ORDER OF SHEETS

NOV 2016

Section No. 1

Section No. 2 Typical Sections and Details Section No. 3 Estimate of Quantities Section No. 3 Miscellaneous Quantities

Section No. 4 Right of Way Plat

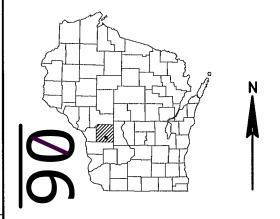
Plan and Profile (Includes Erosion Control) Section No. 5

Standard Detail Drawings

Computer Earthwork Data

Section No. 9 Cross Sections

TOTAL SHEETS = 30



DESIGN DESIGNATION

2017 = 270 2037 = 300 = 46 D,D. = 60/40 = 3.8%

DESIGN SPEED = 50 MPH **ESALS** = 21,900

CONVENTIONAL SYMBOLS

CORPORATE LIMITS PROPERTY LINE

LIMITED HIGHWAY EASEMENT EXISTING RIGHT OF WAY

PROPOSED OR NEW R/W LINE

SLOPE INTERCEPT

REFERENCE LINE

EXISTING CULVERT PROPOSED CULVERT (Box or Pipe)

COMBUSTIBLE FLUIDS

MARSH AREA

WOODED OR SHRUB AREA

POWER POLE TELEPHONE POLE

PROFILE

GRADE LINE ORIGINAL GROUND

SPECIAL DITCH

UTILITIES

ELECTRIC

FIBER OPTIC

SANITARY SEWER

UTILITY PEDESTAL

STORM SEWER

GRADE ELEVATION

MARSH OR ROCK PROFILE

CULVERT (Profile View)

(To be noted as such)

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

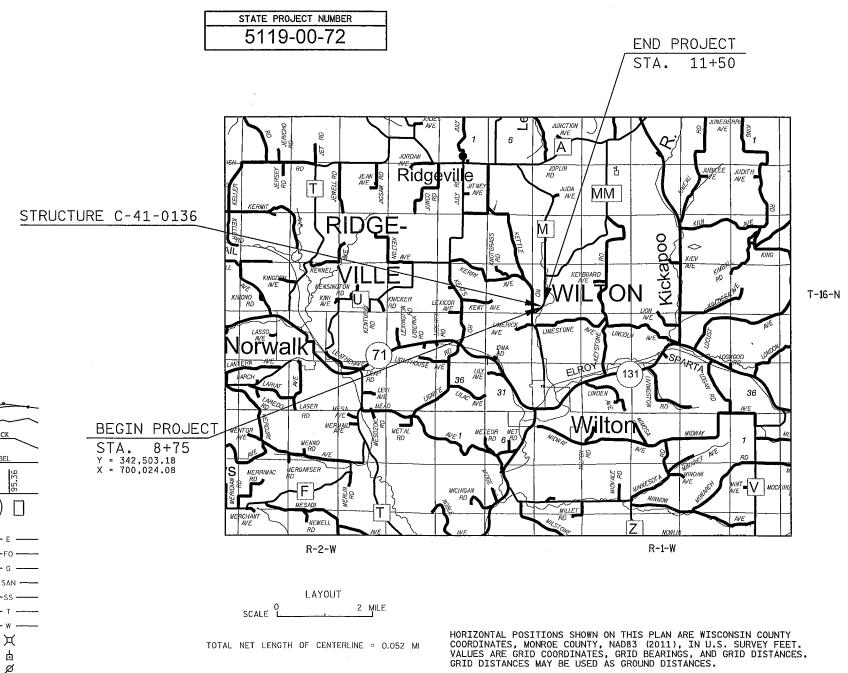
PLAN OF PROPOSED IMPROVEMENT

WILTON - TOMAH

(BR SLEIGHTON CREEK BRIDGE C-41-0136)

CTH M

MONROE COUNTY

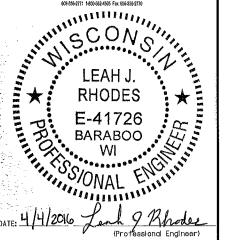


FEDERAL PROJECT STATE PROJECT PROJECT CONTRACT 5119-00-72 WISC 2016341

> ACCEPTED FOR COUNTY OF MONROE

ORIGINAL PLANS PREPARED BY





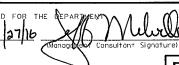
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

REPARED BY Surveyor

MSA PROFESSIONAL SERVICES, INC. MSA PROFESSIONAL SERVICES, INC.

Designer Monagement Consultant

KL ENGINEERING, INC.



STANDARD ABBREVIATIONS

4.0	AODE	F/L	FLOW LINE	SALV	SALVAGED
AC AGG	ACRE	F7L FT	FOOT	SALV	SANITARY SEWER
	AGGREGATE	GN	GRID NORTH	SECT	SECTION
<	ANGLE	HR	HANDICAP RAMP	SHLDR	SHOULDER
ASPH	ASPHALTIC	HT	HEIGHT	SW	
AC	ASPHALT CEMENT	CWT	HUNDREDWEIGHT	SW S	SIDEWALK SOUTH
ADT	AVERAGE DAILY TRAFFIC	HYD	HYDRANT	SB	
В & В	BALLED AND BURLAPPED	IN DIA	INCH DIAMETER		SOUTHBOUND
ВМ	BENCH MARK	INL	INLET	SPECS	SPECIFICATIONS
CB	CATCH BASIN	ID	INSIDE DIAMETER	SQ	SQUARE
€ OR C/L		I	INTERSECTION ANGLE	SF OR SQ FT	SQUARE FEET
C-C	CENTER TO CENTER	IE		SY	SQUARE YARD
CONC	CONCRETE	IP	INVERT ELEVATION IRON PIPE OR PIN	SSPRC	STORM SEWER
CO	COUNTY				PIPE REINFORCED CONCRETE
CTH	COUNTY TRUNK HIGHWAY	JCT	JUNCTION	STD	STANDARD
CY	CUBIC YARD	L	LENGTH OF CURVE	SDD	STANDARD DETAIL DRAWINGS
CULV	CULVERT	LF	LINEAR FOOT	STH	STATE TRUNK HIGHWAYS
CP	CULVERT PIPE	LC	LONG CHORD OF CURVE	STA	STATION
CPRC	CULVERT PIPE	LCB	LONG CHORD BEARING	SS	STORM SEWER
	REINFORCED CONCRETE	LS	LUMP SUM	Т	TANGENT
C & G	CURB AND GUTTER	MH	MANHOLE	TEL	TELEPHONE
D	DEGREE OF CURVE	N	NORTH	TEMP	TEMPORARY
DHV	DESIGN HOUR VOLUME	Υ	NORTH GRID COORDINATE	TLE	TEMPORARY LIMITED EASEMENT
DIA OR Ø	DIAMETER	0E	OUTLET ELEVATION	T	TON
DIST	DISTRICT	OL	OUT LOT	TC	TOP OF CURB
DWY	DRIVEWAY	OD	OUTSIDE DIAMETER	TN	TOWN
E	EAST	OH	OVERHEAD LINES	TRANS	TRANSITION
Χ	EAST GRID COORDINATE	PAVT	PAVEMENT	Т	TRUCKS (percent of)
EB	EASTBOUND	PLE	PERMANENT LIMITED EASEMENT	TYP	TYPICAL
ELEC	ELECTRIC	PC	POINT OF CURVATURE	UNCL	UNCLASSIFIED
EL OR ELI	EV ELEVATION	ΡΙ	POINT OF INTERSECTION	USH	UNITED STATES HIGHWAY
EMB	EMBANKMENT	PT	POINT OF TANGENCY	VAR	VARIABLE
EW	ENDWALL	PCC	PORTLAND CEMENT CONCRETE	VERT	VERTICAL
ESALS	EQUIVALENT SINGLE	LB	POUND	VC	VERTICAL CURVE
	AXLE LOADS	PE	PRIVATE ENTRANCE	VOL	VOLUME
EXC	EXCAVATION	R OR RAD	RADIUS	WM	WATER MAIN
EBS	EXCAVATION BELOW	RR	RAILROAD	WV	WATER VALVE
	SUBGRADE	R	RANGE	W	WEST
EXIST	EXISTING	R OR R/L	REFERENCE LINE	wB	WESTBOUND
EXP	EXPANSION	REQD	REQUIRED	YD	YARD
F-F	FACE TO FACE	RT	RIGHT		IAND
FERT	FERTILIZER	R/W	RIGHT-OF-WAY		
FE	FIELD ENTRANCE	RD	ROAD		
_					

DESIGN CONTACT

MSA PROFESSIONAL SERVICES, INC. ATTN: LEAH RHODES, PE 1230 SOUTH BOULEVARD BARABOO, WI 53913 608-355-8945 LRHODES@MSA-PS.COM

COUNTY CONTACT

MONROE COUNTY ATTN: JACK DITTMAR. COMMISSIONER 803 WASHINGTON STREET SPARTA, WI 54656 608-269-8740 JACK.DITTMAR@CO.MONROE.WI.US

DNR LIAISON

WISCONSIN DEPARTMENT OF NATURAL RESOURCES ATTN: KAREN KALVELAGE ENVIRONMENTAL ANALYSIS AND REVIEW SPECIALIST 3550 MORMON COULEE ROAD LA CROSSE, WI 54601 608-785-9115 KAREN.KALVELAGE@WISCONSIN.GOV

UTILITIES

COMMUNICATION: CENTURYLINK ATTN: BRET CLARK 311 SOUTH COURT STREET SPARTA, WI 54656 608-269-0819 BRET.CLARK@CENTURYLINK.COM

ELECTRIC: OAKDALE ELECTRIC COOPERATIVE ATTN: TRAVIS CHAMPLIN 489 N OAKWOOD STREET P.O. BOX 128 OAKDALE, WI 54649 608-372-8848 TRAVISC@OAKDALEREC.COM

> * NOT A MEMBER OF DIGGERS HOTLINE



GENERAL NOTES

DISTURBED AREAS WITHIN THE RIGHT-OF-WAY, EXCEPT THE AREAS WITHIN THE FINISHED SHOULDER POINTS, SHALL BE FERTILIZED, SEEDED AND MULCHED AS DIRECTED BY THE ENGINEER. OVERSOW PERMANENT SEEDING AREAS WITH TEMPORARY SEED AT 3 LBS. PER 1000 SQUARE FEET.

THE LOCATIONS OF EXISTING UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE AREA THAT ARE

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

ELEVATIONS SHOWN ON THIS PLAN ARE REFERENCED TO USGS NAVD 88 (1996 ADJUSTED). BENCHMARKS WERE LOCATED IN THE FIELD USING GPS TECHNOLOGY.

SILT FENCE TO BE PLACED AS SHOWN ON THE PLAN OR AS DIRECTED BY THE ENGINEER AND IN PLACE PRIOR TO CONSTRUCTION OR BRIDGE REMOVAL.

WETLANDS ARE PRESENT OUTSIDE THE EXISTING TOE OF SLOPE. AREAS OUTSIDE THE SLOPE INTERCEPTS SHALL NOT BE DISTURBED.

RUNOFF COEFFICIENT TABLE

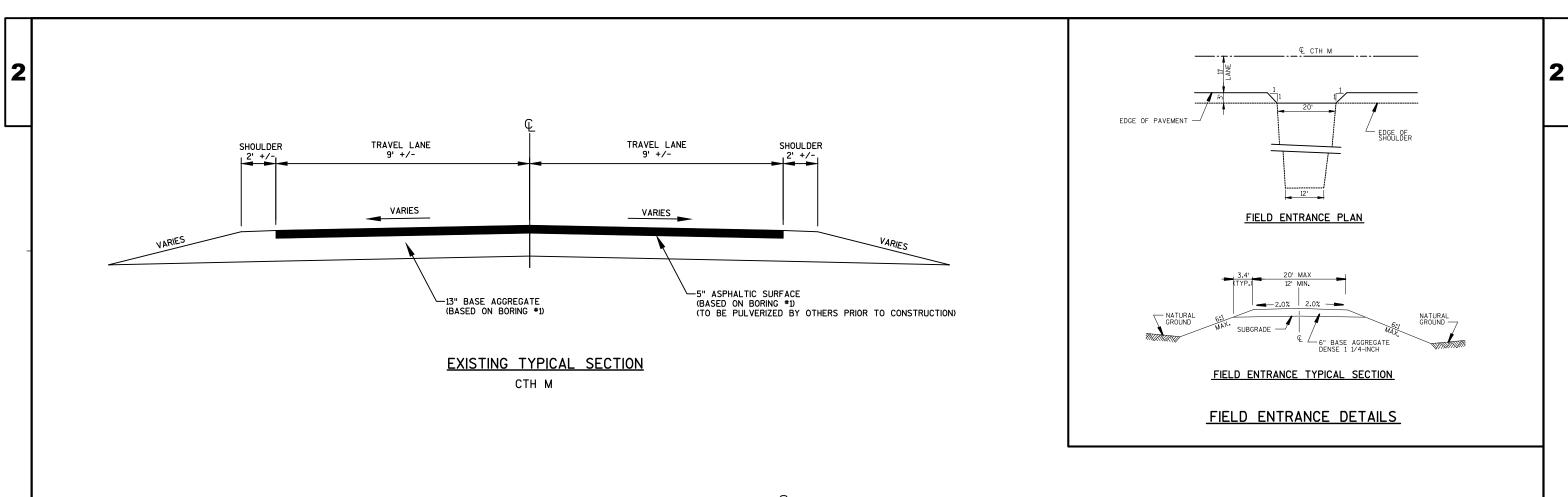
						HYDROLOGIC S	SOIL GROU	JP				
		А			B C				D			
	SLOPE	RANGE	(PERCENT)	SL0PE	RANGE	(PERCENT)	SLOPE	RANGE	(PERCENT)	SL0PE	RANGE	(PERCENT)
LAND USE:	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER
ROW CROPS	.08	.16	.22	.12	.20	.27	.15	.24	.33	.19	.28	.38
	.22	.30	.38	.26	.34	.44	.30	.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:	ı					l .	•					•
ASPHALT						.7095						
CONCRETE	.8095											
BRICK	.7080											
DRIVES, WALKS						.7585						
ROOFS						.7595						
GRAVEL ROADS,	SHOULDE	ERS				.4060						

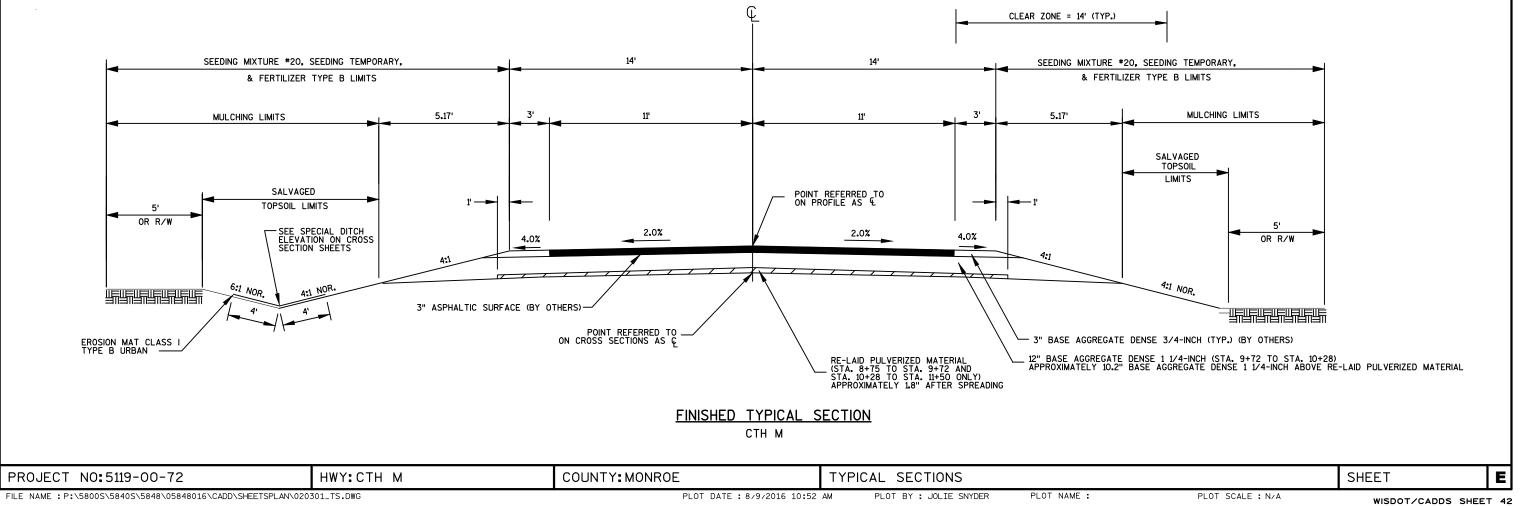
TOTAL PROJECT AREA = 0.80 ACRES TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 0.58 ACRES

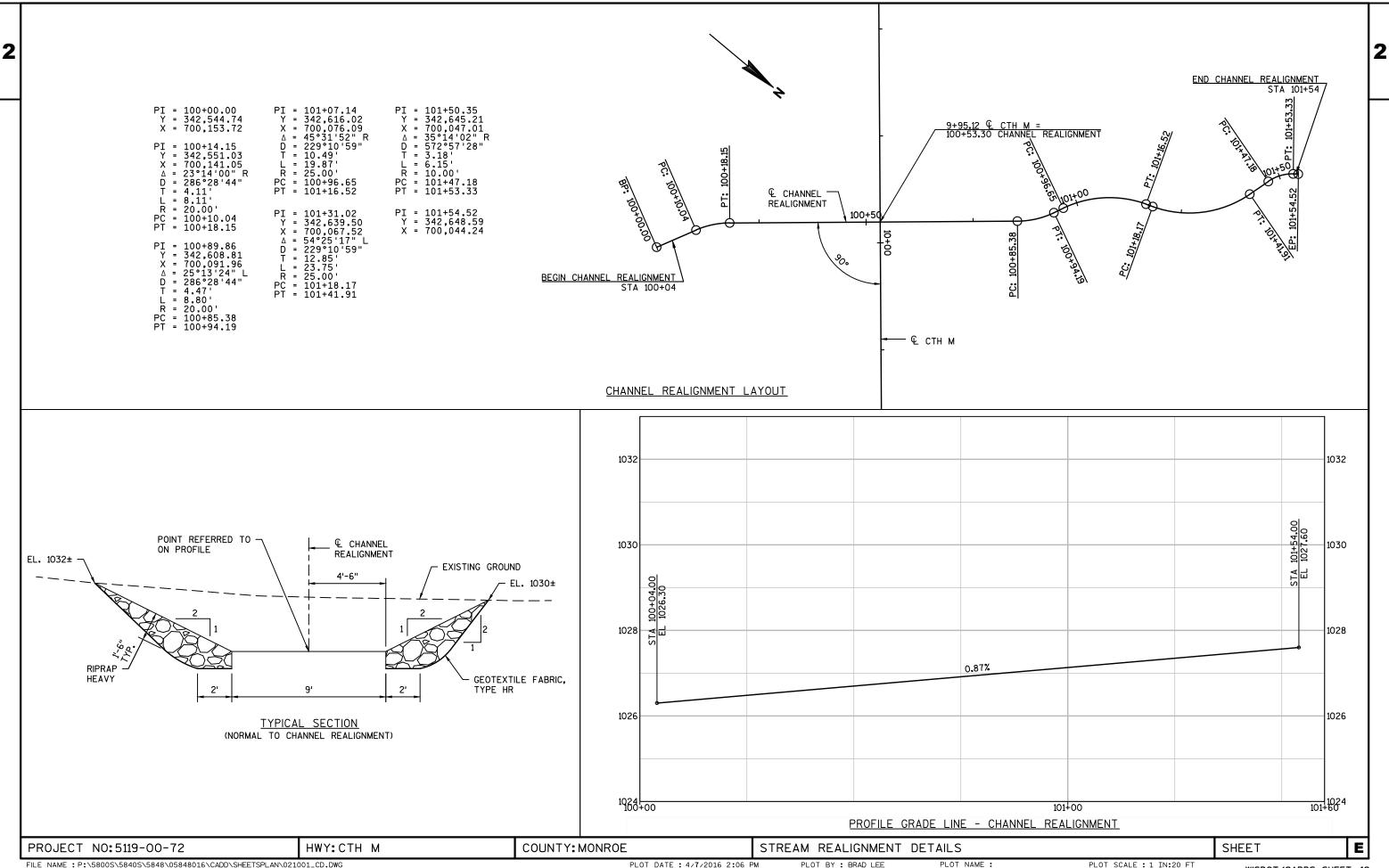
PROJECT NO:5119-00-72 HWY: CTH M COUNTY: MONROE GENERAL NOTES SHEET FILE NAME : P:\5800S\5840S\5848\05848016\CADD\SHEETSPLAN\020101_GN.DWG PLOT DATE: 2/15/2016 4:21 PM PLOT BY : BARB HALLEY PLOT NAME :

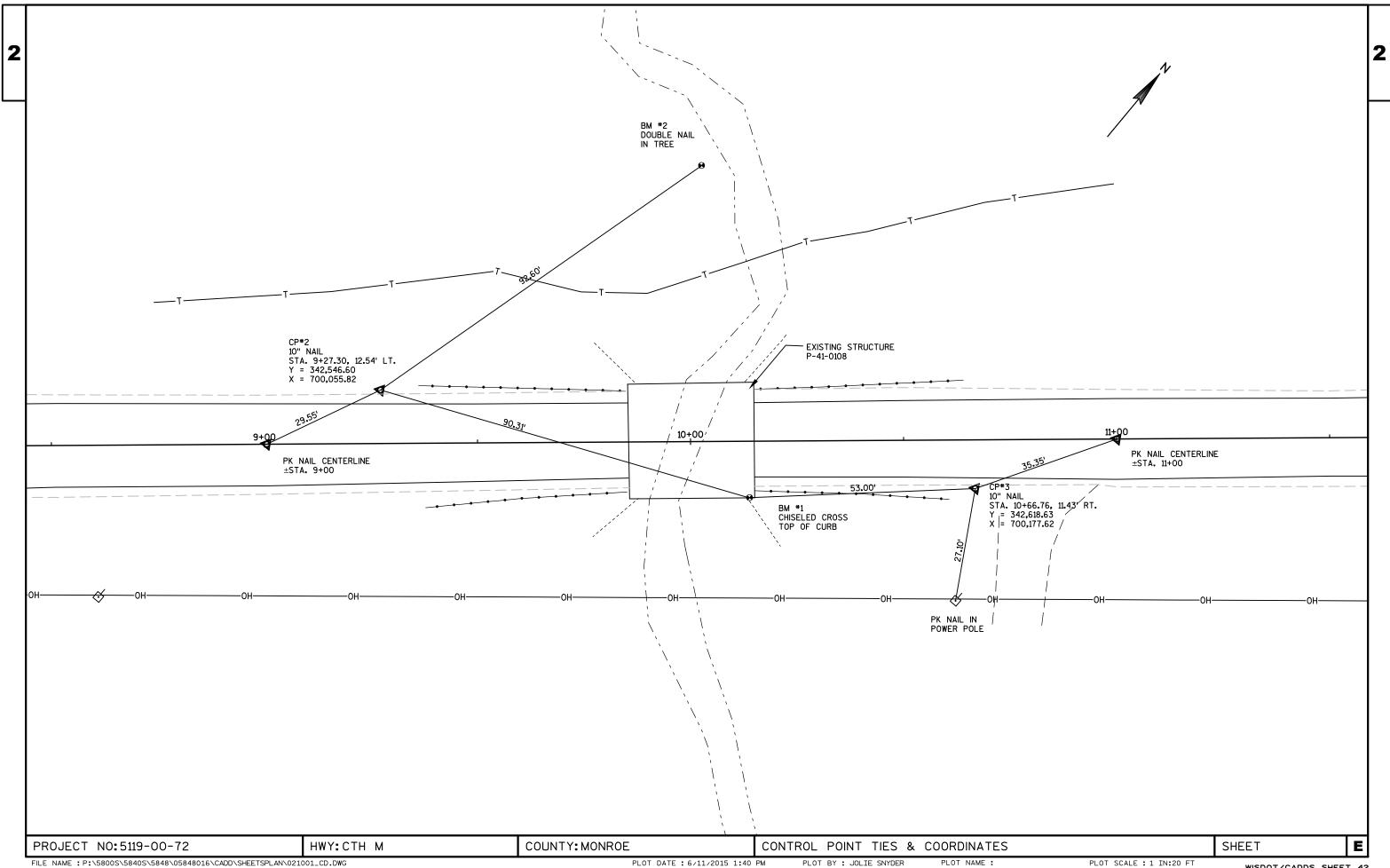
PLOT SCALE: 0.100015

Ε









STATION	_	STATION	LOCATION	GRUBBING STA
10+00	-	11+00	LT	1
		TOTALS:		1

205.0100 EXCAVATION COMMON **P**

208.0100 BORROW

	EXC. COMMON	FILL	EXPANDED FILL	BORROW	
LOCATION	CY	CY (1)	CY (2)	CY	
STA 8+75 - STA 9+72	40	252	328	288	
STA 10+28 - STA 11+50	30	254	331	301	
TOTALS:	70	506	659	589	

(1) - NOT A BID ITEM - FOR INFORMATIONAL PURPOSES ONLY.

(2) - FILL EXPANSION 30%

305.0120 BASE AGGREGATE DENSE 1 1/4-INCH 624.0100 WATER

			1 1/4-INCH (2)	WATER (1)
STATION	-	STATION	TON	MGAL
8+75.00	-	11+50.00	625	12.5
10+81, RT F.E.			20	0.5
		TOTALS:	645	13.0

(1) - ADDITIONAL QUANTITY INCLUDED WITH EROSION CONTROL AND RELAY PULVERIZED MATERIAL ITEMS.

(2) - QUANTITY ASSUMES 71 TONS OF PULVERIZED MATERIAL WILL BE REUSED IN THE BOTTOM LAYER OF THE PAVEMENT STRUCTURE. ESTIMATED THICKNESS OF RE-LAID MATERIAL IS 1.8 INCHES AFTER MATERIAL IS SPREAD TO A WIDTH OF 30 FEET.

606.0300 RIPRAP HEAVY

645.0120 GEOTEXTILE FABRIC TYPE HR

	RIPRAP	FABRIC
LOCATION	CY	SY
STREAM REALIGNMENT	48	131
TOTAL	48	131

614.0920 SALVAGED RAIL

					RAIL
	STATION	-	STATION	LOCATION	LF
	9+36	-	9+85	LT	49
	9+38	-	9+85	RT	47
	10+15	-	10+61	RT	46
	10+15	-	10+64	LT	49
				-	
				TOTALS:	191
_					

625.0500 SALVAGED TOPSOIL
627.0200 MULCHING
629.0210 FERTILIZER TYPE B
630.0120 SEEDING MIXTURE NO. 20
630.0200 SEEDING TEMPORARY
624.0100 WATER

				SALVAGED TOPSOIL	MULCHING	FERTILIZER	SEEDING #20	SEEDING TEMPORARY	WATER (1)
STATION	-	STATION	LOCATION	SY	SY	CWT	LB	LB	MGAL
8+75	-	11+50	LT	620	815	0.60	26	26	22
8+75	-	11+50	RT	575	720	0.55	23	23	19
STREAM REALI	STREAM REALIGNMENT STOCKPILE			-	-	-	-	4	3
UNDISTRIBUTED			120	155	0.15	5	5	4	
TOTALS:				1315	1690	1.30	54	58	48

(1) - ADDITIONAL QUANTITY INCLUDED WITH BASE AGGREGATE AND RELAY PULVERIZED MATERIAL ITEMS.

628.1504 SILT FENCE

628.1520 SILT FENCE MAINTENANCE

STATION	_	STATION	LOCATION	FENCE LF	MAINT. LF
8+75	-	9+95	RT	125	125
9+50	-	9+80	LT	85	85
9+85	-	11+00	LT	190	190
10+05	-	10+65	RT	65	65
10+85	-	11+50	RT	65	65
STREAM REALIGNMENT STOCKPILE				150	150
UNDISTRIBUT	ED		-	70	70
			TOTALS:	750	750

628.2008 EROSION MAT URBAN CLASS I TYPE B

	URBAN CLASS I
	TYPE B
LOCATION	SY
STA 8+75 - STA 9+60, LT	76
STA 10+35 - STA 10+80, LT	40
UNDISTRIBUTED	14
TOTALS:	130

628.1905 MOBILIZATIONS EROSION CONTROL

628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL

PLOT BY : janyder

	MOBILIZATION	EMERGENCY MOB.
DESCRIPTION	EACH	EACH
PROJECT 5119-00-72	2	2
TOTALS:	2	2

PROJECT NO: 5119-00-72

HWY: CTH M

COUNTY: MONROE

MISCELLANEOUS QUANTITIES

PLOT NAME :

PLOT SCALE : 1:20

SHEET

633.5100 MARKERS ROW

STATION	OFFSET	LOCATION	EACH
5+60.19	33.00	LT	1
6+03.70	33.00	RT	1
7+00.42	70.51	RT	1
8+15.92	33.00	LT	1
9+60.00	62.07	LT	1
14+03.05	55.00	RT	1
14+04.95	59.99	LT	1
•		TOTAL:	7

633.5200 MARKERS CULVERT END

STATION	LOCATION	EACH
9+88	29' RT	1
9+88	27' LT	1
10+12	29' RT	1
10+12	27' LT	1
	TOTAL:	4

638.2602 REMOVING SIGNS TYPE II

638.3000 REMOVING SMALL SIGN SUPPORTS

		REMOVING	REMOVING SMALL	
		SIGNS TYPE II	SIGN SUPPORTS	
STATION	LOCATION	EACH	EACH	COMMENTS
9+84	RT	1	1	EXISTING OBJECT MARKER
9+84	LT	1	1	EXISTING OBJECT MARKER
10+16	RT	1	1	EXISTING OBJECT MARKER
10+16	LT	1	1	EXISTING OBJECT MARKER
	TOTAL S:	4	4	

650.4500 CONSTRUCTION STAKING SUBGRADE

650.5000 CONSTRUCTION STAKING BASE

650.9920 CONSTRUCTION STAKING SLOPE STAKES

650.9910 CONSTRUCTION STAKING SUPPLEMENTAL CONTROL 5119-00-72

STATION	-	STATION	SUBGRADE LF	BASE LF	SLOPE STAKES LF	SUPPLEMENTAL CONTROL LS
8+75	-	11+50	275	275	275	-
		TOTALS:	275	275	275	1

NOTE:

ALL ITEMS AND QUANTITIES ON THIS SHEET ARE FOR ENGINEER ESTIMATE CATEGORY 0010.

SPV.0180.01 RELAY PULVERIZED MATERIAL

624.0100 WATER

		RELAY PULVERIZED					
			MATERIAL	WATER (1)			
STATION	-	STATION	SY	MGAL			
8+75	-	9+72	325	1			
10+28	-	11+50	405	1			
		TOTALS:	730	2			

(1) - ADDITIONAL QUANTITY INCLUDED WITH BASE AGGREGATE AND EROSION CONTROL ITEMS.

SPV.0105.02 CHANNEL EXCAVATION SPV.0105.03 CONSTRUCTION STAKING, CHANNEL EXCAVATION

		CHANNEL	CHANNEL
		EXCAVATION	STAKING
	LOCATION	EACH	EACH
_	STREAM REALIGNMENT	1	1
-	TOTAL	- 1	1

PROJECT NO: 5119-00-72 HWY: CTH M

COUNTY: MONROE FILE NAME: P:\\$800a\\$840a\\$848\05848\05848016\Documenta\Estimate\Roadway Quantities\05848016_MiscOty & Earthwork Barders.dgn PLOT DATE : 2/3/2016

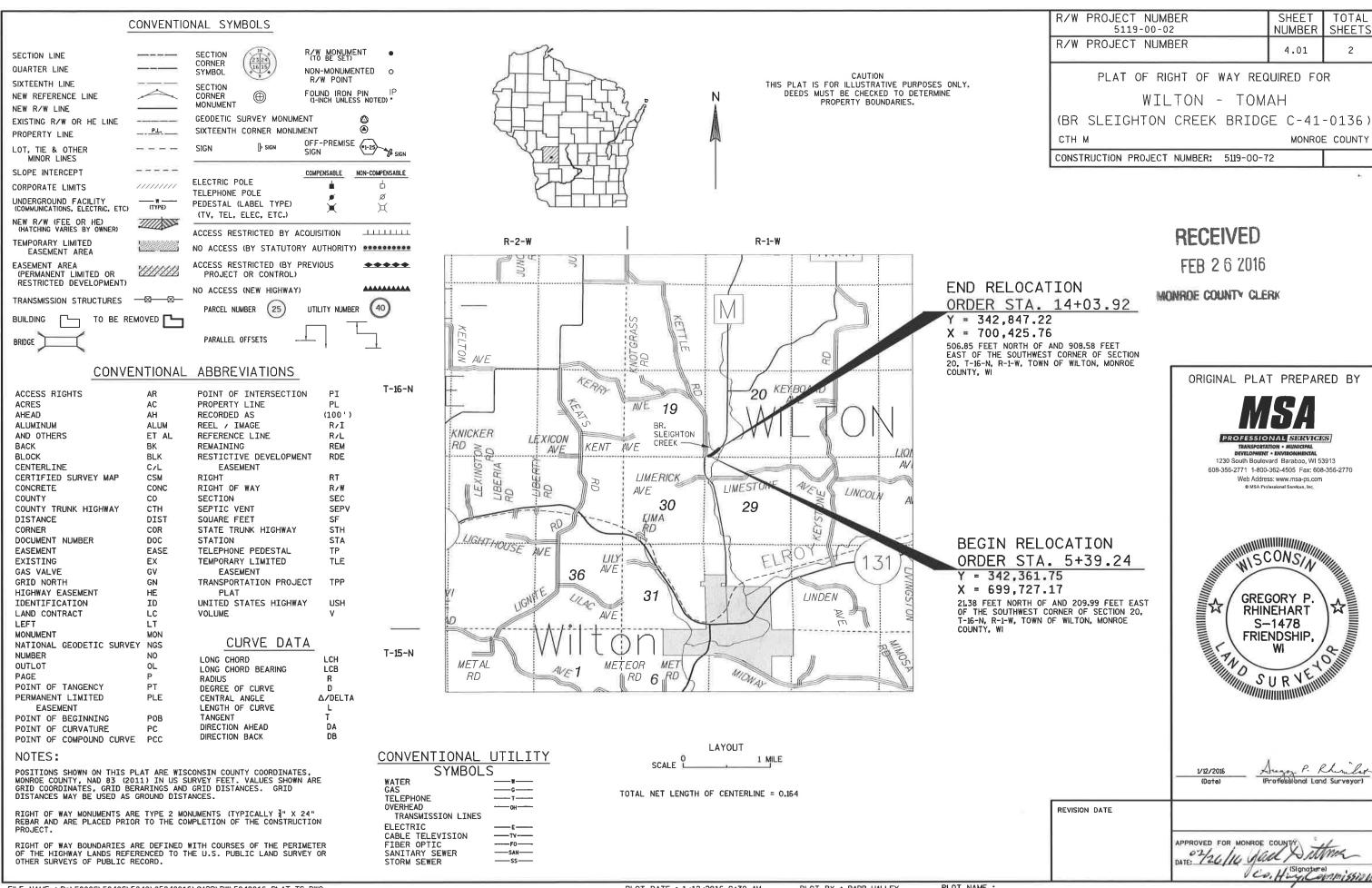
PLOT NAME :

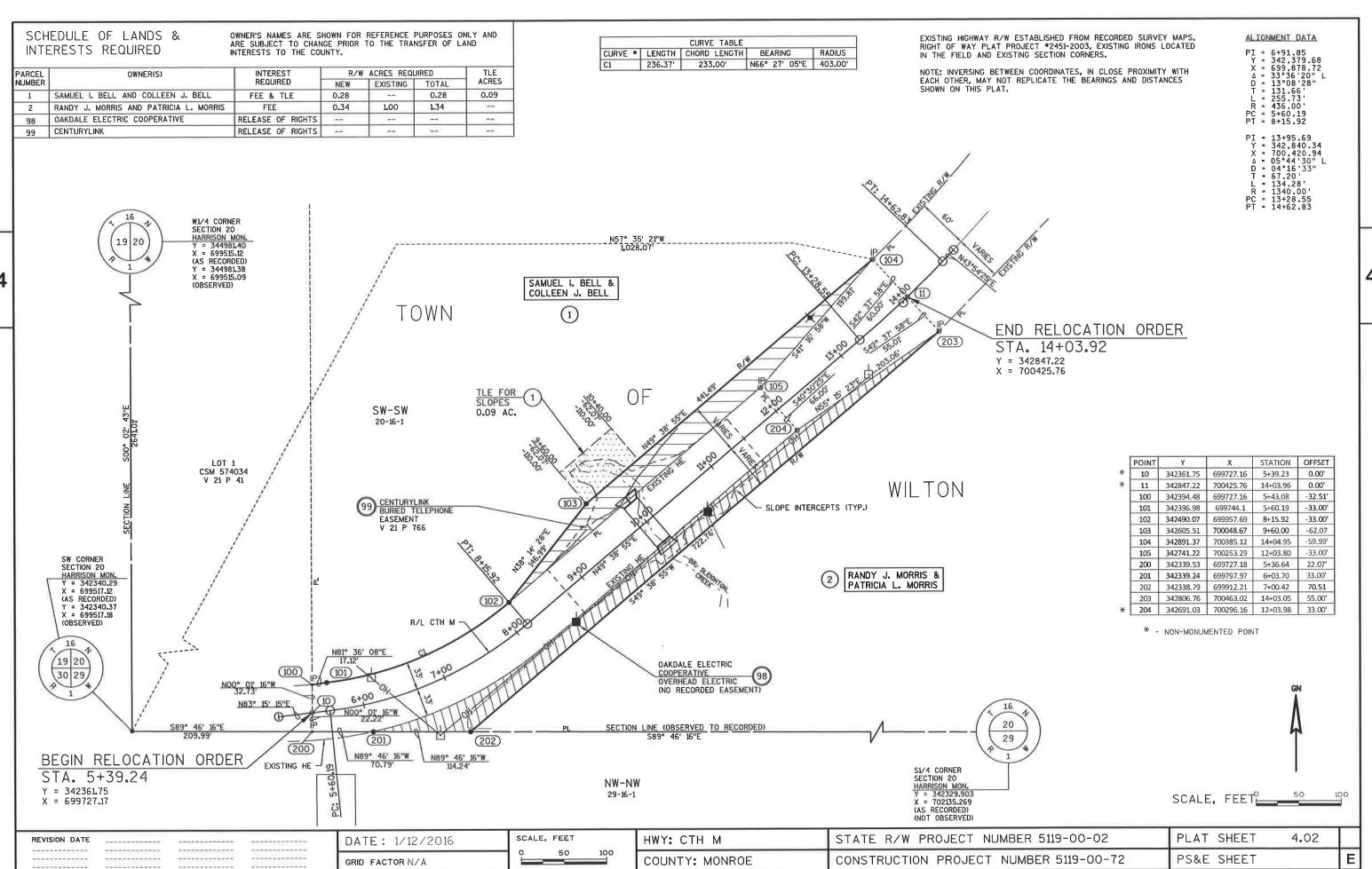
PLOT SCALE : 1:20

SHEET

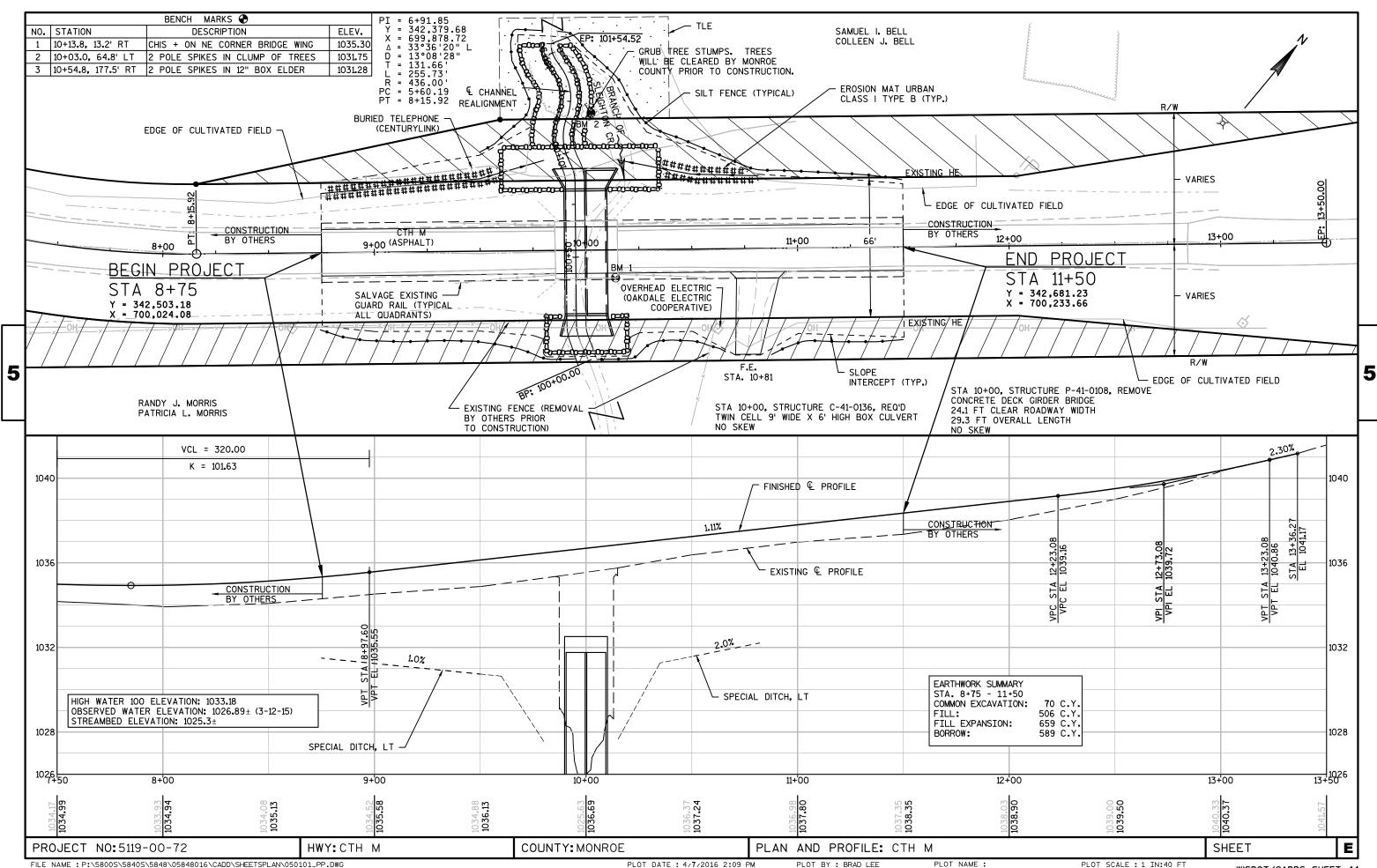
05848016_MiscQty & Earthwork Borders.dgn 2/3/2016 1:26:40 PM jsnyder

MISCELLANEOUS QUANTITIES PLOT BY : janyder





PLOT NAME 3



Standard Detail Drawing List

08E09-06	SILT FENCE
I2A03-10	NAME PLATE (STRUCTURES)
I5A01-12A	MARKER POST FOR RIGHT-OF-WAY
I5A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
I5A03-02B	FLEXIBLE MARKER POST FOR CULVERT END
15C02-06A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-06B	BARRICADES AND SIGNS FOR MAINLINE CLOSURES

TYPICAL APPLICATION OF SILT FENCE

6

b

Ō

Ш





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

6

٥

D.D. 8 E 9





TYPICAL NAME PLATE

(BRIDGES, CULVERTS, AND RETAINING WALLS)



NUMBERING DESIGNATION MULTI-UNIT STRUCTURES

GENERAL NOTES

NAME PLATES TO BE INSTALLED ON BRIDGES, CULVERTS, AND RETAINING WALLS SHALL CONFORM TO THE REQUIREMENTS OF SECTION 502.3.11 OF THE STANDARD SPECIFICATIONS.

THE BRIDGE NUMBER AND YEAR BUILT SHOWN ON THIS DRAWING ARE EXAMPLES ONLY. SEE CONSTRUCTION PLANS FOR INDIVIDUAL NUMBERING AND YEAR BUILT.

- 1 EPOXY RESIN SHALL BE FROM AN APPROVED MANUFACTURER AND USED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
- (2) REHABILITATION OF AN EXISTING STRUCTURE SHOULD USE THE DATE OF ORIGINAL STRUCTURE CONSTRUCTION.



SPREAD OPEN SO THE TOP OF LUG IS 11/4" WIDE

SECTION A-A

ALTERNATE LUG



ALTERNATE LUG

(FOR ATTACHMENT TO PRECAST STRUCTURES)

NAME PLATE (STRUCTURES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

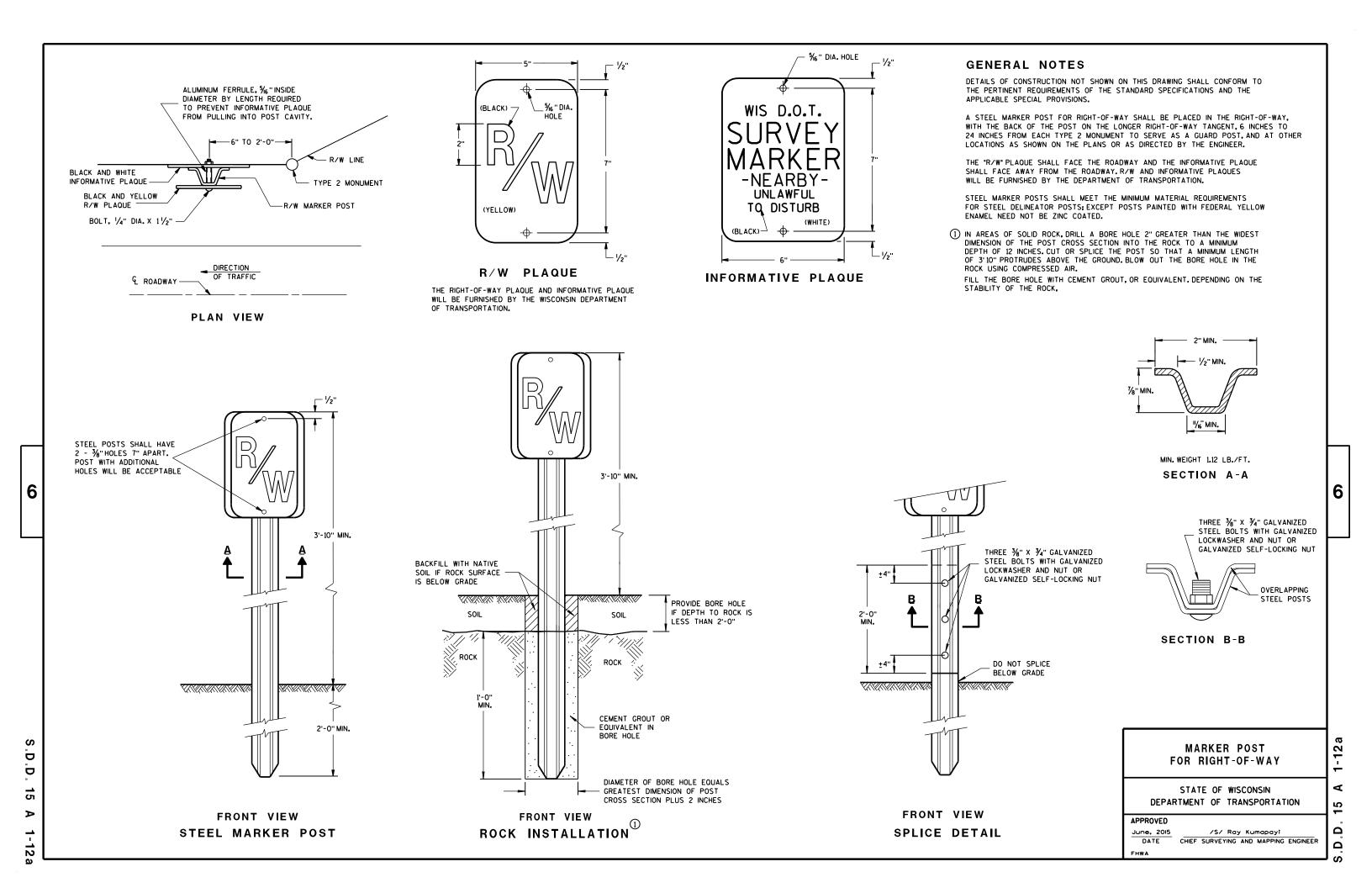
|--|

3/26/IO /S/ SCOT BECKET

CHIEF STRUCTURAL DEVELOPMENT ENGINEER

D.D. 12 A

3-10









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

2

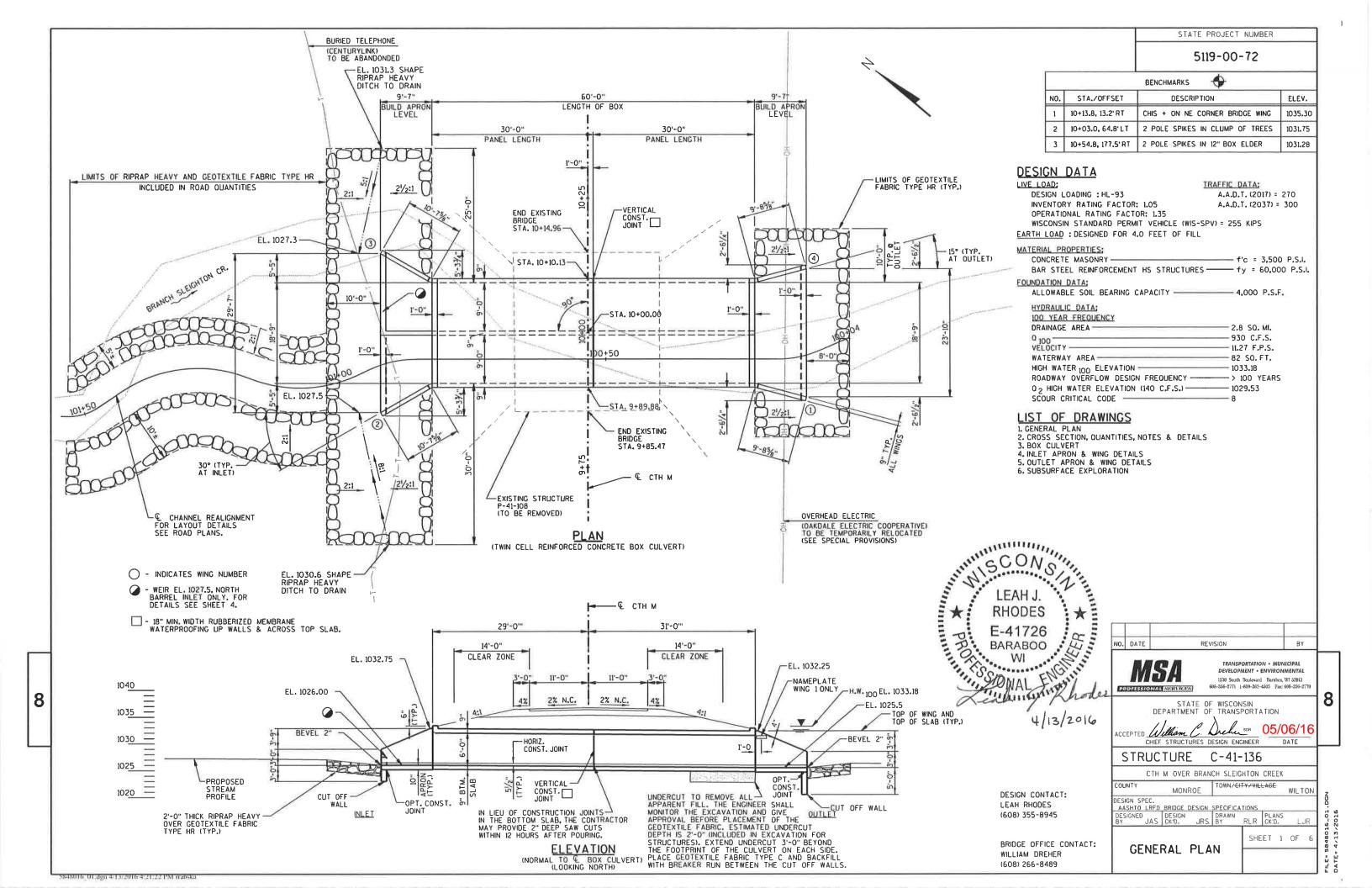
2

Ω

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

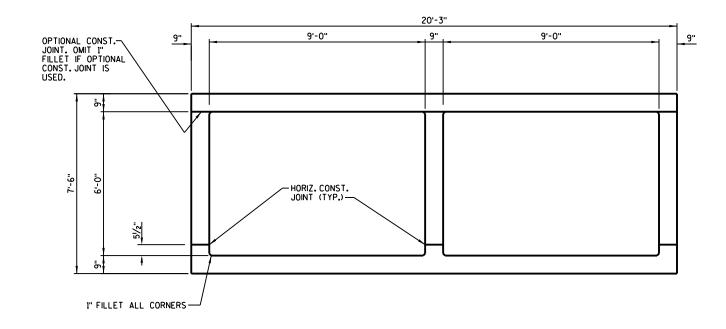
/S/ Peter Amakobe Atepe

STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER



STRUCTURE ESTIMATED QUANTITIES

ITEM NUMBER	BID ITEM	UNIT	TOTAL
203.0500.S.01	REMOVING OLD STRUCTURE OVER WATERWAY STATION 10+00	LS	1
206.2000.01	EXCAVATION FOR STRUCTURES CULVERTS C-41-136	LS	1
210.0100	BACKFILL STRUCTURE	CY	775
311.0115	BREAKER RUN	CY	160
504.0100	CONCRETE MASONRY CULVERTS	CY	126
505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	17,130
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	17
606.0300	RIPRAP HEAVY	CY	137
645.0105	GEOTEXTILE FABRIC TYPE C	SY	285
645.0120	GEOTEXTILE FABRIC TYPE HR	SY	284
SPV.0105.01	TEMPORARY WATER DIVERSION, CULVERT C-41-136	LS	1
	NON-BID ITEMS		
	PREFORMED FILLER	SIZE	3/4"



TYPICAL SECTION THRU BOX

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

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

THE FIRST DIGIT OF A THREE DIGIT BAR MARK SIGNIFIES THE BAR SIZE.

THE CONCRETE IN THE CUT OFF WALL MAY BE PLACED UNDERWATER IF THE EXCAVATION CANNOT BE DEWATERED.

THE ALTERNATE CUT OFF WALL MAY BE USED IN LIEU OF THE CAST IN PLACE CUT OFF WALLS. PAYMENT SHALL BE BASED ON CONCRETE CUT OFF WALLS.

ALL SPACES EXCAVATED AND NOT OCCUPIED BY THE NEW STRUCTURE AND BREAKER RUN SHALL BE BACKFILLED WITH BACKFILL STRUCTURE TO THE ELEVATION OF THE ROADWAY SUBGRADE. BACKFILL STRUCTURE IS REQUIRED BEHIND ALL WINGWALLS. THE BACKFILL STRUCTURE ESTIMATED QUANTITIES ASSUMED A $1\frac{1}{2}$: 1 EXCAVATION SLOPE.

THIS STRUCTURE WILL REPLACE EXISTING BRIDGE P-41-108, A 29.3 FT. LONG SINGLE SPAN CONCRETE DECK GIRDER BRIDGE ON FULL RETAINING CONCRETE ABUTMENTS.

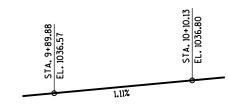
THE UPPER LIMITS OF "EXCAVATION FOR STRUCTURES CULVERTS C-41-136" SHALL BE THE EXISTING GROUND LINE.

THE CONTRACTOR MAY FURNISH A PRECAST CONCRETE BOX CULVERT IN LIEU OF THE CAST-IN-PLACE BOX CULVERT WITH THE ACCEPTANCE OF THE SHOP DRAWINGS BY THE STRUCTURES DESIGN SECTION. THE PRECAST CONCRETE BOX CULVERT SHALL CONFORM TO PRECAST DETAILS IN CHAPTER 36 STANDARDS OF THE CURRENT WISCONSIN DOT BRIDGE MANUAL. PAYMENT FOR THE PRECAST CULVERT SHALL BE BASED ON THE QUANTITIES AND PRICES BID FOR THE ITEMS LISTED IN THE "STRUCTURE ESTIMATED QUANTITIES".

IN LIEU OF USING BREAKER RUN FOR THE BOX CONSTRUCTION PLATFORM, THE CONTRACTOR MAY ELECT TO SUBSTITUTE "1 OR "2 CONCRETE COARSE AGGREGATE, SELECT CRUSHED MATERIAL OR OTHER GRANULAR MATERIAL AS APPROVED BY THE ENGINEER, THE CONTRACTOR IS RESPONSIBLE FOR BASE STABILITY WITH ANY SUBSTITUTED MATERIAL. THE REGION GEOTECHNICAL ENGINEER MAY BE CONTACTED TO DETERMINE IF "OTHER GRANULAR MATERIAL" IS ACCEPTABLE.

ELEVATIONS SHOWN ON THIS PLAN ARE REFERENCED TO NAVD 88 (1996 ADJUSTED), AND WERE ESTABLISHED AT THE SITE USING GPS TECHNOLOGY.

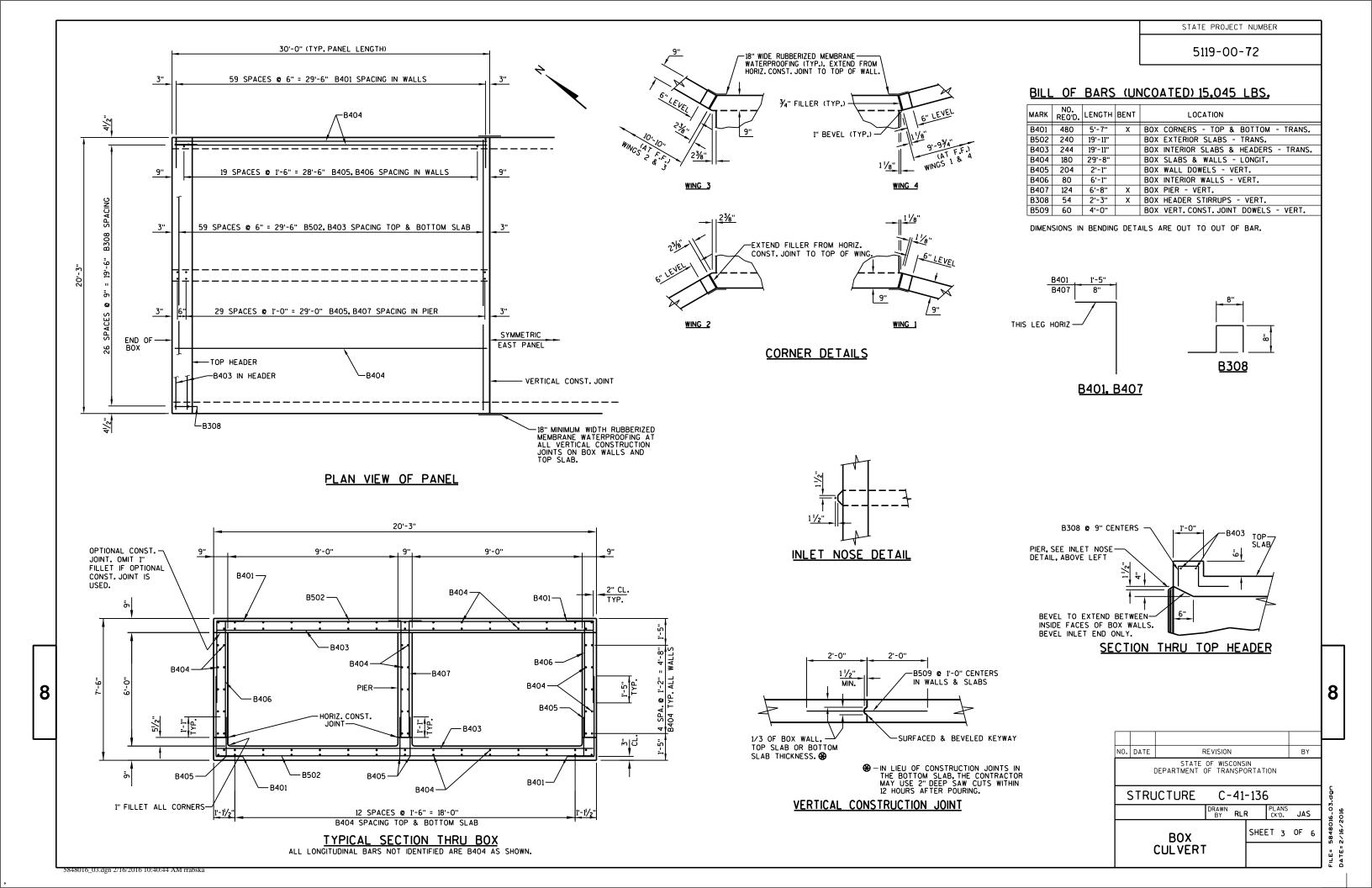
APRONS AND BOTTOM SLAB MAY BE POURED CONTINUOUSLY.

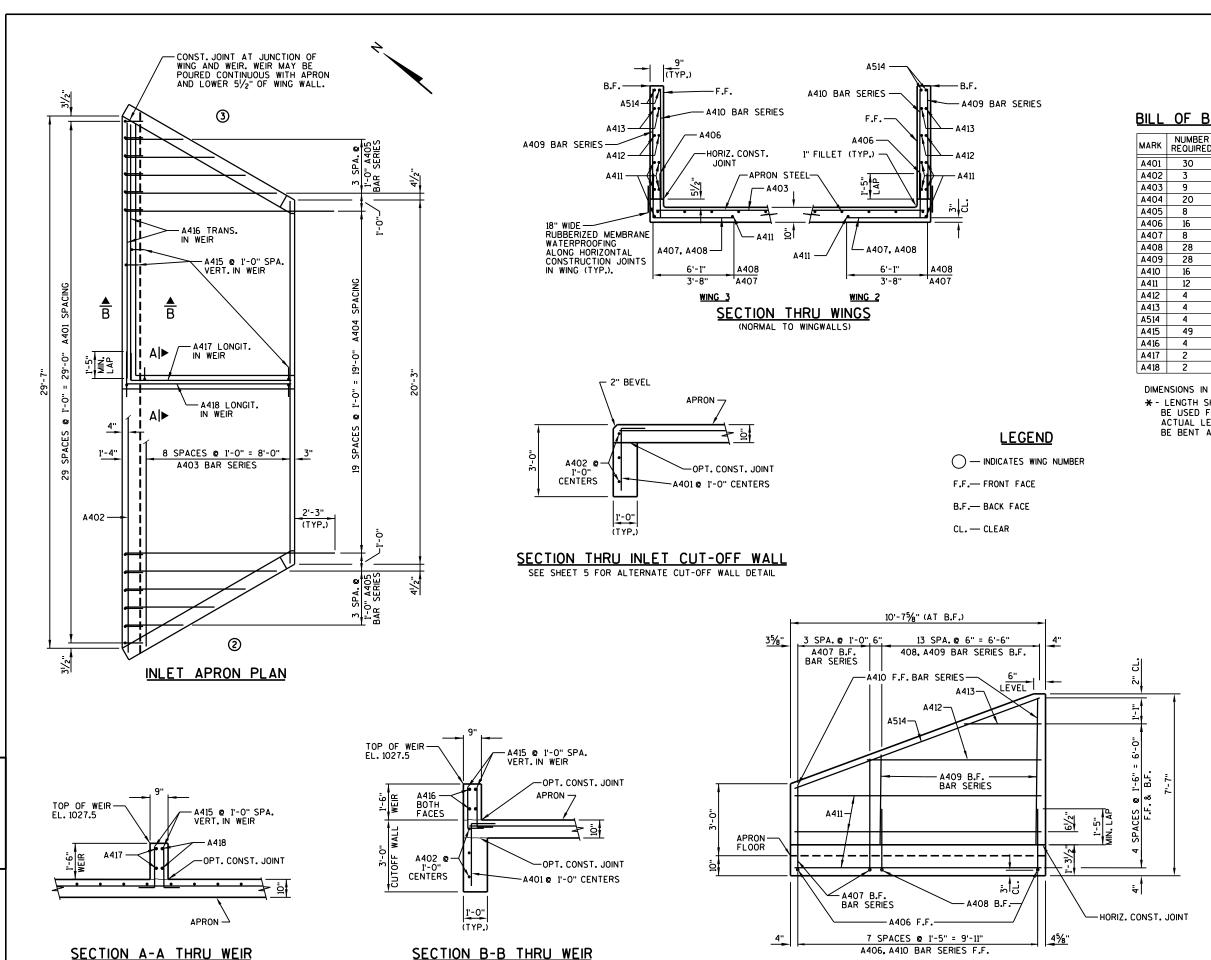


PROFILE GRADE LINE - CTH M

		I						
								_
NO.	DATE	REVISION				B,	Y	
	STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION							
	STRUCTURE C-41-136							2.497
	DRAWN BY RLR PLANS CK'D.				LJI	R	6-02.	
	CROSS SECTION, OUANTITIES, NOTES					OF	6	5848016
	& DETAILS							FILE=

48016 02.den 4/13/2016 4:23:09 PM trabska





WING ELEVATION

INLET - WINGS 2 & 3

BILL OF BARS

UNCOATED 1125 LBS.

STATE PROJECT NUMBER

5119-00-72

MARK	NUMBER REQUIRED	LENGTH	BENT	BAR SERIES	LOCATION
A401	30	3'-6"	X		INLET APRON CUT-OFF WALL - VERT.
A402	3	29'-10"			INLET APRON CUT-OFF WALL - TRANS.
A403	9	24'-9"		*	INLET APRON - TRANS.
A404	20	11'-8"			INLET APRON - LONGIT.
A405	8	5'-10"		*	INLET APRON @ WINGS - LONGIT.
A406	16	2'-6"			INLET WINGS - F.F. DOWELS - VERT.
A407	8	7'-7"	X	*	INLET WINGS - B.F END - VERT.
A408	28	8'-7"	X		INLET WINGS - B.F VERT.
A409	28	4'-11"		*	INLET WINGS - B.F VERT.
A410	16	4'-3"		*	INLET WINGS - F.F VERT.
A411	12	10'-3"			INLET WINGS & APRON - LONGIT.
A412	4	7'-3"			INLET WINGS - LONGIT.
A413	4	3'-3"			INLET WINGS - LONGIT.
A514	4	10'-11"			INLET WINGS - TOP - LONGIT.
A415	49	2'-3"	X		INLET APRON WEIR - VERT.
A416	4	14'-3"			INLET APRON WEIR - TRANS.
A417	2	10'-4"	X		INLET APRON WEIR - LONGIT.
A418	2	10'-11"	X		INLET APRON WEIR - LONGIT.

DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT OF BAR.

* - LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS. BENT BARS IF USED IN BAR SERIES TABLE SHALL BE BENT AFTER CUTTING.

BAR SERIES TABLE

MARK	NO. REQUIRED	LENGTH
A403	1 SERIES OF 9	20'-1" TO 29'-4"
A405	2 SERIES OF 4	3'-2" TO 8'-5"
A407	2 SERIES OF 4	7'-1" TO 8'-1"
A409	2 SERIES OF 14	3'-9" TO 6'-1"
A410	2 SERIES OF 8	2'-5" TO 6'-1"

BUNDLE AND TAG EACH SERIES SEPARATELY

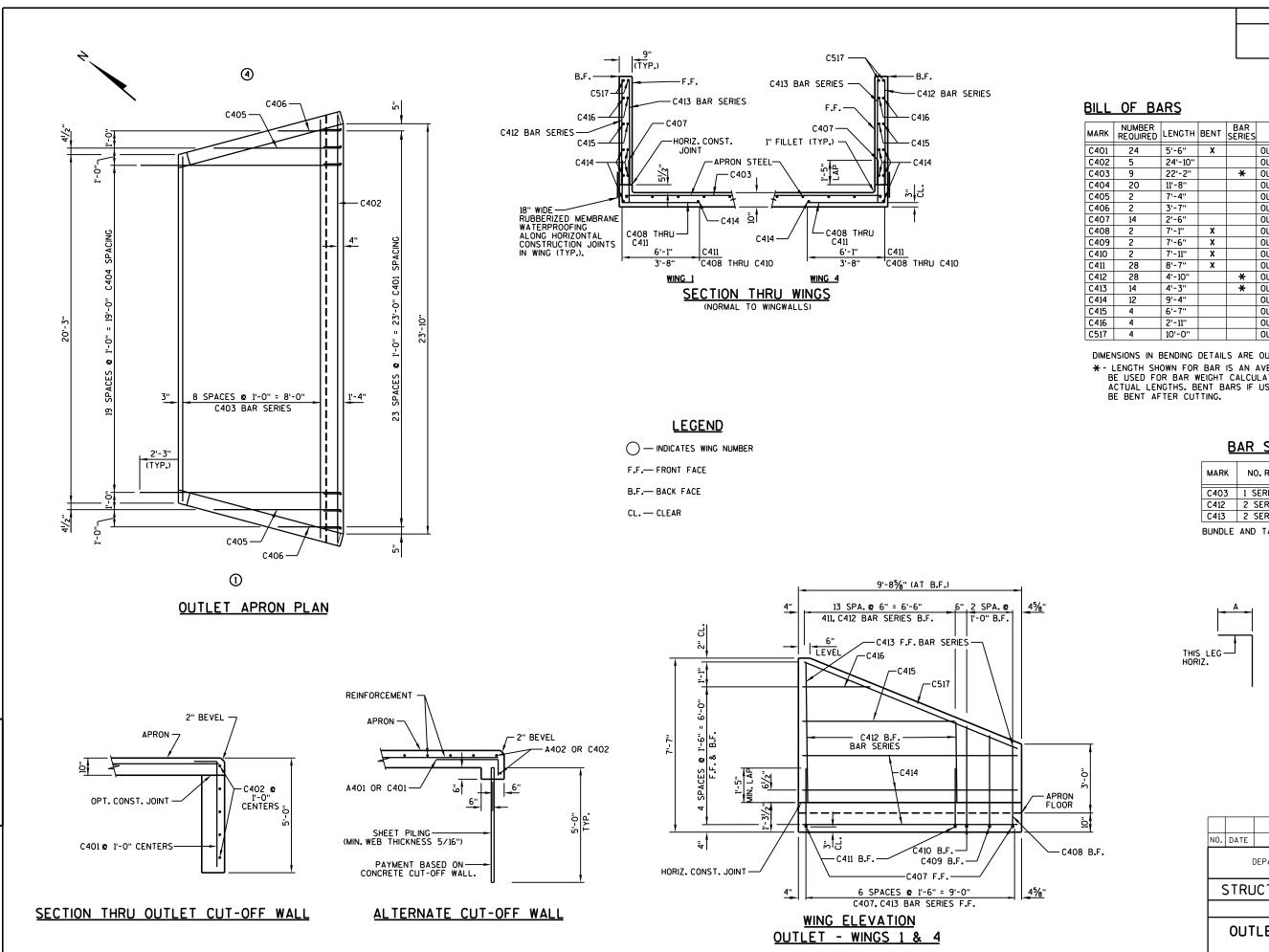


MARK	Δ	
A401	1'-0"	
A407	3'-8"	
A408	6'-1"	
A415	8	
A417	1'-6"	
A418	1'-10"	

REVISION STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE C-41-136 DRAWN BY RLR JAS INLET APRON SHEET 4 OF 6 WING DETAILS

8



STATE PROJECT NUMBER

5119-00-72

UNCOATED 960 LBS.

MARK	NUMBER REQUIRED	LENGTH	BENT	BAR SERIES	LOCATION
C401	24	5'-6"	×		OUTLET APRON CUT-OFF WALL - VERT.
C402	5	24'-10"			OUTLET APRON CUT-OFF WALL - TRANS.
C403	9	22'-2"		*	OUTLET APRON - TRANS.
C404	20	11'-8"			OUTLET APRON - LONGIT.
C405	2	7'-4"			OUTLET APRON @ WINGS - LONGIT.
C406	2	3'-7"			OUTLET APRON @ WINGS - LONGIT.
C407	14	2'-6"			OUTLET WINGS - F.F. DOWELS - VERT.
C408	2	7'-1"	X		OUTLET WINGS - B.F END - VERT.
C409	2	7'-6"	X		OUTLET WINGS - B.F END - VERT.
C410	2	7'-11"	X		OUTLET WINGS - B.F END - VERT.
C411	28	8'-7"	X		OUTLET WINGS - B.F VERT.
C412	28	4'-10"		*	OUTLET WINGS - B.F VERT.
C413	14	4'-3"		*	OUTLET WINGS - F.F VERT.
C414	12	9'-4"			OUTLET WINGS & APRON - LONGIT.
C415	4	6'-7"			OUTLET WINGS - LONGIT.
C416	4	2'-11"			OUTLET WINGS - LONGIT.
C517	4	10'-0"			OUTLET WINGS - TOP - LONGIT.

DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT OF BAR.

*- LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS. BENT BARS IF USED IN BAR SERIES TABLE SHALL BE BENT AFTER CUTTING.

BAR SERIES TABLE

MARK	NO. REQUIRED	LENGTH
C403	1 SERIES OF 9	20'-0" TO 24'-3"
C412	2 SERIES OF 14	3'-6" TO 6'-1"
C413	2 SERIES OF 7	2'-5" TO 6'-1"

BUNDLE AND TAG EACH SERIES SEPARATELY

MARK	Δ	
C401	1'-0"	
C408		
C409	3'-8"	
C410		
C411	6'-1"	

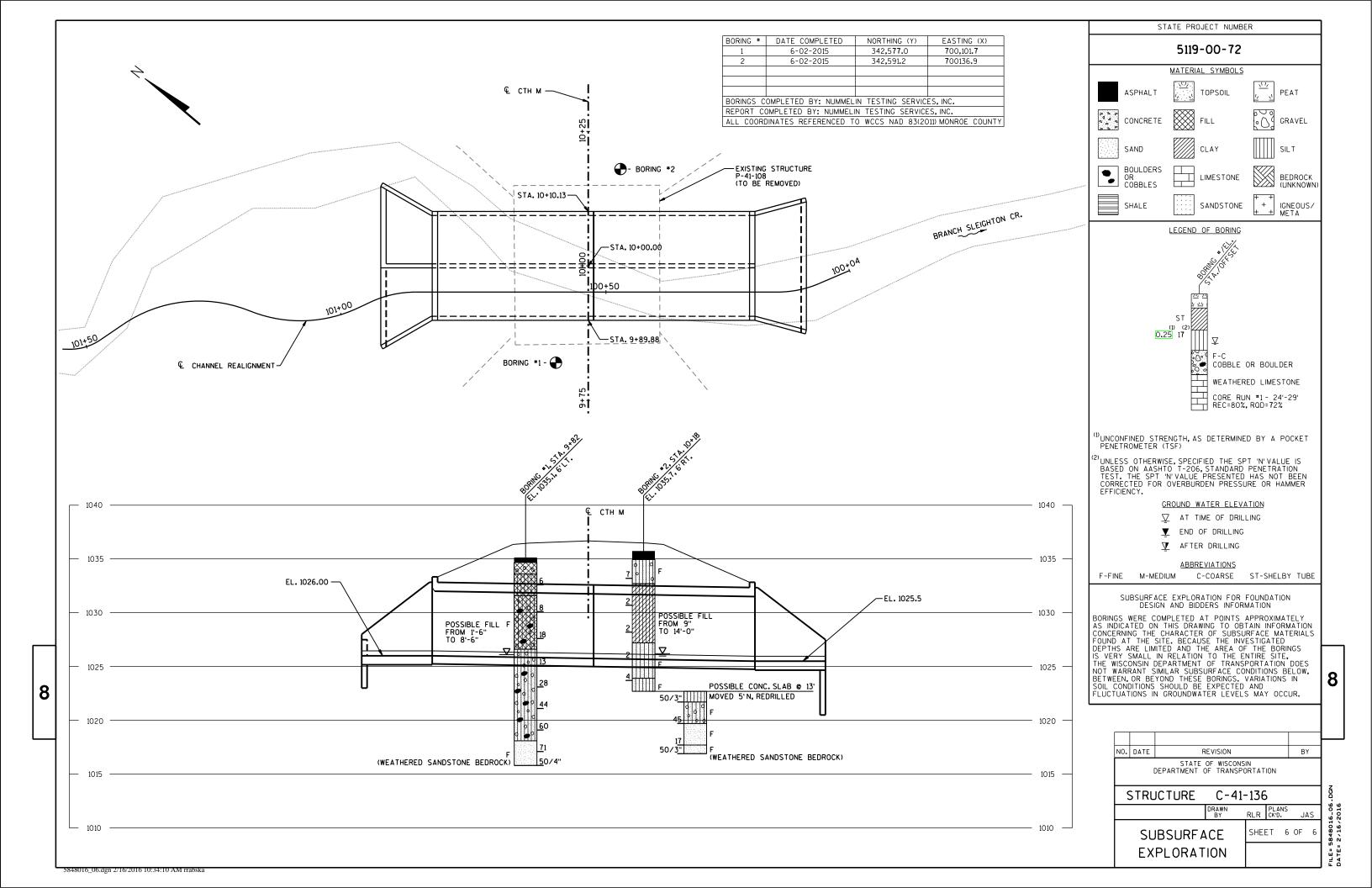
REVISION STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE C-41-136 DRAWN BY RLR

OUTLET APRON WING DETAILS

PLANS CK'D. JAS SHEET 5 OF 6

8



PROJECT I.D. 5119-00-72 EARTHWORK SUMMARY

	EXCAVATION	EXCAVATION		EXPANDED		
	COMMON	ROCK	FILL (1)	FILL (2)	WASTE	BORROV
STA	CY	CY	CY	CY	CY	CY
8+75.00						
	7	0	54	70	-63	63
9+00.00						
	21	0	133	173	-152	152
9+50.00						
	12	0	65	85	-73	73
9+72.00						
	STRU	JCTURE C-41-0136				
10+28.00						
	14	0	55	72	-58	58
10+50.00						
	11	0	63	82	-71	71
10+81.00						
	2	0	34	44	-42	42
11+00.00						
	3	0	102	133	-130	130
11+50.00						
SUBTOTALS						
WEST APPROACH	40	0	252	328	-288	288
EAST APPROACH	30	0	254	331	-301	301
TOTALS	70	0	506	659	-589	589

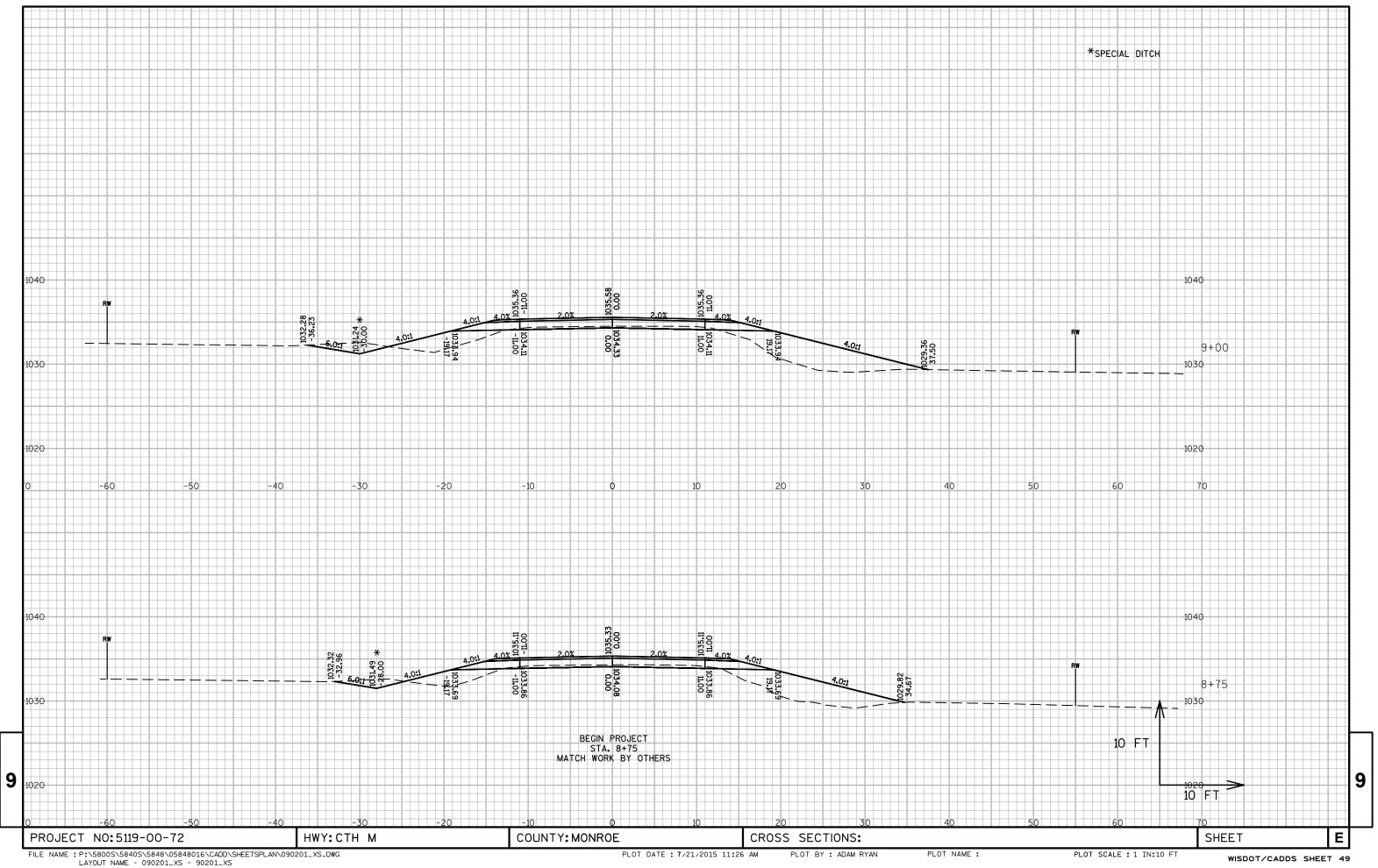
(2) - FILL EXPANSION 30%

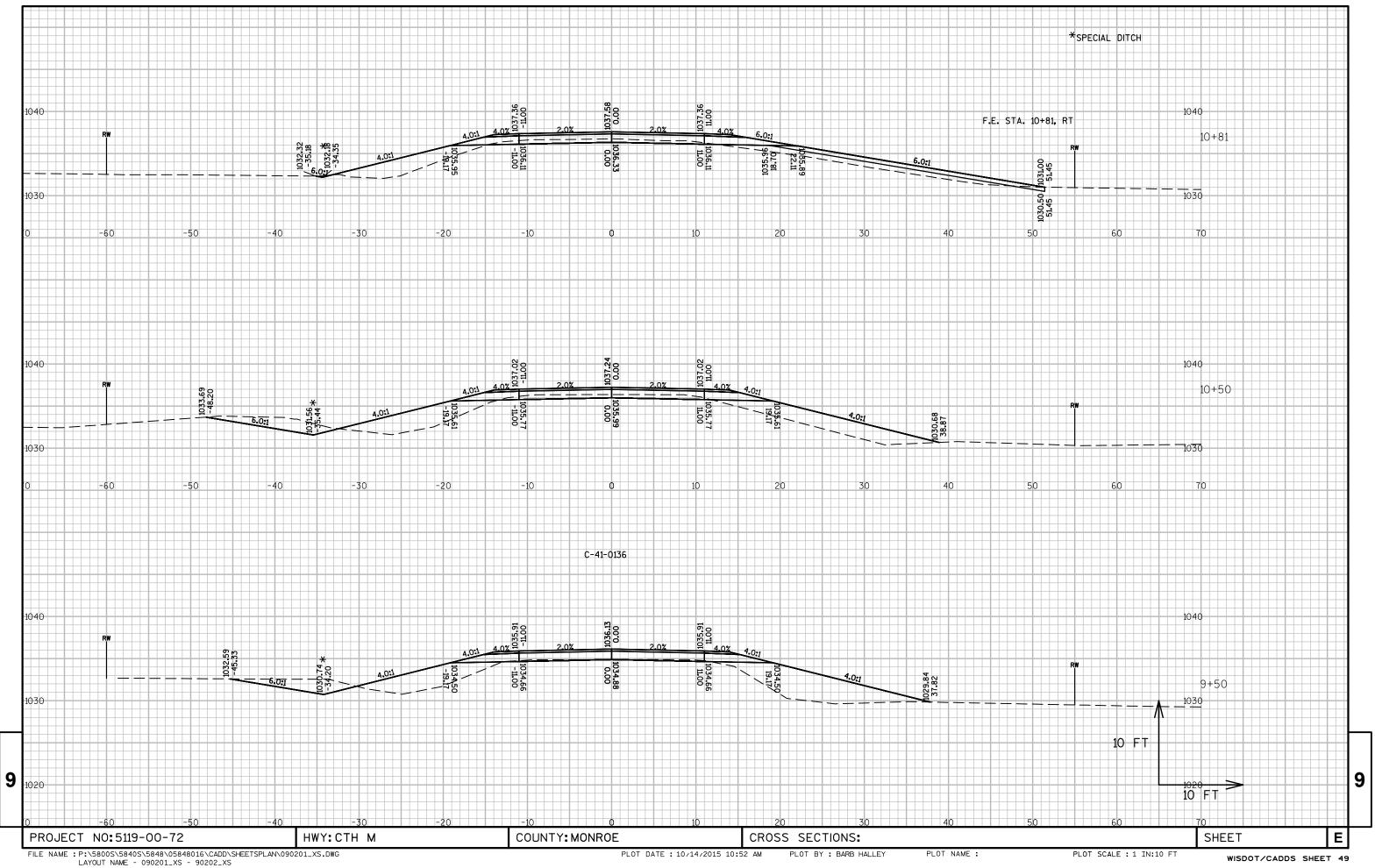
9

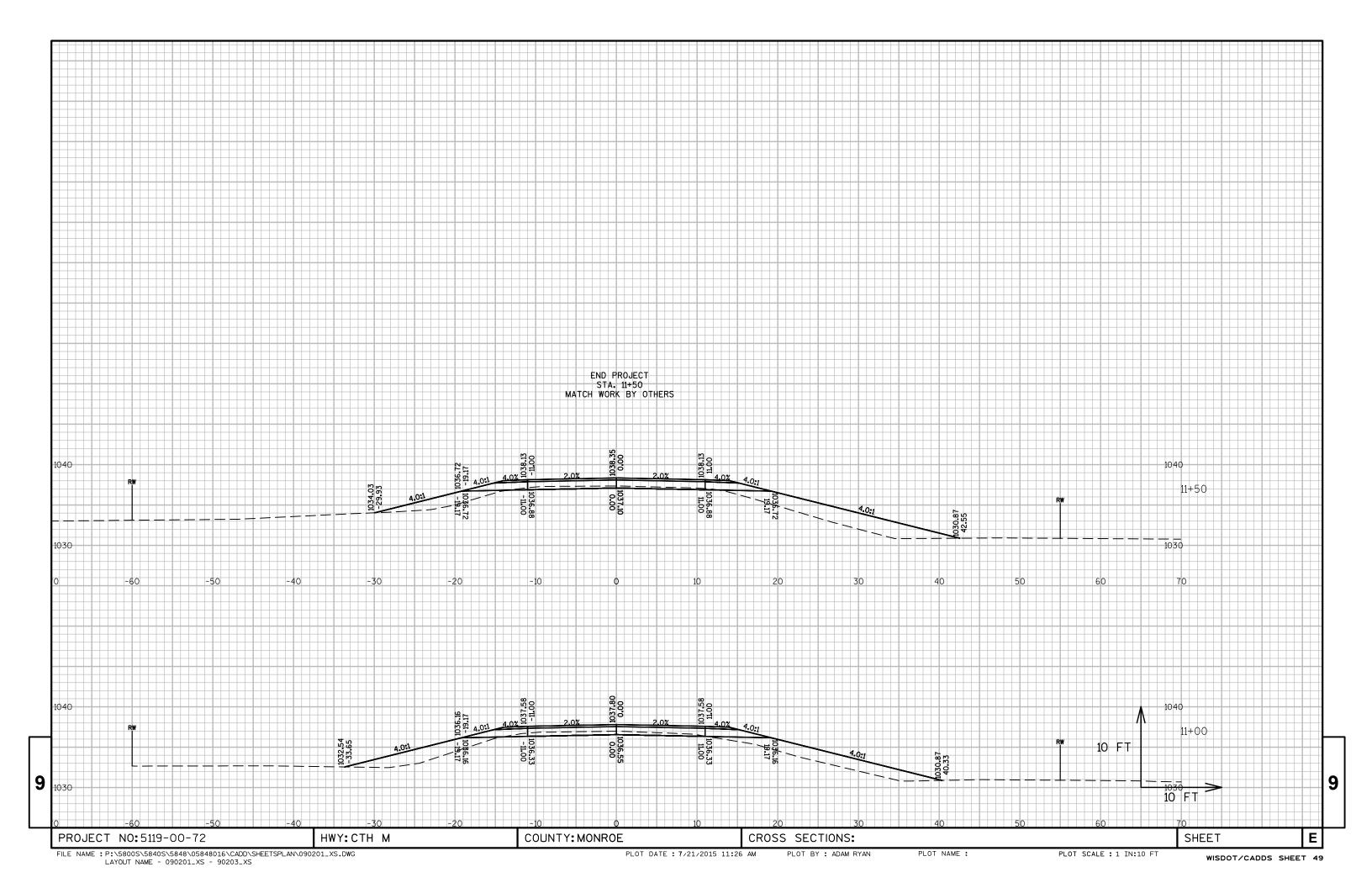
8

PROJECT NO: 5119-00-72 HWY: CTH M COUNTY: MONROE EARTHWORK SHEET E

PLOT BY : janyder









Wisconsin Department of Transportation

Dedicated people creating transportation solutions through innovation and exceptional service.

http://www.dot.wisconsin.gov

NOV 2016

ORDER OF SHEETS

Section No. 1

Section No. 2 Typical Sections and Details Estimate of Quantities Miscellaneous Quantities

Plan and Profile (Includes Erosion Control)

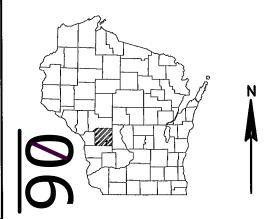
Section No. 6 Standard Detail Drawings

Sign Plates Section No. 8 Structure Plans

Section No. 9 Computer Earthwork Data

Section No. 9 Cross Sections

TOTAL SHEETS = 36



DESIGN DESIGNATION

A.A.D.T. 2017 = 200 A.A.D.T. 2037 = 240 = 40 D.D. = 60/40 = 7.0%

DESIGN SPEED = 55 MPH ESALS = 29,200

CONVENTIONAL SYMBOLS

CORPORATE LIMITS PROPERTY LINE

PROFILE GRADE LINE

ORIGINAL GROUND

SPECIAL DITCH

FIBER OPTIC

SANITARY SEWER

UTILITY PEDESTAL

STORM SEWER

TELEPHONE

POWER POLE TELEPHONE POLE

GRADE ELEVATION

MARSH OR ROCK PROFILE (To be noted as such)

CULVERT (Profile View)

BEGIN PROJECT

9+00

STA.

LIMITED HIGHWAY EASEMENT EXISTING RIGHT OF WAY PROPOSED OR NEW R/W LINE

SLOPE INTERCEPT

REFERENCE LINE

EXISTING CULVERT PROPOSED CULVERT (Box or Pipe)

COMBUSTIBLE FLUIDS

MARSH AREA

WOODED OR SHRUB AREA

FILE NAME : P:\5800\$\5840\$\5848\05848017\CADD\SHEET\$PLAN\010101_TI.DWG

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

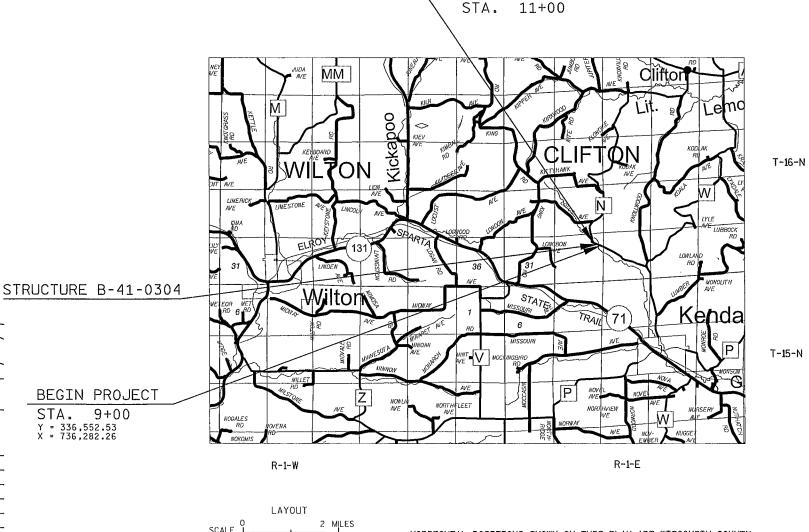
GLENDALE - CLIFTON

(SPRING VALLEY CREEK BRIDGE B-41-0304)

CTH N

MONROE COUNTY

STATE PROJECT NUMBER 5126-00-71



END PROJECT

ACCEPTED FOR COUNTY OF MONROE

FEDERAL PROJECT

PROJECT

WISC 2016342

CONTRACT

STATE PROJECT

5126-00-71

ORIGINAL PLANS PREPARED BY



July SCON

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

REPARED BY

Surveyor Designer

MSA PROFESSIONAL SERVICES, INC.

Consultant

KL ENGINEERING, INC.



HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COUNTY COORDINATES, MONROE COUNTY, NAD83 (2011), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

PLOT DATE : 3/30/2016 12:56 PM

TOTAL NET LENGTH OF CENTERLINE = 0.038

PLOT BY : JOLIE SNYDER

STANDARD ABBREVIATIONS

4.0	ACDE	F/L	FLOW LINE	SALV	SALVAGED
AC AGG	ACRE AGGREGATE	FT	FOOT	SAN	SANITARY SEWER
AGG <		GN	GRID NORTH	SECT	SECTION
	ANGLE	HR	HANDICAP RAMP	SHLDR	SHOULDER
ASPH	ASPHALTIC	HT	HEIGHT	SW	SIDEWALK
AC	ASPHALT CEMENT	CWT	HUNDREDWEIGHT	SW	
ADT	AVERAGE DAILY TRAFFIC	HYD	HYDRANT	S SB	SOUTH
B & B	BALLED AND BURLAPPED	IN DIA	INCH DIAMETER		SOUTHBOUND
ВМ	BENCH MARK	INL	INLET	SPECS	SPECIFICATIONS
CB	CATCH BASIN	INL	INSIDE DIAMETER	SQ	SQUARE
€ OR C/L	CENTER LINE	I	INTERSECTION ANGLE	SF OR SQ FT	SQUARE FEET
C - C	CENTER TO CENTER	IE		SY	SQUARE YARD
CONC	CONCRETE	IP	INVERT ELEVATION IRON PIPE OR PIN	SSPRC	STORM SEWER
CO	COUNTY				PIPE REINFORCED CONCRETE
CTH	COUNTY TRUNK HIGHWAY	JCT	JUNCTION	STD	STANDARD
CY	CUBIC YARD	L	LENGTH OF CURVE	SDD	STANDARD DETAIL DRAWINGS
CULV	CULVERT	LF	LINEAR FOOT	STH	STATE TRUNK HIGHWAYS
CP	CULVERT PIPE	LC	LONG CHORD OF CURVE	STA	STATION
CPRC	CULVERT PIPE	LCB	LONG CHORD BEARING	SS	STORM SEWER
	REINFORCED CONCRETE	LS	LUMP SUM	Т	TANGENT
C & G	CURB AND GUTTER	MH	MANHOLE	TEL	TELEPHONE
D	DEGREE OF CURVE	N	NORTH	TEMP	TEMPORARY
DHV	DESIGN HOUR VOLUME	Υ	NORTH GRID COORDINATE	TLE	TEMPORARY LIMITED EASEMENT
DIA OR Ø	DIAMETER	0E	OUTLET ELEVATION	Т	TON
DIST	DISTRICT	0L	OUT LOT	TC	TOP OF CURB
DWY	DRIVEWAY	OD	OUTSIDE DIAMETER	TN	TOWN
E	EAST	OH	OVERHEAD LINES	TRANS	TRANSITION
Χ	EAST GRID COORDINATE	PAVT	PAVEMENT	Т	TRUCKS (percent of)
EB	EASTBOUND	PLE	PERMANENT LIMITED EASEMENT	TYP	TYPICAL
ELEC	ELECTRIC	PC	POINT OF CURVATURE	UNCL	UNCLASSIFIED
EL OR ELEV	ELEVATION	ΡΙ	POINT OF INTERSECTION	USH	UNITED STATES HIGHWAY
EMB	EMBANKMENT	PT	POINT OF TANGENCY	VAR	VARIABLE
EW	ENDWALL	PCC	PORTLAND CEMENT CONCRETE	VERT	VERTICAL
ESALS	EQUIVALENT SINGLE	LB	POUND	VC	VERTICAL CURVE
	AXLE LOADS	PE	PRIVATE ENTRANCE	VOL	VOLUME
EXC	EXCAVATION	R OR RAD	RADIUS	WM	WATER MAIN
EBS	EXCAVATION BELOW	RR	RAILROAD	WV	WATER VALVE
	SUBGRADE	R	RANGE	W	WEST
EXIST	EXISTING	R OR R/L	REFERENCE LINE	wB	WESTBOUND
EXP	EXPANSION	REQD	REQUIRED	YD	YARD
F-F	FACE TO FACE	RT	RIGHT		I AILO
FERT	FERTILIZER	R / W	RIGHT-OF-WAY		
FE	FIELD ENTRANCE	RD	ROAD		

DESIGN CONTACT

MSA PROFESSIONAL SERVICES, INC. ATTN: LEAH RHODES, PE 1230 SOUTH BOULEVARD BARABOO, WI 53913 608-355-8945 LRHODES@MSA-PS.COM

COUNTY CONTACT

MONROE COUNTY ATTN: JACK DITTMAR, COMMISSIONER 803 WASHINGTON STREET SPARTA, WI 54656 608-269-8740 JACK.DITTMAR@CO.MONROE.WI.US

DNR LIAISON

WISCONSIN DEPARTMENT OF
NATURAL RESOURCES
ATTN: KAREN KALVELAGE
ENVIRONMENTAL ANALYSIS AND
REVIEW SPECIALIST
3550 MORMON COULEE ROAD
LA CROSSE, WI 54601
608-785-9115
KAREN.KALVELAGE@WISCONSIN.GOV

UTILITIES

COMMUNICATION: CENTURYLINK ATTN: BRET CLARK 311 SOUTH COURT STREET SPARTA, WI 54656 608-269-0819 BRET.CLARK@CENTURYLINK.COM

ELECTRIC:
OAKDALE ELECTRIC COOPERATIVE
ATTN: TRAVIS CHAMPLIN
489 N OAKWOOD STREET
P.O. BOX 128
OAKDALE, WI 54649
608-372-8848
TRAVISC@OAKDALEREC.COM

* NOT A MEMBER OF DIGGERS HOTLINE



GENERAL NOTES

DISTURBED AREAS WITHIN THE RIGHT-OF-WAY, EXCEPT THE AREAS WITHIN THE FINISHED SHOULDER POINTS, SHALL BE FERTILIZED, SEEDED AND MULCHED AS DIRECTED BY THE ENGINEER. OVERSOW PERMANENT SEEDING AREAS WITH TEMPORARY SEED AT 3 LBS. PER 1000 SQUARE FEET.

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

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

ELEVATIONS SHOWN ON THIS PLAN ARE REFERENCED TO USGS NAVD 88 (1996 ADJUSTED). BENCHMARKS WERE LOCATED IN THE FIELD USING GPS TECHNOLOGY.

SILT FENCE TO BE PLACED AS SHOWN ON THE PLAN OR AS DIRECTED BY THE ENGINEER AND IN PLACE PRIOR TO CONSTRUCTION OR BRIDGE REMOVAL.

WETLANDS ARE PRESENT OUTSIDE THE EXISTING TOE OF SLOPE. AREAS OUTSIDE THE SLOPE INTERCEPTS SHALL NOT BE DISTURBED.

RUNOFF COEFFICIENT TABLE

		HYDROLOGIC SOIL GROUP										
	Α			В		С			D			
	SLOPE	RANGE	(PERCENT)	SL0PE	RANGE	(PERCENT)	SLOPE	RANGE	(PERCENT)	SL0PE	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:						l .	•					•
ASPHALT						.7095						
CONCRETE .8095												
BRICK					.7080							
DRIVES, WALKS					.7585	85						
ROOFS .7595												
GRAVEL ROADS,	SHOULDE	ERS				.4060						

TOTAL PROJECT AREA = 0.48 ACRES

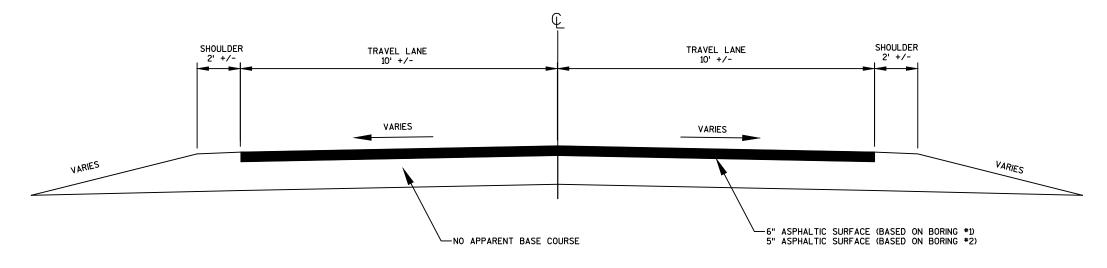
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 0.34 ACRES

PROJECT NO:5126-00-71 HWY:CTH N COUNTY:MONROE GENERAL NOTES

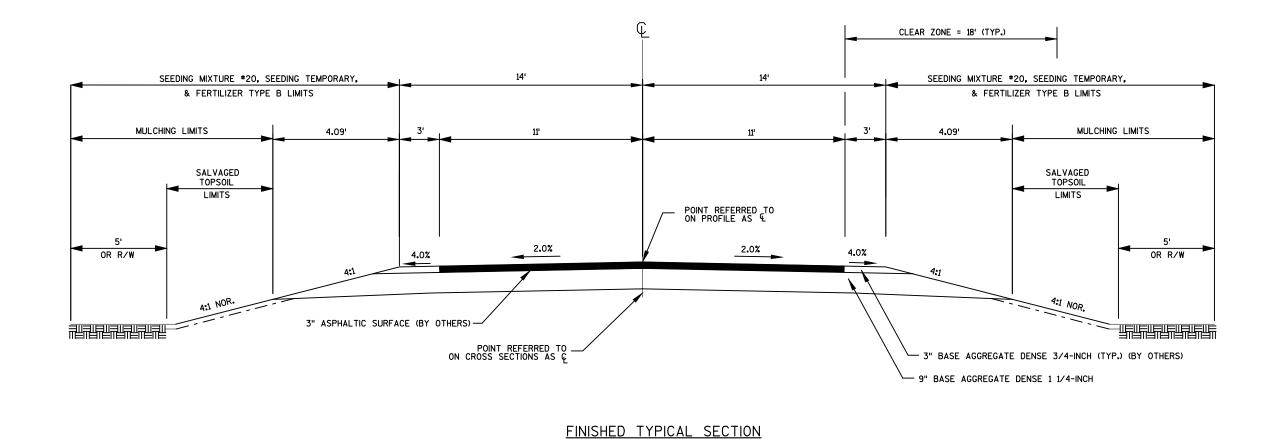
FILE NAME: P:\5800S\5840S\5848017\CADD\SHEETSPLAN\020101_GN.DWG PLOT DATE: 2/16/2016 3:50 PM PLOT BY: BARB HALLEY PLOT NAME: PLOT SCALE: 0.100015

Ε





EXISTING TYPICAL SECTION CTH N



CTH N

PLOT DATE: 8/9/2016 10:54 AM

COUNTY: MONROE

PLOT BY : JOLIE SNYDER

TYPICAL SECTIONS

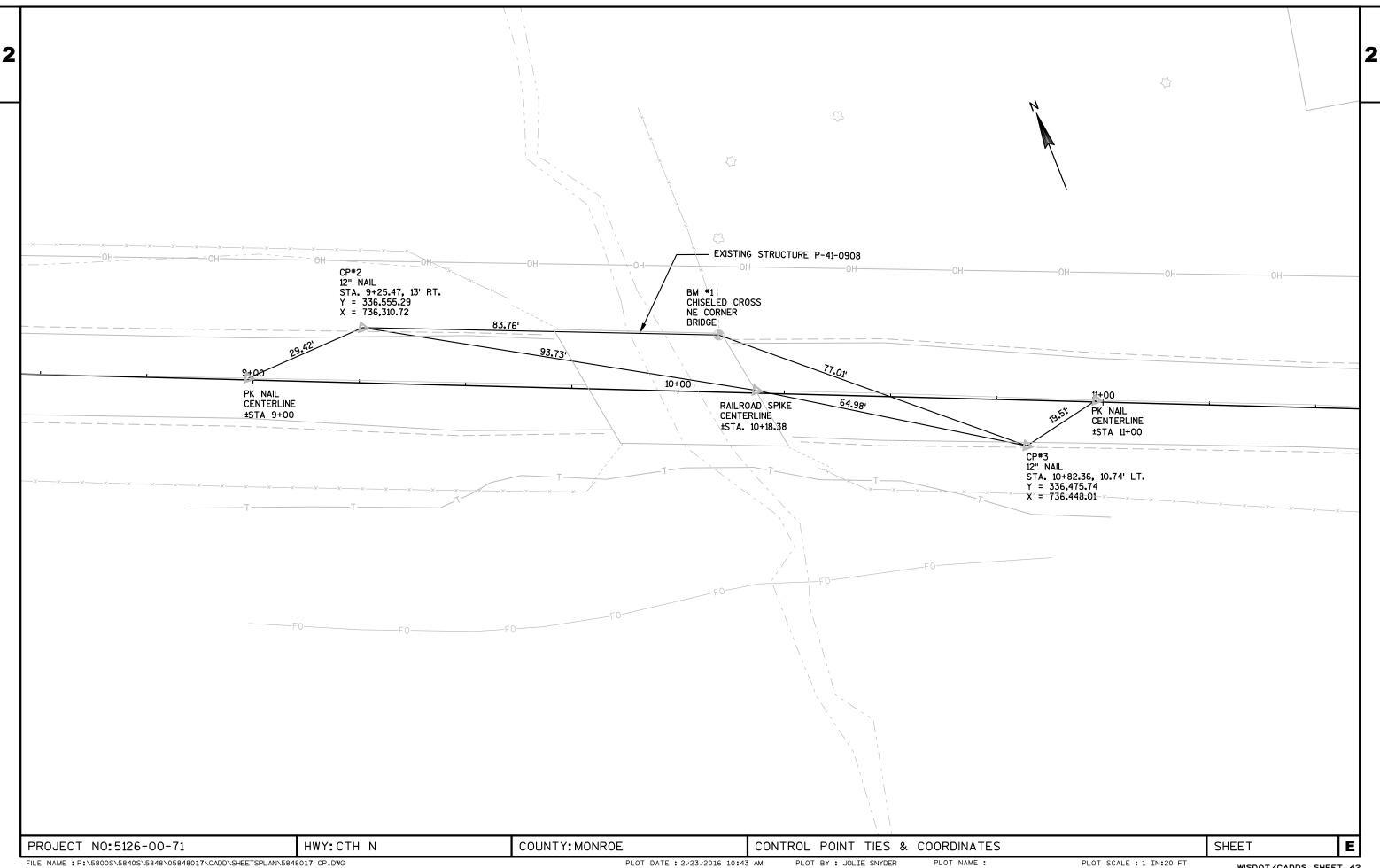
PLOT NAME :

PLOT SCALE : N/A

WISDOT/CADDS SHEET 42

E

SHEET



DATE 16	AUG16	E S	TIMAT	E O F Q U A N	
NUMBER	ITFM	ITEM DESCRIPTION	UNI T	TOTAL	5126-00-71 QUANTI TY
0030		Removing Old Structure Over Waterway With Minimal Debris (station) 01. 10+00	LS	1. 000	1. 000
0040	205. 0100	Excavation Common **P**	CY	127.000	127. 000
0060	206. 2000	Excavation for Structures Culverts (structure) 02. B-41-304	LS	1. 000	1. 000
0070	208. 0100	Borrow	CY	188. 000	188. 000
0800	210. 0100	Backfill Structure	CY	1, 055. 000	1, 055. 000
0100	213. 0100	Finishing Roadway (project) 02. 5126-00-71	EACH	1. 000	1. 000
0110	305. 0120	Base Aggregate Dense 1 1/4-Inch	TON	345.000	345.000
0120	311. 0115	Breaker Run	CY	125. 000	125. 000
0130	504. 0100	Concrete Masonry Culverts	CY	223. 000	223. 000
0140	505. 0400	Bar Steel Reinforcement HS Structures	LB	32, 170. 000	32, 170. 000
0150	516. 0500	Rubberized Membrane Waterproofing	SY	30.000	30.000
0160	606. 0300	Riprap Heavy	CY	110.000	110. 000
0180	619. 1000	Mobilization	EACH	0. 566	0. 566
0190	624. 0100	Water	MGAL	32.000	32.000
0200	625. 0500	Sal vaged Topsoi I	SY	625. 000	625. 000
0210	627. 0200	Mul chi ng	SY	920.000	920.000
0220	628. 1504	Silt Fence	LF	500.000	500.000
0230	628. 1520	Silt Fence Maintenance	LF	500.000	500. 000
0240	628. 1905	Mobilizations Erosion Control	EACH	2. 000	2. 000
0250	628. 1910	Mobilizations Emergency Erosion Control	EACH	2. 000	2. 000
0270	629. 0210	Fertilizer Type B	CWT	0. 650	0. 650
0280	630. 0120	Seeding Mixture No. 20	LB	30.000	30.000
0290	630. 0200	Seeding Temporary	LB	30.000	30.000
0300	633. 5100	Markers Row	EACH	8. 000	8. 000
0310	633. 5200	Markers Culvert End	EACH	4. 000	4. 000
0320	638. 2602	Removing Signs Type II	EACH	4. 000	4. 000
0330	638. 3000	Removing Small Sign Supports	EACH	4.000	4. 000
0340	642. 5001	Field Office Type B	EACH	0. 560	0. 560
0360	643. 0100	Traffic Control (project) 02. 5126-00-71	EACH	1. 000	1.000
0370	645. 0105	Geotextile Type C	SY	400.000	400. 000
0380	645. 0120	Geotextile Type HR	SY	250. 000	250. 000
0390	650. 4500	Construction Staking Subgrade	LF	200. 000	200.000
0400	650. 5000	Construction Staking Base	LF	200. 000	200. 000
0420	650. 6500	Construction Staking Structure Layout (structure) 02. B-41-304	LS	1. 000	1. 000
0440	650. 9910	Construction Staking Supplemental Control (project) 02. 5126-00-71	LS	1. 000	1. 000
0450	/FO 0000			202 222	200 000
0450	650. 9920	Construction Staking Slope Stakes	LF	200.000	200. 000
0460	690. 0150	Sawing Asphal t	LF	39.000	39.000
0470	715. 0502	Incentive Strength Concrete Structures	DOL	1, 338. 000	1, 338. 000
0480	ASP. 1TOA	On-the-Job Training Apprentice at \$5.	HRS	200. 000	200. 000
0490	ASP. 1T0G	On-the-Job Training Graduate at \$5.00/HR	HRS	400.000	400.000
0530	SPV. 0105	Special O4. Temporary Water Diversion, Culvert B-41-304	LS	1.000	1. 000

ALL ITEMS AND QUANTITIES ON THIS SHEET ARE FOR ENGINEER ESTIMATE CATEGORY 0010.

205.0100 EXCAVATION COMMON **P**

208.0100 BORROW

	EXC. COMMON	FILL	EXPANDED FILL	BORROW
LOCATION	CY (3)	CY (1)	CY (2)	CY
STA 9+00 - STA 9+63	65	103	134	69
STA 10+37 - STA 11+00	62	94	123	61
UNUSABLE PAVEMENT				58
TOTALS:	127	197	257	188

(1) - NOT A BID ITEM - FOR INFORMATIONAL PURPOSES ONLY.

(2) - FILL EXPANSION 30%

(3) - EXISTING UNUSABLE ASPHALTIC PAVEMENT IS INCLUDED IN COMMON EXCAVATION TOTALS. SEE EARTHWORK TABLE.

305.0120 BASE AGGREGATE DENSE 1 1/4-INCH

624.0100 WATER

			1 1/4-INCH	WATER (1)
STATION	-	STATION	TON	MGAL
9+00.00	-	11+00.00	345	7
		TOTALS:	345	7
(1) - ADDITIONAL	QUANT	TTY INCLUDED W	ITH EROSION CON	ITROL ITEMS

625.0500 SALVAGED TOPSOIL

627.0200 MULCHING

629.0210 FERTILIZER TYPE B

630.0120 SEEDING MIXTURE NO. 20

630.0200 SEEDING TEMPORARY

624.0100 WATER

				SALVAGED TOPSOIL	MULCHING	FERTILIZER	SEEDING #20	SEEDING TEMPORARY	WATER (1)
STATION	_	STATION	LOCATION	SY	SY	CWT	LB	LB	MGAL
9+00	-	11+00	LT	275	410	0.30	13	13	11
9+00	-	11+00	RT	290	425	0.30	14	14	12
UNDIS	TRIBU	TED		60	85	0.05	3	3	2
		TOTALS:		625	920	0.65	30	30	25

(1) - ADDITIONAL QUANTITY INCLUDED WITH BASE AGGREGATE ITEMS.

628.1504 SILT FENCE

628.1520 SILT FENCE MAINTENANCE

				FENCE	MAINT.
STATION	-	STATION	LOCATION	LF	LF
9+00	-	9+65	LT	80	80
9+00	-	10+25	RT	145	145
9+70		11+00	LT	145	145
10+33	-	11+00	RT	85	85
UNDI	STRIB	UTED	-	45	45
			TOTALS:	500	500

628.1905 MOBILIZATIONS EROSION CONTROL

628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL

	MOBILIZATION	EMERGENCY MOB.
DESCRIPTION	EACH	EACH
PROJECT 5126-00-71	2	2
TOTALS:	2	2

633.5100 MARKERS ROW

STATION	OFFSET	LOCATION	EACH
9+00.00	33.00	LT	1
9+00.00	33.00	RT	1
9+35.00	55.00	LT	1
9+90.00	55.00	RT	1
10+15.00	55.00	LT	1
10+60.00	55.00	RT	1
11+00.00	33.00	LT	1
11+00.00	33.00	RT	1
		TOTAL:	8

633.5200 MARKERS CULVERT END

STATION	LOCATION	EACH
9+65	30' LT	1
9+99	30' LT	1
10+01	30' RT	1
10+35	30' RT	1
	TOTAL:	4

PROJECT NO: 5126-00-71

HWY: CTH N

COUNTY: MONROE

MISCELLANEOUS QUANTITIES

PLOT SCALE : 1:20

SHEET

ALL ITEMS AND QUANTITIES ON THIS SHEET ARE FOR ENGINEER ESTIMATE CATEGORY 0010.

638.2602 REMOVING SIGNS TYPE II

638.3000 REMOVING SMALL SIGN SUPPORTS

		REMOVING SIGNS TYPE II	REMOVING SMALL SIGN SUPPORTS	
STATION	LOCATION	EACH	EACH	COMMENTS
9+58	RT	-	-	EXISTING WEIGHT LIMIT POSTING (REMOVED BY COUNTY)
9+67	LT	1	1	EXISTING OBJECT MARKER
9+84	RT	1	1	EXISTING OBJECT MARKER
10+13	LT	1	1	EXISTING OBJECT MARKER
10+26	LT	-	-	EXISTING WEIGHT LIMIT POSTING (REMOVED BY COUNTY)
10+29	RT	1	1	EXISTING OBJECT MARKER
	TOTALS:	4	4	

650.4500 CONSTRUCTION STAKING SUBGRADE

650.5000 CONSTRUCTION STAKING BASE

650.9920 CONSTRUCTION STAKING SLOPE STAKES

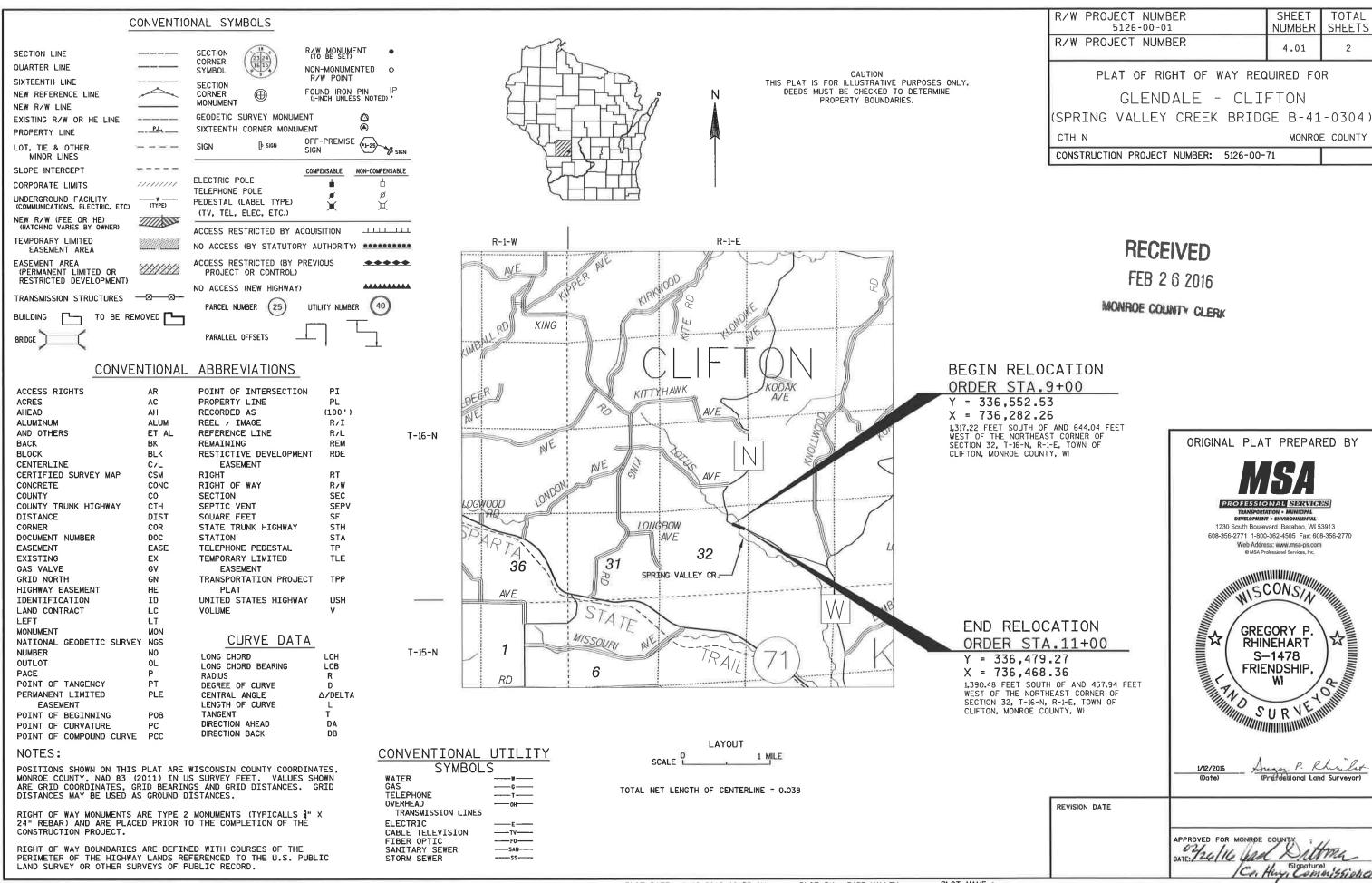
650.9910 CONSTRUCTION STAKING SUPPLEMENTAL CONTROL 5126-00-71

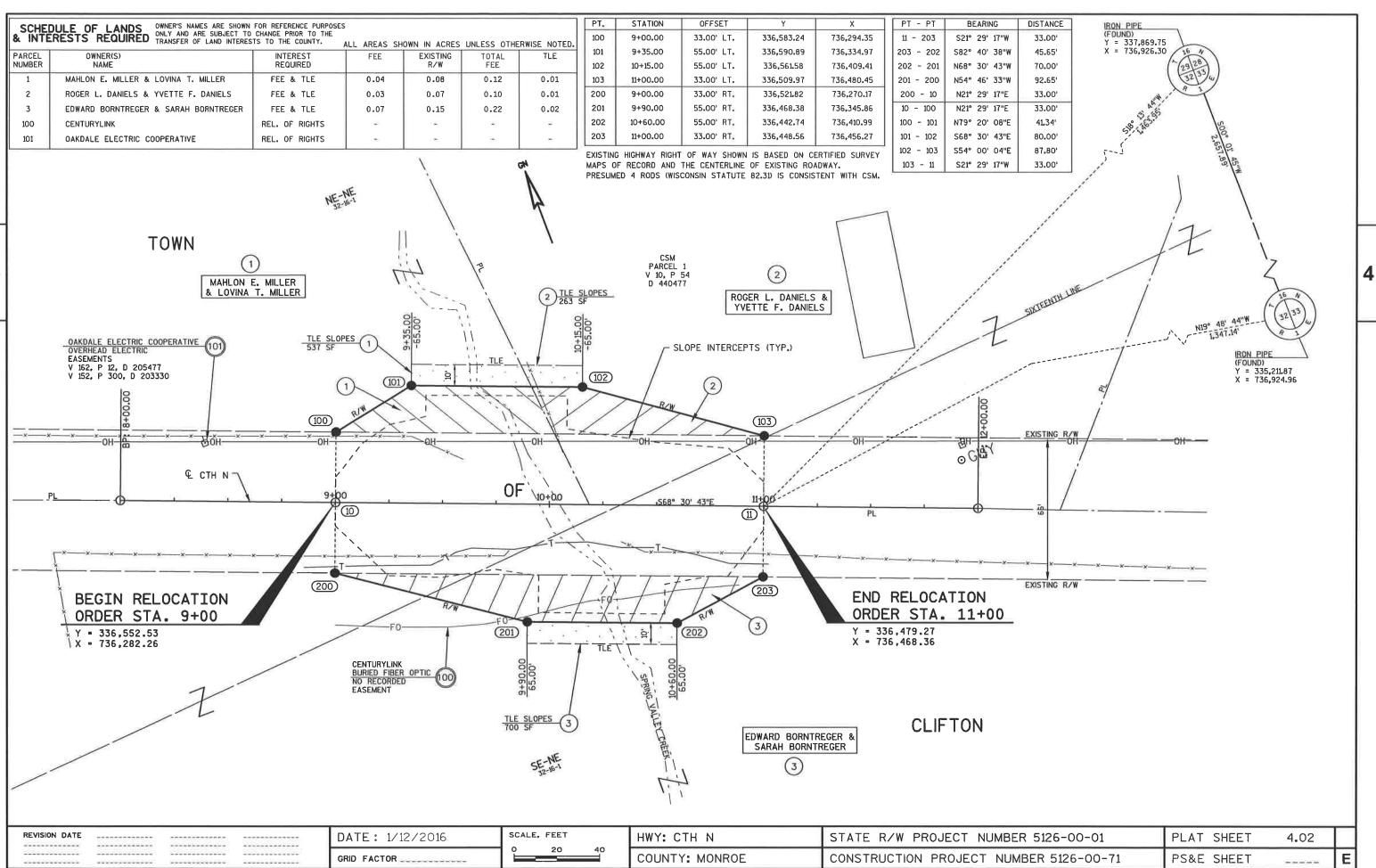
					SLOPE	SUPPLEMENTAL
			SUBGRADE	BASE	STAKES	CONTROL
 STATION	-	STATION	LF	LF	LF	LS
 9+00	-	11+00	200	200	200	-
		TOTALS:	200	200	200	1

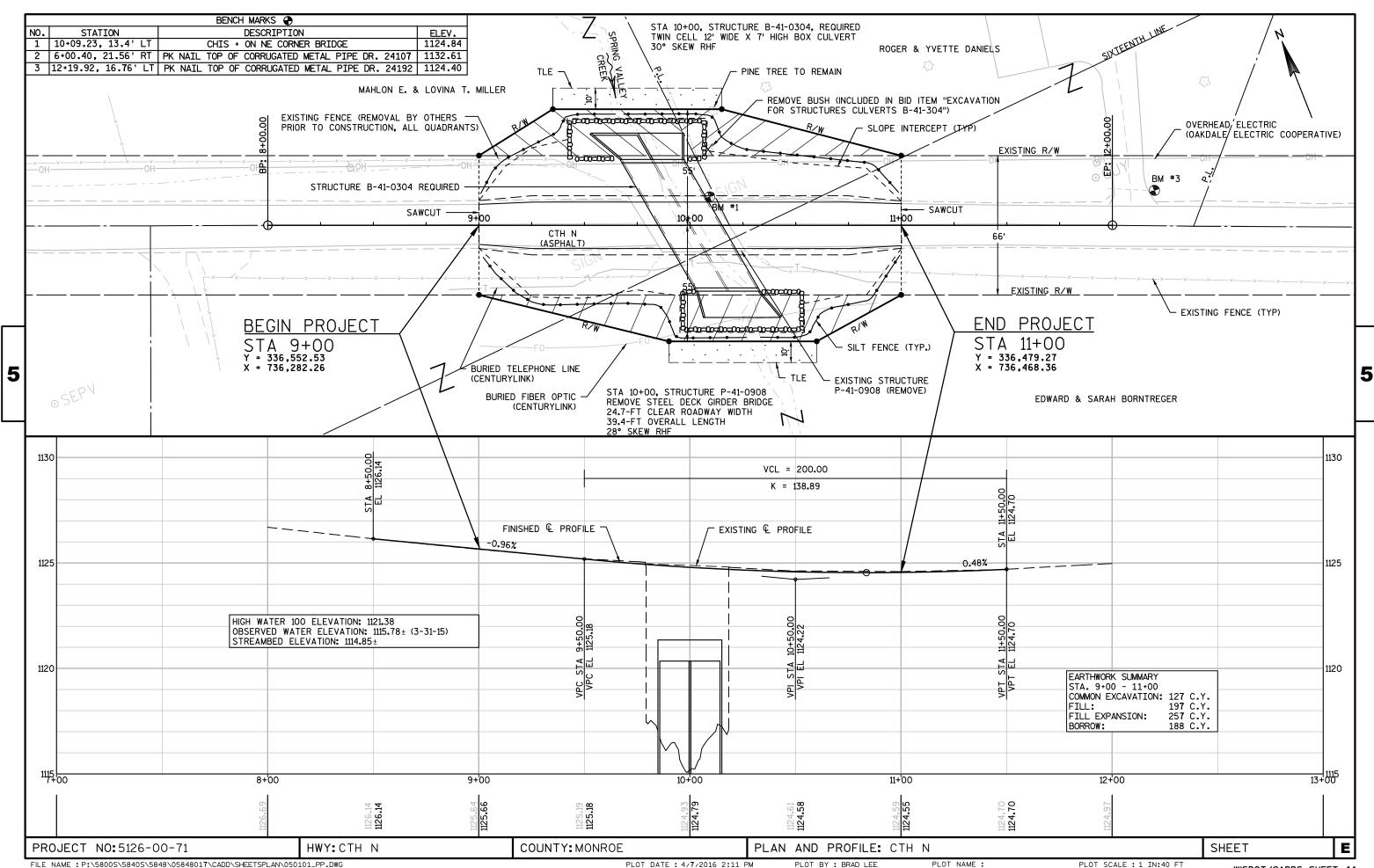
690.0150 SAWING ASPHALT

STATION	LF
9+00	19
11+00	20
TOTAL:	39

MISCELLANEOUS QUANTITIES COUNTY: MONROE SHEET PROJECT NO: 5126-00-71 HWY: CTH N FILE NAME: P:\\$800a\\$840a\\$848\05848\17\Documenta\Estimate\Roodway Quantities\05848017_MiscOty & Earthwork Borders.dgn







Standard Detail Drawing List

08E09-06	SILT FENCE
I2A03-10	NAME PLATE (STRUCTURES)
I5A01-12A	MARKER POST FOR RIGHT-OF-WAY
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
I5A03-02B	FLEXIBLE MARKER POST FOR CULVERT END
I5C02-06A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-06B	BARRICADES AND SIGNS FOR MAINLINE CLOSURES

TYPICAL APPLICATION OF SILT FENCE

6

b

Ō

Ш





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)



SILT FENCE

S.D.D. 8 E 9-6

6





TYPICAL NAME PLATE

(BRIDGES, CULVERTS, AND RETAINING WALLS)



NUMBERING DESIGNATION MULTI-UNIT STRUCTURES

GENERAL NOTES

NAME PLATES TO BE INSTALLED ON BRIDGES, CULVERTS, AND RETAINING WALLS SHALL CONFORM TO THE REQUIREMENTS OF SECTION 502.3.11 OF THE STANDARD SPECIFICATIONS.

THE BRIDGE NUMBER AND YEAR BUILT SHOWN ON THIS DRAWING ARE EXAMPLES ONLY. SEE CONSTRUCTION PLANS FOR INDIVIDUAL NUMBERING AND YEAR BUILT.

- 1 EPOXY RESIN SHALL BE FROM AN APPROVED MANUFACTURER AND USED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
- (2) REHABILITATION OF AN EXISTING STRUCTURE SHOULD USE THE DATE OF ORIGINAL STRUCTURE CONSTRUCTION.



SPREAD OPEN SO THE TOP OF LUG IS 11/4" WIDE

SECTION A-A

ALTERNATE LUG



ALTERNATE LUG

(FOR ATTACHMENT TO PRECAST STRUCTURES)

NAME PLATE (STRUCTURES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

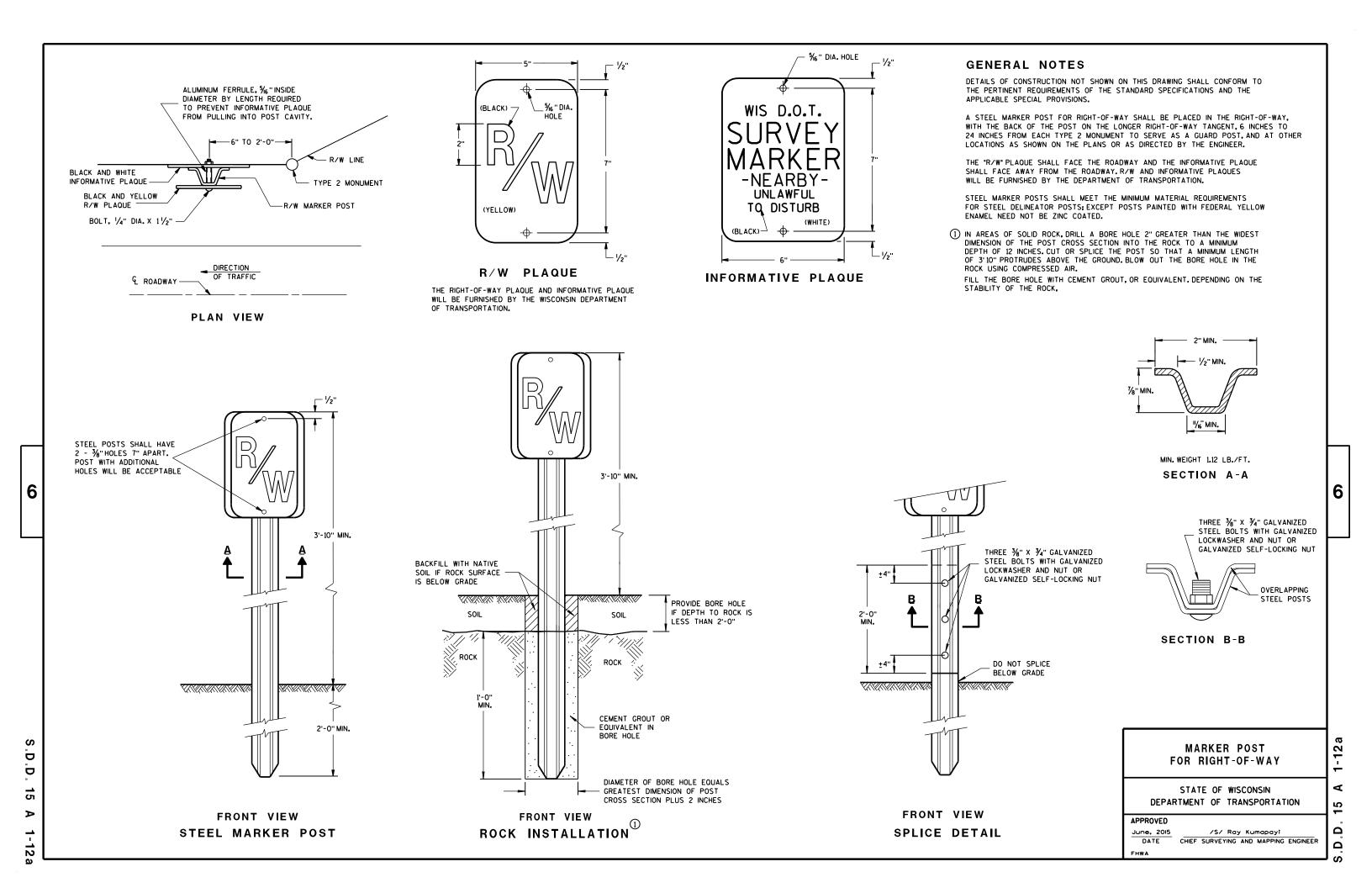
|--|

3/26/IO /S/ SCOT BECKET

CHIEF STRUCTURAL DEVELOPMENT ENGINEER

D.D. 12 A

3-10









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

2

2

Ω

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

/S/ Peter Amakobe Atepe

STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER

TYPICAL APPLICATION OF SILT FENCE

6

b

Ō

Ш





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

6

٥

D.D. 8 E 9





TYPICAL NAME PLATE

(BRIDGES, CULVERTS, AND RETAINING WALLS)



NUMBERING DESIGNATION MULTI-UNIT STRUCTURES

GENERAL NOTES

NAME PLATES TO BE INSTALLED ON BRIDGES, CULVERTS, AND RETAINING WALLS SHALL CONFORM TO THE REQUIREMENTS OF SECTION 502.3.11 OF THE STANDARD SPECIFICATIONS.

THE BRIDGE NUMBER AND YEAR BUILT SHOWN ON THIS DRAWING ARE EXAMPLES ONLY. SEE CONSTRUCTION PLANS FOR INDIVIDUAL NUMBERING AND YEAR BUILT.

- 1 EPOXY RESIN SHALL BE FROM AN APPROVED MANUFACTURER AND USED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
- (2) REHABILITATION OF AN EXISTING STRUCTURE SHOULD USE THE DATE OF ORIGINAL STRUCTURE CONSTRUCTION.



SPREAD OPEN SO THE TOP OF LUG IS 11/4" WIDE

SECTION A-A

ALTERNATE LUG



ALTERNATE LUG

(FOR ATTACHMENT TO PRECAST STRUCTURES)

NAME PLATE (STRUCTURES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

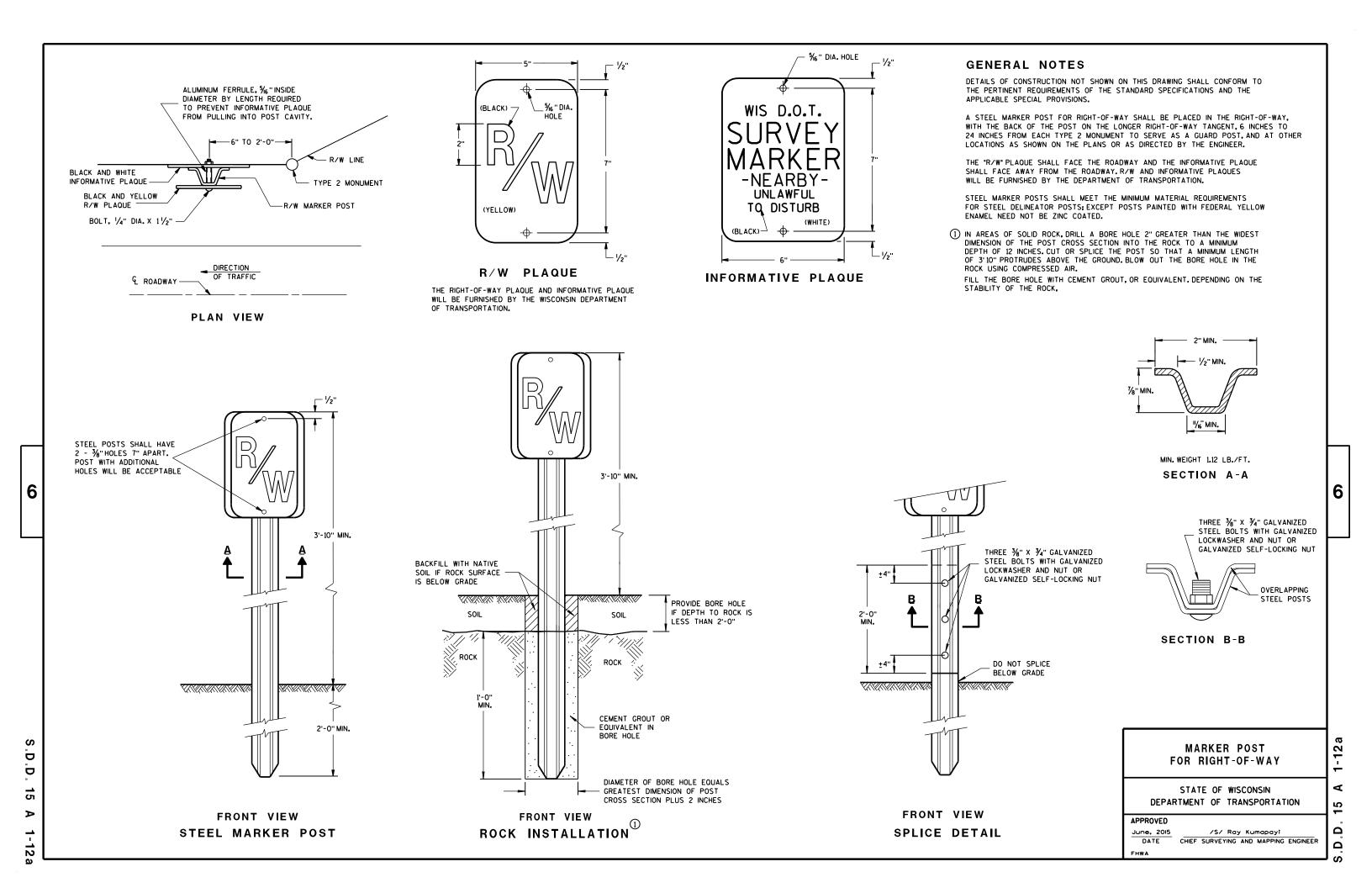
|--|

3/26/IO /S/ SCOT BECKET

CHIEF STRUCTURAL DEVELOPMENT ENGINEER

D.D. 12 A

3-10









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

2

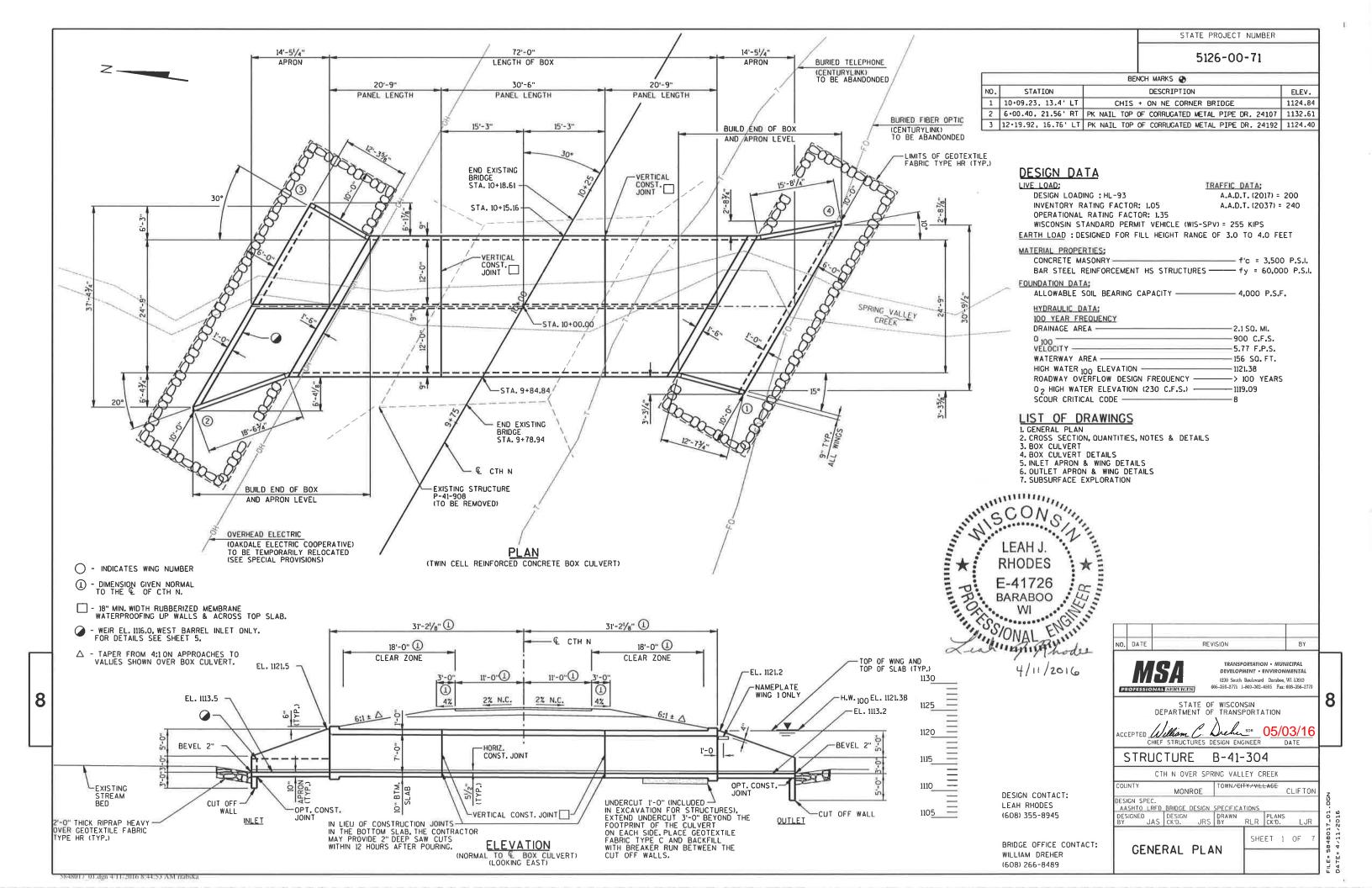
2

Ω

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

/S/ Peter Amakobe Atepe

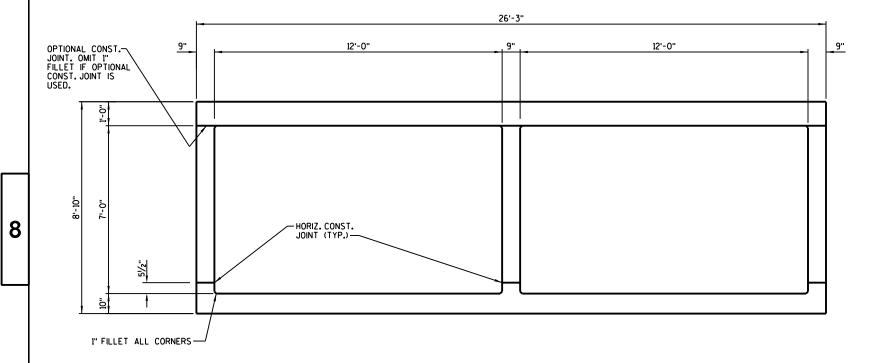
STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER



5126-00-71

STRUCTURE ESTIMATED QUANTITIES

ITEM NUMBER	BID ITEM	UNIT	TOTAL
203.0600.S.01	REMOVING OLD STRUCTURE OVER WATERWAY WITH MINIMAL DEBRIS STATION 10+00	LS	1
206.2000.01	EXCAVATION FOR STRUCTURES CULVERTS B-41-304	LS	1
210.0100	BACKFILL STRUCTURE	CY	1055
311.0115	BREAKER RUN	CY	125
504.0100	CONCRETE MASONRY CULVERTS	CY	223
505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	32,170
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	30
606.0300	RIPRAP HEAVY	CY	110
645.0105	GEOTEXTILE FABRIC TYPE C	SY	400
645.0120	GEOTEXTILE FABRIC TYPE HR	SY	250
SPV.0105.04	TEMPORARY WATER DIVERSION, CULVERT B-41-304	LS	1
	NON-BID ITEMS		
	PREFORMED FILLER	SIZE	3/4"



TYPICAL SECTION THRU BOX

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

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

THE FIRST DIGIT OF A THREE DIGIT BAR MARK SIGNIFIES THE BAR SIZE.

THE CONCRETE IN THE CUT OFF WALL MAY BE PLACED UNDERWATER IF THE EXCAVATION CANNOT BE DEWATERED.

THE ALTERNATE CUT OFF WALL MAY BE USED IN LIEU OF THE CAST IN PLACE CUT OFF WALLS. PAYMENT SHALL BE BASED ON CONCRETE CUT OFF WALLS.

PEAT WAS NOT FOUND IN THE SOIL BORINGS AND IS NOT ANTICIPATED. IF PEAT IS FOUND BELOW THE BOX CULVERT DURING EXCAVATION, REMOVE THE PEAT AND REPLACE IT WITH COMPACTED BREAKER RUN.

ALL SPACES EXCAVATED AND NOT OCCUPIED BY THE NEW STRUCTURE AND BREAKER RUN SHALL BE BACKFILLED WITH BACKFILL STRUCTURE TO THE ELEVATION OF THE ROADWAY SUBGRADE. BACKFILL STRUCTURE IS REQUIRED BEHIND ALL WINGWALLS. THE BACKFILL STRUCTURE ESTIMATED QUANTITIES ASSUMED A $1\frac{1}{2}$: 1 EXCAVATION SLOPE.

THIS STRUCTURE WILL REPLACE EXISTING BRIDGE P-41-908, A 39.4 FT.LONG SINGLE SPAN STEEL DECK GIRDER BRIDGE ON FULL RETAINING CONCRETE ABUTMENTS. SALVAGE EXISTING INTERIOR BEAMS AS NOTED IN THE SPECIAL PROVISIONS.

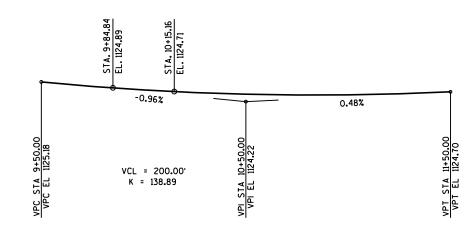
THE UPPER LIMITS OF "EXCAVATION FOR STRUCTURES CULVERTS B-41-304" SHALL BE THE EXISTING GROUND LINE.

THE CONTRACTOR MAY FURNISH A PRECAST CONCRETE BOX CULVERT IN LIEU OF THE CAST-IN-PLACE BOX CULVERT WITH THE ACCEPTANCE OF THE SHOP DRAWINGS BY THE STRUCTURES DESIGN SECTION. THE PRECAST CONCRETE BOX CULVERT SHALL CONFORM TO PRECAST DETAILS IN CHAPTER 36 STANDARDS OF THE CURRENT WISCONSIN DOT BRIDGE MANUAL. PAYMENT FOR THE PRECAST CULVERT SHALL BE BASED ON THE QUANTITIES AND PRICES BID FOR THE ITEMS LISTED IN THE "STRUCTURE ESTIMATED QUANTITIES".

IN LIEU OF USING BREAKER RUN FOR THE BOX CONSTRUCTION PLATFORM, THE CONTRACTOR MAY ELECT TO SUBSTITUTE *1 OR *2 CONCRETE COARSE AGGREGATE, SELECT CRUSHED MATERIAL OR OTHER GRANULAR MATERIAL AS APPROVED BY THE ENGINEER. THE CONTRACTOR IS RESPONSIBLE FOR BASE STABILITY WITH ANY SUBSTITUTED MATERIAL. THE REGION GEOTECHNICAL ENGINEER MAY BE CONTACTED TO DETERMINE IF "OTHER GRANULAR MATERIAL" IS ACCEPTABLE.

ELEVATIONS SHOWN ON THIS PLAN ARE REFERENCED TO NAVD 88 (1996 ADJUSTED), AND WERE ESTABLISHED AT THE SITE USING GPS TECHNOLOGY.

APRONS AND BOTTOM SLAB MAY BE POURED CONTINUOUSLY.



PROFILE GRADE LINE - CTH N

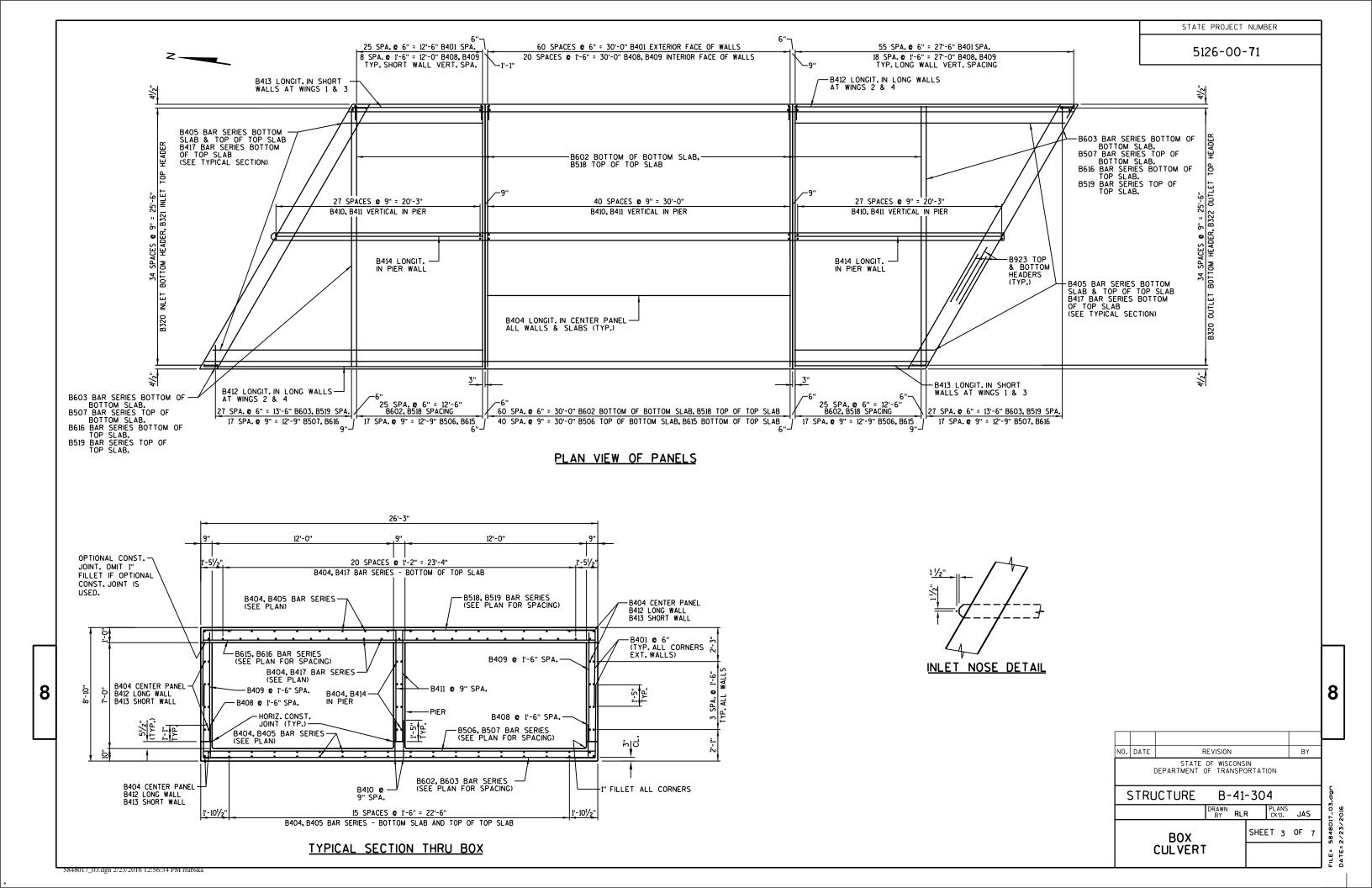
STRUCTURE B-41-304

CROSS SECTION, OUANTITIES, NOTES & DETAILS

23/2016

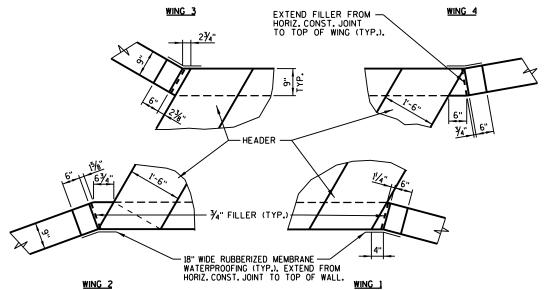
8

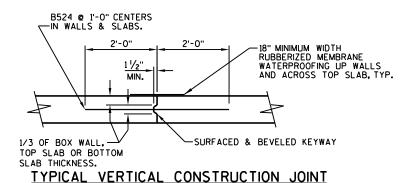
348017_02.dgn 2/23/2016 1:04:31 PM rrabska



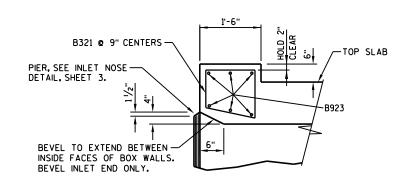
5126-00-71

Z ——

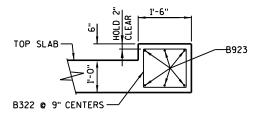




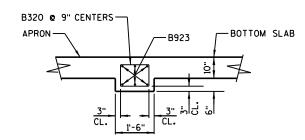
CORNER DETAILS
SEE SHEETS 5 & 6 FOR WING DETAILS







SECTION THRU
OUTLET TOP HEADER



SECTION THRU BOTTOM HEADERS

BILL OF BARS

UNCOATED 28,245 LBS.

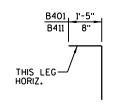
MARK	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
B401	572	6'-3"	х		BOX CORNERS - VERT.
B602	113	25'-11"	<u>'</u>		BOTTOM SLAB - EXTERIOR - TRANS.
B603	56	13'-11"	<u> </u>	*	END - BOTTOM SLAB - EXTERIOR - TRANS.
B404	101	30'-2"	<u> </u>		CENTER PANEL ALL WALLS & SLABS - LONGIT.
B405	96	20'-4"	<u> </u>	*	END - BOTTOM & TOP OF TOP - LONGIT.
B506	77	25'-11"	<u> </u>		TOP OF BOTTOM SLAB - TRANS.
B507	36	13'-9"		 X	END - TOP OF BOTTOM SLAB - TRANS.
B408	98	2'-2"			WALL DOWELS - BOTTOM - VERT.
B409	98	7'-4"			WALLS - TOP - VERT.
B410	194	2'-6"	,		PIER DOWELS - BOTTOM - VERT.
B411	194	7'-11"	X		PIER - TOP - VERT.
B412	24	27'-11"	,		LONG EXTERIOR WALL - LONGIT.
B413	24	13'-0"	,		SHORT EXTERIOR WALL - LONGIT.
B414	16	20'-7"	ļ ,		PIER - LONGIT.
B615	77	25'-11"	ļ ,		BOTTOM OF TOP SLAB - TRANS.
B616	36	13'-9"	,	*	END - BOTTOM OF TOP SLAB - TRANS.
B417	42	20'-4"	,	*	END - BOTTOM OF TOP SLAB - LONGIT.
B518	113	25'-11"	,		TOP SLAB - EXTERIOR - TRANS.
B519	56	13'-11"	'	*	END - TOP SLAB - EXTERIOR - TRANS.
B320	70	4'-9"	Х		BOTTOM HEADERS - STIRRUP - VERT.
B321	35	4'-9"	Х		INLET TOP HEADER - STIRRUP - VERT.
B322	35	5'-1"	Х		OUTLET TOP HEADER - STIRRUP - VERT.
B923	24	29'-11"	ļ ,		HEADERS - TRANS.
B524	150	4'-0"			CONSTRUCTION JOINT DOWEL - LONGIT.

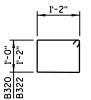
DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT OF BAR.

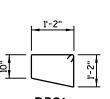
★ - LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

BAR MARK	NO. REO'D. LENGTH
B603	2 SERIES OF 28 2'-3" TO 25'-7"
B405	6 SERIES OF 16 13'-10" TO 26'-10"
B507	2 SERIES OF 18 2'-8" TO 24'-9"
B616	2 SERIES OF 18 2'-8" TO 24'-9"
B417	2 SERIES OF 21 13'-7" TO 27'-1"
B519	2 SERIES OF 28 2'-3" TO 25'-7"

BUNDLE AND TAG EACH SERIES SEPARATELY







B401. B411

B320. B322

<u>B321</u>

NO. DATE REVISION BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

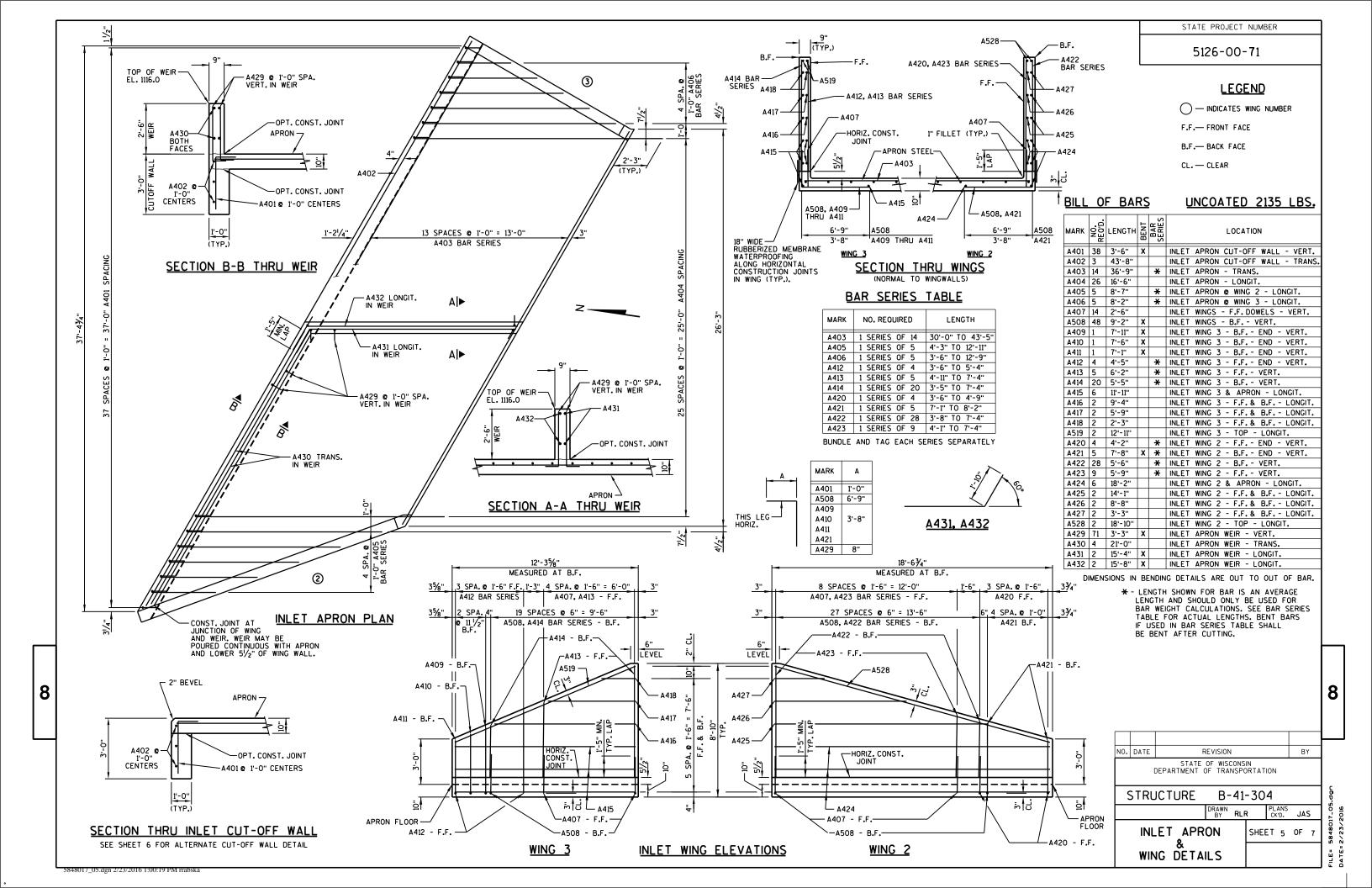
STRUCTURE B-41-304

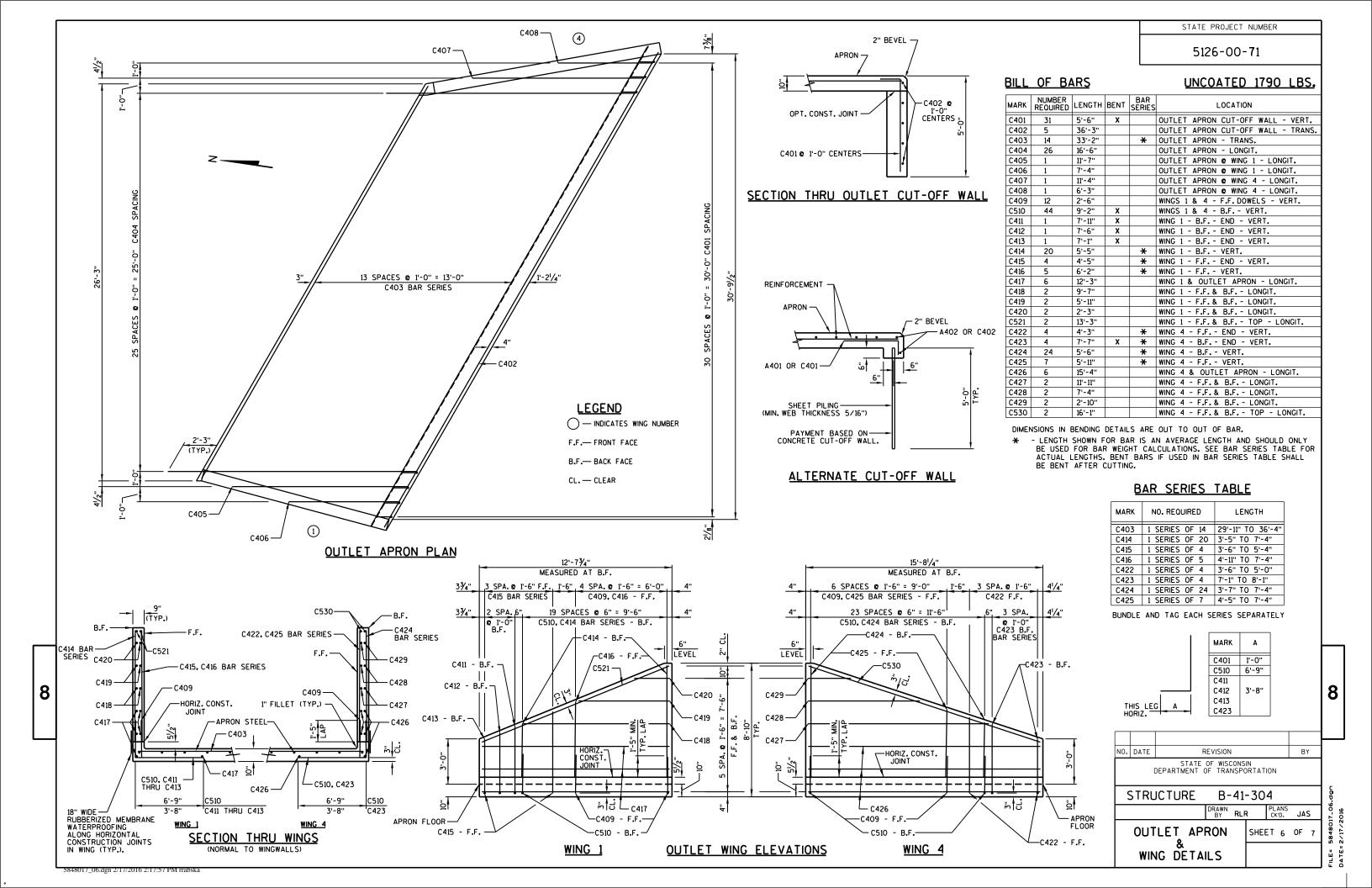
DRAWN
BY RLR PLANS
CKD. LJR

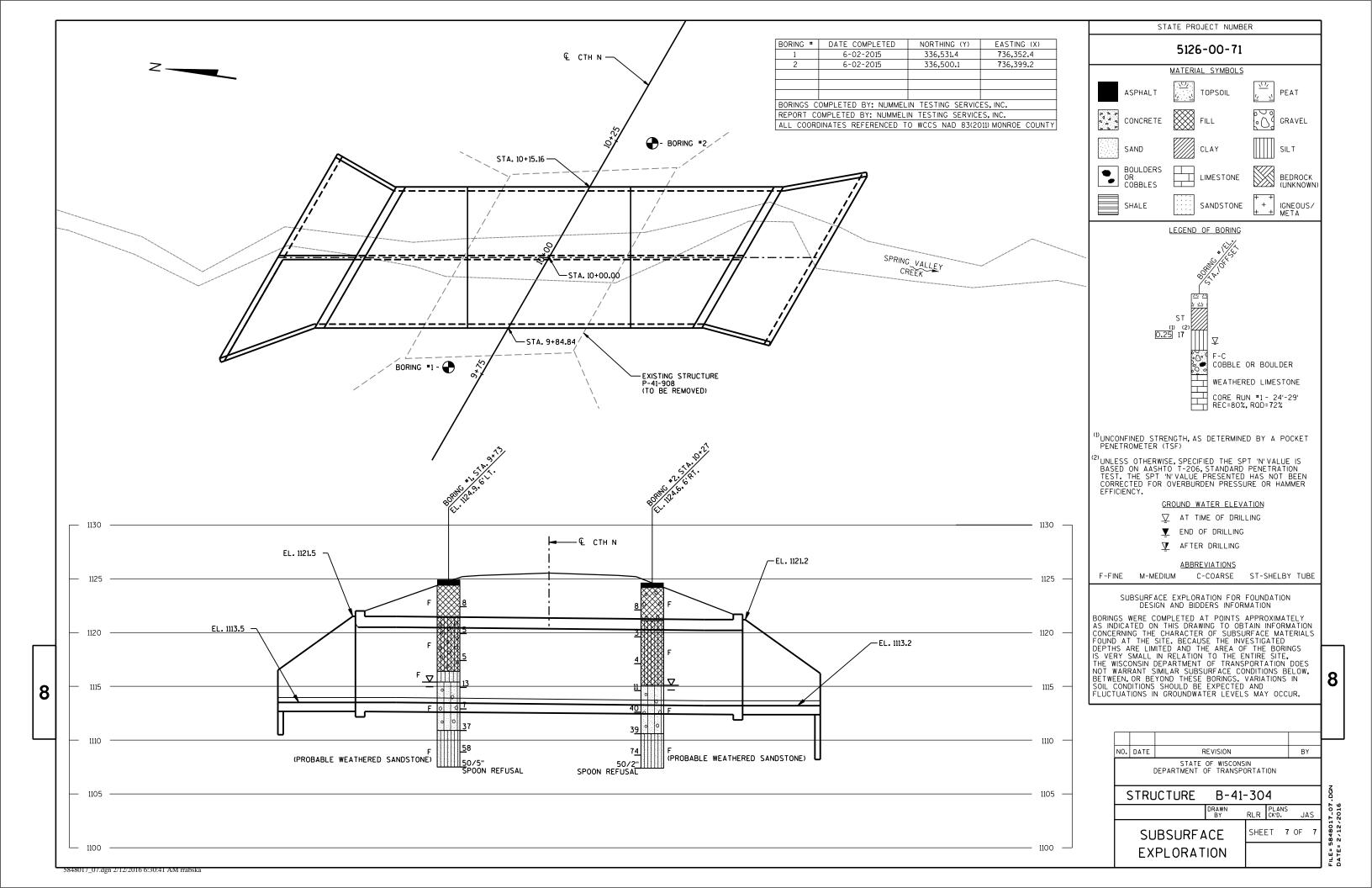
BOX CULVERT DETAILS SHEET 4 OF 7

8

48017 04.dgn 2/23/2016 12:58:16 PM rrabska







PROJECT I.D. 5126-00-71 EARTHWORK SUMMARY

	EXCAVATION (3)	EXCAVATION		EXPANDED		
	COMMON	ROCK	FILL (1)	FILL (2)	WASTE	BORRO
STA	CY	CY	CY	CY	CY	CY
9+00.00						
	52	0	68	88	-36	36
9+50.00						
	13	0	35	46	-33	33
9+63.00						
	STRU	CTURE B-41-0304				
10+37.00						
	13	0	32	42	-29	29
10+50.00						
	49	0	62	81	-32	32
11+00.00						
SUBTOTALS						
WEST APPROACH	65	0	103	134	-69	69
EAST APPROACH	62	0	94	123	-61	61
UNUSABLE PAVEMENT (4)						58
TOTALS	127	0	197	257	-130	188

(1) - NOT A BID ITEM - FOR INFORMATIONAL PURPOSES ONLY.

(2) - FILL EXPANSION 30%

(3) - EXISTING UNUSABLE ASPHALTIC PAVEMENT IS INCLUDED IN COMMON EXCAVATION TOTALS.

(4) - EXISTING UNUSABLE PAVEMENT BASED ON AVERAGE THICKNESS OF 5.5" OF ASPHALT PER BORING LOG.

9

9

PROJECT NO: 5126-00-71 HWY: CTH N COUNTY: MONROE EARTHWORK

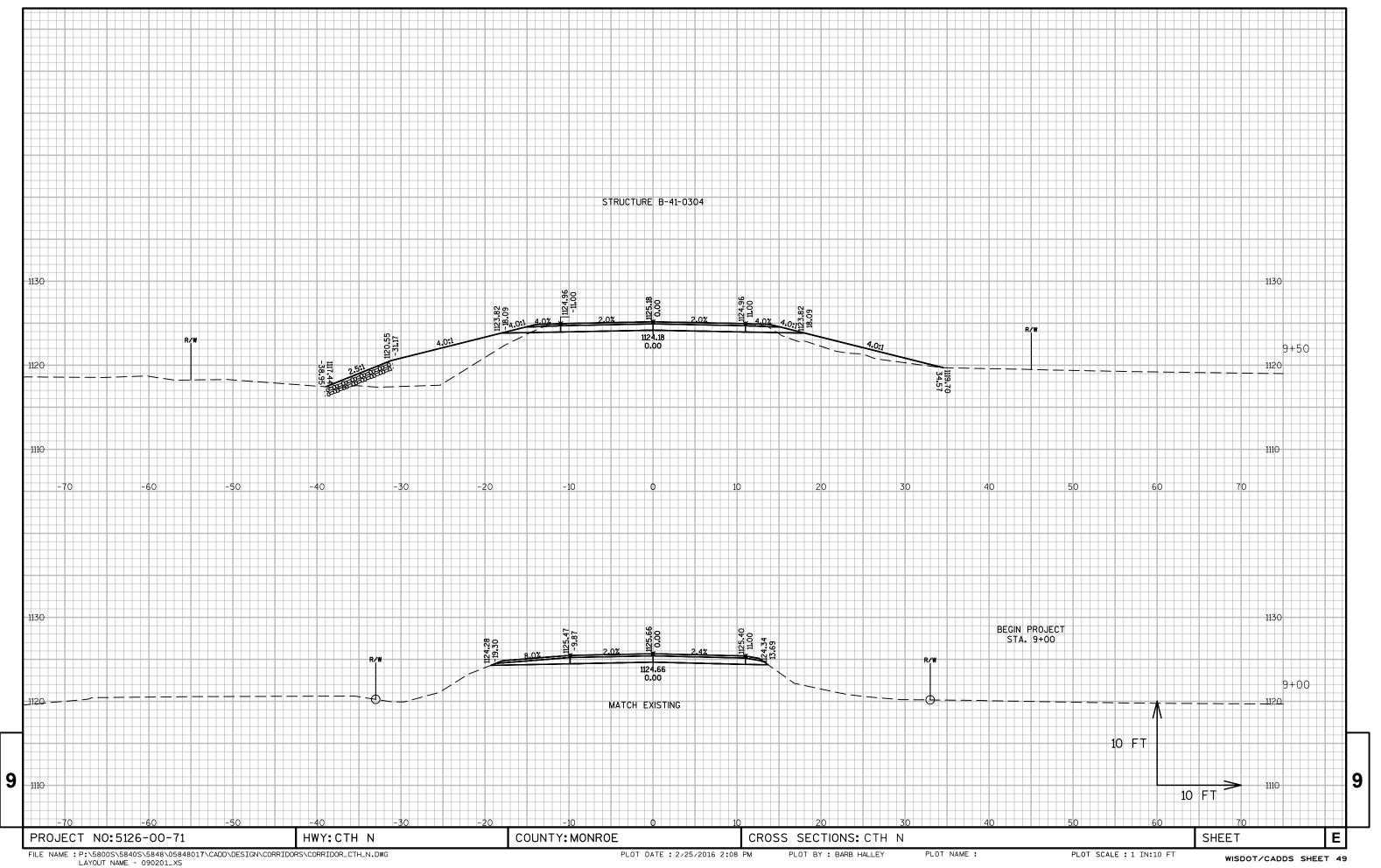
PLOT SCALE : 1:20

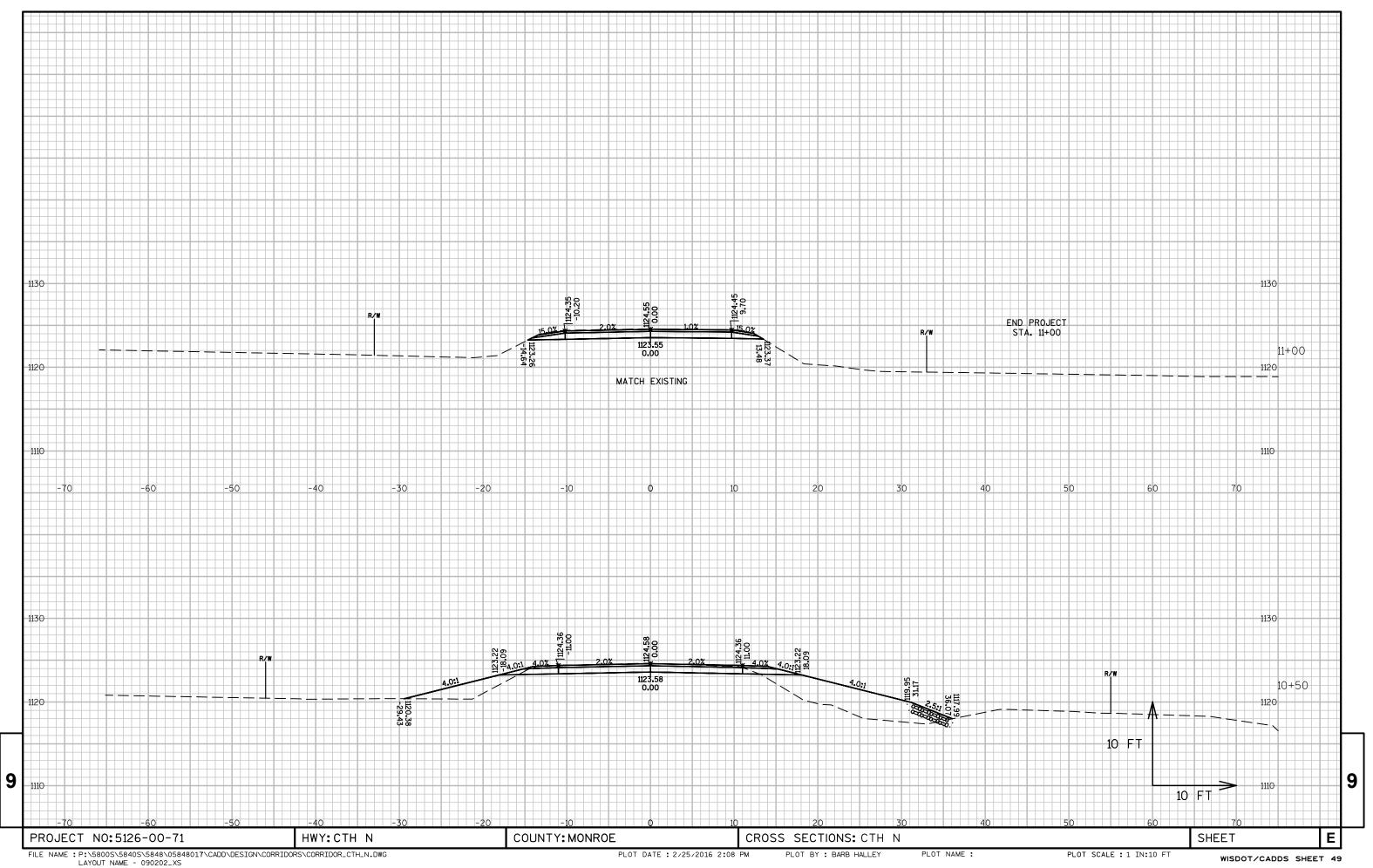
WISDOT/CADDS SHEET 49

SHEET

FILE NAME: P:\5800a\5840a\5848\05848017\Documents\Estimate\Roodway Quantities\05848017_MiscOty & Earthwork Borders.dgn

PLOT BY: janyder







Wisconsin Department of Transportation

Dedicated people creating transportation solutions through innovation and exceptional service.

http://www.dot.wisconsin.gov