

## ORDER OF SHEETS

Section No. 1	Title
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
Section No. 5	Plan and Profile
Section No. 6	Standard Detail Drawings
Section No. 7	Sign Plates
Section No. 8	Structure Plans
Section No. 9	Computer Earthwork Data
Section No. 9	Cross Sections

TOTAL SHEETS = 192



## DESIGN DESIGNATION

A.A.D.T.	2016	=	6200
A.A.D.T.	2036	=	7900
D.H.V.		=	805
D.D.		=	60/40
T.		=	5.5%
DESIGN SPEED		=	35 MPH
ESALS		=	920,000

## CONVENTIONAL SYMBOLS

PLAN  
CORPORATE LIMITS  
PROPERTY LINE  
LOT LINE  
LIMITED HIGHWAY EASEMENT  
EXISTING RIGHT OF WAY  
PROPOSED OR NEW R/W LINE

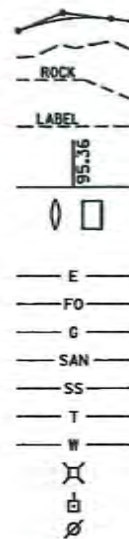
SLOPE INTERCEPT  
REFERENCE LINE  
EXISTING CULVERT  
PROPOSED CULVERT  
(Box or Pipe)  
COMBUSTIBLE FLUIDS

MARSH AREA  
WOODED OR SHRUB AREA

PROFILE  
GRADE LINE  
ORIGINAL GROUND  
MARSH OR ROCK PROFILE  
(To be noted as such)  
SPECIAL DITCH

GRADE ELEVATION  
CULVERT (Profile View)  
UTILITIES  
ELECTRIC  
FIBER OPTIC  
GAS  
SANITARY SEWER  
STORM SEWER  
TELEPHONE

WATER  
UTILITY PEDESTAL  
POWER POLE  
TELEPHONE POLE



# STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

## PLAN OF PROPOSED IMPROVEMENT

## NEW GLARUS - VERONA

STH 92 TO CTH D

STH 69

DANE COUNTY

STATE PROJECT NUMBER  
1690-05-71END PROJECT 1690-05-71  
STA. 28+50.00

## AS-BUILT PLAN STRUCTURE B-13-337

SUPERVISOR: Bill Strobel  
PROJECT LEADER: Derrick Ballweg  
PROJECT MANAGER: Mahesh Shrestha  
PRIME CONTRACTOR: H. James & Sons, Inc.  
WORK STARTED: 5/22/17  
WORK COMPLETED: 8/30/17

B-13-337  
EXCEPTION TO NET  
CENTERLINE LENGTH  
142.67'BEGIN PROJECT 1690-05-71  
STA. 10+17.94  
Y=404,492.01  
X=781,199.50LAYOUT  
SCALE 0 1/8 MILE

TOTAL NET LENGTH OF CENTERLINE = 0.320 MI (URBAN)

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COUNTY  
COORDINATES, DANE 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.

ORIGINAL PLANS PREPARED BY

**GRAEF** 325 S. 84TH STREET, SUITE 401  
MILWAUKEE, WI 5322410/21/16 *Jacquelyn M. Messer*  
(Date) (Signature)STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

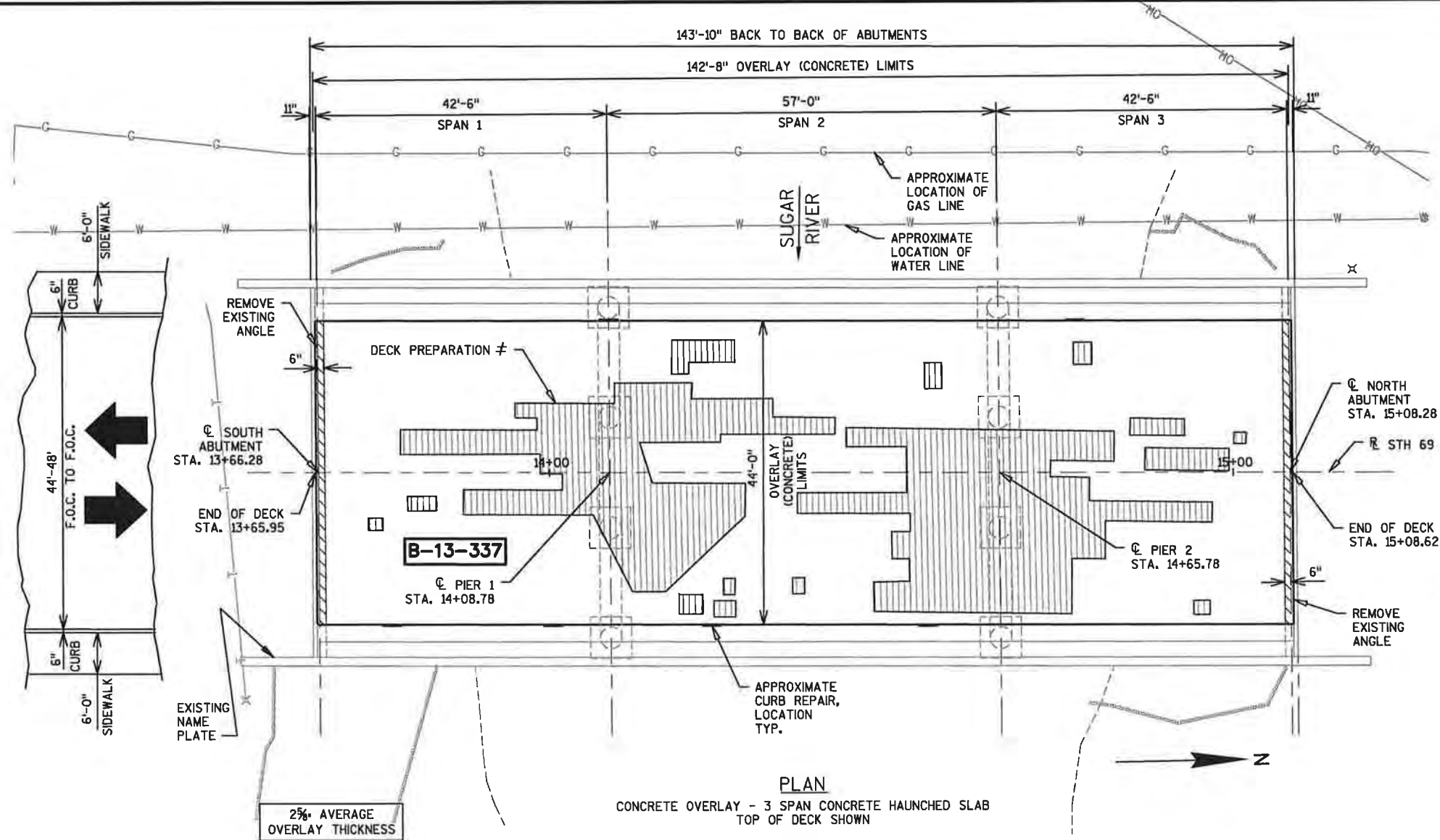
PREPARED BY

Surveyor	GRAEF
Designer	GRAEF
Project Manager	MAHESH SHRESTHA
Regional Examiner	
Regional Supervisor	BILL STROBEL

APPROVED FOR THE DEPARTMENT

DATE: 10/24/2016 *Jackie Messer*  
(Signature)

E

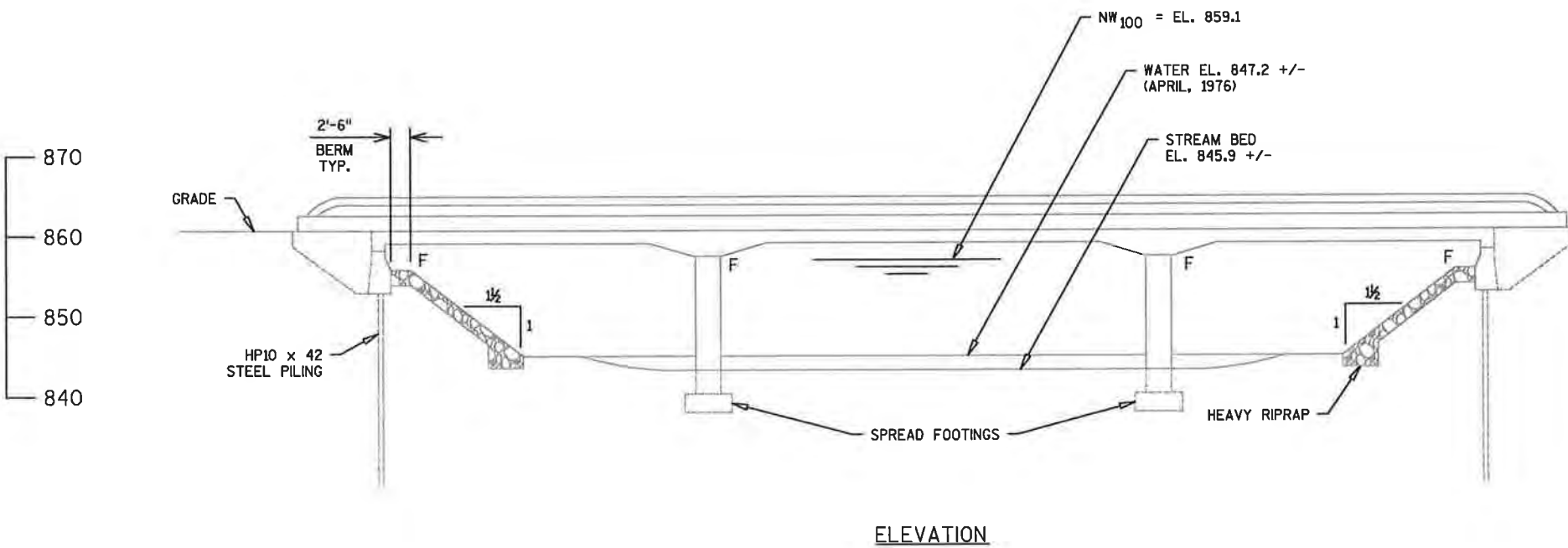


# SURVEY TYPE: INFRARED INSPECTION  
SURVEY COMPLETED DATE: 10/21/2014 BY AECOM

See next sheets for as-built deck repair areas and curb repair areas

LIST OF DRAWINGS

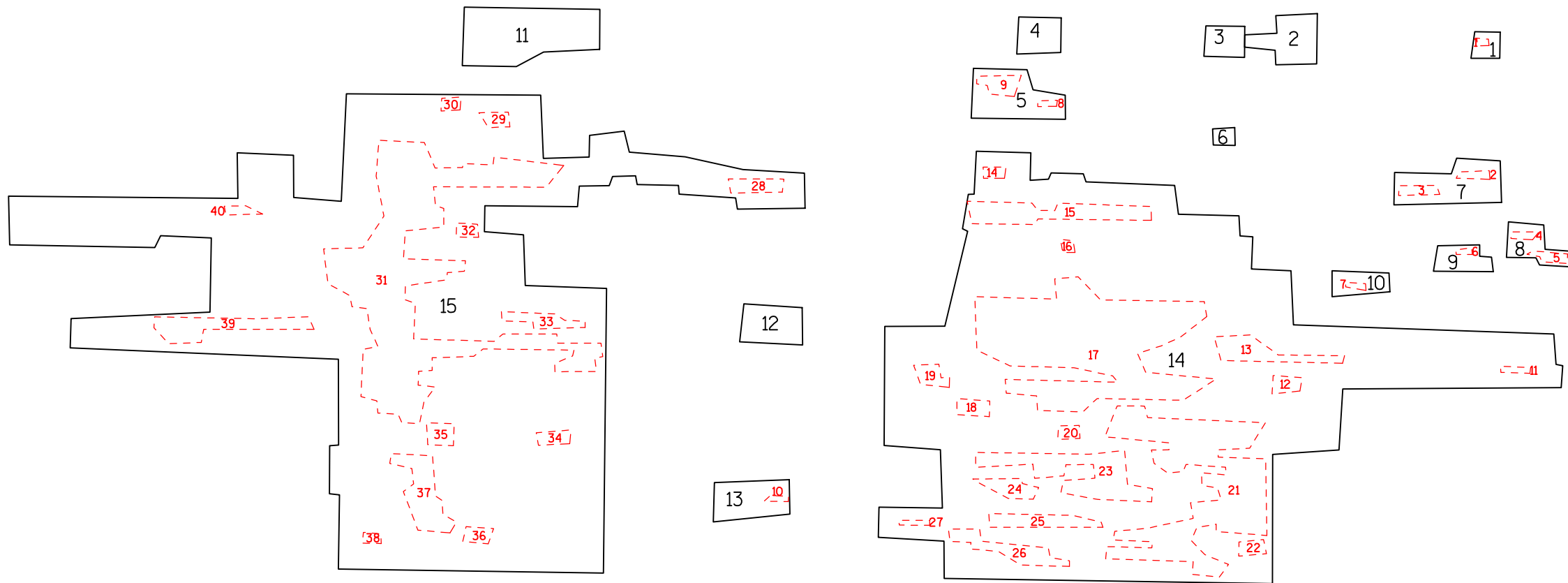
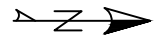
1. GENERAL PLAN & ELEVATION
2. CROSS SECTION & QUANTITIES



BUREAU OF STRUCTURES CONTACT:  
WILLIAM DREHER (608) 266-8489

CONSULTANT CONTACT:  
KEVIN G. WOOD (414) 259-1500

NO.	DATE	REVISION	BY
<b>Gräef</b> 5126 West Terrace Drive, Suite 111 Madison, WI 53718-8345 608/242-1550 608/242-0787 fax www.graef-usa.com			
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
ACCEPTED <i>William C. Dreher</i> SDR		11/18/16	DATE
CHIEF STRUCTURES DESIGN ENGINEER			
STRUCTURE B-13-337			
STH 69 OVER SUGAR RIVER			
COUNTY	DANE	TOWN/CITY/VILLAGE	BELLEVILLE
DESIGN SPEC. REHABILITATION N/A			
DESIGNED BY	CK'D.	KGW	DRAWN BY
SRK	PLANS CK'D.	KGW	
GENERAL PLAN & ELEVATION			SHEET 1 OF 2

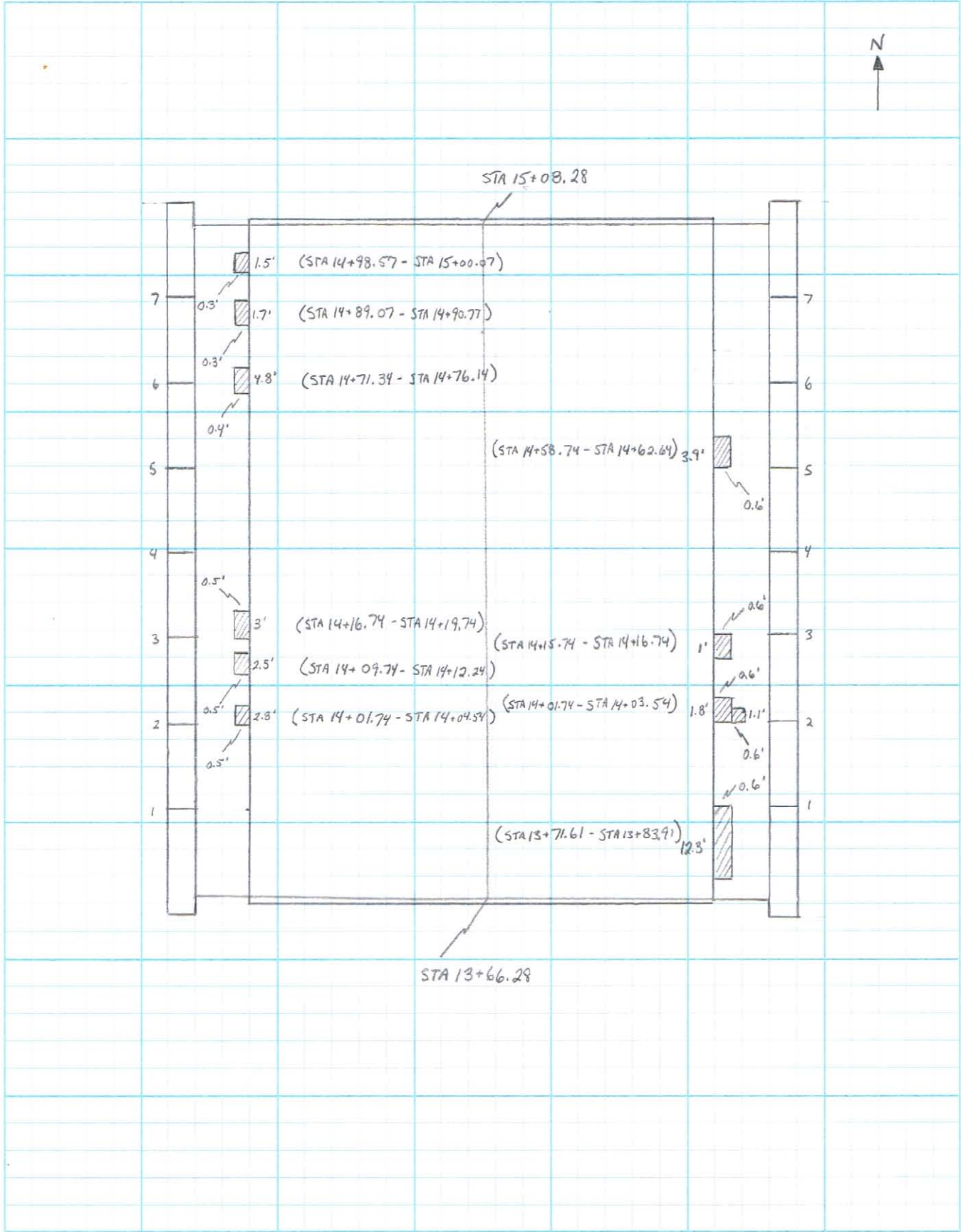


PREPARATION DECKS TYPE 1

1	4.0 SF	0.4 SY	9	7.5 SF	0.8 SY
2	13.9 SF	1.5 SY	10	7.2 SF	0.8 SY
3	6.8 SF	0.8 SY	11	38.3 SF	4.3 SY
4	8.7 SF	1.0 SY	12	12.8 SF	1.4 SY
5	21.2 SF	2.4 SY	13	15.6 SF	1.7 SY
6	2.1 SF	0.2 SY	14	881.4 SF	97.9 SY
7	21.7 SF	2.4 SY	15	889.0 SF	98.8 SY
8	9.6 SF	1.1 SY		<b>TOTAL</b>	<b>215.4 SY</b>

PREPARATION DECKS TYPE 2

1	0.4 SF	0.1 SY	9	3.8 SF	0.4 SY	17	106.7 SF	11.9 SY	25	7.4 SF	0.8 SY	33	4.8 SF	0.5 SY
2	1.3 SF	0.1 SY	10	0.7 SF	0.1 SY	18	2.9 SF	0.3 SY	26	9.1 SF	1.0 SY	34	2.4 SF	0.3 SY
3	2.1 SF	0.2 SY	11	1.0 SF	0.1 SY	19	3.1 SF	0.3 SY	27	0.8 SF	0.1 SY	35	3.3 SF	0.4 SY
4	1.0 SF	0.1 SY	12	2.5 SF	0.3 SY	20	1.6 SF	0.2 SY	28	4.1 SF	0.5 SY	36	2.3 SF	0.3 SY
5	1.8 SF	0.2 SY	13	9.8 SF	1.1 SY	21	73.2 SF	8.1 SY	29	2.1 SF	0.2 SY	37	13.6 SF	1.5 SY
6	0.5 SF	0.1 SY	14	1.4 SF	0.2 SY	22	2.1 SF	0.2 SY	30	1.4 SF	0.2 SY	38	1.0 SF	0.1 SY
7	0.6 SF	0.1 SY	15	17.0 SF	1.9 SY	23	23.6 SF	2.6 SY	31	128.4 SF	14.3 SY	39	13.3 SF	1.5 SY
8	0.6 SF	0.1 SY	16	0.9 SF	0.1 SY	24	4.6 SF	0.5 SY	32	1.6 SF	0.2 SY	40	1.4 SF	0.2 SY
												<b>TOTALS</b>	<b>51.4 SY</b>	



Project/Structure No.	1690-05-71 (B-13-337)	Hwy No.	69	County	DANE	Computations by	JMR	Date	8/15/17
Name of Road	NEW GLARUS - VERONA					Checked by		Date	
Title/Item	CURB REPAIR AREAS : CONCRETE MASONRY					Sheet	1	Of	2

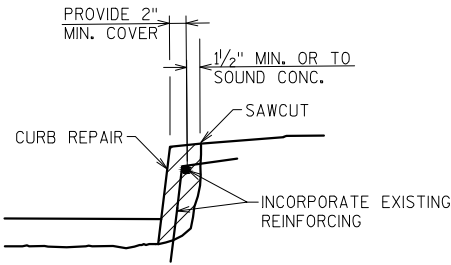
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BENCH MARK

BM#2 - ALUMINUM DISC IN THE SIDEWALK AT THE SOUTHEAST CORNER OF THE BRIDGE WITH ELEVATION 863.06

TOTAL ESTIMATED QUANTITIES

ITEM NO.	BID ITEMS	UNIT	S. ABUT	N. ABUT	PIER 1	PIER 2	SUPER	TOTAL
502.3200	PROTECTIVE SURFACE TREATMENT	SY	-	-	-	-	698	698
509.0301	PREPARATION DECKS TYPE 1	SY	-	-	-	-	200	200
509.0302	PREPARATION DECKS TYPE 2	SY	-	-	-	-	103	103
509.0500	CLEANING DECKS	SY	-	-	-	-	698	698
509.1200	CURB REPAIR	LF	-	-	-	-	10	10
509.1500	CONCRETE SURFACE REPAIR	SF	-	2	17	-	-	19
509.2000	FULL-DEPTH DECK REPAIR	SY	-	-	-	-	1	1
509.2500	CONCRETE MASONRY OVERLAY DECKS	CY	-	-	-	-	69	69
NON-BID ITEMS								



CURB REPAIR DETAIL

DESIGN DATA

LIVE LOAD:  
DESIGN LOADING: HS-20

INVENTORY RATING: HS-23

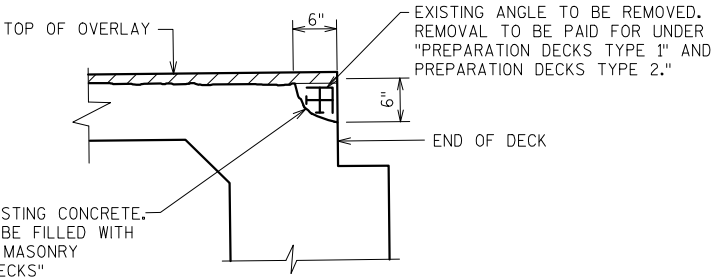
OPERATING RATING: HS-39

WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV) = 250 KIPS

MATERIAL PROPERTIES:  
CONCRETE MASONRY OVERLAY DECKS.....f'c = 4,000 P.S.I.

TRAFFIC DATA

STH 69  
A.D.T. = 6,200 (2016)  
A.D.T. = 7,900 (2036)  
RDS = 35 MPH



SECTION AT END OF SLAB

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

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

DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.

USE EXISTING BAR STEEL REINFORCEMENT WHERE SHOWN AND EXTEND 24 BAR DIAMETERS INTO NEW WORK.

BEVEL ALL EXPOSED EDGES OF CONCRETE 3/4" UNLESS OTHERWISE NOTED.

A MINIMUM OF 1" OF CONCRETE SHALL BE REMOVED FROM THE ENTIRE BRIDGE DECK UNDER THE BID ITEM "CLEANING DECKS". ORIGINAL PLANS INDICATE A 2 1/2-INCH TOP OF CONCRETE COVER.

THE EXISTING STRUCTURE, B-13-337, IS A 3-SPAN CONCRETE HAUNCHED SLAB BRIDGE WITH AN OVERALL WIDTH OF 56'-0" AND AN OVERALL LENGTH OF 143'-10". THE ENTIRE DECK SURFACE IS TO BE PREPARED FOR A NEW CONCRETE OVERLAY.

ANY EXCAVATION REQUIRED TO COMPLETE THE OVERLAY OR THE PAVING BLOCK AT ABUTMENTS TO BE CONSIDERED INCIDENTAL TO THE BID ITEM "CONCRETE MASONRY OVERLAY DECKS".

ALL CONCRETE REMOVAL NOT COVERED WITH A CONCRETE OVERLAY SHALL BE DEFINED WITH A 1" SAWCUT.

PROTECTIVE SURFACE TREATMENT SHALL BE APPLIED TO THE ENTIRE TOP SURFACE OF THE NEW CONCRETE OVERLAY.

CLEAN AND FILL EXISTING LONGITUDINAL AND TRANSVERSE CRACKS WITH PENETRATING EPOXY AS DIRECTED BY THE FIELD ENGINEER.

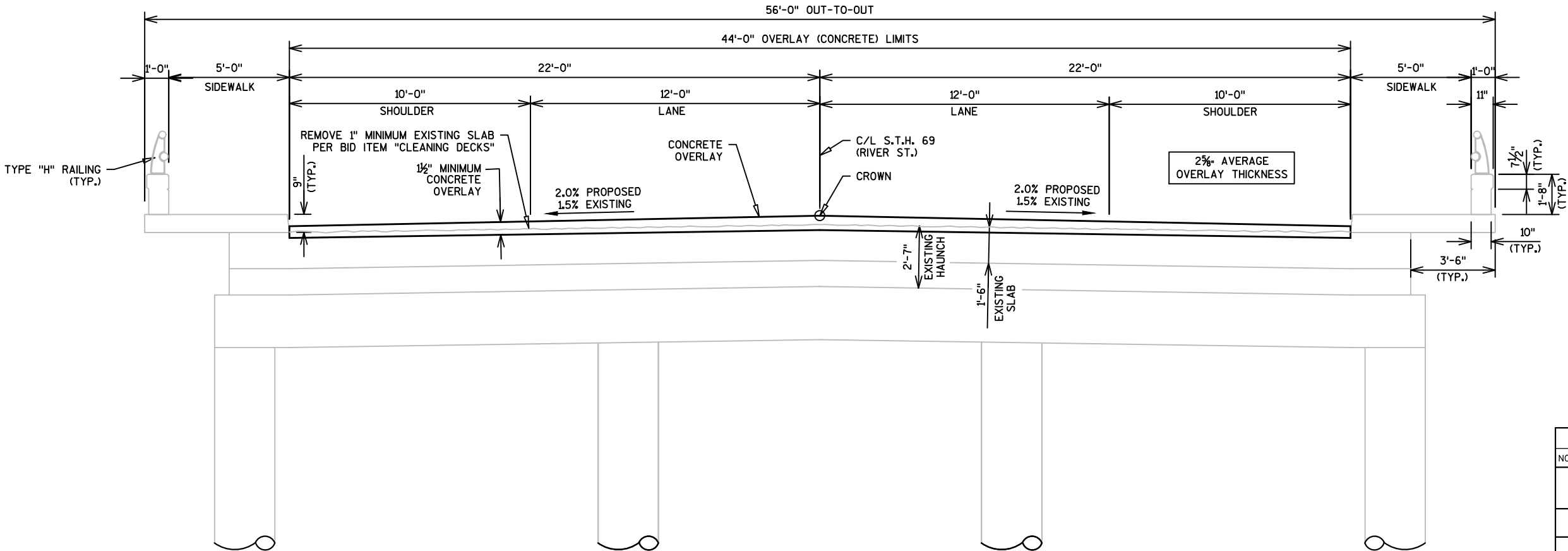
"PREPARATION DECKS TYPE 1", "PREPARATION DECKS TYPE 2", AND "FULL-DEPTH DECK REPAIR" AREAS ARE BASED ON THE PLANS AND AS DETERMINED BY THE ENGINEER. DECK PREPARATION AND FULL-DEPTH DECK REPAIRS SHALL BE FILLED WITH "CONCRETE MASONRY OVERLAY DECKS."

PROFILE GRADE LINE SHALL BE DETERMINED IN THE FIELD BASED ON A MINIMUM OVERLAY THICKNESS OF 1 1/2" PLACED ABOVE THE DECK SURFACE AFTER SURFACE PREPARATION. EXPECTED AVERAGE OVERLAY THICKNESS IS 2 3/8". IF EXPECTED AVERAGE OVERLAY THICKNESS IS EXCEEDED BY MORE THAN 1/2", CONTACT THE STRUCTURES DESIGN SECTION.

"CONCRETE SURFACE REPAIR" AND "CURB REPAIR" AS DIRECTED BY THE FIELD ENGINEER. QUANTITIES SHOWN ON THE PLANS ARE APPROXIMATE.

AT "CURB REPAIR" EXPOSE EXISTING REINFORCEMENT A MINIMUM OF 1 1/2" CLEAR.

NOT MORE THAN 1/3 OF THE TOP BAR STEEL SHALL BE EXPOSED IN THE NEGATIVE MOMENT AREA. IF THE BAR ENDS ARE NOT ANCHORED. IF MORE THAN 1/3 OF THE STEEL IS EXPOSED, EITHER THE CENTERS OF ADJACENT SPANS MUST BE SHORED OR ONLY LONGITUDINALLY OVERLAY 1/3 OF THE BRIDGE AT A TIME.



CROSS SECTION THRU ROADWAY  
LOOKING NORTH

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-13-337			
DRAWN BY SRK		PLANS CK'D. KGW	
CROSS SECTION & QUANTITIES		SHEET 2 OF 2	