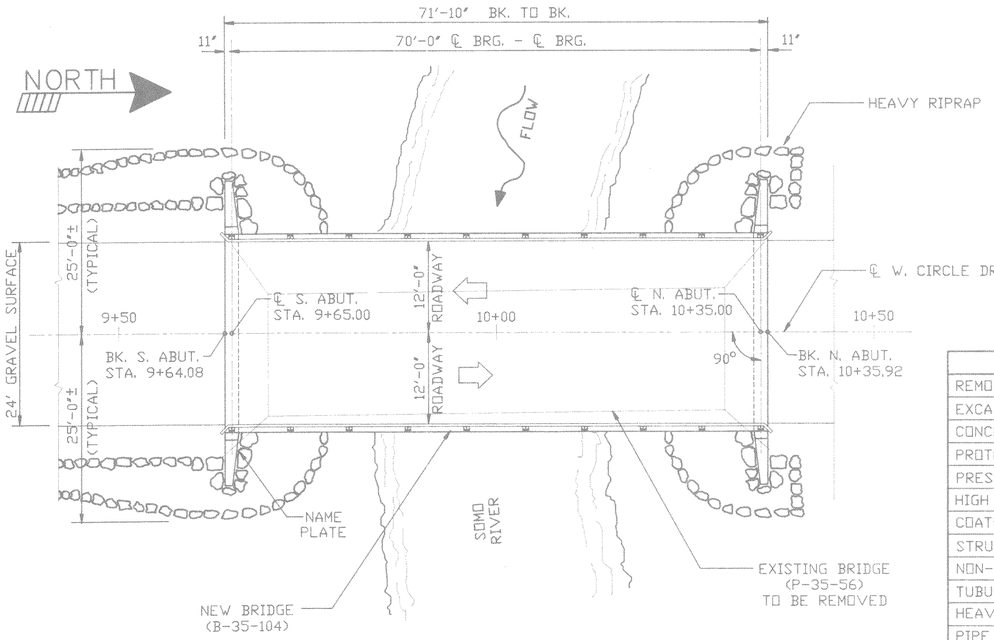
STATE PROJECT NUMBER	SHEET NO.
9863-02-70	



PLAN

SINGLE SPAN PRESTRESSED GIRDER DECK SLAB BRIDGE

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

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

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

PILE SPLICES AT THE ABUTMENTS, IF USED, SHALL BE MADE BY A CERTIFIED WELDER.

THE SLOPE OF FILL IN FRONT OF THE ABUTMENTS SHALL BE COVERED WITH HEAVY RIPRAP TO THE EXTENT SHOWN ON THESE PLANS, AND AS DIRECTED BY THE ENGINEER.

THE EXISTING GROUND LINE AND THE BASE OF UNCLASSIFIED EXCAVATION SHALL BE THE UPPER LIMITS OF EXCAVATION FOR STRUCTURES.

AT ABUTMENT BACKFACES ALL SPACES EXCAVATED AND NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH GRANULAR MATERIAL.

BACKFILL SHALL BE PLACED BEHIND BOTH ABUTMENTS SIMULTANEOUSLY AFTER THE CONCRETE DECK HAS BEEN PLACED AND CURED.

FILLER SHALL CONFORM TO THE REQUIREMENTS OF A.A.S.H.T.O. DESIGNATION: M153, TYPE I, II OR III OR A.A.S.H.T.O. DESIGNATION: M213.

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

EXISTING STRUCTURE (B-35-56) = TWO SPAN LOW STEEL TRUSS BRIDGE, 61 FEET OVERALL LENGTH, 15 FEET WIDTH.

ESTIMATED QUANTITIES

BID ITEMS	UNIT	S.ABUT	N.ABUT	SUPER	TOTAL
REMOVING OLD BRIDGE, STA. 10+00	L.S.	——	——	——	1
EXCAVATION FOR STRUCTURES, BRIDGE B-35-104	L.S.	——	——	——	1
CONCRETE MASONRY, BRIDGES	C.Y.	16	16	54	86
PROTECTIVE SURFACE TREATMENT	GAL.	——	——	10	10
PRESTRESSED GIRDER, I TYPE, 36-INCH	L.F.	——	——	355	355
HIGH STRENGTH BAR STEEL REINFORCEMENT, BRIDGES	LB.	2835	2835	5900	11570
COATED HIGH STRENGTH BAR STEEL REINFORCEMENT, BRIDGES	LB.	——	——	5520	5520
STRUCTURAL CARBON STEEL	LB.	——	——	685	685
NON-LAMINATED ELASTOMERIC BEARING PADS	EACH	——	——	10	10
TUBULAR RAILING, TYPE 'F', STRUCTURE B-35-104	L.S.	——	——	1	1
HEAVY RIPRAP	C.Y.	76	54	——	130
PIPE UNDERDRAIN, 6-INCH	L.F.	48	48	——	96
GEOTEXTILE FABRIC, TYPE HR	S.Y.	113	76	——	189
CAST-IN-PLACE CONCRETE PILING, DELIVERED AND DRIVEN, 10¾ INCH	L.F.	225	225	——	450
NON-BID ITEMS					
POLYVINYL CHLORIDE WATERSTOP	L.F.	34	34	——	68
FILLER	SIZE	3/4"	3/4"	——	——

DESIGN DATA

LIVE LOAD :

DESIGN RATING HS20
INVENTORY RATING** HS26
OPERATING RATING** HS43
STANDARD PERMIT VEHICLE RATING 250 KIPS
FUTURE WEARING SURFACE ..... 20 psf
**BY LOAD FACTOR CRITERIA.

ALLOWABLE DESIGN STRESSES :

CONCRETE MASONRY - SLAB ..... F'c=4,000 psi
- ALL OTHER .. F'c=3,500 psi

HIGH STRENGTH BAR STEEL
REINFORCEMENT, GRADE 60 ..... Fy=60,000 psi

36" PRESTRESSED GIRDERS
CONCRETE MASONRY ..... F'c=6,000 psi
1/2" DIA. PRESTRESSING STRANDS .. F's=270,000 psi

FOUNDATION DATA :

ABUTMENTS TO BE SUPPORTED ON 10¾" DIA. CAST-IN-PLACE CONCRETE PILES DRIVEN TO A MINIMUM BEARING VALUE OF 55 TONS. THE ESTIMATED LENGTH OF THESE PILES IS 45 FEET.

HYDRAULIC DATA :

DRAINAGE AREA ..... 23.0 sq.mi.
Q_{100} ..... 1950 cfs
HIGH $WATER_{100}$ ..... 1551.50 ±
$WATERWAY\ AREA_{100}$ ..... 396 sq.ft.
$VELOCITY_{100}$ ..... 4.92 fps
OVERTOPPING FREQUENCY ..... N/A

TRAFFIC DATA :

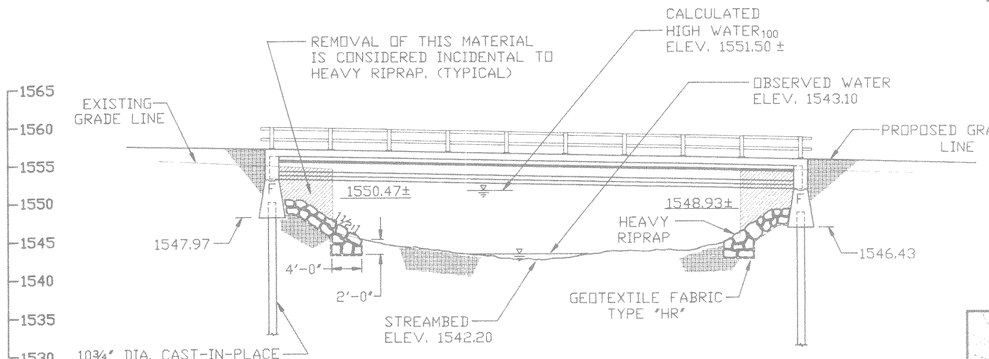
ADT (1990) 35
ADT (2010) 50

BRIDGE OFFICE CONTACT :

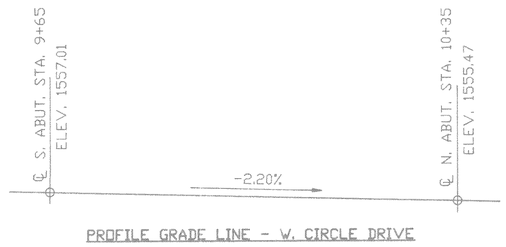
DAVE BABLER ..... (608) 266-8486

LIST OF DRAWINGS, X82697

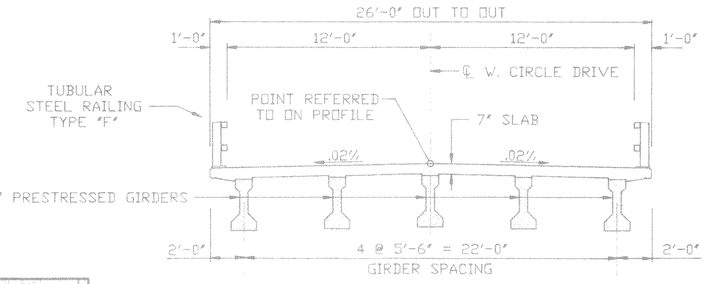
1.) GENERAL PLAN & ELEVATION
2.) SUBSURFACE EXPLORATION
3.) ABUTMENTS
4.) PRESTRESSED GIRDER DETAILS
5.) SUPERSTRUCTURE
6.) STEEL DIAPHRAGM ALTERNATE
7.) TUBULAR RAILING, TYPE 'F'



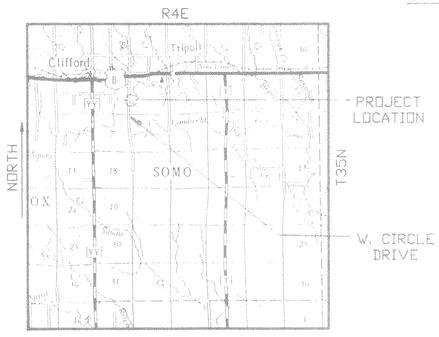
ELEVATION



PROFILE GRADE LINE - W. CIRCLE DRIVE



CROSS-SECTION



LOCATION SKETCH
(LINCOLN COUNTY)

BENCH MARKS

STA.	LOCATION	ELEV.
12+78	P.K. NAIL IN POWER POLE, 30' RIGHT	1556.03
10+30	EXISTING BRIDGE DECK, ON BASE LINE	1554.12

No.	Date	Revision	By :

BECHER-HOPPE Inc.
ENGINEERS, ARCHITECTS, PLANNERS
330 Fourth Street
Wausau, WI. 54402

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-35-104

SOMO RIVER BRIDGE & APPROACHES

Town of SOMO		LINCOLN County	
Design Spec. : AASHTO 1988		Load : HS20	Const. Spec. : 1989
Designed By : DGK	Design Checked :	Drawn By : DGK	Plans Checked :

Approved : _____ State Bridge Engineer _____ Date

GENERAL PLAN & ELEVATION

SHEET 1 of 7

X82697

S-GPNE.DWG