Michigan State University Bridges-Repair and Restore Pedestrian Bridges (FY24) MSU Project Number CP22064 Addendum No. 1

Date: June 27, 2024

ADDENDUM PAGE 1 OF 1

OWNER: Michigan State University

1147 Chestnut Road East Lansing, MI 48824

ENGINEER: Fishbeck

5913 Executive Drive, Suite 100

Lansing, MI 48911

DRAWING REVISION NO.: 1

ISSUED HEREWITH:

SPECIFICATION SECTIONS: None

SHEETS: 2, 3, and 8

SKETCHES None

BIDS DUE: Not changed

This Addendum is issued to all Bid Set Holders, is a part of the Contract Documents, and modifies the previously issued Bidding Documents.

### ITEM NO. 1:

Bidders invitation list updated to include ET Mackenzie and Grand River Construction.

# ITEM NO. 2:

Sheet: 2 GPSTR 001 (reissued)

A. Note added for allowable working limits in the stream with construction sequence notes for 2 stage construction if necessary to maintain working limits required for a minor permit. Pay items to be performed by MSU identified and a note was added below the quantity box. As noted in bidding documents and discussed at the pre-bid meeting, this is a lump sum job. Pay items are solely for informational purposes.

## ITEM NO. 3:

Sheet: 3 REM 001 (reissued)

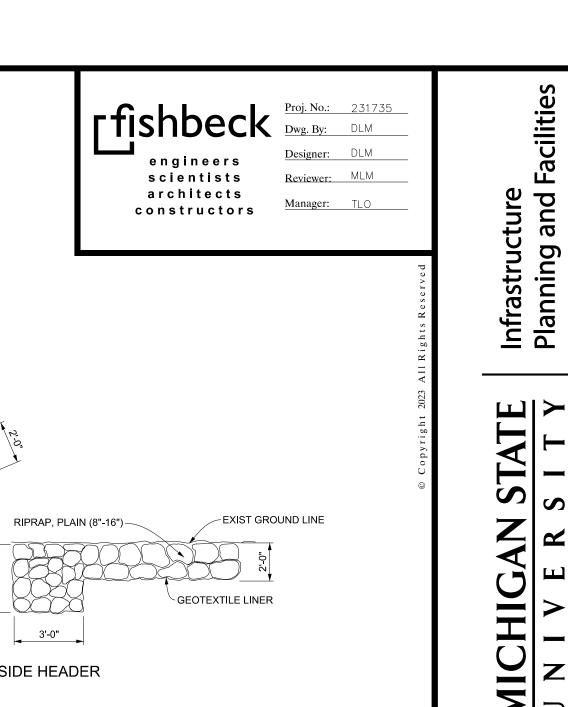
A. Note has been added for ensuring the irrigation system piping and associated equipment along with the abutment drain outlets are not damaged during the placement of riprap in front of the abutments and during substructure repairs.

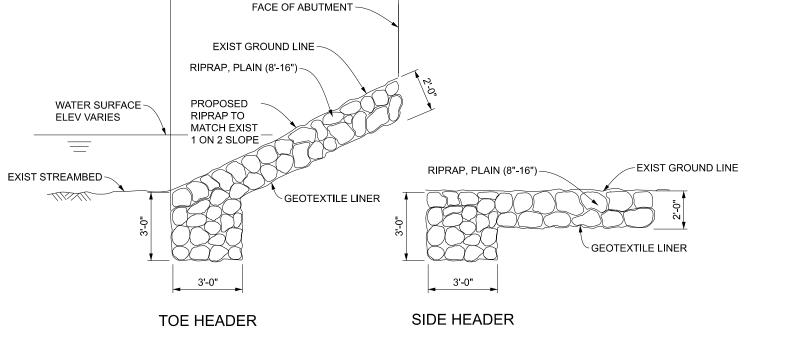
# ITEM NO. 4:

Sheet: 8 STEEL 001 (reissued)

A. Weld from bottom flange to new sole plate revised.

END OF ADDENDUM

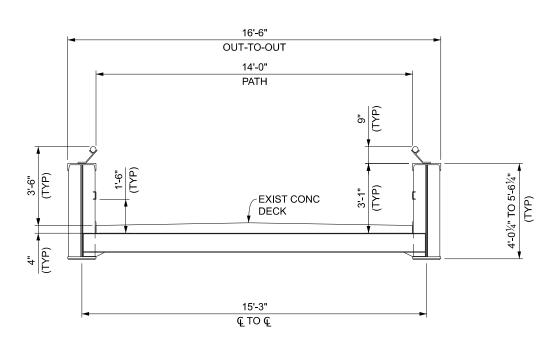




# RIPRAP HEADER DETAILS

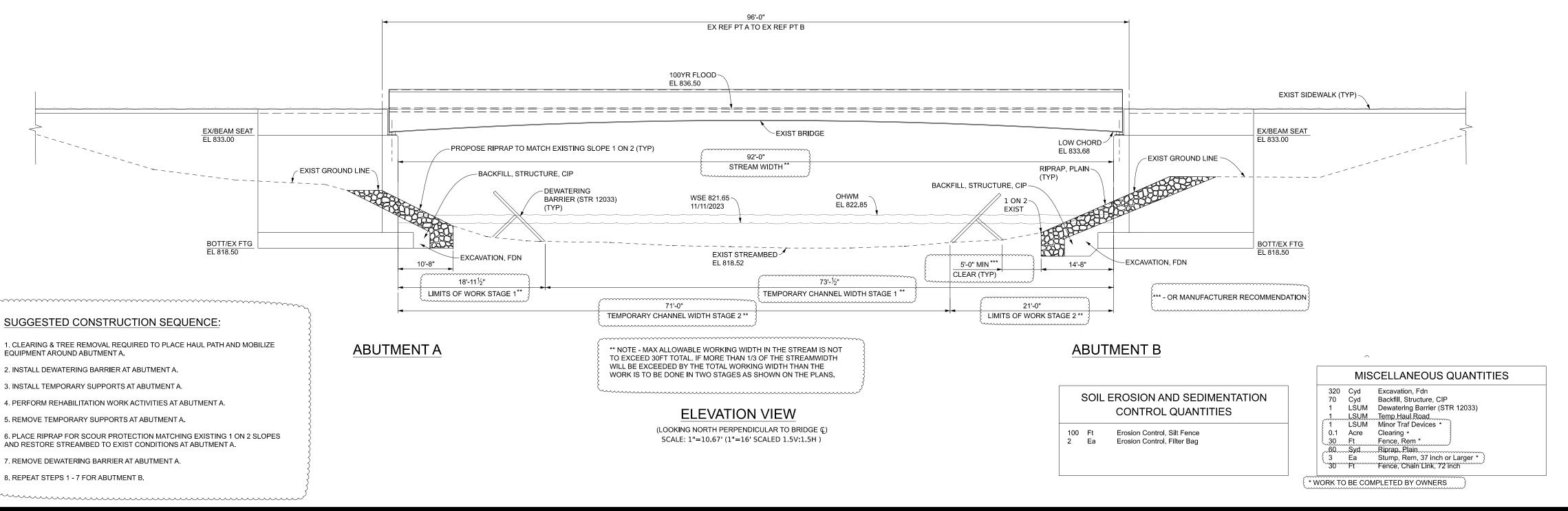
10'-8" ABUT A, 14'-8" ABUT B

SCALE: 1"=5.33' (1"=16' SCALED 3V:3H)



TYPICAL DECK SECTION

SCALE: 1"=5.33' (1"=16' SCALED 3V:3H)



LIMITS OF WORK STAGE 2

EDGE OF-WATER

LIMITS OF RIPRAP

16'-4" (TYP)

LIMITS OF RIPRAP

EXIST REF LINE B

LINK, 72 INCH

FENCE TO BE REMOVED (TYP) \*

CLEARING REQUIRED AS NEEDED

EXIST SIDEWALK (TYP)

FOR ACCESS \*

SILT FENCE (TYP)

TREE TO BE REMOVED \*

DEWATERING

BARRIER

DEWATERING

STUMP, REM, 37 INCH OR LARGER \*-

BARRIER

TEMPORARY CHANNEL WIDTH STAGE 2

DEWATERING BARRIER

(STR 12033) (TYP)

DISCHARGE WATER COLLECTED

LOCATED DOWN STREAM (TYP)

WITHIN DEWATERING BARRIER INTO GEOTEXTILE FILTER BAGS 73'-½" \*

TEMPORARY CHANNEL WIDTH STAGE 1

Ç EXIST BRIDGE

**PLAN VIEW** 

18'-11½"

LIMITS OF WORK STAGE 1

9'-2¾"

(TYP) LIMITS OF

RIPRAP

LINE A

STUMP, REM, 37 INCH

OR LARGER \*

CLEARING REQUIRED AS NEEDED FOR

ACCESS \*

13'-8"

DEWATERING

BARRIER

SUPPORT

COLUMN

RIPRAP, PLAIN

13'-8"

EWATERING

THE WORK COVERED BY THESE PLANS INCLUDES SUBSTRUCTURE PATCHING, BEARING REPLACEMENT, STEEL REPAIRS, AND SCOUR PROTECTION RIPRAP TO THE LIMITS SHOWN. ALL OTHER WORK IS TO BE DONE BY OTHERS AND IS NOT A PART OF THIS CONTRACT.

DETOUR PEDESTRIAN TRAFFIC OVER RAMP NO. 4 BRIDGE LOCATED SOUTH OF THE PROJECT, TO BE COMPLETED BY OWNERS

PLAN ELEVATIONS REFER TO NAVGD29 DATUM.

WATER LEVEL IS SUBJECT TO CHANGE. MAKE A DETERMINATION OF WATER LEVELS THAT MAY EXIST DURING CONSTRUCTION.

IMMEDIATELY AFTER THE CONSTRUCTION OF AN ABUTMENT IS COMPLETED, PLACE SLOPE PROTECTION AND SEEDING OR SODDING ON THE ADJACENT EMBANKMENT SLOPES.

THE DESIGN OF THIS STRUCTURE IS BASED ON CURRENT AASHTO LRFD BRIDGE DESIGN SPECIFICATION PEDESTRIAN LOADING OF (100) PSF AND A MAINTANENCE VEHICLE H10 LOADING, NOT ACTING CONCURRENTLY. LIVELOAD DEFLECTION DOES NOT EXCEED 1/360 OF

PLACE GEOTEXTILE LINER ON ALL SLOPES PRIOR TO PLACING RIPRAP. PAYMENT OF GEOTEXTILE LINER IS INCLUDED IN PAYMENT FOR RIPRAP.

A COFFERDAM HAS NOT BEEN PROVIDED FOR THIS STRUCTURE. USE OTHER MEANS OF WATER CONTROL AS APPROVED BY THE ENGINEER. DO NOT DISTURB THE STREAM BED. WATER CONTROL, WHETHER IT BE BY COFFERDAM OR OTHER APPROVED MEANS, IS INCLUDED IN THE BID ITEM "DEWATERING BARRIER".

THE RIPRAP QUANTITY IS BASED ON THE LATERAL DIMENSIONS OF THE AREA TO BE PROTECTED, REGARDLESS OF THE NUMBER OF LAYERS REQUIRED. THE ESTIMATED WEIGHT OF RIPRAP IS 100 TONS.

SUMBIT ALTERNATE METHODS OF STREAM DIVERSION TO THE ENGINEER FOR APPROVAL.

IMPLEMENT MEASURE TO PREVENT DEBRIS FROM FALLING FROM THE STRUCTURE. IF DEBRIS FALLS INTO THE WATERWAY, REMOVE IT WITHIN 24 HOURS. SINCE DISTURBANCE OF THE WATERWAY BOTTOM MAY BE AS HARMFUL AS THE DEBRIS ITSELF, THE PREVENTATIVE MEASURES MUST BE EFFECTIVE. REMOVAL OF DEBRIS IS IS INCLUDED RELATED ITEMS OF

NOTIFY EACH UTILITY COMPANY A MINIMUM OF THREE FULL WORKING DAYS IN ADVANCE IF WORK IMPACTING THE COMPANY'S CONDUITS OR FACILITIES.

DO NOT WELD ON EXISTING GIRDERS, EXCEPT AS NOTED.

SEE SPECIAL PROVISIONS FOR DEWATERING BARRIER AND TEMP HAUL ROAD.

University Michigan

STORE FY24)

RES S

AND

BRIDGE

- REPAIR . RIAN BRI

**Facilities** 

CAPITAL PROJ. NO. CP23034 PR. MGR. A. LINEBAUGH ARCH. MECH. ELEC. K. BEACH S. GARDNER CIVIL D. WILBER INT. DES. CONST. REP. APPR.

05/22/2024 NO SCALE SCALE REVISIONS 05/22/2024

ADD.1 06/27/2024

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PR. MGR. A. LINEBAUGHARCH.
MECH.
ELEC. K. BEACH
CIVIL S. GARDNER
L.A. D. WILBER
INT. DES.
CONST. REP.
APPR.

CAPITAL PROJ. NO.

REVISIONS
BIDS 05/22/2024

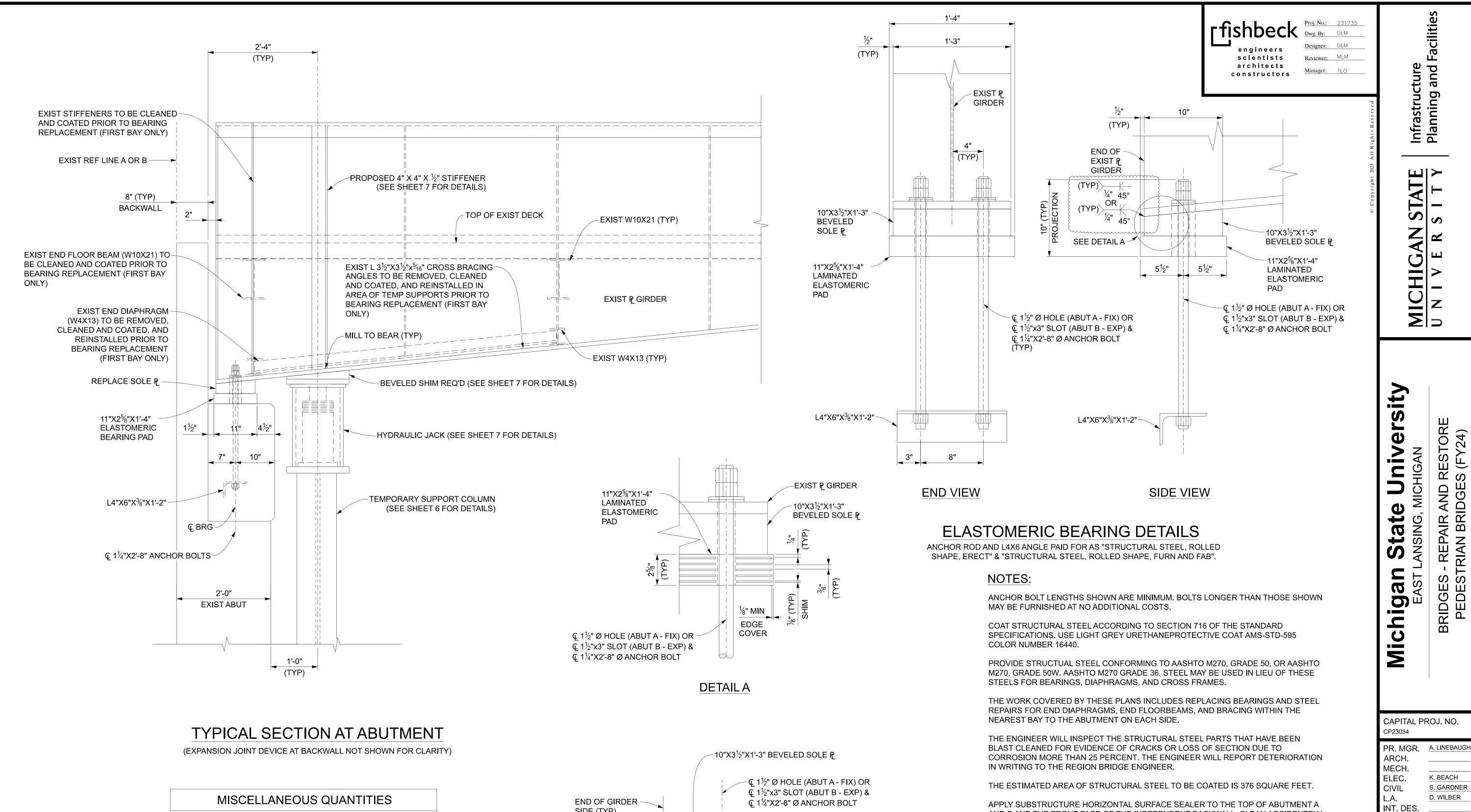
ADD.1 06/27/2024

JOB NO. 231735 THE ONLY ITEMS OF WORK TO BE DONE FROM THIS SHEET ARE IDENTIFIED BY USING THE LEGEND BELOW, LABELED WITH THIS PROJECT'S JOB NUMBER PROPOSED WORK DENOTES REMOVAL PORTIONS JOB NO. 231735 GENERAL LOCATIONS FOR DETERIORATED OR DAMAGED CONCRETE ARE SHOWN. FIELD VERIFY ALL DIMENSIONS, LOCATIONS, AND DEPTH OF REMOVAL LOCATIONS PRIOR TO REMOVAL OF CONCRETE. AREAS NOT SHOWN ON THE PLANS THAT NEED REPAIR ARE TO BE PATCHED ACCORDINGLY. REMOVE SPALLED AND OR DELAMINATED TO SOUND CONCRETE. AT ABUTMENT SEATS, SAWCUT AND REMOVE PORTIONS OF CONCRETE UNDER BEARINGS TO THE LIMITS SHOWN IN SUBSTRUCTURE REPAIR DETAILS. INCLUDED IN THE BID ITEM "HAND CHIPPING, OTHER THAN DECK". AVOID DAMAGING THE EXIST REINF DURING SAW CUTTING AND CONCRETE REMOVAL OPERATIONS. BLAST CLEAN, STRAIGHTEN AND EMBED PROJECTING REINFORCEMENT INTO PROPOSED CONCRETE NOT PAID FOR SEPERATELY, BUT INCLUDED IN THE BID ITEM "HAND CHIPPING, OTHER THAN DECK". EXISTING DRAINAGE AND IRRIGATION SYSTEM PIPE CONNECTED TO THE ABUTMENTS ARE TO REMAIN. ENSURE UTILITIES CONNECTED TO ABUTMENTS ARE NOT DAMAGED DURING THE PLACEMENT OF RIPRAP.

Scale DATE 3/8":1"0" JULY 11,1849

SHEET 2

C1/2" WELD 4x5-1/2 L x14-05 72 4 6 8 × 20" GRATING 4 4 1/2" PACE TO FACE 1/2 × 62 SLOTS C.I. FRAME REMOVE, SEE SHEET 5 FOR 3 PIPE RAILING DETAILS 1-1 CG. C. - No. G WELDED WIRE FABRIC EL. 836-4" EL. 886'-4" REINFORCE & SLAB WITH 6'46" No & WELDED WIRE PARRIC Er.835-0" NEENAH FOUNDRY CO.
R.4405 GRATES (9 BACH ABUT) 8"x20"x8/4" WITH R- 4911 SERIES ANGLE FRAMES 3-7/8 4 TEB REMOVE, SEE - BAND FILL 1/2" = 18" o.c. U SHEET 5 FOR DETAILS 🗐 SYMMETRICAL ABOUT 6 51 5014 SYMMETRICAL ABOUT & PIRE DRAIN -- SAND FILL -SAND FILL d 3.784 TEB WRAP PIPE WITH THO LAYERS OF PAPER THRU WALL 15-76 e Gac E.S. 5/8" de 24" a.c. E.S. 5/6 Pe 18 o.c. 5/8 0 23/4 0 8 0 c. -3" KG" KEYWAY % 9 E12 o.c. SO:037 8.0 A-+ 20'0" 710" CENTERLINE SECTION PLAN HALF PLAN TRUE - HALF PLAN AT BRIDGE SEAT SHOWING REINFORCING BELOW - DOWELS OMITTED MALE SECTION B-13 14-0" WALKWAY - ENSURE DRAIN PIPE OR IRRIGATION PIPE AND 3" PIPE RAILING VALVE EQUIPMENT IS NOT -REMOVE, SEE DAMAGED DURING 4 x 3 x 1/2 L Nos SHEET 5 FOR PLACEMENT OF RIPRAP DETAILS 836-47 EL 835'-8" ( 3/8" A MOLIDING -BOTH ABUTHENTS ARE ALIKE EL. 833-0" POUNDATION BOIL SHOULD BE CAPABLE OF SUPPORTING A LOADING OF TWO TONS PER SQUARE FOOT. 4 6 36 ANCHOR BOLTS BOTTOM OF FOOTING REINFORCING TO HAVE 3 IN. MIN. COVERAGE - ALL OTHER REINFORCING TO HAVE A MIN. COVERAGE OF 2 IM ABOUT & ALL EXPOSED CONCRETE CHAMPER UNLESS OTHERWISE SHOWN. EXTERD WEEP HOLES TO OUTLET WITH BLIND DRAIN. DETAIL OF PIRE RAILING MORIGATION AND BRACKETS TO BE SUBMITTED FOR APPROVAL. GRADE EL 826'0" EL.826'-0" CONTRACT INCLUDES AN ADDITIONAL QUANTITY OF ET CU. YDS. OF CONCRETE NOT SHOWN ON THESE PLANS BATEND G' CT. SOIL PIDE WALK DEAN TO OUTLAT WHICH IS TO BE PLACED PART BELOW EACH ABUTMENT FOOTING OR ALL BELOW ONE ABUTMENT FOOTING AS DIRECTED BY THE ENGINEER. THIS CONCRETE IS TO SERVE AS - Ch. 623 -0' SPALL/DELAM A SEAL ROAT AND/OR AS AN INCREASE IN MOTTING 6 + G' WEEP HOLE DEPTH TO RETABLISH A SUITABLE POUNDATION AS 11 CFT (ABUT A) DETERMINED BY THE ENGINEER, IF NOT REQUIRED 7 CFT (ABUT B) CONTRACT SHALL BE DIMINISHED AS QUOTED. PEDESTRIAN BRIDGE HEAR WK KELLOGG CONTINUING EDUCATION BLOG MICHIGAN STATE COLLEGE - EAST LANSING 20'-0" CLAUD R. ERICKSON CANSING MICHIGAN ABUTMENT DETAILS SIDE ELEVATION FRONT ELEVATION



256 Lb Stiffeners, Furn, Fab, and Erect LSUM Field Repr of Damaged Coating

LSUM Steel Structure, Cleaning, Partial, Type 4 LSUM Steel Structure, Coating, Partial, Type 4

Structural Steel, Welded Repr, Furn, Fab, and Erect 600 Lb

160 Lb Structural Steel, Rolled Shape, Erect 160 Lb Structural Steel, Rolled Shape, Furn and Fab Bearing, Elastomeric, 2 1/2 inch 704 Sin

# SIDE (TYP) 10"

# TYPICAL SOLE PLATE DETAIL

SOLE PLATE PAID FOR AS "STRUCTURAL STEEL, WELDED REPR, FURN, FAB, AND ERECT"

AND B AND THE FRONT FACE OF THE INDEPENDENT BACKWALL. CLEAN ACCIDENTELY COATED VERTICAL SURFACES AT THE CONTRACTORS EXPENSE.

APPLY SEALANT AROUND THE PERIMETER OF BOLTED END DIAPHRAGM CONNECTION PLATES AND ANGLES.

BLAST CLEAN AND PRIME FAYING SURFACE PRIOR TO ERECTING DIAPHRAGMS. INCLUDED IN THE PAY ITEMS FOR CLEANING AND COATING EXISTING STRUCTURAL

APPLY SEALANT AROUND THE CONNECTION OF NEW STRUCTURAL STEEL MEMBER TO EXISTING STRUCTURAL STEEL MEMBER.

PROTECT PORTIONS OF THE STRUCTURE, INCLUDING SUPERSTRUCTURE, SUBSTRUCTURE, SLOPE PROTECTION, AND HIGHWAY APPURTANCES FROM SPLATTER AND OVERSPRAY OF COATING MATERIAL. INCLUDED IN THE BID ITEM 'STRUCTURE, COATING, TYPE 4 (STR# 12033)".

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**Facilities** 

and

Infrastruc Planning

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RESTORE S (FY24)

AND

SS

RIDGE PEDES

K. BEACH

S. GARDNER

D. WILBER

05/22/2024

NO SCALE

05/22/2024

06/27/2024

CONST. REP.

REVISIONS

APPR.

DATE

BIDS

ADD.1

SCALE