

**NEW CONSOLIDATED LOWER BOULDER RESERVOIR AND DITCH COMPANY,
NORTHERN COLORADO WATER CONSERVANCY DISTRICT,
AND TOWN OF ERIE
WELD COUNTY ROAD 3 CULVERT REPLACEMENT LICENSE AGREEMENT**

THIS LICENSE AGREEMENT (the “**Agreement**”) is executed this _____ day of _____, 2024 between the New Consolidated Lower Boulder Reservoir and Ditch Company, a Colorado nonprofit corporation (“**Lower Boulder**”), Northern Colorado Water Conservancy District, a quasi-municipal entity and political subdivision of the State of Colorado (“**Northern Water**”), and the Town of Erie, a Colorado statutory town (“**Licensee**”). This Agreement collectively refers to Lower Boulder, Northern Water, and Licensee, as the “**Parties**.”

RECITALS

A. Lower Boulder, as successor in interest to the Lower Boulder Extension Ditch Company, owns an easement, recorded at the Weld County Clerk and Recorder’s Office on July 12, 1911, Reception No. 168684 (the “**Lower Boulder Easement**”). Northern Water owns an easement, recorded at the Weld County Clerk and Recorder’s Office on February 20, 1956, Reception No. 1224120 (the “**Northern Water Easement**”). The Lower Boulder Ditch and the South Platte Supply Canal are the same structure and are referred to below as the “**Canal**.” This Agreement refers to the Northern Water Easement and the Lower Boulder Easement, jointly, as the “**Canal Easements**.” The Canal Easements provide for the construction, operation, and maintenance of the Canal. Northern Water and Lower Boulder co-own the Canal. The Canal is part of the Colorado-Big Thompson Project, which Northern Water owns and operates. Lower Boulder owns or controls decreed water rights and uses the Canal to deliver water to shareholders and other users pursuant to agreements.

B. Licensee is responsible for the maintenance of the section of Weld County Road 3 (“**WCR 3**”) within Licensee’s town limits. WCR 3 currently passes over the Canal, and across the Canal Easement, at three locations within the town limits. The northernmost location at which WCR 3 passes over the Canal and Canal Easements, and which is the subject of this Agreement, is depicted on attached **Exhibit A**. Licensee desires to obtain Northern Water and Lower Boulder’s permission to relocate a portion of the Canal and Canal Easements for the purpose of widening WCR 3 at this location. Licensee will relocate the Canal by installing a new, extended box culvert (the “**Extended Culvert**”) through which the Canal will pass under the widened portion of WCR 3 (the “**Road Crossing**”). The installation of the Extended Culvert and widening of WCR 3 are referred to as the “**Project**”. The plans for the Project are attached as **Exhibit B** (the “**Plans**”). This Agreement refers to the Extended Culvert and the Road Crossing, together, as the “**Licensed Facilities**.” Pursuant to the terms and conditions of this Agreement, Northern Water and Lower Boulder agree to grant Licensee a license for the Project.

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is acknowledged, the Parties agree:

AGREEMENT

1. The above Recitals are incorporated as if fully set forth below.
2. Northern Water and Lower Boulder grant to Licensee, its successors and permitted assigns, with respect to the title and interest that Northern Water and Lower Boulder may have, and upon the terms and conditions stated, a license for the Project, as set forth in the Plans, and to maintain, repair, and replace the Licensed Facilities (the Project and Licensee's maintenance, repair, and replacement of the Licensed Facilities, together, the "**Licensed Activities**").
3. As consideration Licensee shall, upon execution of this Agreement, pay Northern Water \$500 and shall pay Lower Boulder \$2,500. In addition, Licensee shall pay to Northern Water and Lower Boulder any amounts necessary to reimburse their reasonable legal, engineering costs, and costs of inspection incurred in negotiating, preparing, finalizing, recording and ensuring deadlines are complied with as set forth in this Agreement. Licensee shall not construct or maintain any additional structures on the Canal Easements without first obtaining a separate license for the structures from Northern Water and Lower Boulder.
4. Northern Water and Lower Boulder shall continue to have the right to use the Canal Easements for all purposes in connection with the Canal and the Colorado-Big Thompson Project, and the license granted to Licensee for the use of the Canal Easements is subject to the rights of Northern Water and Lower Boulder to use the Canal Easements for such purposes as described in the applicable deeds and under Colorado law. Northern Water and Lower Boulder reserve the right for their officers, agents, employees, licensees, and permittees to have ingress to, passage over, and egress from the Canal Easements for the purpose of exercising, enforcing, and protecting their rights granted in the Canal Easements.
5. Northern Water and Lower Boulder reserve the right to grant to others the use of the Canal Easements for any purposes consistent with the Canal Easements, provided that the grants shall not unreasonably interfere with the Licensed Facilities and Licensee's rights under this Agreement.
6. Construction, Maintenance, and Repair.
 - 6.1 A copy of this Agreement shall be on the job site at all times.
 - 6.2 Northern Water and/or Lower Boulder's approval of the Plans shall not relieve Licensee of its sole responsibility to ensure that the Project will not interfere with Northern Water and/or Lower Boulder's use and enjoyment of the Canal and the Canal Easements. The Licensed Facilities shall be constructed in accordance with the Plans. Licensee shall obtain the written approval of both Northern Water and Lower Boulder for any deviation in the construction of the Licensed Facilities from the Plans.

- 6.3 Northern Water and/or Lower Boulder's review and approval of the Plans is for their benefit only, creates no obligation or responsibility on either Northern Water or Lower Boulder, and does not relieve Licensee of any obligation or responsibility contained in this Agreement.
- 6.4 Except as provided in Paragraph 18, Licensee shall notify the operational contacts for Northern Water and Lower Boulder three (3) working days (Saturdays, Sundays, and State of Colorado holidays excluded) preceding the date of commencing work on the Project. Northern Water and/or Lower Boulder shall have the right to inspect all of the Licensed Facilities during the Licensed Activities. Licensee agrees to reimburse Northern Water and Lower Boulder, respectively, for its reasonable administrative and inspection costs incurred for this purpose. If Licensee commences construction without notifying Northern Water and Lower Boulder as required, Northern Water and Lower Boulder, at their option, may require Licensee to disassemble and reconstruct any work completed without having provided the required notice. For purposes of this Agreement, Licensee shall reimburse labor costs to Northern Water and Lower Boulder at the actual hourly rate that Northern Water and Lower Boulder currently utilize in computing job costs. Northern Water and Lower Boulder will forward a statement for the total costs chargeable to Licensee hereunder upon acceptance of the Licensed Facilities, and Licensee shall pay those reasonable costs to Northern Water and Lower Boulder respectively within thirty (30) days of the billing date. If either Northern Water and Lower Boulder do not receive payment within forty five (45) days of the billing date, interest shall thereafter accrue on the unpaid balance at the rate of twelve percent (12%) per annum and, to the extent allowable by law.
- 6.5 Licensee agrees that no construction of the Licensed Facilities that effects the operation of the Canal shall take place within the Canal Easements during the water delivery season, which is from April 1 through October 31, of any calendar year except as provided for in Paragraph 18 or otherwise approved in writing by Northern Water and Lower Boulder.
- 6.6 Northern Water and Lower Boulder shall have the right to inspect the Licensed Facilities. All construction shall proceed with due diligence from its initiation to its completion, except in the case of a *force majeure* event, in which event Licensee shall take all practicable measures to complete construction as soon as possible or otherwise to overcome the *force majeure* event, unless Northern Water and/or Lower Boulder reasonably requests that Licensee interrupt or cease construction.
- 6.7 Licensee shall immediately repair, at Licensee's expense, any damage to the Canal, the Canal Easements, or appurtenances to the Canal or Canal Easements, that results from the Licensed Activities, and Licensee shall restore all portions of the Canal, the Canal

Easements, and/or appurtenances to the Canal or Canal Easements that are disturbed by Licensee during the Project to their original condition and revegetation. In the event of any resettling, Licensee shall restore the surface of the Canal Easements by grading and compacting the irregularities that result from the Project.

6.8 Licensee shall not blast or permit any blasting above, underneath, or near the Canal or Canal Easements, without first having received prior written permission from Northern Water and Lower Boulder. Licensee shall conduct any such blasting in the presence of a representative of Northern Water and/or Lower Boulder, and in accordance with directions such representative may give for the protection or safety of the Canal, the Canal Easements, and the Licensed Facilities, in the area that Northern Water and Lower Boulder operate.

6.9 Upon completion of the Project, Licensee shall notify Northern Water and Lower Boulder and shall fix a date within fourteen (14) days thereafter upon which representatives of Northern Water, Lower Boulder, and Licensee shall jointly inspect the Licensed Facilities. If completion of the Project is satisfactory, Northern Water and Lower Boulder shall issue written acceptance of the Licensed Facilities to Licensee as soon as reasonably possible thereafter. If completion of the Project is not satisfactory, Northern Water and Lower Boulder shall provide Licensee with a written explanation of any corrections necessary to bring the Licensed Facilities into material conformance with the Plans and Licensee shall, at its sole expense, make any corrections. Licensee shall be responsible for the correction of any defects or failures of the facilities that Northern Water and/or Lower Boulder operate, due to Licensee's faulty design, use of materials, or workmanship, of the Licensed Facilities. Also, within twenty (20) days of receipt of written acceptance of the Licensed Facilities from Northern Water and Lower Boulder, Licensee shall provide a set of "as built" or record drawings to Northern Water and Lower Boulder. Following Northern Water and Lower Boulder's inspection and acceptance of the Licensed Facilities, Licensee shall not materially modify the Licensed Facilities without obtaining the prior written approval of Northern Water and Lower Boulder.

7. All provisions of this License shall also apply to any other work involving the installation, maintenance, repair, or relocation of the Licensed Facilities.

8. Licensee shall bear the sole obligation of obtaining from the fee title owner of the property burdened by the Canal Easements or any other owner of a proprietary interest in the property burdened by the Canal Easements such authority or rights as Licensee may need in addition to the rights provided in this Agreement for the Licensed Activities.

9. In the event that Licensee's activities on the Canal Easements should, in the sole discretion of Northern Water or Lower Boulder, interfere with or constitute a hazard to the facilities, officials, employees, or contractors of Northern Water or Lower Boulder, or to the general public, Northern

Water or Lower Boulder may require immediate relocation, modification, or removal of the Licensed Facilities to eliminate the interference or hazard and may suspend Licensee's right to use the Canal Easements under this License until such relocation or modification is completed. If Licensee should fail to take such action as requested, Northern Water and/or Lower Boulder may take such action at the expense of Licensee.

10. Licensee may not grant any license or other interest in the Canal Easements that in any way interferes with or threatens to interfere with use of the Canal Easements or any operation, maintenance, use, or administration of the Colorado-Big Thompson Project by Northern Water or Lower Boulder. Prior to granting any license or interest in the Canal Easements, Licensee shall obtain the written permission of Northern Water and Lower Boulder.

11. Licensee shall not cause nor permit to be caused by any of its contractors, agents, or employees, any hazardous substances, as defined by the Comprehensive Environmental Response, Compensation and Liability Act of 1980 ("CERCLA"), pollutants or contaminants, as defined by CERCLA, or hazardous wastes, as defined by the Resource Conservation and Recovery Act ("RCRA"), including, but not limited to asbestos, polychlorinated biphenyls ("PCB's"), and/or urea formaldehyde, or any pollutants or toxic pollutants as defined by the Clean Water Act, and any amendments thereto, to be dumped, spilled, released, permanently stored, or deposited on, over, or beneath the Canal Easements. Any hazardous, toxic, or flammable substances used by Licensee or its agents, representatives, or independent contractors in the construction, operation, maintenance, repair, or replacement of the Licensed Facilities shall be utilized in a lawful manner and in compliance with all federal, state, and local requirements relating to protection of health or the environment. Upon completion of the activities, Licensee shall remove any and all such hazardous, toxic, or flammable substances.

12. To the extent permitted by law, and without in any manner waiving the protections, procedural requirements, and defenses and monetary or limitations on damages provided for in the Colorado Governmental Immunity Act at C.R.S. §§ 24-10-101 to -120, or any successor or similar statutes of the State of Colorado, Licensee shall at all times protect, indemnify, hold harmless, and defend Northern Water and Lower Boulder, their officers, agents, and employees, from any and all claims, liability, or expenses, from any cause whatsoever arising from or growing out of the installation, existence, repair, maintenance, or removal of the Licensed Facilities or the activities of Licensee and its agents, employees, and contractors on the Canal Easements.

13. Northern Water and Lower Boulder shall use ordinary care not to damage the Licensed Facilities in the maintenance, relocation, or reconstruction of their facilities located on the Canal Easements. Licensee understands and acknowledges that normal repair, reconstruction, and maintenance of the Canal facilities on the Canal Easements includes, but is not limited to, excavating the bottom and shaping the sides of the Canal with heavy equipment which travels on the bottom of the Canal or on its banks; installing and replacing riprap; replacing, adding or

reconstructing water turnouts, headgates, valves, check dams, and other structures and facilities to direct or control the flow of water; reconstructing and replacing eroded, weakened or breached canal banks; construction of culverts or bridges across the Canal; and emergency actions taken in the event of overtopping or breach of the Canal; and that such activities are necessarily imprecise with respect to depth of excavations, bank dimensions, and the like. Licensee shall have sole responsibility for assuring that the design and location of the Licensed Facilities are adequate to protect the Licensed Facilities from the foregoing activities.

14. Notwithstanding any other provisions of this Agreement, Northern Water and Lower Boulder shall not be responsible for any loss or damages to property arising from this Agreement, including, but not limited to, damages to growing crops, animals, and machinery; or injury to Licensee or its associates, officers, agents, employees, guests, invitees, trespassers, family, or any others who are on the premises; or for damages or interference caused by natural phenomena.

15. Licensee shall undertake Licensed Activities in a manner that does not interfere with the flow of water through the Canal to Northern Water's contractees and/or Lower Boulder's shareholders. Licensee shall be responsible for any damages caused by its negligence in installing the Licensed Facilities.

16. The cost of any repairs or maintenance to the Canal undertaken by Northern Water and Lower Boulder that are directly or indirectly caused by, or that result from, the Licensed Activities, and not immediately remedied by Licensee pursuant to Paragraphs 3 or 6.4, shall be reimbursed by Licensee to Northern Water and Lower Boulder, as the case may be, within thirty (30) days of billing.

17. Communications:

17.1 Any written communication or correspondence to any of the Parties shall be directed to the following contacts by mail or email:

Real Estate Management Department
Northern Colorado Water Conservancy District
220 Water Avenue
Berthoud, CO 80513
jstruble@northernwater.org

and to:

New Consolidated Lower Boulder Reservoir and Ditch
Company

P.O. Box 119
Longmont, CO 80502-0119
angie@dangrantbookkeeping.com

with a copy to:

Casey Weaver
Lyons Gaddis
P.O. Box 978
Longmont, CO 80502-0978
cweaver@lyonsgaddis.com

Michael Kopp
Trout Raley Freeman Sinor Thompson, P.C.
1120 Lincoln Street, Suite 1600
Denver, CO 80203
mkopp@troutlaw.com

Licensee: Town of Erie
Malcolm Fleming, Town Administrator
645 Holbrook Street
P.O. Box 750
Erie, CO 80516
mfleming@erieco.gov

with copy to: Vranesh and Raisch, LLP
Peter C. Johnson
5303 Spine Road, Suite 202
Boulder, CO 80301
pcj@vrlaw.com

17.2 For operational contacts, the following persons are designated as the entities' contacts:

Northern Water:
Brian Flockhart, Real Estate
Department
E-mail:
bflockhart@northernwater.org
Office: 970-622-2270
Cell: 970-686-2806

Lower Boulder:
Shawn Spitz, Superintendent
E-mail: shawnlowerboulder@gmail.com
720-320-4605

17.3 In the event of an emergency, as described in Paragraph 18, Northern Water, Lower Boulder, or Licensee shall provide notice to the other Parties as soon as practicable at the emergency contacts identified below.

EMERGENCY CONTACTS:

Northern Water:	Brian Flockhart, Office: 970-622-2270 Cell: 970-686-2806	or	Jim Struble Office: 970-622-2243 Cell: 970-593-2074
Lower Boulder:	Shawn Spitz, Superintendent shawnlowerboulder@gmail.com Cell: 720-320-4605		
Licensee:	David Pasic, Town Engineer dpasic@erieco.gov 303-926-2865		

17.4 The parties may change the personnel and addresses to which notice is given, by written notice to the other Parties, at the addresses listed in this Paragraph 17.1 above.

18. In the event of an emergency, Northern Water or Lower Boulder, or Licensee may conduct maintenance or repair immediately, giving notice to the other party as soon as practicable at the emergency contacts identified in Paragraph 17.3. If Northern Water and/or Lower Boulder conduct emergency work on the Licensed Facilities, Licensee shall reimburse them for the cost of the work. Except for any negligent or intentional actions, Northern Water and/or Lower Boulder shall not be responsible or held liable for damages to the Licensed Facilities resulting from maintenance or repair within the Canal Easements.

19. The license shall terminate upon the abandonment of the use of the Licensed Facilities by Licensee. Abandonment shall be deemed to have occurred if the Licensed Facilities have not been used for a period of five (5) years or if Licensee fails to complete initial construction of the Licensed Facilities within three (3) years of the execution of this Agreement. Upon termination, Licensee shall bear all costs of restoring the Canal and Canal Easements to their original condition and removing the Licensed Facilities. In the event that Licensee fails to restore the Canal and Canal Easements to their original condition, Northern Water and/or Lower Boulder may do so at Licensee's expense. Licensee shall not acquire any vested rights in addition to those set forth in this license to maintain and use the Licensed Facilities as a result of Northern Water and Lower Boulder's continued acquiescence in the maintenance and use of the Licensed Facilities.

20. If Licensee constructs or maintains the Licensed Facilities in any manner that is not in reasonable accordance with the Plans, Northern Water and Lower Boulder may require Licensee to remove or correct the nonconforming Licensed Facilities at Licensee's sole expense. Northern Water and Lower Boulder's failure to object, or delay in objecting, to the construction or maintenance of nonconforming Licensed Facilities shall not be deemed a waiver or relinquishment of their right to do so.

21. Licensee shall require all contractors and/or subcontractors, of the Licensed Facilities to provide and keep in full force and effect during the construction of the Licensed Facilities: i) a builder's risk policy in the amount of at least \$1,000,000 per occurrence and the aggregate; ii) commercial general liability insurance, including contractual liability coverage and completed operations coverage, in the amount of at least \$1,000,000 per occurrence and in the aggregate; iii) automobile liability coverage in the amount of at least \$1,000,000 per occurrence and in the aggregate; iv) excess liability coverage in the amount of at least \$1,000,000 per occurrence and in the aggregate; v) pollution liability coverage in the amount of at least \$1,000,000 per occurrence and in the aggregate; and vi) worker's compensation coverage as required by Colorado law covering all employees. The policies shall, except for the worker's compensation policy, name Northern Water and Lower Boulder as additional insureds. The completed operations coverage shall extend for a minimum of three (3) years after project completion. Licensee shall provide Northern Water and Lower Boulder with certificates of insurance from its builder showing that the required coverage is in effect prior to beginning the Project via e-mail at the following addresses: jstruble@northernwater.org; bflockhart@northernwater.org; ssinclair@lyonsgaddis.com; and angie@dangrantbookkeeping.com. Northern Water and Lower Boulder may change these e-mail addresses using the procedure set forth in Paragraph 17.4.

22. This License is issued subject to any prior licenses, easements, or leases granted by Northern Water and Lower Boulder in the Canal Easements.

23. This Agreement shall inure to the benefit of and be binding upon the successors and permitted assigns of the Parties hereto. This Agreement shall be recorded with the Weld County Clerk and Recorder.

24. This Agreement shall not be assigned by Licensee without the prior written approval of Northern Water and Lower Boulder. Any assignees or successors to the rights of Licensee hereunder shall be liable and bound under all provisions of this License to the same extent as Licensee. Licensee must provide a copy of this Agreement to any prospective assignee or purchaser of an interest in the Licensed Facilities or any real estate agent or broker assisting in the conveyance of such interest prior to such assignment.

25. Nothing in this Agreement shall constitute a waiver, in whole or in part, of the governmental immunities, rights, or protections provided to Northern Water or Licensee by the Colorado Governmental Immunity Act, C.R.S. §§ 24-10-101 to -120, or any successor or similar statutes of the State of Colorado, or any protections offered to Lower Boulder under Colorado law.

26. This Agreement shall be interpreted and enforced under the laws of the State of Colorado. In the event of arbitration or litigation, venue shall be exclusively proper in Weld County, Colorado.

27. This Agreement may not be modified, amended, or terminated except by an agreement in writing executed and recorded by the Parties.

28. If any provision in this Agreement is held invalid, illegal, or unenforceable by a court of law, the validity, legality, and enforceability of the remaining provisions of this Agreement shall not be impaired and will remain in full force and effect.

29. This Agreement with exhibits constitutes the entire understanding and agreement between the Parties. Any prior agreements, understandings, and representations are of no further force and effect.

30. The Parties will cooperate in good faith to carry out their respective rights and obligations pursuant to this Agreement.

31. All exhibits referred to in this Agreement are, by reference, incorporated into this Agreement for all purposes.

32. Additional conditions:

33.1 Where compacting of earth materials is required around the Licensed Facilities, the material shall be clay deposited in horizontal layers and compacted using pneumatic and/or other suitable mechanical tampers. Backfill materials shall be deposited in horizontal layers of not more than six (6) inches in thickness after being compacted. Prior to and during compaction operations, backfill material shall have optimum practicable moisture content required for the purpose of compaction as determined by the Northern Water and Lower Boulder. Minimum of ninety five percent (95%) compaction required.

33.2 Licensee shall bear sole responsibility for the installation of any and all signage required by federal, state, or local rules and regulations and/or required by either Northern Water and/or Lower Boulder.

34. Licensee shall acknowledge receipt and acceptance of these conditions by executing the signature and date spaces below and returning the executed License to Northern Water and Lower Boulder. For purposes of this Agreement, electronically transmitted signatures shall be considered original signatures. This Agreement may be executed in counterparts. An executed copy of this Agreement will be returned to Licensee, and Licensee may proceed with the Project only after Licensee has received its copy of the executed Agreement, all required payments from Licensee hereunder have been received by Northern Water and Lower Boulder, and Licensee has given proper notice pursuant to Paragraph 6.4 above.

IN WITNESS WHEREOF, this instrument has been executed the day and year first above written.

NORTHERN COLORADO WATER
CONSERVANCY DISTRICT

THE NEW CONSOLIDATED LOWER
BOULDER RESERVOIR AND DITCH
COMPANY

Signature: DocuSigned by:
Bradley D. Wind
FC0471B7832F49C...

DocuSigned by:
Erik Nelson
7EF70C45B38F4CA...

Print Name: Bradley D. Wind

Print Name: Erik Nelson

Title: General Manager

Title: President

Date: August 29, 2024

Date: 8/27/2024

THE TOWN OF ERIE:

By: _____

Title: _____

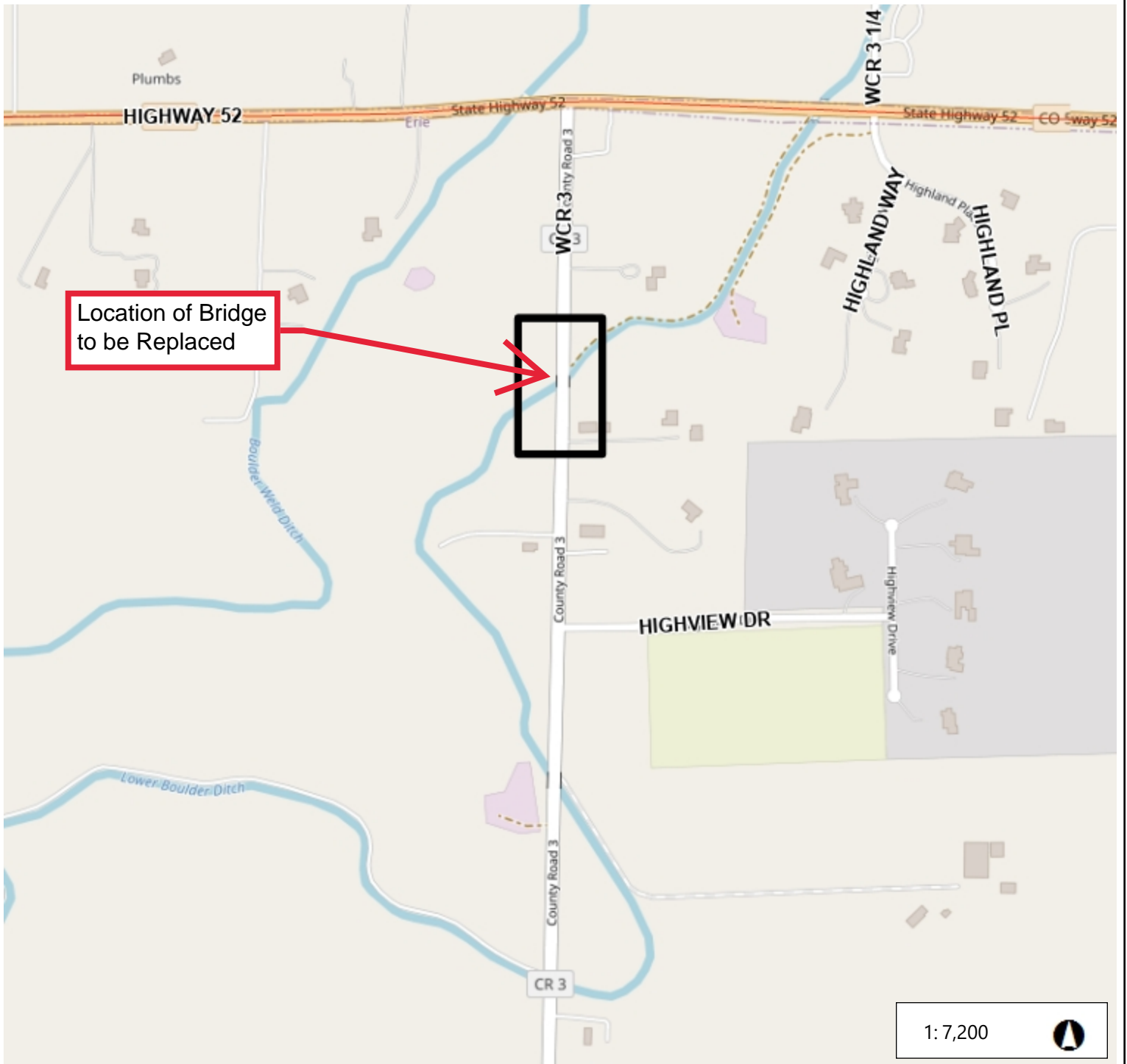
Attest: _____

Title: _____

Date: _____





Exhibit A: Location of Bridge to be Replaced



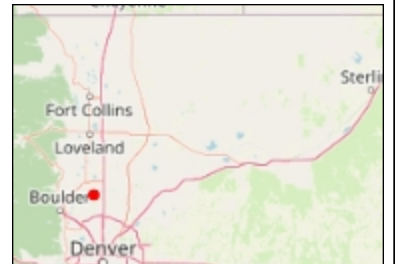
1:7,200



Legend

-  Highway
-  County Boundary

Notes



1,200.0 0 600.00 1,200.0 Feet

WGS_1984_Web_Mercator_Auxiliary_Sphere
© Weld County Colorado

This map is a user generated static output from an Internet mapping site and is for reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable.

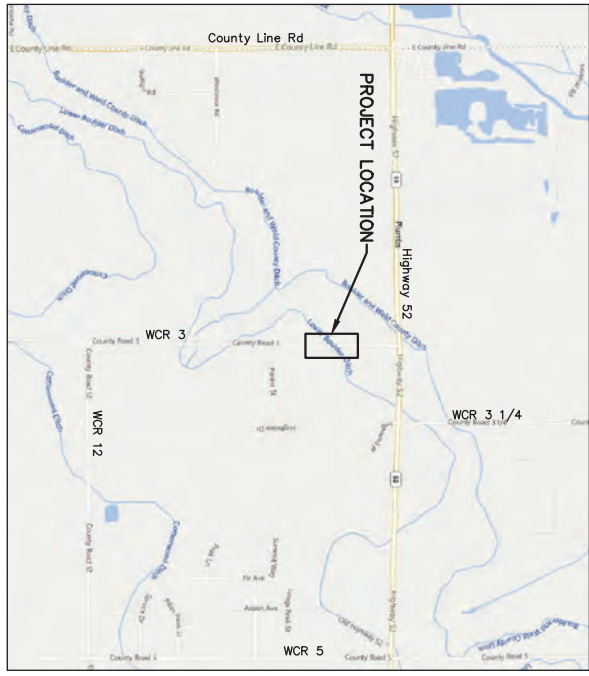
THIS MAP IS NOT TO BE USED FOR NAVIGATION

Plot Date: 4/28/2024 10:22 AM Plotted By: Rudy Parks
 R:\10-PROJECTS\ACTIVE PROJECTS\1401-TOWN OF ERIE-WCR3 BRIDGE REPLACEMENT\COMPUTER DESIGN FILES\02-SHEET FILES\04-01 TITLE SHEET.DWG

PODI / NHS	
FHWA PROJECTS OF DIVISION INTEREST (PODI)?	<input type="checkbox"/> NO <input type="checkbox"/> YES
NATIONAL HIGHWAY SYSTEM?	<input type="checkbox"/> NO <input type="checkbox"/> YES

TABULATION OF LENGTH & DESIGN DATA		LINEAR FEET	
STA TICH	ROADWAY	MAJOR STR.	
STA +124.00 BEGIN WELD COUNTY ROAD 3	48.06		
STA +172.00 BEGIN WELD COUNTY ROAD 3 CULVERT		24.62	
STA +166.68 END WELD COUNTY ROAD 3 CULVERT	63.32		
STA 2+00.00 END WELD COUNTY ROAD 3			
TOTAL	111.38	24.62	
SUMMARY OF PROJECT LENGTH	FEET	MILES	
ROADWAY (NET LENGTH)	111.38	0.021	
MAJOR STRUCTURE	24.62	0.005	
PROJECT CROSS LENGTH	136.00	0.026	
DESIGN DATA	WELD COUNTY ROAD 3		
MAXIMUM DESIGN SPEED (MDS)	50 MPH		
POSTED SPEED	45 MPH		
CLEAR ZONE	20 FT		
MINIMUM RSD VERTICAL (CREST CURVE)	425 FT		
MINIMUM K VALUE (CREST CURVE)	84		

TOWN OF ERIE
 CONSTRUCTION BID PLANS OF PROPOSED
WELD COUNTY ROAD 3
BRIDGE REPLACEMENT
 WELD COUNTY, TOWN OF ERIE, COLORADO
 PROJECT NO. BRO M400-012
 SUB ACCOUNT NO. 25793



SHEET NO.	INDEX OF SHEETS
1	TITLE SHEET
2	STANDARD PLANS LIST
3	SURVEY TABULATION
4	PROJECT CONTROL DIAGRAM
5	TYPICAL SECTIONS
6-7	GENERAL NOTES
8-10	SUMMARY OF APPROXIMATE QUANTITIES
11	TABULATION SHEETS
12	ROADWAY PLAN AND PROFILE
13	GUARDRAIL LAYOUT DETAIL
14	ACCESS DETAIL
15-28	STRUCTURE PLANS
29-30	UTILITY INFORMATION
31	UTILITY PLAN
32	DETOUR PLAN
33-35	STORMWATER MANAGEMENT PLAN

PROJECT LOCATION MAP
 SCALE IN FEET
 0 1000 2000

ALL WORK SHALL BE CONSTRUCTED IN CONFORMANCE WITH CURRENT TOWN OF ERIE STANDARDS AND SPECIFICATIONS. AS MENED, THIS DRAWING HAS BEEN REVIEWED AND FOUND TO BE IN GENERAL COMPLIANCE WITH THESE STANDARDS AND SPECIFICATIONS AND OTHER TOWN REQUIREMENTS. THIS ACCEPTANCE SHALL NOT BE CONSTRUED TO RELIEVE ANY REQUIREMENT TO THESE STANDARDS AND SPECIFICATIONS NOT SPECIALLY ADRESSED IN THESE PLANS. IN ADDITION, THE ENGINEERING DESIGN AND CONCEPT REMAINS THE RESPONSIBILITY OF THE PROFESSIONAL ENGINEER WHOSE STAMP AND SIGNATURE APPEAR HEREON.

PROJECT LIST OF CONTACTS	
TOWN OF ERIE	Zachary Ahlenga 303-926-2878

Print Date: 4/28/2024
 The Name: 04-01 TITLE SHEET.DWG
 Horiz. Scale: As Noted
 Vert. Scale: N/A
RockSol
 Consulting Group Inc.
 12076 Grant Street
 Thornton, CO 80241
 Ph: (303) 962-3300
 Fax: (303) 962-3330

Sheet Revisions	
Date	Comments

TOWN OF ERIE
 PUBLIC WORKS
 646 HARBOR ST.
 ERIE, CO 80515

As Constructed	WELD COUNTY ROAD 3 BRIDGE REPLACEMENT TITLE SHEET	Project No.
No Revisions	Designer: R. PARKS Detailer: H. PUGH	BRO-M400-012
Revised:	Sheet Subsets: GENERAL	Drawing Number 04-001
Void:	Sheet Subsets: 1 of 2	Sheet Number 1

ACCEPTED BY: _____
 TOWN ENGINEER

Know what's below.
 Call before you dig.

Plot Date: 4/28/2024 9:57 AM Plotted By: Rudy Parks
P:\10-PROJECTS\BRIE\PROJECTS\100_TOWN OF ERIE - W03 BRIDGE REPLACEMENT_COMPUTER DESIGN FILES\02_SHEET FILES\01-002 STANDARD PLANS LISTING

PLAN NUMBER	M STANDARD TITLE	PAGE NUMBER	PLAN NUMBER	M STANDARD TITLE	PAGE NUMBER	PLAN NUMBER	S STANDARD TITLE	PAGE NUMBER
M-100-1	STANDARD SYMBOLS (3 SHEETS).....	1-3	M-606-1	MIDWEST GUARDRAIL SYSTEM TYPE 3 W-BEAM.....	99-99	S-612-1	DELINEATOR INSTALLATIONS (8 SHEETS).....	171-179
M-100-2	ACRONYMS AND ABBREVIATIONS (4 SHEETS).....	4-7	M-606-13	GUARDRAIL TYPE 7 F-SHAPE BARRIER (4 SHEETS).....	98-101	S-613-1	ROADWAY LIGHTING (6 SHEETS) <i>(REVISED ON NOVEMBER 2, 2023)</i>	179-186
M-203-1	APPROACH ROADS.....	8	M-606-14	PRECAST TYPE 7 CONCRETE BARRIER (4 SHEETS).....	102-104	S-613-2	ALTERNATIVE ROADWAY LIGHTING (4 SHEETS) <i>(REVISED ON SEPTEMBER 26, 2020)</i>	186-189
M-203-2	DITCH TYPES.....	9	M-606-15	GUARDRAIL TYPE 9 SINGLE SLOPE BARRIER (11 SHEETS) <i>(REVISED ON FEBRUARY 13, 2023)</i>	105-115	S-613-3	PULL BOX DETAIL (2 SHEETS) <i>(NEW, ISSUED ON APRIL 4, 2024)</i> <i>(NEW, ISSUED ON JUNE 15, 2023)</i>	189-192
M-203-11	SUPERELEVATION CRUMMED AND SUPERELEVATION CRACKED (3 SHEETS).....	10-12	M-607-1	CHAIN LINK FENCE (3 SHEETS).....	116-118	S-614-1	GROUND SIGN PLACEMENT (2 SHEETS).....	187-188
M-203-12	SUPERELEVATION STREETS (2 SHEETS).....	13-14	M-607-2	DEER FENCE, GATES, AND GAME RAMPS (7 SHEETS).....	119-121	S-614-2	CLASS I SIGNS.....	187-188
M-206-1	EXCAVATION AND BACKFILL FOR STRUCTURES.....	15-16	M-607-3	DEER FENCE, GATES, AND GAME RAMPS (7 SHEETS).....	122	S-614-3	CLASS II SIGNS.....	189
M-206-2	EXCAVATION AND BACKFILL FOR BRIDGES (2 SHEETS).....	17-18	M-607-4	PICKET SNOW FENCE (3 SHEETS).....	123-124	S-614-4	CLASS III SIGNS (3 SHEETS).....	190
M-208-1	TEMPORARY EROSION CONTROL (11 SHEETS).....	19-29	M-607-5	ROAD CLOSURE GATE (9 SHEETS).....	128	S-614-5	BREAK-AWAY SIGN SUPPORT DETAILS FOR CLASS III SIGNS (2 SHEETS)	194-195
M-210-1	MAILBOX SUPPORTS (2 SHEETS).....	30-31	M-607-10	CURB RAMP (10 SHEETS).....	129-137	S-614-6	CONCRETE FOOTINGS AND SIGN ISLANDS.....	196-197
M-214-1	NURSERY STOCK DETAILS.....	32	M-608-1	CURBS, GUTTERS, AND SIDEWALKS (4 SHEETS).....	138-147	S-614-8	TUBULAR STEEL SIGN SUPPORT DETAILS (7 SHEETS).....	198-204
M-216-1	SOIL RETENTION COVERING (2 SHEETS).....	33-34	M-609-1	CATTLE GUARD (2 SHEETS).....	148-151	S-614-10	DETAILED SIGN SUPPORT ASSEMBLY (2 SHEETS)..... <i>(SUPERSEDED ON JANUARY 23, 2020 BY S-614-4B)</i>	200-206
M-412-1	<i>(REVISED ON JANUARY 31, 2020)</i> CONCRETE PAVEMENT CRACK REPAIR (6 SHEETS)	35-39	M-611-1	DEER GUARD (2 SHEETS).....	152-153	S-614-11	MARKER ASSEMBLY INSTALLATIONS.....	207
M-412-2	<i>(REVISED ON SEPTEMBER 6, 2020)</i> CONCRETE PAVEMENT CRACK REPAIR (6 SHEETS)	40	M-611-2	RUMBLE STRIPS (3 SHEETS).....	154-155	S-614-12	MILEPOST SIGN DETAIL FOR HIGH SNOW AREAS STRUCTURE NUMBER INSTALLATION (2 SHEETS).....	208
M-510-1	STRUCTURAL PLATE PIPE H-20 LOADINGS.....	41-42	M-612-1	INVERTED SIPHON.....	162	S-614-14	FLASHING BEACON AND SIGN INSTALLATIONS (4 SHEETS).....	209-210
M-601-1	SINGLE CONCRETE BOX CULVERT (CAST-IN-PLACE).....	43-44	M-614-1	FIELD LABORATORY CLASS 1.....	163	S-614-14	TYPICAL POLE MOUNT SIGN INSTALLATIONS.....	211-214
M-601-2	DOUBLE CONCRETE BOX CULVERT (CAST-IN-PLACE).....	45-46	M-614-2	FIELD LABORATORY CLASS 2 (2 SHEETS).....	164	S-614-20	CONCRETE BARRIER SIGN POST INSTALLATIONS.....	215
M-601-3	TRIPLE CONCRETE BOX CULVERT (CAST-IN-PLACE).....	47	M-620-1	FIELD OFFICE CLASS 1.....	165-166	S-614-21	TYPICAL MULTI-SIGN INSTALLATIONS.....	216-217
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M-603-1	METAL PIPE (4 SHEETS).....	56				S-614-42	TEMPORARY SPAN WIRE SIGNALS (14 SHEETS).....	241-244
M-603-2	REINFORCED CONCRETE PIPE.....	57				S-614-43	CABINET FOUNDATION DETAIL (4 SHEETS).....	245-252
M-603-3	PRECAST CONCRETE BOX CULVERT <i>(REVISED ON SEPTEMBER 10, 2020)</i>	58				S-614-44	TRAFFIC LOOP AND MISCELLANEOUS SIGNAL DETAILS.....	253-254
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M-603-5	POLYVINYL CHLORIDE (PVC) PIPE (AASHTO M304).....	60				S-614-50	STATIC SIGN MONOTUBE STRUCTURES (14 SHEETS).....	267-280
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M-604-10	INLET, TYPE C.....	66				S-614-60	TRAFFIC CONTROL FOR HIGHWAY CONSTRUCTION (26 SHEETS) <i>(REVISED ON JULY 24, 2020)</i>	315-317
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THE M&S STANDARD PLANS USED TO DESIGN THIS PROJECT ARE INDICATED BY A MARKED BOX ■, AND WILL BE ATTACHED TO THE PLANS. ALL OTHER M&S STANDARD PLANS ARE STILL ELIGIBLE FOR USE IN CONSTRUCTION IF APPROVED BY AN APPROPRIATE CDDOT ENGINEER.

ALL OF THE M&S STANDARD PLANS, AS SUPPLEMENTED AND REVISED, APPLY TO THIS PROJECT WHEN USED BY DESIGNATED PAY ITEM OR SUBSIDIARY ITEM.

COLORADO
DEPARTMENT OF TRANSPORTATION
M&S STANDARDS PLANS LIST
July 31, 2019
Revised on April 4, 2024

 <p>Rocksol Consulting Group Inc. 12076 Grant Street Thornton, CO 80241 Pkt. (303) 962-3300 Fax: (303) 962-5850</p>		<p>Print Date: 4/28/2024</p> <p>The Name: 01-002 STANDARD PLANS LISTING</p> <p>Horiz. Scale: N/A</p> <p>Vert. Scale: N/A</p>		<p>Date</p> <p>Comments</p> <p>Initials</p>	
 <p>TOWN OF ERIE PUBLIC WORKS 666 HOLLBROOK ST. ERIE, CO 80515</p>		<p>As Constructed</p> <p>No Revisions:</p> <p>Revised:</p> <p>Void:</p>		<p>WELD COUNTY ROAD 3 BRIDGE REPLACEMENT STANDARD PLANS LIST</p> <p>Designer: R. Parks Structures Detailer: H. PUGH Numbers Sheet Subsets: GENERAL Subsets Sheets: 2 of 2</p>	
		<p>Project No.</p> <p>P22-076</p>		<p>Drawing Number 01-002</p> <p>Sheet Number 2</p>	

Print Date: 4/28/2024 9:58 AM Plotted By: Rudy Parks
R:\10-PROJECTS\ACTIVE PROJECTS\10-01-TOWN OF ERIE-W03 BRIDGE REPLACEMENT\COMPUTER DESIGN FILES\02-SHEET FILES\01-01 SURVEY TABLATIONS.DWG

Print Date: 4/28/2024

Title Name: SCT-001 SURVEY TABLATIONS.DWG

Horiz. Scale: N/A

Vert. Scale: N/A

12076 Grant Street
Thornton, CO 80241
Tel: (303) 582-5850

Date	Comments	Initials



As Constructed

No Revisions: Revised: Void:

**WELD COUNTY ROAD 3
BRIDGE REPLACEMENT
SURVEY TABLATION**

Designer: R. PARKS
Detailer: H. PUGH
Sheet Subsets: SURVEY Subsets: 1 of 1

Project No. P22-076
Drawing Number: SCT-001
Sheet Number: 3

TO ESTABLISH GEOMETRIC CONTROL FOR THE CONSTRUCTION OF THIS PROJECT, THE DEPARTMENT HAS PROVIDED THE FOLLOWING INFORMATION:

Format: *
 3D Design Modeling Electronic Files
 Horizontal Control
 Vertical Control
 Roadway Alignment
 Digital Terrain Data
 Other: _____

* Specify the information format, i.e., plan sheet, computer disk, computer printout, or other. The information marked is either contained on the plans or is available from the Engineer.

TYPE OF PROJECT

Landscaping
 Major Reconstruction
 New Roadway Construction
 Bridge Widening
 Concrete Overlay
 Minor Widening
 Other: _____

WORK PERFORMED BY THE CONTRACTOR'S SURVEYOR UNDER SECTION 625:

A complete existing Base Line report (completed within 6 months prior to the start of the project)
 An instrument calibration Certificate (completed within 6 months prior to the start of the project)
 Erosion and Maintenance Project Certificate of Engineer Approved Offset Levels
 Verification and Maintenance of Horizontal and Vertical Control
 Verify or Determine existing grades and alignments
 Change and Grabbing Limits (Section 200)
 Removal Limits (Section 202)
 Erosion and Embankment (Section 203)
 Excavation
 Unclassified
 Mapping
 Rock
 Borrow
 Other: _____
 Foliage

Excavation	Slope Staking (Y/N)	Grid (Y/N)	Grade Interval (Y/N)	Special Interval

Embankment	YES	NO	Special Interval

As Staked Earthwork Quantities (See General Notes)

Landscaping
 Top Soil (Section 207)
 Seed and Sod (Section 208)
 Mulch (Section 212)
 Planting (Section 214)
 Herbicide (Section 217)
 Other: _____

Erosion Control (Section 208)
 Seeding (Temp)
 Silt Fence
 Erosion Basins
 Riprap (Temp)
 Other: _____

Roadway Bases
 Untreated Subgrade
 Treated Subgrade
 Aggregate Base Course (Section 304)
 Recompacting
 PMSB - Plant Mix Bituminous Base
 Other: _____

ROADWAY BASES

Grid (Y/N)	Grade Interval (Y/N)	Special Interval	Special Offset

WORK PERFORMED BY THE CONTRACTOR'S SURVEYOR UNDER SECTION 629:

Pavements
 HMA - Hot Mix Asphalt (Section 403)
 Concrete (Section 412)
 Heating & Sealing Treatment
 Prime (Section 407) & Resurfacing Agent
 Seal Coat or Chip Seal (Section 409)
 Other: _____

ROADWAY ELEMENTS

Curb and Gutter (Section 609)
 Dip, alignment and grades (Section 604)
 Retaining Walls
 Guard Rail (Section 606)
 Slewack (Section 608)
 Overly Stabbing
 Other: _____

Riprap (Section 506)
 Slope and Ditch Paving (Section 507)

MAJOR STRUCTURES

Structure Excavation limits (Section 206)
 Culverts w/ Headwalls and Wingwalls (Section 601)
 Concrete Box Culverts w/ Headwalls and Wingwalls (Section 603)
 Piers (Section 603)
 Storm Sewer
 Water
 Irrigation
 Miscellaneous
 Manholes (Section 604)
 Joints (Section 604)
 Piers (Section 604)
 Other: _____

Major Structures - Overhead Signs (Section 614), Concrete Box Culverts, Bridges -

Structures and all other structures assigned a structure number
 Concrete Box Culverts (Section 603) w/ Headwalls and Wingwalls (Section 601)
 Piling locations and out of elevations (Section 502)
 Caisson locations and elevations (Section 503)
 Footing locations, alignment, and elevations
 Minimum/Upper boundary, alignment, and elevations
 Structural concrete form locations
 Substructure As-constructed survey
 Bridge expansion joints (alignment, and grade (longitudinal and transverse))
 Piers and Ditch Paving (Section 507)
 Other: Temp Staking

Fencing (Section 607)
 Temporary
 Permanent
 Sound Barrier
 Other: _____

Delimiters (Section 612)
 Temporary
 Permanent

Lighting (Section 613) and Traffic Control Devices (Permanent) (Section 614)
 Sight pole locations and elevations
 Sign locations
 Field verify sign post locations, elevations, and heights before fabrication.
 Other: _____

GENERAL NOTES:

- These referenced drawings on this Survey Tabulation Sheet, all survey work and staking intervals shall be done in accordance with the latest edition of the CDDT Survey Manual.
- Adequate information for establishing lines, grades, and locations for all work items have been specified on the plans. Any additional information required to stake the item or element shall be generated by the Contractor's surveyor.
- The Contractor's surveyor shall provide an estimate of the man-hours necessary to complete the work item indicated on this sheet. A copy of this sheet, with the estimated man-hours written on the back line to the left of the specified items, shall be submitted with the Survey Schedule to the Engineer _____ days prior to the Pre-survey Conference - Construction Survey.
- Stakes and monuments which are damaged or destroyed by the progress of construction shall be replaced by the Contractor at no additional cost to the Department.
- The Contractor shall furnish on site a 30 Day Best Electronic Final Earthwork Quantity report to the Department. A printed copy of the As Staked for 30 Day Best Electronic Final Earthwork data report and a computer disk with that information on it, in the specified format shall be submitted to the Engineer. The Contractor shall field verify original ground cross sections at a minimum 500 feet intervals.
- Prior to beginning work on any subsequent operation, such as paving base course or paving, the Contractor shall certify in writing to the Engineer that the final grade is within specified tolerance.
- The Contractor's surveyor shall perform all field surveying and calculations necessary to the plan grades into field grades.
- The Contractor shall coordinate construction staking on the project with any utility work.
- Fieldbooks shall contain daily records of public set and/or measurements observed. The information recorded shall contain: date, crew members' names, point no, description, staking information and sketches. If a survey information is collected electronically, information recorded shall be provided to the Project Engineer in a hard copy format that is intuitive, clear and related to the supplemental information recorded in the field books. All linear surveys, such as slope stakes and blue tops, shall have the station and offset information related to the measured information. Non-linear surveys such as structures staking shall have sketches reading electronic data.
- The Contractor's surveyor shall submit the following fieldbooks to the Engineer:
 Horizontal Control (Primary & Secondary)
 Erosion Control (E.C. Benchmarks)
 Property Pin Tags
 Horizontal Alignment
 Grading
 Slope Staking
 Major Structures
 Minor Structures
 One fieldbook for each work category shown on this sheet
 Other Fieldbook(s): _____
- The Contractor's surveyor shall submit the following (prior to surveying on the project) to the Engineer:
 All required Instrument Calibrations

STATIONING

Left Interval	Center Interval	Right Interval	Special Interval

PAVEMENTS

Grid (Y/N)	Special Interval (Y/N)	Special Offset

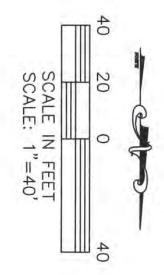
CURB & GUTTER

Target Interval	Curve Interval	Special Interval

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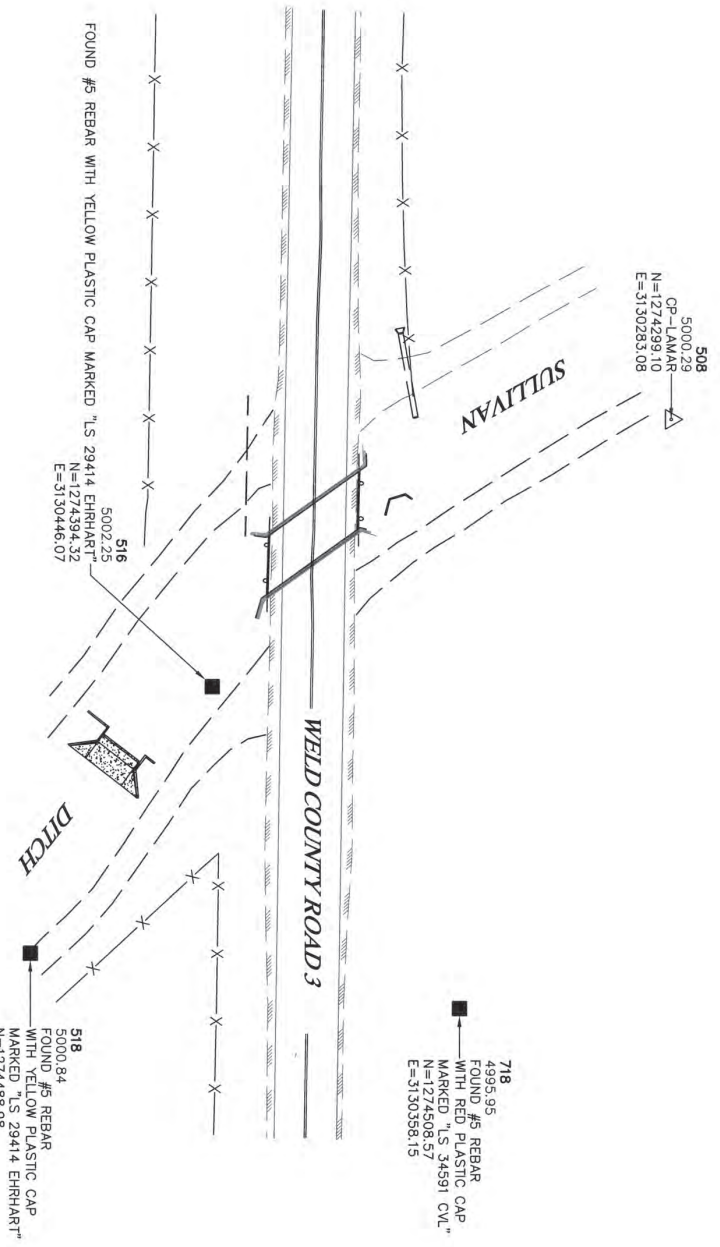
SURVEY CONTROL DIAGRAM

WCR 3 - SULLIVAN DITCH BRIDGE



VERTICAL DATUM:
NORTH AMERICAN VERTICAL DATUM 1988 (NAVD88)
BENCHMARK:
NGS DESIGNATION - "C 119 MP49.50 RESET"
ELEV=9154.19

HORIZONTAL DATUM:
COLORADO STATE PLANE COORDINATES NAD 83(2011)
PROJECT COORDINATES HAVE BEEN SCALED TO GROUND USING A COMBINED
SCALE FACTOR OF 0.9997216445 (1.000278433) ABOUT THE ORIGIN (0,0).



MICHAEL CHAD DILKA - ON BEHALF OF KING SURVEYORS
COLORADO LICENSED PROFESSIONAL LAND SURVEYOR #38106



KING SURVEYORS
650 E. Garden Drive | Windsor, Colorado 80550
Phone: (970) 686-5011 | Fax: (970) 686-5821
Email: contact@KingsSurveyors.com

PROJECT NO.: 20230070
DATE: 7/24/2023
CLIENT: ROCKSOL
DWG: 20230070SCD
DRAWN: SAF CHECKED: MCD

Print Date: 4/28/2024 10:00 AM Printed By: Rudy Parks
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Print Date: 4/28/2024	Sheet Revisions
Title: Name: N/A	Date
Horizontal: Scale: N/A	Comments
Vertical: Scale: N/A	Initials

	Public Works 664 HOLBROOK ST. ERIE, CO 80615
12076 Grant Street Thornton, CO 80241 Ph: (303) 862-5630 Fax: (303) 862-5630	

As Constructed	No Revisions
Revised:	Void:

WELD COUNTY ROAD 3 BRIDGE REPLACEMENT GENERAL NOTES	Project No. P22-076
Designer: R. PARKS Detailer: H. PUGH Sheet Subsets: NOTES Sheet: 1 of 2	Drawing Number: N1-001 Sheet Number: 6



- CONSTRUCTION GENERAL NOTES**
- ALL CONSTRUCTION SHALL CONFORM TO THE LATEST "STANDARDS AND SPECIFICATIONS FOR DESIGN AND CONSTRUCTION OF PUBLIC IMPROVEMENTS" BY THE TOWN OF ERIE. COPIES OF THE TOWN OF ERIE STANDARDS AND SPECIFICATIONS MAY BE OBTAINED FROM THE TOWN OF ERIE WEB SITE. CONTRACTOR SHALL HAVE A SET ON SITE AT ALL TIMES.
 - THE CONTRACTOR SHALL SCHEDULE A PRE-CONSTRUCTION MEETING WITH THE TOWN OF ERIE ENGINEERING STAFF PRIOR TO THE START OF CONSTRUCTION. THOSE IN ATTENDANCE SHALL INCLUDE THE TOWN OF ERIE ENGINEERING STAFF REPRESENTATIVES OF THE CONTRACTORS AND OTHER AFFECTED AGENCIES. PLANS REPRESENTATIVES OF THE CONTRACTORS SHALL BE PROVIDED TO THE TOWN OF ERIE PRIOR TO THE PRE-CONSTRUCTION MEETING. CONTRACTOR SHALL HAVE (1) COPY OF THE SIGNED PLANS ON SITE AT ALL TIMES.
 - THE TOWN OF ERIE, THROUGH ACCEPTANCE OF THIS DOCUMENT, ASSUMES NO RESPONSIBILITY FOR THE COMPLETENESS AND/OR ACCURACY OF THIS DOCUMENT. THE DESIGN ENGINEER UNDERSTANDS THAT THE RESPONSIBILITY FOR THE ENGINEERING AND CONSTRUCTION OF ALL IMPROVEMENTS SHALL BE PROVIDED THROUGHOUT THIS DOCUMENT. REPORT ALL DISCREPANCIES TO THE DESIGN ENGINEER IMMEDIATELY.
 - PRIOR TO BEGINNING THE WORK, THE CONTRACTOR SHALL OBTAIN ANY/ALL NECESSARY PERMITS FOR ACCESS TO THE WORK SITE FROM ADJACENT PRIVATE ACCESS TO OWNERS. A COPY OF ALL AGREEMENTS SHALL BE PROVIDED THROUGHOUT THE CONSTRUCTION PERIOD.
 - ALL MATERIALS AND WORKMANSHIP SHALL BE SUBJECT TO INSPECTION BY THE TOWN OF ERIE ENGINEERING STAFF. THE TOWN RESERVES THE RIGHT TO ACCEPT OR REJECT STANDARDS AND SPECIFICATIONS, INSPECTIONS AND ON-SITE VISITS ARE NOT TO BE CONSIDERED AS A GUARANTEE BY THE TOWN ENGINEERING STAFF OF THE CONTRACTOR'S CONTRACTUAL COMMITMENT. REQUESTS FOR INSPECTION BY THE TOWN OF ERIE SHALL BE MADE BY THE CONTRACTOR A MINIMUM OF TWENTY-FOUR (24) HOURS IN ADVANCE.
 - CONSTRUCTION WATER IS AVAILABLE TO THE CONTRACTOR AS ESTABLISHED IN THE TOWN OF ERIE STANDARDS AND SPECIFICATIONS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT THE TOWN OF ERIE REGARDING CURRENT REGULATIONS, FEES AND REQUIRED AGREEMENTS RELATED TO THE PROVISION OF CONSTRUCTION WATER.
 - THE CONTRACTOR SHALL COORDINATE HIS ACTIVITIES WITH THE AFFECTED UTILITY COMPANIES AND SHALL NOTIFY THE UTILITY NOTIFICATION CENTER, PHONE NUMBER 811, THREE (3) BUSINESS DAYS PRIOR TO THE START OF CONSTRUCTION.
 - UTILITIES IN THE AREA OF CONSTRUCTION ARE APPROXIMATE ONLY. THEY HAVE BEEN LOCATED BY THE CONTRACTOR AND SHALL BE RESPONSIBLE FOR THE BEST AVAILABLE INFORMATION. FOR ALL UTILITIES ENCOUNTERED DURING CONSTRUCTION WHETHER SHOWN ON THESE PLANS OR NOT, THE CONTRACTOR SHALL CONTACT ALL RESPECTIVE UTILITIES AND HAVE ALL UTILITIES FIELD-LOCATED PRIOR TO CONSTRUCTION. IF ANY UNKNOWN SUBSURFACE STRUCTURES ARE ENCOUNTERED DURING CONSTRUCTION, IT SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE TOWN OF ERIE ENGINEERING STAFF AND DESIGN ENGINEER PRIOR TO PROCEEDING.
 - THE CONTRACTOR SHALL NOTIFY TOWN OF ERIE ENGINEERING STAFF OF ANY PROBLEM IMPACTING WATER AND WASTE WATER FACILITIES THAT WOULD POTENTIALLY REQUIRE A VARIANCE FROM THE APPROVED PLANS AND SPECIFICATIONS. ANY VARIANCE FROM THE APPROVED PLANS AND SPECIFICATIONS SHALL BE AT THE SOLE DISCRETION OF THE TOWN OF ERIE ENGINEERING STAFF.
 - CONTRACTOR SHALL OBTAIN, AT HIS OWN EXPENSE, ALL APPLICABLE SPECIFICATIONS AND PERMITS NECESSARY TO PERFORM THE PROPOSED WORK.
 - AS-BUILT DRAWINGS AS REQUIRED IN THE SPECIFICATIONS, ARE TO BE SUBMITTED BY THE CONTRACTOR PRIOR TO INITIAL ACCEPTANCE OF THE CONSTRUCTION.
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING AND REPLACING ANY EXISTING SIGNS, STRUCTURES, FENCES, ETC., ENCOUNTERED ON THE JOB AND RESETTING THEM TO THEIR ORIGINAL CONDITION.
 - CONSTRUCTION GENERAL NOTES (CONTINUED)
 - THE CONTRACTOR IS RESPONSIBLE FOR:
 - NOTIFYING THE TOWN OF ERIE UTILITY CUSTOMERS OF POTENTIAL SERVICE OUTAGES AND COORDINATE WITH THE TOWN OF ERIE FOR DETERMINATION OF MINIMUM TIME REQUIREMENT.
 - NOTIFYING THE TOWN OF ERIE ENGINEERING STAFF IF WORK IS SUSPENDED FOR ANY PERIOD OF TIME AFTER INITIAL START-UP. THE CONTRACTOR SHALL NOTIFY THE TOWN OF ERIE FORTY-EIGHT (48) HOURS PRIOR TO RESUME.
 - IN THE EVENT OF AN AFTER HOURS EMERGENCY, CALL 303-441-4444.
 - NOTIFYING THE MOUNTAIN VIEW FIRE PROTECTION DISTRICT OF ALL STREET CLOSURES AND EXISTING THE TRAFFIC TAKEN OUT OF SERVICE A MINIMUM OF FORTY-EIGHT (48) HOURS PRIOR TO THE START OF CONSTRUCTION.
 - PRIOR TO INSTALLATION OF UTILITY MANS, ROAD CONSTRUCTION MUST HAVE COMPLETED THE OVER LOT GRADING STAGE.
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR MANAGING ANY GROUNDWATER ENCOUNTERED DURING THE CONSTRUCTION OF ANY PORTION OF THIS PROJECT. GROUNDWATER MUST BE MANAGED PER THE REQUIREMENTS IDENTIFIED BY THE COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT (CDPHE). GROUNDWATER SHALL BE PLUMBED, PIPED, REMOVED AND DISPOSED OF IN A MANNER WHICH DOES NOT CAUSE FLOODING OF EXISTING STREETS OR EROSION OF ADJUTING PROPERTIES IN ORDER TO CONSTRUCT THE IMPROVEMENTS SHOWN ON THESE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS. UNTIL THE GROUNDWATER TABLE HAS BEEN LOWERED BELOW THE PROPOSED IMPROVEMENTS, ANY UNSTABLE AREAS, AS A RESULT OF GROUNDWATER ENCOUNTERED DURING THE CONSTRUCTION OF THE PROPOSED IMPROVEMENTS SHALL BE STABILIZED AS AGED UPON BY THE CONTRACTOR, THE TOWN OF ERIE, AND THE DESIGN ENGINEER AT THE TIME OF THE OCCURRENCE.
 - DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, THE CONTRACTOR SHALL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS AT AND ADJACENT TO THE JOB INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF THE WORK. THE CONTRACTOR SHALL PROVIDE ALL LIGHTS, SIGNS, BARRICADES, FLAGMEN, AND OTHER SAFETY MEASURES AS NECESSARY TO MAINTAIN THE SAFETY OF THE TOWN OF ERIE OR THE DESIGN ENGINEER EXERCISE NO CONTROL OVER THE SAFETY OR OTHER WORK AIDS USED IN OR ABOUT THE PROJECT, OR IN THE SUPERVISING OF THE SAME. THE CONTRACTOR SHALL PREPARE, INDENTIFY AND MAINTAIN THE TRAFFIC CONTROL PLAN FOR THIS PROJECT EXCEPT FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER, THE DESIGN ENGINEER, OR THE TOWN OF ERIE ENGINEERING STAFF. IF ANY CONTRACTOR, DESIGN ENGINEER, OR NOT RESPONSIBLE FOR SAFETY IN, ON OR ABOUT THE PROJECT SITE, NOR FOR COMPLIANCE BY THE APPROPRIATE PARTY OF ANY REGULATIONS RELATING THERETO.
 - WORK IN PUBLIC STREETS, ONCE BEGUN, SHALL BE PROSECUTED TO COMPLETE WITHOUT DELAY SO AS TO PROVIDE MINIMUM INCONVENIENCE TO ADJACENT PROPERTY OWNERS AND TO THE TRAVELING PUBLIC.
 - REGULAR WORK HOURS ARE SEVEN (7) A.M. UNTIL SEVEN (7) P.M. OR DUSK (WHICHEVER OCCURS FIRST) OF ONE DAY, MONDAY THROUGH FRIDAY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UTILITIES, THE HOURS OR THE PERFORMANCE OF WORK ON SATURDAY, SUNDAY, OR ANY LEGAL HOLIDAY WITHOUT RECEIVING WRITTEN CONSENT FROM THE TOWN ENGINEER. REQUESTS FOR WEEKEND WORK APPROVAL MUST BE SUBMITTED IN WRITING TO THE TOWN OF ERIE LATER THAN WEDNESDAYS AT 3:30 PM FOR SUBSEQUENT WEEKEND AND REQUESTS FOR HOLIDAY WORK APPROVAL MUST BE SUBMITTED IN WRITING TO THE TOWN OF ERIE NO LATER THAN 7:00 AM, BUSINESS DAYS PRIOR TO THE HOLIDAY. WHEN APPROVED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UTILITIES. FOUR (4) P.M. OR AS STIPULATED BY THE TOWN ENGINEER, WORK HOURS FOR WORK IN ACTIVE ROW SHALL BE SUBJECT TO APPROVAL OF THE TOWN ENGINEER AND SHALL BE CONSIDERED ON A CASE BY CASE BASIS. ALL EXPENSES INCURRED BY THE TOWN SHALL BE REIMBURSED AT A RATE TO BE DETERMINED BY DIRECTOR OF FINANCE.
 - THE CONTRACTOR SHALL TAKE ALL NECESSARY AND PROPER PRECAUTIONS TO PROTECT ADJACENT PROPERTIES FROM ANY AND ALL DAMAGE THAT MAY OCCUR FROM STORM WATER RUNOFF AND/OR DEPOSITION OF DEBRIS RESULTING FROM ANY AND ALL
 - CONSTRUCTION GENERAL NOTES (CONTINUED)
 - WORK, THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL APPROPRIATE PERMITS FROM BOTH THE COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT AND THE TOWN OF ERIE FOR ANY PROJECT DISTURBING ONE ACRE OR MORE OR ANY PUBLIC AREAS THAT IS PART OF A LARGER COMMON PLAN OF DEVELOPMENT.
 - EACH TYPE OF CONSTRUCTION SHALL BE COMPLETED BY A CONTRACTOR THAT HAS DEMONSTRATED ACCEPTABLE QUALIFICATIONS TO THE TOWN AND IS A LICENSED CONTRACTOR IN THE TOWN OF ERIE.
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TRAFFIC CONTROL DURING CONSTRUCTION. ALL TRAFFIC CONTROL SHALL CONFORM TO THE TOWN OF ERIE STANDARDS AND SPECIFICATIONS AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES. (MUTCD) LATEST EDITIONS. A PLAN SHALL BE SUBMITTED TO THE TOWN FOR REVIEW AND ACCEPTANCE PRIOR TO CONSTRUCTION.
 - ALL BARRIERS SHALL CONFORM TO THE TRENCH DETAIL LOCATED IN THE TOWN OF ERIE STANDARDS & SPECIFICATIONS.
 - THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THE IMMEDIATE REMOVAL OF ANY CONSTRUCTION DEBRIS OR MUD TRACKED ONTO EXISTING ROADWAYS.
 - THE CONTRACTOR SHALL REPAIR ANY EXCAVATION OR PAVEMENT FAILURES CAUSED BY HIS CONSTRUCTION.
 - THE CONTRACTOR SHALL RENEW OR REPLACE ANY EXISTING TRAFFIC STRIPING AND/OR PAVEMENT MARKINGS, WHICH HAVE BEEN EITHER REMOVED OR THE EFFECTIVENESS OF WHICH HAS BEEN REDUCED DURING HIS OPERATION, REMOVAL OF PAVEMENT STRIPING AND MARKINGS SHALL BE DONE IN CONFORMANCE WITH THE TOWN OF ERIE STANDARD SPECIFICATIONS.
 - IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO TAKE EVERY MEASURE NECESSARY TO COMPLY WITH ANY STATE, COUNTY OR TOWN DUST CONTROL ORDINANCE.
 - CONSTRUCTION VEHICLES SHALL USE TRUCK ROUTES DESIGNATED BY THE TOWN.
 - THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR THE PROPER FUNCTIONING OF THE IMPROVEMENTS FOR A MINIMUM OF TWENTY (2) YEARS FROM THE DATE OF FINAL ACCEPTANCE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF THE IMPROVEMENTS DURING THIS PERIOD OF GUARANTEE SHALL BE REMOVED BY THE CONTRACTOR TO THE SATISFACTION OF THE TOWN OF ERIE AT NO EXPENSE TO THE TOWN.
 - THE CONTRACTOR SHALL NOTIFY THE TOWN WITHIN 24 HOURS OF BECOMING AWARE OF ANY COLLISION THAT RESULTS IN DAMAGE TO THE STRUCTURE, SIGNAGE, OR OTHER PUBLIC OR PRIVATE PROPERTIES, RESULTING FROM WORK DONE AS PART OF THIS PROJECT.

Plot Date: 4/28/2024 10:00 AM Plotted By: Rudy Parks
 P:\10-PROJECTS\10-10-2023\PROJECTS\10-10-2023\BRODIE\BRODIE\COMPUTER DESIGN FILES\10-10-2023\10-10-2023\GENERAL NOTES.dwg


Print Date: 4/28/2024		Sheet Revisions	
Title: N/A	General Notes	Date	Comments
Horizontal: N/A	Vertical: Scale: N/A		Initials
 12076 Grant Street Thornton, CO 80241 Phone: (303) 962-5930 Fax: (303) 962-5930		 PUBLIC WORKS 646 HOLBROOK ST. ERIE, CO 80515	
As Constructed		No Revisions:	
Designer: R. PARKS Detailer: H. PUGH Sheet Subsets: NOTES Subsets		Revised:	
Project No. P22-076 Drawing Number: N1-002		Void:	
WEED COUNTY ROAD 3 BRIDGE REPLACEMENT GENERAL NOTES		Sheet Subsets: 2 of 2	Sheet Number: 7

- GRADING GENERAL NOTES**
- ALL CONSTRUCTION ACTIVITIES THAT DISTURBS ONE OR MORE ACRES OF LAND, AS WELL AS ACTIVITIES THAT DISTURB LESS THAN ONE ACRE OF LAND, BUT IS PART OF A LARGER COMMON PLAN OF DEVELOPMENT MUST COMPLY WITH BOTH LOCAL AND STATE REGULATIONS. PERMITTEES SHALL OBTAIN A COLORADO STORMWATER DISCHARGE PERMIT FOR CONSTRUCTION ACTIVITIES FROM THE COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT (CDPHE) AND A GRADING AND STORMWATER QUALITY PERMIT FROM THE TOWN OF ERIE. CONTRACTOR SHALL:
 - MAINTAIN A COPY OF THE STORM WATER MANAGEMENT PLAN (SWMP) ON-SITE AT ALL TIMES. THE SWMP MUST BE MAINTAINED AND MADE AVAILABLE TO TOWN OF ERIE INSPECTORS UPON REQUEST.
 - INSTALL AND MAINTAIN EROSION, SEDIMENT, AND MATERIALS MANAGEMENT CONTROL MEASURES AS SPECIFIED IN THE SWMP.
 - INSPECT ALL CONTROL MEASURES AT LEAST EVERY SEVEN (7) DAYS OR EVERY FOURTEEN (14) DAYS AND WITHIN TWENTY FOUR (24) HOURS AFTER ANY PRECIPITATION OR SNOWMELT EVENT THAT CAUSES SURFACE RUNOFF.
 - MAINTAIN INSPECTION AND MAINTENANCE RECORDS OF CONTROL MEASURES WITH ENGINEERING STAFF.
 - BASED ON INSPECTIONS PERFORMED BY THE PERMIT HOLDER OR BY TOWN PERSONNEL, MODIFICATIONS TO THE SWMP WILL BE NECESSARY IF AT ANY TIME THE CONTROL MEASURES DO NOT MEET THE OBJECTIVES OF THE SWMP. THE MODIFICATIONS SHALL BE POSTED IMMEDIATELY AFTER THE REFERENCED INSPECTION, AND SHALL BE RECORDED ON THE OWNER'S COPY OF THE SWMP.
 - THE OPERATOR SHALL AMEND THE SWMP WHENEVER THERE IS A SIGNIFICANT CHANGE IN DESIGN, CONSTRUCTION, OPERATION, OR MAINTENANCE, WHICH HAS A RECEIVING WATERS, OR IF THE SWMP PROVES TO BE INEFFECTIVE IN ACHIEVING THE GENERAL OBJECTIVES OF CONTROLLING POLLUTANTS IN STORM WATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITIES.
 - INSTALLATION AND MAINTENANCE OF CONTROL MEASURES SHALL BE SUPERVISED BY PERSONNEL CERTIFIED IN EROSION AND SEDIMENT CONTROL.
 - ALL APPROPRIATE CONTROL MEASURES SHALL BE INSTALLED PRIOR TO THE START OF EACH CONSTRUCTION PHASE.
 - APPROPRIATE STABILIZED CONSTRUCTION ENTRANCES WITH VEHICLE TRACKING CONTROLS INSTALLED SHALL BE UTILIZED AT ALL TIMES TO REDUCE THE TRACKOUT OF SEDIMENT. IF NON-STRUCTURAL VEHICLE TRACKING CONTROLS ARE UTILIZED, CLEANUP OF TRACKOUT MUST OCCUR AT THE END OF EVERY BUSINESS DAY WITH CONSTRUCTION ACTIVITY OCCURRING.
 - ALL SITE GRADING (EXCAVATION, EMBANKMENT, AND COMPACTION) SHALL CONFORM TO THE RECOMMENDATIONS OF THE LATEST SOILS INVESTIGATION FOR THIS PROPERTY AND SHALL FURTHER BE IN CONFORMANCE WITH THE TOWN OF ERIE STANDARDS AND SPECIFICATIONS FOR THE DESIGN AND CONSTRUCTION OF PUBLIC IMPROVEMENTS, LATEST EDITION.
 - ALL GRADING AND FILLING OPERATIONS SHALL BE OBSERVED, INSPECTED, AND TESTED BY PERSONNEL CERTIFIED AND LICENSED BY THE TOWN OF ERIE ENGINEERING STAFF.
 - NATURAL VEGETATION SHALL BE RETAINED AND PROTECTED WHEREVER POSSIBLE. EXPOSURE OF SOIL TO EROSION BY REMOVAL OR DISTURBANCE OF VEGETATION SHALL BE LIMITED TO THE MINIMUM REQUIRED PERIOD OF TIME. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION AND MAINTENANCE OF VEGETATION AND SHALL BE RESPONSIBLE FOR THE PROTECTION AND MAINTENANCE OF VEGETATION AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION AND MAINTENANCE OF THE PROJECT AREA UNLESS DESIGNATED FOR REMOVAL AND SHALL BE LIABLE FOR SUCH DAMAGE AT HIS/HER EXPENSE.
 - TOPSOIL SHALL BE STORED TO THE EXTENT PRACTICABLE ON THE SITE FOR USE ON THE PROJECT. ALL STOCKPILES SHALL BE COVERED AND PROTECTED FROM EROSION AND PROTECTED FROM EROSION ELEMENTS. IF MATERIALS ARE STORED OFFSITE, A WRITTEN USE AGREEMENT BETWEEN THE PERMITTEE AND THE OWNER/OPERATOR OF ANY CONTROL MEASURES BEING UTILIZED OUTSIDE OF THE PERMITTED AREA MUST BE MADE AVAILABLE TO TOWN PERSONNEL UPON REQUEST.
- GRADING GENERAL NOTES (CONTINUED)**
- TEMPORARY VEGETATION/STABILIZATION SHALL BE INSTALLED ON ALL DISTURBED AREAS WHERE PERMANENT SURFACE IMPROVEMENTS ARE NOT SCHEDULED FOR IMMEDIATE INSTALLATION BUT NO LATER THAN FOURTEEN (14) DAYS. SEEDING WILL BE DONE ACROSS THE SLOPE FOLLOWING THE CONTOUR. VEGETATION SHALL CONFORM TO THE ADVISORY LIST OF PLANTS FOR PLANTING SEASONS FOR NATURAL REGENERATION. SEEDING AREAS SHALL BE IRRIGATED IN ACCORDANCE WITH THE TOWN OF ERIE'S STANDARDS AND SPECIFICATIONS.
 - AT ALL TIMES, A WATER TRUCK SHALL BE ON-SITE AND THE PROPERTY SHALL BE MAINTAINED AND/OR WATERED TO PREVENT AND MINIMIZE EROSION. EARTHWORKS ADJACENT PROPERTY, IF EARTHWORK IS COMPLETE OR DISCONTINUED AND DUST FROM THE SITE CONTINUES TO CREATE PROBLEMS, THE CONTRACTOR SHALL IMMEDIATELY INSTITUTE MITIGATIVE MEASURES AND SHALL CORRECT DAMAGE TO ADJACENT PROPERTY.
 - FILL SLOPES SHALL BE COMPACTED BY MEANS OF SHEEPSFOOT COMPACTOR OR OTHER SUITABLE EQUIPMENT. COMPACTABLE AMOUNT OF LOOSE SOIL ON THE SLOPES AND THERE IS NOT ANY APPRECIABLE AMOUNT OF LOOSE SOIL ON THE SLOPES.
 - DEPTH OF MOISTURE-DENSITY CONTROL SHALL BE FILL DEPTH ON ALL EMBANKMENT AND SIX (6) INCHES ON THE BASE OF CUTS AND FILLS.
 - OUTLET SIDES OF ALL STORM PIPES SHALL BE GRADED TO DRAIN AND SHALL HAVE SUFFICIENT EROSION PROTECTION.
 - THE PERMITTEE OR HIS AGENT SHALL NOTIFY THE SITE GEOTECHNICAL ENGINEER WHEN THE GRADING OPERATION IS READY FOR EACH OF THE FOLLOWING INSPECTIONS:
 - INITIAL INSPECTION WHEN THE PERMITTEE IS READY TO BEGIN WORK, BUT NOT LESS THAN TWO (2) DAYS BEFORE ANY GRADING OR GRUBBING IS STARTED.
 - EXCAVATION INSPECTION AFTER THE EXCAVATION IS STARTED BUT BEFORE THE VERTICAL DEPTH OF THE EXCAVATION EXCEEDS TEN (10) FEET.
 - FILL INSPECTION AFTER THE FILL PLACEMENT IS STARTED, BUT BEFORE THE FILL EXCEEDS TEN (10) FEET.
 - TACK COAT SHALL BE USED PRIOR TO OVERLAY. (CSS-1H), 50:50 DILUTION, 0.10 GAL/SY. ALL EDGES ADJUTING NEW PAVEMENT SHALL BE TACKED. TACK COAT WILL NOT BE PAID SEPARATELY BUT INCLUDED IN THE COST OF HMA PAVEMENT.
 - WHEN IT IS REQUIRED TO MATCH EXISTING PAVEMENT, EXISTING PAVEMENT SHALL BE SAW CUT IN A MANNER TO AFFECT A SMOOTH, VERTICAL, STRAIGHT CUT EDGE. TATCH MILLING MUST BE DONE PER STANDARD DETAILS.
 - ADDITIONAL AREA MILLED TO STAGGER THE JOINTS IS CONSIDERED INCIDENTAL AND WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE WORK.
 - ALL SAWCUT EDGES OF EXISTING PAVEMENT SHALL BE CLEAN AND COATED WITH TACK COAT PRIOR TO PLACING NEW PAVEMENT ADJACENT TO THE EXISTING PAVEMENT.
 - ALL ASPHALT SHALL BE ONE FOURTH (1/4) INCH ABOVE CONCRETE EDGES, MANHOLE COVERS AND ACCESS LIDS.
 - SIGNAGE AND STRIPING SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, THE COLORADO DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROADWAYS, THE STANDARD SPECIFICATIONS FOR PAVEMENT DESIGN OF TRANSPORTATION MASS STANDARDS, AND THE TOWN OF ERIE STANDARD DESIGN CRITERIA AND STANDARD CONSTRUCTION REQUIREMENTS.
 - THE PURCHASE AND INSTALLATION OF STREET NAME SIGNS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE OWNER/CONTRACTOR SHALL SECURE THE APPROVAL OF THE TOWN OF ERIE ENGINEERING STAFF FOR TYPE AND LOCATION OF THE STREET NAME SIGNS PRIOR TO INSTALLATION.
 - ALL NEW ROADWAY SECTIONS SHALL HAVE SUBGRADE PREPARATION AND INITIAL ASPHALT PAVEMENT PLACED WITH A 1% CROWN. FINAL OVERLAYS IS TO BE PLACED WITH A 2% CROWN. SEE DETAIL S17 IN THE STANDARD DETAILS-STREET FOR MORE INFORMATION.
 - THE SULFATE RESISTANCE LEVEL FOR THIS PROJECT IS CLASS 0.
 - ALL MILLED AREAS SHALL BE COVERED WITH ASPHALT PAVEMENT WITHIN 5 DAYS.



Plot Date: 4/28/2024 10:08 AM Plotted By: Rudy Parks
 P:\10-PROJECTS\ACTIVE PROJECTS\14C5F5C4-TOWN OF ERIE-W03 BRIDGE REHAB\W03_COMPUTER DESIGN FILES\02_SHEET FILES\SAQ-001 SUMMARY OF APPROX QUANTITIES.DWG

INDEX BOOK PAGE SHEET	CONTRACT ITEM NO.	CONTRACT ITEM	UNIT	ROADWAY		STRUCTURE ER003-0-022.0D		PROJECT TOTALS	
				PLAN	AS CONST.	PLAN	AS CONST.		PLAN
	201-00000	Clearing and Grubbing	LS	1				1	
	202-00001	Removal of Structure	EACH	1				1	
	202-00035	Removal of Pipe	LF	50				50	
	202-00220	Removal of Asphalt Mat	SY	146				146	
	202-00240	Removal of Asphalt Mat (Planning)	SY	224				224	
	202-00400	Removal of Bridge	EACH			1		1	
	203-00060	Embankment Material (Complete in Place)	CY	100				100	
	203-01597	Potholing	HOURL	24				24	
	206-00000	Structure Excavation	CY			233		233	
	206-00200	Structure Backfill (Class 2)	CY			100		100	
	206-01781	Shoring (Area 1)	LS			1		1	
	206-01782	Shoring (Area 2)	LS			1		1	
	206-01783	Shoring (Area 3)	LS			1		1	
	206-01784	Shoring (Area 4)	LS			1		1	
	207-00704	Subgrade Soil Preparation	SY			168		168	
	208-00002	Erosion Log Type (12 inch)	LF	300				300	
	208-00020	Silt Fence	LF	150				150	
	208-00035	Aggregate Bag	LF	150				150	
	208-00046	Pre-fabricated Concrete Washout Structure (Type I)	EACH	2				2	
	208-00075	Pre-fabricated Vehicle Tracking Pad	EACH	2				2	

Print Date: 4/28/2024
 Title Name: SAQ-001 SUMMARY OF APPROX QUANTITIES.DWG
 Horiz. Scale: N/A
 Vert. Scale: N/A

 12076 Grant Street
 Thornton, CO 80241
 Ph: (303) 962-5850
 Fax: (303) 962-5850

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**WELD COUNTY ROAD 3
 BRIDGE REPLACEMENT
 SUMMARY OF APPROX QUANTITIES**
 Designer: R. PARKS
 Detailer: H. PUGH
 Sheet Subsets: SAQ Subsets Sheets: 1 of 3

Project No.
 P22-076
 Drawing Number SAQ-001
 Sheet Number 8

Plot Date: 4/28/2024 10:08 AM Plotted By: Rudy Parks
 P:\10-PROJECTS\ACTIVE PROJECTS\340-TOWN OF ERIE-WD3 BRIDGE REPLACEMENT_COMPUTER DESIGN FILES\02_SHEET FILES\SAG-01 SUMMARY OF APPROX QUANTITIES.DWG

INDEX BOOK PAGE SHEET	CONTRACT ITEM NO.	CONTRACT ITEM	UNIT	ROADWAY		STRUCTURE		PROJECT TOTALS		
				PLAN	AS CONST.	PLAN	AS CONST.	PLAN	AS CONST.	
	208-00103	Removal and Disposal of Sediment (Labour)	HOUR	24					24	
	208-00105	Removal and Disposal of Sediment (Equipment)	HOUR	24					24	
	208-00106	Sweeping (Sediment Removal)	HOUR	24					24	
	212-00006	Seeding (Native)	ACRE	0.1					0.1	
	212-00032	Soil Conditioning	ACRE	0.1					0.1	
	213-00012	Spray-On Mulch Blanket	ACRE	0.1					0.1	
	213-00150	Bonded Fiber Matrix	ACRE	1.0					1.0	
	217-00000	Herbicide Treatment	SY	200					200	
	304-00000	Aggregate Base Course (Class 6)	TON	163					163	
	403-34751	Hot Mix Asphalt (Grading SX) (PG 64-28)	TON	179					179	
	420-00112	Geotextile (Drainage) (Class 1)	SY	38					38	
	506-00212	Riprap (12 inch)	CY	25					25	
	515-00120	Waterproofing (Membrane)	SY	115					115	
	516-00000	Damping (Asphalt)	SY	96					96	
	601-03030	Concrete Class D (Box Culvert)	CY	132					132	
	602-00020	Reinforcing Steel (Epoxy Coated)	LB	48,506					48,506	
	603-01180	18 inch Reinforced Concrete Pipe	LF	60					60	
	606-00302	Guardrail Type 3 (31 inch Midwest Guardrail System)	LF	50					50	
	606-01400	Transition Type BR10M-G19	EACH	4					4	
	606-02003	End Anchorage (Non-Flared)	EACH	4					4	

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 12076 Grant Street
 Thornton, CO 80241
 P.O. Box 182-3300
 Ft. Collins, CO 80524
 Fax: (970) 782-5850

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**WELD COUNTY ROAD 3
 BRIDGE REPLACEMENT
 SUMMARY OF APPROX QUANTITIES**
 Designer: R. PARKS
 Detailer: H. PUGH
 Sheet Subsets: SAG Subsets
 Sheets: 2 of 3

Project No.
 P22-076
 Drawing Number SAG-002
 Sheet Number 9

Plot Date: 4/28/2024 10:59 AM Plotted By: Rudy Parks
 P:\10-PROJECTS\ACTIVE PROJECTS\14C5F5C4-TOWN OF ERIE-WR3 BRIDGE REPLACEMENT\COMPUTER DESIGN FILES\02_SHEET FILES\SAG-01 SUMMARY OF APPROX QUANTITIES.DWG

BOOK	PAGE	SHEET	CONTRACT ITEM NO.	CONTRACT ITEM	UNIT	ROADWAY		STRUCTURE		PROJECT TOTALS	
						PLAN	AS CONST.	PLAN	AS CONST.	PLAN	AS CONST.
			606-11035	Bridge Nail Type 10M45H	LF			49		49	
			613-00200	2 inch Electrical Conduit	LF			155		155	
			614-85001	Impact Attenuator	EACH					4	
			620-00002	Field Office (Class 2)	EACH					1	
			620-00020	Sanitary Facility	EACH					1	
			625-00000	Construction Surveying	LS					1	
			626-00000	Mobilization	LS					1	
			630-00000	Flagging	HOURL					300	
			630-00007	Traffic Control Inspection	DAY					39	
			630-00012	Traffic Control Management	DAY					80	
			630-80335	Barricade (Type 3M-A) (Temporary)	EACH					7	
			630-80341	Construction Traffic Sign (Panel Size A)	EACH					18	
			630-80342	Construction Traffic Sign (Panel Size B)	EACH					5	
			630-80355	Portable Message Sign Panel	EACH					3	
			630-80360	Drum Channelizing Device	EACH					30	
			630-80380	Traffic Cone	EACH					75	
			700-70010	F/A Minor Contract Revisions	FA					1	

Print Date: 4/28/2024
 Title Name: SAG-001 SUMMARY OF APPROX QUANTITIES.DWG
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 Vert. Scale: N/A

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 Thornton, CO 80241
 Pkt. (303) 962-3300
 Fax: (303) 962-5850

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**FIELD COUNTY ROAD 3
 BRIDGE REPLACEMENT
 SUMMARY OF APPROX QUANTITIES**
 Designer: R. PARKS
 Detailer: H. PUGH
 Sheet Subsets: SAG Subsets
 Sheets: 3 of 3

Project No.
 P22-076
 Drawing Number SAG-003
 Sheet Number 10

Plot Date: 4/28/2024 10:11 AM Plotted By: Rudy Parks
 P:\10-PROJECTS\ACTIVE PROJECTS\1040_TOWN OF ERIE-WR3 BRIDGE REPLACEMENT_COMPUTER DESIGN FILES\02_SHEET FILES\TAB-01 TABLATIONS.DWG

Print Date: 4/28/2024
 The Name: TAB-001 TABLATIONS.DWG
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 Vert. Scale: N/A

 12076 Grant Street
 Thornton, CO 80241
 Pkt. (303) 862-3900
 Fax: (303) 862-5580

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**WELD COUNTY ROAD 3
 BRIDGE REPLACEMENT
 TABULATIONS**
 Designer: R. PARKS
 Detailer: H. PUGH
 Sheet Subsets: TABS
 Drawing Number: TAB-001
 Sheet Number: 1 of 1

Project No.
 P22-076
 Drawing Number: TAB-001
 Sheet Number: 11



- Note:
 1. Hot Mix Asphalt density used in calculations = 149.0 lbs/cuft
 2. Aggregate Base Course density used in calculations = 135.0 lb/cuft

STATION	SIDE	REMOVAL OF ASPHALT MAT		AGGREGATE BASE COURSE (CLASS 6) 304-06000	HOT MIX ASPHALT (GRADING SK) (75) (PG 64-28) 403-34751	REMARKS
		202-00220	202-00240			
1+18.84	-	1+46.62	Lt.	7	5	Access
1+24.00	-	1+46.54	Lt.	6	5	Full Depth Shoulder
1+24.00	-	1+68.79	Rt.	7	10	Full Depth Shoulder
1+24.00	-	1+65.03	Lt. & Rt.	91	10	2 Inch Overlay
1+45.61	-	1+81.71	Rt.	11	10	Access
1+45.62	-	1+85.82	Lt. & Rt.	56	30	Full Depth Roadway and Shoulder
1+58.70	-	2+10.45	Lt. & Rt.	56	41	Variable Depth Over Culvert
1+83.33	-	2+23.69	Lt. & Rt.	56	30	Full Depth Roadway and Shoulder
1+89.78	-	2+20.83	Lt.	12	11	Access
2+04.08	-	2+60.00	Lt. & Rt.	133	14	Full Depth Shoulder
2+22.41	-	2+60.00	Rt.	9	15	2 Inch Overlay
2+28.91	-	2+58.25	Rt.	4	9	Full Depth Shoulder
TOTALS		146	224	163	179	10% For RMA and 15% for ABC

STATION	SIDE	GUARDRAIL TYPE 3 (31 Inch Midwest Guardrail System) (606-00302)		END ANCHORAGE (NON-FLARED) (606-02003)	IMPACT ATTENUATOR (614-85001)	REMARKS
		LF	EACH			
0+74.00	-	0+99.00	Rt.	2	4	End Anchorage attached to either end of Guardrail Type 3
1+38.00	-	2+32.00	Lt. & Rt.	2	4	End Anchorage attached to either end of Guardrail Type 3
2+70.00	-	2+95.00	Lt.	4	4	End Anchorage attached to either end of Guardrail Type 3
TOTALS		50	4	4	4	

Plot Date: 4/28/2024 10:11 AM Plotted By: Rudy Perka
 R:\G-PROJECTS\ACTIVE PROJECTS\3100-TOWN OF ERIE-WCR3 BRIDGE REHAB\WCR3_COMPUTER DESIGN FILES\WCR3_SHEET FILES\W-001 ROADWAY PLAN AND PROFILE.DWG

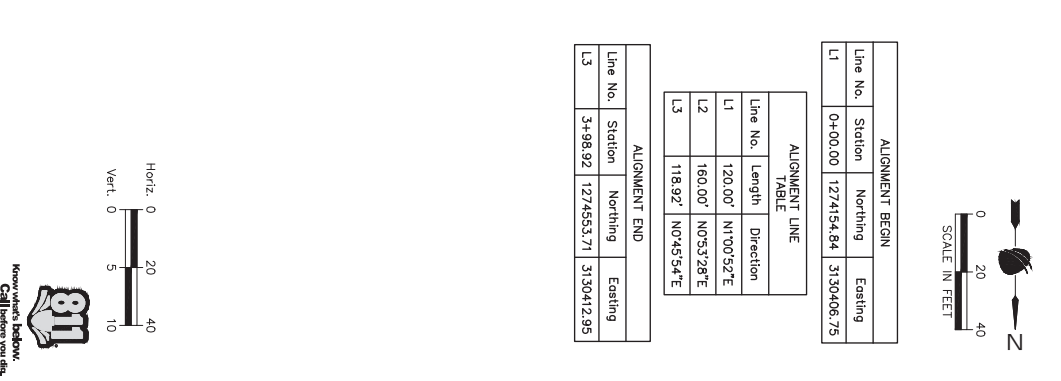
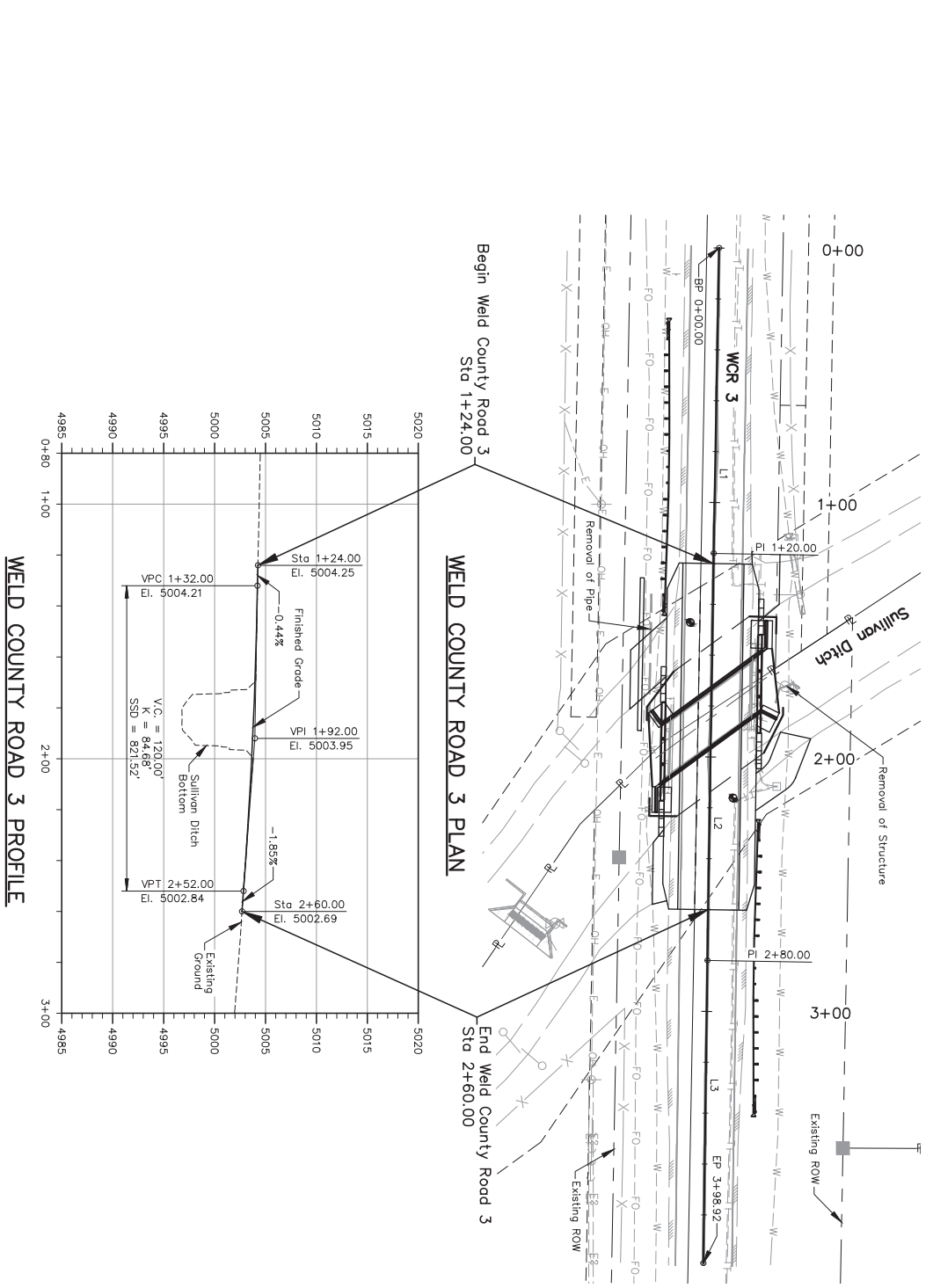
Print Date: 4/28/2024
The Name: P-001 ROADWAY PLAN AND PROFILE.DWG
Horiz. Scale: As Noted
Vert. Scale: As Noted
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Date	Revisions	Comments	Initials

TOWN OF ERIE
 PUBLIC WORKS
 666 HOLLBROOK ST.
 ERIE, CO 80515

No. Revisions:	As Constructed

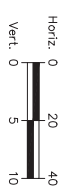
**WELD COUNTY ROAD 3
 BRIDGE REPLACEMENT
 ROADWAY PLAN AND PROFILE**
 Designer: R. PARKS
 Detailer: R. PARKS
 Sheet Subsets: ROAD P&R
 Subsets: 1 of 1
 Project No. P22-076
 Drawing Number P-001
 Sheet Number 12



ALIGNMENT BEGIN		
Line No.	Station	Easting
L1	0+00.00	1274154.84
		3130406.75

ALIGNMENT LINE TABLE		
Line No.	Length	Direction
L1	120.00'	N170052°E
L2	160.00'	N05328°E
L3	118.92'	N04554°E

ALIGNMENT END		
Line No.	Station	Easting
L3	3+98.92	1274553.71
		3130412.95



Plot Date: 4/28/2024 10:12 AM Plotted By: Rudy Pinks
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Print Date: 4/28/2024
 Title Name: DET-001 GUARDRAIL DETAIL.DWG
 Horiz. Scale: As Noted
 Vert. Scale: N/A

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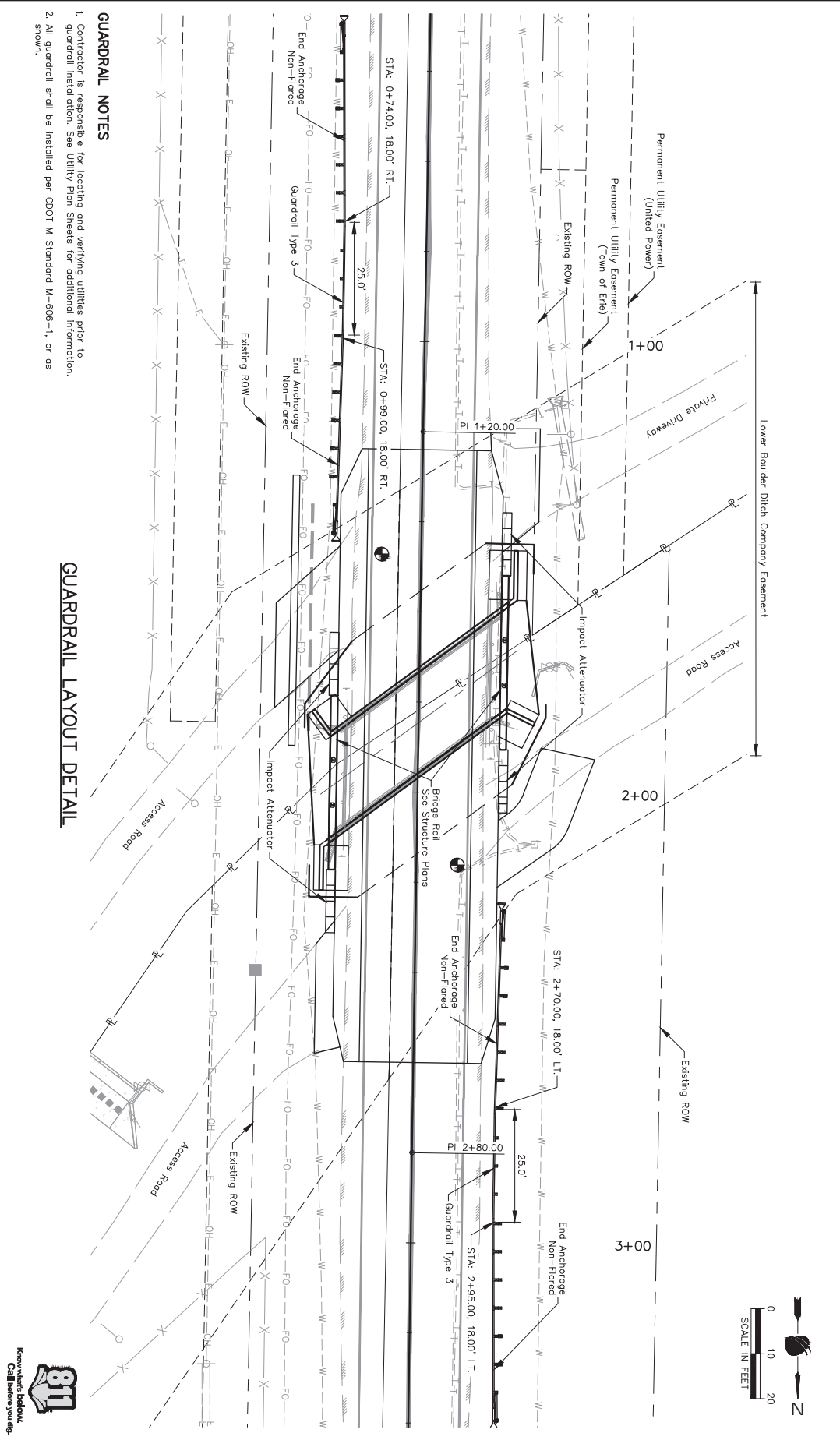
Sheet Revisions	
Date	Comments



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No Revisions:	
Revised:	
Void:	

WELD COUNTY ROAD 3
 BRIDGE REPLACEMENT
 GUARDRAIL LAYOUT DETAIL
 Designer: R. PARKS
 Detailer: H. PUGH
 Subsets: DETAILS
 Subsets: 1 of 2
 Project No. P22-076
 Drawing Number DET-001
 Sheet Number 13



Plot Date: 4/28/2024 10:14 AM Plotted By: Rudy Proke
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Print Date: 4/28/2024
 The Name: DET-002 ACCESS DETAILS
 Horiz. Scale: As Noted
 Vert. Scale: N/A



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Sheet Revisions	
Date	Comments

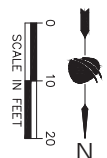
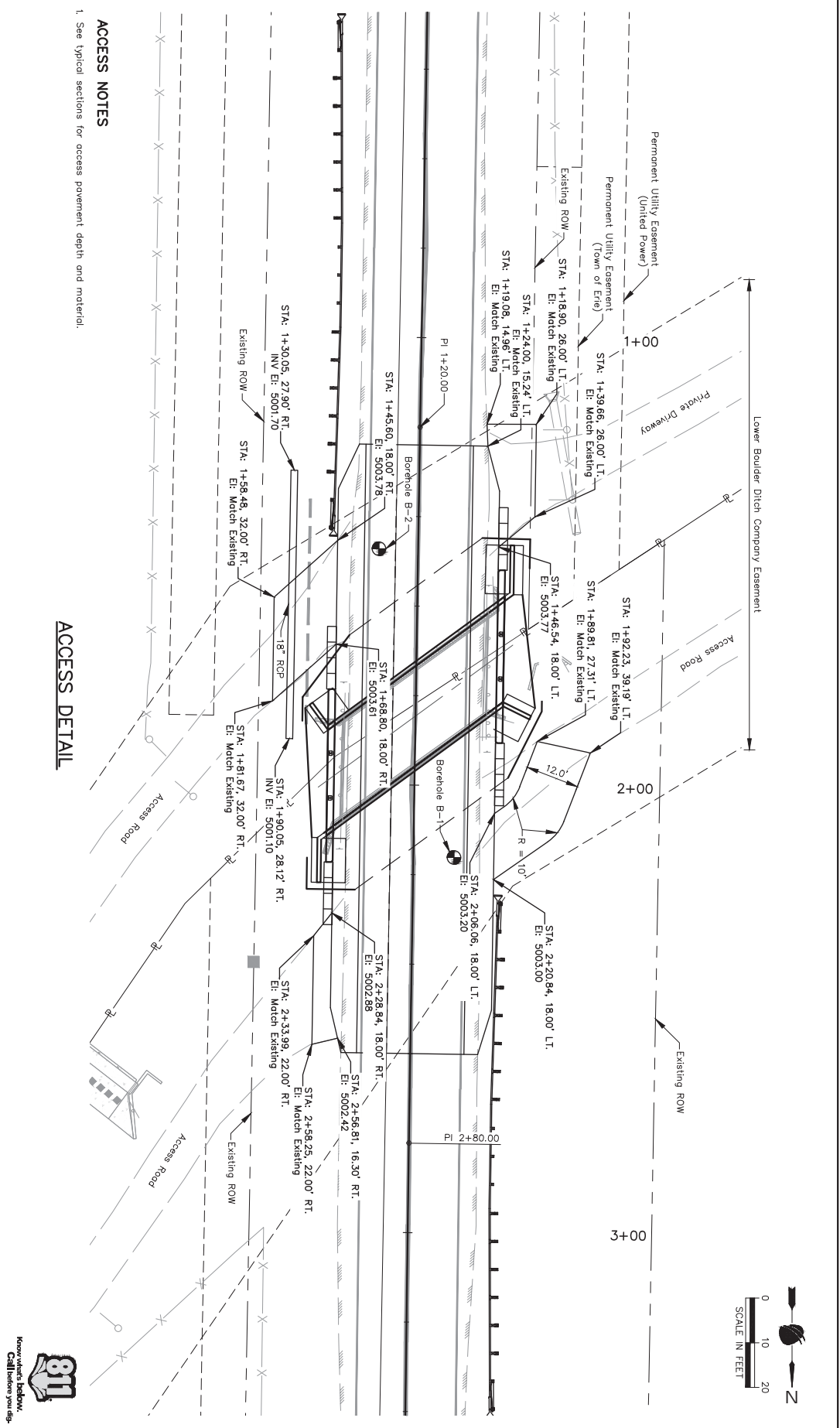


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No Revisions:	Revised:

Designer:	R. PARKS
Detailer:	H. PUGH
Sheet Subsets:	DETAILS

Project No.	P22-076
Drawing Number	DET-002
Sheet Number	14



Plot Date: 1/11/2024 10:51 AM Plotted By: Devita Gaziano
 P:\10-PROJECTS\ACTIVE PROJECTS\100-TOWN OF ERIE-W03 BRIDGE REPLACEMENT_COMPUTER DESIGN FILES\02-SHEET FILES\5-01 GENERAL INFORMATION.DWG

GENERAL NOTES

All work shall be done in accordance with the Colorado Department of Transportation 2022 Standard Specifications and the Project Special Provisions.
 Except as shown in the plans, Structure Excavation and Backfill shall be in accordance with M-206--1 for cast-in-place retaining walls, and cast-in-place concrete box culvert.
 Expansion joint material shall conform to AASHTO Specification M123.
 All concrete shall be Concrete Class D (Box Culvert), unless noted otherwise.
 Structural concrete shall conform to Cementitious Material Requirements Class 2, corresponding to Structure Exposure Class 2.
 The final finish for the surfaces of the headwall / riding curbs shall be Class 2. All other exposed concrete surfaces shall receive a Class 1 final finish to one foot below the ground line.
 Structural Steel shall be the types and grades identified on the Rolling Details.
 Grade 60 reinforcing steel is required.
 Ⓞ denotes non-coated reinforcing steel.
 Non-designated or Ⓞ denotes epoxy-coated reinforcing steel.
 Rebar construction joints to a 1/2" amplitude.
 All electric conduit in culvert shall be galvanized rigid metal conduit.
 Damp proofing shall be applied to the fill-side of exterior walls and fill-side of retaining walls. Damp proofing shall conform to CDDT Specification 702.01 (B). Damp proofing is paid as described in the specifications.
 Waterproofing (Membrane) shall be applied to the box culvert top surface and 18 inches down from the top of exterior walls.
 Stations, elevations, and dimensions contained in these plans are calculated from a recent field survey. The contractor shall verify all dependent dimensions in the field before ordering or fabricating any material.
 The information shown in these plans concerning the type and location of underground utilities is not guaranteed to be accurate or all inclusive. The Contractor is responsible for making the determination of the location and depth of all utilities. The Contractor shall contact the Utility Notification Center of Colorado at 1-800-922-1987 at least 3 days (not including the day of notification) prior to any excavation or other earthwork.
 The Contractor shall be responsible for the stability of the structure during construction.
 The location of splices, except where shown on the plans, shall be based upon using 60 foot stock lengths. The location of splices shall be staggered and shall be approved by the Engineer. Splices shall be staggered unless noted otherwise.

DESIGN DATA

AASHTO LRFD Bridge Design Specifications, Ninth Edition, 2020
 Design Method: Load and Resistance Factor Design (LRFD)
 Box Culverts
 Live Load HL-93 (Design Truck or tandem, and design lane)
 Vertical Dead Load
 Earthfill 146.67 pcf
 Combined 2 ft of fill soil (130 pcf)
 Lateral Soil Load (Partially saturated, at rest/restrained)
 60 pcf (max)
 30 pcf (min)
 Reinforced Concrete:
 Class D Concrete:
 Structural Steel:
 AASHTO M270 Grade 36
 AASHTO M270 Grade 50
 Soil Properties:
 Structure Backfill (Class 1): $\gamma = 130 \text{ pcf}$, $\phi = 34^\circ$
 Structure Bearing Resistance $R_{sb} = 2.0 \text{ ksf}$
 Resistance Factor for Sliding = 0.45
 Service Bearing Resistance = 3.0 ksf
 Seismic Design Criteria: Extreme Event 1 Load Combination
 $\gamma_{EQ} = 0.5$
 $PGA = 0.05$
 $S_s = 0.120$
 $S_1 = 0.032$
 $F_{wp} = 1.60$
 $S_{p1} = 0.077$
 $S_{ps} = 0.192$
 $A_s = 0.08$
 Seismic Zone 1
 Site Class D

ABBREVIATIONS

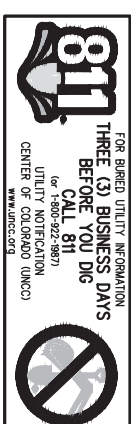
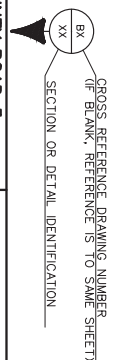
BF	Back Face	JT	Joint
Bearing	Bearing	KSF	Kips Per Square Foot
Concrete Box Culvert	Concrete Box Culvert	KSI	Kips Per Square Inch
CFS	Cubic Feet Per Second	NF	Near Face
CG	Center of Gravity	On Center	On Center
Clear	Clear	PCF	Pounds Per Cubic Foot
Const	Construction	PSI	Pounds Per Square Inch
Each Face	Each Face	Sta	Station
Existing	Existing	Str	Structure
Foundation	Foundation	Spa	Spacers
For Face	For Face	Vp	Vertical
Horizontal	Horizontal	UNO	Unless Noted Otherwise

INDEX OF DRAWINGS

- S-01 GENERAL INFORMATION
- S-02 SUMMARY OF QUANTITIES
- S-03 CULVERT GENERAL LAYOUT
- S-04 TYPICAL SECTION
- S-05 REMOVAL DETAILS
- S-06 HYDRAULIC INFORMATION
- S-07 CULVERT HYDRAULIC INFORMATION
- S-08 SHORING LAYOUT
- S-09 BOX CULVERT DETAILS
- S-10 BRIDGE FOOT TYPE BR10B-GR3
- S-11 BRIDGE PILE TYPE BR10B-GR3
- S-12 BRIDGE PILE TYPE BR10B-GR3
- S-13 BRIDGE PILE TYPE BR10B-GR3
- S-14 TRANSITION TYPE BR10B-GR3

STRUCTURE DESCRIPTION

1-cell (18'-0" wide x 5'-1" high x 48'-10") cast-in-place concrete box culvert, skew: WCR 3 HCL = 53°00'00" Right.
 Replaces existing Str. WEL003.0-012.0C, single span bridge
 Bridge Rail Type 10 MASH

Print Date: 11/16/2023
 The Name: S-01 General Information.dwg
 Horiz. Scale: As Noted
 Vert. Scale: As Noted

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As Constructed		Project No.	
No Revisions:		P22-076	
Revised:		Drawing Number S-01	
Void:		Sheet Number 15	

WELD COUNTY ROAD 3
 BRIDGE REPLACEMENT
 GENERAL INFORMATION

Designer: D. Adams
 Detailer: D. Gonzales
 Structure: Structures
 Subsets: Subsets
 Subsets: Subsets
 Sheets: S-01 of

Plot Date: 1/11/2024 2:22 PM Plotted By: Dennis Gonzalez
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Print Date: 11/05/2023
 The Name: S-02 Summary of Quantities.dwg
 Horiz. Scale: As Noted
 Vert. Scale: As Noted

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Date	Sheet Revisions	Comments	Initials



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As Constructed
 No Revisions:
 Revised:
 Void:

**WELD COUNTY ROAD 3
 BRIDGE REPLACEMENT
 SUMMARY OF QUANTITIES**
 Designer: D. Adams
 Detailer: D. Gonzales
 Structural Numbers: ER003.0-012.0D
 Sheet Subsets: Structures
 Subsets: Structures
 Subsets: Sheets S-02 of

Project No.
 P22-076
 Drawing Number: S-02
 Sheet Number: 16

Summary of Quantities						
Item No.	Description	Unit	CBC	Wingwalls	Total Quantity	
202-00400	Removal of Bridge	EA	1		1	
206-00000	Structure Excavation	CY	159	74	233	
206-00200	Structure Backfill (Class 2)	CY	49	51	100	
206-01781	Shooting (Area 1)	LS		1	1	
206-01782	Shooting (Area 2)	LS		1	1	
206-01783	Shooting (Area 3)	LS		1	1	
206-01784	Shooting (Area 4)	LS		1	1	
207-00704	Subgrade Soil Preparation	SY	131	37	168	
420-00112	Geotextile (Drainage)(Class 1)	SY	38		38	
506-00212	Riprap (12 Inch)	CY	25		25	
515-00120	Waterproofing (Membrane)	SY	115		115	
516-00000	Dampproofing (Asphalt)	SY	68	28	96	
601-03030	Concrete Class D (Box Culvert)	CY	117	15.5	132	
602-00020	Reinforcing Steel (Epoxy Coated)	LB	46978	1528	48506	
606-01402	Transition Type BR10B-CR3	EA	4		4	
606-11035	Bridge Rail Type 10 MASH	LF	49		49	
613-00200	2 Inch Electrical Conduit	LF	155		155	

Plot Date: 2/12/2024 10:09 AM Plotted By: Denis Gonzalez
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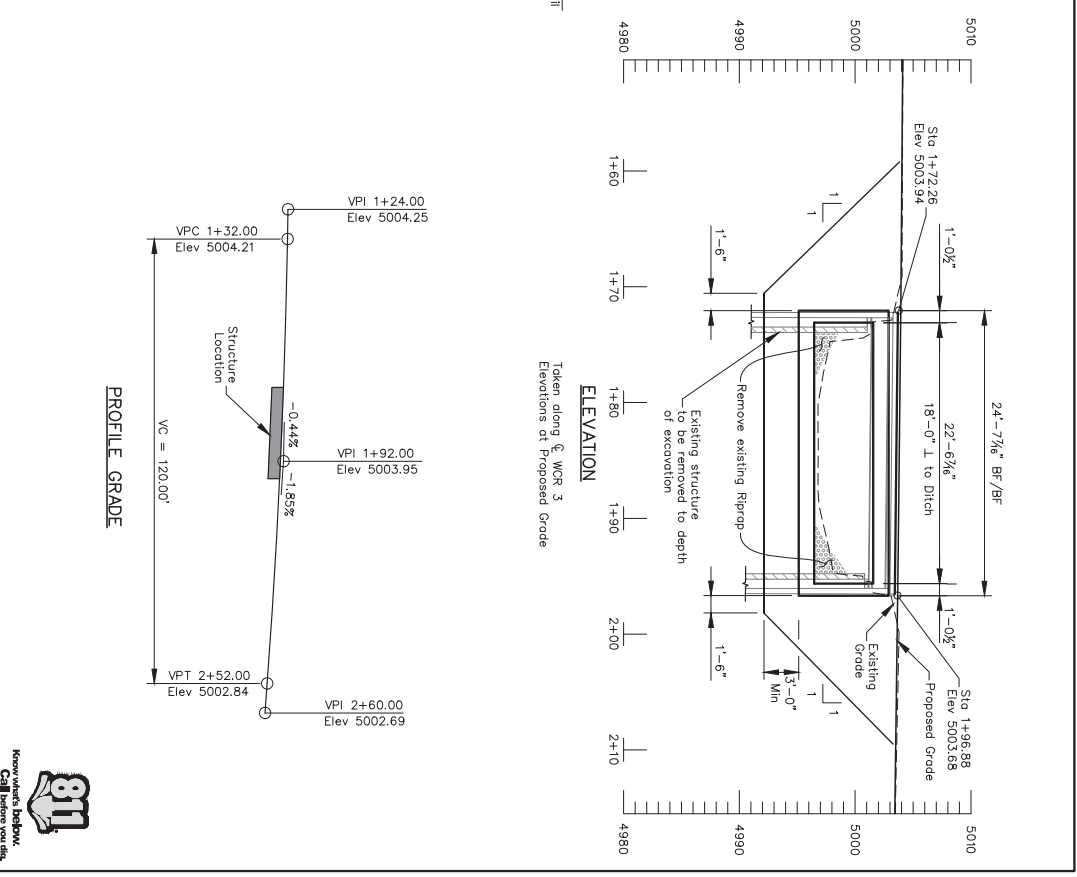
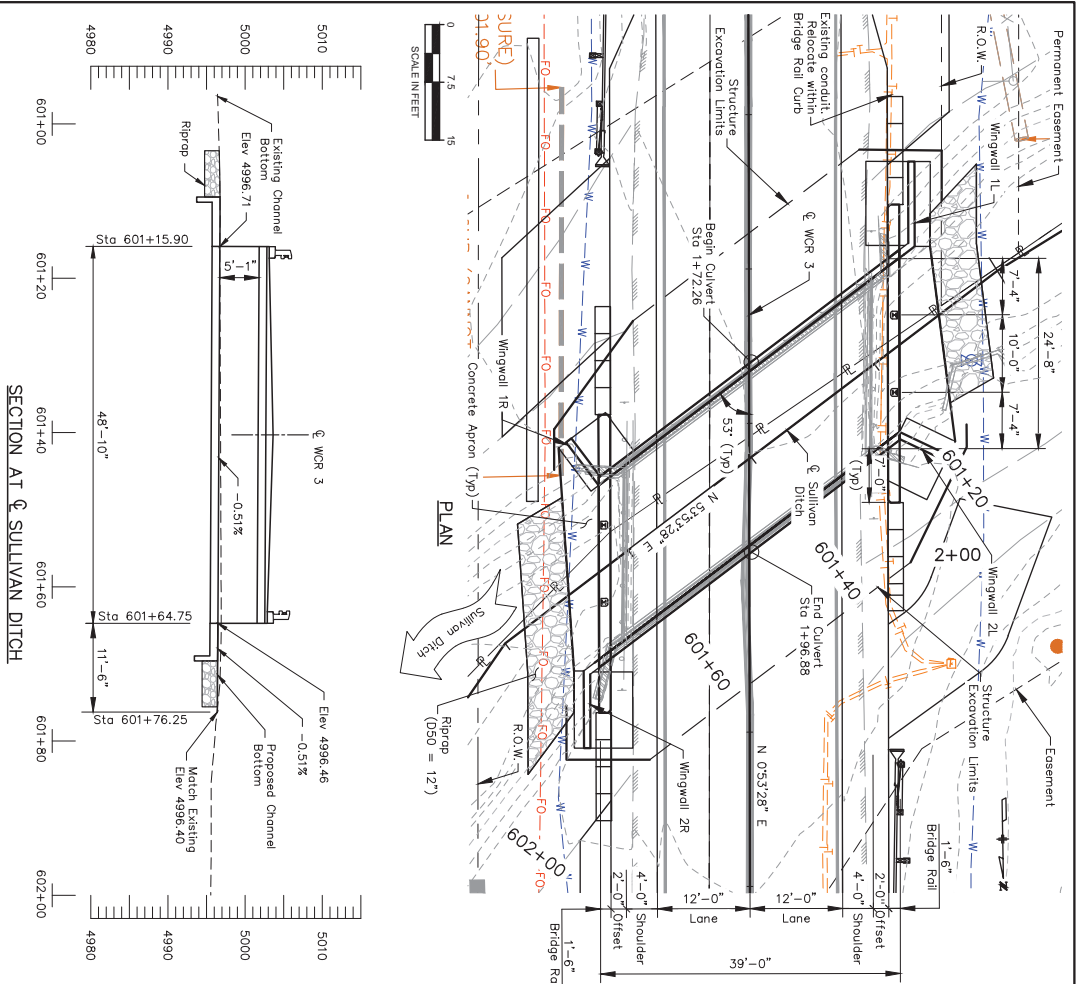
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Sheet Revisions	
Date	Comments


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No Revisions:	
Revised:	
Void:	

**WELD COUNTY ROAD 3
 BRIDGE REPLACEMENT
 CULVERT GENERAL LAYOUT**
 Designer: D. Adams
 Structural Engineer: ER003.0-012.0D
 Detailer: D. Gonzalez
 Drawing Number: S-03
 Project No. P22-076
 Sheet Number 17

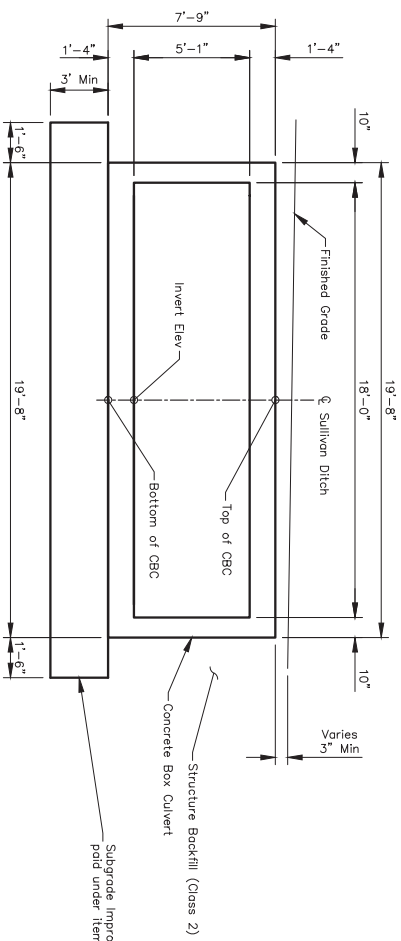


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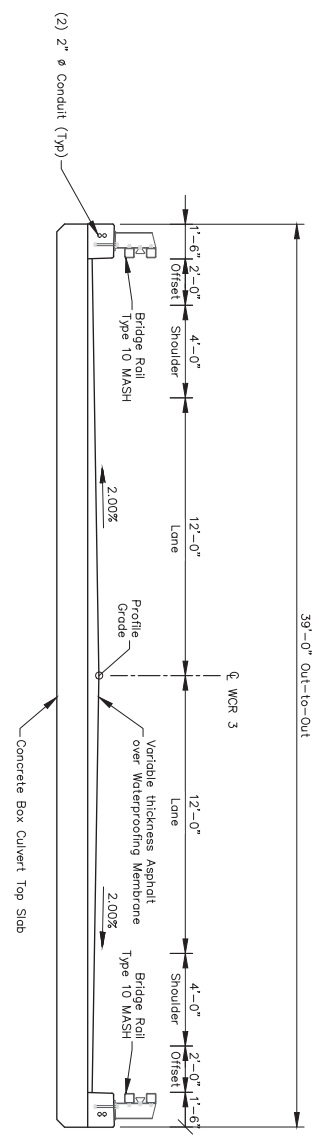
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12076 Grant Street Thornton, CO 80241 P.O. Box 902340 Fax: (303) 582-5580		Date: _____ Comments: _____ Initials: _____	
		PUBLIC WORKS 665 HOLBROOK ST. ERIE, CO 80515	
No Revisions: Revised: Void:		As Constructed Designer: D. Adams Structural Engineer: D. Gonzales Detailer: _____ Sheet Subsets: Structures Subsets: Structures-5-04 of	
WELD COUNTY ROAD 3 BRIDGE REPLACEMENT TYPICAL SECTION		Project No. P22-076 Drawing Number S-04 Sheet Number 18	

- NOTES:**
1. Over excavate and replace soft in-situ clay soil with properly compacted Structure Backfill (Class 1) to a minimum depth of 3'-ft. If necessary to achieve a stable working surface, a platform of 6-in crushed aggregate material meeting CDOT No. 57 Concrete Aggregate which is fully wrapped with CDOT Class 1 stabilization/seperator geotextile may be placed with 2.5'-ft of Structure Backfill (Class 1).
 2. Structure Excavation, Structure Backfill (Class 1), and all other work associated with subgrade preparation shall not be measured separately, but shall be incidental to Pay Item 207.

TYPICAL SECTION - BOX CULVERT
 Perpendicular to Box Culvert



TYPICAL SECTION - ROADWAY
 Perpendicular to WCR 3 HCL



Plot Date: 2/12/2024 11:13 AM Plotted By: Dennis Gonzalez
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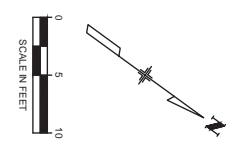
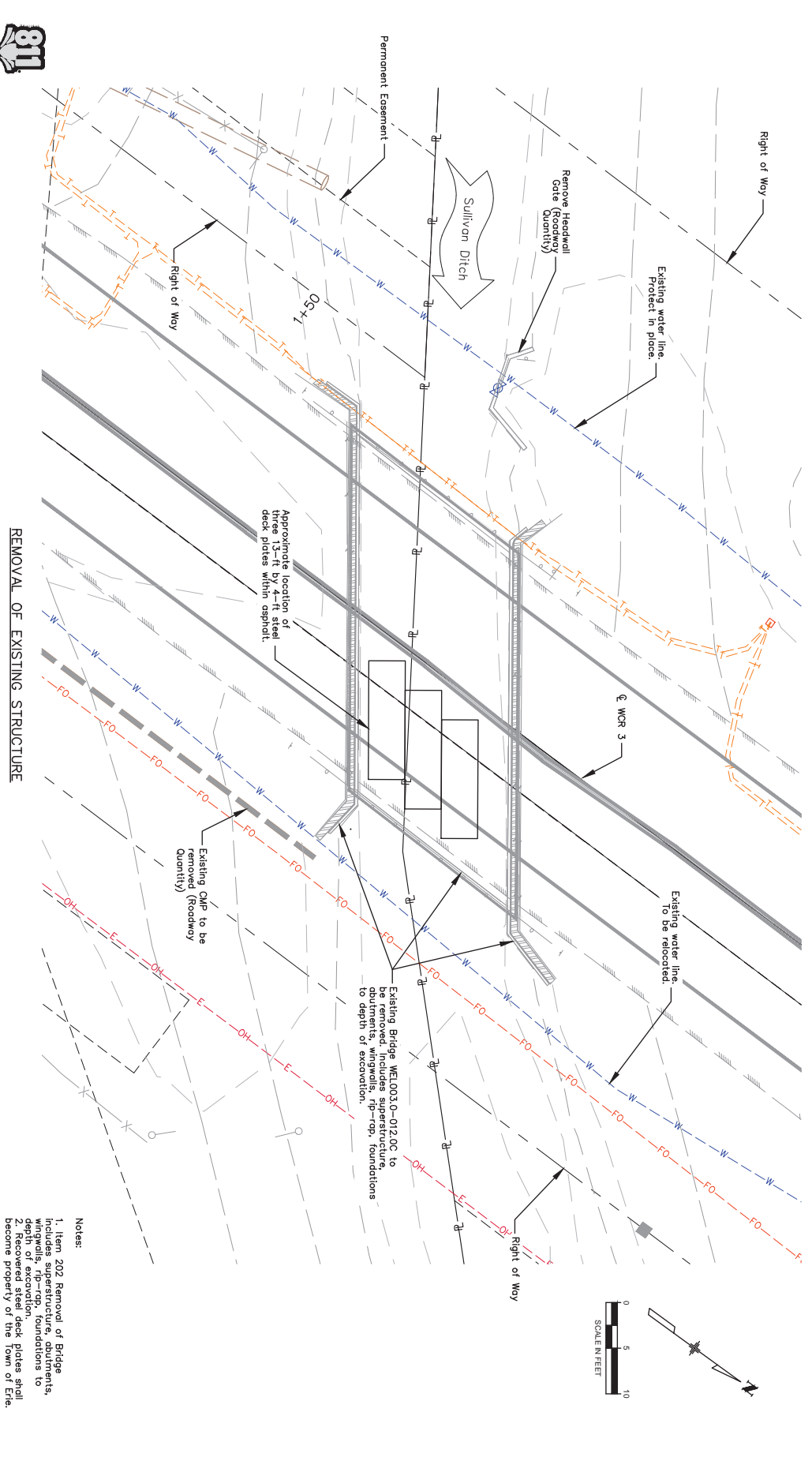
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Sheet Revisions	
Date	Comments

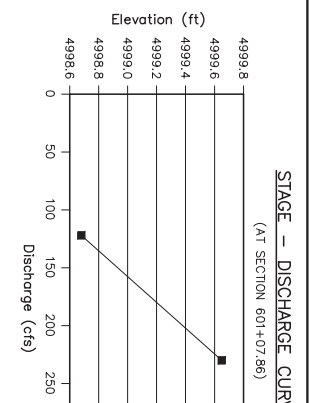
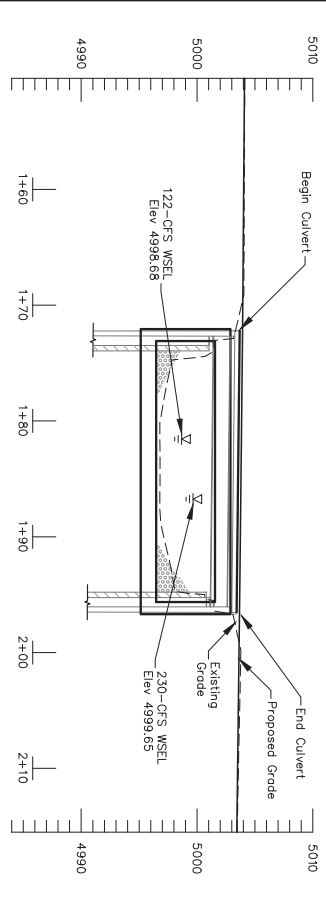
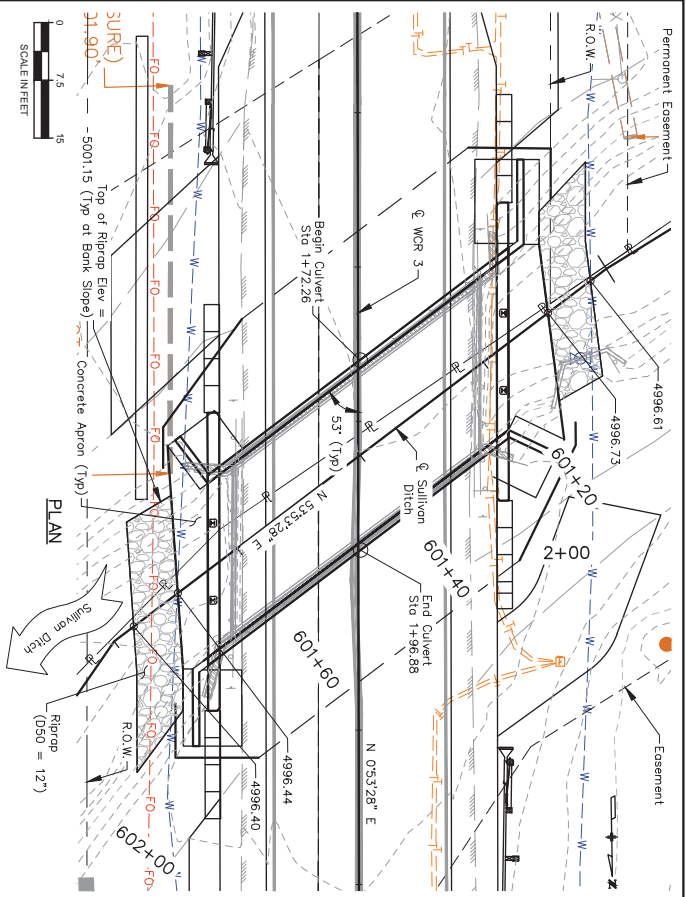
As Constructed
 No Revisions:
 Revised:
 Void:

**WELD COUNTY ROAD 3
 BRIDGE REPLACEMENT
 REMOVAL DETAILS**
 Designer: D. Adams
 Detailer: D. Gonzalez
 Sheet Subsets: Structures
 Subsets: Structures
 Subsets: Structures
 Sheets: 5-05 of

Project No.
 P22-076
 Drawing Number: S-05
 Sheet Number: 19



Print Date: 2/12/2024 9:52 AM Plotted By: Devlin Gonzalez
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COMPARISON OF HYDRAULICS

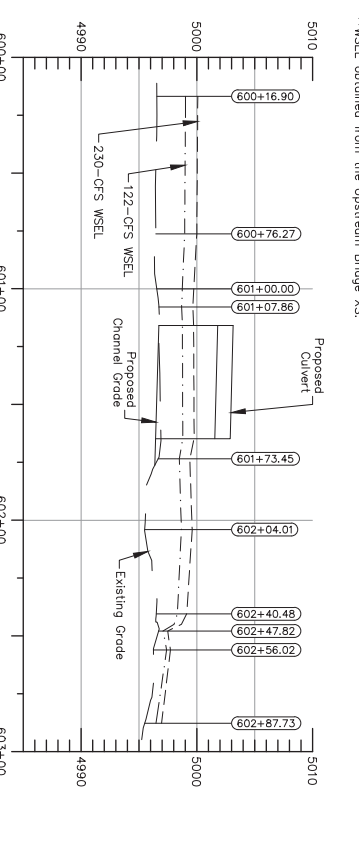
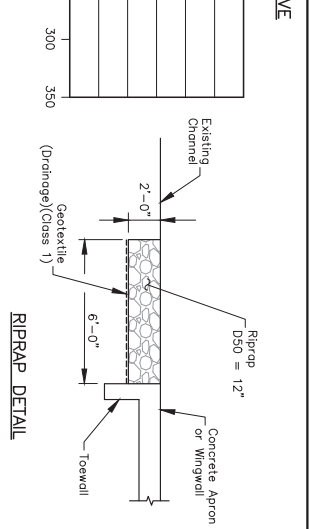
HEC-RAS Model	Discharge (cfs)	Velocity (avg) ** (ft/s)	Freeboard		WSEL (ft)
			Required (ft)	Actual (ft)	
Existing	122	4.48	2.00	2.78	4998.69
Proposed	122	5.22	2.00	3.11	4998.68

**Velocity obtained from Downstream Bridge XS.

SCOUR ANALYSIS

Event	Discharge (cfs)	WSEL**	Long Term Aggradation / Degradation (ft)	Construction Scour (ft)	Abutment Scour Left (ft)	Abutment Scour Right (ft)
Intended Flow	122	4998.68'	0.0	0.81	0.0	0.0
Maximum Potential Flow	230	4999.65'	0.0	1.55	0.0	0.0

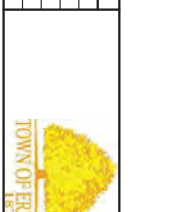
**WSEL obtained from the Upstream Bridge XS.



Print Date: 2/12/2024
 The Name: S-07 Culvert Hydraulic Information.dwg
 Horiz. Scale: As Noted
 Vert. Scale: As Noted
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Sheet Revisions

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As Constructed

No. Revisions:	Designer:	Project No.
	D. Adams	P22-076
	D. Gonzales	

WELD COUNTY ROAD 3
 BRIDGE REPLACEMENT
 CULVERT HYDRAULIC INFORMATION

Project No. P22-076
 Drawing Number S-07
 Sheet Number 21

Print Date: 11/05/2023
 Title: S-08 Vertical Cover Over Structure
 Horiz. Scale: As Noted
 Vert. Scale: As Noted
 Project: TOWN OF ERIE - W03 BRIDGE REPLACEMENT PROJECT SHEET FILES-07 CULVERT HYDRAULIC INFORMATION

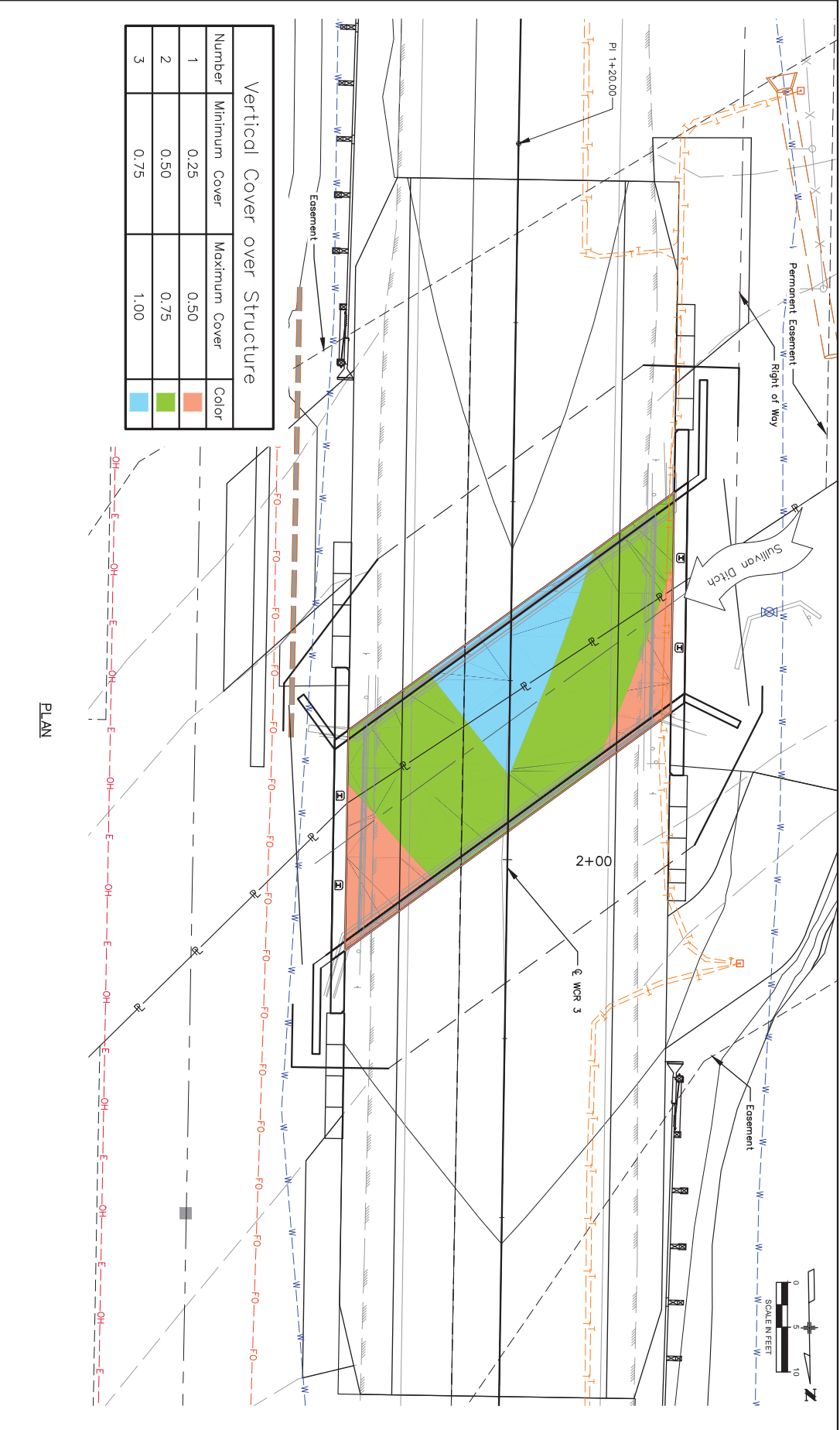
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Sheet Revisions	
Date	Comments

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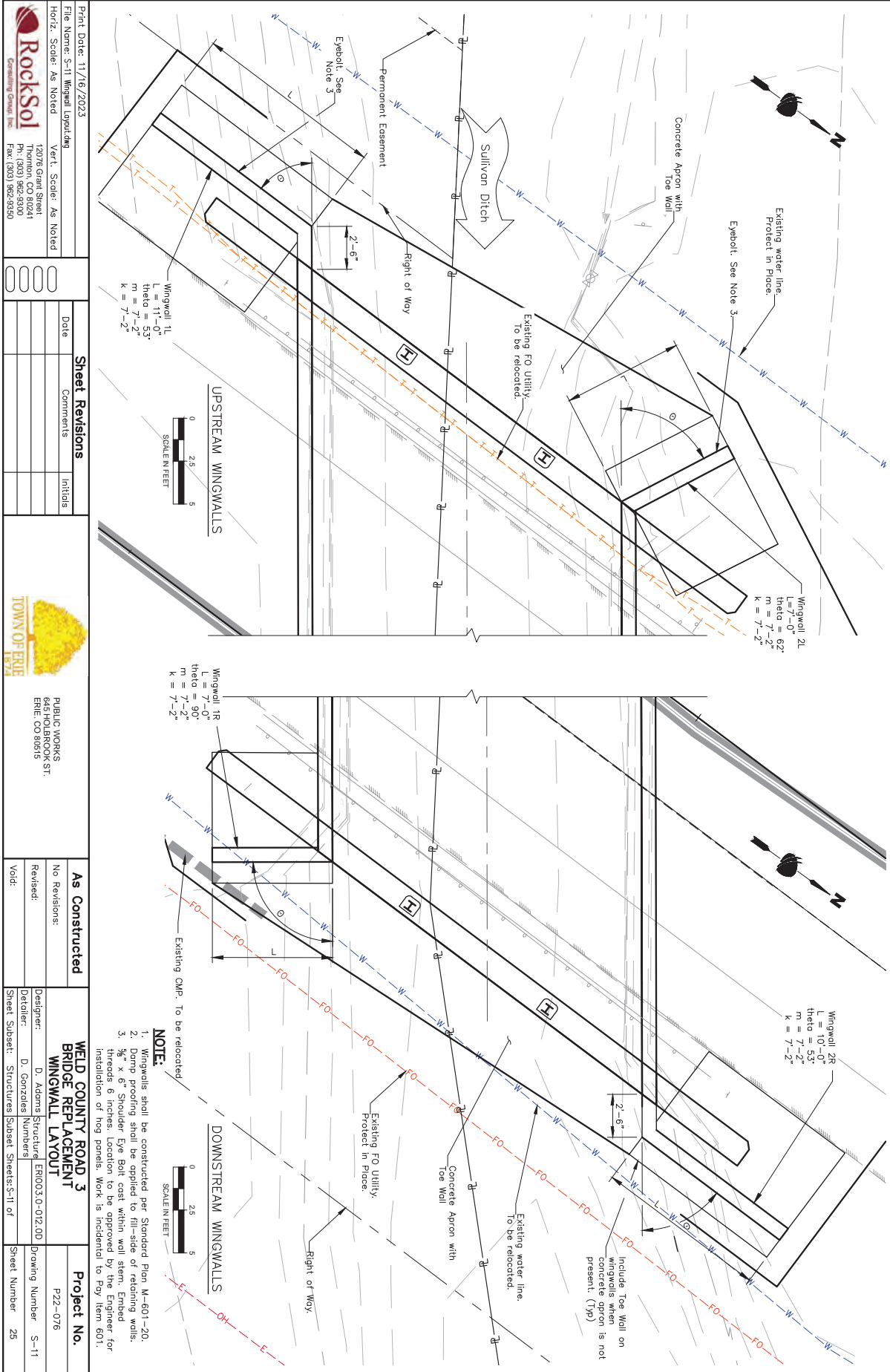
As Constructed	
No Revisions:	
Revised:	
Void:	

WELD COUNTY ROAD 3 BRIDGE REPLACEMENT VERTICAL COVER OVER STRUCTURE	
Designer:	
Detailer:	
Sheet Subsets:	



Vertical Cover over Structure		
Number	Minimum Cover	Maximum Cover
1	0.25	0.50
2	0.50	0.75
3	0.75	1.00

Plot Date: 11/16/2023 2:41 PM Plotted By: Dennis Gonzalez
 R:\10-PROJECTS\ACTIVE PROJECTS\1040_TOWN OF ERIE-WP3 BRIDGE REHAB\100_COMPUTER DESIGN FILES\102_SHEET FILES\5-11 WINGWALL LAYOUT.DWG



- NOTE:**
1. Wingwalls shall be constructed per Standard Plan M-601-20.
 2. Damp proofing shall be applied to fill-side of retaining walls.
 3. 3/4" x 6" Shoulder Eye Bolt cast within wall stem. Embed threads 6 inches. Location to be approved by the Engineer for installation of hog panels. Work is incidental to Pay Item 601.

Print Date: 11/16/2023 Title Name: S-11 Wingwall Layout.dwg Horiz. Scale: As Noted Vert. Scale: As Noted 12076 Grant Street Thornton, CO 80241 Ph: (303) 582-5090 Fax: (303) 582-5090		Date: _____ Comments: _____ Initials: _____	
Sheet Revisions		As Constructed	
No Revisions: Revised: Void:		Designer: D. Adams Detailer: D. Gonzalez Sheet Subsets: Structures Subsets S-11 of _____	
Project No. P22-076 Drawing Number S-11 Sheet Number 25		PUBLIC WORKS 644 HOLLADOCK ST. ERIE, CO 80515	

Print Date: 1/12/2024
 Project: BRIDGE REPLACEMENT PROJECT (340) - TOWN OF ERIE - WOOD BRIDGE REHAB/IMP_COMPUTER DESIGN FILES/02_SHEET FILES/5-13 TRANSITION TYPE BR10B-GR3.DWG

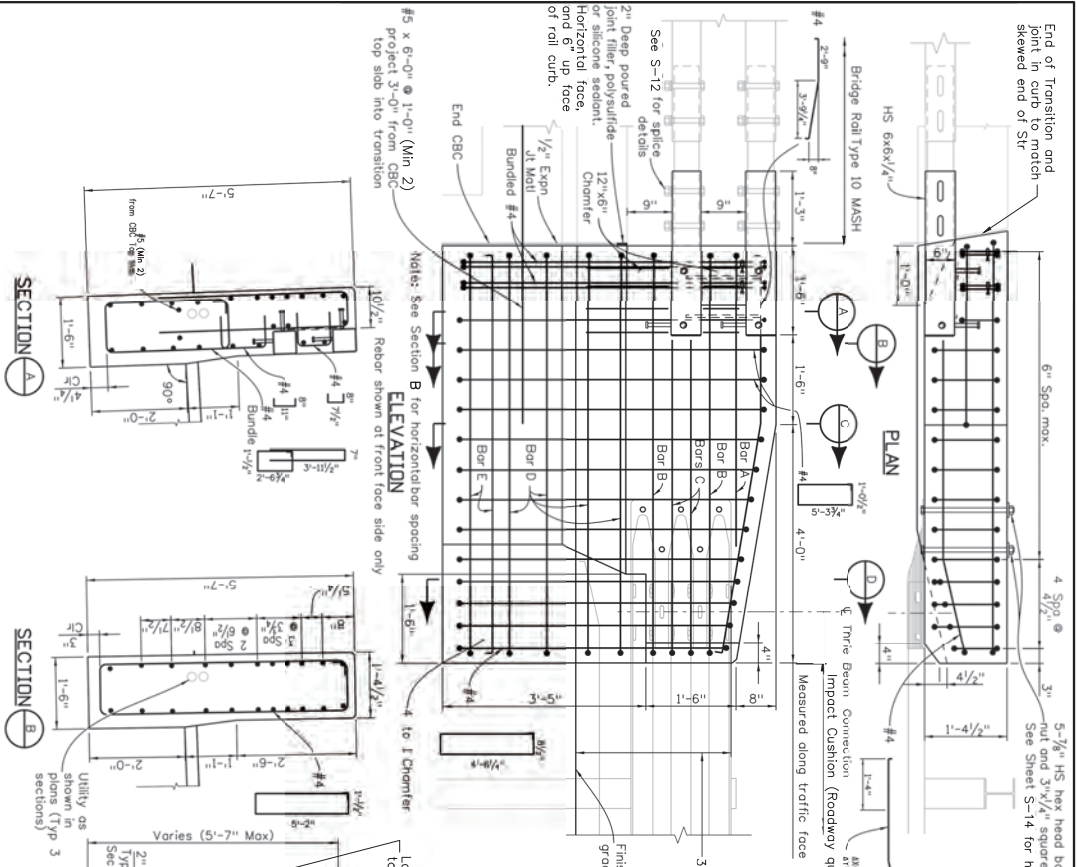
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 Vert. Scale: As Noted
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Sheet Revisions	
Date	Comments

TOWN OF ERIE
 PUBLIC WORKS
 66 HOLLBROOK ST.
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As Constructed	
Revised:	Void:
No Revisions:	

**WELD COUNTY ROAD 3
 BRIDGE REPLACEMENT
 TRANSITION TYPE BR10B-GR3**
 Designer: D. Adams
 Detailer: D. Gonzales
 Sheet Subsets: Structures
 Subsets: S-13 of
 Project No. P22-076
 Drawing Number S-13
 Sheet Number 27



INFORMATION ONLY

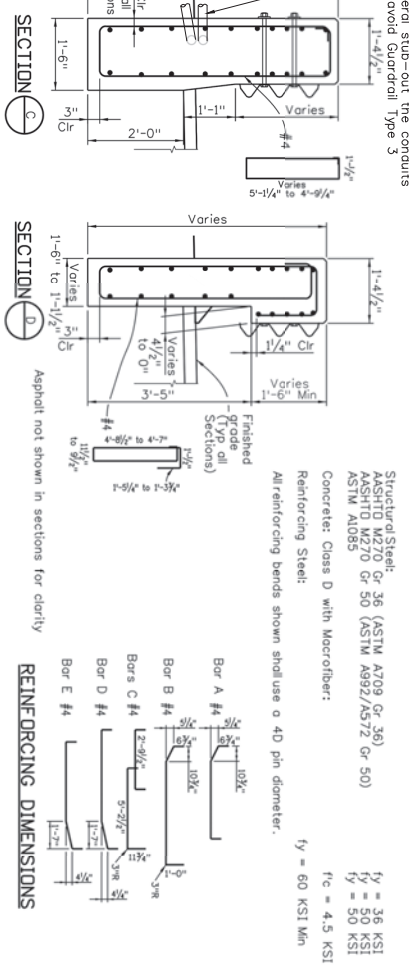
DESCRIPTION	UNIT	QUANTITY
Concrete Sealer	SY	5.9
Structural Steel (Galvanized)	LB	135
Structural Steel (Epoxy Coated)	CY	1.9
Reinforcing Steel (Epoxy Coated)	LB	289

DESIGN DATA

Structural Steel: Gr 36 (ASTM A709 Gr 36)
 ASHTD M270 Gr 50 (ASTM A992/A572 Gr 50)
 ASTM A1085

Concrete: Class D with Macrofiber:
 Reinforcing Steel: fy = 60 KSI Min
 fc = 4.5 KSI

All reinforcing bends shown shall use a 4D pin diameter.



- NOTES:**
- All tubes shall be ASTM A1085. All posts, base plates, and splice tubes fabricated by welding shall be ASTM A572 Grade 50. All other steel shall be Grade 36 unless otherwise noted.
 - The above material and anchor bolts and miscellaneous bolts, nuts, and washers shall be galvanized. Fabrication in accordance with Section 509. Concrete reinforcing steel and structural steel elements shall conform to the requirements of Sections 601 & 605, 602 and 509, respectively unless noted otherwise.
 - All bolts that have lock washers shall be tightened to snug only.
 - The top, inside and end faces of the transition shall receive a coating of epoxy. The epoxy shall be applied to the reinforcement and embedded in the deck concrete.
 - Payment will be made under Item 606, Transition Type BR10B-GR3, for all anchor bolts, miscellaneous bolts nuts, washers, tubes, studs, joint material, epoxy, and concrete sealer. The poured joint, expansion joint material, excavation and backfill will not be paid for separately, but shall be included in the work.
 - Prior to fabrication of this item, an electronic pdf which complies with the requirements of section 105, shall be submitted to the Engineer for information only.
 - All longitudinal reinforcement shall terminate with standard stirrup hooks as shown. Rotate or adjust reinforcing hooks to avoid interferences as required.
 - The T-rite beam connector/post of Type 3G or 3H shall be adjusted or rotated to match the transition plate.
 - Transitions shall be constructed tapering perpendicular to bridge cross slope (bridge roll side beyond curb coverage) to plans (3G/3H side). Vertical dimensions are perpendicular to the longitudinal roadway grade.
 - Rotate and adjust rebar at back face to avoid interference as required.

Plot Date: 11/16/2023 4:23 PM Plotted By: Dennis Gonzalez
 P:\0-PROJECTS\ACTIVE PROJECTS\1401-TOWN OF ERIE-WD3 BRIDGE REPLACEMENT\DESIGN FILES\02-SHEET FILES\5-14 TRANSITION TYPE BRIDGE-GR3.DWG

Print Date: 11/16/2023
 The Name: S-14 Transition Type BRIDGE-GR3.dwg
 Horiz. Scale: As Noted
 Vert. Scale: As Noted
RockSol
 Consulting Group, Inc.
 12076 Grant Street
 Thornton, CO 80241
 P.O. Box 390
 Ft. Collins, CO 80526

Sheet Revisions	
Date	Comments

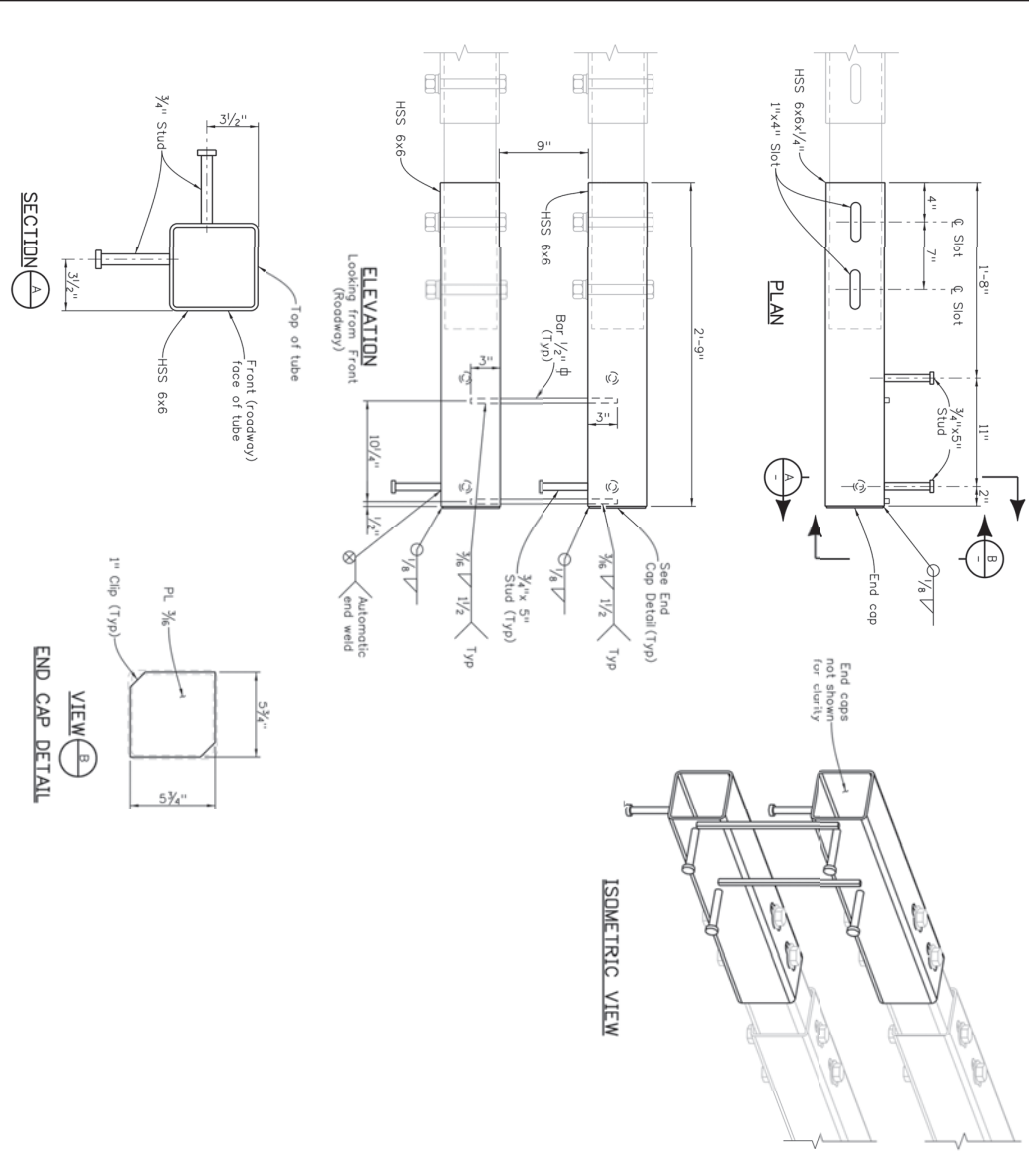
TOWN OF ERIE
 PUBLIC WORKS
 666 HOLBROOK ST.
 ERIE, CO 80515

As Constructed	
No Revisions:	
Revised:	
Void:	

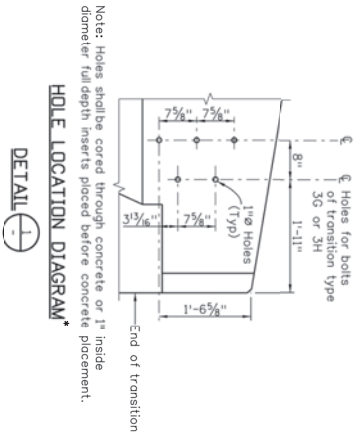
**WELD COUNTY ROAD 3
 BRIDGE REPLACEMENT
 TRANSITION TYPE BR10B-GR3**

Designer: D. Adams
 Structural Engineer
 Detailer: D. Gonzalez
 Structural Engineer
 Sheet Subsets: Structures
 Subsets: Structures
 Sheet: Structures
 Subsets: Structures
 Sheets: S-14 of

Project No.
 P22-076
 Drawing Number: S-14
 Sheet Number: 28



- NOTES:**
- See S-12 Bridge Rail Type 10 MASH for General Notes and details not shown.



* Modify hole pattern as needed to conform to impact cushion manufacturer recommendations.

Plot Date: 4/28/2024 10:15 AM Plotted By: Rudy Proke
 R:\10-PROJECTS\ACTIVE PROJECTS\1400_TOWN OF ERIE - WORKS BRIDGE REHAB\100_COMPUTER DESIGN FILES\102_SHEET FILES\UTN-001 UTILITY GENERAL NOTES.DWG

PROJECT LIST OF UTILITY CONTACTS

COMPANY	ABBREVIATION	UTILITY TYPE	CONTACT NAME	EMAIL	PHONE	811 ENG. TICKET RESULTS
Block Hills Energy – Weld County	BHE	Gas	Billie Taylor	Billie_Taylor@blockhillscorp.com	Not Available	Records Received, Nothing in Project Vicinity
Lumen (CenturyLink)	LUMEN	Fiber & Talco	Kari Roase	KariRoase@lumen.com	970-481-4313	Clear – Not True, Lumen Provided Maps
Crestone Peak Resources	CPR	Gas Pipeline	Delone	Not Available	970-319-7227	Clear – No Conflict
K.P. Kauffman Co.	KPK	Gas Pipeline	Not Available	Not Available	Not Available	Clear – No Conflict
Left Hand Water District	LHWD	Water	Steve Buckbee	sbuckbee@lefthandwater.org	303-530-4200	Records Received
Northern Water/Lower Boulder Ditch Company		Sullivan Ditch	Shawn Spitz	shawnlowerboulder@gmail.com	Not Available	Records Received
Occidental – Kerr McGee Prod	KMGP	Liquid Pipeline, Gas, Oil	Jasmine Hynes	jasminahynes@westernmidstream.com	970-598-4133	Records Received, Nothing in Project Vicinity
Town of Erie H2O	ERIE	Water	Zachary Ahingo	zahingo@erico.gov	303-926-2878	Records Received
United Power	UNPO	Electric	Kasey Peil	kpeil@unitedpower.com	303-637-1227	Records Received
WesternMidstream – Kerr McGee – Avoc	WEST	Gas Pipeline	Jasmine Hynes	jasminahynes@westernmidstream.com	970-598-4133	Records Received, Nothing in Project Vicinity

UTILITY LEGEND

QUALITY LEVEL B

—E— —E— EXISTING ELECTRIC

—FO— —FO— EXISTING FIBER OPTIC

—T— —T— EXISTING TELEPHONE

—W— —W— EXISTING WATER

QUALITY LEVEL C

—E— —OH— EXISTING OVERHEAD ELECTRIC

SYMBOLOLOGY

TELEPHONE PEDESTAL

ELECTRIC POLE

GUY WIRE

WATER GATE VALVE

TEST HOLE LOCATION

SUBSURFACE UTILITY GENERAL NOTES

- Utility data depicted on the following sheets has been prepared in accordance with ASCE 38.02 and C.R.S. 9-1.5. This is not a subsurface utility engineering required project.
- Quality level B designation has been completed by Primo Utility Locating Services, LLC.
- Quality level A test boring was performed by Kinetic on 8/10/2023.
- Storm and sanitary sewer mains and laterals, where shown, meet ASCE quality level C. Service lines are not located.
- It is the Contractor's responsibility to field verify horizontal and vertical locations of all utilities prior to commencing construction. The Contractor must call the Utility Notification Center of Colorado at least 2 business days prior to any excavation to request the exact field locations of utilities. If the Contractor and depth of existing underground utilities are unknown, the Contractor shall perform all necessary exploratory excavation to locate these facilities.
- The Contractor shall be responsible for protecting all utilities during construction and for coordinating with the appropriate utility company for any utility crossing or relocation required. Repair of damaged utilities shall be at the Contractor's expense, including but not limited to unknown underground utilities.

Print Date: 4/28/2024

File Name: U08-001 UTILITY GENERAL NOTES.DWG

Horiz. Scale: N/A

Vert. Scale: N/A

RockSol
 Consulting Group, Inc.
 12076 Grant Street
 Thornton, CO 80241
 Ph: (303) 962-8300
 Fax: (303) 962-8380

Sheet Revisions

Date	Comments	Initials

As Constructed

No Revisions:

Revised:

Void:

**WELD COUNTY ROAD 3
 BRIDGE REPLACEMENT
 UTILITY GENERAL NOTES**

Designer: N. CLOUSE
 Detailer: H. PUGH
 Sheet Subsets: UTILITIES
 Subsets: 1 of 3

Project No.
 P22-076

Drawing Number: UTN-001
 Sheet Number: 29



Plot Date: 4/28/2024 10:15 AM Plotted By: Rudy Poks
 R:\30-PROJECTS\ACTIVE PROJECTS\1401-TOWN OF ERIE-WR3 BRIDGE REHAB\300-COMPUTER DESIGN FILES\302-SHEET FILES\UT04-001 UTILITY GENERAL NOTES.DWG

TEST HOLE TABLE (QUALITY LEVEL A)

TH #	APPX STA	OFFSET (FT)	UTILITY OWNER	UTILITY TYPE	SIZE (IN)	UTILITY MATERIAL	GROUND MATERIAL	DEPTH TO TOP (IN)	DEPTH TO BOP (IN)	GROUND ELEV (FT)	TOP ELEV (FT)	BOP ELEV (FT)	NORTHING	EASTING	DATE PERFORMED	COMMENTS
1	0+39	22	RT	Left Hand	Water	-	DNF	-	-	5002.9	-	-	1274193.63	3130429.39	8/10/2023	Did Not Find 14ft deep with 4ft sweep.
2	1+33	20	RT	Left Hand	Water	-	DNF	-	-	5003.1	-	-	1274287.08	3130429.16	8/10/2023	Did Not Find 10ft deep with 3ft sweep.
3	1+41	27	RT	Lumen	Fiber	-	DNF	-	-	5002.8	-	-	1274295.85	3130436.34	8/10/2023	Did Not Find 9ft deep with 3ft sweep.
4	2+98	20	RT	Left Hand	Water	-	DNF	-	-	5001.7	-	-	1274452.11	3130431.62	8/10/2023	Did Not Find
5	3+03	28	RT	Lumen	Fiber	6	HDPE	42.0	48.0	4999.9	4996.4	4995.9	1274457.72	3130439.59	8/10/2023	Likely a sleeve, direct buried on south side of structure
6	1+20	26	LT	Erie	Water	24	Ductile Iron	120.0	144.0	5003.0	4993.0	4991.0	1274274.95	3130383.06	8/10/2023	Records indicate a 12" line, so this is likely a sleeve
6.1	1+20	24	LT	Lumen	Telephone	(2x) 1"	Conduit	52.0	53.0	5003.1	4998.7	4998.7	1274275.08	3130385.20	8/10/2023	
7	2+35	26	LT	Erie	Water	24	Ductile Iron	112.0	136.0	5000.9	4991.6	4989.6	1274390.52	3130384.88	8/10/2023	Records indicate a 12" line, so this is likely a sleeve
8	0+39	27	RT	Lumen	Fiber	0.5	Direct Buried	24.0	24.5	5002.0	5000.0	5000.0	1274193.38	3130434.94	8/10/2023	

All seeds for this set of drawings are applied to the cover page(s)	Print Date: 4/28/2024 File Name: U04-001 UTILITY GENERAL NOTES.DWG Horiz. Scale: N/A Vert. Scale: N/A	Date: _____ Comments: _____ Initials: _____	 12076 Grant Street Thornton CO 80241 PH: (303) 886-9300 Fax: (303) 886-5380	 PUBLIC WORKS 646 HOLLEROCK ST. ERIE CO 88515	No Revisions: _____ Revised: _____ Void: _____	WEED COUNTY ROAD 3 BRIDGE REPLACEMENT UTILITY TEST HOLE TABLE	Designer: N. CLOUSE Detailer: H. PLUGH Sheet Subsets: UTILITIES Subsets: 2 of 3	Project No. P22-076 Drawing Number UT04-002 Sheet Number 30
	Know what's below. Call before you dig.							

Plot Date: 4/28/2024 10:15 AM Plotted By: Rudy Pinks
 P:\10-PROJECTS\ACTIVE PROJECTS\13401-TOWN OF ERIE-WCR3 BRIDGE REHAB\WCR3_COMPUTER DESIGN FILES\WCR3_SHEET FILES\UTIL-001 UTILITY PLANS.DWG

Print Date: 4/28/2024
 The Name: UTIL-001 UTILITY PLANS.DWG
 Horiz. Scale: As Noted
 Vert. Scale: N/A



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 Pkt. (303) 962-9300
 Fax: (303) 962-5550

Sheet Revisions	
Date	Comments



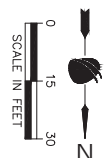
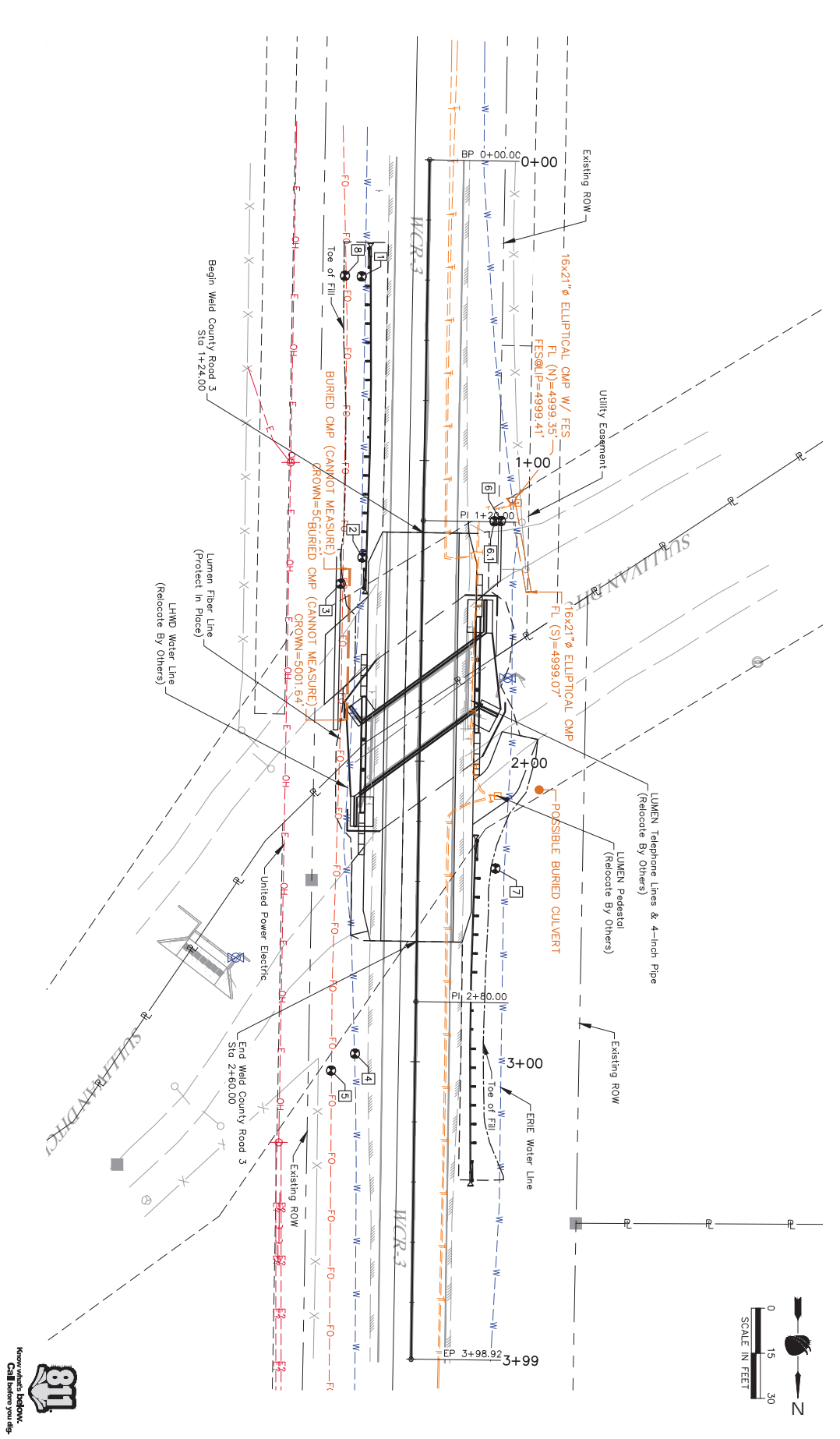
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No Revisions:	
Revised:	
Void:	

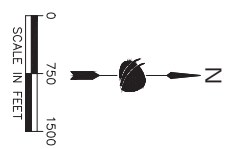
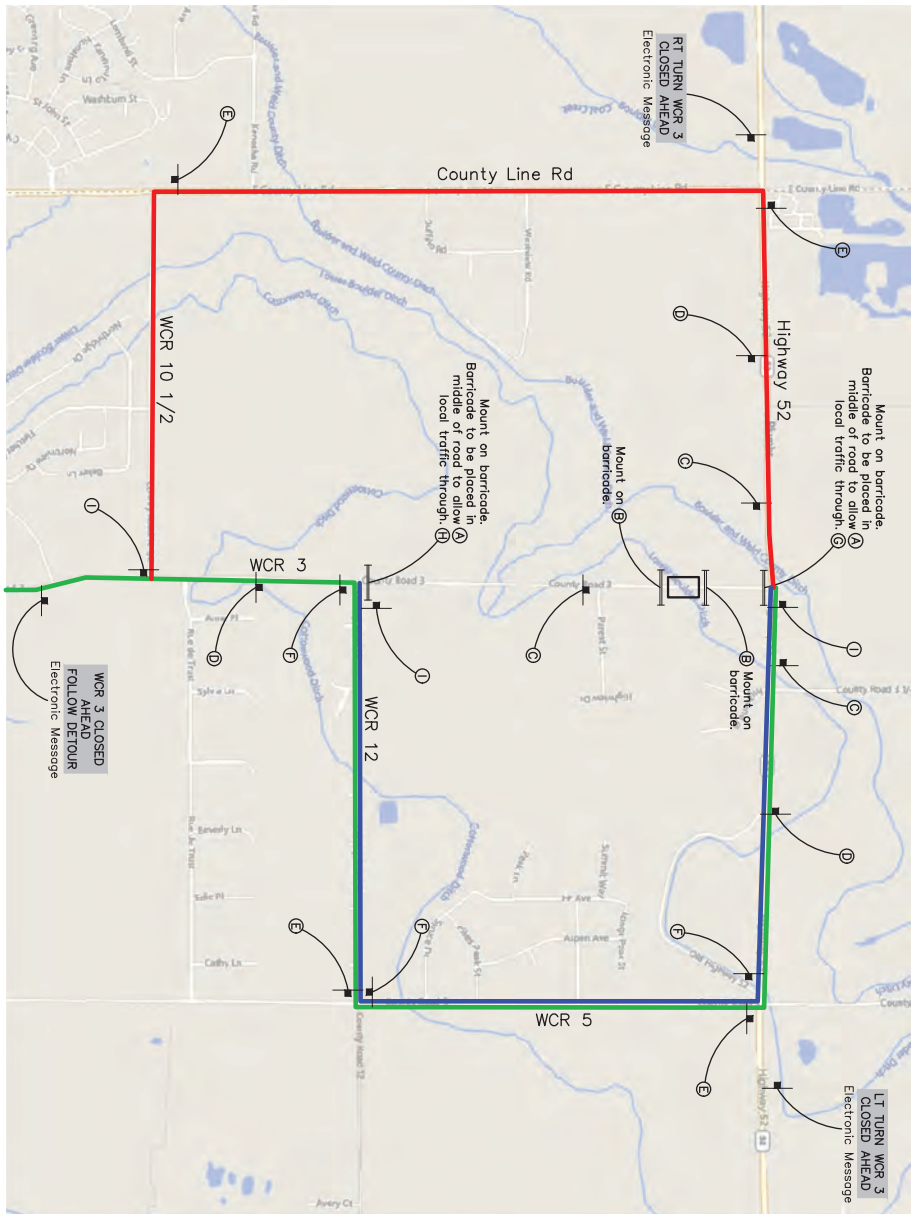
**WELD COUNTY ROAD 3
 BRIDGE REPLACEMENT
 UTILITY PLANS**

Designer: N. CLOUSE
 Detailer: H. PUGH

Subset Streets: 3 of 3
 Drawing Number: UTIL-001
 Sheet Number: 31



Plot Date: 4/28/2024 10:17 AM Plotted By: Rudy Parks
 P:\G-PROJECTS\ACTIVE PROJECTS\TRAFFIC\TOWN OF ERIE-WCR3 BRIDGE REHAIR\WCR3_COMPUTER DESIGN FILES\WCR3_SHEET FILES\TRAFFIC 001 DETOUR PLAN.DWG



SIGN	DESCRIPTION	DIMENSION		PANEL SIZE EACH
		A	B	
WCR-1	ROAD WORK AHEAD	36" x 36"	3	3
WCR-7	FLASHER (BYE BOLL)	36" x 36"	2	2
WCR-1	ONE LANE ROAD AHEAD	36" x 36"	2	2
WCR-2	DETOUR AHEAD	36" x 36"	2	2
M-4-L	DETOUR LEFT	36" x 24"	4	4
M-4-R	DETOUR RIGHT	36" x 24"	3	3
M-4-B	ROAD CLOSED	36" x 36"	3	3
WCR-2	ROAD CLOSED	36" x 36"	3	3
M-4-B	END DETOUR	24" x 36"	1	1
M-4-R	DETOUR RIGHT	36" x 36"	1	1
M-4-L	DETOUR LEFT	36" x 36"	1	1
TOTALS				
			38	38

ITEM	DESCRIPTION	UNIT	QUANTITY
WCR-0001	FLASHERS	INCH	38
WCR-0002	TRAFFIC CONTROL SIGNIFICATION	QTY	38
WCR-0003	TRAFFIC CONTROL SIGNIFICATION	QTY	38
WCR-0004	TRAFFIC CONTROL SIGNIFICATION	QTY	38
WCR-0005	TRAFFIC CONTROL SIGNIFICATION	QTY	38
WCR-0006	TRAFFIC CONTROL SIGNIFICATION	QTY	38
WCR-0007	TRAFFIC CONTROL SIGNIFICATION	QTY	38
WCR-0008	TRAFFIC CONTROL SIGNIFICATION	QTY	38
WCR-0009	TRAFFIC CONTROL SIGNIFICATION	QTY	38
WCR-0010	TRAFFIC CONTROL SIGNIFICATION	QTY	38
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WCR-0097	TRAFFIC CONTROL SIGNIFICATION	QTY	38
WCR-0098	TRAFFIC CONTROL SIGNIFICATION	QTY	38
WCR-0099	TRAFFIC CONTROL SIGNIFICATION	QTY	38
WCR-0100	TRAFFIC CONTROL SIGNIFICATION	QTY	38

Print Date: 4/28/2024

The Name: TRAF-TC 001 DETOUR PLAN.DWG

Horiz. Scale: As Noted

Vert. Scale: N/A

RockSol Consulting Group Inc.

12076 Grant Street
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 Pkt. (303) 582-3300
 Fax: (303) 582-3300

Date

Comments

Initials

ROAD CLOSED LOCAL TRAFFIC ONLY
R11-30

BRIDGE OUT
R11-2

ROAD CLOSED 1000 FT
W20-3

DETOUR AHEAD
W20-2

DETOUR
M4-9L

DETOUR
M4-9R

DETOUR
M4-10R

DETOUR
M4-10L

END DETOUR
M4-80

As Constructed

No Revisions:

Revised:

Void:

WELD COUNTY ROAD 3
 BRIDGE REPLACEMENT
 DETOUR PLAN

Designer: R. Parks
 Detailer: H. PUGH
 Sheet Subsets: TRAFFIC Subsets: 1 of 1

Project No. P22-076

Drawing Number: TRAF-001

Sheet Number: 32

Plot Date: 4/28/2024 10:18 AM Plotted By: Rudy Proke
 R:\10-PROJECTS\ACTIVE PROJECTS\3401-TOWN OF ERIE- WCR3 BRIDGE REPLACEMENT COMPUTER DESIGN FILES\02-SHEET FILES\ENV-01 SWMP NARRATIVE.DWG

Print Date: 4/28/2024

The Name: ENV-001 SWMP NARRATIVE.DWG

Horiz. Scale: N/A

Vert. Scale: N/A

Rocksol
 Consulting Group, Inc.
 12076 Grant Street
 Thornton, CO 80241
 Pkt. (303) 862-3300
 Fax: (303) 862-5850

Sheet Revisions	
Date	Comments

INITIALS

TOWN OF ERIE

PUBLIC WORKS
 666 HOLBROOK ST.
 ERIE, CO 80515

As Constructed

No Revisions:
 Revised:
 Void:

WELD COUNTY ROAD 3
 BRIDGE REPLACEMENT
 SWMP NARRATIVE

Designer: L. GENTILE
 Detailer: H. PUGH
 Sheet Subsets: ENV1
 Subset Streets: 2 of 3

Drawing Number ENV-002
 Sheet Number 34

Template Revised: 2/25/2022

Know what's below.
 Call before you dig.

14. MULCHING APPLICATION:
 Spray-on-Mulch Blanket shall be applied in accordance with Erie Parks and Recreation Construction Section 1033. Seeded areas will be mulched with twenty-five hundred (2,500) pounds per acre of spray-on-mulch blanket immediately following seeding. Spray-on-mulch blanket must include one hundred and fifty (150) pounds per acre organic rockifier. At this rate soil coverage is 100%. Any tin areas in the mulch, where soil is visible, will be cause for a request to reapply mulch until the coverage is satisfactory, at the Contractor's expense. If weather conditions deteriorate, Contractor will delay work until conditions improve. Mulch must be applied in a separate operation on the same day as seeding. No hay will be permitted on the construction site for any purpose.

17. SPECIAL REQUIREMENTS:
 Soil amendments, seeded preparation, and permanent stabilization mulching shall be accomplished within four working days of placing the topsoil. If placed topsoil is not mulched with permanent stabilization mulch within **four working days**, the Contractor shall complete interim stabilization methods in accordance with subsection 208.04(e) or no additional cost to the Town.
 Permanent stabilization mulching shall be accomplished on the same day as application of native seed. The Contractor shall submit a proposed Permanent Stabilization Phasing Plan to the Engineer for approval showing how the SWMP Permanent Stabilization Plans will be implemented to minimize damage to seeded areas.

18. SOIL AMENDMENT REQUIREMENTS:
 Minimum amendment material requirements for all disturbances to receive seeding (native). Soil amendments shall be paid under 21-200032 Soil Conditioning and shall consist of a mixture consisting of the three below described amendments:

Total Acres of Seeding (Native) Broadcast with Topsoil Generated From Topsoil (Onsite)			
Description	Amount/Acre	Units	Total For This Method
Organic Fertilizer High N	300	Pounds	30
Compost	65	CY	6.5
Humate	200	Pounds	20
Mycorrhizae	0	Pounds	0
Elemental Sulfur	0	Pounds	0

A. RESEEDING OPERATIONS/CORRECTIVE STABILIZATION:
 Prior to partial acceptance, all seeded areas shall be reviewed by the Engineer for bare soils caused by surface or wind erosion, bare areas caused by surface or gully erosion, blown away mulch, etc. shall be re-graded, seeded, and have the designated mulching applied as necessary, at no additional cost to the project.

19. PRIOR TO PROJECT FINAL ACCEPTANCE
 1. When directed by the Engineer, removal and disposal of temporary control measures shall be included in the cost of work.
 2. Refer to specification 208.10 for items to be completed prior to requesting partial acceptance of work.

20. TABULATION OF STORMWATER QUANTITIES
 1. Control Measure sediment removal and disposal shall be paid for as: 208 Removal and Disposal of Sediment [Equipment] and 208 Removal and Disposal of Sediment [Labor]. All other control measure maintenance shall be included in the cost of the control measure.
 The following pay items can be used for interim stabilization as defined in section 208.04(e)(2): 21-00012 and 21-3-00150
 Website <https://www.codot.gov/business/designsupport/cdot-construction-specifications/2021-construction-specifications>

21. BIOLOGICAL IMPACTS AND DEWATERING
A. ENVIRONMENTAL IMPACTS:
 Wetland Impacts: NO
 Stream Impacts: Yes

Stream Name	Description
Sullivan Ditch	Mannmade canal with vegetated banks

Threatened and Endangered Species: No species are anticipated to be impacted by the project.

B. DEWATERING:
 Not covered under the CDPHE guidance document Low Risk Discharge Guidance Discharges of Unconfined Groundwater to Land:
<https://www.colorado.gov/pacific/sites/default/files/MG%20LQR%20RISK%20CGW.pdf>
 Dewatering: Refer to other environmental permits in accordance with subsection 107.02 and the permits contained in Tab 16 of the SWMP.
 If groundwater does not meet water quality standards for receiving water a separate CDP's Dewatering Permit shall be obtained by the Contractor from CDPHE in accordance with subsections 107.02 and 107.25.

*It is anticipated that additional control measures and control measure quantities not shown on the SWMP Site Maps shall be required on the project for unforeseen conditions and replacement of items that are beyond their useful service life, see subsections 208.03 and 208.04. Quantities for all control measures shown above are estimated, and have been increased for unforeseen conditions and normal control measure life expectancy. Quantities shall be adjusted according to the conditions encountered in the field as directed and approved by the Engineer. Payment shall be for the actual work completed and material used.

PSR Spec.	Pay Item	Description	Pay Unit	Initial Const.	Interim Const.	Permanent Stabilization	*Total Quantity
	208-00002	Emson Log Type 1 (12 Inch)	LF	150	150		300
	208-00035	Aggregate Bag	LF	100	50		150
	208-00020	Silt Fence	LF	100			100
	208-00046	Pre-fabricated Concrete Washout Structure (Type 1)	Each	2			2
	208-00075	Pre-fabricated Vehicle Tracking Pad	Each	2			2
	208-00106	Sweeping (Sediment Removal)	Hour		24		24
	208-00103	Removal and Disposal of Sediment (Labor)	Hour		24		24
	208-00105	Removal and Disposal of Sediment (Equipment)	Hour		24		24
	212-00006	Seeding (Native)	Acre				0.1
	212-00032	Soil Conditioning	Acre				0.1
	213-00012	Spray-On-Mulch Blanket	Acre				0.1
	213-00150	Bonded Fiber Matrix	Acre		1.0		1.0

Plot Date: 4/28/2024 10:18 AM Plotted By: Rudy Pinks
 P:\10-PROJECTS\ACTIVE PROJECTS\13401-TOWN OF ERIE-WCR3 BRIDGE REHAB\WCR3_COMPUTER DESIGN FILES\ENV-003 SWMP PLAN\DWG

Print Date: 4/28/2024
 The Name: ENV-003 SWMP PLAN\DWG
 Horiz. Scale: As Noted
 Vert. Scale: N/A

 12076 Grant Street
 Thornton, CO 80241
 Pkt. (303) 862-3300
 Fax: (303) 862-3380

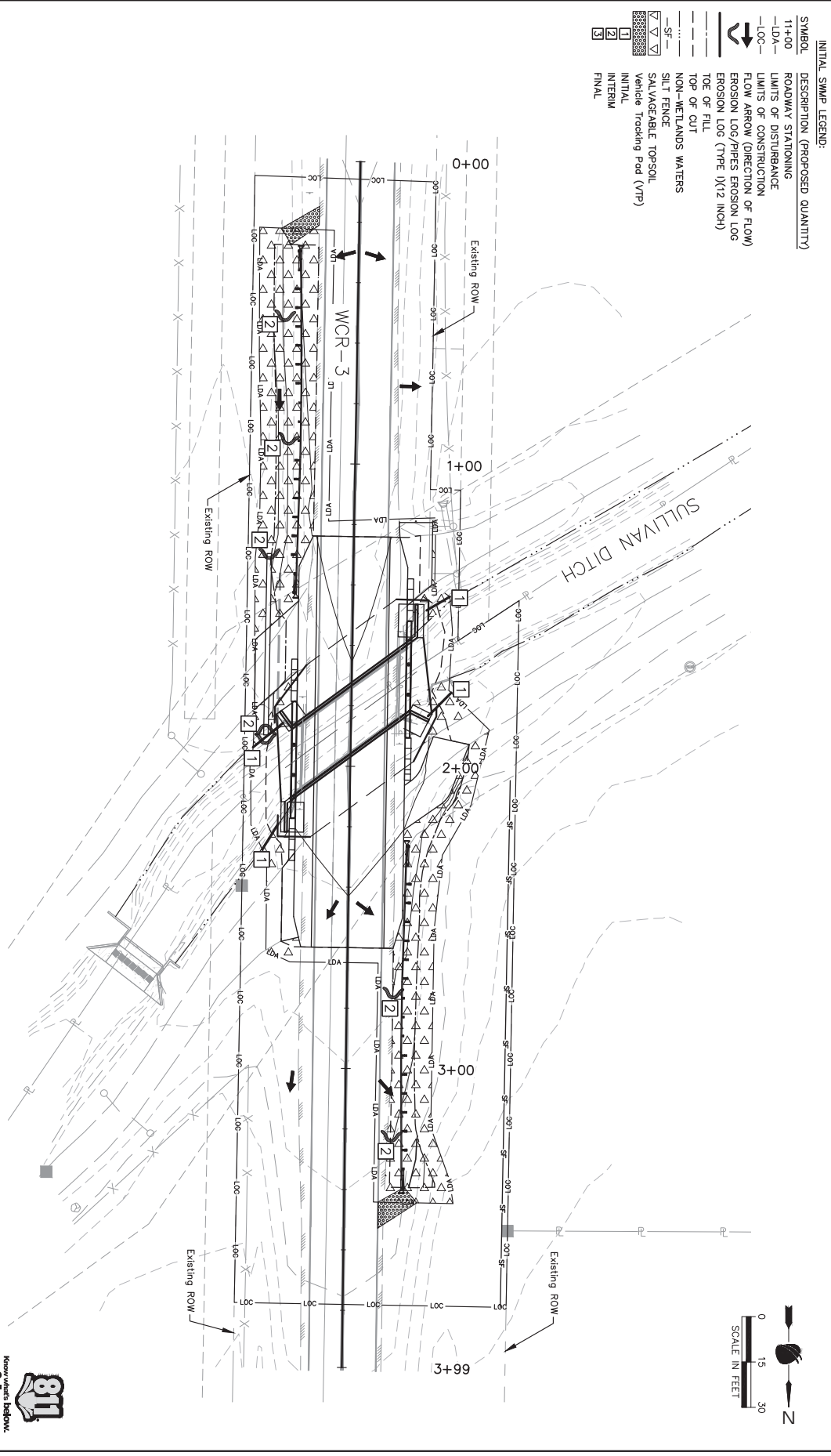
Sheet Revisions		
Date	Comments	Initials



PUBLIC WORKS
 666 HOLBROOK ST.
 ERIE, CO 80515

As Constructed	
No Revisions:	
Revised:	
Void:	
Designer:	L. GENTILE Structures
Detailer:	H. PUGH Numbers
Sheet Subsets:	ENV1 Subsets Streets: 3 of 3

Project No.	
P22-076	
Drawing Number ENV-003	
Sheet Number	35



INITIAL SWMP LEGEND:

SYMBOL	DESCRIPTION (PROPOSED QUANTITY)
1+00	ROADWAY STATIONING
LDA	LIMITS OF DISTURBANCE
LOC	LIMITS OF CONSTRUCTION
→	FLOW ARROW (DIRECTION OF FLOW)
▾	EROSION LOG /PIPES EROSION LOG
▾	EROSION LOG (TYPE 1)(12 INCH)
▾	TOE OF FILL
▾	TOE OF CUT
▾	NON-WETLANDS WATERS
▾	SILT FENCE
▾	SALVAGEABLE TOPSOIL
▾	Vehicle Tracking Pod (VTP)
▾	INITIAL
▾	INTERNAL
▾	FINAL

