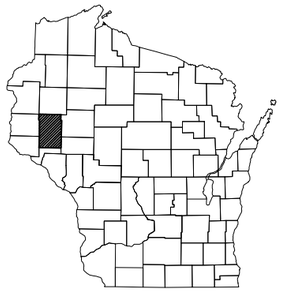
PROJECT ID: 8949-05-72

WITH:

COUNTY: DUNN

ORDER OF SHEETS

TOTAL SHEETS =



N

DESIGN DESIGNATION

A.A.D.T.	2018	=	1900
A.A.D.T.	2038	=	2400
D.H.V.		=	72
D.D.		=	60/40
T.		=	3.6%
DESIGN SPEED		=	60 MPH
ESALS		=	150,000

CONVENTIONAL SYMBOLS

PLAN

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

PROFILE

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

UTILITIES

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

BALDWIN - MENOMONIE

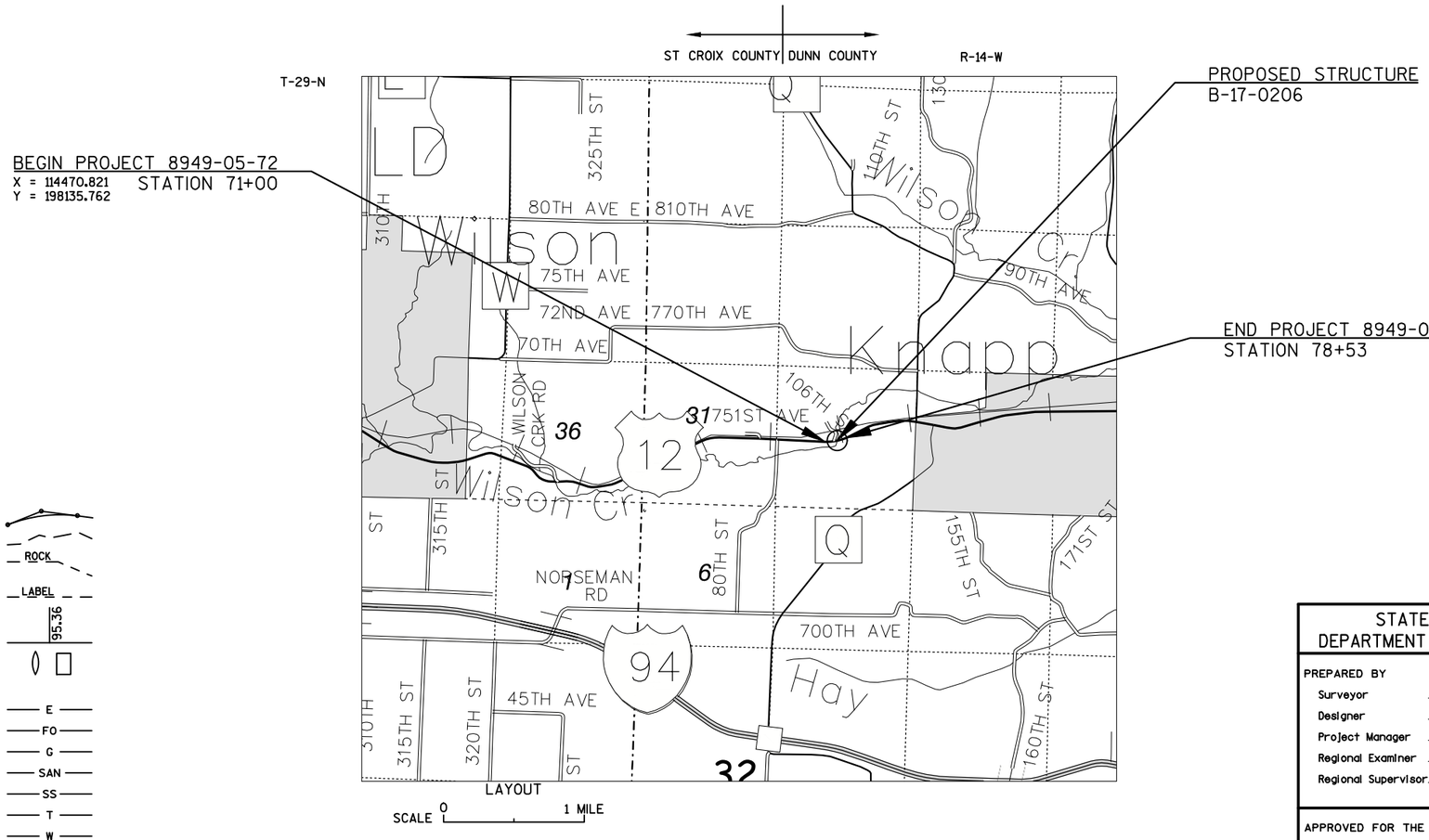
WILSON CREEK BRIDGE B-17-0206

USH 12

DUNN COUNTY

STATE PROJECT NUMBER
8949-05-72

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
8949-05-72		



TOTAL NET LENGTH OF CENTERLINE = 0.143

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

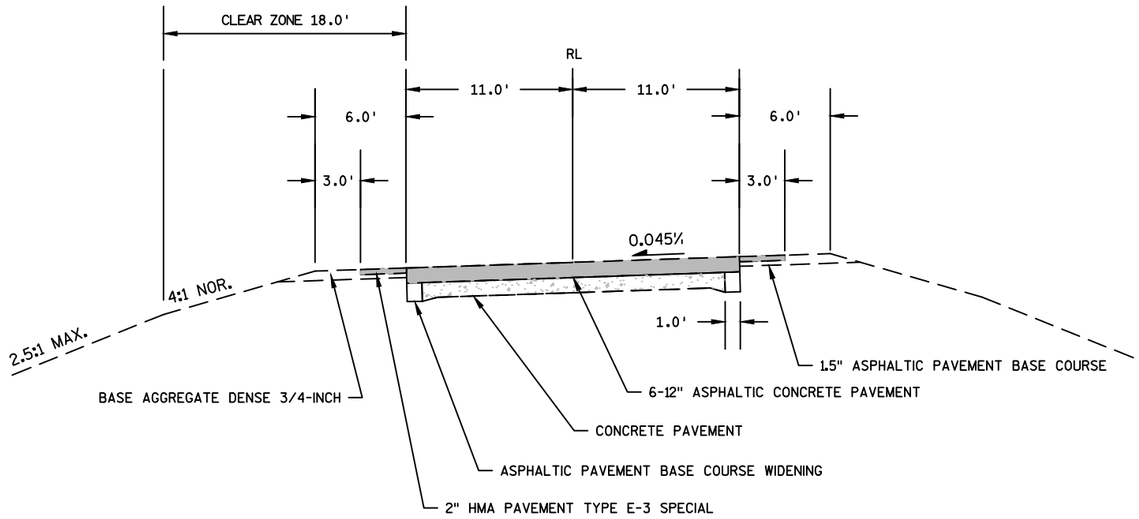
PREPARED BY

Surveyor	NW REGION
Designer	GARY W KRUG
Project Manager	TYLER RONGSTAD
Regional Examiner	JENNIFER OLDENBURG
Regional Supervisor	TIMOTHY MASON

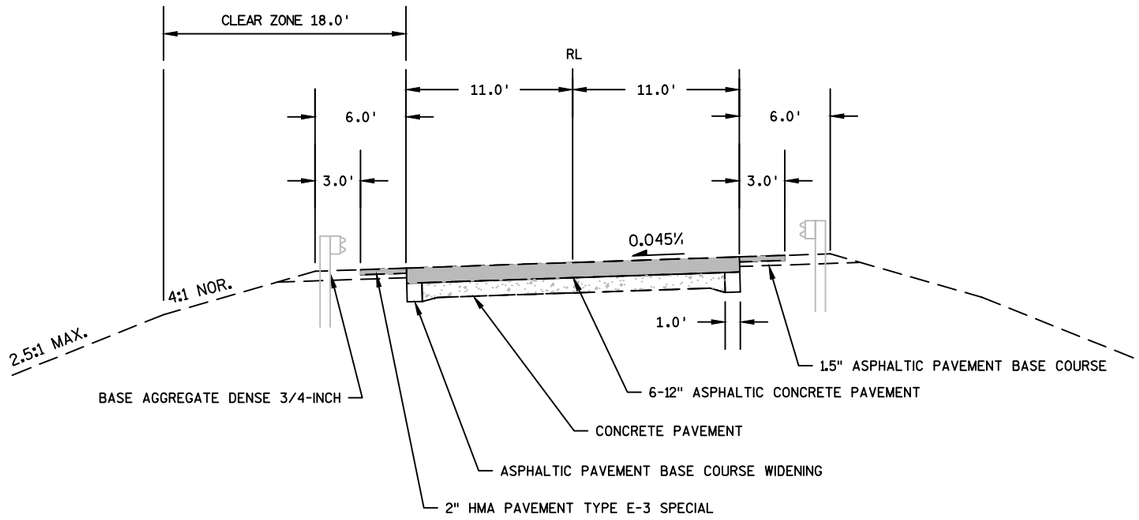
APPROVED FOR THE DEPARTMENT

DATE:_____ _____ (Signature)

E

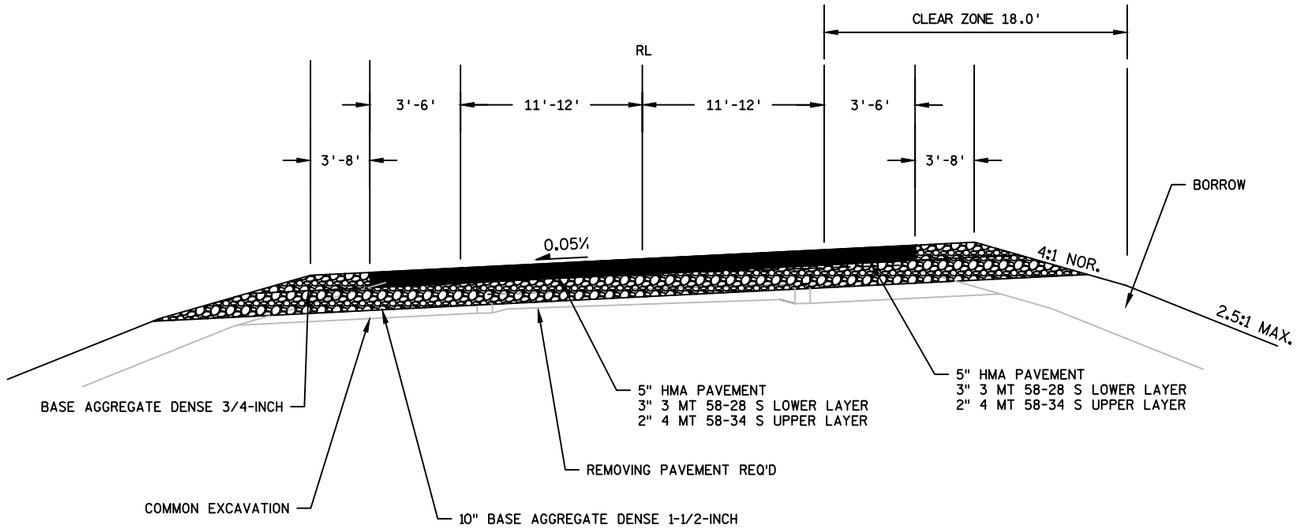


EXISTING TYPICAL SECTION
STA. 71+00 - STA. 74+11.95
STA. 75+07.05 - STA. 78+53

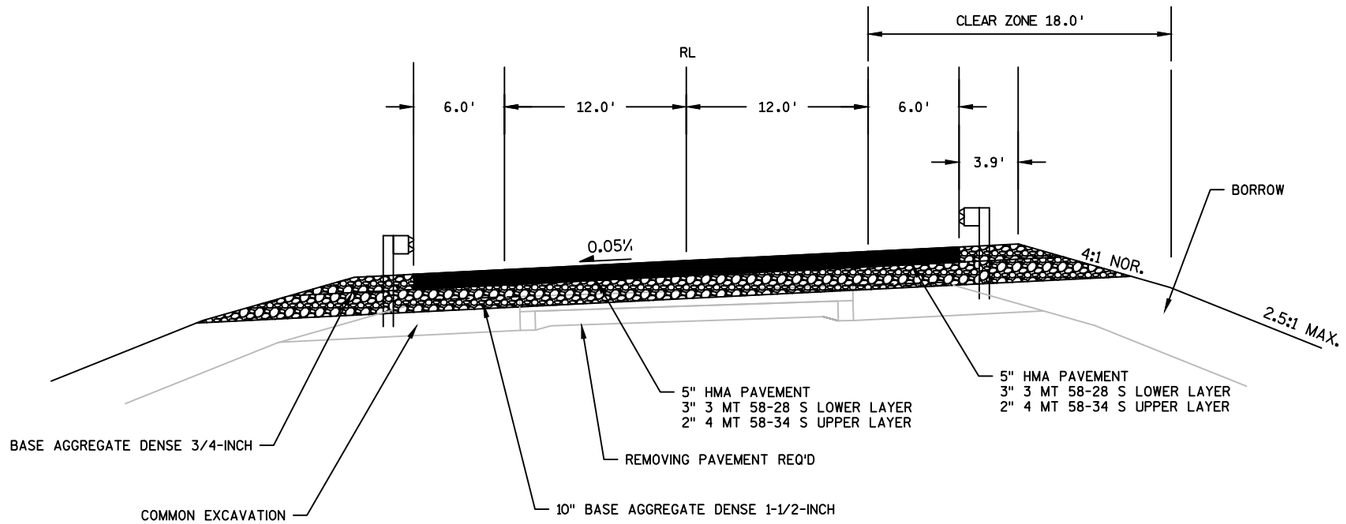


EXISTING TYPICAL SECTION
STA. 74+11.95 - STA. 75+07.05
STA. 76+10.91 - STA. 77+29.66

PROJECT NO: 8949-05-72	HWY: USH 12	COUNTY: DUNN	EXISTING TYPICAL SECTIONS	SHEET	E

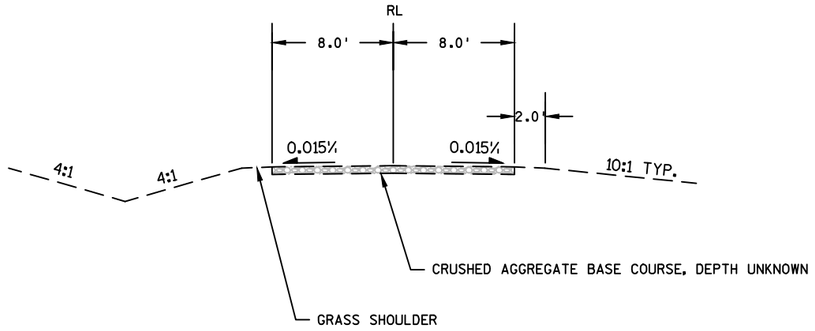


FINISHED TYPICAL SECTION
STA. 71+00 - STA. 75+03.42 LT.
STA. 71+00 - STA. 72+90.40 RT.
STA. 77+29.66 - STA. 78+52.75 RT.
STA. 78+23.79 - STA. 79+59.96 LT.

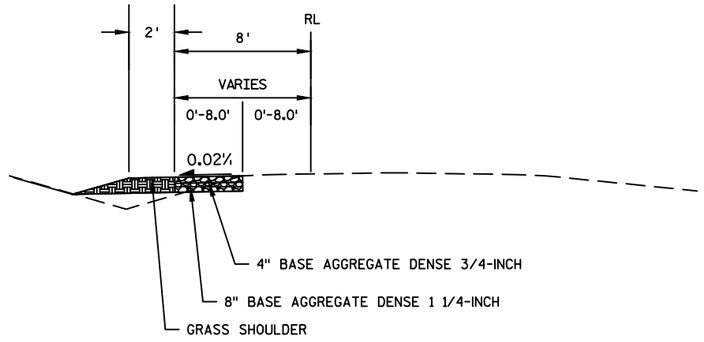


FINISHED TYPICAL SECTION
STA. 72+90.40 - STA. 75+03.72 RT.
STA. 76+15.33 - STA. 77+29.66 RT.
STA. 76+15.33 - STA. 78+23.79 LT.

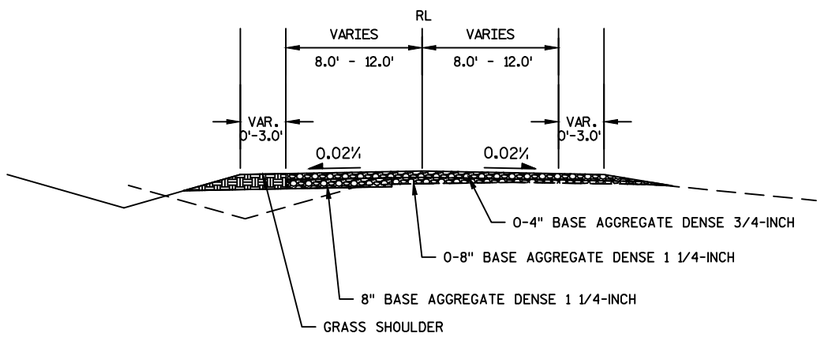
PROJECT NO: 8949-05-72	HWY: USH 12	COUNTY: DUNN	FINISHED TYPICAL SECTIONS	SHEET	E



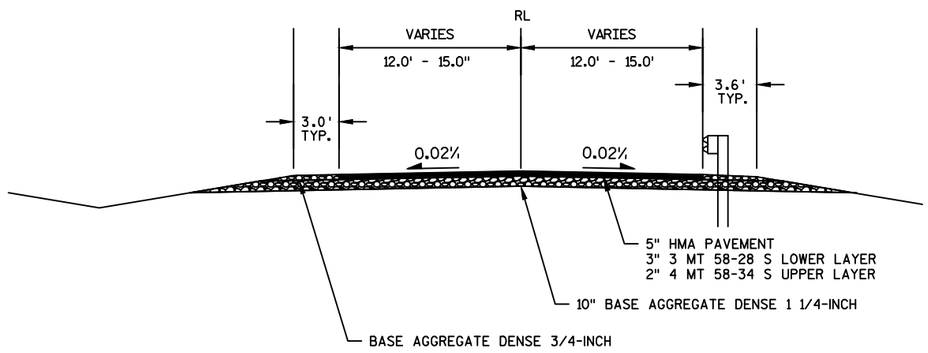
106TH STREET EXISTING TYPICAL SECTION



106TH STREET FINISHED TYPICAL SECTION
STA. 11+74 - STA. 12+97.38

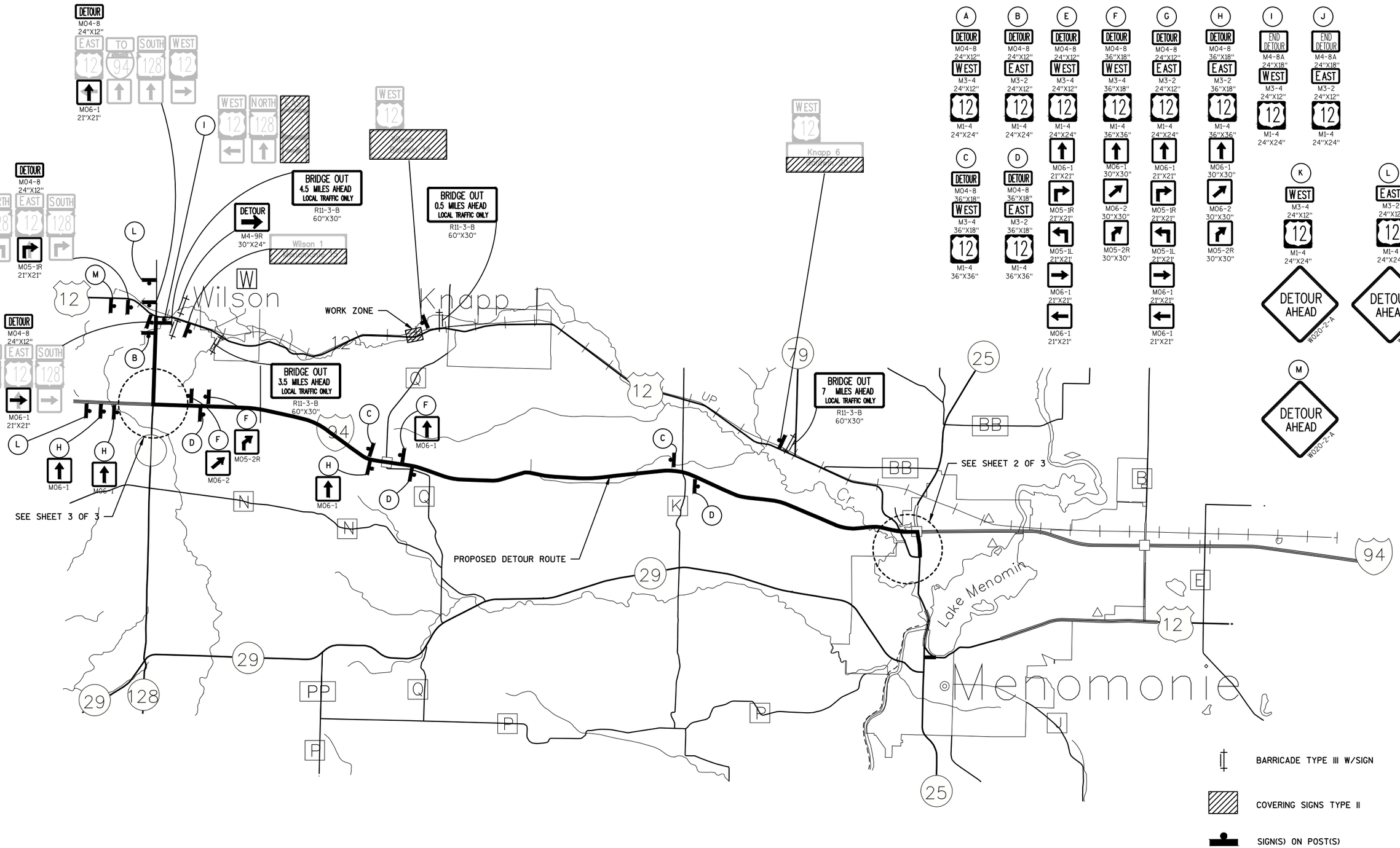


106TH STREET FINISHED TYPICAL SECTION
STA. 10+67 - STA. 11+74



106TH STREET FINISHED TYPICAL SECTION
STA. 10+18 - STA. 10+67

PROJECT NO: 8949-05-72	HWY: USH 12	COUNTY: DUNN	EXISTING/FINISHED TYPICAL SECTIONS 106TH STREET	SHEET	E



PAGE 1 OF 3

PROJECT NO: 8949-05-72	HWY: USH 12	COUNTY: DUNN	DETOUR ROUTE SIGNING	SHEET	E

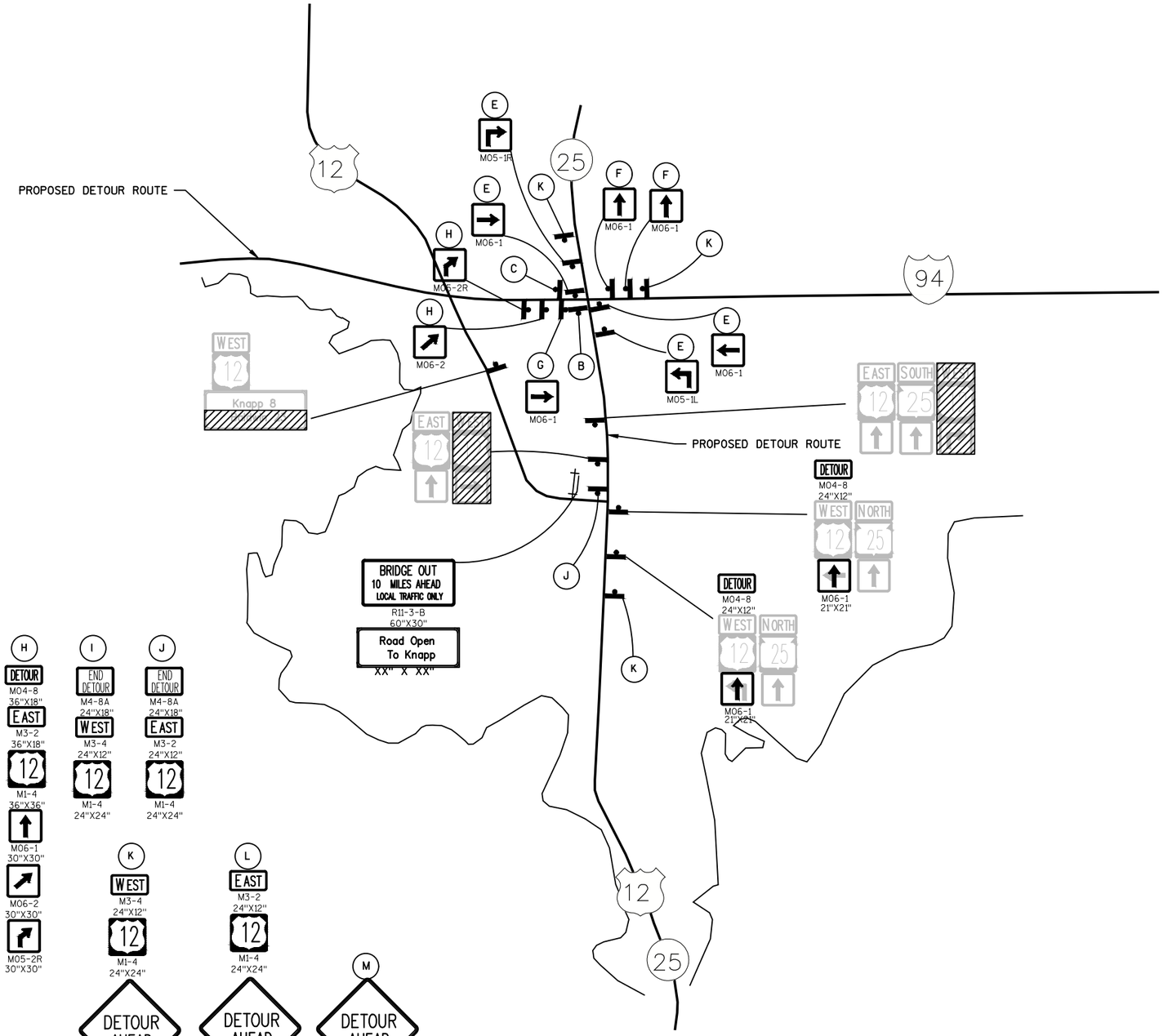
2

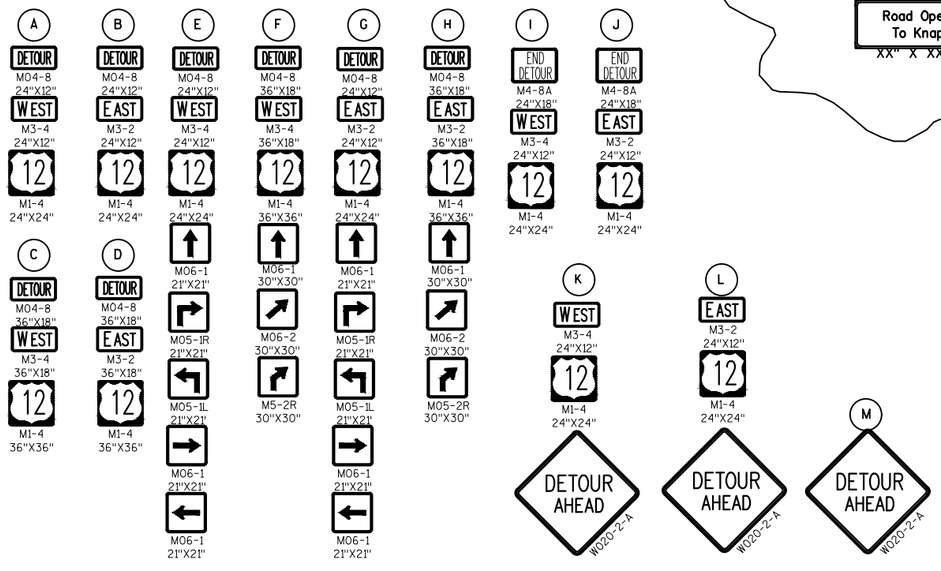
N

BARRICADE TYPE III W/SIGN

COVERING SIGNS TYPE II

SIGN(S) ON POST(S)





PROJECT NO: 8949-05-72	HWY: USH 12	COUNTY: DUNN	DETOUR ROUTE SIGNING	SHEET	E

FILE NAME : N:\PDS\C3D\89490502 WILSON CREEK\SHEETSPLAN\DETOUR.DWG
LAYOUT NAME - ****
PLOT DATE : 2/19/2018 4:33 PM
PLOT BY : KRUG, GARY W
PLOT NAME :
PLOT SCALE : Custom
WISDOT/CADDS SHEET 42

2

N

DETOUR
M04-8
24"X12"
EAST
M3-2
24"X12"
12
M1-4
24"X24"
M06-2
21"X21"

DETOUR
M04-8
24"X12"
EAST
M3-2
24"X12"
12
M1-4
24"X24"
M05-1L
21"X21"

DETOUR
M04-8
24"X12"
EAST
M3-2
24"X12"
12
M1-4
24"X24"
M06-1
21"X21"

EAST SOUTH
94 128
WEST
94

DETOUR
M04-8
24"X12"
EAST
M3-2
24"X12"
12
M1-4
24"X24"
M06-1
21"X21"

235'NB'
240'NB'
245'NB'
250'NB'
255'NB'
260'NB'
265'NB'

DETOUR
M04-8
24"X12"
EAST
M3-2
24"X12"
12
M1-4
36"X36"
DETOUR AHEAD
W20-2-A

DETOUR
M04-8
24"X12"
EAST
M3-2
24"X12"
12
M1-4
24"X24"
M05-1R
21"X21"

DETOUR
M04-8
24"X12"
EAST
M3-2
24"X12"
12
M1-4
24"X24"
M06-1
21"X21"

DETOUR
M04-8
24"X12"
EAST
M3-2
24"X12"
12
M1-4
24"X24"
M06-1
21"X21"

DETOUR
M04-8
24"X12"
EAST
M3-2
24"X12"
12
M1-4
24"X24"
M06-2
21"X21"

DETOUR
M04-8
24"X12"
WEST
M3-4
24"X12"
12
M1-4
24"X24"
M06-1
21"X21"

DETOUR
M04-8
24"X12"
WEST
M3-4
24"X12"
12
M1-4
24"X24"

NORTH
128
ALTERNATE
94

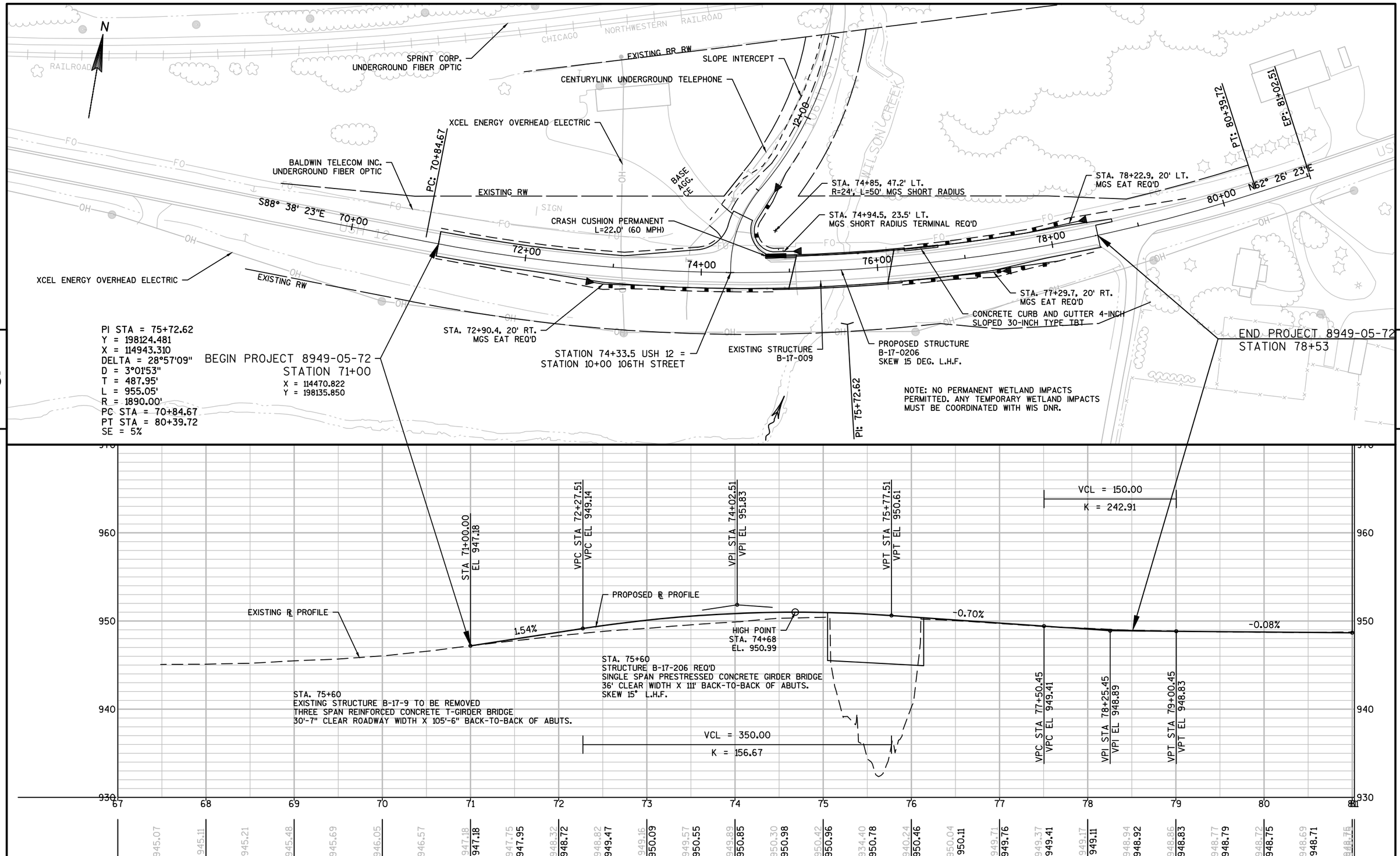
12'WD'
14'WD'
11'PR'
12'PR'
13'PR'
22'ED'
8'SR'
4'SR'
2'SR'

255'D'
260'D'
270'D'
265'D'
260'A'
255'A'
250'A'

PAGE 3 OF 3

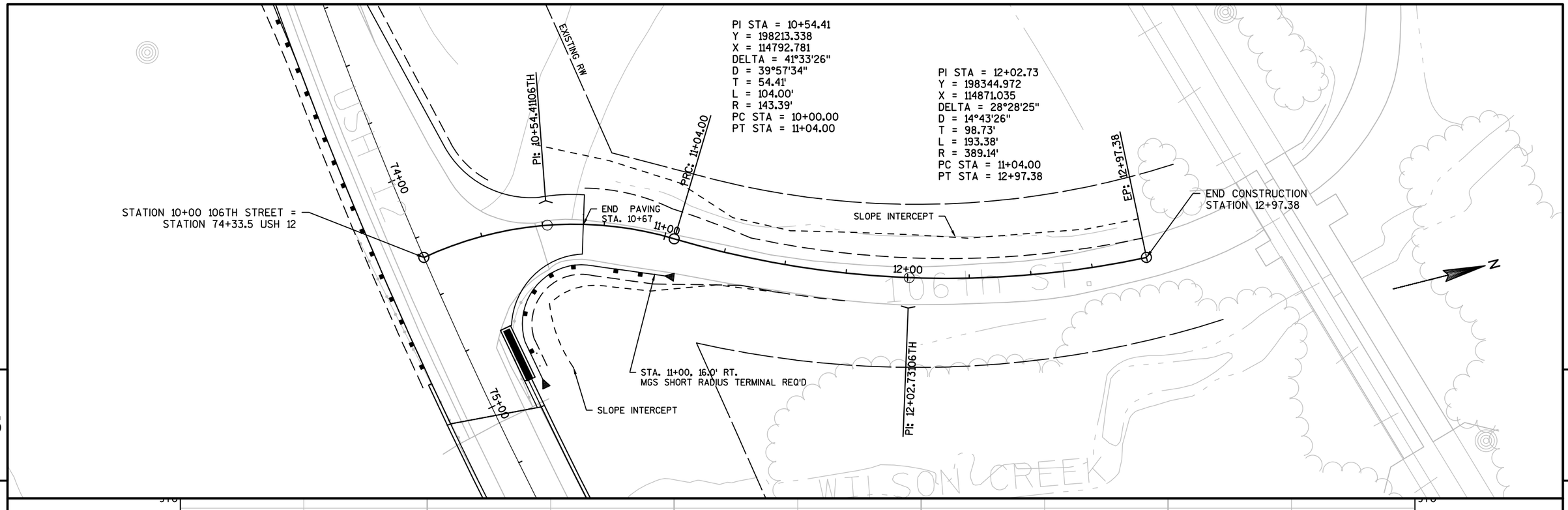
PROJECT NO: 8949-05-72	HWY: USH 12	COUNTY: DUNN	DETOUR ROUTE SIGNING	SHEET	E

FILE NAME : N:\PDS\C3D\89490502 WILSON CREEK\SHEETSOTHER\020602_PS_STH128_10210100.DWG
LAYOUT NAME - SHEET - (4)
PLOT DATE : 2/19/2018 4:35 PM PLOT BY : KRUG, GARY W PLOT NAME : PLOT SCALE : 1 IN:200 FT



PROJECT NO: 8949-05-72	HWY: USH 12	COUNTY: DUNN	PLAN AND PROFILE: WILSON CREEK BRIDGE	SHEET	E

FILE NAME : N:\PDS\C3D\89490502 WILSON CREEK\SHEETSPLAN\050101_PP_ALT 2.DWG
LAYOUT NAME - SHEET - 50101
PLOT DATE : 4/2/2019 4:33 PM
PLOT BY : KRUG, GARY W
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44



PROJECT NO: 8949-05-72	HWY: USH 12	COUNTY: DUNN	PLAN AND PROFILE: 106TH STREET	SHEET	E

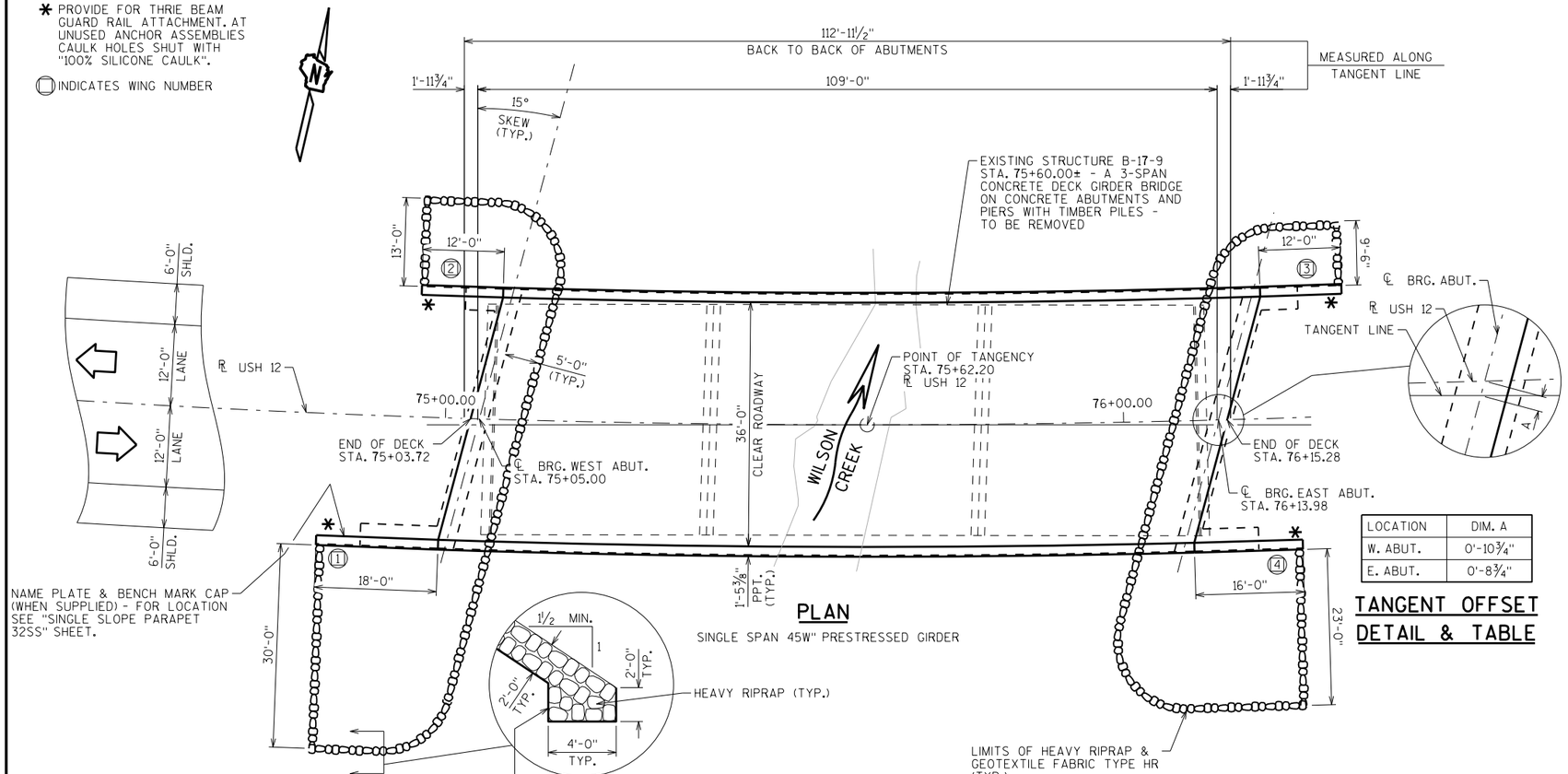
FILE NAME : N:\PDS\C3D\89490502 WILSON CREEK\SHEETSPLAN\050103_PP.DWG
LAYOUT NAME - SHEET - (1)

PLOT DATE : 2/22/2018 11:21 AM PLOT BY : KRUG, GARY W PLOT NAME : PLOT SCALE : 1 IN:40 FT

STATE PROJECT NUMBER
8949-05-72

* PROVIDE FOR THRIE BEAM GUARD RAIL ATTACHMENT. AT UNUSED ANCHOR ASSEMBLIES CAULK HOLES SHUT WITH "100% SILICONE CAULK".

(1) INDICATES WING NUMBER

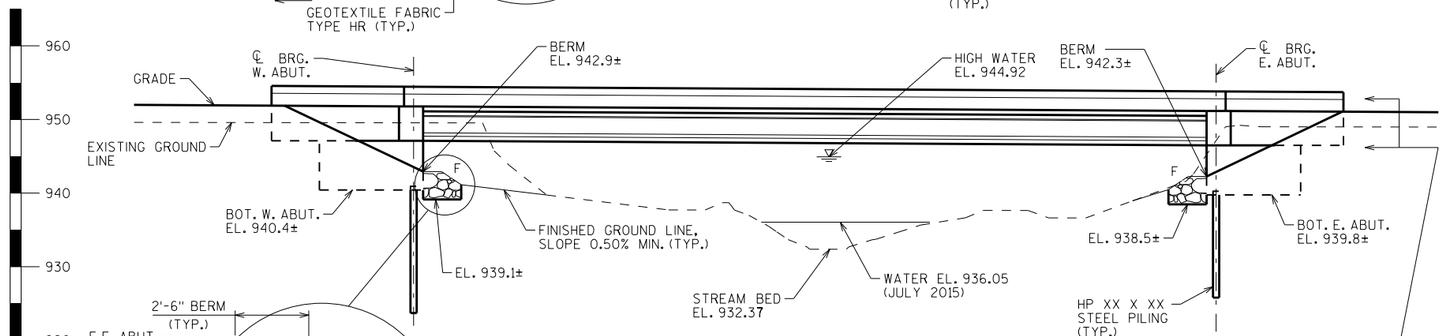


LOCATION	DIM. A
W. ABUT.	0'-10¾"
E. ABUT.	0'-8¾"

PLAN

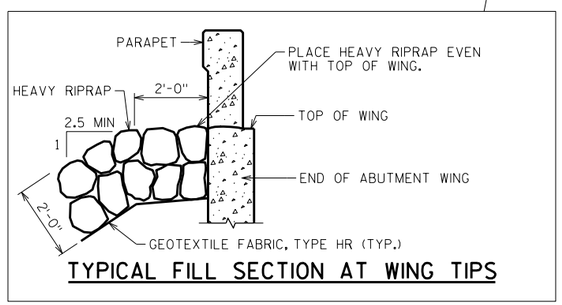
SINGLE SPAN 45W" PRESTRESSED GIRDER

TANGENT OFFSET DETAIL & TABLE



ELEVATION

NORMAL TO WILSON CREEK (LOOKING NORTH)



TYPICAL FILL SECTION AT WING TIPS

DESIGN DATA

LIVE LOAD:

DESIGN LOADING: HL-93
INVENTORY RATING FACTOR: RF =
OPERATING RATING FACTOR: RF =
WISCONSIN STANDARD PERMIT VEHICLE (WIS.-SPV): (KIPS)

STRUCTURE IS DESIGNED FOR A FUTURE WEARING SURFACE OF 20 POUNDS PER SQUARE FOOT.

MATERIAL PROPERTIES:

CONCRETE MASONRY:
SUPERSTRUCTURE & STRUCTURAL APPROACH SLAB — f'c = 4,000 P.S.I.
ALL OTHER — f'c = 3,500 P.S.I.

BAR STEEL REINFORCEMENT:
GRADE 60 — fy = 60,000 P.S.I.
STAINLESS, GRADE 60 — fy = 60,000 P.S.I.

45W" PRESTRESSED GIRDERS:
CONCRETE MASONRY — f'c = P.S.I.
STRANDS: 0.6" DIA. WITH ULTIMATE TENSILE STRENGTH OF 270,000 P.S.I.

FOUNDATION DATA

ABUTMENTS TO BE SUPPORTED ON PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF TONS ✱✱ PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA.
ESTIMATED LONG.

✱✱ THE FACTORED AXIAL RESISTANCE OF PILES IN COMPRESSION USED FOR DESIGN IS THE REQUIRED DRIVING RESISTANCE MULTIPLIED BY A RESISTANCE FACTOR OF 0.5 USING MODIFIED GATES TO DETERMINE DRIVEN PILE CAPACITY.

HYDRAULIC DATA

100 YEAR FREQUENCY

Q_{100} = 2,893 C.F.S.
VEL. = 7.60 F.P.S.
$HW._{100}$ = EL. 944.92
WATERWAY AREA = 380 SQ. FT.
DRAINAGE AREA = 10.10 SQ. MI.
ROADWAY OVERTOPPING = N/A
SCOUR CRITICAL CODE = 8

2 YEAR FREQUENCY

Q_2 = 625 C.F.S.
VEL. = 3.8 F.P.S.
$HW._2$ = EL. 941.82

TRAFFIC VOLUME

USH 12

ADT = 2,400 (2038)
R.D.S. = 60 M.P.H.

CURVE DATA

USH 12

P.I. = STA. 75+72.62
△ = 28°57'09"
D = 3°01'53"
T = 487.95'
L = 955.05'
R = 1890.00'
P.C. = STA. 70+84.67
P.T. = STA. 80+39.72

PRELIMINARY PLAN

STRUCTURE DESIGN CONTACTS:

JONATHON RESHESKE (608) 266-8491
LAURA SHADEWALD (608) 267-9592

LIST OF DRAWINGS

1. GENERAL PLAN
2. CROSS SECTION & QUANTITIES
3. CONSTRUCTION STAGING

NO.	DATE	REVISION	BY

WISCONSIN DEPARTMENT OF TRANSPORTATION — BUREAU OF STRUCTURES

ACCEPTED _____ _____
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE B-17-206

USH 12 OVER WILSON CREEK

COUNTY	TOWN
DUNN	STANTON

DESIGN SPEC.
AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS

DESIGNED BY	DESIGNED CK'D.	DRAWN BY	PLANS CK'D.
JLR	JDM	JLR	JDM

GENERAL PLAN

SHEET 1 OF 2

I.D. 8949-05-02 DATE: JAN/2017

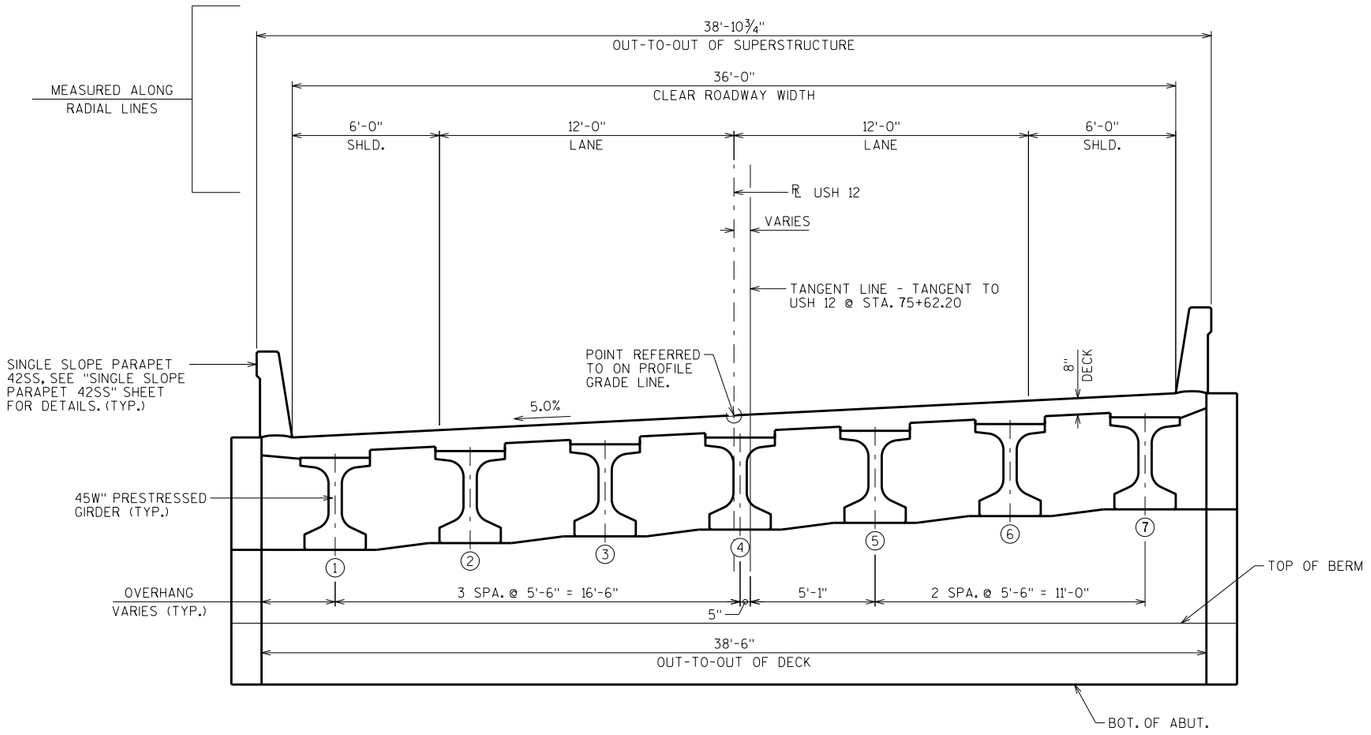
SCALE = 10.00

8

8

STATE PROJECT NUMBER

8949-05-72



SECTION THRU ROADWAY

(LOOKING UPSTATION)

TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEMS	UNIT	SUPER.	WEST ABUT.	EAST ABUT.	TOTALS
203.0600.S	REMOVING OLD STRUCTURE OVER WATERWAY WITH MINIMAL DEBRIS STA. 75+60.00±	LS	———	———	———	1
206.1000	EXCAVATION FOR STRUCTURES BRIDGES B-17-206	LS	———	———	———	1
210.1500	BACKFILL STRUCTURE TYPE A	TON				
502.0100	CONCRETE MASONRY BRIDGES	CY				
502.3200	PROTECTIVE SURFACE TREATMENT	SY				
502.3210	PIGMENTED SURFACE SEALER	SY				
503.0146	PRESTRESSED GIRDER TYPE I 45W-INCH	LF				
505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	LB				
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB				
506.2605	BEARING PADS ELASTOMERIC NON-LAMINATED	EACH				
506.4000	STEEL DIAPHRAGMS B-17-206	EACH				
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY				
550.11XX	PILING STEEL HP 1X-INCH X XX LB	LF				
606.0300	RIPRAP HEAVY	CY				
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF				
614.0150	ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD	EACH				
645.0120	GEOTEXTILE TYPE HR	SY				
	NON-BID ITEMS					
	BRIDGE SEAT PROTECTION	L.S.	———	———	———	1
	FILLER	SIZE	———	———	———	½", ¾"

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

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

THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

BEVEL EXPOSED EDGES OF CONCRETE ¾"UNLESS OTHERWISE NOTED.

AT THE BACK FACE OF ABUTMENT ALL VOLUME WHICH CANNOT BE PLACED BEFORE ABUTMENT CONSTRUCTION AND IS NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH STRUCTURE BACKFILL.

EXCAVATION BELOW THE ABUTMENT AND USE OF ABUTMENT BEDDING MATERIALS REQUIRES ENGINEER APPROVAL. GEOTEXTILE SHALL BE SET AT THE BOTTOM OF EXCAVATION AND EXTEND 2'-0" ABOVE BOTTOM OF ABUTMENT.

THE QUANTITY FOR BACKFILL STRUCTURE IS CALCULATED BASED ON THE DETAIL SHOWN IN THE PLANS.

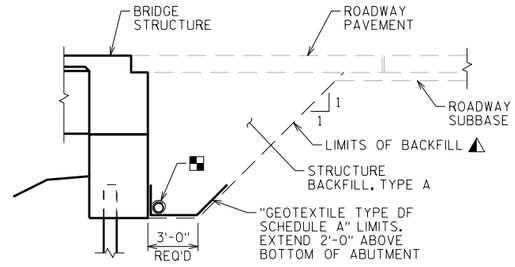
ELASTOMERIC BEARING PADS NEED NOT BE INDIVIDUALLY MOLDED PROVIDED THE CUT EDGES ARE SMOOTH AND TRUE.

PROTECTIVE SURFACE TREATMENT TO BE APPLIED TO THE ENTIRE EXPOSED TOP OF DECK AND TO THE VERTICAL AND HORIZONTAL SURFACES OF THE PAVING NOTCHES AT ABUTMENT DIAPHRAGMS.

PIGMENTED PROTECTIVE SURFACE SEALER TO BE APPLIED TO THE FRONT FACE AND THE TOP OF THE PARAPETS.

THE SLOPE OF THE FILL IN FRONT OF THE ABUTMENTS SHALL BE COVERED WITH HEAVY RIPRAP AND GEOTEXTILE TYPE "HR" TO THE EXTENT SHOWN ON SHEET 1 AND THE ABUTMENT DETAILS.

THE HAUNCH CONCRETE QUANTITY IS BASED ON THE AVERAGE HAUNCH SHOWN ON THE "45W PRESTRESSED GIRDER DETAILS 2" SHEET.

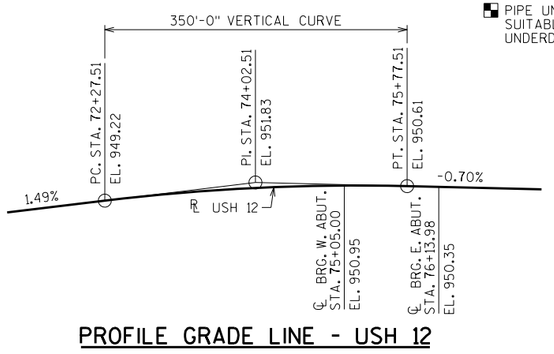


TYPICAL SECTION THRU ABUTMENT

(A1 ABUTMENT WITHOUT STRUCTURAL APPROACH)

◭ BACKFILL PAY LIMITS. BACKFILL BEYOND BACKFILL PAY LIMITS SHALL BE INCIDENTAL TO EXCAVATION FOR STRUCTURES. LIMITS OF EXCAVATION SHALL BE DETERMINED BY THE CONTRACTOR.

▪ PIPE UNDERDRAIN WRAPPED (6 INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT ENDS OF PIPE UNDERDRAIN.



PROFILE GRADE LINE - USH 12

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-17-206

DRAWN BY JLR | PLANS CK'D. JDM

CROSS SECTION & QUANTITIES

SHEET 2

8

8

SCALE = 3.00