BRIDGE REPLACEMENT - PPCB LETTING DATE

BROS-1827 (711) --8J-82 DECEMBER 15, 2026

SCOTT COUNTY

THIS PROJECT IS COVERED BY THE IOWA DNR FLOOD PLAIN & SOVEREIGN LANDS PERMIT No. 2026-1017FP-01

THIS PROJECT REQUIRES A COSESCO PERMIT ISSUED BY THE CITY OF DAVENPORT. CONTRACTOR SHALL APPLY FOR AND OBTAIN A COSESCO PERMIT AFTER AWARD OF THE CONTRACT AND PRIOR TO COMMENCING ANY WORK REQUIRING THE PERMIT

THIS PROJECT IS COVERED BY THE IOWA DEPARTMENT OF NATURAL RESOURCES NPDES GENERAL PERMIT NO.2. THE CONTRACTOR SHALL CARRY OUT THE TERMS AND CONDITIONS OF GENERAL PERMIT NO. 2 AND THE STORM WATER POLLUTION PREVENTION PLAN WHICH IS A PART OF THESE CONTRACT DOCUMENTS. REFER TO SECTION 2602 OF THE STANDARD SPECIFICATIONS FOR ADDITIONAL INFORMATION.

EXISTING UTILITY INFORMATION SHOWN ON THIS PLAN HAS BEEN PROVIDED BY THE UTILITY OWNER. THE CONTRACTOR SHALL FIELD VERIFY EXACT LOCATIONS PRIOR TO COMMENCING CONSTRUCTION AS REQUIRED BY STATE LAW. NOTIFY IOWA ONE CALL, 800-292-8989.

THE SUBSURFACE UTILITY INFORMATION IN THIS PLAN IS UTILITY QUALITY LEVEL D. THIS UTILITY QUALITY LEVEL WAS DETERMINED ACCORDING TO THE GUIDELINES OF CI/ASCE 38-02, ENTITLED "STANDARD GUIDELINES FOR THE COLLECTION AND DEPICTION OF EXISTING SUBSURFACE UTILITY DATA."

A LIST OF APPLICABLE STANDARD ROAD PLANS CAN BE FOUND ON TABULATION 105_04 ON SHEET C.03

IOWA ONE CALL
1-800-292-8989 | 811
www.iowaonecall.com

IOWA | DOT

TRANSPORTATION DEVELOPMENT DIVISION

PLANS OF PROPOSED IMPROVEMENTS ON THE

URBAN ROAD SYSTEM

BRIDGE REPLACEMENT - PPCB

IN THE CITY OF DAVENPORT,

ON WISCONSIN AVE OVER DUCK CREEK

Refer to the Proposal Form for list of applicable specifications.

Value Engineering Saves. Refer to Article 1105.13 of the Specifications.

DRAWING APPROVAL:
ALL SHOP DRAWINGS AND FALSEWORK DRAWINGS THAT REQUIRE APPROVAL SHALL BE SUBMITTED TO AND APPROVED BY THE CONTRACTOR, WHO SHALL STAMP, CERTIFY OR PROVIDE OTHER SUCH EVIDENCE ON THE DRAWINGS THAT THEY HAVE RECEIVED CONTRACTOR APPROVAL. THE APPROVED DRAWINGS SHALL THEN BE SUBMITTED TO BOLTON & MENK INC. FOR REVIEW AND APPROVAL.

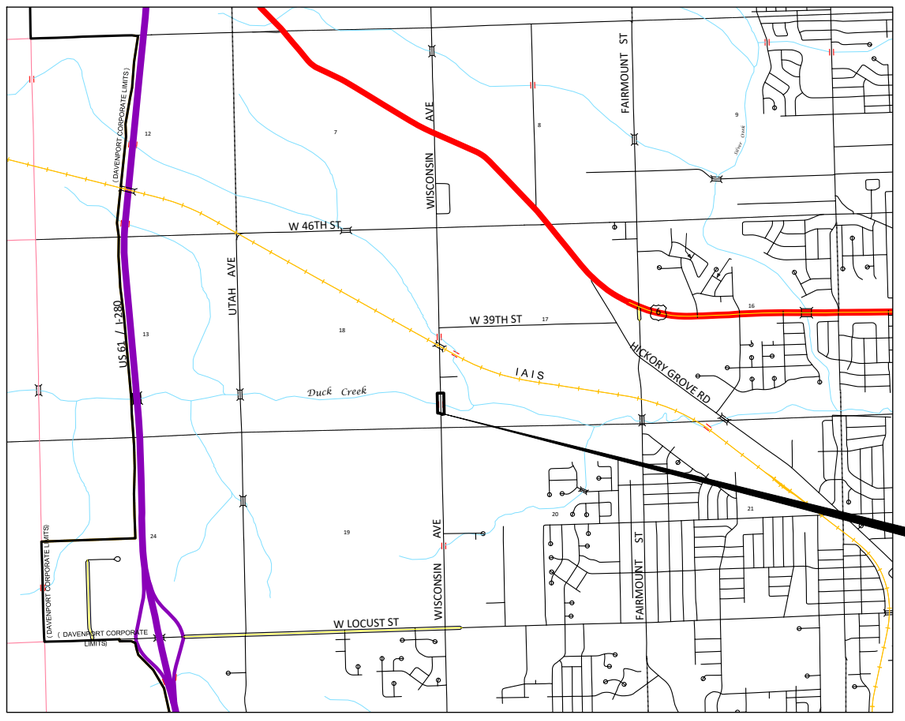
ADDRESS: Ryan.Evans@bolton-menk.com
1519 BALTIMORE DR.
AMES, IA 50010
TELEPHONE: (515) 233-6100

SHOP DRAWINGS SHALL BE INDEPENDENT DRAWINGS WITH ADEQUATE DIMENSIONING FOR FABRICATION OF INDIVIDUAL PIECES OF EACH COMPONENT. PHOTOCOPIES OF PLAN DRAWINGS AND NON-CONTRACTOR APPROVED PLANS WILL BE REJECTED. THESE DRAWINGS SHALL NOT BE SENT TO IOWA DOT OFFICE OF BRIDGES AND STRUCTURES.

	TOTAL
	55
PROJECT IDENTIFICATION NUMBER	
57314	
PROJECT NUMBER	
BROS-1827(711)--8J-82	
CITY PROJECT NUMBER	
PRJ-6021/CIP 21015	

INDEX OF SHEETS

NO.	DESCRIPTION
A SHEETS	TITLE SHEETS
A.01	TITLE SHEET
A.02	LEGEND SHEET
B SHEETS	TYPICAL CROSS SECTIONS AND DETAILS
B.01	TYPICAL CROSS SECTIONS AND DETAILS
C SHEETS	QUANTITIES AND GENERAL INFORMATION
C.01	ESTIMATED QUANTITIES
C.02	ESTIMATE REFERENCE INFORMATION
C.03-C.08	TABULATIONS
D SHEETS	WISCONSIN AVENUE PLAN AND PROFILE SHEETS
D.01	PLAN AND PROFILE
F SHEETS	EXISTING CONDITIONS AND REMOVALS
F.01	EXISTING CONDITIONS & REMOVALS
G SHEETS	REFERENCES AND BENCHMARKS
G.01	REFERENCE TIES, BENCH MARKS, HORIZONTAL CONTROL & SUPERELEVATION TABS FOR ALL ALIGNMENTS
H SHEETS	RIGHT-OF-WAY SHEETS
H.01	RIGHT-OF-WAY SHEETS
J SHEETS	STAGING AND TRAFFIC CONTROL PLANS
J.01	STAGING AND TRAFFIC CONTROL PLAN
L SHEETS	JOINTING SHEETS
L.01	WISCONSIN AVE JOINTING PLAN
N SHEETS	PAVEMENT MARKING AND SIGNAGE SHEETS
N.01	SIGNAGE PLAN
Q SHEETS	SOIL BORING SHEETS
Q.01-Q.04	SOIL BORING SHEETS
RC SHEETS	POLLUTION PREVENTION PLAN AND TABULATIONS
RC.01-RC.02	POLLUTION PREVENTION PLAN
RR SHEETS	EROSION CONTROL SHEETS
RR.01	EROSION CONTROL PLAN
S SHEETS	SIDEWALK SHEETS
S0.01	SIDEWALK PLAN
V SHEETS	BRIDGE DESIGN DETAILS
V.01 - V.27	BRIDGE DESIGN DETAILS
W SHEETS	WISCONSIN AVENUE - CROSS SECTIONS
W.01-W.02	CROSS SECTIONS



MAP OF THE
CITY OF DAVENPORT
SCOTT COUNTY, IA

SCALE 0 2000 4000 FEET



SCOTT COUNTY, IA

281_01
9/28/22

SECTION 404 PERMIT AND CONDITIONS

Construct this project according to the requirements of U.S. Army Corps of Engineers Nationwide, Permit No. 14. A copy of this permit is available from the Iowa DOT website (http://www.envpermits.iowadot.gov/). The U.S. Army Corps of Engineers reserves the right to visit the site without prior notice.

UTILITY CONTACTS

THE FOLLOWING UTILITY COMPANIES MAY HAVE FACILITIES IN PROXIMITY TO THE PROJECT.

UTILITY TYPE	PROVIDER	CONTACT NAME	CONTACT NUMBER	EMAIL
Communications	Windstream/ McLeodUSA	Clec locate desk	(800) 941-3430	wci.clec.locate@windstream.com
Communications	CenturyLink / Lumen	Sadie Hull	(918) 547-0147	sadie.hull@lumen.com
Water	Iowa American Water Co	Heather Brusnahan	(563) 468-9455	heather.brusnahan@amwater.com
Electric	Mid American Electric	Erik Rasmussen	(563) 333-8705	qclocates@midamerican.com
Gas	Mid American Gas	Matt Kovacic	(309) 793-3704	qclocates@midamerican.com
Communications	Metro Fibernet, LLC	Lori Kemper	(812) 213-1050	811design@metronet.com
Communications	Mediacom Comm Corp	Chris Minard	(815) 597-5103	cminard@mediacomcc.com

FHWA STRUCTURE NUMBER: 3170
B.O.P. STA 98+32.50
E.O.P. STA 102+92.29
BRIDGE STA 99+90.88
PROPOSED 138'-10" x 42'-8" THREE-SPAN
PRETENSIONED PRESTRESSED CONCRETE BEAM BRIDGE

Load Rating (LRFR)	
Truck	Rating (RF/Tons)
HL-93 Oper	1.79
HL-93 Inv	1.38

101-5
Modified

DESIGN DATA URBAN

2022 AADT	1630	V.P.D.
2046 AADT	1990	V.P.D.
2046 DHV	83	V.P.H.

INDEX OF SEALS

SHEET NO.	NAME	TYPE
A.01	GREGORY A. BROUSSARD	CIVIL DESIGN
A.01	RYAN R. EVANS	STRUCTURAL DESIGN
Q.01	BUDDIKA GODAGAMA	GEOTECHNICAL
V.03	RYAN M. BENJEGERDES	HYDRAULIC DESIGN

APPROVED

CITY OF DAVENPORT — DATE: Sep 10, 2026

LICENSED PROFESSIONAL ENGINEER
GREGORY A. BROUSSARD
P21974
IOWA

I HEREBY CERTIFY THAT THIS ENGINEERING DOCUMENT WAS PREPARED BY ME OR UNDER MY DIRECT PERSONAL SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF IOWA.

Gregory Broussard

GREGORY A. BROUSSARD, P.E.

LICENSE NUMBER: P21974 DATE: 9/10/2026

MY LICENSE RENEWAL DATE IS DECEMBER 31, 2027

PAGES OR SHEETS COVERED BY THIS SEAL:

ALL SHEETS EXCEPT Q AND V SERIES

LICENSED PROFESSIONAL ENGINEER
RYAN R. EVANS
P22539
IOWA

I HEREBY CERTIFY THAT THIS ENGINEERING DOCUMENT WAS PREPARED BY ME OR UNDER MY DIRECT PERSONAL SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF IOWA.

RYAN R. EVANS, P.E.

LICENSE NUMBER: P22539 DATE: 9/9/2026

MY LICENSE RENEWAL DATE IS 12/31/2027

PAGES OR SHEETS COVERED BY THIS SEAL:

V.01 - V.27

BOLTON & MENK
401 FIRST ST SE, SUITE 201
CEDAR RAPIDS, IOWA 52401
Phone: (319) 362-3219
Email: CedarRapids@bolton-menk.com
www.bolton-menk.com

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H:\DAVENPOR_CI_IA\26\142450000\CAD\C3D\142450A01.dwg 9/9/2026 1:58:36 PM Plotted by: Reese Hansen

EXISTING TOPOGRAPHIC SYMBOLS

- ACCESS GRATE
- AIR CONDITION UNIT
- ANTENNA
- AUTO SPRINKLER CONNECTION
- BARRICADE PERMANENT
- BASKETBALL POST
- BENCH
- BIRD FEEDER
- BOLLARD
- BUSH
- CATCH BASIN RECTANGULAR CASTING
- CATCH BASIN CIRCULAR CASTING
- CURB STOP
- CLEAN OUT
- CULVERT END
- DRINKING FOUNTAIN
- DOWN SPOUT
- ELECTRIC CAR CHARGE STATION
- FILL PIPE
- FIRE HYDRANT
- FLAG POLE
- FLARED END / APRON
- FUEL PUMP
- GRILL
- GUY WIRE ANCHOR
- HANDHOLE
- HANDICAP SPACE
- IRRIGATION SPRINKLER HEAD
- IRRIGATION VALVE BOX
- LIFT STATION CONTROL PANEL
- LIFT STATION
- LIGHT POLE
- MAILBOX
- MANHOLE-COMMUNICATION
- MANHOLE-ELECTRIC
- MANHOLE-GAS
- MANHOLE-HEAT
- MANHOLE-RECLAIMED WATER
- MANHOLE-SANITARY SEWER
- MANHOLE-STORM SEWER
- MANHOLE-UTILITY
- MANHOLE-WATER
- METER
- DRIVE-THRU MICROPHONE
- PARKING METER
- PAVEMENT MARKING
- PEDESTAL-COMMUNICATION
- PEDESTAL-ELECTRIC
- PEDESTRIAN PUSH BUTTON
- PICNIC TABLE
- POLE-UTILITY
- POST
- RAILROAD SIGNAL POLE
- REGULATION STATION GAS
- SATELLITE DISH
- SIGN TRAFFIC
- SIGNAL CONTROL CABINET
- SOIL BORING
- SIREN
- TELEPHONE BOOTH
- TILE INLET
- TILE OUTLET
- TILE RISER
- TRANSFORMER-ELECTRIC
- TREE-CONIFEROUS
- TREE-DEAD
- TREE-DECIDUOUS
- TREE STUMP
- TRAFFIC ARM BARRIER
- TRAFFIC SIGNAL
- TRASH CAN
- UTILITY MARKER
- VALVE
- VALVE POST INDICATOR
- VALVE VAULT
- VAULT
- VENT PIPE
- WATER SPIGOT
- WELL
- WETLAND DELINEATED MARKER
- WETLAND
- WET WELL
- YARD HYDRANT

PROPOSED TOPOGRAPHIC SYMBOLS

- CLEANOUT
- MANHOLE
- LIFT STATION
- STORM SEWER CIRCULAR CASTING
- STORM SEWER RECTANGULAR CASTING
- STORM SEWER FLARED END / APRON
- STORM SEWER OUTLET STRUCTURE
- STORM SEWER OVERFLOW STRUCTURE
- CURB BOX
- FIRE HYDRANT
- WATER VALVE
- WATER REDUCER
- WATER BEND
- WATER TEE
- WATER CROSS
- WATER SLEEVE
- WATER CAP / PLUG
- RIP RAP
- DRAINAGE FLOW
- TRAFFIC SIGNS
- LIGHT POLE

SURVEY SYMBOLS

- BENCHMARK LOCATION
- CONTROL POINT
- MONUMENT FOUND
- CAST IRON MONUMENT
- STONE MONUMENT

EXISTING TOPOGRAPHIC LINES

- RETAINING WALL
- FENCE
- FENCE-DECORATIVE
- GUARD RAIL
- TREE LINE
- BUSH LINE

SURVEY LINES

- CONTROLLED ACCESS
- BOUNDARY
- CENTERLINE
- EXISTING EASEMENT LINE
- PROPOSED EASEMENT LINE
- EXISTING LOT LINE
- PROPOSED LOT LINE
- EXISTING RIGHT-OF-WAY
- PROPOSED RIGHT-OF-WAY
- SETBACK LINE
- SECTION LINE
- QUARTER LINE
- SIXTEENTH LINE
- TEMPORARY EASEMENT

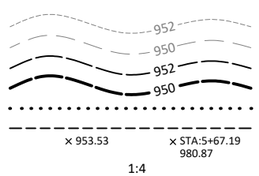
EXISTING UTILITY LINES

- FORCEMAIN
- SANITARY SEWER
- SANITARY SERVICE
- STORM SEWER
- STORM SEWER DRAIN TILE
- WATERMAIN
- WATER SERVICE
- RECLAIMED WATER

PROPOSED UTILITY LINES

- FORCEMAIN
- SANITARY SEWER
- SANITARY SERVICE
- STORM SEWER
- STORM SEWER DRAIN TILE
- WATERMAIN
- WATER SERVICE
- PIPE CASING
- TRENCHLESS PIPE (PLAN VIEW)
- TRENCHLESS PIPE (PROFILE VIEW)

GRADING INFORMATION



- EXISTING CONTOUR MINOR
- EXISTING CONTOUR MAJOR
- PROPOSED CONTOUR MINOR
- PROPOSED CONTOUR MAJOR
- PROPOSED GRADING LIMITS / SLOPE LIMITS
- PROJECT LIMITS
- PROPOSED SPOT ELEVATION
- RISE:RUN (SLOPE)

HATCH PATTERNS

- SIDEWALK
- PCC PAVEMENT

EXISTING PRIVATE UTILITY LINES

NOTE:
EXISTING UTILITY INFORMATION SHOWN ON THIS PLAN HAS BEEN PROVIDED BY THE UTILITY OWNER. THE CONTRACTOR SHALL FIELD VERIFY EXACT LOCATIONS PRIOR TO COMMENCING CONSTRUCTION AS REQUIRED BY STATE LAW. NOTIFY IOWA ONE CALL - 1-800-292-8989

THE SUBSURFACE UTILITY INFORMATION IN THIS PLAN IS UTILITY QUALITY LEVEL D UNLESS OTHERWISE NOTED. THIS UTILITY LEVEL WAS DETERMINED ACCORDING TO THE GUIDELINES OF CI/ASCE 38-02, ENTITLED "STANDARD GUIDELINE FOR INVESTIGATING AND DOCUMENTING EXISTING UTILITIES".

- UNDERGROUND FIBER OPTIC
- UNDERGROUND ELECTRIC
- UNDERGROUND GAS
- UNDERGROUND COMMUNICATION
- OVERHEAD ELECTRIC
- OVERHEAD COMMUNICATION
- OVERHEAD UTILITY

UTILITIES IDENTIFIED WITH A QUALITY LEVEL OTHER THAN D:

LINE TYPES FOLLOW THE FORMAT: UTILITY TYPE - QUALITY LEVEL
EXAMPLE: G-A G-A UNDERGROUND GAS, QUALITY LEVEL A
UTILITY QUALITY LEVEL (A,B,C,D) DEFINITIONS CAN BE FOUND IN CI/ASCE 38-22.

UTILITY QUALITY LEVELS:

LEVEL D - INFORMATION COMES SOLELY FROM EXISTING UTILITY RECORDS.

LEVEL C - SURVEYING ABOVE GROUND UTILITY FACILITIES, SUCH AS MANHOLES, VALVE BOXES, ETC; AND CORRELATING THIS INFORMATION WITH EXISTING UTILITY RECORDS.

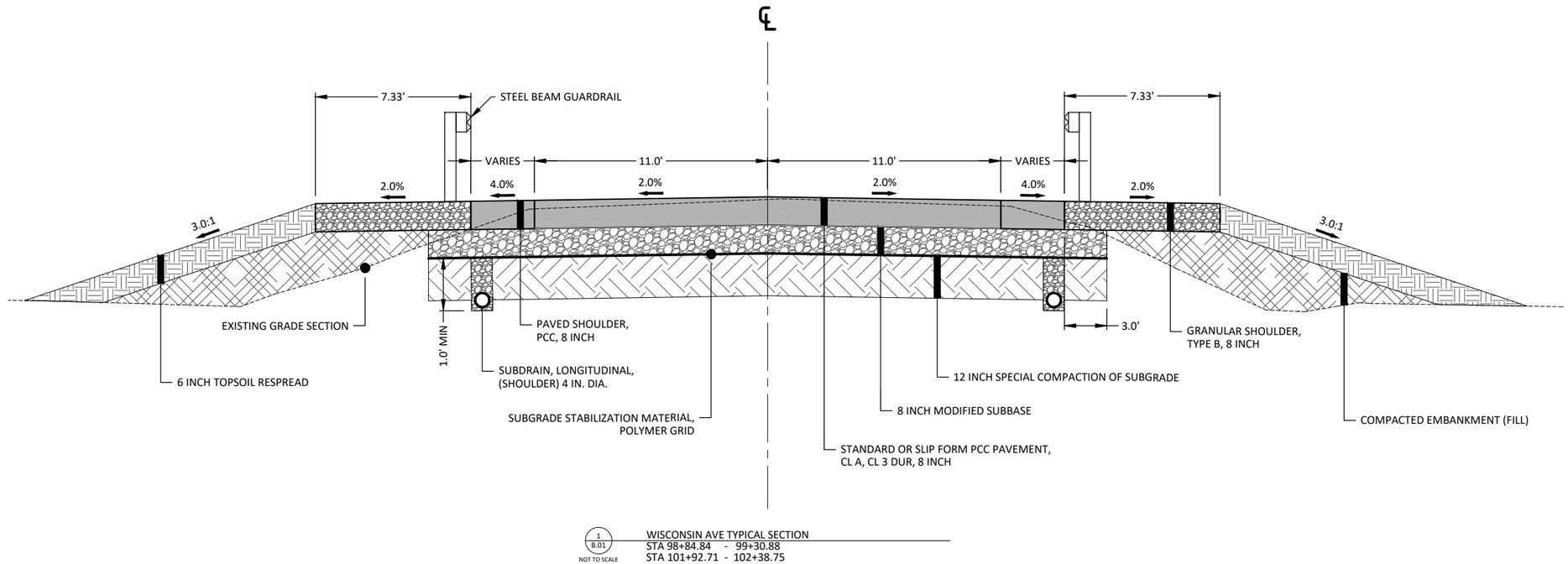
LEVEL B - THE USE OF SURFACE GEOPHYSICAL TECHNIQUES TO DETERMINE THE EXISTENCE AND HORIZONTAL POSITION OF UNDERGROUND UTILITIES.

LEVEL A - THE USE OF NONDESTRUCTIVE DIGGING EQUIPMENT AT HORIZONTAL AND VERTICAL POSITION OF UNDERGROUND UTILITIES, AS WELL AS THE TYPE, SIZE, CONDITION, MATERIAL, AND OTHER CHARACTERISTICS.

ABBREVIATIONS

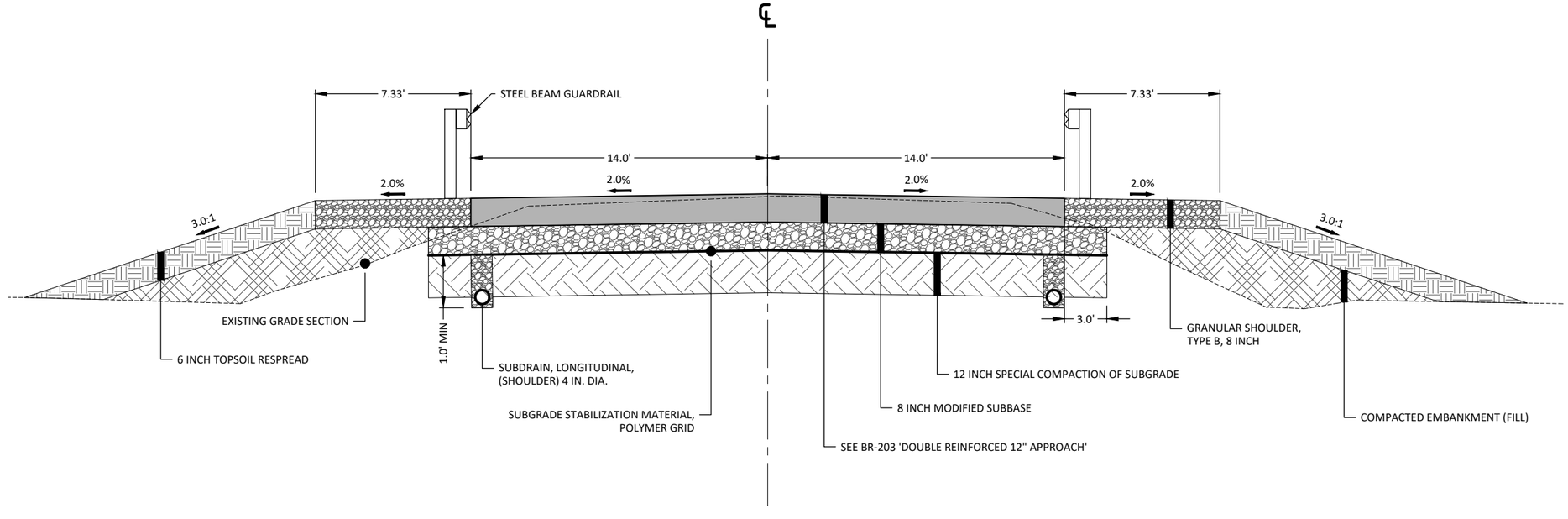
A	ALGEBRAIC DIFFERENCE	GV	GATE VALVE	SAN	SANITARY SEWER
ADJ	ADJUST	HDPE	HIGH DENSITY POLYETHYLENE	SCH	SCHEDULE
ALT	ALTERNATE	HH	HANDHOLE	SERV	SERVICE
B-B	BACK TO BACK	HMA	HOT MIX ASPHALT	SHLD	SHOULDER
BLDG	BUILDING	HP	HIGH POINT	STA	STATION
BMP	BEST MANAGEMENT PRACTICE	HWL	HIGH WATER LEVEL	STD	STANDARD
BR	BEGIN RADIUS	HYD	HYDRANT	STM	STORM SEWER
BV	BUTTERFLY VALVE	I	INVERT	TC	TOP OF CURB
CB	CATCH BASIN	K	CURVE COEFFICIENT	TE	TEMPORARY EASEMENT
C&G	CURB AND GUTTER	L	LENGTH	TEMP	TEMPORARY
CIP	CAST IRON PIPE	LO	LOWEST OPENING	TNH	TOP NUT HYDRANT
CIPP	CURED-IN-PLACE PIPE	LP	LOW POINT	TP	TOP OF PIPE
CL	CENTER LINE	LT	LEFT	TYP	TYPICAL
CL.	CLASS	MH	MANHOLE	VCP	VITRIFIED CLAY PIPE
CMP	CORRUGATED METAL PIPE	MIN	MINIMUM	VERT	VERTICAL
C.O.	CHANGE ORDER	MR	MID RADIUS	VPC	VERTICAL POINT OF CURVE
COMM	COMMUNICATION	NIC	NOT IN CONTRACT	VPI	VERTICAL POINT OF INTERSECTION
CSP	CORRUGATED STEEL PIPE	NMC	NON-METALLIC CONDUIT	VPT	VERTICAL POINT OF TANGENT
CLVT	CULVERT	NTS	NOT TO SCALE	WM	WATERMAIN
DIA	DIAMETER	NWL	NORMAL WATER LEVEL	WS	WATER SERVICE
DIP	DUCTILE IRON PIPE	OHW	ORDINARY HIGH WATER LEVEL		
DWY	DRIVEWAY	PC	POINT OF CURVE		
E	EXTERNAL CURVE DISTANCE	PCC	PORTLAND CEMENT CONCRETE	AC	ACRES
ESMT	EASEMENT	PE	PERMANENT EASEMENT	CF	CUBIC FEET
ELEC	ELECTRIC	PED	PEDESTRIAN, PEDESTAL	CV	COMPACTED VOLUME
ELEV/EL	ELEVATION	PERF	PERFORATED PIPE	CY	CUBIC YARD
EOF	EMERGENCY OVERFLOW	PERM	PERMANENT	EA	EACH
ER	END RADIUS	PI	POINT OF INTERSECTION	EV	EXCAVATED VOLUME
EX	EXISTING	PL	PROPERTY LINE	LB	POUND
FES	FLARED END SECTION	PRC	POINT OF REVERSE CURVE	LF	LINEAR FEET
F-F	FACE TO FACE	PT	POINT OF TANGENT	LS	LUMP SUM
FF	FINISHED FLOOR	PVC	POLYVINYL CHLORIDE PIPE	LV	LOOSE VOLUME
F&I	FURNISH AND INSTALL	PVMT	PAVEMENT	SF	SQUARE FEET
FM	FORCEMAIN	R	RADIUS	SV	STOCKPILE VOLUME
FO	FIBER OPTIC	RCP	REINFORCED CONCRETE PIPE	SY	SQUARE YARD
F.O.	FIELD ORDER	RET	RETAINING		
GRAN	GRANULAR	R/W	RIGHT-OF-WAY		
GRAV	GRAVEL	RSC	RIGID STEEL CONDUIT		
GU	GUTTER	RT	RIGHT		

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1 / B.01 NOT TO SCALE

WISCONSIN AVE TYPICAL SECTION
STA 98+84.84 - 99+30.88
STA 101+92.71 - 102+38.75



1 / B.01 NOT TO SCALE

WISCONSIN AVE BRIDGE APPROACH TYPICAL SECTION
STA 99+30.88 - 99+84.88
STA 101+38.71 - 101+92.71

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ENGLISH	IOWA DOT	DESIGN TEAM EVANS\BOLTON & MENK INC	CITY OF DAVENPORT, IOWA	SCOTT COUNTY	PROJECT NUMBER BROS-1827(711)--8J-82	SHEET NUMBER B.01	REVISED

ESTIMATED PROJECT QUANTITIES

ITEM NO.	ITEM CODE	ITEM	UNIT	QUANTITY	AS-BUILT QTY.
1	2101-0850002	CLEARING AND GRUBBING	UNIT	8	
2	2102-2625000	EMBANKMENT-IN-PLACE	CY	1250	
3	2102-2710070	EXCAVATION, CLASS 10, ROADWAY AND BORROW	CY	800	
4	2104-2710020	EXCAVATION, CLASS 10, CHANNEL	CY	150	
5	2105-8425015	TOPSOIL, STRIP, SALVAGE AND SPREAD	CY	610	
6	2109-8225100	SPECIAL COMPACTION OF SUBGRADE	STA	2.5	
7	2113-0001100	SUBGRADE STABILIZATION MATERIAL, POLYMER GRID	SY	512	
8	2115-0100000	MODIFIED SUBBASE	CY	113.8	
9	2121-7425020	GRANULAR SHOULDERS, TYPE B	TON	154.4	
10	2122-5190008	PAVED SHOULDER, P.C. CONCRETE, 8 IN.	SY	106.4	
11	2123-7450020	SHOULDER FINISHING, EARTH	STA	7.6	
12	2212-5070310	PATCHES, FULL-DEPTH REPAIR	SY	32	
13	2212-5070330	PATCHES BY COUNT (REPAIR)	EACH	2	
14	2301-0690203	BRIDGE APPROACH, BR-203	SY	373.2	
15	2301-1033080	STANDARD OR SLIP FORM PORTLAND CEMENT CONCRETE PAVEMENT, CLASS C, CLASS 3 DURABILITY, 8 IN.	SY	317.8	
16	2301-6911722	PORTLAND CEMENT CONCRETE PAVEMENT SAMPLES	LS	1	
17	2303-6911000	HOT MIX ASPHALT PAVEMENT SAMPLES	LS	1	
18	2312-8260050	GRANULAR SURFACING ON ROAD, CLASS A CRUSHED STONE	CY	66	
19	2401-6745625	REMOVAL OF EXISTING BRIDGE	LS	1	
20	2402-2720000	EXCAVATION, CLASS 20	CY	156	
21	2402-2721000	EXCAVATION, CLASS 21	CY	68	
22	2403-0100010	STRUCTURAL CONCRETE (BRIDGE)	CY	406	
23	2403-1000005	FIBER REINFORCEMENT FOR STRUCTURAL CONCRETE	CY	203.6	
24	2403-1000010	TRIAL BATCH AND TEST PLACEMENT (FIBER REINFORCED CONCRETE)	LS	1	
25	2404-7775000	REINFORCING STEEL	LB	15894	
26	2404-7775005	REINFORCING STEEL, EPOXY COATED	LB	60351	
27	2404-7775009	REINFORCING STEEL, STAINLESS STEEL	LB	60	
28	2407-0551142	BEAMS, PRETENSIONED PRESTRESSED CONCRETE, A42	EACH	12	
29	2407-0551150	BEAMS, PRETENSIONED PRESTRESSED CONCRETE, A50	EACH	6	
30	2408-7800000	STRUCTURAL STEEL	LB	4205	
31	2412-0000100	LONGITUDINAL GROOVING IN CONCRETE, BRIDGE DECK	SY	391.2	
32	2414-6425410	CONCRETE BARRIER, REINFORCED, SEPARATION	LF	319.7	
33	2414-6444100	STEEL PIPE PEDESTRIAN HAND RAILING	LF	305	
34	2501-0201057	PILES, STEEL, HP 10 X 57	LF	840	
35	2501-0201253	PILES, STEEL, HP 12 X 53	LF	1595	
36	2501-6335010	PREBORED HOLES	LF	120	
37	2502-8212034	SUBDRAIN, LONGITUDINAL, (SHOULDER) 4 IN. DIA.	LF	594.9	
38	2505-4008120	REMOVAL OF STEEL BEAM GUARDRAIL	LF	252	
39	2505-4008300	STEEL BEAM GUARDRAIL	LF	50	
40	2505-4008420	STEEL BEAM GUARDRAIL BARRIER TRANSITION SECTION, BA-221	EACH	4	
41	2505-4021010	STEEL BEAM GUARDRAIL END ANCHOR, BOLTED	EACH	4	
42	2505-4021722	STEEL BEAM GUARDRAIL TANGENT END TERMINAL, BA-225	EACH	4	
43	2507-3250005	ENGINEERING FABRIC	SY	923	
44	2507-6800061	REVETMENT, CLASS E	TON	630	
45	2507-8029000	EROSION STONE	TON	52	
46	2510-6745850	REMOVAL OF PAVEMENT	SY	697.4	
47	2519-1002048	FENCE, CHAIN LINK, 48 IN. HEIGHT	LF	309.7	
48	2519-4200190	REMOVAL OF FENCE, WOOD	LF	40	
49	2524-6765210	REMOVAL OF TYPE A SIGN ASSEMBLY	EACH	5	
50	2524-9276010	PERFORATED SQUARE STEEL TUBE POSTS	LF	20	
51	2524-9276021	PERFORATED SQUARE STEEL TUBE POST ANCHOR, BREAK-AWAY SOIL INSTALLATION	EACH	2	
52	2524-9325001	TYPE A SIGNS, SHEET ALUMINUM	SF	10	
53	2524-9325150	INSTALL TYPE A SIGN	EACH	2	
54	2526-8285030	CONSTRUCTION SURVEY, RIGHT OF WAY	LS	1	
55	2526-8285040	CONSTRUCTION SURVEY, LOCATION SURVEY	LS	1	
56	2528-2518000	SAFETY CLOSURE	EACH	2	
57	2528-8445110	TRAFFIC CONTROL	LS	1	
58	2528-9290050	PORTABLE DYNAMIC MESSAGE SIGN (PDMS)	CDAY	28	
59	2533-4980005	MOBILIZATION	LS	1	
60	2601-2634100	MULCHING	ACRE	1.2	
61	2601-2634105	MULCHING, BONDED FIBER MATRIX	ACRE	0.6	
62	2601-2636043	SEEDING AND FERTILIZING (RURAL)	ACRE	0.6	
63	2601-2640350	SPECIAL DITCH CONTROL, WOOD EXCELSIOR MAT	SQ	218	
64	2602-0000020	SILT FENCE	LF	1788	
65	2602-0000071	REMOVAL OF SILT FENCE OR SILT FENCE FOR DITCHCHECKS	LF	1788	
66	2602-0000101	MAINTENANCE OF SILT FENCE OR SILT FENCE FOR DITCH CHECK	LF	1788	

ESTIMATED PROJECT QUANTITIES

ITEM NO.	ITEM CODE	ITEM	UNIT	QUANTITY	AS-BUILT QTY.
67	2602-0000150	STABILIZED CONSTRUCTION ENTRANCE, EC-303	LF	100	
68	2602-0010010	MOBILIZATIONS, EROSION CONTROL	EACH	3	
69	2602-0010020	MOBILIZATIONS, EMERGENCY EROSION CONTROL	EACH	2	

ESTIMATE REFERENCE INFORMATION

ITEM NO.	ITEM CODE	DESCRIPTION
1	2101-0850002	CLEARING AND GRUBBING SEE TABULATION 110_17. ALL DESIRABLE TREES OUTSIDE THE CONSTRUCTION AREA WILL BE SAVED. ALL WOOD MATERIAL GENERATED AS A RESULT OF CLEARING AND GRUBBING MUST BE DISPOSED OF ACCORDING TO IOWA DEPARTMENT OF AGRICULTURE AND LAND STEWARDSHIP EMERALD ASH BORER QUARANTINE ORDER. FOR MORE INFORMATION SEE WWW.IOWATREEPESTS.COM.
2	2102-2625000	EMBANKMENT-IN-PLACE SEE EARTHWORK CALCULATION ON C.03. TYPE "A" COMPACTION WILL BE REQUIRED. AFTER ALL AVAILABLE SUITABLE ON SITE MATERIAL HAS BEEN DEPLETED, THE CONTRACTOR SHALL FURNISH ALL REMAINING REQUIRED MATERIAL. PROVIDE BORROW MATERIAL ACCORDING TO SECTION 2102 OF THE STANDARD SPECIFICATIONS. REFER TO TABULATION(S) 107-23 (AND 107-24). EARTHWORK CALCULATIONS DO NOT INCLUDE TOPSOIL. NO PAYMENT FOR OVERHAUL SHALL BE MADE ON THIS PROJECT. SUITABLE SOILS SHALL BE DEFINED BY ARTICLE 2102.02, D, 2 OF THE STANDARD SPECIFICATIONS.
3	2102-2710070	EXCAVATION, CLASS 10, ROADWAY AND BORROW SEE EARTHWORK CALCULATION ON C.03. EARTHWORK CALCULATIONS DO NOT INCLUDE TOPSOIL. EARTHWORK CALCULATIONS USED AN ASSUMED MATERIAL SHRINKAGE OF 15% (0.85 SHRINK FACTOR). NO PAYMENT FOR OVERHAUL SHALL BE MADE ON THIS PROJECT.
4	2104-2710020	EXCAVATION, CLASS 10, CHANNEL SEE EARTHWORK CALCULATION ON C.03. EARTHWORK CALCULATIONS DO NOT INCLUDE TOPSOIL. ITEM INCLUDES CLEARING THE CHANNEL TO THE SHAPE, DEPTH, AND EXTENT SHOWN IN THE PLANS. ALL WASTE MUST BE REMOVED FROM THE PROJECT SITE.
5	2105-8425015	TOPSOIL, STRIP, SALVAGE AND SPREAD ESTIMATED QUANTITY ASSUMES 6 INCHES OF SUITABLE TOPSOIL SALVAGED AND RESPREAD WITHIN THE LIMITS OF GRADING. UNSUITABLE MATERIAL SHALL BE REMOVED FROM THE SITE AT NO ADDITIONAL COST TO THE CITY. SEED THE DISTURBED TOPSOIL STOCKPILE AREA AS PER SECTION 2601.05 OF THE STANDARD SPECIFICATIONS. SEEDING OF THE STOCKPILE AREAS SHALL BE CONSIDERED INCIDENTAL TO THIS BID ITEM.
6	2109-8225100	SPECIAL COMPACTION OF SUBGRADE SEE B.01 FOR TYPICAL SECTIONS. ESTIMATED QUANTITY DOES NOT INCLUDE AREAS INCIDENTAL TO THE BRIDGE APPROACH ITEM.
7	2113-0001100	SUBGRADE STABILIZATION MATERIAL, POLYMER GRID ITEM SHALL BE A TRIAXIAL POLYMER GRID. SEE TABULATION 100_24. ESTIMATED QUANTITY DOES NOT INCLUDE AREAS INCIDENTAL TO THE BRIDGE APPROACH ITEM.
8	2115-0100000	MODIFIED SUBBASE SEE B.01 FOR TYPICAL SECTIONS. SEE TABULATION 100_24. ESTIMATED QUANTITY DOES NOT INCLUDE AREAS INCIDENTAL TO THE BRIDGE APPROACH ITEM.
9	2121-7425020	GRANULAR SHOULDERS, TYPE B SEE TABULATION 112_09.
10	2122-5190008	PAVED SHOULDER, P.C. CONCRETE, 8 IN. SEE TABULATIONS 100_24 AND 112_09. CERTIFIED PLANT INSPECTION SHALL BE INCLUDED WITH THIS ITEM.
11	2123-7450020	SHOULDER FINISHING, EARTH ESTIMATED VOLUME OF SHOULDER IS INCLUDED IN THE CLASS 10 EXCAVATION QUANTITY. ITEM TO BE MEASURED ALONG EACH SHOULDER.
12	2212-5070310	PATCHES, FULL-DEPTH REPAIR ITEM IS A CONTINGENCY ITEM TO BE USED WITH APPROVAL OF ENGINEER. CERTIFIED PLANT INSPECTION SHALL BE INCLUDED WITH THIS ITEM.
13	2212-5070330	PATCHES BY COUNT (REPAIR) ITEM IS A CONTINGENCY ITEM TO BE USED WITH APPROVAL OF ENGINEER. CERTIFIED PLANT INSPECTION SHALL BE INCLUDED WITH THIS ITEM.
14	2301-0690203	BRIDGE APPROACH, BR-203 SEE BR-101, BR-102, BR-203, AND TABULATION 112_06 FOR ADDITIONAL INFORMATION AND INSTALLATION INSTRUCTIONS. OMIT CURB, AS SHOWN IN BR-203 DETAIL 'G', FROM PAVEMENT. CERTIFIED PLANT INSPECTION SHALL BE INCLUDED WITH THIS ITEM.
15	2301-1033080	STANDARD OR SLIP FORM PORTLAND CEMENT CONCRETE PAVEMENT, CLASS C, CLASS 3 DURABILITY, 8 IN. SEE B.01 FOR TYPICAL SECTION AND TABULATION 100_24 FOR ADDITIONAL INFORMATION. ESTIMATED QUANTITY DOES NOT INCLUDE AREAS INCIDENTAL TO THE BRIDGE APPROACH ITEM. CERTIFIED PLANT INSPECTION SHALL BE INCLUDED WITH THIS ITEM. ALL LONGITUDINAL PAVEMENT JOINTS SHALL BE CLEANED AND SEALED. SAWCUT WIDTH SHALL MEET PV-101. NO ADDITIONAL PAYMENT WILL BE MADE FOR COLD WEATHER PROTECITON.
16	2301-6911722	PORTLAND CEMENT CONCRETE PAVEMENT SAMPLES THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL REQUIRED CONCRETE TESTING AND SAMPLING.
17	2303-6911000	HOT MIX ASPHALT PAVEMENT SAMPLES ITEM IS A CONTINGENCY ITEM TO BE USED WITH APPROVAL OF ENGINEER. ITEM IS CONTINGENT ON THE USE OF THE ITEMS 'PATCHES, FULL-DEPTH REPAIR' AND 'PATCHES BY COUNT (REPAIR)'. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL REQUIRED ASPHALT TESTING AND SAMPLING.
18	2312-8260050	GRANULAR SURFACING ON ROAD, CLASS A CRUSHED STONE ITEM TO BE USED OVER INSTALLED REVETMENT AREAS. ESTIMATED QUANTITY ASSUMED A 4 INCH NOMINAL THICKNESS APPLIED TO REVETMENT AREAS.
19	2401-6745625	REMOVAL OF EXISTING BRIDGE THE EXISTING BRIDGE IS A 127' X 27.9' 3-SPAN CONTINUOUS I-BEAM BRIDGE BUILT IN 1960. THE LUMP SUM BID FOR "REMOVAL OF EXISTING BRIDGE" SHALL INCLUDE REMOVAL AND DISPOSAL OF THE EXISTING STRUCTURE. ALL SALVAGEABLE MATERIAL AND UNSALVAGEABLE MATERIAL SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE SITE BY THE CONTRACTOR. THE EXISTING STRUCTURE SHALL BE REMOVED TO AN ELEVATION AT LEAST 1 FOOT BELOW FINISHED GROUNDLINE AND TO THE EXTENT THAT IT WILL NOT INTERFERE WITH THE NEW CONSTRUCTION. BROKEN CONCRETE FROM THE EXISTING BRIDGE WITH SIMILAR GRADATION TO CLASS 'E' REVETMENT MAY BE PLACED ON THE BANKS OUTSIDE THE LIMITS SHOWN FOR CLASS 'E' REVETMENT, WITH ENGINEER APPROVAL. ALL REINFORCING SHALL BE CUT OFF FLUSH WITH THE CONCRETE. HMA MATERIAL IS SPECIFICALLY EXCLUDED. ALTERNATIVELY, THE CONTRACTOR MAY DISPOSE OF THE BROKEN CONCRETE OFF SITE AT A LOCATION PROVIDED BY THE CONTRACTOR AND NOTED TO THE ENGINEER. NO ASBESTOS CONTAINING MATERIAL WAS DETECTED IN SAMPLES TESTED AS PART OF THE PRE-DEMOLITION HAZARDOUS BUILDING MATERIALS SURVEY REPORT. SEE GENERAL NOTES FOR PAINT SCRAPE SAMPLE RESULTS.

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ESTIMATE REFERENCE INFORMATION

ITEM NO.	ITEM CODE	DESCRIPTION
20	2402-2720000	EXCAVATION, CLASS 20
21	2402-2721000	EXCAVATION, CLASS 21 QUANTITY IS BASED ON THE ASSUMPTION THAT CHANNEL EXCAVATION AND NECESSARY BERM CONSTRUCTION HAVE BEEN COMPLETED. DEWATERING, PUMPING, TEMPORARY SHORING, AND ANY COFFERDAMS REQUIRED TO CONSTRUCT THE PILE BENT PIER ENCASEMENTS SHALL BE CONSIDERED INCIDENTAL TO CLASS 21 EXCAVATION. NO SEPARATE PAYMENT WILL BE MADE.
22	2403-0100010	STRUCTURAL CONCRETE (BRIDGE) INCLUDES THE COST OF PREFORMED EXPANSION JOINT MATERIAL, PVC PIPE IN WINGS AND CONCRETE SEALER ALONG EDGES OF SLAB. INCLUDES THE COST OF ALL MATERIAL AND LABOR TO CONSTRUCT THE WING ARMORING. INCLUDES THE COST OF WATER REQUIRED FOR FLOODING, SUBDRAINS, SUBDRAIN OUTLETS, BACKFILL MATERIAL, FLOODABLE BACKFILL, AND GEOTEXTILE FABRIC FURNISHED AT THE BRIDGE ABUTMENTS. CERTIFIED PLANT INSPECTION SHALL BE INCLUDED WITH THIS ITEM.
23	2403-1000005	FIBER REINFORCEMENT FOR STRUCTURAL CONCRETE THIS BID ITEM INCLUDES FIBER REINFORCEMENT IN THE CONCRETE FOR THE DECK, ABUTMENT DIAPHRAGMS, AND PIER DIAPHRAGMS. REFER TO THE DEVELOPMENTAL SPECIFICATION FOR FIBER REINFORCEMENT FOR STRUCTURAL CONCRETE FOR ADDITIONAL INFORMATION.
24	2403-1000010	TRIAL BATCH AND TEST PLACEMENT (FIBER REINFORCED CONCRETE) REFER TO THE DEVELOPMENTAL SPECIFICATION FOR FIBER REINFORCEMENT FOR STRUCTURAL CONCRETE FOR ADDITIONAL INFORMATION.
25	2404-7775000	REINFORCING STEEL
26	2404-7775005	REINFORCING STEEL, EPOXY COATED INCLUDES WEIGHT FOR PILE SPIRALS AND SPACERS WITH OPTIONAL EPOXY COATING.
27	2404-7775009	REINFORCING STEEL, STAINLESS STEEL
28	2407-0551142	BEAMS, PRETENSIONED PRESTRESSED CONCRETE, A42 INCLUDES COST OF NEOPRENE BEARING PADS AT THE PIERS. INCLUDES COST OF S3 X 7.5 BEARINGS AT THE ABUTMENTS.
29	2407-0551150	BEAMS, PRETENSIONED PRESTRESSED CONCRETE, A50 INCLUDES COST OF NEOPRENE BEARING PADS AT THE PIERS.
30	2408-7800000	STRUCTURAL STEEL INCLUDES COST OF FURNISHING AND INSTALLING STEEL INTERMEDIATE DIAPHRAGMS.
31	2412-0000100	LONGITUDINAL GROOVING IN CONCRETE, BRIDGE DECK PROVIDE LONGITUDINAL GROOVING BASED ON STANDARD SPECIFICATION SECTION 2412.
32	2414-6425410	CONCRETE BARRIER, REINFORCED, SEPARATION INCLUDES ALL MATERIAL, EQUIPMENT, AND LABOR FOR CONCRETE RAIL CONSTRUCTION, EXCEPT REINFORCING STEEL QUANTITY IS NOT INCLUDED AND BID SEPARATELY. ITEM INCLUDES COST OF FURNISHING AND INSTALLING CONDUIT, JUNCTION BOXES, FITTINGS, AND HANDHOLES. CERTIFIED PLANT INSPECTION SHALL BE INCLUDED WITH THIS ITEM.
33	2414-6444100	STEEL PIPE PEDESTRIAN HAND RAILING SEE STEEL PIPE PEDESTRIAN HAND RAIL NOTES ON PEDESTRIAN HAND RAIL SHEET.
34	2501-0201057	PILES, STEEL, HP 10 X 57 INCLUDES COST OF PILE POINTS. SEE PILE NOTES IN GENERAL NOTES.
35	2501-0201253	PILES, STEEL, HP 12 X 53 INCLUDES COST OF PILE POINTS. SEE PILE NOTES IN GENERAL NOTES.
36	2501-6335010	PREBORED HOLES
37	2502-8212034	SUBDRAIN, LONGITUDINAL, (SHOULDER) 4 IN. DIA. SEE TABULATION 104_9A AND SHEET D.01. SEE DR-303, TYPE 6 FOR INSTALLATION INSTRUCTIONS. CONNECTIONS TO ABUTMENT SUBDRAINS ARE INCIDENTAL TO THIS ITEM.
38	2505-4008120	REMOVAL OF STEEL BEAM GUARDRAIL
39	2505-4008300	STEEL BEAM GUARDRAIL SEE BA-200, BA-250, AND TABULATION 108_8A.
40	2505-4008420	STEEL BEAM GUARDRAIL BARRIER TRANSITION SECTION, BA-221 SEE BA-221 AND TABULATION 108_8A.
41	2505-4021010	STEEL BEAM GUARDRAIL END ANCHOR, BOLTED SEE BA-202 AND TABULATION 108_8A.
42	2505-4021722	STEEL BEAM GUARDRAIL TANGENT END TERMINAL, BA-225 SEE BA-225 AND TABULATION 108_8A.
43	2507-3250005	ENGINEERING FABRIC USE MATERIAL SPECIFIED FOR EMBANKMENT EROSION CONTROL ACCORDING TO ARTICLE 4196.01, B, 3. MATERIAL WILL BE MEASURED IN SQ. YDS. OF ACTUAL AREA COVERED. SEE EC-301. FABRIC TO BE INSTALLED UNDER ALL REVENTMENT AND EROSION STONE.
44	2507-6800061	REVETMENT, CLASS E REVETMENT SHALL BE PLACED AT A THICKNESS OF 2 FEET. SEE SHEET RR.01. ESTIMATED AT 1.6 TON/CU YD. MATERIAL USED SHALL MEET REQUIREMENTS OF ARTICLE 4130. BROKEN CONCRETE AND GRANITE IS NOT ALLOWED.
45	2507-8029000	EROSION STONE EROSION STONE SHALL BE PLACED AT A THICKNESS OF 18 INCHES. SEE SHEET RR.01. ESTIMATED AT 1.6 TON/CU YD. MATERIAL USED SHALL MEET REQUIREMENTS OF ARTICLE 4130. BROKEN CONCRETE AND GRANITE IS NOT ALLOWED.
46	2510-6745850	REMOVAL OF PAVEMENT IN ORDER TO AVOID ANY UNNECESSARY SURFACE BREAKS OR PREMATURE SPALLING, THE CONTRACTOR IS CAUTIONED TO EXERCISE EXTREME CARE WHEN PERFORMING ANY OF THE NECESSARY SAW CUTTING OPERATIONS FOR THE PROPOSED PAVEMENT REMOVAL. FULL-DEPTH SAWCUTTING ALONG THE REMOVAL LIMITS ARE INCIDENTAL TO THIS ITEM. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY ADDITIONAL REMOVALS, EARTHWORK, SUBGRADE PREPARATION, MODIFIED SUBBASE, AND PAVING EXPENSES DUE TO DAMAGED EXISTING PAVEMENT OUTSIDE OF THE REMOVAL LIMITS. REMOVAL OF GRANULAR SHOULDER IS INCIDENTAL TO THIS ITEM. BORINGS ENCOUNTERED EXISTING HMA WITH A THICKNESS OF 6-7.5 IN. WITH 4 IN. SUBBASE.

ESTIMATE REFERENCE INFORMATION

ITEM NO.	ITEM CODE	DESCRIPTION
47	2519-1002048	FENCE, CHAIN LINK, 48 IN. HEIGHT SEE CHAIN LINK FENCE NOTES ON FENCE DETAILS SHEET WITHIN V SERIES.
48	2519-4200190	REMOVAL OF FENCE, WOOD SEE SHEET F.01.
49	2524-6765210	REMOVAL OF TYPE A SIGN ASSEMBLY SEE SHEET F.01. THIS ITEM FOR THE REMOVAL OF TYPE A SIGN ASSEMBLIES, INCLUDING THE SIGN PANELS, SIGN BRACKETS, SUPPORTING STRUCTURES AND HARDWARE. THE ENGINEER WILL COUNT THE NUMBER OF SIGN ASSEMBLIES REMOVED.
50	2524-9276010	PERFORATED SQUARE STEEL TUBE POSTS SEE TABULATIONS 190_51, 190_62, 190_66, AND SHEET N.01.
51	2524-9276021	PERFORATED SQUARE STEEL TUBE POST ANCHOR, BREAK-AWAY SOIL INSTALLATION SEE TABULATIONS 190_51, 190_62, 190_66, AND SHEET N.01.
52	2524-9325001	TYPE A SIGNS, SHEET ALUMINUM SEE TABULATIONS 190_51, 190_62, 190_66, AND SHEET N.01. SEE TABULATION 108_8A FOR INCIDENTAL SIGNAGE TO GUARDRAIL ITEM(S).
53	2524-9325150	INSTALL TYPE A SIGN SEE TABULATIONS 190_51, 190_62, 190_66, AND SHEET N.01. THE CONTRACTOR SHALL FURNISH ALL NECESSARY HARDWARE TO INSTALL THE TYPE A SIGNS EXCEPT WHERE NOTED OTHERWISE.
54	2526-8285030	CONSTRUCTION SURVEY, RIGHT OF WAY
55	2526-8285040	CONSTRUCTION SURVEY, LOCATION SURVEY THIS ITEM IS FOR ALL SURVEY WORK NECESSARY FOR CONSTRUCTION OF THIS PROJECT AS DETAILED ON THE CONSTRUCTION DOCUMENTS AND APPROVED REVISIONS. ELECTRONIC DRAWINGS ARE AVAILABLE FOR THE CONTRACTORS USE.
56	2528-2518000	SAFETY CLOSURE SEE SHEET J.01.
57	2528-8445110	TRAFFIC CONTROL SEE SHEET J.01 FOR SIGNAGE PLAN AND TABULATION 108_23A.
58	2528-9290050	PORTABLE DYNAMIC MESSAGE SIGN (PDMS) ONE PDMS SIGN SHALL BE PLACED AT THE NEAREST INTERSECTIONS ON BOTH SIDES OF WISCONSIN AVE. SIGNS SHALL BE PLACED FOURTEEN (14) CALENDAR DAYS PRIOR TO THE CLOSURE OF WISCONSIN AVE. MESSAGE SHALL READ "WISCONSIN AVE CLOSED - AT BRIDGE - BEGINNING MM/DD"
59	2533-4980005	MOBILIZATION
60	2601-2634100	MULCHING ITEM IS A CONTINGENCY ITEM TO BE USED TO SATISFY NPDES PERMIT REQUIREMENTS FOR STABILIZING DISTURBED AREAS DURING CONSTRUCTION. PERFORM MULCHING ACCORDING TO ARTICLE 2601.03, E, 2, OF THE STANDARD SPECIFICATIONS. ANCHOR MULCH INTO THE SOIL USING MULCH ANCHORING EQUIPMENT WITH A MINIMUM OF TWO PASSES. ESTIMATED QUANTITY IS TWICE THE SEEDING LIMITS AS SHOWN ON RR.01.
61	2601-2634105	MULCHING, BONDED FIBER MATRIX APPLY BONDED FIBER MATRIX AS THE MULCH FOR ALL AREAS DESIGNATED AS "SEEDING AND FERTILIZING (RURAL)". APPLY SEED AND FERTILIZER FOR THE AREA TO BE COVERED BEFORE APPLYING BONDED FIBER MATRIX MULCH. APPLY BONDED FIBER MATRIX MULCH AT A RATE OF A MINIMUM OF 3000 POUNDS PER ACRE.
62	2601-2636043	SEEDING AND FERTILIZING (RURAL)
63	2601-2640350	SPECIAL DITCH CONTROL, WOOD EXCELSIOR MAT ITEM TO BE USED ON ALL SLOPES GREATER THAN OR EQUAL TO 3:1. SEE SHEET RR.01. PREPARE SEEDBED ACCORDING TO ARTICLE 2601.03, B, 4 OF THE STANDARD SPECIFICATIONS. INSTALL WOOD EXCELSIOR MAT ACCORDING TO ARTICLE 2601.03, H, 2, OF THE STANDARD SPECIFICATION
64	2602-0000020	SILT FENCE SEE TABULATION 100_17 AND SHEET RR.01. THE ENGINEER MAY ADJUST SILT FENCE LOCATIONS TO FIT FIELD CONDITIONS.
65	2602-0000071	REMOVAL OF SILT FENCE OR SILT FENCE FOR DITCHCHECKS THIS ITEM IS INCLUDED FOR SILT FENCE AND SILT FENCE FOR DITCH CHECK REMOVAL REQUIRED FOR STAGING REASONS, REMOVAL TO ALLOW FOR REPLACEMENT (REPLACEMENT TO BE PAID SEPARATELY), OR FOR AREAS THAT HAVE ACHIEVED 70% PERMANENT GROWTH.THIS ITEM IS INCLUDED FOR SILT FENCE AND SILT FENCE FOR DITCH CHECK REMOVAL. REMOVE SILT FENCE AND POSTS AFTER MULCHING OR VEGETATION IS ESTABLISHED AND APPROVED BY THE ENGINEER.
66	2602-0000101	MAINTENANCE OF SILT FENCE OR SILT FENCE FOR DITCH CHECK THIS ITEM IS INCLUDED FOR CLEAN-OUT AND REPAIR OF THE SILT FENCE AND SILT FENCE FOR DITCH CHECKS DURING THE PROJECT.
67	2602-0000150	STABILIZED CONSTRUCTION ENTRANCE, EC-303
68	2602-0010010	MOBILIZATIONS, EROSION CONTROL
69	2602-0010020	MOBILIZATIONS, EMERGENCY EROSION CONTROL

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105_04
10/20/26

STANDARDS

The following Standards apply to construction work on this project.

Number	Date	Title
BA-200	10-20-26	Steel Beam Guardrail Components
BA-202	10-20-26	Steel Beam Guardrail Bolted End Anchor
BA-221	10-18-22	Steel Beam Guardrail Barrier Transition Section (MASH TL-2)
BA-225	10-17-23	Steel Beam Guardrail Tangent End Terminal (MASH TL-2)
BA-250	10-20-26	Steel Beam Guardrail Installation at Concrete Barrier or Bridge End Post (MASH TL-3)
BR-101	10-20-26	Bridge Approach Section (General Details)
BR-102	10-20-26	Bridge Approach Section (Two-Lane, Abutting PCC Pavement)
BR-203	10-20-26	Double Reinforced 12in Approach
BR-211	04-21-26	Bridge Approach (Abutting PCC or Composite Pavement)
DR-303	10-17-17	Subdrains (Longitudinal)
EC-103	04-21-15	Wood Excelsior Mat for Slope Protection
EC-201	04-20-21	Silt Fence
EC-204	10-19-21	Perimeter, Slope and Ditch Check Sediment Control Devices
EC-301	10-18-22	Rock Erosion Control (REC)
EC-303	10-19-21	Stabilized Construction Entrance
EC-502	04-21-15	Seeding in Rural Areas
EW-101	10-17-17	Embankment and Rebuilding Embankments
EW-202	04-19-16	Bridge Berm Grading without Recoverable Slope (Non-Barnroof Section)
EW-401	10-20-15	Temporary Stream Crossing, Causeway, or Equipment Pad
LI-103	10-21-25	Conduit and Precast Handholes
LI-104	10-21-14	Junction box (cast Iron)
PV-101	10-20-26	Joints
SI-101	04-19-16	Locations - Type 'A' Signs
SI-112	04-19-16	Footings For Steel Breakaway Posts
SI-113	10-15-19	Support Structures - Steel Breakaway Posts
SI-131	10-18-16	Installation - Type 'A' Signs
SI-173	04-19-16	Object Markers
SI-211	10-18-22	Object Marker and Delineator Placement with Guardrail
TC-252	10-20-26	Routes Closed to Traffic

111_25
10/20/26

INDEX OF TABULATIONS

Tabulation	Tabulation Title	Sheet No.
281_01	SECTION 404 PERMIT AND CONDITIONS	A.01
105_04	STANDARD ROAD PLANS	C.03
111_25	INDEX OF TABULATIONS	C.03
110_17	CLEARING AND GRUBBING	C.03
100_24	PCC PAVEMENT	C.04
110_01	REMOVAL OF PAVEMENT	C.04
108_08A	STEEL BEAM GUARDRAIL AT CONCRETE BARRIER OR BRIDGE RAIL END SECTION	C.05
112_06	BRIDGE APPROACH SECTION	C.05
104_09A	LONGITUDINAL SUBDRAIN SHOULDER	C.05
112_09	SHOULDERS	C.06
100_17	TABULATION OF SILT FENCES	C.06
190_51	MATERIALS FOR TYPE A SIGNS	C.07
190_62	EXISTING SIGNS TO BE REMOVED	C.07
190_66	SUMMARY OF TYPE A SIGNS	C.07
100_22	ROLLED EROSION CONTROL	C.07
282_03	TEMPORARY STREAM CROSSING, CAUSEWAY, OR EQUIPMENT PAD	C.08
290_01	SIDEWALK CONSTRAINTS WITHIN CITY LIMITS	C.08
108_26A	STAGING NOTES	J.01
110_12	POLLUTION PREVENTION PLAN	RC.01-2
113_10	SIDEWALK COMPLIANCE	S.01
113_10A	SIDEWALK COMPLIANCE VALUES	S.01

EXCAVATION (APPROXIMATE)

TOTAL SITE CUT (0.85 SHRINK FACTOR):	950 BCY
TOTAL SITE FILL:	2,200 CCY
EMBANKMENT-IN-PLACE (CONTRACTOR FURNISHED BORROW):	1,250 CCY
EXCAVATION, CLASS 10, ROADWAY AND BORROW:	800 BCY
EXCAVATION, CLASS 10, CHANNEL:	150 BCY

110_17
1/27/25

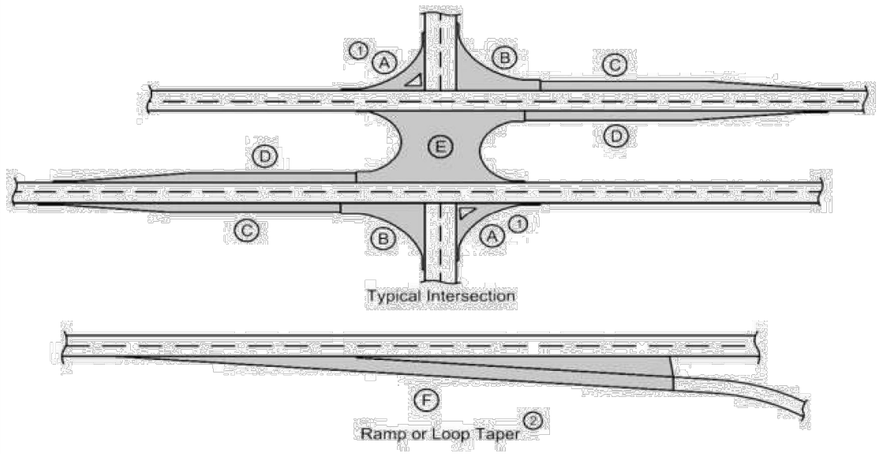
CLEARING AND GRUBBING

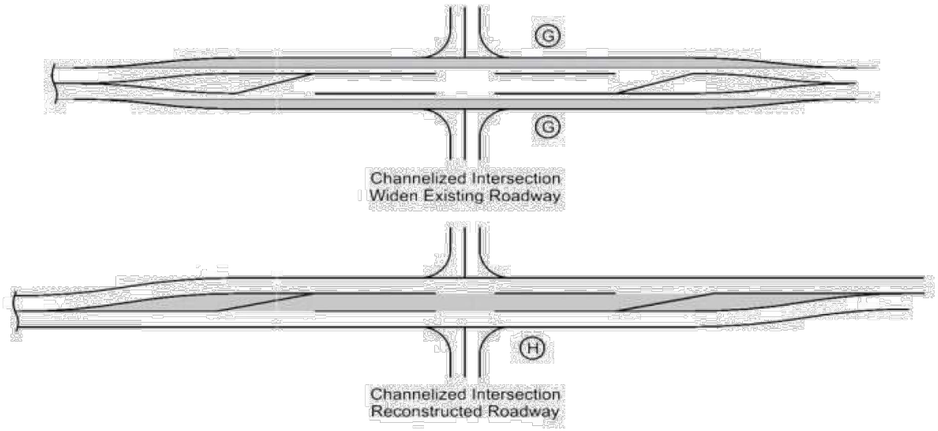
Line No.	Station From	Direction of Traffic	Work and Material Type	>3"-6"	Other Materials Length (FT)	Other Materials Width (FT)	Estimated Units	Estimated Area (Acres)	Estimated Herbicide Application (EA)	Remarks
1.0	99+83.77	NB	Trees - Clearing and Grubbing	1			1.6			25.12' RT
2.0	99+86.65	NB	Trees - Clearing and Grubbing	1			1.6			38.76' RT
3.0	99+92.19	NB	Trees - Clearing and Grubbing	1			1.6			36.74' RT
4.0	99+95.21	NB	Trees - Clearing and Grubbing	1			1.6			42.06' RT
5.0	102+57.68	NB	Trees - Clearing and Grubbing	1			1.6			28.09' RT
Total				5			8.0			

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100_24
10/15/24

PCC PAVEMENT





(1) Does not include raised island area or curb. Refer to tabulation 112-4 for quantities.
(2) Refer to PV-410, PV-411, PV-412, and PV-414.
(3) Quantity includes Pavement Header.

Line No.	Road Identification	Direction of Travel	Station From	Station To	Width (FT)	Length (FT)	Area (SY)	Area by Thickness - Thickness(IN)	Area by Thickness - Area (SY)	Polymer Grid (SY)	Modified Subbase (CY)	Remarks
1.0	Wisconsin Ave	Both	98+65.88	99+30.88	22.0	65.00	158.90	8.0	158.9	256.00	56.90	INLCUDES POLY GRID & SUBBASE QUANT FOR PAVED SHLDR
2.0	Wisconsin Ave	Both	101+92.71	102+57.71	22.0	65.00	158.90	8.0	158.9	256.00	56.90	INLCUDES POLY GRID & SUBBASE QUANT FOR PAVED SHLDR
Total:									**317.8**	**512**	**113.8**	

110_01
4/5/24

REMOVAL OF PAVEMENT

Refer to Tabulation 102-5.

* Not a bid item.

Line No.	Station From	Station To	Side	Pavement Type	Length (FT)	Width (FT)	Area (SY)	Saw Cut* (LF)	Remarks
1.0	98+65.88	100+00.00	Both	HMA	134.10	23.7	353.2	23.7	BEGIN PROJECT TO BRIDGE
2.0	101+27.02	102+57.71	Both	HMA	130.70	23.7	344.2	23.7	BRIDGE TO END PROJECT
3.0									BORINGS ENCOUNTERED EXISTING HMA WITH THICKNESS OF 6 - 7.5" WITH 4" SUBBASE
Total							697.4	47.4	

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108_08A
4/25/25

STEEL BEAM GUARDRAIL AT CONCRETE BARRIER OR BRIDGE RAIL END SECTION

Possible Standards: BA-200, BA-201, BA-202, BA-205, BA-206, BA-209, BA-210, BA-211, BA-221, BA-225, BA-250, BA-260, LS-625, LS-626, LS-630, LS-635, SI-172, SI-173 and SI-211.

(1) Lane(s) to which the obstacle is adjacent.
(2) Not a bid item. Incidental to guardrail installation.

Line No.	Direction of Travel (1)	Side	Station	Offset (FT)	Barrier Transition Section	Barrier Transition Section (EA)	End Terminal	End Terminal Count (EA)	VT1 (LF)	VF (LF)	ET (LF)	BA-211 Station	BA-211 (Type)	SI-211 (Type) (2)	Delineator SI-172 Type 1 (EA) (2)	Object Marker Type 2 (EA) (2)	Object Marker Type 3 Lt (EA)(2)	Object Marker Type 3 Rt (EA)(2)	Bolted End Anchor BA-202 (Type)	Bolted End Anchor BA-202 (EA)	Steel Beam Guardrail BA-200 (LF)	Remarks
1.0	NB	Right	99+87.43	15.0	BA-221	1	BA-225	1	53.120	12.50	35.17	99+34.25	1	1	3	3		1	A	1	12.5	
2.0	SB	Left	99+87.43	15.0	BA-221	1	BA-225	1	53.120	12.50	35.17	99+34.25	1	1	3	3	1		A	1	12.5	
3.0	NB	Right	101+36.16	15.0	BA-221	1	BA-225	1	53.120	12.50	35.17	101+89.29	1	1	3	3		1	A	1	12.5	
4.0	SB	Left	101+36.16	15.0	BA-221	1	BA-225	1	53.120	12.50	35.17	101+89.29	1	1	3	3	1		A	1	12.5	
Total						4		4							12	12	2	2		4	50.0	

112_06
10/20/26

BRIDGE APPROACH SECTION

Refer to the BR Series.

* Not a bid item
** Verify layout of bridge approach does not conflict with guardrail posts.

Line No.	Bridge Station	End	(T) Thickness (IN)	Pay Length (FT)	Non-Reinf. Area (SY)	Single-Reinf. Area (SY)	Double-Reinf. Area (SY)	SRP Approach	SRP Abutment Type	SRP Abutting Pavement	Perforated * 4" Subdrain (LF)	Subdrain * Outlet (STA)	Modified * Subbase (TON)	Polymer * Grid (SY)	Remarks
1.0	99+30.88	S	10.0	60.0	62.2	62.2	62.2	BR-203	Movable	BR-211	91.0	100+10.88	134.400	213.3	OMIT CURB, AS SHOWN IN BR-203 DETAIL 'G', FROM PAVEMENT
2.0	102+57.71	N	10.0	60.0	62.2	62.2	62.2	BR-203	Movable	BR-211	91.0	101+12.78	134.400	213.3	OMIT CURB, AS SHOWN IN BR-203 DETAIL 'G', FROM PAVEMENT
Total				120.0	124.4	124.4	124.4				182.0		268.800	426.6	

104_09A
5/6/24

LONGITUDINAL SUBDRAIN SHOULDER

* Not a bid item.

Line No.	Road or Lane Identification	Station From	Station To	Side	Depth (IN) (D)	Subdrain Size (IN)	Length (FT)	Porous Backfill* (CY)	Remarks
1.0	Wisconsin Ave	98+72.90	99+89.88	Right	30.0	4.0	147.0	9.1	Tie to abutment subdrain
2.0	Wisconsin Ave	98+73.03	99+89.88	Left	30.0	4.0	146.8	9.1	Tie to abutment subdrain
3.0	Wisconsin Ave	101+33.76	102+50.86	Right	30.0	4.0	147.1	9.1	Tie to abutment subdrain
4.0	Wisconsin Ave	101+33.66	102+57.71	Left	30.0	4.0	154.0	9.5	Tie to abutment subdrain
Total							594.9		

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112_09
4/21/26

SHOULDERS

(1) Lane(s) to which the shoulder is adjacent.
(2) See Typ. 7156, 7157, or 7158.
(3) Bid Item.
(4) Applies only for Paved Shoulders constructed on project with existing granular shoulders.
(5) Bid Item. Typ. 7156, 7157, or 7158.
(6) Does not include shrink.
(7) Paved shoulder thickness specified in Remarks.
(8) Subbase type specified in Remarks.

Roadway Identification	Direction of Travel (1)	Station From	Station To	Side	P Width (FT)	P SG Width (2) (FT)	G Width (FT)	L Length (FT)	Paved Shoulder (3) (SY)	Polymer Grid (SY)	Subbase (3) (8) (CY)	Granular Shoulder (3) (TON)	Remarks
Wisconsin Ave	NB	98+65.88	99+30.88	Left	VARIES			65.00	26.6				PV'D SHLDR POLY GRID/ SUBBASE INCLUDED IN PVMT TAB
Wisconsin Ave	NB	98+65.88	99+30.88	Right	VARIES			65.00	26.6				PV'D SHLDR POLY GRID/ SUBBASE INCLUDED IN PVMT TAB
Wisconsin Ave	SB	98+65.88	99+90.88	Left			VARIES	125.00				38.600	
Wisconsin Ave	SB	98+65.88	99+90.88	Right			VARIES	125.00				38.600	
Wisconsin Ave	NB	101+32.71	102+57.71	Left			VARIES	125.00				38.600	
Wisconsin Ave	NB	101+32.71	102+57.71	Right			VARIES	125.00				38.600	
Wisconsin Ave	SB	101+92.71	102+57.71	Left	VARIES			65.00	26.6				PV'D SHLDR POLY GRID/ SUBBASE INCLUDED IN PVMT TAB
Wisconsin Ave	SB	101+92.71	102+57.71	Right	VARIES			65.00	26.6				PV'D SHLDR POLY GRID/ SUBBASE INCLUDED IN PVMT TAB
Total:									**106.4**			**154.4**	

100_22
8/15/22

ROLLED EROSION CONTROL

Refer to EC-101, EC-103 and EC-104.

Line No.	Road Identification	Station From	Station To	Side	Length (FT)	Width (FT)	Slope Protection (EC-103) (Squares)	Remarks
1.0	WISCONSIN AVE	98+32.50	100+63.74	Left	231.0	28.0	56.0	Dimension varies, quantity from CAD
2.0	WISCONSIN AVE	98+37.67	100+57.72	Right	220.0	26.0	51.0	Dimension varies, quantity from CAD
3.0	WISCONSIN AVE	100+87.61	102+92.29	Right	205.0	28.0	49.0	Dimension varies, quantity from CAD
4.0	WISCONSIN AVE	100+88.36	102+93.78	Left	205.0	37.0	62.0	Dimension varies, quantity from CAD
Total:							**218**	

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190_51
2/10/23

MATERIALS FOR TYPE 'A' SIGNS

Refer to SI-101, SI-111, SI-119 and N Sheets.

Sign Number	Dir. of Travel	Sign Location Station	Perf. Sq. Steel Leg 1 (FT)	Perf. Sq. Anchor Type	Anchor Quantity (EA)	Type A Bracket One Post	Install. Type	Install. Dim X (FT)	Install. Signing Notes	Remarks
I3-X	NB	99+80.00	10.0	Soil	1	1	1	10.0		
I3-X	SB	101+45.00	10.0	Soil	1	1	1	10.0		
										SEE GUARDRAIL TAB FOR INCIDENTAL OM SIGNS
Total:			**20**		**2**	**2**				

190_62
2/13/23

EXISTING SIGNS TO BE REMOVED

Line No.	Sign Number or Description	Location Station	Direction of Travel	Type 'A' Sign Assembly (RA) (EA)	Type 'A' Remove and Reinstall (RR) (EA)	Concrete Foundation (RF) (EA)	Support Structure & Foundation (RS) (EA)	Applicable Signing Notes	Remarks
1.0	OM-3L	99+82.26	Left	1					
2.0	OM-3R	99+83.29	Right	1					
3.0	I3-X	99+84.42	Right	1					
4.0	OM-3R	101+40.77	Left	1					
5.0	I3-X	101+40.77	Left	1					
6.0	OM-3L	101+41.51	Right	1					
Total:				**6**					

190_66
9/29/23

SUMMARY OF TYPE 'A' SIGNS

Line No.	Non-Standard Sign Number or Name	Quantity (EA)	Size (IN)	Total Sign Area (SF)	Remarks
1.0	I3-X 'DUCK CREEK	1	24 x 30	5.0	
2.0	I3-X 'DUCK CREEK	1	24 x 30	5.0	
Total:				**10**	

100_17
8/15/22

TABULATION OF SILT FENCES

Refer to EC-201

Line No.	Station From	Station To	Side	Length (FT)	Remarks
1.0	98+30.98	100+47.75	Left	277.00	
2.0	98+37.03	100+43.76	Right	254.00	
3.0	98+45.15	99+85.24	Left	149.00	
4.0	98+49.76	99+83.88	Right	147.00	
5.0	99+82.65	100+04.75	Right	37.00	
6.0	99+92.79	100+11.18	Left	43.00	
7.0	101+02.23	102+89.10	Right	245.00	
8.0	101+06.38	102+93.78	Left	255.00	
9.0	101+27.31	101+38.70	Right	36.00	
10.0	101+27.69	101+48.73	Left	48.00	
11.0	101+39.13	102+67.73	Right	146.00	
12.0	101+39.47	102+69.75	Left	151.00	
Total:				**1788**	

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282_03
9/28/22

TEMPORARY STREAM CROSSING, CAUSEWAY, OR EQUIPMENT PAD

Standard Road Plan EW-401 is listed in Tabulation 105-4; however, it is included for information purposes only since it is an option. No quantities associated with constructing EW-401 are included in any bid items.

290_01
9/28/22

SIDEWALK CONSTRAINTS WITHIN CITY LIMITS

Subtitle to shift change in title Information

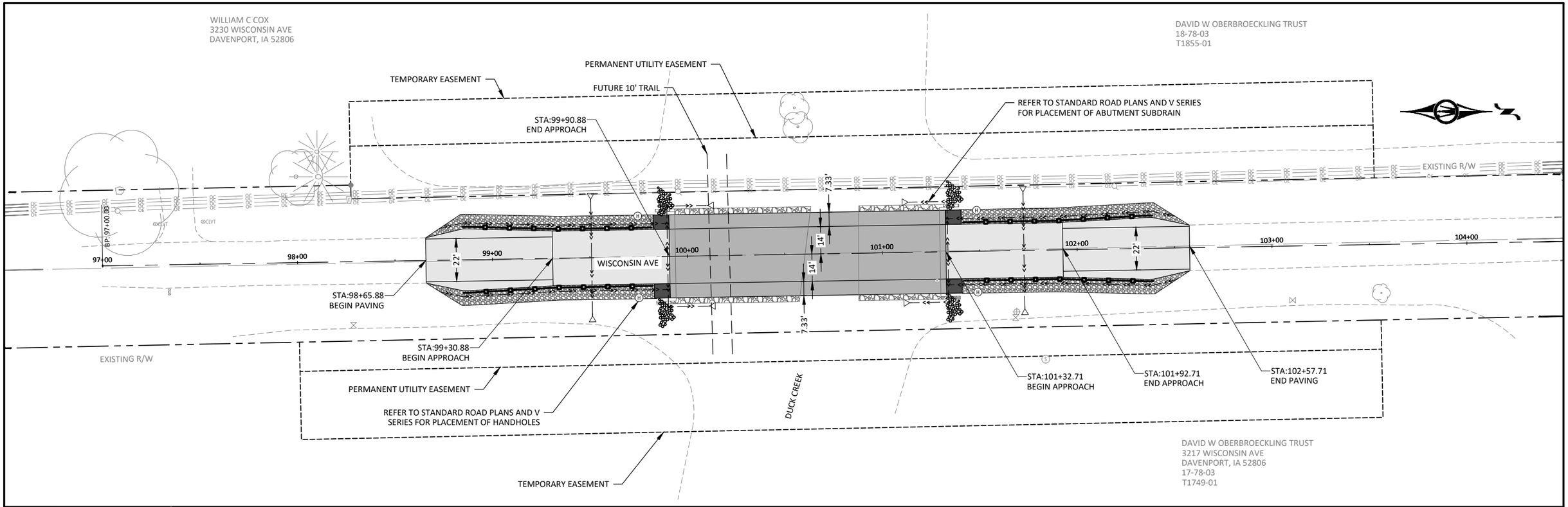
1. Widths:
   Widths listed in the S sheets are minimums.

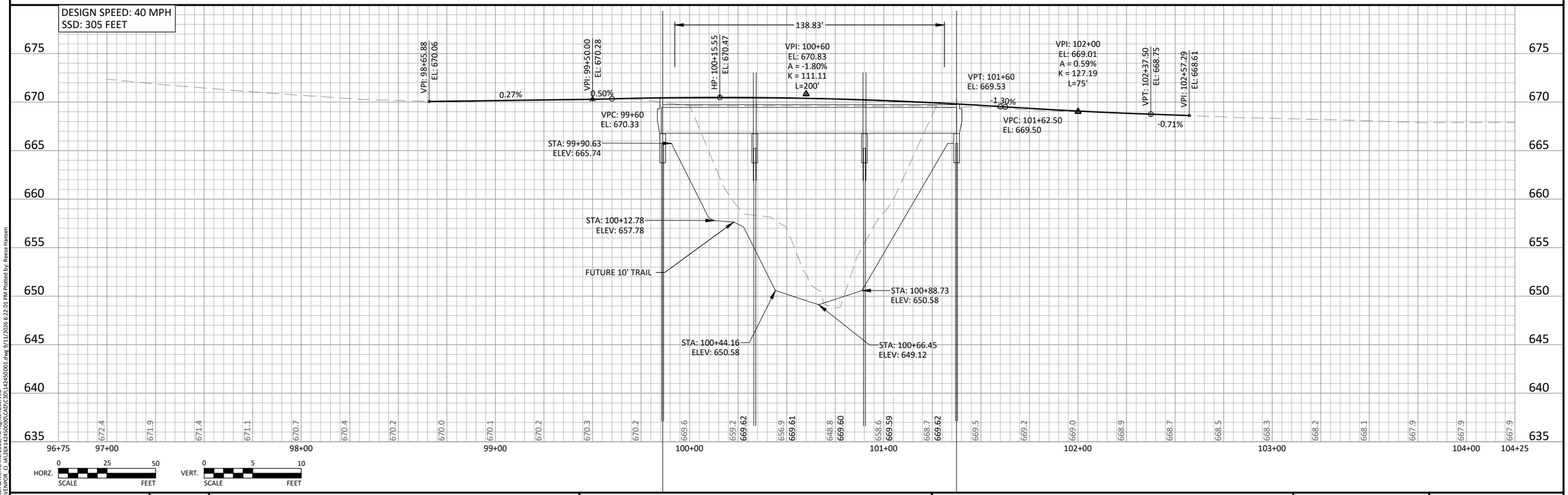
2. Cross Slopes:
   Construct all sidewalks, curb ramps, and landings/turning spaces at a target cross slope of 1.5%. Cross slopes exceeding 2.0% will not be allowed, except for areas tying into existing pavement. In these areas, transition from existing pavement cross slope to a cross slope of less than 2.0% within one panel at a rate not to exceed 1.0% per foot.

3. Longitudinal Slopes:
   a. Sidewalk:
      i. Roadway slope exceeds 5.0%: Sidewalk longitudinal slope exceeding the roadway slope by more than 2.0% will not be allowed.
      ii. Roadway slope 5.0% or less: Sidewalk longitudinal slope exceeding 5.0% will not be allowed.
   b. Ramps:
      i. Ramps 15.0’ in length or less: Longitudinal slope exceeding 8.3% will not be allowed.
      ii. Ramps greater than 15.0’ in length: Construct with the longitudinal slope necessary to conform to the design.

4. Landing/Turning Spaces:
   Longitudinal slopes exceeding 2.0% will not be allowed.

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ENGLISH	IOWA DOT	DESIGN TEAM EVANS\BOLTON & MENK INC	CITY OF DAVENPORT, IOWA	SCOTT COUNTY	PROJECT NUMBER BROS-1827(711)--8J-82	SHEET NUMBER D.01	REVISED

WILLIAM C COX
3230 WISCONSIN AVE
DAVENPORT, IA 52806

DAVID W OBERBROECKLING TRUST
18-78-03
T1855-01

STA:100+75.00
REMOVAL OF EXISTING BRIDGE

STA:101+36.77
18.21' LT
REMOVE FENCE &
REMOVE SIGNAGE

TEMPORARY DE-ENERGIZING AND/OR RELOCATION
OF OVERHEAD ELECTRIC & COMMUNICATIONS FOR
CONSTRUCTION ACTIVITIES BY OTHERS

STA:99+89.99
15.60' LT
REMOVE FENCE &
REMOVE SIGNAGE

55 SY OF GRANULAR SHOULDER REMOVAL
(INCIDENTAL)

EXISTING R/W

97+00 98+00 99+00 100+00 101+00 102+00 103+00 104+00

199 662 663 664 665 666 667 668 669 670

660 661 662 663 664 665 666 667 668 669

STA:98+65.88
BEGIN PAVEMENT REMOVAL

EXISTING HMA PAVEMENT

WISCONSIN AVE

STA:102+57.71
END PAVEMENT REMOVAL

STA:102+57.68
28.09' RT
CLEARING & GRUBBING

STA:100+00.00
END PAVEMENT REMOVAL

STA:99+81.81
17.34' RT
REMOVE FENCE &
REMOVE SIGNAGE

STA:99+95.21
42.06' RT
CLEARING & GRUBBING

DUCK CREEK

STA:101+27.02
BEGIN PAVEMENT REMOVAL

STA:101+36.67
17.51' RT
REMOVE FENCE &
REMOVE SIGNAGE

40 SY OF GRANULAR SHOULDER REMOVAL
(INCIDENTAL)

STA:101+68.50
31.45' RT
HYDRANT RELOCATION
BY OTHERS

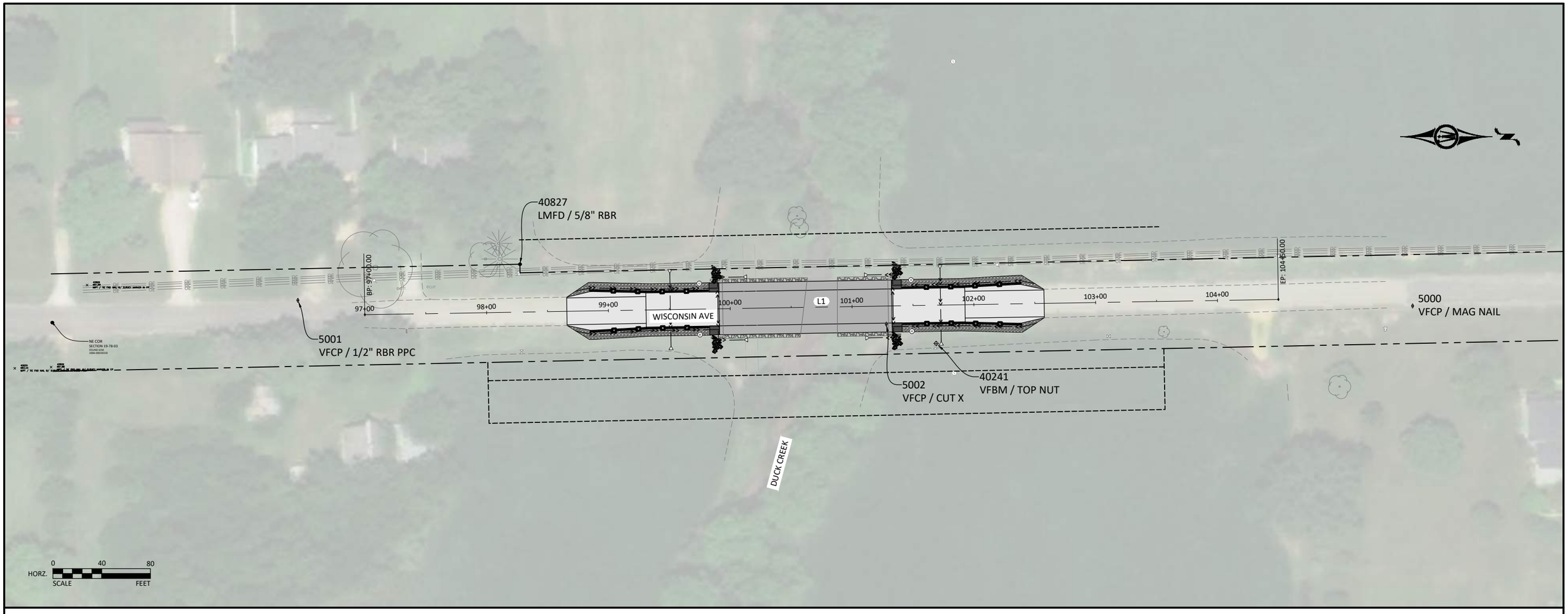
DAVID W OBERBROECKLING TRUST
3217 WISCONSIN AVE
DAVENPORT, IA 52806
17-78-03
T1749-01

LOCATION APPROXIMATE
(NOT SURVEYED)

HORZ. SCALE 0 25 50 FEET

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ENGLISH	IOWA DOT	DESIGN TEAM EVANS\BOLTON & MENK INC	CITY OF DAVENPORT, IOWA	SCOTT COUNTY	PROJECT NUMBER BROS-1827(711)--8J-82	SHEET NUMBER F.01	REVISED



WISCONSIN AVE ALIGNMENT											
NUMBER	START STATION	END STATION	LENGTH	DELTA	RADIUS	CHORD	START NORTHING	START EASTING	END NORTHING	END EASTING	LINE / CHORD DIRECTION
L1	97+00	104+50	750.00'				578,747.33	2,420,605.86	579,497.23	2,420,593.32	N0° 57' 29"W

FOUND MONUMENTS				
POINT NUMBER	RAW DESCRIPTION	ELEVATION	NORTH	EAST
40241	VFBM / TOP NUT	662.595	579216.29	2420629.47
40825	LMFD / SCR PENNY NAIL	674.035	581142.30	2420557.97
40827	LMFD / 5/8" RBR	663.376	578874.61	2420564.40
40831	LMFD / SCR 4X4" CONC MON W/ BRASS CAP	680.417	578490.72	2420612.34

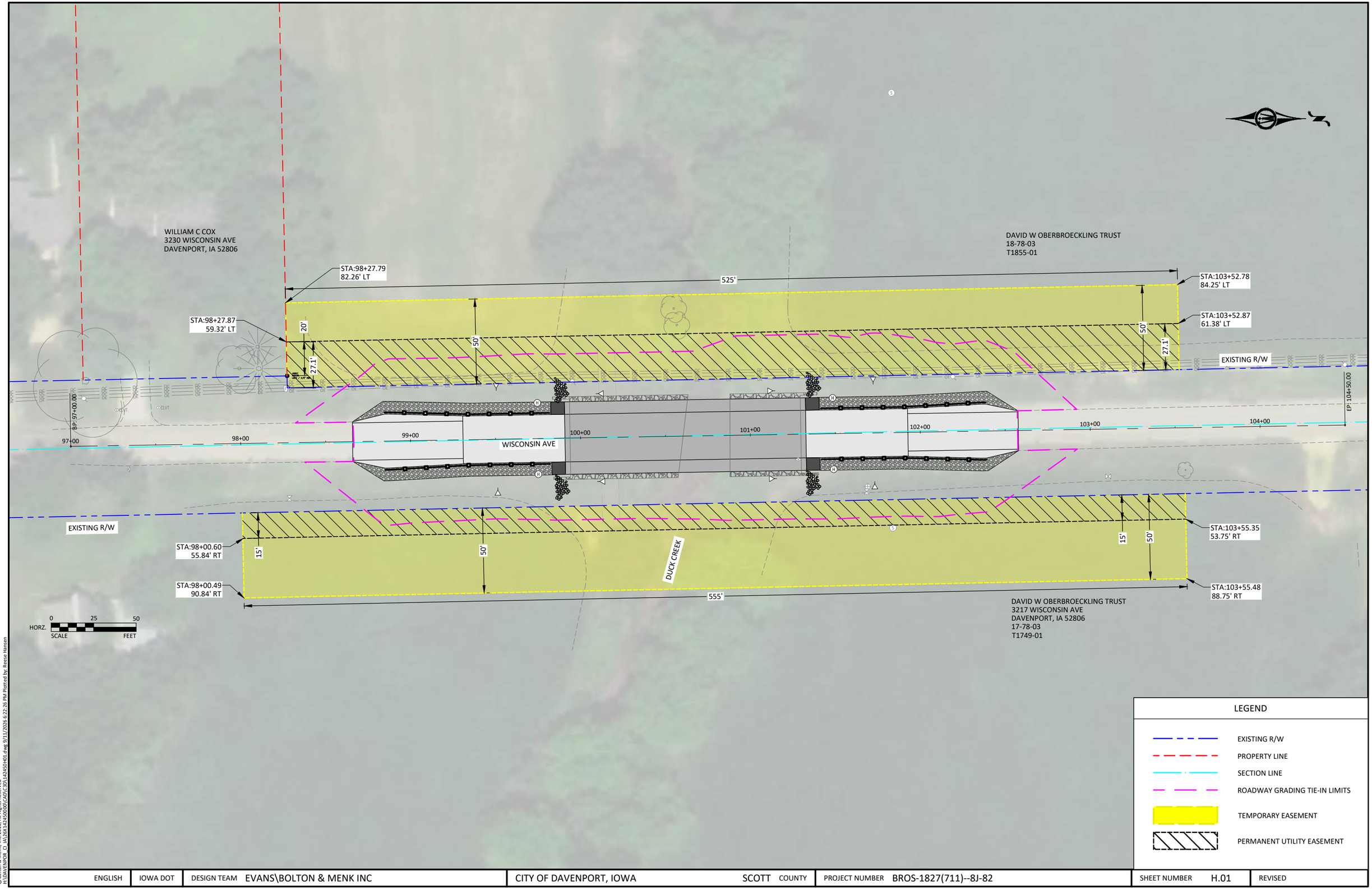
PROJECT DATUM:

HORIZONTAL: NAD83 IOWA STATE PLANE, ZONE SOUTH, US SURVEY FEET

VERTICAL: NAVD88, US SURVEY FEET

CONTROL POINT DATA				
POINT NUMBER	RAW DESCRIPTION	ELEVATION	NORTH	EAST
5000	VFCP / MAG NAIL	667.343	579607.41	2420598.63
5001	VFCP / 1/2" RBR PPC	673.432	578692.37	2420593.99
5002	VFCP / CUT X	670.345	579175.45	2420613.56

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ENGLISH	IOWA DOT	DESIGN TEAM EVANS\BOLTON & MENK INC	CITY OF DAVENPORT, IOWA	SCOTT COUNTY	PROJECT NUMBER BROS-1827(711)--8J-82	SHEET NUMBER H.01	REVISED

W20-3
(48 X 48)

SIGN 1



W20-2
(48 X 48)

SIGN 2



LEGEND

- TRAFFIC SIGN
- TYPE III BARRICADE
- PORTABLE DYNAMIC MESSAGE SIGN
- WORK AREA
- ROAD CLOSURE

HORZ. SCALE 0 1000 2000 FEET

108_23A

8/15/22

TRAFFIC CONTROL PLAN

1. THE CONTRACTOR SHALL COORDINATE TRAFFIC CONTROL WITH OTHER PROJECTS IN THE AREA, AS NECESSARY. TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH THE CLOSURES SHOWN ON J.01.

2. SIGN SPACING MAY BE MODIFIED, AS APPROVED BY THE ENGINEER, TO MEET EXISTING FIELD RESTRICTIONS, OR TO PREVENT OBSTRUCTION OF THE MOTORIST'S VIEW OF PERMANENT SIGNING.

3. THIS LAYOUT DOES NOT INCLUDE ALL BARRICADES AS MAY BE REQUIRED BY THE STANDARD SPECIFICATIONS SECTION 2528.

4. THE CONTRACTOR SHALL FURNISH THE CITY WITH NAMES AND TELEPHONE NUMBERS OF INDIVIDUALS RESPONSIBLE FOR THE MAINTENANCE OF TRAFFIC CONTROL DEVICES AND SIGNING. THE INDIVIDUAL(S) SHALL BE AVAILABLE FOR CORRECTIVE ACTION 24 HOURS A DAY, 7 DAYS A WEEK.

5. THE CONTRACTOR SHALL NOTIFY THE CITY OF STREET CLOSURE AT LEAST TWO (2) WEEKS PRIOR TO THE CLOSURE. STREET CLOSURE NOTIFICATION TO BE ISSUED BY THE CITY TWO (2) WEEKS PRIOR TO CLOSURE. THE CONTRACTOR SHALL COORDINATE CLOSURE WITH THE CITY TO ENSURE THE ABOVE DEADLINES ARE ACHIEVED.

6. THE CONTRACTOR SHALL FURNISH, INSTALL, MAINTAIN, MOVE, AND REMOVE ALL TRAFFIC CONTROL DEVICES ON THE PROJECT. ALL SIGNS SHALL BE REFLECTORIZED AND CONFORM AS TO THE DESIGN, COLOR, SIZE, AND LEGEND OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS, AS ADOPTED BY THE DEPARTMENT PER 761 OF THE IOWA ADMINISTRATIVE CODE (IAC), CHAPTER 130.

7. THE LOCATION FOR STORAGE OF EQUIPMENT BY THE CONTRACTOR DURING NONWORKING HOURS SHALL BE AS APPROVED BY THE ENGINEER, AND THE CONTRACTOR SHALL PROVIDE A WRITTEN AGREEMENT WITH THE PROPERTY OWNER.

8. NO PEDESTRIAN FACILITIES ARE PRESENT WITHIN THE SEGEMENT OF WISCONSIN AVE TO BE CLOSED.

9. PROPOSED CHANGES IN THE TRAFFIC CONTROL PLAN SHALL BE REVIEWED WITH THE ENGINEER BEFORE CHANGES ARE MADE. THE CONTRACTOR MAY SUBMIT AN ALTERNATE STAGING & TRAFFIC CONTROL PLAN TO THE ENGINEER FOR CONSIDERATION. ANY ALTERNATE STAGING/ TRAFFIC CONTROL SHALL BE SUBMITTED TO THE CITY OF DAVENPORT AND THE ENGINEER OF RECORD A MINIMUM OF TWO WEEKS IN ADVANCE OF ANY ADJUSTMENTS.

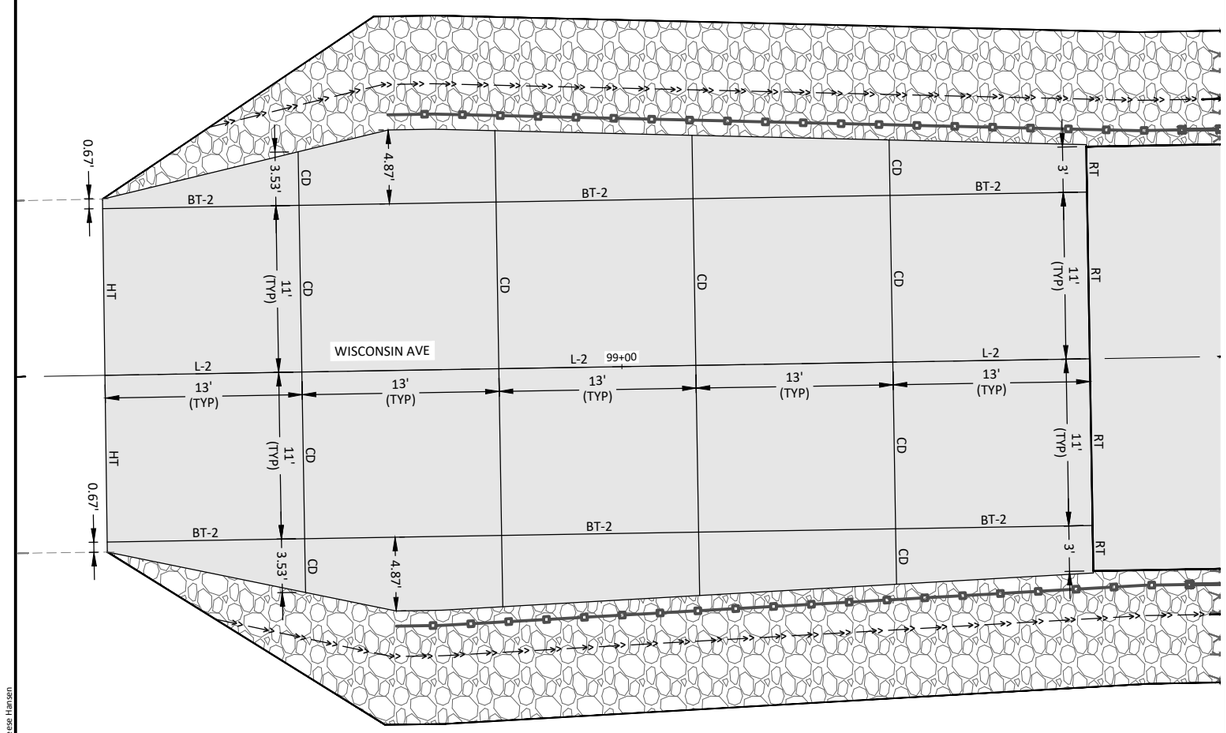
10. SIGN CLOSURE OF WISCONSIN AVENUE IN ACCORDANCE WITH IOWA DOT TC-252 SITUATION 1 (RURAL). SIGN CROSS STREETS WITHOUT ACCESS TO WISCONSIN AVENUE IN ACCORDANCE WITH IOWA DOT TC-252 SITUATION 3.

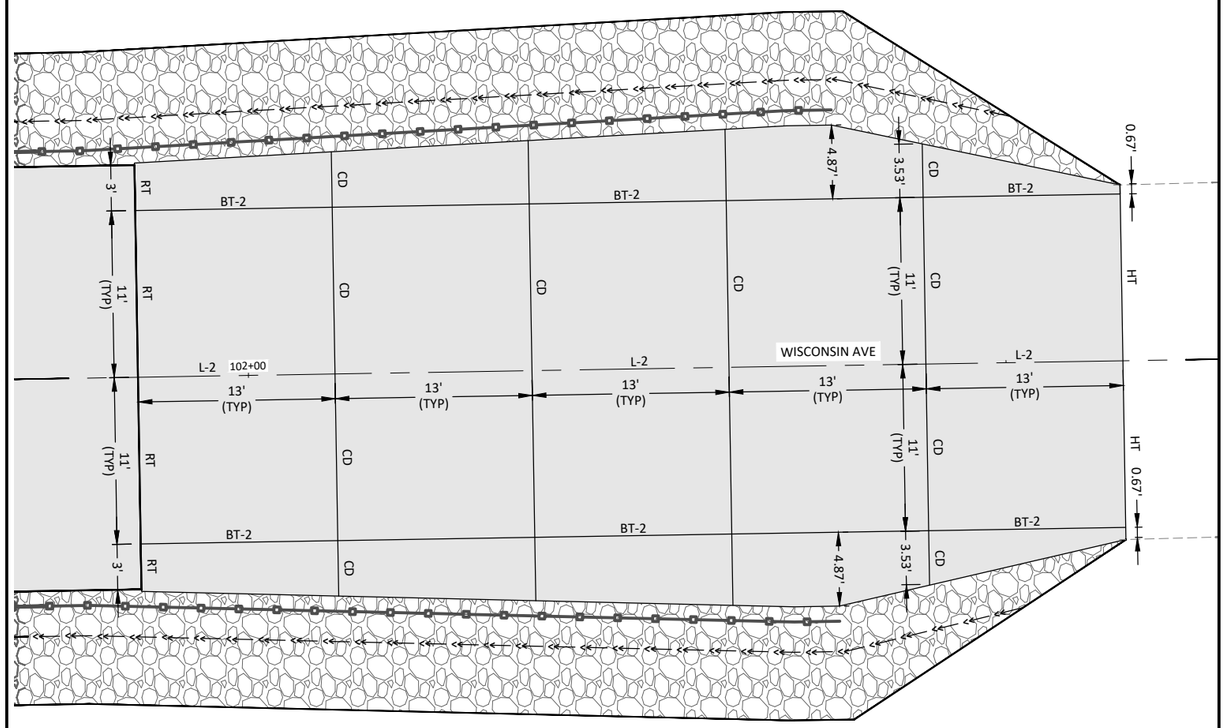
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NOTES:

- SEE APPROACH STANDARD ROAD PLANS IN TABULATION 105_04 FOR APPROACH JOINTING





HORZ. SCALE 0 5 10 FEET

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ENGLISH	IOWA DOT	DESIGN TEAM EVANS\BOLTON & MENK INC	CITY OF DAVENPORT, IOWA	SCOTT COUNTY	PROJECT NUMBER BROS-1827(711)--8J-82	SHEET NUMBER L.01	REVISED

WILLIAM C COX
3230 WISCONSIN AVE
DAVENPORT, IA 52806

DAVID W OBERBROECKLING TRUST
18-78-03
T1855-01

I3-X
(30 X 24)
DUCK
CREEK

STA:101+45.00
25.00' LT

EXISTING R/W

BP: 97+00.00

97+00
98+00
99+00
100+00
101+00
102+00
103+00
104+00

EP: 104+50.00

WISCONSIN AVE

STA:99+80.00
25.00' RT

EXISTING R/W

DUCK CREEK

I3-X
(30 X 24)
DUCK
CREEK

DAVID W OBERBROECKLING TRUST
3217 WISCONSIN AVE
DAVENPORT, IA 52806
17-78-03
T1749-01

HORZ. SCALE 0 25 50 FEET

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ENGLISH	IOWA DOT	DESIGN TEAM EVANS\BOLTON & MENK INC	CITY OF DAVENPORT, IOWA	SCOTT COUNTY	PROJECT NUMBER BROS-1827(711)--8J-82	SHEET NUMBER N.01	REVISED

BRAUN INTERTEC
the science you build on

LOG OF BORING

See Descriptive Terminology sheet for explanation of abbreviations

Project Number 10006397_001
Geotechnical Evaluation
City of Davenport Bridge over Duck Creek
Wisconsin Avenue
Davenport, Iowa

BORING: **BR-01**
LOCATION: Captured with RTK GPS.
DATUM: WGS 84
LATITUDE: 41.554183 LONGITUDE: -90.649015
DRILLER: M. Burdick LOGGED BY: N. Techau START DATE: 04/09/26 END DATE: 04/10/26
SURFACE ELEVATION: 669.7 ft RIG: 7513 METHOD: 3 1/4" HSA SURFACING: Concrete WEATHER: 70, sunny & windy

Elev./ Depth ft	Water Level	Description of Materials (Soil-ASTM D2488 or 2487; Rock-USACE EM 1110-1-2908)	Sample	Blows (N-Value) Recovery	q_p tsf	MC %	Tests or Remarks
~~669.2~~		CONCRETE, 6 inches					
0.5		APPARENT AGGREGATE BASE, 4 inches					
668.9		FILL: LEAN CLAY with SAND (CL), dark brownish gray, moist		9-6-5 (11) 8"			
0.8			5	TW 16"	2		
663.7							
6.0		LEAN CLAY (CL), trace Sand, dark brown, moist, stiff (ALLUVIUM)		3-5-7 (12) 16"		26	LL=41, PL=20, PI=21
			10	TW 12"	2		
				3-4-6 (10) 18"			
			15	TW 12"		28	DD=95 pcf q_u=0.7 tsf
651.7							
18.0		CLAYEY SAND (SC), fine to medium-grained, trace organic, gray, moist, loose (ALLUVIUM)		0-3-3 (6) 18"			
			20				P200=55%
646.7							
23.0		LEAN CLAY (CL), with Silt, gray, moist, stiff (ALLUVIUM)		TW 20"		20	DD=108 pcf q_u=1.13 tsf
			25				
642.7							
27.0		SANDY LEAN CLAY (CL), trace Gravel, stiff to very stiff (GLACIAL TILL)		3-5-6 (11) 18"		15	
			30				
				5-6-10 (16) 18"			
			35				Mud rotary drilling method started at 35 feet.
632.7							
37.0		POORLY GRADED SAND (SP), with Gravel, little Clay, brown, moist to wet, medium dense to dense (GLACIAL OUTWASH)		10-9-10 (19) 8"			P200=8%

Continued on next page

BRAUN INTERTEC
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Project Number 10006397_001
Geotechnical Evaluation
City of Davenport Bridge over Duck Creek
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Elev./ Depth ft	Water Level	Description of Materials (Soil-ASTM D2488 or 2487; Rock-USACE EM 1110-1-2908)	Sample	Blows (N-Value) Recovery	q_p tsf	MC %	Tests or Remarks
		POORLY GRADED SAND (SP), with Gravel, little Clay, brown, moist to wet, medium dense to dense (GLACIAL OUTWASH)	45	10-8-8 (16) 10"			
			50	10-10-9 (19) 8"			
			55	12-14-21 (35) 0"			
612.7							
57.0		SANDY LEAN CLAY (CL), trace Gravel, gray, moist, hard (GLACIAL TILL)	60	13-24-24 (48) 4"			
			65	12-25-50/1" (REF) 4"			
			70	30-50/2" (REF) 5"			
597.7							
72.0		CLAYEY SAND (SC), fine-grained, trace Gravel, gray, wet, very dense (GLACIAL TILL)	75	35-50/1" (REF) 3"			
591.7							
78.0		POORLY GRADED SAND with CLAY (SP-SC), fine to coarse-grained, trace Gravel, gray, wet, medium dense to dense (GLACIAL OUTWASH)		13-20-20 (40) 3"			

Continued on next page

BRAUN INTERTEC
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LOG OF BORING

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Project Number 10006397_001
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City of Davenport Bridge over Duck Creek
Wisconsin Avenue
Davenport, Iowa

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Elev./ Depth ft	Water Level	Description of Materials (Soil-ASTM D2488 or 2487; Rock-USACE EM 1110-1-2908)	Sample	Blows (N-Value) Recovery	q_p tsf	MC %	Tests or Remarks
		POORLY GRADED SAND with CLAY (SP-SC), fine to coarse-grained, trace Gravel, gray, wet, medium dense to dense (GLACIAL OUTWASH)	85	13-13-15 (28) 3"			
582.7							
87.0		SANDY LEAN CLAY (CL), trace Gravel, gray, moist, stiff (GLACIAL TILL)	90	6-7-7 (14) 6"			
			95	7-8-7 (15) 7"			
571.7							
98.0		POORLY GRADED GRAVEL with CLAY (GP-GC), fine-grained, gray, wet, medium dense (GLACIAL TILL)	100	13-10-11 (21) 5"			Water observed at 35.0 feet while drilling.
569.7							
100.0		END OF BORING					
		Boring immediately backfilled	105				
			110				
			115				

Professional Certification

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Iowa.

LICENSED PROFESSIONAL ENGINEER
BUDDIKA GODAGAMA
P26389
IOWA

Signature 9/14/2026
Date

Buddika Godagama
License number: P26389
My license renewal date is December 31, 2027
Pages or sheets covered by this seal: ALL

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BRAUN INTERTEC
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LOG OF BORING

See Descriptive Terminology sheet for explanation of abbreviations

Project Number 10006397_001
Geotechnical Evaluation
City of Davenport Bridge over Duck Creek
Wisconsin Avenue
Davenport, Iowa

BORING: **BR-02**
LOCATION: Captured with RTK GPS.
DATUM: WGS 84
LATITUDE: 41.554458 LONGITUDE: -90.649010
DRILLER: M. Burdick LOGGED BY: S. Holmes START DATE: 04/14/26 END DATE: 04/15/26
SURFACE ELEVATION: 669.6 ft RIG: 7513 METHOD: Mud Rotary SURFACING: Concrete WEATHER: 70, overcast

Elev./ Depth ft	Water Level	Description of Materials (Soil-ASTM D2488 or 2487; Rock-USACE EM 1110-1-2908)	Sample	Blows (N-Value) Recovery	q_p tsf	MC %	Tests or Remarks
669.0		CONCRETE, 7 inches					
0.6		Air					
			5				
			10				
656.6							
13.0		LEAN CLAY with SAND (CL), brown, moist, soft (ALLUVIUM)					
			15				
			20	7-2-2 (4) 4"		17	LL=24, PL=12, PI=12
646.6							
23.0		FAT CLAY (CH), brown, moist, soft to very stiff (ALLUVIUM)	25	2-2-2 (4) 3"			
643.6							
26.0		FAT CLAY with GRAVEL (CH), with organic, brown, moist, very stiff (ALLUVIUM)					
		With organic material from 28 to 38 feet	30	13-10-15 (25) 10"			
			35	14-13-13 (26) 12"		16	
631.6							
38.0		POORLY GRADED SAND with GRAVEL (SP), brown, wet, medium dense (GLACIAL OUTWASH)		10-10-10 (20) 8"			P200=7%

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BRAUN INTERTEC
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LOG OF BORING

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Project Number 10006397_001
Geotechnical Evaluation
City of Davenport Bridge over Duck Creek
Wisconsin Avenue
Davenport, Iowa

BORING: **BR-02**
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DRILLER: M. Burdick LOGGED BY: S. Holmes START DATE: 04/14/26 END DATE: 04/15/26
SURFACE ELEVATION: 669.6 ft RIG: 7513 METHOD: Mud Rotary SURFACING: Concrete WEATHER: 70, overcast

Elev./ Depth ft	Water Level	Description of Materials (Soil-ASTM D2488 or 2487; Rock-USACE EM 1110-1-2908)	Sample	Blows (N-Value) Recovery	q_p tsf	MC %	Tests or Remarks
		POORLY GRADED SAND with GRAVEL (SP), brown, wet, medium dense (GLACIAL OUTWASH)					
626.6							
43.0		POORLY GRADED GRAVEL (GP), trace organic, little Clay, brown, wet, medium dense (GLACIAL OUTWASH)	45	12-10-12 (22) 10"			P200=6%
621.6							
48.0		POORLY GRADED SAND (SP), little Clay, gray, moist, very dense (GLACIAL OUTWASH)	50	30-50/1" (REF) 2"			
			55	35-50/1" (REF) 2"			
611.6							
58.0		LEAN CLAY with SAND (CL), with Gravel, brown, dry, hard (GLACIAL TILL)	60	15-20-25 (45) 4"		12	
			65	15-30-20 (50) 6"			
601.6							
68.0		POORLY GRADED GRAVEL with CLAY (GP-GC), gray, moist, dense (GLACIAL OUTWASH)	70	17-23-23 (46) 6"			
596.6							
73.0		LEAN CLAY with SAND (CL), fine-grained, with Gravel, gray, dry, hard (GLACIAL TILL)	75	30-20-22 (42) 8"			
				20-35-28 (63) 5"			

Continued on next page

BRAUN INTERTEC
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LOG OF BORING

See Descriptive Terminology sheet for explanation of abbreviations

Project Number 10006397_001
Geotechnical Evaluation
City of Davenport Bridge over Duck Creek
Wisconsin Avenue
Davenport, Iowa

BORING: **BR-02**
LOCATION: Captured with RTK GPS.
DATUM: WGS 84
LATITUDE: 41.554458 LONGITUDE: -90.649010
DRILLER: M. Burdick LOGGED BY: S. Holmes START DATE: 04/14/26 END DATE: 04/15/26
SURFACE ELEVATION: 669.6 ft RIG: 7513 METHOD: Mud Rotary SURFACING: Concrete WEATHER: 70, overcast

Elev./ Depth ft	Water Level	Description of Materials (Soil-ASTM D2488 or 2487; Rock-USACE EM 1110-1-2908)	Sample	Blows (N-Value) Recovery	q_p tsf	MC %	Tests or Remarks
		LEAN CLAY with SAND (CL), fine-grained, with Gravel, gray, dry, hard (GLACIAL TILL)					
586.6							
83.0		POORLY GRADED SAND (SP), little Clay, trace Gravel, gray, moist, dense (GLACIAL OUTWASH)	85	23-28-20 (48) 2"			P200=9%
581.6							
88.0		POORLY GRADED GRAVEL with CLAY (GP-GC), brown, wet, dense (GLACIAL OUTWASH)	90	14-20-20 (40) 2"			
576.6							
93.0		POORLY GRADED SAND with CLAY (SP-SC), brown, wet, dense to very dense (GLACIAL OUTWASH)	95	14-18-18 (36) 2"			
569.6			100	50/1" (REF) 1"			Water levels obscured due to mud rotary drilling method.
100.0		END OF BORING					
		Boring then backfilled with auger cuttings	105				
			110				
			115				

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BRAUN INTERTEC
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LOG OF BORING

See Descriptive Terminology sheet for explanation of abbreviations

Project Number 10006397_001
Geotechnical Evaluation
City of Davenport Bridge over Duck Creek
Wisconsin Avenue
Davenport, Iowa

BORING: **BR-03**
LOCATION: Captured with RTK GPS.
DATUM: WGS 84
LATITUDE: 41.554320 LONGITUDE: -90.648933
START DATE: 04/13/26 END DATE: 04/14/26
DRILLER: M. Burdick LOGGED BY: S. Holmes
SURFACE ELEVATION: 669.5 ft RIG: 7513 METHOD: Mud Rotary
SURFACING: Concrete WEATHER: 60, overcast

Elev./ Depth ft	Water Level	Description of Materials (Soil-ASTM D2488 or 2487; Rock-USACE EM 1110-1-2908)	Sample	Blows (N-Value) Recovery	q_p tsf	MC %	Tests or Remarks
668.9		CONCRETE, 7 1/2 inches					
0.6		Air					
			5				
			10				
			15				
653.5							
16.0		WATER					
652.5		LEAN CLAY with SAND (CL), with Gravel, brown, moist, stiff (ALLUVIUM)	20	6-6-8 (14) 16"			
17.0							
646.5		FAT CLAY with SAND (CH), brown, moist, very stiff (ALLUVIUM)	25	7-9-8 (17) 10"			
23.0							
641.5		LEAN CLAY with SAND (CL), with Gravel, brown, moist, very stiff (GLACIAL TILL)	30	10-10-9 (19) 7"		16	LL=22, PL=14, PI=8
28.0							
636.5		POORLY GRADED GRAVEL with SAND (GP), with Clay, brown, wet, medium dense (GLACIAL OUTWASH)	35	13-10-11 (21) 8"			
33.0							
631.5		LEAN CLAY with SAND (CL), fine-grained, with Gravel, gray, moist, hard (GLACIAL TILL)		13-23-21 (44) 10"			LL=27, PL=14, PI=13
38.0							

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BRAUN INTERTEC
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LOG OF BORING

See Descriptive Terminology sheet for explanation of abbreviations

Project Number 10006397_001
Geotechnical Evaluation
City of Davenport Bridge over Duck Creek
Wisconsin Avenue
Davenport, Iowa

BORING: **BR-03**
LOCATION: Captured with RTK GPS.
DATUM: WGS 84
LATITUDE: 41.554320 LONGITUDE: -90.648933
START DATE: 04/13/26 END DATE: 04/14/26
DRILLER: M. Burdick LOGGED BY: S. Holmes
SURFACE ELEVATION: 669.5 ft RIG: 7513 METHOD: Mud Rotary
SURFACING: Concrete WEATHER: 60, overcast

Elev./ Depth ft	Water Level	Description of Materials (Soil-ASTM D2488 or 2487; Rock-USACE EM 1110-1-2908)	Sample	Blows (N-Value) Recovery	q_p tsf	MC %	Tests or Remarks
		LEAN CLAY with SAND (CL), fine-grained, with Gravel, gray, moist, hard (GLACIAL TILL)	45	18-18-21 (39) 12"			P200=17%
			50	14-15-18 (33) 10"		14	
			55	13-25-32 (57) 8"			
			60	20-21-20 (41) 2"			
			65	23-26-30 (56) 2"			
			70	17-21-28 (49) 6"			
596.5							
73.0		CLAYEY SAND (SC), fine to coarse-grained, moist, very dense (GLACIAL OUTWASH)	75	20-18-33 (51) 7"			
				50/1" (REF) 1"			

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BRAUN INTERTEC
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LOG OF BORING

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City of Davenport Bridge over Duck Creek
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SURFACING: Concrete WEATHER: 60, overcast

Elev./ Depth ft	Water Level	Description of Materials (Soil-ASTM D2488 or 2487; Rock-USACE EM 1110-1-2908)	Sample	Blows (N-Value) Recovery	q_p tsf	MC %	Tests or Remarks
		CLAYEY SAND (SC), fine to coarse-grained, moist, very dense (GLACIAL OUTWASH)	85	50/1" (REF) 1"			
579.5				50/1" (REF) 0"			Water levels obscured due to mud rotary drilling method.
90.0		END OF BORING	90				
		Boring then backfilled with auger cuttings	95				
			100				
			105				
			110				
			115				

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LOG OF BORING

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Project Number 10006397_001
Geotechnical Evaluation
City of Davenport Bridge over Duck Creek
Wisconsin Avenue
Davenport, Iowa

BORING: **BR-04**
LOCATION: Captured with RTK GPS.
DATUM: WGS 84
LATITUDE: 41.554583 LONGITUDE: -90.648944
DRILLER: M. Burdick LOGGED BY: N. Techau START DATE: 04/06/26 END DATE: 04/08/26
SURFACE ELEVATION: 669.6 ft RIG: 7513 METHOD: 3 1/4" HSA SURFACING: Concrete WEATHER: 40, windy

Elev./ Depth ft	Water Level	Description of Materials (Soil-ASTM D2488 or 2487; Rock-USACE EM 1110-1-2908)	Sample	Blows (N-Value) Recovery	q_p tsf	MC %	Tests or Remarks
~~669.1~~		CONCRETE, 6 inches					
0.5		APPARENT AGGREGATE BASE, 4 inches					
668.8		FILL: LEAN CLAY (CL), dark brownish gray, stiff		TW 24"	3.5		
0.8			5	5-7-7 (14) 12"		22	LL=41, PL=22, PI=19
				TW 24"	2.5		
			10	6-9-6 (15) 12"			
658.6							
11.0		LEAN CLAY (CL), very dark, moist, stiff (ALLUVIUM)		TW 14"	2	31	DD=89 pcf
			15	3-5-5 (10) 12"			
651.6							
18.0		CLAYEY SAND (SC), fine to medium-grained, trace organic, brown, moist, medium dense (ALLUVIUM)	20	TW 16"		19	DD=121 pcf q_u=0.58 tsf
646.6							
23.0		SANDY LEAN CLAY (CL), trace Gravel, gray, moist, stiff (GLACIAL TILL)	25	8-8-8 (16) 14"		15	
			30	5-6-13 (19) 18"			
635.6							
34.0		POORLY GRADED SAND (SP), fine to coarse-grained, little Clay, trace Gravel, brown, moist to wet, medium dense (GLACIAL OUTWASH)	35	5-10-10 (20) 18"			
	▽			3-6-13 (19) 10"			P200=8%

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LOG OF BORING

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Project Number 10006397_001
Geotechnical Evaluation
City of Davenport Bridge over Duck Creek
Wisconsin Avenue
Davenport, Iowa

BORING: **BR-04**
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DRILLER: M. Burdick LOGGED BY: N. Techau START DATE: 04/06/26 END DATE: 04/08/26
SURFACE ELEVATION: 669.6 ft RIG: 7513 METHOD: 3 1/4" HSA SURFACING: Concrete WEATHER: 40, windy

Elev./ Depth ft	Water Level	Description of Materials (Soil-ASTM D2488 or 2487; Rock-USACE EM 1110-1-2908)	Sample	Blows (N-Value) Recovery	q_p tsf	MC %	Tests or Remarks
627.6		POORLY GRADED SAND (SP), fine to coarse-grained, little Clay, trace Gravel, brown, moist to wet, medium dense (GLACIAL OUTWASH)					
42.0		LEAN CLAY (CL), trace Gravel, gray, moist, hard (GLACIAL TILL)	45	13-25-50/2" (REF) 14"		13	
			50	15-28-50/2" (REF) 14"			
616.6							
53.0		CLAYEY SAND (SC), fine to medium-grained, gray, moist to wet, very dense (GLACIAL TILL)	55	50/2" (REF) 2"			
612.6							
57.0		SANDY LEAN CLAY (CL), trace Gravel, gray, moist, hard (GLACIAL TILL)	60	37-50/2" (REF) 4"			
			65	25-50/1" (REF) 7"			
			70	23-19-32 (51) 12"			
			75	20-20-19 (39) 10"			
				13-13-35 (48) 8"			

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Elev./ Depth ft	Water Level	Description of Materials (Soil-ASTM D2488 or 2487; Rock-USACE EM 1110-1-2908)	Sample	Blows (N-Value) Recovery	q_p tsf	MC %	Tests or Remarks
		SANDY LEAN CLAY (CL), trace Gravel, gray, moist, hard (GLACIAL TILL)	85	13-13-25 (38) 14"			
582.6							
87.0		LEAN CLAY (CL), with Silt, gray, moist, very stiff to hard (GLACIAL TILL)	90	12-13-13 (26) 14"			
			95	14-16-18 (34) 4"			
569.6							
100.0		END OF BORING	100	18-20-35 (55) 0"			Water observed at 40.0 feet while drilling.
		Boring immediately backfilled	105				
			110				
			115				

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ENGLISH	IOWA DOT	DESIGN TEAM EVANS\BOLTON & MENK INC	CITY OF DAVENPORT, IOWA	SCOTT COUNTY	PROJECT NUMBER BROS-1827(711)--8J-82	SHEET NUMBER Q.04	REVISED

POLLUTION PREVENTION PLAN

This project is regulated by the requirements of the Iowa Department of Natural Resources (DNR) National Pollutant Discharge Elimination System (NPDES) General Permit No. 2 OR an Iowa Department of Natural Resources (DNR) National Pollutant Discharge Elimination System (NPDES) individual storm water permit. The Contractor shall carry out the terms and conditions of this permit and the Pollution Prevention Plan (PPP).

This Base PPP includes information on Roles and Responsibilities, Project Site Description, Controls, Maintenance Procedures, Inspection Requirements, Non-Storm Water Controls, Potential Sources of Off Right-of-Way Pollution, and Definitions. This plan references other documents rather than repeating the information contained in the documents. A copy of this Base Pollution Prevention Plan, amended as needed during construction, will be readily available for review.

All contractors shall conduct their operations in a manner that controls pollutants, minimizes erosion, and prevents sediments from entering waters of the state and leaving the highway right-of-way. The Contractor shall be responsible for compliance and implementation of the PPP for their entire contract. This responsibility shall be further shared with subcontractors whose work is a source of potential pollution as defined in this PPP.

I. ROLES AND RESPONSIBILITES

A. Designer:
1. Prepares Base PPP included in the project plan.
2. Prepares Notice of Intent (NOI) submitted to Iowa DNR.
3. Is signature authority on the Base PPP. If consultant designed, signature from Contracting Authority is also required.

B. Contractor:
1. Signs a co-permittee certification statement adhering to the requirements of the NPDES permit and this PPP. All co-permittees are legally required under the Clean Water Act and the Iowa Administrative Code to ensure compliance with the terms and conditions of this PPP.
2. Designates a Water Pollution Control Manager (WPCM), who has the duties and responsibilities as defined in Section 2602 of the Standard Specifications.
3. Submits an Erosion Control Implementation Plan (ECIP) and ECIP updates according to Section 2602 of the Standard Specifications.
4. Installs and maintains appropriate controls. This work may be subcontracted as documented through Subcontractor Request Forms (Form 830231).
5. Supervises and implements good housekeeping practices according to Paragraph III, C, 2.
6. Conducts joint required inspections of the site with inspection staff. When Contractor is not mobilized on site, Contractor may delegate this responsibility to a trained or certified subcontractor. Contracting Authority also may waive joint inspection requirement during winter shutdown. In both circumstances, WPCM (or trained or certified delegate from the Contractor) is still responsible to review and sign inspection reports.
7. Complies with training and certification requirements of Section 2602 of the Standard Specifications.
8. Submits amended PPP site map according to Section 2602 of the Standard Specifications.

C. Subcontractors:
1. Sign a co-permittee certification statement adhering to the requirements of the NPDES permit and this PPP if: responsible for sediment or erosion controls; involved in land disturbing activities; or perorming work that is a source of potential pollution as defined in this PPP. Subcontracted work items are identified in Subcontractor Request Forms (Form 830231). All co-permittees are legally required under the Clean Water Act and the Iowa Administrative Code to ensure compliance with the terms and conditions of this PPP.
2. Implement good housekeeping practices according to Paragraph III, C, 2.

D. RCE/Project Engineer:
1. Is Project Storm Water Manager.
2. On projects where DOT is the Contracting Authority, is current with erosion control training or certification.
3. Takes actions necessary to ensure compliance with storm water requirements including, where appropriate, issuing stop work orders, and directing additional inspections at construction project sites that are experiencing problems with achieving permit compliance.
4. Orders the taking of measures to cease, correct, prevent, or minimize the consequences of non-compliance with the storm water requirements of the Applicable Permit.
5. Supervises all work necessary to meet storm water requirements at the Project, including work performed by contractors and subcontractors.
6. Requires employees, contractors, and subcontractors to take appropriate responsive action to comply with storm water requirements, including requiring any such person to cease or correct a violation of storm water requirements, and to order or recommend such other actions as necessary to meet storm water requirements.
7. Is familiar with the Project PPP and storm water site map.
8. On projects where DOT is Contracting Authority, is responsible for periodically monitoring inspection reports to determine whether deficiencies identified in inspection reports were adequately and timely addressed, and if not, has the authority and responsibility to direct immediate actions to correct the deficiencies.
9. Is the point of contact for the Project for regulatory officials, Inspector, contractors, and subcontractors regarding storm water requirements.
10. Is signature authority on Notice of Discontinuation.
11. Maintains an up-to-date record of contractors, subcontractors, and subcontracted work items through Subcontractor Request Forms (Form 830231).
12. Makes information to determine permit compliance available to the DNR upon their request.

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1/13/23

POLLUTION PREVENTION PLAN

E. Inspector:
1. Updates PPP through fieldbook entries and storm water site inspection reports if there is a change in design, construction, operation, or maintenance which has a significant effect on the discharge of pollutants from the project.
2. Makes information to determine permit compliance available to the DNR upon their request.
3. Conducts joint required inspections of the site with the contractor/subcontractor.
4. Completes an inspection report after each inspection.
5. Is signature authority on storm water inspection reports.

II. PROJECT SITE DESCRIPTION

A. This Pollution Prevention Plan (PPP) is for the reconstruction of a precast prestressed concrete beam bridge.

B. This PPP covers approximately 2.2 acres with an estimated 1.0 acres being disturbed. The portion of the PPP covered by this contract has 1.0 acres disturbed.

C. The PPP is located in an area of one soil association: Tama - Muscatine - Downs. The estimated weighted average runoff coefficient number for this PPP after completion will be 0.41.

D. Storm Water Site Map is located in the RR sheets. Proposed slopes are shown in cross sections, details, or standard road plans. Supplemental information is located in the Tabulations in the C or CE sheets.

E. The base storm water site map is amended by contract modifications and progress payments (fieldbook entries) of completed erosion control work. Also, due to project phasing, erosion and sediment controls shown on project plans may not be installed until needed, based on site conditions. For example, silt fence ditch checks will typically not be installed until the ditch has been installed. Installed locations may also be modified from tabulation locations by field staff. Installed locations will be documented by fieldbook entries and amended PPP site map.

F. Runoff from this work will flow into Duck Creek.

III. CONTROLS

A. The Contractor’s ECIP specified in Article 2602.03 of the Standard Specifications for accomplishment of storm water controls should clearly describe the intended sequence of major activities, and for each activity define the control measure and the timing during the construction process that the measure will be implemented.

B. Preserve vegetation in areas not needed for construction.

C. Sections 2601 and 2602 of the Standard Specifications define requirements to implement erosion and sediment control measures. Actual quantities used and installed locations may vary from the Base PPP and amendment of the plan will be documented via fieldbook entries, amended PPP site map, or by contract modification. Additional erosion and sediment control items may be required as determined by the inspector and/or contractor during storm water site inspections. If the work involved is not applicable to any contract items, the work will be paid for according to Article 1109.03 paragraph B of the Standard Specifications.

1. EROSION AND SEDIMENT CONTROLS

a. Stabilization Practices
1) Site plans will ensure that existing vegetation or natural buffers are preserved where attainable and disturbed portions of the site will be stabilized.
2) Initialize stabilization of disturbed areas immediately after clearing, grading, excavating, or other earth disturbing activities have:
a) Permanently ceased on any portion of the site, or
b) Temporarily ceased on any portion of the site and will not resume for a period exceeding 14 calendar days.
3) Staged permanent and/or temporary stabilizing seeding and mulching shall be completed as the disturbed areas are completed. Incomplete areas shall be stabilized according to paragraph III, C, 1, a, 2, b above.
4) Permanent and Temporary Stabilization practices to be used for this project are located in the storm water site map, Estimated Project Quantities (100-0A, 100-1A, or 100-1C), and Estimate Reference Information (100-4A) located in the C or R sheets. Typical drawings detailing construction of the practices to be used on this project are referenced in the Standard Road Plans Tabulation (105-4) in the C or R sheets.
5) Preservation of existing vegetation within right-of-way or easements will act as vegetative buffer strips.
6) Preservation of topsoil: Bid items to be used for this project are located in the Estimated Project Quantities (100-0A, 100-1A, or 100-1C) and Estimate Reference Information (100-4A) located in the C or R sheets. Additional information may be found in the Tabulations in the C or T Tabulation sheets, or is referenced in Section 2105 of the Standard Specifications.

b. Structural Practices
1) Structural practices will be implemented to divert flows from exposed soils and detain or otherwise limit runoff and the discharge of pollutants from exposed areas of the site. Additionally, structural practices may include: silt basins that provide 3600 cubic feet of storage per acre drained or equivalent sediment controls, outlet structures that withdraw water from surface when discharging basins, and controls to direct storm water to vegetated areas.
2) Structural practices to be used for this project are located in the storm water site map, Estimated Project Quantities (100-0A, 100-1A, or 100-1C), and Estimate Reference Information (100-4A) located in the C or R sheets, as well as all other item specific Tabulations. Typical drawings detailing construction of the devices to be used on this project can be found on the B or R sheets or are referenced in the Standard Road Plans Tabulation (105-4) located in the C or R sheets.

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POLLUTION PREVENTION PLAN

c. Storm Water Management
Measures shall be installed during the construction process to control pollutants in storm water discharges that will occur after construction operations have been completed. This may include velocity dissipation devices at discharge locations and along length of outfall channel as necessary to provide a non-erosion velocity flow from structure to water course. If included with this project, these items are located in the storm water site map and Estimated Project Quantities (100-0A, 100-1A, or 100-1C) and Estimate Reference Information (100-4A) located in the C or R sheets, as well as all other item specific Tabulations. Typical drawings detailing construction of the practices to be used on this project are referenced in the Standard Road Plans Tabulation. The installation of these devices may be subject to Section 404 of the Clean Water Act.

2. OTHER CONTROLS
Contractor disposal of unused construction materials and construction material wastes shall comply with applicable state and local waste disposal, sanitary sewer, or septic system regulations. In the event of a conflict with other governmental laws, rules and regulations, the more restrictive laws, rules or regulations shall apply.

a. Vehicle Entrances and Exits - Construct and maintain entrances and exits to prevent tracking of sediments onto roadways.
b. Material Delivery, Storage and Use - Implement practices to prevent discharge of construction materials during delivery, storage, and use.
c. Stockpile Management - Install controls to reduce or eliminate pollution of storm water from stockpiles of soil and paving.
d. Waste Disposal - Do not discharge any materials, including building materials, into waters of the state, except as authorized by a Section 404 permit.
e. Spill Prevention and Control - Implement chemical spill and leak prevention and response procedures to contain and clean up spills and prevent material discharges to the storm drain system and waters of the state.
f. Concrete Residuals and Washout Wastes - Waste shall not be discharged to a surface water and is not allowed to adversely affect a water of the state. Designate temporary concrete washout facilities for rinsing out concrete trucks. Provide directions to truck drivers where designated washout facilities are located. Designated washout areas should be located at least 50 feet away from storm drains, streams or other water bodies. Care should be taken to ensure these facilities do not overflow during storm events.
g. Concrete Grooving/Grinding Slurry – Do not discharge slurry to a waterbody or storm drain. Slurry may be applied on foreslopes or removed from the project.
h. Vehicle and Equipment Storage and Maintenance Areas - Perform on site fueling and maintenance in accordance with all environment laws such as proper storage of onsite fuels and proper disposal of used engine oil or other fluids on site. Employ washing practices that prevent contamination of surface and ground water from wash water. Wash waters must be treated in a sediment basin or alternative control that provides equivalent or better treatment prior to discharge.
i. Litter Management - Ensure employees properly dispose of litter. Minimize exposure of trash if exposure to precipitation or storm water would result in a discharge of pollutants.
j. Dewatering – Properly treat water to remove suspended sediment before it re-enters a waterbody or discharges off-site. Measures are also to be taken to prevent scour erosion at dewatering discharge point.

3. APPROVED STATE OR LOCAL PLANS
During the course of this construction, it is possible that situations will arise where unknown materials will be encountered. When such situations are encountered, they will be handled according to all federal, state, and local regulations in effect at the time.

IV. MAINTENANCE PROCEDURES
The Contractor is required to maintain all temporary erosion and sediment control measures in proper working order, including cleaning, repairing, or replacing them throughout the contract period. This shall begin when the features have lost 50% of their capacity.

V. INSPECTION REQUIREMENTS
A. Inspections shall be made jointly by the Contractor and the Contracting Authority's inspector at least once every seven calendar days. Storm water site inspections will include:
1. Date of the inspection.
2. Summary of the scope of the inspection.
3. Name and qualifications of the personnel making the inspection.
5. Review of erosion and sediment control measures within disturbed areas for the effectiveness in preventing impacts to receiving waters.
6. Major observations related to the implementation of the PPP.
7. Identification of corrective actions required to maintain or modify erosion and sediment control measures.

B. Include storm water site inspection reports in the Amended PPP. Incorporate any additional erosion and sediment control measures determined as a result of the inspection. Immediately begin corrective actions on all deficiencies found within 3 calendar days of the inspection and complete within 7 calendar days following the inspection. If it is determined that making the corrections less than 72 hours after the inspection is impracticable, it should be documented why it is impracticable and indicate an estimated date by which the corrections will be made.

VI. NON-STORM WATER DISCHARGES

110_12
1/13/23

POLLUTION PREVENTION PLAN

This includes subsurface drains (i.e. longitudinal and standard subdrains) and slope drains. The velocity of the discharge from these features may be controlled by the use of headwalls or blocks, Class A stone, erosion stone or other appropriate materials. This also includes uncontaminated groundwater from dewatering operations, which will be controlled as discussed in Section III of the PPP.

VII. POTENTIAL SOURCES OF OFF RIGHT-OF-WAY (ROW) POLLUTION
Silts, sediment, and other forms of pollution may be transported onto highway right-of-way (ROW) as a result of a storm event. Potential sources of pollution located outside highway ROW are beyond the control of this PPP. Pollution within highway ROW will be conveyed and controlled per this PPP.

VIII. DEFINITIONS
A. Base PPP - Initial Pollution Prevention Plan.
B. Amended PPP - Base PPP amended during construction. May include Plan Revisions or Contract Modifications for new items, storm water site inspection reports, fieldbook entries made by the inspector, amended PPP site map by the Contractor, ECIP, NOI, co-permittee certifications, and Subcontractor Request Forms. Items amending the PPP are stored electronically and are readily available upon request.
C. Fieldbook Entries – This contains the inspector’s daily diary and bid item postings.
D. Controls - Methods, practices, or measures to minimize or prevent erosion, control sedimentation, control storm water, or minimize contaminants from other types of waste or materials. Also called Best Management Practices (BMPs).
E. Signature Authority - Representative authorized to sign various storm water documents.

CERTIFICATION STATEMENT
I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Gregory Broussard
Signature

Greg Broussard, P.E.
Printed or Typed Name

Signature

Printed or Typed Name

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WILLIAM C COX
3230 WISCONSIN AVE
DAVENPORT, IA 52806

DAVID W OBERBROECKLING TRUST
18-78-03
T1855-01

STA:100+25.00
INSTALL 410 CY OF REVETMENT, CLASS E

STA:101+11.08
INSTALL 220 CY OF REVETMENT, CLASS E

STA:99+88.00
27.00' LT
INSTALL 13 CY OF EROSION STONE

STA:101+35.00
27.00' LT
INSTALL 13 CY OF EROSION STONE

EXISTING R/W

WISCONSIN AVE

98+00 99+00 100+00 101+00 102+00 103+00

EXISTING R/W

STA:99+88.00
27.00' RT
INSTALL 13 CY OF EROSION STONE

DUCK CREEK

STA:101+35.00
27.00' RT
INSTALL 13 CY OF EROSION STONE

DAVID W OBERBROECKLING TRUST
3217 WISCONSIN AVE
DAVENPORT, IA 52806
17-78-03
T1749-01

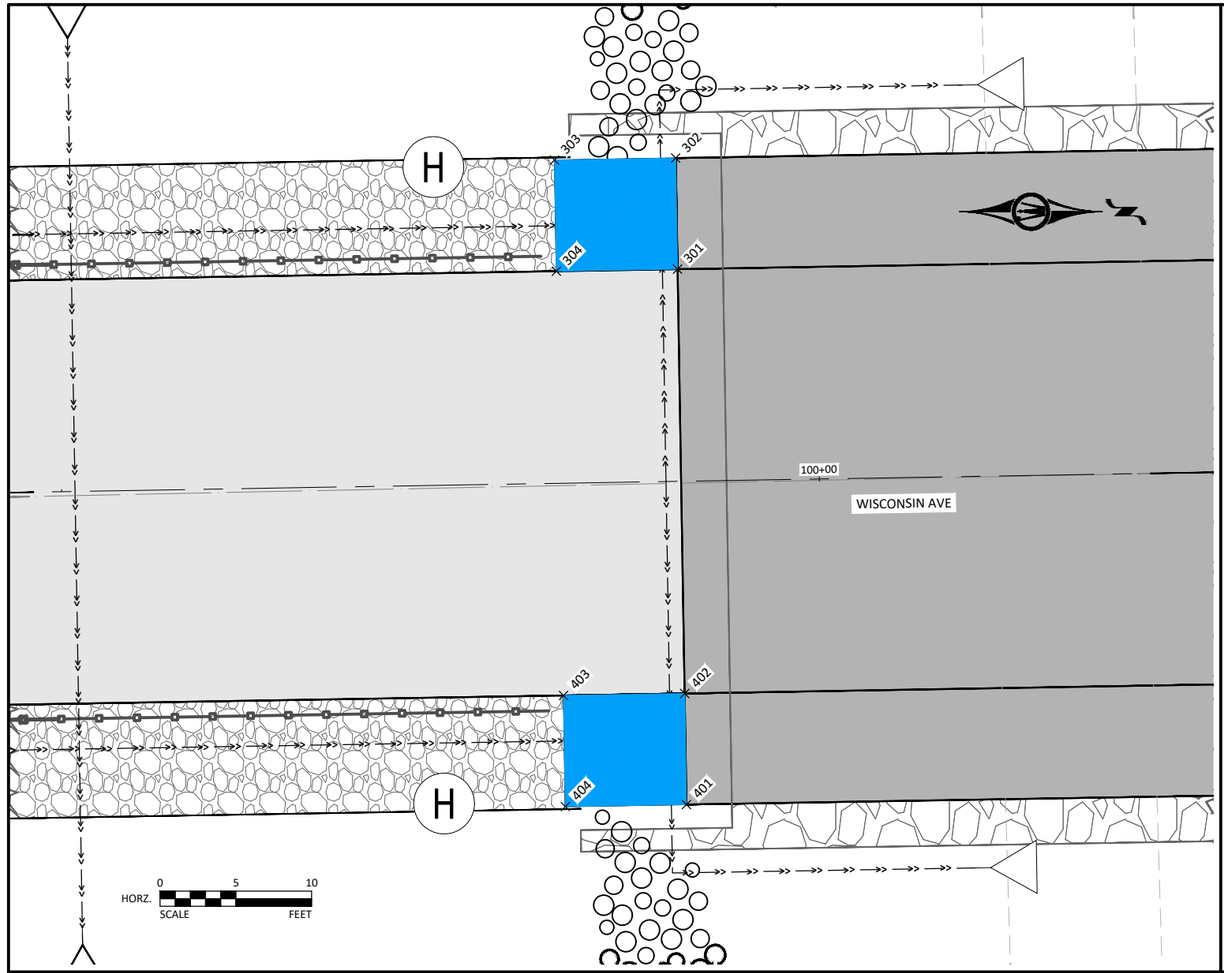
HORZ. SCALE 0 20 40 FEET

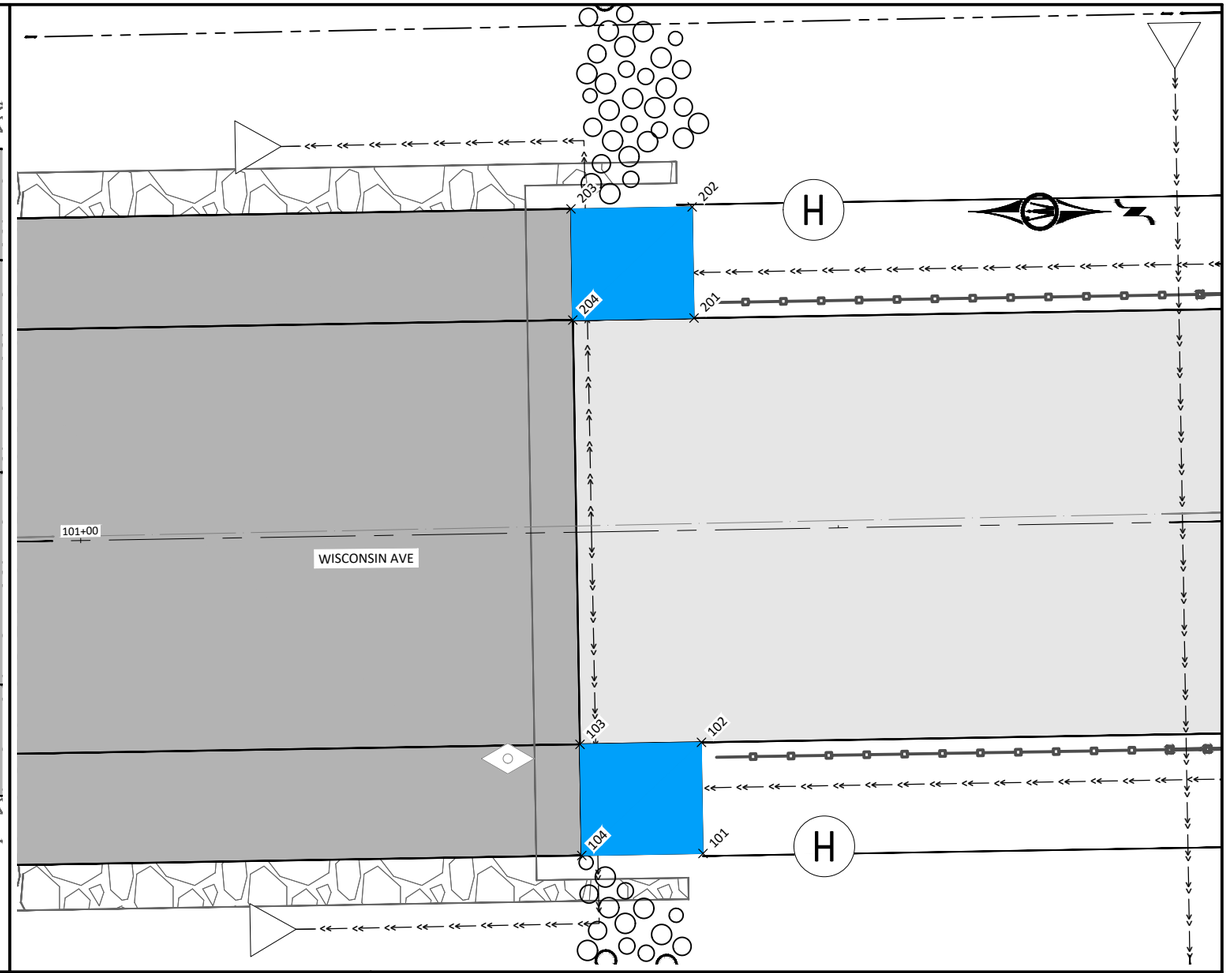
EROSION CONTROL LEGEND

- SEEDING & FERTILIZING (RURAL)
- WOOD EXCELSIOR MAT
- REVETMENT, CLASS E
- SILT FENCE / PERIM CONTROL / DITCH CHECK DEVICE
- EROSION STONE
- PROPOSED DRAINAGE
- EXISTING DRAINAGE
- STABILIZED CONSTRUCTION ENTRANCE
- CONCRETE WASHOUT

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ENGLISH	IOWA DOT	DESIGN TEAM EVANS\BOLTON & MENK INC	CITY OF DAVENPORT, IOWA	SCOTT COUNTY	PROJECT NUMBER BROS-1827(711)--8J-82	SHEET NUMBER RR.01	REVISED





113_10
6/18/25

SIDEWALK COMPLIANCE

See S Sheets

* Does not include curb
1. Staking required by Contracting Authority per Article 2511.03 of the Standard Specifications.
2. Refer to tabulation 113-01 for bid quantities.
3. See Tab 113-10A for point location information.

Roadway Identification	From Point	Ending Point	Sidewalk Designation	Sidewalk Thickness (IN)	Distance* (FT)	Change in Elevation (FT)	Slope (%)	Acceptable Constructed Range	Staking Required? (1)	Measured Slope (%)	Initials	Remarks
NE QUADRANT	101	102	Landing/Turning Space	13	7.30	0.11	1.5					
	102	103	Landing/Turning Space	13	8.00	0.09	1.1					
	103	104	Landing/Turning Space	13	7.30	-0.11	-1.5					
	104	101	Landing/Turning Space	13	8.00	-0.09	-1.1					
NW QUADRANT	201	202	Landing/Turning Space	13	7.30	-0.11	-1.5					
	202	203	Landing/Turning Space	13	8.00	0.09	1.1					
	203	204	Landing/Turning Space	13	7.30	0.11	1.5					
	204	201	Landing/Turning Space	13	8.00	-0.09	-1.1					
SW QUADRANT	301	302	Landing/Turning Space	13	7.30	-0.11	-1.5					
	302	303	Landing/Turning Space	12	8.00	-0.03	-0.4					
	303	304	Landing/Turning Space	13	7.30	0.11	1.5					
	304	301	Landing/Turning Space	13	8.00	0.03	0.4					
SE QUADRANT	401	402	Landing/Turning Space	13	7.30	0.11	1.5					
	402	403	Landing/Turning Space	13	8.00	-0.03	-0.4					
	403	404	Landing/Turning Space	13	7.30	-0.11	-1.5					
	404	401	Landing/Turning Space	13	8.00	0.03	0.4					

113_10A
4/21/26

SIDEWALK COMPLIANCE VALUES

FOR INFORMATION ONLY. VALUES USED TO DETERMINE DESIGNED SLOPES. SEE TAB 113-10.

Point	Station	Offset	Elevation
101	101+40.71	21.33' RT	669.38
102	101+40.71	14.00' RT	669.49
103	101+32.71	14.00' RT	669.58
104	101+32.71	21.33' RT	669.47
201	101+40.71	14.00' LT	669.49
202	101+40.71	21.33' LT	669.38
203	101+32.71	21.33' LT	669.47
204	101+32.71	14.00' LT	669.58
301	99+90.88	14.00' LT	670.17
302	99+90.88	21.33' LT	670.06
303	99+82.88	21.33' LT	670.03
304	99+82.88	14.00' LT	670.14
401	99+90.88	21.33' RT	670.06
402	99+90.88	14.00' RT	670.17
403	99+82.88	14.00' RT	670.14
404	99+82.88	21.33' RT	670.03

NOTES:

- APPROACH SIDEWALKS ARE QUANTIFIED UNDER STRUCTURAL CONCRETE AND REINFORCING STEEL ITEMS.
- SEE V SERIES FOR MORE INFORMATION.

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Summary of Concrete Quantities

Location	Structural Concrete
SECTION 1 - SLAB, ABUT. DIAPH.	58.3
SECTION 2 - SLAB	42.8
SECTION 3 - SLAB, ABUT. DIAPH.	58.3
SECTION 4 - SLAB, PIER DIAPH.	22.1
SECTION 5 - SLAB, PIER DIAPH.	22.1
SOUTH ABUTMENT FOOTING	17.2
NORTH ABUTMENT FOOTING	17.2
ABUT. WINGS 4 AT 2.2 CU.YDS. EACH	8.8
PIER NO. 1 - CAP	14.5
PIER NO. 1 - ENCASEMENT WALL	61.1
PIER NO. 2 - CAP	14.5
PIER NO. 2 - ENCASEMENT WALL	61.1
APPROACH SIDEWALKS	8.0
Total (Cu. Yds.)	**406.0**

Summary of Reinforcing Steel

Location	Non-Coated Reinforcing Steel	Stainless Steel Reinforcing Steel	Epoxy Coated Reinforcing Steel
SUPERSTRUCTURE AND TWO ABUTMENTS **			51321
SEPARATION BARRIER - TWO RAILS			6906
SEPARATION BARRIER (FOUR END SECTIONS)			1500
PIER NO. 1	7,947		
PIER NO. 2	7,947		
APPROACH SIDEWALK		60	624
Total (Lbs.)	**15894**	**60**	**60351**

**Excludes Separation Rail Reinforcing. Includes Lbs. for Pile Spirals and Spacers with Optional Coating.

Summary of Excavation

Location	Class 20 Excavation	Class 21 Excavation
SOUTH ABUTMENT	63	
NORTH ABUTMENT	58	
PIER NO. 1	35	35
PIER NO. 2		33
Total (Cu. Yds.)	**156**	**68**

Summary of Structural Steel

Location	Total (Lbs.)
Intermediate Diaphragms	4205
Total (Lbs.)	**4205**

Summary of Foundations

Location	Substructure Type	Foundation Type	Number	Length (Ln. Ft.)	Total (Ln. Ft.)
SOUTH ABUTMENT	INTEGRAL ABUTMENT	HP 10 x 57 STEEL PILES	6	75	450
NORTH ABUTMENT	INTEGRAL ABUTMENT	HP 10 x 57 STEEL PILES	6	65	390
PIER NO. 1	ENCASED PILE BENT PIER	HP 12 x 53 STEEL PILES	11	75	825
PIER NO. 2	ENCASED PILE BENT PIER	HP 12 x 53 STEEL PILES	11	70	770

Summary of Bearings

Location	Bearing Type	Slope %	Number	Associated Bid Item
SOUTH ABUTMENT	S3 x 7.5	N/A	6	INCIDENTAL ITEM
NORTH ABUTMENT	S3 x 7.5	N/A	6	INCIDENTAL ITEM
PIER NO. 1	PLAIN NEOPRENE 1"	< 1.4%	12	INCIDENTAL ITEM
PIER NO. 2	PLAIN NEOPRENE 1"	< 1.4%	12	INCIDENTAL ITEM

Design For 0° Skew

138'-10" x 28'-0" PPCB Bridge w/ Two 5' Sidewalks

Ext. Spans 43'-3" Int. Span 52'-4"

Summary Quantities

Sta. 100+61.80 (Wisconsin Ave.) December, 2026

City of Davenport

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9/14/2026

Design Team JJP/RRE/SJR | City of Davenport | Project Number BROS-1827(711)--8J-82 | Sheet Number V.01 OF 27

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GENERAL NOTES:

THIS DESIGN IS FOR THE REPLACEMENT OF THE EXISTING 127' x 27.9' 3-SPAN CONTINUOUS I-BEAM BRIDGE WITH A YEAR OF CONSTRUCTION OF 1960.

THIS BRIDGE IS DESIGNED FOR HL93 LOADING PLUS 20 LBS. PER SQ. FT. OF ROADWAY FOR FUTURE WEARING SURFACE. CONTROL OF CRACKING BY DISTRIBUTION OF REINFORCEMENT FOR SLAB DESIGN BASED ON PRE LRFD 2005 INTERIMS.

THE FLOOR SLAB AS SHOWN INCLUDES ½" INTEGRAL WEARING SURFACE.

REMOVALS SHALL BE IN ACCORDANCE WITH SECTION 2401, OF THE STANDARD SPECIFICATIONS.

IT SHALL BE THE BRIDGE CONTRACTOR'S RESPONSIBILITY TO PROVIDE SITES FOR EXCESS EXCAVATED MATERIAL. NO PAYMENT FOR OVERHAUL WILL BE ALLOWED FOR MATERIAL HAULED TO THESE SITES.

CLASS 20 EXCAVATION QUANTITIES ARE BASED ON THE ASSUMPTION THAT THE CHANNEL EXCAVATION IS COMPLETED PRIOR TO STARTING CONSTRUCTION OF THE ABUTMENTS AND PIERS.

CONCRETE BARRIER RAILS PLACED USING THE SLIPFORM METHOD WILL REQUIRE THE USE OF A CLASS BR CONCRETE IN ACCORDANCE WITH ARTICLE 2513.03, A, 2, OF THE STANDARD SPECIFICATIONS. CAST-IN-PLACE BARRIER RAILS SHALL USE CLASS C MIX. CLASS D CONCRETE IS NOT PERMITTED FOR CONCRETE BARRIER RAILS (CAST-IN-PLACE OR SLIPFORMED METHOD).

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING STABILITY OF PRESTRESSED CONCRETE BEAMS DURING ERECTION AND CONSTRUCTION UP THROUGH THE CONCRETE BRIDGE DECK REACHING ITS FULL 28-DAY STRENGTH. THE CONTRACTOR SHALL PROVIDE SUFFICIENT TEMPORARY ANCHOR BRACING AT BEAM ENDS AND TEMPORARY INTERMEDIATE BRACING AS NEEDED TO ENSURE PRESTRESSED BEAM STABILITY. PARTIALLY OR FULLY INSTALLED PERMANENT BRACING AS SHOWN IN THESE DESIGN PLANS SHALL NOT BE ASSUMED SUFFICIENT TO BRACE PRESTRESSED BEAMS DURING ERECTION AND CONSTRUCTION. TEMPORARY BRACING SHALL NOT BE WELDED TO PRESTRESSED BEAM STIRRUPS.

CONCRETE PAVING BLOCKS ARE NOT REQUIRED. HOWEVER, IF IT BECOMES NECESSARY TO PREVENT DAMAGE TO THE END OF THE BRIDGE DECK OR BACKWALL FROM CONSTRUCTION EQUIPMENT, AN APPROPRIATE METHOD OF PROTECTION APPROVED BY THE ENGINEER SHALL BE PROVIDED BY THE BRIDGE CONTRACTOR. ANY DAMAGE TO THE DECK OR BACKWALL SHALL BE REPAIRED BY THE CONTRACTOR AS DIRECTED BY THE ENGINEER. NO ADDITIONAL PAYMENT WILL BE AUTHORIZED FOR THIS WORK.

A SCRAPE SAMPLE WAS TAKEN FROM AN AREA OF THIS BRIDGE (GUARDRAIL) TO GET AN INDICATION OF THE EXISTENCE OF AND LEVEL OF TOTAL LEAD AND TOTAL CHROMIUM. ANALYSIS OF TOTAL LEAD ON THIS SAMPLE WAS <64 PARTS PER MILLION (PPM). ANALYSIS OF TOTAL CHROMIUM ON THIS SAMPLE WAS NOT DETERMINED. THESE ANALYSES SHOW THE EXISTENCE OF THESE TWO TOXIC CONSTITUENTS. LEVELS INDICATED BY THESE TESTS COULD CREATE CONDITIONS ABOVE REGULATORY LIMITS FOR HEALTH AND SAFETY REQUIREMENTS. NO OTHER CONSTITUENTS WERE ANALYZED. THE BIDDER SHOULD NOT RELY ON THE IOWA DOT'S TESTING AND ANALYSIS FOR ANY PURPOSE OTHER THAN AS AN INDICATION OF THE EXISTENCE OF THESE TWO TOXIC CONSTITUENTS.

CAST IN-ONE-PIECE STEEL PILE POINTS ARE REQUIRED FOR THE ABUTMENT AND PIER PILES IN ACCORDANCE WITH ARTICLE 4167.02 OF THE CURRENT STANDARD SPECIFICATIONS AND MATERIALS IM 468.

THE ABUTMENT PILING ARE TO BE DRIVEN THROUGH OVERSIZED HOLES PREBORED TO MINIMUM OF 10 FEET BELOW THE BOTTOM OF FOOTING. THE PREBORED HOLES SHALL BE IN ACCORDANCE WITH ARTICLE 2501.03, Q OF THE STANDARD SPECIFICATIONS.

SOUTH ABUTMENT PILES:

THE CONTRACT LENGTH OF 75 FEET FOR THE SOUTH ABUTMENT PILES IS BASED ON A MIXED SOIL CLASSIFICATION, A TOTAL FACTORED AXIAL LOAD PER PILE (PU) OF 144 KIPS, AND A GEOTECHNICAL RESISTANCE FACTOR (PHI) OF 0.65.

THE NOMINAL AXIAL BEARING RESISTANCE FOR CONSTRUCTION CONTROL WAS DETERMINED FROM A MIXED SOIL CLASSIFICATION AND A GEOTECHNICAL RESISTANCE FACTOR (PHI) OF 0.65. PILES ARE ASSUMED TO BE DRIVEN FROM A START ELEVATION AT THE BOTTOM OF PREBORE.

THE REQUIRED NOMINAL AXIAL BEARING RESISTANCE FOR SOUTH ABUTMENT PILES IS 111 TONS AT END OF DRIVE OR RETAP. THE PILE CONTRACT LENGTH SHALL BE DRIVEN AS PER PLAN UNLESS PILES REACH REFUSAL. IN NO CASE SHALL A PILE BE EMBEDDED LESS THAN 24 FEET. CONSTRUCTION CONTROL REQUIRES A WEAP ANALYSIS WITH BEARING GRAPH.

NORTH ABUTMENT PILES:

THE CONTRACT LENGTH OF 65 FEET FOR THE NORTH ABUTMENT PILES IS BASED ON A COHESIVE SOIL CLASSIFICATION, A TOTAL FACTORED AXIAL LOAD PER PILE (PU) OF 144 KIPS, AND A GEOTECHNICAL RESISTANCE FACTOR (PHI) OF 0.65.

THE NOMINAL AXIAL BEARING RESISTANCE FOR CONSTRUCTION CONTROL WAS DETERMINED FROM A COHESIVE SOIL CLASSIFICATION AND A GEOTECHNICAL RESISTANCE FACTOR (PHI) OF 0.65. PILES ARE ASSUMED TO BE DRIVEN FROM A START ELEVATION AT THE BOTTOM OF PREBORE.

THE REQUIRED NOMINAL AXIAL BEARING RESISTANCE FOR NORTH ABUTMENT PILES IS 111 TONS AT END OF DRIVE OR RETAP. THE PILE CONTRACT LENGTH SHALL BE DRIVEN AS PER PLAN UNLESS PILES REACH REFUSAL. IN NO CASE SHALL A PILE BE EMBEDDED LESS THAN 24 FEET. CONSTRUCTION CONTROL REQUIRES A WEAP ANALYSIS WITH BEARING GRAPH.

PIER 1 PILES:

THE CONTRACT LENGTH OF 75 FEET FOR THE PIER 1 PILES IS BASED ON A COHESIVE SOIL CLASSIFICATION, A TOTAL FACTORED AXIAL LOAD PER PILE (PU) OF 130 KIPS, AND A GEOTECHNICAL RESISTANCE FACTOR (PHI) OF 0.65.

THE NOMINAL AXIAL BEARING RESISTANCE FOR CONSTRUCTION CONTROL WAS DETERMINED FROM A COHESIVE SOIL CLASSIFICATION AND A GEOTECHNICAL RESISTANCE FACTOR (PHI) OF 0.65. PILES ARE ASSUMED TO BE DRIVEN FROM A START ELEVATION AT THE PROPOSED GROUND ELEVATION. DESIGN SCOUR (200-YEAR) WAS ASSUMED TO AFFECT THE UPPER 18 FEET OF EMBEDDED PILE LENGTH AND CAUSE 59 KIPS OF DRIVING RESISTANCE.

THE REQUIRED NOMINAL AXIAL BEARING RESISTANCE FOR PIER 1 PILES IS 129 TONS AT END OF DRIVE OR RETAP. THE PILE CONTRACT LENGTH SHALL BE DRIVEN AS PER PLAN UNLESS PILES REACH REFUSAL. IN NO CASE SHALL A PILE BE EMBEDDED LESS THAN 40 FEET. CONSTRUCTION CONTROL REQUIRES A WEAP ANALYSIS WITH BEARING GRAPH.

PIER 2 PILES:

THE CONTRACT LENGTH OF 70 FEET FOR THE PIER 2 PILES IS BASED ON A MIXED SOIL CLASSIFICATION, A TOTAL FACTORED AXIAL LOAD PER PILE (PU) OF 130 KIPS, AND A GEOTECHNICAL RESISTANCE FACTOR (PHI) OF 0.65.

THE NOMINAL AXIAL BEARING RESISTANCE FOR CONSTRUCTION CONTROL WAS DETERMINED FROM A MIXED SOIL CLASSIFICATION AND A GEOTECHNICAL RESISTANCE FACTOR (PHI) OF 0.65. PILES ARE ASSUMED TO BE DRIVEN FROM A START ELEVATION AT THE PROPOSED GROUND ELEVATION. DESIGN SCOUR (200-YEAR) WAS ASSUMED TO AFFECT THE UPPER 14 FEET OF EMBEDDED PILE LENGTH AND CAUSE 45 KIPS OF DRIVING RESISTANCE.

THE REQUIRED NOMINAL AXIAL BEARING RESISTANCE FOR PIER 2 PILES IS 122 TONS AT END OF DRIVE OR RETAP. THE PILE CONTRACT LENGTH SHALL BE DRIVEN AS PER PLAN UNLESS PILES REACH REFUSAL. IN NO CASE SHALL A PILE BE EMBEDDED LESS THAN 35 FEET. CONSTRUCTION CONTROL REQUIRES A WEAP ANALYSIS WITH BEARING GRAPH.

3" WING PVC PIPE IS INCIDENTAL TO STRUCTURAL CONCRETE.

KEYWAY DIMENSIONS SHOWN ON THE PLANS ARE BASED ON NOMINAL DIMENSIONS UNLESS STATED OTHERWISE. IN ADDITION, THE BEVEL USED ON THE KEYWAY SHALL BE LIMITED TO A MAXIMUM OF 10 DEGREES FROM VERTICAL.

THESE BRIDGE PLANS LABEL ALL REINFORCING STEEL WITH ENGLISH NOTATION (5A1 IS ⅝ INCH DIAMETER BAR). ENGLISH REINFORCING STEEL RECEIVED IN THE FIELD MAY DISPLAY THE FOLLOWING "BAR DESIGNATION". THE "BAR DESIGNATION" IS THE STAMPED IMPRESSION ON THE REINFORCING BARS, AND IS EQUIVALENT TO THE BAR DIAMETER IN MILLIMETERS.

ENGLISH SIZE	3	4	5	6	7	8	9	10	11
BAR DESIGNATION	10	13	16	19	22	25	29	32	36

DESIGN STRESSES:

DESIGN STRESSES FOR THE FOLLOWING MATERIALS ARE IN ACCORDANCE WITH THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 10th Ed, SERIES OF 2024.
REINFORCING STEEL IN ACCORDANCE WITH LRFD AASHTO SECTION 5, GRADE 60.
CONCRETE IN ACCORDANCE WITH LRFD AASHTO SECTION 5, $f'c$ = 4,000 PSI.
FOR PRESTRESSED CONCRETE BEAMS, SEE BEAM DESIGN SHEET.

SPECIFICATIONS:

DESIGN:
AASHTO LRFD 10th Ed, SERIES OF 2024.

CONSTRUCTION:
IOWA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION, SERIES 2023, PLUS APPLICABLE GENERAL SUPPLEMENTAL SPECIFICATIONS, DEVELOPMENTAL SPECIFICATIONS, SUPPLEMENTAL SPECIFICATIONS AND SPECIAL PROVISIONS SHALL APPLY TO CONSTRUCTION WORK ON THIS PROJECT.

BRIDGE DECK DIMENSIONS TABLE

	ITEM	UNITS	QUANTITY
1	DECK LENGTH	L.F.	141.8
2	MINIMUM DECK WIDTH	L.F.	42.7
3	MAXIMUM DECK WIDTH	L.F.	42.7
4	DECK AREA	S.F.	6052

1. DECK LENGTH IS MEASURED FROM FACE-TO-FACE OF PAVING NOTCHES ALONG THE CENTERLINE OF THE ROADWAY.
2, 3. DECK WIDTHS ARE MEASURED FROM OUT-TO-OUT OF DECK PERPENDICULAR TO THE CENTERLINE OF ROADWAY.
4. DECK AREA IS TO BE BASED ON THE FACE-TO-FACE PAVING NOTCH DISTANCE AND OUT-TO-OUT DECK DIMENSIONS.

TRAFFIC CONTROL PLAN:

THE ROADWAY WILL BE CLOSED TO THROUGH TRAFFIC. REFER TO THE TRAFFIC CONTROL PLAN ON SHEET J.01.

POLLUTION PREVENTION PLAN SHOWN ON SHEETS RC.01-RC.02.

Design For 0° Skew

138'-10" x 28'-0" PPCB
Bridge w/ Two 5' Sidewalks

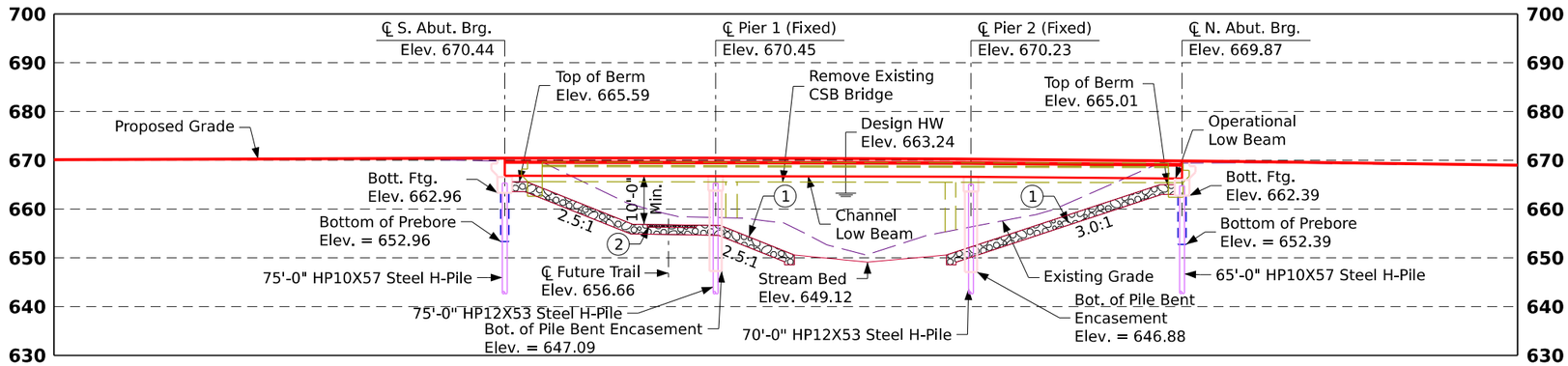
Ext. Spans 43'-3" Int. Span 52'-4"

General Notes

Sta. 100+61.80 (Wisconsin Ave.) December, 2026

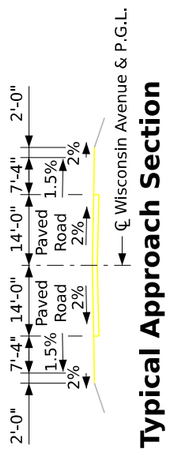
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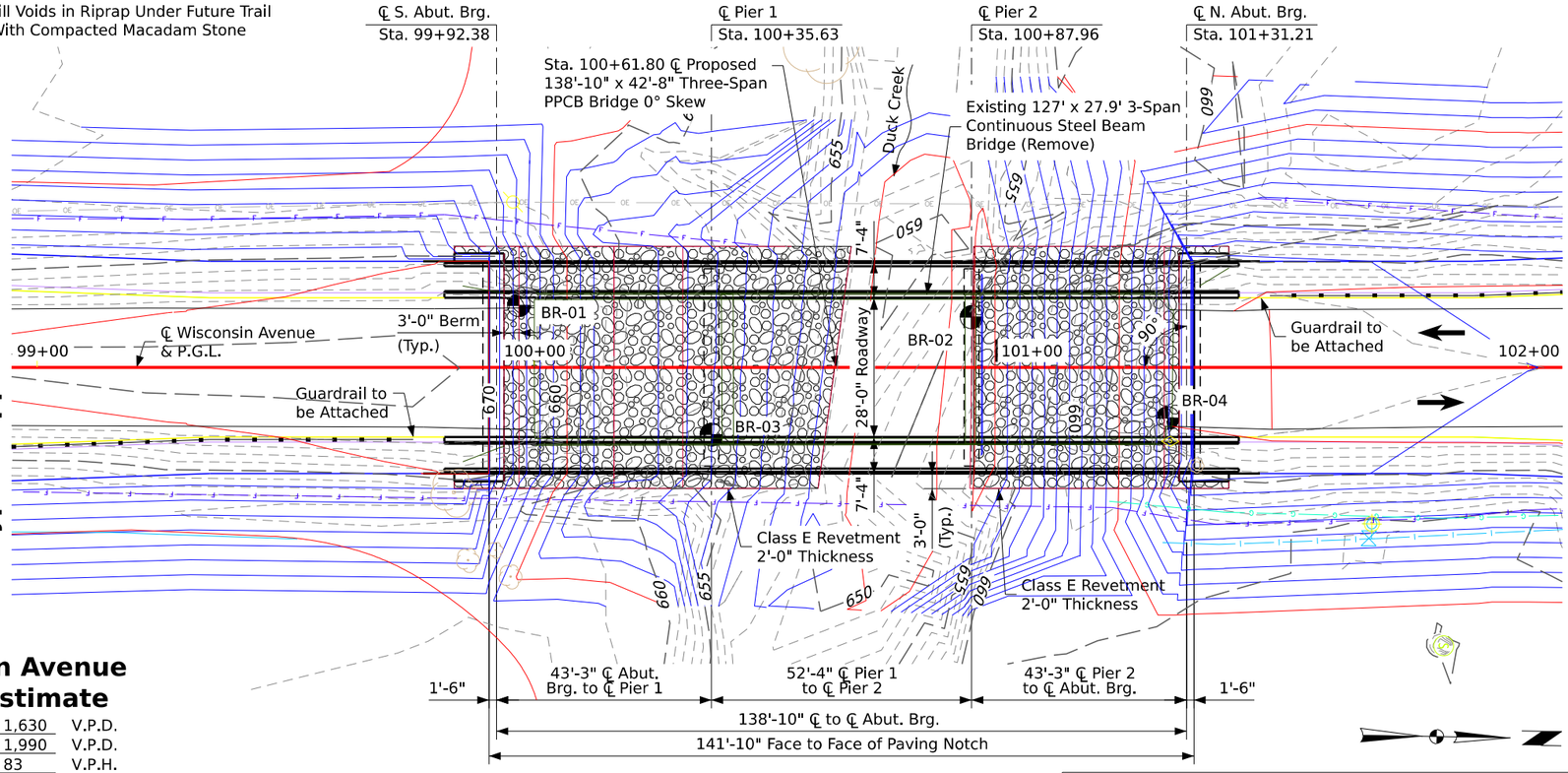


Longitudinal Section Along ℄ Approach Roadway

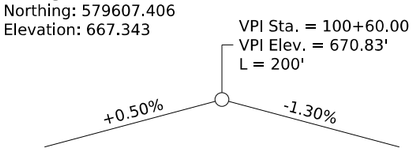
Note:
① Class E Revetment - 2'-0" Thickness
② Fill Voids in Riprap Under Future Trail With Compacted Macadam Stone



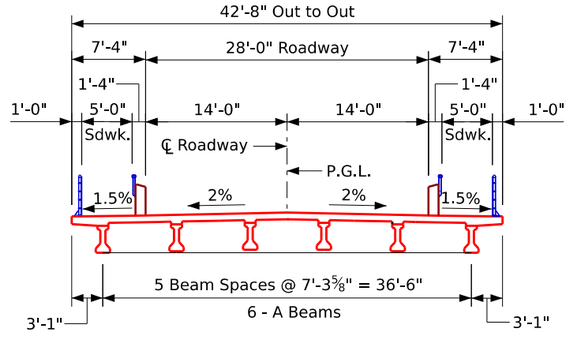
Typical Approach Section



Benchmark No. 5000: VFCP / MAG NAIL
Station: 105+60.07
Offset: 7.15' Right
Easting: 2420598.629
Northing: 579607.406
Elevation: 667.343



Wisconsin Avenue Proposed Profile Grade



Bridge Cross Section

Hydraulic Data

Drainage Area = 19.4 Sq. Mi.
Stream Slope (HGL) = 1.8 Ft./Mi.

Q_{50} = 3761 cfs
Stage = 662.88
Channel Low Beam = 666.64
Avg. Bridge Velocity = 4.21 fps

Q_{100} = 4401 cfs
Stage = 663.24
Operational Low Beam = 666.28
Avg. Bridge Velocity = 4.71 fps

Q_{200} = 5038 cfs
Stage = 663.87
Avg. Bridge Velocity = 5.01 fps
Calculated Scour Design = 636.57

Q_{500} = 5861 cfs
Stage = 664.23
Avg. Bridge Velocity = 5.59 fps
Calculated Check Scour = 634.36

Location

Wisconsin Avenue
over Duck Creek
T-78N R-3E
Section 17/18
City of Davenport
Scott County
FHWA: 003170
Latitude = 41.54768°
Longitude = -90.66832°

Wisconsin Avenue Traffic Estimate

2022 AADT	1,630	V.P.D.
2046 AADT	1,990	V.P.D.
2046 - DHV	83	V.P.H.
Trucks	0	%

Total
Design ESALs XXX,XXX

Situation Plan

All Dimensions are in Feet Unless Otherwise Noted

Utilities Note:

Utilities shown on this sheet are for information only.
See Road Design sheets for utility information.

General Utility Symbols:

OE - Overhead Electric
F - Fiber Optic Line
G - Gas Line
I - Existing Water Line

BOLTON & MENK

Hydraulic Design

LICENSED PROFESSIONAL ENGINEER
RYAN M. BENJEGERDES
P23767
IOWA

I HEREBY CERTIFY THAT THIS ENGINEERING DOCUMENT WAS PREPARED BY ME OR UNDER MY DIRECT PERSONAL SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF IOWA.

RYAN M. BENJEGERDES
LICENSE NUMBER: P23767 DATE: 9/9/2026
MY LICENSE RENEWAL DATE IS 12/31/2027
PAGES OR SHEETS COVERED BY THIS SEAL:
V.03 (HYDRAULIC DESIGN AND CHANNEL GRADING)

Design For 0° Skew

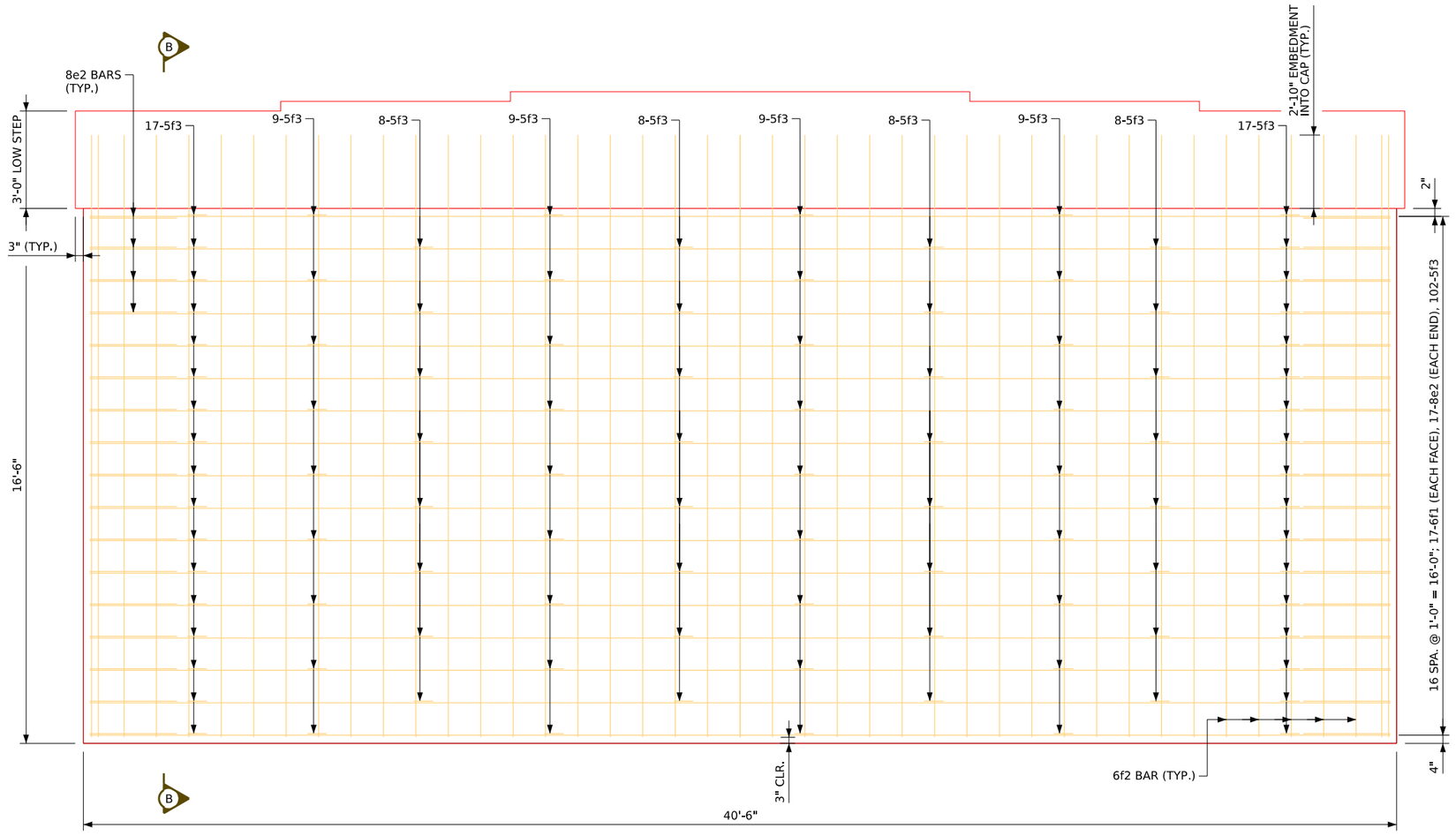
138'-10" x 28'-0" PPCB Bridge w/ Two 5' Sidewalks

Ext. Spans 43'-3" Int. Span 52'-4"

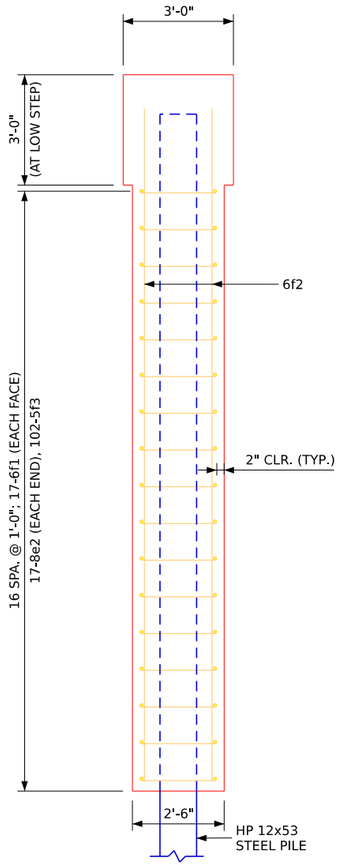
Situation Plan

Sta. 100+61.80 (Wisconsin Ave.) December, 2026

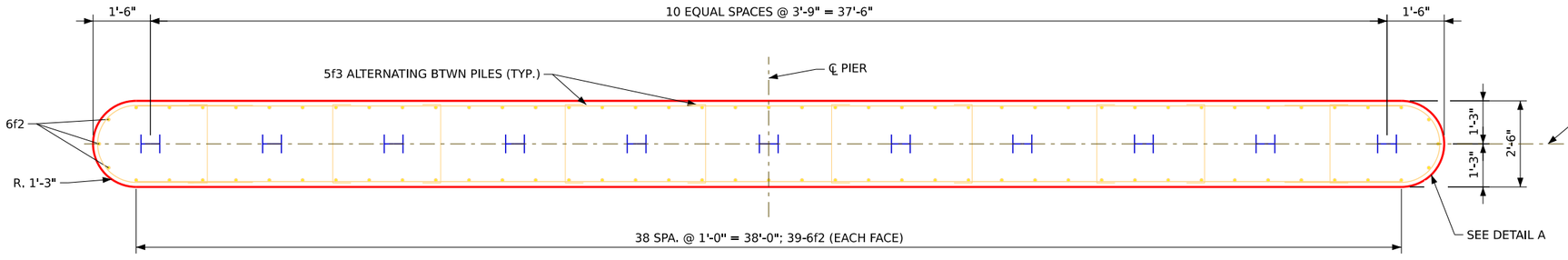
City of Davenport



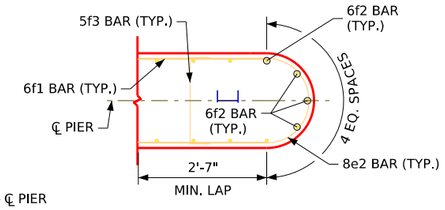
PILE ENCASEMENT ELEVATION



SECTION B-B



PILE ENCASEMENT PLAN



DETAIL A

Design For 0° Skew

138'-10" x 28'-0" PPCB Bridge w/ Two 5' Sidewalks

Ext. Spans 43'-3" Int. Span 52'-4"

Pier Details

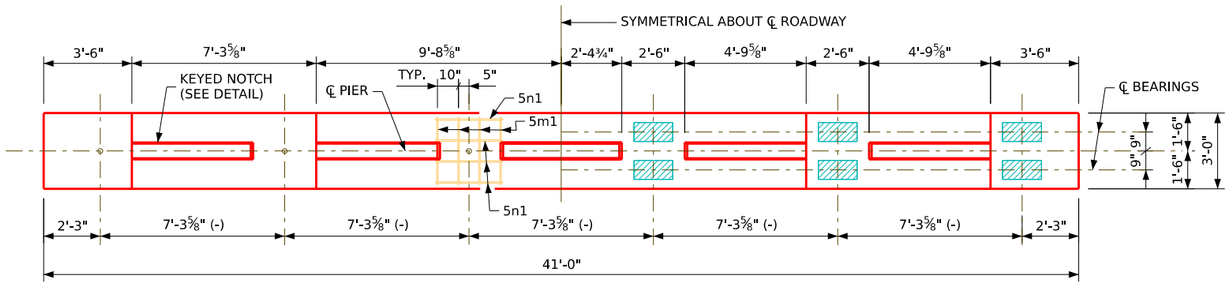
Sta. 100+61.80 (Wisconsin Ave.) December, 2026

City of Davenport

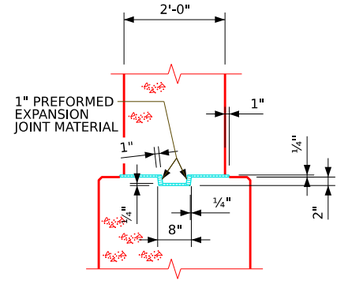
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Design Team JJP/RRE/SJR	City of Davenport	Project Number BROS-1827(711)--8J-82	Sheet Number V.04 OF 27

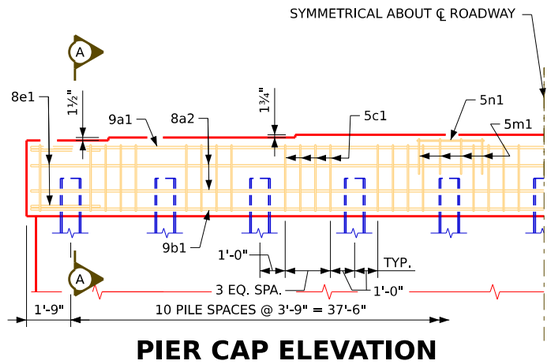
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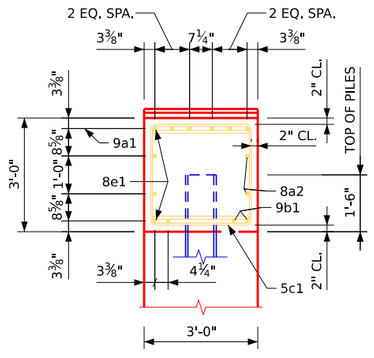
PIER CAP TYPICAL PLAN



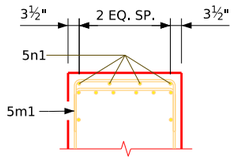
KEYED NOTCH DETAIL



PIER CAP ELEVATION



SECTION A-A
PIER CAP



5m1 & 5n1
BAR LAYOUT

Design For 0° Skew

138'-10" x 28'-0" PPCB
Bridge w/ Two 5' Sidewalks

Ext. Spans 43'-3" Int. Span 52'-4"

Pier Details

Sta. 100+61.80 (Wisconsin Ave.) December, 2026

City of Davenport

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Design Team JJP/RRE/SJR	City of Davenport	Project Number BROS-1827(711)--8J-82	Sheet Number V.05 OF 27

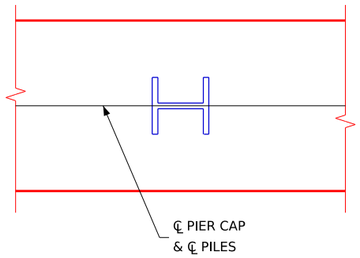
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PILE BENT NOTES:

MINIMUM CLEAR DISTANCE FROM FACE OF CONCRETE TO NEAR REINFORCING BAR SHALL BE 2 INCHES UNLESS OTHERWISE NOTED OR SHOWN.

PIER PILES SHALL BE DRIVEN TO VALUES SHOWN IN DESIGN PLANS.

CONCRETE QUANTITIES IN CAP AND ENCASEMENT DO NOT INCLUDE REDUCTION FOR PILE EMBEDMENT.



PILE ORIENTATION DETAIL

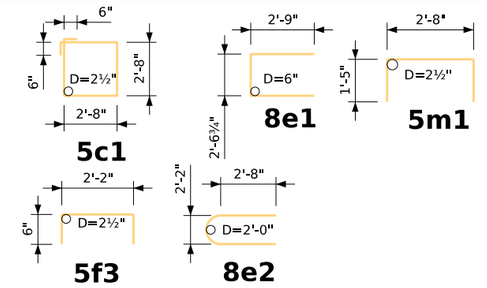
Summary of Quantities - Pier 1

Item Description	Quantity	Units
Structural Concrete (Cap)	14.5	CY
Structural Concrete (Pile Encasement)	61.1	CY
Reinforcing Steel	7,947	LB
Piles, Steel, HP 12X53	825	LF

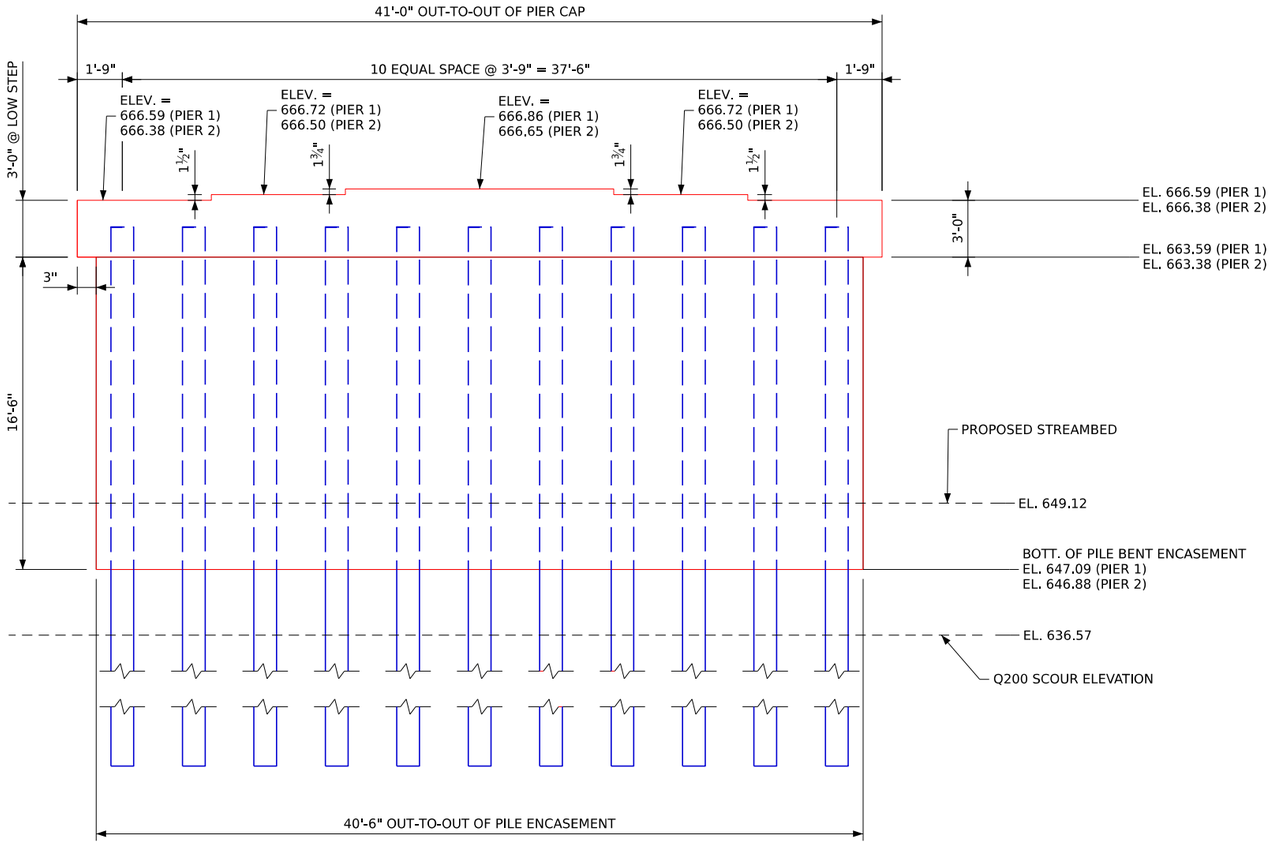
Summary of Quantities - Pier 2

Item Description	Quantity	Units
Structural Concrete (Cap)	14.5	CY
Structural Concrete (Pile Encasement)	61.1	CY
Reinforcing Steel	7,947	LB
Piles, Steel, HP 12X53	770	LF

BENT BAR DETAILS



NOTE: ALL DIMENSIONS ARE OUT TO OUT. D=PIN DIAMETER.



PILE ENCASEMENT ELEVATION

Non-Coated Reinforcing Steel
One Pier

BAR	LOCATION	SHAPE	NO.	LENGTH	WEIGHT
9a1	PIER CAP LONGITUDINAL, TOP		6	40'-8	830
8a2	PIER CAP LONGITUDINAL, SIDES		4	40'-8	434
9b1	PIER CAP LONGITUDINAL, BOTT.		4	40'-8	553
5c1	PIER CAP HOOPS		42	11'-8	511
8e1	PIER CAP ENDS		4	8'-1	86
8e2	PILE ENCASEMENT ENDS		34	8'-7	779
6f1	PILE ENCASEMENT, HORIZ.		34	38'-0	1,941
6f2	PILE ENCASEMENT, VERTICAL		84	19'-1	2,408
5f3	PILE ENCASEMENT, TIES		102	3'-2	337
5m1	PIER CAP STEPS		8	5'-6	46
5n1	PIER CAP STEPS		8	2'-8	22
				Non-Coated Reinforcing Steel Total (lbs)	7,947

CONCRETE ENCASED PILE BENT PIER		
NUMBER OF TRESTLE PILES	PILE SIZE	① LRFD PU, STRENGTH 1 DES. LOAD (KIPS)
11	HP 12x53	130

① NOTE: PU, STRENGTH 1 DESIGN LOAD (KIPS) IS NOT THE VALUE USED IN THE FIELD FOR DRIVING PILES.

Design For 0° Skew

138'-10" x 28'-0" PPCB
Bridge w/ Two 5' Sidewalks

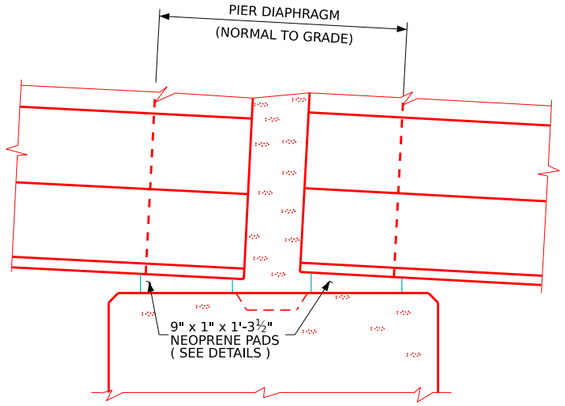
Ext. Spans 43'-3" Int. Span 52'-4"

Pier Details

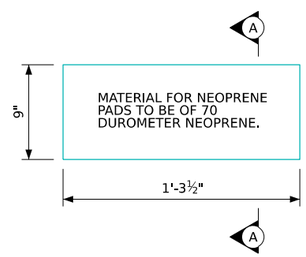
Sta. 100+61.80 (Wisconsin Ave.) December, 2026

City of Davenport

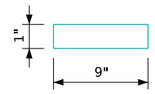
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PART ELEVATION



PLAN OF NEOPRENE PAD



SECTION A-A

FIXED PIER BEARING NOTES:

COST OF NEOPRENE PADS SHALL BE INCLUDED IN THE PRICE BID FOR "PRETENSIONED PRESTRESSED CONCRETE BEAMS".

FIXED PIER

Design For 0° Skew

138'-10" x 28'-0" PPCB Bridge w/ Two 5' Sidewalks

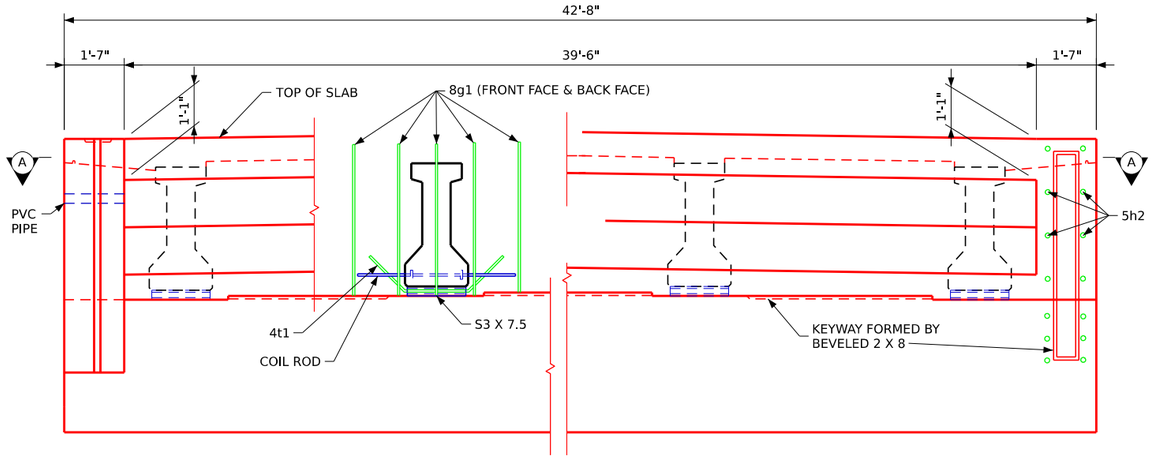
Ext. Spans 43'-3" Int. Span 52'-4"

Pier Bearing Detail

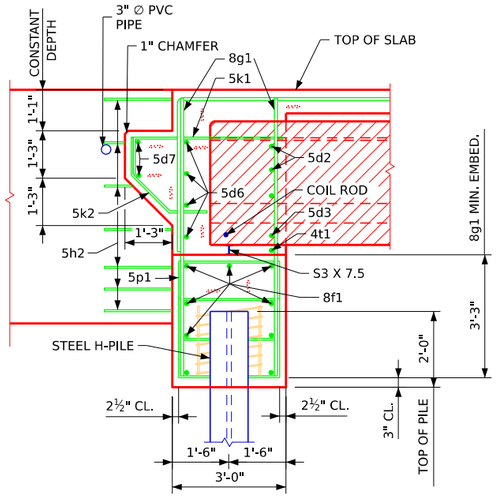
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City of Davenport

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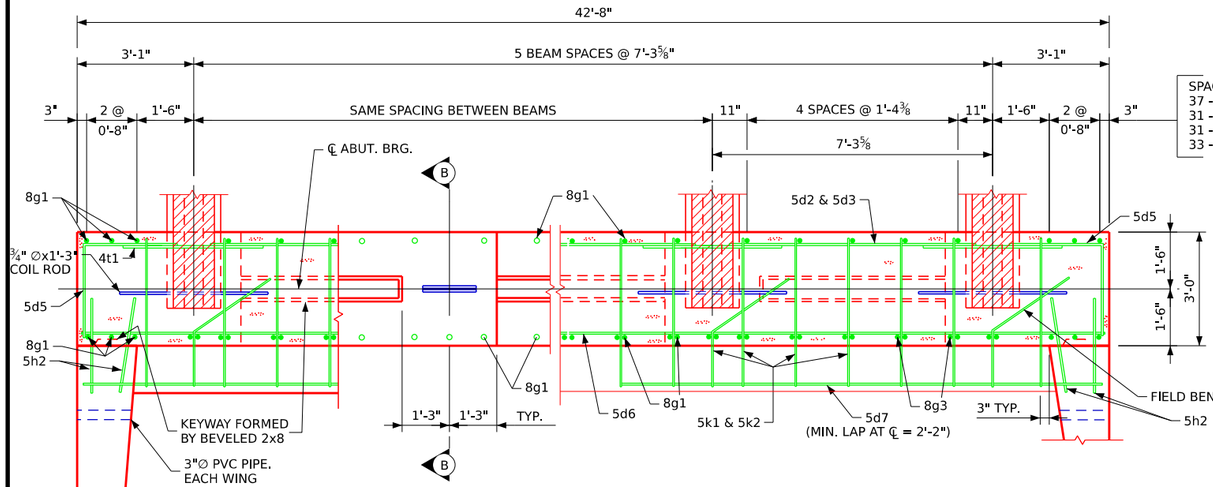


PART REAR ELEVATION AT ABUTMENT



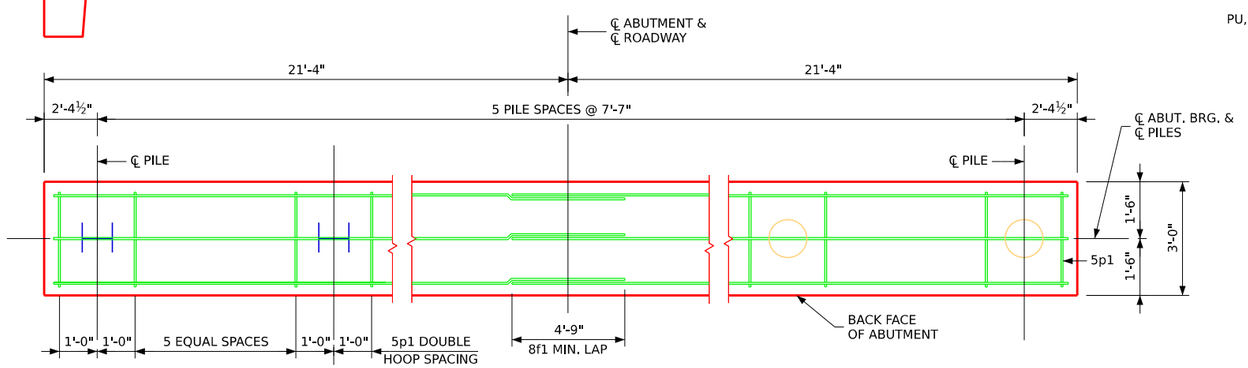
PART SECTION B-B

NOTE:
THE SPIRAL AT THE TOP OF EACH PILE TO BE 7 TURNS OF NO. 2 BAR, 21" DIAMETER, 3" PITCH WITH 3 - L⅞ x ⅞ x ⅛ SPACERS PUNCHED TO HOLD SPIRAL.



SPACING FOR;
37 - 8g1 BACK FACE
31 - 8g1 FRONT FACE
31 - 8g3 BACK FACE
33 - 5k1 & 5k2 BACK FACE

PART SECTION A-A



ABUTMENT PILE PLAN

ABUTMENT NOTES

MINIMUM CLEAR DISTANCE FROM FACE OF CONCRETE TO NEAR REINFORCING BAR IS TO BE 2" UNLESS OTHERWISE NOTED OR SHOWN.

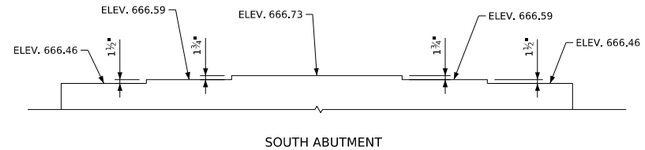
IF NECESSARY TO PREVENT DAMAGE TO THE END OF THE BRIDGE DECK OR BACKWALL FROM CONSTRUCTION EQUIPMENT, AN APPROPRIATE METHOD OF PROTECTION APPROVED BY THE ENGINEER SHALL BE PROVIDED BY THE BRIDGE CONTRACTOR AT NO EXTRA COST TO THE COUNTY OR STATE.

ABUTMENT PILES SHALL BE DRIVEN TO VALUES SHOWN IN DESIGN PLANS.

PLACE 5h2 BAR AT 1:16 SLOPE TO MATCH TRAFFIC SIDE OF ABUTMENT WING FACE. (BOTH SIDES TYPICAL)

SEPERATION BARRIER AND FENCING NOT SHOWN IN DETAILS.

PU, STRENGTH 1 DESIGN LOAD = 144 KIPS/PILE



SOUTH ABUTMENT



NORTH ABUTMENT

ABUTMENT STEP DIAGRAMS

Design For 0° Skew

138'-10" x 28'-0" PPCB Bridge w/ Two 5' Sidewalks

Ext. Spans 43'-3" Int. Span 52'-4"

Abutment Details

Sta. 100+61.80 (Wisconsin Ave.) December, 2026

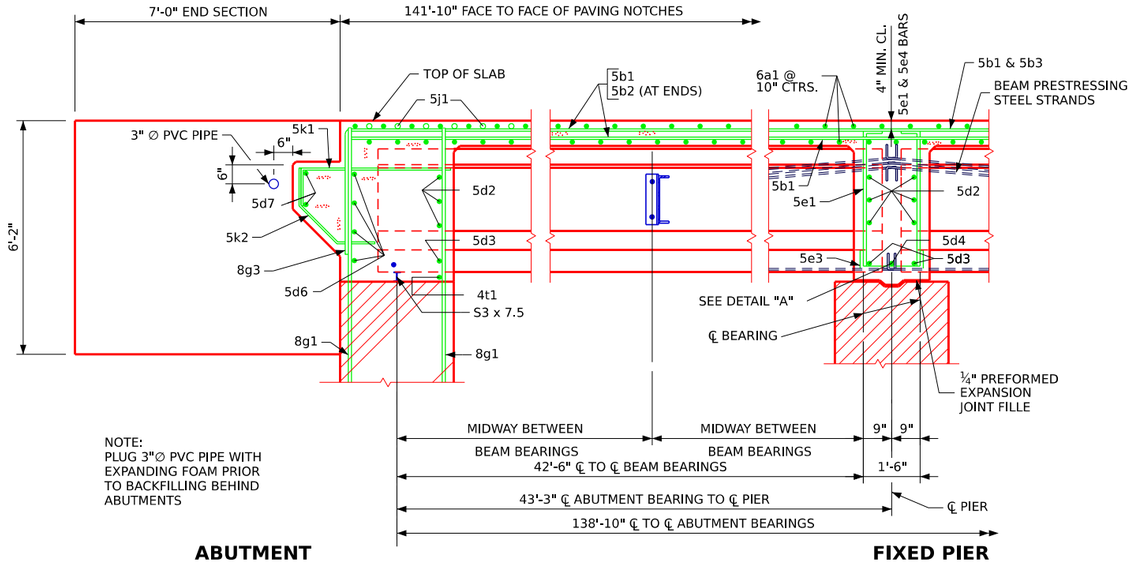
City of Davenport

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Design Team JJP/RRE/SJR	City of Davenport	Project Number BROS-1827(711)--8J-82	Sheet Number V.08 OF 27

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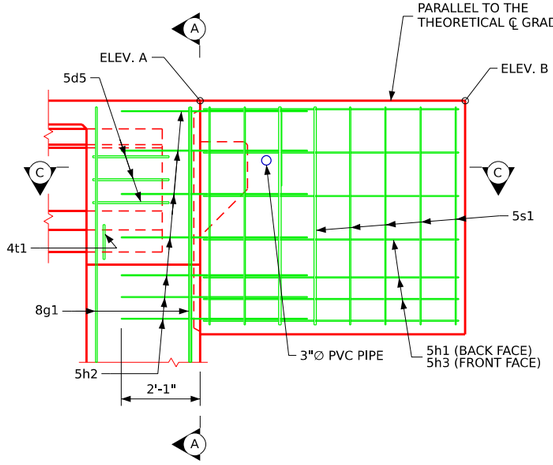
WING ELEVATIONS		
LOCATION	ELEV. "A"	ELEV. "B"
SOUTH ABUT. - WEST WING	670.10	670.08
SOUTH ABUT. - EAST WING	670.10	670.08
NORTH ABUT. - WEST WING	669.51	669.43
NORTH ABUT. - EAST WING	669.51	669.43



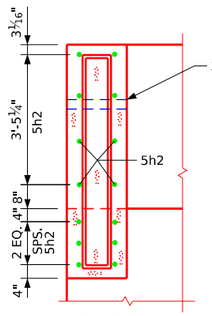
NOTE:
PLUG 3"∅ PVC PIPE WITH EXPANDING FOAM PRIOR TO BACKFILLING BEHIND ABUTMENTS

PART LONGITUDINAL SECTION NEAR EDGE OF SLAB

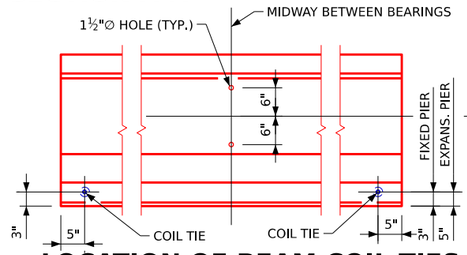
(FOR DETAILS OF INTERMEDIATE DIAPHRAGM SEE SHEET V.14)



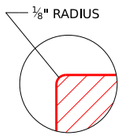
PART END VIEW AT ABUTMENT



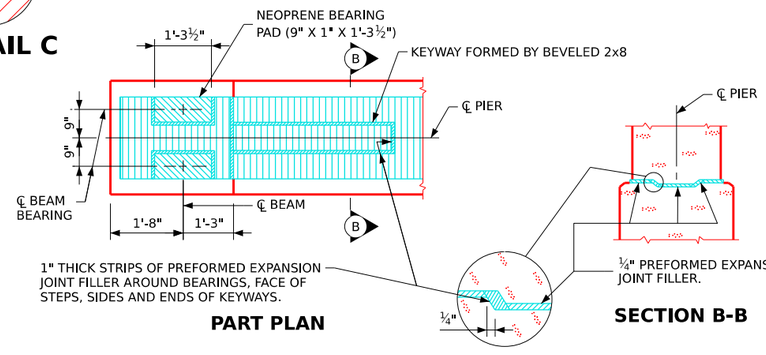
SECTION A-A



LOCATION OF BEAM COIL TIES AND STEEL DIAPHRAGM BOLT HOLES



DETAIL C

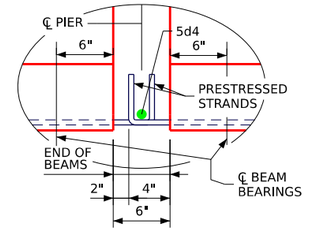


PART PLAN

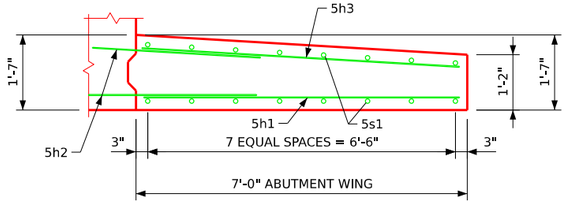
SECTION B-B

TOP OF FIXED PIER DETAILS

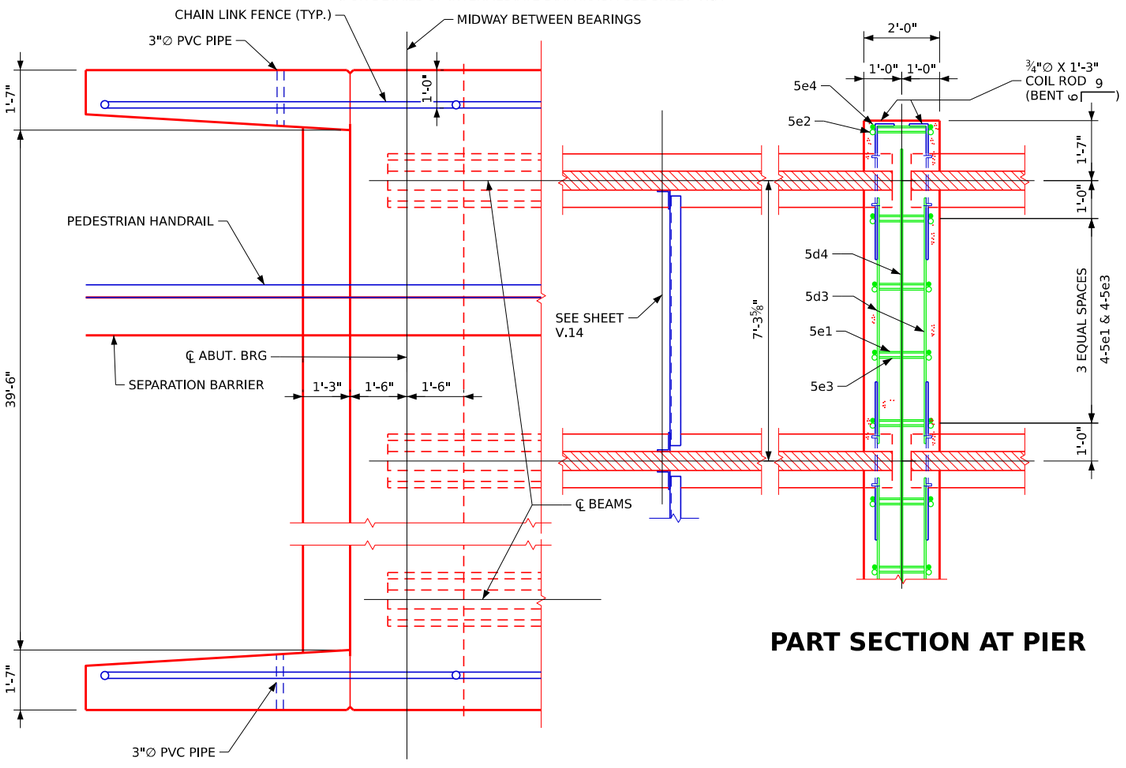
(SEE SHEET V.07 FOR FIXED PIER BEARING DETAILS)



DETAIL A



PART SECTION C-C



PART PLAN

PART SECTION AT PIER

Design For 0° Skew

138'-10" x 28'-0" PPCB Bridge w/ Two 5' Sidewalks

Ext. Spans 43'-3" Int. Span 52'-4"

Superstructure/Abutment Details

Sta. 100+61.80 (Wisconsin Ave.) December, 2026

City of Davenport

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Design Team JJP/RRE/SJR	City of Davenport	Project Number BROS-1827(711)--8J-82	Sheet Number V.09 OF 27

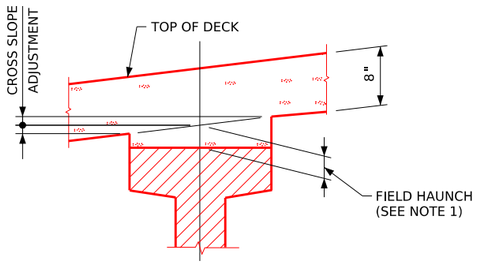
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BEAM LINE HAUNCH ELEVATIONS

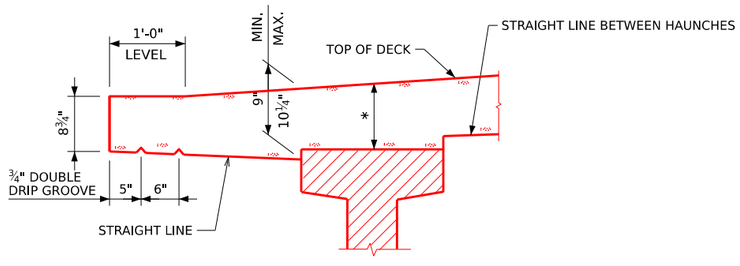
BEAM LINE	C.L. SOUTH ABUT. BEARING						C.L. PIER NO. 1 BEARING	C.L. PIER NO. 1 BEARING						C.L. PIER NO. 2 BEARING	C.L. PIER NO. 2 BEARING						C.L. NORTH ABUT. BEARING
	LINE 1	LINE 2	LINE 3	LINE 4	LINE 5	LINE 6	LINE 7	LINE 8	LINE 9	LINE 10	LINE 11	LINE 12	LINE 13	LINE 14	LINE 15	LINE 16	LINE 17	LINE 18	LINE 19	LINE 20	LINE 21
A	669.46	669.49	669.51	669.52	669.52	669.50	669.47	669.47	669.48	669.48	669.45	669.41	669.34	669.26	669.25	669.22	669.17	669.12	669.05	668.98	668.89
B	669.59	669.62	669.64	669.65	669.64	669.62	669.60	669.59	669.61	669.60	669.58	669.53	669.47	669.38	669.37	669.34	669.30	669.24	669.18	669.10	669.01
C	669.73	669.77	669.78	669.79	669.79	669.77	669.74	669.74	669.75	669.75	669.72	669.68	669.61	669.53	669.52	669.49	669.45	669.39	669.32	669.25	669.16
D	669.73	669.77	669.78	669.79	669.79	669.77	669.74	669.74	669.75	669.75	669.72	669.68	669.61	669.53	669.52	669.49	669.45	669.39	669.32	669.25	669.16
E	669.59	669.62	669.64	669.65	669.64	669.62	669.60	669.59	669.61	669.60	669.58	669.53	669.47	669.38	669.37	669.34	669.30	669.24	669.18	669.10	669.01
F	669.46	669.49	669.51	669.52	669.52	669.50	669.47	669.47	669.48	669.48	669.45	669.41	669.34	669.26	669.25	669.22	669.17	669.12	669.05	668.98	668.89

MISCELLANEOUS DATA TABLE

	BEAM LINE		C.L. SOUTH ABUT. BEARING						C.L. PIER NO. 1 BEARING	C.L. PIER NO. 1 BEARING					C.L. PIER NO. 2 BEARING	C.L. PIER NO. 2 BEARING						C.L. NORTH ABUT. BEARING
			LINE 1	LINE 2	LINE 3	LINE 4	LINE 5	LINE 6	LINE 7	LINE 8	LINE 9	LINE 10	LINE 11	LINE 12	LINE 13	LINE 14	LINE 15	LINE 16	LINE 17	LINE 18	LINE 19	LINE 20	LINE 21
ANTICIPATED DEFLECTION DUE TO SLAB (IN)	ALL		0	1/4	3/8	7/16	3/8	1/4	0	0	3/8	5/8	3/4	5/8	3/8	0	0	1/4	3/8	7/16	3/8	1/4	0
CROSS SLOPE ADJUSTMENTS (IN)	ALL		+/- 1/8																				
ALLOWABLE FIELD HAUNCH (IN)	MAX.	ALL	2 1/2 (0.208)																				
	MIN.	ALL	- 3/8 (-0.031)																				



INTERIOR BEAMS

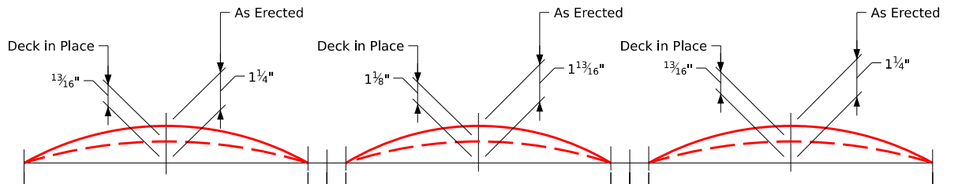


EXTERIOR BEAMS

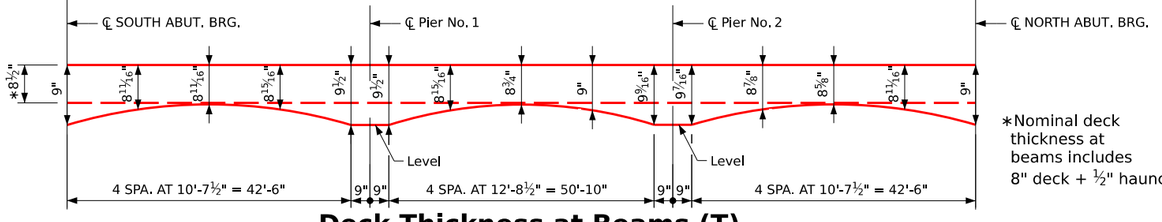
TYPICAL SLAB AND HAUNCH DETAILS

∗ FOR DECK THICKNESS OVER BEAMS SEE "DECK THICKNESS DETAILS" ON THIS SHEET.

NOTE: HAUNCH LOCATIONS ARE AT THE SAME LOCATION AS TE ENCIRCLED LETTERS AND NUMBERS SHOWN ON DECK ELEVATIONS SHEET.

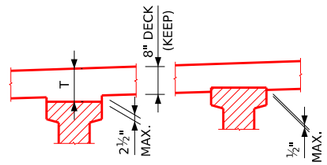


Beam Camber Data



Deck Thickness at Beams (T)

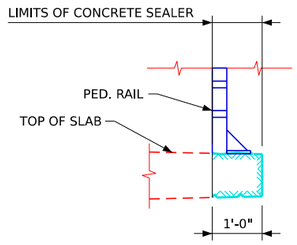
∗Nominal deck thickness at beams includes 8" deck + ½" haunch



DECK THICKNESS DETAILS

NOTE: BRIDGE SEAT ELEVATIONS ARE SET BASED ON THEORETICAL CAMBER AND BEAM DEFLECTIONS. THESE BRIDGE SEATS WILL PROVIDE A THEORETICAL BEAM HAUNCH WITHIN DESIGN PARAMETERS. FIELD HAUNCHES ARE DETERMINED USING SURVEYED TOP OF BEAM ELEVATIONS AND "BEAM LINE HAUNCH ELEVATION" DATA. ALLOWABLE MAXIMUM AND MINIMUM "FIELD HAUNCH" VALUES ARE GIVEN IN INCHES AND DECIMALS OF FEET IN THE "MISCELLANEOUS DATA" TABLE. "CROSS SLOPE ADJUSTMENT" VALUES WILL AID THE CONTRACTOR IN DETERMINING ACTUAL FORMED HAUNCH DIMENSIONS AT THE EDGES OF THE TOP FLANGE.

NOTE 1: TO CALCULATE FIELD HAUNCH REQUIRED AT EACH LOCATION, SURVEY THE BEAM TOPS CONSISTENT WITH THE SPACINGS SHOWN ON THE "TOP OF DECK ELEVATIONS LAYOUT", SUBTRACT THE SURVEYED BEAM SHOT FROM THE "BEAM LINE HAUNCH ELEVATION". THIS VALUE WILL BE THE HAUNCH NEEDED (SEE "FIELD HAUNCH" IN HAUNCH DETAIL). THE "BEAM LINE HAUNCH ELEVATION" INCLUDES ADJUSTMENTS FOR DECK THICKNESSES AND ANTICIPATED DEFLECTIONS. NO ADDITIONAL CALCULATIONS ARE REQUIRED. IF THE FIELD HAUNCH EXCEEDS THE MAXIMUMS AND MINIMUMS SHOWN IN INCHES AND DECIMALS OF FEET IN THE MISCELLANEOUS DATA TABLE, ADJUSTMENTS TO THE GRADE OR ADDITIONAL HAUNCH REINFORCEMENT WILL BE REQUIRED.



CONCRETE SEALER LIMITS

CONCRETE SEALER SHALL BE APPLIED TO BOTH SIDES OF BRIDGE DECK ON THE TOP, EDGE OF DECK AND UNDER THE DECK.

THE CONCRETE SEALER LIMITS ARE SHOWN IN THE DETAIL AND SHALL APPLY TO THE FULL LENGTH OF BRIDGE, CONCRETE SEALER SHALL BE APPLIED IN ACCORDANCE WITH ARTICLE 2403.03, P, 3, OF THE STANDARD SPECIFICATIONS.

Design For 0° Skew

138'-10" x 28'-0" PPCB Bridge w/ Two 5' Sidewalks

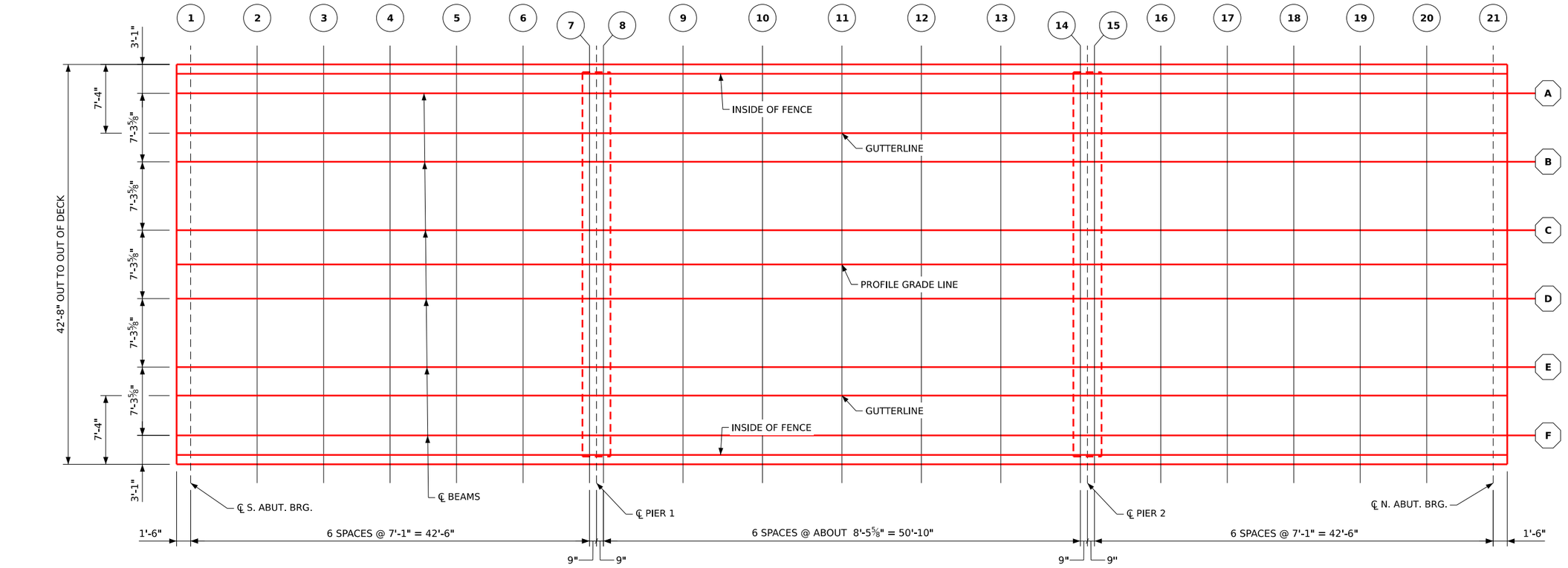
Ext. Spans 43'-3" Int. Span 52'-4"

Deck Haunch Data Details

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City of Davenport

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TOP OF DECK ELEVATIONS LAYOUT

INDICATED BEAM LINES

TOP OF DECK ELEVATIONS

LOCATION	LINE 1	LINE 2	LINE 3	LINE 4	LINE 5	LINE 6	LINE 7	LINE 8	LINE 9	LINE 10	LINE 11	LINE 12	LINE 13	LINE 14	LINE 15	LINE 16	LINE 17	LINE 18	LINE 19	LINE 20	LINE 21
INSIDE OF FENCE	670.10	670.11	670.12	670.12	670.12	670.12	670.11	670.10	670.08	670.06	670.03	669.99	669.94	669.89	669.88	669.83	669.78	669.72	669.66	669.59	669.52
BEAM LINE A	670.13	670.14	670.15	670.15	670.15	670.15	670.14	670.13	670.12	670.09	670.06	670.02	669.97	669.92	669.91	669.86	669.81	669.75	669.69	669.62	669.55
GUTTERLINE	670.19	670.21	670.21	670.22	670.22	670.21	670.20	670.20	670.18	670.15	670.12	670.08	670.04	669.99	669.98	669.93	669.87	669.82	669.75	669.69	669.62
BEAM LINE B	670.25	670.27	670.27	670.28	670.28	670.27	670.26	670.26	670.24	670.21	670.18	670.14	670.10	670.05	670.04	669.99	669.94	669.88	669.82	669.75	669.68
BEAM LINE C	670.40	670.41	670.42	670.42	670.42	670.42	670.41	670.41	670.39	670.36	670.33	670.29	670.24	670.19	670.18	670.13	670.08	670.02	669.96	669.89	669.82
PROFILE GRADE LINE	670.44	670.46	670.47	670.47	670.47	670.46	670.45	670.45	670.43	670.40	670.37	670.33	670.29	670.24	670.23	670.18	670.13	670.07	670.01	669.94	669.87
BEAM LINE D	670.40	670.41	670.42	670.42	670.42	670.42	670.41	670.41	670.39	670.36	670.33	670.29	670.24	670.19	670.18	670.13	670.08	670.02	669.96	669.89	669.82
BEAM LINE E	670.25	670.27	670.27	670.28	670.28	670.27	670.26	670.26	670.24	670.21	670.18	670.14	670.10	670.05	670.04	669.99	669.94	669.88	669.82	669.75	669.68
GUTTERLINE	670.19	670.21	670.21	670.22	670.22	670.21	670.20	670.20	670.18	670.15	670.12	670.08	670.04	669.99	669.98	669.93	669.87	669.82	669.75	669.69	669.62
BEAM LINE F	670.13	670.14	670.15	670.15	670.15	670.15	670.14	670.13	670.12	670.09	670.06	670.02	669.97	669.92	669.91	669.86	669.81	669.75	669.69	669.62	669.55
INSIDE OF FENCE	670.10	670.11	670.12	670.12	670.12	670.12	670.11	670.10	670.08	670.06	670.03	669.99	669.94	669.89	669.88	669.83	669.78	669.72	669.66	669.59	669.52

Design For 0° Skew

138'-10" x 28'-0" PPCB Bridge w/ Two 5' Sidewalks

Ext. Spans 43'-3" Int. Span 52'-4"

Deck Elevations

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City of Davenport

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GENERAL NOTES:

CLEAR DISTANCE FROM FACE OF CONCRETE TO NEAR REINFORCING BAR SHALL BE 2" UNLESS OTHERWISE NOTED OR SHOWN.

ALL REINFORCING BARS ARE TO BE SECURELY WIRED IN PLACE AND ADEQUATELY SUPPORTED ON BAR CHAIRS BEFORE CONCRETE IS PLACED. I.M. 451.01 REQUIREMENTS SHALL APPLY FOR BAR CHAIRS.

ALL PRESTRESSED CONCRETE BEAMS ARE TO BE SET VERTICAL.

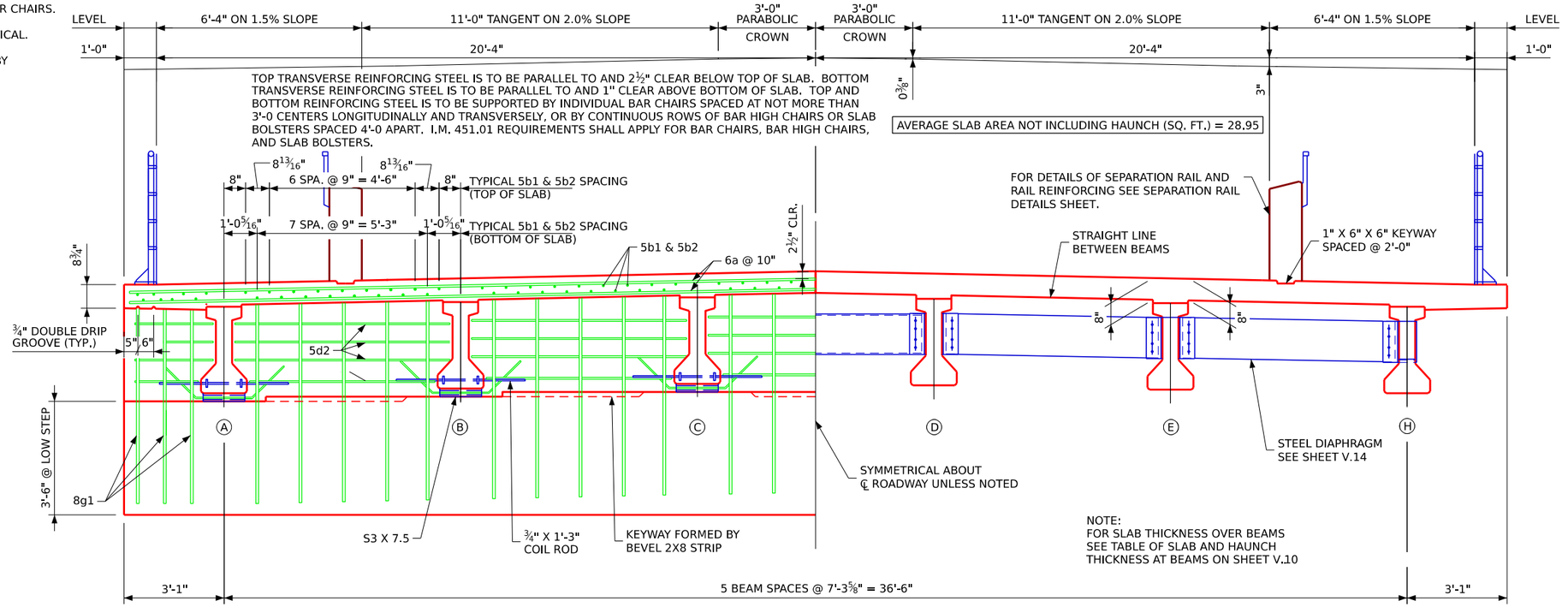
FORMS FOR THE SLAB AND RAILS ARE TO BE SUPPORTED BY THE PRESTRESSED CONCRETE BEAMS.

THE PIER AND ABUTMENT DIAPHRAGM CONCRETE IS TO BE PLACED MONOLITHICALLY WITH THE FLOOR SLAB.

ALL REINFORCING STEEL IS TO BE GRADE 60.

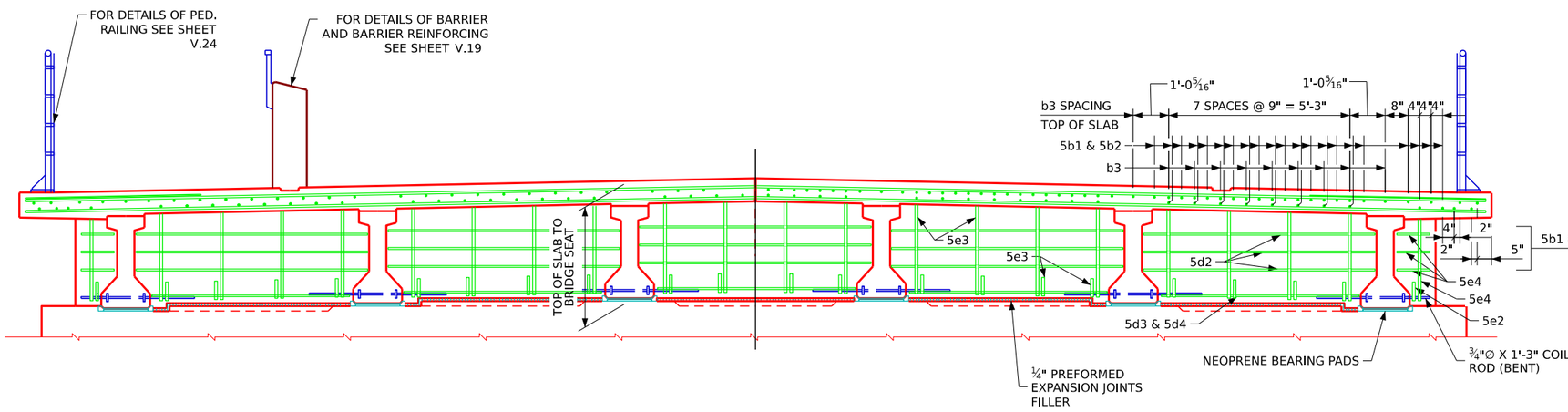
COST OF ALL PREFORMED EXPANSION JOINT FILLER MATERIAL IS TO BE INCLUDED IN THE PRICE BID FOR "STRUCTURAL CONCRETE (BRIDGE)".

LENGTH OF S3 x 7.5 (ABUTMENT BEAM SEAT)	
BEAM BOTTOM FLANGE WIDTH	LENGTH OF S3 x 7.5
1'-5"	1'-3½"



HALF SECTION NEAR ABUTMENT

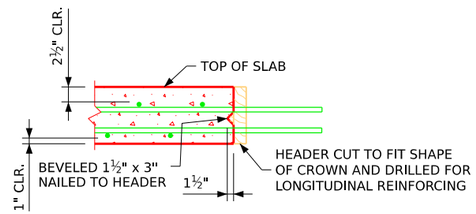
HALF SECTION NEAR MID SPAN



SECTION NEAR PIER

(RIGHT SEPARATION BARRIER NOT SHOWN)

NOTE:
TRAFFIC BARRIER AND RAIL NOT SHOWN ON RIGHT SIDE FOR CLARITY



TRANSVERSE SLAB CONSTRUCTION JOINT

Design For 0° Skew

138'-10" x 28'-0" PPCB Bridge w/ Two 5' Sidewalks

Ext. Spans 43'-3" Int. Span 52'-4"

Superstructure Details

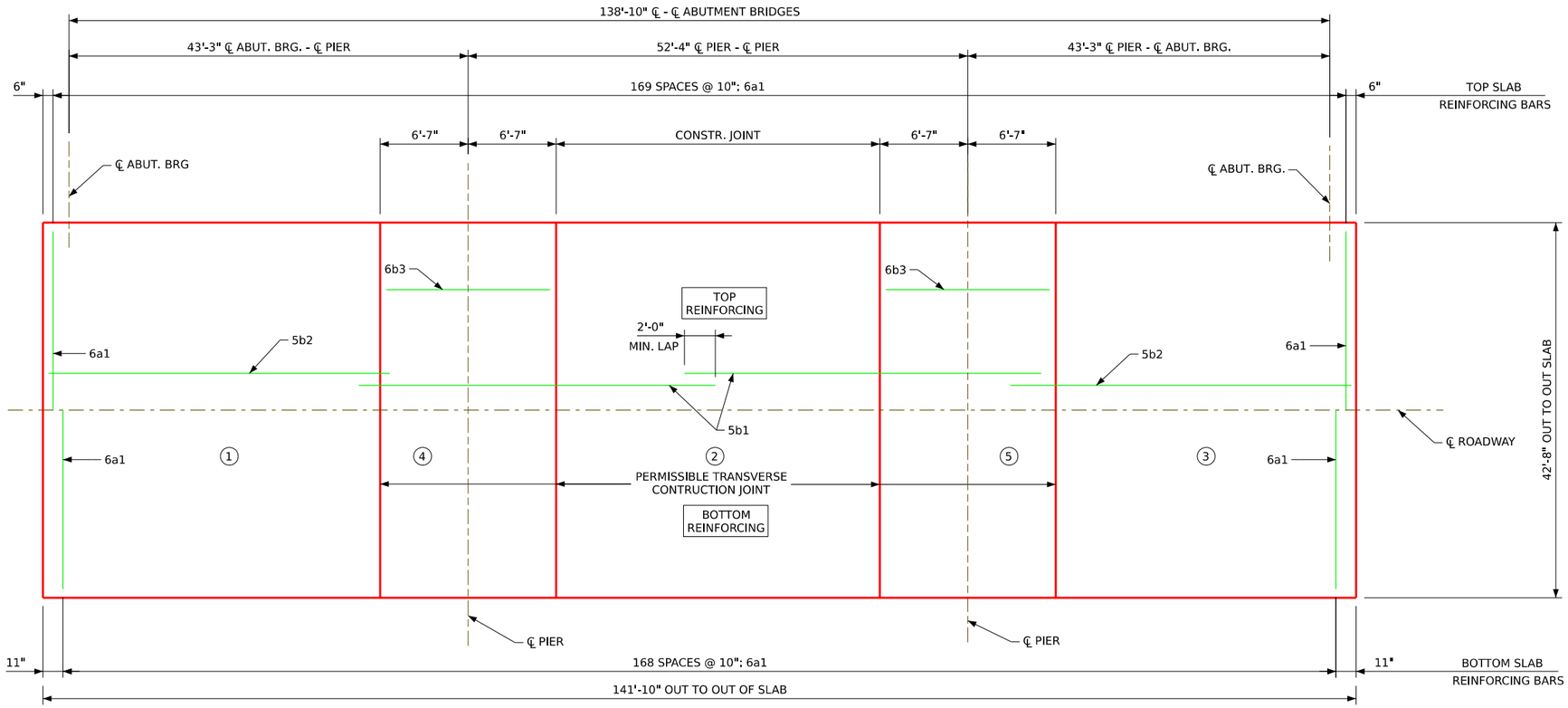
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SLAB LAYOUT

NOTE: CONCRETE DECK SHALL BE PLACED IN SECTIONS AND SEQUENCES INDICATED. ALTERNATE PROCEDURES FOR PLACING DECK CONCRETE MAY BE SUBMITTED FOR APPROVAL TOGETHER WITH A STATEMENT OF THE PROPOSED METHOD AND EVIDENCE THAT THE CONTRACTOR POSSESSES THE NECESSARY EQUIPMENT AND FACILITIES TO ACCOMPLISH THE REQUIRED RESULTS. FOR APPROVED ALTERNATE PROCEDURES THE ENGINEER SHALL DETERMINE IF A RETARDING ADMIXTURE IS REQUIRED TO MAINTAIN PLASTICITY OF THE CONCRETE DECK DURING PLACEMENT.

Design For 0° Skew

138'-10" x 28'-0" PPCB Bridge w/ Two 5' Sidewalks

Ext. Spans 43'-3" Int. Span 52'-4"

Superstructure Details

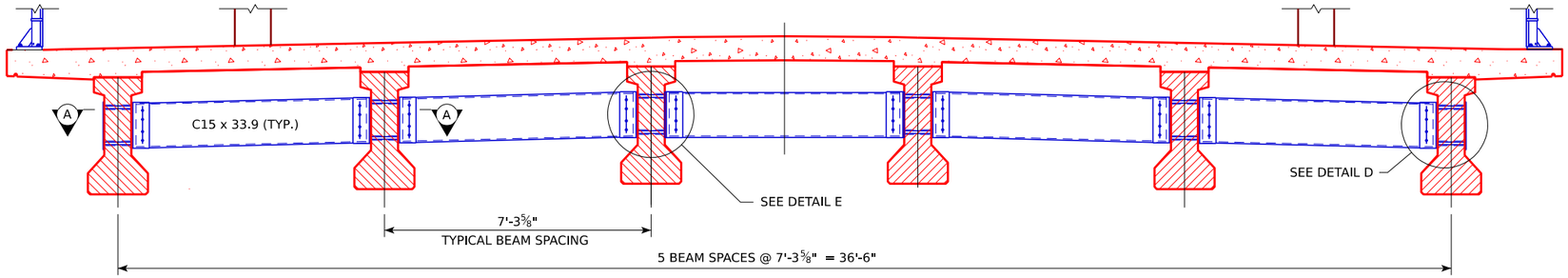
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SECTION SHOWING INTERMEDIATE DIAPHRAGM

NOTES:

ALL DIAPHRAGM MATERIALS, INCLUDING BOLTS, NUTS AND WASHERS SHALL BE GALVANIZED.

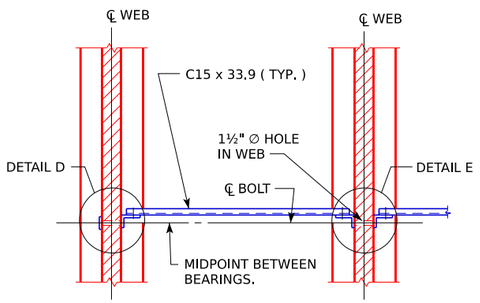
SHOP DRAWINGS OF THE STEEL DIAPHRAGMS SHOWING LAYOUT AND DETAILS OF THE DIAPHRAGMS SHALL BE SUBMITTED FOR APPROVAL.

ALL COSTS FOR FURNISHING AND INSTALLING STEEL INTERMEDIATE DIAPHRAGMS SHALL BE INCLUDED IN THE PRICE BID FOR STRUCTURAL STEEL.

THE ½"∅ HOLES FOR THE ⅞"∅ H.S. BOLTS SHALL BE CAST INTO THE WEB. DRILLING IS NOT ALLOWED.

THE ⅞"∅ H.S. BOLTS THROUGH THE WEB SHALL HAVE A THREAD LENGTH OF 3" MIN. AND 4" MAX. AND SHALL MEET THE REQUIREMENTS OF ASTM A449.

ALL BOLTS ARE TO BE TIGHTENED PRIOR TO PLACING BRIDGE FLOOR CONCRETE.



SECTION A-A

INTERMEDIATE DIAPH. STRUCTURAL STEEL

ONE CONNECTION DETAIL "E"

2 - ⅞"∅ x LENGTH H.S. BOLTS WITH NUTS AND WASHERS

WEB THICKNESS (IN.)	LENGTH OF H.S. BOLTS (IN.)	WEIGHT PER DETAIL "E" (LB.)	BRIDGE SKEW 0° NUMBER OF DETAIL "E"	BRIDGE SKEW 0° WEIGHT (LB.)
6	9	4.30	12	51.6
2-L6 x 4 x ½ x 1'-3¼" = 41.2 LB			12	494.4

ONE CONNECTION DETAIL "D"

2 - ⅞"∅ x LENGTH H.S. BOLTS WITH NUTS AND WASHERS

WEB THICKNESS (IN.)	LENGTH OF H.S. BOLTS (IN.)	WEIGHT PER DETAIL "D" (LB.)	BRIDGE SKEW 0° NUMBER OF DETAIL "D"	BRIDGE SKEW 0° WEIGHT (LB.)
6	9	4.30	6	25.8
1 - BACKING PL 4" x ⅜" x 1'-3¼" = 6.5 LB			6	39.0
1 - L 6" x 4" x ½" x 1'-3¼" = 20.6 LB			6	123.6

* ONE C15 x 33.9 DIAPHRAGM

WEB THICKNESS (IN.)	BEAM SPACING	LENGTH	NO. OF DIAPH.	UNIT WEIGHT (LB.)	WEIGHT (LB.)
6	7'-3⅝"	6'-6¼"	15	221.1	3316.5

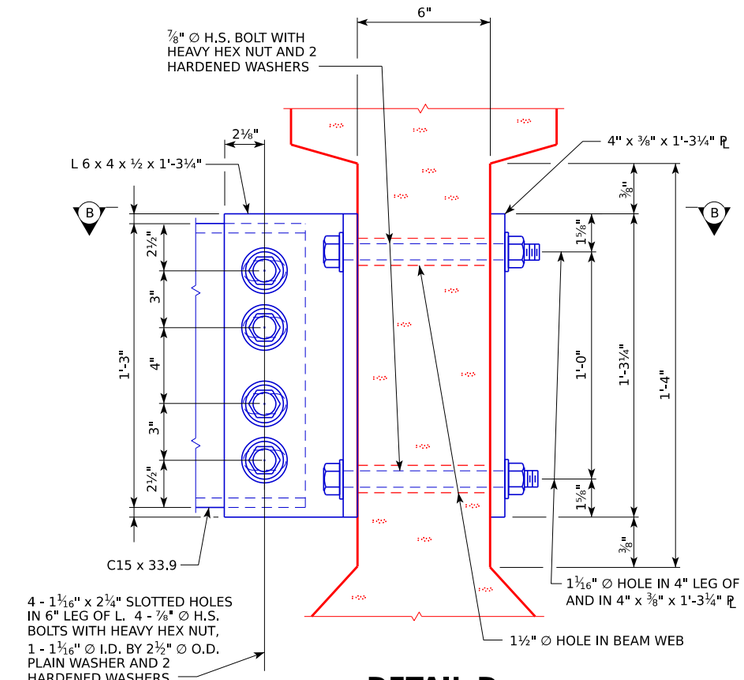
DIAPHRAGM CONNECTION BOLTS

	NO. OF DIAPH.	WEIGHT (LB.)
8 - ⅞"∅ X 0'-2¾" H.S. BOLTS WITH NUTS AND WASHERS, PER UNIT DIAPHRAGM = 10.3 LB	15	154.5

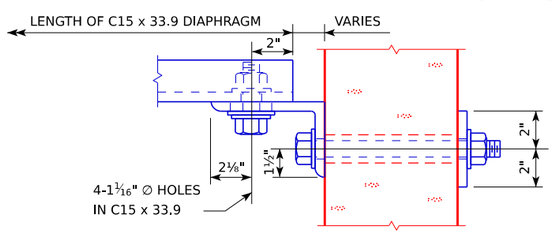
TOTAL WEIGHT

* THE LENGTH OF THE C15 x 33.9 IS BASED ON A VARIABLE CLEARANCE OF 1 11/16 TO 2 1/16 BETWEEN THE FACE OF BEAM WEB AND END OF C15 x 33.9.

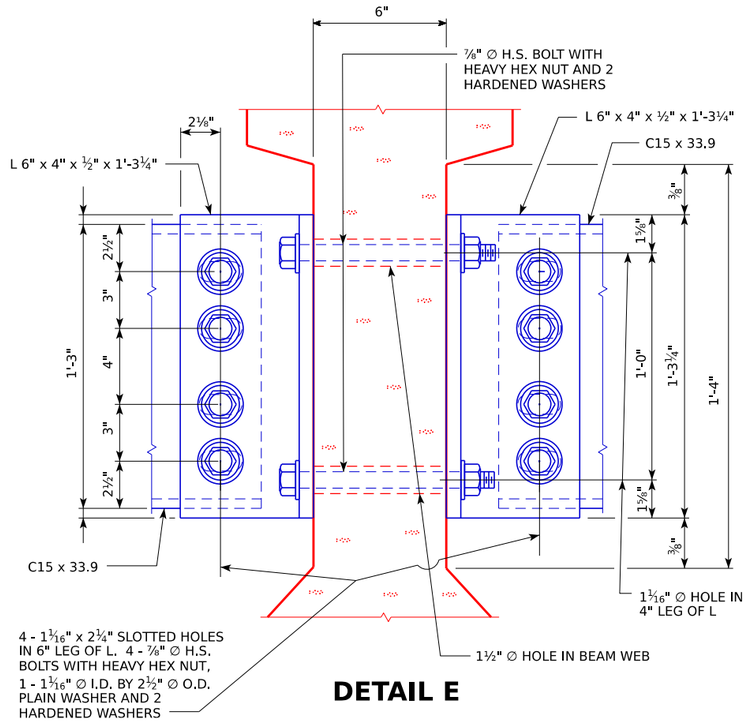
	WEB THICKNESS (IN.)	BRIDGE SKEW 0°
INTERMEDIATE DIAPHR. STRUCT. STEEL - TOTAL (LB) =	6	4205



DETAIL D



SECTION B-B



DETAIL E

Design For 0° Skew

138'-10" x 28'-0" PPCB Bridge w/ Two 5' Sidewalks

Ext. Spans 43'-3" Int. Span 52'-4"

Intermediate Steel Diaphragms

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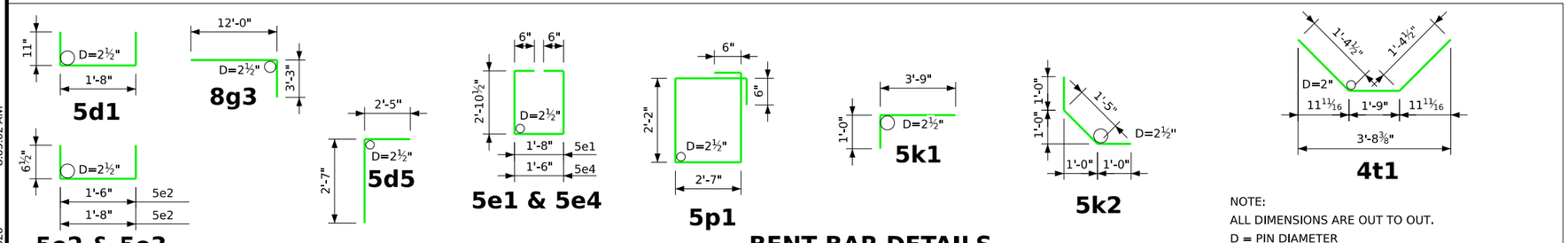
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REINFORCING BAR LIST - EPOXY COATED

(ONE SUPERSTRUCTURE AND TWO ABUTMENTS)

BAR	LOCATION	SHAPE	NO.	LENGTH	WEIGHT
6a1	SLAB TRANSV. TOP & BOTT.		339	42'-4	21555
5b1	SLAB LONGITUDINAL, TOP & BOTT.		202	40'-0	8427
5b2	SLAB LONGITUDINAL, TOP & BOTT., ENDS		202	33'-9	7111
6b3	SLAB LONGITUDINAL, TOP @ PIERS		92	12'-10	1773
5d1	PIER DIAPH. ENDS		12	3'-6	44
5d2	PIER & ABUT. DIAPH. LONGIT.		90	6'-7	618
5d3	PIER & ABUT. DIAPH. LONGIT.		30	5'-8	177
5d4	PIER DIAPH. LONGIT.		2	39'-3	82
5d5	ABUT. DIAPH. ENDS		12	5'-0	63
5d6	ABUT. DIAPH. LONGIT. B.F.		16	22'-3	371
5d7	PAVING NOTCH LONGIT.		8	22'-3	186
5e1	PIER DIAPH. HOOPS		40	8'-5	351
5e2	PIER DIAPH. TIES ENDS		4	2'-7	11
5e3	PIER DIAPH. TIES		40	2'-9	115
5e4	PIER DIAPH. HOOPS ENDS		4	8'-3	34
8f1	ABUT. FOOTING LONGIT.		36	23'-7	2267
8g1	ABUT. VERT.		136	6'-8	2421
8g3	ABUT. DIAPH. VERT. B.F.		62	15'-3	2524
5h1	ABUT. WING HORIZ. B.F.		28	6'-8	195
5h2	ABUT. TO WING ANCHOR		56	4'-11	287
5h3	ABUT. WING HORIZ. TRAFFIC FACE		28	6'-9	197
5k1	PAVING NOTCH		66	4'-9	327
5k2	PAVING NOTCH		66	3'-5	235
5p1	ABUTMENT HOOPS		128	10'-6	1402
5s1	WING VERT.		64	5'-10	389
4t1	UNDER BEAMS AT ABUTMENTS		12	4'-6	36
#2	PILE SPIRAL		12	38'-6	77
	SPIRAL SPACERS, L 7/8 x 7/8 x 1/8 x 0.70*		36	1'-10	46
	*EPOXY COATING NOT REQUIRED				
	REINFORCING STEEL (EPOXY COATED) - TOTAL (LBS.)				51321



BENT BAR DETAILS

NOTE:
ALL DIMENSIONS ARE OUT TO OUT.
D = PIN DIAMETER

Design For 0° Skew

138'-10" x 28'-0" PPCB Bridge w/ Two 5' Sidewalks

Ext. Spans 43'-3" Int. Span 52'-4"

Deck & Abutment Reinforcement

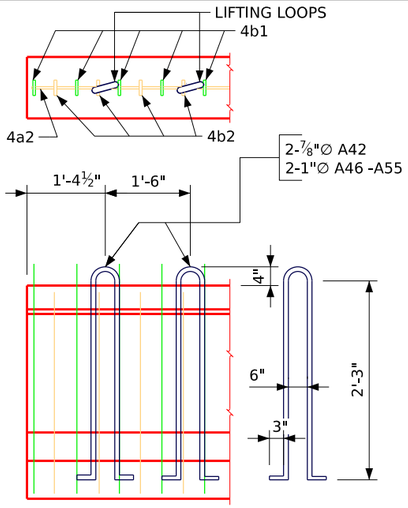
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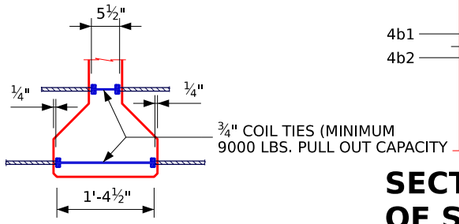
Design Team JJP/RRE/SJR | City of Davenport | Project Number BROS-1827(711)--8J-82 | Sheet Number V.15 OF 27

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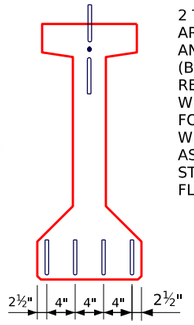
LIFTING LOOP DETAIL

ALTERNATE TYPES MAY BE SUBSTITUTED WITH THE APPROVAL OF THE NEGINNER. LIFTING LOOPS ARE TO BE STRUCTURAL GRADE.

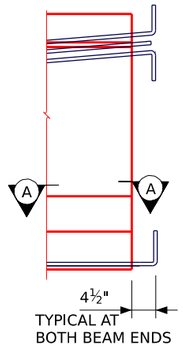


COIL TIE DETAIL

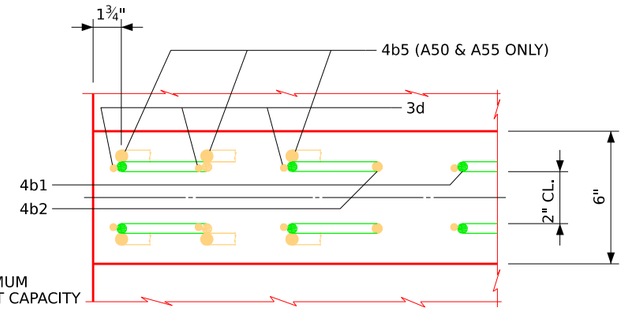
NUMBER AND EXACT LOCATION OF COIL TIES TO BE AS DETAILED ON SPECIFIC BRIDGE DESIGN.



2 TOP DEFLECTED OR STRAIGHT STRANDS ARE TO BE CUT WITH 1'-0 PROJECTIONS AND SHOP BENT UP OR DOWN AS SHOWN (BEND TOP AND BOTTOM ROWS). THE REMAINING TOP STRANDS ARE TO BE CUT WITH 0'-3 PROJECTIONS.
FOUR BOTTOM STRANDS ARE TO BE CUT WITH 1'-0 PROJECTIONS AND SHOP BENT AS SHOWN. THE REMAINING BOTTOM STRANDS SHALL BE CUT OFF REASONABLY FLUSH WITH THE CONCRETE.



STRAND PROJECTION AT BEAM ENDS WHEN EMBEDDED IN CONCRETE END DIAPHRAGMS



SECTION A-A SHOWING PLACEMENT OF STIRRUPS NEAR END OF BEAM

A BEAM DATA

BEAM	SPAN LENGTH |-| BEARING	OVERALL BEAM LENGTH (L)	STRAND SIZE	NO. OF STRANDS		TOTAL INITIAL PRESTRESS KIPS ③	HOLD DOWN FORCE-KIPS	CAMBER (in.)				DEFLECTION (in.) Δ_D				PERMISSIBLE SPACING				WEIGHT (TONS)		CONCRETE (C. Y.)	REINFORCING STEEL-(lb)
								AT RELEASE		AFTER LOSSES		IMMEDIATE① (ELASTIC) Δ_I		TIME ② (PLASTIC) Δ_T				HL93 LOADING					
				STRAIGHT	DEFLECTED							CONC. DIAPH.	STEEL DIAPH.	CONC. DIAPH.	STEEL DIAPH.			CONC. DIAPH.	STEEL DIAPH.				
A42	42'-6	43'-6	0.6"	7	2	383	9.3	0.70		1.24		0.38	0.35	0.09	0.09			7'-6	7'-6	7.1		3.49	452
*A50	50'-10	51'-10	0.6"	9	3	510.9	11.7	1.02		1.82		0.69	0.65	0.17	0.16			7'-6	7'-6	8.4		4.15	503

① DEFLECTION AT MID-SPAN DUE TO WEIGTH OF SLAB AND DIAPHRAGM. THE DEFLECTIONS SHOWN ARE FOR A SLAB WEIGHT OF 757 #/FT. (8" SLAB AND 7'-6" BEAM SPACING) AND ONE CONCRETE DIAPHRAGM (1912 #) OR ONE STEEL DIAPHRAGM (285 #) AT ℄ OF SPAN. FOR DIFFERENT SLAB AND DIAPHRAGM WEIGHTS, DEFLECTIONS WILL BE DIRECTLY PROPORTIONAL

② DEFLECTIONS DUE TO THE COMBINED EFFECT OF CREEP DUE TO WEIGHT OF SLAB AND SHRINKAGE OF SLAB

TOTAL BEAM DEFLECTIONS AT ℄ OF SPAN $\Delta_{,}$,DUE TO WEIGHT OF SLAB AND DIAPHRAGMS FOR DETAILING PURPOSE:

(A) $\Delta_{,}=\Delta_{,}+\Delta_{,}$ FOR SIMPLE SPAN.
(B) $\Delta_{,}=\Delta_{,}+\frac{3}{4}\Delta_{,}$ FOR END SPANS OF CONTINOUS BRIDGE.
(C) $\Delta_{,}=\Delta_{,}+\frac{1}{2}\Delta_{,}$ FOR INTERIOR SPANS OF CONTINOUS BRIDGE.

③ TOTAL INITITAL PRESTRESS IS BASED ON 72.6% f's, f's = 270 KSI AND As = 0.217 sq. in.

* MINIMUM CONCRETE f'c (AT 28 DAYS) SHALL BE 7,000 psi. MINIMUM f'ci AT RELEASE SHALL BE 6,000 psi

SPECIFICATIONS

CONSTRUCTION: STANDARD SPECIFICATIONS OF THE IOWA DEPARTMENT OF TRANSPORTATION, CURRENT SERIES, WITH CURRENT APPLICABLE SPECIAL PROVISIONS AND SUPPLE-MENTAL SPECIFICATIONS.

DESIGN: A.A.S.H.T.O. LRFD, SERIES OF 2007, WITH MINOR MODIFICATIONS.

DESIGN STRESSES:

DESIGN STRESS FOR THE FOLLOWING MATERIALS ARE TO BE IN ACCORDANCE WITH A.A.S.H.T.O. LRFD SPECIFICATIONS FOR HIGHWAY BRIDGES, SERIES OF 2007

REINFORCING STEEL IN ACCORDANCE WITH SECTION 5, GRADE 60

CONCRETE IN ACCORDANCE WITH SECTION 5, f'c = 5000 psi (EXCEPT AS NOTED)

PRESETRESSING STEEL IN ACCORDANCE WITH SECTION 5, f's = 270,000 psi

NOTES:

THESE BEAMS ARE DESIGNED FOR AASHTO LIVE LOADS AS INDICATED IN ABOVE TABLE WITH AN ALLOWANCE OF 20 lb. PER SQUARE FOOT OF ROADWAY FOR FUTURE WEARING SURFACE.

HOLD DOWN POINTS FOR DEFLECTED STRANDS MAY BE MOVED TOWARD ENDS OF BEAM A DISTANCE OF 0.05 L MAXIMUM AT PRODUCER'S OPTION.

ALL PRESTRESSING STRANDS SHALL CONFORM TO ASTM A416 GRADE 270 LOW RELAXATION STRANDS.

TOPS OF BEAMS ARE TO BE STRUCK OFF LEVEL AND FINSHED AS PER MATERIALS IM570.

BEARINGS SHALL BE AS DETAILED ON OTHER DESIGN SHEETS.

BEAMS TO BE USED IN BRIDGES MADE CONTINUOUS BY THE POURED IN PLACE FLOOR, ARE TO BE AT LEAST 28 DAYS OLD BEFORE THE FLOOR IS PLACED UNLESS A SHORTER CURING TIME IS APPROVED BY THE BRIDGE ENGINEER.

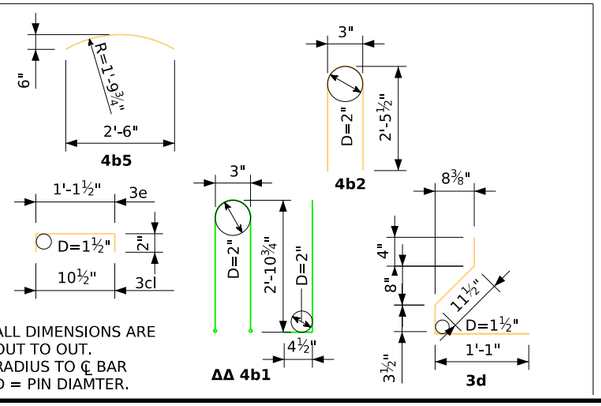
THE PORTIONS OF THE PRESTRESS BEAMS THAT ARE TO BE EMBEDDED IN THE ABUTMENT AND PIER DIAPHRAGMS SHALL BE ROUGHENED FOR A DISTANCE OF 10" FROM THE BEAM END BY SANDBLASTING OR OTHER APPROVED METHODS TO PROVIDE SUITABLE BOND BETWEEN THE BEAM AND THE DIAPHRAGM IN ACCORDANCE WITH ARTICLE 2403.03, I, OF THE STANDARD SPECIFICATIONS.

ALL BEAMS ARE TO BE INCREASED IN LENGTH TO COMPENSATE FOR ELASTIC SHORTENING, CREEP AND SHRINKAGE.

HOLES MUST BE CAST IN THE WEB TO ACCOMMODATE THE STEEL DIAPHRAGM ATTACHMENTS AS DETAILED ON THE STEEL DIAPHRAGM DETAIL SHEET.

0.6" DIAMETER STRANDS STRESSED TO NOT MORE THAN 5,000 LBS. EACH MAY BE USED IN LIEU OF THE a BARS WHICH RUN THE FULL LENGTH OF THE BEAM IN THE TOP FLANGE.

	BEAM / SPAN	A42 / 42'-6		A50 / 50'-10	
	BAR	SHAPE	NO.	LENGTH	NO.	LENGTH
	5a1		4	22'-10"	4	27'-0"
	4a2		2	3'-3"	2	3'-3"
ΔΔ	4b1		40	6'-8"	46	6'-8"
	4b2		12	5'-0"	8	5'-0"
	4b5		—	———	8	2'-9"
	3c1		40	1'-3"	46	1'-3"
**	3d		104	2'-8"	108	2'-8"
	3e		20	1'-6"	18	1'-6"



ALL DIMENSIONS ARE OUT TO OUT.
RADIUS TO ℄ BAR
D = PIN DIAMTER.

ΔΔ 4b1 BARS TO BE EPOXY COATED.

** WHERE DEFLECTING STRANDS INTERFERE WITH PLACEMENT, SOME IN-PLACE BENDING MAY BE NECESSARY.

Design For 0° Skew

138'-10" x 28'-0" PPCB Bridge w/ Two 5' Sidewalks

Ext. Spans 43'-3" Int. Span 52'-4"

A Beam Details

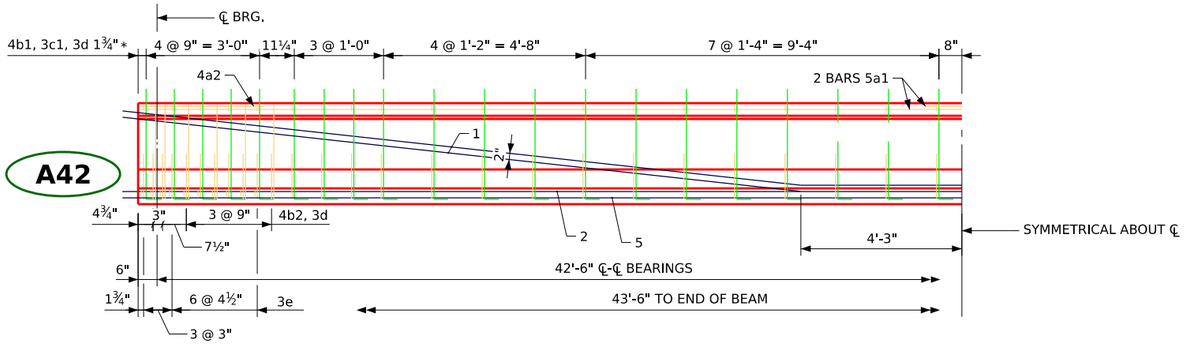
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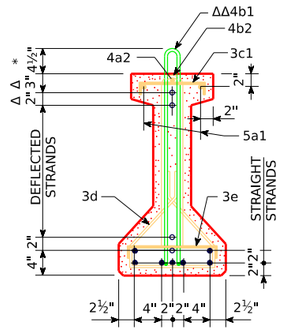
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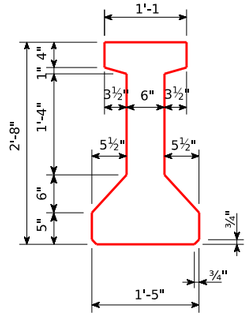
Design Team JJP/RRE/SJR	City of Davenport	Project Number BROS-1827(711)--8J-82	Sheet Number V.16 OF 27

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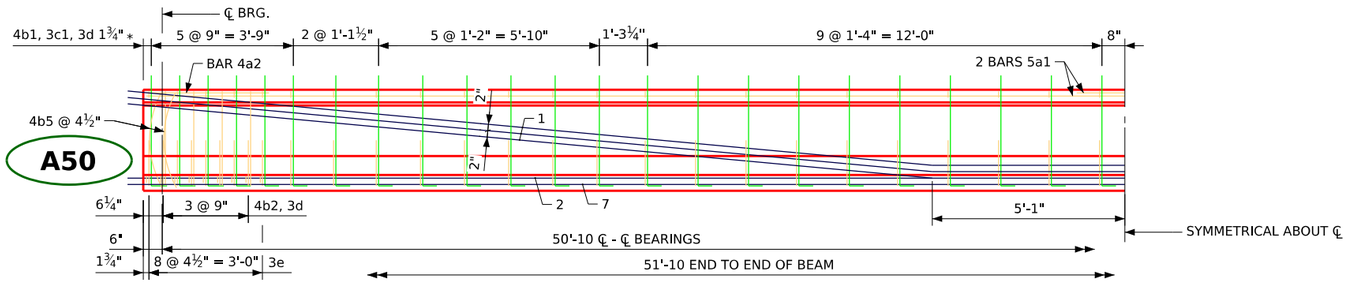


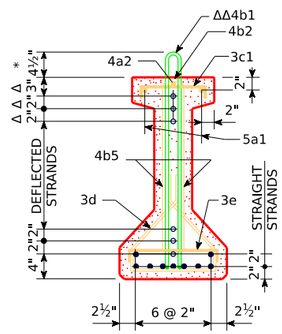
BEAM A42



"A" BEAM CROSS SECTION

A = 311.5 in²
Y_b = 14.05 in.
I = 34,082 in.⁴





BEAM A50

NOTE: BARS 3d ARE TO BE PLACED IN PAIRS.

O DEFLECTED STRANDS
* KEEP
Δ DIMENSIONS AT END OF BEAM
ΔΔ EPOXY COATED BARS

NOTE:
DIMENSIONS FOR THE LOCATION OF THE DEFLECTED STRANDS ARE AT ℄ BEAM AND END OF BEAM.

Design For 0° Skew

138'-10" x 28'-0" PPCB Bridge w/ Two 5' Sidewalks

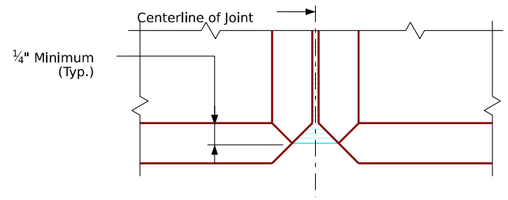
Ext. Spans 43'-3" Int. Span 52'-4"

A Beam Details

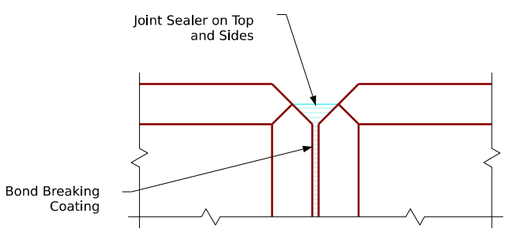
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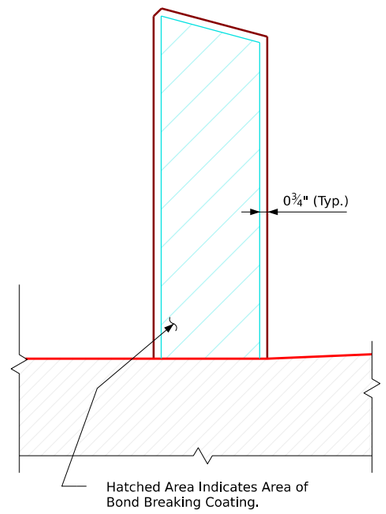
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Part Plan View



Part Elevation View



Part Section

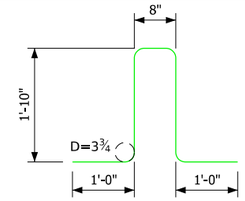
Separation Barrier Rail Joint Details

(Permissible Construction Joint)

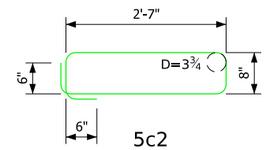
Epoxy-Coated Reinforcing Steel
One Separation Barrier

Bar	Location	Shape	No.	Length	Weight
5c1	Separation Barrier, Vertical		152	6'-4"	1004
5c2	Separation Barrier, Vertical		152	7'-6"	1189
5d1	Separation Barrier, Longitudinal		32	37'-9"	1260
				Epoxy-Coated Reinforcing Steel Total (lbs)	3453

Bent Bar Details



5c1



5c2

Note: All dimensions are out to out. D = Pin Diameter

Concrete Placement Summary - Two Separation Barriers

Section		Total
Standard Section (Both Separation Barriers)	283.67' @ 0.110 cu. yd. per ft.	31.2

Concrete Separation Barrier Quantity

Section	Unit	Total
Concrete Barrier, Reinforced, Separation	L.F.	319.7

Separation Barrier Notes:

Maintain a minimum clear distance of 2" from the concrete face to the nearest reinforcing bar, unless otherwise specified.

Construct permissible construction joints between vertical bars with a minimum spacing of 20 feet, ensuring a minimum distance of 1'-0" from the centerline of any handrail post. Apply an approved bond breaker on construction joint contact surfaces.

The cost of joint sealer and bond breaker is considered incidental to overall construction expenses.

All barrier rail reinforcing steel to be epoxy coated or stainless steel as shown.

Bid for Concrete Barrier, Reinforced, Separation on a lineal foot basis. Payment will be made at the contract priced per linear foot based on plan quantities. The bid includes all material, equipment, and labor for concrete rail construction, including conduit if shown in these plans. Reinforcing steel quantity not included and bid separately.

Use a light gray nonsag latex caulking sealer designed for outdoor use as the joint sealer. No testing or certification is required.

Ensure the top of the barrier rail aligns parallel to the theoretical centerline grade.

Fillet all exposed corners with a ¾" dressed and beveled strip for corners with a 90 degree or sharper angle.

The cross-sectional area of the separation barrier is 2.96 square feet.

Note:
Reinforcing Steel quantities are included on the "Summary Quantities Sheet"

Design For 0° Skew

138'-10" x 28'-0" PPCB
Bridge w/ Two 5' Sidewalks

Ext. Spans 43'-3" Int. Span 52'-4"

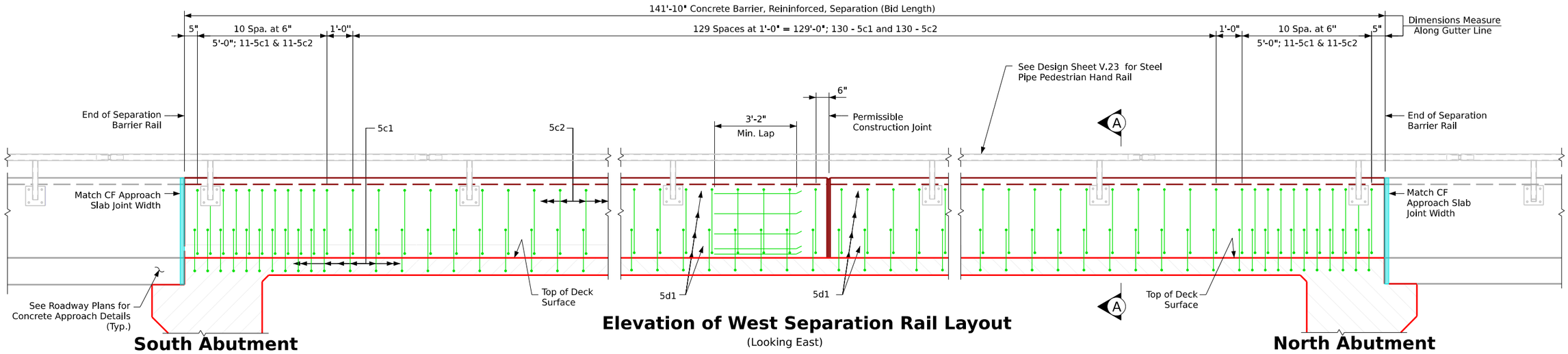
Separation Barrier Details

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City of Davenport

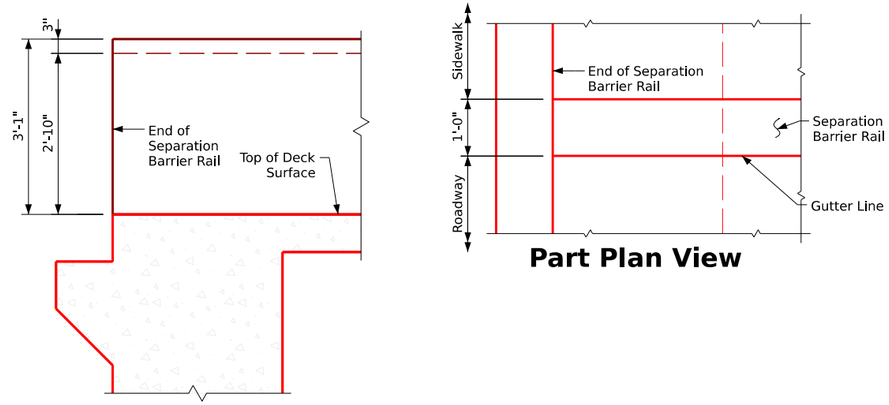
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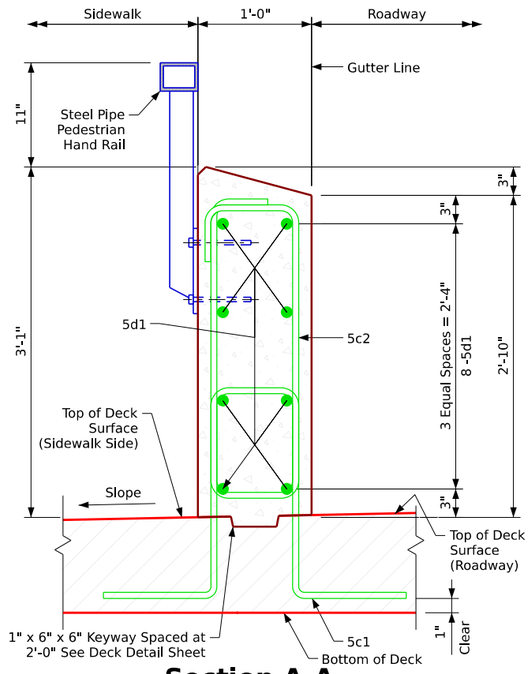
Elevation of West Separation Rail Layout

(Looking East)



Part Elevation View at Approach

Part Plan View



Section A-A

Design For 0° Skew

138'-10" x 28'-0" PPCB Bridge w/ Two 5' Sidewalks

Ext. Spans 43'-3" Int. Span 52'-4"

Separation Barrier Details

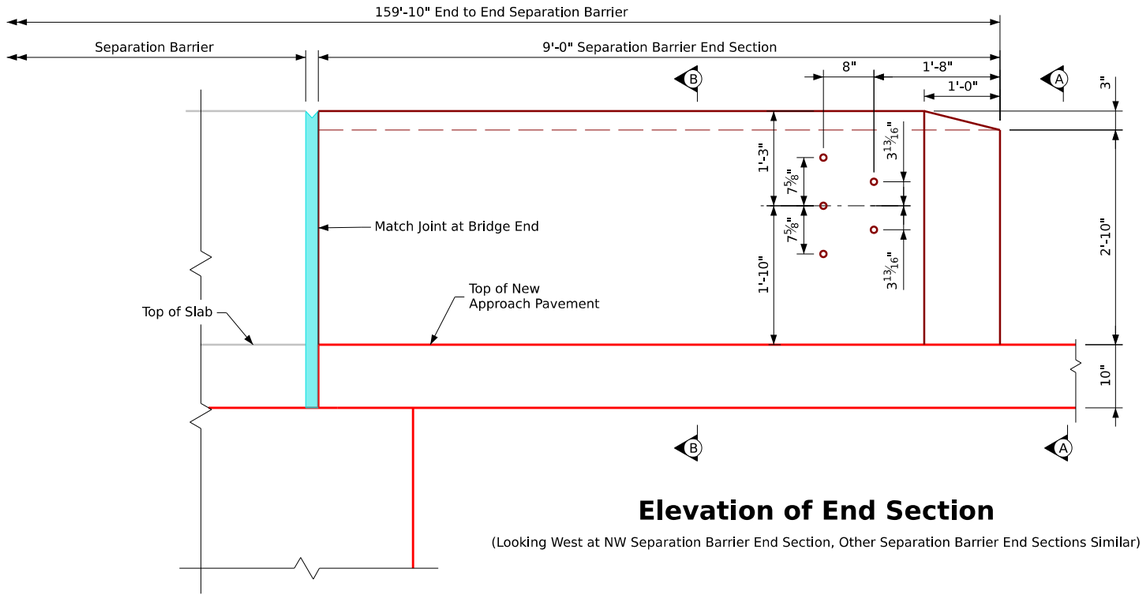
Sta. 100+61.80 (Wisconsin Ave.) December, 2026

City of Davenport

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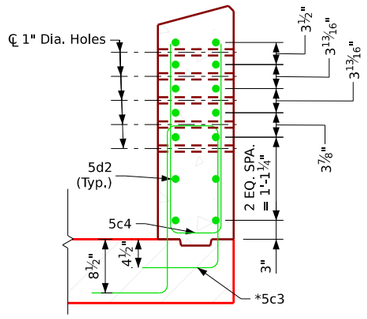
Design Team JJP/RRE/SJR	City of Davenport	Project Number BROS-1827(711)--8J-82	Sheet Number V.19 OF 27

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Elevation of End Section

(Looking West at NW Separation Barrier End Section, Other Separation Barrier End Sections Similar)

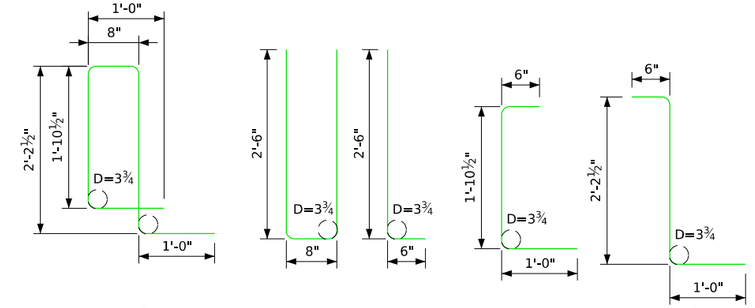


Section A-A

* 5c5, 5c6 Placement Similar

Epoxy-Coated Reinforcing Steel
One Separation Barrier End Section

BAR	LOCATION	SHAPE	NO.	LENGTH	WEIGHT
5c3	Appr. To Rail, Vertical		17	6'-9	120
5c4	Rail, Vertical		17	5'-8	100
5c5	Appr. To Rail, End, Vertical		2	3'-5	7
5c6	Appr. To Rail, End, Vertical		2	3'-9	8
5c7	Rail, End, Vertical		4	3'-0	13
5d2	Rail, End, Longitudinal		14	8'-8	127
				Epoxy-Coated Reinforcing Steel Total (lbs)	375

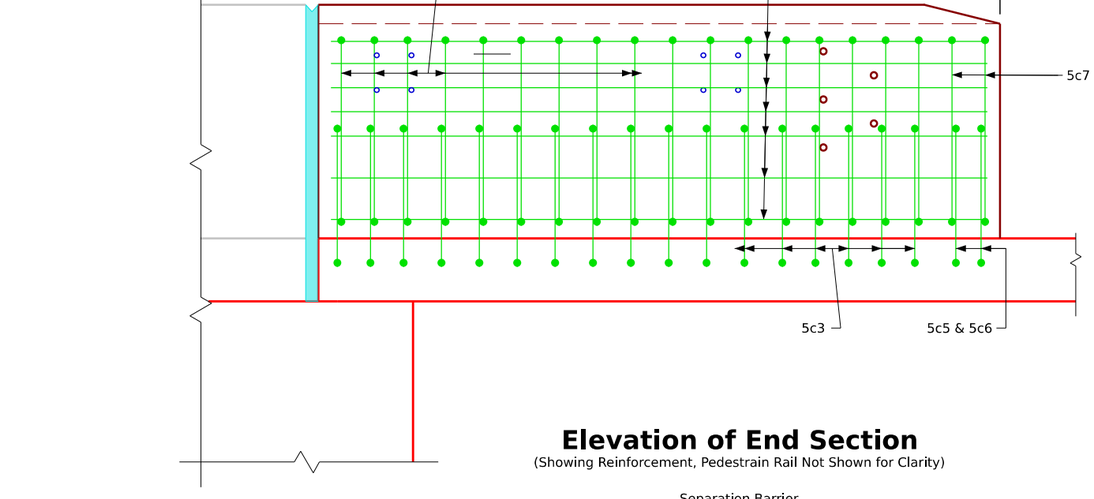


5c3 **5c4** **5c7** **5c5** **5c6**

Note: All dimensions are out to out. D = Pin Diameter

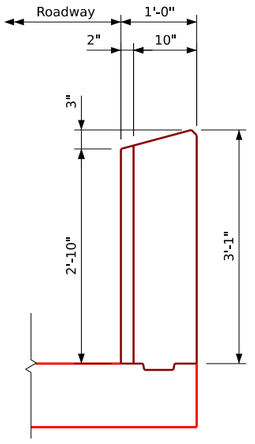
Concrete Placement Summary - One Separation Barrier End Section

Section		Total
One End Section	9' @ 0.110 cu. yd. per ft.	1.0



Elevation of End Section

(Showing Reinforcement, Pedestrain Rail Not Shown for Clarity)



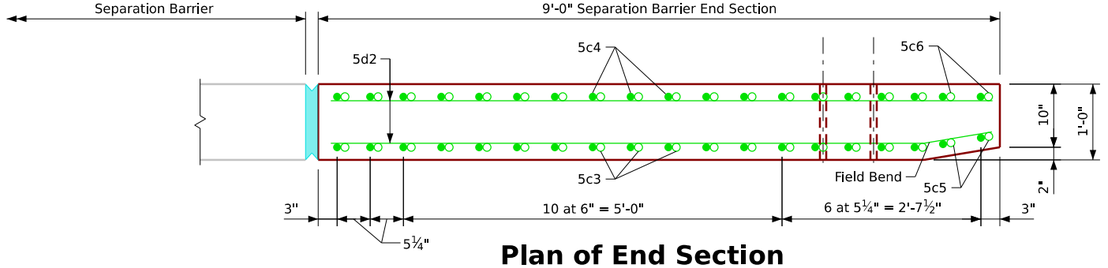
Section B-B

Notes:

Provide 5 holes formed with 1" dia. plastic conduit. Cost to be included in the price bid for "Concrete Barrier, Reinforced, Separation".

The 5c3, 5c5, 5c6 bars are to be placed with new approach slab. See Roadway Sheets for details.

See Sheets V.18 and V.23 for additional separation barrier rail notes.



Plan of End Section

(NW Shown, Others Similar)

Design For 0° Skew

138'-10" x 28'-0" PPCB Bridge w/ Two 5' Sidewalks

Ext. Spans 43'-3" Int. Span 52'-4"

Separation Barrier End Section Details

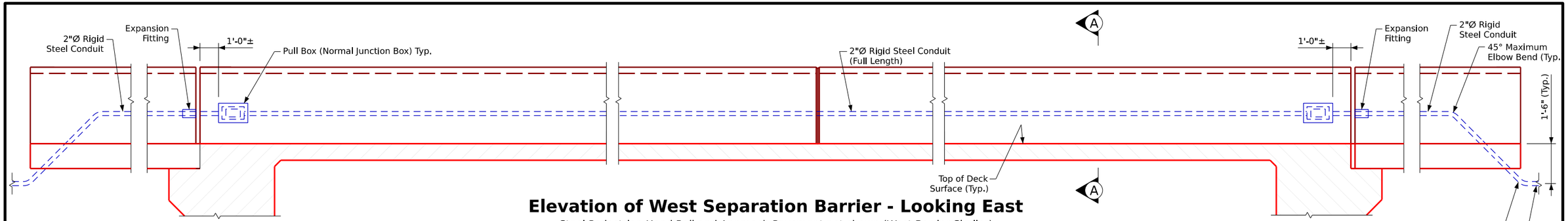
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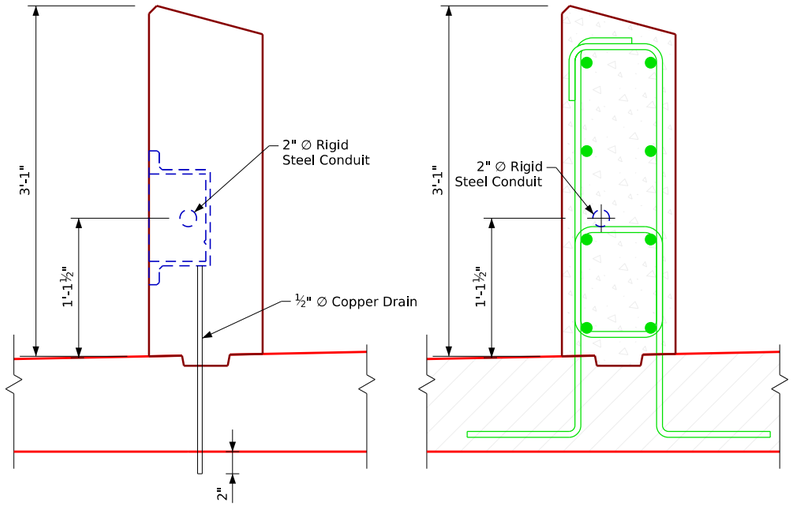
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Elevation of West Separation Barrier - Looking East

Steel Pedestrian Hand Rail and Approach Pavement not shown (West Barrier Similar)

South Abutment

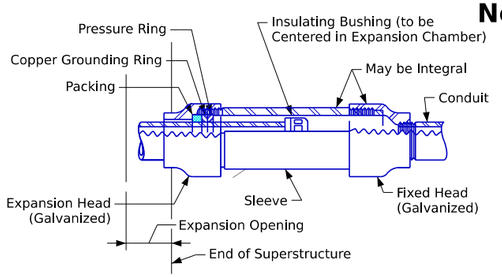


Section Thru Junction Box

Section A-A

Adjust Reinforcing to clear Junction Box. Junction Boxes are to be placed no further than 300'-0" apart.

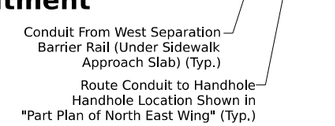
North Abutment



Expansion Chamber Length is 2" Min.

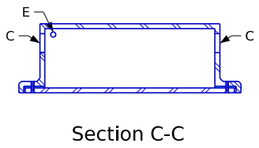
Expansion Fitting Detail

(4 Required)



Bossed For	Hole	For Conduit Size
5 Threads	C	2" Ø Rigid Steel
None	E	½" Ø Copper Pipe

Note: The grounding buttons are to be blind drilled and tapped for ⅜"Ø x 0'-0¾" bolts.



Section C-C

Barrier Conduit Notes:

See LI-103 Standard Road Plan for additional information on handholes.

See LI-104 Standard Road Plan for additional information on junction boxes.

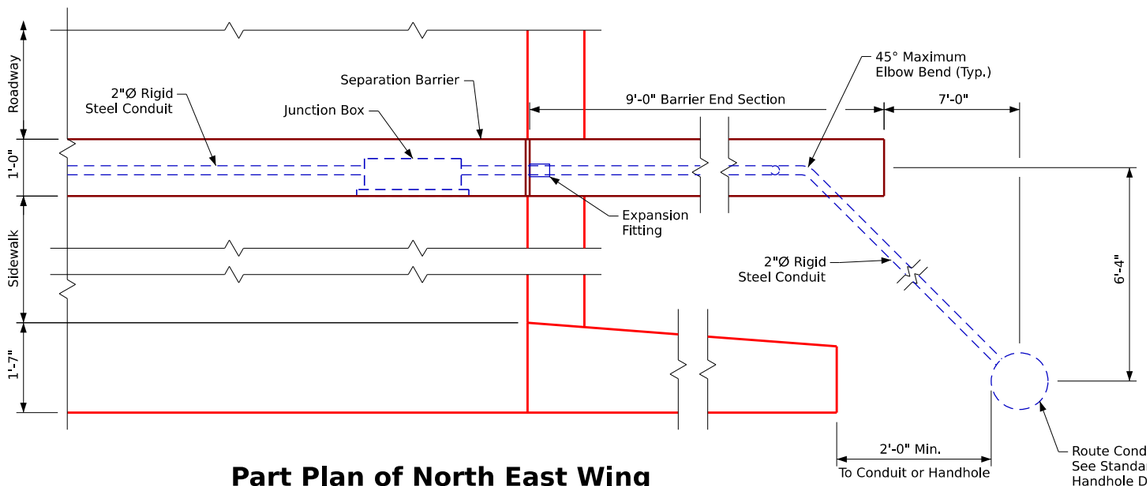
Construction shall conform to the current Iowa D.O.T. Standard and Supplemental Specifications and Special Provisions.

Conduit installation shall be in accordance with Article 2523.03, N, of the Standard Specifications.

All "C" entrance holes in junction boxes shall be drilled and tapped for the specified conduit size. All other holes shall have a concrete-tight slip fit. Conduit ends shall not protrude into junction box more than 1/4". Drain pipe end shall be flush with inside surface of box. Grounding buttons shall be located approximately 3" from the inside surface of the box wall, and not closer than 3" to the edge of any hole in the box floor. Holes for drain pipe shall be placed in the low corner of the box, with a minimum clearance of 1" between the edge of the hole and the inside surface of the box wall. Typical details are shown on this sheet.

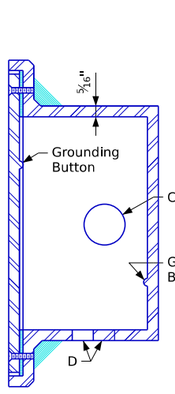
Expansion fitting shall be as specified or as approved by the Engineer. Typical details are shown on this sheet.

The rigid steel conduit, junction boxes and fittings including labor and any additional work to do the installation is considered incidental to the cost of the railing.

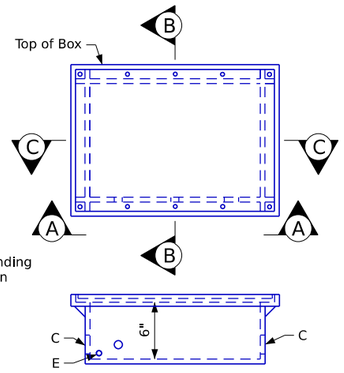


Part Plan of North East Wing

All Wings Similar



Section B-B



View A-A

LI-104 Junction Box

Watertight, Cast Iron - Flush Mount

Design For 0° Skew

138'-10" x 28'-0" PPCB Bridge w/ Two 5' Sidewalks

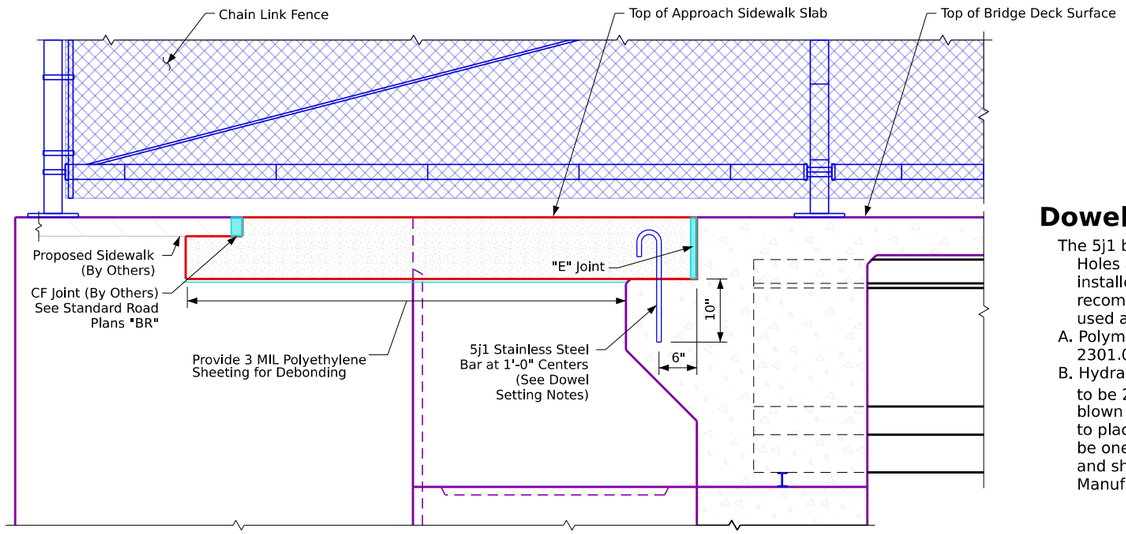
Ext. Spans 43'-3" Int. Span 52'-4"

Conduit Details

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City of Davenport

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Part Longitudinal Section Thru Approach Sidewalk Slab

Dowel Setting Notes:

The 5j1 bars shall be set as dowels in drilled holes. Holes are to be 10" deep. The dowels shall be installed in accordance with the Manufacturer's recommendations. The following systems shall be used as a bonding agent for the dowels:

A. Polymer grout system in accordance with Article 2301.03, E, of the Standard Specifications.

B. Hydraulic cement grout systems. Drilled holes are to be 2½ times the dowel diameter and are to be blown clean with compressed air immediately prior to placing grout. The hydraulic cement grout shall be one of those approved in Materials I.M. 491.13 and shall be used in accordance with the Manufacturer's recommendations.

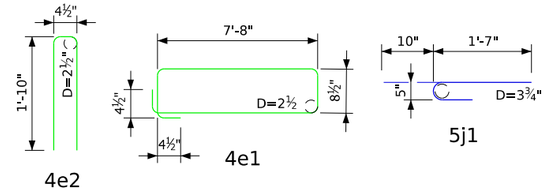
Epoxy-Coated Reinforcing Steel - One Sidewalk Slab

Bar	Location	Shape	No.	Length	Weight
4e1	Sidewalk Slab Hoop		6	17'-6"	70
4e2	Sidewalk Slab Hoop, at Sidewalk Lip		6	4'-1"	16
4m1	Sidewalk Slab transv. Top & Bottom		21	5'-0"	70
				Epoxy-Coated Reinforcing Steel Total (lbs)	156

Stainless Steel Reinforcing - One Sidewalk Slab

Bar	Location	Shape	No.	Length	Weight
5j1	Sidewalk Slab Dowel		6	2'-5"	15
				Stainless Steel Reinforcing Total (lbs)	15

Bent Bar Details



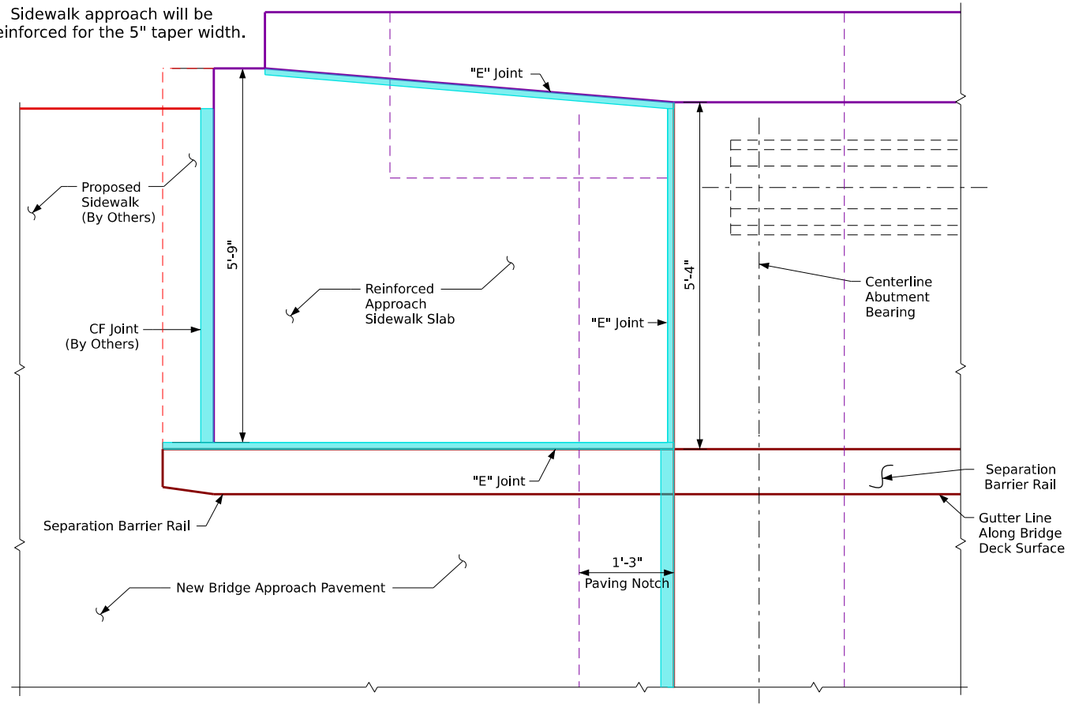
Note: All dimensions are out to out. D = Pin Diameter

Concrete Placement Quantity - Four Sidewalk Slabs

Item	Unit	Total
Structural Concrete (Bridge)	cu. yd.	8.0

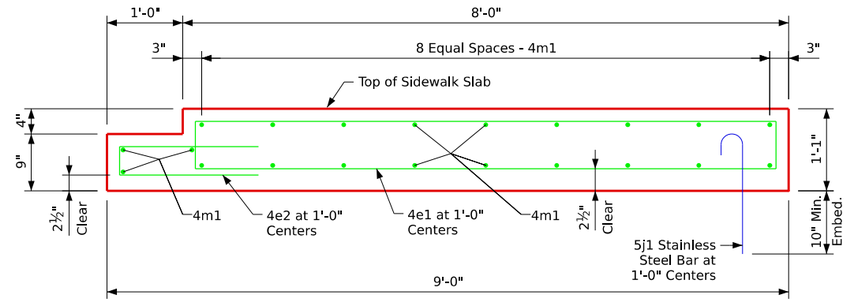
5j1 dowels shall be deformed bar Grade 60, Type 316 LN in accordance with Standard Specifications 4151.03.E.

Note:
Sidewalk approach will be unreinforced for the 5" taper width.



Plan View Approach Sidewalk Slab

(Chain Link Fence, Steel Pipe Hand Rail, and Guardrail NOT shown)



Longitudinal Section of Approach Sidewalk Slab

Note:
Reinforcing Steel and Structural Concrete (Bridge) quantities are included on the "Summary Quantities Sheet"

Design For 0° Skew

138'-10" x 28'-0" PPCB Bridge w/ Two 5' Sidewalks

Ext. Spans 43'-3" Int. Span 52'-4"

Approach Sidewalk Details

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City of Davenport

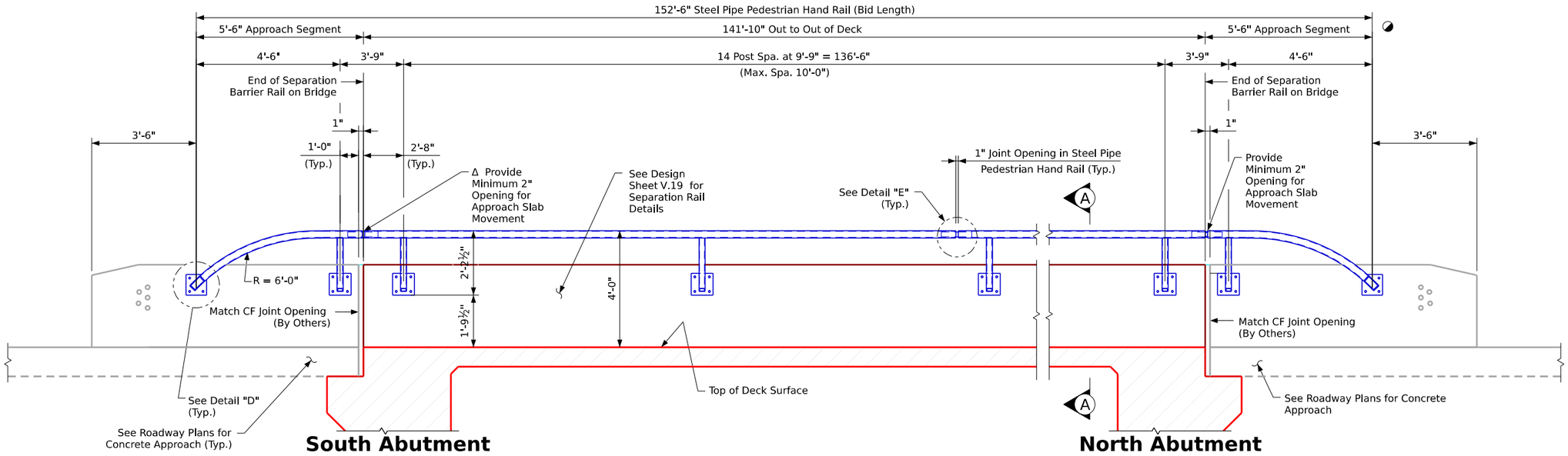
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Design Team	JJP/RRE/SJR	City of Davenport	Project Number	BROS-1827(711)--8J-82	Sheet Number	V.22 OF 27

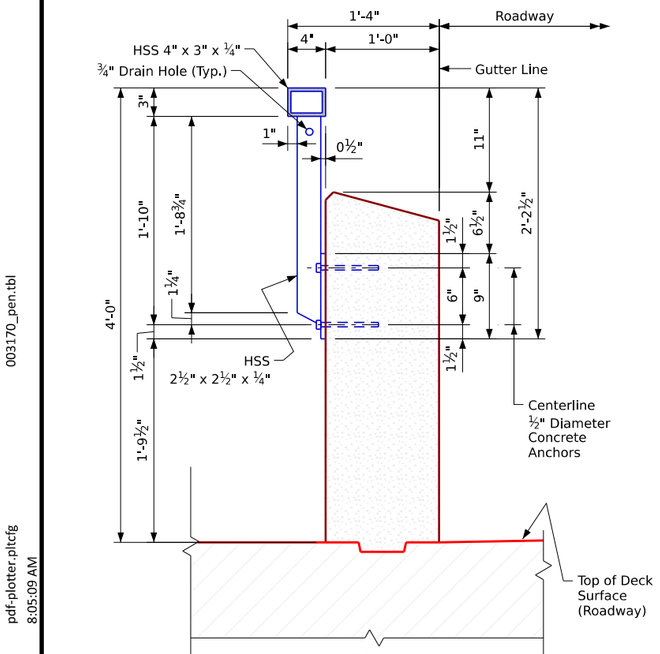
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Pedestrian Handrail Placement Quantity (Both Rails)

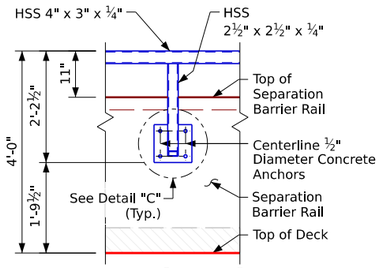
Item	Unit	Total
Steel Pipe Pedestrian Hand Rail	L.F.	305.0



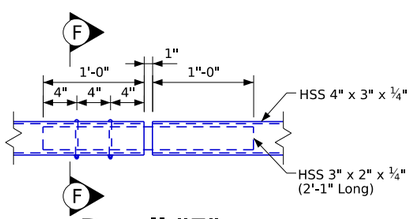
Elevation of Steel Pipe Pedestrian Hand Rail Layout



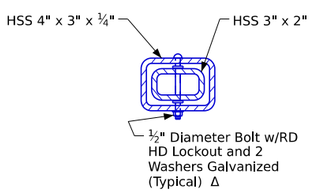
Section A-A (Hand Rail Detail)



Part Elevation

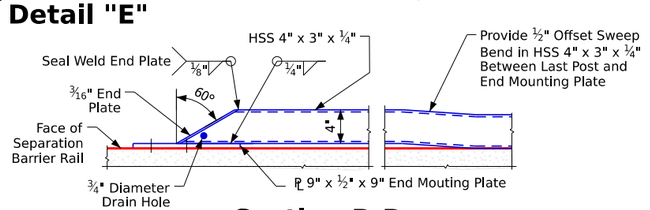


Detail "E"

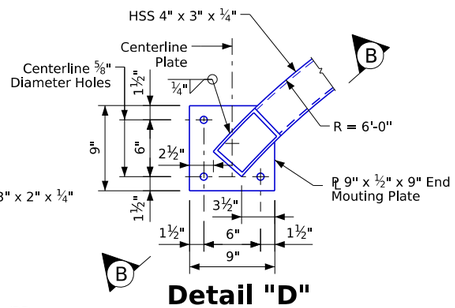


Section F-F

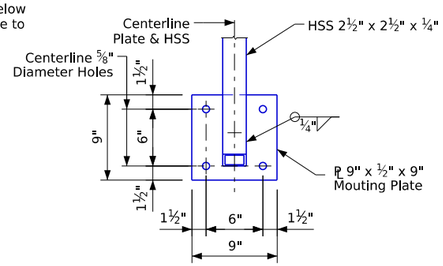
Note:
Δ Space inner sleeve from outer tube with tack weld standard washer above and below sleeve at each bolt. Holes in inner sleeve to be ¾" diameter oversized holes.



Section B-B



Detail "D"



Detail "C"

Steel Pipe Pedestrian Hand Rail Notes

The Steel Pipe Pedestrian Hand Rail is to be bid on a lineal foot basis measured end to end of rail. The price bid for Steel Pipe Pedestrian Hand Rail shall be full compensation for furnishing all material, including anchor bolts and shims, and all of the equipment and labor required to erect the rail in accordance with these plans and specifications.

Hollow structural sections must meet the requirements of ASTM A500 Grade B. Steel plates and shims must meet ASTM A-36. Panels, splice sections, and end sections are to be galvanized after fabrication in accordance with ASTM A123 specifications

Ends of rail sections are to be sawed or milled. All cut ends are to be true, smooth, and free of burrs or ragged edges.

No painting will be required.

The stud concrete anchors shall be galvanized and have a minimum pull out strength of 8000 pounds based on 4000 psi concrete.

◕ Dimensions provided are along the back face of the separation barrier rail (Sidewalk Side) and are in the horizontal plane only. The Contractor must adjust for slope and vertical curve to align with the horizontal and vertical alignment of the bridge. Posts shall be set normal to the bridge grade.

Design For 0° Skew

138'-10" x 28'-0" PPCB Bridge w/ Two 5' Sidewalks

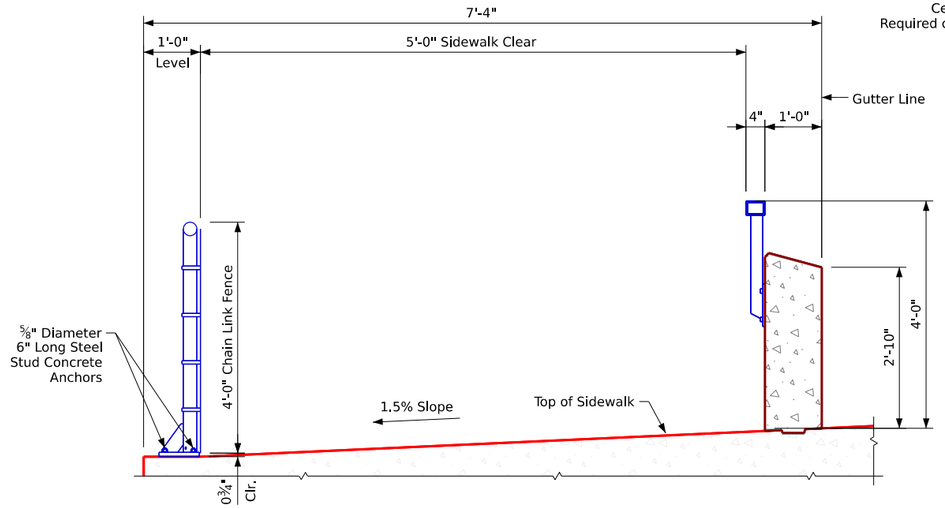
Ext. Spans 43'-3" Int. Span 52'-4"

Back Mounted Ped. Hand Rail

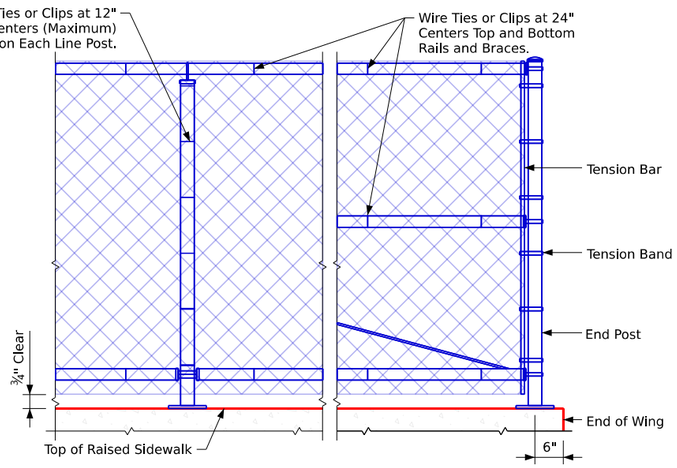
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Typical Section



Fence Detail View

Looking towards Traffic

Fence Placement Quantity (Both Fences)

Item	Unit	Total
Fence, Chain Link, 48in. Height	L.F.	309.7

Chain Link Fence Notes:

The chain link fence is to be bid on a linear foot basis measured from centerline to centerline of end posts. The price bid for "Fence, Chain Link, 48in. Height" shall be full compensation for furnishing all material, including concrete anchors and shims, and all of the equipment and labor required to erect the fence in accordance with these Plans and Specifications.

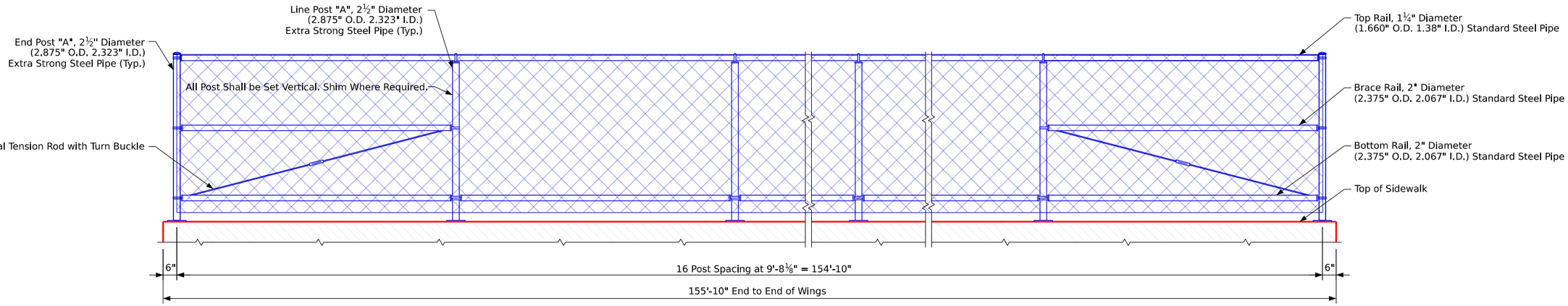
The chain link fence shall be either zinc or aluminum coated fabric, 2" mesh, no. 9 wires, 4'-0" height with knuckled selvages top and bottom.

The stud concrete anchors shall be galvanized and have a minimum pullout strength of 8000 pounds based on 4000 psi concrete.

The material for posts, braces and rails shall be steel pipe in accordance with Article 4154.10, A, of the Standards Specifications. As an alternate, ASTM A500 Grade B pipe material may be substituted for the posts. Base plates and shims shall meet the requirements of ASTM A36. Posts and base plates shall be galvanized, after fabrication, in accordance with the requirements of ASTM A123. Special fittings shall be in accordance with Article 4154.11, of the Standard Specifications, unless otherwise noted.

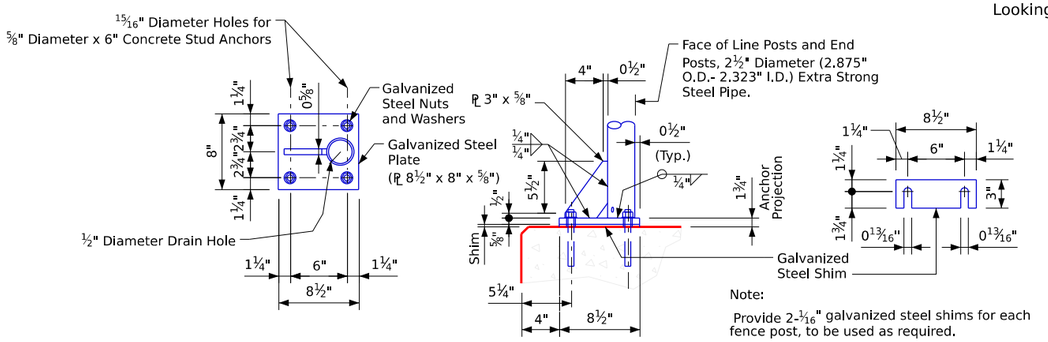
The fence shall be true to line, taut, and comply with the best practice for fence construction of this type. All ends of wires shall be turned so that they extend away from the sidewalk side of the fence.

Do not attach signs, company advertising, or other insignia to the completed fence.



Elevation of Fence

Looking Towards Traffic (Maximum Post Spacing 10'-0")



Base Plate Details for End Posts and Line Posts

Post and base plates shall be galvanized, after fabrication, in accordance with the requirements of ASTM A123.

Design For 0° Skew

138'-10" x 28'-0" PPCB Bridge w/ Two 5' Sidewalks

Ext. Spans 43'-3" Int. Span 52'-4"

Fence Details

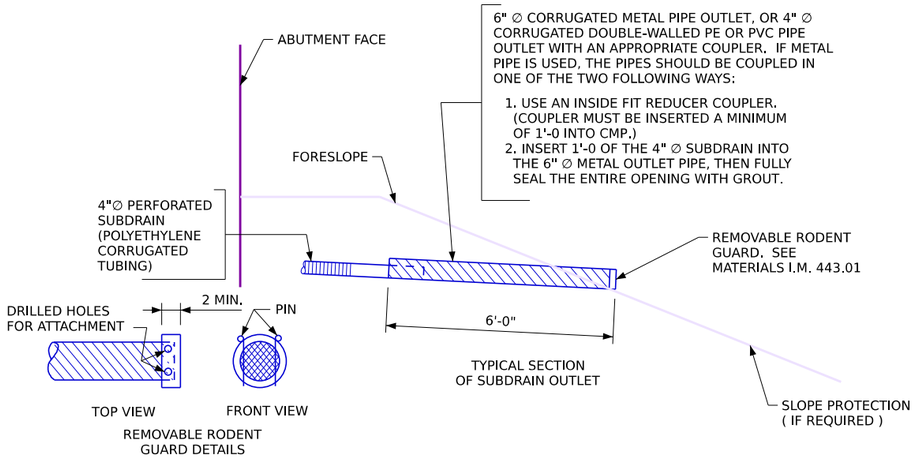
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City of Davenport

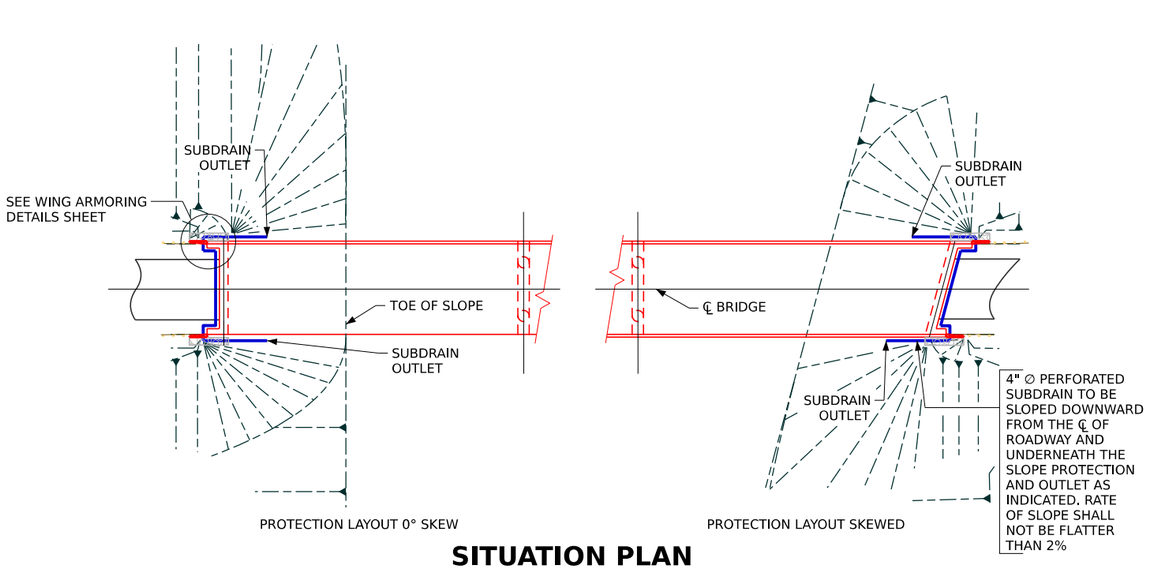
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OUTLET DETAILS



SITUATION PLAN

REFER TO SITUATION PLAN FOR NORTH ARROW.

NOTE:
SEE ABUTMENT BACKFILL DETAILS SHEET FOR DETAILS NOT SHOWN ON THIS SHEET WHICH ARE PERTINENT TO THIS STRUCTURE.

Design For 0° Skew

138'-10" x 28'-0" PPCB Bridge w/ Two 5' Sidewalks

Ext. Spans 43'-3" Int. Span 52'-4"

Subdrain Details

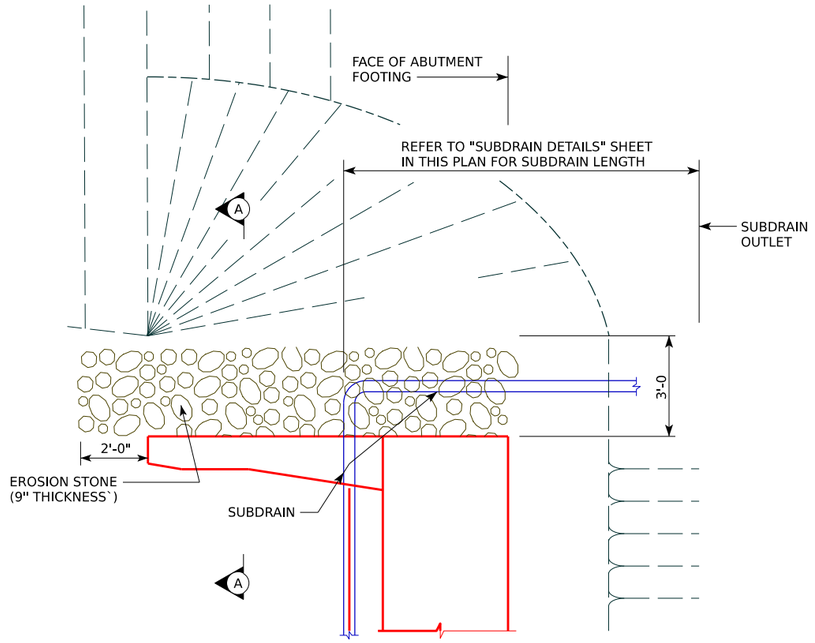
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City of Davenport

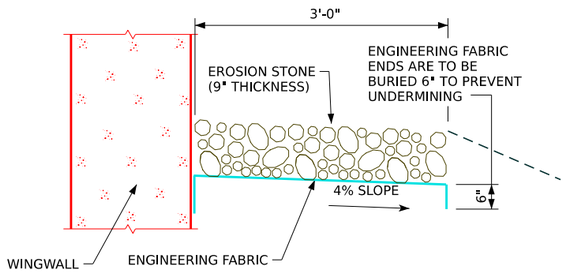
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TOP VIEW OF WING ARMORING



SECTION A-A

SUBDRAIN NOTES:

SEE SHEET V.25 FOR DETAILS OF PLACING
ALL SUBDRAINS AND SUBDRAIN OUTLETS REQUIRED FOR THIS STRUCTURE.

THE BRIDGE CONTRACTOR IS TO INSTALL SUBDRAINS BEHIND THE ABUTMENT. THE SUBDRAINS SHALL BE 4" IN DIAMETER AND BE IN ACCORDANCE WITH ARTICLE 4143.01, B, OF THE STANDARD SPECIFICATIONS. THE SUBDRAIN OUTLET SHALL CONSIST OF A 6'-0 LENGTH OF PIPE WITH A REMOVABLE RODENT GUARD.

THE DIMENSIONS SHOWN FOR THE PROPOSED SUBDRAINS ARE BASED ON THE PROPOSED GRADING LAYOUT OF BRIDGE BERMS. THE DIMENSIONS SHOWN ARE FOR ESTIMATING ONLY. REQUIRED LENGTHS AND GENERAL LOCATIONS OF SUBDRAINS ARE SUBJECT TO CHANGE DUE TO FIELD ADJUSTMENTS OF THE GRADING LAYOUT.

THE COST OF FURNISHING AND PLACING SUBDRAIN (INCLUDING EXCAVATION), GRANULAR BACKFILL, POROUS BACKFILL, AND SUBDRAIN OUTLET IS TO BE INCLUDED IN THE PRICE BID FOR "STRUCTURAL CONCRETE (BRIDGE)". NO EXTRA PAYMENT WILL BE MADE.

EROSION STONE WING ARMORING NOTES:

EROSION STONE SHALL BE PLACED ALONG THE SIDE OF THE WING AND ABUTMENT FOOTING. THIS IS TYPICAL AT EACH CORNER OF THE BRIDGE UNLESS OTHERWISE NOTED IN THE PLANS. THE EROSION STONE AT THESE LOCATIONS SHALL BE UNDERLAYED WITH ENGINEERING FABRIC AND BE IN ACCORDANCE WITH ARTICLE 4196.01, B, 3, OF THE STANDARD SPECIFICATIONS.

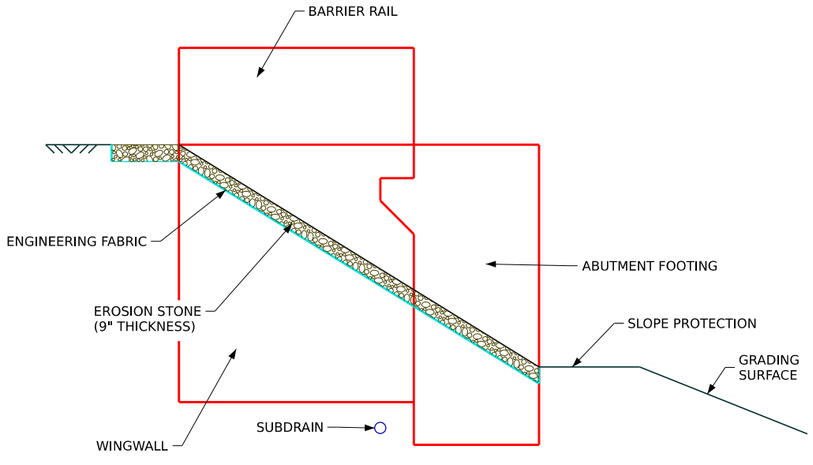
THE BRIDGE BERM FORESLOPE SHALL BE COMPACTED AND SHAPED AS SHOWN ON THESE PLANS, THE SITUATION PLAN AND AS DIRECTED BY THE ENGINEER. THE BERM FORESLOPE SHALL BE FIRM WHEN THE ENGINEERING FABRIC AND EROSION STONE ARE PLACED.

IF THE ENGINEERING FABRIC IS LAPPED THE LAPS SHALL BE A MINIMUM OF ONE FOOT IN LENGTH, SHINGLE FASHION WITH UP SLOPE LAP PIECE ON TOP AND STAPLED FOR CONTINUITY.

THE EROSION STONE SHALL BE IN ACCORDANCE WITH ARTICLE 4130

THE EROSION STONE SHALL BE DEPOSITED, SPREAD, CONSOLIDATED AND SHAPED BY MECHANICAL OR HAND METHODS THAT WILL PROVIDE UNIFORM DEPTH AND DENSITY AND PROVIDE UNIFORM SURFACE APPEARANCE.

PAYMENT FOR THE BRIDGE WING ARMORING SHALL BE INCIDENTAL TO THE BID ITEM "STRUCTURAL CONCRETE (BRIDGE)" AND SHALL INCLUDE COSTS OF ALL MATERIAL AND LABOR TO CONSTRUCT THE WING ARMORING AS SHOWN ON THESE PLANS.



PROFILE VIEW OF WING ARMORING

(SHOWN FOR INTEGRAL ABUTMENT)

Design For 0° Skew

138'-10" x 28'-0" PPCB Bridge w/ Two 5' Sidewalks

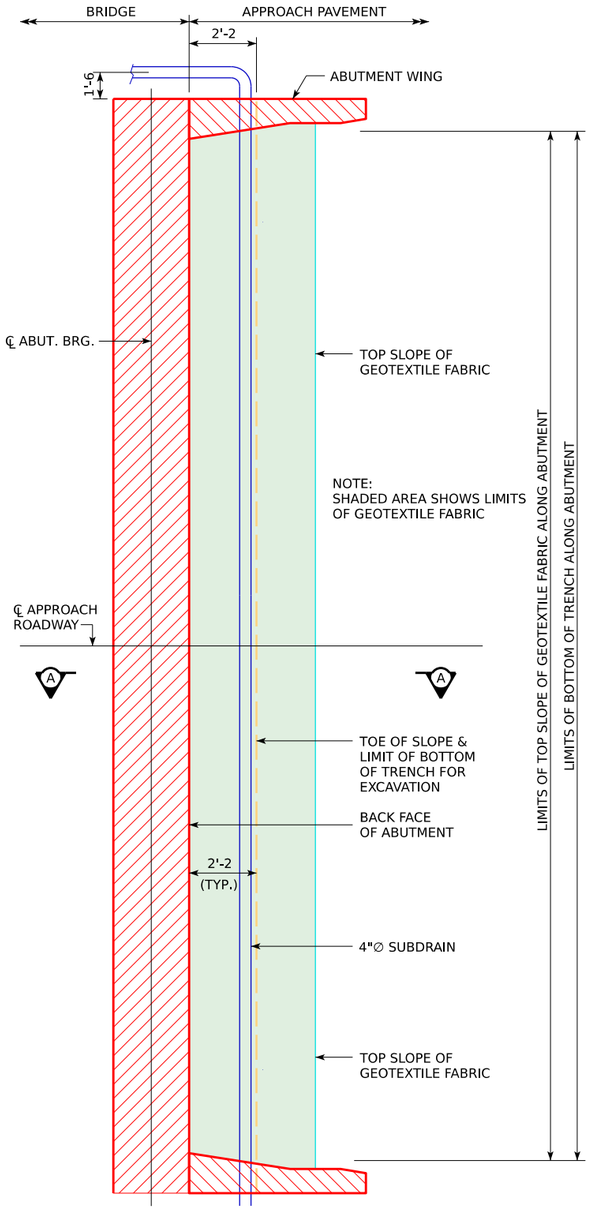
Ext. Spans 43'-3" Int. Span 52'-4"

Wing Armoring Details

Sta. 100+61.80 (Wisconsin Ave.) December, 2026

City of Davenport

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ABUTMENT PLAN WITHOUT WING EXTENSIONS

ABUTMENT BACKFILL PROCESS:

THE BASE OF THE EXCAVATION SUBGRADE BEHIND THE ABUTMENT IS TO BE GRADED WITH A 4% SLOPE AWAY FROM THE ABUTMENT FOOTING AND A 2% CROSS SLOPE IN THE DIRECTION OF THE SUBDRAIN OUTLET. THIS EXCAVATION SHAPING IS TO BE DONE PRIOR TO BEGINNING INSTALLATION OF THE GEOTEXTILE AND BACKFILL MATERIAL.

AFTER THE SUBGRADE HAS BEEN SHAPED, THE GEOTEXTILE FABRIC SHALL BE INSTALLED IN ACCORDANCE WITH THE DETAILS SHOWN. THE FABRIC IS INTENDED TO BE INSTALLED IN THE BASE OF THE EXCAVATION AND EXTENDED VERTICALLY UP THE ABUTMENT BACKWALL, ABUTMENT WING WALLS, AND EXCAVATION FACE TO A HEIGHT THAT WILL BE APPROXIMATELY 1 TO 2 FOOT HIGHER THAN THE HEIGHT OF THE POROUS BACKFILL PLACEMENT AS SHOWN IN THE "BACKFILL DETAILS" ON THIS SHEET. THE STRIPS OF THE FABRIC PLACED SHALL OVERLAP APPROXIMATELY 1 FOOT AND SHALL BE PINNED IN PLACE. THE FABRIC SHALL BE ATTACHED TO THE ABUTMENT BY USING LATH FOLDED IN THE FABRIC AND SECURED TO THE CONCRETE WITH SHALLOW CONCRETE NAILS. THE FABRIC PLACED AGAINST THE EXCAVATION FACE SHALL BE PINNED.

WHEN THE FABRIC IS IN PLACE, THE SUBDRAIN SHALL BE INSTALLED DIRECTLY ON THE FABRIC AT THE TOE OF THE REAR EXCAVATION SLOPE. A SLOT WILL NEED TO BE CUT IN THE FABRIC AT THE POINT WHERE THE SUBDRAIN EXITS THE FABRIC NEAR THE END OF THE ABUTMENT WING WALL.

POROUS BACKFILL IS THEN PLACED AND LEVELED, NO COMPACTION IS REQUIRED.

THE REMAINING WORK INVOLVES BACKFILLING WITH FLOODABLE BACKFILL, SURFACE FLOODING, AND VIBRATORY COMPACTION. THE FLOODABLE BACKFILL MATERIAL SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS. THE FLOODABLE BACKFILL SHALL BE PLACED IN INDIVIDUAL LIFTS, SURFACE FLOODED, AND COMPACTED WITH VIBRATORY COMPACTION TO ENSURE FULL CONSOLIDATION. LIMIT THE LOOSE LIFTS TO NO MORE THAN 2 FEET OF THICKNESS.

START SURFACE FLOODING FOR EACH FLOODABLE BACKFILL LIFT AT THE HIGH POINT OF THE SUBDRAIN AND PROGRESS TO THE LOW POINT WHERE THE SUBDRAIN EXITS THE FABRIC. TO ENSURE UNIFORM SURFACE FLOODING, WATER RUNNING FULL IN A 2-INCH DIAMETER HOSE SHOULD BE SPRAYED IN SUCCESSIVE 6-FOOT TO 8-FOOT INCREMENTS FOR 5 MINUTES WITHIN EACH INCREMENT.

FLOODABLE BACKFILL LIFT PLACEMENT, FLOODING, AND COMPACTION SHALL PROGRESS UNTIL THE REQUIRED FULL THICKNESS OF THE ABUTMENT BACKFILL HAS BEEN COMPLETED.

WATER REQUIRED FOR FLOODING, SUBDRAINS, POROUS BACKFILL, FLOODABLE BACKFILL, AND GEOTEXTILE FABRIC FURNISHED AT THE BRIDGE ABUTMENTS WILL NOT BE MEASURED SEPARATELY FOR PAYMENT.

THE COST OF WATER REQUIRED FOR FLOODING, SUBDRAINS, POROUS BACKFILL, FLOODABLE BACKFILL, AND GEOTEXTILE FABRIC FURNISHED AT THE BRIDGE ABUTMENTS SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE BID FOR STRUCTURAL CONCRETE.

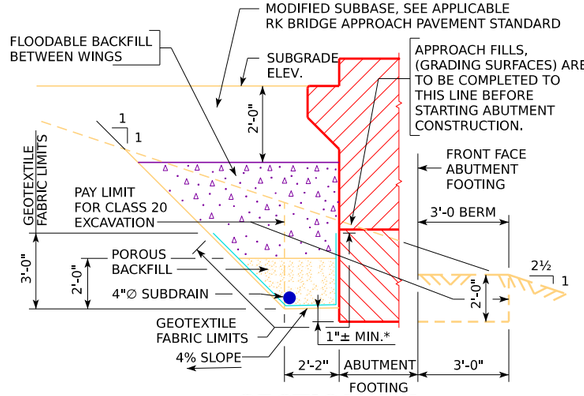
NOTE:
SEE SUBDRAIN DETAILS SHEET FOR DETAILS NOT SHOWN ON THIS SHEET WHICH ARE PERTINENT TO THIS STRUCTURE.

NOTE:

SUBDRAIN SHALL SLOPE DOWNWARD 2% FROM ℄ APPROACH ROADWAY WHEN OUTLETTING BOTH SIDES OF THE ABUTMENT.

SUBDRAIN SHALL SLOPE DOWNWARD 2% FROM HIGH END WHEN OUTLETTING AT ONE END OF THE ABUTMENT.

THE GEOTEXTILE FABRIC SHALL BE IN ACCORDANCE WITH ARTICLE 4196.01, B, 6 OF THE STANDARD SPECIFICATIONS. IF THE ENGINEERING FABRIC IS LAPPED THE LAPS SHALL BE A MINIMUM OF ONE FOOT IN LENGTH, SHINGLE FASHION WITH UP SLOPE LAP PIECE ON TOP AND STAPLED FOR CONTINUITY.



SECTION A-A

BACKFILL DETAILS

NOTE: GEOTEXTILE FABRIC WILL BE ATTACHED TO FACE OF ABUTMENT FOOTING AND WINGS.

Design For 0° Skew

138'-10" x 28'-0" PPCB Bridge w/ Two 5' Sidewalks

Ext. Spans 43'-3" Int. Span 52'-4"

Abutment Backfill Details

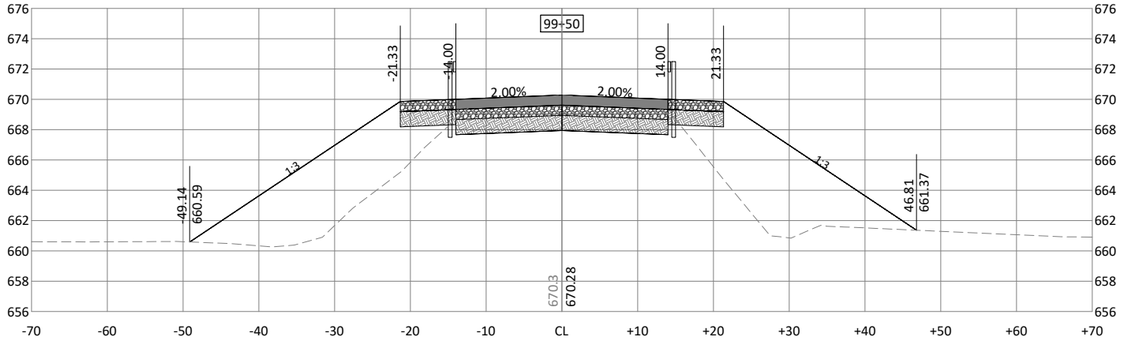
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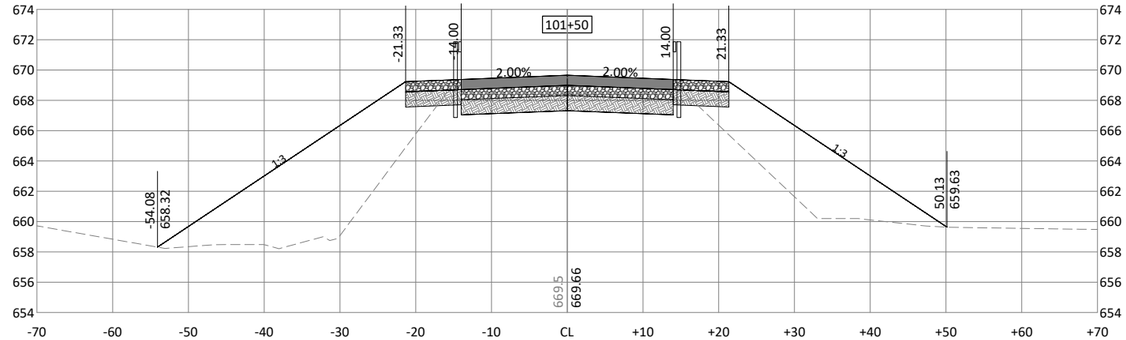
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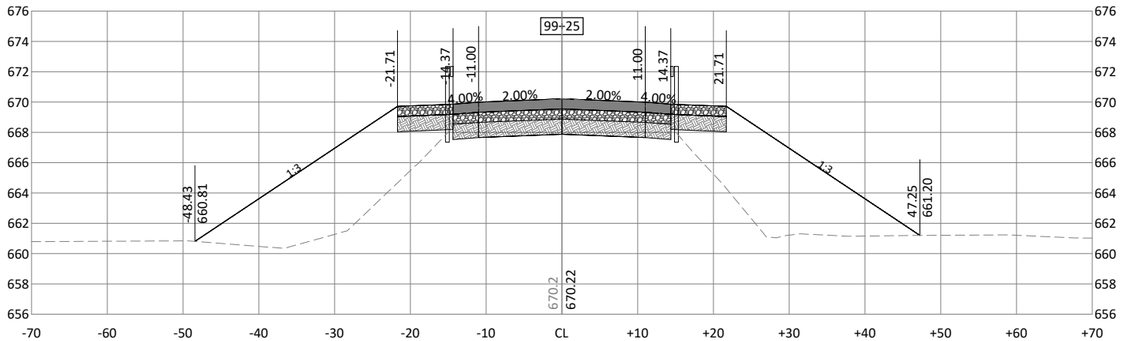
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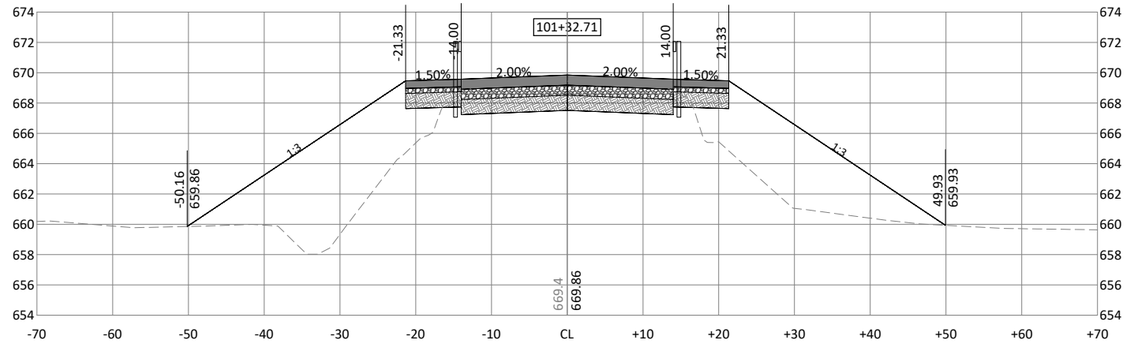
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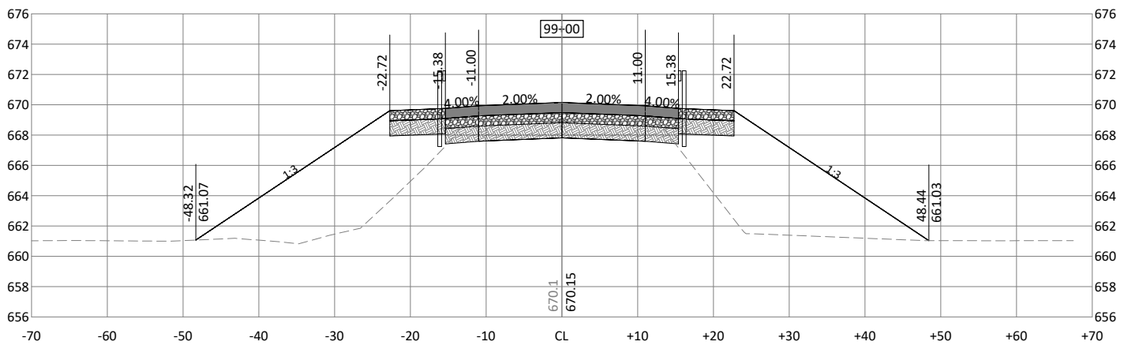
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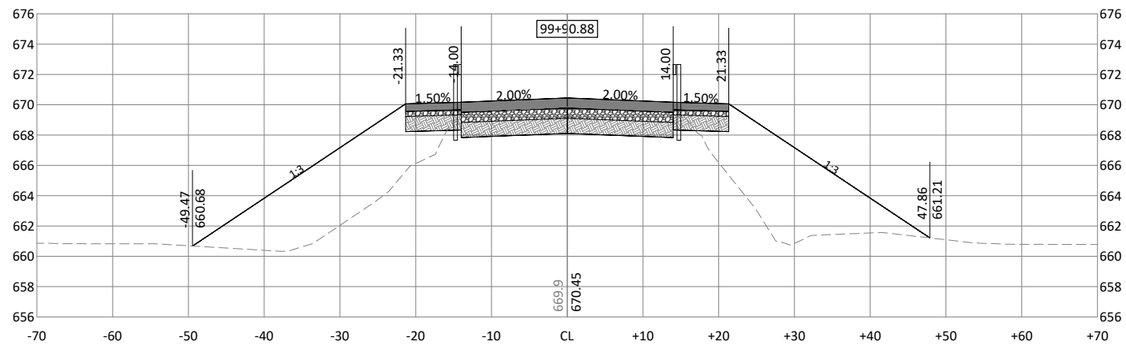


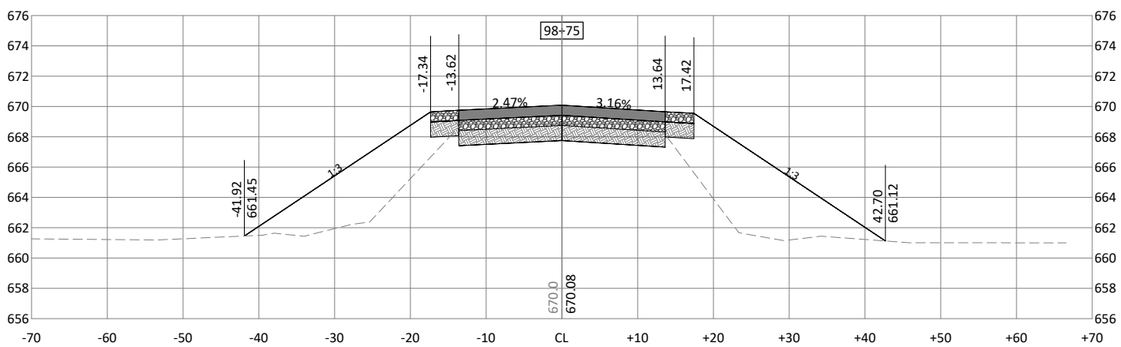


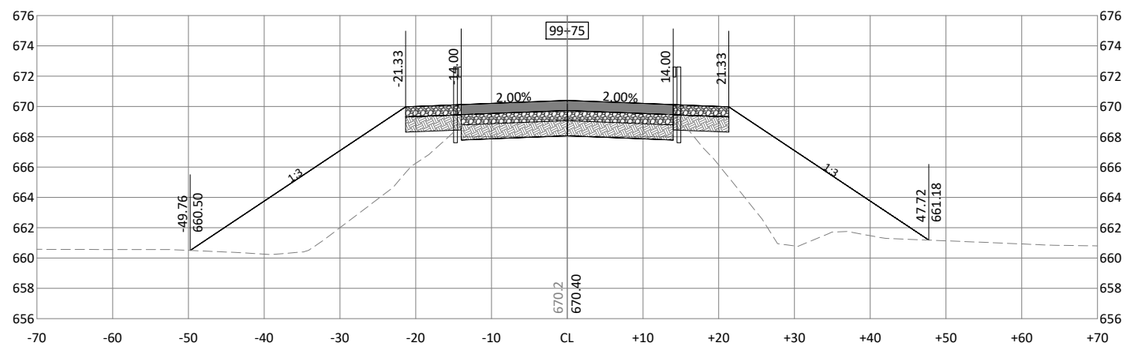








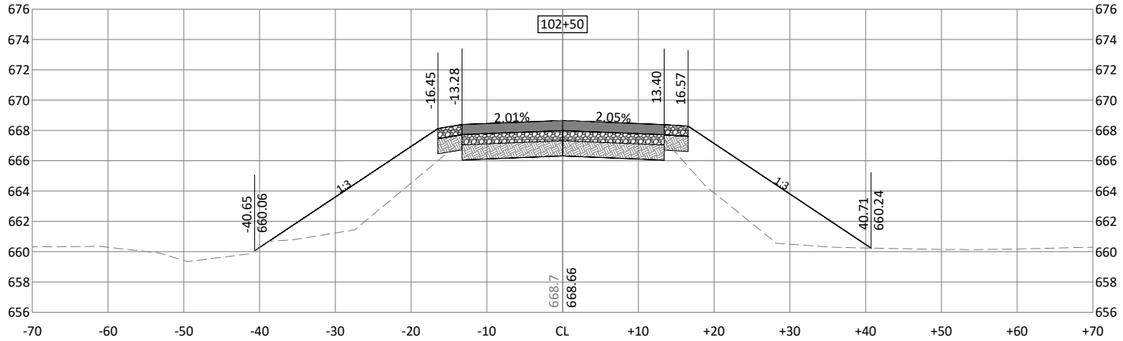


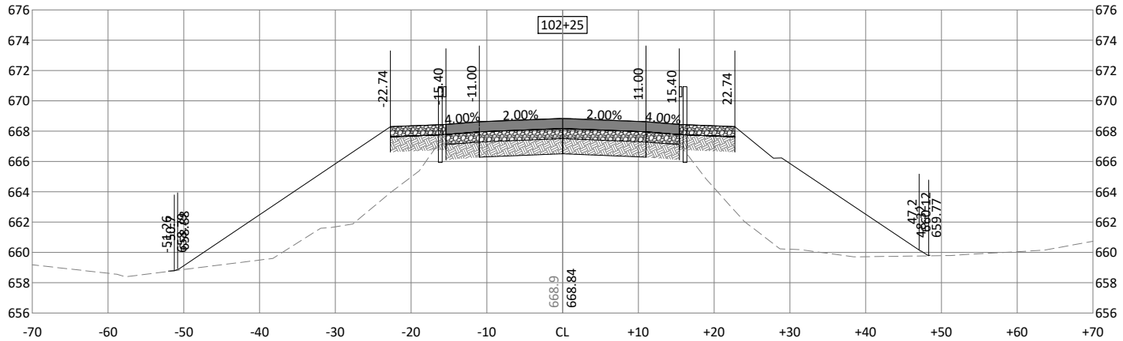


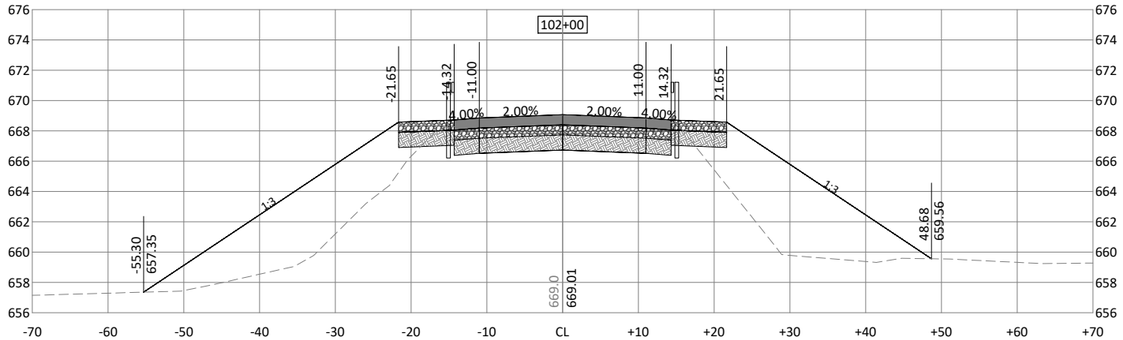


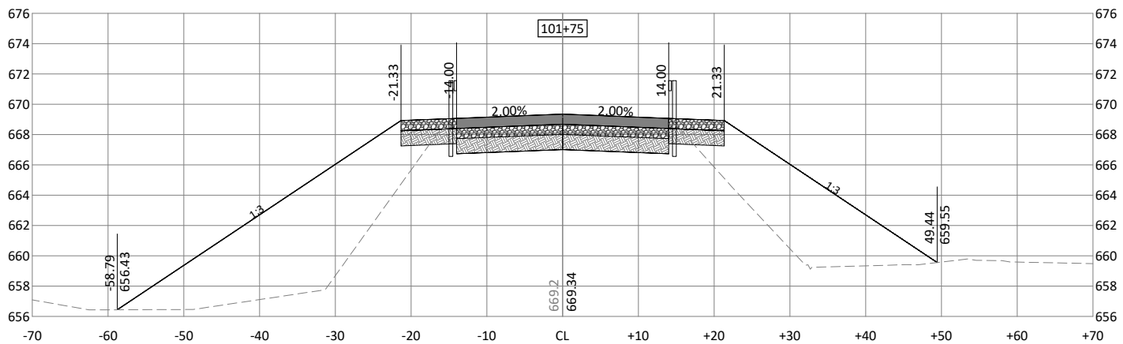
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ENGLISH	IOWA DOT	DESIGN TEAM EVANS\BOLTON & MENK INC	CITY OF DAVENPORT, IOWA	SCOTT COUNTY	PROJECT NUMBER BROS-1827(711)--8J-82	SHEET NUMBER W.02	REVISED