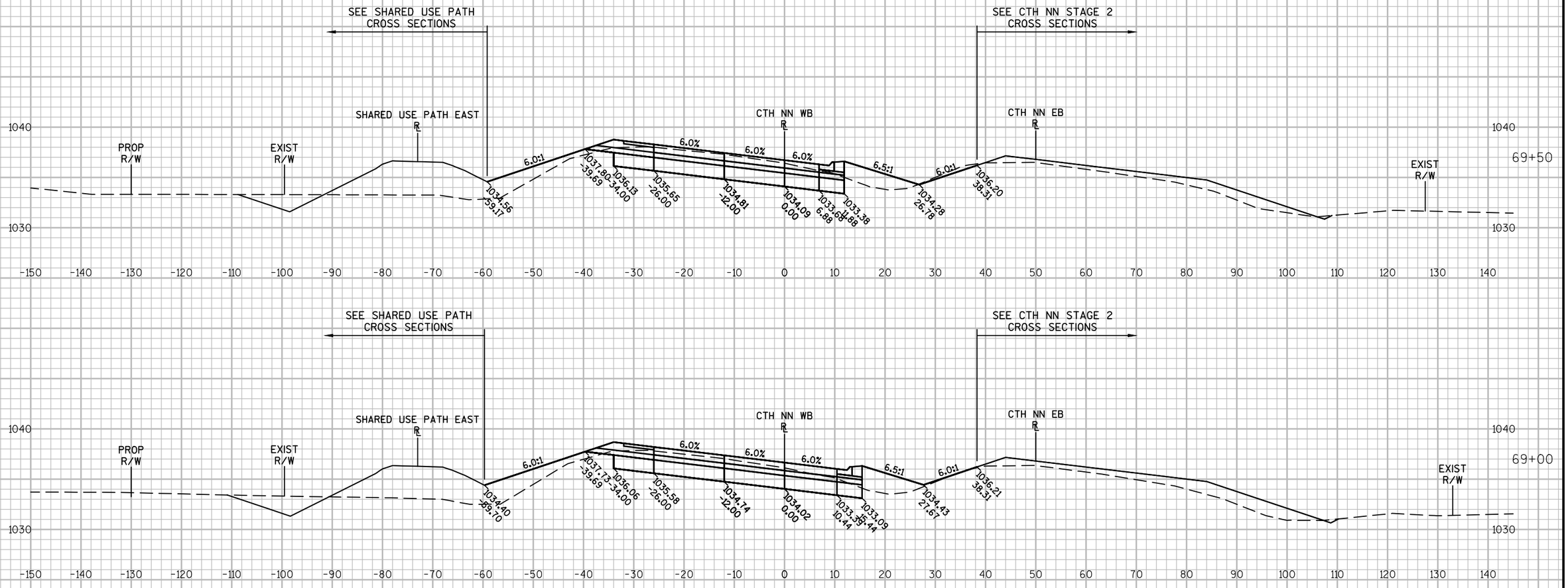


PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN WB STAGE 3	SHEET 662	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090203_XS3_NN.DWG
LAYOUT NAME - 49

PLOT DATE : 4/29/2015 7:42 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:20_XREF

WISDOT/CADDS SHEET 49



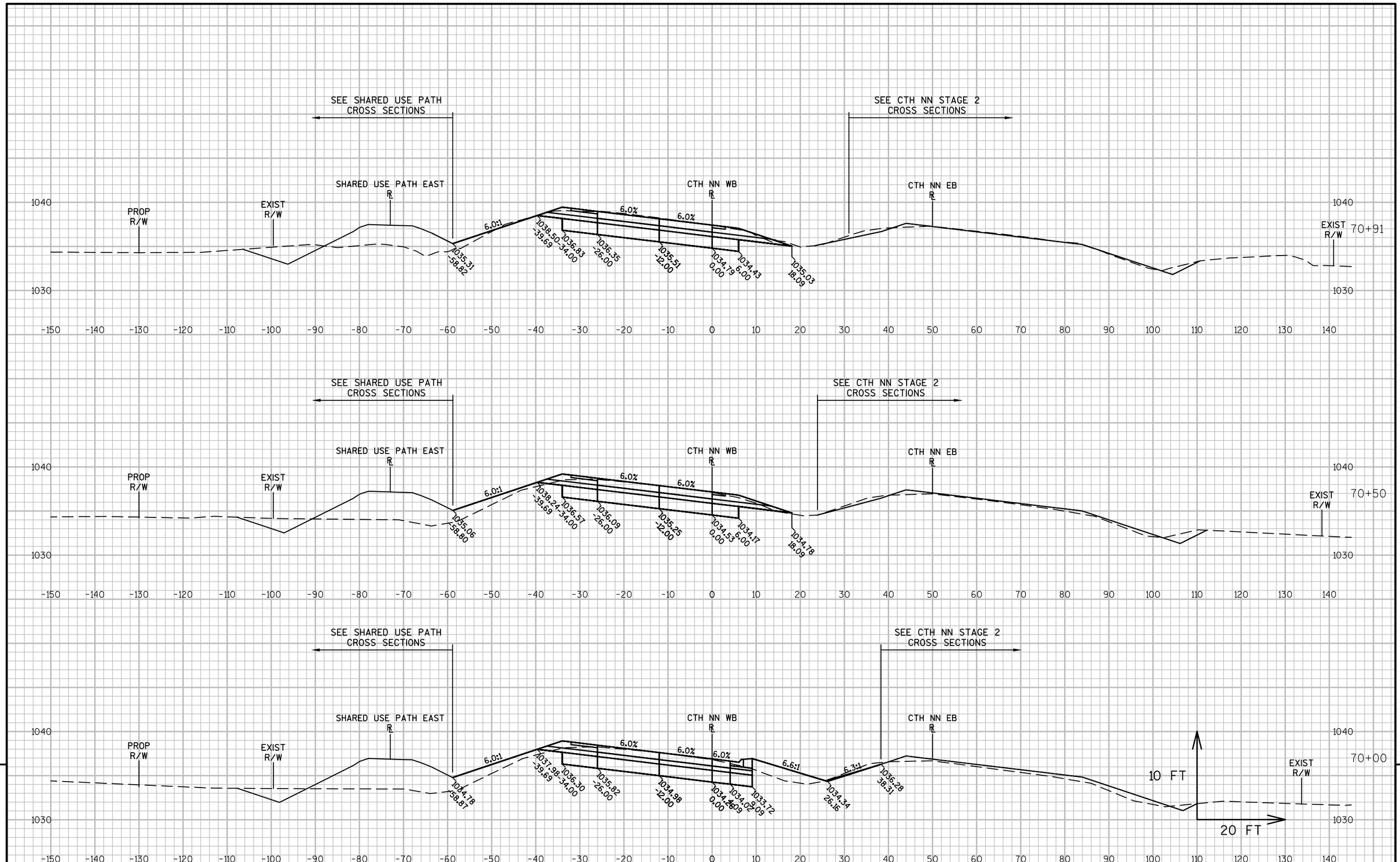
9

9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN WB STAGE 3	SHEET 663	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090203_XS3_NN.DWG
LAYOUT NAME - 50

PLOT DATE : 4/29/2015 7:42 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:20_XREF

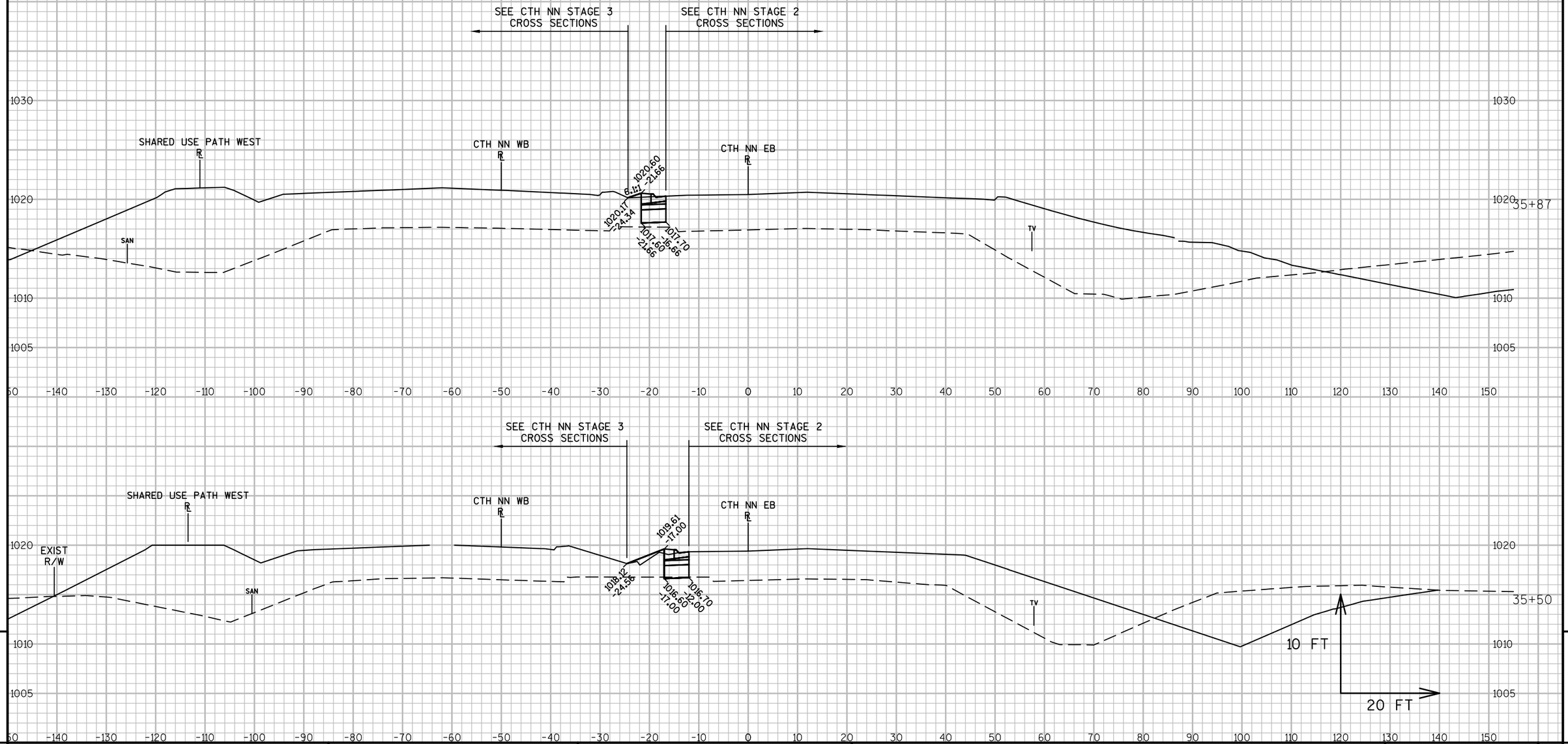


9

9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN WB STAGE 3	SHEET 664	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090203_XS3_NN.DWG
LAYOUT NAME - 51
PLOT DATE : 4/29/2015 7:43 AM
PLOT BY : CORY IHDE
PLOT NAME :
PLOT SCALE : 1:20_XREF
WISDOT/CADDS SHEET 49



9

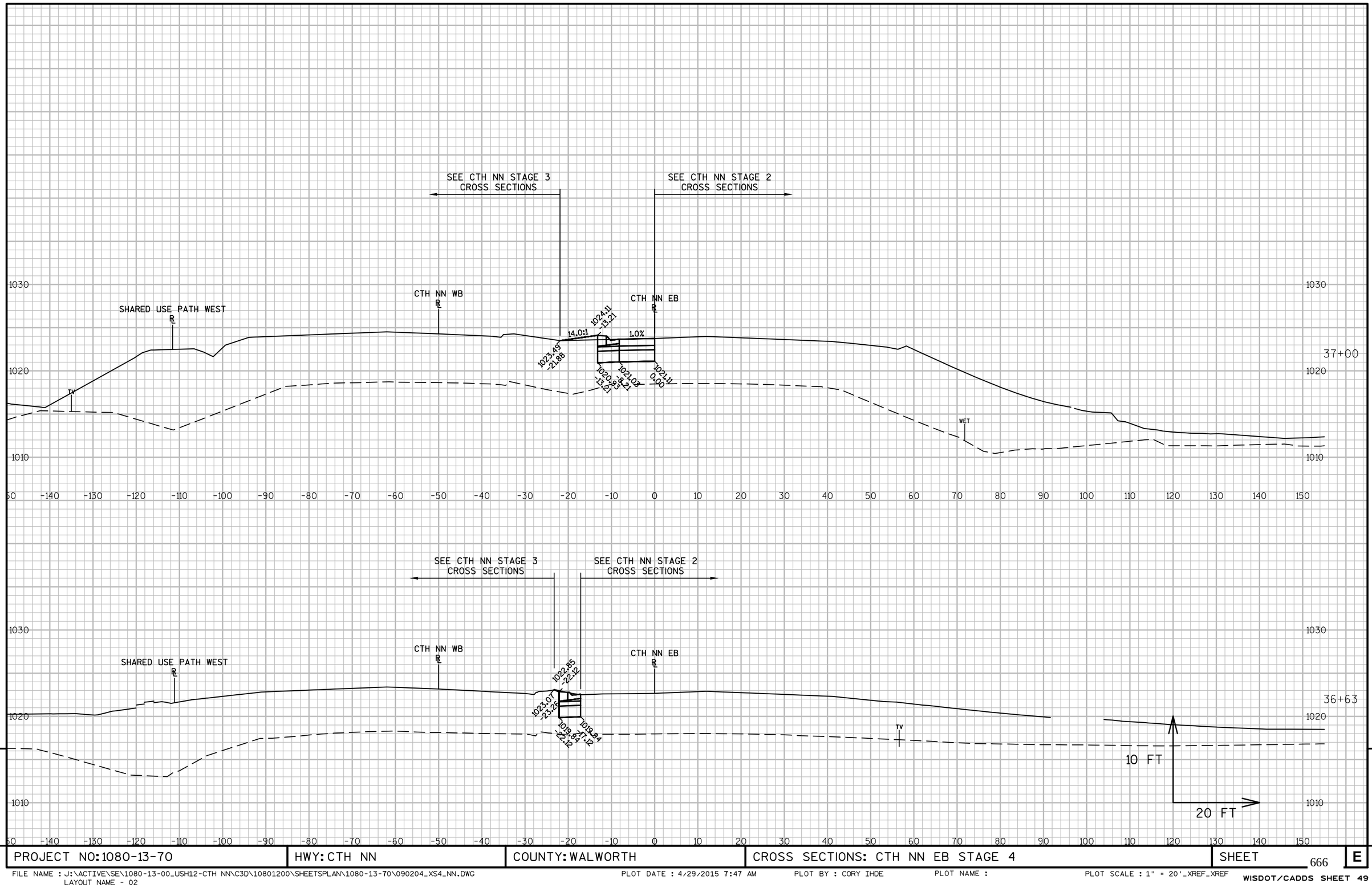
9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN EB STAGE 4	SHEET 665	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090204_XS4_NN.DWG
LAYOUT NAME - 01

PLOT DATE : 4/29/2015 7:47 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1" = 20'_XREF_XREF

WISDOT/CADDS SHEET 49

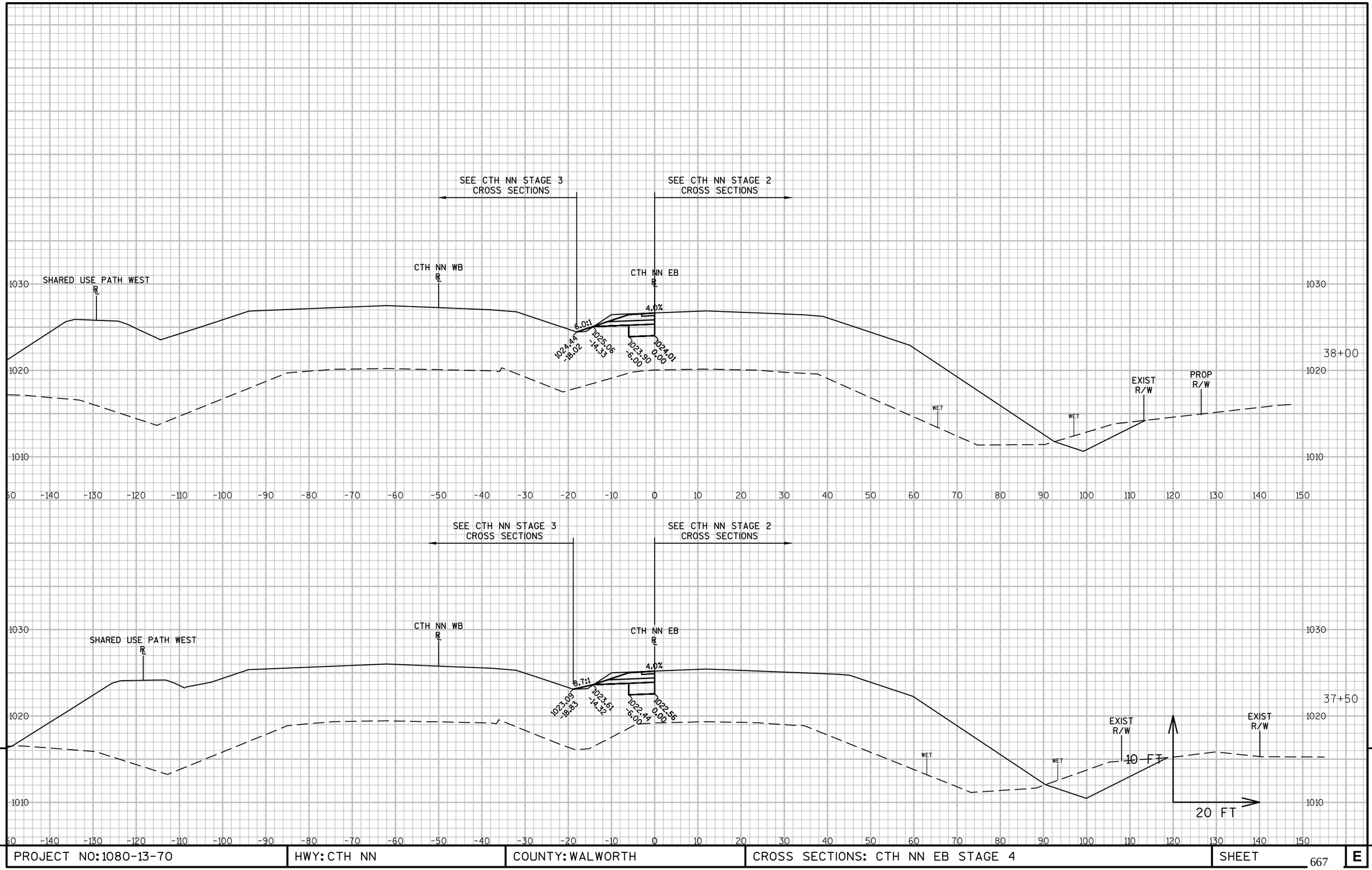


PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN EB STAGE 4	SHEET 666	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090204_XS4_NN.DWG
LAYOUT NAME - 02

PLOT DATE : 4/29/2015 7:47 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1" = 20'_XREF_XREF

WISDOT/CADDS SHEET 49



9

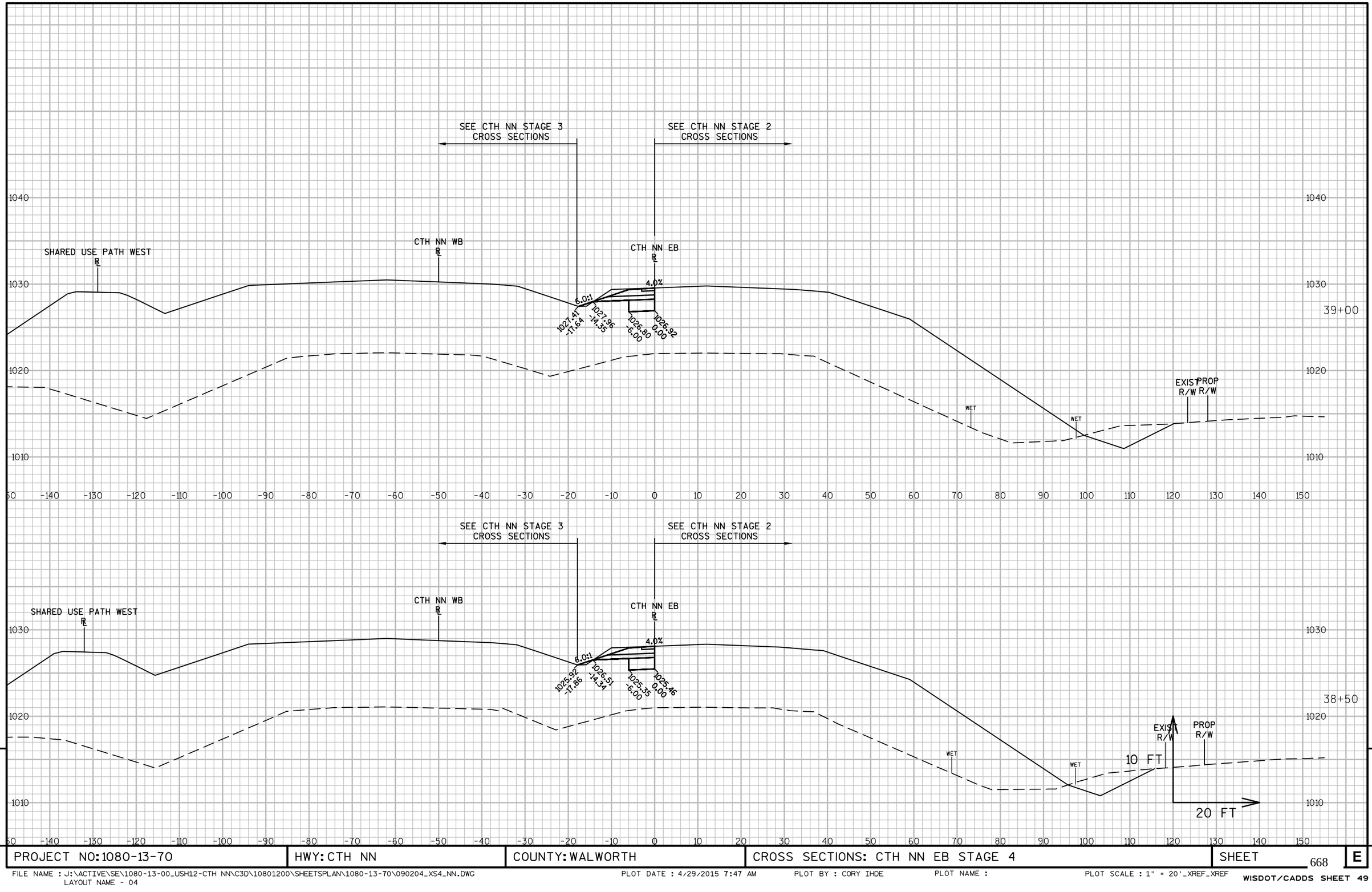
9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN EB STAGE 4	SHEET 667	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090204_XS4_NN.DWG
LAYOUT NAME - 03

PLOT DATE : 4/29/2015 7:47 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1" = 20'_XREF_XREF

WISDOT/CADDS SHEET 49

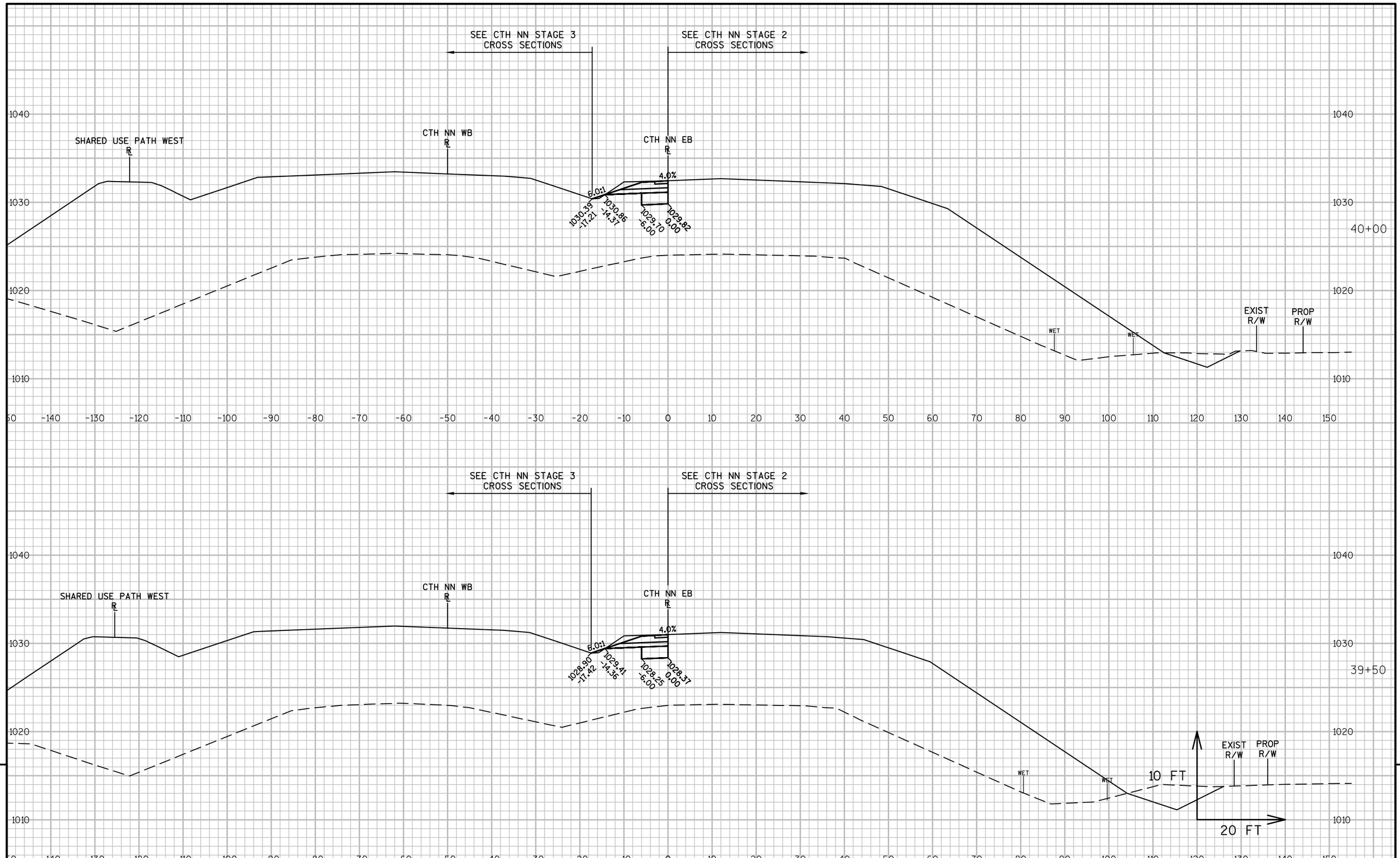


PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN EB STAGE 4	SHEET 668	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090204_XS4_NN.DWG
LAYOUT NAME - 04

PLOT DATE : 4/29/2015 7:47 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1" = 20'_XREF_XREF

WISDOT/CADDS SHEET 49



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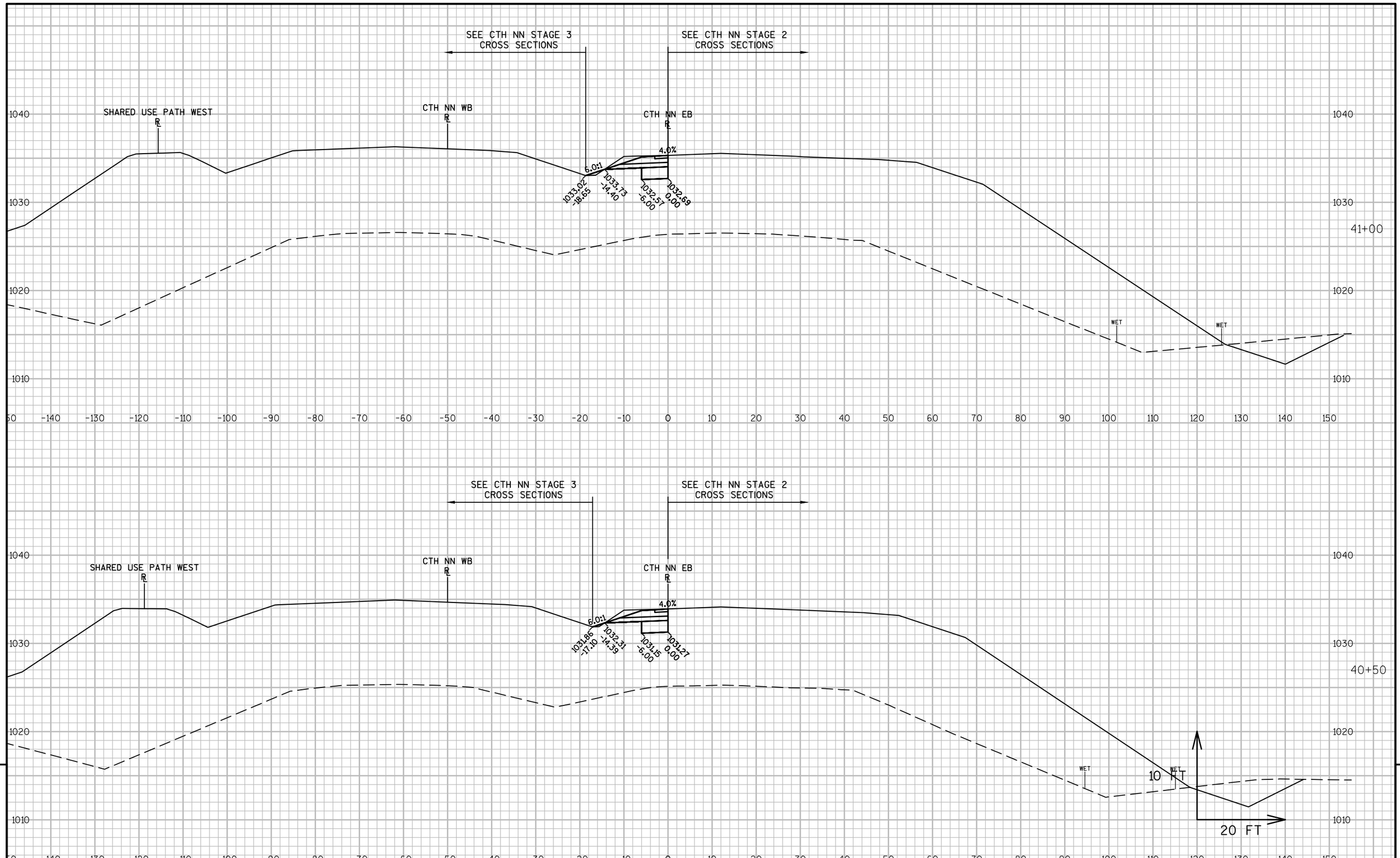
9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN EB STAGE 4	SHEET 669	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090204_XS4_NN.DWG
LAYOUT NAME - 05
PLOT DATE : 4/29/2015 7:47 AM
PLOT BY : CORY IHDE
PLOT NAME :
PLOT SCALE : 1" = 20'_XREF_XREF
WISDOT/CADDS SHEET 49



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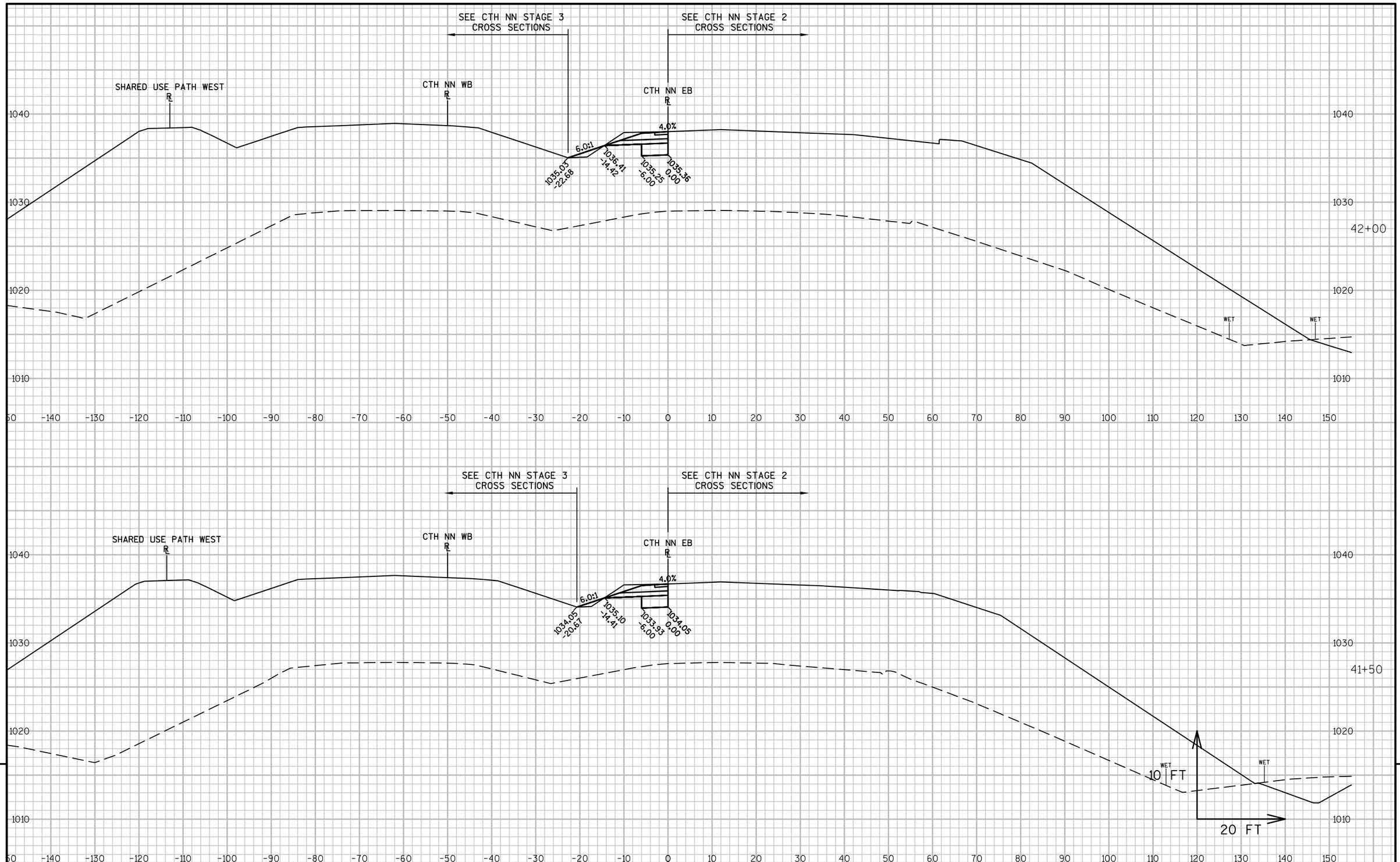
9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN EB STAGE 4	SHEET 670	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090204_XS4_NN.DWG
LAYOUT NAME - 06

PLOT DATE : 4/29/2015 7:48 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1" = 20'_XREF_XREF

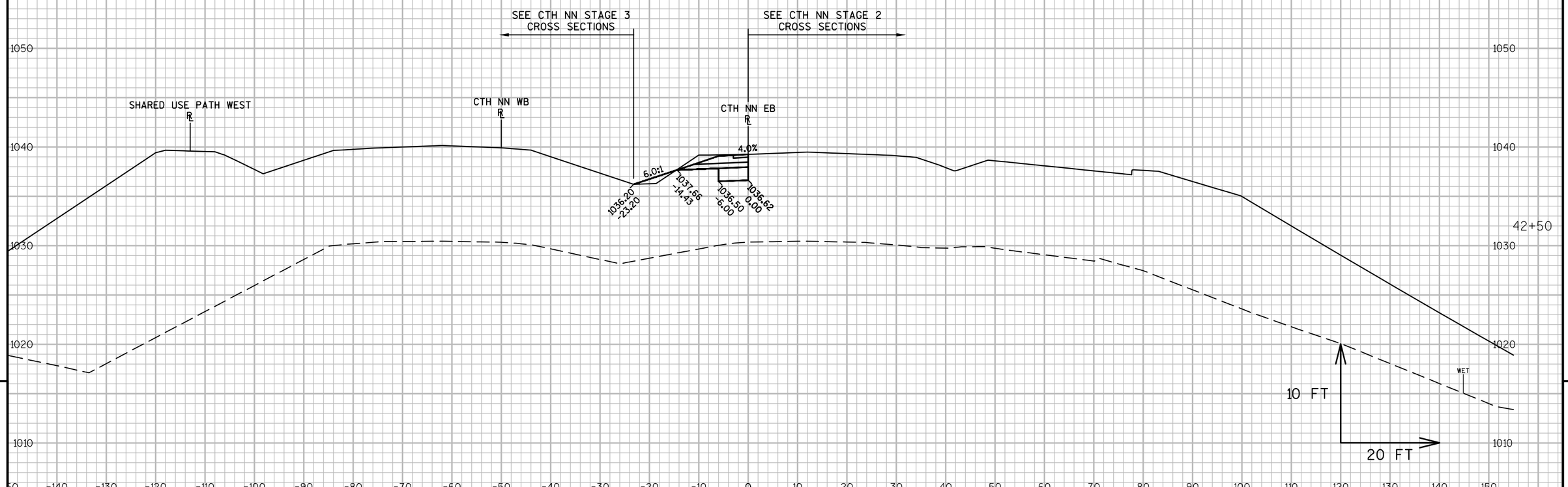


PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN EB STAGE 4	SHEET 671 E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090204_XS4_NN.DWG
LAYOUT NAME - 07

PLOT DATE : 4/29/2015 7:48 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1" = 20'_XREF_XREF

WISDOT/CADDS SHEET 49



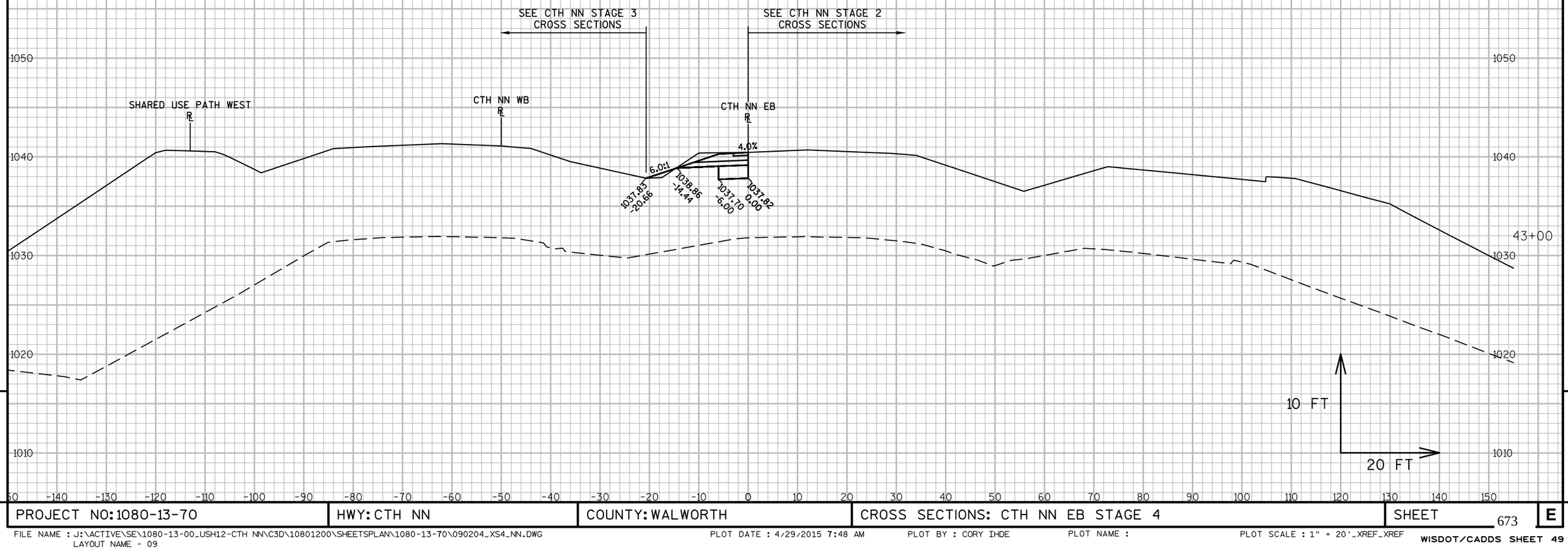
9

9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN EB STAGE 4	SHEET 672	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090204_XS4_NN.DWG
LAYOUT NAME - 08

PLOT DATE : 4/29/2015 7:48 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1" = 20'_XREF_XREF



9

9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN EB STAGE 4	SHEET 673	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090204_XS4_NN.DWG
LAYOUT NAME - 09

PLOT DATE : 4/29/2015 7:48 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1" = 20'_XREF_XREF

WISDOT/CADDS SHEET 49

SEE CTH NN STAGE 3 CROSS SECTIONS

SEE CTH NN STAGE 2 CROSS SECTIONS

SHARED USE PATH WEST

CTH NN WB

CTH NN EB

4.0%

8.6:1

1039.41
-19.12

1040.01
-14.46

1038.85
-6.00

1038.97
0.00

43+50

10 FT

20 FT

1050
1040
1030
1020
1010

-150 -140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

9

9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN EB STAGE 4	SHEET 674	E

SEE CTH NN STAGE 3
CROSS SECTIONS

SEE CTH NN STAGE 2
CROSS SECTIONS

SHARED USE PATH WEST
℄

CTH NN WB
℄

CTH NN EB
℄

1042.92
-14.11

7.6:1

0.5%

1042.28
-18.98

1039.92
-14.11

1040.02
-9.11

1040.06
0.00

44+00

10 FT

20 FT

1050
1040
1030
1020
1010

-150 -140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

9

9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN EB STAGE 4	SHEET 675	E

SEE CTH NN STAGE 3
CROSS SECTIONS

SEE CTH NN STAGE 2
CROSS SECTIONS

SHARED USE PATH WEST
℄

CTH NN WB
℄

CTH NN EB
℄

1043.11
-16.99

0.5%

1043.12
-18.05

1040.10
-16.99

1040.20
-11.99

1040.26
0.00

1050
1040
1030
1020
1010

44+10

10 FT
20 FT

-150 -140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

9

9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN EB STAGE 4	SHEET 676	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090204_XS4_NN.DWG
LAYOUT NAME - 12

PLOT DATE : 4/29/2015 7:49 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1" = 20'_XREF_XREF

WISDOT/CADDS SHEET 49

SEE CTH NN STAGE 3
CROSS SECTIONS

SEE CTH NN STAGE 2
CROSS SECTIONS

SHARED USE PATH WEST
℄

CTH NN WB
℄

CTH NN EB
℄

10.3:1

0.5%

1041.51
16.95

1041.67
11.95

1041.73
0.00

44+82

10 FT

20 FT

1050
1040
1030
1020
1010

-150 -140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

9

9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN EB STAGE 4	SHEET 677	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090204_XS4_NN.DWG
LAYOUT NAME - 13

PLOT DATE : 4/29/2015 7:49 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1" = 20'_XREF_XREF

WISDOT/CADDS SHEET 49

SEE CTH NN STAGE 3
CROSS SECTIONS

SEE CTH NN STAGE 2
CROSS SECTIONS

SHARED USE PATH WEST
℄

CTH NN WB
℄

CTH NN EB
℄

33.3:1

1044.95
-11.99

0.5%

1045.22
-20.87

1044.95
-11.99

1042.05
-6.99

1042.08
0.00

45+00

10 FT

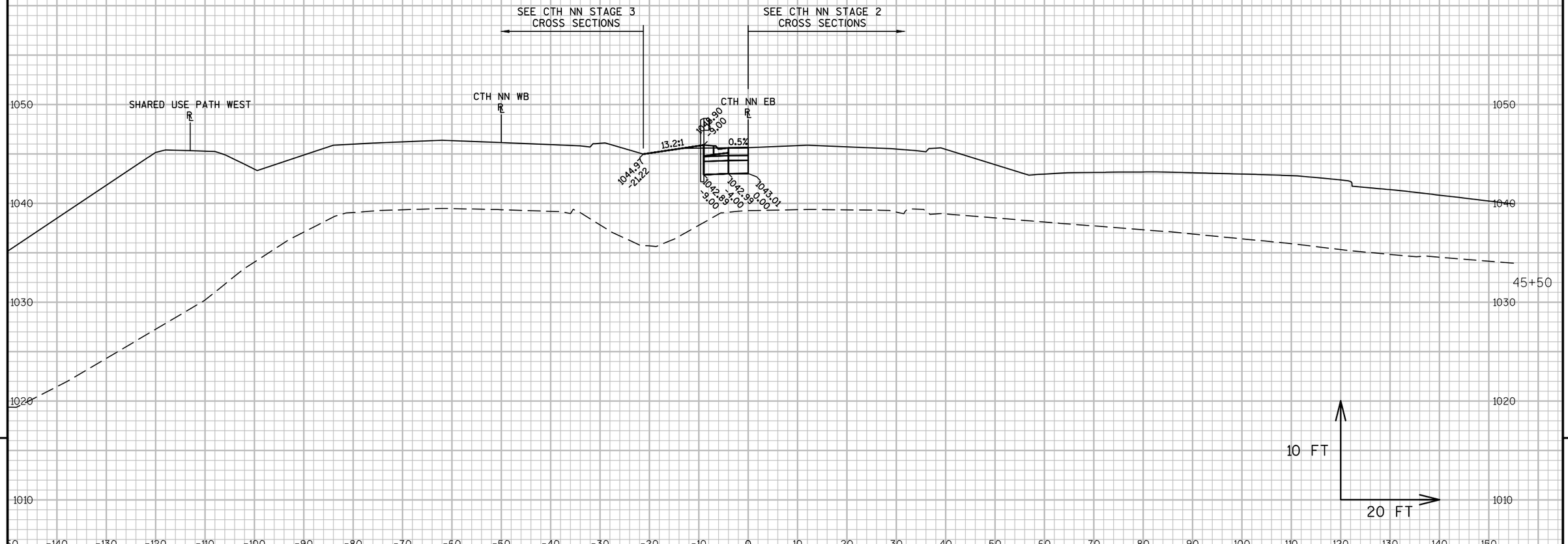
20 FT

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN EB STAGE 4	SHEET 678	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090204_XS4_NN.DWG
LAYOUT NAME - 14

PLOT DATE : 4/29/2015 7:49 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1" = 20'_XREF_XREF

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN EB STAGE 4	SHEET 679	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090204_XS4_NN.DWG
LAYOUT NAME - 15

PLOT DATE : 4/29/2015 7:49 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1" = 20'_XREF_XREF

SEE CTH NN STAGE 3
CROSS SECTIONS

SEE CTH NN STAGE 2
CROSS SECTIONS

SHARED USE PATH WEST
℄

CTH NN WB
℄

CTH NN EB
℄

1046.16
-0.00

12.7:1

0.6%

1045.81
-21.14

1045.75
-9.00

1043.85
-4.00

1045.88
0.00

46+00

10 FT

20 FT

1050
1040
1030
1020

-150 -140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

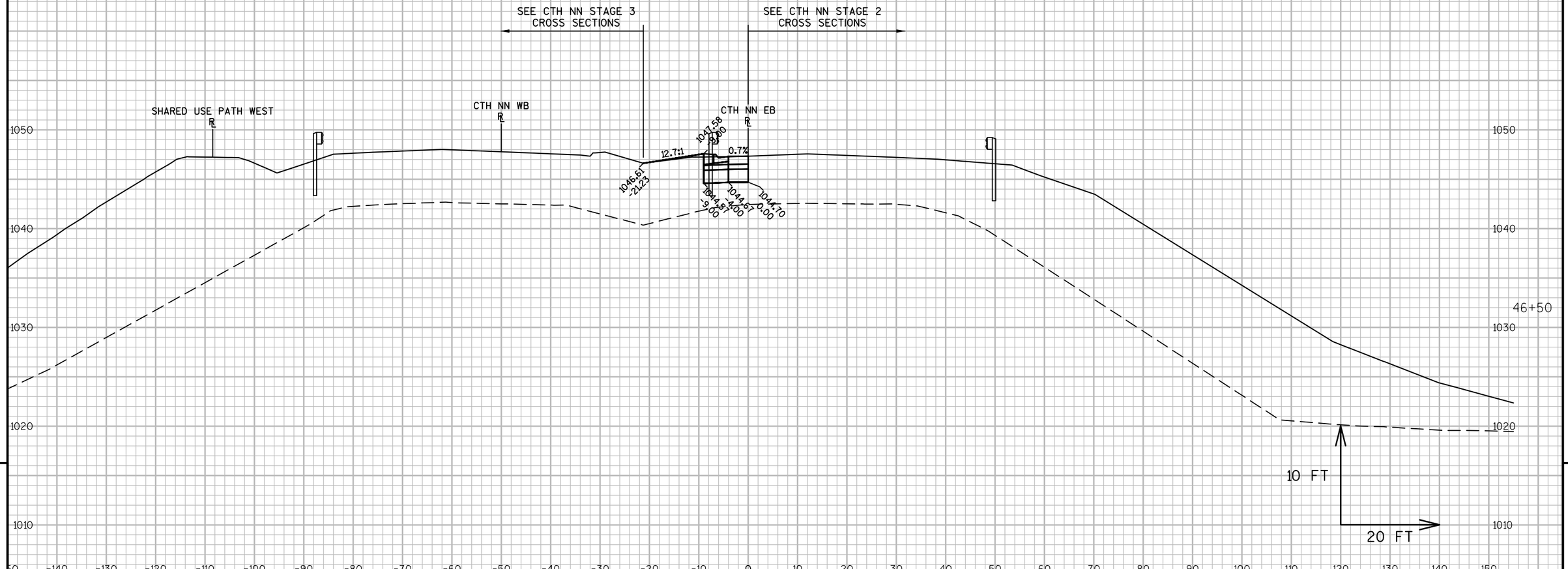
9

9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN EB STAGE 4	SHEET 680	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090204_XS4_NN.DWG
LAYOUT NAME - 16

PLOT DATE : 4/29/2015 7:49 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1" = 20'_XREF_XREF



9

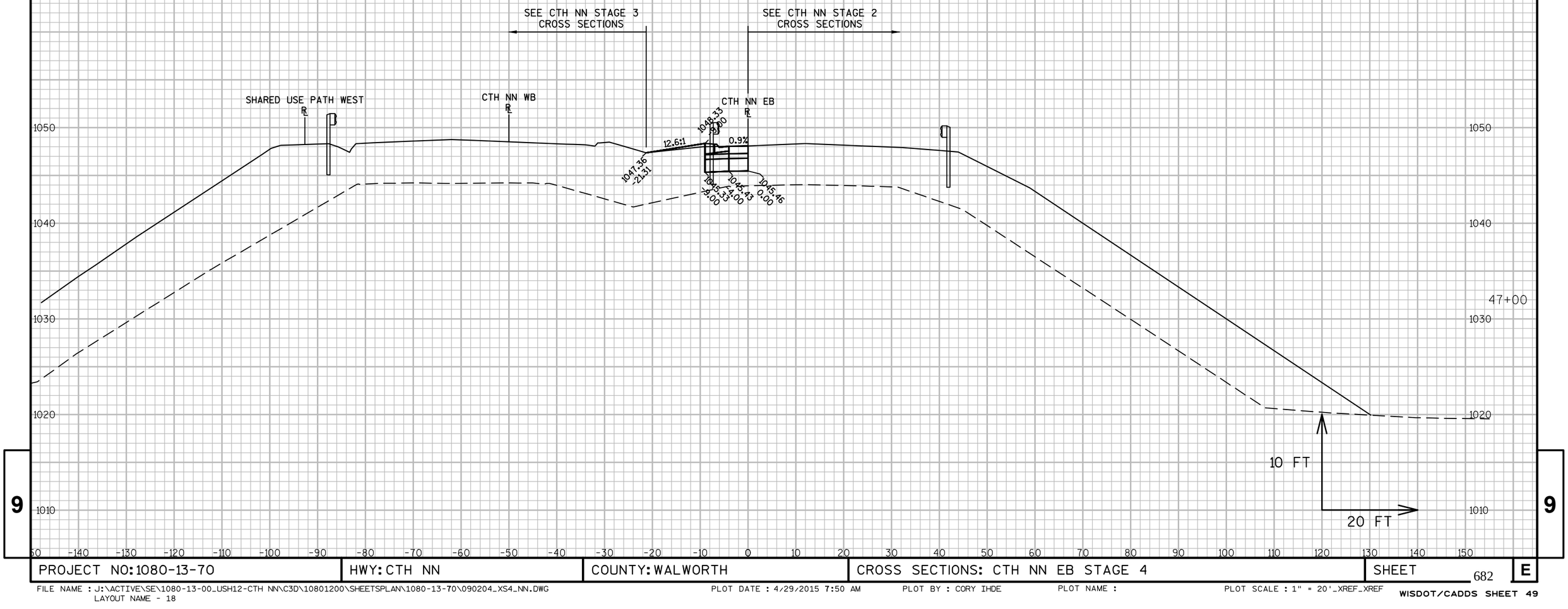
9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN EB STAGE 4	SHEET 681	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090204_XS4_NN.DWG
LAYOUT NAME - 17

PLOT DATE : 4/29/2015 7:49 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1" = 20'_XREF_XREF

WISDOT/CADDS SHEET 49



9

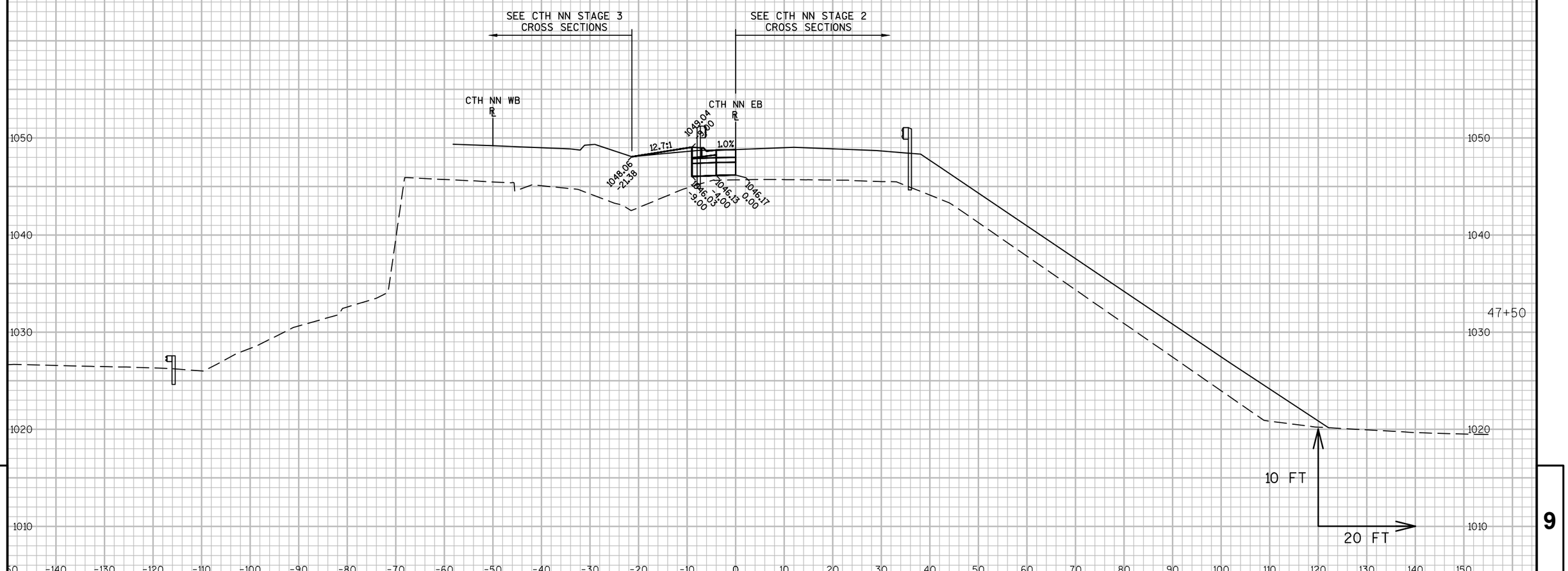
9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN EB STAGE 4	SHEET 682	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090204_XS4_NN.DWG
LAYOUT NAME - 18

PLOT DATE : 4/29/2015 7:50 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1" = 20'_XREF_XREF

WISDOT/CADDS SHEET 49



9

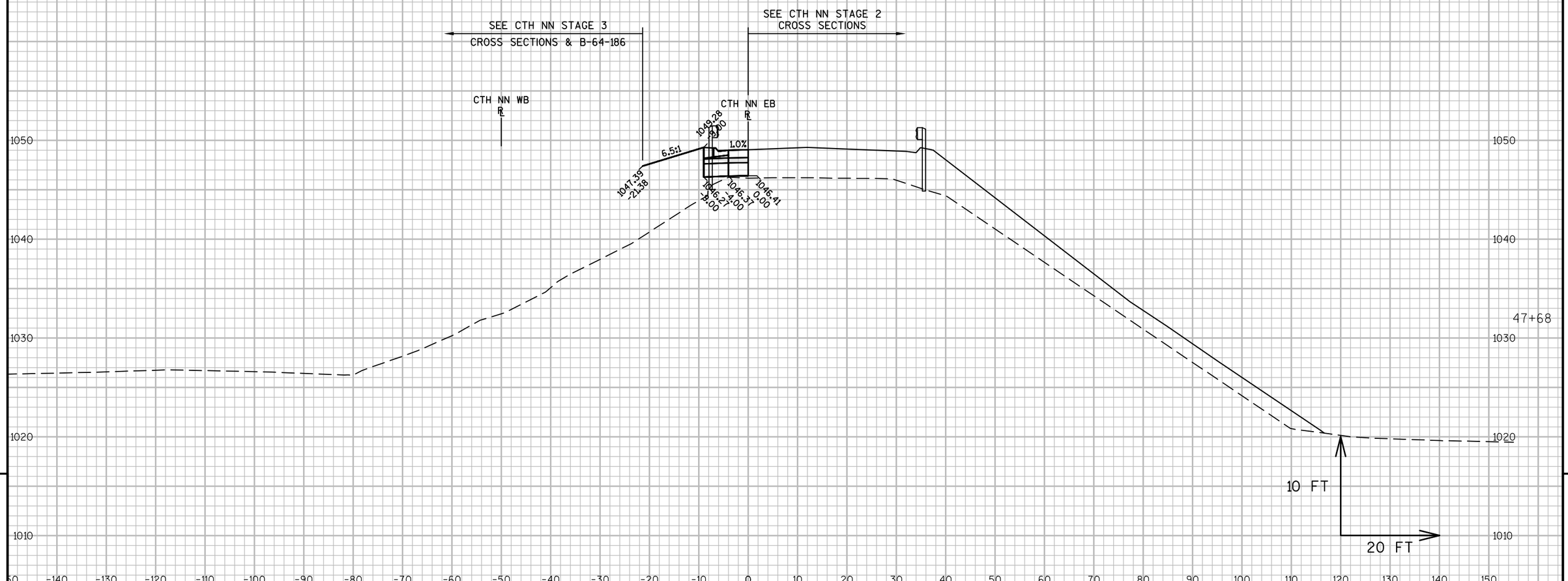
9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN EB STAGE 4	SHEET 683	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090204_XS4_NN.DWG
LAYOUT NAME - 19

PLOT DATE : 4/29/2015 7:50 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1" = 20'_XREF_XREF

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN EB STAGE 4	SHEET 684	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090204_XS4_NN.DWG
LAYOUT NAME - 20
PLOT DATE : 4/29/2015 7:50 AM
PLOT BY : CORY IHDE
PLOT NAME :
PLOT SCALE : 1" = 20'_XREF_XREF

SEE CTH NN STAGE 3 CROSS SECTIONS

SEE CTH NN STAGE 2 CROSS SECTIONS

SHARED USE PATH EAST
℄

CTH NN WB
℄

CTH NN EB
℄

1052.02
-17.01

7.5:1

1050.55
-28.09

1049.01
-17.01

1049.11
-12.01

1060
1050
1040
1030
1020

57+00

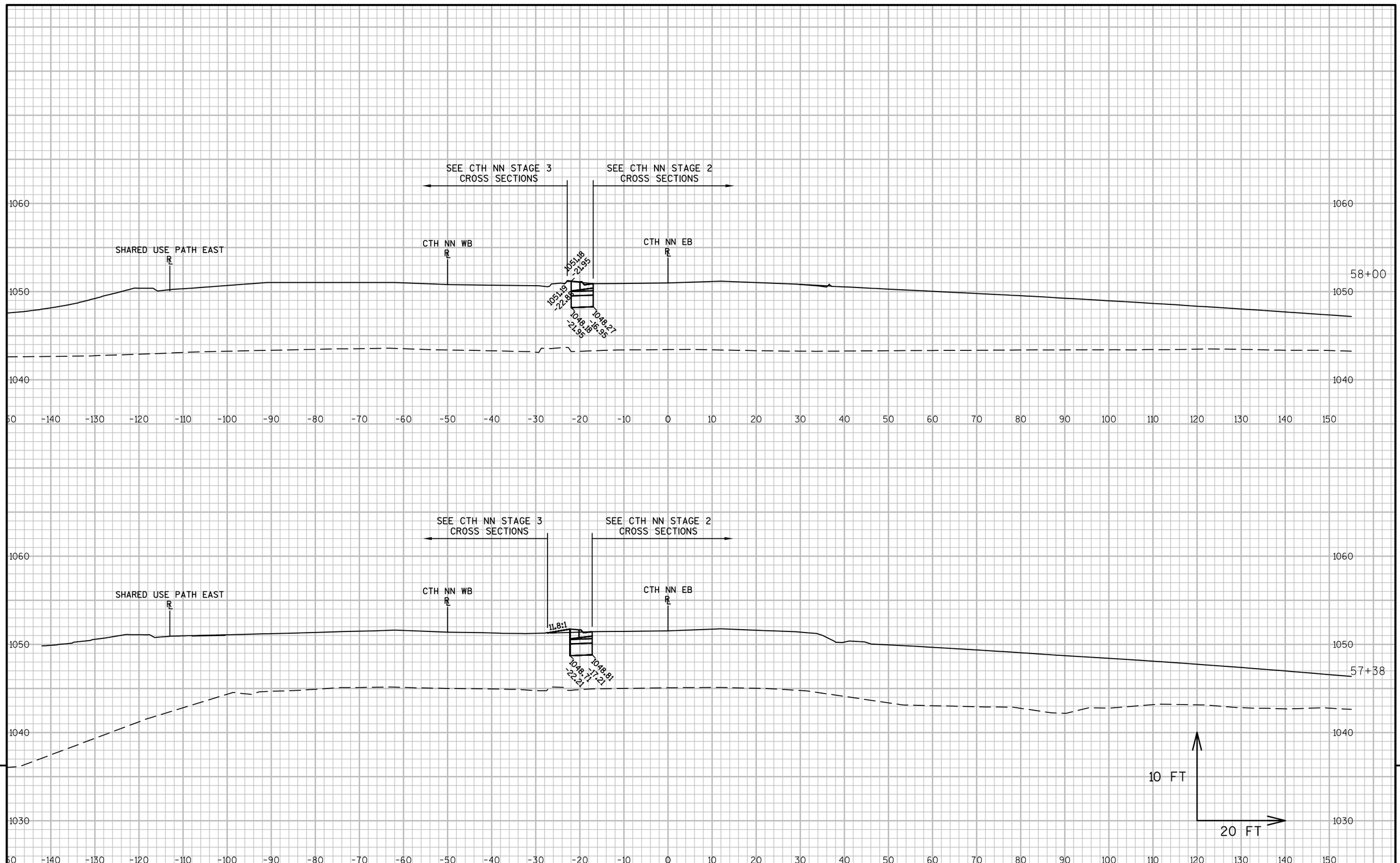
10 FT
20 FT

-150 -140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

9

9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN EB STAGE 4	SHEET 685	E



PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN EB STAGE 4	SHEET 686 E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090204_XS4_NN.DWG
LAYOUT NAME - 22

PLOT DATE : 4/29/2015 7:50 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1" = 20'_XREF_XREF

WISDOT/CADDS SHEET 49

SEE CTH NN STAGE 3 CROSS SECTIONS

SEE CTH NN STAGE 2 CROSS SECTIONS

SHARED USE PATH EAST
℄

CTH NN WB
℄

CTH NN EB
℄

1050+72
-15.49

6.8:1

0.5%

1049.45
-22.11

1047.87
-13.49

1047.81
-8.49

1047.85
0.00

58+50

10 FT

20 FT

1060
1050
1040
1030
1020

-150 -140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

9

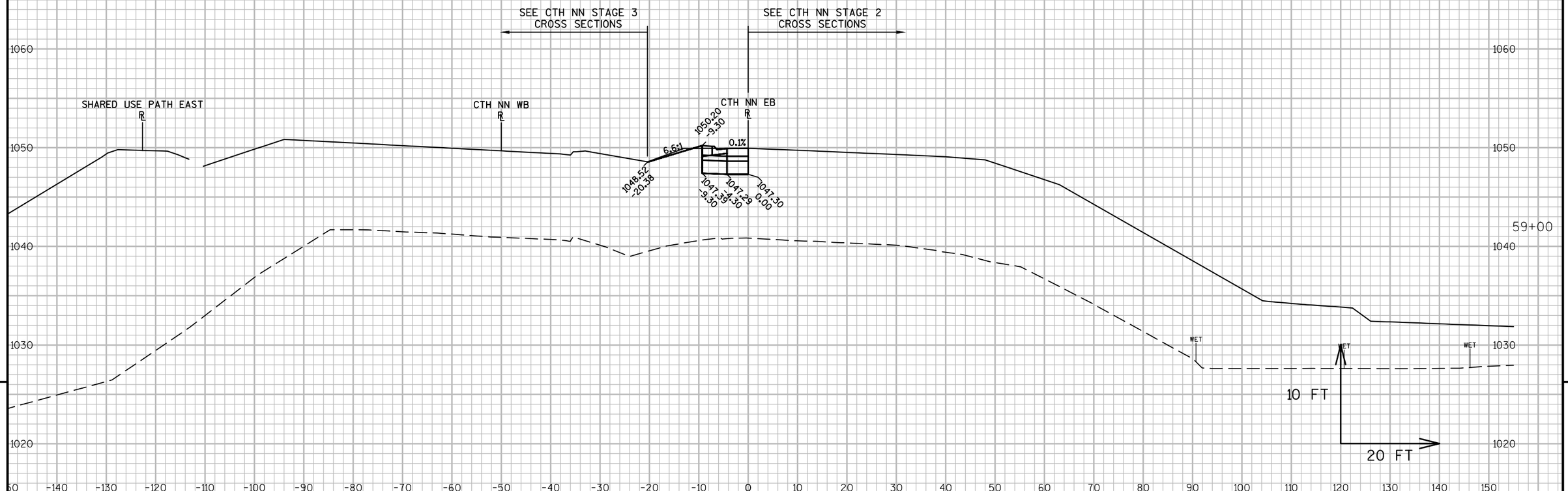
9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN EB STAGE 4	SHEET 687	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090204_XS4_NN.DWG
LAYOUT NAME - 23

PLOT DATE : 4/29/2015 7:50 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1" = 20'_XREF_XREF

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN EB STAGE 4	SHEET 688	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090204_XS4_NN.DWG
LAYOUT NAME - 24

PLOT DATE : 4/29/2015 7:51 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1" = 20'_XREF_XREF

WISDOT/CADDS SHEET 49

SEE CTH NN STAGE 3 CROSS SECTIONS

SEE CTH NN STAGE 2 CROSS SECTIONS

SHARED USE PATH EAST

CTH NN WB

CTH NN EB

1049.92
-8.99

6.5:1

3.2%

1047.94
-21.92

1047.00
-8.99

1046.82
-3.99

1046.69
0.00

59+50

WET

EXIST R/W

PROP R/W

10 FT

20 FT

1060
1050
1040
1030
1020

-150 -140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

9

9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN EB STAGE 4	SHEET 689	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090204_XS4_NN.DWG
LAYOUT NAME - 25

PLOT DATE : 4/29/2015 7:51 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1" = 20'_XREF_XREF

WISDOT/CADDS SHEET 49

SEE CTH NN STAGE 3 CROSS SECTIONS

SEE CTH NN STAGE 2 CROSS SECTIONS

SHARED USE PATH EAST

CTH NN WB

CTH NN EB

10
49.33
-9.00

6.5:1

4.0%

1047.17
-22.96

1046.36
-9.00

1046.18
-4.00

1046.02
0.00

WET

EXIST R/W

PROP R/W

WET

10 FT

20 FT

60+00

1060
1050
1040
1030
1020

-150 -140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

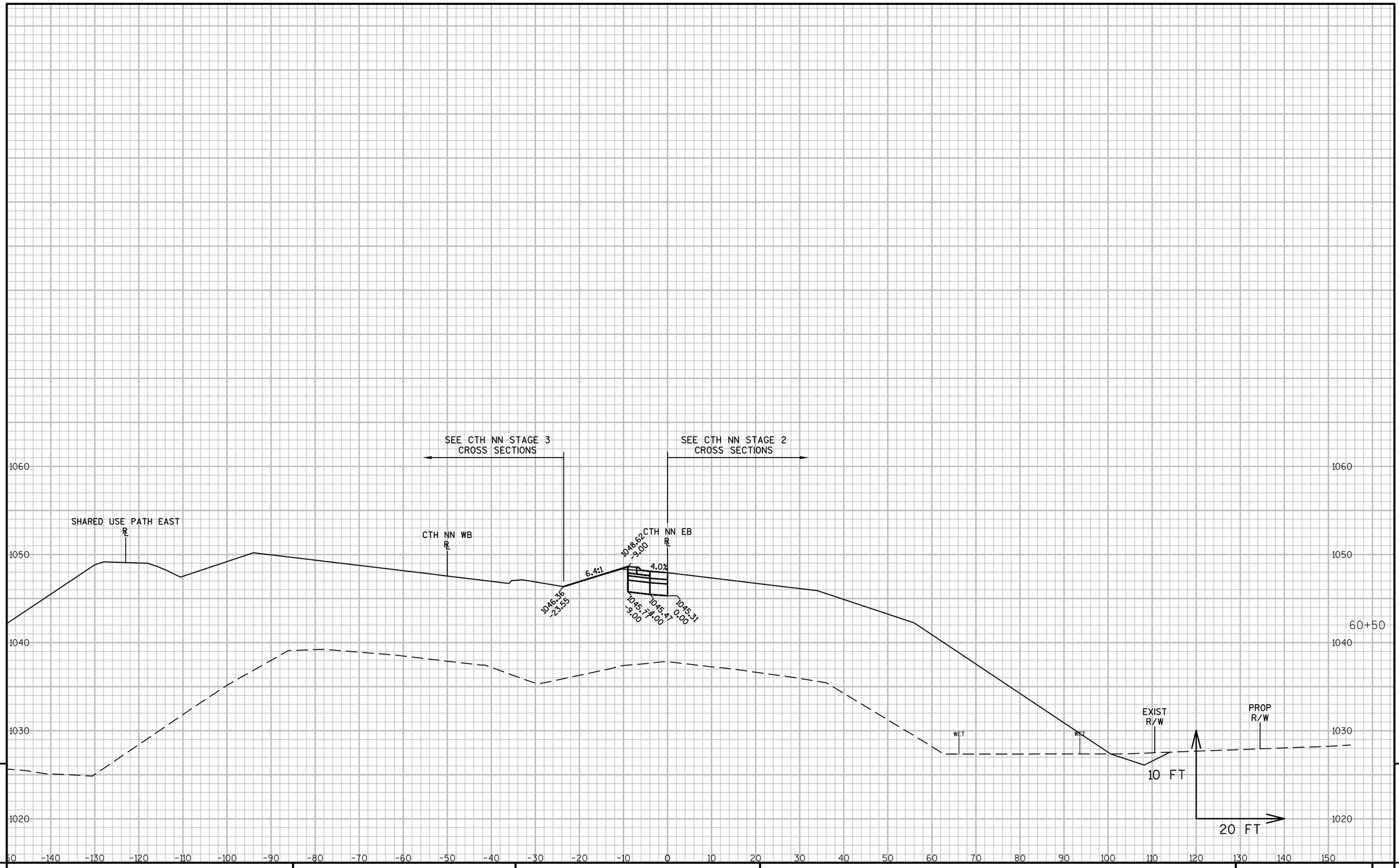
9

9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN EB STAGE 4	SHEET 690	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090204_XS4_NN.DWG
LAYOUT NAME - 26

PLOT DATE : 4/29/2015 7:51 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1" = 20'_XREF_XREF



9

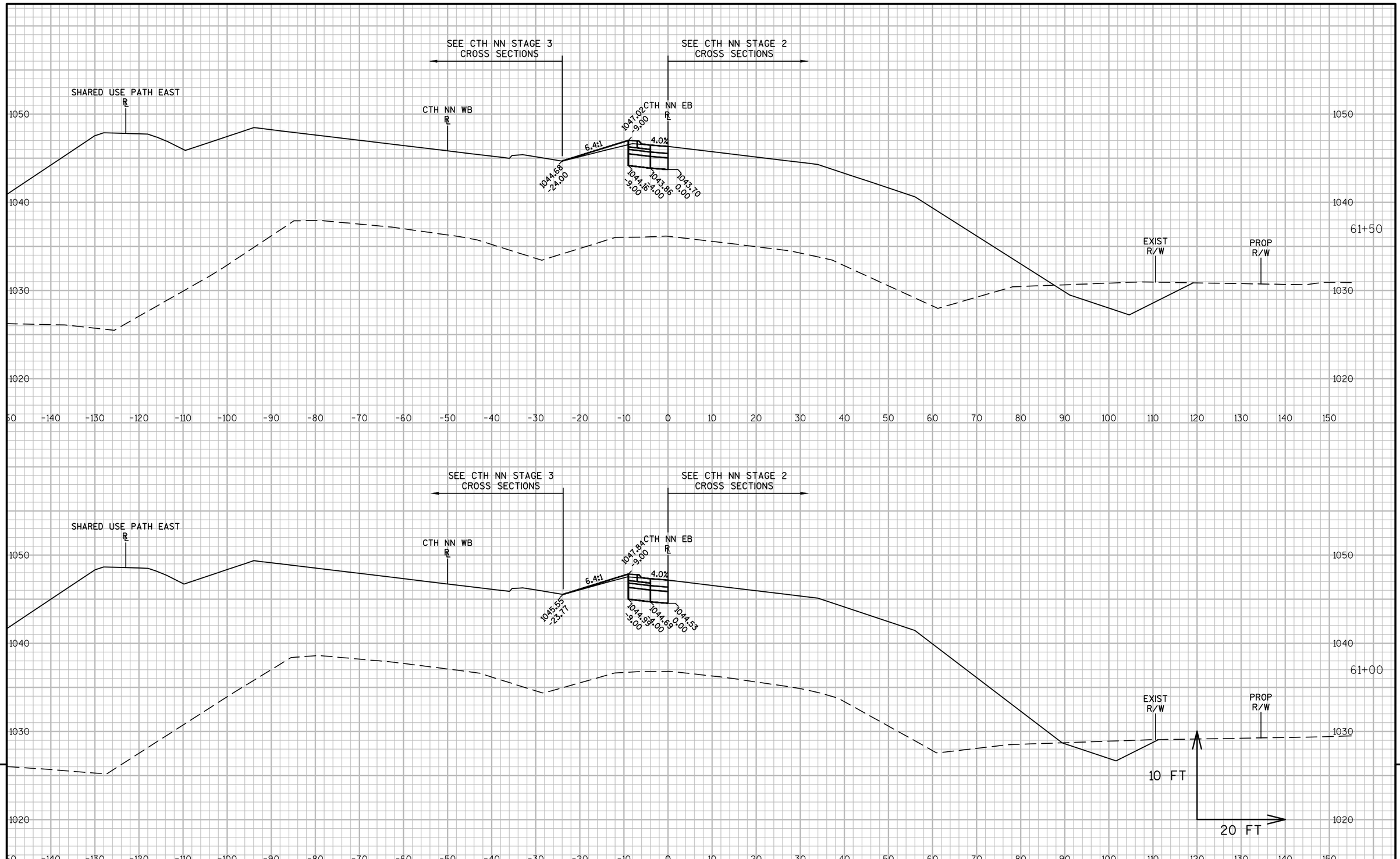
9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN EB STAGE 4	SHEET 691	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090204_XS4_NN.DWG
LAYOUT NAME - 27

PLOT DATE : 4/29/2015 7:51 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1" = 20'_XREF_XREF

WISDOT/CADDS SHEET 49



9

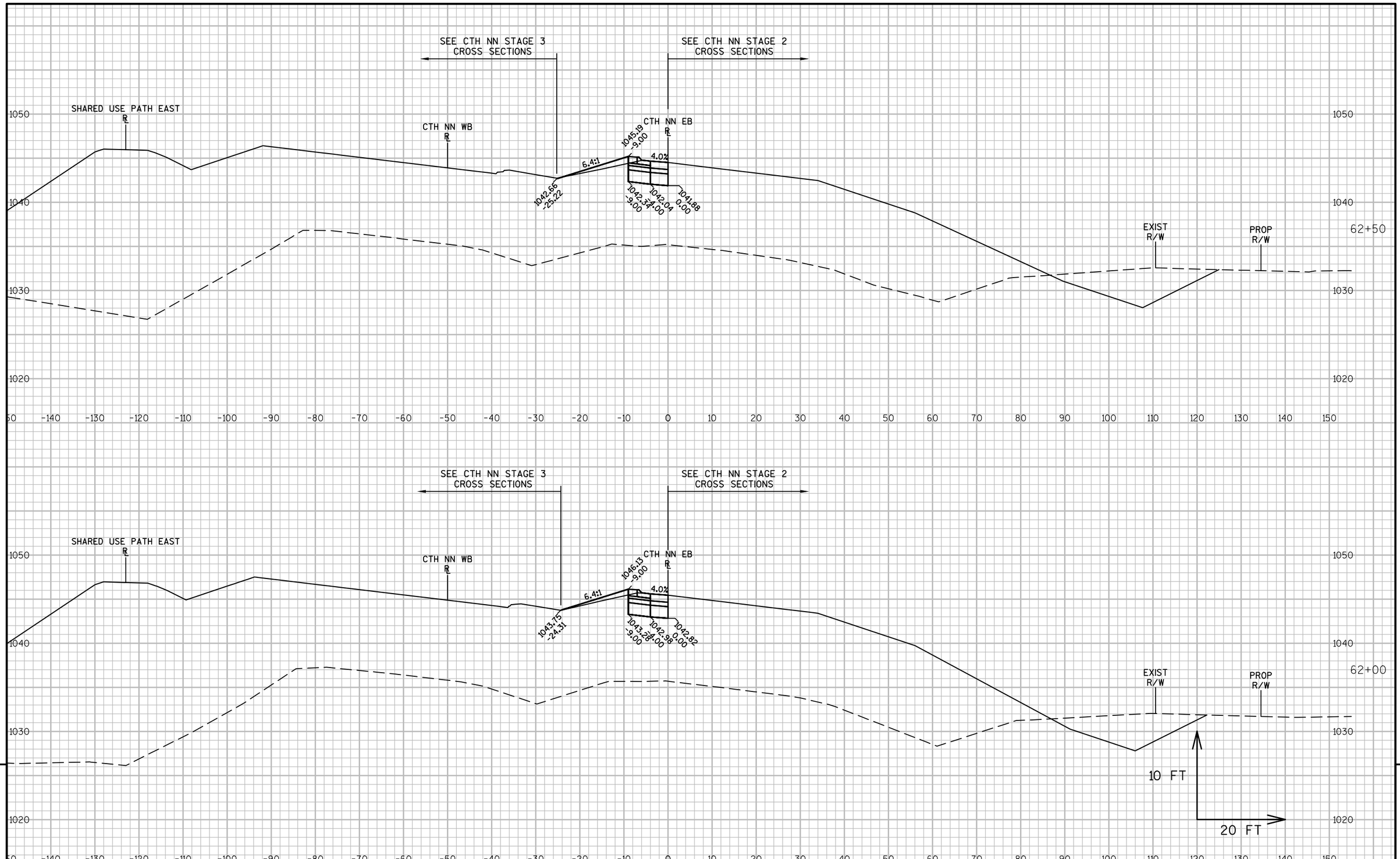
9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN EB STAGE 4	SHEET 692	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090204_XS4_NN.DWG
LAYOUT NAME - 28

PLOT DATE : 4/29/2015 7:51 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1" = 20'_XREF_XREF

WISDOT/CADDS SHEET 49

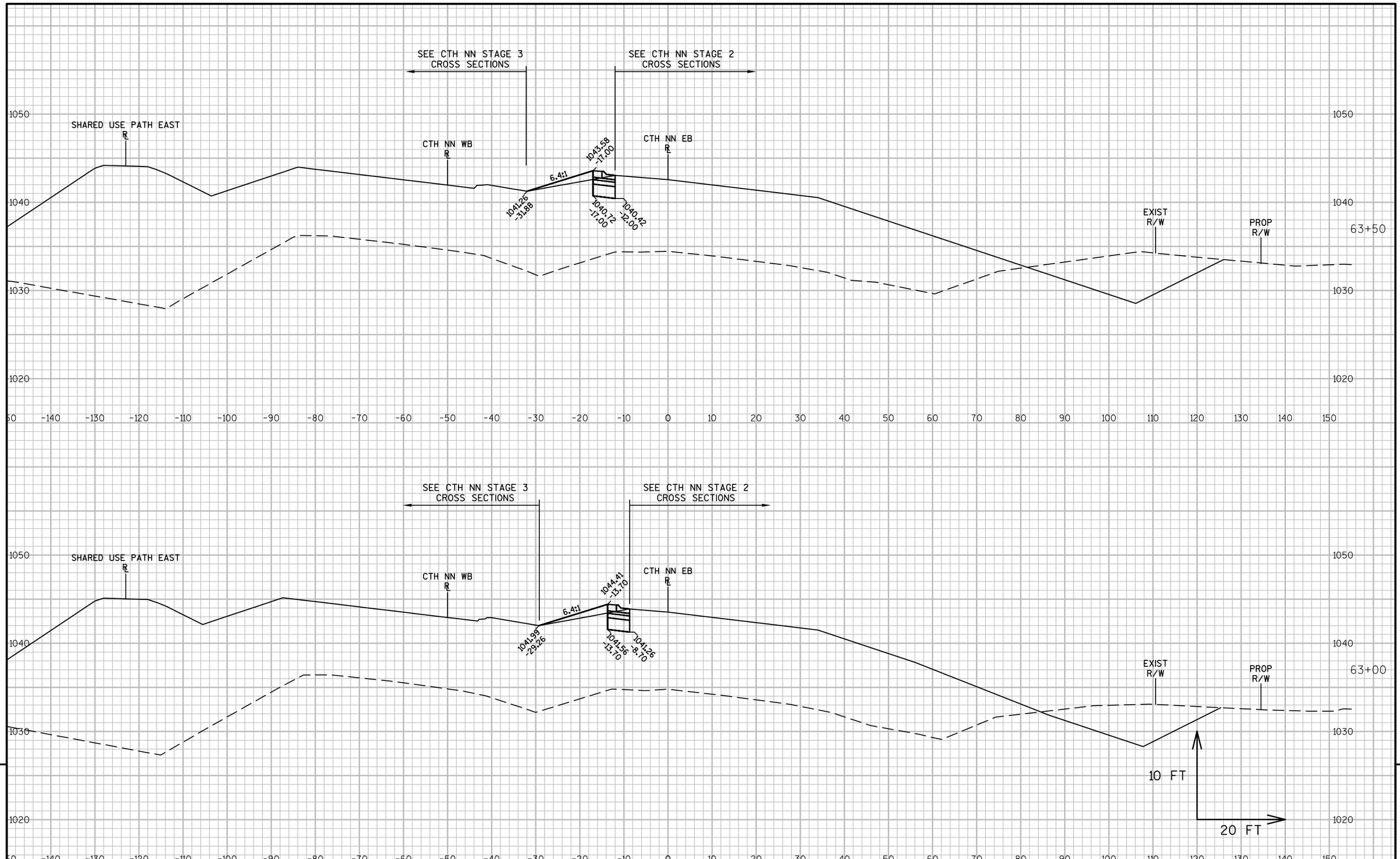


PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN EB STAGE 4	SHEET 693 E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090204_XS4_NN.DWG
LAYOUT NAME - 29

PLOT DATE : 4/29/2015 7:51 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1" = 20'_XREF_XREF

WISDOT/CADDS SHEET 49



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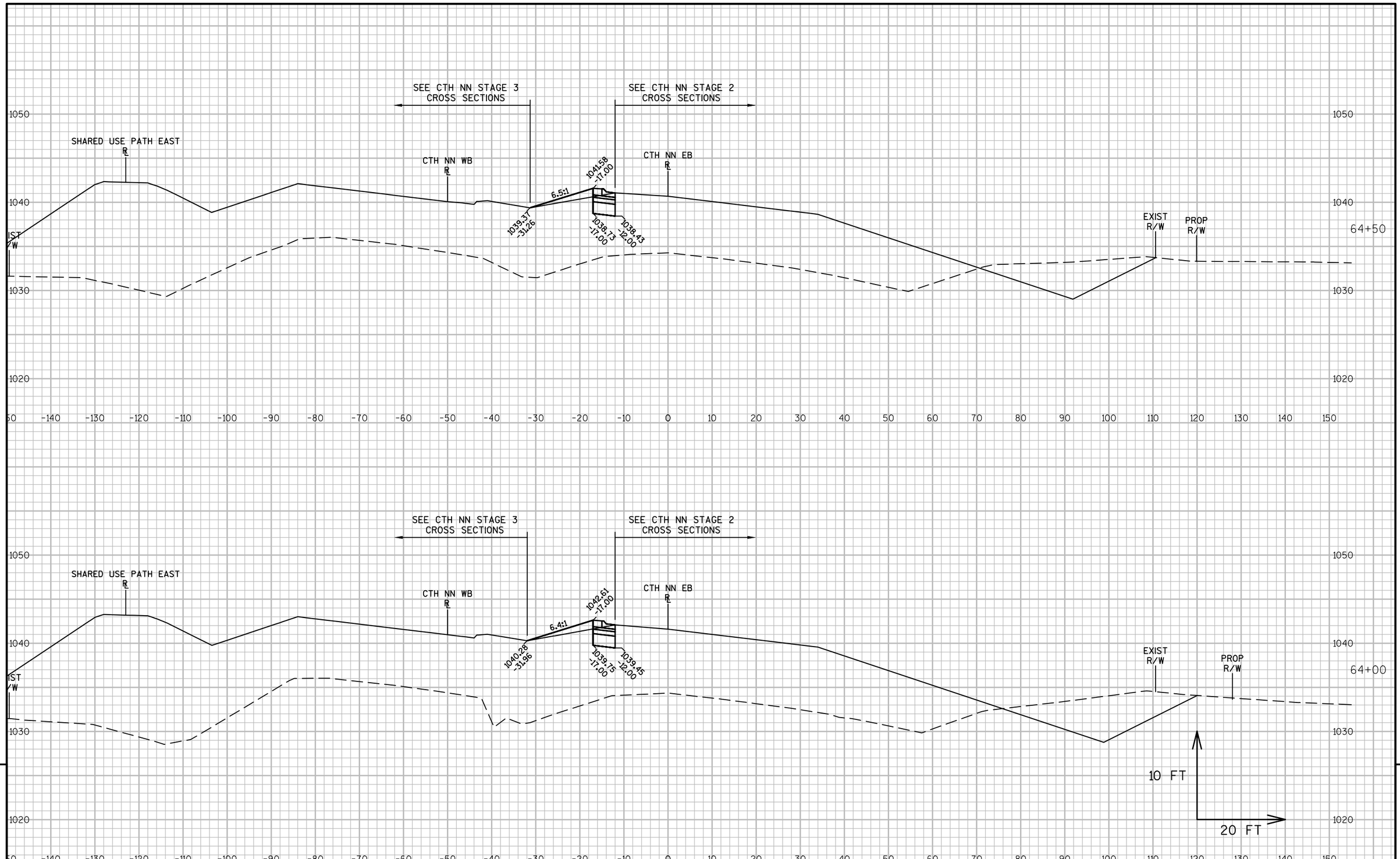
9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN EB STAGE 4	SHEET 694	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090204_XS4_NN.DWG
LAYOUT NAME - 30
PLOT DATE : 4/29/2015 7:52 AM
PLOT BY : CORY IHDE
PLOT NAME :
PLOT SCALE : 1" = 20'_XREF_XREF

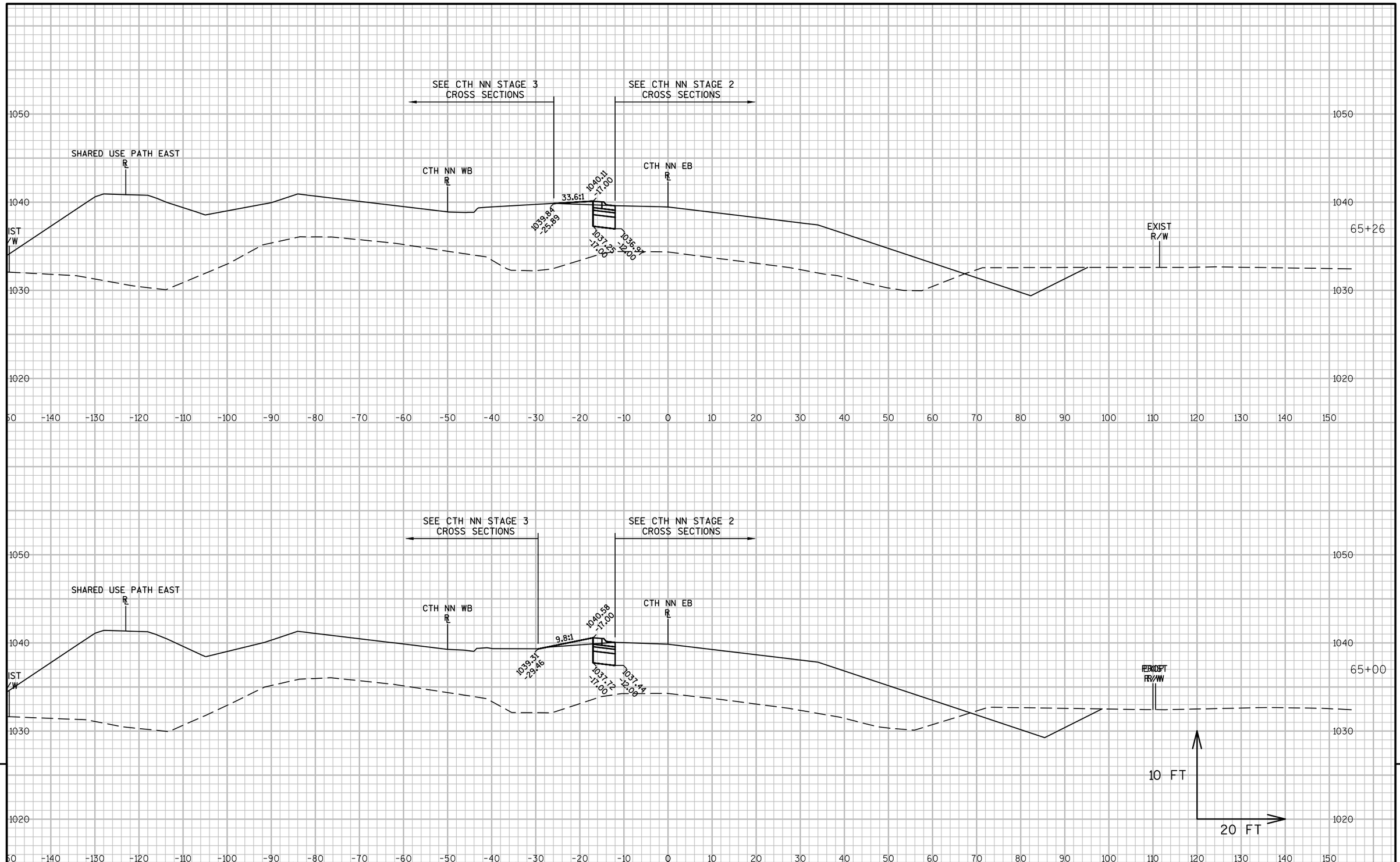


PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN EB STAGE 4	SHEET 695	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090204_XS4_NN.DWG
LAYOUT NAME - 31

PLOT DATE : 4/29/2015 7:52 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1" = 20'_XREF_XREF

WISDOT/CADDS SHEET 49

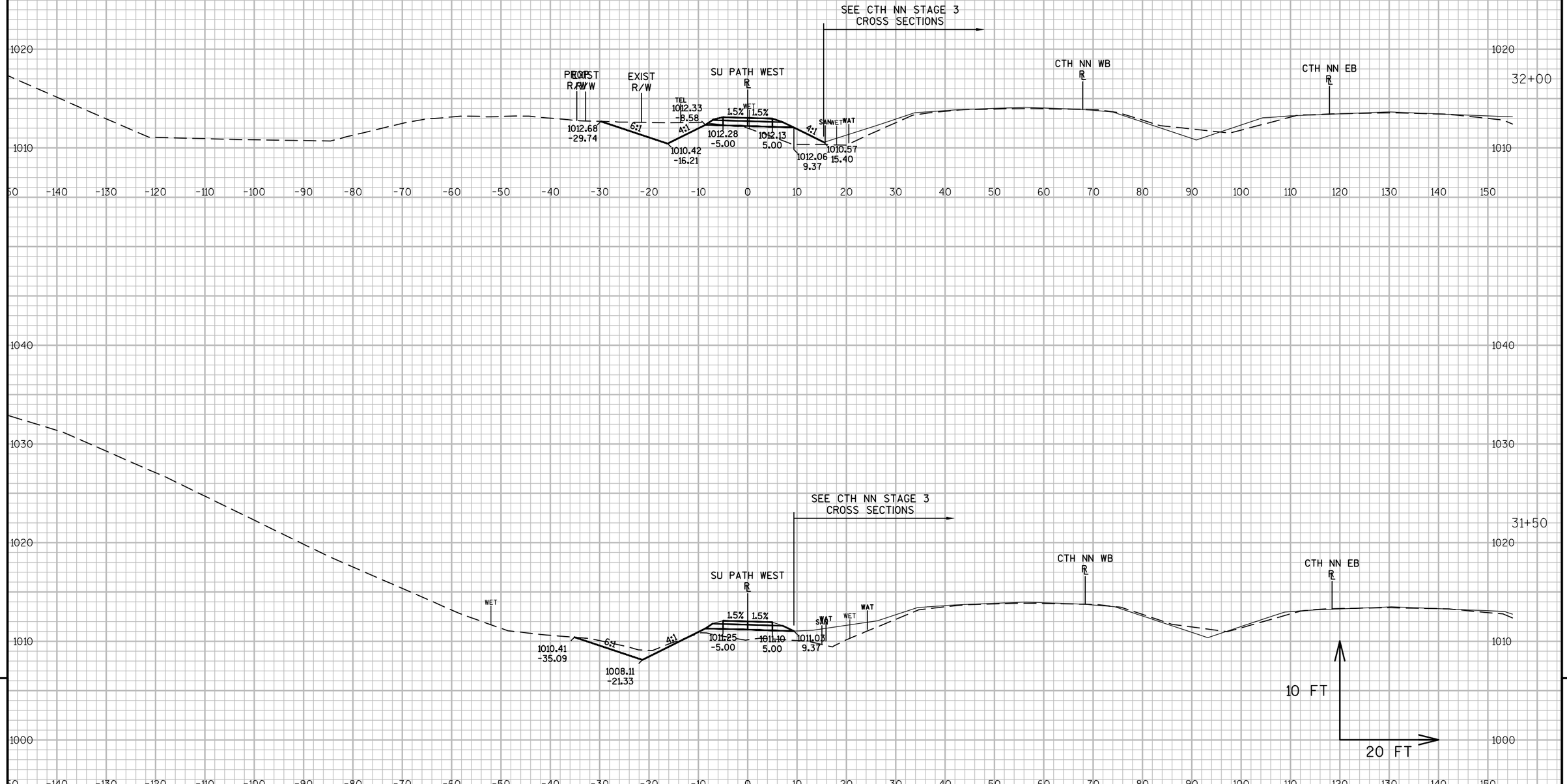


PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH NN EB STAGE 4	SHEET 696	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090204_XS4_NN.DWG
LAYOUT NAME - 32

PLOT DATE : 4/29/2015 7:52 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1" = 20'_XREF_XREF

WISDOT/CADDS SHEET 49

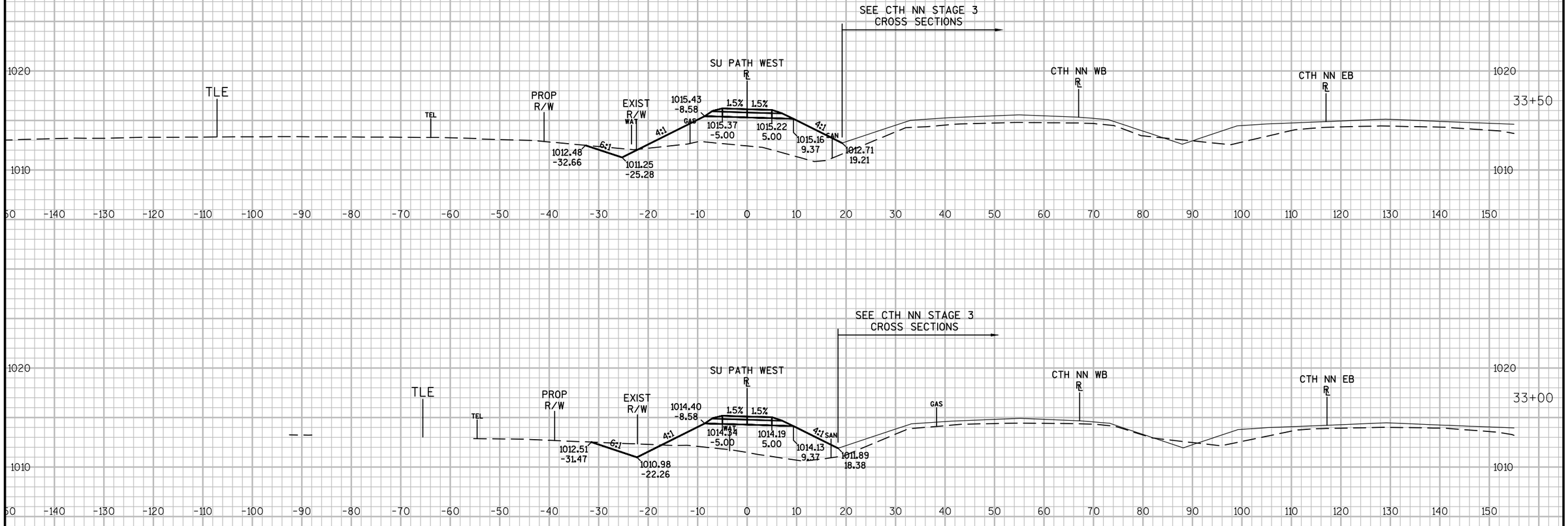


PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: SHARED USE PATH	SHEET 697 E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090205_XS_PATH.DWG
LAYOUT NAME - 01

PLOT DATE : 4/29/2015 8:00 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



9

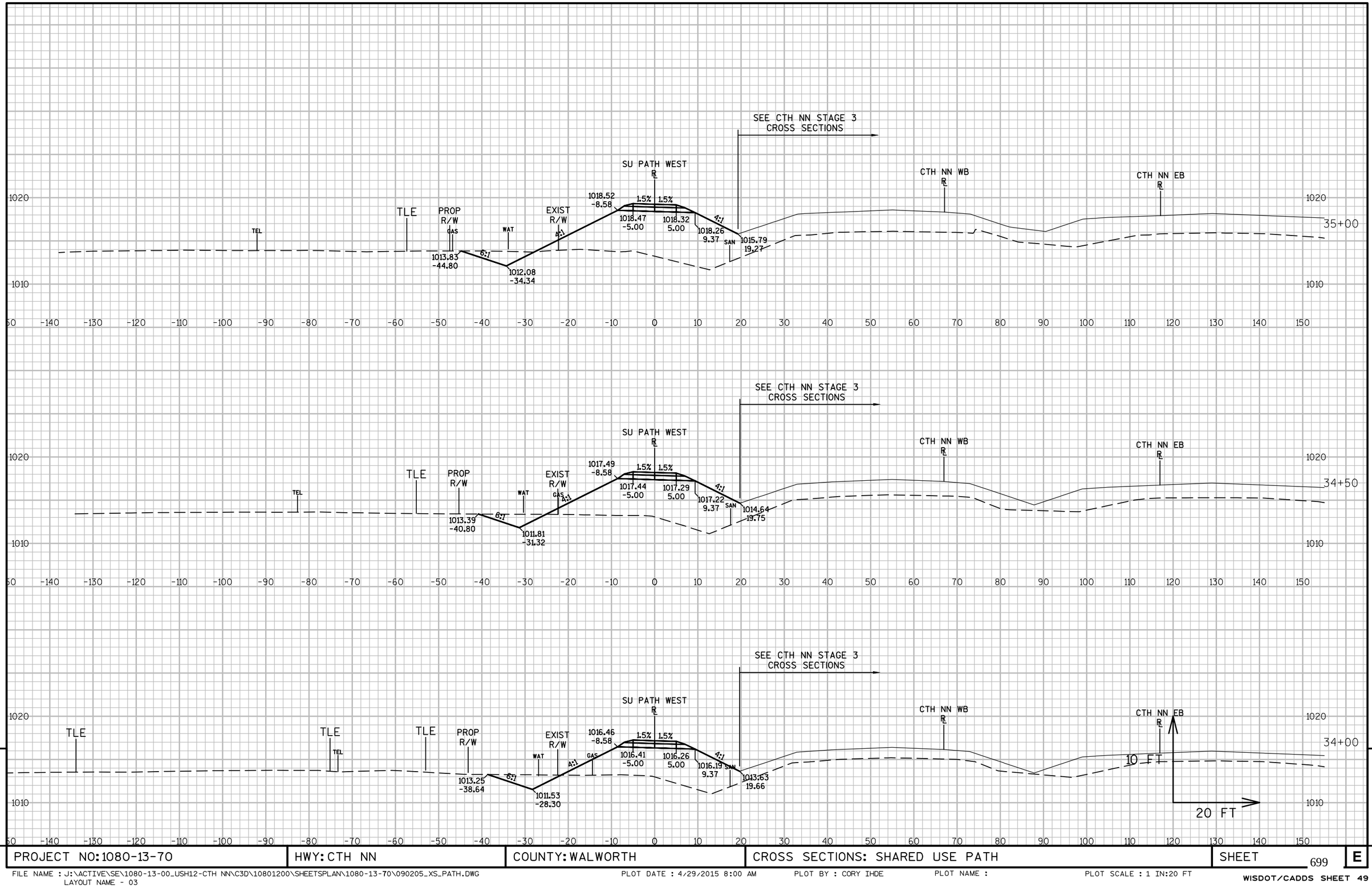
9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: SHARED USE PATH	SHEET 698	E

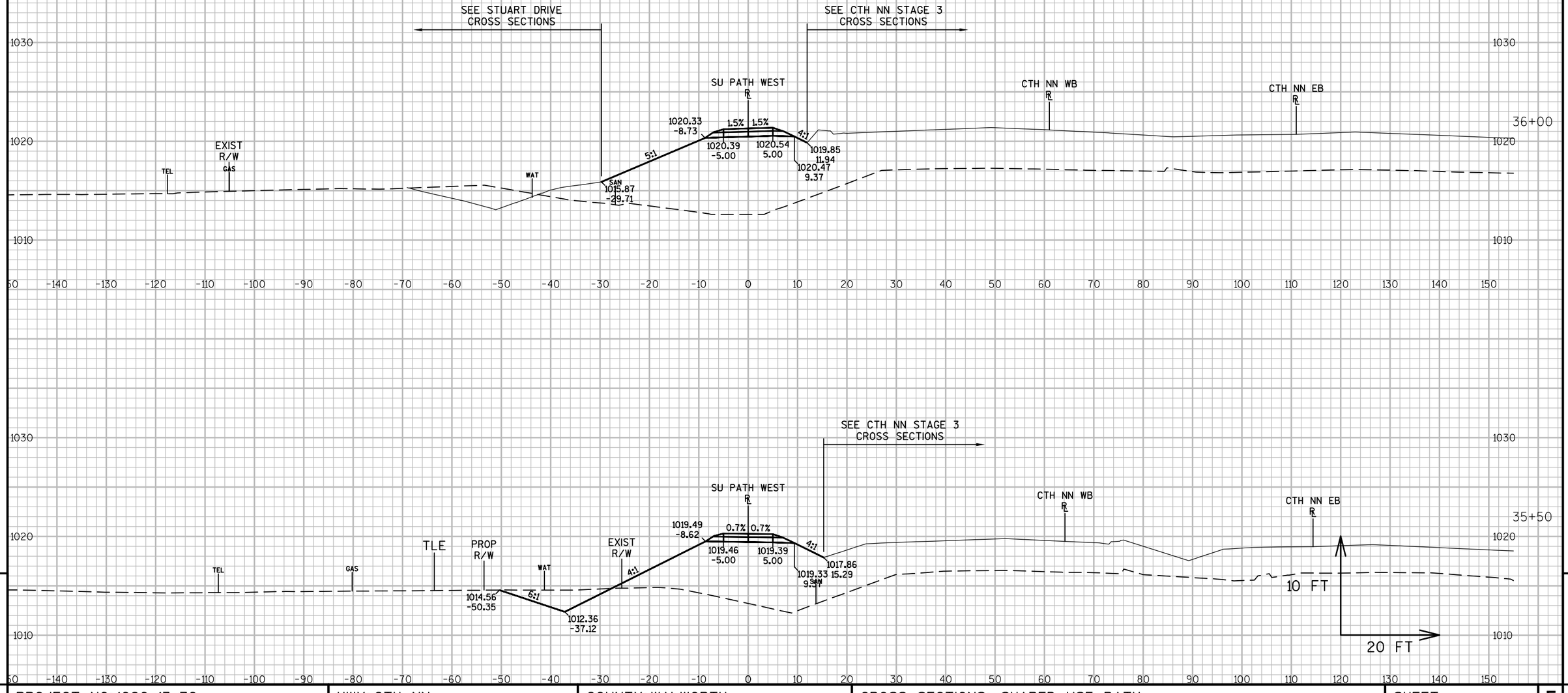
FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090205_XS_PATH.DWG
LAYOUT NAME - 02

PLOT DATE : 4/29/2015 8:00 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: SHARED USE PATH	SHEET 699	E



9

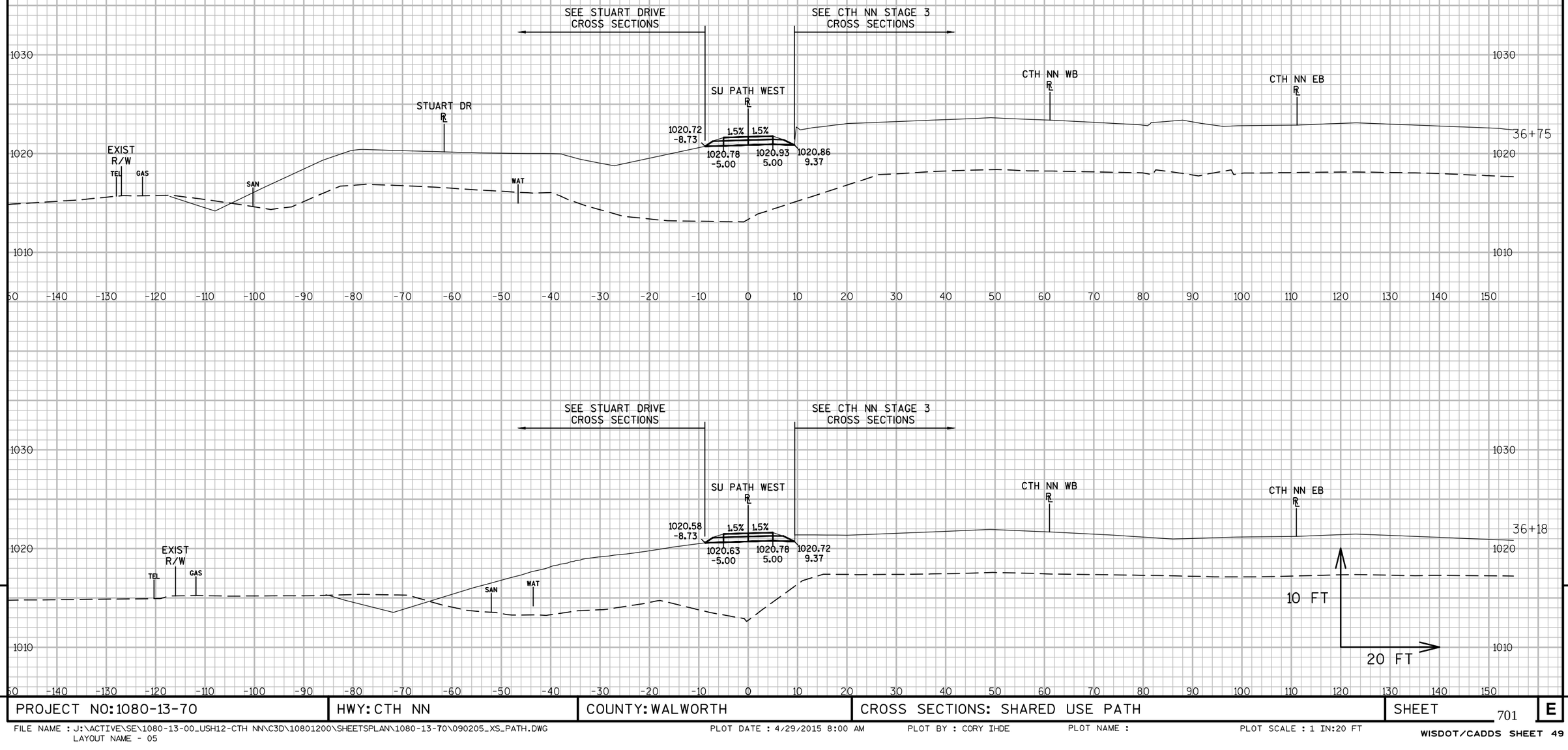
9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: SHARED USE PATH	SHEET 700	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090205_XS_PATH.DWG
LAYOUT NAME - 04

PLOT DATE : 4/29/2015 8:00 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49

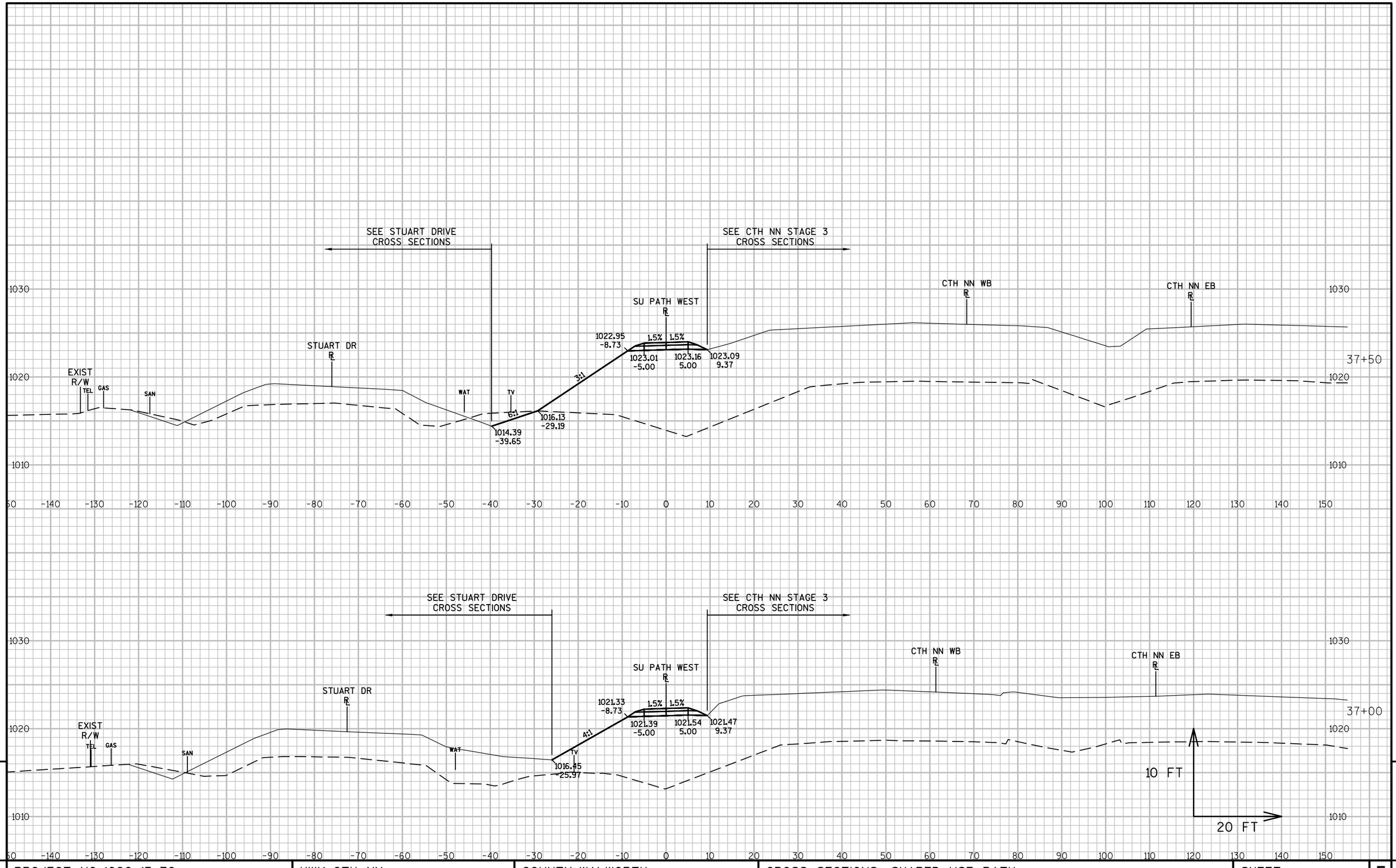


PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: SHARED USE PATH	SHEET 701 E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090205_XS_PATH.DWG
LAYOUT NAME - 05

PLOT DATE : 4/29/2015 8:00 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



9

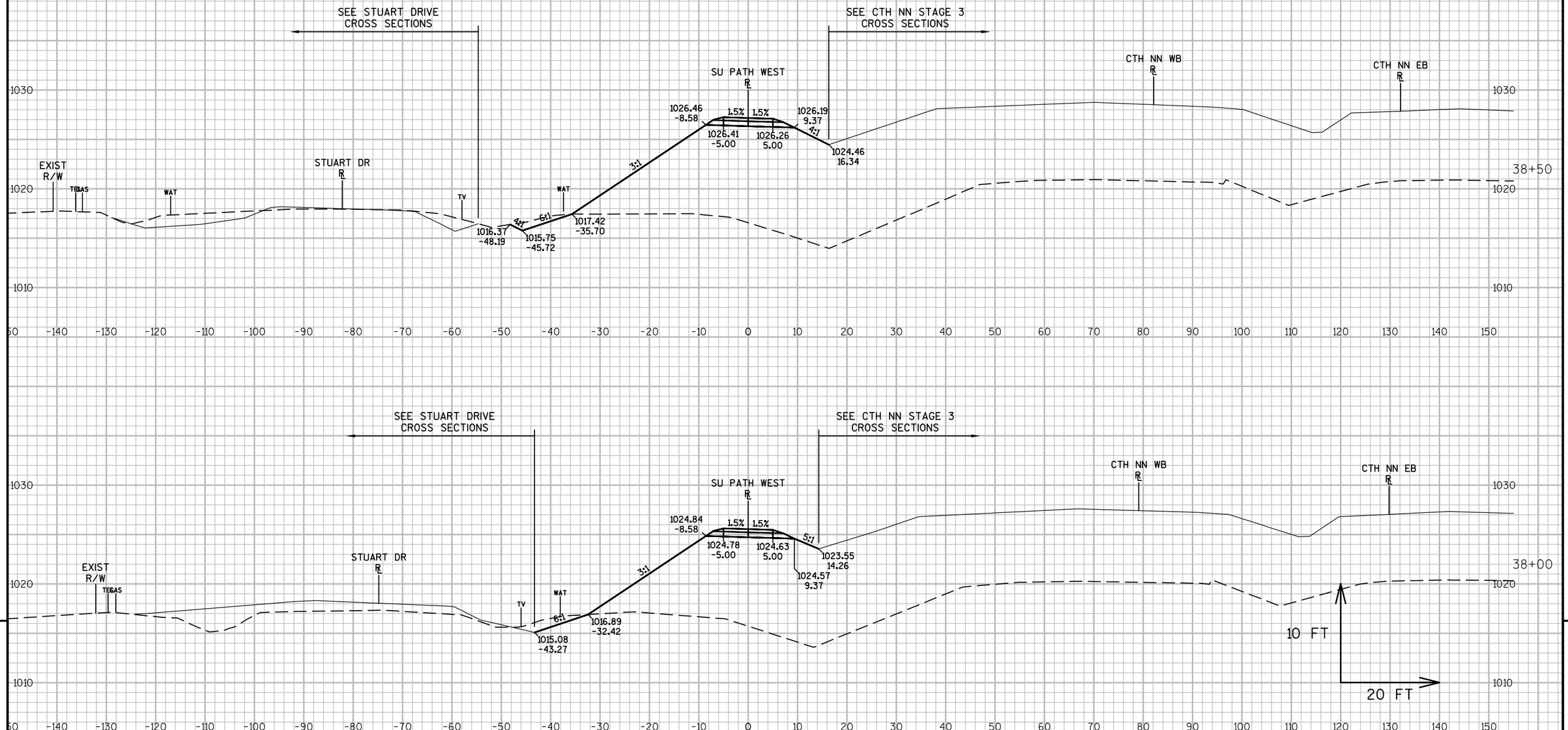
9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: SHARED USE PATH	SHEET 702	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090205_XS_PATH.DWG
LAYOUT NAME - 06

PLOT DATE : 4/29/2015 8:01 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



9

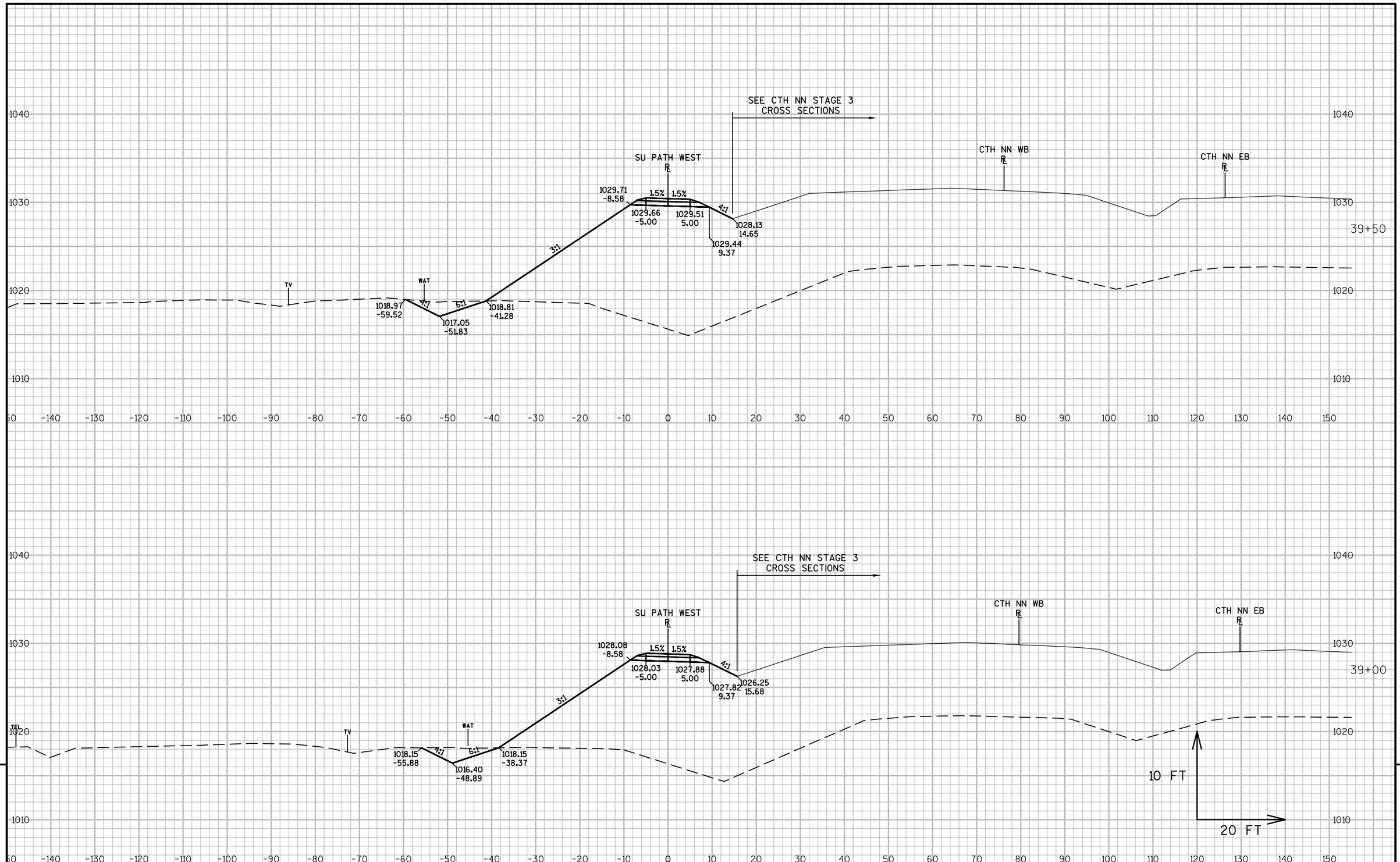
9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: SHARED USE PATH	SHEET 703 E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090205_XS_PATH.DWG
LAYOUT NAME - 07

PLOT DATE : 4/29/2015 8:01 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49

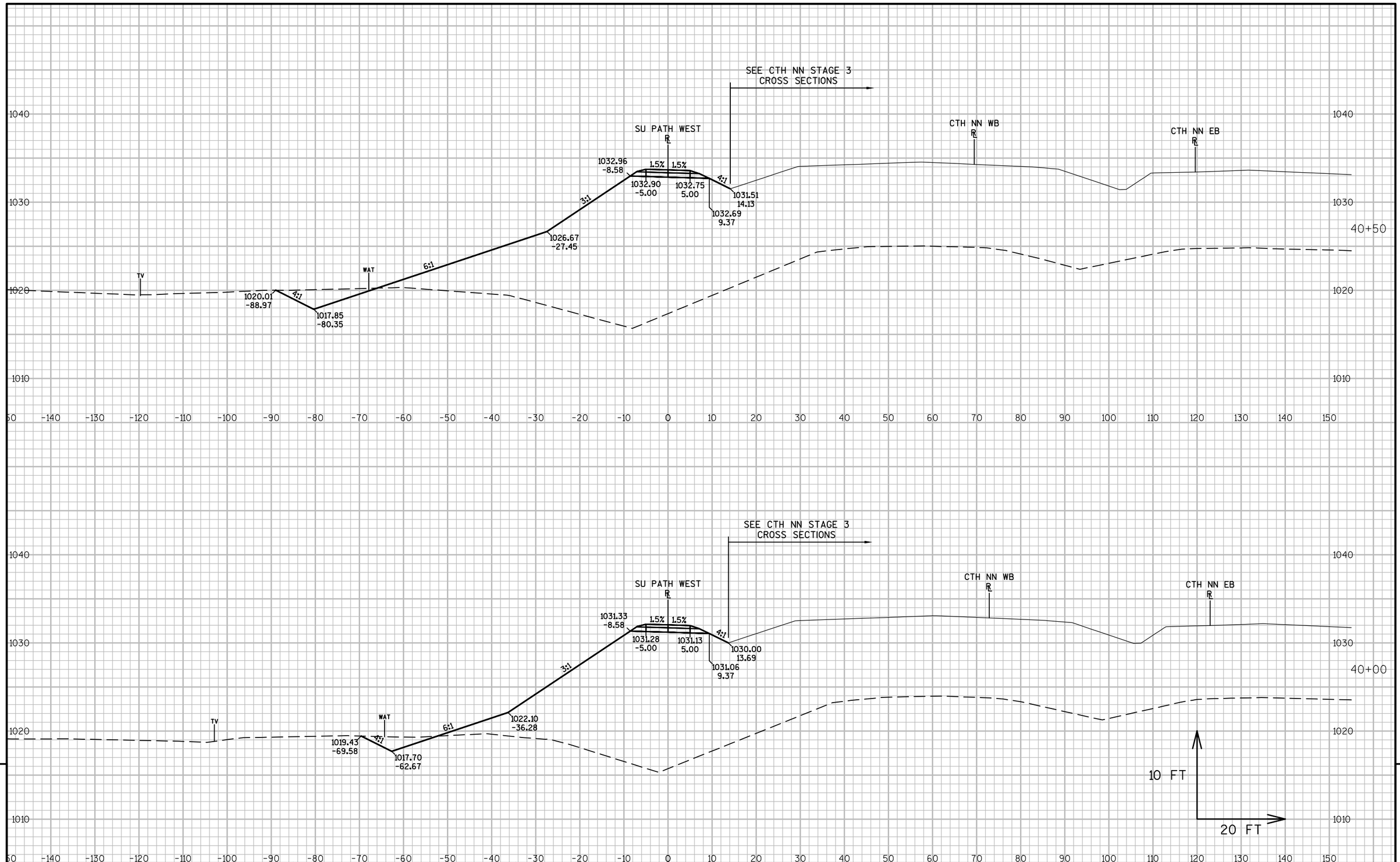


PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: SHARED USE PATH	SHEET 704 E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090205_XS_PATH.DWG
LAYOUT NAME - 08

PLOT DATE : 4/29/2015 8:01 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



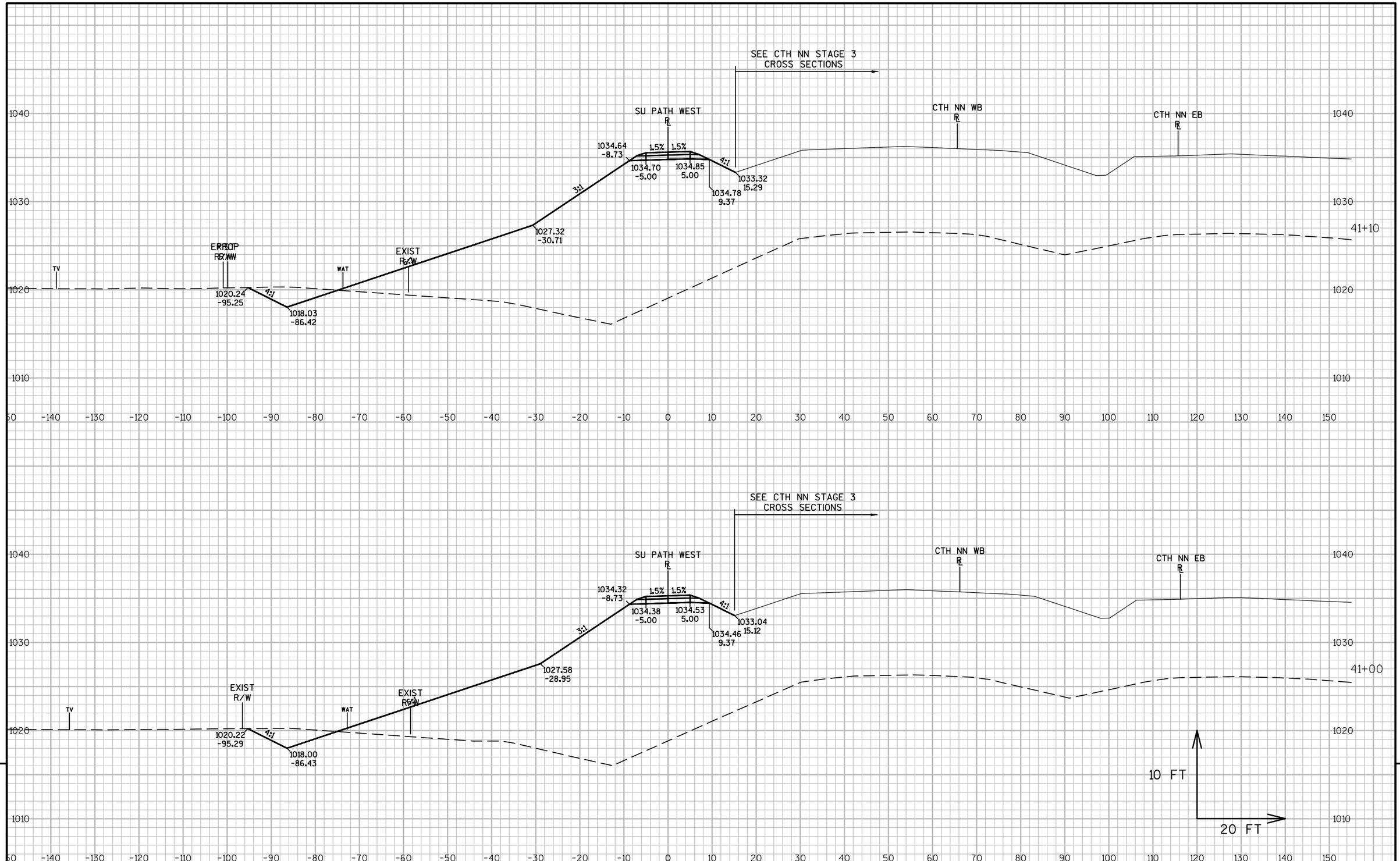
9

9

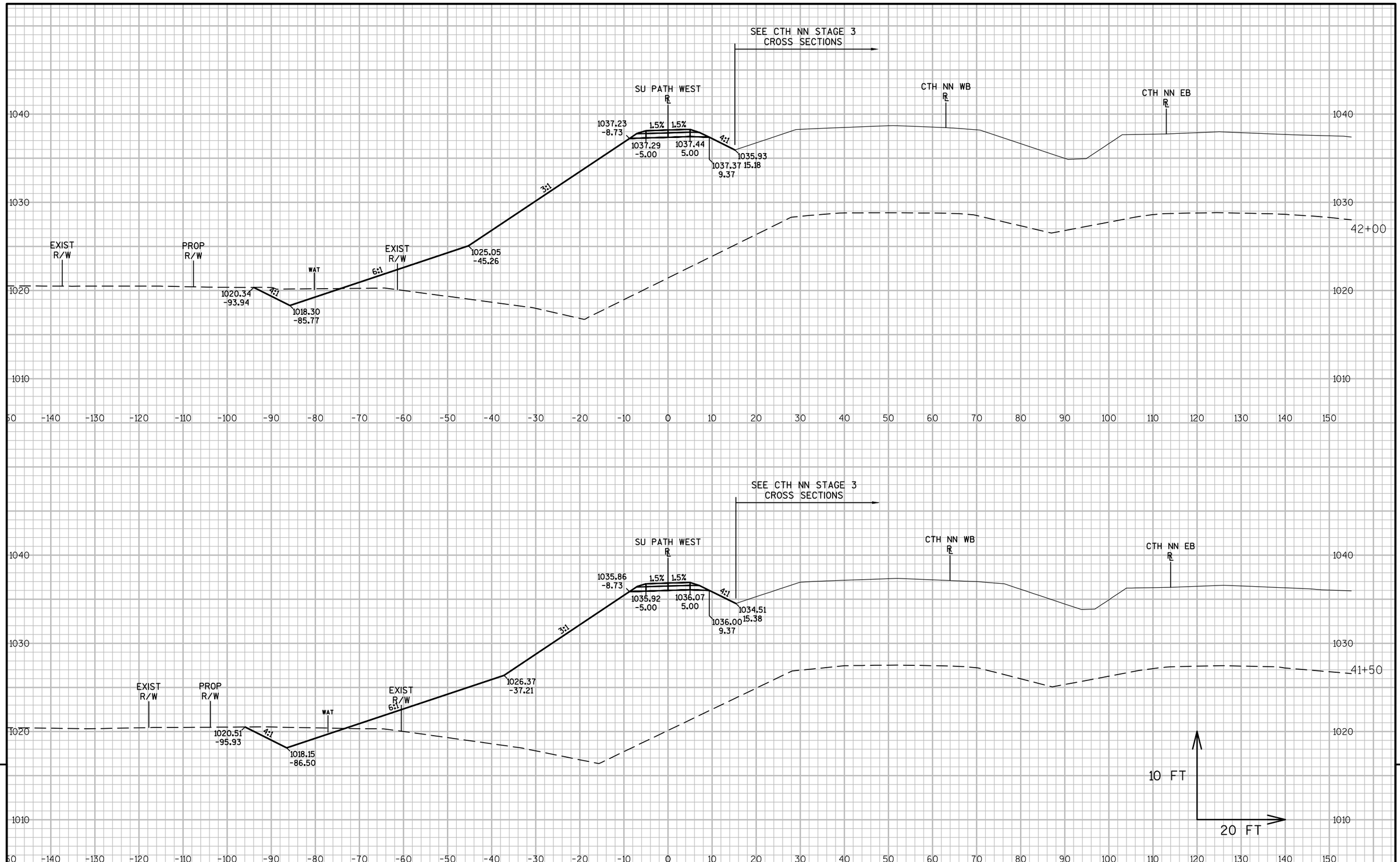
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: SHARED USE PATH	SHEET 705	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090205_XS_PATH.DWG
LAYOUT NAME - 09

PLOT DATE : 4/29/2015 8:01 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1 IN:20 FT



PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: SHARED USE PATH	SHEET 706 E

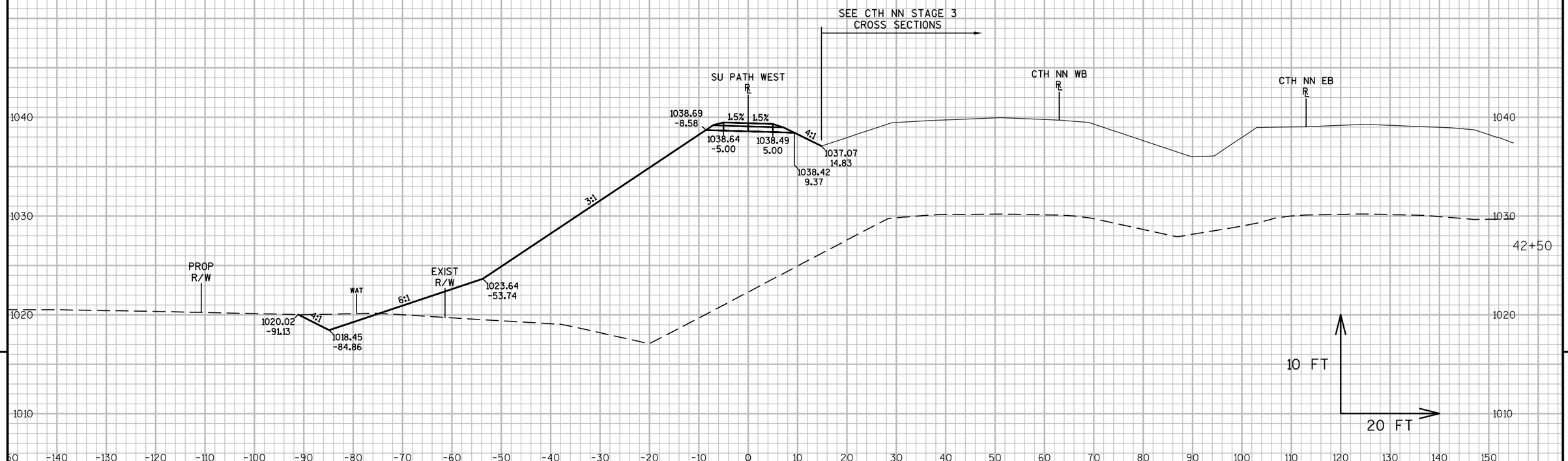


9

9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: SHARED USE PATH	SHEET 707	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090205_XS_PATH.DWG
LAYOUT NAME - 11
PLOT DATE : 4/29/2015 8:01 AM
PLOT BY : CORY IHDE
PLOT NAME :
PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: SHARED USE PATH	SHEET 708	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090205_XS_PATH.DWG
LAYOUT NAME - 12

PLOT DATE : 4/29/2015 8:02 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49

9

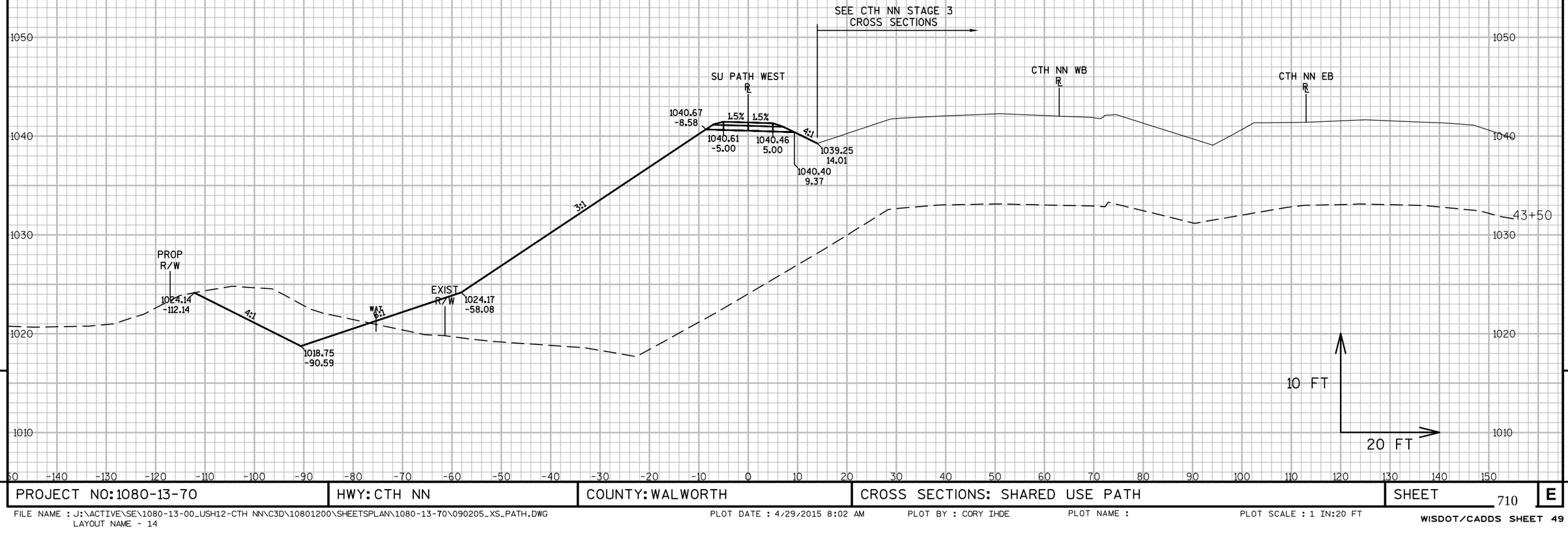
9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: SHARED USE PATH	SHEET 709	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090205_XS_PATH.DWG
LAYOUT NAME - 13

PLOT DATE : 4/29/2015 8:02 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



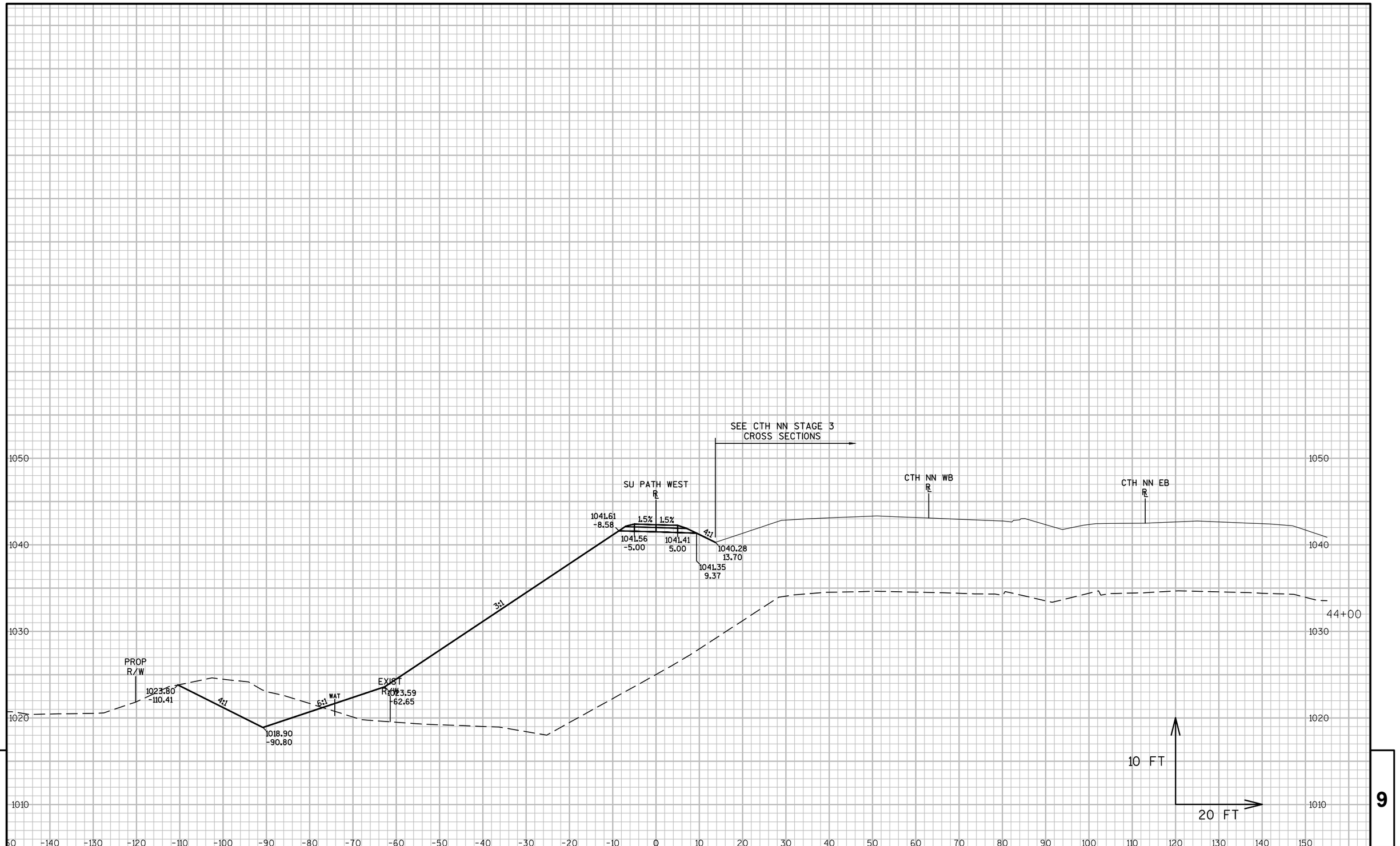
9

9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: SHARED USE PATH	SHEET 710	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090205_XS_PATH.DWG
LAYOUT NAME - 14

PLOT DATE : 4/29/2015 8:02 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1 IN:20 FT

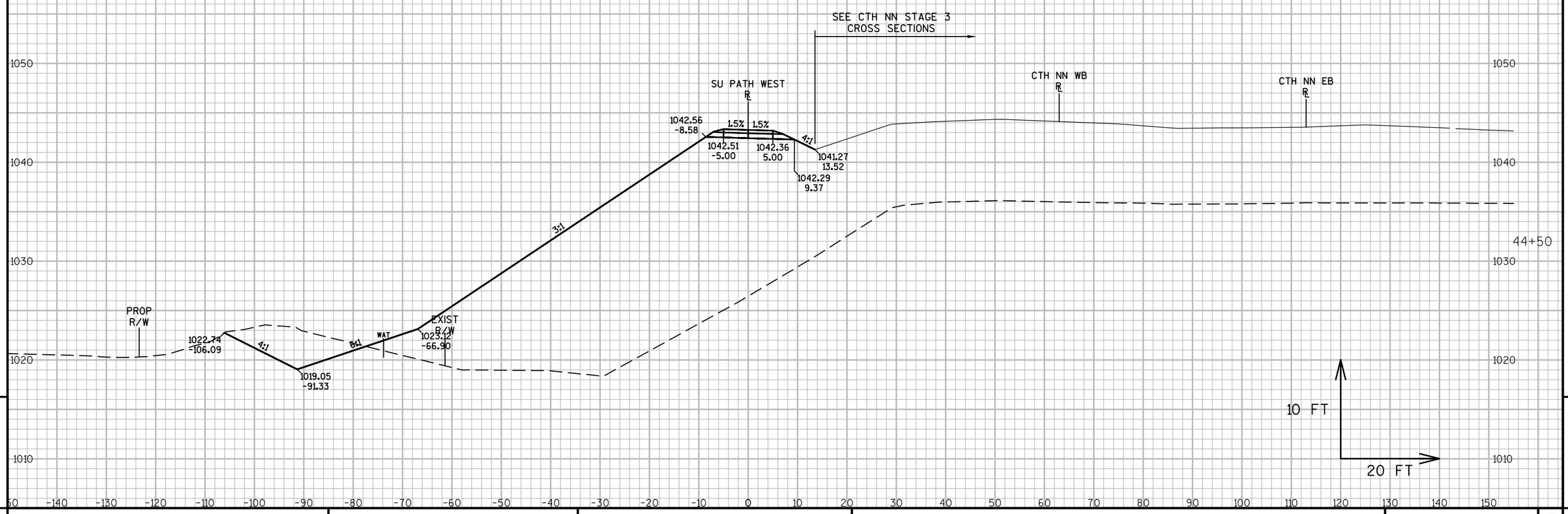


9

9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: SHARED USE PATH	SHEET 711	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090205_XS_PATH.DWG
LAYOUT NAME - 15
PLOT DATE : 4/29/2015 8:02 AM
PLOT BY : CORY IHDE
PLOT NAME :
PLOT SCALE : 1 IN:20 FT



9

9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: SHARED USE PATH	SHEET 712	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090205_XS_PATH.DWG
LAYOUT NAME - 16

PLOT DATE : 4/29/2015 8:02 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1 IN:20 FT

SEE CTH NN STAGE 3
CROSS SECTIONS

SU PATH WEST
℄

CTH NN WB
℄

CTH NN EB
℄

1043.51
-8.58

1.5%

1.5%

4:1

1043.46
-5.00

1043.31
5.00

1042.23
13.47

1043.24
9.37

3:1

PROP
R/W

EXIST
R/W

1023.09
-107.84

4:1

6:1

WAT

1022.79
-70.74

1019.20
-92.27

45+00

10 FT

20 FT

1050
1040
1030
1020
1010

-150 -140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

9

9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: SHARED USE PATH	SHEET 713	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090205_XS_PATH.DWG
LAYOUT NAME - 17

PLOT DATE : 4/29/2015 8:02 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1 IN:20 FT

SEE CTH NN STAGE 3
CROSS SECTIONS

SU PATH WEST
℄

CTH NN WB
℄

CTH NN EB
℄

1044.46
-8.58

1.5%

1.5%

4:1

1044.40
-5.00

1044.25
5.00

1043.15
13.56

1044.19
9.37

3:1

PROP
R/W

EXIST
R/W

1022.67
-104.07

4:1

6:1

WAT

1021.65
-77.00

1019.35
-90.79

45+50

10 FT

20 FT

1050
1040
1030
1020
1010

-150 -140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

9

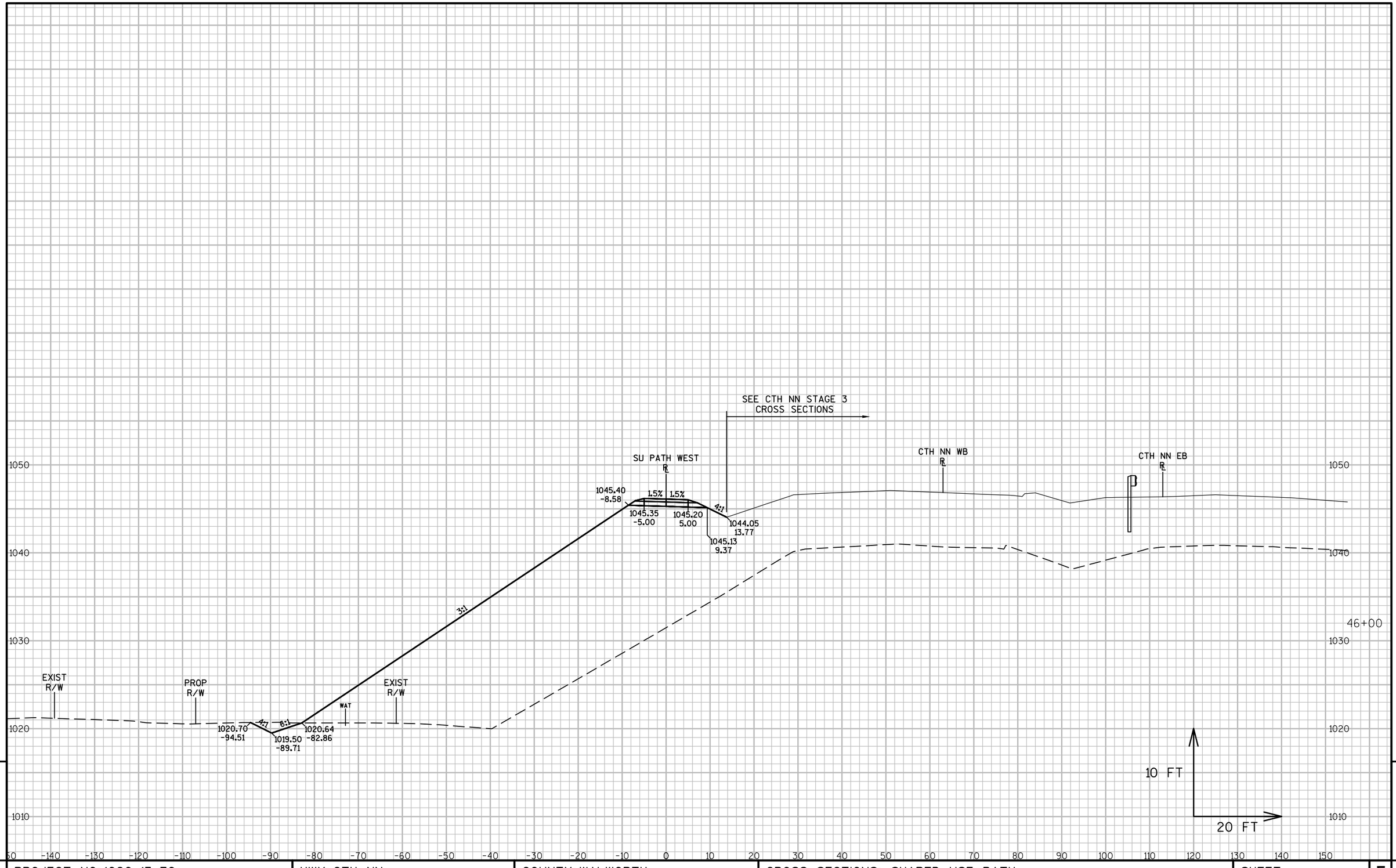
9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: SHARED USE PATH	SHEET 714	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090205_XS_PATH.DWG
LAYOUT NAME - 18

PLOT DATE : 4/29/2015 8:03 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



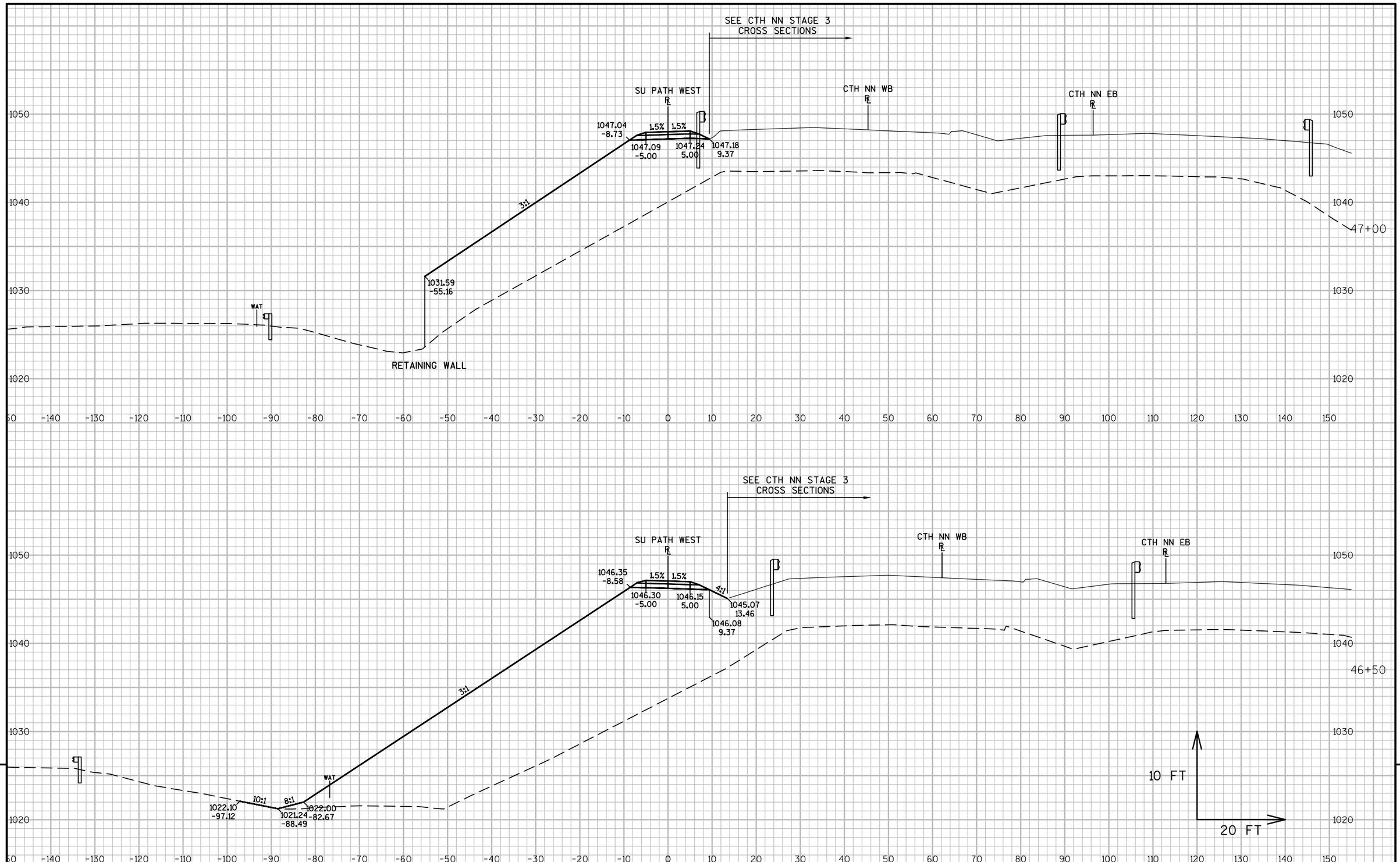
9

9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: SHARED USE PATH	SHEET 715	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090205_XS_PATH.DWG
LAYOUT NAME - 19

PLOT DATE : 4/29/2015 8:03 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1 IN:20 FT



PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: SHARED USE PATH	SHEET 716	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090205_XS_PATH.DWG
LAYOUT NAME - 20

PLOT DATE : 4/29/2015 8:03 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49

STRUCTURES B-64-186/185

SU PATH EAST
℄

CTH NN WB
℄

CTH NN EB
℄

1051.11
-8.65

1.5%

1.5%

1051.17
-5.00

1051.32
5.00

1051.32
9.37

3:1

PROP
R/W

EXIST
R/W

WAT

1020.85
-99.45

10 FT

20 FT

51+00

1060
1050
1040
1030
1020

-150 -140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

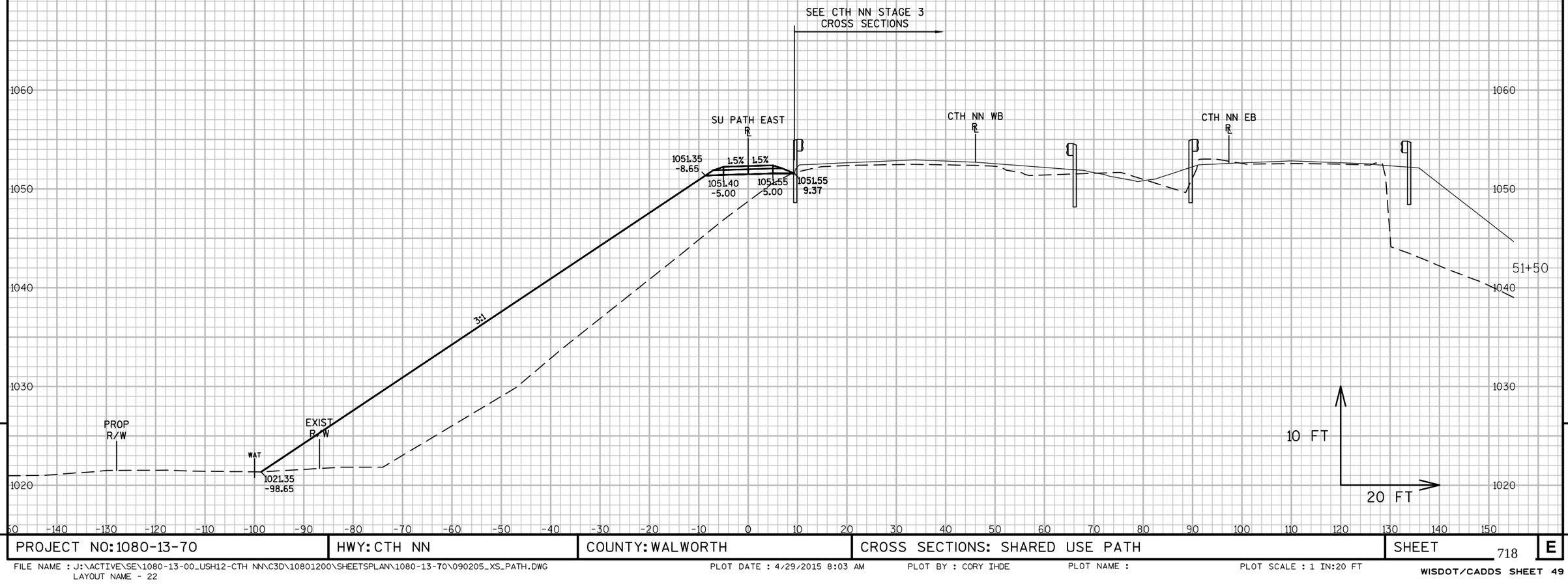
9

9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: SHARED USE PATH	SHEET 717	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090205_XS_PATH.DWG
LAYOUT NAME - 21

PLOT DATE : 4/29/2015 8:03 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1 IN:20 FT



9

9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: SHARED USE PATH	SHEET 718	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090205_XS_PATH.DWG
LAYOUT NAME - 22

PLOT DATE : 4/29/2015 8:03 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49

SEE CTH NN STAGE 3
CROSS SECTIONS

SU PATH EAST
℄

CTH NN WB
℄

CTH NN EB
℄

1051.83
-8.34

1.5%

1.5%

4:1

1051.78
-5.00

1051.63
5.00

1050.73
13.12

1051.63
9.37

3:1

PROP
R/W

EXIST
R/W

WAT

1021.07
-100.64

52+00

10 FT

20 FT

1060
1050
1040
1030
1020

-150 -140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

9

9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: SHARED USE PATH	SHEET 719	E

SEE CTH NN STAGE 3
CROSS SECTIONS

SU PATH EAST
℄

CTH NN WB
℄

CTH NN EB
℄

1052.06
-8.34

1.5%

1.5%

4:1

1052.01
-5.00

1051.86
5.00

1050.75
14.00

1051.86
9.37

3:1

PROP
R/W

EXIST
R/W

WAT

1020.13
-104.13

52+50

10 FT

20 FT

1060 1050 1040 1030 1020 1010

-150 -140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

9

9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: SHARED USE PATH	SHEET 720	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090205_XS_PATH.DWG
LAYOUT NAME - 24

PLOT DATE : 4/29/2015 8:04 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1 IN:20 FT

SEE CTH NN STAGE 3
CROSS SECTIONS

SU PATH EAST

CTH NN WB

CTH NN EB

1052.18
-8.34

1.5%

1.5%

4:1

1052.13
-5.00

1051.98
5.00

1050.90
14.07

1051.98
9.37

3:1

PROP
R/W

EXIST
R/W

WAT

WET

WET

1019.93
-105.09

10 FT

20 FT

53+00

1060 1050 1040 1030 1020 1010

-150 -140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

9

9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: SHARED USE PATH	SHEET 721	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090205_XS_PATH.DWG
LAYOUT NAME - 25

PLOT DATE : 4/29/2015 8:04 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49

SEE CTH NN STAGE 3
CROSS SECTIONS

SU PATH EAST
℄

CTH NN WB
℄

CTH NN EB
℄

1052.06
-8.34

1.5%

1.5%

5:1

1052.01
-5.00

1051.86
5.00

1051.05
13.73

1051.87
9.37

3:1

PROP
R/W

EXIST
R/W

WET

WET

WAT

1019.74
-105.32

53+50

10 FT

20 FT

1060 1050 1040 1030 1020 1010

-150 -140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

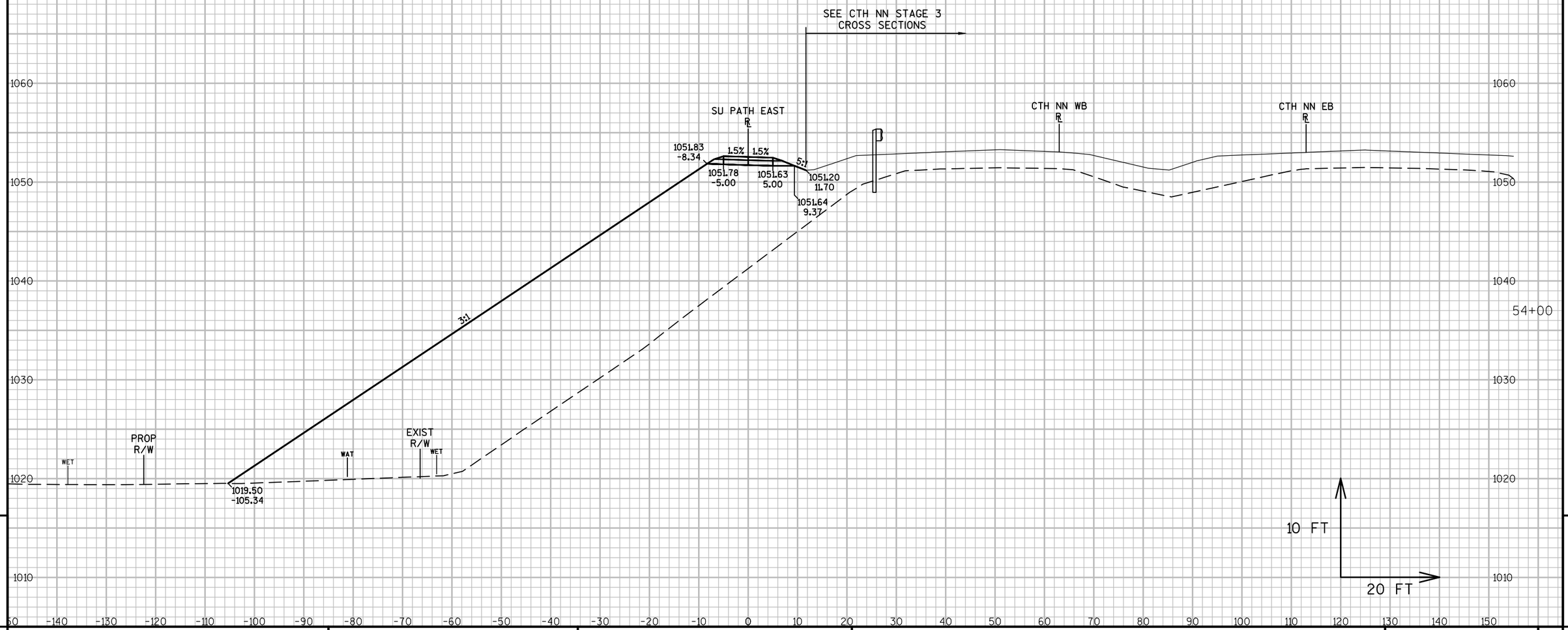
9

9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: SHARED USE PATH	SHEET 722	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090205_XS_PATH.DWG
LAYOUT NAME - 26

PLOT DATE : 4/29/2015 8:04 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1 IN:20 FT



9

9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: SHARED USE PATH	SHEET 723	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090205_XS_PATH.DWG
LAYOUT NAME - 27

PLOT DATE : 4/29/2015 8:04 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1 IN:20 FT

SEE CTH NN STAGE 3
CROSS SECTIONS

SU PATH EAST
℄

CTH NN WB
℄

CTH NN EB
℄

1051.60
-8.34

1.5%

1.5%

5:1

1051.55
-5.00

1051.40
5.00

1050.80
12.20

1051.41
9.37

3:1

PROP
R/W

EXIST
R/W

WET

WET

WAT

WET

1019.47
-104.73

1060
1050
1040
1030
1020
1010

54+50

10 FT

20 FT

-150 -140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

9

9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: SHARED USE PATH	SHEET 724	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090205_XS_PATH.DWG
LAYOUT NAME - 28

PLOT DATE : 4/29/2015 8:04 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1 IN:20 FT

SEE CTH NN STAGE 3
CROSS SECTIONS

SU PATH EAST
℄

CTH NN WB
℄

CTH NN EB
℄

1051.37
-8.34

1.5%

1.5%

5:1

1051.32
-5.00

1051.17
5.00

1050.34
13.14

1051.18
9.37

3:1

PROP
R/W

EXIST
R/W

WET

WAT

WET

1019.36
-104.37

1060
1050
1040
1030
1020
1010

55+00

10 FT

20 FT

-150 -140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

9

9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: SHARED USE PATH	SHEET 725	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090205_XS_PATH.DWG
LAYOUT NAME - 29

PLOT DATE : 4/29/2015 8:04 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1 IN:20 FT

SEE CTH NN STAGE 3
CROSS SECTIONS

SU PATH EAST
℄

CTH NN WB
℄

CTH NN EB
℄

1051.14
-8.34

1.5%

1.5%

4:1

1051.09
-5.00

1050.94
5.00

1049.88
13.79

1050.94
9.37

3:1

PROP
R/W

WET

WAT

EXIST
R/W

WET

1019.40
-103.56

1060
1050
1040
1030
1020
1010

55+50

10 FT

20 FT

-150 -140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

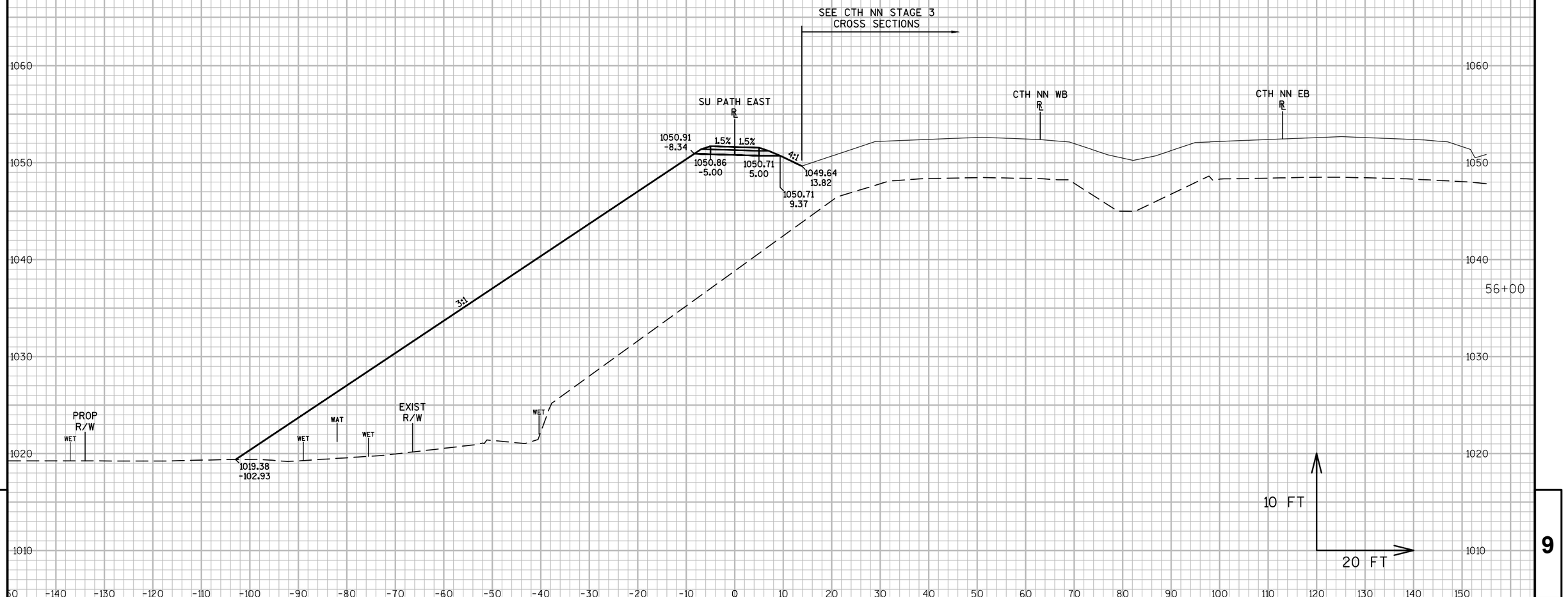
9

9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: SHARED USE PATH	SHEET 726	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090205_XS_PATH.DWG
LAYOUT NAME - 30

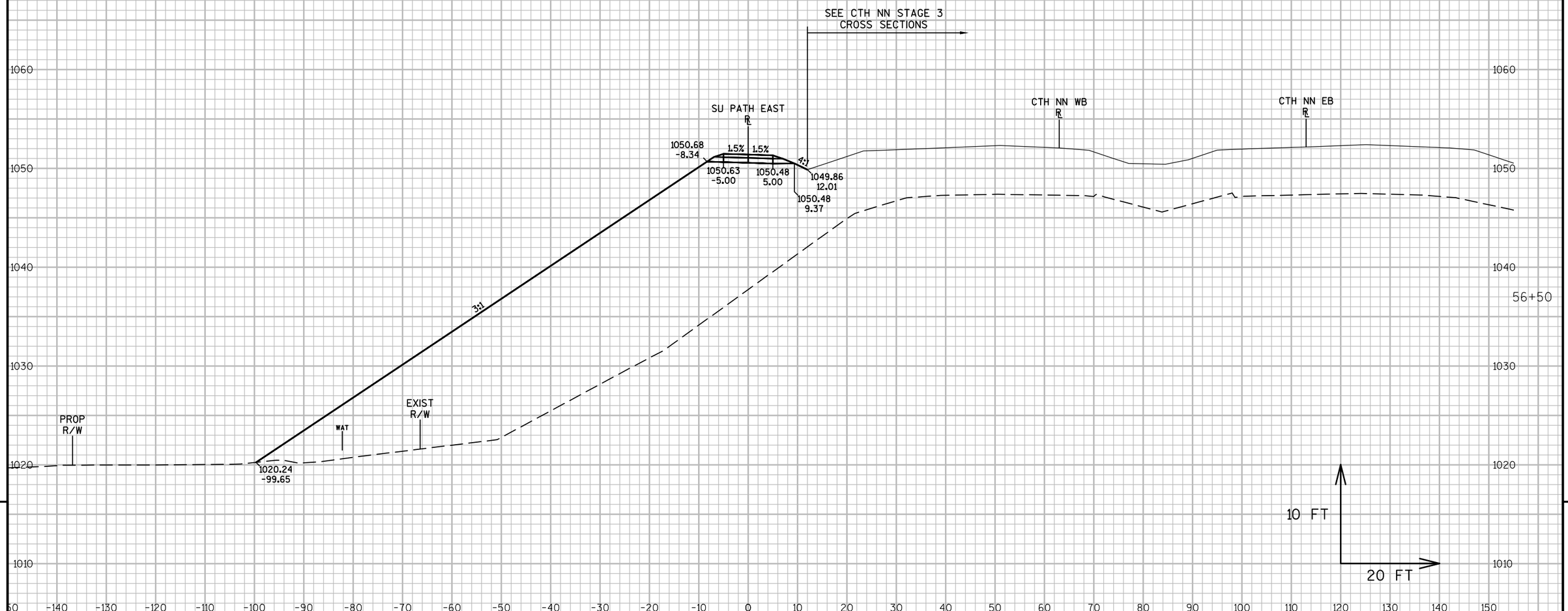
PLOT DATE : 4/29/2015 8:05 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1 IN:20 FT



PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: SHARED USE PATH	SHEET 727 E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090205_XS_PATH.DWG
LAYOUT NAME - 31

PLOT DATE : 4/29/2015 8:05 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1 IN:20 FT



PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: SHARED USE PATH	SHEET 728 E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090205_XS_PATH.DWG
LAYOUT NAME - 32

PLOT DATE : 4/29/2015 8:05 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49

SEE BRAY ROAD
CROSS SECTIONS

SEE CTH NN STAGE 3
CROSS SECTIONS

SU PATH EAST
℄

CTH NN WB
℄

CTH NN EB
℄

1050.40
-8.40

0.9%

0.9%

19:1

1050.37
-5.00

1050.28
5.00

1050.20
10.90

1050.28
9.37

3:1

1036.65
-52.51

EXIST
R/W

WAT

EXIST
R/W

57+00

10 FT

20 FT

1060
1050
1040
1030
1020

-150 -140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

9

9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: SHARED USE PATH	SHEET 729	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090205_XS_PATH.DWG
LAYOUT NAME - 33

PLOT DATE : 4/29/2015 8:05 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1 IN:20 FT

SEE BRAY ROAD
CROSS SECTIONS

SEE CTH NN STAGE 3
CROSS SECTIONS

SU PATH EAST
℄

1048.95
-8.65

1.5%

1.5%

1049.00
-5.00

1049.15
5.00

1049.16
9.37

4:1

1037.02
-56.24

WAT

CTH NN WB
℄

CTH NN EB
℄

58+50

1060
1050
1040
1030
1020

10 FT

20 FT

-150 -140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

9

9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: SHARED USE PATH	SHEET 730	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090205_XS_PATH.DWG
LAYOUT NAME - 34

PLOT DATE : 4/29/2015 8:05 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1 IN:20 FT

SEE BRAY ROAD
CROSS SECTIONS

SEE CTH NN STAGE 3
CROSS SECTIONS

SU PATH EAST
℄

CTH NN WB
℄

CTH NN EB
℄

1049.02
-8.34

1.5%

1.5%

1048.97
-5.00

1048.82
5.00

1048.83
9.37

4:1

WAT

WAT

1020.64
-114.09

59+00

10 FT

20 FT

1060
1050
1040
1030
1020

-140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

9

9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: SHARED USE PATH	SHEET 731	E

SEE CTH NN STAGE 3
CROSS SECTIONS

SU PATH EAST
℄

CTH NN WB
℄

CTH NN EB
℄

1048.84
-8.34

1.5%

1.5%

4:1

1048.79
-5.00

1048.64
5.00

1047.95
12.17

1048.65
9.37

59+50

3:1

PROP
R/W

EXIST
R/W

1026.05
-114.29

4:1

6:1

1022.48
-99.99

1026.66
-74.88

WAT

10 FT

20 FT

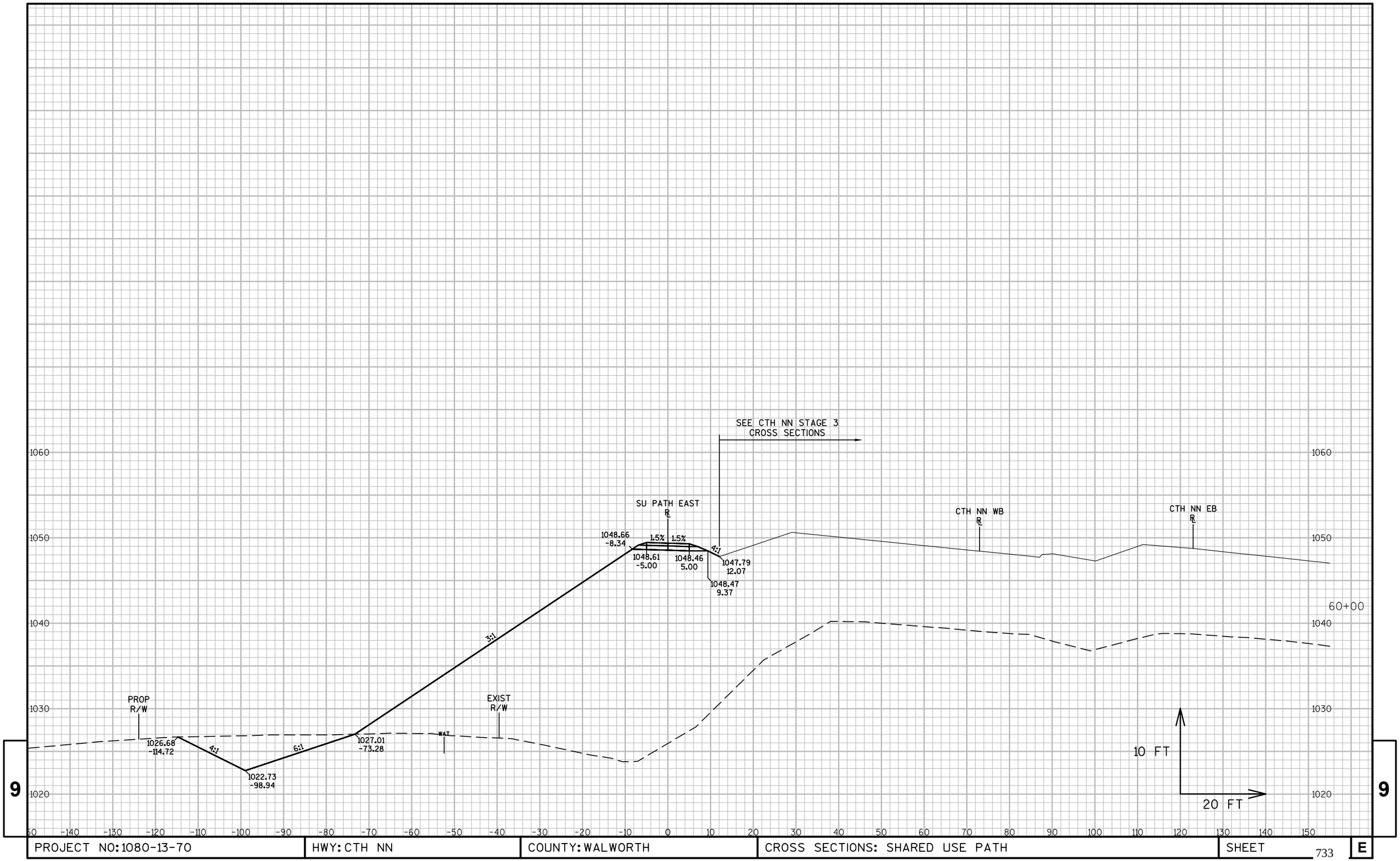
1060
1050
1040
1030
1020

-150 -140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

9

9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: SHARED USE PATH	SHEET 732	E



9

9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: SHARED USE PATH	SHEET 733	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090205_XS_PATH.DWG
LAYOUT NAME - 37

PLOT DATE : 4/29/2015 8:06 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49

SEE CTH NN STAGE 3
CROSS SECTIONS

SU PATH EAST
℄

1048.63
-8.34

1.5%

1.5%

4:1

1048.58
-5.00

1048.43
5.00

1048.44
9.38

CTH NN WB
℄

CTH NN EB
℄

60+08

PROP
R/W

EXIST
R/W

3:1

4:1

6:1

1026.48
-113.04

1022.77
-98.22

1026.88
-73.59

WAT

10 FT

20 FT

1060
1050
1040
1030
1020

-150 -140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

9

9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: SHARED USE PATH	SHEET 734	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090205_XS_PATH.DWG
LAYOUT NAME - 38

PLOT DATE : 4/29/2015 8:06 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49

SEE CTH NN STAGE 3
CROSS SECTIONS

SU PATH EAST
℄

CTH NN WB
℄

CTH NN EB
℄

1048.45
-8.34

1.5%

1.5%

4:1

1048.40
-5.00

1048.25
5.00

1047.54
12.25

1048.26
9.37

3:1

PROP
R/W

EXIST
R/W

WAT

1025.18
-101.31

4:1

6:1

1025.61
-76.86

1022.99
-92.56

60+50

10 FT

20 FT

1060
1050
1040
1030
1020

-150 -140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

9

9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: SHARED USE PATH	SHEET 735	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090205_XS_PATH.DWG
LAYOUT NAME - 39

PLOT DATE : 4/29/2015 8:06 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1 IN:20 FT

SEE CTH NN STAGE 3
CROSS SECTIONS

SU PATH EAST
℄

CTH NN WB
℄

CTH NN EB
℄

1047.42
-8.34

1.5%

1.5%

4:1

1047.37
-5.00

1047.22
5.00

1046.20
13.46

1047.22
9.37

3:1

PROP
R/W

EXIST
R/W

WAT

1025.18
-91.13

4:1

6:1

1026.19
-72.01

1023.88
-85.92

1050

1040

1030

1020

61+50

-150 -140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

SEE CTH NN STAGE 3
CROSS SECTIONS

SU PATH EAST
℄

CTH NN WB
℄

CTH NN EB
℄

1048.04
-8.34

1.5%

1.5%

4:1

1047.99
-5.00

1047.84
5.00

1046.94
13.03

1047.85
9.37

3:1

PROP
R/W

EXIST
R/W

WAT

1024.64
-93.94

4:1

6:1

1025.14
-77.06

1023.25
-88.38

1050

1040

1030

1020

61+00

10 FT

20 FT

-150 -140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

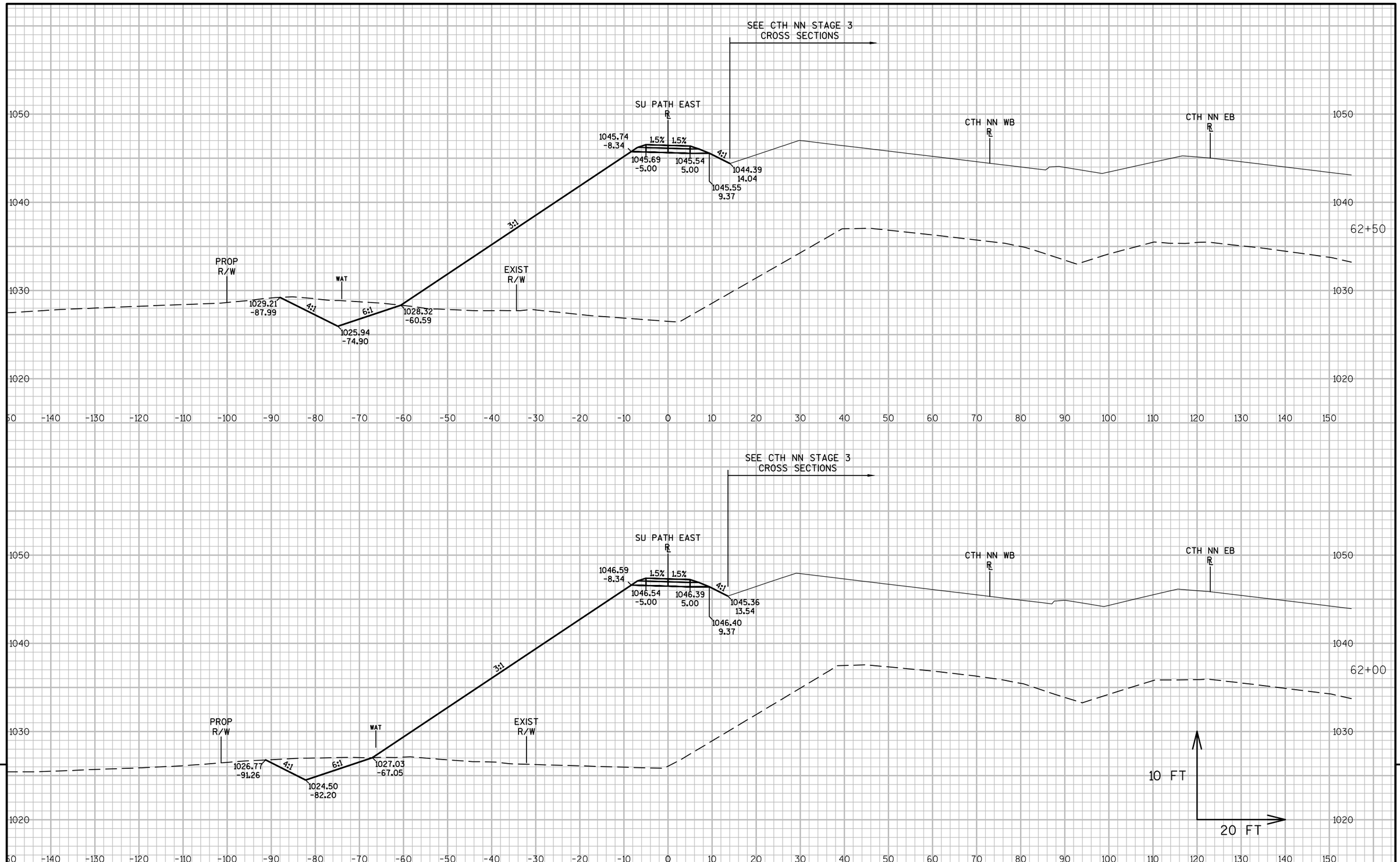
9

9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: SHARED USE PATH	SHEET 736	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090205_XS_PATH.DWG
LAYOUT NAME - 40

PLOT DATE : 4/29/2015 8:06 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1 IN:20 FT



9

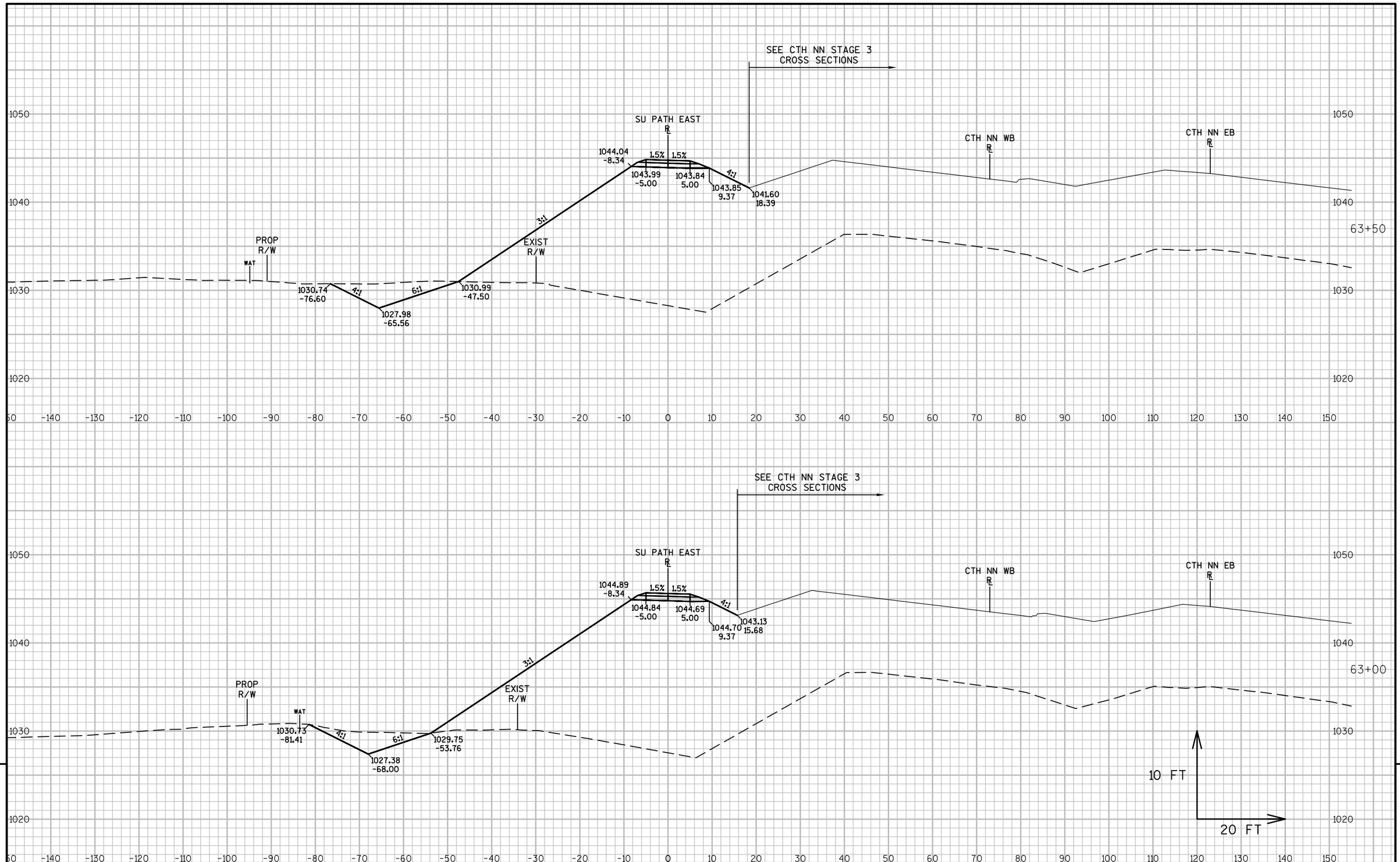
9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: SHARED USE PATH	SHEET 737	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090205_XS_PATH.DWG
LAYOUT NAME - 41

PLOT DATE : 4/29/2015 8:06 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



9

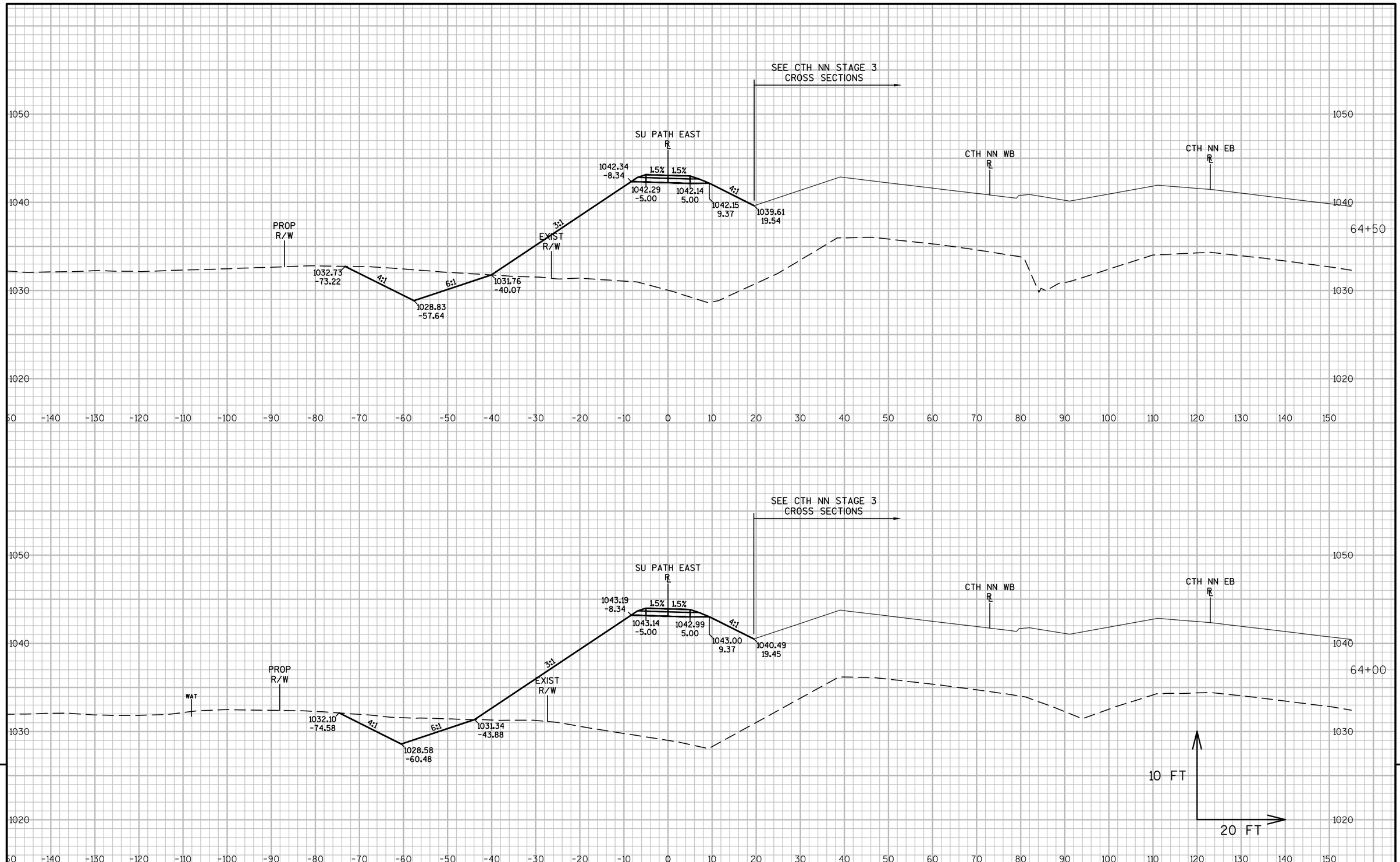
9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: SHARED USE PATH	SHEET 738	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090205_XS_PATH.DWG
LAYOUT NAME - 42

PLOT DATE : 4/29/2015 8:07 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



9

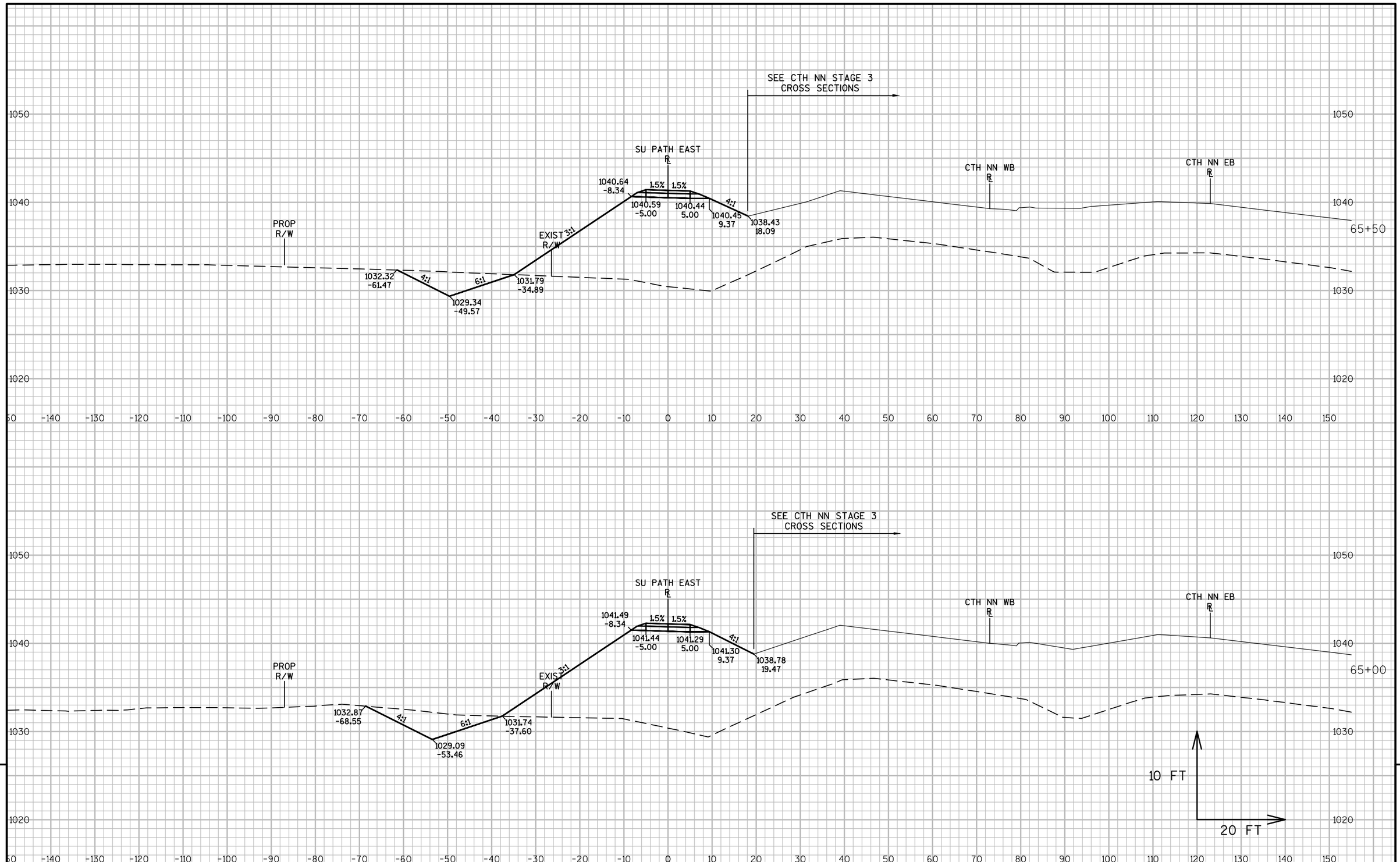
9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: SHARED USE PATH	SHEET 739	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090205_XS_PATH.DWG
LAYOUT NAME - 43

PLOT DATE : 4/29/2015 8:07 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49

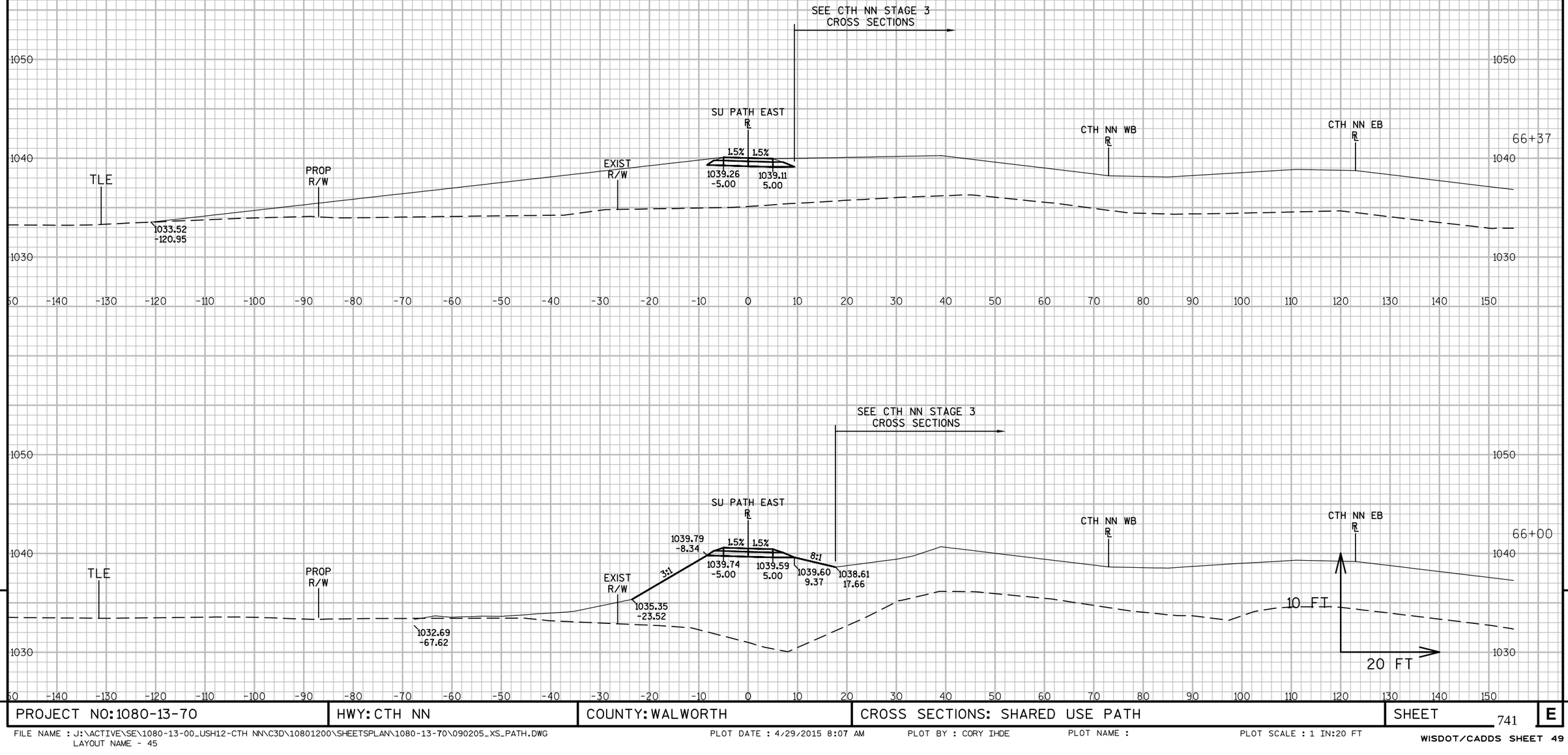


PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: SHARED USE PATH	SHEET 740 E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090205_XS_PATH.DWG
LAYOUT NAME - 44

PLOT DATE : 4/29/2015 8:07 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: SHARED USE PATH	SHEET 741	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090205_XS_PATH.DWG
LAYOUT NAME - 45

PLOT DATE : 4/29/2015 8:07 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49

SEE CTH NN STAGE 3
CROSS SECTIONS

SU PATH EAST
℄

CTH NN WB
℄

CTH NN EB
℄

PROP
R/W

EXIST
R/W

1037.64
-8.34

1.5%

1.5%

4:1

3:1

1037.59
-5.00

1037.44
5.00

1037.46
9.37

1035.59
16.86

1031.77
-39.47

4:1

6:1

1030.34
-33.73

1031.49
-26.79

1040

1030

67+50

-150 -140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

SEE CTH NN STAGE 3
CROSS SECTIONS

SU PATH EAST
℄

CTH NN WB
℄

CTH NN EB
℄

PROP
R/W

EXIST
R/W

1038.43
-8.34

1.5%

1.5%

4:1

3:1

1038.38
-5.00

1038.23
5.00

1038.24
9.37

1036.12
17.85

1032.74
-51.34

4:1

6:1

1030.09
-40.73

1032.55
-25.98

1040

1030

67+00

-150 -140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

SEE CTH NN STAGE 3
CROSS SECTIONS

SU PATH EAST
℄

CTH NN WB
℄

CTH NN EB
℄

TLE

PROP
R/W

EXIST
R/W

1039.17
-8.34

1.5%

1.5%

1039.12
-5.00

1038.97
5.00

1038.98
9.37

1033.77
-94.52

10 FT

20 FT

1050

1040

1030

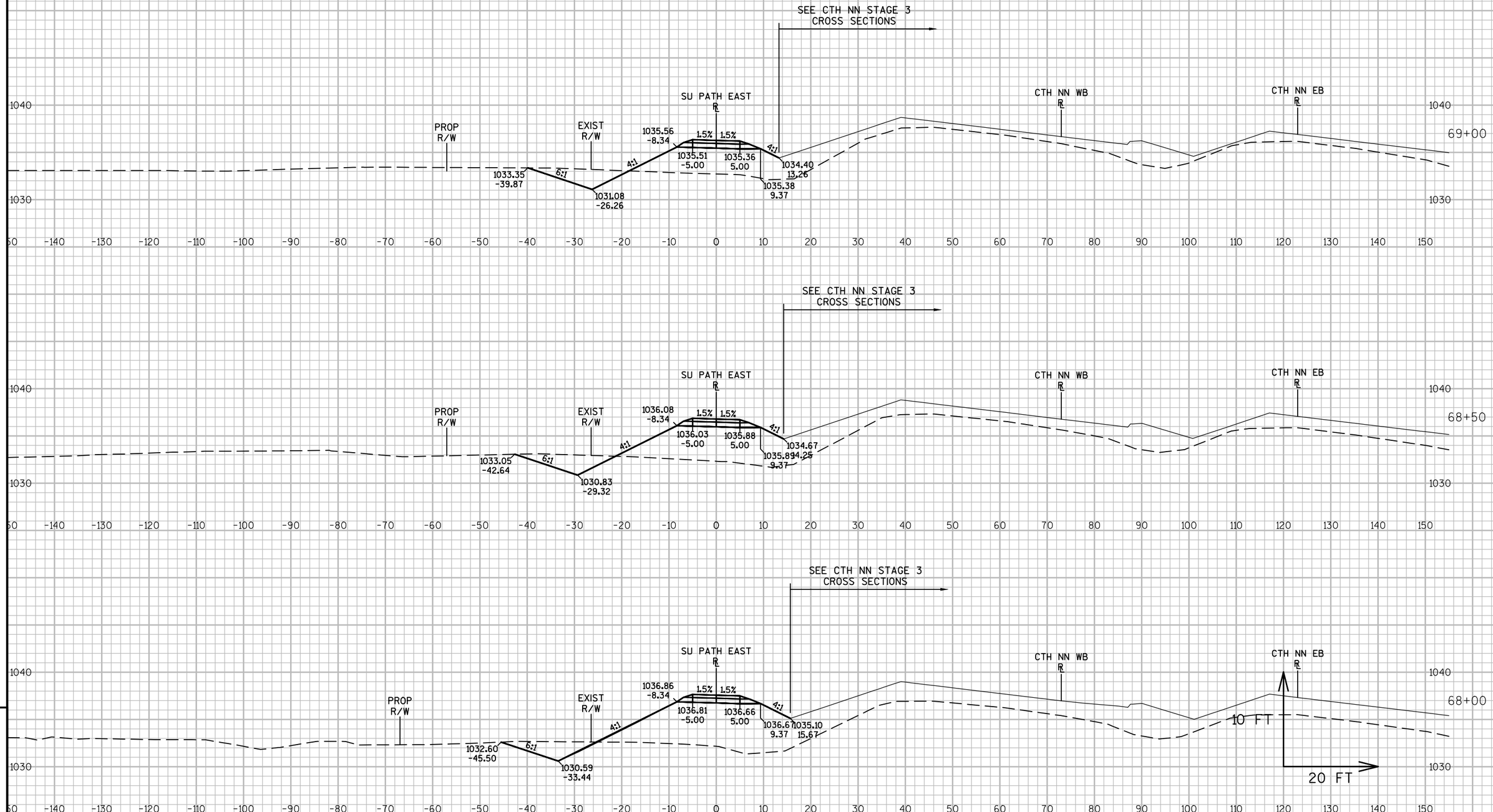
66+50

-150 -140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

9

9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: SHARED USE PATH	SHEET 742	E



9

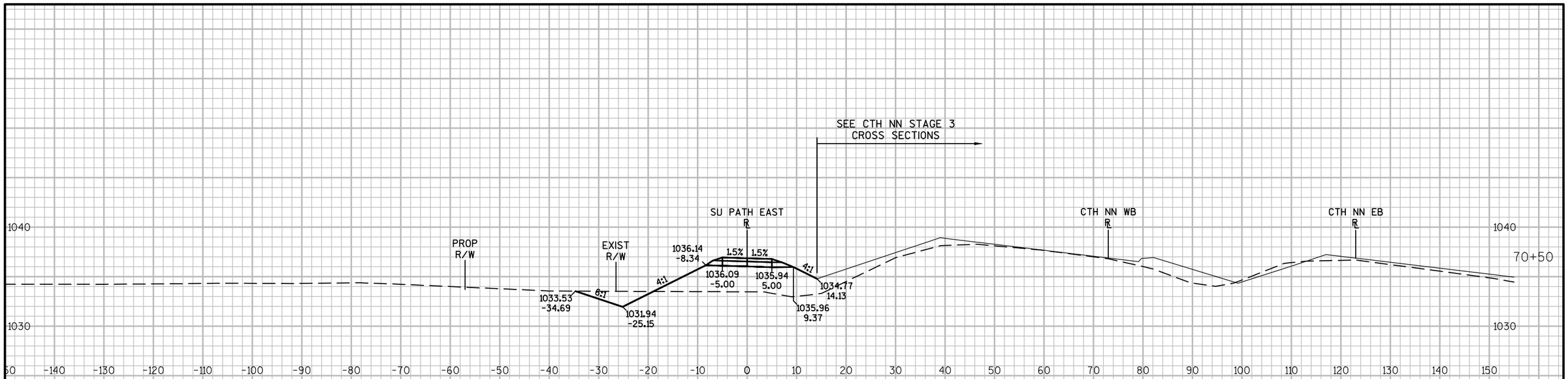
9

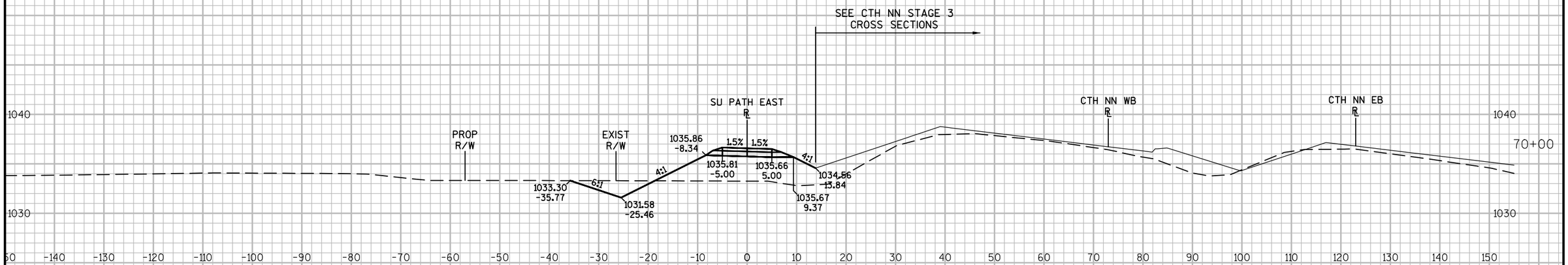
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: SHARED USE PATH	SHEET 743	E

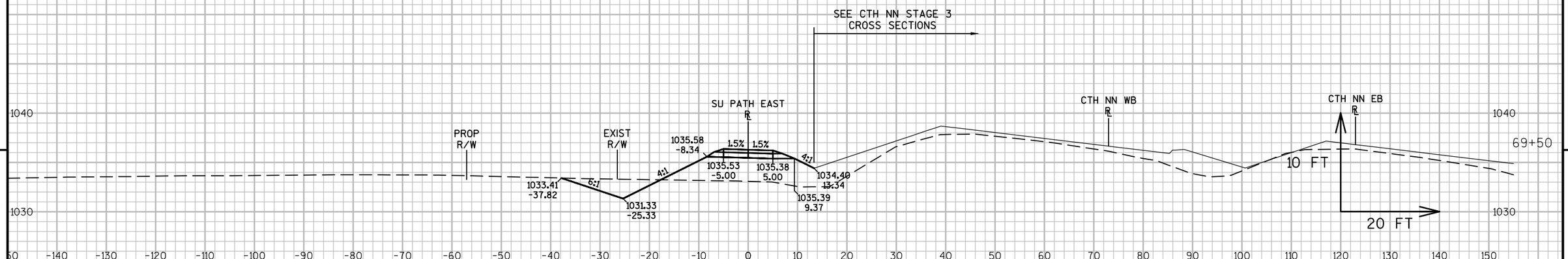
FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090205_XS_PATH.DWG
LAYOUT NAME - 47

PLOT DATE : 4/29/2015 8:07 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49





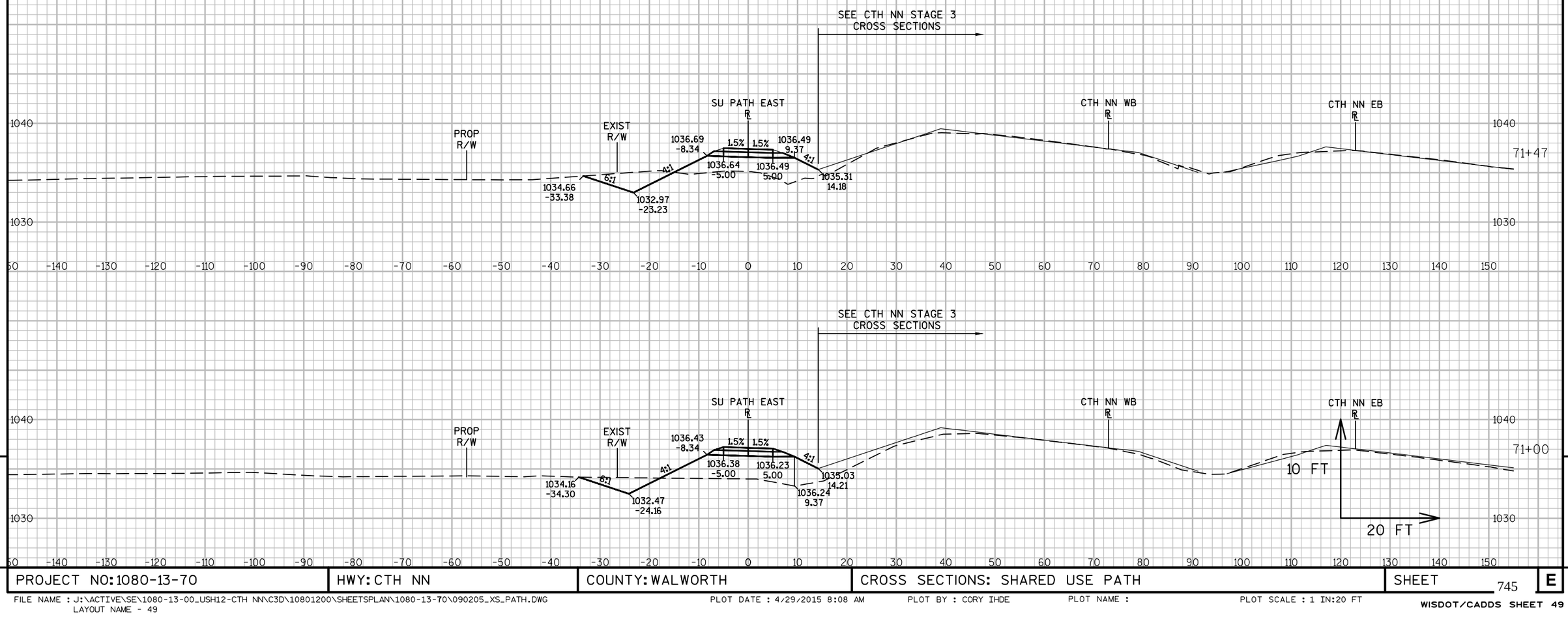


9

9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: SHARED USE PATH	SHEET 744	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090205_XS_PATH.DWG
LAYOUT NAME - 48
PLOT DATE : 4/29/2015 8:08 AM
PLOT BY : CORY IHDE
PLOT NAME :
PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 49



9

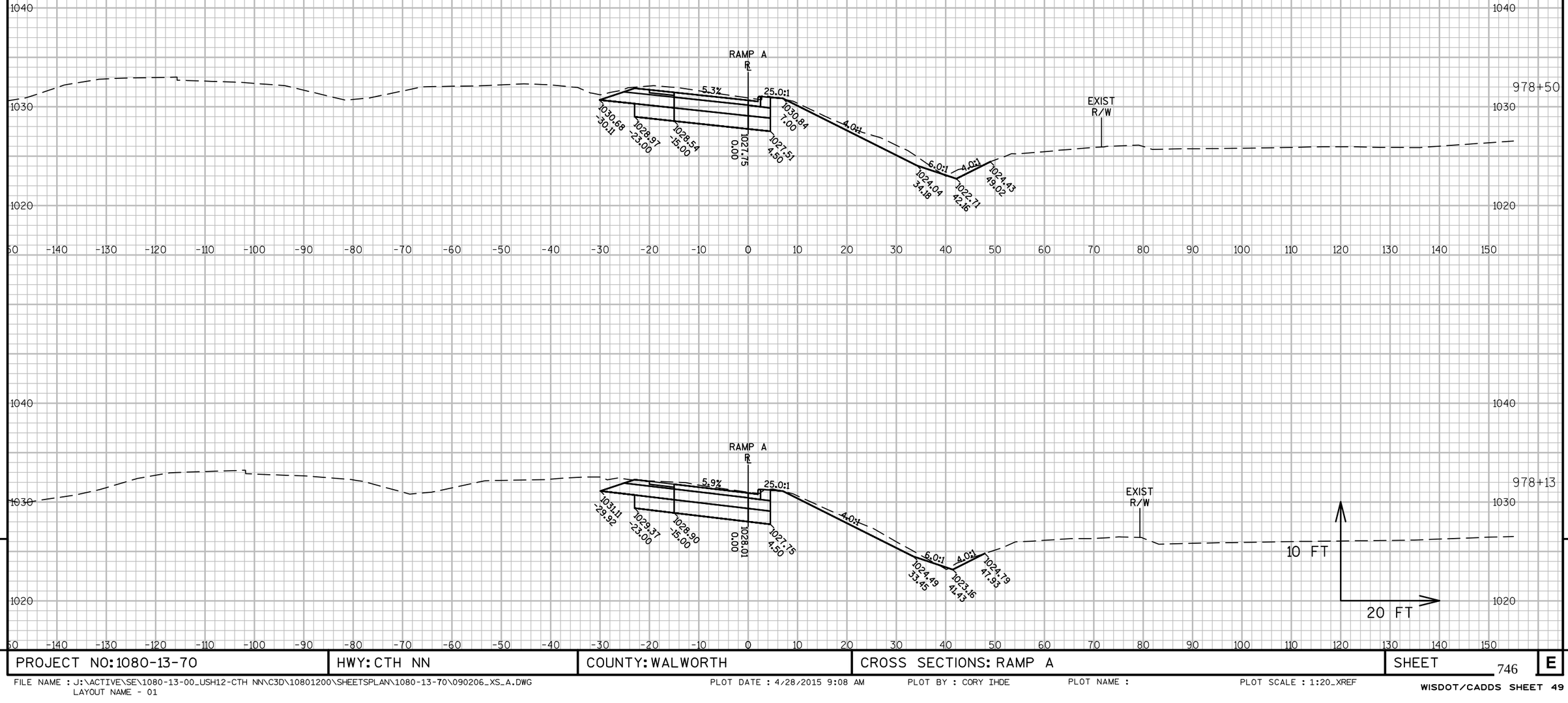
9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: SHARED USE PATH	SHEET 745	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090205_XS_PATH.DWG
LAYOUT NAME - 49

PLOT DATE : 4/29/2015 8:08 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



9

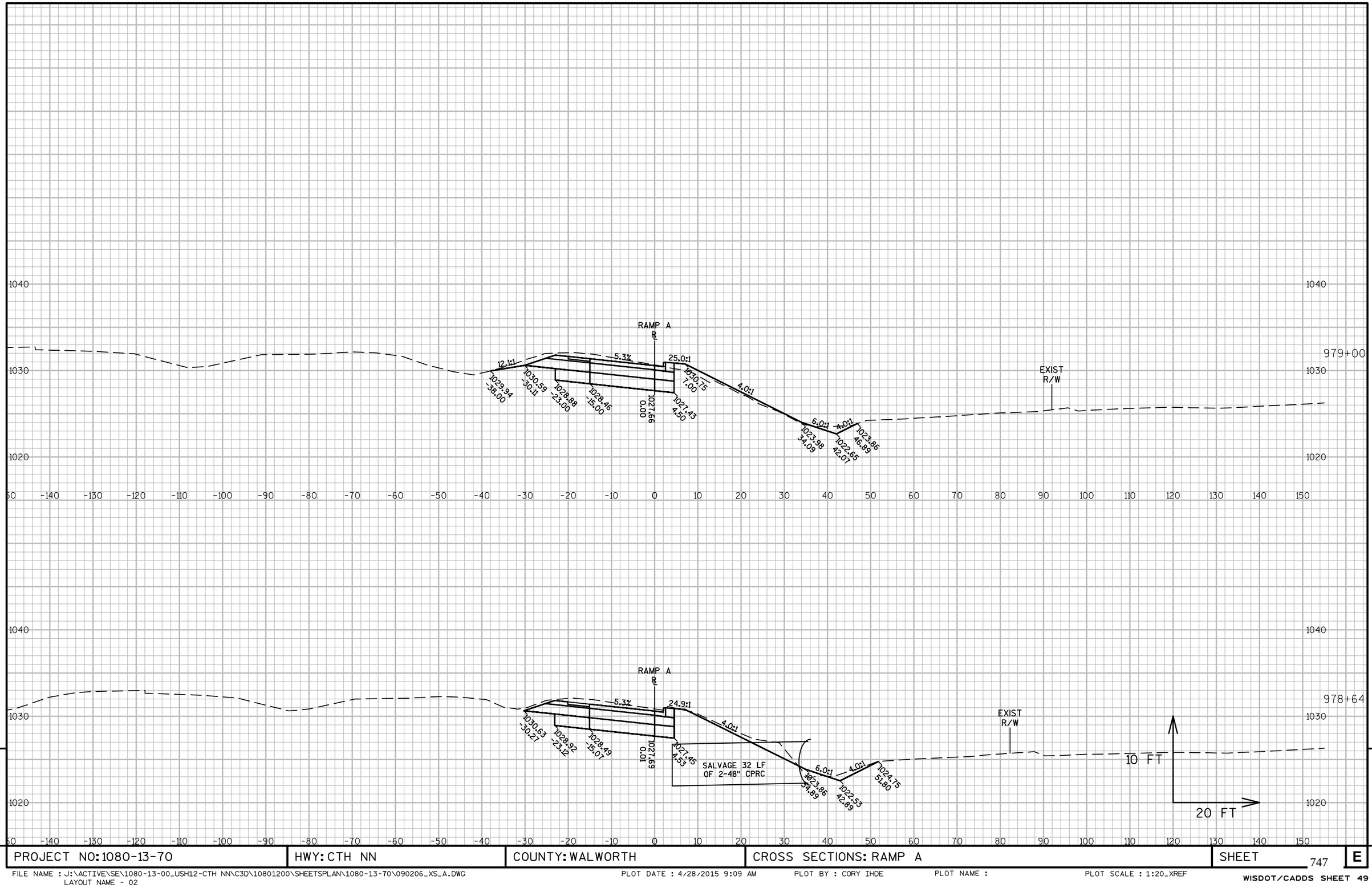
9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: RAMP A	SHEET 746	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090206_XS_A.DWG
LAYOUT NAME - 01

PLOT DATE : 4/28/2015 9:08 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:20_XREF

WISDOT/CADDS SHEET 49



9

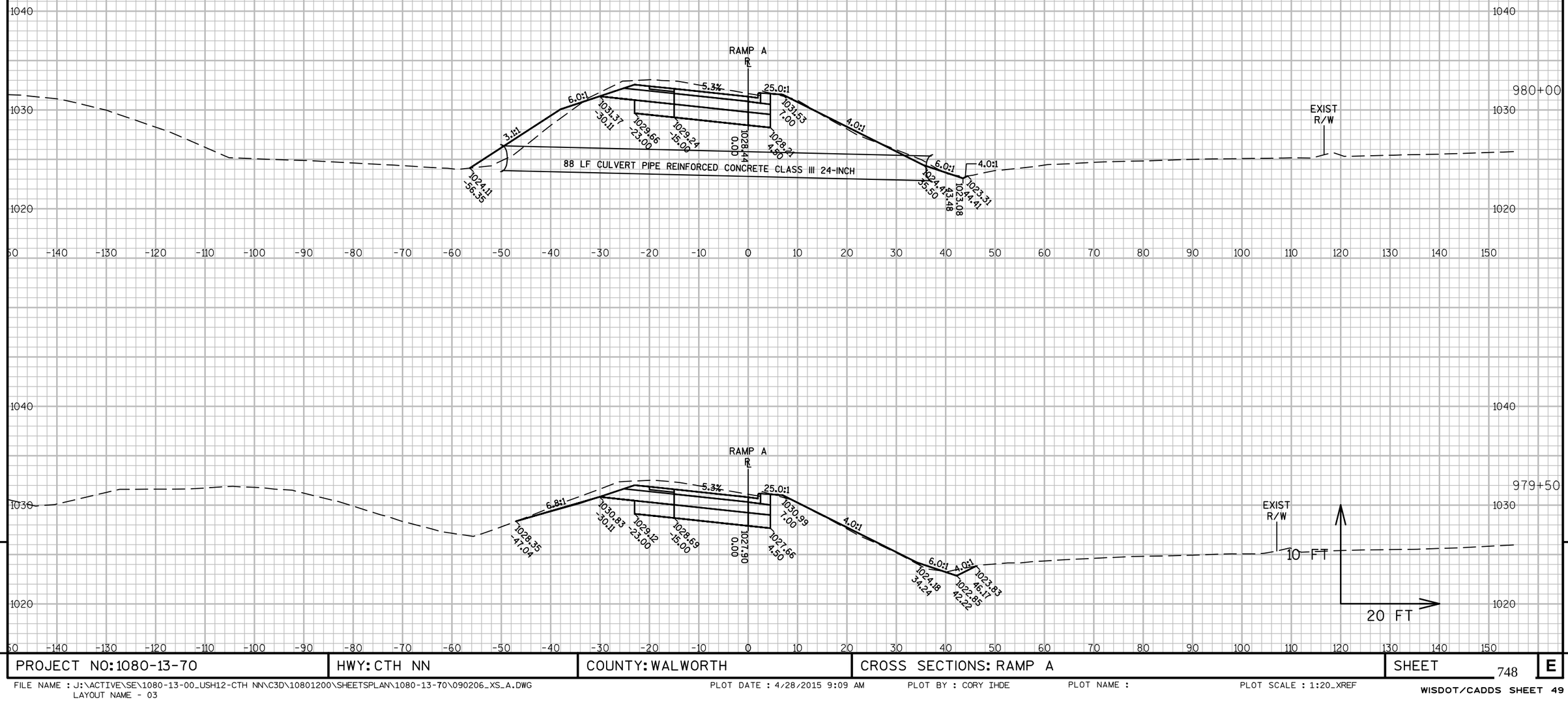
9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: RAMP A	SHEET 747	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090206_XS_A.DWG
LAYOUT NAME - 02

PLOT DATE : 4/28/2015 9:09 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:20_XREF

WISDOT/CADDS SHEET 49



9

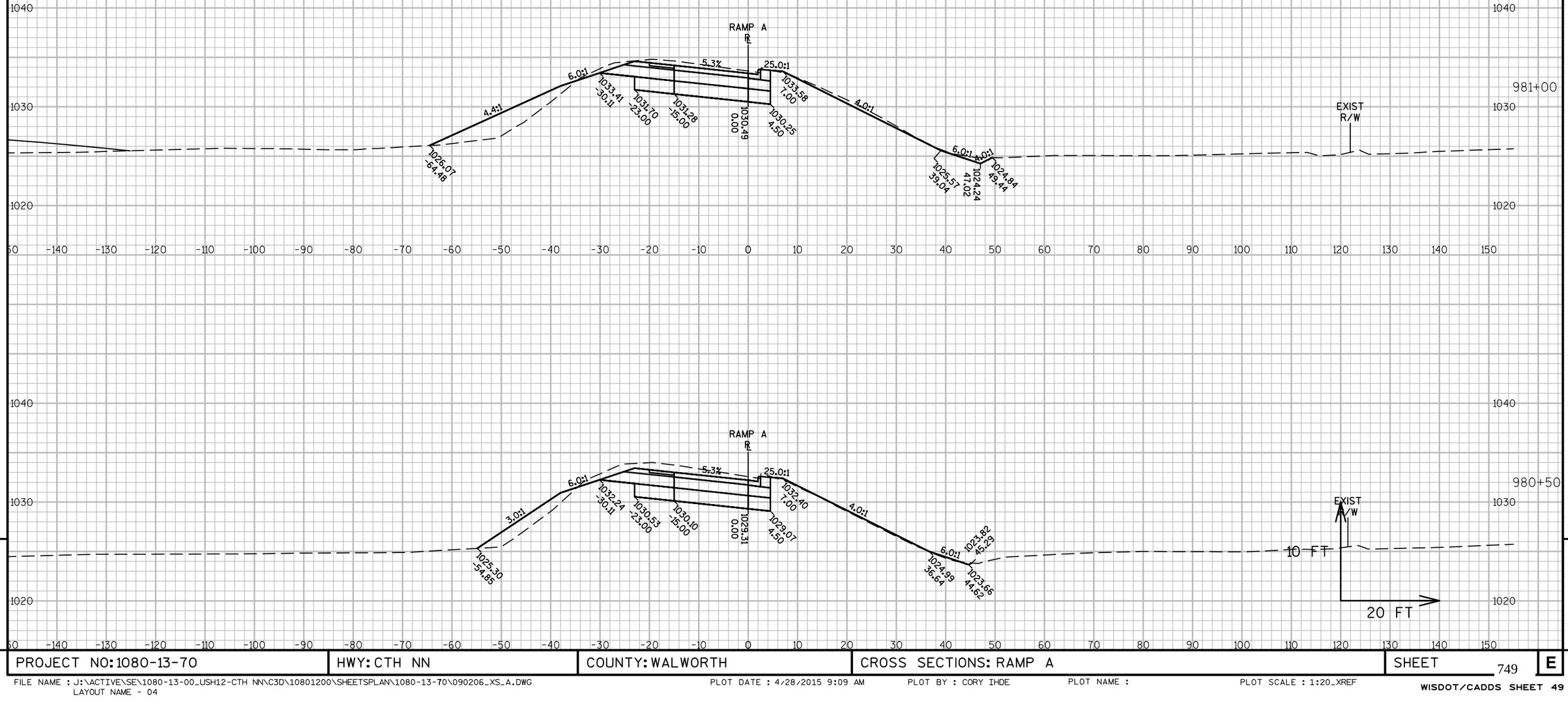
9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: RAMP A	SHEET 748	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090206_XS_A.DWG
LAYOUT NAME - 03

PLOT DATE : 4/28/2015 9:09 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:20_XREF

WISDOT/CADDS SHEET 49



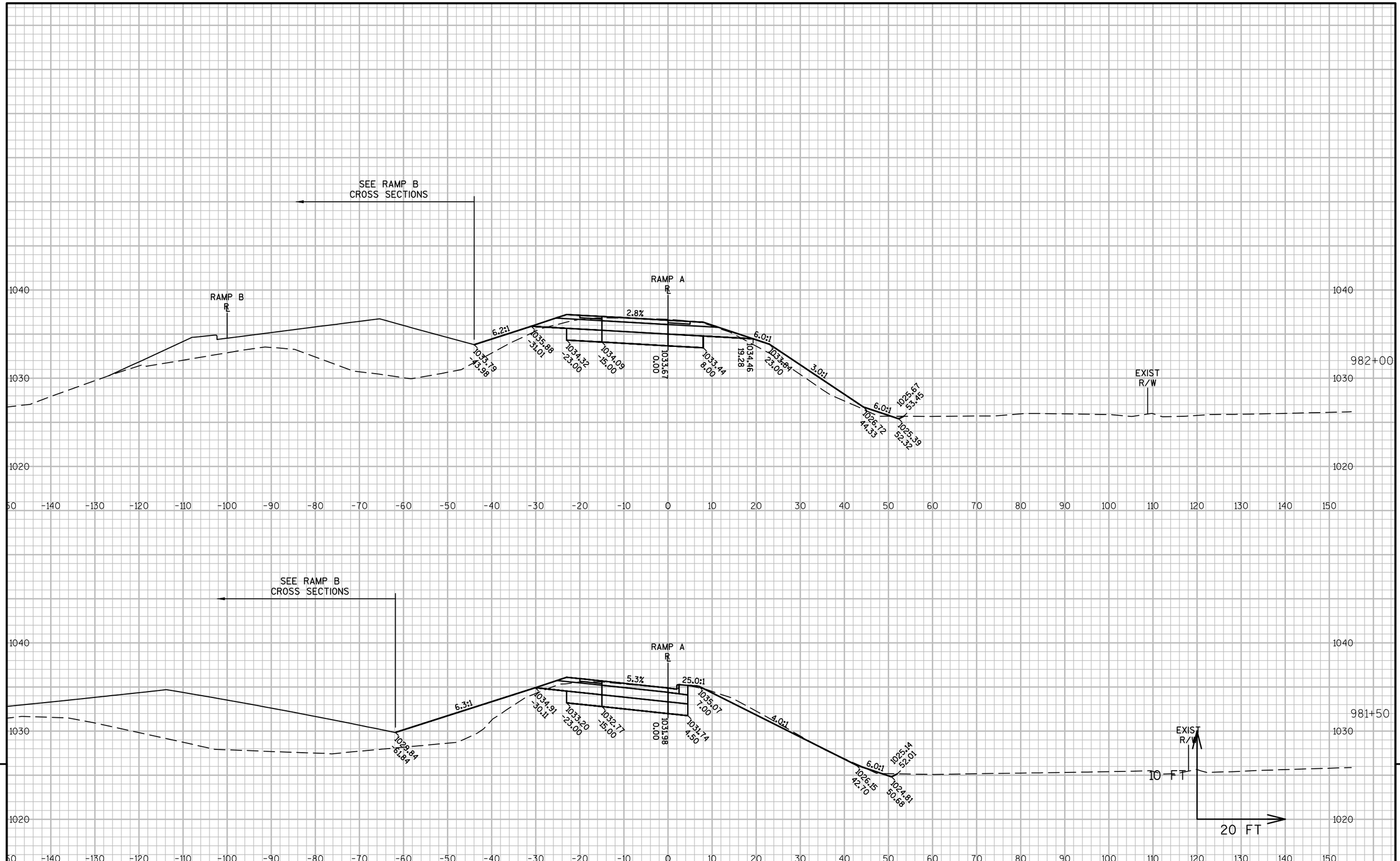
9

9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: RAMP A	SHEET 749	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090206_XS_A.DWG
LAYOUT NAME - 04

PLOT DATE : 4/28/2015 9:09 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:20_XREF



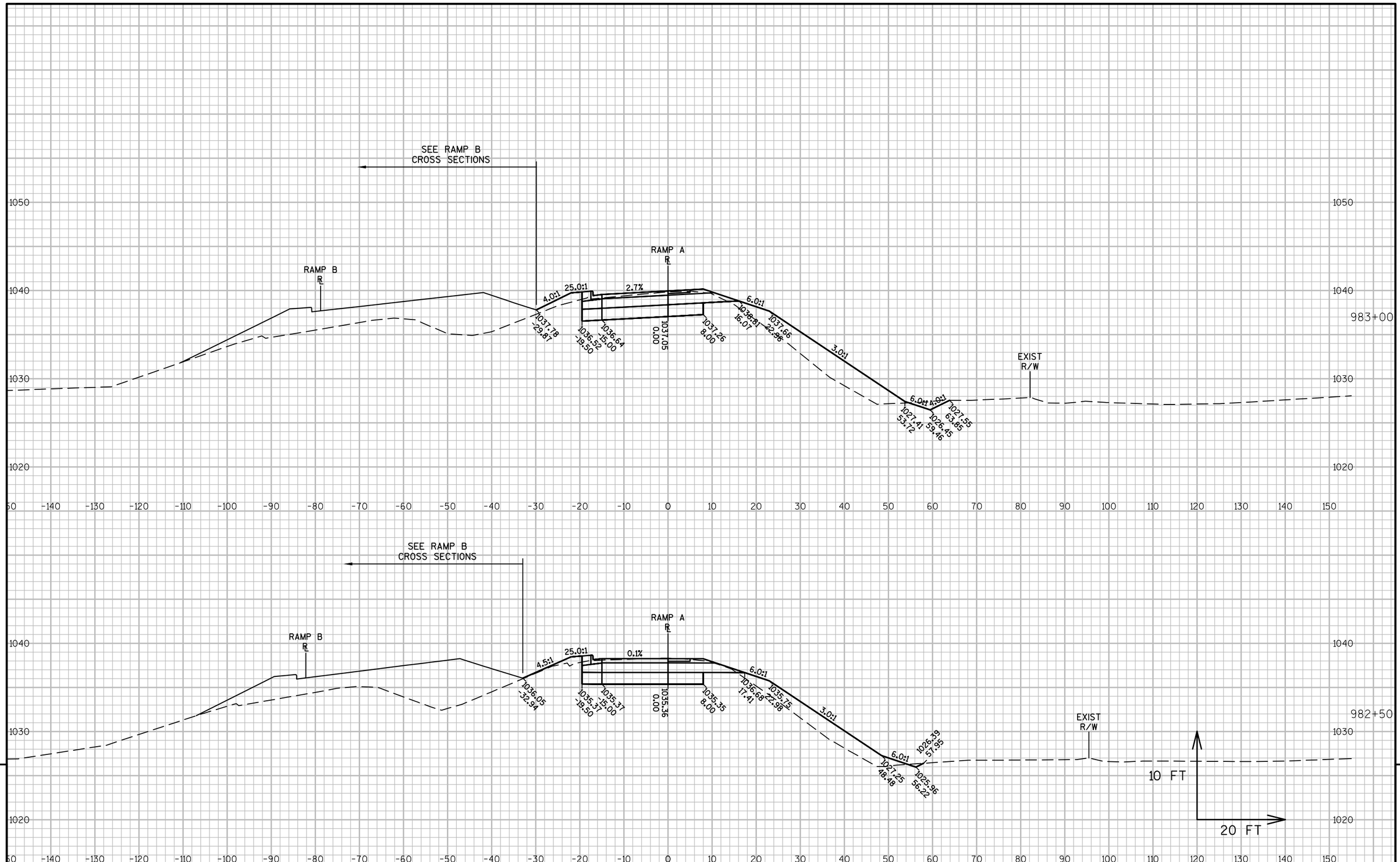
9

9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: RAMP A	SHEET 750	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090206_XS_A.DWG
LAYOUT NAME - 05

PLOT DATE : 4/28/2015 9:09 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:20_XREF

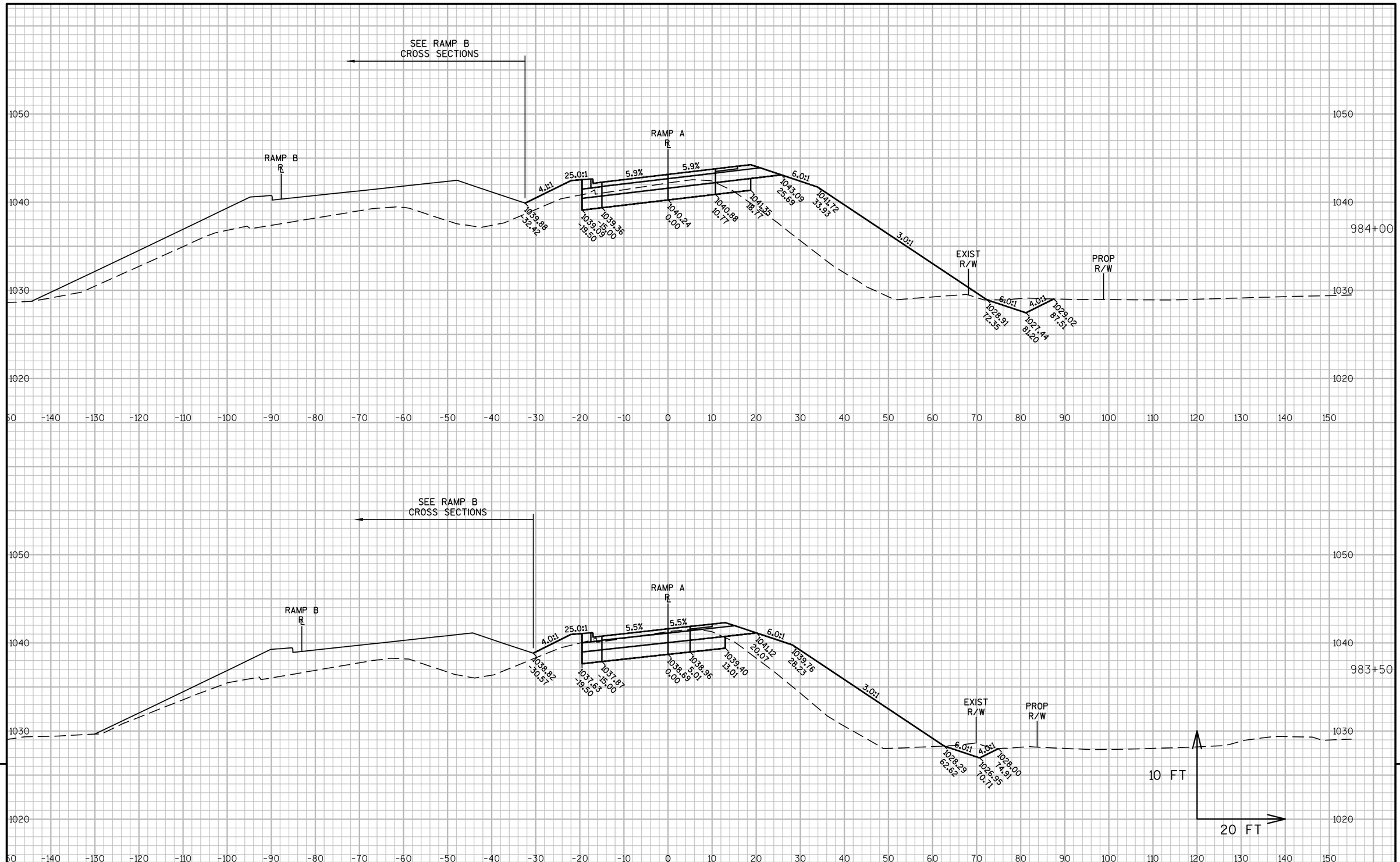


PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: RAMP A	SHEET 751 E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090206_XS_A.DWG
LAYOUT NAME - 06

PLOT DATE : 4/28/2015 9:10 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:20_XREF

WISDOT/CADDS SHEET 49



9

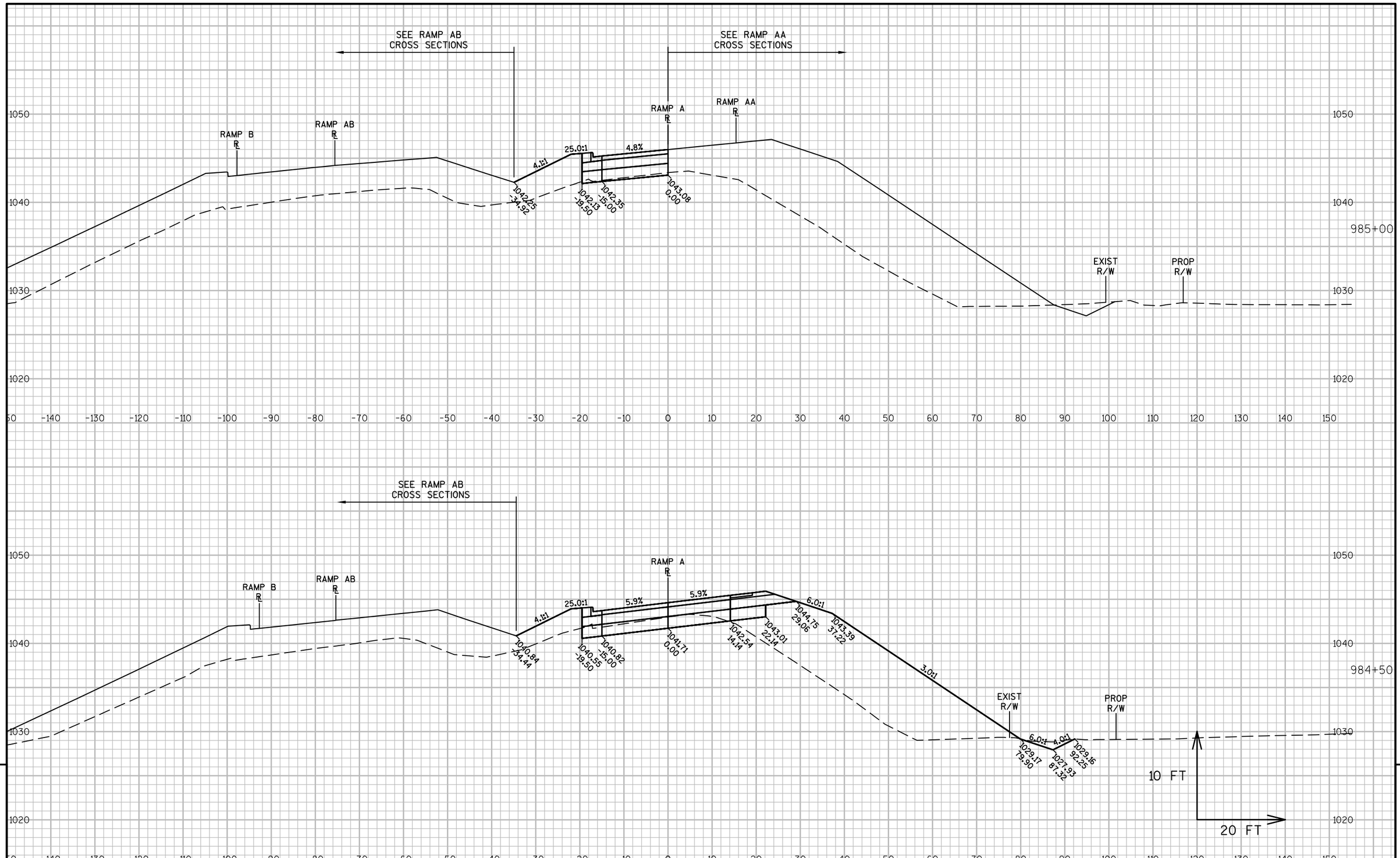
9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: RAMP A	SHEET 752	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090206_XS_A.DWG
LAYOUT NAME - 07

PLOT DATE : 4/28/2015 9:10 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:20_XREF

WISDOT/CADDS SHEET 49

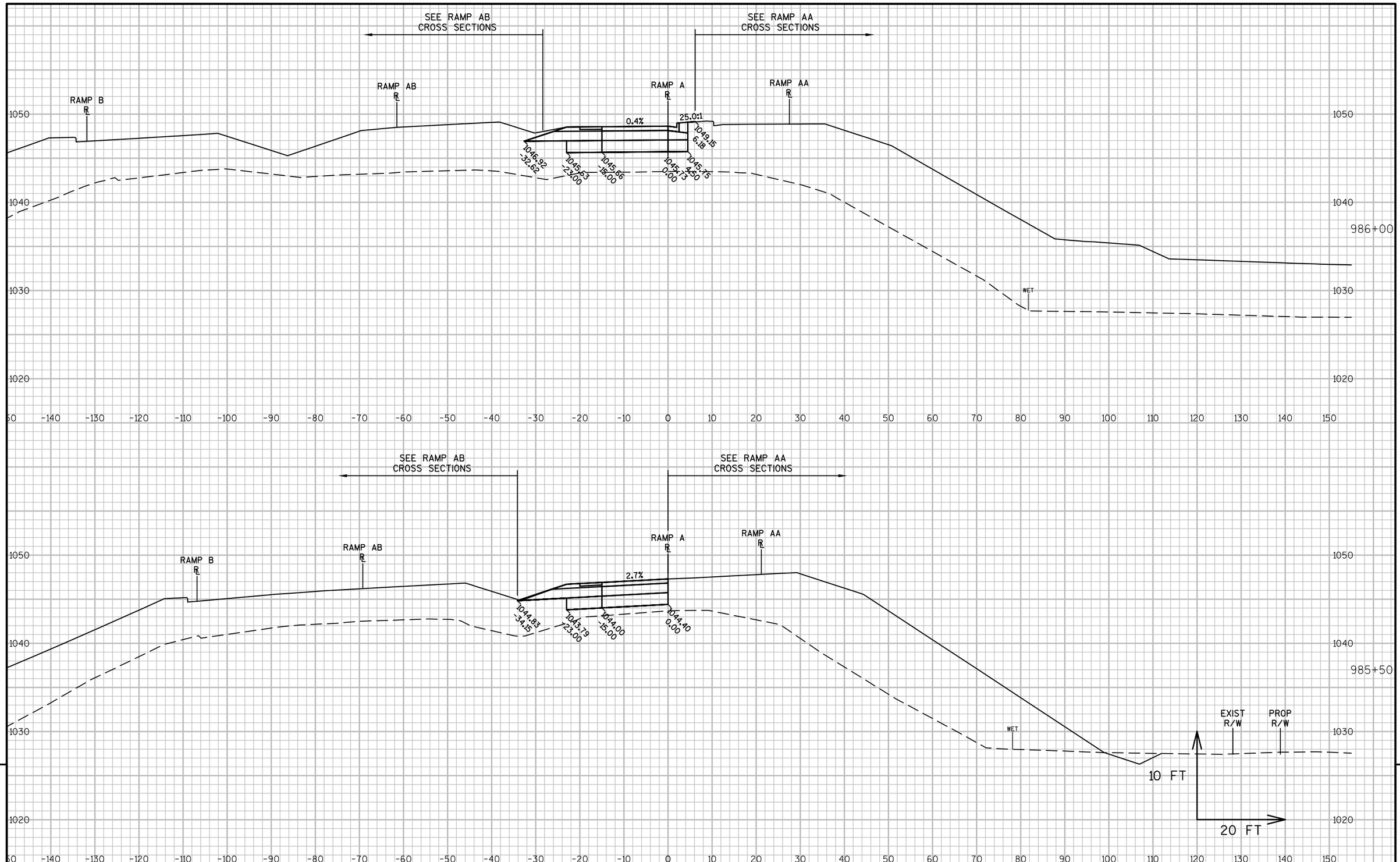


PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: RAMP A	SHEET 753	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090206_XS_A.DWG
LAYOUT NAME - 08

PLOT DATE : 4/28/2015 9:10 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:20_XREF

WISDOT/CADDS SHEET 49



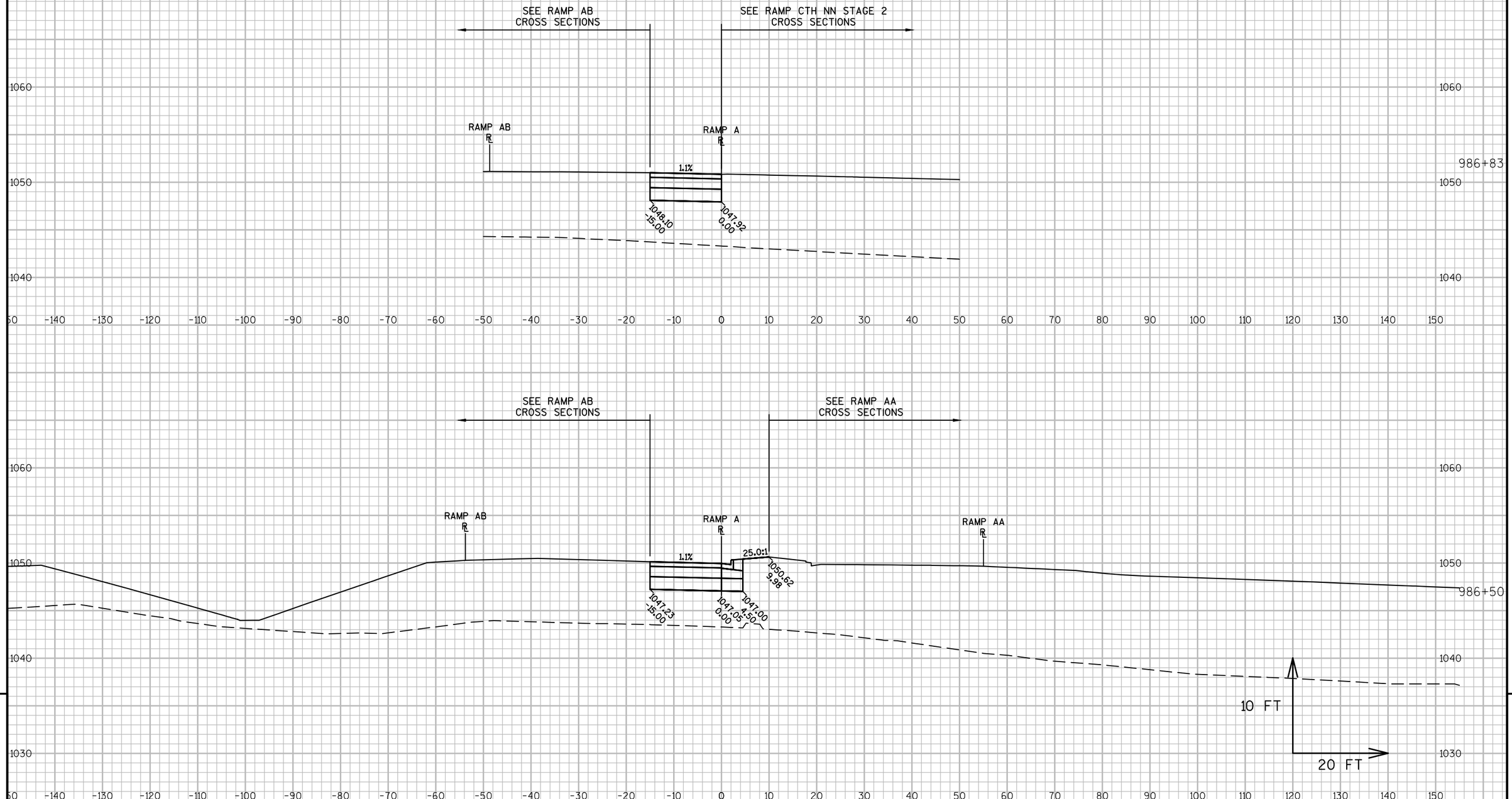
9

9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: RAMP A	SHEET 754	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090206_XS_A.DWG
LAYOUT NAME - 09

PLOT DATE : 4/28/2015 9:10 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:20_XREF



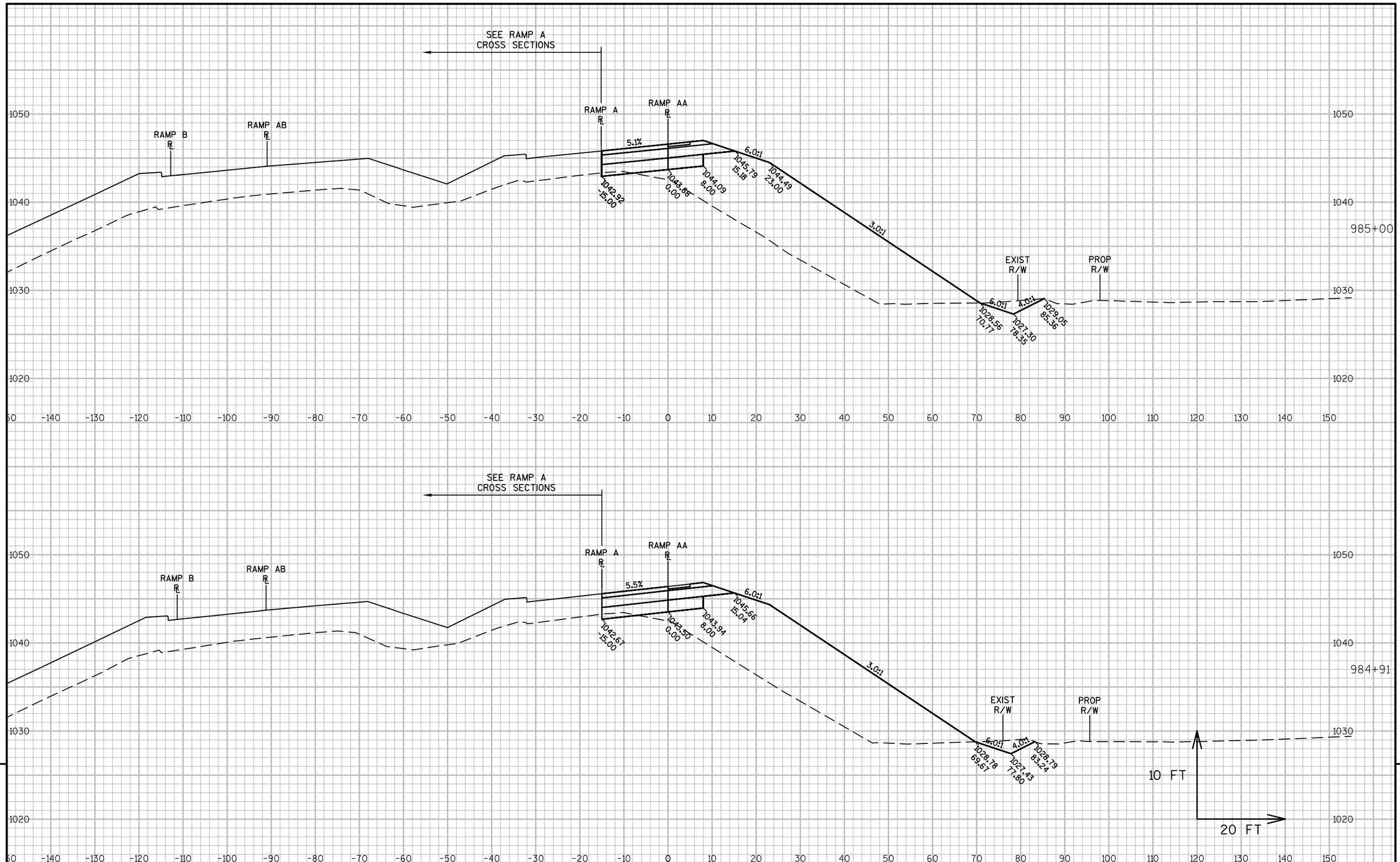
9

9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: RAMP A	SHEET 755	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090206_XS_A.DWG
LAYOUT NAME - 10

PLOT DATE : 4/28/2015 9:11 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:20_XREF

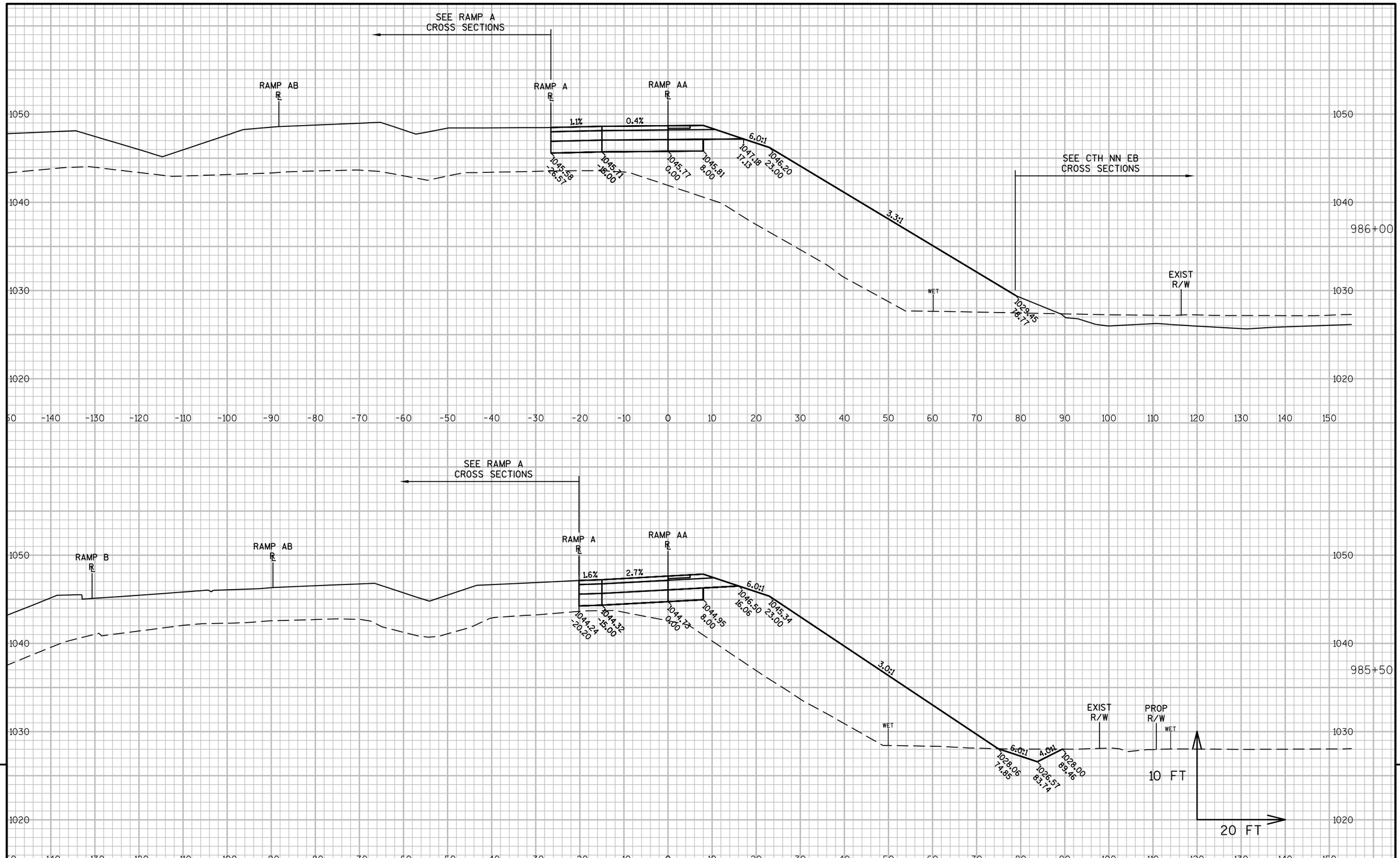


PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: RAMP AA	SHEET 756 E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090207_XS_AA.DWG
LAYOUT NAME - 01

PLOT DATE : 4/28/2015 9:34 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:20_XREF

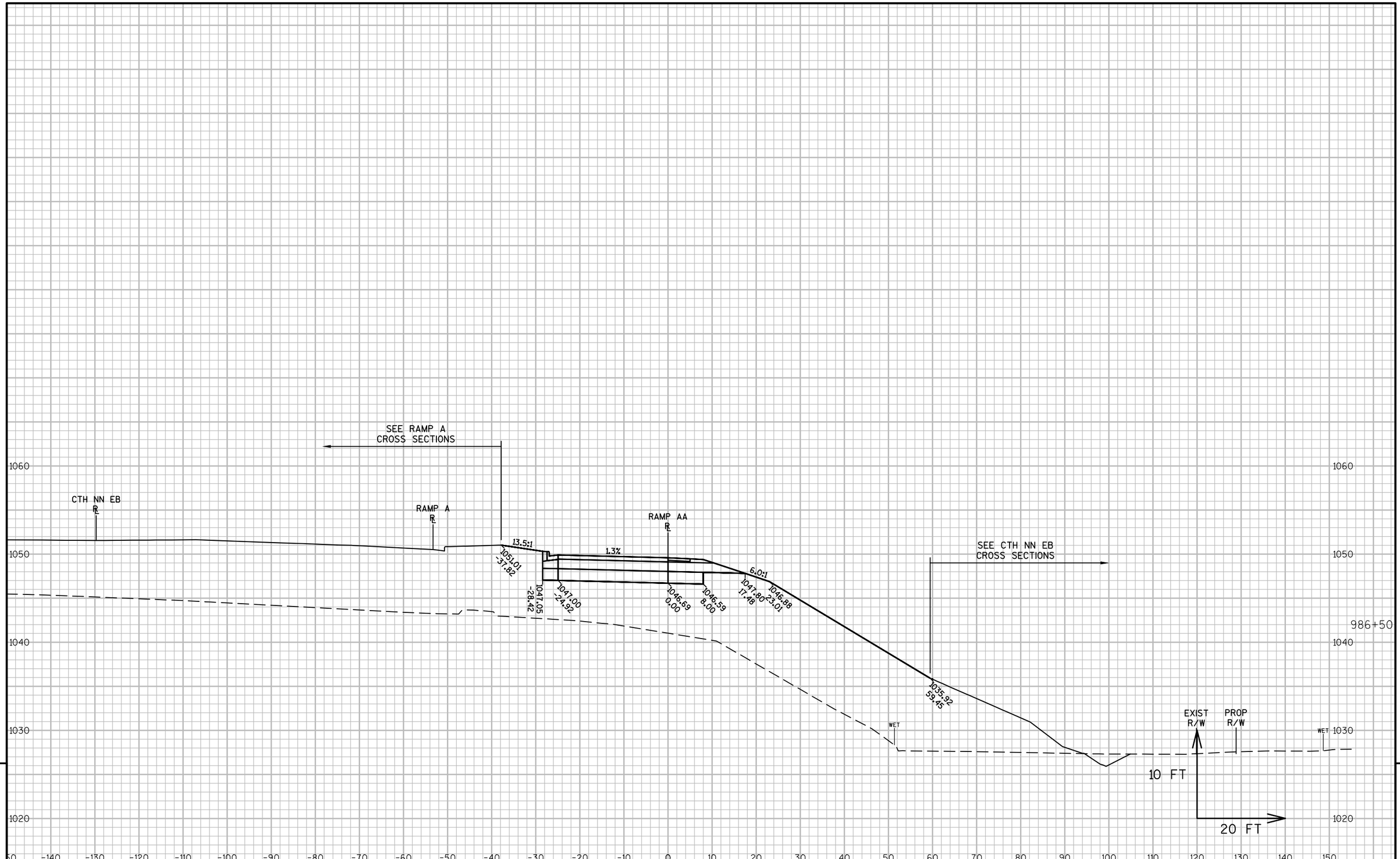
WISDOT/CADDS SHEET 49



PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: RAMP AA	SHEET 757 E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090207_XS_AA.DWG
LAYOUT NAME - 02

PLOT DATE : 4/28/2015 9:34 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:20_XREF



9

9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: RAMP AA	SHEET 758	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090207_XS_AA.DWG
LAYOUT NAME - 03
PLOT DATE : 4/28/2015 9:35 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:20_XREF
WISDOT/CADDS SHEET 49

SEE CTH NN EB
CROSS SECTIONS

SEE CTH NN EB
CROSS SECTIONS

CTH NN EB
℄

RAMP AA
℄

2.1%

6.0:1

3.5:1

1046.72
-12.81

1046.44
0.00

1046.28
8.00

1047.42
17.56

1046.53
22.93

WET

987+00

1060
1050
1040
1030
1020

10 FT
20 FT

-150 -140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

9

9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: RAMP AA	SHEET 759	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090207_XS_AA.DWG
LAYOUT NAME - 04

PLOT DATE : 4/28/2015 9:35 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:20_XREF

SEE CTH NN EB
CROSS SECTIONS

SEE CTH NN EB
CROSS SECTIONS

CTH NN EB
℄

RAMP AA
℄

2.2%

6.0:1

3.5:1

1046.63
-12.09

1046.37
0.00

1046.21
8.00

1047.35
17.56

987+04

1060
1050
1040
1030
1020

10 FT
20 FT

-150 -140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

9

9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: RAMP AA	SHEET 760	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090207_XS_AA.DWG
LAYOUT NAME - 05

PLOT DATE : 4/28/2015 9:35 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:20_XREF

SEE CTH NN EB
CROSS SECTIONS

CTH NN WB
R

CTH NN EB
R

RAMP B
R

3.3%

6.0:1

3.0:1

1049.80
-17.00

1049.24
0.00

1048.98
8.00

1049.94
19.24

1049.31
23.00

1024.84
96.43

10 FT

20 FT

54+67

1060
1050
1040
1030
1020

-150 -140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

9

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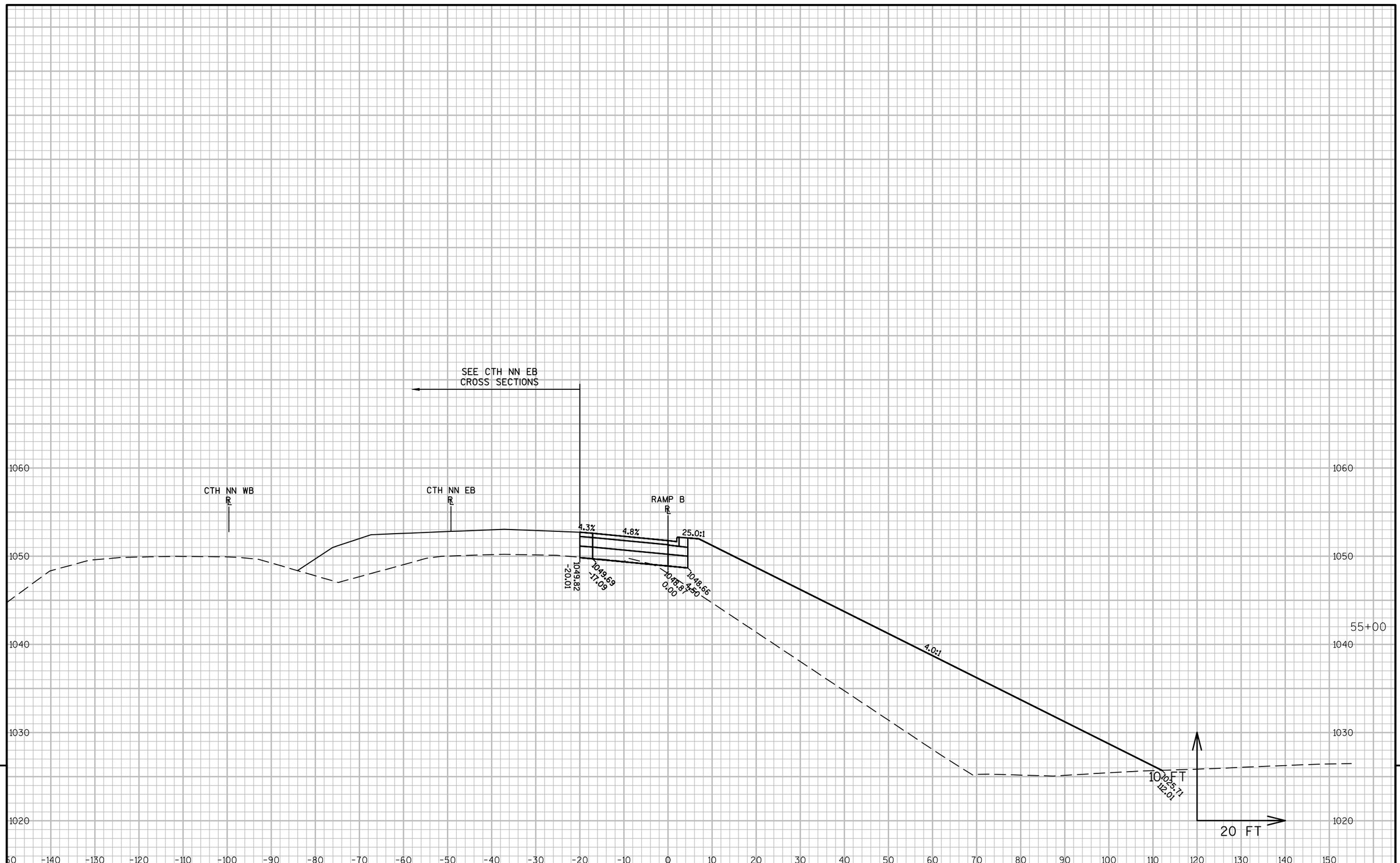
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: RAMP B	SHEET 761	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090208_XS_B.DWG
LAYOUT NAME - 01

PLOT DATE : 4/22/2015 2:30 PM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:20_XREF



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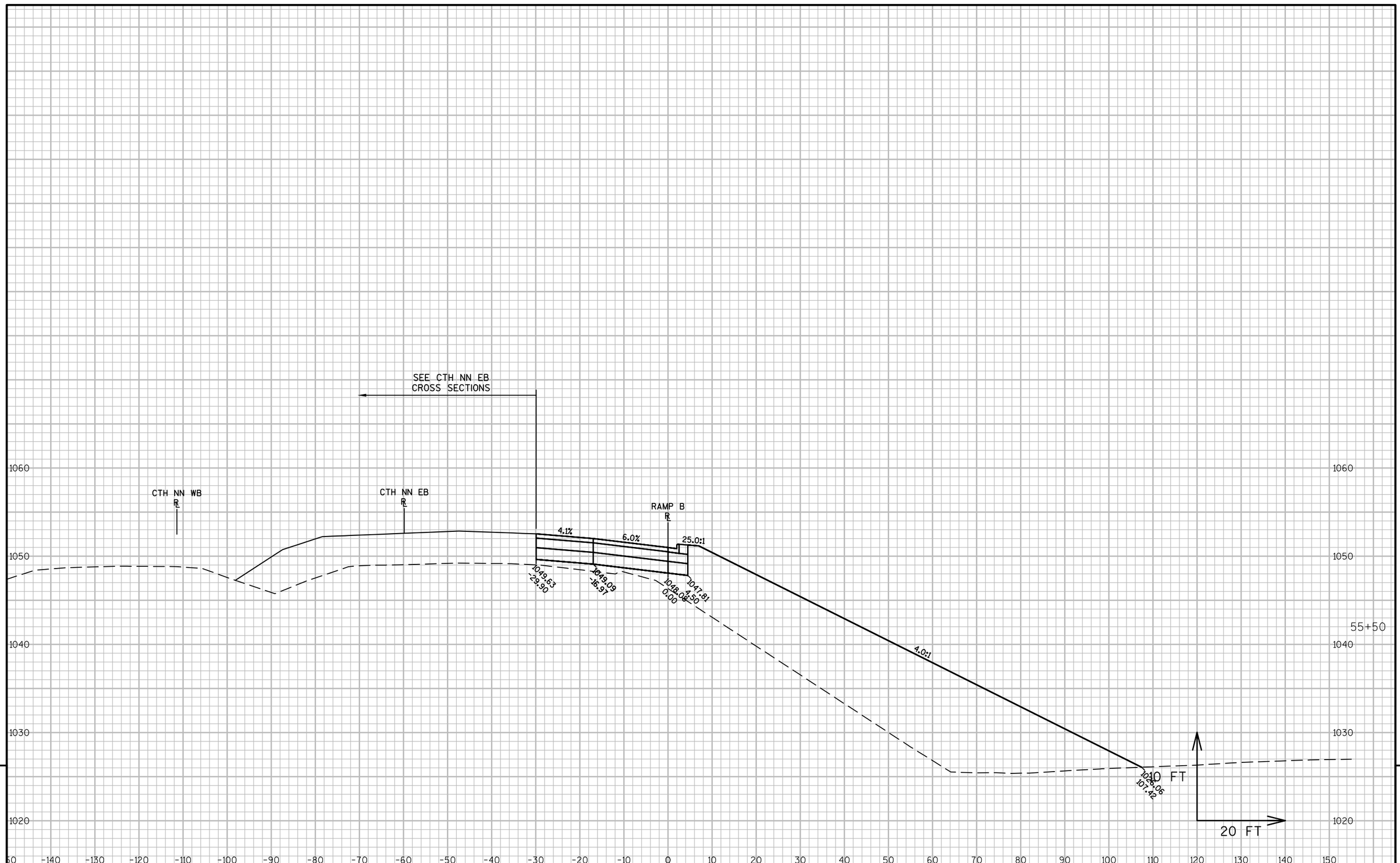
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: RAMP B	SHEET 762	E



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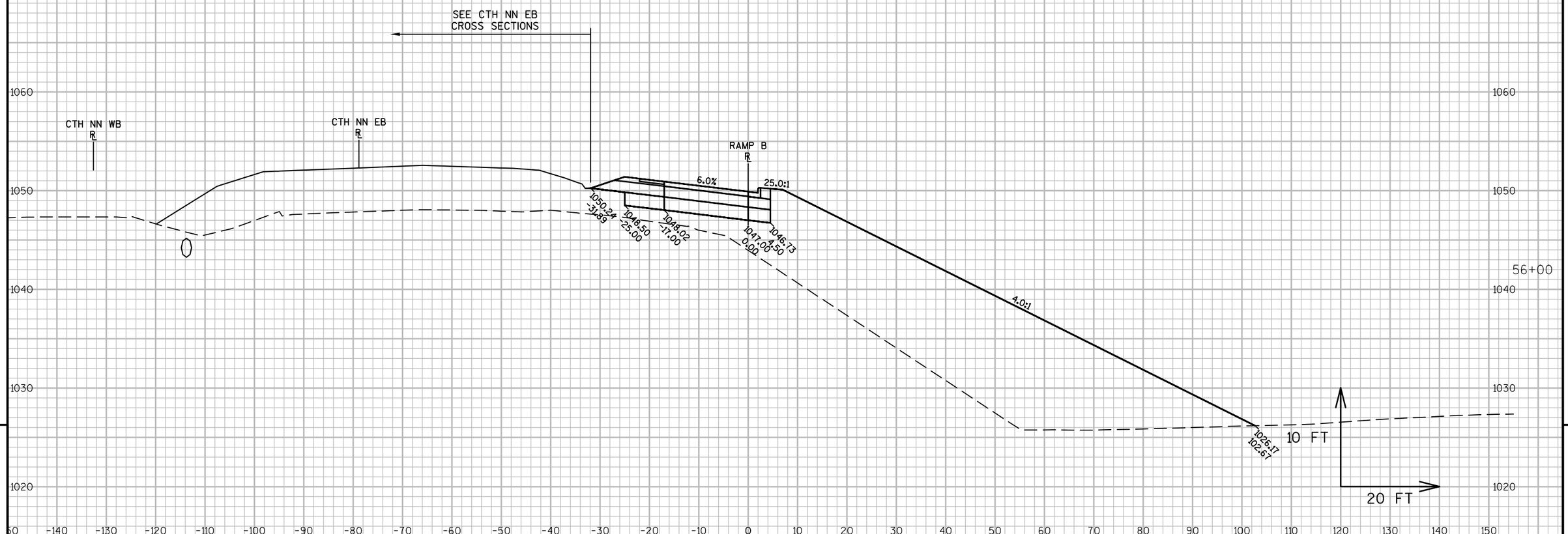
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: RAMP B	SHEET 763	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090208_XS_B.DWG
LAYOUT NAME - 03

PLOT DATE : 4/22/2015 2:31 PM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:20_XREF

SEE CTH NN EB
CROSS SECTIONS



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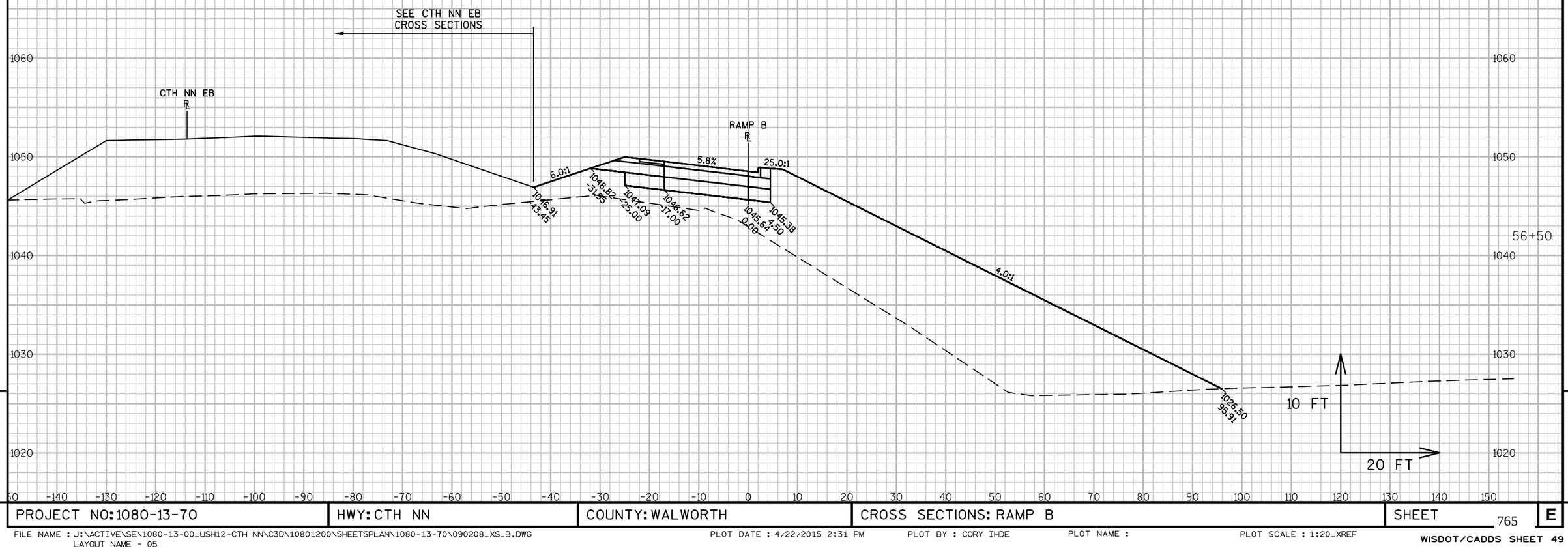
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: RAMP B	SHEET 764	E

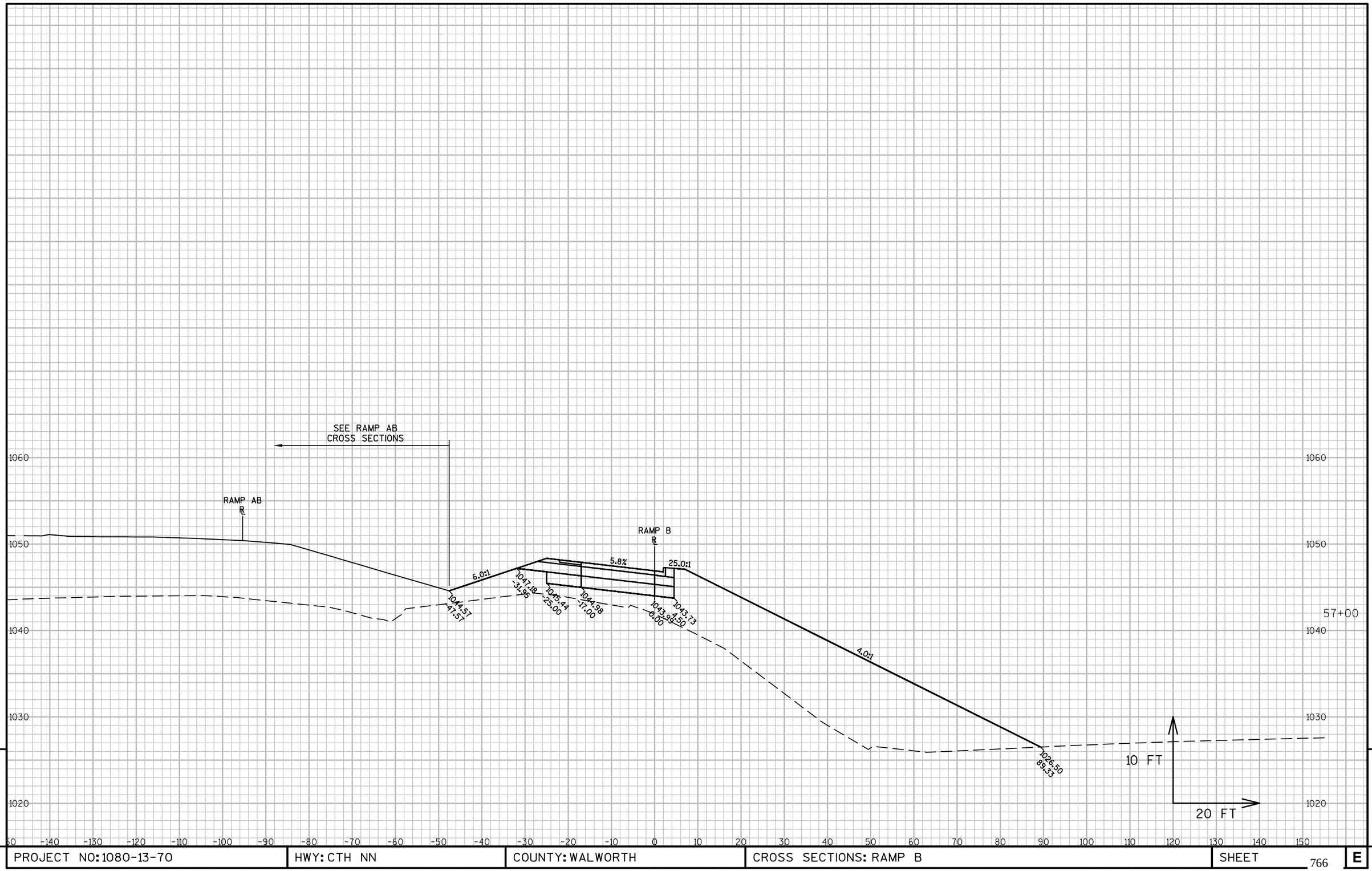


PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: RAMP B	SHEET 765 E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090208_XS_B.DWG
LAYOUT NAME - 05

PLOT DATE : 4/22/2015 2:31 PM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:20_XREF

WISDOT/CADDS SHEET 49



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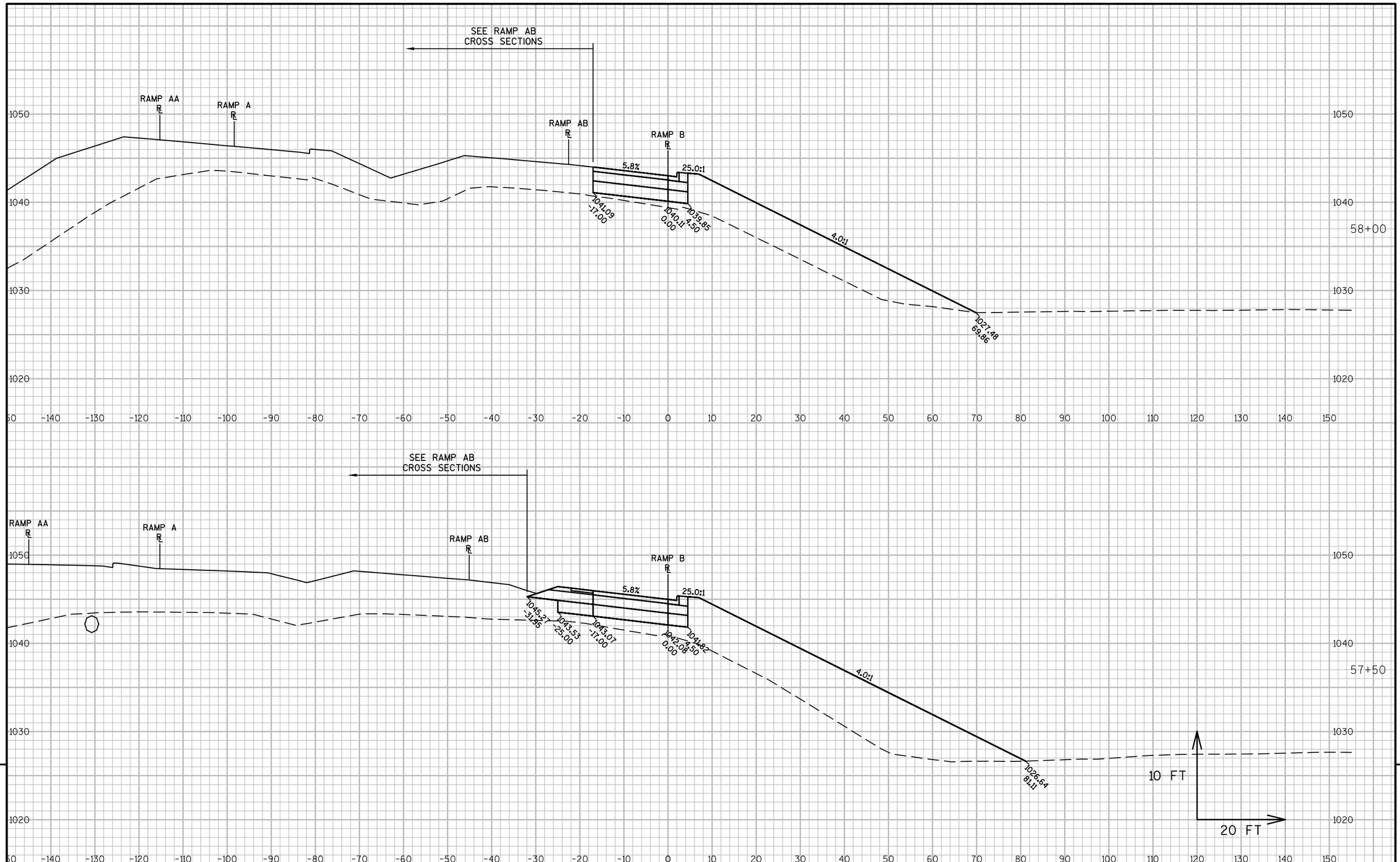
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: RAMP B	SHEET 766	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090208_XS_B.DWG
LAYOUT NAME - 06

PLOT DATE : 4/22/2015 2:31 PM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:20_XREF



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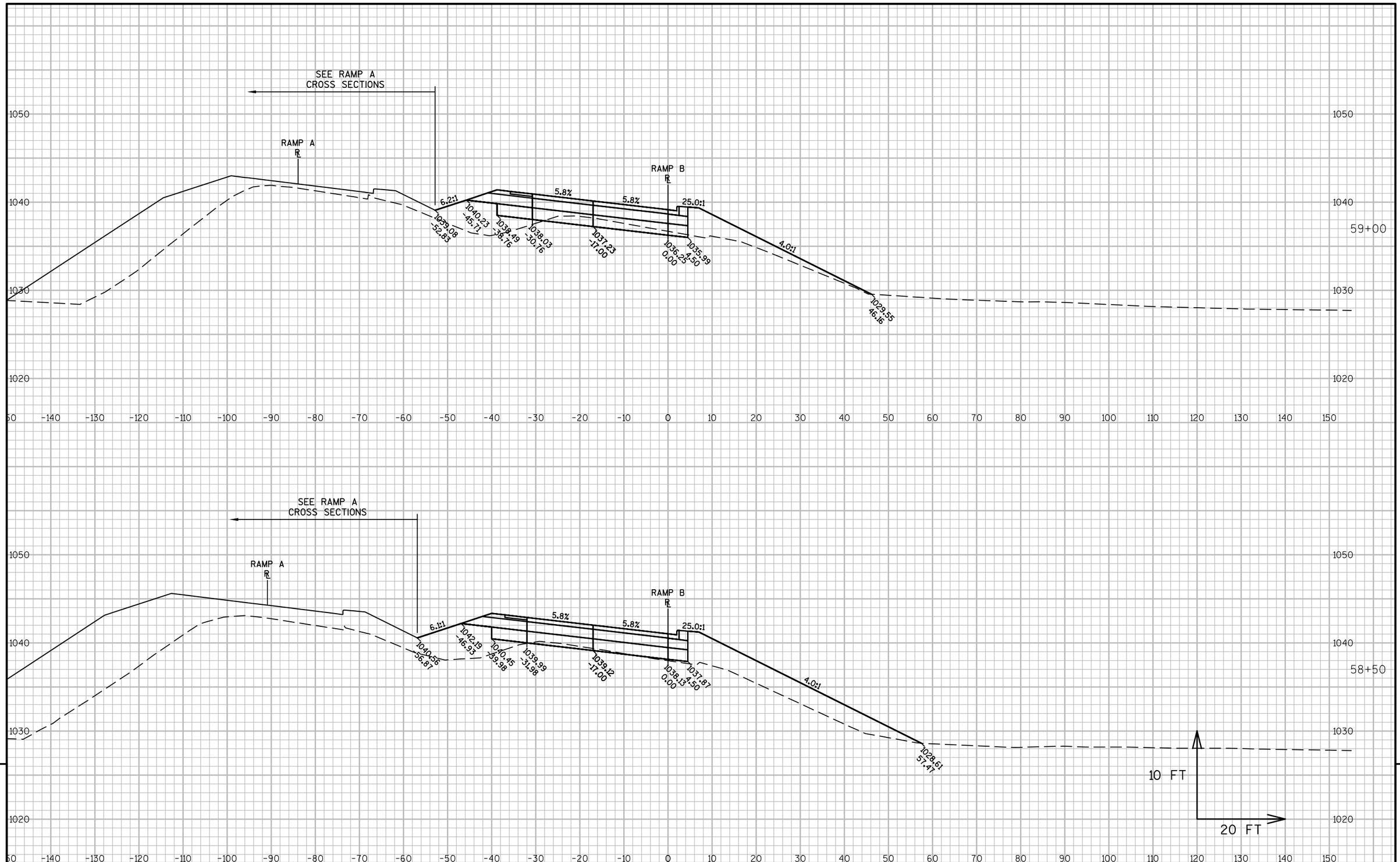
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: RAMP B	SHEET 767	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090208_XS_B.DWG
LAYOUT NAME - 07

PLOT DATE : 4/22/2015 2:32 PM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:20_XREF



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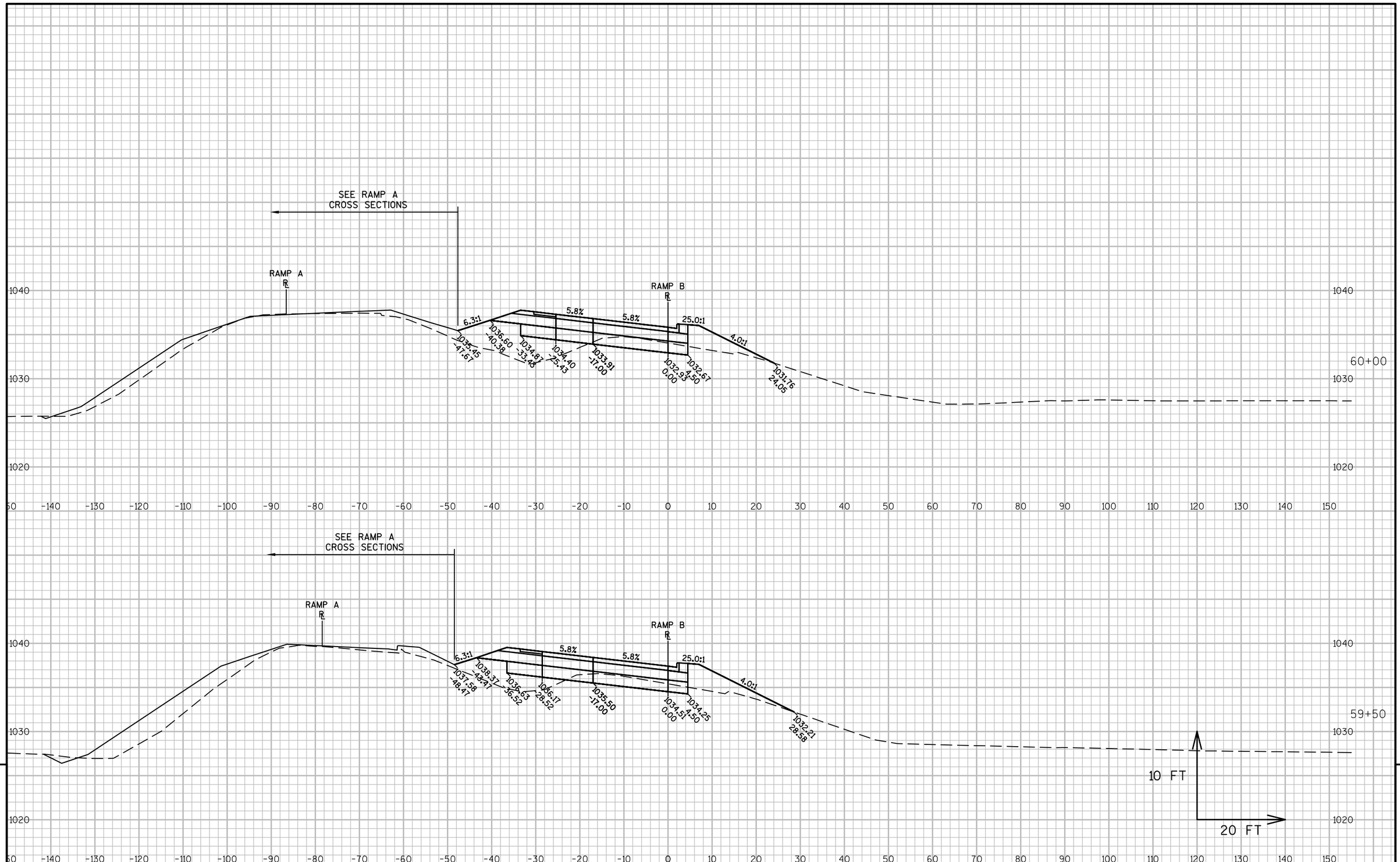
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: RAMP B	SHEET 768	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090208_XS_B.DWG
LAYOUT NAME - 08

PLOT DATE : 4/22/2015 2:32 PM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:20_XREF

WISDOT/CADDS SHEET 49



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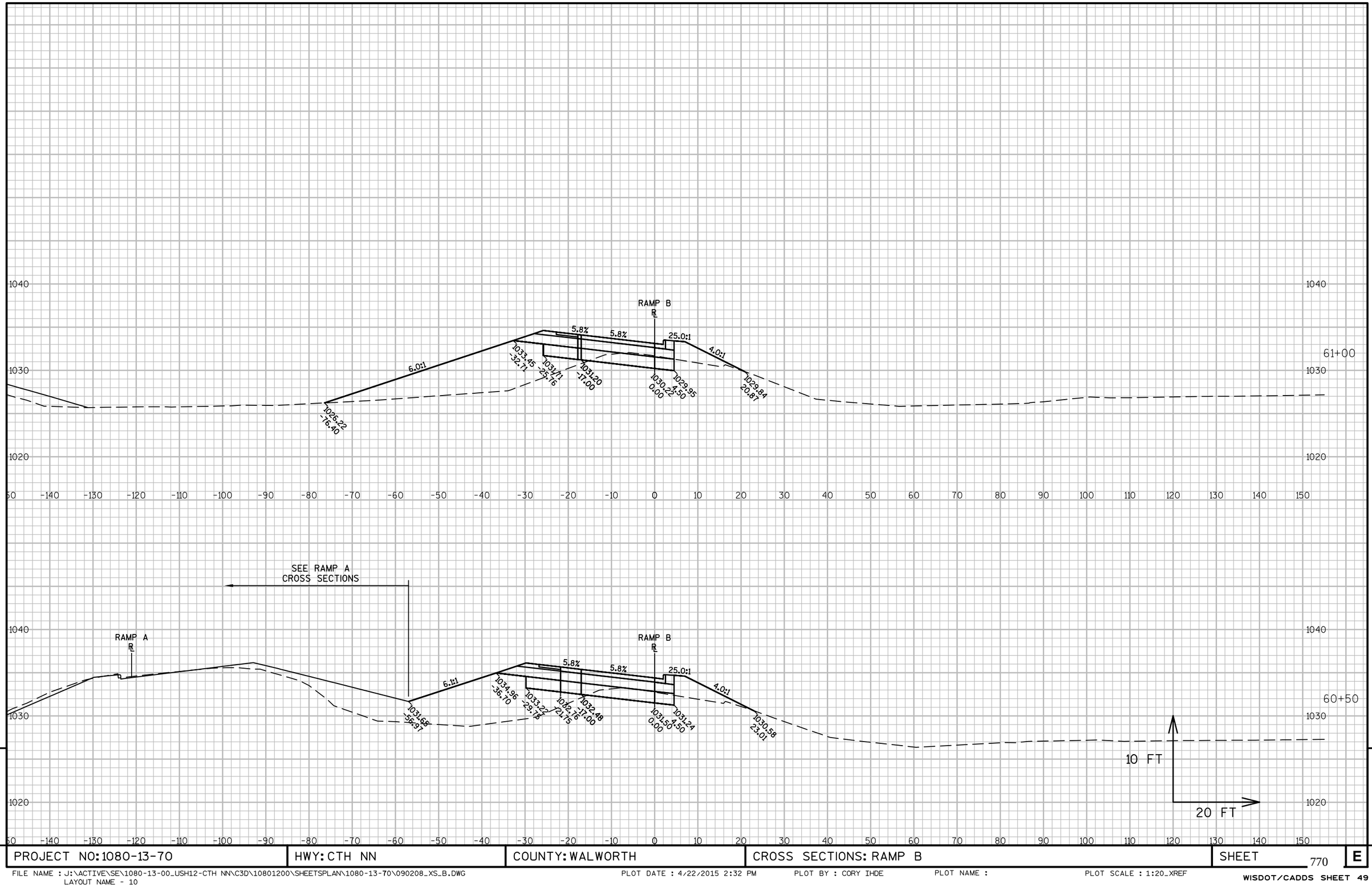
9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: RAMP B	SHEET 769	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090208_XS_B.DWG
LAYOUT NAME - 09

PLOT DATE : 4/22/2015 2:32 PM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:20_XREF



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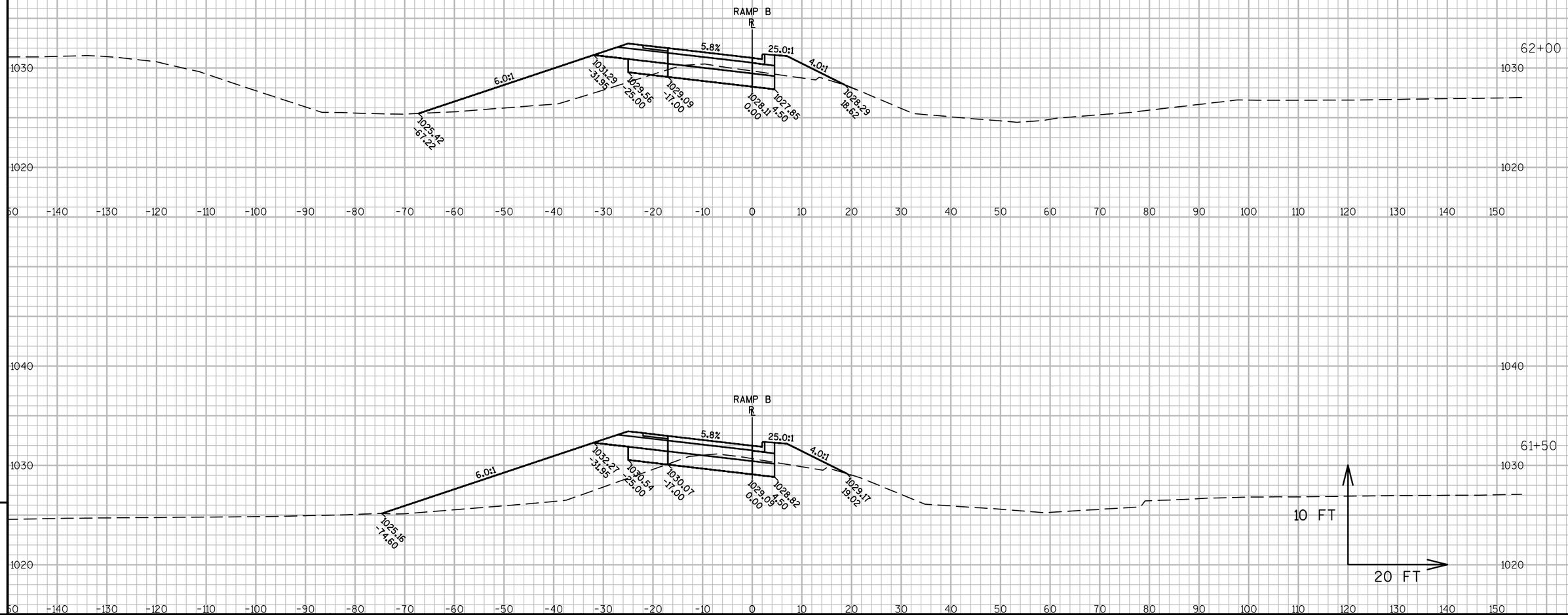
9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: RAMP B	SHEET 770	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090208_XS_B.DWG
LAYOUT NAME - 10

PLOT DATE : 4/22/2015 2:32 PM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:20_XREF



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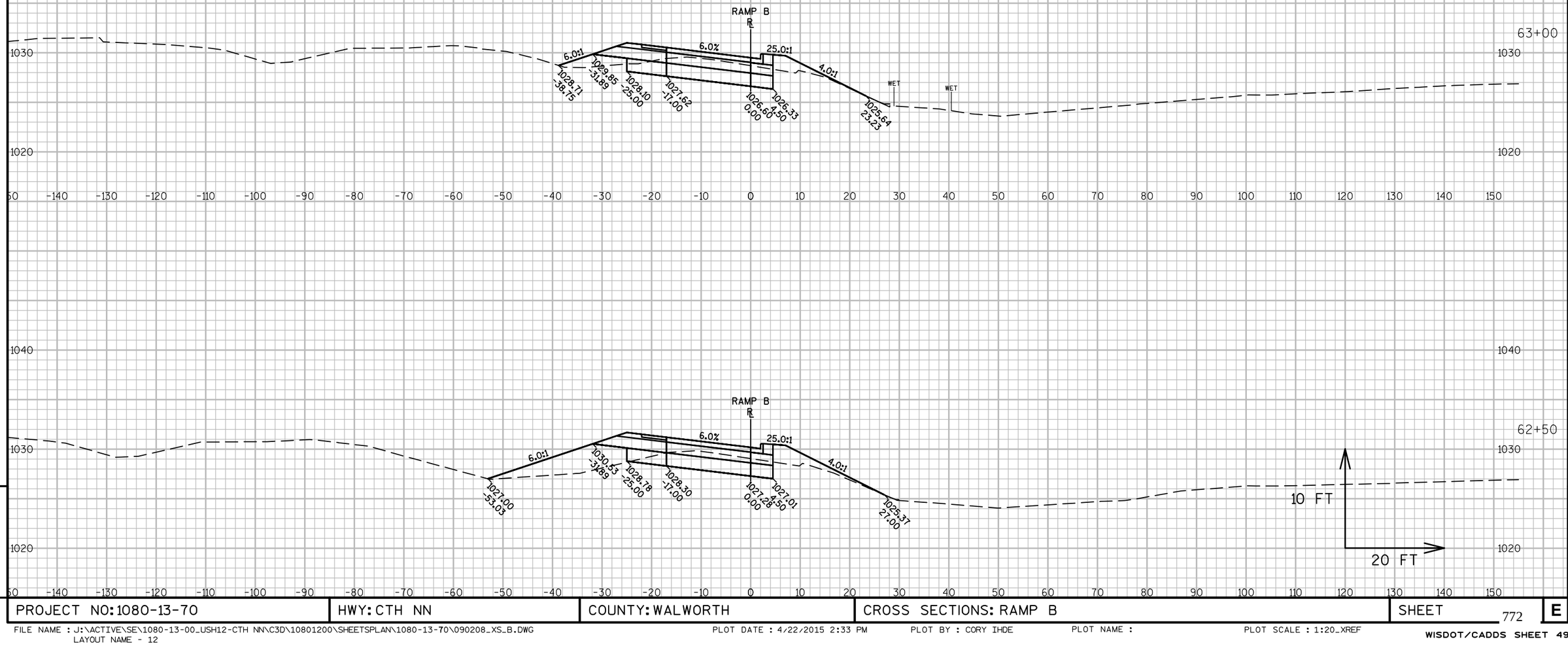
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: RAMP B	SHEET 771	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090208_XS_B.DWG
LAYOUT NAME - 11

PLOT DATE : 4/22/2015 2:33 PM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:20_XREF

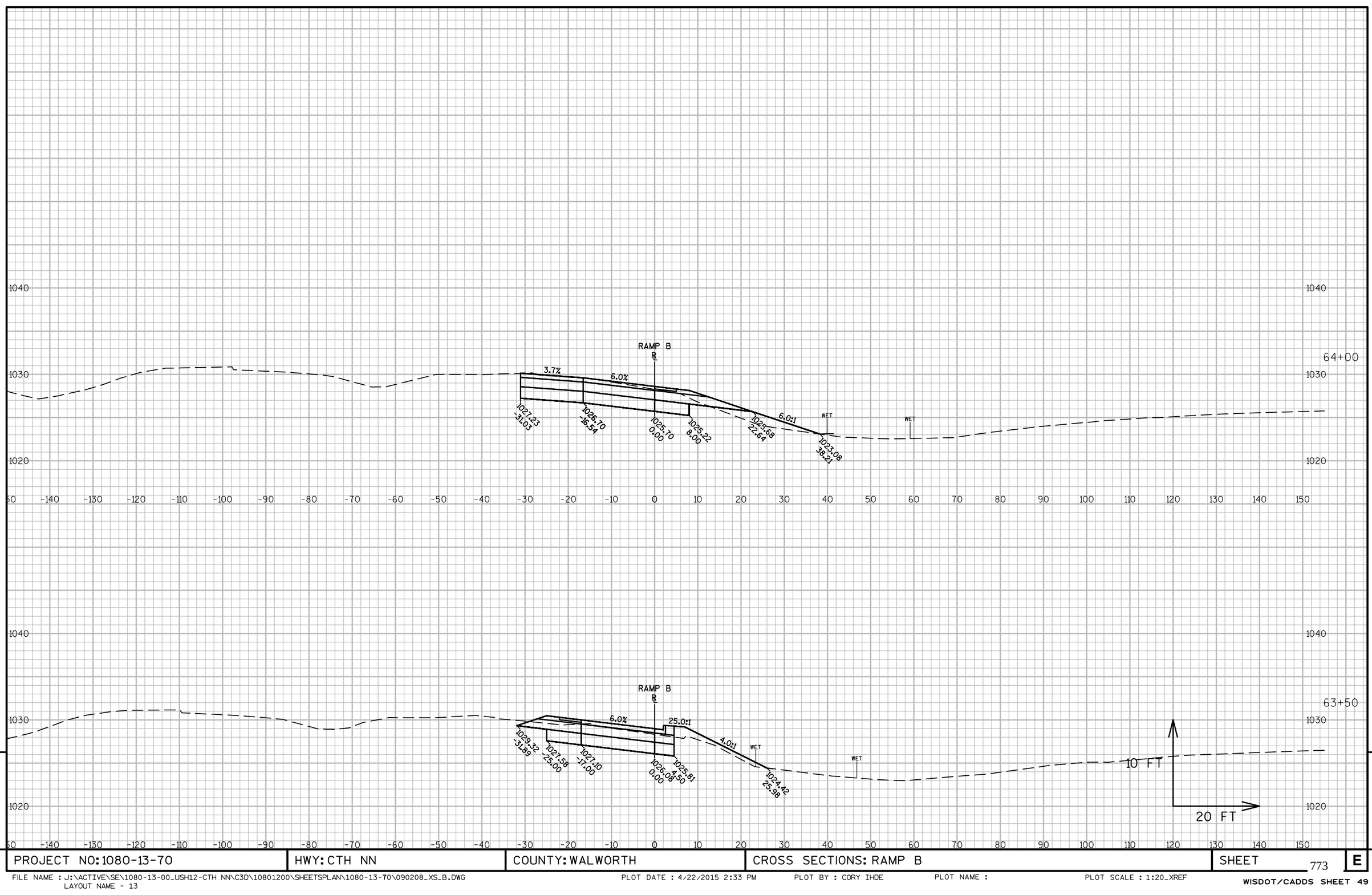


PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: RAMP B	SHEET 772 E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090208_XS_B.DWG
LAYOUT NAME - 12

PLOT DATE : 4/22/2015 2:33 PM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:20_XREF

WISDOT/CADDS SHEET 49



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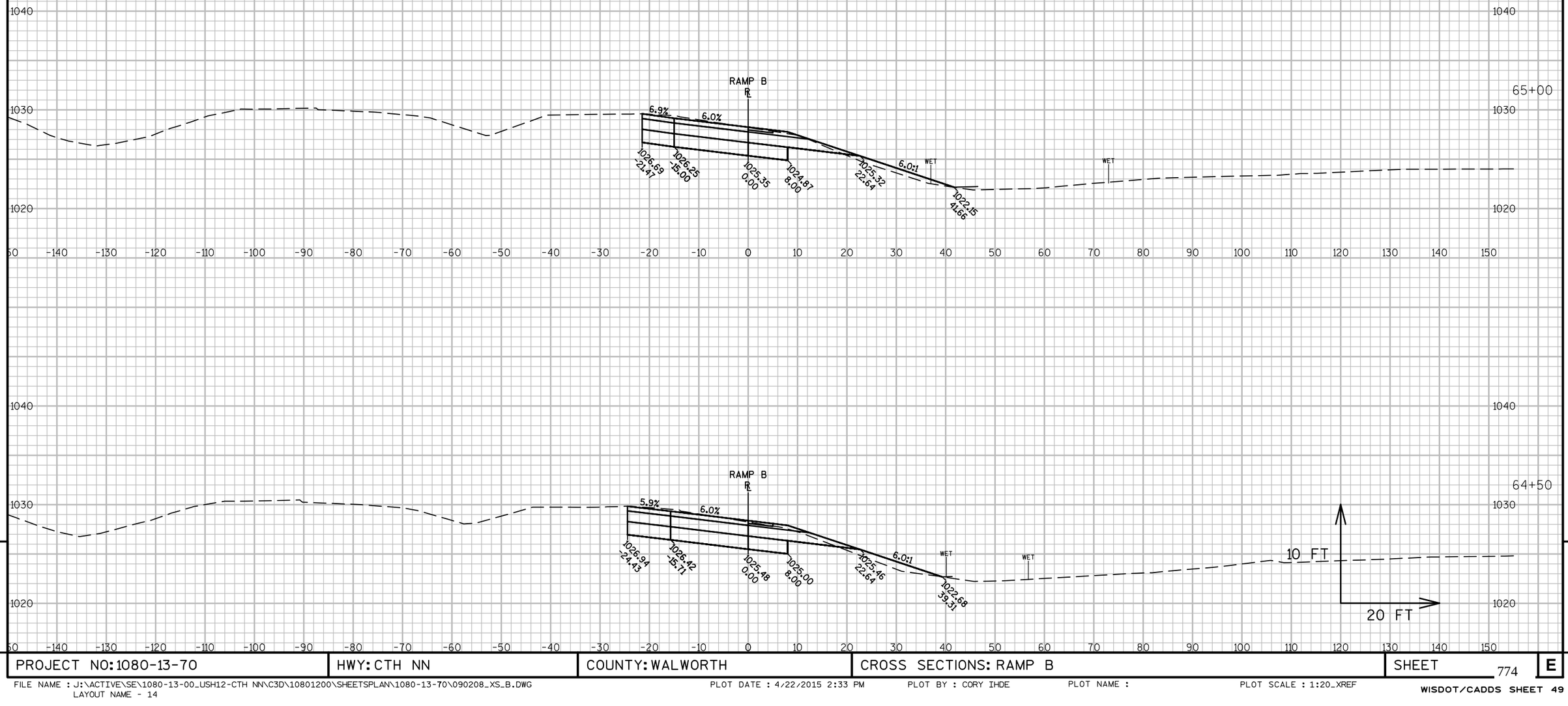
9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: RAMP B	SHEET 773	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090208_XS_B.DWG
LAYOUT NAME - 13

PLOT DATE : 4/22/2015 2:33 PM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:20_XREF



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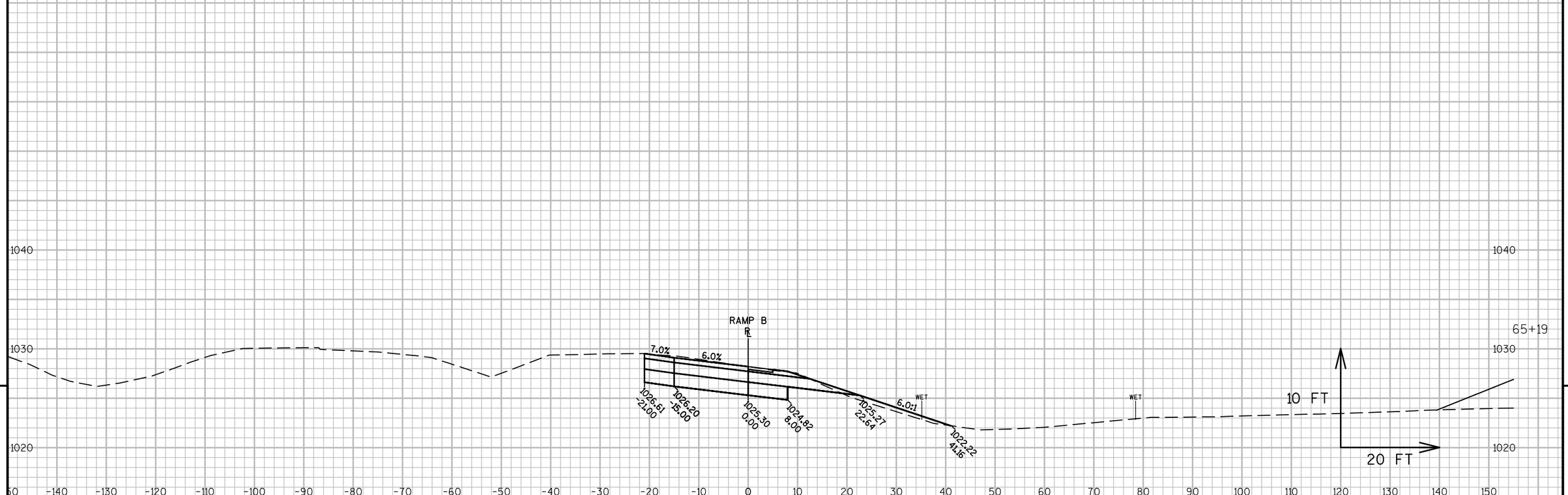
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: RAMP B	SHEET 774	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090208_XS_B.DWG
LAYOUT NAME - 14
PLOT DATE : 4/22/2015 2:33 PM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:20_XREF
WISDOT/CADDS SHEET 49



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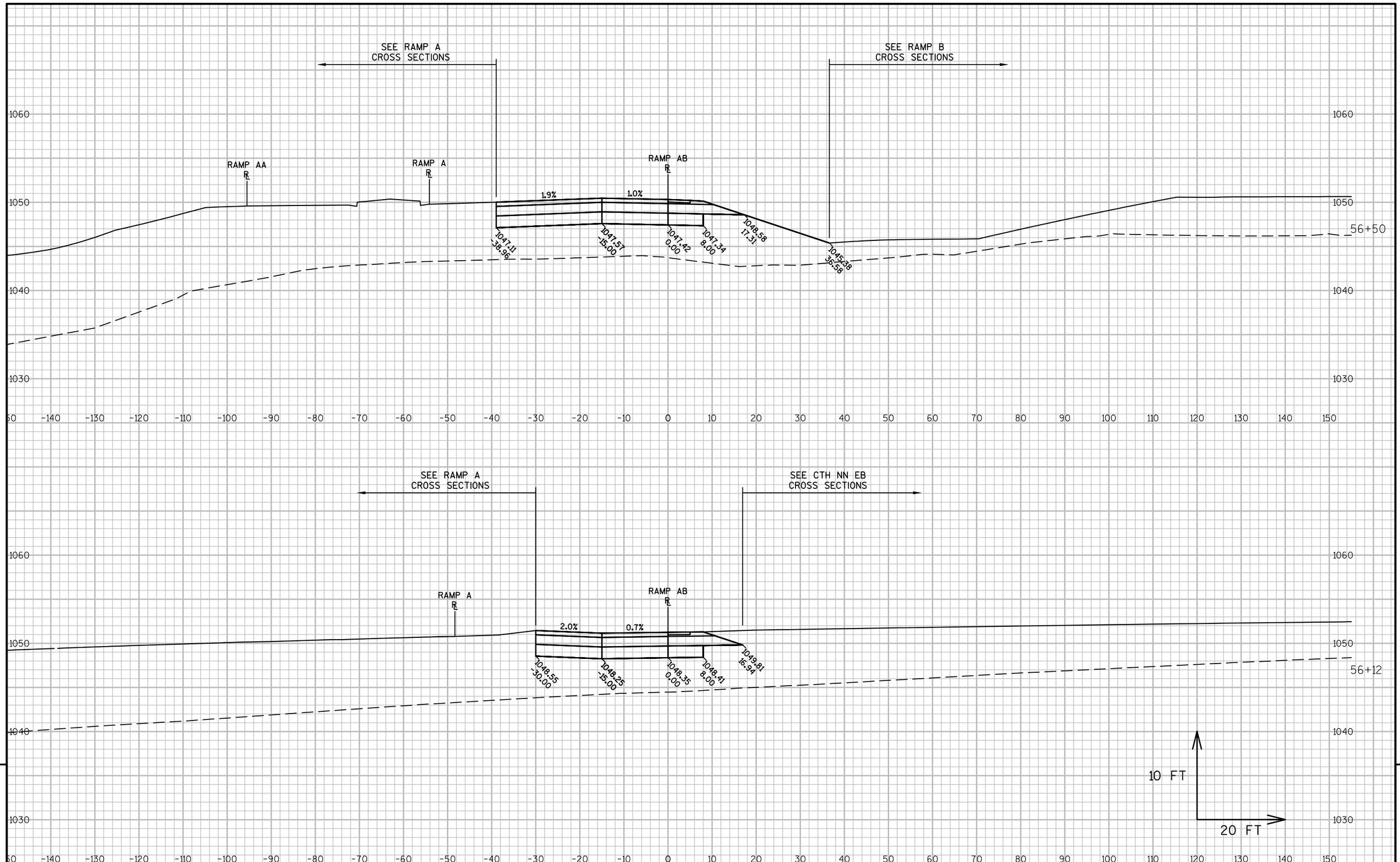
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: RAMP B	SHEET 775	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090208_XS_B.DWG
LAYOUT NAME - 15

PLOT DATE : 4/22/2015 2:34 PM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:20_XREF

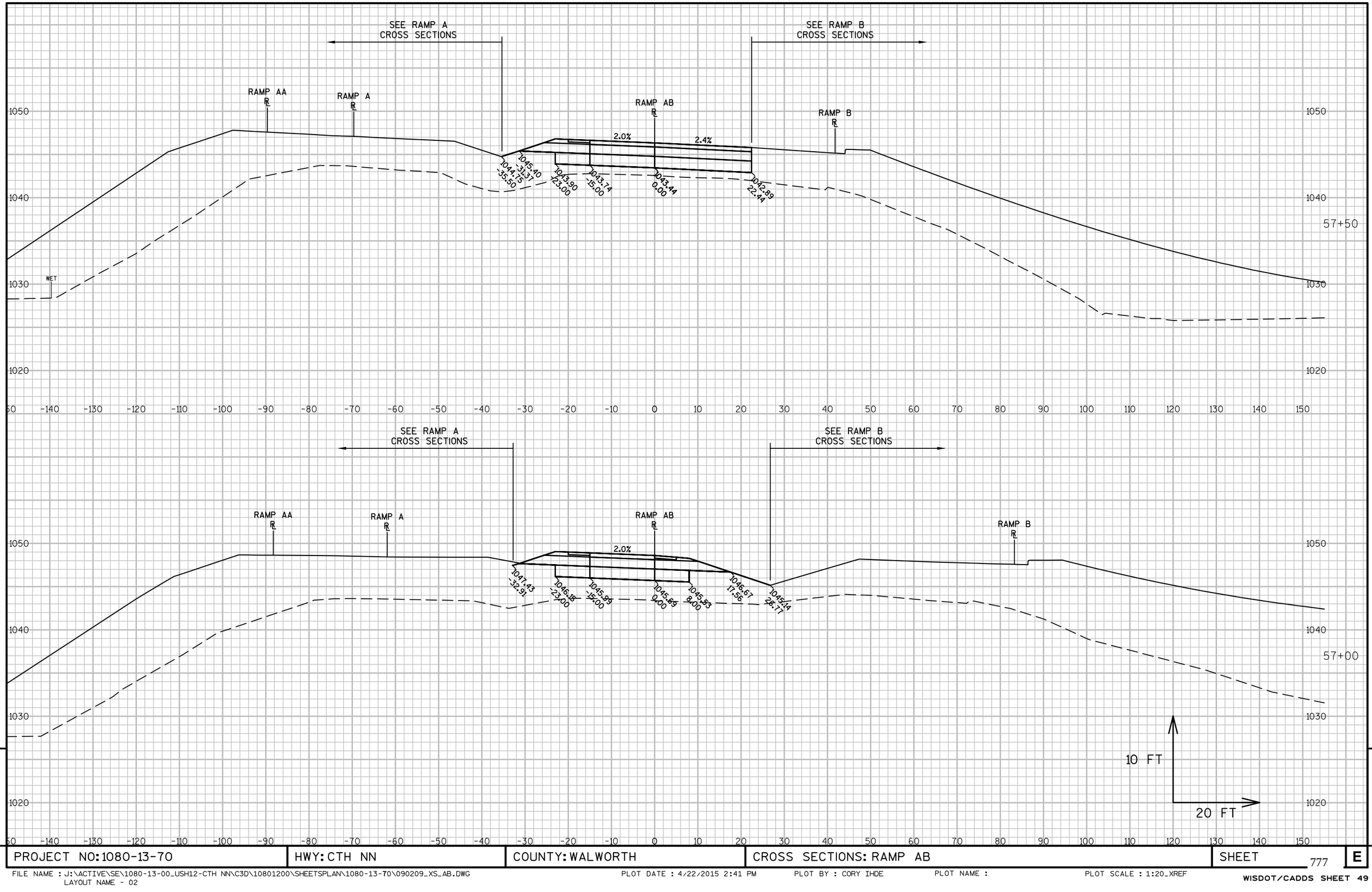


PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: RAMP AB	SHEET 776	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090209_XS_AB.DWG
LAYOUT NAME - 01

PLOT DATE : 4/22/2015 2:40 PM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:20_XREF

WISDOT/CADDS SHEET 49



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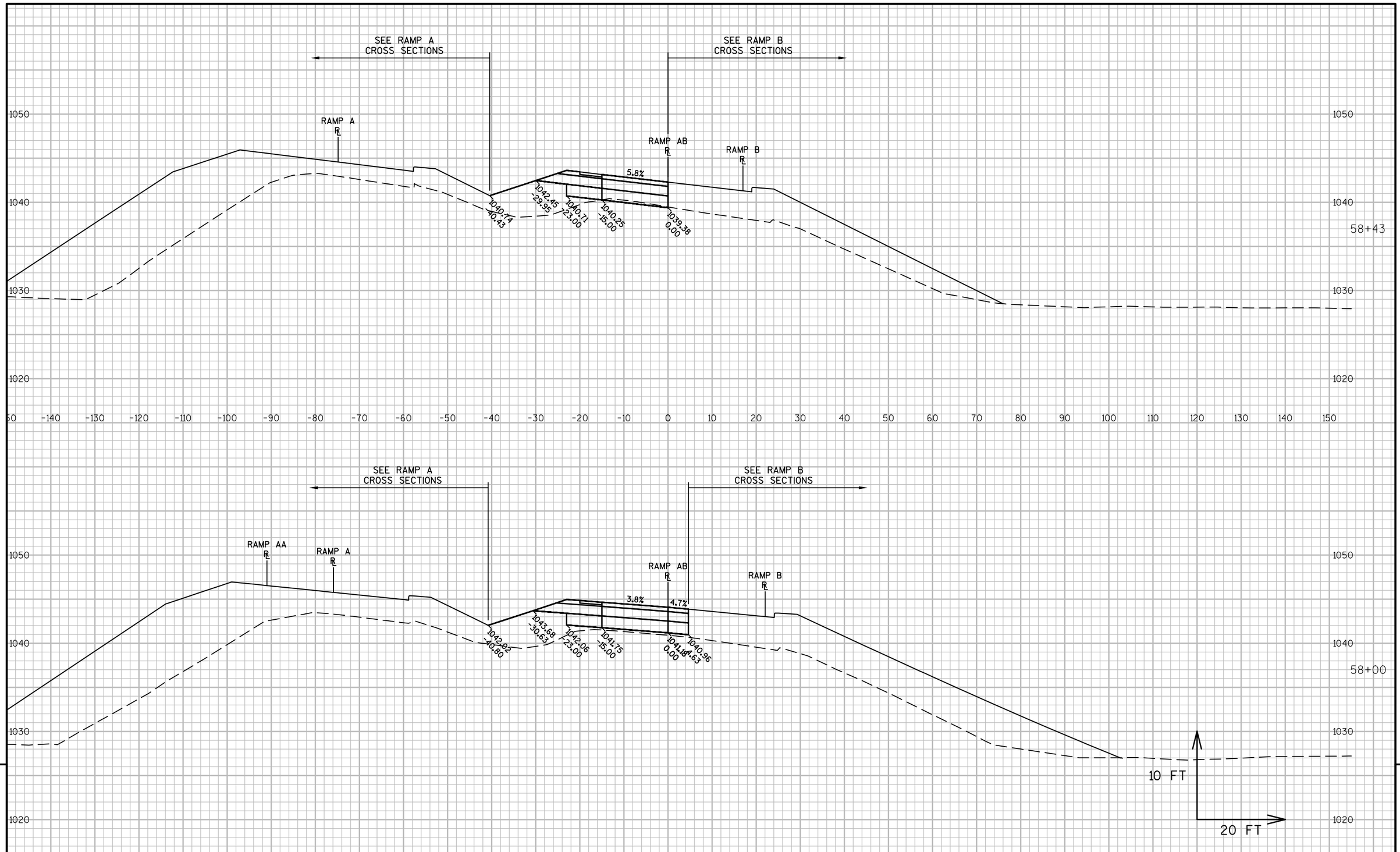
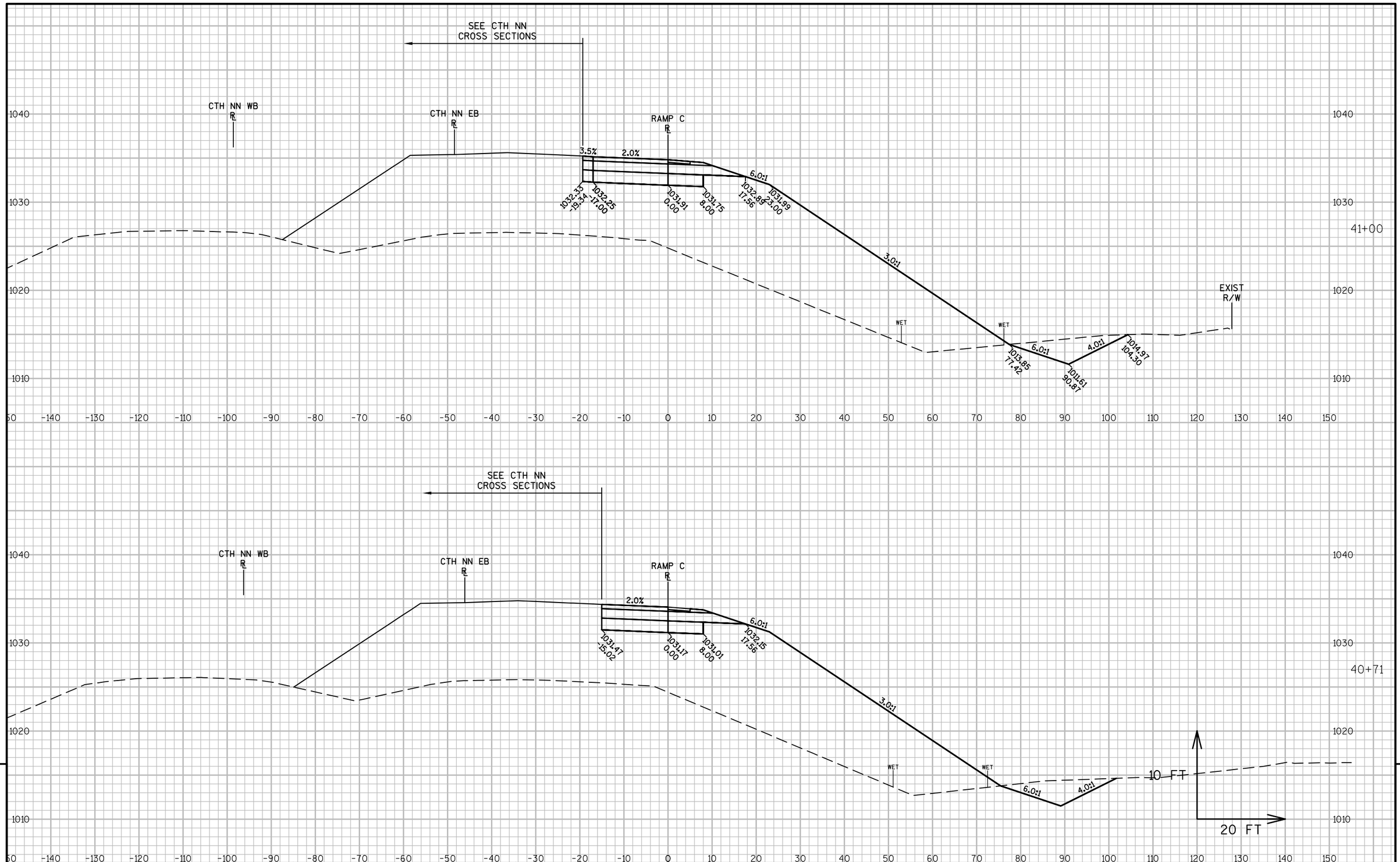
9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: RAMP AB	SHEET 777	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090209_XS_AB.DWG
LAYOUT NAME - 02
PLOT DATE : 4/22/2015 2:41 PM
PLOT BY : CORY IHDE
PLOT NAME :
PLOT SCALE : 1:20_XREF



9	PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: RAMP AB	SHEET 778 E



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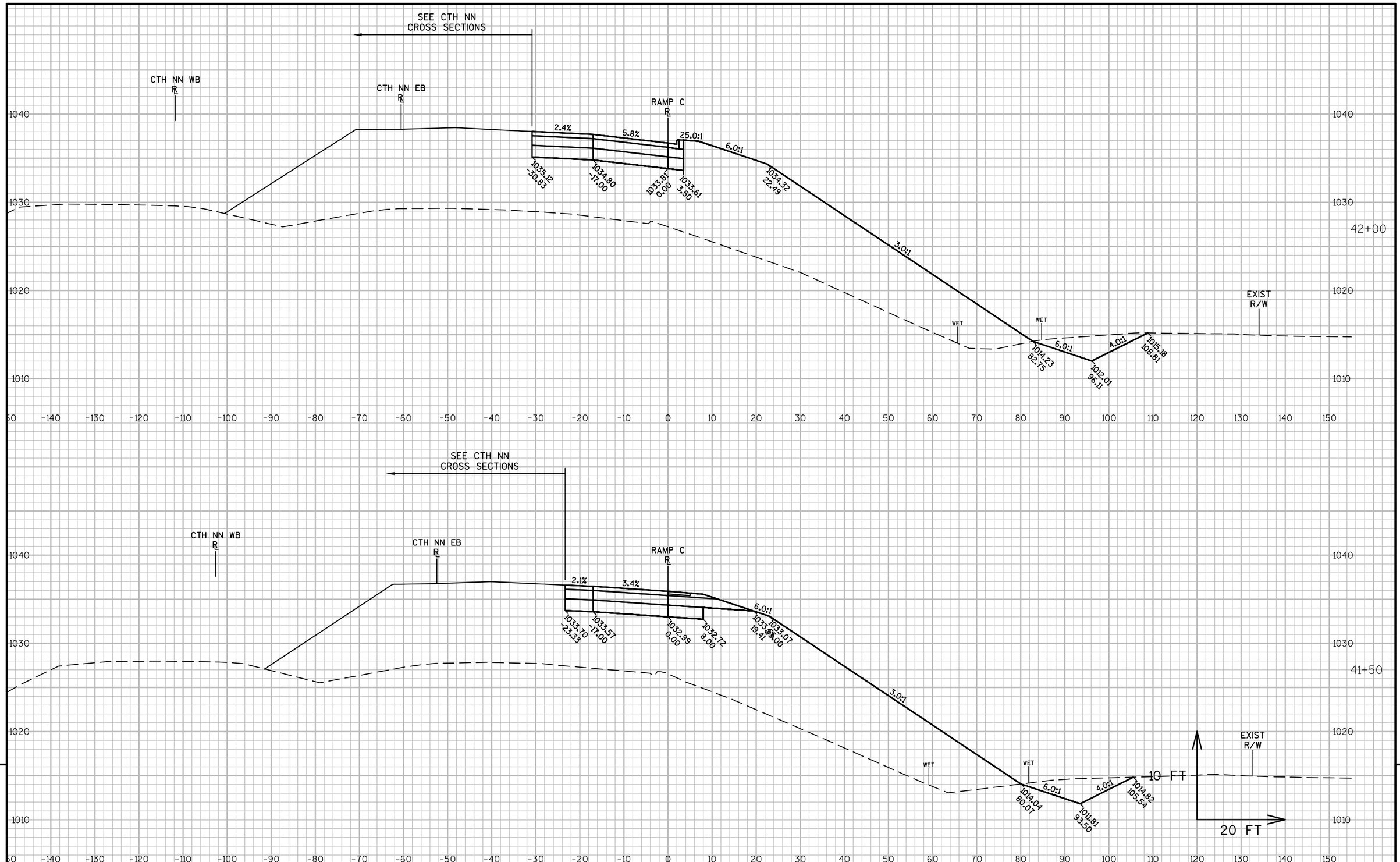
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: RAMP C	SHEET 779	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090212_XS_C.DWG
LAYOUT NAME - 01

PLOT DATE : 4/29/2015 8:13 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1" = 20'_XREF_XREF



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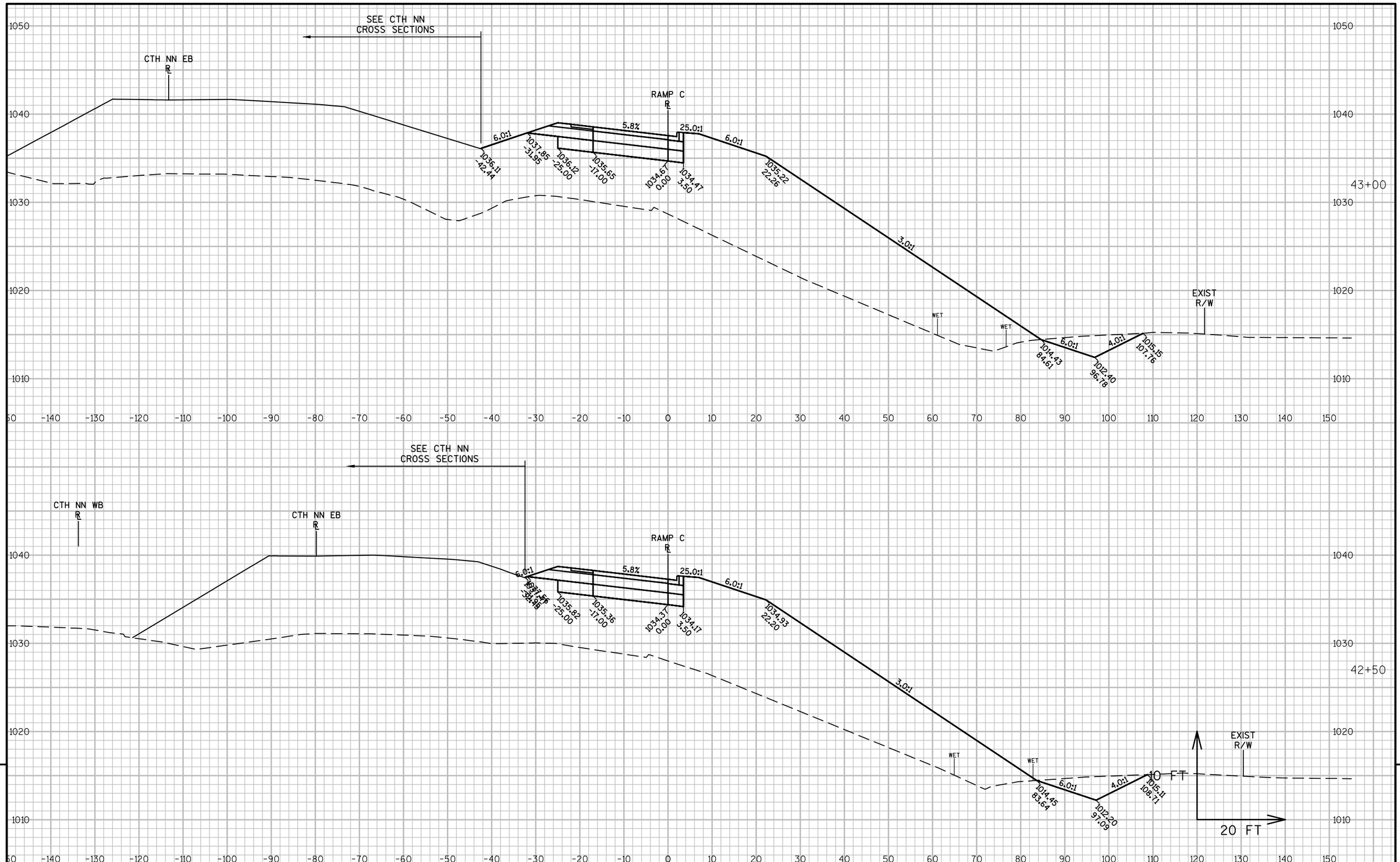
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: RAMP C	SHEET 780	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090212_XS_C.DWG
LAYOUT NAME - 02

PLOT DATE : 4/29/2015 8:14 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1" = 20'_XREF_XREF



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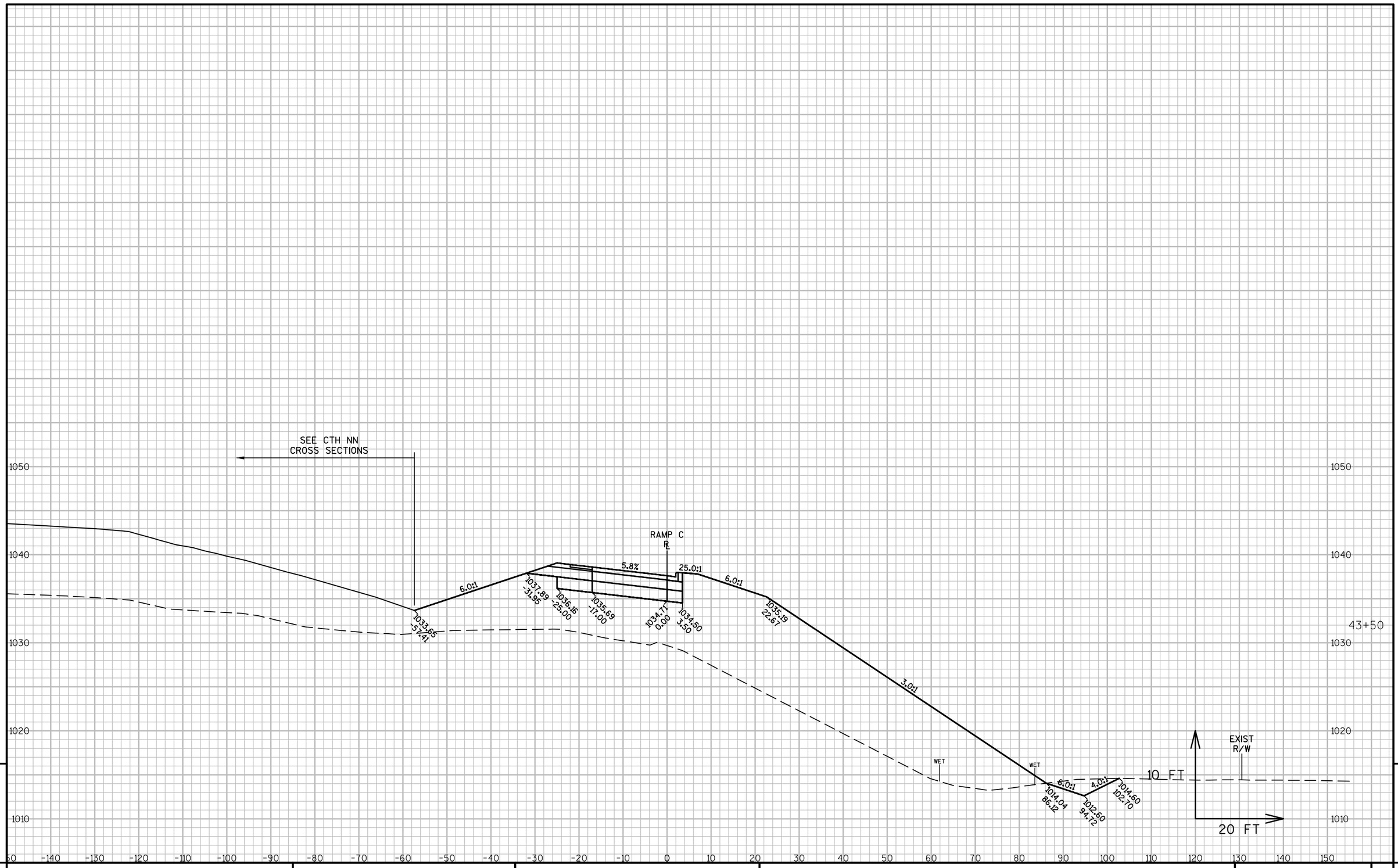
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: RAMP C	SHEET 781	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090212_XS_C.DWG
LAYOUT NAME - 03

PLOT DATE : 4/29/2015 8:14 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1" = 20'_XREF_XREF

WISDOT/CADDS SHEET 49



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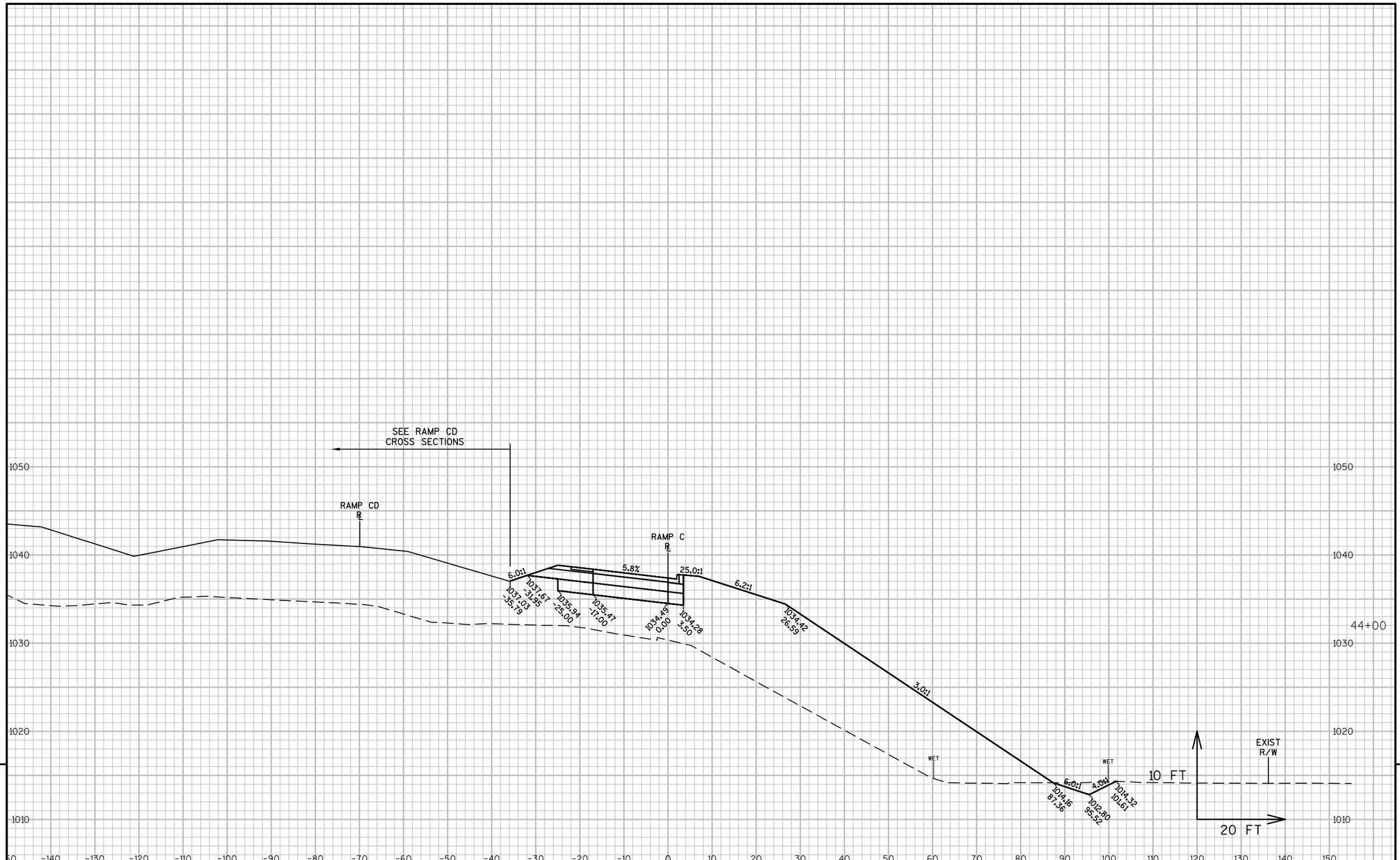
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: RAMP C	SHEET 782	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090212_XS_C.DWG
LAYOUT NAME - 04

PLOT DATE : 4/29/2015 8:14 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1" = 20'_XREF_XREF

WISDOT/CADDS SHEET 49



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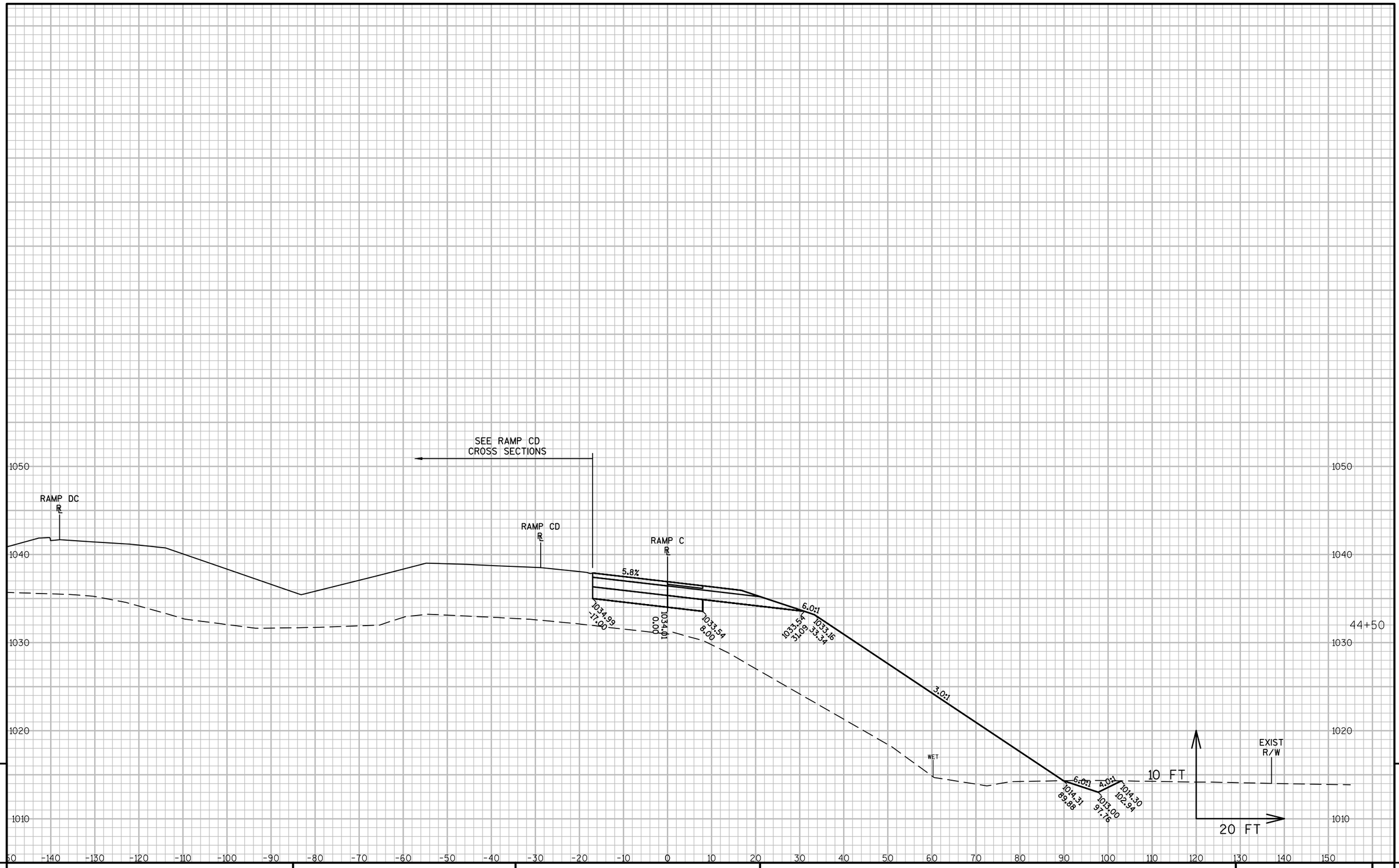
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: RAMP C	SHEET 783	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090212_XS_C.DWG
LAYOUT NAME - 05

PLOT DATE : 4/29/2015 8:14 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1" = 20'_XREF_XREF



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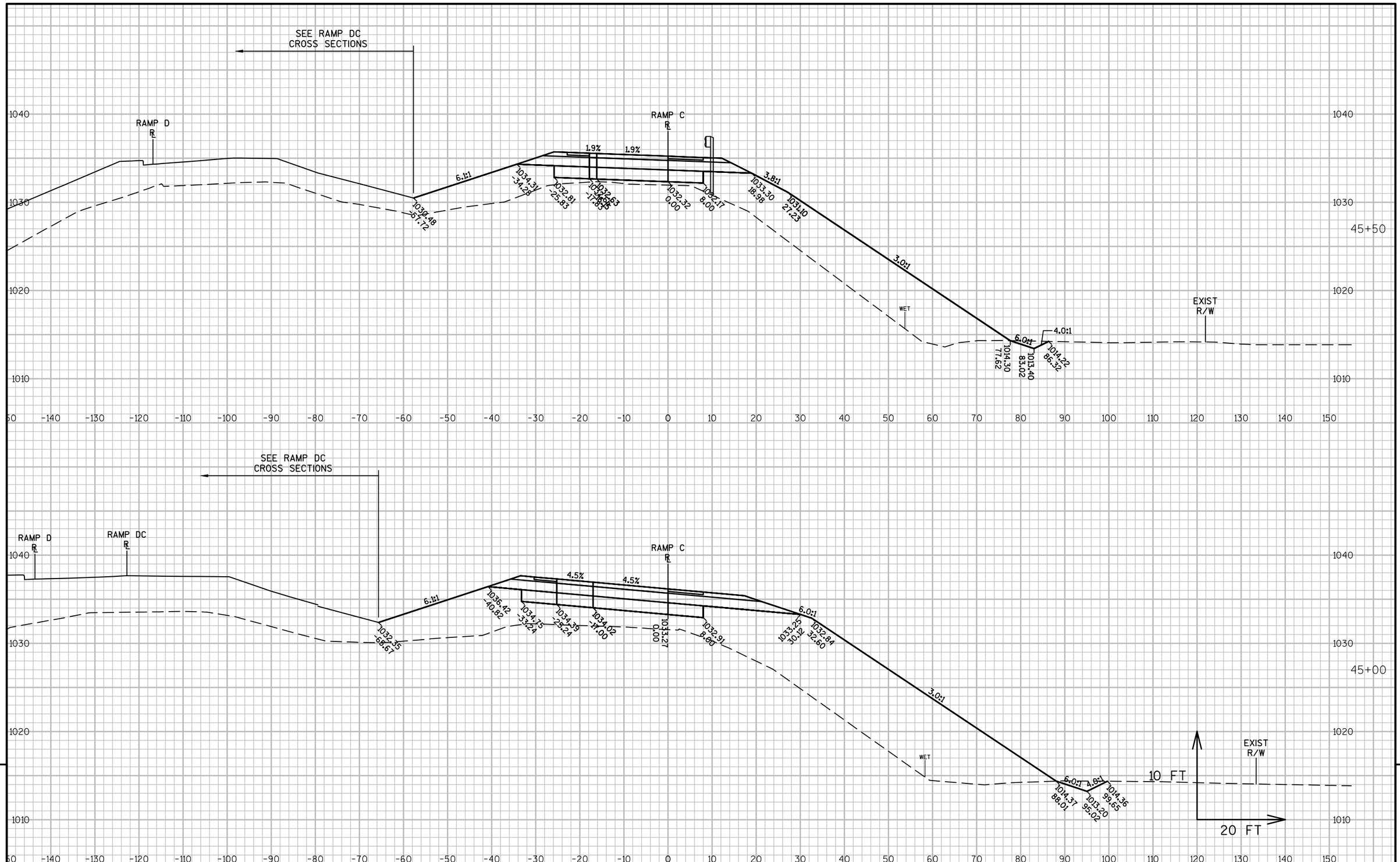
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: RAMP C	SHEET 784	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090212_XS_C.DWG
LAYOUT NAME - 06

PLOT DATE : 4/29/2015 8:15 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1" = 20'_XREF_XREF

WISDOT/CADDS SHEET 49



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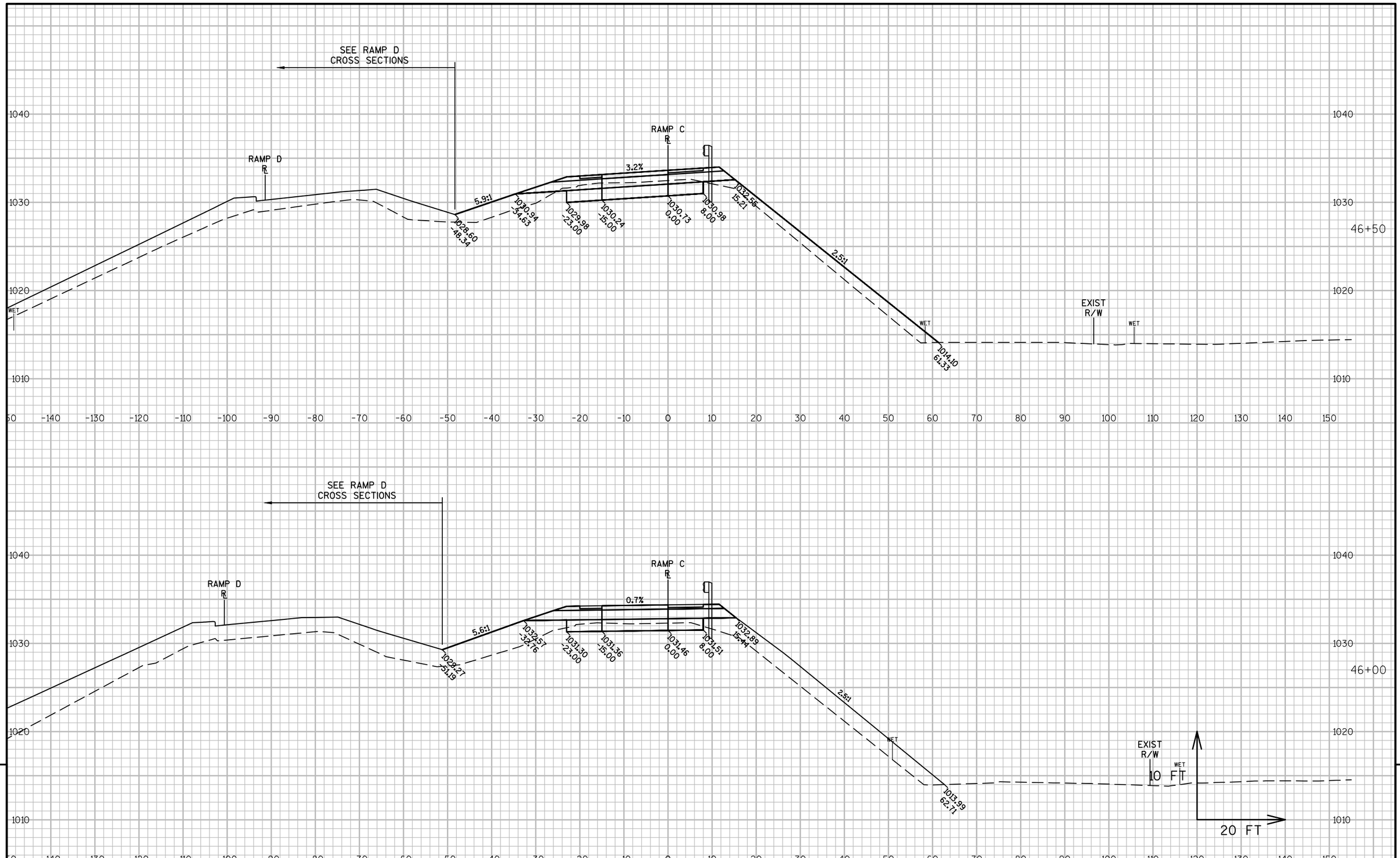
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: RAMP C	SHEET 785	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090212_XS_C.DWG
LAYOUT NAME - 07

PLOT DATE : 4/29/2015 8:15 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1" = 20'_XREF_XREF



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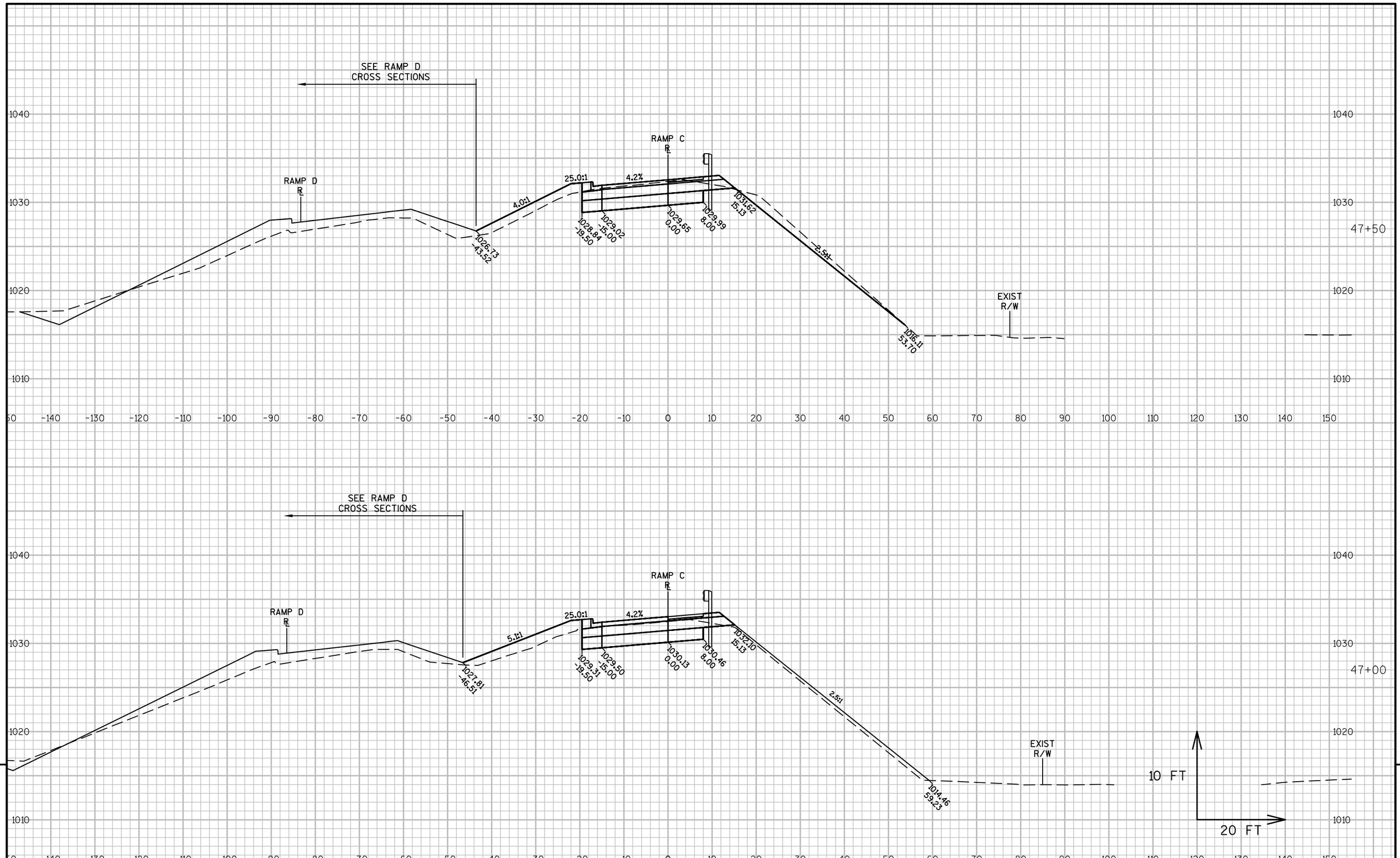
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: RAMP C	SHEET 786	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090212_XS_C.DWG
LAYOUT NAME - 08

PLOT DATE : 4/29/2015 8:15 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1" = 20'_XREF_XREF

WISDOT/CADDS SHEET 49



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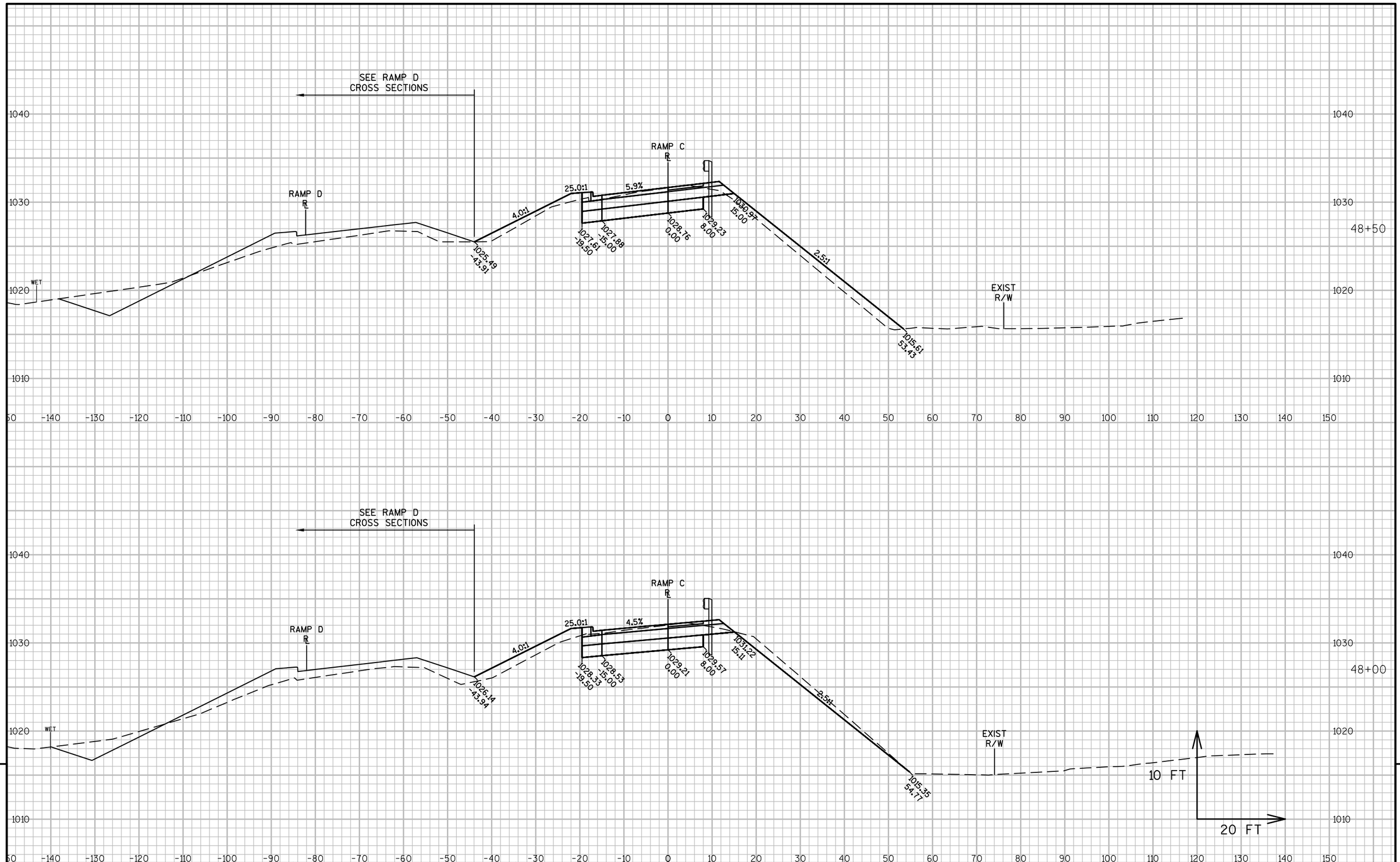
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: RAMP C	SHEET 787	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090212_XS_C.DWG
LAYOUT NAME - 09

PLOT DATE : 4/29/2015 8:15 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1" = 20'_XREF_XREF



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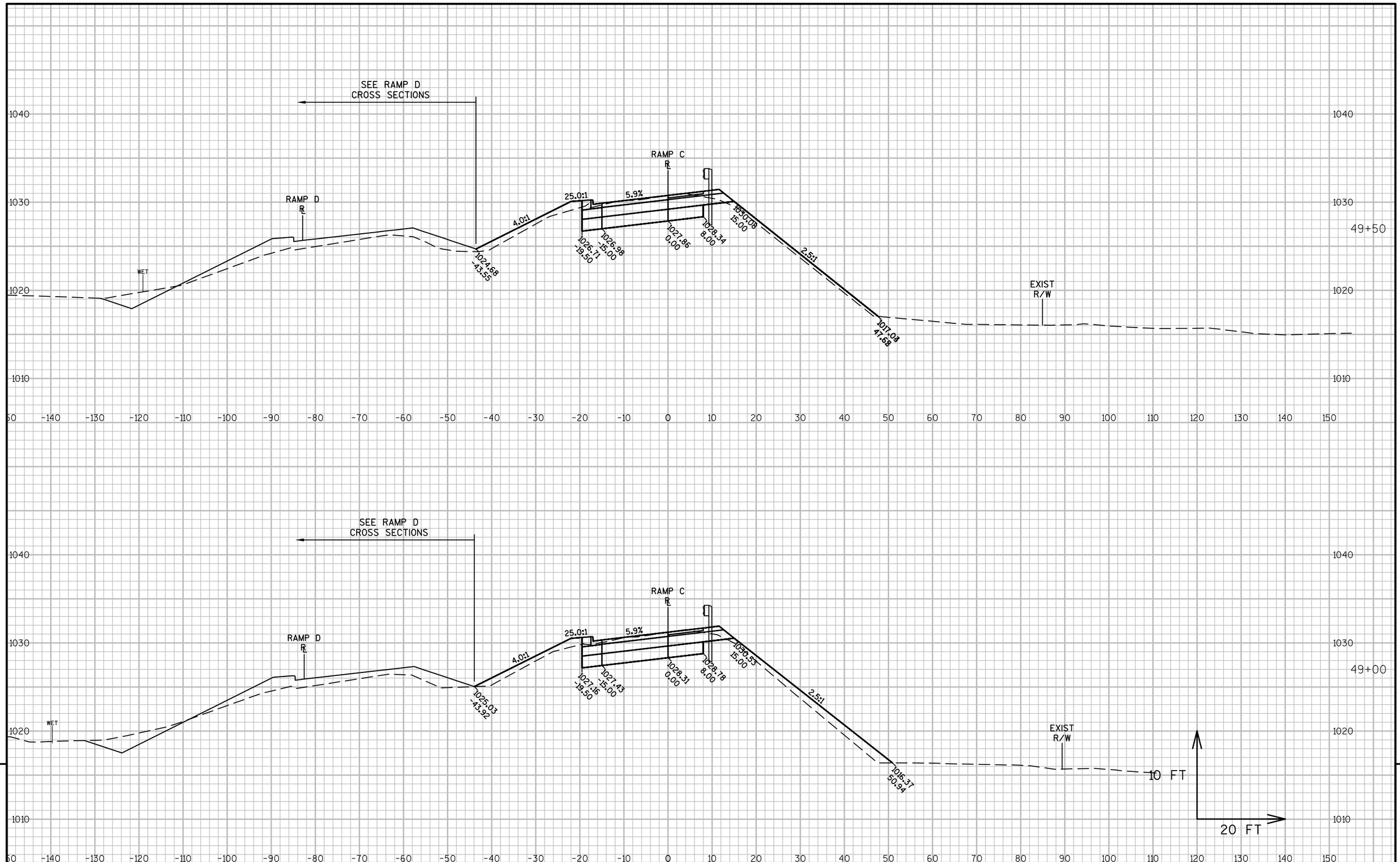
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: RAMP C	SHEET 788	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090212_XS_C.DWG
LAYOUT NAME - 10

PLOT DATE : 4/29/2015 8:16 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1" = 20'_XREF_XREF



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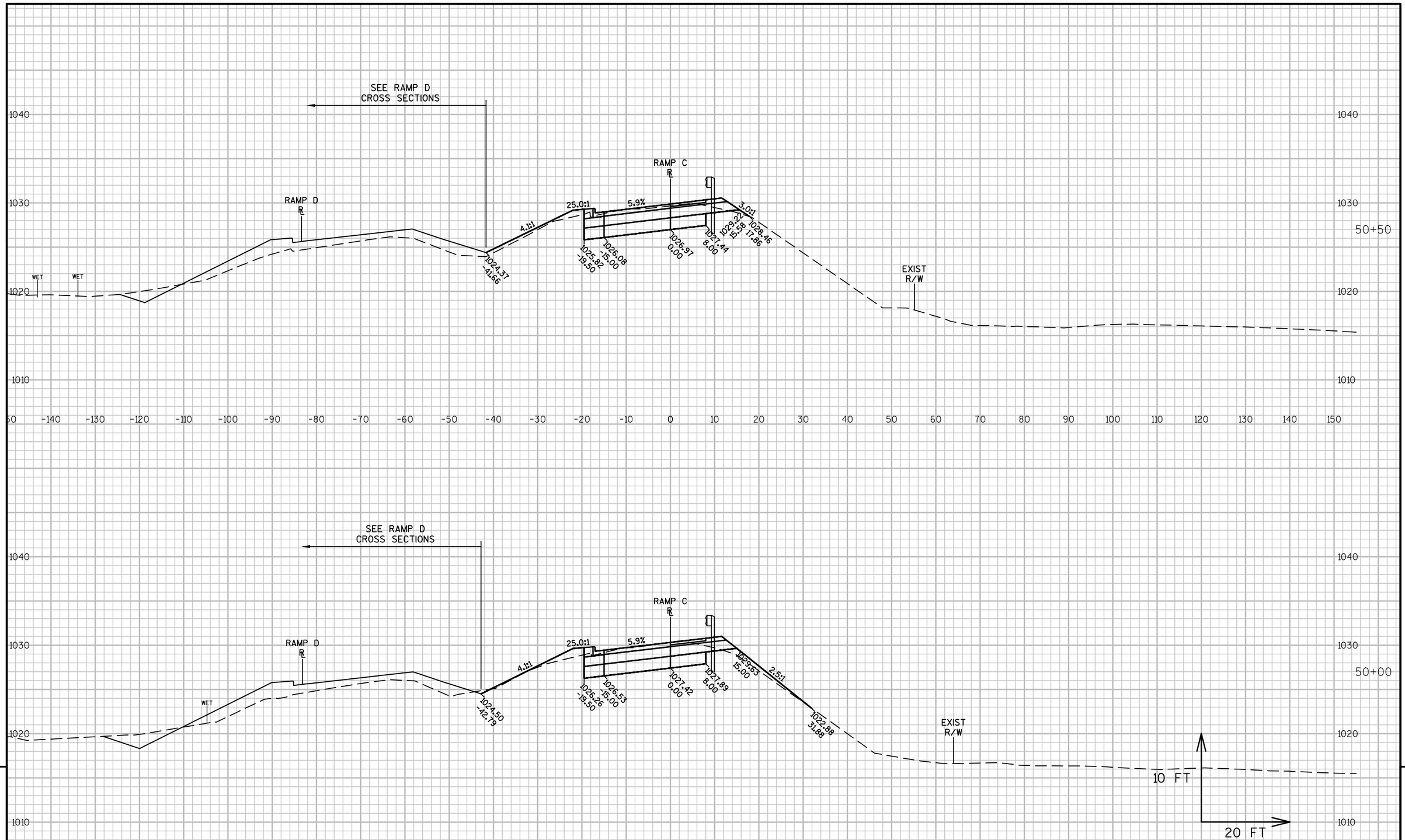
9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: RAMP C	SHEET 789	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090212_XS_C.DWG
LAYOUT NAME - 11

PLOT DATE : 4/29/2015 8:16 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1" = 20'_XREF_XREF

WISDOT/CADDS SHEET 49



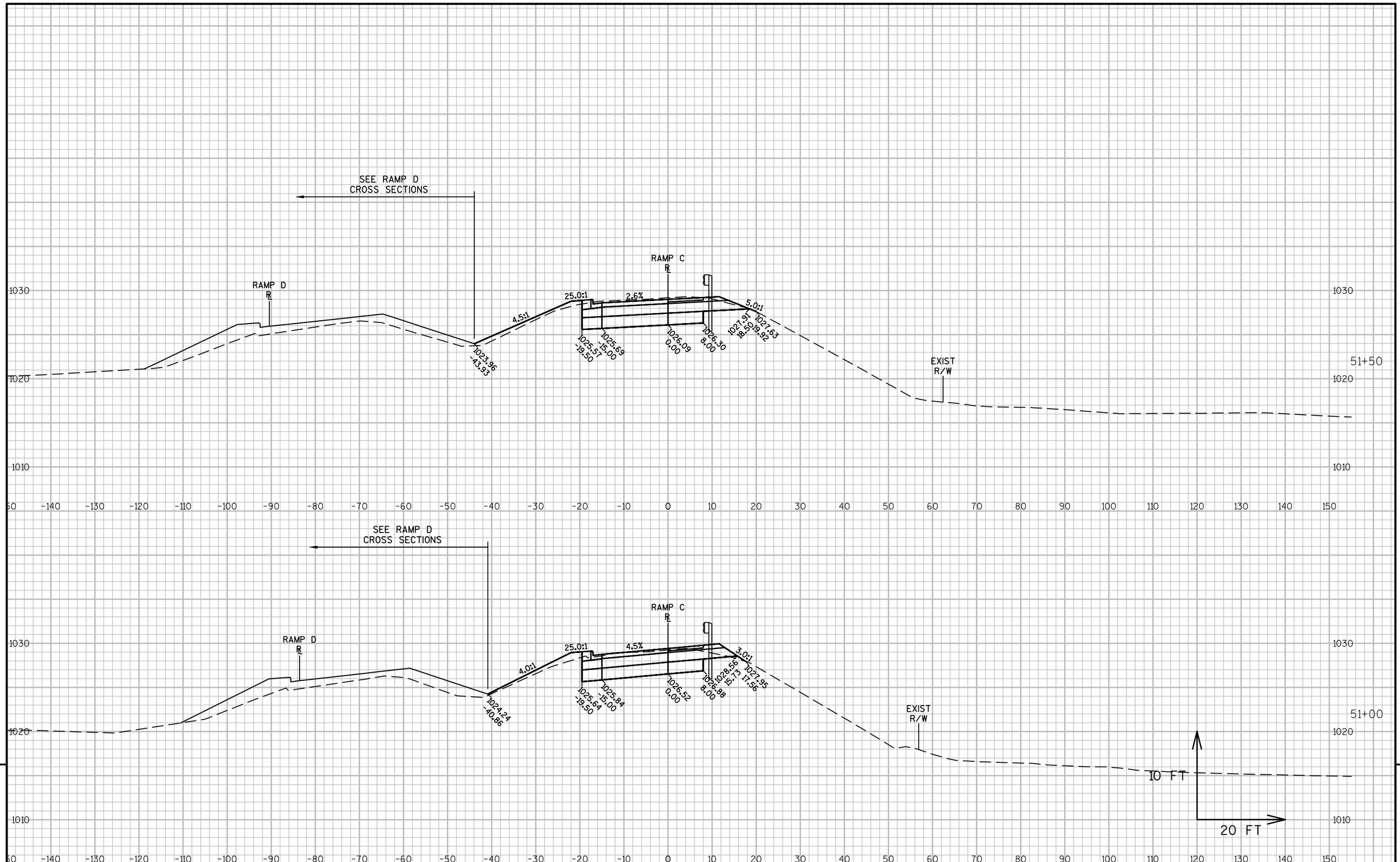
9

9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: RAMP C	SHEET 790	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090212_XS_C.DWG
LAYOUT NAME - 12

PLOT DATE : 4/29/2015 8:16 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1" = 20'_XREF_XREF



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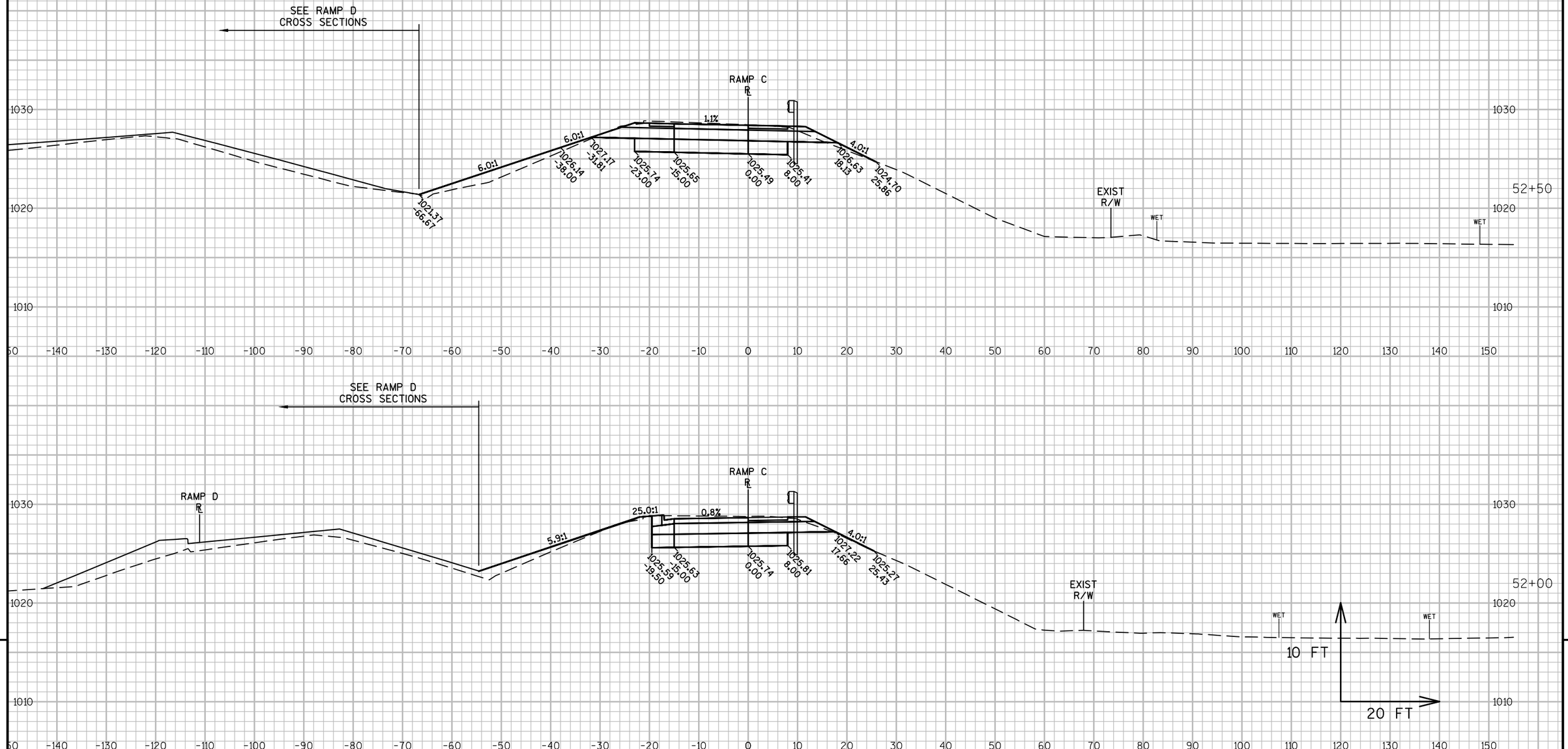
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: RAMP C	SHEET 791	E

9

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090212_XS_C.DWG
LAYOUT NAME - 13

PLOT DATE : 4/29/2015 8:16 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1" = 20'_XREF_XREF

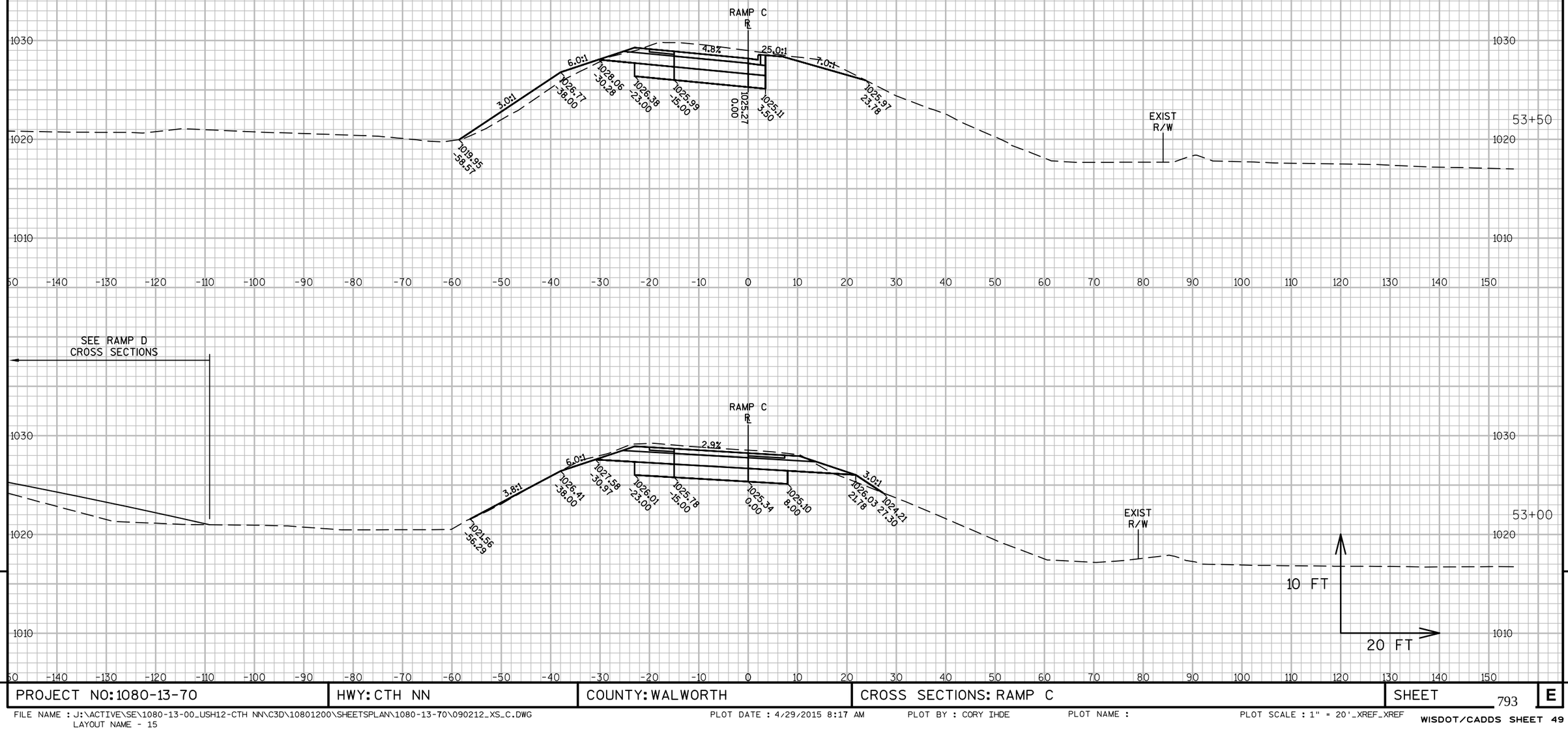
WISDOT/CADDS SHEET 49



PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: RAMP C	SHEET 792 E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090212_XS_C.DWG
LAYOUT NAME - 14

PLOT DATE : 4/29/2015 8:17 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1" = 20'_XREF_XREF



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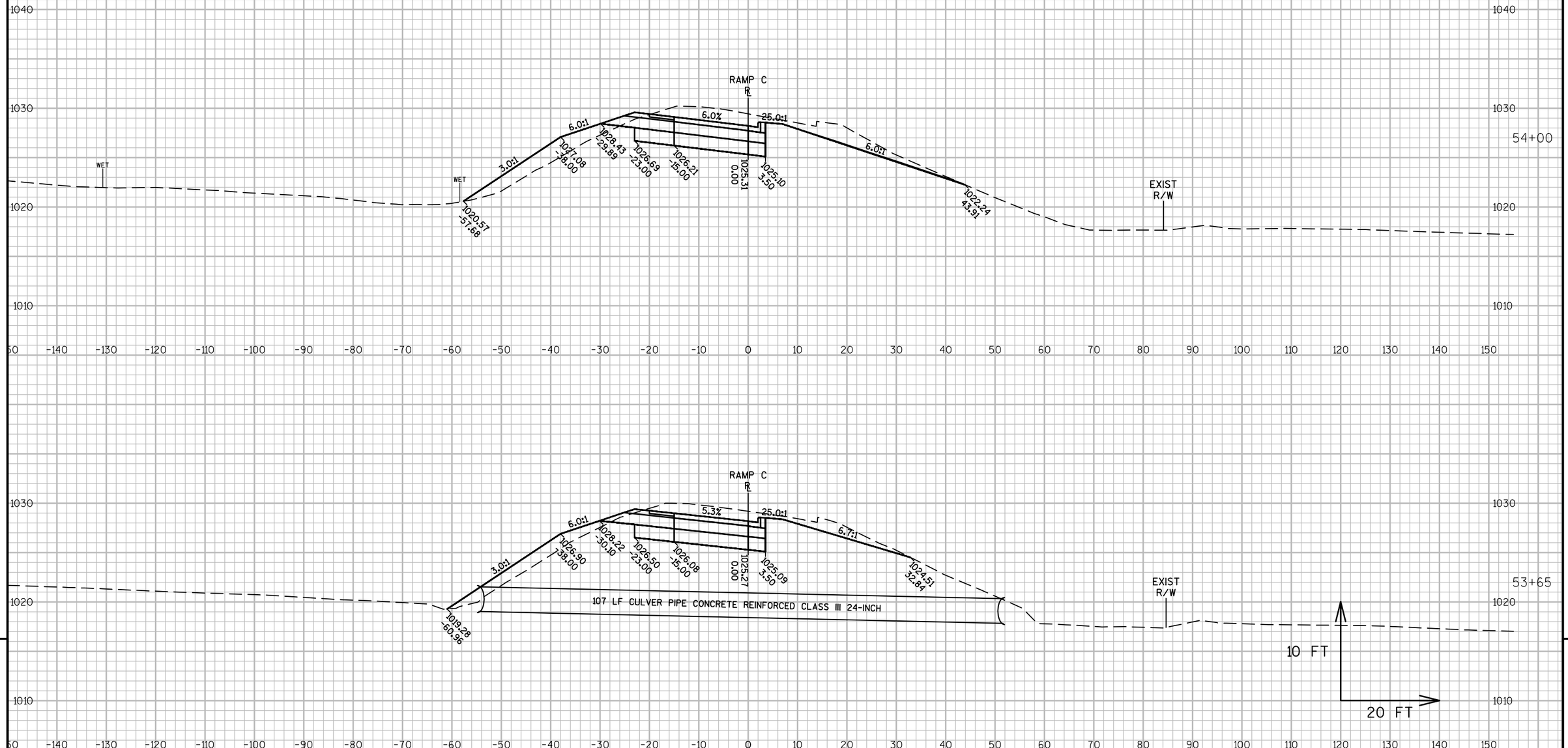
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: RAMP C	SHEET 793	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090212_XS_C.DWG
LAYOUT NAME - 15

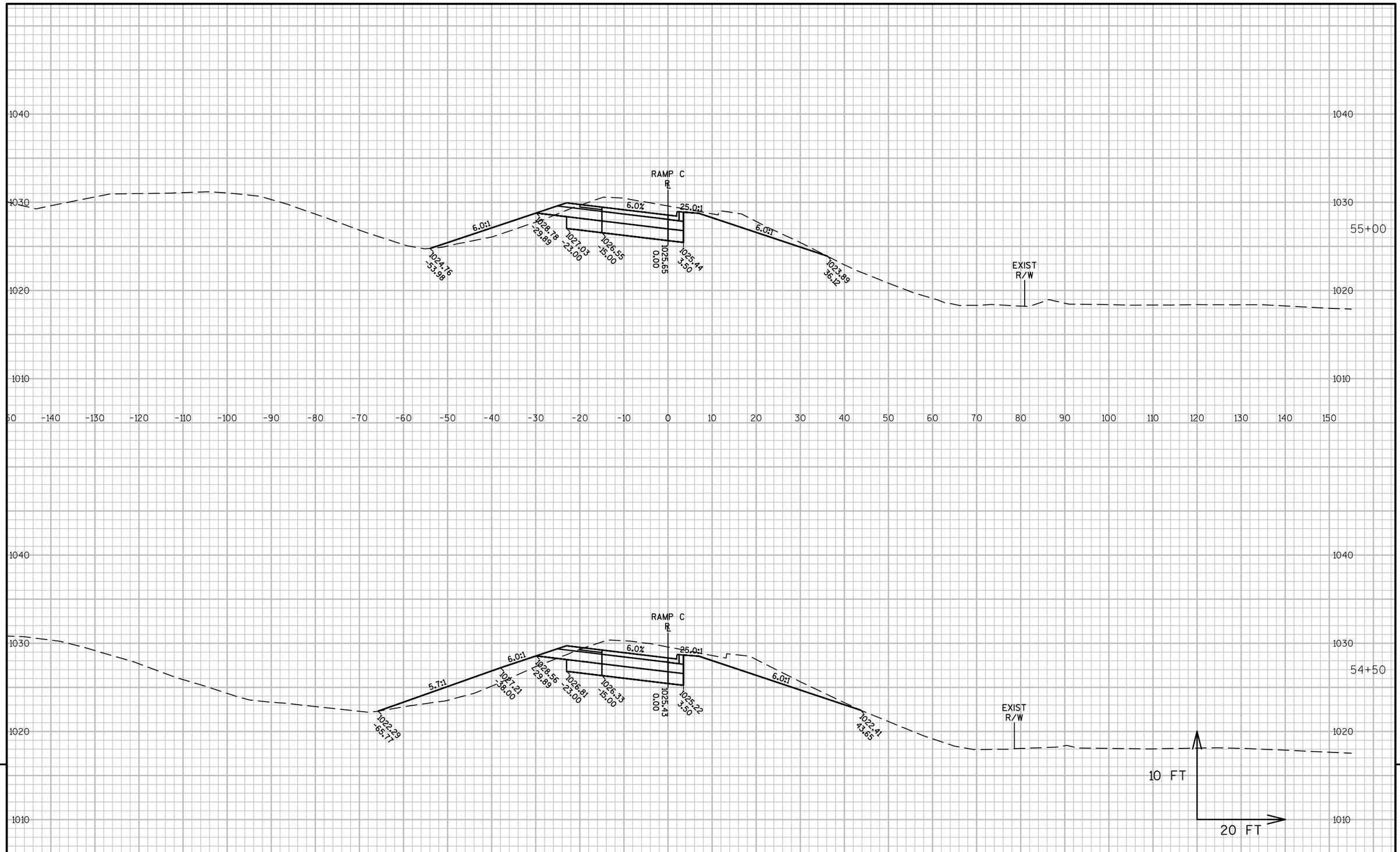
PLOT DATE : 4/29/2015 8:17 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1" = 20'_XREF_XREF



PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: RAMP C	SHEET 794	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090212_XS_C.DWG
LAYOUT NAME - 16

PLOT DATE : 4/29/2015 8:17 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1" = 20'_XREF_XREF



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PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: RAMP C	SHEET 795	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090212_XS_C.DWG
LAYOUT NAME - 17

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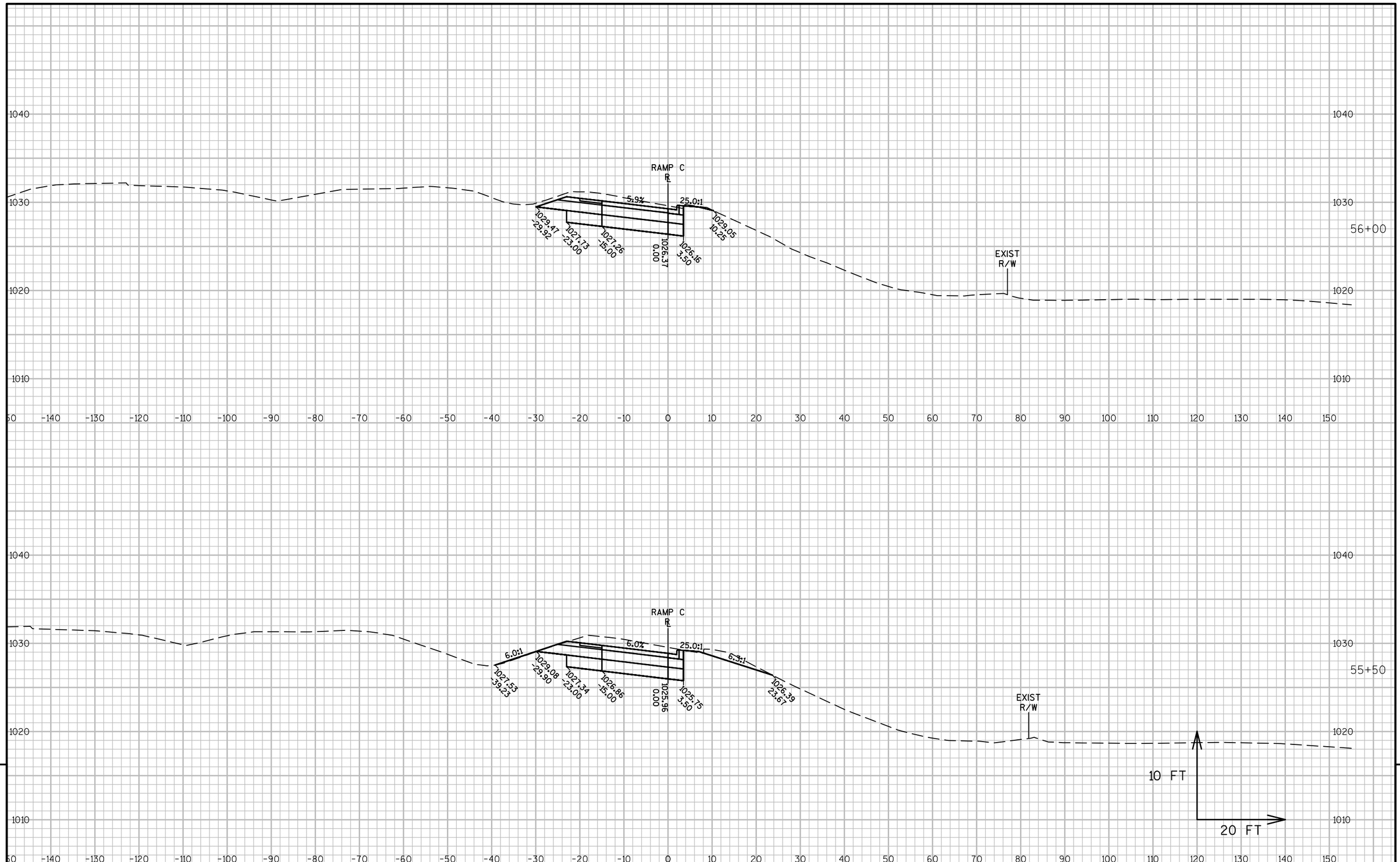

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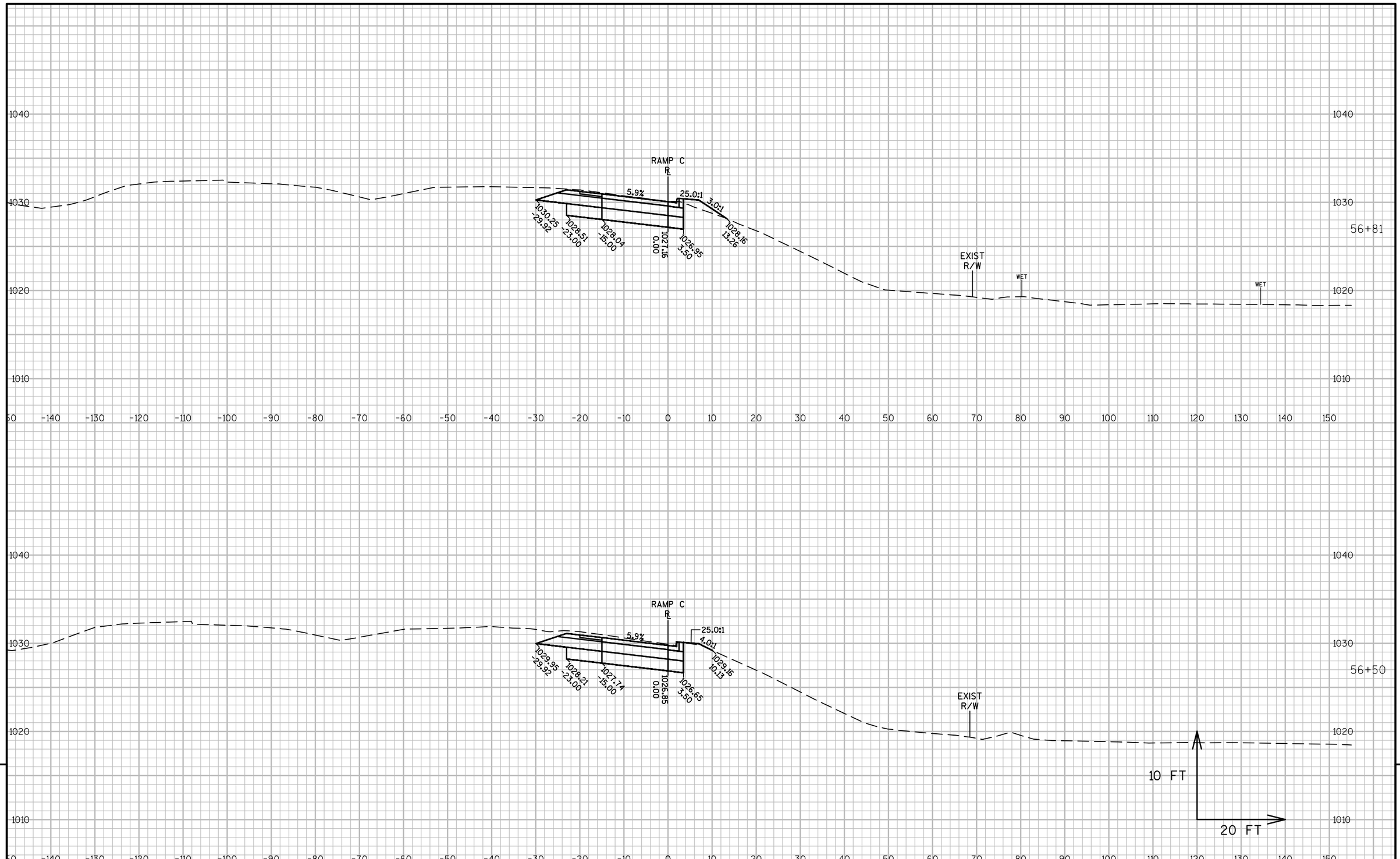
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: RAMP C	SHEET 796	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090212_XS_C.DWG
LAYOUT NAME - 18

PLOT DATE : 4/29/2015 8:18 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1" = 20'_XREF_XREF

WISDOT/CADDS SHEET 49



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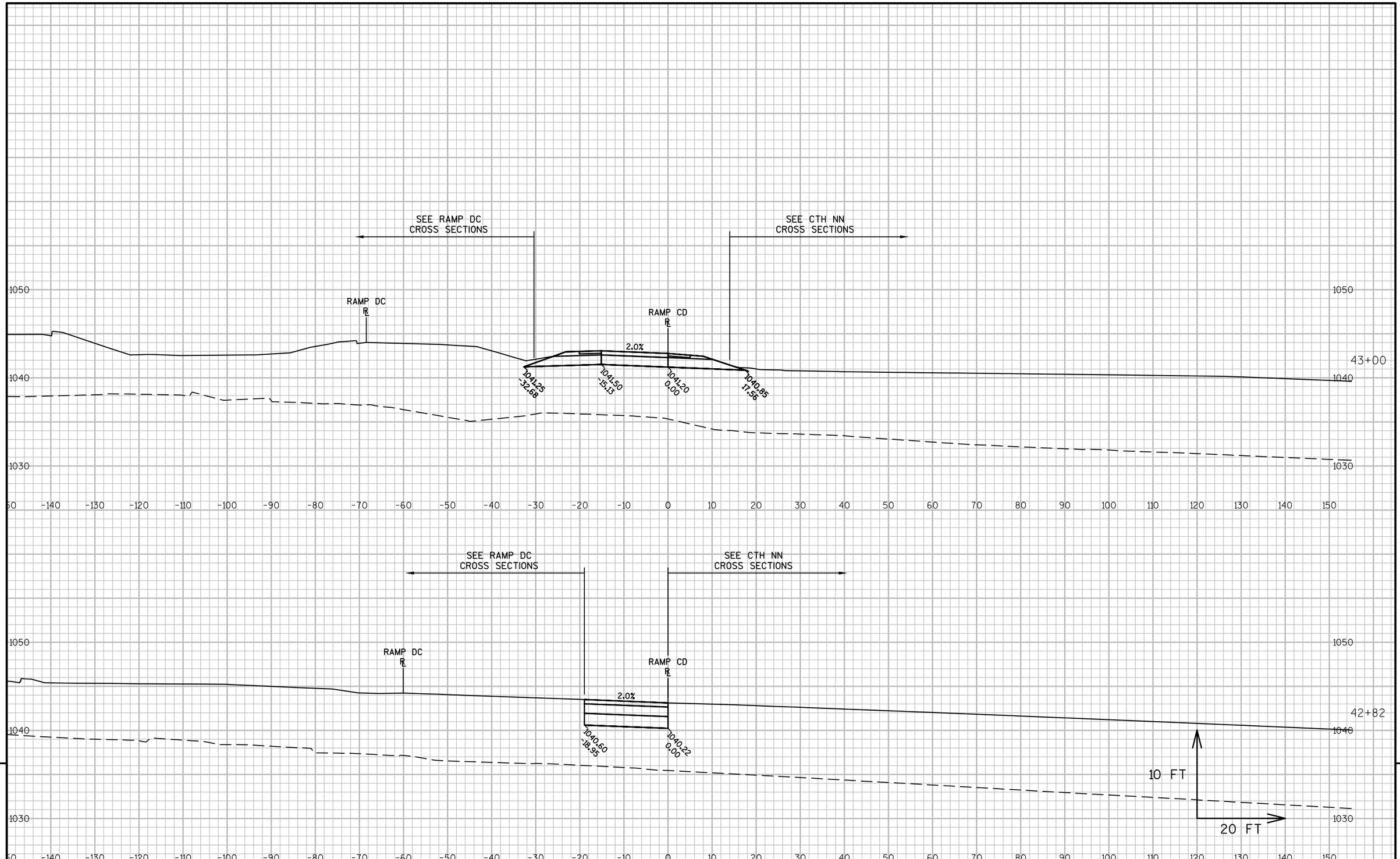
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: RAMP C	SHEET 797	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090212_XS_C.DWG
LAYOUT NAME - 19

PLOT DATE : 4/29/2015 8:18 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1" = 20'_XREF_XREF

WISDOT/CADDS SHEET 49



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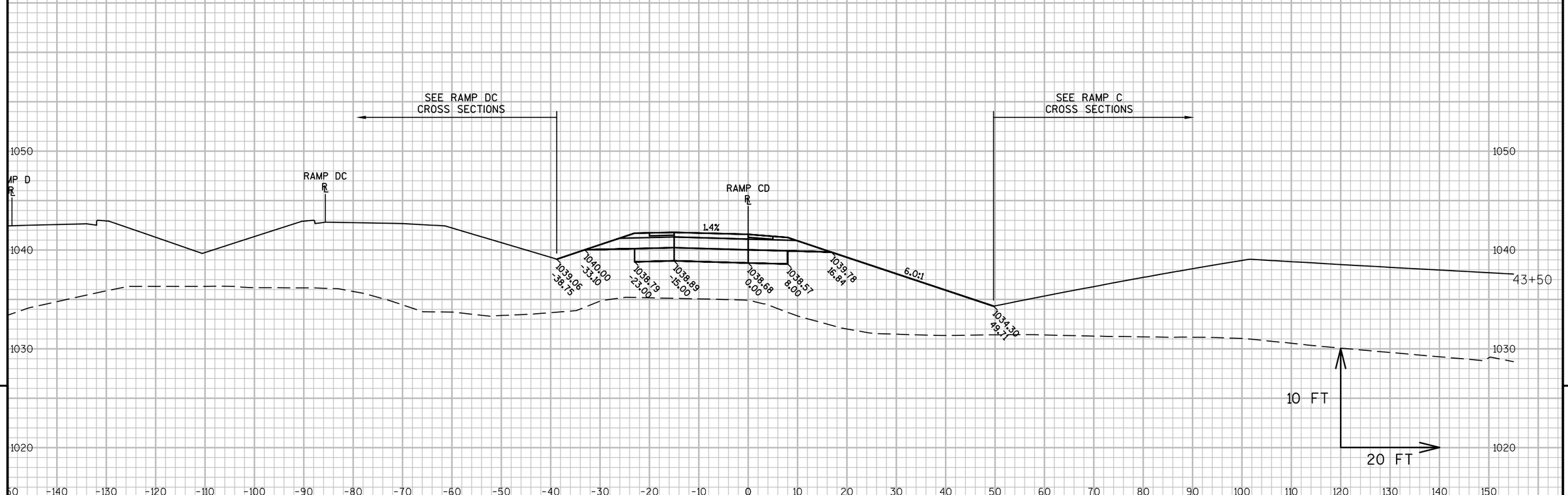
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: RAMP CD	SHEET 798	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090213_XS_CD.DWG
LAYOUT NAME - 01
PLOT DATE : 4/22/2015 3:54 PM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1" = 20'_XREF_XREF
WISDOT/CADDS SHEET 49



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PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: RAMP CD	SHEET 799	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090213_XS_CD.DWG
LAYOUT NAME - 02
PLOT DATE : 4/22/2015 3:55 PM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1" = 20'_XREF_XREF
WISDOT/CADDS SHEET 49

SEE RAMP DC CROSS SECTIONS

SEE RAMP C CROSS SECTIONS

RAMP D

RAMP DC

RAMP CD

RAMP C

0.9%

6.0:1

1036.31 -45.73

1038.47 -32.73

1037.20 -23.00

1037.25 -15.00

1037.41 0.00

1037.04 8.00

1038.30 16.35

1037.29 22.36

44+00

10 FT

20 FT

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: RAMP CD	SHEET 800	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090213_XS_CD.DWG
LAYOUT NAME - 03

PLOT DATE : 4/22/2015 3:55 PM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1" = 20'_XREF_XREF

WISDOT/CADDS SHEET 49

SEE RAMP DC
CROSS SECTIONS

SEE RAMP C
CROSS SECTIONS

RAMP D
℄

RAMP DC
℄

RAMP CD
℄

RAMP C
℄

0.5%

4.1%

1036.75
-32.39

1035.42
-24.00

1035.42
-15.90

1035.36
0.00

1034.96
9.53

1033.54
51.66

WET

WET

10 FT

20 FT

44+50

1040

1030

1020

1010

-150 -140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

9

9

PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: RAMP CD	SHEET 801	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090213_XS_CD.DWG
LAYOUT NAME - 04

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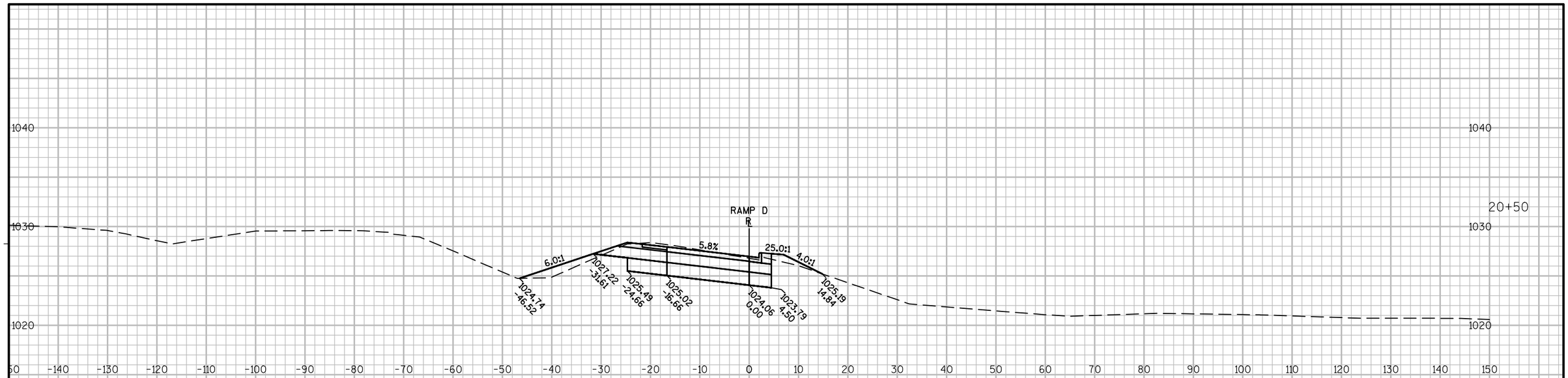

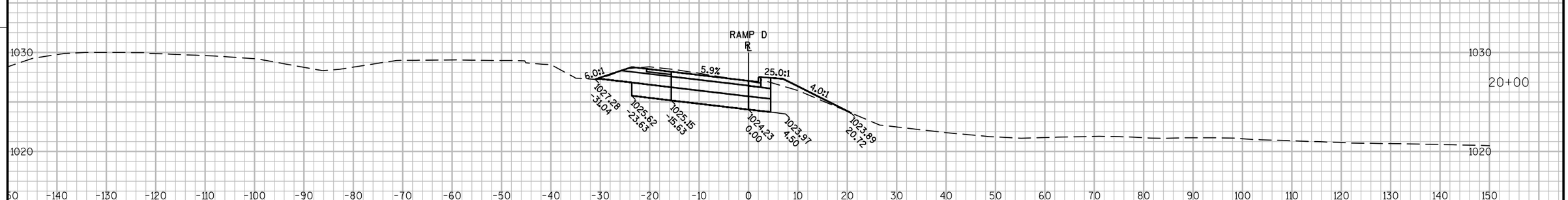

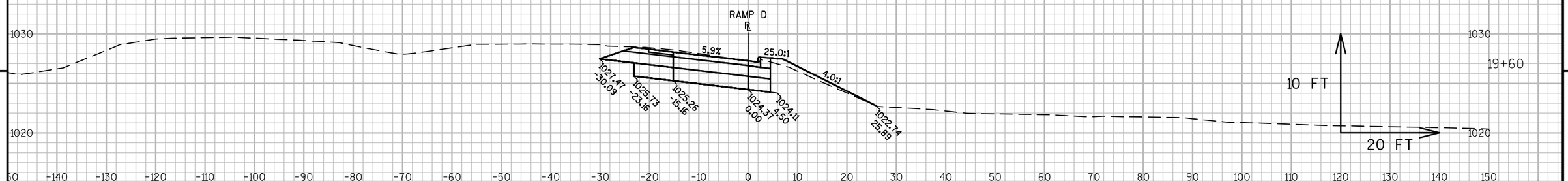

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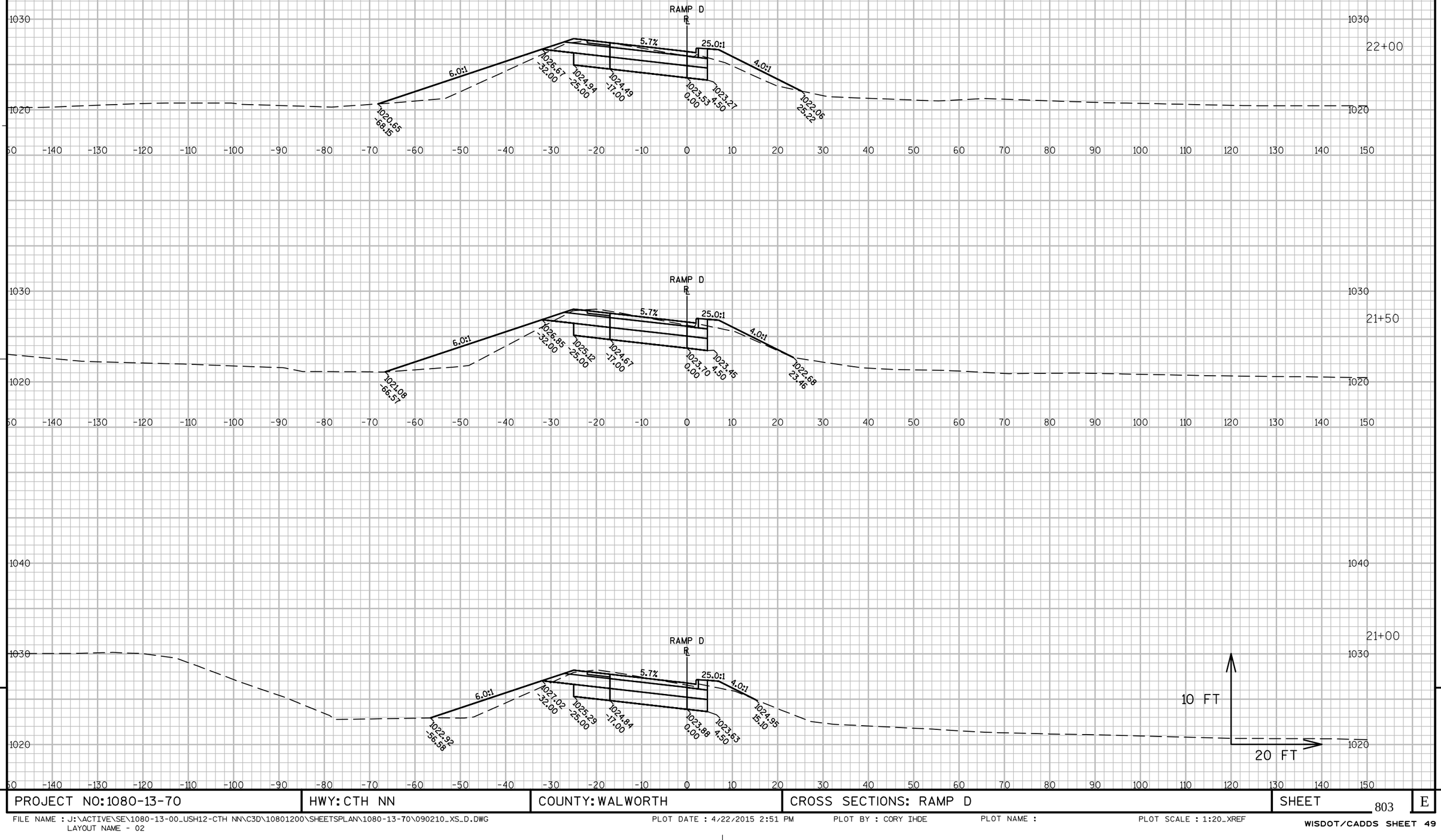
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: RAMP D	SHEET 802	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090210_XS_D.DWG
LAYOUT NAME - 01

PLOT DATE : 4/22/2015 2:50 PM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:20_XREF

WISDOT/CADDS SHEET 49



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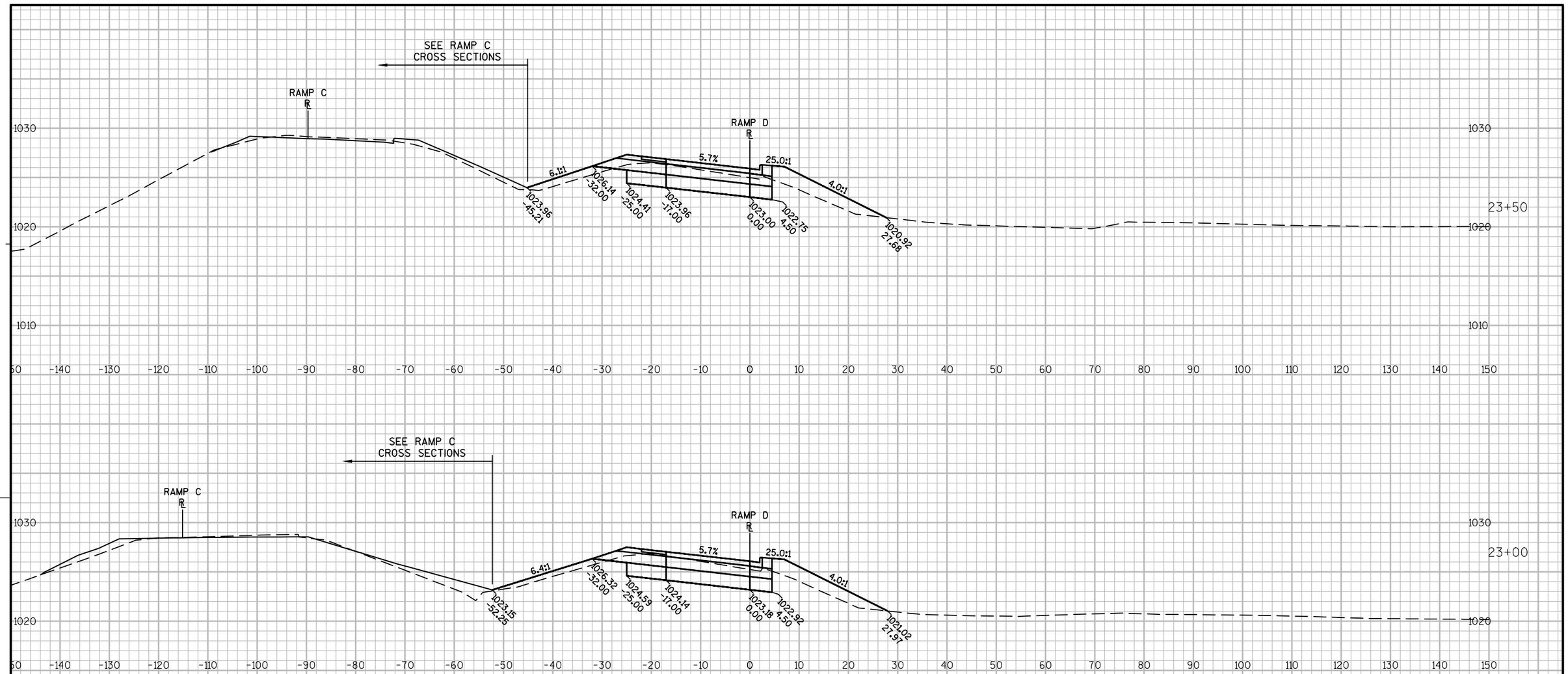
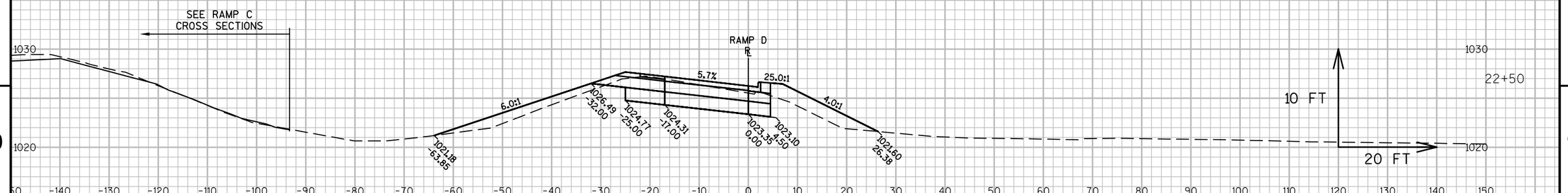
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: RAMP D	SHEET 803	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090210_XS_D.DWG
LAYOUT NAME - 02

PLOT DATE : 4/22/2015 2:51 PM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:20_XREF

WISDOT/CADDS SHEET 49





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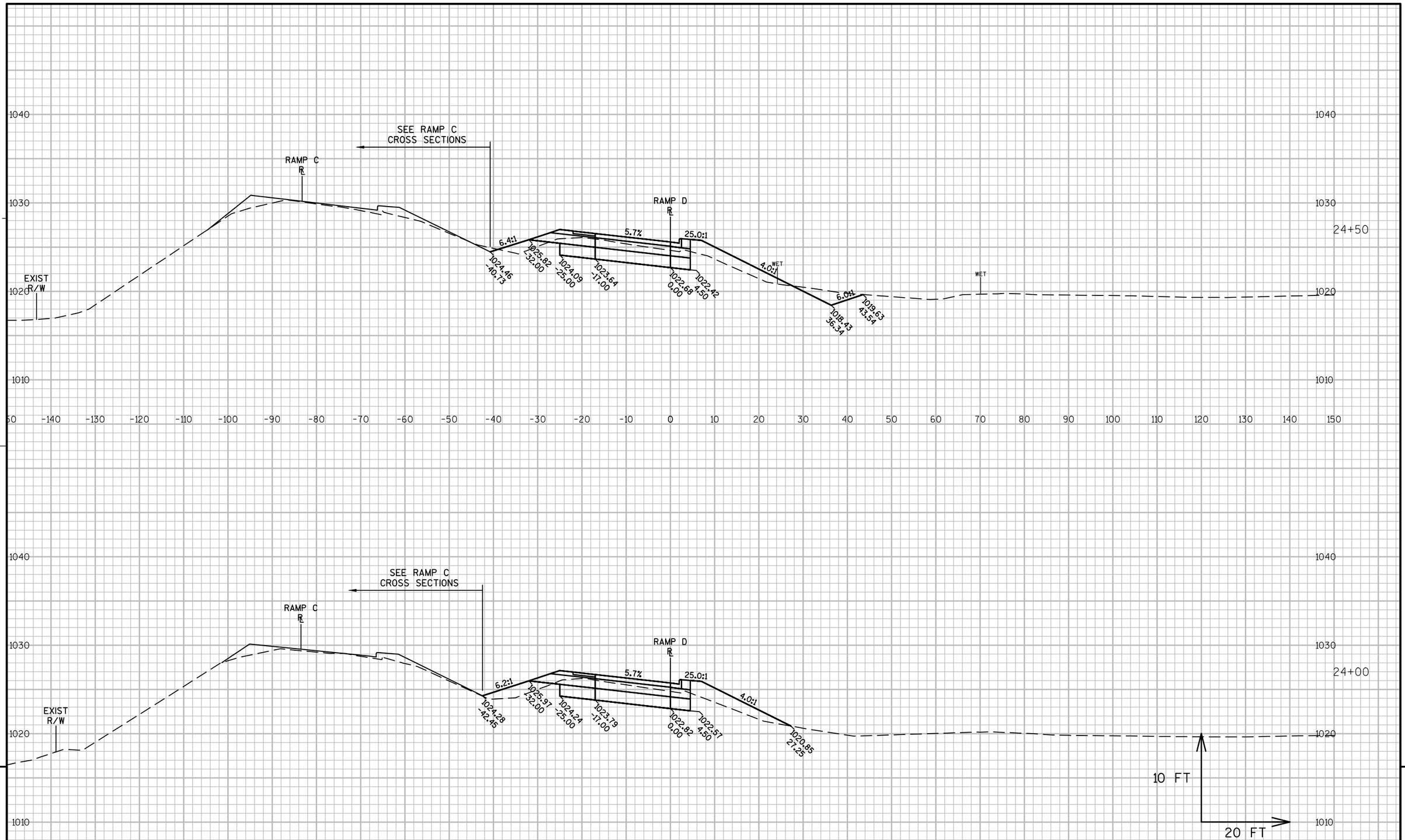
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: RAMP D	SHEET 804	E

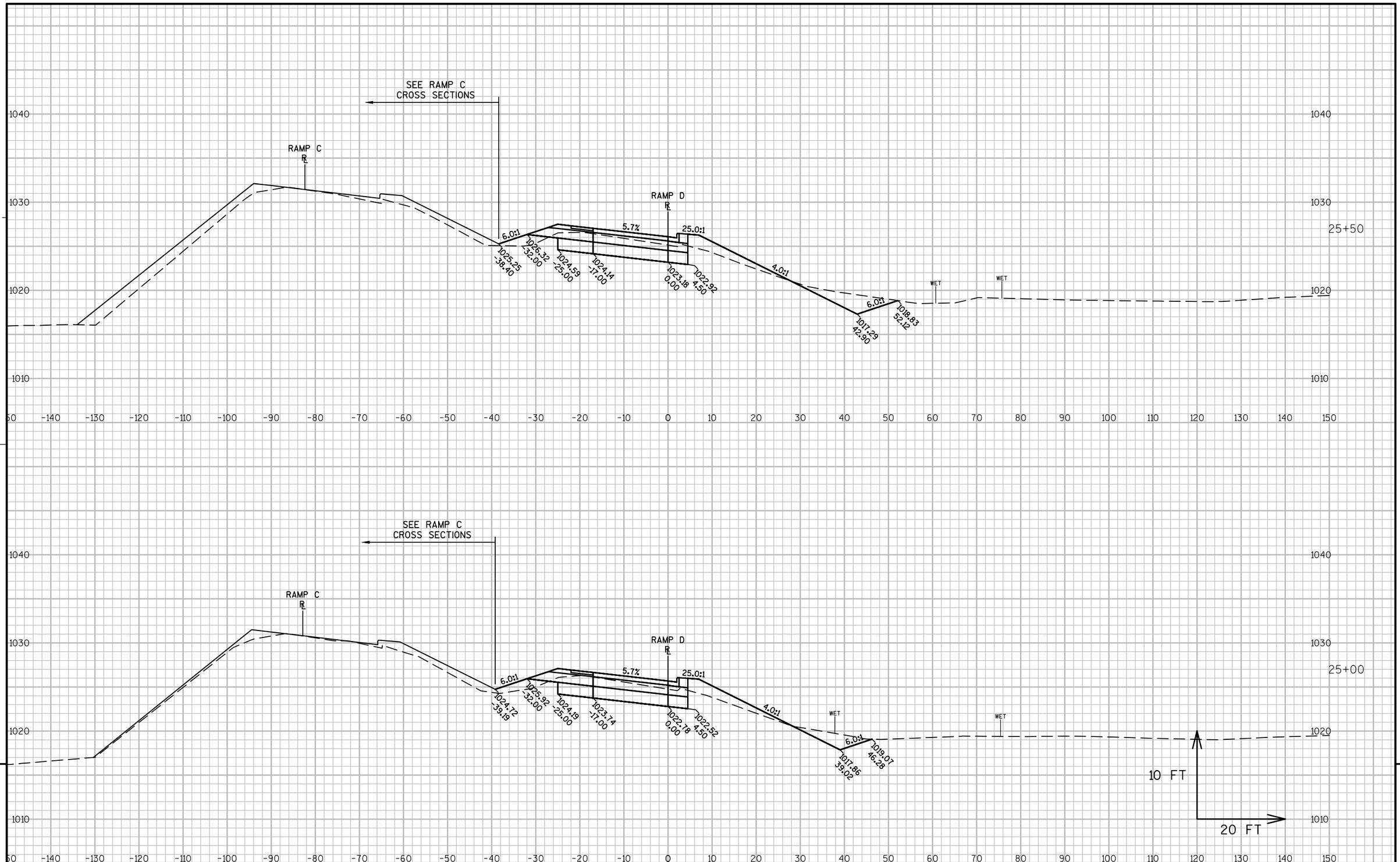


PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: RAMP D	SHEET 805 E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090210_XS_D.DWG
LAYOUT NAME - 04

PLOT DATE : 4/22/2015 2:51 PM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:20_XREF

WISDOT/CADDS SHEET 49

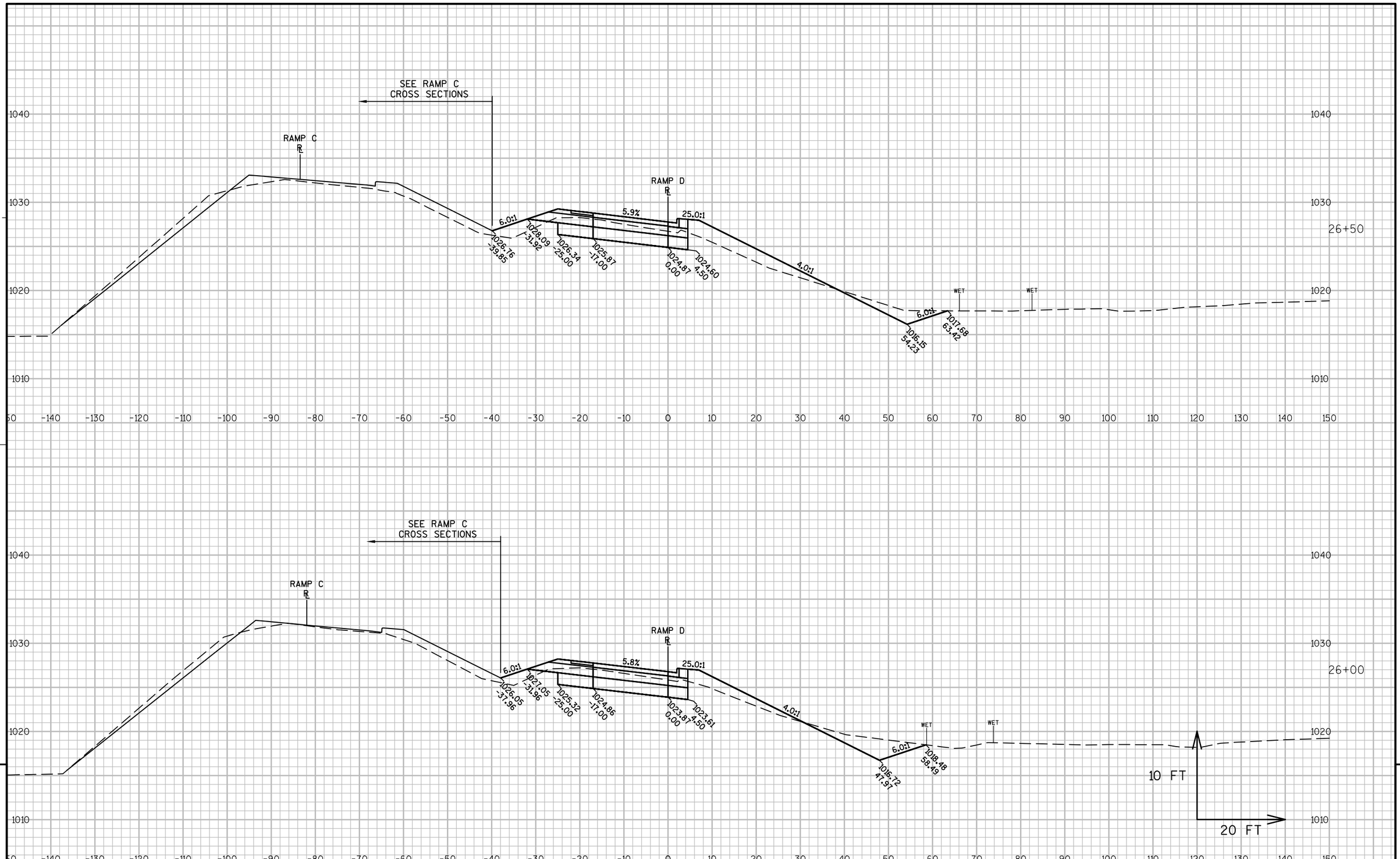


PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: RAMP D	SHEET 806	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090210_XS_D.DWG
LAYOUT NAME - 05

PLOT DATE : 4/22/2015 2:51 PM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:20_XREF

WISDOT/CADDS SHEET 49

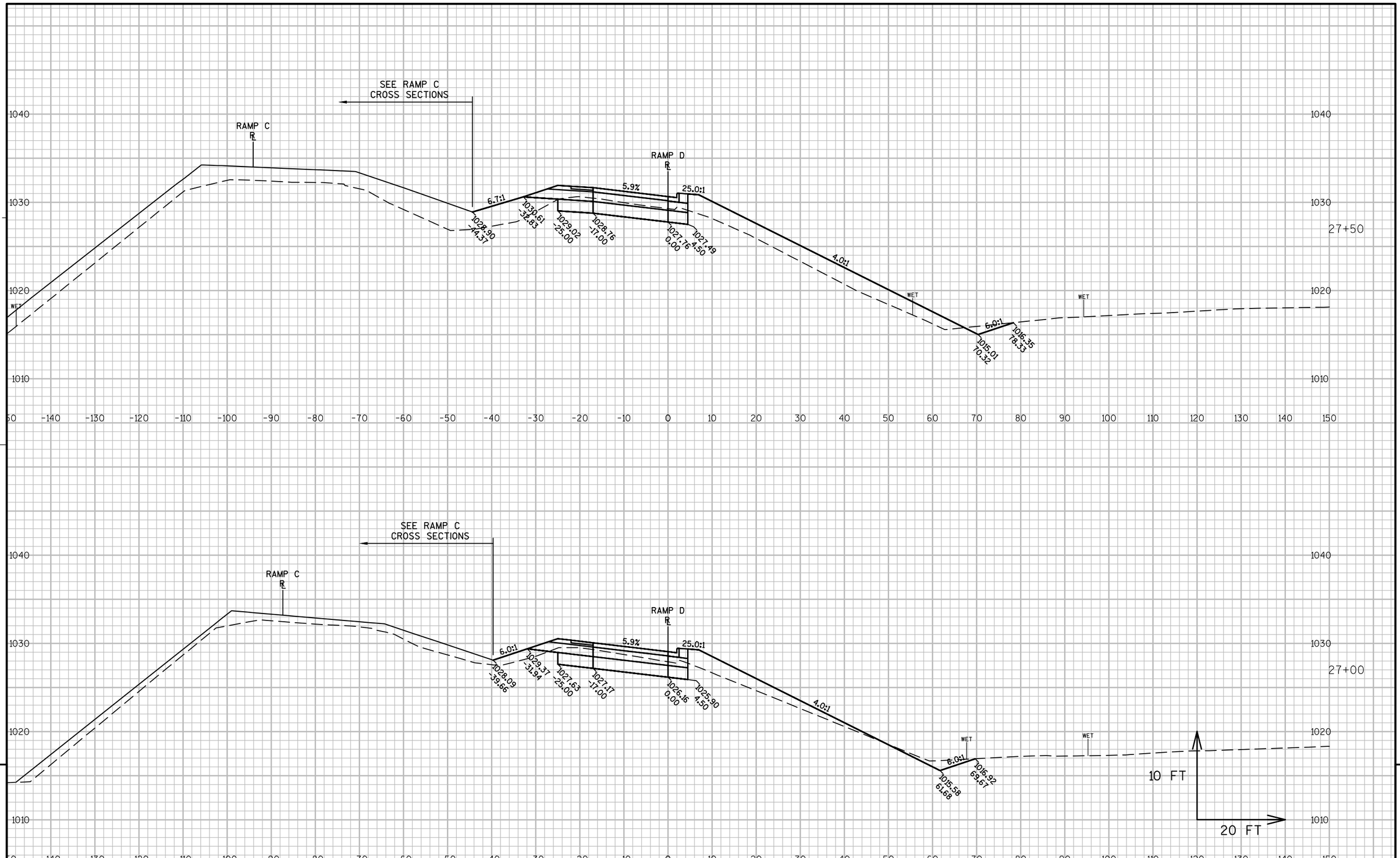


PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: RAMP D	SHEET 807	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090210_XS_D.DWG
LAYOUT NAME - 06

PLOT DATE : 4/22/2015 2:52 PM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:20_XREF

WISDOT/CADDS SHEET 49

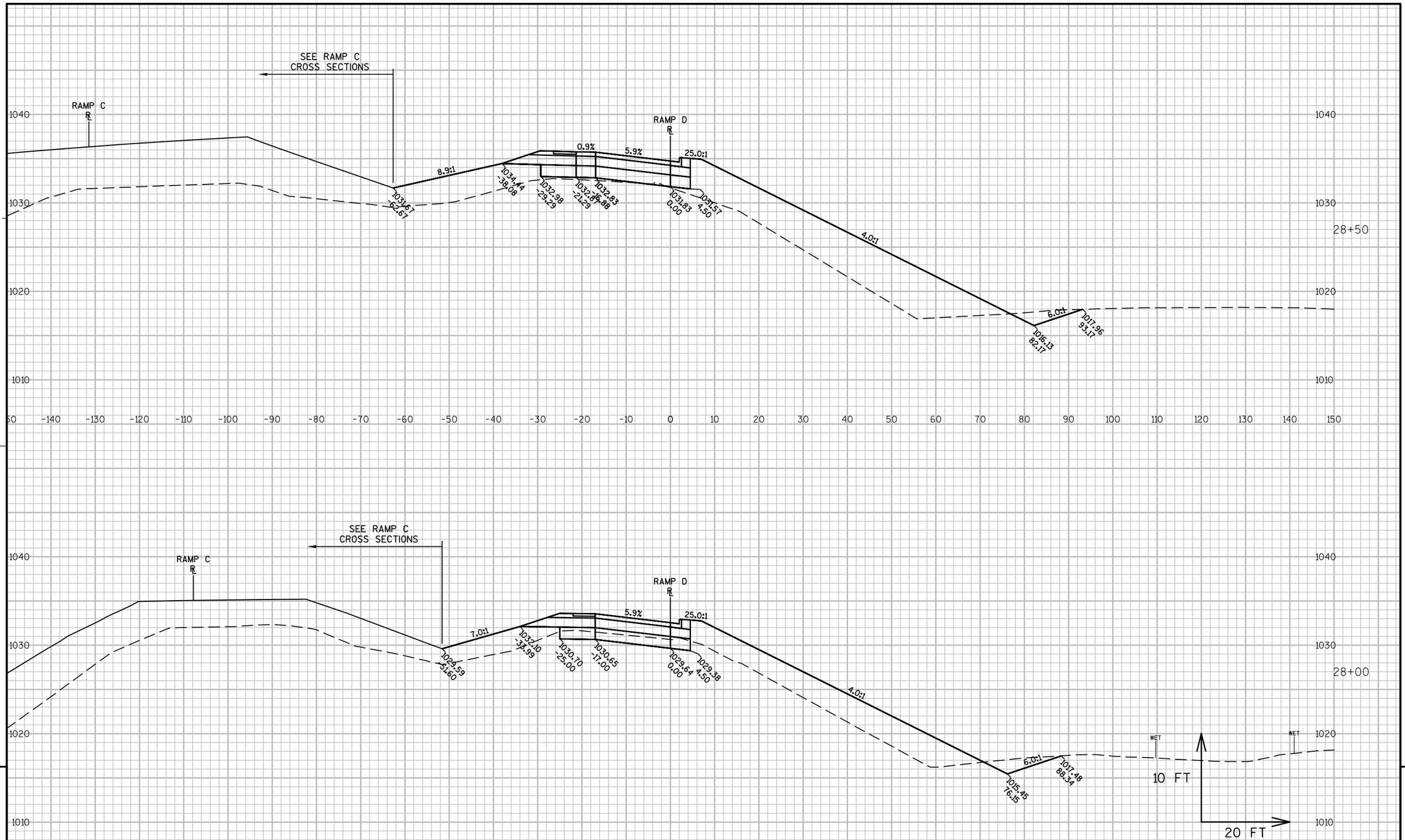


PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: RAMP D	SHEET 808	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090210_XS_D.DWG
LAYOUT NAME - 07

PLOT DATE : 4/22/2015 2:52 PM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:20_XREF

WISDOT/CADDS SHEET 49

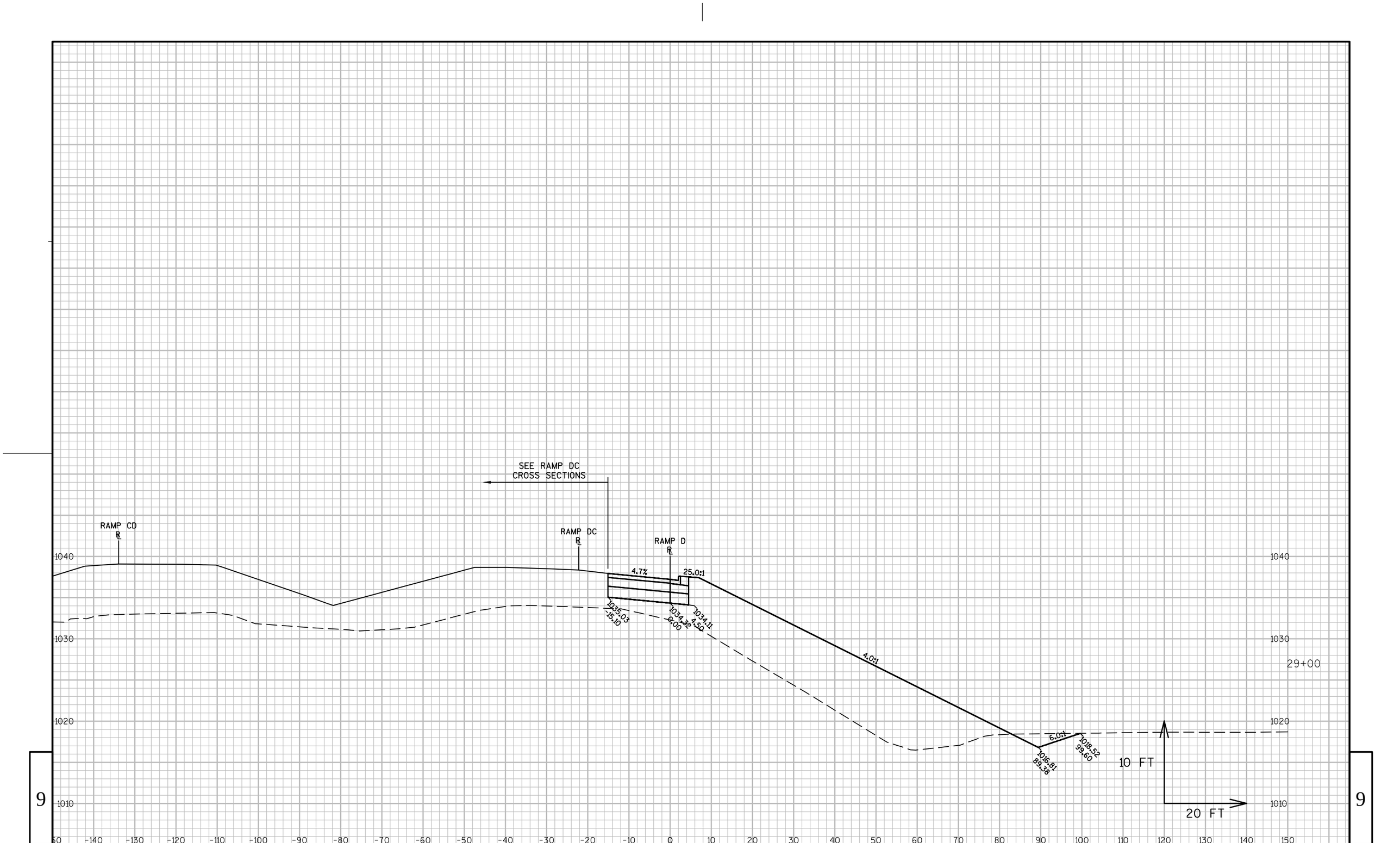


PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: RAMP D	SHEET 809 E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090210_XS_D.DWG
LAYOUT NAME - 08

PLOT DATE : 4/22/2015 2:52 PM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:20_XREF

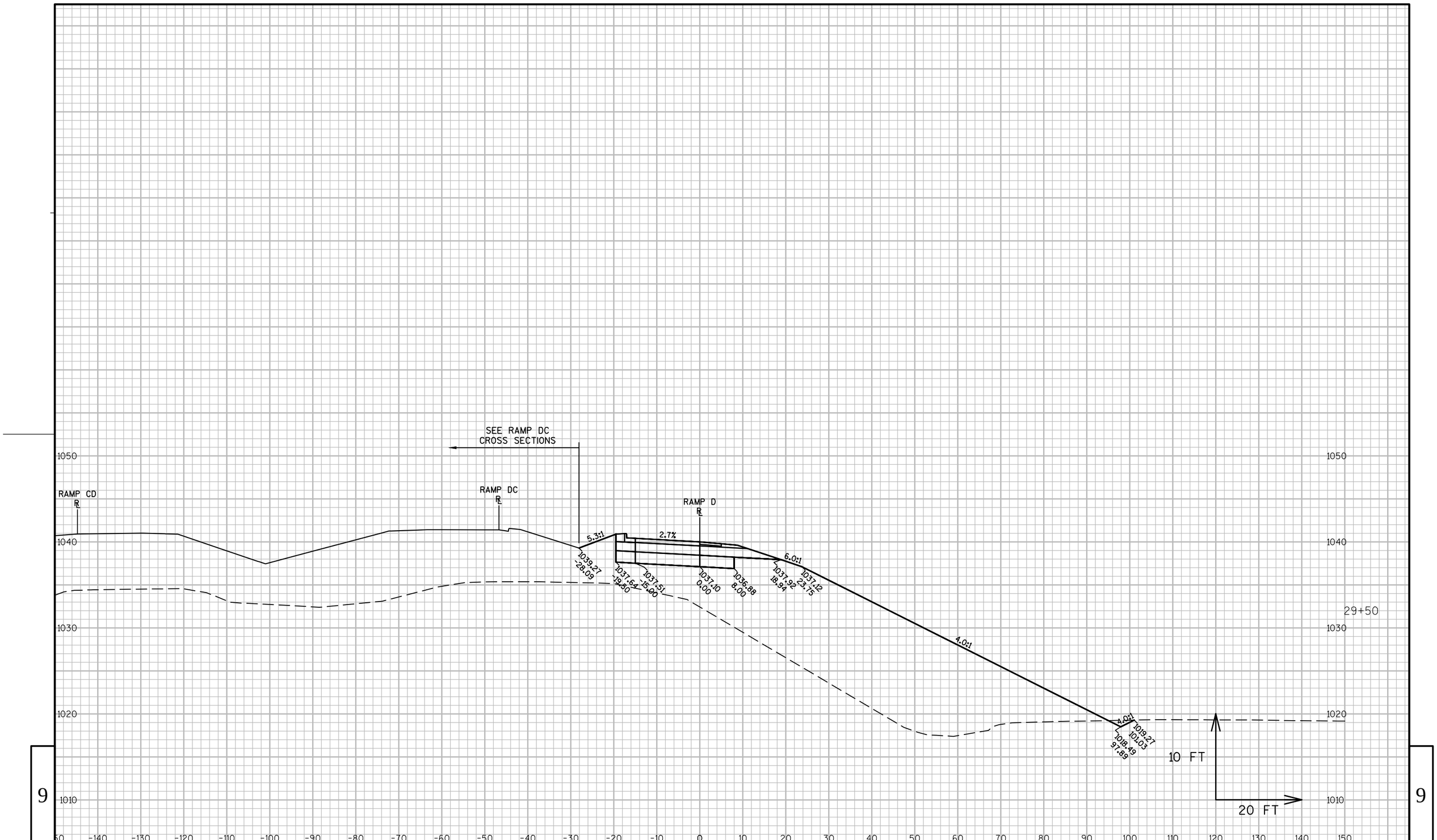
WISDOT/CADDS SHEET 49



PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: RAMP D	SHEET 810	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090210_XS_D.DWG
LAYOUT NAME - 09

PLOT DATE : 4/22/2015 2:52 PM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:20_XREF



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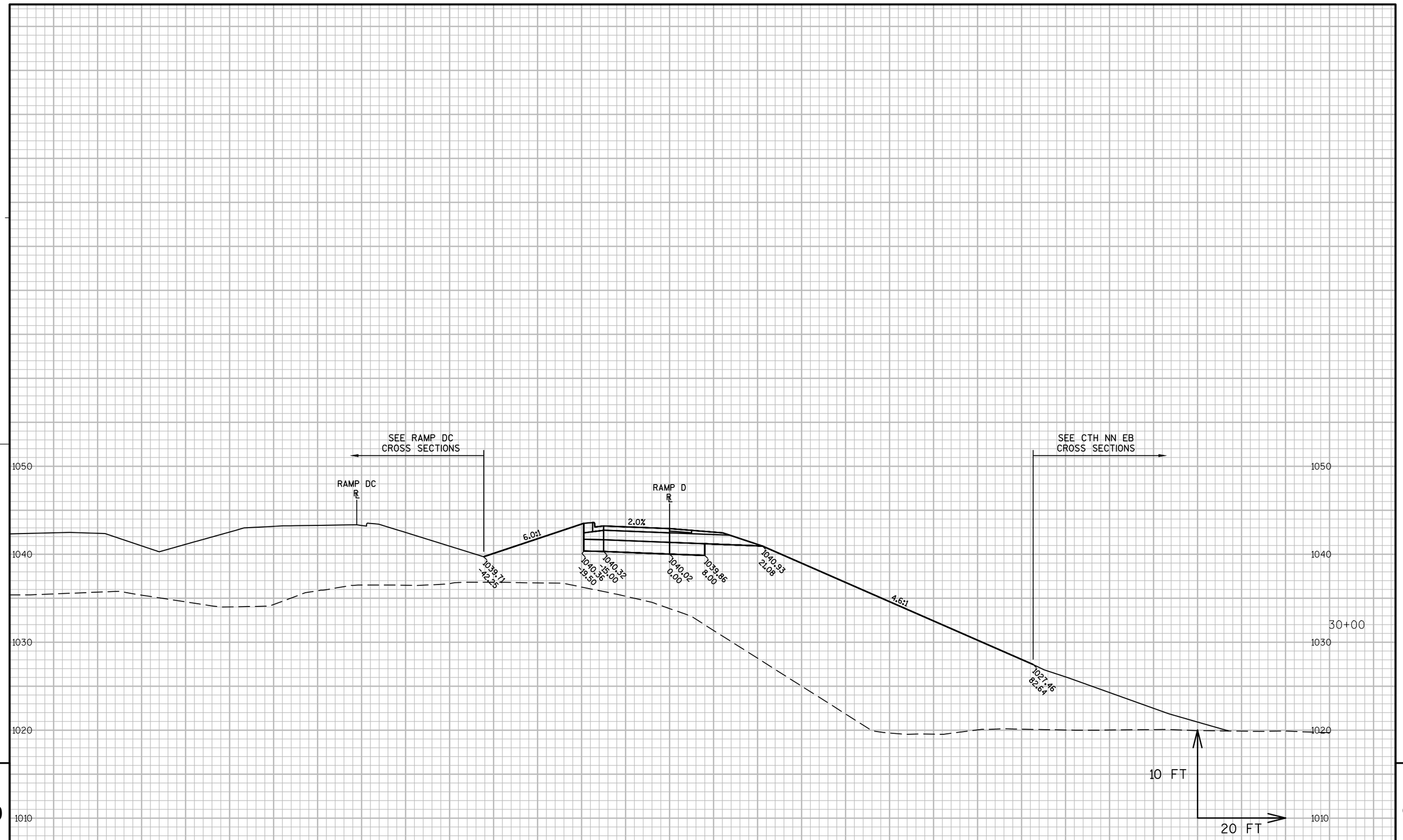
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: RAMP D	SHEET 811	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090210_XS_D.DWG
LAYOUT NAME - 10

PLOT DATE : 4/22/2015 2:52 PM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:20_XREF

WISDOT/CADDS SHEET 49



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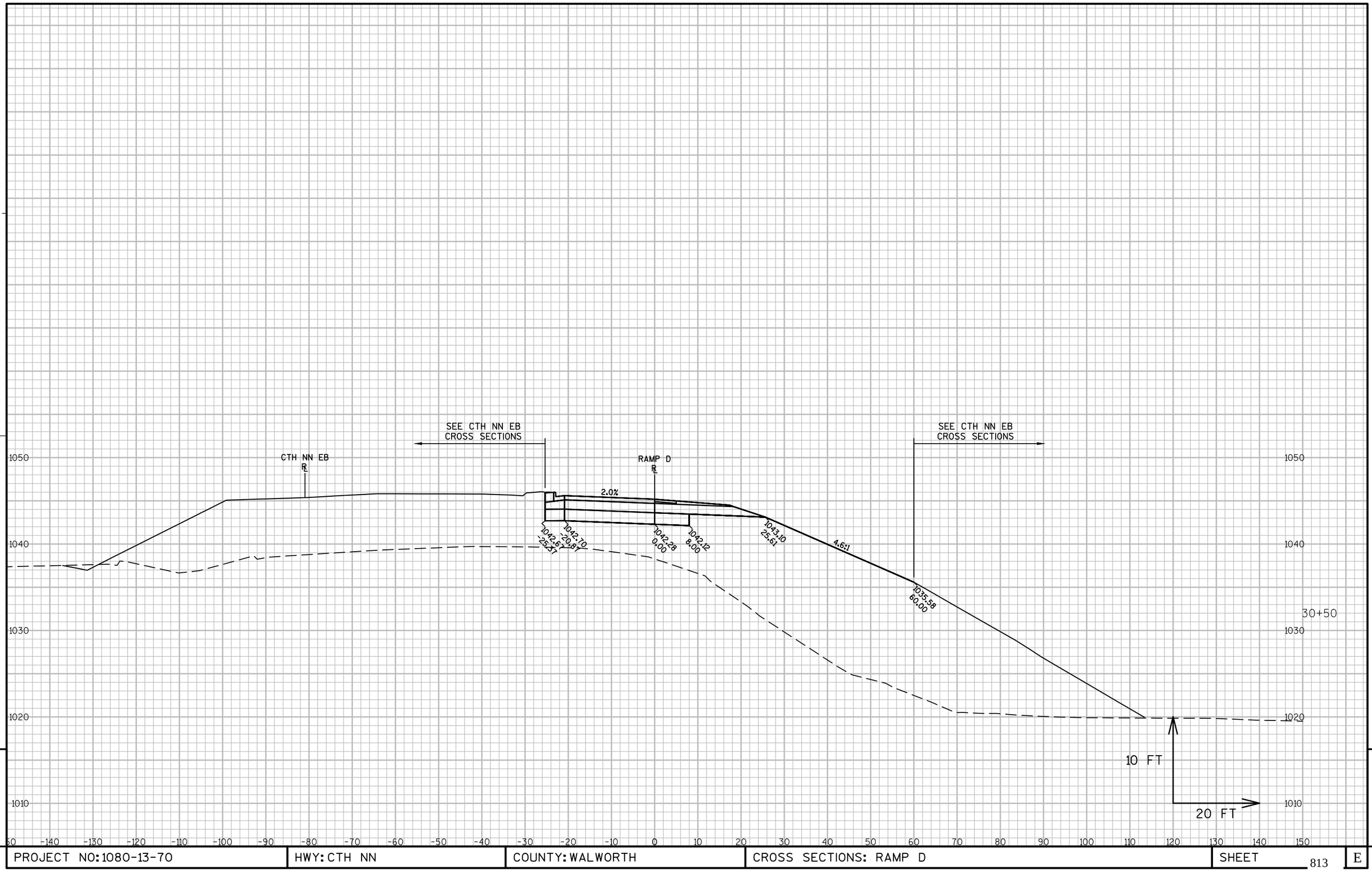
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: RAMP D	SHEET 812	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090210_XS_D.DWG
LAYOUT NAME - 11
PLOT DATE : 4/22/2015 2:53 PM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:20_XREF
WISDOT/CADDS SHEET 49



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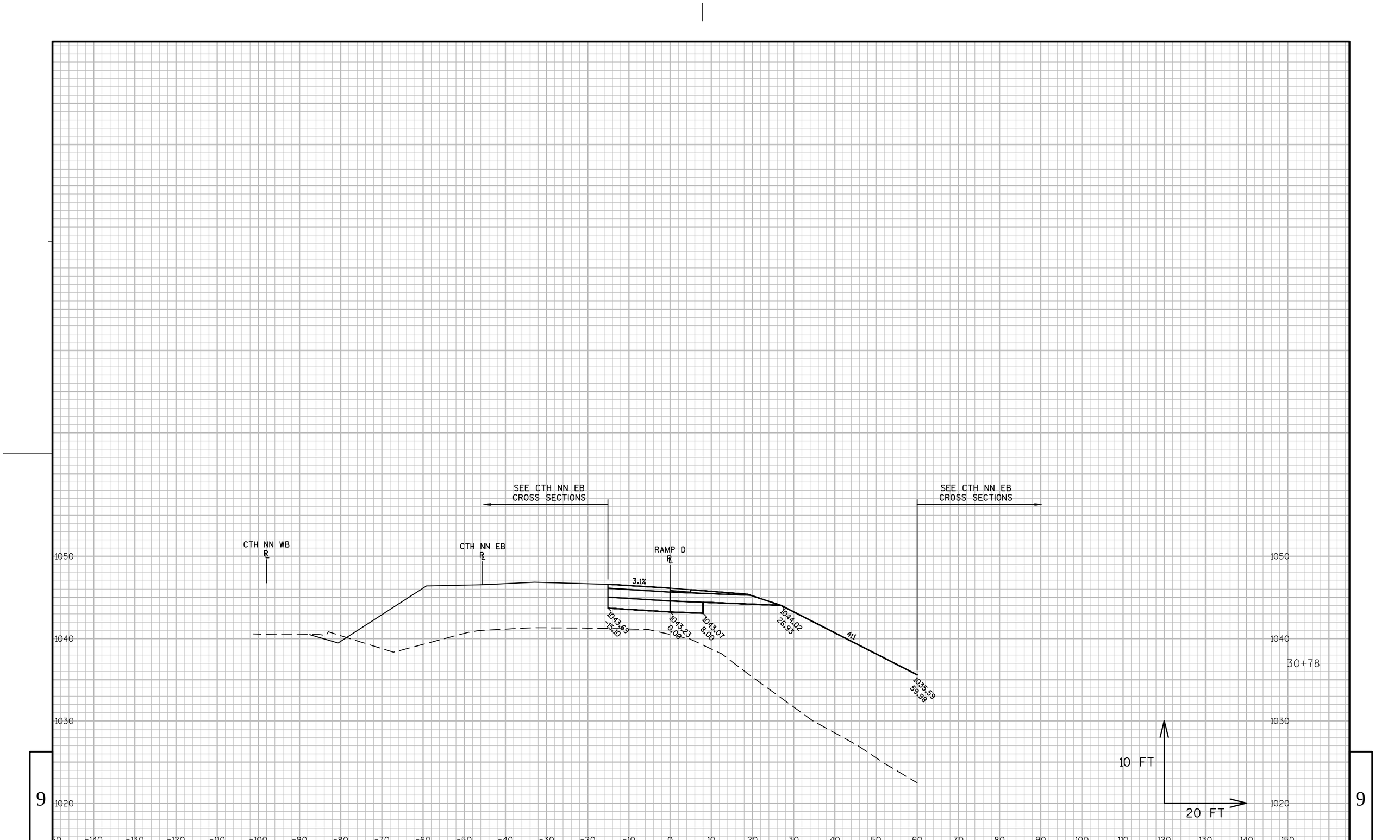
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: RAMP D	SHEET 813	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090210_XS_D.DWG
LAYOUT NAME - 12

PLOT DATE : 4/22/2015 2:53 PM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:20_XREF

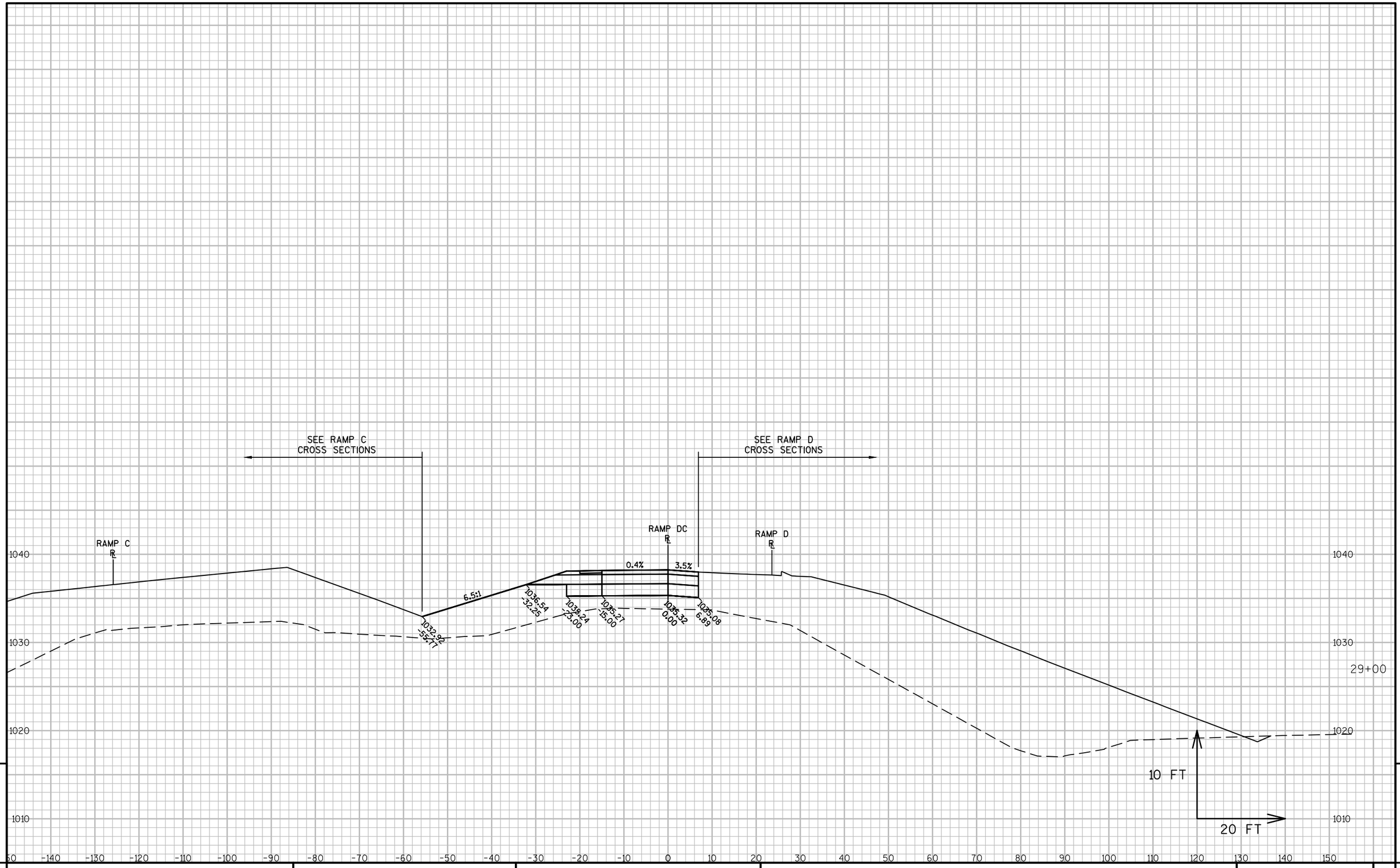


PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: RAMP D	SHEET 814 E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090210_XS_D.DWG
LAYOUT NAME - 13

PLOT DATE : 4/22/2015 2:53 PM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:20_XREF

WISDOT/CADDS SHEET 49



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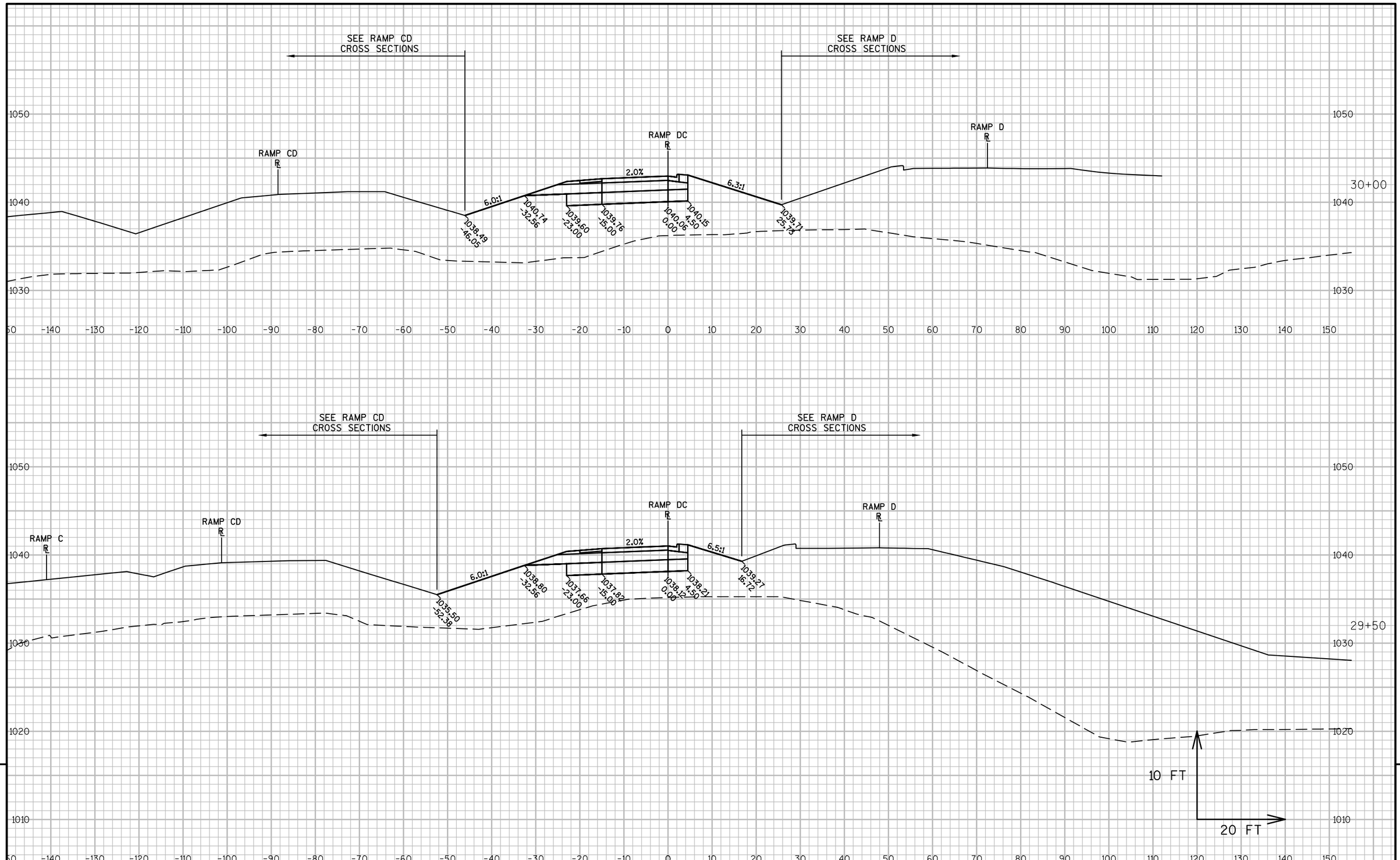
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: RAMP DC	SHEET 815	E

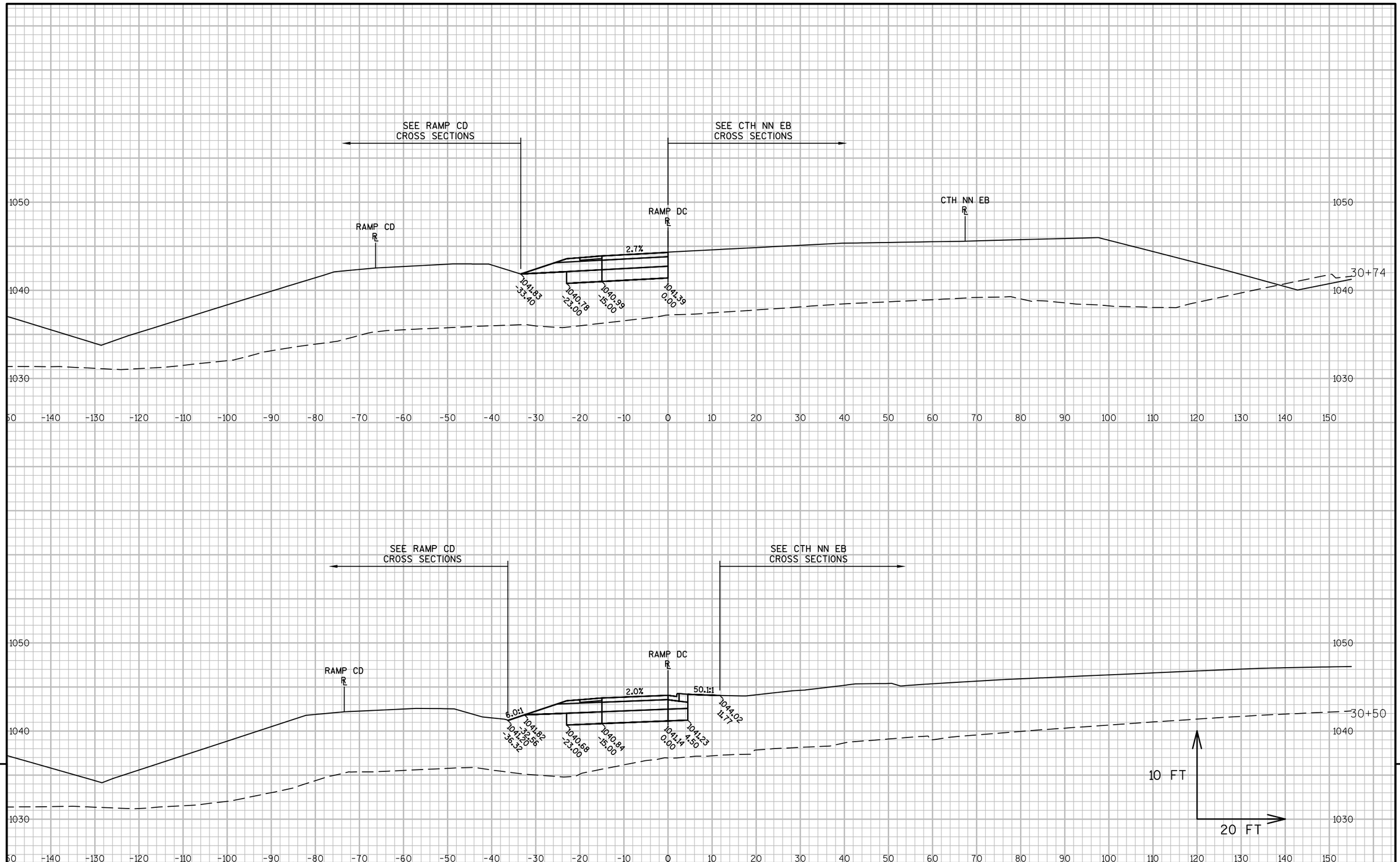
FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090211_XS_DC.DWG
LAYOUT NAME - 01
PLOT DATE : 4/22/2015 2:57 PM
PLOT BY : CORY IHDE
PLOT NAME :
PLOT SCALE : 1" = 20'_XREF_XREF



PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: RAMP DC	SHEET 816	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090211_XS_DC.DWG
LAYOUT NAME - 02

PLOT DATE : 4/22/2015 2:57 PM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1" = 20'_XREF_XREF



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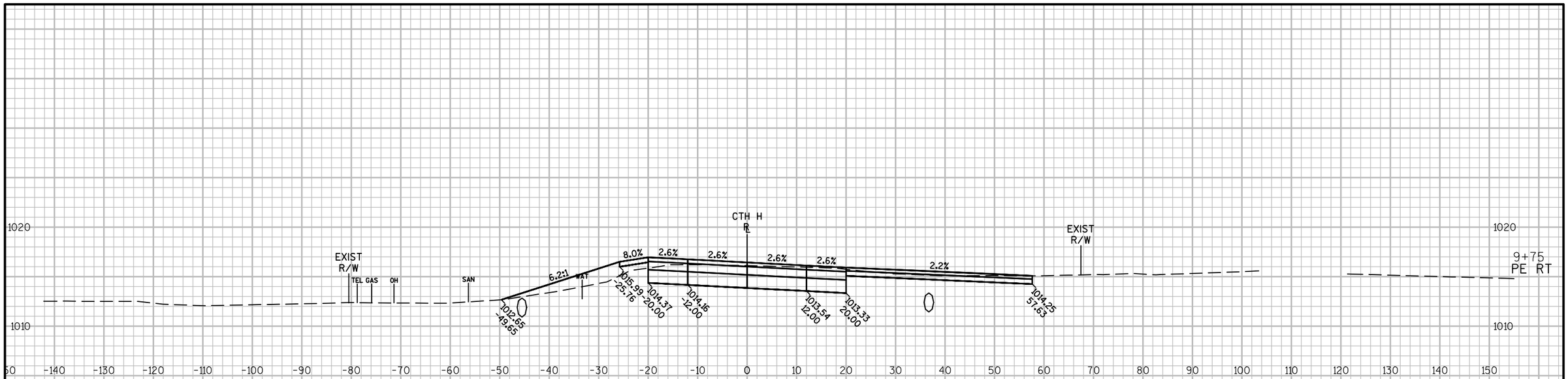
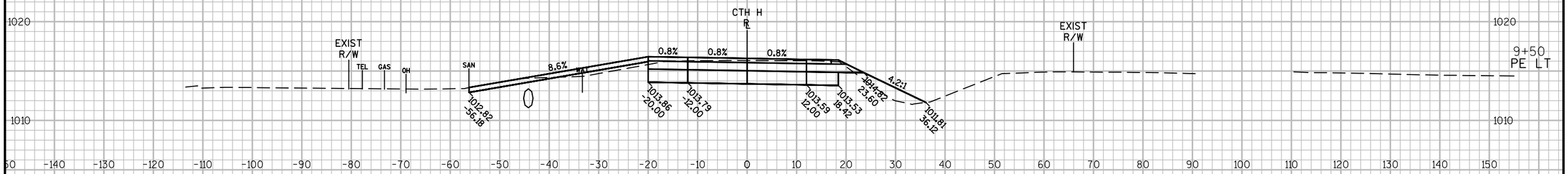
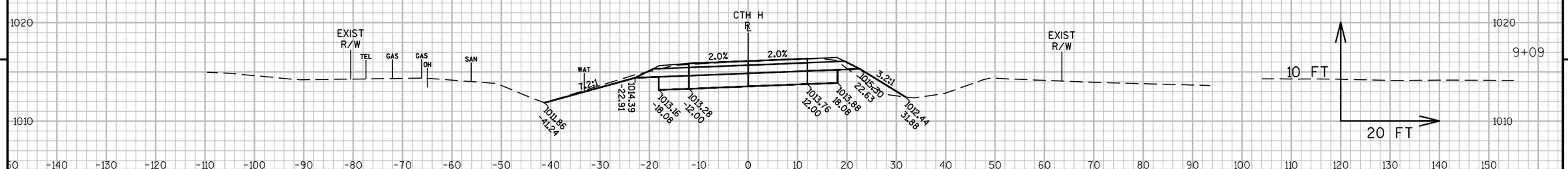
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: RAMP DC	SHEET 817	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090211_XS_DC.DWG
LAYOUT NAME - 03
PLOT DATE : 4/22/2015 2:57 PM
PLOT BY : CORY IHDE
PLOT NAME :
PLOT SCALE : 1" = 20'_XREF_XREF
WISDOT/CADDS SHEET 49







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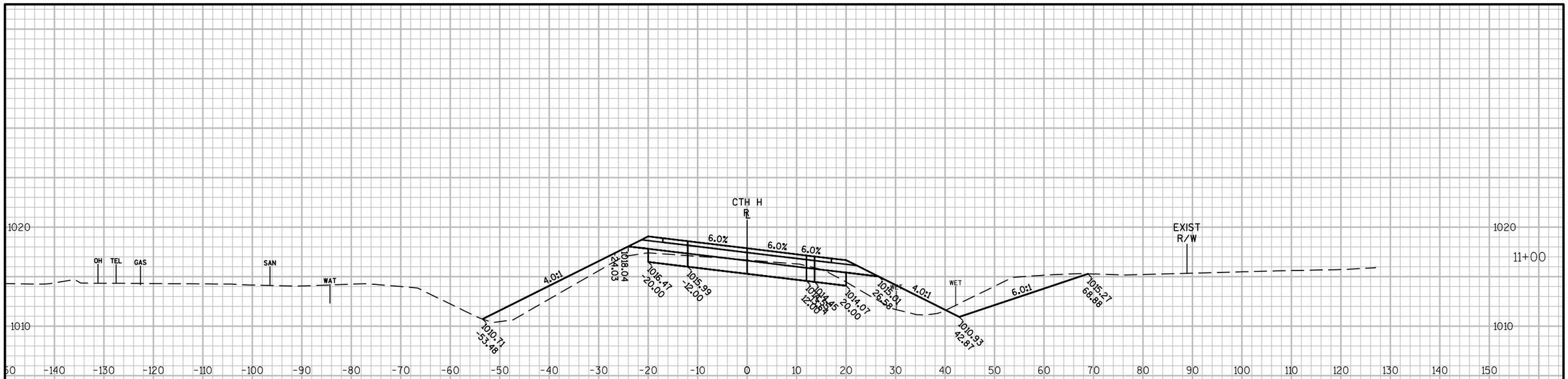
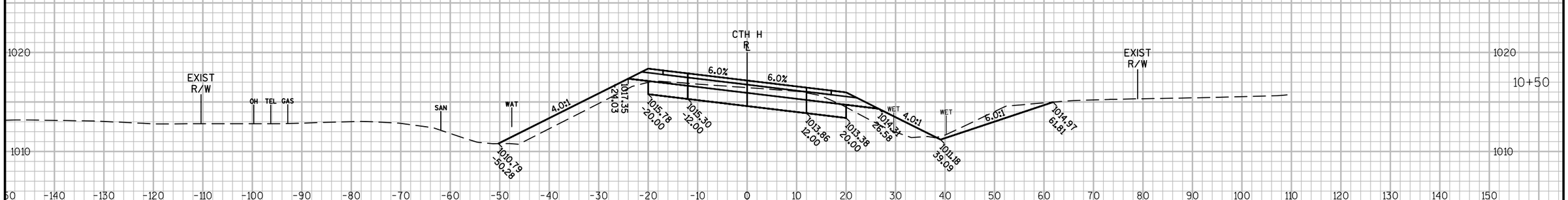
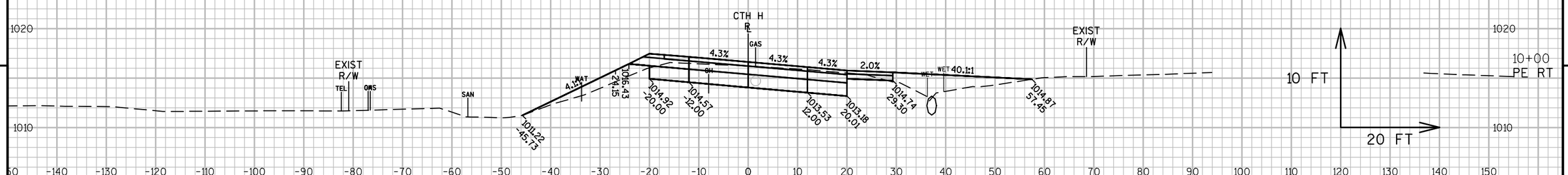
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH H	SHEET 818	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090214_XS_H.DWG
LAYOUT NAME - 01
PLOT DATE : 4/22/2015 3:57 PM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1" = 20'_XREF_XREF
WISDOT/CADDS SHEET 49







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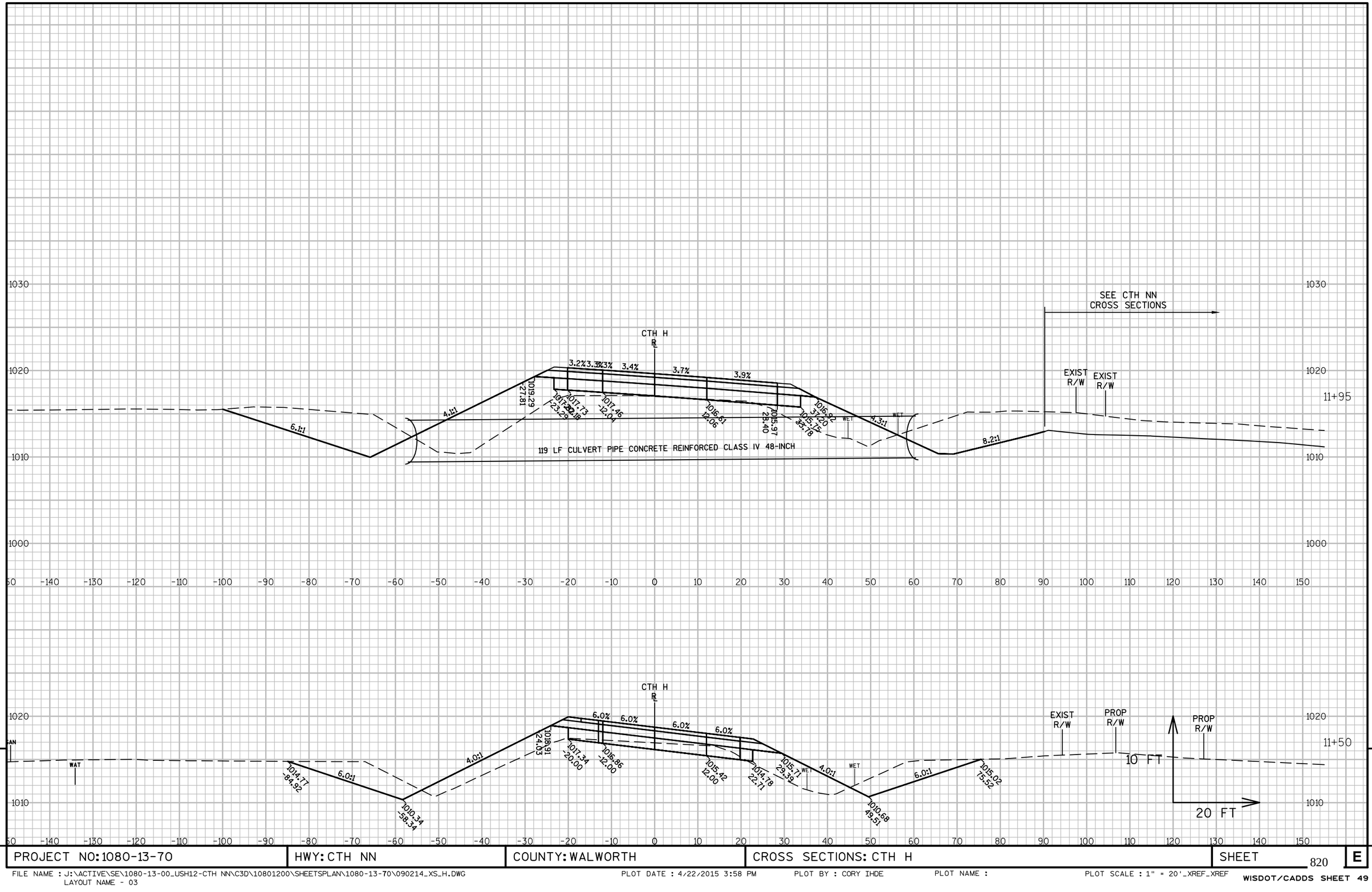
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH H	SHEET 819	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090214_XS_H.DWG
LAYOUT NAME - 02

PLOT DATE : 4/22/2015 3:58 PM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1" = 20'_XREF_XREF

WISDOT/CADDS SHEET 49



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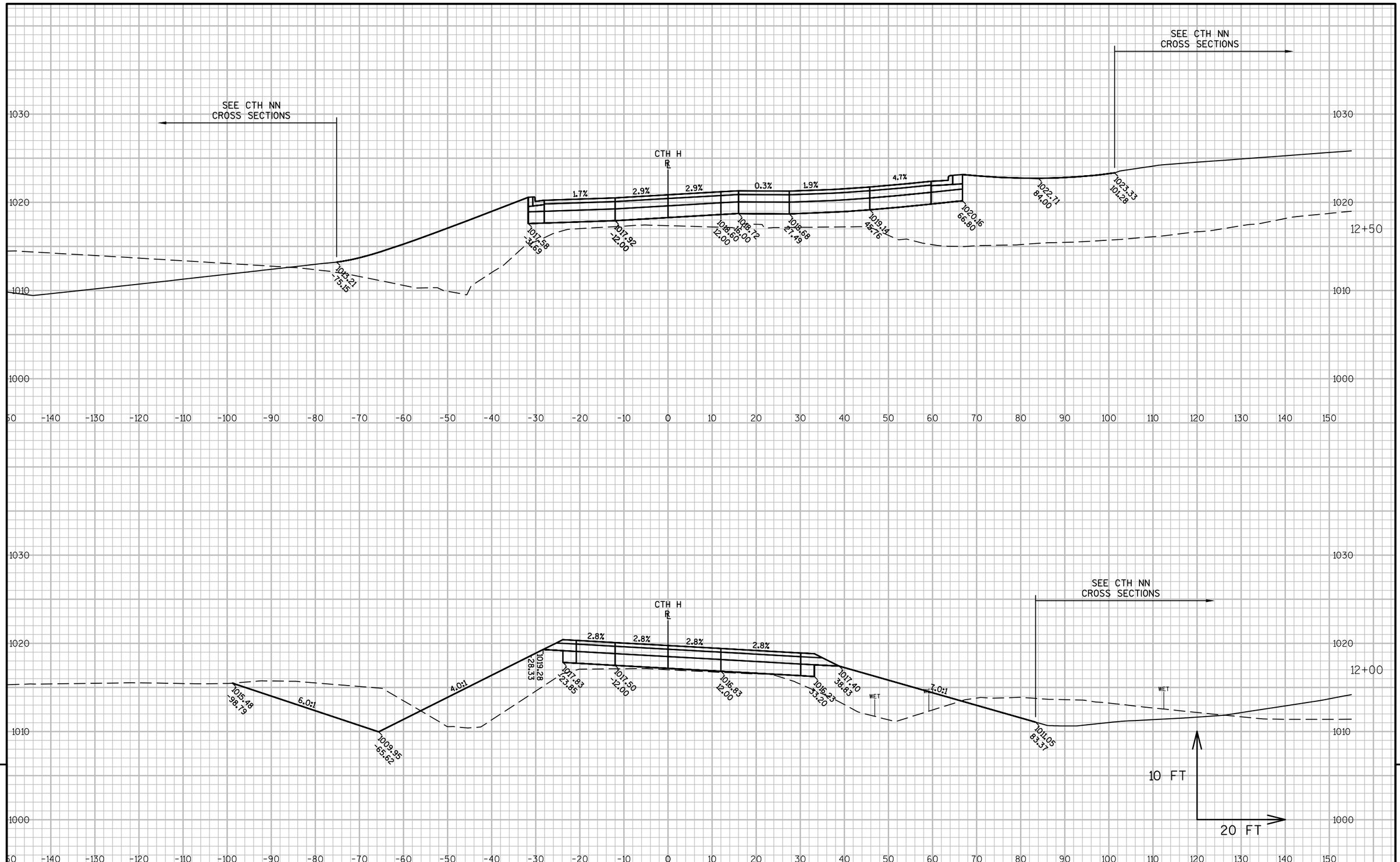
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH H	SHEET 820	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090214_XS_H.DWG
LAYOUT NAME - 03

PLOT DATE : 4/22/2015 3:58 PM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1" = 20'_XREF_XREF

WISDOT/CADDS SHEET 49



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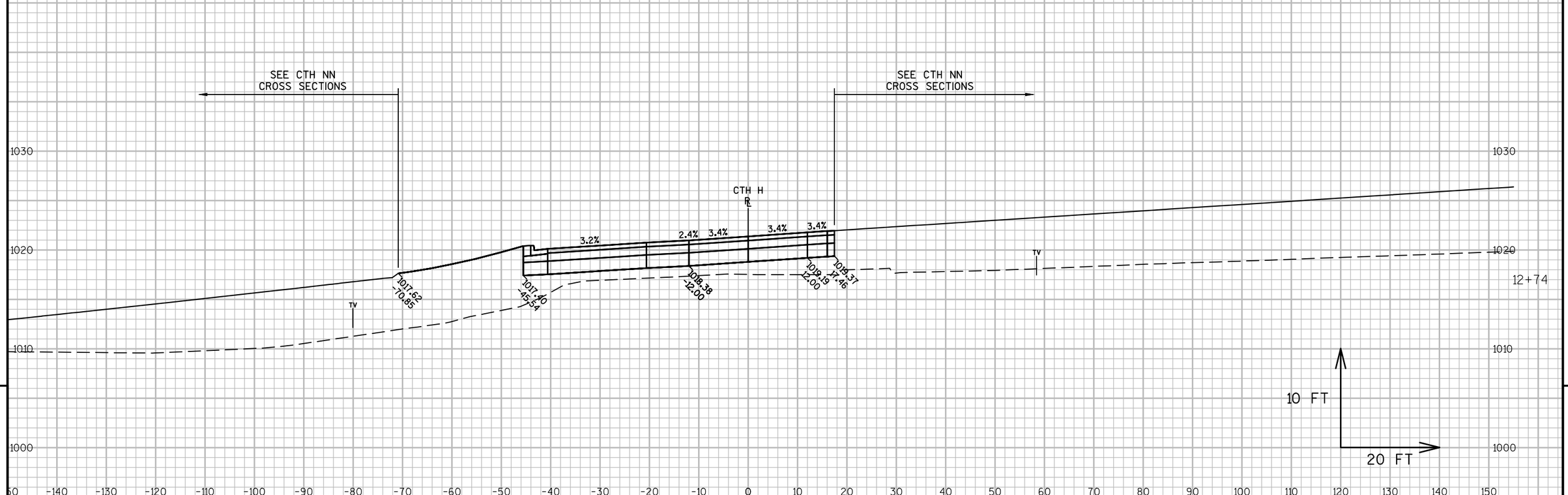
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH H	SHEET 821	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090214_XS_H.DWG
LAYOUT NAME - 04
PLOT DATE : 4/22/2015 3:58 PM
PLOT BY : CORY IHDE
PLOT NAME :
PLOT SCALE : 1" = 20'_XREF_XREF



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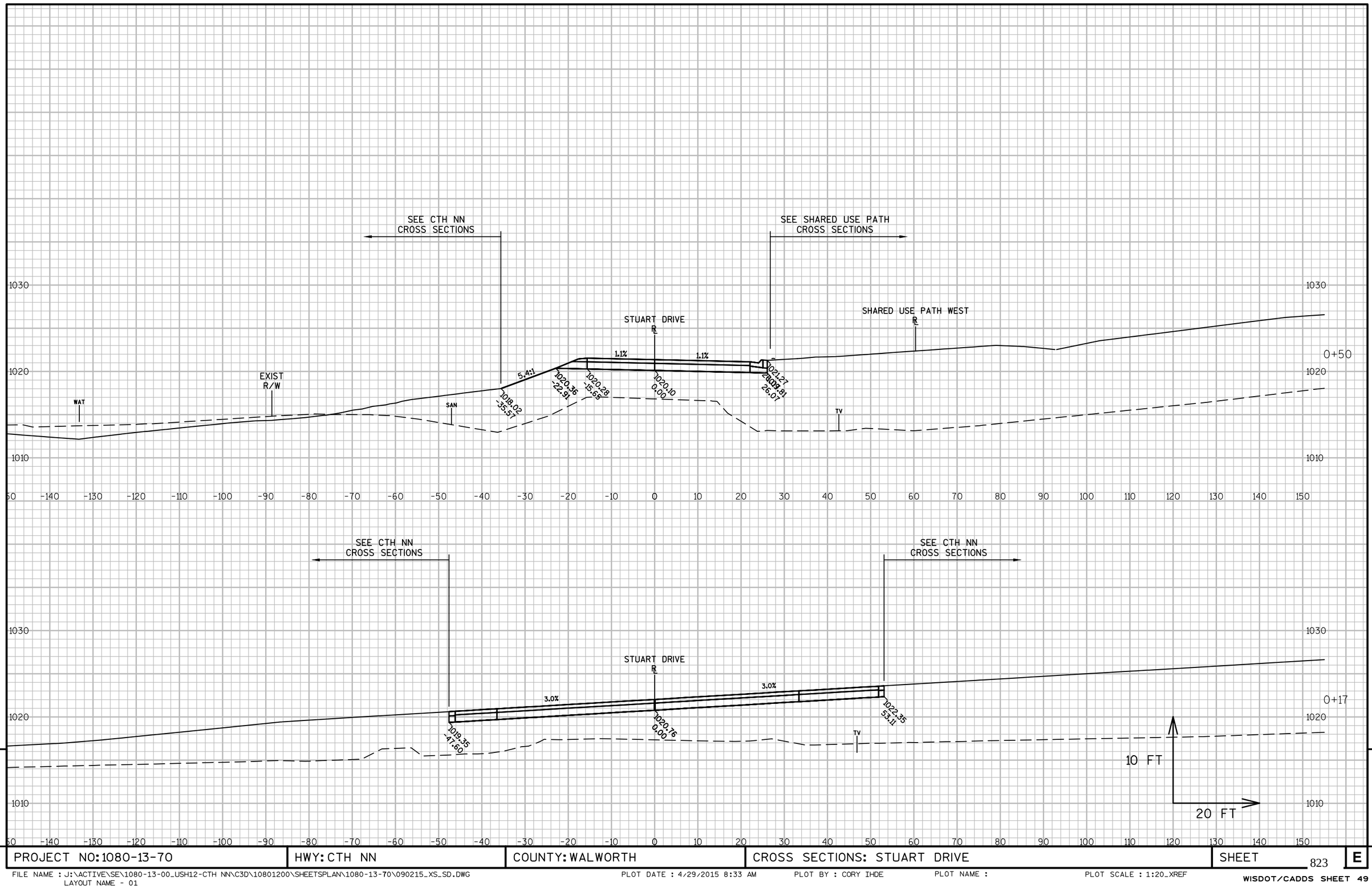
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: CTH H	SHEET 822	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090214_XS_H.DWG
LAYOUT NAME - 05

PLOT DATE : 4/22/2015 3:58 PM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1" = 20'_XREF_XREF

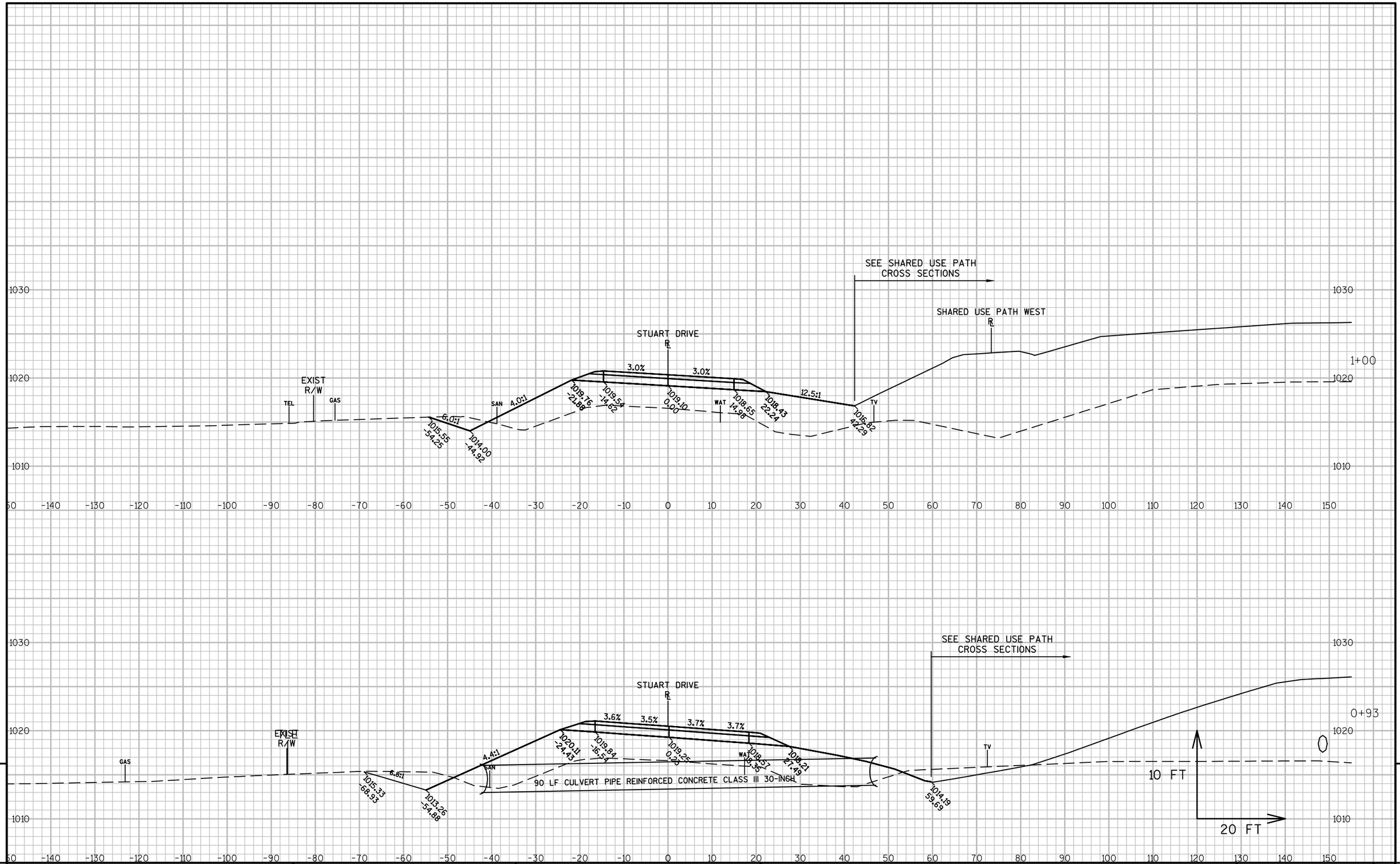
WISDOT/CADDS SHEET 49



PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: STUART DRIVE	SHEET 823 E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090215_XS_SD.DWG
LAYOUT NAME - 01

PLOT DATE : 4/29/2015 8:33 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:20_XREF

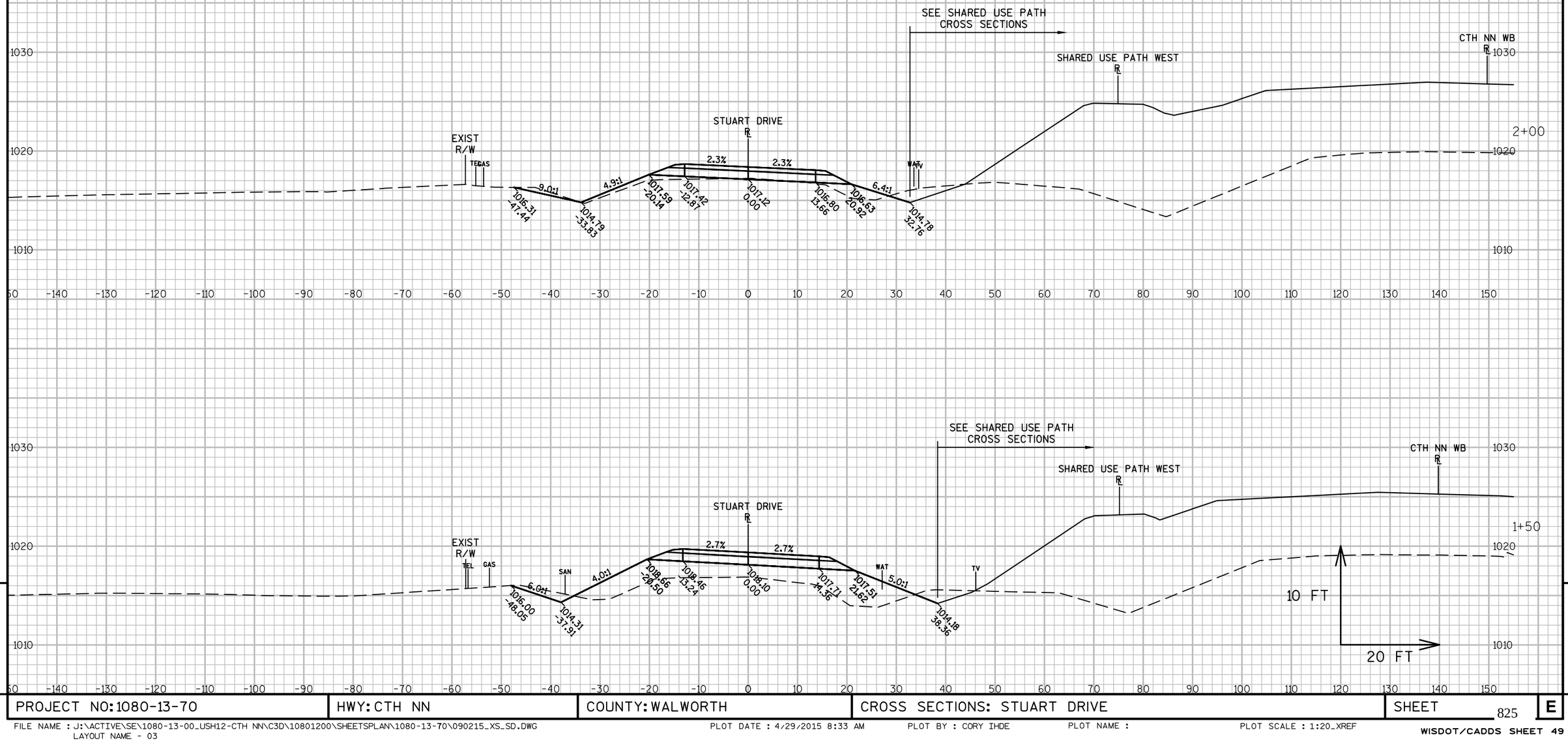


PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: STUART DRIVE	SHEET 824	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090215_XS_SD.DWG
LAYOUT NAME - 02

PLOT DATE : 4/29/2015 8:33 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:20_XREF

WISDOT/CADDS SHEET 49



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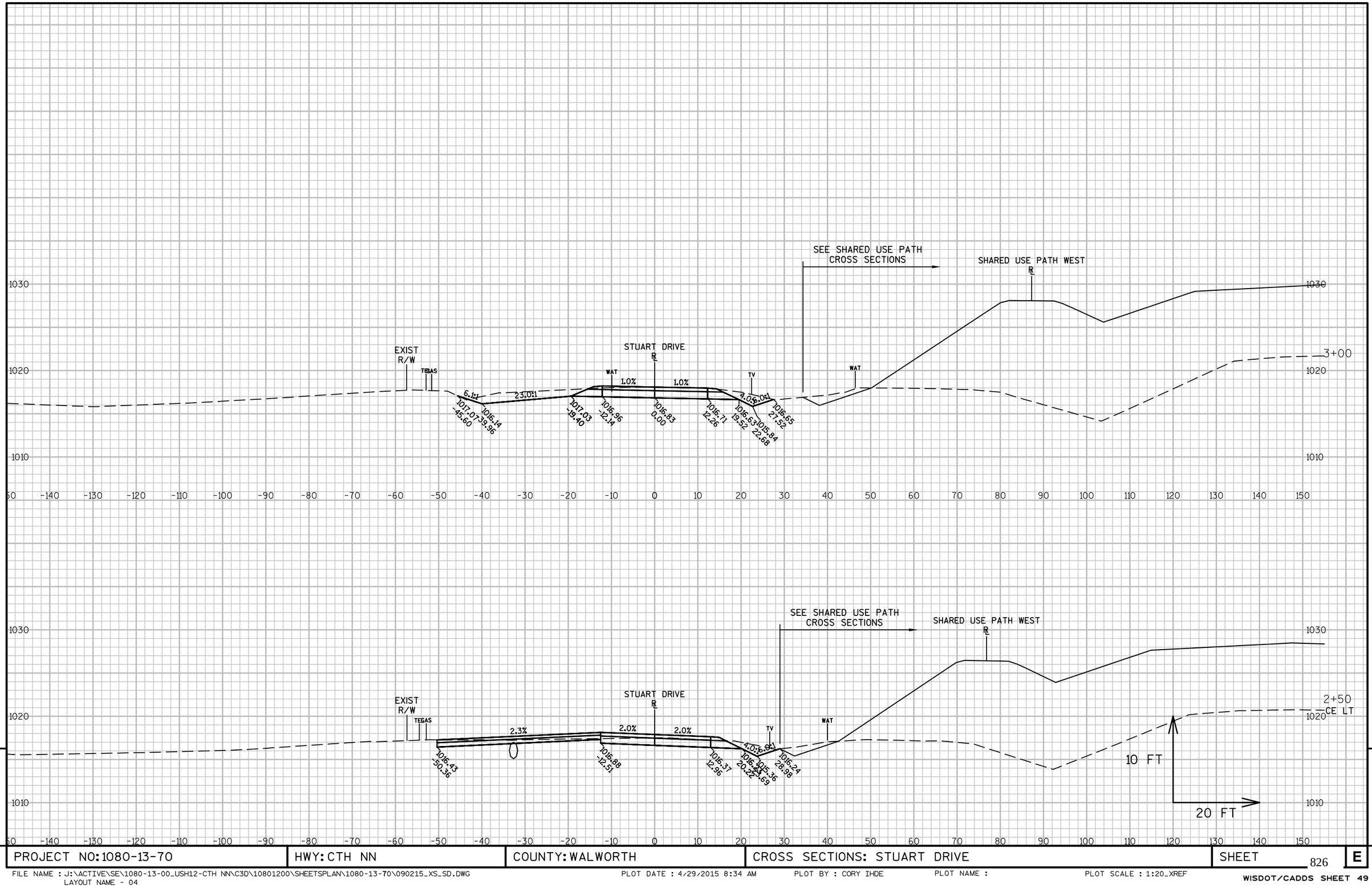
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: STUART DRIVE	SHEET 825	E



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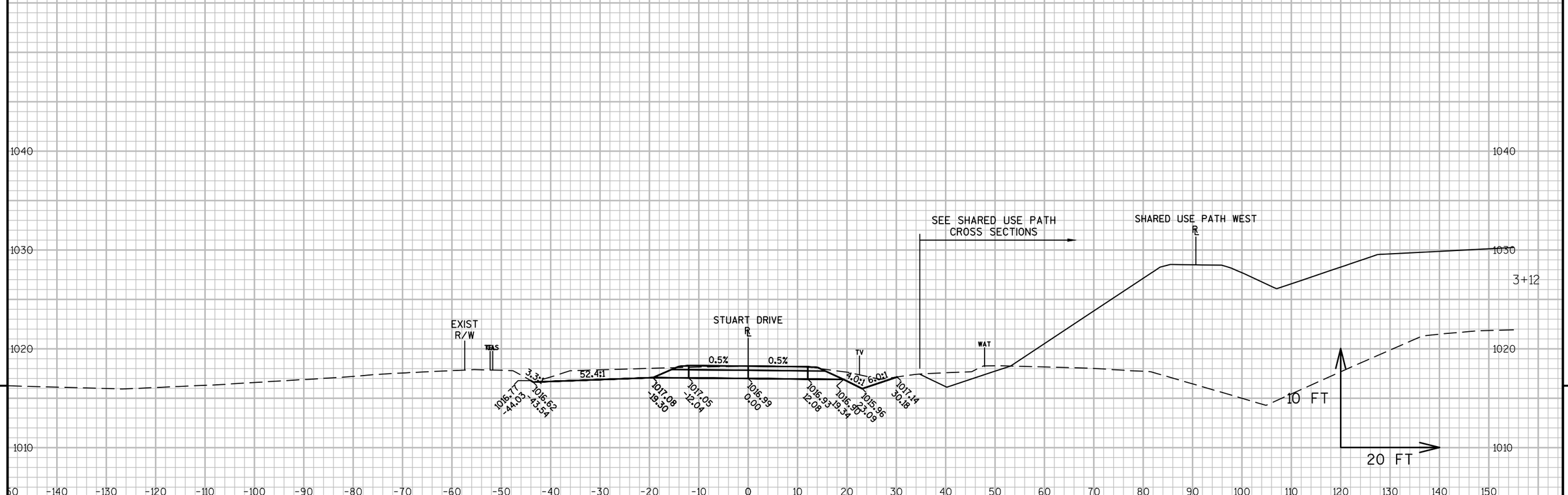
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: STUART DRIVE	SHEET 826	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090215_XS_SD.DWG
LAYOUT NAME - 04

PLOT DATE : 4/29/2015 8:34 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:20_XREF

WISDOT/CADDS SHEET 49



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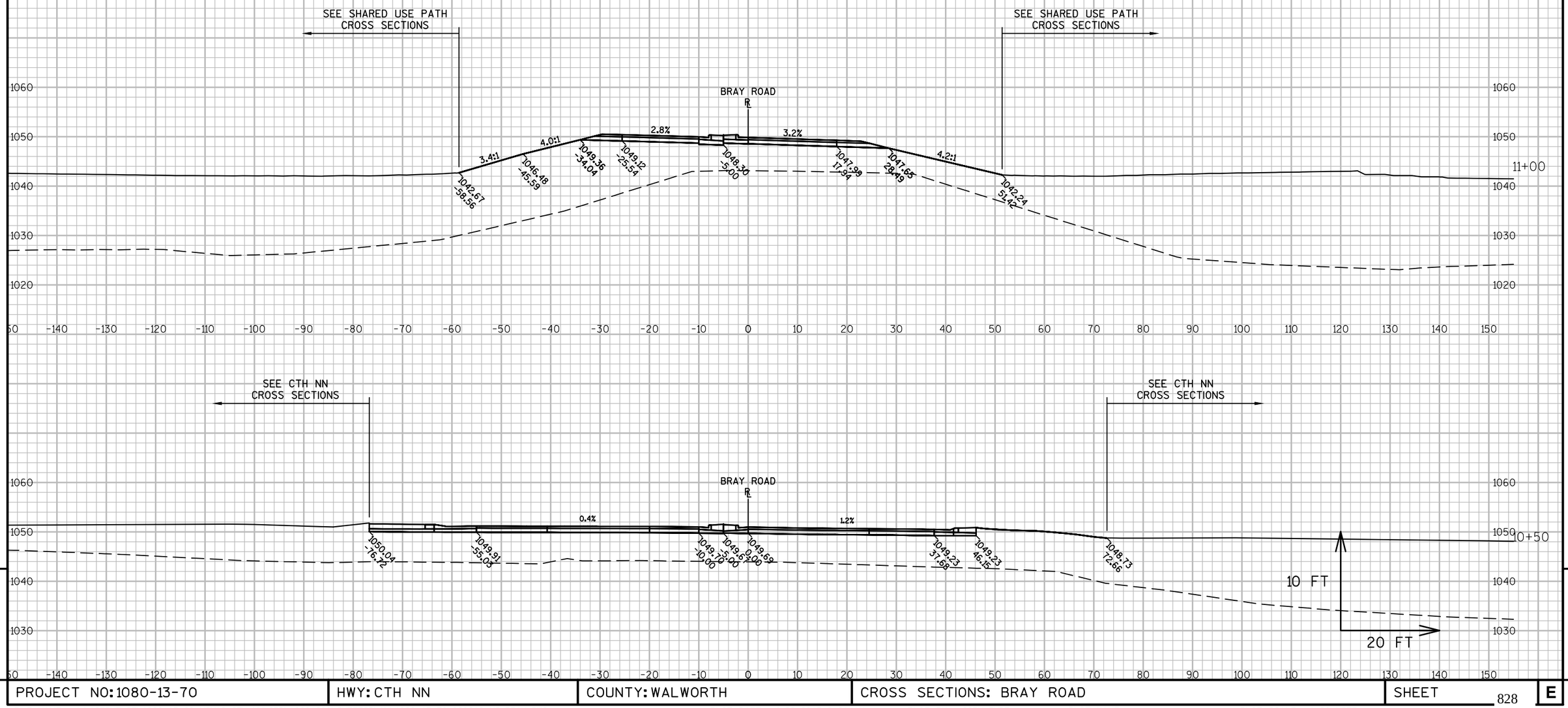
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: STUART DRIVE	SHEET 827	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090215_XS_SD.DWG
LAYOUT NAME - 05

PLOT DATE : 4/29/2015 8:34 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:20_XREF

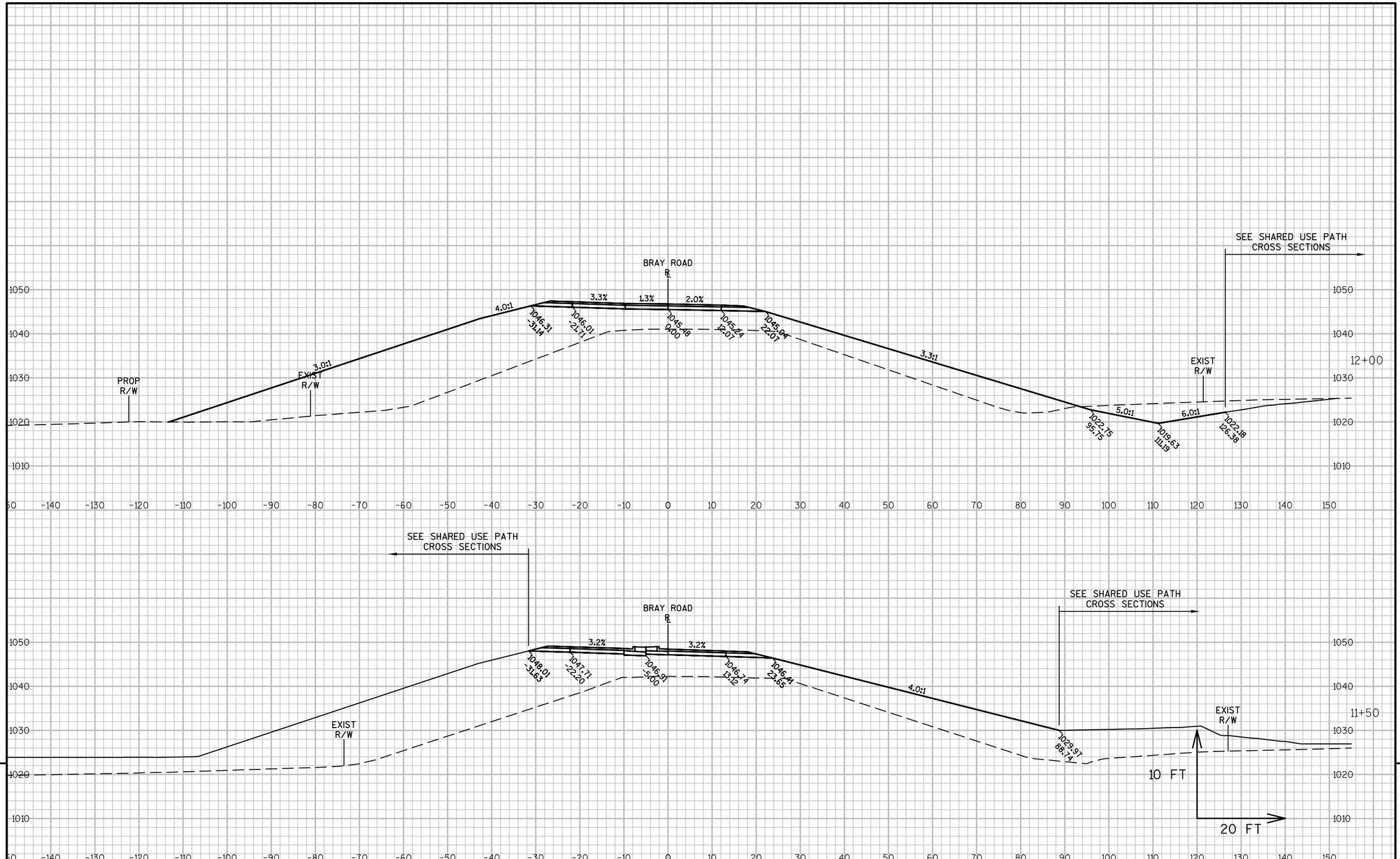


PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: BRAY ROAD	SHEET 828	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090216_XS_BRAY.DWG
LAYOUT NAME - 01

PLOT DATE : 4/29/2015 8:21 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:20_XREF

WISDOT/CADDS SHEET 49



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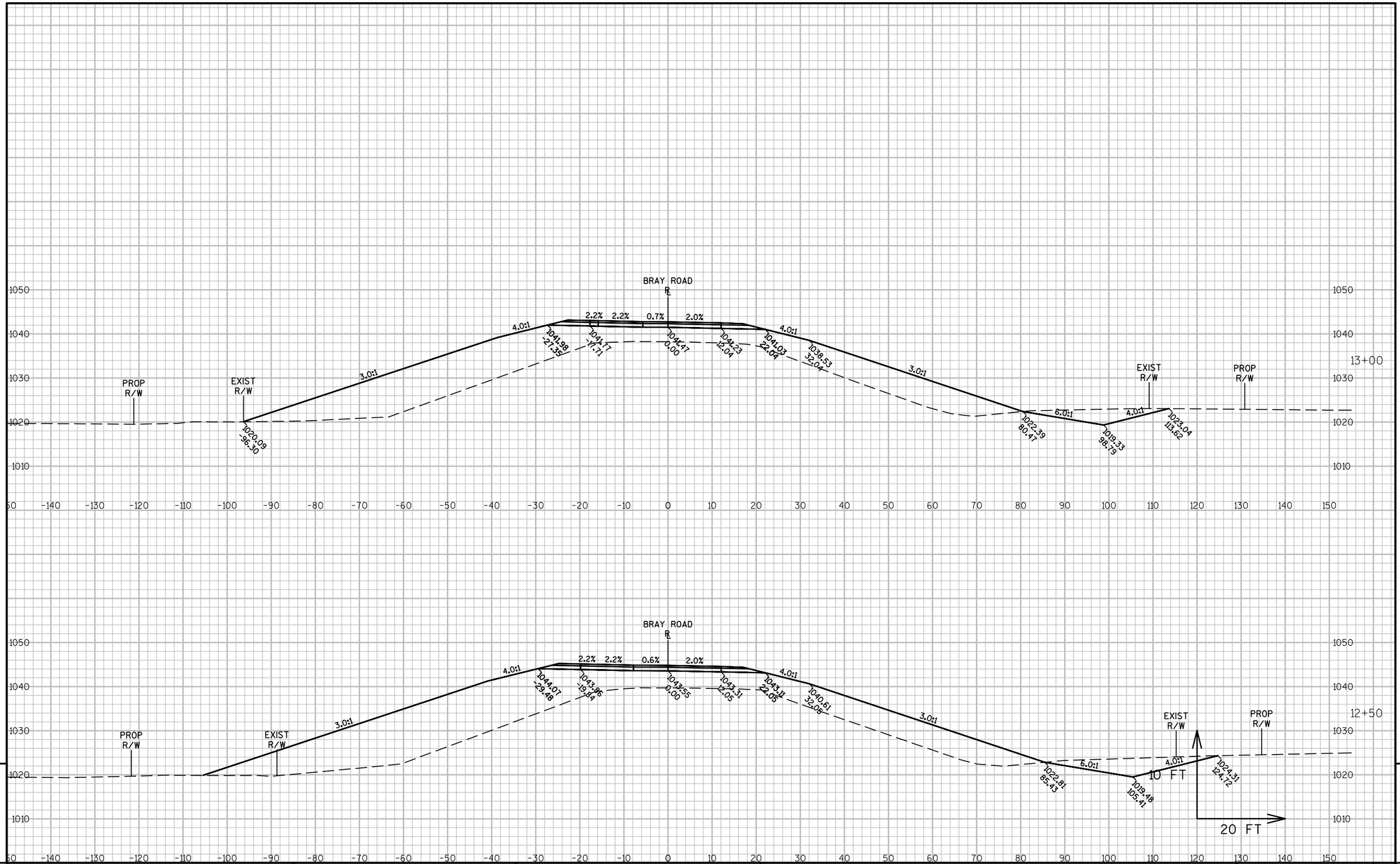
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: BRAY ROAD	SHEET 829	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090216_XS_BRAY.DWG
LAYOUT NAME - 02

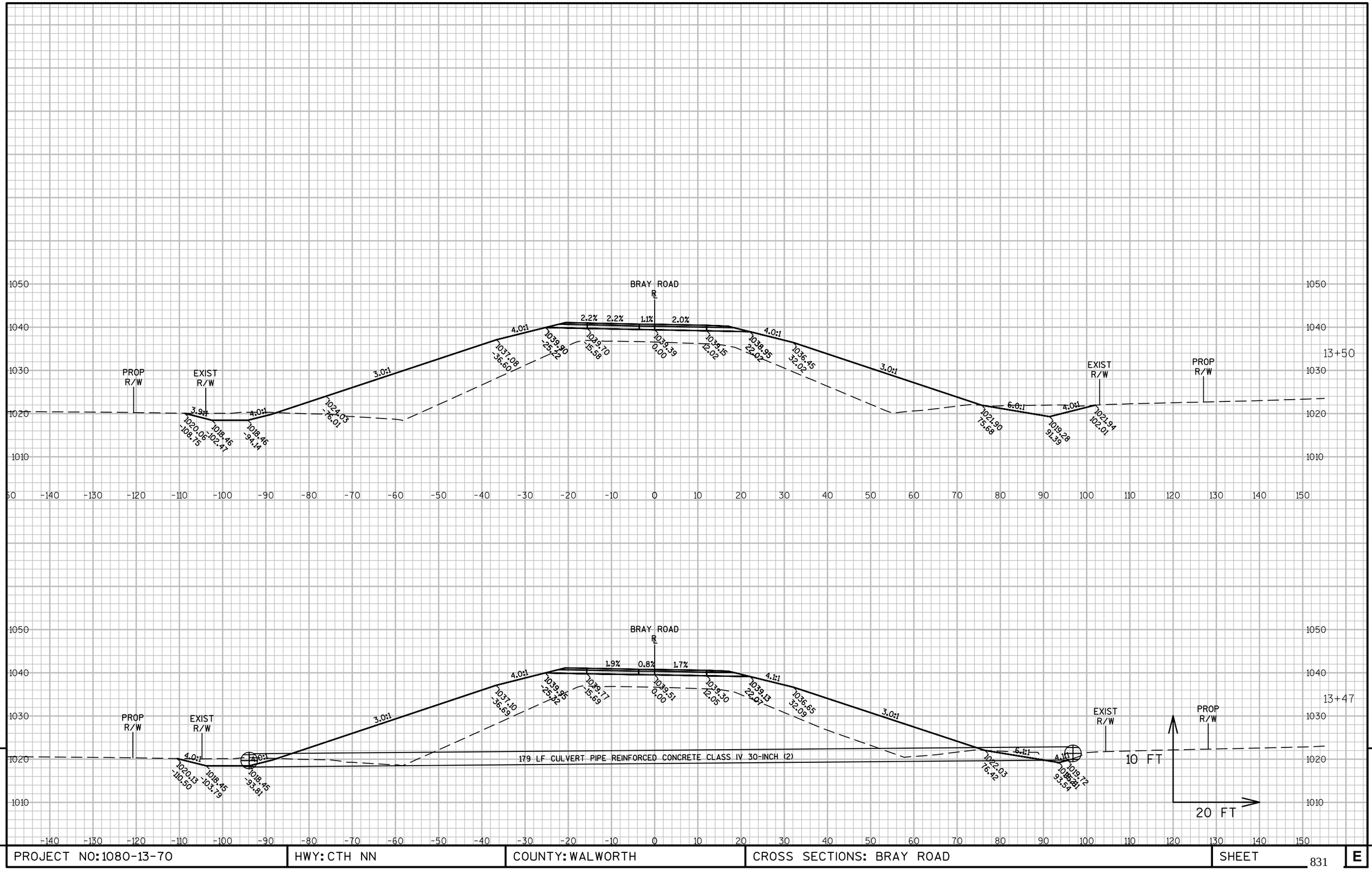
PLOT DATE : 4/29/2015 8:21 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:20_XREF

WISDOT/CADDS SHEET 49



PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: BRAY ROAD	SHEET 830 E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090216_XS_BRAY.DWG
LAYOUT NAME - 03
PLOT DATE : 4/29/2015 8:21 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:20_XREF



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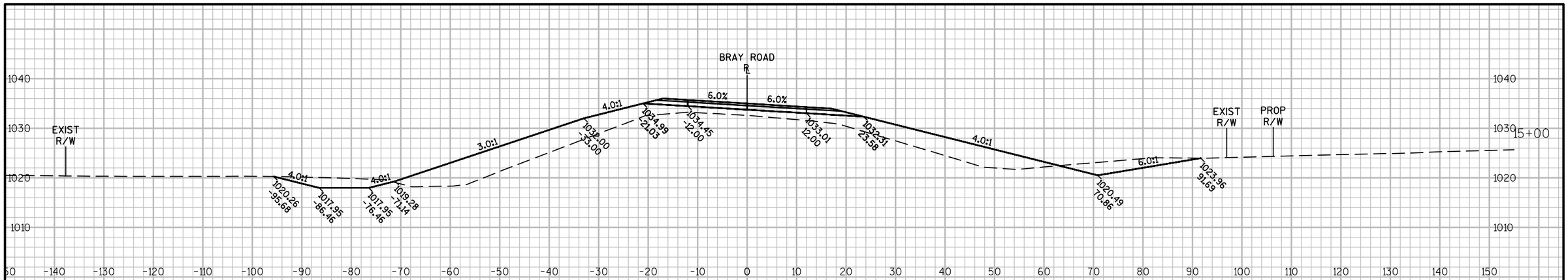
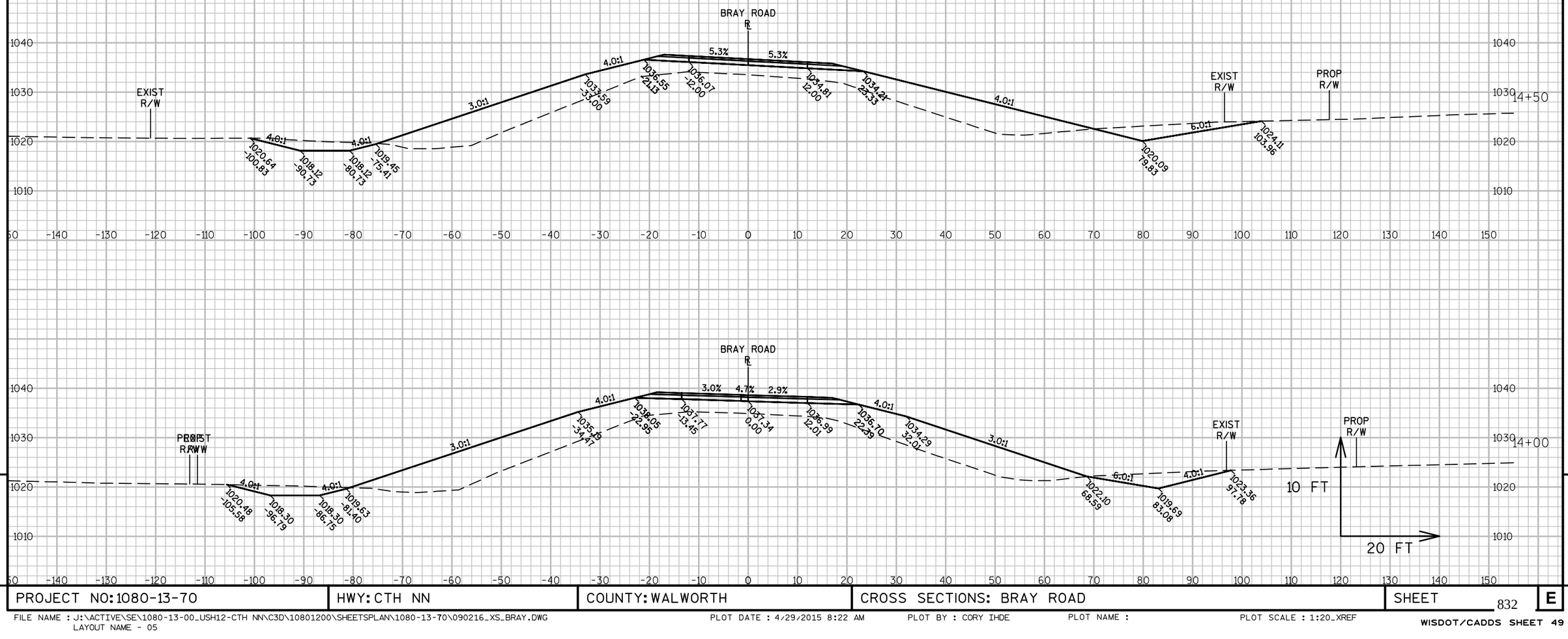
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: BRAY ROAD	SHEET 831	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090216_XS_BRAY.DWG
LAYOUT NAME - 04
PLOT DATE : 4/29/2015 8:22 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:20_XREF
WISDOT/CADDS SHEET 49



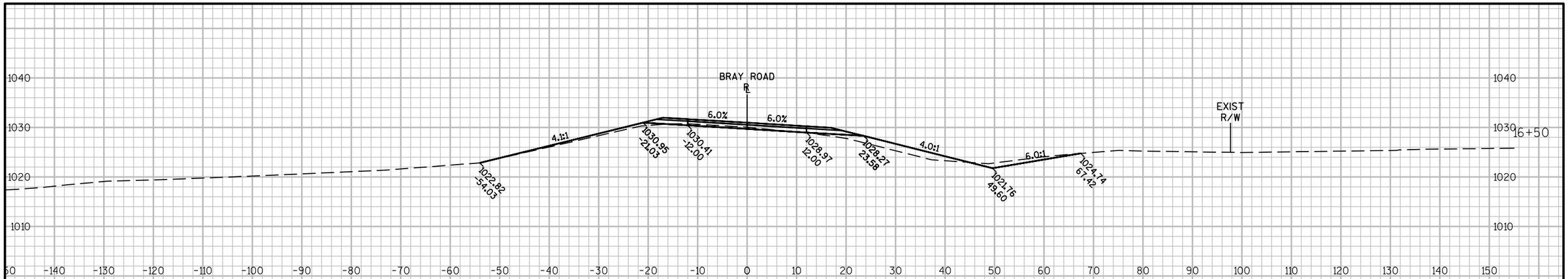


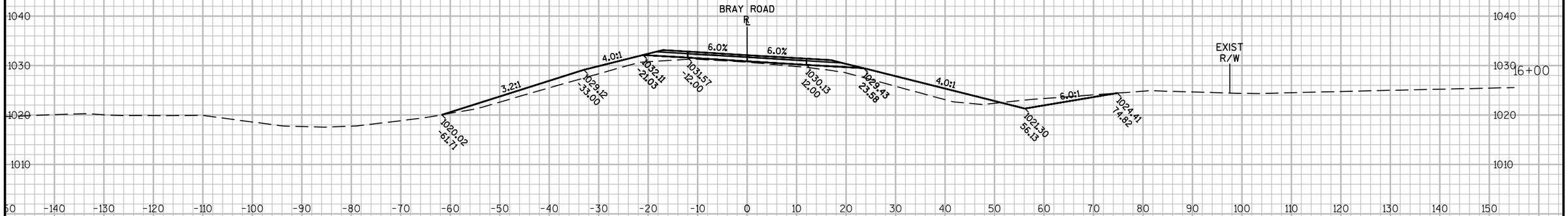
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: BRAY ROAD	SHEET 832 E

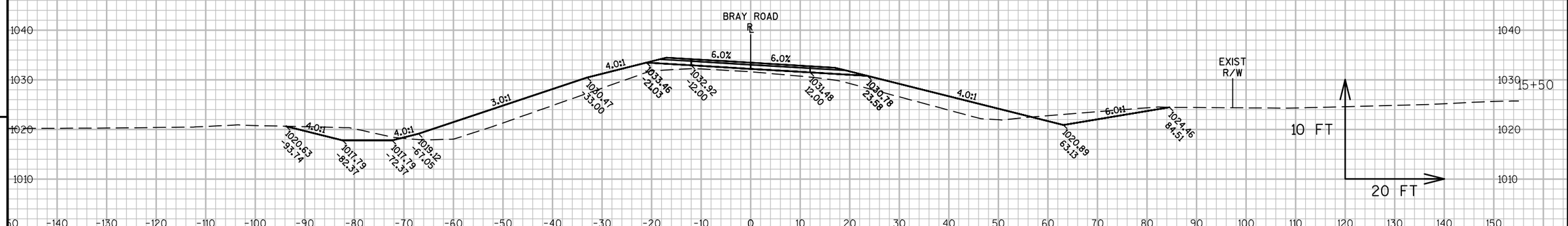
FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090216_XS_BRAY.DWG
LAYOUT NAME - 05

PLOT DATE : 4/29/2015 8:22 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:20_XREF

WISDOT/CADDS SHEET 49







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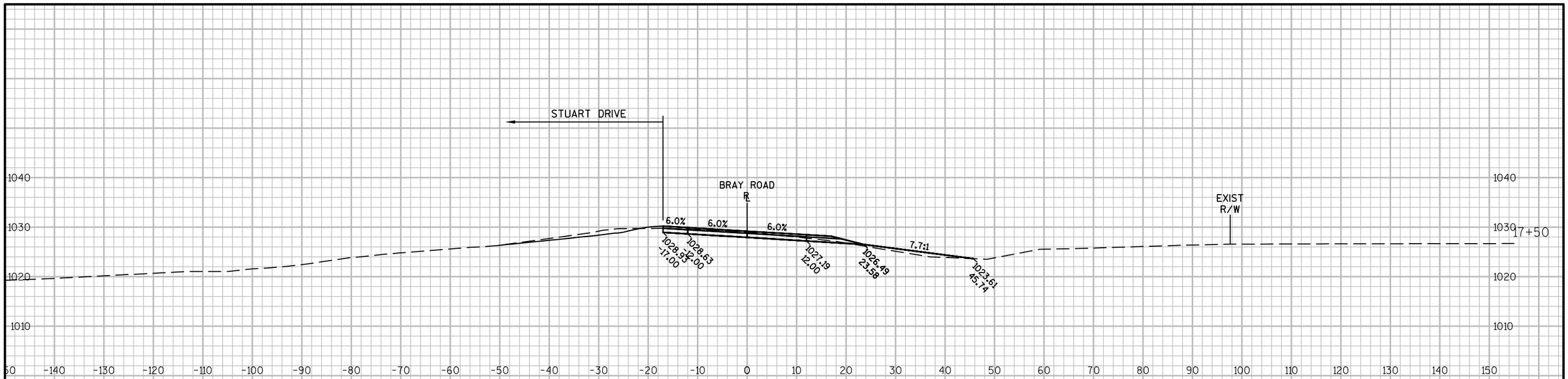
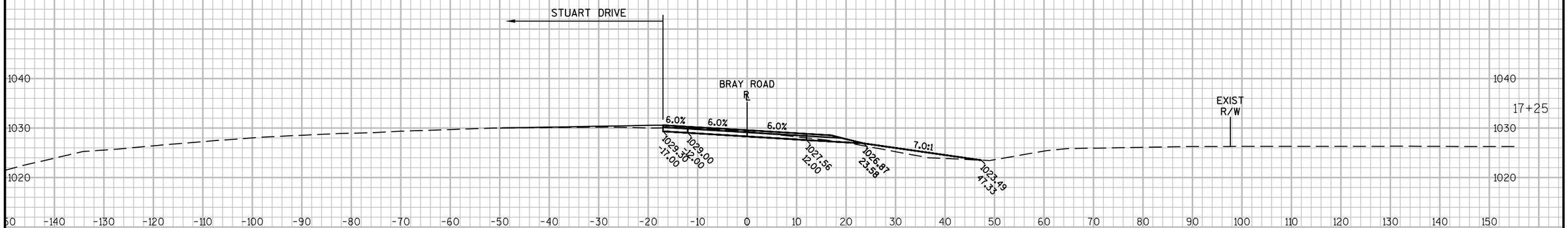
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: BRAY ROAD	SHEET 833	E

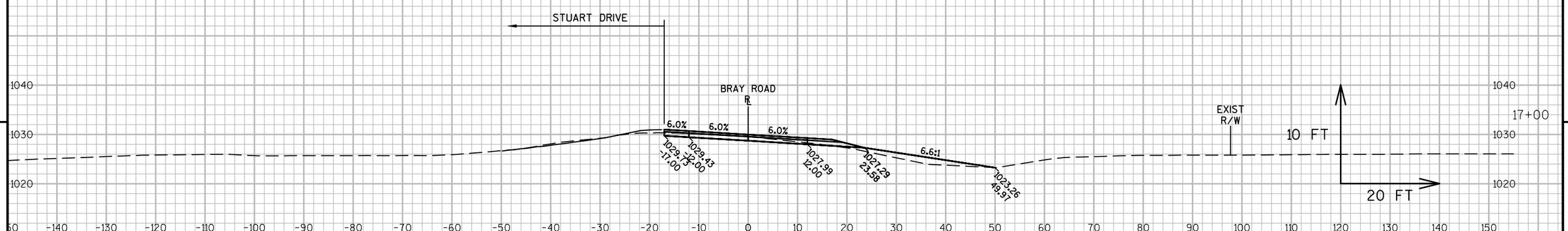
FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090216_XS_BRAY.DWG
LAYOUT NAME - 06

PLOT DATE : 4/29/2015 8:22 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:20_XREF

WISDOT/CADDS SHEET 49







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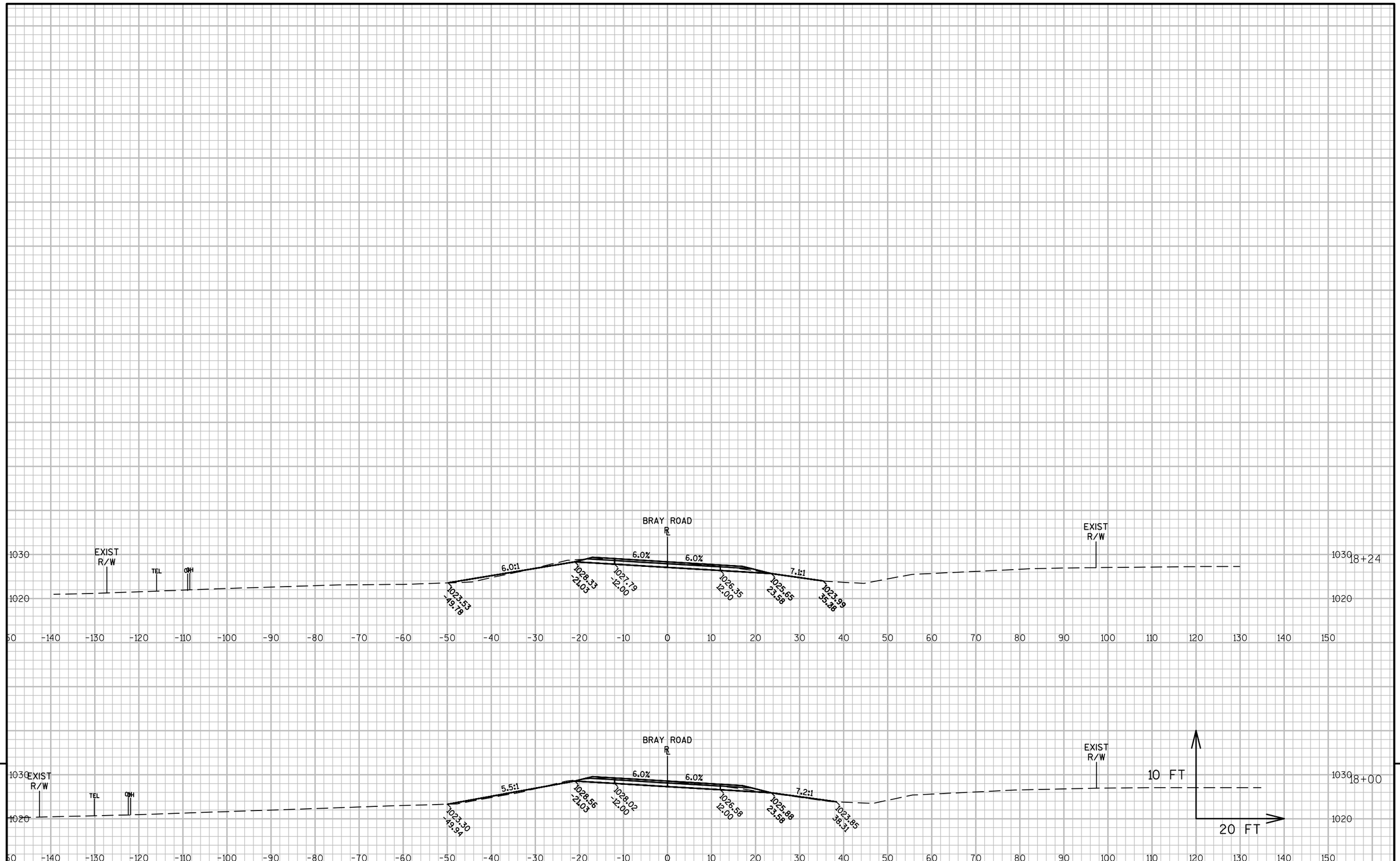
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: BRAY ROAD	SHEET 834	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090216_XS_BRAY.DWG
LAYOUT NAME - 07

PLOT DATE : 4/29/2015 8:22 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:20_XREF

WISDOT/CADDS SHEET 49



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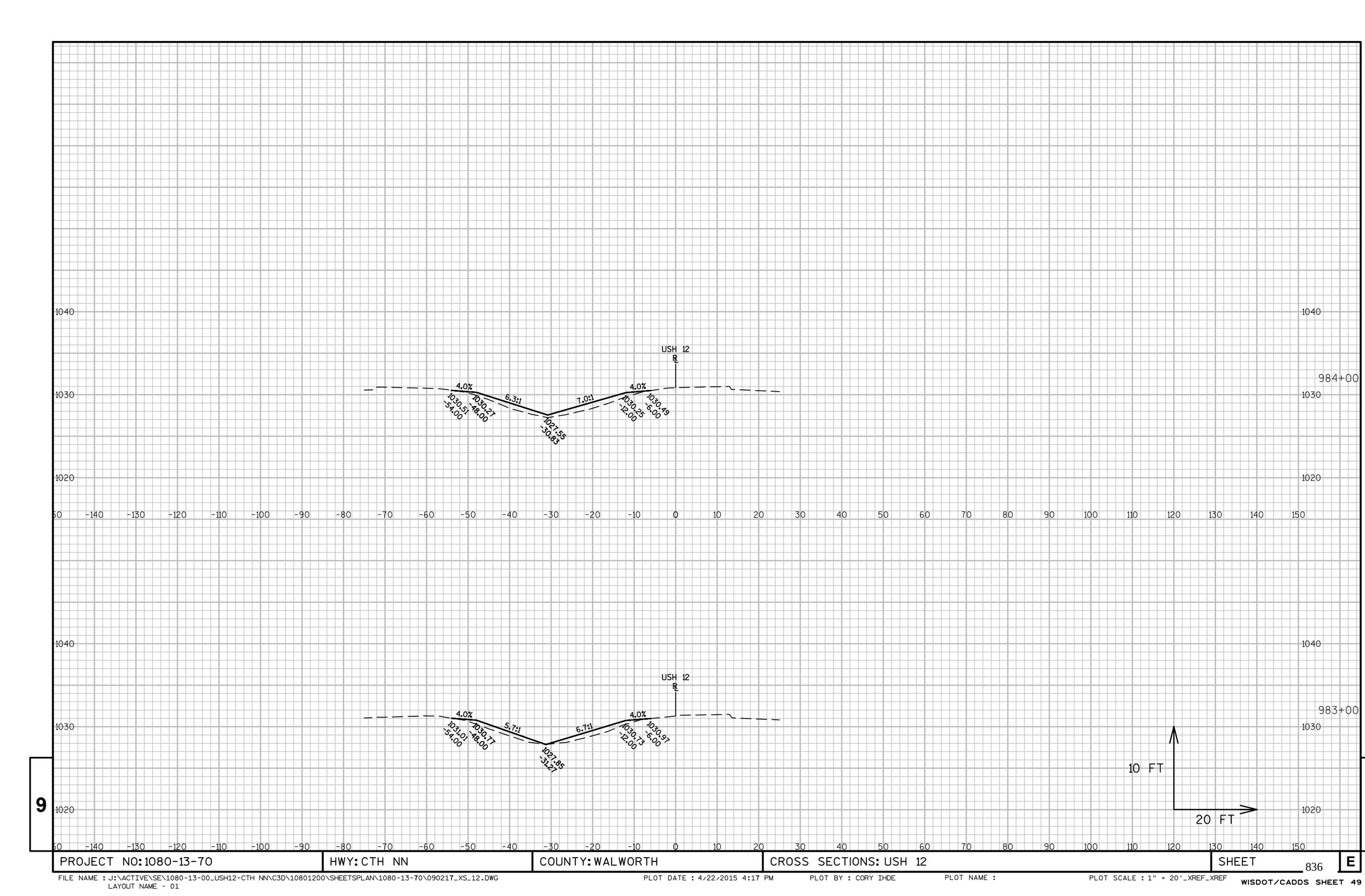
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: BRAY ROAD	SHEET 835	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090216_XS_BRAY.DWG
LAYOUT NAME - 08
PLOT DATE : 4/29/2015 8:22 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1:20_XREF
WISDOT/CADDS SHEET 49



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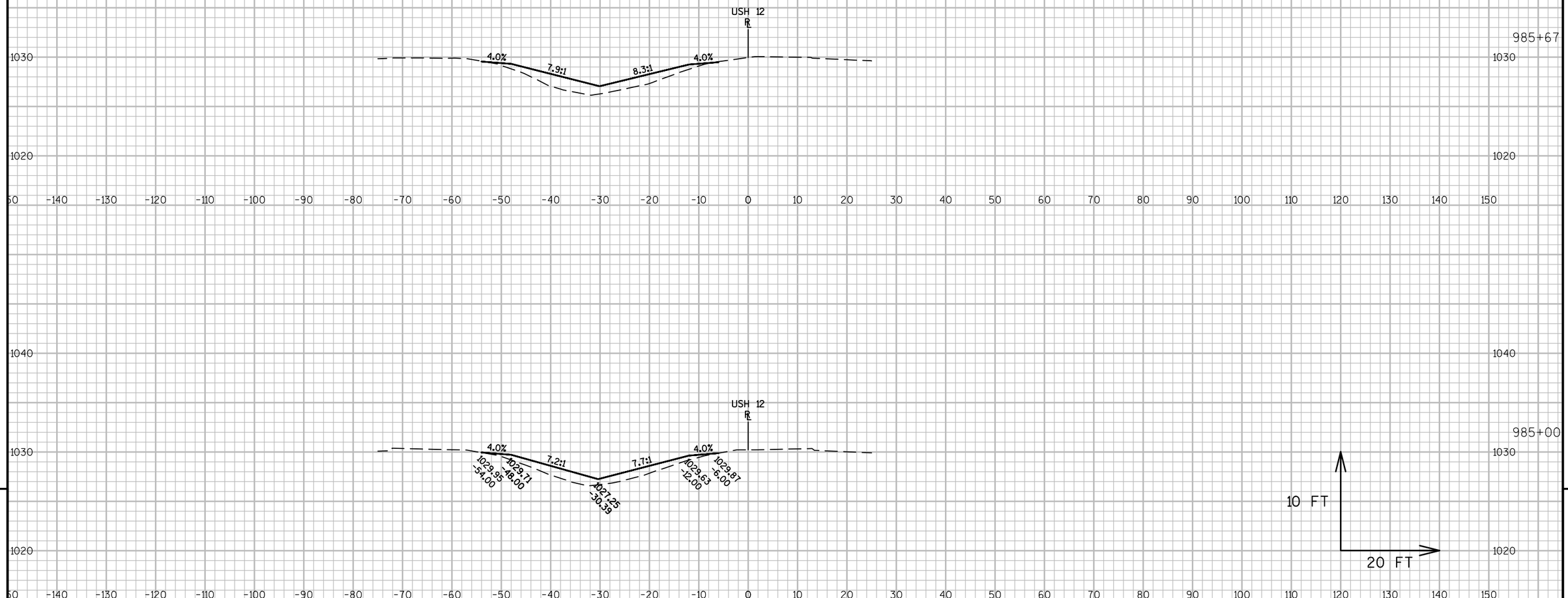
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: USH 12	SHEET 836	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090217_XS_12.DWG
LAYOUT NAME - 01
PLOT DATE : 4/22/2015 4:17 PM
PLOT BY : CORY IHDE
PLOT NAME :
PLOT SCALE : 1" = 20'_XREF_XREF
WISDOT/CADDS SHEET 49



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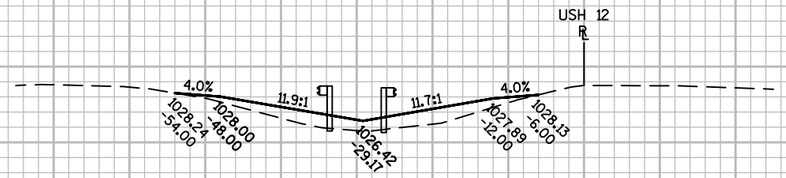
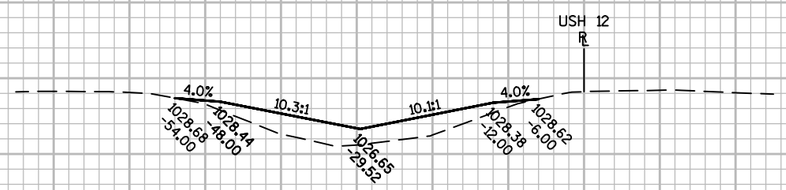
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: USH 12	SHEET 837	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090217_XS_12.DWG
LAYOUT NAME - 02

PLOT DATE : 4/22/2015 4:17 PM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1" = 20'_XREF_XREF

WISDOT/CADDS SHEET 49





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PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: USH 12	SHEET 838	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090217_XS_12.DWG
LAYOUT NAME - 03
PLOT DATE : 4/22/2015 4:17 PM
PLOT BY : CORY IHDE
PLOT NAME :
PLOT SCALE : 1" = 20'_XREF_XREF

9

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PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: USH 12	SHEET 839	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090217_XS_12.DWG
LAYOUT NAME - 04
PLOT DATE : 4/22/2015 4:17 PM
PLOT BY : CORY IHDE
PLOT NAME :
PLOT SCALE : 1" = 20'_XREF_XREF
WISDOT/CADDS SHEET 49

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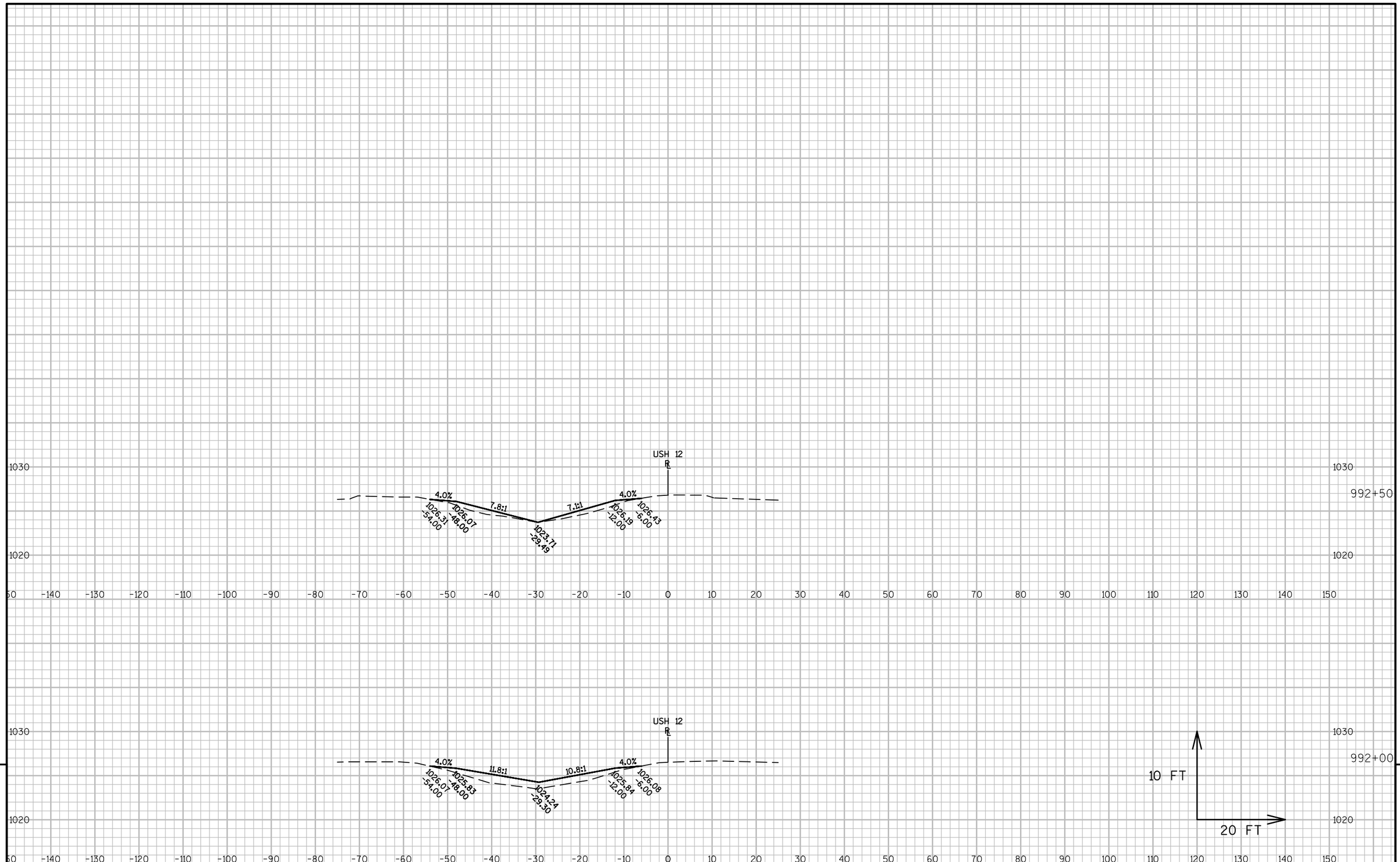
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: USH 12	SHEET 840	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090217_XS_12.DWG
LAYOUT NAME - 05
PLOT DATE : 4/22/2015 4:18 PM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1" = 20'_XREF_XREF



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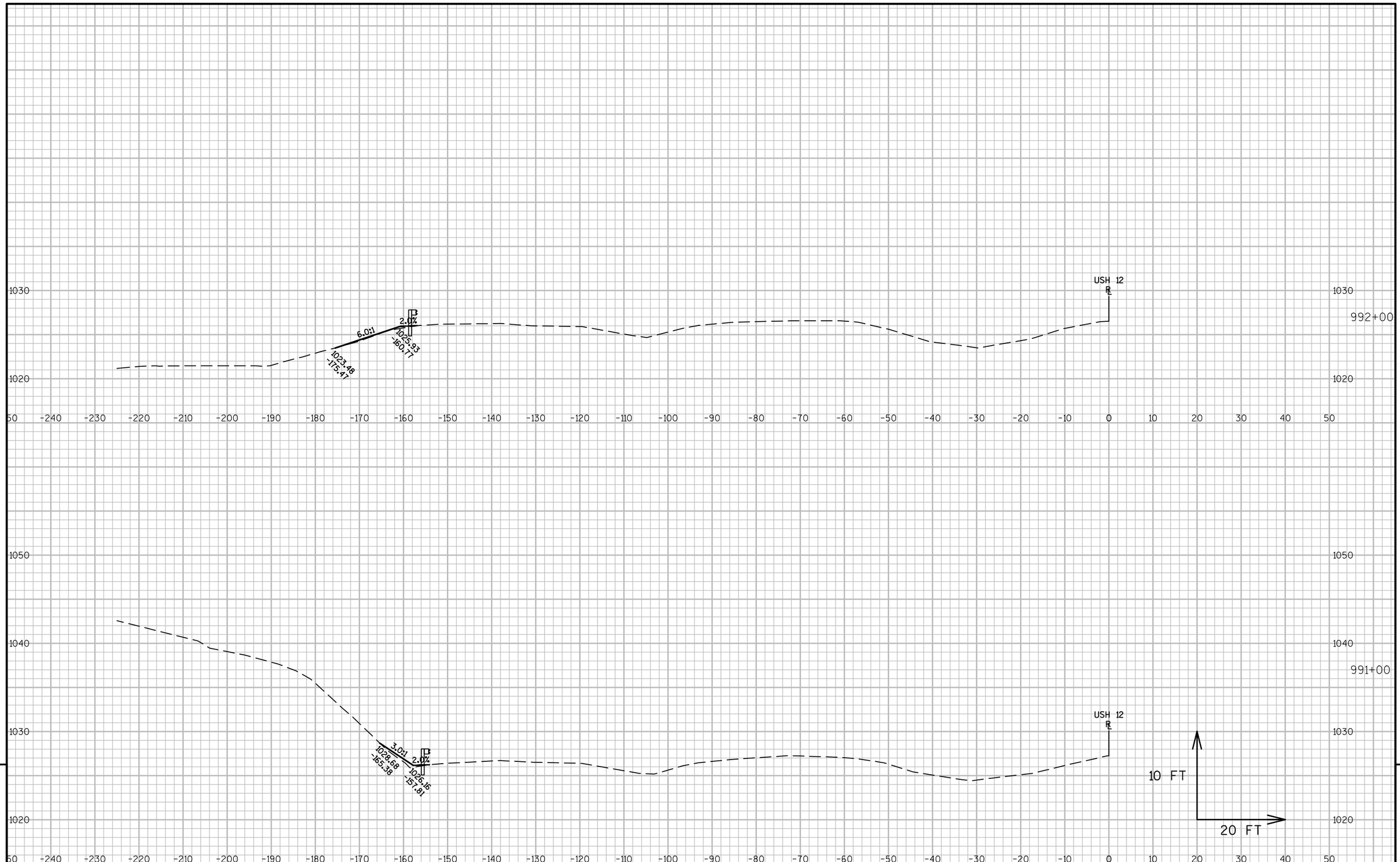
PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: USH 12	SHEET 841	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090217_XS_12.DWG
LAYOUT NAME - 06
PLOT DATE : 4/22/2015 4:18 PM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1" = 20'_XREF_XREF
WISDOT/CADDS SHEET 49

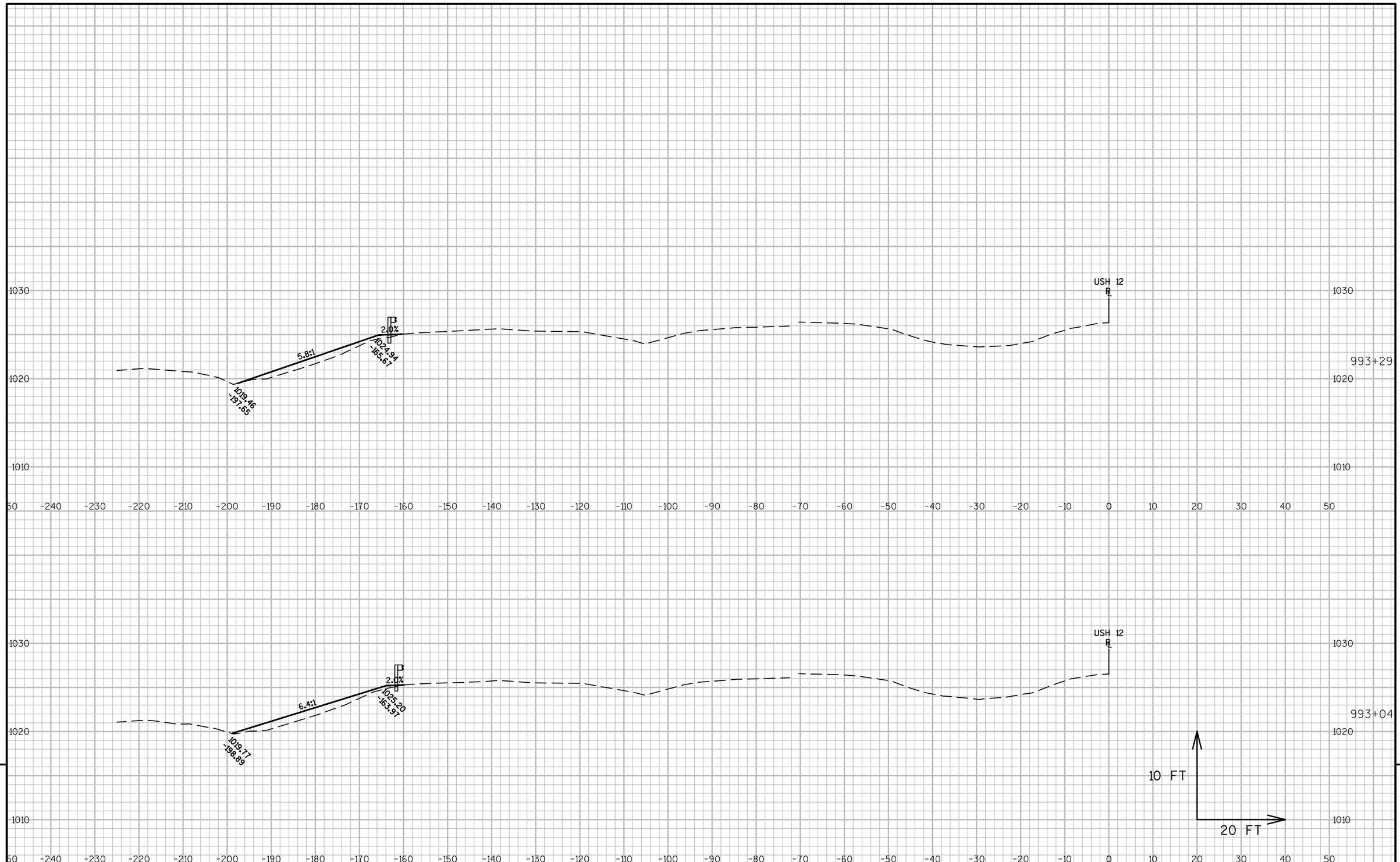


PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: USH 12	SHEET 842	E

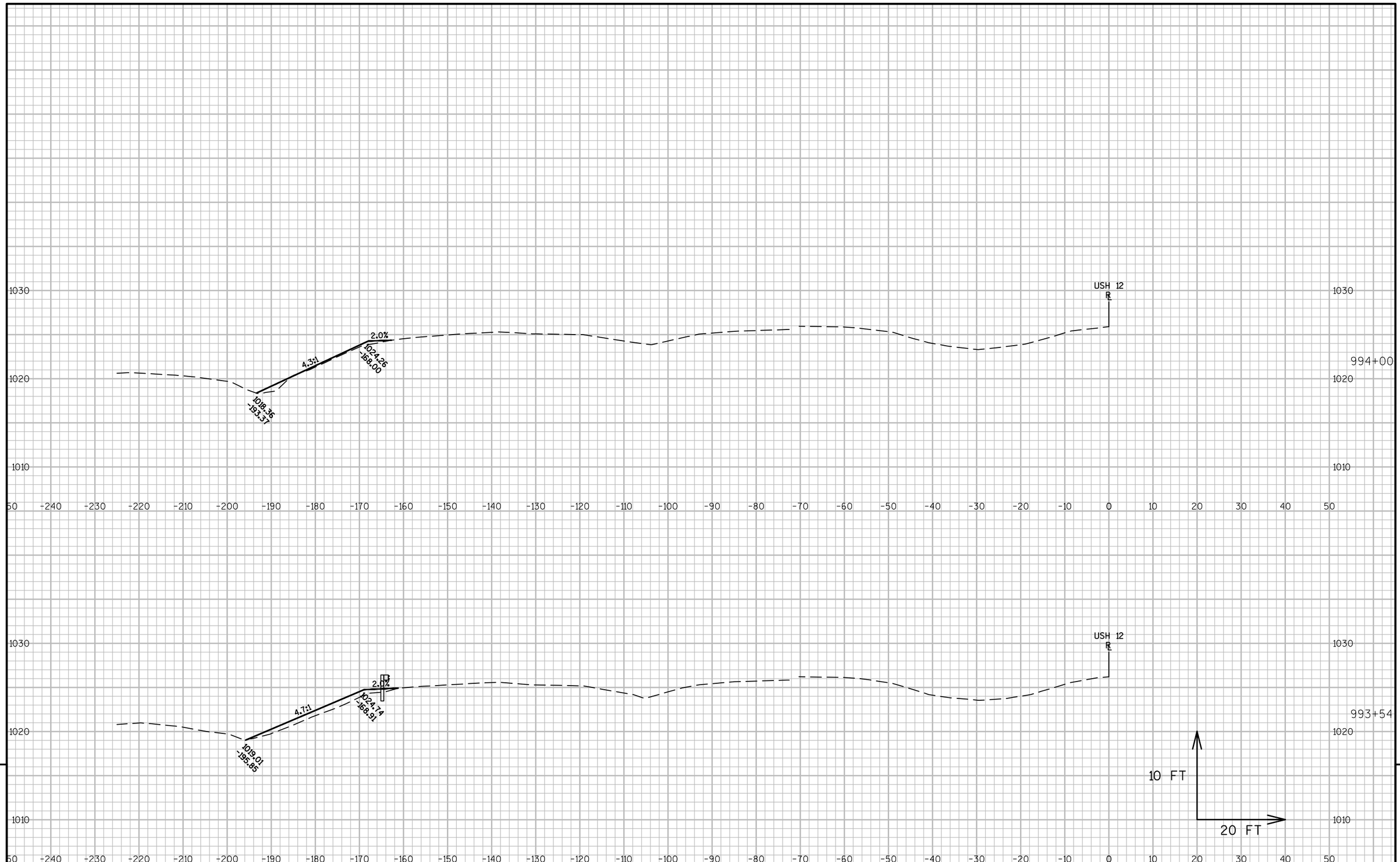
FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090217_XS_12.DWG
LAYOUT NAME - 07

PLOT DATE : 4/22/2015 4:18 PM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1" = 20'_XREF_XREF

WISDOT/CADDS SHEET 49



PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: USH 12	SHEET 843	E



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PROJECT NO: 1080-13-70	HWY: CTH NN	COUNTY: WALWORTH	CROSS SECTIONS: USH 12	SHEET 844	E

FILE NAME : J:\ACTIVE\SE\1080-13-00_USH12-CTH NN\C3D\10801200\SHEETSPLAN\1080-13-70\090217_XS_12.DWG
LAYOUT NAME - 09

PLOT DATE : 4/22/2015 4:18 PM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1" = 20'_XREF_XREF

Notes

Wisconsin Department of Transportation

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