



Miranda Gold, President
Alexis Pickering, Vice-President
Kent Goldthorpe, Commissioner
Dave McKinney, Commissioner
Patricia Nilsson, Commissioner

ADDENDUM NUMBER TWO

1. This Addendum is addressed to all bidders and plan holders who have contract documents for the preparation of offers for the project identified below.
2. **PROJECT IDENTIFICATION**
 - a. Eckert Road Bridges 2147 and 2148 – Boise River and Ridenbaugh Canal, Eckert Road and Boise Avenue Roundabout
 - b. Contract No: CT227-01
 - c. ACHD Project No: 225044, 225045, and 325043

3. **ADDENDUM IDENTIFICATION**

Addendum Number ONE

Date: August 20, 2026

Bidders shall acknowledge receipt of this Addendum and acknowledge each Addendum. Bidders shall sign and submit their Proposal through the eProcurement system OpenGov by the Bid Submission Deadline on **August 26th, 2026, at 3:00 p.m.**, unless amended below. Any bid submitted that fails to comply with this requirement and the requirements listed in this Addendum will be considered unresponsive.

4. **CONTRACT MODIFICATION**

This Addendum shall become part of the Contract Documents for the project identified in Item Number 2.

5. Make the following amendments to the Contract Documents previously issued:

- a. **DELETION:** Schedule 5, Eckert Road and Boise Avenue Roundabout

Delete item S904-50L SP Remove and Reset Historical Marker in its entirety

- b. **REVISION:** Schedule 3, Eckert Rd Bridge #2147, Revise Quantity

Revise Quantity for item 626-010A Temporary Traffic Control Signs from 1347 SF to 1427 SF

- c. **REVISION:** Schedule 3, Eckert Rd Bridge #2147– Boise River (Roadway Portion), 225045, 20006.

connecting you to more

Revise 609-025C Minor Structures (24" Headwall) to:

609-025C Minor Structures (Basin Inlet Protection) 1 Each

d. **ADDITION:** Add the following to the Project Documents, Attachments:

1. Basin Inlet Protection
2. Eckert Boise River Global Analysis-UPDATED
3. BR12805_Repair
4. BK12810_Repair
5. 12806 12811 Eckert Bridges Utility Vault Detail

e. **DELETION:** Schedule 3, Eckert Rd Bridge #2147 – Boise River (Roadway Portion), 225045, 200006

Delete item 609-025B Minor Structures (7' x 12'x8' Utility Vault) in its entirety.

f. **CLARIFICATION:** Buy-America Provisions

Project is State Funded; Buy America provisions do not apply to contract.

g. **CLARIFICATION:** Schedule 3, Eckert Rd bridge Item 609-025B Minor Structures (7' x 12'x8' Utility Vault)

Utility Vaults shown in plans for clarity.

h. **REVISION:** Schedule 3, Eckert Rd Bridge #2147 – Boise River (Roadway Portion), 225045, 200006

Revise Bid item S9111-05A SP Install 4-6" Conduit quantity to 640 FT

i. **ADDITION:** Add the following contact for In-water Work Coordination

Grant Bell, P.E.
Reservoir Regulator
USACE Walla Walla District
Email: Grant.S.Bell@usace.army.mil
Office: (509) 527-7619
Cell: (509) 730-3862

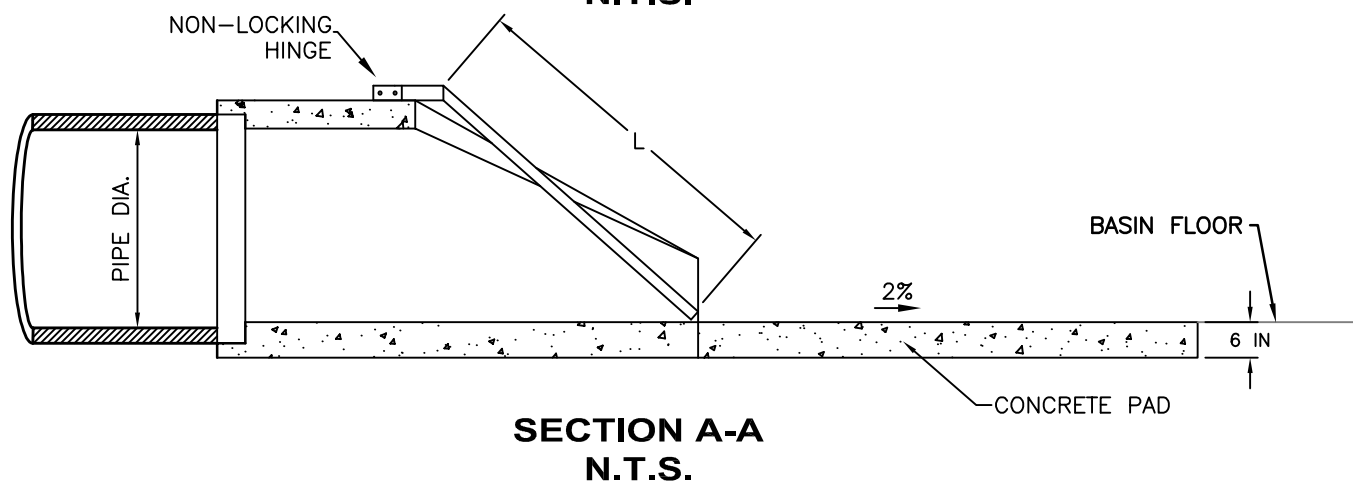
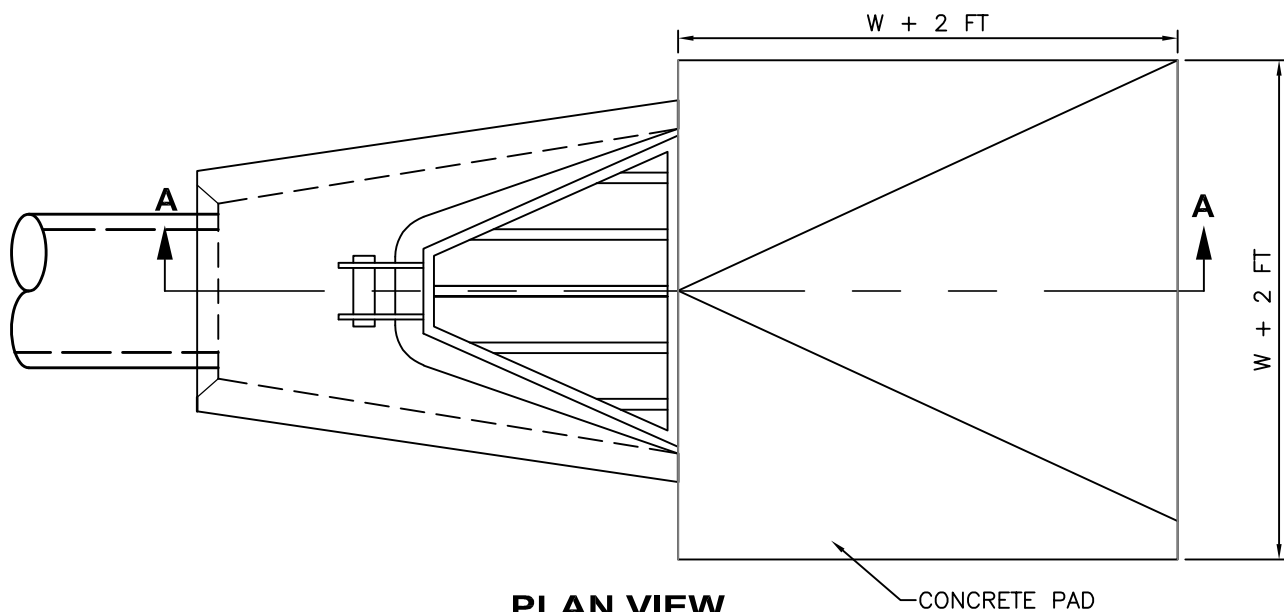
Approved by:

Dale Kuperus, P.E.
District Engineer

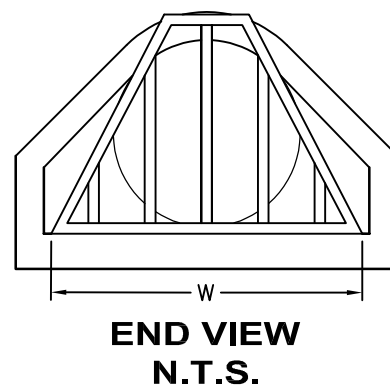
Signature:

A handwritten signature in black ink, appearing to read 'Dale Kuperus', is written over a horizontal line. To the left of the signature, there is a small 'x' mark.

connecting you to more

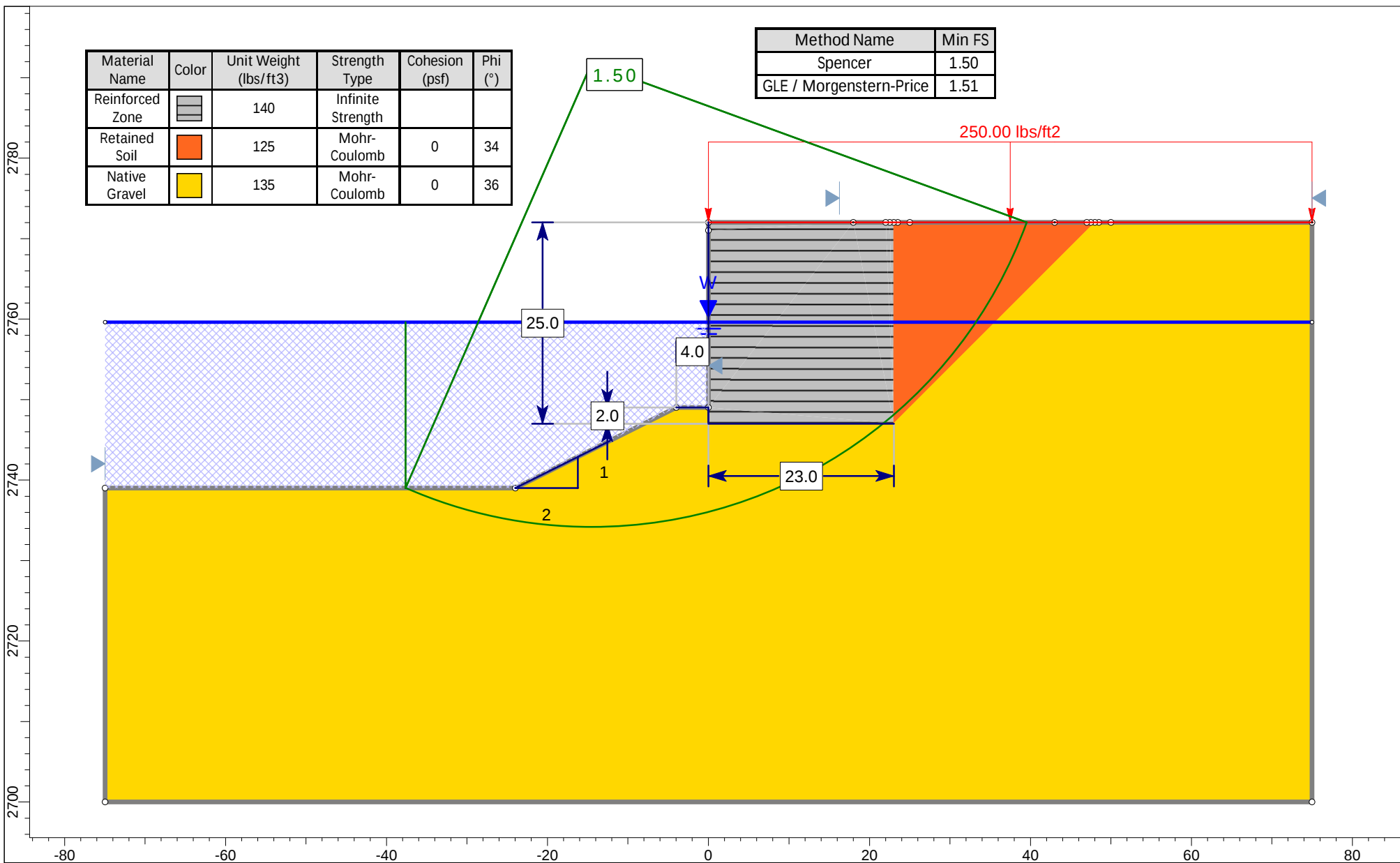


Pipe Diameter (IN)	Trash Rack Width W (IN)	Trash Rack Length L (IN)	Total # of Grate Bars	Bar Spacing (IN)
12	21	30.00	3	6.0
15	28	32.00	3	6.5
18	33	34.00	3	8.0
24	40	47.50	5	8.0
30	55	63.00	5	9.0
36	58	71.25	6	8.0
42	64	76.00	7	8.0
48	70	82.75	9	8.0
54	84	84.00	14	6.0
60	94	90.00	22	6.0
72	106	106.00	22	6.0



Material Name	Color	Unit Weight (lbs/ft3)	Strength Type	Cohesion (psf)	Phi (°)
Reinforced Zone		140	Infinite Strength		
Retained Soil		125	Mohr-Coulomb	0	34
Native Gravel		135	Mohr-Coulomb	0	36

Method Name	Min FS
Spencer	1.50
GLE / Morgenstern-Price	1.51



Project

Eckert Road Over Boise River

Abutment 1, Static

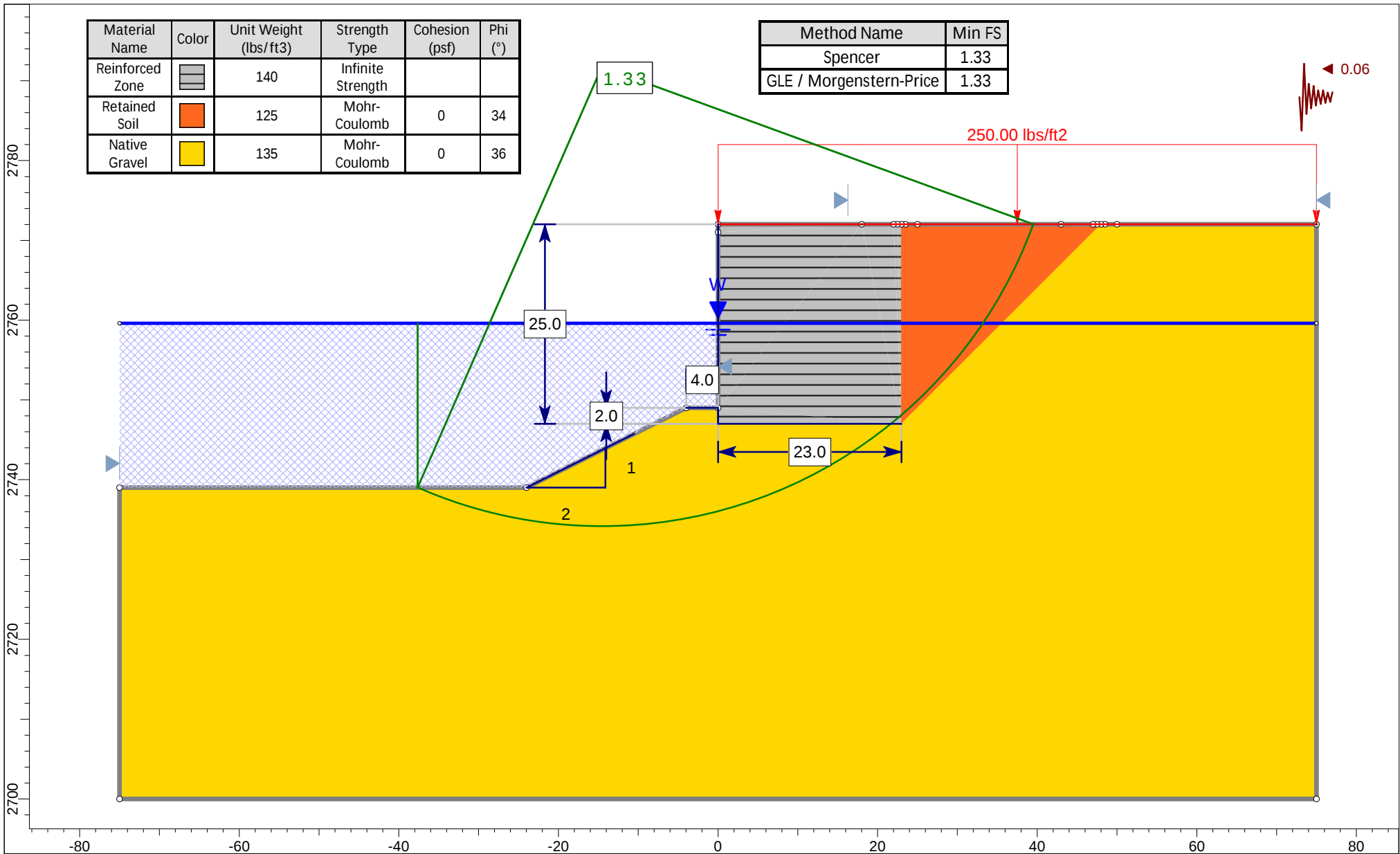
Created by: CM

Reviewed by: LM

1/30/2026

Material Name	Color	Unit Weight (lbs/ft3)	Strength Type	Cohesion (psf)	Phi (°)
Reinforced Zone		140	Infinite Strength		
Retained Soil		125	Mohr-Coulomb	0	34
Native Gravel		135	Mohr-Coulomb	0	36

Method Name	Min FS
Spencer	1.33
GLE / Morgenstern-Price	1.33



Project

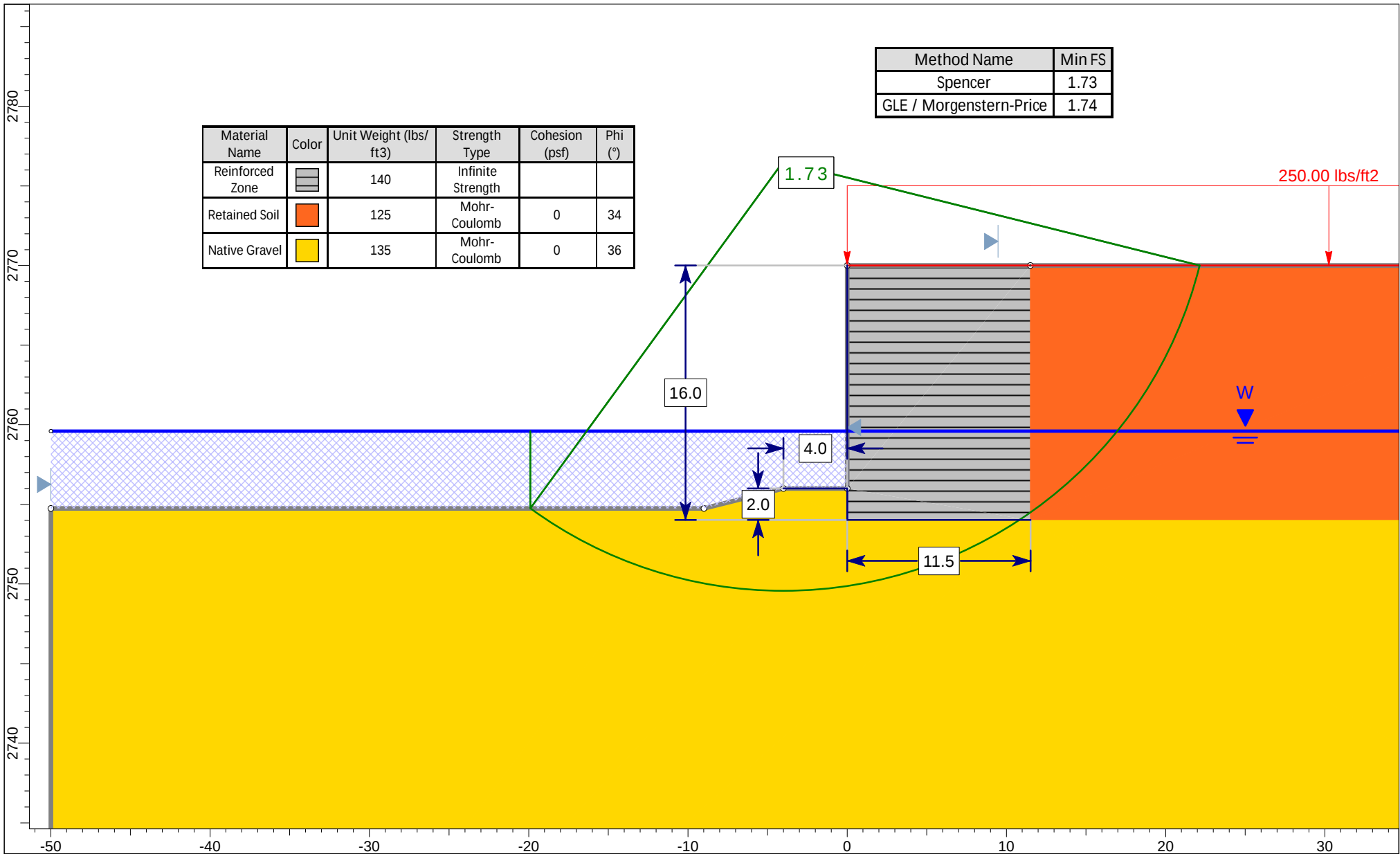
Eckert Road Over Boise River

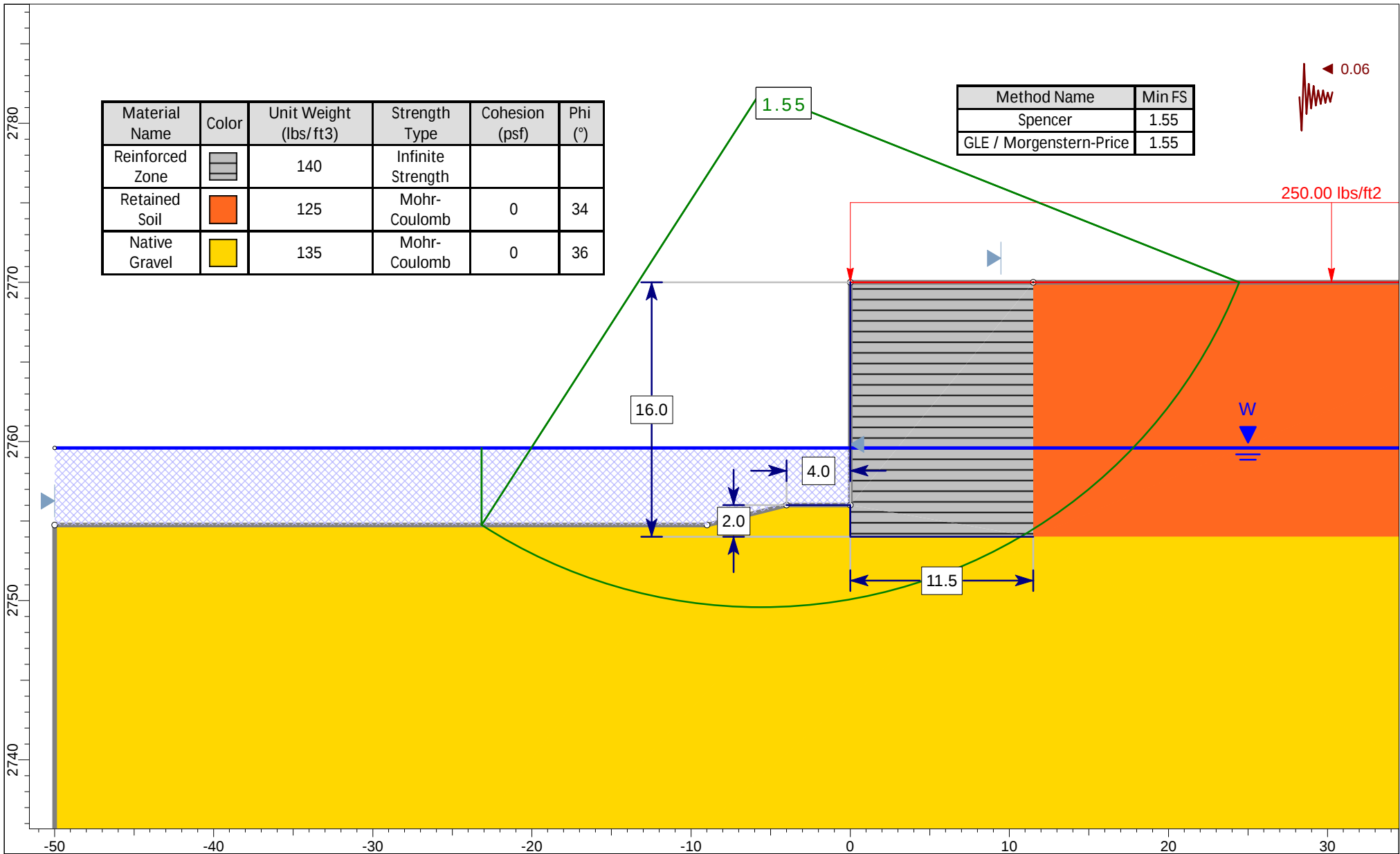
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Reviewed by: LM

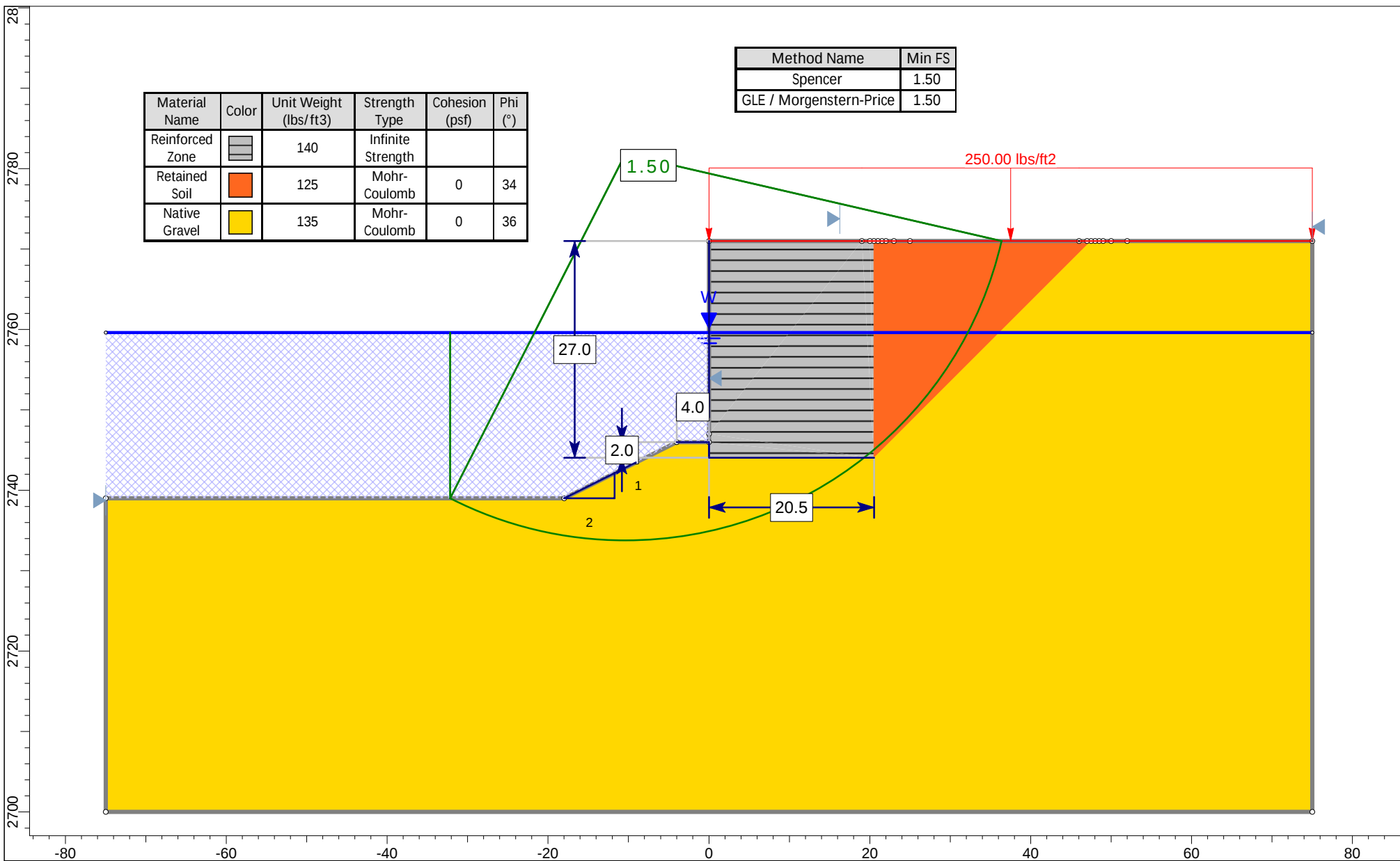
1/30/2026





Material Name	Color	Unit Weight (lbs/ft3)	Strength Type	Cohesion (psf)	Phi (°)
Reinforced Zone		140	Infinite Strength		
Retained Soil		125	Mohr-Coulomb	0	34
Native Gravel		135	Mohr-Coulomb	0	36

Method Name	Min FS
Spencer	1.50
GLE / Morgenstern-Price	1.50



Project

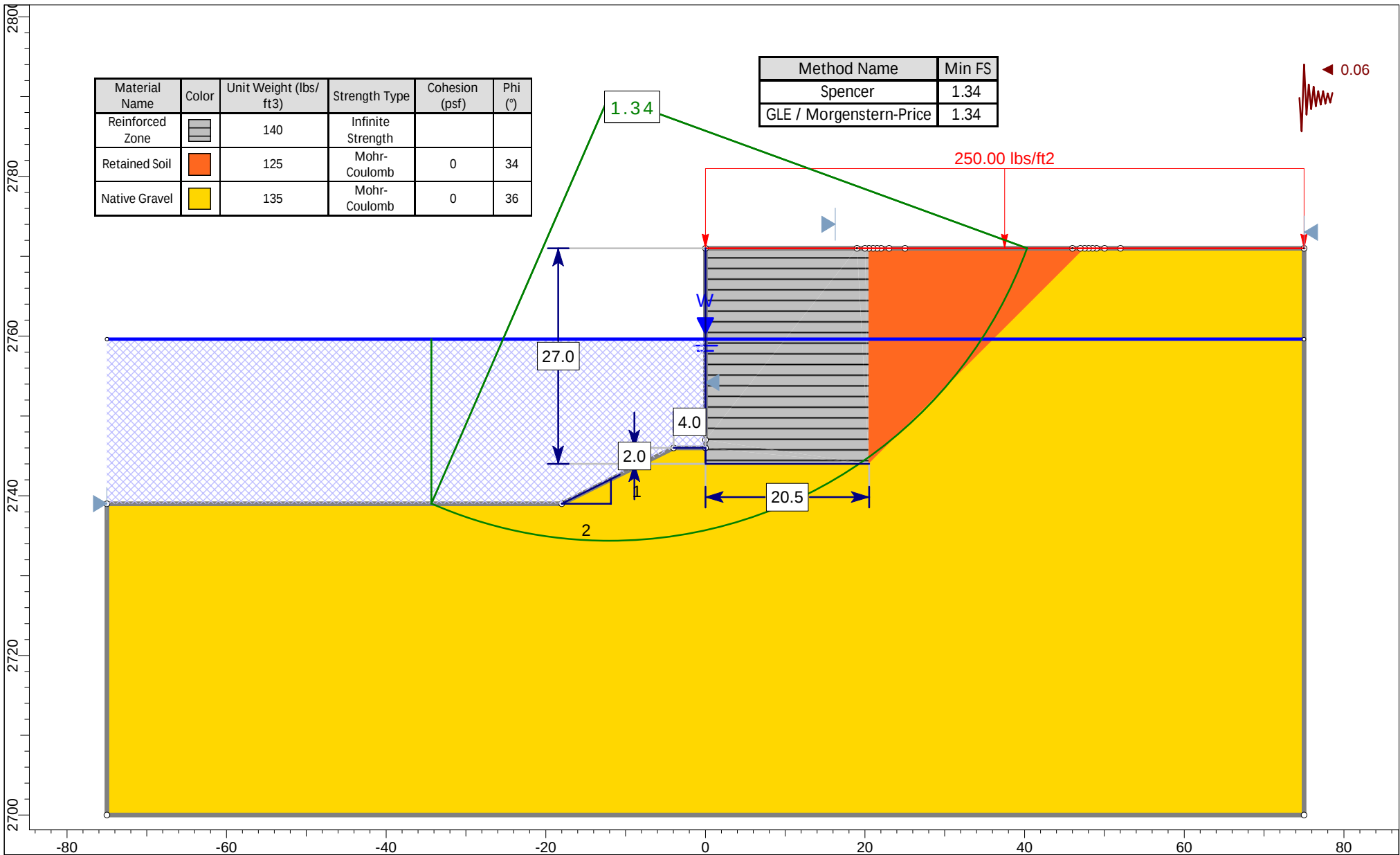
Eckert Road Over Boise River

Abutment 2, Static

Created by: CM

Reviewed by: LM

1/30/2026



GENERAL NOTES

CONSTRUCTION SPECIFICATIONS

MATERIALS, CONSTRUCTION AND WORKMANSHIP IN ACCORDANCE WITH THE STATE OF IDAHO TRANSPORTATION DEPARTMENT, "STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION", 2023 EDITION, THE PROJECT PLANS, AND SPECIAL PROVISIONS.

EXISTING PLANS

EXISTING CONSTRUCTION: ITD DWG. NO. 6404 & 6404-B

PLAN DIMENSIONS AND ELEVATIONS

DIMENSIONS TO REINFORCING STEEL ARE TO CENTERLINE OF BAR UNLESS NOTED OTHERWISE.
PROVIDE 2" CONCRETE COVER MEASURING FROM THE FACE OF THE CONCRETE TO THE FACE OF ANY REINFORCING BAR, UNLESS SHOWN OTHERWISE ON THE DRAWINGS.
PROVIDE REINFORCING STEEL SPLICE LENGTHS IN ACCORDANCE WITH AASHTO SPECIFICATIONS.
DIMENSIONS SHOWN ARE BASED ON THE EXISTING PLANS AND DO NOT NECESSARILY REPRESENT THE AS-CONSTRUCTED BRIDGE. WHERE DIMENSIONS OF THE PROPOSED WORK DEPEND ON EXISTING CONDITIONS, FIELD VERIFY AND ADJUST CONTROLLING DIMENSIONS TO FIT THE AS-CONSTRUCTED BRIDGE BEFORE ORDERING MATERIALS.
DO NOT SCALE DIMENSIONS FROM THE PROJECT PLANS.

CONSTRUCTION

ALL REINFORCING STEEL TO BE EPOXY COATED IS DESIGNATED BY AN (E) AFTER THE BAR MARK.
PROVIDE CONSTRUCTION JOINTS ONLY AT THE LOCATIONS SHOWN ON THE PLANS OR AS APPROVED.
PREVENT DEBRIS, RESULTING FROM CONTRACTOR OPERATIONS, FROM ENTERING THE WATERWAY.
DISPOSE OF REMOVED MATERIALS IN ACCORDANCE WITH ITD 2023 STANDARD SPECIFICATIONS SECTION 106.16.
LOCATE, RETAIN, AND PROTECT UTILITIES WITHIN THE VICINITY OF THE BRIDGE.

MATERIALS

CONCRETE: PILE REPAIR - CLASS 40A f'c = 4.00 ksi
METAL REINFORCEMENT: AASHTO M31 GRADE 60 fy = 60.00 ksi
TIMBER: SWAY BRACE - DOUGLAS FIR/LARCH GRADE NO. 1
FASTENERS: THREADED ROD - ASTM A307, GRADE A fu = 60.00 ksi
 ANCHOR BOLTS - ASTM F1554, GRADE 36
 THRU BOLTS - ASTM A307, GRADE A
 NUTS - ASTM A563, GRADE A HEX
 TIMBER MALLEABLE WASHERS - ASTM A47
OTHER: CARBON STEEL WIRE ROPE - ASTM A1023

INCIDENTAL ITEMS

WORK NECESSARY TO FULFILL THE CONTRACT THAT IS NOT MEASURED OR PAID FOR SEPARATELY.

ESTIMATED QUANTITIES

30" GALV. CMP OR HDPE PIPE	10.25 FT
1/2"X8" GALV. L-SHAPED ANCHOR BOLTS	48 EA
NO. 5 EPOXY COATED METAL REINFORCEMENT	78.75 FT
1/2" DIA. GALV. WIRE ROPE	150 FT
CONCRETE CLASS 40A SCH. NO. 1	1.50 CY
GALV. OR SS STEEL BANDING	6 EA
3"X8" TIMBER	10 FT
3/4"X1'-6" GALV. BOLTS W/ NUTS AND WASHERS	1 EA
3/4" DIA. GALV. THREADED ROD W/ NUTS AND WASHERS	1 EA
3/4" GALV. THREADED PRECAST INSERT	1 EA

CONSTRUCTION PROCEDURE

- CUT 30" GALV. CMP OR HDPE PIPE IN HALF, LONGITUDINALLY.
- CUT EXISTING SWAY BRACE CLOSE TO PILE T2 AND REMOVE THE CUT SECTION FROM PILE T1.
- INSTALL L-SHAPED ANCHOR BOLTS RADIALLY AT EIGHTH POINTS WITH HILTI HIT-RE 500 V3 EPOXY PER MANUFACTURER'S INSTRUCTIONS. EMBED ANCHOR BOLTS 3¾" INTO TIMBER PILE.
- ATTACH LONGITUDINAL REINFORCING TO ANCHOR BOLTS WITH WIRE TIES.
- BEGINNING AT THE TOP OF THE LONGITUDINAL BARS, SPIRALLY WRAP THE GALV. STEEL CABLE AROUND THE BARS AT A 6" PITCH, SECURING WITH WIRE TIES.
- PLACE THE TWO HALVES OF THE CMP OR HDPE PIPE (WITH SWWAY BRACE BOLT AND THREADED PRECAST INSERT ATTACHED) AROUND THE PILE WITH A FORMED BOTTOM SURFACE. SECURE THE TWO HALVES TOGETHER USING GALV. OR SS STEEL BANDING IN SUFFICIENT NUMBER TO PREVENT DISTORTION OF CMP OR HDPE PIPE DURING CONCRETE POUR.
- FILL THE CMP OR HDPE WITH CLASS 40A SCH. NO. 1 CONCRETE.
- FINISH THE CONCRETE TOP SURFACE WITH A SLOPE TO PREVENT STANDING WATER.
- AFTER CONCRETE HAS CURED INSTALL NEW SWAY BRACE WITH HOLE DRILLED IN TIMBER TO MATCH THREADED PRECAST INSERT LOCATION.

REVISIONS				DESIGNED	SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY	ADA COUNTY HIGHWAY DISTRICT		ENGLISH	GENERAL NOTES, QUANTITIES, & PROCEDURE	BRIDGE PLANS		
NO.	DATE	BY	DESCRIPTION	KEH						BRIDGE KEY NO. 12805		
△				DESIGN CHECKED	JCS	CADD FILE NAME BR12805_REPAIR.dgn		PROJECT NO. -----	ECKERT ROAD OVER RIDENBAUGH CANAL TIMBER PILE REPAIR	COUNTY	KEY NO.	
△				DETAILED	KEH					ADA	-----	
△				DWG. CHECKED	JCS	DATE: FEB 2025	BURGESS & NIPLE					
△				CORRECTIONS	KEH					BRIDGE DWG. NO.	SHEET	
△											-----	
△												



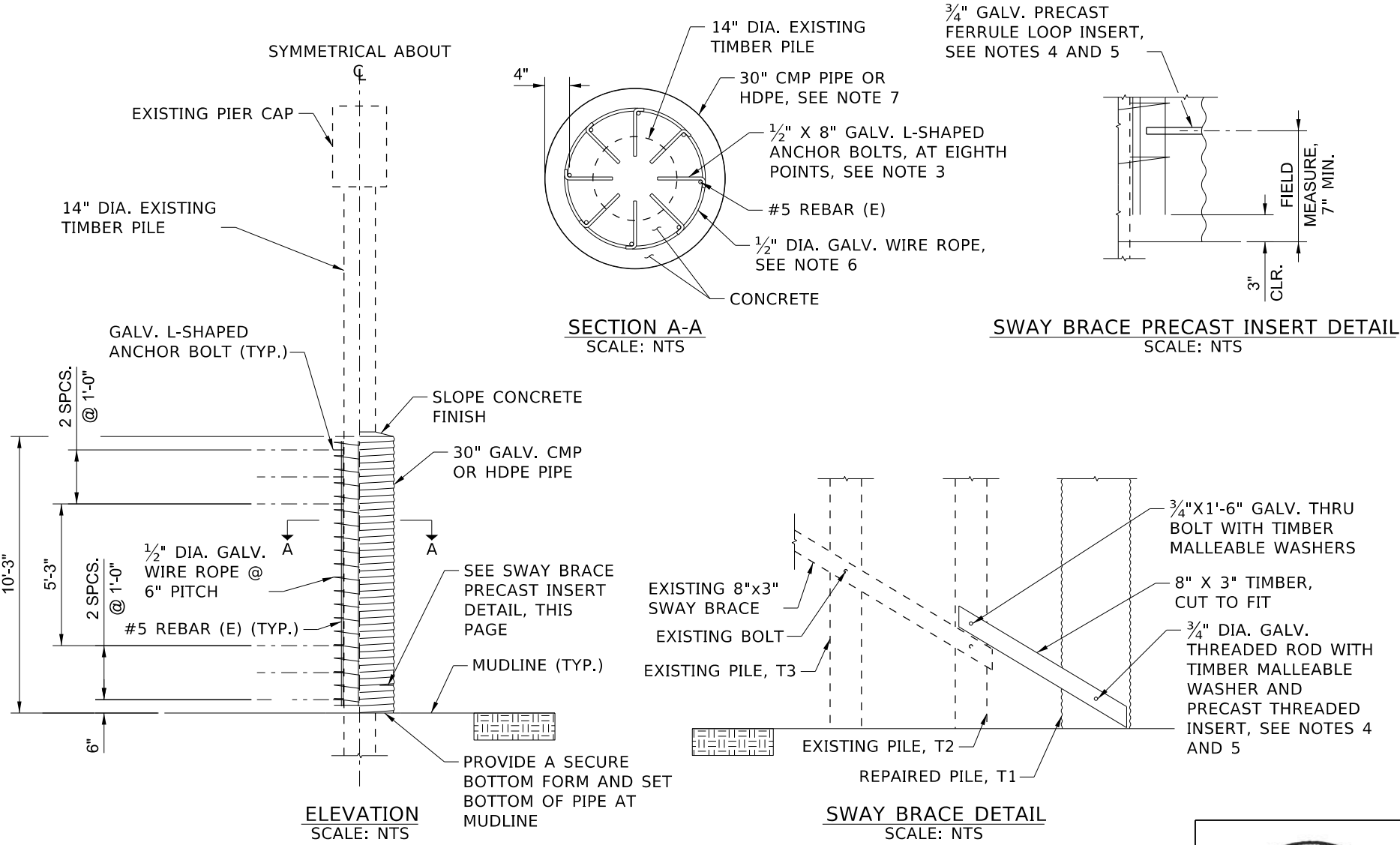
DECAY EXTENT
SCALE: NTS



PROPOSED REPAIR
SCALE: NTS

NOTES

1. PROVIDE HOT-DIP GALVANIZED ANCHOR BOLTS, THRU BOLTS, THREADED ROD, PRECAST INSERT, CMP PIPE, AND WIRE ROPE.
2. L-SHAPED OR J-SHAPED ANCHOR BOLTS ARE PERMITTED.
3. ANCHORING EPOXY FOR ANCHOR BOLTS SHALL BE HILTI HIT-RE 500 V3 OR APPROVED SIMILAR PRODUCT.
4. PRECAST INSERT SHALL BE DAYTON SUPERIOR GALV. F64 FERRULE LOOP INSERT W/ NC THREADS (PRODUCT CODE 43965) OR APPROVED SIMILAR.
5. FIELD MEASURE AND VERIFY INSERT HEIGHT FROM MUDLINE PRIOR TO DRILLING CMP OR HDPE PIPE. GALV. THREADED ROD WITH ANCHORING EPOXY IS AN ACCEPTABLE ALTERNATIVE TO THE PRECAST INSERT. ENSURE 6" EMBEDMENT IF THREADED ROD AND HILTI HIT-RE 500 V3 ANCHORING EPOXY OR APPROVED SIMILAR PRODUCT ARE UTILIZED. UTILIZE PACHOMETER OR OTHER NDT REBAR LOCATING TOOL/METHOD TO AVOID METAL REINFORCEMENT WHILE DRILLING CONCRETE.
6. EPOXY COATED NO. 4 REBAR HOOPS ARE AN ACCEPTABLE ALTERNATIVE TO THE WIRE ROPE. ENSURE 6" SPACING IS MAINTAINED IF REBAR HOOPS ARE UTILIZED. LAP HOOP ENDS TO CONFORM WITH AASHTO MIN. LAP LENGTH.
7. ORIENT CMP OR HDPE PIPE SO THAT THE LONGITUDINAL JOINTS ARE IN LINE WITH PILES.
8. TREAT TIMBER PER ITD 2023 STANDARD SPECIFICATIONS SECTION 710.09.
9. PERFORM ALL CUTTING AND DRILLING OF TIMBER MEMBERS PRIOR TO PRESERVATIVE TREATMENT OR APPLY TOUCH-UP PRESERVATIVE TREATMENT AFTER CUTTING AND DRILLING.



REVISIONS				DESIGNED KEH	SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY
NO.	DATE	BY	DESCRIPTION		
△				DESIGN CHECKED JCS	CADD FILE NAME
△				DETAILED KEH	BR12805_REPAIR.dgn
△				DWG. CHECKED JCS	DATE: FEB 2025
△				CORRECTIONS KEH	

ADA COUNTY
HIGHWAY
DISTRICT

BURGESS & NIPLE

ENGLISH

PROJECT NO.

CONCRETE JACKET REPAIR

ECKERT ROAD OVER RIDENBAUGH CANAL
TIMBER PILE REPAIR

BRIDGE PLANS

BRIDGE KEY NO.
12805

COUNTY
ADA

KEY NO.

BRIDGE DWG. NO.

SHEET
2 OF 2





**Your Safety • Your Mobility
Your Economic Opportunity**

IDAHO TRANSPORTATION DEPARTMENT

P.O. Box 7129 • Boise, ID 83707-1129

(208) 334-8000 • itd.idaho.gov

March 10th 2025

Dale Kuperus
District Engineer
Ada County Highway District
5800 N. Meeker Ave.
Boise, ID 83713

RE: Bridge Load Rating Recommendation (Re-Open)

The Idaho Transportation Department (ITD) has evaluated the below referenced bridge, **BK 12810**, for live load carrying capacity based on the recent repairs completed by ACHD and ITD that address the critical finding (widespread decay of the timber piles) issued by Burgess and Niple recommended to ACHD through a Local Agency Communication Verification form that the bridge be posted at 3 tons total gross vehicle. ACHD acknowledged the critical finding and responded by closing the bridge that same day. The bridge remains closed to all vehicle traffic. Repair plans were finalized by Forsgren Associates Inc. on 2/13/2025 and are attached.

HMH Engineering completed a Special Supplemental Inspection on 3/7/25 (attached) documenting the completed repairs and recommended Item 60 for Substructure condition be upgraded from "3, Serious Condition" to "5, Fair Condition." Our load rating analysis shows the bridge is adequate to carry legal loads. Please see attached load rating for the superstructure and substructure. The structure will be moved to a 12 month inspection interval. No additional work is recommended and we understand that ACHD is moving forward with bridge replacement plans.

ITD advises that the current bridge closure may be lifted, allowing highway traffic to resume.

Please contact Patty Fish at (208) 334-8847 or patty.fish@itd.idaho.gov and let her know when the bridge has re-opened to public traffic. Your attention to this matter is much appreciated.

Sincerely,

Alan Buehrig

Digitally signed by Alan Buehrig
DN: cn=Alan Buehrig, email=alan.buehrig@itd.idaho.gov,
ou=Idaho Transportation Department,
ou=Bridge HO, cn=Alan Buehrig
Date: 2025.03.10 12:17:33 -0600

Alan Buehrig, P.E.
Bridge Asset Management Engineer

Cc: Scott Wood (LHTAC); Amanda LaMott (LHTAC);
Laila Kral (LHTAC); Burgess and Niple (Inspection)

BRIDGE INFORMATION:

Bridge Key:	12810	Structure Name:	97643A 4.04
(6)Features Intersected:	BOISE RIVER(BARBER BR)	(9)Location:	AT BOISE ECL;ECKERT RD
Facility Carried(Route):	SMA 7643;ECKERT RD	Admin Jurisdiction:	0101 Ada County Hwy District
Xref Structure Name:		District:	03



Idaho Transportation Department Inspection Form District No. 3

BRIDGE KEY: 12810

STRUCTURE NAME: 97643A 4.04

FEATURES INTERSECTED: BOISE RIVER

LOCATION: AT BOISE ECL; ECKERT RD

OWNER: ADA COUNTY HIGHWAY DISTRICT

TYPE OF INSPECTION

- ☐ **DAMAGE**
- ☐ **UNDER BRIDGE INSPECTION TRUCK (UBIT)**
- ☐ **IN-DEPTH**
- ☒ **SUPPLEMENTAL INSPECTION**

SUBSTRUCTURE:

From the 2/4/2025 Supplemental Level III Timber Inspection: The Timber piles are in serious condition with major defects. The timber piles are concealed with a 2" x 12" x 22'-6" timber plank system on both sides and a steel nose armor at the upstream end. Decay is typically located near the high waterline. (13) Timber piles have widespread moderate to major decay. (5) Timber piles have moderate decay between 14% and 30% of the cross-sectional area and are rated as (CS 3). (8) Timber piles have decay affecting more than 51% of the cross-sectional area and are rated as (CS 4). The Timber piles at pier 6 are in the worst condition. See the Timber Resistograph Supplemental Report "12810_0225_resi" for more details on drilling locations and analysis.

During the 03/07/2025 Supplemental Inspection, the following piles were observed to have been retrofitted with steel channels embedded in a reinforced concrete foundation:

Timber Pile 2 at Pier 1

Timber Piles 3-6 at Pier 2

Timber Piles 3, 5, and 6 at Pier 3

Timber Piles 1 and 4-6 at Pier 4

Timber Piles 1-6 at Pier 6

Timber Piles 1-6 at Pier 7

Timber Piles 3-5 at Pier 8

Pier 5 had no retrofit repairs installed

See the Repair Plans prepared by Forsgren for more details and information on the structural repairs.

NOTES:

The Idaho Transportation Department contacted HMH Engineering to perform a Quality Control supplemental inspection using HMH's IML PD500 Resistograph to re-evaluate the timber piles. An In-Depth Inspection was completed on 2/4/2025 by Rick Smith and Rene Leon with HMH Engineering using ITD's A62 UBIT and standard wading equipment to access and perform a Level III Timber Inspection of the timber piles.

A follow up Supplemental Inspection assessing the sufficiency of the pile repairs was completed on 3/7/2025 by Rick Smith and Anthony Jankowski with HMH Engineering. Item 60 – Substructure rating should be changed to a 5 due to the repairs completed on the timber piles.

WORK ACCOMPLISHED:

All timber piles with moderate to major decay were repaired with steel channels embedded into reinforced concrete foundations.

INSPECTION INTERVAL:

Inspection interval to remain at 12 months to monitor repairs and condition of timber piles without repairs. Perform Level III Timber Inspections at a 12-month interval to monitor the condition of the timber piles.

MAINTENANCE RECOMMENDATIONS:

None.

INSPECTOR'S SIGNATURE : Rick Smith Digitally signed by Rick Smith
DN: C=US, E=rsmith@hnh-llc.com,
O=HMH Engineering, OU=Inspection,
CN=Rick Smith
Date: 2025.03.07 15:45:11-07'00' DATE: 3/7/2025



Idaho Transportation Department Supplemental Bridge Inspection Report

Bridge Key:	12810	Structure Name:	97643A 4.04
(6)Features Intersected:	BOISE RIVER(BARBER BR)	(9)Location:	AT BOISE ECL;ECKERT RD
Facility Carried(Route):	SMA 7643;ECKERT RD	Admin Jurisdiction:	0101 Ada County Hwy District
Xref Structure Name:		District:	03



Repair of Timber Pile 2 at Pier 1 Looking North.



Repair of Timber Pile 2 at Pier 1 Looking South.



Idaho Transportation Department Supplemental Bridge Inspection Report

Bridge Key:	12810	Structure Name:	97643A 4.04
(6)Features Intersected:	BOISE RIVER(BARBER BR)	(9)Location:	AT BOISE ECL;ECKERT RD
Facility Carried(Route):	SMA 7643;ECKERT RD	Admin Jurisdiction:	0101 Ada County Hwy District
Xref Structure Name:		District:	03



Repair of Timber Piles 4-6 at Pier 2 Looking North.



Repair of Timber Piles 4-6 at Pier 2 Looking South.



Idaho Transportation Department Supplemental Bridge Inspection Report

Bridge Key:	12810	Structure Name:	97643A 4.04
(6)Features Intersected:	BOISE RIVER(BARBER BR)	(9)Location:	AT BOISE ECL;ECKERT RD
Facility Carried(Route):	SMA 7643;ECKERT RD	Admin Jurisdiction:	0101 Ada County Hwy District
Xref Structure Name:		District:	03



Repair of Timber Piles 3, 5, & 6 at Pier 3 Looking North.



Repair of Timber Piles 3, 5, & 6 at Pier 3 Looking South.



Idaho Transportation Department Supplemental Bridge Inspection Report

Bridge Key:	12810	Structure Name:	97643A 4.04
(6)Features Intersected:	BOISE RIVER(BARBER BR)	(9)Location:	AT BOISE ECL;ECKERT RD
Facility Carried(Route):	SMA 7643;ECKERT RD	Admin Jurisdiction:	0101 Ada County Hwy District
Xref Structure Name:		District:	03



Repair of Timber Piles 1 & 4-6 at Pier 4 Looking North.



Repair of Timber Piles 1 & 4-6 at Pier 4 Looking South.



Idaho Transportation Department Supplemental Bridge Inspection Report

Bridge Key:	12810	Structure Name:	97643A 4.04
(6) Features Intersected:	BOISE RIVER (BARBER BR)	(9) Location:	AT BOISE ECL; ECKERT RD
Facility Carried (Route):	SMA 7643; ECKERT RD	Admin Jurisdiction:	0101 Ada County Hwy District
Xref Structure Name:		District:	03



Pier 5 Looking North.

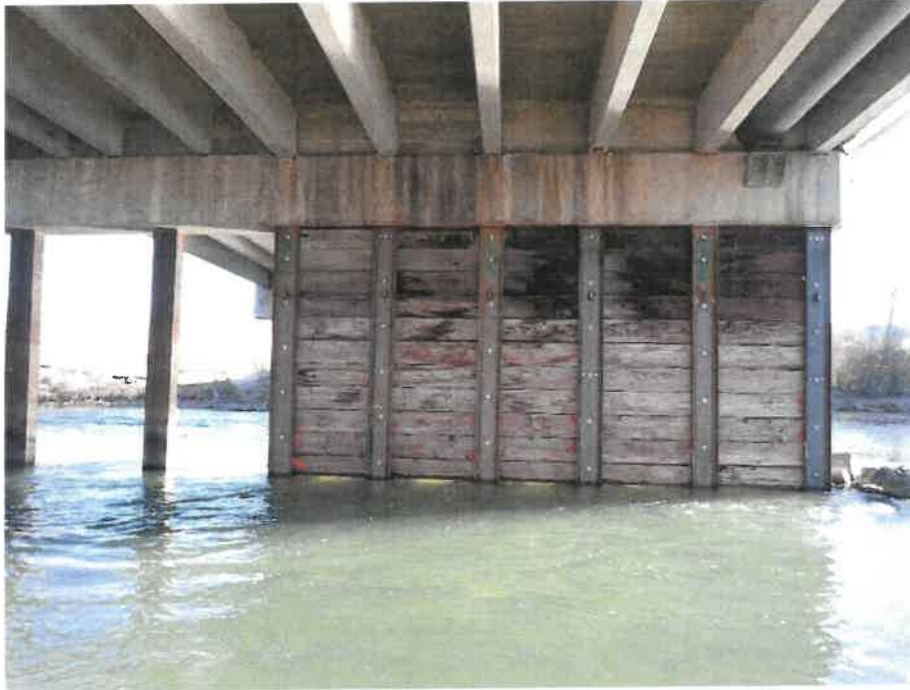


Pier 5 Looking South.



Idaho Transportation Department Supplemental Bridge Inspection Report

Bridge Key:	12810	Structure Name:	97643A 4.04
(6)Features Intersected:	BOISE RIVER(BARBER BR)	(9)Location:	AT BOISE ECL;ECKERT RD
Facility Carried(Route):	SMA 7643;ECKERT RD	Admin Jurisdiction:	0101 Ada County Hwy District
Xref Structure Name:		District:	03



Repair of All Timber Piles at Pier 6 Looking North.



Repair of All Timber Piles at Pier 6 Looking South.



Idaho Transportation Department Supplemental Bridge Inspection Report

Bridge Key:	12810	Structure Name:	97643A 4.04
(6)Features Intersected:	BOISE RIVER(BARBER BR)	(9)Location:	AT BOISE ECL;ECKERT RD
Facility Carried(Route):	SMA 7643;ECKERT RD	Admin Jurisdiction:	0101 Ada County Hwy District
Xref Structure Name:		District:	03



Repair of All Timber Piles at Pier 7 Looking North.



Repair of All Timber Piles at Pier 7 Looking South.



Idaho Transportation Department Supplemental Bridge Inspection Report

Bridge Key:	12810	Structure Name:	97643A 4.04
(6) Features Intersected:	BOISE RIVER (BARBER BR)	(9) Location:	AT BOISE ECL; ECKERT RD
Facility Carried (Route):	SMA 7643; ECKERT RD	Admin Jurisdiction:	0101 Ada County Hwy District
Xref Structure Name:		District:	03



Repair of Timber Piles 3-5 at Pier 8 Looking North.



Repair of Timber Piles 3-5 at Pier 8 Looking South.

Substructure Rating



ASR/LFR BRIDGE LOAD RATING SUMMARY

rev. 1/26/2024

Page 1

Bridge Key No. 33085		Structure Name X996410 8.11		(27) Year Built 1984		(106) Year Reconstruct N/A		Inspection Date 9/6/2023		Inventory Data Date 2/21/2024			
(9) Bridge Location 0.5 S. 1.0 E. TETONIA				(7) Facility Carried N 2000 W				(6a) Feature Intersected SPRING CR;N.FK.LEIGH CR				Drawing Number 18068	
(49) Length 29 ft.		(11) Milepost 100.260		(2) District 6		(3) County Teton		(22) Owner County Highway Agency				Administrative Jurisdiction Teton County	
(45, 43a, 43b) Bridge Description 1 Span Prestressed Concrete Tee Beam						(31) Design Load (per plans) HS-20		Granular WS 2 in.		Asphalt WS N/A in.		Concrete WS N/A in.	
Rating Program & Version BrR 7.5 - AASHTO Engine				Rating Method LFR		AASHTO Reference The Manual for Bridge Evaluation, Third Edition, 2018							
(58) Deck 6 Satisfactory		(59) Superstructure 7 Good		(60) Substructure 6 Satisfactory		(62) Culvert N N/A (NBI)		(113) Scour Critical 5 Stable, w/in Footing					
(30) ADT Year 2019		(29) ADT 100		(109) Truck % ADT 10 %		ADTT (ADT x Truck % ADT) 10		(19) Detour Length 3 miles		Year Programmed N/A			

INVENTORY RATINGS

Rating Vehicle	Controlling Configuration	Weight (Tons)	Controlling Member	Controlling Location	Controlling Limit State	Rating Factor	Rating (Tons)
HS-20	Truck	36	Pile 4	Pier 6	Axial - Compression + Bending	0.99	35
Idaho - Type 3	Truck	27	Pile 4	Pier 6	Axial - Compression + Bending	1.18	31
Idaho - Type 3S2	Truck	39.5	Pile 4	Pier 6	Axial - Compression + Bending	1.18	46
Idaho - Type 3-3	Truck	39.5	Pile 4	Pier 6	Axial - Compression + Bending	1.12	44
Idaho - 121k	Truck	60.5	Pile 4	Pier 6	Axial - Compression + Bending	0.99	60
NRL	Truck	40	Pile 4	Pier 6	Axial - Compression + Bending	0.86	34

OPERATING RATINGS

Rating Vehicle	Controlling Configuration	Weight (Tons)	Controlling Member	Controlling Location	Controlling Limit State	Rating Factor	Rating (Tons)
HS-20	Truck	36	Pile 4	Pier 6	Axial - Compression + Bending	1.35	48
Idaho - Type 3	Truck	27	Pile 4	Pier 6	Axial - Compression + Bending	1.60	43
Idaho - Type 3S2	Truck	39.5	Pile 4	Pier 6	Axial - Compression + Bending	1.60	63
Idaho - Type 3-3	Truck	39.5	Pile 4	Pier 6	Axial - Compression + Bending	1.52	60
Idaho - 121k	Truck	60.5	Pile 4	Pier 6	Axial - Compression + Bending	1.35	81
NRL	Truck	40	Pile 4	Pier 6	Axial - Compression + Bending	1.17	46

BRIDGE LOAD RATING SUMMARY

Controlling Truck Idaho - Type 3-3	Bridge Factor 752	Bridge Color Blue	Load Posting Required? No	Max Axle Weight if Posting Req. N/A
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#	Load Rater	Checker	Quality Control Engineer
Name:	Jared R. Larkin, PE	Kayla M. Jacobsen, PE	Ryan L. Sherman, SE
Company:	Forsgren Associates, Inc.	Forsgren Associates, Inc.	Forsgren Associates, Inc.
Date:	2/3/2025	2/6/2025	3/3/2025

Remarks:

- *These ratings are for the substructure with repaired timber piles only. The superstructure was not rated as part of this analysis.
- *See supporting calculations for additional comments and assumptions.





ASR/LFR BRIDGE LOAD RATING SUMMARY

rev. 1/26/2024

Page 2 of 2

Bridge Key No. 33085		Structure Name X996410 8.11		(27) Year Built 1984		(106) Year Reconstruct N/A		Inspection Date 9/6/2023		Inventory Data Date 2/21/2024	
(9) Bridge Location 0.5 S. 1.0 E. TETONIA				(7) Facility Carried N 2000 W			(6a) Feature Intersected SPRING CR;N.FK.LEIGH CR			Drawing Number 18068	
(49) Length 29 ft.	(11)Milepost 100.26	(2) District 6	(3) County Teton		(22) Owner County Highway Agency			Administrative Jurisdiction Teton County			
(45, 43a, 43b) Bridge Description 1 Span Prestressed Concrete Tee Beam				(31) Design Load (per plans) HS-20		Granular WS 2 in.		Asphalt WS N/A in.		Concrete WS N/A in.	
(45, 43a, 43b) Bridge Description 1 Span Prestressed Concrete Tee Beam				(31) Design Load (per plans) HS-20		Granular WS 2 in.		Asphalt WS N/A in.		Concrete WS N/A in.	
Rating Program & Version BrR 7.5 - AASHTO Engine				Rating Method LFR		AASHTO Reference The Manual for Bridge Evaluation, Third Edition, 2018					
(58) Deck 6 Satisfactory		(59) Superstructure 7 Good		(60) Substructure 6 Satisfactory		(62) Culvert N N/A (NBI)		(113) Scour Critical 5 Stable, w/in Footing			
(30) ADT Year 2019	(29) ADT 100	(109) Truck % ADT 10 %		ADTT (ADT x Truck % ADT) 10		(19) Detour Length 3 miles		Year Programmed N/A			

OPERATING RATINGS - Specialized Hauling Vehicles (SHV)

(Fill in the below SHV Operating Ratings only when Operating Rating Factor for NRL is less than 1.0)

Rating Vehicle	Controlling Configuration	Weight (Tons)	Controlling Member	Controlling Location	Controlling Limit State	Rating Factor	Rating (Tons)
SU4	Truck	27				0.30	8
SU5	Truck	31				0.28	8
SU6	Truck	34.75				0.25	8
SU7	Truck	38.75				0.23	8

OPERATING RATINGS - Emergency Vehicles (EV)

(Fill in the below EV Operating Ratings only when bridge is within one mile of Interstate System)

Rating Vehicle	Controlling Configuration	Weight (Tons)	Controlling Member	Controlling Location	Controlling Limit State	Rating Factor	Rating (Tons)
EV2	Truck	28.75					0
EV3	Truck	43					0

POSTING

Vehicle	Schematic	Posting (Tons)
Single Unit		N/A
Semi Tractor-Trailer Combination		N/A
Truck-Trailer Combination		N/A
	Max Axle	N/A

Additional Remarks:

Superstructure Rating



ASR/LFR BRIDGE LOAD RATING SUMMARY

rev. 4/30/2019

Page 1 of 2

Bridge Key No. 12810	Structure Name 97643A 4.04	(27) Year Built 1954	(106) Year Reconstruct 1998	Inspection Date 10/25/2018	Inventory Data Date 3/25/2019
(9) Bridge Location AT BOISE ECL;ECKERT RD	(7) Facility Carried SMA 7643;ECKERT RD	(6a) Feature Intersected BOISE RIVER(BARBER BR)	Drawing Number 6404		
(49) Length 315 ft.	(11) Milepost 4.040	(2) District 3	(3) County Ada	(22) Owner County Highway Agency	Administrative Jurisdiction Ada County Hwy District
(45, 43a, 43b) Bridge Description 9 Span Concrete Stringer/Girder	(31) Design Load HS-15	Granular WS N/A in.	Asphalt WS 1 in.	Concrete WS N/A in.	Timber WS N/A in.
Rating Program & Version BrR 6.8.2 - AASHTO Engine	Rating Method LFR	AASHTO Reference The Manual for Bridge Evaluation, Third Edition, 2018			
(58) Deck 7 Good	(59) Superstructure 6 Satisfactory	(60) Substructure 6 Satisfactory	(62) Culvert N N/A (NBI)	(113) Scour Critical 3 SC - Unstable	
(30) ADT Year 2016	(29) ADT 4600	(109) Truck % ADT 4	ADTT (ADT x Truck % ADT) 184	(19) Detour Length 4 mi.	Year Programmed N/A

INVENTORY RATINGS

Rating Vehicle	Controlling Configuration	Weight (Tons)	Controlling Member	Controlling Location	Controlling Limit State	Rating Factor	Rating (Tons)
HS-15	Truck	27	G3 - Int. Gir.	1.20	Design Shear - Concrete	0.89	24.0
HS-20	Truck	36	G3 - Int. Gir.	1.20	Design Shear - Concrete	0.67	24.1
Idaho - Type 3	Truck	27	G3 - Int. Gir.	1.20	Design Shear - Concrete	0.74	20.0
Idaho - Type 3S2	Truck	39.5	G3 - Int. Gir.	1.20	Design Shear - Concrete	0.87	34.4
Idaho - Type 3-3	Truck	39.5	G3 - Int. Gir.	2.00	Design Shear - Concrete	0.99	39.1
Idaho - 121k	Truck	60.5	G3 - Int. Gir.	1.20	Design Shear - Concrete	0.81	48.7
NRL	Truck	40	G3 - Int. Gir.	1.50	Design Flexure - Concrete	0.65	26.1

OPERATING RATINGS

Rating Vehicle	Controlling Configuration	Weight (Tons)	Controlling Member	Controlling Location	Controlling Limit State	Rating Factor	Rating (Tons)
HS-15	Truck	27	G3 - Int. Gir.	1.20	Design Shear - Concrete	1.48	40.0
HS-20	Truck	36	G3 - Int. Gir.	1.20	Design Shear - Concrete	1.12	40.1
Idaho - Type 3	Truck	27	G3 - Int. Gir.	1.20	Design Shear - Concrete	1.24	33.3
Idaho - Type 3S2	Truck	39.5	G3 - Int. Gir.	1.20	Design Shear - Concrete	1.45	57.3
Idaho - Type 3-3	Truck	39.5	G3 - Int. Gir.	2.00	Design Shear - Concrete	1.66	65.4
Idaho - 121k	Truck	60.5	G3 - Int. Gir.	1.20	Design Shear - Concrete	1.34	81.0
NRL	Truck	40	G3 - Int. Gir.	1.50	Design Flexure - Concrete	1.09	43.6

BRIDGE LOAD RATING SUMMARY

Controlling Truck Idaho - Type 3	Bridge Factor 686	Bridge Color Blue	Load Posting Required? No	Max Axle Weight if Posting Req. N/A
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Remarks:

- *Girders were evaluated assuming simple span load distribution.
- *Lump sum girder losses were in accordance with the design drawings.
- *Composite dead load was equally distributed to all girders.
- *Prestressing strand reinforcement was input into Virtis using the strand locations given in the shop drawings.
- *Pedestrian live loads were not considered.
- *Live load distribution factor overridden for G3 RCT since double-tees are only designed for pedestrian loads. Assumed G3 has a distributed load more like an exterior girder; used the same factors as G8 RCT.
- *Inspection report calls out 6-inch water main attached to the right curb on the deck, a 22-inch diameter welded steel pipe between girders 5 & 6 (G7 & G8), and 16-inch diameter steel pipe outside girder 6 (G8) along entire length of bridge.
- *Site visit was done to verify placement of utilities. 6-inch water main is attached to the superstructure while 22-inch and 16-inch steel pipes were bearing on the piers and were not a part of the superstructure. Pictures are included.

Quality Assurance Engineer

Name: Brent Schiller
Company: Forsgren Associates, Inc.
Date: 9/25/2009

Load Rating Engineer

Name: Barrie Jo Moss
Company: Forsgren Associates, Inc.
Date: 9/11/2009



ASR/LFR BRIDGE LOAD RATING SUMMARY

rev. 4/30/2019

Page 2 of 2

Bridge Key No. 12810	Structure Name 97643A 4.04	(27) Year Built 1954	(106) Year Reconstruct 1998	Inspection Date 43398	Inventory Data Date 43549
(9) Bridge Location AT BOISE ECL;ECKERT RD		(7) Facility Carried SMA 7643;ECKERT RD		(6a) Feature Intersected BOISE RIVER(BARBER BR)	
(49) Length 315 ft.	(11) Milepost 4.04	(2) District 3	(3) County Ada	(22) Owner County Highway Agency	Administrative Jurisdiction Ada County Hwy District
(45, 43a, 43b) Bridge Description 9 Span Concrete Stringer/Girder			(31) Design Load (per SI&A) HS-15	Granular WS N/A in.	Asphalt WS 1 in.
				Concrete WS N/A in.	Timber WS N/A in.
Rating Program & Version BrR 6.8.2 - AASHTO Engine		Rating Method LFR		AASHTO Reference The Manual for Bridge Evaluation, Third Edition, 2018	
(58) Deck 7 Good		(59) Superstructure 6 Satisfactory		(60) Substructure 6 Satisfactory	
				(62) Culvert N N/A (NBI)	
(30) ADT Year 2016		(29) ADT 4600	(109) Truck % ADT 4	ADTT (ADT x Truck % ADT) 184	
				(19) Detour Length 4 mi.	
				Year Programmed N/A	
				(113) Scour Critical 3 SC - Unstable	

OPERATING RATINGS - Specialized Hauling Vehicles (SHV)

(Fill in the below SHV Operating Ratings only when Operating Rating Factor for NRL is less than 1.0)

Rating Vehicle	Controlling Configuration	Weight (Tons)	Controlling Member	Controlling Location	Controlling Limit State	Rating Factor	Rating (Tons)
SU4	Truck	27					0.0
SU5	Truck	31					0.0
SU6	Truck	34.75					0.0
SU7	Truck	38.75					0.0

OPERATING RATINGS - Emergency Vehicles (EV)

(Fill in the below EV Operating Ratings only when bridge is within one mile of Interstate System)

Rating Vehicle	Controlling Configuration	Weight (Tons)	Controlling Member	Controlling Location	Controlling Limit State	Rating Factor	Rating (Tons)
EV2		28.75					0.0
EV3		43					0.0

POSTING

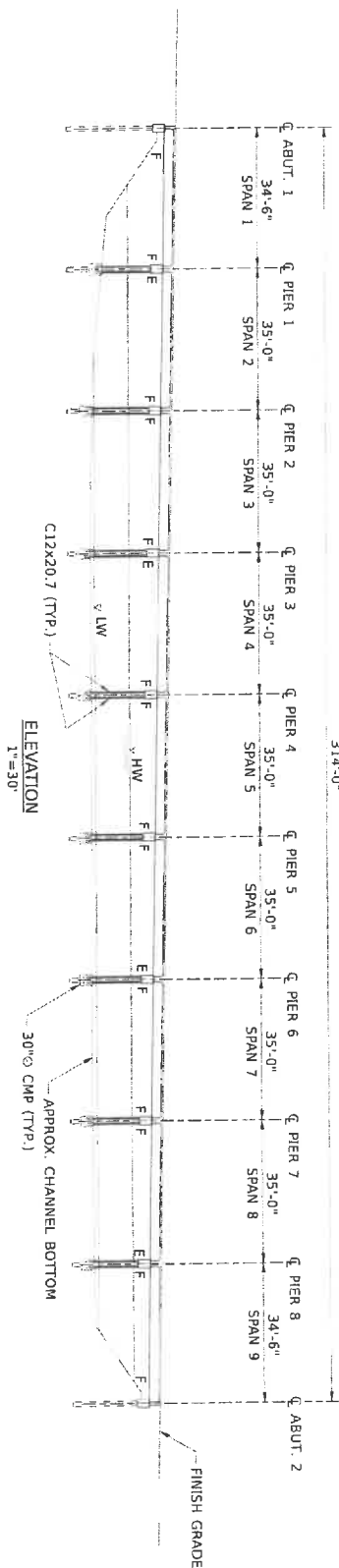
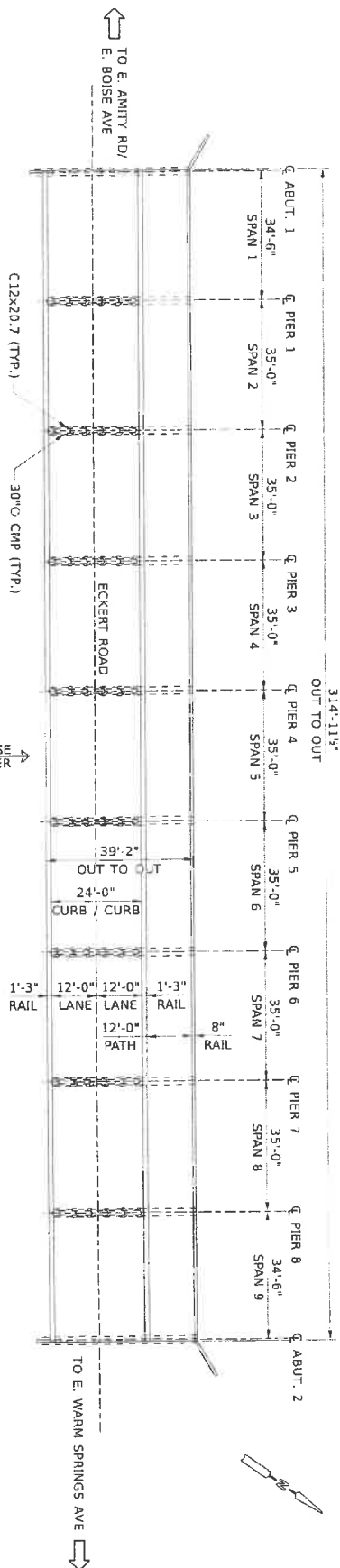
Vehicle	Schematic	Posting (Tons)
Single Unit		N/A
Semi Tractor-Trailer Combination		N/A
Truck-Trailer Combination		N/A
	Max Axle	N/A

EMERGENCY VEHICLE POSTING

Axle	Posting (Tons)
Single	N/A
Tandem	N/A
Gross	N/A

Additional Remarks:

Modified by Forsgren 05/10/2019
*Changed from BRASS to AASHTO Engine
*Updated ADTT per 2016 Traffic Data
*Updated LFR and LRFR Control Options
*Updated Utilities Load from DC2 to DW
*Design Truck Updated from H15 to HS15

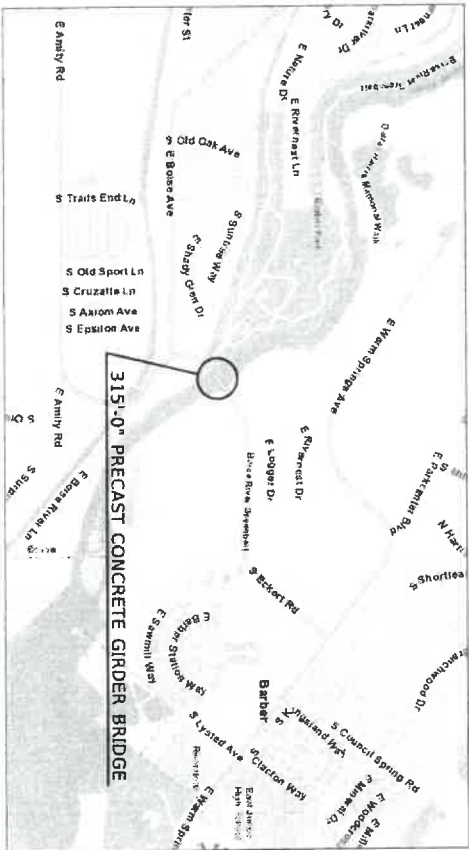
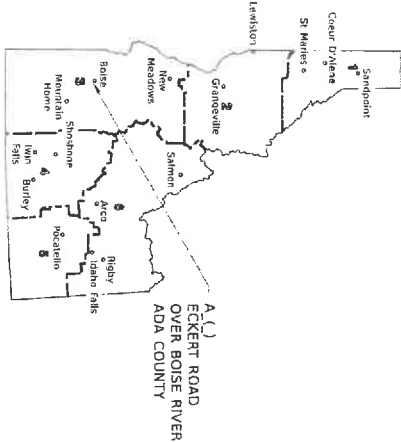


SCOPE OF WORK

1. DEMATER
2. STRENGTHEN TIMBER PILES ONE BY ONE AT EACH PIER:
 - A. EXCAVATE TO INSTALL STAY-IN-PLACE FORM.
 - B. REMOVE EXISTING BOLTS IN PILE.
 - C. REMOVE A SMALL PORTION OF THE TIMBER PLANKS UNDER THE CONCRETE CAP.
 - D. DRILL NEW HOLES IN TIMBER PILES.
 - E. DRILL HOLES IN STEEL CHANNEL ASSEMBLIES.
 - F. INSTALL NEW THREADED ROD THROUGH THE STEEL CHANNELS AND TIMBER PILE FOLLOWED BY A WASHER ON EACH SIDE.
 - G. INSTALL A LOCKING NUT ON EACH SIDE.
 - H. REPEAT PROCESS FOR ALL TIMBER PILES AT EACH PIER.
3. INSTALL STEEL REINFORCEMENT AND POUR ALL CONCRETE FOOTINGS AT THE PIER AT THE SAME TIME.

REVISIONS		DESIGNED		SCALES SHOWN	
NO.	DATE BY	DESCRIPTION	DESIGNED	ARE FOR 11" X 17"	PRINTS ONLY
1			R. SHERMAN		
2			K. JACOBSEN		
3			DETACHED		
4			DWG. CHECKED		
5			B. SCHILLER		
6			CORRECTIONS		
DRAWING DATE		CADD FILE NAME		YOUR SIGNATURE (Mobile - Your Electronic Signature)	
13-FEB-2025		2713100.dwg		FORSGREN	
		PROJECT NO.		SITUATION AND LAYOUT	
		315' PRECAST CONCRETE GIRDER BRIDGE		BRIDGE PLANS	
		ECKERT ROAD OVER BOISE RIVER		BRIDGE KEY NO. 12810	
				COUNTY ADA	
				BRIDGE DWG. NO. 5HEET	
				1 OF 5	





VICINITY MAP
NTS

QUANTITIES		
560-005A	DEWATERING FOUNDATION	1 LS
5501-20A	SP BRIDGE, TIMBER PILE RETROFIT	48 EA

SHEET INDEX

SITUATION AND LAYOUT	1
SHEET INDEX, QUANTITIES, & VICINITY MAP	2
PIER DETAILS (1 OF 2)	3
PIER DETAILS (2 OF 2)	4
CHANNEL FABRICATION DETAILS	5

GENERAL NOTES

MATERIALS: CONSTRUCTION AND WORKMANSHIP IN ACCORDANCE WITH THE STATE OF IDAHO TRANSPORTATION DEPARTMENT: 2023 STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, 2024 SUPPLEMENTAL SPECIFICATIONS, SPECIAL PROVISIONS AND THE PROJECT PLANS.
DESIGN SPECIFICATIONS AND DESIGN LOADS
NEW CONSTRUCTION: "ASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" 17TH EDITION (DECEMBER 2024) ITD BRIDGE LRFD DESIGN MANUAL.
ELEMENTS STRENGTHENED: TIMBER PILES RETROFITTED WITH STEEL CHANNELS.

EXISTING CONSTRUCTION: DWG. NO. 6404, 6404-A, & 6404-B.
EXISTING PLANS ARE AVAILABLE AT THE BRIDGE DESIGN OFFICE.

PLAN DIMENSIONS
STATIONS, ELEVATIONS, BEARINGS, AND DIMENSIONS SHOWN ARE BASED ON THE EXISTING PLANS AND DO NOT NECESSARILY REPRESENT THE AS-CONSTRUCTED BRIDGE. WHERE DIMENSIONS OF THE PROPOSED WORK DEPEND ON EXISTING CONDITIONS, FIELD VERIFY AND ADJUST CONTROLLING DIMENSIONS TO FIT THE AS-CONSTRUCTED BRIDGE BEFORE ORDERING MATERIALS.
DO NOT SCALE DIMENSIONS FROM THE PROJECT PLANS.

CONSTRUCTION
PROVIDE 2" CONCRETE COVER MEASURED FROM FACE OF THE CONCRETE TO THE FACE OF ANY REINFORCING BAR, UNLESS SHOWN OTHERWISE.

REINFORCING STEEL DIMENSIONS ARE MEASURED TO BAR CENTERLINE UNLESS NOTED OTHERWISE.
PREVENT DAMAGE TO THE PORTIONS OF THE STRUCTURE AND ROADWAY TO REMAIN DURING REPAIR OPERATIONS.
REPAIR OR REPLACE DAMAGE DUE TO CONTRACTOR OPERATIONS AS APPROVED BY THE ENGINEER AND AT NO ADDITIONAL COST TO THE DEPARTMENT.

PREVENT DEBRIS, RESULTING FROM CONTRACTOR OPERATIONS, FROM ENTERING THE WATERWAY.
DISPOSE OF REMOVED MATERIALS IN ACCORDANCE WITH 106.16.
LOCATE, RETAIN, AND PROTECT UTILITIES WITHIN THE VICINITY OF THE BRIDGE.

CONSTRUCTION BRIDGE LOAD RESTRICTION
LIMIT CONSTRUCTION EQUIPMENT OR OTHER LOADS ON THE BRIDGE TO A TOTAL OF 3 TONS. DO NOT ALLOW CONSTRUCTION EQUIPMENT OR OTHER LOADS TO BE PLACED WITHIN 5 FEET OF THE UPSTREAM (SOUTHEAST) CURB. DO NOT ALLOW CONSTRUCTION EQUIPMENT OR OTHER LOADS TO BE PLACED IN ADJACENT SPANS AT ANY TIME. DO NOT ALLOW CONSTRUCTION EQUIPMENT OR OTHER LOADS TO BE PLACED IN SPANS ADJACENT TO A PIER THAT IS UNDER REPAIR. LOAD RESTRICTIONS ON A SPAN WILL BE REMOVED BY THE ENGINEER IN WRITING ONCE THE PIERS ON EACH SIDE OF THE SPAN ARE CONSIDERED FULLY REPAIRED.

NEW MATERIALS
CONCRETE: FOOTING - CLASS 50A
METAL REINFORCEMENT: AASHTO M31, GRADE 60, TYPE S
STRUCTURAL STEEL:
CHANNELS - ASTM A36
PLATES - ASTM A36
THREADED ROD - ASTM A307, GRADE A
NUTS - ASTM A563, GRADE A HEX
WASHERS - ASTM A36, TYPE 1 CIRCULAR
INCIDENTAL ITEMS
WORK NECESSARY TO FULFILL THE CONTRACT THAT IS NOT MEASURED OR PAID FOR SEPARATELY.

$f_c = 5.0 \text{ ksi}$
 $f_y = 60 \text{ ksi}$
 $f_u = 60 \text{ ksi}$
 $f_y = 36 \text{ ksi}$
 $f_u = 36 \text{ ksi}$
 $f_u = 60 \text{ ksi}$

NO. DATE BY	REVISIONS	DESIGNED R. SHERMAN	SCALE SHOWN ARE FOR 11" X 17"	TRANSPORTATION DEPARTMENT	ENGLISH	SITUATION AND LAYOUT	BRIDGE PLANS
		DESIGN CHECKED K. JACOBSEN	PRINTS ONLY	CADD FILE NAME P:\2023\6404-005A\6404-C.dwg	PROJECT NO.	315' PRECAST CONCRETE GIRDER BRIDGE	BRIDGE KEY NO. 12810
		DWG. CHECKED B. SCHILLER		YOUR SIGNATURE AND SEAL ARE REQUIRED FOR ALL PROJECTS		ECKERT ROAD OVER BOISE RIVER	COUNTY ADA
		CORRECTIONS	DRAWING DATE: 13-FEB-2023	FORSGREN Associates Inc.			BRIDGE DWG. NO. 6404-C
							SHEET 2 OF 5



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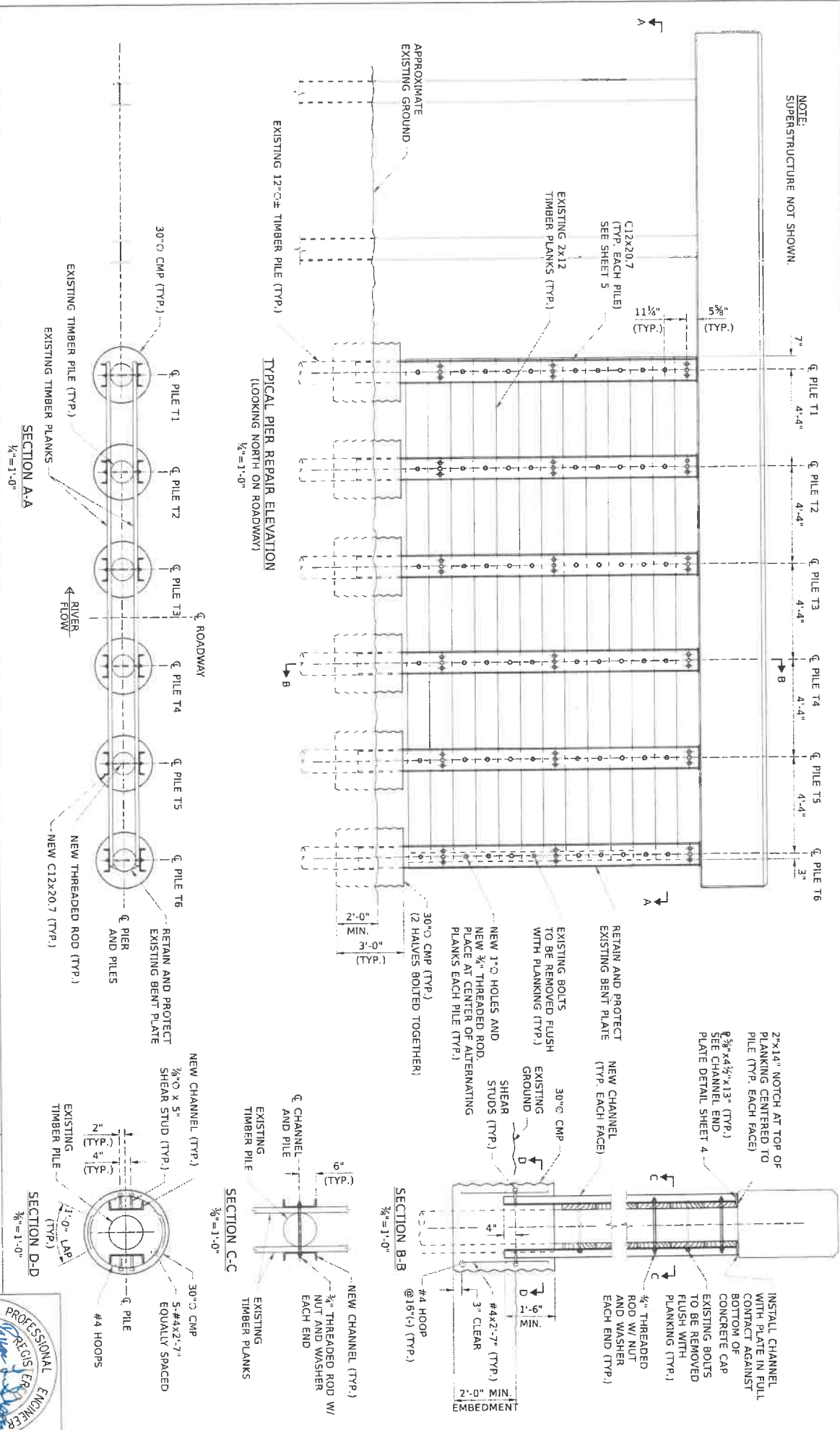
**IDAHOTRANSPORTATION
DEPARTMENT**
YOUR SAFETY • YOUR Mobility • YOUR Economic Opportunity
FORSGREN Chevrolet, Inc.

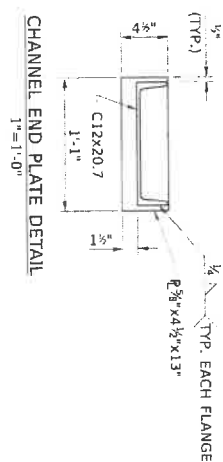
PIER REPAIR DETAILS (1 OF 2)

315' PRECAST CONCRETE GIRDER BRIDGE
ECKERT ROAD OVER BOISE RIVER

BRIDGE PLANS	
BRIDGE KEY NO. 12810	KEY NO.
COUNTY ADA	
BRIDGE DWG. NO. 6A04-C	SHEET 3 OF 5

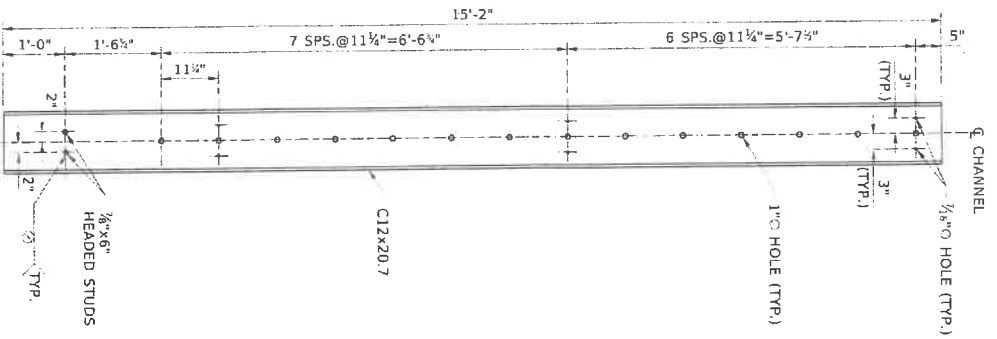
13061
2/13/2005
STATE OF IDAHO
RYAN L. SHERMAN



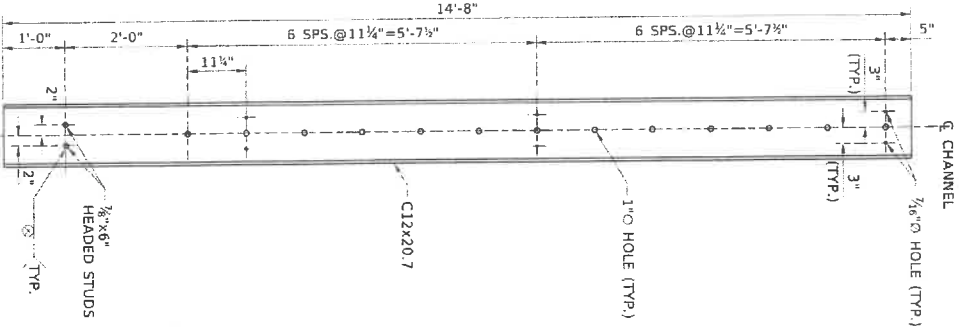


Pier	Pile	Pier 1										Pier 2										Pier 3										Pier 4										Pier 5										Pier 6										Pier 7										Pier 8										Pier 9										Pier 10																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
		Bott. Conc. To Ground	CMP Length	Anticipated CMP Embedment into Ground	Bott. Cap Conc. To Top CMP	Channel Length per side (2' Embd into Conc.)	Order Length	Number of 2x12 Planks/side	Number of Treaded Rods	Number of Washers	Number of Locking Nuts	Concrete Qty (CY)	Reinforcing Steel (LB)	Number of Steel Studs	Bott. Conc. To Ground	CMP Length	Anticipated CMP Embedment into Ground	Bott. Cap Conc. To Top CMP	Channel Length per side (2' Embd into Conc.)	Order Length	Number of 2x12 Planks/side	Number of Treaded Rods	Number of Washers	Number of Locking Nuts	Concrete Qty (CY)	Reinforcing Steel (LB)	Number of Steel Studs	Bott. Conc. To Ground	CMP Length	Anticipated CMP Embedment into Ground	Bott. Cap Conc. To Top CMP	Channel Length per side (2' Embd into Conc.)	Order Length	Number of 2x12 Planks/side	Number of Treaded Rods	Number of Washers	Number of Locking Nuts	Concrete Qty (CY)	Reinforcing Steel (LB)	Number of Steel Studs	Bott. Conc. To Ground	CMP Length	Anticipated CMP Embedment into Ground	Bott. Cap Conc. To Top CMP	Channel Length per side (2' Embd into Conc.)	Order Length	Number of 2x12 Planks/side	Number of Treaded Rods	Number of Washers	Number of Locking Nuts	Concrete Qty (CY)	Reinforcing Steel (LB)	Number of Steel Studs	Bott. Conc. To Ground	CMP Length	Anticipated CMP Embedment into Ground	Bott. Cap Conc. To Top CMP	Channel Length per side (2' Embd into Conc.)	Order Length	Number of 2x12 Planks/side	Number of Treaded Rods	Number of Washers	Number of Locking Nuts	Concrete Qty (CY)	Reinforcing Steel (LB)	Number of Steel Studs	Bott. Conc. To Ground	CMP Length	Anticipated CMP Embedment into Ground	Bott. Cap Conc. To Top CMP	Channel Length per side (2' Embd into Conc.)	Order Length	Number of 2x12 Planks/side	Number of Treaded Rods	Number of Washers	Number of Locking Nuts	Concrete Qty (CY)	Reinforcing Steel (LB)	Number of Steel Studs	Bott. Conc. To Ground	CMP Length	Anticipated CMP Embedment into Ground	Bott. Cap Conc. To Top CMP	Channel Length per side (2' Embd into Conc.)	Order Length	Number of 2x12 Planks/side	Number of Treaded Rods	Number of Washers	Number of Locking Nuts	Concrete Qty (CY)	Reinforcing Steel (LB)	Number of Steel Studs	Bott. Conc. To Ground	CMP Length	Anticipated CMP Embedment into Ground	Bott. Cap Conc. To Top CMP	Channel Length per side (2' Embd into Conc.)	Order Length	Number of 2x12 Planks/side	Number of Treaded Rods	Number of Washers	Number of Locking Nuts	Concrete Qty (CY)	Reinforcing Steel (LB)	Number of Steel Studs	Bott. Conc. To Ground	CMP Length	Anticipated CMP Embedment into Ground	Bott. Cap Conc. To Top CMP	Channel Length per side (2' Embd into Conc.)	Order Length	Number of 2x12 Planks/side	Number of Treaded Rods	Number of Washers	Number of Locking Nuts	Concrete Qty (CY)	Reinforcing Steel (LB)	Number of Steel Studs	Bott. Conc. To Ground	CMP Length	Anticipated CMP Embedment into Ground	Bott. Cap Conc. To Top CMP	Channel Length per side (2' Embd into Conc.)	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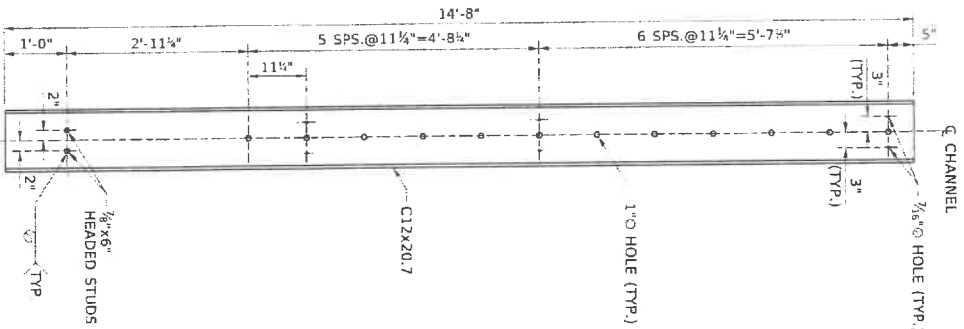
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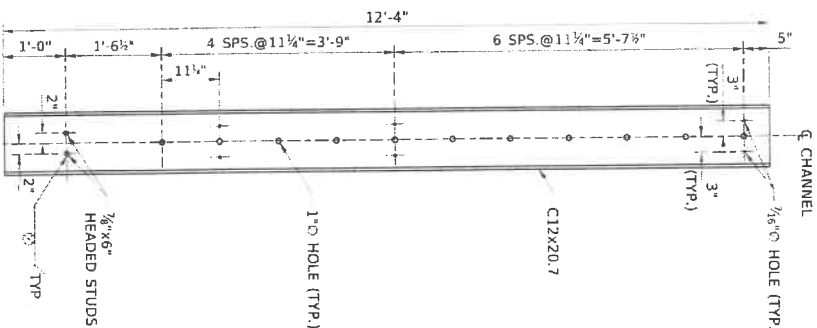
CHANNEL FOR PIERS 1, 2, & 3
(36 REQUIRED)
 $\frac{1}{2}" = 1'-0"$



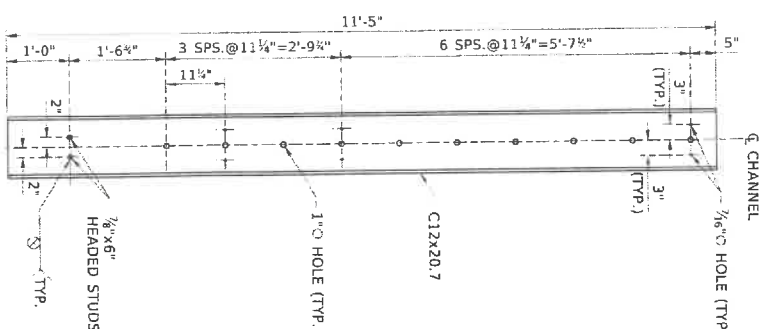
CHANNEL FOR PIERS 4 & 5
(24 REQUIRED)
 $\frac{1}{2}" = 1'-0"$



CHANNEL FOR PIER 6
(12 REQUIRED)
 $\frac{1}{2}" = 1'-0"$



CHANNEL FOR PIER 7
(12 REQUIRED)
 $\frac{1}{2}" = 1'-0"$



CHANNEL FOR PIER 8
(12 REQUIRED)
 $\frac{1}{2}" = 1'-0"$

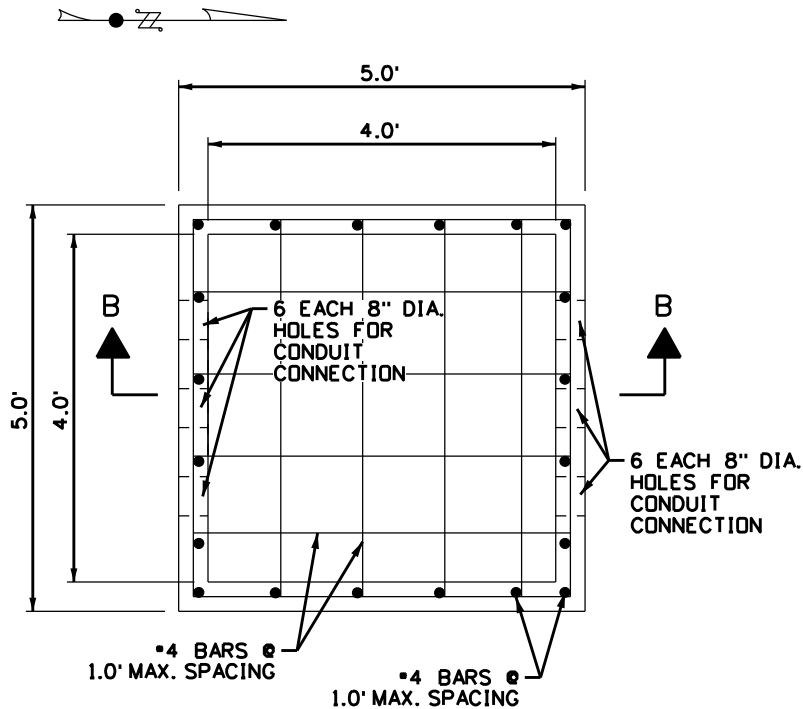
NO.	DATE	BY	REVISIONS	DESIGNED	SCALE	SHOWN	ARE FOR 11" X 17"	PRINTS ONLY	CADD FILE NAME	TRANSPORTATION	ENGLISH	CHANNEL FABRICATION DETAILS	BRIDGE PLANS
1				R. SHERMAN						DEPARTMENT	PROJECT NO.	315' PRECAST CONCRETE GIRDER BRIDGE	BRIDGE KEY NO.
2				K. JACOBSEN								ECKERT ROAD OVER BOISE RIVER	COUNTY
3				DET. GHAN									ADA
4				DWG. CHECKER									BRIDGE DWG. NO.
5				B. SCHILLER									KEY NO.
6				CORRECTIONS									SHEET
7													5 OF 5
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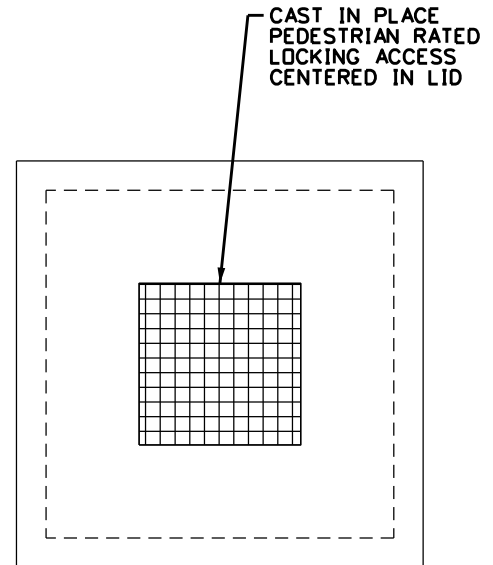
DETAIL: UTILITY VAULT - 609-025A

N.T.S.

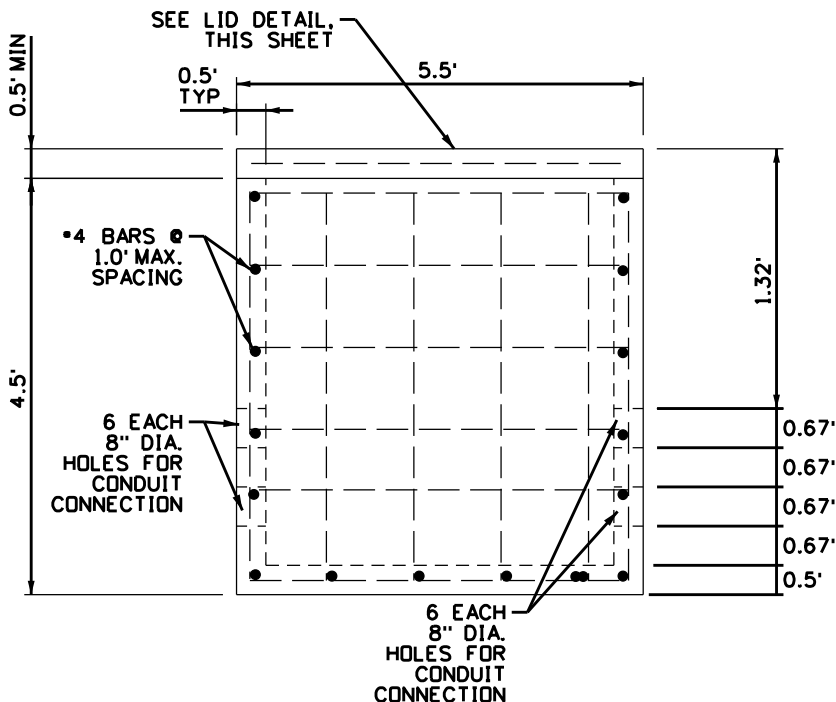
PLAN VIEW



LID DETAIL



SECTION B-B



UTILITY VAULT BOX NOTES:

1. CAST-IN-PLACE UTILITY VAULT SHALL CONFORM TO SECTION 609 - MINOR STRUCTURES.
2. ALL METAL REINFORCEMENT SHALL BE NO. 4 BARS WITH A MAXIMUM SPACING OF 1' CENTER TO CENTER AND HAVE A MINIMUM CONCRETE COVER OF 3".
3. ALL OUTSIDE EDGES TO HAVE 3/4" CHAMFER OR TOOLED EDGES.
4. ALL WELDING SHALL MEET THE REQUIREMENTS OF AMERICAN WELDING SOCIETY D1.1.
5. LID, ACCESS LID AND FRAME, HINGES, AND LOCKING MECHANISM ARE CONSIDERED INCIDENTAL TO THE COST OF CONCRETE FOR THE VAULT.
6. OUTSIDE DIMENSIONS OF LID SHALL MATCH OUTSIDE DIMENSION OF THE VAULT. CAST THE LID TO MATCH THE SLOPES OF THE MOUNT SLAB/SIDEWALK.