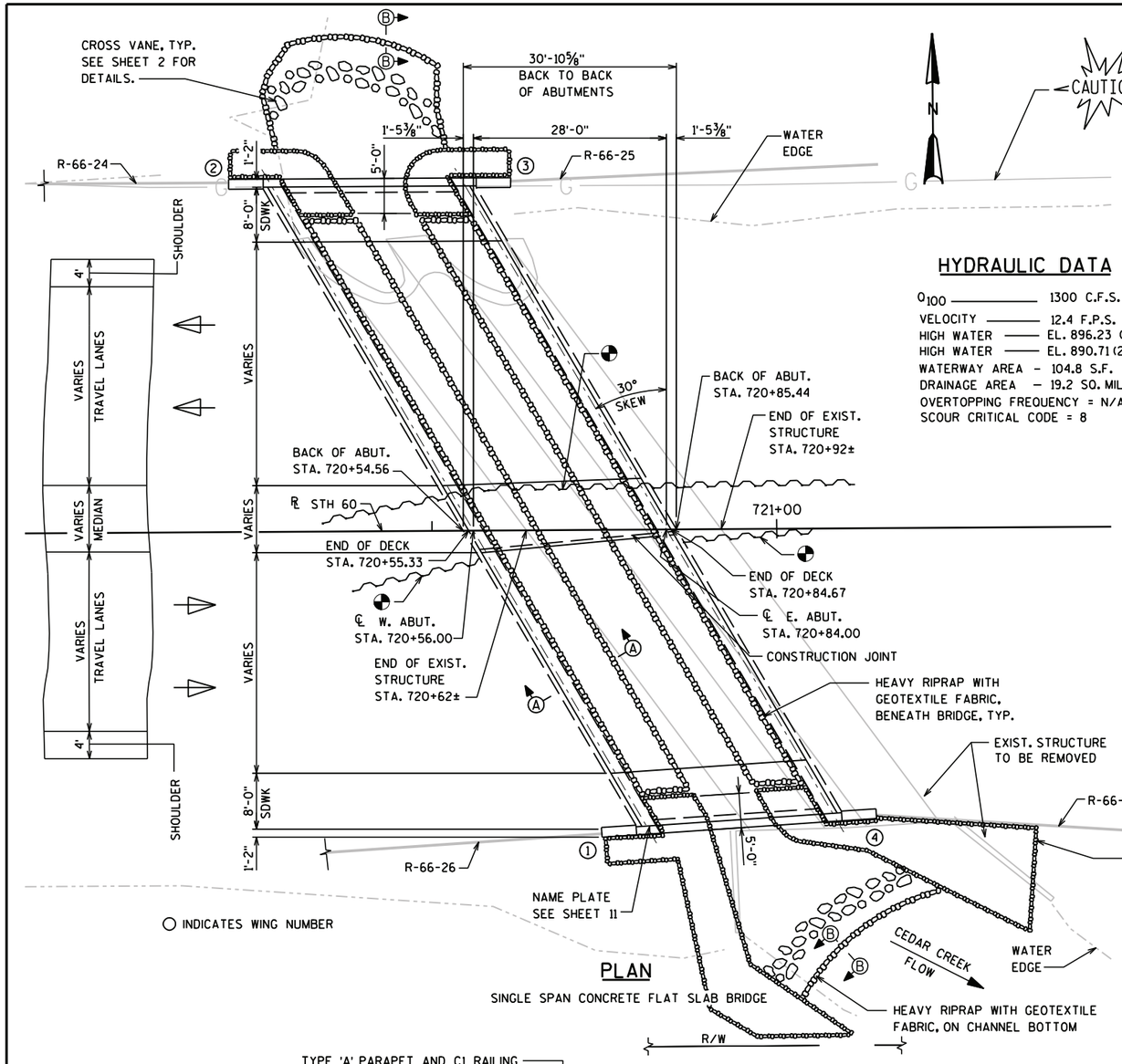
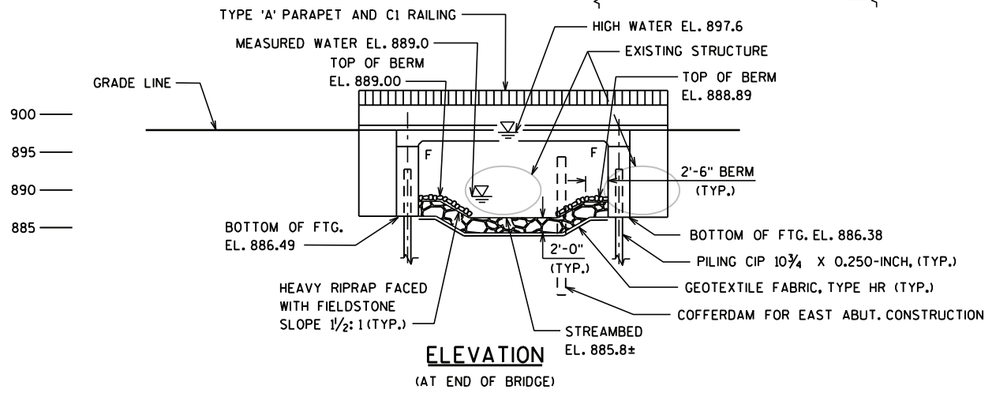


PLAN

SINGLE SPAN CONCRETE FLAT SLAB BRIDGE

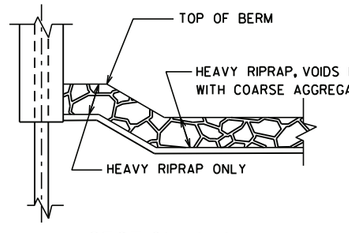
HYDRAULIC DATA

Q_{100}	1300 C.F.S.
VELOCITY	12.4 F.P.S.
HIGH WATER	EL. 896.23 (100 YEAR)
HIGH WATER	EL. 890.71 (2 YEAR)
WATERWAY AREA	104.8 S.F.
DRAINAGE AREA	19.2 SQ. MILES
OVERTOPPING FREQUENCY	N/A
SCOUR CRITICAL CODE	8



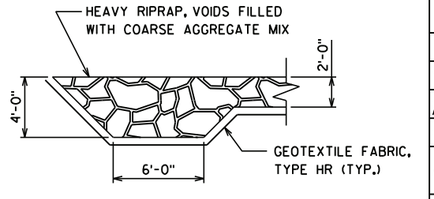
ELEVATION

(AT END OF BRIDGE)



SECTION A-A

RIPRAP DETAIL BENEATH BRIDGE



SECTION B-B

RIPRAP DETAIL AT INLET AND OUTLET

DESIGN DATA

STRUCTURE IS DESIGNED FOR FUTURE WEARING SURFACE OF 20#/SQ. FT.

LIVE LOAD:

DESIGN LOADING	HL-93
INVENTORY RATING FACTOR	RF= 1.23
OPERATING RATING FACTOR	RF= 1.59
MAX. STD. PERMIT VEHICLE LOAD	250 KIPS

ULTIMATE DESIGN STRESSES:

CONCRETE MASONRY SUPERSTRUCTURE	f'c = 4,000 psi
ALL OTHER	f'c = 3,500 psi
HIGH STRENGTH BAR STEEL REINFORCEMENT, GRADE 60	fy = 60,000 psi

TRAFFIC DATA

ADT = 18,800 (2010)
26,300 (2030)

RDS = 45 M.P.H.

LIST OF DRAWINGS

1. GENERAL PLAN
2. CROSS SECTION AND QUANTITES
3. SUBSURFACE EXPLORATION
4. WEST ABUTMENT
5. WEST ABUTMENT DETAILS
6. EAST ABUTMENT
7. EAST ABUTMENT DETAILS
8. GENERAL ABUTMENT DETAILS
9. SUPERSTRUCTURE LAYOUT
10. SUPERSTRUCTURE CROSS SECTION
11. SUPERSTRUCTURE DETAILS
12. VERTICAL FACE PARAPET
13. STEEL RAILING, TYPE C1

CONSULTANT CONTACT

KRISTOFER OLSON
OMNNI ASSOCIATES, INC.
(920) 735-6900

BRIDGE OFFICE CONTACT

WILLIAM DREHER
(608) 266-8489

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

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

SLAB FALSEWORK SHALL BE SUPPORTED ON PILES OR SUBSTRUCTURE, UNLESS ALTERNATE METHOD IS APPROVED BY THE ENGINEER.

THE SLOPE OF FILL IN FRONT OF THE ABUTMENTS AND THE STREAMBED SHALL BE COVERED WITH HEAVY RIPRAP AND GEOTEXTILE FABRIC TO THE EXTENT SHOWN ON THIS SHEET, ON THE CROSS SECTION AND IN THE ABUTMENT DETAILS.

THIS STRUCTURE WILL REPLACE THE EXISTING CULVERT WITH TWIN MULTIPLATE ARCHES. THE CULVERT WAS BUILT IN 1984 AND EXTENDED 10 FEET TO THE SOUTH IN 1995.

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

BENDING DIMENSIONS FOR REINFORCING BARS ARE OUT TO OUT.

AT THE BACKFACE OF ABUTMENTS, ALL EXCAVATED VOLUME NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH STRUCTURE BACKFILL.

THE EXISTING GROUND LINE SHALL BE USED AS THE UPPER LIMITS OF EXCAVATION.

◓ TEMPORARY SHORING B-66-185, SEE ROADWAY PLANS FOR ADDITIONAL DETAILS "CEDAR CREEK BRIDGE STAGING".

CEDAR CREEK FLOW WILL BE DIVERTED BETWEEN THE EAST AND WEST EXISTING CULVERTS FOR CONSTRUCTION OF THE NEW CHANNEL AND REMOVAL OF THE EXISTING CULVERTS. SEE THE ROADWAY PLANS FOR "CEDAR CREEK BRIDGE STAGING". DIVERSION OF FLOW WILL BE PAID FOR UNDER "STREAM FLOW DIVERSION OF CEDAR CREEK".

FOUNDATION DATA

ABUTMENTS TO BE SUPPORTED ON 10 3/4-INCH CIP PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 130 TONS ** PER PILE. ESTIMATED LENGTH = 71 FEET AT EAST ABUTMENT AND 60 FEET AT WEST ABUTMENT.

** 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.

BENCH MARKS (NAVD 88)

NO.	DESCRIPTION	ELEV.
BM106	CHISELED SQUARE ON NE WING WALL B-66-80-84, STA. 78-07.30 CEDAR PKWY, 44.16' RT.	896.48
BM107	CAP ON SB USH 45, NW PARAPET WALL B-66-49-89, STA. 731+56.49, 85.33' LT.	918.20

WISCONSIN
KRISTOFER R. OLSON
E-35236
APPLETON, WI
PROFESSIONAL ENGINEER

4/27/11

NO.	DATE	REVISION	BY

ORIGINAL PLANS PREPARED BY
OMNNI ASSOCIATES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STATE PROJECT NUMBER
2310-10-70

STRUCTURE B-66-185

STH 60 OVER CEDAR CREEK

COUNTY WASHINGTON		TOWN POLK	
DESIGN SPEC. AASHTO LRFD 4TH EDITION		LOAD HL-93	CONST. SPEC. 2012
DESIGNED BY KRO	DESIGN CK'D. JAW	DRAWN BY SSO	PLANS CK'D. KRO

APPROVED William C. Dreher FOR 08/01/11
CHIEF STRUCTURAL DESIGN ENGINEER — DATE

GENERAL PLAN

SHEET 1 OF 13

708

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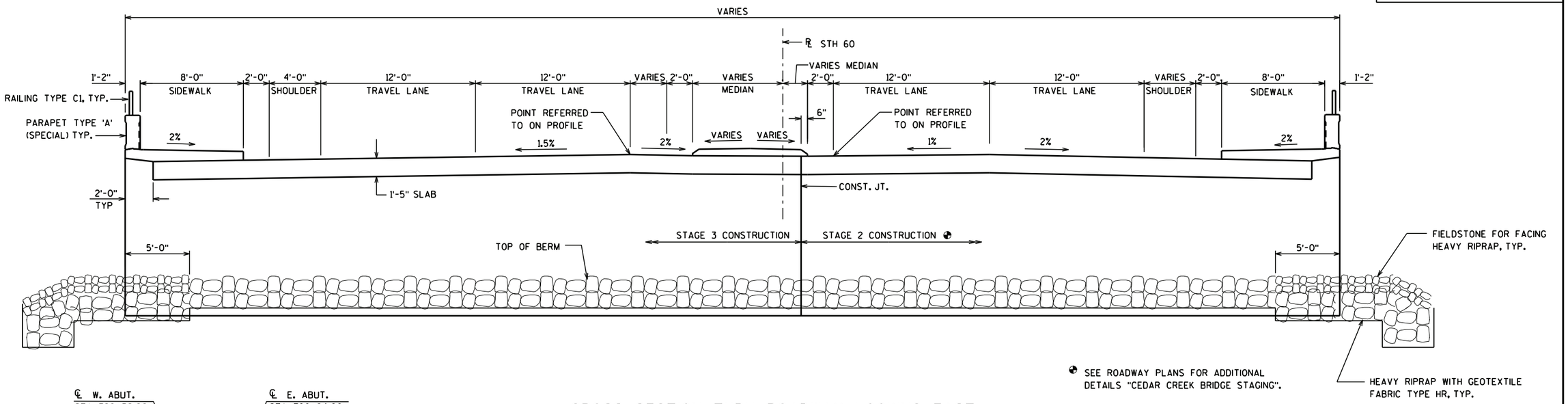
FILE NAME : F:±TR±JOBS±E1951A10±Sheets±B-66-185±B-66-185 01 gp.dgn PLOT BY : olsonk PLOT DATE: 4/27/2011 3:43:44 PM

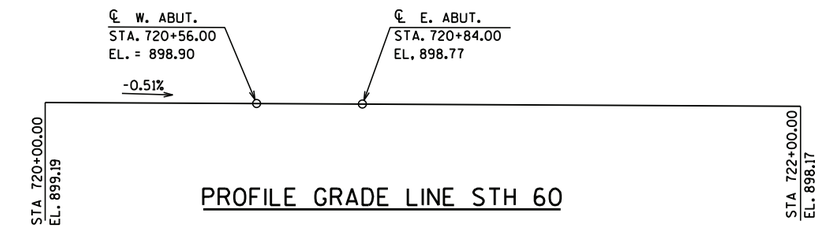
ATTACHMENT - F

STATE PROJECT NUMBER
2310-10-70



✣ SEE ROADWAY PLANS FOR ADDITIONAL DETAILS "CEDAR CREEK BRIDGE STAGING".

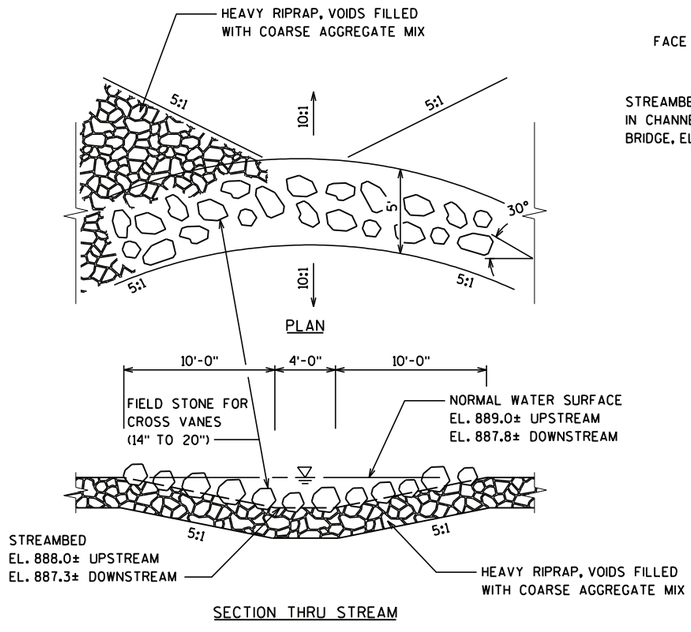
CROSS SECTION THRU ROADWAY LOOKING EAST



PROFILE GRADE LINE STH 60

TOTAL ESTIMATED QUANTITIES

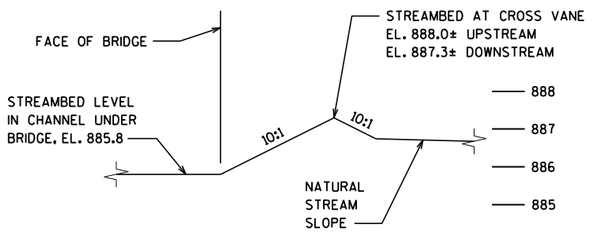
ITEMS NO.	BID ITEMS	UNIT	SUPER.	WEST ABUT.	EAST ABUT.	TOTALS
203.0200.01	REMOVING OLD STRUCTURE (STA 720+68)	LS	——	——	——	1
203.0200.02	REMOVING OLD STRUCTURE (STA 720+85)	LS	——	——	——	1
206.1000	EXCAVATION FOR STRUCTURES BRIDGES (B-66-185)	LS	——	——	——	1
206.5000	COFFERDAMS (B-66-185)	LS	——	——	——	1
210.0100	BACKFILL STRUCTURE	CY	——	490	480	970
502.0100	CONCRETE MASONRY BRIDGES	CY	186.8	117.3	114.9	419
502.3200	PROTECTIVE SURFACE TREATMENT	SY	321	——	——	321
502.6102	MASONRY ANCHORS TYPE S 1/2-INCH	EA	40	——	——	40
505.0405	BAR STEEL REINFORCEMENT HS BRIDGES	LB	——	6740	6660	13400
505.0605	BAR STEEL REINFORCEMENT HS COATED BRIDGES	LB	29620	2350	2270	34240
513.7005	RAILING STEEL TYPE C1 (B-66-185)	LS	——	——	——	1
550.2104.S	PILING CIP CONCRETE 10¾ X 0.250-INCH	LF	——	840	994	1834
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	——	23	22	45
517.1015.S	CONCRETE STAINING MULTI-COLOR (B-66-185)	SF	161	——	——	161
517.1050.S	ARCHITECTURAL SURFACE TREATMENT (B-66-185)	SF	161	——	——	161
606.0300	RIPRAP HEAVY	CY	——	180	180	360
612.0206	PIPE UNDERDRAIN UNPERFORATED 6-INCH	LF	——	30	30	60
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	——	113	111	224
645.0120	GEOTEXTILE FABRIC TYPE HR	SY	——	240	240	480
SPV.0035.02	FIELDSTONE FOR FACING HEAVY RIPRAP	CY	——	35	35	70
SPV.0035.04	FIELDSTONE FOR CROSS VANES	CY	——	5	5	10
SPV.0035.05	COARSE AGGREGATE MIX, STRUCTURE B-66-185	CY	——	25	25	50
SPV.0105.04	STREAM FLOW DIVERSION OF CEDAR CREEK, STA 720+70	LS	——	——	——	1
SPV.0165.02	TEMPORARY SHORING B-66-185	SF	——	500	500	1000
	NON-BID ITEMS					
	FILLER	SIZE	——	——	——	½"&¾"



SECTION THRU STREAM

CROSS VANE DETAILS

(AT ENDS OF BRIDGE)



STREAM PROFILE

AT CROSS VANES
(DOWNSTREAM SHOWN)

NO.	DATE	REVISION	BY

ORIGINAL PLANS PREPARED BY

OMNI ASSOCIATES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-66-185

CONST. SPEC.	2011	DRAWN BY	SSO	PLANS CK'D.	KRO

CROSS SECTION AND QUANTITIES

SHEET 2 OF 13

709

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ATTACHMENT - F