MARCH 2018

Section No. Section No.

Section No. Section No.

Section No.

Section No.

Section No.

Section No.

TOTAL SHEETS = 430

Estimate of Quantities

Right of Way Plat

Plan and Profile

Cross Sections

Miscellaneous Quantities

Standard Detail Drawings

Computer Earthwork Data

STATE OF WISCONSIN ORDER OF SHEETS Section No. DEPARTMENT OF TRANSPORTATION Section No. Typical Sections and Details

PLAN OF PROPOSED IMPROVEMENT

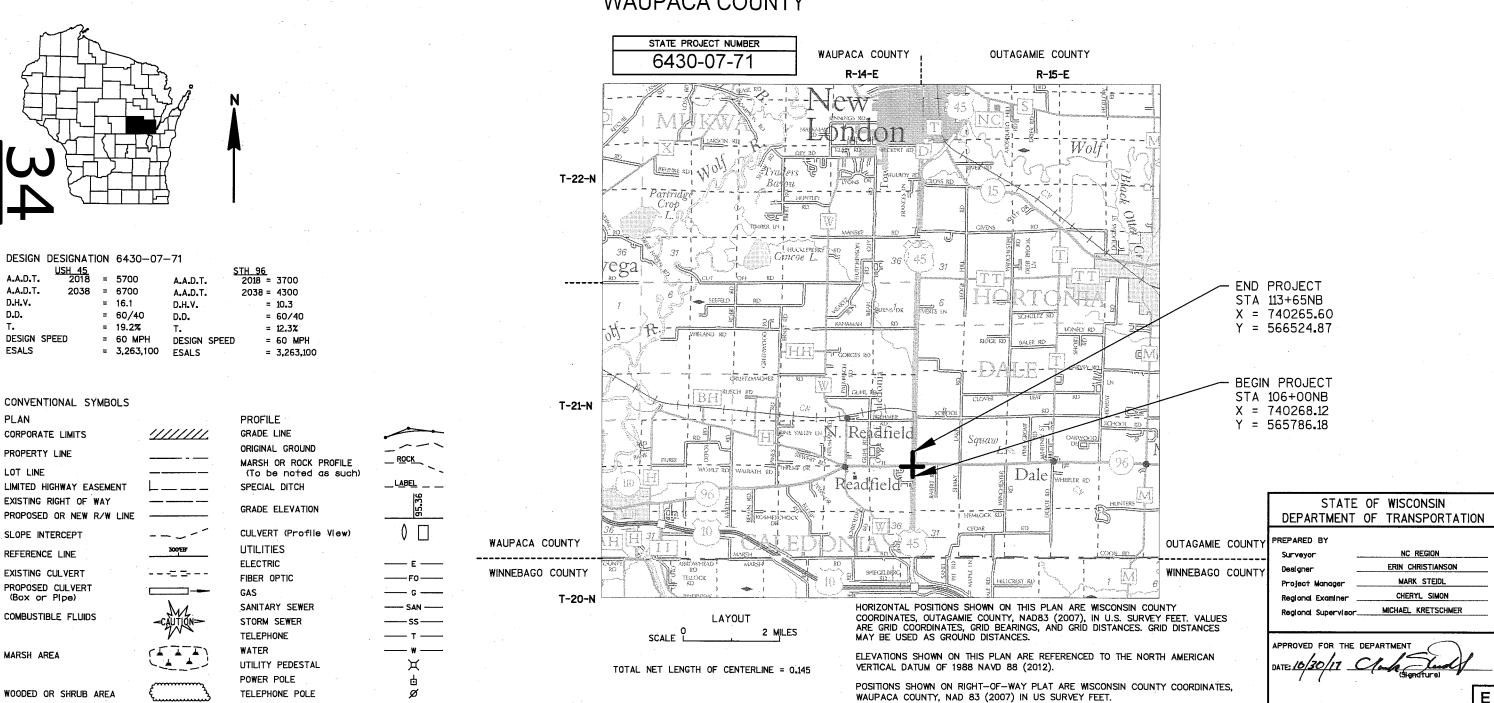
FEDERAL PROJECT STATE PROJECT **PROJECT** CONTRACT WISC2018161 6430-07-71

WINCHESTER - NEW LONDON

STH 96 & USH 45 INTERSECTION

USH 45

WAUPACA COUNTY



2

2

GENERAL NOTES

CONTRACTOR WILL BE RESPONSIBLE FOR RESHAPING AND SEEDING ANY PREVIOUSLY GRASSED AREAS WHICH ARE DISTURBED BY HIS OPERATION OUTSIDE OF THE NORMAL CONSTRUCTION LIMITS.

SECTIONS AS SHOWN ON THE CROSS SECTION SHEETS INCLUDE THE THICKNESS OF TOPSOIL.

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

PURSUANT TO CHAPTER 59 OF THE WISCONSIN STATUTES, THE CONTRACTOR SHALL CAREFULLY MAKE A SEARCH FOR EVIDENCE OF A LANDMARK IN ALL AREAS WHERE SUCH A LANDMARK MAY EXIST.

THE CONTRACTOR IS TO WORK WITH UTMOST CARE AND PROTECT ALL SURVEY MARKERS. REMOVAL OF ANY SURVEY MARKER IS TO BE WITH THE APPROVAL OF THE ENGINEER.

DNR LIAISON

WISCONSIN DNR
MARC HERSHFIELD
WDNR EA LIAISON
473 GRIFFITH DRIVE
WISCONSIN RAPIDS, WI 54494
PHONE: (715) 421-7867

E-MAIL: Marc.Hershfield@wisconsin.gov



UTILITIES

CENTURY LINK - COMMUNICATIONS LINE

TIM KROEZE 19 W FOND DU LAC ST RIPON WI 54971 PHONE: (920) 748-8491 CELL: (920) 219-0112

E-MAIL: Tim.Kroeze@Centurylink.com

NET LEC LLC - COMMUNICATIONS LINE

DENNIS LAFAVE 1700 INDUSTRIAL DR GREEN BAY WI 54302 CELL: (920) 619-9774 E-MAIL: dlafave@mi-tech.us

WE ENERGIES - GAS

HEATHER DEUTH 800 S LYNNDALE DR APPLETON WI 54912 PHONE: (920) 242-5633 CELL: (920) 242-5633

WE ENERGIES - ELECTRICITY

SHANE BRUHNKE 800 S LYNNDALE DR APPLETON WI 54914 PHONE: (920) 380-3450 CELL: (920) 450-5648

Send all WE Energies Correspondence to:

WE ENERGIES - GAS &/or ELECTRIC DAN SANDE 333 W EVERETT ST, A299 MILWAUKEE WI 53203 PHONE: (414) 221-4578 CELL: (414) 550-4993

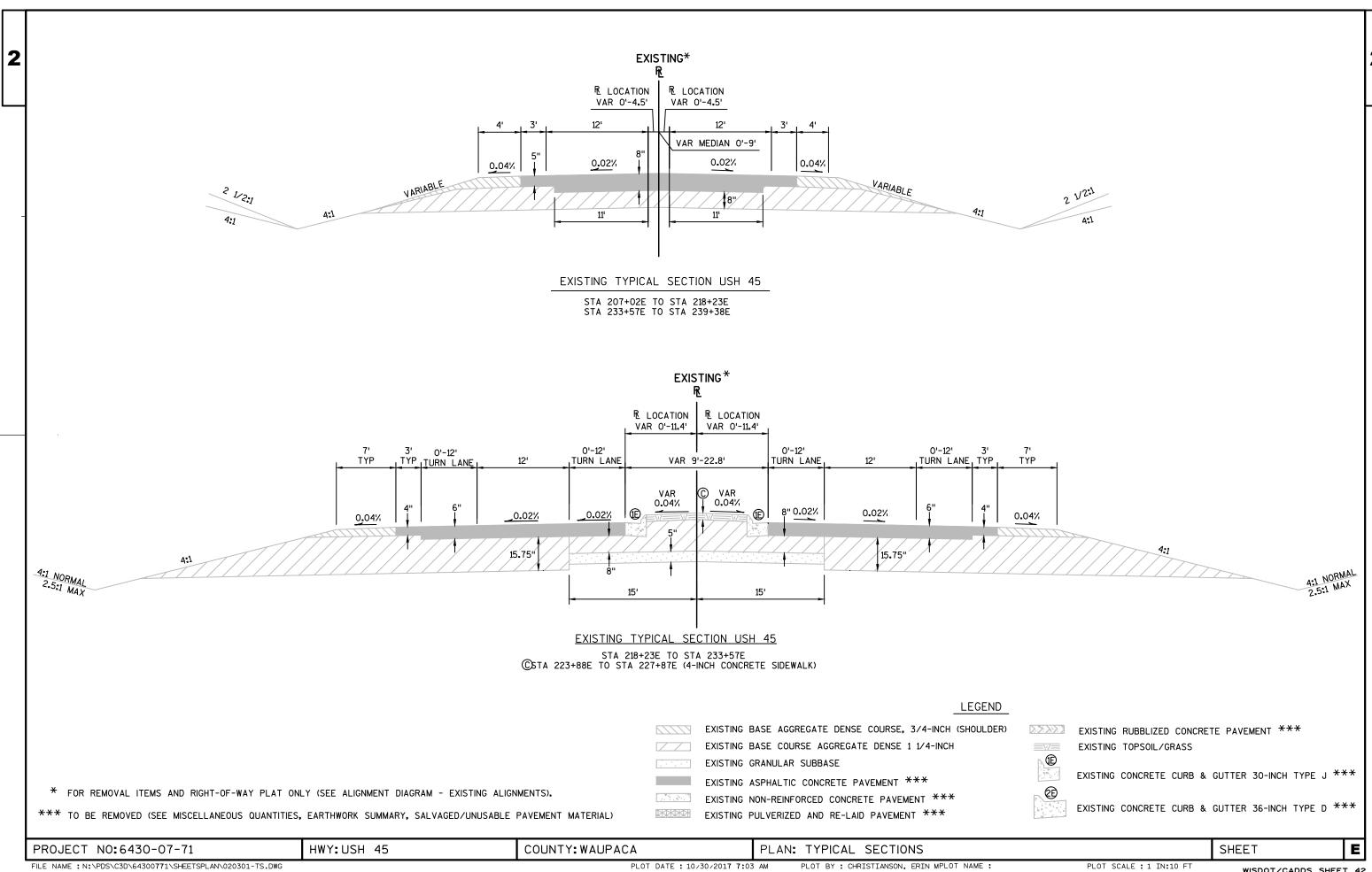
E-MAIL: dan.sande@we-energies.com

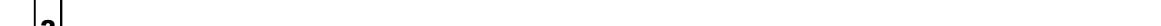
PROJECT NO: 6430-07-71 HWY: USH 45 COUNTY: WAUPACA GENERAL NOTES SHEET: I

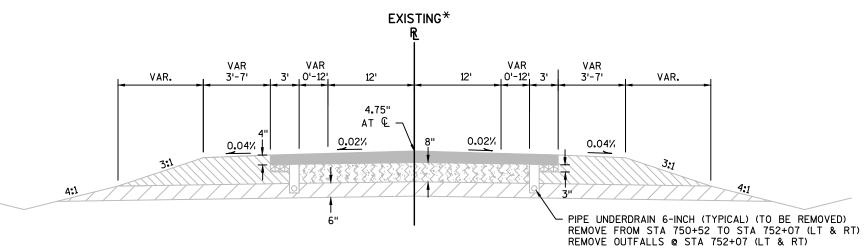
FILE NAME : <u>N\pds\design_id\6430-07-00,71 ush 45\quantities\020101-gn.pptx</u> PLOT NAME : <u>020101-gn.pptx</u> PLOT SCALE : 1:1



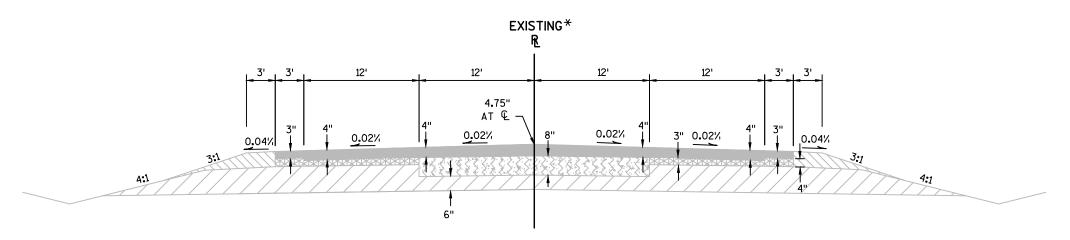








EXISTING TYPICAL SECTION STH 96 STA 750+52EX TO STA 753+35EX



EXISTING TYPICAL SECTION STH 96 STA 753+35EX TO STA 754+31EX

LEGEND

EXISTING BASE AGGREGATE DENSE COURSE, 3/4-INCH (SHOULDER) EXISTING BASE COURSE AGGREGATE DENSE 1 1/4-INCH

EXISTING GRANULAR SUBBASE

EXISTING ASPHALTIC CONCRETE PAVEMENT ***

EXISTING NON-REINFORCED CONCRETE PAVEMENT *** EXISTING PULVERIZED AND RE-LAID PAVEMENT ***

EXISTING RUBBLIZED CONCRETE PAVEMENT *** EXISTING TOPSOIL/GRASS



EXISTING CONCRETE CURB & GUTTER 30-INCH TYPE J ***

EXISTING CONCRETE CURB & GUTTER 36-INCH TYPE D ***

SHEET

* FOR REMOVAL ITEMS AND RIGHT-OF-WAY PLAT ONLY (SEE ALIGNMENT DIAGRAM - EXISTING ALIGNMENTS).

*** TO BE REMOVED (SEE MISCELLANEOUS QUANTITIES, EARTHWORK SUMMARY, SALVAGED/UNUSABLE PAVEMENT MATERIAL)

HWY: USH 45 COUNTY: WAUPACA PLAN: TYPICAL SECTIONS

PLOT BY: CHRISTIANSON, ERIN MPLOT NAME:

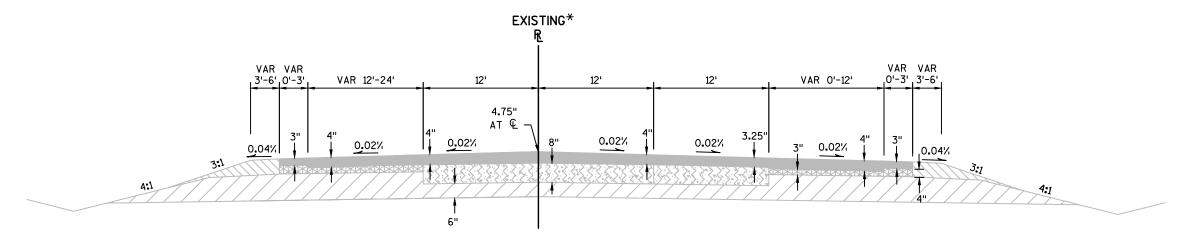
PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 42

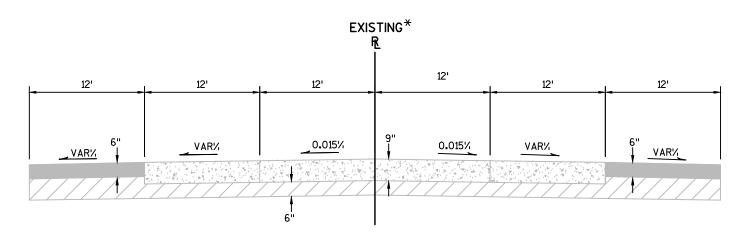
E

PROJECT NO:6430-07-71





EXISTING TYPICAL SECTION STH 96 STA 754+31EX TO STA 756+27EX

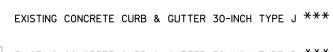


EXISTING TYPICAL SECTION STH 96 STA 756+27EX TO STA 757+71EX

EXISTING BASE AGGREGATE DENSE COURSE, 3/4-INCH (SHOULDER) EXISTING BASE COURSE AGGREGATE DENSE 1 1/4-INCH EXISTING GRANULAR SUBBASE EXISTING ASPHALTIC CONCRETE PAVEMENT *** EXISTING NON-REINFORCED CONCRETE PAVEMENT *** EXISTING PULVERIZED AND RE-LAID PAVEMENT ***

LEGEND

EXISTING RUBBLIZED CONCRETE PAVEMENT *** EXISTING TOPSOIL/GRASS



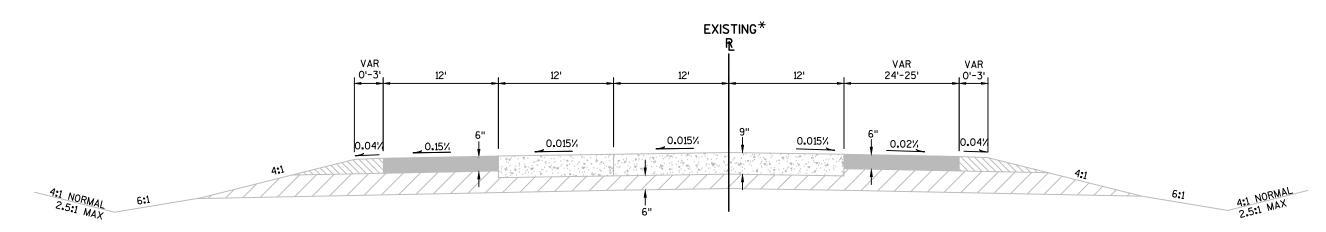
EXISTING CONCRETE CURB & GUTTER 36-INCH TYPE D ***

PROJECT NO:6430-07-71 E HWY: USH 45 COUNTY: WAUPACA PLAN: TYPICAL SECTIONS SHEET PLOT BY: CHRISTIANSON, ERIN MPLOT NAME:

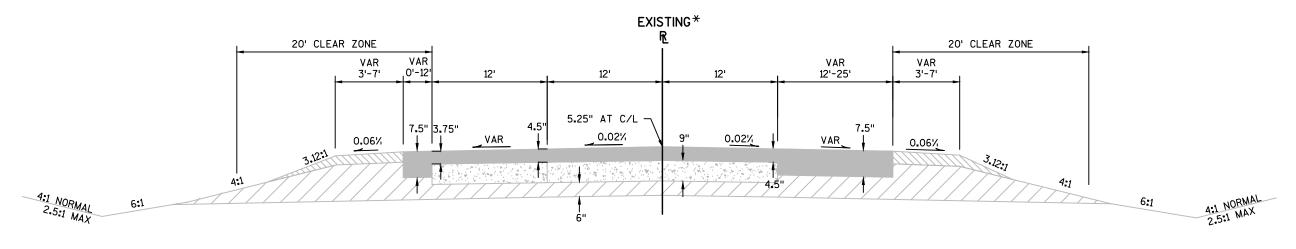
* FOR REMOVAL ITEMS AND RIGHT-OF-WAY PLAT ONLY (SEE ALIGNMENT DIAGRAM - EXISTING ALIGNMENTS).

*** TO BE REMOVED (SEE MISCELLANEOUS QUANTITIES, EARTHWORK SUMMARY, SALVAGED/UNUSABLE PAVEMENT MATERIAL)

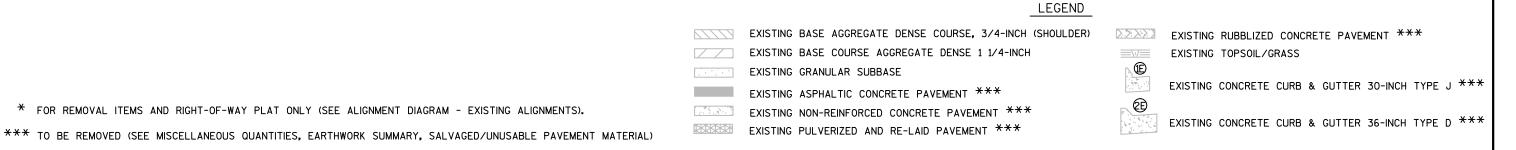




EXISTING TYPICAL SECTION STH 96 STA 757+71EX TO STA 758+03EX



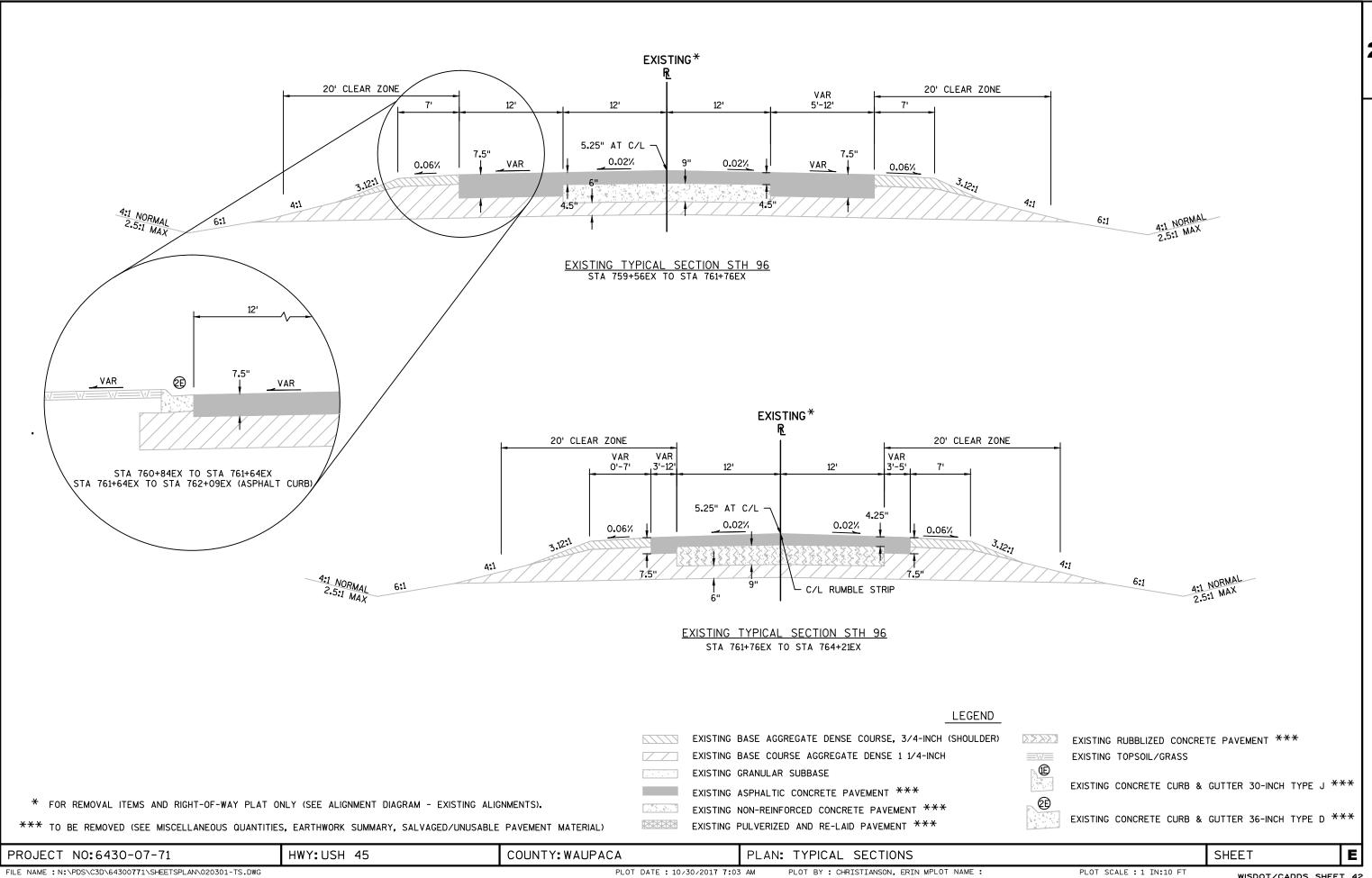
EXISTING TYPICAL SECTION STH 96 STA 758+03EX TO STA 759+56EX



PROJECT NO:6430-07-71 COUNTY: WAUPACA E HWY: USH 45 PLAN: TYPICAL SECTIONS SHEET PLOT BY: CHRISTIANSON, ERIN MPLOT NAME: FILE NAME : N:\PDS\C3D\64300771\SHEETSPLAN\020301-TS.DWG PLOT SCALE : 1 IN:10 FT

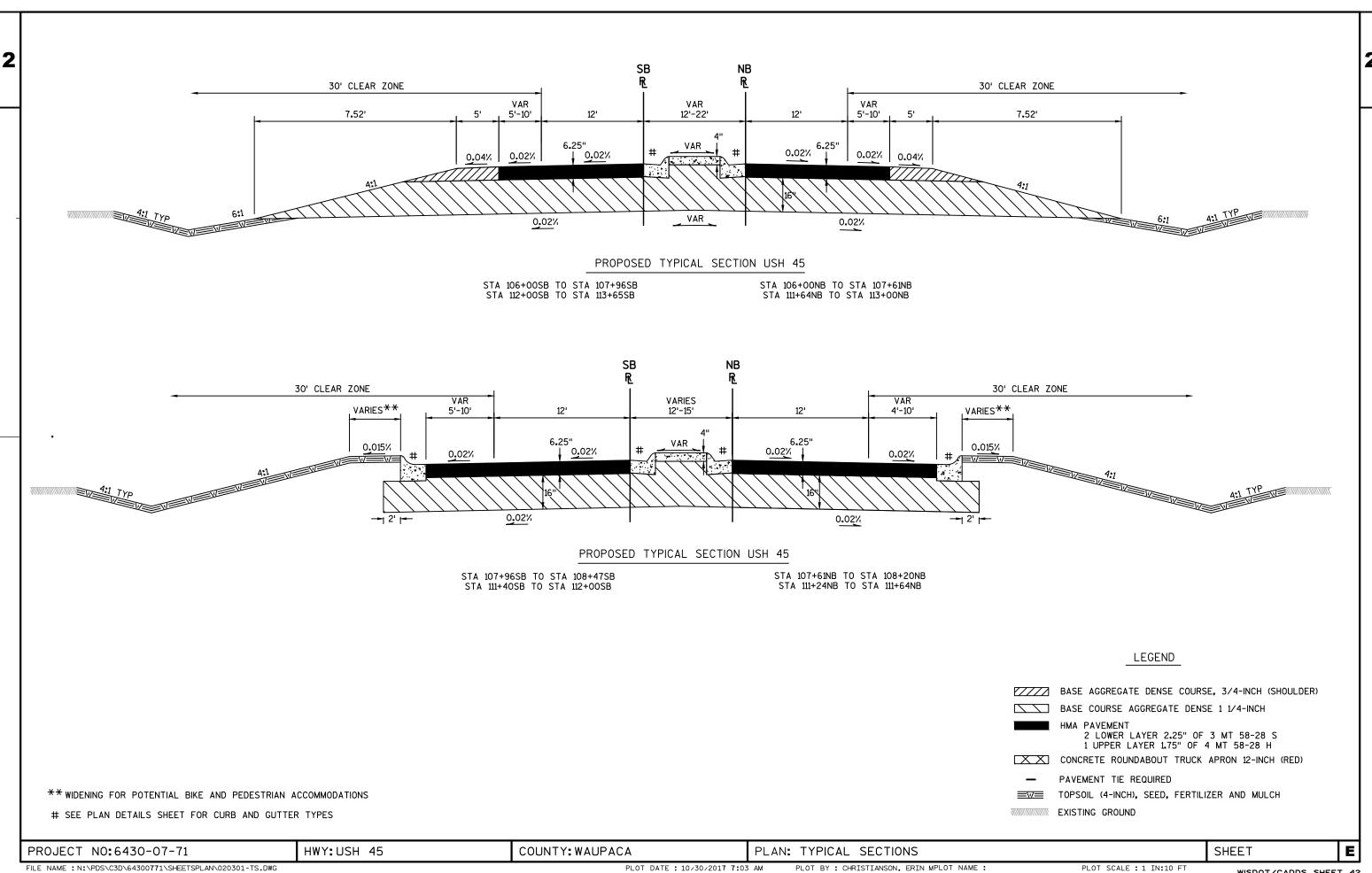
LAYOUT NAME - 04

PLOT DATE: 10/30/2017 7:03 AM

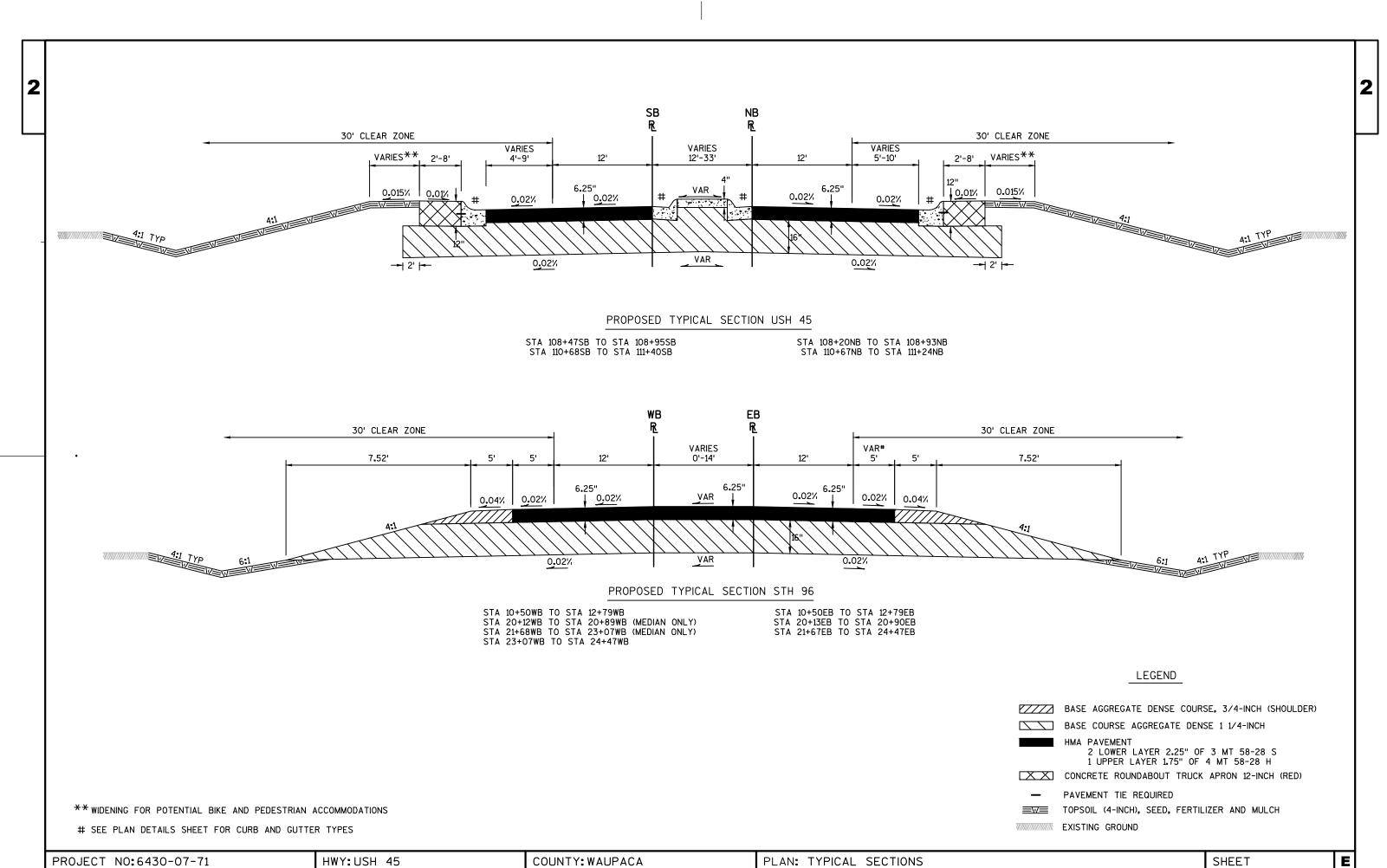


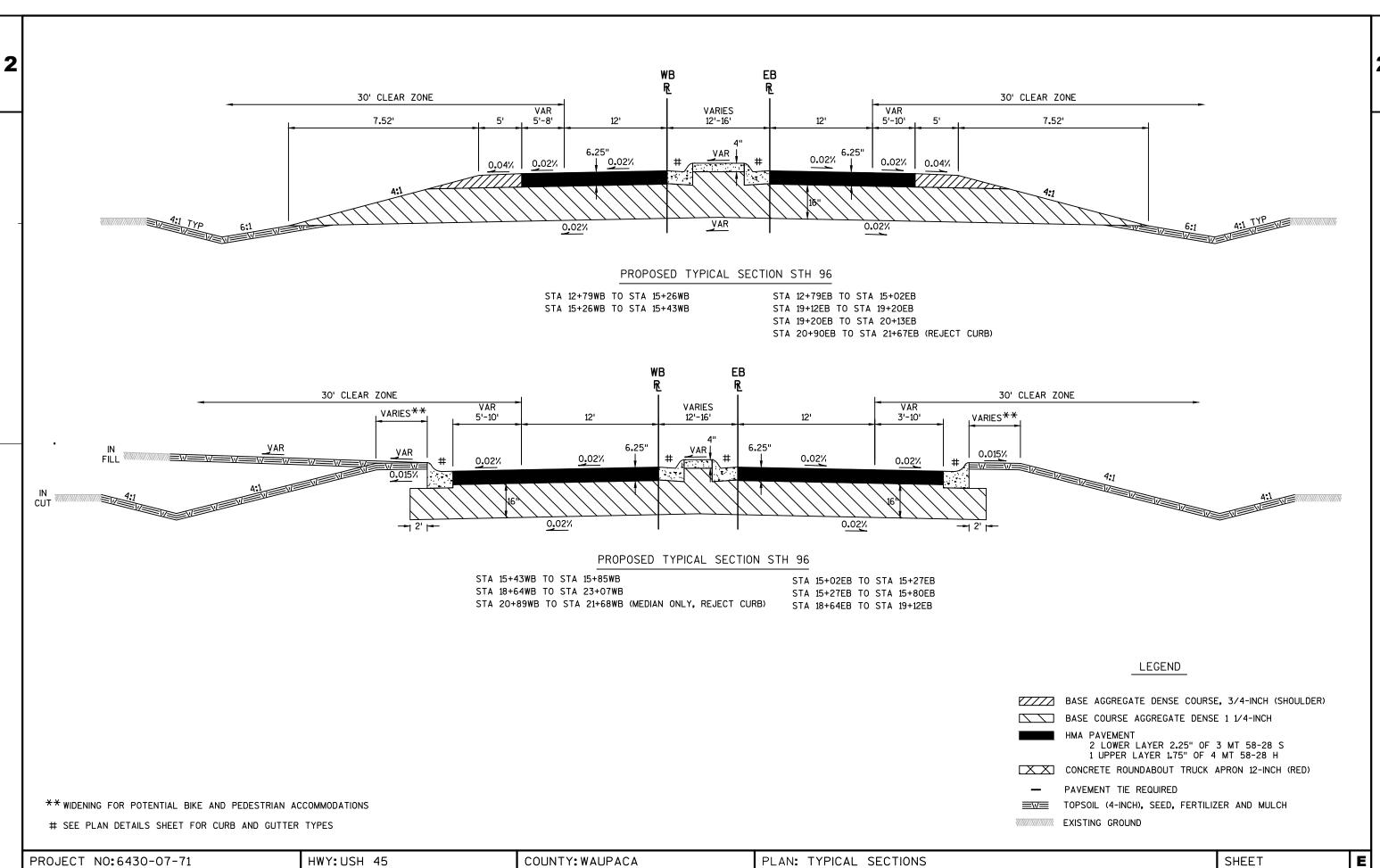
LAYOUT NAME - 05

PLOT DATE: 10/30/2017 7:03 AM



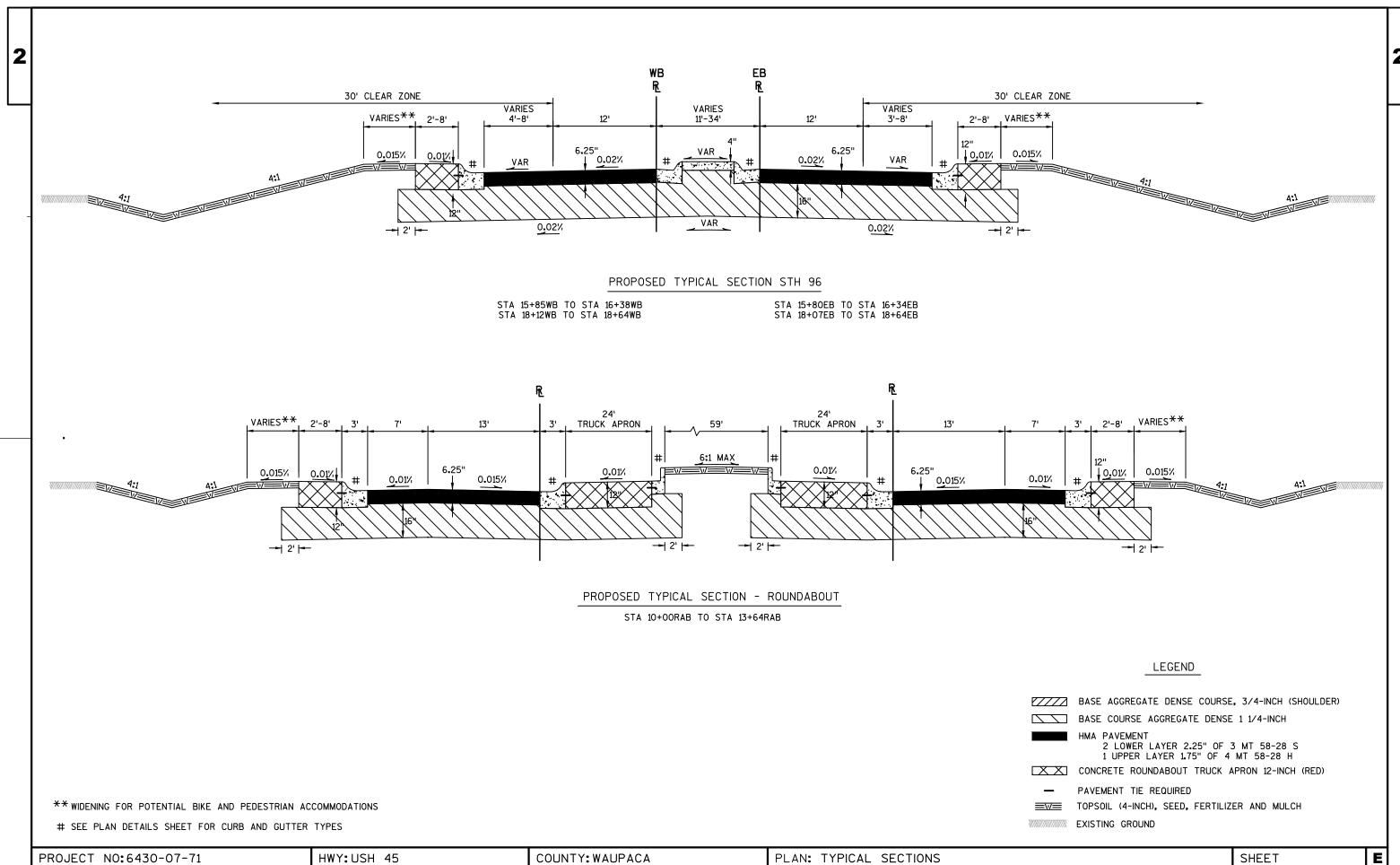
WISDOT/CADDS SHEET 42 LAYOUT NAME - 06





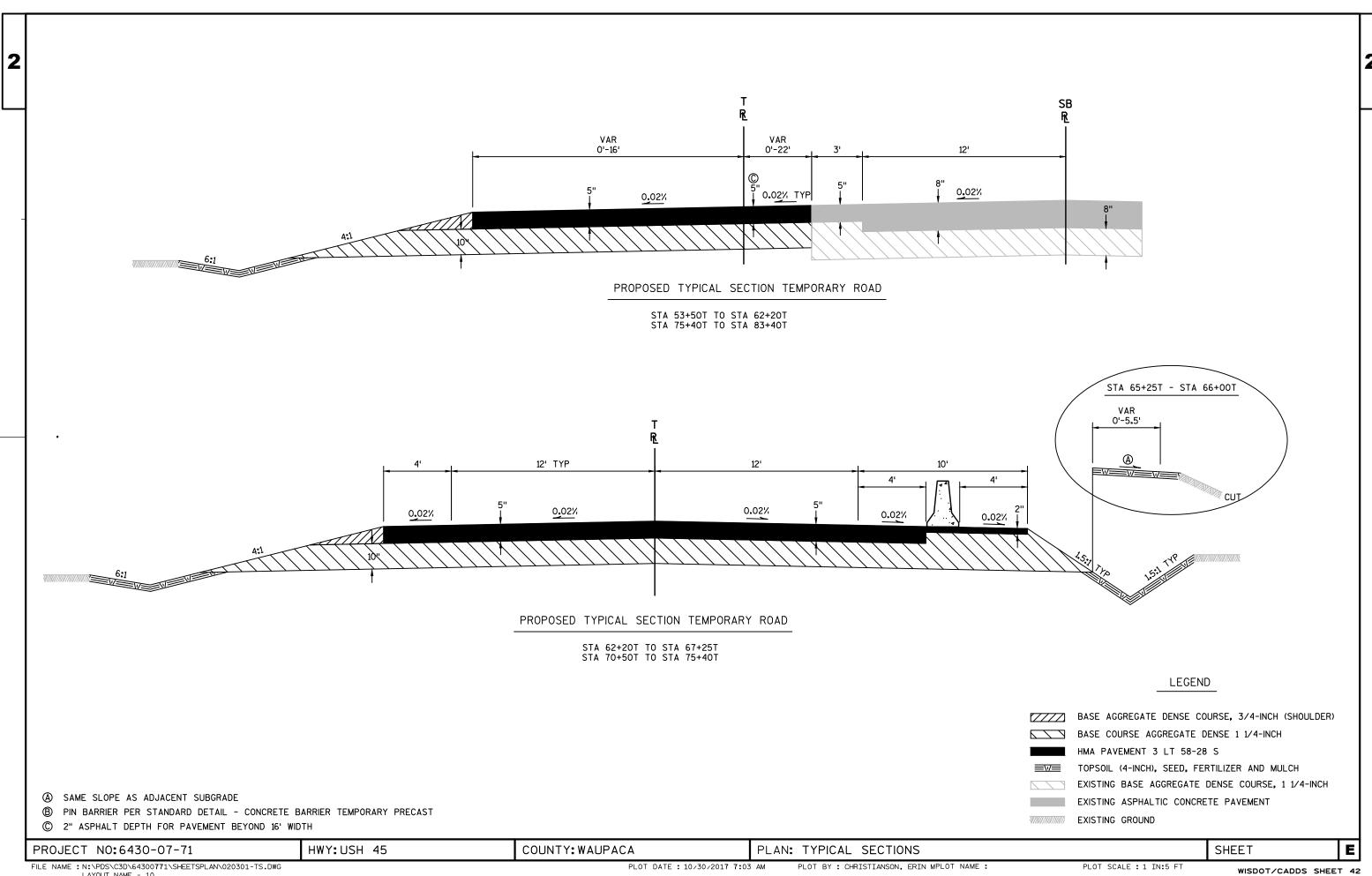
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LAYOUT NAME - 08

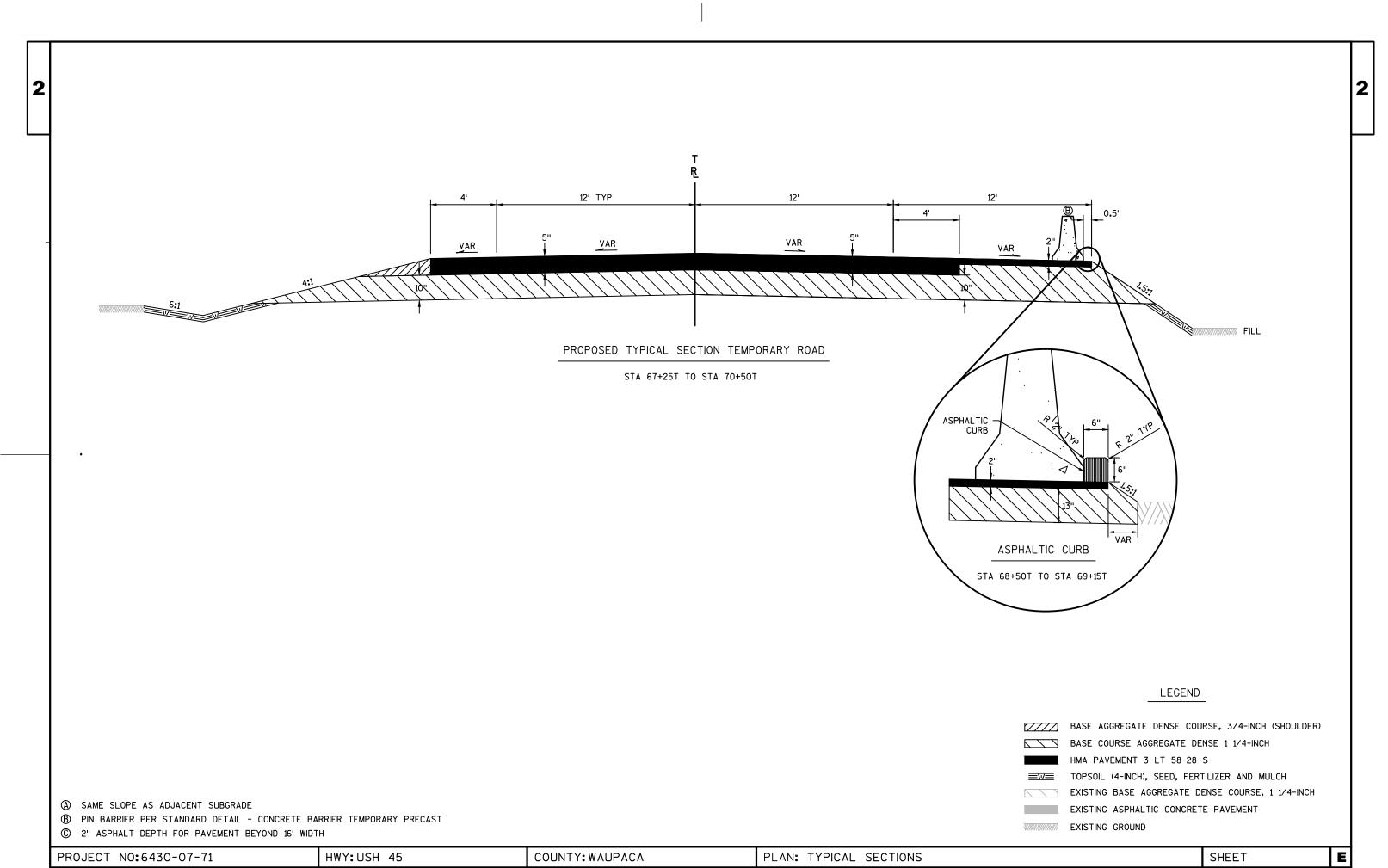
PLOT DATE : 10/30/2017 7:03 AM PLOT BY : CHRISTIANSON, ERIN MPLOT NAME : PLOT SCALE : 1 IN:10 FT
LAYOUT NAME - 08



FILE NAME : N:\PDS\C3D\64300771\SHEETSPLAN\020301-TS.DWG
LAYOUT NAME - 09

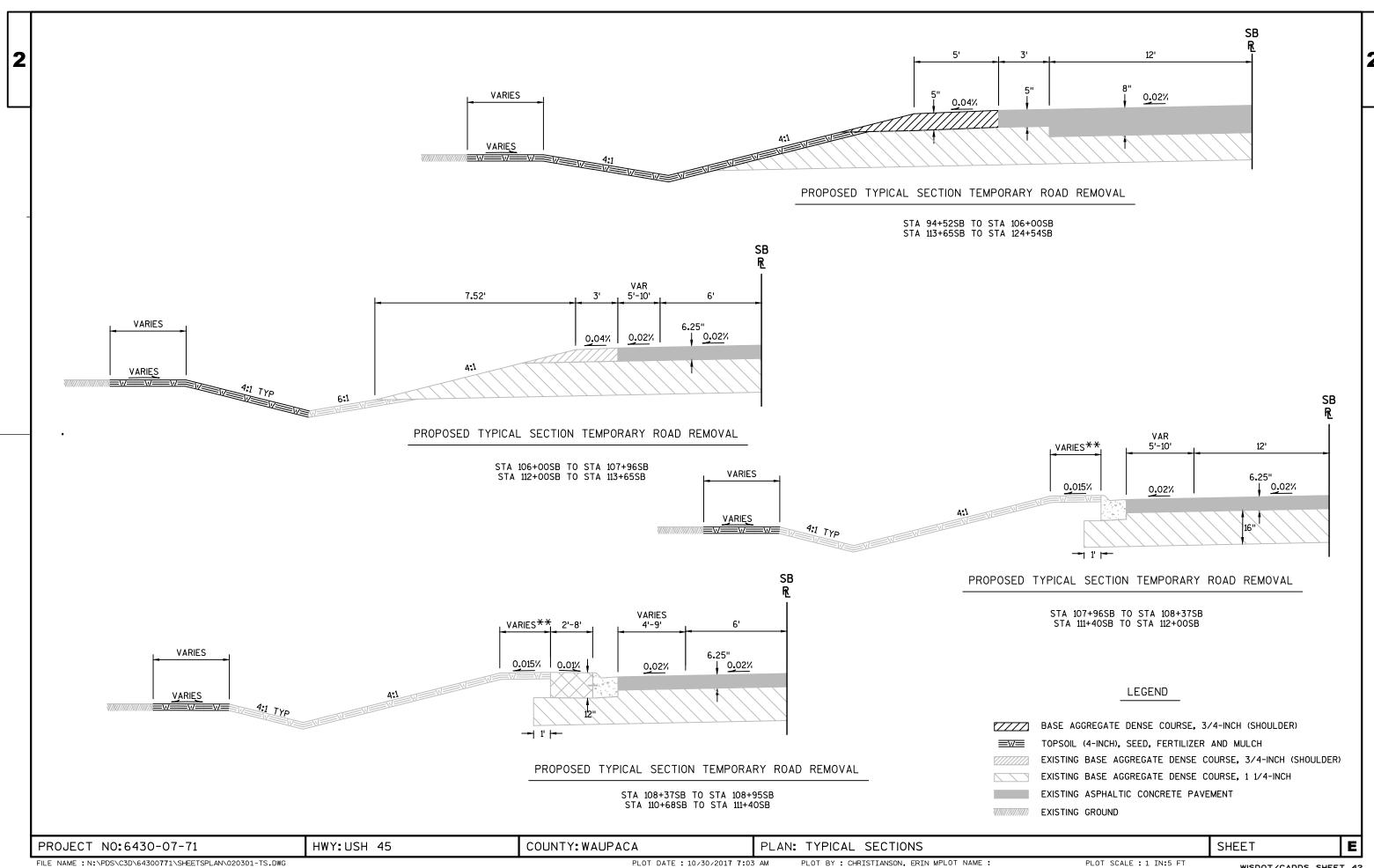
PLOT DATE : 10/30/2017 7:03 AM PLOT BY : CHRISTIANSON, ERIN MPLOT NAME : PLOT SCALE : 1 IN:10 FT
LAYOUT NAME - 09

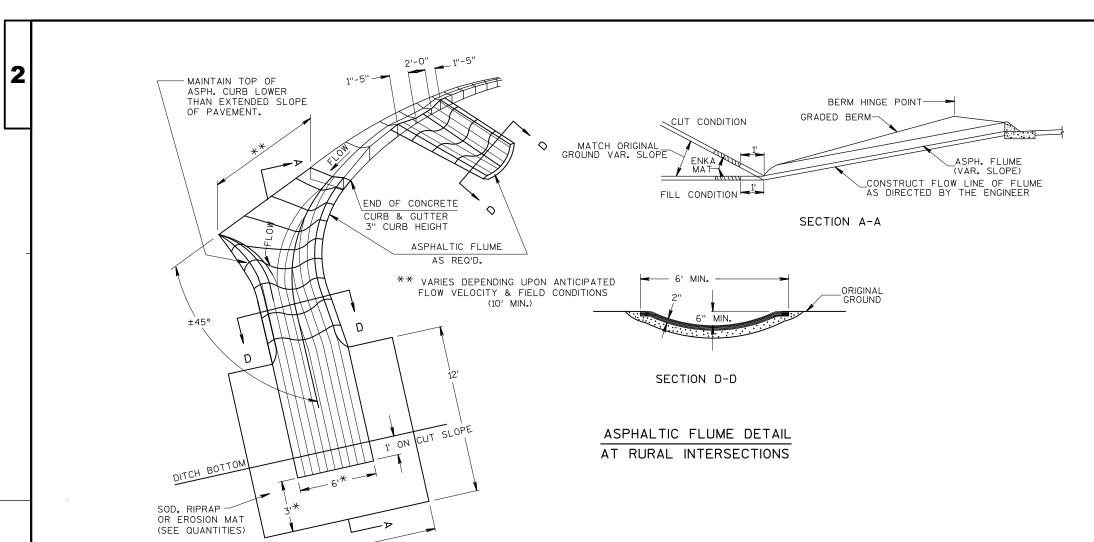


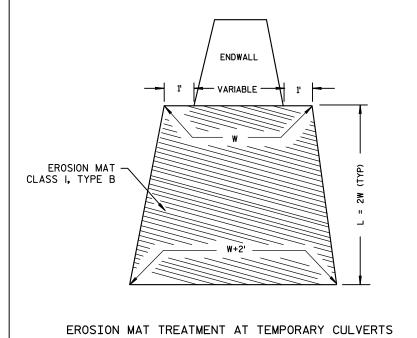


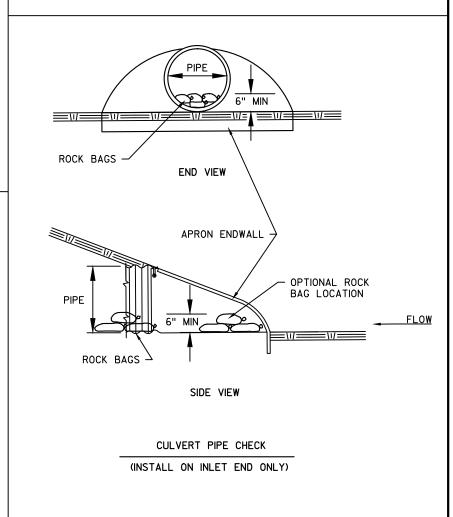
FILE NAME : N:\PDS\C3D\64300771\SHEETSPLAN\020301-TS.DWG LAYOUT NAME - 11 PLOT DATE: 10/30/2017 7:03 AM PLOT BY : CHRISTIANSON, ERIN MPLOT NAME : PLOT SCALE : 1 IN:5 FT

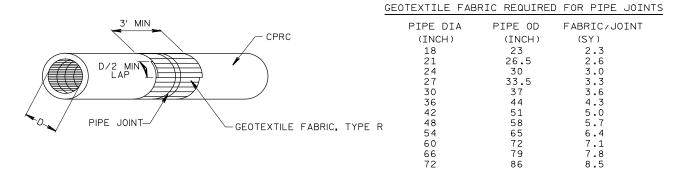
WISDOT/CADDS SHEET 42









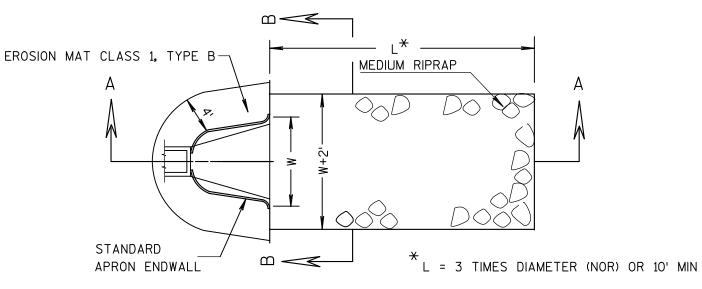


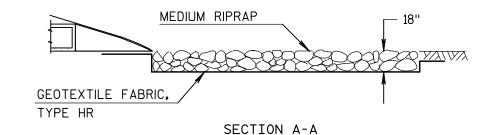
DETAIL OF WRAPPED PIPE JOINT WRAP ALL JOINTS

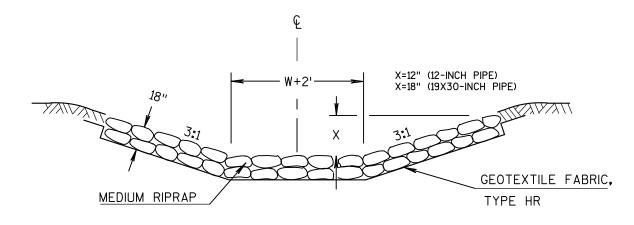
HWY: USH 45 COUNTY: WAUPACA PLAN: CONSTRUCTION DETAILS E PROJECT NO:6430-07-71 SHEET

2





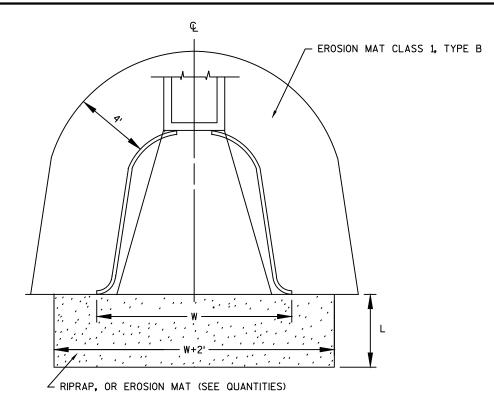




SECTION B-B

EROSION MAT, MEDIUM RIPRAP AND GEOTEXTILE DETAIL AT APRON ENDWALL

HWY: USH 45



PERMANENT EROSION CONTROL AT PIPE ENDS

L = 3 TIMES DIAMETER OR 10' MIN INCREASE IF WARRANTED

RUNOFF COEFFICIENT TABLE

		HYDROLOGIC SOIL GROUP										
	A			В С			D					
	SLOPE	RANGE	(PERCENT)	SLOPE	RANGE	(PERCENT)	SLOPE	RANGE	(PERCENT)	SLOPE	RANGE	(PERCENT)
LAND USE:	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER
ROW CROPS	.08	.16	.22	.12	.20	.27	.15	.24	.33	.19	.28	.38
	.22	.30	.38	.26	.34	.44	.30	.37	.50	.34	.41	.56
MEDIAN STRIP-	.19	.20	.24	.19	.22	.26	.20	.23	.30	.20	.25	.30
TURF	.24	.26	.30	.25	.28	.33	.26	.30	.37	.27	.32	.40
SIDE SLOPE-			.25			.27			.28			.30
TURF			.32			.34			.36			.38
PAVEMENT:		•		•		•			•	•		•
ASPHALT						.7095						
CONCRETE						.8095						
BRICK	.7080											
DRIVES, WALKS						.7585						
R00FS			_	_		.7595				_		
GRAVEL ROADS,	SHOULDE	ERS				.4060						

TOTAL PROJECT AREA = 15.008 ACRES

TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 8.412 ACRES

FILE NAME : N:\PDS\C3D\64300771\SHEETSPLAN\021001-CD.DWG

LAYOUT NAME - 021002-CD

PROJECT NO:6430-07-71

COUNTY: WAUPACA

PLAN: CONSTRUCTION DETAILS

AM PLOT BY: CHRISTIANSON, ERIN MPLOT NAME:

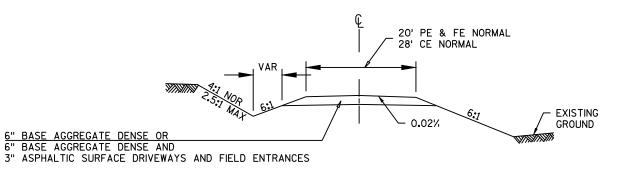
SHEET

WISDOT/CADDS SHEET 42

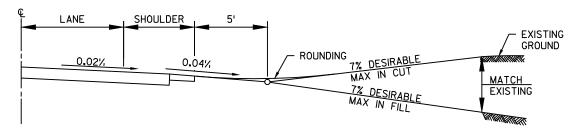
E

PLOT DATE: 10/30/2017 7:07 AM

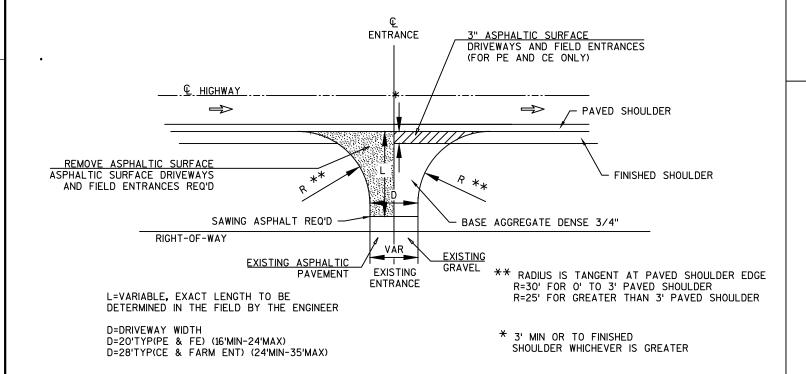
PLOT SCALE : 1 IN:10 FT



TYPICAL CROSS SECTION

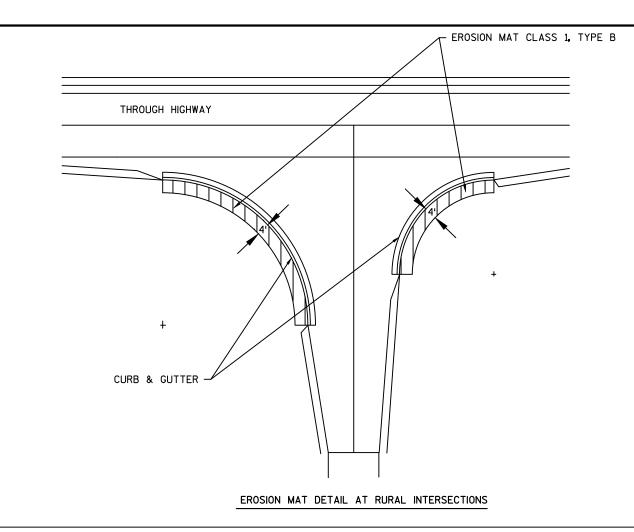


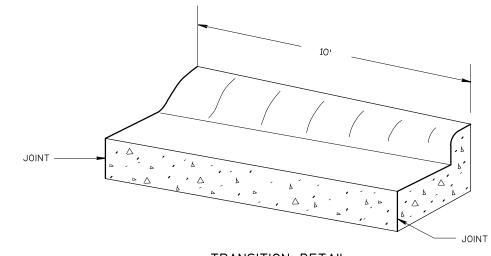
TYPICAL PROFILE VIEW



PLAN VIEW

RURAL DRIVEWAY INTERSECTION (PE. FE & CE) (FOR NEW CONSTRUCTION)





TRANSITION DETAIL

CURB AND GUTTER TRANSITION FROM 6-INCH TO 4-INCH 36-INCH TYPE D (PAID FOR AS 4-INCH CONCRETE CURB & GUTTER)

> STA 15+17EB TO STA 15+27EB STA 15+16WB TO STA 15+26WB STA 19+20EB TO STA 19+30EB STA 19+19WB TO STA 19+29WB

CURB AND GUTTER TRANSITION FROM TYPE J (EXISTING) TO TYPE D (PROPOSED) (PAID FOR AS 6-INCH CONCRETE CURB & GUTTER)

> STA 106+00NB TO STA 106+10NB STA 106+00SB TO STA 106+10SB STA 112+90NB TO STA 113+00NB STA 113+55SB TO STA 113+65SB

PROJECT NO:6430-07-71

HWY: USH 45

COUNTY: WAUPACA

PLAN: CONSTRUCTION DETAILS

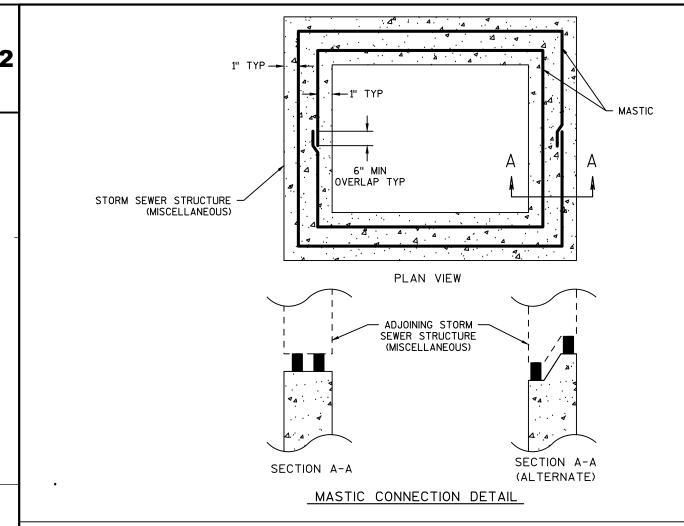
SHEET

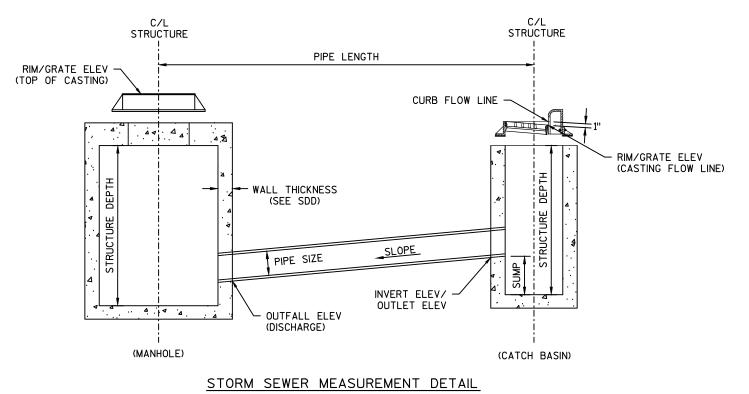
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PLOT DATE: 10/30/2017 7:07 AM

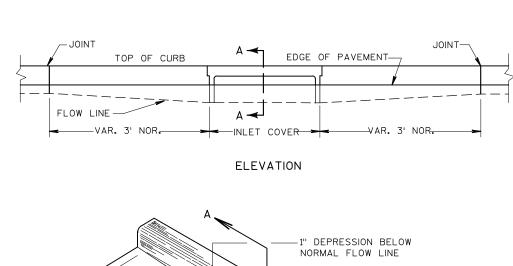
PLOT BY : CHRISTIANSON, ERIN MPLOT NAME : PLOT SCALE : 1 IN:10 FT E

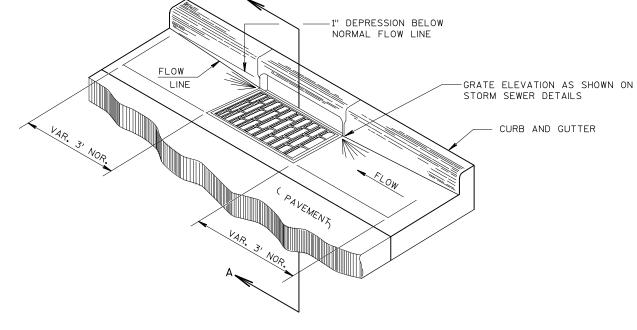


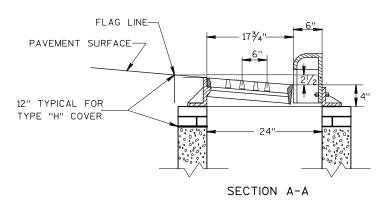




HWY: USH 45







DETAIL OF CURB AND GUTTER AT INLETS

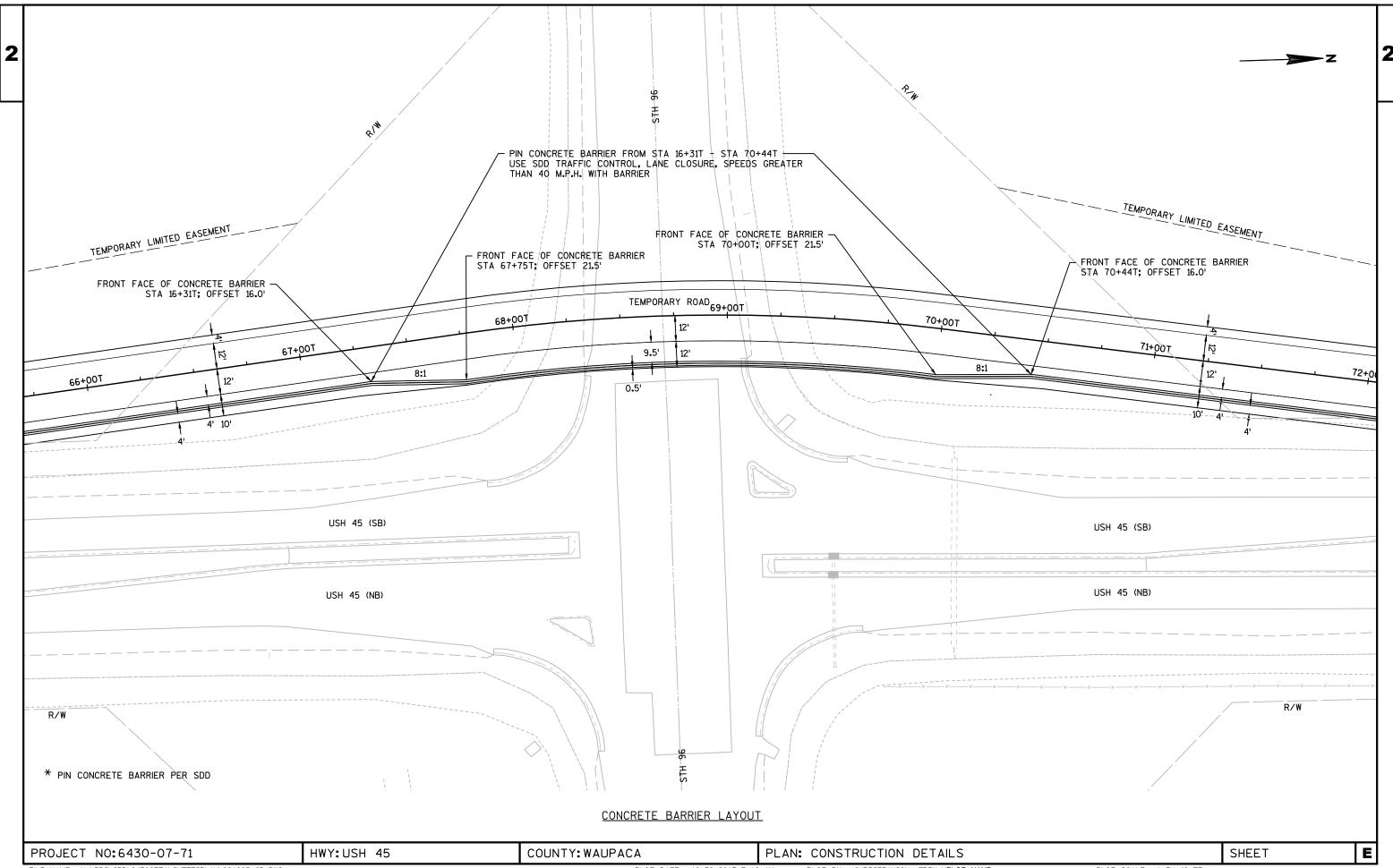
(TYPE 3-H INLET SHOWN)

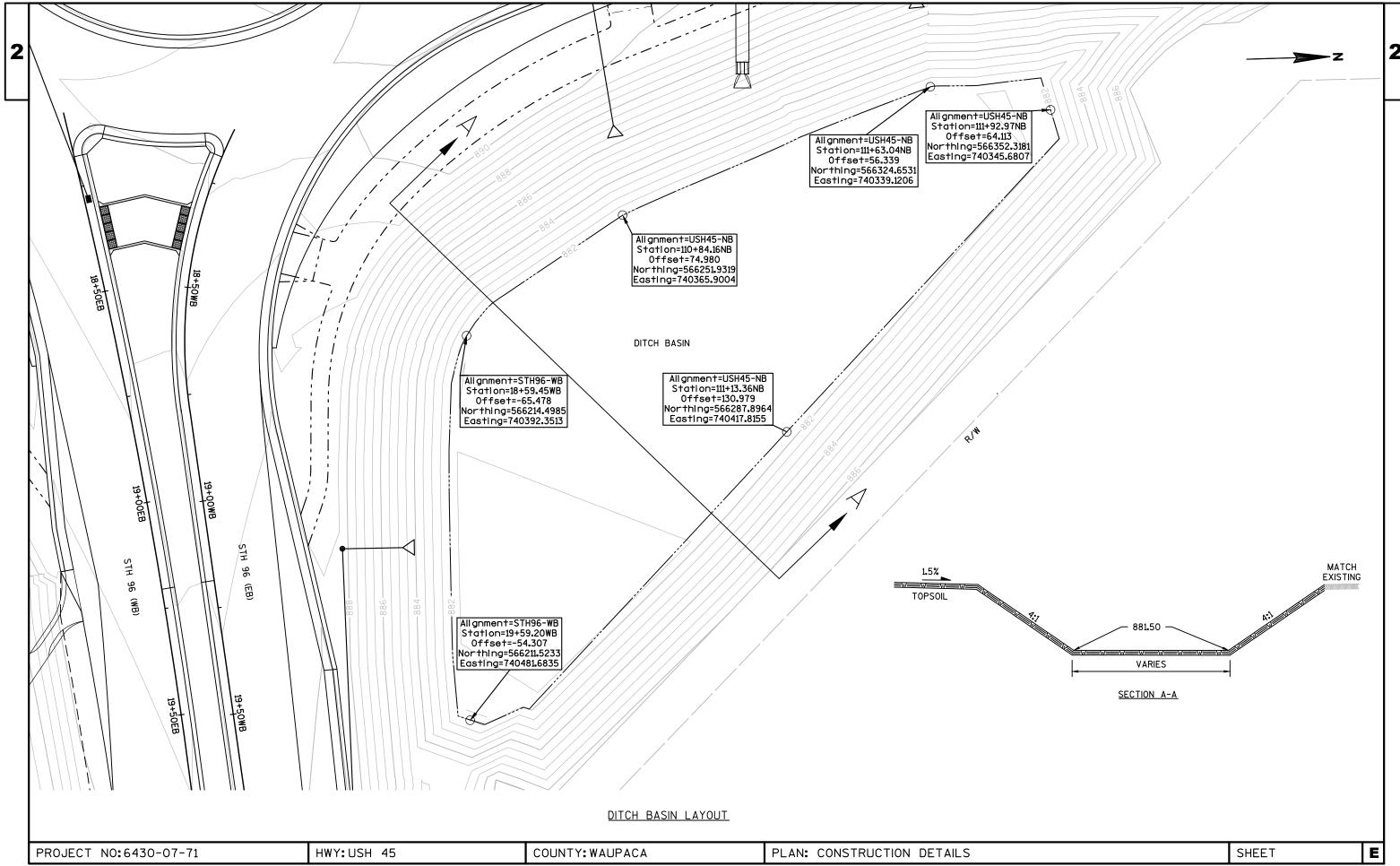
PLAN: CONSTRUCTION DETAILS SHEET

PROJECT NO:6430-07-71

COUNTY: WAUPACA

E

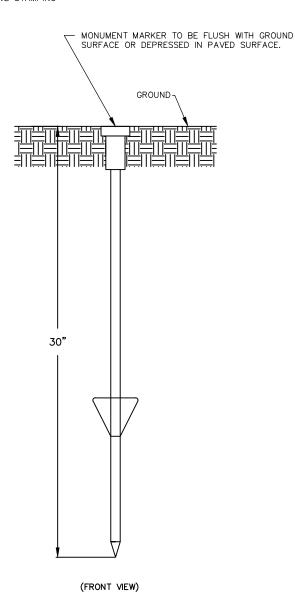






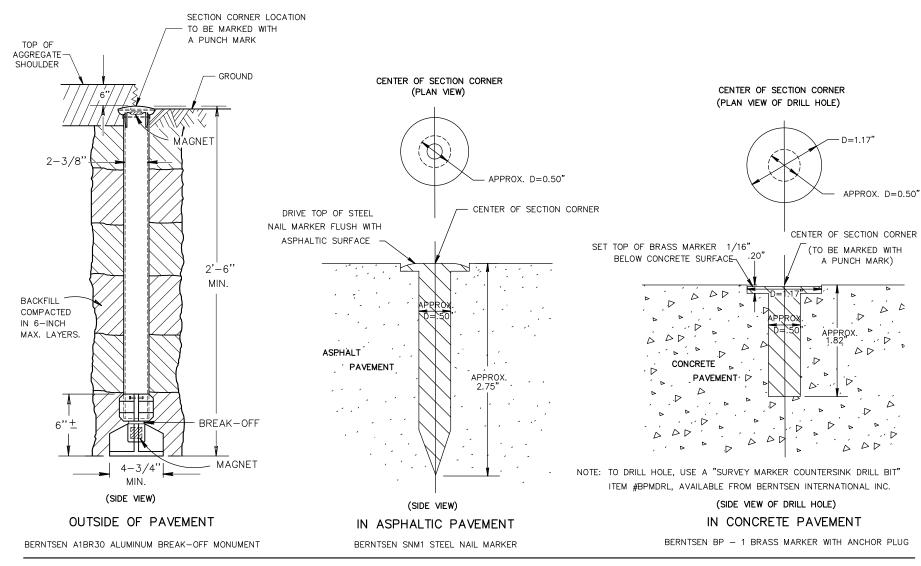
WIS DOT MONUMENT CAP MARKER LOGO (SSDR130)

CONTRACTOR TO ORDER LANDMARK REFERENCE MONUMENTS WITH THE ABOVE STAMPING



BERNSTEN DRIVABLE MONUMENT SSDR130

LANDMARK REFERENCE MONUMENT (TIES ONLY)



SECTION CORNER MONUMENTS

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.

LOCATE LANDMARK REFERENCE MONUMENTS OUTSIDE THE CONSTRUCTION LIMITS AND WITHIN WISDOT RIGHT OF WAY. LOCATION TO BE APPROVED BY THE ENGINEER.

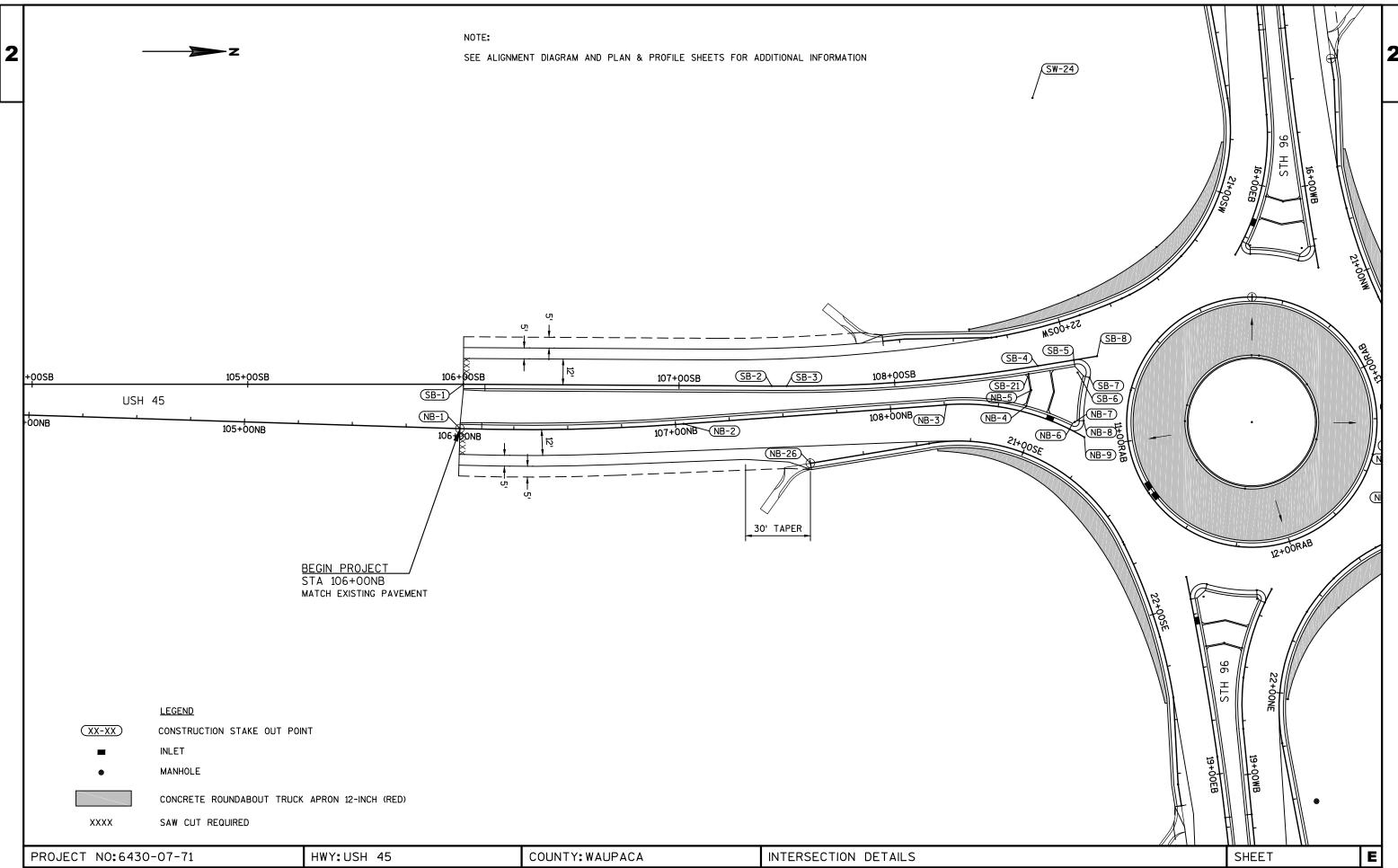
CONTRACTOR WILL SUPPLY ALL REQUIRED SURVEY MONUMENTS.

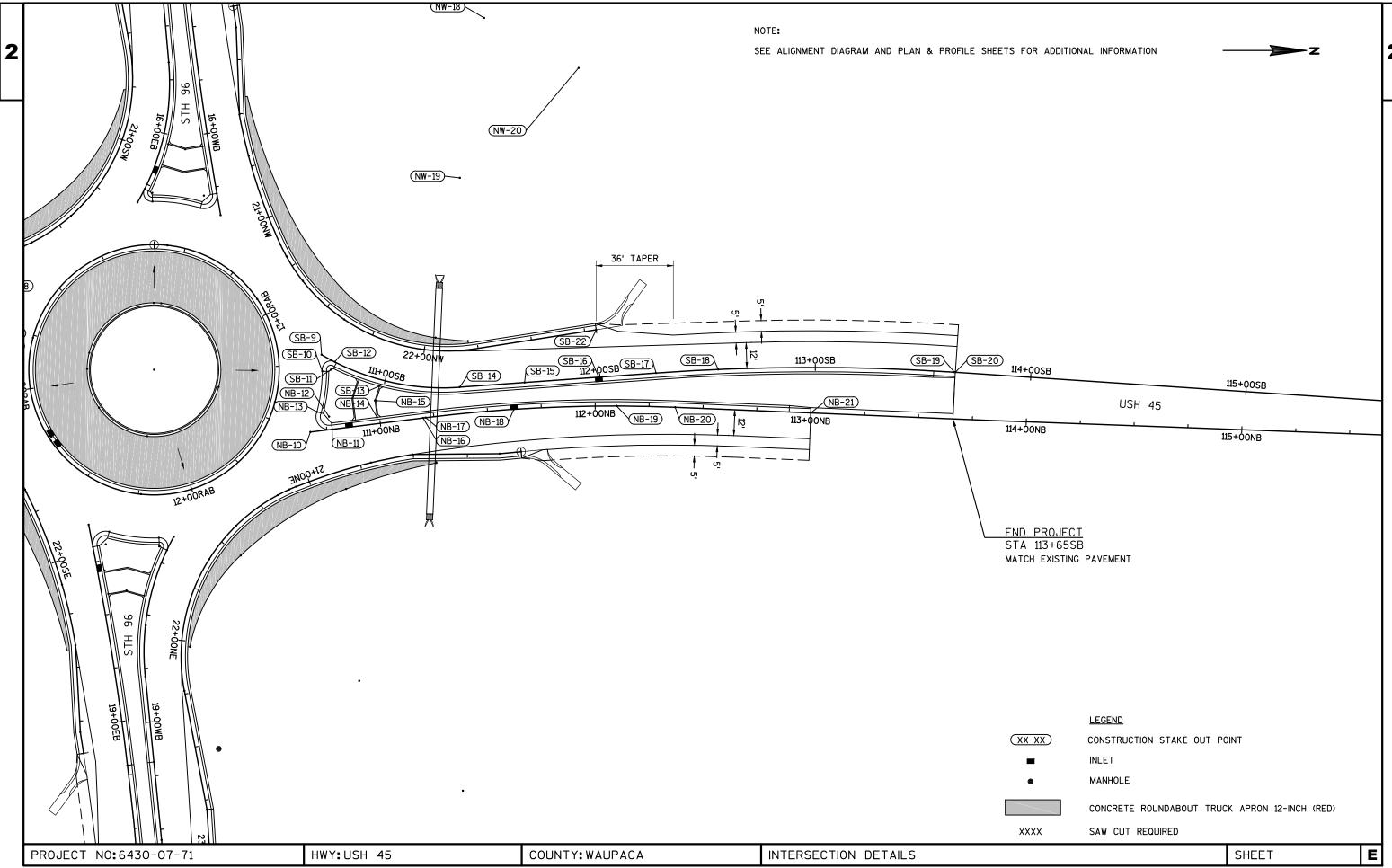
SECTION CORNER MONUMENT AND LANDMARK REFERENCE MONUMENT DETAIL

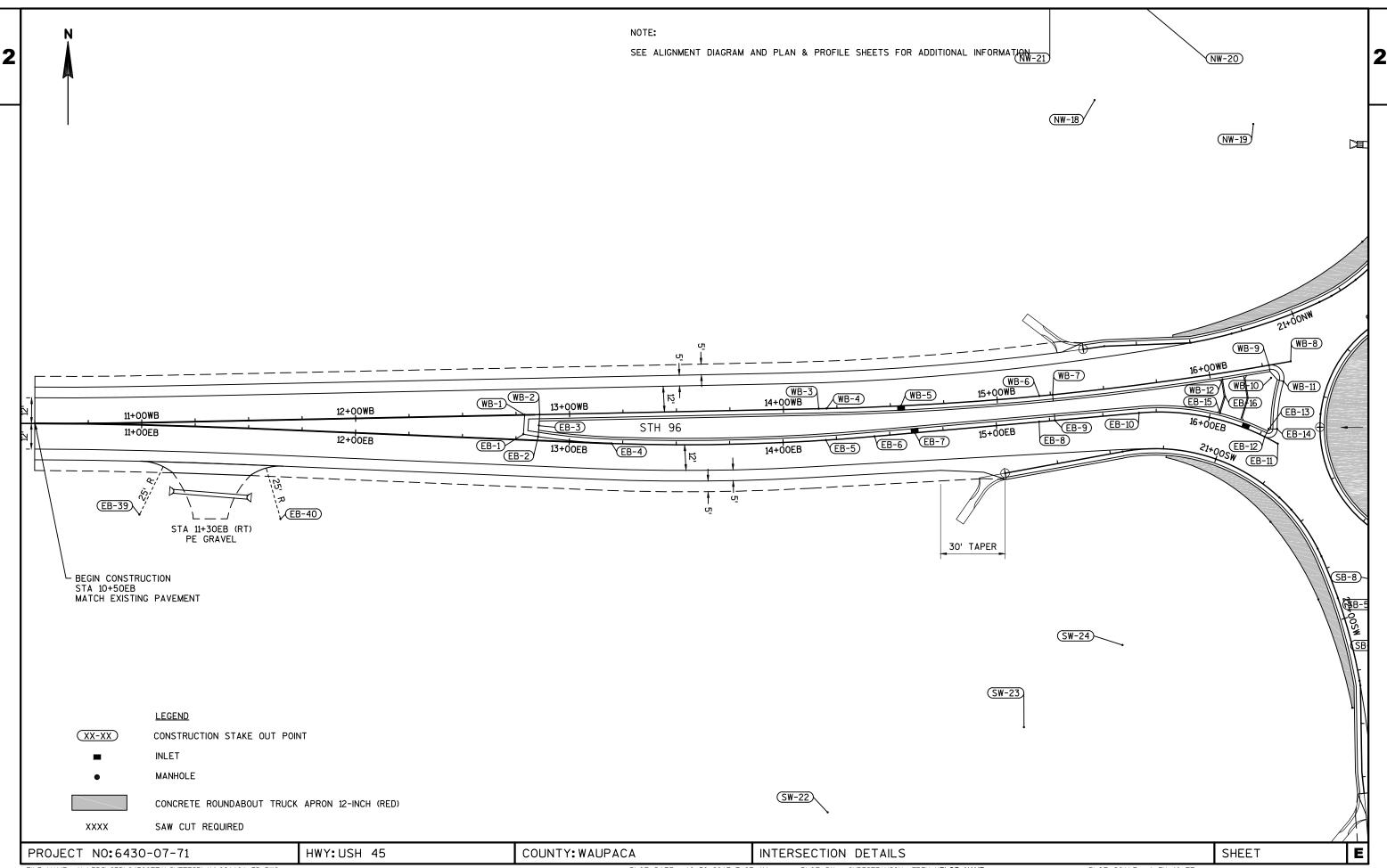
E PROJECT NO:6430-07-71 HWY: USH 45 COUNTY: WAUPACA PLAN: CONSTRUCTION DETAILS SHEET FILE NAME : N:\PDS\C3D\64300771\SHEETSPLAN\021007-CD.DWG PLOT BY : CHRISTIANSON, ERIN MPLOT NAME :

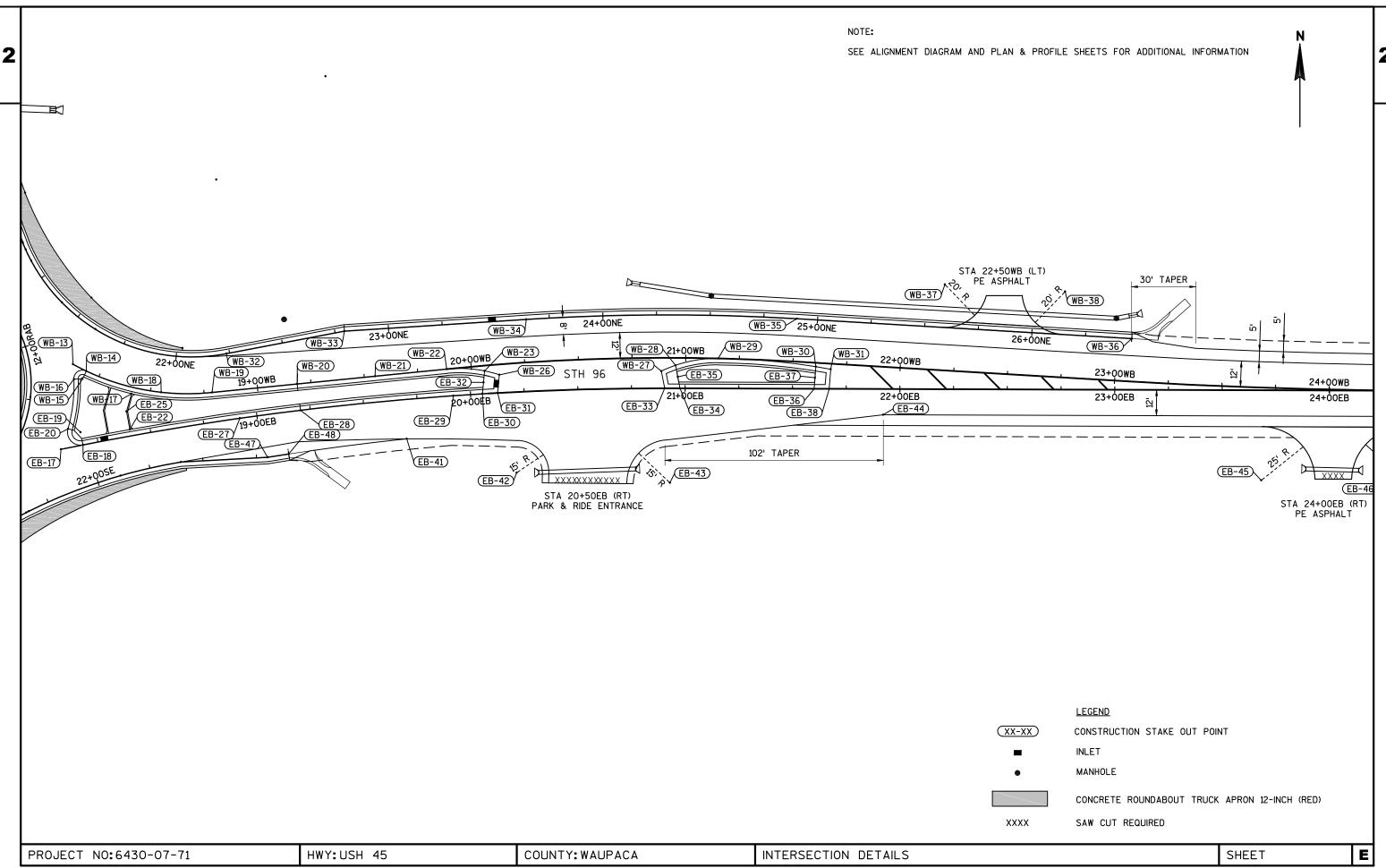
LAYOUT NAME - 021008-cd

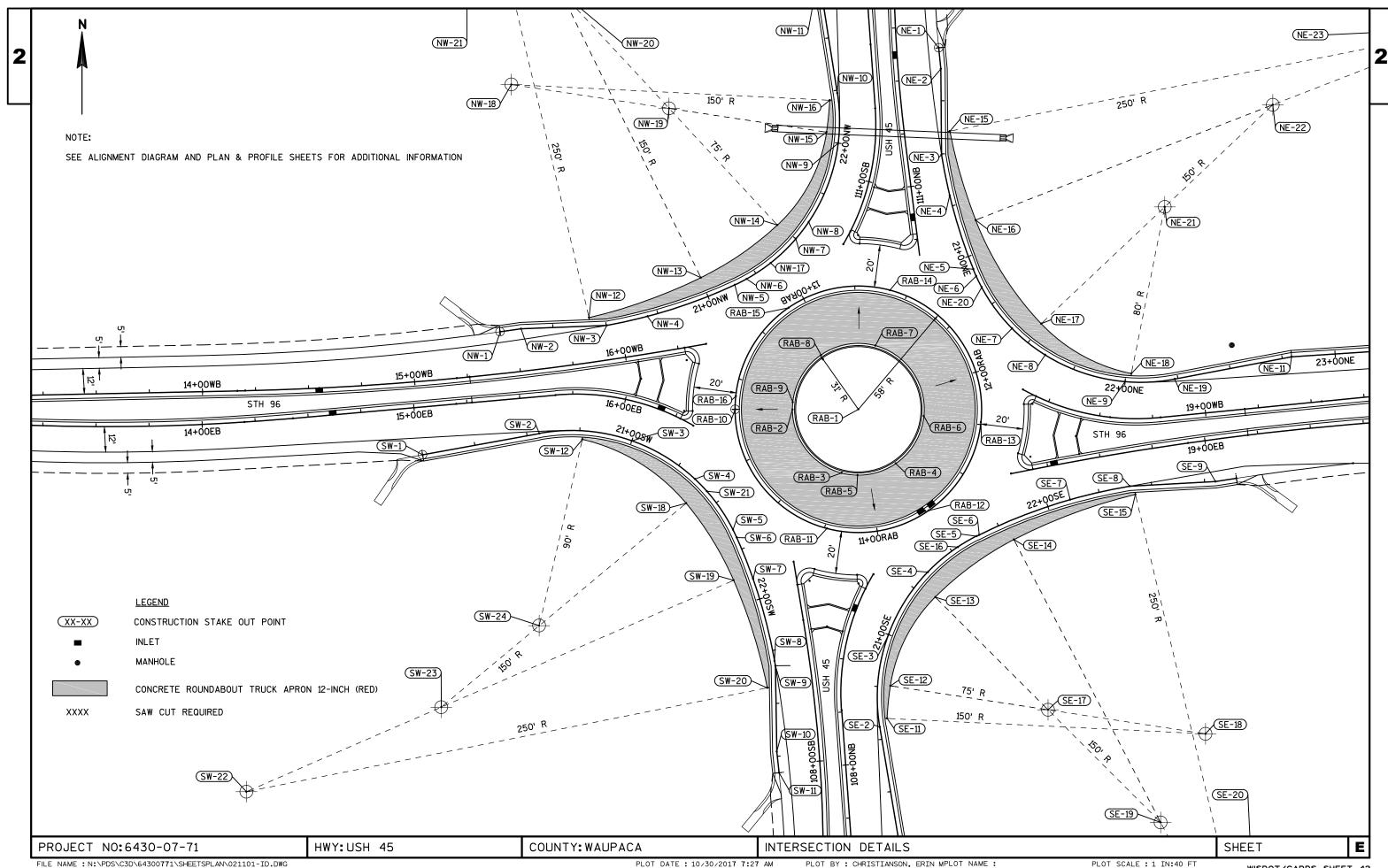
PLOT DATE: 10/30/2017 7:20 AM











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	NB ALIGNMENT CONST POINTS USH 45								
POINT NO	STATION	OFFSET/SIDE	ELEV	NORTHING	EASTING	RADIUS			
NB-1	106+00.00	0.00' RT	886.59	565786.18	740268.12	PC, 1000' R			
NB-2	107+03.79	0.00,	887.59	565889.90	740265.87	PT, 1000' R			
NB-3	108+25.88	0.00,	888.78	566011.66	740256.90	PC, 110 ' R			
NB-4	108+62.58	3 . 00' LT	889.16	566048.80	740257.41	SIDE WALK			
NB-5	108+62.89	10.67' LT	889.23	566051.10	740250.08	SIDE WALK			
NB-6	108+84.89	0.00'	889.35	566068.86	740268.18	PC, 4' R			
NB-7	108+85.54	4.08' LT	889.79	566071.28	740264.83	CC, 4' R			
NB-8	108+88.70	6 . 55' LT	889.47	566075.37	740264.19	PT, 4' R			
NB-9	108+92.67	0.00'	889.43	566075.69	740271.90	VPI			
NB-10	110+67.30	0.00'	890.34	566225.84	740293 . 61	VPI			
NB-11	110+77.53	0.00'	890.28	566236.00	740292.33	PC, 6' R			
NB-12	110+76.80	6 . 00' LT	890.72	566234.52	740286.47	CC, 6' R			
NB-13	110+71.49	8.90' LT	890.42	566228.89	740284.26	PT, 6' R			
NB-14	110+98.85	3 . 00' LT	890.19	566256.78	740286.70	SIDE WALK			
NB-15	110+98.85	10 . 79' LT	890.29	566255.80	740278.97	SIDE WALK			
NB-16	111+20.02	0.00'	0.00	566278.15	740287.03	VPC			
NB-17	111+21.22	0.00'	0.00	566279.34	740286.88	PC, 700' R			
NB-18	111+62.30	0.00'	889.90	566320.23	740282.95	LOW POINT			
NB-19	112+10.00	0.00'	890.06	566367.89	740281.41	VPT			
NB-20	112+37.10	0.00' LT	890.24	566394.99	740281.98	PT, 700' R			
NB-21	113+00.00	0.00'	0.00	566457.84	740284.53	PI			
NB-26	107+61.09	22 . 45' RT	887.70	565948.69	740284.06				
NB-27	108+16.69	17 . 36' RT	888.34	566003.76	740274.89				

	SB ALIGNMENT CONST POINTS USH 45								
POINT NO	STATION	OFFSET/SIDE	ELEV	NORTHING	EASTING	RADIUS			
SB-1	105+99.99	0.01' LT	886.54	565787.74	740247.52	PI			
SB-2	107+42.99	0•00,	888.06	565930.74	740248.26	PI			
SB-3	107+49.90	0•00,	888.13	565937.65	740248.28	PC, 700' R			
SB-4	108+66.85	0.00'	889.38	566054.07	740238.86	PT, 700' R			
SB-5	108+83.79	0.00,	889.56	566070.79	740236.09	PC, 6' R			
SB-6	108+84.57	6.01' RT	889.94	566072.54	740241.88	CC, 6' R			
SB-7	108+89.70	9 . 22' RT	889.60	566078.13	740244.21	PT, 6' R			
SB-8	108+94.71	0.00'	889.67	566081.57	740234.30	VPI			
SB-9	110+68.05	0.00,	890.57	566231.05	740257.71	VPI			
SB-10	110+72.01	6 . 55' RT	890.54	566231.36	740265.42	PC, 4' R			
SB-11	110+75.05	4.01' RT	890.91	566235.37	740264.65	CC, 4' R			
SB-12	110+75.00	0.00,	890.54	566237.14	740261.06	PT, 4' R			
SB-13	110+98.14	3.00' RT	890.38	566257.93	740272.22	SIDE WALK			
SB-14	111+34.84	0.00,	890.24	566295.07	740272.74	PT			
SB-15	111+65.00	0.00'	890.09	566325.15	740270.54	VPC			
SB-16	111+99.47	0.00'	890.00	566359.53	740268.03	LOW POINT			
SB-17	112+26.13	0.00	890.05	566386.12	740266.09	PC			
SB-18	112+55.00	0.00'	890.22	566414.94	740264.40	VPT			
SB-19	113+64.51	0.00'	0.00	566524.39	740265.56	PT			
SB-20	113+65.00	0.00'	0.00	566524.88	740265.60	VPI			
SB-21	108+62.09	3.00' RT	889.30	566049.86	740242.58	SIDE WALK			
SB-22	111+99.88	22 . 00' LT	889.56	566358.33	740246.06	PI			

	RAB-CONST POINTS ROUND-ABOUT							
POINT NO	STATION	OFFSET/SIDE	ELEV	NORTHING	EASTING	RADIUS		
RAB-1	10+00.00	58 . 00' LT	894.80	566153.37	740264.78			
RAB-2	10+00.25	27 . 00' LT	890.72	566153.23	740233.78			
RAB-3	10+76.27	27 . 00' LT	889.96	566123.37	740256.94			
RAB-4	11+26.16	27 . 00' LT	889.71	566127.86	740282.40			
RAB-5	10+90.38	27 . 00' LT	889.84	566122.37	740264.39			
RAB-6	11+76.27	27 . 00' LT	889.96	566150.19	740295.62			
RAB-7	12+58.19	27 . 00' LT	890.78	566183.32	740272.78			
RAB-8	13+08.23	27 . 00' LT	891.03	566178.92	740247.23			
RAB-9	13+58.19	27 . 00' LT	890.78	566156.69	740233.96			
RAB-10	10+00.00	0 . 00' LT	890.23	566153.37	740206.78			
RAB-11	10+76.20	0.00' RT	889.47	566097.27	740250.04	VPC		
RAB-12	11+26.20	0.00'	889.22	566105.66	740297.77	LOW POINT		
RAB-13	11+76.20	0.00'	889.47	566147.36	740322.47	VPT		
RAB-14	12+58.26	0.00'	890.29	566209.42	740279.67	VPC		
RAB-15	13+08.26	0.00'	890.54	566201.15	740231.92	HIGH POINT		
RAB-16	13+58.26	0.00'	890.29	566159.52	740207.11	VPT		

		EB ALIGNMENT	CONST F	POINTS STH	96	
POINT NO	STATION	OFFSET/SIDE	ELEV	NORTHING	EASTING	RADIUS
EB-1	12+78.40	2 . 58' LT	890.07	566150.09	739834.50	PC
EB-2	12+85.38	1.74' LT	890.09	566148.96	739841.44	POC
EB-3	12+85.52	6 . 93' LT	890.18	566154.14	739841.79	
EB-4	13+19.80	0.00'	889.94	566145.79	739875.75	PC
EB-5	14+20.00	0.00'	889.51	566147.33	739975.90	VPC
EB-6	14+42.84	0.00'	889.44	566149.09	739998.67	PT
EB-7	14+61.70	0.00'	889.42	566150.75	740017.45	LOW POINT
EB-8	15+20.00	0.00,	889.59	566155.90	740075.53	VPT
EB-9	15+27.45	0.00'	889.64	566156.56	740082.95	
EB-10	15+66.93	0.00,	889.88	566160.04	740122.28	PC
EB-11	16+34.46	0•00,	890.29	566145.62	740187.17	VPI
EB-12	16+27.46	0.00'	890.25	566148.94	740181.00	PC, 4' R
EB-13	16+27.46	4.00' LT	890.70	566152.52	740182.79	CC, 4' R
EB-14	16+30.84	5.87' LT	890.34	566152.56	740186.79	PT, 4' R
EB-15	16+04.37	3.00' LT	890.12	566159.90	740160.16	SIDE WALK
EB-16	16+04.70	11.19' LT	890.17	566167.74	740162.55	SIDE WALK
EB-17	18+07.45	0.00'	889.45	566123.08	740336.66	VPI
EB-18	18+17.91	0,00'	889.38	566125.14	740346.91	PC. 6' R
EB-19	18+17.91	6.00' LT	889.86	566131.02	740345.76	CC, 6' R
EB-20	18+12.56	8.69' LT	889.50	566132.61	740339.96	PT, 6' R
EB-22	18+40.62	3.00' LT	889.26	566132.29	740368.71	SIDE WALK
EB-25	18+40.59	11.51' LT	889.30	566140.66	740367.17	SIDE WALK
EB-27	18+92.00	0.00'	888.93	566137.50	740419.96	VPC
EB-28	19+20.48	0.00'	888.76	566141.22	740448.19	VIC
EB-29	19+92.00	0.00'	888.39	566148.03	740519.38	VPT
EB-30	20+05.56	0.00,	888.32	566148.91	740532.91	VIII
EB-31	20+12.64	0.00'	888.29	566149.32	740532.31	
EB-32	20+06.37	5.27' LT	888.48	566154.22	740533.40	
EB-33	20+90.45	0.00'	887.91	566151.44	740617.75	
EB-34	20+97.58	0.00' RT	887.88	566151.42	740624.88	
EB-35	20+96.55	5.34' LT	888.21	566156.77	740623.87	
EB-36	21+60.04	0.00'	887.58	566151.23	740687.34	
EB-37	21+60.42	5.16' LT	887.88	566156.38	740687.74	
EB-38	21+67.06	0.00'	887.54	566151.21	740694.36	
EB-39	10+99.94	42.00' RT	0.00	566112.49	739655.08	CC, 25' R
EB-40	11+66.67	41.74' RT	889.83	566110.47	739721.01	CC, 25' R
EB-41	19+68.63	18.35' RT	888.14	566127.92	740497.66	30, 20 11
EB-42	20+19.59	37.60' RT	884.48	566112.13	740548.80	CC, 15' R
	20+92.99	44.00' RT				CC, 20' R
EB-43			0.00	566107.44	740620.19	00, 20 R
EB-44	21+92.31	12.01' RT	887.18	566139.12	740719.57	CC 351 D
EB-45	23+68.38	42.00' RT	0.00	566108.58	740895.55	CC, 25' R
EB-46	24+35.38	42.00' RT	0.00	566108.37	740962.55	CC, 25' R
EB-47	19+02.34	19.76' RT	888.47	566119.34	740432.84	
EB-48	19+12.48	19.51' RT	888.42	566120.88	740442.72	CHEET

PROJECT NO:6430-07-71 HWY:USH 45 COUNTY:WAUPACA INTERSECTION DETAILS: CONSTRUCTION DATA POINTS SHEET **E**

WB ALIGNMENT CONST POINTS STH 96							
POINT NO	STATION	OFFSET/SIDE	ELEV	NORTHING	EASTING	RADIUS	
WB-1	12+79.03	0.00'	889.90	566159.18	739835.12		
WB-2	12+86.06	0.00'	889.86	566159.33	739842.15		
WB-3	14+16.52	0.00'	889.16	566162.03	739972.58	PC	
WB-4	14+20.15	0.00' LT	889.14	566162.11	739976.21	VPC	
WB-5	14+54.96	0.00'	889.04	566163.36	740011.00	LOW POINT	
WB-6	15+19.85	0.00'	889.37	566167.99	740075.71	VPT	
WB-7	15+26.06	0.00'	889.43	566168.59	740081.90		
WB-8	16+38.40	0.00'	890.55	566184.16	740193.12	VPI	
WB-9	16+28.11	0.00'	890.45	566182.37	740182.99	PC, 6' R	
WB-10	16+28.11	6.00' RT	890.88	566176.46	740184.02	CC, 6' R	
WB-11	16+33.48	8.62' RT	890.50	566174.81	740189.79	PT, 6' R	
WB-12	16+05.62	3.00' RT	890.21	566175.73	740161.27	SIDE WALK	
WB-13	18+11.61	0.00'	889.69	566162.67	740342.22	VPI	
WB-14	18+18.61	0.00'	889.61	566159.47	740348.46	PC, 4' R	
WB-15	18+18.61	4.00' RT	890.06	566155.86	740346.74	CC, 4' R	
WB-16	18+15.23	5.87' RT	889.67	566155.74	740342.75	PT, 4' R	
WB-17	18+41.70	3.00' RT	889.34	566148.94	740369.52	SIDE WALK	
WB-18	18+55.00	0.00'	889.19	566149.59	740383.30	VPC	
WB-19	18+78.80	0.00'	888.93	566149.52	740407.06	PT	
WB-20	19+18.61	0.00'	888.59	566153.46	740446.67		
WB-21	19+55.00	0.00' RT	888.37	566157.07	740482.88	VPT	
WB-22	19+88.51	0.00'	888.21	566160.39	740516.23	PC, 60' R	
WB-23	20+06.04	2.52' RT	888.15	566159.53	740533.90	PT, 60' R	
WB-26	20+12.76	4.87' RT	888.17	566157.73	740540.76		
WB-27	20+88.69	6.25' RT	887.82	566159.41	740616.24		
WB-28	20+95.33	3.55' RT	887.78	566162.11	740622.85	PC, 60' R	
WB-29	21+15.09	0.06' RT	887.61	566165.33	740642.62	PCC, 60', 300' R	
WB-30	21+60.75	1.77' RT	887.43	566161.55	740688.13	PT, 300' R	
WB-31	21+67.74	2.56' RT	887.40	566160.35	740695.06		
WB-32	18+87.18	17.33' LT	888.50	566167.59	740413.68	PT	
WB-33	19+42.92	22 . 33' LT	887.99	566178.09	740468.65	PI	
WB-34	20+27.01	19 . 98' LT	887.63	566183.54	740553.30	PC, 1020' R	
WB-35	21+50.63	20 . 00' LT	887.04	566183.88	740679.31	PT, 1020' R	
WB-36	23+06.83	20 . 00' LT	886.37	566174.63	740835.24	PI	
WB-37	22+18.48	40 . 00' LT	0.00	566199.83	740748.23	CC, 20' R	
WB-38	22+74.57	40 . 00' LT	0.00	566196.51	740804.22	CC, 20' R	

		NW ALIGNMENT	CONST	POINTS TRUC	K APRON	
POINT NO	STATION	OFFSET/SIDE	ELEV	NORTHING	EASTING	RADIUS
NW-1	20+00.08	0.00'	889.20	566189.86	740096.23	PI
NW-2	20+10.00	0.00,	889.30	566191.27	740106.04	PI
NW-3	20+50.39	0.00,	889.78	566192.85	740146.41	PC, 250' R
NW-4	20+70.00	0.00,	889.96	566197.12	740165.54	VPI
NW-5	21+13.73	0•00,	890.48	566211.93	740206.62	PCC, 250', 85' R
NW-6	21+20.00	0.00'	890.55	566214.77	740212.21	VPC
NW-7	21+50.00	0.00'	890.51	566233 . 62	740235.35	VPT
NW-8	21+60.00	0.004	890.37	566241.57	740241.41	VPC
NW-9	22+00.00	0.00'	889.98	566278.69	740255.29	VPT
NW-10	22+23.69	0•00,	889.85	566302.30	740254.89	PT, 85' R
NW-11	22+80.42	0.00' RT	889.56	566358.33	740246.06	PI
NW-12	20+42.16	4.00' LT	889.96	566196.53	740138.02	PC, 250' R
NW-13	21+00.17	9.47' LT	890.64	566215.37	740190.67	PCC, 250', 150' R
NW-14	21+49.15	10.80' LT	890.81	566240.11	740226.68	PCC, 150', 75' R
NW-15	22+04.81	5 . 93' LT	890.19	566283 . 87	740249.82	PCC, 75', 150' R
NW-16	22+20.74	4.00' LT	890.12	566298.90	740251.32	PT, 150' R
NW-17	21+33.61	0.00,	890.63	566222.30	740223.53	HIGH POINT
NW-18	20+10.00	115 . 12' LT	0.00	566306.30	740101.51	CC, 150' R
NW-19	22+28.89	79 . 38' LT	0.00	566295.08	740175.66	CC, 75' R
NW-20	20+34.83	157.94' LT	0.00	566350.06	740124.65	CC, 150' R
NW-21	???	777' 777	0.00	566439.85	740080.63	CC, 250' R

	SW ALIGNMENT CONST POINTS TRUCK APRON								
POINT NO	STATION	OFFSET/SIDE	ELEV	NORTHING	EASTING	RADIUS			
SW-1	20+00.00	0.00'	889.05	566131.94	740059.67	PI			
SW-2	20+55.89	0•00'	889.48	566141.96	740114.65	PC, 85' R			
SW-3	21+00.00	0.00'	889.77	566138.51	740158.13	VPI			
SW-4	21+35.00	0•00'	889.99	566120.51	740187.86	VPC			
SW-5	21+65.00	0•00,	889.83	566096.64	740205.78	VPT			
SW-6	21+69.06	0•00'	889.76	566092.97	740207.52	PCC, 85', 250' R			
SW-7	21+90.00	0•00,	889.40	566073 . 52	740215.24	VPC			
SW-8	22+30.00	0.00'	888.87	566034.86	740225.36	VPT			
SW-9	22+32.31	0.00'	888.85	566032.59	740225.75	PT 250' R			
SW-10	22+72.75	0•00'	888.33	565992.15	740226.39	PI			
SW-11	22+82.75	0•00,	888.23	565982.21	740227.46	PI			
SW-12	20+76.45	4.00' RT	889.89	566139.18	740134.88	PC, 90' R			
SW-18	21+40.45	11 . 00' RT	890.30	566109.11	740183.72	PCC, 90', 150' R			
SW-19	21+87.55	8.87' RT	889.70	566072.82	740206.08	PCC, 150', 250' R			
SW-20	22+42.64	4.00' RT	888.93	566022.19	740221.91	PT, 250' R			
SW-21	21+43.03	0.00'	890.01	566114.76	740193.46	HIGH POINT			
SW-22	333	333, 333	0.00	565973.28	739976.74	CC, 250' R			
SW-23	22+49.28	157.56' RT	0.00	566013.10	740068.48	CC, 150' R			
SW-24	20+39.59	88 . 97' RT	0.00	566051.50	740114.57	CC, 90' R			

		NE ALIGNMENT	CONST	POINTS TRUC	K APRON	
POINT NO	STATION	OFFSET/SIDE	ELEV	NORTHING	EASTING	RADIUS
NE-1	20+00.00	0.00'	889.50	566323.59	740302.61	PI
NE-2	20+10.00	0.00,	889.50	566313.64	740303.59	PI
NE-3	20+50.44	0.00' RT	889.75	566273.20	740303.92	PC, 250' R
NE-4	20+70.00	0.00,	889.84	566254.03	740307.77	VPI
NE-5	21+06.49	0.00,	890.02	566219.31	740318.89	PCC, 250', 85' R
NE-6	21+10.00	0.00,	890.04	566216.08	740320.27	VPC
NE-7	21+40.00	0.00,	889.82	566191.47	740337.15	VPT
NE-8	21+60.00	0.00'	889.42	566178.98	740352.72	VPC
NE-9	22+00.00	0.00'	888.77	566166.41	740390.30	VPT
NE-11	22+79.45	0.00' LT	887.99	566178.09	740468.65	PI
NE-15	20+39.36	4.00' LT	889.85	566284.31	740307.83	PC, 250' R
NE-16	20+84.59	8.75' LT	890.18	566242.50	740319.98	PCC, 250', 150' R
NE-17	21+49.23	10.88' LT	889.92	566193.68	740350.85	PCC, 150', 80' R
NE-18	22+02.76	4.00' LT	888.98	566170.21	740393.27	PT, 80' R
NE-19	22+23.49	0.00,	888.50	566167.59	740413.68	PT, 85' R
NE-20	21+15.85	0.00,	890.05	566210.84	740322.86	HIGH POINT
NE-21	22+34.07	80 . 50' LT	881.50	566248.65	740408.97	CC, 80' R
NE-22	22+79.45	118.98' LT	0.00	566296.75	740459.83	CC, 150' R
NE-23	23+72.45	149 . 11' LT	0.00	566332.92	740553.06	CC, 250' R
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		SE ALIGNMENT	CONST	POINTS TRUC	K APRON	
POINT NO	STATION	OFFSET/SIDE	ELEV	NORTHING	EASTING	RADIUS
SE-2	20+55.83	0.00'	888.34	566003.76	740274.89	PC, 80' R
SE-3	21+00.00	0.00'	888.82	566047.24	740279.02	VPI
SE-4	21+35.00	0.00'	889.20	566076.68	740297.50	VPC
SE-5	21+63.64	0.00'	889.27	566093.61	740320.43	PCC, 80', 250' R
SE-6	21+65.00	0.00'	889.26	566094.22	740321.65	VPT
SE-7	22+11.00	0.00'	888.95	566110.83	740364.48	VPI
SE-8	22+39.76	0.00'	888.80	566117.11	740392.52	PT, 250' R
SE-9	22+80.13	0.00'	888.47	566119.34	740432.84	PI
SE-11	20+59.40	4.00' RT	888.65	566007.79	740278.34	PC, 150' R
SE-12	20+75.70	5.96' RT	888.84	566023.16	740279.88	PCC, 150', 75' R
SE-13	21+28.08	10.44' RT	889.46	566064.90	740301.00	PCC, 75', 150' R
SE-14	21+79.13	8.90' RT	889.43	566091.98	740337.98	PCC, 150', 250' R
SE-15	22+42.17	4.00' RT	889.00	566113.25	740395.16	PT, 250' R
SE-16	21+53.46	0.00'	889.30	566088.49	740311.64	HIGH POINT
SE-17	20+50.82	79 . 39' RT	0.00	566011.86	740354.03	CC, 75' R
SE-18	22+68.93	118.33' RT	0.00	566000.56	740428.17	CC, 150' R
SE-19	22+08.93	157.85' RT	0.00	565958.83	740407.06	CC, 150' R
SE-20	333	333, 333	0.00	565870.06	740453.10	CC, 250' R

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HWY:USH 45

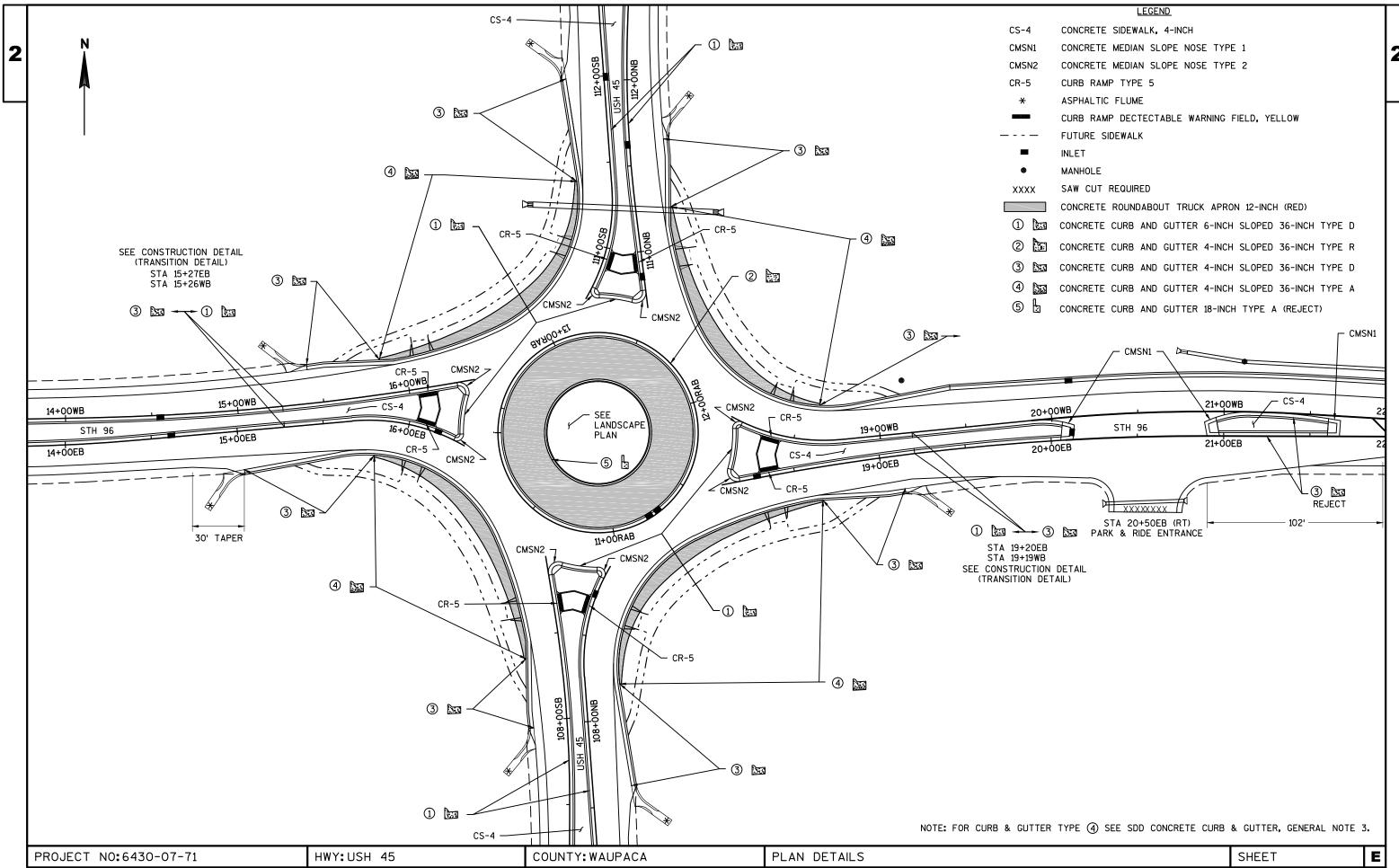
COUNTY: WAUPACA

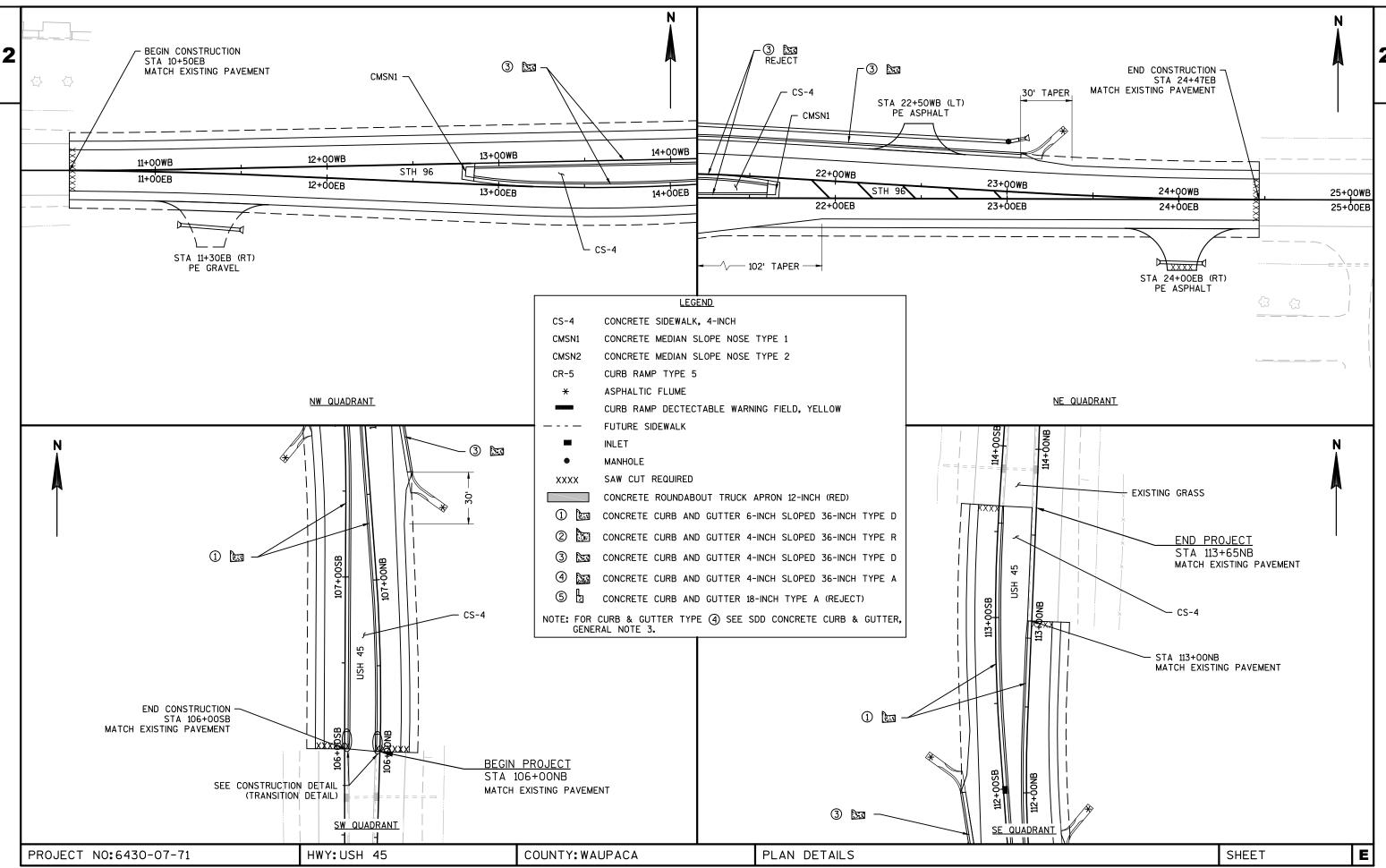
INTERSECTION DETAILS: CONSTRUCTION DATA POINTS

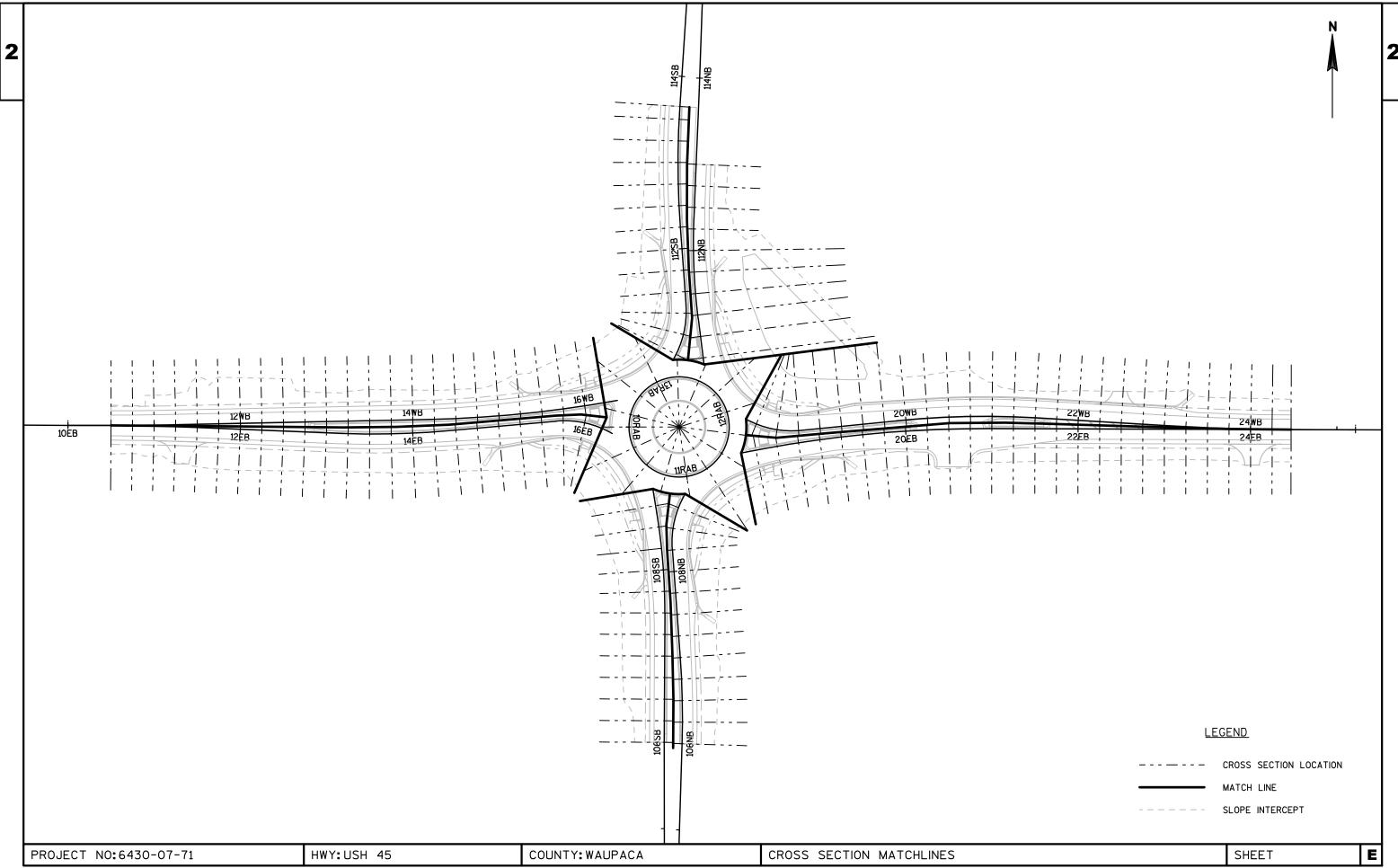
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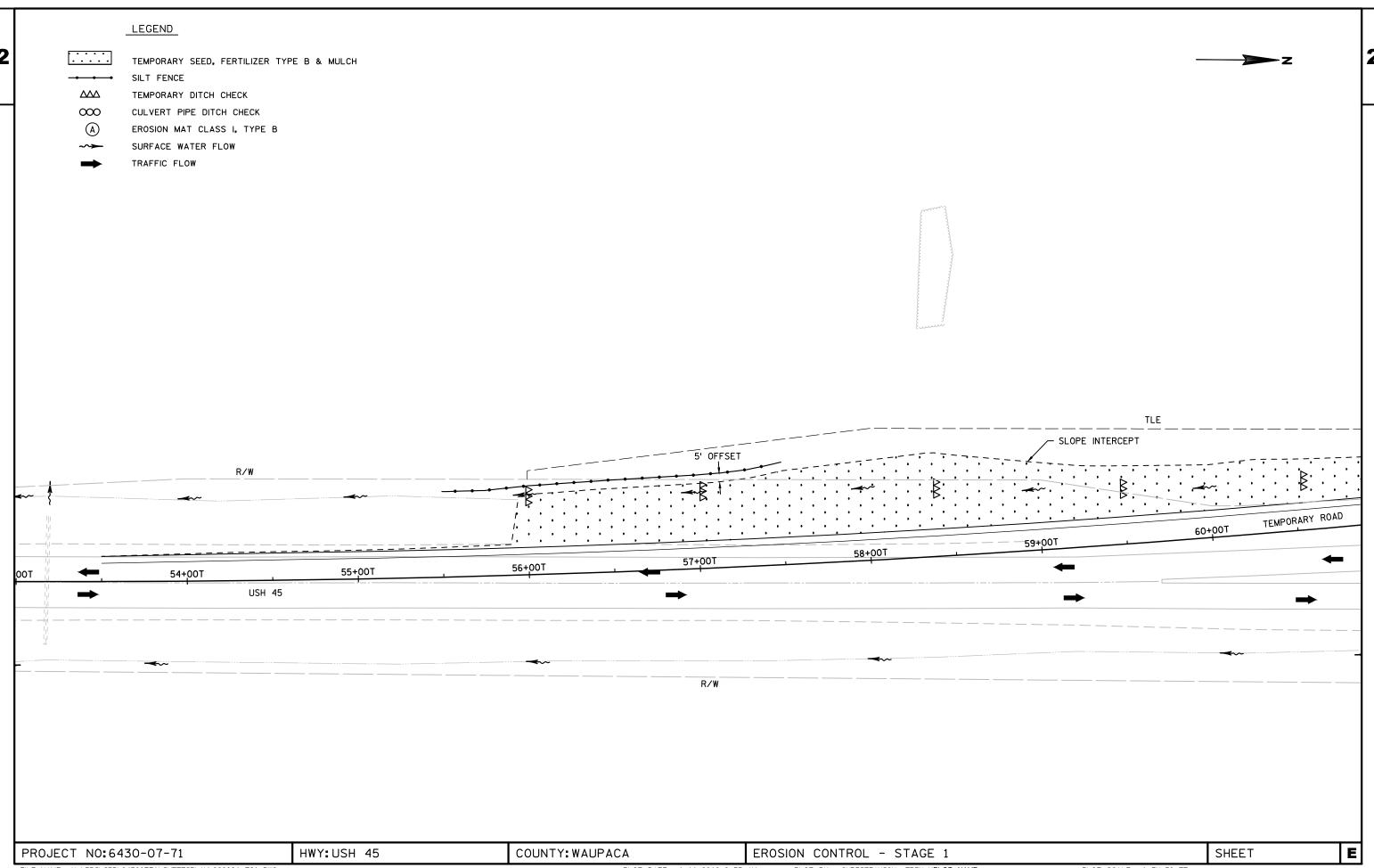
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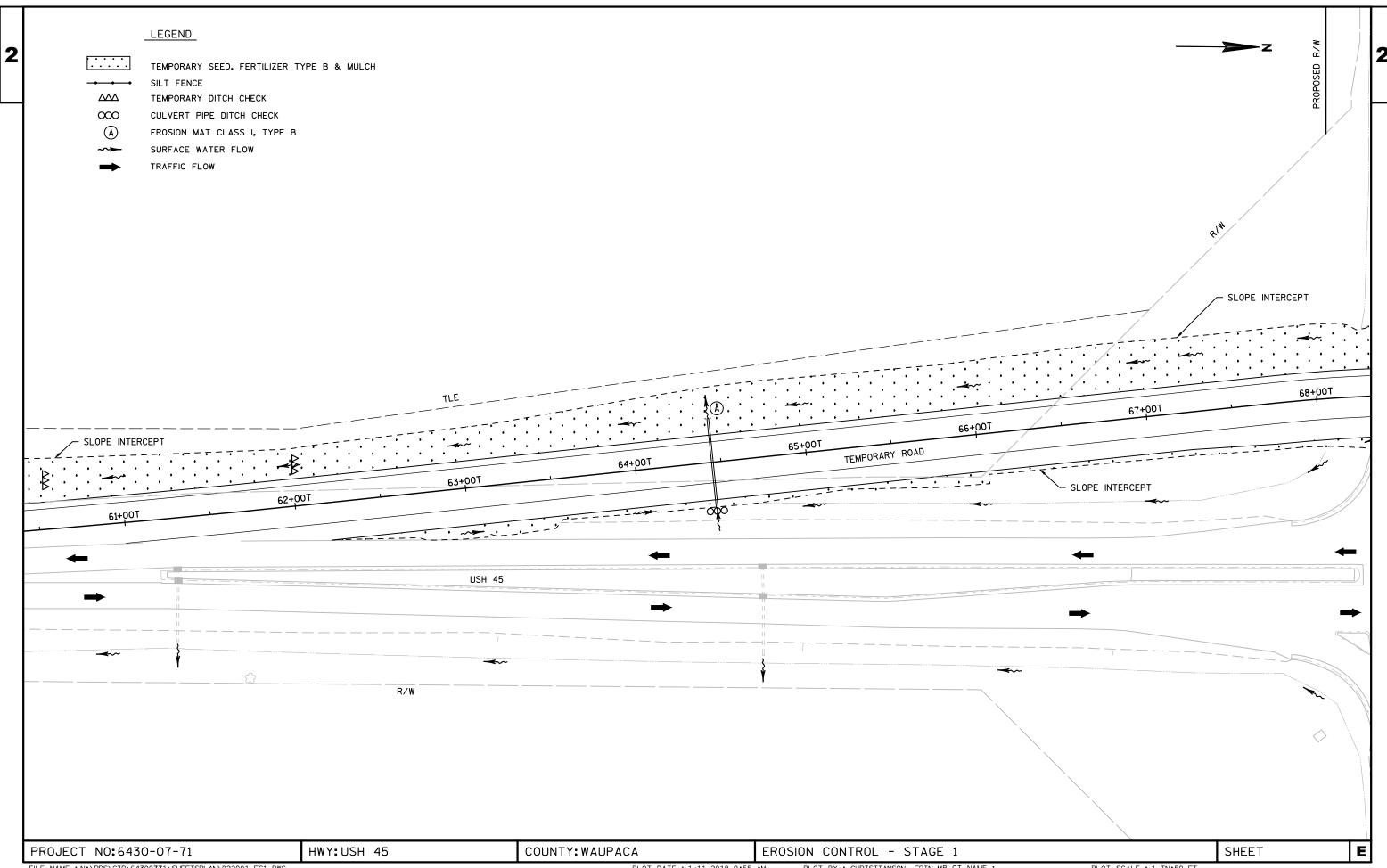
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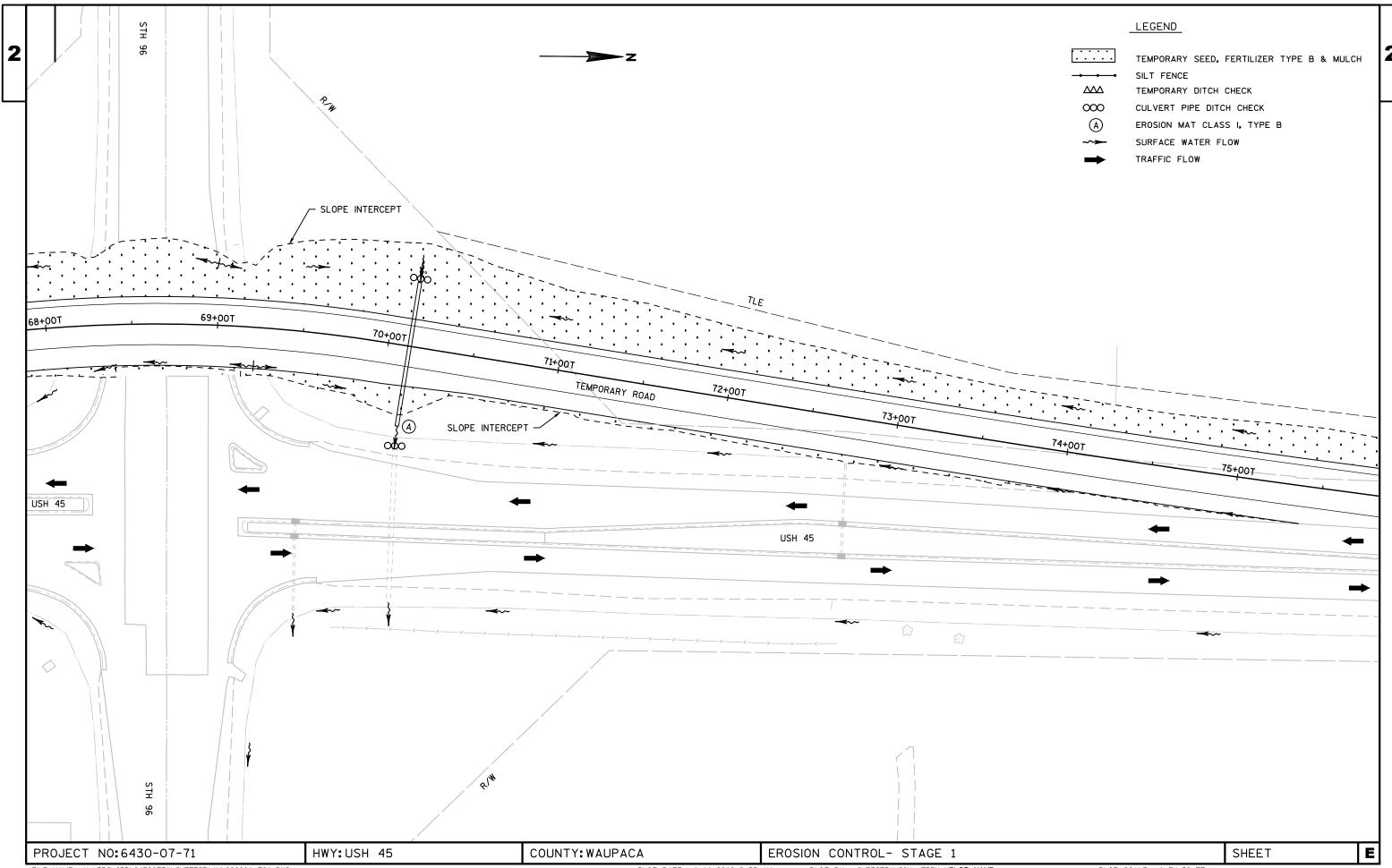


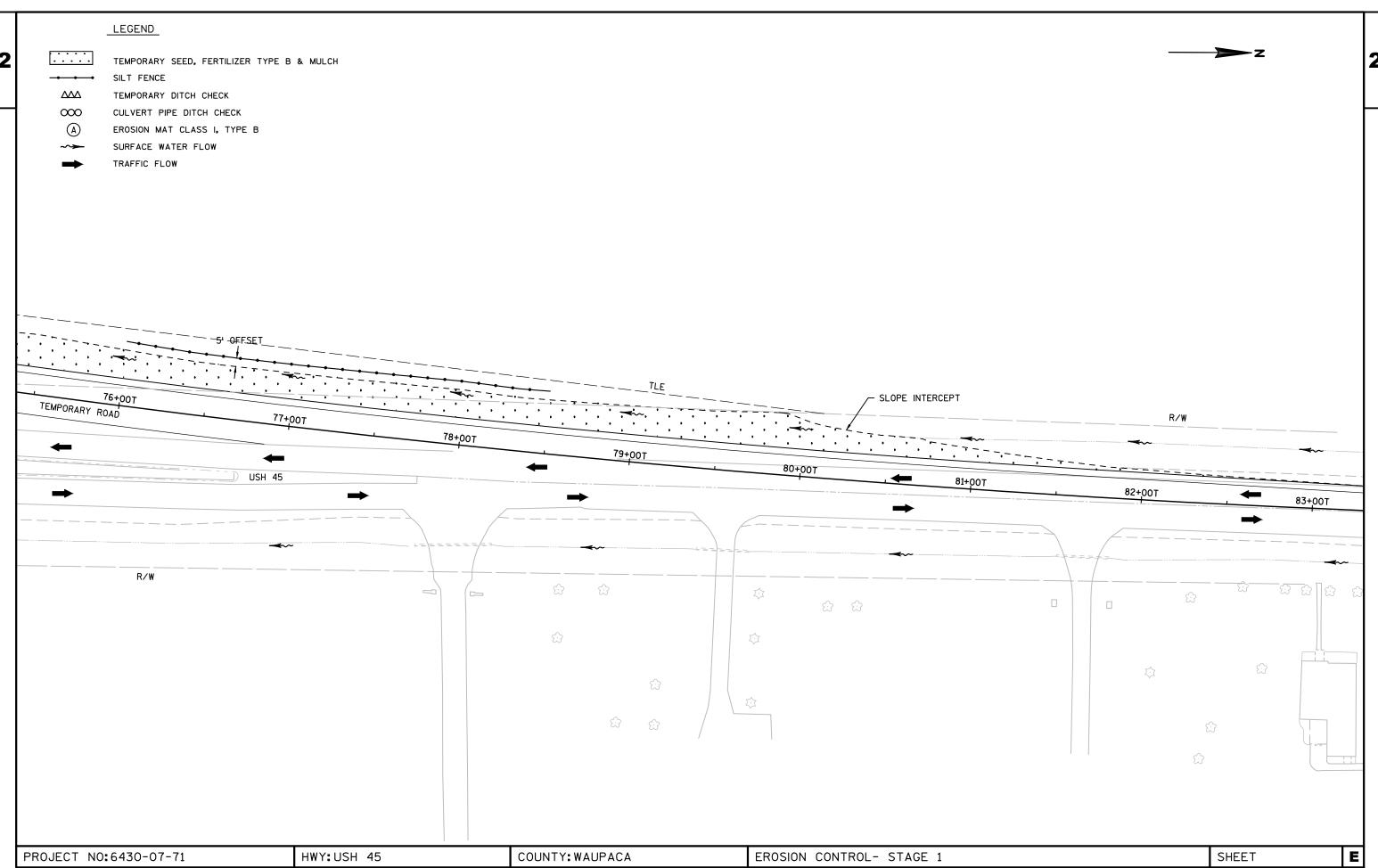


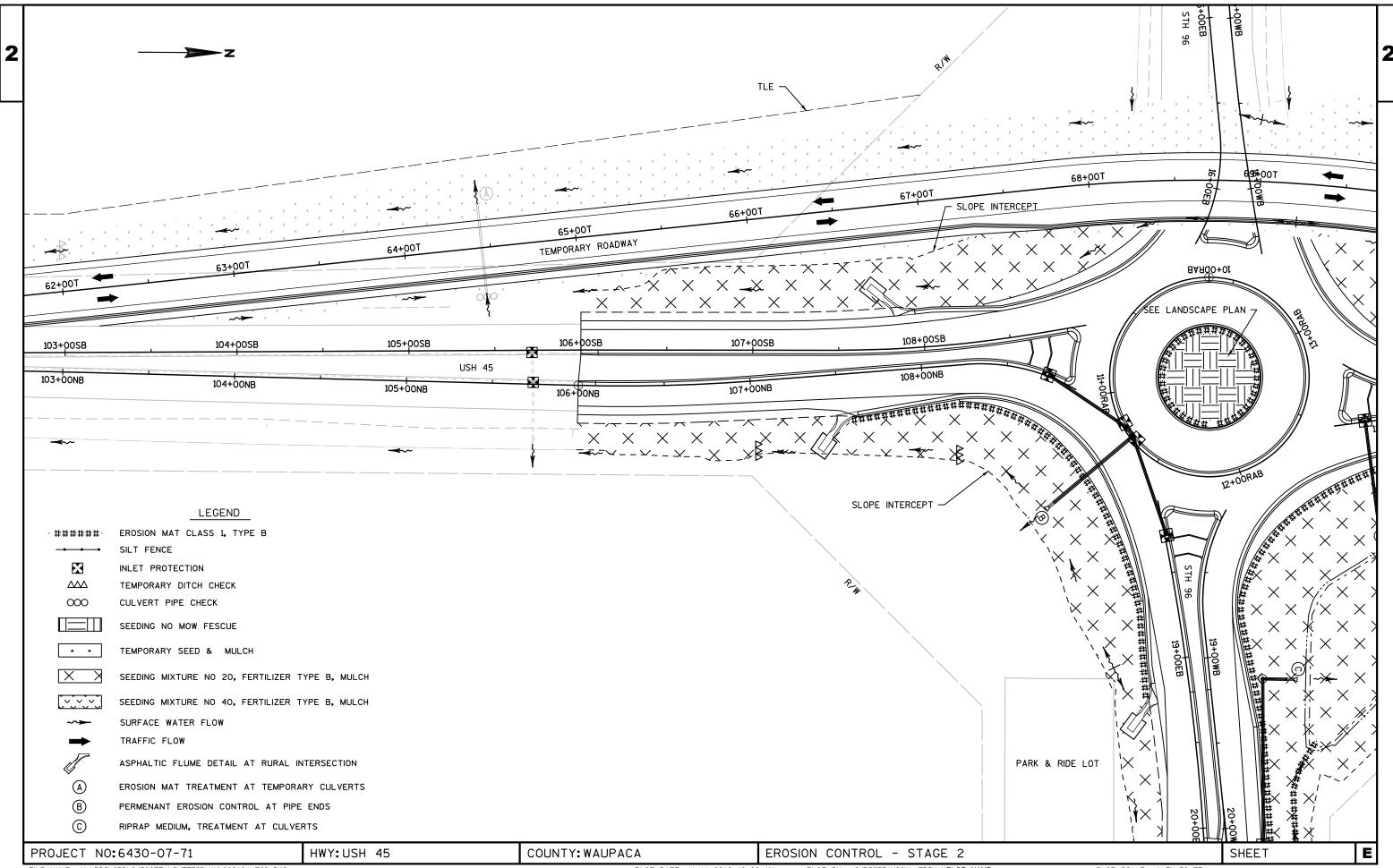


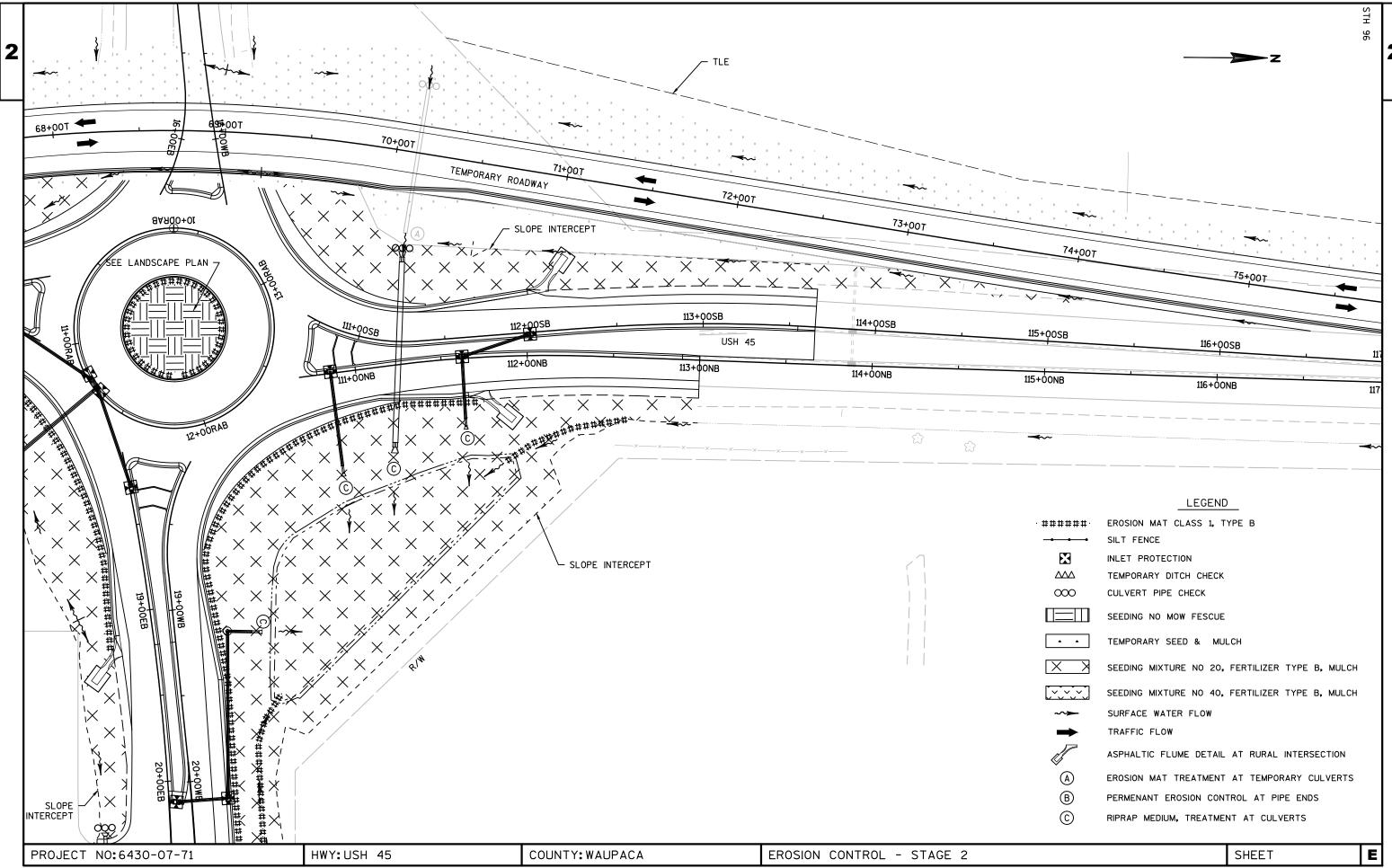


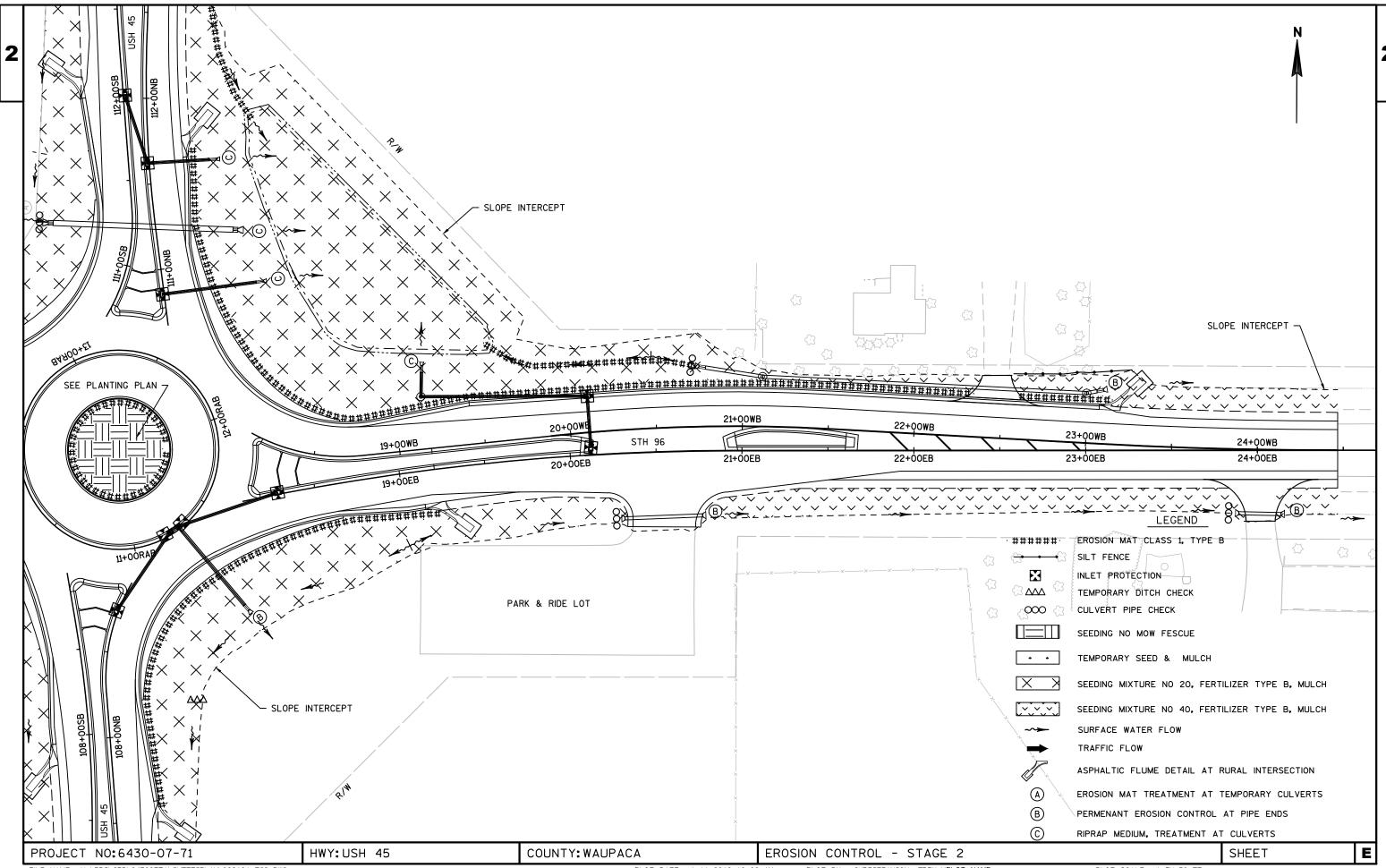


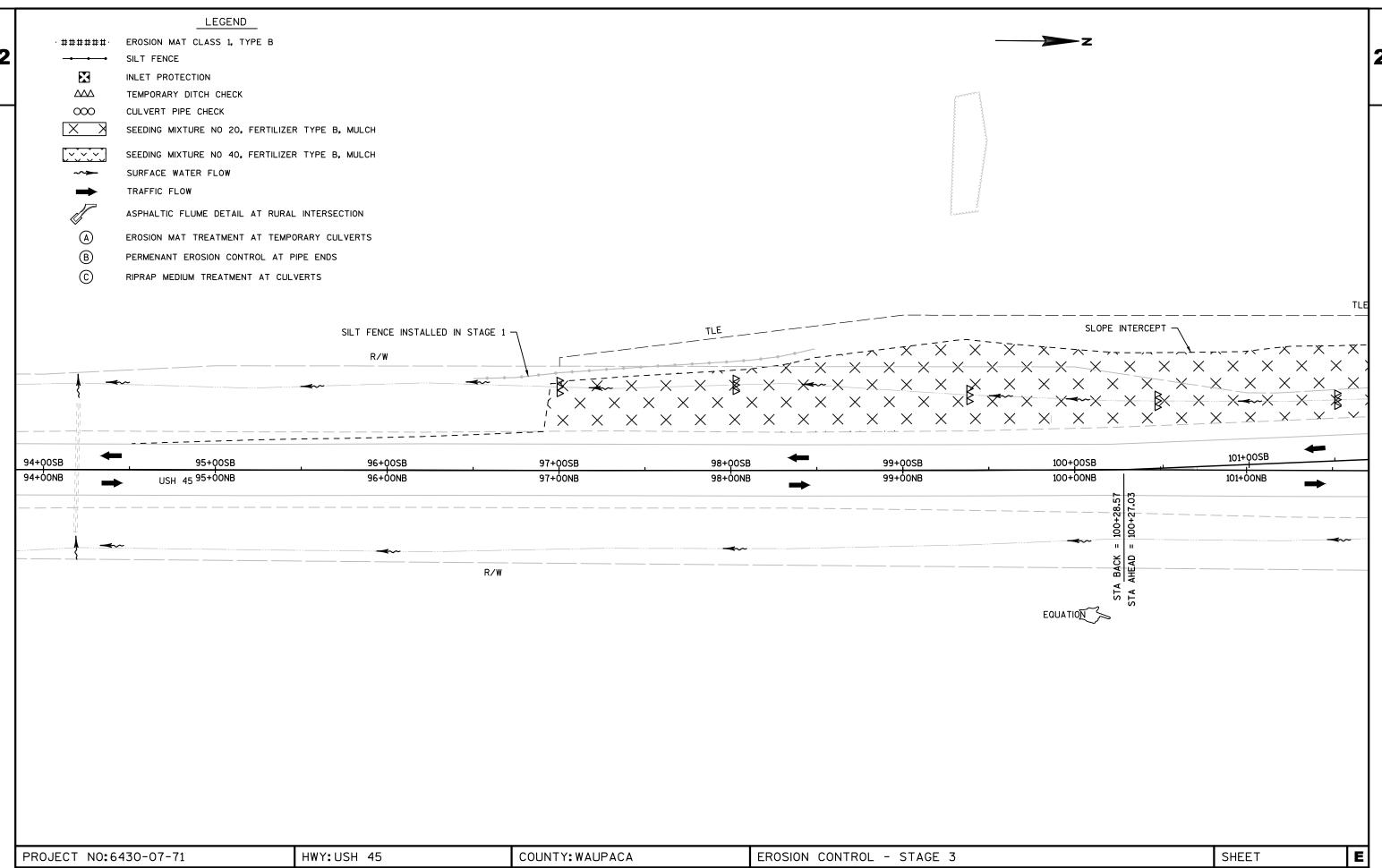


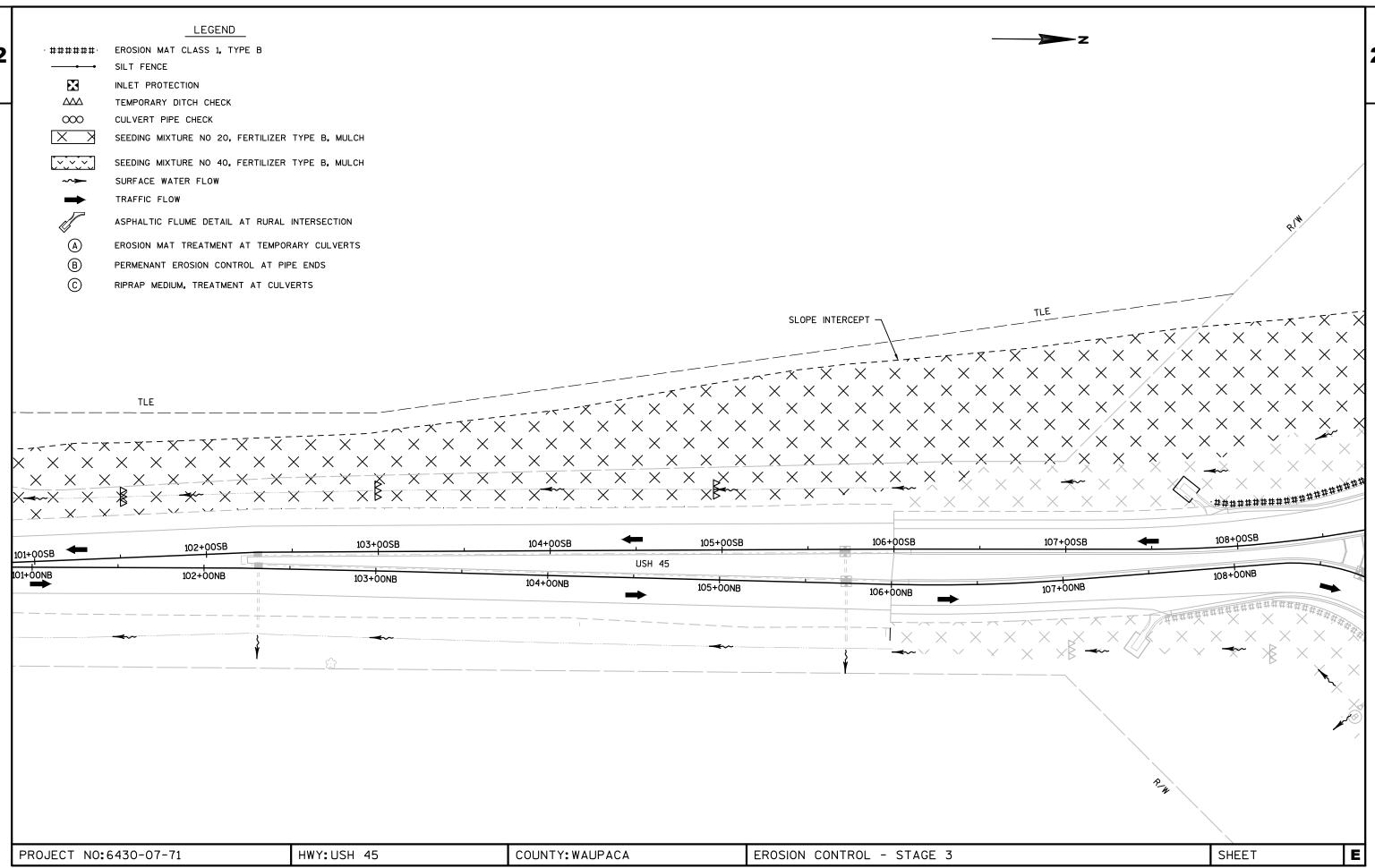


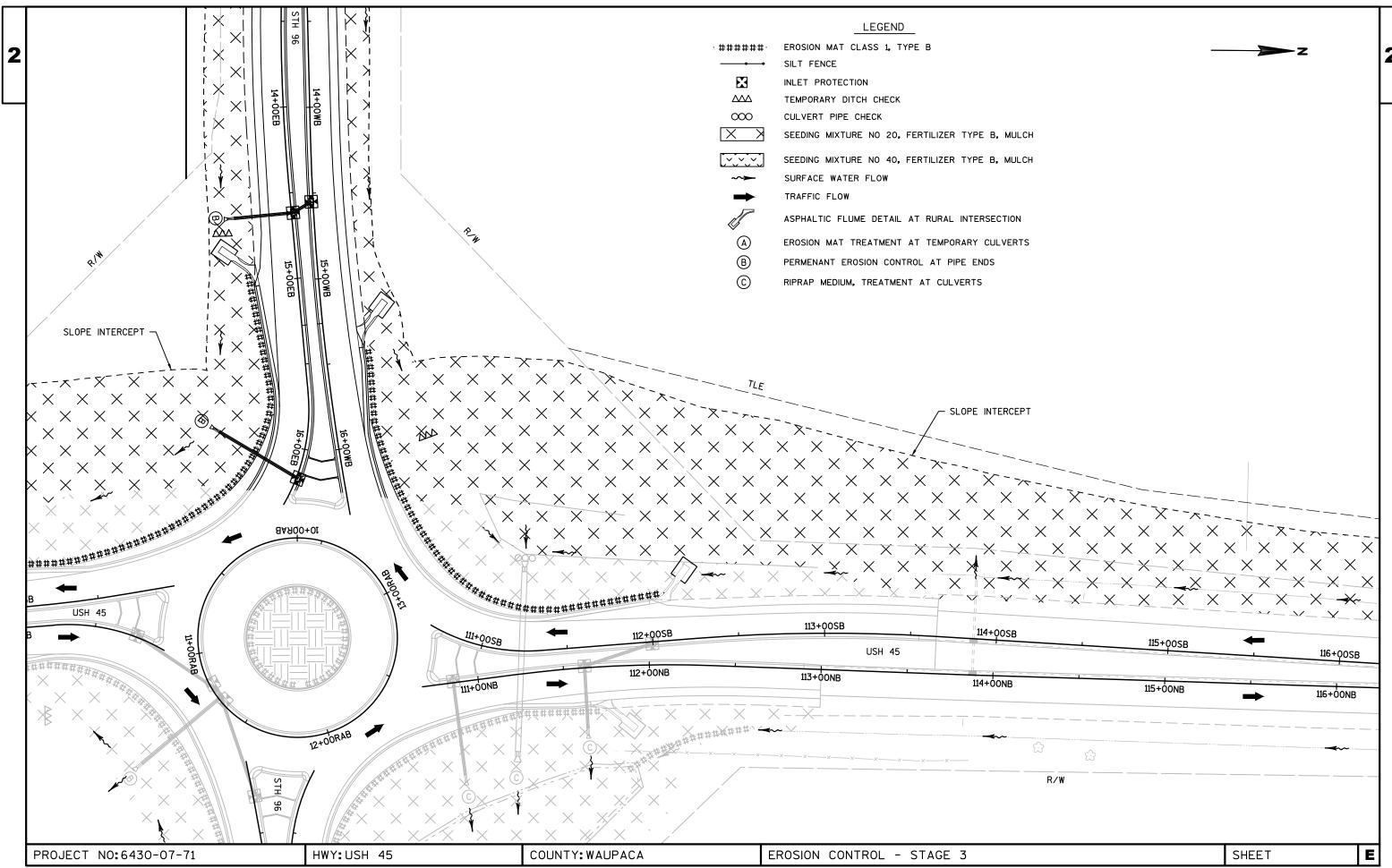


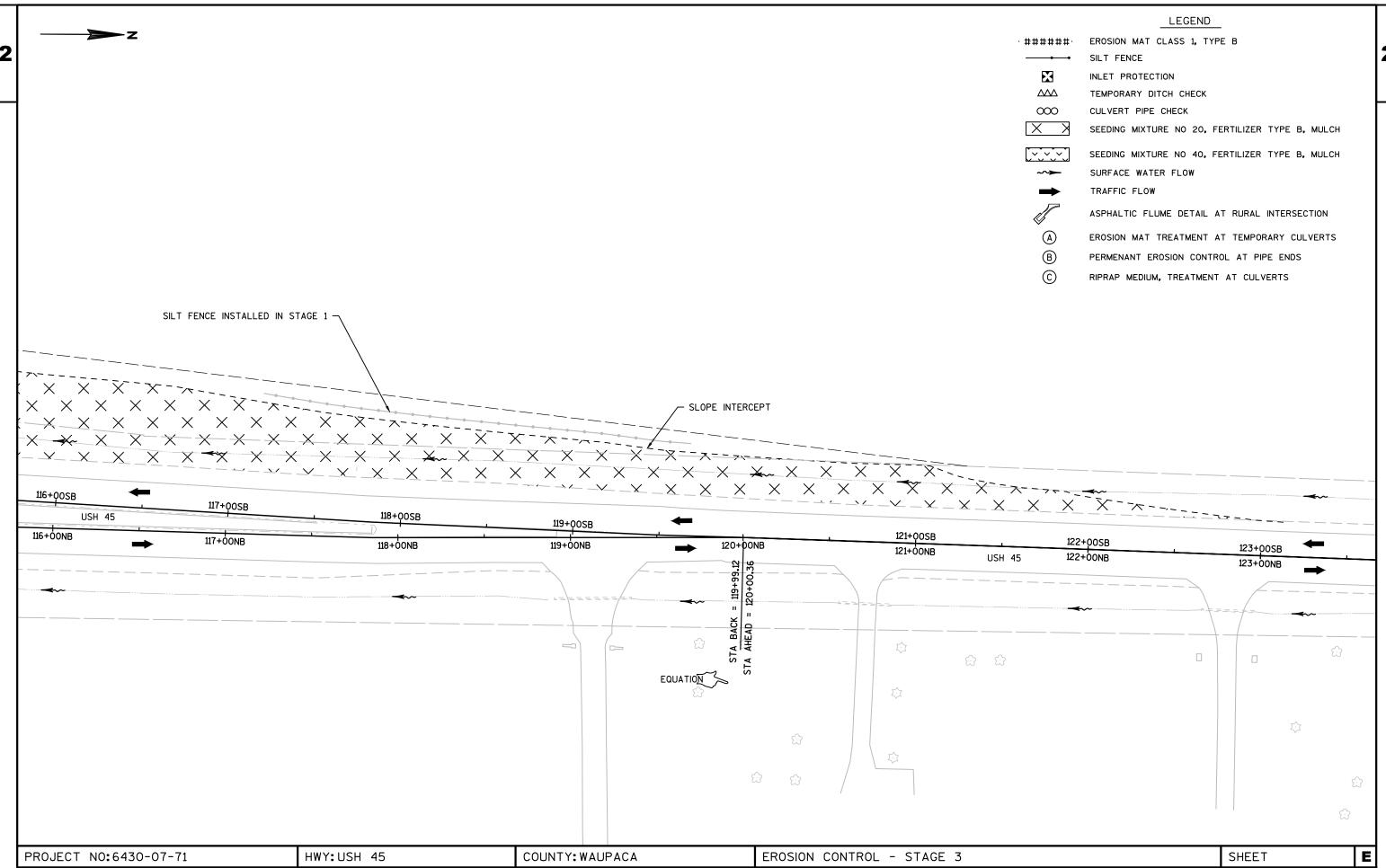


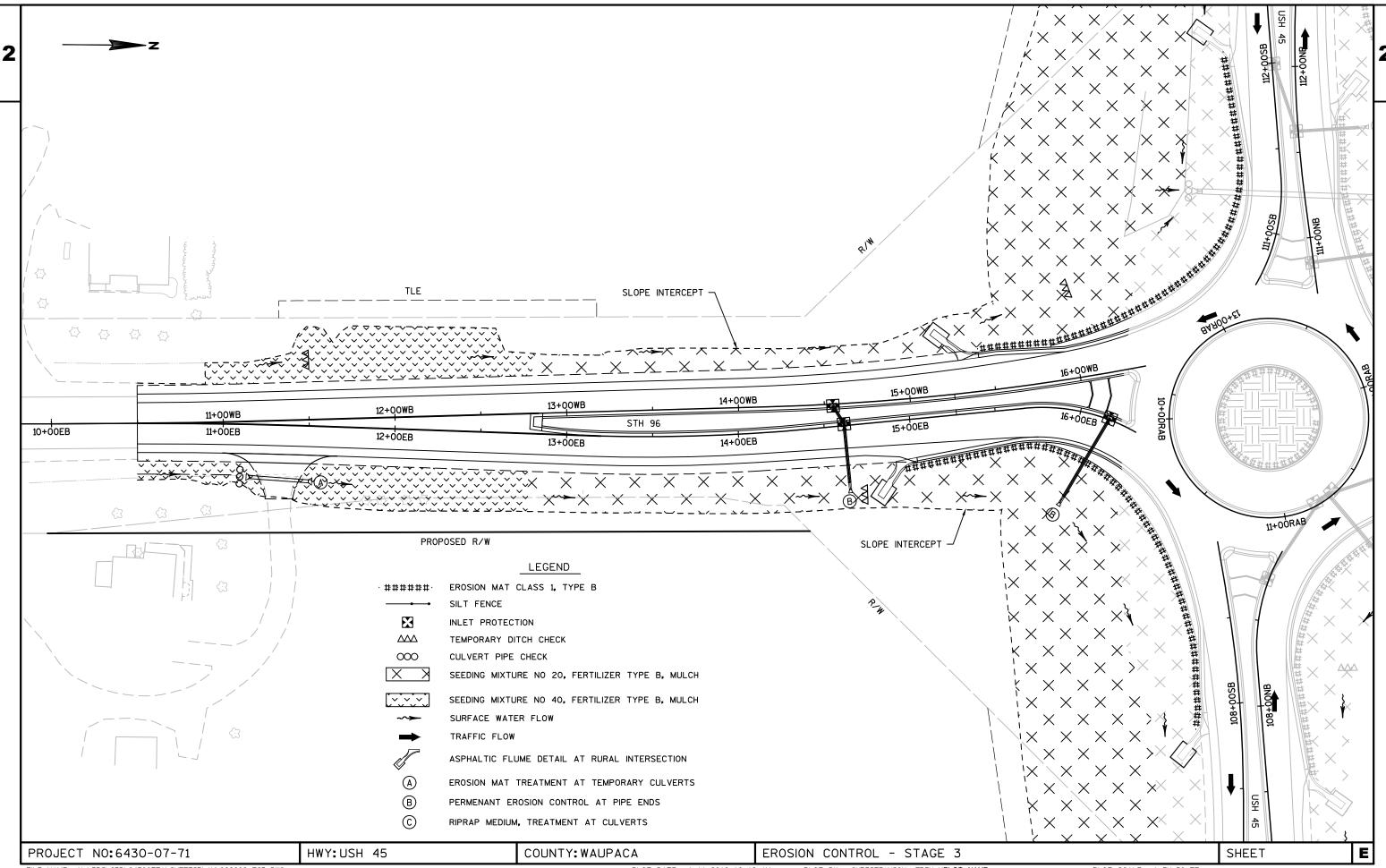


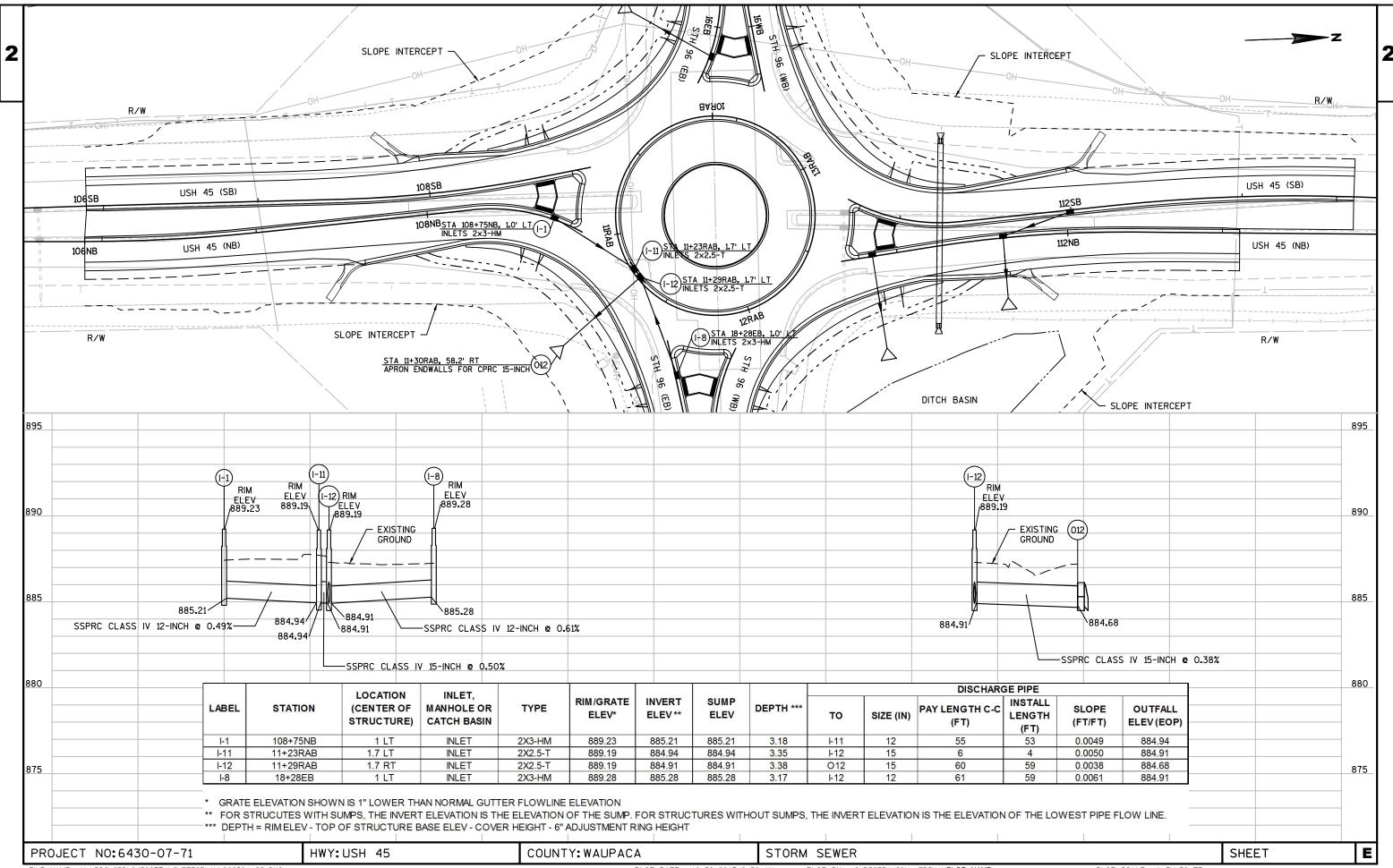


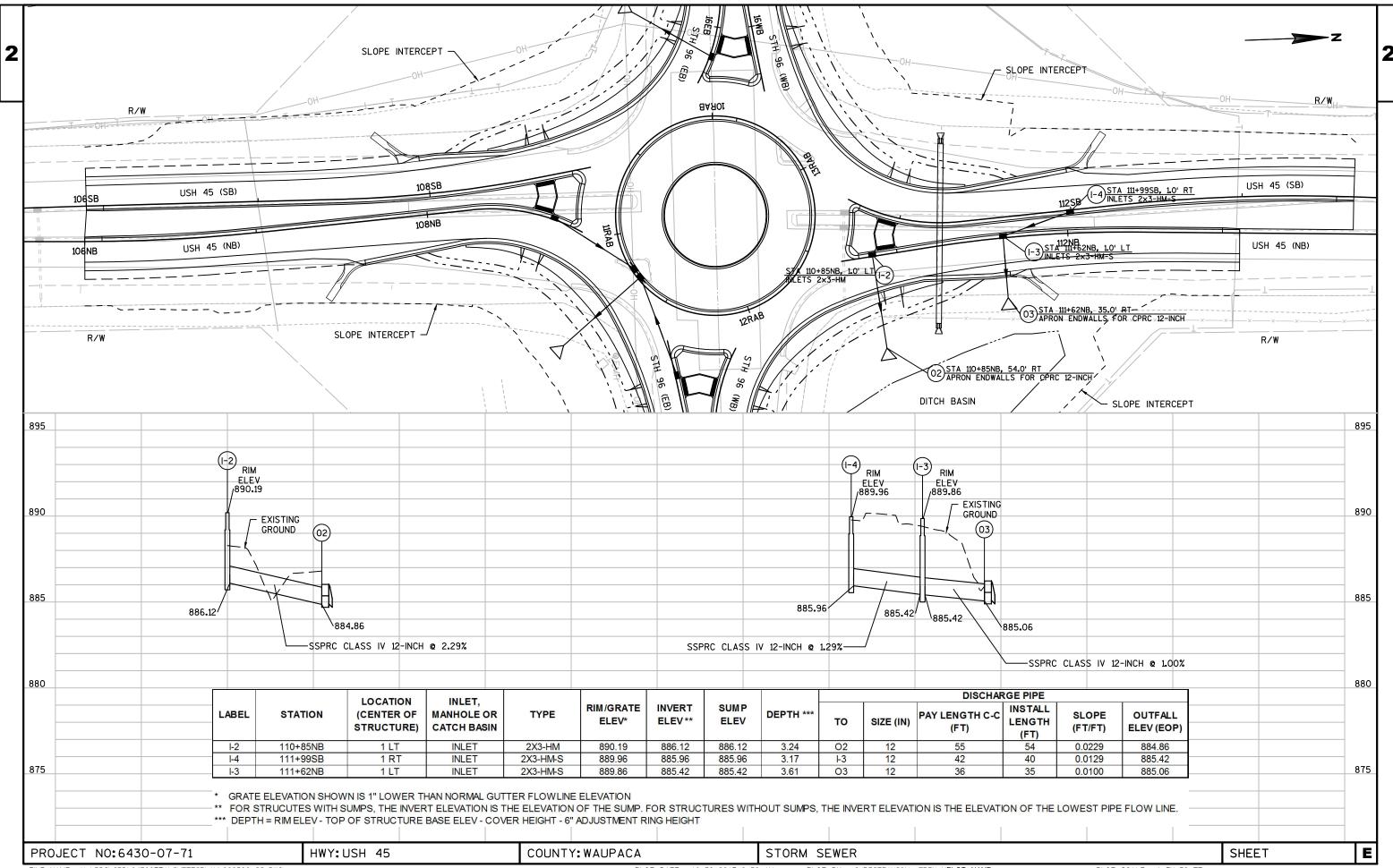


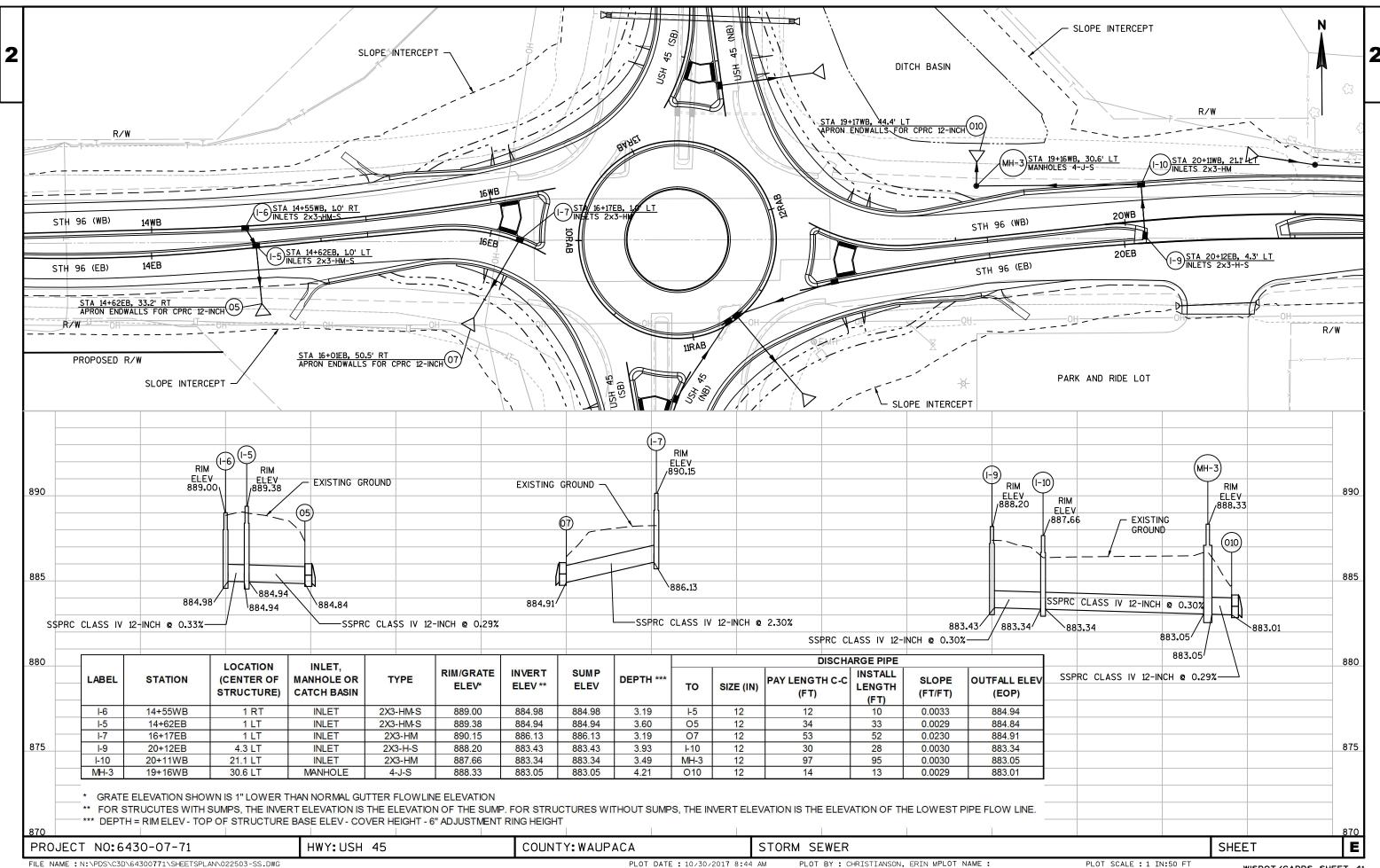


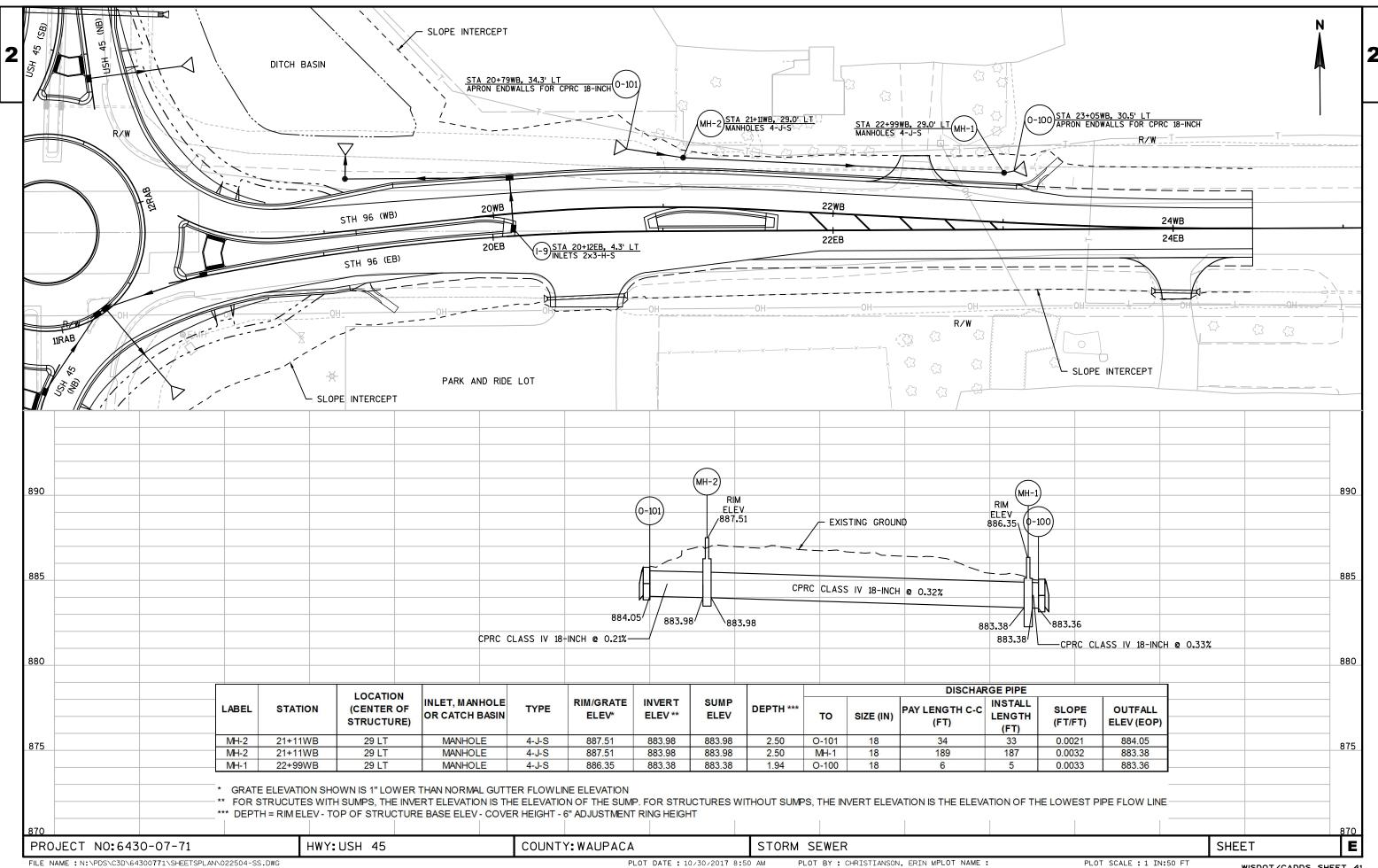


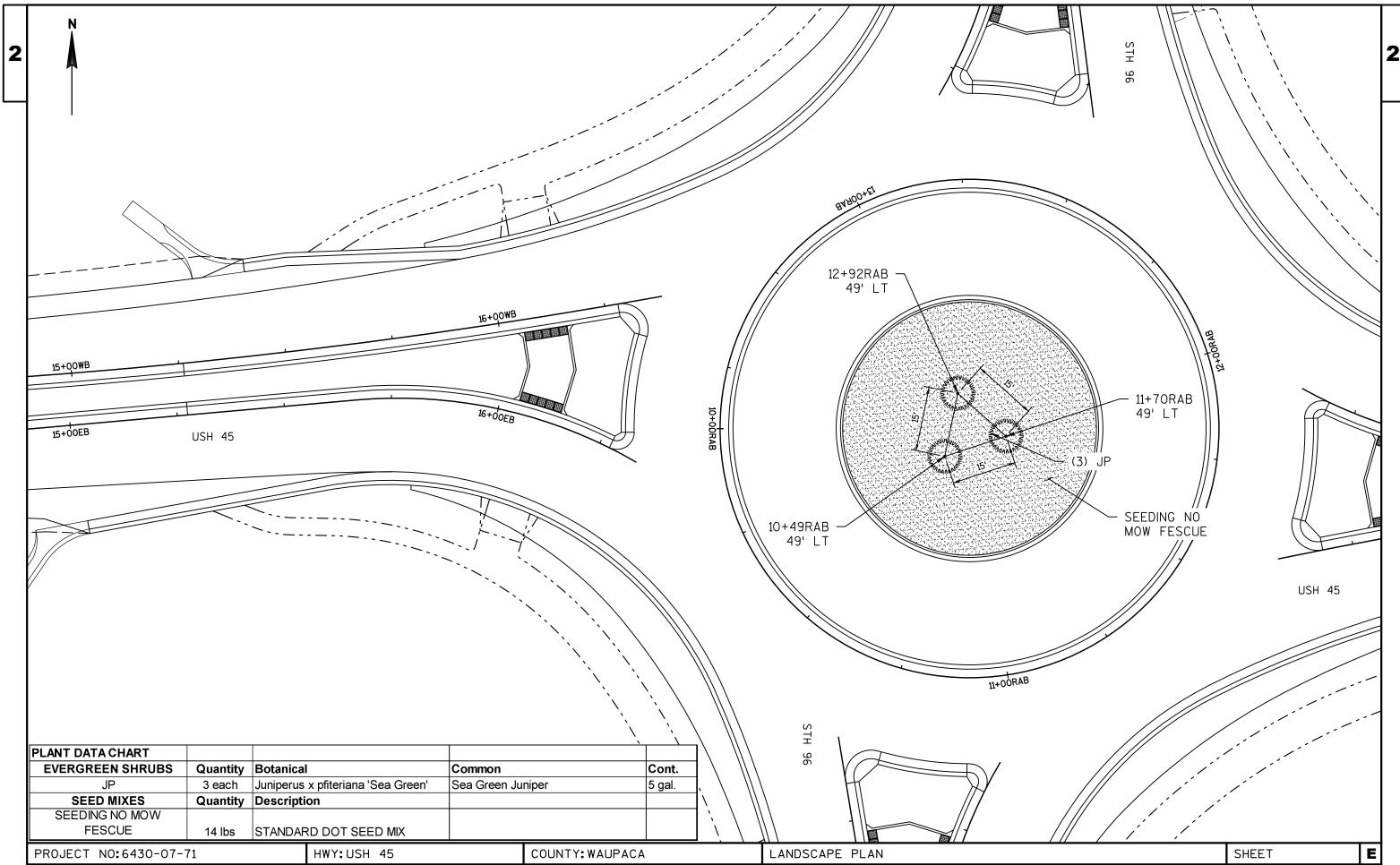


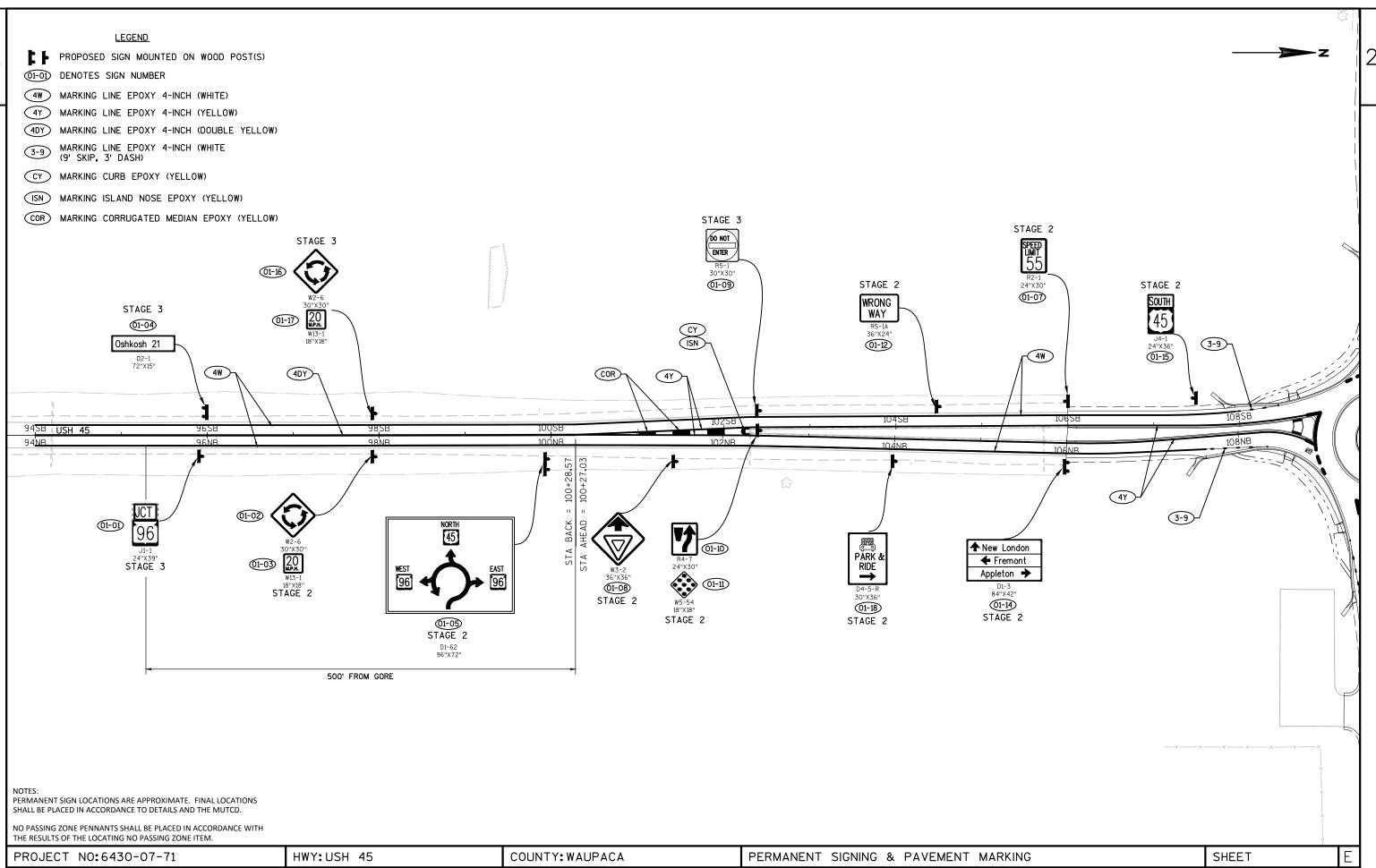


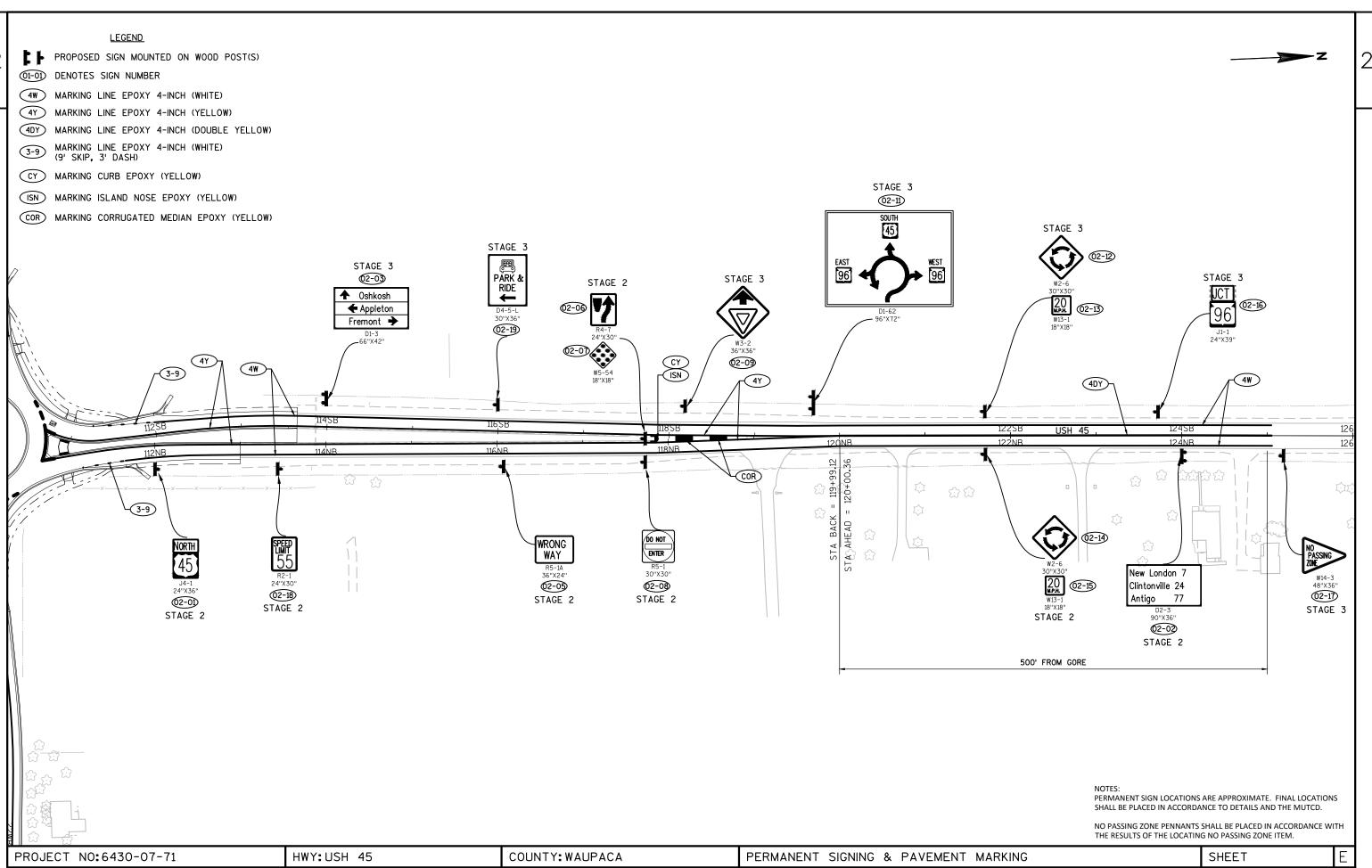


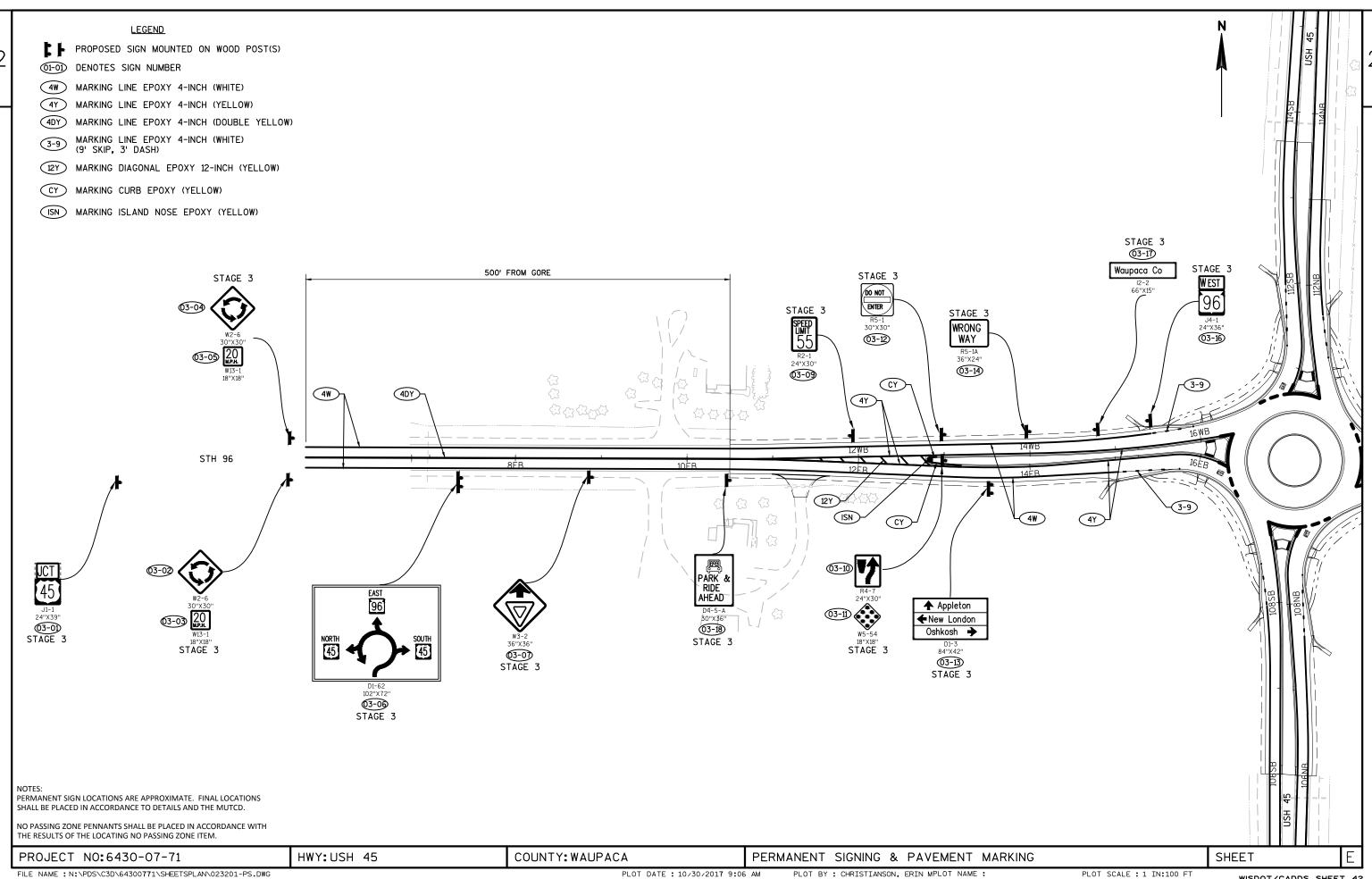










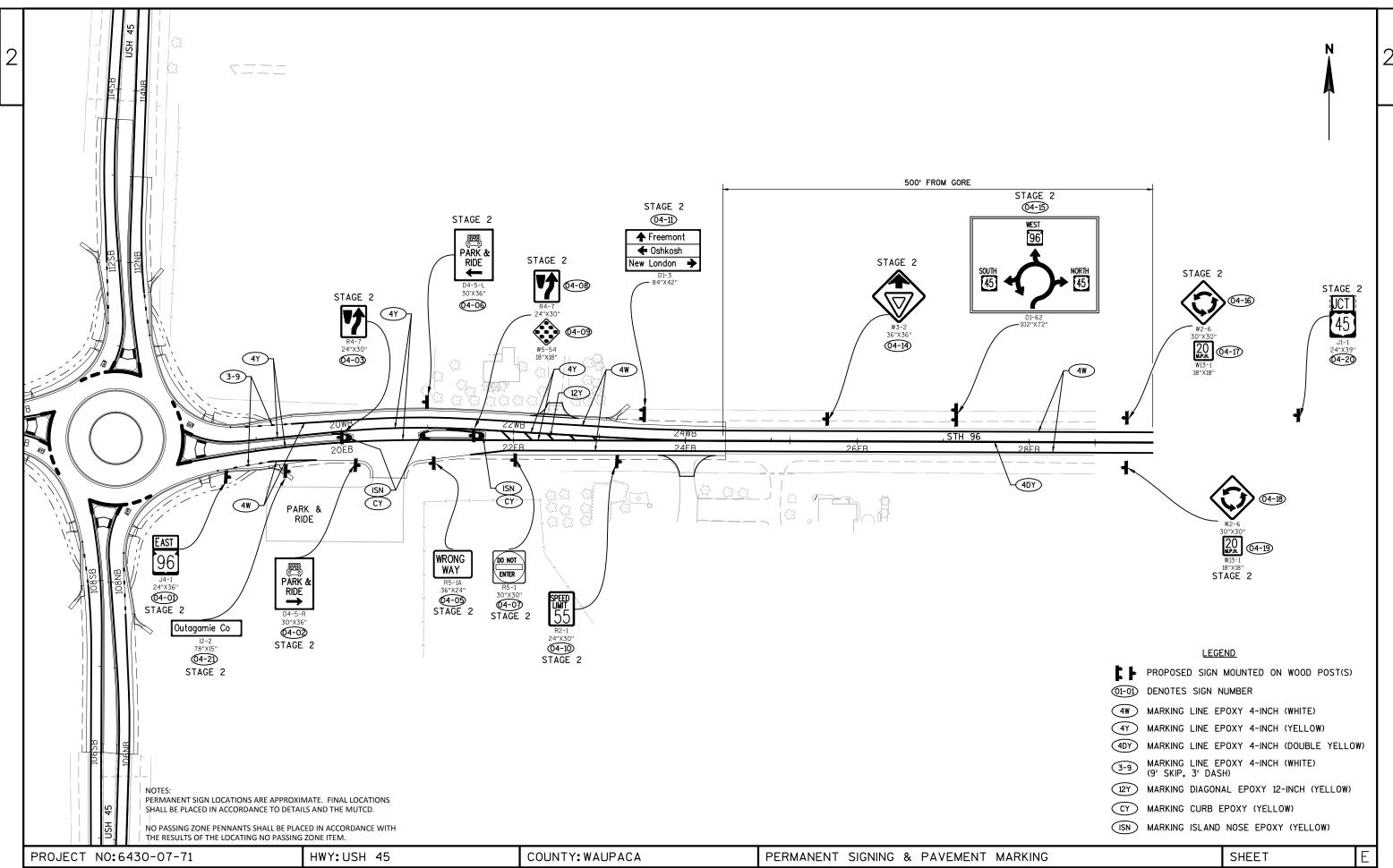


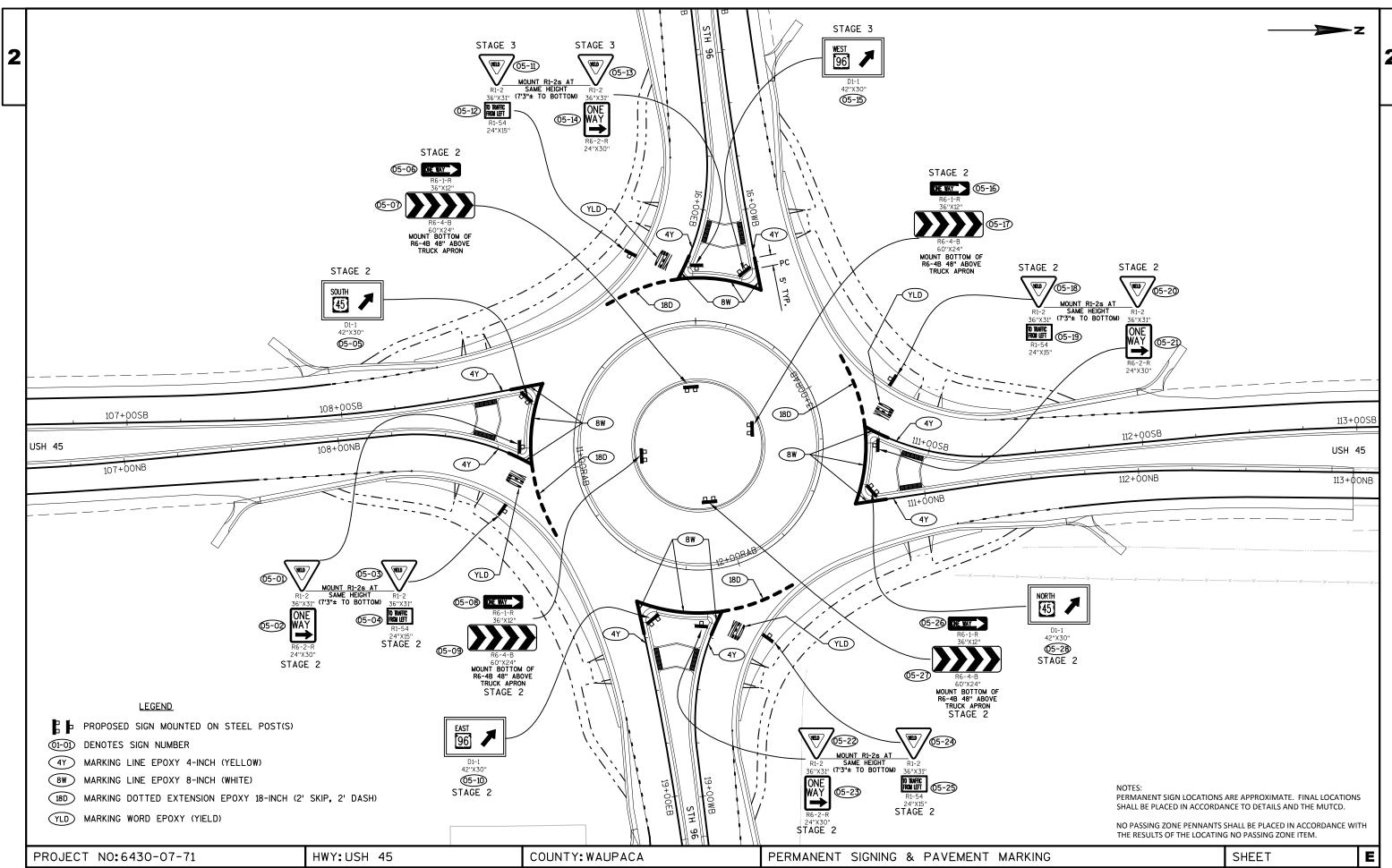
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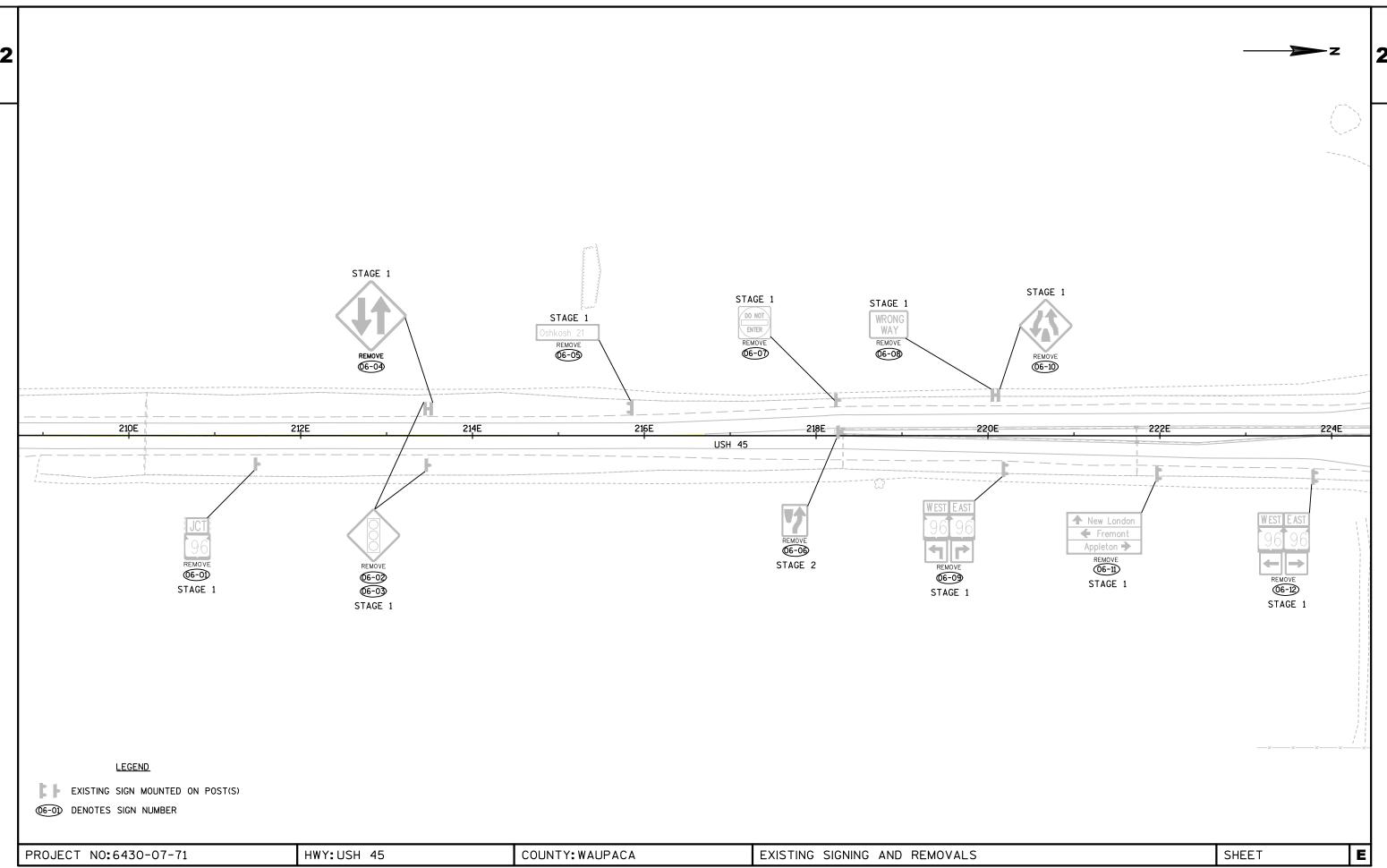
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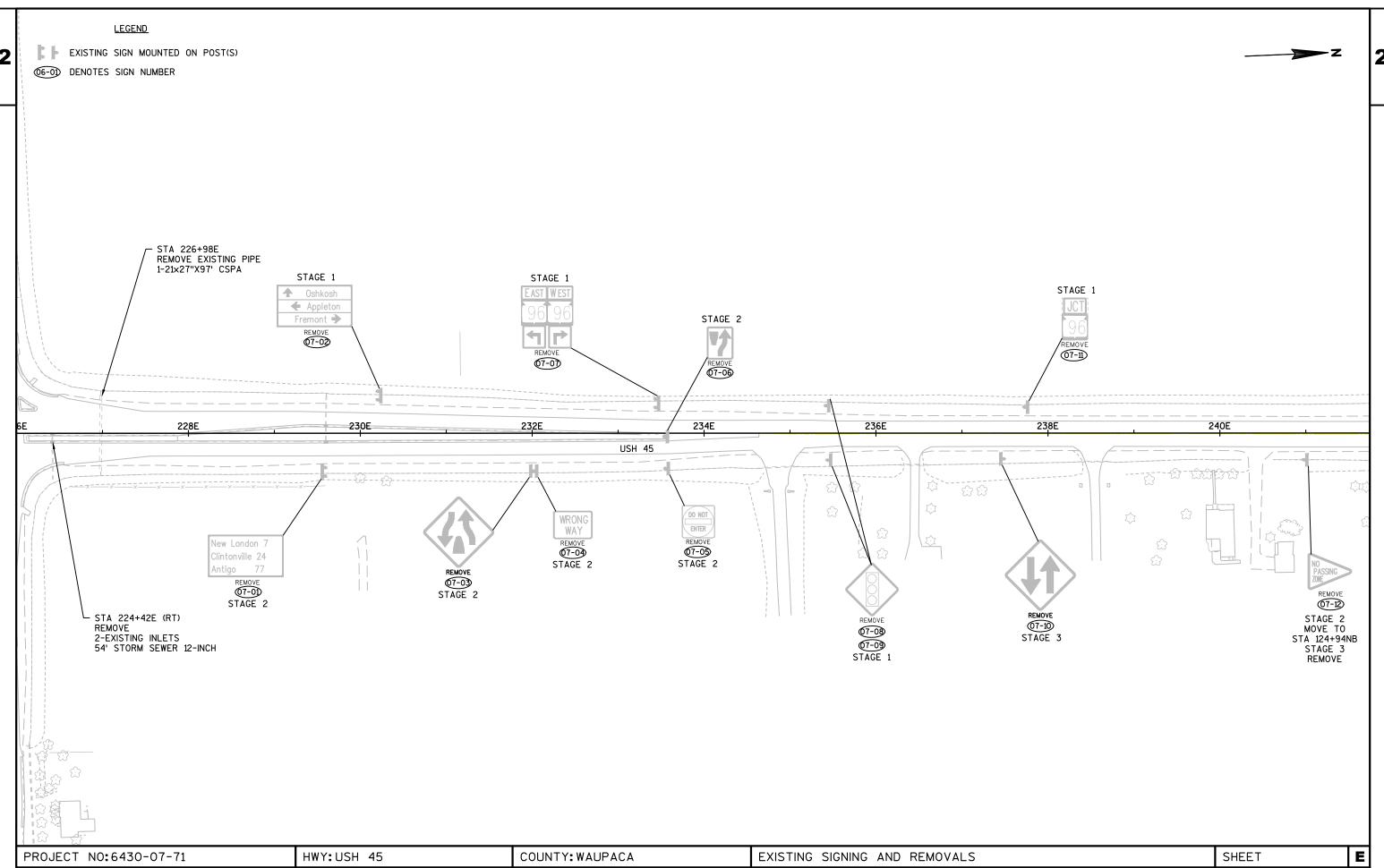
PLOT BY: CHRISTIANSON, ERIN MPLOT NAME:

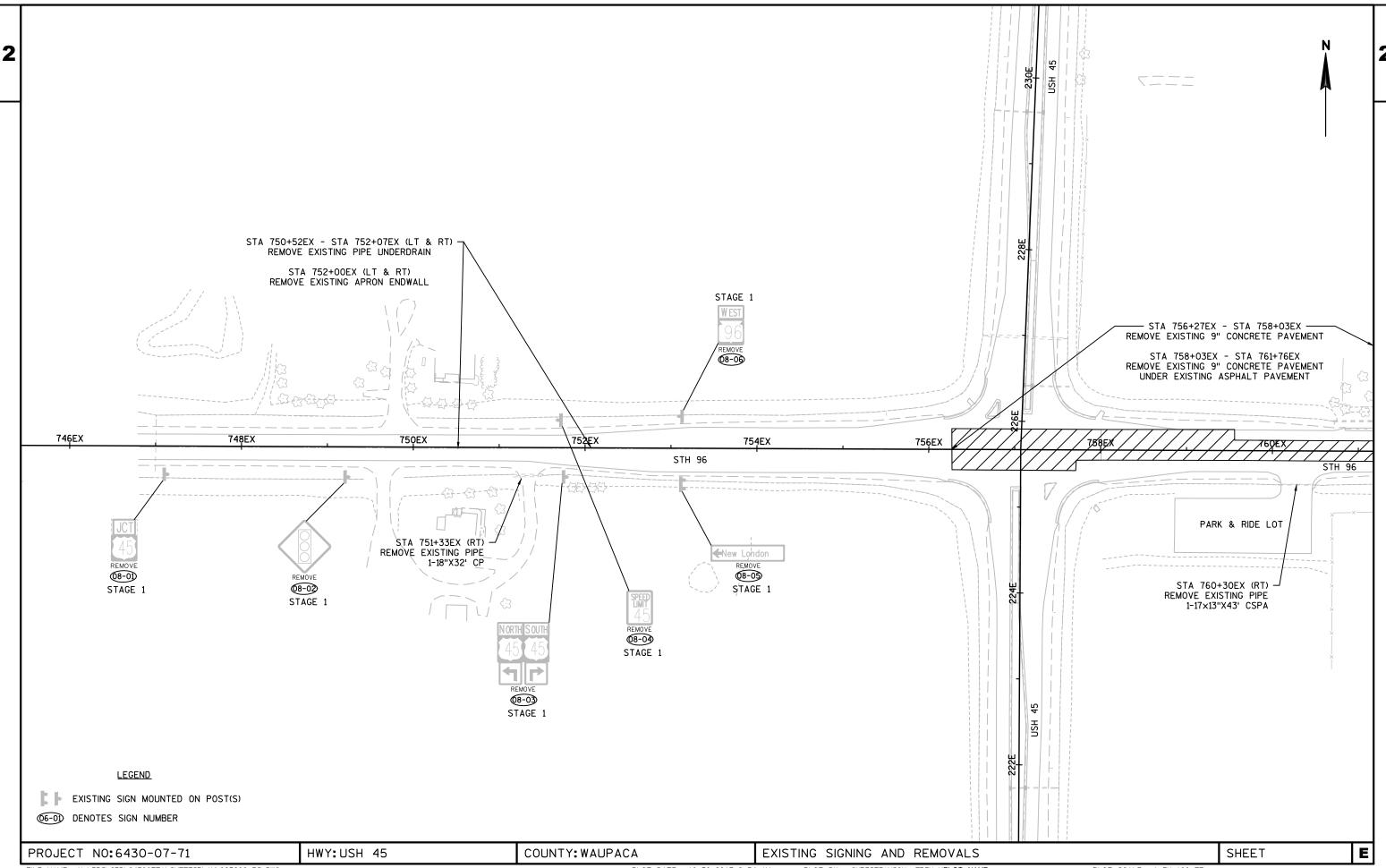
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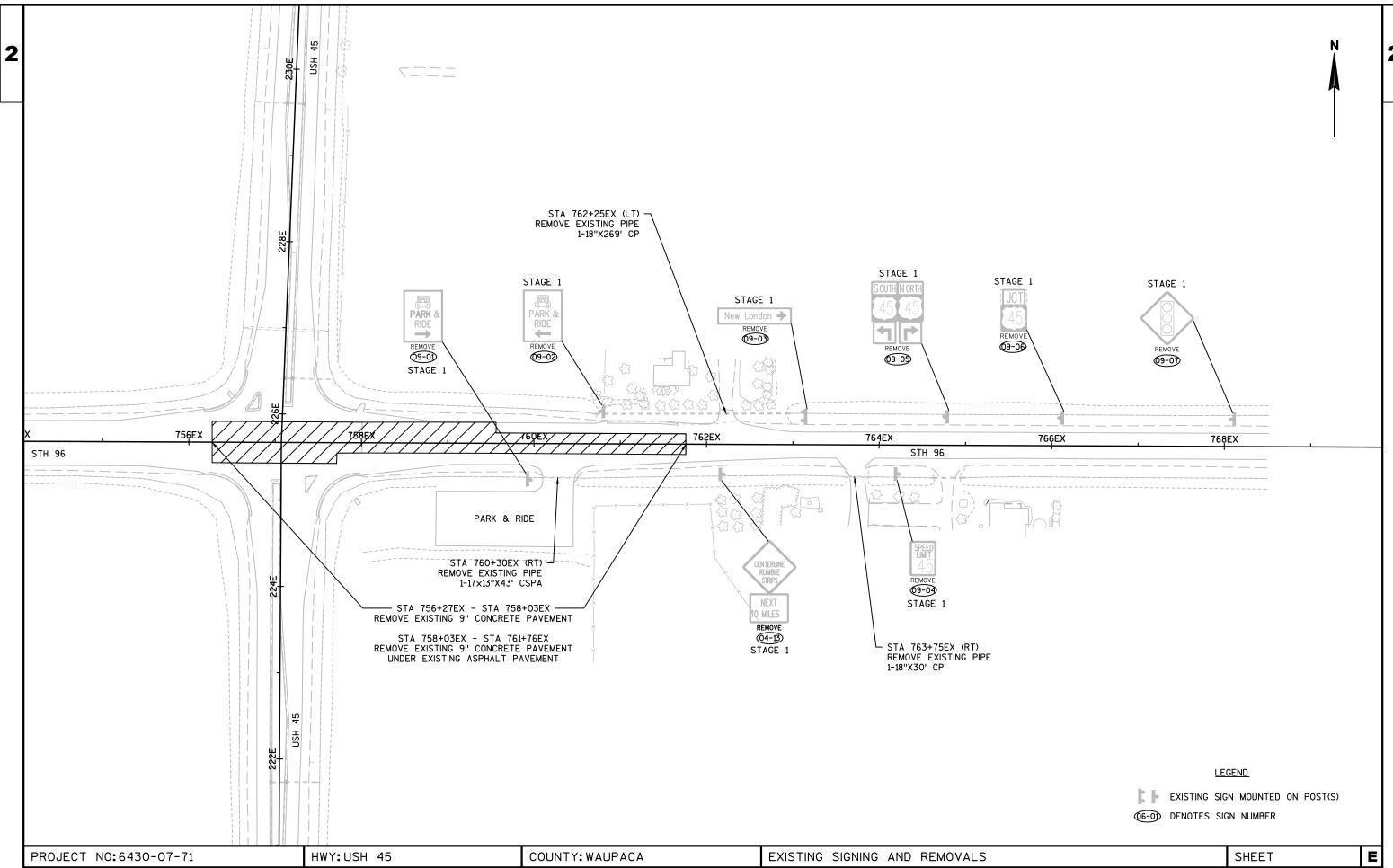


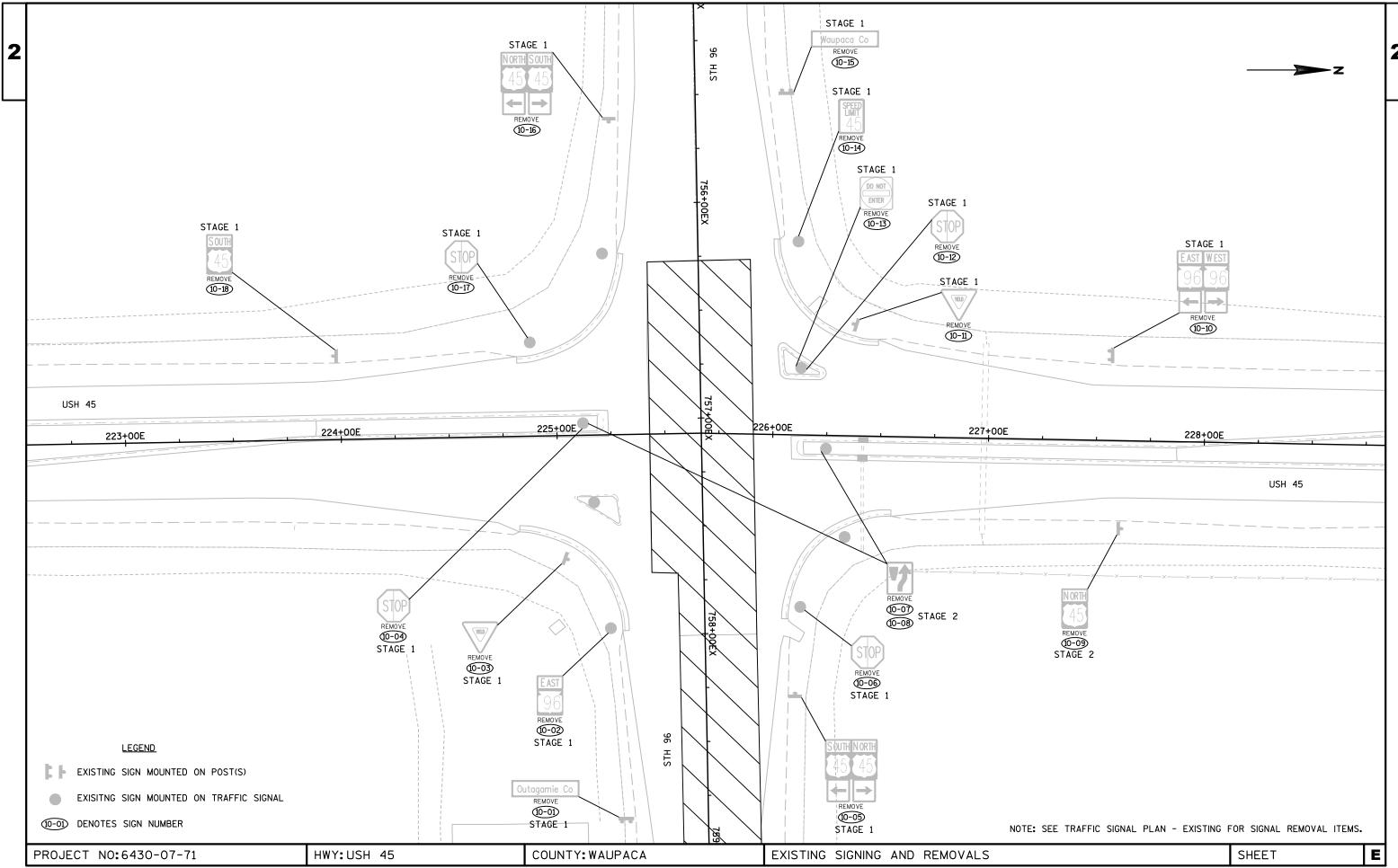


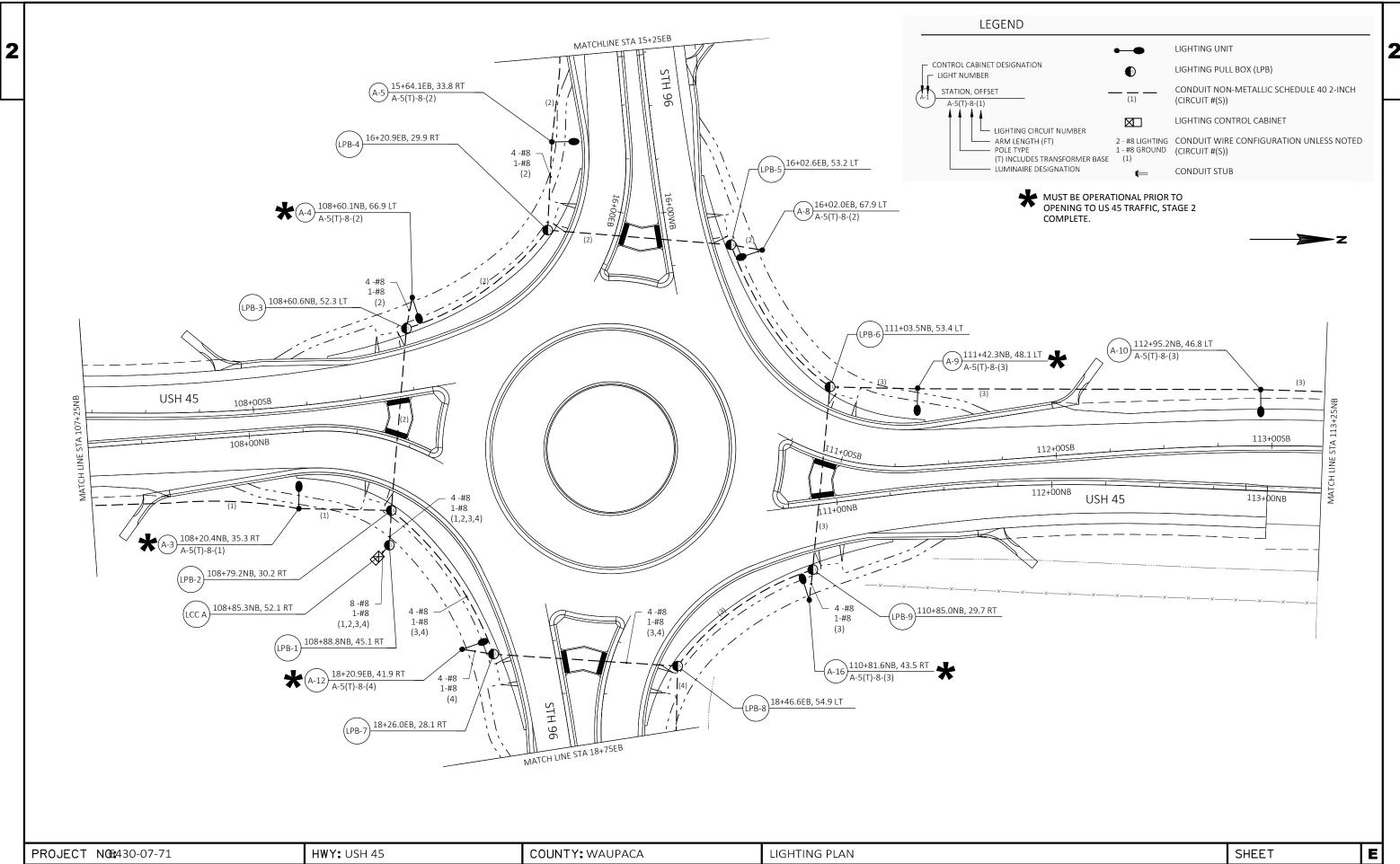


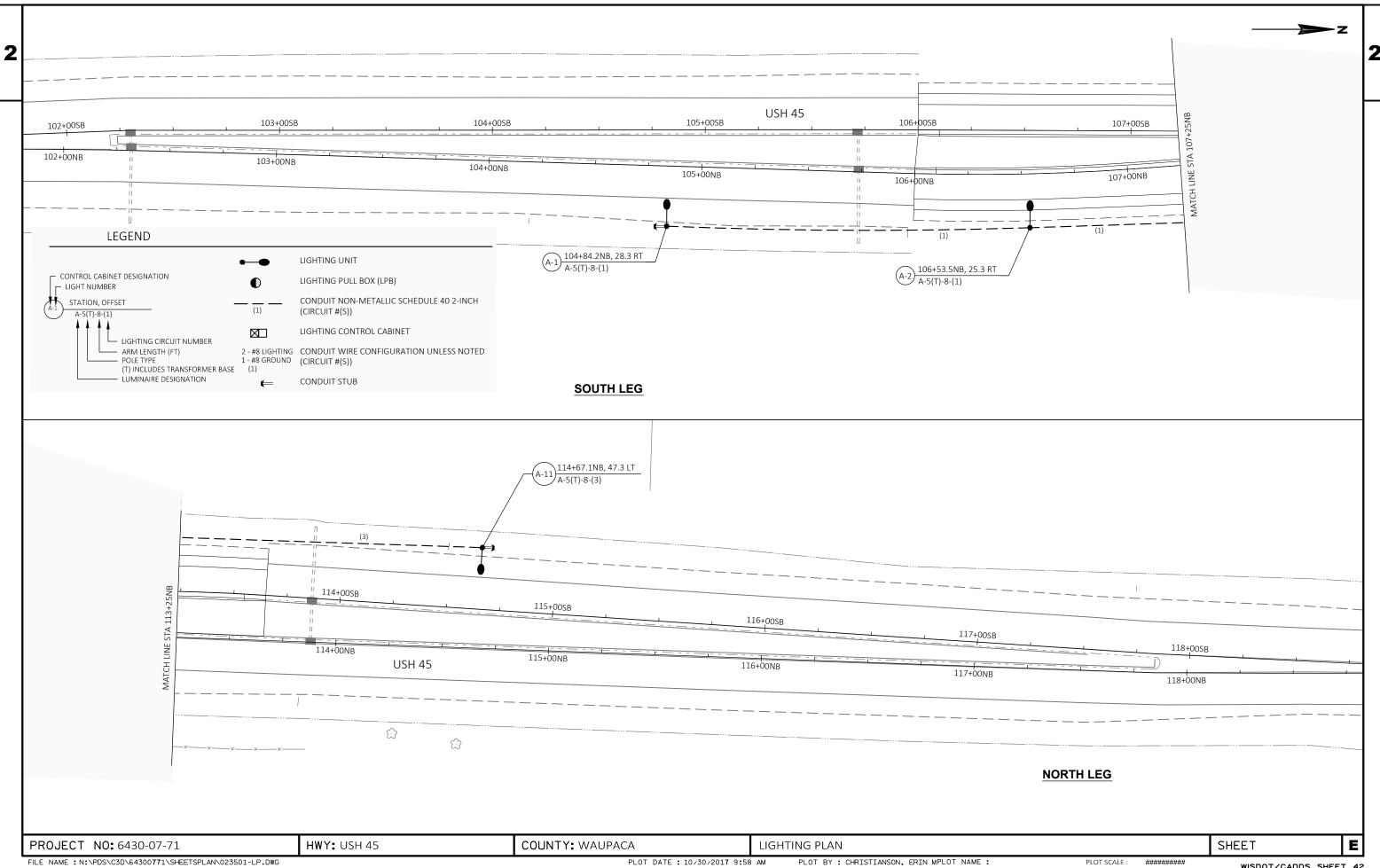


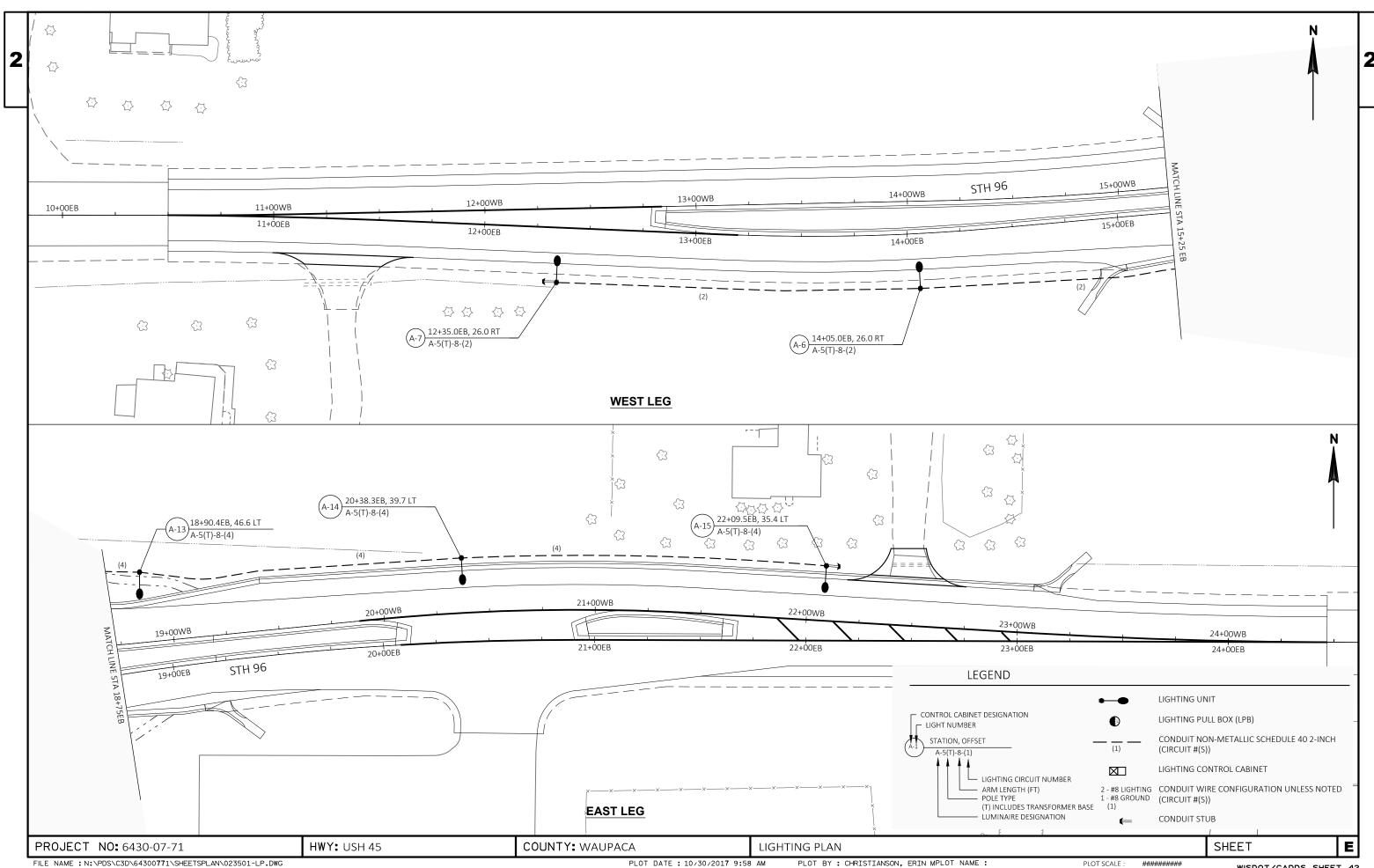


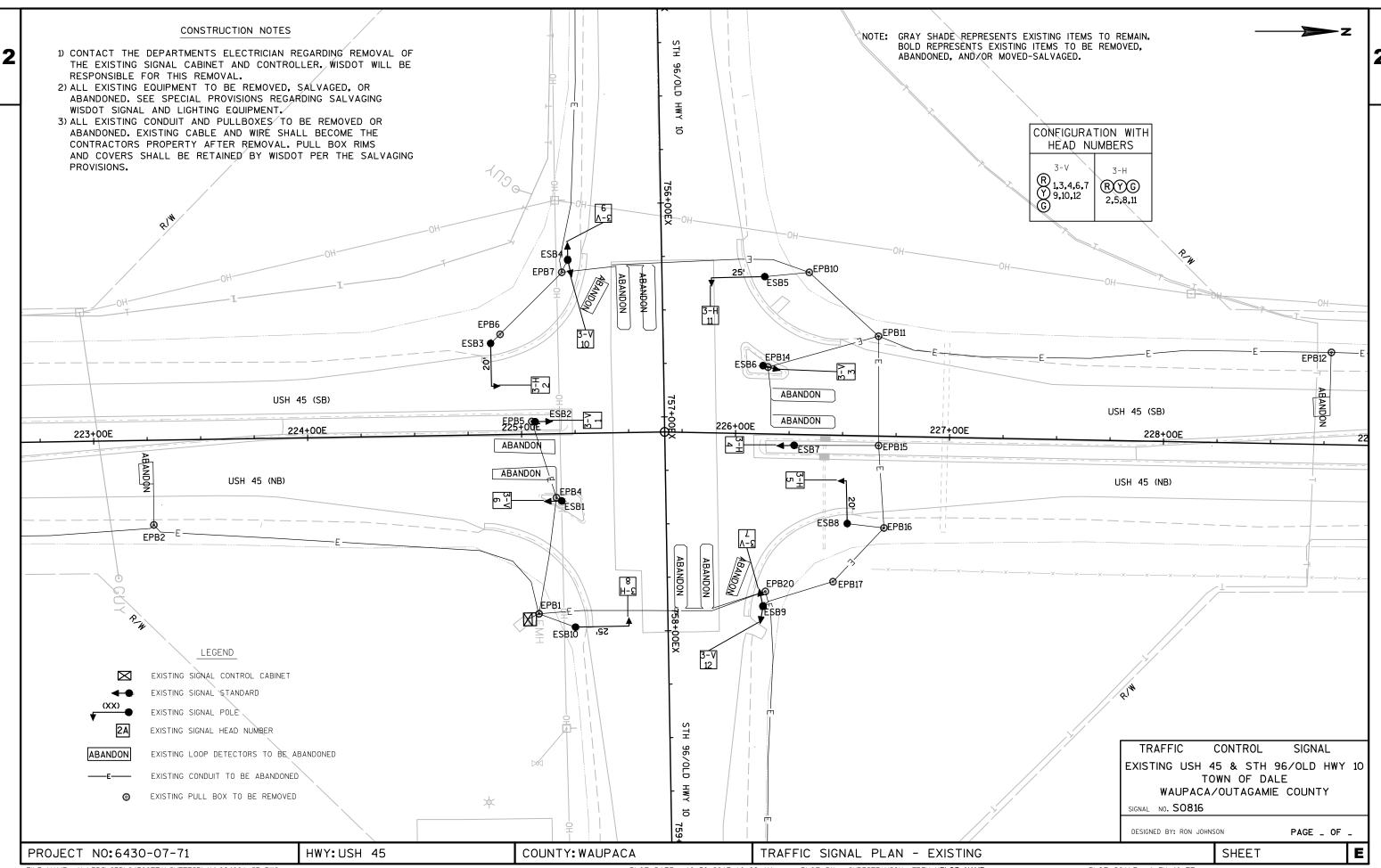


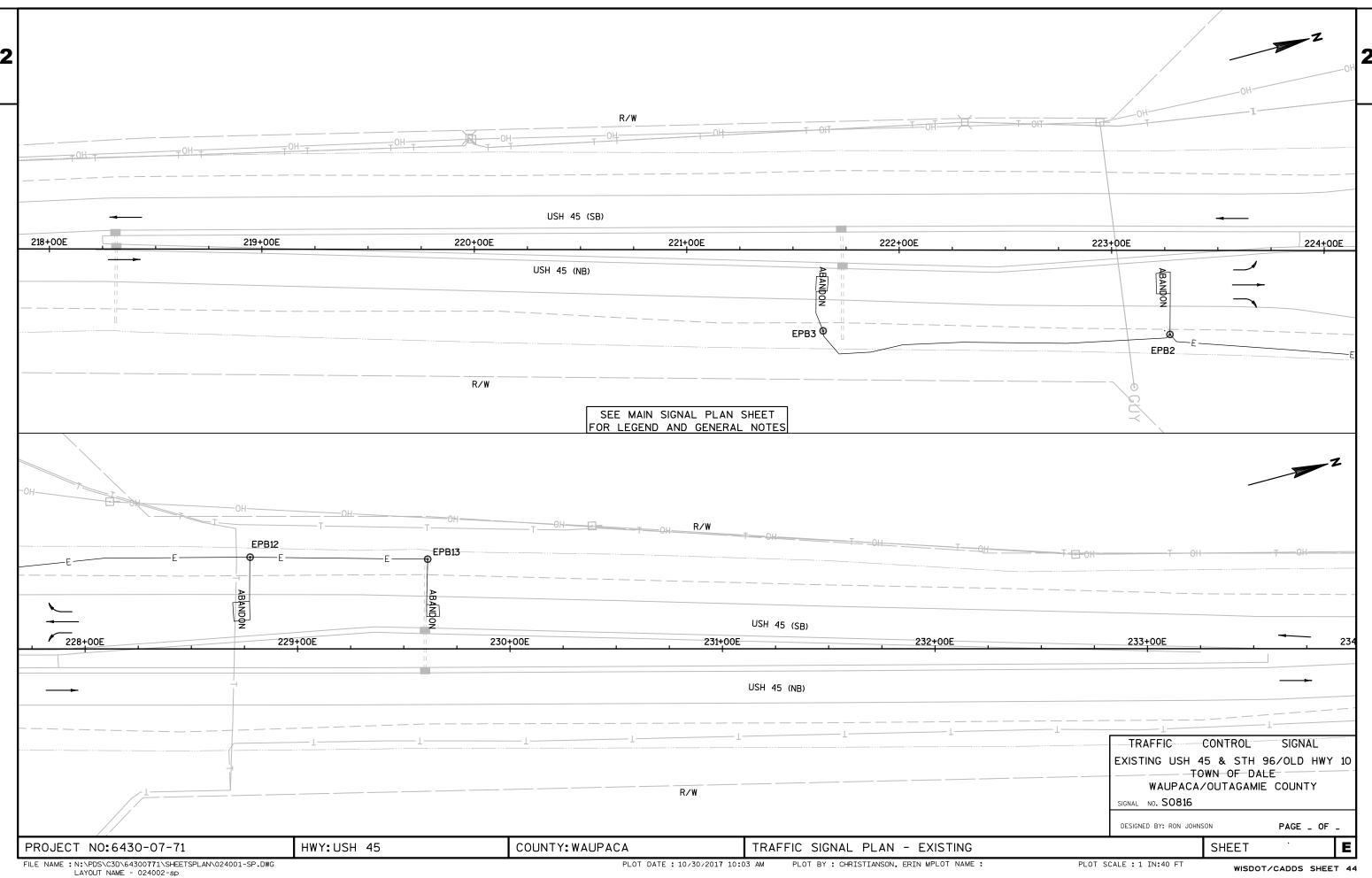


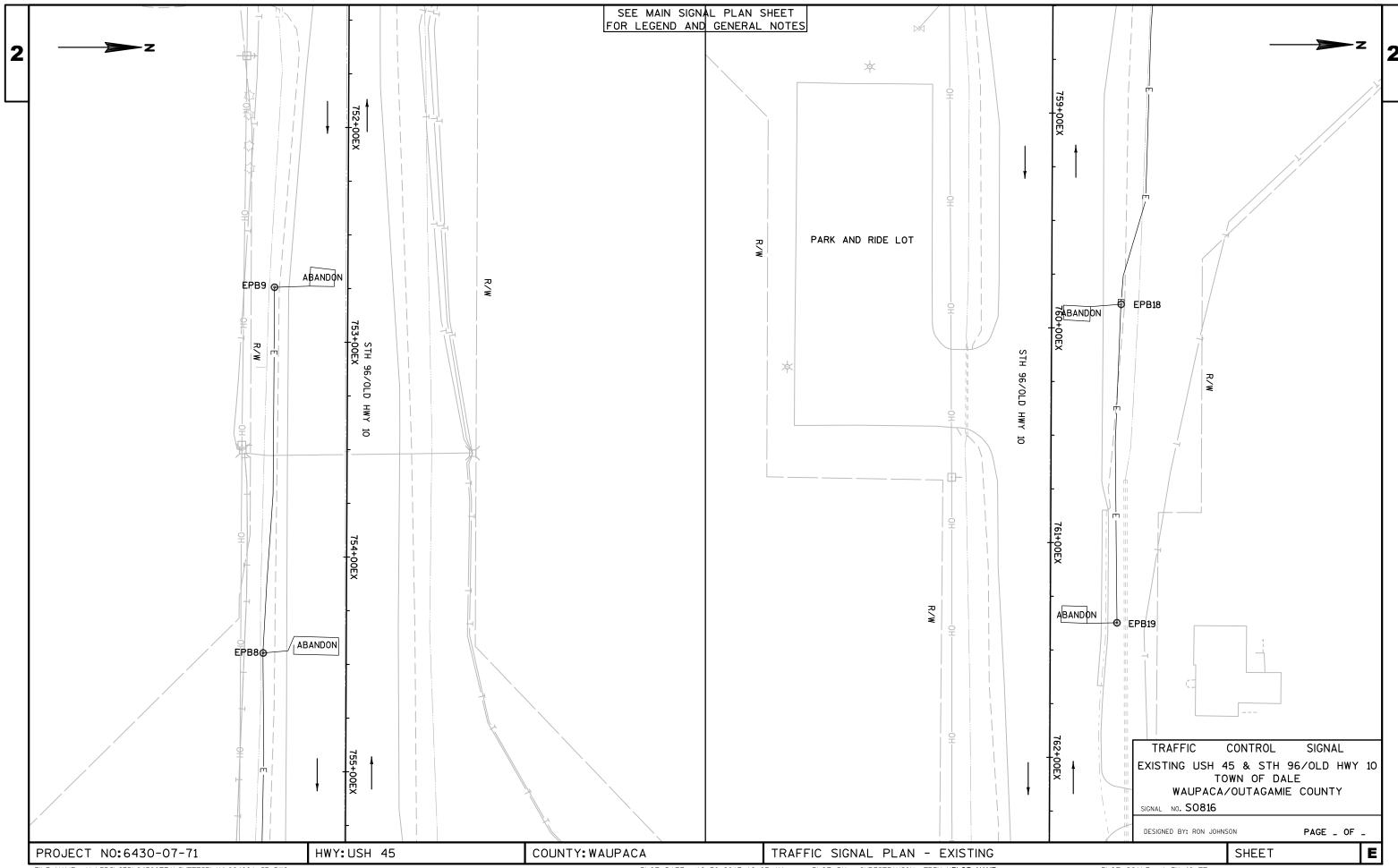


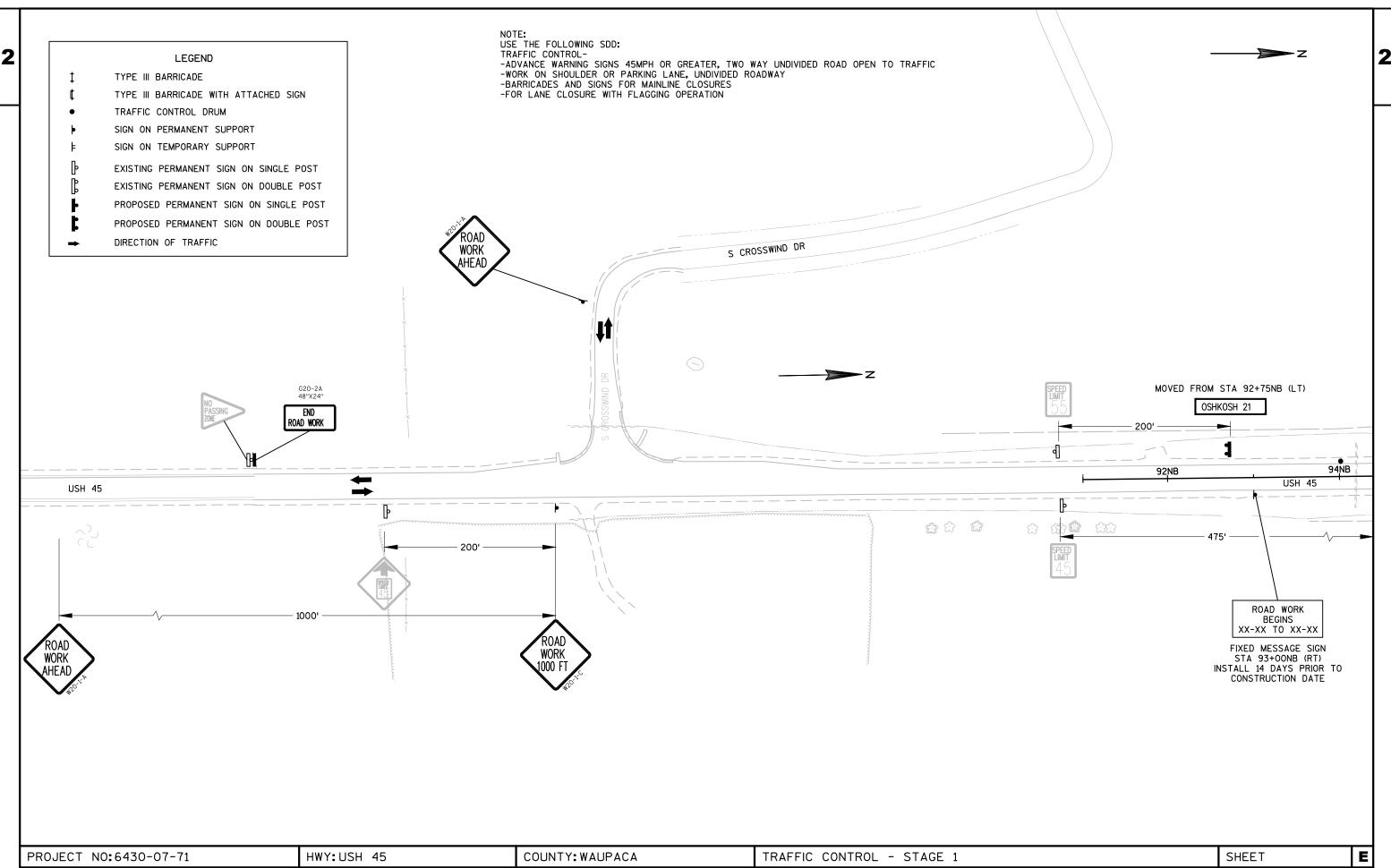


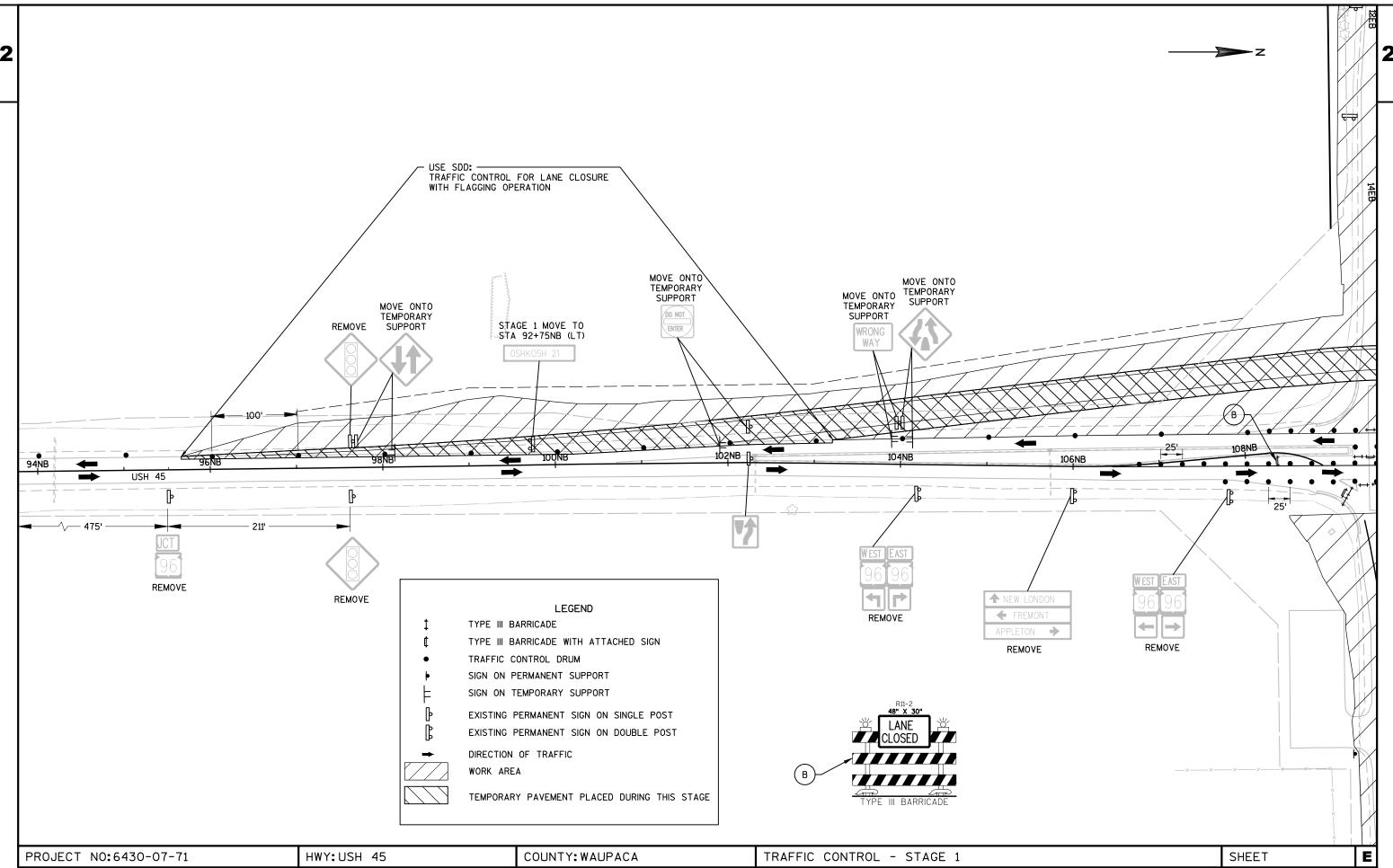


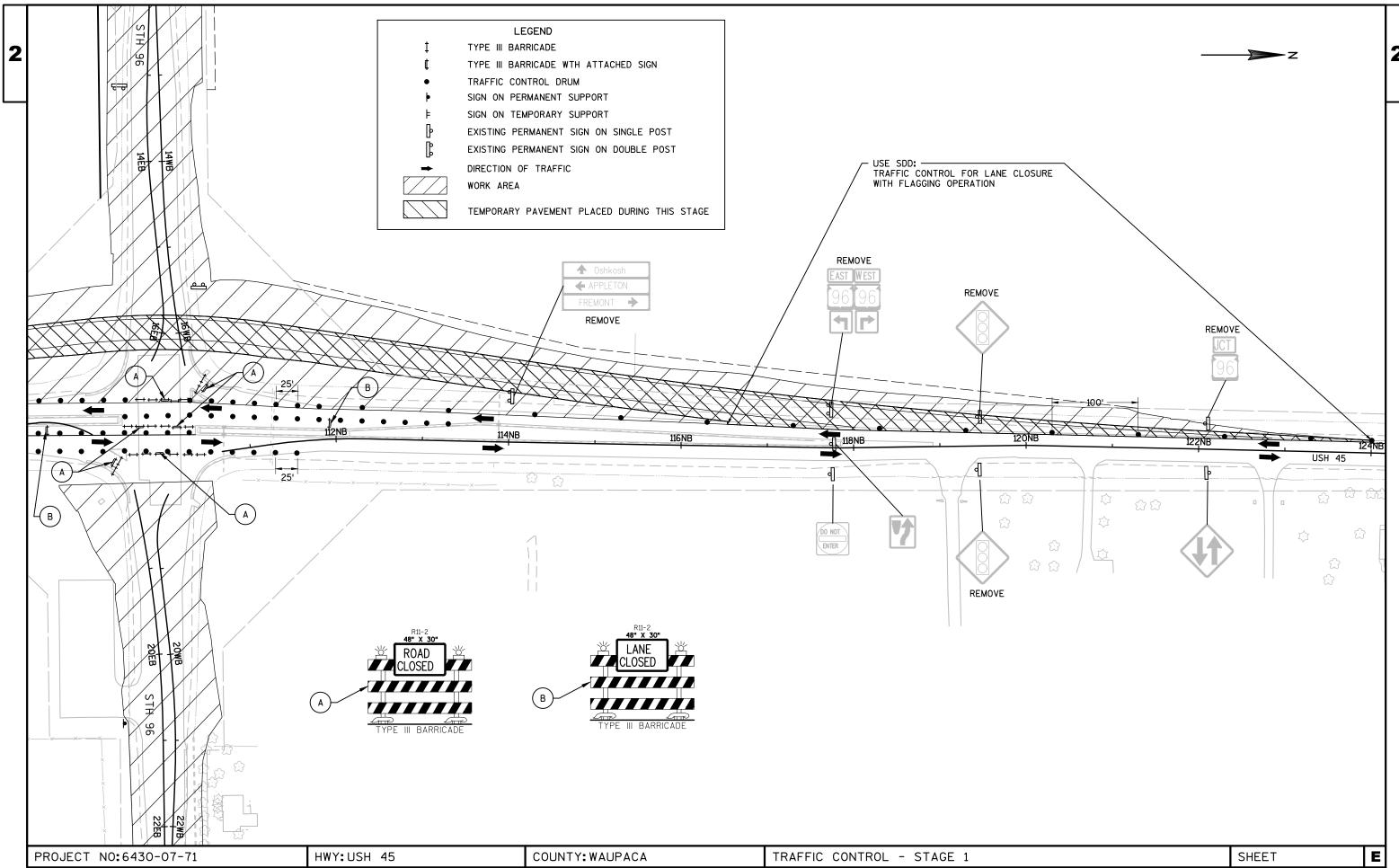


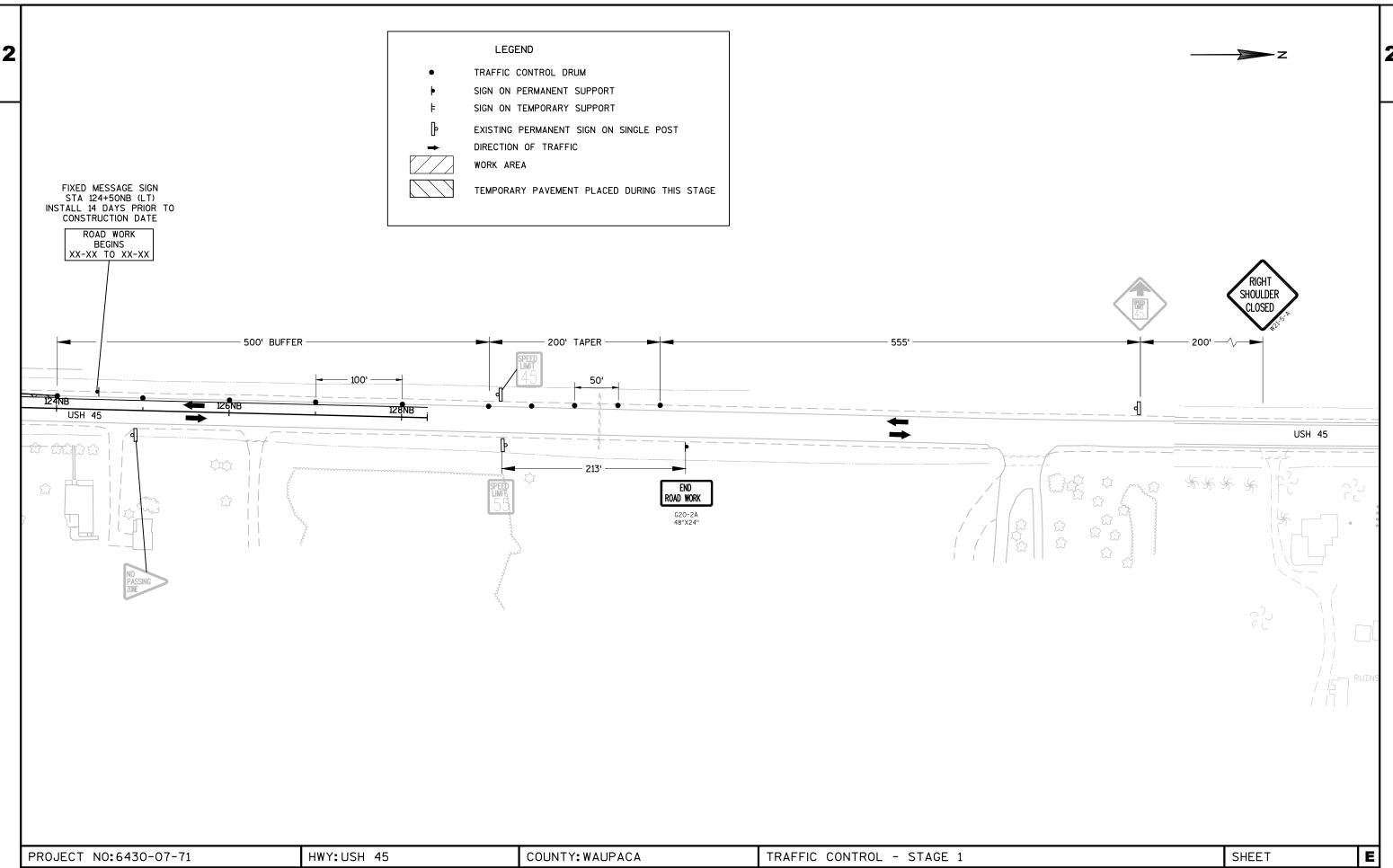


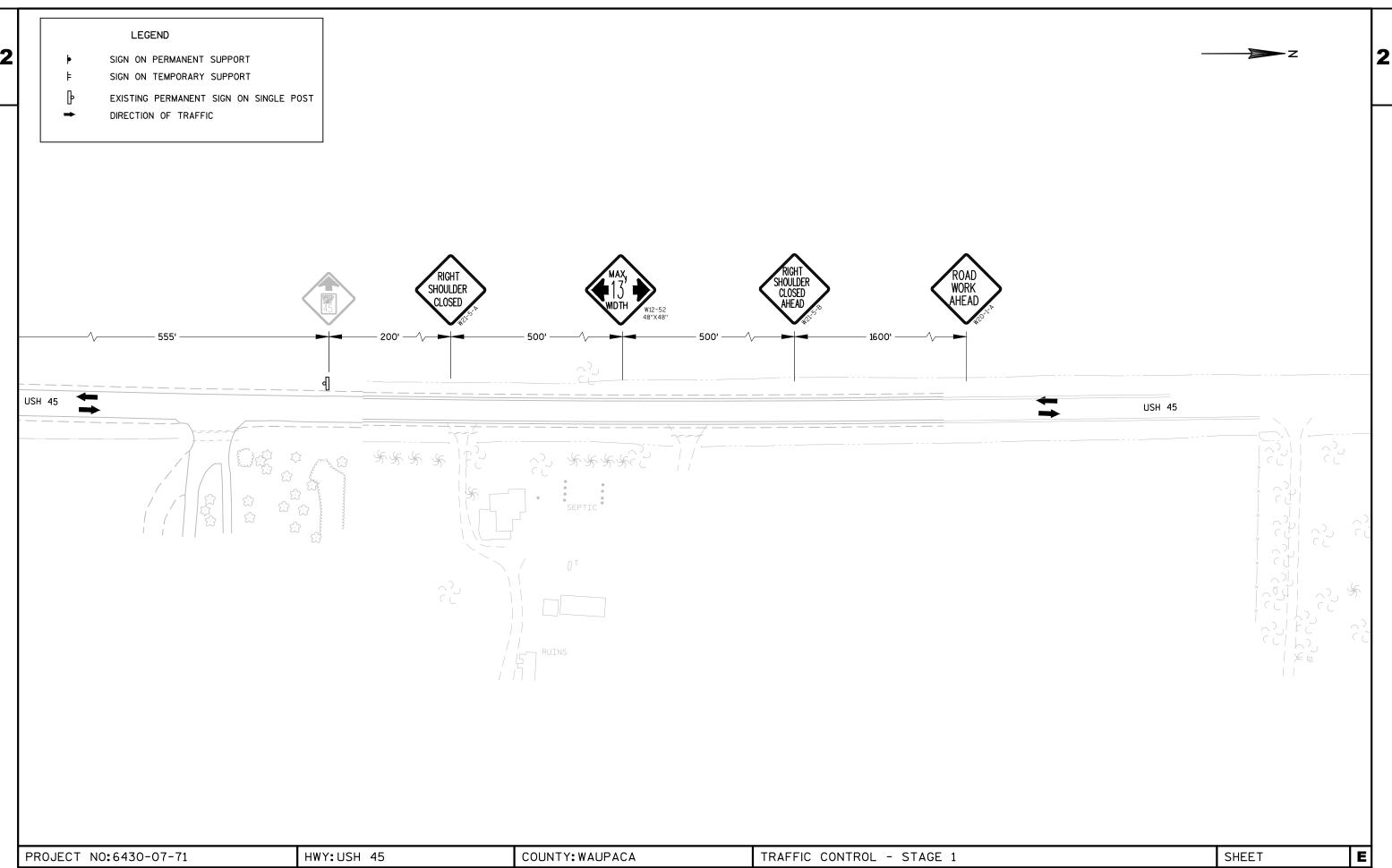


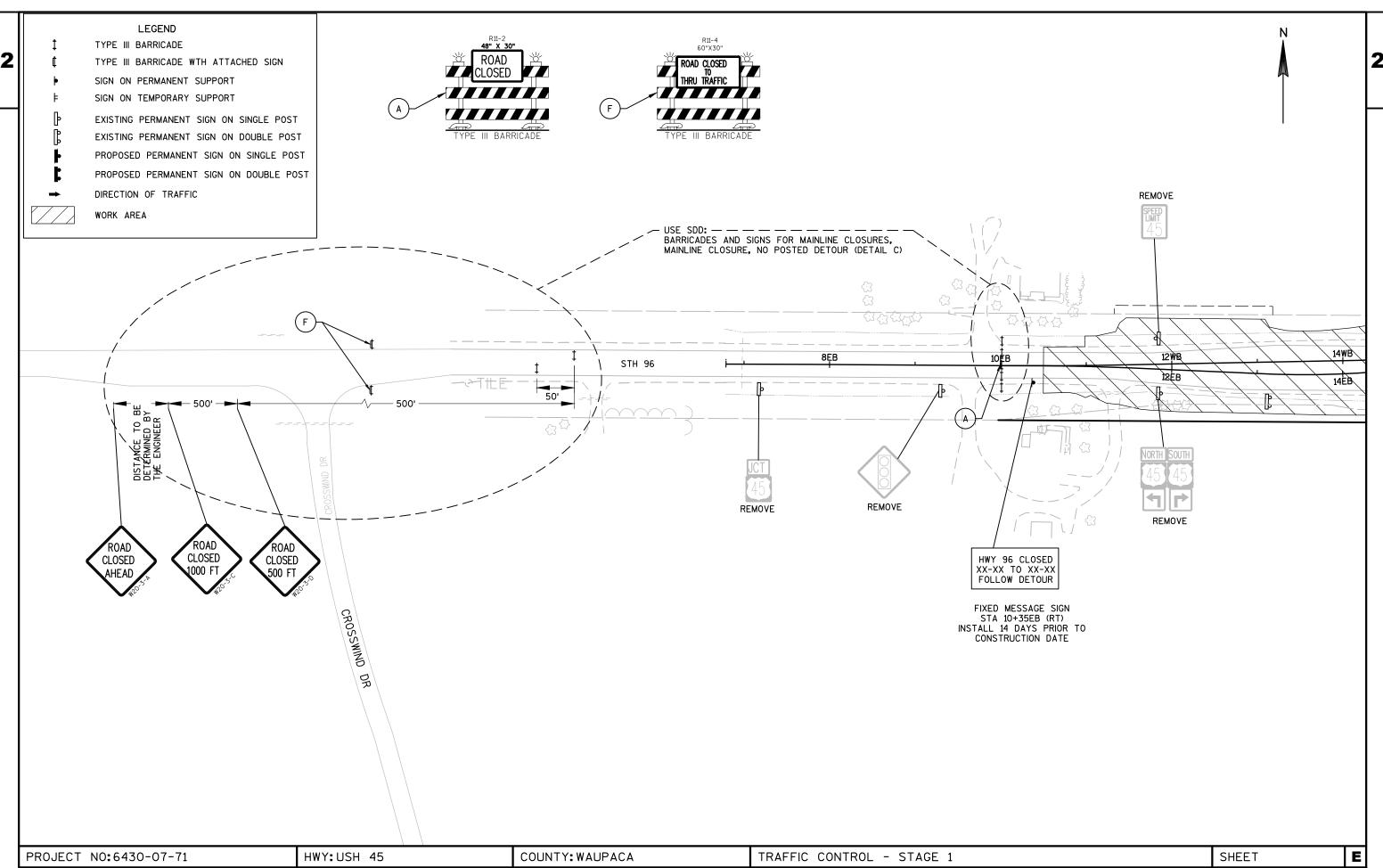


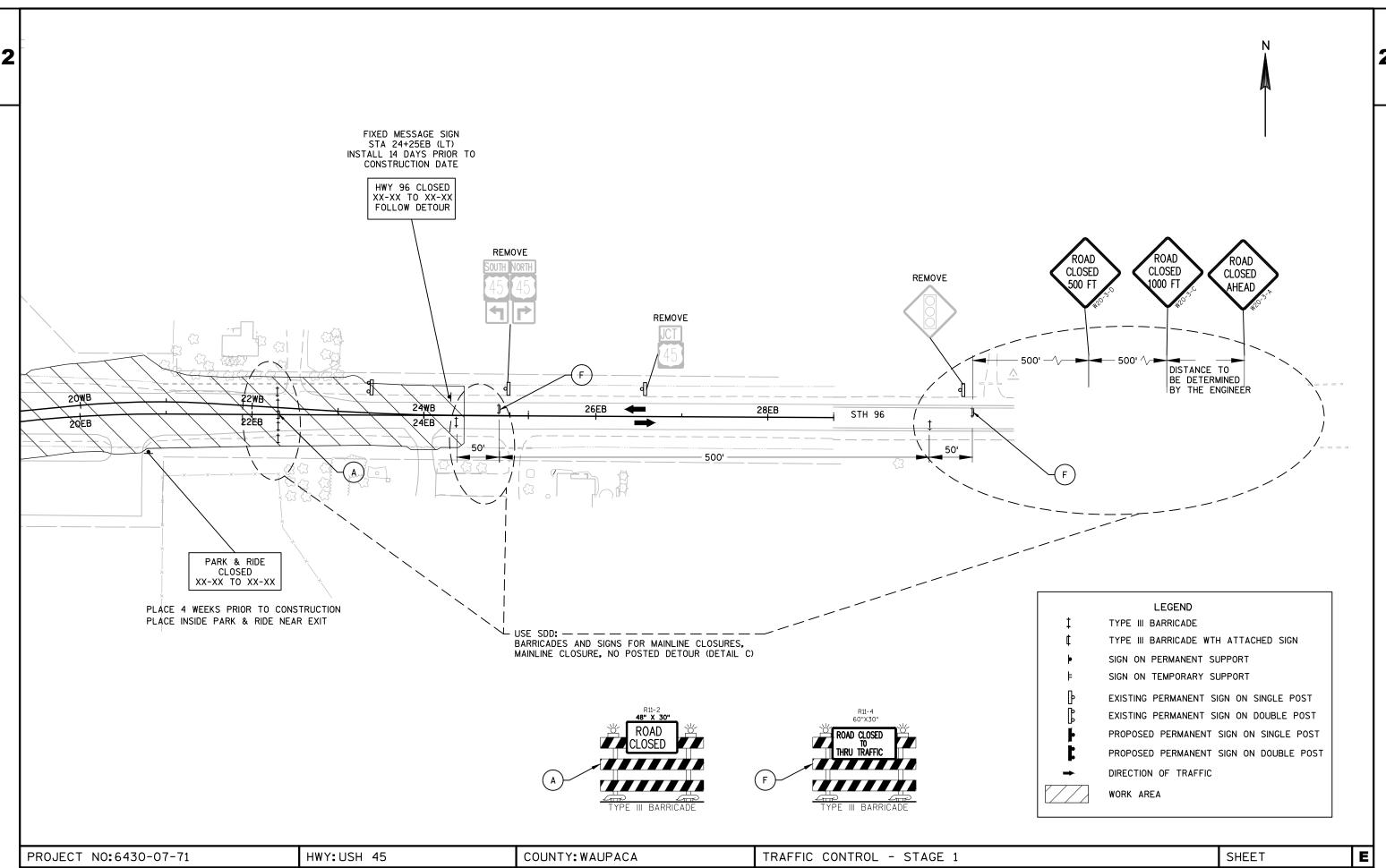


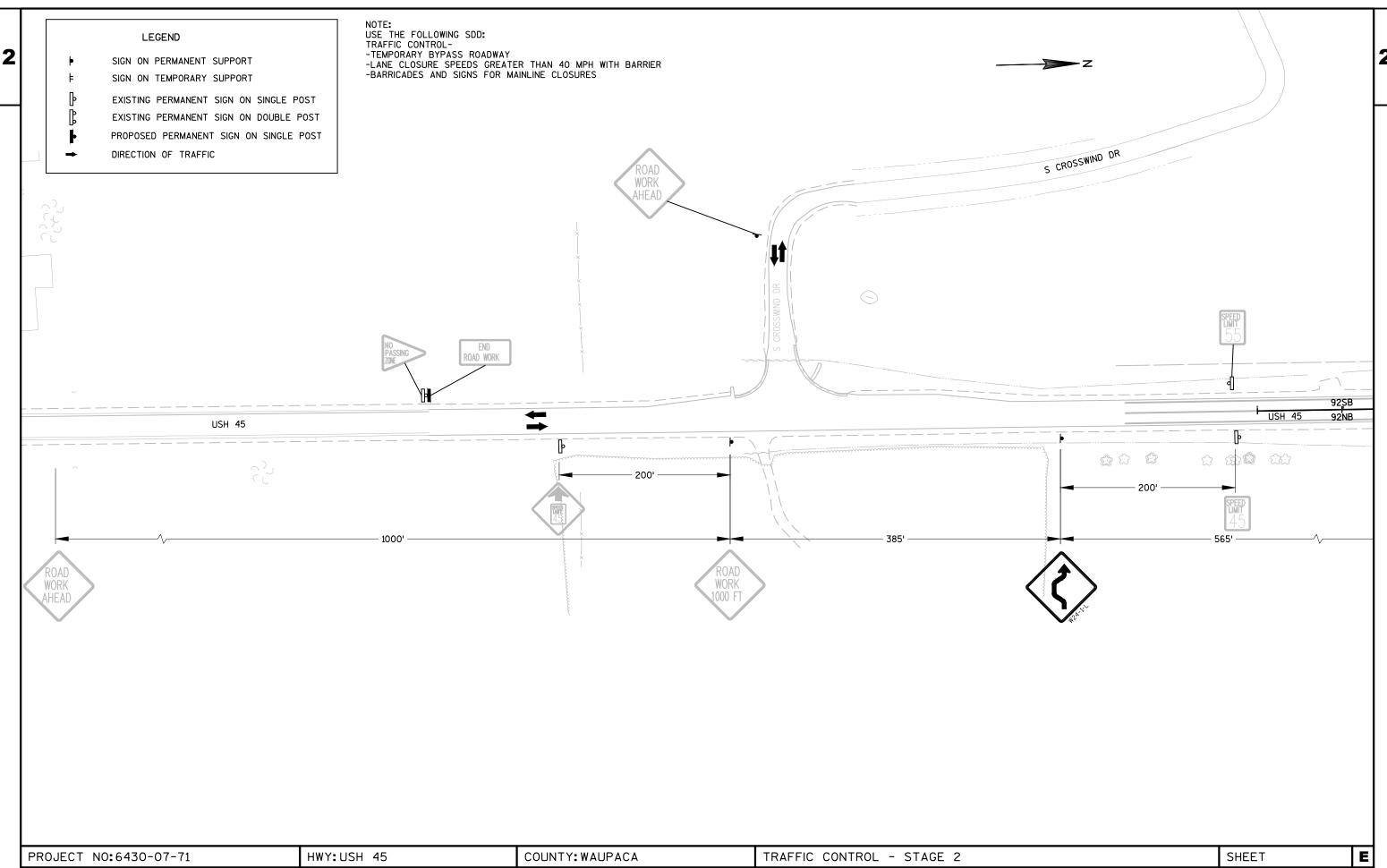


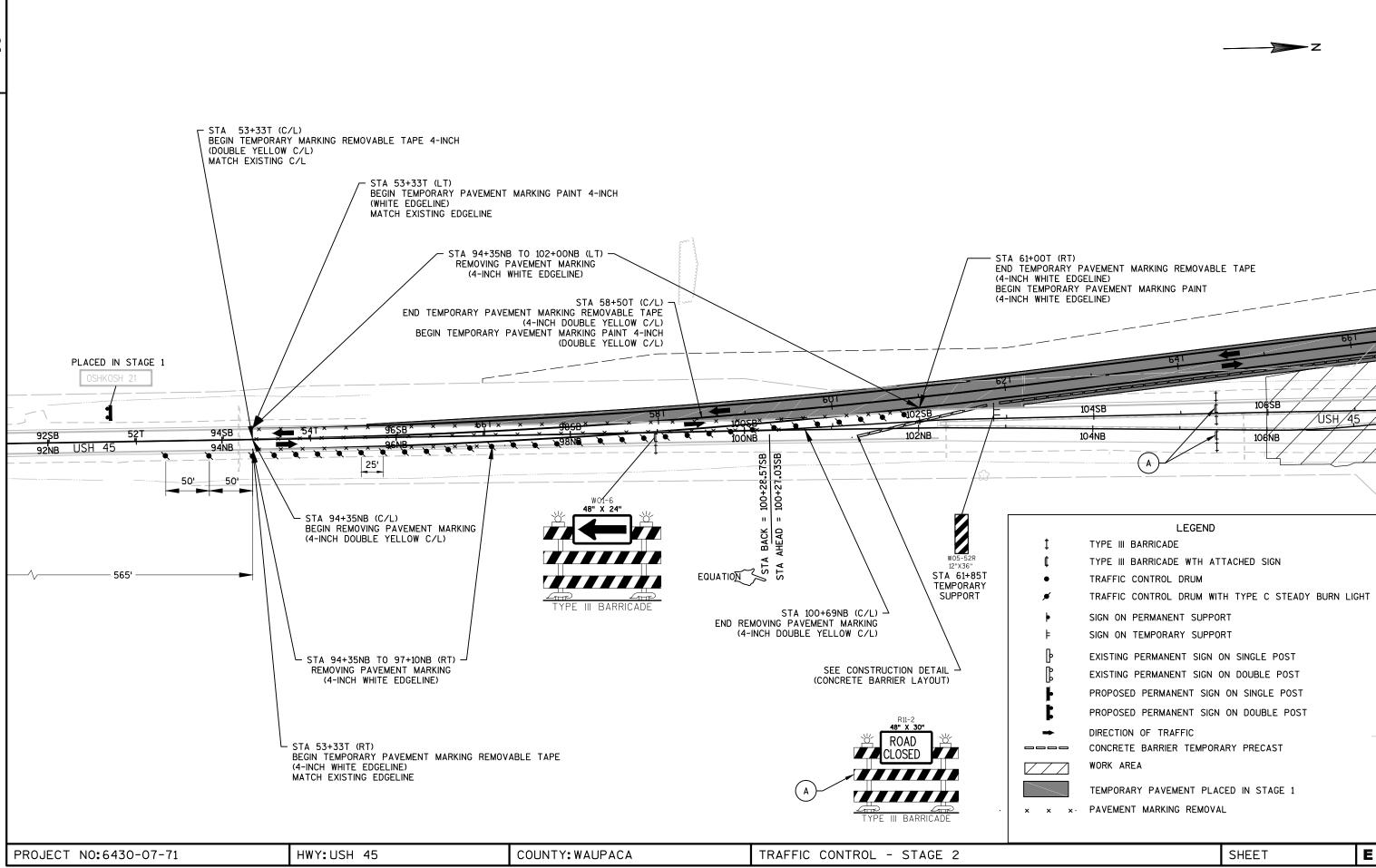


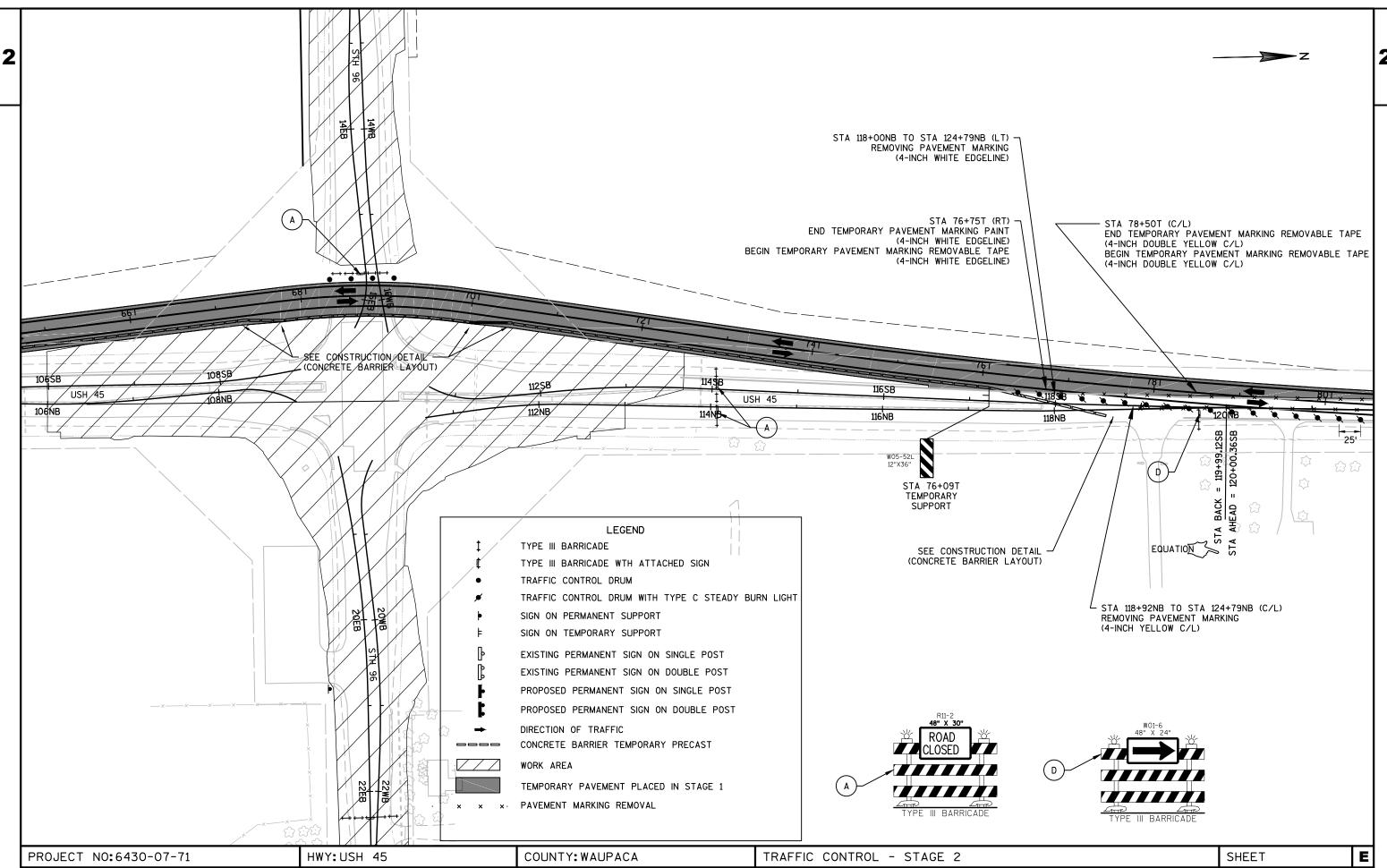


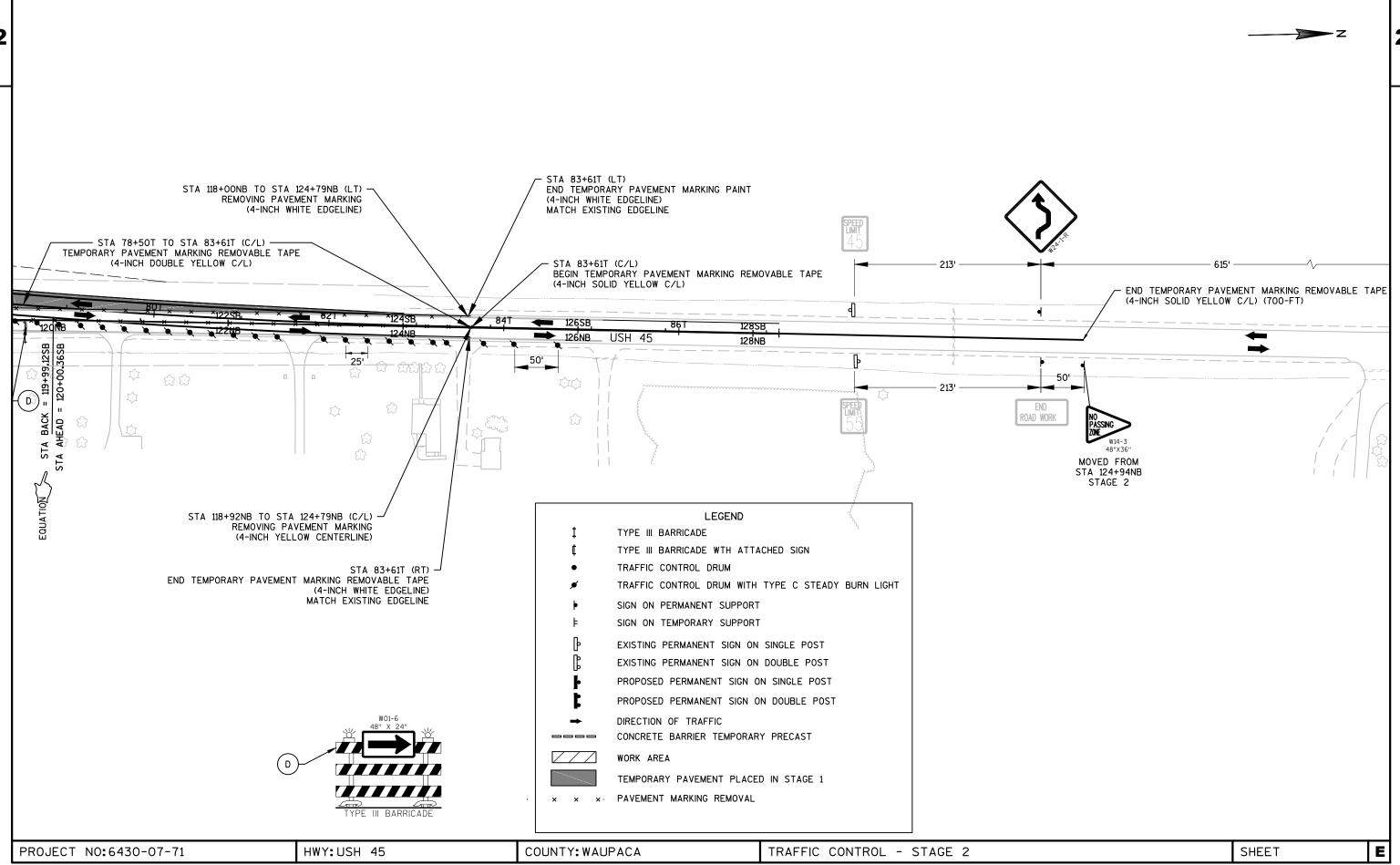










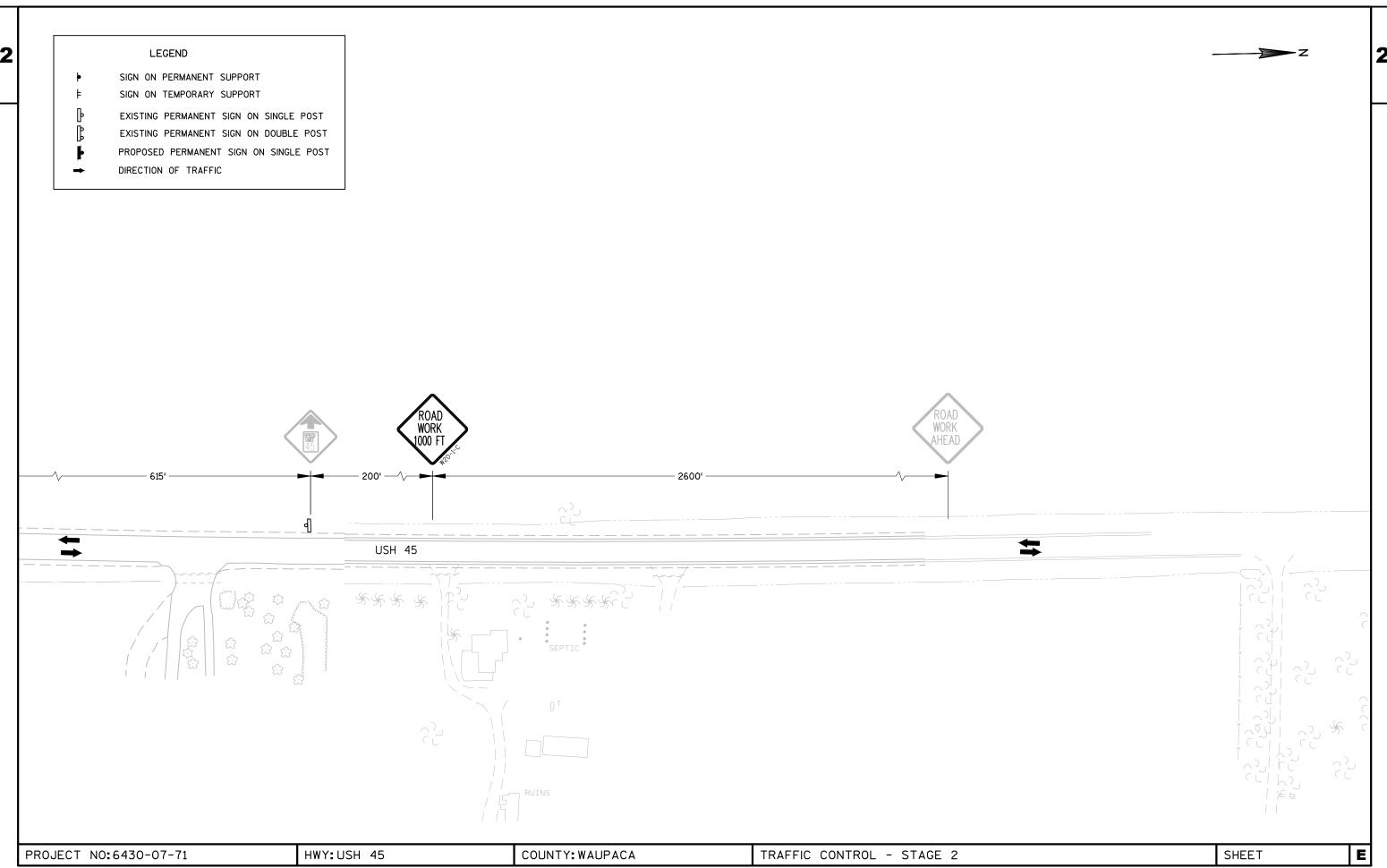


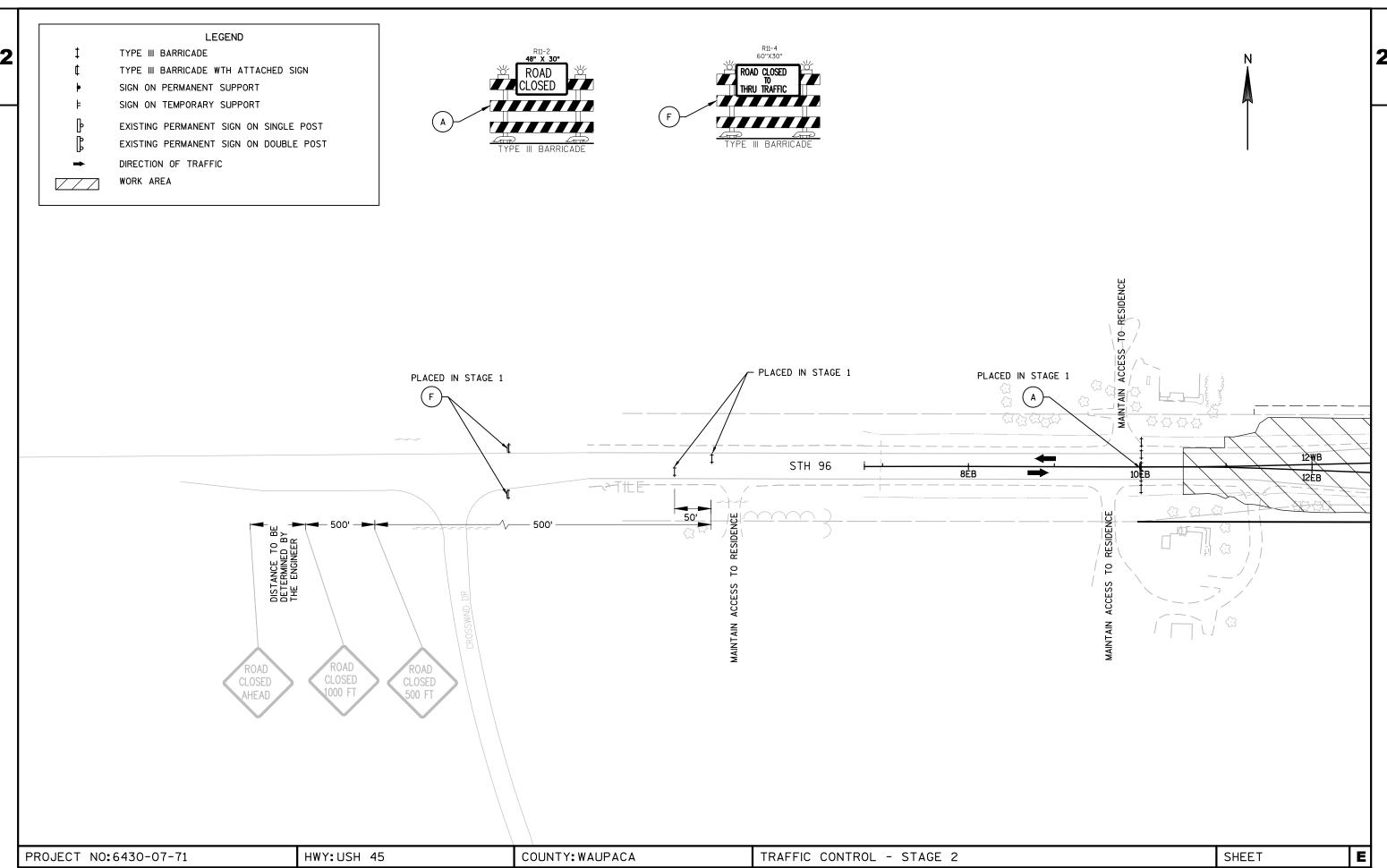
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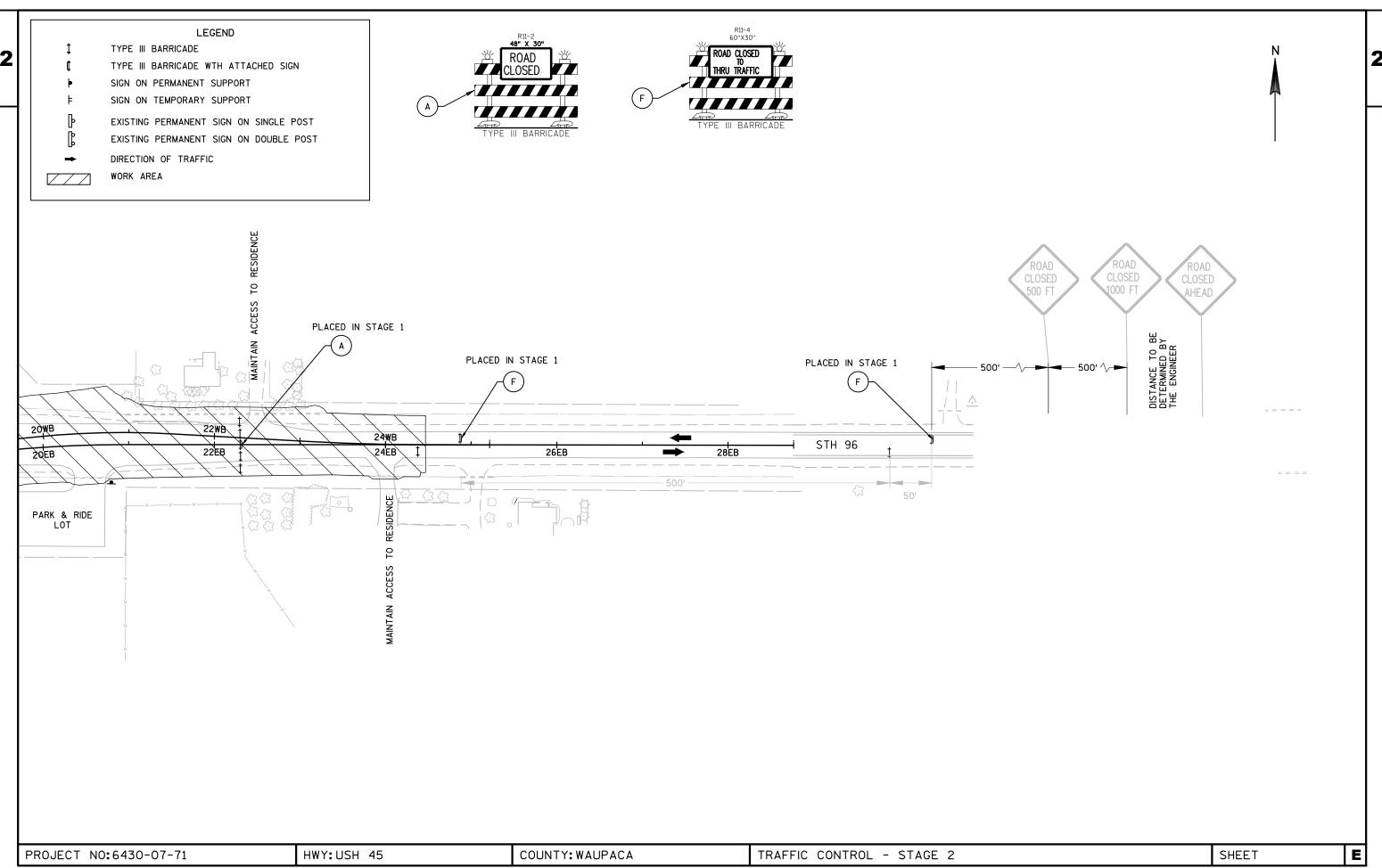
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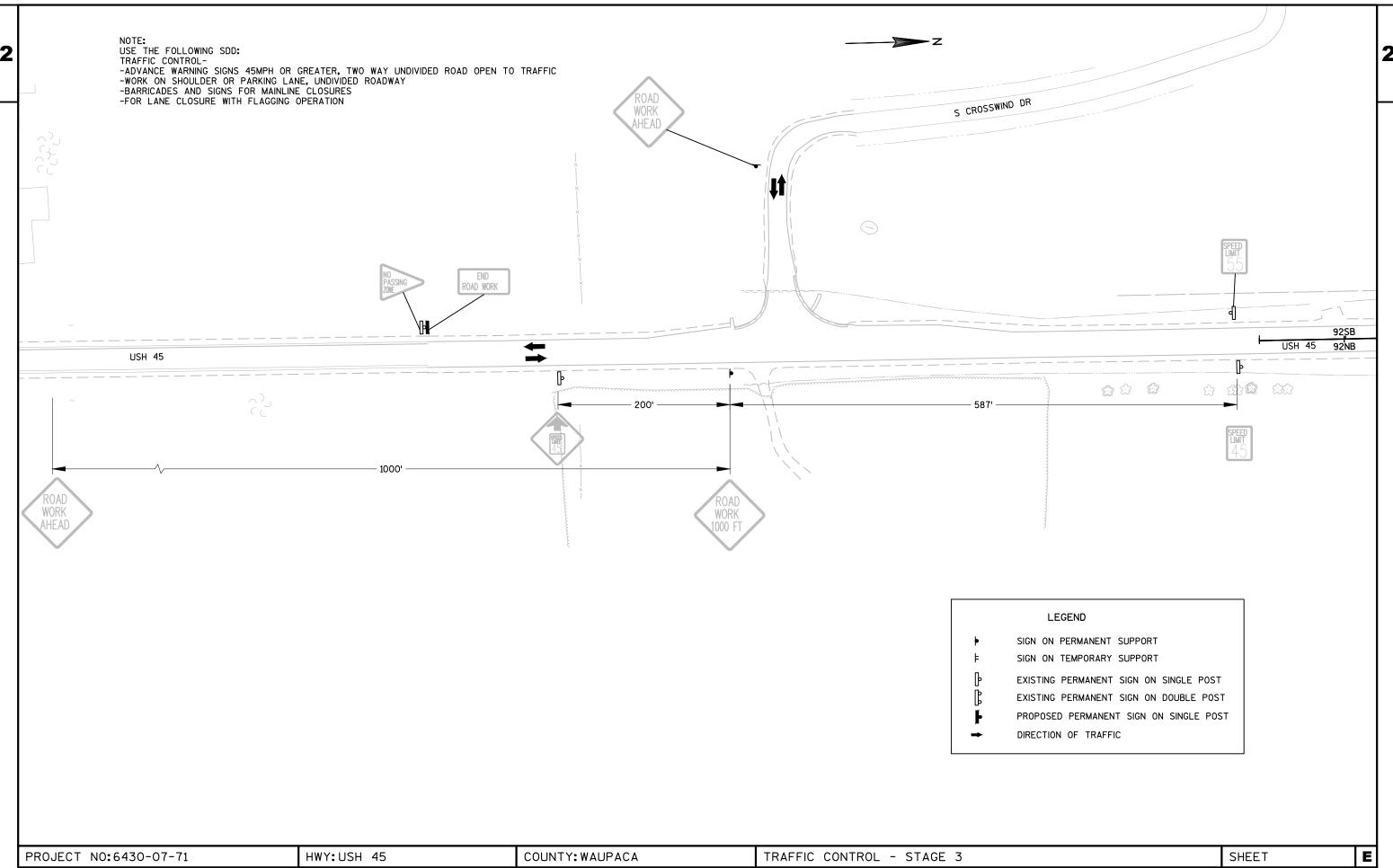
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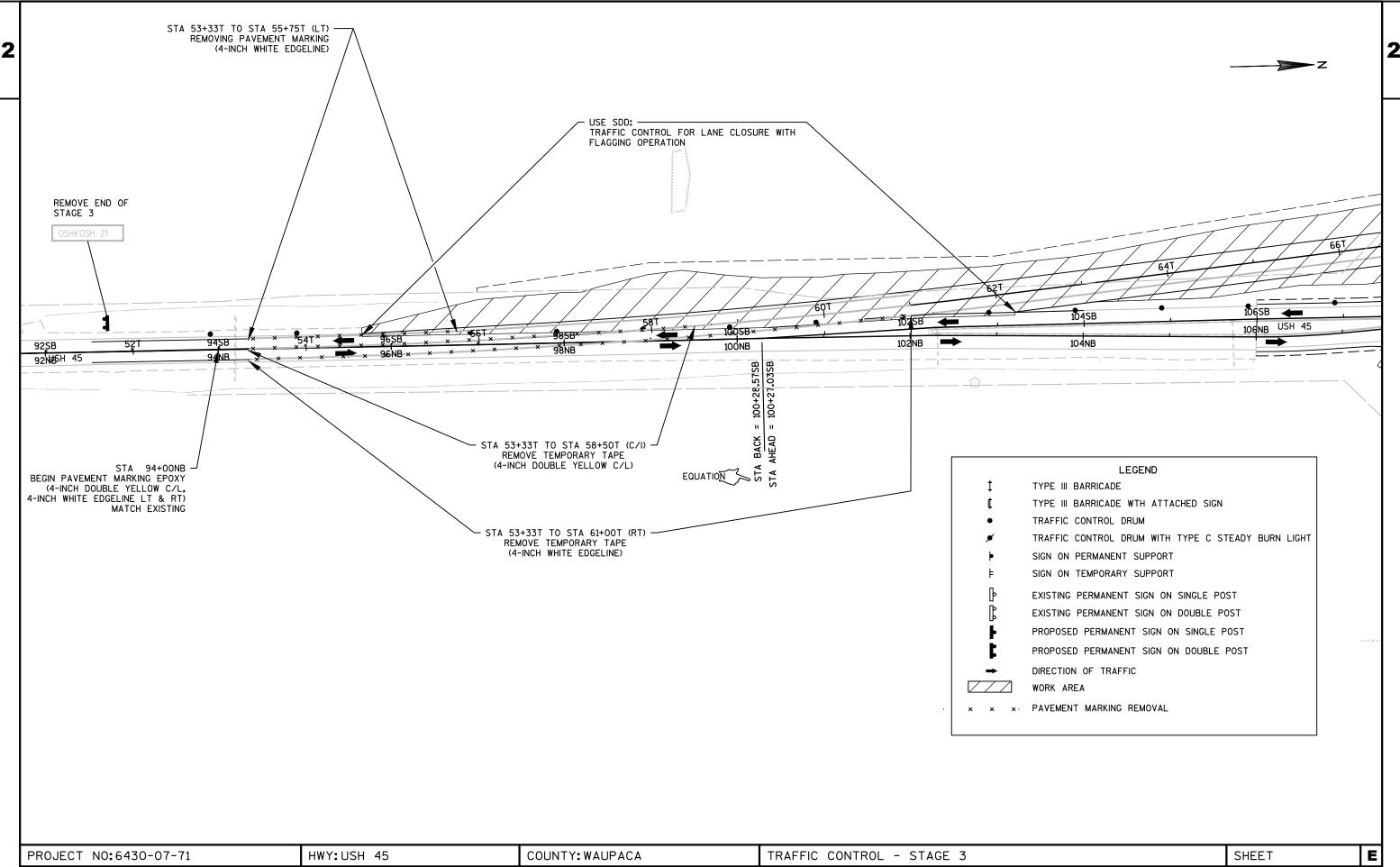
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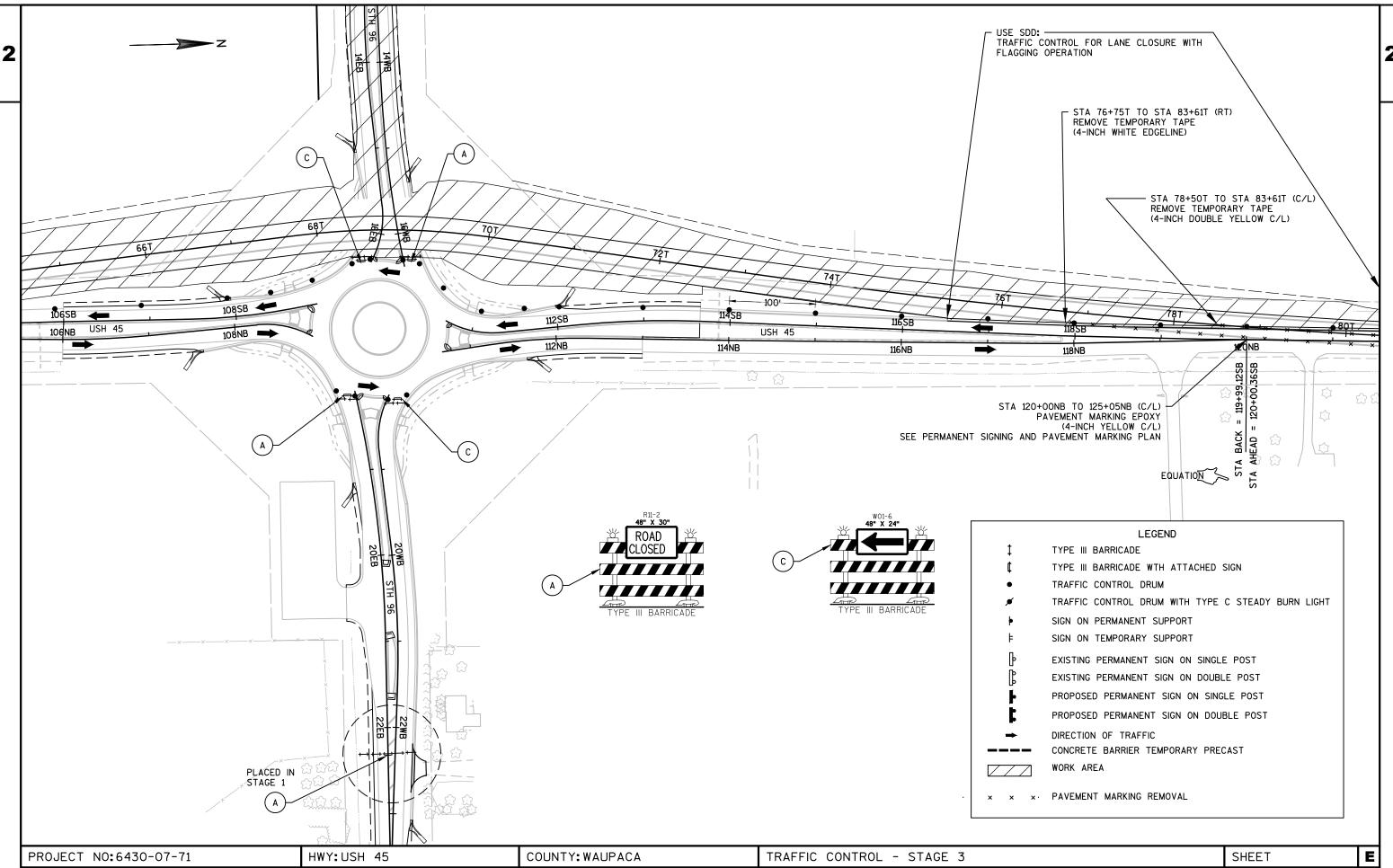


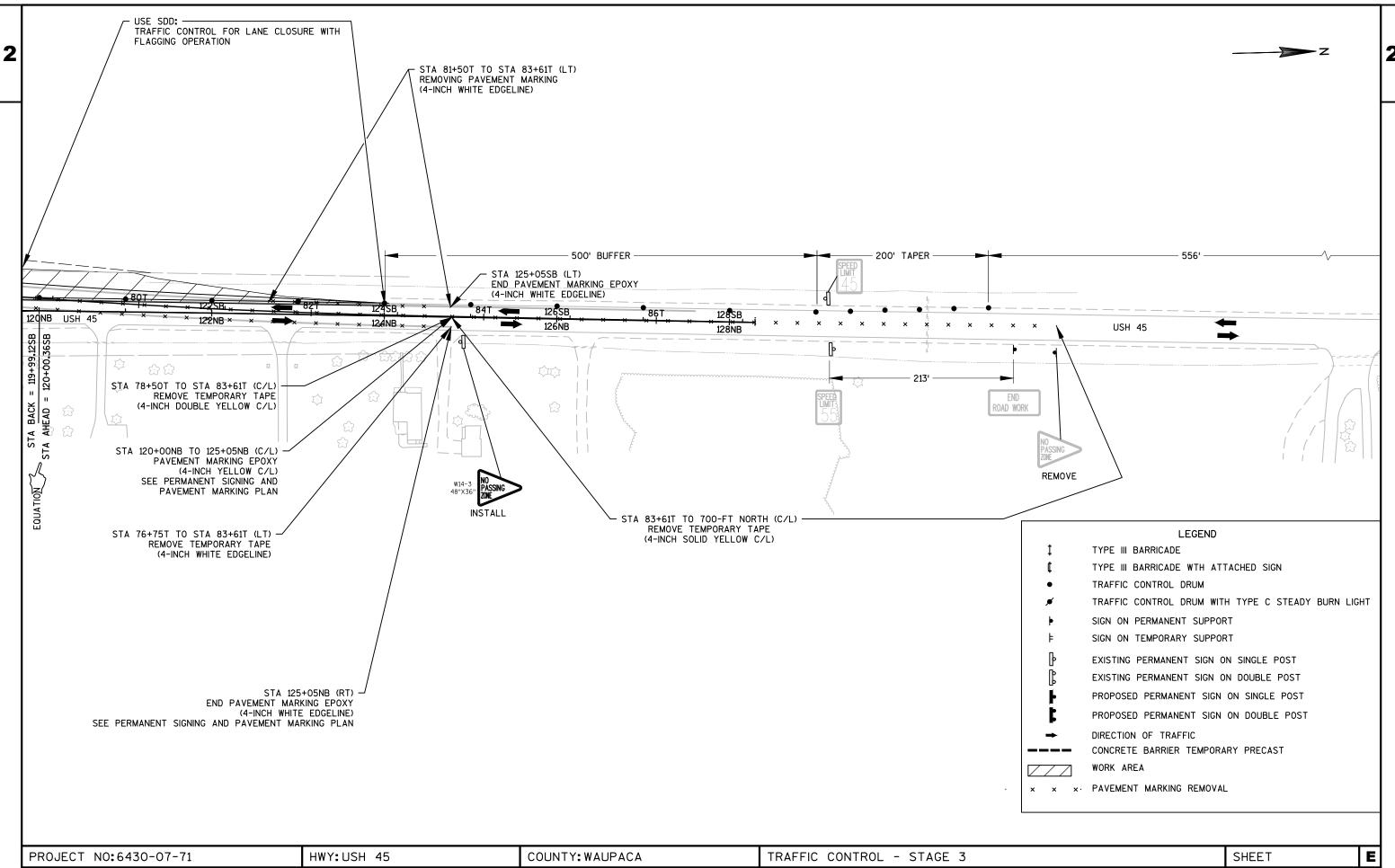


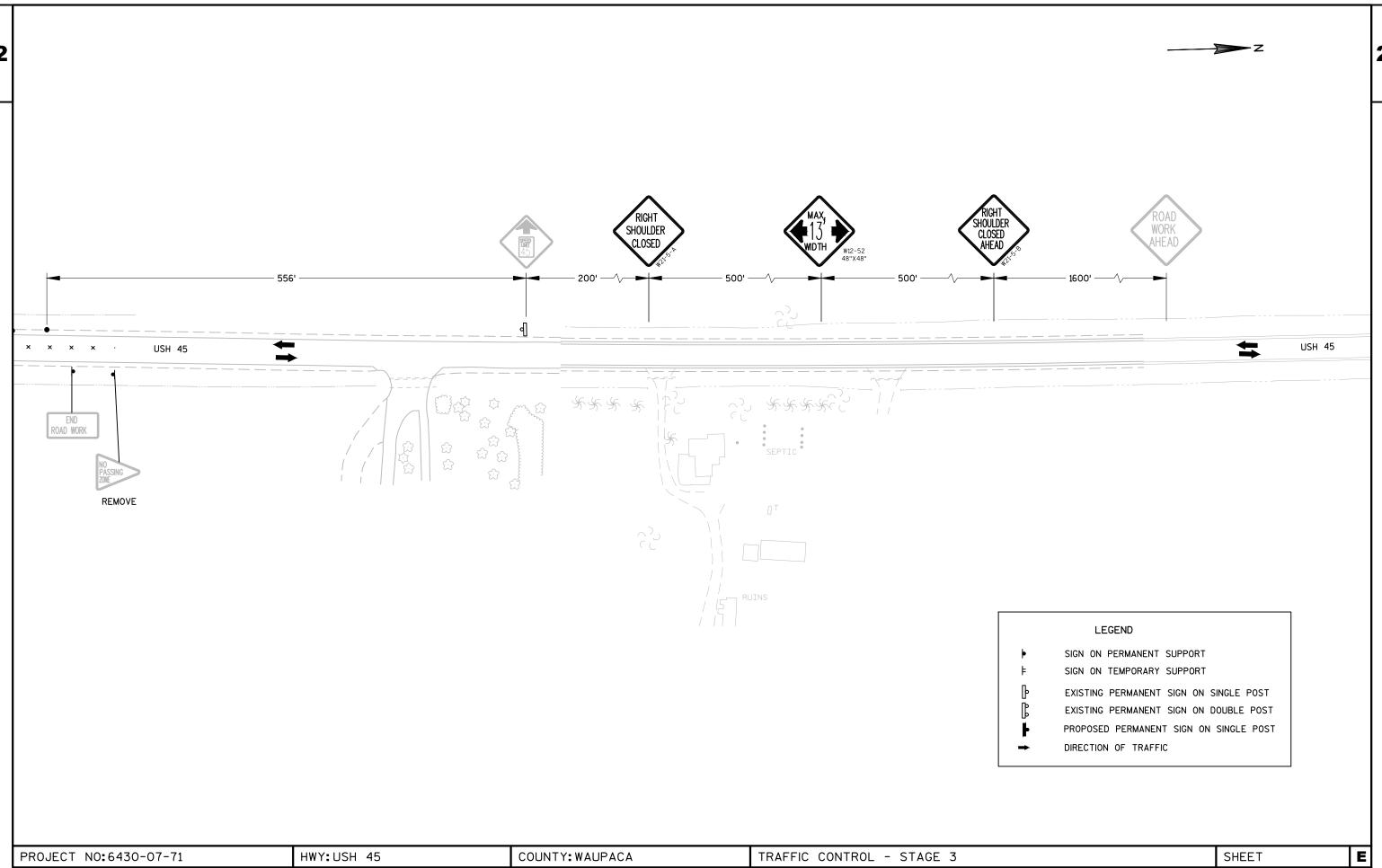


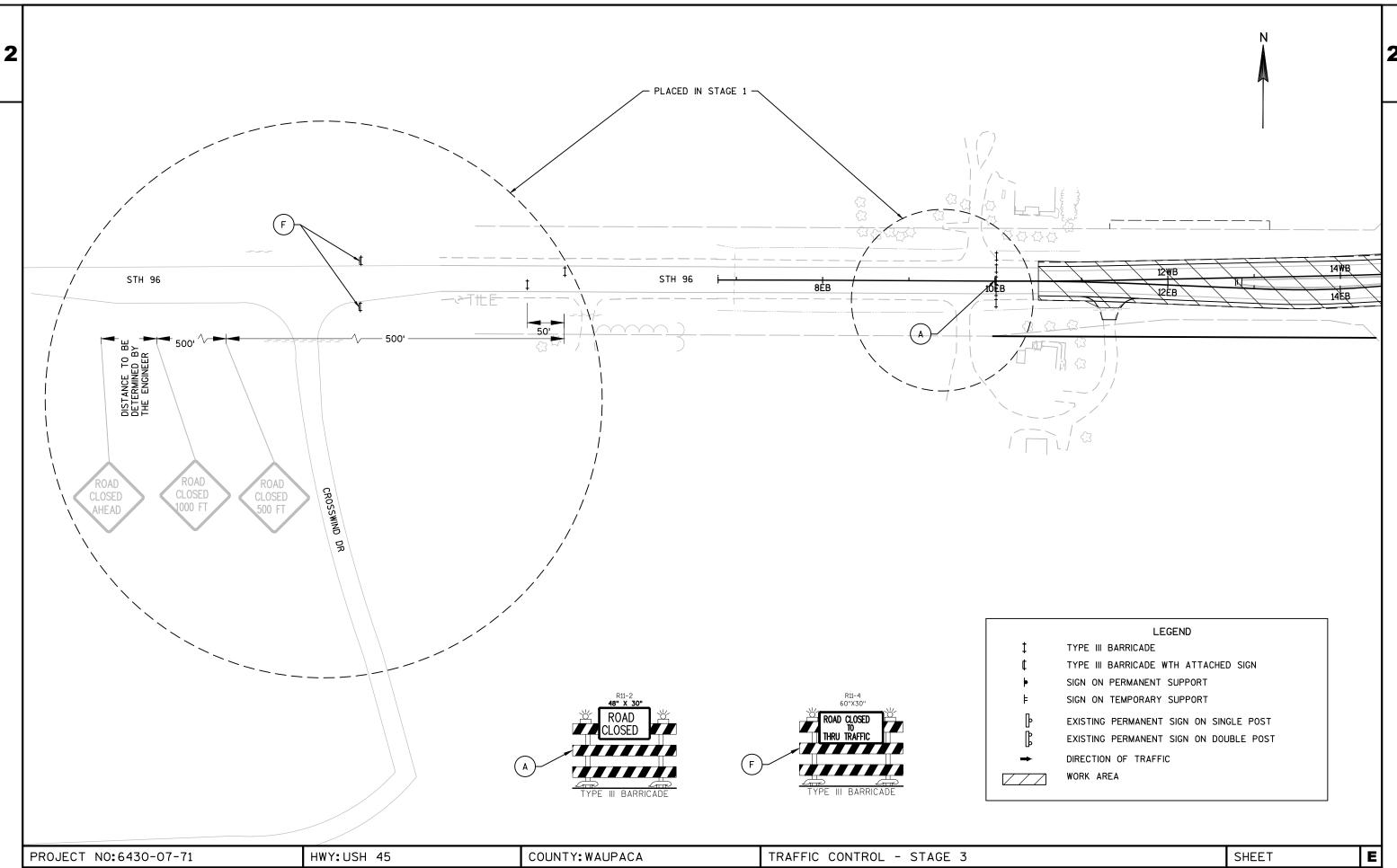


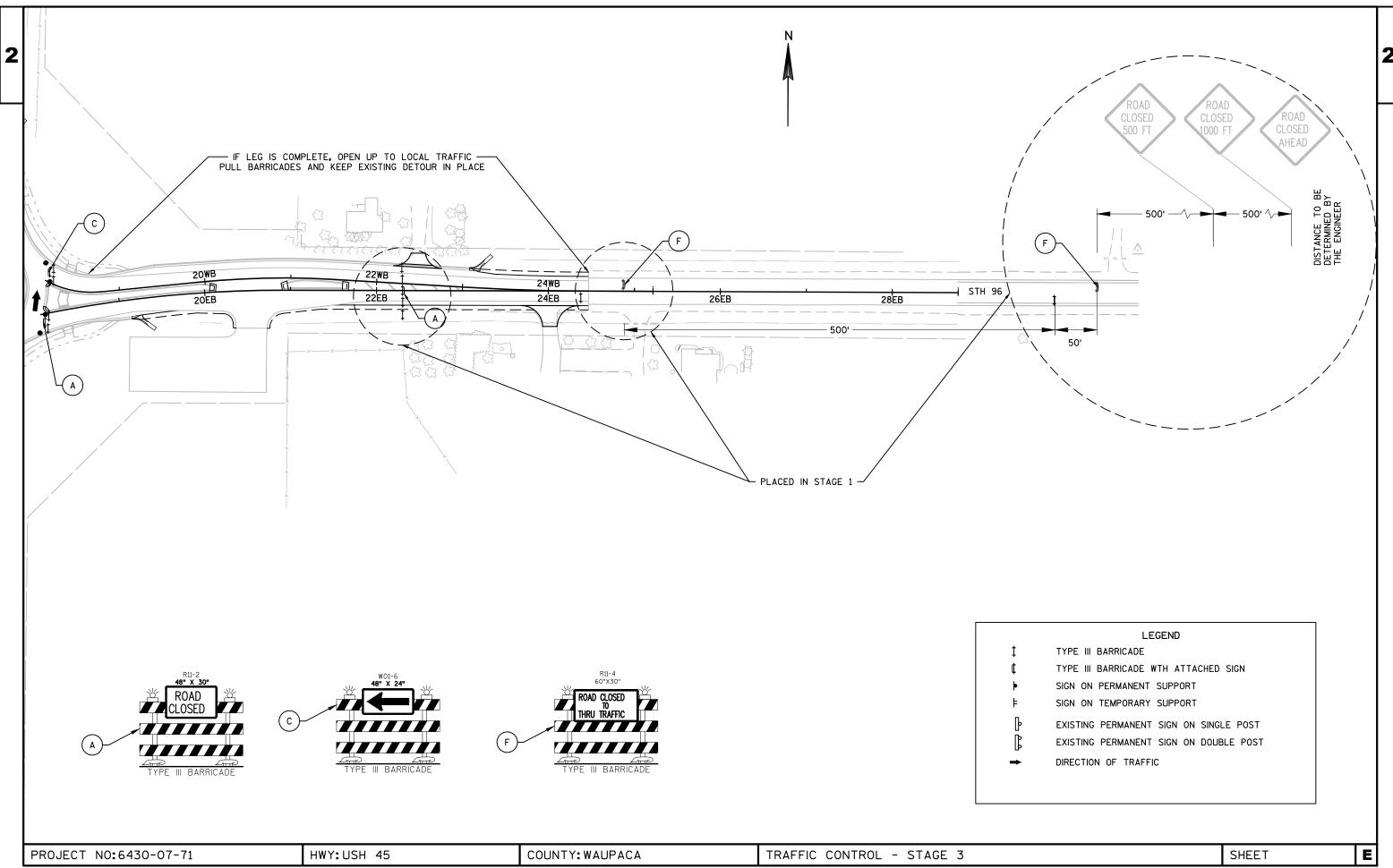


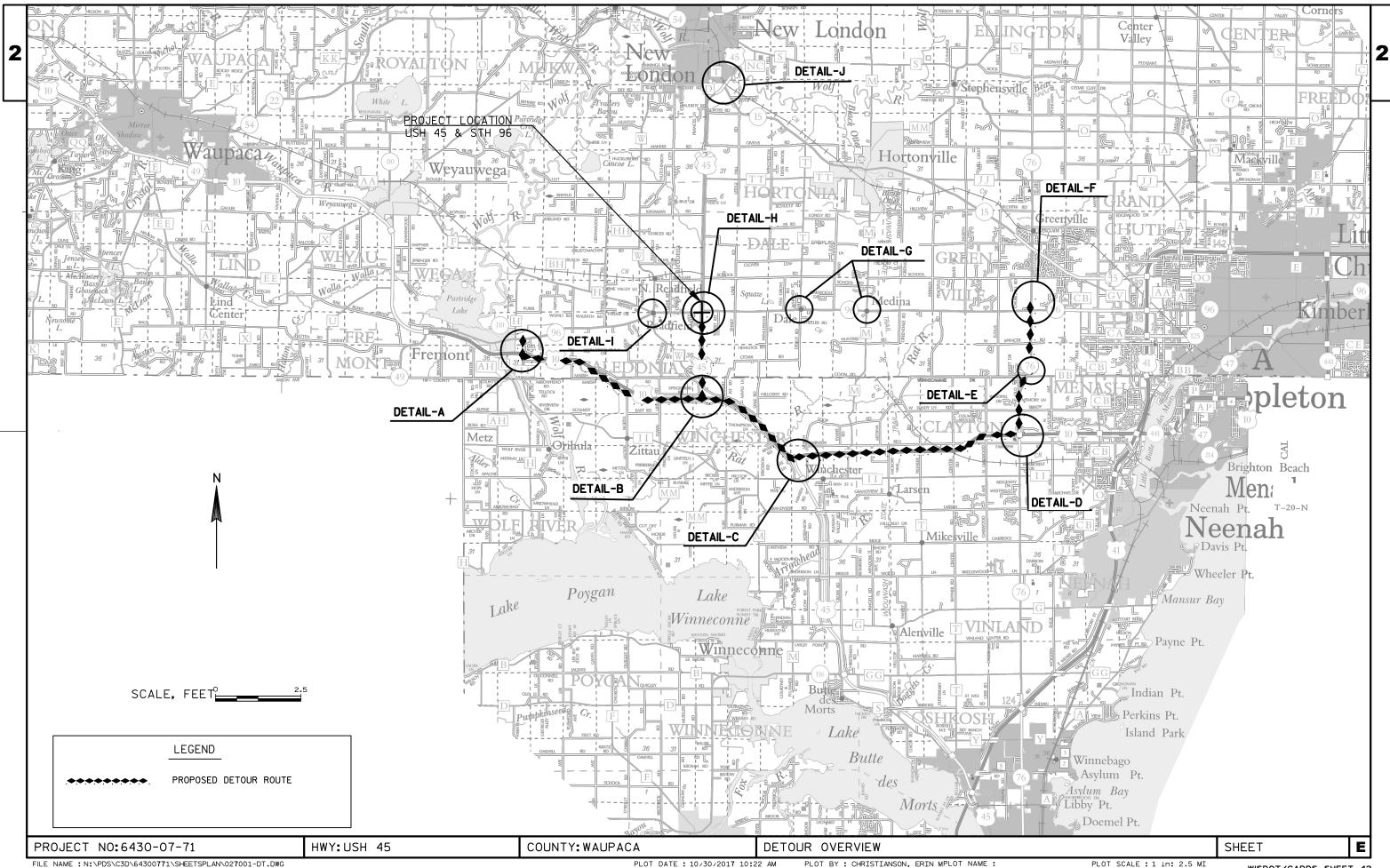


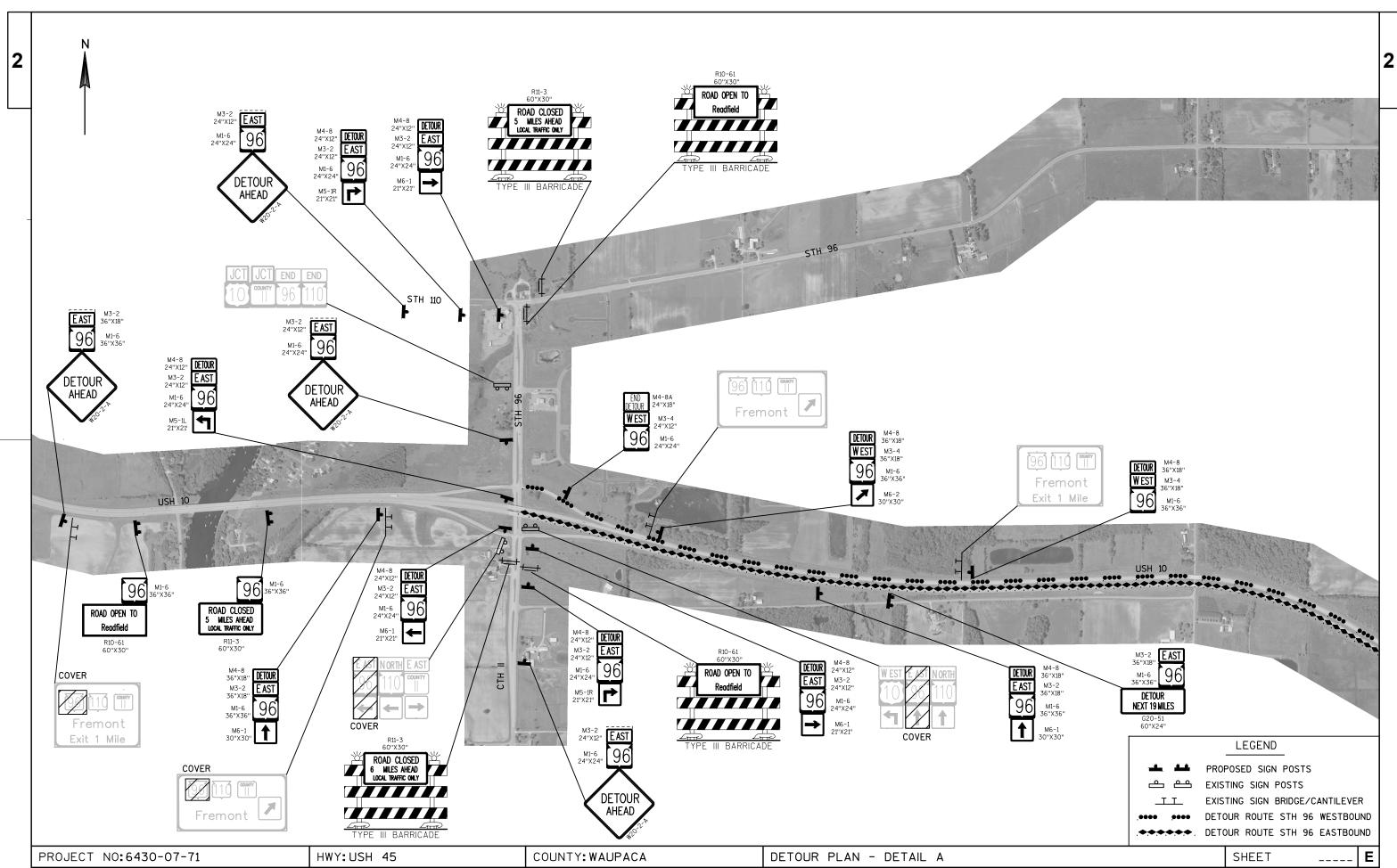


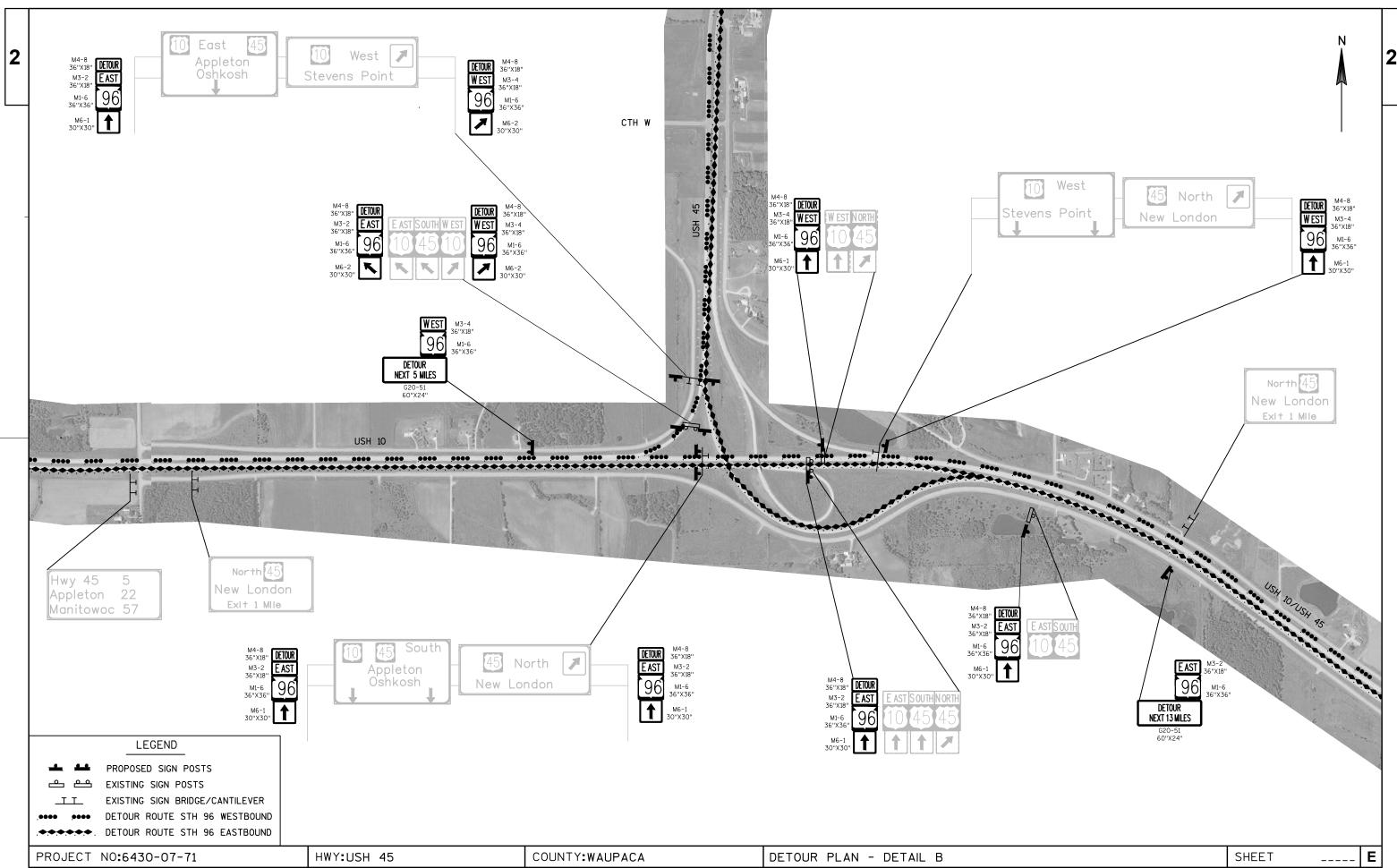


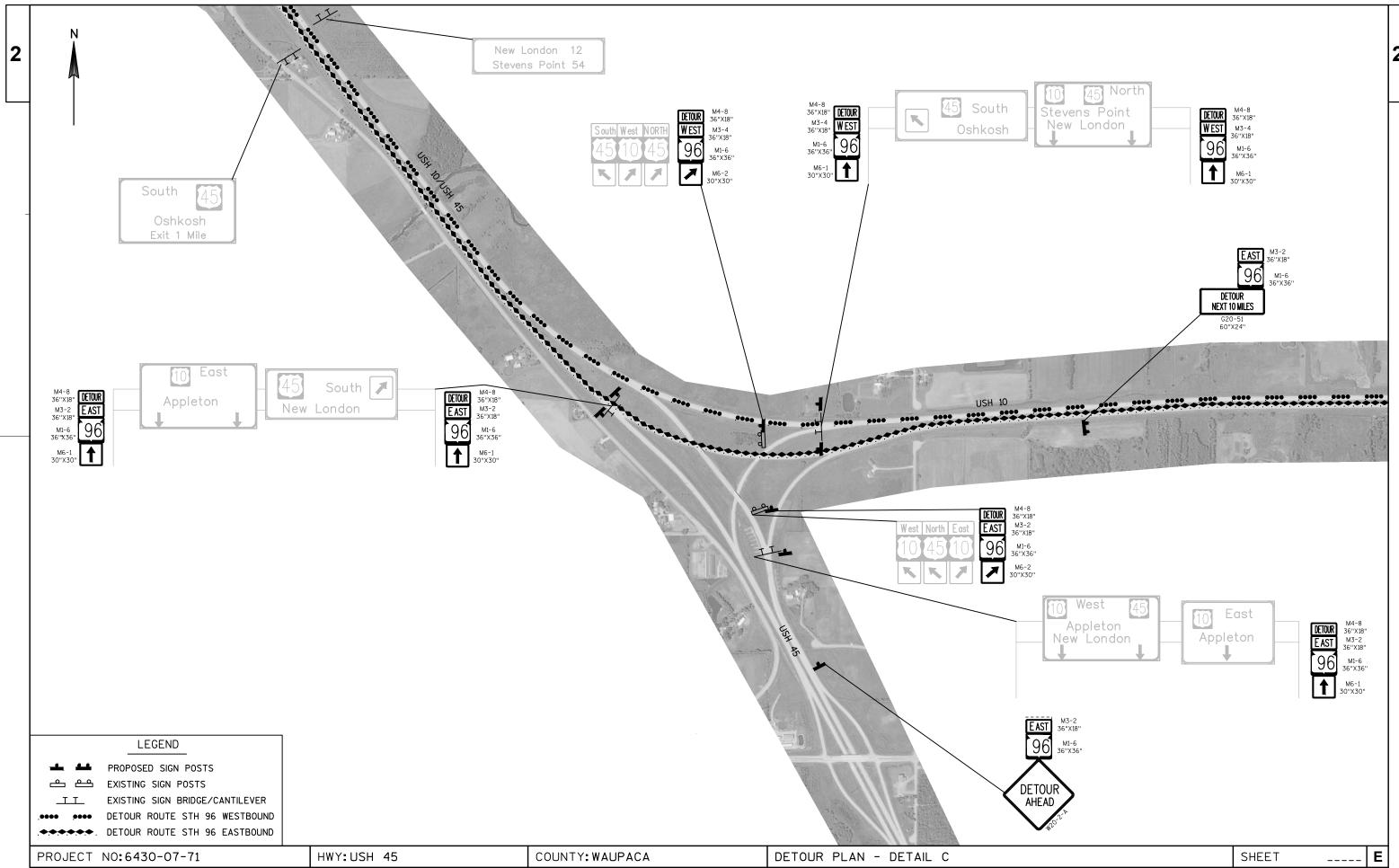


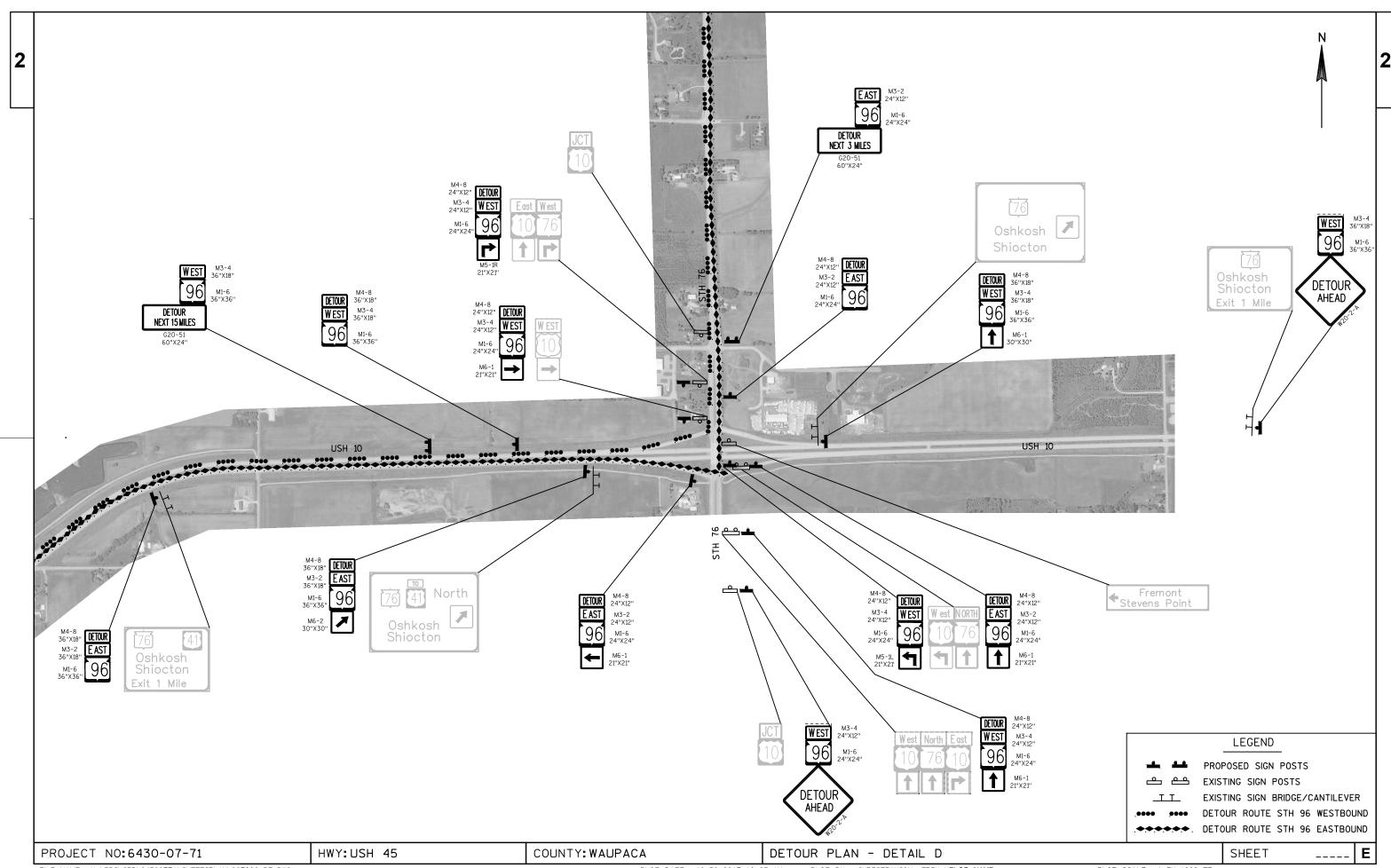


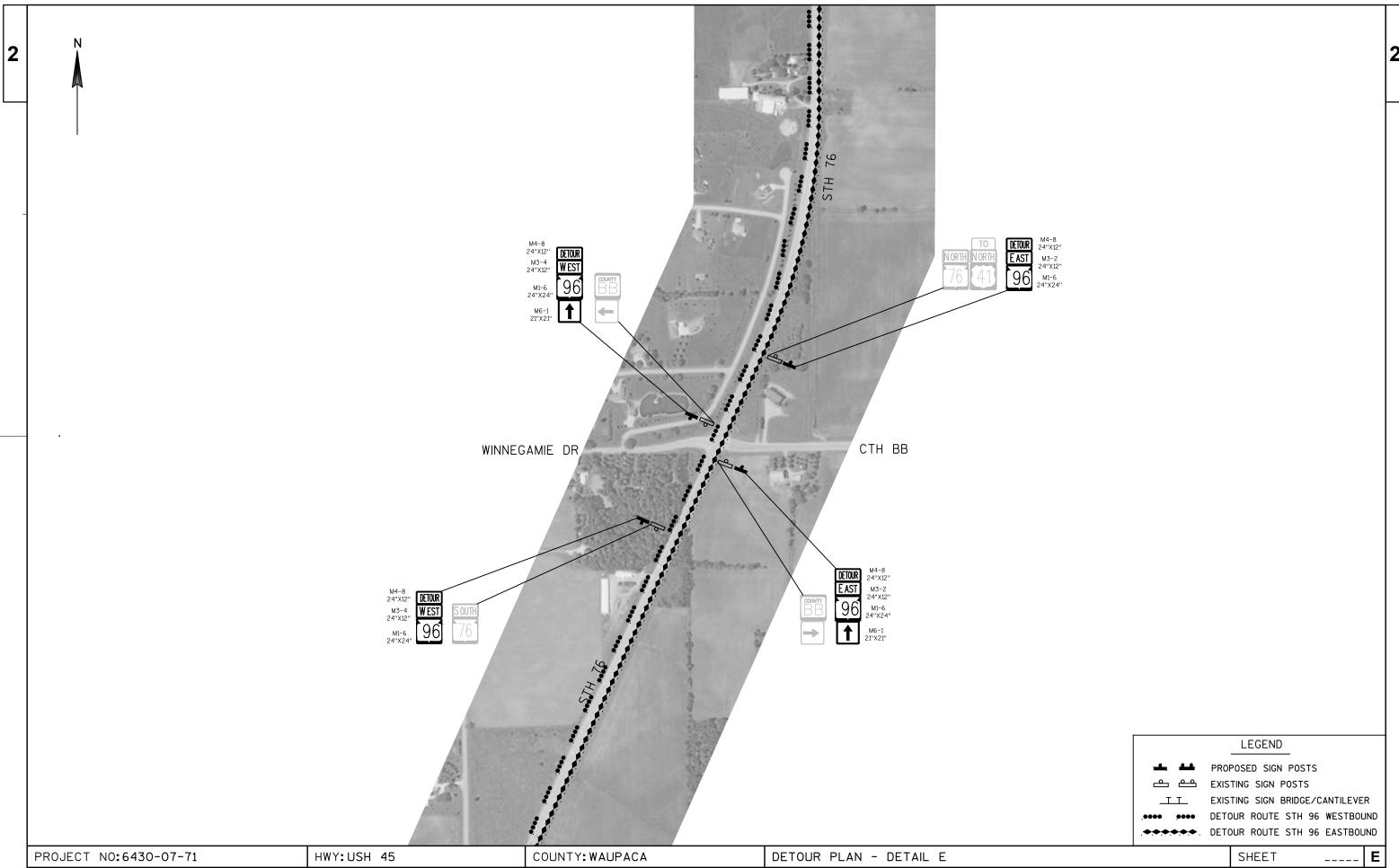


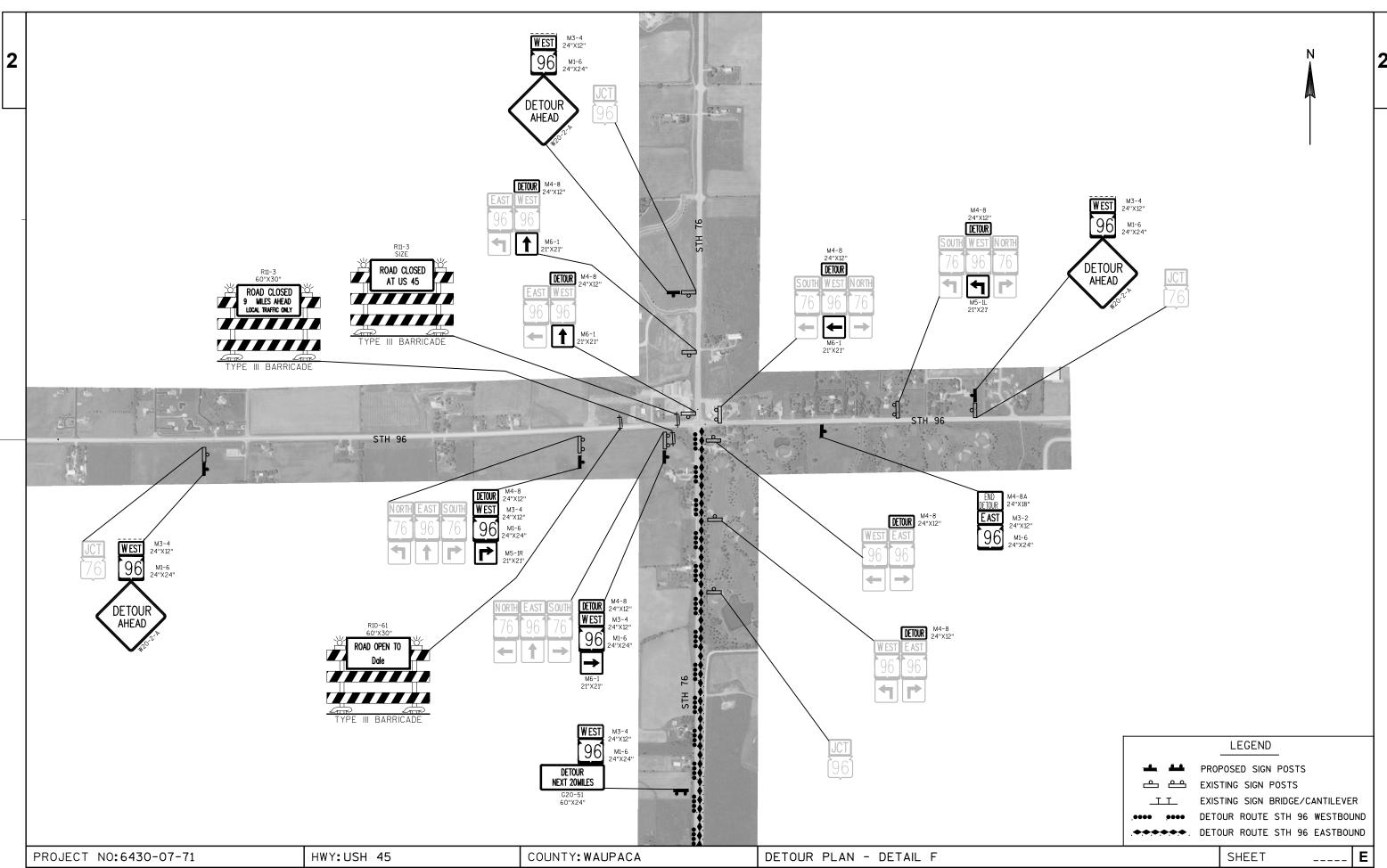


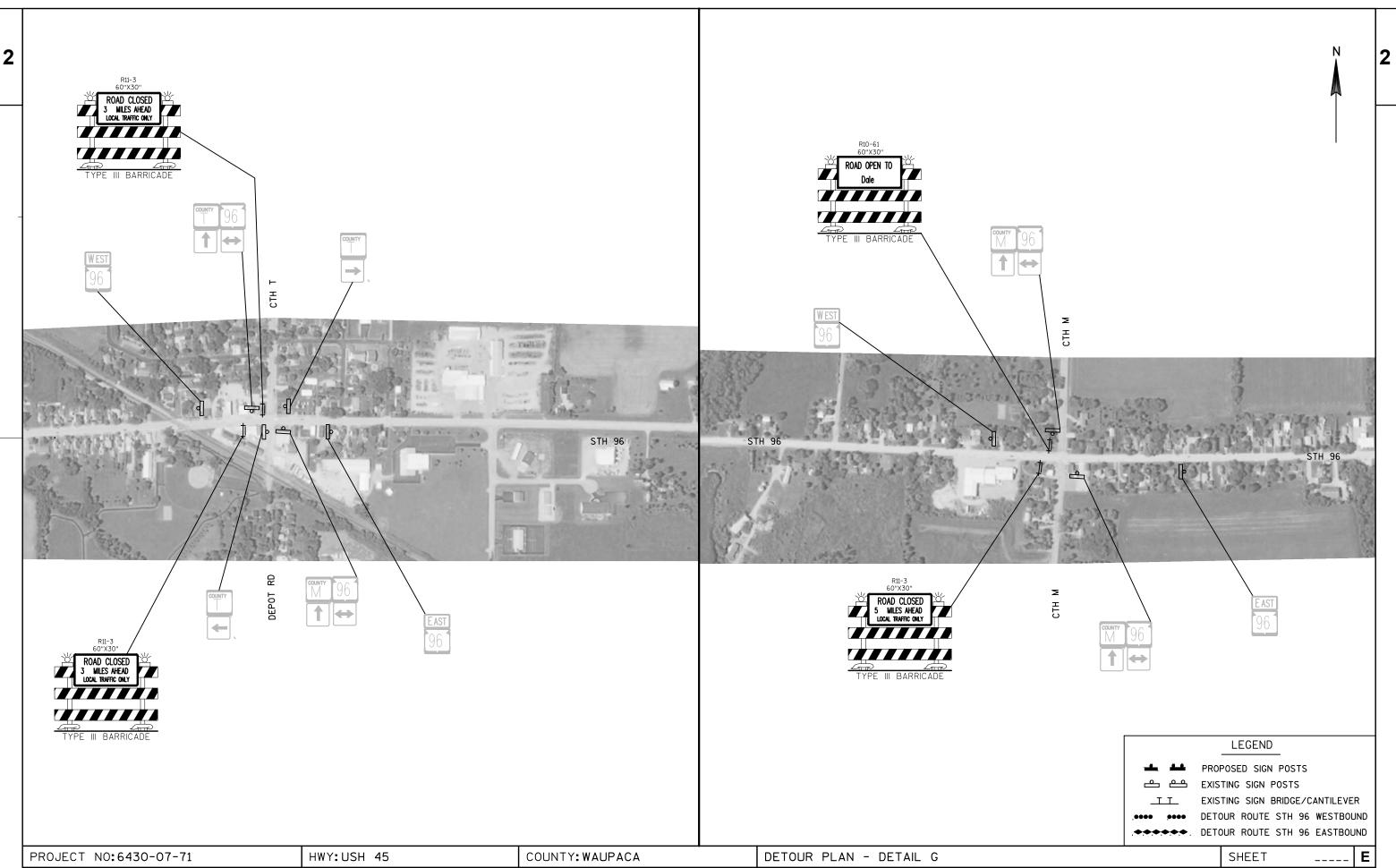


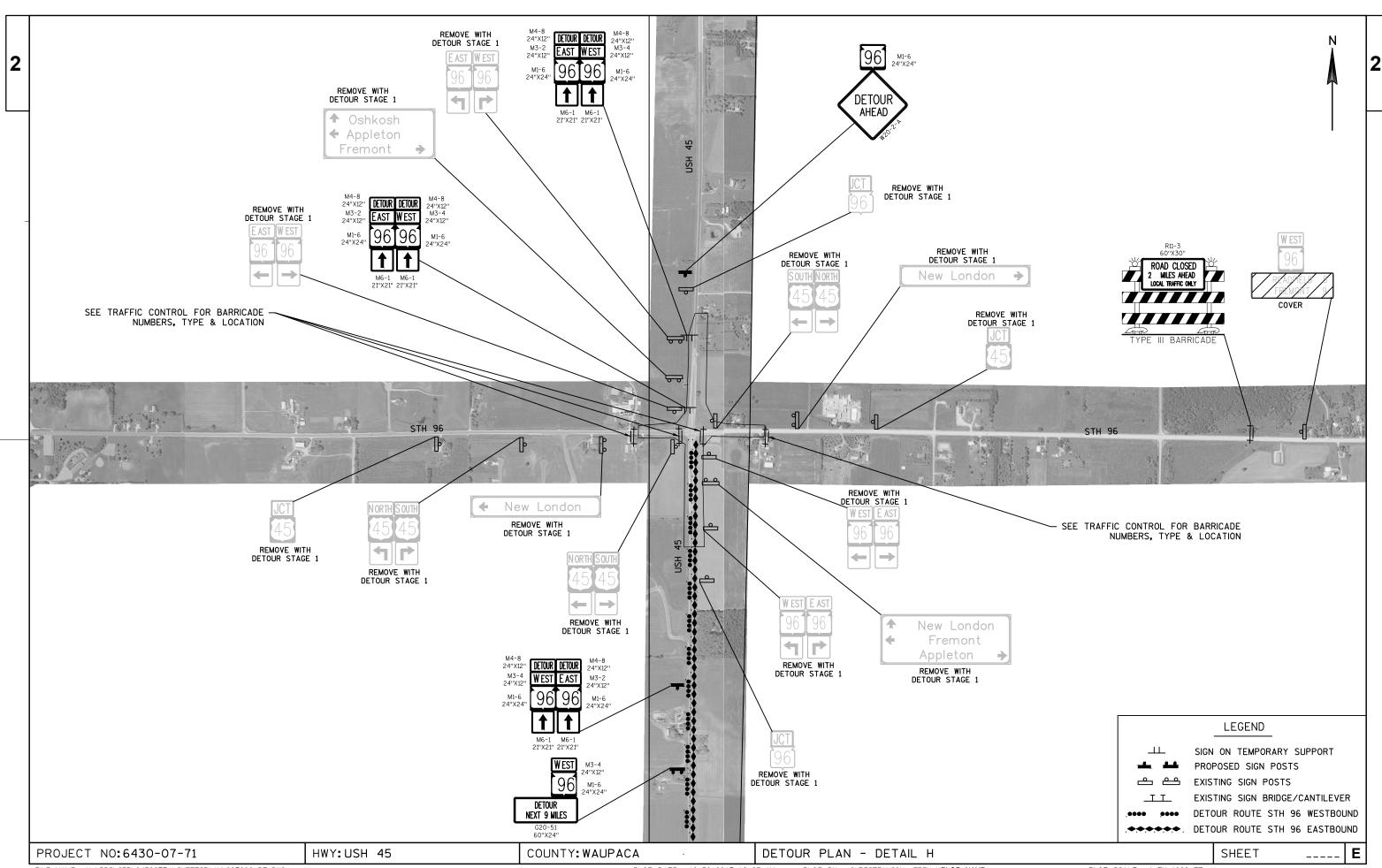


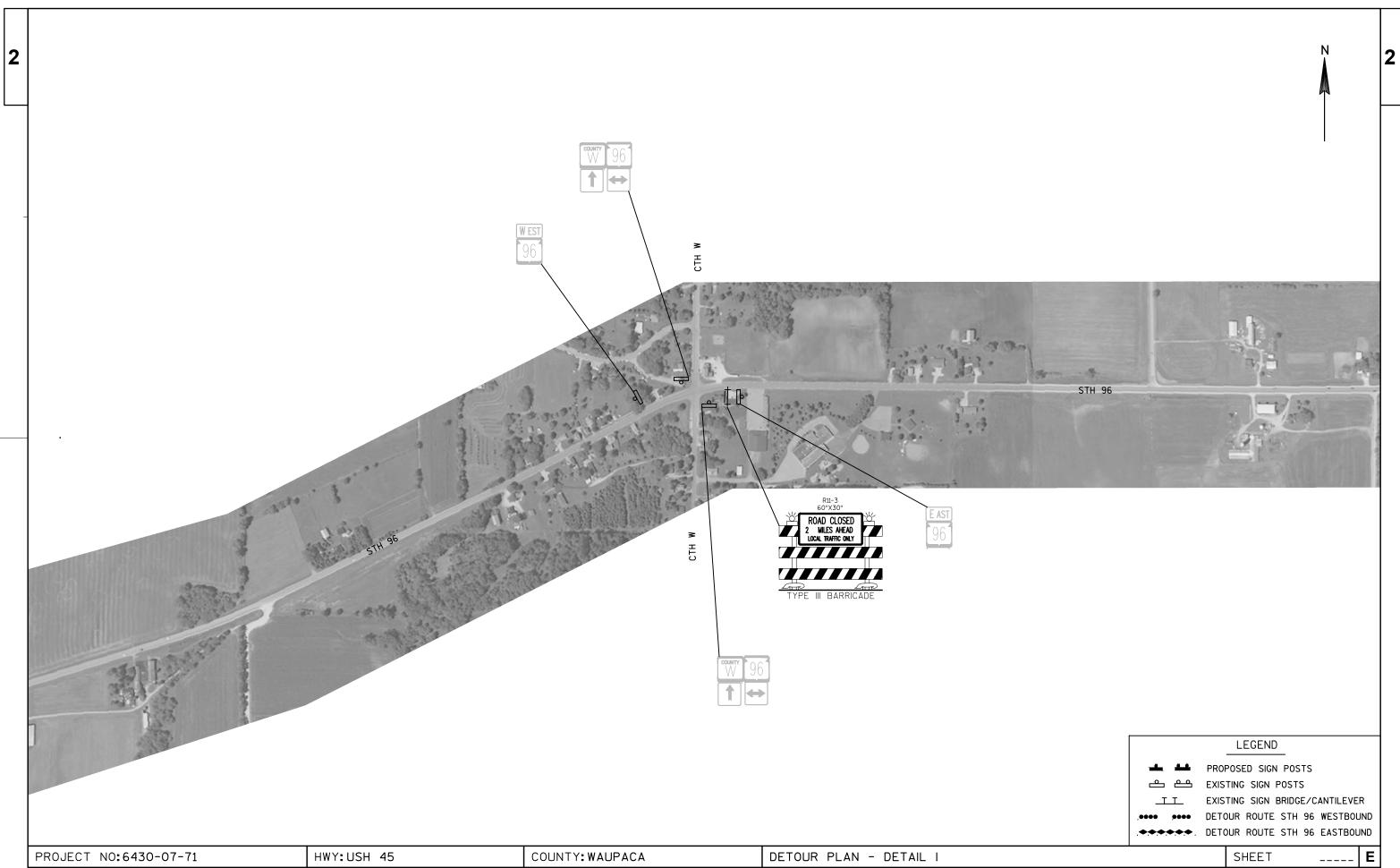


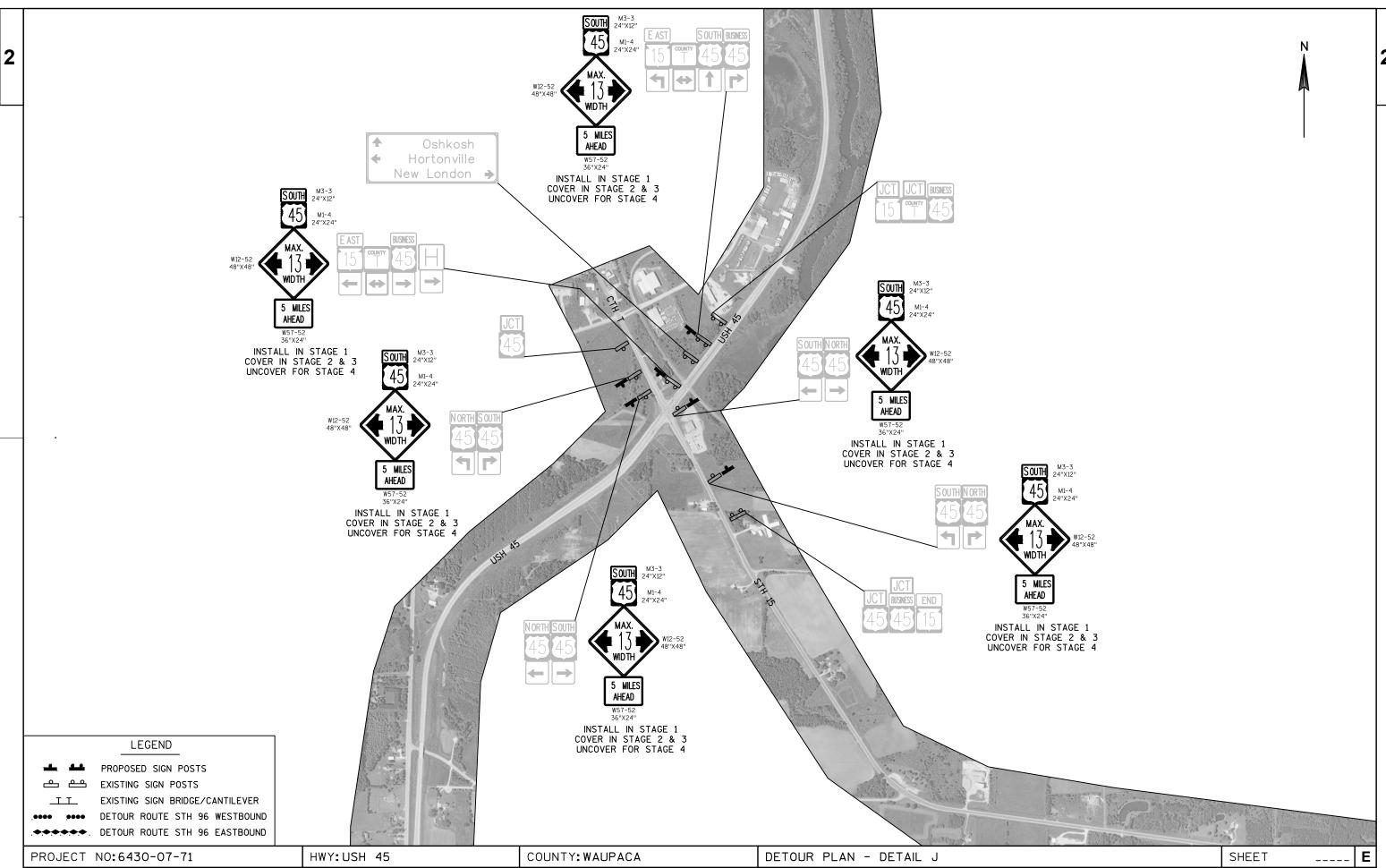


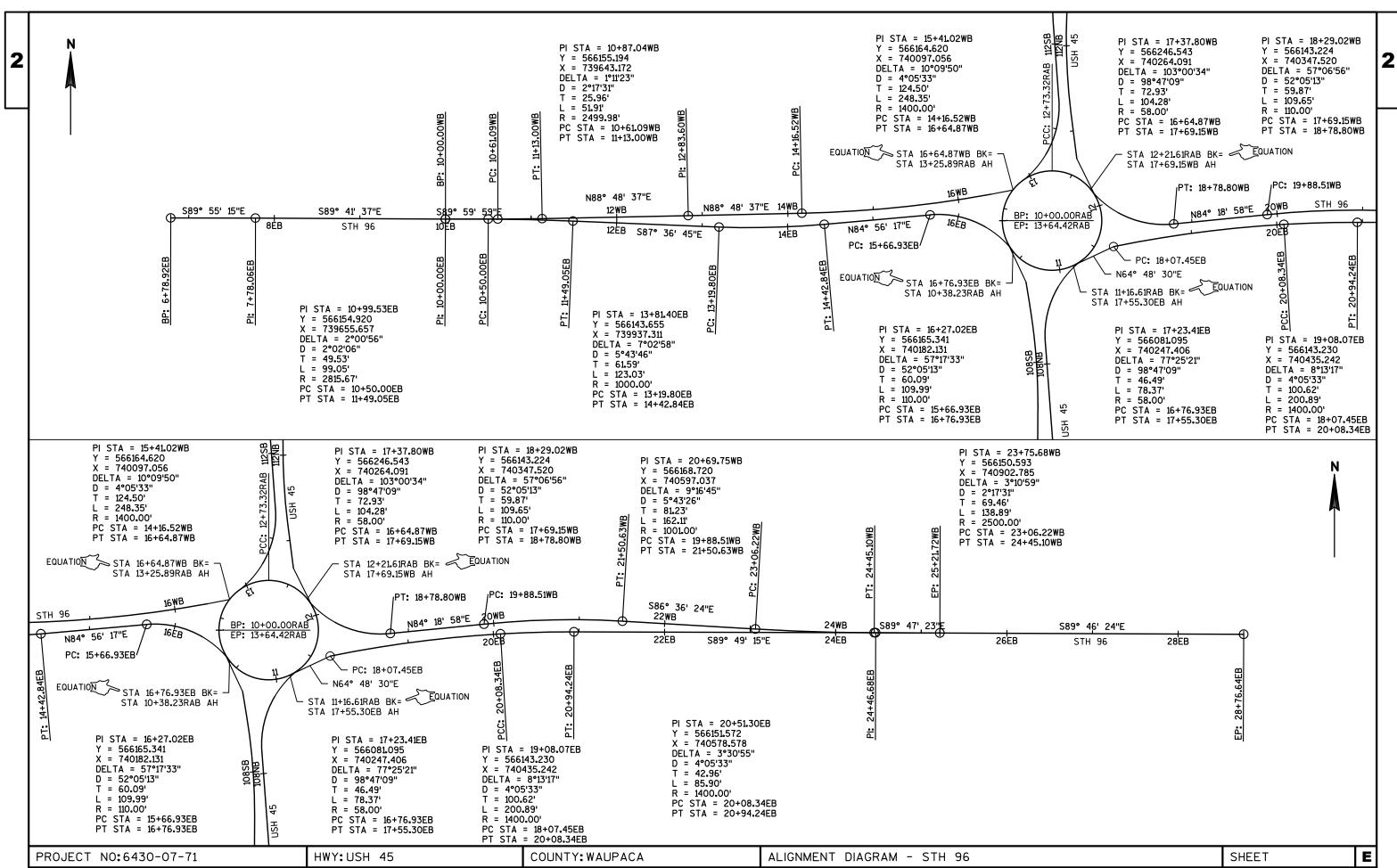


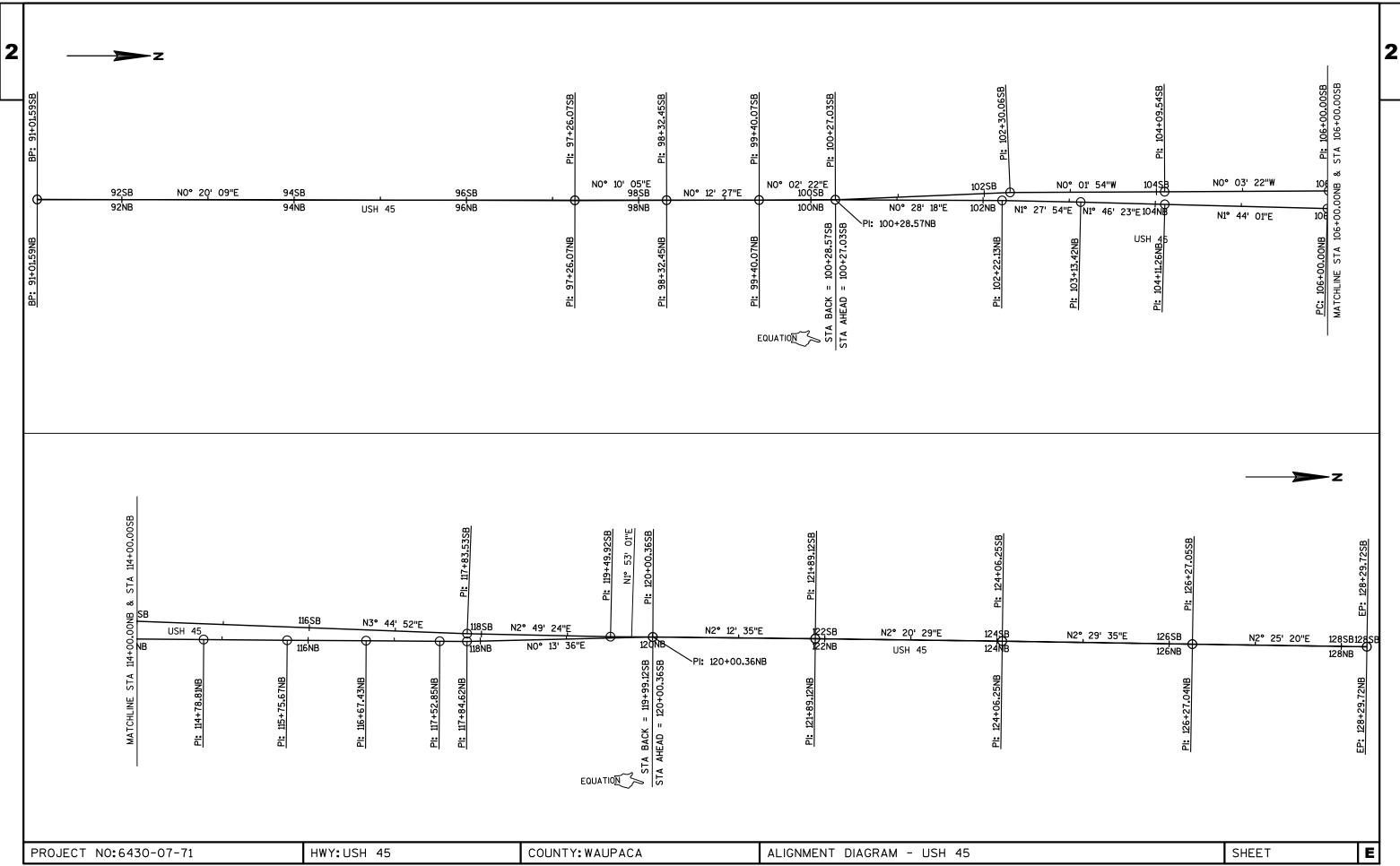


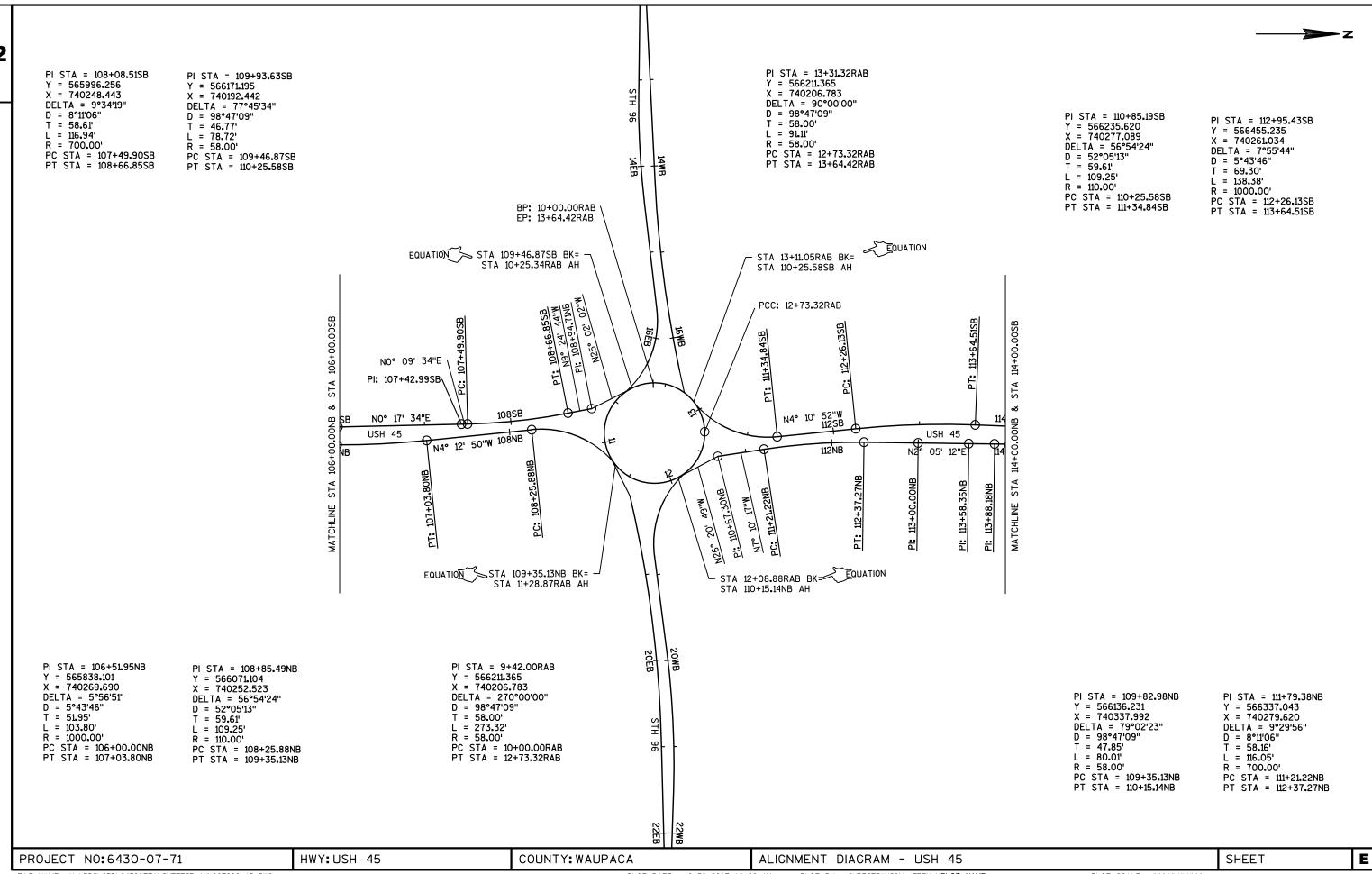










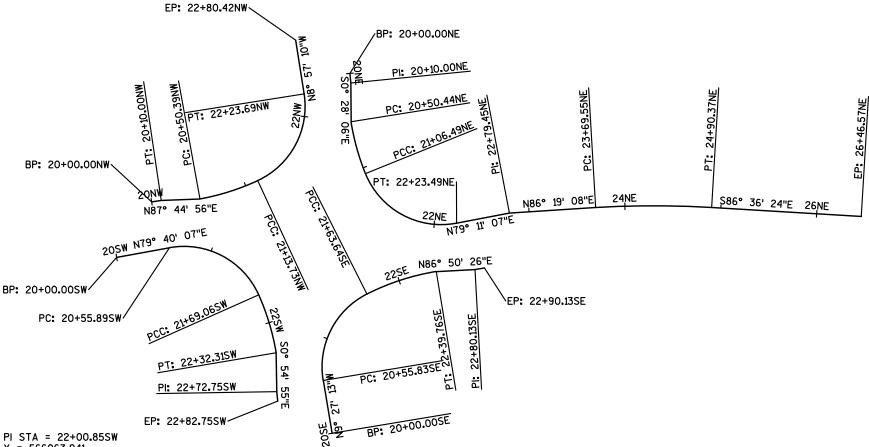


2

PT STA = 24+90.37NE

PI STA = 20+78.58NE PI STA = 21+76.39NE PI STA = 24+30.03NE Y = 566245.412Y = 566154.479Y = 566187.459X = 740308.376X = 740345.023X = 740618.939DELTA = 12°50'40" DELTA = 78°51'54" DELTA = 6°47'12" D = 22°55'06" D = 67°24'24" D = 5°37'02" T = 28.14'T = 60.48'T = 69.90'L = 56.04L = 117.00'L = 120.82'R = 250.00'R = 85.00'R = 1020.00'PC STA = 20+50.44NE PC STA = 21+06.49NE PC STA = 23+69.55NE

PT STA = 22+23.49NE



PT STA = 21+06.49NE

PI STA = 22+00.85SW Y = 566063.941 X = 740220.473DELTA = 14°29'40" D = 22°55'06" T = 31.79' L = 63.24R = 250.00'PC STA = 21+69.06SW PT STA = 22+32.31SW

HWY: USH 45

PI STA = 20+82.23NW

R = 250.00' PC STA = 20+50.39NW

PT STA = 21+13.73NW

Y = 566198.556

X = 740177.729

D = 22°55'06"

T = 31.84'

L = 63.34'

DELTA = 14°30'56"

PI STA = 20+05.00NW

PC STA = 20+00.00NW

PI STA = 21+22.64SW Y = 566153.930X = 740180.319

PC STA = 20+55.89SW

PT STA = 21+69.06SW

DELTA = 76°17'04"

D = 67°24'24"

T = 66.75'

L = 113.17'

R = 85.00'

PT STA = 20+10.00NW

Y = 566190.536

X = 740101.096

 $D = 4^{\circ}47'41''$

T = 5.00'

L = 10.00'

R = 1195.00'

 $DELTA = 0^{\circ}28'46"$

PI STA = 21+77.92NW

Y = 566238.889

X = 740264.876

 $D = 67^{\circ}24'24''$

T = 64.19'

L = 109.96

R = 85.00'

DELTA = 74°07'03"

PC STA = 21+13.73NW

PT STA = 22+23.69NW

PI STA = 21+18.35SE Y = 566065.437 X = 740264.617DELTA = 72°40'25" $D = 67^{\circ}24'24''$ T = 62.52'L = 107.81 R = 85.00'PC STA = 20+55.83SE PT STA = 21+63.64SE

PI STA = 22+02.00SE Y = 566110.889X = 740354.675DELTA = 17°26'40" D = 22°55'06"T = 38.35' L = 76.12' R = 250.00'PC STA = 21+63.64SE PT STA = 22+39.76SE

PROJECT NO:6430-07-71

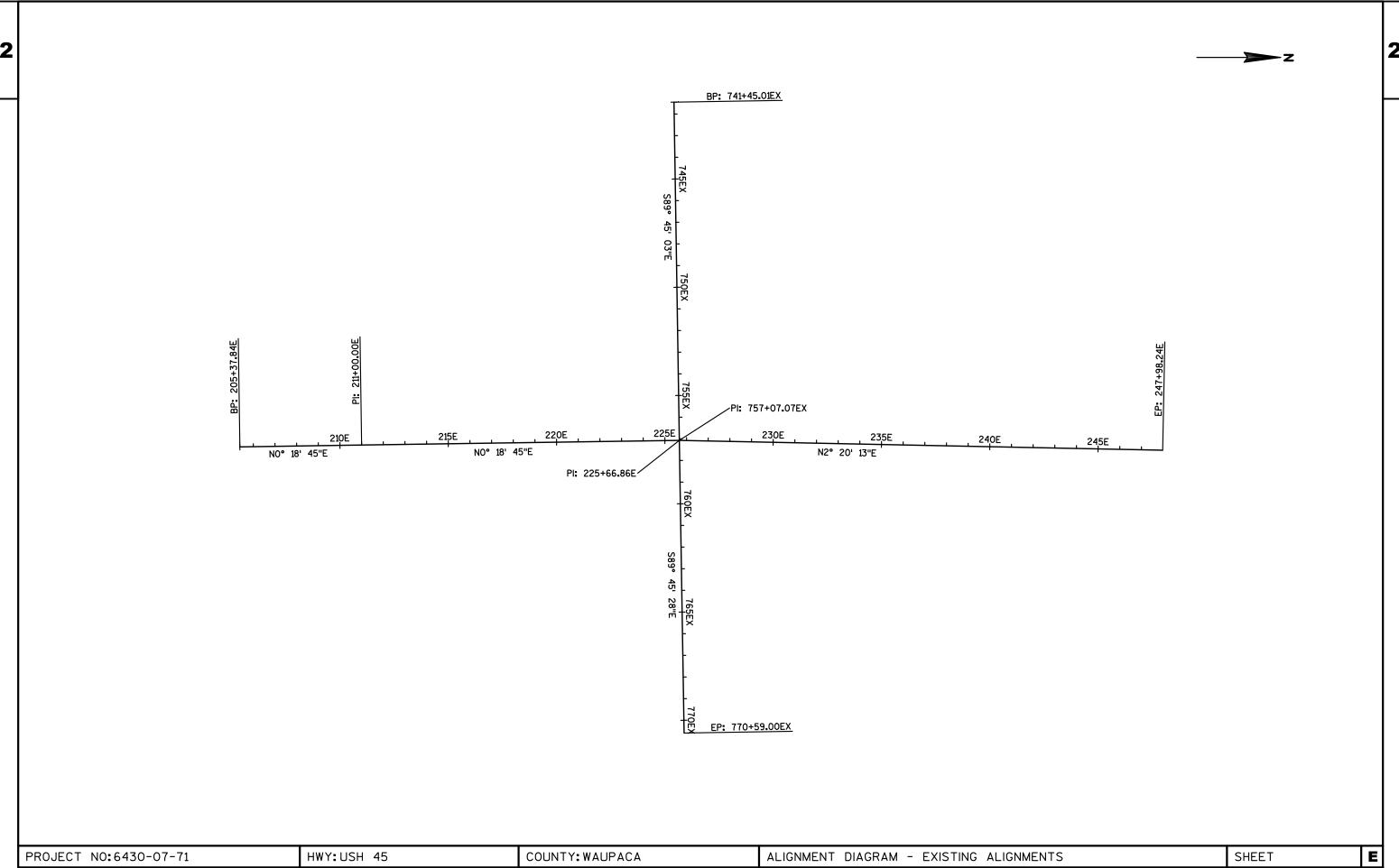
COUNTY: WAUPACA

ALIGNMENT DIAGRAM - CURB AND GUTTER

SHEET

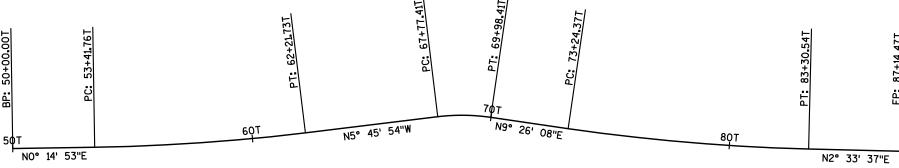
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E



	SUPERELEVATION TAB	LE TEMPORA	RY ROAD (T)	1	
STATION	DESCRIPTION	LT SHLD	LT LANE	RT LANE	RT SHLD
66+33.41T	END NC	-2.00%	-2.00%	-2.00%	-2.00%
66+81.41T	LEVEL CROWN	0.00%	0.00%	-2.00%	-2.00%
67+29.41T	REVERSE CROWN	2.00%	2.00%	-2.00%	-2.00%
68+25.41T	BEGIN FS	6.00%	6.00%	-6.00%	-6.00%
69+50.41T	END FS	6.00%	6.00%	-6.00%	-6.00%
70+46.41T	REVERSE CROWN	2.00%	2.00%	-2.00%	-2.00%
70+94.41T	LEVEL CROWN	0.00%	0.00%	-2.00%	-2.00%
71+42.41T	BEGIN NC	-2.00%	-2.00%	-2.00%	-2.00%





PI STA = 57+82.15T Y = 565070.093 X = 740254.417 DELTA = 6°00'47" D = 0°41'00" T = 440.39'L = 879.97' R = 8385.00' PC STA = 53+41.76T PT STA = 62+21.73T

PI STA = 68+88.57T Y = 566171.716 X = 740143.198 DELTA = 15°12'02" D = 6°52'42" T = 111.15' L = 221.00'R = 833.00'PC STA = 67+77.41T PT STA = 69+98.41T PI STA = 78+28.06T Y = 567099.787 X = 740297.431DELTA = 6°52'31" $D = 0^{\circ}41'00''$ T = 503.69' L = 1006.17' R = 8385.00PC STA = 73+24.37T PT STA = 83+30.54T

PROJECT NO:6430-07-71

HWY:USH 45

COUNTY: WAUPACA

ALIGNMENT DIAGRAM - TEMPORARY ROAD (T)

SHEET

PLOT DATE: 10/30/2017 10:34 AM PLOT BY: CHRISTIANSON, ERIN MPLOT NAME:

E

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Page 1

					6430-07-71
Line	Item	Item Description	Unit	Total	Qty
0002	203.0100	Removing Small Pipe Culverts	EACH	5.000	5.000
0004	204.0100	Removing Pavement	SY	2,096.000	2,096.000
0006	204.0110	Removing Asphaltic Surface	SY	10,370.000	10,370.000
0008	204.0150	Removing Curb & Gutter	LF	1,719.000	1,719.000
0010	204.0155	Removing Concrete Sidewalk	SY	235.000	235.000
0012	204.0195	Removing Concrete Bases	EACH	11.000	11.000
0014	204.0220	Removing Inlets	EACH	2.000	2.000
0016	204.0245	Removing Storm Sewer (size) 01. 12-Inch	LF	54.000	54.000
0018	205.0100	Excavation Common	CY	16,284.000	16,284.000
0020	208.0100	Borrow	CY	338.000	338.000
0022	213.0100	Finishing Roadway (project) 01. 6430-07-71	EACH	1.000	1.000
0024	305.0110	Base Aggregate Dense 3/4-Inch	TON	1,263.000	1,263.000
0026	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	19,457.000	19,457.000
0028	405.0100	Coloring Concrete WisDOT Red	CY	370.000	370.000
0030	416.0512	Concrete Truck Apron 12-Inch	SY	1,109.000	1,109.000
0032	455.0605	Tack Coat	GAL	1,244.000	1,244.000
0034	460.2000	Incentive Density HMA Pavement	DOL	3,300.000	3,300.000
0036	460.5223	HMA Pavement 3 LT 58-28 S	TON	2,153.000	2,153.000
0038	460.6223	HMA Pavement 3 MT 58-28 S	TON	2,158.000	2,158.000
0040	460.6424	HMA Pavement 4 MT 58-28 H	TON	840.000	840.000
0042	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	50.000	50.000
0044	465.0310	Asphaltic Curb	LF	65.000	65.000
0046	465.0315	Asphaltic Flumes	SY	200.000	200.000
0048	465.0475	Asphalt Centerline Rumble Strips 2-Lane Rural	LF	1,193.000	1,193.000
0050	520.2012	Culvert Pipe Temporary 12-Inch	LF	52.000	52.000
0052	520.2024	Culvert Pipe Temporary 24-Inch	LF	84.000	84.000
0054	521.1221	Apron Endwalls for Pipe Arch Steel 21x15-Inch	EACH	6.000	6.000
0056	521.3721	Pipe Arch Corrugated Steel 21x15-Inch	LF	105.000	105.000
0058	522.0418	Culvert Pipe Reinforced Concrete Class IV 18-Inch	LF	229.000	229.000
0060	522.1012	Apron Endwalls for Culvert Pipe Reinforced Concrete	EACH	5.000	5.000
		12-Inch		2.223	0.000
0062	522.1015	Apron Endwalls for Culvert Pipe Reinforced Concrete	EACH	1.000	1.000
		15-Inch			
0064	522.1018	Apron Endwalls for Culvert Pipe Reinforced Concrete	EACH	2.000	2.000
0000	500 00 10	18-Inch		464.665	101000
0066	522.2319	Culvert Pipe Reinforced Concrete Horizontal Elliptical Class HE-III 19x30-Inch	LF	104.000	104.000
0069	E22 2640		EACH	2.000	2.000
0068	522.2619	Apron Endwalls for Culvert Pipe Reinforced Concrete Horizontal Elliptical 19x30-Inch	EACH	2.000	2.000
0070	601.0405	Concrete Curb & Gutter 18-Inch Type A	LF	189.000	189.000
0070	601.0551	Concrete Curb & Gutter 4-Inch Sloped 36-Inch Type A		673.000	673.000
0012	001.0001	Considere Curb & Gutter 4-mon Stoped So-mon Type A	LI	073.000	073.000

					6430-07-71
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Line	Item	Item Description	Unit	Total	Qty
0148	630.0200	Seeding Temporary	LB	203.000	203.000
0150	631.0300	Sod Water	MGAL	20.000	20.000
0152	632.0201	Shrubs (species) (size) (root) 01. Sea Green Juniper, B&B, 5 Gal	EACH	3.000	3.000
0154	632.9101	Landscape Planting Surveillance and Care Cycles	EACH	1.000	1.000
0156	633.5200	Markers Culvert End	EACH	2.000	2.000
0158	634.0614	Posts Wood 4x6-Inch X 14-FT	EACH	17.000	17.000
0160	634.0616	Posts Wood 4x6-Inch X 16-FT	EACH	36.000	36.000
0162	634.0618	Posts Wood 4x6-Inch X 18-FT	EACH	3.000	3.000
0164	634.0620	Posts Wood 4x6-Inch X 20-FT	EACH	5.000	5.000
0166	634.0622	Posts Wood 4x6-Inch X 22-FT	EACH	5.000	5.000
0168	634.0811	Posts Tubular Steel 2x2-Inch X 11-FT	EACH	8.000	8.000
0170	634.0814	Posts Tubular Steel 2x2-Inch X 14-FT	EACH	16.000	16.000
0172	637.2210	Signs Type II Reflective H	SF	665.340	665.340
0174	637.2230	Signs Type II Reflective F	SF	118.560	118.560
0176	638.2102	Moving Signs Type II	EACH	6.000	6.000
0178	638.2602	Removing Signs Type II	EACH	56.000	56.000
0180	638.3000	Removing Small Sign Supports	EACH	56.000	56.000
0182	642.5201	Field Office Type C	EACH	1.000	1.000
0184	643.0300	Traffic Control Drums	DAY	3,024.000	3,024.000
0186	643.0310.S		LS	1.000	1.000
0188	643.0420	Traffic Control Barricades Type III	DAY	2,008.000	2,008.000
0190	643.0705	Traffic Control Warning Lights Type A	DAY	2,054.000	2,054.000
0192	643.0715	Traffic Control Warning Lights Type C	DAY	1,472.000	1,472.000
0194	643.0900	Traffic Control Signs	DAY	15,090.000	15,090.000
0196	643.0910	Traffic Control Covering Signs Type I	EACH	2.000	2.000
0198	643.0920	Traffic Control Covering Signs Type II	EACH	4.000	4.000
0200	643.1000	Traffic Control Signs Fixed Message	SF	97.500	97.500
0200	643.5000	Traffic Control	EACH	1.000	1.000
0202	645.0120	Geotextile Type HR	SY	107.000	107.000
0204	646.1020	Marking Line Epoxy 4-Inch	LF	19,531.000	19,531.000
0208	646.3020	Marking Line Epoxy 4-Inch	LF	264.000	264.000
0208	646.5120	Marking Word Epoxy	EACH	4.000	4.000
0210	646.6320	Marking Dotted Extension Epoxy 18-Inch	LF	80.000	80.000
0212	646.7120	Marking Diagonal Epoxy 12-Inch	LF	96.000	96.000
0214					
	646.8020	Marking Curb Enovy	SF LF	596.000	596.000
0218	646.8120	Marking Curb Epoxy		103.000	103.000
0220	646.8220	Marking Island Nose Epoxy	EACH	6.000	6.000
0222	646.9000	Marking Removal Line 4-Inch	LF	4,178.000	4,178.000
0224	649.0105	Temporary Marking Line Paint 4-Inch	LF	8,603.000	8,603.000

6430-07-71		

Line	Item	Item Description	Unit	Total	Qty
0226	649.0150	Temporary Marking Line Removable Tape 4-Inch	LF	4,209.000	4,209.000
0228	650.4000	Construction Staking Storm Sewer	EACH	22.000	22.000
0230	650.4500	Construction Staking Subgrade	LF	6,919.000	6,919.000
0232	650.5000	Construction Staking Base	LF	6,919.000	6,919.000
0234	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	4,398.000	4,398.000
0236	650.6000	Construction Staking Pipe Culverts	EACH	3.000	3.000
0238	650.8500	Construction Staking Electrical Installations (project) 01. 6430-07-71		1.000	1.000
0240	650.9000	Construction Staking Curb Ramps	EACH	8.000	8.000
0242	650.9910	Construction Staking Supplemental Control (project) 01. 6430-07-71	LS	1.000	1.000
0244	650.9920	Construction Staking Slope Stakes	LF	6,919.000	6,919.000
0246	652.0225	Conduit Rigid Nonmetallic Schedule 40 2-Inch	LF	2,294.000	2,294.000
0248	653.0164	Pull Boxes Non-Conductive 24x42-Inch	EACH	9.000	9.000
0250	653.0905	Removing Pull Boxes	EACH	20.000	20.000
0252	654.0105	Concrete Bases Type 5	EACH	16.000	16.000
0254	654.0224	Concrete Control Cabinet Bases Type L24	EACH	1.000	1.000
0256	655.0525	Electrical Wire Traffic Signals 6 AWG	LF	7,713.000	7,713.000
0258	655.0610	Electrical Wire Lighting 12 AWG	LF	2,112.000	2,112.000
0260	656.0200	Electrical Service Meter Breaker Pedestal (location) 01. USH 45 & STH 96 Intersection	LS	1.000	1.000
0262	657.0255	Transformer Bases Breakaway 11 1/2-Inch Bolt Circle	EACH	16.000	16.000
0264	657.0322	Poles Type 5-Aluminum	EACH	16.000	16.000
0266	657.0615	Luminaire Arms Single Member 4 1/2-Inch Clamp 8-FT	EACH	16.000	16.000
0268	659.1115	Luminaires Utility LED A	EACH	16.000	16.000
0270	659.2124	Lighting Control Cabinets 120/240 24-Inch	EACH	1.000	1.000
0272	690.0150	Sawing Asphalt	LF	173.000	173.000
0274	690.0250	Sawing Concrete	LF	10.000	10.000
0276	ASP.1T0A	On-the-Job Training Apprentice at \$5.00/HR	HRS	600.000	600.000
0278	ASP.1T0G	On-the-Job Training Graduate at \$5.00/HR	HRS	1,200.000	1,200.000
0270	SPV.0030	Special 01. Fertilizer for Lawn Type Turf	CWT	0.170	0.170
0282	SPV.0060	Special 01. Research and Locate Existing Land Parcel	EACH	9.000	9.000
5202	C1 V.0000	Monuments	2, (011	3.000	3.000
0284	SPV.0060	Special 02. Verify and Replace Existing Land Parcel Monuments	EACH	9.000	9.000
0286	SPV.0060	Special 03. Reestablish Section Corner Monuments	EACH	1.000	1.000
0288	SPV.0085	Special 01. Seeding No Mow Fescue	LB	14.000	14.000
0290	SPV.0105	Special 01. Remove and Salvage Traffic Signals (USH 45 & STH 96 / Old Hwy 10)	LS	1.000	1.000
0292	SPV.0180	Special 01. Preparing Topsoil for Lawn Type Turf	SY	263.000	263.000
3_0_	2	-1	-	_00.000	_00.000

REMOVING SMALL PIPE CULVERTS						
STATION I	LOCATION	203.0100 EACH	REMARKS			
751+33EX ST 760+30EX STH 96 (762+25EX ST	5 CROSSDRAIN H 96 (PE) RT (PARK & RIDE) RT H 96 (PE) LT H 96 (PE) RT	1 1 1	21"x27" X 97' CSPA 18" X 32' CP 17"x13" X 43' CSPA 18" X 269' CP 18" X 30' CP			
		-				
REMO	VING ASPHALT	C SURFA	<u> </u>			
		204.0110	1			
STATION - STATION	LOCATION	SY	REMARKS			
226+08E - 229+38E US 225+20E US 226+10E US 750+52EX - 756+27EX S	ISH 45 (NB & SB) ISH 45 (NB & SB) ISH 45 (NB) ISLAND ISH 45 (SB) ISLAND TH 96 (EB & WB)	2017 1959 14 11 3033	ASPHALT PAVEMEN SE QUAD ISLAND NW QUAD ISLAND ASPHALT PAVEMEN	NT		
758+03EX - 764+21EX S	TH 96 (EB & WB)	3336	ASPHALT PAVEMEN =	NT		
REMO	VING CONCRET	E SIDEW	ALK			
		204.015	5			
STATION - STATION	I LOCATION	SY	REMARKS			
223+88E - 225+24E 226+08E - 227+87E	,	,	4" CONCRETE 4" CONCRETE			
	TOTA	L 235	=			
REMOVING CONCRETE BASES						
LOCATIO	N	TYPE	204.0195 EACH			
USH 45 & STH 96 INTI USH 45 & STH 96 INTI		FFIC SIGN	AL BASES 10 R BASE 1			
			TOTAL 11			

REMOVING PAVEMENT

STATION - STATION	WIDTH FEET	204.0100 SY	REMARKS
756+27EX - 757+71EX	48	773	9" CONCRETE
757+71EX - 758+03EX	36	120	9" CONCRETE
758+03EX - 759+56EX	36		9" CONCRETE UNDER EXISTING ASPHALT
759+56EX - 761+76EX	24		9" CONCRETE UNDER EXISTING ASPHALT

TOTAL 2096

REMOVING CURB & GUTTER

		204.0150)
STATION - STATION	LOCATION	LF	REMARKS
			_
222+00E - 225+24E	MEDIAN ISLAND	648	30" C & G
225+20E	SE QUAD ISLAND	54	30" C & G
226+08E - 228+72E	MEDIAN ISLAND	263	30" C & G
226+08E - 229+38E	MEDIAN ISLAND	330	30" C & G
226+10E	NW QUAD ISLAND	54	30" C & G
760+85EX - 761+67EX	STH 96 (WB) LT	82	36" C & G
USH 45 & STH 96 INT	SE QUAD	72	36" C & G
USH 45 & STH 96 INT	SW QUAD	69	36" C & G
USH 45 & STH 96 INT	NE QUAD	75	36" C & G
USH 45 & STH 96 INT	NW QUAD	72	36" C & G

TOTAL 1719

REMOVING PULL BOXES

PULL

	BOX			653.0905
_	NO	STATION	LOCATION	EACH
	EPB1	225+07E	USH 45' 84' RT	1
	EPB2	223+27E	USH 45; 40' RT	1
_	EPB3	221+64E	USH 45; 38' RT	1
	EPB4	225+16E	USH 45; 30' RT	1
	EPB5	225+05E	USH 45; 6' LT	1
_	EPB6	224+91E	USH 45; 43' LT	1
	EPB7	225+20E	USH 45; 75' LT	1
	EPB8	754+45EX	STH 96; 39' RT	1
_	EPB9	752+75EX	STH 96; 34' RT	1
	EPB10	226+33E	USH 45; 76' LT	1
	EPB11	226+66E	USH 45; 47' LT	1
_	EPB12	228+78E	USH 45; 43' LT	1
	EPB13	229+61E	USH 45; 42' LT	1
	EPB14	226+15E	USH 45; 31' LT	1
_	EPB15	226+67E	USH 45; 4' RT	1
	EPB16	226+70E	USH 45; 43' RT	1
	EPB17	226+47E	USH 45; 68' RT	1
_	EPB18	759+89EX	STH 96; 32' LT	1
	EPB19	761+37EX	STH 96; 31' LT	1
	EPB20	226+15E	USH 45; 74' RT	1
			TOTAL	20

REMOVING INLETS & STORM SEWER

			204.0245 REMOVING
		204.0220	STORM
		REMOVING	SEWER
		INLETS	12-INCH
STATION	LOCATION/OFFSET	EACH	LF
226+42E	USH 45 (NB) RT	1	6
226+42E	USH 45 (NB) RT	1	48
	TOTALS	2	54

HWY: USH 45 COUNTY: WAUPACA PROJECT NO: 6430-07-71 MISCELLANEOUS QUANTITIES - 1 FILE NAME : N:\pds\design_id\6430-07-00,71 ush 45\quantities\6430-07-71

PLOT DATE : <u>1/11/2018 8:55 AM</u>

PLOT NAME : 030201 mg 71

SHEET:

EARTHWORK SUMMARY

STAGE	STATION - STATION	LOCATION	205.0100 COMMON EXCATION (1) CUT (2) CY	SALVAGED/ UNUSABLE PAVEMENT MATERIAL (4)	AVAILABLE MATERIAL (5)	UNEXPANDED FILL	EXPANDED FILL (13) FACTOR 1.25	- MASS ORDINATE +/- (14)	WASTE	208.0100 BORROW CY	COMMENTS
STAGE 1											
EWKDetail-USH45-TempRoad	94+52T - 83+40T	TEMP ROAD	2,287	0	2,287	2,099	2,624	-338	0	338	
		STAGE 1 SUBTOTALS	2,287	0	2,287	2,099	2,624	-338	0	338	=
STAGE 2			•		•	,	•				
EWKDetail-USH45-NB	106+00NB - 113+65NB	USH 45 (NB)	2,803	332	2,471	410	512	1,960	1,960	-1,960	
EWKDetail-USH45-SB	106+00SB - 113+65SB	USH 45 (SB)	996	332	664	450	562	102	102	-102	
EWKDetail-STH96-EB	18+07EB - 24+46.68EB	STH 96 (EB)	851	472	379	175	218	161	161	-161	
EWKDetail-STH96-WB	18+11.61WB - 24+46.84WB	STH 96 (WB)	1,757	473	1,284	335	419	865	865	-865	_
EWKDetail-USH45-RAB	10+00RAB - 13+64.42RAB	USH 45 (RAB)	53	0	53	924	1,155	-1,102	0	1,102	
		STAGE 2 SUBTOTALS	6,461	1,609	4,852	2,293	2,866	1,985	3,087	0	=
STAGE 3	04.5000 404.54.0500	TEMP BOAR BELLOVAL	5.054	4 007	4 00 4	4 = 4 4	4 000	0.070	0.070	•	
EWKDetail-USH45-TempRoad-SB		TEMP ROAD REMOVAL	5,351	1,087	4,264	1,511	1,888	2,376	2,376	0	
EWKDetail-STH96-EB	10+50EB - 16+21EB	STH 96 (EB)	1,204	668	536	118	148	388	388	0	
EWKDetail-STH96-WB	10+50WB - 16+23WB	STH 96 (WB)	981	668	313	228	285	28	28	0	
		STAGE 3 SUBTOTALS	7,537	2,423	5,114	1,857	2,321	2,792	2,792	0	=
	TOTAL	GRAND TOTALS .COMMON EXCAVATION	16,284 16,284	4,032	12,252	6,250	7,812	4,440	5,880	338	=

Notes:

- (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.
- (4) Salvaged/Unusable Pavement Material
- (5) Available Material = Cut Salvaged/Unusuable Pavement Material
- (13) Expanded Fill Factor = 1.25

Depending on selections: Expanded Fill = (Unexpanded Fill - Rock* Rock Factor - Reduced Marsh - Reduced EBS) * Fill Factor

Or Expanded Fill = (Unexpanded Fill - Rock * Rock Factor - Reduced EBS) * Fill Factor
Or Expanded Fill = (Unexpanded Fill - Rock * Rock Factor - Reduced Marsh) * Fill Factor
Or Expanded Fill = (Unexpanded Fill - Rock * Rock Factor) * Fill Factor

(14) 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.

PROJECT NO: 6430-07-71 HWY: USH 45 COUNTY: WAUPACA MISCELLANEOUS QUANTITIES - 2 SHEET: **E**

FILE NAME : N:\pds\design id\6430-07-00.71 ush 45\quantities\6430-07-71 PLOT NAME : 030201 mg 71 PLOT SCALE : 1:1

BASE AGGREGATE DENSE

		305.0110 3/4-INCH	305.0120 1 1/4-INCH	
STATION - STATION	LOCATION	TON	TON	REMARKS
106+00NB - 108+93NB	USH 45 (NB)	42	849	
106+00NB - 108+83NB	USH 45 - MEDIAN		451	
110+67NB - 113+00NB	USH 45 (NB)	36	713	
94+52SB - 106+00SB	USH 45 (SB)	233		TEMP ROAD REMOVAL
113+65SB - 124+54SB	USH 45 (SB)	221		TEMP ROAD REMOVAL
106+00SB - 108+95SB	USH 45 (SB)	52	889	
110+77SB - 113+00SB	USH 45 - MEDIAN		332	
110+68SB - 113+65SB	USH 45 (SB)	167	892	
10+50EB - 16+35EB	STH 96 (EB)	119	1784	
12+79EB - 16+34EB	STH 96 - MEDIAN		366	_
18+08EB - 24+47EB	STH 96 (EB)	140	2036	
18+07EB - 21+67EB	STH 96 - MEDIAN		384	
10+50WB - 16+38WB	STH 96 (WB)	129	1700	
18+12WB - 24+47WB	STH 96 (WB)	36	1607	
10+00RAB - 13+64RAB	USH 45 (RAB)		1903	
53+50T - 83+40T	TEMP ROAD	88	5551	

TOTALS 1263

ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES

19457

STATION	LOCATION	465.0120 TON	REMARKS
11+30EB 20+50EB 24+00EB 22+50WB	STH 96 (EB) RT STH 96 (EB) RT STH 96 (EB) RT STH 96 (WB) LT	5 26 13 6	PE PARK & RIDE LOT PE PE
22 00112	TOTAL	50	•

ASPHALTIC CENTER LINE RUMBLE STRIP 2-LANE RURAL

STATION - STATION	LOCATION	465.0475 LF
94+02NB - 100+42NB 119+52NB - 125+05NB	USH 45 (C/L) USH 45 (C/L)	640 553
	TOTAL	1193

CONCRETE TRUCK APRON & COLORING CONCRETE

		405.0100 COLORING CONCRETE WISDOT RED	416.0512 CONCRETE TRUCK APRON 12-INCH	
STATION - STATION	LOCATION	CY	SY	REMARKS
108+20NB - 18+64 EB 111+24NB - 18+64WB 15+80EB - 108+37SB	SE QUAD NE QUAD SW QUAD	32 33 31	96 98 94	BEHIND CURB & GUTTER BEHIND CURB & GUTTER BEHIND CURB & GUTTER
15+85WB - 111+40 SB 10+00RAB - 13+65RAB	NW QUAD RAB MEDIAN	34 240	101 720	BEHIND CURB & GUTTER
10.001415 - 10.001415	TOTALS	370	1109	•

ASPHALTIC FLUMES

	TOTAL	200
23+13WB	STH 96 (WB) LT	19
15+36WB	STH 96 (WB) LT	23
19+19EB	STH 96 (EB) RT	27
14+96EB	STH 96 (EB) RT	22
112+06SB	USH 45 (SB) LT	21
107+90SB	USH 45 (SB) LT	29
111+70NB	USH 45 (NB) RT	35
107+55NB	USH 45 (NB) RT	24
STATION	LOCATION	SY
		465.0315

ASPHALTIC CURB

		465.0310	
STATION - STATION	LOCATION	LF	REMARKS
68+50T - 69+15T	TEMP ROAD (RT)	65	
	TOTAL	65	I

HMA PAVEMENT & TACK COAT

			F	VT	_	
		455.0605	460.5223	460.6223	460.6424	_
		TACK COAT	3 LT 58-28 S	3 MT 58-28 S	4 MT 58-28 H	
STATION - STATION	LOCATION	GAL	TON	TON	TON	REMARKS
						_
106+00NB - 108+93NB	USH 45 (NB)	61		152	59	3 LIFTS
110+67NB - 113+00NB	USH 45 (NB)	50		124	48	3 LIFTS
106+00SB - 108+95SB	USH 45 (SB)	61		151	59	3 LIFTS
110+68SB - 113+65SB	USH 45 (SB)	61		152	59	3 LIFTS
10+50EB - 16+34EB	STH 96 (EB)	124		308	120	3 LIFTS
18+07EB - 24+47EB	STH 96 (EB)	138		340	132	3 LIFTS
20+13EB - 20+90EB	STH 96 (MEDIAN)	122		32	13	3 LIFTS
10+50WB - 16+38WB	STH 96 (WB)	146		303	118	3 LIFTS
18+12WB - 24+47WB	STH 96 (WB)	13		361	141	3 LIFTS
10+00RAB - 13+64RAB	USH 45 (RAB)	95		235	91	3 LIFTS
53+50T - 83+40T	TEMP ROAD	373	2153			2 LIFTS
						=
	TOTALS	1244	2153	2158	840	

PROJECT NO: 6430-07-71 HWY: USH 45 COUNTY: WAUPACA MISCELLANEOUS QUANTITIES - 3 SHEET: PLOT SCALE: 1:1

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PLOT DATE : <u>1/11/2018 8:55 AM</u>

PLOT NAME : 030201 mg 71

CONCRETE SIDEWALK 4-INCH

		602.0405	
STATION - STATION	LOCATION	SF	REMARKS
106+00NB - 108+87NB	USH 45 (MEDIAN)	3567	
110+74NB - 113+00NB	USH 45 (MEDIAN)	2622	
12+85EB - 16+27EB	STH 96 (MEDIAN)	3082	
18+15FB - 20+06FB	STH 96 (MEDIAN)	1788	

20+97EB - 21+60EB STH 96 (MEDIAN) 434

TOTAL 11493

CURB RAMP DETECTABLE WARNING FIELD

_	STATION - STATION	LOCATION	602.0505 SF
	108+63NB - 108+73NB	USH 45 (MEDIAN)	20
	110+89NB - 110+99NB	USH 45 (MEDIAN)	20
	108+62SB - 108+72SB	USH 45 (MEDIAN)	20
	110+88SB - 110+98SB	USH 45 (MEDIAN)	20
	16+04EB - 16+14EB	STH 96 (MEDIAN)	20
_	18+31EB - 18+41EB	STH 96 (MEDIAN)	20
	16+06WB - 16+16WB	STH 96 (MEDIAN)	20
	18+32WB - 18+42WB	STH 96 (MEDIAN)	20

TOTAL 160

CROSS DRAINS & SIDE ROAD CULVERT PIPES

CULVERT PIPE TEMPORARY

STATION	LOCATION	520.2012 12-INCH LF	520.2024 24-INCH LF	REMARKS
64+45T 70+12T	TEMP ROAD TEMP ROAD	52 	 84	
	TOTALS	52	84	

STATION	LOCATION		521.1221 AEW PACS 21X15-INCH		522.1018 AEW CPRC 18-INCH	CPRC HE CLASS HE-III 19X30-INCH	19X30-INCH	MINIMUM WALL THICKNESS INCHES	* JOINT TIES	REMARKS
STATION	LUCATION	LF	EACH	LF	EACH	LF	EACH	INCHES	EACH	REIVIARNS
111+25NB 11+30EB 20+50EB	USH 45 (NB) STH 96 (EB) RT STH 96 (EB) RT		 2 2	 	 	104 	2 	3.250 0.064 0.064	28 	CROSS DRAIN PE PARK & RIDE LOT
24+00EB	STH 96 (EB) RT	25	2					0.064		PE
22+50WB	STH 96 (WB) LT			229	2			2.500	54	PE
	TOTALS	105	6	229	2	104	2			

^{*} FOR INFORMATION ONLY. ALL JOINTS SHALL HAVE TIES.

PROJECT NO: 6430-07-71 HWY: USH 45 COUNTY: WAUPACA MISCELLANEOUS QUANTITIES - 4 SHEET:

FILE NAME : N:\pds\design id\6430-07-00,71 ush 45\quantities\6430-07-71

PLOT DATE : <u>1/11/2018 8:55 AM</u>

PLOT BY : _____ PLOT NAME : <u>030201_mq_71</u>

PLOT SCALE: 1:1

601.0405 601.0551 601.0553 601.0557 601.0580 18-INCH 4-INCH SLOPED 4-INCH SLOPED 6-INCH SLOPED 4-INCH SLOPED TYPE A 36-INCH TYPE A 36-INCH TYPE D 36-INCH TYPE R

	TOTALS	189	673	1596	1576	352	
	<u>-</u>						
12+59RAB - 12+73RAB	ROUNDABOUT				21		NORTH LEG USH 45
11+67RAB - 11+84RAB	ROUNDABOUT				24		EAST LEG STH 96
10+76RAB - 10+91RAB	ROUNDABOUT				21		SOUTH LEG USH 45
10+01RAB - 13+48RAB	ROUNDABOUT				23		WEST LEG STH 96
10+00RAB - 13+64RAB	OUTER MEDIAN CIRCLE					352	
10+00RAB - 13+64RAB	INNER MEDIAN CIRCLE	189					REJECT CURB
19+43WB - 23+07WB	STH 96 (WB) LT			364			
111+40SB - 112+00WB	NW QUAD			60			
15+85WB - 111+40SB	NW QUAD		174				
15+42WB - 15+85WB	NW QUAD			43			
107+96SB - 108+37SB	SW QUAD			41			
15+80EB - 108+37SB	SW QUAD		162				
15+02EB - 15+80EB	SW QUAD			78			
111+24NB - 111+64NB	NE QUAD			40			
18+64WB - 111+24NB	NE QUAD		 159	7 			
18+64WB - 19+43WB	NE QUAD			79			
18+64EB - 19+14EB	SE QUAD			48			
108+20NB - 18+64EB	SE QUAD		178				
107+61NB - 108+20NB	SE QUAD			59			THE TOTAL
20+95WB - 21+61WB	STH 96 (WB) MEDIAN			66			REJECT CURB
19+19WB - 20+06WB	STH 96 (WB) MEDIAN			 87			
18+19WB - 19+19WB	STH 96 (WB) MEDIAN				100		
15+26WB - 16+28WB	STH 96 (WB) MEDIAN				102		
12+86WB - 15+26WB	STH 96 (WB) MEDIAN			240			TALULUI OUTA
20+97EB - 21+60EB	STH 96 (EB) MEDIAN			63			REJECT CURB
19+20EB - 20+06EB	STH 96 (EB) MEDIAN			86			
18+18EB - 19+20EB	STH 96 (EB) MEDIAN				102		
15+27EB - 16+27EB	STH 96 (EB) MEDIAN				100		
12+85EB - 15+27EB	STH 96 (EB) MEDIAN			242	<u></u>		
110+75SB - 113+65SB	USH 45 (SB) MEDIAN				290		
106+00SB - 108+85SB	USH 45 (SB) MEDIAN				285		
110+77NB - 113+00NB	USH 45 (NB) MEDIAN USH 45 (NB) MEDIAN				205 223		
106+00NB - 108+85NB	LICH 45 (NID) MEDIAN				285		
STATION - STATION	LOCATION	LF	LF	LF	LF	LF	REMARKS
OTATION OTATION	LOCATION				36-INCH TYPE D		

PROJECT NO: 6430-07-71 HWY: USH 45 COUNTY: WAUPACA MISCELLANEOUS QUANTITIES - 5 SHEET:

PLOT NAME : 030201_mq_71 FILE NAME : N:\pds\design_id\6430-07-00,71 ush 45\quantities\6430-07-71 PLOT DATE : <u>1/11/2018 8:55 AM</u> PLOT SCALE: 1:1

CONCRETE MEDIAN SLOPED NOSE

620.0300 CONCRETE MEDIAN

SLOPE NOSE

LOCATION	SF	REMARKS
		_
USH 45 (NB) MEDIAN	18	TYPE 2
USH 45 (NB) MEDIAN	27	TYPE 2
USH 45 (SB) MEDIAN	28	TYPE 2
USH 45 (SB) MEDIAN	18	TYPE 2
STH 96 MEDIAN	68	TYPE 1
STH 96 MEDIAN	67	TYPE 1
STH 96 MEDIAN	66	TYPE 1
STH 96 MEDIAN	68	TYPE 1
STH 96 (EB) MEDIAN	15	TYPE 2
STH 96 (EB) MEDIAN	25	TYPE 2
STH 96 (WB) MEDIAN	25	TYPE 2
STH 96 (WB) MEDIAN	15	TYPE 2
	USH 45 (NB) MEDIAN USH 45 (NB) MEDIAN USH 45 (SB) MEDIAN USH 45 (SB) MEDIAN STH 96 (EB) MEDIAN STH 96 (EB) MEDIAN STH 96 (EB) MEDIAN	USH 45 (NB) MEDIAN 18 USH 45 (NB) MEDIAN 27 USH 45 (SB) MEDIAN 28 USH 45 (SB) MEDIAN 18 STH 96 MEDIAN 68 STH 96 MEDIAN 67 STH 96 MEDIAN 66 STH 96 MEDIAN 68 STH 96 MEDIAN 68 STH 96 (EB) MEDIAN 15 STH 96 (EB) MEDIAN 25 STH 96 (WB) MEDIAN 25

TOTAL

STORM SEWER PIPE

STORM SEWER PIPE APRON ENDWALLS FOR REINFORCED CONCRETE **CULVERT PIPE** CLASS IV REINFORCED CONCRETE 522.1015 608.0412 608.0415 522.1012 STRUCTURE 12-INCH 15-INCH 12-INCH 15-INCH STATION - STATION FROM LOCATION LF **EACH** EACH REMARKS LF 108+75NB - 11+23RAB USH 45 (NB) I-1 I-11 55 110+85NB - 110+85NB USH 45 (NB) I-2 0-2 55 111+62NB - 111+62 NB USH 45 (NB) I-3 O-3 36 111+99SB - 111+62SB USH 45 (MEDIAN) I-3 41 34 14+62EB - 14+62 EB STH 96 (EB) I-5 O-5

12

53

61

30

97

14

I-5

0-7

I-12

I-10

MH-3

I-12

0-12

O-10

I-6

I-7

I-8

I-9

I-10

I-11

I-12

MH-3

488 **TOTALS** 66 5 1

6

60

STORM SEWER STRUCTURES

CONCRETE BARRIER TEMPORARY PRECAST

603.8000

440

PRECAST 603.8125 FURNISHED & PRECAST

DELIVERED INSTALLED

STATION - STATION LOCATION LF LF

60+26T - 77+56T TEMP ROAD (RT) 1730 1730

> **TOTALS** 1730 1730

			611.0535	611.2004	INL	ETS		INLET CO	OVERS		
			MANHOLE COVERS	MANHOLES	611.3225	611.3230	611.0627	611.0636	611.0639	611.0652	-
			TYPE J-SPECIAL	4-FT	2X2.5-FT	2X3-FT	TYPE HM	TYPE HM-S	TYPE H-S	TYPE T	
STATIO	N LOCATION	STRUCTURE	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	REMARKS
108+75N	IB USH 45 (NB) MEDIAN	I-1				1	1				
110+85N	IB USH 45 (NB) MEDIAN	I-2				1	1				
111+62N	IB USH 45 (NB) MEDIAN	I-3				1		1			
111+99S	B USH 45 (SB) MEDIAN	I-4				1		1			
14+62EI	B STH 96 (EB) MEDIAN	I-5				1		1			
14+55W	B STH 96 (WB) MEDIAN	I-6				1		1			
16+17E	B STH 96 (EB) MEDIAN	I-7				1	1				
18+28E	B STH 96 (EB) MEDIAN	I-8				1	1				
20+12E	B STH 96 (EB) MEDIAN	I-9				1			1		
20+11W	B STH 96 (WB) LT	I-10				1	1				
11+23RA	AB USH 45 (RAB)	I-11			1					1	
11+29RA	AB USH 45 (RAB)	I-12			1					1	
22+99W	B STH 96 (WB) LT	MH-1	1	1							PE
21+11W	B STH 96 (WB) LT	MH-2	1	1							PE
19+16W	B STH 96 (WB) LT	MH-3	1	1							
		TOTALS	3	3	2	10	5	4	1	2	ı

Е HWY: USH 45 COUNTY: WAUPACA SHEET: PROJECT NO: 6430-07-71 MISCELLANEOUS QUANTITIES - 6

14+55WB - 14+62EB STH 96 (MEDIAN)

STH 96 (EB)

STH 96 EB

STH 96 (WB)

STH 96 (WB)

USH 45 (RAB)

USH 45 (RAB)

STH 96 (WB)

16+17EB - 16+01EB

18+28EB - 11+29RAB

20+12EB - 20+11WB

20+11WB - 19+16WB

11+23RAB - 11+29RAB

11+29RAB - 11+30RAB

19+16WB - 19+17WB

FILE NAME : N:\pds\design_id\6430-07-00,71 ush 45\quantities\6430-07-71

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PLOT NAME : 030201 mg 71

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631.0300

WATER

SOD 624.0100 WATER WATER MGAL REMARKS

MGAL 250 20

TOTALS 250 20

LOCATION

PROJECT LIMITS

RIPRAP & GEOTEXTILE

					606.0200 RIPRAP	645.0120 GEOTEXTILE	
			RIPF	RAP	MEDIUM	TYPE HR	
STATION	LOCATION	STRUCTURE	LENGTH	WIDTH	CY	SY	REMARKS
110+85NB	USH 45 (NB) RT	O-2	18-FT	9-FT	9	23	
111+25NB	USH 45 (NB) RT		19-FT	17-FT	18	45	CROSSDRAIN
111+62NB	USH 45 (NB) RT	O-3	19-FT	9-FT	10	24	
19+17WB	STH 96 (WB) LT	O-10	10-FT	9-FT	5	15	
							_
				TOTALS	42	107	•

LANDMARK REFERENCE MONUMENTS

SPV.0060.03 REESTABLISH 621.0100 SECTION REFERENCE CORNER MONUMENTS MONUMENTS LANDMARK LOCATION EACH **EACH** REMARKS Y = 310624.58 4 **BRASS DISK** X = 627244.66TOTALS

INLET PROTECTION

STATION	LOCATION	628.7010 TYPE B EACH	628.7015 TYPE C EACH
105+74NB	USH 45 (NB)		1
108+75NB	USH 45 (NB)		1
110+85NB	USH 45 (NB)		1
111+62NB	USH 45 (NB)		1
105+74SB	USH 45 (SB)		1
111+99SB	USH 45 (SB)		1
14+62EB	STH 96 (EB)		1
16+17EB	STH 96 (EB)		1
18+28EB	STH 96 (EB)		1
20+12EB	STH 96 (EB)	1	
14+55WB	STH 96 (WB)		1
20+11WB	STH 96 (WB)		1
11+23RAB	USH 45 (RAB)		1
11+29RAB	USH 45 (RAB)		1

TOTALS 1 13

HWY: USH 45

TOPSOIL, MULCHING, FERTILIZER, AND SEEDING

STATION - STATION	LOCATION	625.0100 TOPSOIL SY	627.0200 MULCHING SY	629.0210 FERTILIZER TYPE B CWT	630.0120 SEEDING MIXTURE NO. 20 LB	630.0140 SEEDING MIXTURE NO. 40 LB	630.0200 SEEDING TEMPORARY LB	SPV.0030.01 FERTILIZER FOR LAWN TYPE TURF CWT	SPV.0085.01 SEEDING NO MOW FESCUE LB	SPV.0180.01 PREPARING TOPSOIL FOR LAWN TYPE TURF SY
40C+00ND 442+00ND	LICH 45 (ND) DT	1446	1116	0.01	20					
106+00NB - 113+00NB	USH 45 (NB) RT	1446	1446	0.91	39					
106+00SB - 113+65SB	USH 45 (SB) LT	1583	1583	1.00	43					
10+50EB - 24+47EB	STH 96 (EB) RT	2239	2239	1.41	33	19		0.07		115
11+00WB - 24+47WB	STH 96 (WB) LT	2329	2329	1.47	40	15		0.06		95
10+16RAB - 13+30RAB	USH 45 (RAB) RT	828	828	0.52	22					
10+00RAB - 13+64RAB	USH 45 (RAB) LT	1193	1193	0.75					12.0	
5+00D - 7+25D	DITCH BASIN	1529	1529	0.96	41					
56+00T - 81+85T	TEMP ROAD (LT)	5771	5771	3.64			156			
62+50T - 69+75T	TEMP ROAD (RT)	240	240	0.15			6			
97+00SB - 123+00SB	TEMP ROAD REMOVAL (LT)	15651	15651	9.86						
UNDISTRIBUTED	PROJECT LIMITS	3191	3191	5.17	54	9	41	0.03	2.0	53
	TOTALS	36000	36000	25.84	272	43	203	0.17	14.0	263

PROJECT NO: 6430-07-71

COUNTY: WAUPACA

MISCELLANEOUS QUANTITIES - 7

SHEET:

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PLOT DATE : <u>1/11/2018 8:55 AM</u>

PLOT NAME : 030201 mg 71 PLOT SCALE: 1:1

FILE NAME : <u>N:\pds\design_id\6430-07-00,71 ush 45\quantities\6430-07-71</u>

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EROSION CONTROL ITEMS

STATION - STATION	LOCATION	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF	628.1905 MOBILIZATION EROSION CONTROL EACH	628.1910 MOBILIZATION EMERGENCY EROSION CONTROL EACH	628.2004 EROSION MAT CLASS I TYPE B SY	628.7504 TEMPORARY DITCH CHECKS LF	628.7555 CULVERT PIPE CHECKS EACH	REMARKS
107+00NB	USH 45 (NB) RT						10		
107+37NB	USH 45 (NB) RT					10			ASPHALTIC FLUME
107+57NB - 19+22EB	USH 45 (NB) RT					130			
108+16NB	USH 45 (NB) RT						10		
111+74NB - 22+35WB	USH 45 (NB) RT					255			
111+85NB - 112+60NB	USH 45 (NB) RT					67			
111+91NB	USH 45 (NB) RT					10			ASPHALTIC FLUME
97+00SB	USH 45 (SB) LT						10		
98+00SB	USH 45 (SB) LT						10		
99+37SB	USH 45 (SB) LT						10		
100+47SB	USH 45 (SB) LT						10		
101+50SB	USH 45 (SB) LT						10		
103+00SB	USH 45 (SB) LT						10		_
105+00SB	USH 45 (SB) LT						10		
107+66SB	USH 45 (SB) LT					10			ASPHALTIC FLUME
107+85SB - 14+94EB	USH 45 (SB) LT					130			
111+25SB	USH 45 (SB) LT					9		5	19X30-INCH AEW
112+23SB	USH 45 (SB) LT					10			ASPHALTIC FLUME
11+15EB	STH 96 (EB) RT							3	12-INCH AEW
11+51EB	STH 96 (EB) RT					6			12-INCH AEW
14+62EB	STH 96 (EB) RT					12			12-INCH AEW
14+70EB	STH 96 (EB) RT						10		
14+96EB	STH 96 (EB) RT					10			ASPHALTIC FLUME
16+01EB	STH 96 (EB) RT					12			12-INCH AEW
19+38EB	STH 96 (EB) RT					10			ASPHALTIC FLUME
20+30EB	STH 96 (EB) RT							3	12-INCH AEW
20+77EB	STH 96 (EB) RT					6			12-INCH AEW
23+88EB	STH 96 (EB) RT							3	12-INCH AEW
24+15EB	STH 96 (EB) RT					6	_		12-INCH AEW
11+50WB	STH 96 (WB) LT						10		12 IIVOITALVV
15+20WB	STH 96 (WB) LT					10			ASPHALTIC FLUME
15+35WB - 112+08SB	STH 96 (WB) LT					125			AOITIALIIOTLOML
16+01WB	STH 96 (WB) LT						 10		
19+55WB - 20+74WB	STH 96 (WB) LT					120			
20+75WB	STH 96 (WB) LT					7		 5	18-INCH AEW
	, ,	60							10-INCH AEVV
22+56WB - 23+25WB	STH 96 (WB) LT	69	69			20			
22+58WB - 23+20WB	STH 96 (WB) LT					28			10 INICLI A EVA!
23+09WB	STH 96 (WB) LT					14			18-INCH AEW
23+32WB	STH 96 (WB) LT					10			ASPHALTIC FLUME

CONT. ON NEXT PAGE

PROJECT NO: 6430-07-71 HWY: USH 45 COUNTY: WAUPACA MISCELLANEOUS QUANTITIES - 8 SHEET: E

FILE NAME : N:\pds\design id\6430-07-00,71 ush 45\quantities\6430-07-71 PLOT NAME : 030201 mg 71 PLOT SCALE : 1:1

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EROSION CONTROL ITEMS

					628.1910	628.2004			
				628.1905	MOBILIZATION	EROSION	628.7504	628.7555	
		628.1504	628.1520	MOBILIZATION	EMERGENCY	MAT	TEMPORARY	CULVERT	
		SILT	SILT FENCE	EROSION	EROSION	CLASS I	DITCH	PIPE	
		FENCE	MAINTENANCE	CONTROL	CONTROL	TYPE B	CHECKS	CHECKS	
STATION - STATION	LOCATION	LF	LF	EACH	EACH	SY	LF	EACH	REMARKS
11+30RAB	USH 45 (RAB) RT					13			15-INCH AEW
10+00RAB - 13+64RAB	USH 45 (RAB)					83			INNER CIRCLE
55+50T - 57+00T	TEMP ROAD (LT)	150	150						
56+00T	TEMP ROAD (LT)						10		
57+00T	TEMP ROAD (LT)						10		
58+40T	TEMP ROAD (LT)						10		
59+50T	TEMP ROAD (LT)						10		
60+55T	TEMP ROAD (LT)						10		
62+00T	TEMP ROAD (LT)						10		
64+45T	TEMP ROAD (LT)					6		3	12-INCH PIPE
70+12T	TEMP ROAD (LT)					9		5	24-INCH PIPE
70+12T	TEMP ROAD (LT)							5	EXISTING PIPE
76+00T - 78+50T	TEMP ROAD (LT)	250	250						
UNDISTRIBUTED		181	181	8	4	282	45	8	
	TOTALS	650	650	8	4	1400	225	40	

SHRUBS (SEA GREEN JUNIPER)(B&B)(5 GAL)

632.0201.01

STATION	LOCATION	EACH	REMARKS
10+49RAB	49' LT	1	SEA GREEN JUNIPER
11+70RAB	49' LT	1	SEA GREEN JUNIPER
12+92RAB	49' LT	1	SEA GREEN JUNIPER

TOTAL 3

MARKERS CULVERT END

633.5200 STATION LOCATION EACH REMARKS 111+25NB USH 45 (NB) 2 CROSS DRAIN TOTAL 2

PROJECT NO: 6430-07-71 HWY: USH 45 COUNTY: WAUPACA MISCELLANEOUS QUANTITIES - 9 SHEET:

FILE NAME : N:\pds\design_id\6430-07-00,71 ush 45\quantities\6430-07-71

PLOT DATE : <u>1/11/2018 8:55 AM</u>

PLOT BY : _____ PLOT NAME : <u>030201_mq_71</u>

SIGN LISTING

					BULAR STEEL					637.2210	637.2230		
					X 2"			4"X6"			SIGNS	SIGNS	
0.01	0.01			634.0811	634.0814				634.0620			TYPE II	_
SIGN	SIGN	115001.05	0.175	11-FT	14-FT	14-FT	16-FT	18-FT	20-FT	22-FT		REFLECTIVE F	
NO.	CODE	MESSAGE	SIZE	EACH	EACH	EACH	EACH	EACH	EACH	EACH	SF	SF	REMARKS
01-01	J1-1	JCT 96	24"x39"				1				6.50		
01-02	W2-6	ROUNDABOUT AHEAD	30"x30"				1					6.25	0.115 0.05 1.0 0.1 0.0
01-03	W13-1	20 M.P.H.	18"x18"								7.50	2.25	SAME POST AS 01-02
01-04	D2-1	OSHKOSH 21	72"x15"			2					7.50		
01-05	D1-62	ROUNDABOUT GUIDE SIGN	96"X72"						1	1	48.00		
01-07	R2-1	SPEED LIMIT 55	24"x30"			1					5.00		
01-08	W3-2	YIELD AHEAD	36"x36"				1					9.00	
01-09	R5-1	DO NOT ENTER	30"x30"			1					6.26		
01-10	R4-7	KEEP RIGHT SYMBOL	24"x30"			1					5.00		0.115 0.007 1.0 0.1 10
01-11	W5-54	IN ROAD OBJECT MARKER	18"x18"									2.25	SAME POST AS 01-10
01-12	R5-1A	WRONG WAY	36"x24"								6.00		
01-14	D1-3	NEW LONDON/FREMONT/APPLETON	84"X42"				1	1			24.50		
01-15	J4-1	SOUTH US 45	24"x36"				1				6.00		
01-16	W2-6	ROUNDABOUT AHEAD	30"x30"				1					6.25	
01-17	W13-1	20 M.P.H.	18"x18"									2.25	SAME POST AS 01-16
01-18	D4-5R	PARK & RIDE W/CAR SYMBOL & ARROW	30"x36"				1				7.50		
02-01	J4-1	NORTH US 45	24"x36"				1				6.00		
02-02	D2-3	NEW LONDON 7/CLINTONVILLE 24/ANTIGO 77	90"X36"						1	1	22.50		
02-03	D1-3	OSHKOSH/APPLETON/FREMONT	66"X42"				2				19.25		
02-05	R5-1A	WRONG WAY	36"x24"				1				6.00		SAME POST AS 02-04
02-06	R4-7	KEEP RIGHT SYMBOL	24"x30"			1					5.00		
02-07	W5-54	IN ROAD OBJECT MARKER	18"x18"									2.25	SAME POST AS 02-06
02-08	R5-1	DO NOT ENTER	30"x30"				1				6.26		
02-09	W3-2	YIELD AHEAD	36"x36"				1					9.00	
02-11	D1-62	ROUNDABOUT GUIDE SIGN	96"X72"						1	1	48.00		
02-12	W2-6	ROUNDABOUT AHEAD	30"x30"				1					6.25	0= = = =
02-13	W13-1	20 M.P.H.	18"x18"									2.25	SAME POST AS 02-12
02-14	W2-6	ROUNDABOUT AHEAD	30"x30"				1					6.25	
02-15	W13-1	20 M.P.H.	18"x18"									2.25	SAME POST AS 02-14
02-16	J1-1	JCT 96	24"x39"				1				6.50		
02-17	W14-3	NO PASSING ZONE	48"x36"				1					5.56	
02-18	R2-1	SPEED LIMIT 55	24"x30"			1					5.00		
02-19	D4-5L	PARK & RIDE W/CAR SYMBOL & ARROW	30"x36"				1				7.50		
03-01	J1-1	JCT 45	24"x39"				1				6.50		
03-02	W2-6	ROUNDABOUT AHEAD	30"x30"				1					6.25	
03-03	W13-1	20 M.P.H.	18"x18"									2.25	SAME POST AS 03-02
03-04	W2-6	ROUNDABOUT AHEAD	30"x30"				1					6.25	
03-05	W13-1	20 M.P.H.	18"x18"									2.25	SAME POST AS 03-04
03-06	D1-62	ROUNDABOUT GUIDE SIGN	102"X72"						1	1	51.00		
03-07	W3-2	YIELD AHEAD	36"x36"				1					9.00	
03-09	R2-1	SPEED LIMIT 55	24"x30"				1				5.00		
03-10	R4-7	KEEP RIGHT SYMBOL	24"x30"			1					5.00		

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HWY: USH 45 COUNTY: WAUPACA SHEET: PROJECT NO: 6430-07-71 MISCELLANEOUS QUANTITIES - 10 FILE NAME : N:\pds\design_id\6430-07-00,71 ush 45\quantities\6430-07-71 PLOT DATE : <u>1/11/2018 8:55 AM</u> PLOT NAME : 030201 mg 71 PLOT SCALE : 1:1

SIGN LISTING

SIGN NEW NESSAGE SIGN SALE SALE						ULAR STEEL X 2"	POSTS WOOD 4"X6"					637.2210 SIGNS	637.2230 SIGNS	
NO. COLDE MESSAGE SIZE EACH SF SF REMARKS 10-10-10-12-12-13-14-14-14-14-14-14-14-14-14-14-14-14-14-					634.0811	634.0814	634.0614	634.0616	634.0618	634.0620	634.0622	TYPE II	TYPE II	
03-11 W/S-54 N ROAD OBLECT MARKER 19/18"														
03-12 R5-1 DO NOTENTER 301-30" - 1 - - 0.28 -					EACH	EACH	EACH	EACH	EACH	EACH	EACH	SF		
03-13 D1-3 APPLETON, NEW LONDON, OSKOSH 887*82" - 2 24.50 -													2.25	SAME POST AS 03-10
03-14 R5-14 RFS-16 WRONG WAY 038"364"							1							
G3-17 U-5			·											
03-18 D-54 PARK & RIDE W/CAR SYMEOL & ARROW 30°X36° 1 7.50 1 7.50								1						
03-18 D4-6A PARK & RIDE WICKER SYMBOL & ARROW 20/330"								Ţ						
04-01								1						
04-02 D4-9R PARK & RIDE WICKAR SYMBOL & ARROW 30°x36"								1						
04-03 R4-7 KEEP RIGHT SYMBOL 24"x30"								1						
04-05 R5-14 WRONG WAY 36"x24"							1							
04-06 04-5L PARK & RIDE WICAR SYMBOL & ARROW 30°x36"								1						
04-07 R5-1 DO NOTENTER 30",30" -								1						
04-08 R4-7 KEEP RIGHT SYMBOL							1							
04-10 W-5-54 IN ROAD OBJECT MARKER 18"x18"							1							
D1-11	04-09	W5-54	IN ROAD OBJECT MARKER	18"x18"									2.25	SAME POST AS 04-08
04-14 W3-2 YIELD AHEAD 38"x36"	04-10	R2-1	SPEED LIMIT 55	24"x30"			1					5.00		
04-15 D1-62 ROUNDABOUT GUIDE SIGN 102"X72" 1 1 51.00 04-16 W2-6 ROUNDABOUT AHEAD 30"x30"	04-11	D1-3	FREMONT, OSHKOSH, NEW LONDON	84"X42"				2				24.50		
04-16 W2-6 ROUNDABOUT AHEAD 30"x30"	04-14	W3-2	YIELD AHEAD	36"x36"				1					9.00	
04-17 W13-1 20 M.P.H.	04-15	D1-62	ROUNDABOUT GUIDE SIGN	102"X72"						1	1	51.00		
04-18 W2-6 ROUNDABOUT AHEAD 30"x30" 1 6.25 04-19 W13-1 20 M.P.H.		W2-6						1						
04-19 W13-1 20 M.P.H. 18"x18"														SAME POST AS 04-16
04-20 J1-1 JCT USH 45 24"x39" 1 6.50 04-21 I2-2 OUTAGAMIE CO 76"X15" 2 8.13 05-01 R1-2 YIELD 36"x31" 1 5.00 05-02 R6-2R ONE WAY 24"x30" 3.88 05-03 R1-2 YIELD 36"x31" 1 3.88 05-04 R1-54 TO TRAFFIC FROM LEFT 24"x15" 8.75 05-05 R6-1R ONE WAY FOR ROUNDABOUTS 36"x12" 2 3.00 05-06 R6-1R ONE WAY FOR ROUNDABOUTS 36"x12" 2 3.00 05-09 R6-4B CHEVRON FOR ROUNDABOUTS 36"x12" 2 3.88 05-10 D1-1 EAST STH 96 & ARROW 42"x30" 2 3.88 05-11 R1-2 YIELD 36"x31" 1 3.88 05-12 R1-54 TO TRAFFIC FROM LEFT 24"x15" 3.88 05-14 R6-2R ONE WAY FOR ROUNDABOUTS 36"x31" 1 3.88 05-14 R6-2R ONE WAY FOR ROUNDABOUTS 36"x31" 1 -								1						
04-21 12-2 OUTAGAMIE CO 78"X15"													2.25	SAME POST AS 04-18
05-01 R1-2 YIELD 36"x31"								1						
05-02 R6-2R ONE WAY 24"x30" 5.00 SAME POST AS 05-01 05-03 R1-2 YIELD 36"x31" 1 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td>2</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>							2							
05-03 R1-2 YIELD 36"x31"						1								CAME DOOT AS OF 04
05-04 R1-54 TO TRAFFIC FROM LEFT 24"x15" 2 8.75 8.75 8.75 8.75 8.75 8.75 <														SAME POST AS 05-01
05-05 D1-1 SOUTH USH 45 & ARROW 42"X30" 2 8.75 05-06 R6-1R ONE WAY FOR ROUNDABOUTS 36"x12" 2 3.00 05-07 R6-4B CHEVRON FOR ROUNDABOUT 60"x24" 10.00 SAME POST AS 05-06 05-08 R6-1R ONE WAY FOR ROUNDABOUTS 36"x12" 2 3.00 05-09 R6-4B CHEVRON FOR ROUNDABOUT 60"x24" 3.00 05-10 D1-1 EAST STH 96 & ARROW 42"X30" 2 8.75 05-12 R1-54 TO TRAFFIC FROM LEFT 24"x15"						I								SAME DOST AS 05 03
05-06 R6-1R ONE WAY FOR ROUNDABOUTS 36"x12" 2						2								SAME FOST AS 05-03
05-07 R6-4B CHEVRON FOR ROUNDABOUT 60"x24" 10.00 SAME POST AS 05-06 05-08 R6-1R ONE WAY FOR ROUNDABOUTS 36"x12" 2 <td></td>														
05-08 R6-1R ONE WAY FOR ROUNDABOUTS 36"x12" 2 3.00 05-09 R6-4B CHEVRON FOR ROUNDABOUT 60"x24" <														SAME POST AS 05-06
05-09 R6-4B CHEVRON FOR ROUNDABOUT 60"x24" 10.00 SAME POST AS 05-08 05-10 D1-1 EAST STH 96 & ARROW 42"X30" 2 8.75 05-11 R1-2 YIELD 36"x31" 1 3.88 05-12 R1-54 TO TRAFFIC FROM LEFT 24"x15" 2.50 SAME POST AS 05-11 05-13 R1-2 YIELD 36"x31" 1 3.88 05-14 R6-2R ONE WAY 24"x30" 5.00 SAME POST AS 05-13 05-15 D1-1 WEST STH 96 & ARROW 42"X30" <														5, IIII 1 551 7 15 55 55
05-10 D1-1 EAST STH 96 & ARROW 42"X30" 2 8.75 05-11 R1-2 YIELD 36"x31" 1 3.88 05-12 R1-54 TO TRAFFIC FROM LEFT 24"x15" 2.50 SAME POST AS 05-11 05-13 R1-2 YIELD 36"x31" 1 3.88 05-14 R6-2R ONE WAY 24"x30" 5.00 SAME POST AS 05-13 05-15 D1-1 WEST STH 96 & ARROW 42"X30" 2 8.75 05-16 R6-1R ONE WAY FOR ROUNDABOUTS 36"x12" 2 3.00														SAME POST AS 05-08
05-11 R1-2 YIELD 36"x31" 1						2								
05-12 R1-54 TO TRAFFIC FROM LEFT 24"x15" 2.50 SAME POST AS 05-11 05-13 R1-2 YIELD 36"x31" 1 3.88 05-14 R6-2R ONE WAY 24"x30" 5.00 SAME POST AS 05-13 05-15 D1-1 WEST STH 96 & ARROW 42"X30" 2 8.75 05-16 R6-1R ONE WAY FOR ROUNDABOUTS 36"x12" 2 3.00						1								
05-13 R1-2 YIELD 36"x31" 1			TO TRAFFIC FROM LEFT											SAME POST AS 05-11
05-15 D1-1 WEST STH 96 & ARROW 42"X30" 2 8.75 05-16 R6-1R ONE WAY FOR ROUNDABOUTS 36"x12" 2 3.00	05-13	R1-2	YIELD	36"x31"		1								
05-16 R6-1R ONE WAY FOR ROUNDABOUTS 36"x12" 2 3.00	05-14	R6-2R	ONE WAY	24"x30"										SAME POST AS 05-13
	05-15	D1-1	WEST STH 96 & ARROW	42"X30"		2						8.75		
05-17 R6-4B CHEVRON FOR ROUNDABOUT 60"x24" 10.00 SAME POST AS 05-16	05-16	R6-1R	ONE WAY FOR ROUNDABOUTS	36"x12"	2							3.00		
	05-17	R6-4B	CHEVRON FOR ROUNDABOUT	60"x24"								10.00		SAME POST AS 05-16

CONT. ON NEXT PAGE

HWY: USH 45 COUNTY: WAUPACA PROJECT NO: 6430-07-71 MISCELLANEOUS QUANTITIES - 11 SHEET:

FILE NAME : N:\pds\design_id\6430-07-00,71 ush 45\quantities\6430-07-71

PLOT DATE : 1/11/2018 8:55 AM

PLOT BY : _____ PLOT NAME : <u>030201_mq_71</u>

PLOT SCALE : 1:1

SIGN LISTING

					ULAR STEEL X 2"		PO	OSTS WO	OD		637.2210 SIGNS	637.2230 SIGNS	
				634.0811	634.0814	634.0614	634.0616	634.0618	634.0620	634.0622	TYPE II	TYPE II	
SIGN	SIGN			11-FT	14-FT	14-FT	16-FT	18-FT	20-FT	22-FT	REFLECTIVE H	REFLECTIVE F	
NO.	CODE	MESSAGE	SIZE	EACH	EACH	EACH	EACH	EACH	EACH	EACH	SF	SF	REMARKS
05-18	R1-2	YIELD	36"x31"		1						3.88		
05-19	R1-54	TO TRAFFIC FROM LEFT	24"x15"								2.50		SAME POST AS 05-18
05-20	R1-2	YIELD	36"x31"		1						3.88		
05-21	R6-2R	ONE WAY	24"x30"								5.00		SAME POST AS 05-20
05-22	R1-2	YIELD	36"x31"		1						3.88		
05-23	R6-2R	ONE WAY	24"x30"								5.00		SAME POST AS 05-22
05-24	R1-2	YIELD	36"x31"		1						3.88		
05-25	R1-54	TO TRAFFIC FROM LEFT	24"x15"								2.50		SAME POST AS 05-24
05-26	R6-1R	ONE WAY FOR ROUNDABOUTS	36"x12"	2							3.00		
05-27	R6-4B	CHEVRON FOR ROUNDABOUT	60"x24"								10.00		SAME POST AS 05-26
05-28	D1-1	NORTH USH 45 & ARROW	42"X30"		2						8.75		
			TOTALS	8	16	17	36	3	5	5	665.34	118.56	=

MOVING & REMOVING SIGNS

638.3000

638.2102 638.2602 REMOVING MOVING REMOVING SMALL

SIGN NO.	MESSAGE	SIZE	SIGNS TYPE II EA	SIGNS TYPE II EA	SIGN SUPPORTS EA	REMARKS
04-13	CENTERLINE RUMBLE STRIPS/NEXT 10 MILES			1	1	
06-01	JCT STH 96			1	1	
06-02	TRAFFIC SIGNAL AHEAD			1	1	
06-03	TRAFFIC SIGNAL AHEAD			1	1	
06-04	TWO-WAY TRAFFIC SYMBOL		1	1		SAME POST AS 06-03
06-05	OSHKOSH 21		1	1	2	
06-06	KEEP RIGHT SYMBOL			1	1	
06-07	DO NOT ENTER		1	1	1	
06-08	WRONG WAY		1	1	1	
06-09	WEST STH 96 ARROW/EAST STH 96 ARROW			1	2	
06-10	DIVIDED HIGHWAY SYMBOL		1	1		SAME POST AS 06-08
06-11	NEW LONDON/FREMONT/APPLETON			1	2	

CONT. ON NEXT PAGE

SHEET:

FILE NAME : N:\pds\design_id\6430-07-00,71 ush 45\quantities\6430-07-71

HWY: USH 45

PROJECT NO: 6430-07-71

PLOT DATE : 1/11/2018 8:55 AM

COUNTY: WAUPACA

MISCELLANEOUS QUANTITIES - 12

PLOT NAME : 030201 mg 71

PLOT SCALE : 1:1

2

	SIGN					REMOVING SIGNS	638.3000 REMOVING SMALL SIGN SUPPORTS	
	NO.	MESSAGE		SIZE	EA	EA	EA	REMARKS
-		WEST STH 96 ARROW/EAST STH 96 A	A PPOW			1	2	T LEWN II II C
	06-12 07-01					1	2	
	07-01	NEW LONDON 7/CLINTONVILLE 24/AN OSHKOSH/APPLETON/FREMONT	IIGO 11			1	2	
-	07-02	DIVIDED HIGHWAY SYMBOL				1		
	07-03	WRONG WAY				1	1	SAME POST AS 07-03
	07-04	DO NOT ENTER				1	1	SAME F 031 A3 01-03
_	07-05	KEEP RIGHT SYMBOL				1	1	
	07-06	EAST STH 96 ARROW/WEST STH 96 A	A DDOW			1	1	
	07-07	TRAFFIC SIGNAL AHEAD	AI AI AO V V			1	∠ 1	
_	07-08	TRAFFIC SIGNAL AHEAD				1	1	
		TWO-WAY TRAFFIC SYMBOL				1 1	1	
	07-10					1	1 1	
	07-11				1	1	I	
	07-12				1	1	1	
	08-01					1	1	
-	08-02	TRAFFIC SIGNAL AHEAD	45 ADDOW			1	1	
	08-03	NORTH USH 45 ARROW/SOUTH USH 4	15 ARROW			1	1	
	08-04	SPEED LIMIT 45				1	1	
_	08-05	NEW LONDON				1	2	
	08-06	WEST STH 96	OW			1	1	
	09-01	PARK & RIDE W/CAR SYMBOL & ARR				1	1	
_	09-02	PARK & RIDE W/CAR SYMBOL & ARR	OW			1	1	
	09-03	NEW LONDON				1	2	
	09-04	SPEED LIMIT 45	·- • · · · · · · · · · · · · · ·			1	1	
_	09-05	SOUTH USH 45 ARROW/NORTH USH 4	15 ARROW			1	11	
	09-06	JCT USH 45				1	1	
	09-07	TRAFFIC SIGNAL AHEAD				1	1	
_	10-01	OUTAGAMIE CO				1	2	
	10-02	EAST STH 96				1		MOUNTED ON TRAFFIC SIGNAL
	10-03					1	1	
<u>-</u>	10-04	STOP (FOLDING)	45.45501::			1		MOUNTED ON TRAFFIC SIGNAL
	10-05	SOUTH USH 45 ARROW/NORTH USH 4	15 ARROW			1	1	
	10-06	STOP (FOLDING)				1		MOUNTED ON TRAFFIC SIGNAL
<u>-</u>	10-07	KEEP RIGHT SYMBOL				1		MOUNTED ON TRAFFIC SIGNAL
	10-08	KEEP RIGHT SYMBOL				1		MOUNTED ON TRAFFIC SIGNAL
	10-09	NORTH USH 45				1	1	
<u>-</u>	10-10	EAST STH 96 ARROW/WEST STH 96 A	ARROW			1	2	
	10-11					1	1	
	10-12	STOP (FOLDING)				1		MOUNTED ON TRAFFIC SIGNAL
<u> </u>	10-13	DO NOT ENTER				1		MOUNTED ON TRAFFIC SIGNAL
	10-14	SPEED LIMIT 45				1		MOUNTED ON TRAFFIC SIGNAL
	10-15	WAUPACA CO				1	2	
<u> </u>	10-16	NORTH USH 45 ARROW/SOUTH USH 4	45 ARROW			1	1	
		STOP (FOLDING)				1		MOUNTED ON TRAFFIC SIGNAL
	10-18	SOUTH USH 45				1	1	
				TOTALS	6	56	56	=
OJECT NO: 6430-07-71	Iн	WY: USH 45	DUNTY: WAUPAC		-	1		JANTITIES - 13
NOULO I NO. 0400-01-11	1 "	W1. USI145	JUNIT. WAUFAU	$\overline{}$		I MIIOCELL	LAINEUUS QI	JANTITIES - 13

MOVING & REMOVING SIGNS

CONT. FROM PREVIOUS PAGE

TRAFFIC CONTROL

C43.0420 WARNING WARNING				643.0705	643.0715	
DRUMS			643.0420	WARNING	WARNING	
Detail		643.0300	BARRICADE	LIGHTS	LIGHTS	
DETOUR		DRUMS	TYPE III	TYPE A	TYPE C	
USH 10 & STH 96/CTH	LOCATION	DAYS	DAYS	DAYS	DAYS	REMARKS
USH 10 & STH 96/CTH	DETOUR					
USH 10 & USH 45 USH 10 & USH 45 USH 10 & STH 76 USH 10 & STH 96 USH 10 & USH 11 USH 11 & STH 96 USH 12 & STH 96 USH 15 USH			100	260		SEE DETOLID DETAIL A
USH 10 & USH 45 SEE DETOUR - DETAIL C USH 10 & STH 76 SEE DETOUR - DETAIL D STH 76 & STH 76 SEE DETOUR - DETAIL D STH 76 & STH 96 135 270 SEE DETOUR - DETAIL E STH 96 & CTH M 90 180 SEE DETOUR - DETAIL G STH 96 & USH 45 45 90 SEE DETOUR - DETAIL G STH 96 & CTH W 45 90 SEE DETOUR - DETAIL H USH 45 & STH 15/CTH T SEE DETOUR - DETAIL I USH 45 & STH 15/CTH T SEE DETOUR - DETAIL J DETOUR TOTALS 0 495 990 0 STAGE 1 USH 45 (SB) LT SHLD 441 72 36 SEE TRAFFIC CONTROL STAGE 1 USH 45 (NB) RT TURN 135 81 36 SEE TRAFFIC CONTROL STAGE 1 USH 45 (NB) RT TURN 135 81 36 SEE TRAFFIC CONTROL STAGE 1 STAGE 1 TOTALS 889 387 252 0 STAGE 2 TEMP ROAD (T-LINE) 1472 1472 SEE TRAFFIC CONTROL STAGE 2 STH 96 414 276 SEE TRAFFIC CONTROL STAGE 2 STAGE 2 TOTALS 1472 736 552 1472 STAGE 3 USH 45 (SB) LT SHLD 611 SEE TRAFFIC CONTROL STAGE 2 STAGE 3 TOTALS 663 390 260 SEE TRAFFIC CONTROL STAGE 3 STAGE 3 TOTALS 663 390 260 0			100	300		
USH 10 & STH 76						
STH 76 & CTH BB						
STH 76 & STH 96						
STH 96 & CTH M				270		
STH 96 & USH 45						
STH 96 & CTH W						
USH 45 & STH 15/CTH T						
DETOUR TOTALS 0 495 990 0						
STAGE 1 USH 45 (SB) LT SHLD 441 72 36 SEE TRAFFIC CONTROL STAGE 1 USH 45 (NB) RT TURN LANE 270 72 72 SEE TRAFFIC CONTROL STAGE 1 USH 45 (NB) RT TURN 135 81 36 SEE TRAFFIC CONTROL STAGE 1 STH 96 162 108 SEE TRAFFIC CONTROL STAGE 1 STAGE 1 TOTALS 889 387 252 0 STAGE 2 TOTALS 1472 1472 SEE TRAFFIC CONTROL STAGE 2 USH 45 322 276 SEE TRAFFIC CONTROL STAGE 2 STAGE 2 TOTALS 1472 736 552 1472 STAGE 3 USH 45 (SB) LT SHLD 611 SEE TRAFFIC CONTROL STAGE 3 STAGE 3 TOTALS 663 390 260 SEE TRAFFIC CONTROL STAGE 3						
USH 45 (SB) LT SHLD 441 72 36 SEE TRAFFIC CONTROL STAGE 10 SET TURN LANE 270 72 72 SEE TRAFFIC CONTROL STAGE 10 SET TURN LANE 270 72 72 SEE TRAFFIC CONTROL STAGE 10 SEE TRAFFIC CONTROL STAGE	DETOUR TOTALS	0	495	990	0	
USH 45 (SB) LT SHLD 441 72 36 SEE TRAFFIC CONTROL STAGE 10 SET TURN LANE 270 72 72 SEE TRAFFIC CONTROL STAGE 10 SET TURN LANE 270 72 72 SEE TRAFFIC CONTROL STAGE 10 SEE TRAFFIC CONTROL STAGE						
USH 45 LT TURN LANE 270 72 72 SEE TRAFFIC CONTROL STAGE 1 USH 45 (NB) RT TURN 135 81 36 SEE TRAFFIC CONTROL STAGE 1 STH 96 162 108 SEE TRAFFIC CONTROL STAGE 1 STAGE 1 TOTALS 889 387 252 0 STAGE 1 TOTALS 889 387 252 0 STAGE 2 TEMP ROAD (T-LINE) 1472 1472 SEE TRAFFIC CONTROL STAGE 2 USH 45 322 276 SEE TRAFFIC CONTROL STAGE 2 STH 96 414 276 SEE TRAFFIC CONTROL STAGE 2 STAGE 2 TOTALS 1472 736 552 1472 STAGE 3 USH 45 (SB) LT SHLD 611 SEE TRAFFIC CONTROL STAGE 3 STH 96 52 390 260 SEE TRAFFIC CONTROL STAGE 3 STAGE 3 TOTALS 663 390 260 0						
USH 45 (NB) RT TURN 135 81 36 SEE TRAFFIC CONTROL STAGE 1 STH 96 162 108 SEE TRAFFIC CONTROL STAGE 1 STAGE 1 TOTALS 889 387 252 0 STAGE 2 TEMP ROAD (T-LINE) 1472 1472 SEE TRAFFIC CONTROL STAGE 2 USH 45 322 276 SEE TRAFFIC CONTROL STAGE 2 STH 96 414 276 SEE TRAFFIC CONTROL STAGE 2 STAGE 2 TOTALS 1472 736 552 1472 STAGE 3 USH 45 (SB) LT SHLD 611 SEE TRAFFIC CONTROL STAGE 3 STH 96 52 390 260 SEE TRAFFIC CONTROL STAGE 3 STAGE 3 TOTALS 663 390 260 0						
STH 96 162 108 SEE TRAFFIC CONTROL STAGE 1 STAGE 1 TOTALS STAGE 2 TEMP ROAD (T-LINE) 1472 1472 SEE TRAFFIC CONTROL STAGE 2 USH 45 322 276 SEE TRAFFIC CONTROL STAGE 2 STH 96 414 276 SEE TRAFFIC CONTROL STAGE 2 STAGE 3 USH 45 (SB) LT SHLD 611 SEE TRAFFIC CONTROL STAGE 3 STH 96 52 390 260 SEE TRAFFIC CONTROL STAGE 3 STAGE 3 TOTALS 663 390 260 0						
STAGE 1 TOTALS 889 387 252 0 STAGE 2 TEMP ROAD (T-LINE) 1472 1472 SEE TRAFFIC CONTROL STAGE 2 USH 45 322 276 SEE TRAFFIC CONTROL STAGE 2 STH 96 414 276 SEE TRAFFIC CONTROL STAGE 2 STAGE 3 USH 45 (SB) LT SHLD 611 SEE TRAFFIC CONTROL STAGE 3 STH 96 52 390 260 SEE TRAFFIC CONTROL STAGE 3 STAGE 3 TOTALS 663 390 260 0	• •	135				
STAGE 2 TEMP ROAD (T-LINE) 1472 1472 SEE TRAFFIC CONTROL STAGE 2 USH 45 322 276 SEE TRAFFIC CONTROL STAGE 2 STAGE 2 TOTALS 1472 736 552 1472 STAGE 3 USH 45 (SB) LT SHLD 611 SEE TRAFFIC CONTROL STAGE 3 STH 96 52 390 260 SEE TRAFFIC CONTROL STAGE 3 STAGE 3 TOTALS	S1H 90		162	108		SEE TRAFFIC CONTROL STAGE 1
TEMP ROAD (T-LINE) 1472 1472 SEE TRAFFIC CONTROL STAGE 2 USH 45 322 276 SEE TRAFFIC CONTROL STAGE 2 STH 96 414 276 SEE TRAFFIC CONTROL STAGE 2 STAGE 3 USH 45 (SB) LT SHLD 611 SEE TRAFFIC CONTROL STAGE 3 STH 96 52 390 260 SEE TRAFFIC CONTROL STAGE 3 STAGE 3 TOTALS 663 390 260 0	STAGE 1 TOTALS	889	387	252	0	
TEMP ROAD (T-LINE) 1472 1472 SEE TRAFFIC CONTROL STAGE 2 USH 45 322 276 SEE TRAFFIC CONTROL STAGE 2 STH 96 414 276 SEE TRAFFIC CONTROL STAGE 2 STAGE 3 USH 45 (SB) LT SHLD 611 SEE TRAFFIC CONTROL STAGE 3 STH 96 52 390 260 SEE TRAFFIC CONTROL STAGE 3 STAGE 3 TOTALS 663 390 260 0	CTACE 0					
USH 45		1/172			1/172	SEE TRAFFIC CONTROL STAGE 2
STH 96 414 276 SEE TRAFFIC CONTROL STAGE 2 STAGE 2 TOTALS 1472 736 552 1472 STAGE 3 USH 45 (SB) LT SHLD 611 SEE TRAFFIC CONTROL STAGE 3 STH 96 52 390 260 SEE TRAFFIC CONTROL STAGE 3 STAGE 3 TOTALS 663 390 260 0	,	1472	322	276		
STAGE 2 TOTALS 1472 736 552 1472 STAGE 3 USH 45 (SB) LT SHLD 611 SEE TRAFFIC CONTROL STAGE 3 STH 96 52 390 260 SEE TRAFFIC CONTROL STAGE 3 STAGE 3 TOTALS 663 390 260 0						
STAGE 3 USH 45 (SB) LT SHLD 611 SEE TRAFFIC CONTROL STAGE 3 STH 96 52 390 260 SEE TRAFFIC CONTROL STAGE 3 STAGE 3 TOTALS	011130		717	210		SEE IIVITIO GOVINGE GIAGE 2
USH 45 (SB) LT SHLD 611 SEE TRAFFIC CONTROL STAGE 3 STH 96 52 390 260 SEE TRAFFIC CONTROL STAGE 3 STAGE 3 TOTALS 663 390 260 0	STAGE 2 TOTALS	1472	736	552	1472	
USH 45 (SB) LT SHLD 611 SEE TRAFFIC CONTROL STAGE 3 STH 96 52 390 260 SEE TRAFFIC CONTROL STAGE 3 STAGE 3 TOTALS 663 390 260 0	071070					
STH 96 52 390 260 SEE TRAFFIC CONTROL STAGE 3 STAGE 3 TOTALS 663 390 260 0		644				SEE TRAFFIC CONTROL STAGE S
STAGE 3 TOTALS 663 390 260 0			200			
	S1H 90	52	390	∠00		SEE TRAFFIC CONTROL STAGE 3
GRAND TOTALS 3024 2008 2054 1472	STAGE 3 TOTALS	663	390	260	0	
	GRAND TOTALS	3024	2008	2054	1472	

FIELD OFFICE TYPE C

LOCATION EACH REMARKS

PROJECT 1

TOTAL 1

TEMPORARY PORTABLE RUMBLE STRIPS

LOCATION DESCRIPTION LS REMARKS

PROJECT LIMITS USH 45 (SB) 1 STAGE 1 & 3

TOTAL 1

PROJECT NO: 6430-07-71 HWY: USH 45 COUNTY: WAUPACA MISCELLANEOUS QUANTITIES - 14 SHEET: **E**

FILE NAME : N:\(\text{PLOT DATE}\): \(\frac{1}{1}\)!\(\text{PLOT BY}\): \(\text{PLOT BY}\): \(\text{PLOT NAME}\): \(\text{030201 mg 71}\) \(\text{PLOT SCALE}\): 1:1

3

TRAFFIC CONTROL SIGNS

643.0900 SIGNS

	CION	DETOUR	LICITAE (ND)	LICIT 4E (CD)	OTILOG (ED)	CTILOC (M/D)	_
MECCACE	SIGN		` ,	, ,	STH 96 (EB)	,	
MESSAGE	CODE	DAYS	DAYS	DAYS	DAYS	DAYS	REMARKS
DETOUR PLAN							
USH 10 & STH 96/CTH II INTERS	ECTION						
DETOUR AHEAD	W20-2A	180					SEE DETOUR PLAN - DETAIL A
ROAD OPEN TO READFIELD	R10-61	135					SEE DETOUR PLAN - DETAIL A
ROAD CLOSED X MILES AHEAD	R11-3	135					SEE DETOUR PLAN - DETAIL A
DETOUR NEXT X MILES	G20-51	45					SEE DETOUR PLAN - DETAIL A
DETOUR	M4-8	450					SEE DETOUR PLAN - DETAIL A
END DETOUR	M4-8A	45					SEE DETOUR PLAN - DETAIL A
EAST	M3-2	585					SEE DETOUR PLAN - DETAIL A
WEST	M3-4	135					SEE DETOUR PLAN - DETAIL A
STH 96	M1-6	810					SEE DETOUR PLAN - DETAIL A
ADVANCED LEFT TURN ARROW	M5-1L	45					SEE DETOUR PLAN - DETAIL A
ADVANCED RIGHT TURN ARROW	M5-1R	90					SEE DETOUR PLAN - DETAIL A
ARROW	M6-1	225					SEE DETOUR PLAN - DETAIL A
TILT ARROW	M6-2	45					SEE DETOUR PLAN - DETAIL A
LICH 40 0 LICH 45 NODTH INTER							
USH 10 & USH 45 NORTH INTERC							OFF DETOUD DUANT DETAIL D
DETOUR NEXT X MILES	G20-51	90					SEE DETOUR PLAN - DETAIL B
DETOUR	M4-8	450					SEE DETOUR PLAN - DETAIL B
STH 96	M1-6	540					SEE DETOUR PLAN - DETAIL B
EAST	M3-2	315					SEE DETOUR PLAN - DETAIL B
WEST	M3-4	225					SEE DETOUR PLAN - DETAIL B
AHEAD	M6-1	315					SEE DETOUR PLAN - DETAIL B
TILT ARROW	M6-2	135					SEE DETOUR PLAN - DETAIL B
USH 10 & USH 45 SOUTH INTERC	CHANGE						
DETOUR NEXT X MILES	G20-51	4 5					SEE DETOUR PLAN - DETAIL C
DETOUR AHEAD	W20-2A	45					SEE DETOUR PLAN - DETAIL C
DETOUR	M4-8	315					SEE DETOUR PLAN - DETAIL C
EAST	M3-2	270					SEE DETOUR PLAN - DETAIL C
WEST	M3-4	135					SEE DETOUR PLAN - DETAIL C
STH 96	M1-6	405					SEE DETOUR PLAN - DETAIL C
AHEAD	M6-1	225					SEE DETOUR PLAN - DETAIL C
TILT ARROW	M6-2	90					SEE DETOUR PLAN - DETAIL C
USH 10 & STH 76 INTERCHAI							
DETOUR NEXT X MILES	G20-51	90					SEE DETOUR PLAN - DETAIL D
DETOUR AHEAD	W20-2A	90					SEE DETOUR PLAN - DETAIL D
ADVANCED LEFT TURN ARROW	M5-1L	45					SEE DETOUR PLAN - DETAIL D
ARROW	M6-1	225					SEE DETOUR PLAN - DETAIL D
ADVANCED RIGHT TURN ARROW	M5-1R	45					SEE DETOUR PLAN - DETAIL D
TILT ARROW	M6-2	45					SEE DETOUR PLAN - DETAIL D
DETOUR	M4-8	495					SEE DETOUR PLAN - DETAIL D
EAST	M3-2	270					SEE DETOUR PLAN - DETAIL D
WEST	M3-4	405					SEE DETOUR PLAN - DETAIL D
STH 96	M1-6	675					SEE DETOUR PLAN - DETAIL D

CONT. ON NEXT PAGE

PROJECT NO: 6430-07-71 HWY: USH 45 COUNTY: WAUPACA MISCELLANEOUS QUANTITIES - 15 SHEET: **E**

FILE NAME : N:\pds\design id\6430-07-00.71 ush 45\quantitities\6430-07-71 PLOT NAME : 030201 mg 71 PLOT SCALE : 1:1

TRAFFIC CONTROL SIGNS

643.0900 SIGNS

	SIGN	DETOUR	LISH 45 (NR)	LISH 45 (SR)	STH 96 (EB)	STH 96 (W/R)	-
MESSAGE	CODE	DAYS	DAYS	DAYS	DAYS	DAYS	REMARKS
DETOUR PLAN							
STH 76 & CTH BB INTERSEC							OFF DETOUD DUAN, DETAIL F
DETOUR	M4-8	180					SEE DETOUR PLAN - DETAIL E
EAST	M3-2	90					SEE DETOUR PLAN - DETAIL E
WEST	M3-4	90					SEE DETOUR PLAN - DETAIL E
STH 96	M1-6	180					SEE DETOUR PLAN - DETAIL E
ARROW	M6-1	90					SEE DETOUR PLAN - DETAIL E
STH 76 & STH 96 INTERSEC	TION	_					
ROAD OPEN TO DALE	R10-61	45					SEE DETOUR PLAN - DETAIL F
ROAD CLOSED AT USH 45	R11-3	45					SEE DETOUR PLAN - DETAIL F
DETOUR AHEAD	W20-2A	135					SEE DETOUR PLAN - DETAIL F
DETOUR NEXT X MILES	G20-51	45					SEE DETOUR PLAN - DETAIL F
ROAD CLOSED X MILES AHEAD	R11-3	45					SEE DETOUR PLAN - DETAIL F
EAST	M3-2	45					SEE DETOUR PLAN - DETAIL F
WEST	M3-4	270					SEE DETOUR PLAN - DETAIL F
STH 96	M1-6	315					SEE DETOUR PLAN - DETAIL F
DETOUR	M4-8	360					SEE DETOUR PLAN - DETAIL F
END DETOUR	M4-8A	45					SEE DETOUR PLAN - DETAIL F
ARROW	M6-1	180					SEE DETOUR PLAN - DETAIL F
ADVANCED LEFT TURN ARROW	M5-1L	45					SEE DETOUR PLAN - DETAIL F
ADVANCED RIGHT TURN ARROW	M5-1R	45					SEE DETOUR PLAN - DETAIL F
							SEE BETOOKT EXIX BETTIET
1 96 & CTH T AND STH 96 & CTH M		-					
ROAD OPEN TO DALE	R10-61	45					SEE DETOUR PLAN - DETAIL G
ROAD CLOSED X MILES AHEAD	R11-3	135					SEE DETOUR PLAN - DETAIL G
STH 96 & USH 45 INTERSEC	TION						
ROAD CLOSED X MILES AHEAD	R11-3	- 45					SEE DETOUR PLAN - DETAIL H
DETOUR AHEAD	W20-2A	45					SEE DETOUR PLAN - DETAIL H
DETOUR NEXT X MILES	G20-51	45					SEE DETOUR PLAN - DETAIL H
DETOUR	M4-8	270					SEE DETOUR PLAN - DETAIL H
ARROW	M6-1	270					SEE DETOUR PLAN - DETAIL H
EAST	M3-2	135					SEE DETOUR PLAN - DETAIL H
WEST	M3-4	180					SEE DETOUR PLAN - DETAIL H
STH 96	M1-6	360					SEE DETOUR PLAN - DETAIL H
		000					522 52 10 St. 1 2 tt. 52 17 tt2 11
STH 96 & CTH W INTERSEC		- 45					OFF DETOLID DLANL DETAIL L
ROAD CLOSED X MILES AHEAD	R11-3	45					SEE DETOUR PLAN - DETAIL I
USH 45 & STH 15/CTH T INTERS		_					
MAX 13' WIDTH	W12-52						SEE DETOUR PLAN - DETAIL J
5 MILES AHEAD	W57-52	270					SEE DETOUR PLAN - DETAIL J
USH 45	M1-4	270					SEE DETOUR PLAN - DETAIL J
SOUTH	M3-3	270					SEE DETOUR PLAN - DETAIL J
DETOUR PLA	AN TOTAL &	13815	0	0	0	0	=
DETOUR PEA	AIT I O I ALO	13013	U	0	J	J	

CONT. ON NEXT PAGE

PROJECT NO: 6430-07-71 HWY: USH 45 COUNTY: WAUPACA MISCELLANEOUS QUANTITIES - 16 SHEET: E

FILE NAME : N:\pds\design id\6430-07-00,71 ush 45\quantities\6430-07-71 PLOT NAME : 030201 mg 71 PLOT SCALE : 1:1

_									
	CONT. FROM PREVIOUS PAGE	•			TRAFFIC (CONTROL S	<u>IGNS</u>		
						643.0900			
						SIGNS			<u></u>
					, ,	USH 45 (SB)	, ,	•	
		MESSAGE	CODE	DAYS	DAYS	DAYS	DAYS	DAYS	REMARKS
7		STAGE 1					_	_	
		ROAD CLOSED AHEAD	W20-3A				9	9	SEE TRAFFIC CONTROL - STAGE 1
\mathbf{A}		ROAD CLOSED 1000 FT	W20-3C				9	9	SEE TRAFFIC CONTROL - STAGE 1
3		ROAD CLOSED 500 FT	W20-3D				9	9	SEE TRAFFIC CONTROL - STAGE 1
		ROAD WORK AHEAD	W20-1		18	18			SEE TRAFFIC CONTROL - STAGE 1
		ROAD WORK 1000 FT	W20-1C						SEE TRAFFIC CONTROL - STAGE 1
\dashv		END ROAD WORK	G20-2A		9	9	40	40	SEE TRAFFIC CONTROL - STAGE 1
		ROAD CLOSED TO THRU TRAFFIC	R11-4				18	18	SEE TRAFFIC CONTROL - STAGE 1
		MAX 13' WIDTH	W12-52		9	9			SEE TRAFFIC CONTROL - STAGE 1
		RIGHT SHOULDER CLOSED AHEAD			9	9			SEE TRAFFIC CONTROL - STAGE 1
		RIGHT SHOULDER CLOSED	W21-5A		9	9			SEE TRAFFIC CONTROL - STAGE 1
		LANE CLOSED	R11-2		9	9			SEE TRAFFIC CONTROL - STAGE 1
		ROAD CLOSED	R11-2		18	18	9	9	SEE TRAFFIC CONTROL - STAGE 1
		STAGE	1 TOTALS	0	81	81	54	54	
		STAGE 2							
		ROAD CLOSED AHEAD	W20-3A				23	23	SEE TRAFFIC CONTROL - STAGE 2
		ROAD CLOSED 1000 FT	W20-3C				23	23	SEE TRAFFIC CONTROL - STAGE 2
		ROAD CLOSED 500 FT	W20-3D				23	23	SEE TRAFFIC CONTROL - STAGE 2
		ROAD WORK AHEAD	W20-1		23	46			SEE TRAFFIC CONTROL - STAGE 2
		ROAD WORK 1000 FT	W20-1C		23	23			SEE TRAFFIC CONTROL - STAGE 2
		END ROAD WORK	G20-2A		23	23			SEE TRAFFIC CONTROL - STAGE 2
		ROAD CLOSED	R11-2		46	46	23	23	SEE TRAFFIC CONTROL - STAGE 2
		ROAD CLOSED TO THRU TRAFFIC	R11-4				46	46	SEE TRAFFIC CONTROL - STAGE 2
		DOUBLE REVERSE CURVE	W24-1R			23			SEE TRAFFIC CONTROL - STAGE 2
		DOUBLE REVERSE CURVE	W24-1L		23				SEE TRAFFIC CONTROL - STAGE 2
		WORK ZONE RIGHT ARROW	W01-6		23	23			SEE TRAFFIC CONTROL - STAGE 2
		BRIDGE HASH MARKS	W05-52R		23				SEE TRAFFIC CONTROL - STAGE 2
		BRIDGE HASH MARKS	WO5-52L			23			SEE TRAFFIC CONTROL - STAGE 2
		STAGE	2 TOTALS	0	184	207	138	138	-
		STAGE 3		·					
		ROAD CLOSED AHEAD	W20-3A				13	13	SEE TRAFFIC CONTROL - STAGE 3
		ROAD CLOSED 1000 FT	W20-3C				13	13	SEE TRAFFIC CONTROL - STAGE 3
		ROAD CLOSED 500 FT	W20-3D				13	13	SEE TRAFFIC CONTROL - STAGE 3
		ROAD WORK AHEAD	W20-1		13	26			SEE TRAFFIC CONTROL - STAGE 3
		ROAD WORK 1000 FT	W20-1C		13				SEE TRAFFIC CONTROL - STAGE 3
		END ROAD WORK	G20-2A		13	13			SEE TRAFFIC CONTROL - STAGE 3
		ROAD CLOSED	R11-2		13	13	13	13	SEE TRAFFIC CONTROL - STAGE 3
		ROAD CLOSED TO THRU TRAFFIC	R11-4				26	26	SEE TRAFFIC CONTROL - STAGE 3
		2 MILES AHEAD	W057-52			13			SEE TRAFFIC CONTROL - STAGE 3

W12-52 13 ---SEE TRAFFIC CONTROL - STAGE 3 ---STAGE 3 TOTALS 65 117 78 78 SUBTOTALS 13815 330 405 270 270 GRAND TOTAL 15090

13

RIGHT SHOULDER CLOSED AHEAD W21-5B

W21-5A

WO1-6

RIGHT SHOULDER CLOSED

WORK ZONE RIGTH ARROW

MAX 13' WIDTH

HWY: USH 45 PROJECT NO: 6430-07-71 COUNTY: WAUPACA MISCELLANEOUS QUANTITIES - 17 SHEET:

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FILE NAME : N:\pds\design_id\6430-07-00,71 ush 45\quantities\6430-07-71

PLOT DATE : 1/11/2018 8:55 AM

PLOT NAME : 030201 mg 71

SEE TRAFFIC CONTROL - STAGE 3

SEE TRAFFIC CONTROL - STAGE 3

SEE TRAFFIC CONTROL - STAGE 3

MARKING REMOVAL LINE

TRAFFIC CONTROL COVERING SIGNS

		NUMBER OF CYCLES	NUMBER OF SIGNS		643.0920 TYPE II	
LOCATION	DESCRIPTION	EACH	EACH	EACH	EACH	REMARKS
USH 10 (EB)	STH 96	1	1	1		SEE DETOUR - DETAIL A
USH 10 (EB)	STH 96	1	1	1		SEE DETOUR - DETAIL A
USH 10 (EB) OFF RAMP	EAST, 96, ARROW LEFT	1	3		1	SEE DETOUR - DETAIL A
CTH II (NB)	EAST, 96, ARROW AHEAD	1	3		1	SEE DETOUR - DETAIL A
STH 96 (WB)	READFIELD 6, FREMONT 9	1	1		1	SEE DETOUR - DETAIL H
USH 45 (NB)	FREMONT, APPLETON	1	1		1	SEE DETOUR - DETAIL H
			TOTALS	2	4	-

STATION - STATION	LOCATION	646.9000 4-INCH LF	REMARKS
USH 45 - STAGE 2			
94+35NB - 102+00NB	USH 45 (NB) LT	765	EDGELINE
118+00NB - 124+79NB	USH 45 (NB) LT	679	EDGELINE
94+35NB - 100+69NB	USH 45 (NB) C/L	1268	CENTERLINE
118+92NB - 124+79NB	USH 45 (NB) C/L	737	CENTERLINE
94+35NB - 97+10NB	USH 45 (NB) RT	275	EDGELINE
ST	AGE 2 SUBTOTAL	3724	=
TEMP ROAD - STAGE 3			
53+33T - 55+75T	TEMP ROAD (LT)	243	EDGELINE
81+50T - 83+61T	TEMP ROAD (LT)	211	EDGELINE
STA	454	=	

GRAND TOTAL 4178

TRAFFIC CONTROL SIGNS FIXED MESSAGE

SIGN		643.1000	
NUMBER	MESSAGE	SF	REMARKS
	PARK & RIDE		
PARK & RIDE	CLOSED	19.5	PLACE 4 WEEKS PRIOR TO CONSTRUCTION
	XX-XX TO XX-XX		
	ROAD WORK		
USH 45 NB	BEGINS	19.5	PLACE 14 DAYS PRIOR TO CONSTRUCTION
	XX-XX TO XX-XX		
	ROAD WORK		
USH 45 SB	BEGINS	19.5	PLACE 14 DAYS PRIOR TO CONSTRUCTION
	XX-XX TO XX-XX		
	HWY 96 CLOSED		
STH 96 EB	XX-XX TO XX-XX	19.5	PLACE 14 DAYS PRIOR TO CONSTRUCTION
	FOLLOW DETOUR		
	HWY 96 CLOSED		
STH 96 WB	XX-XX TO XX-XX	19.5	PLACE 14 DAYS PRIOR TO CONSTRUCTION
	FOLLOW DETOUR		

TOTAL 97.5

TEMPORARY MARKING LINE

			.0150 E TAPE 4-INCH SOLID YELLOW	PAIN SOLID	0.0105 Γ4-INCH SOLID YELLOW	
STATION - STATION	LOCATION	LF	LF	LF	LF	REMARKS
TEMP ROAD - STAG				0000		
53+33T - 83+61T 53+33T - 58+50T	TEMP ROAD (LT) TEMP ROAD (C/L)		 1034	3028		DOUBLE YELLOW C/L
58+50T - 78+50T	TEMP ROAD (C/L)				4000	DOUBLE YELLOW C/L
78+50T - 83+61T	TEMP ROAD (C/L)		1022			DOUBLE YELLOW C/L
83+61T - 90+61T	TEMP ROAD (C/L)		700			SINGLE YELLOW C/L
53+33T - 61+00T	TEMP ROAD (RT)	767				
61+00T - 76+75T	TEMP ROAD (RT)			1575		
76+75T - 83+61T	TEMP ROAD (RT)	686				
	STAGE 2 TOTALS	1453	2756	4603	4000	:
	GRAND TOTALS	4209		8	603	•

HWY: USH 45 PROJECT NO: 6430-07-71 COUNTY: WAUPACA MISCELLANEOUS QUANTITIES - 18 SHEET: PLOT SCALE: 1:1

FILE NAME : N:\pds\design_id\6430-07-00,71 ush 45\quantities\6430-07-71 PLOT NAME : 030201 mg 71 PLOT DATE : <u>1/11/2018 8:55 AM</u>

MARKING EPOXY

		FDOFLINE	646.10 4-INC SKIP-DASH	Н	DOUBLE	-	646.6320 DOTTED EXTENSION		646.8120 CURR	646.8220 ISLAND		646.8020 CORRUGATED
		WHITE	WHITE		YELLOW	8-INCH WHITE	18-INCH WHITE	WORDS (YIFLD)	CURB YELLOW	NOSE	12-INCH YELLOW	MEDIAN YELLOW
STATION - STATION	LOCATION	LF	LF	LF	LF	LF	LF	EACH	LF	EACH	LF	SF
USH 45 SOUTH LEG												
94+00NB - 100+29NB	USH 45 C/L				1258							
94+00NB - 107+61NB	USH 45 (NB) RT	1361										
100+29NB - 108+81NB	USH 45 (NB) LT			852								
100+29NB - 102+25NB	USH 45 MEDIAN											339
102+25NB	USH 45 MEDIAN									1		
102+25NB - 102+30NB	USH 45 (NB) LT								5			
107+61NB - 108+34NB	USH 45 (NB) RT		18									
108+67NB	USH 45 (NB)											
108+81NB - 108+80SB	USH 45 MEDIAN					66						
108+89NB	USH 45 (NB)	4000						1				
94+00SB - 107+96SB	USH 45 (SB) LT	1396										
100+29SB - 108+80SB 102+24SB - 102+29SB	USH 45 (SB) RT			851								
102+245B - 102+295B 107+96SB - 108+47SB	USH 45 (SB) RT		 10						5			
107+905B - 100+475B 108+62SB	USH 45 (SB) LT USH 45 (SB)		12									
100+023D	USH 45 (SB)											
USH 45 NORTH LEG												
110+82NB - 110+80SB	USH 45 MEDIAN					63						
110+82NB - 120+00NB	USH 45 (NB) LT			918								
110+94NB	USH 45 (NB)											
111+13NB - 111+64NB	USH 45 (NB) RT		12									
111+64NB - 125+05NB	USH 45 (NB) RT	1341										
117+80NB - 117+85NB	USH 45 (NB) LT								5			
117+85NB	USH 45 MEDIAN									1		
117+85NB - 120+00NB	USH 45 MEDIAN											257
120+00NB - 125+05NB	USH 45 C/L				1010							
110+72SB	USH 45 (SB)							1				
110+80SB - 120+00SB	USH 45 (SB) RT			920								
110+93SB	USH 45 (SB)											
111+27SB - 112+00SB	USH 45 (SB) LT		18									
112+00SB - 125+05SB	LT	1305										
117+79SB - 117+84SB	USH 45 (SB) RT								5			
STH 96 WEST LEG	0711000"				1000							
5+50EB - 10+50EB	STH 96 C/L				1000							
5+50EB - 15+02EB	STH 96 (EB) RT	952										
10+50EB - 16+23EB	STH 96 (EB) LT			573							4.4	
11+00EB - 12+86EB	STH 96 MEDIAN										44	
12+86EB	STH 96 MEDIAN									1		
12+86EB - 13+20EB	STH 96 (EB) LT								5			

CONT. ON NEXT PAGE

PROJECT NO: 6430-07-71 HWY: USH 45 COUNTY: WAUPACA MISCELLANEOUS QUANTITIES - 19 SHEET: **E**

FILE NAME : N:\(\text{DdS\\design}\) id\(\left\{0.430-07-00.71\) ush 45\\quantitities\(\left\{0.430-07-71\}\) PLOT NAME : \(\frac{0.30201\] mg 71}{2} PLOT SCALE : 1:1

MARKING EPOXY

646.6320

	GRAND TOTAL		19531			264	80	4	103	6	96	596
	SUB TOTALS	9206	123	5934	4268	264	80	4	103	6	96	596
2+79RAB - 13+05RAB	USH 45 (SB)						20					
1+89RAB - 12+15RAB	STH 96 (WB)						20					
0+96RAB - 11+23RAB	USH 45 (NB)						20					
ROUND-A-BOUT 0+06RAB - 10+32RAB	STH 96 (EB)						20					
21+22WB - 21+60WB	STH 96 (WB) RT								38			
20+96WB - 21+01WB	STH 96 (WB) RT								5			
9+88WB - 20+03WB	STH 96 (WB) RT								15 -			
9+43WB - 29+47WB	STH 96 (WB) LT	1004										
8+70WB - 19+43WB	STH 96 (WB) LT		18									
8+37WB	STH 96 (WB)											
8+24WB - 24+47WB	STH 96 (WB) RT			623								
8+17WB	STH 96 (WB)							1				
4+47EB - 29+47EB	STH 96 C/L				1000							
21+60EB - 23+25EB	STH 96 MEDIAN										52	
1+60EB	STH 96 MEDIAN									1		
21+55EB - 21+60EB	STH 96 (EB) LT								5			
21+50EB - 29+47EB	STH 96 (EB) RT	797										
20+97EB - 21+02EB	STH 96 (EB) LT								5			
0+97EB	STH 96 MEDIAN									1		
0+06EB	STH 96 MEDIAN									1		
0+01EB - 20+06EB	STH 96 (EB) LT								5			
9+12EB - 19+69EB	STH 96 (EB) RT	57										
8+52EB - 19+12EB	STH 96 (EB) RT		15									
8+35EB	STH 96 (EB)											
8+23EB - 18+24WB	STH 96 MEDIAN					68						
8+23EB - 24+47EB	STH 96 (EB) LT			624								
TH 96 EAST LEG												
0.2011D - 10.20ED	O II I OO WILDIAN					01		-				
6+23WB - 16+23EB	STH 96 (WB)					 67						
6+11WB	STH 96 (WB) LT		1 ∠									
2+86WB - 12+91WB 5+43WB - 15+94WB	STH 96 (WB) RT STH 96 (WB) LT		 12						5			
0+50WB - 16+23WB	STH 96 (WB) RT			573					 E			
5+50WB - 15+43WB	STH 96 (WB) LT	993		 570								
6+30EB	STH 96 (EB)							1				
6+09EB	STH 96 (EB)											
5+02EB - 15+75EB	STH 96 (EB) RT		18									
H 96 WEST LEG (CON			4.0									
				LI	LI	LI	LI	LACIT	LI	LACIT	LI	
STATION - STATION	LOCATION	LF	LF	LF	LF	LF	LF	EACH	LF	EACH	LF	SF
		WHITE	WHITE		YELLOW		WHITE			YELLOW	YELLOW	YELLOV
		EDCELINE	SKIP-DASH		DOUBLE		18-INCH	WORDS	CURB	NOSE	12-INCH	MEDIAN
			646.10 4-INC			646 2020	DOTTED EXTENSION	646 5120	646.8120	646.8220 ISLAND	646.7120	646.802 CORRUGA

FILE NAME : N:\pds\design_id\6430-07-00,71 ush 45\quantities\6430-07-71

PROJECT NO: 6430-07-71

HWY: USH 45

PLOT DATE : 1/11/2018 8:55 AM

COUNTY: WAUPACA

PLOT BY : ____

MISCELLANEOUS QUANTITIES - 20

PLOT NAME : 030201 mg 71

PLOT SCALE : 1:1

CONSTRUCTION STAKING

		650.4000							
		STORM			650.5500	650.6000	650.8500	650.9000	650.9920
		SEWER	650.4500	650.5000	CURB &	PIPE	ELECTRICAL	CURB	SLOPE
		SYSTEM	SUBGRADE	BASE	GUTTER	CULVERTS	INSTALLATIONS	RAMPS	STAKES
STATION - STATION	LOCATION	EACH	LF	LF	LF	EACH	LS	EACH	LF
PROJECT LIMITS	USH 45 & STH 96	22				3	1		
106+00NB - 108+93NB	USH 45 (NB)		293	293	285			1	293
110+67NB - 113+00NB	USH 45 (NB)		233	233	783			1	233
106+00SB - 108+95SB	USH 45 (SB)		295	295	858			1	295
110+68SB - 113+65SB	USH 45 (SB)		297	297	290			1	297
10+50EB - 16+34EB	STH 96 (EB)		584	584	342			1	584
18+07EB - 24+47EB	STH 96 (EB)		640	640	251			1	640
10+50WB - 16+38WB	STH 96 (WB)		588	588	342			1	588
18+12WB - 24+47WB	STH 96 (WB)		635	635	617			1	635
10+00RAB - 13+64RAB	USH 45 (RAB)		364	364	630				364
53+50T - 83+40T	TEMP ROAD		2990	2990					2990
	TOTALS	22	6919	6919	4398	3	1	8	6919

LI	Gŀ	ΗT	ΊN	G

			654.0105 CONCRETE	655.0610 ELECTRICAL WIRE	657.0255 TRANSFORMER BASES	657.0322 POLES	657.0615 LUMINAIRE ARMS	659.1115 LUMINAIRES
			BASES	LIGHTING	BREAKAWAY	TYPE 5	SINGLE MEMBER	UTILITY
			TYPE 5	12 AWG	11 1/2-INCH BOLT CIRCLE			LED A
LIGHT NO.	STATION	LOCATION/OFFSET	EACH	LF	EACH	EACH	EACH	EACH
۸.4	404 · 04ND	LIQUATE (ND): 00 OLDT	4	400	4	4	4	4
A-1	104+84NB	USH 45 (NB); 28.3' RT	1	132	1	1	1	1
A-2	106+54NB	USH 45 (NB); 25.3' RT	1	132	1	1	1	1
A-3	108+20NB	USH 45 (NB); 35.4' RT	1	132	1	1	1	1
A-4	108+60NB	USH 45 (NB); 66.9' LT	1	132	1	1	1	1
A-5	15+64EB	STH 96 (EB); 33.8' RT	1	132	1	1	1	1
A-6	14+05EB	STH 96 (EB); 26.0' RT	1	132	1	1	1	1
A-7	12+35EB	STH 96 (EB); 26.0' RT	1	132	1	1	1	1
A-8	16+02EB	STH 96 (EB); 67.9' LT	1	132	1	1	1	1
A-9	111+42NB	USH 45 (NB); 48.1' LT	1	132	1	1	1	1
A-10	112+95NB	USH 45 (NB); 46.8' LT	1	132	1	1	1	1
A-11	114+67NB	USH 45 (NB); 47.3' LT	1	132	1	1	1	1
A-12	18+21EB	STH 96 (EB); 41.9' RT	1	132	1	1	1	1
A-13	18+90EB	STH 96 (EB); 46.7' LT	1	132	1	1	1	1
A-14	20+38EB	STH 96 (EB); 39.7' LT	1	132	1	1	1	1
A-15	22+10EB	STH 96 (EB); 35.4' LT	1	132	1	1	1	1
A-16	110+82NB	USH 45 (NB); 43.5' RT	1	132	1	1	1	1
		TOTALS	16	2112	16	16	16	16

CONDUIT RIGID NONMETALLIC

652.0225 SCHEDULE 40

			2-INCH
FROM	TO	NO.	LF
LCC A	LPB-1	3	15
LPB-1	LPB-2	2	30
LPB-2	LPB-3	1	80
LPB-3	A-4	1	15
LPB-3	LPB-4	1	82
LPB-4	A-5	1	41
A-5	A-6	1	160
A-6	A-7	1	175
A-7	STUB	1	6
LPB-4	LPB-5	1	83
LPB-5	A-8	1	15
LPB-2	LPB-7	1	83
LPB-7	A-12	1	15
LPB-7	LPB-8	1	86
LPB-8	A-13	1	47
A-13	A-14	1	154
A-14	A-15	1	174
A-15	STUB	1	6
LPB-2	A-3	1	45
A-3	A-2	1	170
A-2	A-1	1	170
A-1	STUB	1	6
LPB-8	LPB-9	1	79
LPB-9	A-16	1	15
LPB-9	LPB-6	1	81
LPB-6	A-9	1	41
A-9	A-10	1	160
A-10	A-11	1	172
A-11	STUB	1	6
LPB-5	LPB-6	1	82
		_	

TOTAL 2294

PROJECT NO: 6430-07-71 HWY: USH 45 COUNTY: WAUPACA MISCELLANEOUS QUANTITIES - 21 SHEET: E

LIGHTING CONTROL CABINET AND BASES

			654.0224 CONCRETE CONTROL	656.0200 ELECTRICAL SERVICE METER	659.2124 LIGHTING CONTROL
			CABINET BASES TYPE L24	BREAKER PEDESTAL (LCC A)	CABINETS 120/240 24-INCH
STATION	LOCATION	DESCRIPTION	EACH	LS	EACH
108+85NB	USH 45 (NB); 52.1' RT	LCC A	1	1	1
		TOTALS	1	1	1

PULL BOXES NONCONDUCTIVE

PB NO.	STATION	LOCATION/OFFSET	653.0164 24x42-INCH EACH
LDD 4	108+89NB	LICLL 45 (ND), 45 4' DT	
LPB-1		USH 45 (NB); 45.1' RT	1
LPB-2	108+79NB	USH 45 (NB); 30.2' RT	1
LPB-3	108+61NB	USH 45 (NB); 52.3' LT	1
LPB-4	16+21EB	STH 96 (EB); 29.9' RT	1
LPB-5	16+03EB	STH 96 (EB); 53.2' LT	1
LPB-6	111+04NB	USH 45 (NB); 53.4' LT	1
LPB-7	18+26EB	STH 96 (EB); 28.1' RT	1
LPB-8	18+47EB	STH 96 (EB); 54.9' LT	1
LPB-9	110+85NB	USH 45 (NB); 29.7' RT	1

SAWING ASPHALT

TOTAL 9

		690.0150	
STATION	LOCATION	LF	REMARKS
106+00NB	USH 45 (NB)	15	
113+00NB	USH 45 (NB)	15	
106+00SB	USH 45 (SB)	15	
113+65SB	USH 45 (SB)	15	
10+50EB	STH 96 (EB)	30	
20+50EB	STH 96 (EB) RT	36	PARK & RIDE LOT
24+00EB	STH 96 (EB) RT	17	PE
24+47EB	STH 96 (EB)	30	

TOTAL 173

SAWING CONCRETE

STATION	LOCATION	690.0250 LF	REMARKS
106+00NB 113+00NB 106+00SB	USH 45 (NB) USH 45 (NB) USH 45 (SB)	2.5 2.5 2.5	CURB & GUTTER CURB & GUTTER CURB & GUTTER
113+65SB	USH 45 (SB)	2.5 10.0	CURB & GUTTER

EXISTING LAND PARCEL MONUMENTS

NUMBER	LOCATION	DESCRIPTION	SPV.0060.01 RESEARCH AND LOCATE EACH	SPV.0060.02 VERIFY AND REPLACE EACH
PROP99	USH 45 (SB) LT	1 1/2-INCH IRON PIPE	1	1
PROP100	USH 45 (SB) LT	1 1/2-INCH IRON PIPE	1	1
PROP101	USH 45 (SB) LT	1 1/2-INCH IRON PIPE	1	1
PROP102	USH 45 (SB) LT	1 1/2-INCH IRON PIPE	1	1
PROP103	USH 45 (SB) LT	REBAR YELLOW R/W CAP	1	1
PROP104	USH 45 (SB) LT	REBAR YELLOW R/W CAP	1	1
PROP2	USH 45 (SB) LT	REBAR YELLOW R/W CAP	1	1
PROP3	USH 45 (SB) LT	1-INCH IRON PIPE	1	1
PROP4	USH 45 (SB) LT	1-INCH IRON PIPE	1	1
		TOTALS	9	9

ELECTRICAL WIRE LIGHTING 8 AWG

	FROM	TO	CONDUCTORS	655.0525 LF
	I INOIVI	10	CONDUCTORS	
	LCC A	LPB-1	9	99
	LPB-1	LPB-2	9	189
	LPB-2	LPB-3	3	258
•	LPB-3	A-4	5	105
	LPB-3	LPB-4	3	264
	LPB-4	A-5	5	235
•	A-5	A-6	3	498
	A-6	A-7	3	543
	A-7	STUB	0	0
	LPB-4	LPB-5	3	267
	LPB-5	A-8	3	63
	LPB-2	LPB-7	5	445
	LPB-7	A-12	5	105
	LPB-7	LPB-8	5	460
	LPB-8	A-13	3	159
	A-13	A-14	3	480
	A-14	A-15	3	540
	A-15	STUB	0	0
•	LPB-2	A-3	3	153
	A-3	A-2	3	528
	A-2	A-1	3	528
•	A-1	STUB	0	0
	LPB-8	LPB-9	3	255
-	LPB-9	A-16	5	105
	LPB-9	LPB-6	3	261
	LPB-6	A-9	3	141
	A-9	A-10	3	498
	A-10	A-11	3	534
	A-11	STUB	0	0
	LPB-5	LPB-6	0	0

TOTAL 7713

REMOVE AND SALVAGE TRAFFIC SIGNALS (USH 45 & STH 96 / OLD HWY 10)

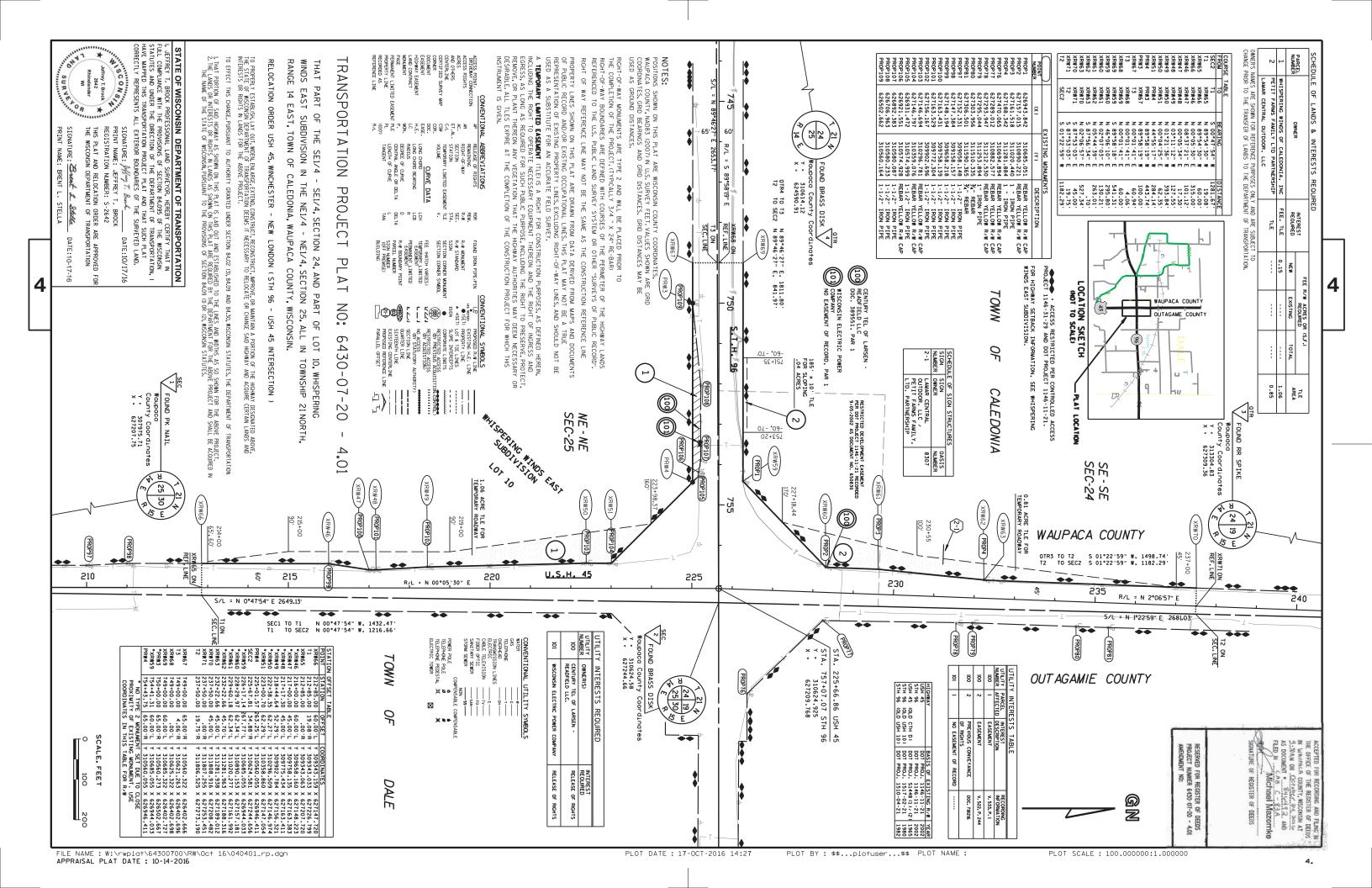
SI	SPV.0105.01		
LOCATION	LS	REMARKS	
USH 45 & STH 96 / OLD HWY 10	1		
TOTAL =	1	=	

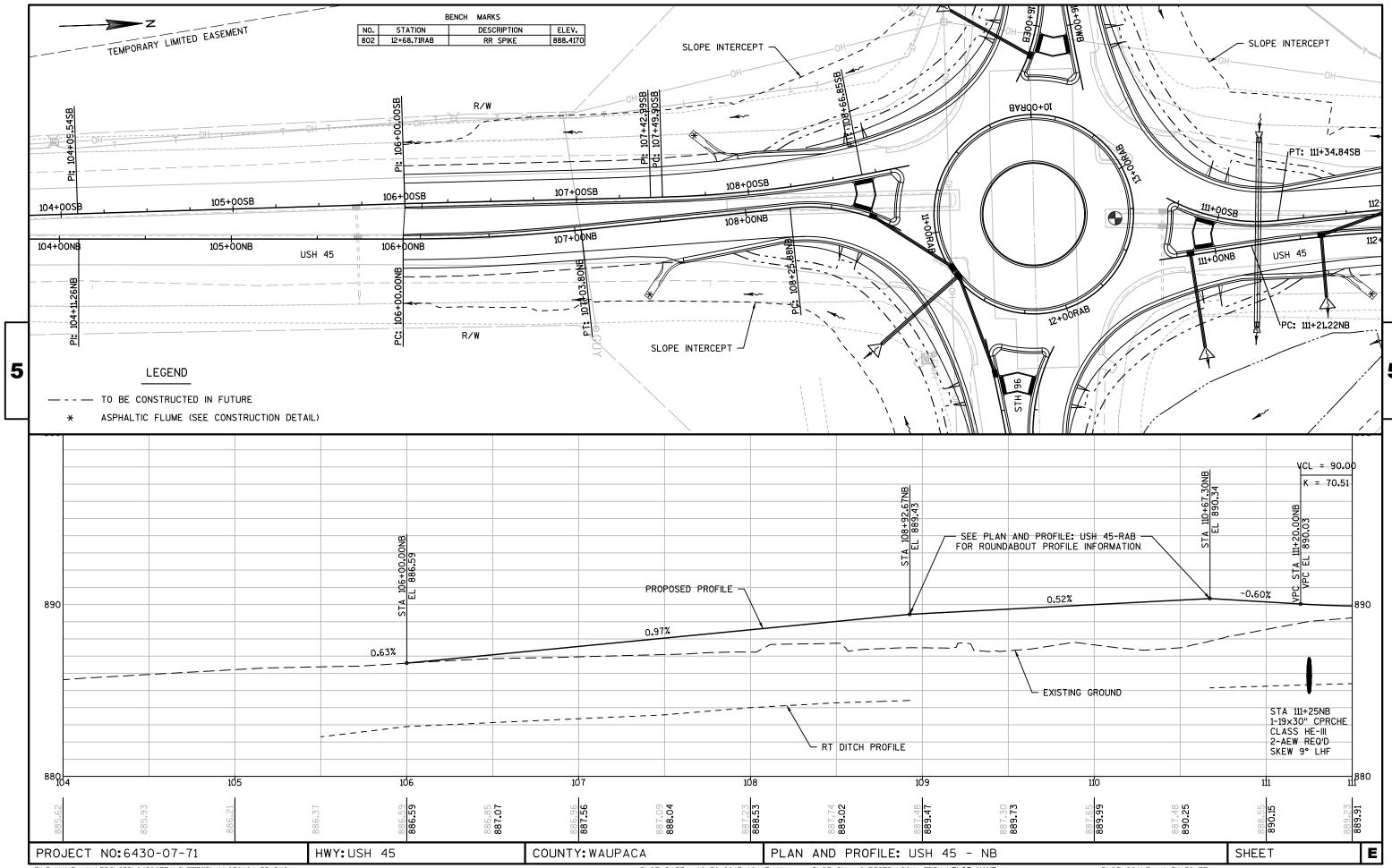
PROJECT NO: 6430-07-71 HWY: USH 45 COUNTY: WAUPACA MISCELLANEOUS QUANTITIES - 22 SHEET:

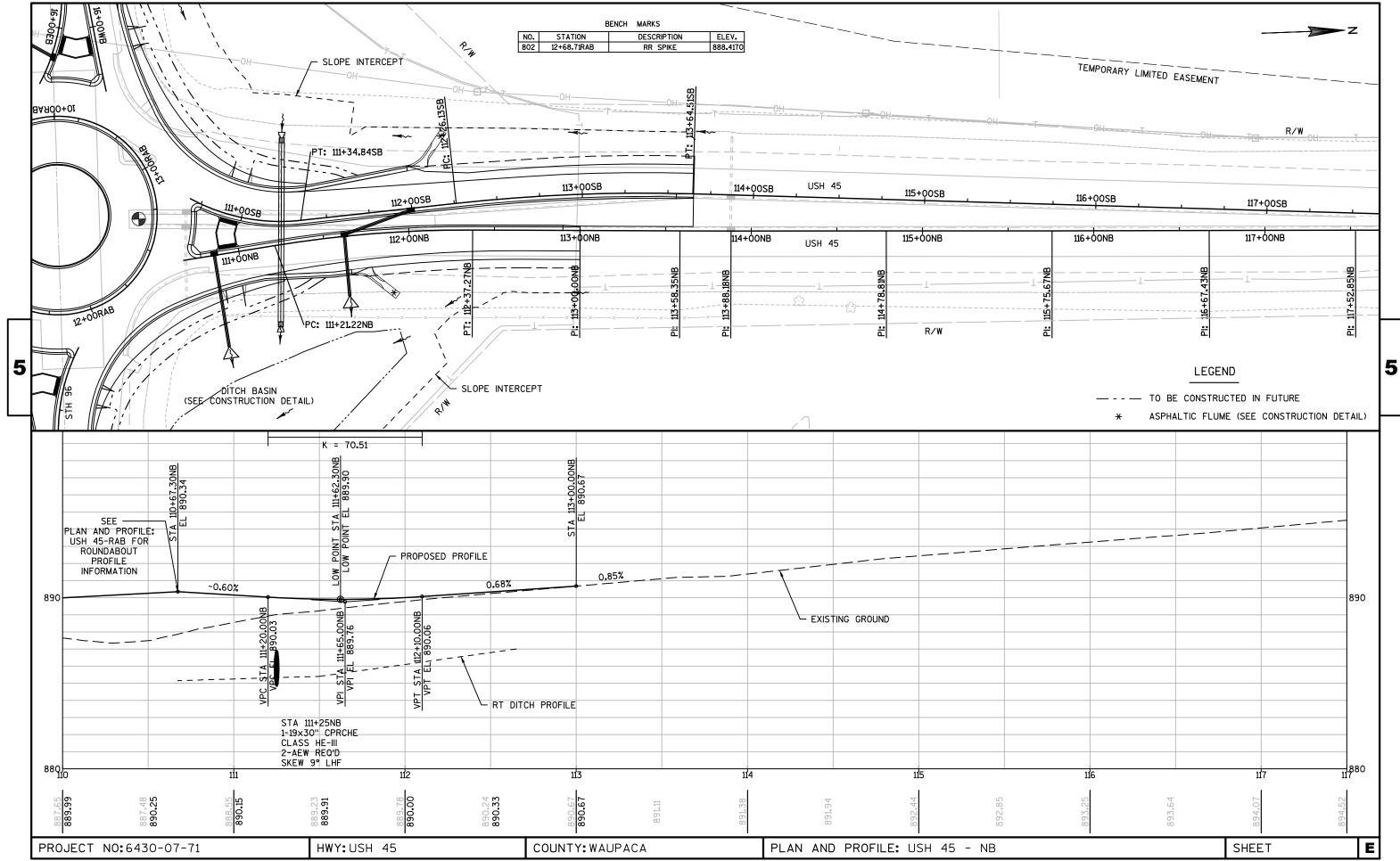
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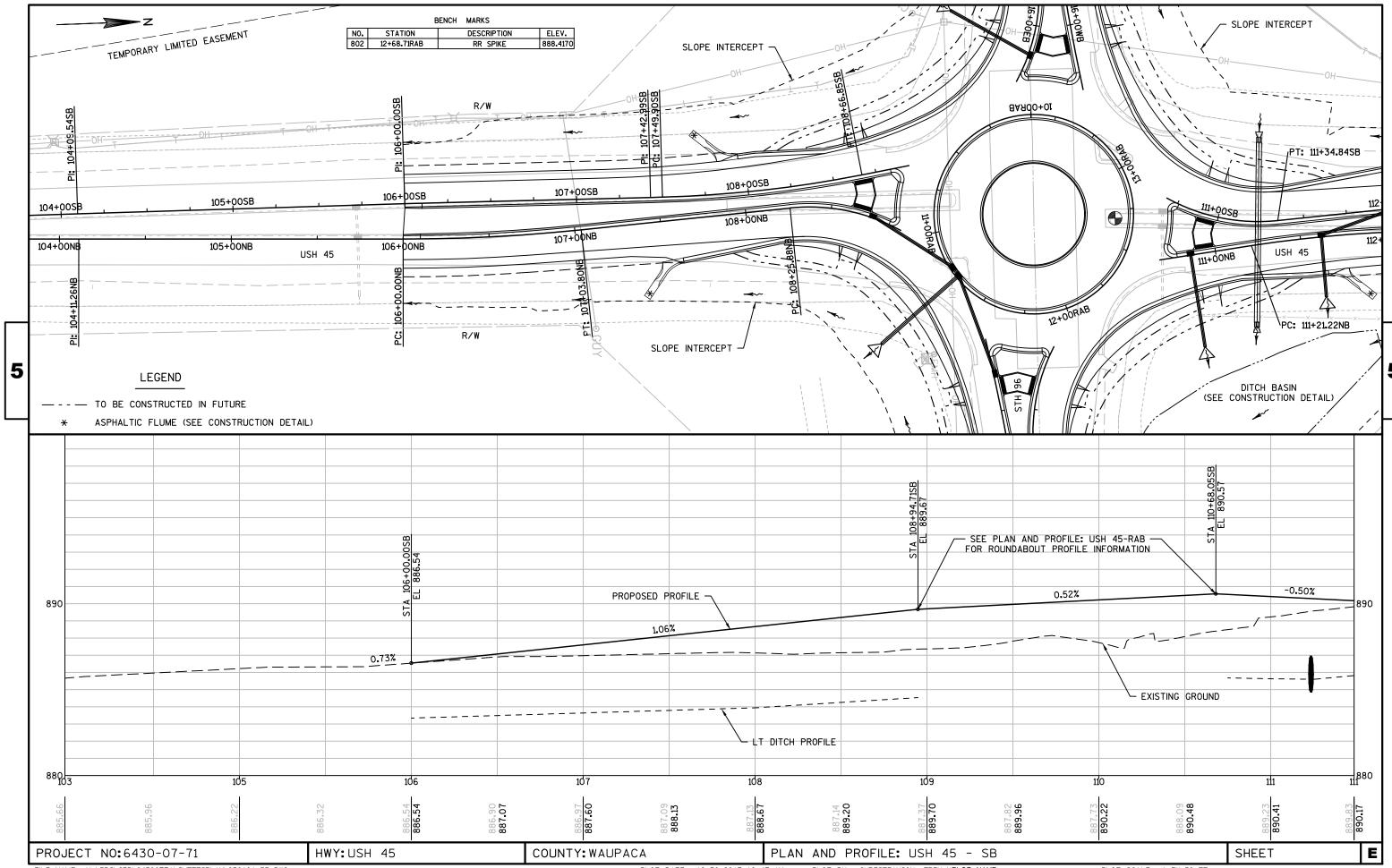
PLOT DATE : 1/11/2018 8:55 AM

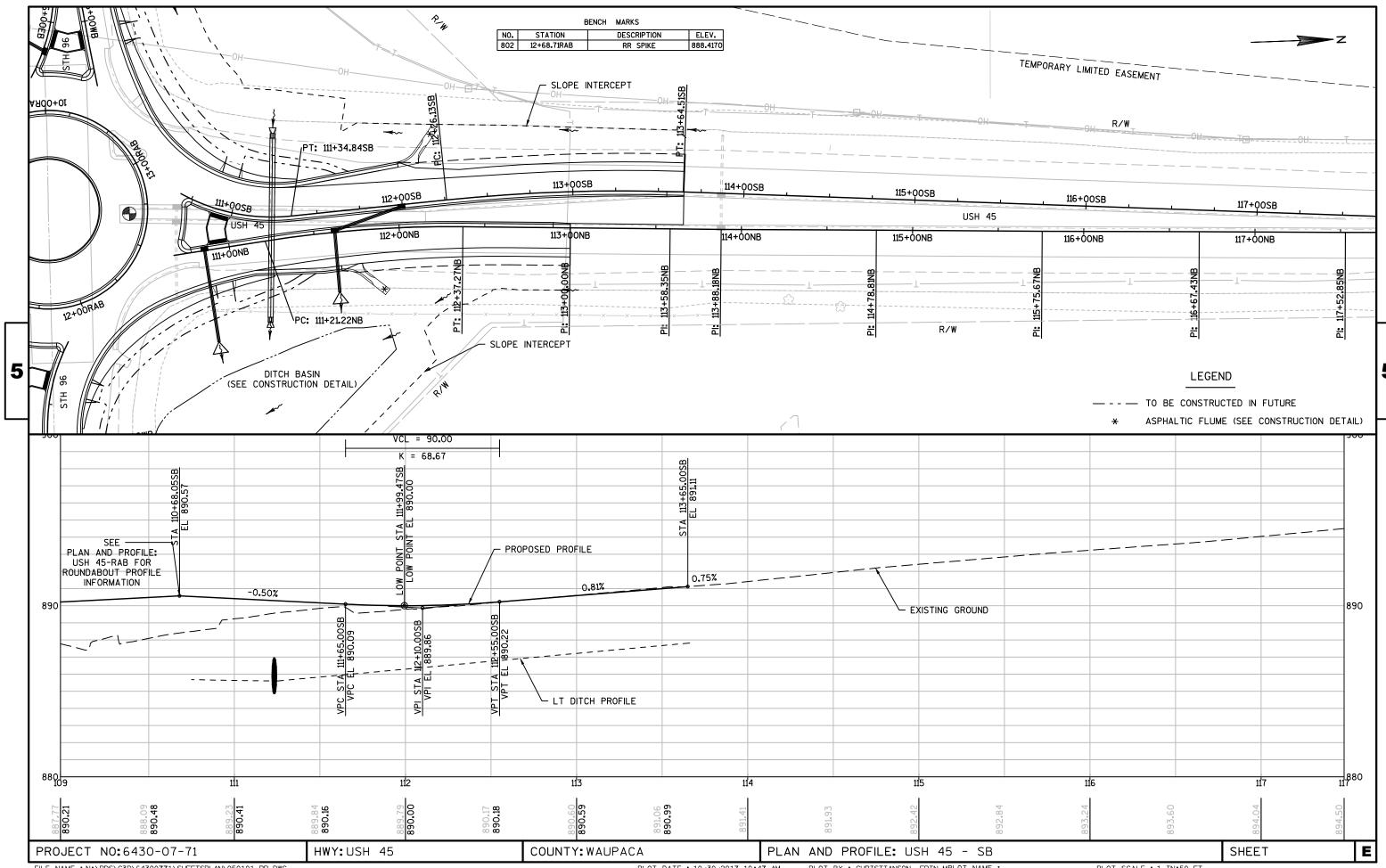
PLOT NAME : 030201 mg 71

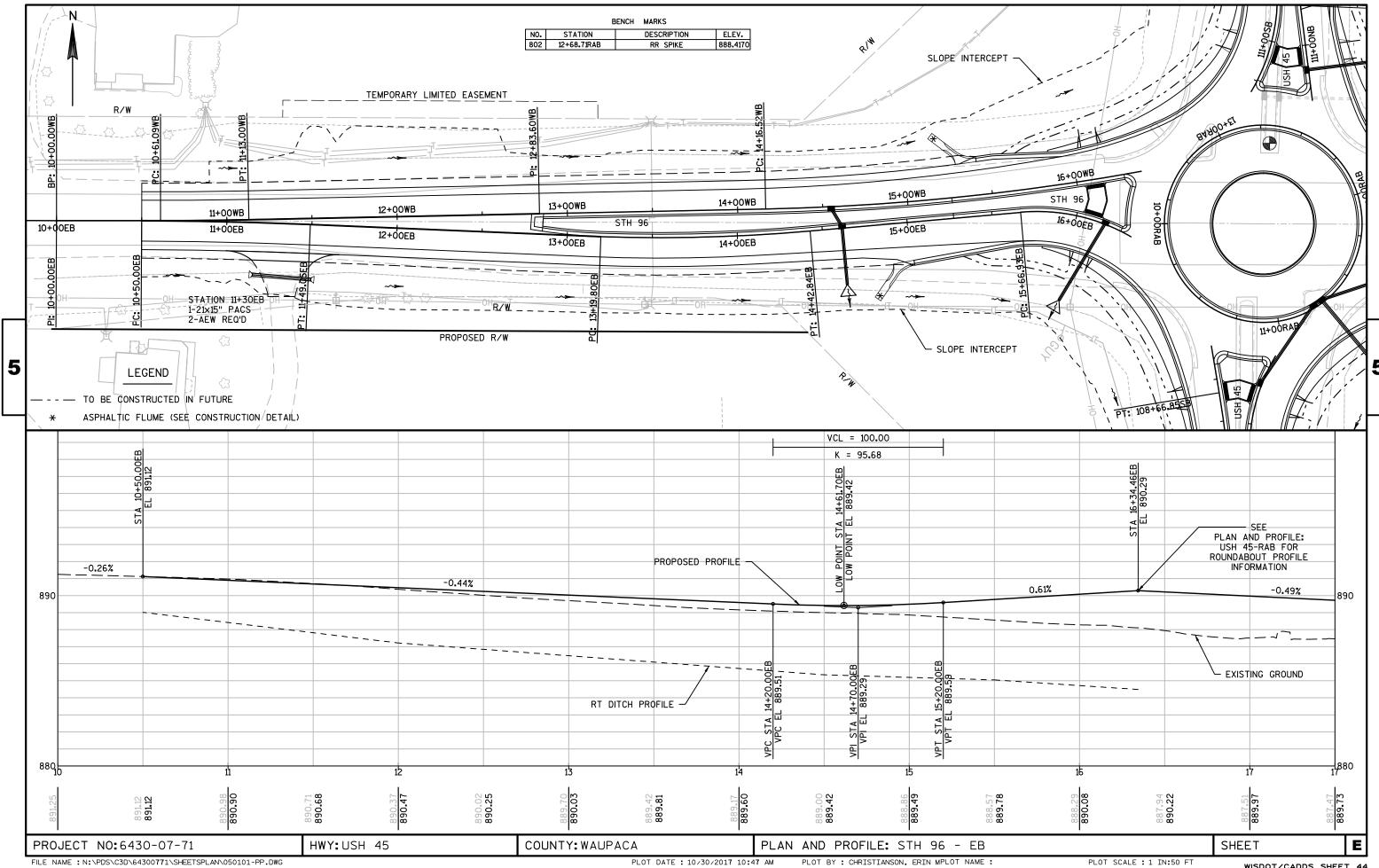


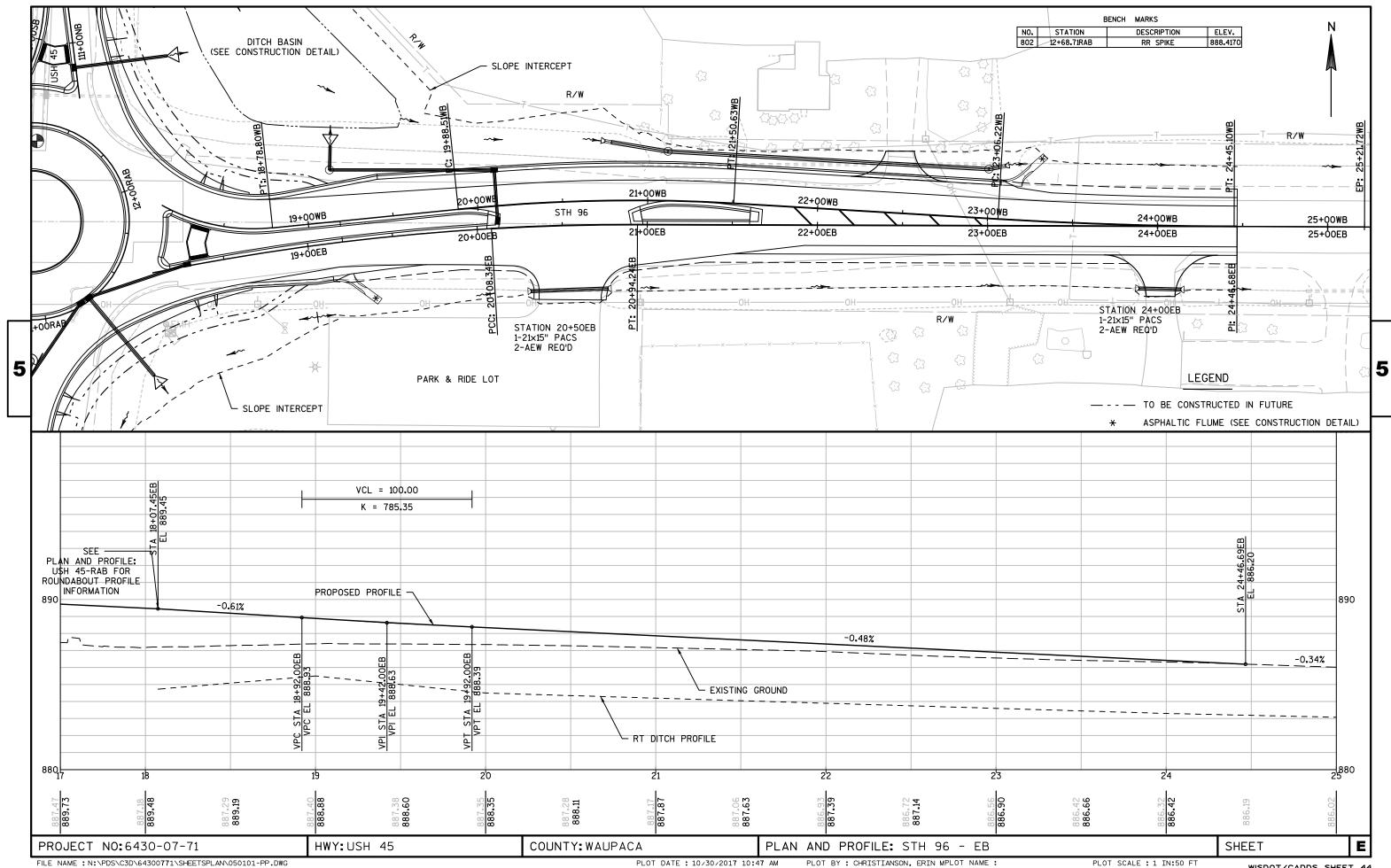


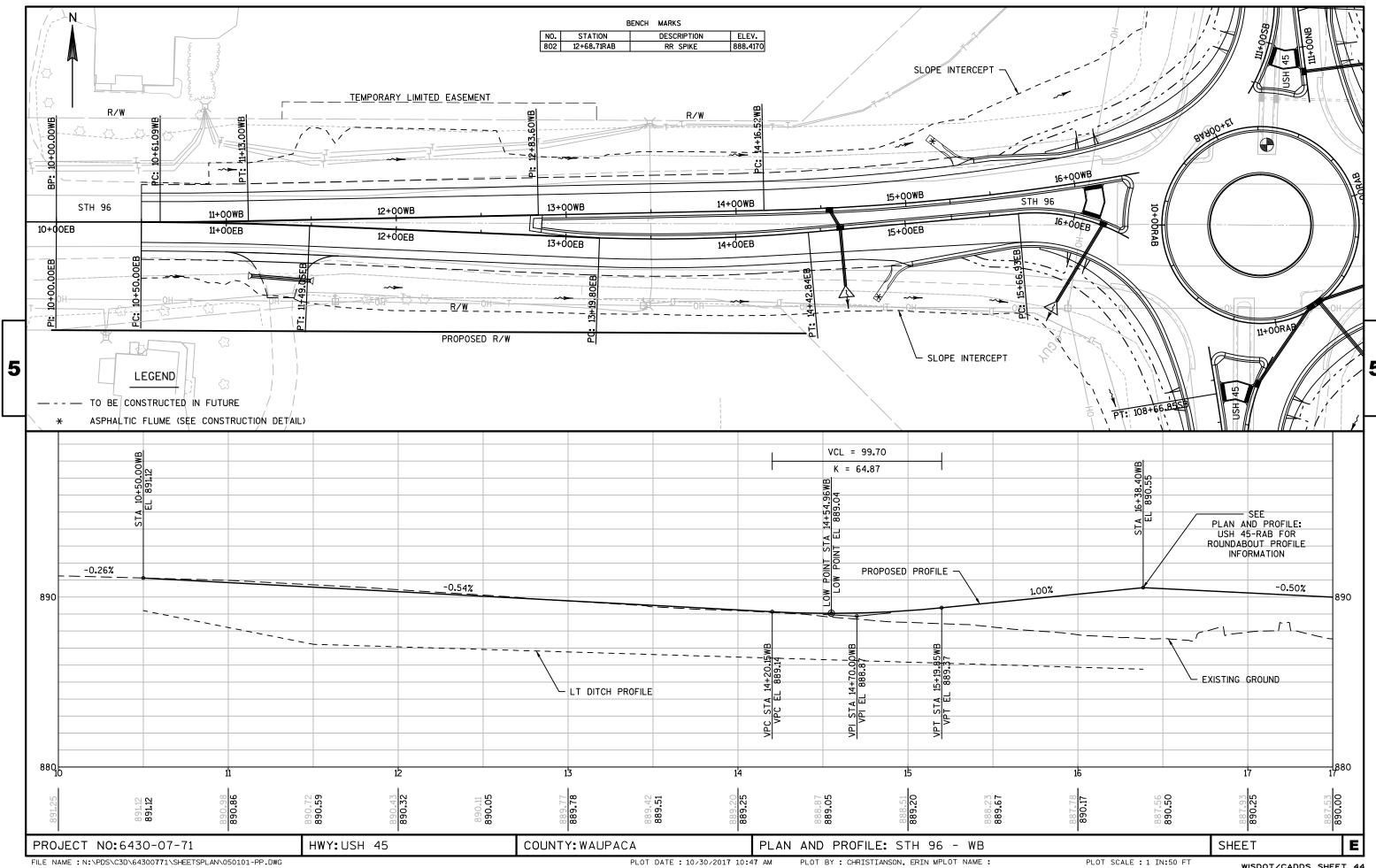


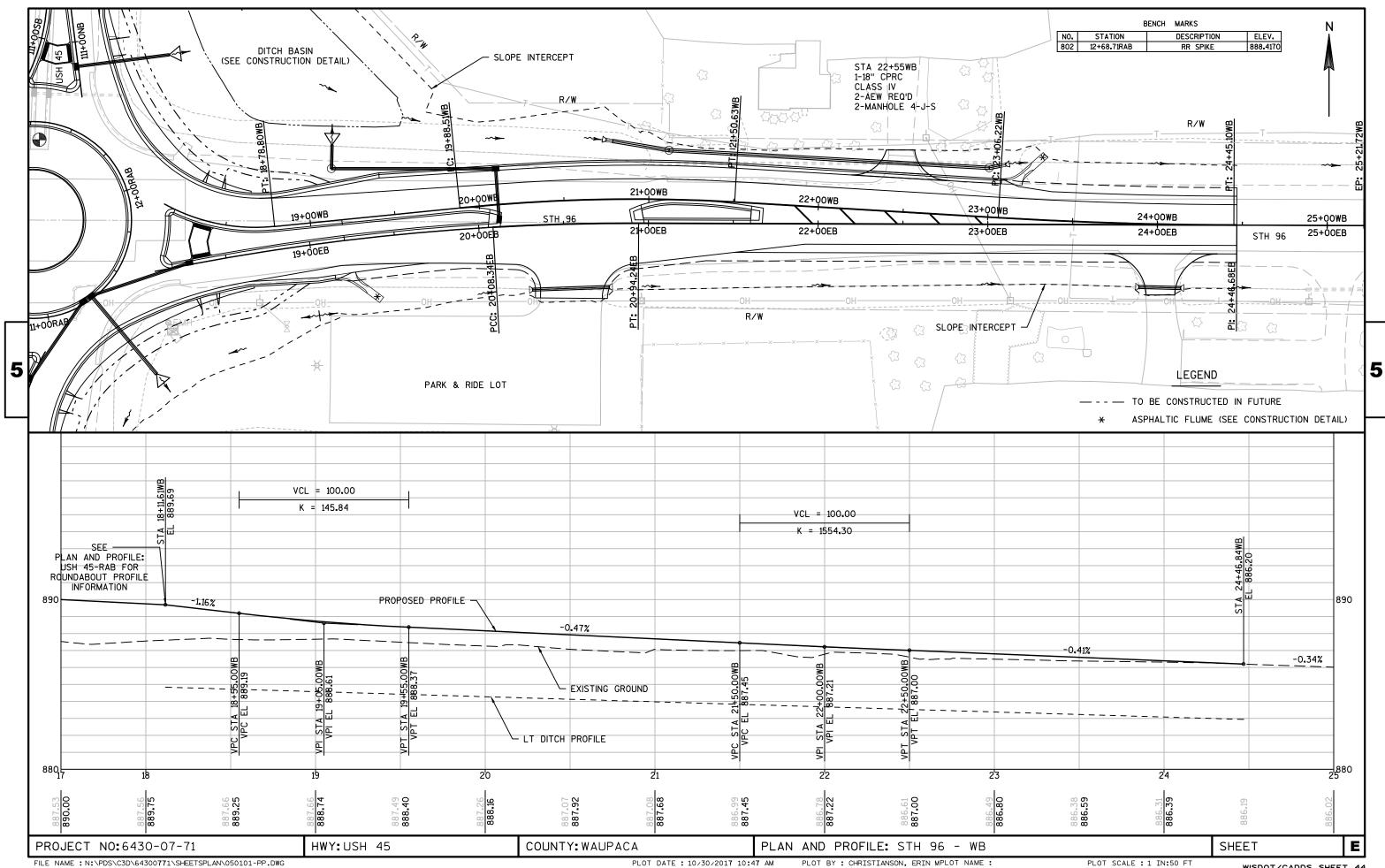


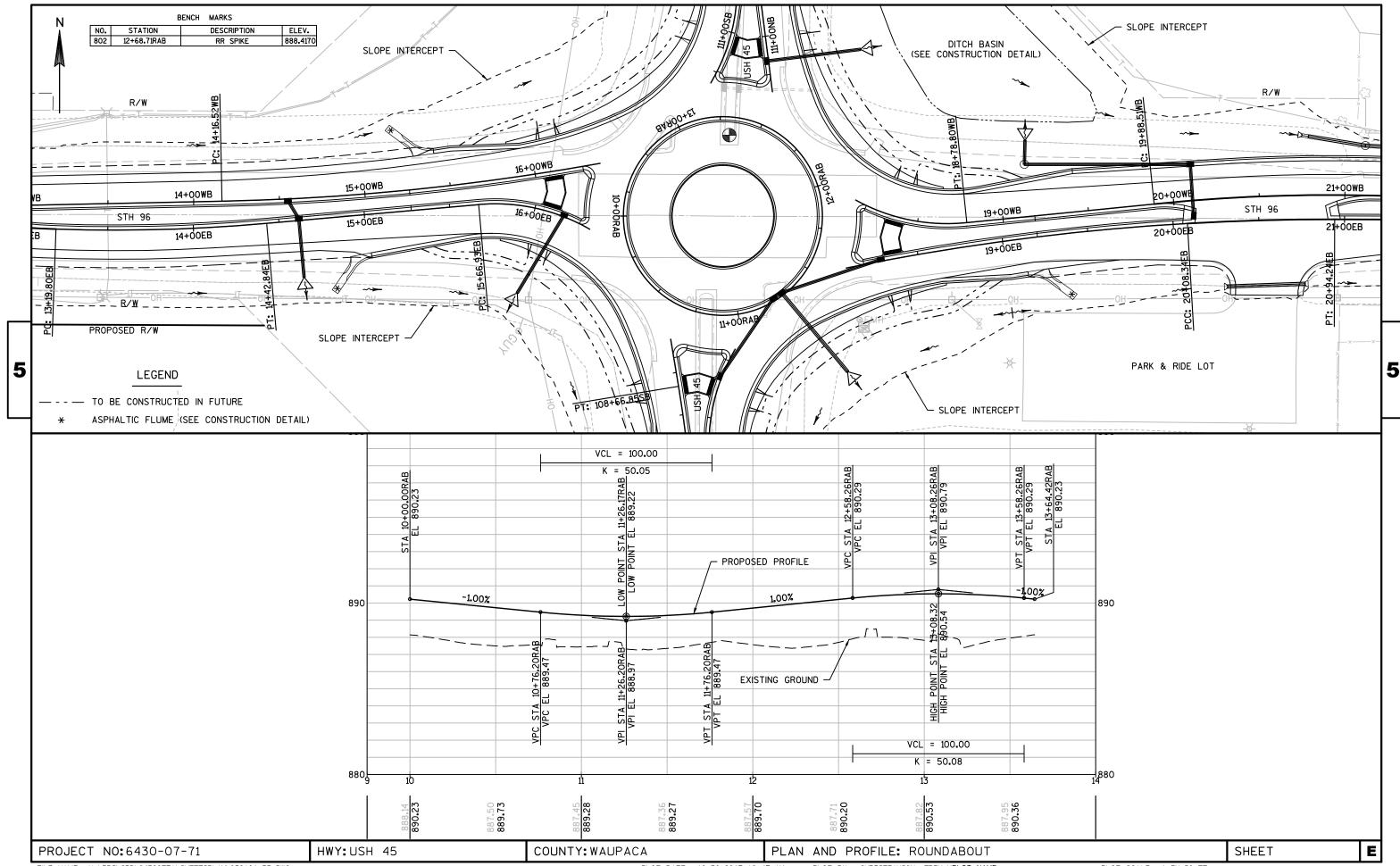


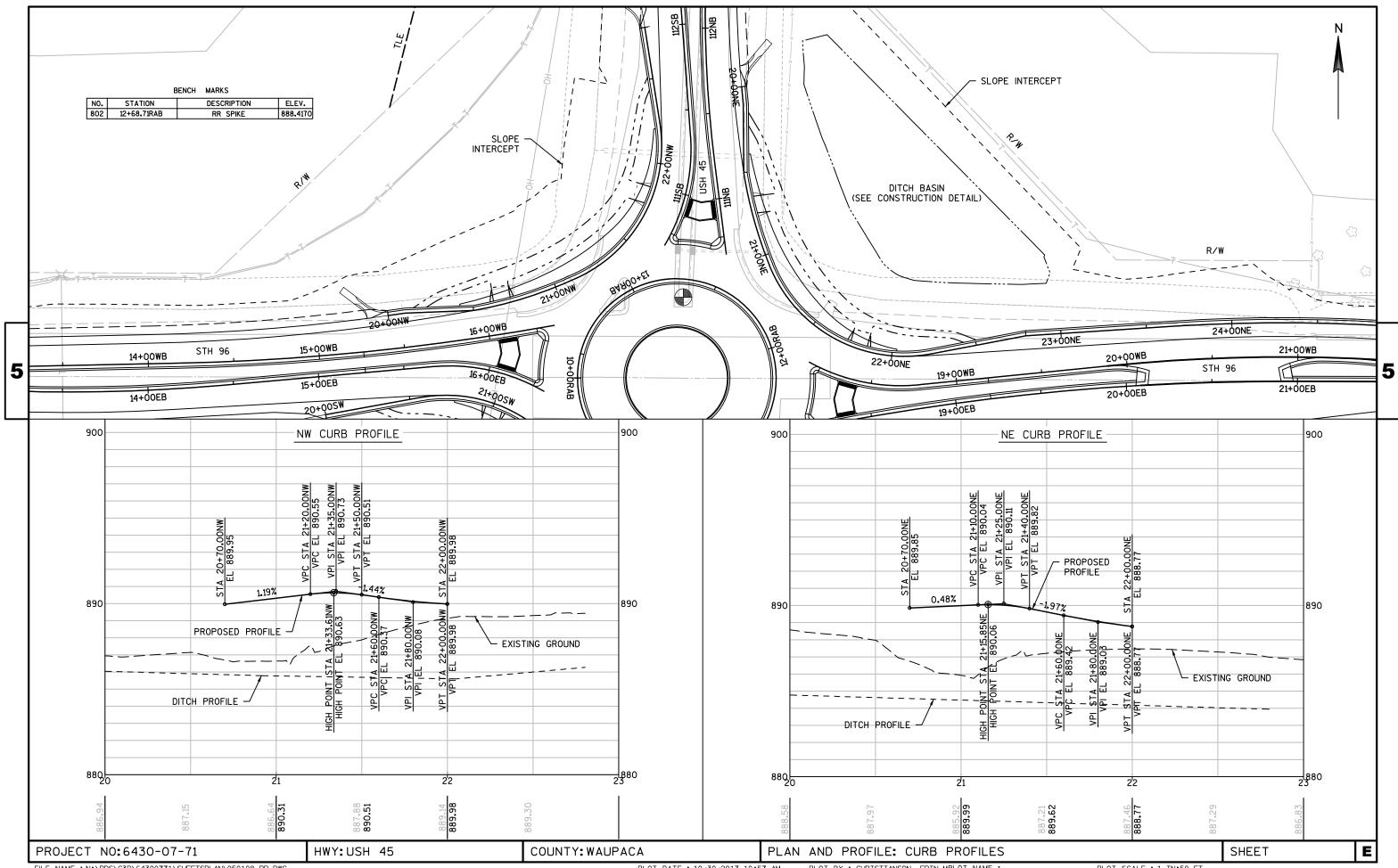


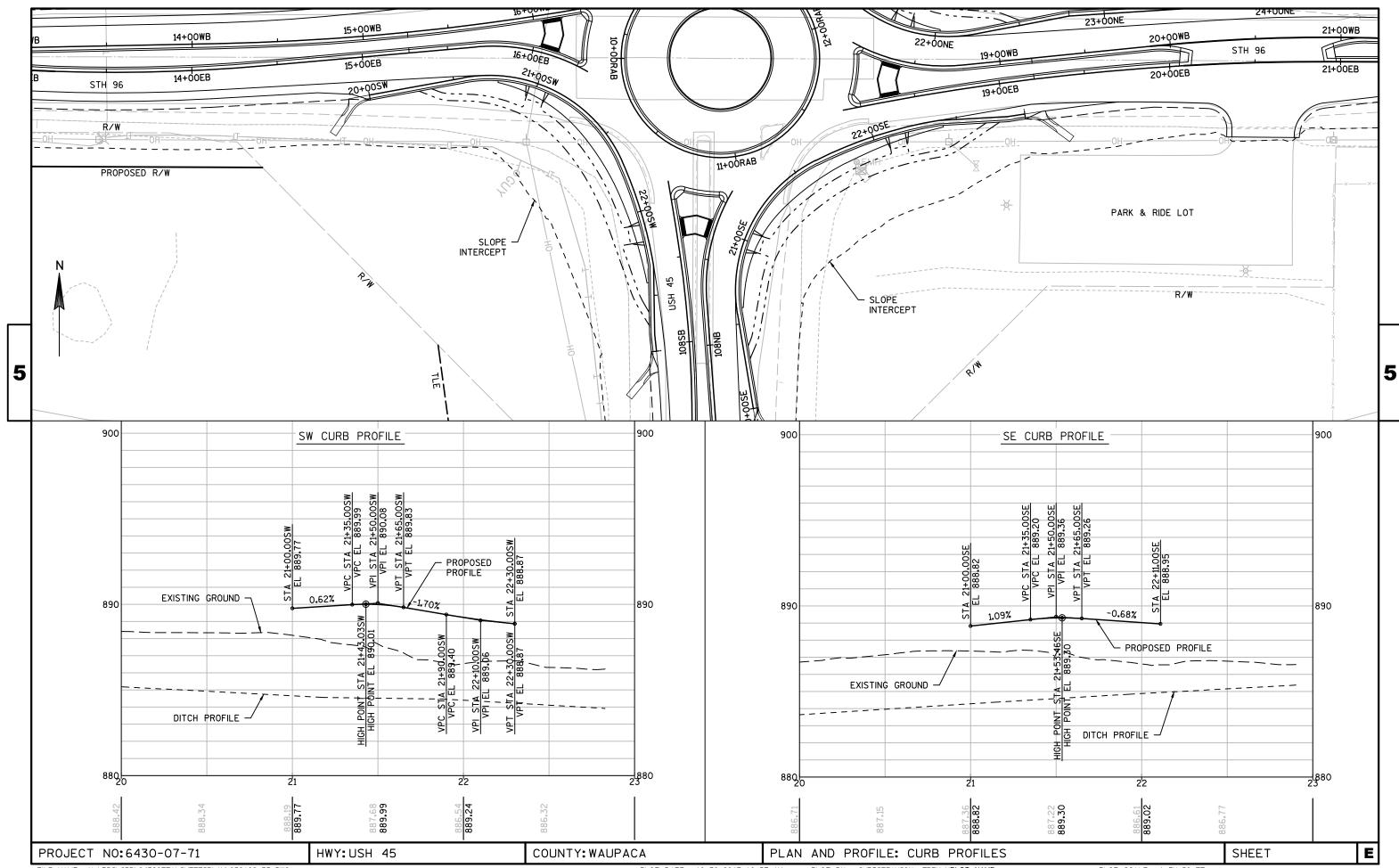


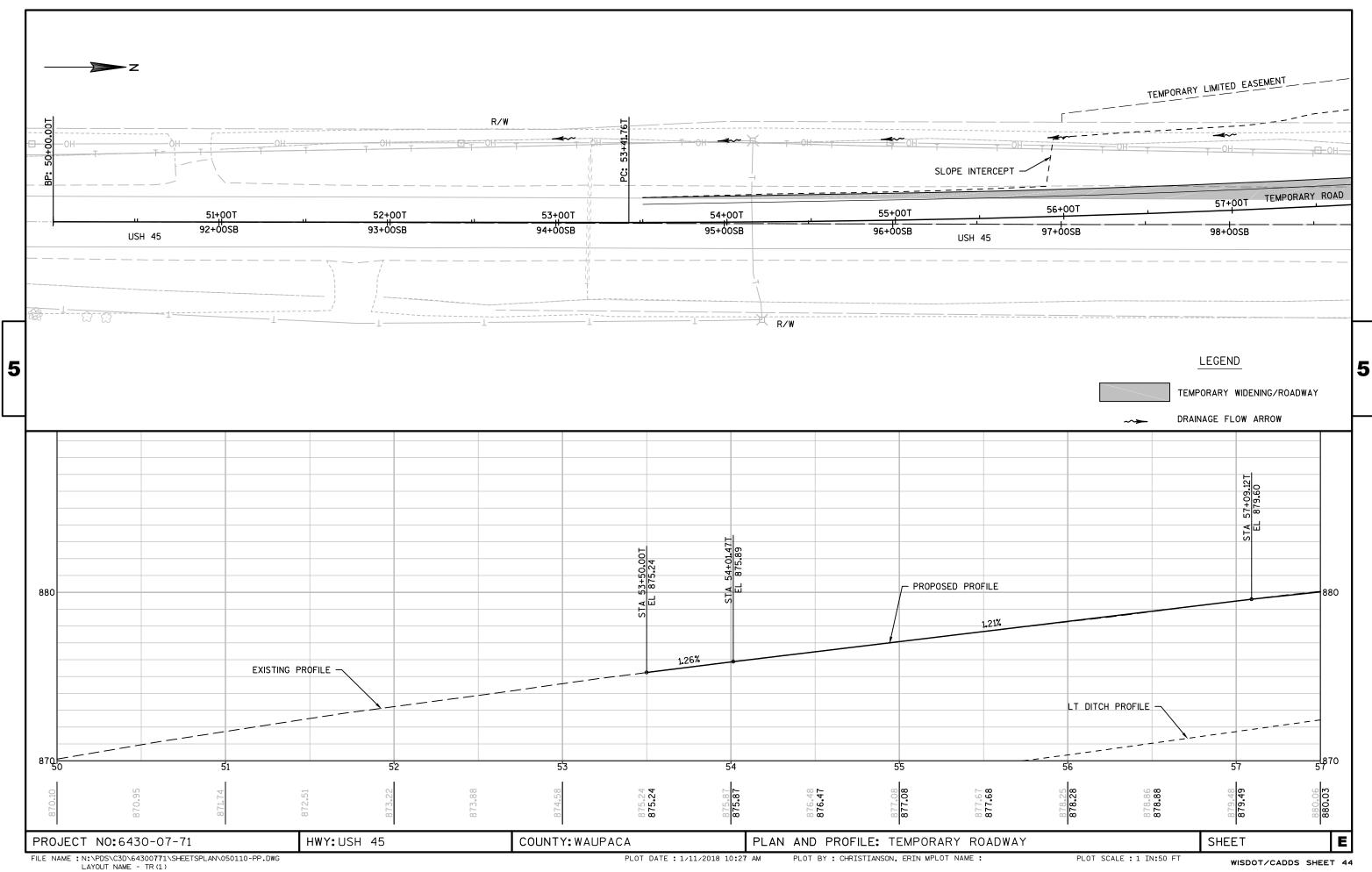


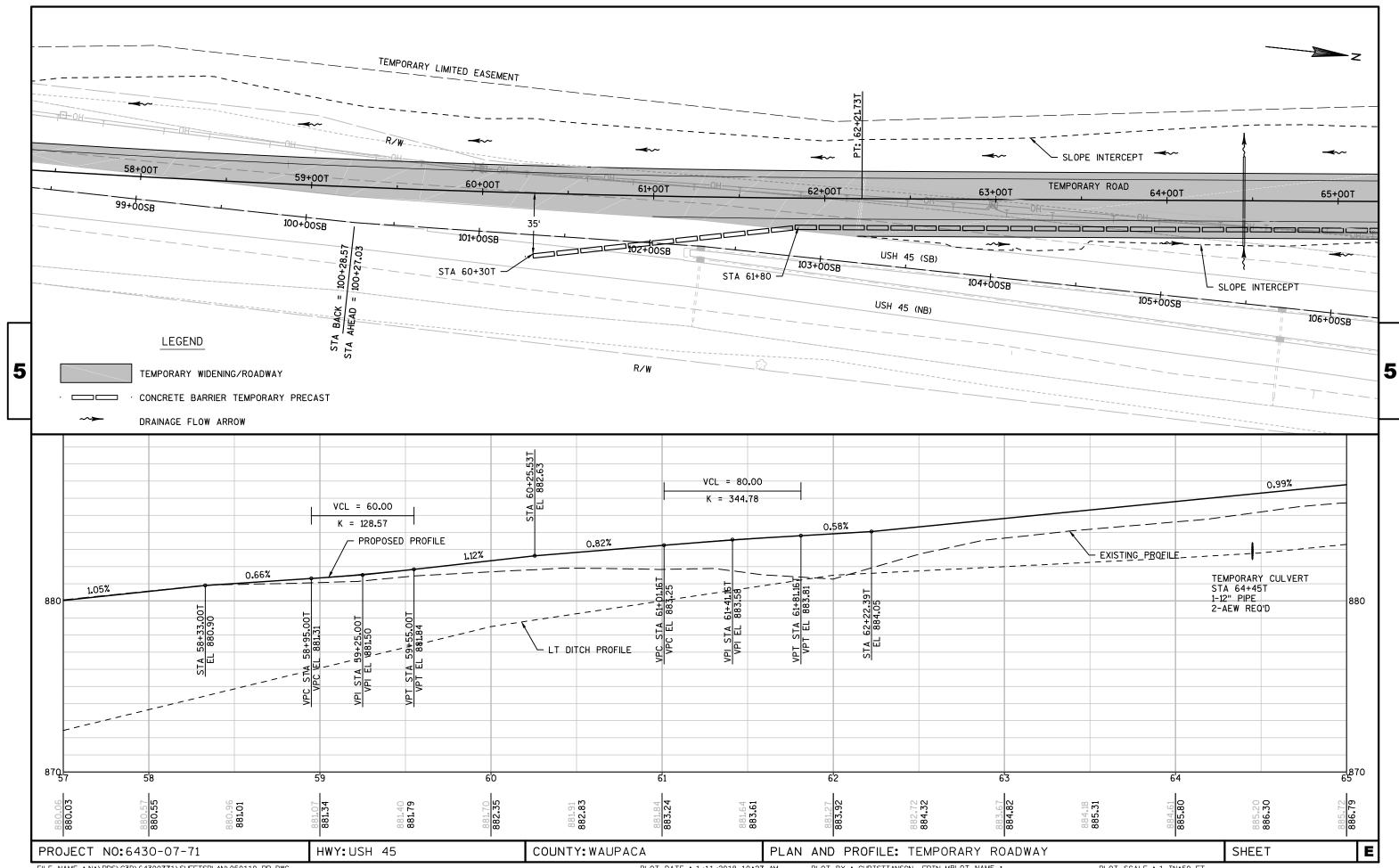


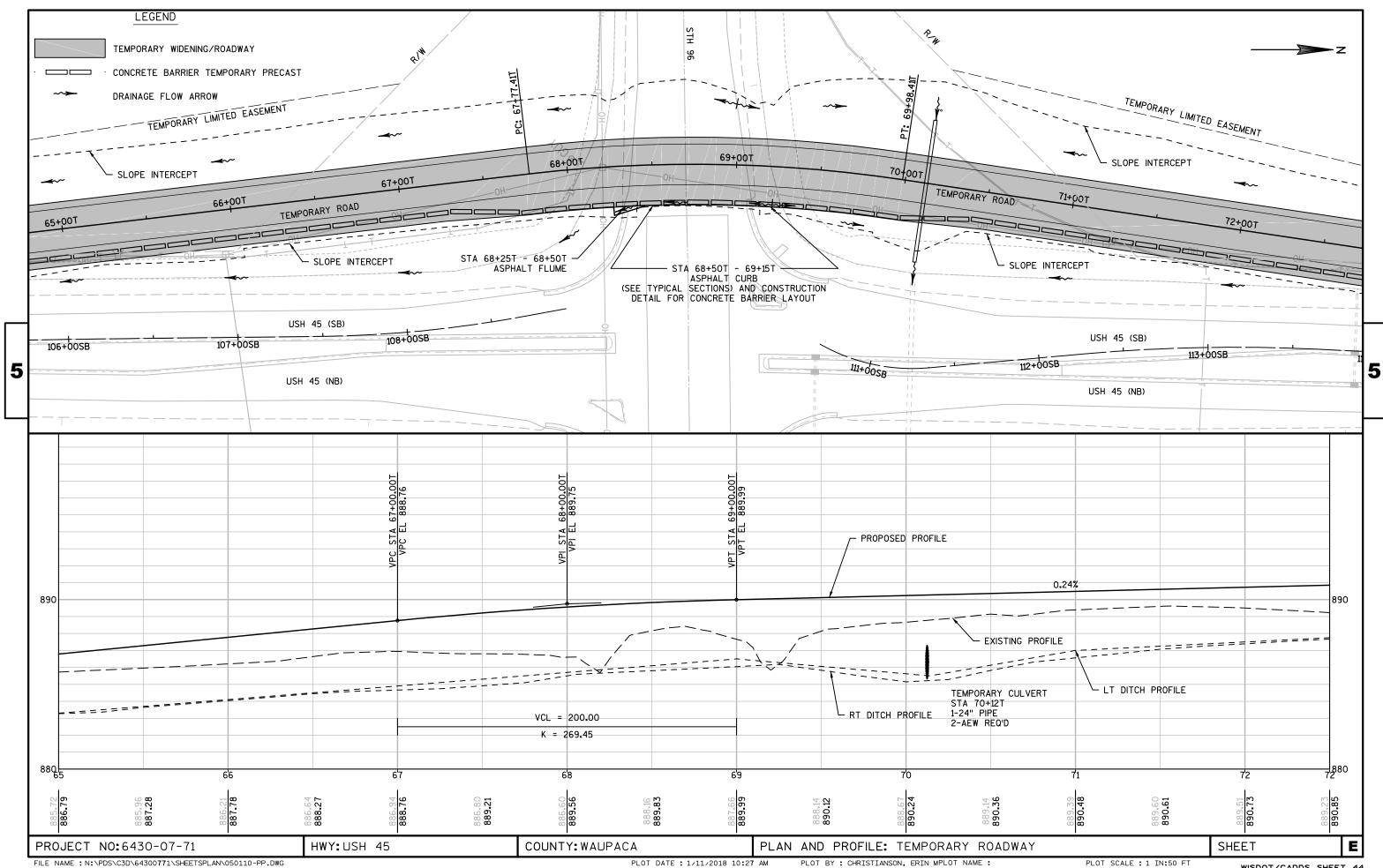


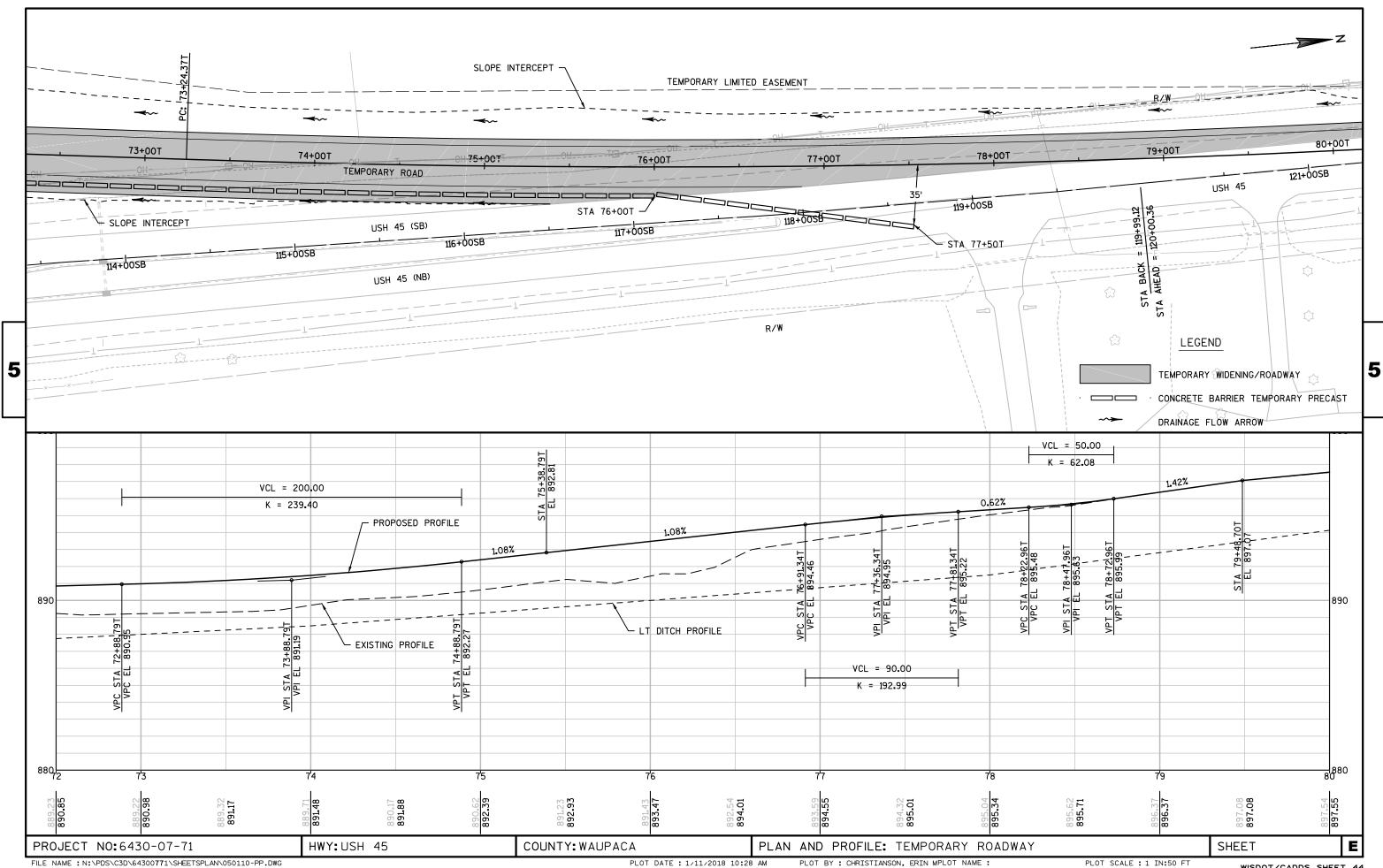


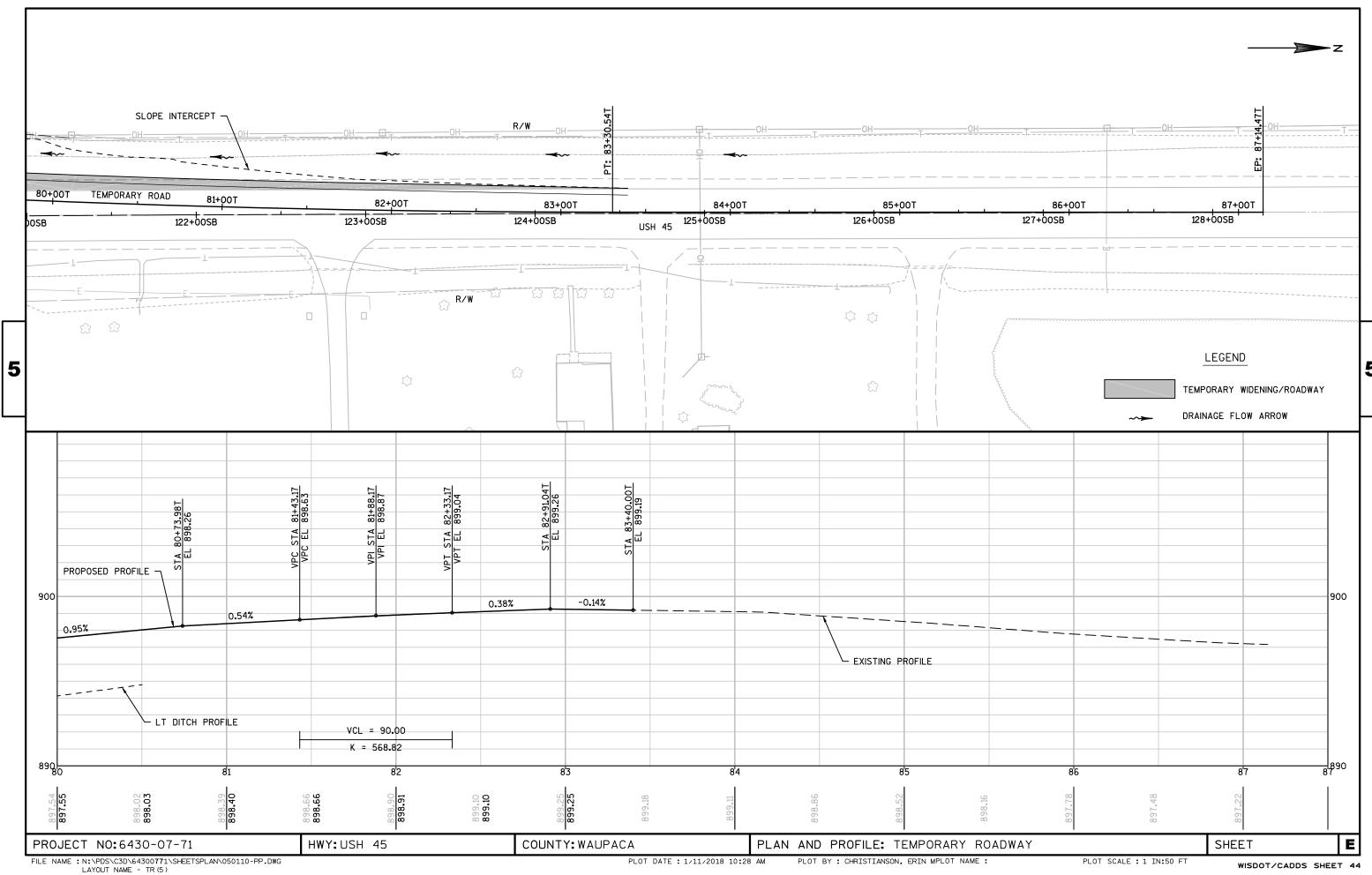








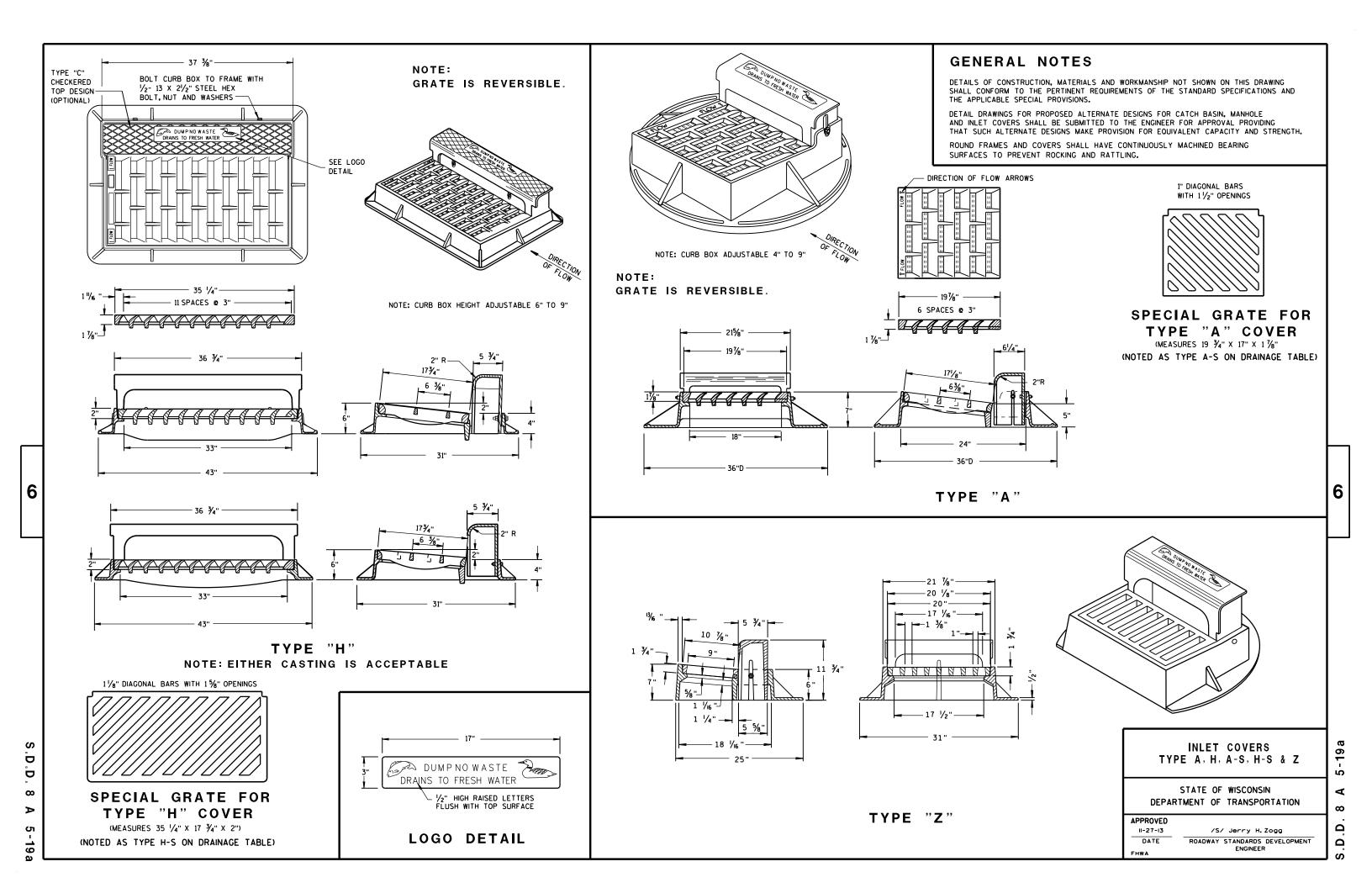




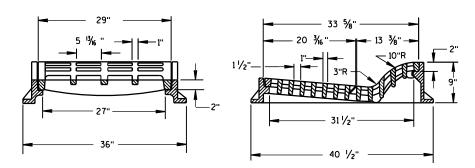
6

Standard Detail Drawing List

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08A05-19A
              INLET COVERS TYPE A, H, A-S, H-S & Z
08A05-19C
              INLET COVERS TYPE F, HM, HM-S, S, T, V, HM-GJ, & HM-GJ-S
08A05-19D
              INLET COVER TYPE BW, MANHOLE COVERS, TYPE K, J, J-S, L & M
               MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER
08B09-02
08C07-02
               INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT
08D01-20A
               CONCRETE CURB & GUTTER
08D01-20B
              CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS
08D05-19A
              CURB RAMPS TYPES 1 AND 1-A
08D05-19B
              CURB RAMPS TYPES 2 AND 3
08D05-19C
              CURB RAMPS TYPES 4A AND 4A1
08D05-19D
              CURB RAMPS TYPE 4B AND 4B1
08D05-19E
              CURB RAMPS TYPES 5, 6, 7A, 7B & 8
08E08-03
               TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06
               SILT FENCE
08E10-02
               INLET PROTECTION TYPE A, B, C AND D
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
09B02-10
               CONDUI T
09B16-01
               PULL BOX NON-CONDUCTIVE
09C02-07
               CONCRETE BASES, TYPES 1, 2, 5, & 6
09C03-04
               TRANSFORMER/PEDESTAL BASES
09C05-10
              CONCRETE CONTROL CABINET BASES
               CONCRETE CONTROL CABINET BASE, TYPE L
09C14-02
09D01-05
              CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)
09D04-02
              LIGHTING CONTROL CABINET 120/240 VOLT
09E01-14D
              POLE MOUNTINGS FOR LIGHTING UNITS, TYPE 5 (30 FEET)
09E01-14G
              HARDWARE DETAILS FOR POLE MOUNTINGS
09E03-05
               NON-FREEWAY LIGHTING UNIT POLE WIRING
11B02-02
               CONCRETE MEDIAN NOSE
13A11-02A
              2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
13A11-02B
               2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
              TREE PLANTING DETAIL
14A02-01
               CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-15A
14B07-15B
              CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-15C
              CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-15D
               CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-15E
               CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
               CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-15F
14B07-15G
               CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-15H
               CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-15I
               CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
15A03-02A
               FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B
               FLEXIBLE MARKER POST FOR CULVERT END
15C02-06A
              BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-06B
              BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-06C
              DETOUR SIGNING FOR MAINLINE CLOSURES
15C04-03
               TRAFFIC CONTROL. ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C07-14A
               PAVEMENT MARKING SYMBOLS
15C07-14B
              PAVEMENT MARKING WORDS
15C08-18A
               LONGITUDINAL MARKING (MAINLINE)
15C11-07B
               CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C12-06
               TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION
15C18-04
               MEDIAN ISLAND MARKING
              PAVEMENT MARKING (ISLANDS)
15C27-02B
15C33-02
               STOP LINE AND CROSSWALK PAVEMENT MARKING
15D03-04
               TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATER THAN 40 M.P.H. WITH BARRIER
15D28-03
               TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY
15D31-03
               TRAFFIC CONTROL, TEMPORARY BYPASS ROADWAY
               TEMPORARY TRAFFIC CONTROL SIGN MOUNTING
15D38-02A
               ATTACHMENT OF SIGNS TO POSTS
15D38-02B
```



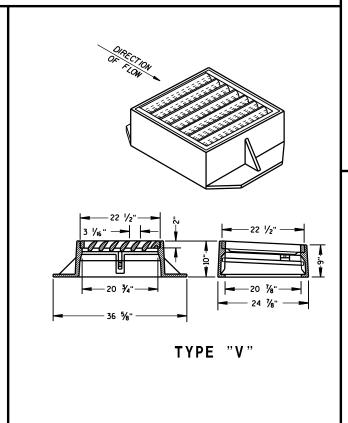
6



TYPE "F"

USE WITH TYPES A & D CONCRETE CURB & GUTTER, 36 INCH.

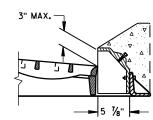
25 ½" 23 ½" 23 ½" 23 ½" 23 ½" 23 ½" 23 ½" 23 ½" 23 ½" 25 ½" 23 ½" 25 ½" 25 ½" 26 ½" 27 ½" 28 ½" 28 ½" 29 ½" 20 ½"



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.

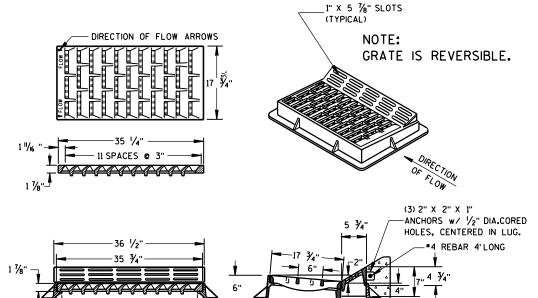
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.



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

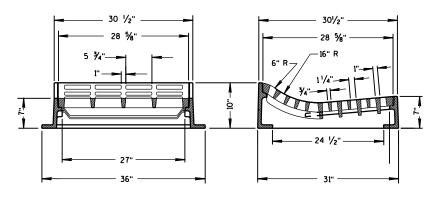
NOIE:
SPECIAL GRATE FOR THE
TYPE "H" COVER MAY ALSO BE
USED FOR THE TYPE "HM-GJ" COVER
NOTED AS TYPE HM-GJ-S ON DRAINAGE TABLE



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 "T"

USE WITH TYPES R & T CONCRETE CURB & GUTTER, 36 INCH.



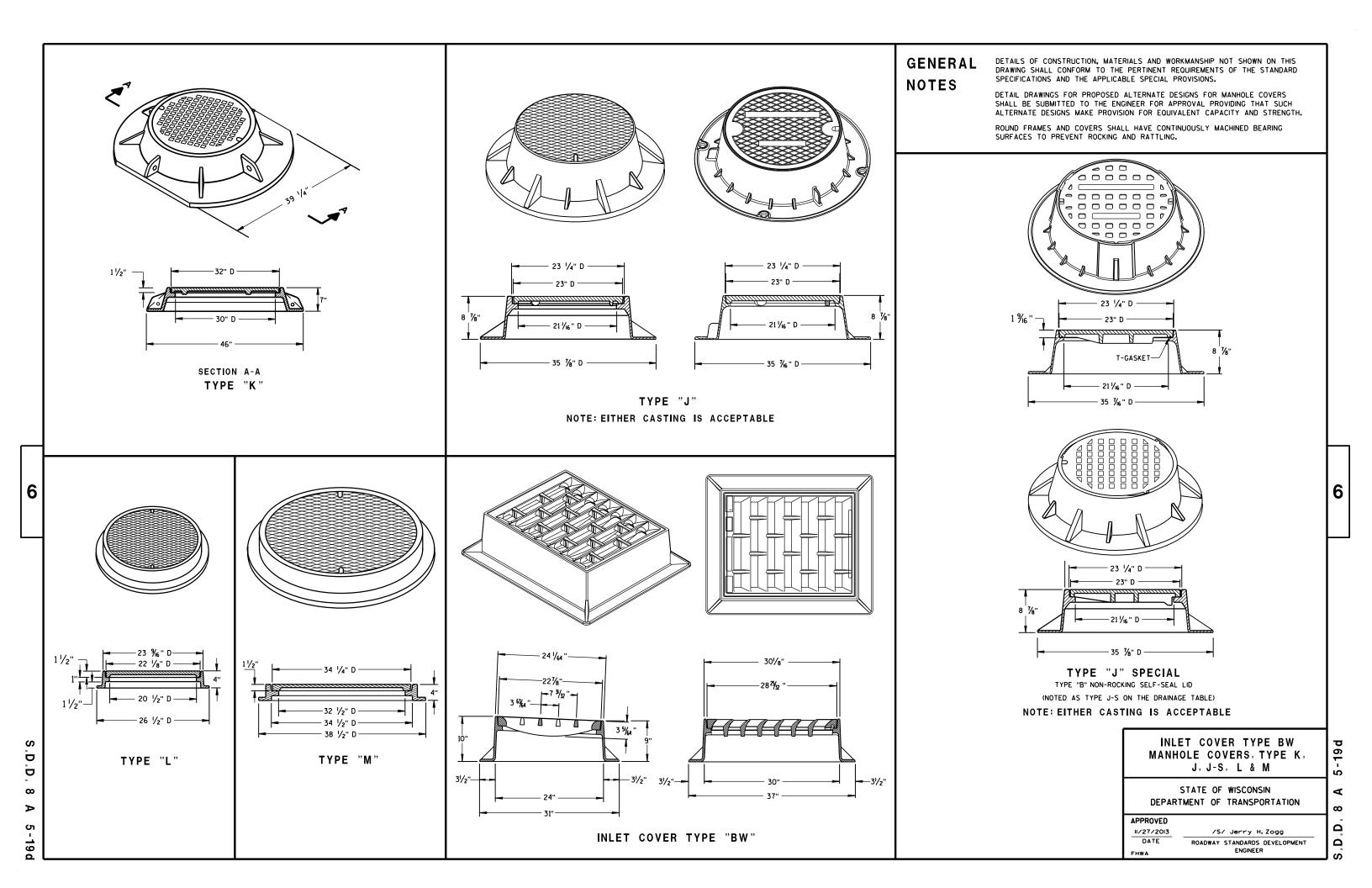
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

II/27/2013
DATE / /S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER

A 5-19

D.D. 8

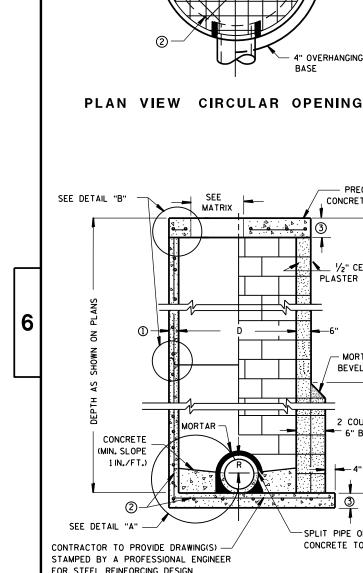


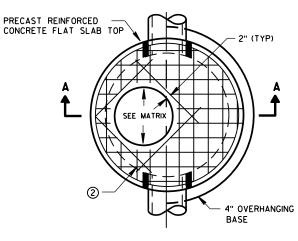


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Δ







SEE

MATRIX

SEE __ MATRIX **PRECAST** REINFORCED CONCRETE RISERS

OPTIONAL PRECAST REINFORCED CONCRETE **ECCENTRIC TOP**

PRECAST

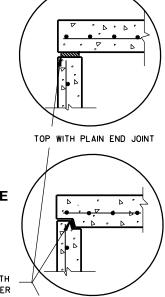
WALL

PRECAST REINFORCED

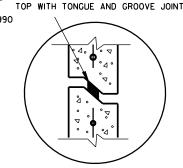
CONCRETE FLAT SLAB TOP

CONCRETE BASE 2

OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP

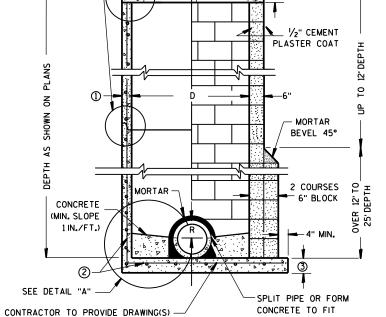


JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C990 (TYP)

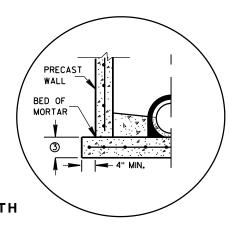


RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B'



FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES PRECAST REINFORCED CONCRETE BLOCK WITH **CONCRETE WITH** CAST-IN-PLACE OR PRECAST REINFORCED MONOLITHIC BASE

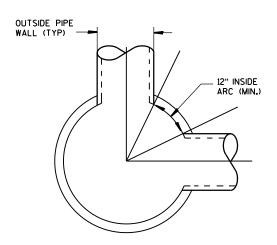


PRECAST REINFORCED

CONCRETE WITH INTEGRAL BASE OPTION

SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"



DETAIL "C"

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

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 FOUNDATION 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.

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 1/2" 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".

- MINIMUM WALL THICKNESS SHALL BE 4 INCHES FOR 3-FT, 5 INCHES FOR 4-FT. 6 INCHES FOR 5-FT, 7 INCHES O MINIMUM WALL IHICKNESS SHALL DE 4 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

MANHOLE COVER OPENING MATRIX

ĺ	MANHOLE COVER TYPE	С	ALL J'S	K	L	М
	OPENING SIZE (FT)					
	2 DIA.	×	х		Х	
ı	3 DIA.			Х		Х

PIPE MATRIX

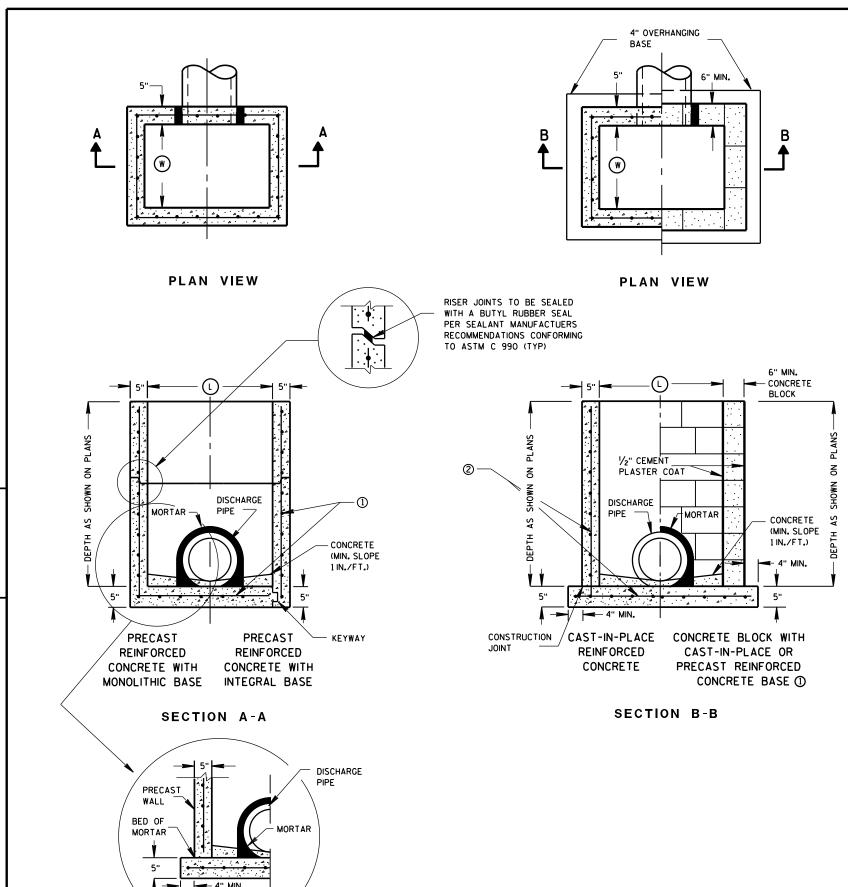
MANHOLE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES									
SIZE	180° SEPARATION (IN)	90° SEPARATION (IN)								
3-FT	15	12								
4-FT	24	18								
5-FT	36	24								
6-FT	42	36								
7-FT	48	36								
8-FT	60	42								

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

> STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

PPROVED	
Sept., 2016	/S/ Rodney Taylo
DATE	ROADWAY STANDARDS DEVE
	UNIT SUPERVISOR

ELOPMENT



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 FOUNDATION 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.

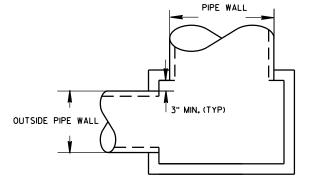
- ① FOR PRECAST INLETS PROVIDE REINFORCING STEEL IN ACCORDANCE TO ASTM C 913.
- ② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

INLET COVER MATRIX

INLET SIZE		INLET COVER TYPE	ALL A'S	ALL B'S	BW	F	ALL H'S	S	Т	٧	WM
	WIDTH (V) (FT)	LENGTH (L) (FT)									
2X2-FT	2	2	Х	Х				Х		х	
2X2.5-FT	2	2.5			Х			Х	Х	Х	Х
2X3-FT	2	3					Х				
2.5X3-FT	2.5	3				Х					

PIPE MATRIX

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



DETAIL "A"

OUTSIDE

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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APPROVED

Sept., 2016

DATE

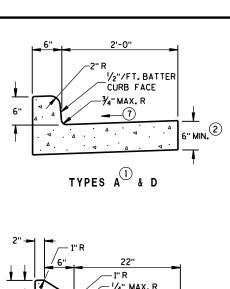
ROADWAY STANDARDS DEVELOPMENT
UNIT SUPERVISOR

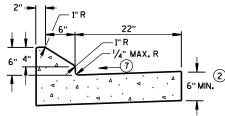
INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT

S.D.D. 8 C

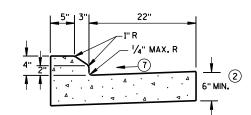
SEPARATE PRECAST REINFORCED

CONCRETE BASE OPTION

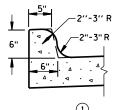




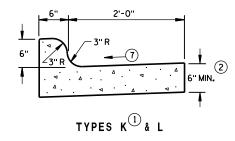
6" SLOPED CURB TYPES G 4 J



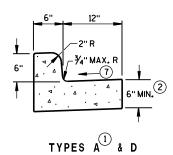
4" SLOPED CURB TYPES G 4 J



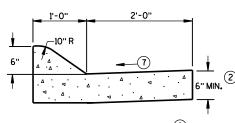
TYPES K (1) & L (OPTIONAL CURB SHAPE)



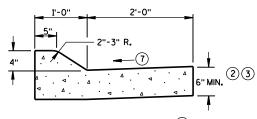
CONCRETE CURB & GUTTER 30"



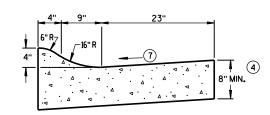
CONCRETE CURB & GUTTER 18"



6" SLOPED CURB TYPES A & D

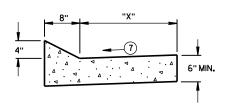


4" SLOPED CURB TYPES A D



4" SLOPED CURB TYPES R T & T

CONCRETE CURB & GUTTER 36"



TYPES TBT & TBTT

CONCRETE CURB & GUTTER

TBT & TBTT	"X"
30"	22"
36"	28"

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.

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'-O" BEHIND THE BACK OF CURBS.

- (1) TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G, K, R AND TBTT.
- 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) USE 8" MINIMUM GUTTER THICKNESS WHEN USED WITH AN ADJACENT CONCRETE TRUCK APRON PLACED
- (4) 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.
- (5) THE FACE OF CURB IS 6" FROM THE BACK OF CURB.
- (6) WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.
- (7) USE 4% GUTTER CROSS SLOPE UNLESS OTHERWISE NOTED IN THE PLANS.
- (8) INCLUDE LONGITUDINAL JOINT AND TIE BARS ALONG LANE EDGE WHEN CONCRETE PANEL WIDTH EXCEEDS THE MAXIMUM WIDTH PER TABLE BELOW. LONGITUDINAL JOINT(S) ARE NOT ALLOWED WITHIN TRAFFIC LANES AND BIKE LANES. LONGITUDINAL JOINT MAY BE SAWED.

PAVEMENT THICKNESS AND MAXIMUM CONCRETE PANEL WIDTH TABLE

PAVEMENT THICKNESS	MAXIMUM PANEL WIDTH
LESS THAN 10"	12'
10" & ABOVE	15'

6

20a

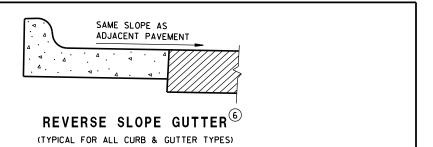
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CONCRETE PANEL WIDTH SAME PAY LIMITS TRAFFIC TRAFFIC LANE -AS CURB & GUTTER LANE PAVEMENT SLOPE PAVEMENT THICKNESS

PARTIAL SECTION OF PAVEMENT WITH INTEGRAL CURB & GUTTER



CONCRETE CURB & GUTTER

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

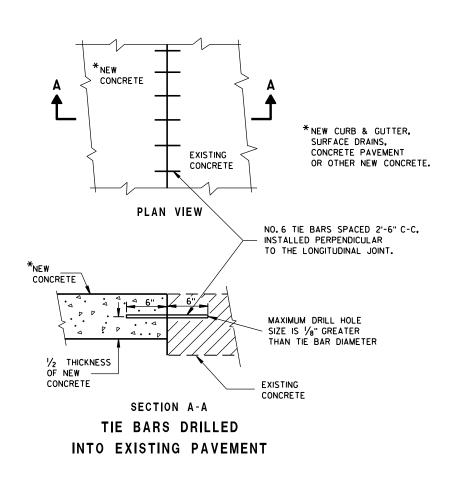
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^{*} BIKE LANE IS NOT SHOWN.

DETAIL OF CURB AND GUTTER AT INLETS (TYPE H INLET COVER SHOWN)

CONTRACTION **PAVEMENT**

END SECTION CURB & GUTTER



GENERAL NOTES

_ 1/2"/FT.BATTER,FACE OF CURB (ABOVE ADJACENT PAVEMENT)

ADJACENT

PAVEMENT

NO. 4 X 2'-0" DEF. TIE

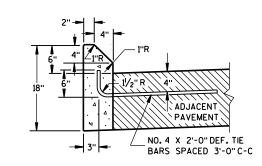
BARS SPACED 3'-0" C-C

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.

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

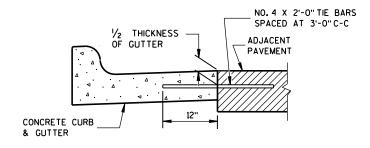
- 1) TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A.G.K.R AND TBTT.
- 2 THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.
- (9) REFER TO SDD 8D18 AND SDD 8D19 FOR ADDITIONAL DRIVEWAY ENTRANCE CURB DETAILS.



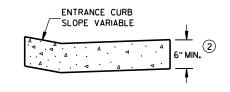
TYPES A D

TYPES G 4 J

CONCRETE CURB



TYPICAL TIE BAR LOCATION 1



DRIVEWAY ENTRANCE CURB (9)

(WHEN DIRECTED BY THE ENGINEER)

CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

/S/ Rodney Taylor June, 2017 DATE

ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

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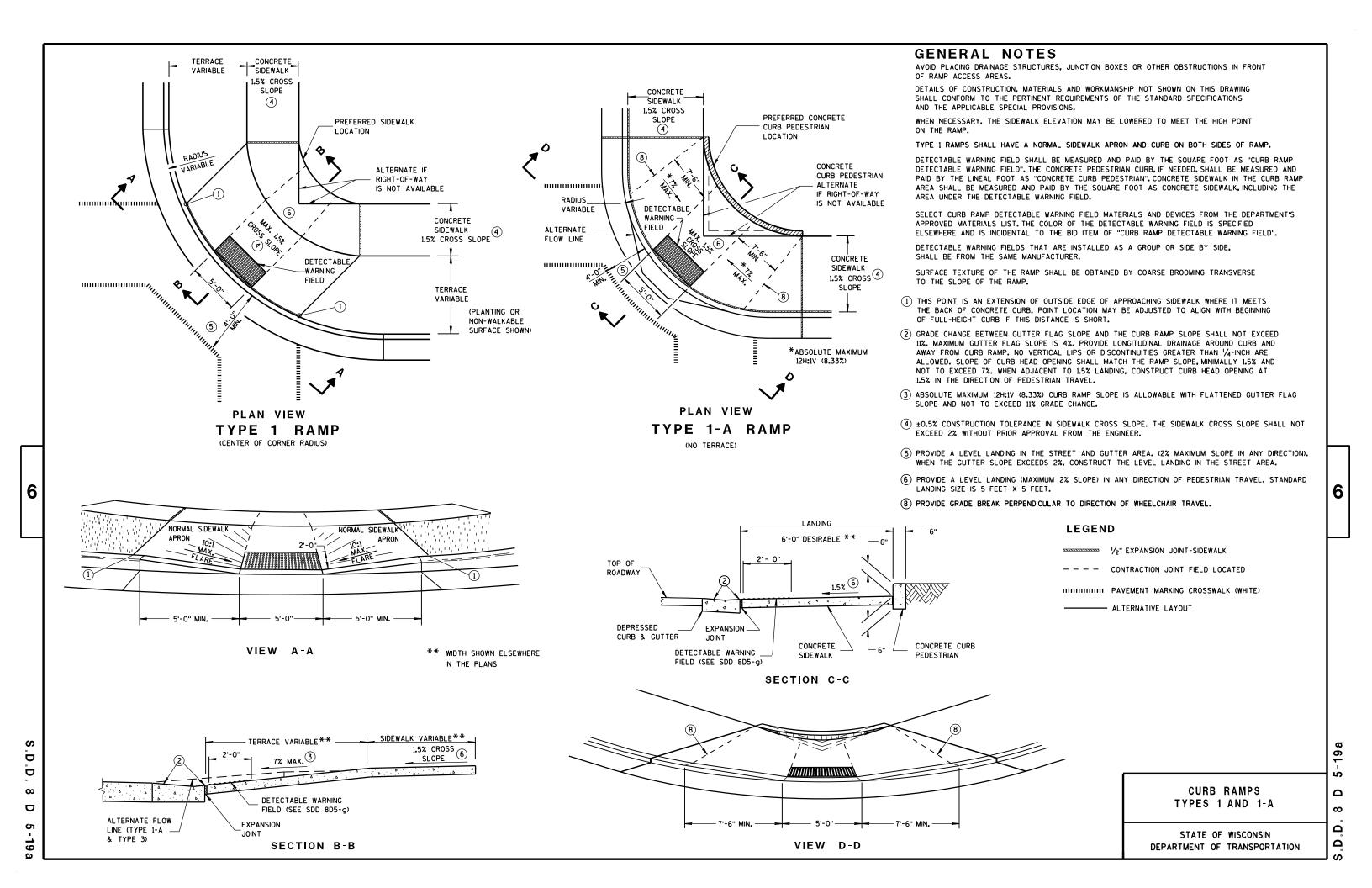
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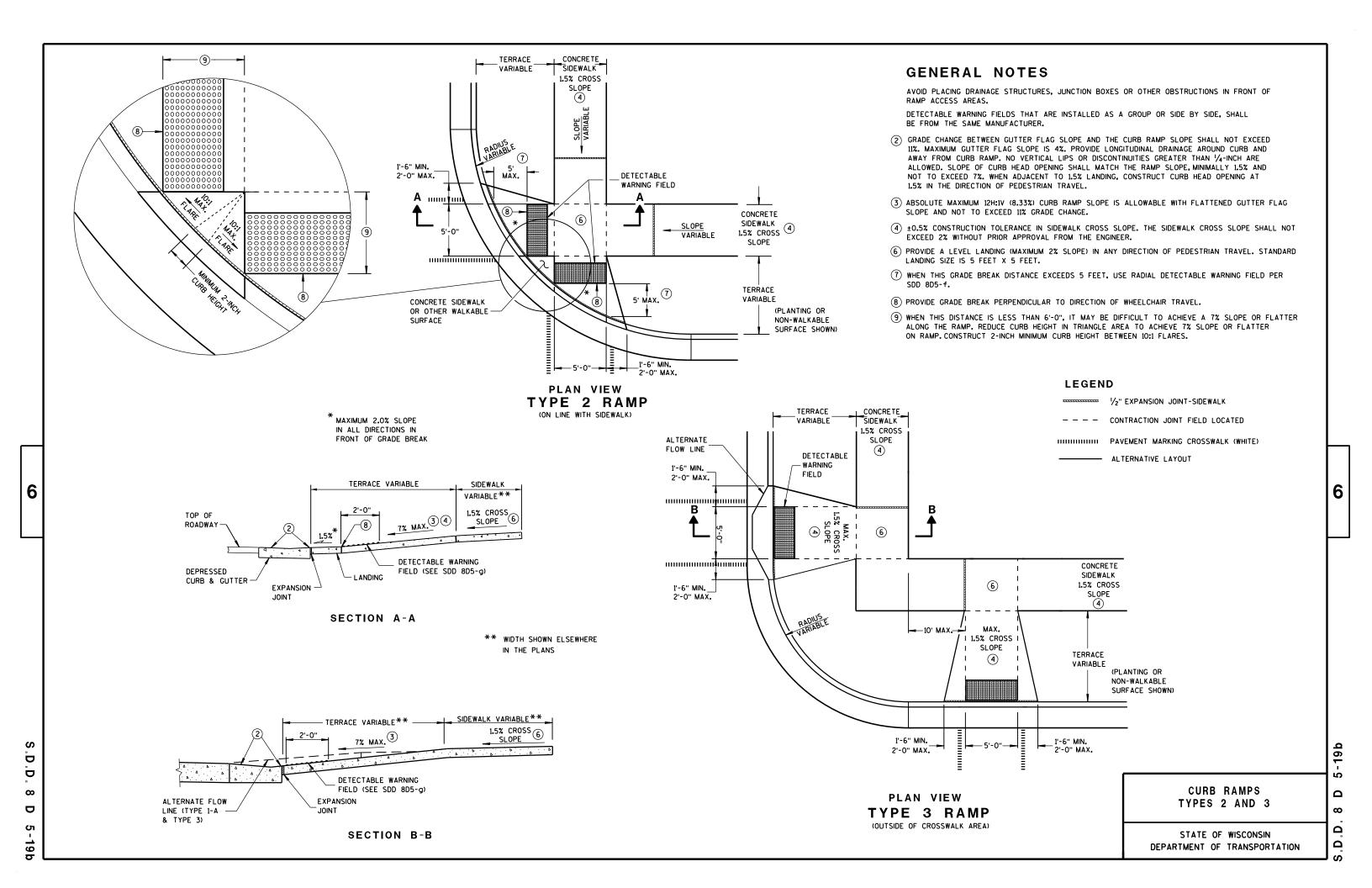
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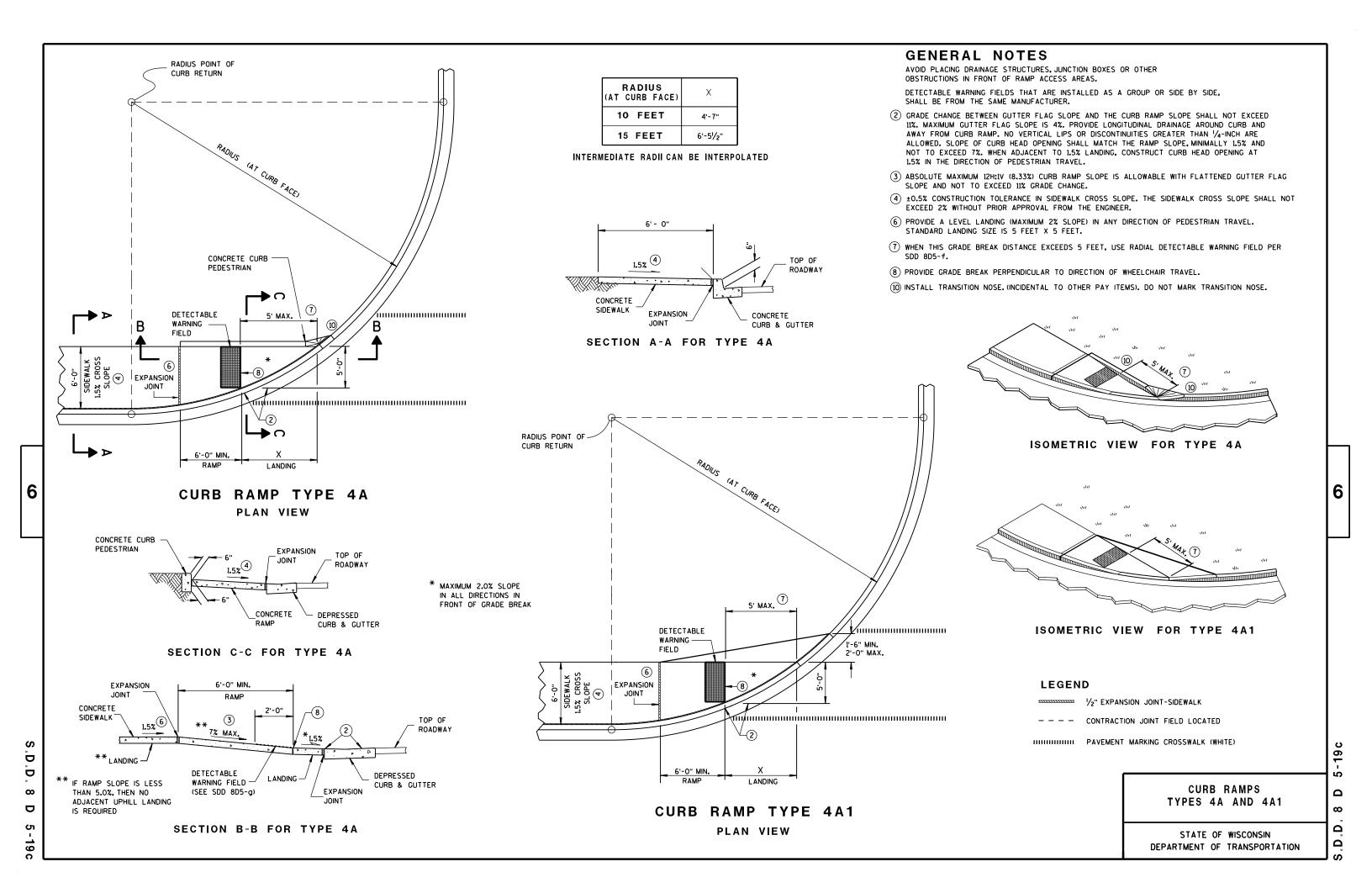
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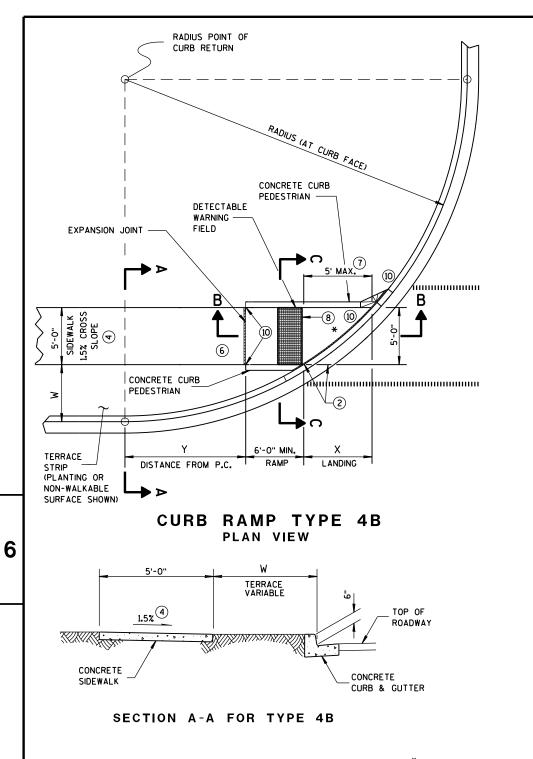
20b

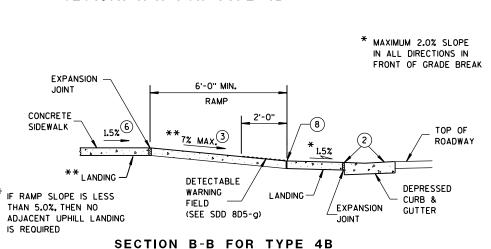
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RADIUS	W =	3' - 0"	W = 4' - Ø"		W = 5' - 0"		W = 6' - 0"		W =	7' - Ø"	W = 8' - Ø"		W = 9' - Ø"		W = 10' - 0"	
(AT CURB FACE)	Х	Y	Х	Y	Х	Y	X	Y	Х	Y	Х	Y	Х	Y	Х	Y
10 FEET	2'-101/4"	0'-5"	2'-1"	1'-41/2"	1'-5"	2'-1"	0'-10"	2'-71/2"	0'-31/4"	3'-01/4"						
15 FEET	4'-6¾"	2'-13/4"	3'-9"	3'-51/4"	3'-1'/4"	4'-6"	2'-6¾"	5'-41/2"	2'-1"	6'-1"	1'-8"	6'-81/2"	1'-31/4"	7'-21/2"	0'-10¾"	7'-71/4"
20 FEET	5'-9¾"	3'-61/2"	4'-11'/2"	5'-13/4"	4'-3'/4"	6'-51/2"	3'-8¾"	7'-7"	3'-3"	8'-61/2"	2'-10"	9'-41/2"	2'-51/2"	10'-1'/4"	2'-11/4"	10'-9"
30 FEET			6'-9'/4"	7'-11'/4"	6'-0'/4"	9'-8"	5'-5"	11'-1¾''	4'-10¾"	12'-5¾"	4'-51/2"	13'-7¾"	4'-0¾"	14'-81/2"	3'-81/2"	15'-8'/4"
40 FEET									6'-1¾"	15'-81/2"	5'-8"	17'-2"	5'-3"	18'-5¾"	4'-10¾"	19'-8'/4"
50 FEET															5'-10'/4"	23'-2"

GENERAL NOTES

5'-0" RAMP

VARIES

0 TO 6"

<u>1.5%</u>

SECTION C-C FOR TYPE 4B

CONCRETE CURB

PEDESTRIAN

TERRACE STRIP

VARIES O TO W

CONCRETE

CURB & GUTTER

ROADWAY

INTERMEDIATE RADII CAN BE INTERPOLATED
DIMENSION "Y" IS CALCULATED BASED ON 6'-0" RAMP LENGTH
DIMENSION "X" IS CALCULATED BASED ON 5'-0" SIDEWALK WIDTH

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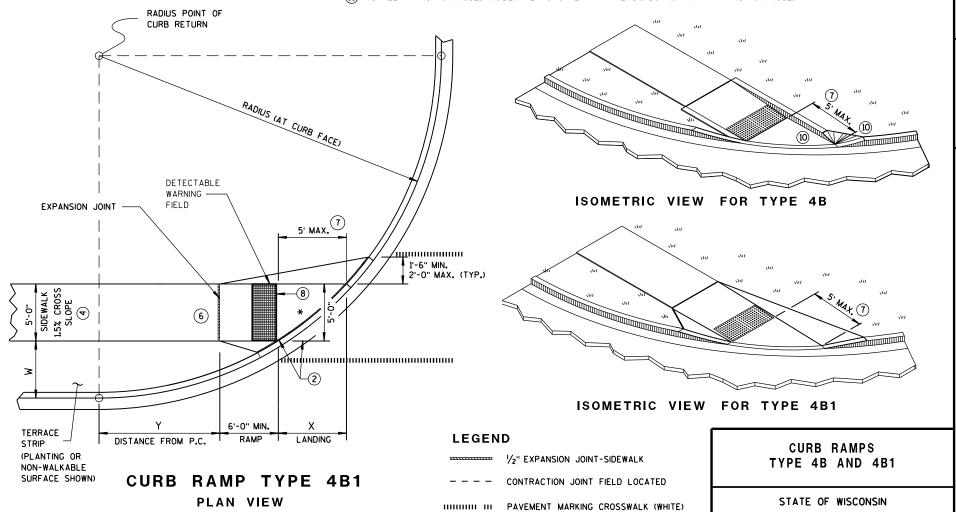
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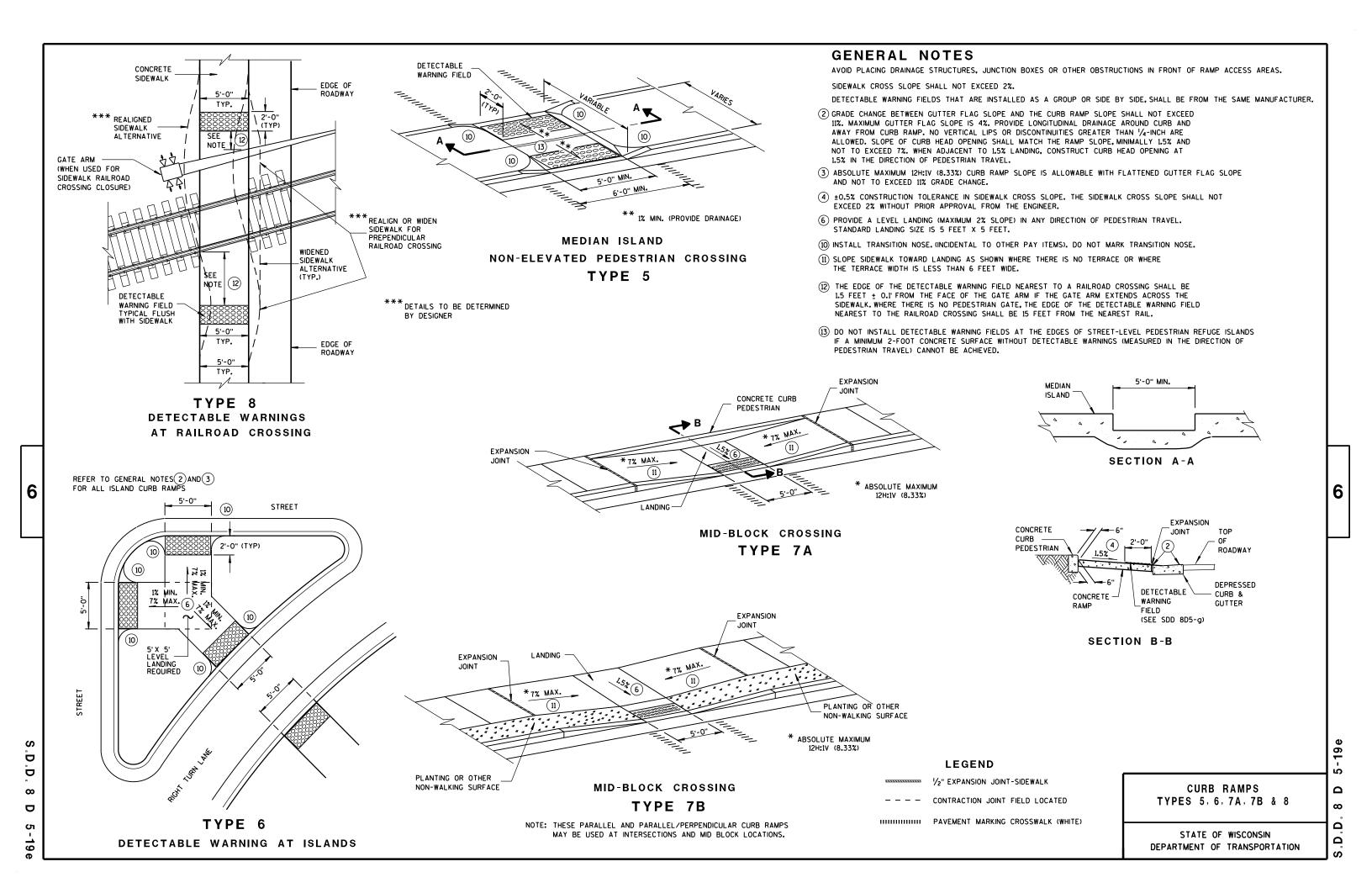
DEPARTMENT OF TRANSPORTATION

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

- ② GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4-INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.
- 3 ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.
- 4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
- 6 PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET.
- WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.
- 8 PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.
- (10) INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.





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.

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.



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 /S/ Beth Connestro
CHIEF ROADWAY DEVELOPMENT ENGINEER

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TYPICAL APPLICATION OF SILT FENCE

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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.

- \bigcirc 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 11/8" X 11/8" 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 TIE BACK
(WHEN REQUIRED BY THE ENGINEER)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
4-29-05 /S/ Beth Cannestra

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

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INLET PROTECTION, TYPE A

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

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.



INLET PROTECTION, TYPE C (WITH CURB BOX)

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

/S/ Beth Cannestra CHIEF ROADWAY DEVELOPMENT ENGINEER 6

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	METAL APRON ENDWALLS													
PIPE	MIN. 1	THICK.		APPROX.										
DIA.	(Incl		A	В	Н	[.	Γį	L ₂	W	SLOPE	BODY			
(IN.)	STEEL	ALUM.	(±1")	(MAX.)	(±1")	(±1 ½")	①	0	(±2")	320.2				
12	.064	.060	6	6	6	21	12	171/2	24	2½+o 1	1Pc.			
15	.064	.060	7	8	6	26	14	213/4	30	21/2+o 1	1Pc.			
18	.064	.060	8	10	6	31	15	281/4	36	21/2+o 1	1Pc.			
21	.064	.060	9	12	6	36	18	295/8	42	21/2+o 1	1Pc.			
24	.064	.075	10	13	6	41	18	371/4	48	21/2+o 1	1Pc.			
30	.079	.075	12	16	8	51	18	521/4	60	21/2+0 1	1Pc.			
36	.079	. 105	14	19	9	60	24	59¾	72	21/2+o 1	2 Pc.			
42	.109	.105	16	22	11	69	24	75%	84	21/2 to 1	2 Pc.			
48	.109	.105	18	27	12	78	24	81	90	2 ¹ / ₄ +o 1	3 Pc.			
54	.109	.105	18	30	12	84	30	851/2	102	2 ¹ / ₄ †o 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	11/2+0 1	3 Pc.			
84	.109×	.105×	18	45	12	87	_	_	138	11/2 to 1	3 Pc.			
90	.109×	.105×	18	37	12	87	_	_	144	11/2+0 1	3 Pc.			
96	.109×	.105×	18	35	12	87	_	_	150	1/2+0 1	3 Pc.			

	RE	INFORC	ED C	ONCRET	E APRO	N E	NDWAL	.LS				
PIPE		DIMENSIONS (Inches)										
DIA.	T	A	В	С	D	Ε	G	APPROX. SLOPE				
12	2	4	24	48 1/8	721/8	24	2	3 to 1				
15	21/4	6	27	46	73	30	21/4	3 to 1				
18	21/2	9	27	46	73	36	21/2	3 to 1				
21	23/4	9	36	371/2	731/2	42	23/4	3 to 1				
24	3	91/2	431/2	30	731/2	48	3	3 to 1				
27	31/4	101/2	491/2	24	731/2	54	31/4	3 to 1				
30	$3\frac{1}{2}$	12	54	193/4	731/2	60	31/2	3 to 1				
36	4	15	63	34¾	97¾	72	4	3 to 1				
42	$4\frac{1}{2}$	21	63	35	98	78	41/2	3 to 1				
48	5	24	72	26	98	84	5	3 to 1				
54	51/2		65	**************************************	8 ¹ / ₄ - 100	90	51/2	2% to 1				
60	6	* * * 30-35	60	39	99	96	5	2 to 1				
66	61/2	* ** 24-30	* * * 72-78	* * * 21-27	99	102	51/2	2 to 1				
72	7	* ** 24-36	78	21	99	108	6	2 to 1				
78	71/2	* ** 24-36	78	21	99	114	61/2	2 to 1				
84	8	36	901/2	21	1111/2	120	61/2	1½+o 1				
90	81/2	41	871/2	24	1111/2	132	61/2	11/2+0 1				

THREADED %6" DIA. ROD CONNECTOR AROUND CULVERT & THROUGH TANK TYPE CONNECTOR LUG LUG OR ALTERNATE CONNECTOR STRAP (SEE DETAIL) MEASURED LENGTH OF CULVERT TYPE 1 FOR 12" THRU 24" CORR. PIPE







NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL.

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

DIMPLED BAND MAY BE USED WITH HELICALLY

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.

1" WIDE, 12 GA. (0.109" THICK) GALVANIZED STRAP WITH STANDARD 6" X 1/2" BAND BOLT AND NUT ALTERNATE FOR TYPE 1 CONNECTION END SECTION CONNECTOR STRAP

* EXCEPT CENTER PANEL SEE GENERAL NOTES





SHOULDER

SLOPE



SIDE ELEVATION METAL ENDWALLS



**MAXIMUM





CONCRETE ENDWALLS

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

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.

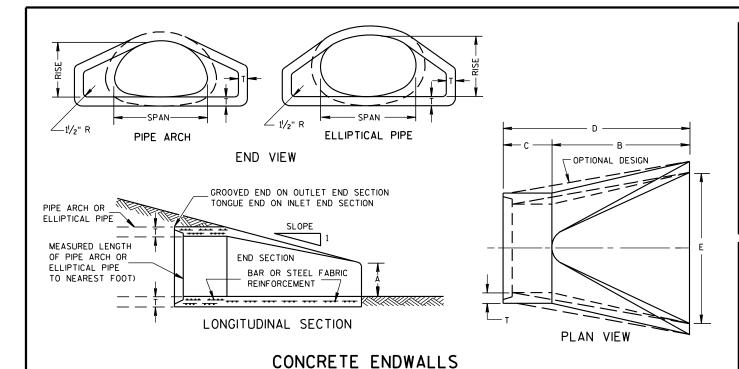
(1) FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.



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

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Checkson SPAN RISE STEEL ALUM. (±1") (MAX.) (±1") (±1½") (±1½") (±2") SLOPE		2- 2/3" X 1/2" CORRUGATIONS													
DIA. (Inches) A B H L L1 L2 W (±2") SLOPE BOD'	EQUIV.	(loci	hasi	MIN. 1	HICK.				APPROX						
15	DIA.		(Incl	nes)	A B			L			W	1 1	BODY		
18 21 15 .064 .060 7 10 6 23 14 19¾8 36 2½to 1 1 Pc 21 24 18 .064 .060 8 12 6 28 18 21¾4 42 2½to 1 1 Pc 24 28 20 .064 .060 9 14 6 32 18 27½ 48 2½to 1 1 Pc 30 35 24 .079 .075 10 16 6 39 18 37½ 60 2½to 1 1 Pc 36 42 29 .079 .075 12 18 8 46 24 45¾ 75 2½to 1 1 Pc 42 49 33 .109 .105 13 21 9 53 24 54¾ 85 2½to 1 3 Pc 48 57 38 .109 .105 18 26 12 63 24 68 90 2½to 1 3 Pc 54 64 43 .109 .105 18 30 12 70 24 72¾ 102 2½to 1 3 Pc 60 71 47 </th <th>(Inches)</th> <th>SPAN</th> <th>RISE</th> <th>STEEL</th> <th>ALUM.</th> <th>(±]")</th> <th>(MAX.)</th> <th>(±]")</th> <th>(±1 ½")</th> <th>①</th> <th>0</th> <th>(±2")</th> <th>3E0. E</th> <th></th>	(Inches)	SPAN	RISE	STEEL	ALUM.	(±]")	(MAX.)	(±]")	(±1 ½")	①	0	(±2")	3E0. E		
21	15	17	13	.064	.060	7	9	6	19	14	16	30	2½+o 1	1Pc.	
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 18 375% 60 2½ to 1 1 Pc 36 42 29 .079 .075 12 18 8 46 24 45¾ 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 66 77 52 .109* .105* 18 36 12 77 — 126 2 to 1 3 Pc 66 77 52 .109* .105* 18 36 12 77 — 126 2 to 1 3 Pc	18	21	15	.064	.060	7	10	6	23	14	193/8	36	21/2+o 1	1Pc.	
30 35 24 .079 .075 10 16 6 39 18 375/8 60 21/2 to 1 1 Pc 36 42 29 .079 .075 12 18 8 46 24 453/8 75 21/2 to 1 1 Pc 42 49 33 .109 .105 13 21 9 53 24 543/4 85 21/2 to 1 2 Pc 48 57 38 .109 .105 18 26 12 63 24 68 90 21/2 to 1 3 Pc 54 64 43 .109 .105 18 30 12 70 24 723/4 102 21/4 to 1 3 Pc 60 71 47 .109* .105* 18 33 12 77 30 821/4 114 21/4 to 1 3 Pc 66 77 52 .109* .105* 18 36 12 77 — 126 2 to 1 3 Pc	21	24	18	.064	.060	8	12	6	28	18	213/4	42	21/2+o 1	1Pc.	
36	24	28	20	.064	.060	9	14	6	32	18	271/2	48	21/2+o 1	1 Pc.	
42 49 33 .109 .105 13 21 9 53 24 54¾ 85 2½to 1 2 Pr 48 57 38 .109 .105 18 26 12 63 24 68 90 2½to 1 3 Pr 54 64 43 .109 .105 18 30 12 70 24 72¾ 102 2¼to 1 3 Pr 60 71 47 .109* .105* 18 33 12 77 30 82¼ 114 2¼to 1 3 Pr 66 77 52 .109* .105* 18 36 12 77 — 126 2 to 1 3 Pr	30	35	24	.079	.075	10	16	6	39	18	375/8	60	21/2+o 1	1 Pc.	
48 57 38 .109 .105 18 26 12 63 24 68 90 2½t 1 3 Pr 54 64 43 .109 .105 18 30 12 70 24 72¾ 102 2½t 1 3 Pr 60 71 47 .109* .105* 18 33 12 77 30 82¼ 114 2¼t 1 3 Pr 66 77 52 .109* .105* 18 36 12 77 — 126 2 to 1 3 Pr	36	42	29	.079	.075	12	18	8	46	24	45%	75	21/2+o 1	1Pc.	
54 64 43 .109 .105 18 30 12 70 24 72¾ 102 2½/4 to 1 3 Po 60 71 47 .109* .105* 18 33 12 77 30 82¼ 114 2¼ to 1 3 Po 66 77 52 .109* .105* 18 36 12 77 — 126 2 to 1 3 Po	42	49	33	.109	.105	13	21	9	53	24	54¾	85	21/2 to 1	2 Pc.	
60 71 47 .109* .105* 18 33 12 77 30 82'/4 114 2'/4+0 1 3 PG 66 77 52 .109* .105* 18 36 12 77 — 126 2 +0 1 3 PG	48	57	38	.109	.105	18	26	12	63	24	68	90	2½+o 1	3 Pc.	
66 77 52 .109* .105* 18 36 12 77 — — 126 2 to 1 3 Pd	54	64	43	.109	.105	18	30	12	70	24	723/4	102	2 ¹ / ₄ +o 1	3 Pc.	
	60	71	47	.109*	.105*	18	33	12	77	30	821/4	114	21/4+0 1	3 Pc.	
70 07 57 1004 1054 10 70 10 77	66	77	52	. 109*	.105 *	18	36	12	77	_	-	126	2 to 1	3 Pc.	
12 83 57 .109* .105* 18 39 12 77 — — 138 2 †0 1 3 Pa	72	83	57	.109*	.105*	18	39	12	77	_	_	138	2 to 1	3 Pc.	

	3" X 1" CORRUGATIONS														
EQUIV.	(Incl	nes)	MIN. 1		A	DIMENSIONS (Inches) A B H L L1 L2 W									
(Inches)	SPAN	RISE	STEEL	ALUM.	(±1")	(MAX.)		(±1½")		0	(±2")	SLOPE			
48	53	41	.109	.105	18	26	12	63	24	723/4	90	2½+o 1	2 Pc.		
54	60	46	.109	.105	18	30	12	70	30	821/4	102	2 to 1	2 Pc.		
60	66	51	.109*	.105 *	18	33	12	77	_	_	114	11/2+0 1	3 Pc.		
66	73	55	.109 ×	. 105*	18	36	12	77	_	_	126	11/2+0 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	1/2+0 1	3 Pc.		
84	95	67	.109*	.105×	22	34	12	77	_	_	162	11/2+0 1	3 Pc.		
90	103	71	.109*	. 105*	22	38	12	77	_	_	174	11/2+0 1	3 Pc.		
96	112	75	.109*	.105*	24	40	12	77	_	_	174	11/2 to 1	3 Pc.		

NOTE: ALL SPLICES TO BE LAP RIVETED OR BOLTED.

THREADED 7/6" DIA. ROD OVER TOP OF APRON, SIDE

LUGS TO BE RIVETED TO

MEASURED LENGTH OF PIPE ARCH

MEASURED LENGTH

OF PIPE ARCH

SECTION

CONNECTOR SECTION

TO BE PAID FOR AS

PART OF END SECTION

CONNECTOR

* EXCEPT CENTER PANEL SEE GENERAL NOTES

ROD HOLDER

COUPLING BAND

RIVETED OR

BOLTED

REQUIRED

		REINF	ORCE	CON	CRET	E PIP	E ARC	СН			
EQUIV.		DIMENSIONS (Inches)									
DIA. (Inches)	** SPAN	** RISE	T	A	В	С	D	E	SLOPE		
24	29	18	3	81/2	39	33	72	48	3 to 1		
30	36	22	31/2	91/2	50	46	96	60	3 to 1		
36	44	27	4	111/8	60	36	96	72	3 to 1		
42	51	31	41/2	1513/16	60	36	96	78	3 to 1		
48	58	36	5	21	60	36	96	84	3 to 1		
54	65	40	51/2	251/2	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	281/2	83	19	102	144	2 to 1		

REINFORCED CONCRETE ELLIPTICAL PIPE									
EQUIV.			DIME	NSIONS	(Inche	s)			APPROX.
DIA. (Inches)	** SPAN	** RISE	T	A	В	С	D	Ε	SLOPE
24	30	19	31/4	81/2	39	33	72	48	3 to 1
30	38	24	3¾	91/2	54	18	72	60	3 to 1
36	45	29	41/2	111/8	60	24	84	72	21/2+o 1
42	53	34	5	15¾	60	36	96	78	21/2+o 1
48	60	38	51/2	21	60	36	96	84	2½+o 1
54	68	43	6	251/2	60	36	96	90	2½+o 1
60	76	48	61/2	30	60	36	96	96	21/2 to 1

**NOMINAL SIZE

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.

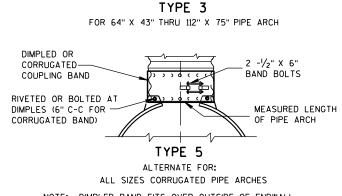
CONCRETE APRON ENDWALLS MAY NOT BE USED WITH GALVANIZED STEEL OR ALUMINUM CULVERT PIPE OR VISE VERSA, GALVANIZED STEEL OR ALUMINUM APRON ENDWALLS SHALL NORMALLY BE INSTALLED ON CULVERT PIPE OF THE

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

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.



TYPE 2

FOR 17" X 13" THRU 112" X 75" PIPE ARCH

NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL.

phonelly.	TUBING SLIPPED (AND RIVETS PRIO CATION OF THE E
L ₂ ① 3%" R.	3%" DIA. X 1/2" OR ALUM. BUT SPACED AT 6 LENGTH OF RI 3%" R. OUTSIDE SIDEWALL
EDGE OF SIDEWALL SHEET ROLLED SNUGLY AGAINST STEEL ROD	MINIMUM %6" STEEL ROD O GALV. REINFOF

APRON ENDWALLS FOR PIPE ARCH AND ELLIPTICAL PIPE

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVED				
11/30/94	/	S/ Rory	L. Rhinesmi	th
DATE	CHIEF	ROADWAY	DEVELOPMENT	ENGINEER
FHWA				

REINFORCED EDGE (SEE SECTION A-A)
PLAN VIEW END CORNER PLATES MAY BE FASTENED TO APRON PROPER BY BOLTS, RIVETS, OR RESISTANCE SPOT WELDS WHICH WILL HOLD THE SURFACES TIGHTLY TOGETHER PLATE W + 10" (RISE 23" THRU 29") W + 20" (RISE 33" THRU 75") END VIEW END CORNER PLATES MAY BE FASTENED TO APRON PROPER BY BOLTS, RIVETS, OR RESISTANCE SPOT WELDS WHICH WILL HOLD THE SURFACES TIGHTLY TOGETHER TOE PLATE (SAME THICKNESS AND METAL AS APRON) SHALL BE FURNISHED WHEN CALLED FOR ON THE PLANS
SHOULDER SLOPE SLOPE FLOW LINE

SIDE ELEVATION

METAL ENDWALLS

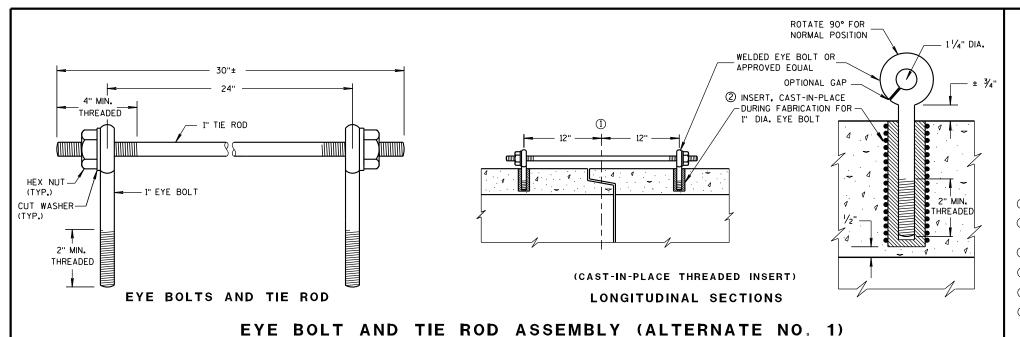
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0.109" THICK GALV. STEEL OR 0.109" THICK ALUMINUM 3/8" DIA. RIVETS SPACED APRON SIDEWALL AT 6" C-C SHEET 1" O.D. X O.079" THICK GALV. STEEL OR 0.075" THICK ALUM. OVER SHEET OR TO FABRI-END SECTION "- GALV. STEEL TTONHEAD RIVETS 6" C-C. OVER-RIVET = 0.78" OF APRON L SHEET DIA. GALV. OR 10M ORCING BAR

└─ ¹/8" (APPROX.)

CONNECTION DETAILS



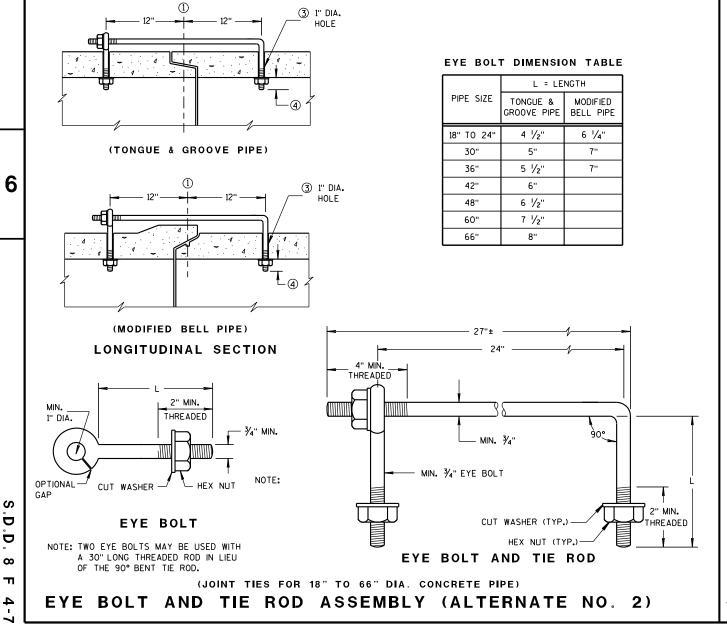
DETAILS OF CONSTRUCTION, MATERIALS, AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

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.

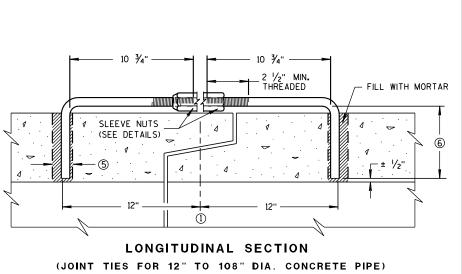
DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR JOINT TIES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

JOINT TIES TO BE HOT-DIP GALVANIZED PER ASTM A 153.

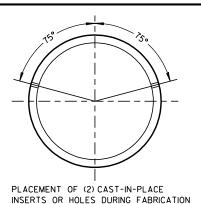
- (1) & OF TONGUE AND GROOVE OR BELL AND SPIGOT JOINTS.
- THE INSIDE OF THE THREADED INSERTS SHALL BE CLEAN TO ALLOW THE INSERTION OF THREADED EYE
- ${\mathfrak S}$ HOLES SHALL BE CAST-IN-PLACE OR DRILLED 12 INCHES FROM ${\mathfrak L}$ OF TONGUE AND GROOVE.
- 4 BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 2 INCHES.
- (5) OPENING TO BE ROD DIAMETER PLUS 1 INCH.
- ⑥ LENGTH ADEQUATE TO EXTEND TO WITHIN $rac{1}{2}$ INCH OF THE INNER SURFACE OF THE PIPE.



ADJUSTABLE TIE ROD TABLE 5/8 5 12-60 3/4 5 1/2 3/4 90-108 DIMENSIONS SHOWN ARE IN INCHES **TAPERED** PLAIN RIGHT AND LEFT THREADS **SLEEVE NUTS** 2 1/2" MIN. THREADED

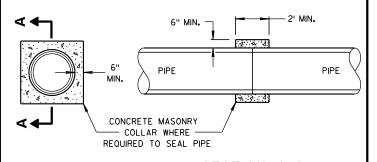


ADJUSTABLE TIE ROD (ALTERNATE NO. 3)



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

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

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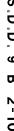
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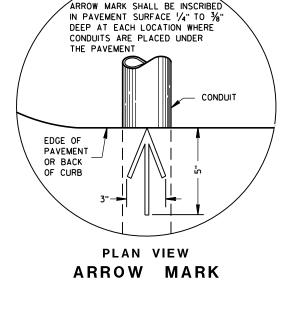


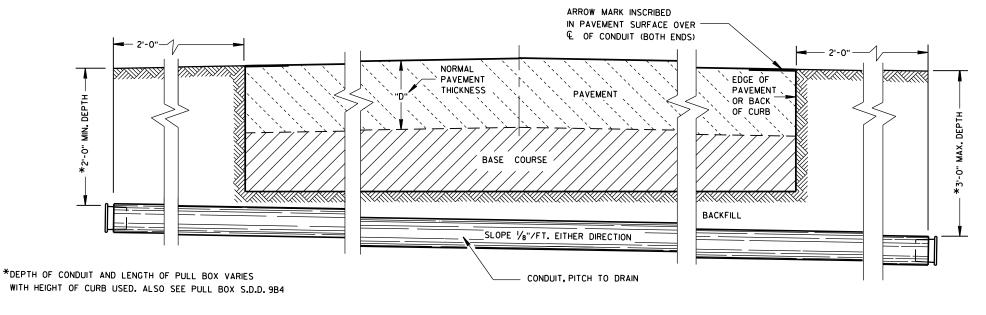












SIDE ELEVATION DETAIL FOR CONDUIT UNDER PAVED HIGHWAYS

GENERAL NOTES

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

METALLIC (STANDARD SPECIFICATION 652.2.2) OR NONMETALLIC (STANDARD SPECIFICATION 652.2.3) CONDUIT SHALL BE FURNISHED AND PLACED AS SHOWN.

DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES MINIMUM AND 36 INCHES MAXIMUM.

DEPTH OF CONDUIT INSTALLED THAT IS NOT BELOW THE TRAVELED WAY SHALL BE 18 INCHES MINIMUM AND 36 INCHES MAXIMUM.

ANY EXCEPTION TO THE MAXIMUM DEPTH SHALL BE ONLY WITH THE WRITTEN APPROVAL OF THE ENGINEER.

THE TRENCH SHALL NOT BE BACKFILLED PRIOR TO INSPECTION OF THE CONDUIT.

ALL METALLIC CONDUIT RACEWAY ENDS SHALL BE REAMED AND THREADED.

ALL METALLIC CONDUIT IN WHICH WIRE OR CABLE IS TO BE INSTALLED SHALL BE BUSHED WITH APPROVED THREADED BUSHINGS BEFORE INSTALLATION OF THE WIRE OR CABLE.

ALL METALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT TO BE INSTALLED SHALL BE CAPPED WITH THREADED PROTECTIVE CAPS, AS APPROVED BY THE ENGINEER.

ALL NONMETALLIC CONDUIT SHALL BE CAPPED OR PLUGGED IMMEDIATELY AFTER INSTALLATION AND SHALL REMAIN CAPPED OR PLUGGED UNTIL WIRE/CABLES ARE INSTALLED.

NONMETALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BENDING OF PVC ELECTRICAL CONDUIT SHALL BE ACCOMPLISHED BY USING A BLANKET OR EMERSION TYPE TANK DESIGNED FOR THE PURPOSE OF BENDING PVC ELECTRICAL CONDUIT.

ALL CUT ENDS SHALL BE TRIMMED INSIDE AND OUTSIDE TO REMOVE ALL ROUGH EDGES ON NONMETALLIC CONDUIT. (SEE NEC 347.5)

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY U.L.LISTED ADAPTER FITTINGS SHALL BE USED.

PRIOR TO CONDUIT ACCEPTANCE, CONDUIT CAPS OR PLUGS SHALL BE REMOVED, AND THE CAPS, PLUGS AND CONDUIT ENDS SHALL BE THOROUGHLY CLEANED AND THEN THE CAPS OR PLUGS REIN-STALLED TO ENSURE THAT THE CAPS OR PLUGS CAN BE EASILY REMOVED IN THE FUTURE.

ALL CONDUIT BEING FURNISHED AND INSTALLED SHALL HAVE THE U.L. LABEL FIRMLY

CONDUIT RUNS SHALL BE THE SAME SIZE OF CONDUIT FROM ONE END TO THE OTHER (FROM PULL BOX TO PULL BOX-OR-JUNCTION BOX TO JUNCTION BOX-OR-BASE TO BASE, ETC.).

TRACER WIRE SHALL BE INSTALLED AS STATED IN THE STANDARD SPECIFICATION, ITEM 652.3.1.1.

ALL CONDUIT RUNS SHALL BE STRAIGHT (WITHOUT BENDS) FROM PULL BOX TO PULL BOX, PULL BOX TO BASE AND BASE TO BASE AS SHOWN ON THE PLANS.

CONDUIT

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVED	
March, 2017	/S/ Ahmet Demirbilek
DATE	STATE ELECTRICAL ENGINEER

DIMENSION IN INCHES		NON-CONDUCTIVE PULL BOX			
BOX DIAMETER ** (INSIDE)	I Δ I		24		
BOX OVERALL OUTSIDE DIAMETER	В	27	27		
BOX LENGTH		36	42		
FRAME OPENING	D	22 1/2	22 1/2		
WEIGHT IN POUNDS *					
COVER		50	50		
BOX ONLY		75	85		

- * THE ACTUAL WEIGHT OF THE COVER OR BOX ONLY MAY VARY NOT TO EXCEED 100 LBS INDIVIDUALLY.
- ** DIAMETER VARIES FROM TOP TO BOTTOM WITH THE DIAMETER LARGER AT THE BOTTOM TO PREVENT FROST HEAVE

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

ALL BOXES, FRAMES AND COVERS SHALL BE SUITABLE FOR TIER 15 LOADING AS SPECIFIED IN ANSI/SCTE 77.

PROVIDE AN OPENING FOR TOOL ASSISTED COVER REMOVAL NOT LARGE ENOUGH TO PERMIT PASSAGE OF A SPHERE MORE THAN 1/2" DIAMETER

ENSURE COVER SURFACE IS SKID RESISTANT WITH A COEFFICIENT OF FRICTION OF AT LEAST 0.5 AND VERTICAL SURFACE DICONTINUITIES LESS THAN 1/4".

COVER SHALL BE MAGNETICALLY LOCATABLE.

BOXES AND EXTENSIONS ARE TRIMMABLE FOR CUSTOM LENGTHS. TRIMMED PIECES SHALL MAINTAIN A UNIFORM LENGTH.

ENTRANCE HOLES INTO PULL BOXES SHALL BE CUT WITH A CIRCULAR HOLE SAW OR HYDRAULIC CONDUIT PUNCH. HOLE SIZE SHALL BE THE OUTSIDE DIAMETER OF THE CONDUIT THAT IS TO FIT IN THE OPENING PLUS NO MORE THAN 1/4".

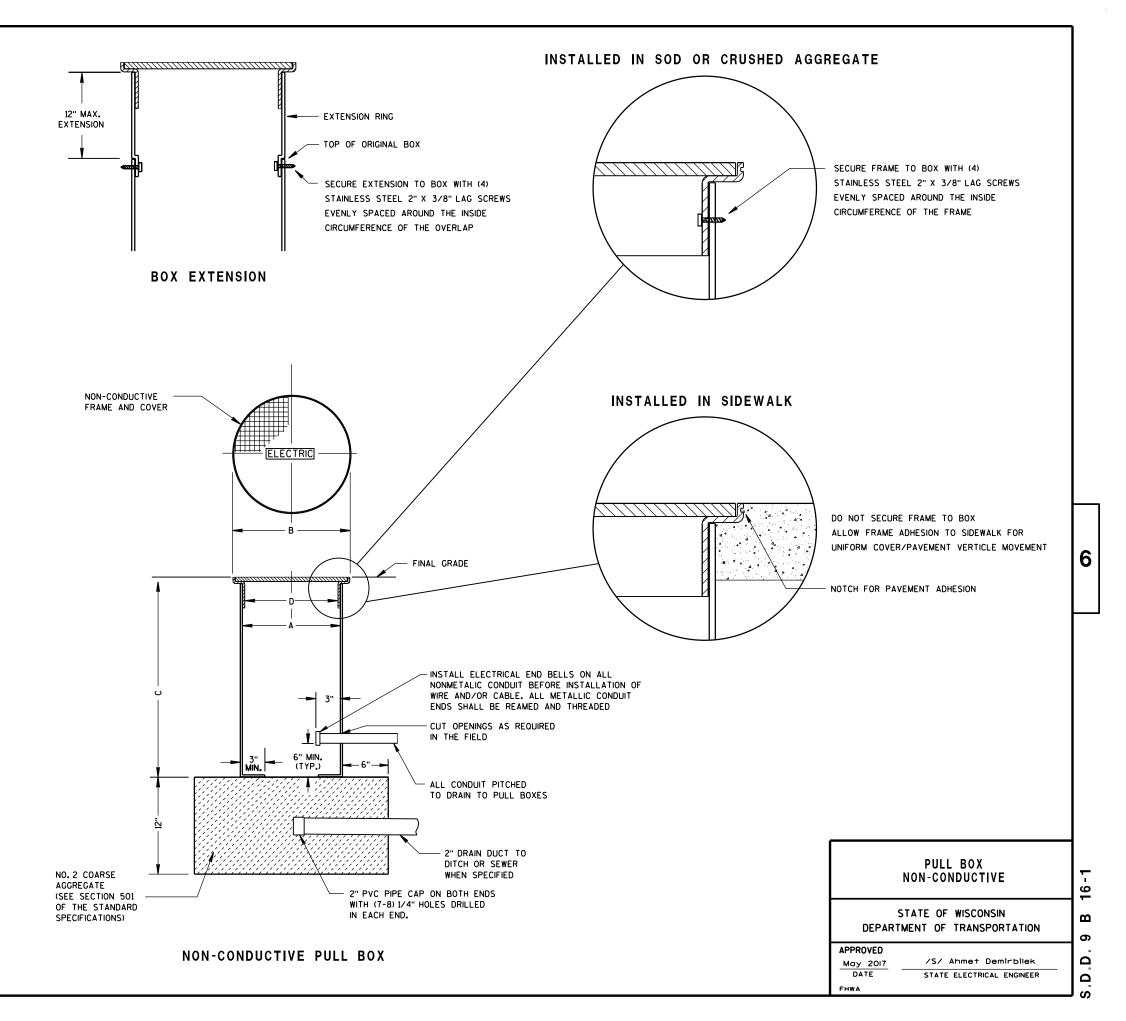
THE CONTRACTOR SHALL NOT INSTALL WIRE IN ANY PULL BOX UNTIL ITS INSTALLATION HAS BEEN INSPECTED AND ACCEPTED BY THE ENGINEER.

ALL METALLIC CONDUIT IN WHICH WIRE AND/OR CABLE IS TO BE INSTALLED, SHALL BE BUSHED BEFORE INSTALLATION OF THE WIRE AND/OR CABLE.

ENTIRE BOX MUST BE CONSTRUCTED OF NON-CONDUCTIVE MATERIALS WITH THE EXCEPTION OF STAINLESS STEEL FASTENERS AND MAGNETIC LOCATABLE DEVICE.

WHEN A PULL BOX IS INSTALLED IN CRUSHED AGGREGATE SHOULDERS, PLACE IT 2-3 INCHES BELOW GRADE AND COVER IT WITH 2-3 INCHES OF CRUSHED AGGREGATE

LABEL ON COVER SHALL READ "ELECTRIC" FOR SIGNAL AND LIGHTING SYSTEMS, "WISDOT ITS" FOR COMMUNICATIONS AND ITS EQUIPMENT SYSTEMS.



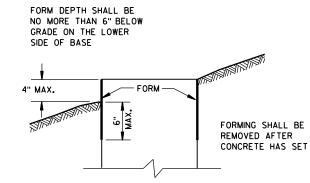


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QUANTITY	CONCRETE BASE TYPE				
REQUIREMENTS	1	2	5 & 6		
APPROX. CUBIC YARDS OF CONCRETE	0.40	0.57	0.40		
LBS. OF HOOP BAR STEEL	NONE	23	16		
LBS. OF VERTICAL BAR STEEL	NONE	60	18		

1" CONDUIT

PURPOSES

6" DIA.

ANCHOR RODS SHALL BE

ORIENTED PARALLEL TO

FORM ALL EXPOSED

CONCRETE. PROVIDE

1" CHAMFER ALL AROUND

THE ROADWAY

FOR GROUNDING

CONDUIT WITHIN

FORMING DETAIL

1'-8"

a)

1.1

1.1

1.1

CONDUIT WITHIN

ANCHOR RODS SHALL BE

ORIENTED PARALLEL TO

THE ROADWAY

FORM ALL EXPOSED

CONCRETE. PROVIDE

TOPSOIL AND

SEED OR CRUSHED

AGGREGATE

EXOTHERMIC CONNECTION

GROUNDING CONDUCTOR

TO EQUIPMENT

%" DIA. X 8'-0"

COPPERCLAD EQUIPMENT

GROUNDING

ELECTRODE

D

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C

1" CHAMFER ALL AROUND

HALF SECTION

IN UNPAVED AREA

(TYPICAL FOR TYPES 1, 2, 5, & 6)

-CONDUIT

123/4" BOLT

CIRCLE

HALF SECTION

(TYPICAL FOR TYPES 1, 2, 5, & 6)

IN PAVEMENT

PAVEMENT 9

¾" PREFORMED

FILLER AS APPROVED BY THE ENGINEER

EXOTHERMIC CONNECTION

GROUNDING CONDUCTOR

TO EQUIPMENT

5/8" DIA. X 8'-0" COPPERCLAD EQUIPMENT

OPTIONAL 4" L BEND

REQUIRED

GROUNDING ELECTRODE

GENERAL NOTES

1" CONDUIT

PURPOSES

FOR GROUNDING

CONDUIT

CONDUIT WITHIN

6" DIA.

ANCHOR RODS SHALL

BE ORIENTED

PARALLEL TO

THE ROADWAY

FORM ALL EXPOSED

CONCRETE, PROVIDE

EXOTHERMIC CONNECTION

GROUNDING CONDUCTOR

%" DIA. X 8'-0" COPPERCIAD FOUIPMENT GROUNDING ELECTRODE

REQUIRED

OPTIONAL 4" L BEND

OR HEX NUT (TYPICAL

FOR TYPES 1, 2, 5, & 6)

TO EQUIPMENT

1" CHAMFER ALL AROUND

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

BASES SHALL BE EXCAVATED BY USE OF A CIRCULAR AUGER.

TOP SURFACES OF CONCRETE BASES SHALL BE TROWEL FINISHED SMOOTH AND LEVEL.

CONDUIT SIZES AND LOCATIONS SHALL BE AS SHOWN ON THE PLANS.

THE FINAL OR TERMINATING CONCRETE BASE IN A CONDUIT RUN SHALL HAVE A 6" EXIT STUB INSTALLED FOR FUTURE CABLING USE. THE EXIT STUB SHALL BE SIZED AS USED THROUGHOUT THE CONDUIT RUN AS SHOWN AT THE ENTRANCE OF THE BASE.

MINIMUM BENDING RADIUS OF CONDUIT IS EQUAL TO 6 X THE DIAMETER.

CONDUIT HEIGHT ABOVE CONCRETE BASES SHALL BE 1 INCH. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED, CONDUITS IN WHICH WIRE OR CABLE IS NOT INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

- Colo

-CONDUIT

3" X

-3" CLEAR

6" STUB

OPTIONAL 4" I BEND

OR HEX NUT (TYPICAL

FOR TYPES 1, 2, 5, & 6)

111/2" BOL T

COUT TO OUT

GENERAL NOTES (CONTINUED)

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF CONCRETE BASES BEFORE INSTALLATION OF CABLE OR WIRE.

ENDS OF CONDUIT INSTALLED BELOW GRADE FOR FUTURE USE SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC.

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

IF A BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE DIRT OR FILL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING AROUND THE BASE. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BARE CONCRETE BASE IN LAYERS OF 1FOOT OR LESS.

A NO. 4 AWG. STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD) FOR TYPE 1, TYPE 2, TYPE 5, AND TYPE 6 BASES.

THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE FURNISHED AND INSTALLED TO ENTER THE BASE OF THE TYPE 2 AND TYPE 5 BASES THROUGH A LINCH CONDUIT INSTALLED FOR GROUNDING PURPOSES, LEAVING A 4 FOOT COIL OF WIRE ABOVE THE CONCRETE BASE. THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE NEATLY COILED AND THE COILS TIED TOGETHER.

ANCHOR RODS SHALL BE THREADED 12" IN LENGTH ON EACH END OF THE ROD, ANCHOR RODS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 654.2.1 OF THE STANDARD SPECIFICATIONS.

WASHERS AND LOCK WASHERS ARE REQUIRED ON ALL ANCHOR RODS.

WHEN ANCHOR RODS USING THE ALTERNATE "L" BEND ARE FURNISHED. THE 4" "L" BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR ROD BAR LENGTH. THE "L" BEND END SHALL NOT BE THREADED.

ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40

WELDING OF THE ANCHOR RODS TO THE CAGE IS UNACCEPTABLE. TIE WIRES SHALL BE USED.

BAR STEEL REINFORCEMENT SHALL BE COATED WITH POWDERED EPOXY RESIN IN ACCORDANCE WITH SECTION 505 OF THE STANDARD SPECIFICATIONS (LATEST EDITION).

- 1) THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18 INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36 INCHES EXCEPT WITH WRITTEN APPROVAL BY THE ENGINEER.
- (2) (4) 1" DIA. X 3'-6" ANCHOR RODS.
- (3) (4) 1" DIA. X 5'-0" ANCHOR RODS.
- (4) (6) NO. 6 X 6'-8" BAR STEEL REINFORCEMENT.
- (5) (7) NO. 4 X 5'-1" BAR STEEL REINFORCEMENT @ 1'-0" C-C.
- (6) (4) 1" DIA. X 3'-6" ANCHOR RODS.
- (7) (6) NO.4 X 4'-8" BAR STEEL REINFORCEMENT.
- (8) (5) NO. 4 X 5'-1" BAR STEEL REINFORCEMENT @ 1'-0" C-C.

CONCRETE BASES, TYPES 1, 2, 5, & 6

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

/S/ Ahmet Demirbile STATE ELECTRICAL ENGINEER

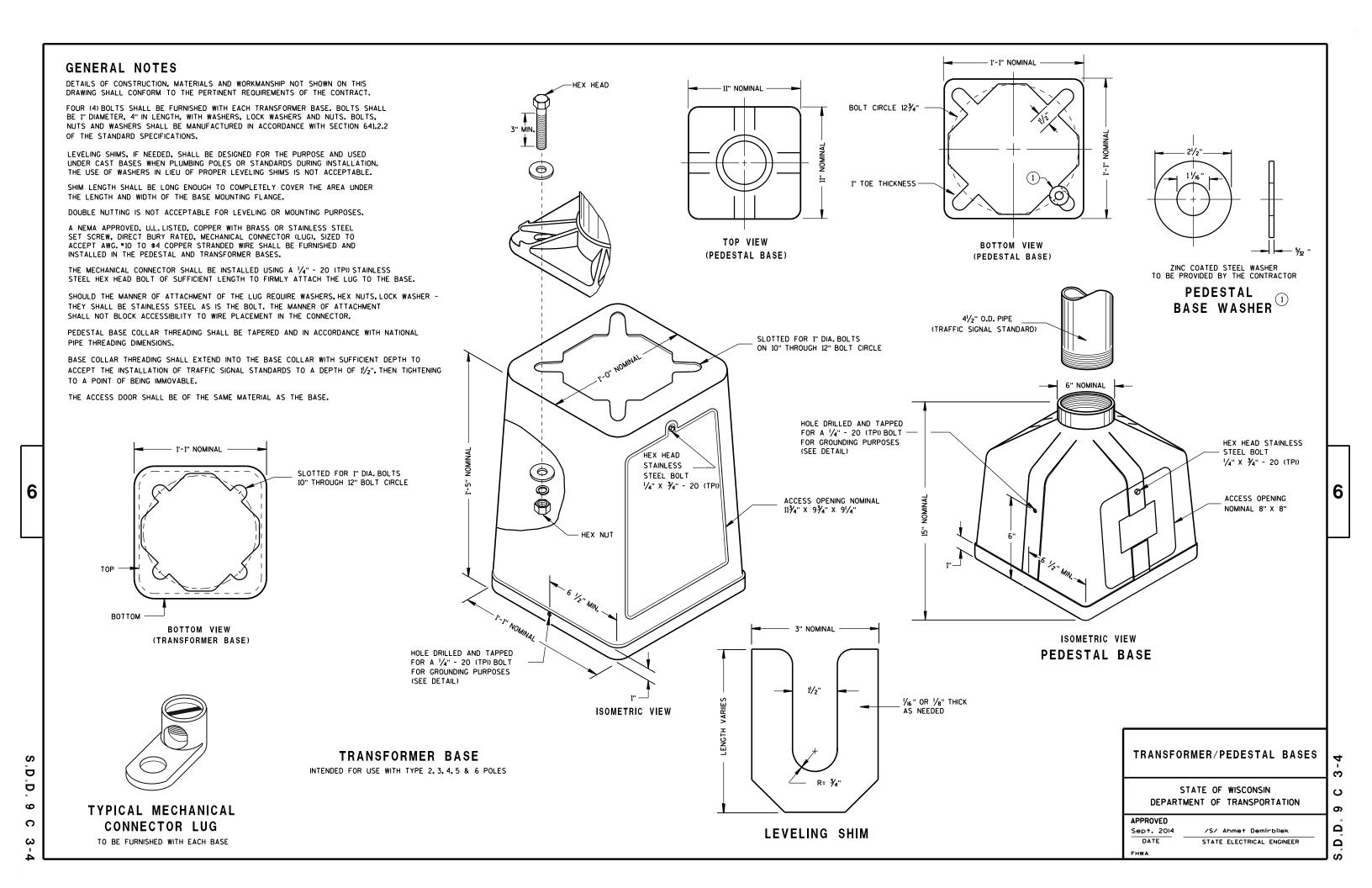
OR HEX NUT (TYPICAL FOR TYPES 1, 2, 5, & 6) **TYPE 5 & 6** TYPE 1 TYPE 2 **CONCRETE BASES** APPROVED Sept. 2014 * ANY ANCHOR ROD PROJECTION SHORTER THAN 2¾" OR LONGER THAN 31/4" SHALL REQUIRE ** FOR NONBREAKAWAY INSTALLATIONS, 41/2" ± ANCHOR ROD PROJECTION WITH THE DATE THE BASE TO BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE. USE OF LEVELING NUTS. RODENT SCREEN REQUIRED.

-CONDUIT

111/2" BOLT

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CIRCLE



DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING

SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

GENERAL NOTES

	IMEN	ISION	IS	C.Y. CONCRETE
Н	ı	7	K	(APPROX.)
34"	60"	10"	17"	.64
42"	60"	10"	21"	.93
42"	72"	12"	21"	1.29
54"	72"	14"	27"	1.56
AS SHOWN			.65 X	
	H 34" 42" 42" 54"	H I 34" 60" 42" 60" 42" 72" 54" 72"	H I J 34" 60" 10" 42" 60" 10" 42" 72" 12" 54" 72" 14"	34" 60" 10" 17" 42" 60" 10" 21" 42" 72" 12" 21" 54" 72" 14" 27"

INCLUDES MAINTENANCE PLATFORM.

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TYPICAL 3'-0" X 3'-0" X 4" THICK MAINTENANCE PLATFORM. LOCATION TO BE DETERMINED IN THE FIELD. COST TO BE -INCLUDED UNDER CONCRETE CONTROL CABINET TYPE 10. EXIT LOCATION OF 11/4" CONDUIT FROM CABINET BASE DEPENDENT UPON LOCATION OF ELECTRIC SERVICE. THE 3" CONDUIT SHALL BE INSTALLED FROM THE CABINET BASE TO THE FIRST (NEAREST) PULL BOX LOCATED AS SHOWN ON THE PLAN A O ALL CONDUITS WITHIN 6" DIA. CIRCLE

12 ¾" BOLT

4 2" CONDUIT 3" CONDUIT

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4

CONDUIT LOCATIONS IN 24" X 36" PULL BOX

(LEADING TO CONTROLLER CABINET BASE TYPE 6, 7, 8 AND 9)

FORM ALL EXPOSED CONCRETE. PROVIDE 1" CHAMFER ALL AROUND ALL CONDUIT SHALL FORM ALL EXPOSED BE INSTALLED WITHIN CONCRETE. PROVIDE 7" X 14" RECTANGLE 1" CHAMFER ALL AROUND LOCATE CONCRETE MAINTENANCE HALF SECTION HALF SECTION OCATE CONCRETE MANY LOVAR OCATE CONCRETE MANY LOVAR OCATE CONCRET (SEE NOTES) IN UNPAVED AREA IN PAVED AREA TOPSOIL AND SIDEWALK SEED OR CRUSHED AGGREGATE ·||| | ¾" PREFORMED FILLER AS 1" CONDUIT - 6" STUB GROUND APPROVED BY THE ENGINEER FOR GROUNDING WIRE LINE ENTRANCE **EXOTHERMIC** 6" STUB CONNECTION THE 3" CONDUIT SHALL BE TO EQUIPMENT APPROX. SPACED 2" MIN. APART TO GROUNDING CONDUCTOR ALLOW FOR PLACEMENT OF 6" STUB-CAPS, BUSHINGS OR COUPLINGS 1 1/4" SERVICE 4 - 6" STUBS SPACED 2" MIN. ENTRANCE APART TO ALLOW FOR PLACEMENT WITH 6" STUB OF CAPS, BUSHING OR COUPLINGS %" DIA. X 8'-0" 2" CONDUIT COPPERCLAD EQUIPMENT COMMUNICATION CABLE 3.0".BASE TYPE 8 & 9 GROUNDING ELECTRODE REQUIRED (ALTERNATE) EXIT LOCATION OF 11/4" CONDUIT 4" L BEND OR FROM CABINET BASE DEPENDENT ONE HEX NUT UPON LOCATION OF ELECTRIC

> TYPE 6,7,8 AND 9 (ISOMETRIC VIEW)

SERVICE.

* ANY ANCHOR ROD PROJECTION SHORTER THAN 2¾" OR LONGER THAN 31/4" SHALL REQUIRE THE BASE TO BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE.

TYPE 10

CONCRETE CONTROL CABINET BASES

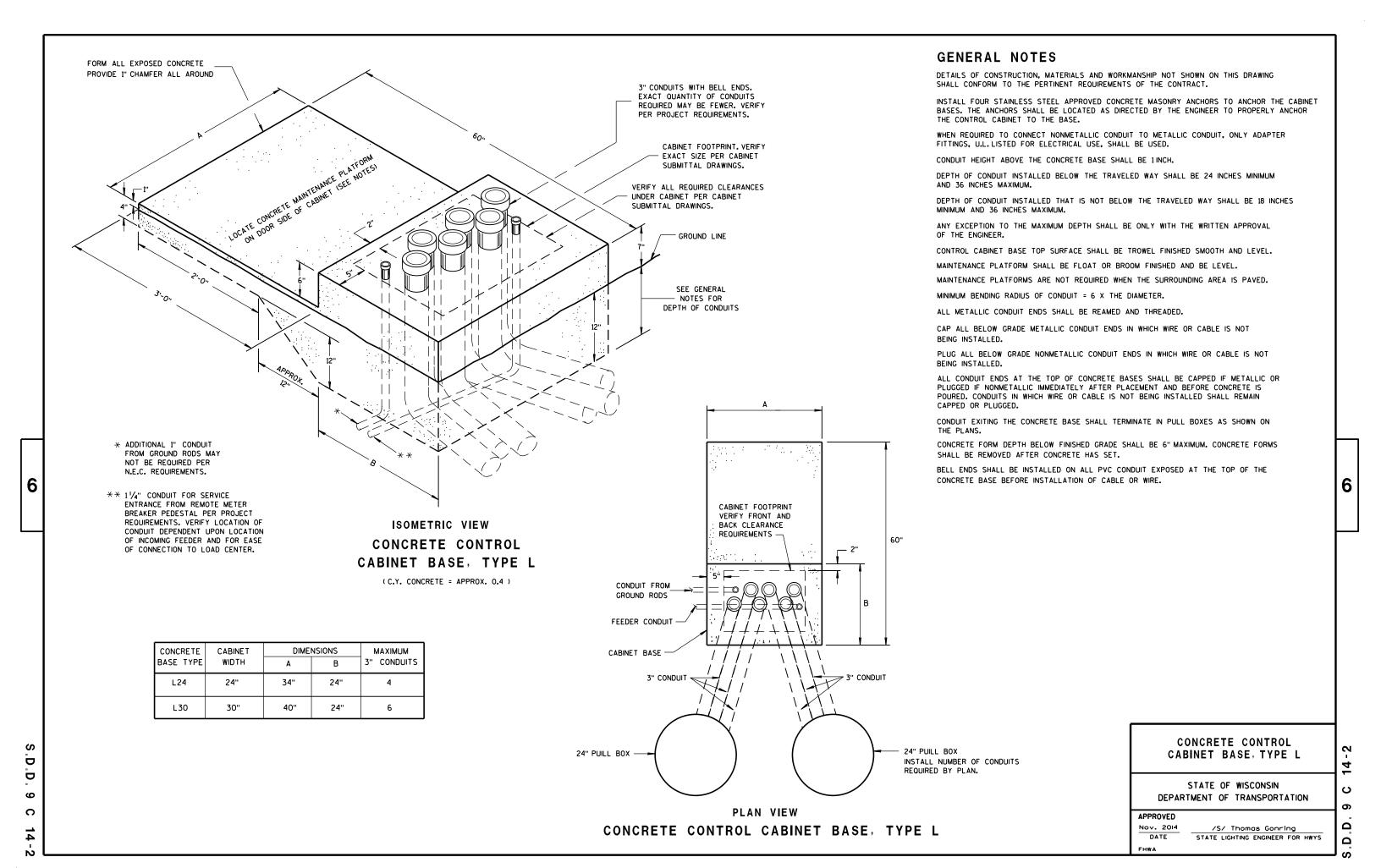
CONCRETE CONTROL CABINET BASES

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION 2

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APPROVED

/S/ Ahmet Demirbilek DATE STATE ELECTRICAL ENGINEER FHWA



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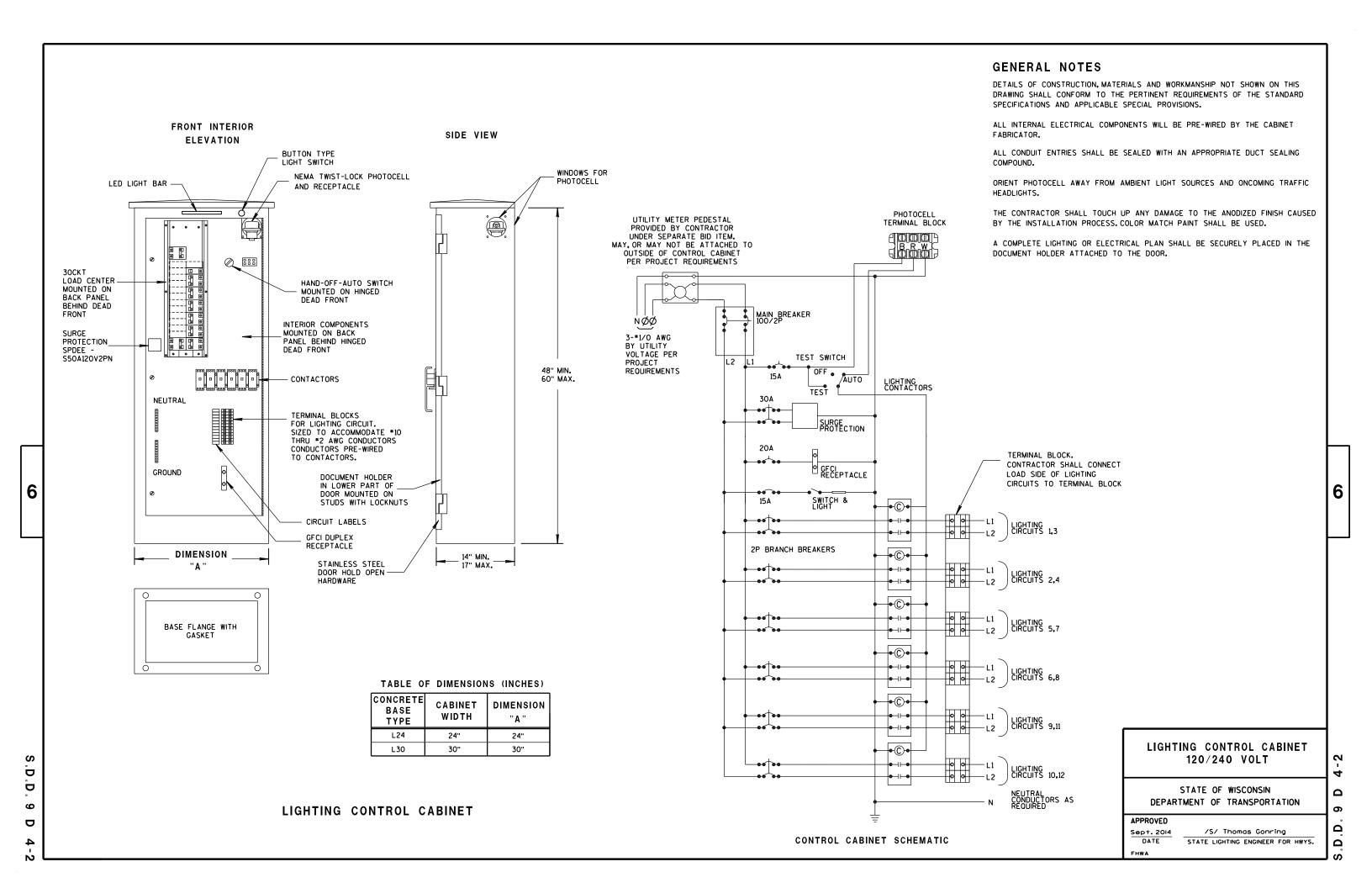
/S/ Ahmet Demirbilek

STATE ELECTRICAL ENGINEER

Sept. 2014

DATE

FHWA



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

ALL TYPE 5 POLE MOUNTINGS SHALL BE DESIGNED TO INCLUDE TWIN 15' ARMS

TYPE 5 ALUMINUM POLES SHALL BE CONSTRUCTED OF 6063-T6 ALUMINUM ALLOY.

THE TYPE 5 ALUMINUM POLES SHALL HAVE A MINIMUM WALL THICKNESS OF 0.188".

TYPE 5 STEEL POLES SHALL HAVE A MINIMUM WALL THICKNESS OF U.S. STANDARD

2% INCHES IN OUTSIDE DIAMETER. THE STRAIGHT PORTION OF THE SLIPFITTER

WHEN TRANSFORMER BASES ARE USED, WIRE CONEECTIONS SHALL BE MADE IN THE

- 4" x 6" REINFORCED HANDHOLE & COVER ASSEMBLY WITH 2 (TWO) 1/4" X 3/4" 20
- GROMMETS, 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS
- FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) 1/4" X 3/4" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.
- SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION

POLE MONTINGS FOR LIGHTING UNITS, TYPE 5 (30 FEET)

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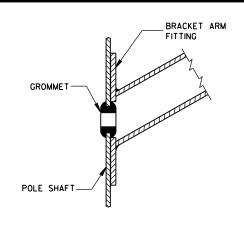
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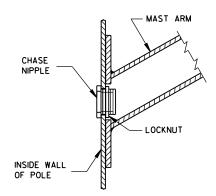
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STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION



TYPICAL APPLICATION OF **GROMMET IN POLE SHAFT**

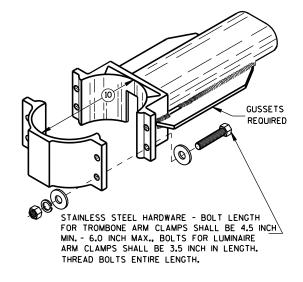


TYPICAL APPLICATION OF CHASE NIPPLE IN POLE SHAFT

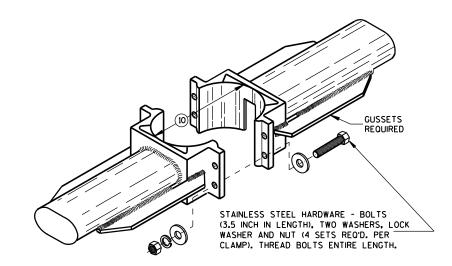
CLAMP BOLT-NUT TIGHTENING TORQUE SHALL BE INDICATED BY INDENT STAMPING (1/2 INCH NUMERALS AND LETTERS) OR WEATHERPROOF PRINTING ON THE INSIDE OF THE CLAMP THAT IS WELDED TO THE ARM MEMBER.

- (10) 4.5" I.D. FOR LUMINAIRE MAST ARM CLAMP. 6.625" I.D. FOR TROMBONE MAST ARM CLAMP.
- INDIVIDUAL BASE PLATE ANCHOR ROD COVERS. (4 REQUIRED)
- (12) BASE PLATE SLOTTED TO ACCEPT 11" THROUGH 12" BOLT CIRCLE USING 1" DIAMETER ANCHOR RODS.
- (13) LEVELING SHIMS, DESIGNED FOR THE PURPOSE, SHALL BE USED WHEN PLUMBING POLES. THE USE OF WASHERS IN LIEU OF PROPER LEVELING SHIMS IS NOT ACCEPTABLE. LEVELING SHIMS SHALL BE USED ONLY BETWEEN THE TOP OF THE CONCRETE BASE AND A METALLIC BASE PLATE.

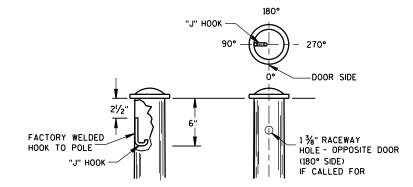
SHIMS SHALL BE LONG ENOUGH AND WIDE ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.



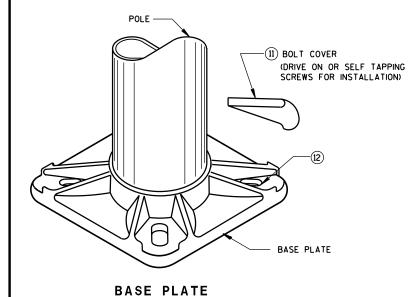
TYPICAL TROMBONE MAST ARM AND SINGLE LUMINAIRE MAST ARM MOUNTING CLAMP

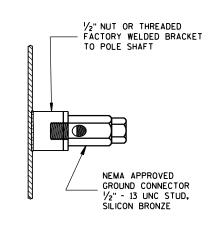


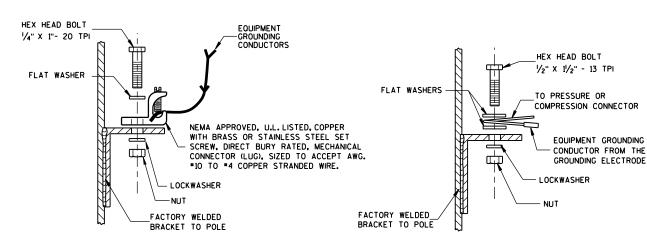
TYPICAL LUMINAIRE MAST ARM (DOUBLE) MOUNTING BRACKETS



TYPICAL "J" HOOK LOCATION







TYPICAL GROUNDING CONNECTIONS NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL

HARDWARE DETAILS FOR POLE MOUNTINGS

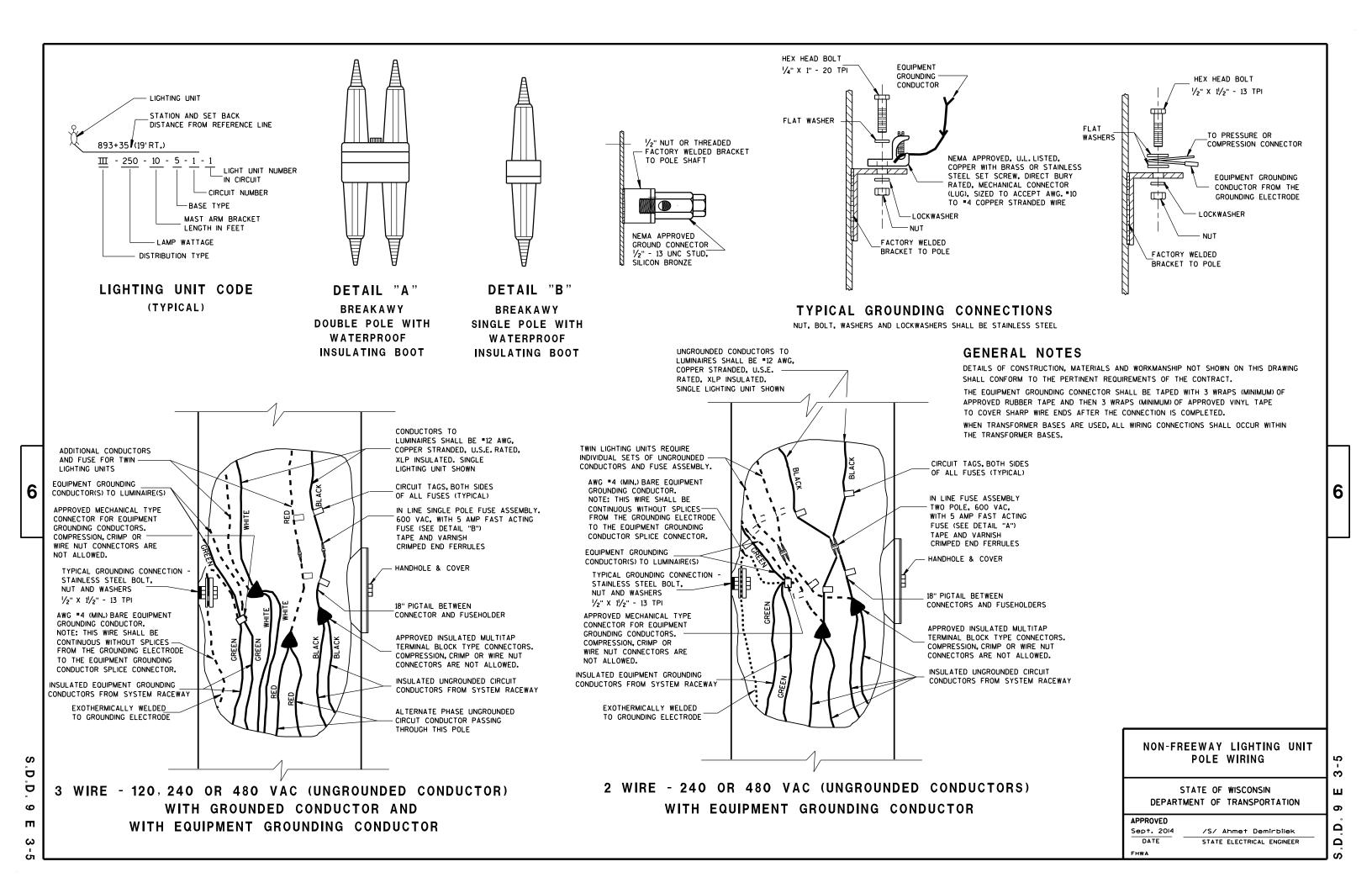
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

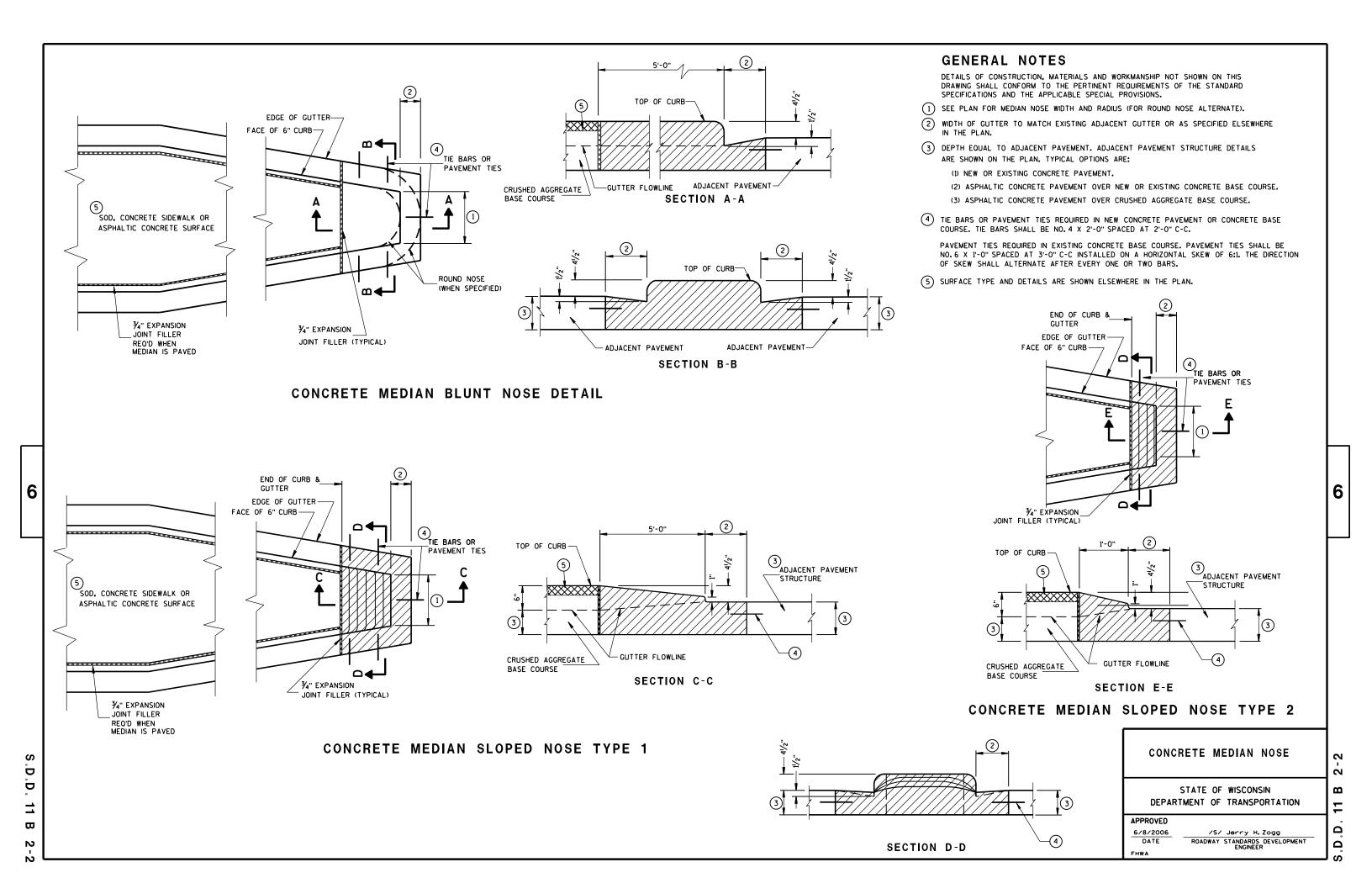
APPROVED	
Feb. 2015	/S/ Ahmet Demirbilek
DATE	STATE ELECTRICAL ENGINEER
FHWA	

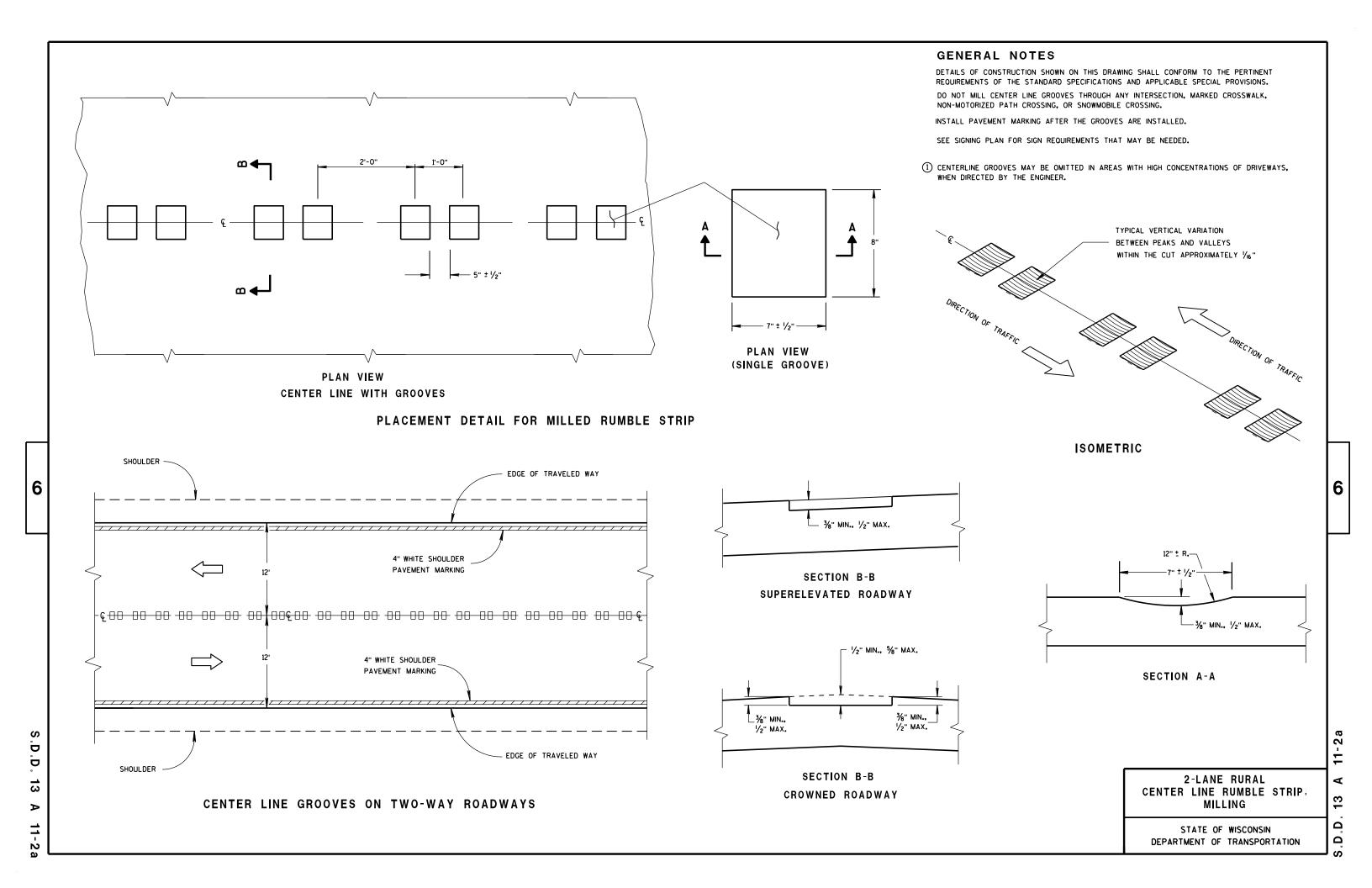
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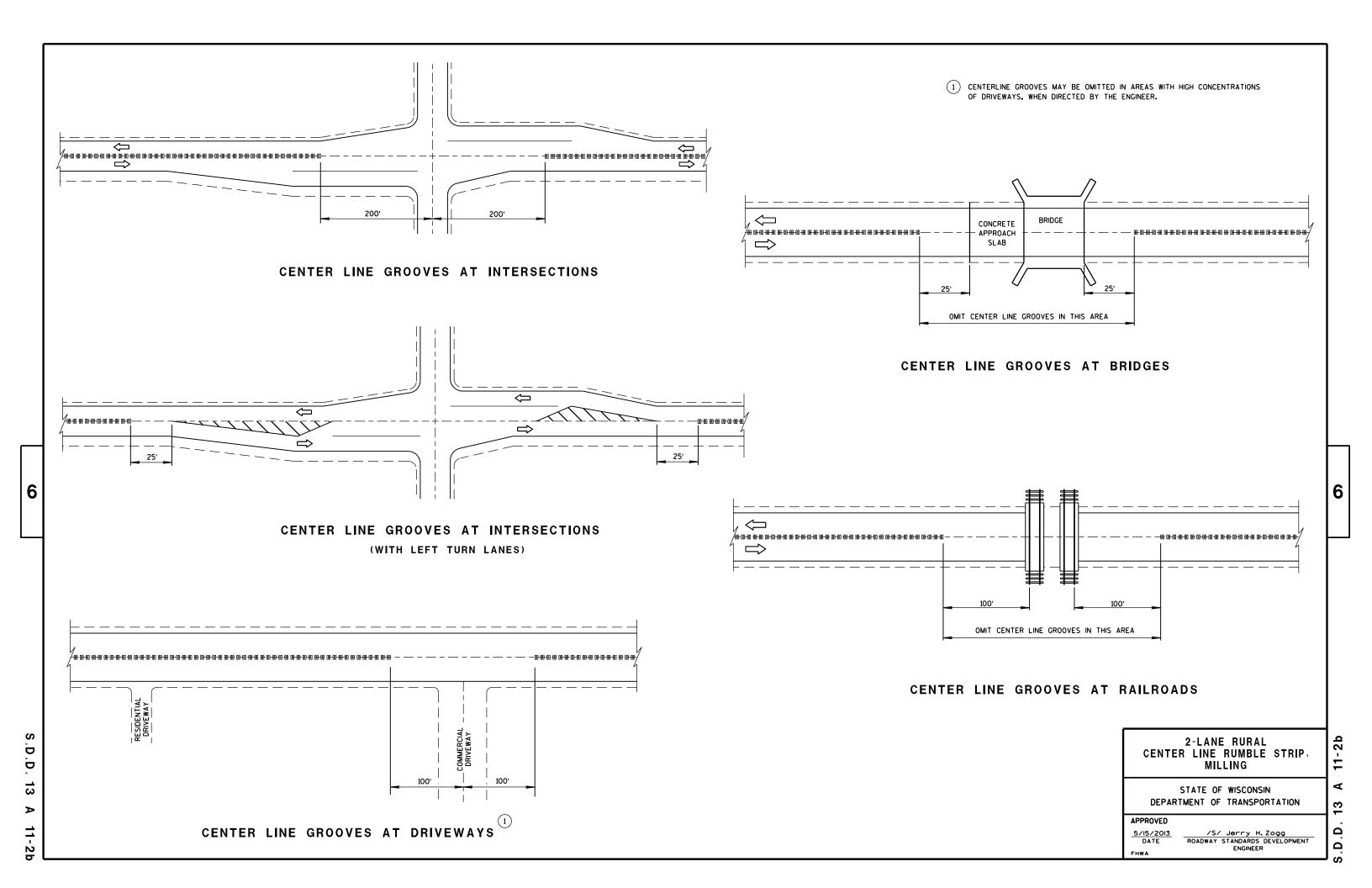
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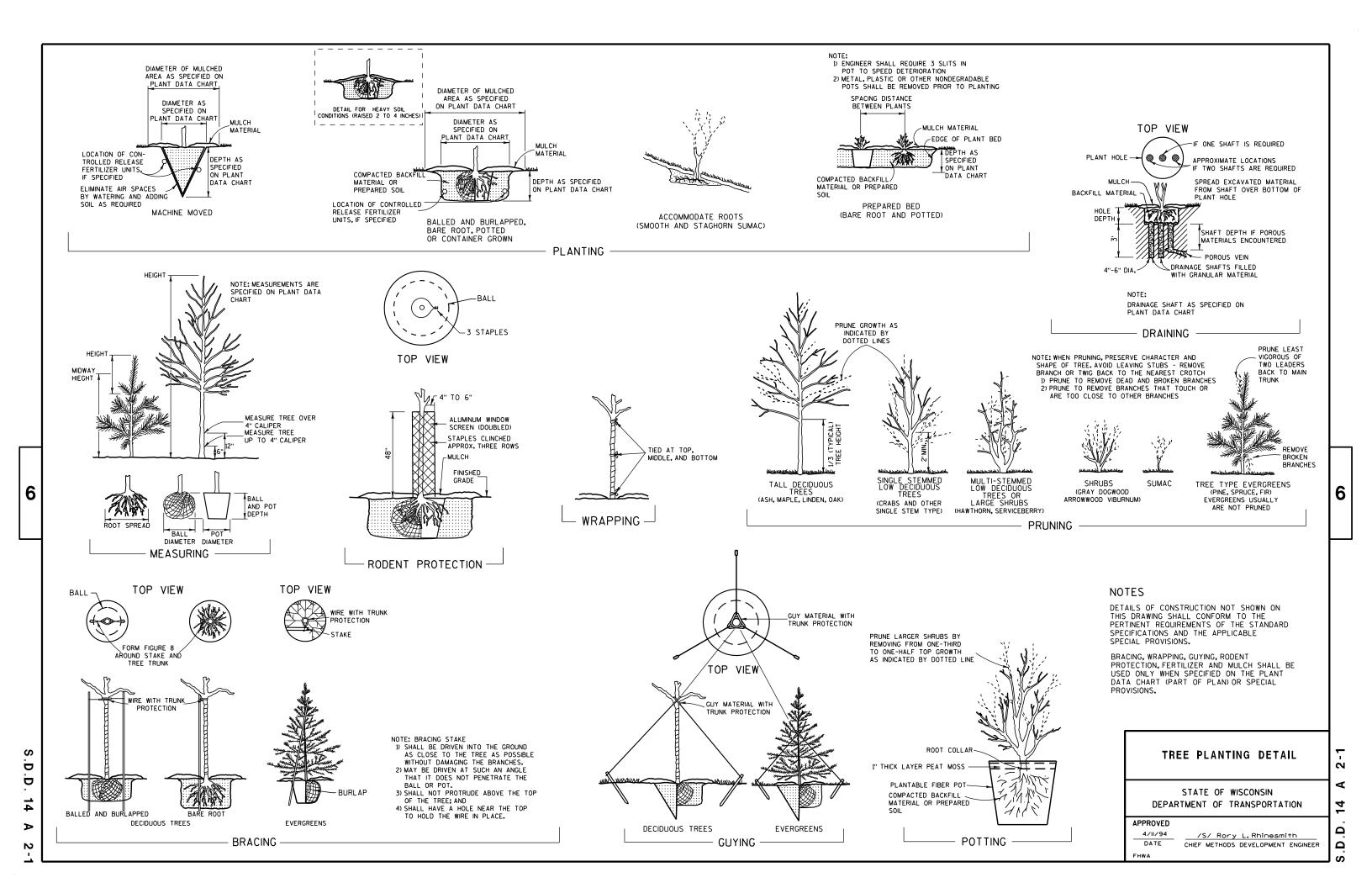
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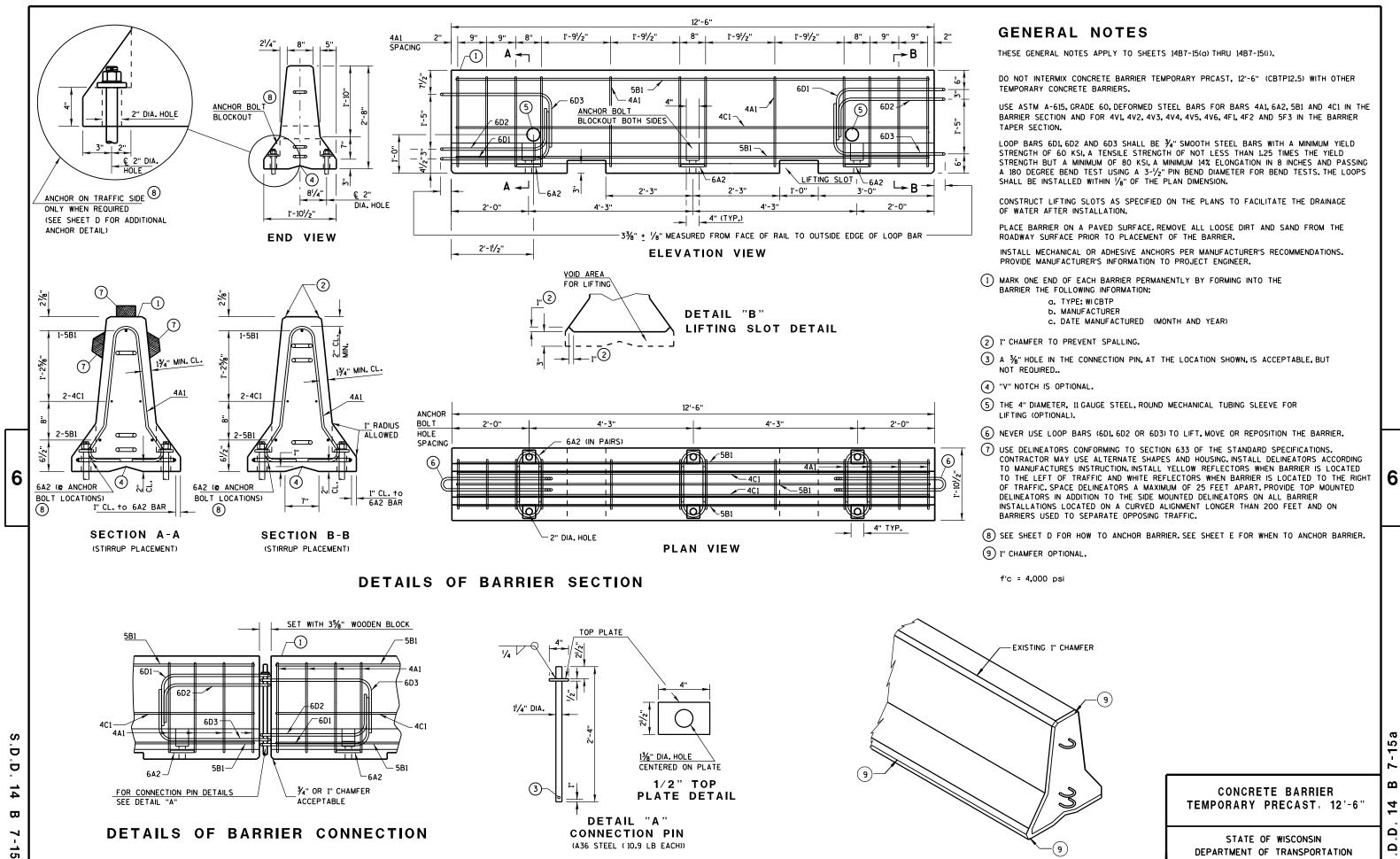






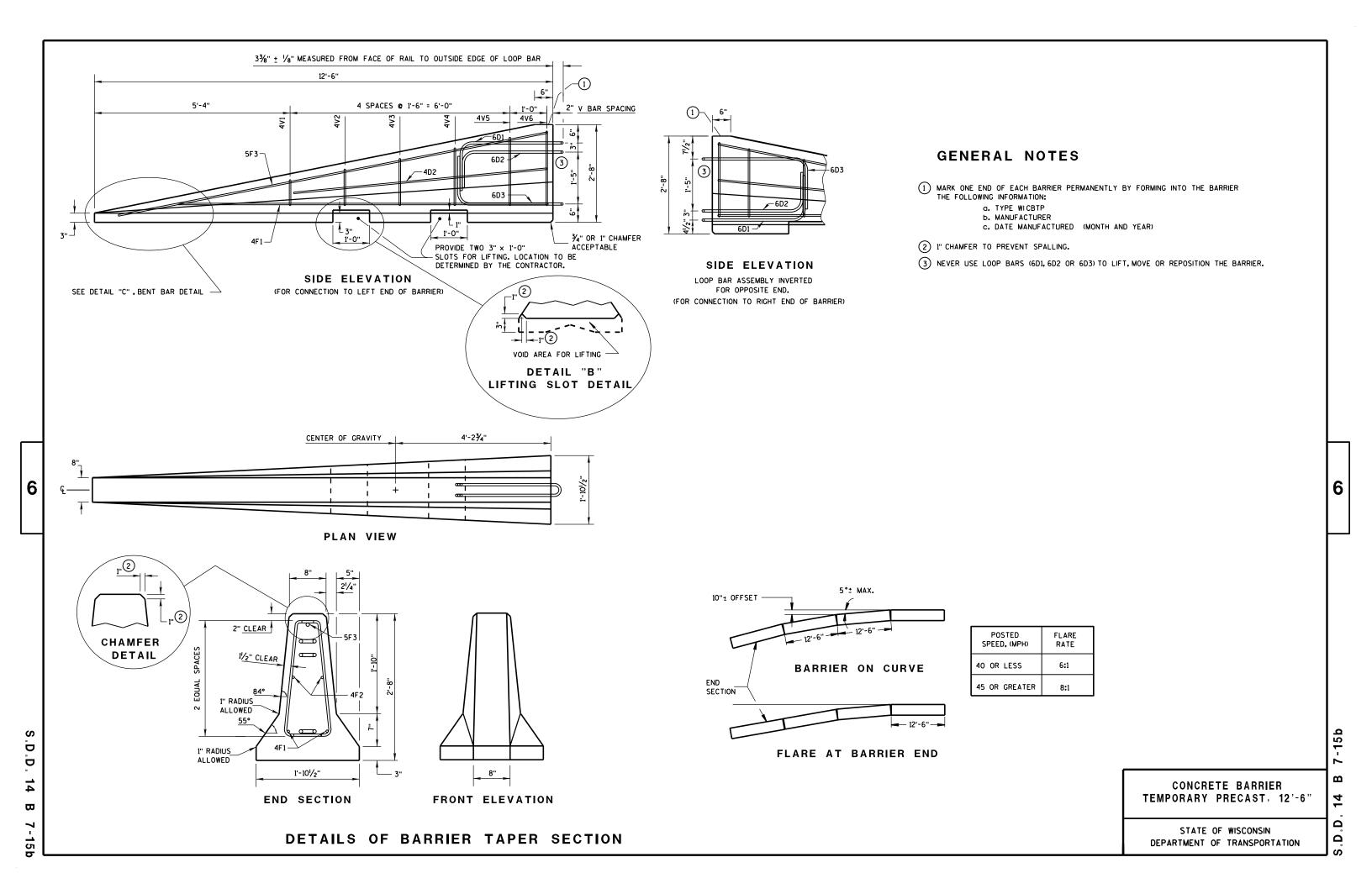






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DEPARTMENT OF TRANSPORTATION

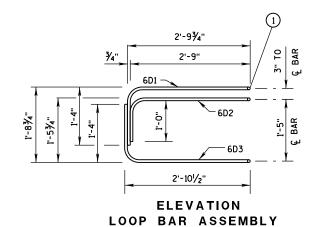


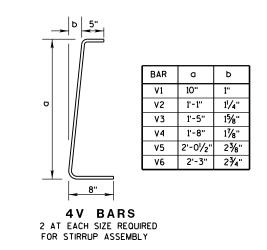
1) NEVER USE LOOP BARS (6D1, 6D2 OR 6D3) TO LIFT, MOVE OR REPOSITION THE BARRIER.

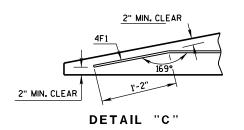
BARRIER TAPER SECTION BILL OF MATERIALS

(PER 12'-6" BARRIER TAPER SECTION)

WENTE O BANNEN TALEN SECTION			
BAR	BAR SIZE	NO. OF BARS	LENGTH FT.
4V1	4	2	1'-11"
4V2	4	2	2'-2"
4٧3	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"
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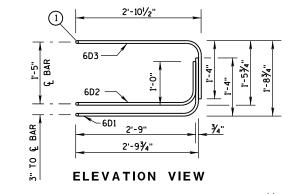


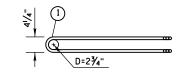
BENT BAR DETAIL

TAPER BARRIER SECTION



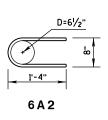
BAR	BAR SIZE	NO. OF BARS	LENGTH FT.
4A1	4	12	6'-0"
6A2	6	6	2'-11"
5B1	5	3	12'-2"
4C1	4	2	12'-2"
LOOP ASSEMBLY			
6D1	6	2	8'-5"
6D2	6	2	7'-7"
6D3	6	2	8'-6"

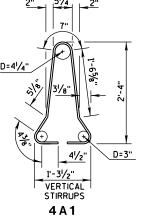




PLAN VIEW LOOP BAR ASSEMBLY

(MARKED END SHOWN, INVERT FOR OTHER END)





BARRIER SECTION

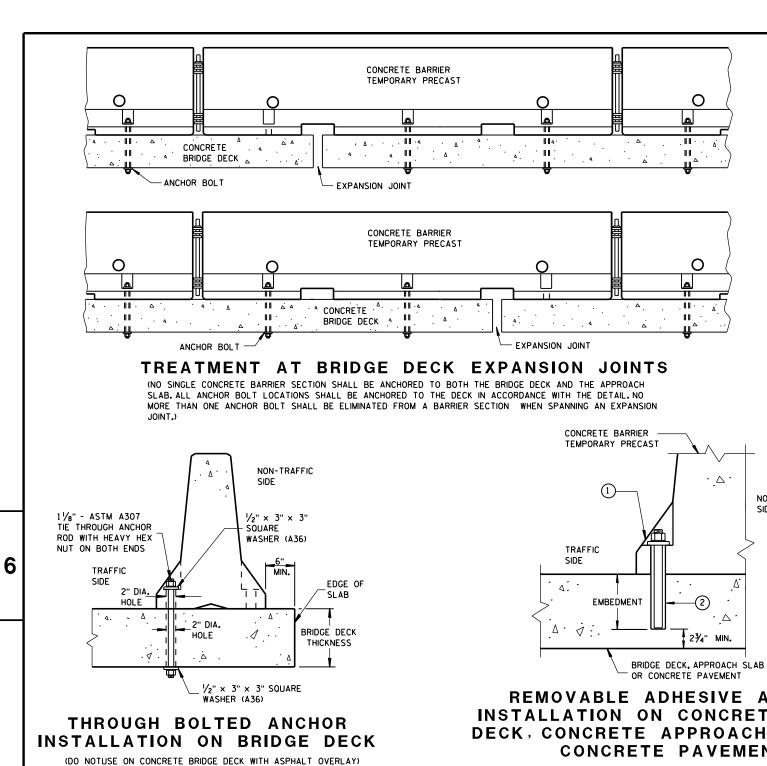
CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

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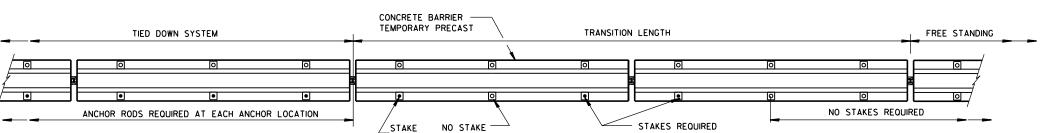
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REMOVABLE ADHESIVE ANCHOR INSTALLATION ON CONCRETE BRIDGE DECK, CONCRETE APPROACH SLAB, OR **CONCRETE PAVEMENT**

NON-TRAFFIC

(DO NOT USE ON CONCRETE WITH AN ASPHALTIC OVERLAY)



DIRECTION OF TRAFFIC

PLAN VIEW

REQUIRED

FREE STANDING TRANSITION TO TIED-DOWN SYSTEM

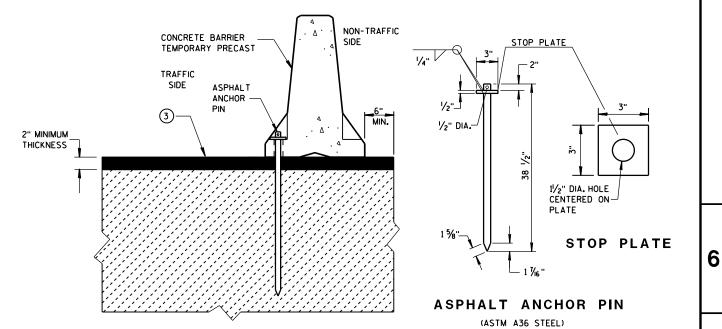
(PLACE TRANSITION IN A TANGENT SECTION OF BARRIER PARALLEL TO THE ROADWAY. IF TRANSITION OCCURS ON STRUCTURAL SLAB, ANCHOR AS SHOWN,)

GENERAL NOTES

SEE SHEET E FOR WHEN TO ANCHOR. OTHER PARTS OF THE PLAN MAY SHOW ADDITIONAL LOCATIONS REQUIRING ANCHORING.

REMOVE ALL ANCHORS WHEN NO LONGER NEEDED. FILL CONCRETE PAVEMENTS, DECKS AND APPROACH SLABS WITH NON-SHRINK COMMERICAL GROUT FROM THE APPROVED PRODUCT LIST. FILL ASPHALT PAVEMENTS WITH ASTM D6690 TYPE II RUBBERIZED CRACK FILLER.

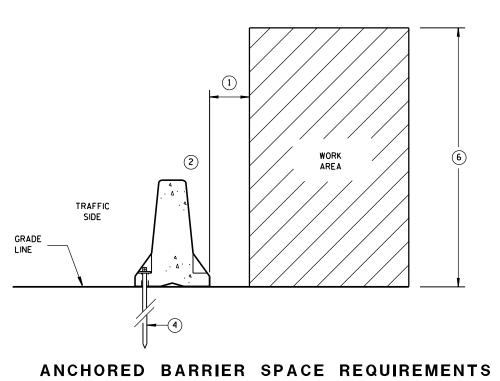
- 1 1/8" DIAMENTER A307 THREADED ROD, 1/2" X 3" X 3" SOUARE PLATE WASHER WITH ASTM A36 STEEL, ASTM A563A HEAVY HEX NUT.
- 2 ADHESIVE ANCHORS WITH A MINIMUM BOND STRENGTH OF 1,800 PSI AND 51/4" EMBEDMENT. SEE 603.2 AND 603.3.1.2 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR MORE INFORMATION ON ADHESIVE ANCHORS.
- (3) ASPHALT SURFACE SHOWN. CONTRACTOR MAY DRILL THROUGH CONCRETE PAVEMENT AND THAN DRIVE ASPHALT ANCHOR PIN.



STAKE DOWN INSTALLATION FOR **ASPHALTIC SURFACE**

> **CONCRETE BARRIER** TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION -15d $\mathbf{\omega}$ Ω



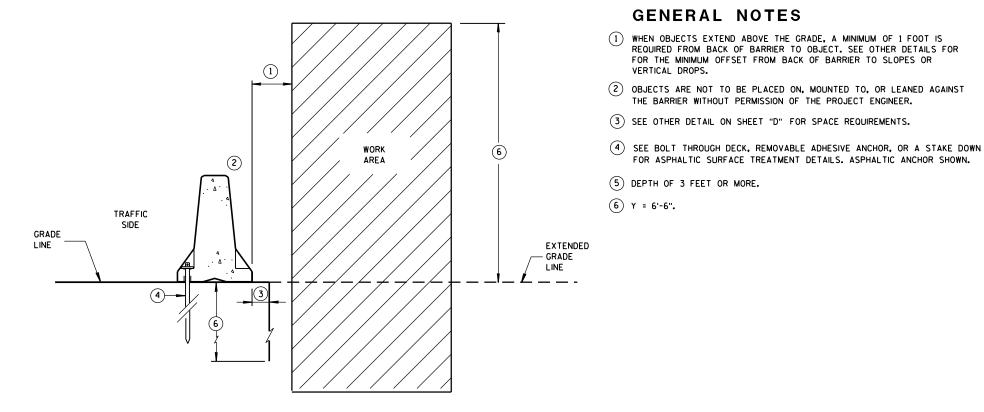
FOR HAZARDS EXTENDED ABOVE THE GRADE LINE

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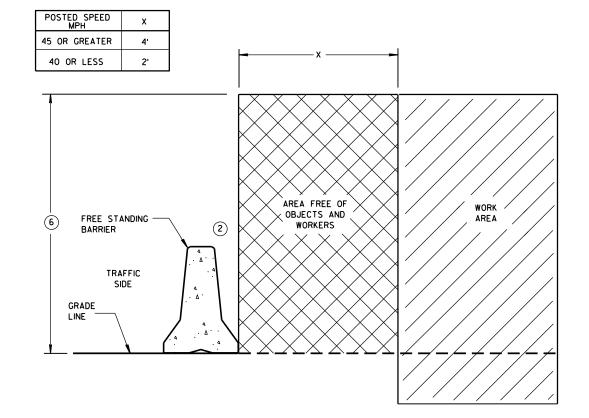
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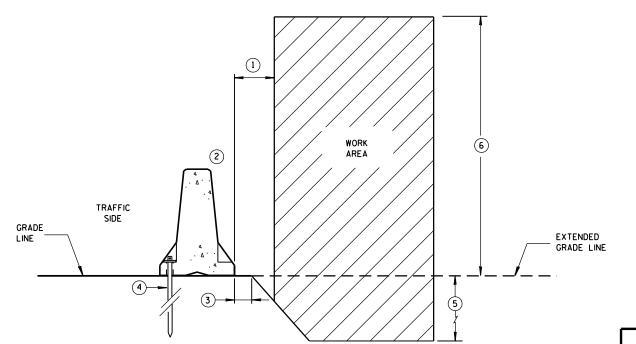
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ANCHORED BARRIER SPACE REQUIREMENTS ON VERTICAL DROP OFFS



FREE STANDING BARRIER SPACE REQUIREMENTS



ANCHORED BARRIER SPACE REQUIREMENTS ON SLOPES

CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"

GENERAL NOTES

FOR THE MINIMUM OFFSET FROM BACK OF BARRIER TO SLOPES OR

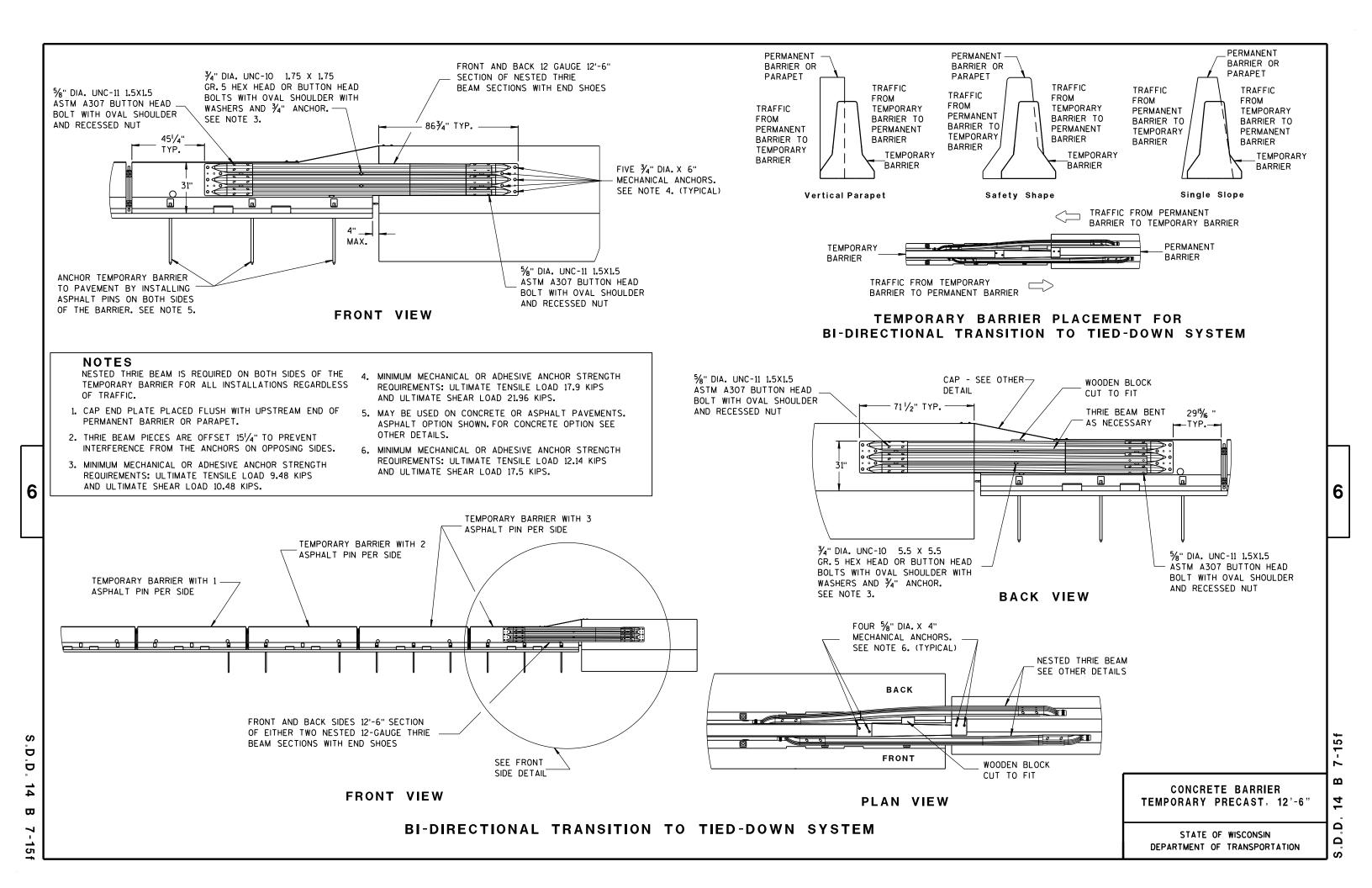
FOR ASPHALTIC SURFACE TREATMENT DETAILS. ASPHALTIC ANCHOR SHOWN.

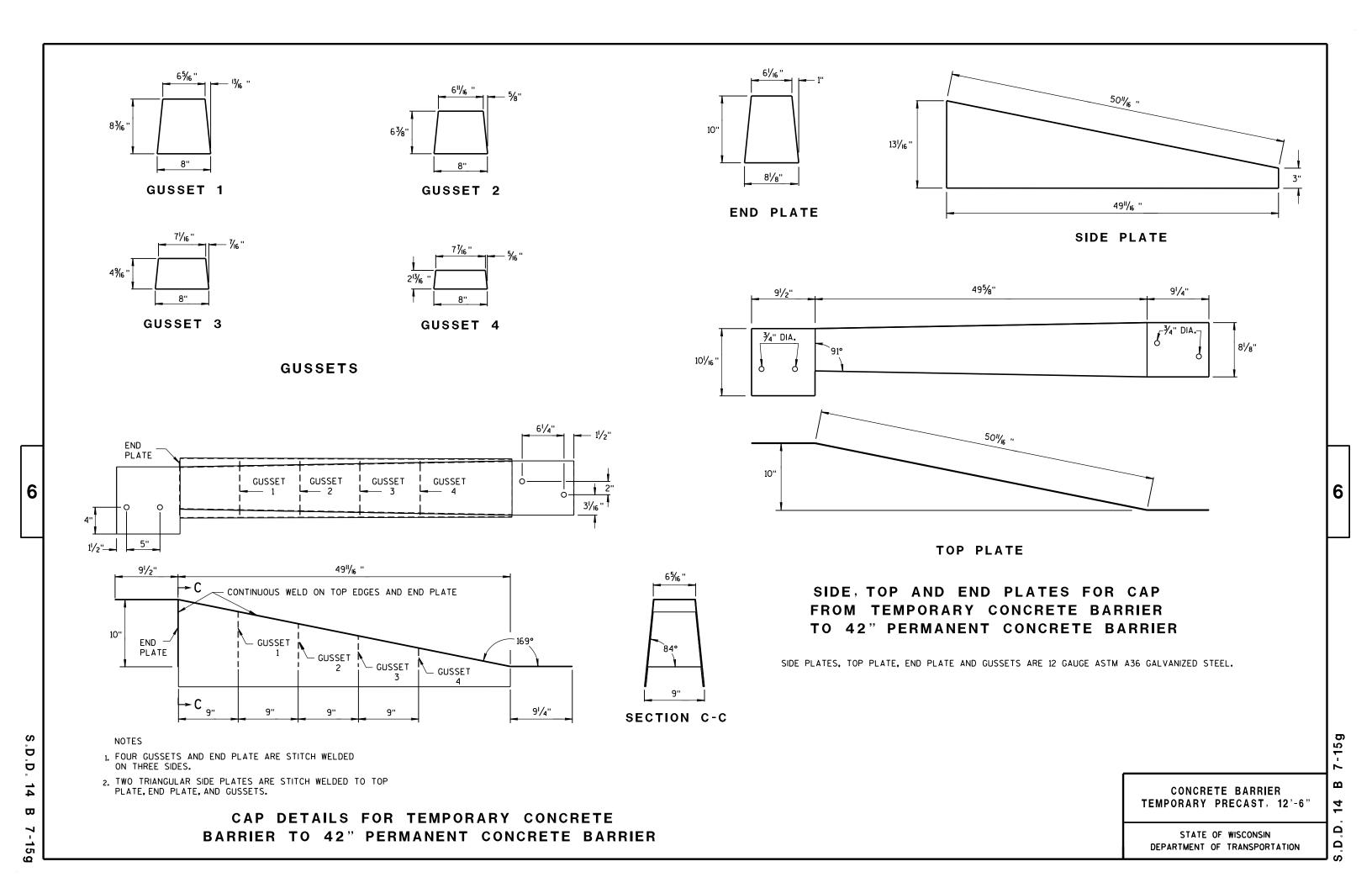
THE BARRIER WITHOUT PERMISSION OF THE PROJECT ENGINEER.

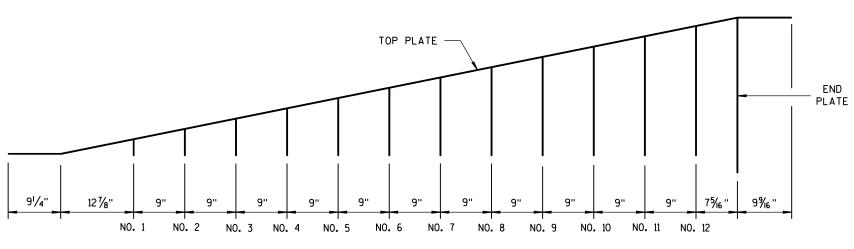
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION 6

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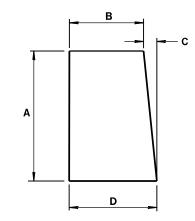




GUSSET LOCATION

CAP DETAILS FOR TEMPORARY CONCRETE

BARRIER TO 56" PERMANENT CONCRETE BARRIER



GUSSETS 1 - 12

ALL GUSSETS 1/8" STEEL PLATE

GUSSET DIMENSIONS				
GUSSET No.	A	В	С	D
1	21/8"	73/4"	1/4"	8
2	4"/16 "	7% "	1/2"	8
3	61/2"	73/8"	11/16 "	81/16"
4	85/6"	73//6"	7∕8"	81/16 "
5	101/8"	7''	1 ½ ₆ "	81/16"
6	11 ¹⁵ / ₁₆ ''	6 ¹³ // ₆ "	1 1/4"	81/16"
7	13¾"	65%"	1 1/6"	81/16"
8	15% "	6¾6"	1 % "	81/16"
9	173/8"	6 ¹ /4"	1 ¹³ / ₁₆ "	8½ ₆ "
10	193/6"	6½ ₆ "	1 15/16 "	81/16"
11	21"	57/8"	23/6"	81/16"
12	22 ¹³ / ₁₆ "	5 ¹¹ / ₁₆ "	2% "	8½ ₆ "

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.

> CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"

DEPARTMENT OF TRANSPORTATION

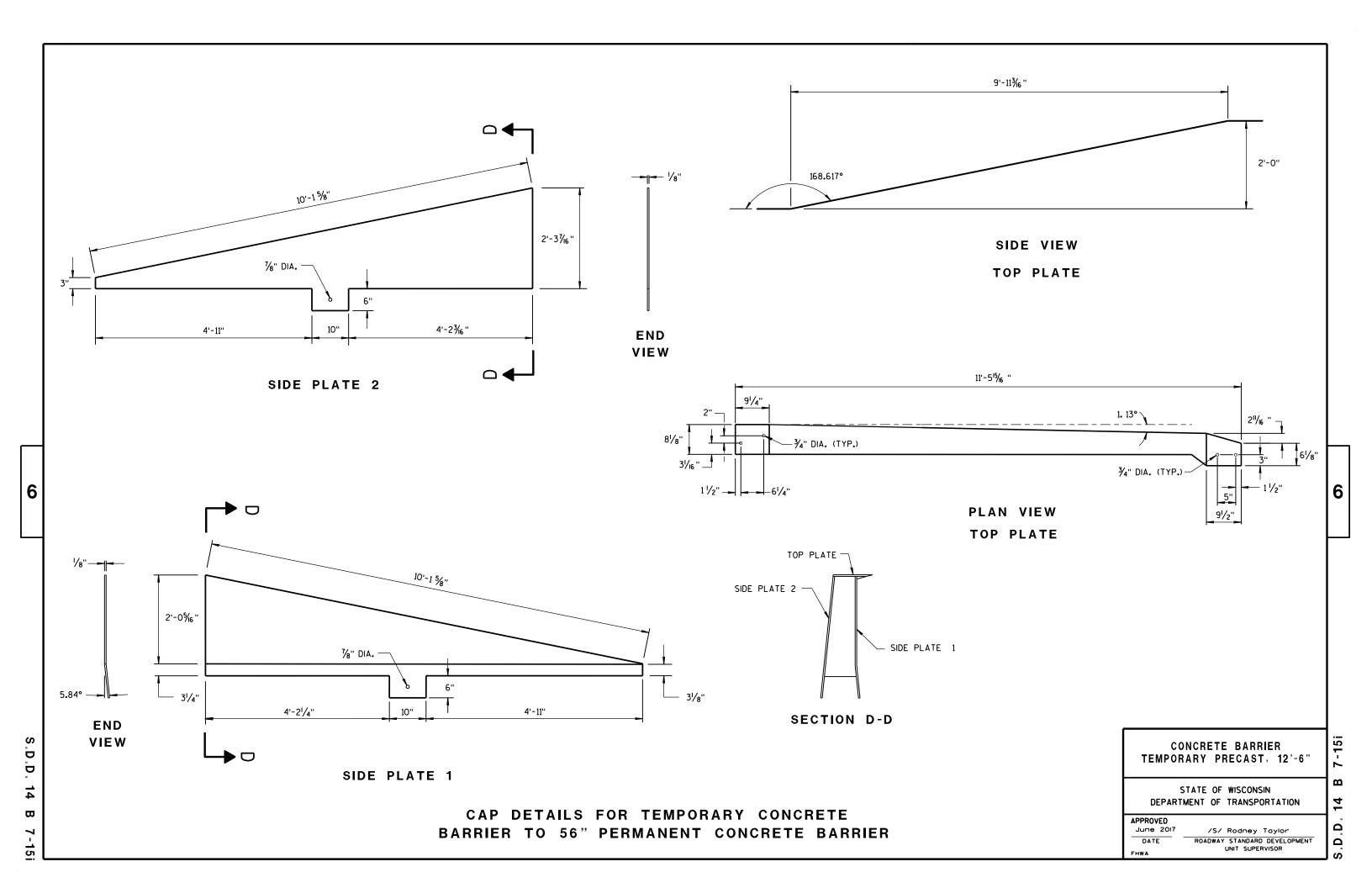
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ROAD CLOSURE BARRICADE DETAIL

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

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.) MO5-1 AND MO6-1 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
- THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT INTERSECTION.
- FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL D.
- FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT, SEE LANE CLOSURE BARRICADE DETAIL E.
- FOR BRIDGE OR CULVERT REPLACEMENTS, SUBSTITUTE "BRIDGE OUT" INSTEAD OF "ROAD CLOSED" ON R11-2 AND R11-3 SIGNS.
- 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.
- "EAST" CARDINAL DIRECTION MARKERS AND RIGHT TURN ARROWS ARE SHOWN. USE OTHER CARDINAL DIRECTIONS AND ARROWS AS APPROPRIATE.

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

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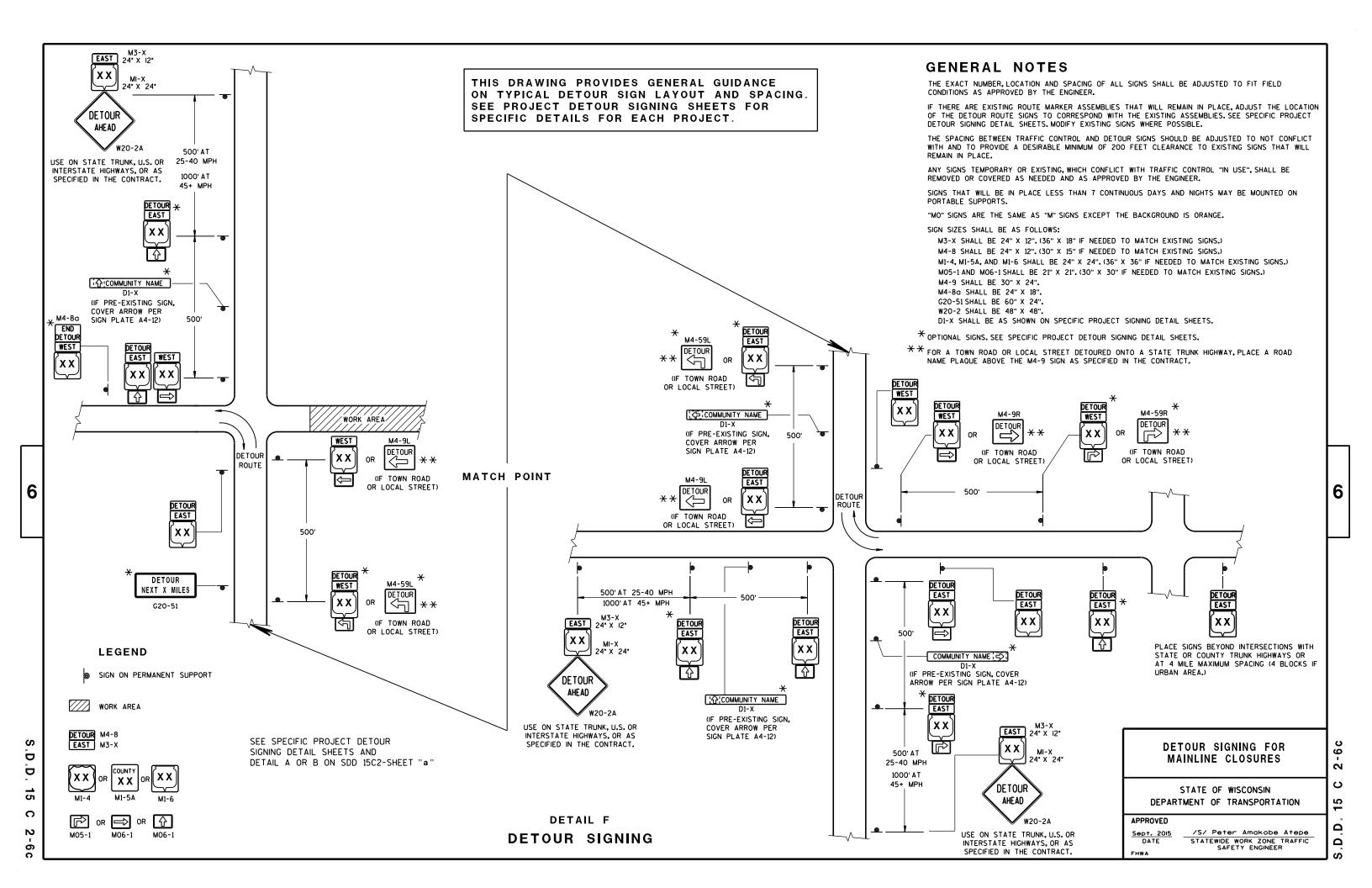
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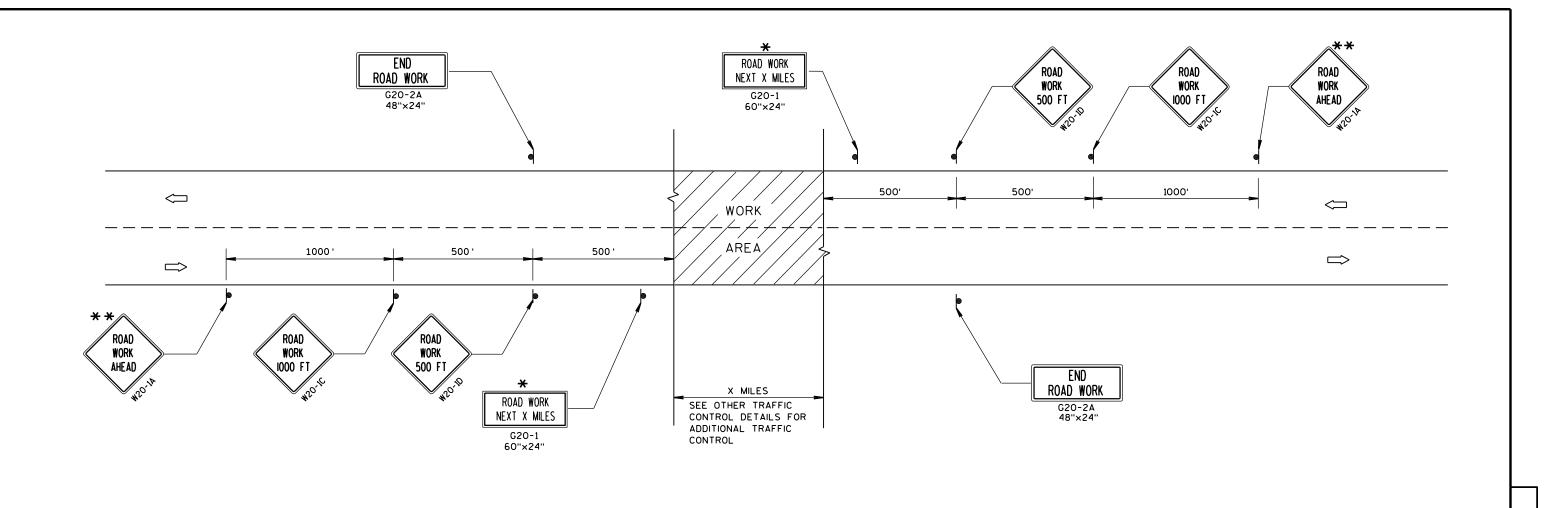
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STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

/S/ Peter Amakobe Atepe

STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER





TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

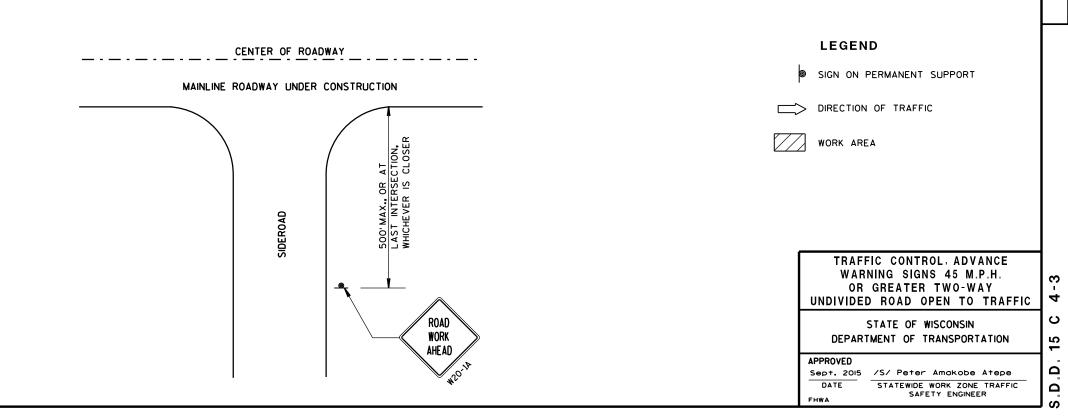
THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48"×48" UNLESS OTHERWISE NOTED.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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.

- $igspace{*}$ OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.
- ** PLACE ADDITIONAL W20-1A "ROAD WORK AHEAD" SIGN IF WORK AREA WITHIN THE PROJECT IS SEPARATED BY MORE THAN 2 MILES FROM PREVIOUS WORK AREA.

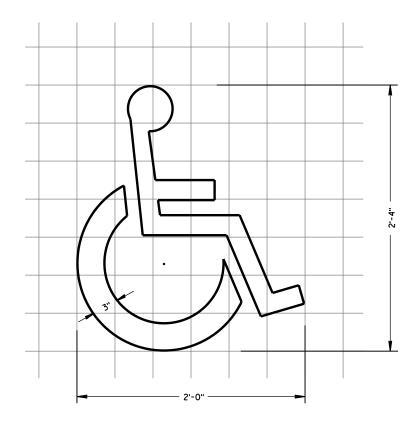


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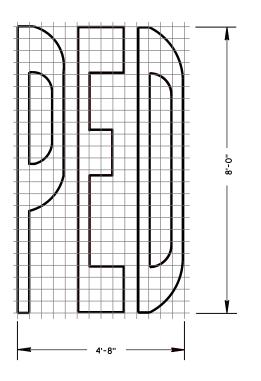
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DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.



HANDICAP SYMBOL



3'-0"

PREFERENTIAL LANE SYMBOL

PAVEMENT MARKING SYMBOLS

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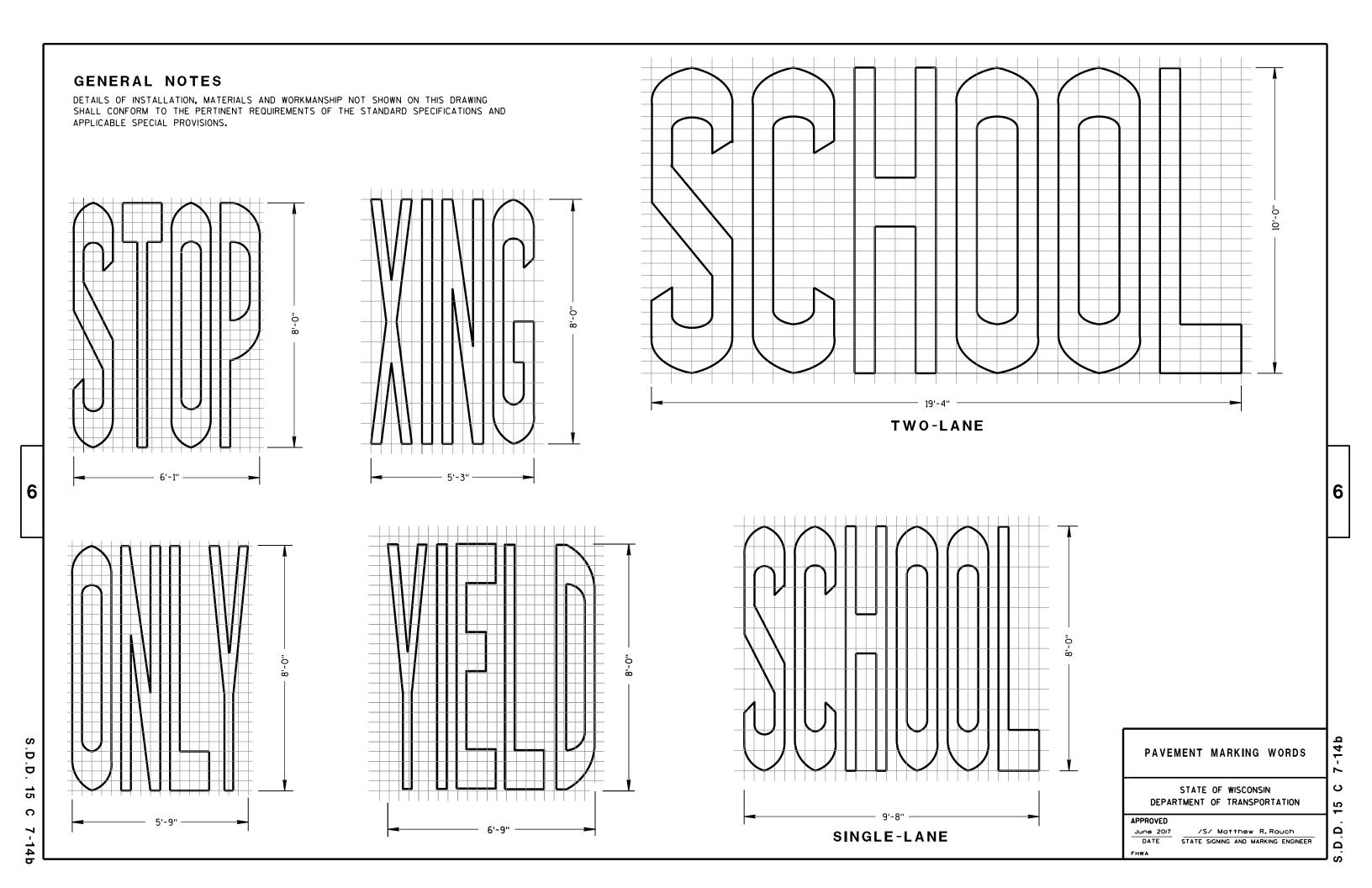
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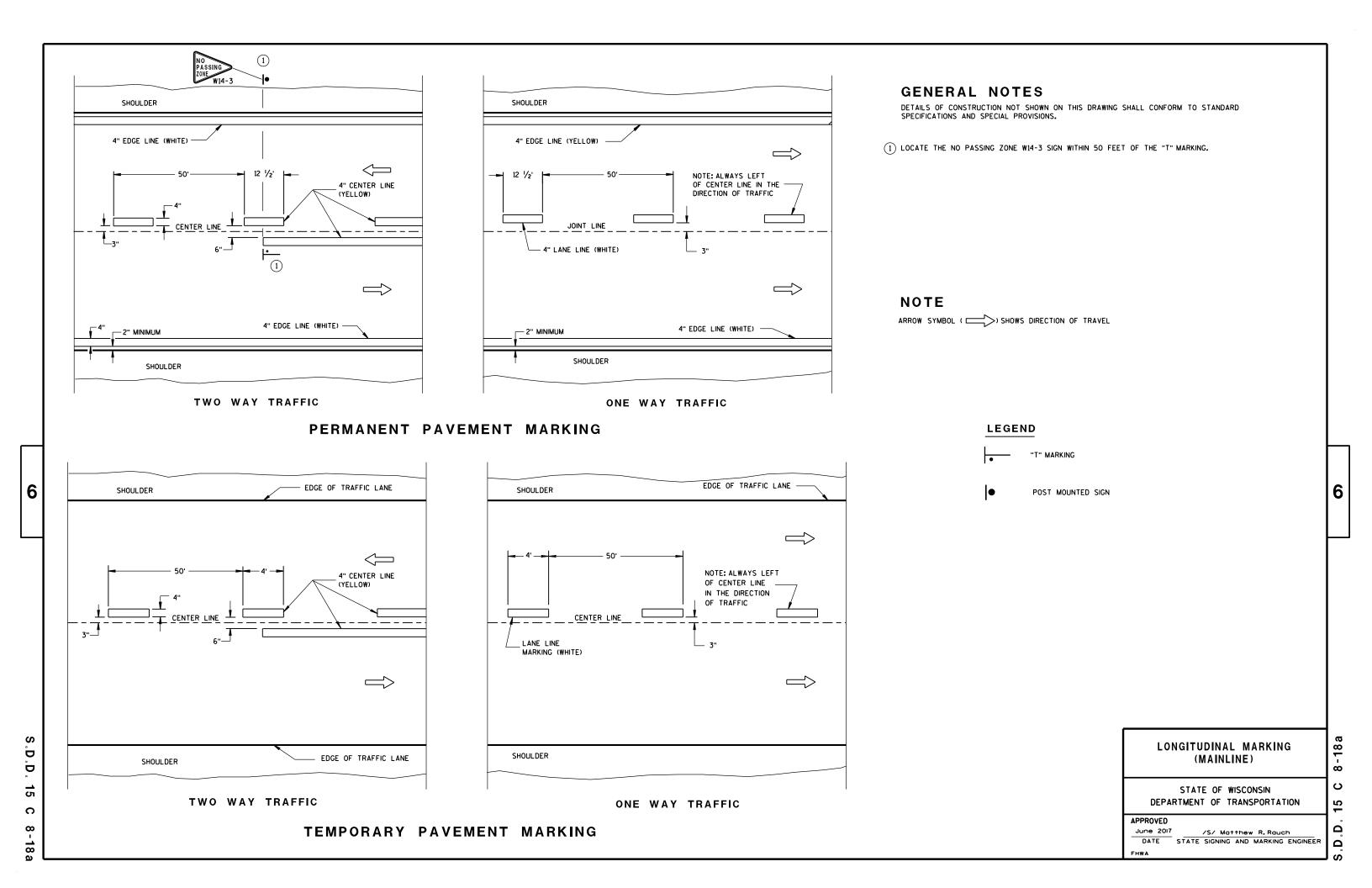
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June 2017
DATE

//S/ Motthew R. Rouch
STATE SIGNING AND MARKING ENGINEER

S.D.D. 15 C 7-14

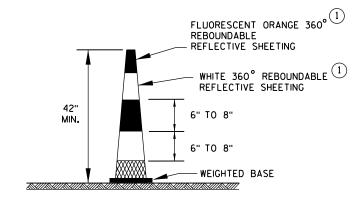




DRUM

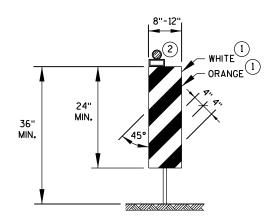
TYPE 2 BARRICADE

FOR RAILS LESS THAN 36" LONG, 4" WIDE STRIPES MAY BE USED. ALL STRIPES SHALL SLOPE DOWNWARD TO THE TRAFFIC SIDE FOR CHANNELIZATION.



42" CONE

DO NOT USE IN TAPERS 1/2 SPACING OF DRUMS

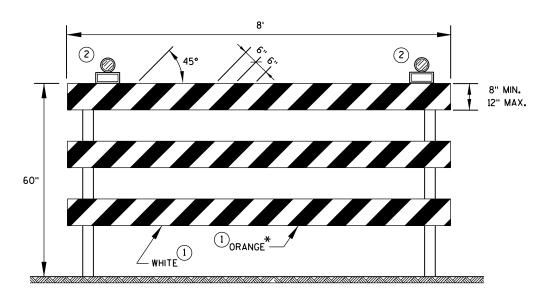


VERTICAL PANEL

THE STRIPES SHALL SLOPE DOWNWARD TO THE TRAFFIC SIDE FOR CHANNELIZATION.

GENERAL NOTES

- REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.
- (2) LOCATION OF WARNING LIGHTS WHEN SHOWN ON THE PLAN.



TYPE 3 BARRICADE

IF SIGN MOUNTED, DO NOT COVER MORE THAN 50% OF THE TOP TWO RAILS OR 33% OF THE TOTAL AREA OF THE THREE RAILS.

* IF USED FOR A PERMANENT APPLICATION, USE RED SHEETING.

CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS

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WORK ZONE ENGINEER
FHWA

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TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

STOP/SLOW PADDLE ON SUPPORT STAFF

5' MIN.

WORK

AHEAD

48" X 24"

END ROAD WORK G20-2A

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W20-1A

GENERAL NOTES

DETAILS OF TRAFFIC CONTROL DEVICES AND INSTALLATION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES (AND THE LOCATION OF ALL FLAGGERS) SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE FIRST ADVANCE WARNING SIGN SHOULD TYPICALLY BE LOCATED IN ADVANCE OF THE ANTICIPATED TRAFFIC BACKUP OR QUEUE.

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

WHEN A SIDE ROAD OR 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.

INSTALL TEMPORARY RUMBLE STRIPS PER MANUFACTURER'S RECOMMENDATIONS. PLACE ADVANCE SIGNING PRIOR TO INSTALLING TEMPORARY RUMBLE STRIPS.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

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. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT. REMOVE TEMPORARY RUMBLE STRIPS PRIOR TO COVERING OR REMOVING ALL ADVANCE SIGNING.

* UTILIZE TEMPORARY RUMBLE STRIPS WHEN FLAGGING OPERATION IS ANTICIPATED TO BE STATIONARY IN EXCESS OF TWO HOURS.

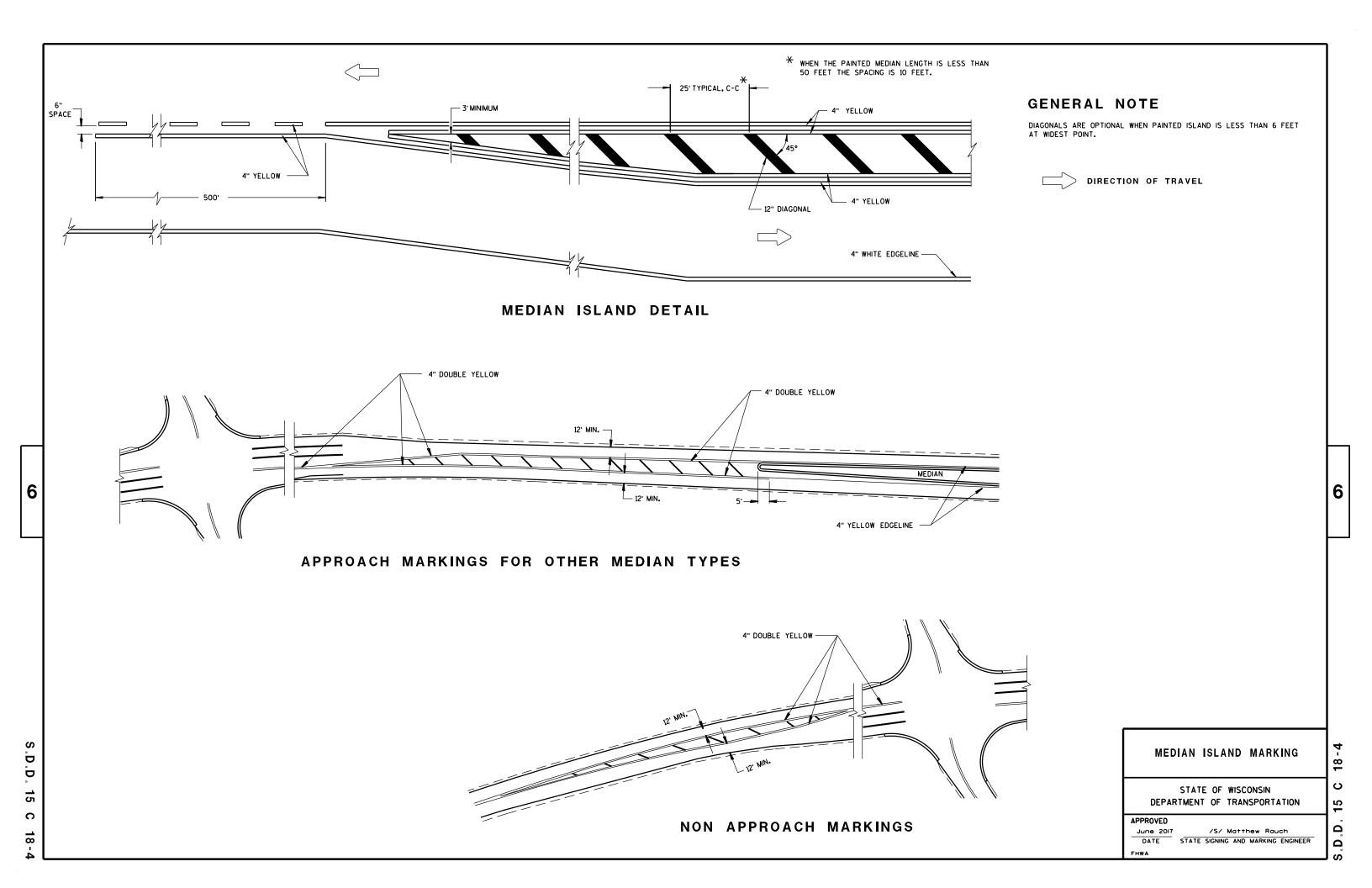
- 1) FOR A MOVING WORK OPERATION, SIGNING AND TEMPORARY RUMBLE STRIPS (IF USED) SHALL BE REESTABLISHED (AS SIMULTANEOUSLY AS PRACTICAL) AT APPROXIMATELY 3,500 FOOT INTERVALS IN THE MOVING WORK OPERATION OR AS APPROVED BY THE ENGINEER.
- SIGN NOT REQUIRED IF FLAGGING OPERATION OCCURS WITHIN A SIGNED ROAD WORK ZONE AREA.
- EACH TEMPORARY RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS SPACED ACCORDING TO MANUFACTURER'S RECOMMENDATION, PLACED TRANSVERSE ACROSS THE LANE AT LOCATIONS SHOWN.

TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

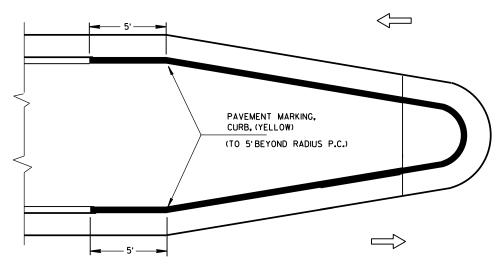
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June 2017	/S/ Andrew Heidtke
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FHWA	

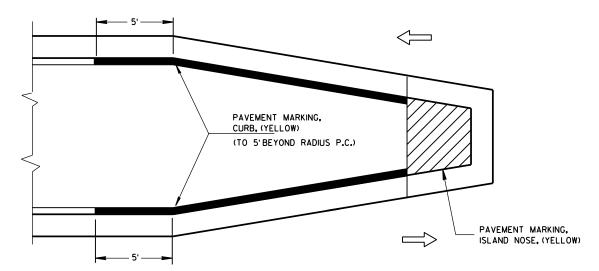
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MEDIAN ISLAND WITH SQUARE BLUNT NOSE



MEDIAN ISLAND WITH ROUND BLUNT NOSE



MEDIAN ISLAND WITH SLOPED NOSE

TYPICAL PLACEMENT OF PAVEMENT MARKING ON MEDIAN ISLANDS

GENERAL NOTES

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.

CURB MARKING

CURB MARKING

CORRUGATED MEDIAN MARKING

DIRECTION OF TRAVEL

PAVEMENT MARKING (ISLANDS)

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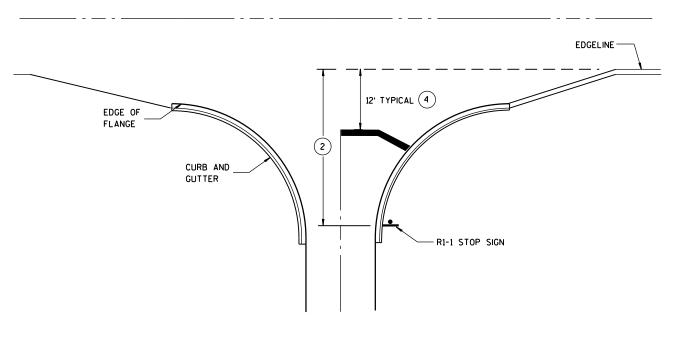
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8" CHANNELIZATION WHITE

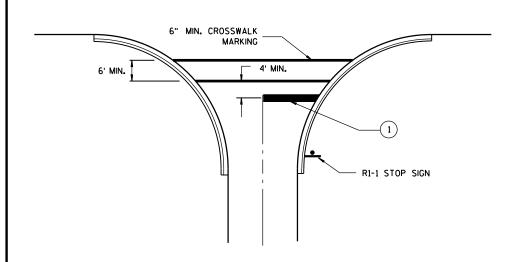
FLANGELINE (EXTENSION)

4" WHITE EDGELINE

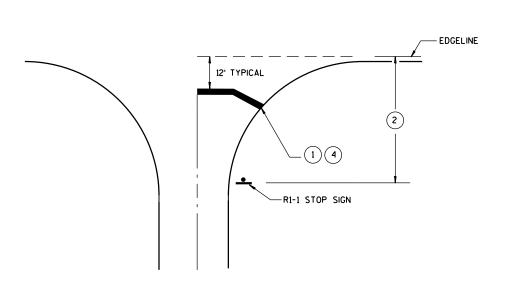
RI-1 STOP SIGN

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.
- MOVE CLOSER TO EDGE OF TRAVEL LANE AS NEEDED FOR VISIBILITY AND SIGHT LINES. (NO CLOSER THAN 4 FEET).

STOP LINE AND CROSSWALK PAVEMENT MARKING

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4-18-2016	/S/ Matthew R. Rauch
DATE	STATE SIGNING AND MARKING ENGINEER

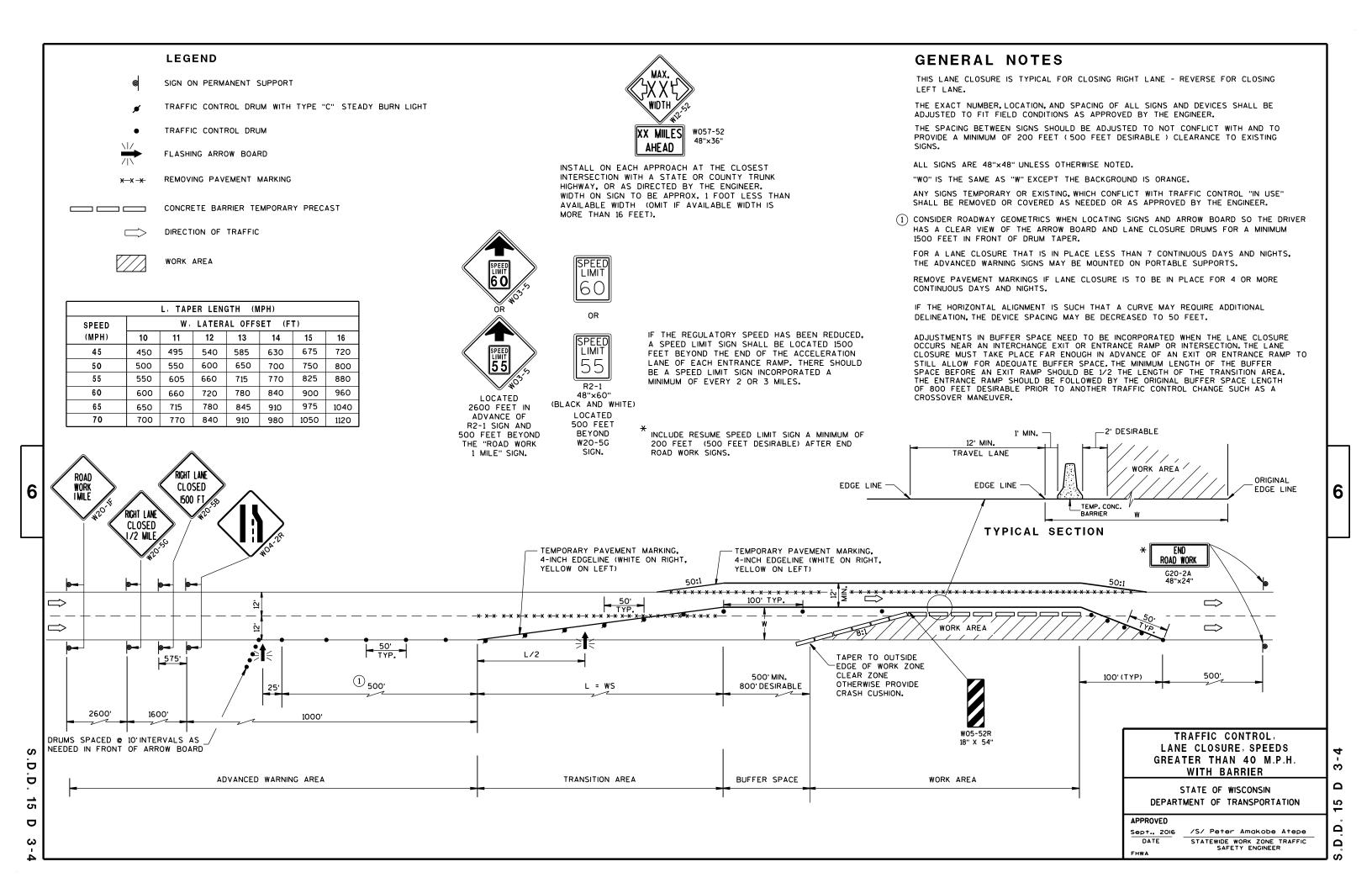
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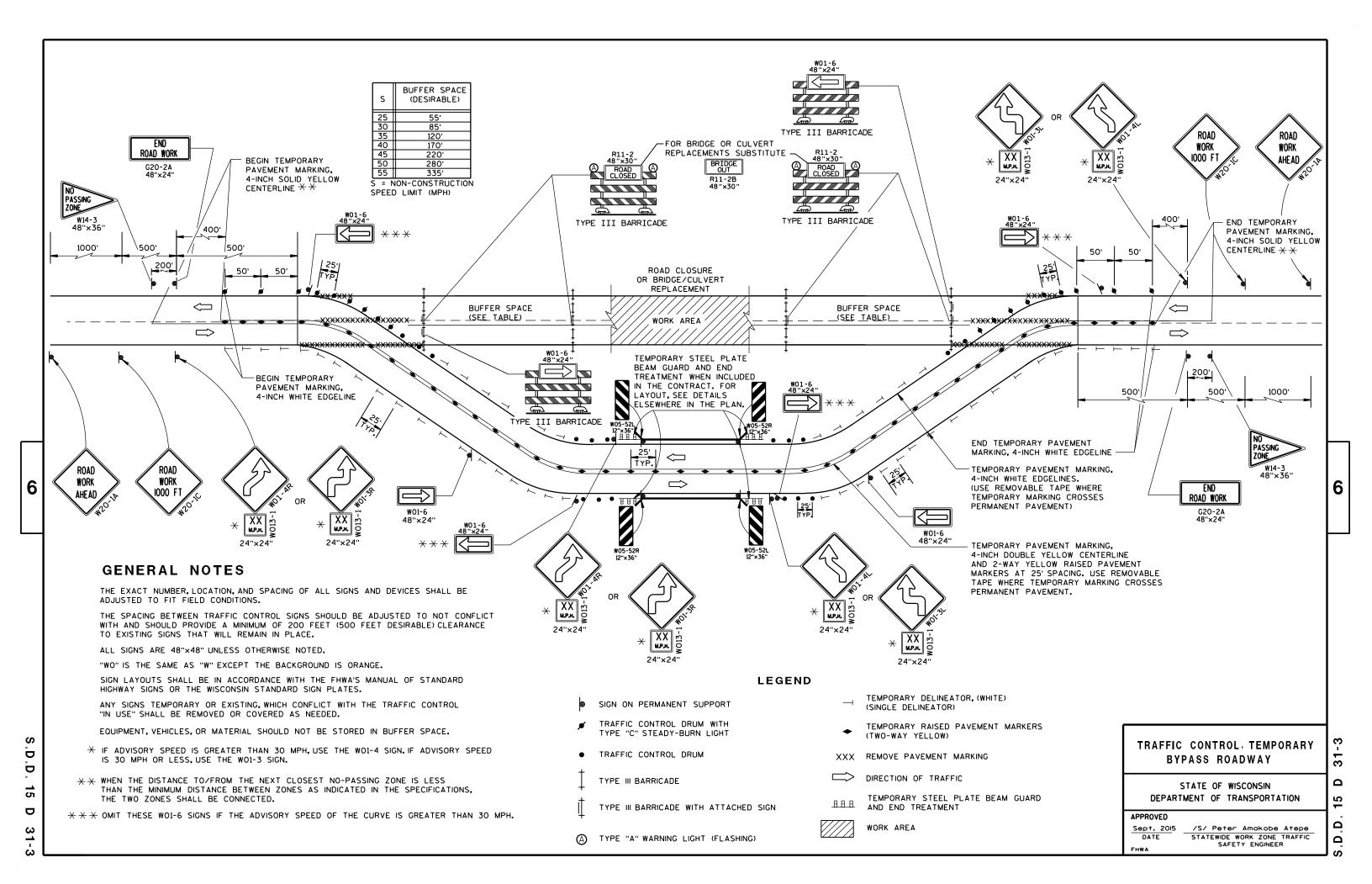
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TUBULAR STEEL POSTS

AREA OF SIGN INSTALLATION (SO. 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 SO.FT. SHALL BE MOUNTED ON MULTIPLE POSTS (SEE ABOVE TABLE). SIGNS LARGER THAN 27 SO.FT. SHALL NOT BE MOUNTED ON TUBULAR STEEL POSTS.

URBAN AREA

POST MOUNTING DETAIL FOR TEMPORARY TRAFFIC CONTROL FIXED MESSAGE SIGNS

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	
L	E	WOOD POSTS REQUIRED	
48" OR LESS AND LESS THAN 20 SO.FT.	-	1	
LESS THAN 60"	12"	2	٤
60" TO 120"	L/5	2	
GREATER THAN 120" LESS THAN 168"	12"	3	
168" AND GREATER	12"	4	

SEE NOTE (3)

RURAL AREA

TEMPORARY TRAFFIC CONTROL SIGN MOUNTING

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

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- 11/2" DIAMETER HOLES

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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 - 1/6" 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 - 1/32 " (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

* 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. FOR A SINGLE POST INSTALLATION, ALL SIGNS GREATER THAN 9 SQ. FT. REQUIRE THE USE OF 3 FASTENERS.

> ATTACHMENT OF SIGNS TO POSTS

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June 2017 /S/ Andrew Heidtke DATE WORK ZONE ENGINEER FHWA

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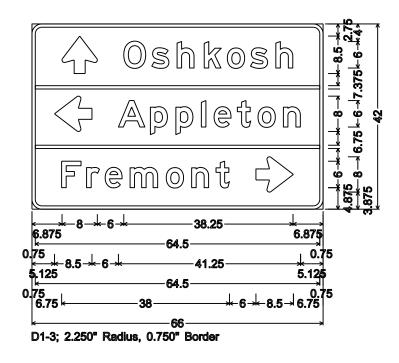
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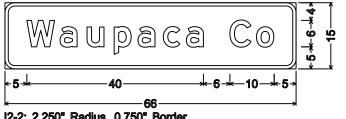


- 1. All Signs Type II Type H Reflective
- 2. Color:

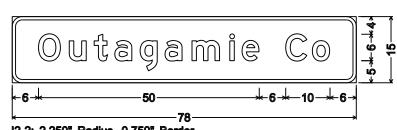
Background - Green Message - White

3. Message Series - E except as noted

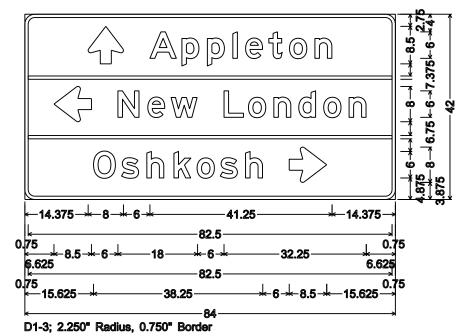


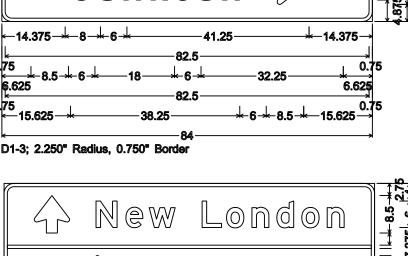


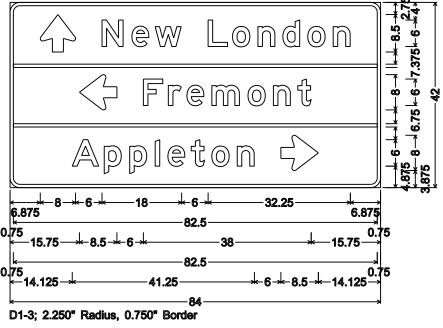
12-2; 2.250" Radius, 0.750" Border

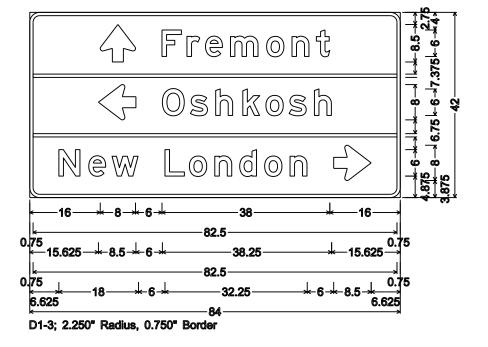


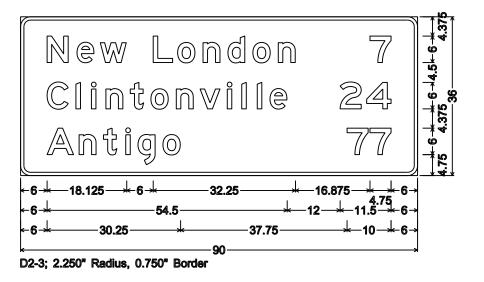
12-2: 2.250" Radius. 0.750" Border

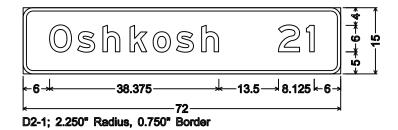












7

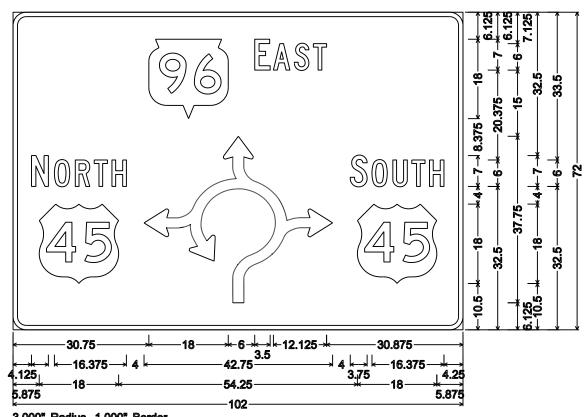
PLOT BY: \$\$...plotuser...\$\$ PLOT NAME:

Ε

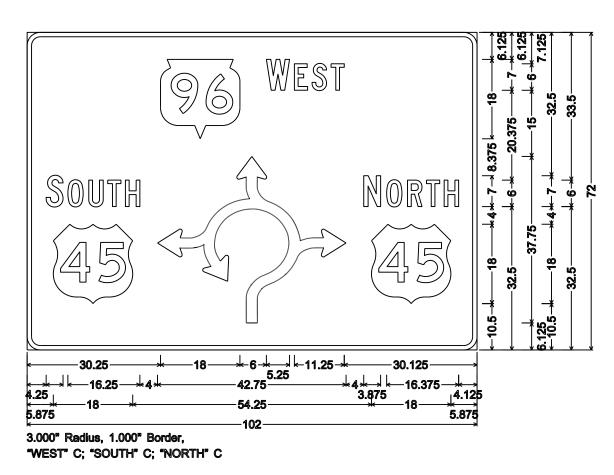
- 1. All Signs Type II Type H Reflective
- 2. Color:

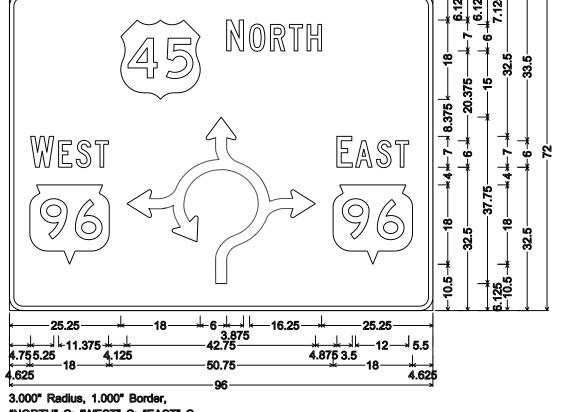
Background - Green Message - White

3. Message Series - E except as noted



3.000" Radius, 1.000" Border, "EAST" C; "NORTH" C; "SOUTH" C





"NORTH" C: "WEST" C: "EAST" C

COUNTY: WAUPACA Ε HWY: USH 45 PROJECT NO: 6430-07-71 PERMANENT SIGNING SHEET NO:

FILE NAME : C:\CAEfiles\Projects\tr_d4\4682an16.dgn

PLOT DATE: 17-NOV-2016 13:40

PLOT BY: \$\$...plotuser...\$\$ PLOT NAME:

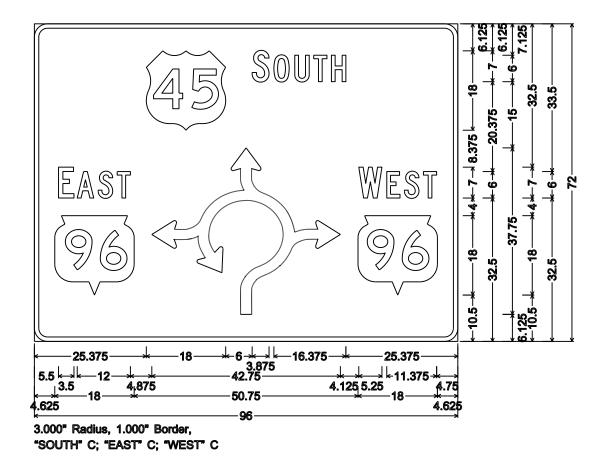
PLOT SCALE: 21.757661:1.000000

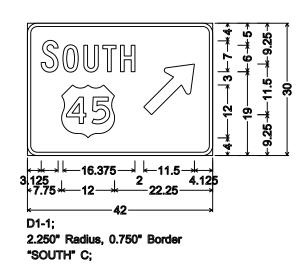
WISDOT/CADDS SHEET 42

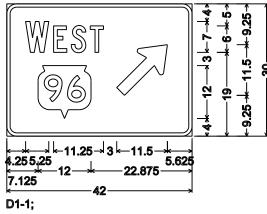
- 1. All Signs Type II Type H Reflective
- 2. Color:

Background - Green Message - White

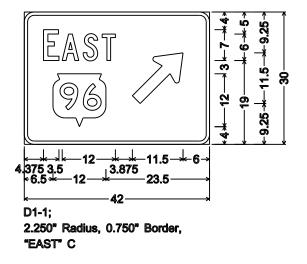
3. Message Series - E except as noted

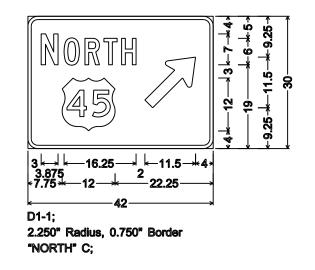






D1-1; 2.250" Radius, 0.750" Border "WEST" C





PROJECT NO: 6430-07-71 HWY:

HWY: USH 45

COUNTY: WAUPACA

PERMANENT SIGNING

SHEET NO:

PLOT SCALE : 21.757661:1.000000

WISDOT/CADDS SHEET 42

Ε

FILE NAME: C:\CAEfiles\Projects\tr_d4\4682an16.dgn

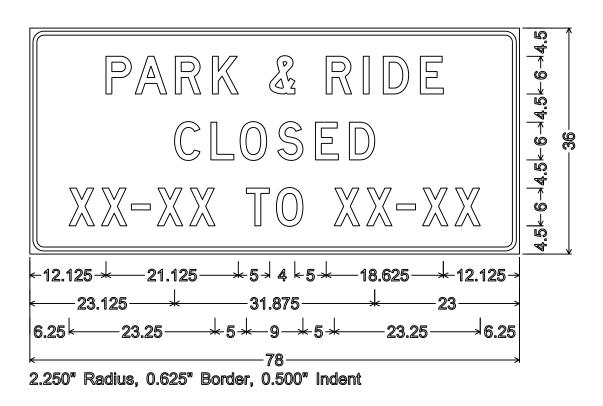
PLOT DATE : 17-NOV-2016 13:41

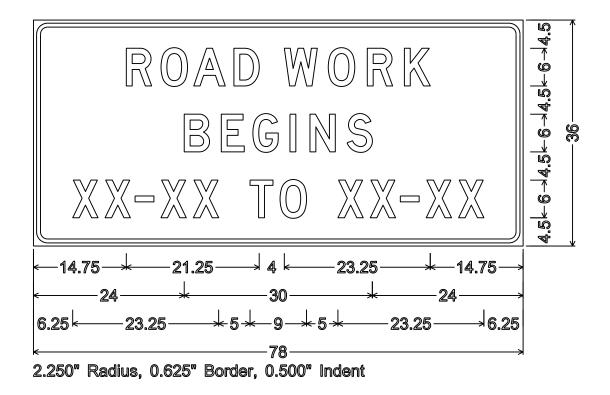
PLOT BY: \$\$...plotuser...\$\$ PLOT NAME:

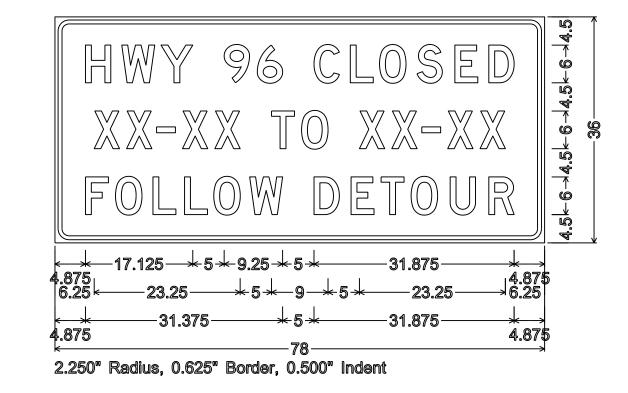
- 1. Fixed Message Type II Signs Type F Reflective
- 2. Color:

Background - Orange Message - Black

3. Message Series - D







PROJECT NO:6430-07-71 HWY: USH 45 COUNTY: WAUPACA TEMPORARY SIGNING SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_d4\Hwy45FMS.dgn PLOT DATE : 03-MAY-2017 14:39

PL01

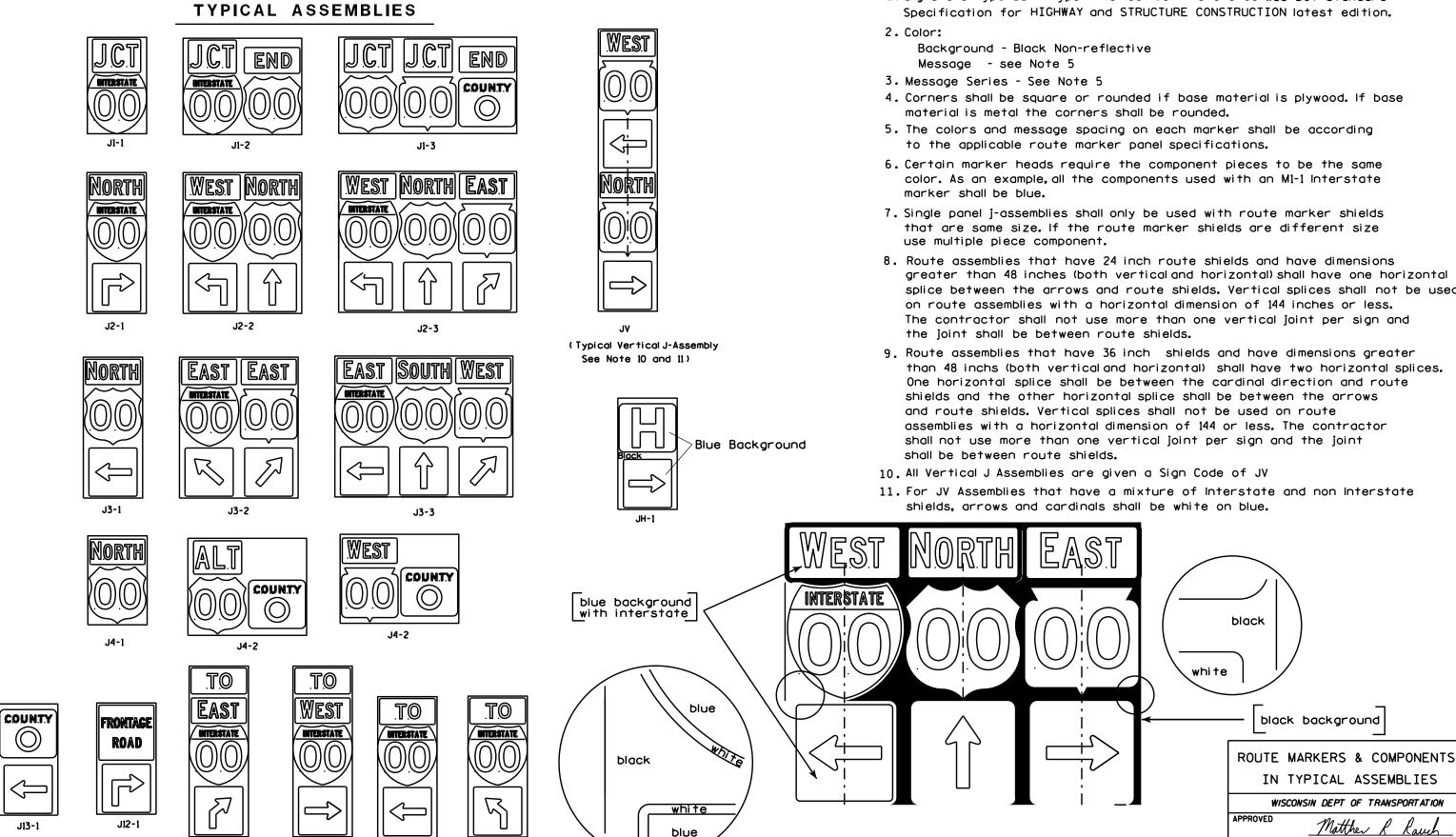
PLOT BY: \$\$...plotuser...\$\$ PLOT NAME:

PLOT SCALE: 15.287845:1.000000

WISDOT/CADDS SHEET 42

1. Signs are Type II - Type H Reflective - reference WIS DOT Standard

areater 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.



PROJECT NO:

J32-1

J22-1

J23-1

J33-1

PLOT BY: mscsja

PLATE NO. __A2-15.8

DATE 2/06/14

SHEET NO:

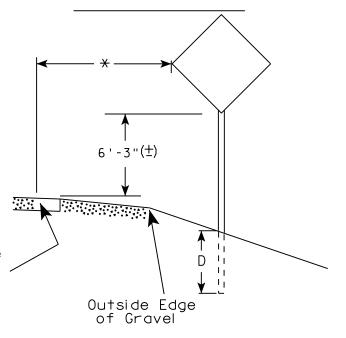
urban area

2' Min - 4' Max (See Note 6)

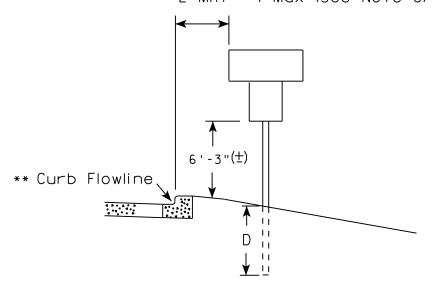
** Curb Flowline

D | White Edgeline Location

RURAL AREA (See Note 2)



2' Min - 4' Max (See Note 6)



White Edgeline
Location

Outside Edge
of Gravel

PLOT DATE: 21-AUG-2017 16:04

** 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.

POST EMBEDMENT DEPTH

Area of Sign	
Installation	D
(Sq.Ft.)	(Min)
20 or Less	4'
Greater than 20	5'

* 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.

GENERAL NOTES

- 1. Signs wider than 4 feet or 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" (\pm) or 6'-3" (\pm) depending upon existence of a sub-sign.
- 4. J-Assemblies are considered to be one sign for mounting height.
- 5. Minimum mounting height for signs mounted on traffic signal poles is $5'-3''(\pm)$.
- 6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
- 7. The (\pm) tolerance for mounting height is 3 inches.
- 8. Folding signs shall be mounted at a height of 5'-3'' (\pm) 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" (±).

TYPICAL INSTALLATION
OF PERMANENT TYPE II
SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Matther R Rauch

For State Traffic Engineer

DATE 8/21/17 PLATE NO. A4-3.21

SHEET NO:

PROJECT NO:

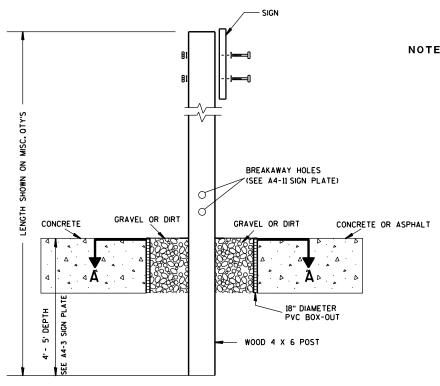
HWY:

COUNTY:

NTY:

PLOT BY: \$\$...plotuser...\$\$ PLOT NAME:

PLOT SCALE : 100.601251:1.000000



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.



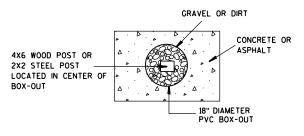
ELEVATION VIEW

DETAIL OF STEEL 2 X 2 SIGN POST IN BOX-OUT



DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

HWY:



COUNTY:

PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST BOX-OUTS A4-3B

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Math

For State Traffic Engineer

DATE 1/27/14 PLATE NO. A4-3B.1

SHEET NO:

PROJECT NO:

FILE NAME: C:\CAEFiles\Projects\tr_stdplate\A43B.DGN

PLOT DATE: 27-JAN-2014 09:48

PLOT NAME :

PLOT BY: mscsja

PLOT SCALE: 13.659812:1.000000

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. J-Assemblies are considered to be one sign for mounting height.
- 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'' (\pm) 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 and less than 20 S.F. in area.

POST EMBEDMENT DEPTH

D
(Min)
4'
5'

WISCONSIN DEPT OF TRANSPORTATION APPROVED For State Traffic Engineer DATE 8/21/17 PLATE NO. <u>A4-4.15</u>





	SIGN SHAPE OTHER THAN (TWO POSTS REQUIRE)		
	L	E	
***	Greater than 48" Less than 60"	12"	
	60" to 108"	L/5	

HWY:

SIGN SHAPE OTHER THAN (THREE POSTS REQUIR	
L	E
Greater than 108" to 144"	12''

COUNTY:

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A44.DGN

PROJECT NO:

PLOT DATE: 21-AUG-2017 15:54

PLOT SCALE: 108.188297:1.000000

WISDOT/CADDS SHEET 42

OF TYPE II SIGNS ON MULTIPLE POSTS

TYPICAL INSTALLATION

SHEET NO:

PLOT BY: \$\$...plotuser...\$\$ PLOT NAME:



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

Nather R Raw
For State Traffic Engineer

DATE <u>8/11/16</u>

PLATE NO. <u>44-8.8</u>

PROJECT NO:

FILE NAME : C:\CAFfiles\Projects\tr stdplote\A48 DCN

PLOT DATE . 11-416-2016 11:35

PINT RY * \$\$ nintuser \$\$

SHEET NO:

| | |



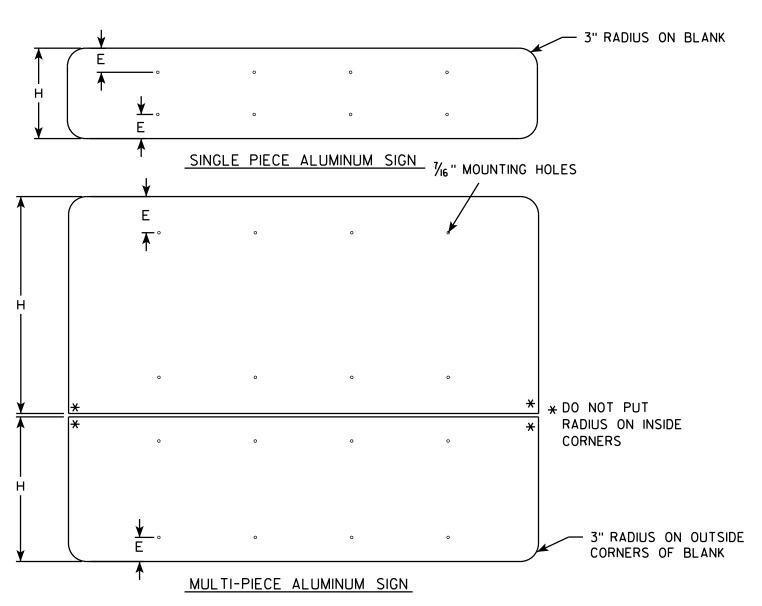
PROJECT NO: HWY: COUNTY: SHEET NO: FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A49.DGN PLOT DATE: 05-FEB-2015 17:09 PLOT BY: mscsja PLOT NAME : PLOT SCALE: 13.659812:1.000000

DATE 2/05/15

PLATE NO. <u>A4-9.9</u>

For State Traffic Engineer

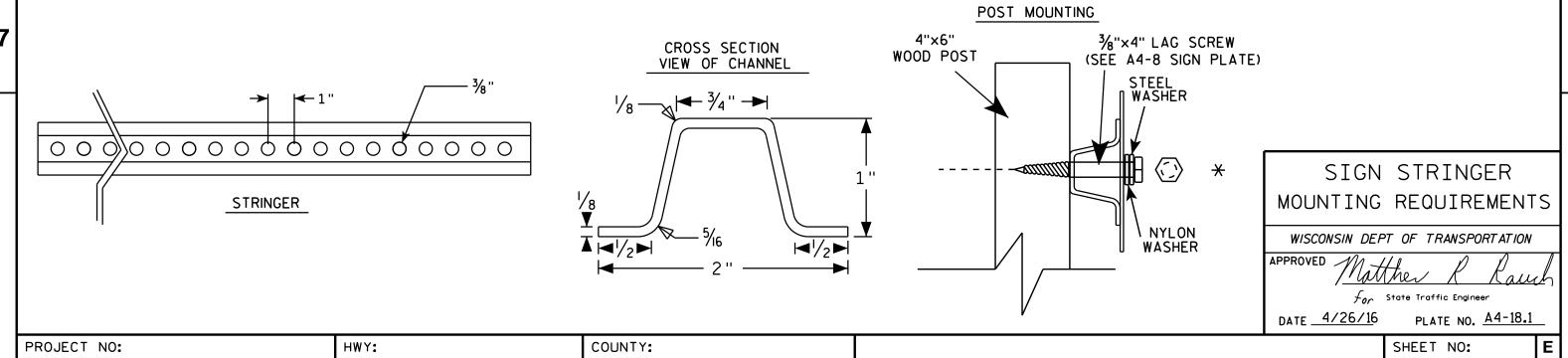




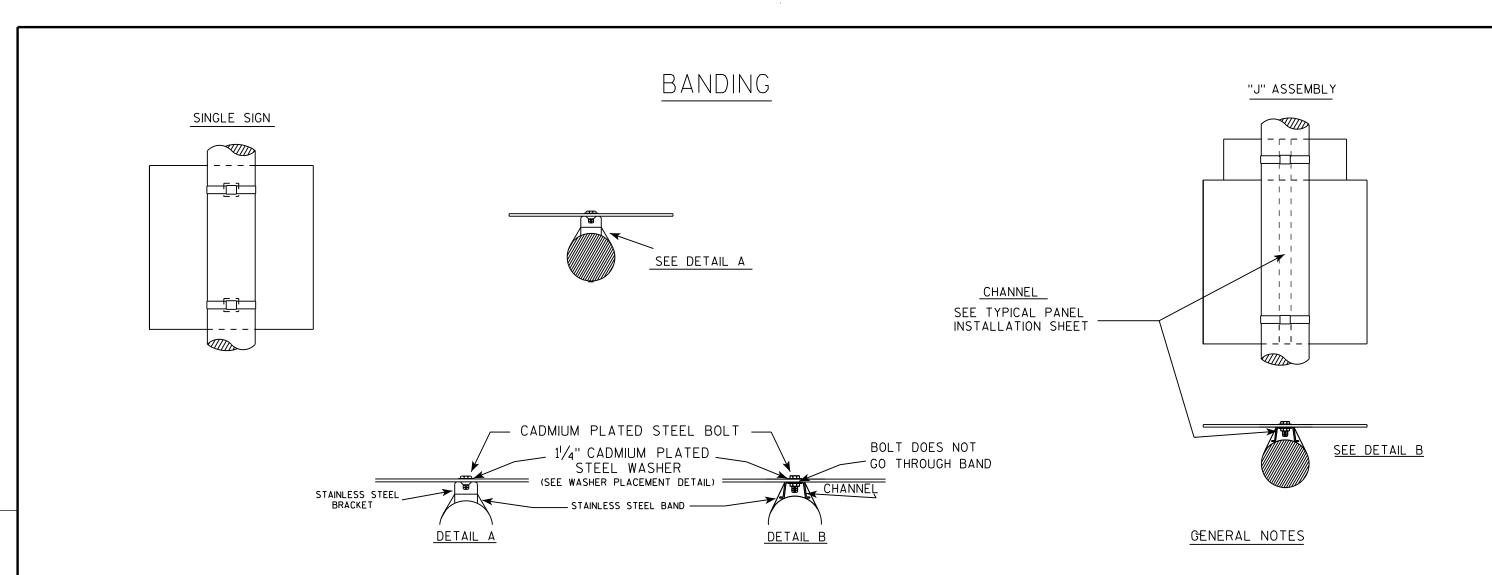
GENERAL NOTES

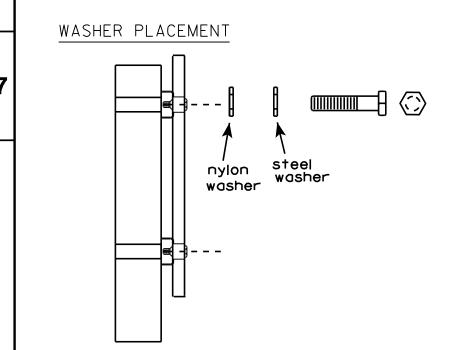
- ALL SIGNS OVER 60" IN WIDTH SHALL HAVE A 3" RADIUS ON THE OUTSIDE CORNERS OF THE ALUMINUM BLANK.
- MOUNTING HOLES SHALL BE $\frac{7}{16}$ " DIAMETER.
- SEE CHART FOR HOLE SPACING REQUIREMENTS
- FOR SIGN PANELS WITH DIMENSION (H) 36" AND OVER, DIMENSION E SHALL BE 6"
- FOR SIGN PANELS WITH DIMENSION (H) UNDER 36", DIMENSION E SHALL BE 4"
- SIGN STRINGER MATERIAL SHALL CONSIST OF STEEL CHANNEL POST SECTIONS, WEIGHING 1.12 LBS/FT IN ACCORDANCE WITH SECTION 633.2.1 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION.
- SEE SIGN PLATE A4-8 FOR SIGN STRINGER BOLTING REQUIREMENTS.

SIGN WIDTH	STRINGER WIDTH	POSTS	HOLE SPACING				NTING OLES			
7 8''	7 2"	2	16''	15''	31''	47''	63''			
84''	72"	2	17''	161/2"	331/2"	501/2"	6 7 1/2	1		
90"	72"	2	18''	18''	36''	54''	72"			
96"	90''	2	19''	191/2"	381/2''	57½"	761/2			
102"	90''	2	20"	21''	41''	61''	81''			
108''	90"	2	21''	221/21	' 43 ^l / ₂ ''	641/2"	851/2			
114''	108''	3	15''	12''	2 7 ''	42''	57''	72"	87''	102''
120''	108''	3	16''	12''	28''	44''	60"	76"	92"	108''
126"	108''	3	17''	12''	29"	46''	63''	80"	97''	114''
132"	126''	3	18''	12''	30"	48''	66''	84"	102"	120''
138''	126''	3	19"	12''	31''	50"	69"	88"	107''	126"
144''	126"	3	20"	12''	32"	52"	72"	92"	112''	132"



PLOT BY: mscj9h





HWY:

WASHERS (ALL POSTS) -

COUNTY:

1-1/4" O.D. $X\frac{3}{8}$ " I.D. $X\frac{1}{16}$ " STEEL 1-1/4" O.D. $X\frac{3}{8}$ " I.D. X .080 NYLON FOR ALL TYPE H SIGNS

PLOT BY: mscsja

- 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 $\frac{3}{4}$ " in width and 0.025" thickness.

STANDARD SIGN
SIGN BANDING DETAILS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED 400 1100 400 400

For State Traffic Engineer

DATE 8/16/13

713 PLATE NO. A5-9.3

SHEET NO:

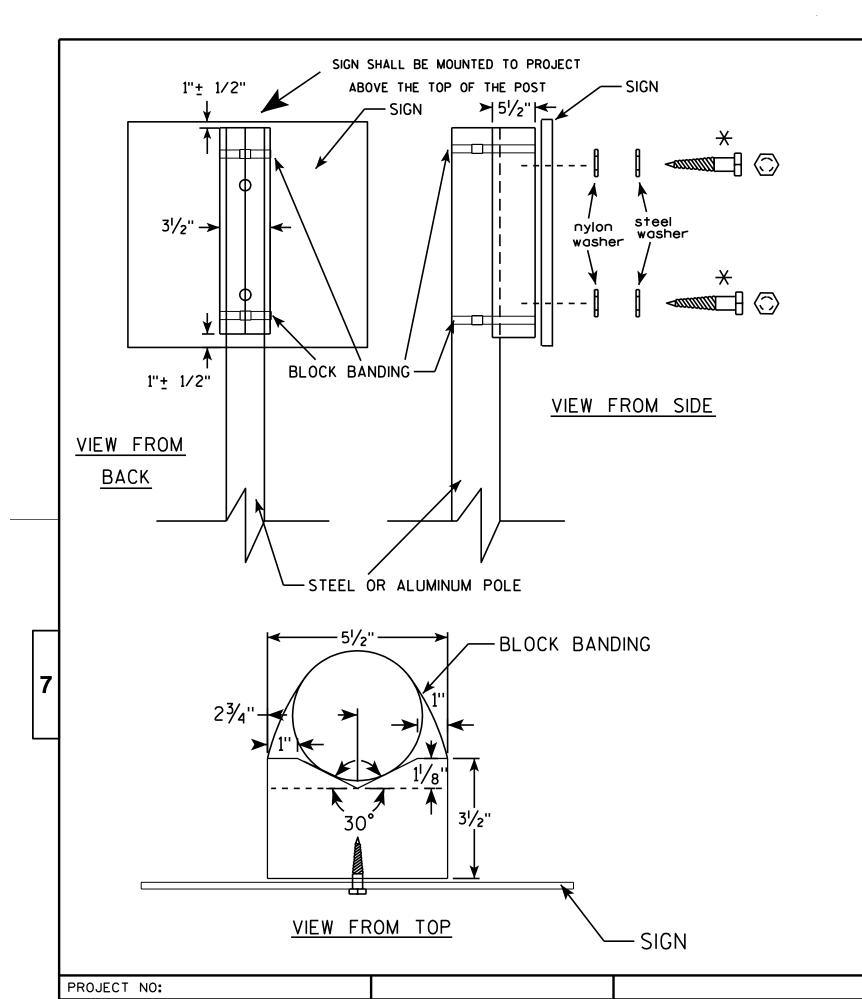
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A59.DGN

PROJECT NO:

PLOT DATE: 16-AUG-2013 13:27

PLOT NAME :

PLOT SCALE: 33.740899:1.000000



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, 3/4" 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 11/4" O.D. X 3/8" I.D. X 1/16"
- 8. NYLON WASHERS SHALL BE $1^{1}/_{4}$ " O.D. X $3/_{8}$ " I.D. X .080 FOR TYPE H OR TYPE F FACE SIGN

X LAG BOLTS SHALL BE 3/8" X 21/2"

BLOCK BANDING DETAIL
(V-BLOCK OPTION)

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

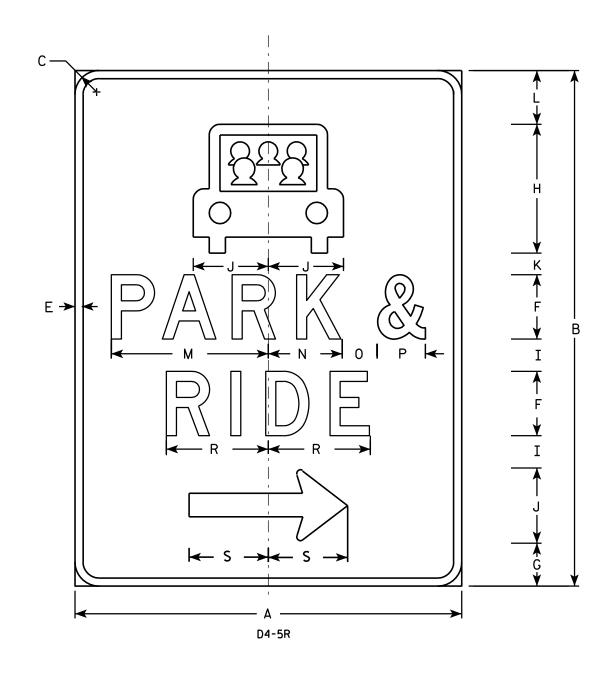
APPROVED

For State Traffic Engineer

DATE 7/12/07

PLATE NO. A5-10.1

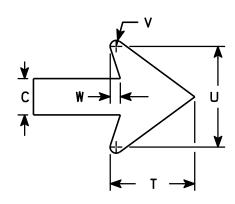
SHEET NO:



- 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 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. The D4-5L is the same as a D4-5R except the arrow is reversed.



<u>Arrow Detail</u>

SIZE	Α	В	С	D	E	F	G	Н	I	J	K	L	M	N	0	Р	0	R	S	T	U	٧	W	Х	Y	Z	Area sq. ft.
1																											
2	30	36	1 3/8		5/8	5	1 3/8	9	2	5	1 %	5	11 3/4	5 1/2	2 3/4	3 3/4		8	6 1/8	4	4 3/8	3/8	1/2				7.50
3	36	48	2 1/4		3/4	6	4	12	3	7	2	5	14 5/8	6 1/8	3 1/4	4 1/2		9 1/2	7 1/2	5 1/4	6 1/4	3/8	5/8				12.0
4																											
5																											

STANDARD SIGN D4-5 L&R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

For State Traffic Engineer

DATE 11/15/10

SHEET NO:

FILE NAME : C:\Users\PROJECTS\tr_stdplate\D45.DGN

PROJECT NO:

PLATE NO. <u>D4-5.2</u>

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	Α	В	С	D	E	F	G	Н	I	J	К	L	М	N	0	Р	Q	R	S	T	U	٧	W	Х	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 %	6 3/4	16 ¾	2 1/2	1 3/4	18 ½													8.0	0.72
3	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 %	6 3/4	16 ¾	2 1/2	1 3/4	18 ½													8.0	0.72
4	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 %	6 3/4	16 ¾	2 1/2	1 3/4	18 ½													8.0	0.72
5	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 1/8	6 3/4	16 ¾	2 1/2	1 3/4	18 ½													8.0	0.72

COUNTY:

STANDARD SIGN G20-2A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED 400 110 00 00 110

for State Traffic Engineer

DATE 9/30/09 PLATE NO. G20-2A.8

SHEET NO:

FILE NAME : C:\Users\PROJECTS\tr_stdplate\G202A.DGN

HWY:

PROJECT NO:

PLOT DATE: 30-SEP-2009 09:31

PLOT BY : ditjph

PLOT NAME :

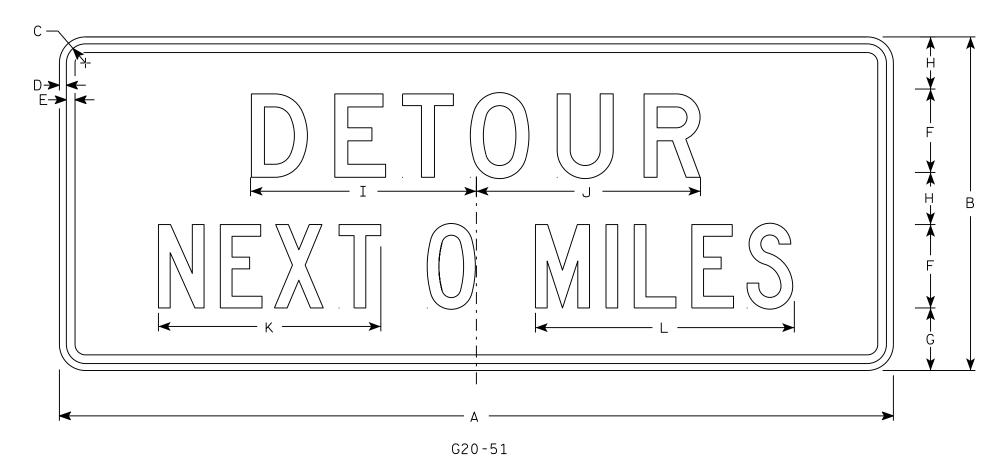
PLOT SCALE : 5.561773:1.000000

5.561773:1.000000 WISDOT/CADDS SHEET 42

- 1. Sign is Type II Type F Reflective
- 2. Color:

Background - Orange Message - Black

- 3. Message Series Line 1 is D and Line 2 is 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. Round distance to nearest whole Mile and substitute appropriate numerals and optically adjust spacing to achieve proper balance



SIZE Z D Ε 4 1/2 3 3/4 16 1/4 16 1/8 24 | 1 3/8 1/2 5/8 16 18 5/8 6 10 3 24 1 3/8 5/8 4 1/2 3 3/4 16 1/4 16 1/8 1/2 60 6 16 18 5/8 10

COUNTY:

STANDARD SIGN G20-51

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

ROVED Matthew & Rawh
For State Traffic Engineer

SHEET NO:

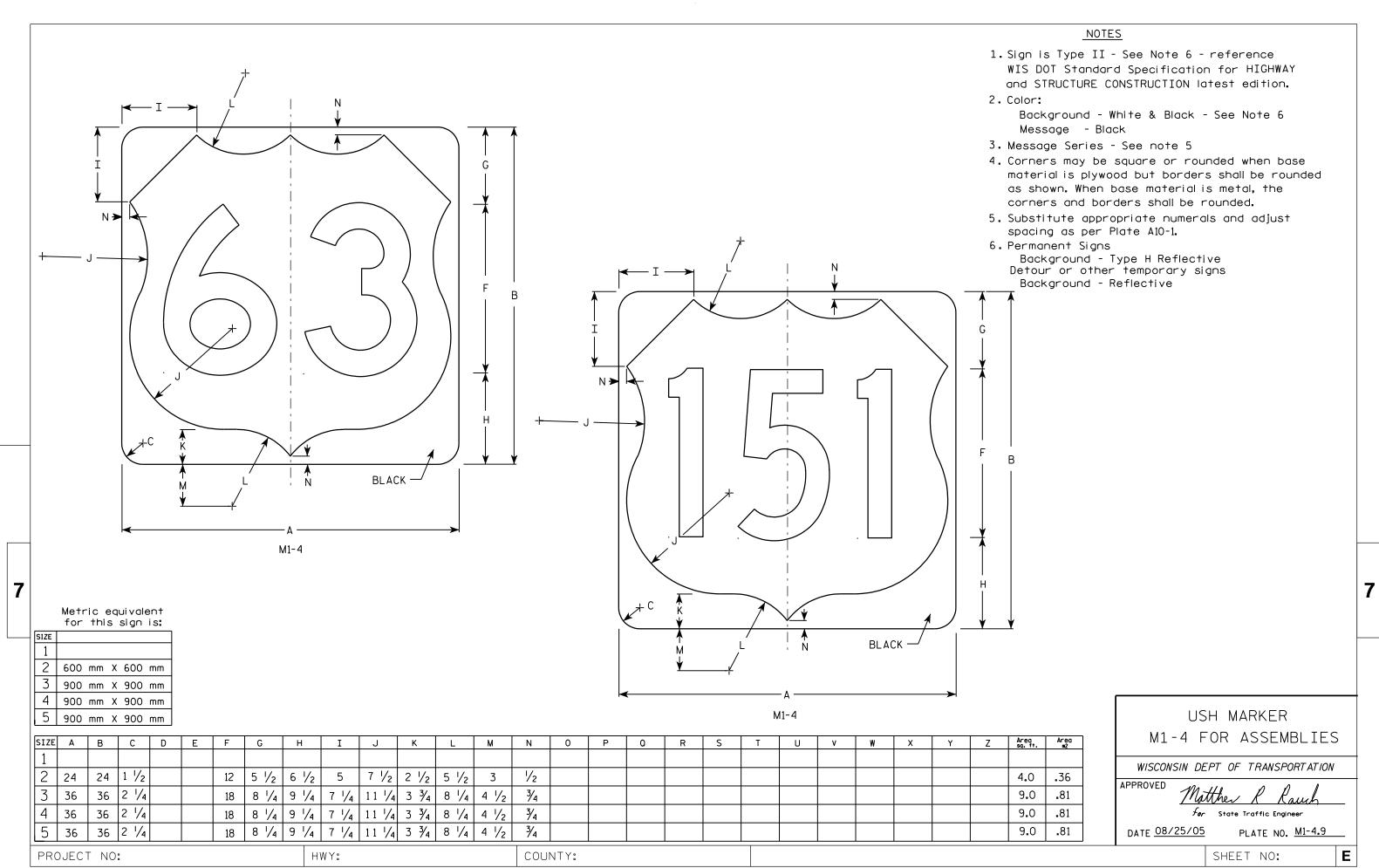
DATE 3/14/17

PLATE NO. G20-51.2

PLOT SCALE: 6.904489:1.000000

HWY:

PROJECT NO:



FILE NAME : C:\Users\Projects\tr_stdplate\M14.DGN

- 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 Series numerals and adjust spacing as per plate A10-1.
- 6. Permanent Signs
 Background Type H Reflective
 Detour or temporary Signs
 Background Reflective

J M N BLACK N

		F A H H H
Metric equivalent for this sign is:	M1 - 6	

HWY:

PROJECT NO:

900 mm X 900 mm

SIZE	Α	В	С	D	E	F	G	Н	I	J	K	L	М	N	0	Р	0	R	S	Т	U	٧	W	Х	Υ	Z	Area sq. ft.	Area m2
1																												
2	24		1 1/2			12	5 1/2	6 ½	10 1/4	2 1/2	8 %	11 1/2	1	1 %	11 1/4	21 1/8											4.0	. 36
3	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 ½	2 1/8	16 1/8	33											9.0	.81
4	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 1/8	16 1/8	33											9.0	.81
5	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 ½	2 1/8	16 1/8	33											9.0	. 81

COUNTY:

STATE ROUTE MARKER M1-6 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Cheste J Spang

For State Traffic Engineer

DATE 3/20/02 PLATE NO. M1-6.9

SHEET NO:

PLOT NAME :

- 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

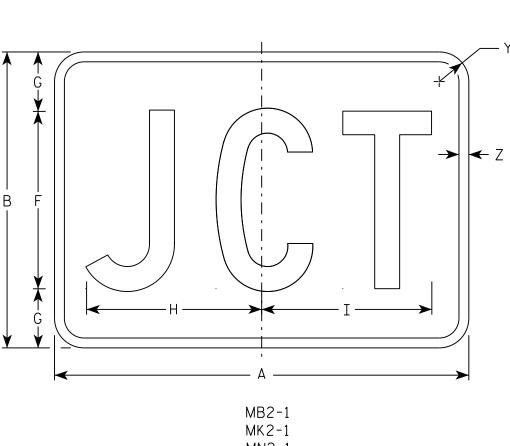
Message - White

MP2-1 Background - White

Message - Blue

MR2-1 Background - Brown

Message - Yellow



MN2-1

MR2-1

SIZE	Α	В	С	D	E	F	G	Н	I	J	K	L	М	N	0	Р	0	R	S	T	J	V	W	Х	Υ	Z	Area sq. ft.
1																											
2	21	15	1 1/8	3/8	3/8	9	3	8 1/8	8 %																1 1/2	1/2	2.20
3	30	21	1 1/8	3/8	3/8	13	4	12 1/8	12 3/8																1 1/2	1/2	4.40
4	30	21	1 1/8	3/8	3/8	13	4	12 1/8	12 3/8																1 1/2	1/2	4.40
5	30	21	1 1/8	3/8	3/8	13	4	12 1/8	12 3/8																1 1/2	1/2	4.40

COUNTY:

В

STANDARD SIGN

M2 - 1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Matthew & Rauch f_{or} State Traffic Engineer

DATE 10/15/15

PLATE NO. M2-1.12 Ε

SHEET NO:

FILE NAME · C·\CAFfiles\Projects\tr stdplote\M21 DGN

PROJECT NO:

M2-1

HWY:

MM2-1

MP2-1

PLOT DATE . 01-DEC-2015 17:54

PLOT BY . \$\$ Diotuser \$\$ PLOT NAME :

PLOT SCALE • 4 864603•1 000000







MP3-1









HWY:



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

MP3-1 thru MP3-4 Background - White

Message - Blue

6. Note the first letter of each direction is larger than the remainder of the message.

SIZE	Α	В	С	D	E	F	G	Н	I	J	К	L	М	N	0	Р	0	R	S	Т	U	V	W	Х	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 1/8	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

COUNTY:

STANDARD SIGNS M3-1 thur M3-4 **SERIES**

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

DATE 10/15/15 PLATE NO. M3-1.14

Ε

SHEET NO:

FILE NAME · C·\CAFfiles\Projects\tr stdolote\M31 DCN

PROJECT NO:

PLOT DATE . 01-DEC-2015 17:54

PLOT RY . \$\$ plotuser \$\$ PLOT NAME :

PLOT SCALE . 11 675051.1 000000

- 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.

) A G	
	;
→ G →	
Y	

Α С E F G H I J S Х Z D 0 10 10 1/4 1 1/8 3/8 3/8 24 2.0 3 36 1 1/8 3/8 1/2 4 1/2 14 5/8 14 1/2 4.5 4 5

COUNTY:

STANDARD SIGN M4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

DATE 11/10/10 PLATE NO. M4-8.2

SHEET NO:

FILE NAME : C:\Users\PROJECTS\tr_stdplate\M48.DGN

PROJECT NO:

HWY:

PLOT DATE: 10-NOV-2010 13:18

PLOT BY : ditjph

PLOT SCALE : 4.767

PLOT NAME :

PLOT SCALE: 4.767233:1.000000

WISDOT/CADDS SHEET 42

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.

 $D \longrightarrow$ Н M4-8A

SIZE	Α	В	С	D	E	F	G	Н	I	J	K	L	М	N	0	Р	0	R	S	Т	U	٧	w	Х	Y	Z	Area sq. ft.
$\parallel 1 \parallel$																											
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				·	·						·				·												

COUNTY:

STANDARD SIGN M4-8A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Matther

For State Traffic Engineer DATE 3/9/11

PLATE NO. M4-8A.2

SHEET NO:

FILE NAME : C:\Users\PROJECTS\tr_stdplate\M48A.DGN

HWY:

PROJECT NO:

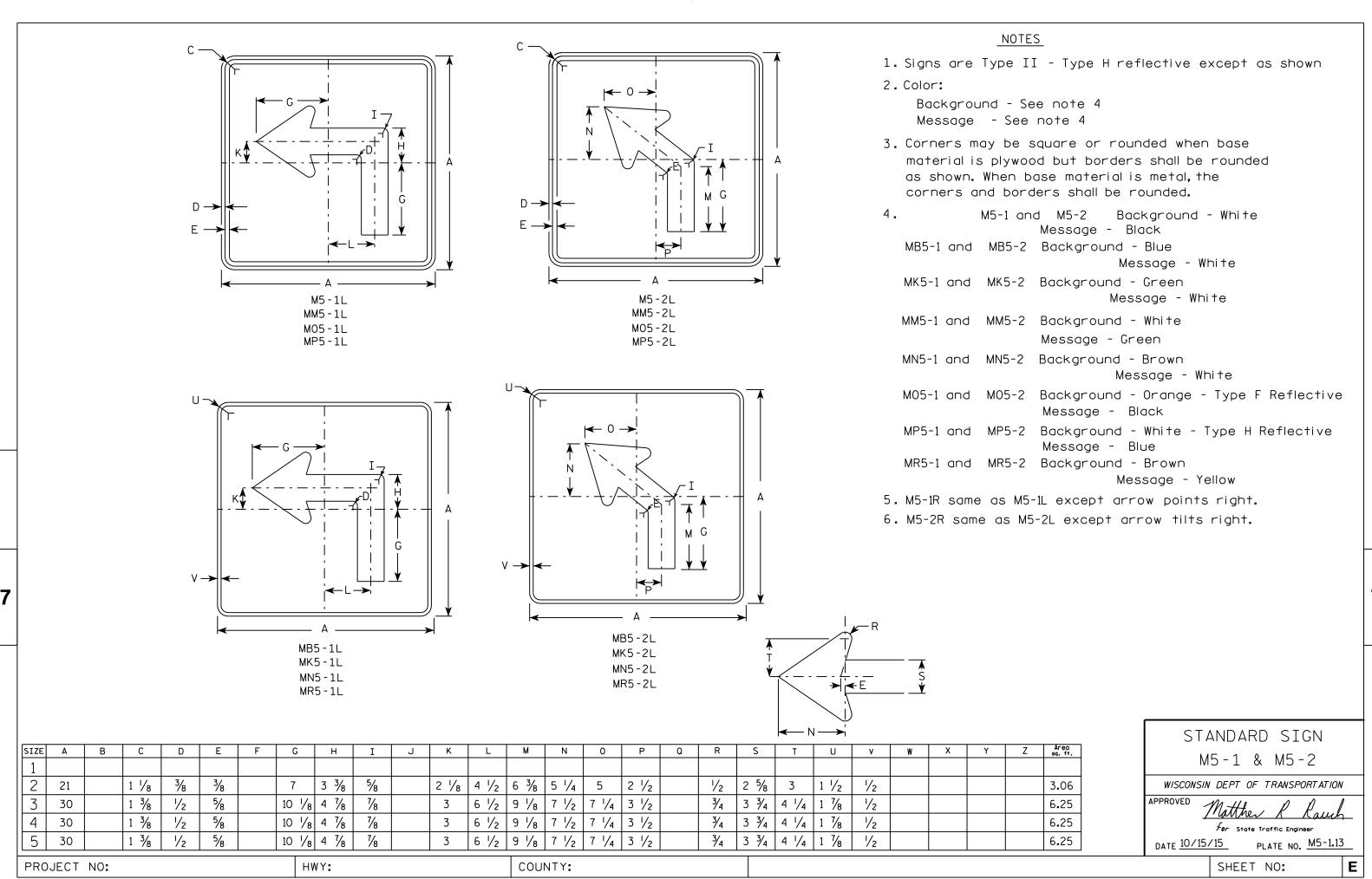
PLOT DATE: 09-MAR-2011 10:29

PLOT BY: mscj9h

PLOT NAME :

PLOT SCALE: 3.972696:1.000000

WISDOT/CADDS SHEET 42

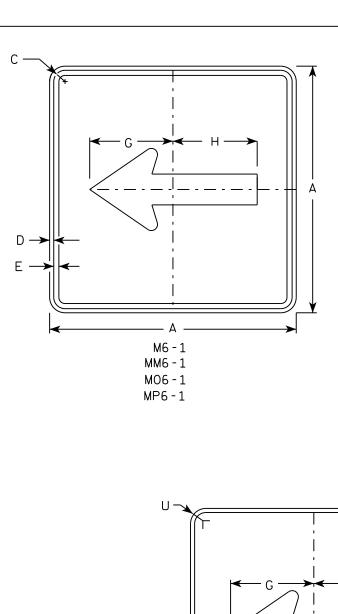


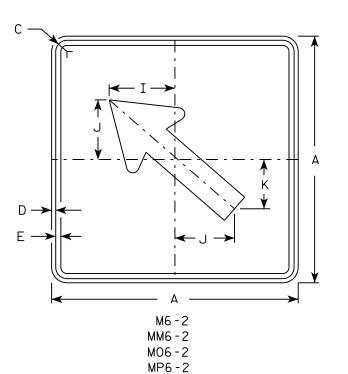
FILE NAME . C.\CAFfiles\Projects\tr stdolote\M51 DCN

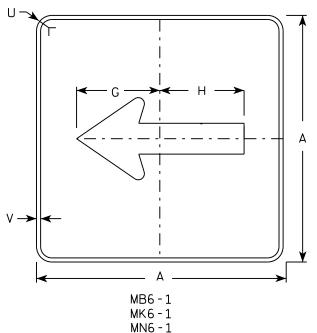
PLOT DATE . 01-DEC-2015 18:07

PINT RY . \$\$ DIOTUSET \$\$ PINT NAMF :

PLOT SCALE . 11 675051.1 000000

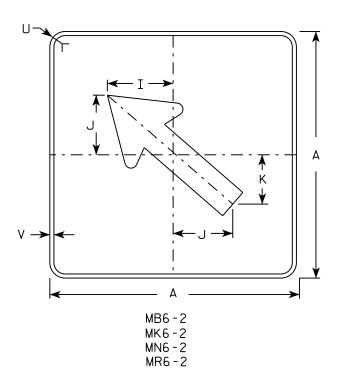






MR6-1

HWY:



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

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

M06-1 and M06-2 Background - Orange - Type F Reflective

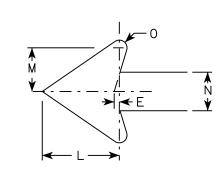
Message - Black

MP6-1 and MP6-2 Background - White

Message - Blue

MR6-1 and MR6-2 Background - Brown

Message - Yellow



SIZE	Α	В	С	D	E	F	G	Н	I	J	K	L	М	N	0	Р	٥	R	S	T	U	٧	W	Х	Y	Z	Area sq. ft.
1 1																											
2	21		1 1/8	3/8	3/8		7 1/2	7 1/8	5 %	5	4 1/4	5 1/4	3	2 %	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 1/8	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 1/8	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 1/8	1/2					6.25

COUNTY:

STANDARD SIGN M6-1 & M6-2 SERIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Matthew & Rawl For State Traffic Engineer

Ε

DATE 10/15/15 PLATE NO. M6-1.15

SHEET NO:

FILE NAME · C·\CAFfiles\Projects\tr stdplote\M61 DCN

PROJECT NO:

PLOT DATE . 01-DEC-2015 17:57

PIOT RY . \$\$ plotuser \$\$ PIOT NAMF :

PLOT SCALE . 11 675051.1 000000

- 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

PLOT NAME :

- 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.

A	
	G
	\\ \ F \\ \ \ \
E	 B
D D	
R1-2	

SIZE	Α	В	С	D	E	F	G	н	I	J	K	L	М	N	0	Р	0	R	S	Т	U	V	W	Х	Y	Z	Area sq. ft.
1	30	26	1 1/2	5/8	4	2 1/2	6 3/8	7 ⁄8	4	3 %																	2.71
25	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 %																	7.00
3	48	42	3	1	6	4	9 3/4	2	6 1/4	5 %																	7.00
4	48	42	3	1	6	4	9 3/4	2	6 1/4	5 %																	7.00
5	60	52	3	1 1/2	8	5	13	2 1/2	7 1/8	7 1/4																	10.83
6																											
7	18	15 1/2	1	3/8	2 1/2	1 1/2	3 1/8	5/8	2 3/8	2 1/4																	0.97

COUNTY:

STANDARD SIGN R1-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Matthew & Rauch

 f_{or} State Traffic Engineer

3/14 PLATE NO. R1-2.12

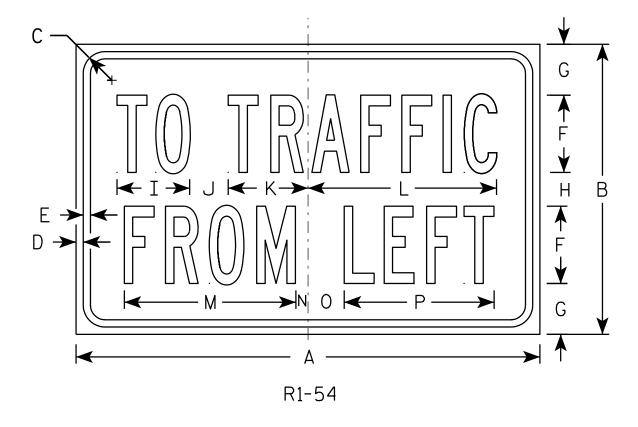
DATE 10/13/14 PLA

SHEET NO:

311221

PROJECT NO:

HWY:



- 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 - B

Z Area SIZE A 24 1 1/8 3/8 3/8 2 % 1 ¾ 3 ¾ 4 1/8 9 3/4 8 1/8 5/8 1 1/8 7 3/4 2.5 15 2 5/8 1 3/4 3 3/4 4 1/8 9 3/4 8 7/8 5/8 1 1/8 7 3/4 24 3/8 2 1 1/8 15 2.5 3 4 5 HWY: COUNTY: PROJECT NO:

STANDARD SIGN R1-54

WISCONSIN DEPT OF TRANSPORTATION

SHEET NO:

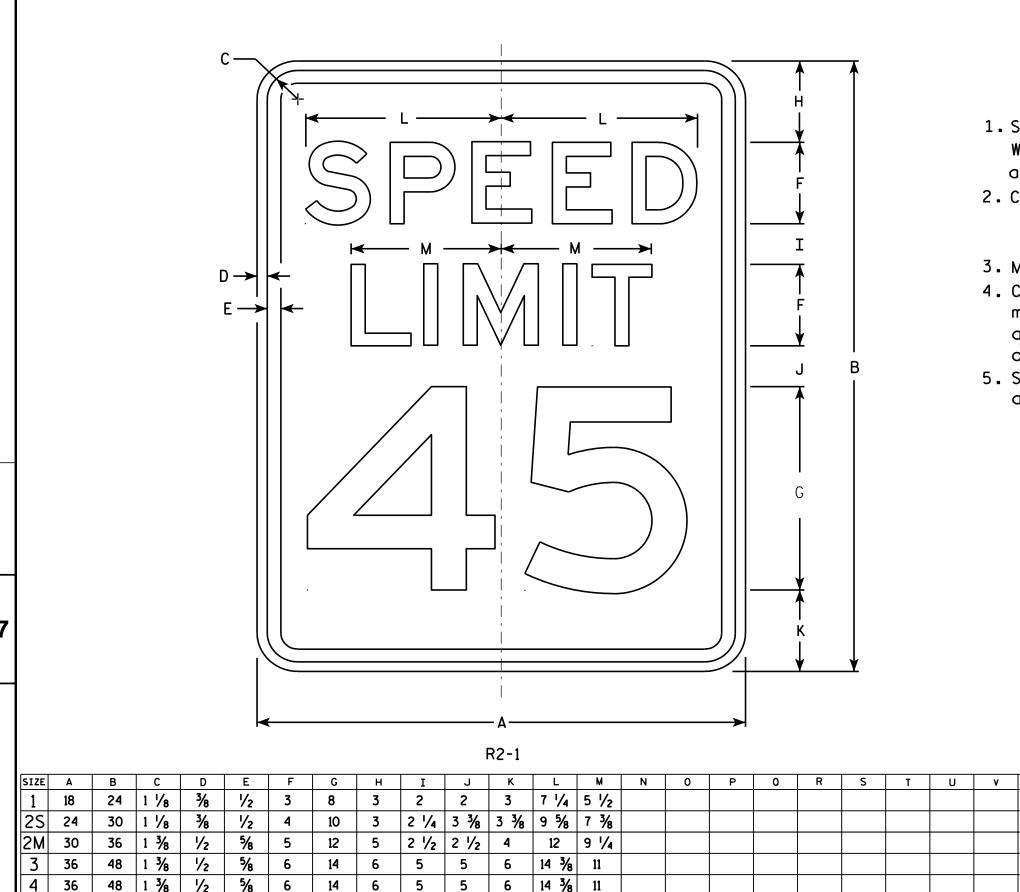
APPROVED

for State Traffic Engineer

DATE 12/03/10

PLATE NO. R1-54.2

PLOT NAME : PLOT BY: dotsja



4 1/2 6 3/4 6 3/4 19 1/4 14 5/8

COUNTY:

20

HWY:

6

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.

3.0

5.0

7.5

12.0

12.0

20.0

STANDARD SIGN R2-1

WISCONSIN DEPT OF TRANSPORTATION APPROVED

Matther R Raus For State Traffic Engineer PLATE NO. R2-1.13

DATE <u>5/26/1</u>0

SHEET NO:

2 1/4

60

5

48

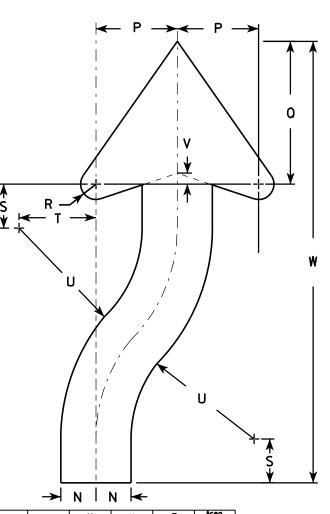
PROJECT NO:

PLOT NAME :

- 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

																							→	N I	N 		
SIZE	Α	В	С	D	Ε	F	G	Н	I	J	K	L	M	N	0	Р	0	R	S	Т	U	٧	W	X	Y	Z	Arec sq. f
1	18	24	1 1/8	3∕8	1/2	3 %	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%	1 %	3 1/4	6 3/4	1/2	20 3/8				3.0
25	24	30	1 1/8	3/8	1/2	4 1/2	6 1/4	7 3/8	1 %	3	8	4	12 1/2	2	30	4 %	8 1/8	1 / ₈	2 1/2	4 3/8	9	5/8	25 1/8				5.0
2N	24	30	1 1/8	3/8	1/2	4 1/2	6 1/4	7 3/8	1 1/8	3	8	4	12 1/2	2	30	4 %	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 1/8	4 1/2	12	6	18 3/4	3	45	6 %	12 1/4	1 1/4	3 3/4	6 %	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 1/8	4 1/2	12	6	18 3/4	3	45	6 %	12 1/4	1 1/4	3 3/4	6 %	13 1/2	1	40 3/4				12.
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 ¾	18	1 1/4	50 1/4				20.

COUNTY:

R4-7

STANDARD SIGN R4-7 & R4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

State Traffic Engineer
3/25/2011 PLATE NO. R4-

DATE 3/25/2011 PLATE NO. R4-7.8

SHEET NO:

PROJECT NO:

D→

HWY:

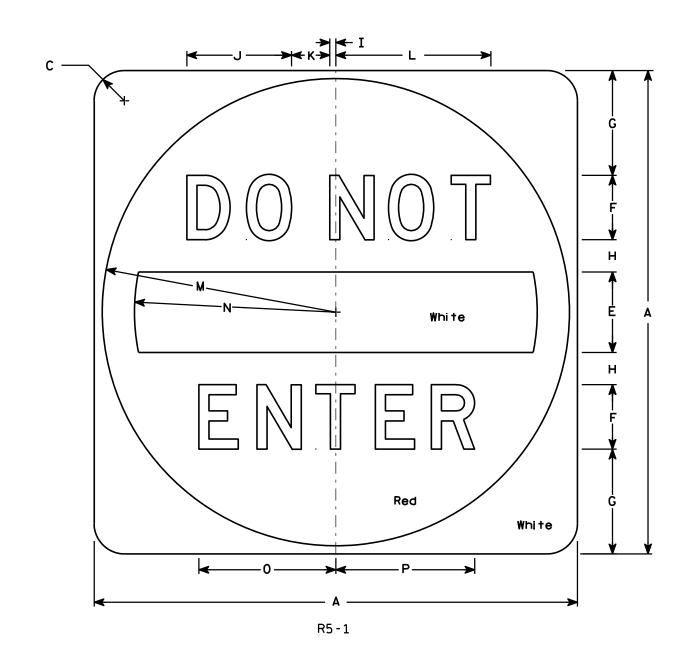
PLOT BY: mscsja

<u>NOTES</u>

- 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	Α	В	С	D	E	F	G	Н	I	J	K	L	М	N	0	Р	0	R	S	Т	U	V	W	Х	Y	Z	Area sq. ft.
1																											
25	30		1 1/8		5	4	6 1/2	2	3/8	6 1/2	2 3/8	9 %	14 1/2	12 1/2	8 1/2	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 %	10 ¾											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 %	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 %	10 3/4											9.0
5	48		3		8	6	11	3	5/8	9 3/4	3 %	14 1/2	23 ½	20	12 3/4	12 1/8											16.0

COUNTY:

STANDARD SIGN R5-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

For State Traffic Engineer

DATE 12/17/10

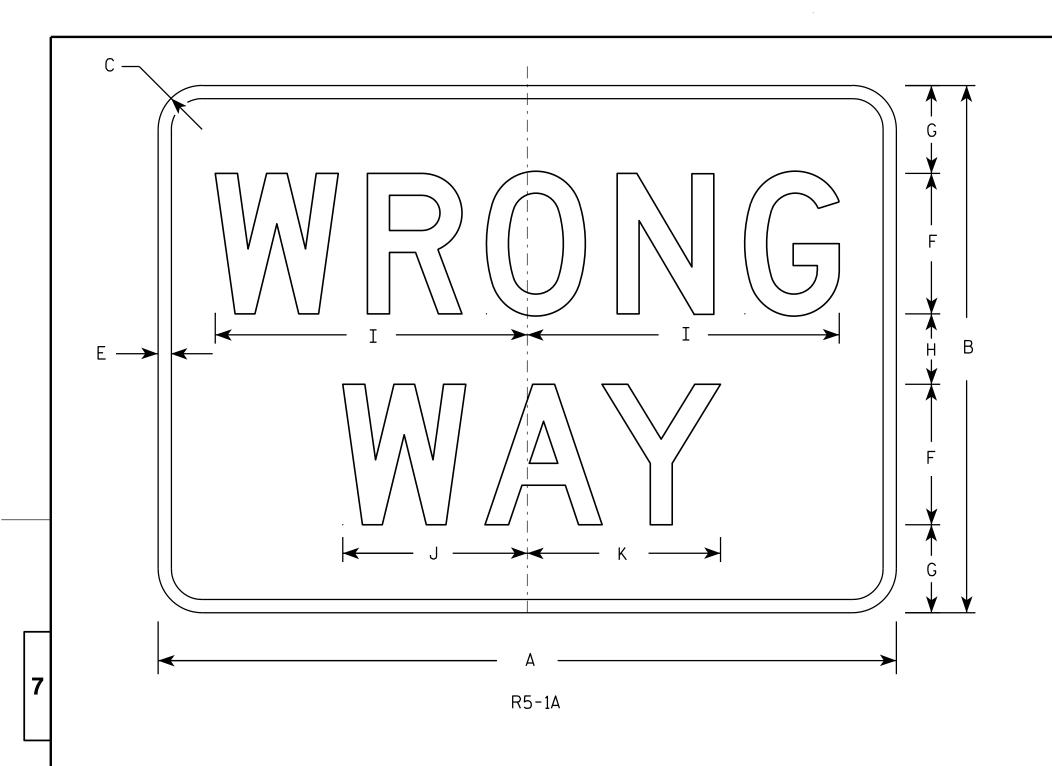
10 PLATE NO. R5-1.15

Р

PLOT NAME :

HWY:

PROJECT NO:



- 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	Α	В	С	D	Ε	F	G	Н	I	J	K	L	M	N	0	Р	0	R	S	T	U	٧	W	X	Y	Z	Area sq. ft.
1	30	18	1 1/2		1/2	5	3	2	11	6 ½	6 %																3.75
2S	36	24	2		5/8	6	4 1/2	3	13 1/4	7 1/8	8 1/4																6.00
2M	42	30	2 1/2		3/4	8	5	4	17 ¾	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

COUNTY:

STANDARD SIGN R5-1A

WISCONSIN DEPT OF TRANSPORTATION

Matther R Raud PLATE NO. R5-1A.2

DATE 12/17/10

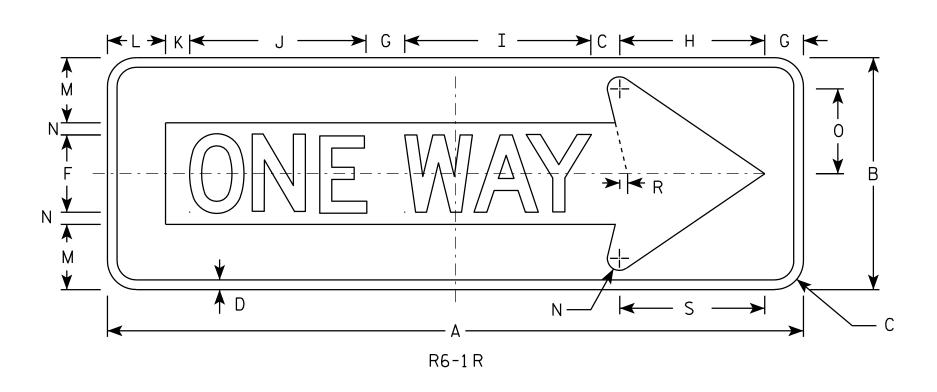
SHEET NO:

PROJECT NO:

HWY:

PLOT BY: dotsja

PLOT NAME :



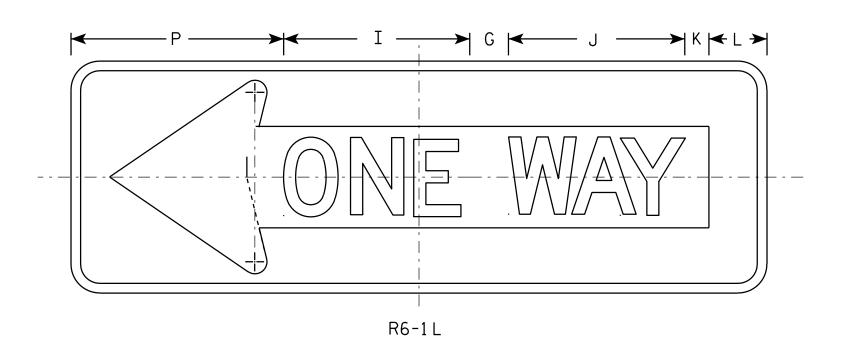
<u>NOTES</u>

- 1. Sign is Type II Type H Reflective reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color:

Background - BLACK

Message - BLACK LEGEND & WHITE ARROW & BORDER

- 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	Α	В	С	D	E	F	G	Н	I	J	K	L	M	N	0	Р	0	R	S	T	U	٧	W	X	Y	Z	Arec sq. f
1																											
25	36	12	1 1/2	1/2		4	2	7 1/2	9 %	9 1/8	1 1/4	3	3 %	5/8	4 3/8	11		3/8	7 1/2								3.0
2M	54	18	2 1/4	3/4		6	3	11 1/4	14 1/2	13 %	1 1/8	4 1/2	5	1	6 1/2	16 1/2		5/8	11 1/4								6.
3	54	18	2 1/4	3/4		6	3	11 1/4	14 1/2	13 %	1 1/8	4 1/2	5	1	6 1/2	16 1/2		5/8	11 1/4								6.
4	54	18	2 1/4	3/4		6	3	11 1/4	14 1/2	13 %	1 1/8	4 1/2	5	1	6 1/2	16 1/2		5/8	11 1/4								6.
5																											

STANDARD SIGN R6-1 L & R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

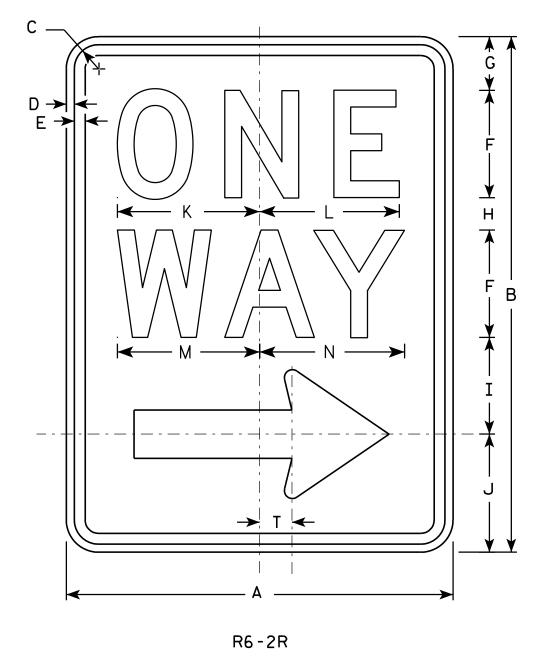
Matther & Raw For State Traffic Engineer

DATE 12/17/10

O PLATE NO.R<u>6-1.2</u> SHEET NO:

PLOT DATE: 17-DEC-2010 14:11 PLOT BY: dotsja

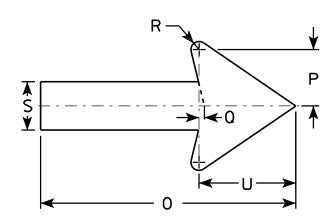
PROJECT NO:



- 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	В	С	D	E	F	G	Н	I	J	K	L	М	N	0	Р	0	R	S	T	U	٧	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 ½	6 %	6 1/2	6 %	6 3/4	11 1/8	2 %	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 %	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	6 %	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 1/8	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 %	1/2	3/4	4 3/4	3	9					
4	36	48	1 1/8	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 %	1/2	3/4	4 3/4	3	9					
5																										

COUNTY:

STANDARD SIGN R6-2 R&L

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

For State Traffic Engineer

DATE 11/2/10

PLATE NO. R6-2.8 SHEET NO:

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R62.DGN

HWY:

PROJECT NO:

PLOT DATE: 02-NOV-2010 15:25

PLOT BY: ditjph

PLOT NAME :

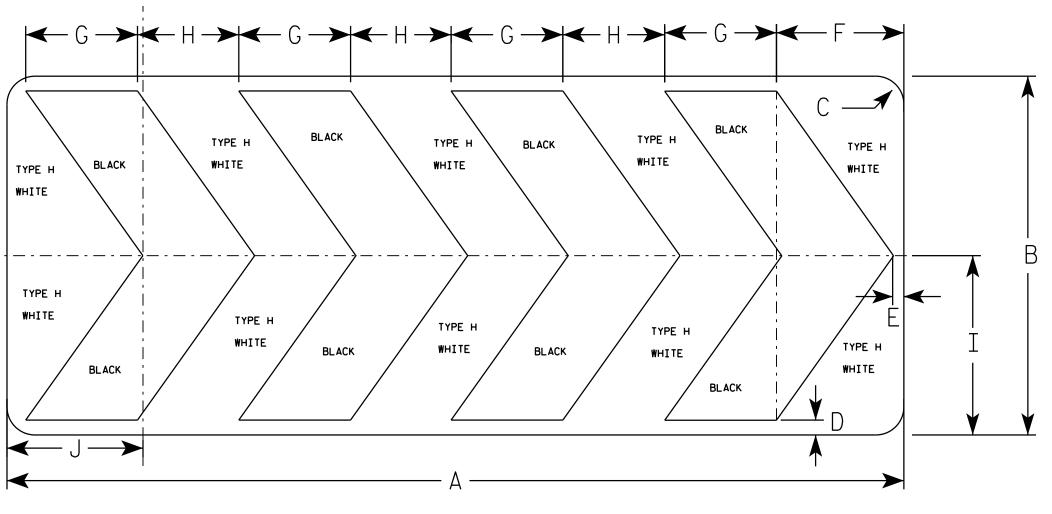
PLOT SCALE: 4.469282:1.000000

WISDOT/CADDS SHEET 42

- 1. Sign is Type II Type H Reflective
- 2. Color:

Background - WHITE 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.



R6-4B

SIZE	Δ	В	С	D	E	F	G	Н	I	J	K	L	М	N	0	Р	0	R	S	T	U	٧	W	X	Y	Z	Area sq. ft.
1																											
2S	60	24	1 1/8	1	3/4	8 1/2	7 1/2	6 3/4	12	9 1/8																	10.0
2M	60	24	1 1/8	1	3/4	8 1/2	7 1/2	6 3/4	12	9 1/8																	10.0
3																											
4																											
5																											

STANDARD SIGN R6-4B

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

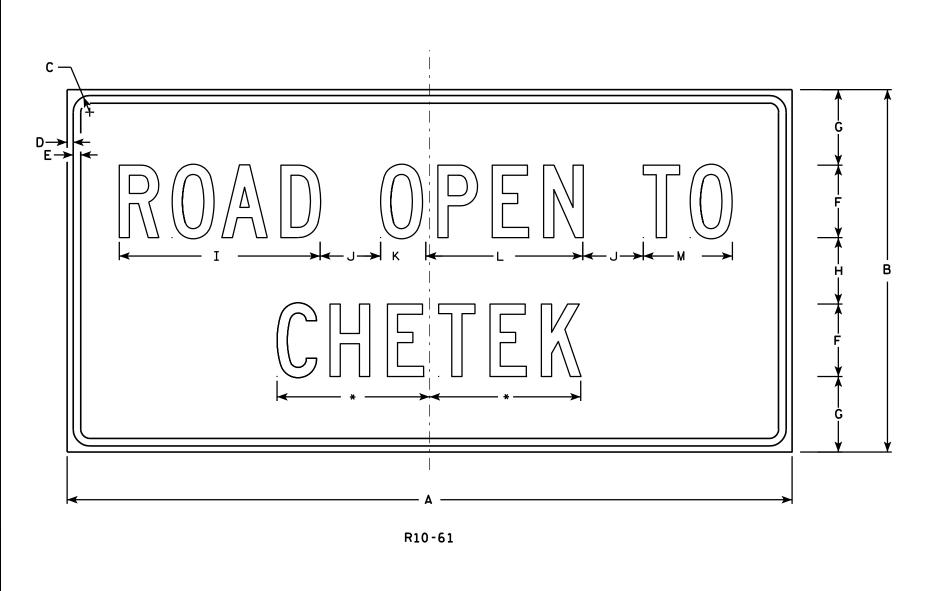
State Traffic Engineer

DATE 8/21/14

SHEET NO:

PROJECT NO:

PLATE NO. R6-4.3



- 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 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. Substitute appropriate message and optically balance.

*See note 5

PRO	JECT	NO:					Н١	WY:					coul	NTY:													
5																											
4																											
3																											
2M	60	30	1 3/8	1/2	5/8	6	6 1/4	5 ½	16 %	5	3 3/4	13	7 3/8														12.5
<u>2S</u>	60	30	1 3/8	1/2	5/8	6	6 1/4	5 ½	16 %	5	3 3/4	13	7 3/8														12.5
1	36	24	1 3/8	1/2	5/8	4	5 ½	5	10 ¾	2	2 1/8	8 3/8	4 %														6.0
SIZE	Α	В	С	D	E	F	G	Н	I	J	K	L	М	N	0	Р	0	R	S	T	U	٧	W	X	Y	Z	Are sq.

STANDARD SIGN R10-61

WISCONSIN DEPT OF TRANSPORTATION

APPROVED For State Traffic Engineer DATE 4/4/11

SHEET NO:

PLOT NAME :

PLOT BY: mscj9h



<u>NOTES</u>

- 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.





R	1	1	-	2	L

PLOT NAME :

SIZ	Έ	A	В	С	D	Ε	F	G	Н	I	J	K	L	M	N	0	Р	0	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																												
2	S	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													10.0
21	I	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 ½	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 ½	19	14	15	13													10.0

COUNTY:

STANDARD SIGN R11-2

WISCONSIN DEPT OF TRANSPORTATION

DATE 4/1/11 PLATE NO. R11-2.10

SHEET NO:

HWY:

PROJECT NO:



- 1. Sign is Type II Type H Reflective
- 2. Color:

Background - White 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.
- 5. Substitute appropriate numerals to nearest quarter mile and optically adjust spacing to achieve proper balance.

R11-3 ** See Note 5

SIZE A В С D Е G 5/8 1 3/8 1/2 1 1/8 | 15 1/4 | 8 10 3/4 8 3/8 4 3/4 6 3/4 36 18 4 3 2 1/2 2 2 11 1/8 6 1/2 2 7 1/8 4.5 1/2 17 3/8 13 1/8 30 $1\frac{3}{8}$ 5/8 4 1/4 3 3/8 16 5/8 1 1/2 23 | 13 1/4 | 1 3/4 3 1/2 11 1/8 12.5 6 10 11 2M 4 1/4 3 3/8 16 5/8 1 1/2 23 | 13 1/4 | 1 3/4 30 17 3/8 13 1/8 10 3 1/2 12.5 3 4 5

COUNTY:

STANDARD SIGN R11-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Matthew R Rauch DATE 3/15/17 PLATE NO. R11-3.8

SHEET NO:

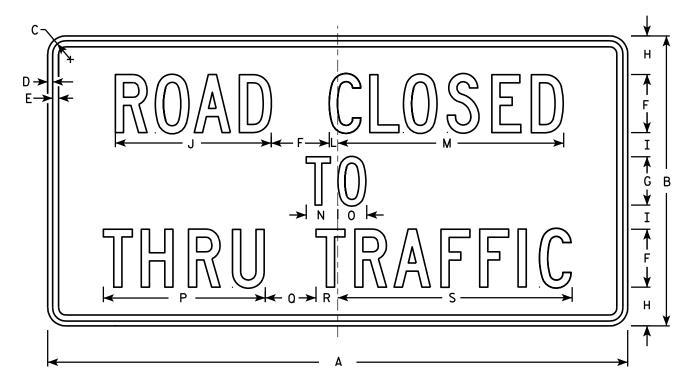
HWY:

PROJECT NO:

- 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 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.



R11-4

SIZE	Α	В	С	D	E	F	G	Н	I	J	K	L	М	N	0	Р	0	R	S	T	U	٧	W	х	Y	Z	Area sq. ft.
1																											
2S	60	30	1 3/8	1/2	5/8	6	5	4	2 1/2	16 1/8		7 /8	23 ¾	3 1/4	3	16 3/4	5 1/4	2 1/4	24 1/4								12.5
2M	60	30	1 3/8	1/2	5/8	6	5	4	2 1/2	16 1/8		7∕8	23 ¾	3 1/4	3	16 3/4	5 1/4	2 1/4	24 1/4								12.5
3																											
4																											
5																											

COUNTY:

STANDARD SIGN R11 - 4

WISCONSIN DEPT OF TRANSPORTATION

DATE 4/1/11 PLATE NO. R11-4.3

SHEET NO:

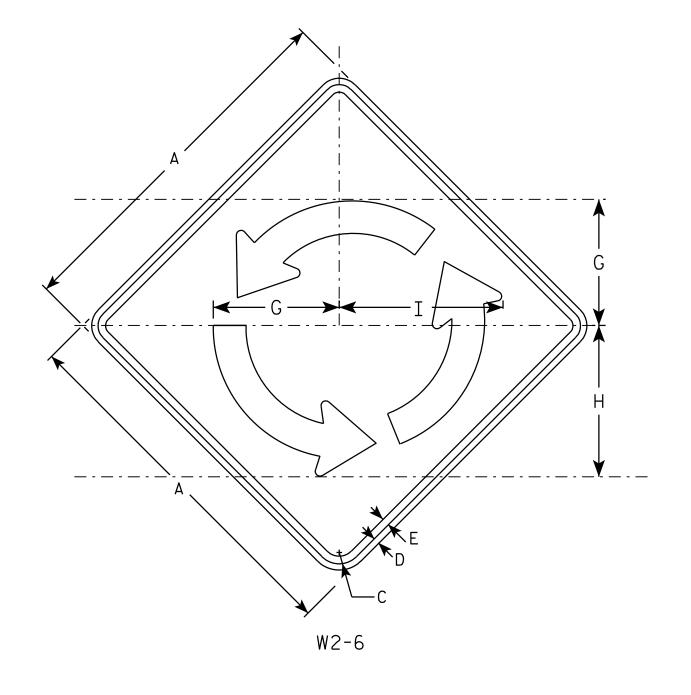
PROJECT NO: FILE NAME : C:\Users\PROJECTS\tr_stdplate\R114.DGN HWY:

PLOT DATE: 01-APR-2011 14:11

PLOT BY: mscj9h

PLOT NAME :

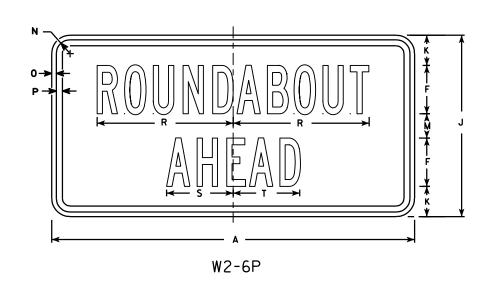
PLOT SCALE: 9.931739:1.000000



- 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 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.



																									W2-6	W2-6P
SIZE	Α	В	С	D	E	F	G	Н	I	J	K	L	М	N	0	Р	0	R	S	Т	U	٧	W	Х	Area sq. ft.	Area sq. ft.
1																										
25	30		1 3/8	1/2	5/8	4	10 3/8	12 1/2	13 ½	15	2 1/2		2	1 1/8	3/8	1/2		11 1/4	5 ½	5 ½					6.25	3.12
2M	30		1 3/8	1/2	5/8	4	10 3/8	12 1/2	13 1/2	15	2 1/2		2	1 1/8	3/8	1/2		11 1/4	5 ½	5 ½					6.25	3.12
3	36		1 %	5/8	3/4	5	12 1/2	15	16 1/4	18	2 %		2 3/4	1 1/8	3/8	1/2		14	7	6 3/4					9.00	4.50
4	48		2 1/4	3/4	1	6	16 %	20	16 1/4	24	4 %		3 %	1 3/8	1/2	5/8		17	8 1/4	8 1/4					16.0	8.0
5									·	·																
													•		•	•										

STANDARD SIGN W2 - 6

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

for State Traffic Engineer

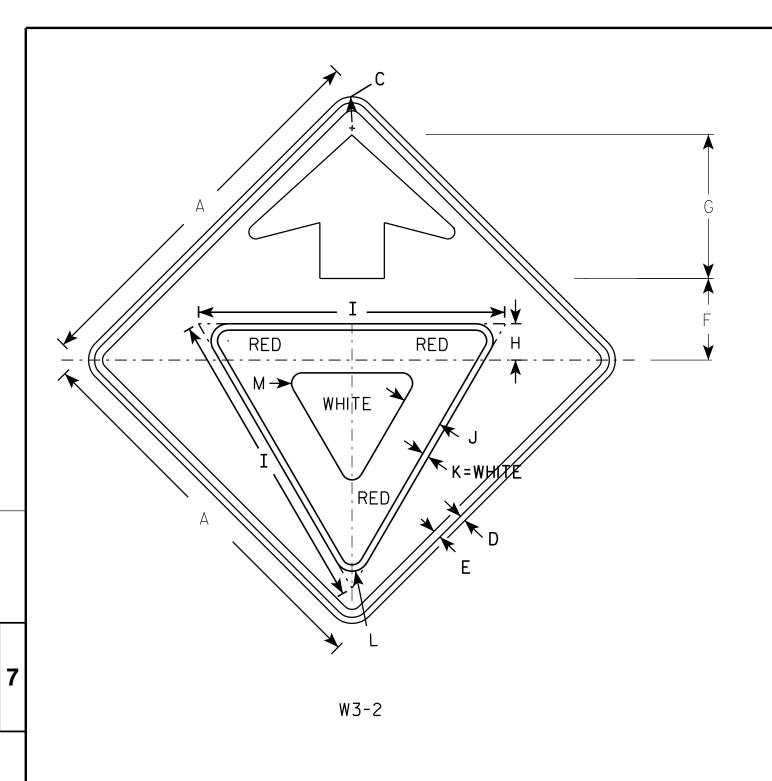
DATE <u>6/29/12</u>

SHEET NO:

PROJECT NO:

PLOT BY: mscsja

PLATE NO. <u>W2-6.5</u>



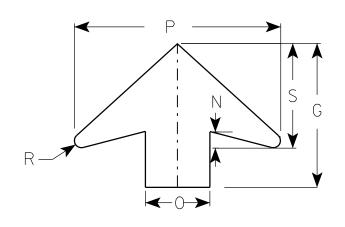
<u>NOTES</u>

- 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	Α	В	С	D	Ε	F	G	Н	I	C	K	L	М	N	0	P	0	R	S	Т	U	٧	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 %	1/2	1 3/8	1 /8	1 1/4	5	16		1/2	8								6.25
2S	36		1 %	5/8	3/4	7 1/2	13 1/2	3 %	28	3 3/4	5/8	1 1/2	1	1 %	6	19 1/4		5/8	9 3/4								9.0
2M	36		1 %	5/8	3/4	7 1/2	13 1/2	3 %	28	3 3/4	5/8	1 1/2	1	1 %	6	19 1/4		5/8	9 3/4								9.0
3	36		1 %	5/8	3/4	7 1/2	13 1/2	3 %	28	3 3/4	5/8	1 1/2	1	1 %	6	19 1/4		5/8	9 3/4								9.0
4	48		2 1/4	3/4	1	10	17 1/8	4 1/2	38	5	3/4	2 1/8	1 3/8	2	8	25 %		7 /8	13								16.0
5	48		2 1/4	3/4	1	10	17 1/8	4 1/2	38	5	3/4	2 1/8	1 3/8	2	8	25 %		7 /8	13								16.0

STANDARD SIGN W3-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew

For State Traffic Engineer

DATE 6/7/10 PLATE NO. W3-2..9

SHEET NO:

PROJECT NO:

- 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.

	>
W5-54	

SIZE	Α	В	С	D	E	F	G	Н	I	C	K	L	М	N	0	Р	a	R	S	Т	U	٧	W	X	Υ	Z	Area sq. ft.
1	12								1																		1.0
2S	18								1 1/2																		2.25
2M	18								1 1/2																		2.25
3																											
4																											
5																							·				
													1														

COUNTY:

STANDARD SIGN W5-54

WISCONSIN DEPT OF TRANSPORTATION APPROVED

Matthew R Rauch DATE 11/3/10 PLATE NO. W5-54.8

SHEET NO:

FILE NAME : C:\Users\PROJECTS\tr_stdplate\W554.DGN

PROJECT NO:

HWY:

PLOT DATE: 03-NOV-2010 09:54

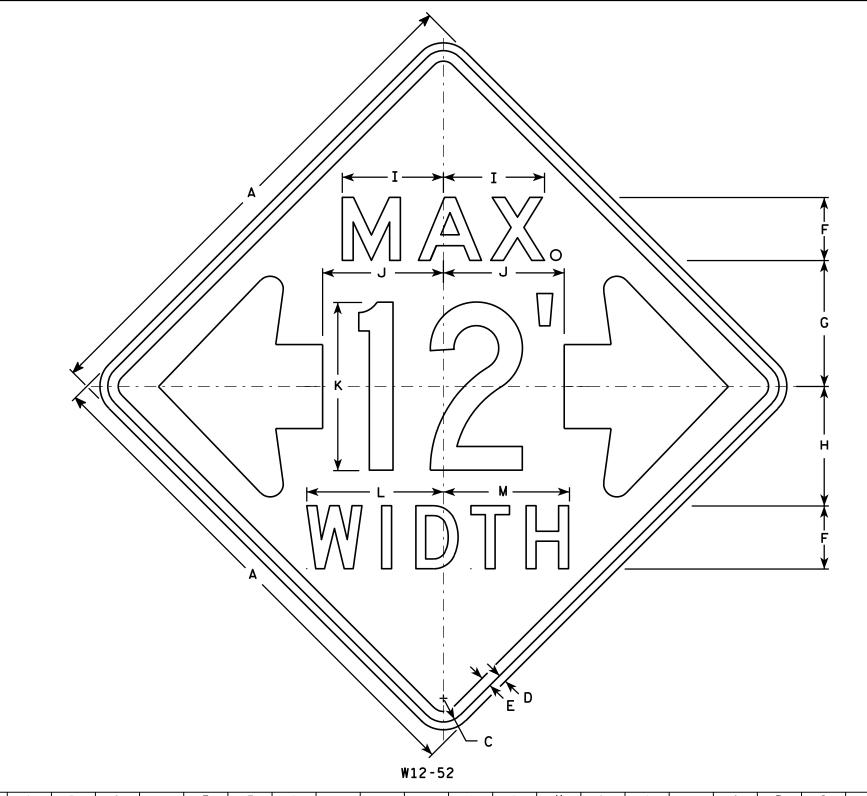
PLOT BY : ditjph

PLOT NAME :

PLOT SCALE: 4.965871:1.000000

WISDOT/CADDS SHEET 42

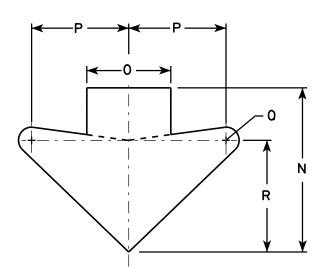
Ε



- 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

CT TE			T ^ T					ш			1/		1.4		_		_		_					· ·	· ·	7	Area
SIZE	Α	В	L L	ט	-	F	G	Н	l I	J	K	L	M	N	U	P	U	R	>	l	U	V	W	X	Y		Areg sq. ft.
1																											
2S	48		2 1/4	¾	1	6	12	11 3/8	9 %	11 1/2	16	13	12	15 %	8	9 1/4	1 1/4	10 %									16.0
2M	48		2 1/4	₹4	1	6	12	11 3/8	9 %	11 1/2	16	13	12	15 5/8	8	9 1/4	1 1/4	10 %									16.0
3																											
4																											
5				•																						•	

COUNTY:

STANDARD SIGN W12-52

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

For State Traffic Engineer

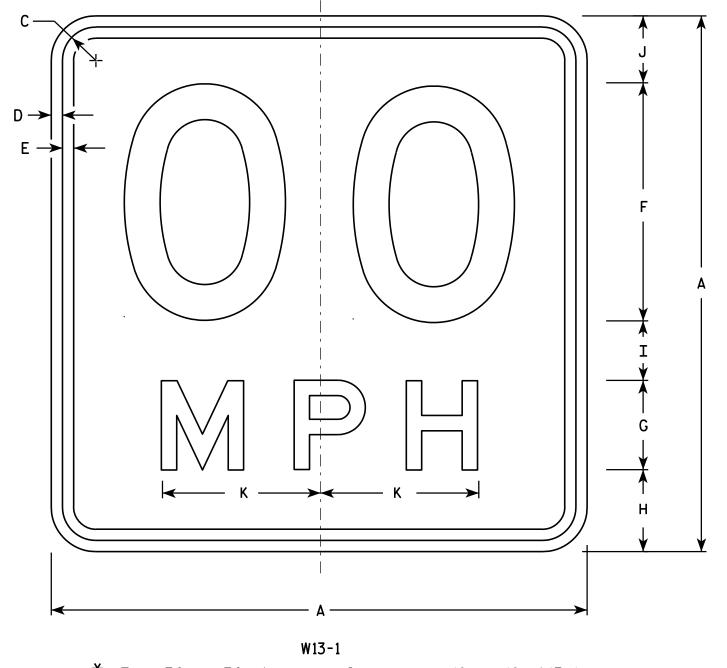
DATE 3/16/11 PLATE NO. W12-52.7

SHEET NO:

HWY:

PROJECT NO:

PLOT NAME :



- 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

* For 30" \times 30" Warning Signs, use 18" \times 18" W13-1 signs. For 36" \times 36" Warning Signs, use 24" \times 24" W13-1 signs.

SIZE	A	В	С	D	E	F	G	Н	I	J	K	L	М	N	0	Р	0	R	S	T	U	٧	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 %																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 1/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 %																9.00
5	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 %																9.00

STANDARD SIGN W13-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Matthew & Ram

 f_{or} State Traffic Engineer S1/12 PLATE NO. W13-1.16

DATE <u>5/31/12</u>

SHEET NO:

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W131.DGN

PLOT DATE: 31-MAY-2012 10:57

PLOT NAME :

PLOT BY: mscsja

PLOT SCALE: 3.225232:1.000000

WISDOT/CADDS SHEET 42



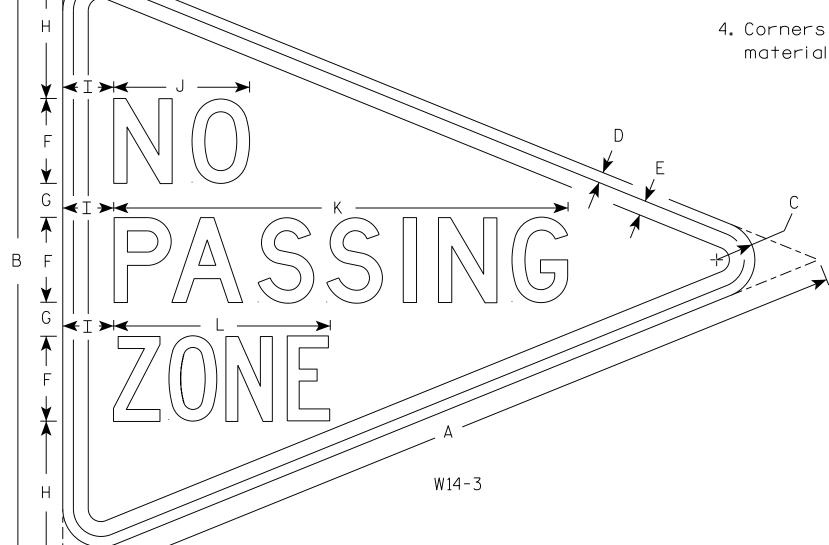
- 1. Sign is Type II Type F Reflective
- 2. Color:

Background - Yellow

Message – Black

3. Message Series - Lines 1 and 2 are Series D. Line 3 is series C.

4. Corners and borders shall be rounded on all base materials for this sign.



			,																								
SIZE	Α	В	С	D	E	F	G	Н	I	J	K	L	М	N	0	Р	0	R	S	Т	U	٧	W	Х	Y	Z	Area sq. ft.
1																											
2S	48	36	2 1/4	5/8	<i>7</i> ⁄8	5	2	8 ½	3	8	26 ¾	12 3/4															5.56
2M																											
3																											
4																											
5																											
PRC	JECT	NO:					Н	WY:					COL	INTY:													

STANDARD SIGN W14-3

WISCONSIN DEPT OF TRANSPORTATION

500 3/21/17

E 3/21/17 PLATE NO. W14-3

SHEET NO:

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W143.DGN

PLOT DATE: 21-MAR-2017 08:48

PLOT BY: \$\$...plotuser...\$\$ PLOT NAME:

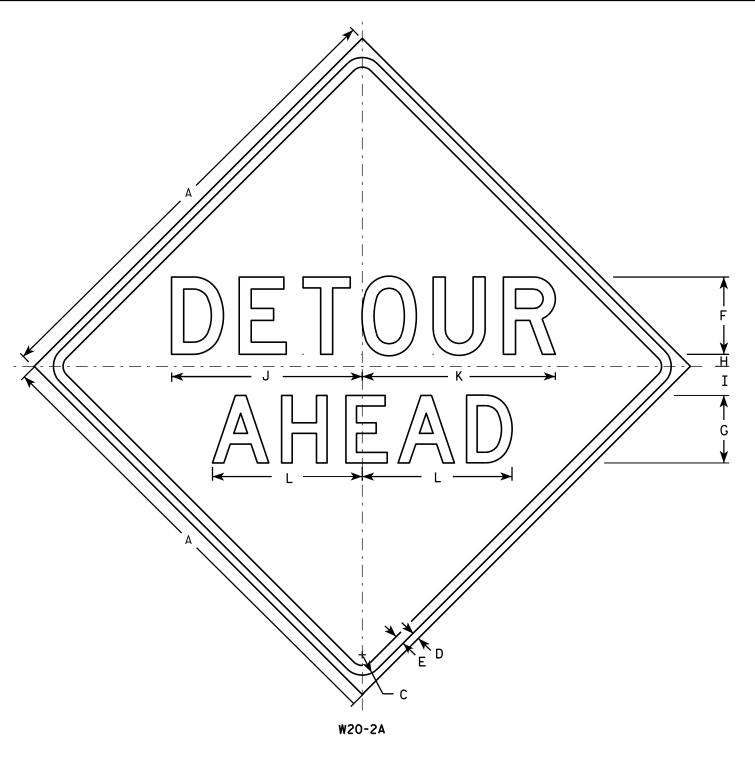
PLOT SCALE : 5.650195:1.000000



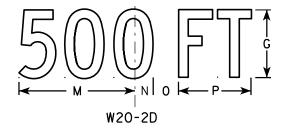
FILE NAME . C.\CAFfiles\Projects\tr stdolote\W201 DCN

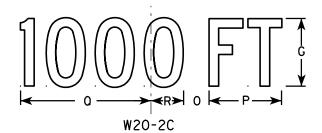
PLOT DATE . 01-DEC-2015 18.24

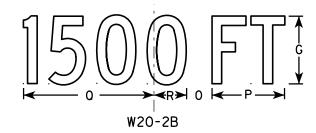
PIOT RY * \$\$ plotuser \$\$

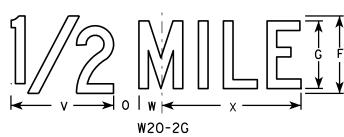


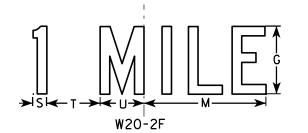
HWY:











PLOT BY: mscj9h

<u>NOTES</u>

- 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. Line 1 is Series D.
 Line 2 is Series D for AHEAD and
 Series C for all other distances.

SIZE	Α	В	С	D	Ε	F	G	Н	I	J	K	L	М	N	0	Р	0	R	S	Т	U	v	W	X	Y	Z	Areo sq. ft.
1	36		1 5/8	5/8	₹4	6	5	1	2 1/4	14 3/4	15	11 5/8	9	1 3/8	1 1/8	5 %	10 1/8	2 1/2	1 1/8	4 1/2	3 1/2	8	1 3/4	10 3/4			9.0
2S	48		2 1/4	3/4	1	8	7	1 1/4	3	19 ¾	20	15 1/2	12	1 1/8	2 %	7 1/2	13 1/2	3 %	1 1/2	6	4 %	10 %	2 3/8	14 3/8			16.0
2M	48		2 1/4	3/4	1	8	7	1 1/4	3	19 ¾	20	15 1/2	12	1 1/8	2 %	7 1/2	13 1/2	3 %	1 1/2	6	4 %	10 %	2 3/8	14 3/8			16.0
3	48		2 1/4	¾	1	8	7	1 1/4	3	19 ¾	20	15 1/2	12	1 %	2 %	7 1/2	13 ½	3 %	1 1/2	6	4 %	10 %	2 3/8	14 3/8			16.0
4	48		2 1/4	¾	1	8	7	1 1/4	3	19 ¾	20	15 1/2	12	1 %	2 %	7 1/2	13 1/2	3 %	1 1/2	6	4 %	10 %	2 3/8	14 3/8			16.0
5	48		2 1/4	3/4	1	8	7	1 1/4	3	19 ¾	20	15 1/2	12	1 1/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 %	2 3/8	14 3/8			16.0

COUNTY:

STANDARD SIGN W20-2A,B,C,D,F & G

WISCONSIN DEPT OF TRANSPORTATION

DATE 3/18/11 PLATE NO. W20-2.6

SHEET NO:

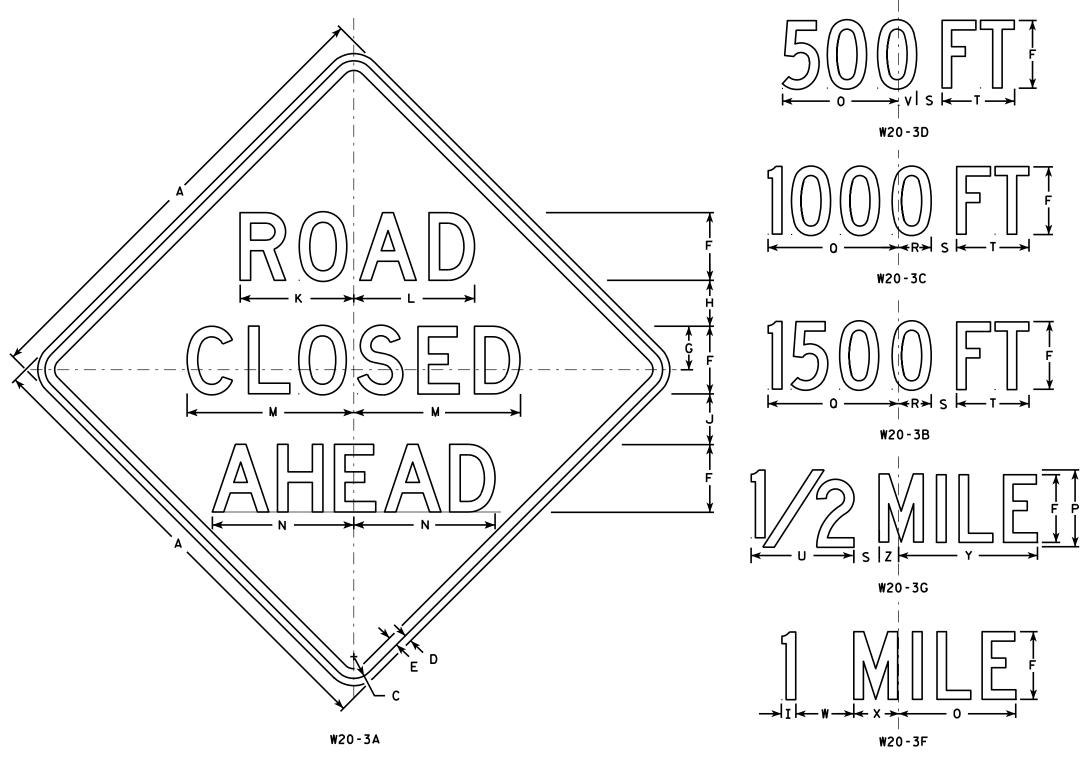
PROJECT NO:

FILE NAME : C:\Users\PROJECTS\tr_stdplate\W202.DGN

PLOT DATE: 18-MAR-2011 10:00

PLOT NAME :

PLOT SCALE: 9.931739:1.000000



- 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. Lines 1 and 2 are Series D. Line 3 is Series D for AHEAD and Series C for all other distances.

1 % 5/8 ¾ 8 3/8 8 7/8 12 1/2 5 % 1 3/8 4 1/2 36 3 1/2 10 3/4 1 3/4 8 4 \(\frac{5}{8} \) 14 \(\frac{3}{8} \) 2 \(\frac{3}{8} \) 16.0 3/4 1 1/2 | 5 1/4 | 11 3/4 | 12 1/2 | 17 1/4 | 14 5/8 | 7 1/2 10 5/8 1 7/8 2M 3/4 4 \\ 14 \\ 38 \ 2 \\ 38 \ 16.0 48 | 5 1/4 | 11 3/4 | 12 1/2 | 17 1/4 | 14 5/8 | 7 1/2 10 % 1 % 4 1/2 4 3/4 1 1/2 5 1/4 11 3/4 12 1/2 17 1/4 14 5/8 3/4 13 1/2 3 3/8 2 5/8 7 1/2 10 5/8 1 3/8 4 % | 14 % | 2 % | 16.0 48 3/4 4 1/2 4 3/4 1 1/2 5 1/4 11 3/4 12 1/2 17 1/4 14 5/8 13 1/2 3 3/8 2 5/8 4 \\ 14 \\ 38 2 \\ 38 16.0 7 1/2 10 5/8 1 7/8 48 5 4 5/8 14 3/8 2 3/8 16.0 3/4 2 1/4 4 1/2 | 4 3/4 | 1 1/2 | 5 1/4 | 11 3/4 | 12 1/2 | 17 1/4 | 14 5/8 | 13 1/2 3 3/8 2 5/8 7 1/2 10 5/8 1 3/8 48

COUNTY:

STANDARD SIGN W20-3A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

For State Traffic Engineer DATE 3/18/11

PLATE NO. W20-3.7

SHEET NO:

PROJECT NO: FILE NAME : C:\Users\PROJECTS\tr_stdplate\W203.DGN HWY:

PLOT DATE: 18-MAR-2011 12:08

PLOT BY: mscj9h

PLOT NAME :

PLOT SCALE: 9.931739:1.000000

- 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.

A
SHOULDER
W21-5

ВС SIZE A D Ε G H L N 0 0 Х 3/8 1/2 4 2 1/2 10 3/4 6 24 1 1/8 4.0 5/8 3 | 13 3/8 | 7 1/2 1 3/8 30 1/2 5 6.25 2M 1/2 5/8 13 3/8 7 1/2 30 5 3 6.25 3 36 5/8 *¾* 6 1 1/8 3 1/2 | 16 | 9 9.0 4 2 1/4 3/4 5 21 3/8 11 1/4 48 8 16.0 1 5 2 1/4 ¾ 21 3/8 | 11 1/4 16.0 48

COUNTY:

STANDARD SIGN W21-5

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Raws

DATE 3/21/11 PLATE NO. W21-5.5

SHEET NO:

FILE NAME : C:\Users\PROJECTS\tr_stdplate\W215.DGN

PROJECT NO:

HWY:

PLOT DATE : 21-MAR-2011 08:01

PLOT NAME :

PLOT BY: mscj9h

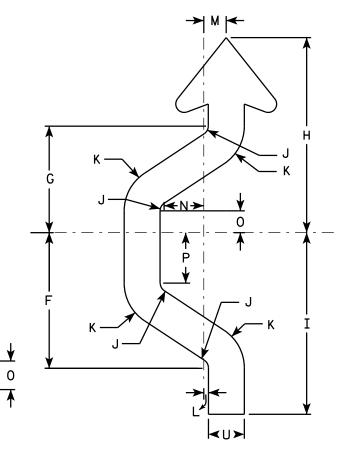
PLOT SCALE: 6.207338:1.000000



- 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. W24-1R is the same as W24-1L except reversed along the vertical centerline.



Arrow D	etail
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SIZE	Α	В	С	D	E	F	G	Н	I	J	K	L	М	N	0	Ρ	0	R	S	T	U	٧	W	X	Y	Z	Areg sq. ft
1																											
25	36		1 3/8	5/8	1/2	11 3/8	8 1/8	16 3/8	15 1/4	3/4	3 3/4	3/8	2	3 %	1 %	4 1/4		5 1/2	3 1/2	5/8	3						9
2M	36		1 3/8	5/8	1/2	11 3/8	8 1/8	16 3/8	15 1/4	3/4	3 3/4	3/8	2	3 3/8	1 %	4 1/4		5 1/2	3 1/2	5/8	3						9
3																											
4																											
5																											

COUNTY:

W24-1L

STANDARD SIGN W24-1 L & R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

For State Traffic Engineer

DATE 9/25/2013 PLATE NO. W24-1.3

SHEET NO:

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W241L.DGN

HWY:

PROJECT NO:

W24-1R

PLOT DATE: 25-SEP-2013 13:00

Arrowhead Detail

PLOT BY: mscsja

PLOT NAME :

PLOT SCALE: 10.702132:1.000000

- 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.

c —	
D → ←	
K L L L L L L L L L L L L L L L L	
M —	→ I ← I
N	Н — Н
l⊸ MO	1-6

SIZE	Α	В	С	D	E	F	G	Н	I	J	K	L	M	N	0	Р	0	R	S	T	U	٧	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 ¾													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 ¾													12.5

COUNTY:

STANDARD SIGN WO1-6

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Matther R Rauch
For State Traffic Engineer

DATE <u>11/18/13</u>

SHEET NO:

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W016.DGN

HWY:

PROJECT NO:

PLOT DATE: 28-FEB-2014 11:37

PLOT NAME :

PLOT BY: mscj9h

PLOT SCALE: 5.837526:1.000000

- 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.
- 5. Substitute appropriate numerals to the nearest quarter mile and optically adjust spacing to achieve proper balance.

W057-52

HWY:

* See note 5

SIZE	Α	В	С	D	E	F	G	Н	I	J	K	L	М	N	0	Р	Q	R	S	T	U	٧	W	X	Y	Z	Area sq. ft.
1	36	24	1 1/8	3/8	1/2	6	4 1/2	3	4 3/4	14 %	10 %	11 3/8	2	12													6.0
25	48	36	1 3/8	1/2	5/8	8	7	6	6 3/8	19 ½	14	15	2 3/4	16 3/8													12.0
2M	48	36	1 3/8	1/2	5/8	8	7	6	6 3/8	19 ½	14	15	2 3/4	16 3/8													12.0
3	48	36	1 3/8	1/2	5/8	8	7	6	6 3/8	19 ½	14	15	2 3/4	16 3/8													12.0
4	48	36	1 3/8	1/2	5/8	8	7	6	6 3/8	19 ½	14	15	2 3/4	16 3/8													12.0
5	48	36	1 3/8	1/2	5/8	8	7	6	6 3/8	19 ½	14	15	2 3/4	16 3/8													12.0

COUNTY:

STANDARD SIGN W057-52

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

For State Traffic Engineer

SHEET NO:

DATE 3/21/17

PLATE NO. W057-52.2

....

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W05752.DGN

PROJECT NO:

PLOT DATE: 21-MAR-2017 08:53

PLOT BY: \$\$...plotuser...\$\$ PLOT NAME:

PLOT SCALE: 8.139174:1.000000

STAGE 1 – TEMPORARY ROAD EARTHWORK

				nental (CY)		mulative 'ol (CY)	Mass
STATION	AREA	A (SF)	(Unad	justed)	1.00	1.25	Ordinate
	Cut	Fill	Cut	Fill	Cut	Expanded Fill	
53+50.00T	0.01	0.00	0	0	0	0	0
53+75.00T	0.65	0.01	0	0	0	0	0
54+00.00T	1.28	0.02	1	0	1	0	1
54+25.00T	1.87	0.05	1	0	3	0	3
54+50.00T	2.39	0.04	2	0	5	0	5
54+75.00T	2.77	0.05	2	0	7	0	7
55+00.00T	3.18	0.07	3	0	10	0	10
55+25.00T	3.69	0.09	3	0	13	0	13
55+50.00T	4.30	0.17	4	0	17	0	16
55+75.00T	4.97	0.27	4	0	21	1	20
56+00.00T	5.68	15.76	5	7	26	10	16
56+25.00T	8.75	18.64	7	16	33	30	3
56+50.00T	9.26	23.55	8	20	41	54	-13
56+75.00T	9.98	28.39	9	24	50	84	-35
57+00.00T	10.76	32.99	10	28	59	120	-60
57+25.00T	11.80	37.16	10	32	70	160	-91
57+50.00T	18.84	40.92	14	36	84	206	-122
57+75.00T	26.81	43.48	21	39	105	255	-149
57+81.75T	29.40	43.98	7	11	112	268	-156
58+00.00T	37.35	44.89	23	30	135	306	-171
58+25.00T	50.51	45.04	41	42	175	358	-182
58+50.00T	54.59	41.77	49	40	224	408	-184
58+75.00T	47.73	37.80	47	37	271	454	-183
59+00.00T	40.68	37.40	41	35	312	498	-185
59+25.00T	33.12	36.49	34	34	347	540	-194
59+50.00T	31.18	32.76	30	32	376	580	-204
59+75.00T	29.46	29.11	28	29	404	616	-212
60+00.00T	27.96	24.91	27	25	431	647	-216
60+25.00T	31.90	19.90	28	21	459	673	-215
60+50.00T	31.04	17.14	29	17	488	695	-207
60+75.00T	30.30	14.51	28	15	516	713	-197
61+00.00T	29.92	12.25	28	12	544	729	-185
61+25.00T	29.62	10.05	28	10	572	742	-170
61+50.00T	28.70	9.97	27	9	599	753	-154
61+75.00T	28.49	10.03	26	9	625	765	-140
62+00.00T	29.18	9.64	27	9	652	776	-124
62+21.73T	33.64	10.05	25	8	677	786	-109
62+25.00T	33.27	10.22	4	1	681	788	-106
62+50.00T	30.08	12.54	29	11	711	801	-90
62+75.00T	28.38	15.29	27	13	738	817	-79
63+00.00T	27.00	18.86	26	16	763	837	-73
63+25.00T	25.77	22.69	24	19	788	861	-73
63+50.00T	25.86	23.39	24	21	812	887	-76
63+75.00T	26.37	21.07	24	21	836	913	-77
64+00.00T	30.31	17.55	26	18	862	935	-73

			Incren Vol			mulative ol (CY)	Mass
STATION	AREA	A (SF)	(Unadj	usted)	1.00	1.25	Ordinate
	Cut	Fill	Cut	Fill	Cut	Expanded Fill	
64+25.00T	35.69	12.95	31	14	893	953	-60
64+50.00T	44.58	7.85	37	10	930	965	-35
64+75.00T	50.66	3.18	44	5	974	971	2
65+00.00T	45.80	0.69	45	2	1,018	974	45
65+25.00T	40.94	0.00	40	0	1,059	974	85
65+50.00T	35.77	0.29	36	0	1,094	974	120
65+75.00T	31.46	2.13	31	1	1,125	976	150
66+00.00T	28.07	5.45	28	4	1,153	980	173
66+25.00T	29.80	8.80	27	7	1,180	988	191
66+33.41T	30.40	9.43	9	3	1,189	992	197
66+50.00T	30.00	10.39	19	6	1,208	999	208
66+75.00T	27.42	14.48	27	12	1,234	1,014	220
66+81.41T	25.82	17.95	6	4	1,240	1,019	222
67+00.00T	21.47	28.88	16	16	1,257	1,039	218
67+25.00T	16.37	45.65	18	35	1,274	1,082	192
67+29.41T	15.55	48.86	3	8	1,277	1,092	185
67+50.00T	12.96	60.10	11	42	1,288	1,143	144
67+75.00T	10.81	72.67	11	61	1,299	1,220	78
67+77.41T	10.62	73.62	1	7	1,300	1,228	71
67+77.41T	10.62	73.62	0	0	1,300	1,228	71
68+00.00T	8.99	91.01	8	69	1,308	1,315	-7
68+25.00T	4.66	107.99	6	92	1,314	1,430	-116
68+25.41T	4.79	105.64	0	2	1,314	1,432	-117
68+50.00T	36.21	28.64	19	61	1,333	1,508	-175
68+75.00T	40.61	25.12	36	25	1,368	1,539	-171
68+87.91T	25.33	38.70	16	15	1,384	1,558	-174
69+00.00T	11.72	56.68	8	21	1,393	1,585	-193
69+25.00T	3.96	139.14	7	91	1,400	1,698	-299
69+50.00T	37.77	37.21	19	82	1,419	1,800	-381
69+50.41T	38.22	36.71	1	1	1,420	1,801	-381
69+75.00T	59.72	23.35	45	27	1,464	1,835	-371
69+98.41T	61.79	15.97	53	17	1,517	1,857	-340
69+98.41T	61.79	15.97	0	0	1,517	1,857	-340
70+00.00T	63.01	15.74	4	1	1,521	1,858	-337
70+25.00T	66.59	8.81	60	 11	1,581	1,872	-291
70+46.41T	56.76	3.85	49	5	1,630	1,878	-249
70+50.00T	53.78	3.68	7	1	1,637	1,879	-242
70+75.00T	43.87	1.19	45	2	1,682	1,882	-200
70+73.001 70+94.41T	45.34	0.21	32	1	1,714	1,882	-168
71+00.00T	45.82	0.20	9	0	1,724	1,882	-159
71+00.00T	55.10	0.00	47	0	1,770	1,883	-112
71+23.001 71+42.41T	59.95	0.00	37	0	1,807	1,883	-75
71+50.00T	60.40	0.00	17	0	1,824	1,883	-73 -58
71+75.00T	49.21	0.00	51	0	1,875	1,883	-36 -7
71+75.00T 72+00.00T	36.31	1.02	40	0	1,915	1,883	32
1 4 T U U . U U I	JU.J I	1.02	40	U	1,910	1,003	JZ

NOTE: SALVAGED/UNUSABLE PAVEMENT MATERIAL NOT SHOWN IN CROSS SECTION, SEE MISCELLANEOUS QUANTITIES SHEETS.

CONT. ON NEXT PAGE

PROJECT NO: 6430-07-71 HWY: USH 45 FILE NAME : \\Wis31fp1\n3public\pds\design id\6430-07-00,71 ush 45\quantities\090101 ew.ppt

COUNTY: WAUPACA

EARTHWORK - STAGE 1

SHEET:

PLOT NAME : 090101 ew.ppt

STAGE 1 – TEMPORARY ROAD EARTHWORK

			Vol	mental (CY)		mulative ol (CY)	Mass
STATION	ARE	A (SF)	(Unad	justed)	1.00	1.25	Ordinate
	Cut	Fill	Cut	Fill	Cut	Expanded Fill	
72+25.00T	26.37	5.76	29	3	1,944	1,887	57
72+50.00T	18.41	11.68	21	8	1,964	1,897	67
72+75.00T	10.59	22.84	13	16	1,978	1,917	61
73+00.00T	8.76	23.25	9	21	1,987	1,944	43
73+24.37T	7.06	25.87	7	22	1,994	1,971	22
73+25.00T	7.02	25.93	0	1	1,994	1,972	22
73+50.00T	5.20	28.08	6	25	2,000	2,003	-4
73+75.00T	4.32	28.55	4	26	2,004	2,036	-32
74+00.00T	4.76	26.80	4	26	2,008	2,068	-60
74+25.00T	5.55	24.46	5	24	2,013	2,098	-85
74+50.00T	6.69	21.75	6	21	2,019	2,125	-106
74+75.00T	9.20	18.24	7	19	2,026	2,148	-122
75+00.00T	12.42	13.99	10	15	2,036	2,166	-130
75+25.00T	15.80	10.48	13	11	2,049	2,181	-131
75+50.00T	17.60	7.70	15	8	2,065	2,191	-126
75+75.00T	14.64	13.40	15	10	2,080	2,203	-124
76+00.00T	12.35	20.05	12	15	2,092	2,223	-131
76+25.00T	10.98	26.43	11	22	2,103	2,250	-147
76+50.00T	10.78	27.88	10	25	2,113	2,281	-168
76+75.00T	10.26	27.57	10	26	2,123	2,313	-190
77+00.00T	8.97	27.34	9	25	2,132	2,345	-213
77+25.00T	8.59	26.58	8	25	2,140	2,376	-236
77+50.00T	8.85	23.86	8	23	2,148	2,405	-257
77+75.00T	9.13	21.40	8	21	2,156	2,432	-275
78+00.00T	9.59	19.35	9	19	2,165	2,455	-290
78+25.00T	9.30	18.09	9	17	2,174	2,477	-303
78+27.45T	9.22	18.02	1	2	2,174	2,479	-304

			Vol	mental (CY)		mulative ol (CY)	Mass
STATION	ARE	A (SF)	(Unad	justed)	1.00	1.25	Ordinate
	Cut	Fill	Cut	Fill	Cut	Expanded Fill	
78+50.00T	9.35	16.61	8	14	2,182	2,497	-315
78+75.00T	10.35	15.19	9	15	2,191	2,515	-324
79+00.00T	9.73	15.07	9	14	2,201	2,533	-332
79+25.00T	9.07	14.93	9	14	2,209	2,550	-341
79+50.00T	8.41	14.45	8	14	2,217	2,567	-350
79+75.00T	8.67	11.77	8	12	2,225	2,582	-357
80+00.00T	8.20	8.98	8	10	2,233	2,594	-361
80+25.00T	7.86	6.45	7	7	2,241	2,603	-363
80+50.00T	7.01	7.79	7	7	2,247	2,612	-364
80+75.00T	6.31	3.03	6	5	2,254	2,618	-364
81+00.00T	5.77	1.84	6	2	2,259	2,621	-361
81+25.00T	5.23	1.04	5	1	2,264	2,622	-358
81+50.00T	4.71	0.56	5	1	2,269	2,623	-354
81+75.00T	4.21	0.32	4	0	2,273	2,624	-351
82+00.00T	3.70	0.22	4	0	2,277	2,624	-347
82+25.00T	3.17	0.11	3	0	2,280	2,624	-344
82+50.00T	2.51	0.04	3	0	2,282	2,624	-342
82+75.00T	1.82	0.02	2	0	2,284	2,624	-340
83+00.00T	1.10	0.01	1	0	2,286	2,624	-339
83+25.00T	0.40	0.00	1	0	2,287	2,624	-338
83+30.54T	0.25	0.00	0	0	2,287	2,624	-338
83+39.47T	0.01	0.00	0	0	2,287	2,624	-338
			2,287	2,099			

NOTE: SALVAGED/UNUSABLE PAVEMENT MATERIAL NOT SHOWN IN CROSS SECTION, SEE MISCELLANEOUS QUANTITIES SHEETS.

PROJECT NO: 6430-07-71 HWY: USH 45 COUNTY: WAUPACA

EARTHWORK - STAGE 1

SHEET:

FILE NAME : \\Wis31fp1\n3public\pds\design id\6430-07-00,71 ush 45\quantities\090101 ew.ppt

PLOT DATE : 10/30/2017 12:25 PM

PLOT NAME : 090101 ew.ppt

STAGE 2 – USH 45 (NB) EARTHWORK

			Increm Vol (nulative ol (CY)		
STATION	AREA	A (SF)	(Unadj	•	1.00	1.25	Mass Ordinate	
	Cut	Fill	Cut	Fill	Cut	Expanded Fill		
106+00.00NB	54.05	0.59	0	0	0	0	0	
106+00.00NB	54.05	0.59	0	0	0	0	0	
106+25.00NB	68.35	0.05	57	0	57	0	56	
106+50.00NB	62.23	0.00	60	0	117	0	117	
106+51.90NB	61.47	0.00	4	0	121	0	121	
106+75.00NB	54.82	0.11	50	0	171	0	171	
107+00.00NB	51.28	0.00	49	0	220	1	220	
107+03.80NB	50.85	0.00	7	0	228	1	227	
107+25.00NB	48.29	0.00	39	0	266	1	266	
107+50.00NB	43.97	0.00	43	0	309	1	309	
107+75.00NB	34.72	8.49	36	4	346	5	340	
108+00.00NB	31.49	13.32	31	10	376	18	358	
108+25.00NB	22.65	23.72	25	17	401	39	362	
108+25.88NB	22.66	24.07	1	1	402	40	362	
108+50.00NB	20.55	32.46	19	25	421	72	349	
108+75.00NB	20.84	45.72	19	36	441	117	323	
108+80.51NB	20.69	49.08	4	10	445	129	315	
108+92.67NB	20.15	55.76	9	24	454	159	295	
110+67.35NB	503.46	125.76	0	0	454	159	295	
110+75.00NB	494.27	118.31	141	35	595	202	393	
111+00.00NB	464.79	87.97	444	96	1,039	321	718	
111+21.22NB	442.59	73.82	357	64	1,396	401	995	
111+25.00NB	440.00	65.83	62	10	1,458	413	1,044	
111+50.00NB	401.70	37.12	390	48	1,847	473	1,375	
111+75.00NB	333.86	8.60	341	21	2,188	499	1,689	
111+79.24NB	320.61	7.65	51	1	2,239	501	1,738	
112+00.00NB	216.42	4.17	206	5	2,446	506	1,939	
112+25.00NB	72.97	1.47	134	3	2,580	510	2,070	
112+37.27NB	63.63	0.47	31	0	2,611	510	2,100	
112+50.00NB	60.61	0.00	29	0	2,640	510	2,130	
112+75.00NB	64.20	0.82	58	0	2,698	511	2,187	
113+00.00NB	67.97	0.99	61	1	2,759	512	2,247	
113+00.00NB	17.88	0.00	0	0	2,759	512	2,247	
113+25.00NB	18.14	0.00	17	0	2,776	512	2,264	
113+50.00NB	18.38	0.00	17	0	2,793	512	2,281	
113+58.35NB	18.69	0.00	6	0	2,798	512	2,286	
113+65.75NB	18.95	0.00	5	0	2,803	512	2,292	
			2,803	410				

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NOTE: SALVAGED/UNUSABLE PAVEMENT MATERIAL NOT SHOWN IN CROSS SECTION, SEE MISCELLANEOUS QUANTITIES SHEETS.

CONT. ON NEXT PAGE

SHEET:

STAGE 2 – USH 45 (SB) EARTHWORK

			Increm Vol (nulative ol (CY)		
STATION	AREA	A (SF)	(Unadji	usted)	1.00	1.25	Mass Ordinate	
	Cut	Fill	Cut	Fill	Cut	Expanded Fill		
106+00.00SB	24.17	0.00	0	0	0	0	0	
106+25.00SB	64.15	0.07	41	0	41	0	41	
106+50.00SB	60.11	0.57	58	0	98	0	98	
106+75.00SB	55.75	1.25	54	1	152	1	151	
107+00.00SB	46.76	2.09	47	2	200	3	196	
107+25.00SB	37.72	3.23	39	2	239	6	232	
107+42.99SB	32.30	4.59	23	3	262	10	252	
107+49.90SB	30.45	5.27	8	1	270	11	259	
107+50.00SB	30.42	5.28	0	0	270	11	259	
107+75.00SB	24.73	8.63	26	6	296	19	276	
108+00.00SB	16.63	25.27	19	16	315	39	276	
108+08.37SB	15.20	39.05	5	10	320	51	268	
108+25.00SB	13.48	60.71	9	31	329	90	239	
108+50.00SB	14.64	80.31	13	65	342	171	170	
108+66.85SB	15.88	90.98	10	53	351	238	113	
108+75.00SB	16.69	97.52	5	28	356	274	82	
108+94.71SB	20.06	110.73	13	76	369	369	1	
110+68.05SB	6.24	91.23	0	0	369	369	1	
110+80.21SB	4.46	66.86	2	36	372	413	-42	
111+00.00SB	19.39	46.63	9	42	381	465	-85	
111+25.00SB	33.23	34.58	24	38	405	512	-107	
111+34.84SB	35.39	27.48	12	11	417	527	-109	
111+50.00SB	42.63	20.63	22	14	439	543	-104	
111+75.00SB	56.46	5.13	46	12	485	558	-73	
112+00.00SB	73.39	0.54	60	3	545	562	-16	
112+25.00SB	79.11	0.00	71	0	616	562	54	
112+26.13SB	78.94	0.00	3	0	619	562	57	
112+50.00SB	75.54	0.00	68	0	688	562	126	
112+75.00SB	72.19	0.00	68	0	756	562	194	
112+95.32SB	70.69	0.00	54	0	810	562	248	
113+00.00SB	70.62	0.00	12	0	822	562	260	
113+25.00SB	71.80	0.00	66	0	888	562	326	
113+50.00SB	73.76	0.00	67	0	955	562	393	
113+64.51SB	72.91	0.02	39	0	995	562	433	
113+65.00SB	72.86	0.02	1	0	996	562	434	
			996	450		1		

NOTE: SALVAGED/UNUSABLE PAVEMENT MATERIAL NOT SHOWN IN CROSS SECTION, SEE MISCELLANEOUS QUANTITIES SHEETS.

CONT. ON NEXT PAGE

PROJECT NO: 6430-07-71 HWY: USH 45 COUNTY: WAUPACA EARTHWORK – STAGE 2 SHEET:

FILE NAME : \\Wis31fp1\n3public\pds\design id\6430-07-00,71 ush 45\quantities\090101 ew.ppt

PLOT DATE : 10/30/2017 12:25 PM

PLOT NAME : 090101 ew.ppt

STAGE 2 – STH 96 (EB) EARTHWORK

STATION	STATION AREA	A (SF)	Vol	nental (CY) justed)		mulative ol (CY) 1.25	Mass Ordinate	
OTATION		Fill	Cut	Fill	Cut	Expanded Fill	Mass Gramate	
18+07.48EB	26.16	45.98	0	0	0	0	0	
18+25.00EB	23.76	44.92	16	29	16	37	-21	
18+50.00EB	19.17	42.50	20	40	36	87	-51	
18+75.00EB	16.80	41.71	17	39	53	136	-83	
19+00.00EB	16.86	26.01	16	31	68	175	-107	
19+07.90EB	16.86	21.76	5	7	73	184	-111	
19+25.00EB	16.99	7.32	11	9	84	196	-112	
19+50.00EB	19.37	6.42	17	6	101	204	-103	
19+75.00EB	21.76	4.91	19	5	120	210	-90	
20+00.00EB	25.53	2.74	22	4	142	215	-73	
20+08.34EB	27.99	1.04	8	1	150	215	-65	
20+25.00EB	33.01	0.05	19	0	169	216	-47	
20+50.00EB	55.23	0.00	41	0	210	216	-6	
20+51.29EB	55.72	0.00	3	0	212	216	-3	
20+75.00EB	52.24	0.00	47	0	260	216	44	
20+94.24EB	41.49	0.00	33	0	293	216	77	
21+00.00EB	41.24	0.00	9	0	302	216	86	
21+25.00EB	42.64	0.00	39	0	341	216	125	
21+50.00EB	42.88	0.00	40	0	380	216	165	
21+75.00EB	42.73	0.00	40	0	420	216	204	
22+00.00EB	42.06	0.03	39	0	459	216	244	
22+25.00EB	41.78	0.24	39	0	498	216	282	
22+50.00EB	41.26	0.48	38	0	537	216	320	
22+75.00EB	40.49	0.55	38	0	574	217	357	
23+00.00EB	40.02	0.53	37	1	612	218	394	
23+25.00EB	39.56	0.47	37	0	648	218	430	
23+50.00EB	40.54	0.00	37	0	686	218	467	
23+75.00EB	42.54	0.00	38	0	724	218	506	
24+00.00EB	62.42	0.00	49	0	773	218	554	
24+25.00EB	47.14	0.02	51	0	823	218	605	
24+46.68EB	21.60	0.00	28	0	851	218	633	
			851	175				

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NOTE: SALVAGED/UNUSABLE PAVEMENT MATERIAL NOT SHOWN IN CROSS SECTION, SEE MISCELLANEOUS QUANTITIES SHEETS.

CONT. ON NEXT PAGE

PROJECT NO: 6430-07-71 HWY: USH 45 COUNTY: WAUPACA EARTHWORK – STAGE 2 SHEET:

FILE NAME : \\\Wis31fp1\n3public\pds\design id\6430-07-00,71 ush 45\quantities\090101 ew.ppt

PLOT DATE : 10/30/2017 12:25 PM

PLOT NAME : 090101 ew.ppt

STAGE 2 – STH 96 (WB) EARTHWORK

			Increm Vol (nulative ol (CY)		
STATION	AREA	(SF)	(Unadj	usted)	1.00	1.25	Mass Ordinate	
	Cut	Fill	Cut	Fill	Cut	Expanded Fill		
18+11.61WB	89.66	87.44	0	0	0	0	0	
18+23.97WB	110.34	68.91	46	36	46	45	1	
18+25.00WB	111.99	67.30	4	3	50	48	2	
18+50.00WB	153.38	43.96	123	52	173	112	61	
18+75.00WB	178.00	32.41	153	35	326	157	170	
18+78.80WB	181.44	30.90	25	4	352	162	189	
19+00.00WB	205.02	23.20	152	21	503	189	315	
19+25.00WB	227.19	19.17	200	20	703	213	490	
19+50.00WB	232.15	13.93	213	15	916	232	684	
19+74.99WB	55.53	16.41	133	14	1,049	250	799	
19+75.00WB	55.49	16.41	0	0	1,049	250	799	
19+88.51WB	40.98	17.72	24	9	1,073	261	813	
20+00.00WB	37.48	18.84	17	8	1,090	270	820	
20+25.00WB	40.17	20.85	36	18	1,126	293	833	
20+50.00WB	44.27 21.42				20	1,165	318	847
20+69.57WB	46.46	19.83	33	15	1,198	336	862	
20+75.00WB	43.70	19.95	9	4	1,207	341	866	
21+00.00WB	27.23	8.10	33	13	1,240	358	882	
21+25.00WB	40.21	1.85	31	5	1,271	363	908	
21+50.00WB	41.88	1.40	38	2	1,309	365	944	
21+50.63WB	41.89	1.41	1	0	1,310	365	945	
21+75.00WB	39.67	2.11	37	2	1,347	367	980	
22+00.00WB	40.84	3.07	37	2	1,384	370	1,014	
22+25.00WB	41.37	4.06	38	3	1,422	374	1,048	
22+50.00WB	37.97	4.26	37	4	1,459	379	1,080	
22+75.00WB	35.38	9.63	34	6	1,493	387	1,106	
23+00.00WB	37.19	12.97	34	10	1,526	400	1,126	
23+06.22WB	38.81	13.08	9	3	1,535	404	1,131	
23+25.00WB	41.20	2.10	28	5	1,563	411	1,152	
23+50.00WB	39.04	2.80	37	2	1,600	414	1,187	
23+75.00WB	41.65	1.82	37	2	1,638	416	1,221	
23+75.66WB	41.73	1.79	1	0	1,639	416	1,222	
24+00.00WB	43.95	0.90	39	1	1,677	418	1,259	
24+25.00WB	46.41	0.28	42	1	1,719	418	1,301	
24+45.10WB	47.30	0.25	35	0	1,754	419	1,335	
24+46.84WB	47.35	0.26	3	0	1,757	419	1,338	
			1,757	335				

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NOTE: SALVAGED/UNUSABLE PAVEMENT MATERIAL NOT SHOWN IN CROSS SECTION, SEE MISCELLANEOUS QUANTITIES SHEETS.

CONT. ON NEXT PAGE

PROJECT NO: 6430-07-71 HWY: USH 45 COUNTY: WAUPACA EARTHWORK – STAGE 2 SHEET:

FILE NAME: \\Wis31fp1\n3public\pds\design id\6430-07-00,71 ush 45\quantities\090101 ew.ppt

PLOT DATE : 10/30/2017 12:25 PM

BY : _____

PLOT NAME : 090101 ew.ppt

STAGE 2 – USH 45 (RAB) EARTHWORK

			Vol	mental (CY)	V	mulative 'ol (CY)	Mass				Vol	mental I (CY)	V	mulative /ol (CY)	Mass
STATION		A (SF)	•	justed)	1.00	1.25	Ordinate	STATION		A (SF)	`	ljusted)	1.00	1.25	Ordinate
10.00.00040	Cut	Fill	Cut	Fill	Cut	Expanded Fill		44 05 000 40	Cut	Fill	Cut	Fill	Cut	Expanded Fill	005
10+00.00RAB	0.00	32.00	0	0	0	0	0	11+35.00RAB	6.02	58.65	3	11	23	318	-295
10+05.00RAB	0.00	32.57	0	6	0	7	-7	11+36.66RAB	0.54	57.01	0	4	23	323	-300
10+10.00RAB	0.06	33.30	0	6	0	15	-15	11+40.00RAB	0.62	42.43	0	6	23	331	-307
10+15.00RAB	0.00	36.85	0	6	0	23	-23	11+45.00RAB	0.79	19.17	0	6	23	338	-314
10+20.00RAB	0.00	67.22	0	10	0	35	-35	11+50.00RAB	1.06	14.12	0	3	24	342	-318
10+25.00RAB	0.00	114.22	0	17	0	56	-56	11+55.00RAB	1.44	12.57	0	2	24	345	-321
10+30.00RAB	13.64	127.05	1	22	1	84	-83	11+60.00RAB	1.90	10.00	0	2	24	347	-323
10+32.58RAB	15.26	131.42	1	12	3	100	-97	11+65.00RAB	2.30	8.76	0	2	24	349	-325
10+32.60RAB	15.26	131.46	0	0	3	100	-97	11+70.00RAB	2.69	7.72	0	2	25	351	-326
10+35.00RAB	16.36	134.10	1	12	4	114	-110	11+75.00RAB	2.96	7.01	1	1	25	353	-328
10+37.18RAB	16.98	134.88	1	11	5	128	-123	11+80.00RAB	3.33	6.49	1	1	26	355	-329
10+37.18RAB	16.98	134.88	0	0	5	128	-123	11+85.00RAB	1.42	8.90	0	1	26	356	-330
10+40.00RAB	14.45	134.86	2	14	7	146	-139	11+90.00RAB	0.04	14.78	0	2	27	359	-332
10+45.00RAB	0.00	130.82	1	25	8	176	-168	11+95.00RAB	0.00	23.45	0	4	27	364	-337
10+50.00RAB	0.00	74.68	0	19	8	200	-192	12+00.00RAB	0.00	34.01	0	5	27	370	-344
10+55.00RAB	0.00	40.84	0	11	8	214	-205	12+05.00RAB	0.00	57.58	0	8	27	381	-354
10+60.00RAB	0.00	30.60	0	7	8	222	-213	12+10.00RAB	0.00	134.50	0	18	27	403	-376
10+65.00RAB	0.00	24.77	0	5	8	228	-220	12+15.00RAB	20.06	158.42	2	27	28	437	-408
10+70.00RAB	0.00	20.08	0	4	8	233	-225	12+17.53RAB	68.09	162.25	4	15	33	456	-423
10+75.00RAB	0.16	16.21	0	3	8	238	-229	12+18.26RAB	67.76	163.72	2	4	34	461	-427
10+80.00RAB	6.45	11.96	1	3	9	241	-232	12+18.26RAB	70.23	163.73	0	0	34	461	-427
10+85.00RAB	4.49	10.56	1	2	10	244	-233	12+20.00RAB	33.39	166.53	3	11	38	474	-437
10+90.00RAB	0.02	13.09	0	2	10	246	-236	12+25.00RAB	0.00	171.71	3	31	41	514	-473
10+95.00RAB	0.15	11.25	0	2	10	249	-239	12+30.00RAB	0.00	145.05	0	29	41	550	-509
11+00.00RAB	0.41	9.49	0	2	11	251	-241	12+35.00RAB	0.00	103.15	0	23	41	579	-538
11+05.00RAB	1.66	8.32	0	2	11	254	-243	12+40.00RAB	0.00	71.24	0	16	41	599	-558
11+10.00RAB	2.74	7.48	0	1	11	255	-244	12+45.00RAB	0.00	62.70	0	12	41	615	-574
11+15.00RAB	2.70	37.47	1	4	12	261	-249	12+50.00RAB	0.00	58.23	0	11	41	629	-588
11+20.00RAB	6.22	72.12	1	10	12	273	-261	12+55.00RAB	0.00	55.58	0	11	41	642	-601
11+24.78RAB	25.24	68.22	3	12	15	289	-274	12+60.00RAB	0.00	53.55	0	10	41	655	-614
11+24.81RAB	25.24	68.20	0	0	15	289	-274	12+65.00RAB	0.00	50.90	0	10	41	667	-626
11+25.00RAB	25.28	67.98	0	0	15	289	-274	12+70.00RAB	0.10	40.82	0	8	41	677	-636
11+29.79RAB	25.08	61.87	4	12	20	304	-284	12+73.32RAB	0.00	57.35	0	6	41	685	-644
11+29.80RAB	25.08	61.87	0	0	20	304	-284	12+75.00RAB	0.00	57.44	0	4	41	689	-648
11+30.00RAB	25.11	61.71	0	0	20	304	-284	12+80.00RAB	0.00	59.54	0	11	41	703	-662

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NOTE: SALVAGED/UNUSABLE PAVEMENT MATERIAL NOT SHOWN IN CROSS SECTION, SEE MISCELLANEOUS QUANTITIES SHEETS.

CONT. ON NEXT PAGE

PROJECT NO: 6430-07-71 HWY: USH 45 COUNTY: WAUPACA EARTHWORK – STAGE 2 SHEET: **E**

FILE NAME : \\Wis31fp1\n3public\pds\design id\6430-07-00,71 ush 45\quantities\090101 ew.ppt

STAGE 2 – USH 45 (RAB) EARTHWORK

				mental (CY)		mulative ol (CY)	Mass
STATION	AREA	A (SF)	(Unad	justed)	1.00	1.25	Ordinate
	Cut	Fill	Cut	Fill	Cut	Expanded Fill	
12+85.00RAB	0.00	63.76	0	11	41	717	-676
12+90.00RAB	0.00	72.72	0	13	41	733	-692
12+95.00RAB	0.00	97.47	0	16	41	753	-712
13+00.00RAB	0.00	165.15	0	24	41	783	-742
13+05.00RAB	9.03	193.76	1	33	42	824	-783
13+06.97RAB	14.36	193.81	1	14	43	842	-800
13+07.00RAB	14.43	193.81	0	0	43	842	-800
13+10.00RAB	17.45	192.72	2	21	44	869	-825
13+15.00RAB	20.19	189.67	3	35	48	914	-866
13+17.80RAB	19.25	191.59	2	20	50	938	-888
13+17.93RAB	19.30	191.59	0	1	50	939	-889
13+18.87RAB	19.54	191.18	1	7	51	948	-897
13+20.00RAB	20.30	189.94	1	8	52	958	-906
13+25.00RAB	0.00	195.14	2	36	53	1,002	-949
13+30.00RAB	0.00	153.50	0	32	53	1,043	-989
13+35.00RAB	0.00	104.92	0	24	53	1,073	-1,019
13+40.00RAB	0.00	84.00	0	17	53	1,094	-1,041
13+45.00RAB	0.00	68.62	0	14	53	1,112	-1,059
13+50.00RAB	0.00	56.03	0	12	53	1,126	-1,073
13+55.00RAB	0.00	46.31	0	9	53	1,138	-1,085
13+60.00RAB	0.00	38.41	0	8	53	1,148	-1,095
13+64.42RAB	0.00	32.00	0	6	53	1,155	-1,102
			53	924			

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NOTE: SALVAGED/UNUSABLE PAVEMENT MATERIAL NOT SHOWN IN CROSS SECTION, SEE MISCELLANEOUS QUANTITIES SHEETS.

PROJECT NO: 6430-07-71 HWY: USH 45 COUNTY: WAUPACA EARTHWORK - STAGE 2 SHEET: **E**

3

PLOT NAME : 090101 ew.ppt

STAGE 3 – STH 96 (EB) EARTHWORK

			Increme Vol (0			nulative ol (CY)	
STATION	AREA	(SF)	(Unadju	sted)	1.00	1.25	Mass Ordinate
	Cut	Fill	Cut	Fill	Cut	Expanded Fill	
10+50.00EB	43.60	0.00	0	0	0	0	0
10+75.00EB	46.70	0.00	42	0	42	0	42
10+99.52EB	50.45	0.00	44	0	86	0	86
11+00.00EB	50.56	0.00	1	0	87	0	87
11+25.00EB	70.64	0.00	56	0	143	0	143
11+49.05EB	72.58	0.00	64	0	207	0	207
11+50.00EB	72.58	0.00	3	0	209	0	209
11+75.00EB	67.77	0.00	65	0	274	0	274
12+00.00EB	70.22	0.00	64	0	338	0	338
12+25.00EB	68.41	0.00	64	0	402	0	402
12+50.00EB	66.40	0.02	62	0	465	0	465
12+75.00EB	64.20	0.06	60	0	525	0	525
13+00.00EB	63.78	0.22	59	0	584	0	584
13+19.80EB	62.81	0.39	46	0	631	1	630
13+25.00EB	62.53	0.43	12	0	643	1	642
13+50.00EB	61.08	0.66	57	1	700	1	699
13+75.00EB	61.78	0.65	57	1	757	2	755
13+81.32EB	61.95	0.54	14	0	772	2	769
14+00.00EB	63.58	0.09	43	0	815	2	812
14+25.00EB	67.69	0.00	61	0	876	2	873
14+42.84EB	69.04	0.00	45	0	921	2	918
14+50.00EB	69.94	0.00	18	0	939	2	937
14+75.00EB	69.28	0.00	64	0	1,004	2	1,001
15+00.00EB	64.33	0.00	62	0	1,066	2	1,063
15+25.00EB	42.55	10.56	49	5	1,115	9	1,106
15+50.00EB	30.46	20.40	34	14	1,149	27	1,122
15+66.93EB	23.93	27.27	17	15	1,166	45	1,121
15+75.00EB	21.71	30.75	7	9	1,173	56	1,117
16+00.00EB	18.15	41.19	18	33	1,191	98	1,094
16+21.20EB	14.72	60.81	13	40	1,204	148	1,056
			1,204	118			

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NOTE: SALVAGED/UNUSABLE PAVEMENT MATERIAL NOT SHOWN IN CROSS SECTION, SEE MISCELLANEOUS QUANTITIES SHEETS.

CONT. ON NEXT PAGE

PROJECT NO: 6430-07-71 HWY: USH 45 COUNTY: WAUPACA EARTHWORK – STAGE 3 SHEET: E

PLOT DATE : 10/30/2017 12:25 PM

PLOT NAME: 090101 ew.ppt

STAGE 3 – STH 96 (WB) EARTHWORK

			Increm Vol	(CY)		mulative ol (CY)	
STATION	AREA	A (SF)	(Unadj	•	1.00	1.25	Mass Ordinate
	Cut	Fill	Cut	Fill	Cut	Expanded Fill	
10+50.00WB	17.05	0.15	0	0	0	0	0
10+61.09WB	39.73	0.11	12	0	12	0	12
10+75.00WB	40.89	0.06	21	0	32	0	32
10+87.04WB	42.04	0.03	18	0	51	0	51
11+00.00WB	53.73	0.00	23	0	74	0	74
11+13.00WB	54.43	0.00	26	0	100	0	100
11+25.00WB	55.49	0.00	24	0	124	0	124
11+50.00WB	59.46	0.00	53	0	178	0	177
11+75.00WB	59.12	0.00	55	0	232	0	232
12+00.00WB	61.96	0.00	56	0	289	0	288
12+25.00WB	64.19	0.00	58	0	347	0	347
12+50.00WB	63.42	0.00	59	0	406	0	406
12+75.00WB	58.59	0.00	56	0	463	0	462
12+83.60WB	58.18	0.00	19	0	481	0	481
13+00.00WB	57.32	0.01	35	0	516	0	516
13+25.00WB	57.08	0.66	53	0	569	1	569
13+50.00WB	55.40	1.67	52	1	621	2	619
13+75.00WB	55.31	1.76	51	2	672	4	669
14+00.00WB	54.22	1.68	51	2	723	6	717
14+16.52WB	53.38	1.55	33	1	756	7	749
14+25.00WB	52.92	1.48	17	0	773	8	765
14+50.00WB	47.18	1.98	46	2	819	10	809
14+75.00WB	37.42	3.13	39	2	858	13	846
15+00.00WB	27.07	5.62	30	4	888	18	870
15+25.00WB	21.20	10.39	22	7	911	27	884
15+40.70WB	18.60	14.26	12	7	922	36	886
15+50.00WB	18.40	32.47	6	8	928	46	882
15+75.00WB	18.16	59.15	17	42	945	99	846
16+00.00WB	20.76	83.68	18	66	963	182	782
16+23.03WB	20.78	110.40	18	83	981	285	696
			981	228			

NOTE: SALVAGED/UNUSABLE PAVEMENT MATERIAL NOT SHOWN IN CROSS SECTION, SEE MISCELLANEOUS QUANTITIES SHEETS.

CONT. ON NEXT PAGE

PROJECT NO: 6430-07-71 HWY: USH 45 COUNTY: WAUPACA EARTHWORK – STAGE 3 SHEET:

FILE NAME : \\Wis31fp1\n3public\pds\design id\6430-07-00,71 ush 45\quantities\090101 ew.ppt

PLOT DATE : 10/30/2017 12:25 PM

PLOT NAME : 090101 ew.ppt

STAGE 3 – TEMPORARY ROAD REMOVAL EARTHWORK

			_		Cumula	tive Vol (CY)	
	ΔRF	A (SF)		ntal Vol (CY) usted)	Cut	Expanded	Mass Ordinate
STATION	Cut	Fill	Cut	Fill	1.00	1.25	Mass Ordinate
94+51.61SB	0.00	0.58	0	0	0	0	0
94+75.00SB	0.00	0.61	0	1	0	1	-1
95+00.00SB	0.01	0.59	0	1	0	 	-1
95+25.00SB	0.02	0.52	0	1	0	2	-2
95+50.00SB	0.04	0.36	0	0	0	2	-2
95+75.00SB	0.06	0.24	0	0	0	3	-3
96+00.00SB	0.08	0.16	0	0	0	3	-3
96+25.00SB	0.11	0.09	0	0	0	3	-3
96+50.00SB	0.19	0.00	0	0	0	3	-3
96+75.00SB	0.36	0.00	0	0	1	3	-3
97+00.00SB	10.77	0.00	5	0	6	3	3
97+00.003B 97+25.00SB	15.64	0.00	12	0	18	3	15
97+26.07SB	15.89	0.23	1	0	19	3	15
97+50.00SB	21.83	0.49	17	0	35	4	32
97+75.00SB	28.47	0.49	23	1	59	5	54
98+00.00SB	34.78	3.09	29	2	88	7	81
98+00.003B 98+25.00SB	41.79	4.83	35	4	123	11	112
98+32.45SB	43.84	5.75	12	1	135	13	122
98+50.00SB	48.63	10.66	30	5	165	20	145
98+75.00SB	53.55	16.68	47	13	213	36	177
99+00.00SB	57.81	24.21	52	19	264	59	205
99+00.00SB 99+25.00SB	61.39	33.11	55	27	319	92	205
99+25.003B 99+40.07SB	62.24	37.17	34	20	354	117	237
99+40.07SB 99+50.00SB	62.74	35.92	23	13	377	134	243
99+75.00SB	59.97	31.75	23 57	31	434	173	261
100+00.00SB	59.89	28.17	55	28	489	208	281
100+00.00SB	58.84	23.65	55	24	544	238	306
100+25.00SB 100+28.57SB		23.40		3		242	310
100+26.57SB 100+50.00SB	57.86		8 47		552	266	
	53.76 50.20	22.02 20.44	48	19 20	599 647	290	334 357
100+75.00SB			46 45				379
101+00.00SB	46.91	19.19		18	692	313	
101+25.00SB	46.94	22.38	43	19	736	337	399
101+50.00SB	45.77	20.55	43	20	779	362	417
101+75.00SB	44.30	19.32	42	18	820	385	435
102+00.00SB	42.62	18.06	40	17	861	407	454
102+25.00SB	40.38	16.73	38	16	899	427	472
102+30.06SB	39.84	16.45	8	3	907	431	476
102+50.00SB	38.94	14.87	29	12	936	445	490
102+75.00SB	37.69	13.15	35	13	971	461	510
103+00.00SB	35.90	12.43	34	12	1,005	476	529
103+25.00SB	38.02	14.15	34	12	1,039	492	548
103+50.00SB	45.29	13.99	39	13	1,078	508	570
103+75.00SB	52.66	14.98	45	13	1,123	525	599
104+00.00SB	60.15	16.23	52	14	1,176	543	633

	ADE	EA (SE)	Incremer (Unadj	ntal Vol (CY) usted)	Curt	Mass Ordinate	
OTATION		EA (SF)	04	Fill	Cut	Fill	wass Ordinate
STATION 104+09.54SB	Cut 62.75	Fill 16.51	Cut 22	Fill 6	1. 00 1,197	1.25	647
104+25.00SB	64.93	17.70	37	10	1,137	562	672
104+50.00SB	65.33	19.55	60	17	1,294	584	710
104+75.00SB	64.00	22.08	60	19	1,354	608	746
105+00.00SB	61.04	25.83	58	22	1,412	636	776
105+25.00SB	56.04	29.99	54	26	1,466	668	798
105+50.00SB	47.25	34.24	48	30	1,514	705	809
105+30.003B 105+75.00SB	38.85	39.33	40	34	1,514	748	806
105+75.00SB	35.71	35.64	35	35	1,588	740	797
			0	0	· · · · · · · · · · · · · · · · · · ·	791	797
106+00.00SB	36.06	34.30	34	30	1,588		
106+25.00SB	37.27	31.18	-		1,622	829	793
106+50.00SB	39.48	29.09	36	28	1,658	864	794
106+75.00SB	43.27	27.50	38	26	1,696	897	800
107+00.00SB	53.47	27.50	45	25	1,741	928	813
107+25.00SB	63.74	26.77	54	25	1,795	960	835
107+42.99SB	73.33	25.30	46	17	1,841	982	859
107+49.90SB	75.52	25.02	19	6	1,860	990	870
107+50.00SB	75.54	25.01	0	0	1,860	990	871
107+75.00SB	83.91	23.21	74	22	1,934	1,018	916
108+00.00SB	98.10	19.04	84	20	2,018	1,042	976
108+08.37SB	101.33	18.15	31	6	2,049	1,049	1,000
108+20.80SB	105.90	16.43	48	8	2,097	1,059	1,038
STH 96	109.76	15.12	0	0	2,097	1,059	1,038
STH 96	115.18	13.38	62	8	2,159	1,069	1,090
STH 96	121.59	11.24	110	11	2,268	1,083	1,185
STH 96	138.23	9.05	120	9	2,388	1,095	1,294
STH 96	150.38	5.64	134	7	2,522	1,103	1,419
STH 96	118.37	16.07	124	10	2,647	1,116	1,531
STH 96	80.40	25.93	92	19	2,739	1,140	1,598
STH 96	94.48	14.20	81	19	2,820	1,164	1,656
STH 96	166.71	0.38	121	7	2,940	1,172	1,768
STH 96	143.77	18.04	144	9	3,084	1,183	1,902
STH 96	83.95	45.74	105	30	3,190	1,220	1,970
STH 96	81.99	51.85	77	45	3,266	1,276	1,990
STH 96	80.61	61.80	75	53	3,342	1,342	2,000
STH 96	72.36	60.03	65	52	3,407	1,407	2,000
111+74.04SB	77.69	59.50	0	0	3,407	1,059	1,038
112+00.00SB	62.98	48.38	68	52	3,474	1,124	1,040
112+25.00SB	57.62	39.73	56	41	3,530	1,175	1,045
112+26.13SB	57.39	39.37	2	2	3,533	1,177	1,046
112+50.00SB	44.56	38.49	45	34	3,578	1,220	1,048
112+75.00SB	35.16	41.70	37	37	3,615	1,267	1,038
112+95.32SB	39.99	33.92	28	28	3,643	1,302	1,031
113+00.00SB	41.53	32.13	7	6	3,650	1,309	1,031
113+25.00SB	49.53	23.65	42	26	3,692	1,342	1,041

NOTE: SALVAGED/UNUSABLE PAVEMENT MATERIAL NOT SHOWN IN CROSS SECTION, SEE MISCELLANEOUS QUANTITIES SHEETS.

CONT. ON NEXT PAGE

PROJECT NO: 6430-07-71 HWY: USH 45 COUNTY: WAUPACA EARTHWORK – STAGE 3 SHEET: **E**

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PLOT DATE : 1/17/2018 7:05 AM

PLOT NAME : 090101_ew.ppt

PLOT SCALE : 1:1

3

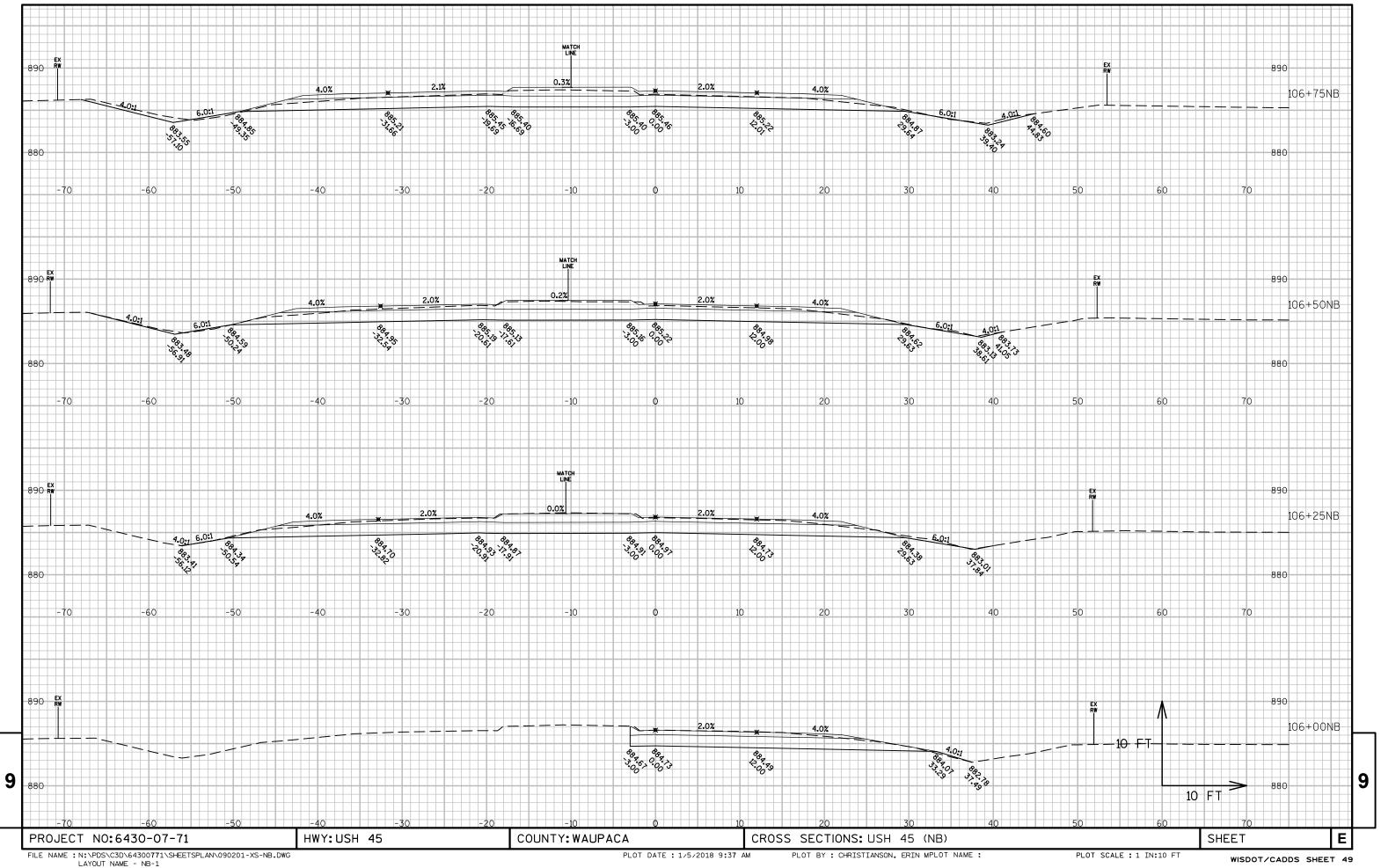
STAGE 3 – TEMPORARY ROAD REMOVAL EARTHWORK

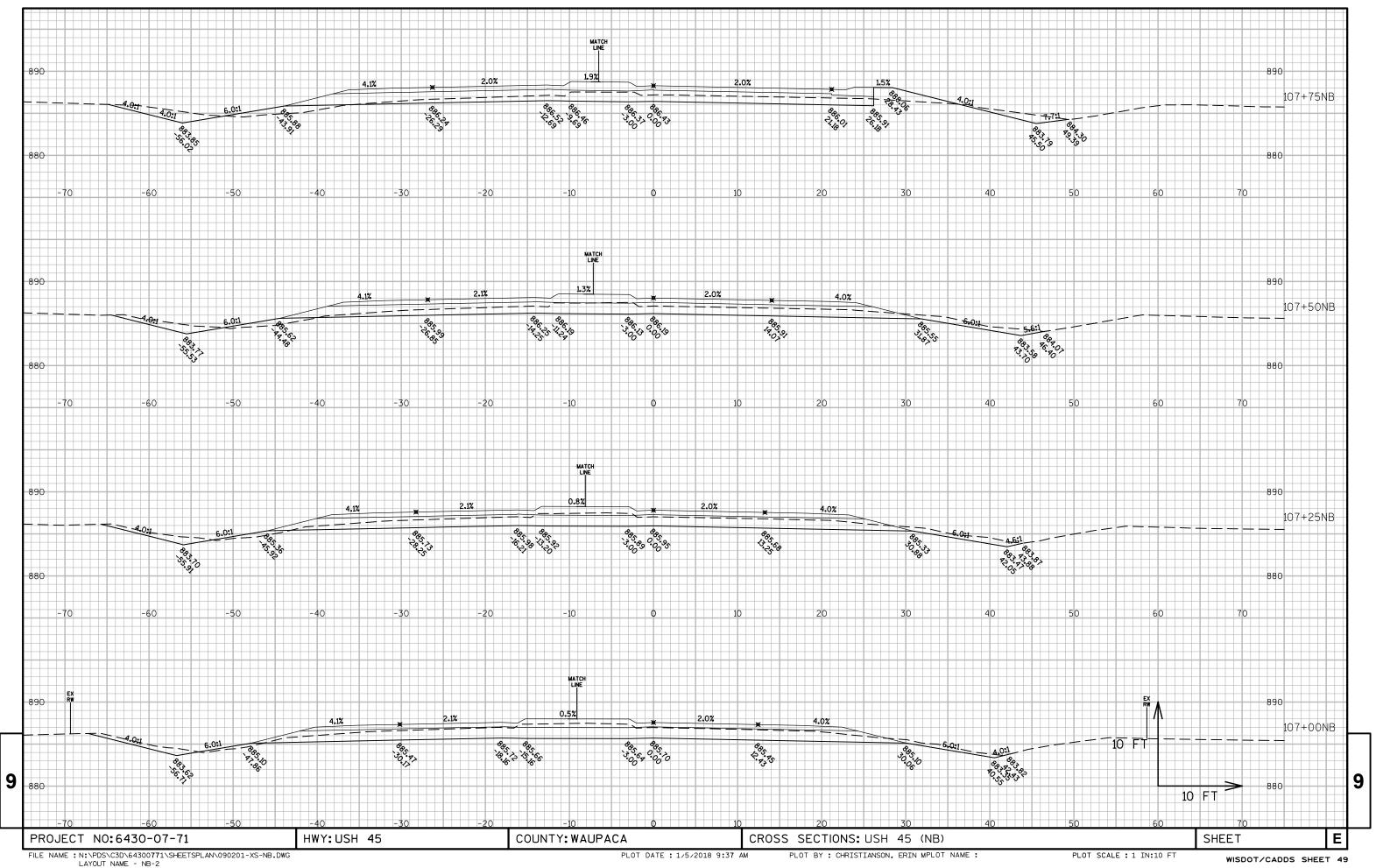
	ARE	EA (SF)		ntal Vol (CY) justed)	Cumula Cut	tive Vol (CY) Expanded Fill	Mass Ordinate		ARI	EA (SF)		ntal Vol (CY) justed)	Cumula Cut	tive Vol (CY) Expanded Fill	Mass Ordinate
STATION	Cut	Fill	Cut	Fill	1.00	1.25		STATION	Cut	Fill	Cut	Fill	1.00	1.25	
113+50.00SB	57.16	17.08	49	19	3,742	1,365	1,067	119+50.00SB	34.15	0.93	0	0	5,168	1,512	2,346
113+64.51SB	57.66	17.73	31	9	3,772	1,377	1,086	119+75.00SB	30.85	1.60	30	1	5,198	1,514	2,374
113+75.00SB	65.26	16.88	24	7	3,796	1,385	1,101	120+00.36SB	27.42	2.11	26	2	5,224	1,516	2,398
114+00.00SB	66.33	11.78	61	13	3,857	1,402	1,146	120+25.00SB	26.33	2.68	25	2	5,249	1,519	2,420
114+25.00SB	69.87	10.03	63	10	3,920	1,414	1,196	120+50.00SB	23.32	3.31	23	3	5,272	1,522	2,439
114+50.00SB	73.18	8.07	66	8	3,987	1,425	1,252	120+75.00SB	20.05	4.91	20	4	5,292	1,527	2,455
114+75.00SB	76.43	6.30	69	7	4,056	1,433	1,313	121+00.00SB	16.42	7.23	17	6	5,309	1,534	2,465
115+00.00SB	77.38	5.86	71	6	4,127	1,440	1,377	121+25.00SB	13.92	0.68	14	4	5,323	1,539	2,474
115+25.00SB	76.21	5.53	71	5	4,198	1,447	1,441	121+50.00SB	11.16	0.06	12	0	5,334	1,539	2,485
115+50.00SB	74.41	4.94	70	5	4,268	1,453	1,505	121+75.00SB	5.48	0.00	8	0	5,342	1,539	2,493
115+75.00SB	72.26	4.19	68	4	4,336	1,458	1,568	121+89.12SB	4.22	0.00	3	0	5,344	1,539	2,495
116+00.00SB	67.00	5.42	64	4	4,400	1,464	1,627	122+00.00SB	3.46	0.00	2	0	5,346	1,539	2,497
116+25.00SB	63.07	7.10	60	6	4,460	1,471	1,680	122+25.00SB	2.05	0.00	3	0	5,349	1,539	2,500
116+50.00SB	60.09	8.88	57	7	4,517	1,480	1,727	122+50.00SB	1.08	0.00	1	0	5,350	1,539	2,501
116+75.00SB	60.09	8.43	56	8	4,573	1,490	1,773	122+75.00SB	0.48	0.00	1	0	5,351	1,539	2,502
117+00.00SB	63.47	5.30	57	6	4,630	1,498	1,822	123+00.00SB	0.14	0.00	0	0	5,351	1,539	2,502
117+25.00SB	66.32	2.89	60	4	4,690	1,503	1,878	123+25.00SB	0.10	0.18	0	0	5,351	1,539	2,502
117+50.00SB	69.36	1.19	63	2	4,753	1,505	1,938	123+50.00SB	0.07	0.28	0	0	5,351	1,539	2,502
117+75.00SB	69.59	0.73	64	1	4,818	1,506	2,001	123+75.00SB	0.04	0.30	0	0	5,351	1,540	2,502
117+83.53SB	69.09	0.68	22	0	4,839	1,507	2,023	124+00.00SB	0.02	0.34	0	0	5,351	1,540	2,501
118+00.00SB	67.05	0.60	42	0	4,881	1,507	2,064	124+06.25SB	0.02	0.34	0	0	5,351	1,540	2,501
118+25.00SB	63.30	0.47	60	0	4,941	1,508	2,124	124+25.00SB	0.00	0.37	0	0	5,351	1,541	2,501
118+50.00SB	57.99	0.53	56	0	4,997	1,508	2,179	124+50.00SB	0.00	0.38	0	0	5,351	1,541	2,500
118+75.00SB	52.20	0.73	51	1	5,048	1,509	2,229	124+54.25SB	0.00	0.37	0	0	5,351	1,541	2,500
119+00.00SB	46.11	1.00	46	1	5,094	1,510	2,274								
119+25.00SB	39.85	1.13	40	1	5,134	1,511	2,313								
119+49.92SB	34.04	0.95	34	1	5,168	1,512	2,345				5,351	1,511			

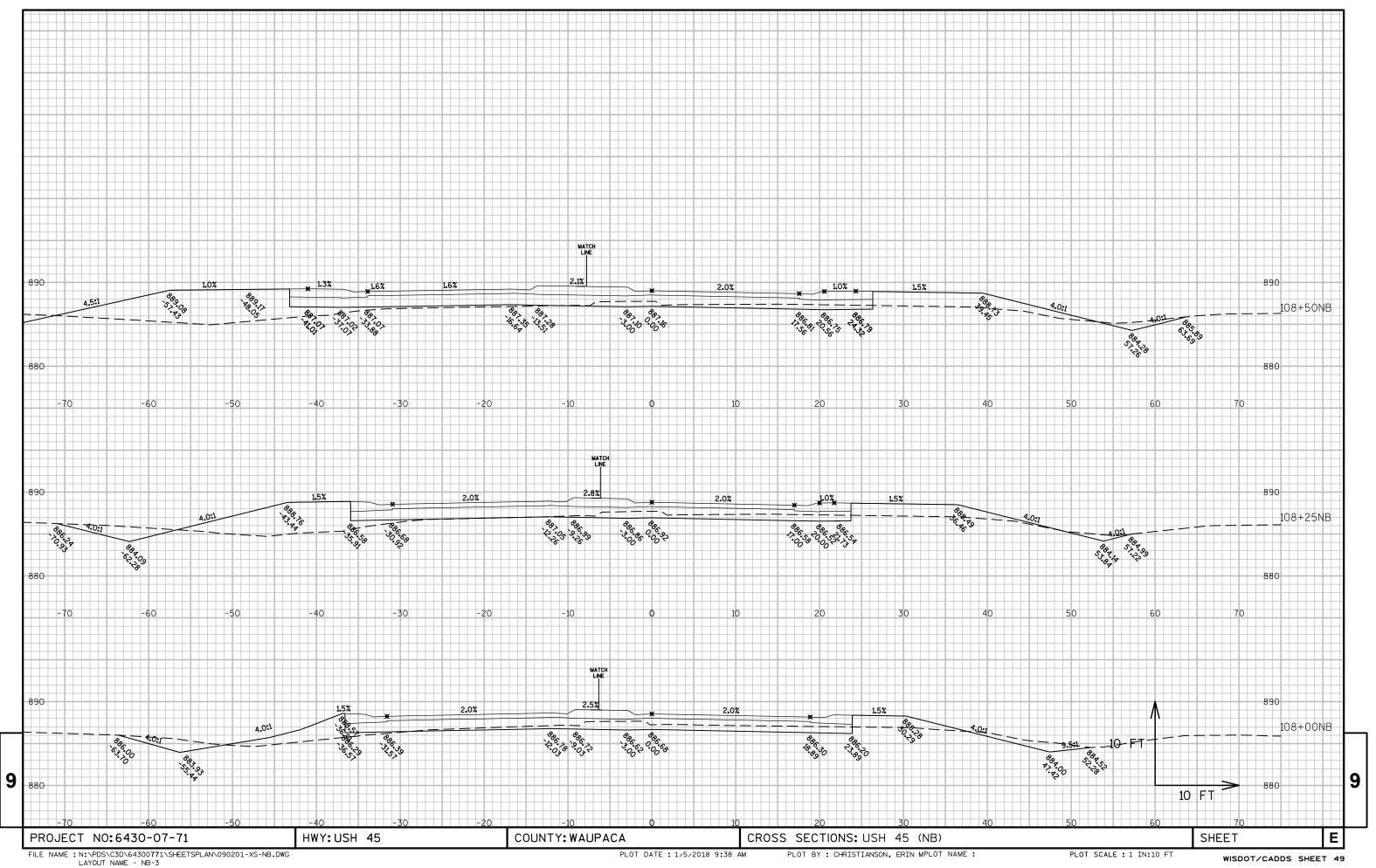
NOTE: SALVAGED/UNUSABLE PAVEMENT MATERIAL NOT SHOWN IN CROSS SECTION, SEE MISCELLANEOUS QUANTITIES SHEETS.

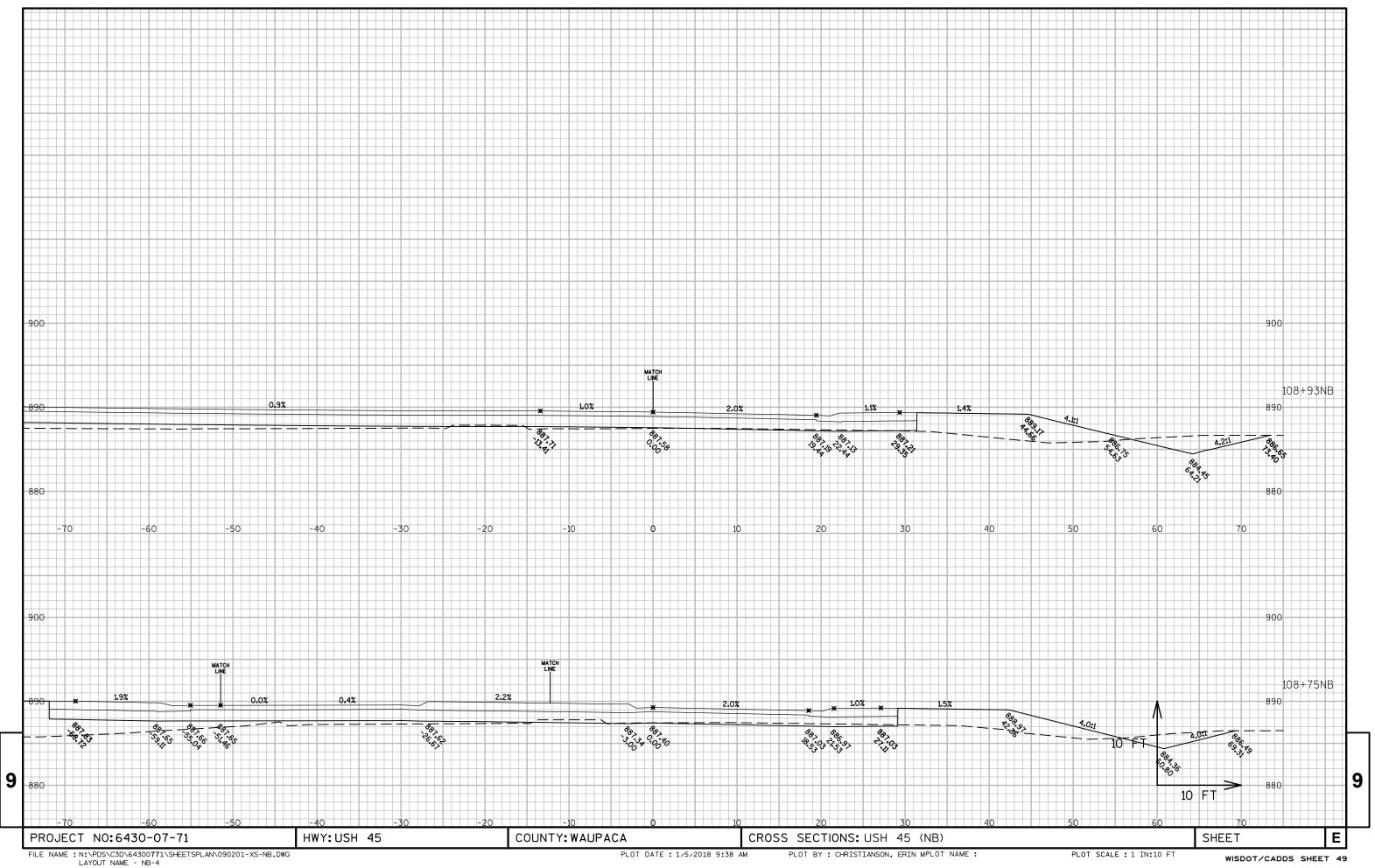
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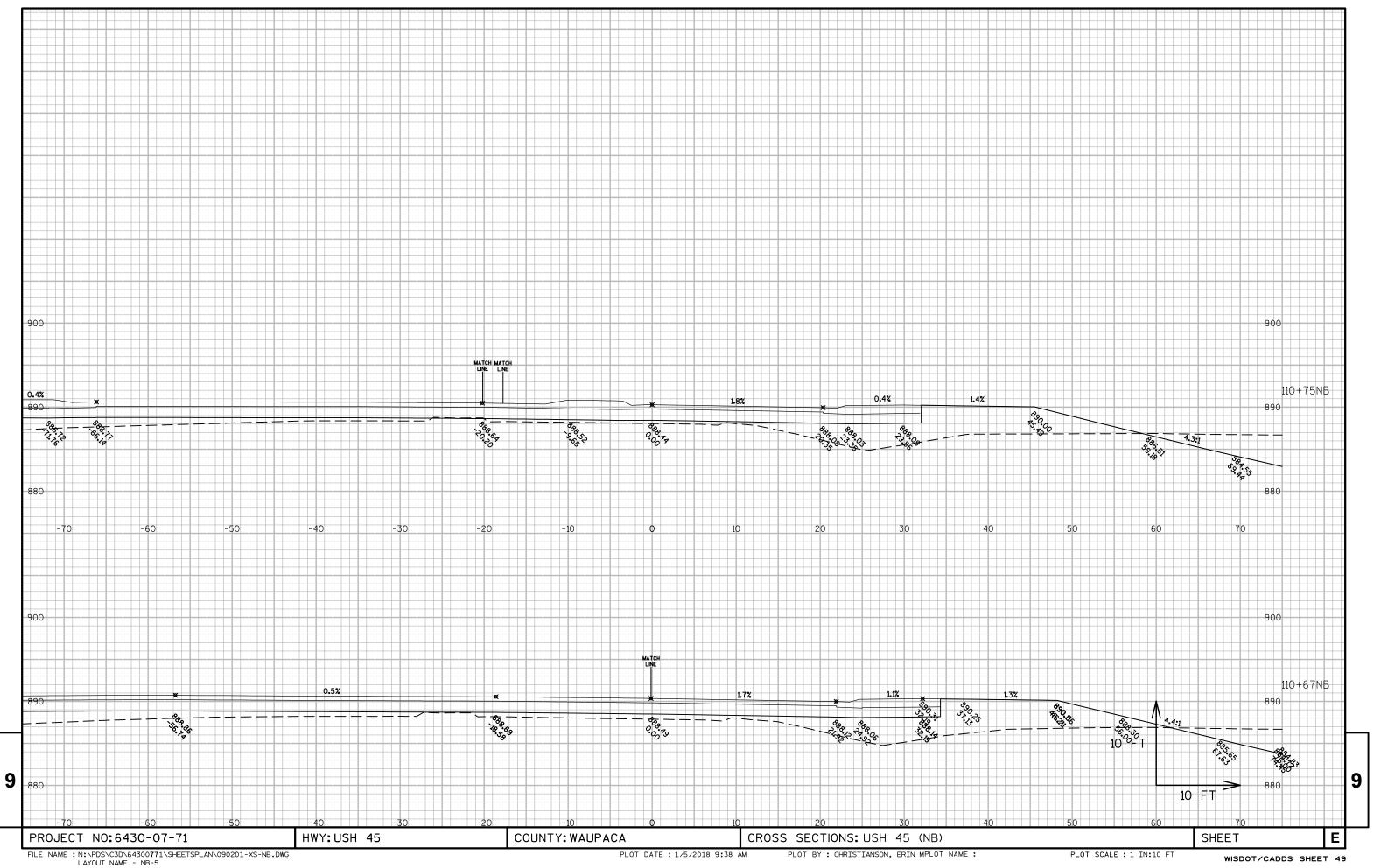
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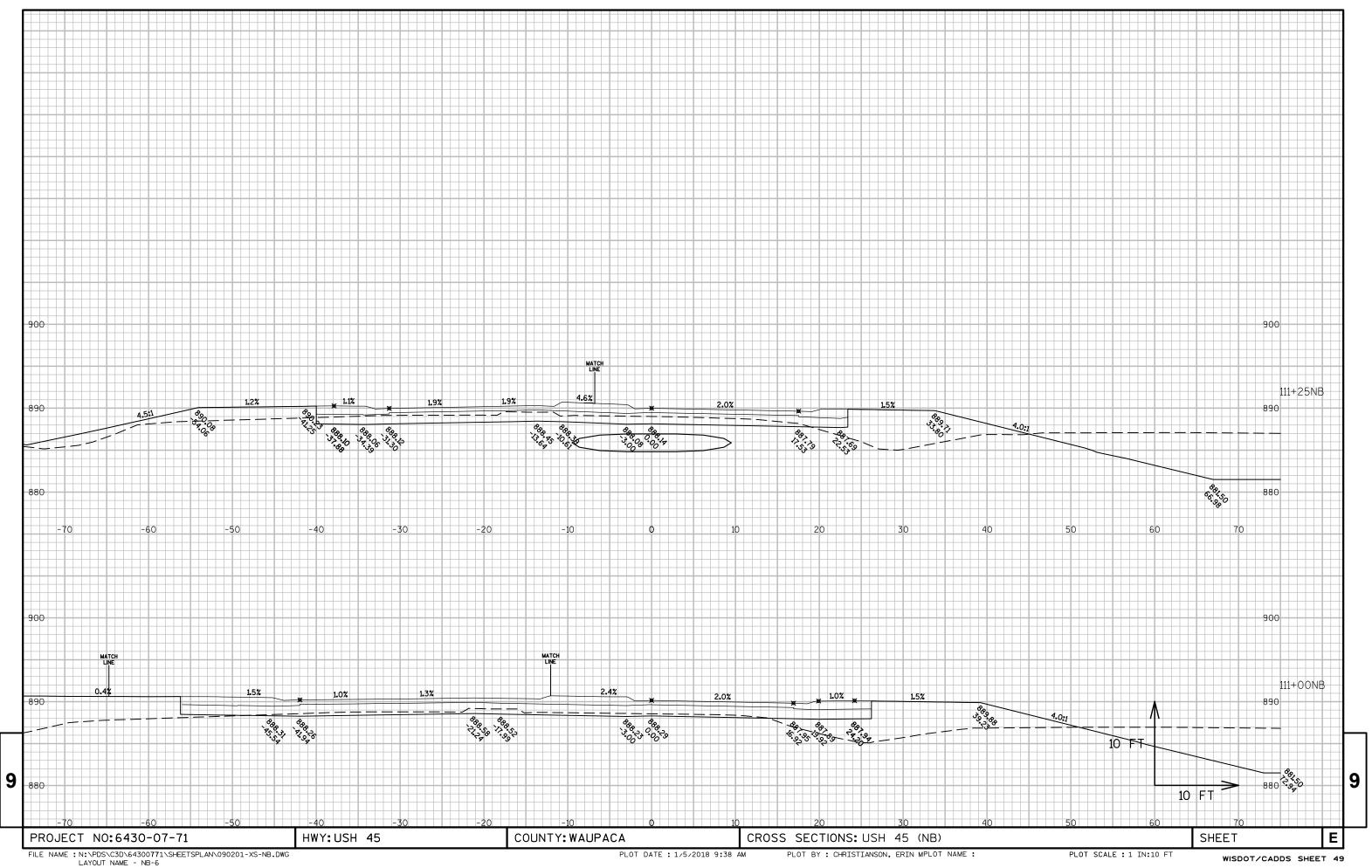


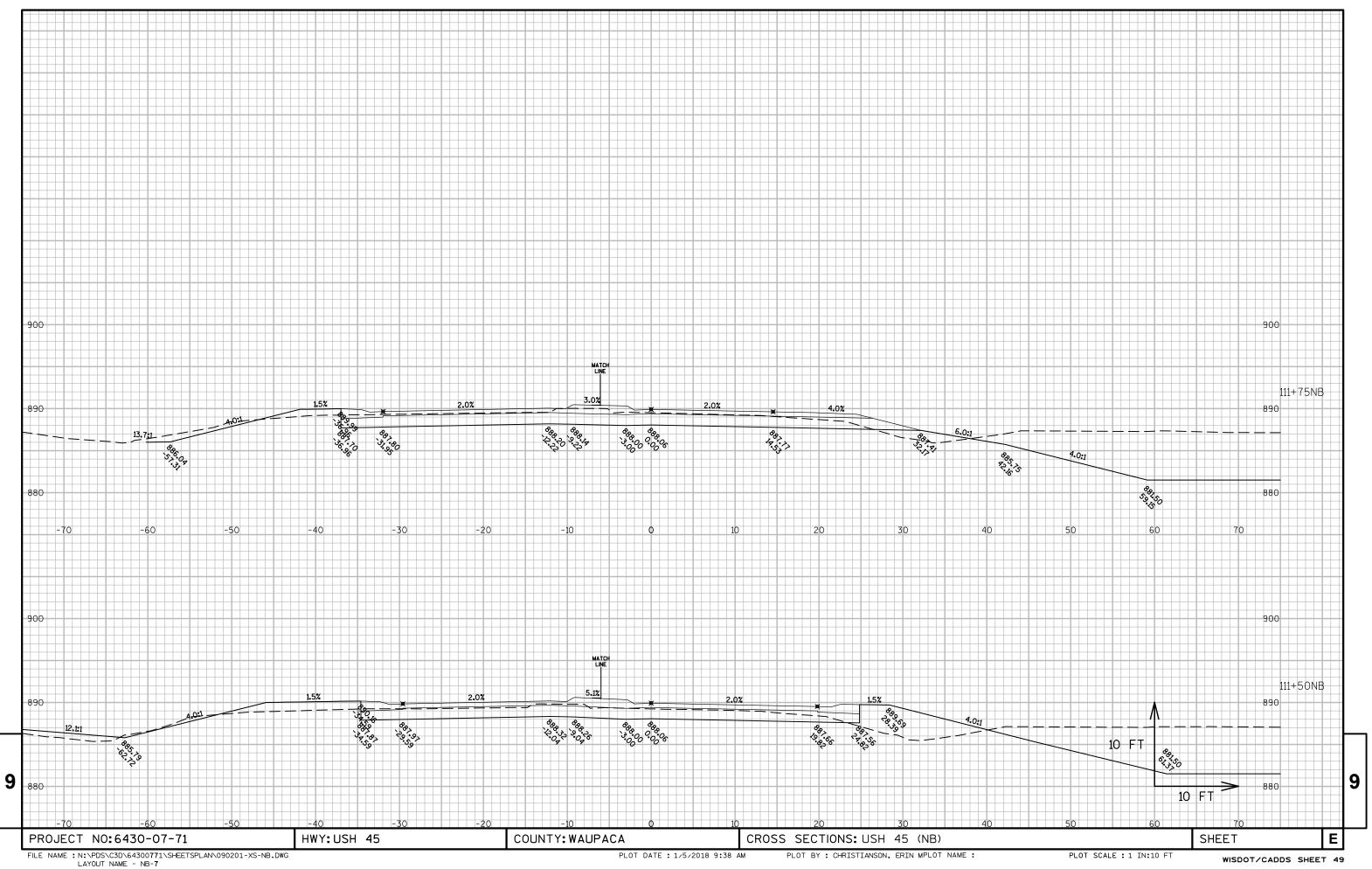


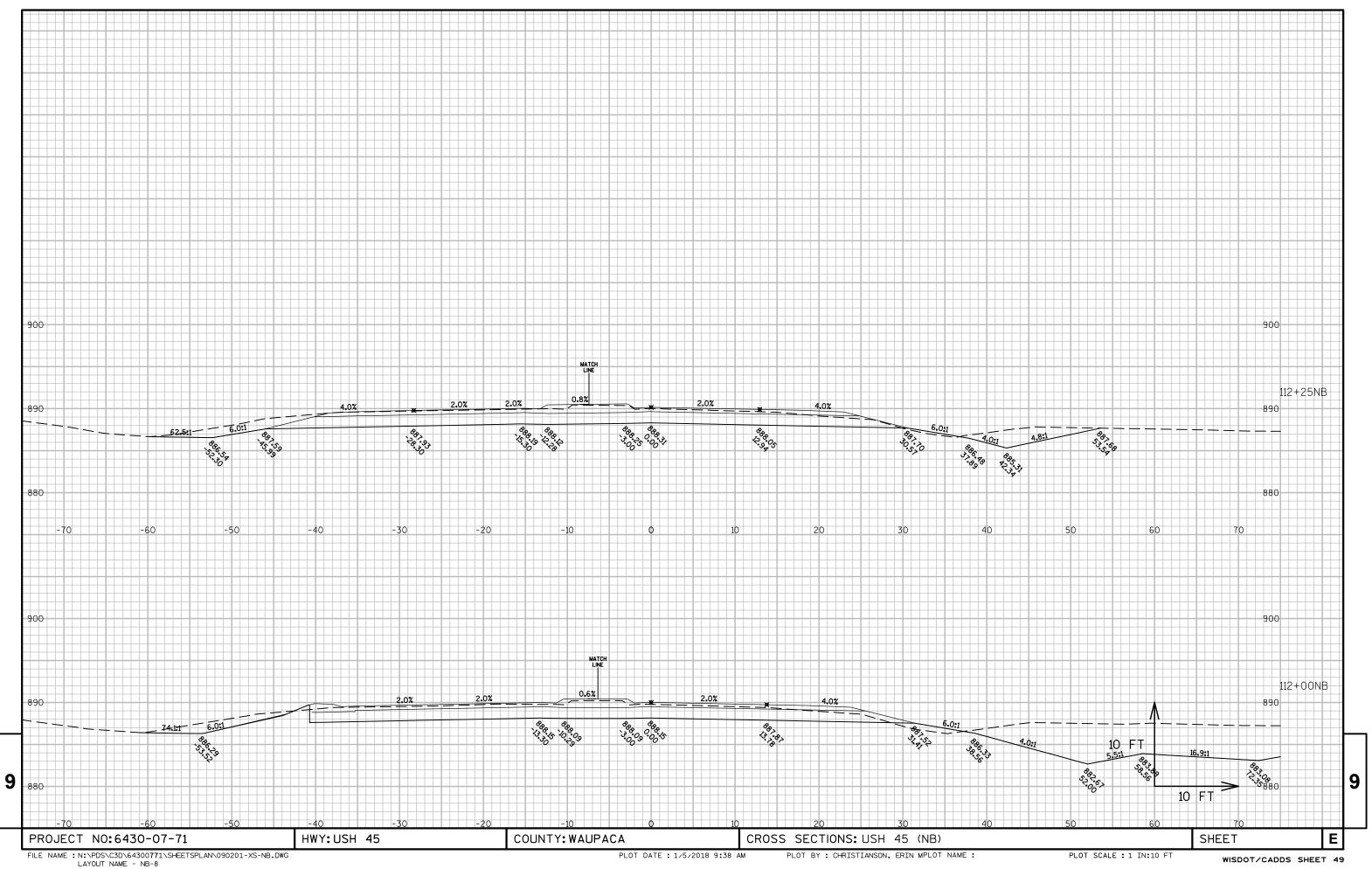


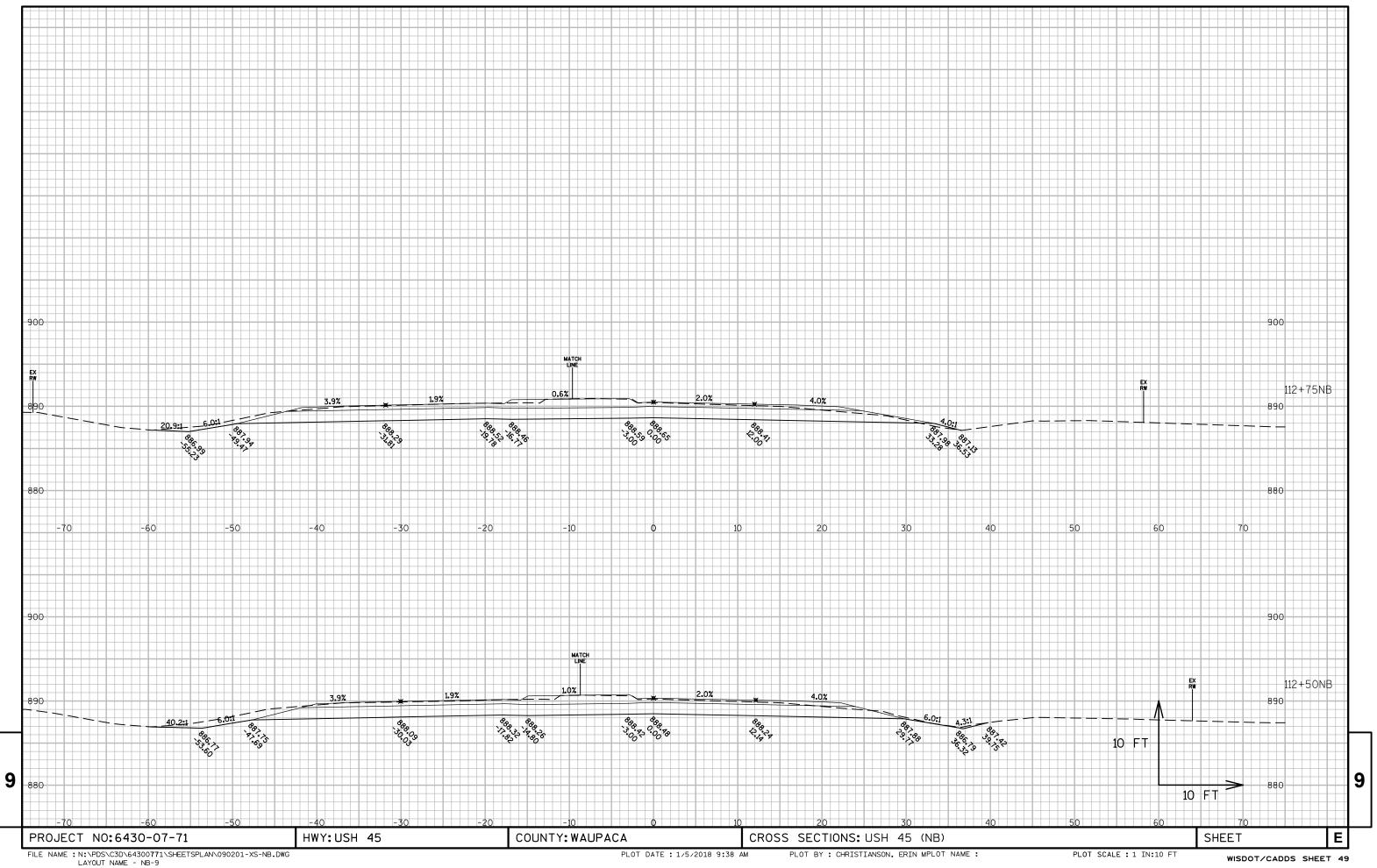


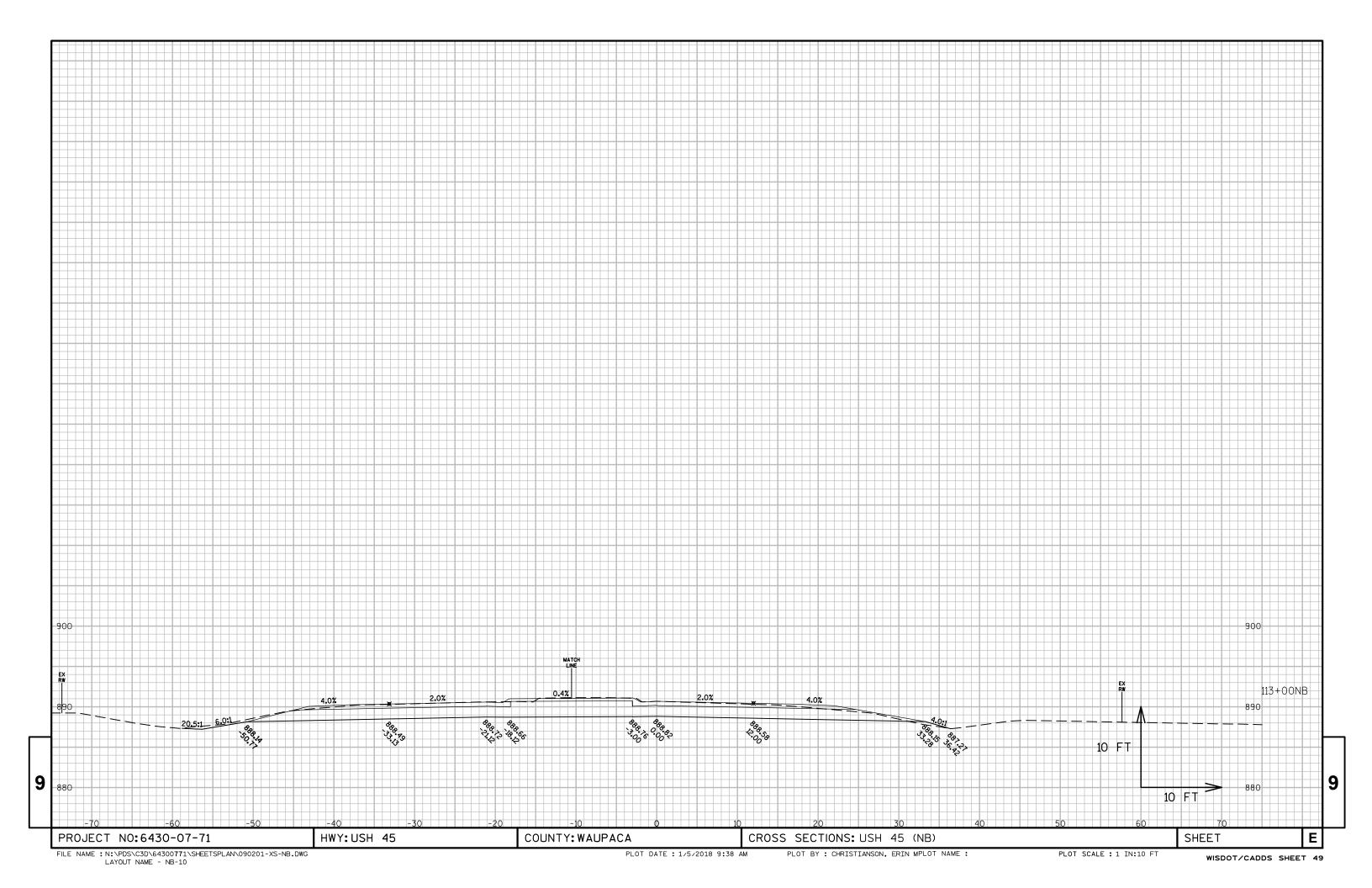


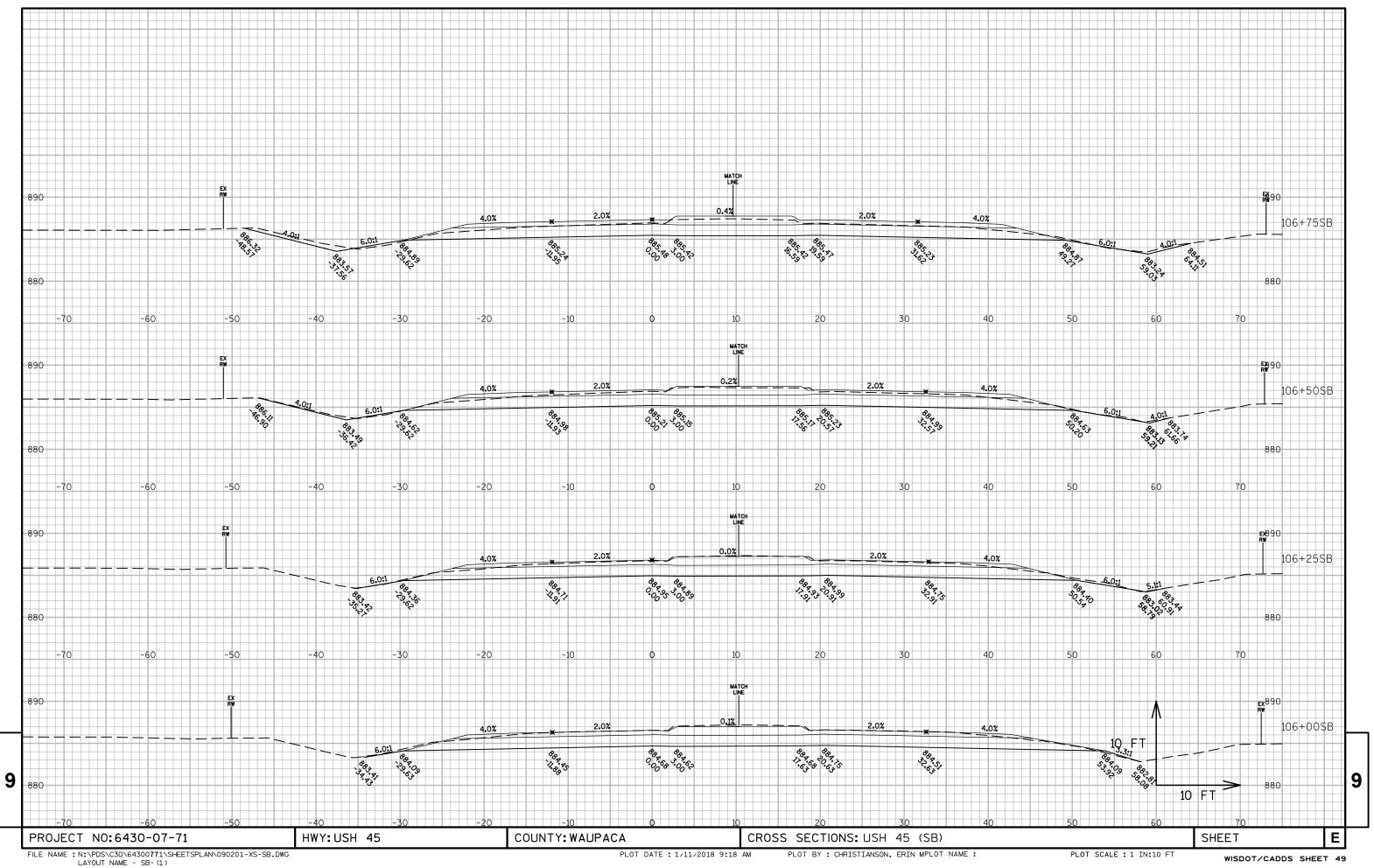


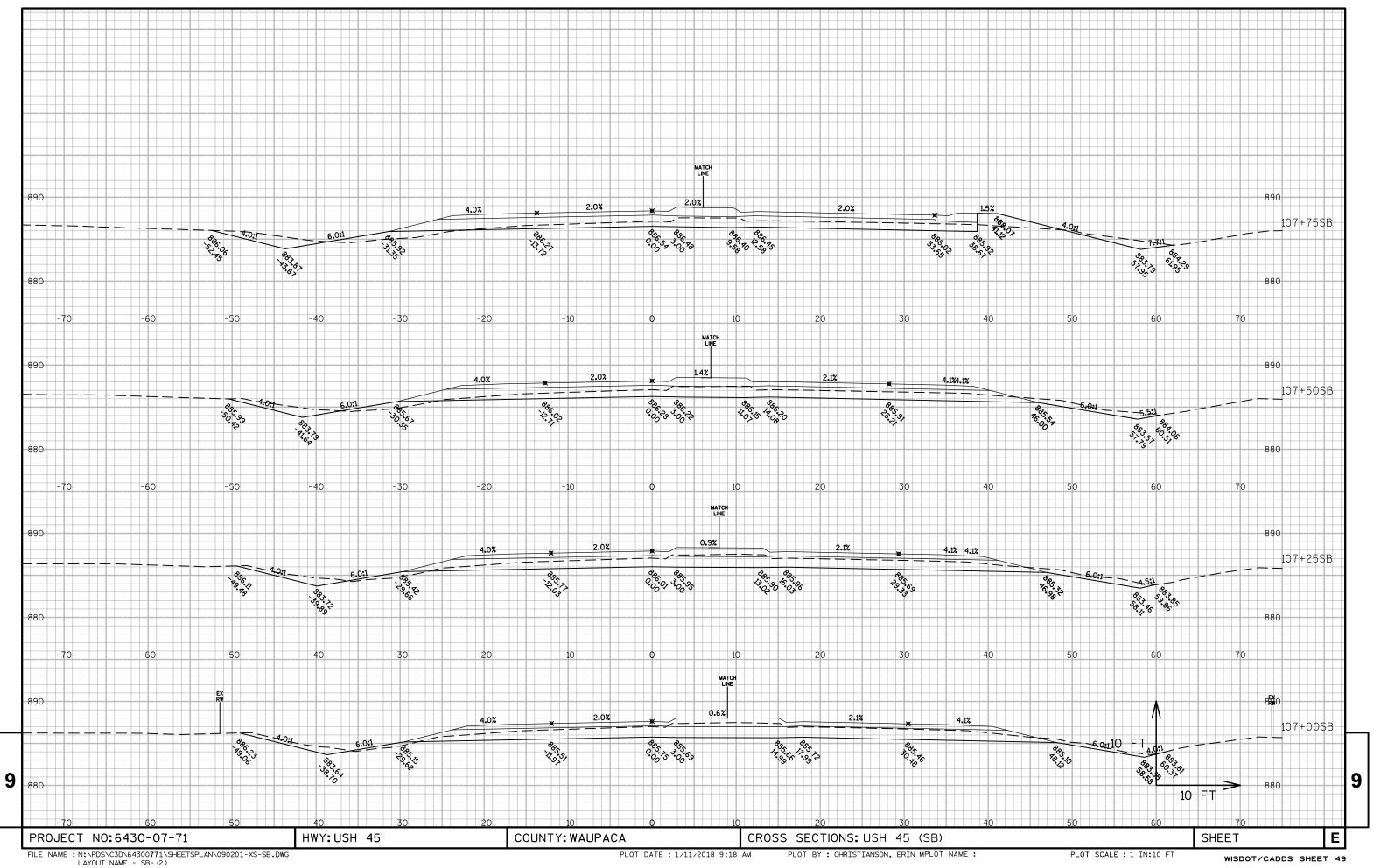


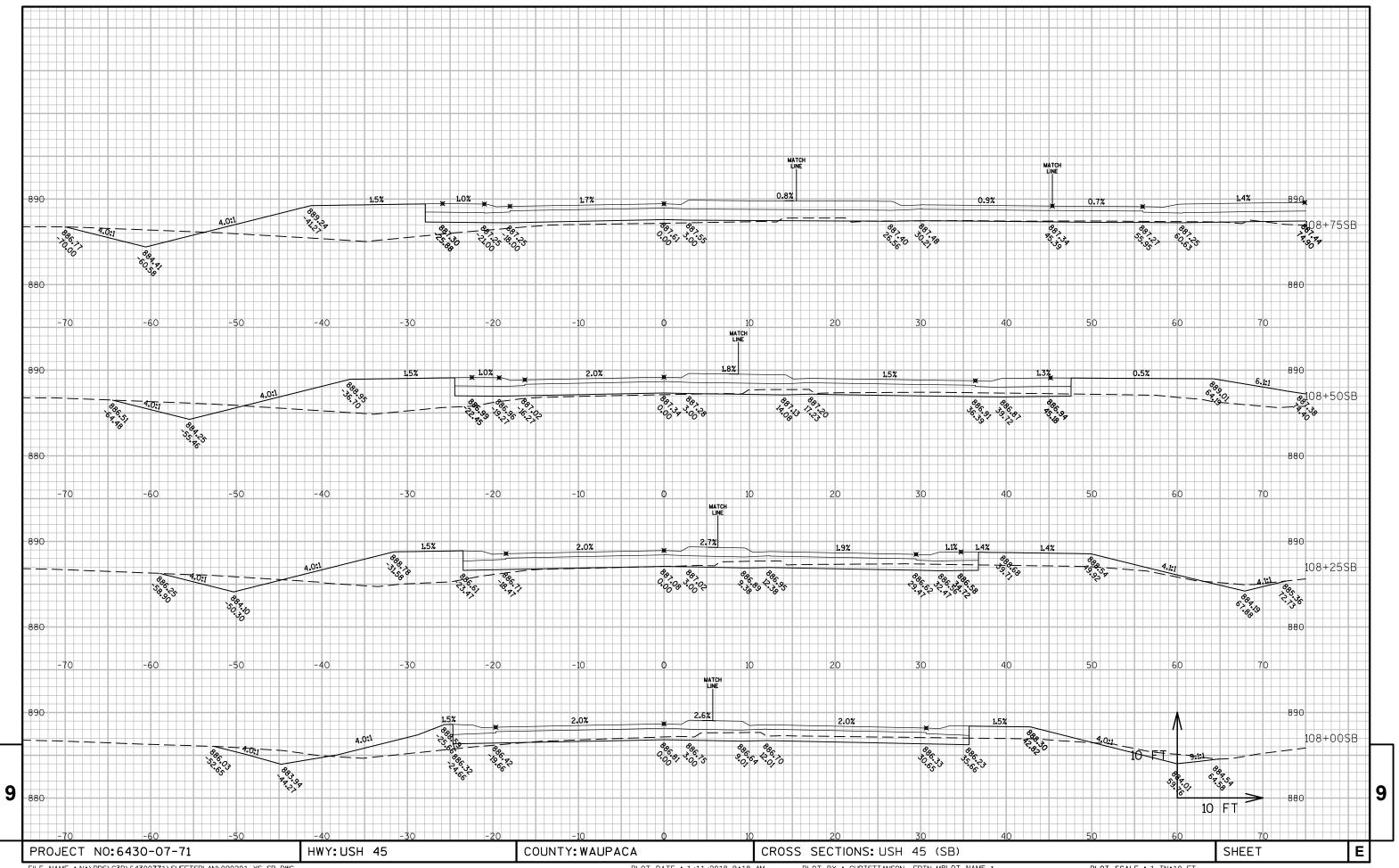


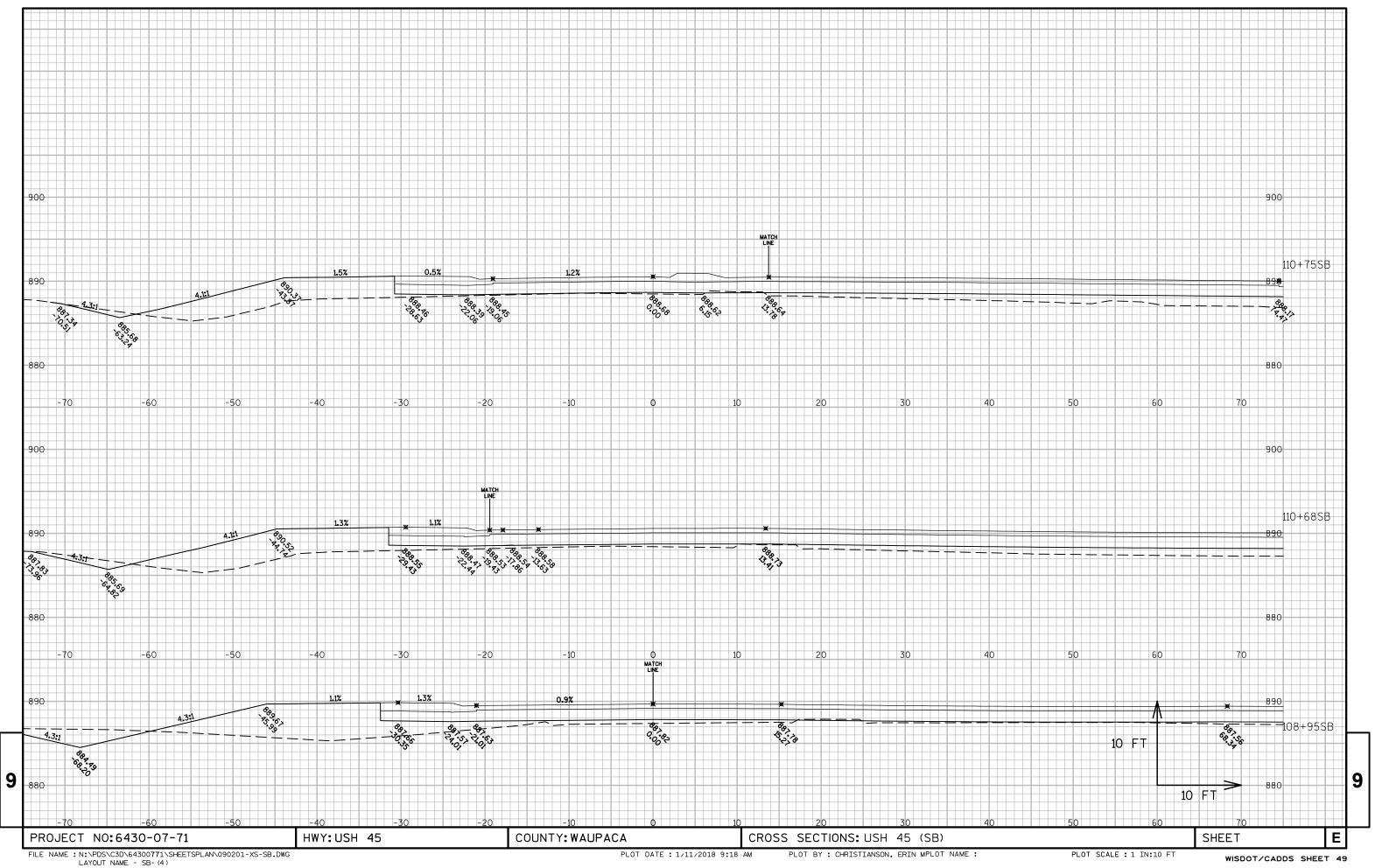


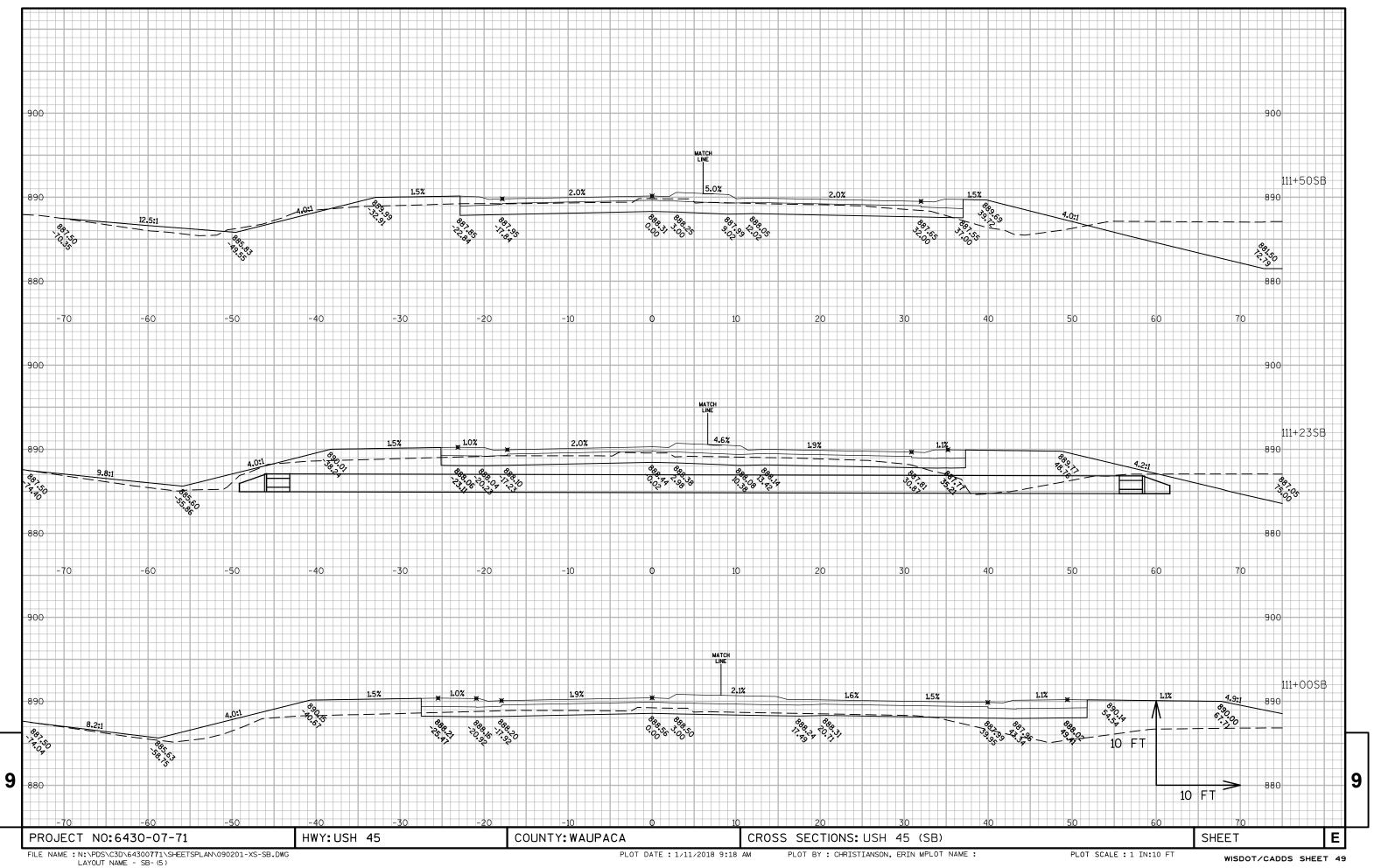


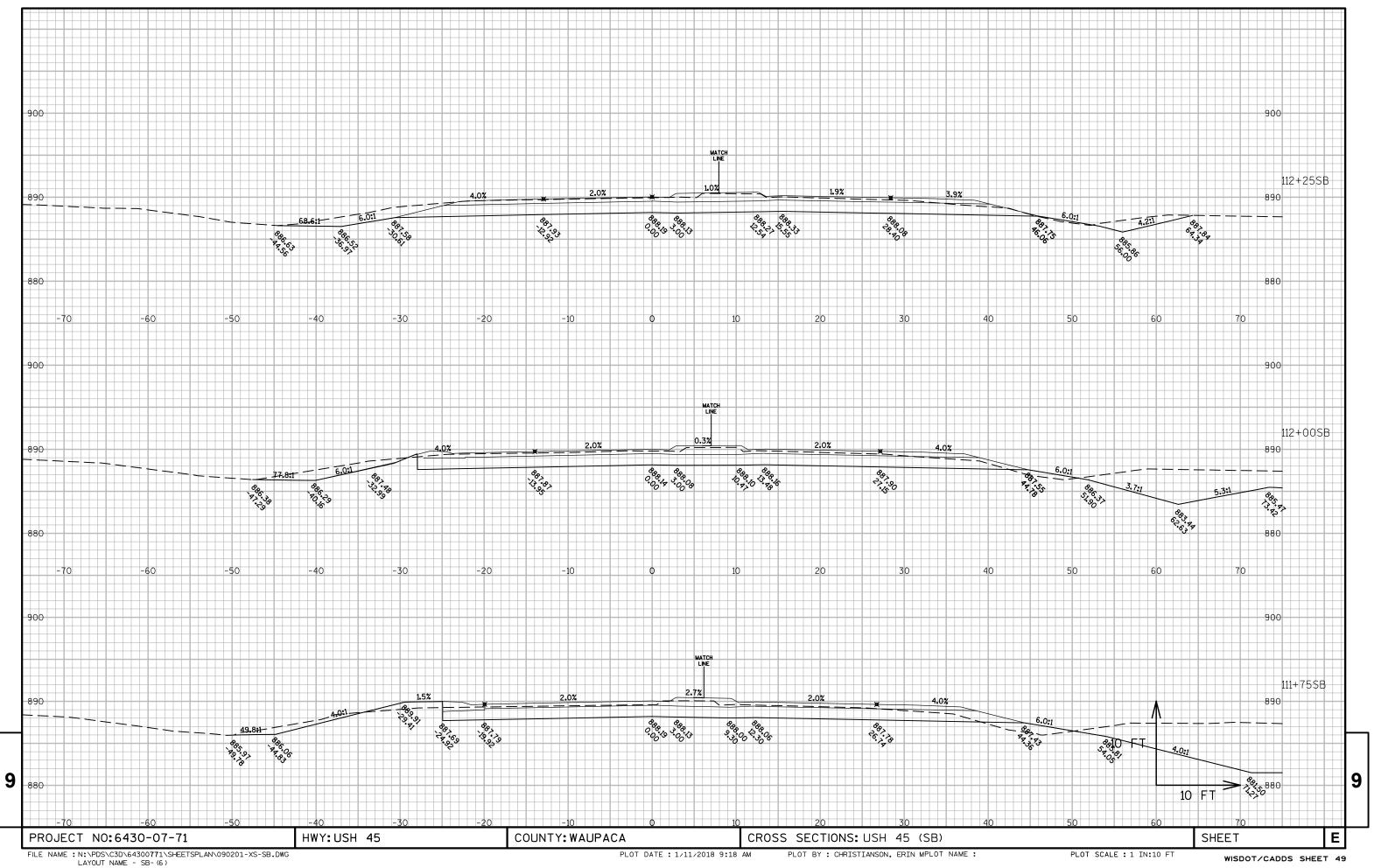


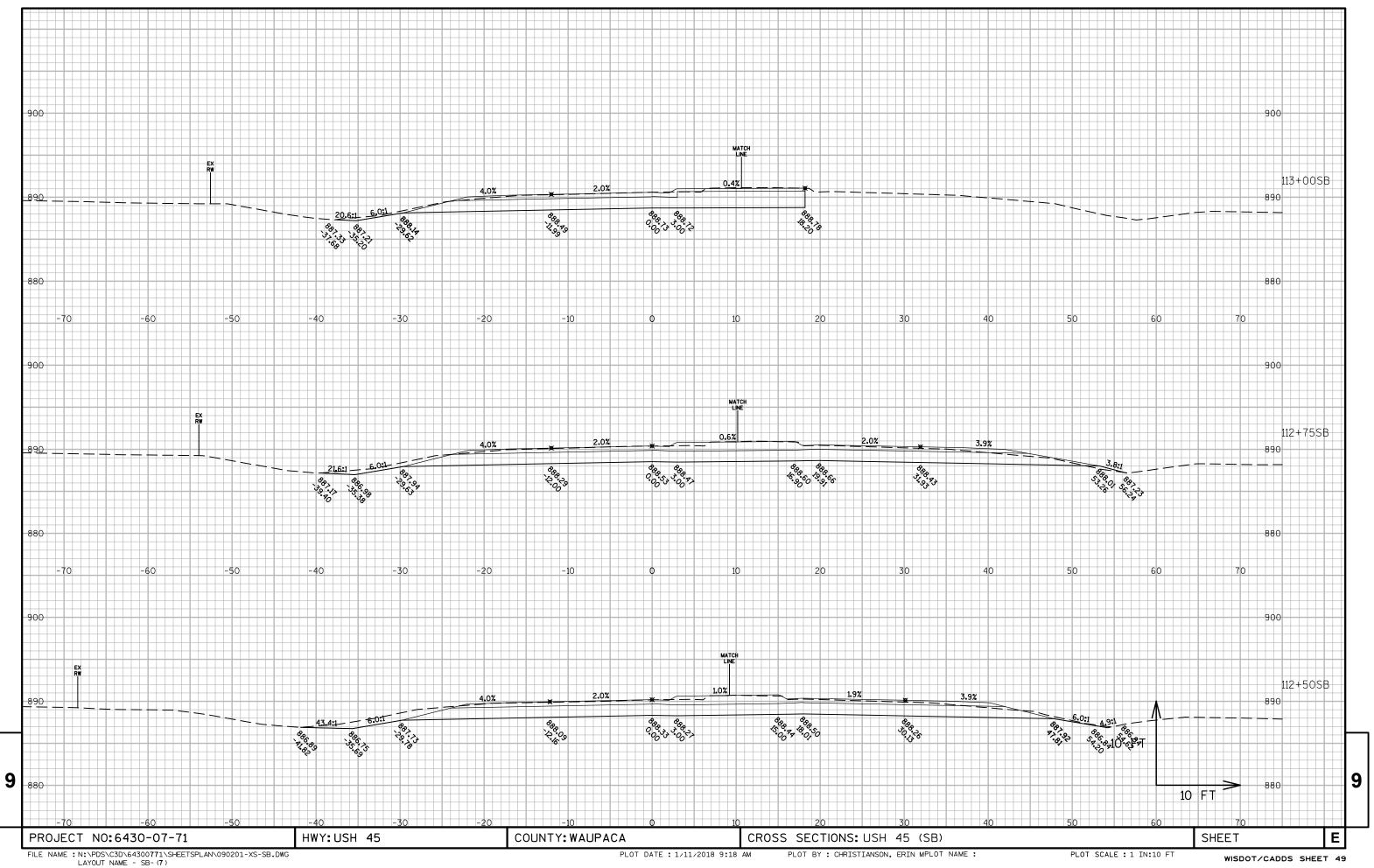


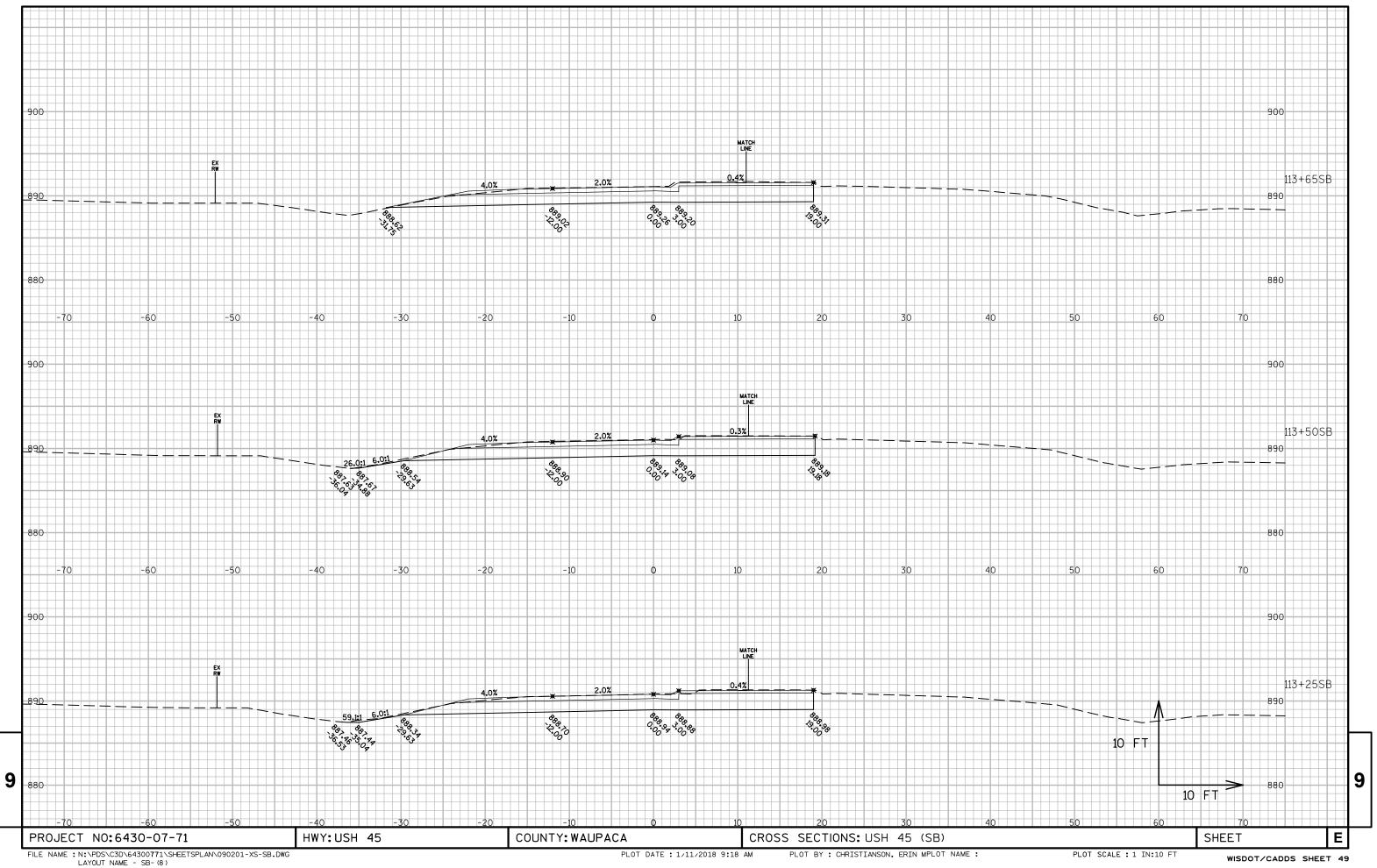


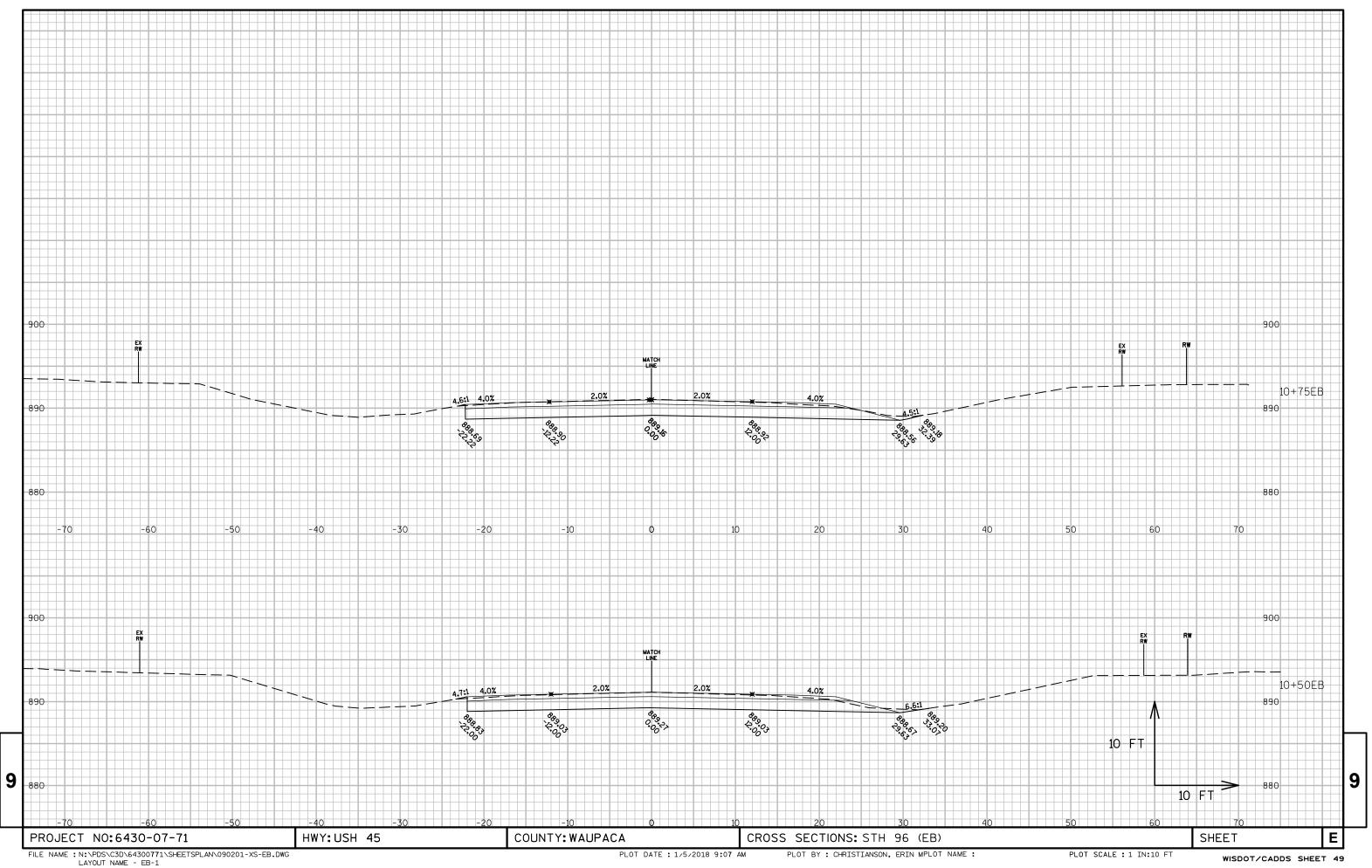


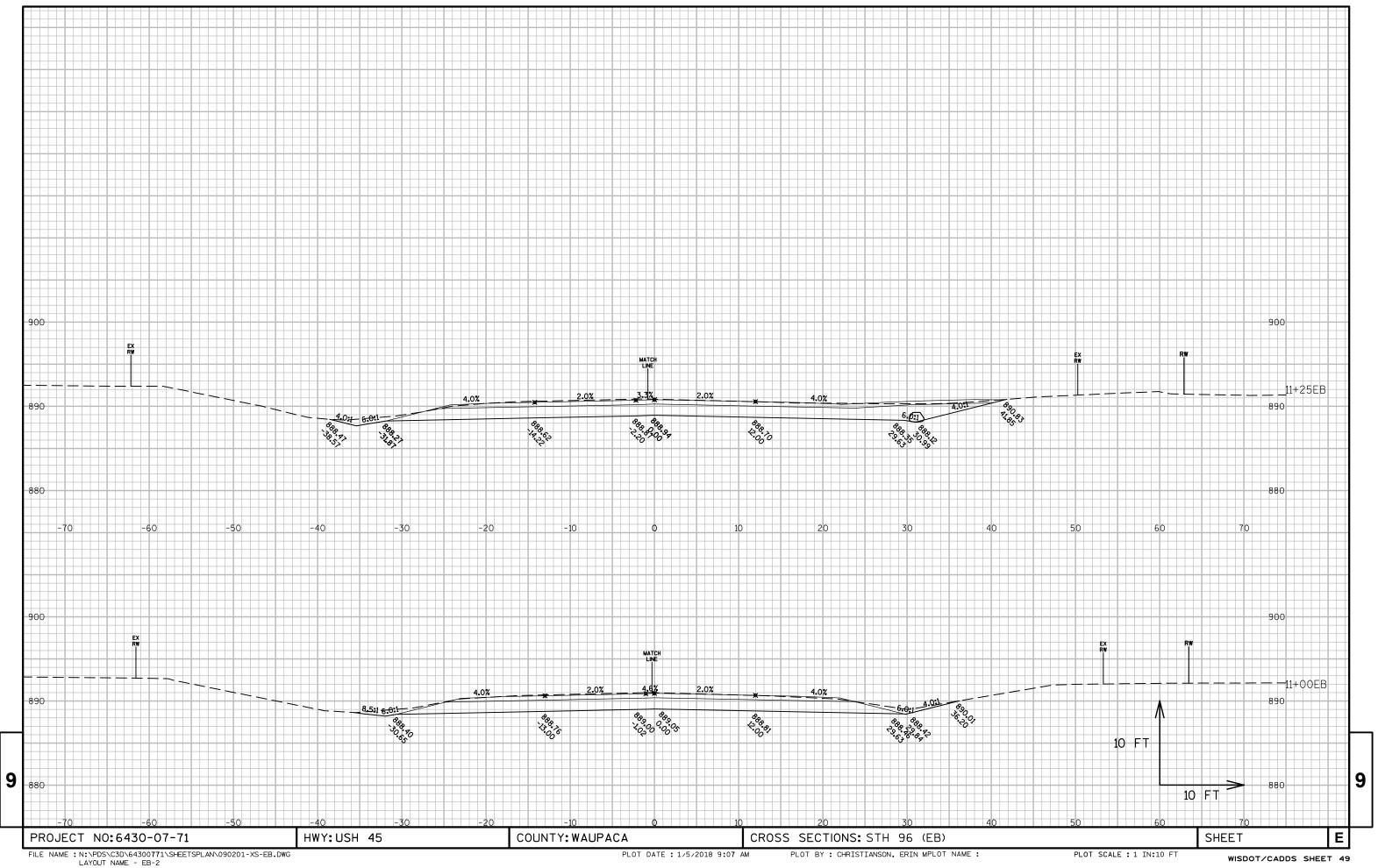


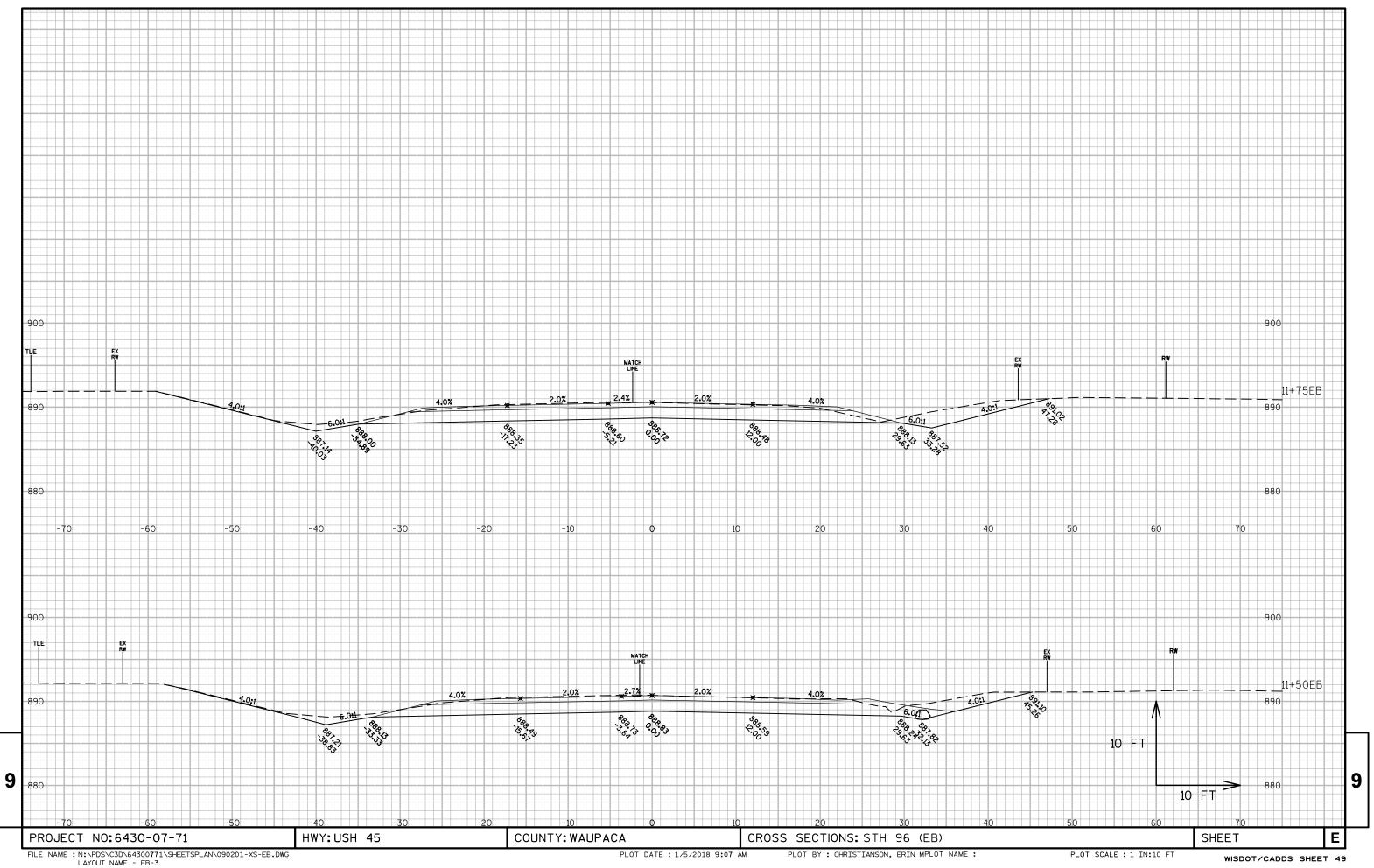


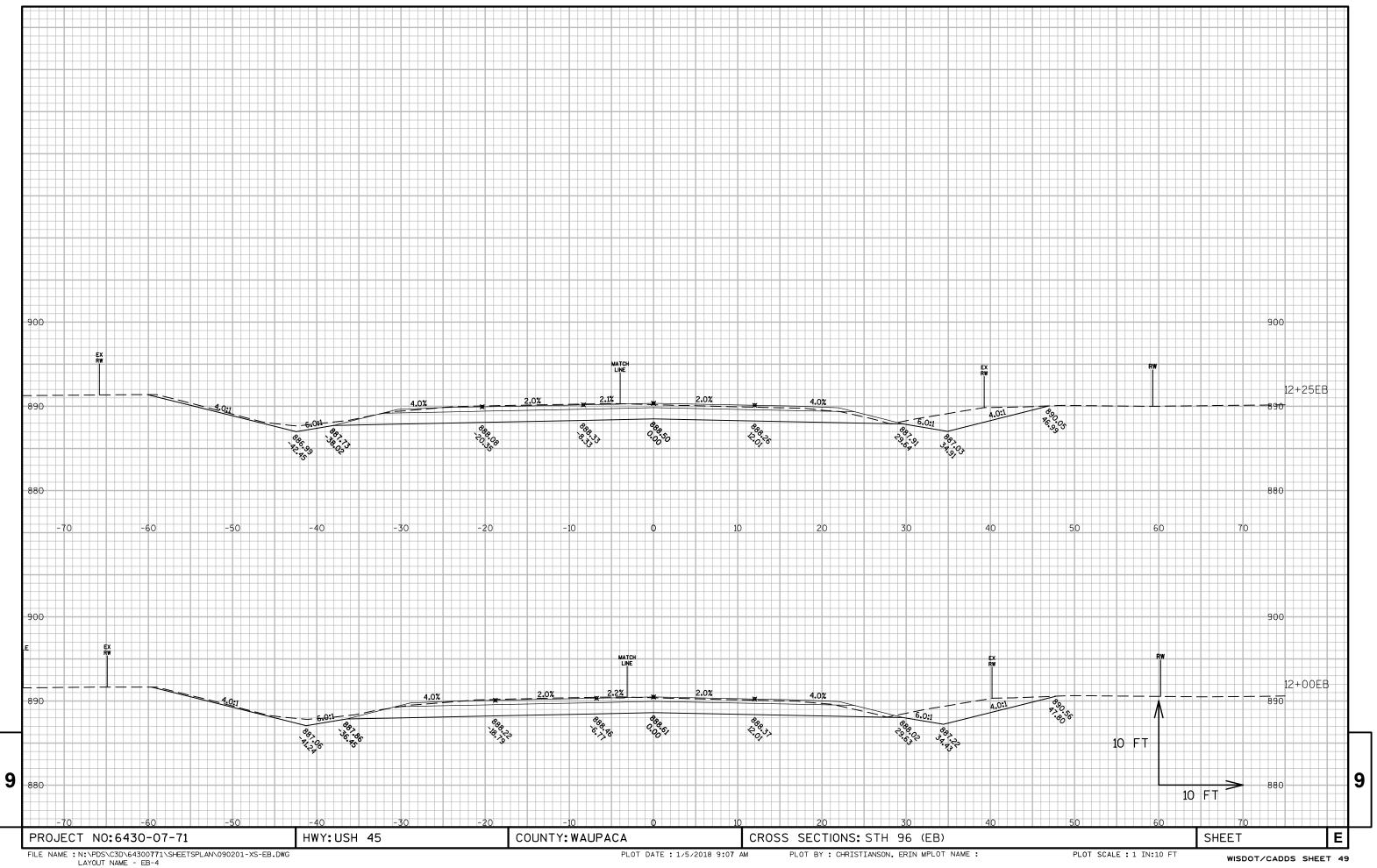


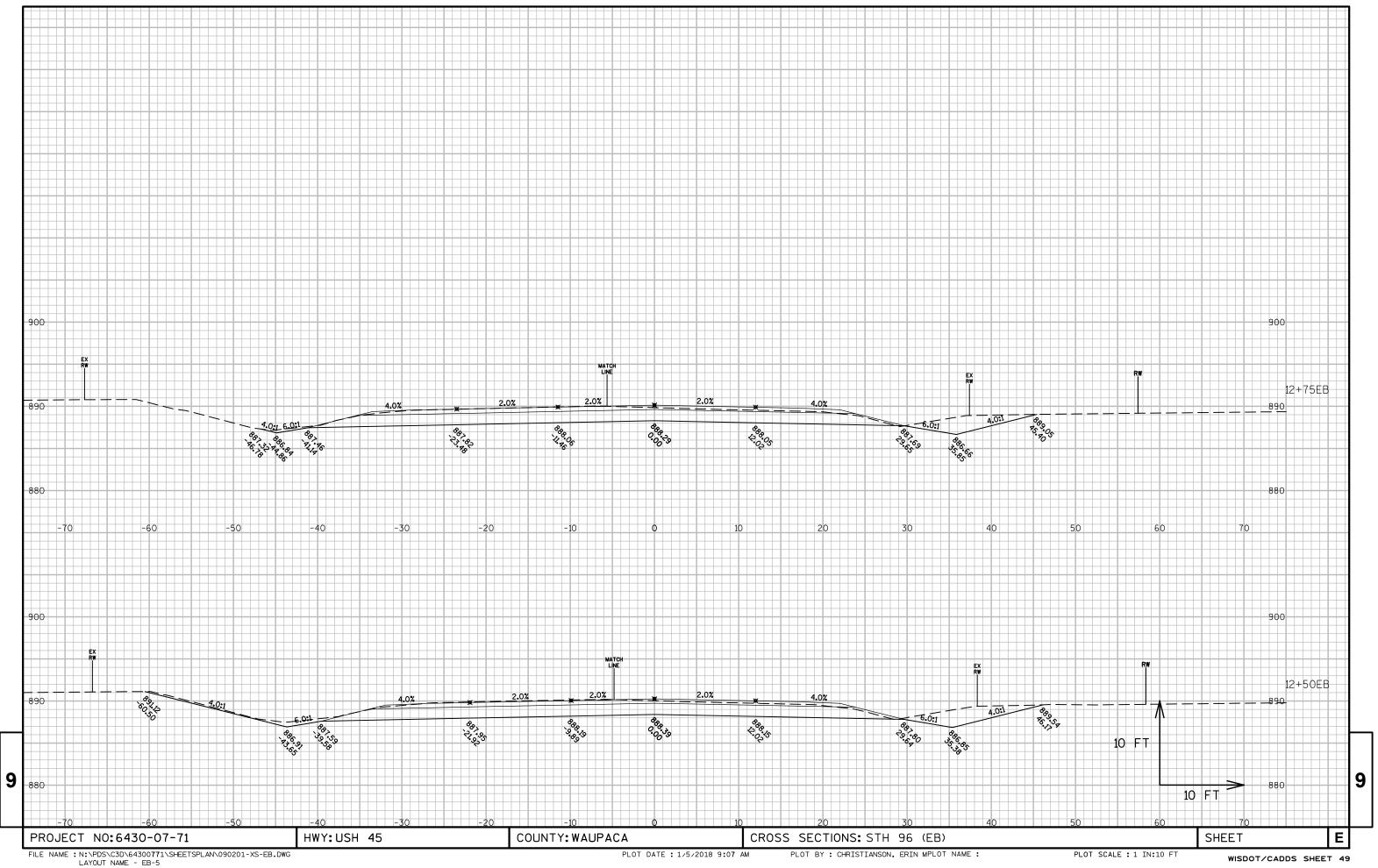


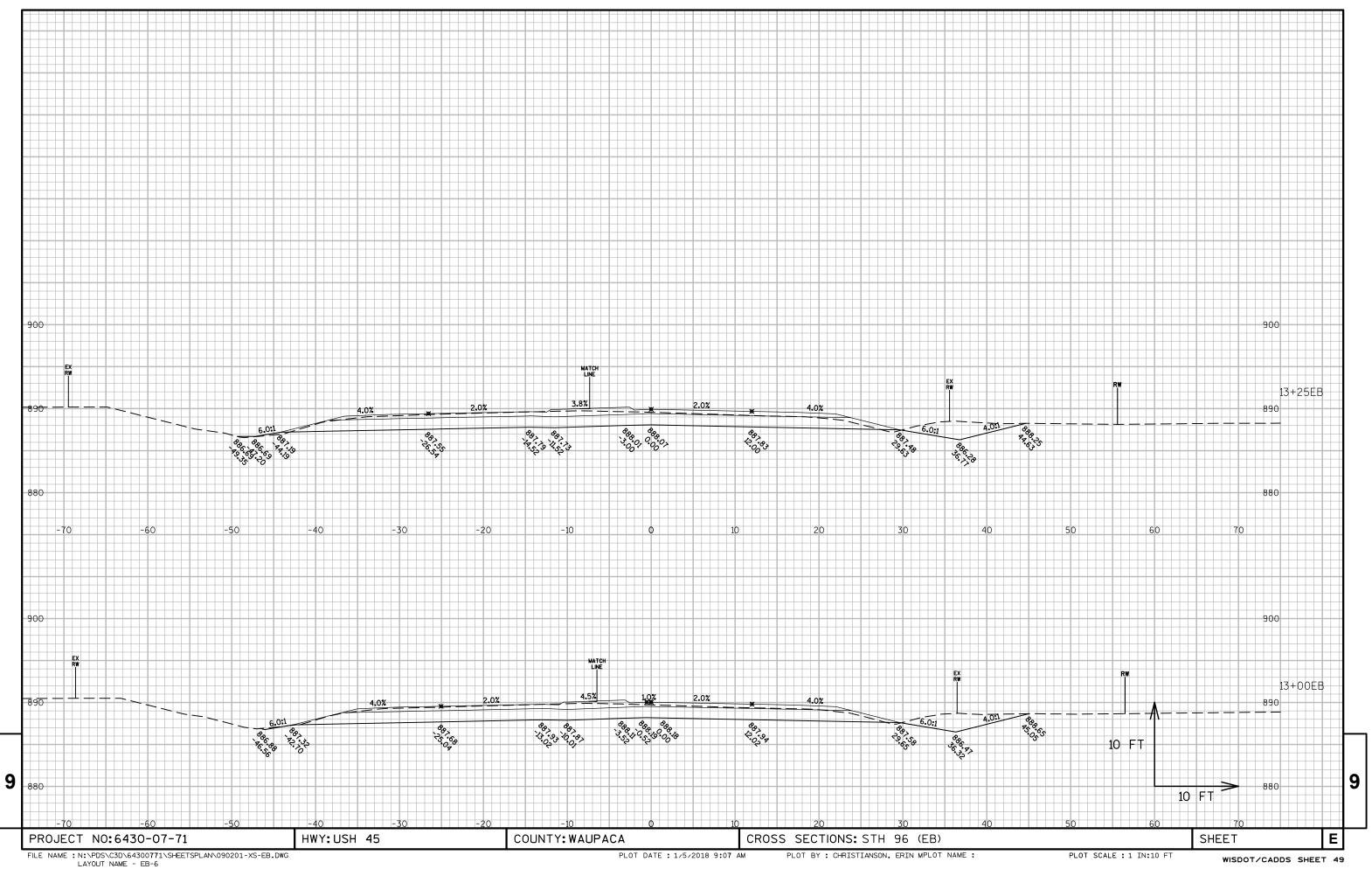


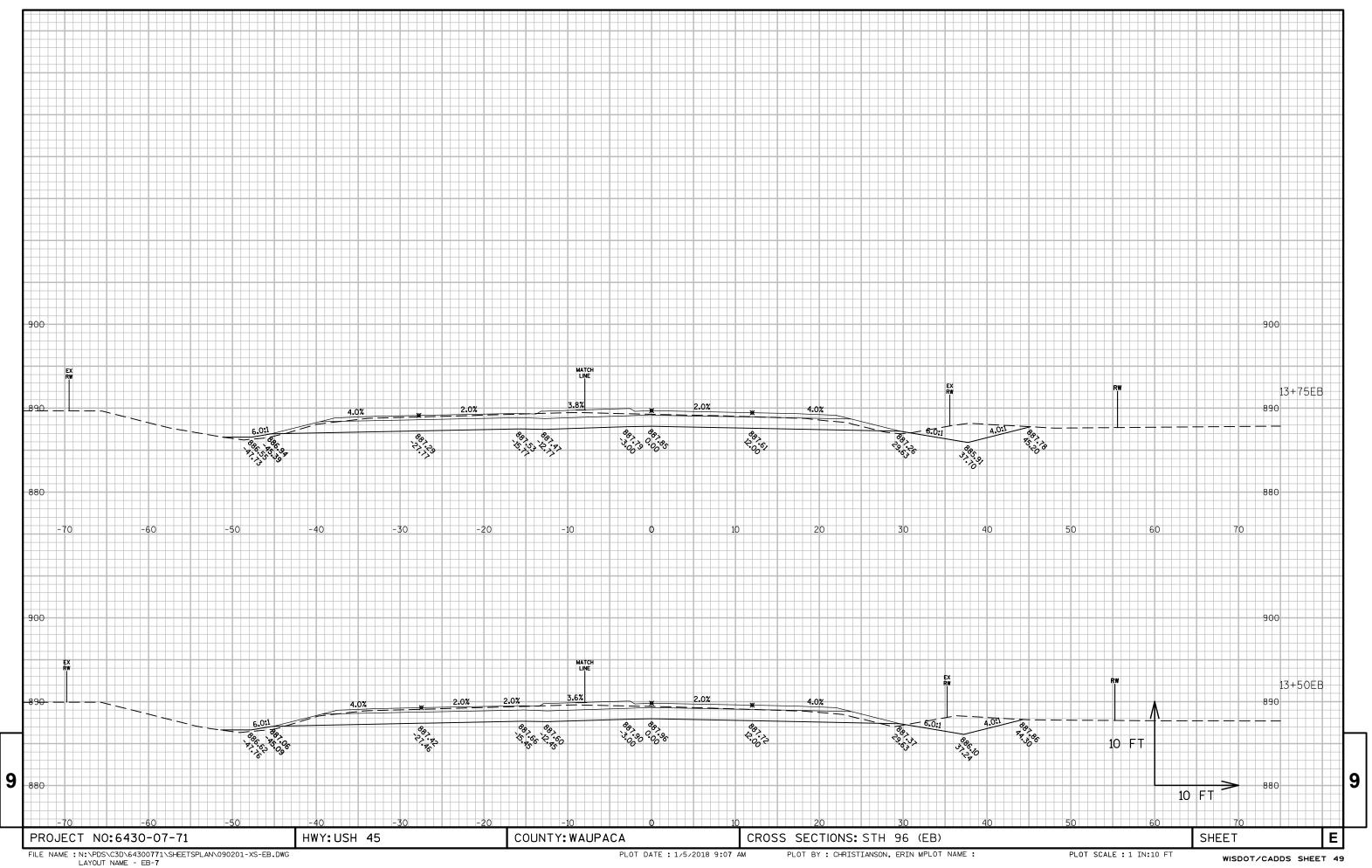


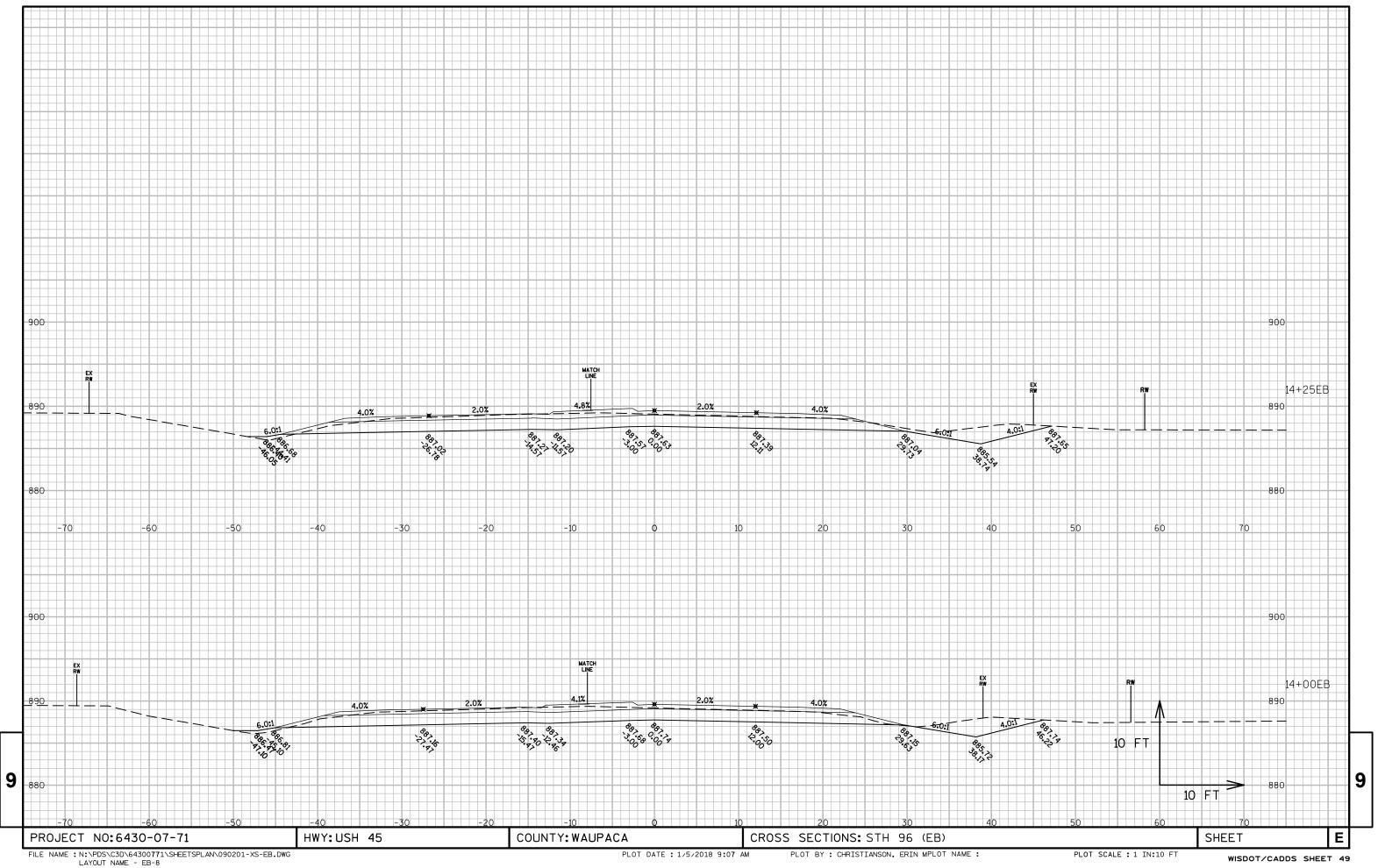


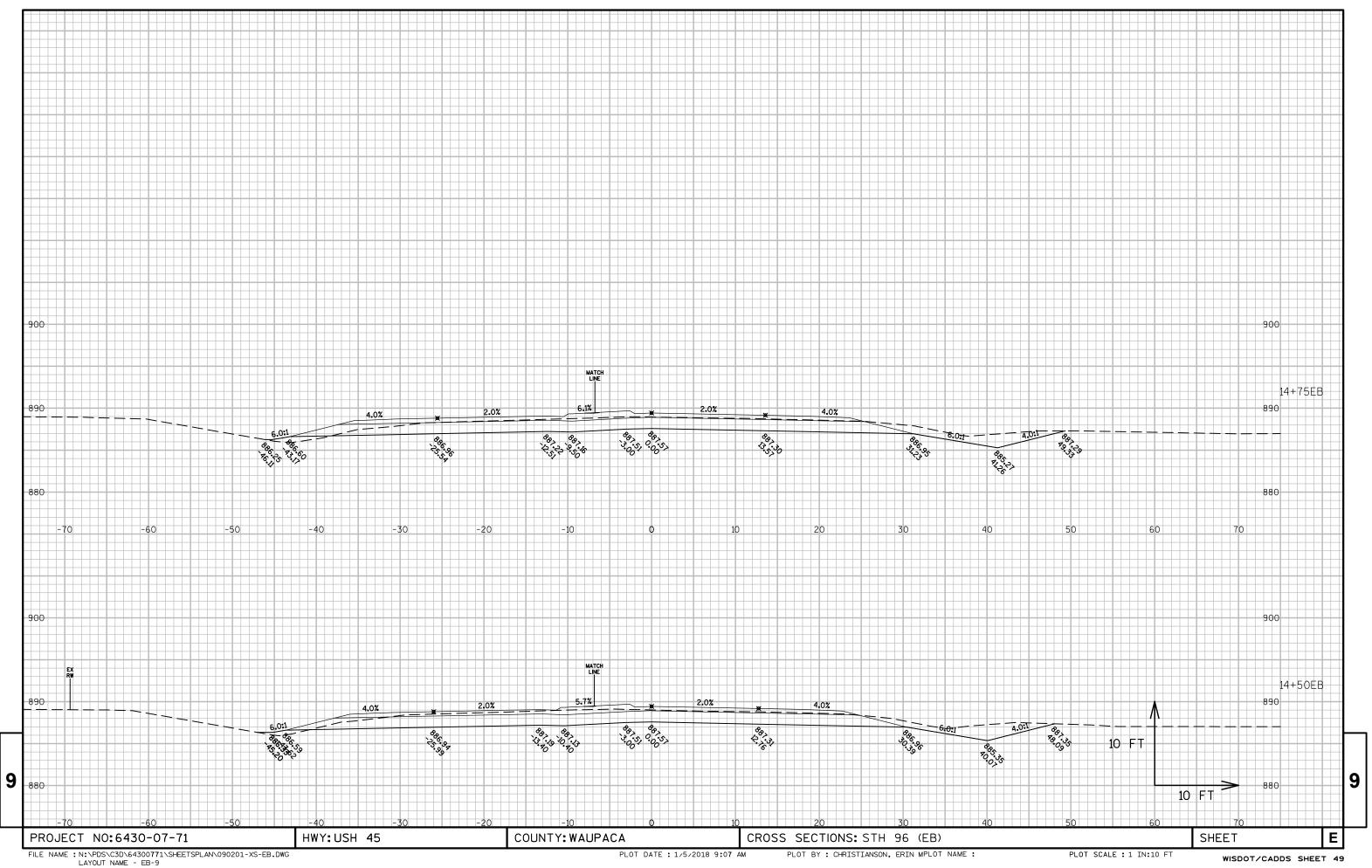


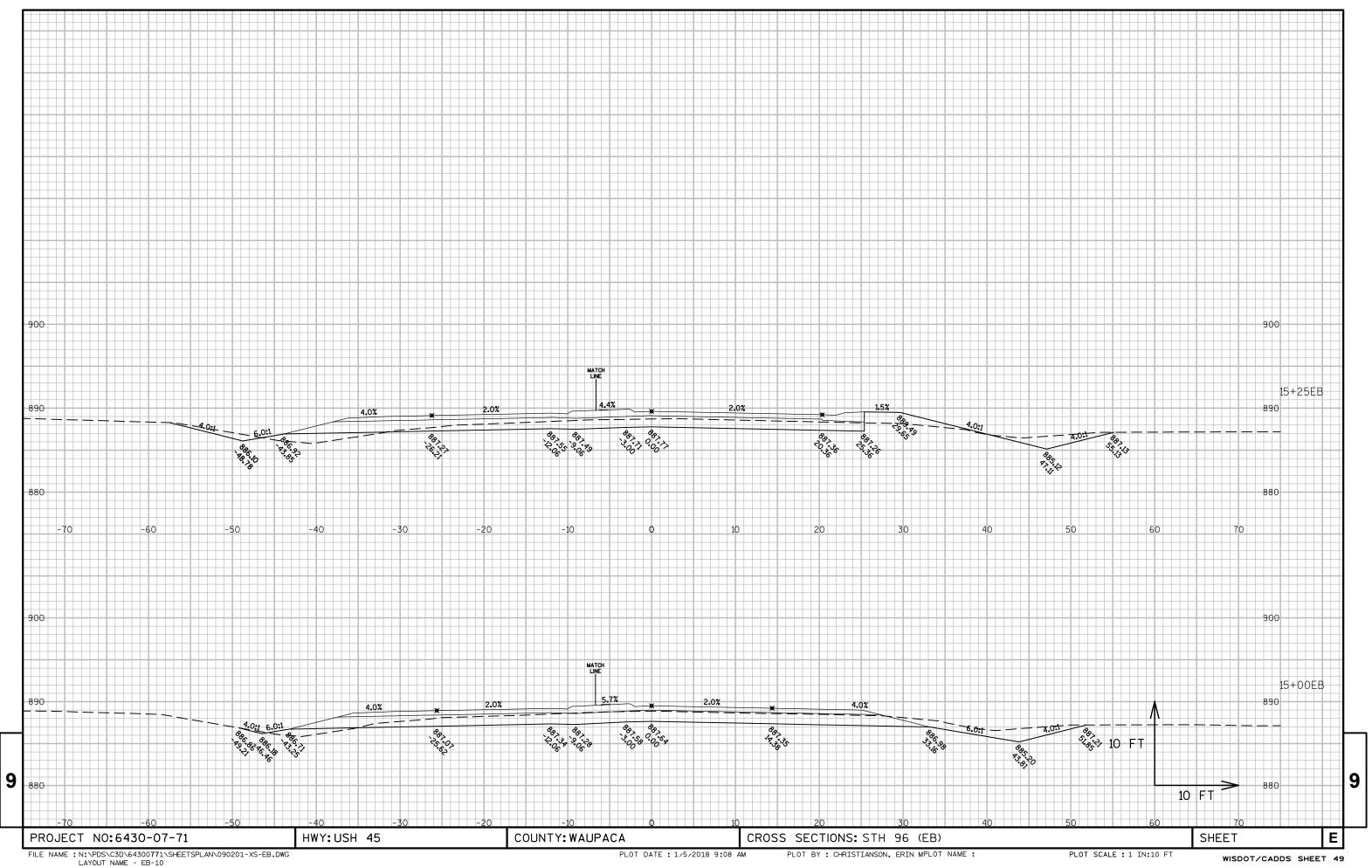


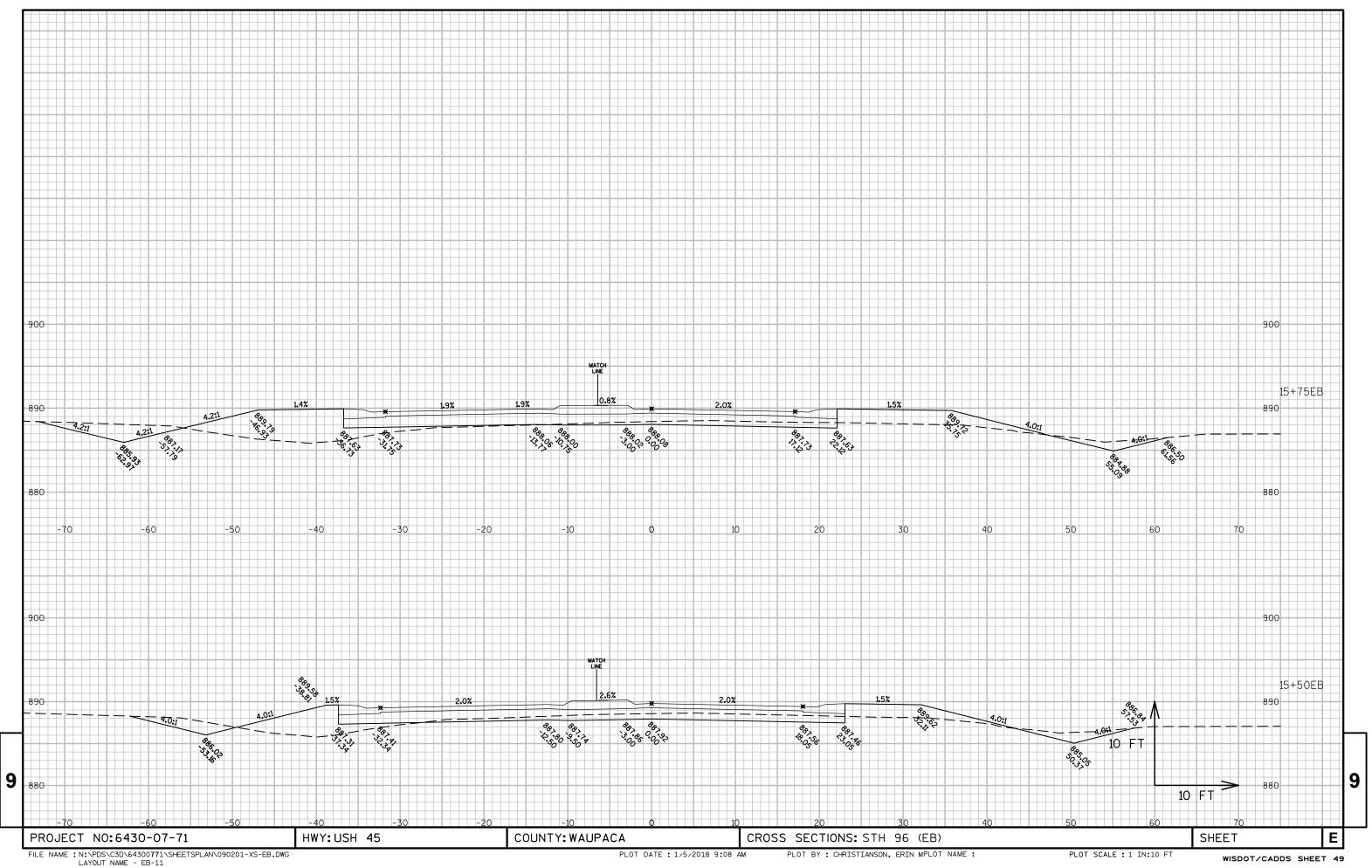


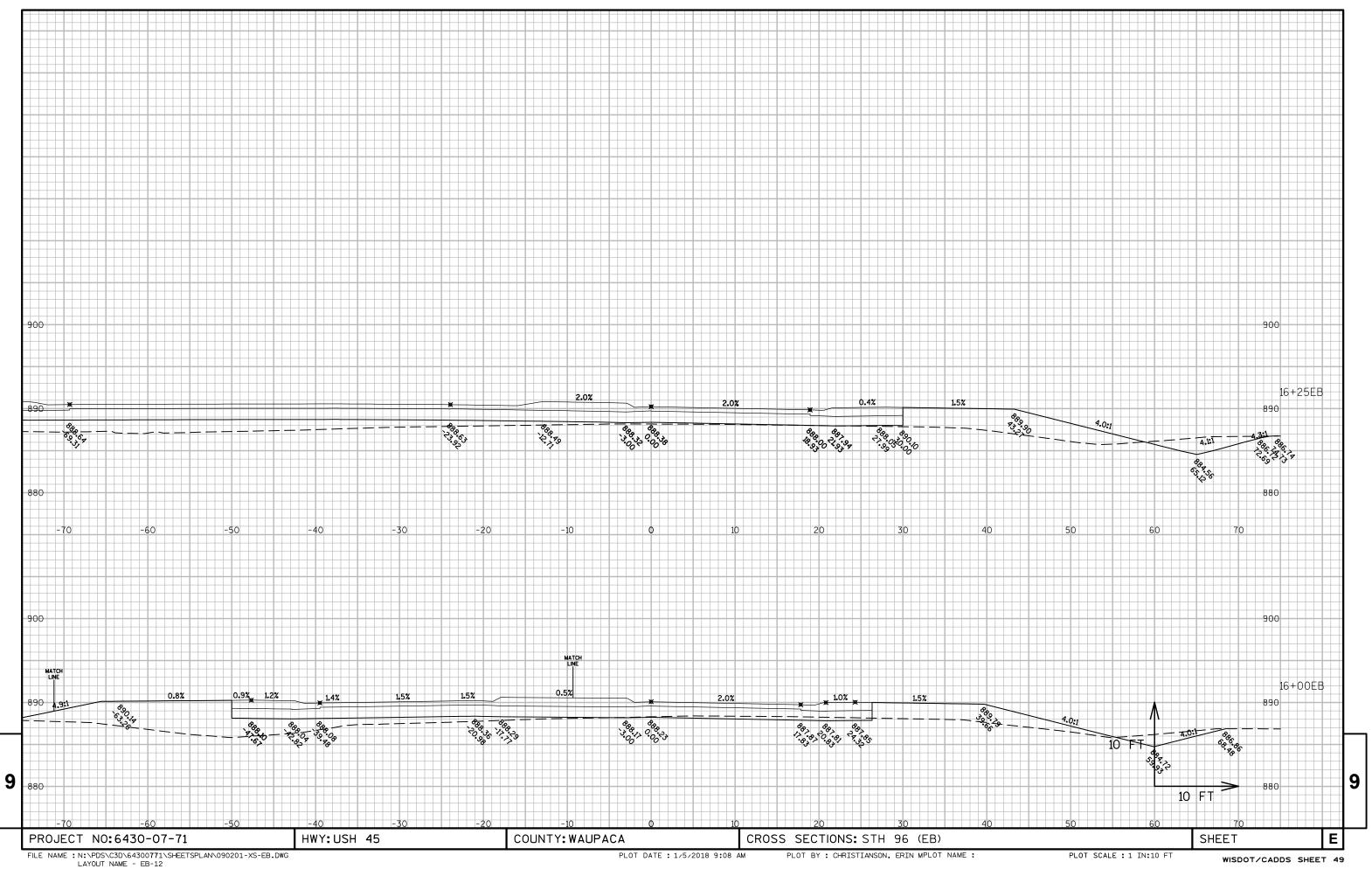


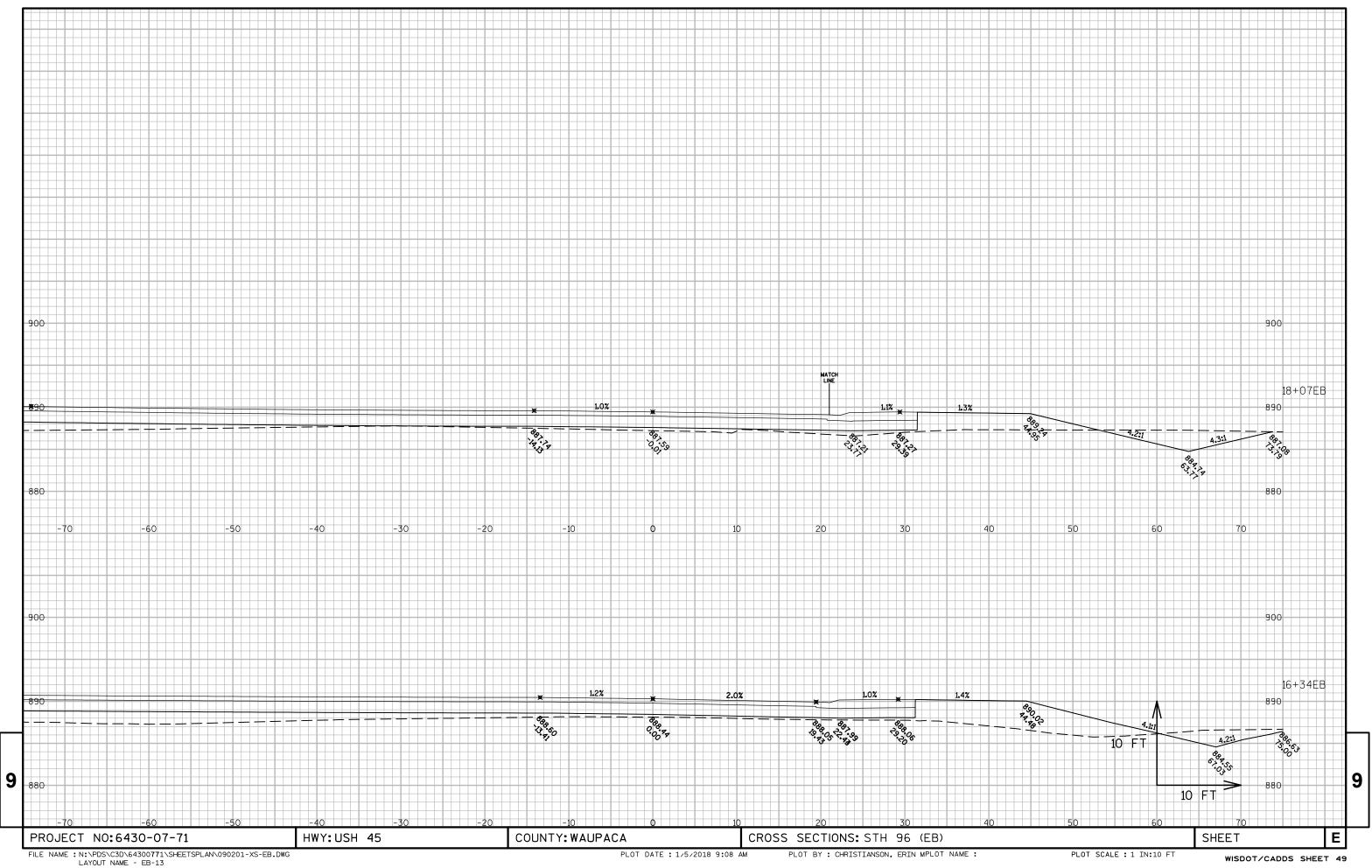


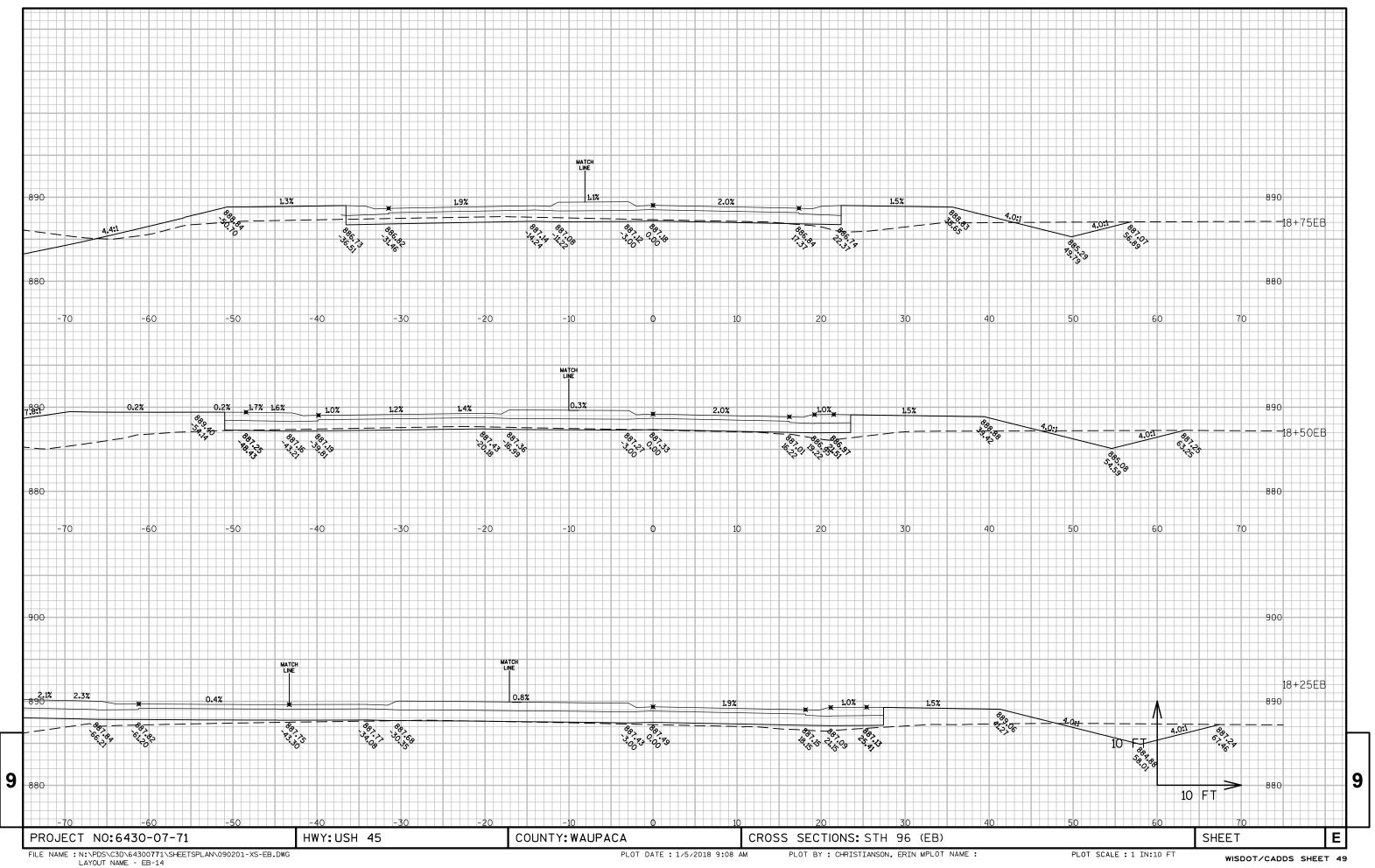


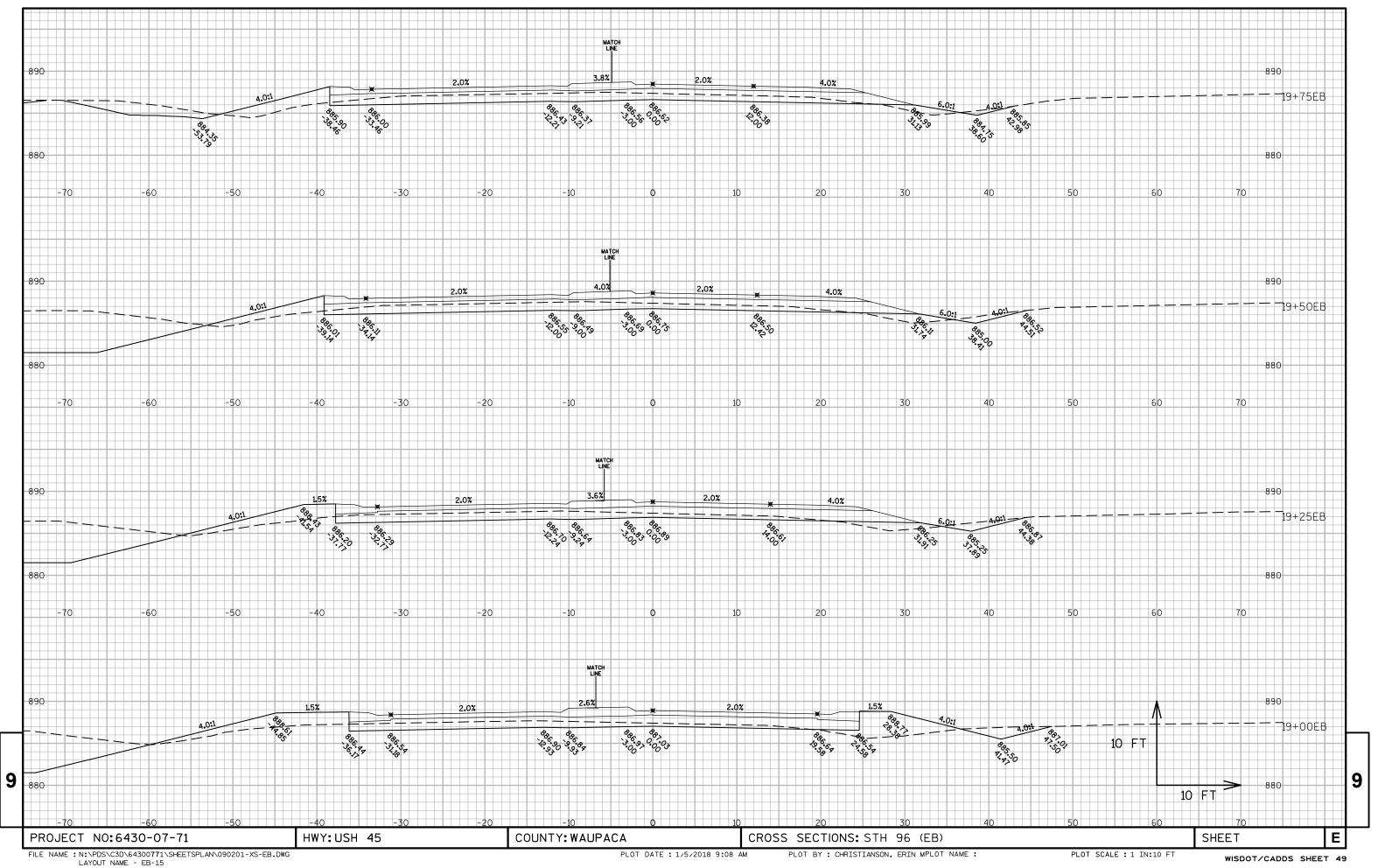


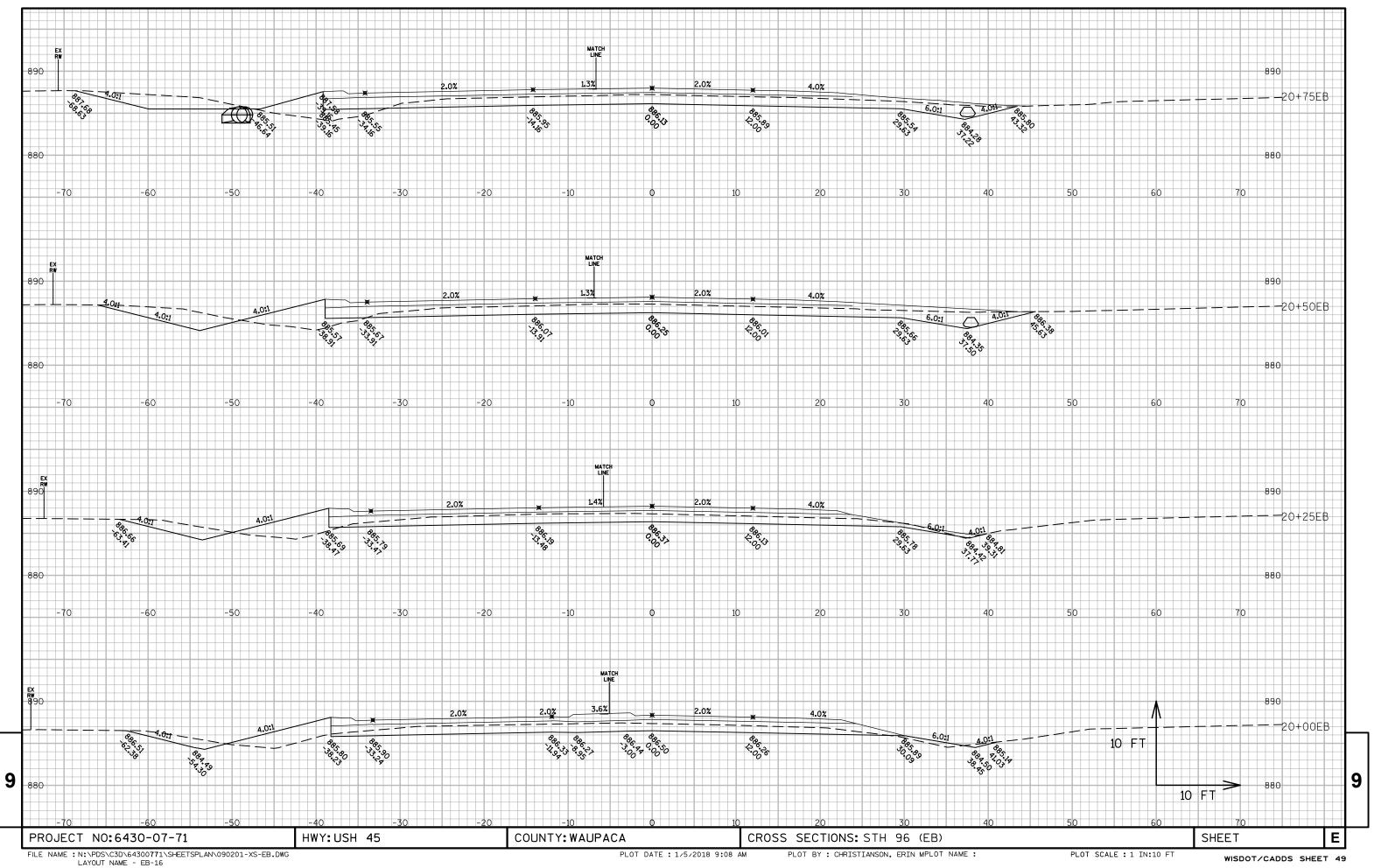


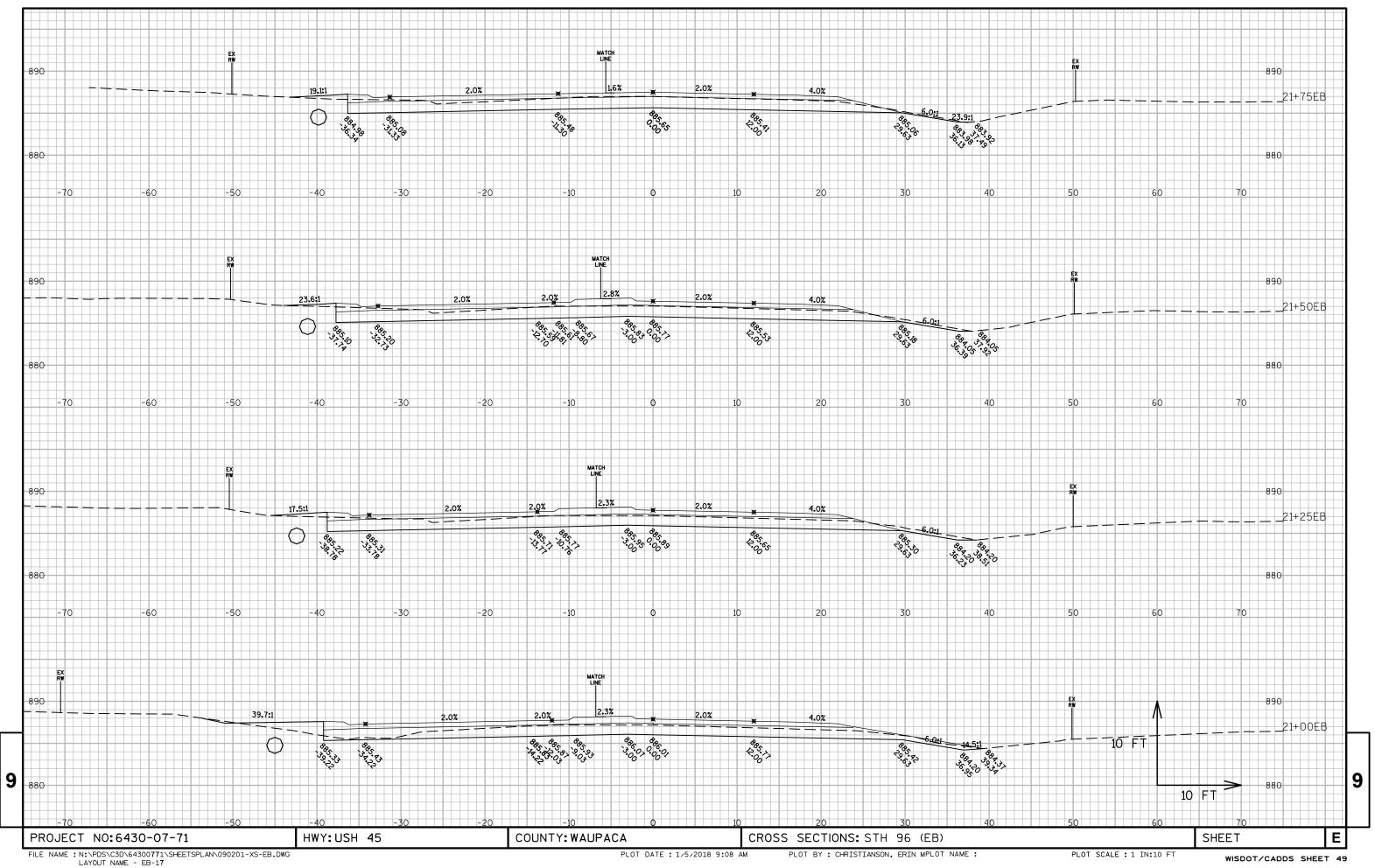


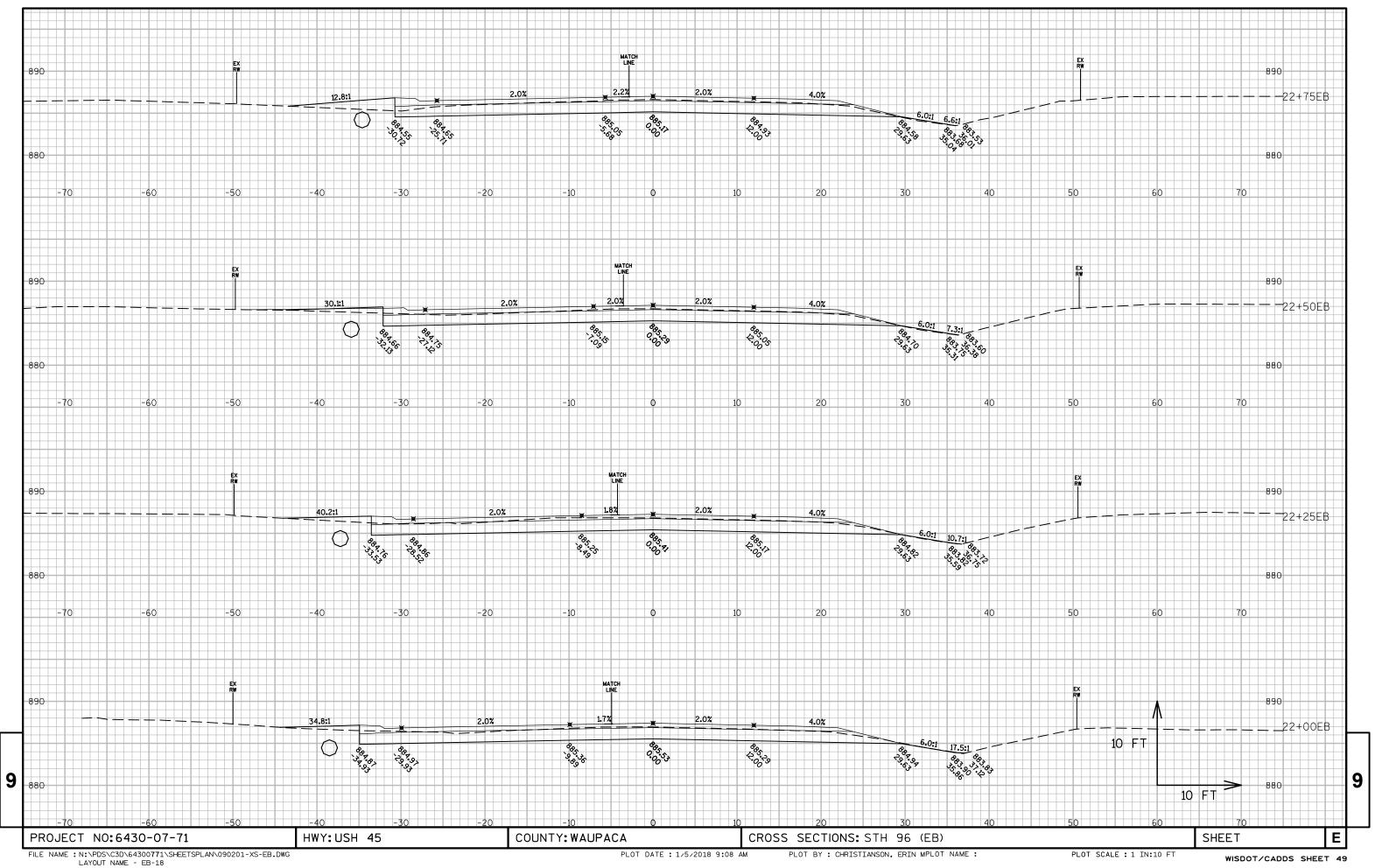


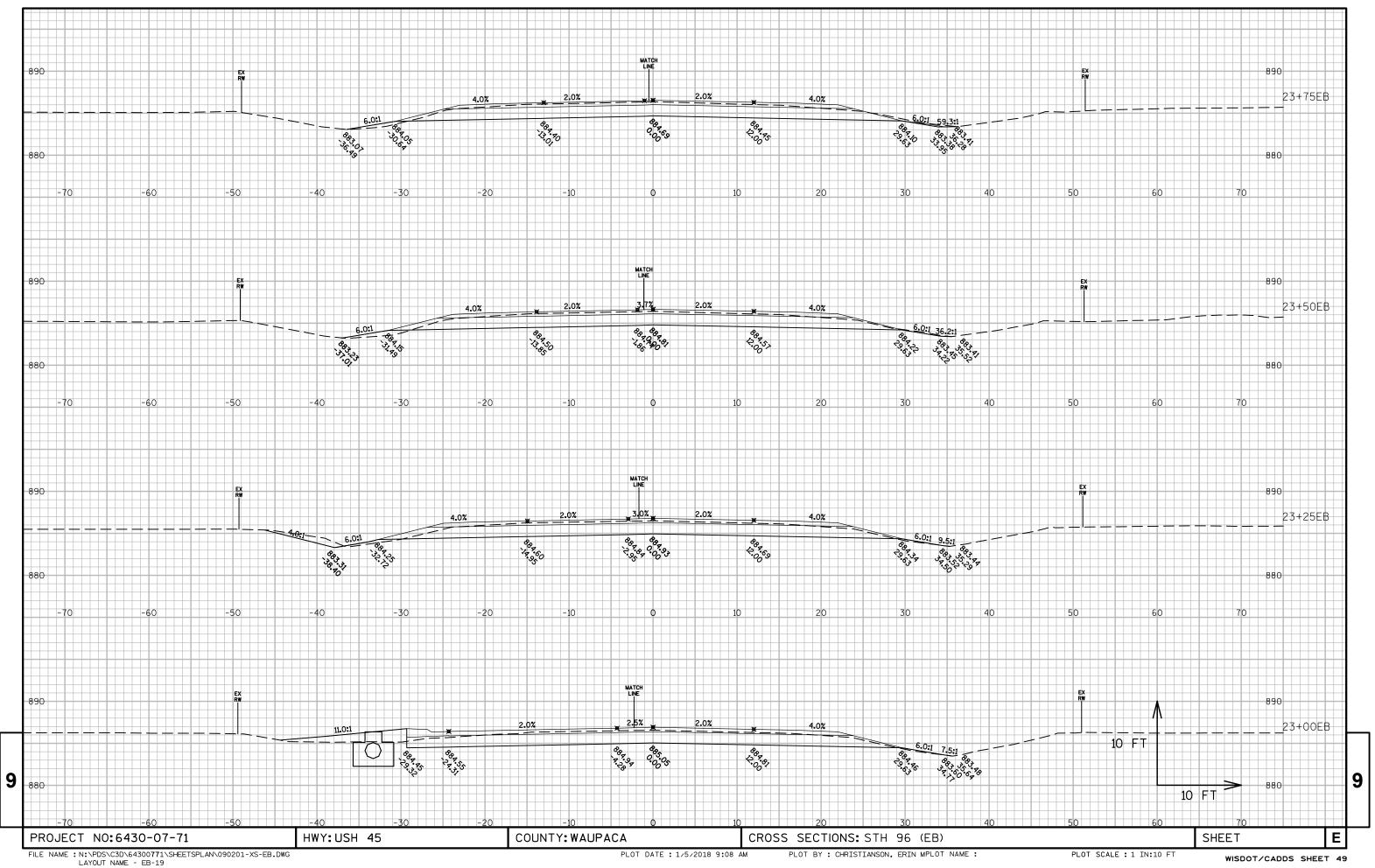


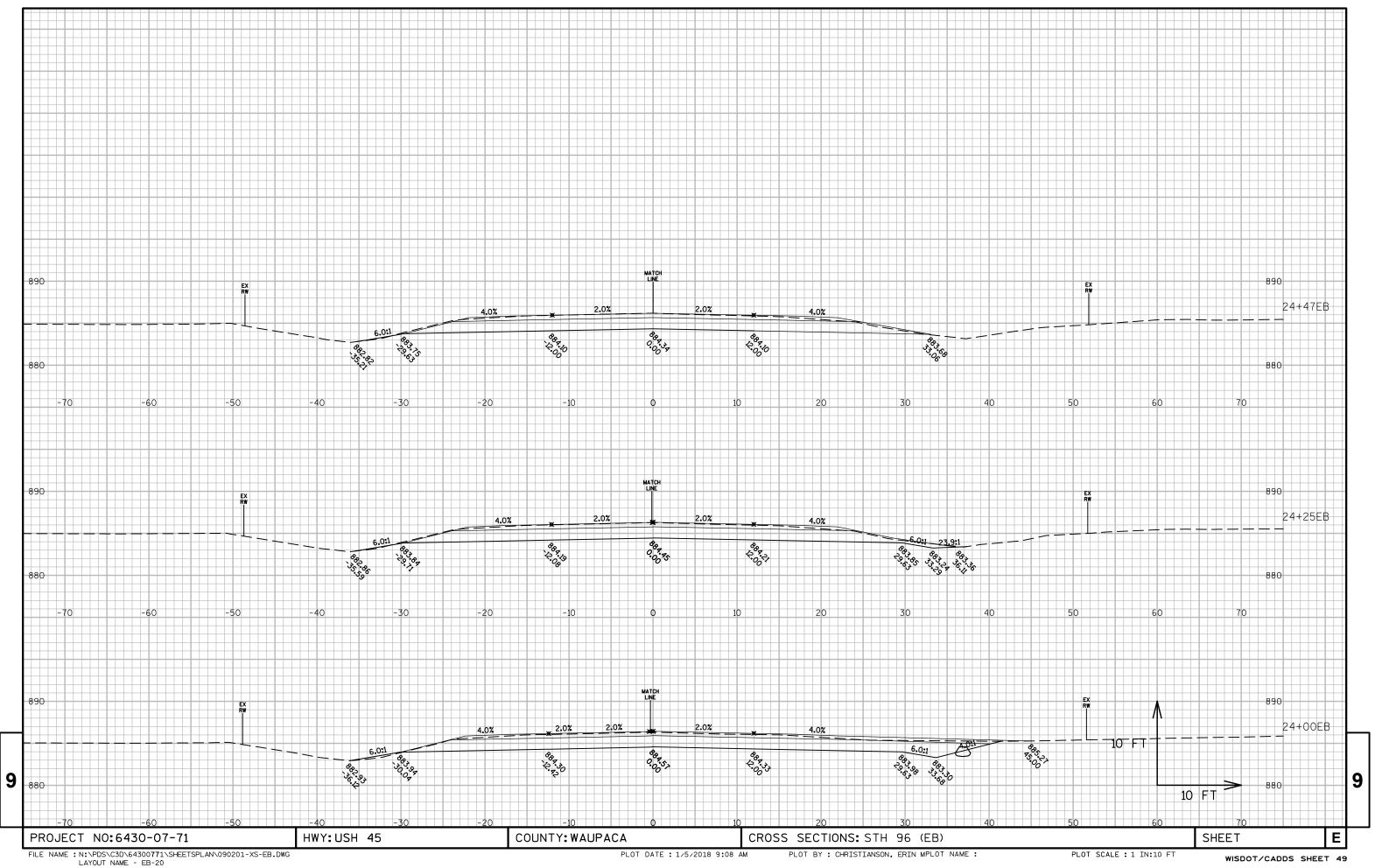


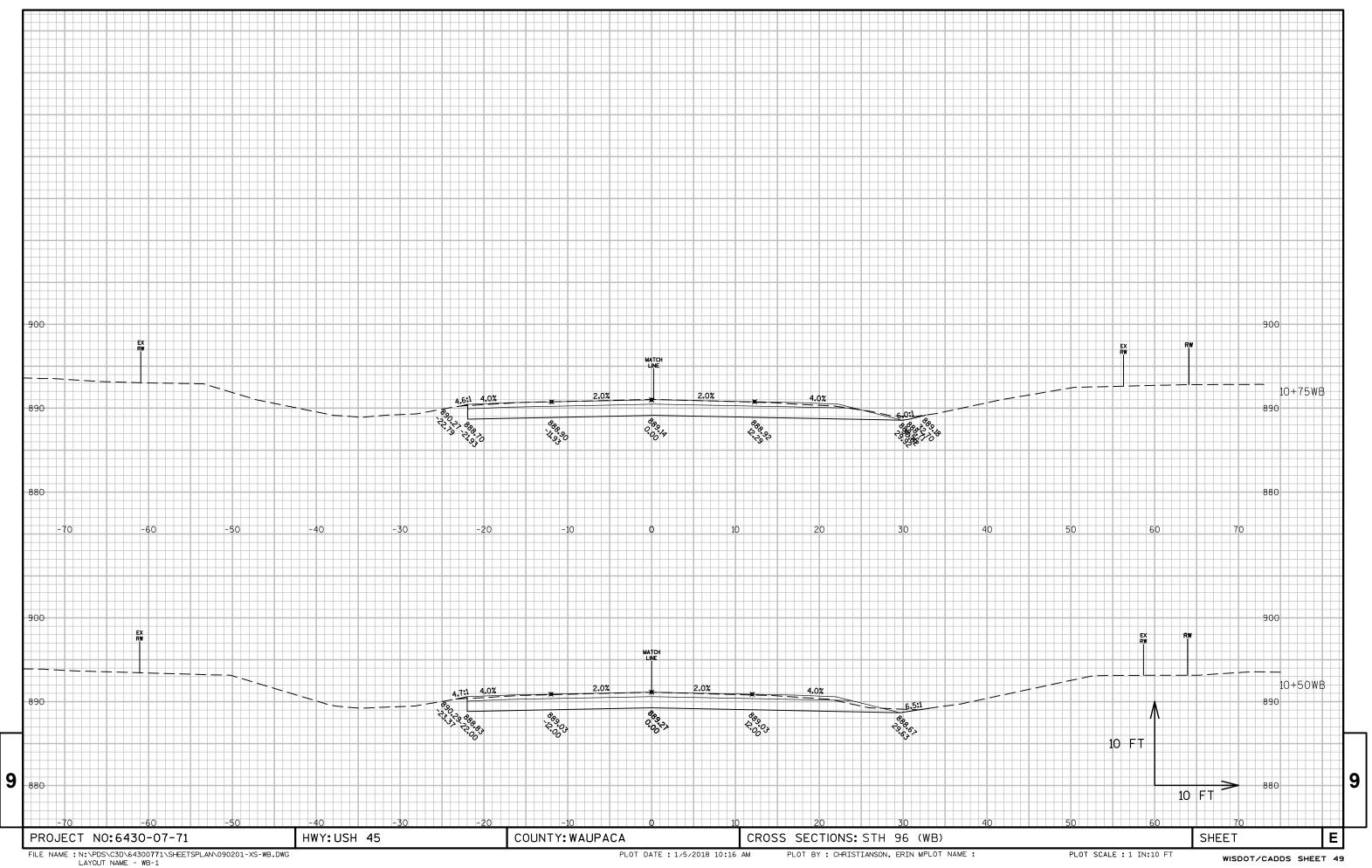


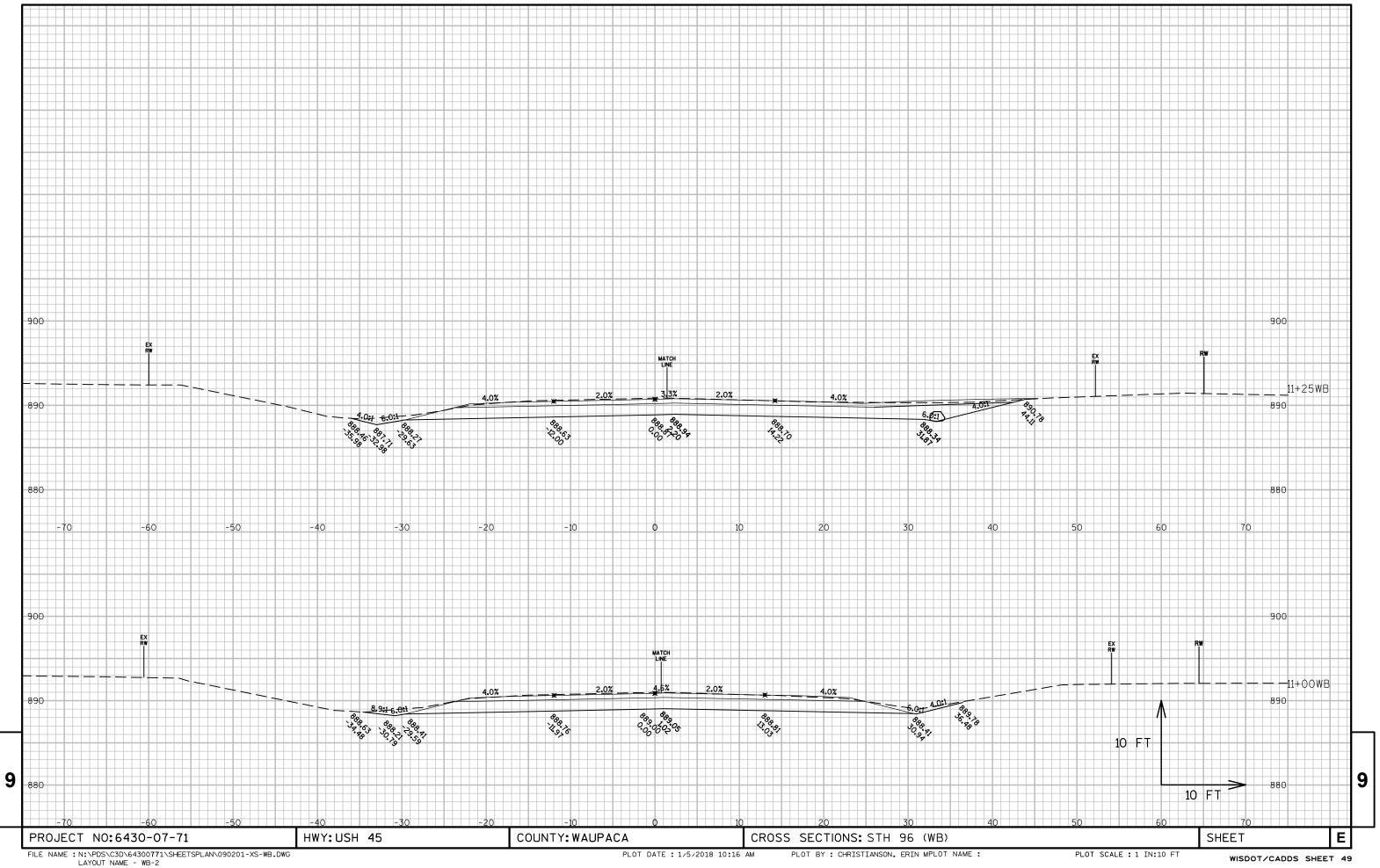


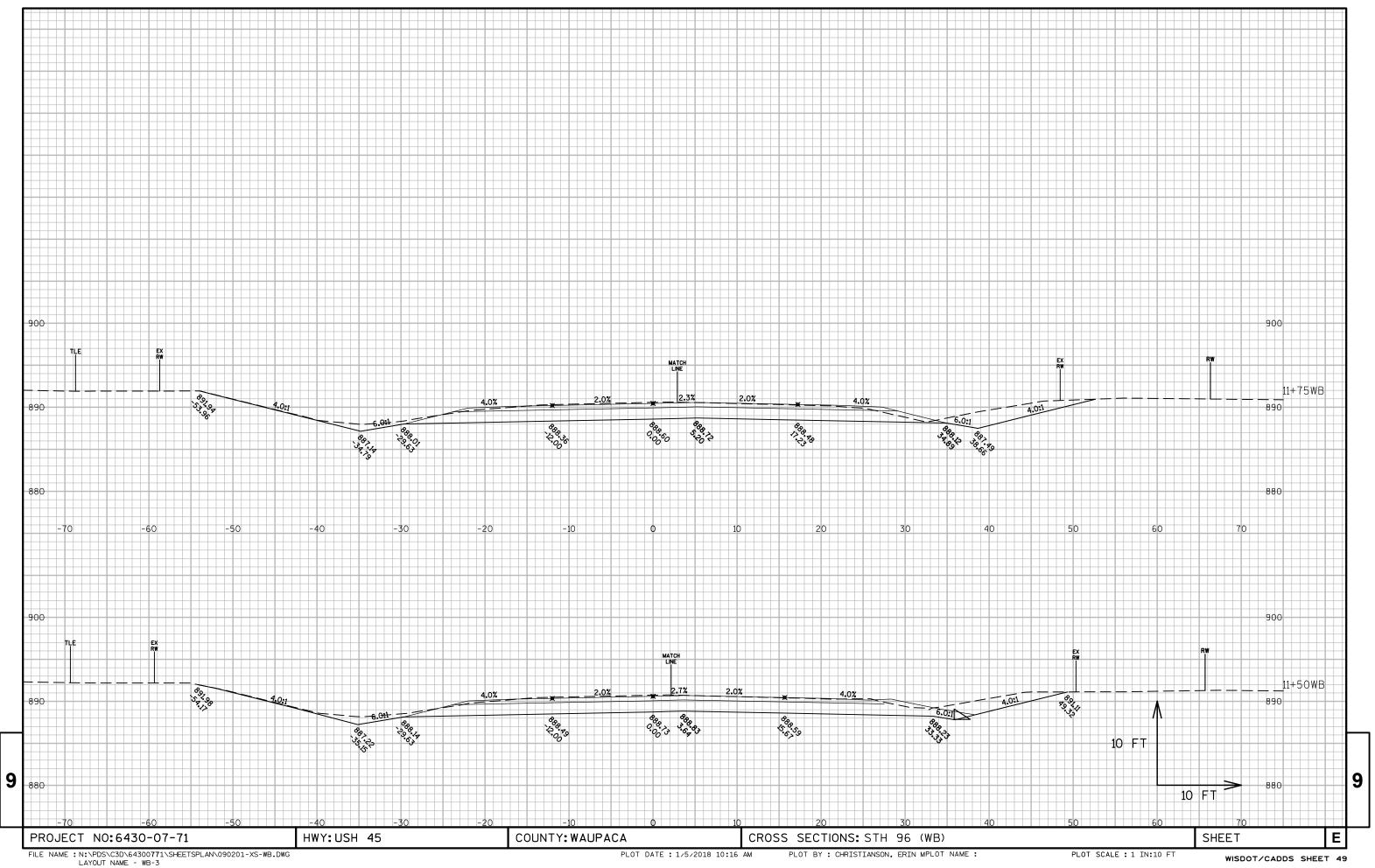


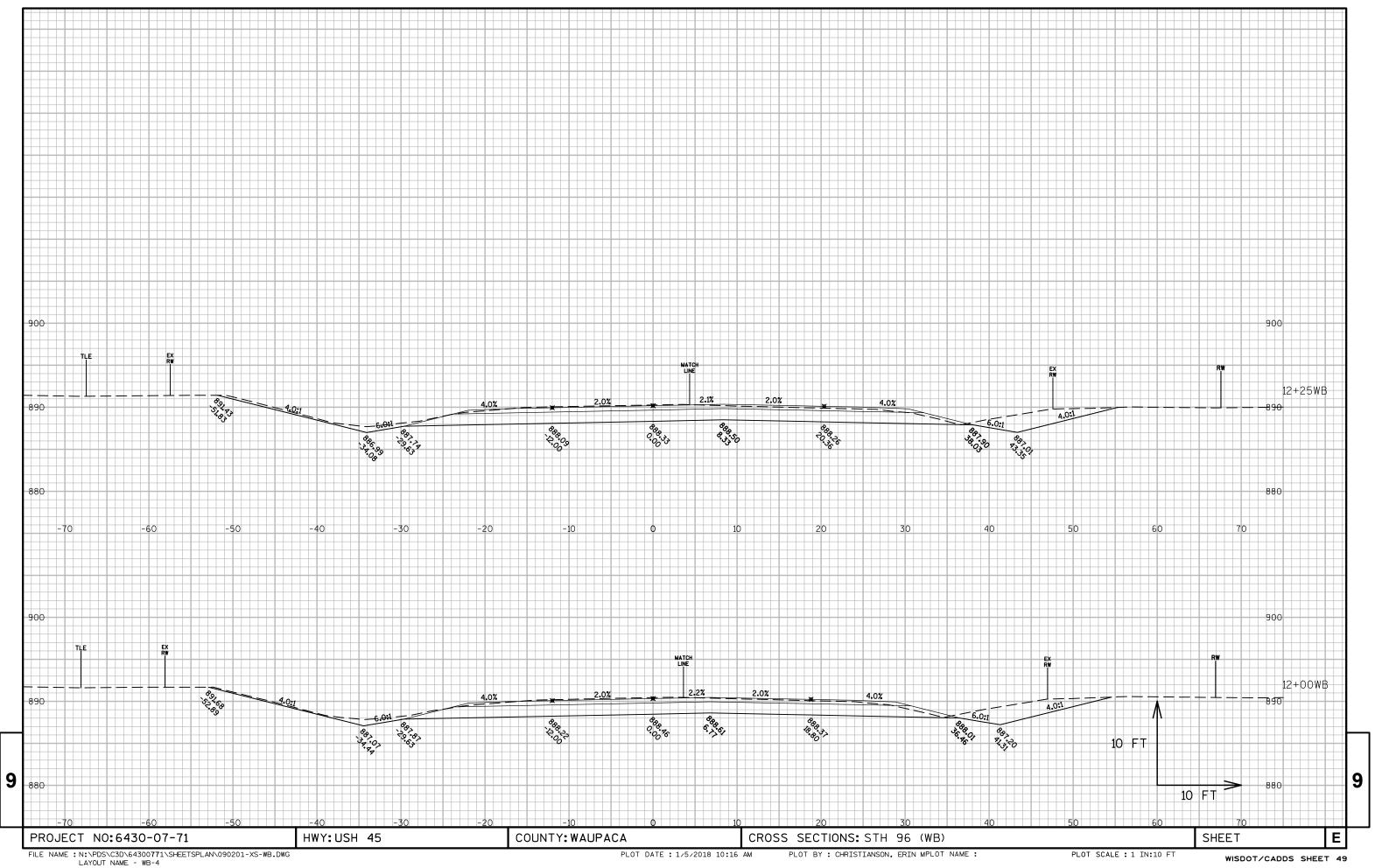


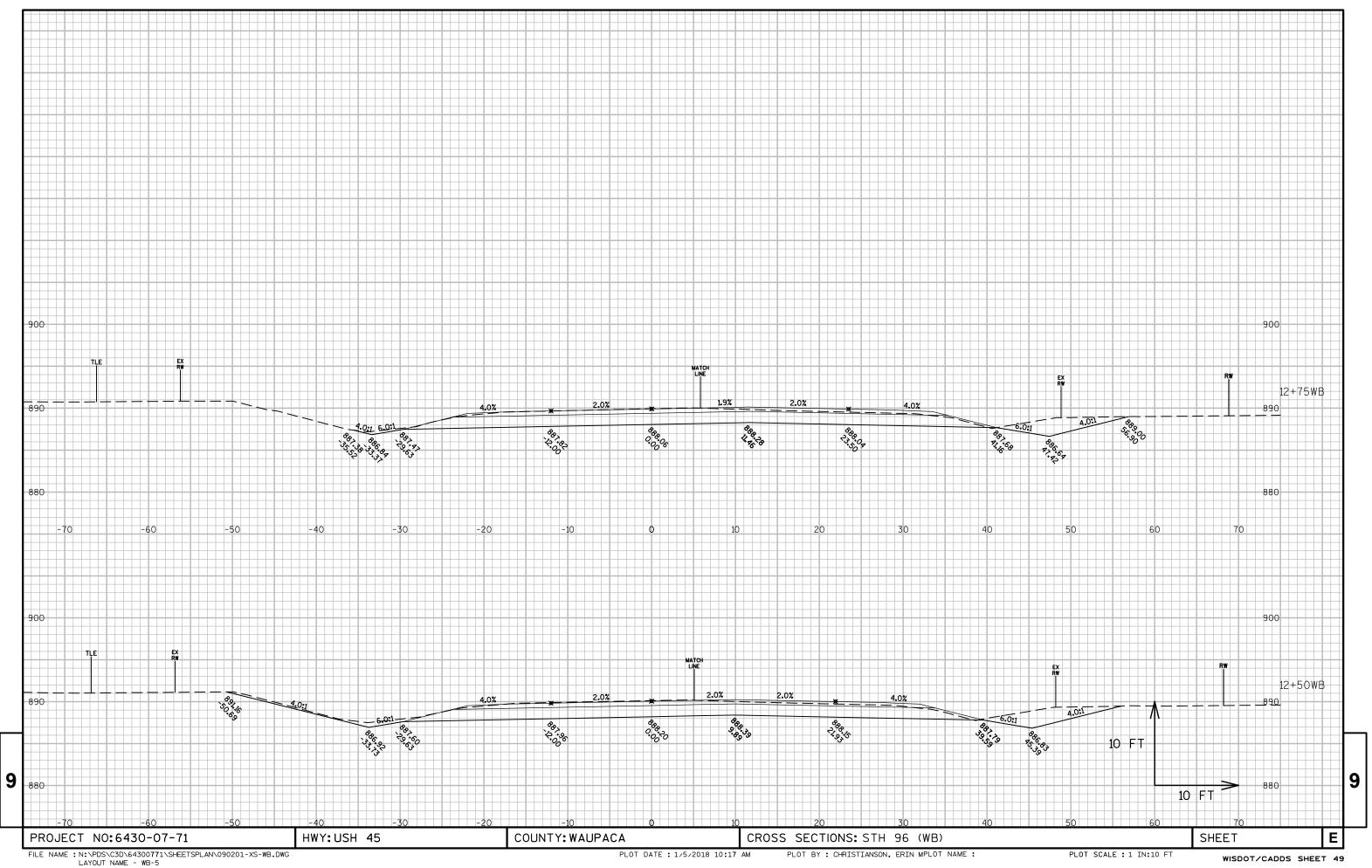


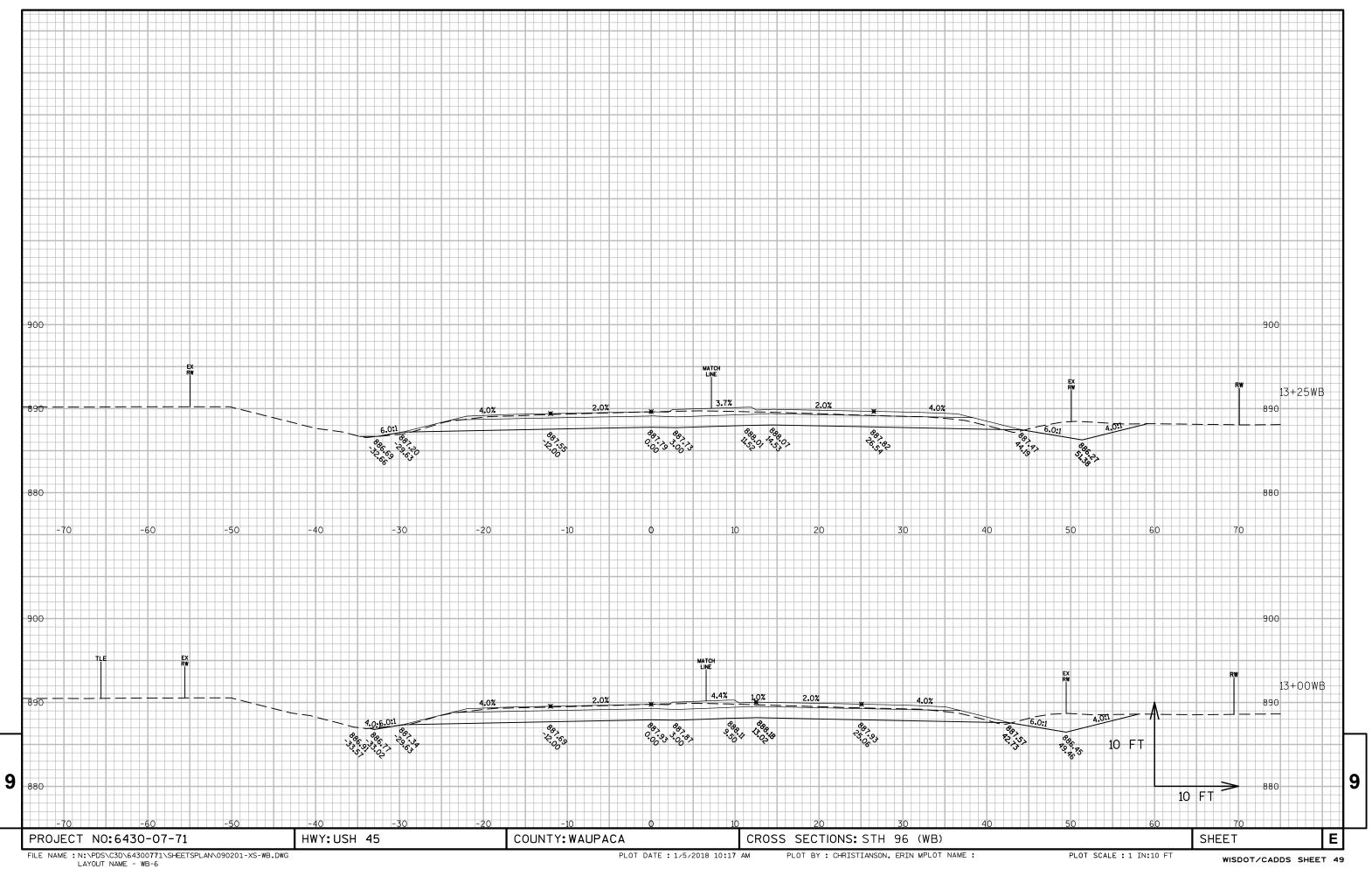


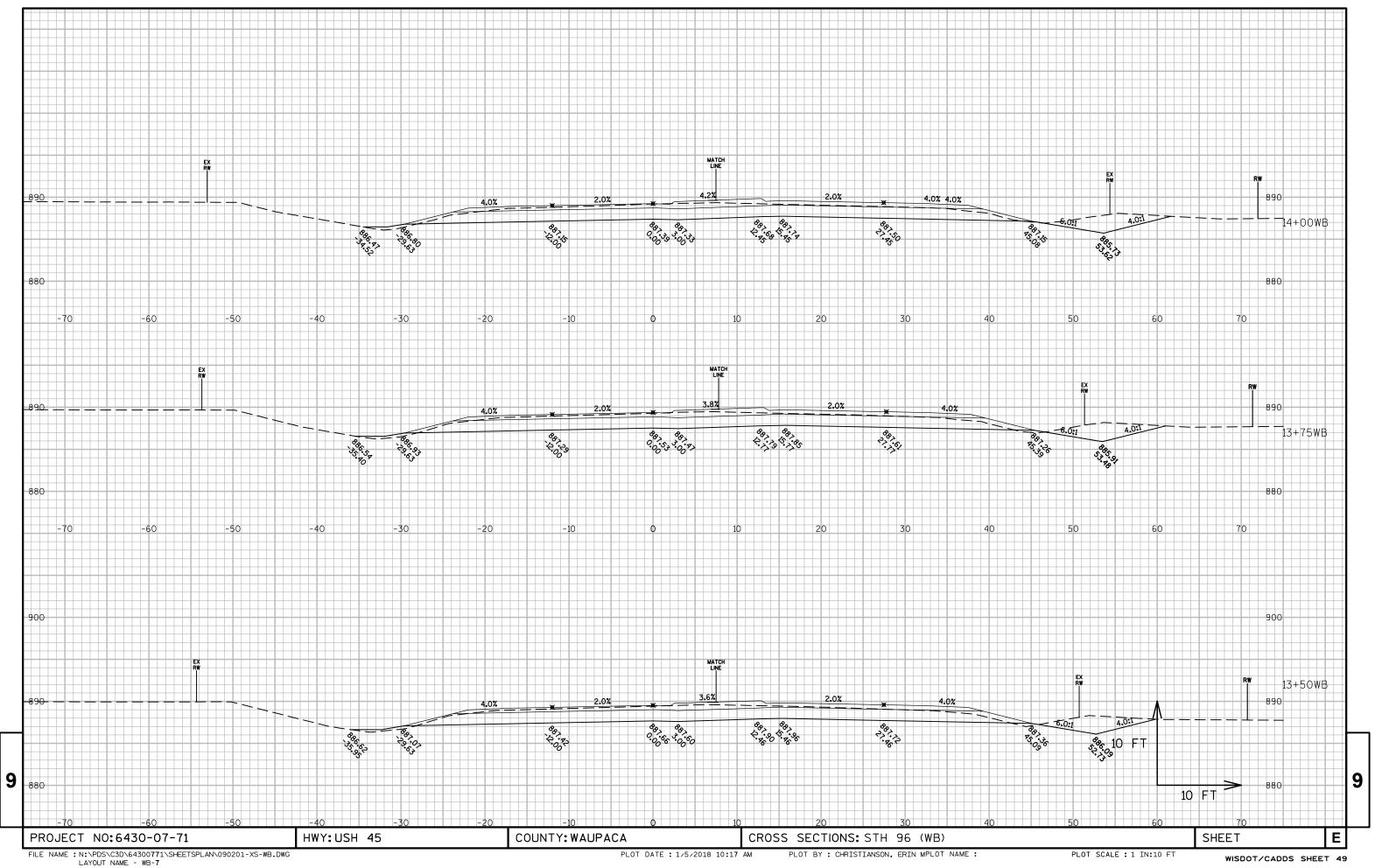


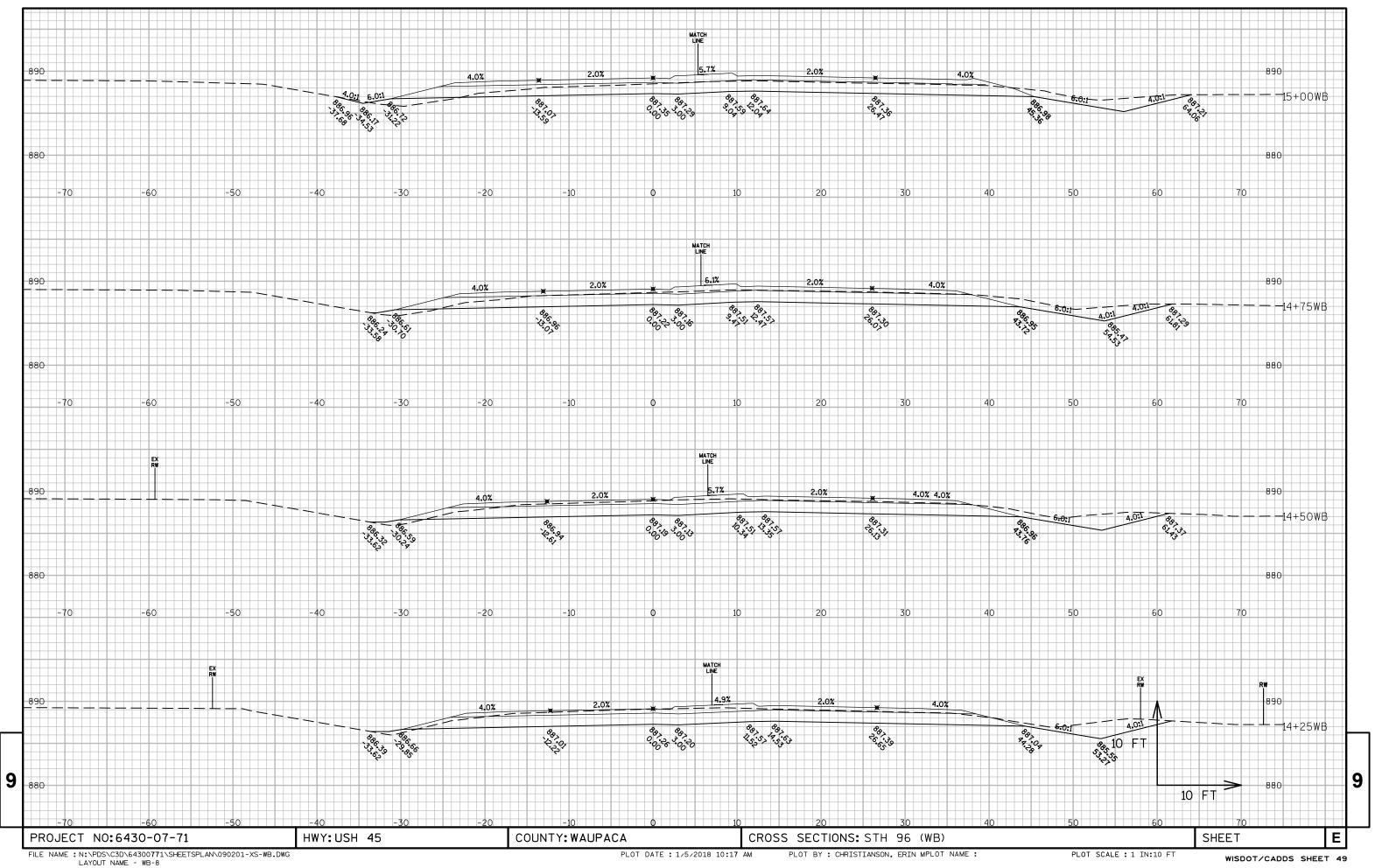


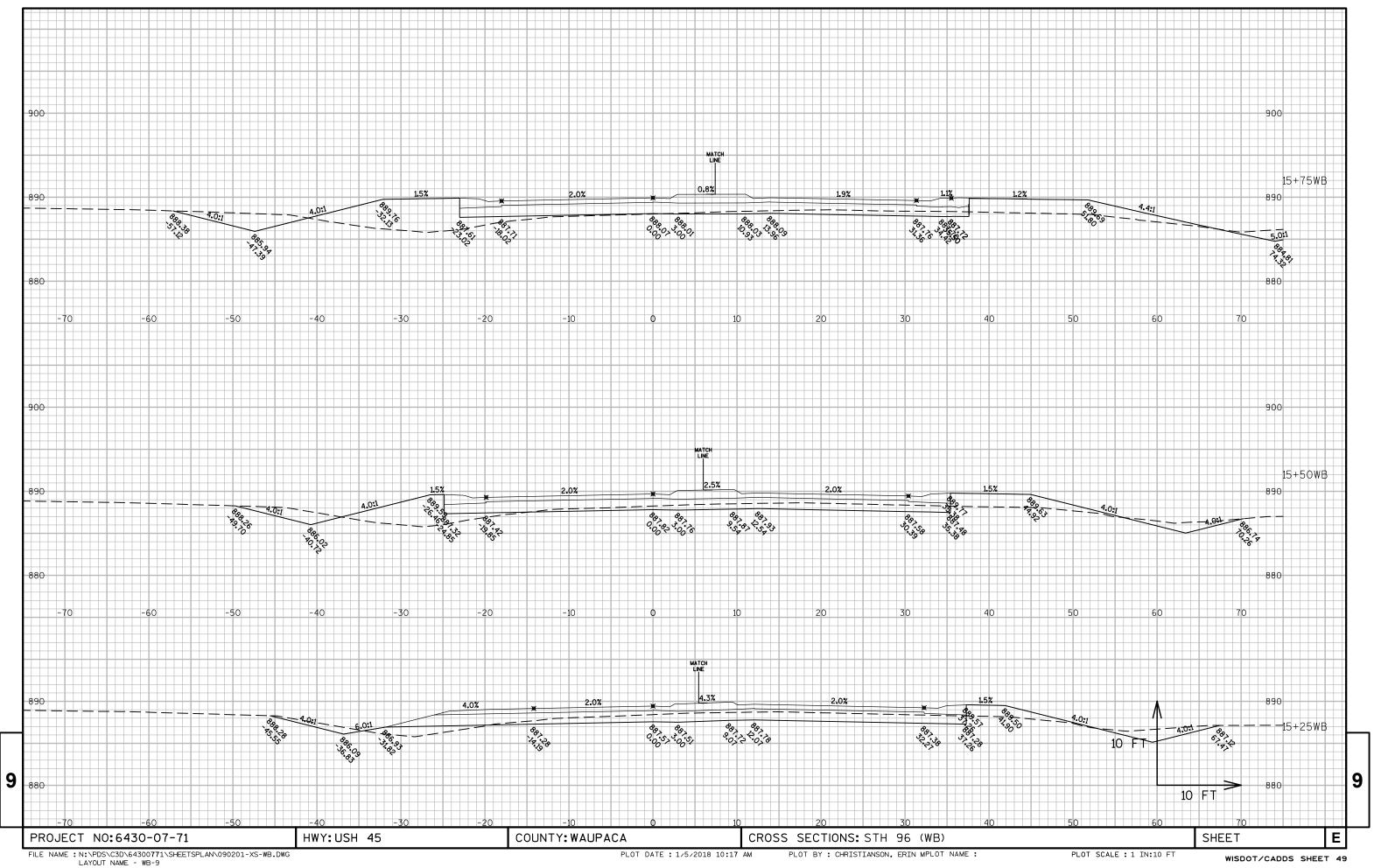


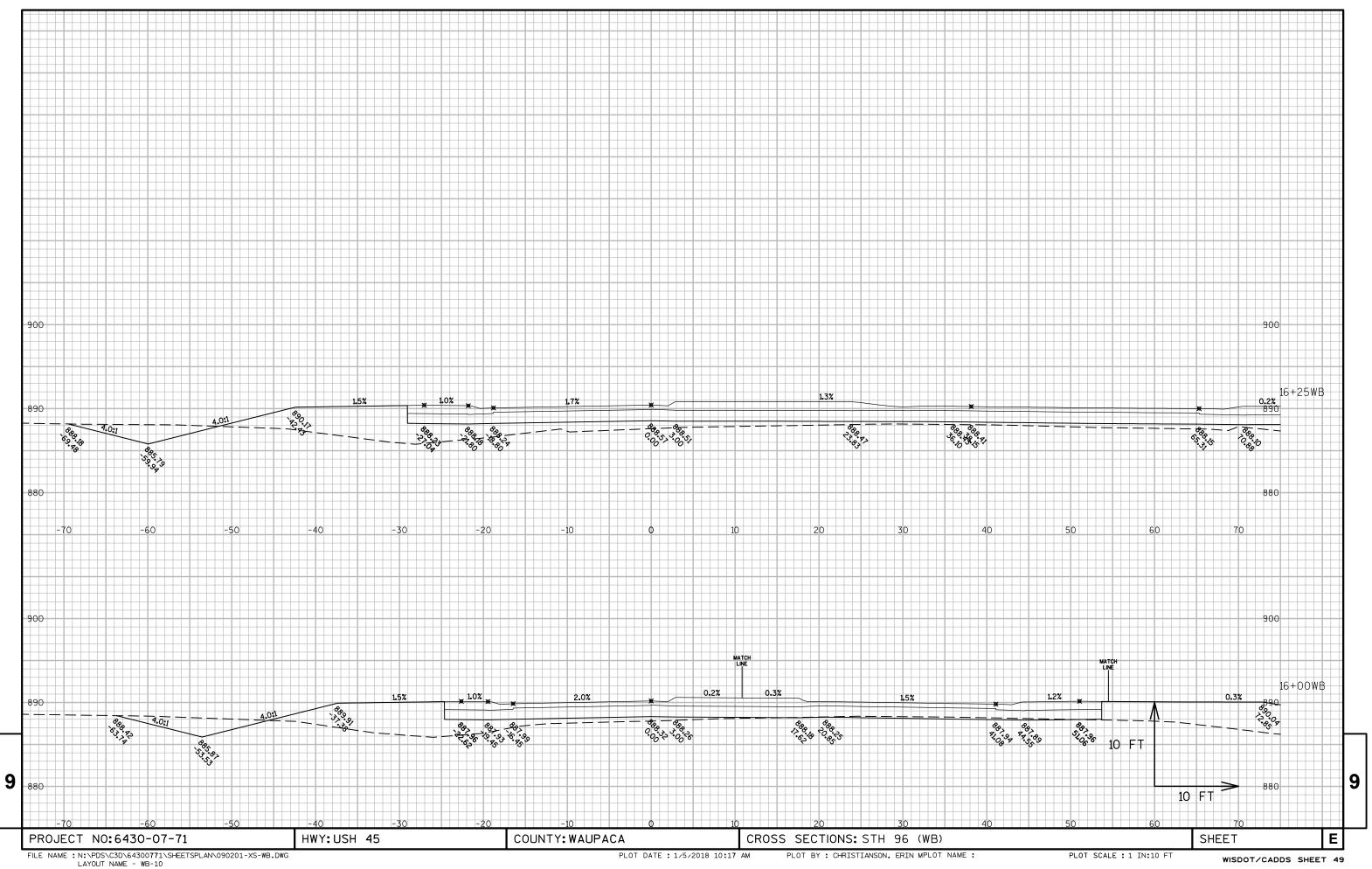


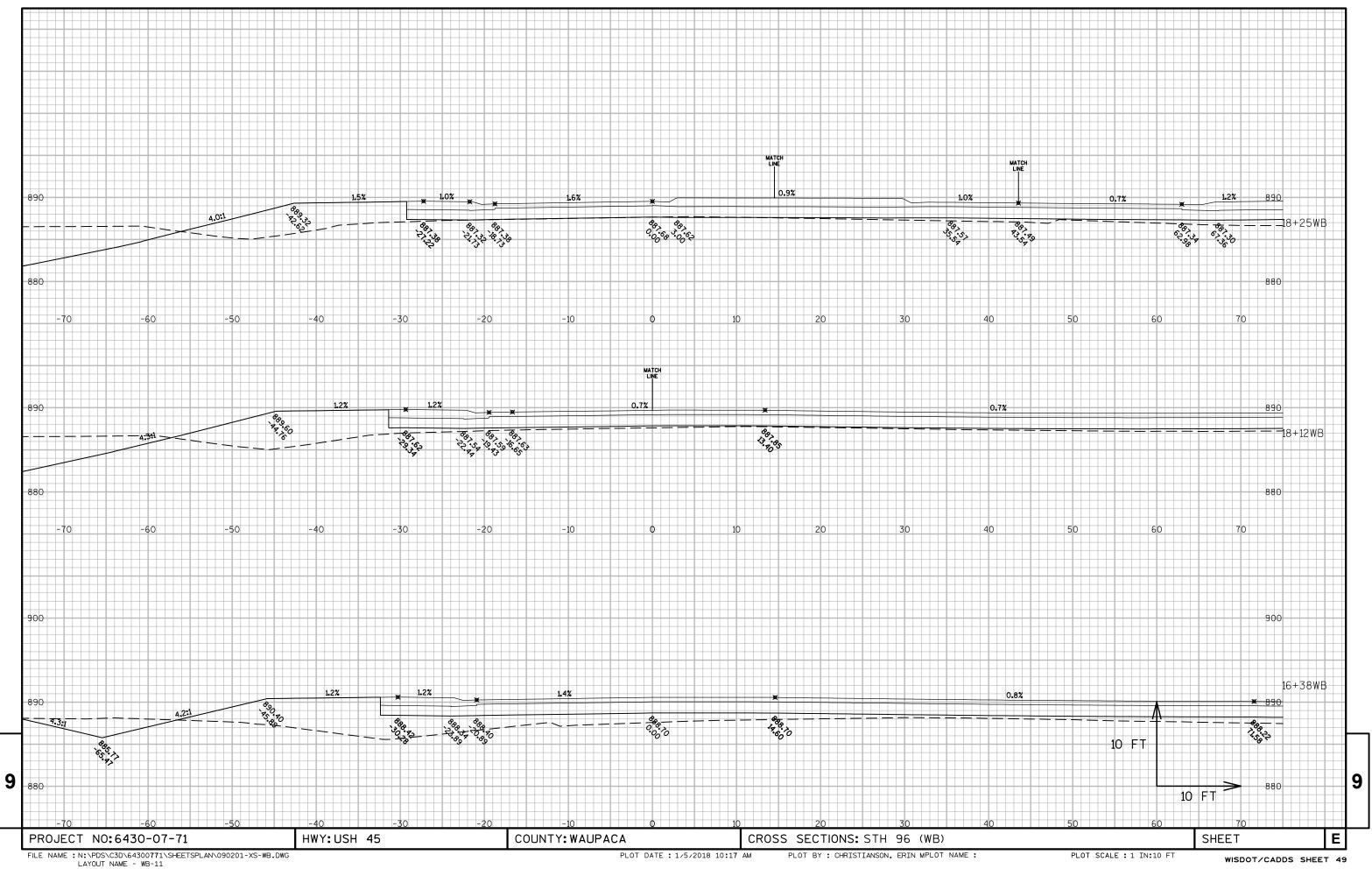


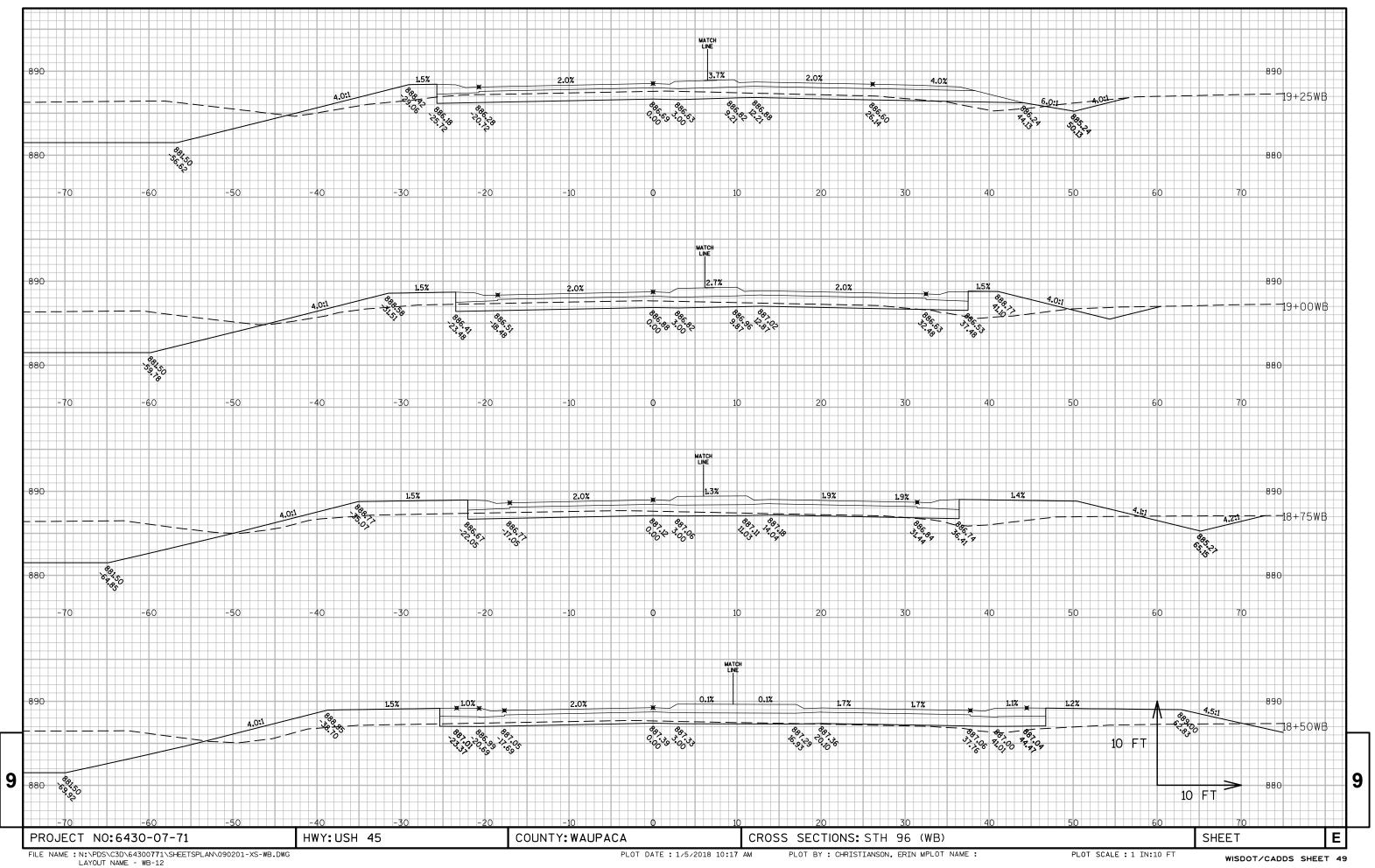


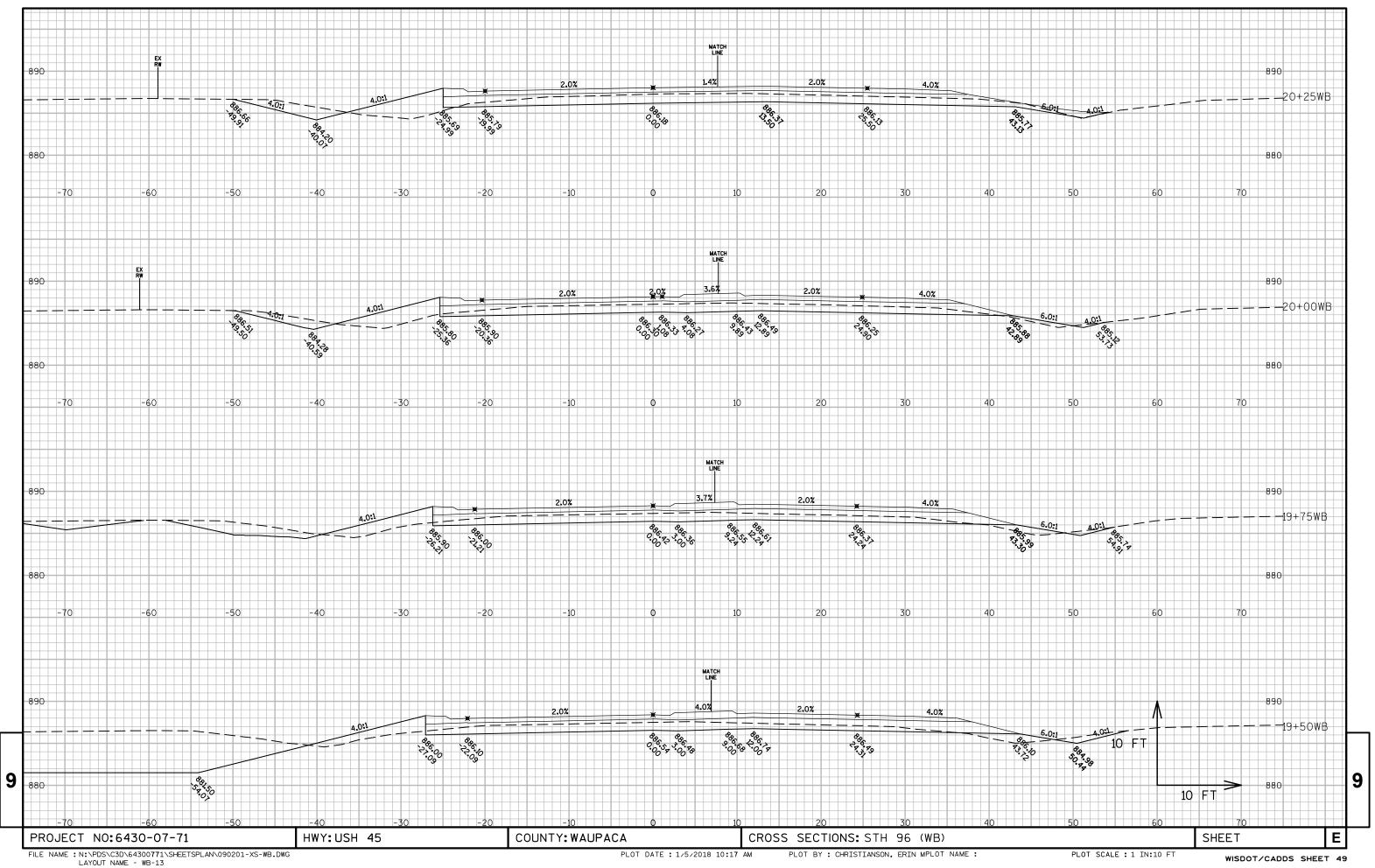


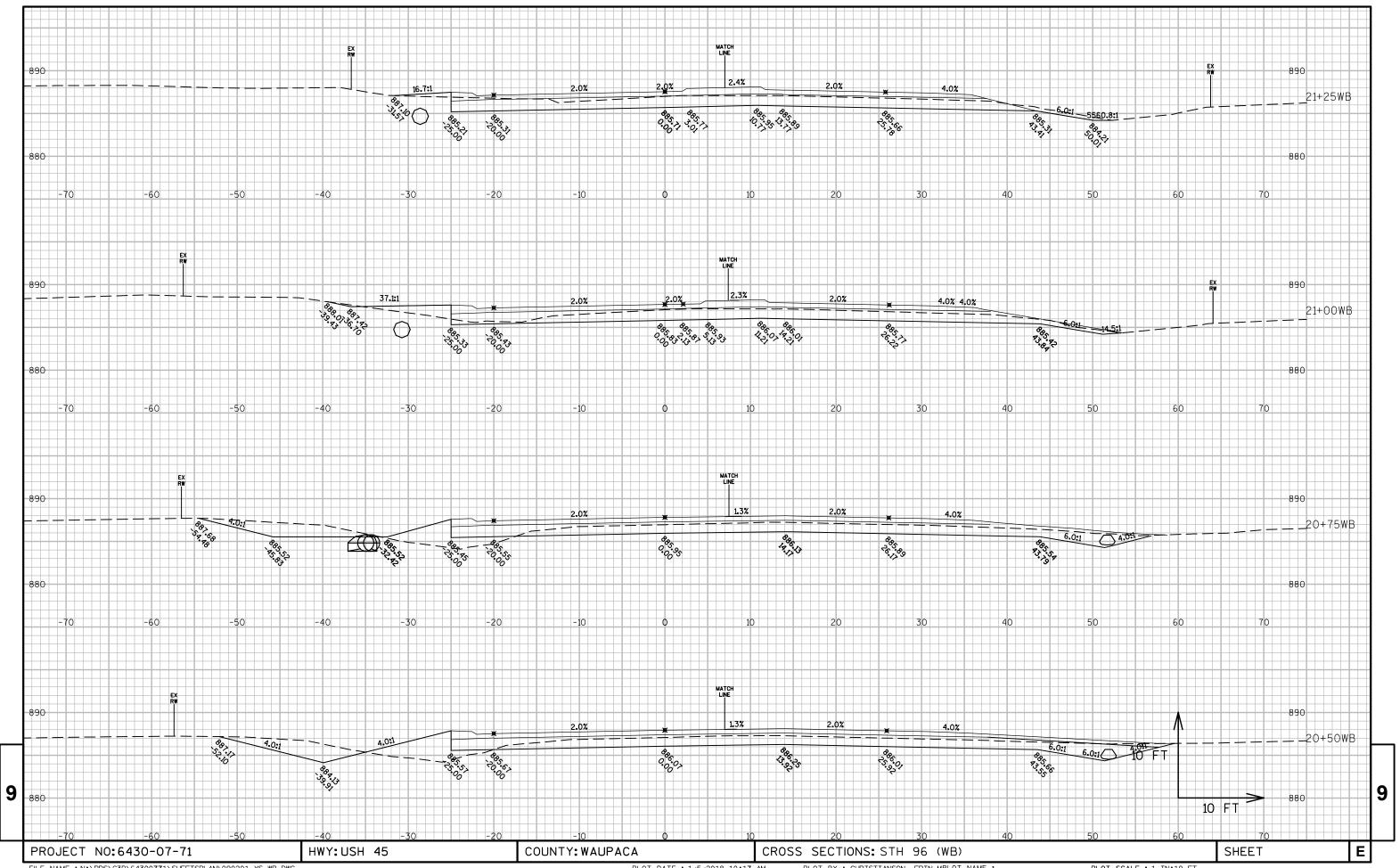


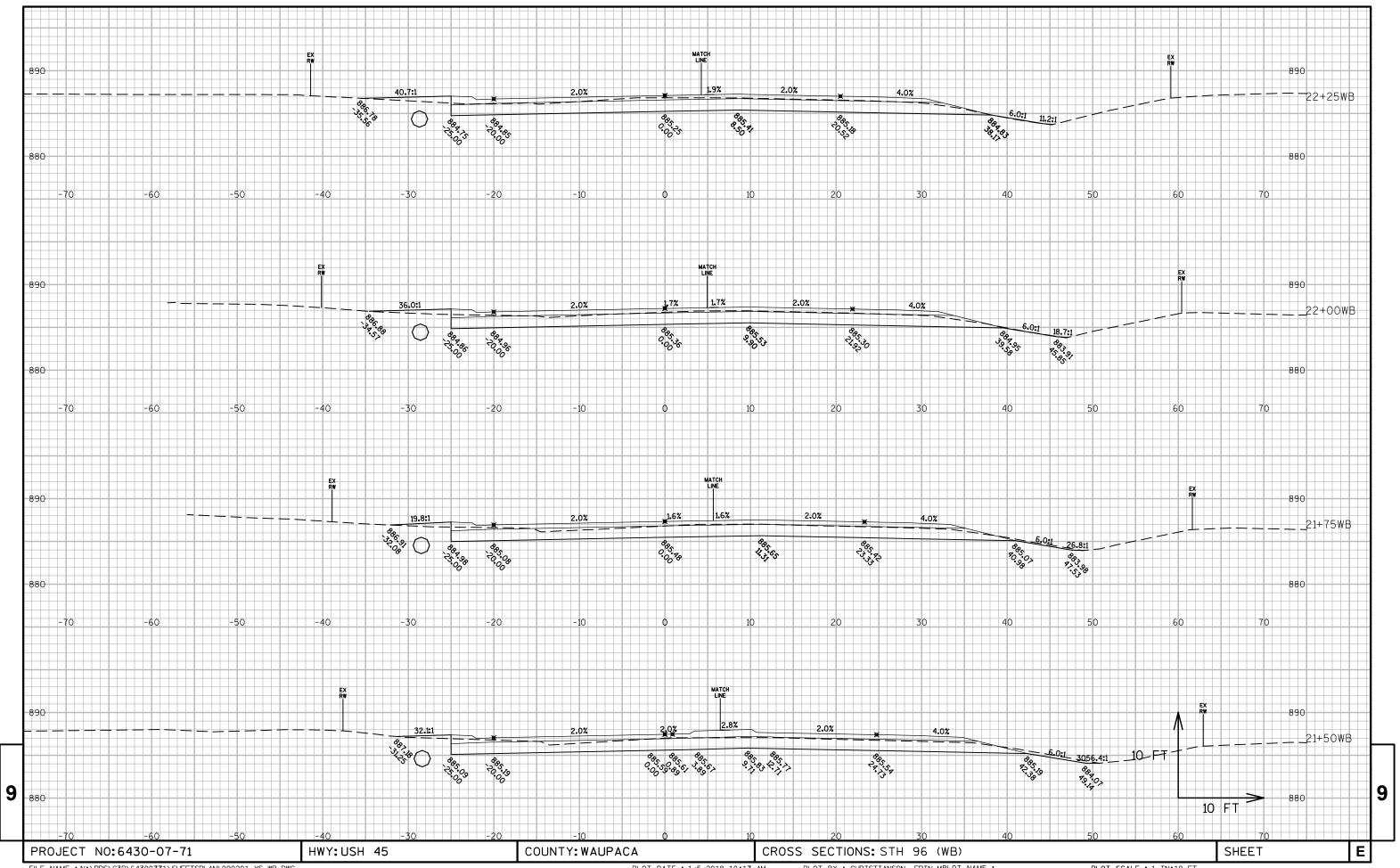


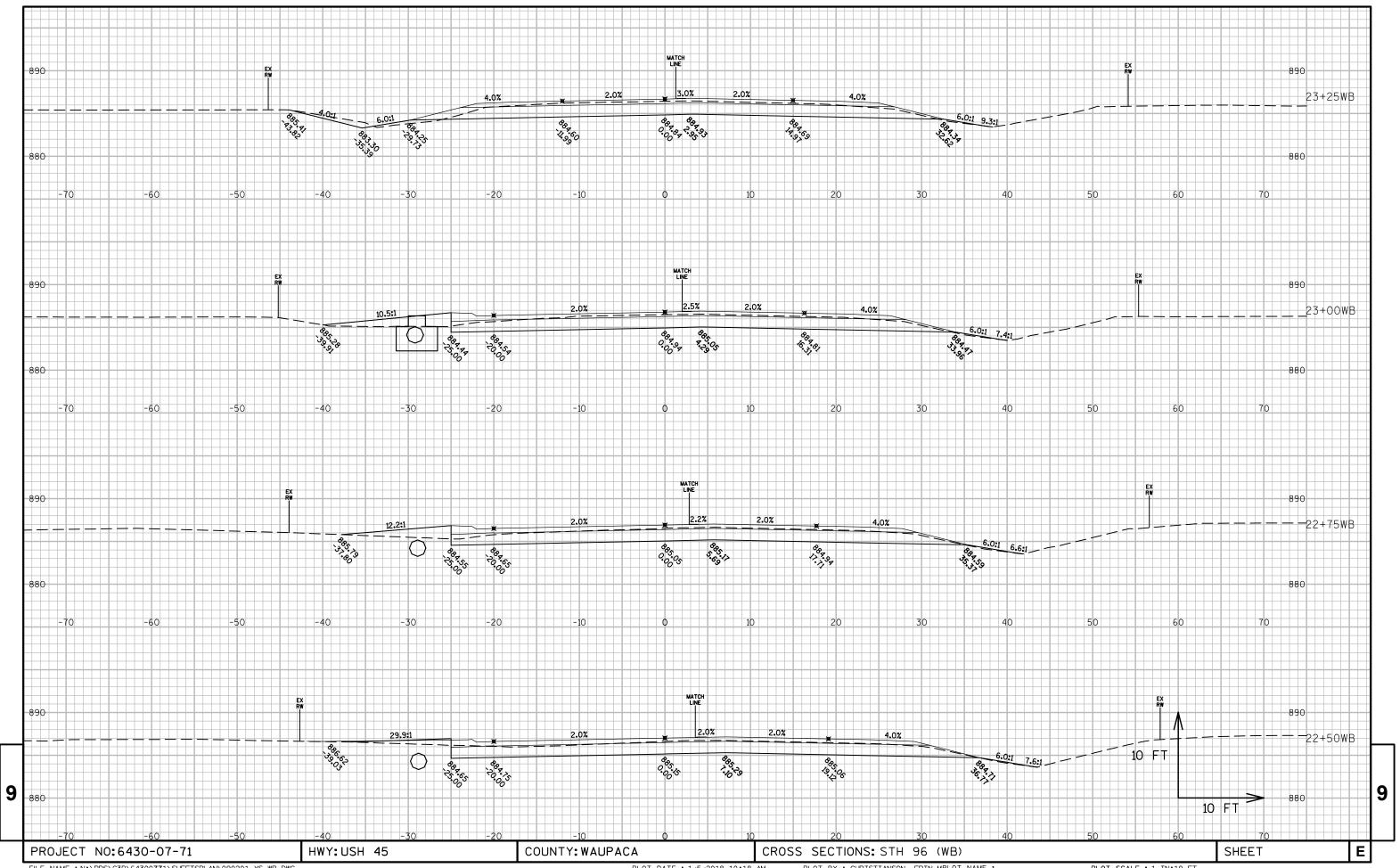


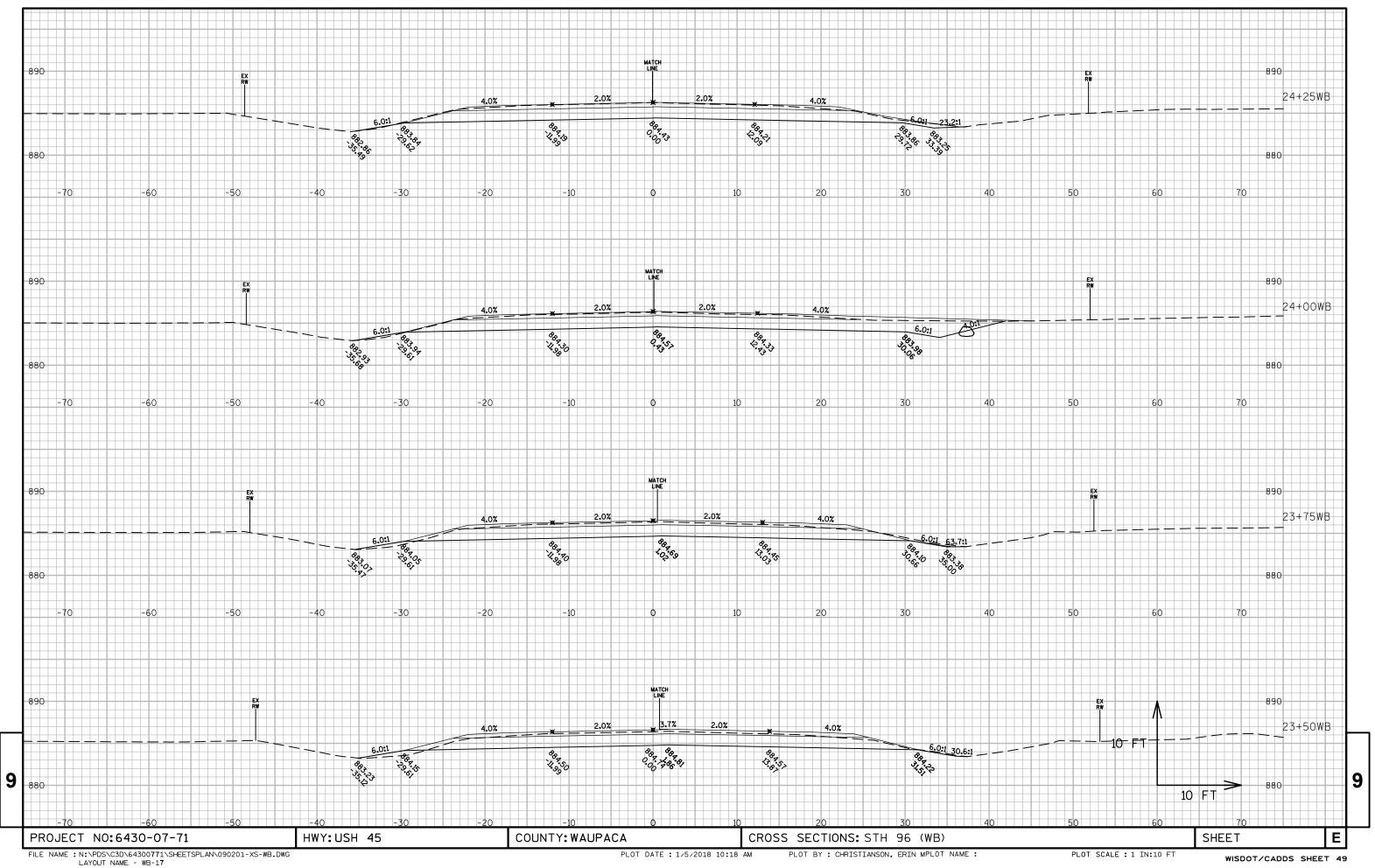


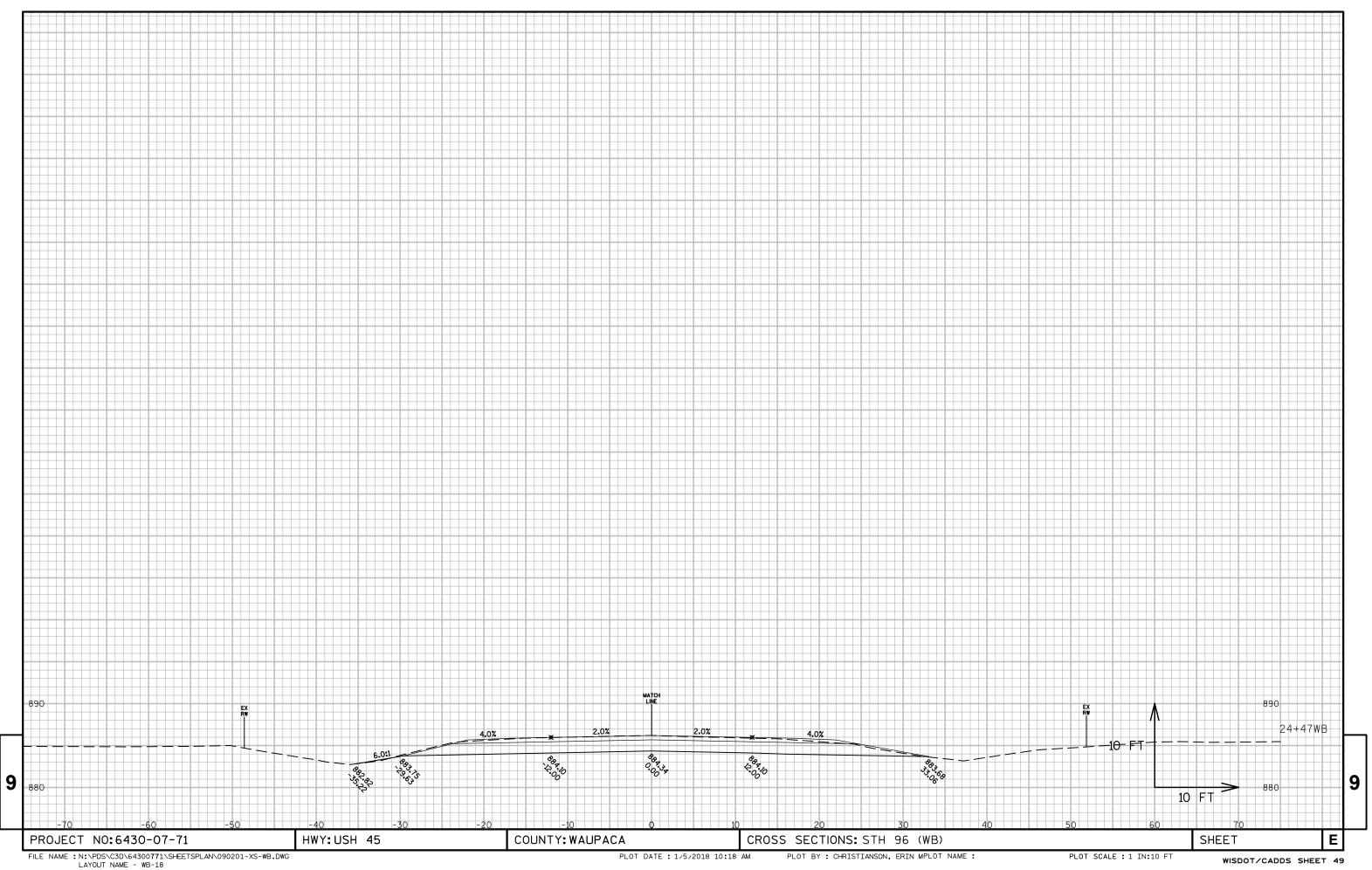


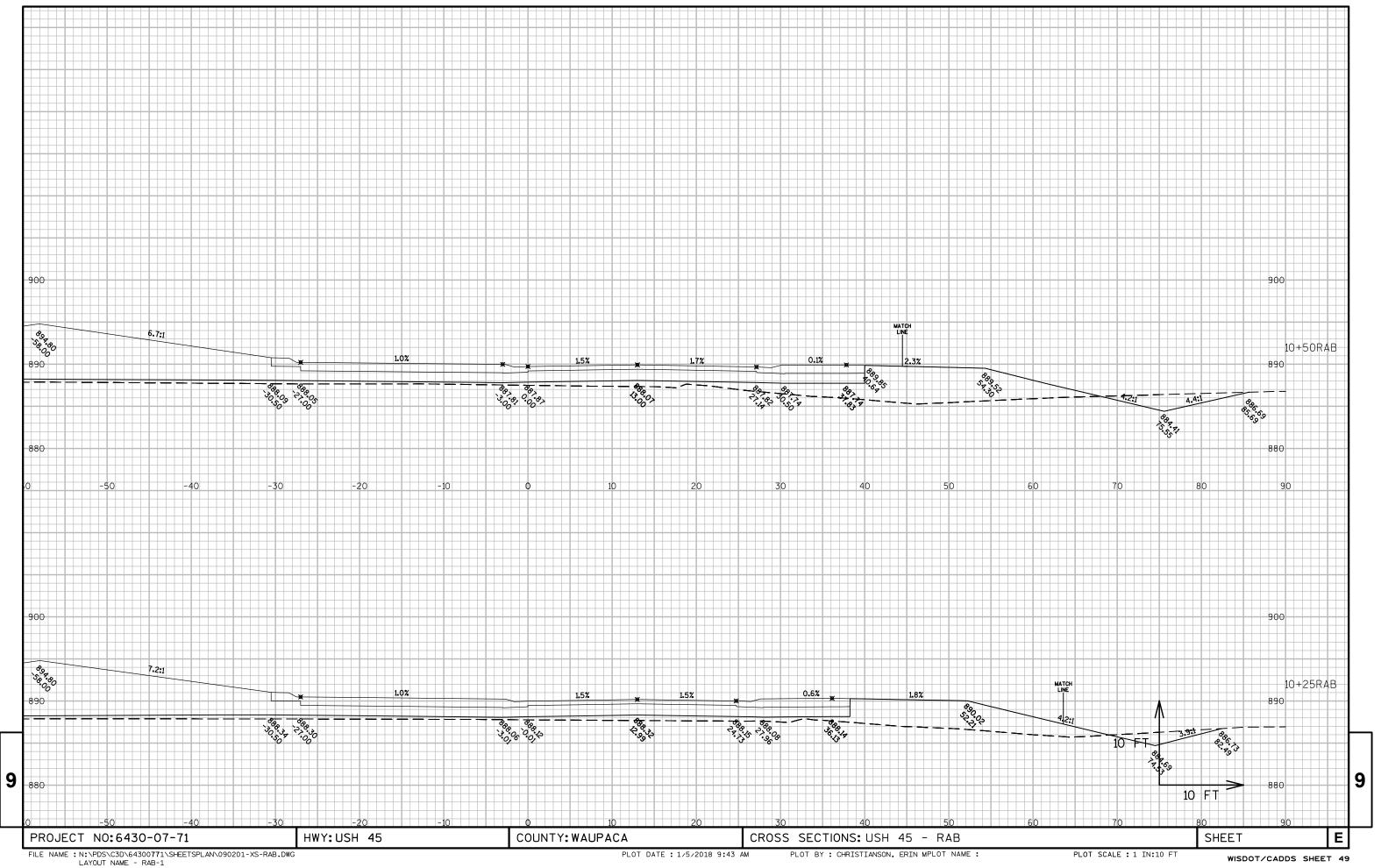


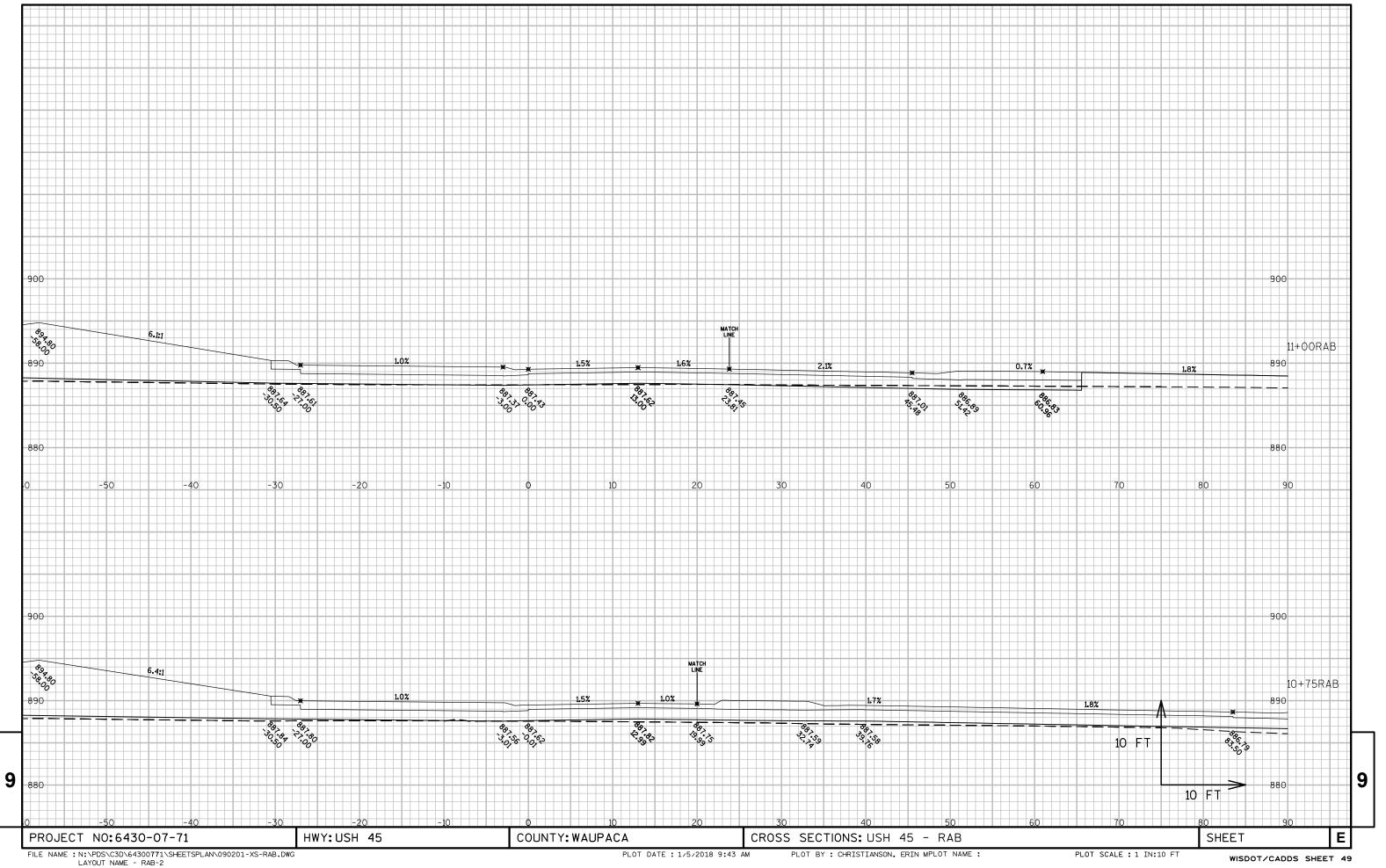


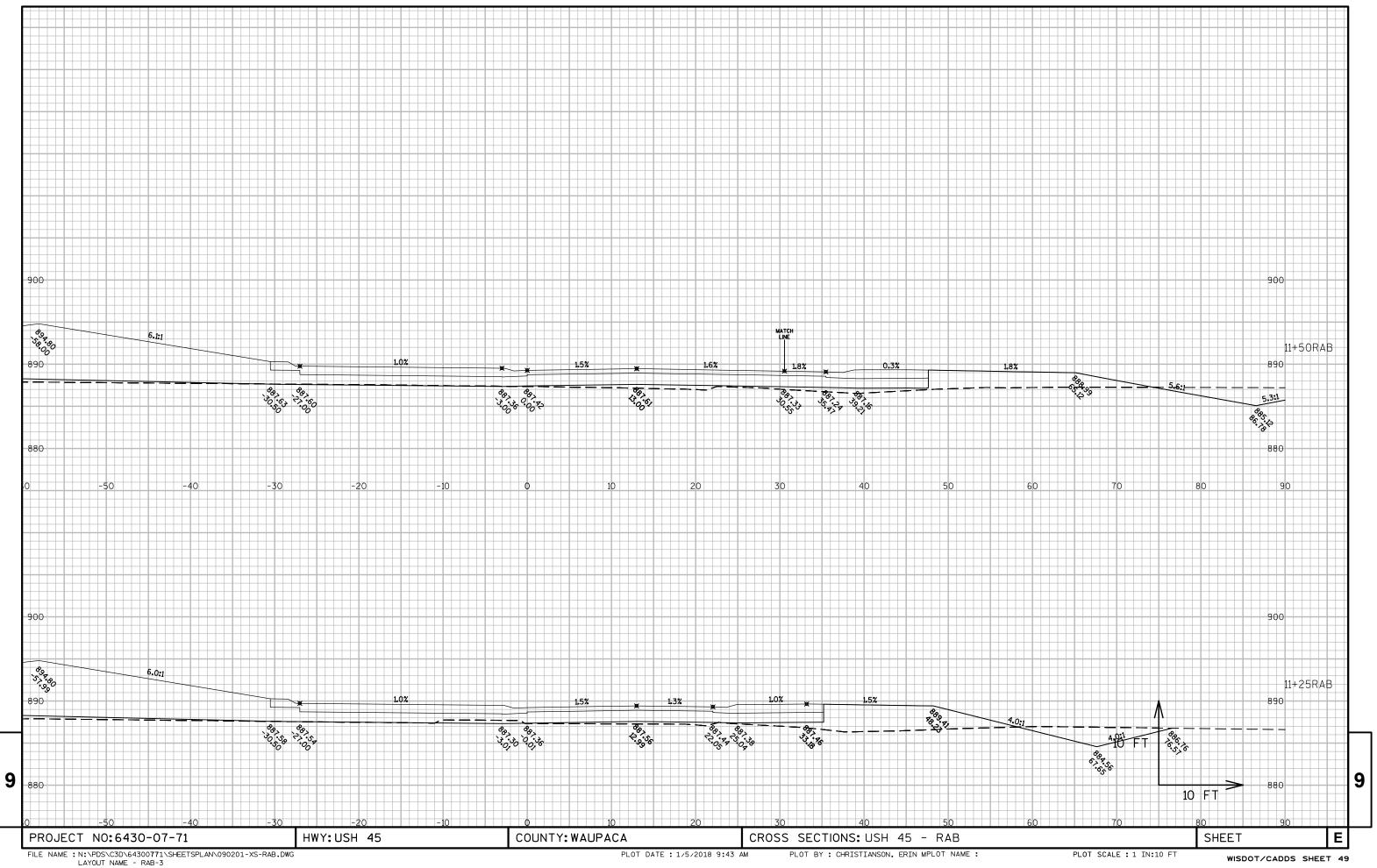


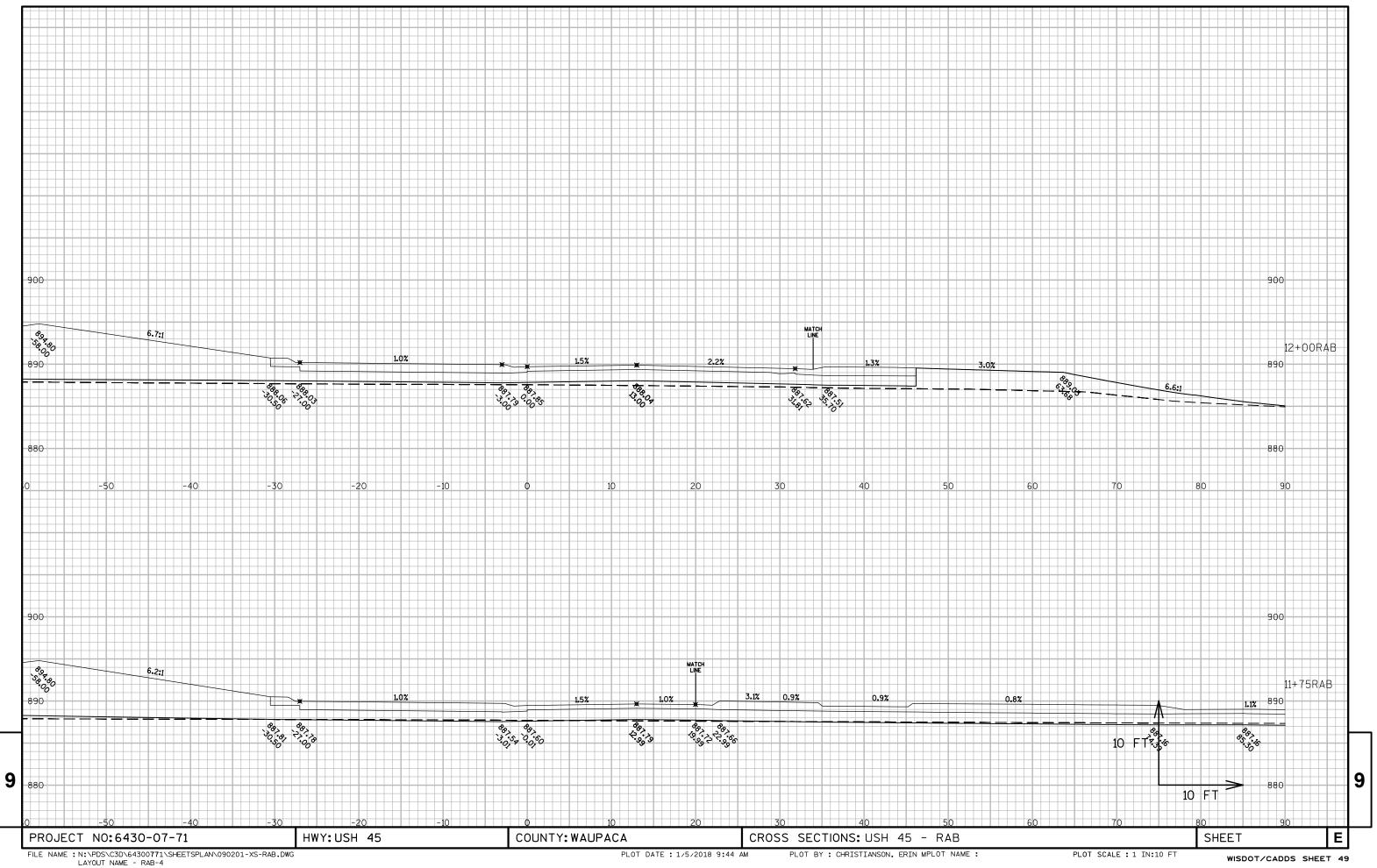


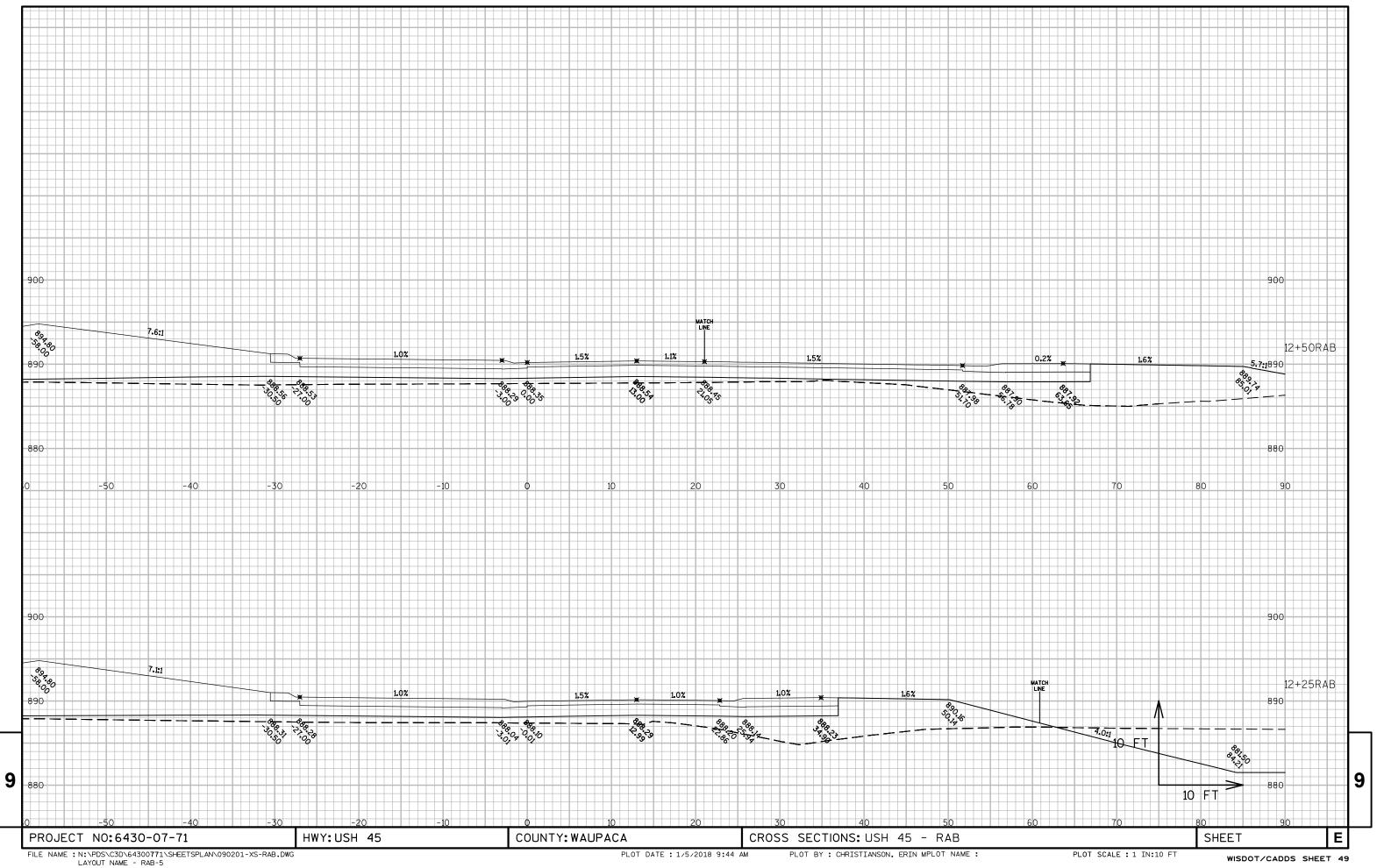


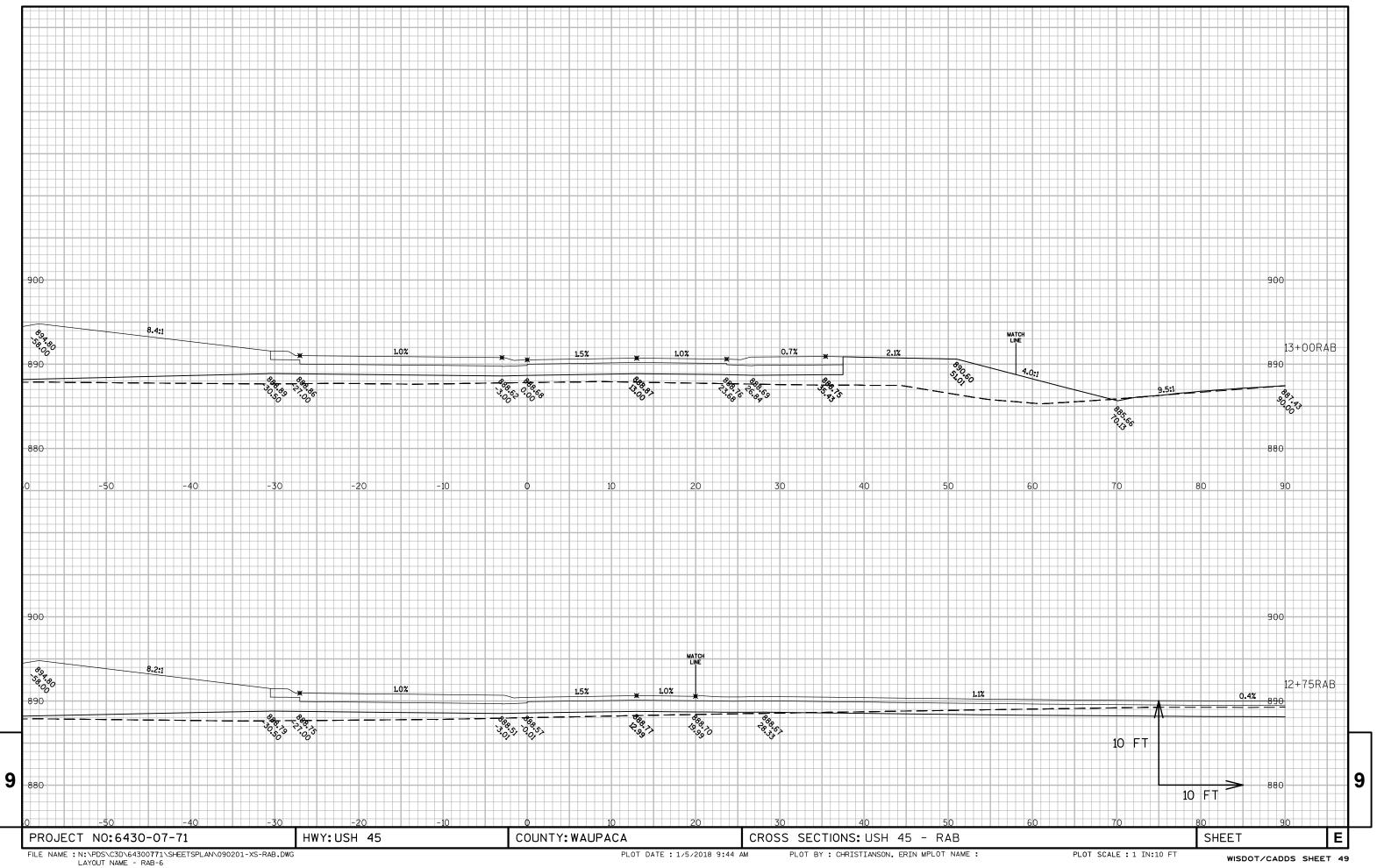


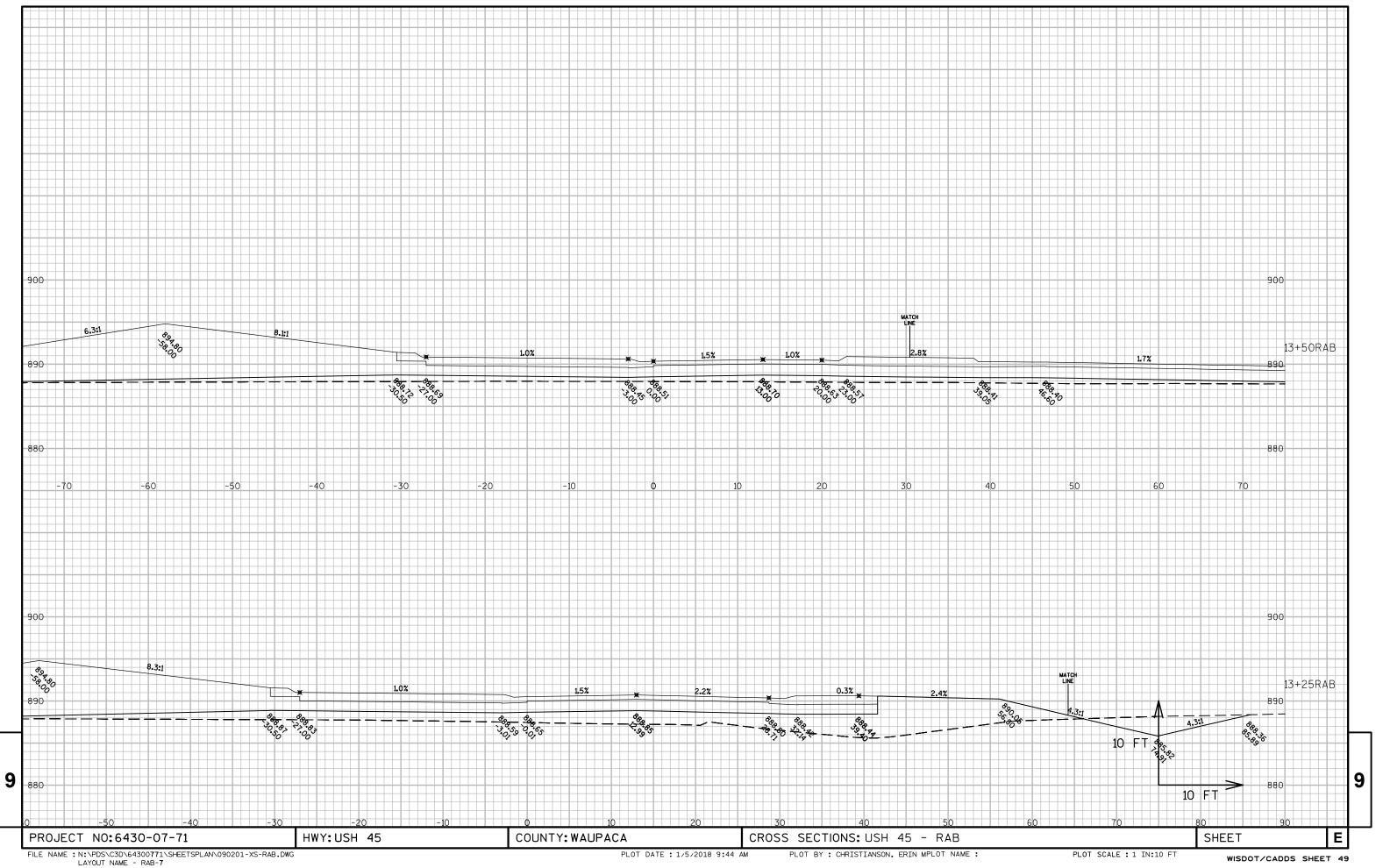


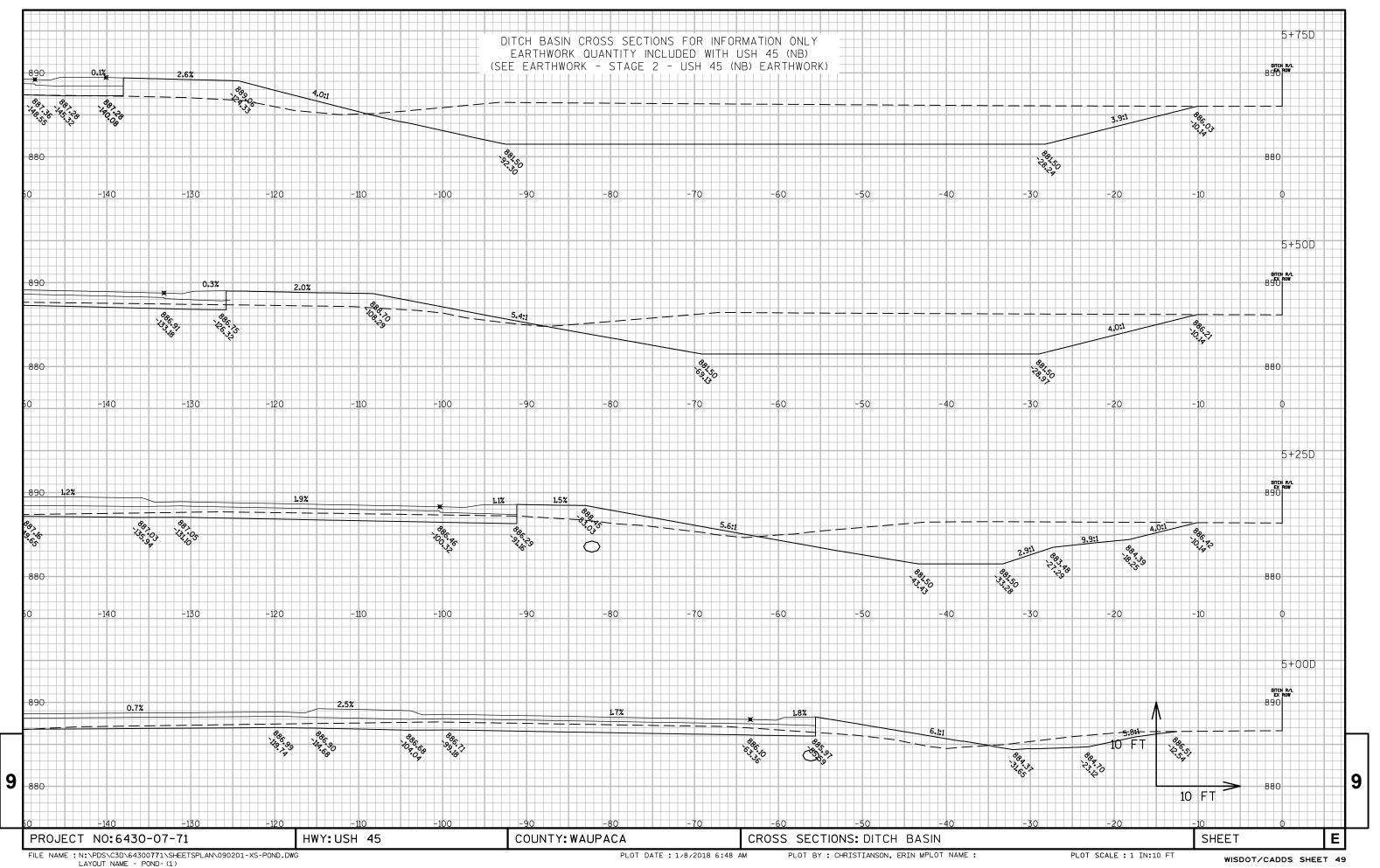


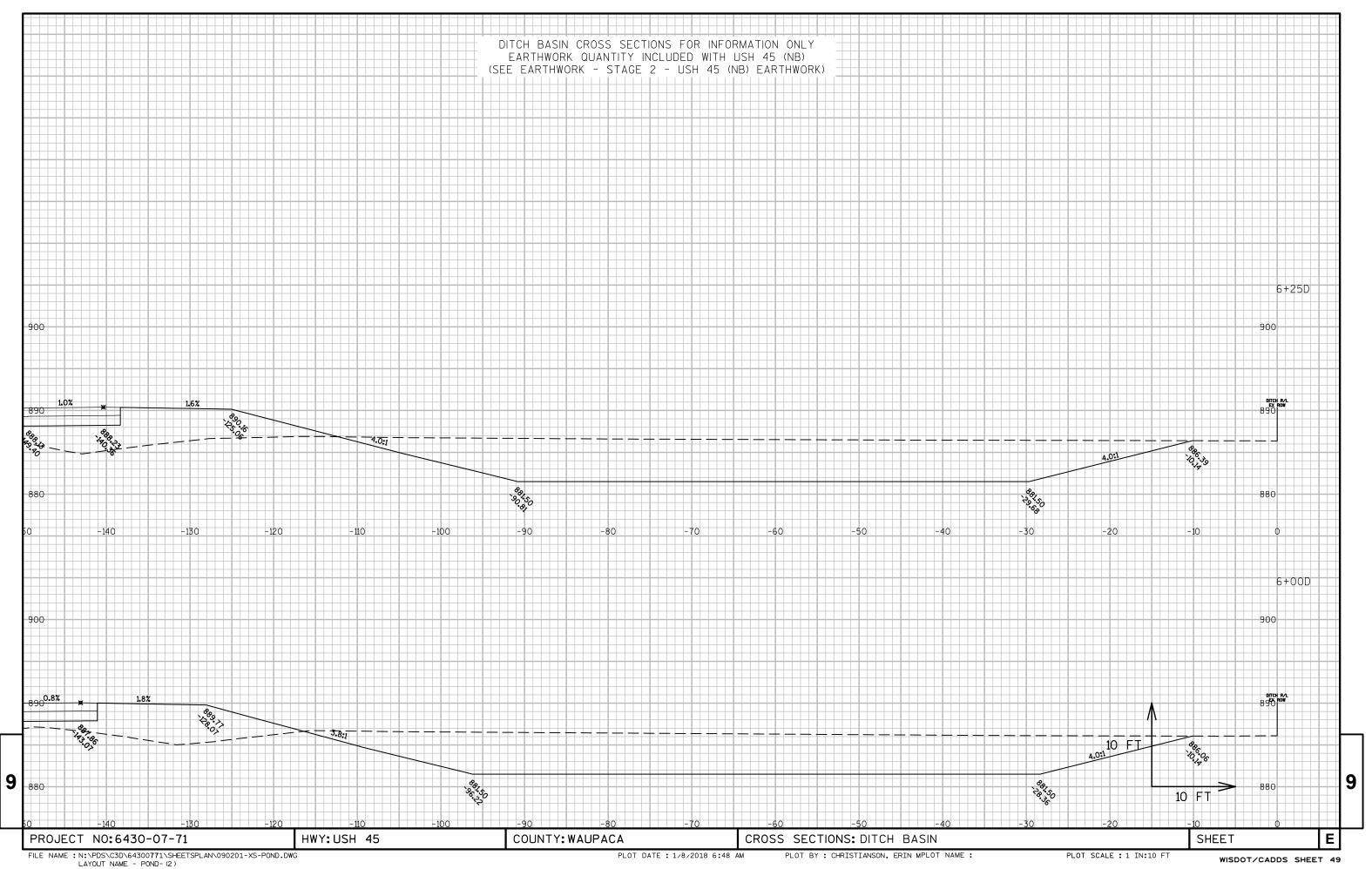


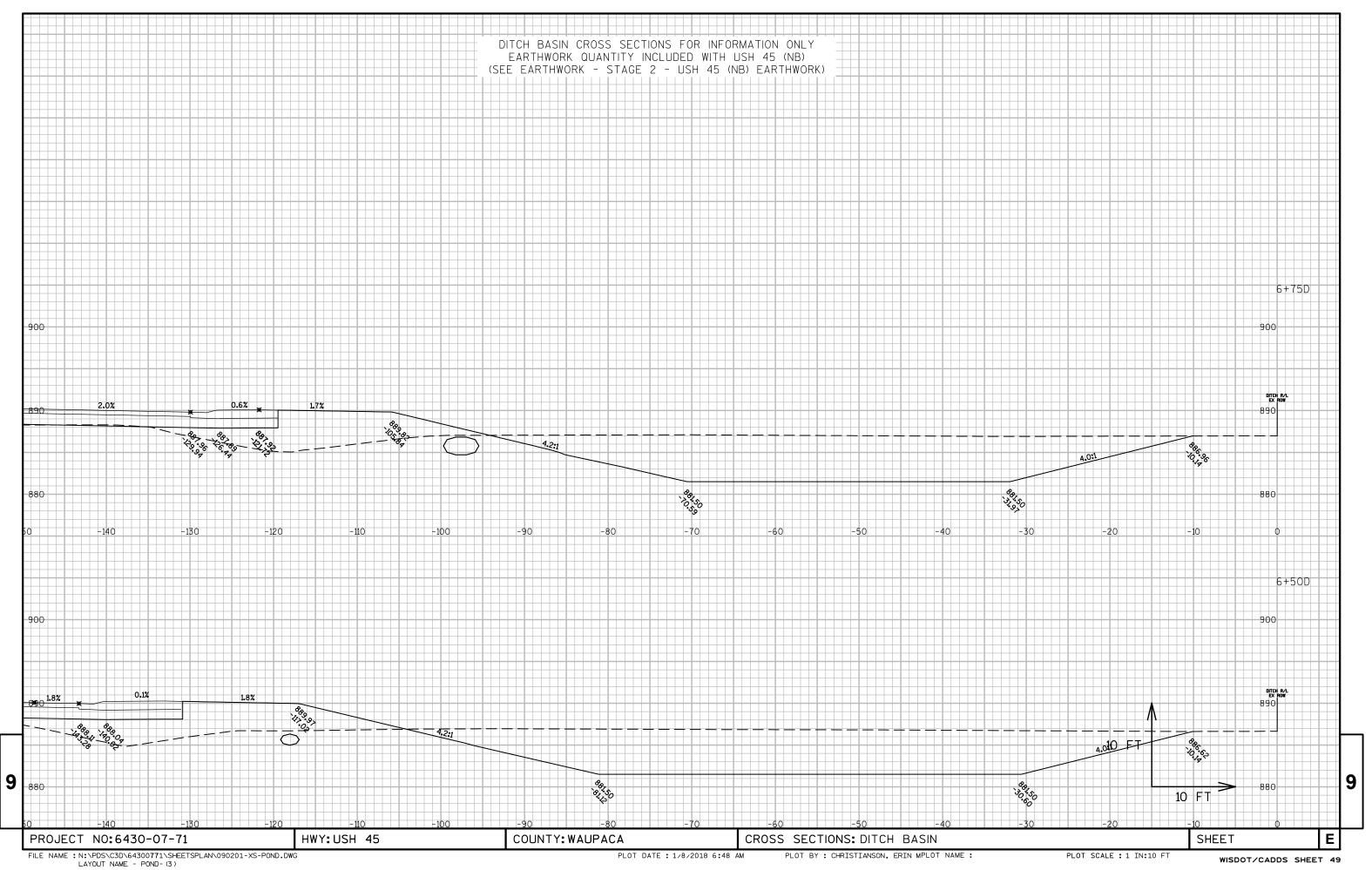


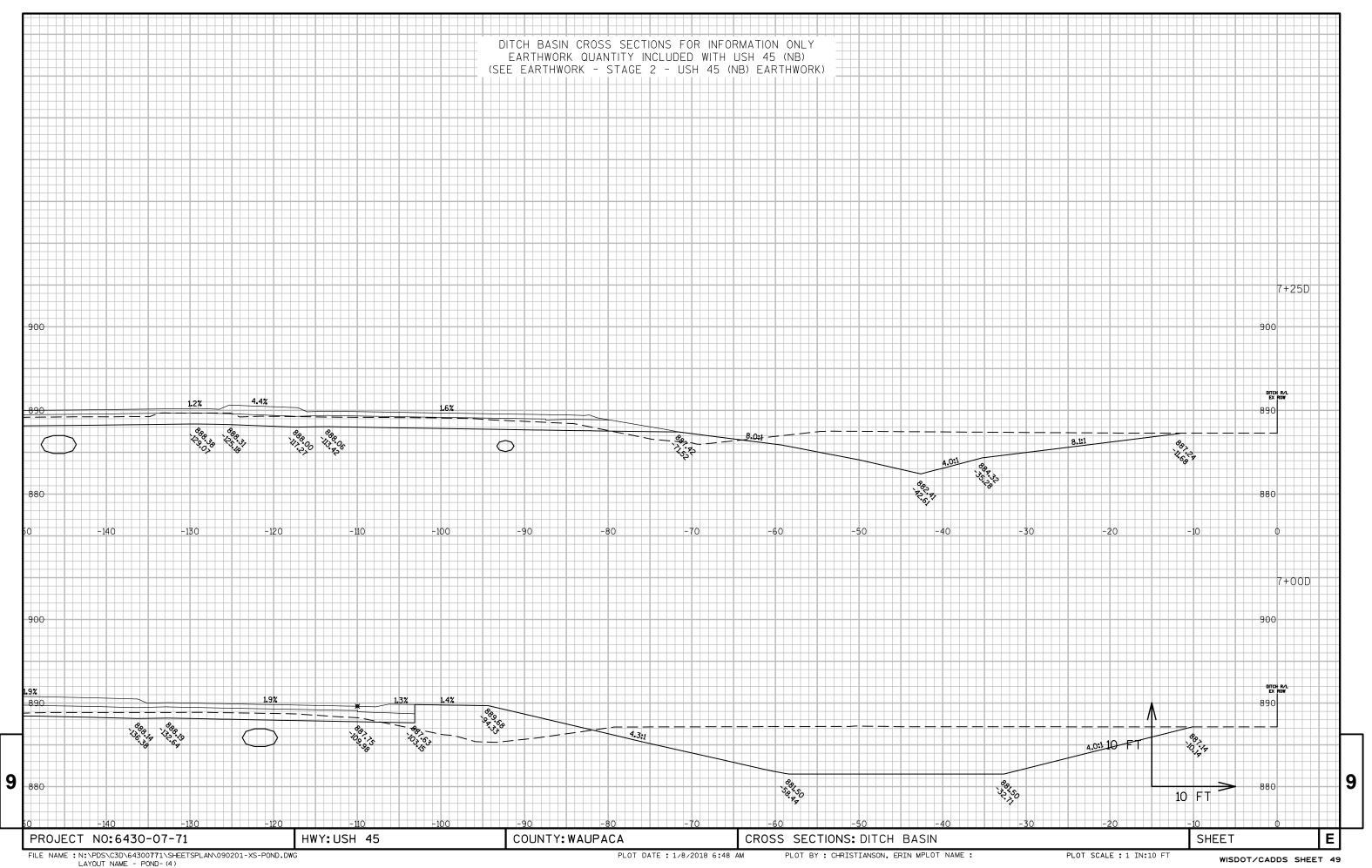


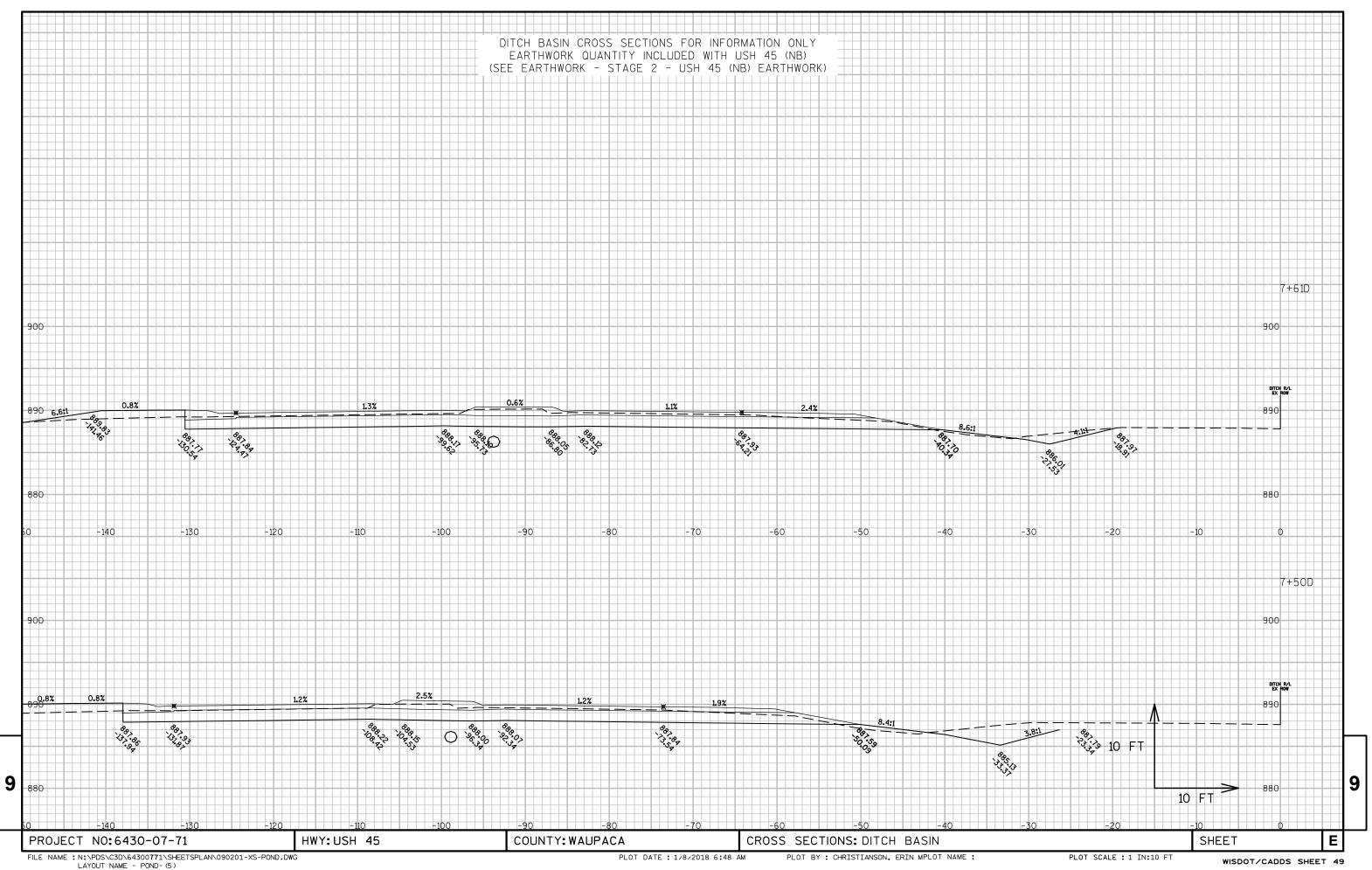


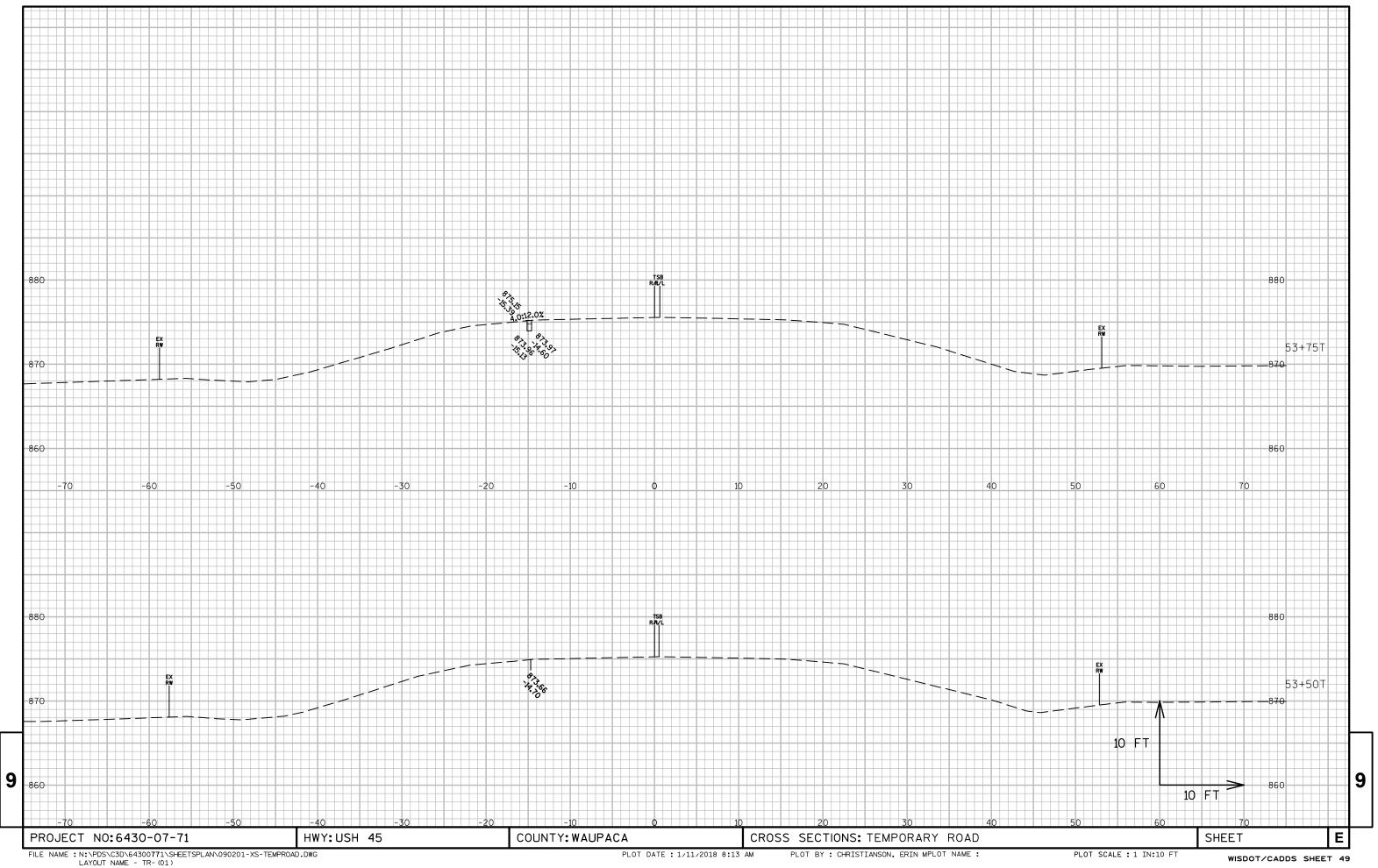


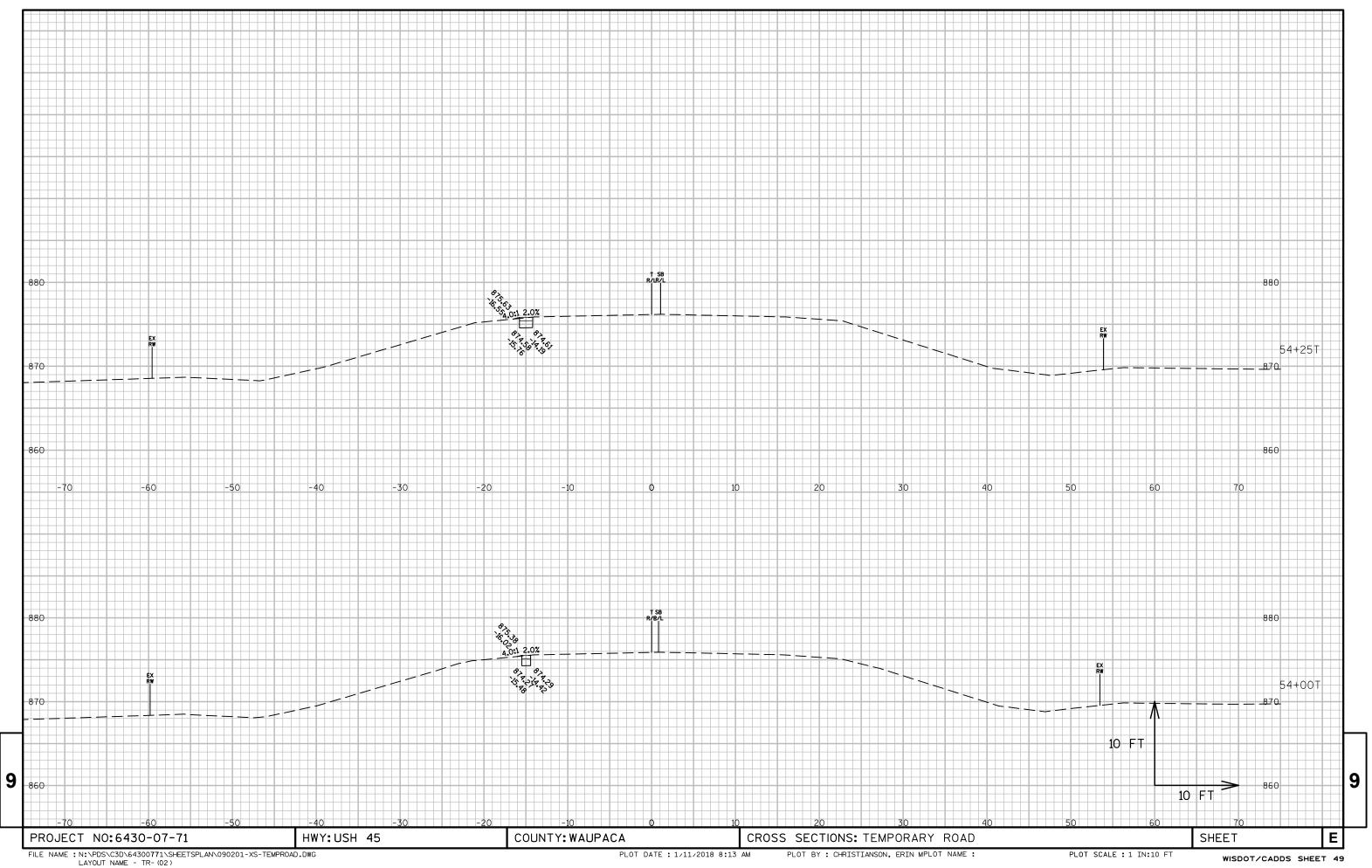


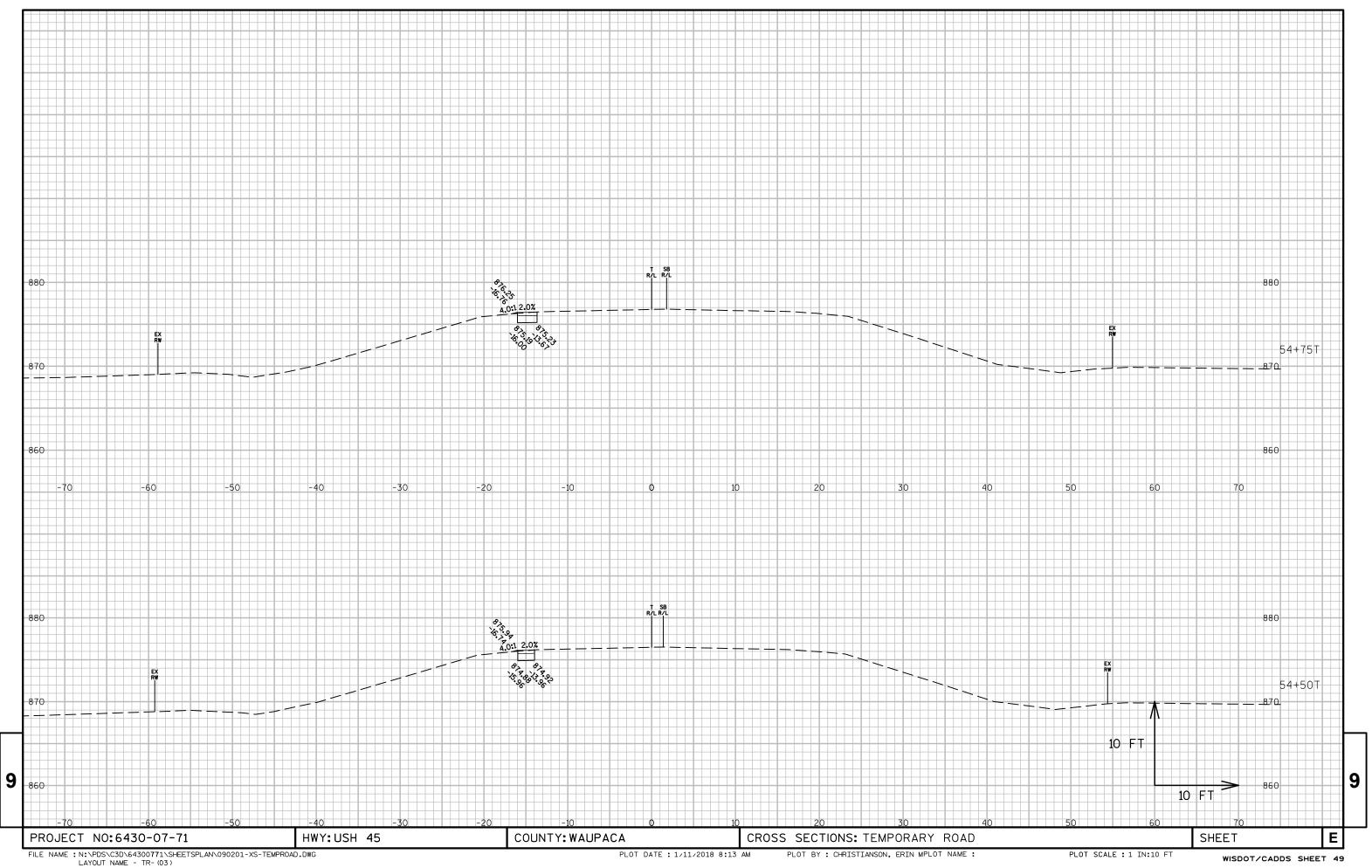


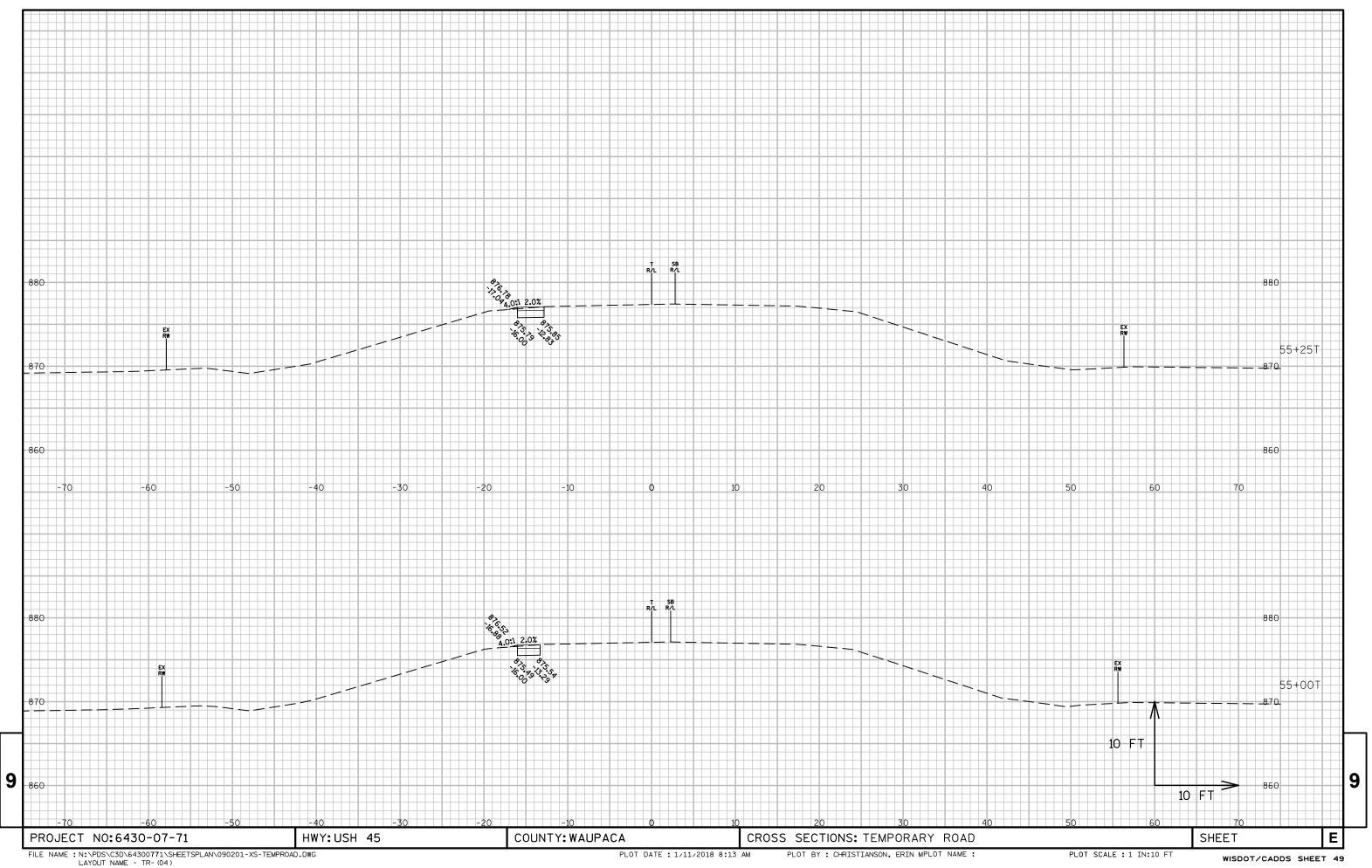


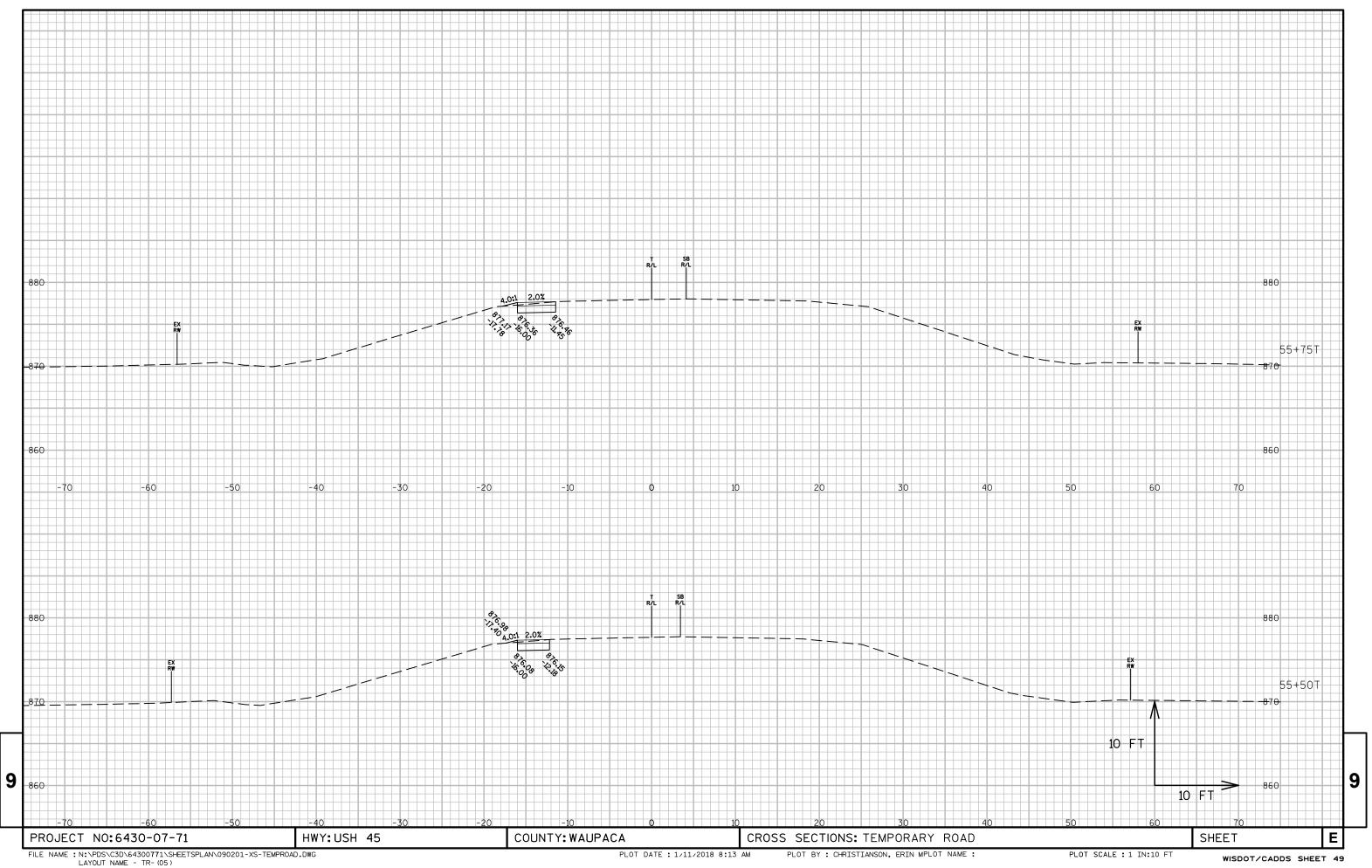


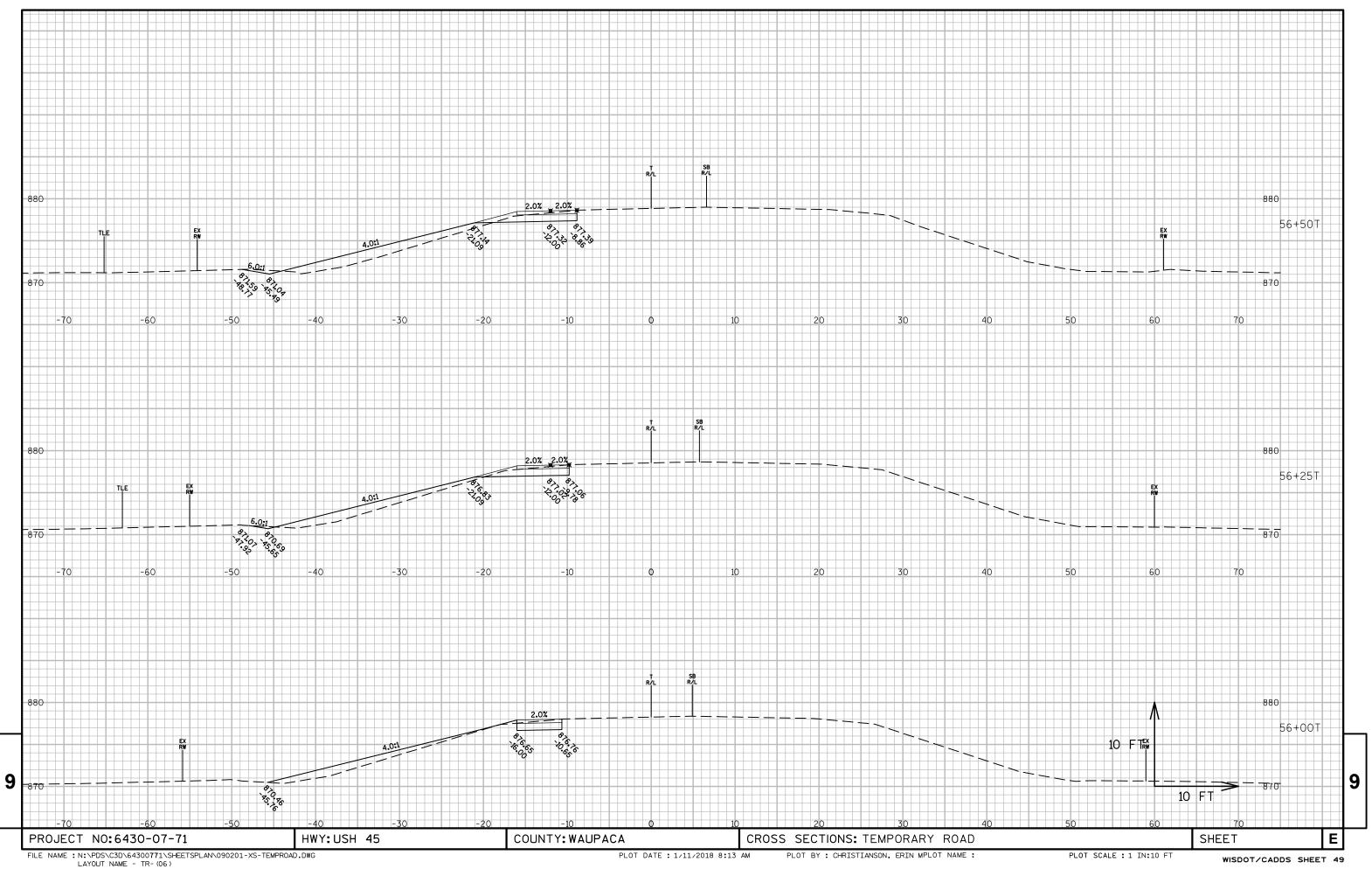


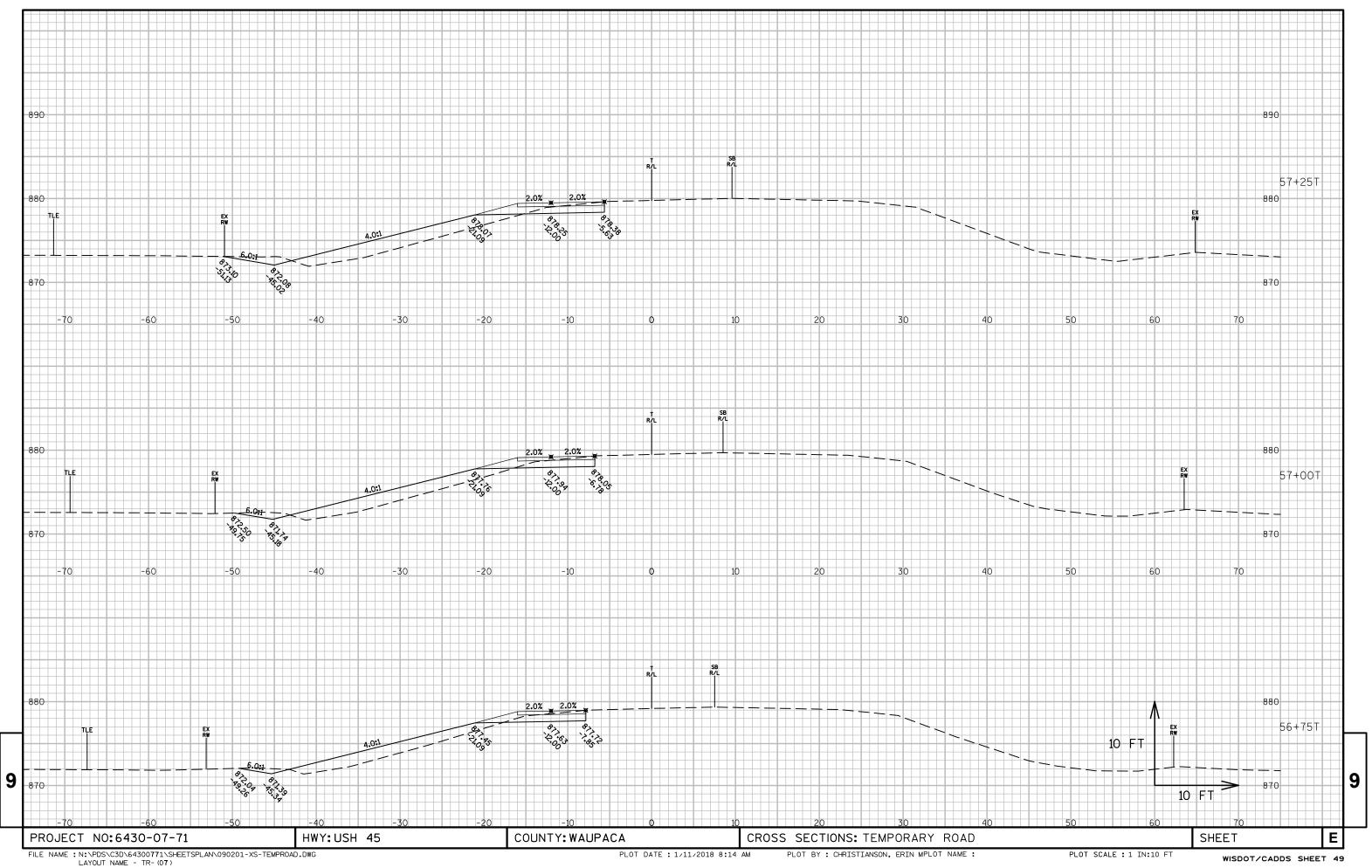


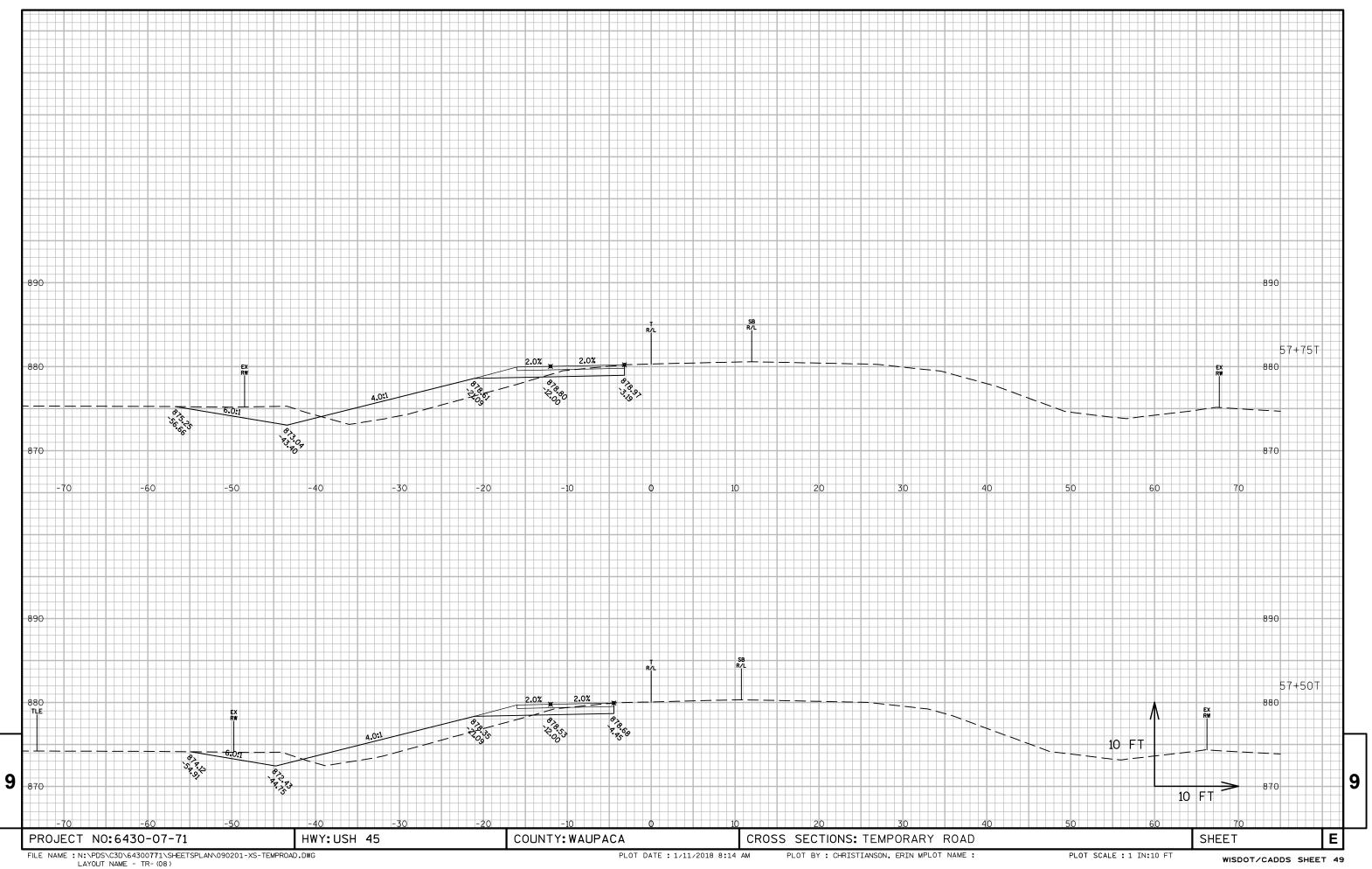


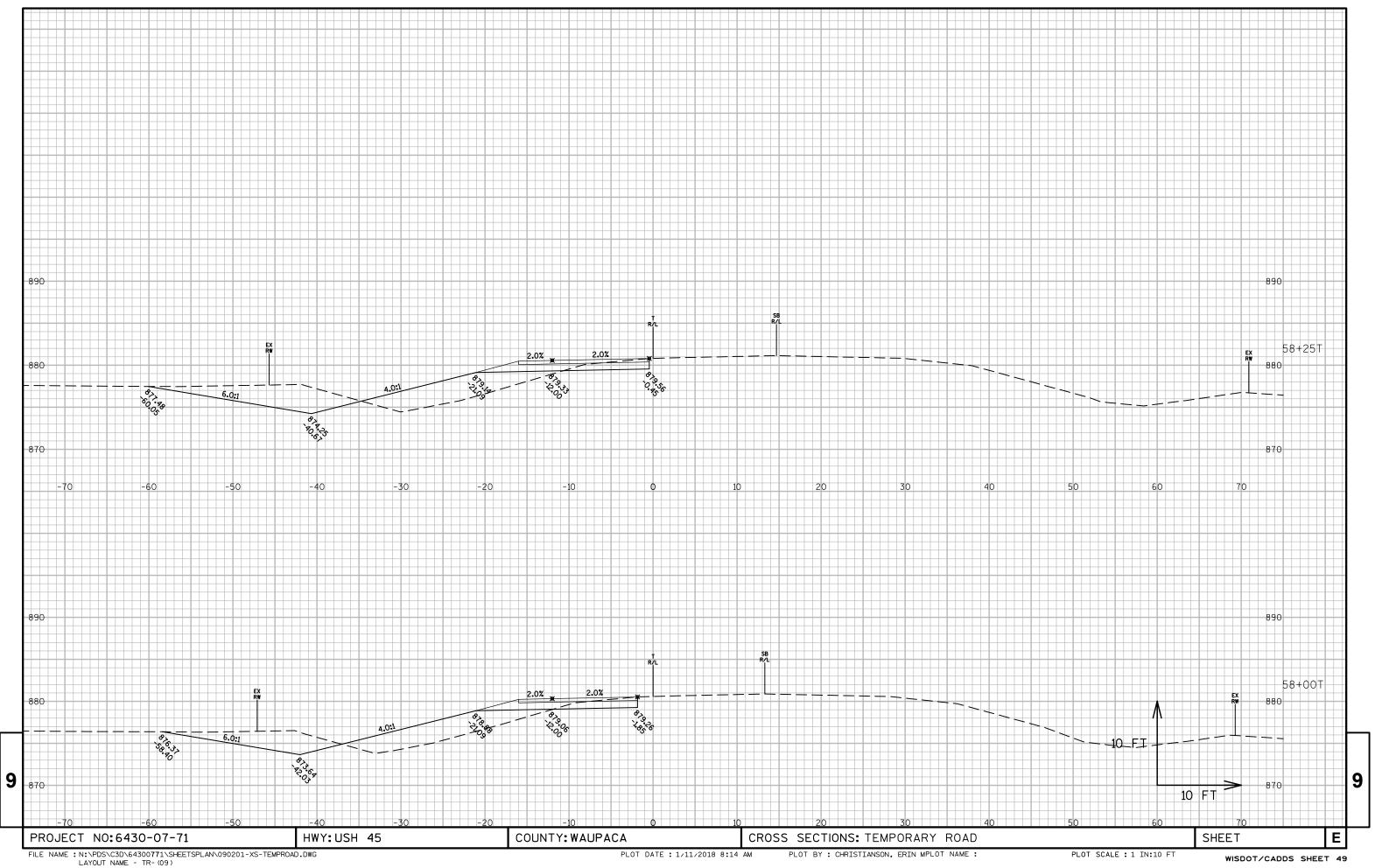


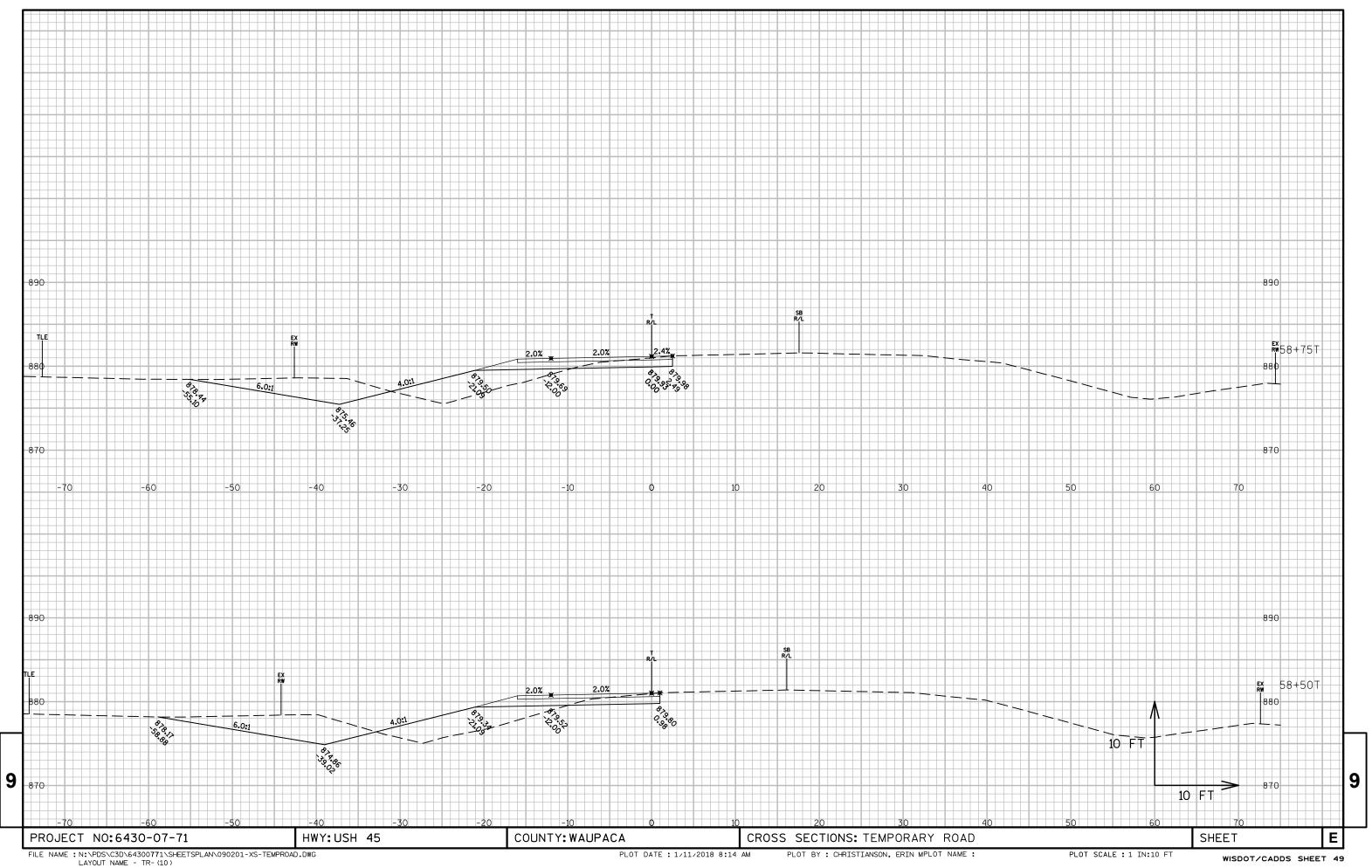


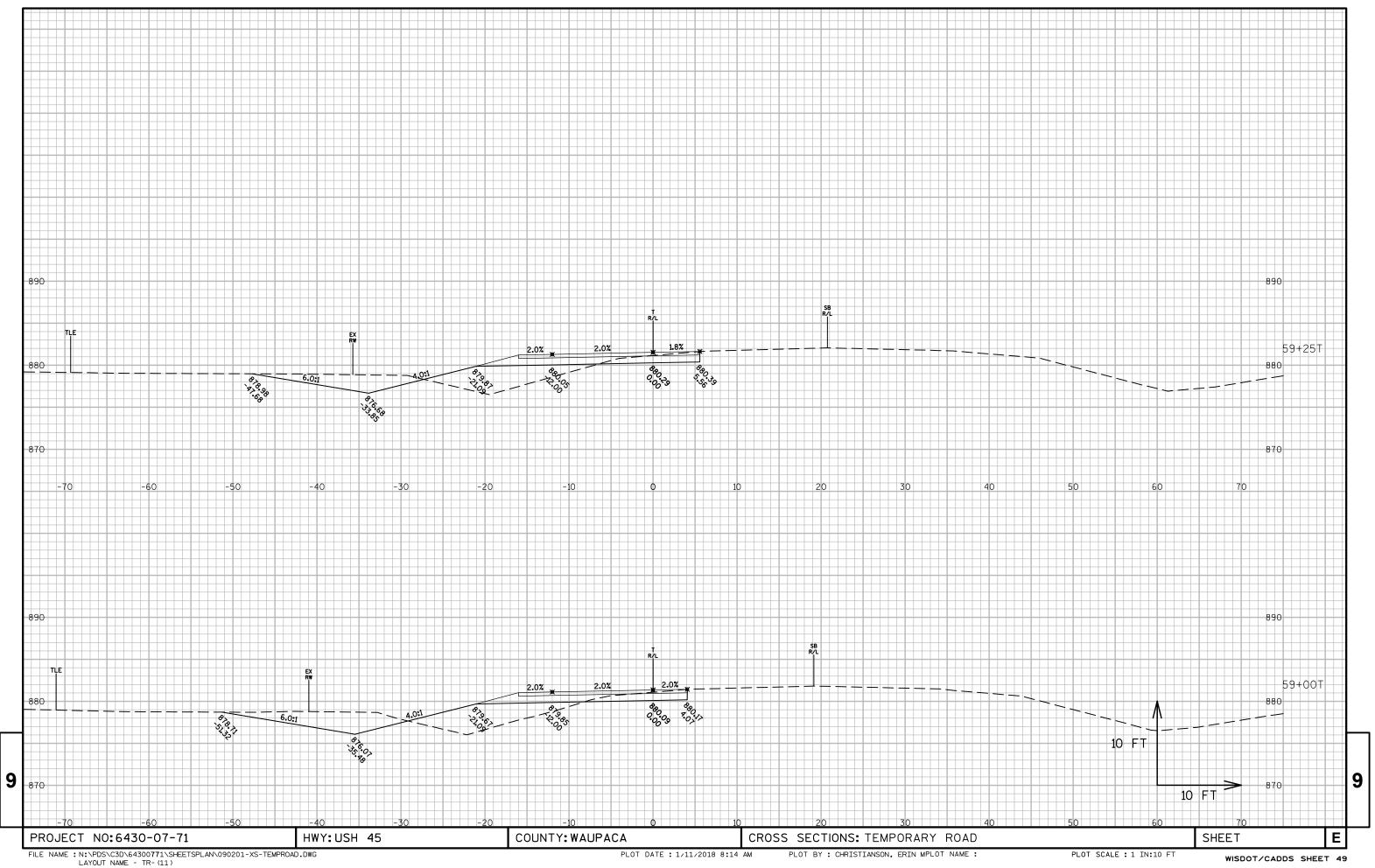


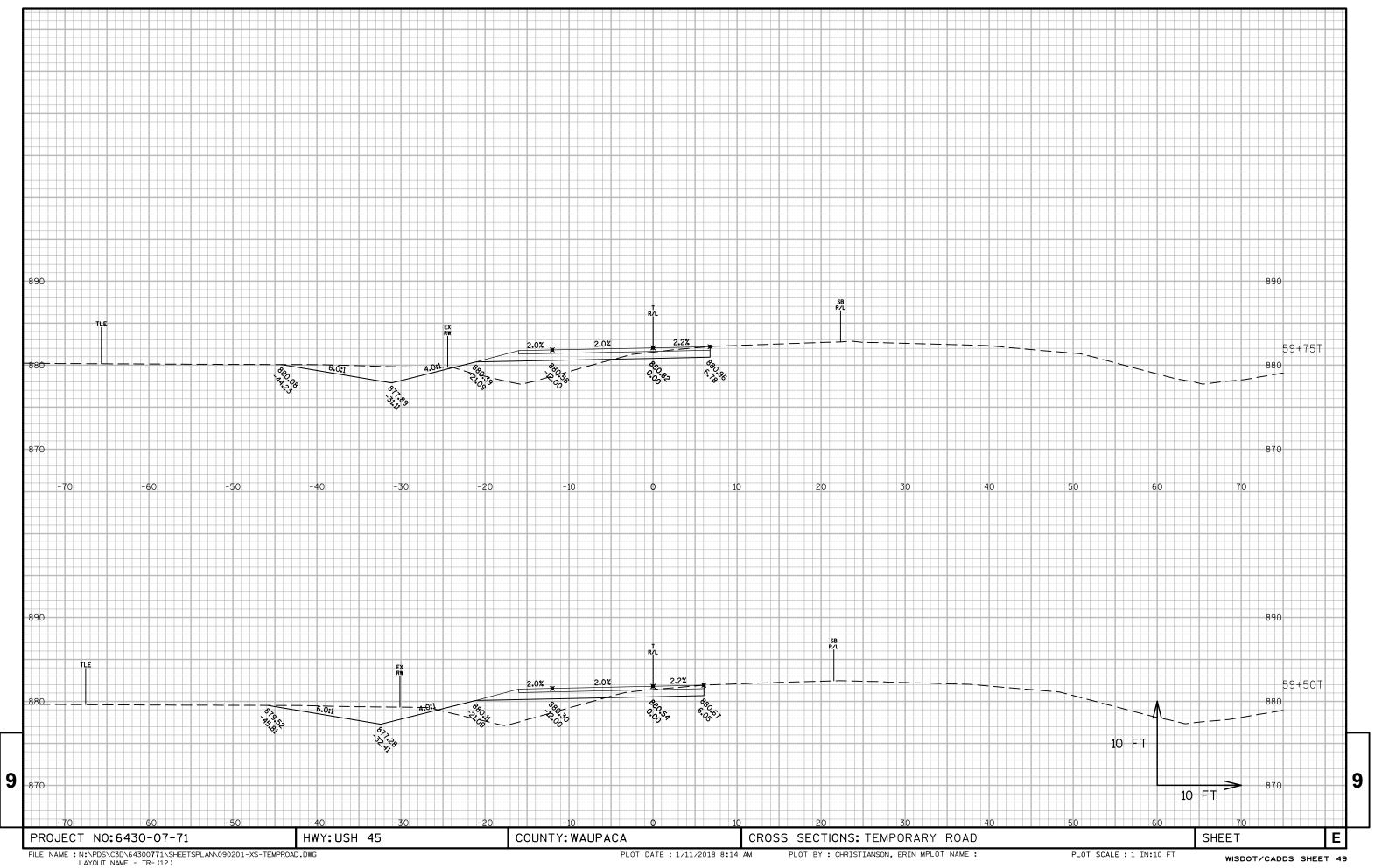


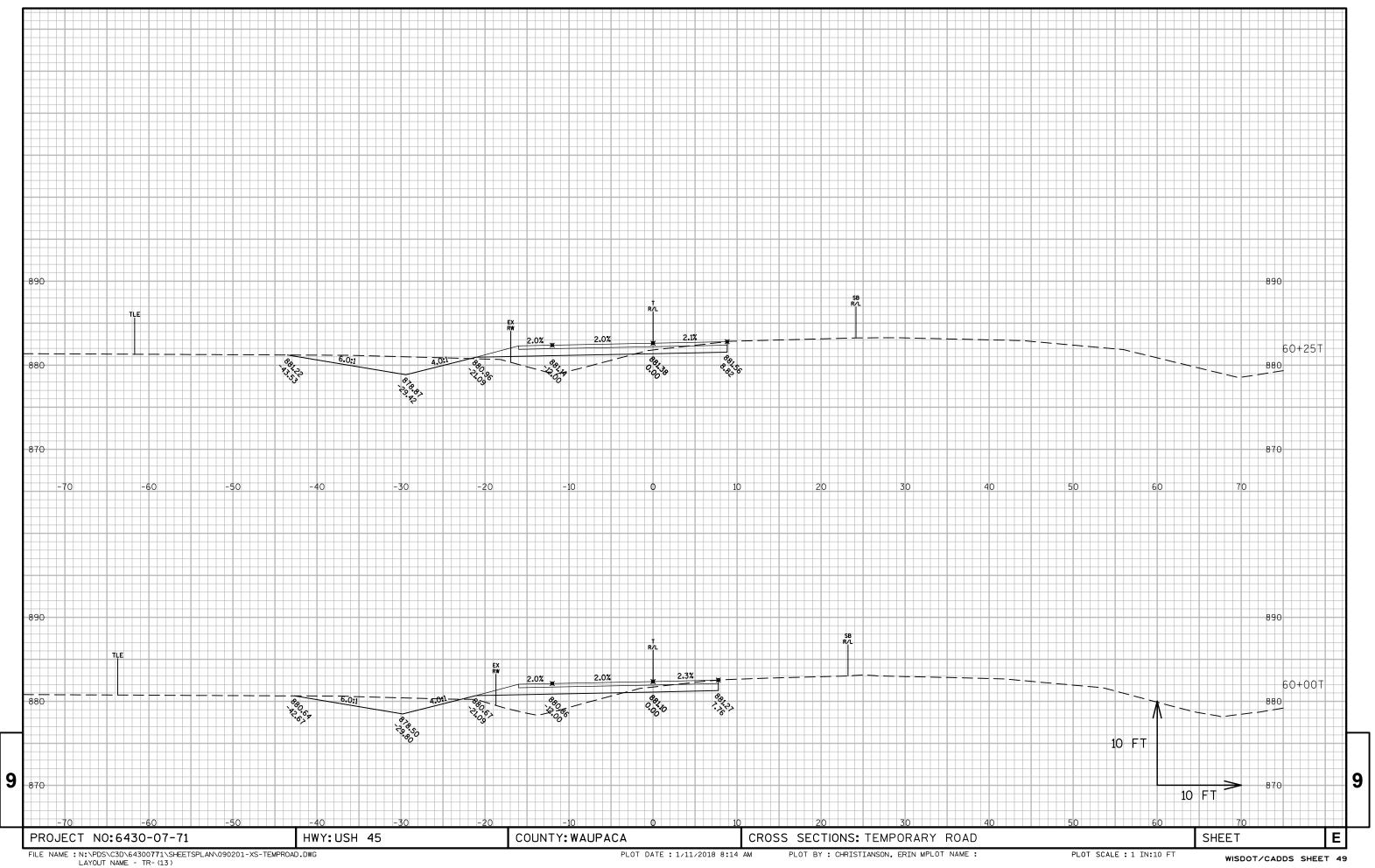


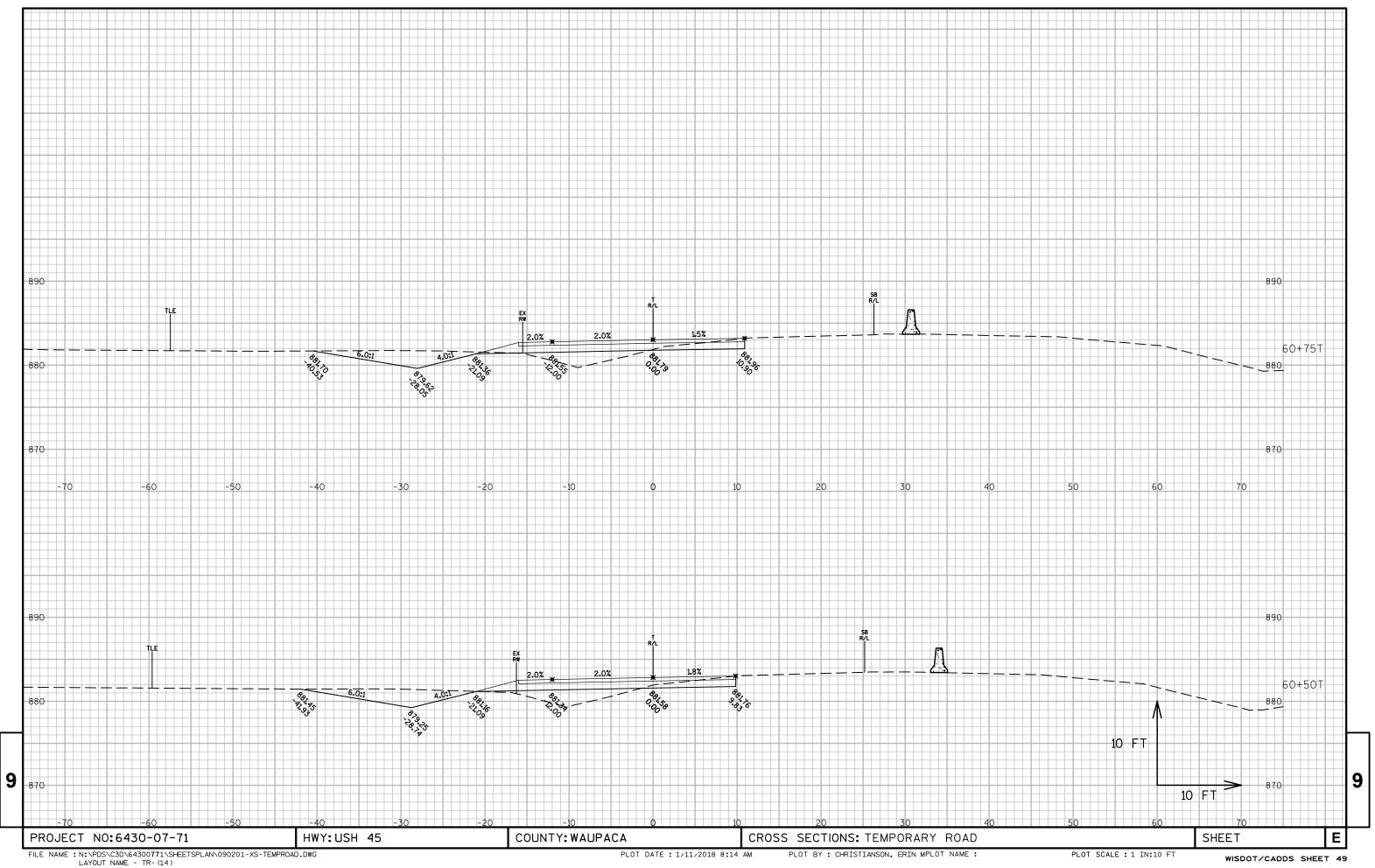


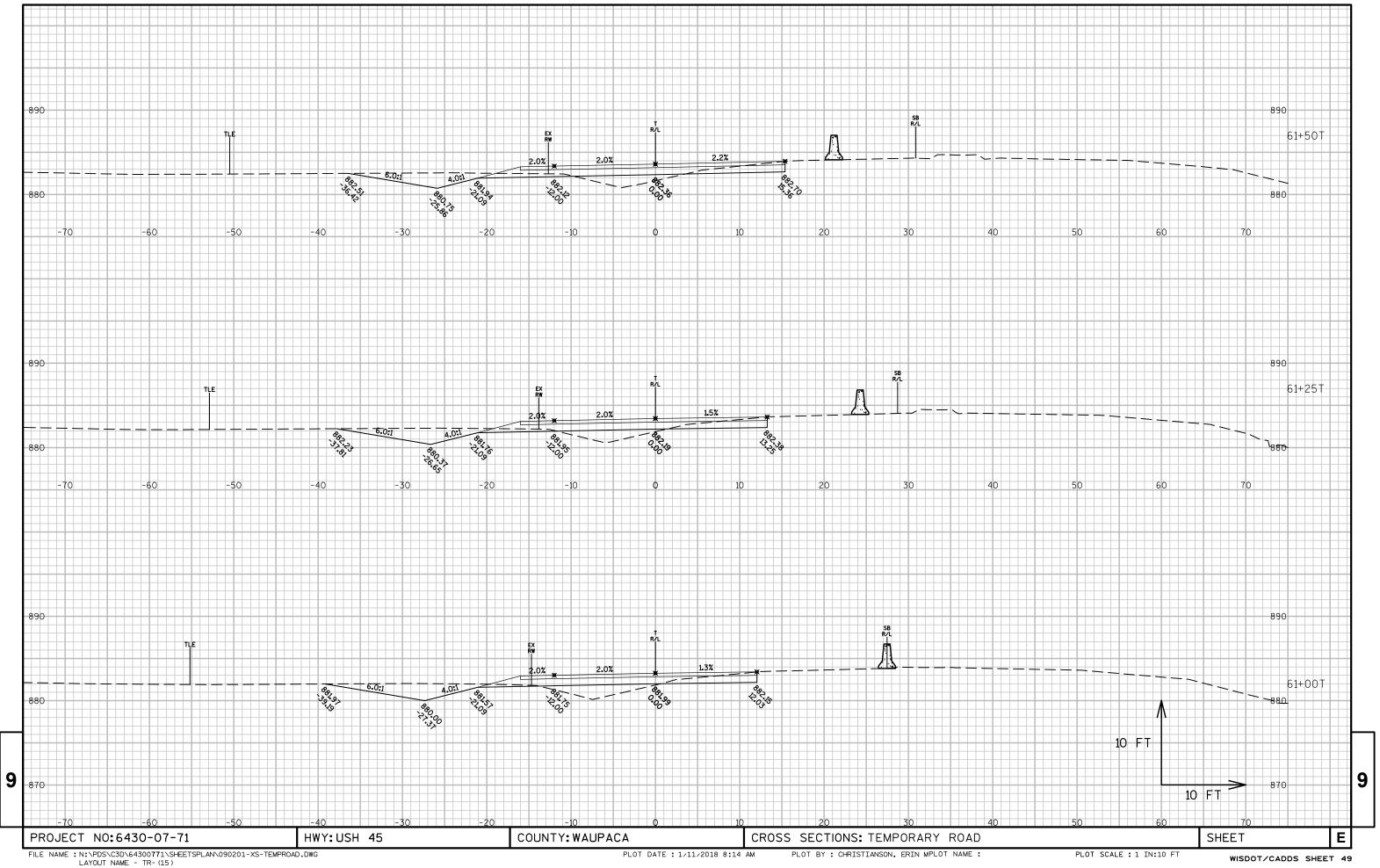


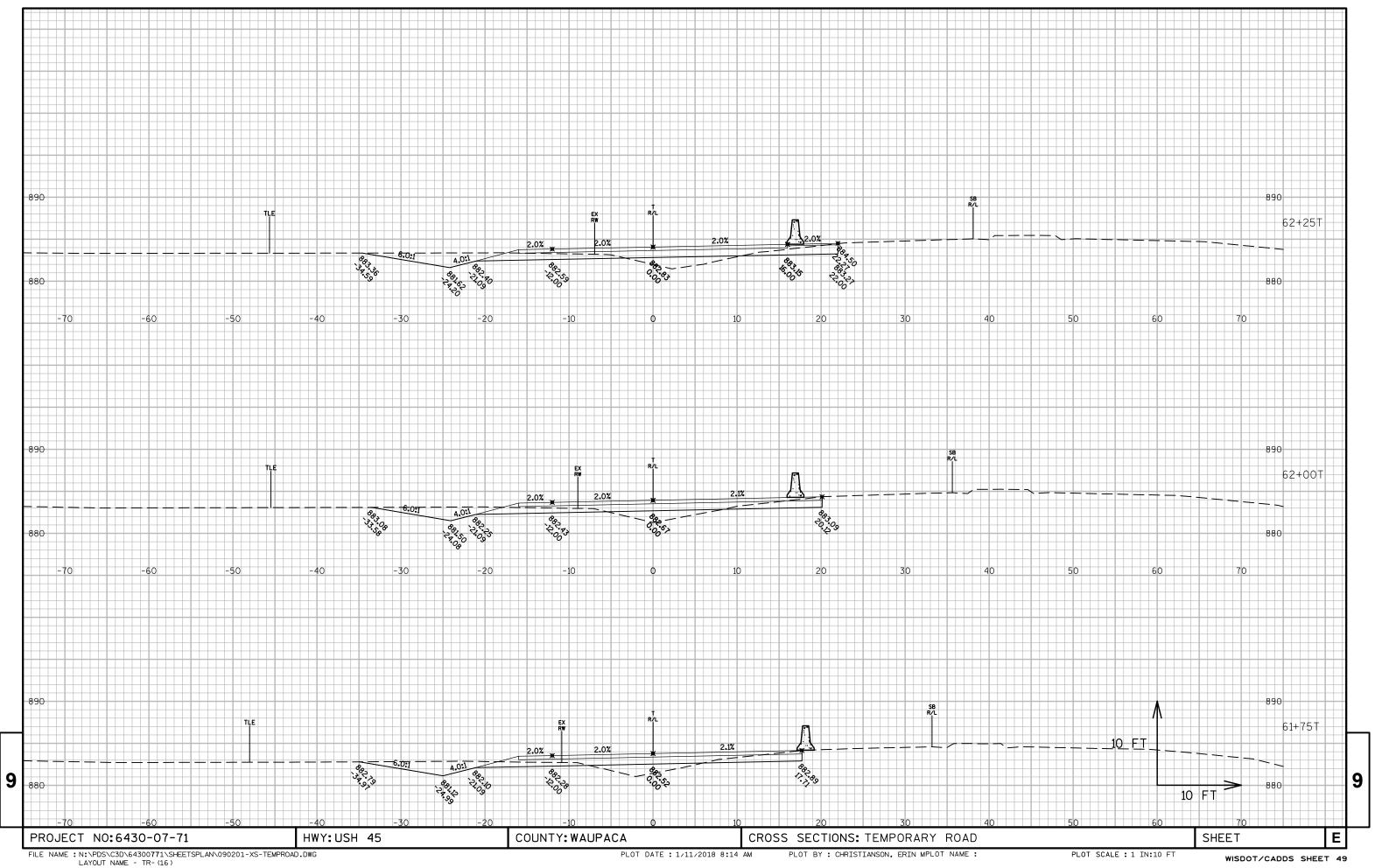


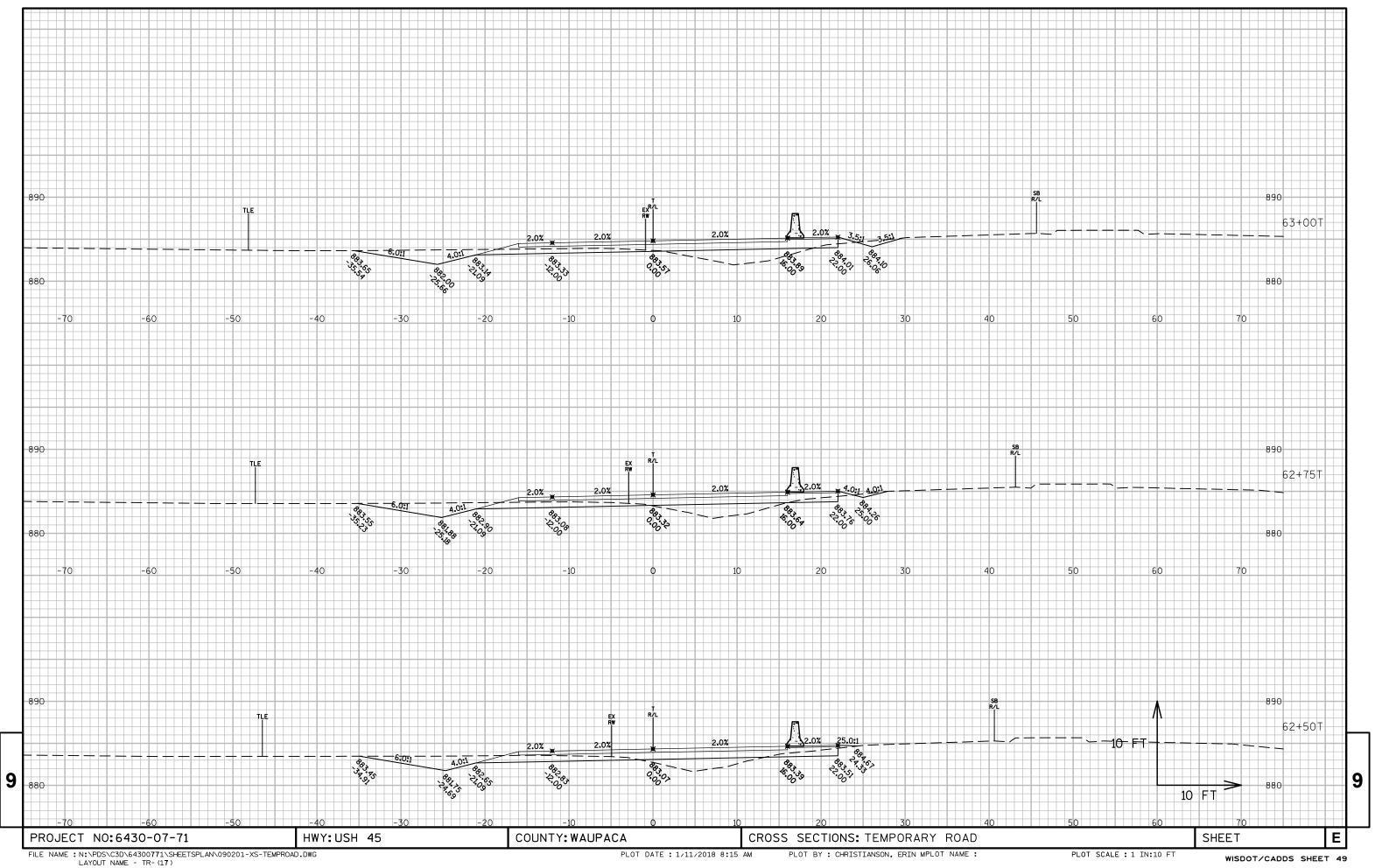


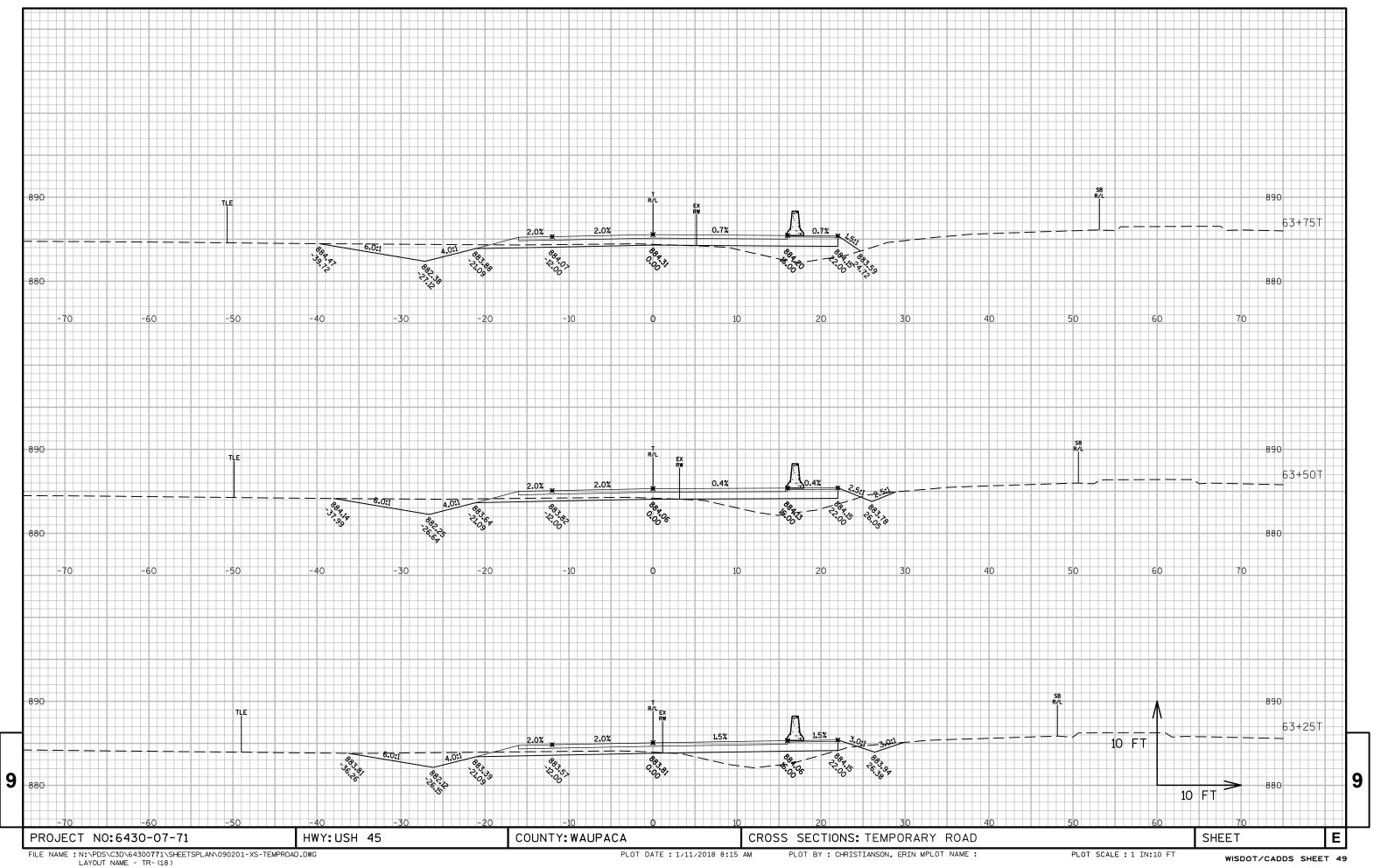


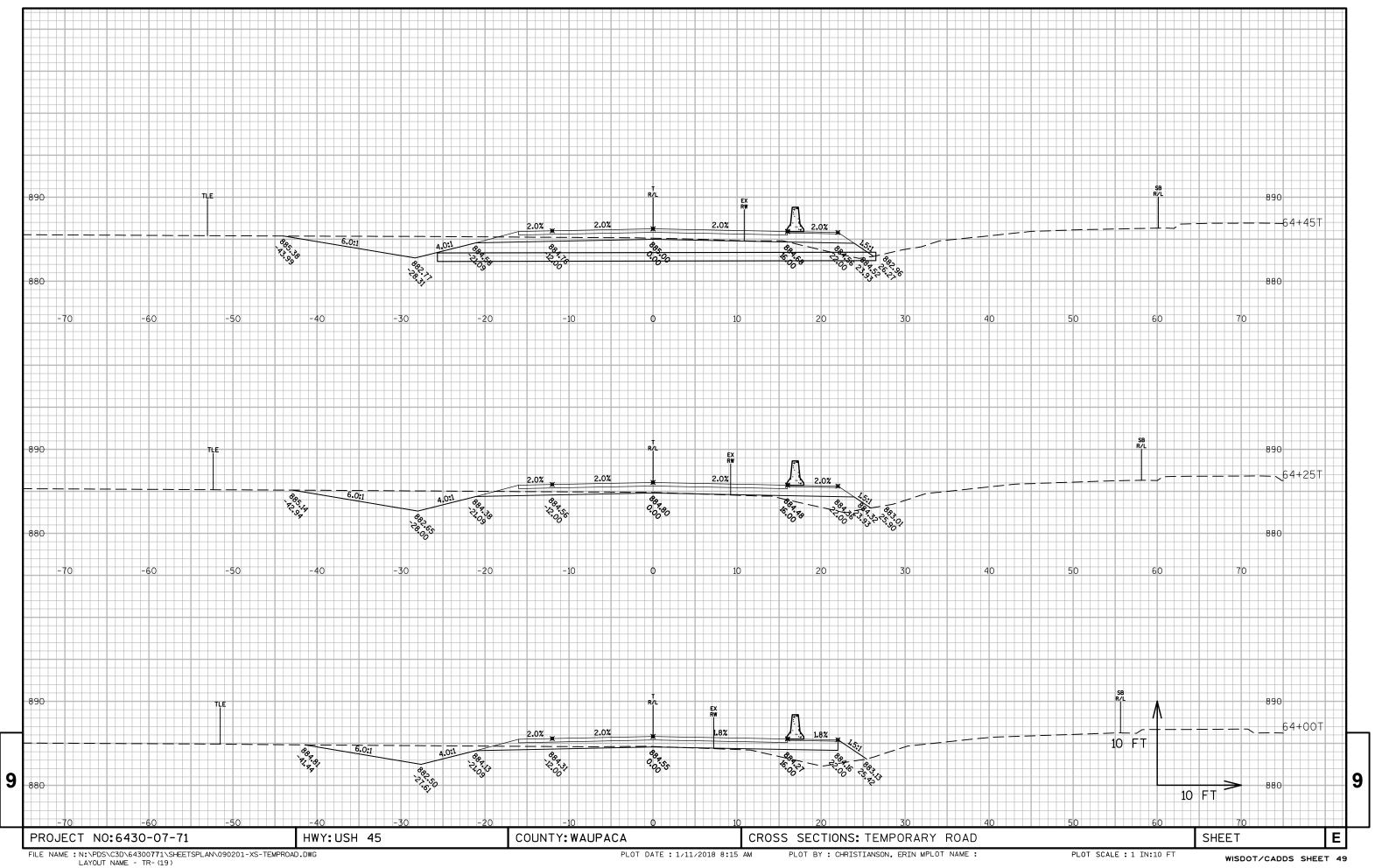


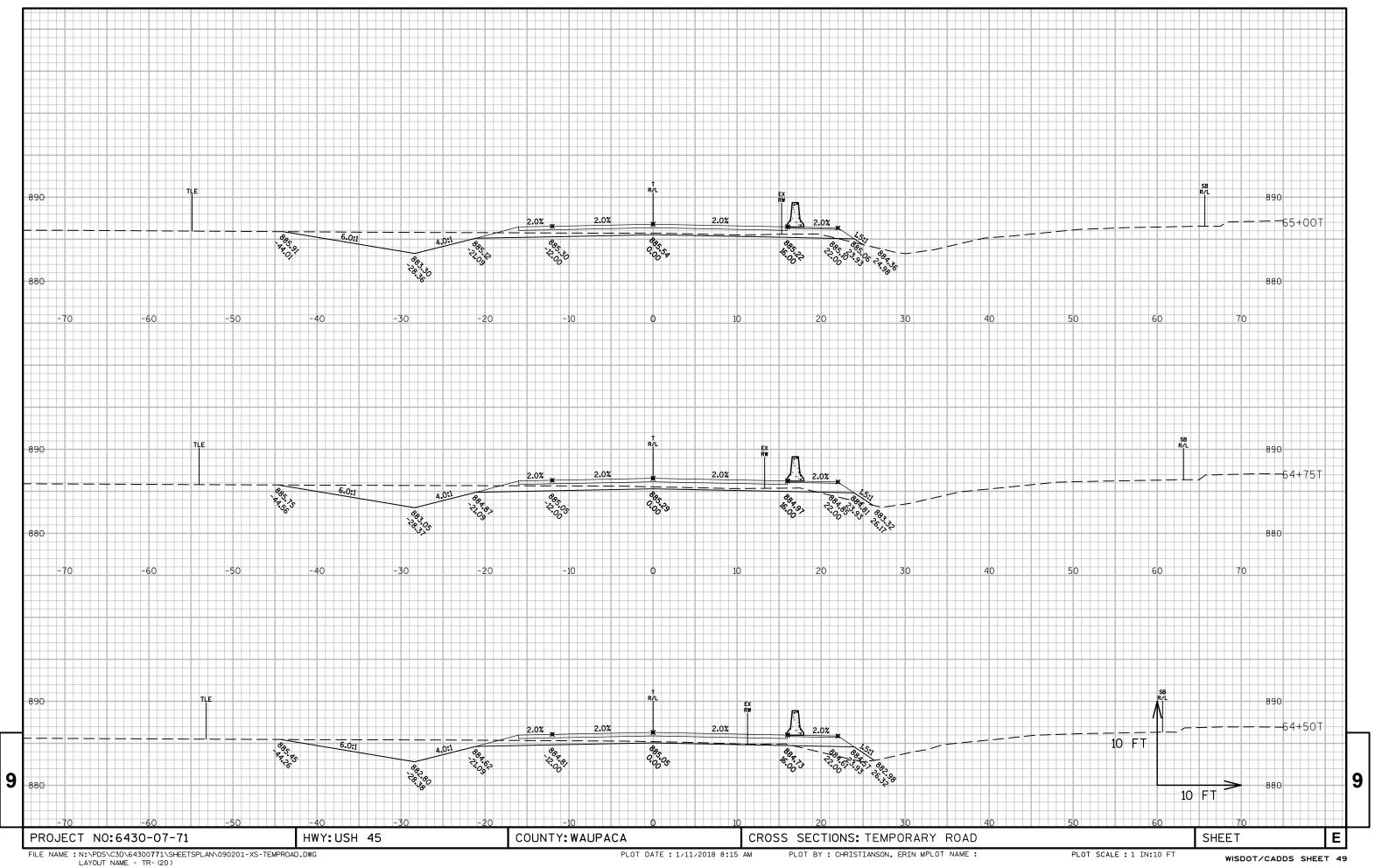


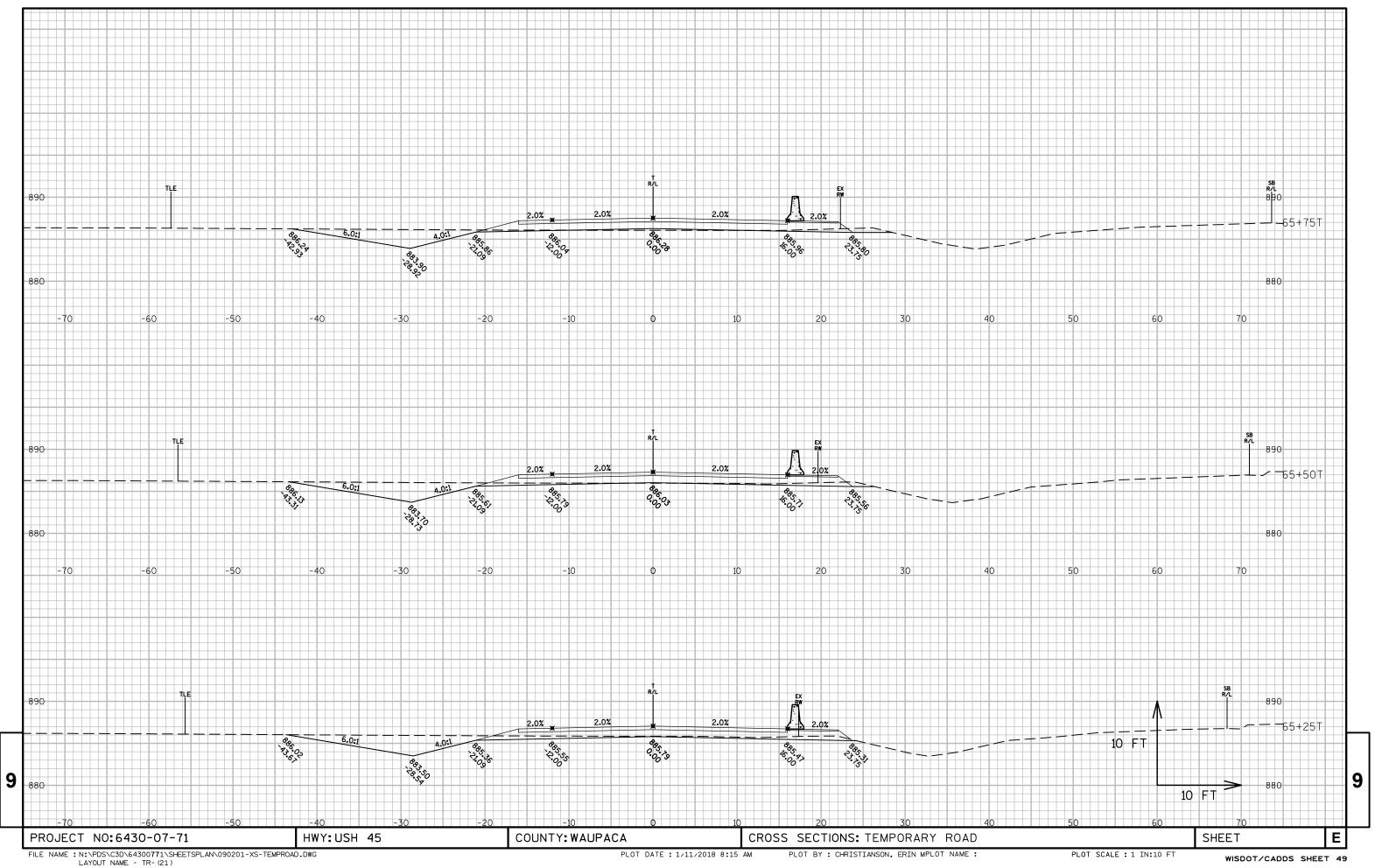


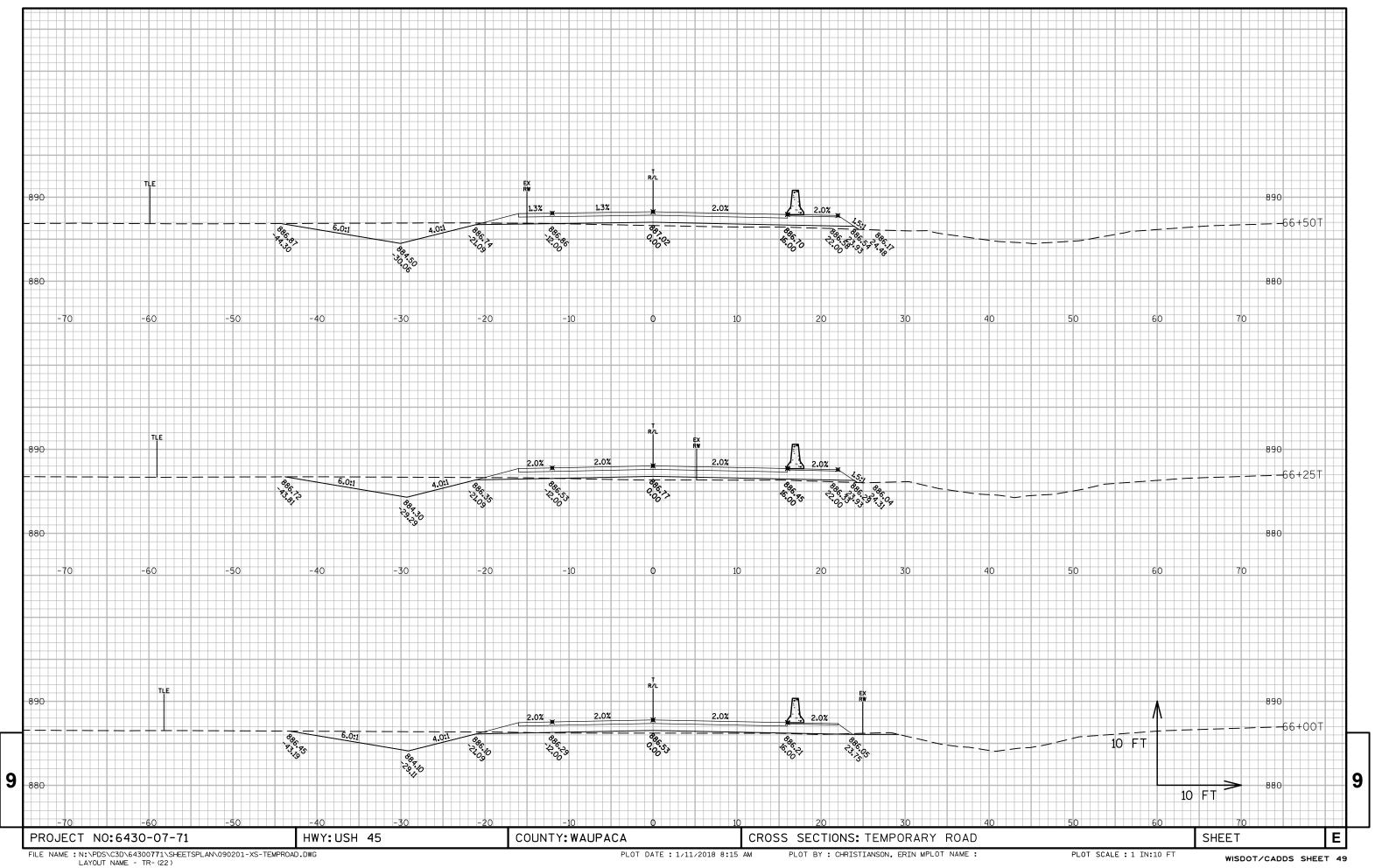


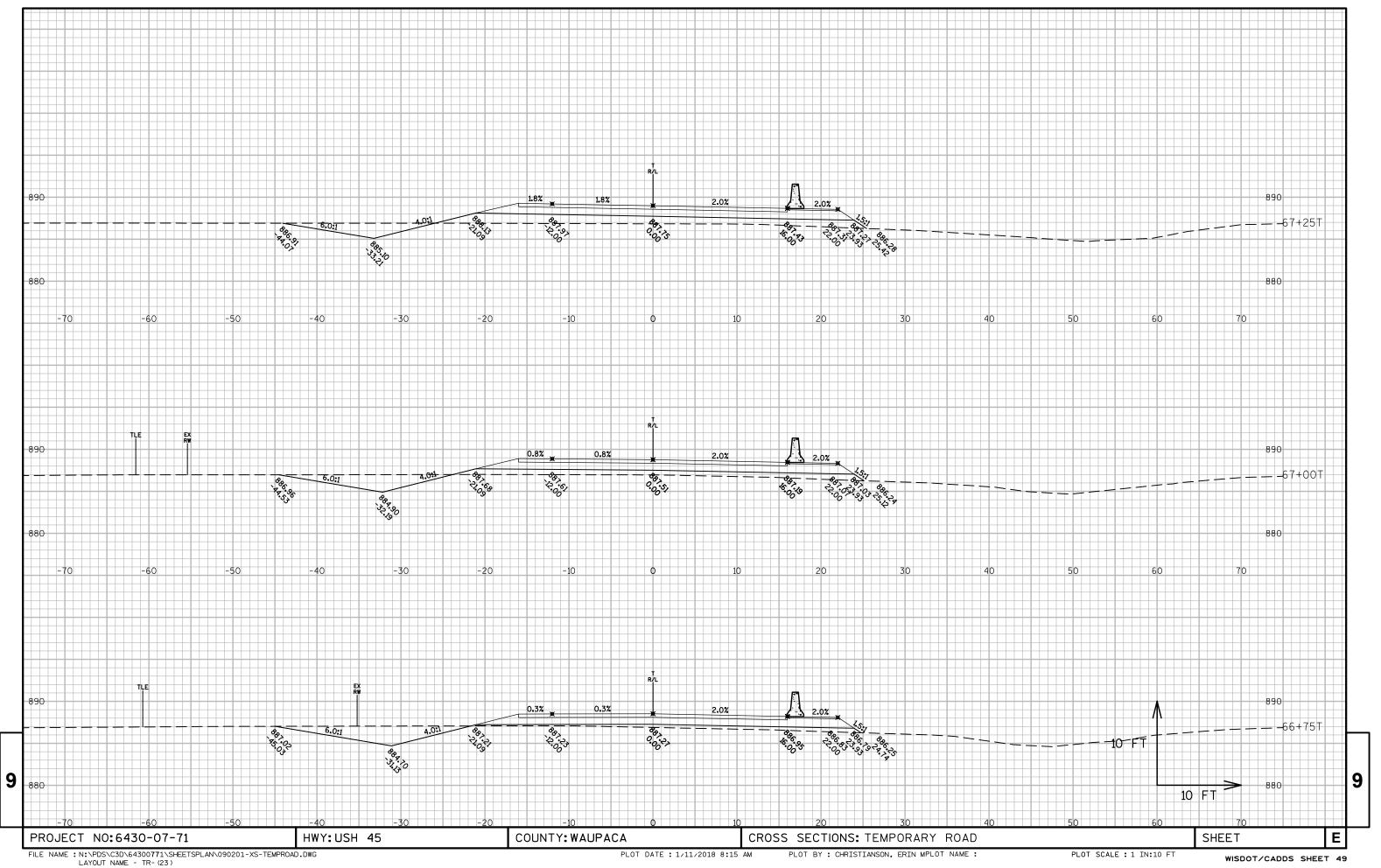


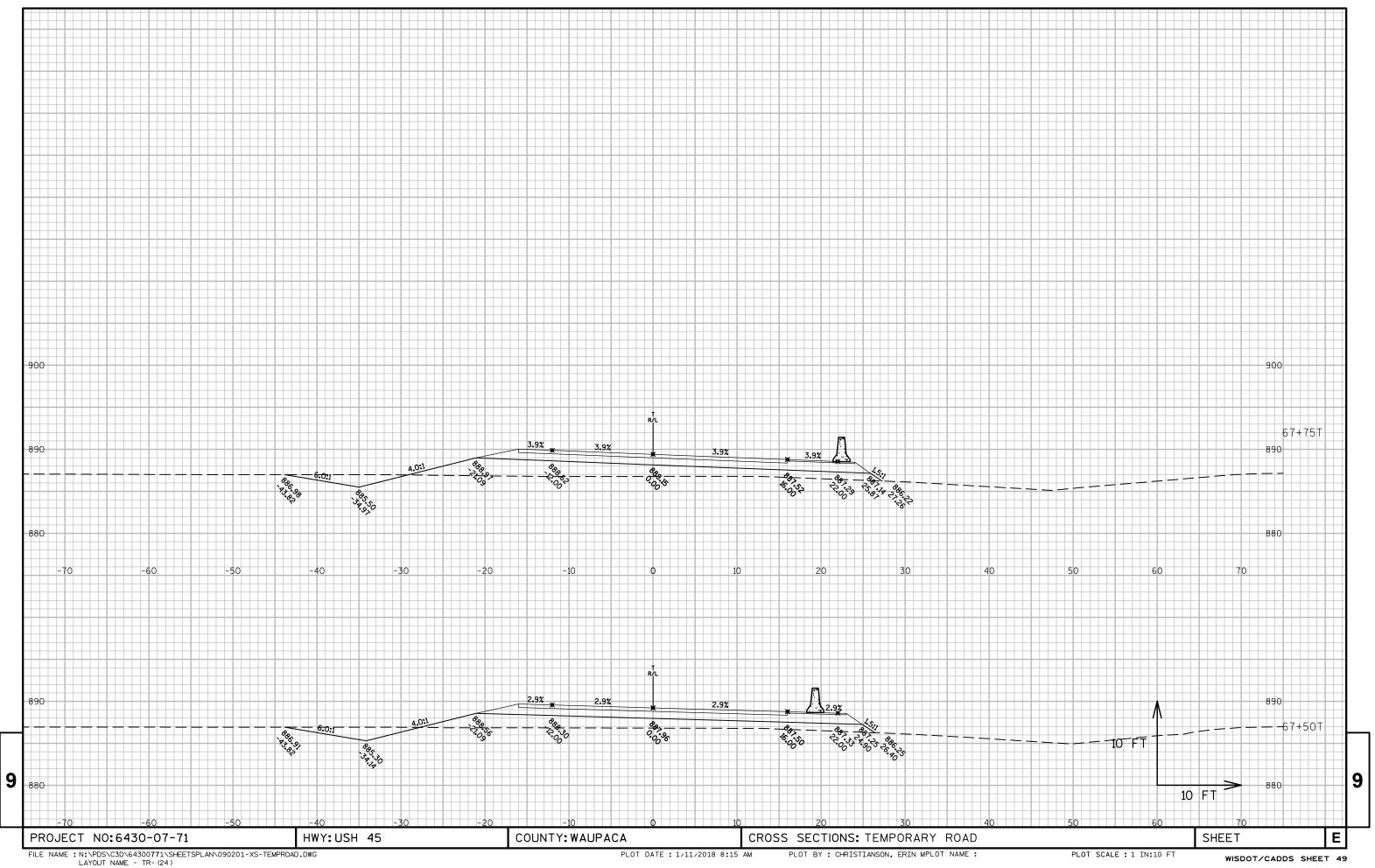


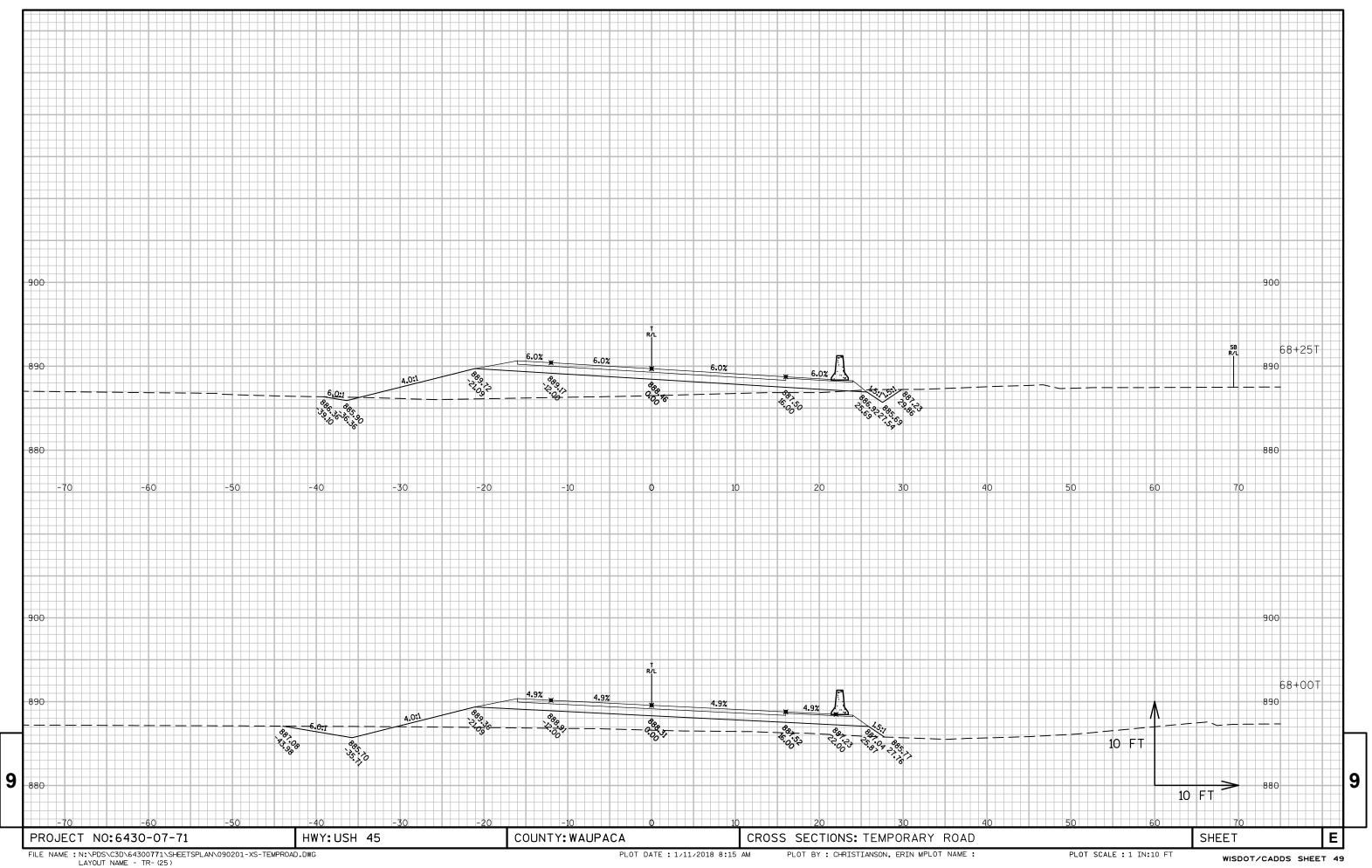


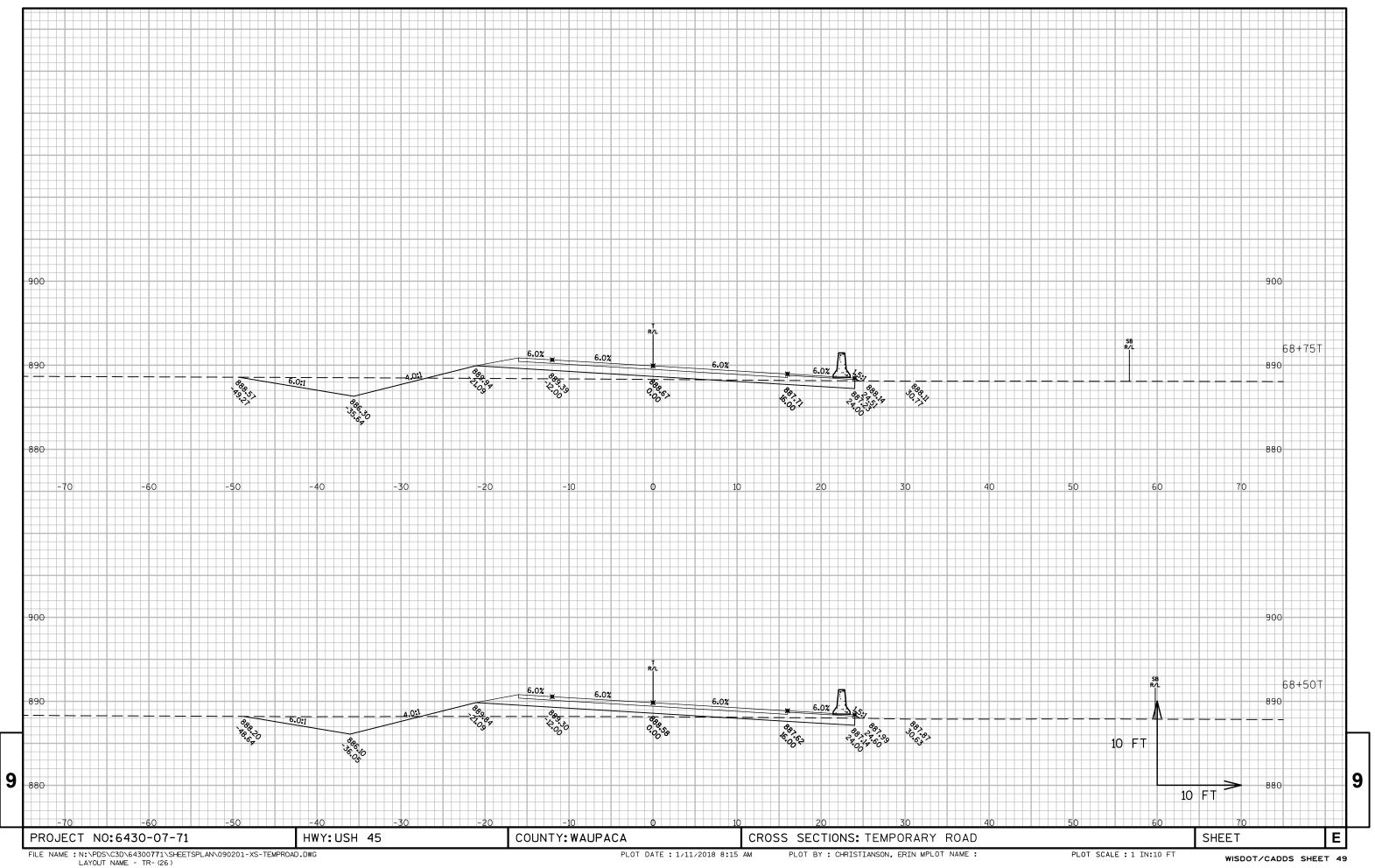


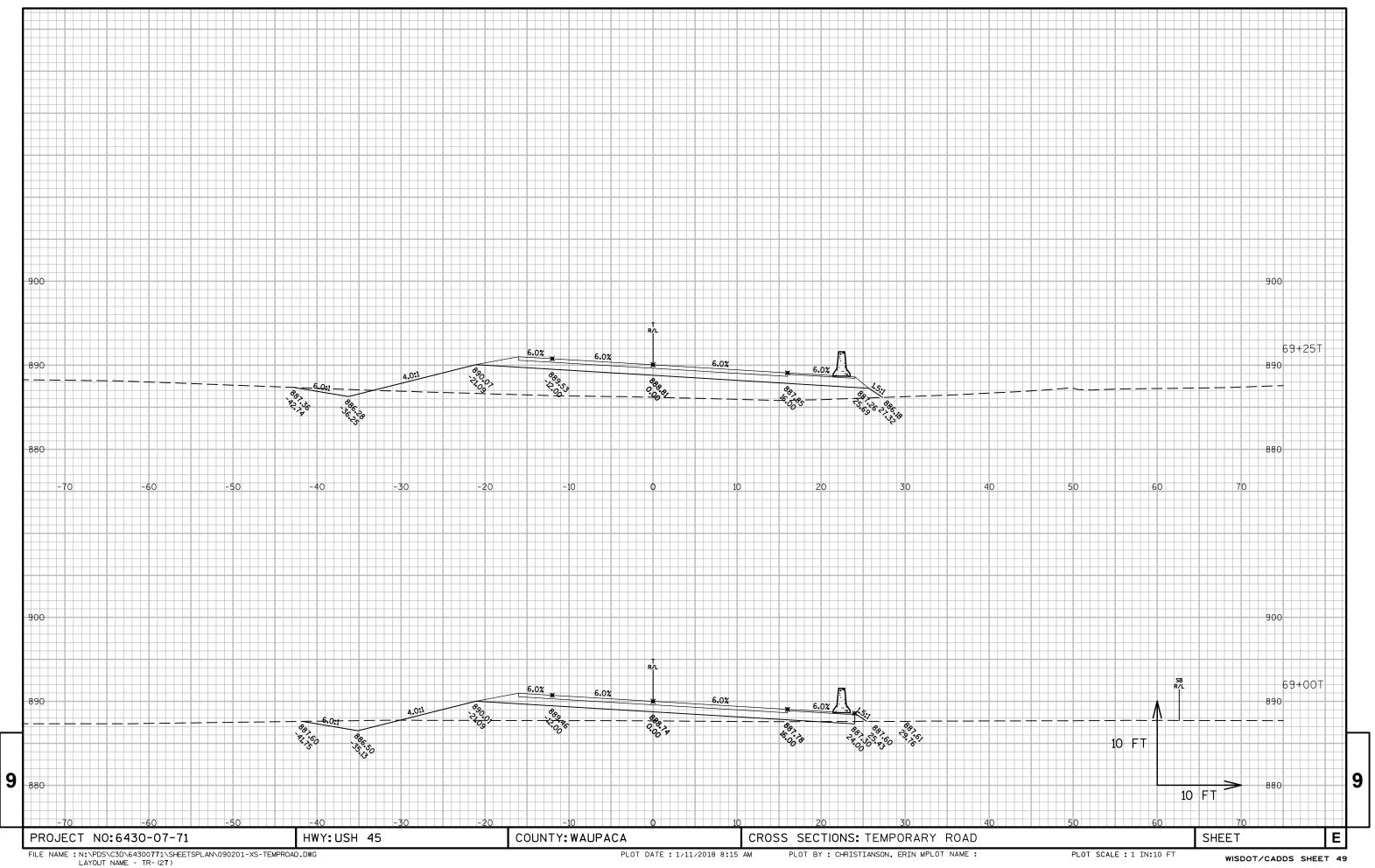


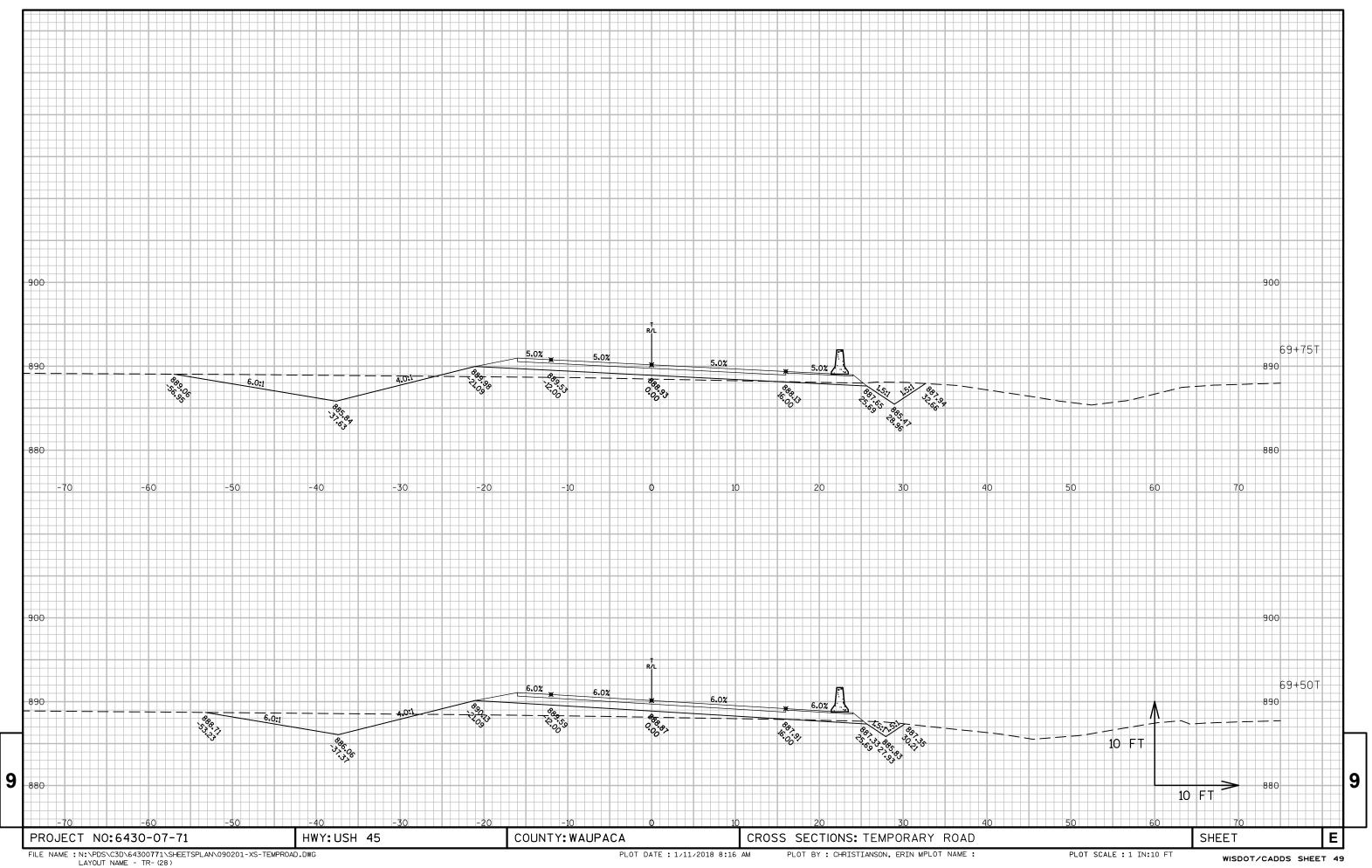


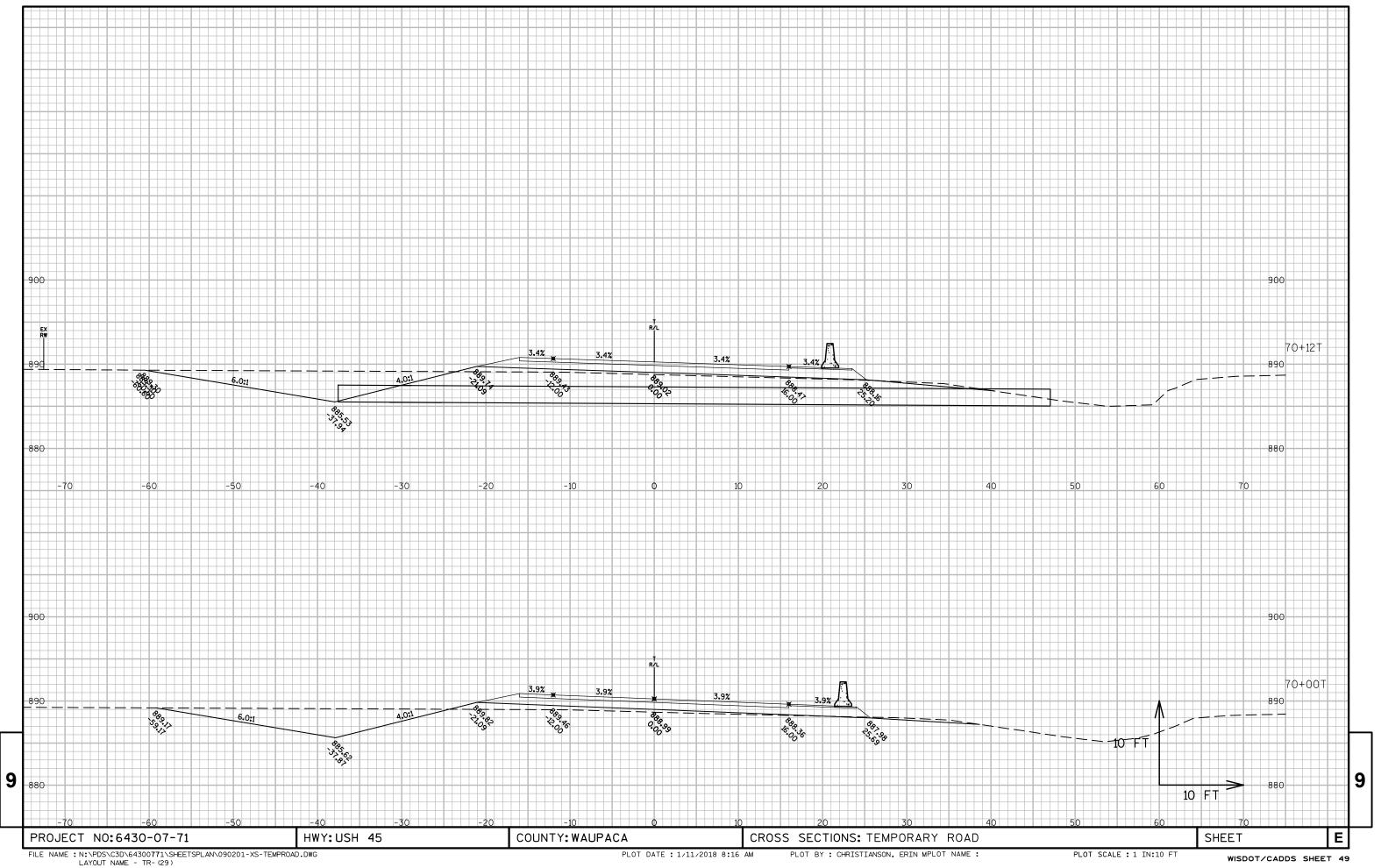


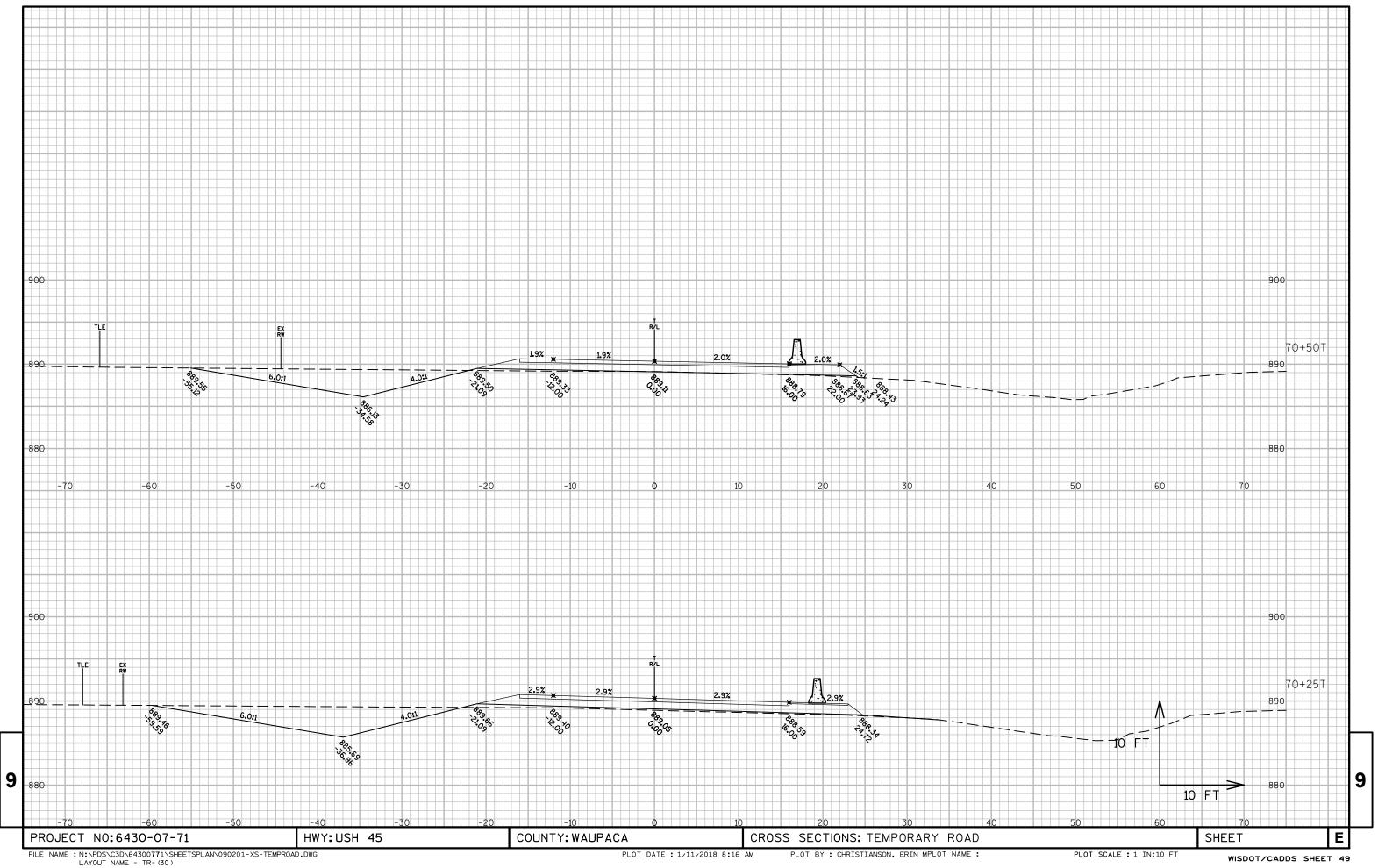


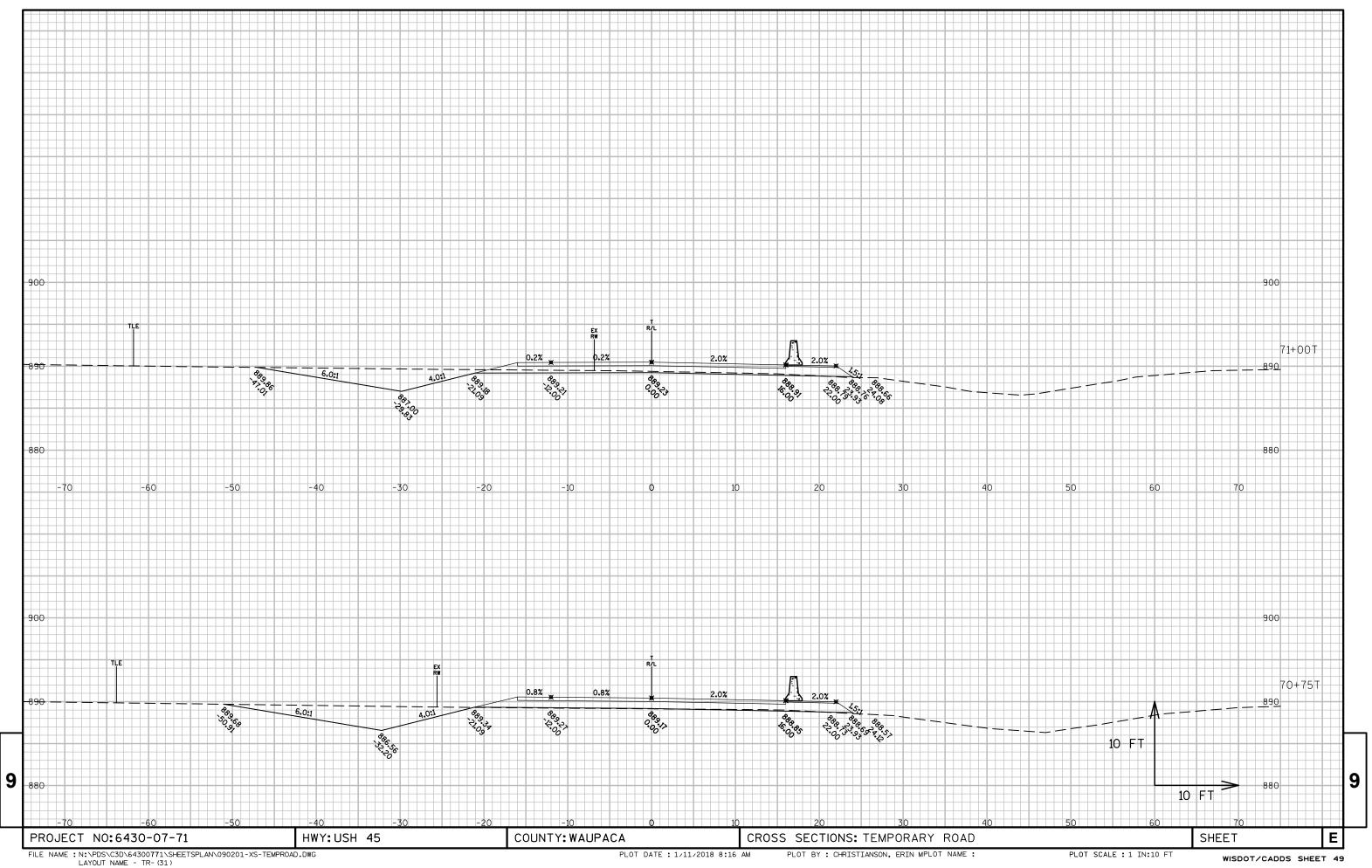


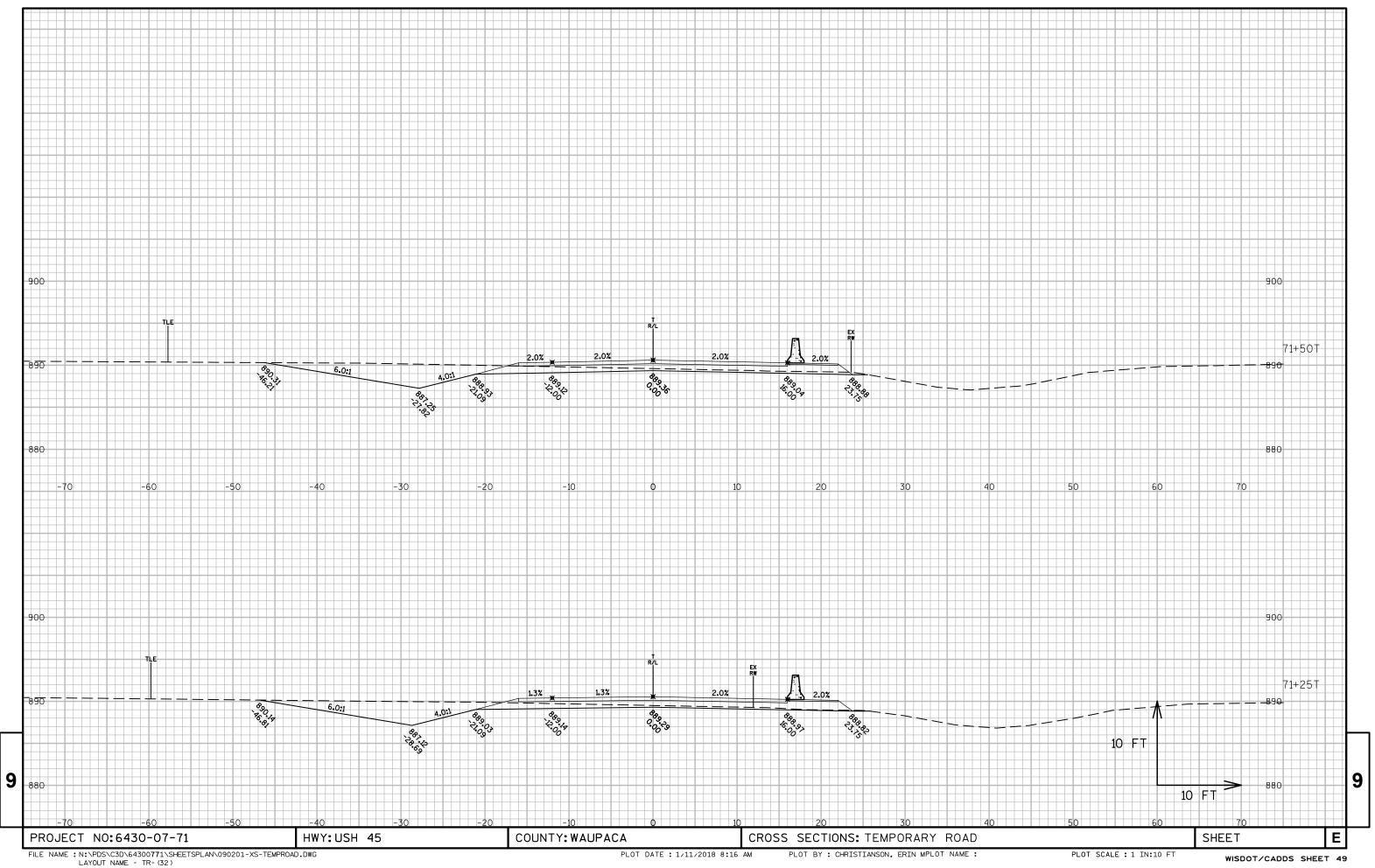


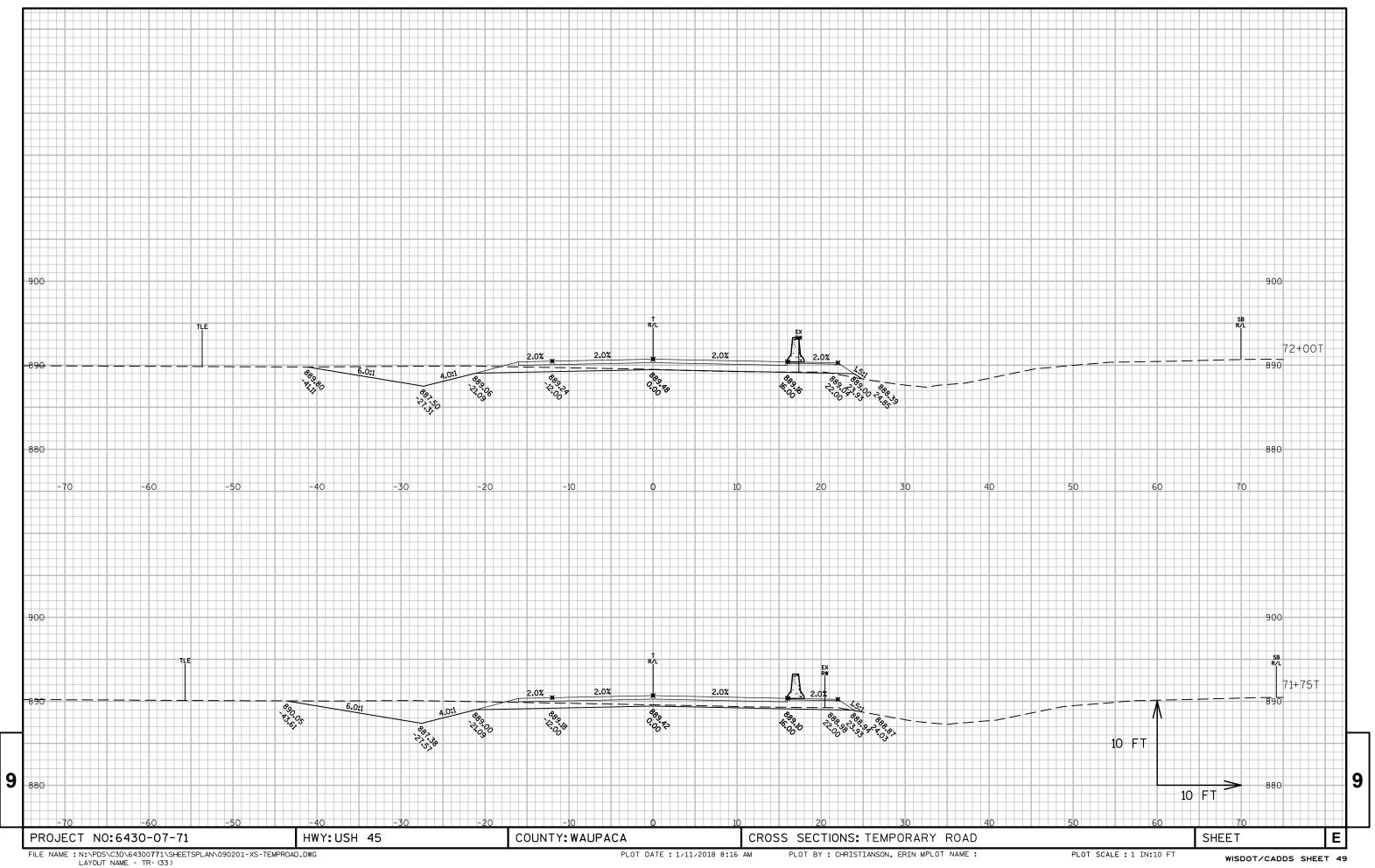


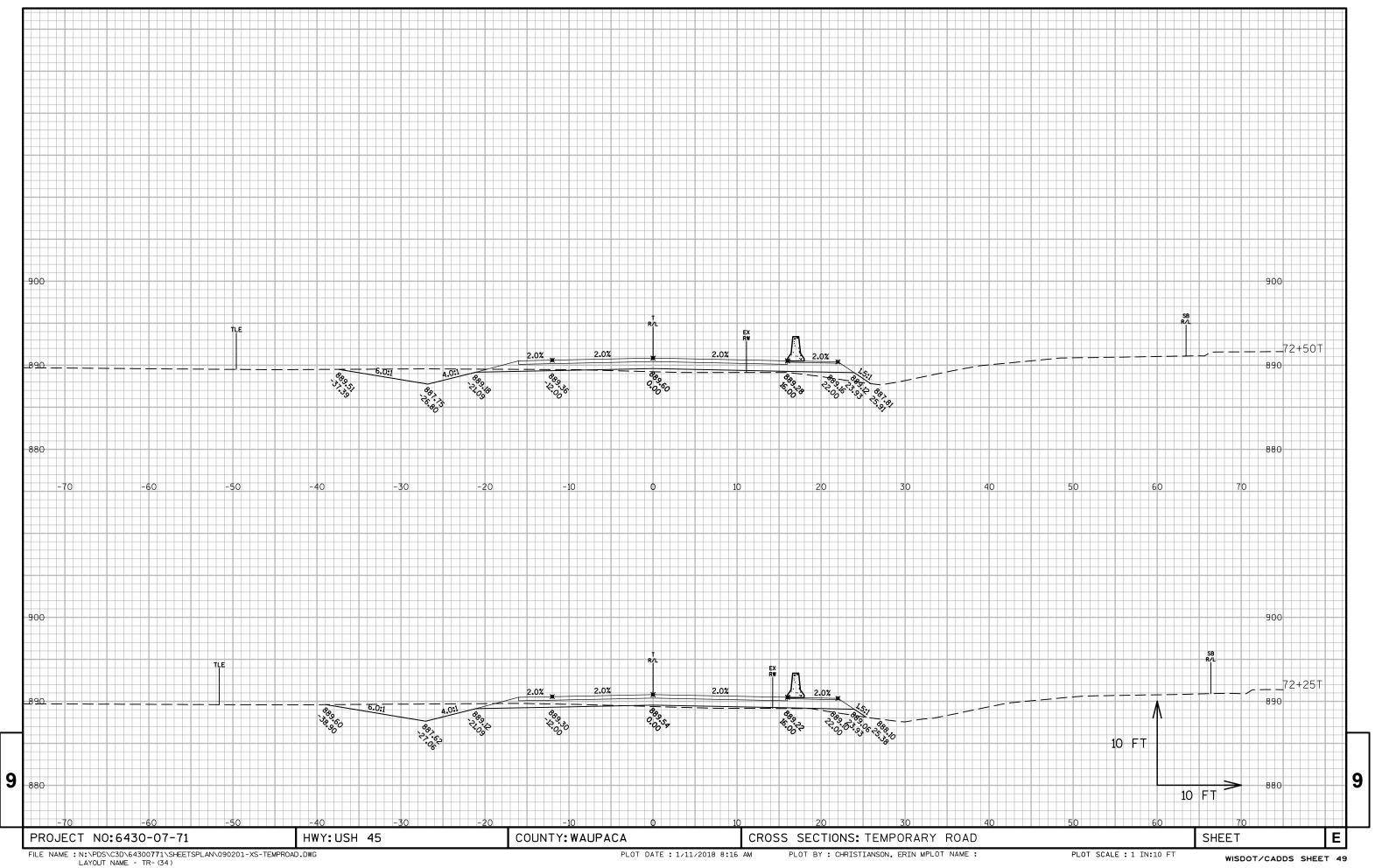


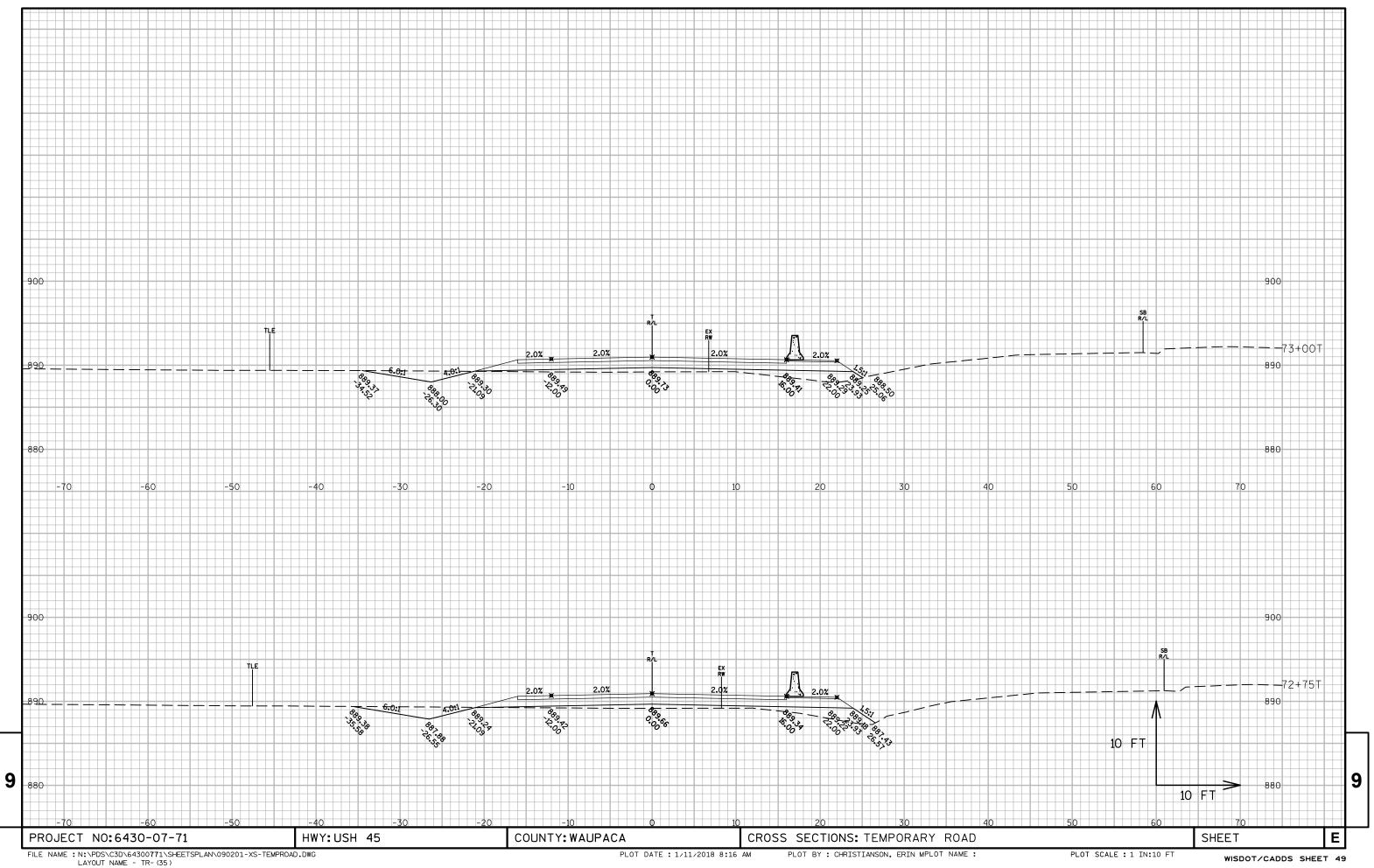


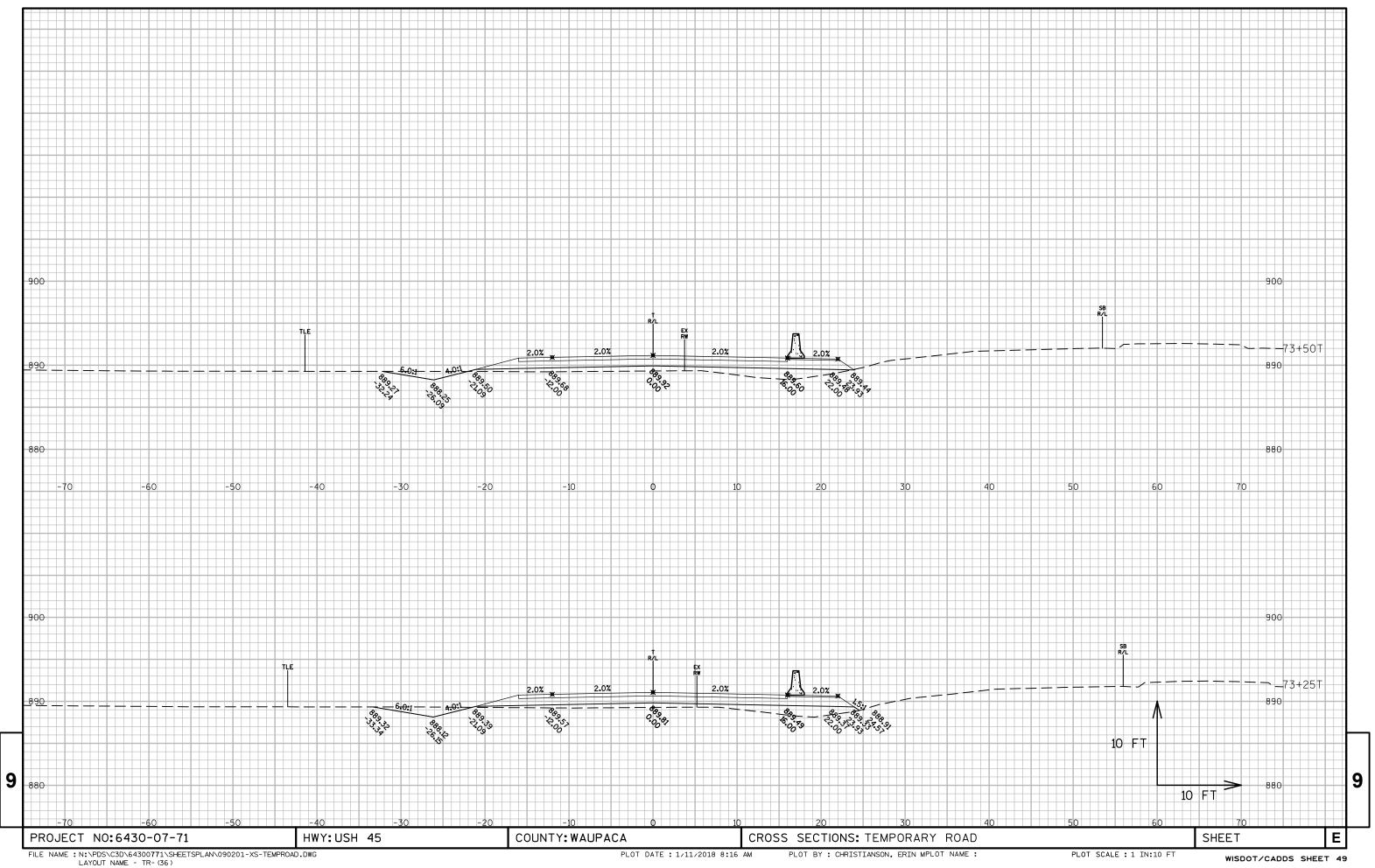


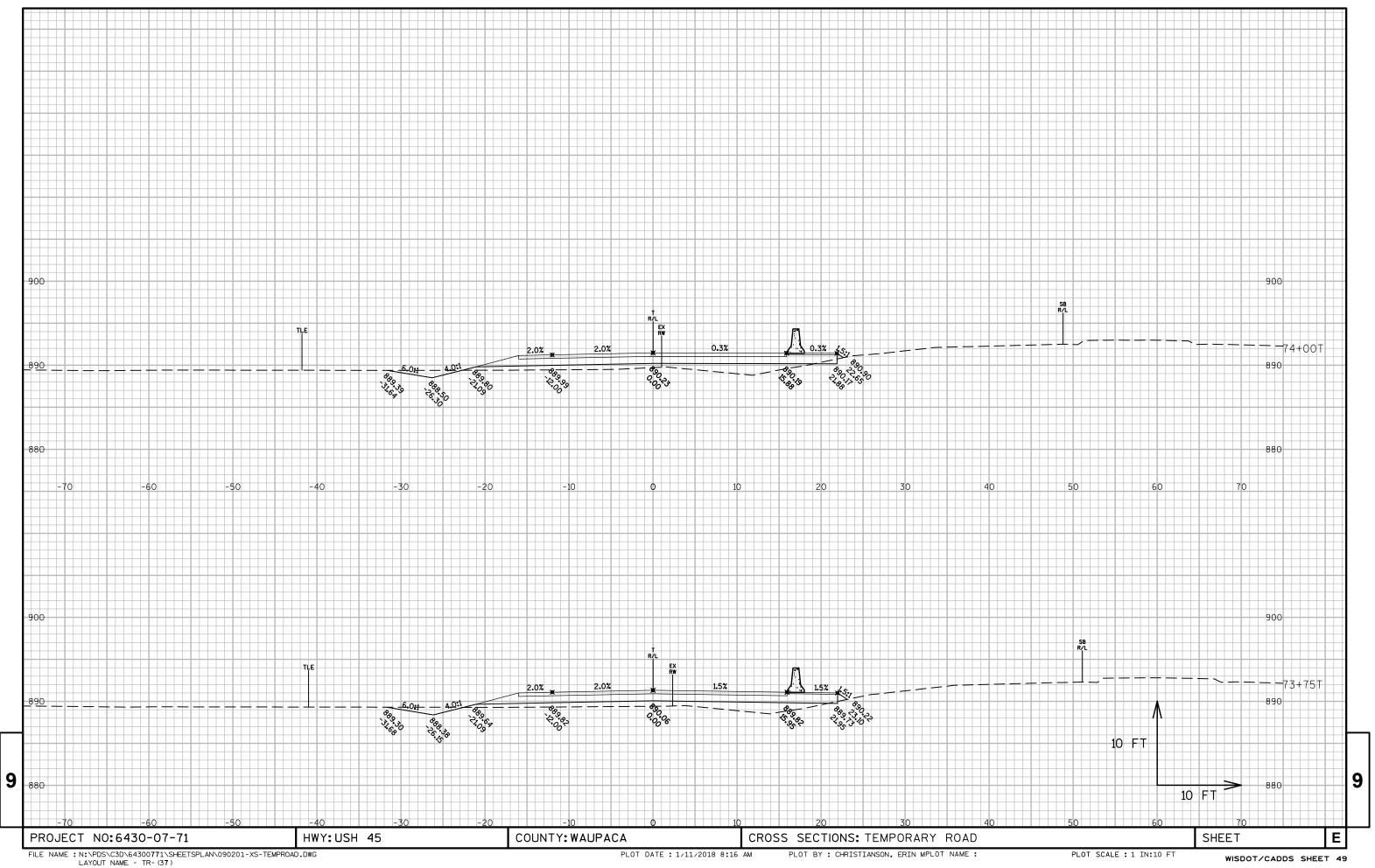


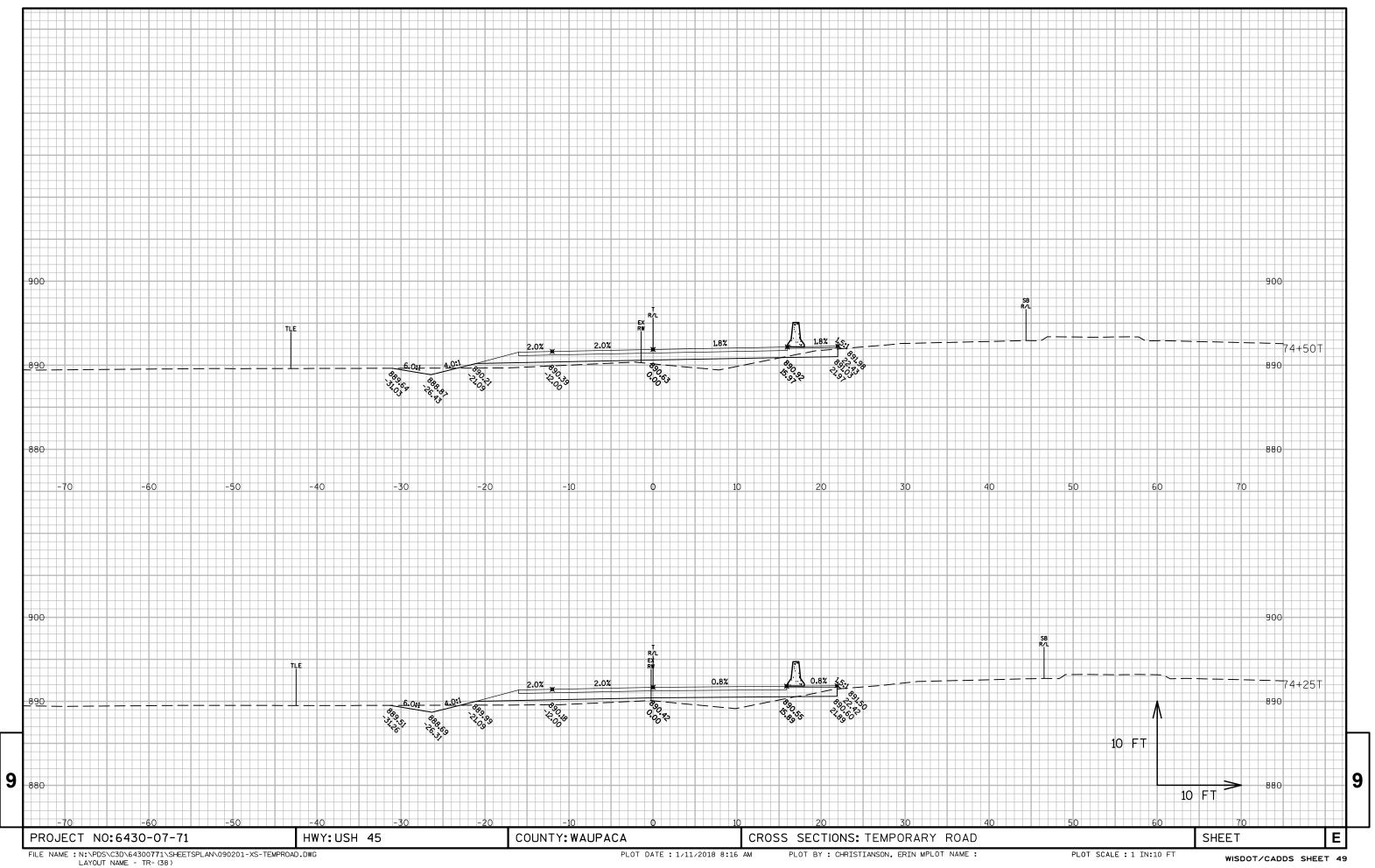


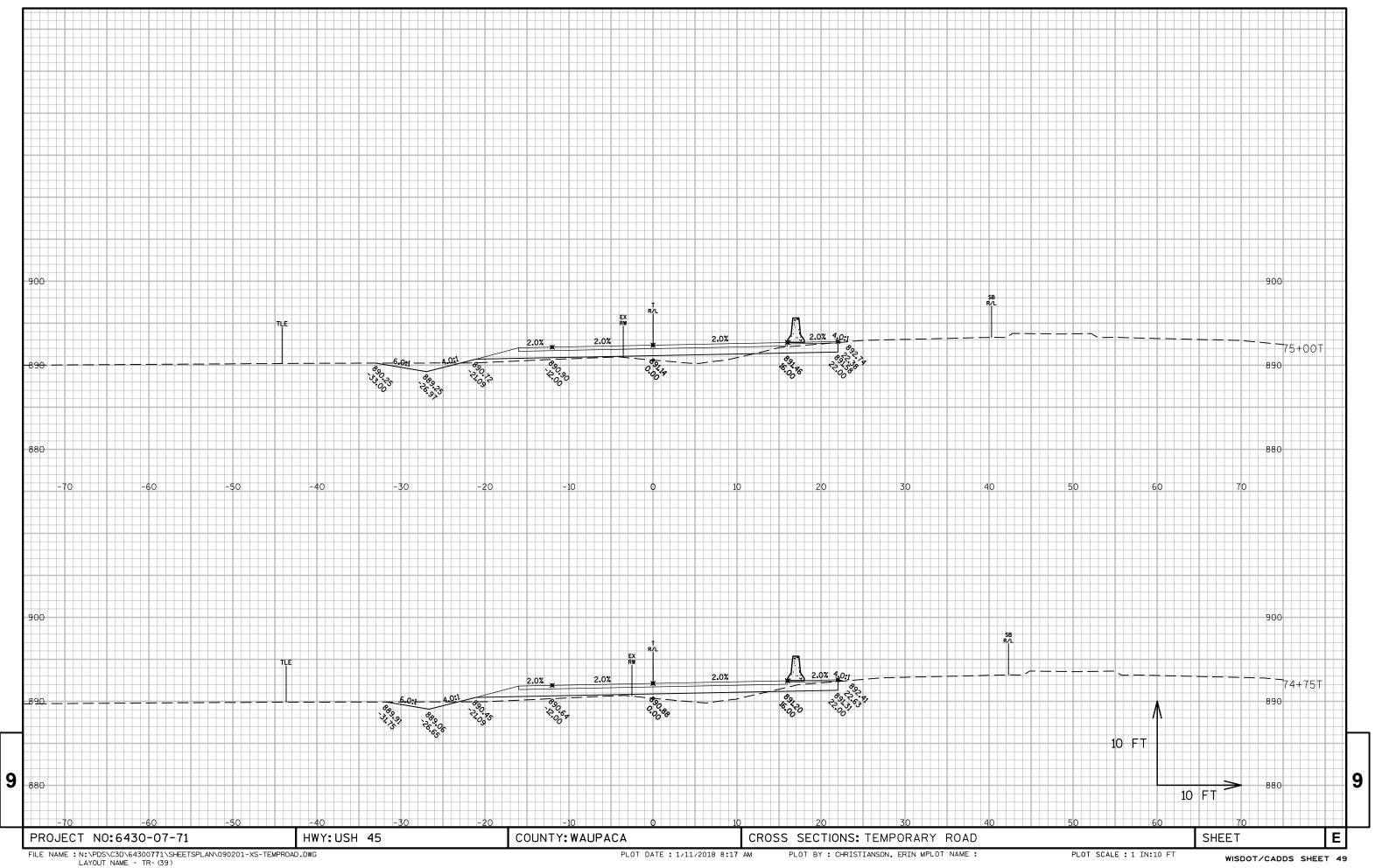


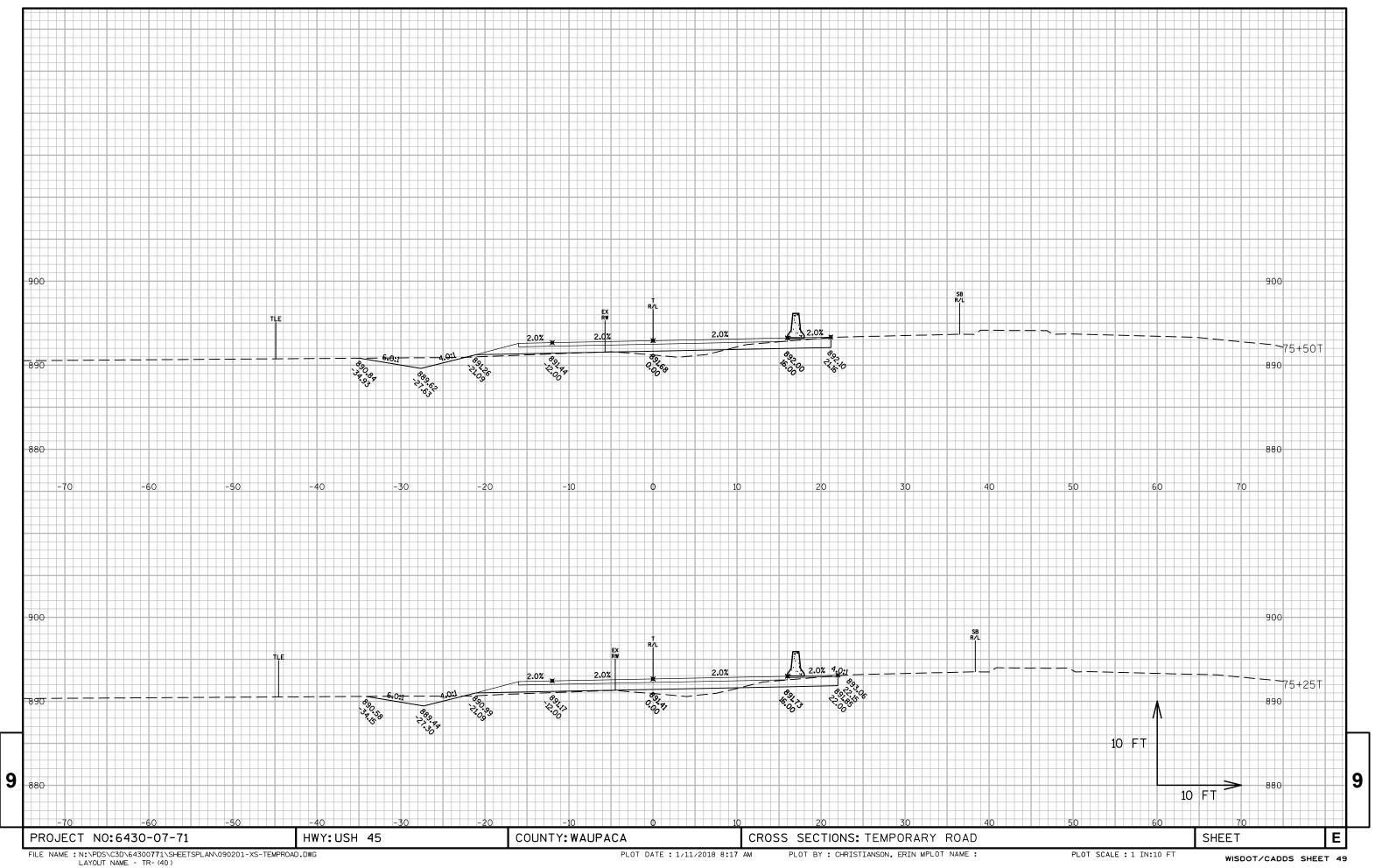


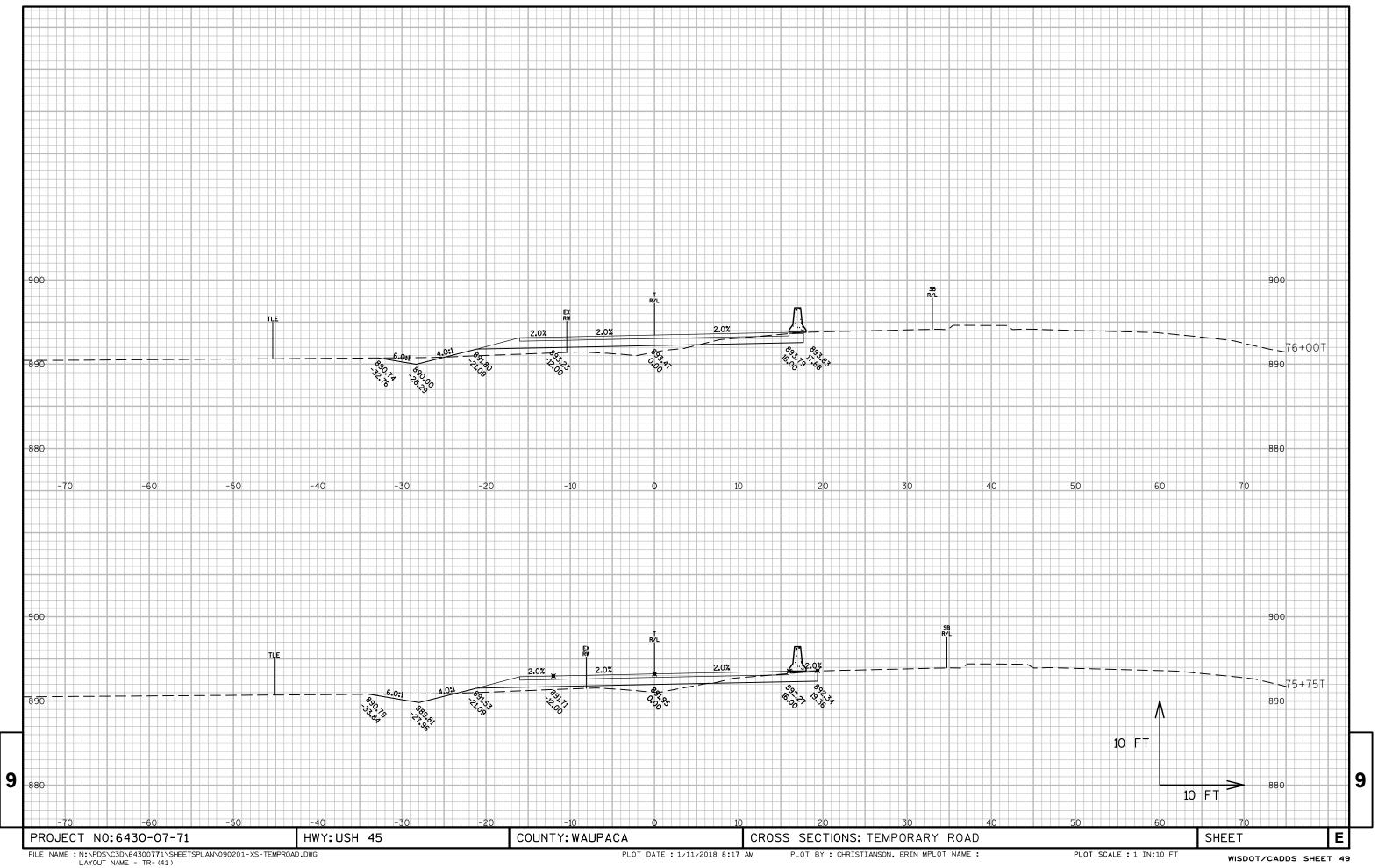


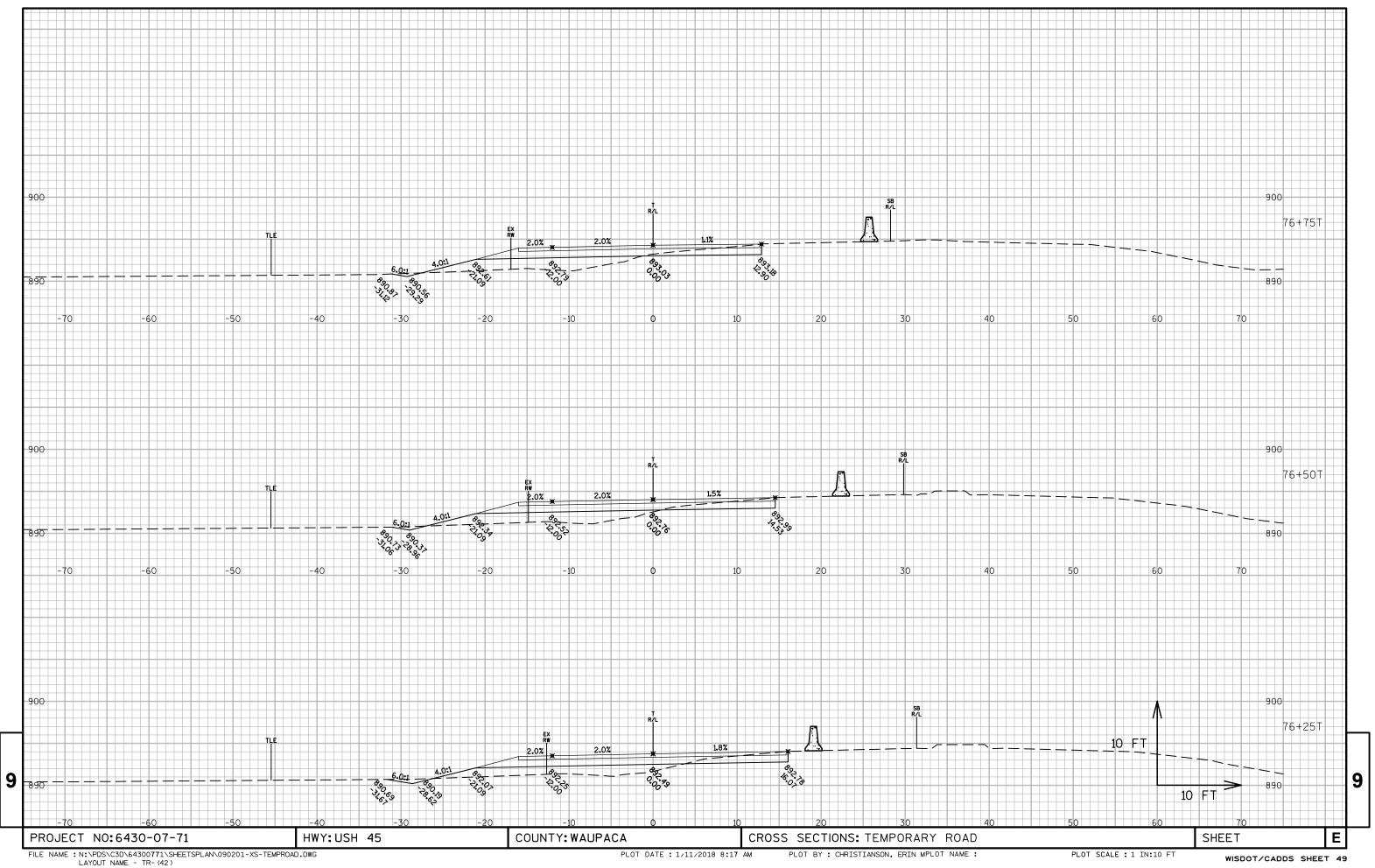


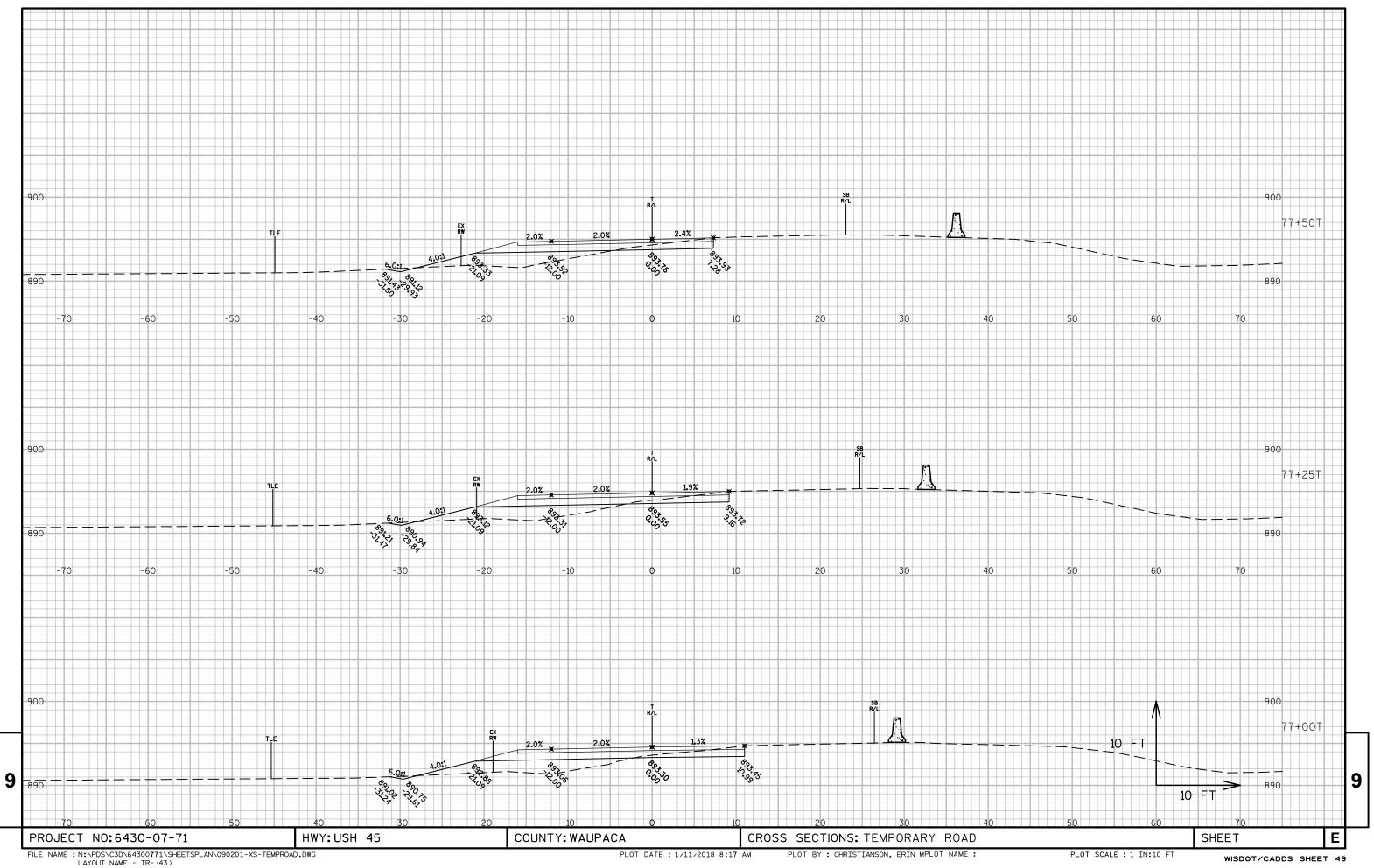


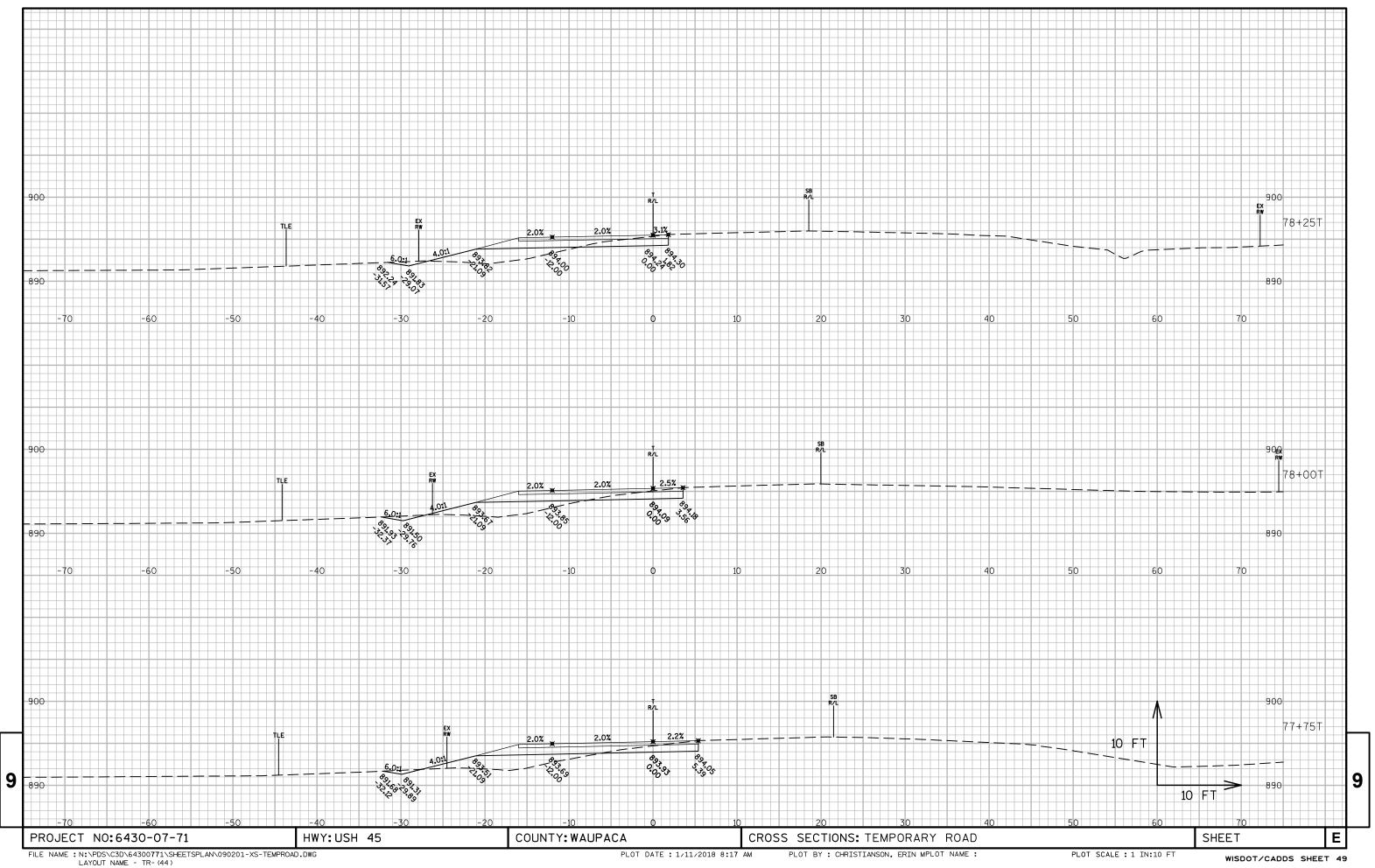


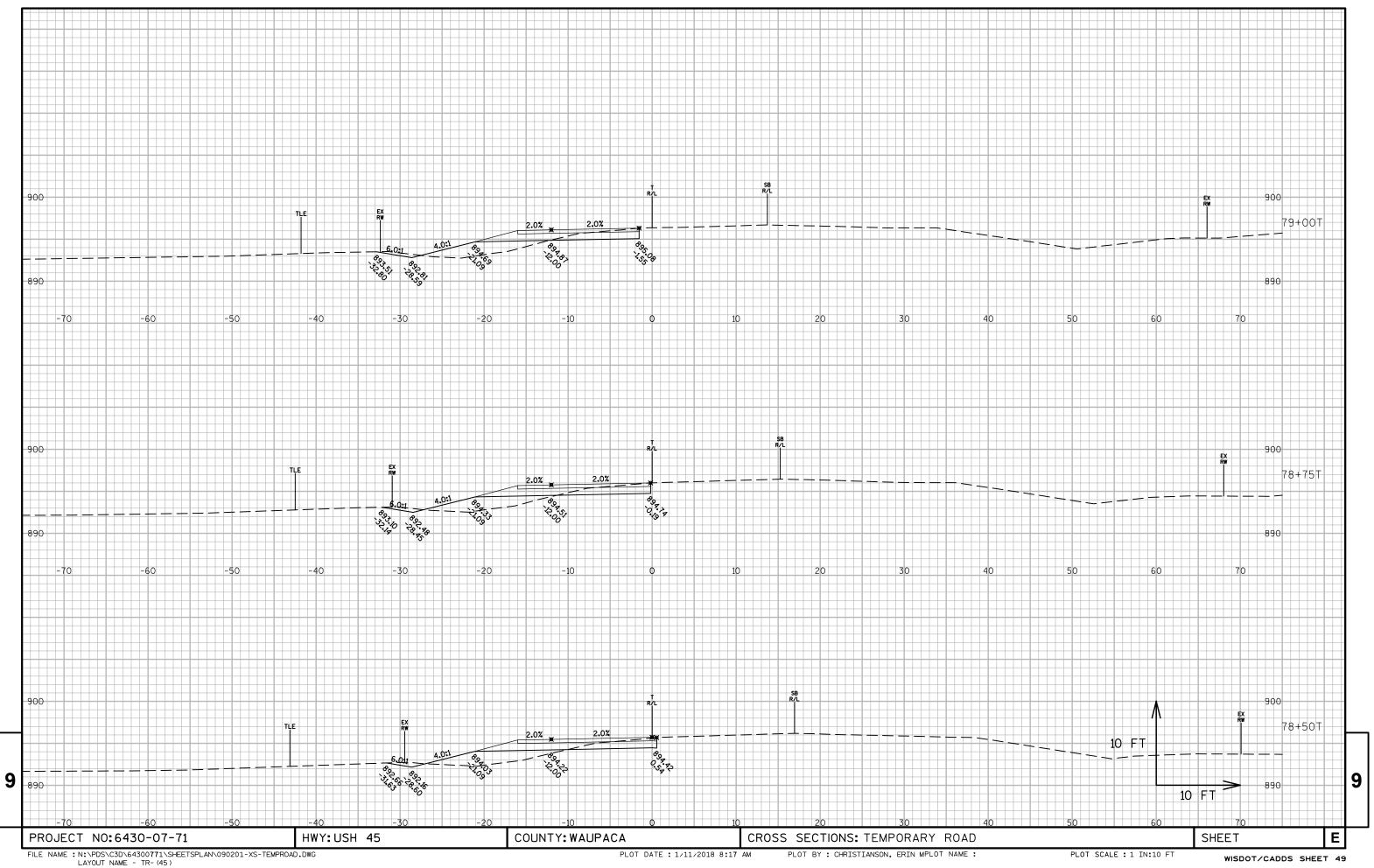


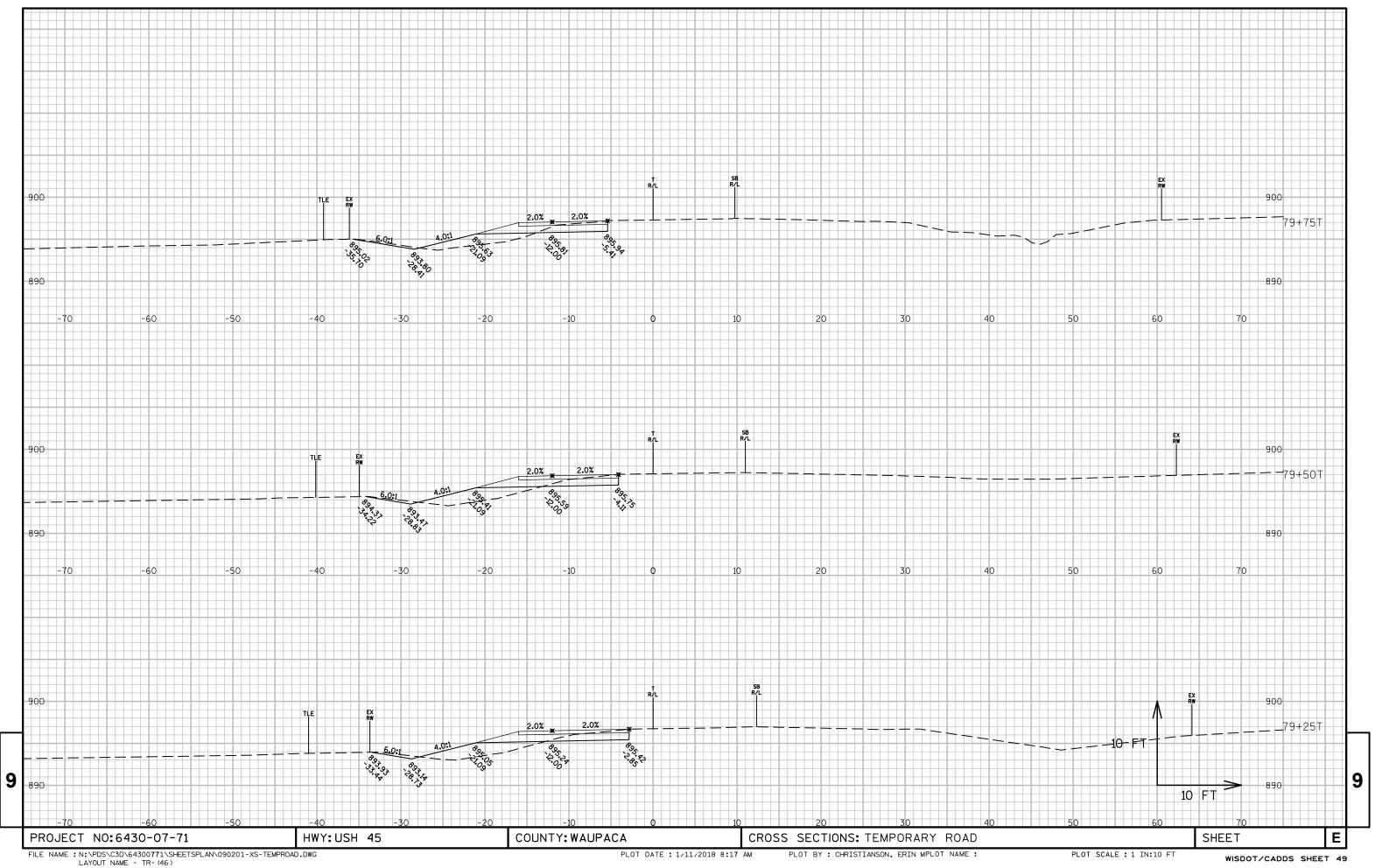


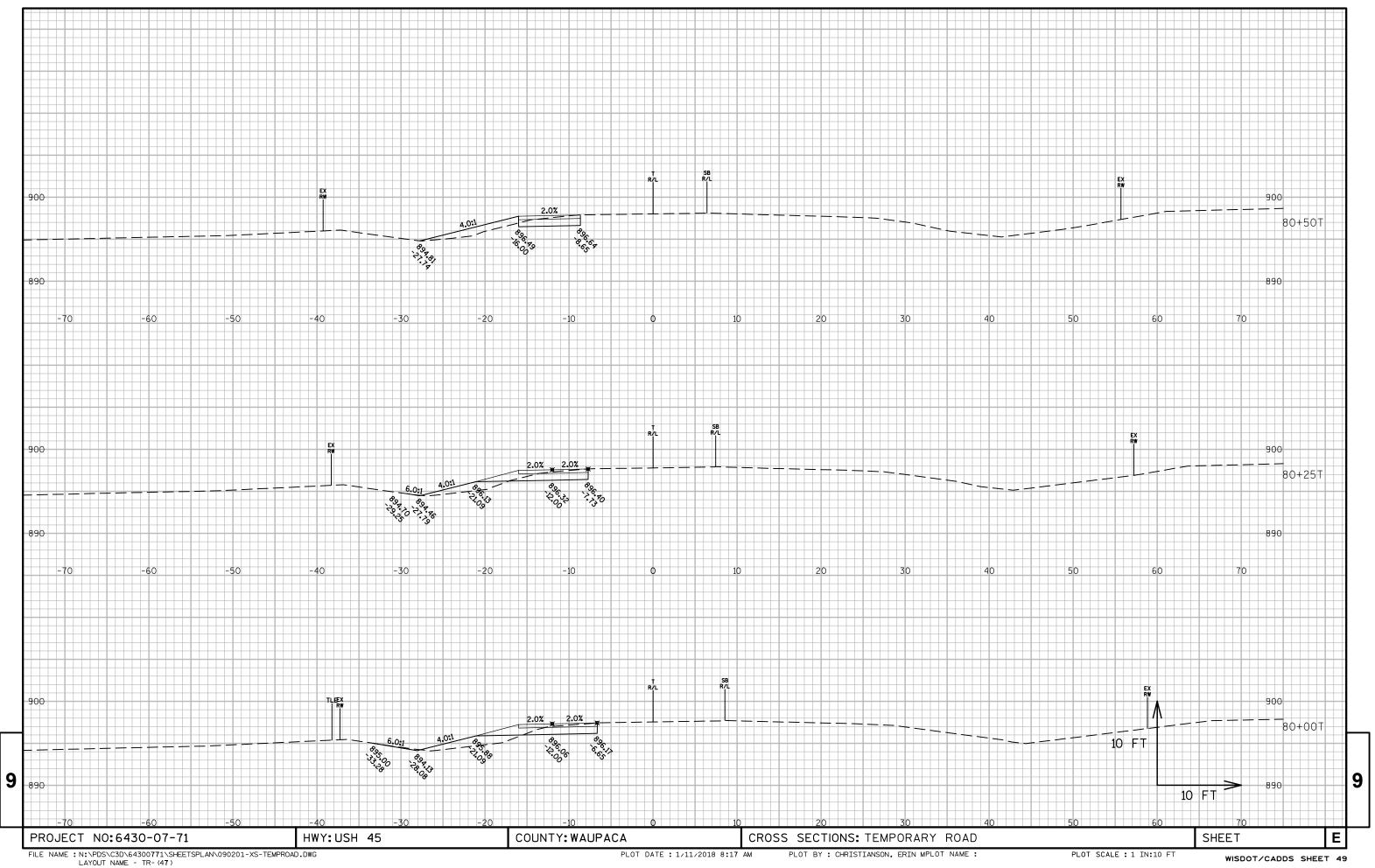


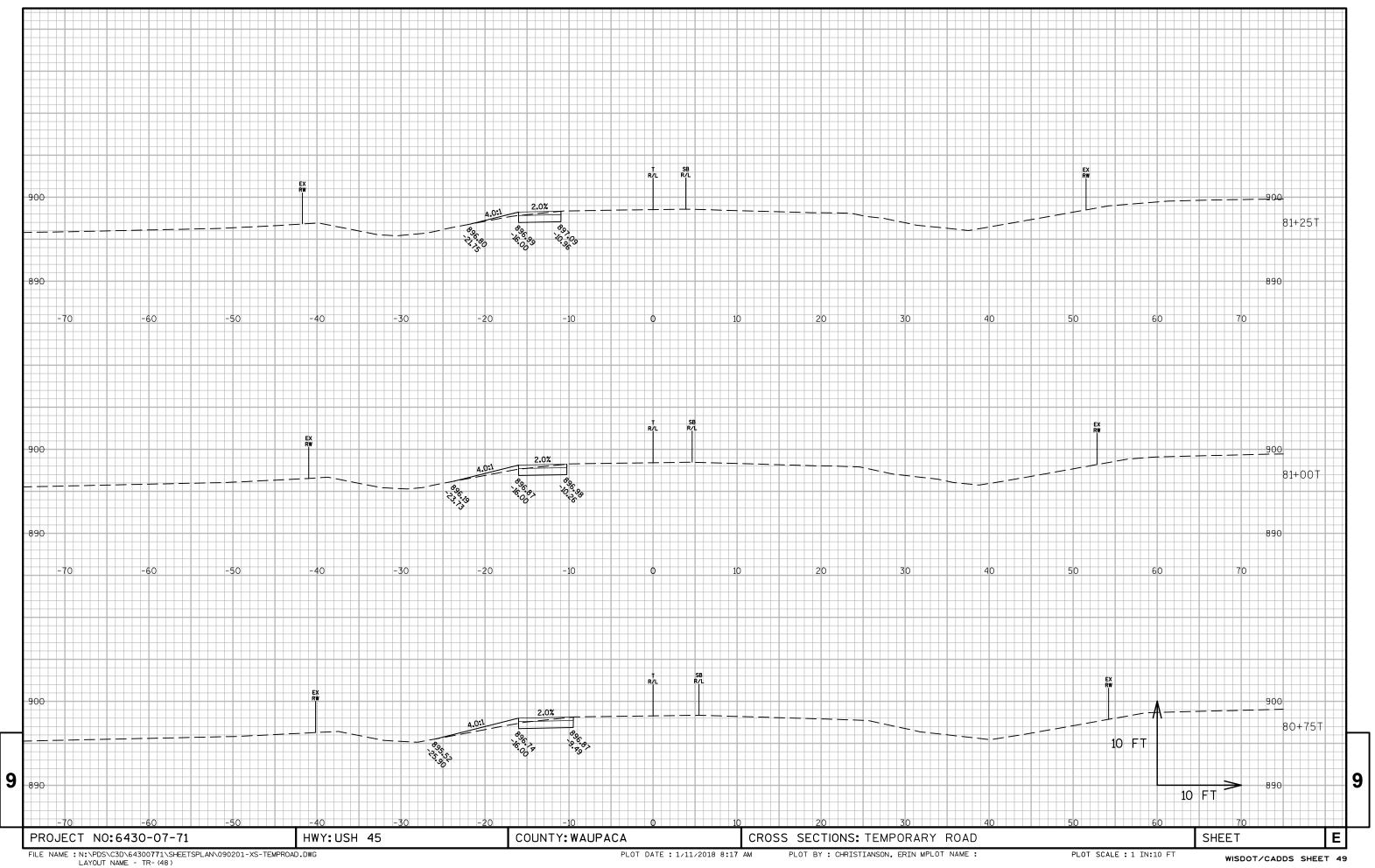


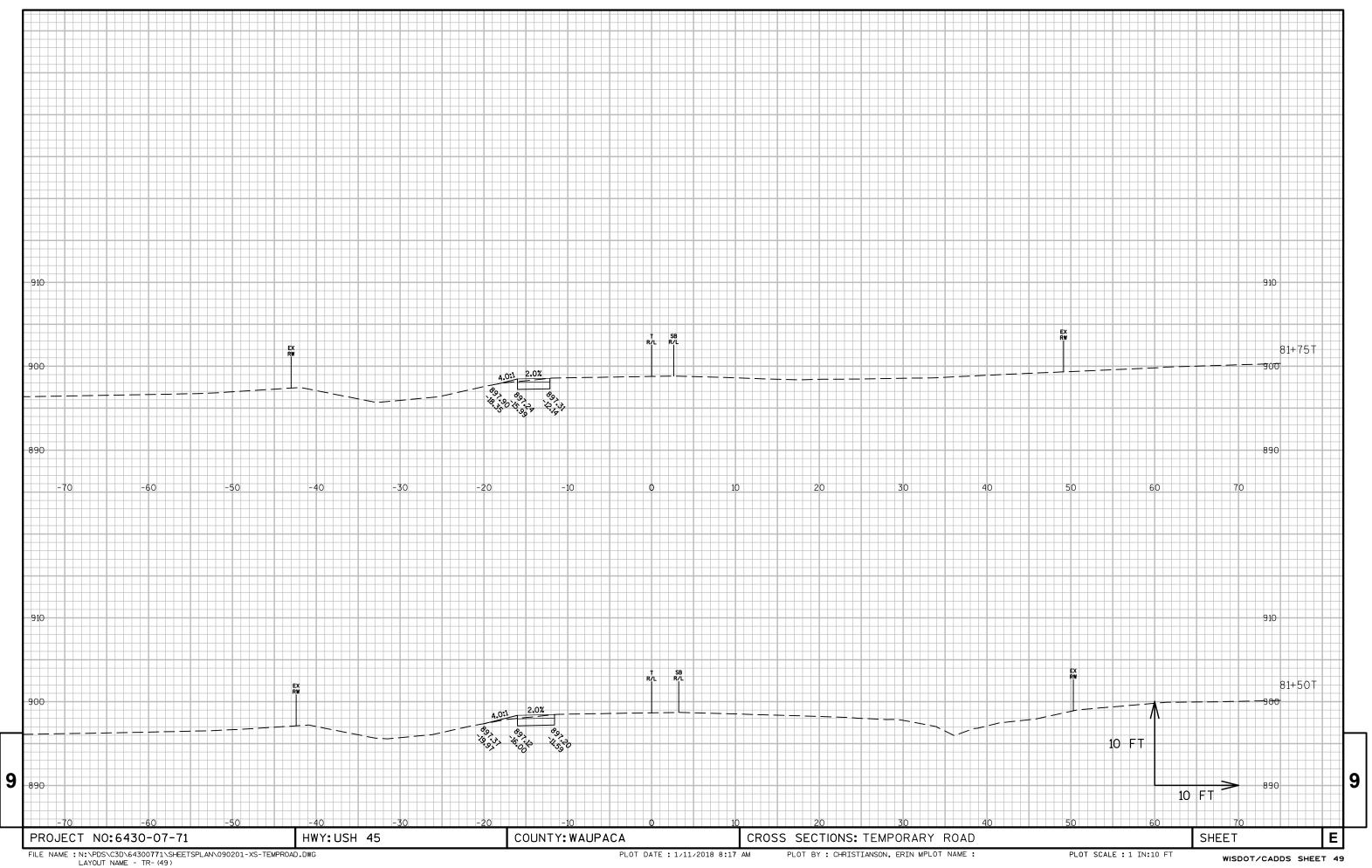


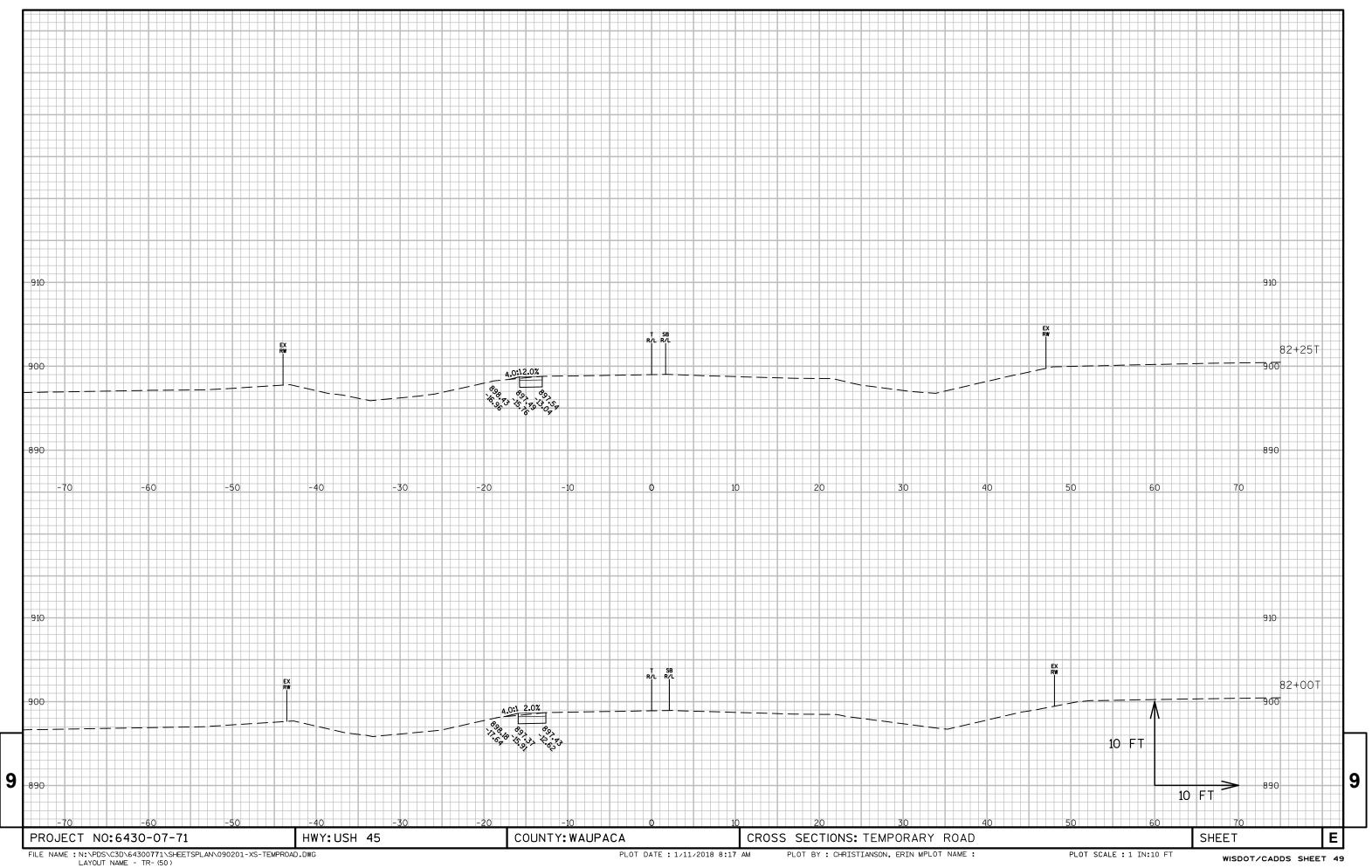


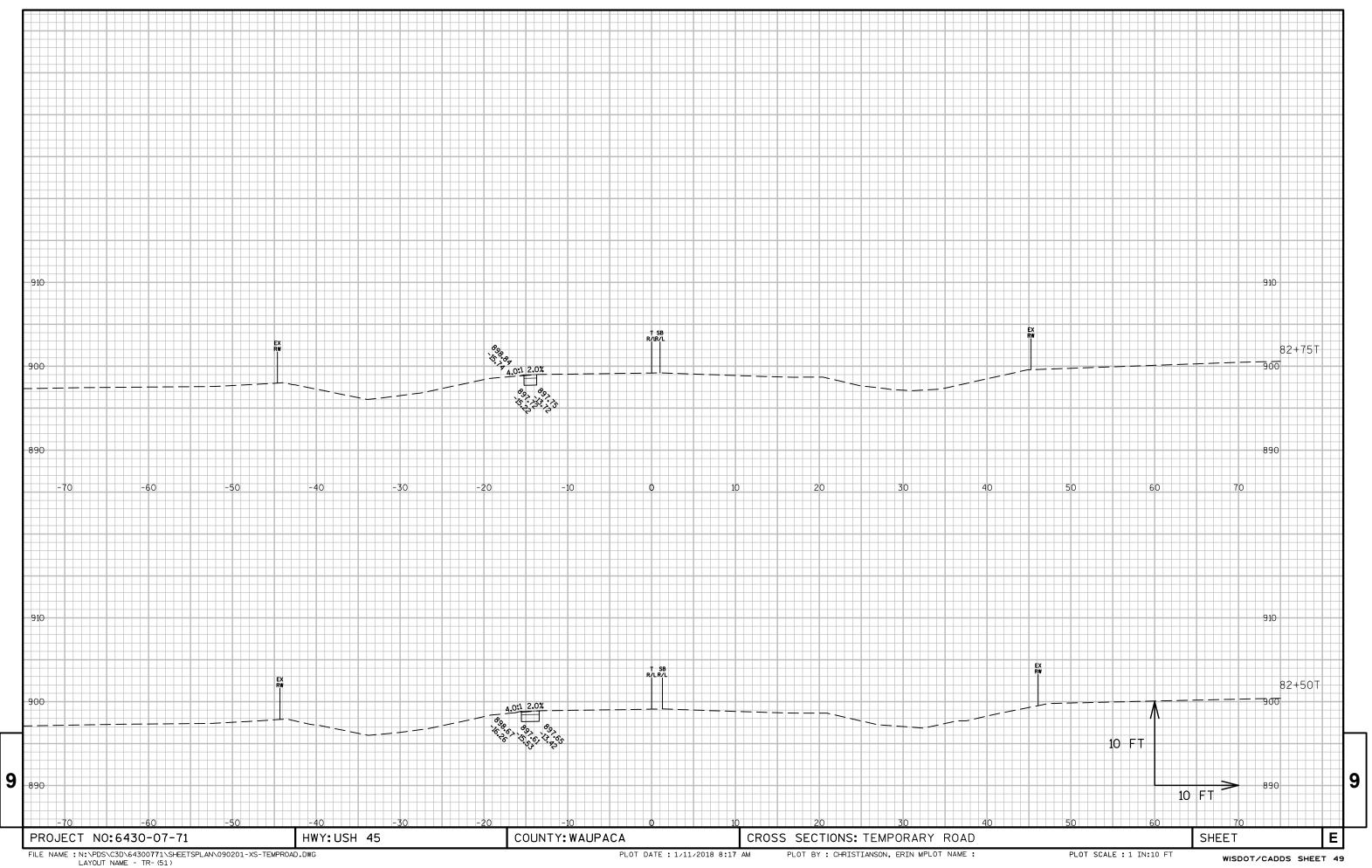


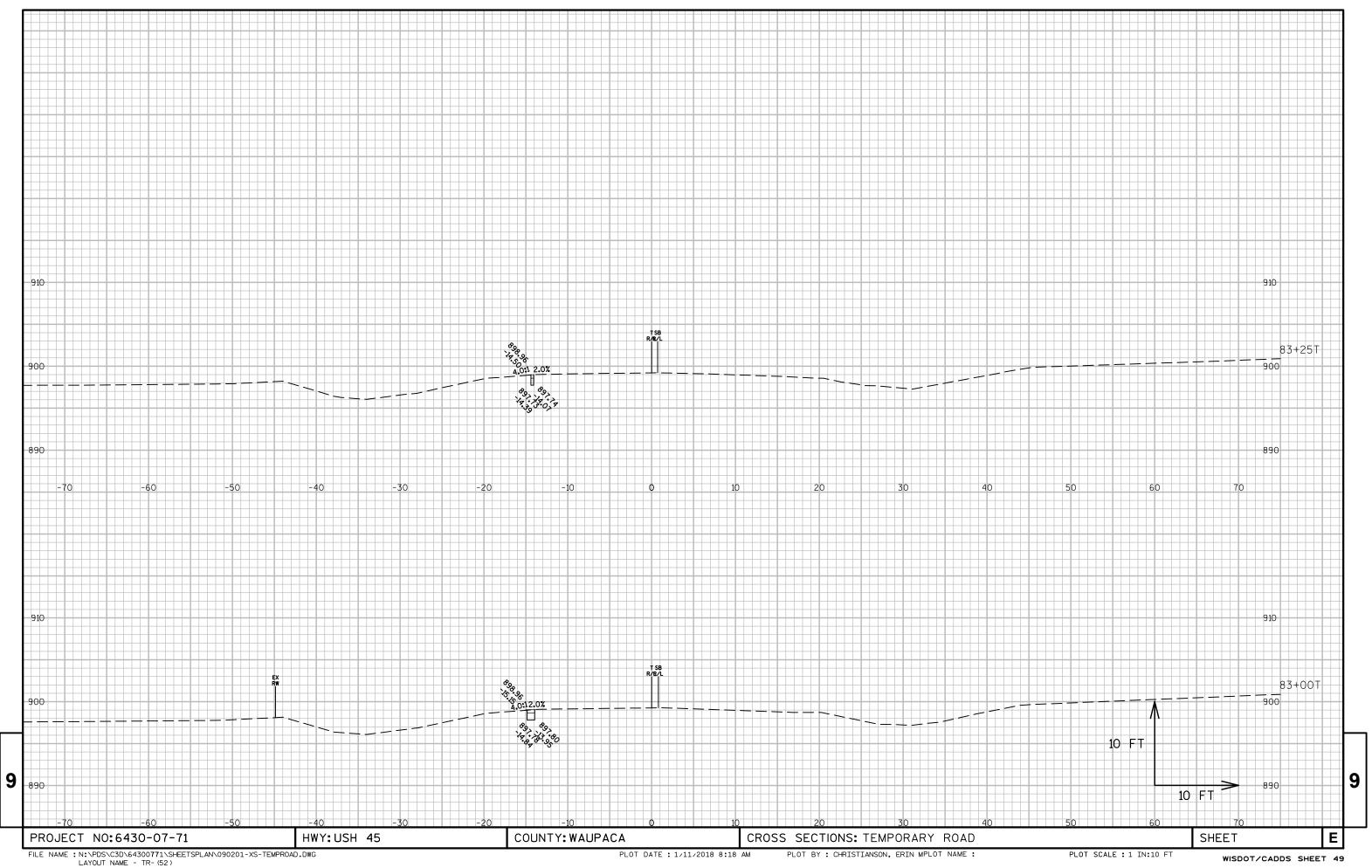


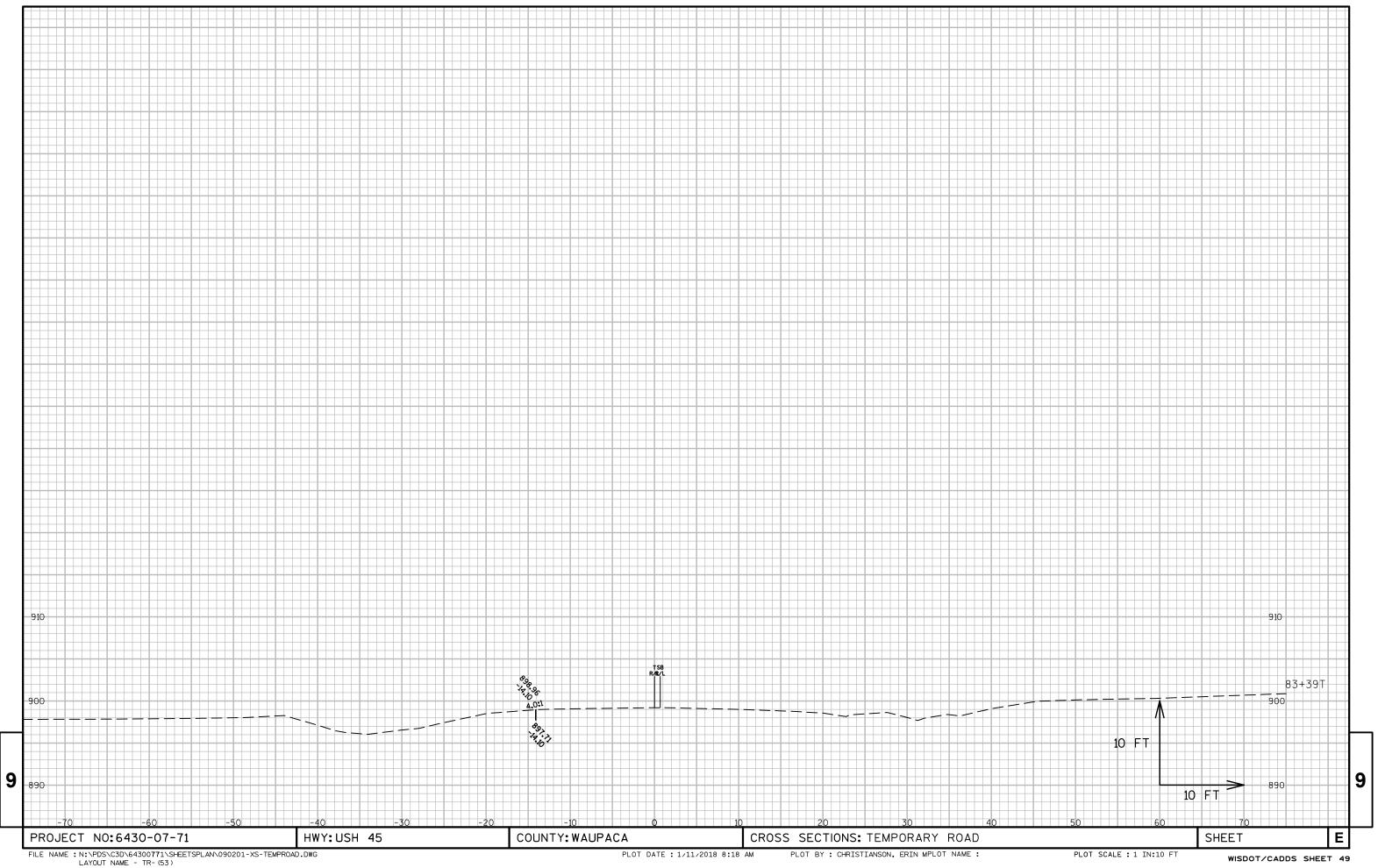


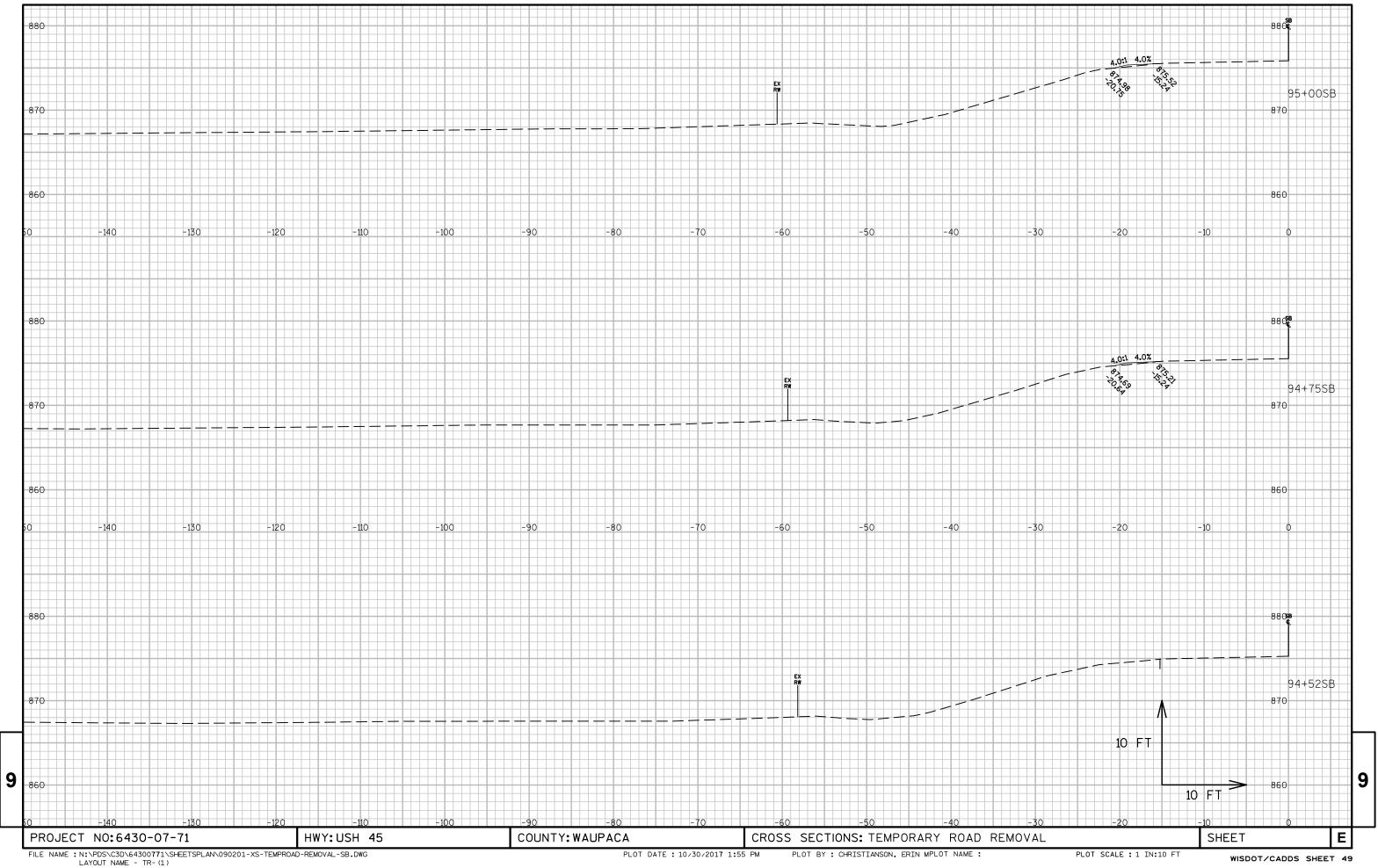


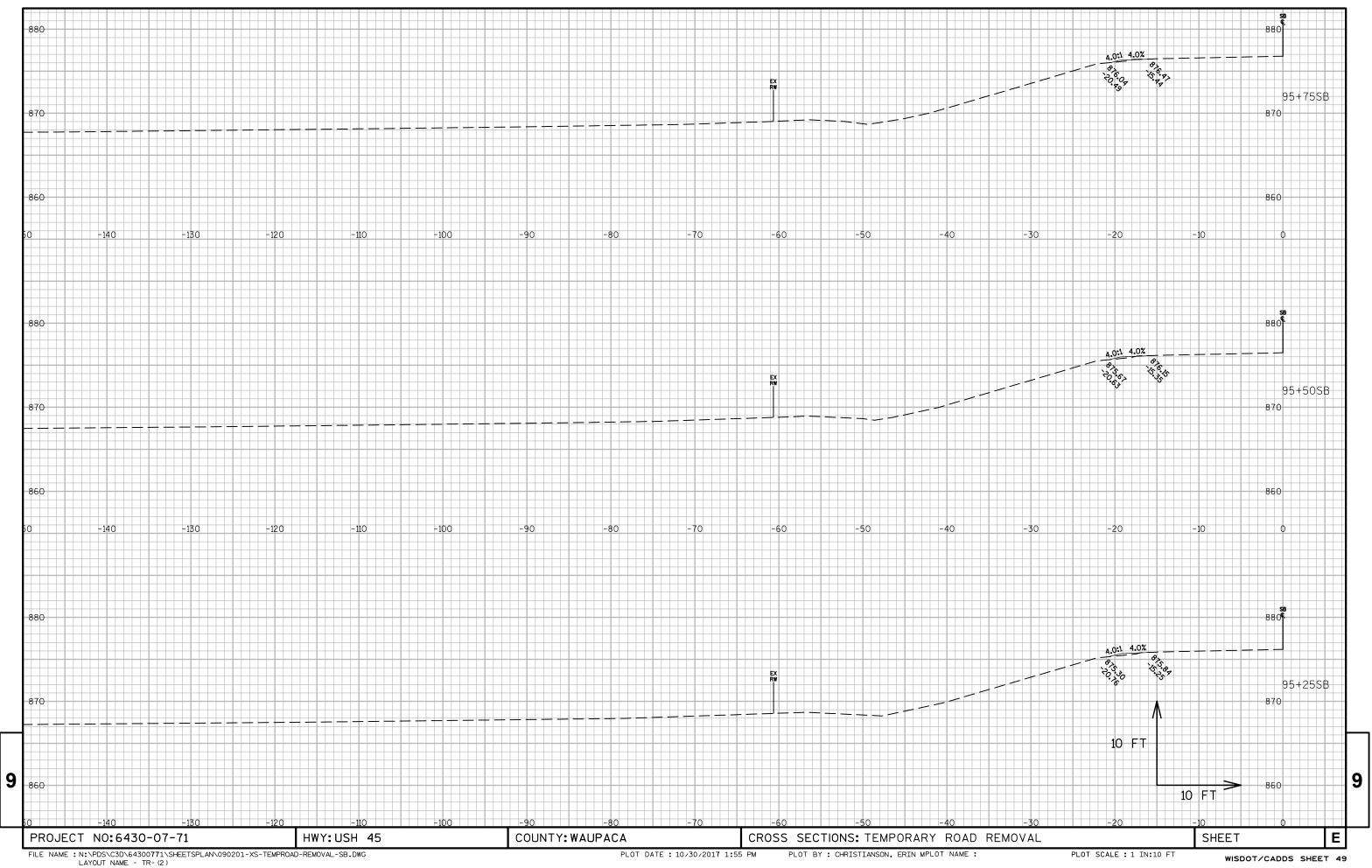


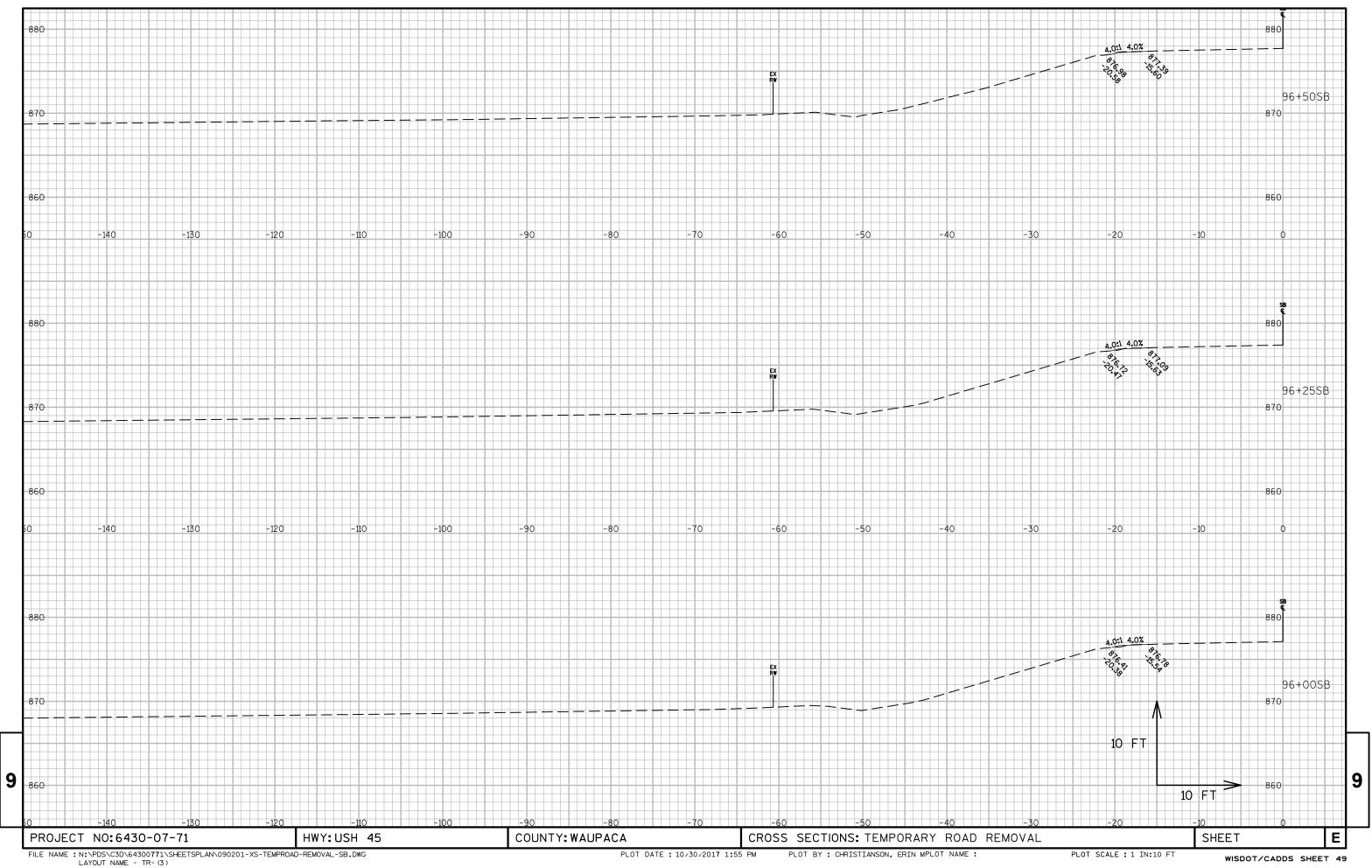


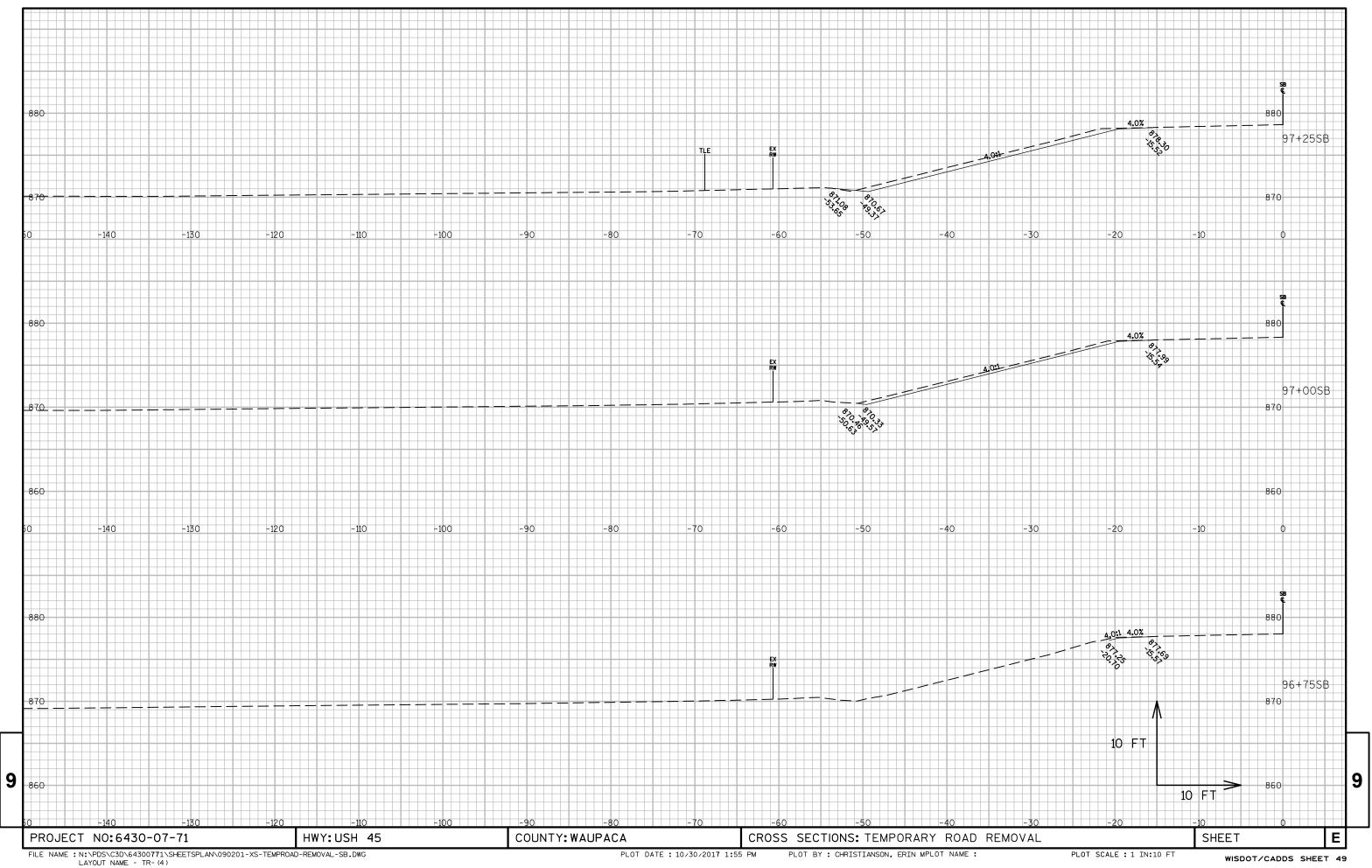


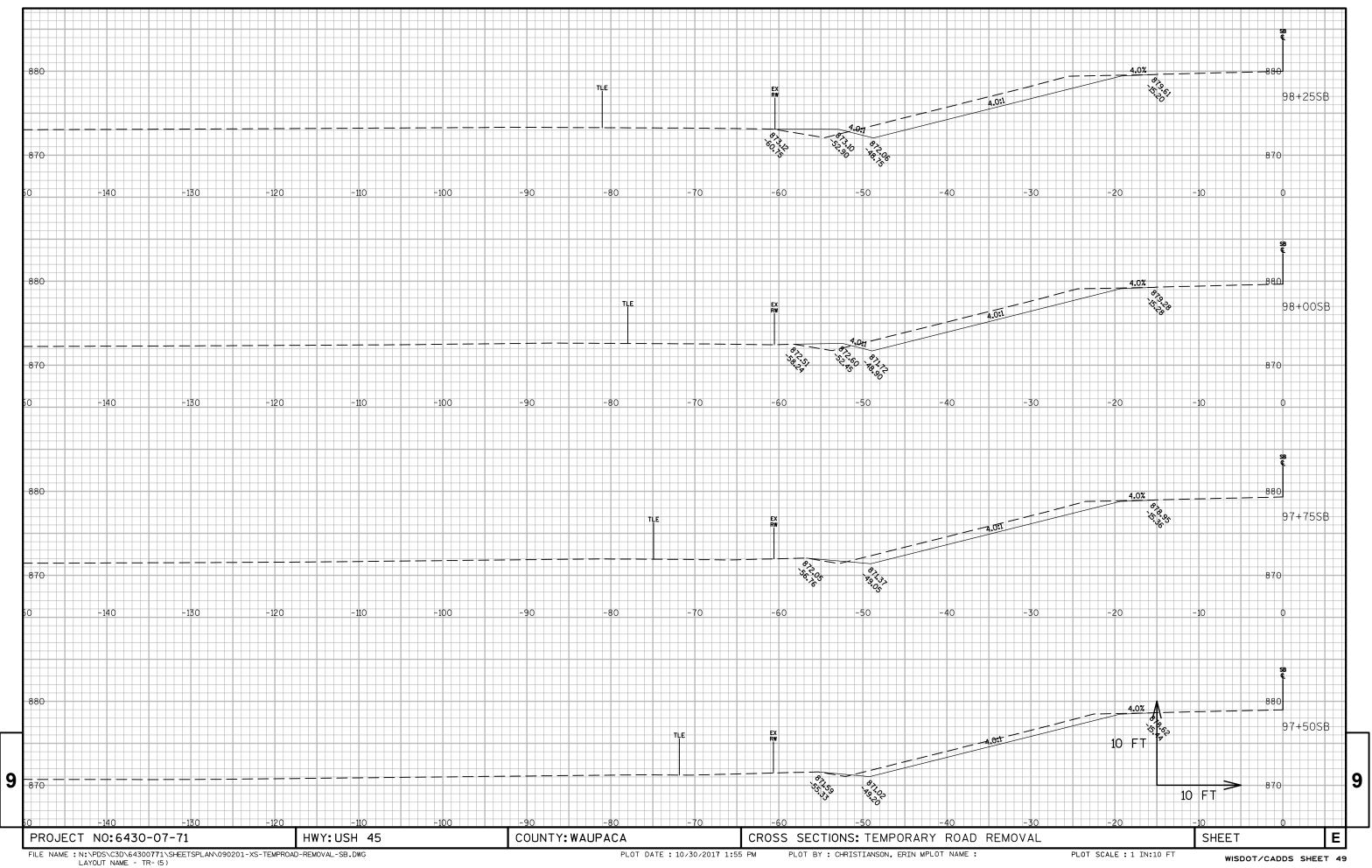


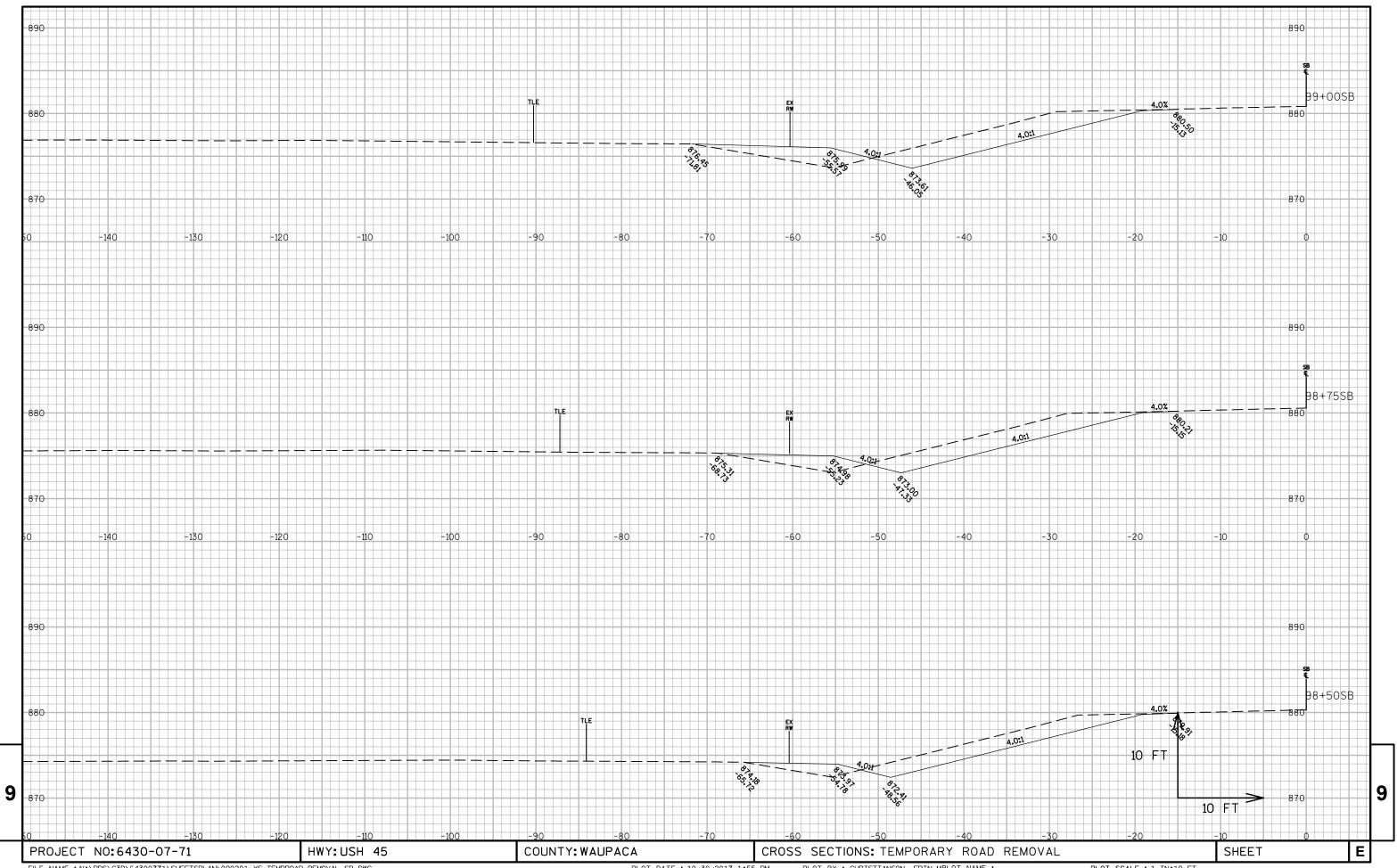


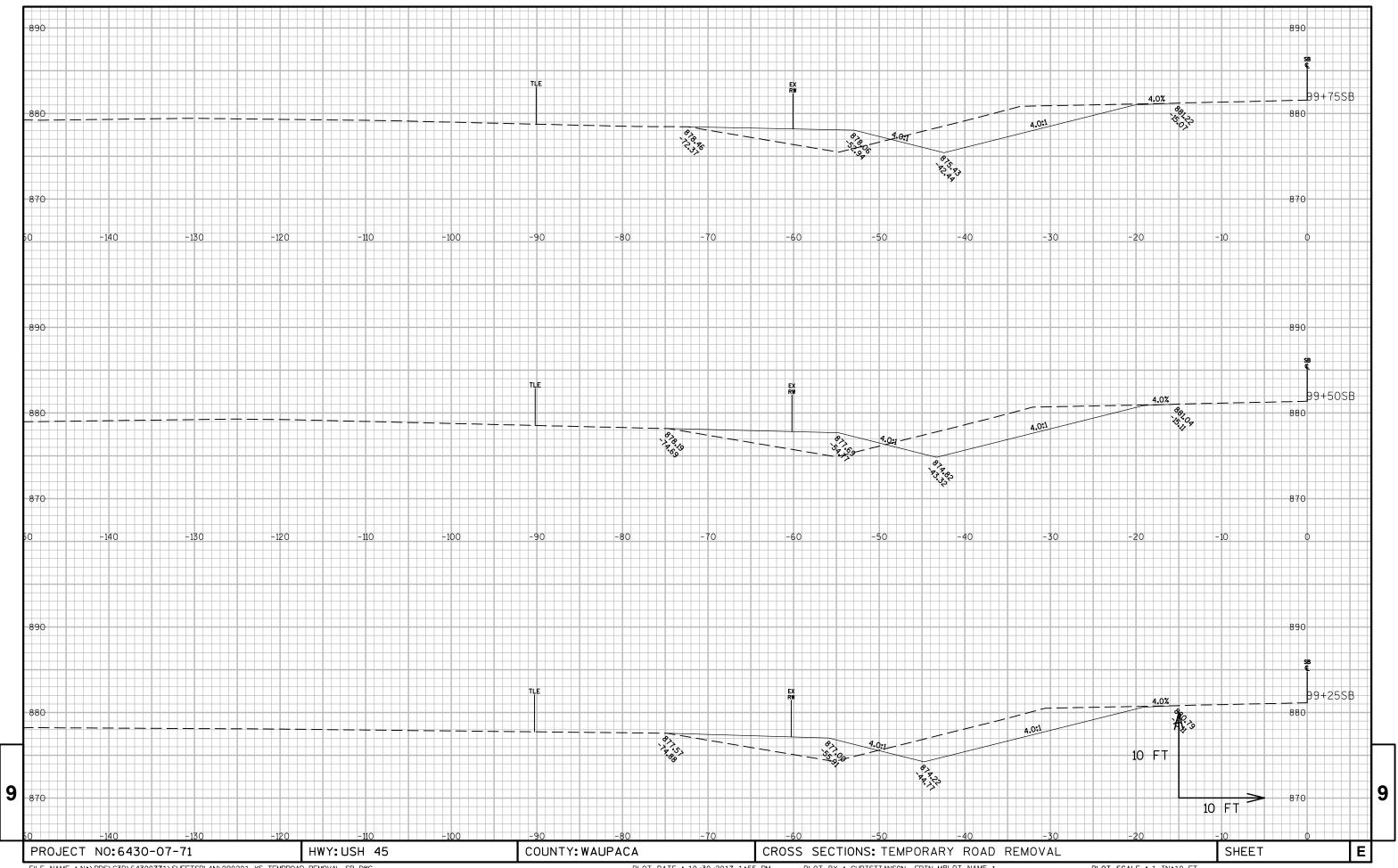


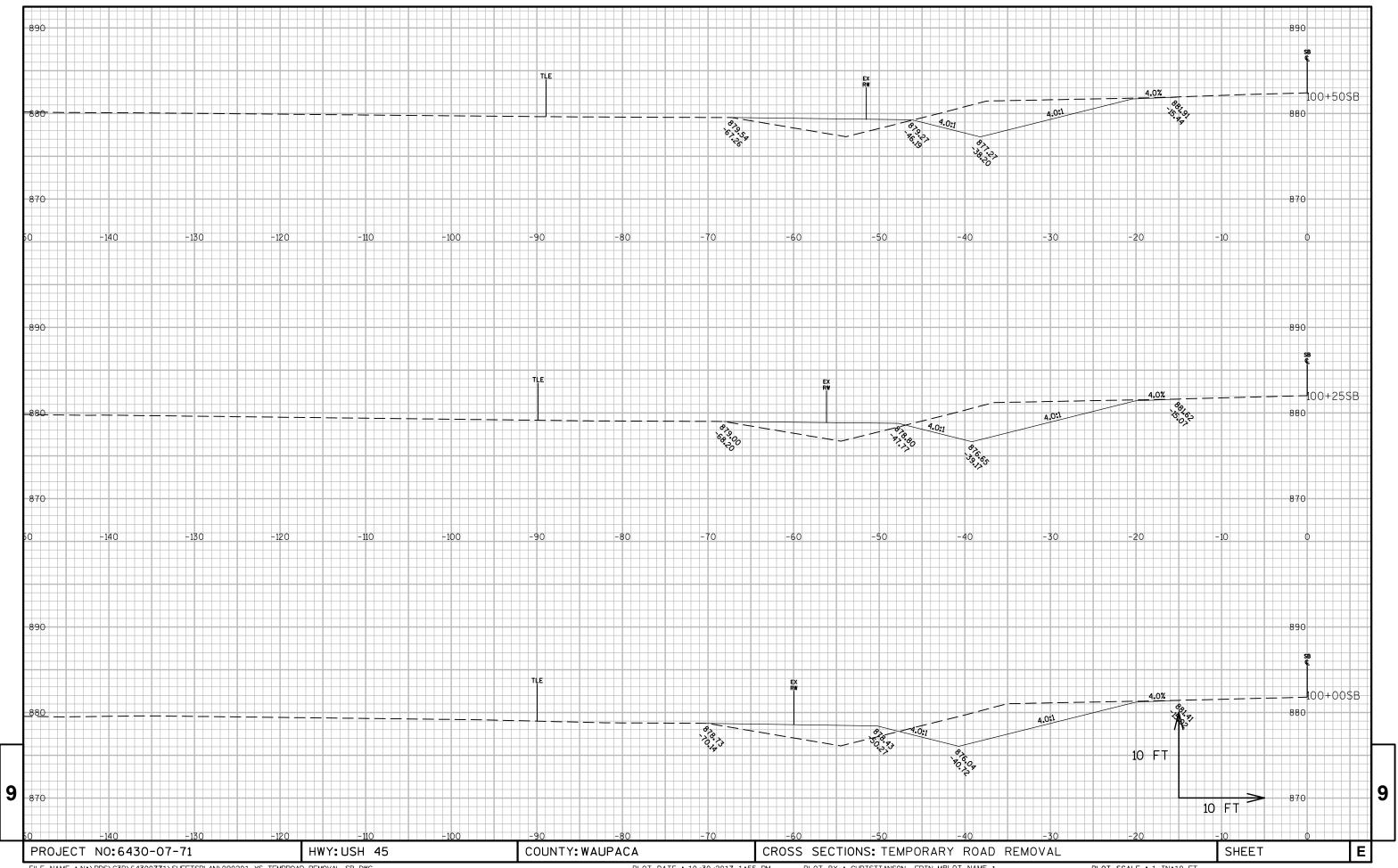


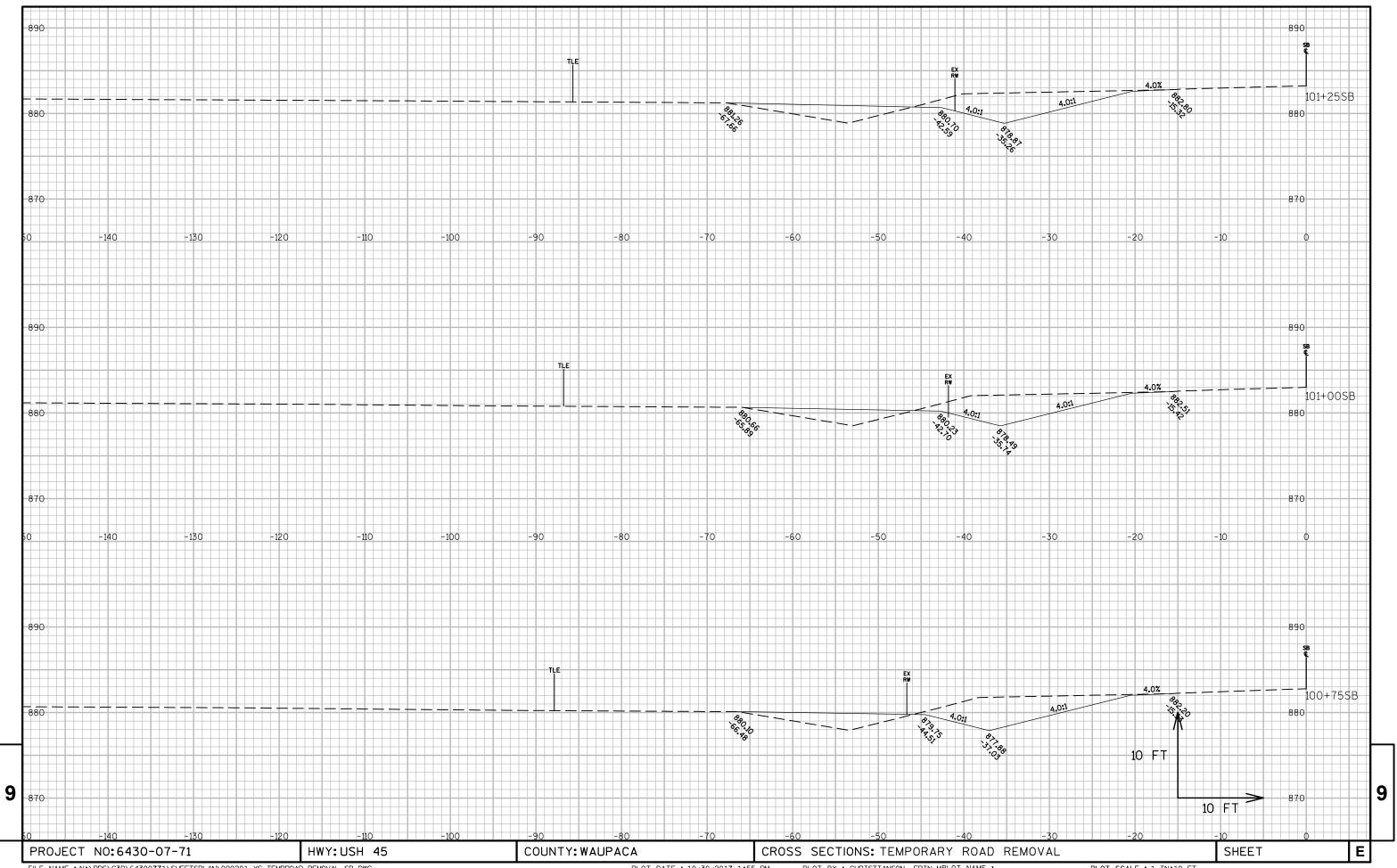


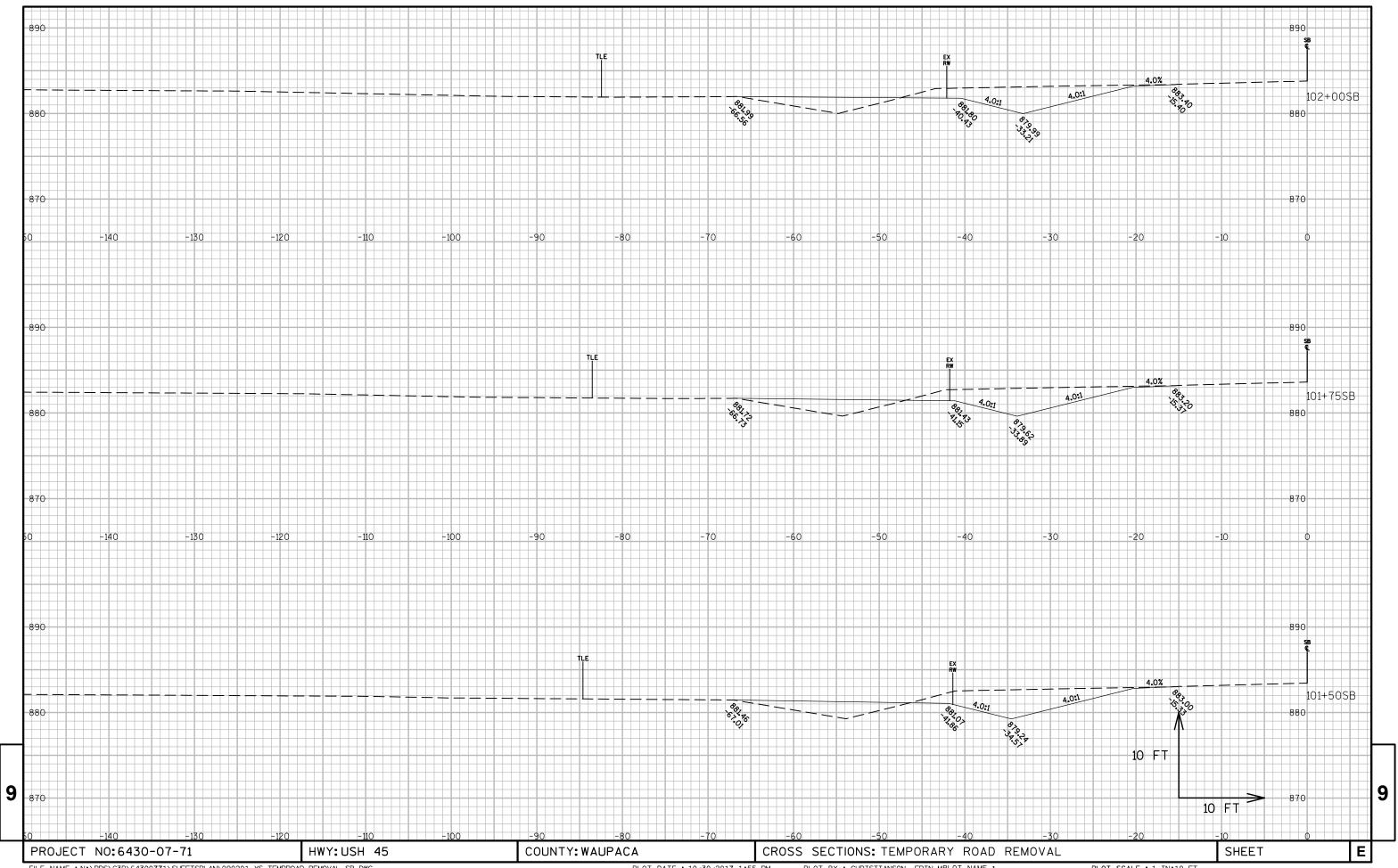


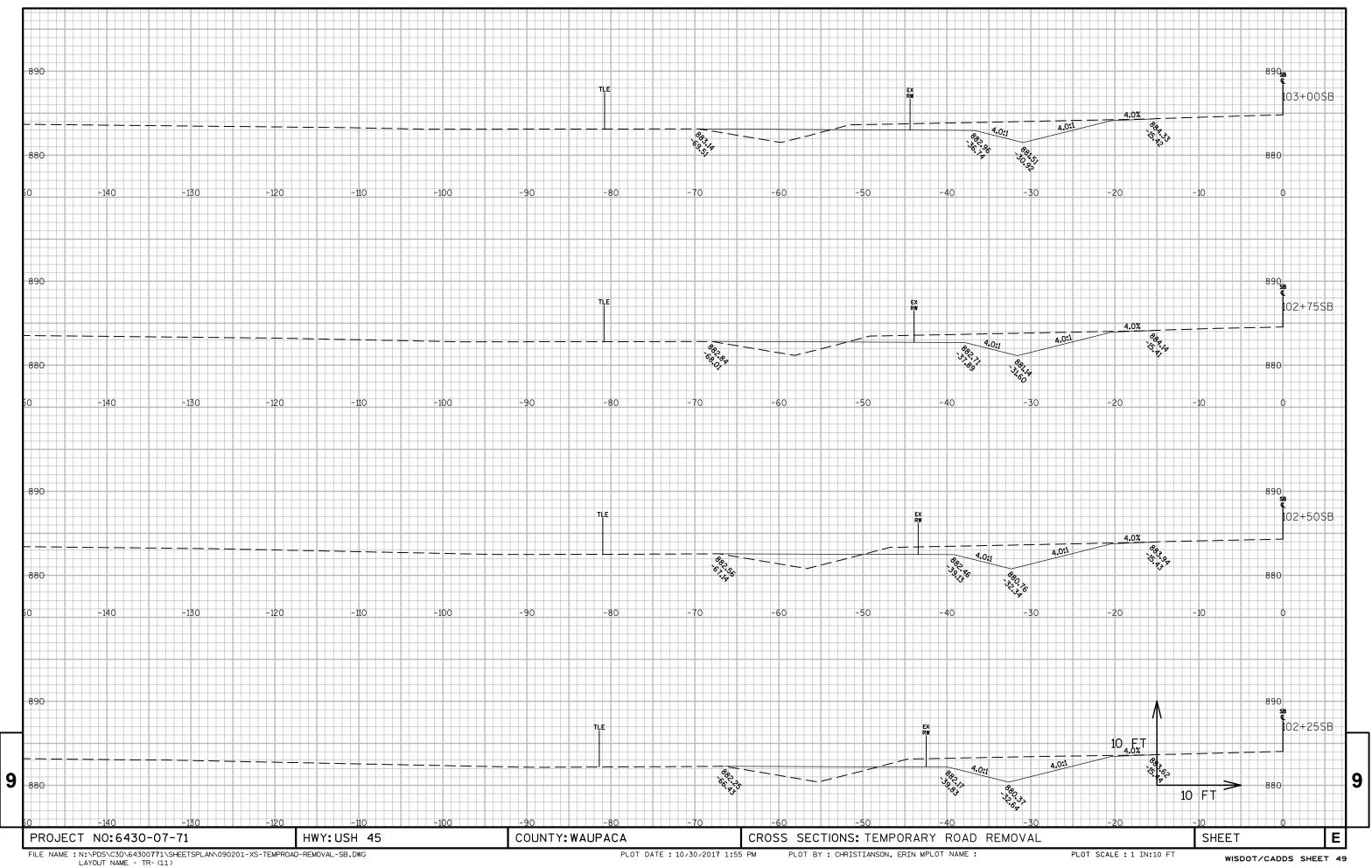


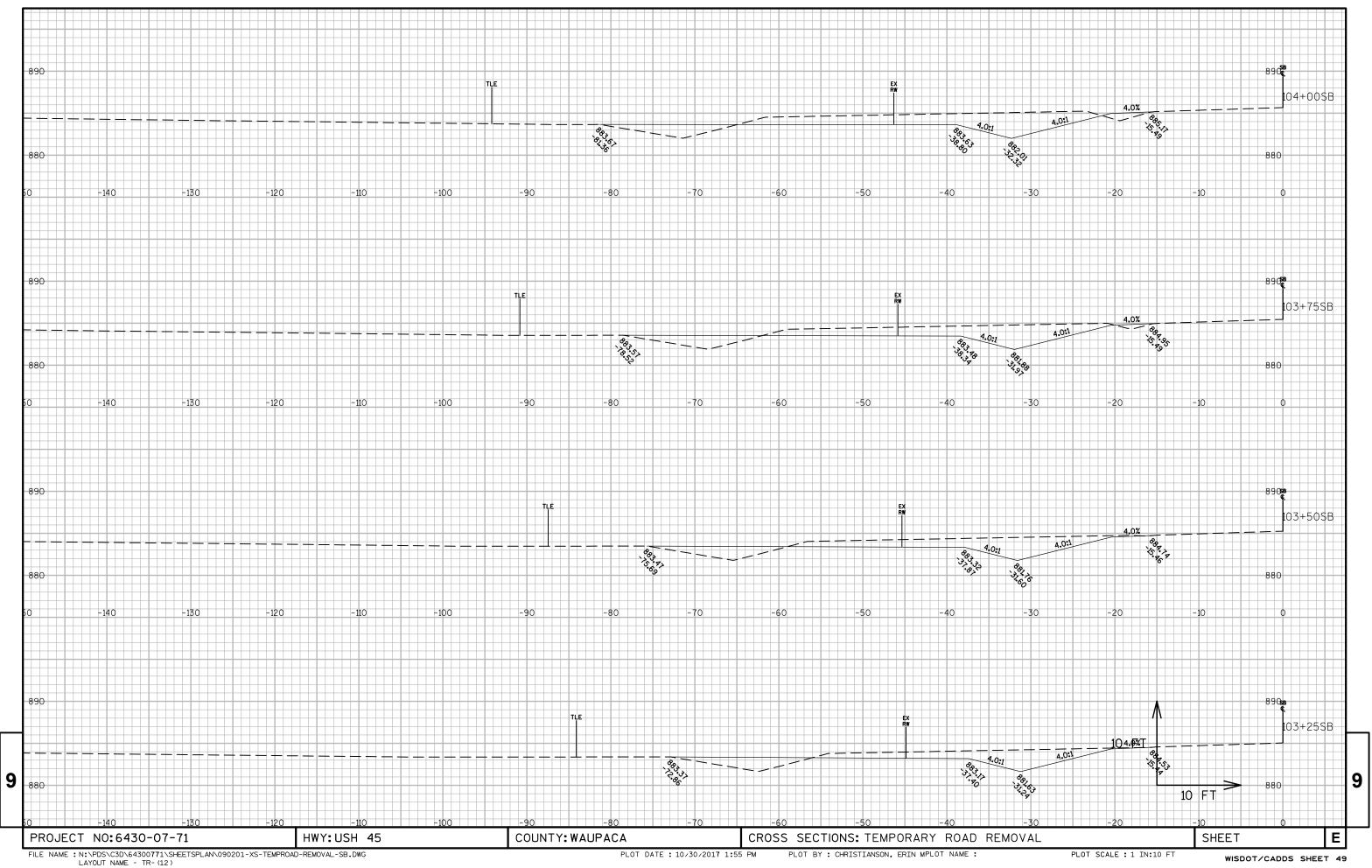


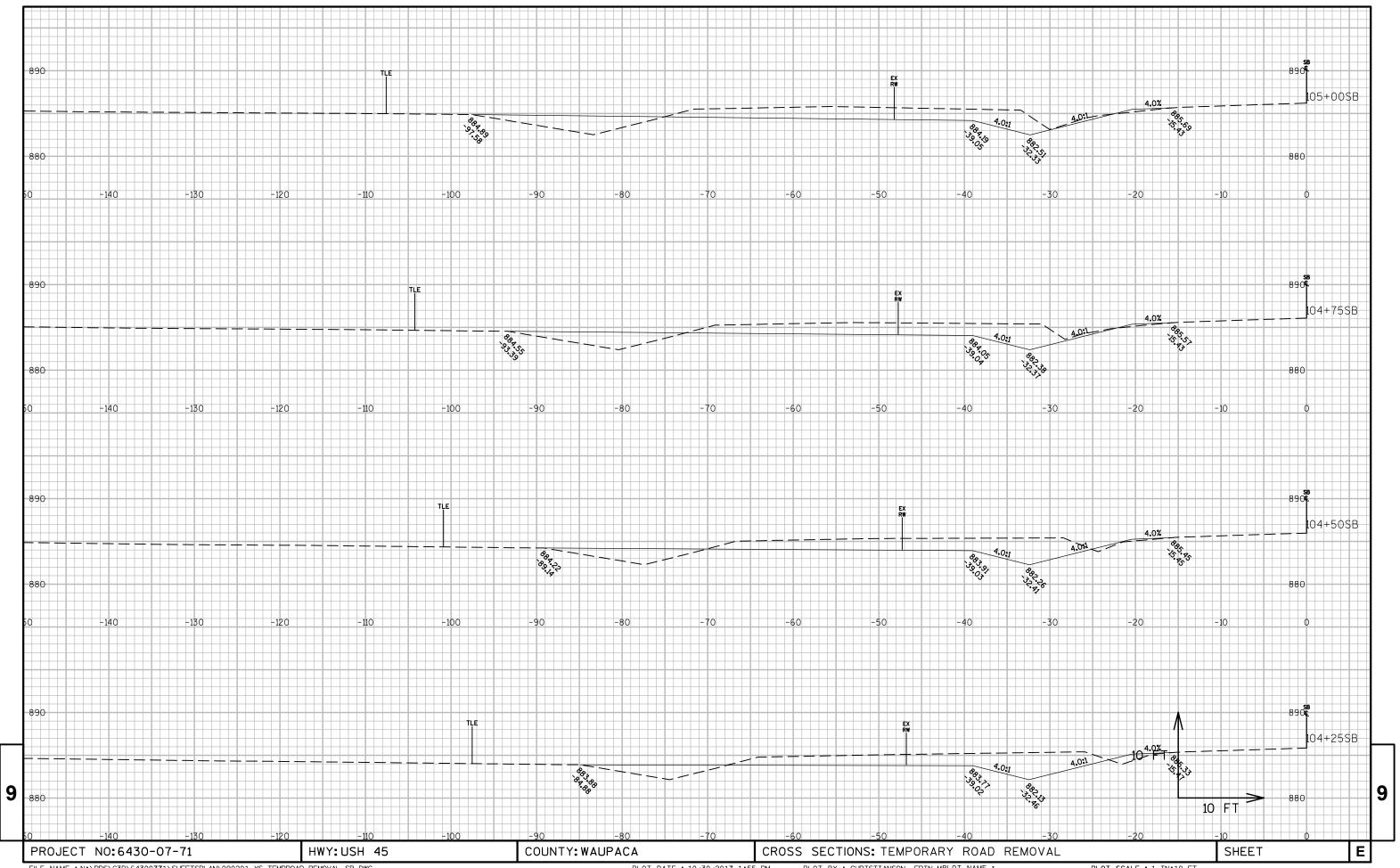


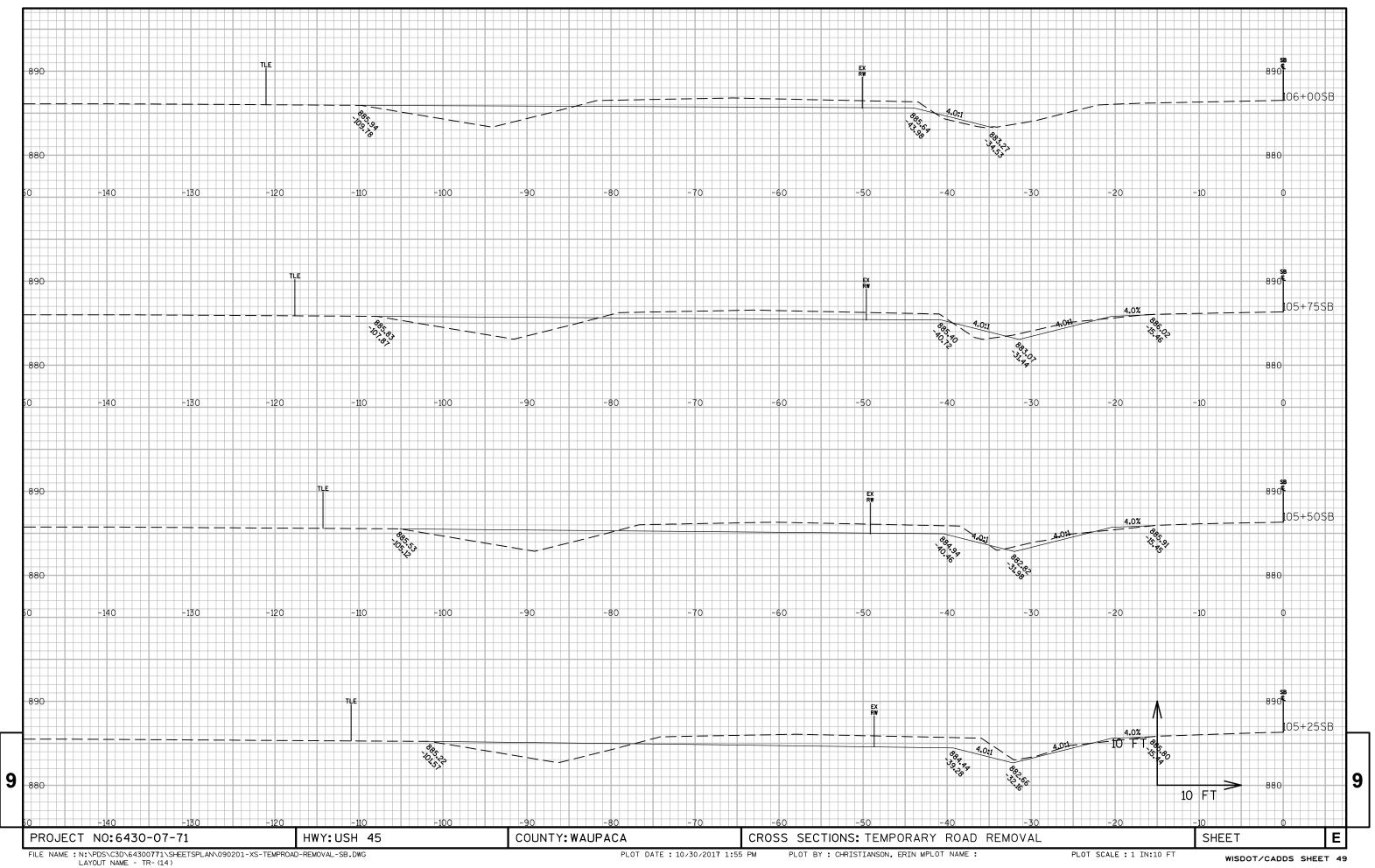


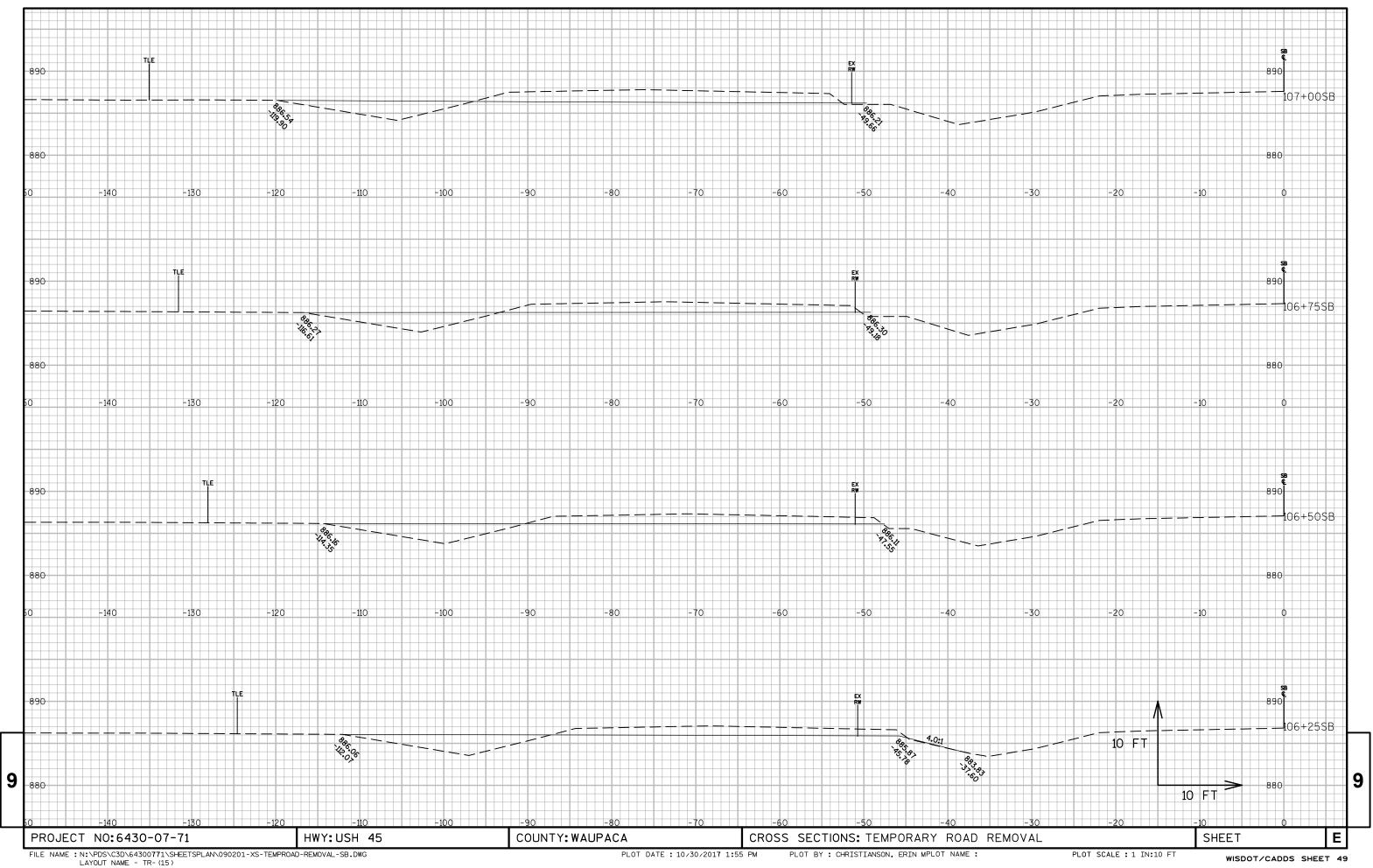


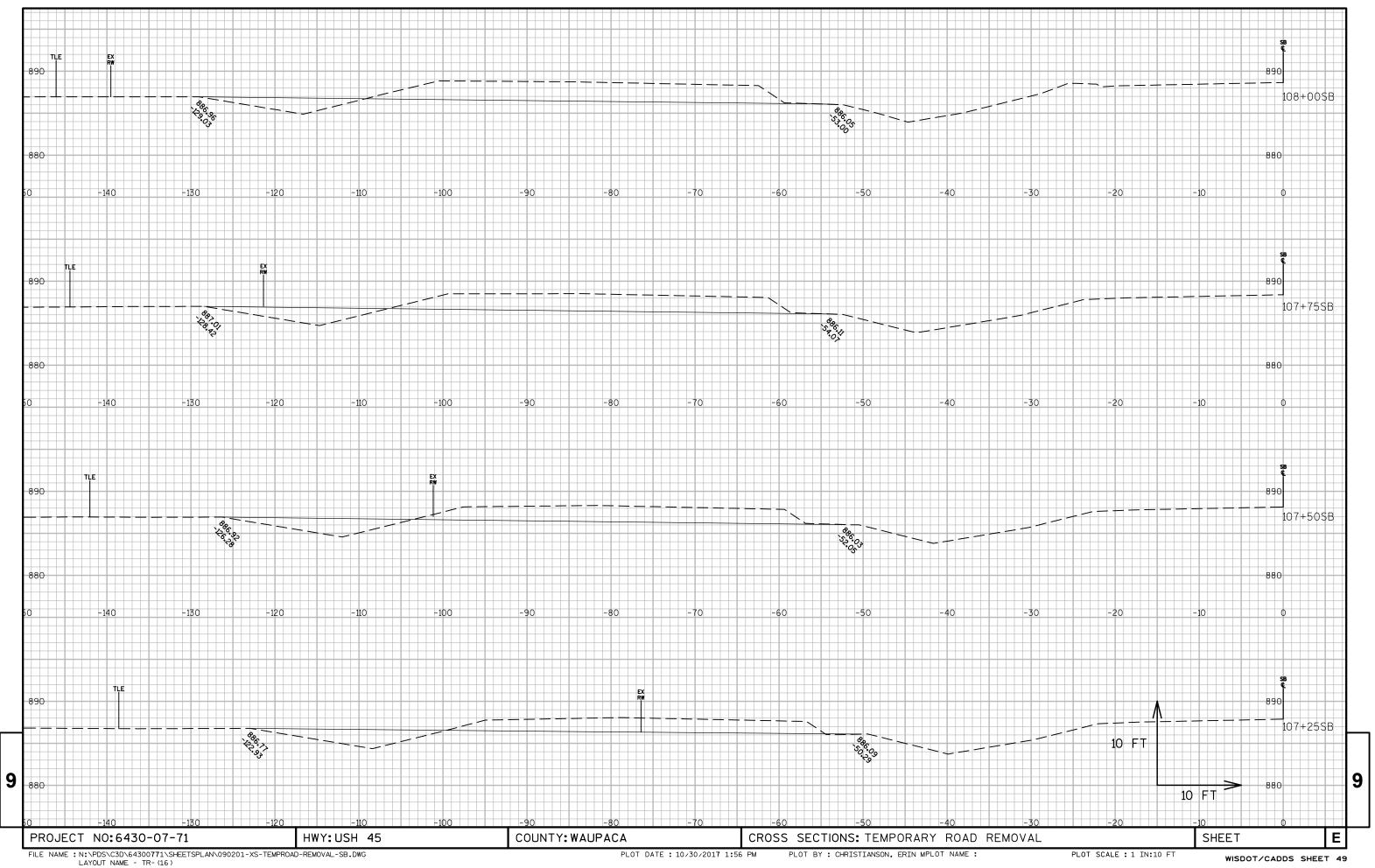


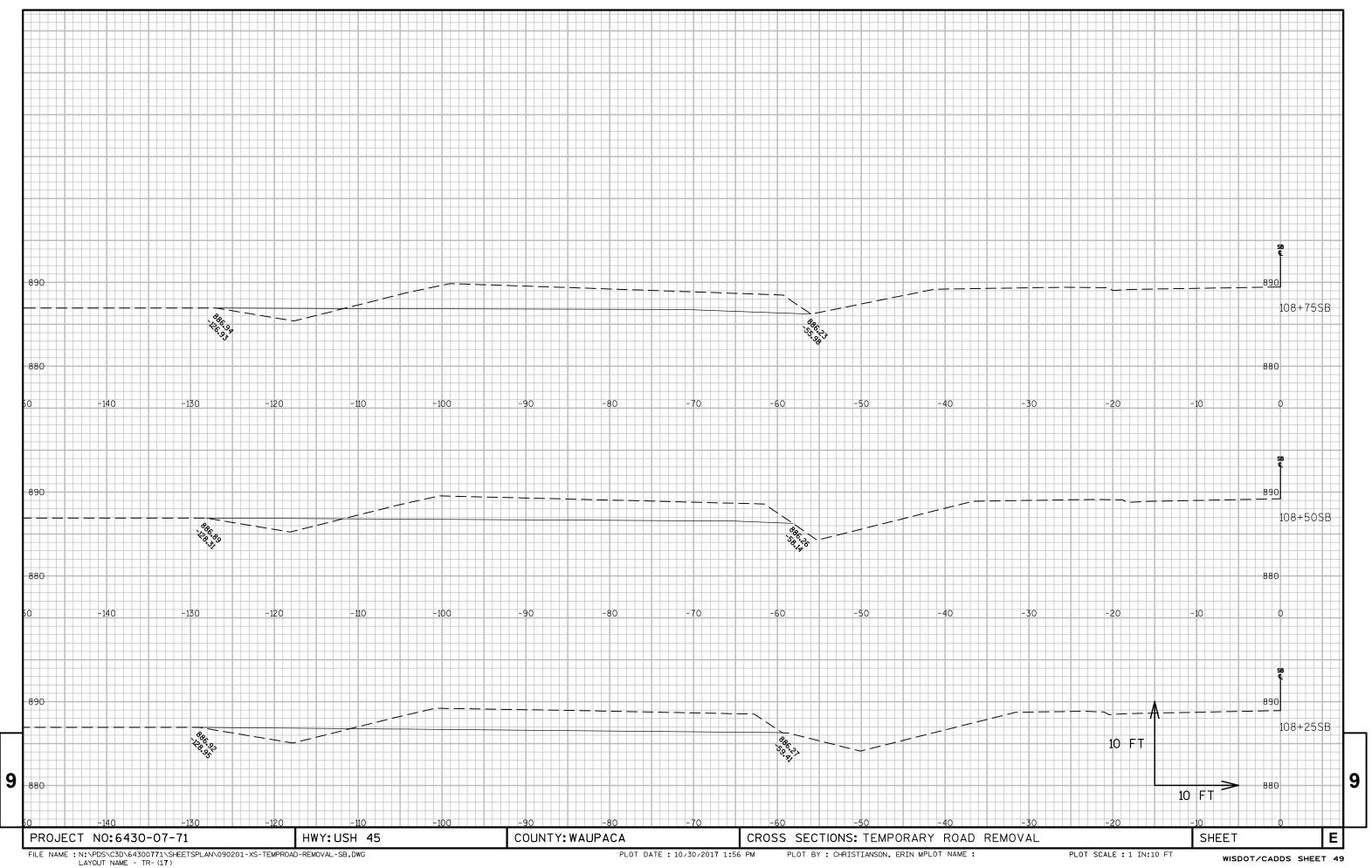


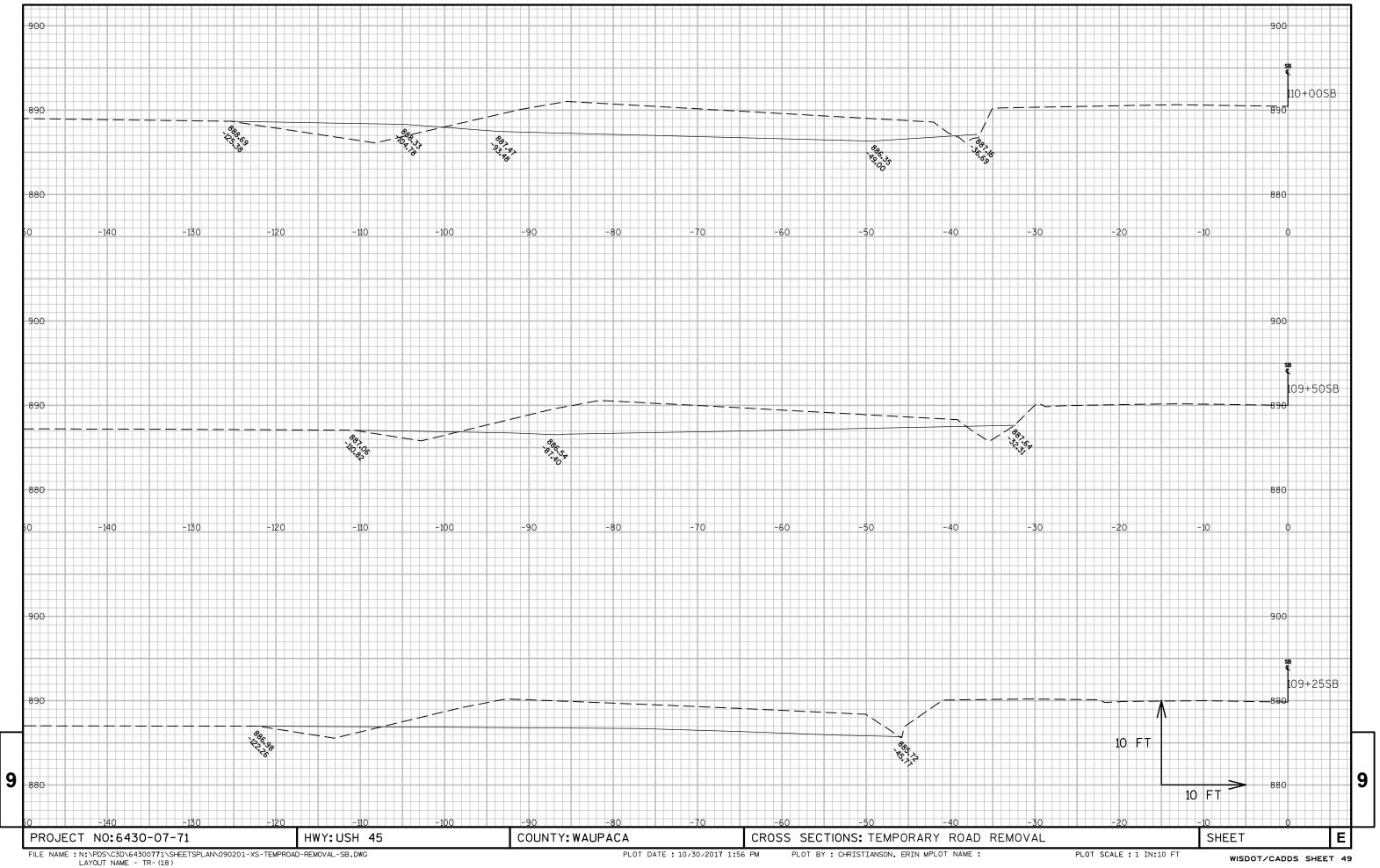


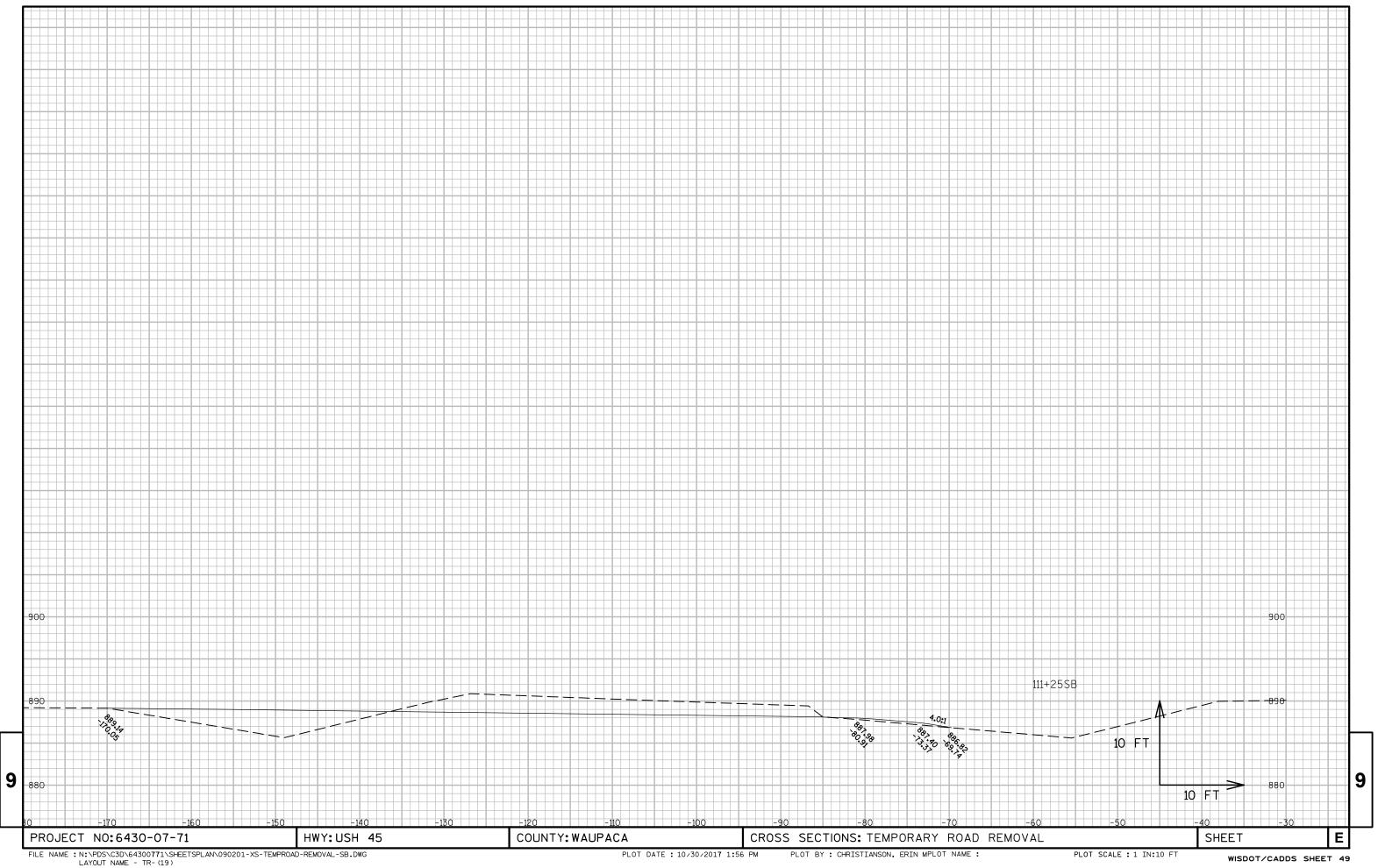


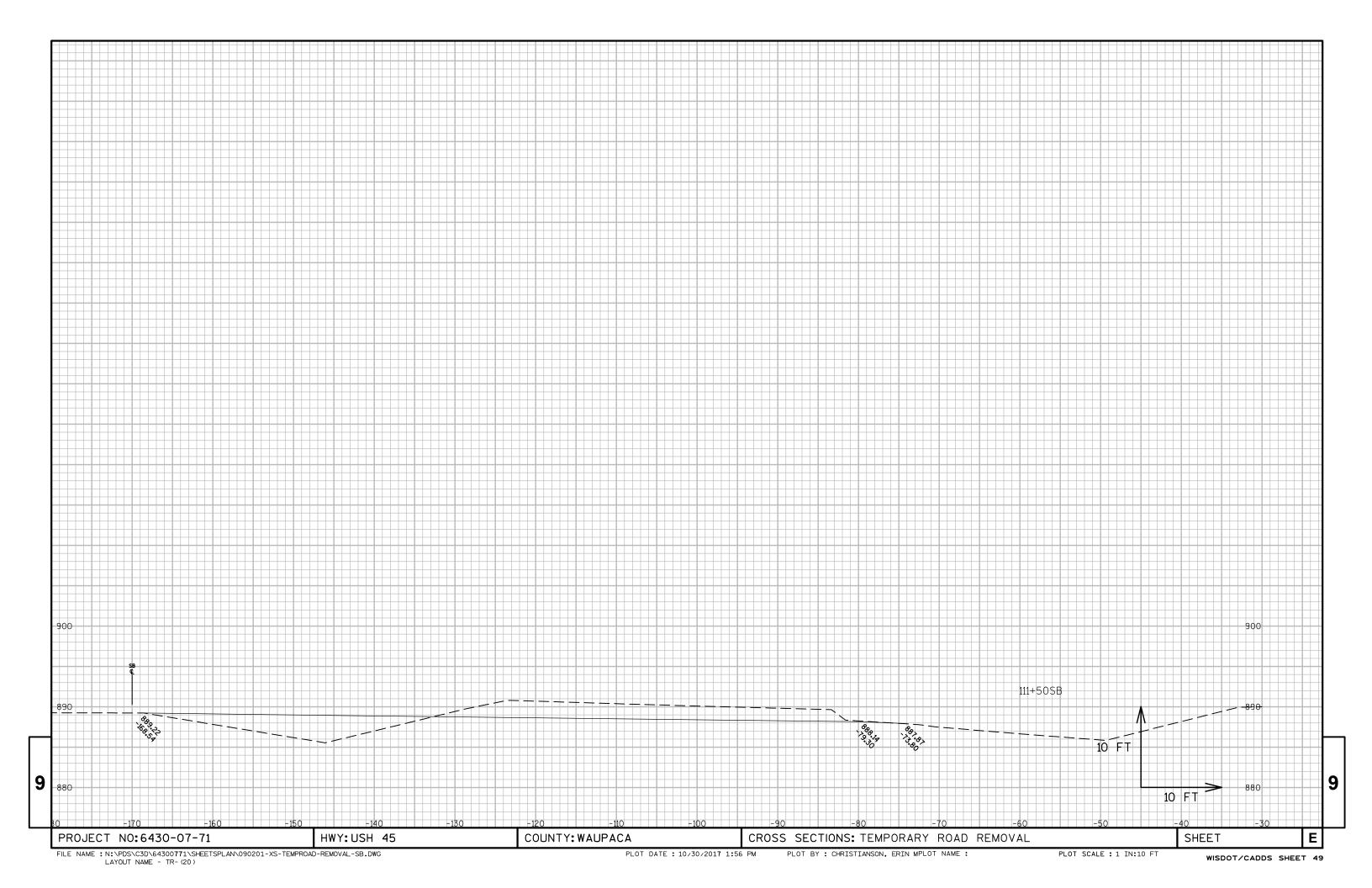


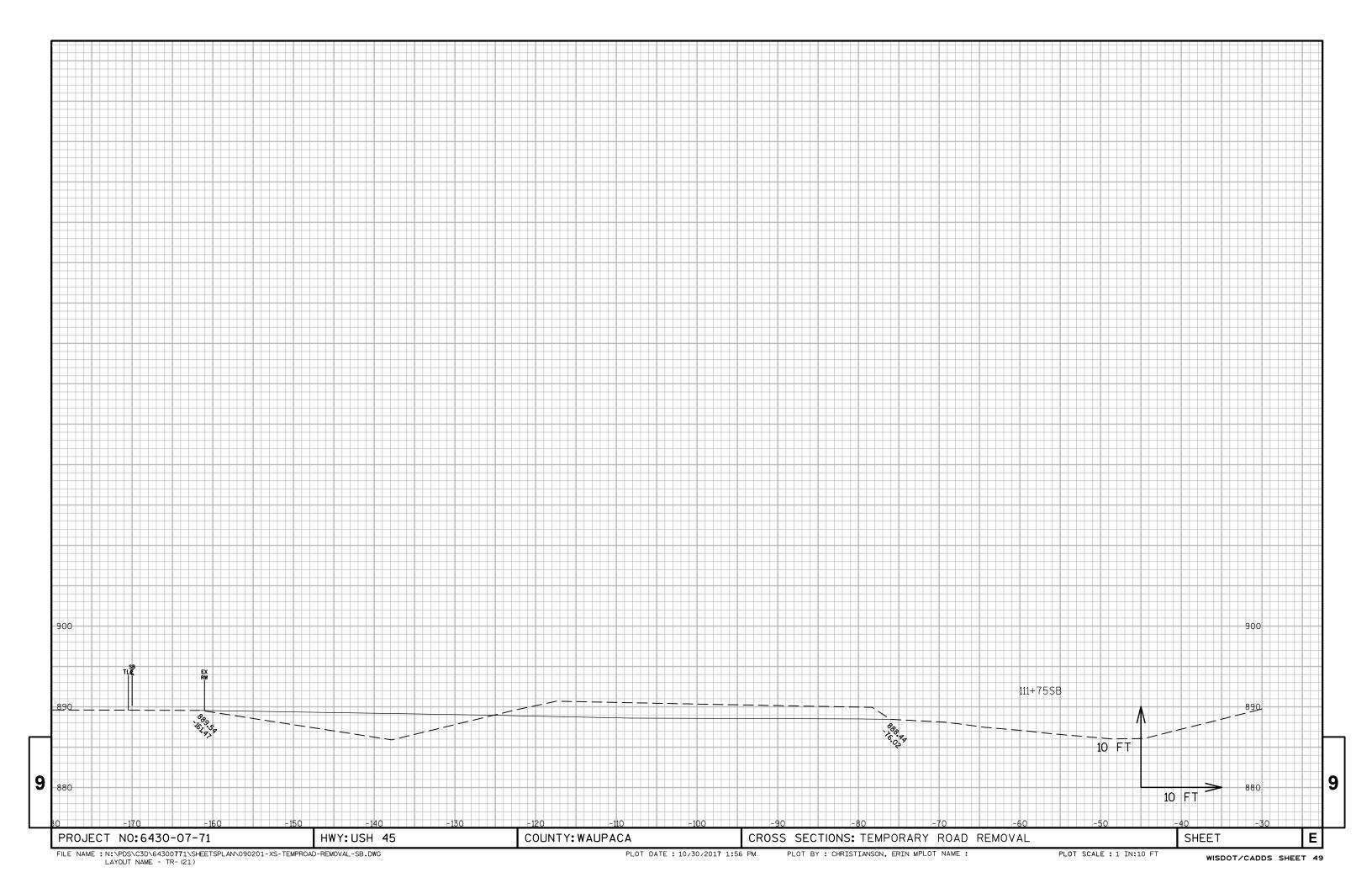


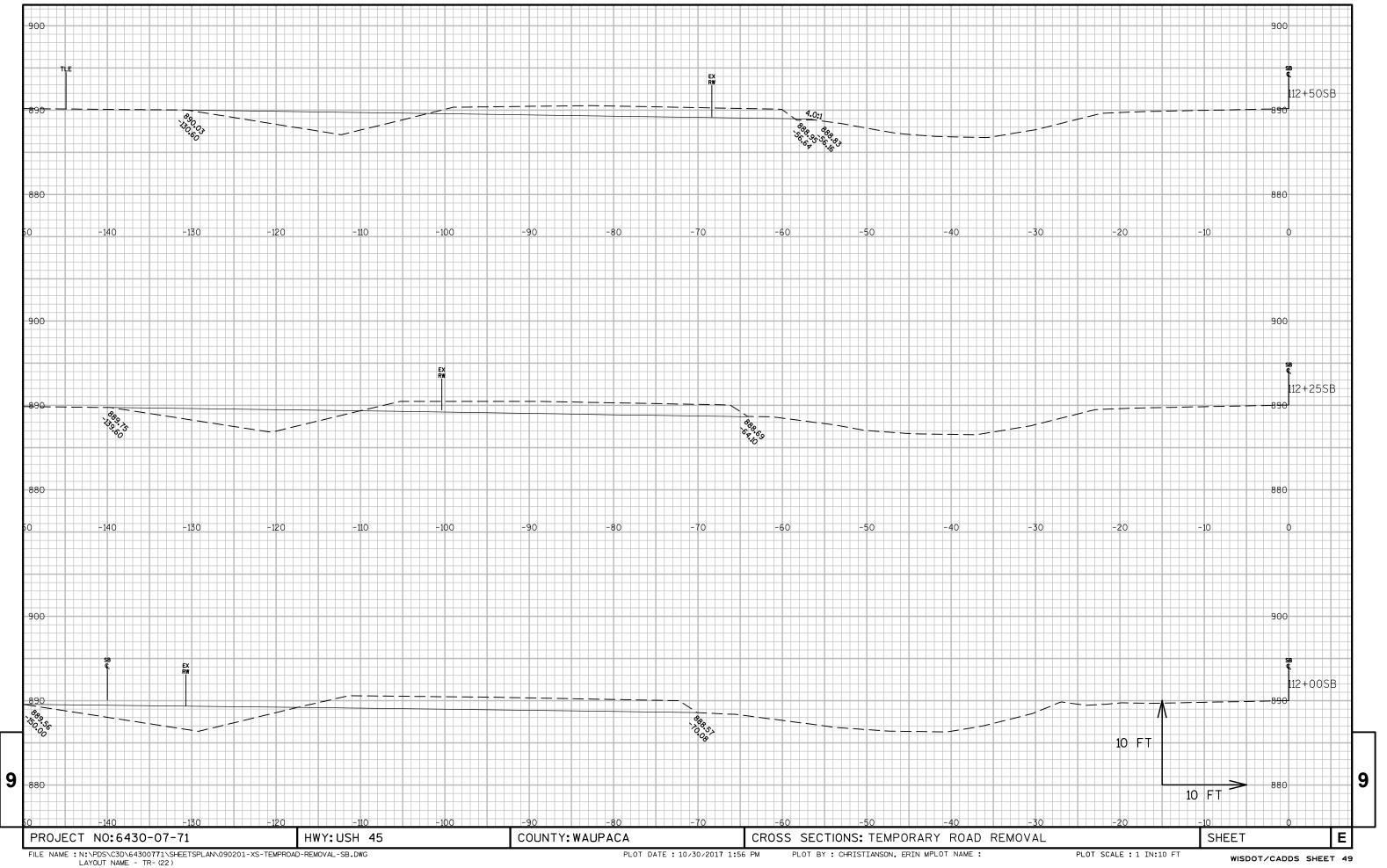


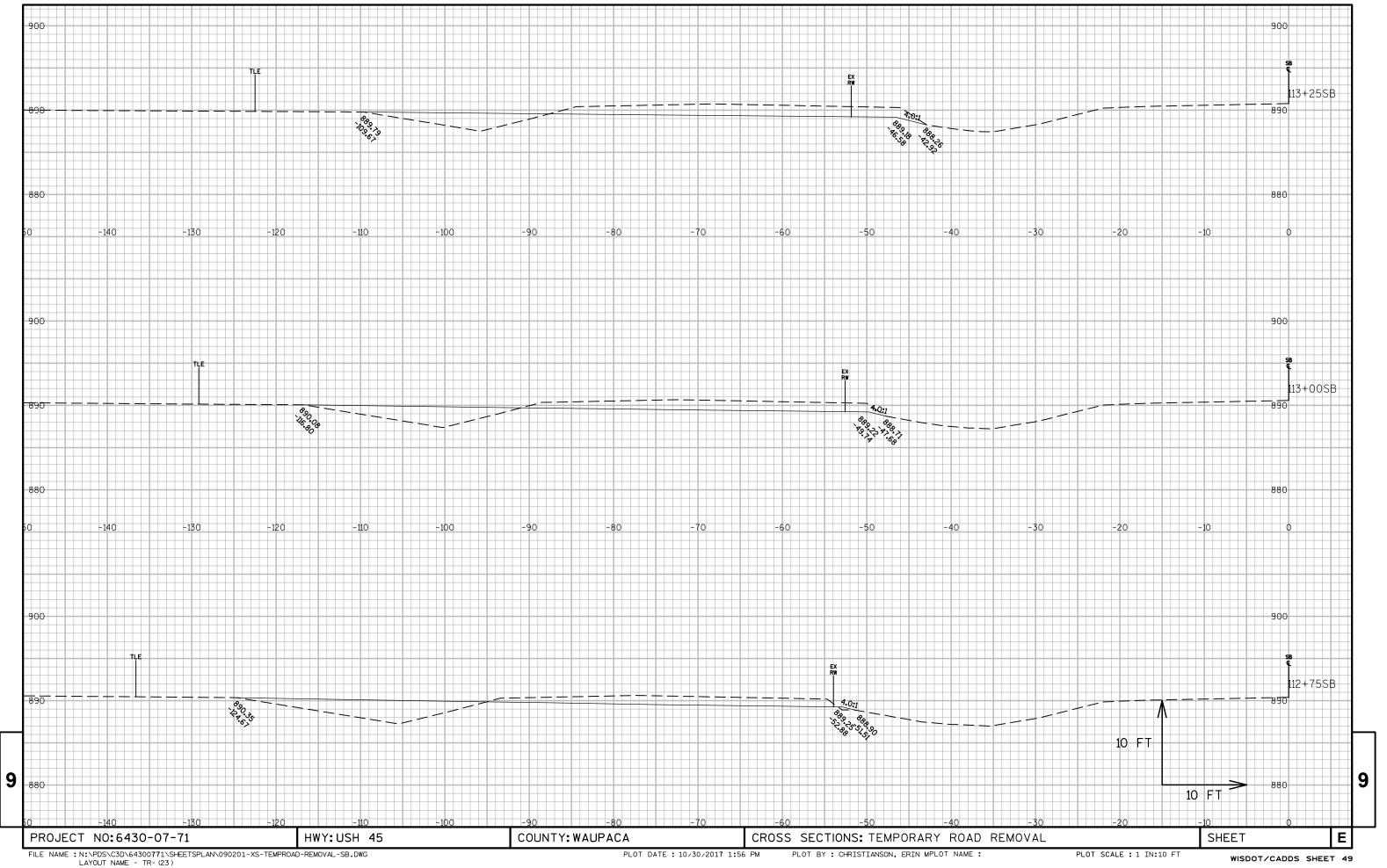


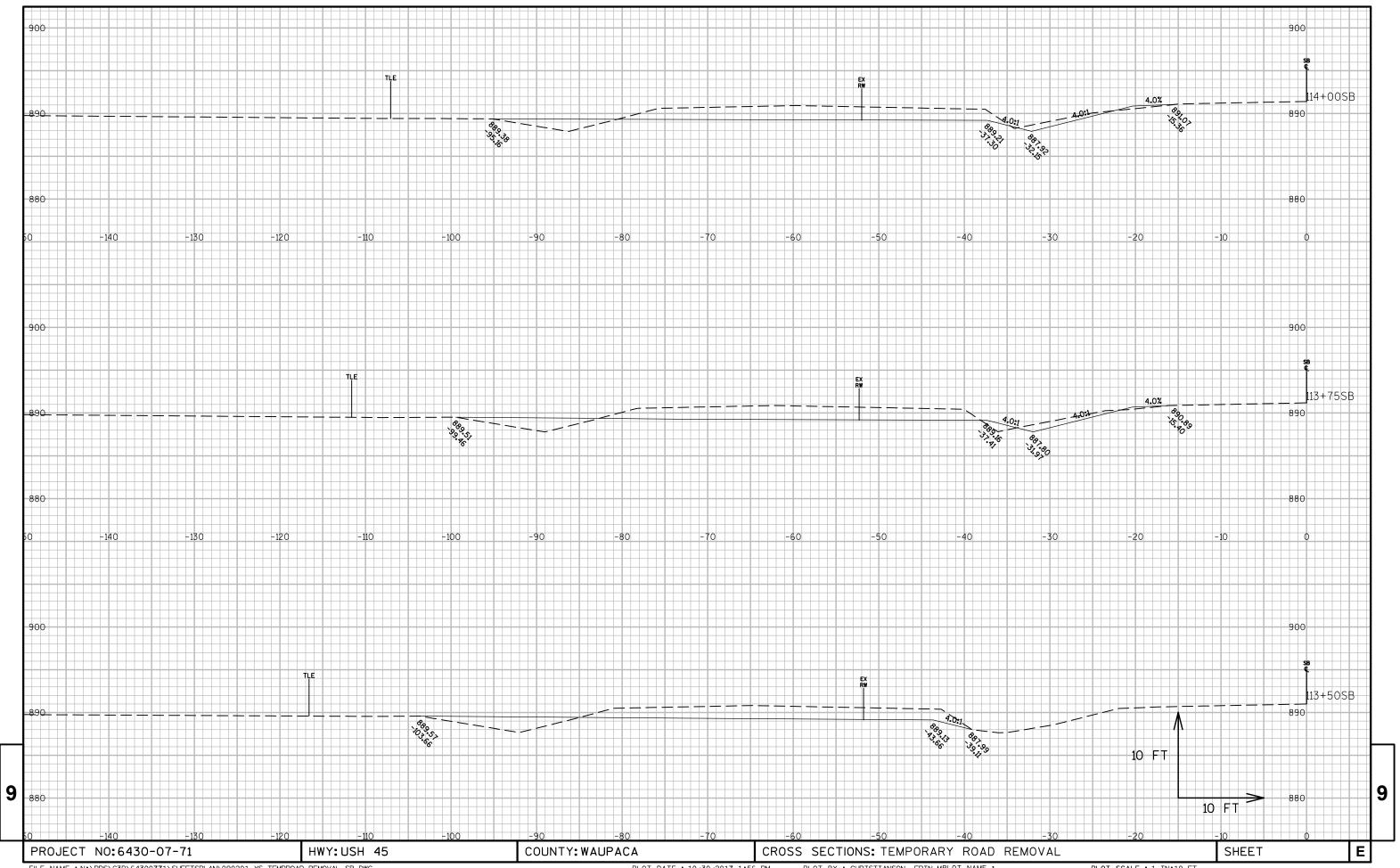


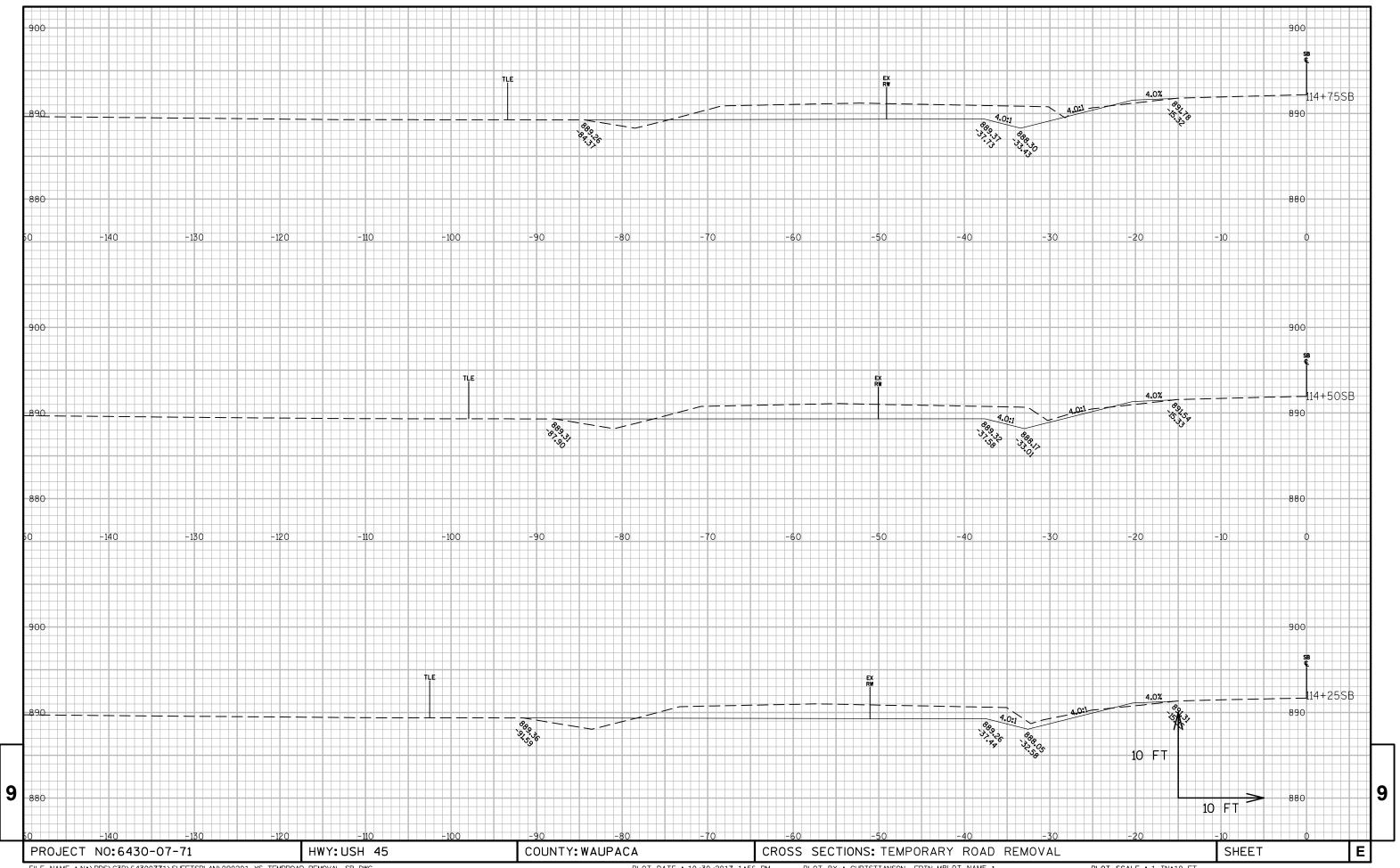


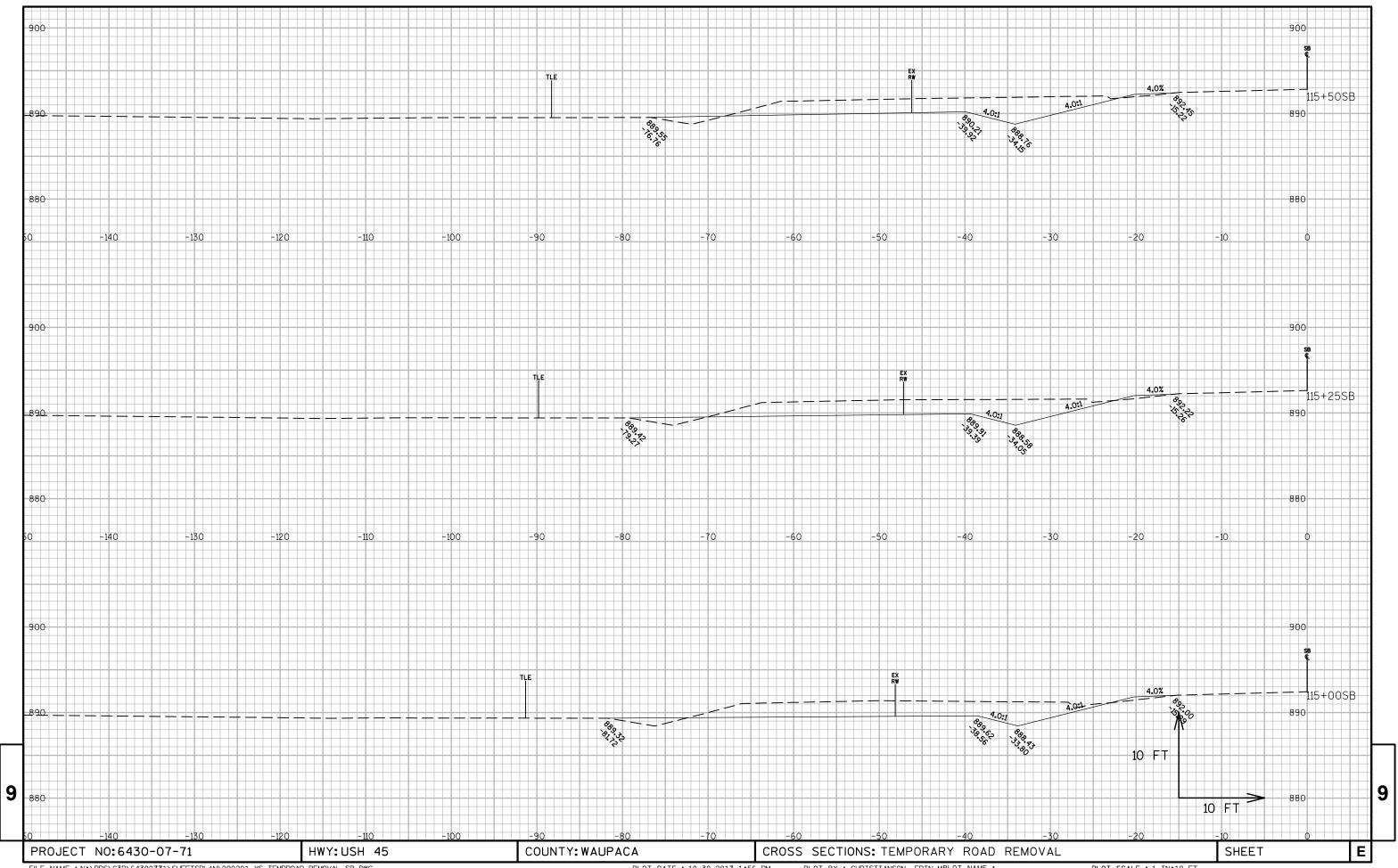


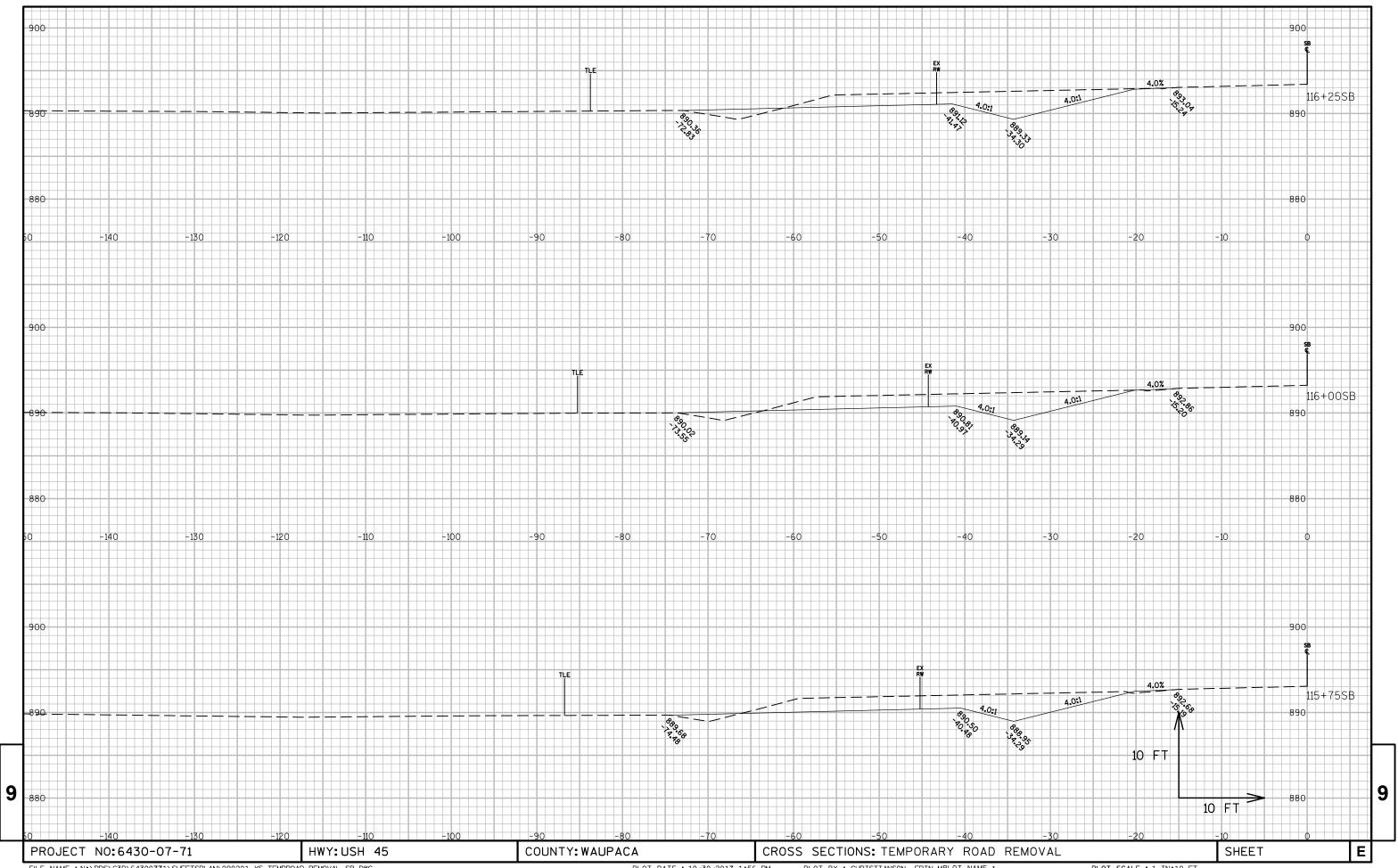


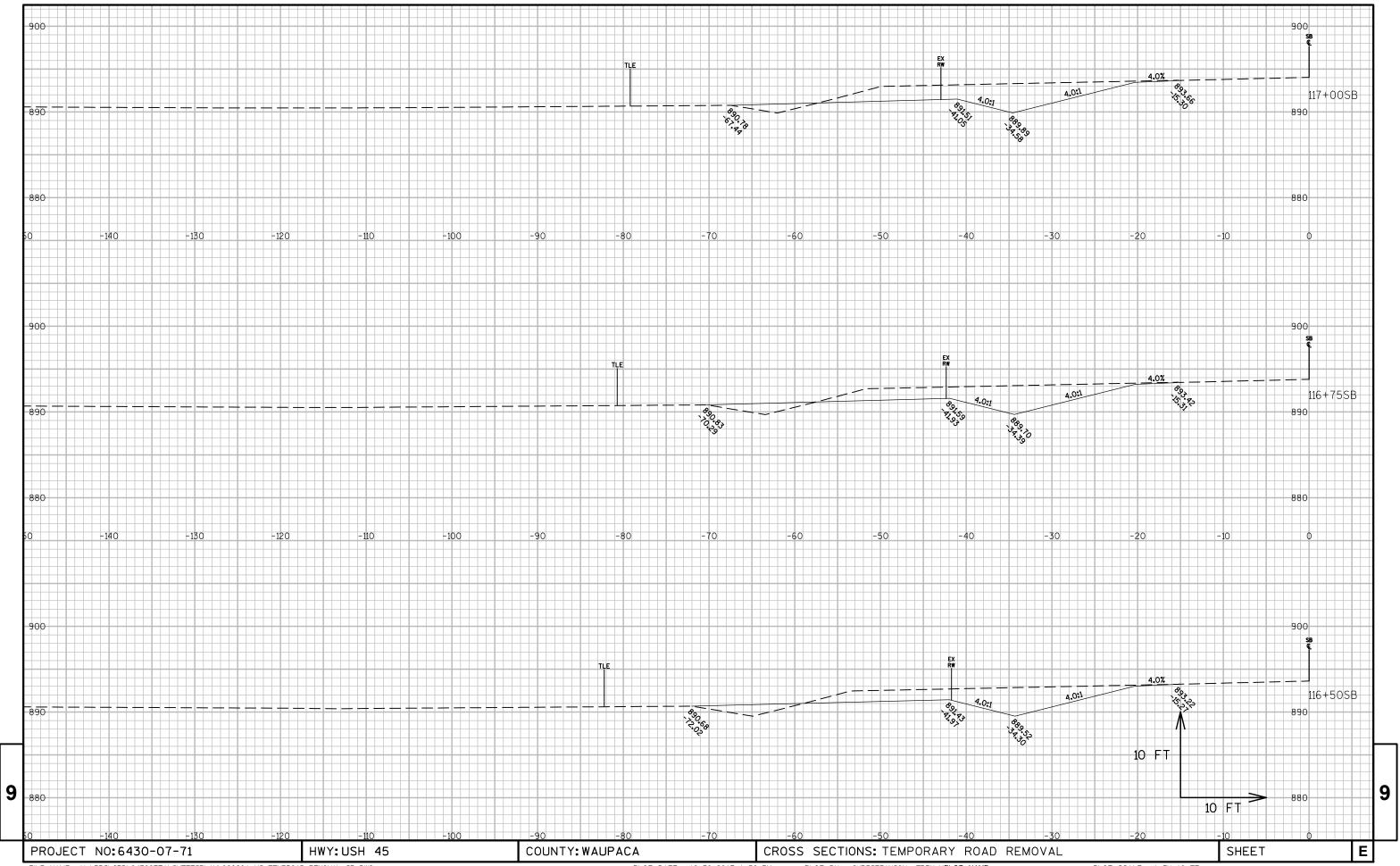


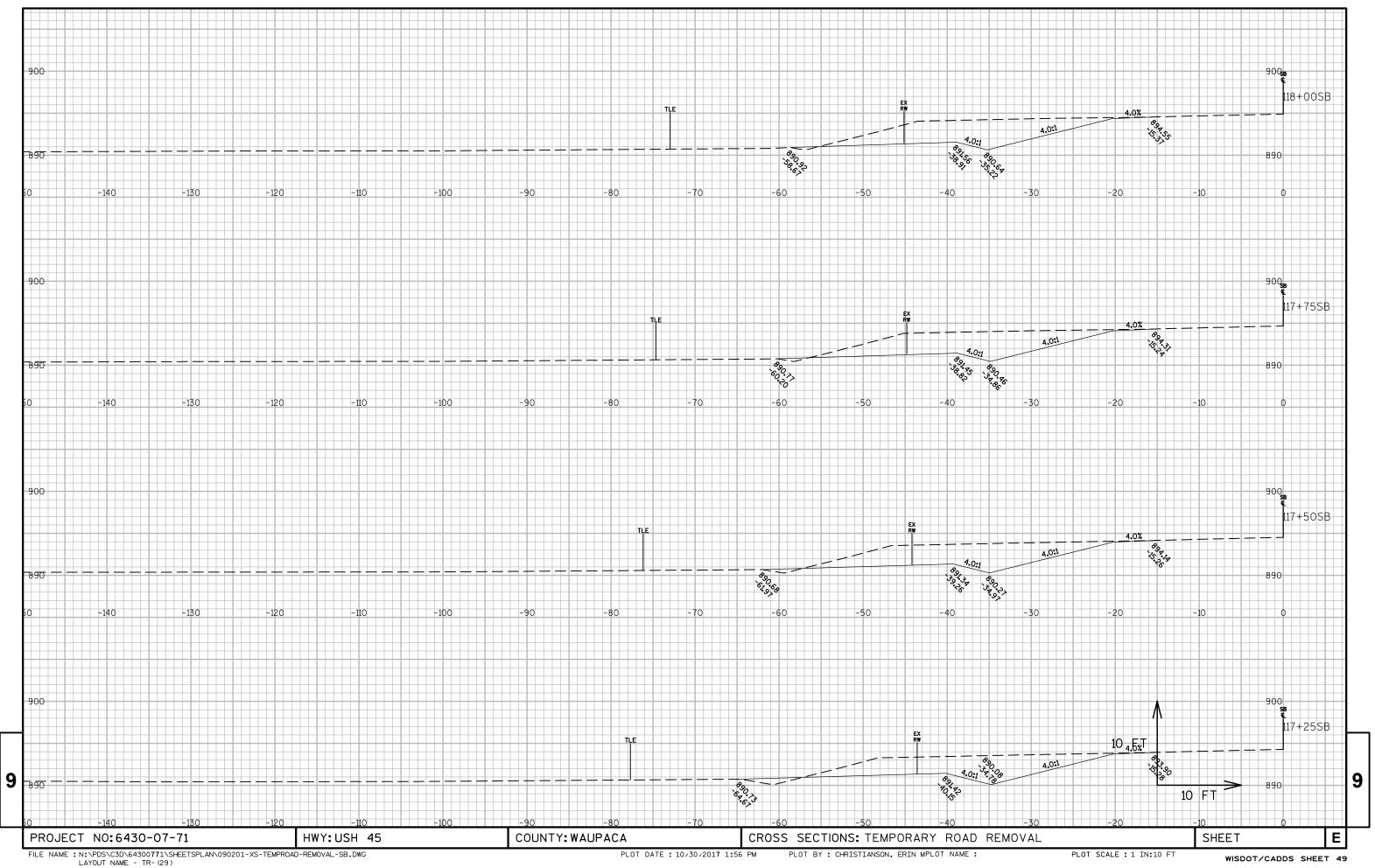


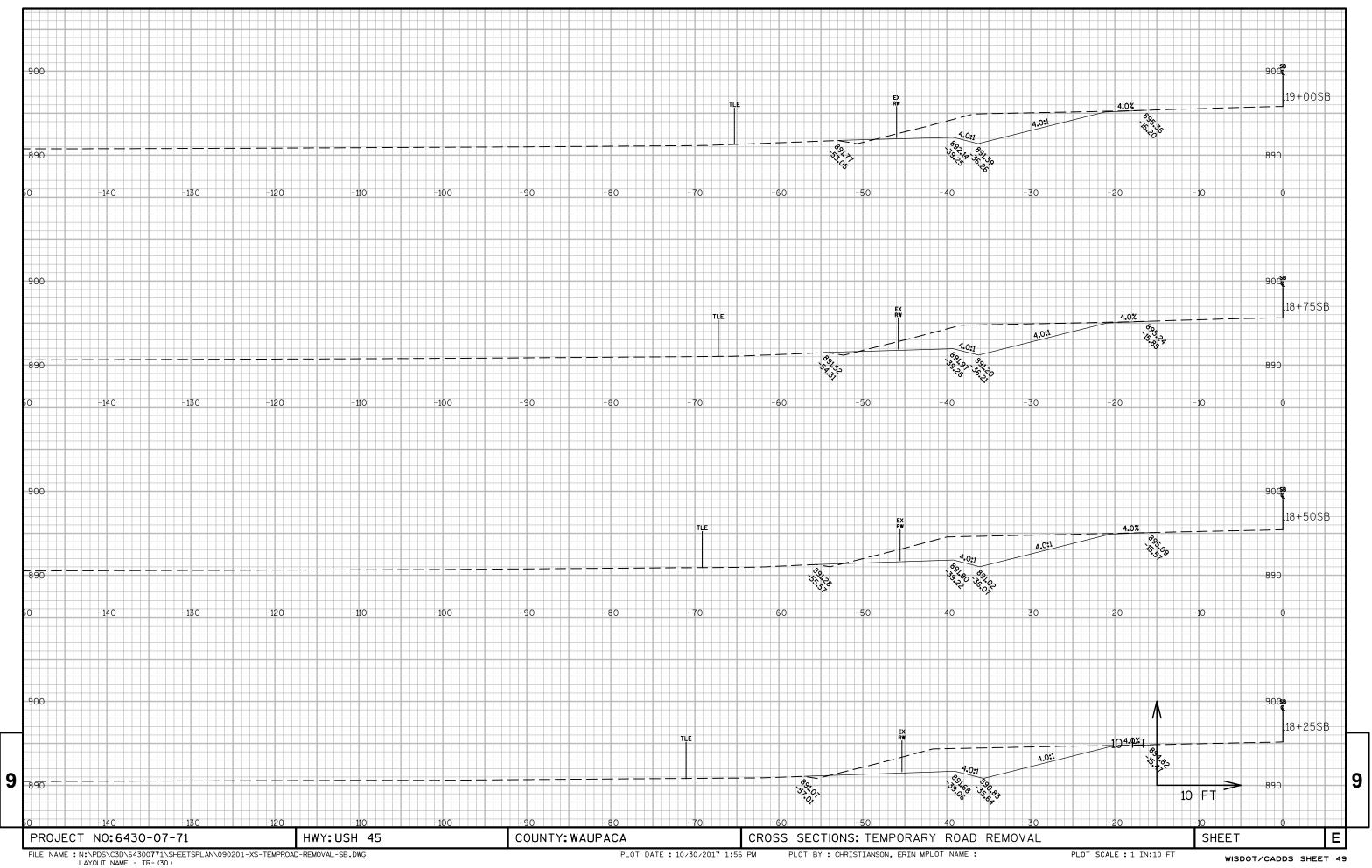


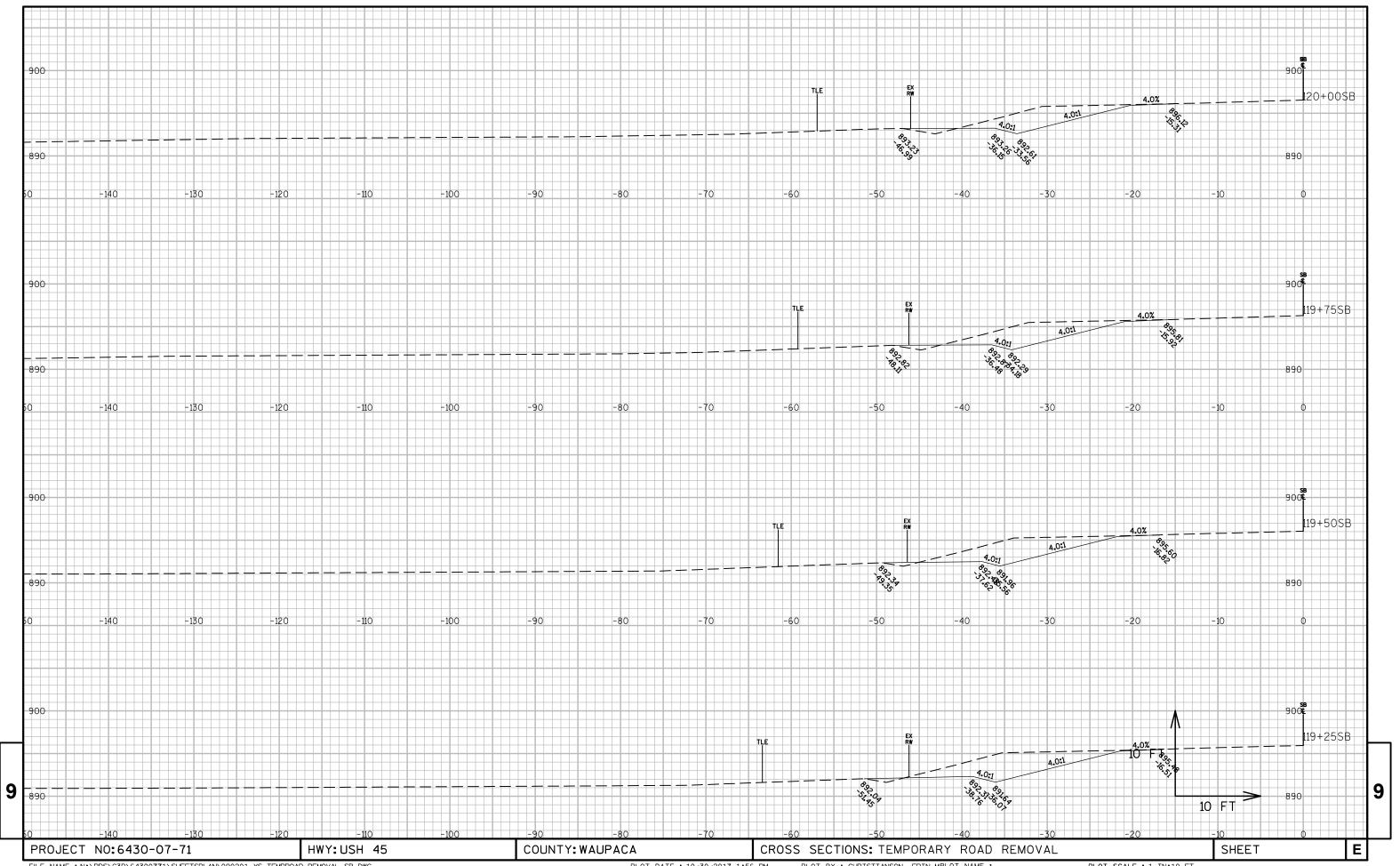


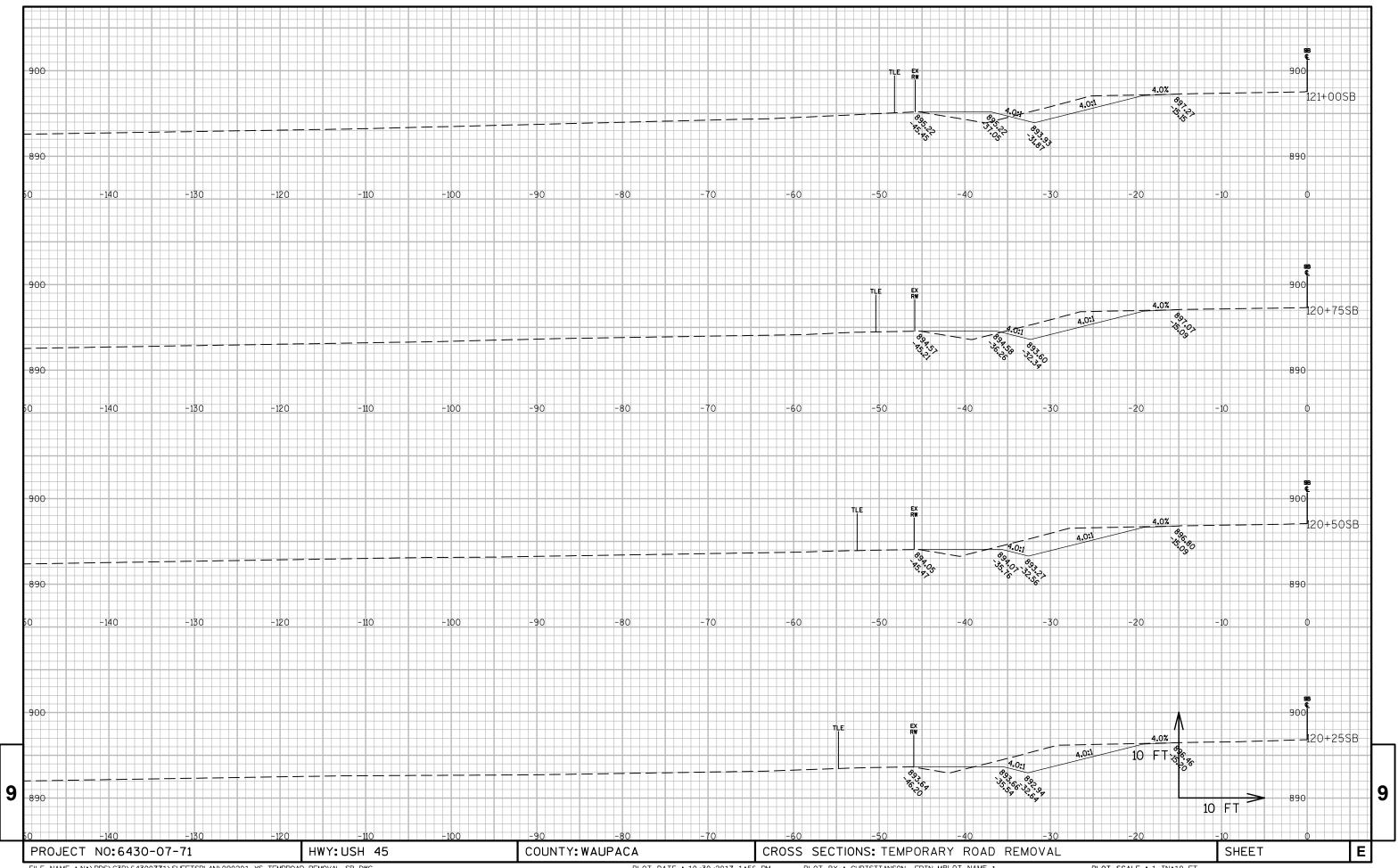


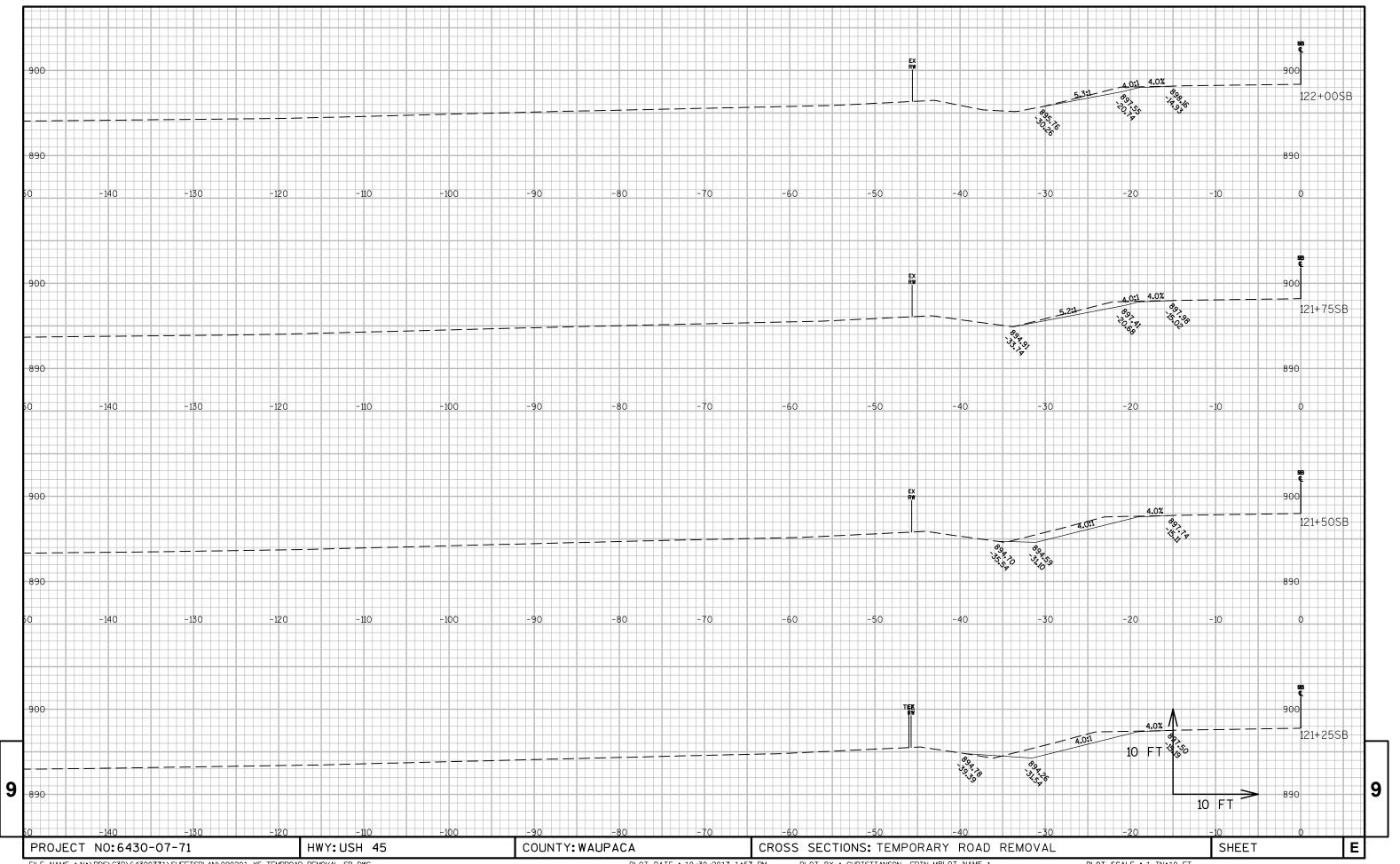


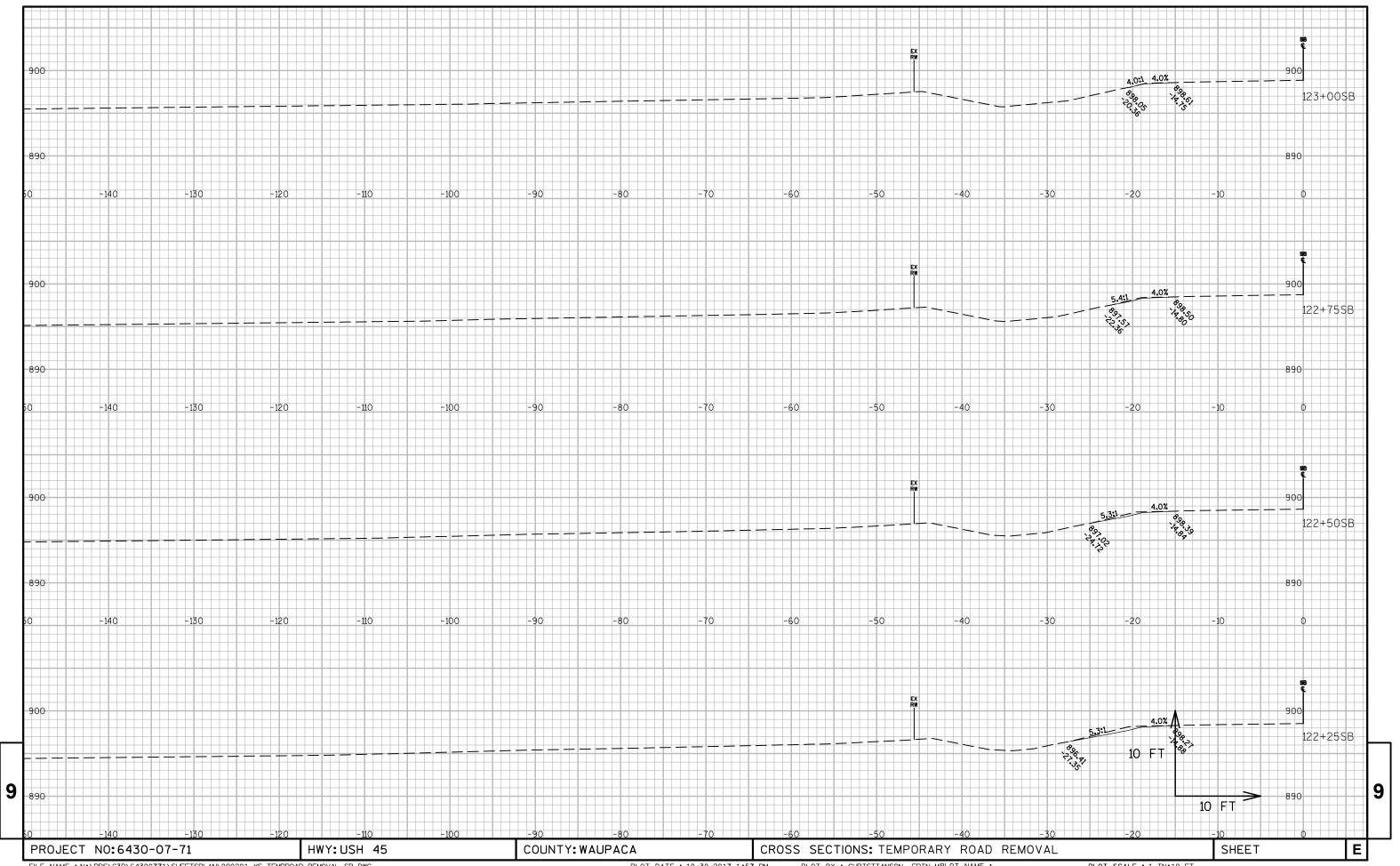


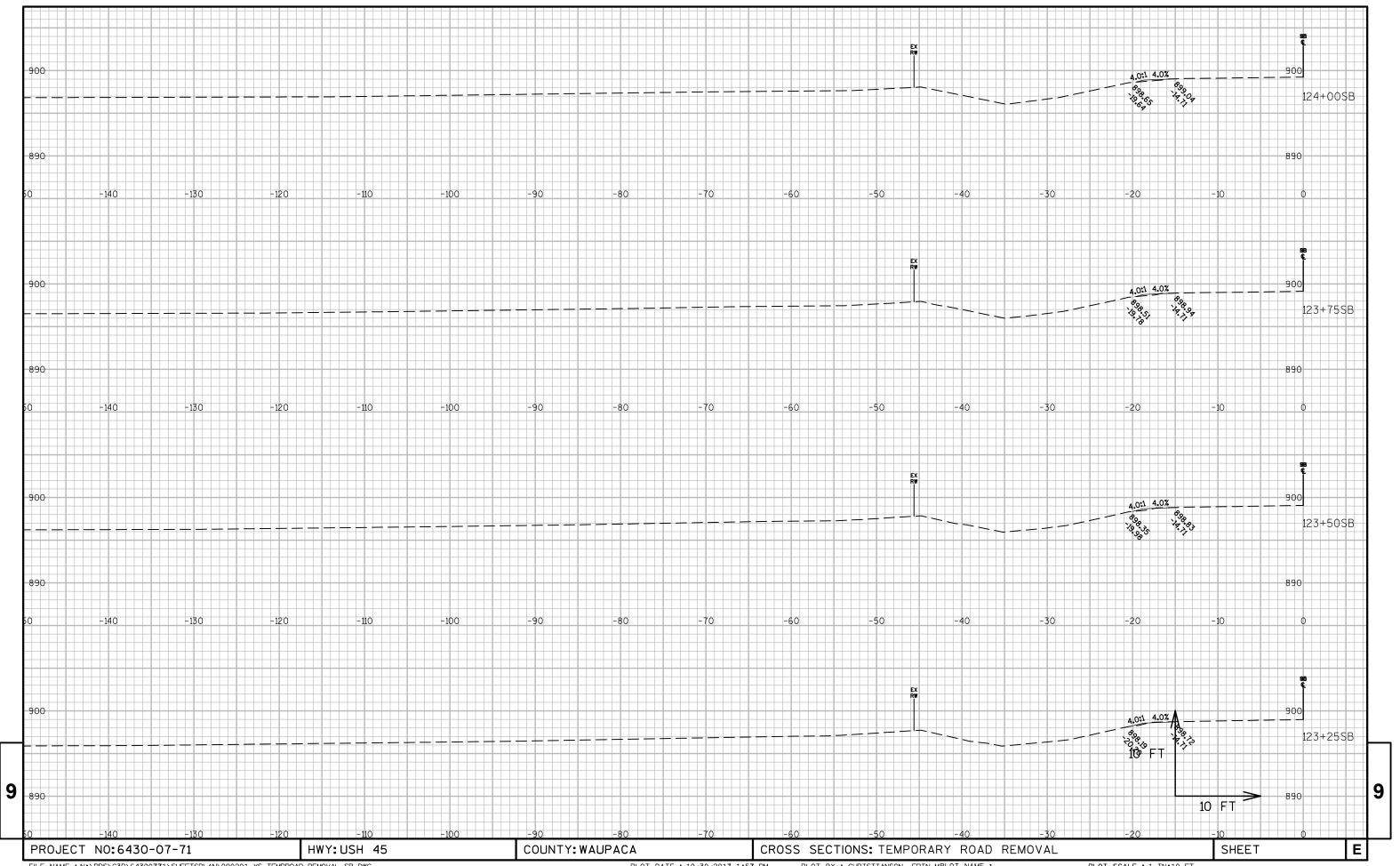


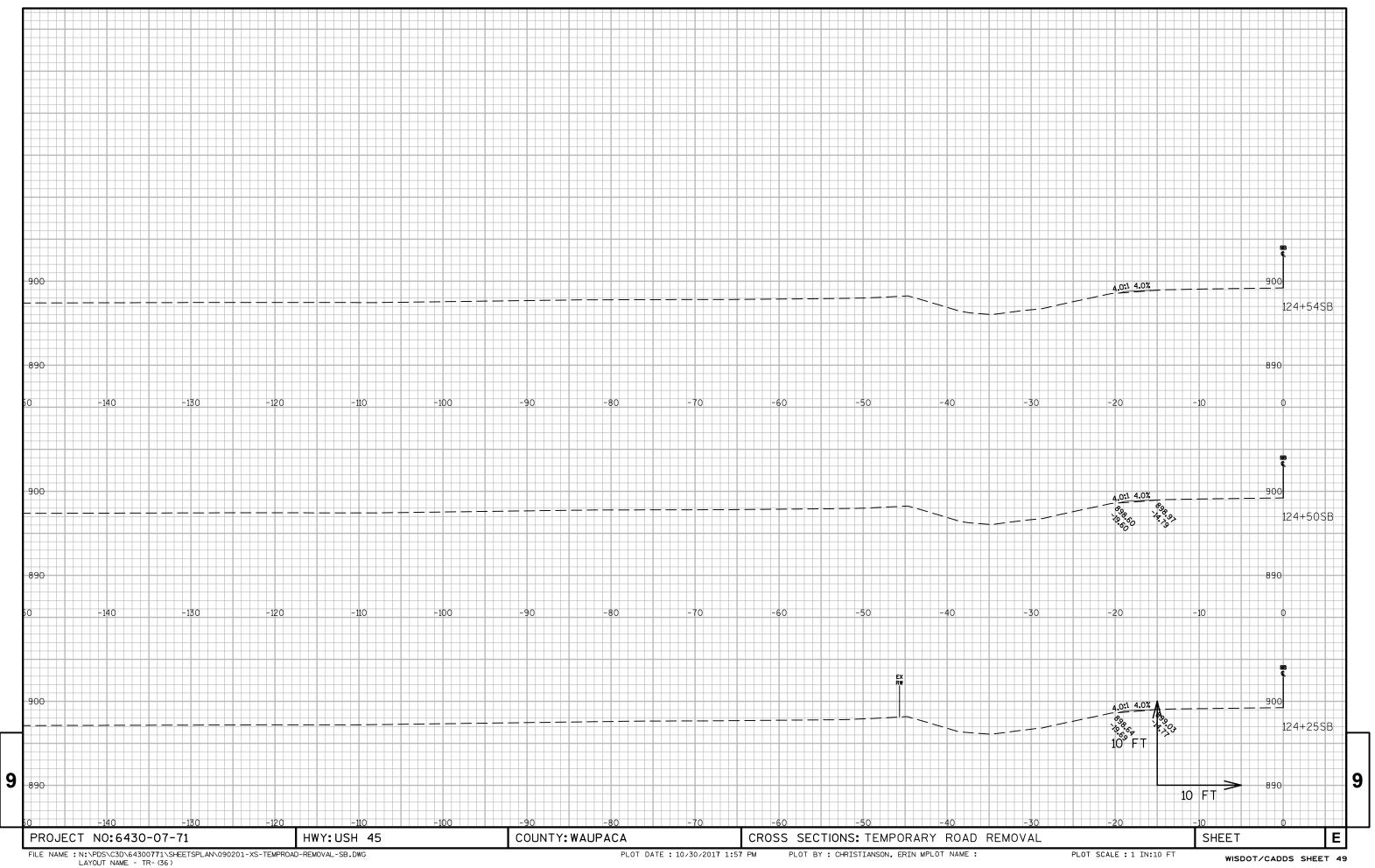














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