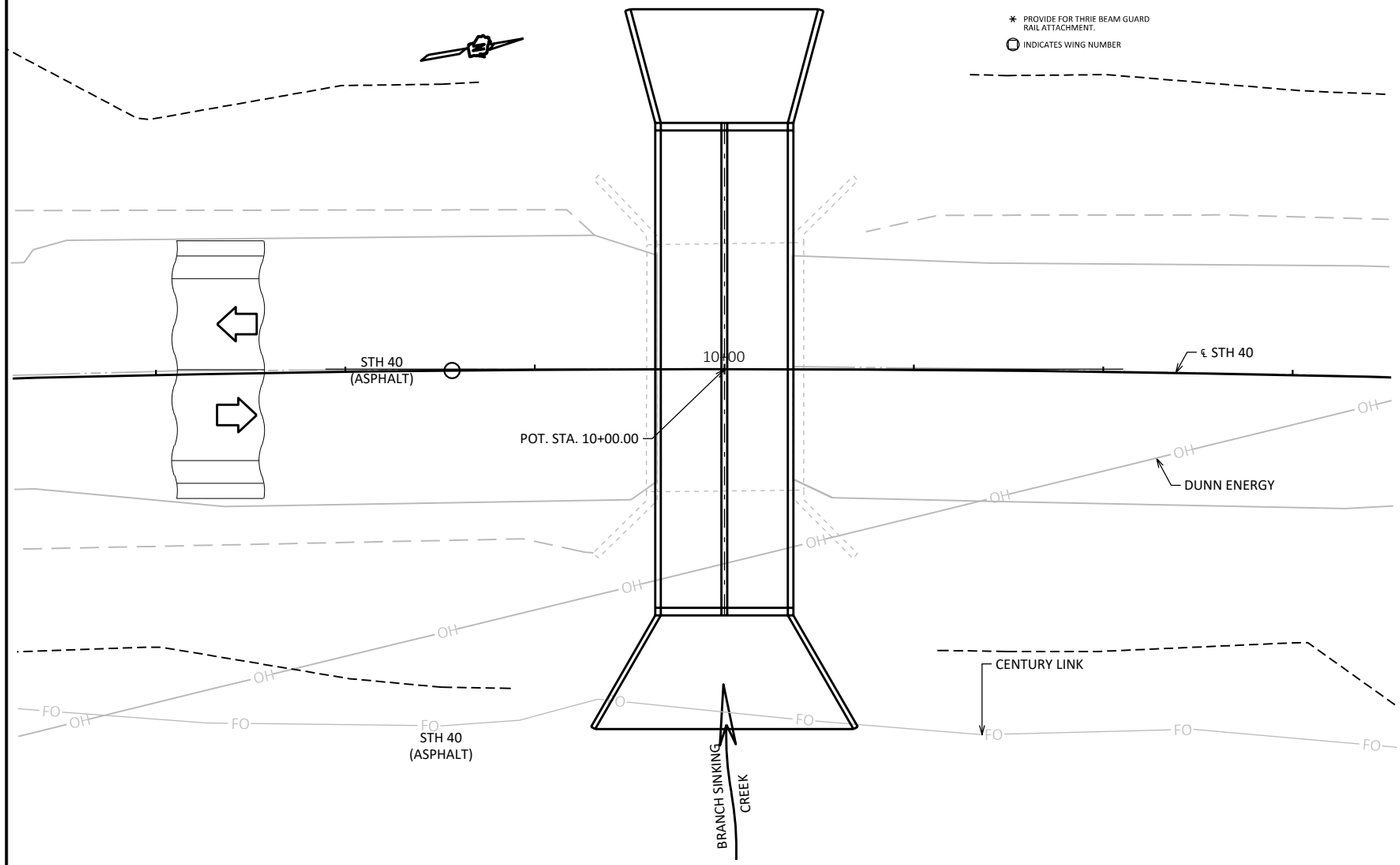
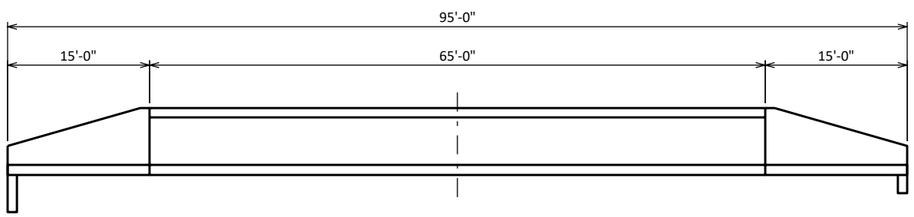
STATE PROJECT NUMBER

8620-00-74

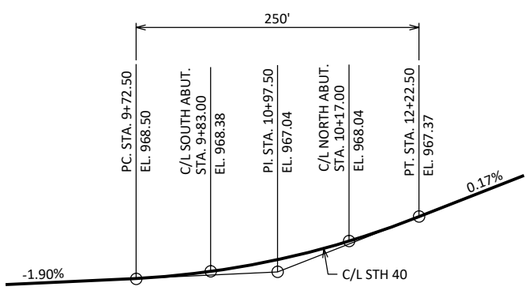


PLAN

SINGLE-SPAN CONCRETE FLAT SLAB

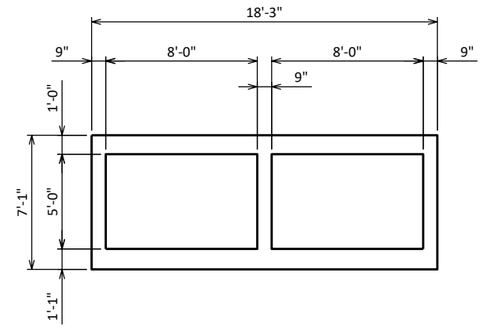


ELEVATION



PROFILE GRADE LINE

BENCH MARKS			
NO.	STA.	DESCRIPTION	ELEV.
50	10+09.72	CHISELED X IN W END N ABUT., 17' LT	968.07
51	8+99.33	RR SPIKE IN PPOL, 48' RT	963.49



TYPICAL SECTION THRU BOX

DESIGN DATA

LIVE LOAD:

DESIGN LOADING: HL-93
INVENTORY RATING: RF =
OPERATING RATING: RF =
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV): XXX (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 PSI
ALL OTHER —— f'_c = 3,500 PSI
HIGH STRENGTH STRUCTURAL STEEL:
ASTM A709, GRADE 50 —— f_y = 50,000 PSI

CURVE DATA

FEATURE ON
P.I. = 9+66.74
Δ = 14°57'56.56"
D =
T = 474.60
L = 943.80'
R = 3613.33'
S.E. = 209203.51
P.C. = 4+92.14
P.T. = 14+35.94

FOUNDATION DATA

ABUTMENTS TO BE SUPPORTED ON HP 10x42 STEEL PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 180 TONS ** PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA.
ESTIMATED 50-'0" 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 PILE CAPACITY.

HYDRAULIC DATA

100-YEAR FREQUENCY:
Q_{100}= 270 C.F.S.
V_{100}= 4.6 F.P.S.
HW_{100}= 964.25 EL.
WATERWAY AREA = 59 SQ. FT.
DRAINAGE AREA = 1.3 SQ. MI.
ROADWAY OVERTOPPING = N/A
SCOUR CRITICAL CODE = 8

2-YEAR FREQUENCY:
Q_2= 60 C.F.S.
V_2= 1.9 F.P.S.
HW_2= EL.

TRAFFIC DATA

FEATURE ON:
ADT = 3,790 (2026)
AADT= 4,280 (2046)
R.D.S. = MPH

LIST OF DRAWINGS:

STRUCTURE DESIGN CONTACTS:

AARON BONK	608-261-0261
ARLEN BEAUDETTE	715-834-3161

NO.	DATE	REVISION	BY

ORIGINAL PLANS PREPARED BY
AYRES
3433 Oakwood Hills Parkway
Eau Claire, WI 54701
www.AyresAssociates.com

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORATION

ACCEPTED _____ _____
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE B-17-0243

STH 40 OVER BRANCH SINKING CREEK

COUNTY	VILLAGE
DUNN	COLFAX

DESIGN SPEC.
AASHTO LRFD BRIDGE DESIGN SPECIFICATION

DESIGNED BY	DESIGNED CK'D	DRAWN BY	PLANS CK'D
ZSS	AEB	ZSS	

GENERAL PLAN

SHEET 1 OF 3

I.D.

DATE:

SCALE =

8

8