Docusign Envelope ID: 1016404A-DDC8-4097-A7D6-A5B7AA527A8A

CHANGE ORDER

Number 1

Date: May 13, 2025
To: Dirtworks
From: City of Grand Junction, Department of Public Works and Utilities
Project: **Monument Connect Trail - Phase 2 - Addendum 2**
P.O.: **GJPO100016**

It is agreed to modify the Contract for the Project as follows:

Due to construction means and methods, and existing material viability, the existing embankment sourced for fill on the construction site ran out before the fill at the west switchbacks (Sta 29+50 to Sta 33+00) could be installed. The Project Engineer decided to use Class 6 base material for the import material to establish grade under the trail and shoulders. The existing pricing of $26.50 will be used for this additional material. This Change Order also includes additional time for the winter shut down in January and February.

Summary of Contract price adjustments - itemized on the attached sheet(s):

Original Contract Amount	$1,299,327.45
Approved Change Orders	0.00
This Change Order	69,848.17
Revised Contract Amount	$1,369,175.62

Summary of Contract time adjustments:

Original Contract Time	182.	Cal. Days
Approved Change Orders	0.	
This Change Order	56.	
Revised Contract Time	238.	Cal. Days

Construction Start Date: October 1, 2024
Contract Completion Date: May 26, 2025

This modification constitutes compensation in full for all costs and mark-ups directly and/or indirectly attributable to the changes ordered herein, for all delays, impacts and disruptions related thereto and for performance of the changes within the Contract Time.

Owner: **City of Grand Junction**

Prepared by: Signed by: Kirsten Armbruster 80EF8BEDD468483... Date: 5/22/2025
Kirsten Armbruster, Project Engineer

Recommended by: DocuSigned by: Ken Sherbenou 13B0EAE622F547B... Date: 5/22/2025
Ken Sherbenou, Parks Director

Approved by: Signed by: Mike Bennett – City Manager 7245B2BCAB8F4F3... Date: 5/30/2025
Mike Bennett, City Manager

Contractor: **Dirtworks**

Signature: Signed by: E5003CD5465B42A... Date: 5/30/2025

Name and Title: Branden Hughes Owner/President

Docusign Envelope ID: 1016404A-DDC8-4097-A7D6-A5B7AA527A8A

Monument Connect Trail - Phase 2 - Addendum 2 -- City P.O. No. GJPO100016

May 13, 2025

Change Order No. 1

Item No.	CDOT, City Ref.	Description	Original Contract Quantity	Units	Unit Price	Extended Price	Revised Quantity	Units	Unit Price	Extended Price	Change
- - -	- - -	Construction Period	182	Cal. Days	- - -	- - -	238	Cal. Days	- - -	- - -	56
1	102.1	Reinforced Concrete Pipe (RCP) (76-inch x 48-inch Horizontal Elliptical) (Includes bedding, material and install)	80.	Lin. Ft.	$ 583.00	$ 46,640.00	80	Lin. Ft.	$ 583.00	$ 46,640.00	
2	102.1	Reinforced Concrete Pipe (RCP) (48-inch) (Includes bedding, material and install)	24.	Lin. Ft.	$ 245.00	$ 5,880.00	24	Lin. Ft.	$ 245.00	$ 5,880.00	
3	102.1	Reinforced Concrete Pipe (RCP) (24-inch) (Includes bedding, material and install)	144.	Lin. Ft.	$ 85.00	$ 12,240.00	144	Lin. Ft.	$ 85.00	$ 12,240.00	
4	102.1	Reinforced Concrete Pipe (RCP) (18-inch) (Includes bedding, material and install)	72.	Lin. Ft.	$ 58.00	$ 4,176.00	72	Lin. Ft.	$ 58.00	$ 4,176.00	
5	102.1	Reinforced Concrete Pipe (RCP) (12-inch) (Includes bedding, material and install)	24.	Lin. Ft.	$ 54.00	$ 1,296.00	24	Lin. Ft.	$ 54.00	$ 1,296.00	
6	102.1	Reinforced Concrete Box Culvert (CBC) (9 ft wide by 4 ft high (Delivery from Rinker Materials, bedding and Install Only)	74.	Lin. Ft.	$ 400.00	$ 29,600.00	74	Lin. Ft.	$ 400.00	$ 29,600.00	
7	102.1	Reinforced Concrete Box Culvert (CBC) (9 ft wide by 5 ft high (Delivery from Rinker Materials, bedding and Install Only)	74.	Lin. Ft.	$ 400.00	$ 29,600.00	74	Lin. Ft.	$ 400.00	$ 29,600.00	
8	102.13	Area Inlet (Type D, H = 3.5 FT) (CDOT M-604-11)	1.	Each	$ 6,500.00	$ 6,500.00	1	Each	$ 6,500.00	$ 6,500.00	
9	201	Clearing and Grubbing	5.2	Acre	$ 1,500.00	$ 7,800.00	5.2	Acre	$ 1,500.00	$ 7,800.00	
10	202	Removal of Tree (2" dia.)	6.	Each	$ 100.00	$ 600.00	6	Each	$ 100.00	$ 600.00	
11	203	Unclassified Excavation (Complete in Place)	2,700.	Cu. Yd.	$ 8.00	$ 21,600.00	2700	Cu. Yd.	$ 8.00	$ 21,600.00	
12	208	Erosion Logs (12 inch)	1,210.	Lin. Ft.	$ 5.50	$ 6,655.00	1210	Lin. Ft.	$ 5.50	$ 6,655.00	
13	208	Compacted Earthen Berms	2,790.	Lin. Ft.	$ 2.00	$ 5,580.00	2790	Lin. Ft.	$ 2.00	$ 5,580.00	
14	208	Aggregate Bag	10.	Each	$ 30.00	$ 300.00	10	Each	$ 30.00	$ 300.00	
15	208	Concrete Washout Structure	2.	Each	$ 1,200.00	$ 2,400.00	2	Each	$ 1,200.00	$ 2,400.00	
16	208	Vehicle Track Pad	3.	Each	$ 800.00	$ 2,400.00	3	Each	$ 800.00	$ 2,400.00	
17	208	BMP Swale Berms	32.	Each	$ 500.00	$ 16,000.00	32	Each	$ 500.00	$ 16,000.00	

[x] - See Change Order No. "x"

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Monument Connect Trail - Phase 2 - Addendum 2 -- City P.O. No. GJPO100016

May 13, 2025

Change Order No. 1

Item No.	CDOT, City Ref.	Description	Original Contract Quantity	Units	Unit Price	Extended Price	Revised Quantity	Units	Unit Price	Extended Price	Change
- - -	- - -	Construction Period	182	Cal. Days	- - -	- - -	238	Cal. Days	- - -	- - -	56
18	209	Dust Abatement	1.	LS	$ 2,100.00	$ 2,100.00	1	LS	$ 2,100.00	$ 2,100.00	
19	210	Reset Sign	1.	Each	$ 250.00	$ 250.00	1	Each	$ 250.00	$ 250.00	
20	210	Adjust existing metal post and rail fence at bike park	1.	LS	$ 1,500.00	$ 1,500.00	1	LS	$ 1,500.00	$ 1,500.00	
21	212	Seeding (Native) (Hydroseed) (Use Seed Mixes Specified Based on Property Owner - City or BLM)	4.5	Acre	$ 5,000.00	$ 22,500.00	4.5	Acre	$ 5,000.00	$ 22,500.00	
22	216	Soil Retention Blanket (Coconut) (As Needed Where Disturbed Slope is Greater Than 3:1)	1,000.	Sq. Yd.	$ 5.25	$ 5,250.00	1000	Sq. Yd.	$ 5.25	$ 5,250.00	
23	304	Granular Stabilization Material (Type B) (Crushed Rock) (As Needed in Excavations Where Unstable Bottom Exists)	20.	Ton	$ 48.00	$ 960.00	20	Ton	$ 48.00	$ 960.00	
24	304	Aggregate Base Course (Class 6) (12 inch thick shoulders)	3,411.	Ton	$ 26.50	$ 90,391.50	6046.78	Ton	$ 26.50	$ 160,239.67	$ 69,848.17
25	304	Aggregate Base Course (Class 3) (subgrade stabilization as needed)	500.	Cu. Yd.	$ 45.00	$ 22,500.00	500	Cu. Yd.	$ 45.00	$ 22,500.00	
26	306	Reconditioning (12 inches deep)	20,253.	Sq. Yd.	$ 1.50	$ 30,379.50	20253	Sq. Yd.	$ 1.50	$ 30,379.50	
27	306	Singletrack Trail (3-ft wide) (Complete in Place)	880.	Lin. Ft.	$ 4.50	$ 3,960.00	880	Lin. Ft.	$ 4.50	$ 3,960.00	
28	504	Precast Concrete Block Retaining Wall System (includes all necessary appurtenances, work, etc. to complete).	508.	FSF	$ 58.50	$ 29,718.00	508	FSF	$ 58.50	$ 29,718.00	

[x] - See Change Order No. "x"

Docusign Envelope ID: 1016404A-DDC8-4097-A7D6-A5B7AA527A8A

Monument Connect Trail - Phase 2 - Addendum 2 -- City P.O. No. GJPO100016

May 13, 2025

Change Order No. 1

Item No.	CDOT, City Ref.	Description	Original Contract Quantity	Units	Unit Price	Extended Price	Revised Quantity	Units	Unit Price	Extended Price	Change
- - -	- - -	Construction Period	182	Cal. Days	- - -	- - -	238	Cal. Days	- - -	- - -	56
29	504	Concrete Wall (Class D) per M and S Standard M-601-20 (Wall Design Height 3' to 6' per plan). (Includes associated headwall, and toe walls) Work shall include approximately 6,000 lbs. Reinforcing Steel (Epoxy Coated), 130 sy Structural Concrete Coating (Exposed wall), 84 cy Structural Backfill (Class 1) and any necessary appurtenances to complete work.	64.	Cu. Yd.	$ 1,860.00	$ 119,040.00	64	Cu. Yd.	$ 1,860.00	$ 119,040.00	
30	506	Riprap (D50 = 12 inch)	100.	Cu. Yd.	$ 45.00	$ 4,500.00	100	Cu. Yd.	$ 45.00	$ 4,500.00	
31	506	Landscape Boulders (Site Access Control)	112.	Each	$ 75.00	$ 8,400.00	112	Each	$ 75.00	$ 8,400.00	
32	514	Detectable Warning (Cast Iron, Wet Set) (2 ft x 2 ft)	15.	Each	$ 161.00	$ 2,415.00	15	Each	$ 161.00	$ 2,415.00	
33	601	Cast-in-Place Concrete Footings to support shade structures (1.5 ft diameter, 6 ft drilled into ground, including rebar per details)	24.	LF	$ 158.00	$ 3,792.00	24	LF	$ 158.00	$ 3,792.00	
34	608	Colored Concrete Sidewalk (6" Thick) to include 6" of Class 6 Aggregate Base Course	10,167.	Sq. Yd.	$ 55.45	$ 563,760.15	10167	Sq. Yd.	$ 55.45	$ 563,760.15	
35	608	Colored Concrete Curb Ramp to include 6" of Class 6 Aggregate Base Course	150.	Sq. Yd.	$ 108.60	$ 16,290.00	150	Sq. Yd.	$ 108.60	$ 16,290.00	
36	608	Colored Concrete Pad for Benches (6 inch thick)(Includes 6 inch thick Class 6 ABC) (Location To Be Decided)	18.	Sq. Yd.	$ 71.35	$ 1,284.30	18	Sq. Yd.	$ 71.35	$ 1,284.30	
37	620	Portable Sanitary Facility	2.		$ 500.00	$ 1,000.00	2		$ 500.00	$ 1,000.00	
38	625	Construction Surveying (Includes As-Built Drawings)	1.	LS	$ 38,570.00	$ 38,570.00	1	LS	$ 38,570.00	$ 38,570.00	
39	626	Mobilization	1.	LS	$ 64,000.00	$ 64,000.00	1	LS	$ 64,000.00	$ 64,000.00	
40	630	Traffic Control (Complete in Place)	1.	LS	$ 7,500.00	$ 7,500.00	1	LS	$ 7,500.00	$ 7,500.00	

[x] - See Change Order No. "x"

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Monument Connect Trail - Phase 2 - Addendum 2 -- City P.O. No. GJPO100016

May 13, 2025

Change Order No. 1

Item No.	CDOT, City Ref.	Description	Original Contract Quantity	Units	Unit Price	Extended Price	Revised Quantity	Units	Unit Price	Extended Price	Change
- - -	- - -	Construction Period	182	Cal. Days	- - -	- - -	238	Cal. Days	- - -	- - -	56
MCR		Minor Contract Revisions	- - -	- - -	$ 60,000.00	$ 60,000.00	- - -	- - -	$ 60,000.00	$ 60,000.00	$ 0.00
		TOTALS:				$ 1,299,327.45				$ 1,369,175.62	$ 69,848.17

[x] - See Change Order No. "x"

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NOTICE TO PROCEED

Date: October 14 2024

Contractor: Dirtworks Construction, LLC

Project: Monument Connect Phase 2 Multi-Modal Concrete Path Construction
IFB-5491-24-DD

In accordance with the Contract dated September 27, 2024, the Contractor is hereby notified to begin work on the Project on or before October 21, 2024.

The date of final completion shall be March 31, 2025.

CITY OF GRAND JUNCTION, COLORADO

Dolly Daniels, Senior Buyer

Receipt of this Notice to Proceed is hereby acknowledged:

Contractor: Dirtworks Construction, LLC

By: Signed by: Branden Hughes 095A400B38EC45A...

Print Name: Branden Hughes

Title: Owner/President

Date: 10/15/2024

CITY OF Grand Junction COLORADO

Please send the invoice for this order to the address shown. Failure to use our order number on any documentation pertaining to this order may result in return of shipment or delayed payment.

Supplier:

Dirtworks Construction
Grand Junction, CO 81505

Ship To:

244 North 7th Street
GRAND JUNCTION, CO 81501
UNITED STATES

Bill To:

Engineering
244 North 7th Street
GRAND JUNCTION, CO 81501
UNITED STATES

SUPPLIER #: 10444
FAX#:
EMAIL:

Order Number	Order Date
GJPO100016	

NOTES: Award IFB-5491-24-DD

Tax Terms			*For the tax-exempt purchase, Grand Junction's tax ID is 84-6000592* *All Library Purchases are Tax Exempt - Tax ID 98-03544*		
Requestor			Phone	Net Terms Net 30	Date Required
QUANTITY	**UNIT**	**ITEM**	**DESCRIPTION**	**UNIT PRICE**	**EXTENDED PRICE**
			Monument Connect Phase 2		948,313.14
				Total	948,313.14

Approved: Sally Daniels

For Purchase Order Terms and Conditions, please visit www.gjcity.org, and select the Purchasing Division information page

CITY OF Grand Junction COLORADO

Purchase Order
No. 2024-00000481

DATE 09/27/2024

Ph. (970) 256-4048

Fax

Ship To
City of Grand Junction
Parks & Recreation - Admin
1340 Gunnison Ave
GRAND JUNCTION, CO 81501

Bill To
City of Grand Junction
Parks & Recreation - Admin
1340 Gunnison Ave
GRAND JUNCTION, CO 81501

Vendor
VENDOR NO. 5639
Dirtworks Construction
ACH
1010 21 1/2 Road
Grand Junction, CO 81505
Phone: (970) 256-1691

SHIP VIA Best Way
DELIVER BY
FREIGHT TERMS FOB Dest, Frght Prepaid _Allow
Payment Terms: Net 30 Days
Buyer Name: Dolly Daniels
Buyer Email: dollyd@gjcity.org

Award IFB-5491-24-DD

QUANTITY	UNIT	DESCRIPTION	UNIT COST	TOTAL COST
1.0000	Lump Su	CONTRACT SERVICES - Monument Connect Phase 2 201-710-385-380.8520 - Special Projects 1,299,327.45 G2208	1,299,327.4500	$1,299,327.45
			PURCHASE ORDER TOTAL	$1,299,327.45

Special Instructions:PURCHASE ORDER No. MUST APPEAR ON ALL INVOICES, SHIPPERS, PACKAGES, CORRESPONDENCE
Tax Exempt No. 98-03544

By: Dolly J. Daniels

For Purchase Order Terms and Conditions, please visit www.gjcity.org, and select the Purchasing Department information page.

Docusign Envelope ID: F1CDA6E5-8419-4CFD-881D-B1C0652410E5

CITY OF GRAND JUNCTION, COLORADO

****

CONTRACT

This CONTRACT made and entered into this **27th day of September, 2024** by and between the **City of Grand Junction, Colorado,** a government entity in the County of Mesa, State of Colorado, hereinafter in the Contract Documents referred to as the "Owner" and **Dirtworks Construction, LLC** hereinafter in the Contract Documents referred to as the "Contractor."

WITNESSETH:

WHEREAS, the Owner advertised that sealed Responses would be received for furnishing all labor, tools, supplies, equipment, materials, and everything necessary and required for the Project described by the Contract Documents and known as **Monument Connect – Phase 2 Multi-Modal Concrete Path Construction IFB-5491-24-DD.**

WHEREAS, the Contract has been awarded to the above-named Contractor by the Owner, and said Contractor is now ready, willing, and able to perform the Work specified in the Notice of Award, in accordance with the Contract Documents.

NOW, THEREFORE, in consideration of the compensation to be paid the Contractor, the mutual covenants hereinafter set forth and subject to the terms hereinafter stated, it is mutually covenanted and agreed as follows:

ARTICLE 1

Contract Documents: It is agreed by the parties hereto that the following list of instruments, drawings, and documents which are attached hereto, bound herewith, or incorporated herein by reference constitute and shall be referred to either as the "Contract Documents" or the "Contract", and all of said instruments, drawings, and documents taken together as a whole constitute the Contract between the parties hereto, and they are fully a part of this agreement as if they were set out verbatim and in full herein:

The order of contract document governance shall be as follows:

- The body of this Contract Agreement
- Solicitation Documents for the Project; **Monument Connect – Phase 2 Multi-Modal Concrete Path Construction IFB-5491-24-DD**
- Notice of Award
- Contractor's Response to the Solicitation
- Work Change Requests (directing that changed work be performed);
- Field Orders;
- Change Orders.

Docusign Envelope ID: F1CDA6E5-8419-4CFD-881D-B1C0652410E5

ARTICLE 2

Definitions: The clauses provided in the Solicitation apply to the terms used in the Contract and all the Contract Documents.

ARTICLE 3

Contract Work: The Contractor agrees to furnish all labor, tools, supplies, equipment, materials, and all that is necessary and required to complete the tasks associated with the Work described, set forth, shown, and included in the Contract Documents as indicated in the Solicitation Document.

ARTICLE 4

Contract Time and Liquidated Damages: Time is of the essence with respect to this Contract. The Contractor hereby agrees to commence Work under the Contract on or before the date specified in the Solicitation from the Owner, and to achieve Substantial Completion and Final Completion of the Work within the time or times specified in the Solicitation. In the event the Work is not completed in the times set forth and as agreed upon, the Contractor further agrees to pay Liquidated Damages to the Owner as set forth in the Solicitation. The Contractor acknowledges and recognizes the delays, expenses and difficulties involved in proving in a legal proceeding the actual losses suffered by the Owner if the work is not completed on time. Accordingly, instead of requiring any such proof, the Owner and the Contractor agree that as Liquidated Damages for delay, but not as a penalty, the Contractor shall pay to the Owner the amounts specified in the Solicitation.

ARTICLE 5

Contract Price and Payment Procedures: The Contractor shall accept as full and complete compensation for the performance and completion of all of the Work specified in the Contract Documents, the lump sum of **One Million, Two Hundred, Ninety-Nine Thousand, Three Hundred, Twenty-Seven and 45/100 Dollars ($1,299,327.45)**. If this Contract contains unit price pay items, the Contract price shall be adjusted in accordance with the actual quantities of items completed and accepted by the Owner at the unit prices quoted in the Solicitation Response. The amount of the Contract Price is and has heretofore been appropriated by the Grand Junction City Council for the use and benefit of this Project. The Contract Price shall not be modified except by Change Order or other written directive of the Owner. The Owner shall not issue a Change Order or other written directive which requires additional work to be performed, which work causes the aggregate amount payable under this Contract to exceed the amount appropriated for this Project, unless and until the Owner provides Contractor written assurance that lawful appropriations to cover the costs of the additional work have been made.

Unless otherwise provided in the Solicitation, monthly partial payments shall be made as the Work progresses. Applications for partial and Final Payment shall be prepared by the Contractor and approved by the Owner in accordance with the Solicitation.

Upon Final Completion of the Work under the Contract and before the Contractor shall receive final payment, the Owner shall publish at least twice in a newspaper of general circulation published in the County a notice that: 1. the Owner has accepted such Work as completed according to the Contract Documents; 2. the Contractor is entitled to final

Docusign Envelope ID: F1CDA6E5-8419-4CFD-881D-B1C0652410E5

payment therefore; 3. Thirty (30) days after the first publication, specifying the exact date, the Owner shall pay the full balance due under the Contract; and 4. persons having claims for labor, materials, team hire, sustenance, provisions, provender, or other supplies used or consumed by the Contractor or a subcontractor shall file a verified statement of the amount due and unpaid on account of such claim prior to the date specified for such payment. Nothing herein shall be construed as relieving the Contractor and the Sureties on the Contractor's Bonds from any claim or claims for work or labor done or materials or supplies furnished in the execution of the Contract.

ARTICLE 6

Bonds: The Contractor shall furnish currently herewith the Bonds required by the Contract Documents; such Bonds being attached hereto. The Performance Bond shall be in an amount not less than one hundred percent (100%) of the Contract Price set forth in Article 5. The Payment Bond shall be in an amount not less than one hundred percent (100%) of the Contract Price set forth in Article 5.

ARTICLE 7

Contract Binding: The Owner and the Contractor each bind itself, its partners, successors, assigns and legal representatives to the other party hereto in respect to all covenants, agreements and obligations contained in the Contract Documents. The Contract Documents constitute the entire agreement between the Owner and Contractor and may only be altered, amended, or repealed by a duly executed written instrument. Neither the Owner nor the Contractor shall, without the prior written consent of the other, assign or sublet in whole or in part its interest under any of the Contract Documents and specifically, the Contractor shall not assign any moneys due or to become due without the prior written consent of the Owner.

ARTICLE 8

Severability: If any part, portion or provision of the Contract shall be found or declared null, void or unenforceable for any reason whatsoever by any court of competent jurisdiction or any governmental agency having the authority thereover, only such part, portion or provision shall be affected thereby and all other parts, portions and provisions of the Contract shall remain in full force and effect.

IN WITNESS WHEREOF, City of Grand Junction, Colorado, has caused this Contract to be subscribed and sealed and attested in its behalf; and the Contractor has signed this Contract the day and the year first mentioned herein.

The Contract is executed in two counterparts.

CITY OF GRAND JUNCTION, COLORADO

By: DocuSigned by: Dolly Daniels
Dolly Daniels, Senior Buyer

9/27/2024
Date

Dirtworks Construction, LLC

By: DocuSigned by:
Branden Hughes, Owner/ President

9/27/2024
Date

Purchasing Division

Invitation for Bid

IFB-5491-24-DD
Monument Connect – Phase 2 Multi-Modal Concrete Path Construction

Responses Due:

September 4, 2024, prior to 2:00 PM (MST)

Accepting Electronic Responses Only
Responses Only Submitted Through the Rocky Mountain E-Purchasing System (RMEPS)

www.bidnetdirect.com/colorado

(Purchasing Representative does not have access or control of the vendor side of RMEPS. If website or other problems arise during response submission, vendor MUST contact RMEPS to resolve issue prior to the response deadline. 800-835-4603)

NOTE: All City solicitation openings will continue to be held virtually.

Purchasing Representative:
Dolly Daniels, Senior Buyer; Acting as Purchasing Agent
dollyd@gjcity.org
970-256-4048

Invitation for Bids

Table of Contents

Section 1 Instruction to Bidders

Section 2 General Contract Conditions

Section 3 Statement of Work

Section 4 Contractor's Bid Form

Price Proposal/Bid Schedule Form

Appendix (Click on Links in Section 3.5)

Attachment A: Special Provisions
Attachment B: Construction Documents
Attachment C: BLM ROW Grant – Plan of Development

1. Instructions to Bidders

NOTE: It is the Contractor's responsibility to read and review all solicitation documentation in its entirety, and to ensure that they have a clear and complete understanding of not only the scope, specifications, project requirements, etc., but also all other requirements, instructions, rules, regulations, laws, conditions, statements, procurement policies, etc. that are associated with the solicitation process and project/services being solicited.

1.1. Americans with Disability Act (ADA) Compliance Mandate: Following HB21-1110. all documents produced and submitted in response to this solicitation must adhere to the provisions outlined in §§24-85-101, C.R.S., and subsequent sections, as well as the Accessibility Standards for Individuals with a Disability, as established by the Office of Information Technology under section §24-85-103 (2.5), C.R.S. Additionally, all documents must align with the State of Colorado's technology standards related to accessibility, including Level A.A. conformity with the latest iteration of the Web Content Accessibility Guidelines (WCAG) as integrated within the State of Colorado's technology standards.

1.2. Required Review: The Offeror is responsible for thoroughly reviewing all solicitation documentation to gain a comprehensive understanding of the scope, specifications, project requirements, and all associated rules, regulations, laws, conditions, instructions, and procurement policies related to the solicitation process and the Project or Work outlined in this Invitation for Bid (IFB).

1.3. Purpose: The City of Grand Junction is soliciting competitive bids from qualified and interested Contractors for all labor, equipment, and materials required to construct a multi-modal path along the No Thoroughfare Creek and Monument Road east of South Camp Road. All dimensions and scope of work should be verified by Contractors prior to submission of bids.

IFB Questions:
Dolly Daniels; Purchasing Agent
dollyd@gjcity.org

With the exception of Pre-Bid or Site Visit Meeting(s) all questions, inquiries, comments, or communication pertaining to this Solicitation (whether process, specifications, scope, etc.) must be directed (in writing) to the Purchasing Agent. Other communication may result in disqualification.

1.4. Non-Mandatory Pre-Bid Meeting: Prospective bidders are encouraged to attend a non-mandatory pre-bid meeting on Friday, August 23, 2024, at 9:00 AM. Meeting location is at the Lunch Loop Trailhead parking lot, 2415 Monument Road Rd, Lat/Long (39.049914, -108.605013). The purpose of this visit will be to inspect and to clarify the contents of this Invitation for Bids (IFB).

1.5. **The Owner:** The Owner is the City of Grand Junction, Colorado and is referred to throughout this Solicitation. The term Owner means the Owner or his authorized representative.

1.6. **Compliance:** All Bidders, by submitting a bid, agree to comply with all conditions, requirements, and instructions of this IFB as stated or implied herein. Should the Owner omit anything which is necessary to clear understanding of the requirements, or should it appear that various instructions are in conflict, the Bidder(s) shall secure instructions from the Purchasing Agent prior to submittal deadline.

1.7. **Procurement Process:** The most current version of the City Purchasing Policy and Procedure Manual is contracting and applies to this Solicitation.

1.8. **Submission:** ***Each bid shall be submitted in electronic format only, and only through the Rocky Mountain E-Purchasing website (wwwbidnetdirect.com/colorado). This site offers both "free" and "paying" registration options that allow for full access of the Owner's documents and for electronic submission of bids.*** *(Note: "free" registration may take up to 24 hours to process. Please Plan accordingly.)* Please view our "**Electronic Vendor Registration Guide"** at http://www.gjcity.org/business-and-economic-development/bids/ for details. (Purchasing Representative does not have access or control of the vendor side of RMEPS. If website or other problems arise during response submission, vendor **MUST** contact RMEPS to resolve issues prior to the response deadline. **800-835-4603**)

Bid Opening Monument Connect - Phase 2 Multi-Modal Concrete Path Construction
Sep 4, 2024, 2:00 – 2:30 PM (America/Denver)
Please join my meeting from your computer, tablet or smartphone.
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United States: +1 (646) 749-3122
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1.9. **Modification and Withdrawal of Bids Before Opening.** Bids may be modified or withdrawn by an appropriate document stating such, duly executed and submitted to the place where Bids are to be submitted at any time prior to Bid Opening.

1.10. **Form for Price Bid:** All Price Bids must be made upon the Price Bid Schedule attached and state the amounts both in words and in figures and must be signed and acknowledged by the Bidder.

The Bidder shall specify a unit price in figures for each pay item for which a quantity is given and shall provide the products (in numbers) of the respective unit prices and quantities in the Extended Amount column. The total Bid price shall be equal to the sum

of all extended amount prices. When an item in the Price Bid Schedule provides a choice to be made by the Bidder, Bidder's choice shall be indicated in accordance with the specifications for that particular item and thereafter no further choice shall be permitted.

Where the unit of a pay item is lump sum, the lump sum amount shall be shown in the "extended amount" column and included in the summation of the total Bid.

All blank spaces in the Price Bid Schedule must be properly filled out.

Bids by Corporations must be executed in the corporate name by the president or vice president, or other business officer accompanied by evidence of authority to sign. The entity address and state of organization of the entity shall be shown below the signature. All names must be typed or printed below the signature.

Bids by partnerships must be executed in the partnership name and signed by a partner whose title must appear under the signature and the official address of the partnership must be shown below the signature.

The Bidder's Bid shall contain an acknowledgement of receipt of all Addenda, the numbers of which shall be filled in on the Contractor's Bid Form.

The contact information to which communications regarding the Bid are to be directed must be shown.

1.11. Exclusions: No oral, telephonic, emailed, or facsimile bid will be considered

1.12. Contract Documents: The complete IFB and bidder's response compose the Contract Documents. Copies of bid documents can be obtained from the City Purchasing website, https://co-grandjunction.civicplus.com/501/Purchasing-Bids .

1.13. Additional Documents: The July 2010 edition of the "City Standard Contract Documents for Capital Improvements Construction", Plans, Specifications and other Bid Documents are available for review or download on the Purchasing Bids page at https://co-grandjunction.civicplus.com/501/Purchasing-Bids.

1.14. Definitions and Terms: See Article I, Section 3 of the General Contract Conditions in the *Standard Contract Documents for Capital Improvements Construction*.

1.15. Examination of Specifications: Bidders shall thoroughly examine and be familiar with the project Statement of Work. The failure or omission of any Offeror to receive or examine any form, addendum, or other document shall in no way relieve any Offeror from any obligation with respect to his bid. The submission of a bid shall be taken as evidence of compliance with this section. Prior to submitting a bid, each Offeror shall, at a minimum:

a. Examine the *Contract Documents* thoroughly;

b. Visit the site to familiarize themselves with local conditions that may in any manner affect cost, progress, or performance of the Work;

c. Become familiar with federal, state, and local laws, ordinances, rules, and regulations that may in any manner affect cost, progress or performance of the Work;

d. Study and carefully correlate Bidder's observations with the *Contract Documents*, and;

e. Notify the Purchasing Agent of all conflicts, errors, ambiguities or discrepancies in or among the *Contract Documents* within the designated inquiry period.

On request, the Owner will provide each Offeror access to the site to conduct such investigations and tests as each Bidder deems necessary for submission of a Bid. It shall be the Offeror's responsibility to make or obtain any additional examinations, investigations, explorations, tests and studies and obtain any additional information and data which pertain to the physical conditions (including without limitation, surface, subsurface and underground utilities) at or contiguous to the site or otherwise which may affect cost, progress or performance of the work and which the Offeror deems necessary to determine its Bid for performing the work in accordance with the time, price and other terms and conditions of the Contract Documents. Location of any excavation or boring made by Offeror shall be subject to prior approval of Owner and applicable agencies. Offeror shall fill all holes, restore all pavements to match the existing structural section and shall clean up and restore the site to its former condition upon completion of such exploration. The Owner reserves the right to require the Offeror to execute an access agreement with the Owner prior to accessing the site.

The lands upon which the Work is to be performed, rights of way, and access thereto, and other lands designated for use by Contractor in performing the Work, are identified on the Drawings.

Information and data reflected in the *Contract Documents* with respect to underground utilities at or contiguous to the site are based upon information and data furnished to the Owner and the Engineer by the owners of such underground utilities or others, and the Owner does not assume responsibility for the accuracy or completeness thereof, unless it is expressly provided otherwise in the *Contract Documents*.

By submission of a Bid, the Offeror shall be conclusively presumed to represent that the Offeror has complied with every requirement of these Instructions to Bidders, that the *Contract Documents* are not ambiguous and are sufficient in scope and detail to indicate and convey understanding of all terms and conditions for performance of the Work.

1.16. Questions Regarding Statement of Work: Any information relative to interpretation of Scope of Work or specifications shall be requested of the Purchasing Representative, in writing, in ample time, prior to the inquiry deadline.

1.17. Addenda & Interpretations: If it becomes necessary to revise any part of this solicitation, a written addendum will be posted electronically on the City's website at http://www.gjcity.org/business-and-economic-development/bids/ . The Owner is not bound by any oral representations, clarifications, or changes made in the written

specifications by Owner, unless such clarification or change is provided in written addendum form from the City Purchasing Representative.

1.18. Taxes: The Owner is exempt from State, County, and Municipal Sales Tax and Federal Excise Tax, therefore, all fees and costs should not include taxes.

1.19. Sales and Use Taxes: The Contractor and all Subcontractors are required to obtain exemption certificates from the Colorado Department of Revenue for sales and use taxes in accordance with the provisions of the General Contract Conditions, Section XVI "Taxes". Bids shall reflect this method of accounting for sales and use taxes on materials, fixtures, and equipment.

1.20. Offers Binding 60 Days: Unless additional time is required by the Owner, or otherwise specified, all formal offers submitted shall be binding for sixty (60) calendar days following opening date, unless the Bidder, upon request of the Purchasing Agent, agrees to an extension.

1.21. Exceptions and Substitutions: All bids meeting the intent of this IFB shall be considered for award. A Bidder taking exception to the specifications does so at the Bidder's risk. The Owner reserves the right to accept or reject any or all substitutions or alternatives. When offering substitutions and/or alternatives, Bidder must state any exception(s) in the section to which the exception(s) pertain. Exception/substitution, if accepted, must meet, or exceed the stated intent and/or specifications. The absence of stated exception(s) indicates that the Bidder has not taken exception, and if awarded a Contract shall hold the Bidder responsible to perform in strict accordance with the specifications or scope of the bid and Contract Documents.

1.22. Collusion Clause: Each Bidder by submitting a bid certifies that it is not party to any collusive action or any action that may be in violation of the Sherman Antitrust Act. Any and all bids shall be rejected if there is evidence or reason for believing that collusion exists among Bidders. The Owner may, or may not, accept future bids for the same Work or commodities from participants in such collusion.

1.23. Disqualification of Bidders: A Bid will not be accepted from, nor shall a Contract be awarded to, any person, firm, or corporation that is in arrears to the Owner, upon debt or contract, or that has defaulted, as surety or otherwise, upon any obligation to the Owner, or that is deemed irresponsible or unreliable.

Bidders may be required to submit satisfactory evidence that they are responsible, have a practical knowledge of the project bid upon and that they have the necessary financial and other resources to complete the proposed Work.

Either of the following reasons, without limitation, shall be considered sufficient to disqualify a Bidder and Bid:

a. More than one Bid is submitted for the same Work from an individual, firm, or corporation under the same or different name; and

b. Evidence of collusion among Bidders. Any participant in such collusion shall

not receive recognition as a Bidder for any future work of the Owner until such participant has been reinstated as a qualified bidder.

1.24. Public Disclosure Record: If the Bidder has knowledge of its employee(s) or sub-contractors having an immediate family relationship with an Owner employee or elected official, the Bidder must provide the Purchasing Agent with the name(s) of the individuals. The individuals are required to file a "Public Disclosure Record", a statement of financial interest, before conducting business with the Owner.

2. General Contract Conditions for Construction Projects

2.1. The Contract: This Invitation for Bid submitted documents, and any negotiations, when properly accepted by the Owner, shall constitute an enforceable Contract equally binding between the Owner and Contractor. The Contract represents the entire and integrated agreement between the Owner and Contractor and supersedes all prior negotiations, representations, or agreements, either written or oral including the bid documents. The Contract may be amended or modified with Change Orders, Field Orders, or Addendums.

2.2. The Work: The term Work includes all labor necessary to produce the construction required by the Contract Documents, and all materials and equipment incorporated or to be incorporated in such construction.

2.3. Execution, Correlation, Intent, and Interpretations: The Contract Documents shall be signed by the Owner and Contractor. By executing the Contract, the Contractor represents that it has familiarized itself with the local conditions under which the Work is to be performed and correlated its observations with the requirements of the Contract Documents. The Contract Documents are complementary, and what is required by anyone, shall be as binding as if required by all. The intention of the Contract Documents is to include all labor, materials, equipment, services, and other items necessary for the proper execution and completion of the Scope of Work as defined in the technical specifications and drawings contained herein. All drawings, specifications and copies furnished by the Owner are, and shall remain, Owner property. It is not to be used on any other project.

2.4. The Owner: The Owner is the City and is referred to throughout the Contract Documents. The term Owner means the Owner or its authorized representative. The Owner shall, at all times, have access to the Work wherever it is in preparation and progress. The Contractor shall provide facilities for such access. The Owner will make periodic visits to the site to familiarize itself generally with the progress and quality of Work and to determine, in general, if the Work is proceeding in accordance with the Contract Documents. Based on such observations and the Contractor's Application for Payment, the Owner will determine the amounts owing to the Contractor and will issue Certificates for Payment in such amounts as provided in the Contract. The Owner will have authority to reject Work which does not conform to the Contract Documents. Whenever, in its reasonable opinion, it considers it necessary or advisable to ensure the proper implementation of the intent of the Contract Documents, it will have authority to require the Contractor to stop the Work or any portion, or to require special inspection or

testing of the Work, whether or not such Work can be then be fabricated, installed, or completed. The Owner will not be responsible for the acts or omissions of the Contractor, and Sub-Contractor, or any of its agents or employees, or any other persons performing any of the Work.

2.5. Contractor: The Contractor is the person or organization identified as such in the Agreement and is referred to throughout the Contract Documents. The term Contractor means the Contractor or its authorized representative. The Contractor shall carefully study and compare the General Contract Conditions of the Contract, Specification and Drawings, Scope of Work, Addenda and Modifications and shall at once report to the Owner any error, inconsistency, or omission it may discover. Contractor shall not be liable to the Owner for any damage resulting from such errors, inconsistencies, or omissions. The Contractor shall not commence Work without clarifying Drawings, Specifications, or Interpretations.

2.6. Sub-Contractors: A Sub-Contractor is a person or organization that has a direct Contract with the Contractor to perform any of the Work at the site. The term Sub-Contractor is referred to throughout the Contract Documents and means a Sub-Contractor or its authorized representative.

2.7. Award of Sub-Contractors & Other Contracts for Portions of the Work: Contractor shall submit with its bid response to the Owner, in writing for acceptance, a list of the names of the sub-contractors or other persons or organizations proposed for such portions of the Work as may be designated in the bid requirements, or, if none is so designated, the names of the sub-contractors proposed for the principal portions of the Work. Prior to the award of the Contract, the Owner shall notify the successful Contractor in writing if, after due investigation, has reasonable objection to any person or organization on such list. If, prior to the award of the Contract, the Owner has a reasonable and substantial objection to any person or organization on such list and refuses in writing to accept such person or organization, the successful Contractor may, prior to the award, withdraw its bid without forfeiture of bid security. If the successful Contractor submits an acceptable substitute with an increase in the proposed price to cover the difference in cost occasioned by the substitution, the Owner may, at its discretion, accept the increased bid or may disqualify the Contractor. If, after the award, the Owner refuses to accept any person or organization on such list, the Contractor shall submit an acceptable substitute and the Contract sum shall be increased or decreased by the difference in cost occasioned by such substitution and an appropriate Change Order shall be issued. No increase in the Contract sum shall be allowed for any such substitution unless the Contractor has acted promptly and responsively in submitting a name with respect thereto prior to the award.

2.8. Quantities of Work and Unit Price: Materials or quantities stated as unit price items in the Bid are supplied only to give an indication of the general scope of the Work, and are, as such, estimates only. The Owner does not expressly or by implication agree that the actual amount of Work or material will correspond therewith and reserves the right after award to increase or decrease the quantity of any unit item of the Work without a change in the unit price except as set forth in Article VIII, Section 70 of the *General Contract Conditions*. The City also reserves the right to make changes in the Work (including the

right to delete any bid item in its entirety or add additional bid items) as set forth in Article VIII, Sections 69 through 71 of the *General Contract Conditions*.

2.9. Substitutions: The materials, products and equipment described in the *Solicitation Documents* shall be regarded as establishing a standard of required performance, function, dimension, appearance, or quality to be met by any proposed substitution. No substitution will be considered prior to receipt of Bids unless the Bidder submits a written request for approval to the Purchasing Agent at least ten (10) days prior to the date for receipt of Bids. Such requests for approval shall include the name of the material or equipment for which substitution is sought and a complete description of the proposed substitution including drawings, performance and test data, and other information necessary for evaluation, including samples if requested. The Bidder shall set forth changes in other materials, equipment, or other portions of the Work including changes of the Work of other Contracts which incorporation of the proposed substitution would require to be included. The Owner's decision of approval or disapproval of a proposed substitution shall be final. If the Owner approves a proposed substitution before receipt of Bids, such approval will be set forth in an Addendum. Bidders shall not rely upon approvals made in any other manner.

2.10. Supervision and Construction Procedures: The Contractor shall supervise and direct the Work, using its best skill and attention. It shall be solely responsible for all construction means, methods, techniques, sequences, and procedures and for coordinating all portions of the Work under the Contract.

2.11. Warranty: The Contractor warrants to the Owner that all materials and equipment furnished under the Contract will be new unless otherwise specified, and that all Work will be of good quality, free from faults and defects and in conformance with the Contract Documents. All Work not conforming to these standards may be considered defective. If required by Owner, the Contractor shall furnish satisfactory evidence as to the kind and quality of materials and equipment. If within ten (10) days after written notice to the Contractor requesting such repairs or replacement, the Contractor should neglect to make or undertake with due diligence to the same, the City may make such repairs or replacements. All indirect and direct costs of such correction or removal or replacement shall be at the Contractor's expense. The Contractor will also bear the expenses of making good all Work of others destroyed or damaged by the correction, removal, or replacement of its defective Work.

2.12. Permits, Fees, & Notices: The Contractor shall secure and pay for all permits, fees, and licenses necessary for the proper execution and completion of the Work. The Contractor shall give all notices and comply with all laws, ordinances, rules, regulations, and orders of any public authority, including the City, bearing on the performance of the Work. If the Contractor observes that any of the Contract Documents are at variance in any respect, it shall promptly notify the Purchasing Agent in writing, and any necessary changes shall be adjusted. If the Contractor performs any Work knowing it to be contrary to such laws, ordinances, rules, and regulations, and without such notice to the Owner, it shall assume full responsibility and shall bear all costs attributable to the non-conforming Work.

2.13. Responsibility for Those Performing the Work: The Contractor shall be responsible to the Owner for the acts and omissions of all its employees and all sub-contractors, its agents and employees, and all other persons performing any of the Work under a Contract with the Contractor.

2.14. Use of the Site: The Contractor shall confine operations at the site to areas permitted by law, ordinances, permits and the Contract Documents, and shall not unreasonably encumber the site with any materials or equipment.

2.15. Cleanup: The Contractor at all times shall keep the premises free from accumulation of waste materials or rubbish caused by its operations. At the completion of Work, it shall remove all its waste materials and rubbish from and about the project, as well as all its tools, construction equipment, machinery, and surplus materials.

2.16. Insurance Requirements: The selected Contractor agrees to procure and maintain, at its own cost, policies of insurance sufficient to insure against all liability, claims, demands, and other obligations assumed by the Contractor pursuant to the Contract. Such insurance shall be in addition to any other insurance requirements imposed by the Contract and/or by law. The Contractor shall not be relieved of any liability, claims, demands, or other obligations assumed pursuant to the Contract by reason of its failure to procure or maintain insurance in sufficient amounts, durations, or types.

Contractor shall procure and maintain and, if applicable, shall cause any Sub-contractor of the Contractor to procure and maintain insurance coverage listed below. Such coverage shall be procured and maintained with forms and insurers acceptable to Owner. All coverage shall be continuously maintained to cover all liability, claims, demands, and other obligations assumed by the Contractor pursuant to the Contractor. In the case of any claims-made policy, the necessary retroactive dates and extended reporting periods shall be procured to maintain such continuous coverage. Minimum coverage limits shall be as indicated below unless specified otherwise in the Special Conditions:

(a) Worker Compensation: Contractor shall comply with all State of Colorado Regulations concerning Workers' Compensation insurance coverage.

(b) General Liability insurance with minimum limits of:

TWO MILLION DOLLARS ($2,000,000) each occurrence and
TWO MILLION DOLLARS ($2,000,000) per job aggregate.

The policy shall be applicable to all premises, products, and completed operations. The policy shall include coverage for bodily injury, broad form property damage (including completed operations), personal injury (including coverage for contractual and employee acts), blanket contractual, products, and completed operations. The policy shall include coverage for explosion, collapse, and underground (XCU) hazards. The policy shall contain a severability of interests' provision.

(c) Comprehensive Automobile Liability insurance with minimum limits for bodily injury and property damage of not less than:

ONE MILLION DOLLARS ($1,000,000) each occurrence and
ONE MILLION DOLLARS ($1,000,000) aggregate

(d) Professional Liability & Errors and Omissions Insurance policy with a minimum of:

TWO MILLION DOLLARS ($2,000,000) per claim

This policy shall provide coverage to protect the City against liability incurred as a result of the professional Services performed as a result of responding to this Solicitation.

With respect to each of Contractors owned, hired, or non-owned vehicles assigned to be used in performance of the Work. The policy shall contain a severability of interest provision.

2.16.1 Additional Insured Endorsement: The policies required by paragraphs (b), and (c) above shall be endorsed to include the City, its Elected and Appointed Officials, Employees and Volunteers as Additional Insured. Every required policy above shall be primary insurance, and any insurance carried by the Owner, its officers, or its employees, or carried by or provided through any insurance pool of the Owner, shall be excess and not contributory insurance to that provided by the Contractor. The Contractor shall be solely responsible for any deductible losses under any policy required above.

2.17 Indemnification: The Contractor shall defend, indemnify and save harmless the Owner, and all its officers, employees, insurers, and self-insurance pool, from and against all liability, suits, actions, or other claims of any character, name and description brought for or on account of any injuries or damages received or sustained by any person, persons, or property on account of any negligent act or fault of the Contractor, or of any Contractor's agent, employee, Sub-Contractor or supplier in the execution of, or performance under, any Contract which may result from bid award. Contractor shall pay any judgment with cost which may be obtained by and/or against the Owner growing out of or under the performance.

2.18. Miscellaneous Conditions: Material Availability: The Contractor must accept responsibility for verification of material availability, production schedules, and other pertinent data prior to submission of bid. It is the responsibility of the Bidder to notify the Owner immediately if materials specified are discontinued, replaced, or not available for an extended period of time.

2.19. Time: Time is of the essence with respect to the Project and any other milestones or deadline which are part of the Contract. It will be necessary for each Bidder to satisfy the City of its ability to complete the Work within the Contract time set forth in the Contract Documents. The Contract time is the period of time allotted in the Contract Documents for completion of the Work. The date of commencement of the Work is the date established in a Notice to Proceed. If there is no Notice to Proceed, it shall be the date of the Contract, or such other date as may be established therein, or as established as entered on the Bid Form. The Date of Final Completion of the Work is the date certified by the Owner when all construction, and all other Work including, but not be limited to: testing, QA/QC, receipt of required reports and/or forms, grant requirements (if

applicable), punch list items, clean-up, receipt of drawings and/or as-builts, etc., is fully complete, and in accordance with the Contract Documents.

2.20. Progress & Completion: The Contractor shall begin the Work on the Commencement Date as noted on the Notice to Proceed and perform the Work expeditiously with adequate forces to complete the Work within the Contract time/by the Completion date.

2.21. Payment & Completion: The Contract Sum is stated in the Contract and is the total amount payable by the Owner to the Contractor for the performance of the Work under the Contract Documents. Upon receipt of written notice that the Work is ready for final inspection and acceptance and upon receipt of application for payment, the Owner's Project Manager will promptly make such inspection and, when it finds the Work acceptable under the Contract Documents and the Contract fully performed, the Owner shall make payment in the manner provided in the Contract Documents.

2.22. Bid Bond: Each bid shall as a guaranty of good faith on the part of the Offeror be accompanied by a Bid Guaranty consisting of a certified or cashier's check drawn on an approved national bank or trust company in the State of Colorado and made payable without condition to the City; or a **Bid Bond** written by an approved corporate surety in favor of the City. The amount of the Bid Guaranty shall not be less than 5% of the total Bid amount. Once a Bid is accepted and a Contract is awarded, the apparent successful Offeror has ten calendar days to enter into a Contract in the form prescribed and to furnish the bonds with a legally responsible and approved surety. Failure to do so will result in forfeiture of the Bid Guaranty to the City as Liquidated Damages.

Each Offeror shall guarantee its total bid price for a period of sixty (60) Calendar Days from the date of the bid opening.

2.23. Performance & Payment Bonds: The Contractor shall furnish a Performance and a Payment Bond, each in an amount at least equal to that specified for the Contract amount as security for the faithful performance and payment of all Contractor's obligations under the Contract Documents. These bonds shall remain in effect for the duration of the Warranty Period (as specified in the Special Conditions). The Contractor shall also furnish any other bonds that may be required by the Special Conditions. All bonds shall be in the forms prescribed by the Contract Documents and be executed by such sureties as (1) are licensed to conduct business in the State of Colorado and (2) are named in the current list of "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as published in Circular 570 (amended) by the Audit Staff, Bureau of Accounts, U.S. Treasury Department. All bonds signed by an agent must be accompanied by a certified copy of the Authority Act. If the surety on any bond furnished by the Contractor is declared bankrupt or becomes insolvent, or its rights to do business in Colorado are terminated, or it ceases to meet the requirements of clauses (1) and (2) of this section, the Contractor shall within five (5) days thereafter substitute another bond and surety, both of which shall be acceptable to the City.

2.24. Retention: The Owner will deduct money from the partial payments in amounts considered necessary to protect the interest of the Owner and will retain this money until after completion of the entire Contract. The amount to be retained from partial payments will be

five (5) percent of the value of the completed Work, and not greater than five (5) percent of the amount of the Contract. When the retainage has reached five (5) percent of the amount of the Contract no further retainage will be made and this amount will be retained until such time as final payment is made.

2.25. Liquidated Damages for Failure to Enter Into Contract: Should the Successful Bidder fail or refuse to enter into the Contract within ten Calendar Days from the issuance of the Notice of Award, the City shall be entitled to collect the amount of such Bidder's Bid Guaranty as Liquidated Damages, not as a penalty but in consideration of the mutual release by the City and the Successful Bidder of all claims arising from the City's issuance of the Notice of Award and the Successful Bidder's failure to enter into the Contract and the costs to award the Contract to any other Bidder, to readvertise, or otherwise dispose of the Work as the City may determine best serves its interest.

2.26. Delay Damages for Failure to Meet Project Completion Schedule: If the Contractor does not achieve Final Completion by the required date, whether by neglect, refusal or any other reason, the parties agree and stipulate that the Contractor shall pay liquidated damages to the City for each such day that final completion is late. As provided elsewhere, this provision does not apply for delays caused by the City. The date for Final Completion may be extended in writing by the Owner.

The Contractor agrees that as a part of the consideration for the City's awarding of this Contract liquidated damages in the daily amount of **$1,000.00** is reasonable and necessary to pay for the actual damages resulting from such delay. The parties agree that the real costs and injury to the City for such delay include hard to quantify items such as: additional engineering, inspection and oversight by the City and its agents; additional contract administration; inability to apply the efforts of those employees to the other work of the City; perceived inefficiency of the City; citizens having to deal with the construction and the Work, rather than having the benefit of a completed Work, on time; inconvenience to the public; loss of reputation and community standing for the City during times when such things are very important and very difficult to maintain.

The Contractor must complete the Work and achieve final completion included under the Bid Schedule in the number of consecutive calendar days after the City gives is written Notice to Proceed. When the Contractor considers the entire Work ready for its intended use, Contractor shall certify in writing that the Work is fully complete. Final Completion date is the date by which the Contractor shall have fully completed all clean-up, and all items that were identified by the City in the inspection for final completion. Unless otherwise stated in the Special Conditions, for purposes of this liquidated damages clause, the Work shall not be finished, and the Contract time shall continue to accrue until the City gives its written Final Acceptance.

If the Contractor shall fail to pay said liquidated damages promptly upon demand thereof after having failed to achieve Final Completion on time, the City shall first look to any retainage or other funds from which to pay said liquidated damages; if retainage or other liquid funds are not available to pay said liquidated damages amounts, the Surety on the Contractor's Performance Bond and Payment Bond shall pay such liquidated damages. In addition, the City may withhold all, or any part of, such liquidated damages from any payment otherwise due the Contractor.

Liquidated damages as provided do not include any sums to reimburse the City for extra costs which the City may become obligated to pay on other contracts which were delayed or extended because of the Contractor's failure to complete the Work within the Contract Time. Should the City incur additional costs because of delays or extensions to other contracts resulting from the Contractor's failure of timely performance, the Contractor agrees to pay these costs that the City incurs because of the Contractor's delay, and these payments are separate from and in addition to any liquidated damages.

The Contractor agrees that the City may use its own forces or hire other parties to obtain Final Completion of the work if the time of completion has elapsed and the Contractor is not diligently pursuing completion. In addition to the Liquidated Damages provided for, the Contractor agrees to reimburse the City for all expenses thus incurred.

2.27. Contingency/Force Account/Minor Contract Revisions: Contingency/Force Account/Minor Contract Revisions Work will be authorized by the Owner's Project Manager and is defined as minor expenses to cover miscellaneous or unforeseen expenses related to the project. The expenses are not included in the Drawings, Specifications, or Scope of Work and are necessary to accomplish the scope of this Contract. Contingency/Force Account/Minor Contract Revisions Authorization will be directed by the Owner through an approved form. Contingency/Force Account/Minor Contract Revisions funds are the property of the Owner and any Contingency/Force Account/Minor Contract Revisions funds, not required for project completion, shall remain the property of the Owner. Contractor is not entitled to any Contingency/Force Account/Minor Contract Revisions funds, that are not authorized by Owner or Owner's Project Manager.

2.28. Protection of Persons & Property: The Contractor shall comply with all applicable laws, ordinances, rules, regulations, and orders of any public authority having jurisdiction for the safety of persons or property or to protect it from damage, injury, or loss. Contractor shall erect and maintain, as required by existing safeguards for safety and protection, and all reasonable precautions, including posting danger signs or other warnings against hazards promulgating safety regulations and notifying owners and users of adjacent utilities. When or where any direct or indirect damage or injury is done to public or private property by or on account of any act, omission, neglect, or misconduct by the Contractor in the execution of the Work, or in consequence of the non-execution thereof by the Contractor, it shall restore, at its own expense, such property to a condition similar or equal to that existing before such damage or injury was done, by repairing, rebuilding, or otherwise restoring as may be directed, or it shall make good such damage or injury in an acceptable manner.

2.29. Changes in the Work: The Owner, without invalidating the Contract, may order changes in the Work within the general scope of the Contract consisting of additions, deletions or other revisions, the Contract sum and the Contract time being adjusted accordingly. All such changes in the Work shall be authorized by Change Order and shall be executed under the applicable conditions of the contract documents. A Change Order is a written order to the Contractor signed by the Owner issued after the execution of the Contract, authorizing a change in the Work or an adjustment in the contract sum

or the Contract time. The Contract sum and the Contract time may be changed only by Change Order.

2.30. Claims for Additional Cost or Time: If the Contractor wishes to make a claim for an increase in the Contract sum or an extension in the Contract time, it shall give the Owner written notice thereof within a reasonable time after the occurrence of the event giving rise to such claim. This notice shall be given by the Contractor before proceeding to execute the Work, except in an emergency endangering life or property in which case the Contractor shall proceed in accordance with the regulations on safety. No such claim shall be valid unless so made. Any change in the Contract sum or Contract time resulting from such claim shall be authorized by Change Order.

2.31. Minor Changes in the Work: The Owner shall have authority to order minor changes in the Work not involving an adjustment in the Contract sum or an extension of the Contract time and not inconsistent with the intent of the Contract Documents.

2.32. Field Orders: The Owner may issue written Field Orders which interpret the Contract Documents in accordance with the specifications, or which order minor changes in the work in accordance with the agreement, without change in the contract sum or time. The Contractor shall carry out such Field Orders promptly.

2.33. Uncovering & Correction of Work: The Contractor shall promptly correct all work rejected by the Owner as defective or as failing to conform to the contract documents whether observed before or after substantial completion and whether or not fabricated installed or competed. The Contractor shall bear all costs of correcting such rejected work, including the cost of the Owner's additional services thereby made necessary. If within one (1) year after the date of completion or within such longer period of time as may be prescribed by law or by the terms of any applicable special guarantee required by the contract documents, any of the work found to be defective or not in accordance with the contract documents, the Contractor shall correct it promptly after receipt of a written notice from the Owner to do so unless the Owner has previously given the Contractor a written acceptance of such condition. The Owner shall give such notice promptly after discovering of the condition. All such defective or non-conforming work under the above paragraphs shall be removed from the site where necessary and the work shall be corrected to comply with the contract documents without cost to the Owner. The Contractor shall bear the cost of making good all work of separate Contractors destroyed or damaged by such removal or correction. If the Owner prefers to accept defective or non-conforming work, he may do so instead of requiring its removal and correction, in which case a Change Order will be issued to reflect an appropriate reduction in the payment or Contract sum, or, if the amount is determined after final payment, it shall be paid by the Contractor.

2.34. Amendment: No oral statement of any person shall modify or otherwise change, or affect the terms, conditions or specifications stated in the resulting contract. All amendments to the Contract shall be made in writing by the Owner.

2.35. Assignment: The Contractor shall not sell, assign, transfer or convey any Contract resulting from this IFB, in whole or in part, without the prior written approval from the Owner.

2.36. Compliance with Laws: Bids must comply with all Federal, State, County, and local laws governing its Work and the fulfillment of the Work for and on behalf of the public. Contractor hereby warrants that it is qualified to assume the responsibilities and render the Work described herein and has all requisite corporate authority and professional licenses in good standing as required by law.

2.37. Confidentiality: All information disclosed by the Owner to the Contractor for the purpose of the work to be done, or information that comes to the attention of the Contractor during the course of performing such Work is to be kept strictly confidential.

2.38. Conflict of Interest: No public official and/or City/County employee shall have interest in any Contract resulting from this Invitation for Bid.

2.39. Contract Termination: This Contract shall remain in effect until any of the following occurs: (1) Contract expires; (2) completion of Work; (3) final acceptance of Work or, (4) for convenience terminated by either party with a written *Notice of Cancellation* stating therein the reasons for such cancellation and the effective date of cancellation at least thirty (30) days past notification.

2.40. Employment Discrimination: During the performance of any Work, the Contractor, by submitting a Bid, agrees to the following conditions:

2.40.1. The Contractor shall not discriminate against any employee or applicant for employment because of race, religion, color, sex, age, handicap, or national origin except when such condition is a legitimate occupational qualification reasonably necessary for the normal operations of the Contractor. The Contractor agrees to post in conspicuous places, visible to employees and applicants for employment, notices setting forth the provisions of this nondiscrimination clause.

2.40.2. The Contractor, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, shall state that such Contractor is an Equal Opportunity Employer.

2.40.3. Notices, advertisements, and solicitations placed in accordance with federal law, rule, or regulation shall be deemed sufficient for the purpose of meeting the requirements of this section.

2.41. Affirmative Action: In executing a Contract with the City, the Contractor agrees to comply with Affirmative Action and Equal Employment Opportunity regulations presented in the General Contract Conditions Section 9 “Affirmative Action/EEO.

2.42. Immigration Reform and Control Act of 1986 and Immigration Compliance: The Contractor certifies that it does not and will not during the performance of the Contract employ workers without authorization or otherwise violate the provisions of the Federal Immigration Reform and Control Act of 1986 and/or laws regulating immigration compliance.

2.43. Ethics: The Contractor shall not accept or offer gifts or anything of value nor enter into any business arrangement with any employee, official, or agent of the Owner.

2.44. Failure to Deliver: In the event of failure of the Contractor to perform in accordance with the Contract Documents, the Owner, after due oral or written notice, may procure the Work from other sources and hold the Contractor responsible for any costs resulting in additional Work, materials and/or administration services necessary to perform the Work. This remedy shall be in addition to any other remedies that the Owner may have.

2.45. Failure to Enforce: Failure by the Owner at any time to enforce the provisions of the Contract shall not be construed as a waiver of any such provisions. Such failure to enforce shall not affect the validity of the Contract or any part thereof or the right of the Owner to enforce any provision of the Contract Documents at any time in accordance with the terms thereof.

2.46. Force Majeure: The Contractor shall not be held responsible for failure to perform the duties and responsibilities imposed by the Contract due to legal strikes, fires, riots, rebellions, and acts of God beyond the control of the Contractor, unless otherwise specified in the Contract.

2.47. Independent Contractor: The Contractor shall be legally considered an Independent Contractor and neither the Contractor nor its employees shall, under any circumstances, be considered servants or agents of the Owner. The Owner shall be at no time legally responsible for any negligence or other wrongdoing by the Contractor, its servants, or agents. The Owner shall not withhold from the Contract payments to the Contractor any federal or state unemployment taxes, federal or state income taxes, Social Security, or any other amounts for benefits to the Contractor. Further, the Owner shall not provide to the Contractor any insurance coverage or other benefits, including Workers' Compensation, normally provided by the Owner for its employees.

2.48. Nonconforming Terms and Conditions: A bid that includes terms and conditions that do not conform to the terms and conditions of this Invitation for Bid is subject to rejection as non-responsive. The Owner reserves the right to permit the Contractor to withdraw nonconforming terms and conditions from its bid prior to a determination by the Owner of non-responsiveness based on the submission of nonconforming terms and conditions.

Items for non-responsiveness may include, but not be limited to:

a. Submission of the Bid on forms other than those supplied by the City;
b. Alteration, interlineation, erasure, or partial detachment of any part of the forms which are supplied herein;
c. Inclusion of unauthorized additions conditional or alternate Bids or irregularities of any kind which may tend to make the Bid incomplete, indefinite, or ambiguous as to its meaning;
d. Failure to acknowledge receipt of any or all issued Addenda;
e. Failure to provide a unit price or a lump sum price, as appropriate, for each pay item listed except in the case of authorized alternative pay items;
f. Failure to list the names of Subcontractors used in the Bid preparation as may be required in the Solicitation Documents;

g. Submission of a Bid that, in the opinion of the Owner, is unbalanced so that each item does not reasonably carry its own proportion of cost or which contains inadequate or unreasonable prices for any item;
h. Tying of the Bid with any other bid or contract; and
i. Failure to calculate Bid prices as described herein.

2.49. Evaluation of Bids and Offerors: The Owner reserves the right to:

- Reject any and all Bids,
- Waive any and all informalities,
- Take into account any prompt payment discounts offered by Bidder,
- Negotiate final terms with the Successful Bidder,
- Take into consideration past performance of previous awards/contracts with the Owner of any Contractor, Vendor, Firm, Supplier, or Service Provider in determining final award. and
- Disregard any and all nonconforming, nonresponsive or conditional Bids.

Discrepancies between words and figures will be resolved in favor of words. Discrepancies between Unit Prices and Extended Prices will be resolved in favor of the Unit Prices. Discrepancies between the indicated sum of any column of figures and the correct sum thereof will be resolved in favor of the correct sum. The corrected extensions and totals will be shown in the tabulation of Bids.

The Owner may consider the qualifications and experience of Subcontractors and other persons and organizations (including those who are to furnish the principal items of material or equipment) proposed for those portions of the work as to which the identity of Subcontractors and other persons and organizations must be submitted. Operating costs, maintenance considerations, performance data, and guarantees of materials and equipment may also be considered by the Owner.

The Owner will conduct such investigations as deemed necessary to assist in the evaluation of any Bid and to establish the responsibility, qualifications, and financial ability of the Bidder, proposed Subcontractors and other persons and organizations to do the Work in accordance with the *Contract Documents* to the City's satisfaction within the Contract Time.

The Bidder shall furnish the Owner all information and data requested by the Owner to determine the ability of the Bidder to perform the Work. The Owner reserves the right to reject the Bid if the evidence submitted by, or investigation of such Bidder fails to satisfy the Owner that such Bidder is properly qualified to carry out the obligations of the Contract and to complete the Work contemplated therein.

By submitting a Bid, each Bidder authorizes the Owner to perform such investigation of the Bidder as the Owner deems necessary to establish the responsibility, qualifications, and financial ability of the Bidder and, by its signature thereon, authorizes the Owner to obtain reference information concerning the Bidder and releases the party providing such information and the Owner from any and all liability to the Bidder as a result of such reference information so provided.

The Owner reserves the right to reject the Bid of any Offeror who does not pass any evaluation to the Owner's satisfaction.

If the Contract is to be awarded, it will be awarded to the Offeror who, by evaluation, the Owner determines will best meet the Owner's interests.

The Owner reserves the right to accept or reject the Work contained in any of the Price Bid Schedules or alternates, either in whole or in part.

2.50. Award of Contract: Unless otherwise indicated, a single award will be made for all the bid items in an individual bid schedule. In the event that the Work is contained in more than one Bid Schedule, the City may award Schedules individually or in combination. In the case of two Bid Schedules which are alternative to each other, only one of such alternative Schedules will be awarded. Within forty-five (45) Calendar Days of Bid Opening, the City will issue a Notice of Award to the Successful Bidder which will be accompanied by a Contract electronically submitted via DocuSign for digital signature. Within ten (10) Calendar Days thereafter, the Successful Bidder shall sign and deliver the digitally executed Contract via DocuSign. Performance Bond, Payment Bond, and Certificate of Insurance shall be submitted to the City within ten (10) days of Contract execution. No Contract shall exist between the Successful Bidder and the City and the Successful Bidder shall have no rights at law or in equity until the Contract has been duly executed by the City.

The Successful Bidder's failure to sign and submit a Contract and other documents set forth in this Paragraph within the prescribed time shall be just cause of annulment of the award, and forfeiture of the Bid Guaranty. The award of Contract may then be made to the next qualified Bidder in the same manner as previously prescribed.

2.51. Ownership: All plans, prints, designs, concepts, etc., shall become the property of the Owner.

2.52. Oral Statements: No oral statement of any person shall modify or otherwise affect the terms, conditions, or specifications stated in this document and/or resulting agreement. All modifications to this request and any agreement must be made in writing by the Owner.

2.53. Patents/Copyrights: The Contractor agrees to protect the Owner from any claims involving infringements of patent(s) and/or copyright(s). In no event shall the Owner be liable to the Contractor for any claims, damages, awards and/or costs of defense arising on the grounds of patent(s)/copyright(s) infringement. Patent/copyright infringement shall null and void any agreement resulting from response to this Invitation For Bid.

2.54. Remedies: The Contractor and Owner agree that both parties have all rights, duties, and remedies available as stated in the Uniform Commercial Code.

2.55. Venue: Any agreement as a result of responding to this Invitation For Bid shall be deemed to have been made in, and shall be construed and interpreted in accordance with, the laws of the City of Grand Junction, Mesa County, Colorado.

2.56. Expenses: Expenses incurred in preparation, submission, and presentation of a response to this Invitation For Bid are the responsibility of the Bidder and cannot be charged to the Owner.

2.57. Sovereign Immunity: The Owner specifically reserves its right to sovereign immunity pursuant to Colorado law as a defense to any action arising out of this Contract.

2.58. Non-Appropriation of Funds: Funds for payment have been provided through the Owner's budget approved by the City Council/Board of County Commissioners for the stated fiscal year only. State of Colorado prohibits the obligation and expenditure of public funds beyond the fiscal year for which a budget has been approved. Therefore, anticipated orders or other obligations that may arise past the end of the stated Owner's fiscal year shall be subject to budget approval. The Contract, if any, will be subject to and must contain a non-appropriation of funds clause/limitation on multi-year fiscal obligations as required by Art X, Section 20 of the Colorado Constitution, and other applicable law(s).

2.59. Cooperative Purchasing: Purchases as a result of this Solicitation are primarily for the City/County. Other governmental entities may be extended the opportunity to utilize the resultant Contract award with the agreement of the successful provider and the participating agencies. All participating entities will be required to abide by the specifications, terms, conditions, and pricing established in this Bid. The quantities furnished in this bid document are for only the City/County. It does not include quantities for any other jurisdiction. The City or County will be responsible only for the award for its jurisdiction. Other participating entities will place its own awards on its respective Purchase Orders through its purchasing office or use its purchasing card for purchase/payment as authorized or agreed upon between the provider and the individual entity. The Owner accepts no liability for payment of orders placed by other participating jurisdictions that choose to "piggy-back" on Owner's Solicitation. Orders placed by participating jurisdictions under the terms of this Solicitation will indicate its specific delivery and invoicing instructions.

2.60. Keep Jobs in Colorado Act: Contractor shall be responsible for ensuring compliance with Article 17 of Title 8, Colorado Revised Statutes (C.R.S.) requiring 80% Colorado labor to be employed on public works. Contractor shall, upon reasonable notice provided by the Owner, permit the Owner to inspect documentation of identification and residency required by C.R.S. §8-17-101(2)(a). If Contractor claims it is entitled to a waiver pursuant to C.R.S. §8-17-101(1), Contractor shall state that there is insufficient Colorado labor to perform the Work such that compliance with Article 17 would create an undue burden that would substantially prevent a project from proceeding to completion and shall include evidence demonstrating the insufficiency and undue burden in its response.

Unless expressly granted a waiver by the Owner pursuant to C.R.S. §8-17-101(1), Contractor shall be responsible for ensuring compliance with Article 17 of Title 8, C.R.S. requiring 80% Colorado labor to be employed on public works. Contractor shall, upon reasonable notice provided by the Owner, permit the Owner to inspect documentation of identification and residency required by C.R.S. §8-17-101(2)(a).

2.60.1. "Public project" is defined as:

(a) any construction, alteration, repair, demolition, or improvement of any land, building, structure, facility, road, highway, bridge, or other public improvement suitable for and intended for use in the promotion of the public health, welfare, or safety and any maintenance programs for the upkeep of such projects

(b) for which appropriate or expenditure of moneys may be reasonably expected to be $500,000.00 or more in the aggregate for any fiscal year

(c) except any project that receives federal moneys.

3. Statement of Work

3.1. GENERAL: The Work request is for construction of a new concrete pedestrian and bicycle trail from South Camp Road to the existing trail at Lunch Loop Trailhead along the No Thoroughfare Creek and Monument Road. The improvements will include earthwork, aggregate base course, concrete trail placement, construction of two large precast concrete box culvert crossings, and landscape restoration along the path.

3.2. PROJECT DESCRIPTION: The Project includes approximately 10,200 square yards of new 6" concrete sidewalk underlain by 6 inches of Class 6 aggregate base course for a trail along the No Thoroughfare Creek and Monument Road, from South Camp Road to the existing trail at Lunch Loop Trailhead. This Project also includes installation of reinforced concrete box culverts to support the trail crossing over No Thoroughfare Creek (Precast CBC units have already been purchased by the City and are located at Rinker Materials at 2311 River Road). A portion of the trail traverses BLM ROW and therefore the Contractor will need to follow the requirements of the Right-of-Way Grants and Temporary Use Permit issued by BLM (attached as Appendix C). All dimensions and scope of work should be verified by Contractors prior to submission of bids.

NOTE: The descriptions of the pay items listed in the Price Bid Schedule for this Project may not agree with those listed in the Standard Specifications. Payment for all Work performed, as required in the Contract Documents, will be in accordance with the items and units listed in the Price Bid Schedule.

The performance of the Work for this Project shall conform to the General Contract Conditions presented in the City of Grand Junction's Standard Contract Documents for Capital Improvements Construction, revised July 2010, except as specifically modified or supplemented herein or on the Construction Drawings.

3.3. SPECIAL CONDITIONS & PROVISIONS:

3.3.1 Non-Mandatory Pre-Bid Meeting: **Prospective bidders are encouraged to attend a non-mandatory pre-bid meeting on Friday, August 23, 2024 at 9:00 AM**. Meeting location is at the Lunch Loop Trailhead parking lot, 2415 Monument Road Rd, Lat/Long (39.049914, -108.605013). The purpose of this visit will be to inspect and to clarify the contents of this Invitation for Bids (IFB).

3.3.2 Prequalification Requirement: Contractors submitting bids over $500,000 must be pre-qualified in accordance with the City's *"Contractors Prequalification Application*".

All bids received by the specified time will be opened, but the City will reject bids over $500,000 from contractors who have not been prequalified. Application forms for prequalification are available by clicking the **Application Link** Call 970-256-4082 for additional information. Due to the time required to process applications, ***all applications must be submitted no later than the application due date stated in the Solicitation document.*** Contractors may view its approved pre-qualified categories by clicking the Pre-Qualification List Link.

Pre-Qualification: Contractors must either be pre-qualified in category ***2E. Concrete Sidewalk, Curb and Gutter*** and ***2G. Small Bridges and Minor Structures*** or submit the above noted Pre-Qualification Application. This requirement is to comply with State safety rules and regulations.

3.3.3 QUESTIONS REGUARDING SOLICITATION PROCESS/SCOPE OF WORK:

Dolly Daniels; Senior Buyer/Purchasing Agent
City of Grand Junction
dollyd@gjcity.org

3.3.4 Project Manager: The Project Manager for the Project is Kirsten Armbruster, Project Engineer, who can be reached at (970) 244-1421 or kirstena@gjcity.org. During Construction, all notices, letters, submittals, and other communications directed to the City shall be addressed and mailed or delivered to:

City of Grand Junction
Department of Public Works and Planning
Attn: Kirsten Armbruster, Project Manager
244 North 7th Street
Grand Junction, CO 81501

3.3.5 Contract Administrator: The Contract Administrator for the Project is Duane Hoff Jr., Contract Administrator, who can be reached at (970)244-1545. During Construction, Contract related inquiries, issues, and other communications shall be directed to:

Duane Hoff Jr., Contract Administrator
duaneh@gjcity.org

3.3.6 Affirmative Action: The Contractor is not required to submit a written Affirmative Action Program for the Project.

3.3.7 Pricing: Pricing shall be all inclusive to include but not be limited to: all labor, equipment, supplies, materials, freight (F.O.B. Destination – Freight Pre-paid and Allowed to each site), travel, mobilization costs, fuel, set-up and take down costs, and full-time inspection costs, and all other costs related to the successful completion of the Project.

The Owner shall not pay nor be liable for any other additional costs including but not limited to: taxes, shipping charges, insurance, interest, penalties, termination payments, attorney fees, liquidated damages, etc.

3.3.8 Freight/Shipping: All freight/shipping shall be F.O.B. Destination – Freight Pre-Paid and Allowed to the project site(s), Grand Junction, CO.

Contractor must meet all federal, state, and local rules, regulations, and requirements for providing such services.

3.3.9 Contract: A binding contract shall consist of: (1) the IFB and any amendments thereto, (2) Additional Documents as stated in Section 1.10, (3) the bidder's response (bid) to the IFB, (4) clarification of the bid, if any, and (5) the City's Purchasing Department's acceptance of the bid by "Notice of Award" or by "Purchase Order". All Exhibits and Attachments included In the IFB shall be incorporated into the Contract by reference.

A. The Contract expresses the complete agreement of the parties and, performance shall be governed solely by the specifications and requirements contained therein.

B. Any change to the Contract, whether by modification and/or supplementation, must be accomplished by a formal contract amendment signed and approved by and between the duly authorized representative of the bidder and the City Purchasing Division or by a modified Purchase Order prior to the effective date of such modification. The bidder expressly and explicitly understands and agrees that no other method and/or no other document, including acts and oral communications by or from any person, shall be used or construed as an amendment or modification to the contract.

3.3.10 Time of Completion: The scheduled date of Completion for the Project is January 31, 2025.

Completion is achieved when site cleanup and all punch list items (resulting from the final inspection) have been completed. Completion shall have the meaning set forth in Article I, Section 3 (Definitions and Terms) of the General Contract Conditions.

3.3.11 Working Days and Hours: The working days and hours shall be as stated in the General Contract Conditions or as mutually agreed upon in the preconstruction meeting with the following exception:

All work shall be performed between the hours of 7:00 AM to 5:00 PM.

3.3.12 Licenses and Permits: Contractor is responsible for obtaining all necessary licenses and permits required for Construction, at Contractors expense. See Section 2.12. Contractor shall supply to Owner all copies of finalized permits.

3.3.13 Permits: The following permits are required for the Project and will be obtained by the City at no cost to the Contractor:

Stormwater Construction Permit (CDPHE)

The following permits are required for the Project and shall be obtained but not paid for by the Contractor:

Stormwater Construction Permit (Mesa County MS4)

The Contractor shall strictly adhere to the stipulations imposed by these permits.

The following permits are required for the Project and shall be obtained and paid for by the Contractor, with the costs included in the total bid price for the Project:

Right-of-way Permit (if needed)

3.3.14 City Furnished Materials: The City will furnish the following materials for the Project:

- None

3.3.15 Project Newsletters:

- None

3.3.16 Project Sign: Project signs, if any, will be furnished and installed by the City.

3.3.17 Authorized Representatives of the City: Those authorized to represent the City shall include Purchasing Agent, Engineers, and Inspectors employed by the City, only.

3.3.18 Stockpiling Materials and Equipment: All stockpiling/storage shall be in accordance with General Contract Condition Section 51.

3.3.19 Traffic Control: Traffic control, if required, is the responsibility of the Contractor.

3.3.20 Clean-Up: The Contractor is responsible for cleaning up all loose materials that have been deposited or swept into gutters, and onto sidewalks and driveways as a result of sidewalk operations. The costs for all clean-up work shall be considered incidental and will not be paid for separately.

3.3.21 Quality Control Testing: The Contractor is required to retain a consultant to perform quality control materials testing to determine the conformance of the work with the specifications. The City will perform all other necessary QA/QC.

3.3.22 Schedule of Submittals: Contractor shall deliver these submittals at least two days prior to the pre-construction meeting:

- Critical Path Method Format Project Schedule
- All submittals identified in the project specifications, and all other materials to be incorporated into the completed project.
- Schedule of Values (See General Contract Condition 29).

3.3.23 Uranium Mill Tailings: It is anticipated that radioactive mill tailings will not be encountered on this Project.

3.3.24 Fugitive Petroleum or Other Contamination: It is anticipated that soil contamination from fugitive petroleum or other contaminants will not be encountered with the Project.

3.3.25 Excess Material: All excess materials shall be disposed in accordance with General Contract Condition Section 50.

3.3.26 Existing Utilities and Structures: Utilities were **not** potholed during design of this Project. The location of existing utilities and structures shown on the Plans is approximate with the information gathered during design. It is the responsibility of the Contractor to pothole/locate and protect all structures and utilities in accordance with General Contract Condition Section 37.

3.3.27 Incidental Items: Any item of work not specifically identified or paid for directly, but which is necessary for the satisfactory completion of any paid items of work, will be considered as incidental to those items, and will be included in the cost of those items.

3.3.28 Survey: The Contractor shall give the City survey crew a minimum of 72 hours' notice for all requested surveys.

3.3.29 Work to be Performed by the City (Prior to Construction):

- None

3.3.30 Existing Concrete Sidewalks, Pans, Fillets, Curbs and Gutters: The existing sidewalks, pans, fillets, curb and gutter are in good serviceable condition. In most instances the installation of new sidewalks and pavement will be adjacent to existing concrete. The Contractor will need to protect all concrete adjacent to construction. If the concrete is damaged during construction the Contractor will be responsible for its replacement at no cost to the City. The Contractor, the City Project Inspector, and/or the City Project Manager will walk and record any concrete that is deemed to be damaged before construction has started.

3.3.31 ACI Concrete and Flatwork Finisher and Technician: Hand finishing concrete will be permitted only when performed under the direct supervision of a craftsman holding the following certificate: ACI Concrete Flatwork Finisher and Technician (ACICFFT) or other Flatwork Finisher certification program approved by the City Engineering Manager.

3.3.32 Weekly Progress Meetings: The Contractor and Engineer shall schedule and hold Weekly progress meetings. The purpose of the meetings will be to review the progress of the work, maintain coordination efforts, discuss the schedule, and resolve issues that may develop.

3.4. SCOPE OF WORK: The Work will include all necessary labor, supervision, equipment, tools and materials for the construction of a concrete trail with soft shoulders along the No Thoroughfare Creek and Monument Road, from South Camp Road to the existing trail at Lunch Loop Trailhead. Work includes, but is not limited to, installation of 10 foot wide concrete paving 6 inches thick with 3 foot wide soft shoulders on each side of paving, installation of reinforced concrete box culverts to support the trail crossing over No Thoroughfare Creek (Precast CBC units have already been purchased by the City and are located at Rinker Materials at 2311 River Road).and all associated site work

relating to the trail project. For a complete scope of work refer to: Standard Contract Documents 2010, construction documents, project manual listed in 3.5 Attachments.

3.5. Attachments: (Click on links below for access)

Appendix A: Special Provisions

Appendix B: Construction Drawings

Appendix C: BLM ROW Grant Plan of Development

3.6. Contractor Bid Documents: For Contractor's convenience, the following is a list of forms/items to be submitted with the Contractor's bid response. However, should a form/item not be listed in this section, but required in the solicitation documents, it is the Contractor's responsibility to ensure all forms/items are submitted.

- Contractor's Bid Form
- Sub-contractors Form
- Price Bid Schedule
- Bid Bond

3.7. IFB TENTATIVE TIME SCHEDULE:

Invitation For Bids available	August 13, 2024
Non-Mandatory Pre-Bid Meeting	August 23, 2024, 9:00 AM
Pre-Qualification Application Deadline	August 26, 2024
Inquiry deadline, no questions after this date	August 27, 2024
Addendum Posted	August 29, 2024
Submittal deadline for proposals	September 4, 2024, 2:00 PM
City Council Approval	September 18, 2024
Notice of Award & Contract execution	September 20, 2024
Bonding & Insurance Cert due	September 30, 2024
Preconstruction meeting	TBD
Work begins no later than	Upon Receipt of Notice to Proceed
Final Completion	January 31, 2025

Holidays:	DATES
Labor Day	September 2, 2024
Veteran's Day	November 11, 2024
Thanksgiving	November 21-22, 2024
Christmas Day	December 25, 2024
New Years Day	January 1, 2025
Martin Luther King Day	January 15, 2025
President's Day	February 17, 2025

3. Contractor's Bid Form

Project: IFB-5491-24-DD "Monument Connect – Phase 2 Multi-modal Concrete Path Construction"

Bid Date: _____

Bidding Company: _____

Name of Authorized Agent: _____

Email _____

Telephone _____ Address_____

City_____State_____Zip_____

The undersigned Bidder, in compliance with the Invitation for Bids, having examined the Instruction to Bidders, General Contract Conditions, Statement of Work, Specifications, and any and all Addenda thereto, having investigated the location of, and conditions affecting the proposed work, hereby proposes to furnish all labor, materials and supplies, and to perform all work for the Project in accordance with Contract Documents, within the time set forth and at the prices stated below. These prices are to cover all expenses incurred in performing the work required under the Contract Documents, of which this Contractor's Bid Form is a part.

The undersigned Contractor does hereby declare and stipulate that this offer is made in good faith without collusion or connection to any person(s) providing an offer for the same work, and that it is made in pursuance of, and subject to, all terms and conditions of the Instructions to Bidders, the Specifications, and all other Solicitation Documents, all of which have been examined by the undersigned.

The Contractor also agrees that if awarded the Contract, to provide insurance certificates within ten (10) working days of the date of Notification of Award. Submittal of this offer will be taken by the Owner as a binding covenant that the Contractor will be prepared to complete the project in its entirety.

The Owner reserves the right to make the award on the basis of the offer deemed most favorable, to waive any formalities or technicalities and to reject any or all offers. It is further agreed that this offer may not be withdrawn for a period of sixty (60) calendar days after closing time. Submission of clarifications and revised offers automatically establish a new thirty day (30) period.

Prices in the bid proposal have not knowingly been disclosed with another provider and will not be prior to award.

- Prices in this bid proposal have been arrived at independently, without consultation, communication or agreement for the purpose of restricting competition.
- No attempt has been made nor will be to induce any other person or firm to submit a bid proposal for the purpose of restricting competition.
- The individual signing this bid proposal certifies they are a legal agent of the offeror, authorized to represent the offeror and is legally responsible for the offer with regard to supporting documentation and prices provided.
- Direct purchases by the City of Grand Junction are tax exempt from Colorado Sales or Use Tax. Tax exempt No. 98-03544. The undersigned certifies that no Federal, State, County or Municipal tax will be added to the above quoted prices.
- City of Grand Junction payment terms shall be Net 30 days.
- Prompt payment discount of _____ percent of the net dollar will be offered to the Owner if the invoice is paid within _____ days after the receipt of the invoice. The Owner reserves the right to take into account any such discounts when determining the bid award that are no less than Net 10 days.

RECEIPT OF ADDENDA: the undersigned Contractor acknowledges receipt of Addenda to the Solicitation, Specifications, and other Contract Documents.

State number of Addenda received: _____.

It is the responsibility of the Bidder to ensure all Addenda have been received and acknowledged.

By signing below, the Undersigned agree to comply with all terms and conditions contained herein.

Company: _____

Authorized Signature: _____

Title:_____

The undersigned Bidder proposes to subcontract the following portion of Work:

Name & address of Sub-Contractor	Description of work to be performed	% of Contract

The undersigned Bidder acknowledges the right of the City to reject any and all Bids submitted and to waive informalities and irregularities therein in the City's sole discretion.

By submission of the Bid, each Bidder certifies, and in the case of a joint Bid each party thereto certifies as to his own organization, that this Bid has been arrived at independently, without collusion, consultation, communication, or agreement as to any matter relating to this Bid with any other Bidder or with any competitor.

Bid Schedule: Monument Connect Trail - Phase 2

Item No.	CDOT, City Ref.	Description	Quantity	Units	Unit Price	Total Price
1	102.10	Reinforced Concrete Pipe (RCP) (76-inch x 48-inch Horizontal Elliptical) (Includes bedding, material and install)	80.	Lin. Ft.	$ _____	$ _____
2	102.10	Reinforced Concrete Pipe (RCP) (48-inch) (Includes bedding, material and install)	24.	Lin. Ft.	$ _____	$ _____
3	102.10	Reinforced Concrete Pipe (RCP) (24-inch) (Includes bedding, material and install)	144.	Lin. Ft.	$ _____	$ _____
4	102.10	Reinforced Concrete Pipe (RCP) (18-inch) (Includes bedding, material and install)	72.	Lin. Ft.	$ _____	$ _____
5	102.10	Reinforced Concrete Pipe (RCP) (12-inch) (Includes bedding, material and install)	24.	Lin. Ft.	$ _____	$ _____
6	102.10	Reinforced Concrete Box Culvert (CBC) (9 ft wide by 4 ft high (Delivery from Rinker Materials, bedding and Install Only)	74.	Lin. Ft.	$ _____	$ _____
7	102.10	Reinforced Concrete Box Culvert (CBC) (9 ft wide by 5 ft high (Delivery from Rinker Materials, bedding and Install Only)	74.	Lin. Ft.	$ _____	$ _____
8	102.13	3 ft x 3 ft Area Inlet	1.	Each	$ _____	$ _____
9	201	Clearing and Grubbing	5.2	Acre	$ _____	$ _____
10	202	Removal of Tree (2" dia.)	6.	Each	$ _____	$ _____
11	203	Unclassified Excavation (Complete in Place)	2,700.	Cu. Yd.	$ _____	$ _____
12	208	Erosion Logs (12 inch)	4,000.	Lin. Ft.	$ _____	$ _____
13	208	Aggregate Bag	10.	Each	$ _____	$ _____
14	208	Concrete Washout Structure	2.	Each	$ _____	$ _____
15	208	Vehicle Track Pad	3.	Each	$ _____	$ _____
16	208	BMP Swale Berms	32.	Each	$ _____	$ _____
17	209	Dust Abatement	Lump	Sum	- - -	$ _____
18	210	Reset Sign	1.	Each	$ _____	$ _____
19	210	Adjust existing metal post and rail fence at bike park	Lump	Sum	- - -	$ _____
20	212	Seeding (Native) (Hydroseed) (Use Seed Mixes Specified Based on Property Owner - City or BLM)	4.5	Acre	$ _____	$ _____
21						
22	216	Soil Retention Blanket (Coconut) (As Needed Where Disturbed Slope is Greater Than 3:1)	1,000.	Sq. Yd.	$ _____	$ _____
23	304	Granular Stabilization Material (Type B) (Crushed Rock) (As Needed in Excavations Where Unstable Bottom Exists)	20.	Ton	$ _____	$ _____
24	304	Aggregate Base Course (Class 6) (12 inch thick shoulders)	3,411.	Ton	$ _____	$ _____
25	304	Aggregate Base Course (Class 3) (subgrade stabilization as needed)	500.	Cu. Yd.	$ _____	$ _____

Bid Schedule: Monument Connect Trail - Phase 2

Item No.	CDOT, City Ref.	Description	Quantity	Units	Unit Price	Total Price
26	306	Reconditioning (12 inches deep)	20,253.	Sq. Yd.	$ _____	$ _____
27	306	Singletrack Trail (3-ft wide) (Complete in Place)	880.	Lin. Ft.	$ _____	$ _____
28	504	Precast Concrete Block Retaining Wall System (includes all necessary appurtenances, work, etc. to complete).	508.	FSF	$ _____	$ _____
29	504	Concrete Wall (Class D) per M and S Standard M-601-20 (Wall Design Height 3' to 7' per plan). (Includes associated headwall, and toe walls) Work shall include approximately 3750 lbs. Reinforcing Steel (Epoxy Coated), 75 sy Structural Concrete Coating (Exterior of wall), 35 cy Structural Backfill (Class 1) and any necessary appurtenances to complete work.	95.	Cu. Yd.	$ _____	$ _____
30	506	Riprap (D_{50} = 12 inch)	100.	Cu. Yd.	$ _____	$ _____
31	506	Landscape Boulders (Site Access Control)	112.	Each	$ _____	$ _____
32	514	Detectable Warning (Cast Iron, Wet Set) (2 ft x 2 ft)	15.	Each	$ _____	$ _____
33	601	Cast-in-Place Concrete Footings to support shade structures (1.5 ft diameter, 6 ft drilled into ground, including rebar per details)	24.	LF	$ _____	$ _____
34	608	Colored Concrete Sidewalk (6" Thick) to include 6" of Class 6 Aggregate Base Course	10,167.	Sq. Yd.	$ _____	$ _____
35	608	Colored Concrete Curb Ramp to include 6" of Class 6 Aggregate Base Course	150.	Sq. Yd.	$ _____	$ _____
36	608	Colored Concrete Curb and Gutter (2 ft wide) to include 6" of Class 6 Aggregate Base Course	290.	Lin. Ft.	$ _____	$ _____
37	608	Colored Concrete Pad for Benches (6 inch thick)(Includes 6 inch thick Class 6 ABC) (Location To Be Decided)	18.	Sq. Yd.	$ _____	$ _____
38	620	Portable Sanitary Facility	2.		$ _____	$ _____
39	625	Construction Surveying (Includes As-Built Drawings)	Lump Sum		- - -	$ _____
40	626	Mobilization	Lump Sum		- - -	$ _____
41	630	Traffic Control (Complete in Place)	Lump Sum		- - -	$ _____
MCR		Minor Contract Revisions	- - -	- - -	- - -	$ 60,000.00
				Bid Amount:		**$** _____

Bid Amount:

_____ **dollars**

CITY OF GRAND JUNCTION
DEPARTMENT OF PUBLIC WORKS AND UTILITIES
ENGINEERING DIVISION

Monument Connect Trail - Phase 2 Project

SPECIAL PROVISIONS

GENERAL:

The descriptions of the pay items listed in the Bid Schedule for this Project may not agree with those listed in the Standard Specifications. Payment for all Work performed, as required in the Contract Documents, will be in accordance with the items and units listed in the Bid Schedule.

STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION:

The ***City of Grand Junction Standard Specifications for Road and Bridge Construction*** are hereby modified or supplemented for this Project by the following modifications to ***The Standard Specifications for Road and Bridge Construction***, State Department of Highways, Division of Highways, State of Colorado:

SP-1 SECTION 203 – POTHOLING

Section 203 of the Standard Specifications is hereby revised for this project as follows:

Subsection 203.05(g) shall include the following:

All potholing shall be accomplished using noninvasive, vacuum equipment. All potholing methods and locations shall be preapproved by the Project Engineer. Any potholing that has not been preapproved by the Project Engineer shall be at the Contractor's expense.

SP-2 SECTION 203 – PROOF ROLLING

Section 203 of the Standard Specifications is hereby revised for this project as follows:

Delete Subsection 203.11(f)

In Subsection 203.12, delete the pay item Proof Rolling and add the following:

Proof Rolling will not be measured and paid for separately but shall be included in the work.

SP-3 SECTION 206 – EXCAVATION AND BACKFILL FOR STRUCTURES

Section 206 of the Standard Specifications is hereby revised for this project as follows:

Subsection 206.07 shall include the following:

Structure excavation and structure backfill required for all manholes, valve boxes, inlets, walls, pipes, culverts, utility conduits, extensions, removed pipes and removed conduits will not be measured and paid for separately but shall be included in the work.

SP-4 SECTION 212 – SEEDING

Section 212 of the Standard Specifications is hereby revised for this project as follows:

Subsection 212.02 shall include the following:

City-owned Lands Seed mix shall be:

Common Name	Scientific Name	PLS (lbs/acre)
Indian Ricegrass	Achnatherum hymenoides	1.0
Thickspike Wheatgrass	Elymus lanceolatus	2.3
Western Wheatgrass	Pascopyrum smithii	7.5
Bluebunch Wheatgrass	Pseudoroegneria spicata	2.3
Slender Wheatgrass	Elymus trachycaulus	9.5
Red Mexican Hat	Ratibida columnifera	0.5
Blanket Flower	Gaillardia	1.5
Western Yarrow	Achillea millefolium	0.5
	TOTAL	**25.00**

BLM-owned Lands Seed mix shall be:

Greasewood Flats, Desert Scrubland

Common Name	Scientific Name	Variety	Percentage of Mix (%)	PLS (lbs/acre)
Western Wheatgrass	Pascopyrum smithii	Arriba, Rosana	35	9.5
Bottlebrush Squirreltail	Elymus elymoides	VNS	22	5.8
Alkali Sacaton	Sporobolus airoides	VNS	1	0.27
Sand Dropseed	Sporobolus cryptandrus	VNS	<1	0.09
Shadscale	Atriplex confertifolia	VNS	17	4.5
Four-wing Saltbush	Atriplex canescens	Source N of CO-NM line or above 5,000 ft	23	6.2

Common Name	Scientific Name	Variety	Percentage of Mix (%)	PLS (lbs/acre)
Scarlet Globemallow	Sphaeralcea coccinea	VNS	2	0.47
	TOTAL			**25.00**

Must be able to verify source. Double seeding rate for broadcast seeding. All seed shall be certified weed free.

Contractor shall reference the Plan of Development (Appendix C of the Solicitation) for Reclamation Procedures outlined in Section 4.6.

SP-5 SECTION 240 – BIOLOGICAL, PALEOLOGICAL, AND CULTURAL MANAGEMENT

Section 240 of the Standard Specifications is hereby revised for this project as follows:

Environmental Awareness Training. All staff, contractors, and volunteers responsible for any element of on-the-ground work will receive environmental awareness training prior to being allowed to work on this project. Training will include:

a) information on the legal and biological status of Colorado Hookless Cactus (CHC);
b) the habitats important to the species;
c) awareness of mandatory conservation/avoidance measures;
d) information on fines and penalties for damaging or directly impacting CHC;
e) and reporting procedures if any violation occur.

Cultural Stipulations. Any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by the contractor on public or Federal land shall be immediately reported to the Project Engineer. The Contractor shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Project Engineer. An evaluation of the discovery will be made by the City's Environmental Consultant to determine appropriate actions to prevent the loss of significant cultural or scientific values. The City will be responsible for the cost of evaluation, and any decision as to proper mitigation measures will be made by the BLM after consulting with the City.

The environmental survey identified several populations of CHC in the vicinity of the project limits (within 200 feet of construction and access roads). As part of the BLM ROW and Temporary Use Easements, there are Stipulations to be followed (see Appendix C of the Solicitation), and the Contractor shall coordinate with the City's Biological Monitor when working within the buffer zone around the surveyed CHCs. These zones include the paved trail construction from Station 57+00 to 63+25, Station 71+00 to 76+00, and Station 79+25 to 84+00, including the construction access road at Station 71+60 connecting to Monument Road.

SP-6 SECTION 250 – FIRE PROTECTION PLAN

Section 250 of the Standard Specifications is hereby revised for this project as follows:

A. *Fire Protection Plan.* Prior to start of work, the Contractor shall submit a Fire Control Plan in writing to the Engineer for approval. The plan shall include the following:

1) The name and contact information of a Fire Control Coordinator who shall be assigned to the project.
2) A list of numbers to call in case of a fire, including 911 (or the equivalent in the area).
3) A complete list, including storage locations, of all tools and equipment the Contractor will use in the event of a fire within project limits.
4) Methods that will be employed if a fire is encountered or started during construction activities within the project limits.
5) Specific fire prevention precautions, and the required firefighting equipment, for every activity which has the potential for starting a fire. At a minimum the plan shall address prevention planning related to the use of heavy equipment, vehicles, hand tools, storage and parking areas.
6) Specific precautions for fueling operations.
7) Provisions for field safety meetings. The Contractor shall conduct field safety meetings (also known as toolbox or tailgate meetings) at least once per week. The Contractor shall encourage participation by all persons working at the project site. Participants shall discuss specific fire prevention precautions for construction activities.

B. Equipment and Procedures.

1) Fire Boxes. Fire boxes shall contain tools and equipment that shall be used exclusively for controlling or suppressing fires which occur due to construction activities on project sites. Each fire box shall contain, as a minimum, the following:

   a) five round-pointed shovels,
   b) two double-bitted axes,
   c) three pulaskis or mattocks, and
   d) two backpack pumps

2) Welding. If welding at field locations is required, the welding shall be done at a location where all flammable material has been cleared away for a distance of 16 feet around the area.
3) Spark Arrestors. All diesel and gasoline powered engines, both mobile and stationary, shall be equipped with serviceable spark arrestors.
4) Power Saws. Each gasoline power saw shall be provided with a spark screen and a muffler in good condition. Spill-proof metal safety cans shall be used for refueling.

5) Storage and Parking Areas. Batch plant areas, equipment service areas, parking areas, gas and oil drum storage areas, and explosive storage areas shall be cleared of all flammable materials for a distance of 50 feet. Small stationary engine sites shall be cleared of all flammable material for a distance of 17 feet. Other mitigation methods may be used as approved by the Engineer. No construction vehicles or equipment shall be parked on dry brush.

C. *Fire Control Coordinator Responsibilities*. The Fire Control Coordinator shall:

1) Implement the Fire Control Plan.
2) Monitor, manage, and adjust the Fire Control Plan as needed as construction work progresses.
3) Document in a letter to the Engineer changes to the Fire Control Plan.
4) Immediately contact firefighting authorities when a fire is started due to construction activities within project limits.
5) Coordinate fire control and suppression activities until authorities arrive, including the evacuation of staff.
6) When the Fire Control Coordinator cannot be on the project site, he shall designate a person who is on site to serve as the Fire Control Coordinator. The Fire Control Coordinator, or his designee, shall be on site at all times that work is being performed.

D. *Costs.* All costs associated with the preparation and implementation of the Plan and compliance with all fire protection provisions and requirements will not be measured and paid for separately but shall be included in the work.

SP-7 SECTION 506 – STONE BOULDERS

Section 506 of the Standard Specifications is hereby revised for this project as follows:

Subsection 506.01 shall include the following:

This work includes installation of stone boulders in the construction access zones shown on the plans. Each feature contains a variable number of boulders from off-site sources. Work includes the selection of suitable boulders, transport, and placement of approved boulders into distinct features as shown on the plans to block vehicle access after construction is completed.

Construction shall be limited to areas as shown on the plans or as agreed to by the Engineer.

Subsection 506.02 shall include the following:

Boulders for use in the trailhead improvements shall be angular or subrounded on the sides and top, and 24 inches to 36 inches in diameter (measured on the A-axis (minimum

dimension), and a height of 16 inches minimum (after installation). Exposed surface of installed boulders shall not show machine-caused scarring or breakage. Boulders are to be tan/red sandstone. Examples of this type of boulder can be seen at “The Rock Shop”, 800 S 15th Street, Grand Junction – Burnt Autumn and Redstone Red boulders.

Contractor shall submit sample to Engineer prior to acquisition.

Subsection 506.03 shall include the following:

Boulders are to be placed where indicated on the drawings or as approved by the Engineer. The nature of the selected rock will require excavation of a pit 1/3 to 1/2 the height of the rock in the position the rock is to be placed. Backfill following placement, and compact.

Subsection 506.04 shall include the following:

Sandstone Boulders will be measured by the plan linear feet of each area installed in the field, including and all labor, materials equipment, and transportation of materials required to complete the work.

Subsection 506.05 shall include the following:

The accepted quantities of Sandstone Boulders will be paid for at the contract unit price for each of the items listed below that appear in the bid schedule.

Pay Item	**Pay Unit**
Stone Boulders for access control	Each

Work shall include all boulder transport, handling, and placement.

SP-8 SECTION 601 – CONCRETE

Section 601 of the Standard Specifications is hereby revised for this project as follows:

Subsection 601.02, Classification:

CONCRETE SHALL MEET THE FOLLOWING REQUIREMENTS:

- 4,500 PSI Compressive at 28 Days
- 6% air ±1.5%
- Slump 4”, Loads exceeding 6” shall be rejected
- Maximum Water Cement Ratio no greater than 0.45.

Subsection 601.06, Batching:

This CDOT Specification has been added to this Project:

The Contractor shall furnish a batch ticket (delivery ticket) with each load for all concrete. Concrete delivered without a batch ticket containing complete information as specified shall be rejected. The Contractor shall collect and complete the batch ticket at the placement site and deliver all batch tickets to the Engineer or his representative at the end of each day. The Engineer or his representative shall have access to the batch tickets at any time during the placement. The following information shall be provided on each ticket:

1. Suppliers name and date
2. Truck number
3. Project name and location
4. Concrete class and designation number
5. Cubic yards batched
6. Type brand and amount of each admixture
7. Type, brand, and amount of cement and fly ash
8. Weights of fine and coarse aggregates
9. Moisture of fine and coarse aggregates
10. Gallons of batch water

The contractor shall add the following information to the batch ticket at time of placement:

1. Gallons of water added by the truck operator.
2. Number of revolutions of the drum for mixing
3. Discharge time

STANDARD SPECIFICATIONS FOR CONSTRUCTION OF WATER LINES, SANITARY SEWERS, STORM DRAINS, UNDERDRAINS AND IRRIGATION SYSTEMS

The City of Grand Junction ***Standard Specifications for Construction of Water Lines, Sanitary Sewers, Storm Drains, Underdrains and Irrigation Systems*** are hereby modified for this Project as follows:

SP-9 SECTION 103 – REMOVALS, EXCAVATION, BACKFILLING & RESTORATION

Section 103 of the Standard Specifications is hereby revised for this project as follows:

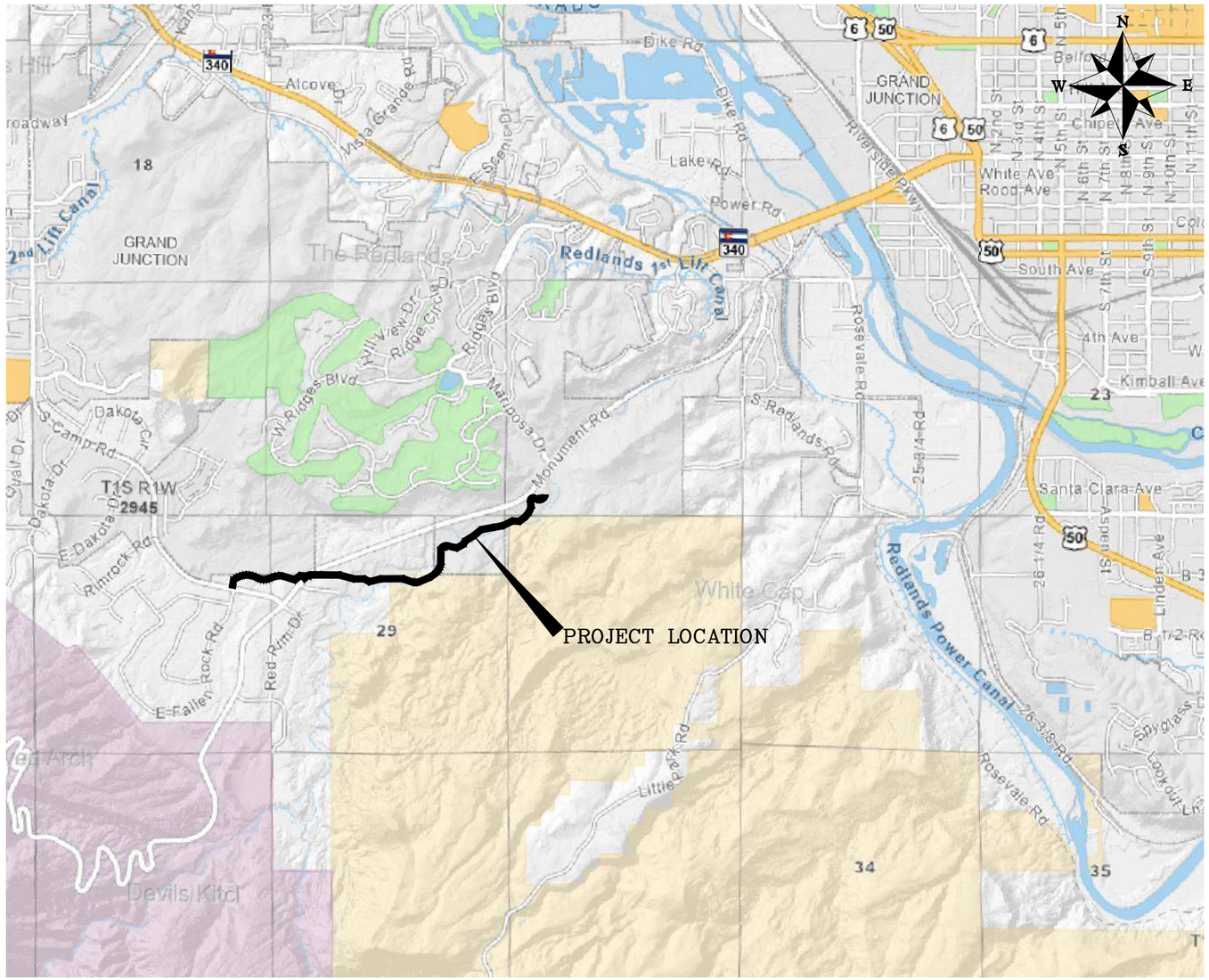
Subsection 103.16, Earth Backfill Material, shall include the following:

> Native material excavated on site shall be used for backfill on all pipelines and appurtenances above the bedding and haunching material unless the native material is too wet and/or otherwise unsuitable for backfill as determined by the Project Engineer or the Project Inspector. In such case, imported trench backfill material, or other approved material, shall be used and paid for per ton of material supplied, placed and compacted. The Contractor will be required to

salvage useable materials from the project excavations and mix the useable material with imported trench backfill prior to placing backfill in the trench. The contract price for “Imported Trench Backfill” shall include the disposal of the unsuitable material.

PROJECT NO.G2208

CITY OF GRAND JUNCTION
MONUMENT CONNECT TRAIL PHASE 2
August 13, 2024



VICINITY MAP

0 1500 3000

SHEET LIST

1	COVER SHEET
2	STANDARD ABBREVIATIONS LEGENDS AND SYMBOLS
3	CONTROL PLAN
4	SUMMARY OF APPROXIMATE QUANTITIES
5	SUMMARY OF EARTHWORK QUANTITIES
6	BOX CULVERT PLAN & PROFILE
7	WING WALL PLAN AND PROFILE
8	WING WALL PLAN AND PROFILE
9	RETAINING WALL PLAN AND PROFILE
10	RETAINING WALL PLAN AND PROFILE
11	PATH TYPICAL CROSS SECTIONS
12	POST FOUNDATION DETAIL
13	PLAN AND PROFILE KEY MAP
14-47	TRAIL PLAN AND PROFILES
48	PIPE TABLE
49	SINGLE TRACK PLAN
50-65	TRAIL CROSS SECTIONS (TO BE DISTRIBUTED IN FUTURE ADDENDUM)
66-84	STORM WATER MANAGEMENT PLAN

NOTE: NOTIFY AFFECTED UTILITY VENDOR 48 HOURS PRIOR TO EXCAVATIONS THAT WILL EXPOSE UTILITY LINES. THE COVER SHEET WILL HAVE A LISTING OF UTILITY VENDORS AND TELEPHONE NUMBERS.

DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

811 Know what's **below.** **Call** before you dig.

CITY OF Grand Junction COLORADO

Public Works
Engineering Division

N:\EngPro\g2208 (monument connect phase iii)\60CAD\00DESIGN\COVER SHEET.dwg — PLOTTED 8/13/2024 11:14:23 AM

ABBREVIATIONS

AASHTO	AMERICAN ASSOCIATION OF STATE HIGHWAY & TRANSPORTATION OFFICIALS
ABC	AGGREGATE BASE COURSE
AC	ASBESTOS CEMENT
AP	ANGLE POINT
ASB	ANCHORED STRAW BALES
ASP	ALUMINIZED STEEL PIPE
ASTM	AMERICAN SOCIETY FOR TESTING MATERIALS
AWWA	AMERICAN WATER WORKS ASSOCIATION
BC	BACK OF CURB
BF	BUTTERFLY VALVE
BOW	BACK OF WALK
BCR	BEGIN CURB RETURN
BOT	BOTTOM
BSWMP	BETTER STORM WATER MANAGEMENT PRACTICES
CH	CHORD
CAP	CORRUGATED ALUMINUM PIPE
CDOT	COLORADO DEPARTMENT OF TRANSPORTATION
CI	CAST IRON
C,G,& SW	CURB, GUTTER & SIDEWALK
℄	CENTER LINE
CL	CLEAR
CMP	CORRUGATED METAL PIPE
CO	CLEAN OUT
COMB	COMBINATION (AS IN STORM SEWER AND SANITARY SEWER)
CONC	CONCRETE
CSM	CITY SURVEY MONUMENT
CSP	CORRUGATED STEEL PIPE
CU	COPPER
DI	DUCTILE IRON
DWY	DRIVEWAY
E	ELECTRIC
ECR	END CURB RETURN
EG	EDGE OF GUTTER
EL	ELEVATION
EP	EDGE OF PAVEMENT
EX	EXISTING
FB	FULL BODY
FC	FACE OF CURB
FG	FINISHED GRADE
℄	FLOW LINE
FL	FLANGE
FM	FORCE MAIN
FO	FIBER OPTICS
FS	FAR SIDE
FTG	FOOTING
G	GAS
GB	GRADE BREAK
GM	GAS METER
GV	GATE VALVE
HBP	HOT BITUMINOUS PAVEMENT
HDPE	HIGH DENSITY POLYETHYLENE
INV	INVERT
IRR	IRRIGATION
L	LENGTH OF ARC
LC	LONG CHORD
LF	LINEAR FEET
LL	LONG ARC
LS	SHORT ARC
LT	LEFT
MB	MAILBOX
MCSM	MESA COUNTY SURVEY MONUMENT
MH	MANHOLE
MJ	MECHANICAL JOINT
MW	MILL WRAP
N/A	NOT APPLICABLE
NIC	NOT IN CONTRACT
NOP	NO ONE PERSON
NRCP	NON-REINFORCED CONCRETE PIPE
NS	NEAR SIDE
NTS	NOT TO SCALE
OHP	OVERHEAD POWER
OHT	OVERHEAD TELEPHONE
PC	POINT OF CURVATURE
PCC	POINT OF COMPOUND CURVATURE
PE	POLYETHYLENE
PERF	PERFORATED
PI	POINT OF INTERSECTION
PIP	PLASTIC IRRIGATION PIPE
POC	POINT ON CURVE
POT	POINT ON TANGENT
PR	PROPOSED
PRC	POINT OF REVERSE CURVATURE
PT	POINT OF TANGENCY
PVC	POLYVINYL CHLORIDE
R	RADIUS
RCP	REINFORCED CONCRETE PIPE
REQ'D	REQUIRED
RG	RESTRAINED GLANDS
RL	LONG RADIUS
ROW	RIGHT OF WAY
RP	RADIUS POINT
RR	RAIL ROAD
RS	SHORT RADIUS
RT	RIGHT
S	SLOPE
SAN	SANITARY
SC	SHORT CHORD
SCD	STANDARD CONTRACT DOCUMENTS
SCH	SCHEDULE
SF	SILT FENCE
SL	SECTION LINE
SSRB	STANDARD SPECIFICATIONS FOR ROAD & BRIDGE CONSTRUCTION
SSUU	STANDARD SPECIFICATIONS FOR CONSTRUCTION OF UNDERGROUND UTILITIES
STA	STATION
STL	STEEL
STM	STORM
T	TELEPHONE
TAN	LENGTH OF TANGENT
TC	TOP OF CURB
TH	TEST HOLE
TV	TELEVISION
(TYP)	TYPICAL
UU	UNDERGROUND UTILITIES
VC	VERTICAL CURVE
VCP	VITRIFIED CLAY PIPE
VPC	VERTICAL POINT OF CURVATURE
VPCC	VERTICAL POINT OF COMPOUND CURVATURE
VPRC	VERTICAL POINT OF REVERSE CURVATURE
VPI	VERTICAL POINT OF INTERSECTION
VPT	VERTICAL POINT OF TANGENCY
W	WATER
Δ	DELTA ANGLE

LEGEND

BSWMP DRAINAGE BASIN BOUNDARY

BSWMP ANCHORED STRAW BALES — ASB ASB ASB ASB ASB ASB ASB

BSWMP SILT FENCE — SF SF SF SF SF SF SF

BUILDING

CONCRETE CURB AND GUTTER — 2" CURB AND GUTTER

CONCRETE CURB,GUTTER, & SIDEWALK — 7" C, G, & SW

CONCRETE DITCH — CONCRETE

CONCRETE SIDEWALK — 4" SW

CULVERT — 18" RCP

EARTH DITCH — EARTH EARTH EARTH

EDGE OF GRAVEL

EDGE OF PAVEMENT

FENCE (HT & MATL NOTED) — 6' CHAINLINK

GUARD RAIL

HATCHING: INDICATES ASPHALT REMOVAL

HATCHING: INDICATES CONCRETE REMOVAL

HATCHING: INDICATES STAGING AREA — ~STAGING AREA~

LINE (CENTER OF IMPROVEMENTS) — CENTERLINE

LINE (CITY LIMITS) — CITY LIMITS

LINE (CONTROL) — CONTROL LINE

LINE (EASEMENT)

LINE (MONUMENT/SECTION) — MONUMENT/SECTION LINE

LINE (PROPERTY)

LINE (RIGHT OF WAY)

MATCH LINE — MATCH LINE

PIPE (IRRIGATION) — 4" IRR

PIPE (SIPHON) — 4" SIPHON

PROPOSED CONCRETE CURB AND GUTTER

PROPOSED CONCRETE CURB,GUTTER,& SIDEWALK

PROPOSED CONCRETE SIDEWALK

PROPOSED "WET" UTILITIES (CONSTRUCTION NOTE WILL INDICATE TYPE, SIZE, AND MATERIAL OF NEW MAIN) — 8" PVC SANITARY SEWER

ALL PROPOSED FEATURES NOT SHOWN IN LEGEND WILL BE SHOWN THE SAME AS THEIR EXISTING COUNTERPART, BUT INDICATED BY BOLDER LINETYPE

RAIL ROAD

RETAINING WALL — 1' RETAINING WALL

STRIPING (CONTINUOUS WHITE) — WHITE

STRIPING (DASHED WHITE) — WHITE

STRIPING (CONTINUOUS YELLOW) — YELLOW

STRIPING (DASHED YELLOW) — YELLOW

TOP OF SLOPE

CONTOUR LINES (SHOWN BETWEEN TOP & TOE) — 4580

TOE OF SLOPE — 4570

TRAFFIC DETECTOR LOOP

UTILITY LINE (ABANDON) (THIS CASE A WATER LINE) — W (ABANDONED) 8" W

UTILITY LINE (CABLE TV) — TV TV

UTILITY LINE (ELECTRIC) — E E

UTILITY LINE (FIBER OPTIC) — FO QWEST FO

UTILITY LINE (GAS) — G 1 1/4" MW G

UTILITY LINE (HIGH VOLTAGE OVERHEAD POWER) — HVOHP

UTILITY LINE (OVERHEAD POWER) — OHP

UTILITY LINE (OVERHEAD TELEPHONE) — OHT

UTILITY LINE (SANITARY SEWER) — 8" SAN

UTILITY LINE (SANITARY SEWER FORCE MAIN) — 8" FM

UTILITY LINE (SANITARY SEWER SERVICE) — SS

UTILITY LINE (STORM SEWER) — 8" STM

UTILITY LINE (STORM SEWER, PERFORATED) — 6" PERF

UTILITY LINE (STORM/SANITARY SEWER SEWER COMBINATION) — 18" COMB

UTILITY LINE (TELEPHONE) — T T

UTILITY LINE (WATER) — W 8" W

SYMBOLS

BENCH MARK — A

CATCH BASIN

CLEAN OUT — SSCO

CURB STOP

FIRE HYDRANT

GUY WIRE ANCHOR

HEADGATE

IRRIGATION PUMP — IP

MAILBOX — MB

MANHOLE (ELECTRIC) — E

MANHOLE (GAS) — G

MANHOLE (SANITARY/STORM)

MANHOLE (TELEPHONE) — T

MANHOLE (TV) — TV

MANHOLE (WATER) — W

METER (GAS) — GM

METER (WATER)

PEDESTAL (TELEPHONE)

PEDESTAL (TV) — TV

PROPERTY PIN — PIN

PULL BOX

REDUCER FITTING

SIGN OR POST (SIGN TYPE NOTED) — STOP

SPRINKLER HEAD

STREET LIGHT

SURVEY MONUMENT (CITY) — CSM

SURVEY MONUMENT (TYPE NOTED) — MCSM

TEST HOLE — TH #1

TRAFFIC PAINT MARKING

TRAFFIC SIGNAL POLE AND MAST ARM — TS

UTILITY POLE

VALVE (GAS) — GV

VALVE (IRRIGATION) — IRR

VALVE (WATER)

VEGETATION (HEDGE OR BUSH)

VEGETATION (TREE STUMP)

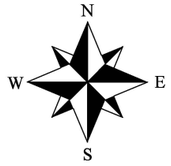
VEGETATION (TREE) (CALIPER SIZE NOTED) — 6"

WATER HYDRANT — WH

WEIR

YARD LIGHT

NORTH ARROW:



BAR SCALE:

GRAPHIC SCALE

10 0 20 60

(IN FEET)
1 inch = 20 ft.

DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES:

SEE PLAN FOR SCALE INFO

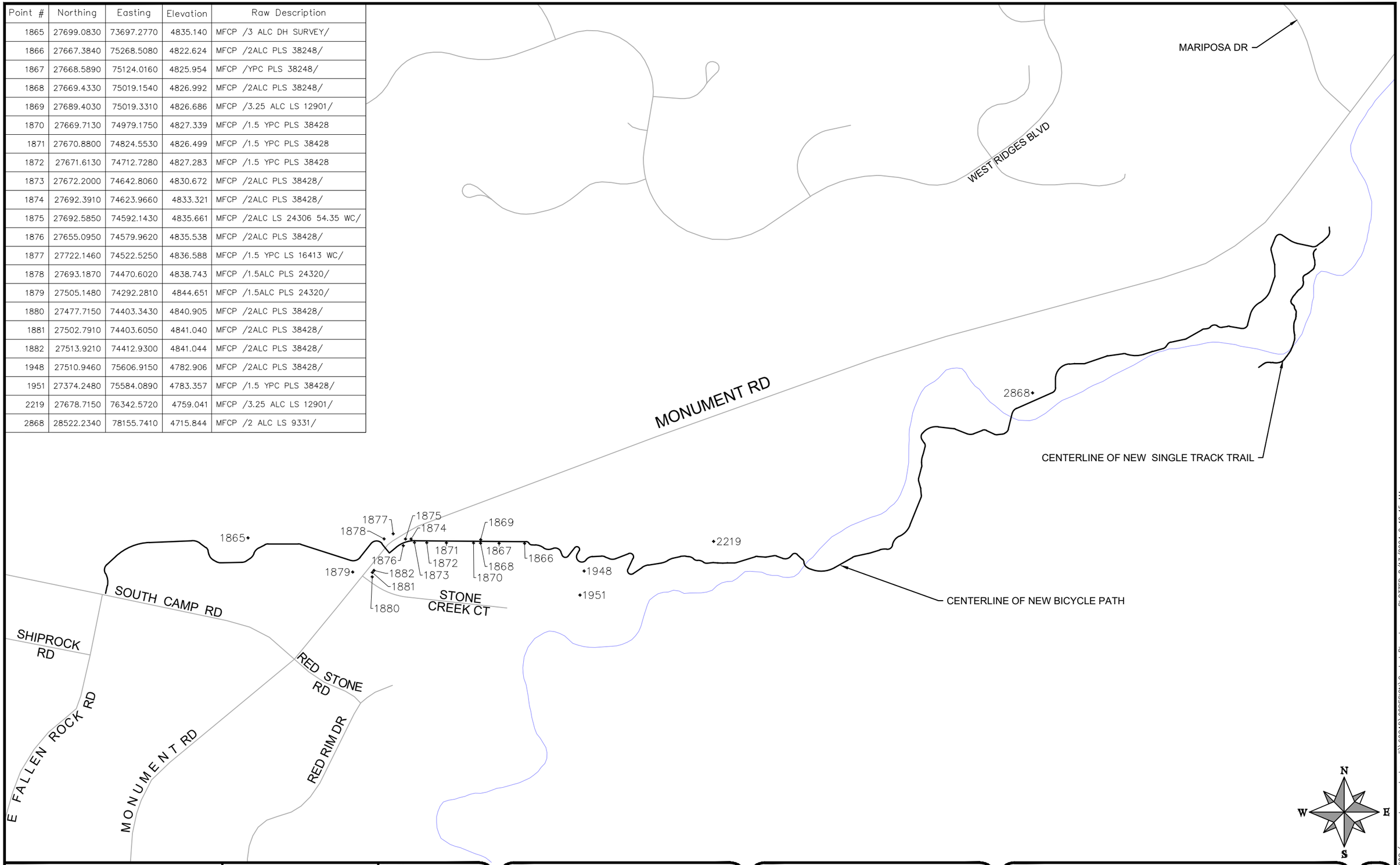
CITY OF Grand Junction COLORADO

PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
STANDARD ABBREVIATIONS LEGENDS AND SYMBOLS
August 13, 2024

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Point #	Northing	Easting	Elevation	Raw Description
1865	27699.0830	73697.2770	4835.140	MFCP /3 ALC DH SURVEY/
1866	27667.3840	75268.5080	4822.624	MFCP /2ALC PLS 38248/
1867	27668.5890	75124.0160	4825.954	MFCP /YPC PLS 38248/
1868	27669.4330	75019.1540	4826.992	MFCP /2ALC PLS 38248/
1869	27689.4030	75019.3310	4826.686	MFCP /3.25 ALC LS 12901/
1870	27669.7130	74979.1750	4827.339	MFCP /1.5 YPC PLS 38428
1871	27670.8800	74824.5530	4826.499	MFCP /1.5 YPC PLS 38428
1872	27671.6130	74712.7280	4827.283	MFCP /1.5 YPC PLS 38428
1873	27672.2000	74642.8060	4830.672	MFCP /2ALC PLS 38428/
1874	27692.3910	74623.9660	4833.321	MFCP /2ALC PLS 38428/
1875	27692.5850	74592.1430	4835.661	MFCP /2ALC LS 24306 54.35 WC/
1876	27655.0950	74579.9620	4835.538	MFCP /2ALC PLS 38428/
1877	27722.1460	74522.5250	4836.588	MFCP /1.5 YPC LS 16413 WC/
1878	27693.1870	74470.6020	4838.743	MFCP /1.5ALC PLS 24320/
1879	27505.1480	74292.2810	4844.651	MFCP /1.5ALC PLS 24320/
1880	27477.7150	74403.3430	4840.905	MFCP /2ALC PLS 38428/
1881	27502.7910	74403.6050	4841.040	MFCP /2ALC PLS 38428/
1882	27513.9210	74412.9300	4841.044	MFCP /2ALC PLS 38428/
1948	27510.9460	75606.9150	4782.906	MFCP /2ALC PLS 38428/
1951	27374.2480	75584.0890	4783.357	MFCP /1.5 YPC PLS 38428/
2219	27678.7150	76342.5720	4759.041	MFCP /3.25 ALC LS 12901/
2868	28522.2340	78155.7410	4715.844	MFCP /2 ALC LS 9331/



DESCRIPTION	DATE
REVISION 1	–
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REVISION 3	–
REVISION 4	–

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APPROVED BY KA DATE 2024

SCALES:
PLAN & PROFILE
HORIZONTAL: 1" = 20'
VERTICAL: 1" = 5'

CITY OF Grand Junction COLORADO

PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
CONTROL PLAN
August 13, 2024

3

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Monument Connect Trail - Phase 2

Item No.	CDOT, City Ref.	Description	Quantity	Units
1	102.10	Reinforced Concrete Pipe (RCP) (76-inch x 48-inch Horizontal Elliptical) (Includes bedding, material and install)	80.	Lin. Ft.
2	102.10	Reinforced Concrete Pipe (RCP) (48-inch) (Includes bedding, material and install)	24.	Lin. Ft.
3	102.10	Reinforced Concrete Pipe (RCP) (24-inch) (Includes bedding, material and install)	144.	Lin. Ft.
4	102.10	Reinforced Concrete Pipe (RCP) (18-inch) (Includes bedding, material and install)	72.	Lin. Ft.
5	102.10	Reinforced Concrete Pipe (RCP) (12-inch) (Includes bedding, material and install)	24.	Lin. Ft.
6	102.10	Reinforced Concrete Box Culvert (CBC) (9 ft wide by 4 ft high (Delivery from Rinker Materials, bedding and Install Only)	74.	Lin. Ft.
7	102.10	Reinforced Concrete Box Culvert (CBC) (9 ft wide by 5 ft high (Delivery from Rinker Materials, bedding and Install Only)	74.	Lin. Ft.
8	102.13	3 ft x 3 ft Area Inlet	1.	Each
9	201	Clearing and Grubbing	5.2	Acre
10	202	Removal of Tree (2" dia.)	6.	Each
11	203	Unclassified Excavation (Complete in Place)	2,700.	Cu. Yd.
12	208	Erosion Logs (12 inch)	4,000.	Lin. Ft.
13	208	Aggregate Bag	10.	Each
14	208	Concrete Washout Structure	2.	Each
15	208	Vehicle Track Pad	3.	Each
16	208	BMP Swale Berms	32.	Each
17	209	Dust Abatement	Lump Sum	
18	210	Reset Sign	1.	Each
19	210	Adjust existing metal post and rail fence at bike park	Lump Sum	
20	212	Seeding (Native) (Hydroseed) (Use Seed Mixes Specified Based on Property Owner - City or BLM)	4.5	Acre
21				
22	216	Soil Retention Blanket (Coconut) (As Needed Where Disturbed Slope is Greater Than 3:1)	1,000.	Sq. Yd.
23	304	Granular Stabilization Material (Type B) (Crushed Rock) (As Needed in Excavations Where Unstable Bottom Exists)	20.	Ton
24	304	Aggregate Base Course (Class 6) (12 inch thick shoulders)	3,411.	Ton
25	304	Aggregate Base Course (Class 3) (subgrade stabilization as needed)	500.	Cu. Yd.

Item No.	CDOT, City Ref.	Description	Quantity	Units
26	306	Reconditioning (12 inches deep)	20,253.	Sq. Yd.
27	306	Singletrack Trail (3-ft wide) (Complete in Place)	880.	Lin. Ft.
28	504	Precast Concrete Block Retaining Wall System (includes all necessary appurtenances, work, etc. to complete).	508.	FSF
29	504	Concrete Wall (Class D) per M and S Standard M-601-20 (Wall Design Height 3' to 7' per plan). (Includes associated headwall, and toe walls) Work shall include approximately 3750 lbs. Reinforcing Steel (Epoxy Coated), 75 sy Structural Concrete Coating (Exterior of wall), 35 cy Structural Backfill (Class 1) and any necessary appurtenances to complete work.	95.	Cu. Yd.
30	506	Riprap (D_{50} = 12 inch)	100.	Cu. Yd.
31	506	Landscape Boulders (Site Access Control)	112.	Each
32	514	Detectable Warning (Cast Iron, Wet Set) (2 ft x 2 ft)	15.	Each
33	601	Cast-in-Place Concrete Footings to support shade structures (1.5 ft diameter, 6 ft drilled into ground, including rebar per details)	24.	LF
34	608	Colored Concrete Sidewalk (6" Thick) to include 6" of Class 6 Aggregate Base Course	10,167.	Sq. Yd.
35	608	Colored Concrete Curb Ramp to include 6" of Class 6 Aggregate Base Course	150.	Sq. Yd.
36	608	Colored Concrete Curb and Gutter (2 ft wide) to include 6" of Class 6 Aggregate Base Course	290.	Lin. Ft.
37	608	Colored Concrete Pad for Benches (6 inch thick)(Includes 6 inch thick Class 6 ABC) (Location To Be Decided)	18.	Sq. Yd.
38	620	Portable Sanitary Facility	2.	
39	625	Construction Surveying (Includes As-Built Drawings)	Lump Sum	
40	626	Mobilization	Lump Sum	
41	630	Traffic Control (Complete in Place)	Lump Sum	

DESCRIPTION	DATE
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REVISION 3	
REVISION 4	

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APPROVED BY KA DATE 2024

SCALES: NO SCALE

CITY OF Grand Junction COLORADO

PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
SUMMARY OF APPROXIMATE QUANTITIES
August 13, 2024

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SUMMARY OF EARTHWORK QUANTITIES

INDEX Book	INDEX Page	INDEX Sheet		PROJECT TOTAL CU. YD.	PROJECT TOTAL *As Const.*
			203-00010 UNCLASSIFIED EXCAVATION (CIP)		
			ROADWAY (QUANTITY CALCULATED FROM CIVIL3D)		
			Monument Connect Trail - Phase 2	2694	
			ADDITION OF CONCRETE AND PAVING PRISM	0	
			REMOVAL OF PAVEMENT REMOVAL PAY ITEMS	0	
			SUBTOTAL:	2694	
			SUBTOTAL:	0	
			SUBTOTAL:	0	
			TOTAL FOR PAY QUANTITIES	**2694**	
			EMBANKMENT MATERIAL (CIP) (FOR INFORMATION ONLY)	**CU. YD.**	
			QUANTITY CALCULATED FROM CIVIL3D		
			Monument Connect Trail - Phase 2	7310	
			REMOVAL OF CONCRETE PAVING AND SHOULDER WITH BASE PRISM	-5110	
			TOTAL	**2200**	

INDEX Book	INDEX Page	INDEX Sheet	**ROADWAY QUANTITIES BALANCE (FOR INFORMATION ONLY)**	PROJECT TOTAL CU. YD.	PROJECT TOTAL *As Const.*
			Total Unclassified Excavation	2694	
			Total Embankment (net)	2200	
			EMBANKMENT TIMES FACTOR 1.2	2640	
			Import Material (Material to be Imported by Contractor)	-54	

NOTES:

TOP 4 INCHES OF ALL EMBANKMENT SHALL BE FREE OF DEBRIS AND ROCKS OR CLODS GREATER THAN 3 INCHES IN DIAMETER, AND SHALL BE SUITABLE AS NATIVE TOPSOIL.
ALL IMPORTED EMBANKMENT MATERIAL SHALL MEET A MINIMUM OF R-VALUE = 40.

DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

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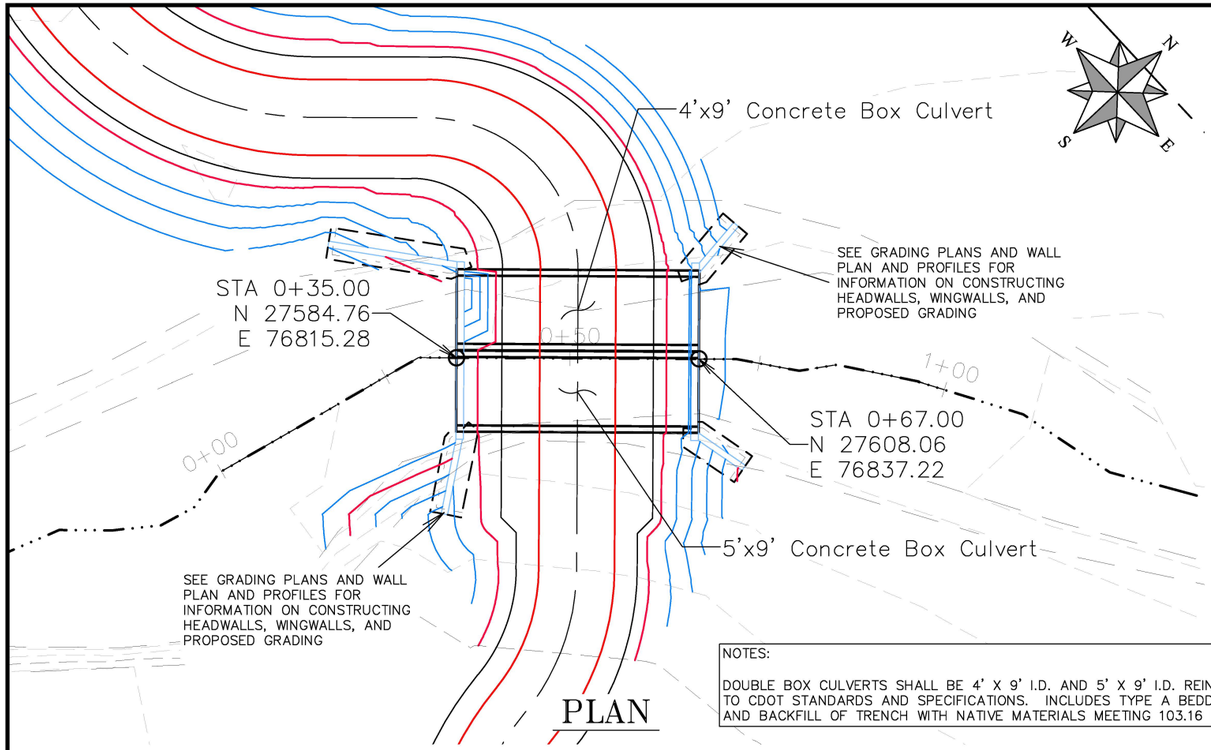
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CITY OF Grand Junction COLORADO

PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
SUMMARY OF EARTHWORK QUANTITIES
August 13, 2024

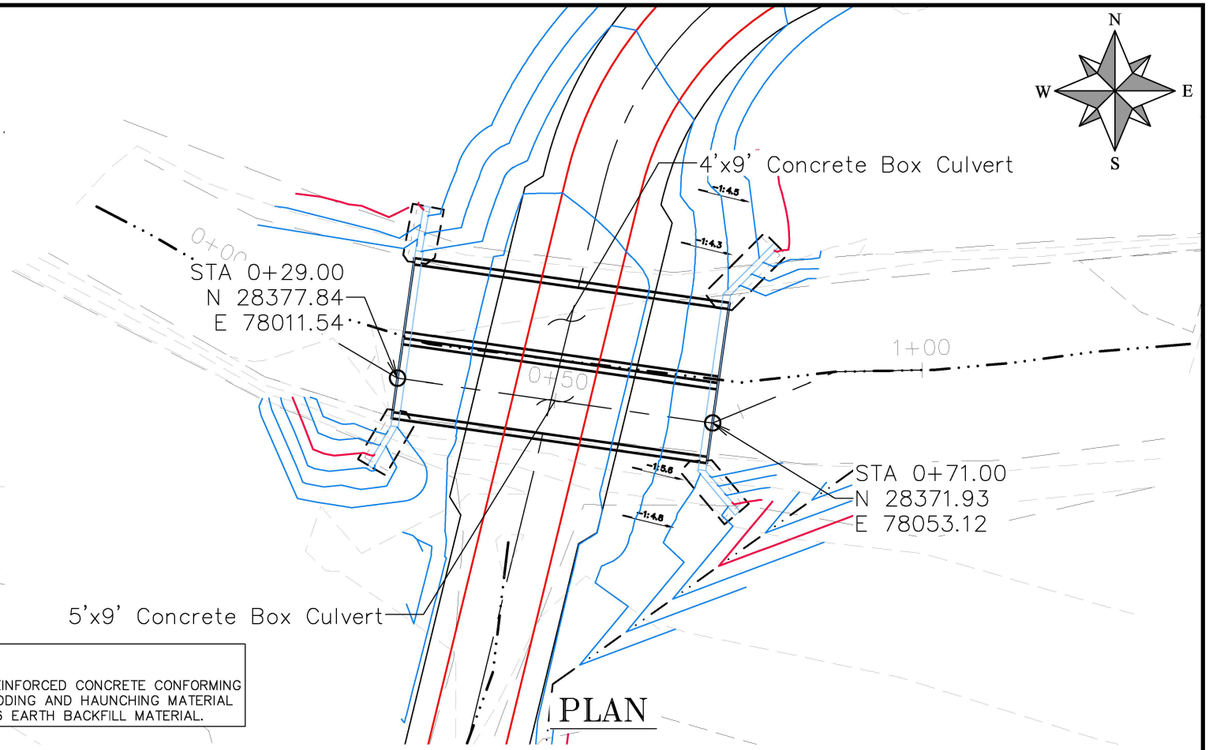
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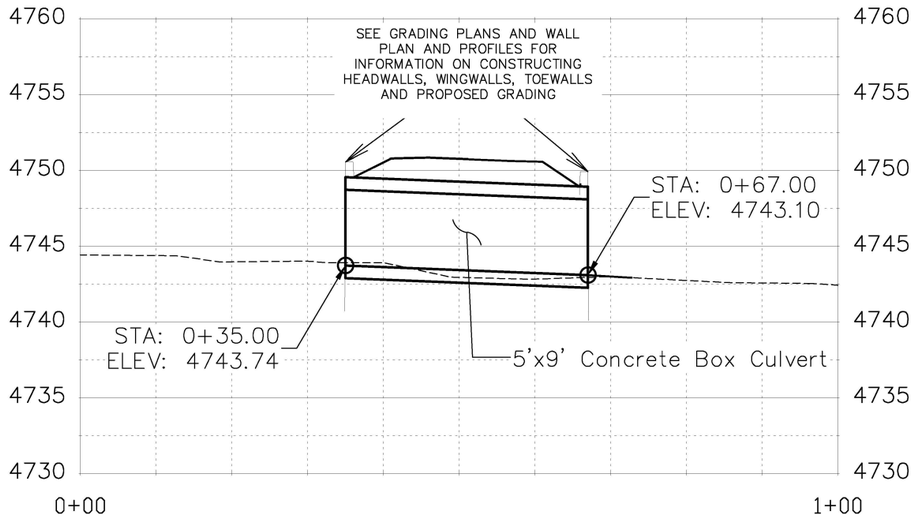
PLAN

NOTES:

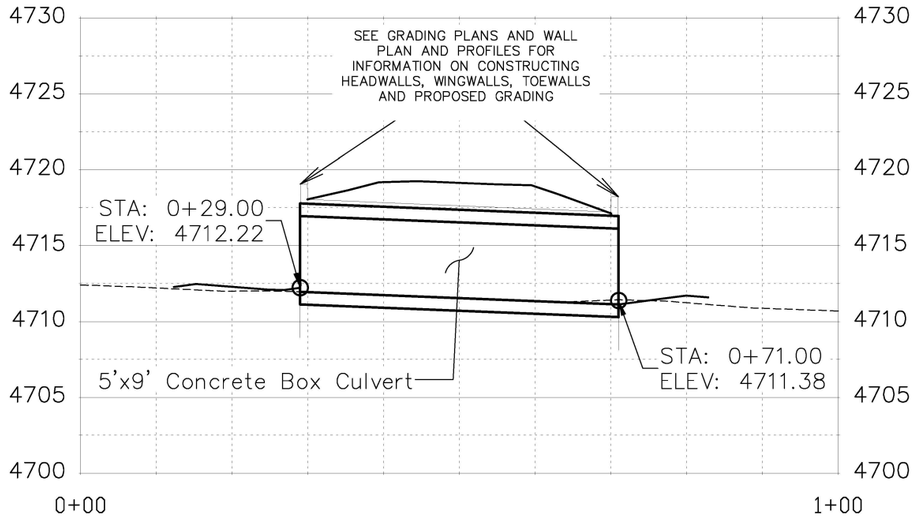
DOUBLE BOX CULVERTS SHALL BE 4' X 9' I.D. AND 5' X 9' I.D. REINFORCED CONCRETE CONFORMING TO CDOT STANDARDS AND SPECIFICATIONS. INCLUDES TYPE A BEDDING AND HAUNCHING MATERIAL AND BACKFILL OF TRENCH WITH NATIVE MATERIALS MEETING 103.16 EARTH BACKFILL MATERIAL.



PLAN



PROFILE



PROFILE

DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

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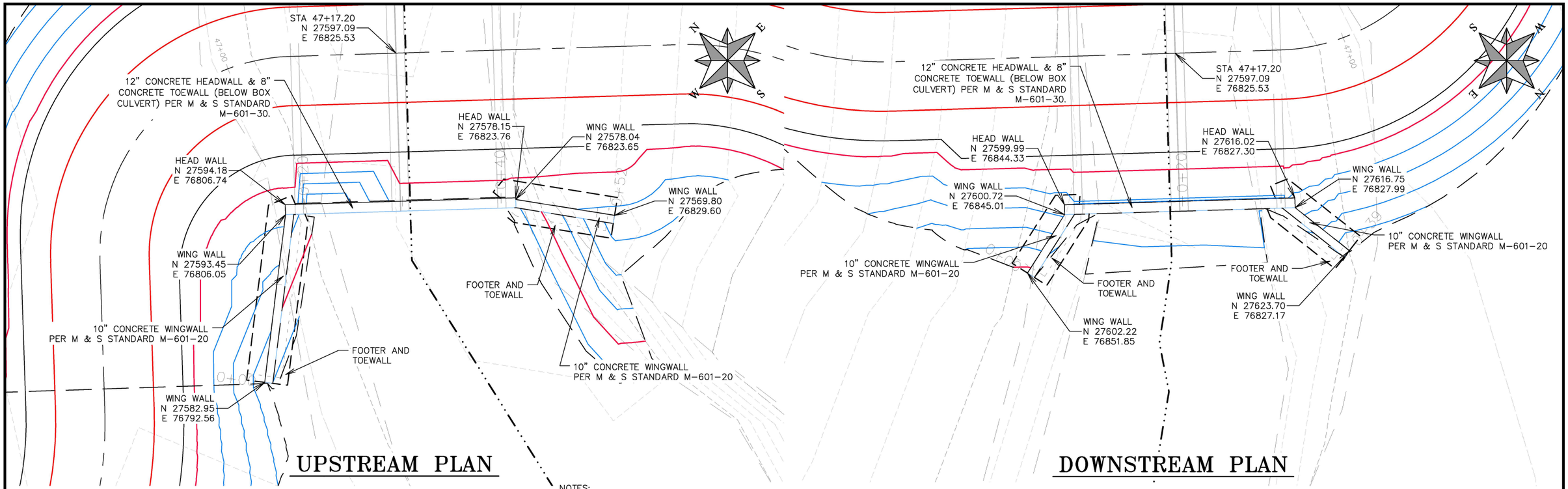
SCALES:
PLAN & PROFILE
HORIZONTAL: 1" = 20'
VERTICAL: 1" = 5'

CITY OF Grand Junction COLORADO

PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

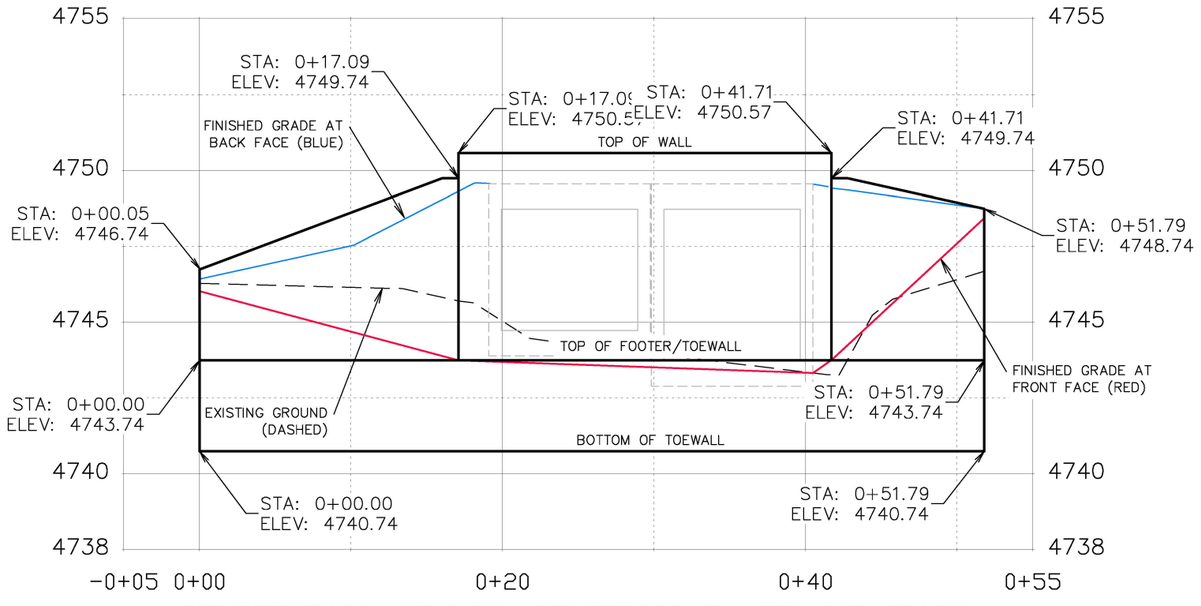
MONUMENT CONNECT TRAIL PHASE 2
BOX CULVERT PLAN & PROFILE
August 13, 2024

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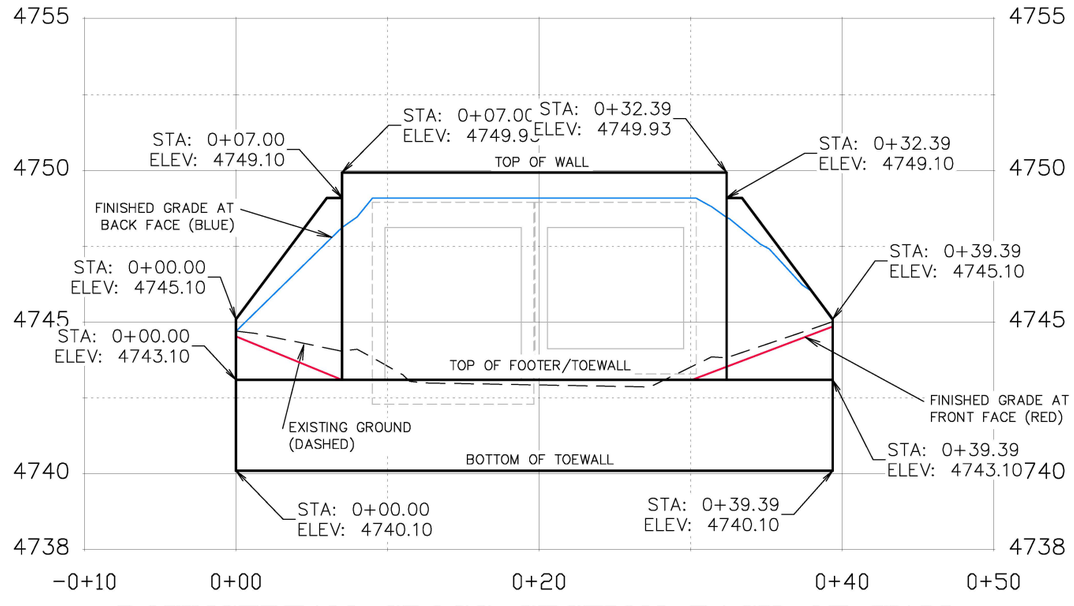


NOTES:

DOUBLE BOX CULVERTS SHALL BE 4' X 9' I.D. AND 5' X 9' I.D. REINFORCED CONCRETE CONFORMING TO CDOT STANDARDS AND SPECIFICATIONS. INCLUDES TYPE A BEDDING AND HAUNCHING MATERIAL AND BACKFILL OF TRENCH WITH NATIVE MATERIALS MEETING 103.16 EARTH BACKFILL MATERIAL.



UPSTREAM CROSS SECTION BACK OF WALL



DOWNSTREAM CROSS SECTION BACK OF WALL

DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2024
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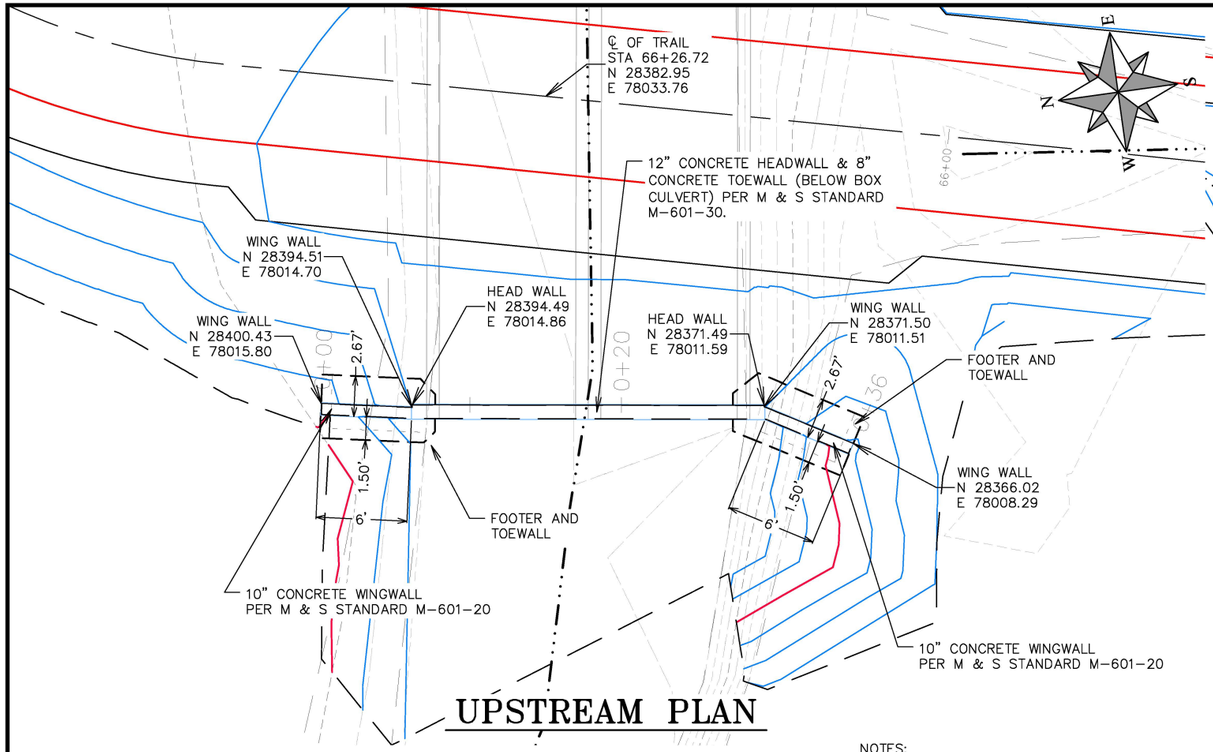
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VERTICAL: 1" = 5'

CITY OF Grand Junction COLORADO

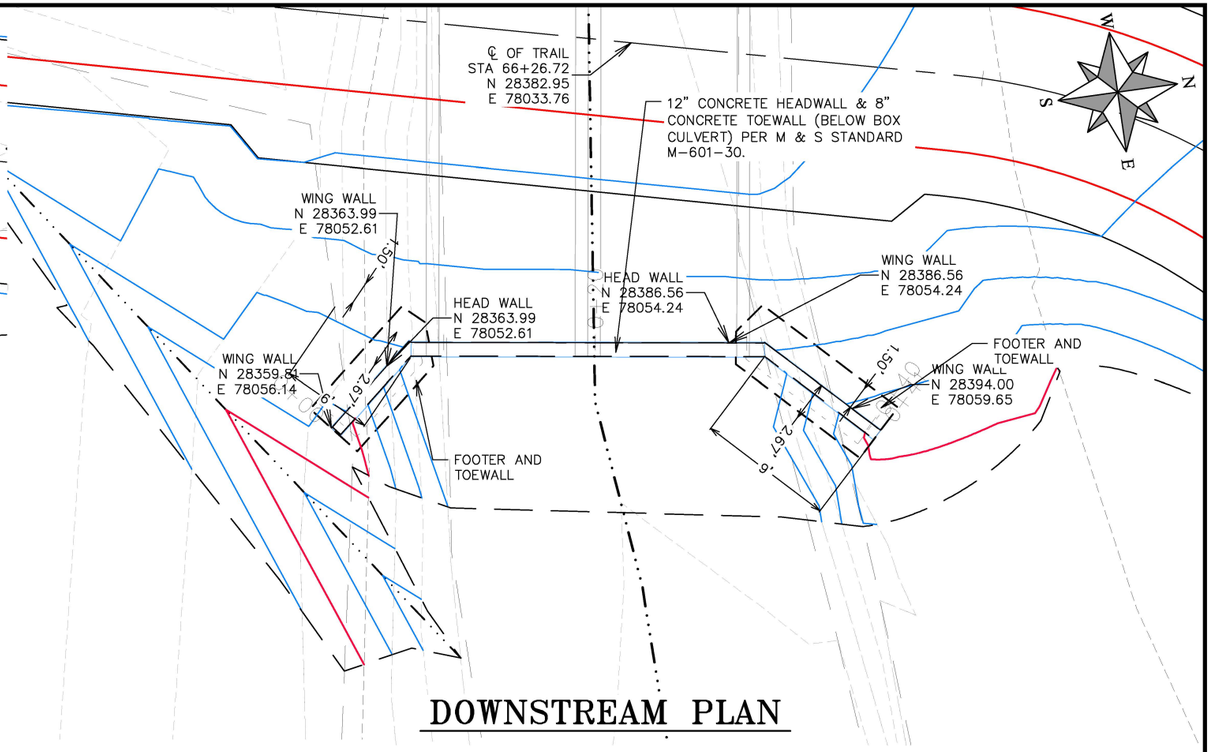
PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
WING WALL PLAN AND PROFILE
August 13, 2024

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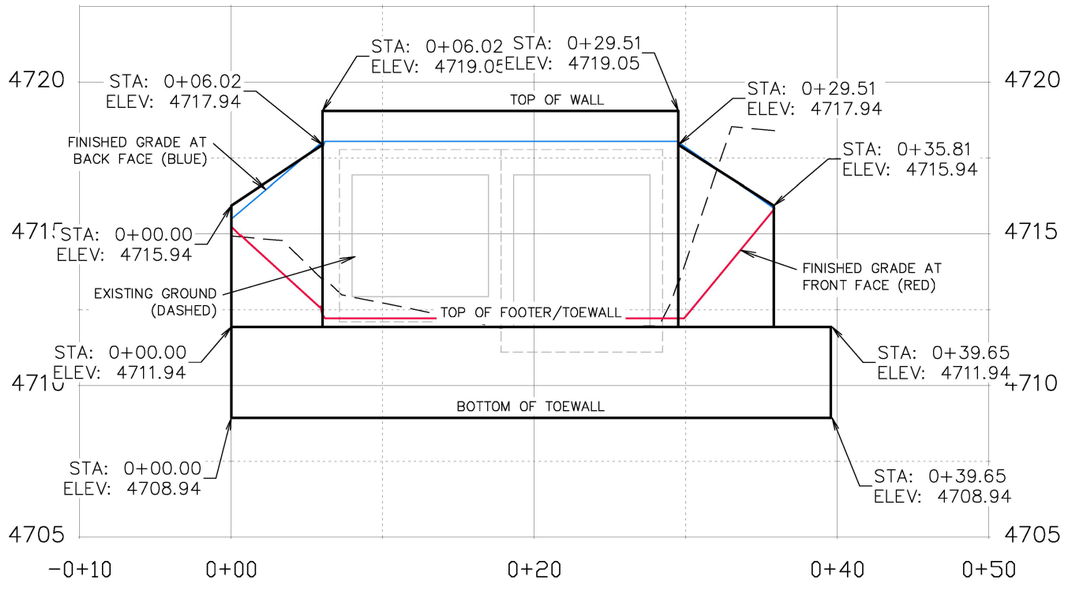
UPSTREAM PLAN



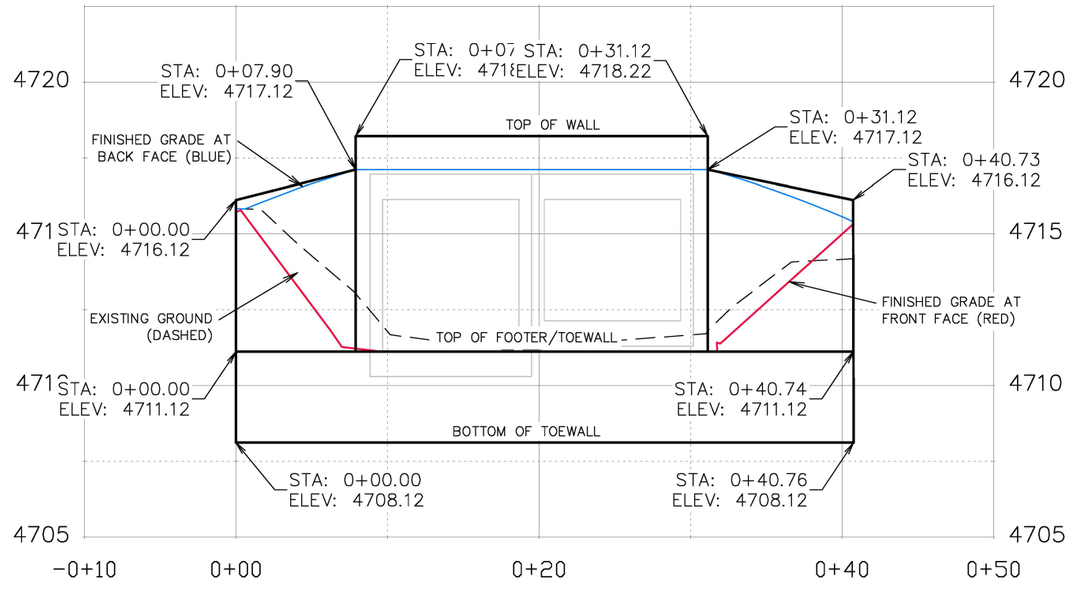
DOWNSTREAM PLAN

NOTES:

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UPSTREAM CROSS SECTION BACK OF WALL



DOWNSTREAM CROSS SECTION BACK OF WALL

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REVISION 4	

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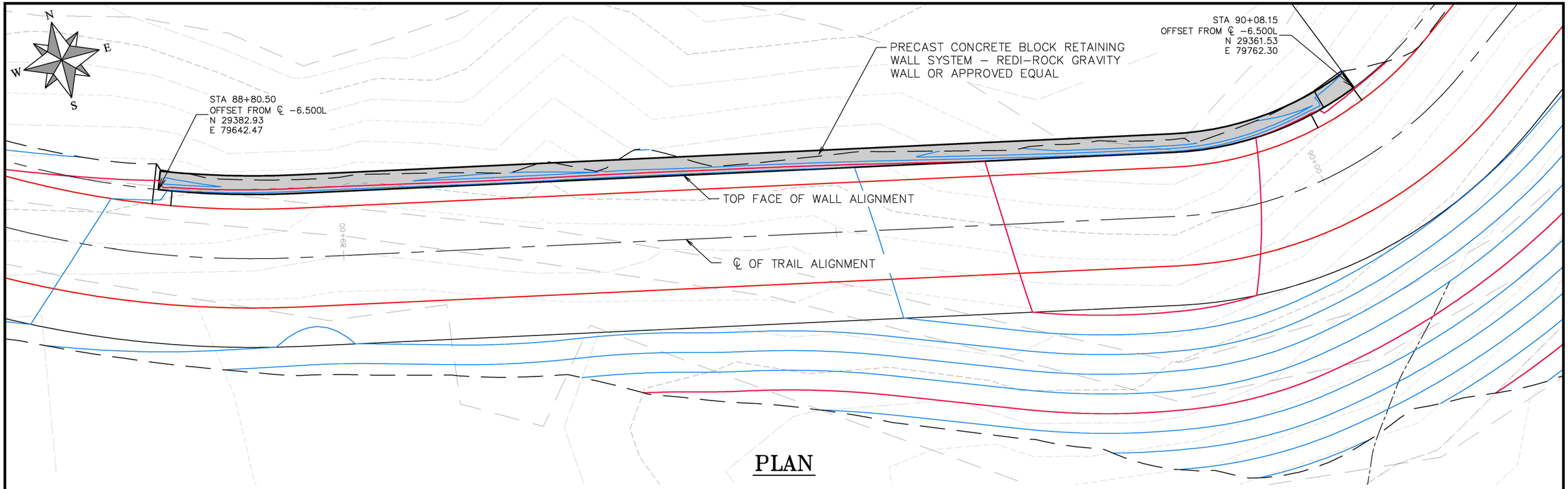
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VERTICAL: 1" = 2.5'

CITY OF Grand Junction COLORADO

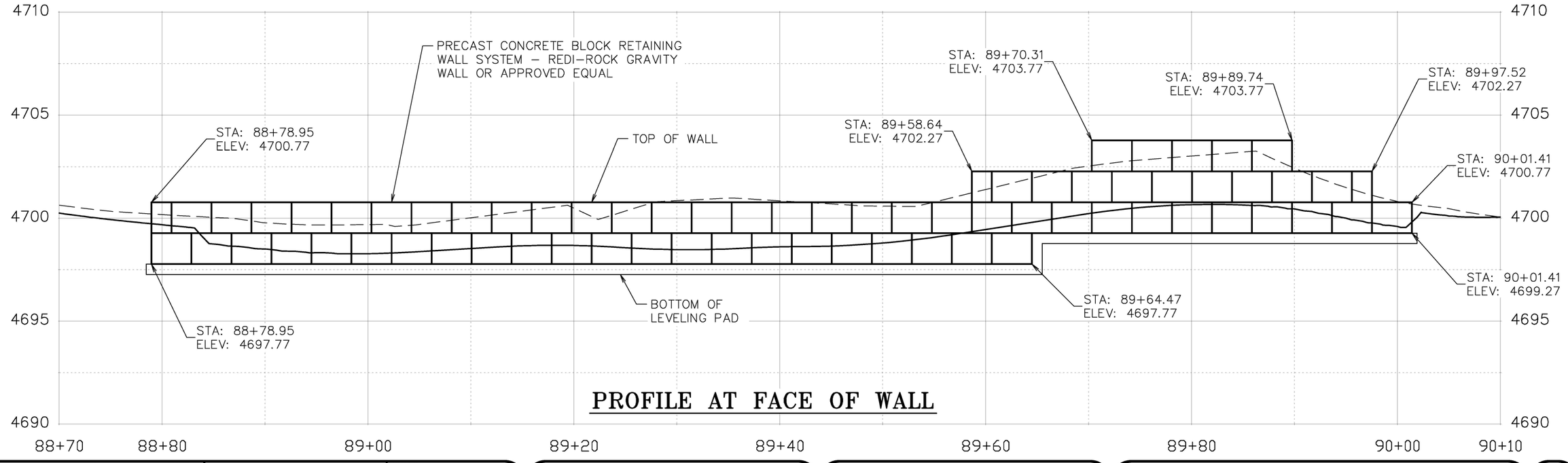
PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
WING WALL PLAN AND PROFILE
August 13, 2024

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PLAN



PROFILE AT FACE OF WALL

DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

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SCALES:
PLAN & PROFILE
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VERTICAL: 1" = 5'

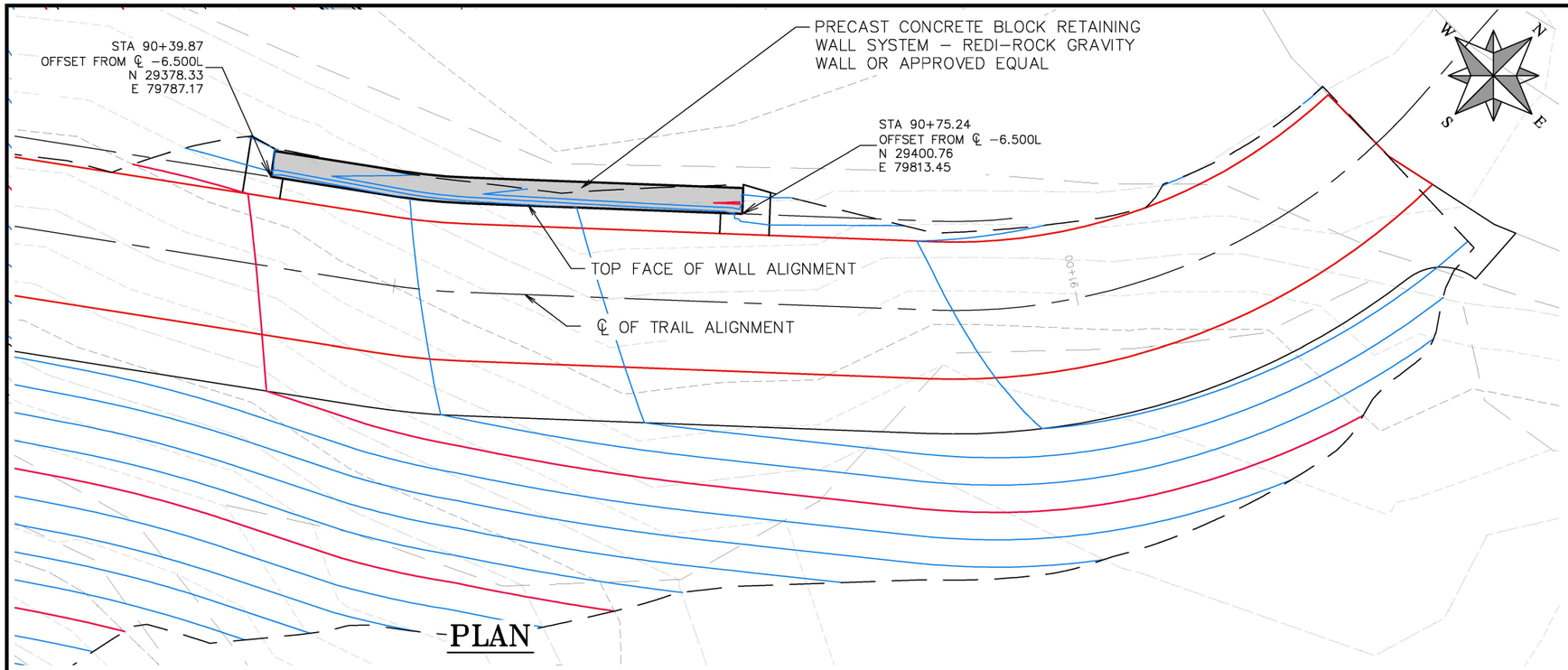
CITY OF Grand Junction COLORADO

PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

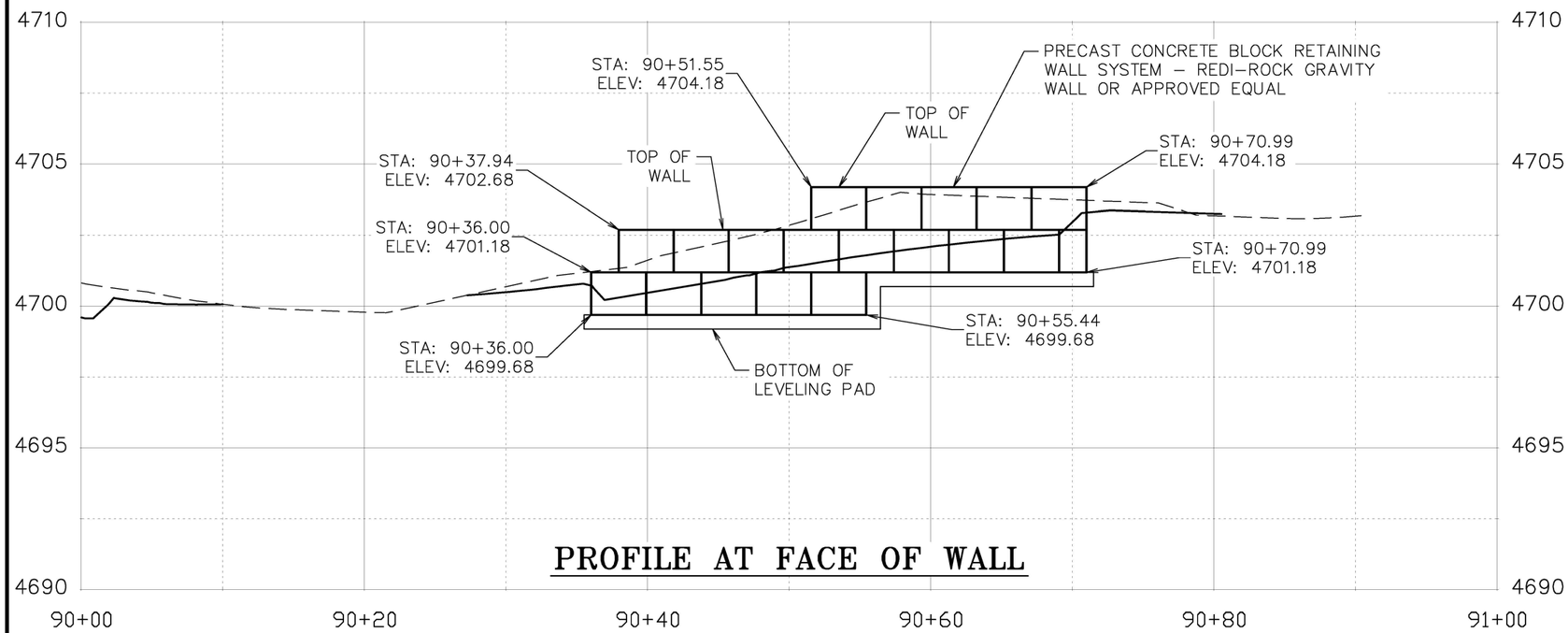
MONUMENT CONNECT TRAIL PHASE 2
RETAINING WALL PLAN AND PROFILE
August 13, 2024

9

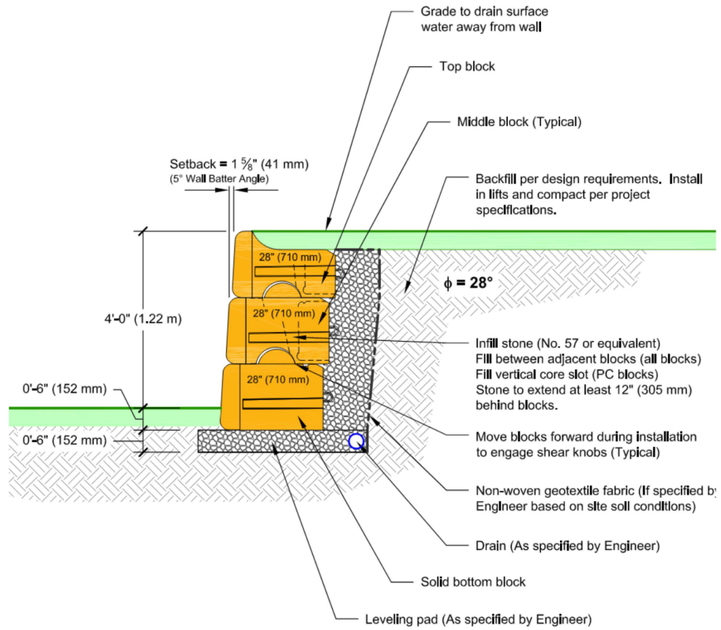
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PLAN



PROFILE AT FACE OF WALL



DESCRIPTION	DATE
REVISION 1	–
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REVISION 3	–
REVISION 4	–

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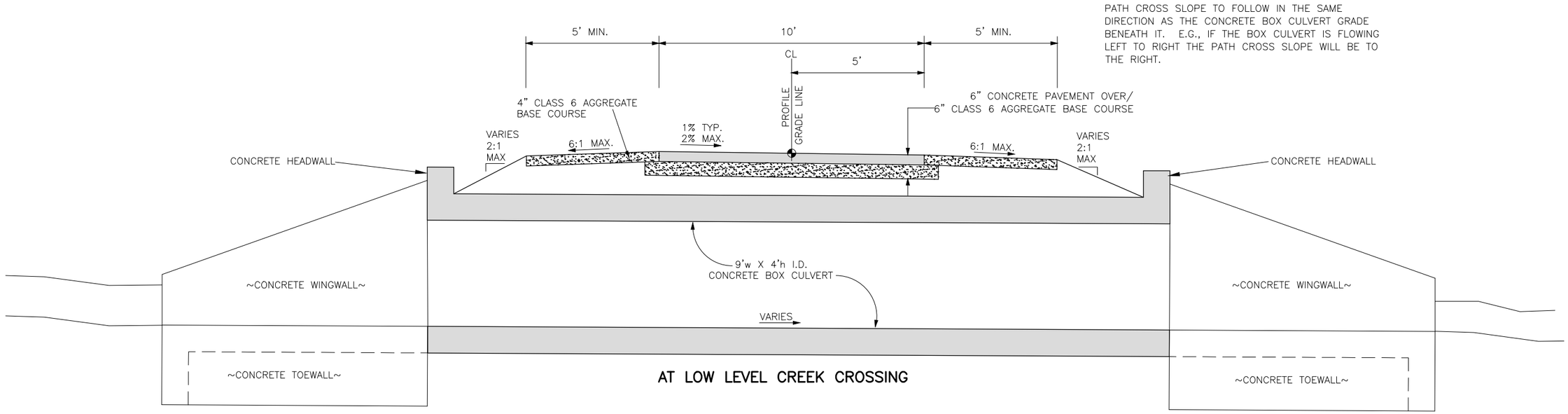
CITY OF Grand Junction COLORADO

PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
RETAINING WALL PLAN AND PROFILE
August 13, 2024

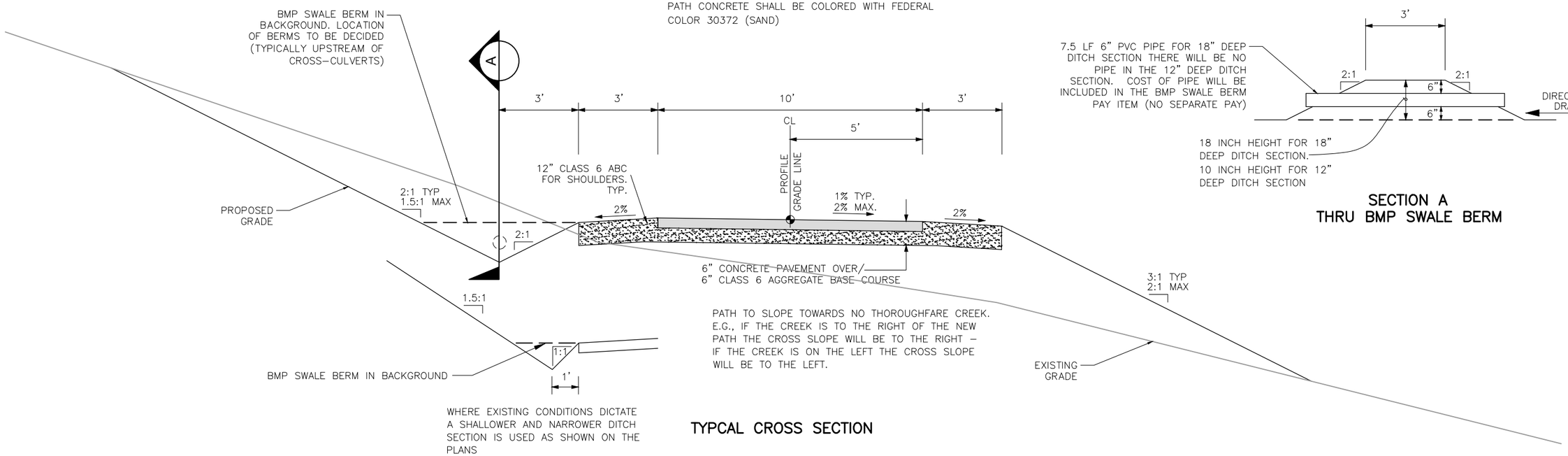
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AT LOW LEVEL CREEK CROSSING

NOTE:
PATH CONCRETE SHALL BE COLORED WITH FEDERAL COLOR 30372 (SAND)



WHERE EXISTING CONDITIONS DICTATE A SHALLOWER AND NARROWER DITCH SECTION IS USED AS SHOWN ON THE PLANS

TYPCAL CROSS SECTION

SECTION A
THRU BMP SWALE BERM

DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES:
PLAN & PROFILE
HORIZONTAL 0 10 20 40
VERTICAL 0 4 8

CITY OF Grand Junction COLORADO

PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
PATH TYPICAL CROSS SECTIONS
August 13, 2024

11

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FOUNDATION NOTES

1. CAISSON CONCRETE SHALL BE AIR ENTRAINED CLASS BZ IN ACCORDANCE WITH SECTION 503 OF THE STANDARD SPECIFICATIONS.
2. REINFORCING STEEL SHALL BE GRADE 60 IN ACCORDANCE WITH SECTION 602 OF THE STANDARD SPECIFICATIONS.
3. ALL REINFORCING STEEL SHALL BE NON COATED.
4. CAISSONS SHALL BE PLACED AGAINST UNDISTURBED EARTH.

DESIGN DATA

CAISSON CONCRETE:
CLASS BZ CONCRETE: f'c = 4,000 psi
REINFORCING STEEL: fy = 60,000 psi

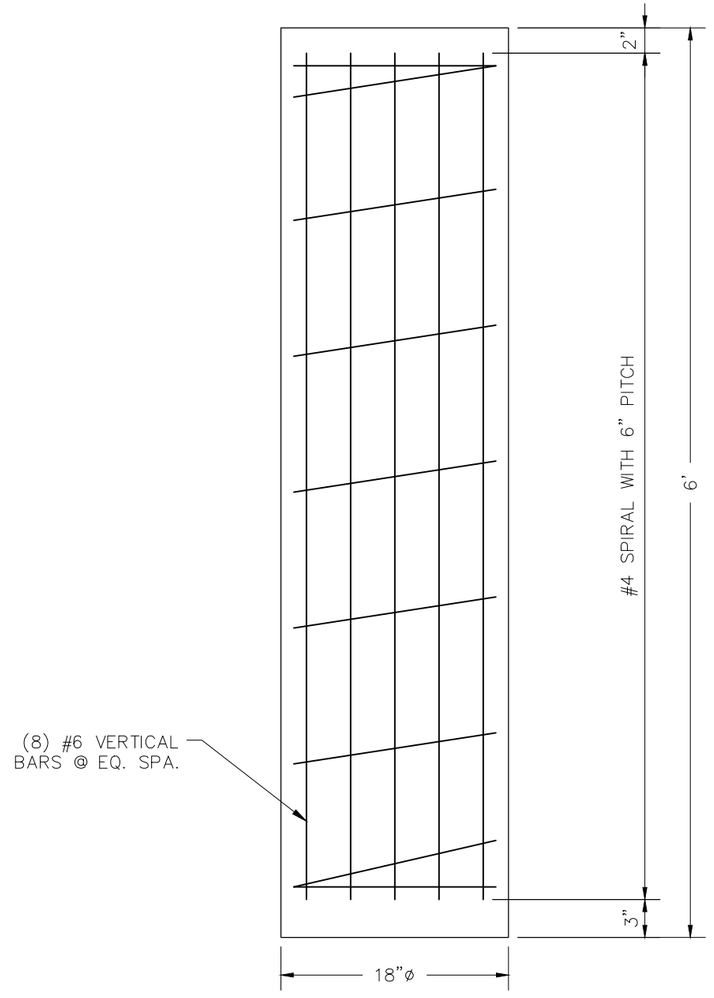
DESIGN WIND SPEED = 115 mph

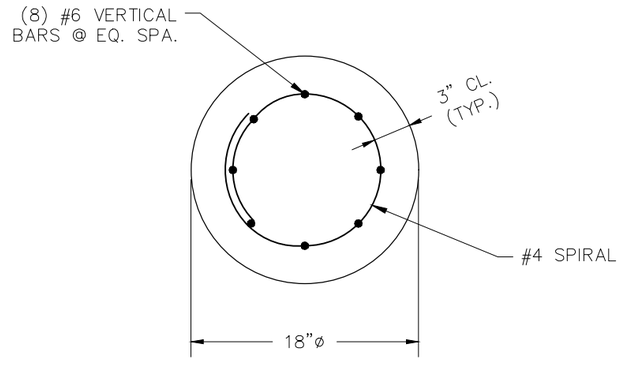
THE DESIGNS HEREIN ASSUME THAT THE FOUNDATIONS ARE INSTALLED WINTHIN THE NATIVE SOIL WITH THE FOLLOWING PARAMETERS:

MEDIUM DENSE COHESIONLESS SOIL:
SOIL DENSITY, γ = 110 pcf
SOIL COHESION = 750 psf
SF = 1.25 FOR FLEXURAL RESISTANCE

CONTACT THE ENGINEER IF ANY OF THE FOLLOWING SOIL CONDITIONS ARE ENCOUNTERED DURING DRILLING:

(A) THE SOIL HAS A HIGH ORGANIC CONTENT OR CONSISTS OF SATURATED SILT AND CLAY.
(B) THE SITE WON'T SUPPORT THE WEIGHT OF THE DRILLING RIG.
(C) THE FOUNDATION SOILS ARE NOT HOMOGENOUS.
(D) FIRM BEDROCK IS ENCOUNTERED.





DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES: NO SCALE

CITY OF Grand Junction COLORADO

PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
POST FOUNDATION DETAIL
August 13, 2024

12

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DESCRIPTION	DATE
REVISION 1	–
REVISION 2	–
REVISION 3	–
REVISION 4	–

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES:
PLAN
HORIZONTAL 1" = 500'
0 125 250 500

CITY OF Grand Junction COLORADO

PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
PLAN AND PROFILE KEY MAP
August 13, 2024

13

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S CAMP RD

0+00
N 27406.14
E 72903.05
EL 61.93

DETECTABLE WARNING PLATES (5 TOTAL)

0+13.13
N 27396.57
E 72890.91
EL 63.40

0+44.33
N 27427.10
E 72897.36
EL 62.45

1+16.50
N 27496.89
E 72886.63
EL 63.20

Pipe – (1)
SEE SHEET 43
FOR PIPE TABLE

N 27504.70
E 72869.97
EL 61.12

N 27502.47
E 72898.10
EL 61.14

CONSTRUCT BIKE PATH PER TYPICAL CROSS SECTION

N 27538.99
E 72900.68
EL 60.25

N 27546.78
E 72880.57
EL 60.28

1+69.99
N 27545.89
E 72894.30
EL 60.87

DAYLIGHT LINE

2+39.05
N 27592.81
E 72944.98
EL 57.87

2945-301-13-001
CITY OF GRAND JUNCTION

N 27623.68
E 72968.17
EL 56.42

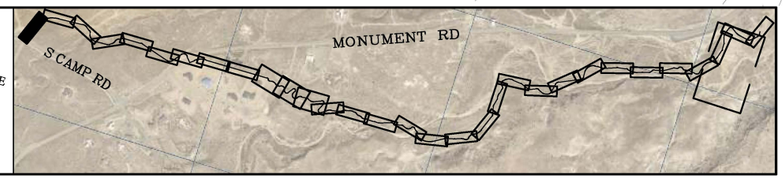
SHEET 15

N 27586.49
E 72951.46
EL 57.34

R40.00'
R300.00'
R300.00'

MATCH LINE

KEYMAP
1" = 1500'



VPI=0+13.13
EL=4863.20

VPI=0+44.35
VPI EL=4862.45
LP=0+46.37
LP EL=4862.55
AD=4.67%
K=3.99
VC=18.61
VPC= 0+35.04 EL=4862.71
VPT= 0+53.65 EL=4862.62

VPI=1+08.03
VPI EL=4864.13
HP=1+04.10
HP EL=4863.62
AD=-12.35%
K=2.84
SSD=71.34
VC=35.07
VPC= 0+90.50 EL=4863.29
VPT= VPI=1+25.57 1+25.57 EL=4862.81

VPI=2+47.61
VPI EL=4857.50
LP=2+65.75
LP EL=4857.05
AD=1.87%
K=19.45
VC=36.28
VPC= VPI=2+29.47 2+29.47 EL=4858.29
VPT= 2+65.75 EL=4857.05

-2.21%
1.83%
-4.35%
-2.49%

FINISHED GRADE
EXISTING GROUND
12in Concrete Pipe

DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES:
PLAN & PROFILE
HORIZONTAL 1" = 20'
VERTICAL 1" = 5'

CITY OF Grand Junction COLORADO

PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
TRAIL PLAN AND PROFILE
August 13, 2024

PP01

14

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2945-292-00-125
AZCARRAGA MARTIN

2945-301-13-001
CITY OF GRAND JUNCTION

4+50.87
N 27672.43
E 73136.53
EL 55.57

DAYLIGHT LINE

CONSTRUCT BIKE PATH PER TYPICAL CROSS SECTION

R300.00'

SHEET 14

SHEET 16

MATCH LINE

MATCH LINE

KEYMAP
1" = 1500'

S CAMP RD

MONUMENT RD

VPI=3+30.87
VPI EL=4855.43
LP=3+54.40
LP EL=4855.46
AD=2.60%
K=19.92
VC=51.79

VPC= 3+04.97
EL=4856.07

VPT= VPI=3+56.76
EL=4855.46

VPI=4+94.58
VPI EL=4855.62
HP=4+76.64
HP EL=4855.60
AD=-2.03%
K=19.95
SSD=347.25
VC=40.55

VPC= VPI=4+74.30
EL=4855.60

VPT= 5+14.85
EL=4855.23

VPI=5+78.45
EL=4853.91

FINISHED GRADE

EXISTING GROUND

0.12%

-2.08%

DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES:
PLAN & PROFILE
HORIZONTAL 1" = 20'
VERTICAL 1" = 5'

CITY OF Grand Junction COLORADO

PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
TRAIL PLAN AND PROFILE
August 13, 2024

PP02

15

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2945-292-00-125
AZCARRAGA MARTIN

2945-301-13-001
CITY OF GRAND JUNCTION

CONSTRUCT BIKE PATH PER TYPICAL CROSS SECTION

DAYLIGHT LINE

MATCH LINE

SHEET 16

SHEET 17

6+93.32
N 27682.34
E 73378.78
EL 51.82

7+40.18
N 27669.02
E 73422.80
EL 49.23

7+84.33
N 27643.07
E 73458.51
EL 46.63

8+05.29
N 27626.04
E 73469.99
EL 45.39

8+26.85
N 27605.11
E 73475.19
EL 44.12

8+68.72
N 27573.05
E 73500.18
EL 44.28

8+89.21
N 27563.41
E 73518.27
EL 44.69

9+14.80
N 27557.54
E 73542.89
EL 43.39

R70.00'
R30.00'
R50.00'
R50.00'

Pipe - (2)
SEE SHEET 43
FOR PIPE TABLE

KEYMAP
1" = 1500'

SCAMP RD

MONUMENT RD

VPI=6+97.92
VPI EL=4851.72
HP=6+90.25
HP EL=4851.87
AD=-3.98%
K=3.85
SSD=174.75
VC=15.33

VPC= 6+90.25
EL=4851.87

VPT= 7+05.58
EL=4851.27

VPI=8+37.10
VPI EL=4843.52
LP=8+44.16
LP EL=4843.78
AD=8.08%
K=3.94
VC=31.85

VPC= 8+21.17
EL=4844.45

VPT= 8+53.03
EL=4843.88

VPI=8+89.09
VPI EL=4844.69
HP=8+83.58
HP EL=4844.47
AD=-7.26%
K=3.96
SSD=105.90
VC=28.76

VPC= 8+74.71
EL=4844.37

-1.83%

-5.90%

2.23%

EXISTING GROUND

FINISHED GRADE

48in Concrete Pipe

4870
4860
4850
4840
4830

6+00
7+00
8+00
9+00

DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES:
PLAN & PROFILE
HORIZONTAL: 1" = 20'
VERTICAL: 1" = 5'

CITY OF Grand Junction COLORADO

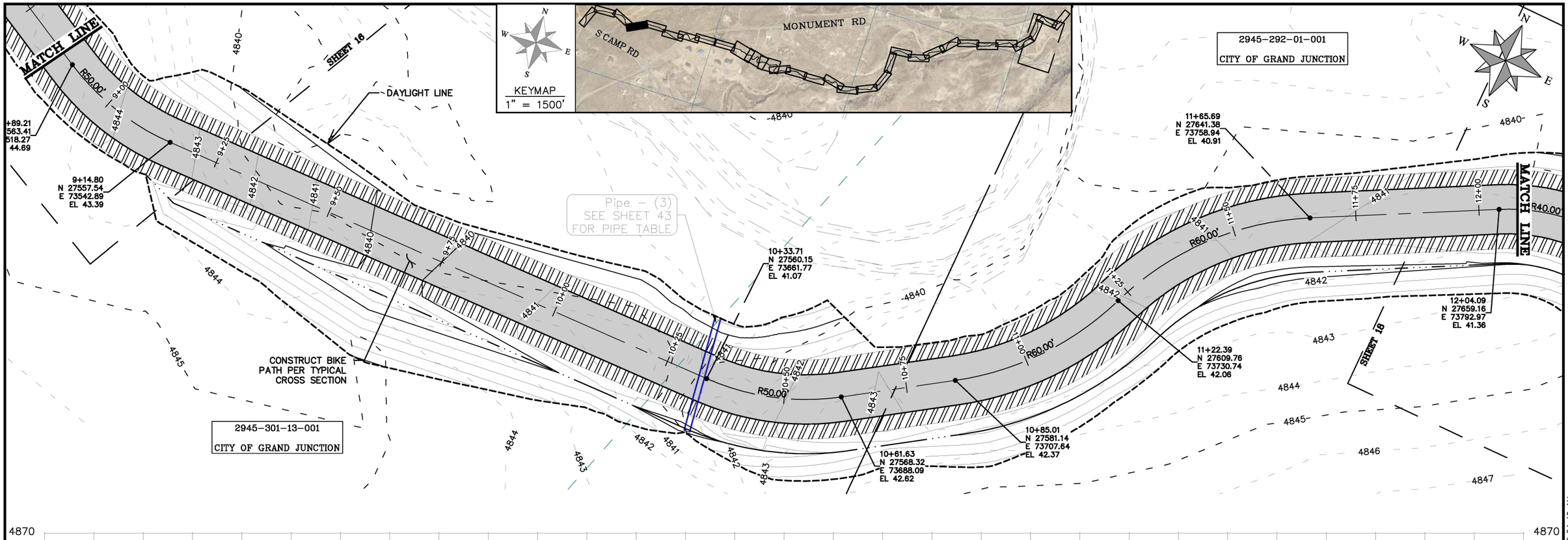
PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
TRAIL PLAN AND PROFILE
August 13, 2024

PP03

16

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DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES:
PLAN & PROFILE
HORIZONTAL: 1" = 20'
VERTICAL: 1" = 5'

CITY OF Grand Junction COLORADO

PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
TRAIL PLAN AND PROFILE
August 13, 2024

PP04 | 17

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2945-292-00-125
AZCARRAGA MARTIN

2945-292-01-001
CITY OF GRAND JUNCTION

CONSTRUCT BIKE PATH PER TYPICAL CROSS SECTION

SHEET 17

SHEET 19

MATCH LINE

MATCH LINE

12+23.29
N 27663.71
E 73811.44
EL 41.58

12+04.09
N 27659.16
E 73792.97
EL 41.36

13+94.50
N 27663.96
E 73982.65
EL 48.63

14+02.28
N 27663.37
E 73990.40
EL 48.80

14+10.07
N 27661.58
E 73997.97
EL 48.96

R40.00'

R50.00'

KEYMAP
1" = 1500'

S CAMP RD

MONUMENT RD

VPI=12+45.30
VPI EL=4841.81
LP=12+28.25
LP EI=4841.64
AD=9.26%
K=3.68
VC=34.09

VPI=12+81.96
VPI EL=4845.57
HP=13+00.54
HP EI=4845.52
AD=-10.51%
K=3.73
SSD=82.87
VC=39.23

VPI=13+25.16
VPI EL=4845.48
LP=13+02.93
LP EI=4845.52
AD=4.79%
K=9.86
VC=47.17

VPI=14+37.69
VPI EL=4850.81
HP=14+30.29
HP EI=4849.34
AD=-11.15%
K=9.59
SSD=113.09
VC=106.95

VPI=15+01.71
VPI EL=4846.75
LP=15+12.26
LP EI=4846.33
AD=2.25%
K=9.39
VC=21.10

VPC=
12+28.25
EL=4841.64

VPT=
12+62.35
EL=4843.56

VPC=
13+01.58
EL=4845.52

VPT=
13+48.75
EL=4846.58

VPC=
13+84.21
EL=4848.24

VPT=
14+14+91.16
EL=4847.41

4.67%

4870
4860
4850
4840
4830

12+00
13+00
14+00
15+00

DESCRIPTION	DATE
REVISION 1	–
REVISION 2	–
REVISION 3	–
REVISION 4	–

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES:
PLAN & PROFILE
HORIZONTAL: 1" = 20'
VERTICAL: 1" = 5'

CITY OF Grand Junction COLORADO

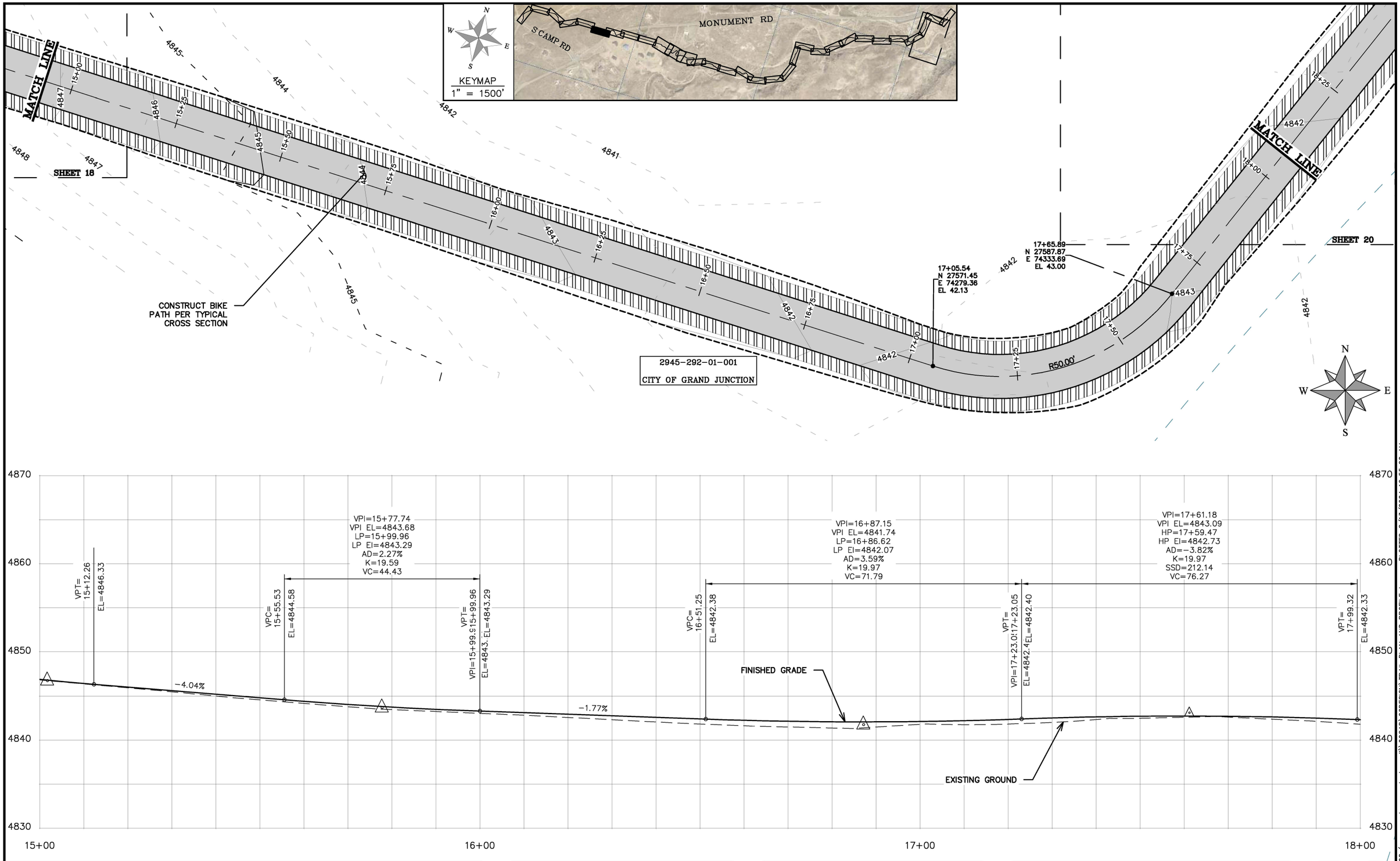
PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
TRAIL PLAN AND PROFILE
August 13, 2024

PP05

18

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DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES: PLAN & PROFILE
HORIZONTAL: 1" = 20'
VERTICAL: 1" = 5'

CITY OF Grand Junction COLORADO

PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
TRAIL PLAN AND PROFILE
August 13, 2024

PP06 | 19

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2945-292-01-001
CITY OF GRAND JUNCTION

Pipe – (4)
SEE SHEET 43
FOR PIPE TABLE

18+65.30
N 27665.55
E 74395.72
EL 41.01

CONSTRUCT BIKE PATH PER TYPICAL CROSS SECTION
SHEET 19

MATCH LINE

19+36.61
N 27665.90
E 74457.95
EL 39.36

DETECTABLE WARNING PLATES (5 TOTAL)

DETECTABLE WARNING PLATES (5 TOTAL)

MFCP /1.5ALC PLS 24320/
N 27693.1870
E 74470.60
EL 4838.74

MONUMENT RD

Pipe – (5)
SEE SHEET 43
FOR PIPE TABLE

21+10.81
N 27672.70
E 74588.39
EL 34.43

MATCH LINE

R165.00'

MFCP /2ALC PLS 38428/
N 27655.0950
E 74579.96
EL 4838.54

SHEET 21

20+53.39
N 27644.57
E 74538.67
EL 35.84

20+04.38
N 27613.42
E 74500.83
EL 37.34

2945-292-07-001
2310 STONE CREEK CT
MCLEROY ZACHARY KEITH

KEYMAP
1" = 1500'
S CAMP RD
MONUMENT RD

FINISHED GRADE
EXISTING GROUND

−2.00%
−3.99%
−3.04%

VPI=19+25.39
EL=4839.81

VPI=19+81.64
VPI EL=4837.57
LP=19+95.79
LP EI=4837.41
AD=2.88%
K=9.84
VC=28.30

VPC=
19+67.49
EL=4838.13

VPT=
19+95.79
EL=4837.41

VPI=20+05.34
VPI EL=4837.31
HP=19+95.79
HP EI=4837.41
AD=−1.93%
K=9.89
SSD=353.64
VC=19.11

VPT=
20+14.90
EL=4837.02

VPI=20+89.11
VPI EL=4834.76
LP=20+96.53
LP EI=4834.64
AD=1.50%
K=9.87
VC=14.83

VPC=
20+81.70
EL=4834.98

VPT=
20+96.53
EL=4834.64

12in Concrete Pipe
12in Concrete Pipe

DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES:
PLAN & PROFILE
HORIZONTAL 1" = 20'
VERTICAL 1" = 5'

CITY OF Grand Junction COLORADO

PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
TRAIL PLAN AND PROFILE
August 13, 2024

PP07

20

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2945-292-00-127
CITY OF GRAND JUNCTION

2945-292-00-045
2320 MONUMENT RD
ORACLE GALE LLC

MFCP /2ALC LS 24306 54.35 WC/
N 27692.5850
E 74592.14
EL 4835.66

MFCP /2ALC PLS 38428/
N 27692.3910
E 74623.97
EL 4833.32

21+68.23
N 27682.18
E 74644.73
EL 31.37

CONSTRUCT BIKE PATH PER TYPICAL CROSS SECTION

SHEET 20

SHEET 22

21+10.81
N 27672.70
E 74588.39
EL 34.43

R165.00'

MATCH LINE

MATCH LINE

MFCP /2ALC PLS 38428/
N 27672.2000
E 74642.81
EL 4830.67

MFCP /2ALC PLS 38428/
N 27655.0950
E 74579.96
EL 4835.54

MFCP /1.5 YPC PLS 38428
N 27671.6130
E 74712.73
EL 4827.28

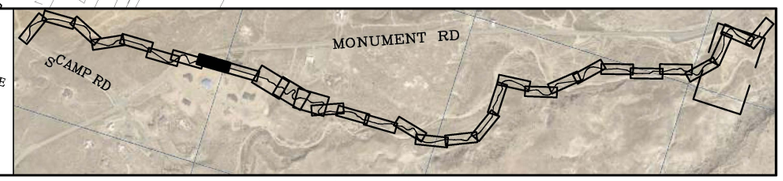
2945-292-07-002
2312 STONE CREEK CT
INGERSOLL ERIC

MFCP /1.5 YPC PLS 38428
N 27670.8800
E 74824.55
EL 4826.50

2945-292-07-001
2310 STONE CREEK CT
MCLEROY ZACHARY KEITH

2945-292-07-003
2314 STONE CREEK CT
JOHNSON JOSHUA

KEYMAP
1" = 1500'



VPT= 21+37.49
EL=4833.15

VPI=21+97.59
VPI EL=4829.68
LP=22+10.99
LP EI=4829.09
AD=1.42%
K=18.82
VC=26.80

VPC= 21+84.19
EL=4830.45

VPT= 22+10.99
EL=4829.09

VPC= 22+24.64
EL=4828.50

VPI=22+47.65
VPI EL=4827.50
LP=22+70.67
LP EI=4827.04
AD=2.36%
K=19.52
VC=46.03

VPT= 22+70.67
EL=4827.04

VPI=22+99.25
VPI EL=4826.47
LP=22+97.88
LP EI=4826.57
AD=4.68%
K=3.99
VC=18.68

VPC= 22+89.91
EL=4826.65

VPT= 23+08.58
EL=4826.72

VPI=23+30.90
VPI EL=4827.32
HP=23+33.26
HP EI=4827.24
AD=-4.18%
K=3.99
SSD=167.19
VC=16.69

VPC= 23+22.55
EL=4827.09

VPT= 23+39.24
EL=4827.19

VPI=23+71.60
VPI EL=4826.71
LP=23+70.15
LP EI=4826.77
AD=3.73%
K=3.99
VC=14.88

VPC= 23+64.16
EL=4826.82

VPT= 23+79.04
EL=4826.87

FINISHED GRADE

EXISTING GROUND

-5.78%
-4.36%
-2.00%
2.69%
-1.50%

4860
4850
4840
4830
4820

21+00
22+00
23+00
24+00

DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2024
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CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES:
PLAN & PROFILE
HORIZONTAL: 1" = 20'
VERTICAL: 1" = 5'

CITY OF Grand Junction COLORADO

PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
TRAIL PLAN AND PROFILE
August 13, 2024

PP08

21

n:\EngPro\g2208 (monument connect phase II)\60CAD\00DESIGN\TRAIL PLAN AND PROFILE.dwg — PLOTTED 8/13/2024 10:56:02 AM

SHEET 21

MATCH LINE

2945-292-00-045
2320 MONUMENT RD
ORACLE GALE LLC

CONSTRUCT BIKE PATH PER TYPICAL CROSS SECTION

2945-292-00-112
2332 MONUMENT RD
HUNDTOFT THOMAS J

MFCP /3.25 ALC LS 12901/
N 27689.4030
E 75019.33
EL 4826.69

SHEET 23

MATCH LINE

24+00 24+25 24+50 24+75 25+00 25+25 25+50 25+75 26+00 26+25 26+50 26+75 27+00

4826 4825

4825

MFCP /1.5 YPC PLS 38428-
N 27669.7130
E 74979.18
EL 4827.34

4825

MFCP /2ALC PLS 38248/
N 27669.4330
E 75019.15
EL 4826.99

4825

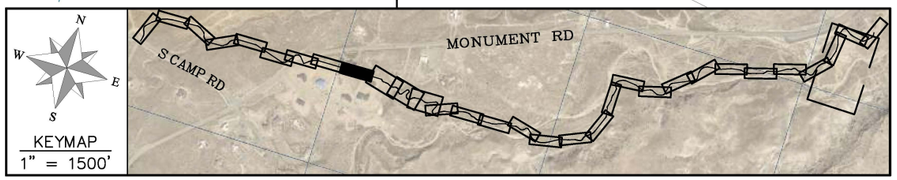
MFCP /YPC PLS 38248/
N 27668.5890
E 75124.02
EL 4825.95

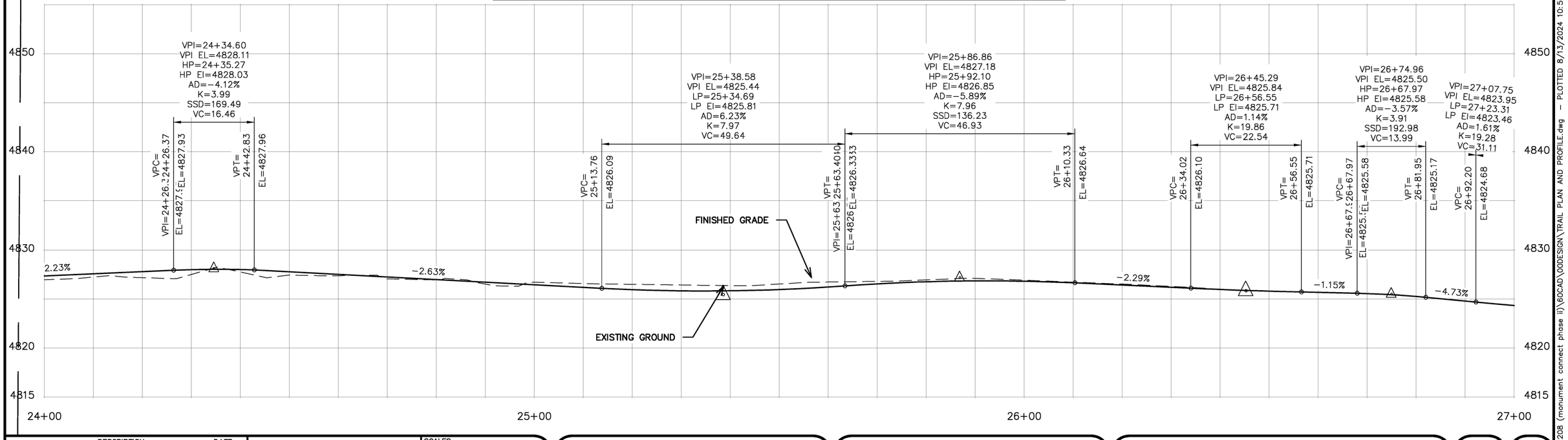
4825

2945-292-07-003
2314 STONE CREEK CT
JOHNSON JOSHUA

2945-292-07-004
2316 STONE CREEK CT
TRUST AGREEMENT RICHARD N MIZE

2945-292-07-005
2318 STONE CREEK CT
GERMAN KENDAL P





DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES:
PLAN & PROFILE
HORIZONTAL: 1" = 20'
VERTICAL: 1" = 5'

CITY OF Grand Junction COLORADO

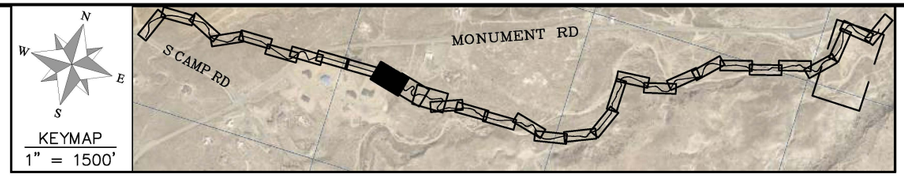
PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
TRAIL PLAN AND PROFILE
August 13, 2024

PP09

22

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SHEET 25

2945-292-00-112
2332 MONUMENT RD
HUNDTOFT THOMAS J

CONSTRUCT BIKE PATH PER TYPICAL CROSS SECTION

27+99.91
N 27677.64
E 75276.39
EL 21.90

28+10.00
N 27675.08
E 75286.04
EL 21.06

28+20.09
N 27668.17
E 75293.25
EL 20.22

28+59.81
N 27658.16
E 75329.64
EL 17.45

28+85.39
N 27653.43
E 75354.68
EL 15.85

29+55.49
N 27635.47
E 75419.75
EL 10.84

29+68.03
N 27639.28
E 75431.69
EL 10.03

29+94.10
N 27637.67
E 75457.12
EL 8.08

SHEET 22

MATCH LINE

MATCH LINE

R20.00'
R20.00'
R82.65'
R50.00'
R35.00'

28+29.97
N 27661.37
E 75300.28
EL 19.40

28+39.86
N 27658.71
E 75309.70
EL 19.11

29+10.97
N 27641.30
E 75377.08
EL 13.77

29+33.23
N 27633.56
E 75397.76
EL 12.40

MFCP /2ALC PLS 38248/
N 27667.3840
E 75268.51
EL 4822.62

Pipe - (6)
SEE SHEET 43
FOR PIPE TABLE

2945-292-07-005
2318 STONE CREEK CT
GERMAN KENDAL P

2945-292-06-002
2312 MONUMENT RD
CITY OF GRAND JUNCTION

2945-292-07-006
2320 STONE CREEK CT
ZAMAN SHAHREAR

DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES:
PLAN
HORIZONTAL 1" = 20'
0 5 10 20

CITY OF Grand Junction COLORADO

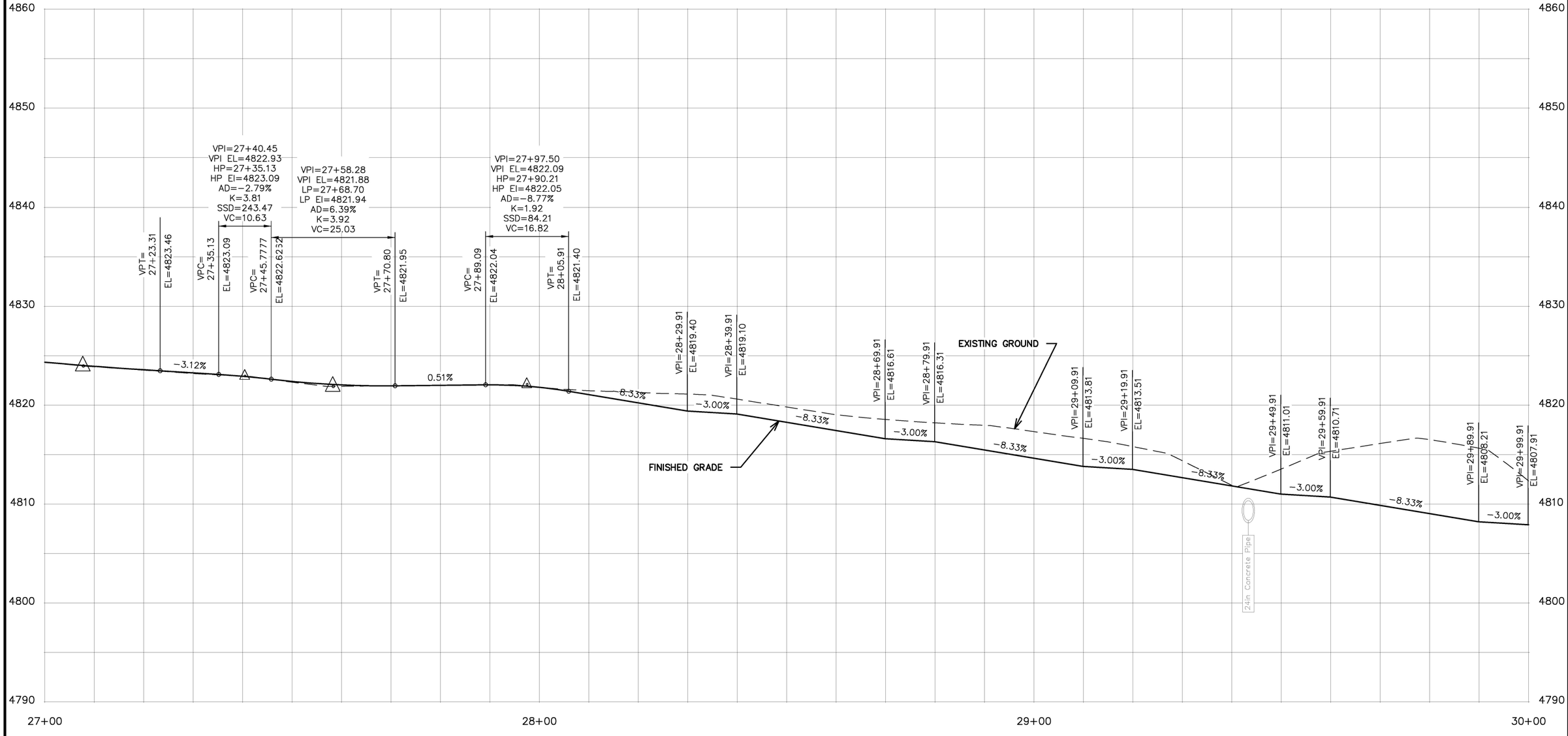
PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
TRAIL PLAN AND PROFILE
August 13, 2024

PP10A

23

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DESCRIPTION	DATE
REVISION 1	–
REVISION 2	–
REVISION 3	–
REVISION 4	–

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES:
PLAN & PROFILE
HORIZONTAL 1" = 20'
VERTICAL 1" = 5'

CITY OF Grand Junction COLORADO

PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
TRAIL PLAN AND PROFILE
August 13, 2024

PP10B

24

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KEYMAP
1" = 1500'

MONUMENT RD
S CAMP RD

SHEET 23

2945-292-00-112
2332 MONUMENT RD
HUNDTOFT THOMAS J

2945-292-06-002
2312 MONUMENT RD
CITY OF GRAND JUNCTION

CONSTRUCT BIKE PATH PER TYPICAL CROSS SECTION

MATCH LINE

MATCH LINE

Pipe - (6)
SEE SHEET 43
FOR PIPE TABLE

Pipe - (7)
SEE SHEET 43
FOR PIPE TABLE

29+94.10
N 27637.67
E 75457.12
EL 8.08

29+68.03
N 27639.28
E 75431.69
EL 10.03

29+55.49
N 27635.47
E 75419.75
EL 10.84

29+33.23
N 27633.56
E 75397.76
EL 12.40

30+20.18
N 27619.25
E 75474.72
EL 6.22

30+40.19
N 27600.75
E 75482.33
EL 5.09

30+60.99
N 27588.55
E 75498.02
EL 3.35

30+81.80
N 27595.92
E 75516.49
EL 2.15

31+41.80
N 27642.91
E 75553.80
EL 97.69

31+84.04
N 27646.10
E 75573.80
EL 96.37

31+86.28
N 27626.46
E 75578.74
EL 94.52

32+09.95
N 27605.63
E 75567.50
EL 93.08

32+54.55
N 27566.27
E 75577.48
EL 89.89

32+99.15
N 27572.90
E 75617.54
EL 86.71

33+20.51
N 27586.46
E 75633.83
EL 85.47

33+41.87
N 27592.05
E 75654.28
EL 83.69

33+91.47
N 27594.67
E 75703.81
EL 81.01

R15.00'
R35.00'
R50.00'
R20.00'
R30.00'
R50.00'

4815 4810 4805 4800 4795 4790 4785 4780

MFCP /2ALC PLS 38428/
N 27510.9460
E 75606.92
EL 4782.91

2945-292-07-006
2320 STONE CREEK CT
ZAMAN SHAHREAR

SHEET 27

DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES:
PLAN
HORIZONTAL 1" = 20'
0 5 10 20

CITY OF Grand Junction COLORADO

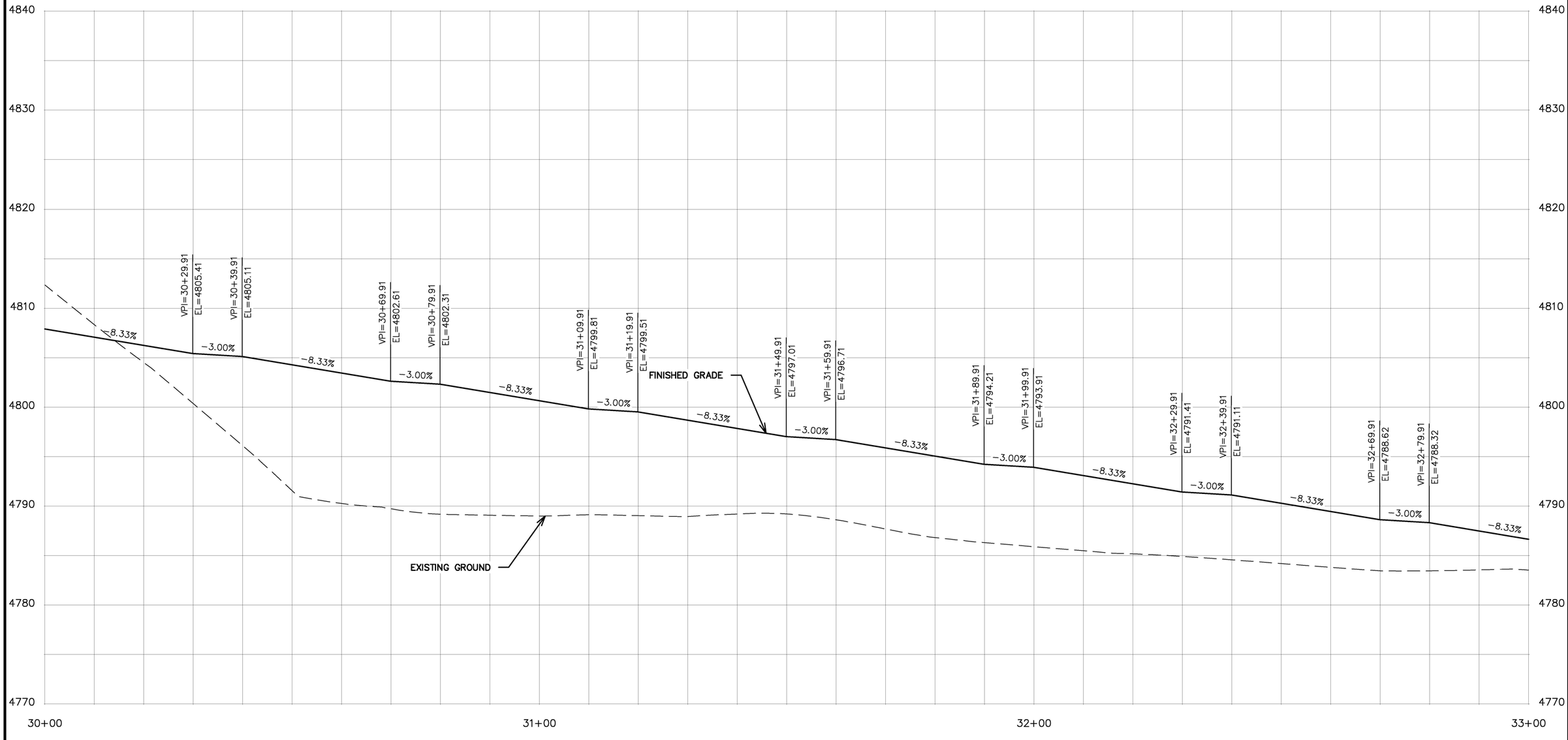
PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
TRAIL PLAN AND PROFILE
August 13, 2024

PP11A

25

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DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES:
PLAN & PROFILE
HORIZONTAL: 1" = 20'
VERTICAL: 1" = 5'

CITY OF Grand Junction COLORADO

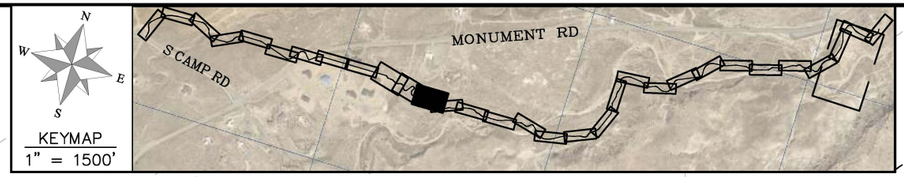
PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
TRAIL PLAN AND PROFILE
August 13, 2024

PP11B

26

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N
W
E
S

CONSTRUCT BIKE PATH PER TYPICAL CROSS SECTION

SHEET 25

SHEET 29

33+41.87
N 27592.05
E 75654.28
EL 83.69

33+91.47
N 27594.67
E 75703.81
EL 81.01

34+13.26
N 27591.11
E 75725.13
EL 80.14

34+39.51
N 27581.29
E 75749.48
EL 79.01

34+77.08
N 27581.00
E 75786.17
EL 77.56

34+58.30
N 27577.65
E 75767.80
EL 78.16

34+02.36
N 27594.06
E 75714.67
EL 80.58

33+20.51
N 27586.46
E 75633.83
EL 85.47

32+99.15
N 27572.90
E 75617.54
EL 86.71

35+55.95
N 27609.35
E 75859.76
EL 76.11

35+79.78
N 27604.28
E 75881.63
EL 74.98

36+03.60
N 27582.10
E 75885.01
EL 73.86

36+70.83
N 27521.40
E 75856.13
EL 68.72

36+96.88
N 27497.67
E 75861.12
EL 68.30

37+22.92
N 27496.18
E 75885.32
EL 67.87

R50.00'
R20.00'
R50.00'
R20.00'

MATCH LINE
MATCH LINE

Pipe - (7)
SEE SHEET 43
FOR PIPE TABLE

MFCP /2ALC PLS 38428/
N 27510.9460
E 75606.92
EL 4782.91

DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES:
PLAN
HORIZONTAL: 1" = 20'
0 5 10 20

CITY OF Grand Junction COLORADO

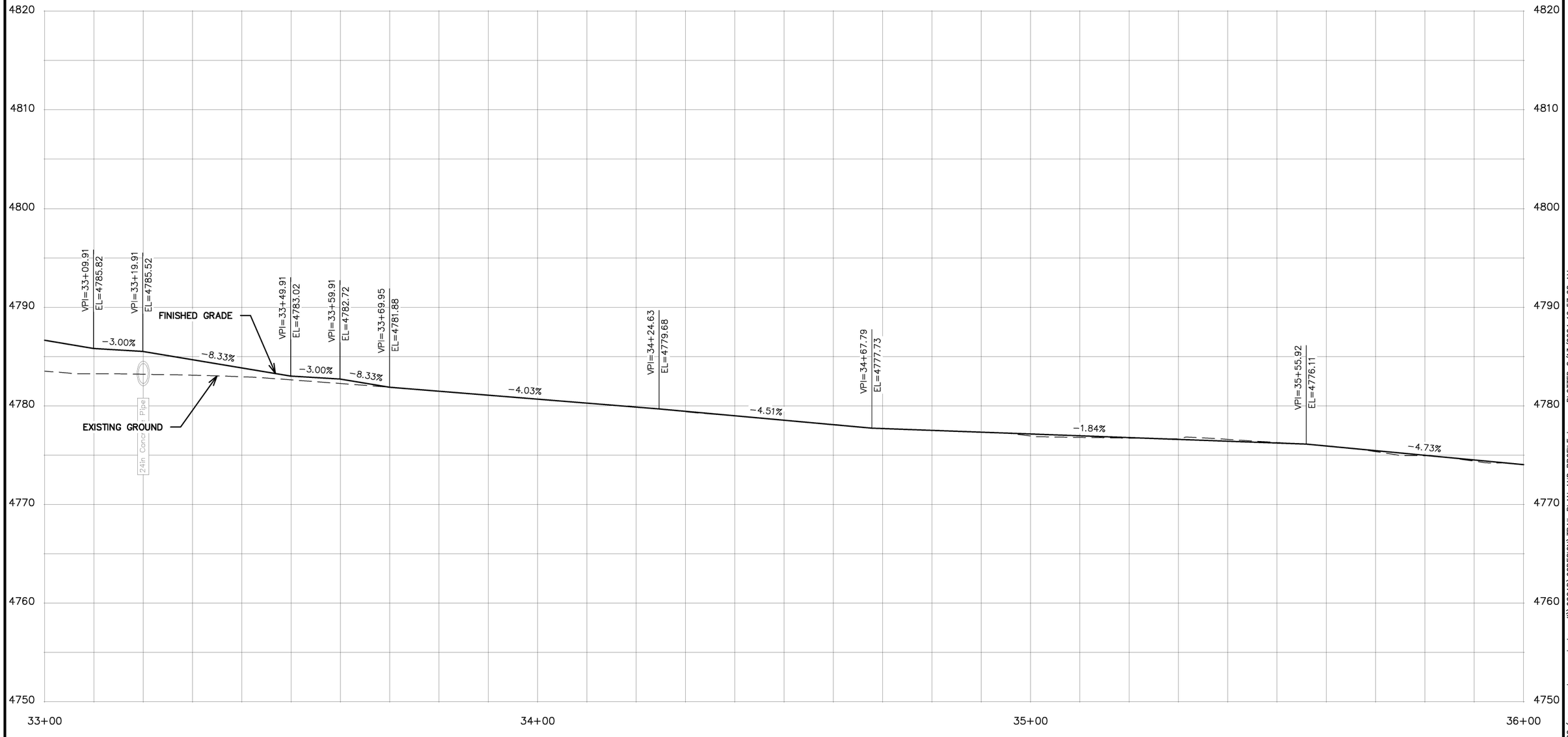
PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
TRAIL PLAN AND PROFILE
August 13, 2024

PP12A

27

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DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES:
PLAN & PROFILE
HORIZONTAL: 1" = 20'
VERTICAL: 1" = 5'

CITY OF Grand Junction COLORADO

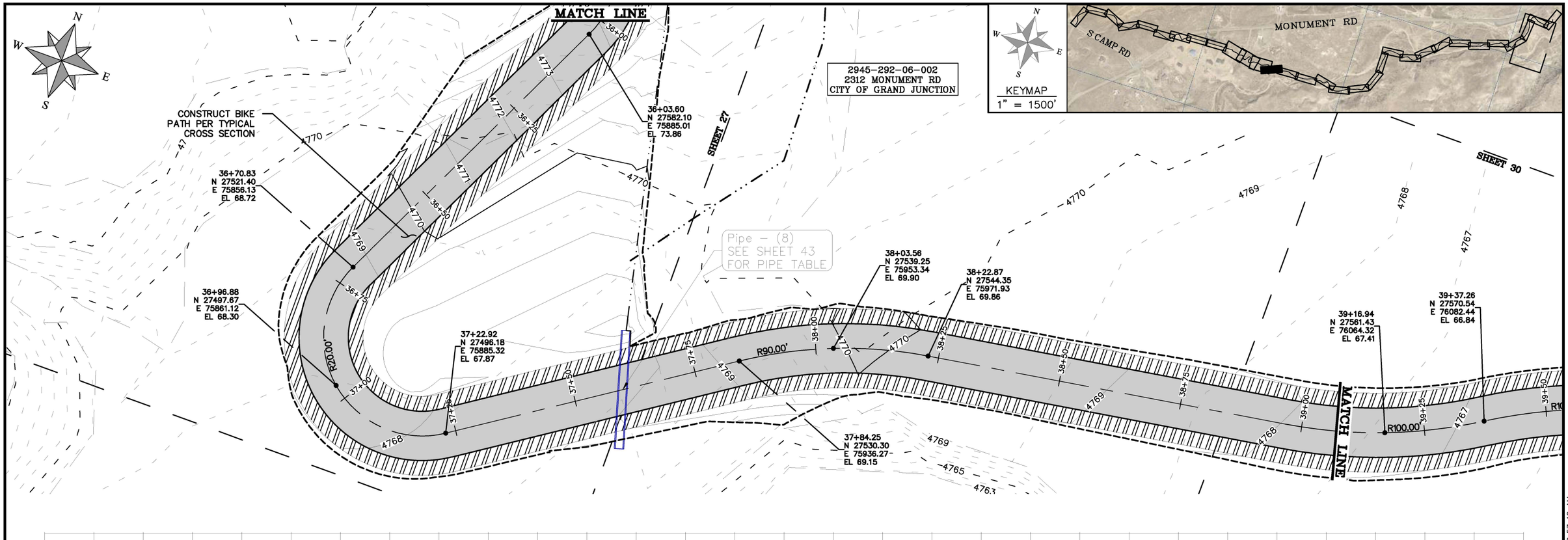
PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
TRAIL PLAN AND PROFILE
August 13, 2024

PP12B

28

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DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES:
PLAN & PROFILE
HORIZONTAL: 1" = 20'
VERTICAL: 1" = 5'

CITY OF Grand Junction COLORADO

PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
TRAIL PLAN AND PROFILE
August 13, 2024

PP13

29

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2945-292-06-002
2312 MONUMENT RD
CITY OF GRAND JUNCTION

SHEET 29

SHEET 31

MATCH LINE

MATCH LINE

39+16.94
N 27561.43
E 76064.32
EL 67.41

39+37.26
N 27570.54
E 76082.44
EL 66.84

39+71.88
N 27583.76
E 76114.26
EL 65.62

39+54.57
N 27578.53
E 76097.78
EL 66.36

40+11.22
N 27592.38
E 76152.64
EL 63.69

40+27.83
N 27594.66
E 76169.08
EL 63.22

40+44.45
N 27594.19
E 76185.66
EL 62.76

40+59.66
N 27592.50
E 76200.78
EL 62.34

40+74.24
N 27588.80
E 76214.83
EL 61.94

40+88.83
N 27581.22
E 76227.23
EL 61.53

40+94.42
N 27577.64
E 76231.53
EL 61.38

41+05.61
N 27572.22
E 76241.25
EL 61.06

41+16.80
N 27570.72
E 76252.27
EL 60.44

41+34.23
N 27568.59
E 76269.48
EL 58.95

41+51.65
N 27560.72
E 76284.92
EL 57.88

41+63.08
N 27555.72
E 76295.13
EL 57.59

41+74.51
N 27554.88
E 76306.45
EL 57.30

42+05.47
N 27558.47
E 76337.20
EL 56.50

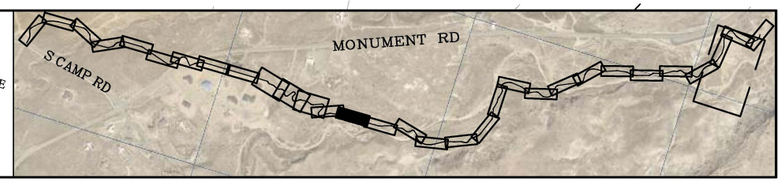
42+11.70
N 27558.54
E 76343.43
EL 58.34

42+08.58
N 27558.67
E 76340.31
EL 56.42

R100.00'
R40+25
R100.00'
R50.00'
R30.00'
R50.00'
R30.00'
R30.00'

CONSTRUCT BIKE PATH PER TYPICAL CROSS SECTION

KEYMAP
1" = 1500'



VPI=39+57.44
VPI EL=4766.28
HP=39+34.36
HP EL=4766.92
AD=-2.40%
K=19.26
SSD=300.37
VC=46.15

VPI=40+03.63
VPI EL=4763.89
LP=40+26.76
LP EL=4763.25
AD=2.40%
K=19.26
VC=46.25

VPI=41+11.02
VPI EL=4760.92
HP=41+00.38
HP EL=4761.21
AD=-5.74%
K=3.71
SSD=126.35
VC=21.29

VPI=41+44.87
VPI EL=4758.05
LP=41+55.94
LP EL=4757.77
AD=5.96%
K=3.72
VC=22.13

VPC=
39+34.36
EL=4766.92

VPT=
39+80.51
EL=4765.09

VPC=
39+80.51
EL=4765.09

VPT=
40+26.76
EL=4763.25

VPC=
41+00.38
EL=4761.21

VPT=
41+21.67
EL=4760.02

VPC=
41+33.81
EL=4758.98

VPT=
41+55.94
EL=4757.77

FINISHED GRADE

EXISTING GROUND

-2.78%

-8.54%

4790
4780
4770
4760
4750

39+00
40+00
41+00
42+00

DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES:
PLAN & PROFILE
HORIZONTAL: 1" = 20'
VERTICAL: 1" = 5'

CITY OF Grand Junction COLORADO

PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
TRAIL PLAN AND PROFILE
August 13, 2024

PP14

30

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2945-294-00-001
BLM

SHEET 30

SHEET 32

MATCH LINE

MATCH LINE

42+11.70
N 27558.54
E 76343.43
EL 56.34

42+08.58
N 27558.67
E 76340.31
EL 56.42

42+05.47
N 27558.47
E 76337.20
EL 56.50

42+34.78
N 27556.45
E 76366.41
EL 55.75

42+33.73
N 27556.53
E 76365.36
EL 55.78

42+35.82
N 27556.57
E 76367.46
EL 55.73

42+62.26
N 27555.83
E 76393.88
EL 55.05

42+63.27
N 27555.83
E 76394.90
EL 55.02

42+64.04
N 27555.85
E 76395.66
EL 55.00

42+89.46
N 27557.00
E 76421.06
EL 54.35

42+88.57
N 27556.98
E 76420.17
EL 54.37

42+90.35
N 27557.01
E 76421.95
EL 54.33

43+33.04
N 27556.80
E 76464.62
EL 53.79

43+28.38
N 27556.50
E 76459.97
EL 53.87

43+37.70
N 27557.82
E 76469.16
EL 53.71

44+53.00
N 27591.63
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EL 52.23

44+58.46
N 27592.75
E 76584.74
EL 52.04

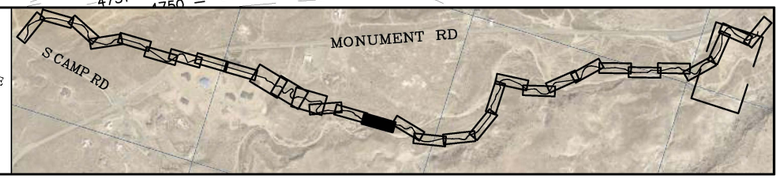
44+63.93
N 27592.88
E 76590.20
EL 51.85

R30.00'

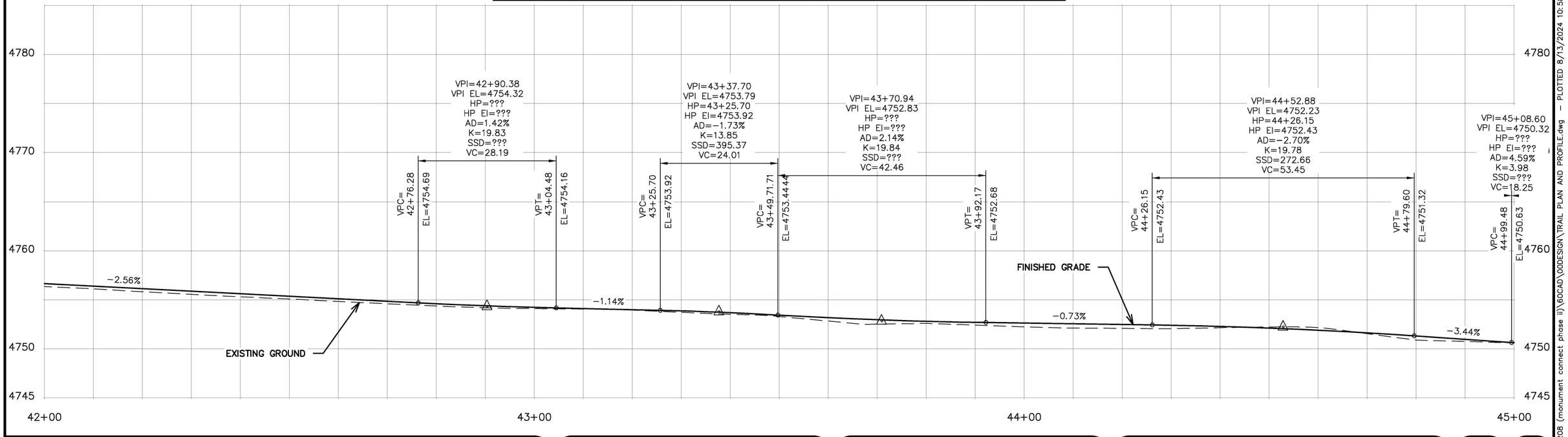
CONSTRUCT BIKE PATH PER TYPICAL CROSS SECTION

4752 4751 4750 4753 4754 4755 4756 4757

KEYMAP
1" = 1500'



NOTE:
CONTRACTOR SHALL KEEP WITHIN THE 35FT WIDE ROW (TEMP & PERMANENT) ON THIS SEGMENT THROUGH BLM PARCEL.



DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2024
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APPROVED BY KA DATE 2024

SCALES:
PLAN & PROFILE
HORIZONTAL: 1" = 20'
VERTICAL: 1" = 5'

CITY OF Grand Junction COLORADO

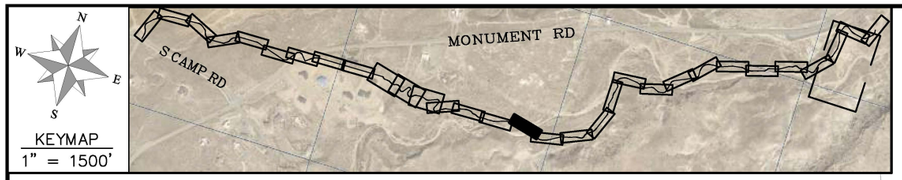
PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
TRAIL PLAN AND PROFILE
August 13, 2024

PP15

31

n:\EngProj\g2208 (monument connect phase ii)\60CAD\00DESIGN\TRAIL PLAN AND PROFILE.dwg — PLOTTED 8/13/2024 10:58:26 AM



NOTE:
CONTRACTOR SHALL KEEP WITHIN THE 35FT WIDE ROW (TEMP & PERMANENT) ON THIS SEGMENT THROUGH BLM PARCEL – AREA AROUND CBC SHALL REMAIN WITHIN 50FT WIDE ROW.

DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES:
PLAN & PROFILE
HORIZONTAL: 1" = 20'
VERTICAL: 1" = 5'

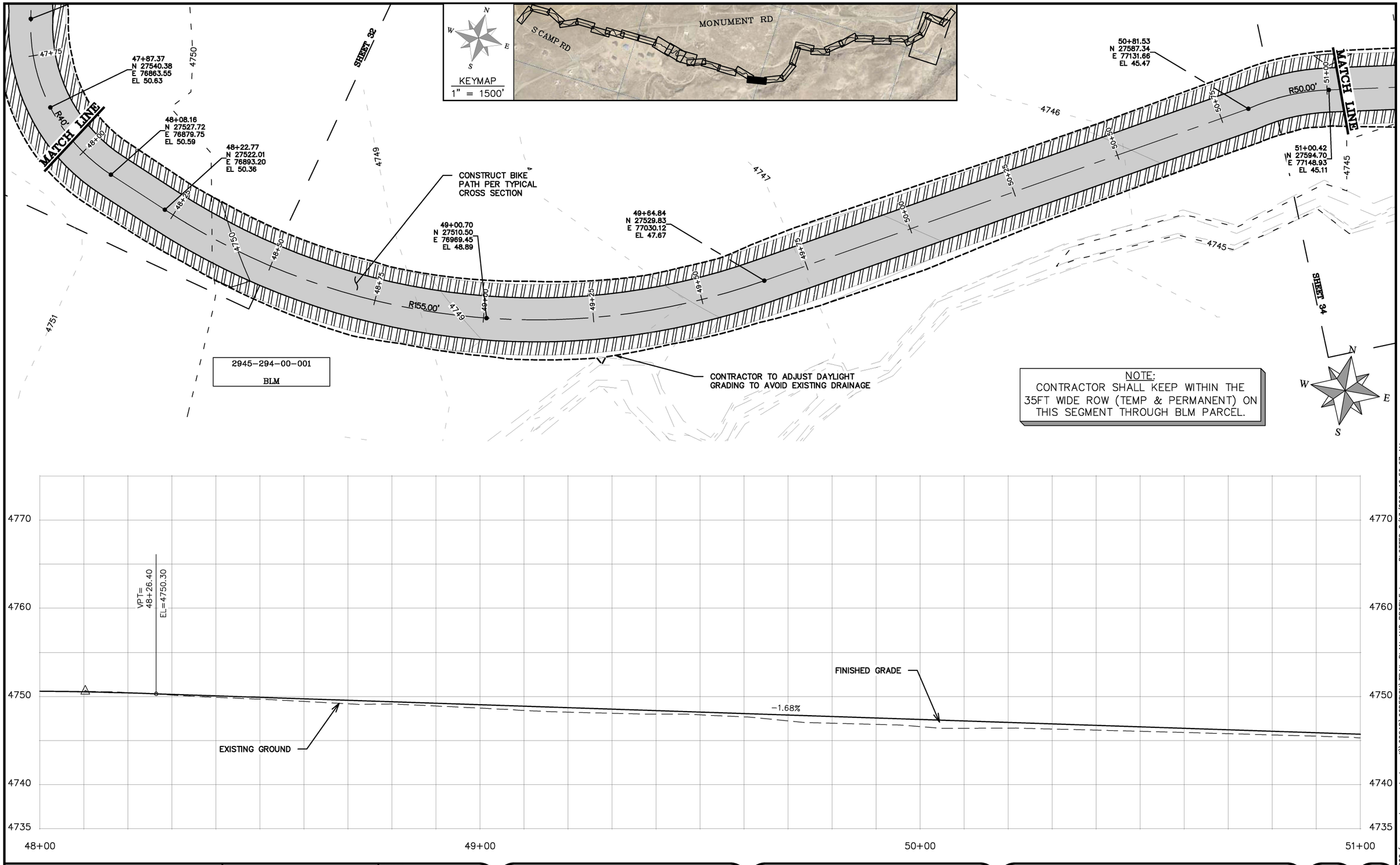
CITY OF Grand Junction COLORADO

PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
TRAIL PLAN AND PROFILE
August 13, 2024

PP16 | 32

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DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES:
PLAN & PROFILE
HORIZONTAL: 1" = 20'
VERTICAL: 1" = 5'

CITY OF Grand Junction COLORADO

PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
TRAIL PLAN AND PROFILE
August 13, 2024

PP17

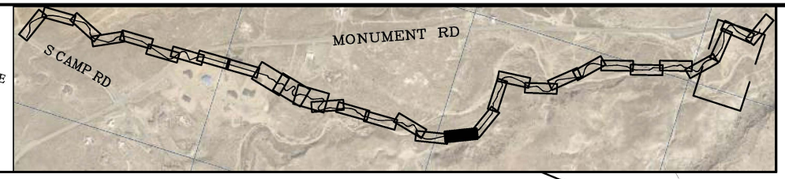
33

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2945-294-00-001
BLM

2945-291-00-126
CITY OF GRAND JUNCTION

KEYMAP
1" = 1500'



MATCH LINE

51+00.42
N 27594.70
E 77148.93
EL 45.11

51+78.08
N 27611.23
E 77224.82
EL 45.82

51+82.42
N 27612.36
E 77229.01
EL 45.86

51+86.76
N 27613.64
E 77233.16
EL 45.90

52+45.82
N 27631.10
E 77289.58
EL 46.44

52+65.91
N 27634.53
E 77309.34
EL 46.63

52+86.00
N 27634.12
E 77329.40
EL 46.22

53+08.21
N 27641.86
E 77349.68
EL 45.76

53+30.43
N 27661.22
E 77359.82
EL 45.30

53+63.77
N 27690.67
E 77374.58
EL 44.62

53+97.11
N 27710.07
E 77401.33
EL 43.93

R50.00'
R100.00'
R100.00'
R30.00'
R70.00'
R115.00'

CONSTRUCT BIKE PATH PER TYPICAL CROSS SECTION

SHEET 33
SHEET 35

NOTE:
CONTRACTOR SHALL KEEP WITHIN THE 35FT WIDE ROW (TEMP & PERMANENT) ON THIS SEGMENT THROUGH BLM PARCEL.

Pipe – (11)
SEE SHEET 43
FOR PIPE TABLE

VPI=51+22.73
VPI EL=4745.33
LP=51+25.81
LP EL=4745.39
AD=2.58%
K=7.99
VC=20.58
VPC= 51+12.44
EL=4745.50
VPT= 51+33.02
EL=4745.42

VPI=52+66.11
VPI EL=4746.63
HP=52+63.95
HP EL=4746.59
AD=-3.04%
K=3.99
SSD=224.88
VC=12.13
VPC= 52+60.04
EL=4746.57
VPT= 52+72.17
EL=4746.50

VPI=54+04.75
VPI EL=4743.77
LP=54+13.74
LP EL=4743.67
AD=0.91%
K=19.87
VC=18.00
VPC= 53+95.75
EL=4743.96

FINISHED GRADE
EXISTING GROUND
0.90%
-2.06%
76in x 48in Concrete Horizontal Elliptical Culvert

4770
4760
4750
4740
4730
51+00
52+00
53+00
54+00

DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES:
PLAN & PROFILE
HORIZONTAL: 1" = 20'
VERTICAL: 1" = 5'

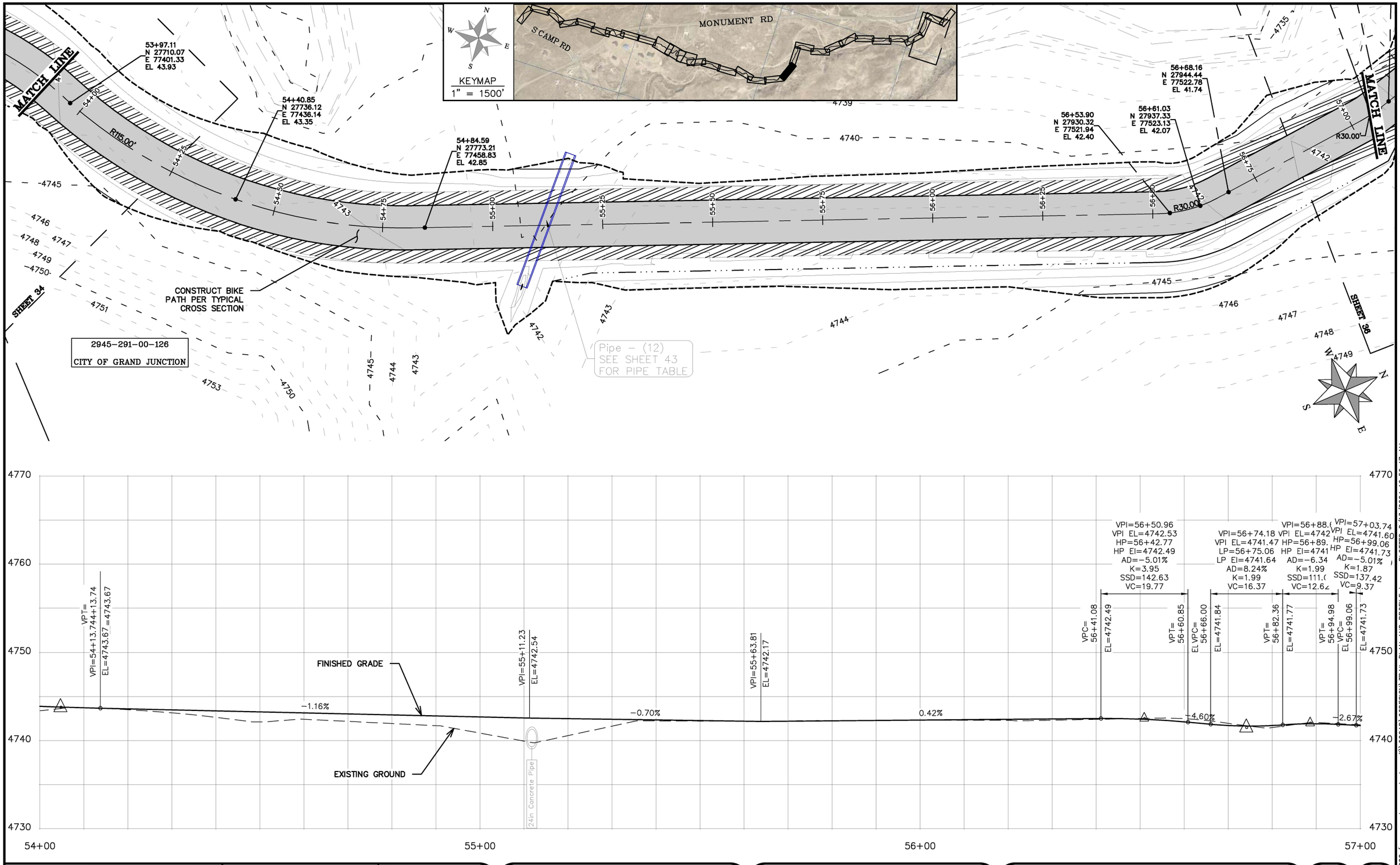
CITY OF Grand Junction COLORADO

PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
TRAIL PLAN AND PROFILE
August 13, 2024

PP18 | 34

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DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES:
PLAN & PROFILE
HORIZONTAL: 1" = 20'
VERTICAL: 1" = 5'

CITY OF Grand Junction COLORADO

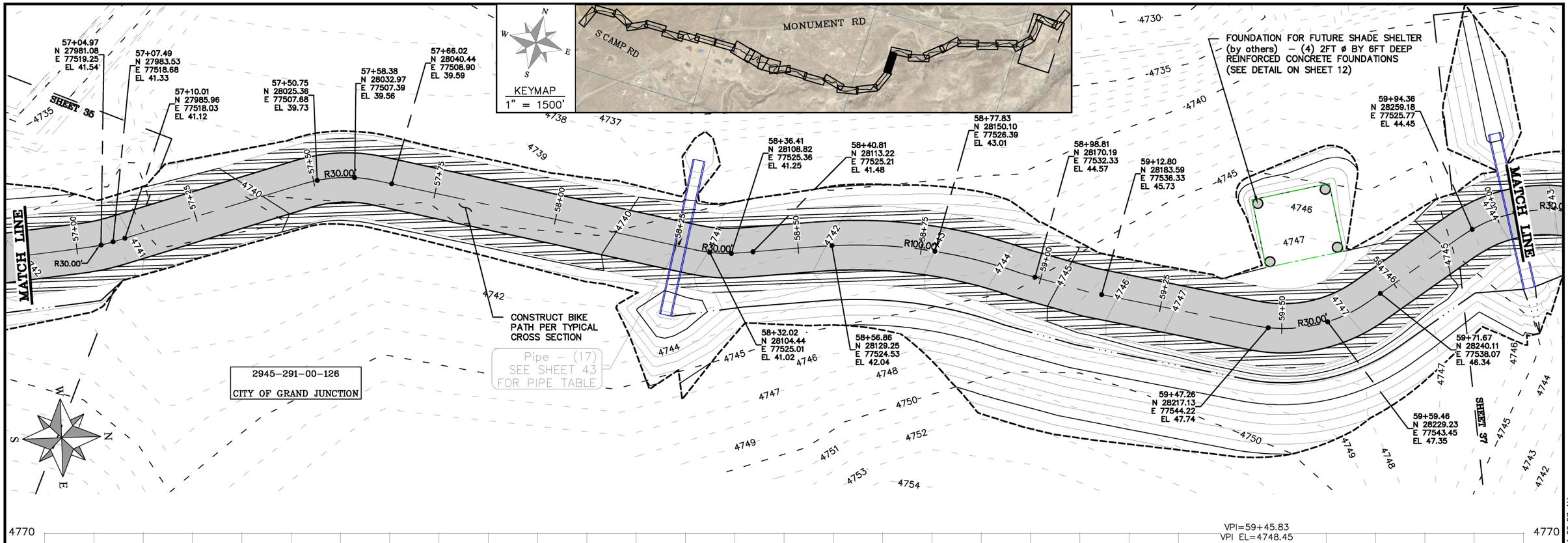
PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
TRAIL PLAN AND PROFILE
August 13, 2024

PP19

35

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DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES:
PLAN & PROFILE
HORIZONTAL: 1" = 20'
VERTICAL: 1" = 5'

CITY OF Grand Junction COLORADO

PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
TRAIL PLAN AND PROFILE
August 13, 2024

PP20

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2945-291-00-126
CITY OF GRAND JUNCTION

2945-291-00-125
2395 MONUMENT RD
CITY OF GRAND JUNCTION

60+88.70
N 28324.92
E 77577.58
EL 36.59

61+33.67
N 28328.62
E 77622.02
EL 32.84

CONSTRUCT BIKE PATH PER TYPICAL CROSS SECTION

62+20.02
N 28318.80
E 77707.82
EL 28.01

62+23.95
N 28318.10
E 77711.68
EL 27.90

62+27.87
N 28316.91
E 77715.41
EL 27.84

60+43.73
N 28302.30
E 77539.15
EL 40.33

60+35.28
N 28296.35
E 77533.15
EL 41.04

60+14.82
N 28279.04
E 77522.93
EL 42.74

R100.00'

R30.00'

R30.00'

SHEET 36

SHEET 38

Pipe - (18)
SEE SHEET 43
FOR PIPE TABLE

MATCH LINE

MATCH LINE

KEYMAP
1" = 1500'

MONUMENT RD

S CAMP RD

4760
4750
4740
4730
4720

60+00
61+00
62+00
63+00

FINISHED GRADE

EXISTING GROUND

-8.33%

-5.44%

2.16%

VPC=
62+03.33
EL=4728.91

VPI=62+33.20
VPI EL=4727.31
LP=62+45.85
LP EL=4727.77
AD=7.56%
K=7.91
VC=59.74

VPT=
62+63.07
EL=4727.96

VPC=
62+83.65
EL=4728.40

VPI=63+12.81
VPI EL=4729.04
HP=63+00.88
HP EL=4728.59
AD=-7.37%
K=7.91
SSD=119.35
VC=58.31

REVISION	DESCRIPTION	DATE
1		
2		
3		
4		

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES:
PLAN & PROFILE
HORIZONTAL: 1" = 20'
VERTICAL: 1" = 5'

CITY OF Grand Junction COLORADO

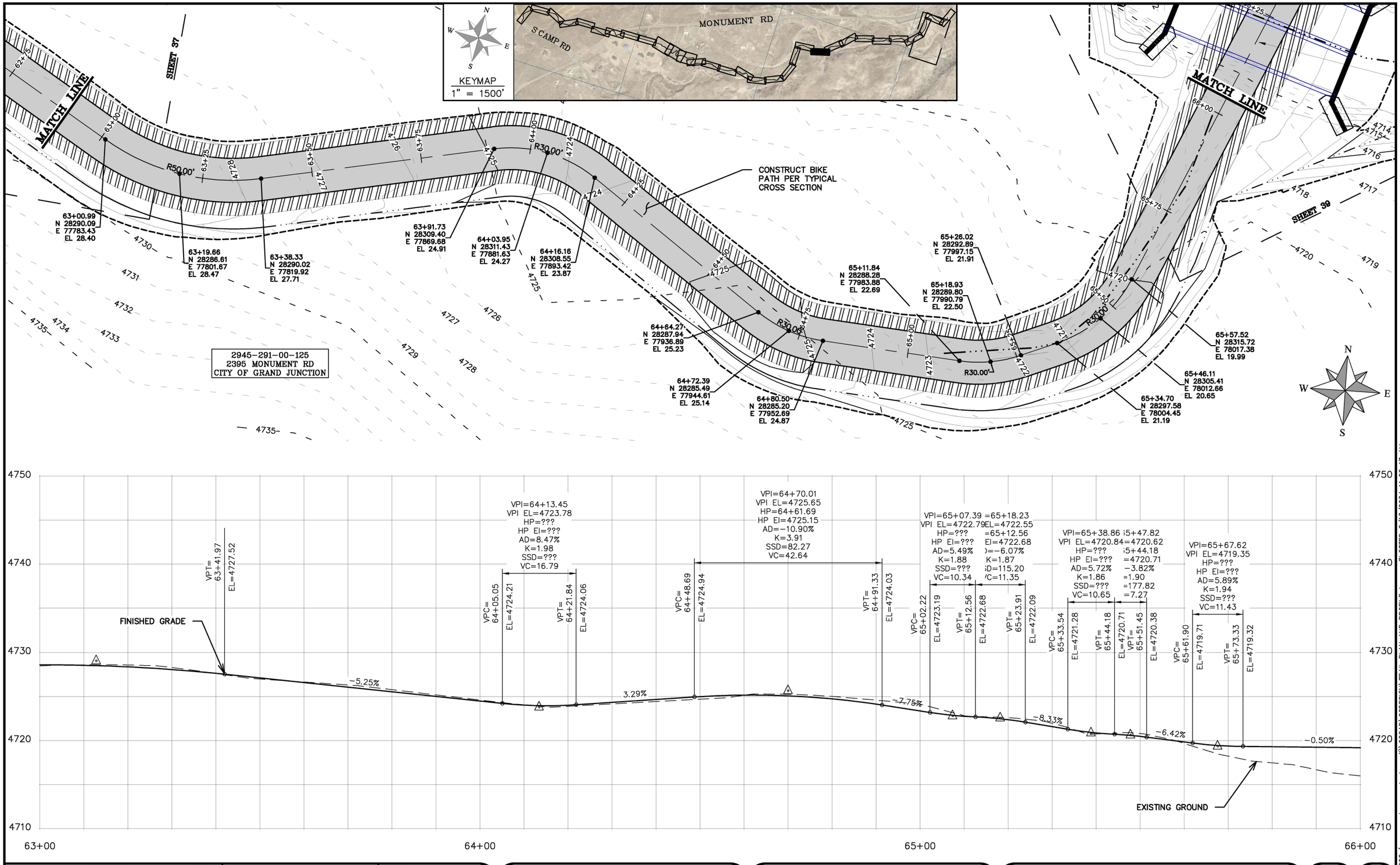
PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
TRAIL PLAN AND PROFILE
August 13, 2024

PP21

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DESCRIPTION	DATE
REVISION 1	–
REVISION 2	–
REVISION 3	–
REVISION 4	–

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES:
PLAN & PROFILE
HORIZONTAL: 1" = 20'
VERTICAL: 1" = 5'

CITY OF Grand Junction COLORADO

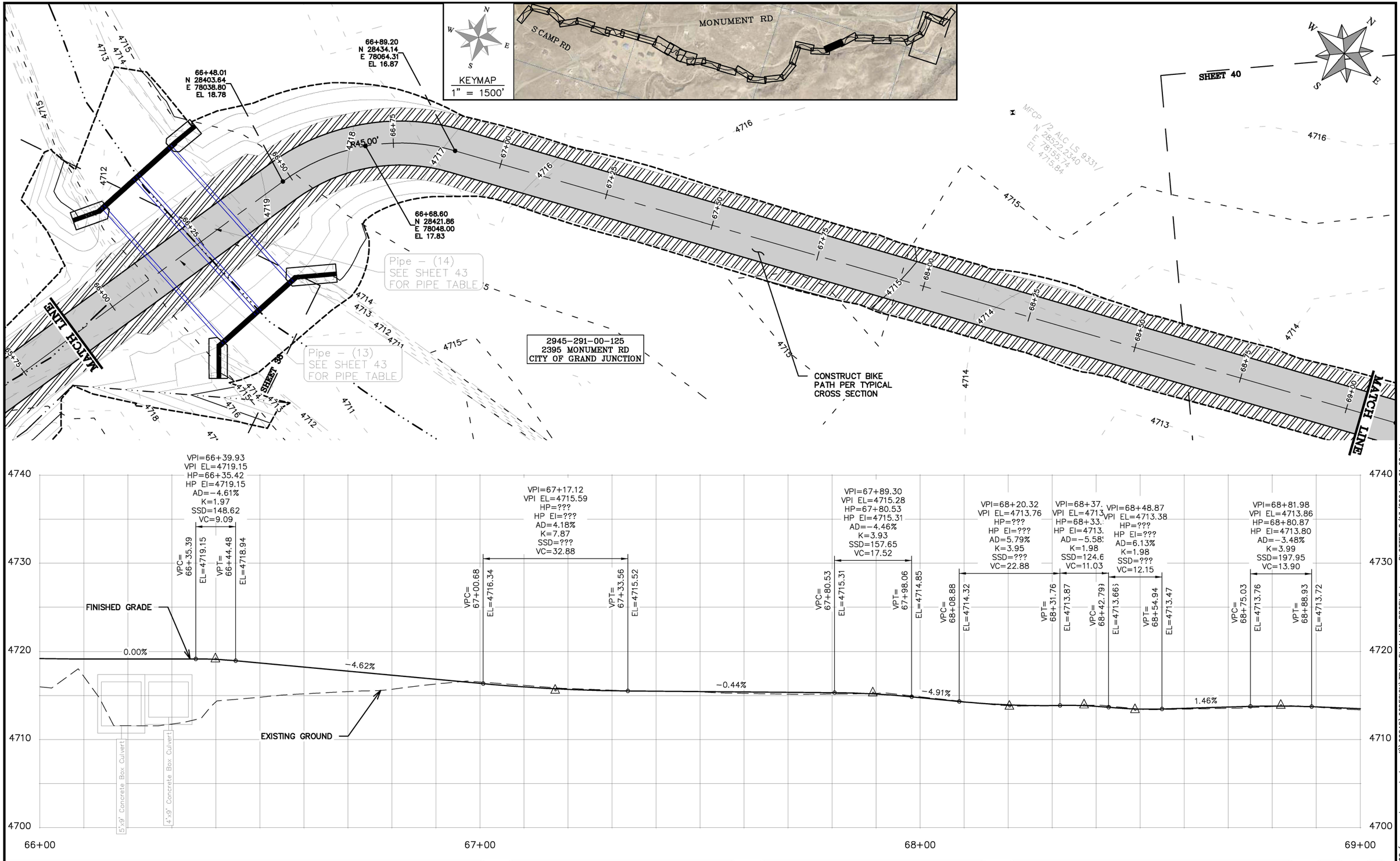
PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
TRAIL PLAN AND PROFILE
August 13, 2024

PP22

38

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DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES:
PLAN & PROFILE
HORIZONTAL 1" = 20'
VERTICAL 1" = 5'

CITY OF Grand Junction COLORADO

PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
TRAIL PLAN AND PROFILE
August 13, 2024

PP23

39

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2945-291-00-125
2395 MONUMENT RD
CITY OF GRAND JUNCTION

69+95.89
N 28601.19
E 78285.62
EL 14.34

70+59.67
N 28659.15
E 78308.45
EL 14.26

71+23.45
N 28685.98
E 78364.68
EL 12.37

69+46.31
N 28551.61
E 78285.62
EL 13.45

69+11.69
N 28524.18
E 78267.76
EL 13.26

69+29.00
N 28535.25
E 78280.76
EL 13.07

R85.00'
R30.00'
R30.00'

CONSTRUCT BIKE
PATH PER TYPICAL
CROSS SECTION

MATCH LINE
MATCH LINE

SHEET 39
SHEET 41

KEYMAP
1" = 1500'
MONUMENT RD
S CAMP RD

VPI=69+82.98
VPI EL=4714.39
HP=69+87.32
HP EL=4714.37
AD=-2.95%
K=3.99
SSD=231.39
VC=11.74
VPC= 69+77.10
EL=4714.24
VPT= 69+88.85
EL=4714.37

VPI=70+52.53
VPI EL=4714.50
HP=70+48.26
HP EL=4714.42
AD=-4.37%
K=3.98
SSD=160.72
VC=17.41
VPC= 70+43.83
EL=4714.40
VPT= 70+61.23
EL=4714.21

-2.02%
2.57%
-0.38%
1.11%
-2.96%

EXISTING GROUND
FINISHED GRADE

4740
4730
4720
4710
4700

69+00
70+00
71+00
72+00

DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES:
PLAN & PROFILE
HORIZONTAL: 1" = 20'
VERTICAL: 1" = 5'

CITY OF Grand Junction COLORADO

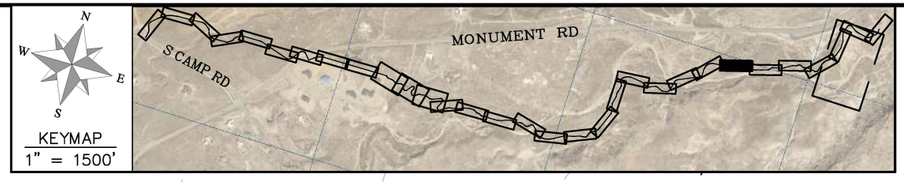
PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

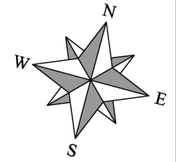
MONUMENT CONNECT TRAIL PHASE 2
TRAIL PLAN AND PROFILE
August 13, 2024

PP24

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SHEET 40

MATCH LINE

SHEET 42

MATCH LINE

72+00
R30.00'
72+04.85
N 28687.99
E 78446.00
EL 9.96
72+09.79
N 28688.39
E 78450.92
EL 9.81
72+14.73
N 28689.60
E 78455.70
EL 9.66

2945-291-00-125
2395 MONUMENT RD
CITY OF GRAND JUNCTION

73+43.33
N 28731.17
E 78577.40
EL 5.98
73+46.21
N 28731.97
E 78580.17
EL 5.93
73+49.10
N 28732.50
E 78583.00
EL 5.89
R30.00'

CONSTRUCT BIKE PATH PER TYPICAL CROSS SECTION

74+37.97
N 28744.64
E 78671.04
EL 5.29
74+44.16
N 28744.85
E 78677.22
EL 5.50
74+50.36
N 28743.79
E 78683.31
EL 5.73
74+66.75
N 28739.32
E 78699.08
EL 6.27
R30.00'

4700
4710
4720
4730
4740

VPI=73+43.42
VPI EL=4705.85
LP=73+66.28
LP EI=4705.70
AD=2.31%
K=19.83
VC=45.72
VPC= 73+20.56
EL=4706.53
VPT= 73+66.28
EL=4705.70

VPI=75+57.22
VPI EL=4710.01
VPI=74+37.50
VPI EL=4705.23
LP=74+34.21
LP EI=4705.26
AD=4.64%
K=1.98
VC=9.21
VPC= 74+32.89
EL=4705.26
VPT= 74+42.10
EL=4705.42.42

EXISTING GROUND
FINISHED GRADE
-0.66%

72+00
73+00
74+00
75+00

DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES:
PLAN & PROFILE
HORIZONTAL: 1" = 20'
0 5 10 20
VERTICAL: 1" = 5'
0 1.25 2.5 5

CITY OF Grand Junction COLORADO

PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
TRAIL PLAN AND PROFILE
August 13, 2024

PP25

41

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2945-291-00-125
2395 MONUMENT RD
CITY OF GRAND JUNCTION

SHEET 41

MATCH LINE

75+11.11
N 28733.68
E 78742.92
EL 7.12

75+55.47
N 28741.05
E 78786.50
EL 7.11

76+02.36
N 28755.60
E 78831.08
EL 6.15

76+09.18
N 28757.57
E 78837.60
EL 5.93

76+05.77
N 28756.62
E 78834.33
EL 6.04

76+70.29
N 28773.87
E 78896.50
EL 3.05

76+80.32
N 28778.10
E 78905.54
EL 2.60

76+90.35
N 28785.05
E 78912.70
EL 2.64

77+06.94
N 28798.44
E 78922.51
EL 3.08

77+17.82
N 28805.87
E 78930.37
EL 3.02

77+28.70
N 28810.03
E 78940.36
EL 2.69

R150.00'
R30.00'

Pipe - (15)
SEE SHEET 43
FOR PIPE TABLE

CONSTRUCT BIKE PATH PER TYPICAL CROSS SECTION

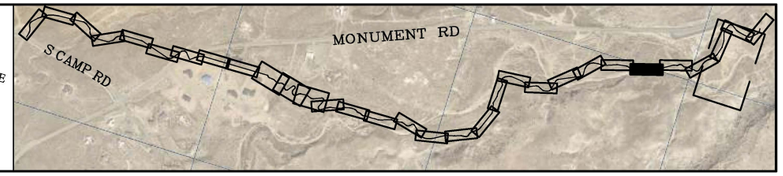
SHEET 43

MATCH LINE

2945-282-00-001
BLM

NOTE:
CONTRACTOR SHALL KEEP WITHIN THE 22FT WIDE ROW (TEMP & PERMANENT) ON THIS SEGMENT THROUGH BLM PARCEL.

KEYMAP
1" = 1500'



VPI=76+82.64
VPI EL=4702.29
LP=76+84.48
LP EL=4702.55
AD=10.44%
K=1.97
VC=20.61

VPI=77+08.12
VPI EL=4703.38
HP=77+09.92
HP EL=4703.10
AD=-7.63%
K=3.97
SSD=102.25
VC=30.34

VPC=
76+72.34
EL=4702.93

VPT=
76+72.34
EL=4702.93

VPT=
76+92.955
EL=4702.733

VPT=
77+23.28
EL=4702.87

FINISHED GRADE

EXISTING GROUND

-3.37%

18in Concrete Pipe

75+00 76+00 77+00 78+00

4730 4720 4710 4700 4690

DESCRIPTION	DATE
REVISION 1	–
REVISION 2	–
REVISION 3	–
REVISION 4	–

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES:
PLAN & PROFILE
HORIZONTAL: 1" = 20'
VERTICAL: 1" = 5'

CITY OF Grand Junction COLORADO

PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
TRAIL PLAN AND PROFILE
August 13, 2024

PP26

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NOTE:
CONTRACTOR SHALL KEEP WITHIN THE 22FT WIDE ROW (TEMP & PERMANENT) ON THIS SEGMENT THROUGH BLM PARCEL – AREA AROUND CBC SHALL REMAIN WITHIN 35FT WIDE ROW.

Pipe – (16)
SEE SHEET 43
FOR PIPE TABLE

2945-282-00-001
BLM

N
W E
S

SHEET 42

MATCH LINE

78+11.77
N 28827.60
E 79021.55
EL 99.89

78+20.86
N 28830.83
E 79030.01
EL 99.58

78+16.31
N 28828.89
E 79025.90
EL 99.73

79+22.44
N 28880.95
E 79118.36
EL 95.36

79+27.77
N 28883.16
E 79123.21
EL 95.65

79+33.11
N 28884.47
E 79128.37
EL 95.93

79+53.16
N 28887.68
E 79148.17
EL 97.00

79+62.54
N 28890.59
E 79157.04
EL 97.07

79+71.91
N 28896.08
E 79164.59
EL 96.69

79+75.55
N 28898.65
E 79167.16
EL 96.47

79+95.85
N 28907.26
E 79185.13
EL 95.25

80+16.16
N 28902.73
E 79204.52
EL 94.24

80+23.51
N 28898.77
E 79210.72
EL 94.00

80+34.65
N 28894.64
E 79221.00
EL 93.78

80+45.80
N 28894.51
E 79232.07
EL 93.67

80+78.27
N 28900.16
E 79264.05
EL 93.39

80+83.42
N 28900.62
E 79269.18
EL 93.34

80+88.58
N 28900.19
E 79274.32
EL 93.30

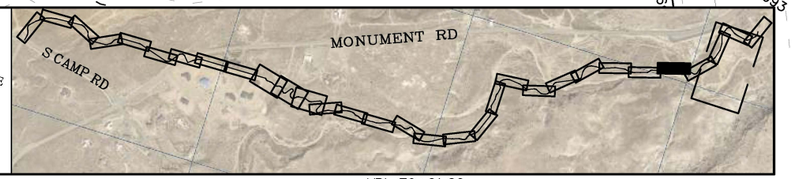
SHEET 44

MATCH LINE

R30.00'

CONSTRUCT BIKE PATH PER TYPICAL CROSS SECTION

KEYMAP
1" = 1500'



=78+64.44
VPI=78+53.89 EL=4698.48
VPI EL=4698.47 =78+57.28
LP=78+57.00 EL=4698.46
LP EI=4698.46 =-17.71%
AD=3.14% K=0.84
K=1.98 SD=44.95
VC=6.23 C=14.86

VPC= 78+50.77
EL=4698.57
VPT= 78+57.00
EL=4698.46

VPI=78+79.44
VPI EL=4695.80
LP=78+87.02
LP EI=4695.23
AD=10.91%
K=1.39
VC=15.15

VPC= 78+71.87 T= 78+71.87
EL=4697.19 69
VPC= 78+87.022
EL=4695.233

VPI=79+00.17
VPI EL=4694.17
LP=79+02.87
LP EI=4694.59
AD=13.44%
K=1.96
VC=26.29

VPT= 79+13.31
EL=4694.87

VPI=79+61.00
VPI EL=4697.26
HP=79+59.32
HP EI=4697.10
AD=-8.16%
K=1.99
SSD=89.58
VC=16.19

VPC= 79+52.90
EL=4696.99

VPT= 79+69.10
EL=4696.86

VPI=80+18.52
VPI EL=4693.90
LP=80+38.33
LP EI=4693.74
AD=5.10%
K=7.76
VC=39.60

VPC= 79+98.72
EL=4695.08

VPT= 80+38.33
EL=4693.74

VPI=80+97.44
VPI EL=4693.22
HP=80+89.55
HP EI=4693.29
AD=-1.99%
K=7.93
SSD=341.67
VC=15.79

VPC= 80+89.55
EL=4693.29

5.36%
-5.99%
-0.87%

FINISHED GRADE
EXISTING GROUND

76in x 48in Concrete Horizontal Elliptical Culvert

4720 4710 4700 4690 4680

78+00 79+00 80+00 81+00

DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES:
PLAN & PROFILE
HORIZONTAL: 1" = 20'
VERTICAL: 1" = 5'

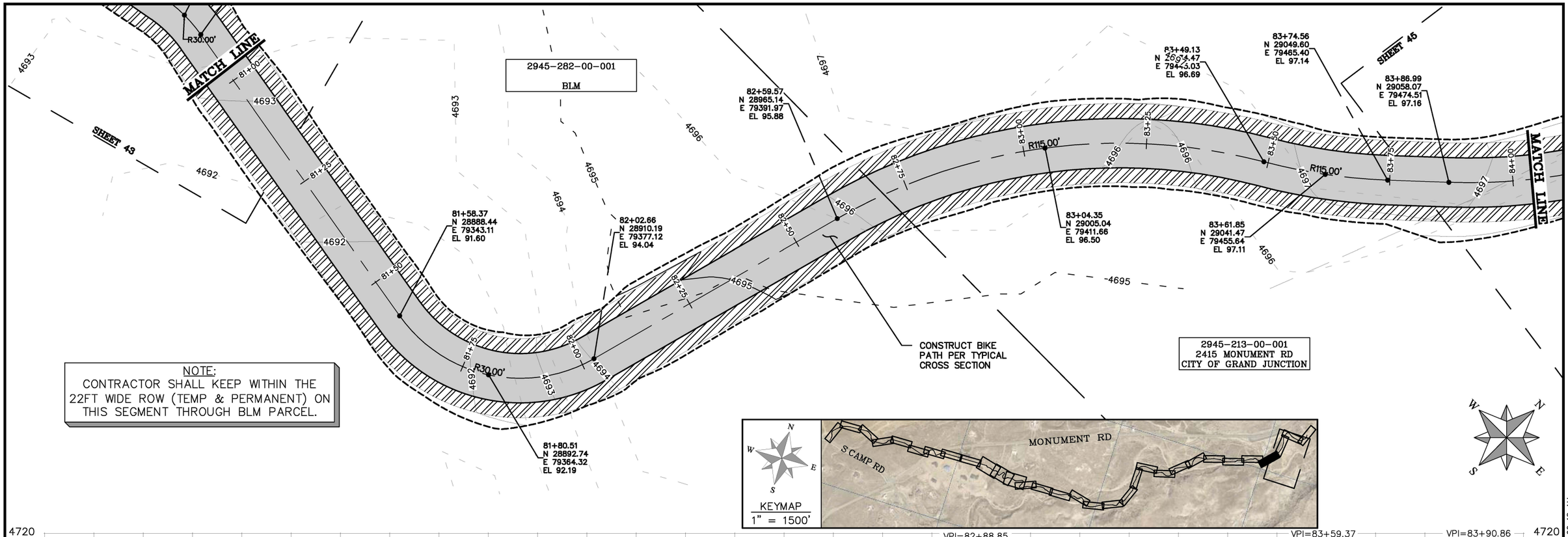
CITY OF Grand Junction COLORADO

PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
TRAIL PLAN AND PROFILE
August 13, 2024

PP27 | 43

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DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES:
PLAN & PROFILE
HORIZONTAL: 1" = 20'
VERTICAL: 1" = 5'

CITY OF Grand Junction COLORADO

PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
TRAIL PLAN AND PROFILE
August 13, 2024

PP28

44

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83+86.99
N 29058.07
E 79474.51
EL 97.16

MATCH LINE

84+15.11
N 29079.53
E 79492.56
EL 96.07

R115.00'

84+43.22
N 29104.73
E 79504.88
EL 96.23

85+23.22
N 29180.34
E 79531.00
EL 96.45

85+30.24
N 29187.23
E 79532.09
EL 96.55

85+26.73
N 29183.74
E 79531.85
EL 96.50

R20.00'

85+96.09
N 29253.03
E 79530.39
EL 98.13

85+91.59
N 29248.58
E 79530.98
EL 97.96

85+93.84
N 29250.82
E 79530.81
EL 98.04

R30.00'

86+94.86
N 29349.09
E 79512.55
EL 1.13

86+75.90
N 29330.49
E 79511.19
EL 0.73

86+85.38
N 29339.90
E 79510.39
EL 0.93

MATCH LINE

SHEET 44

SHEET 46

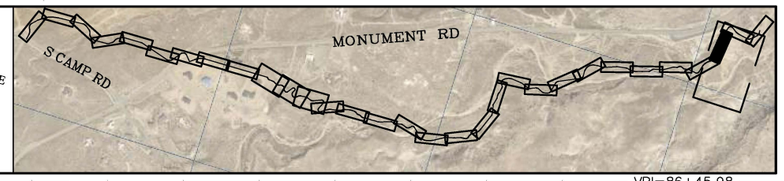
4696 4697 4698 4699 4700 4701

CONSTRUCT BIKE PATH
(1-FT WIDE CONCRETE 6" THICK w/ 4FT WIDE SHOULDER 12" THICK ON RIGHT SIDE ONLY)

CONSTRUCT BIKE PATH PER TYPICAL CROSS SECTION

2945-213-00-001
2415 MONUMENT RD
CITY OF GRAND JUNCTION

KEYMAP
1" = 1500'



VPI=84+13.37
VPI EL=4696.01
LP=84+17.51
LP EI=4696.06
AD=6.04%
K=1.97
VC=11.91
VPC= 84+07.42
EL=4696.32
VPT= 84+19.33
EL=4696.07

VPI=84+56.57
VPI EL=4696.40
HP=84+66.35
HP EI=4696.28
AD=-1.42%
K=52.29
SSD=503.84
VC=74.48
VPC= 84+93.81
EL=4696.21

VPI=85+04.08
VPI EL=4696.15
LP=84+99.06
LP EI=4696.19
AD=2.06%
K=9.99
VC=20.55
VPT= 85+14.36
EL=4696.31

VPI=85+72.32
VPI EL=4697.20
LP=85+48.83
LP EI=4696.84
AD=2.39%
K=19.64
VC=46.99
VPC= 85+48.83
EL=4696.84
VPT= 85+95.82
EL=4698.12

VPI=86+45.98
VPI EL=4700.09
HP=86+63.36
HP EI=4700.46
AD=-1.78%
K=19.56
SSD=391.22
VC=34.77
VPC= 86+28.59
EL=4699.40
VPT= 86+63.36
EL=4700.46

FINISHED GRADE

EXISTING GROUND

-5.16%
1.53%
3.93%

4720 4710 4700 4690 4680

84+00 85+00 86+00 87+00

DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES:
PLAN & PROFILE
HORIZONTAL: 1" = 20'
VERTICAL: 1" = 5'

CITY OF Grand Junction COLORADO

PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
TRAIL PLAN AND PROFILE
August 13, 2024

PP29

45

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2945-213-00-001
2415 MONUMENT RD
CITY OF GRAND JUNCTION

88+01.62
N 29418.33
E 79573.23
EL 3.62

REMOVE AT LEAST 10FT OF EXISTING RAILING TO NEAREST POST

CONSTRUCT BIKE PATH
(1-FT WIDE CONCRETE 6" THICK w/ 4FT WIDE SHOULDER 12" THICK ON RIGHT SIDE ONLY)

PRECAST CONCRETE BLOCK RETAINING WALL SYSTEM - REDI-ROCK GRAVITY WALL OR APPROVED EQUAL. SEE SHEET 9-10 FOR PLAN, PROFILE & SECTION.

90+49.26
N 29378.60
E 79798.59
EL 0.79

87+57.43
N 29406.99
E 79536.27
EL 2.75

87+79.52
N 29421.40
E 79552.07
EL 4.05

REMOVE AT LEAST 22FT OF EXISTING RAILING TO NEAREST POST

88+58.32
N 29386.98
E 79620.47
EL 0.00

88+76.86
N 29378.21
E 79636.78
EL 98.84

88+95.41
N 29372.60
E 79654.43
EL 98.15

90+18.23
N 29360.33
E 79773.50
EL 99.29

90+01.34
N 29353.53
E 79758.18
EL 99.43

89+84.45
N 29353.60
E 79741.42
EL 0.48

R25.00'
R100.00'
R40.00'

SHEET 45
SHEET 47

MATCH LINE
MATCH LINE

KEYMAP
1" = 1500'
MONUMENT RD
S CAMP RD

VPI=87+51.41
VPI EL=4702.33
LP=87+42.99
LP EI=4702.16
AD=4.85%
K=3.47
VC=16.83
VPC= 87+42.99
EL=4702.16
VPT= 87+59.82
EL=4702.91

VPI=87+81.51
VPI EL=4704.34
HP=87+84.63
HP EI=4704.12
AD=-9.89%
K=1.97
SSD=76.92
VC=19.48
VPC= 87+71.77
EL=4703.70
VPT= 87+91.25
EL=4704.01

VPI=88+19.52
VPI EL=4702.95
HP=88+13.01
HP EI=4703.20
AD=-3.51%
K=3.71
SSD=195.87
VC=13.01
VPC= 88+13.01
EL=4703.20
VPT= 88+26.03
EL=4702.47

VPI=88+68.99
VPI EL=4699.20
LP=88+74.36
LP EI=4698.95
AD=2.92%
K=3.68
VC=10.74
VPC= 88+63.63
EL=4699.59
VPT= 88+74.36
EL=4698.95

VPI=88+95.45
VPI EL=4698.01
LP=88+96.86
LP EI=4698.14
AD=7.53%
K=1.99
VC=14.96
VPC= 88+87.97
EL=4698.34
VPT= 89+02.93
EL=4698.23

VPI=89+16.7
VPI EL=4698.
HP=89+16.4
HP EI=4698.
AD=-6.31%
K=1.99
SSD=111.53
VC=12.58
VPC= 89+10.42
EL=4698.46
VPT= 89+23.00
EL=4698.45

VPI=89+29.00
VPI EL=4698.25
LP=89+29.51
LP EI=4698.34
AD=6.02%
K=1.99
VC=12.00
VPC= 89+17.53
EL=4698.45
VPT= 89+35.00
EL=4698.49

VPI=89+47.49
VPI EL=4698.50
LP=89+40.25
LP EI=4698.49
AD=7.54%
K=1.92
VC=14.48
VPC= 89+40.25
EL=4698.49
VPT= 89+54.73
EL=4699.05

VPI=89+81.74
VPI EL=4701.10
HP=89+80.20
HP EI=4700.54
AD=-16.95%
K=1.58
SSD=52.57
VC=26.72
VPC= 89+68.38
EL=4700.10

VPI=90+04.70
VPI EL=4699.06
LP=90+10.86
LP EI=4699.20
AD=9.92%
K=1.93
VC=19.18
VPC= 89+95.11
EL=4699.84

FINISHED GRADE
EXISTING GROUND
2.14%
6.64%
-3.71%
-7.64%
-4.52%
3.06%
7.70%

4730 4720 4710 4700 4690

87+00 88+00 89+00 90+00

DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES:
PLAN & PROFILE
HORIZONTAL: 1" = 20'
VERTICAL: 1" = 5'

CITY OF Grand Junction COLORADO

PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
TRAIL PLAN AND PROFILE
August 13, 2024

PP30

46

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MATCH LINE

90+01.34
N 29353.53
E 79758.18
EL 99.43

90+18.23
N 29360.33
E 79773.50
EL 99.29

90+49.26
N 29378.60
E 79798.59
EL 0.79

90+55.17
N 29382.35
E 79803.15
EL 1.28

90+89.31
N 29405.56
E 79828.19
EL 2.94

91+29.24
N 29441.44
E 79842.51
EL ???

91+09.28
N 29421.89
E 79839.40
EL 3.38

R40.00'

R45.00'

PRECAST CONCRETE BLOCK RETAINING WALL SYSTEM – REDI-ROCK GRAVITY WALL OR APPROVED EQUAL. SEE SHEET 9-10 FOR PLAN, PROFILE & SECTION.

CONTRACTOR TO DOWEL #4 REBAR 12" ON CENTER TO EXISTING TRAIL PRIOR TO POUR OF NEW TRAIL CONCRETE.

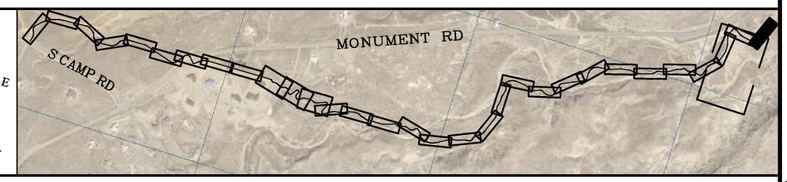
SHEET 46

CONSTRUCT BIKE PATH
(1-FT WIDE CONCRETE 6" THICK w/ 4FT WIDE SHOULDER 12" THICK ON RIGHT SIDE ONLY)

CONSTRUCT BIKE PATH PER TYPICAL CROSS SECTION

2945-213-00-001
2415 MONUMENT RD
CITY OF GRAND JUNCTION

KEYMAP
1" = 1500'



VPI=90+34.55
VPI EL=4699.57
LP=90+28.34
LP EI=4699.47
AD=6.60%
K=1.88
VC=12.42

VPI=90+64.86
VPI EL=4702.08
HP=90+73.64
HP EI=4702.39
AD=-4.77%
K=3.68
SSD=148.13
VC=17.55

VPI=90+97.65
VPI EL=4703.24
HP=91+02.30
HP EI=4703.30
AD=-2.36%
K=3.94
SSD=286.63
VC=9.30

VPT= 90+14.29 EL=4699.23
VPC= 90+28.34 EL=4699.47
VPT= 90+40.76 EL=4700.08
VPC= 90+56.09 EL=4701.35
VPT= VPI=90+73.64 EL=4702.39
VPC= 90+93.00 EL=4703.08
VPT= 91+02.30 EL=4703.30
VPI=91+29.24 EL=4703.62

1.70%
8.33%
3.55%
1.19%

FINISHED GRADE

EXISTING GROUND

4730
4720
4710
4700
4690

90+00
91+00
92+00
93+00

DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES:
PLAN & PROFILE
HORIZONTAL: 1" = 20'
VERTICAL: 1" = 5'

CITY OF Grand Junction COLORADO

PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
TRAIL PLAN AND PROFILE
August 13, 2024

PP31

47

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	Pipe Table					
	Pipe Name	Size	Length	Slope	Invert In	Invert Out
*	Pipe – (1)	12in Concrete Pipe	24 FT	2.87%	4861.75	4861.07
	Pipe – (2)	48in Concrete Pipe	32 FT	0.50%	4838.20	4838.04
	Pipe – (3)	12in Concrete Pipe	24 FT	2.00%	4839.09	4838.61
	Pipe – (4)	12in Concrete Pipe	24 FT	2.00%	4838.34	4837.86
	Pipe – (5)	12in Concrete Pipe	24 FT	2.00%	4835.60	4835.12
	Pipe – (6)	24in Concrete Pipe	32 FT	0.50%	4808.40	4808.24
	Pipe – (7)	24in Concrete Pipe	24 FT	2.00%	4782.52	4782.04
	Pipe – (8)	18in Concrete Pipe	24 FT	2.00%	4765.62	4765.14
+	Pipe – (9)	4'x9' Concrete Box Culvert	32 FT	2.00%	4744.74	4744.10
+	Pipe – (10)	5'x9' Concrete Box Culvert	32 FT	2.00%	4743.74	4743.10
	Pipe – (11)	76in x 48in Concrete Horizontal Elliptical Culvert	56 FT	0.49%	4741.44	4741.16
*	Pipe – (12)	24in Concrete Pipe	32 FT	3.25%	4739.77	4738.73
+	Pipe – (13)	5'x9' Concrete Box Culvert	42 FT	2.00%	4711.96	4711.12
+	Pipe – (14)	4'x9' Concrete Box Culvert	42 FT	2.00%	4712.96	4712.12
*	Pipe – (15)	18in Concrete Pipe	32 FT	3.47%	4700.77	4699.66
	Pipe – (16)	76in x 48in Concrete Horizontal Elliptical Culvert	56 FT	0.23%	4691.94	4691.81
	Pipe – (17)	24 inch Concrete Pipe	32 FT	1.50%	4737.67	4737.19
	Pipe – (18)	24 inch Concrete Pipe	32 FT	1.00%	4740.05	4739.73

NOTE: * PROVIDE RIPRAP (D_{50} = 12") AT PIPE OUTFALL (INCLIDED IN COST PIPE)

\+ PRECAST CONCRETE BOX CULVERTS PROVIDED BY CITY. CONTRACTOR TO LOAD ON TRUCK AND UNLOAD AT SITE.

DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES:
PLAN & PROFILE
HORIZONTAL: 1" = 20'
VERTICAL: 1" = 5'

CITY OF Grand Junction COLORADO

PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
PIPE TABLE
August 13, 2024

PP32

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2945-282-00-001
BLM

2945-213-00-001
2415 MONUMENT RD
CITY OF GRAND JUNCTION

CONSTRUCT 880 LF OF SINGLE-TRACK TRAIL - NATIVE SOIL, 3 FT WIDE, CROSS-SLOPE TO DRAIN.

CONNECT SINGLE-TRACK TRAIL TO SOFT SHOULDER USING MAXIMUM SLOPE OF 11% NATIVE EMBANKMENT MAY BE USED

KEYMAP
1" = 1500'

MONUMENT RD
S CAMP RD

DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES:
PLAN
HORIZONTAL: 1" = 50'
0 12.5 25 50

CITY OF Grand Junction COLORADO

PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
SINGLE TRACK PLAN
August 13, 2024

PP33

49

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CONSTRUCTION ACCESS & STAGING AREA

CONCRETE WASHOUT

VEHICLE TRACKING PAD

Pipe – (1)

CHECK DAM (TYP.)

APPROXIMATE LIMITS OF DISTURBANCE

2945-301-13-001
CITY OF GRAND JUNCTION

2945-292-00-125
AZCARRAGA MARTIN

CHECK DAM IN SWALE (TYP.)

APPROXIMATE LIMITS OF DISTURBANCE

CHECK DAM IN SWALE (TYP.)

2945-301-13-001
CITY OF GRAND JUNCTION

DESCRIPTION	DATE
REVISION 1	–
REVISION 2	–
REVISION 3	–
REVISION 4	–

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES:
PLAN
HORIZONTAL: 1" = 20'
0 5 10 20

CITY OF Grand Junction COLORADO

PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
STORM WATER MANAGEMETN PLAN
July 16, 2024

SW01

60

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2945-292-00-125
AZCARRAGA MARTIN

PERIMETER CONTROL (STRAW WATTLE OR BERM) (TYP.)

CHECK DAM IN SWALE (TYP.)

APPROXIMATE LIMITS OF DISTURBANCE

2945-301-13-001
CITY OF GRAND JUNCTION

CHECK DAM IN SWALE (TYP.)

PERIMETER CONTROL (STRAW WATTLE OR BERM) (TYP.)

Pipe – (2)

2945-292-01-001
CITY OF GRAND JUNCTION

APPROXIMATE LIMITS OF DISTURBANCE

Pipe – (3)

PERIMETER CONTROL (STRAW WATTLE OR BERM) (TYP.)

CHECK DAM IN SWALE (TYP.)

CHECK DAM IN SWALE (TYP.)

2945-301-13-001
CITY OF GRAND JUNCTION

DESCRIPTION	DATE
REVISION 1	–
REVISION 2	–
REVISION 3	–
REVISION 4	–

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES:
PLAN
HORIZONTAL: 1" = 20'
0 5 10 20

CITY OF Grand Junction COLORADO

PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
STORM WATER MANAGEMETN PLAN
July 16, 2024

SW02

67

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2945-292-00-125
AZCARRAGA MARTIN

APPROXIMATE LIMITS OF DISTURBANCE

CHECK DAM IN SWALE (TYP.)

2945-292-01-001
CITY OF GRAND JUNCTION

APPROXIMATE LIMITS OF DISTURBANCE

PERIMETER CONTROL (STRAW WATTLE OR BERM) (TYP.)

2945-292-01-001
CITY OF GRAND JUNCTION

DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2024
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CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES:
PLAN
HORIZONTAL: 1" = 20'
0 5 10 20

CITY OF Grand Junction COLORADO

PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
STORM WATER MANAGEMETN PLAN
July 16, 2024

SW03

68

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Pipe – (4)

PERIMETER CONTROL (STRAW WATTLE OR BERM) (TYP.)

Pipe – (5)

APPROXIMATE LIMITS OF DISTURBANCE

2945-292-01-001
CITY OF GRAND JUNCTION

MFCP /1.5ALC PLS 24320/
N 27693.1870
E 74470.60
EL 4838.74

MFCP /2ALC PLS 38428/
N 27655.0950
E 74579.96
EL 4835.54

2945-292-07-001
2310 STONE CREEK CT
MCLEROY ZACHARY KEITH

PERIMETER CONTROL (STRAW WATTLE OR BERM) (TYP.)

2945-292-00-127
CITY OF GRAND JUNCTION

MFCP /2ALC LS 24320 34.35 WC/
N 27692.5850
E 74592.14
EL 4835.66

VEHICLE TRACKING PAD

MFCP /2ALC PLS 38428/
N 27694.3910
E 74623.37
EL 4833.47

2945-292-00-045
2320 MONUMENT RD
ORACLE GALE LLC

APPROXIMATE LIMITS OF DISTURBANCE

MFCP /2ALC PLS 38428/
N 27672.2000
E 74642.81
EL 4830.67

MFCP /1.5 YPC PLS 38428
N 27671.6130
E 74712.73
EL 4827.28

2945-292-07-002
2312 STONE CREEK CT
INGERSOLL ERIC

MFCP /1.5 YPC PLS 38428
N 27670.8800
E 74824.55
EL 4826.50

2945-292-07-001
2310 STONE CREEK CT
MCLEROY ZACHARY KEITH

2945-292-07-003
2314 STONE CREEK CT
JOHNSON JOSHUA

PERIMETER CONTROL (STRAW WATTLE OR BERM) (TYP.)

DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES: PLAN HORIZONTAL: 1" = 20'

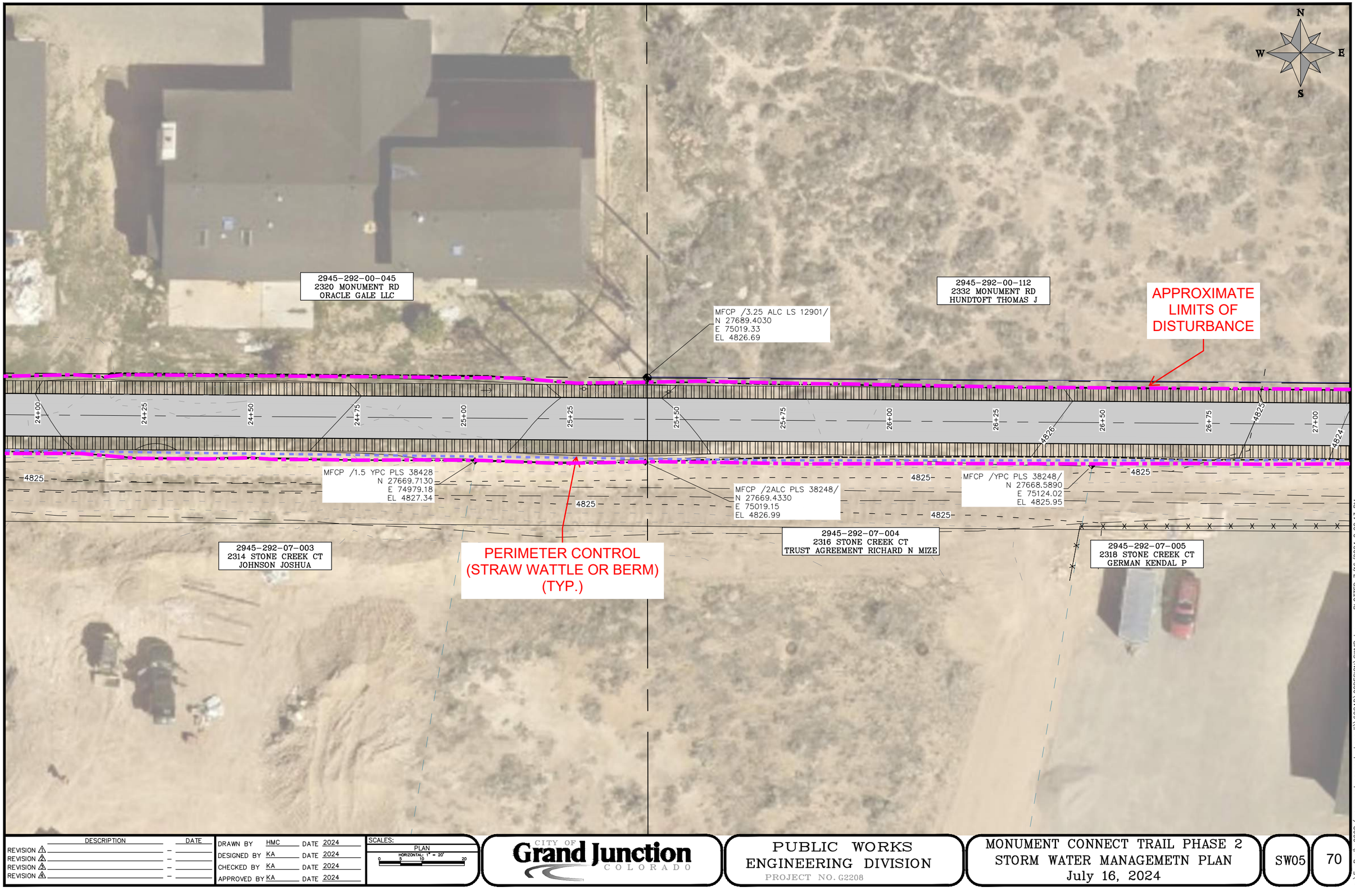
CITY OF Grand Junction COLORADO

PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
STORM WATER MANAGEMETN PLAN
July 16, 2024

SW04 | 63

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REVISION 2	–
REVISION 3	–
REVISION 4	–

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

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HORIZONTAL 1" = 20'
0 5 10 20

CITY OF Grand Junction COLORADO

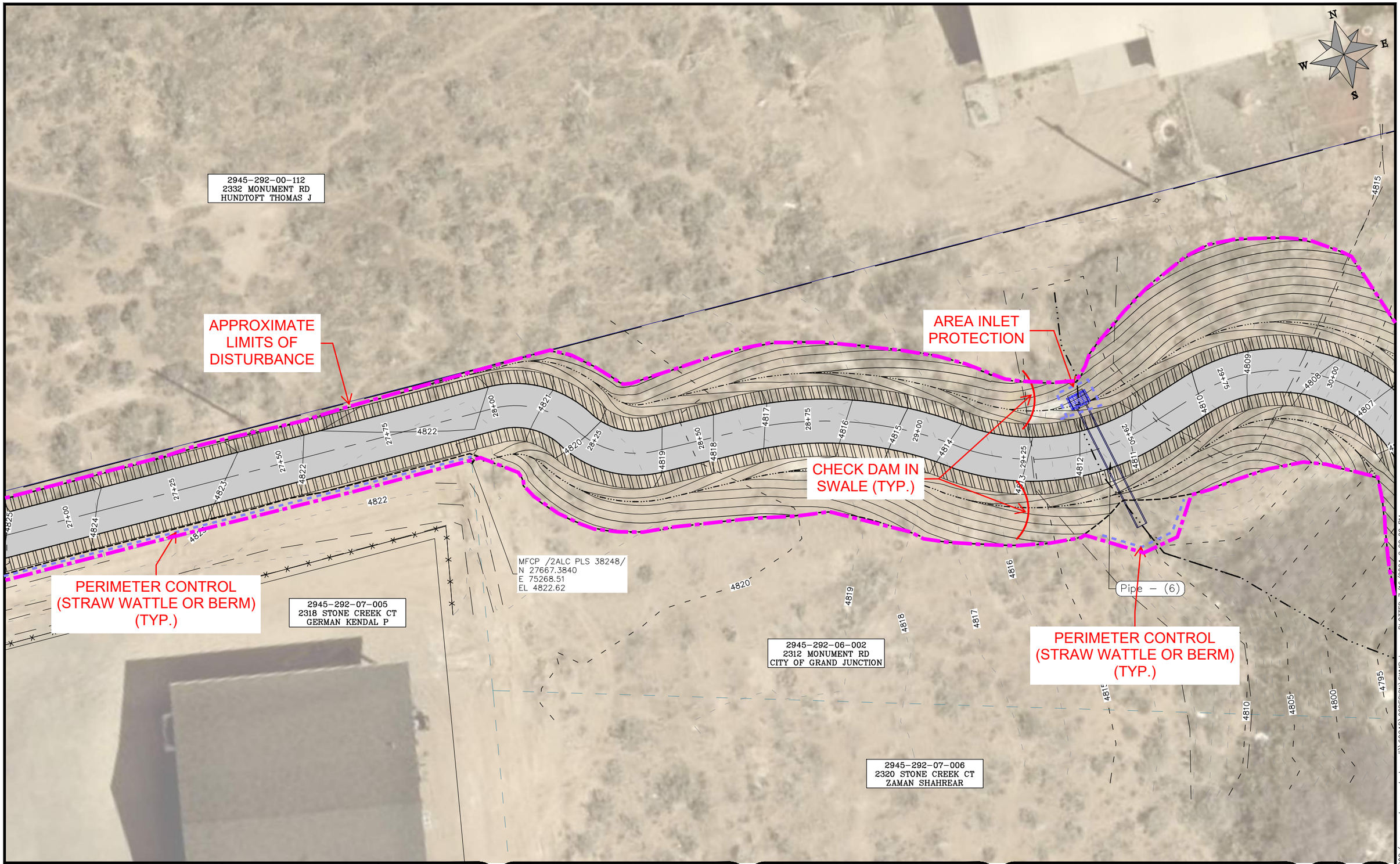
PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
STORM WATER MANAGEMETN PLAN
July 16, 2024

SW05

70

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REVISION 2	
REVISION 3	
REVISION 4	

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DESIGNED BY	KA	DATE	2024
CHECKED BY	KA	DATE	2024
APPROVED BY	KA	DATE	2024

SCALES:
PLAN
HORIZONTAL: 1" = 20'
0 5 10 20

CITY OF Grand Junction COLORADO

PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
STORM WATER MANAGEMETN PLAN
July 16, 2024

SW06

71

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2945-292-00-126
2328 MONUMENT RD
GRAND JUNCTION GEM & MINERAL CLUB INC

2945-292-00-112
2332 MONUMENT RD
HUNDTOFT THOMAS J

2945-292-06-002
2312 MONUMENT RD
CITY OF GRAND JUNCTION

PERIMETER CONTROL
(STRAW WATTLE OR BERM)
(TYP.)

APPROXIMATE
LIMITS OF
DISTURBANCE

AREA INLET
PROTECTION

CHECK DAM IN
SWALE (TYP.)

CHECK DAM IN
SWALE (TYP.)

Pipe – (7)

Pipe – (6)

PERIMETER CONTROL
(STRAW WATTLE OR BERM)
(TYP.)

MFCP /2ALC PLS 38428/
N 27510.9460
E 75606.92
EL 4782.91

2945-292-07-006
2320 STONE CREEK CT
ZAMAN SHAHREAR

DESCRIPTION	DATE
REVISION 1	–
REVISION 2	–
REVISION 3	–
REVISION 4	–

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES:
PLAN
HORIZONTAL 1" = 20'
0 5 10 20

CITY OF Grand Junction COLORADO

PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
STORM WATER MANAGEMETN PLAN
July 16, 2024

SW07

72

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2945-292-06-002
2312 MONUMENT RD
CITY OF GRAND JUNCTION

N
W E
S

PERIMETER CONTROL
(STRAW WATTLE OR BERM)
(TYP.)

APPROXIMATE
LIMITS OF
DISTURBANCE

Pipe – (7)

MFCP /2ALC PLS 38428/
N 27510.9460
E 75606.92
EL 4782.91

PERIMETER CONTROL
(STRAW WATTLE OR BERM)
(TYP.)

DESCRIPTION	DATE
REVISION 1	–
REVISION 2	–
REVISION 3	–
REVISION 4	–

DRAWN BY	HMC	DATE	2024
DESIGNED BY	KA	DATE	2024
CHECKED BY	KA	DATE	2024
APPROVED BY	KA	DATE	2024

SCALES:
PLAN
HORIZONTAL: 1" = 20'
0 5 10 20

CITY OF Grand Junction COLORADO

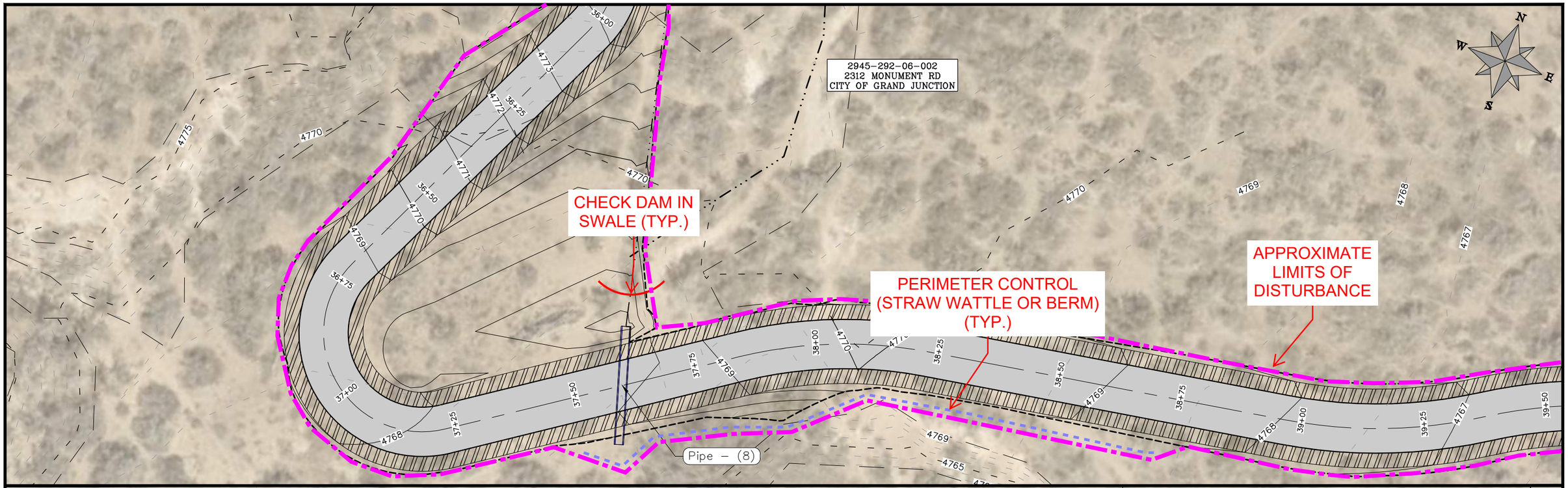
PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

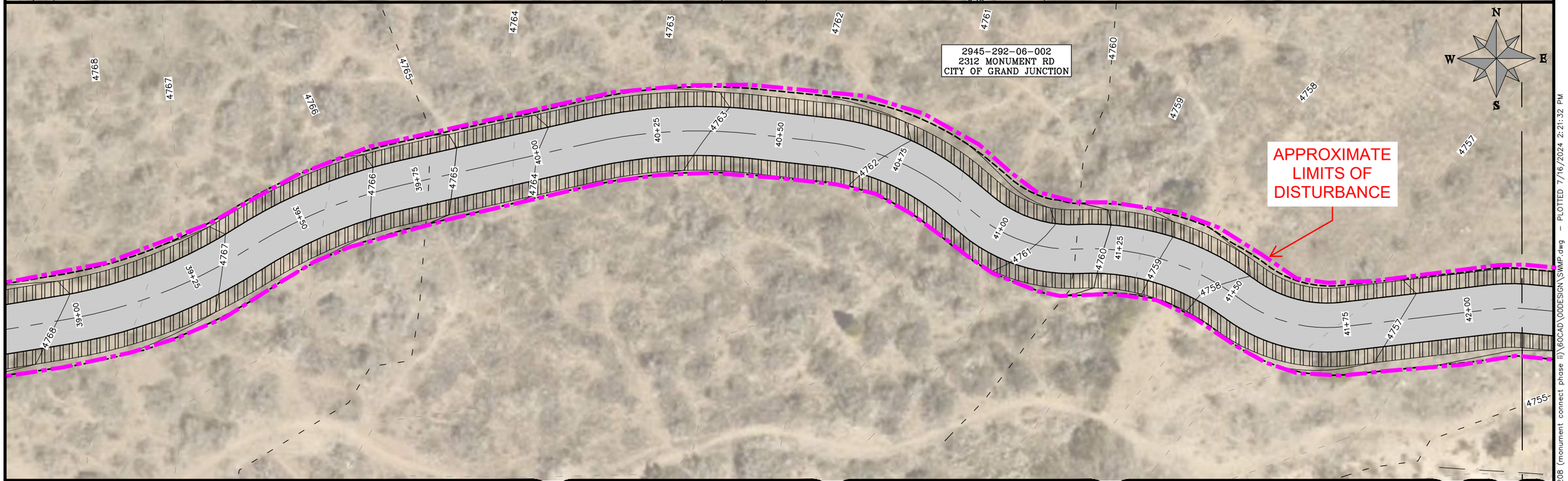
MONUMENT CONNECT TRAIL PHASE 2
STORM WATER MANAGEMETN PLAN
July 16, 2024

SW08

73

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REVISION 2	–
REVISION 3	–
REVISION 4	–

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES:
PLAN
HORIZONTAL: 1" = 20'
0 5 10 20

CITY OF Grand Junction COLORADO

PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
STORM WATER MANAGEMETN PLAN
July 16, 2024

SW09

74

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2945-294-00-001
BLM

APPROXIMATE LIMITS OF DISTURBANCE

PERIMETER CONTROL (STRAW WATTLE OR BERM) (TYP.)

2945-294-00-001
BLM

Pipe – (9)

Pipe

APPROXIMATE LIMITS OF DISTURBANCE

PERIMETER CONTROL (STRAW WATTLE OR BERM) (TYP.)

PERIMETER CONTROL (STRAW WATTLE OR BERM) (TYP.)

CHECK DAM IN SWALE (TYP.)

DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES:
PLAN
HORIZONTAL: 1" = 20'
0 5 10 20

CITY OF Grand Junction COLORADO

PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
STORM WATER MANAGEMETN PLAN
July 16, 2024

SW10

75

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2945-294-00-001
BLM

APPROXIMATE LIMITS OF DISTURBANCE

PERIMETER CONTROL (STRAW WATTLE OR BERM) (TYP.)

2945-292-00-065
2370 MONUMENT RD
COOPER DAVID

2945-291-00-126
CITY OF GRAND JUNCTION

2945-294-00-001
BLM

APPROXIMATE LIMITS OF DISTURBANCE

PERIMETER CONTROL (STRAW WATTLE OR BERM) (TYP.)

PERIMETER CONTROL (STRAW WATTLE OR BERM) (TYP.)

Pipe – (11)

DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES:
PLAN
HORIZONTAL: 1" = 20'
0 5 10 20

CITY OF Grand Junction COLORADO

PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
STORM WATER MANAGEMETN PLAN
July 16, 2024

SW11

76

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PERIMETER CONTROL (STRAW WATTLE OR BERM) (TYP.)

Pipe – (12)

APPROXIMATE LIMITS OF DISTURBANCE

2945-291-00-126
CITY OF GRAND JUNCTION

PERIMETER CONTROL (STRAW WATTLE OR BERM) (TYP.)

Pipe – (17)

APPROXIMATE LIMITS OF DISTURBANCE

2945-291-00-126
CITY OF GRAND JUNCTION

DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY	HMC	DATE	2024
DESIGNED BY	KA	DATE	2024
CHECKED BY	KA	DATE	2024
APPROVED BY	KA	DATE	2024

SCALES:
PLAN
HORIZONTAL: 1" = 20'
0 5 10 20

CITY OF Grand Junction COLORADO

PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
STORM WATER MANAGEMETN PLAN
July 16, 2024

SW12

77

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PERIMETER CONTROL (STRAW WATTLE OR BERM) (TYP.)

2945-291-00-126
CITY OF GRAND JUNCTION

2945-291-00-125
2395 MONUMENT RD
CITY OF GRAND JUNCTION

APPROXIMATE LIMITS OF DISTURBANCE

CHECK DAM IN SWALE (TYP.)

Pipe – (18)

CHECK DAM IN SWALE (TYP.)

APPROXIMATE LIMITS OF DISTURBANCE

2945-291-00-125
2395 MONUMENT RD
CITY OF GRAND JUNCTION

DESCRIPTION	DATE
REVISION 1	–
REVISION 2	–
REVISION 3	–
REVISION 4	–

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES:
PLAN
HORIZONTAL: 1" = 20'
0 5 10 20

CITY OF Grand Junction COLORADO

PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
STORM WATER MANAGEMETN PLAN
July 16, 2024

SW13

78

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PERIMETER CONTROL (STRAW WATTLE OR BERM) (TYP.)

APPROXIMATE LIMITS OF DISTURBANCE

CHECK DAM IN SWALE (TYP.)

Pipe – (13)

Pipe – (14)

2945-291-00-125
2395 MONUMENT RD
CITY OF GRAND JUNCTION

MFOP /2 ALC LS 9331/
N 2852222340
E 781557.74
EL 4715.84

APPROXIMATE LIMITS OF DISTURBANCE

2945-291-00-125
2395 MONUMENT RD
CITY OF GRAND JUNCTION

DESCRIPTION	DATE
REVISION 1	–
REVISION 2	–
REVISION 3	–
REVISION 4	–

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES:
PLAN
HORIZONTAL: 1" = 20'
0 5 10 20

CITY OF Grand Junction COLORADO

PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
STORM WATER MANAGEMETN PLAN
July 16, 2024

SW14

79

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APPROXIMATE LIMITS OF DISTURBANCE

2945-291-00-125
2395 MONUMENT RD
CITY OF GRAND JUNCTION

2945-291-00-125
2395 MONUMENT RD
CITY OF GRAND JUNCTION

Pipe – (15)

APPROXIMATE LIMITS OF DISTURBANCE

PERIMETER CONTROL (STRAW WATTLE OR BERM) (TYP.)

2945-282-00-001
BLM

DESCRIPTION	DATE
REVISION 1	–
REVISION 2	–
REVISION 3	–
REVISION 4	–

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES:
PLAN
HORIZONTAL: 1" = 20'
0 5 10 20

CITY OF Grand Junction COLORADO

PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
STORM WATER MANAGEMETN PLAN
July 16, 2024

SW15

80

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2945-282-00-001
BLM

Pipe – (16)

APPROXIMATE LIMITS OF DISTURBANCE

PERIMETER CONTROL (STRAW WATTLE OR BERM) (TYP.)

2945-282-00-001
BLM

APPROXIMATE LIMITS OF DISTURBANCE

PERIMETER CONTROL (STRAW WATTLE OR BERM) (TYP.)

2945-213-00-001
2415 MONUMENT RD
CITY OF GRAND JUNCTION

DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES: PLAN HORIZONTAL 1" = 20'

CITY OF Grand Junction COLORADO

PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
STORM WATER MANAGEMETN PLAN
July 16, 2024

SW16

81

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APPROXIMATE LIMITS OF DISTURBANCE

2945-213-00-001
2415 MONUMENT RD
CITY OF GRAND JUNCTION

APPROXIMATE LIMITS OF DISTURBANCE

PERIMETER CONTROL (STRAW WATTLE OR BERM) (TYP.)

DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2024
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CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES: PLAN HORIZONTAL 1" = 20'

CITY OF Grand Junction COLORADO

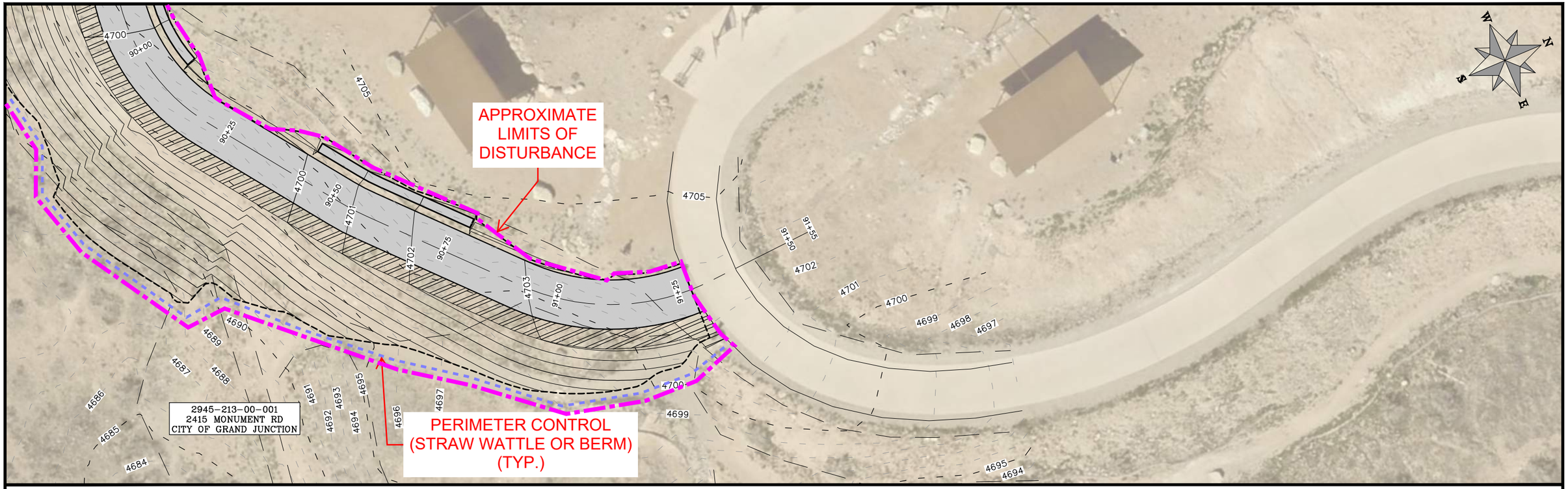
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PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
STORM WATER MANAGEMETN PLAN
July 16, 2024

SW17

82

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SCALES:
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0 5 10 20

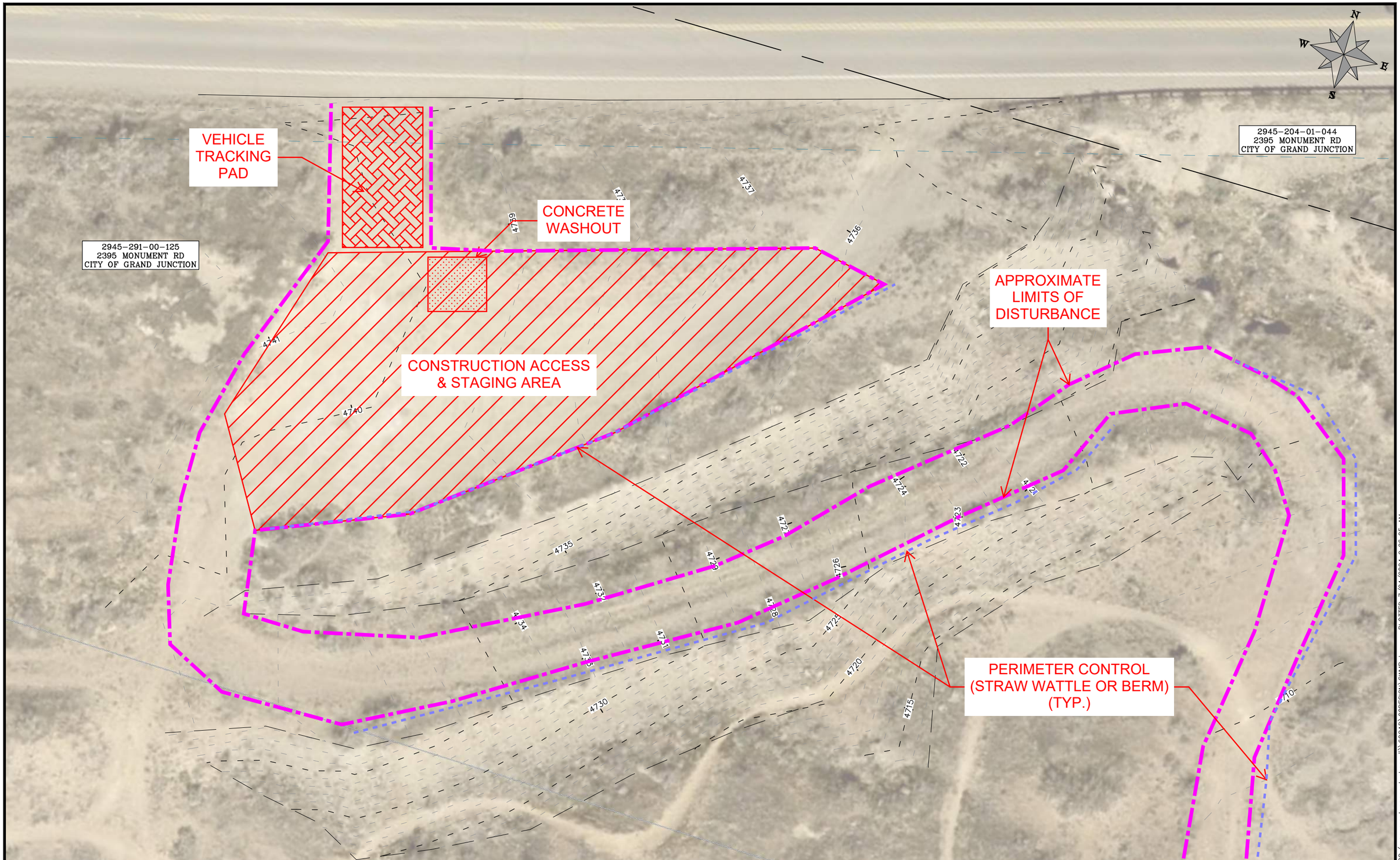
CITY OF Grand Junction COLORADO

PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
STORM WATER MANAGEMETN PLAN
July 16, 2024

SW18

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REVISION 4	

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
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SCALES:
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HORIZONTAL: 1" = 20'
0 5 10 20

CITY OF Grand Junction COLORADO

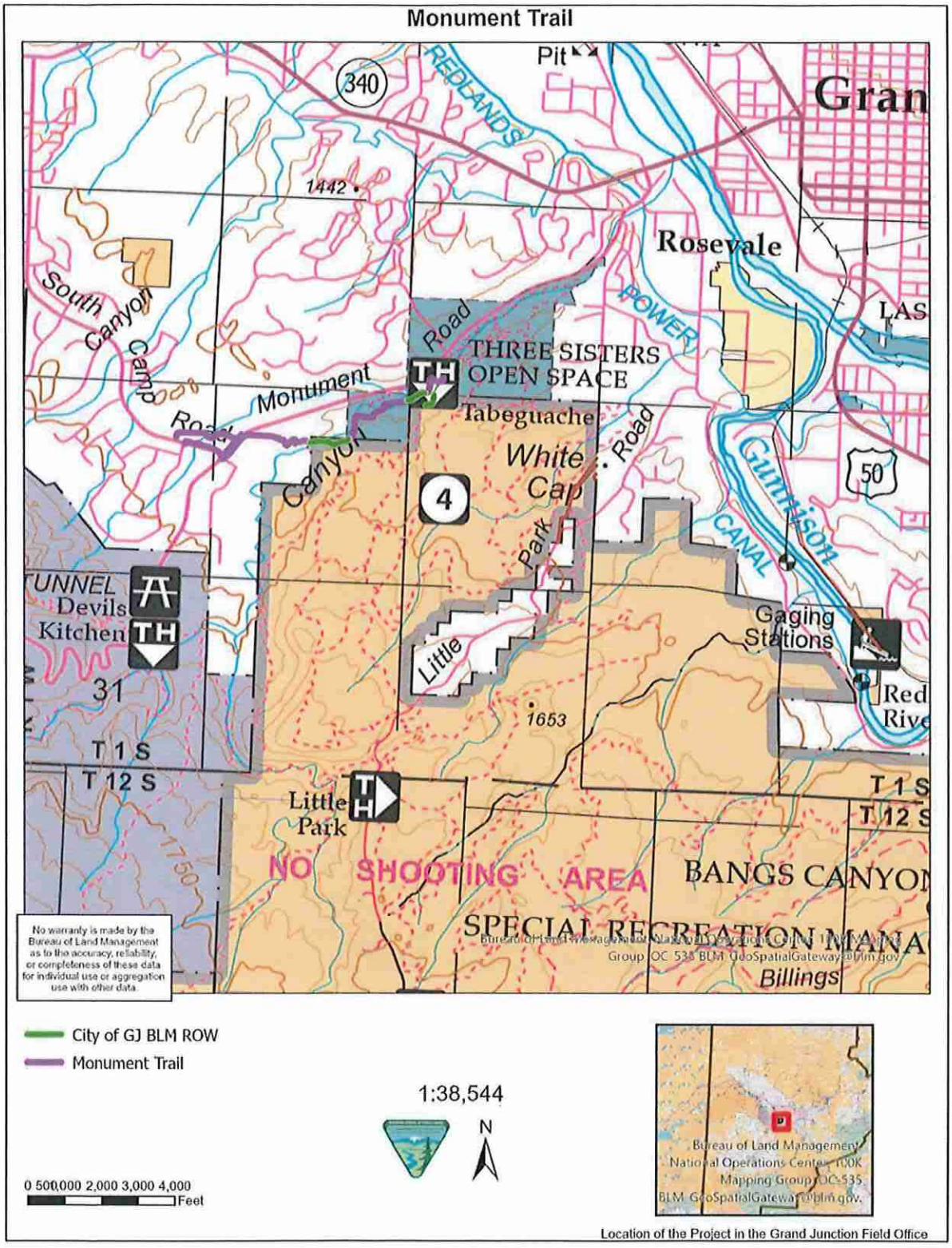
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ENGINEERING DIVISION
PROJECT NO. G2208

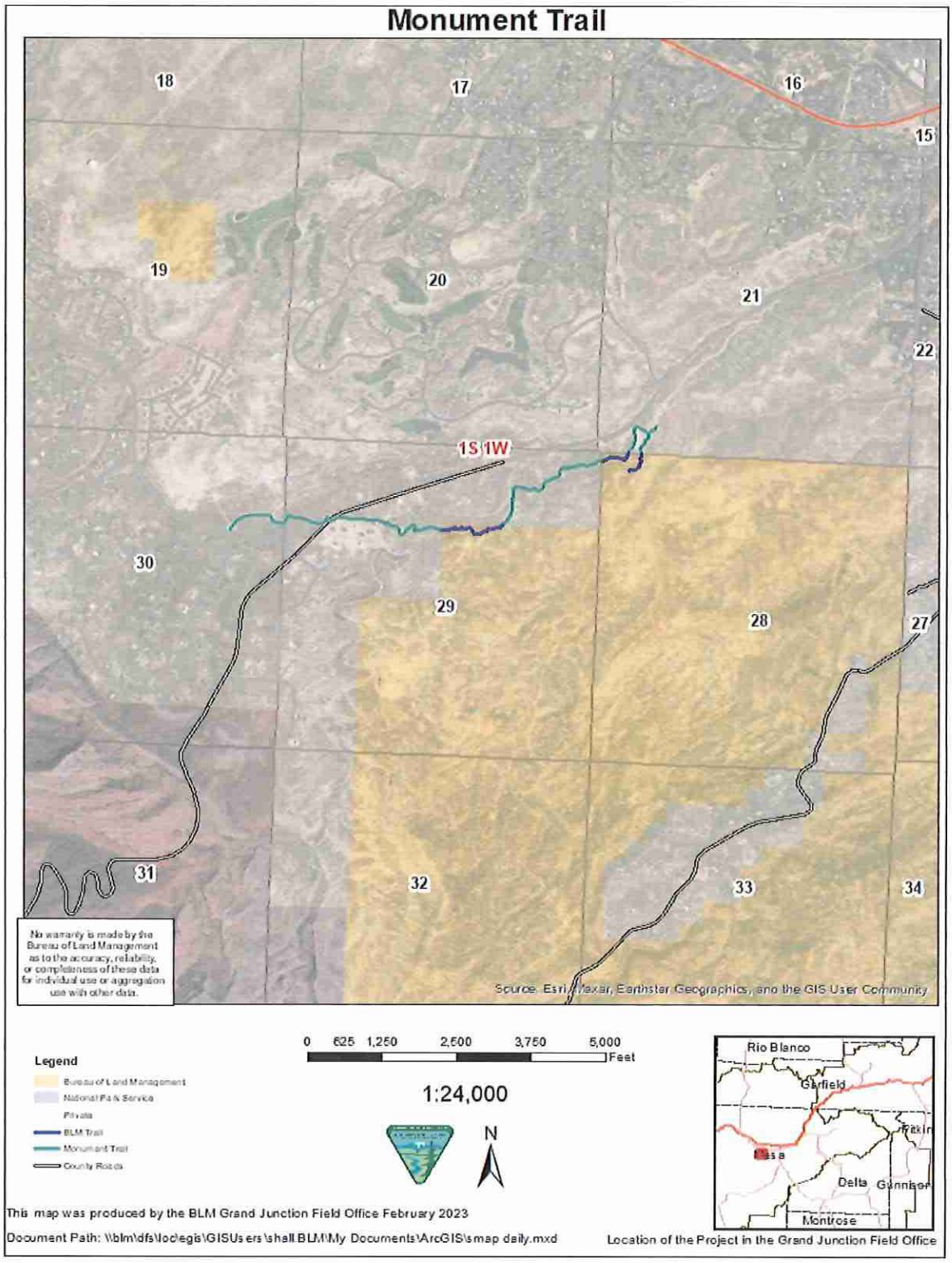
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STORM WATER MANAGEMENT PLAN
July 24, 2024

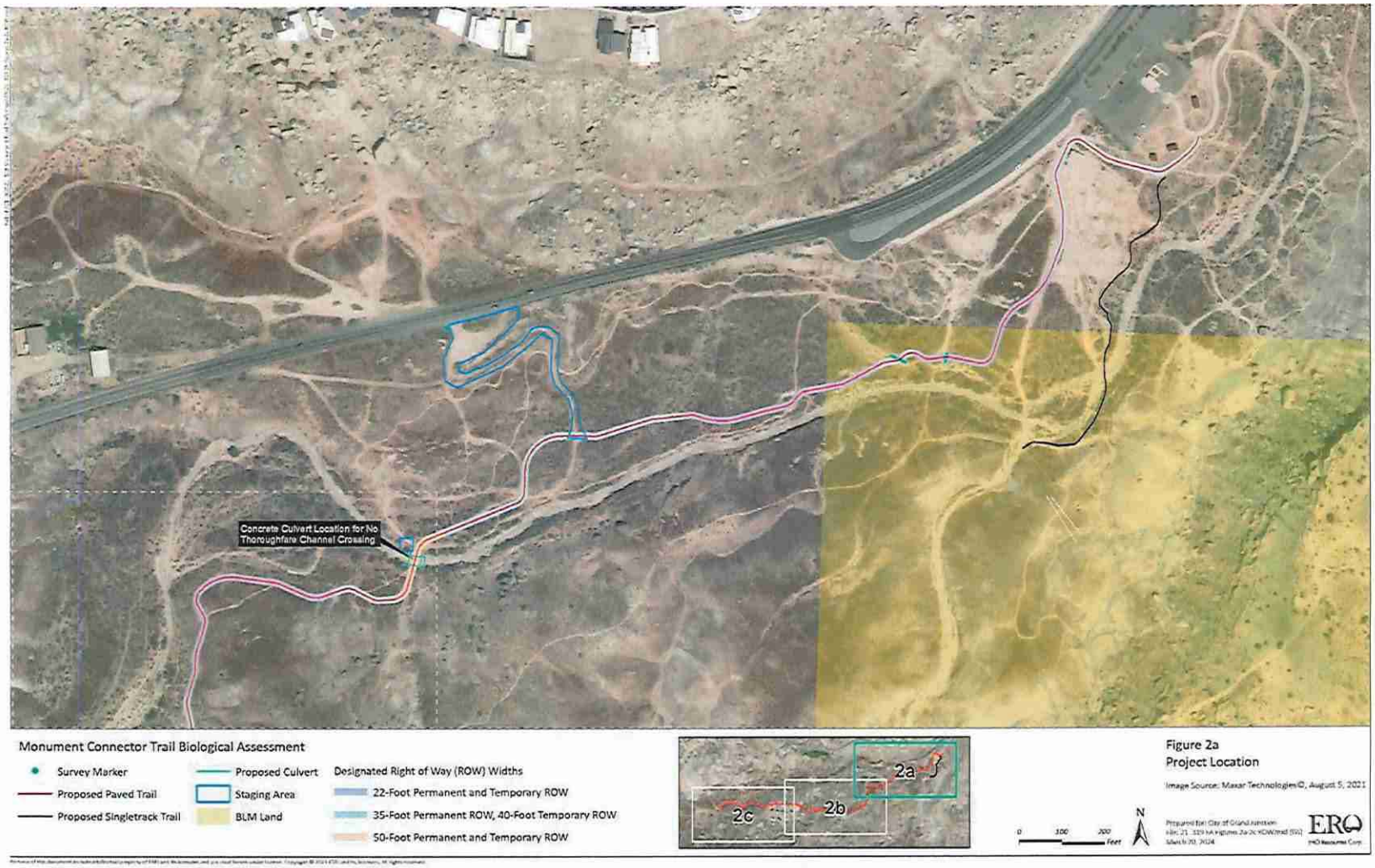
SW19 | 78

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EXHIBIT A. PROJECT MAPS




Monument Trail
18
17
16
15
19
20
21
22
1S 1W
30
29
28
27
31
32
33
34
No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual use or aggregation use with other data.
Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community
Legend
Bureau of Land Management
National Park Service
Private
BLM Trail
Monument Trail
County Roads
0 625 1,250 2,500 3,750 5,000
Feet
1:24,000
N
This map was produced by the BLM Grand Junction Field Office February 2023
Document Path: \\blm\dfs\loclegis\GISUsers\shall.BLM\My Documents\ArcGIS\smap daily.mxd
Rio Blanco
Garfield
Mesa
Delta
Gunnison
Montrose
Location of the Project in the Grand Junction Field Office


Concrete Culvert Location for No Thoroughfare Channel Crossing
Monument Connector Trail Biological Assessment
Survey Marker
Proposed Paved Trail
Proposed Singletrack Trail
Proposed Culvert
Staging Area
BLM Land
Designated Right of Way (ROW) Widths
22-Foot Permanent and Temporary ROW
35-Foot Permanent ROW, 40-Foot Temporary ROW
50-Foot Permanent and Temporary ROW
2a
2b
2c
N
0
100
200
Feet
Figure 2a
Project Location
Image Source: Maxar Technologies©, August 5, 2021
ERO


Concrete Culvert Location for No Thoroughfare Channel Crossing
Concrete Culvert Location for No Thoroughfare Channel Crossing
Monument Connector Trail Biological Assessment
Survey Marker
Proposed Paved Trail
Proposed Singletrack Trail
Proposed Culvert
Staging Area
BLM Land
Designated Right of Way (ROW) Widths
22-Foot Permanent and Temporary ROW
35-Foot Permanent ROW, 40-Foot Temporary ROW
50-Foot Permanent and Temporary ROW
2a
2b
2c
N
Figure 2b
Project Location
ERO

EXHIBIT B. STIPULATIONS

SPECIAL STATUS SPECIES (Colorado hookless cactus)

1. The disturbance width along the trail will be confined to 22 feet in areas where CHC is located.
2. Construction equipment including concrete trucks will use the trail corridor as a travel way during construction.
3. All new soil-disturbing activities will be greater than 20 meters from current occupied CHC locations*.
4. Use of an access route during construction will not result in new disturbance to two CHC individuals located 18 meters from the route due to topography and existing disturbance/access use.
5. Dust-suppression measures will be used to control fugitive dust from access routes and areas of disturbance in the vicinity of the trail alignment.
6. All new soil-disturbing activities will be greater than 20 meters from current occupied CHC locations (mentioned previously)*.
7. Construction activities will occur outside of the blooming season (April 1 to June 30) to minimize impacts on pollination/pollinators.
8. Measures to control the spread of weeds will be conducted per the requirements in the BLM GJFO Integrated Weed Management Plan (BLM 2017) (mentioned previously).
9. Gravel will be procured from a weed free source to limit the introduction of knapweed or other invasives.

Additional general design features incorporated in the proposed action are listed below:

1. All staff, contractors, and volunteers responsible for any element of on-the-ground work will receive environmental awareness training prior to being allowed to work on this project. Training will include: (a) information on the legal and biological status of CHC, (b) the habitats important to the species, (c) awareness of mandatory conservation/avoidance measures, (d) information on fines and penalties for damaging or directly impacting CHC, and (e) reporting procedures if any violation occur.
2. Any unrecorded/new cactus documented during construction will be avoided, and the minimization measures/design features will be applied to these individuals.
3. All tools and equipment used for trail construction will be cleaned to prevent weed infestations. Disturbed areas will be reseeded with a BLM-approved seed mix.
4. The BLM and City will monitor for the presence of noxious weeds and control undesirable plants in disturbed areas.
5. The BLM and City will coordinate to close and potentially rehabilitate social trails near CHC.

6. The City will coordinate with the BLM for needed trail maintenance on BLM managed lands.

VISUAL

1. The concrete surface and aggregate base used for the shoulders of the paved trail must match the existing Lunch Loops paved bike path. The concrete must have a red tint that blends in with the natural red soils in the project area. All areas where vegetations has been removed or damaged from construction-related activities must be reseeded, planted, and restored.
2. The singletrack connector trail must be constructed following existing contours of the landscape to minimize visual contrast.

ABANDONMENT

1. Ninety days prior to termination of the ROW, Holder must contact the AO to arrange a joint inspection of the ROW. This inspection will be held to agree to an acceptable termination and rehabilitation plan. This plan must include, but is not limited to, removal of facilities, drainage structures, or surfacing material, recontouring, top soiling or seeding. The AO must approve the plan in writing prior to Holder's commencement of any termination actions.

CULTURAL STIPULATIONS

1. Any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on his behalf, on public or Federal land must be immediately reported to the authorized officer. The holder must suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the authorized officer. An evaluation of the discovery will be made by the authorized officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder must be responsible for the cost of evaluation, and any decision as to proper mitigation measures will be made by the authorized officer after consulting with the holder.

2. Pursuant to 43 CFR 10.4(g) the holder must notify the authorized officer, by telephone, with written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony. Further, pursuant to 43 CFR 10.4(c) and (d), the holder must stop activities in the vicinity of the discovery and protect it for 30 days or until notified to proceed by the authorized officer.

GENERAL

1. The holder must construct, operate, and maintain the facilities, improvements, and structures within this right-of-way in strict conformity with the proposed plan of development. Any relocation, additional construction, or use that is not in accord with the approved plan of development, must not be initiated without the prior written approval of the authorized officer. A copy of the complete right-of-way grant, including all stipulations and approved plan of development, must be made available on the right-of-way area during construction, operation,

and termination. Noncompliance with the above are grounds for an immediate temporary suspension of activities if it constitutes a threat to public health and safety or the environment.

2. The holder must notify the BLM authorized officer at least 90 days prior to non-emergency activities that will cause surface disturbance in the right-of-way. A "Notice to Proceed" must be required prior to any non-emergency activities that will cause surface disturbance on the right-of-way. Any request for a 'Notice to Proceed" must be made to the authorized officer, who will review the proposed action for consistency with resource management concerns such as special status species, cultural resource protection, and wildlife. The authorized officer may require the completion of special status species surveys or other resource surveys and monitoring by a third-party contractor at the expense of the holder. Additional measures may be required to protect special status species or other resources.

3. Construction sites must be maintained in a sanitary condition at all times; waste materials at those sites must be disposed of promptly at an appropriate waste disposal site. "Waste" means all discarded matter including, but not limited to, human waste, trash, garbage, refuse, oil drums, petroleum products, ashes, water used for pressure testing, and equipment.

3. Holder must maintain the ROW in a safe, useable condition, as directed by the Authorized Officer (AO) (A regular maintenance program must be included in the POD).

4. The BLM will approve all signs place on federal use or that indicate allowed uses on federal land. Uses on federal lands will be allowed in accordance with federal rules, regulations, and policies.

5. Use of pesticides and herbicides must comply with the applicable Federal and State laws. Pesticides and herbicides must be used only in accordance with their registered uses and within limitations imposed by the Secretary of the Interior. Prior to the use of pesticides, Holder must obtain from the AO written approval of a plan showing the type and quantity of material to be used, pest(s) to be controlled, method of application, location of storage and disposal of containers, and any other information deemed necessary by the AO. Emergency use of pesticides must be approved in writing by the AO prior to use.

6. For projects with surface disturbance equal to or greater than one acre, a stormwater permit and stormwater management plan (SWMP) is required by the State of Colorado. Best Management Practices (BMPs) identified in the SWMP must be in place prior to any surface-disturbing activity. The holder must install additional BMPs as determined necessary by the authorized officer.

7. Holder of this right-of-way agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, et seq. or the Resource Conservation and Recovery Act, 42 U.S.C. 6901, et seq.) on this ROW (unless the release or threatened release is wholly unrelated to Holder's activity in this ROW). This agreement applies without regard to whether a release is caused by the Holder, their agent, or unrelated third parties.

8. The holder must comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder must comply with the Toxic Substances Control Act of 1976, as amended (15 U.S.C. 2601 et. seq.) with regard to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way grant (see 40 CFR, Part 702-799 and C:;Spcl":fally, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193). Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 must be reported as required by the Comprehensive Environmental Response, Compensation and Liability Act of 1980, Section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances must be furnished to the authorized officer concurrent with the filing of the reports to the involved Federal agency or State government.

9. Holder of this right-of-way grant, or the Holder's successor in interest, must comply with Title VI of the Civil Rights Act of 1964 (42 U.S.C. 2000d et. seq.) and the regulations of the Secretary of the Interior issued pursuant thereto.

FIRE PREVENTION AND CONTROL STIPULATIONS

1. The Holder must indemnify the United States for any and all injury, loss or damage to life or property, including fire suppression costs, the United States may suffer as a result of losses, claims, demands or judgments caused by Holder's use or occupancy of public lands under this grant or permit.

2. The Authorized Officer may suspend or terminate in whole, or in part, any notice to proceed which has been issued when, in his or her judgment, conditions arise which result in the approved terms and conditions being inadequate to protect the public health and safety or to protect the environment.

3. Holder must maintain the ROW in a safe, usable condition.

4. When performing construction and maintenance (including emergency repairs) activities during the "closed" fire season (May 10 – October 20), as set by Colorado State Law, or during any other closed fire season prescribed by the BLM Colorado State Director, the Holder, including any persons such as contractors, etc. working on their behalf, must equip at least one on-site vehicle with firefighting equipment, including, but not limited to, fire suppression hand tools (i.e. shovels, rakes, Pulaski's, etc.), a 16-20 pound fire extinguisher, and a sufficient supply of water for initial attack, with a mechanism to effectively spray the water (i.e., backpack pumps, water sprayer, etc.).

5. During conditions of extreme fire danger or when the State of Colorado and/or the BLM Colorado State Director issues a fire restriction order, operations must be limited or suspended in specific areas, or additional mitigation measures may be required by the BLM Authorized Officer.

6. In accordance with 43 CFR 2805.12(d) (or subsequent revisions), the Holder must do everything reasonable to prevent fires on or in the immediate vicinity of the ROW. The Holder

will immediately report fires to the BLM Authorized Officer **(970) 244-3000** or local fire dispatch **(970) 257-4800** and take all necessary fire suppression actions, when safe to do so, with their personnel and equipment on any fires they cause to ignite.

7. Holder must maintain the condition of the origin area of the fire from further damage to enable the Fire Investigator to properly assess the origin area and cause of the fire. The Holder must report to the Fire Investigator or BLM Incident Commander and must not enter into the origin area on fires unless given permission to do so.

8. The Holder will cooperate with the BLM in its efforts to investigate, suppress and respond to all future fires. The duty to "cooperate" includes, but is not limited to, the following duties regardless of whether BLM is on the scene:

   i. The duty to provide the BLM (Authorized Officer **(970) 244-3000** or local fire dispatch **(970) 257-4800** with reasonable and timely notice concerning all fires involving the Holder's facilities or discovered during routine operations.
   ii. The duty to share factual information with the BLM concerning fires, including but not limited to the names of Holder's employees and/or contractors with knowledge of the incident; and to allow employees and/or contractors to be interviewed by BLM's investigators regarding factual information relating to a fire.
   iii. It is the duty of the Holder to preserve the point of ignition, fire scene and reasonably account to the BLM for Holders actions taken at the scene of a fire.
   iv. The duty to minimize disturbance of potential evidence located at the scene; to not engage in any evidence collection or destructive testing without BLM and or its counsel's express written consent; to properly handle and preserve any evidence collected and to make all documents and evidence, including expert reports, available to the BLM in a rapid and timely manner upon request of BLM and/or its counsel.
   v. The duty to not hamper the BLM investigation of origin and cause of the fire; and to reasonably assist BLM's investigation at the scene.
   vi. The duty to provide information upon request of BLM and/or its counsel concerning the construction, monitoring, inspection, maintenance and/or repairs of any of Holder's facilities located at or adjacent to a fire.
   vii. The duty to provide information upon request of BLM and/or its counsel concerning the monitoring, inspection, and or alteration by Holder of any condition on public land, including but not limited to, public land adjacent to any of the Holder's facilities.
   viii. The duty, during BLM fire suppression efforts: to defer to and follow the instructions of the BLM's Incident Commander regarding activities within the boundaries of the fire and checking in and out of the fire; and to recognize BLM's primary authority over the incident scene.

APPLICANT COMMITTED DESIGN FEATURES

The following are applicant-committed design features, generally from the GJFO 2015 Resource Management Plan.

General/Notification

M&E-14: A pre-construction meeting will be held with the BLM before and to facilitate implementation of plans and ensure compliance with stipulations or conditions of approval. The BLM will be notified at least 48 hours prior to construction or reclamation work.

90-day notice is required for any maintenance activities. except where there are rare plant populations; in those cases, BLM requires additional 90-days' notice no later than the March preceding any work to be done.

R-11: Project design must take into consideration any existing vegetation surrounding the project that can be used for visual screening. Care must be taken to preserve the integrity of the vegetation and the vegetation must remain standing and undamaged when the cut-and-fill slopes are recontoured.

A-10: Improve engine technology (Tier 2 or better) for all mobile and non-road diesel engines to reduce NOx, PM, CO, and VOC emissions.

A-24: Utilize dust suppression techniques on unpaved surfaces including watering, chemical suppressants, and gravel.

A-30: Reduce unnecessary vehicle idling to reduce combustion emissions, ozone formation, visibility impacts, and fuel consumption.

A-32: Restrict surface disturbing activities to periods when wind speeds are less than 25 mph.

S-17: Native vegetation and soils will be protected and disturbance to them will be minimized.

H-6: Before activities take place, every pad, access road, or facility site will have an approved surface drainage plan for establishing positive management of surface water drainage, to reduce erosion and sediment transport. The drainage plan will include adaptive BMPs, monitoring, maintenance and reporting. BMPs may include run-on/run-off controls such as surface pocking or re-vegetation, ditches or berms, basins, and other control methods to reduce erosion. Pre-construction drainage BMPs will be installed as appropriate.

H-36: Limit surface disturbance near drainage features and minimize surface disturbance on steep slopes, fragile soils, saline soils, and Mancos shale derived soils.

H-43: Maintain appropriate vegetative/riparian buffers around water features to slow runoff and trap sediments and protect water quality. A minimum buffer distance must be 200 meters or greater where site conditions warrant.

M&E-44: Dust from vehicular traffic, equipment operations, or wind events will be controlled as needed. No application of surfactants or dust agents will proceed without BLM approval. In areas

with soils mapped as Mancos shale, application of water on native road surfaces will be limited, to minimize mobilization of selenium. In such areas, alternate dust abatement measures such as proper road surfacing and maintenance, and speed limits will be used, subject to BLM approval.

M&E-61: Cut and fill slopes will be protected against erosion by contour grading, microbasins or other measures approved by the BLM. Well anchored BMPs such as biodegradable matting, weed-free bales or wattles may also be used on cut-and-fill slopes and along drainages to protect against soil movement.

VR-10: Ensure that seed used for revegetation as well as straw and hay bales used for erosion control are certified free of noxious weeds.

V-14: Perform final reclamation recontouring of all disturbed areas, including access roads, to the original contour or a contour that blends with the surrounding topography.

WEED-11: Minimize soil disturbance. To the extent practicable, native vegetation must be retained in and around project activity areas, and soil disturbance kept to a minimum.

WEED-19: Remove mud, dirt, and plant parts from project equipment before moving it into a project area. Seeds and plant parts must be collected and incinerated when practical, or washed off in an approved containment area.

WEED-25: Clean all equipment (power or high-pressure cleaning) of all mud, dirt, and plant parts before leaving the project site if operating in areas infested with weeds. Seeds and plant parts must be collected and incinerated when possible.

WEED-26: When seeding has been specified for construction and maintenance activities, seed all disturbed soil (except travel route) soon after work is completed.

WEED-27: Use a certified weed-free seed mix suitable for local environmental conditions that includes fast, early growing (preferably native) species to provide quick revegetation. Consider applying weed-free mulch with seeding. (SOP)

WEED-28: Periodically inspect roads and rights-of-way for noxious weeds. Train staff to recognize weeds and report locations to the local weed specialist. Follow-up with treatment when needed.

WEED-29: When reclaiming roads, treat weeds before roads are made impassable. Inspect and follow up based on initial inspection and documentation.

WEED-30: To avoid weed infestations, create and maintain healthy plant communities whenever possible, including utility rights-of-ways, roadsides, scenic overlooks, trailheads, and campgrounds.

CR-4: The National Historic Preservation Act, as amended, requires that if newly discovered historic or archaeological materials or other cultural resources are identified during project implementation, work in that area must stop and the BLM Authorized Officer must be notified immediately. Within five working days the BLM Authorized Officer will inform the proponent as

to: a) Whether the materials appear eligible for the National Register of Historic Places; b) The mitigation measures the proponent will likely have to undertake before the site could be used (assuming in situ preservation is not practicable), (36 CFR 800.13); and c) A timeframe for the BLM Authorized Officer to complete an expedited review under 36 CFR 800.11 to confirm, through the State Historic Preservation Office, that the BLM Authorized Officer's findings were correct and mitigation was appropriate.

S-2: When saturated soil conditions existing on access roads or location, or when road rutting becomes deeper than 3 inches, construction must be halted until soil material dries out or is frozen sufficiently for construction to proceed without undue damage and erosion to soils, roads and locations.

S-3: Topsoil must not be placed while in a frozen or muddy condition, when the subgrade is excessively wet, or in a condition that may otherwise be detrimental to proper grading or proposed sodding or seeding.

FWS-51: Noise reduction techniques and designs will be used to reduce noise from compressors or other motorized equipment.

Additional Site-specific BMPs are as follows (not from GJFO RMP):

BR-5 Biological Monitors will be employed for construction activities in the following locations for the following species: Colorado hookless cactus, within 60 meters of documented populations.

BR-6 Must any previously unknown populations of the Federally listed plants be discovered, City's contractor will inform City and the BLM to assure compliance with the Endangered Species Act (ESA), and consultation with the U.S. Fish and Wildlife Service (USFWS) and ensuing mitigation can proceed to ensure timely completion of the proposed project.

BR-7 Biological monitors will be employed to conduct migratory bird surveys for any vegetation clearing required during the time period May 15 to July 15.

Additional general design features incorporated in the Proposed Action are listed below:

- All staff, contractors, and volunteers responsible for any element of on-the-ground work will receive environmental awareness training before being allowed to work on this project. Training will include (a) information on the legal and biological status of CHC, (b) the habitats important to the species, (c) awareness of mandatory conservation/avoidance measures, (d) information on fines and penalties for damaging or directly impacting CHC, and (e) reporting procedures must any violation occur.

- The City will hire BLM approved biologic monitors to protect plants during construction and maintenance activities

- Any unrecorded/new cactus documented during construction will be avoided, and the minimization measures and design features will be applied to these individuals.

- All tools and equipment used for trail construction will be cleaned to prevent weed infestations. Disturbed areas will be reseeded with a BLM-approved seed mix.

- The City will monitor for the presence of noxious weeds and treat noxious weeds in coordination with BLM

- The BLM and City will coordinate to close and potentially rehabilitate social trails near CHC.

- The City will coordinate with the BLM for needed trail maintenance on BLM-managed lands.

Long-term maintenance of the Monument Trail will be performed by the City throughout the life of the trail system. Maintenance will include repair of erosion-control features, culverts, noxious weed treatments, and trail clearing as needed.

CHC normally blooms in April through May, and populations fluctuate over time, requiring new surveys to determine appropriate avoidance activities. Any future construction or maintenance work on the Monument Trail will be coordinated with BLM ecologists, who will determine the extent of monitoring and survey that is required. The BLM will be notified in the fall prior to any planned maintenance work so that spring surveys can take place for CHC in the project area. Only ground-disturbing activities will require BLM coordination.

Paleontological Resources

PR-1 Culvert installation in PYFC 4/5 level areas of the Morrison Formation, Summerville Formation, or Entrada Sandstone. The Unanticipated Discovery Plan below outlines procedures to follow in the event that paleontological resources are encountered during ground-disturbing and other construction activities in the absence of a paleontological resources monitor:

1. Upon discovery/excavation of significant paleontological resources, immediately stop construction activities and inform the on-site construction foreman/supervisor of discovery. Do not attempt to remove the fossils.

2. The construction foreman/supervisor must contact the appropriate personnel (BLM, City, etc.) immediately and notify them of the discovery.

3. A salvage/recovery plan must be formulated with help of a BLM-permitted paleontologist. Construction activities in the area of discovery must be ceased until fossil salvage/recovery is completed and the area is cleared by the appropriate personnel.

4. Areas that were previously excavated in the project area (including associated spoils piles) must be inspected for additional paleontological resources. Paleontological monitoring during subsequent construction activities must be considered for the remainder of the project.

Soils

S-1 All soils compacted by movement of construction vehicles and equipment, will be 1.) loosened and leveled harrowing or disking to approximate pre-construction contours and 2.)

reseeded with certified weed-free native grasses and mulched (except in cultivated fields). The specific seed mix(s) and rate(s) of application will be determined by the BLM (see seed tables in the EA *Restoration* Section).

Traffic

T-1 The contractor will all make all necessary provisions for conformance with federal, state and local traffic safety standards and will conduct construction operations so as to offer the least possible obstruction and inconvenience to public traffic.

Water Quality

WQ-1 Construction activities will be performed by methods that prevent entrance or accidental spillage of solid matter, contaminants debris, and other objectionable pollutants and wastes into flowing streams or dry water courses, lakes and underground water sources. Such pollutants and wastes include, but are not restricted to, refuse, garbage, cement, concrete, sanitary waste, industrial waste, radioactive substances, oil and other petroleum products, aggregate processing tailings, mineral salts and thermal pollution.

EXHIBIT C. APPLICANT PLAN OF DEVELOPMENT

PLAN OF DEVELOPMENT

City of Grand Junction:

Monument Connector Trail

Prepared for—

Bureau of Land Management
Grand Junction Field Office
2815 H Road
Grand Junction, Colorado 81506

Prepared by—

ERO Resources Corporation
161 South 2nd Street
Hotchkiss, Colorado 81419
(970) 872-3020
ERO Project #21-319

March 2024

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Appendix A: Typical Trail Sections, Details, Roll Plot

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Proposed Monument Connector Trail Plan

1.0 Location, Description, and Design

The City of Grand Junction (City) is proposing to construct the Monument Connector Trail Project (project) to provide a continuous shared-use path from Lunch Loops/Tabeguache Trailhead to South Camp Road (trailhead) (project area; Figure 1). The City, in cooperation with the Bureau of Land Management (BLM), Colorado West Land Trust, and Mesa County, completed the Lunch Loops Connector Trail in December 2019 (phase one). The trail connects the Lunch Loops Trailhead to the Colorado Riverfront Trail and Las Colonias. The same organizations are working together to extend the trail from the Lunch Loops Trailhead on the east to South Camp Road on the west in phase two of the project, called the Monument Connector Trail (Monument Trail). The paved trail will be approximately 9,147 feet long with 1,625 feet crossing public lands in two segments in the BLM's Grand Junction Field Office (GJFO) Bangs Canyon Special Recreation Management Area. An additional 858 feet of connecting single-track trail (unpaved) with 416 feet crossing BLM GJFO land is also incorporated into the project. In total, the project will provide 10,005 feet of additional recreation trail (paved and single-track).

The City intends to construct, operate, maintain, and terminate a multiuse concrete trail with aggregate base shoulders on two segments of BLM land. The City has applied to the BLM for a right-of-way (ROW) grant along the trail on BLM land, including a 40-foot-wide temporary construction ROW and a 35-foot-wide permanent ROW, with a 22-foot wide ROW in areas with Colorado hookless cactus and 50-foot wide ROW in areas with concrete box culverts. The permanent ROW will be issued for a term of 30 years and contain terms, conditions, and stipulations. Federal lands crossed by the trail include BLM lands (managed by the GJFO). Detailed maps (Figures 2a through 2c) that display the trail, ownership and management, access points, and proposed activities including impact area are attached.

1.1 Legal Description

Below are the legal descriptions for the trail.

1.1.1 BLM-Managed Lands

NW4 NW4 Sec. 28 T1S R1W

SE4 NE4 Sec. 29 T1S R1W

SW4 NE4 Sec. 29 T1S R1W

1.1.2 City-Owned Lands

SW4 SW4 Sec. 21 T1S R1W

NE4 NE4 Sec. 29 T1S R1W

NW4 NE4 Sec. 29 T1S R1W

S2 NW4 Sec. 29 T1S R1W

SE4 NE4 Sec. 30 T1S R1W

1.2 Design

The trail design will follow the latest Colorado Department of Transportation Bicycle Facility Design guidelines with a minimum grade or cross slope of 1%, a maximum grade of 5% (with up to 8% grade over very short distances), and a maximum cross slope of 2%. Drainage swales (ditches) will be provided along both sides of the trail where space allows. Drainpipes perpendicular and under the trail will be located per engineering design. Swale berms will be located in the swales at each perpendicular pipe to catch sediment before it reaches the pipe. The trail construction will follow the City of Grand Junction Standard Specifications for Road and Bridge Construction, which references the Colorado Department of Transportation Construction Specifications. (See Appendix A for typical trail sections used on phase one of the trail on City-owned lands; these typical trail sections are proposed for use on phase two. Also included in Appendix A is a roll plot for phase two.)

2.0 Project Purpose and Need

The trail project is required to provide safe year-round nonmotorized recreation use (bicycle, e-bicycle, and pedestrian) and access from the lunch loop to residential areas to the west. Use of Monument Road for bicycle and pedestrian access creates an unsafe condition, and the City intends to provide for safe recreation and transportation access that is separated from Monument Road.

3.0 General Activities and Equipment

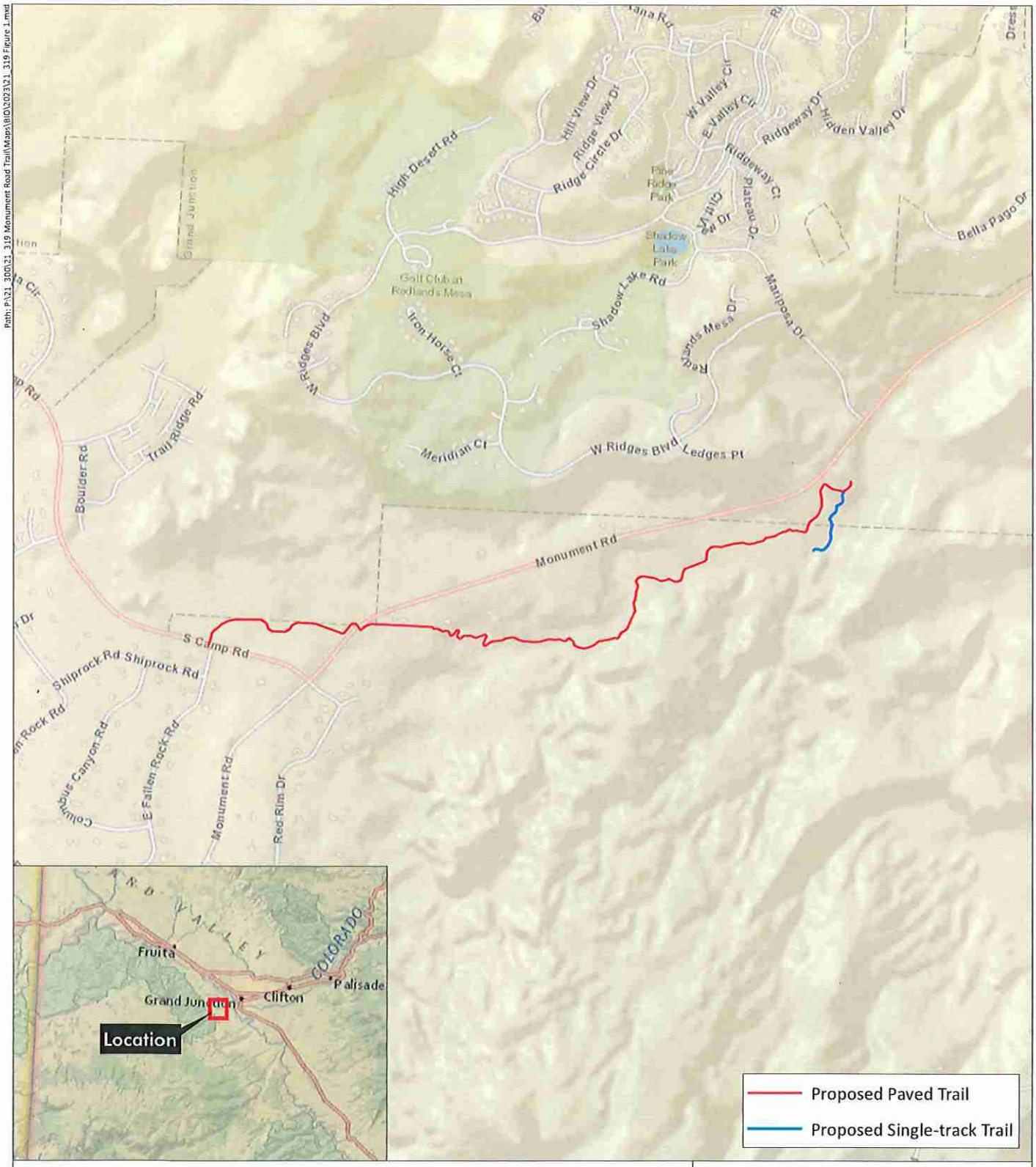
Maintenance activities and equipment are listed below with additional details in Section 4.0.

3.1 Access

- Drive-in access with ATV, light truck, front-end loader, dozer, concrete equipment, and crane (for placement of two preformed concrete box culverts) on existing roads as shown on figures, and along the trail ROW. Construction access will use existing access roads. The contractor may choose to place aggregate to stabilize the native material, but no asphalt or concreate will be needed.
- Turnaround locations (35-foot diameter) at staging areas as shown on figures.
- Walk-in access on existing trails if needed.

3.2 Staging and Storage

Three staging areas have been designated along the west, central, and east sides of the project area (Figures 2a through 2c). Staging will be on existing disturbed areas; the total staging area acreage is 1.54 acres.



Monument Road Trail Biological Assessment

Sections 21 and 28-30, T1S, R1W; Ute Meridian

UTM NAD 83: Zone 13N; 706485mE, 4324457mN

Longitude 108.614061°W, Latitude 39.044802°N

USGS Colorado National Monument and Grand Junction, CO Quadrangles

Mesa County, Colorado

0 750 1,500 Feet

N

Figure 1
Vicinity Map

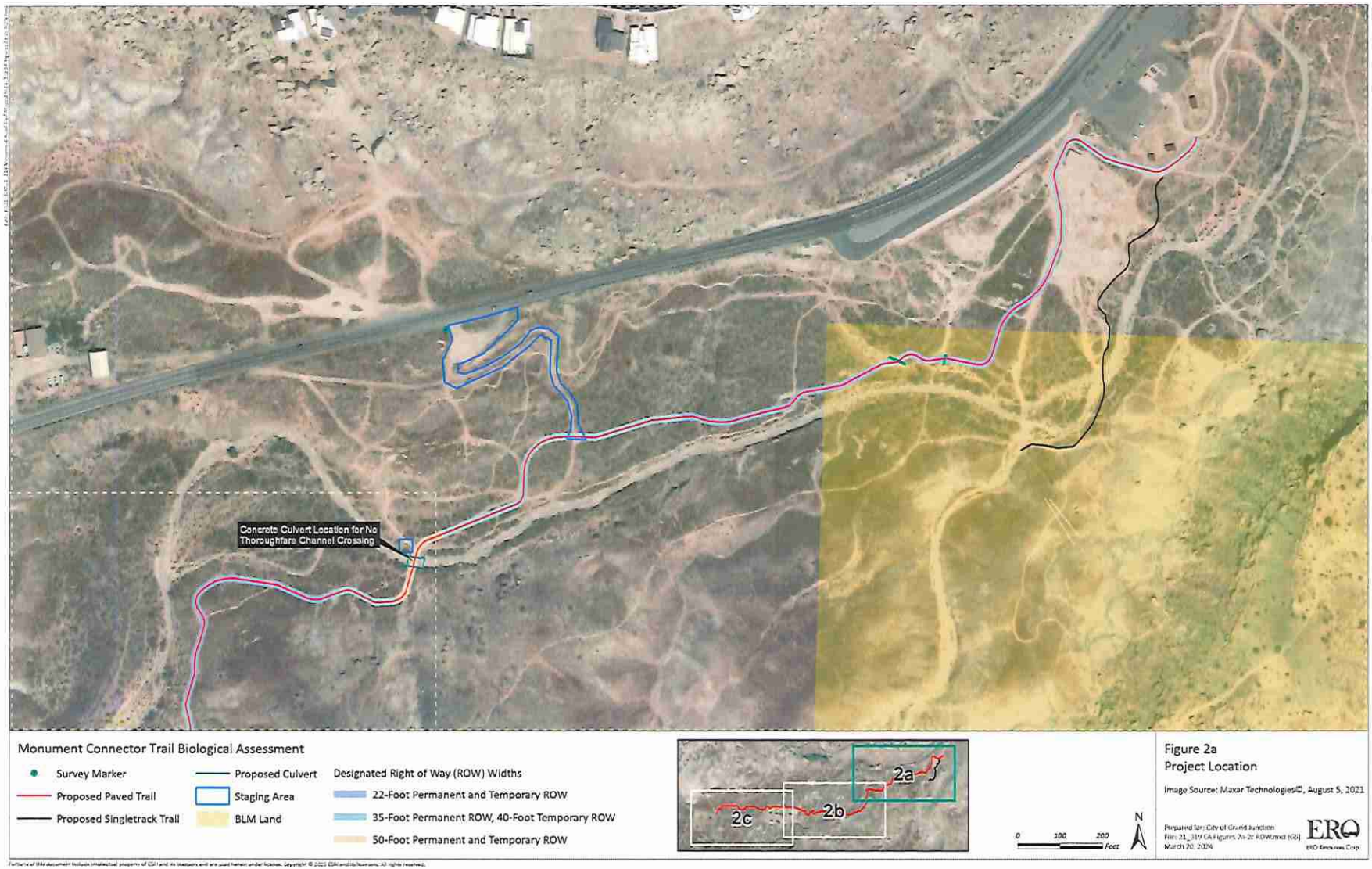
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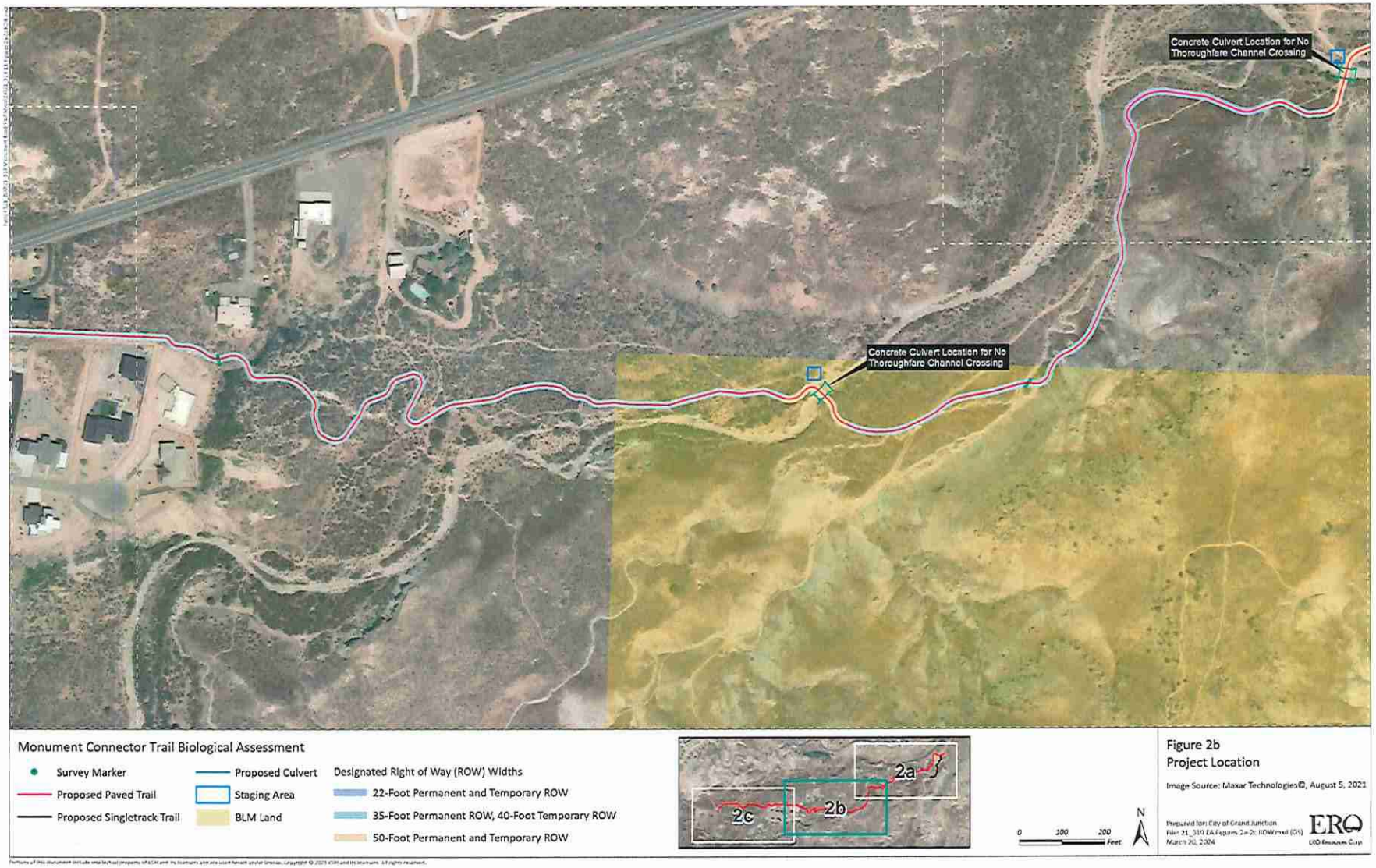
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July 28, 2023

ERO Resources Corp.

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Concrete Culvert Location for No Thoroughfare Channel Crossing
Monument Connector Trail Biological Assessment
Survey Marker
Proposed Paved Trail
Proposed Singletrack Trail
Proposed Culvert
Staging Area
BLM Land
Designated Right of Way (ROW) Widths
22-Foot Permanent and Temporary ROW
35-Foot Permanent ROW, 40-Foot Temporary ROW
50-Foot Permanent and Temporary ROW
2a
2b
2c
0 100 200 Feet
N
Figure 2a
Project Location
Image Source: Maxar Technologies©, August 5, 2021
Prepared for: City of Grand Junction
March 20, 2024
ERO
ERO Resources Corp.


Concrete Culvert Location for No Thoroughfare Channel Crossing
Concrete Culvert Location for No Thoroughfare Channel Crossing
Monument Connector Trail Biological Assessment
Survey Marker
Proposed Paved Trail
Proposed Singletrack Trail
Proposed Culvert
Staging Area
BLM Land
Designated Right of Way (ROW) Widths
22-Foot Permanent and Temporary ROW
35-Foot Permanent ROW, 40-Foot Temporary ROW
50-Foot Permanent and Temporary ROW
2a
2b
2c
0 100 200 Feet
N
Figure 2b
Project Location
Image Source: Maxar Technologies©, August 5, 2021
Prepared for: City of Grand Junction
File: 21_319 EA Figures 2a-2c ROWmxd (GN)
March 20, 2024
ERO
ERO Resources Corp


Monument Connector Trail Biological Assessment
Survey Marker
Proposed Paved Trail
Proposed Singletrack Trail
Proposed Culvert
Staging Area
BLM Land
Designated Right of Way (ROW) Widths
22-Foot Permanent and Temporary ROW
35-Foot Permanent ROW, 40-Foot Temporary ROW
50-Foot Permanent and Temporary ROW
2a
2b
2c
0 100 200 Feet
N
Figure 2c
Project Location
Image Source: Maxar Technologies©, August 5, 2021
Prepared for: City of Grand Junction
March 20, 2024
ERO

- Three larger staging areas (Figure 2a, one just west of the trailhead parking for the Lunch Loop Trail; and Figure 2c, one at the western terminus of the trail along South Camp Road and one along Monument Road just east of the South Camp Road intersection) and two smaller staging areas where box culverts are needed for crossing the No Thoroughfare channel (see Figure 2b).
- Culverts, aggregate base, concrete forms, and other construction materials will be stored for a short term (typically less than a month) in the staging areas shown on Figures 2a through 2c and within approved ROW except where there is known habitat for threatened, endangered, or sensitive species to be protected (see Section 7.0, Design Features).
- Equipment and vehicle storage will be at City facilities, in the staging areas, or within approved ROW shown on Figures 2a through 2c.

3.3 Construction Activities

The concrete trail would generally follow existing grade and dips in terrain to naturally convey stormflow. In addition to a 16-foot total trail width (10 feet of concrete and 3 feet of shoulder on either side), an additional 7 feet of temporary construction buffer would be needed on both sides of the trail. The estimated maximum depth of excavation for trail construction is not expected to exceed 2 feet, other than the two areas where the trail crosses No Thoroughfare Canyon drainage. Additional design detail information is attached. Construction would follow these basic steps:

- The location of the trail would be excavated and leveled to provide a stable base and drainage for the concrete trail. Slopes would be laid back to prevent sloughing of material into the project working area.
- A concrete slip-form machine would be placed to follow surveyed string line, and concrete would be trucked in, poured, and set/cured. Aggregate base would be placed on either side of the trail for the shoulders. The anticipated quantities of material and number of trucks are shown in Table 1.
- Following construction, all disturbed areas would be regraded/contoured, seeded, and managed to prevent weed infestation.

Table 1. Tons of construction material and truck loads required.

Material	Tons	Truck Loads
Aggregate base	6,300	630
Concrete	3,400	170

The trail crosses the No Thoroughfare Canyon drainage in two places (Figure 2b). Two dual flood stage concrete box culverts (see Appendix A) would be installed where the trail crosses the channel, and extra working space around the culverts would be needed during construction (a total of 50 feet of permanent use for the span (100 feet either side of culvert centerline) of the culverts to accommodate operations and maintenance). A space of about 30 feet by 30 feet

would be utilized by the contractor at one side of the crossing to lift and place the precast boxes. The channel would be excavated to allow the concrete forms to be assembled. Forms to shape the concrete would be assembled on-site. Precast concrete structures may be used instead of cast-in-place construction depending on availability and costs. Wing walls to direct the flow would be installed.

3.4 Patrols and Minor Maintenance Activities

The City typically performs routine preventative and corrective maintenance for the trails system-wide in order to maintain safe infrastructure for recreating. City staff perform routine inspections of the trail at least once a year, or more frequently if warranted due to storm activity, vandalism issues, or reported damage. Patrols may be performed by ATV or on foot, depending on access, terrain, soil stability, and weather conditions.

Maintenance activities for trail structures may include the following:

- Repair or "shave" sections of pavement that are shifting
- Replace pavement sections that cannot be repaired
- Add aggregate to shoulders if needed
- Repair eroded areas
- Repair culverts

The parts and tools may be brought to the trail alignment or each structure via ATV or light truck. The maintenance activities will ensure the integrity and reliability of the trail and its appurtenant structures such as culverts and shoulders. Crews would sweep and/or plow the trail during winter after snows that are not expected to melt quickly, and generally once during the summer season. The trail would be reviewed for erosion and sediment issues twice each year, typically after storm events, and authorize additional sweeping if the need is identified.

Structures would be inspected approximately annually, or as needed, for evidence of maintenance requirements. Following weather incidents, more frequent inspections may be required. Access for inspection will be via ATV or pickup truck on designated improved or drive-in access routes, and on foot for designated walk-in access.

3.5 Equipment and Workforce

The City's goal is to begin the project as soon as possible, in 2024, and complete the construction within about 8 months.

It is anticipated that the following equipment and workforce may be on-site at any one time:

- Pickup (3; 3 to 5 people)
- Front-end loader (1-2; 1 operator per loader)
- Dozer (1-2; 1 operator per dozer)

- Concrete truck (1-3 at a time; 1 operator per truck with 2-4 people assisting)
- Rubber-tired backhoe/trackhoe (1; 1 operator)
- Small crane (1; 1 operator)
- Air compressor (1; personnel noted above)
- Hand tools including shovels and jackhammers (various numbers; personnel noted above)

3.6 Staking

Before construction commences, the construction surveyor will stake the proposed improvements on-site as shown in the construction documents. During construction, the surveyor will update any damaged or missing stakes as needed.

3.7 Contingency Planning

Contingency planning during construction will include communication priority (depending on injury or non-injury incident) and steps to take for a potential pollution spill. Potential for pollution at the project site will most likely come from the vehicles used to import materials (dump trucks, concrete trucks, cranes, etc.) and to grade and compact the trail subgrade (road grader and wheel drum compactor). The contractor will develop a contingency plan (Spill Prevention and Response Plan) to mitigate a potential pollution spill from a piece of equipment. The following spill control procedures will be implemented: containment, vessel, tank, and piping inspection and maintenance; spill response, containment and cleanup; and company policies on reporting and responding to spills. When not in use, all equipment will be parked in one of the three proposed construction access areas and protected from potential flooding.

3.8 Safety Requirements

City staff and construction workers will be required to wear Personal Protective Equipment (PPE) while working on site. PPE includes a hardhat, a safety vest, closed-toe boots, and safety glasses (gloves and hearing protection as needed). The contractor will host daily safety talks prior to commencing work each day.

4.0 Project Activities

4.1 Vegetation Management and Site Preparation

Overland construction methods will be used for vegetation management requirements, in addition to use of the authorized access and along the approved ROW. The clearing of vegetation may be required when necessary to support trail construction. There are a limited number of trees and shrubs located along most of the trail alignment (see Photo 1 and Photo 2 for representative vegetation conditions). Vegetation communities in the project area include sandy greasewood flats, sandy washes/disturbed areas, and salt desert scrub (see additional information on vegetation communities and dominant species in the project Biological Assessment). Primary shrubby vegetation that would require clearing includes greasewood,

Mormon tea, rabbitbrush, and sagebrush (Wyoming big sagebrush and black sagebrush) with some limited tamarisk. The remainder of the vegetation communities are primarily herbaceous with small subshrubs such as shadscale. Trimming and removal of vegetation may be completed with chainsaws or other hand-held equipment and mechanical equipment such as a dozer. Vegetation debris will be removed from the project area and disposed of appropriately. In authorized areas, trimmed vegetation may be chipped and spread along trail shoulders.

For the paved trail sections, a swath of vegetation clearing about 22 feet wide (in areas within 60 feet of sensitive plant locations) to about 40 feet wide (outside of the sensitive plant buffer of 60 feet and on slopes where additional grading is needed) will be required. For the single-track trail, most of the alignment is bare of vegetation and occurs on non-BLM lands.

Photo 1. Overview south from Monument Road toward trail alignment showing scattered greasewood and sagebrush community.

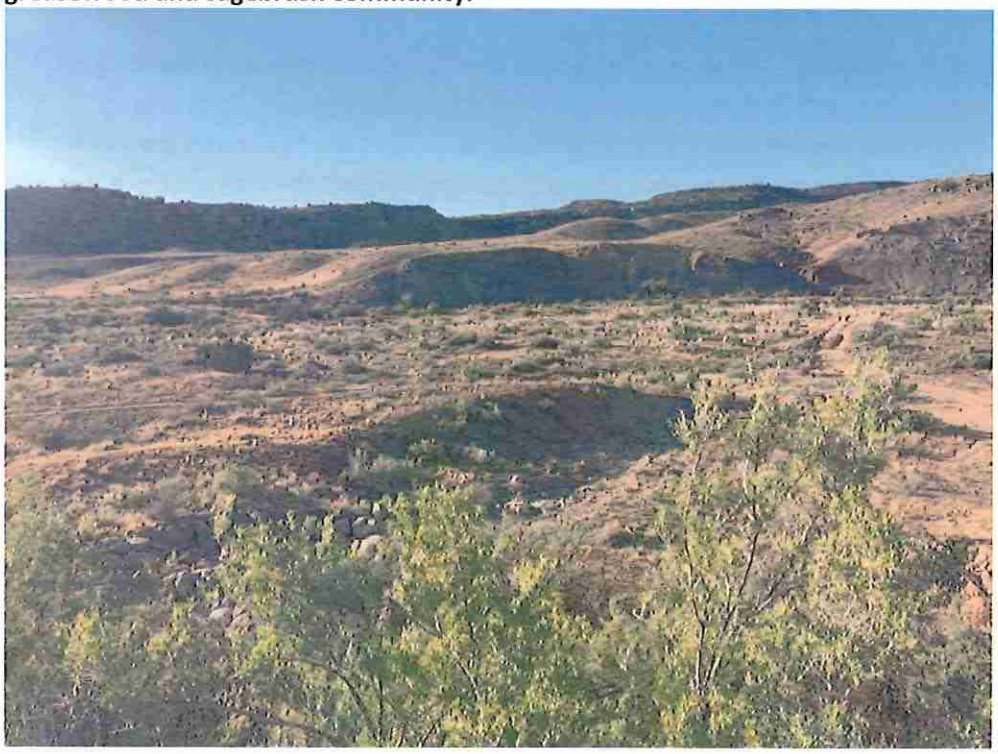
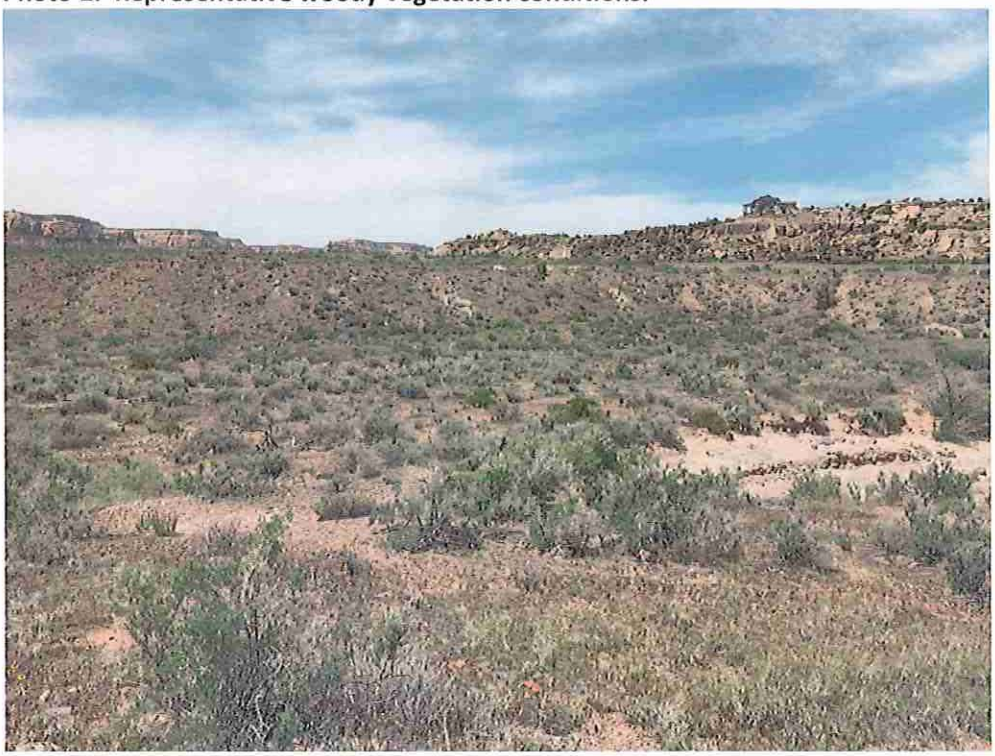


Photo 2. Representative woody vegetation conditions.

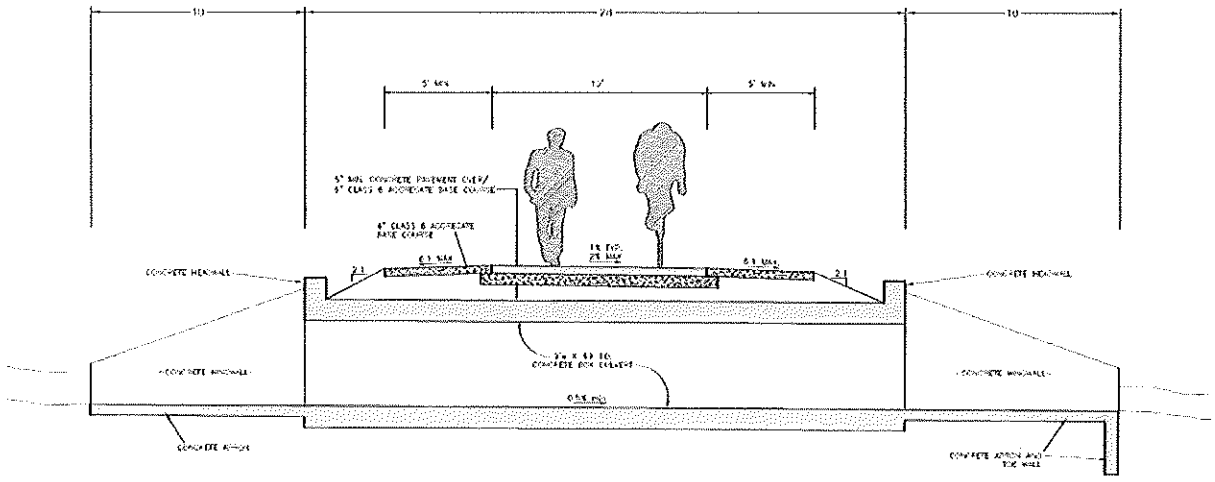


4.2 Site Excavation

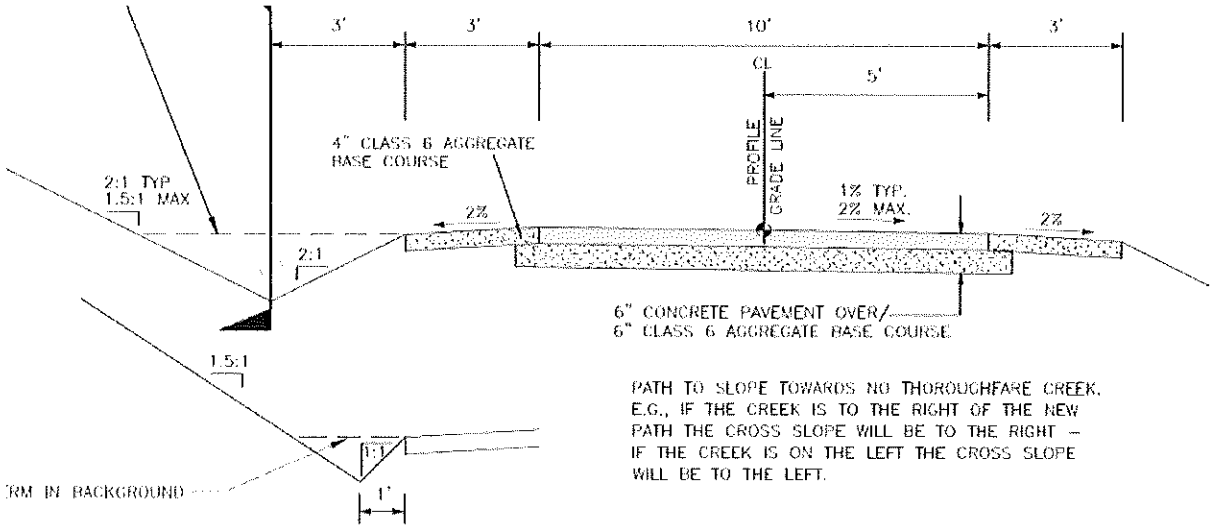
As noted above, the City has requested a 40-foot-wide temporary construction ROW across BLM lands and a 35-foot-wide permanent ROW. The proposed trail would be a 10-foot-wide concrete surface, with 3-foot-wide aggregate base course shoulders on either side (16 feet total). The single-track trail would be 4 feet wide.

A bulldozer would be used to clear and level the trail alignment after vegetation removal has been conducted. The intent, as noted previously, is to follow the natural topography and conduct fill or excavation at no more than 2 feet throughout the project area except in steeper areas and adjacent to the box culverts.

A proposed cross section of the trail is shown below.



MONUMENT ROAD TRAIL AT
NO THOROUGHFARE CREEK
CROSSING – SECTION VIEW



TYPCAL CROSS SECTION

4.3 Survey

Surveys were completed for cultural resources, paleontological resources, and biological resources (raptors, weeds and vegetation communities, rare plants, and wetlands and other waters of the U.S.).

The entire trail corridor on BLM and City-owned lands, including trail components and access routes, and respective buffer zones have been surveyed for cultural resources (see Archaeological Survey Findings Report). ERO surveyed a total of 42.8 acres, which includes the entire trail alignment with a 75-foot buffer (150-foot temporary ROW) (area of potential effect [APE]). Land within the APE is administered by the BLM (7.1 acres) and the City (35.7 acres). ERO archaeologists Kathy Croll and John Zachman conducted a Class III cultural resource survey of the entire APE on December 13, 2021, and May 10, 2022 (ERO 2022a).

Based on the presence of a fossiliferous sedimentary geologic formation in the project area, a preconstruction paleontological resources survey was requested by the BLM GJFO. Western Slope Paleontological Services (WSP) performed a pedestrian paleontological resources survey of the proposed trail alignments for 5 days in February, March, and April 2022. The survey was conducted in accordance with BLM Colorado Paleontological Resources Use Permit #COC76202 issued to Josh A. Smith of WSP on February 9, 2022, and expiring on December 31, 2022 (WSP 2022).

Raptor surveys were completed within a 1-mile buffer of the trail and maintenance access routes. A qualified biologist conducted the surveys in compliance with the "BLM Grand Junction Field Office (GJFO) Standards for Contractor Inventories for Special Status Plants, Significant Plant Communities & Noxious Weeds" on several dates both within and outside of the blooming season for Colorado hookless cactus (CHC) and the other target plant species. The survey included a 20-meter (66-foot) survey buffer and 60 meters (197 feet) on each side of the trail construction disturbance width (22-foot width), as well as a 20-meter buffer adjacent to staging areas and a temporary access route. The project design was adjusted after the initial survey to avoid impacts on CHC found; subsequent survey was required due to these changes as well as the identification of staging and access areas. The dates surveyed were April 20, 2022 (phenology check); May 13, 2022; and July 22, 2022. Transects were walked throughout the project area and varied depending on habitat, ranging from about 10 to 15 feet to about 2 to 3 feet in suitable habitat and when specimens were encountered. Disturbed, bare, greasewood flats and other unsuitable habitat areas were walked at wider transects. The May 2022 survey, conducted during blooming season when the CHC are more visible, also used wider transects in nonsuitable habitat. The July survey was conducted using 3- to 5-foot transects due to lower visibility, even in marginally suitable habitat. General vegetation communities and noxious weeds were surveyed (ERO 2022b).

A wetland delineation was conducted to identify the need for Clean Water Act permitting (ERO 2022c).

4.4 New Access

There will be no new access roads needed for the City trail activities.

4.5 Drive-In Access

Drive-in access will be along the approved ROW and via an existing access road on private land from Monument Road (see Figure 2a-2c). No other access will be required.

4.6 Reclamation

All areas from which the vegetation has been removed or damaged as a result of construction-related activities will be reseeded. The disturbed areas greater than about 2 to 3 square feet will be reseeded or revegetated using a planting mix that is agreed on by City and the landowner or BLM. BLM seed mixes have been coordinated with BLM ecologist Anna Lincoln.

The contractor will seed the disturbed areas at the end of construction with the specified seed mixes in Table 2 and Table 3. Seeding involves the mechanical or hand application of specific seed mixes appropriate for the site location and soil type. Seeding provides plant growth to stabilize the soil, reducing the likelihood of erosion or sediment transport. As soon as practical after the completion of construction activities, soil should be properly prepared for seeding. Preparing the seed bed will require loosening compacted soil to a depth of 4 inches, removing any stone greater than 1 inch in diameter, and leveling the site to reduce unnatural undulations in the soil surface (also see description of surface roughening below).

The choice of seed mix would dictate application rates and methods (see Table 2 and Table 3 for seed mixes). Seeding should always be accompanied by an additional best management practice (BMP), such as mulching or tackifying, to protect the seed and soil from erosion during the germination and growth process. Surface roughening and pocking are other successful reclamation approaches in areas where precipitation is limited and erosion is elevated. Surface roughening includes use of various measures, such as a sheep's foot roller, tracked excavator, or discing the surface to ensure it is adequately roughened to avoid erosional rilling that can result from artificially smooth surfaces. Seed areas would be inspected to ensure that the soil stabilization method (e.g., surface roughening, crimp mulch, etc.) was applied correctly and has not been compromised. The area would also be inspected for erosion and sediment deposition. Maintenance items will include regrading and seeding bare areas or areas of thin vegetative growth and adding additional BMPs as appropriate. If seeding cannot be accomplished due to seasonal or other constraints, temporary stabilization (such as mulch and mulch tackifier) would be used. This temporary stabilization would be inspected and maintained until permanent seeding is allowed. All seed, mulch, waddles, and other restoration materials would be certified weed free. Once construction is complete but prior to closure of the stormwater permit, the project area would be inspected monthly and following storm events. Once the stormwater permit is closed and the area is stabilized, there is a typical 2-times per year review for erosion and sedimentation issues, particularly after large storm events.

Table 2. City-owned lands seed mix.

Common Name	Scientific Name	PLS (lbs/ac)
Indian ricegrass	*Achnatherum hymenoides*	1

Common Name	Scientific Name	PLS (lbs/ac)
Thickspike wheatgrass	*Elymus lanceolatus*	2.3
Western wheatgrass	*Pascopyrum smithii*	7.5
Bluebunch wheatgrass	*Pseudoroegneria spicata*	2.3
Slender wheatgrass	*Elymus trachycaulus*	9.5
Red Mexican hat	*Ratibida columnifera*	0.5
Blanket flower	*Gaillardia*	1.5
Western yarrow	*Achillea millefolium*	0.5
	TOTAL	**25.00**

Hydroseed all disturbed areas at the construction site per subsection 212. Soil compaction shall be minimized for areas where permanent stabilization will be achieved through vegetative cover. PLS = pure live seed.

Table 3. BLM seed mix, greasewood flats, desert scrubland.

Common Name	Scientific Name	Variety	Percentage of Mix (%)	PLS (lbs/ac)
Western wheatgrass	*Pascopyrum smithii*	Arriba, Rosana	35	9.5
Bottlebrush squirreltail	*Elymus elymoides*	VNS	22	5.8
Alkali sacaton	*Sporobolus airoides*	VNS	1	0.27
Sand dropseed	*Sporobolus cryptandrus*	VNS	<1	0.09
Shadscale	*Atriplex confertifolia*	VNS	17	4.5
Four-wing saltbush	*Atriplex canescens*	Source N of CO-NM line or above 5,000 ft	23	6.2
Scarlet globemallow	*Sphaeralcea coccinea*	VNS	2	0.47
		TOTAL	**100**	**26.83**

Must be able to verify source. Double seeding rate for broadcast seeding. All seed will be certified weed free.

The reclamation procedures described above will be applied to all areas that result in temporary disturbance to vegetation greater than about 2 to 3 square feet, except where sensitive species are within 20 feet of disturbed areas and the City has been directed to avoid seeding activities.

4.7 Noxious Weed Plan

When native vegetation is disturbed, opportunities arise for populations of weedy species to increase or to invade disturbed areas. Disturbed corridors along access roads are particularly vulnerable to the increase of weedy vegetation. Invasive populations of weedy species often outcompete and can directly impact native plant populations, including special status species. Other impacts from an increase in weed infestations include the loss of forage for wildlife, decreased availability of habitat for wildlife, and a loss of biodiversity relative to undisturbed areas.

Weeds can be introduced during projects by vehicles, through improper treatment of equipment, and through revegetation seed mixtures. Wildlife, wind dispersal, and spreading by livestock are non-project-related means of increasing weedy species.

The City Parks department will be responsible for weed control after construction of the trail. Colorado West Land Trust may assist the City with trail maintenance and noxious weed control, pre- and postconstruction (they have assisted with this in the past on phase one). All chemical weed control will be in accordance with the BLM-approved herbicide formulations updated on April 4, 2019, except that the City no longer uses glyphosate. Noxious weed populations identified along the alignment will be treated by the City with BLM-approved chemicals

(Appendix B). To prevent reinfestation as well as unnecessary expense to the City, cooperation from the BLM will be expected in situations where an infestation is large and extends out from the alignment. Table 4 lists noxious weeds for the State of Colorado and Mesa County and their known occurrence in the project area. The City Parks department will survey, treat, and monitor for noxious weeds in coordination with the BLM. Weed spraying should be avoided in windy conditions and within 60 feet of sensitive species (CHC) occurrences.

Table 4. State of Colorado and Mesa County noxious weeds.

Common Name	Scientific Name	Mesa County	Colorado State List (CDA)	Occurrence in Project Area
Absinth wormwood	*Artemisia absinthium*	A	B	
African rue	*Peganum harmala*	Not known in county	A	
Black henbane	*Hyoscyamus niger*		B	
Bohemian knotweed	*Polygonum x bohemicum*	A	A	
Bouncingbet	*Saponaria officinalis*		B	
Bulbous bluegrass	*Poa bulbosa*		C	
Bull thistle	*Cirsium vulgare*	B	B	
Camelthorn	*Alhagi pseudalhagi*	Not known in county	A	
Canada thistle	*Cirsium arvense*	B	B	
Chicory	*Cichorium intybus*	G	C	
Chinese clematis	*Clematis orientalis*	A	B	
Common burdock	*Arctium minus*	G	C	
Common crupina	*Crupina vulgaris*	Not known in county	A	
Common mullein	*Verbascum thapsus*		C	
Common St. Johnswort	*Hypericum perforatum*		C	
Common tansy	*Tanacetum vulgare*	B	B	
Common teasel	*Dipsacus fullonum*		B	
Cutleaf teasel	*Dipsacus laciniatus*		B	
Cyprus spurge	*Euphorbia cypatissias*	A	A	
Dalmatian toadflax, broad-leaved	*Linaria dalmatica*	A	B	
Dalmatian toadflax, narrow-leaved	*Linaria genistifolia*		B	
Dame's rocket	*Hesperis matronalis*	A	B	
Diffuse knapweed	*Centaurea diffusa*	A	B	
Downy brome	*Bromus tectorum*		C	X
Dyer's woad	*Isatis tinctoria*	A	A	
Elongated mustard	*Brassica elongate*	Not known in county	A	
Eurasian watermilfoil	*Myriophyllum spicatum*		B	
Field bindweed	*Convolvulus arvensis*		C	X
Flowering rush	*Butomus umbellatus*	A	A	
Giant knotweed	*Polygonum sachalinense*	A	A	
Giant reed	*Arundo donax*	A	A	
Giant salvia	*Salvinia molesta*	Not known in county	A	
Hairy willowherb	*Epilobium hirsutum*	Not known in county	A	
Halogeton	*Halogeton glomeratus*		C	X
Hoary cress	*Cardaria draba*	B	B	
Houndstongue	*Cynoglossum officinale*	B	B	
Hydrilla	*Hydrilla verticillata*	Not known in county	A	
Japanese knotweed	*Polygonum cuspidatum*	A	A	
Johnsongrass	*Sorghum halepense*		C	

Common Name	Scientific Name	Mesa County	Colorado State List (CDA)	Occurrence in Project Area
Jointed goatgrass	*Aegilops cylindrica*	G	B	X
Leafy spurge	*Euphorbia esula*	A	B	
Mayweed chamomile	*Anthemis cotula*		B	
Meadow knapweed	*Centaurea nigrescens*	Not known in county	A	
Mediterranean sage	*Salvia aethiopis*	Not known in county	A	
Medusahead	*Taeniatherum caput-medusae*	Not known in county	A	
Moth mullein	*Verbascum blattaria*		B	
Musk thistle	*Carduus nutans*	B	B	
Myrtle spurge	*Euphorbia myrsinites*	A	A	
Orange hawkweed	*Hieracium aurantiacum*	Not known in county	A	
Oxeye daisy	*Chrysanthemum leucantheum*	B	B	
Parrotfeather	*Myriophyllum aquaticum*	Not known in county	A	
Perennial pepperweed	*Lepidium latifolium*	B	B	
Perennial sowthistle	*Sonchus arvensis*		C	
Plumeless thistle	*Carduus acanthoides*	A	B	
Poison hemlock	*Conium maculatum*		C	
Puncturevine	*Tribulus terrestris*	B	C	
Purple loosestrife	*Lythrum salicaria*	A	A	
Quackgrass	*Elymus repens*		C	
Redstem filaree	*Erodium cicutarium*		C	X
Rush skeletonweed	*Chondrilla juncea*	Not known in county	A	
Russian knapweed	*Acroptilon repens*	B	B	
Russian olive	*Elaeagnus angustifolia*	G	B	
Salt cedar (2 species)	*Tamarix chinensis* *Tamarix ramosissima*	B	B	X
Scentless chamomile	*Tripleurospermum perforata*		B	
Scotch thistle	*Onopordum acanthium, O. tauricum*	B	B	
Spotted knapweed	*Centaurea stoebe* ssp. *micranthos*	A	B	
Spotted x diffuse knapweed hybrid	*Centaurea* x *psammogena* = *C. stoebe* x *C. diffusa*	A	B	
Squarrose knapweed	*Centaurea virgata*	Not known in county	A	
Sulfur cinquefoil	*Potentilla recta*	A	B	
Tansy ragwort	*Senecio jacobaea*	Not known in county	A	
Velvetleaf	*Abutilon theophrasti*		C	
Wild caraway	*Carum carvi*		B	
Wild proso millet	*Panicum miliaceum*		C	
Yellow nutsedge	*Cyperus esculentus*		B	
Yellow starthistle	*Centaurea solstitalis*	A	A	
Yellow toadflax	*Linaria vulgaris*	A	B	
Yellow x Dalmatian toadflax hybrid	*Linaria vulgaris* x *L. dalmatica*		B	
Common reed	*Phragmites australis*	Watch		
Syrian bean caper	*Zygophyllum fabago*	Watch		
Yellow flag iris	*Iris psuedacorus*	Watch		

Sources and notes: Colorado Department of Agriculture (CDA) 2020; Mesa County 2020. CDA List "A" Species in Colorado are designated by the Commissioner for eradication. List "B" Species are species for which the Commissioner, in consultation with the state noxious weed advisory committee, local governments, and other interested parties, develops and implements state noxious weed management plans designed to stop the continued spread of these species. List "C" Species are species for which the Commissioner, in consultation with the state noxious weed advisory committee, local governments, and other interested parties, will develop and implement state noxious weed management plans designed to support the efforts of local governing bodies to facilitate more effective

integrated weed management on private and public lands. The goal of such plans will not be to stop the continued spread of these species but to provide additional education, research, and biological control resources to jurisdictions that choose to require management of List "C" species. Mesa County "A" species are Colorado List "A" species known to exist/have existed in the county, and List "B" species are designated for eradication in the county. Mesa County "B" species include Colorado List "B" and List "C" species, each with specified management criteria for Mesa County.

During surveys, six species were documented in the project area: downy brome (Bromus tectorum), field bindweed (Convolvulus arvensis), halogeton (Halogeton glomeratus), jointed goatgrass (Aegilops cylindrica), redstem filaree (Erodium cicutarium), and salt cedar (Tamarix parviflora). The City Parks department will survey, treat, and monitor for noxious weeds in coordination with the BLM. Weed spraying should be avoided in windy conditions and within 60 meters of sensitive species (CHC) occurrences.

The design features listed in Appendix A that prevent the spread of noxious weeds will be followed.

4.8 Abandonment

Waste construction materials and rubbish from all construction areas will be collected, hauled away, and disposed of in an approved manner.

4.9 Survey Monuments

The City and contractors will protect all public survey monuments affected by or adjacent to the ROW. Survey monuments include but are not limited to the General Land Office and BLM cadastral survey corners, reference corners, witness points, and recognizable civil (both public and private) survey monuments. If any of the above are obliterated or disturbed, the City will report the incident in writing to the BLM and the respective installing authority if known. If BLM or General Land Office ROW monuments or references are obliterated during operations, the City will secure the service of a registered land surveyor or a BLM cadastral surveyor to restore the disturbed monument. Restoration will follow procedures found in the Manual of Surveying instructions for the Survey of Public Lands of the United States, latest edition. The City will record such survey in the appropriate county and send a copy to the BLM. If a BLM cadastral survey crew restores the disturbed survey monument, the City will be responsible for the cost of such survey.

5.0 Project Schedule

The construction work is planned to begin in the summer of 2023 and to be completed within 8 months.

6.0 Right-of-Way Requirements

On public lands, the City will conform to the GJFO BLM Standard Mitigation and BLM ROW stipulations for the ROW. The City will conduct maintenance and monitoring in accordance with the Grand Junction BLM ROW stipulations in the land use authorization. Other lands are owned by the City.

On public lands, the City will conform to the GJFO BLM Standard Mitigation and BLM ROW stipulations for the ROW. The City will conduct maintenance and monitoring in accordance with the Grand Junction BLM ROW stipulations in the land use authorization. Other lands are owned by the City. The City has requested a 35-foot-wide, 30-year ROW for the trail. The City has requested a 40-foot-wide temporary ROW for construction. For areas within 100 feet of the centerline for the concrete dual-flood phase box culvert on BLM-managed lands, the City has requested a 50-foot temporary and permanent ROW to allow for construction and maintenance (see Table 5).

Table 5. ROW lengths on Private and BLM-managed Lands.

ROW type	ROW width	ROW length	Ownership
Paved trail, no CHC*	40-foot temporary, 35-foot permanent	1,024	BLM
Paved trail, no CHC	40-foot temporary, 35-foot permanent	6,186	Private
Paved trail, CHC	22-foot temporary and permanent	401	BLM
Paved trail, CHC	22-foot temporary and permanent	1,136	Private
Paved trail, culvert	50-foot temporary and permanent	200	BLM
Paved trail, culvert	50-foot temporary and permanent	200	Private

Note: lengths vary slightly compared to previous totals provided in Section 2.1.1 due to rounding. *CHC = Colorado hookless cactus.

6.1 Trail Right-of-Way

The City has requested a 35-foot-wide, 30-year ROW for the trail.

6.2 Temporary Use Areas

The City has requested a 40-foot-wide temporary ROW for construction.

7.0 Design Features

Ninety-day notice is required for maintenance activities except where there are rare plant populations; in those cases, the BLM requires notice during the March preceding any work to be done.

The City will contact the BLM as soon as possible upon mobilization to complete emergency repairs. The City will provide the BLM with a list of structures and activities to be completed, disturbance limits, access routes to be used, and timeframe for implementation.

Emergency access will be allowed during any time of the year. In the event of an emergency, the City and its contractor(s) will notify the BLM immediately (within 24 hours) as soon as possible. The City will meet with the BLM on-site after an emergency to determine the required rehabilitation work and to establish a rehabilitation schedule.

If emergency access to the trail is required during wet weather, or if other maintenance activities result in the removal of vegetation or substantial vehicle impacts on existing native vegetation, revegetation of disturbed areas will be completed as directed by the BLM. Reclamation and revegetation will be implemented, as required, as soon as practical after any emergency road access or maintenance work needed to repair the trail.

If emergency maintenance is required during the winter or spring months, care will be taken to minimize erosion and sedimentation to the extent practicable, and effects will be mitigated after the emergency has been resolved in coordination with the affected land management agency or landowner.

The following commitments have been made for sensitive areas identified during biological and cultural resource surveys.

7.1 Cultural Resources

Within or overlapping the area of potential effect are three newly recorded resources (5ME23813.1, 5ME23814, and 5ME23815) and two isolated finds (5ME23816 and 5ME23817). All resources are recommended not eligible or nonsupporting for listing in the National Register of Historic Places. ERO recommends no further work upon concurrence with eligibility recommendations. A determination of "no historic properties affected" is also recommended pursuant to 36 Code of Federal Regulations (CFR) 800.4 of the National Historic Preservation Act.

7.2 Paleontological Resources

The survey was conducted in accordance with BLM Colorado Paleontological Resources Use Permit #COC76202 issued to Josh A. Smith of WSP on February 9, 2022, and expiring on December 31, 2022. The survey produced negative results, with no paleontological resources discovered in the project area. No further work is anticipated.

7.3 Biological Resources

Waters of the U.S.: While no wetland areas were mapped in the project area, one intermittent drainage (No Thoroughfare Canyon) and four ephemeral tributaries were mapped for a total of 0.802 acre of open water. More than 0.10 acre of ordinary high water mark would be impacted by the project; therefore, ERO recommends submitting a preconstruction notification to the U.S. Army Corps of Engineers to obtain authorization for the project under Nationwide Permit 14 or 42.

Endangered Species Act: The threatened species CHC (*Sclerocactus glaucus*) has occurrences in the project area. Table 6 lists recommendations with regard to this species.

Table 6. Design features specific to protecting CHC in the project area.

Potential Impact	Design Feature	Notes/Additional Description
Soil compaction	Revegetation measures; biological monitor	• The disturbance width along the trail will be confined to 22 feet in areas where CHC is located. • Construction equipment including concrete trucks will use the trail corridor as a travelway during construction. • All new soil-disturbing activities will be more than 20 meters from current occupied CHC locations.* • Use of an access route during construction will not result in new disturbance to two CHC individuals located 18 meters from the route due to topography and existing disturbance/access use.
Accidental crushing	Biological monitor; flagging/marking during construction; workforce education	• A biological monitor will provide an educational session with contractors and be on-site when work is being conducted in sensitive areas. • The biological monitor will ensure compliance with specific protection measures (e.g., install protective boulders) and/or short-term protection during construction (flagging, cones, barrier fencing, or other methods) coordinated with the BLM. • Activities will remain on existing designated impact areas. Vehicles will not deviate from the existing authorized access roads or the trail construction corridor. • Surface disturbance and the number of vehicles accessing the sensitive area will be minimized.
Increased soil erosion	Revegetation measures; stormwater management plan and measures	• Silt logs and other measures will be implemented during construction for control of soil erosion and stormwater management. • Trail design incorporates erosion control and stormwater management.
Use of herbicides and pesticides	All weed management will be per the BLM GJFO Integrated Weed Management Plan	• No infestations of noxious weeds requiring management were documented in sensitive areas during plant surveys. Jointed goatgrass was observed near the north end of the Monument Trail, and tamarisk was observed in the wash. Management of these weed infestations would not affect CHC populations. • Measures to control the spread of weeds will be conducted per the requirements in the BLM GJFO Integrated Weed Management Plan (BLM 2017).
Dust	Biological monitor; dust suppression; restriction of activities in sensitive areas to outside of blooming seasons	• Dust-suppression measures will be used to control fugitive dust from access routes and areas of disturbance in the vicinity of the trail alignment. • All new soil-disturbing activities will be more than 20 meters from current occupied CHC locations (mentioned previously).* • Construction activities will occur outside of the blooming season (April 1 to May 30) to minimize impacts on pollination/pollinators.
Noxious weeds	Clean tools and equipment used for trail construction; monitoring, then spraying and reseeding with native seed mix	• Soil disturbance may increase the spread of noxious weeds. Jointed goatgrass has been documented in the project area and could be spread by construction; tamarisk infestations are not anticipated to increase due to the project. • Measures to control the spread of weeds will be conducted per the requirements in the BLM GJFO Integrated Weed Management Plan (BLM 2017) (mentioned previously).*

*Although one segment of the existing construction access proposed for use as-is is less than 20 meters to a cluster of CHC, a significant topographic barrier would prevent any inadvertent impacts from vehicles and would minimize dust deposition.

Additional general design features incorporated in the proposed action are listed below:

- All staff, contractors, and volunteers responsible for any element of on-the-ground work will receive environmental awareness training before being allowed to work on this project. Training will include (a) information on the legal and biological status of CHC, (b) the habitats important to the species, (c) where occurrences are located in the project area, (d) awareness of mandatory conservation/avoidance measures, (e) information on fines and penalties for damaging or directly impacting CHC, and (f) reporting procedures should any violation occur.
- Any unrecorded/new cactus documented during construction will be avoided, and the minimization measures and design features will be applied to these individuals.
- All tools and equipment used for trail construction will be cleaned to prevent weed infestations. Disturbed areas will be reseeded with a BLM-approved seed mix.
- The BLM and City will monitor for the presence of noxious weeds and control undesirable plants in disturbed areas.
- The BLM and City will coordinate to close and potentially rehabilitate social trails near CHC.
- The City will coordinate with the BLM for needed trail maintenance on BLM-managed lands.

Long-term maintenance of the Monument Trail will be performed by the City throughout the life of the trail system. Maintenance will include repair of erosion-control features, culverts, and trail clearing as needed.

CHC normally blooms in April through May, and populations fluctuate over time, requiring new surveys to determine appropriate avoidance activities. Any future construction or maintenance work on the Monument Trail will be coordinated with BLM ecologists, who will determine the extent of monitoring and survey that is required. The BLM will be notified in the fall prior to any planned maintenance work so that spring surveys can take place for CHC in the project area. Only ground-disturbing activities will require BLM coordination.

Standard environmental protection measures associated with construction are shown in Appendix A.

9.0 Operation and Maintenance

9.1 Inspection/Patrols

Structures will be inspected approximately annually, or as needed, for evidence of maintenance requirements. Following weather incidents, more frequent inspections may be required. Access for inspection will be via ATV or pickup truck on designated improved or drive-in access routes, and on foot for designated walk-in access.

9.2 Work Schedule

The normal work schedule will be weekdays (Monday through Friday), approximately from 8am to 5pm. Emergency situations may result in activities outside the normal work schedule. Work will be completed when weather permits year-round but normally will occur between March and October. Exceptions will be in areas with seasonal restrictions identified by the BLM. In case of emergencies, work will be completed as soon as conditions allow.

9.3 Fire Control

Spark arresters are required for equipment generating sparks, including ATVs and chainsaws. No smoking will be allowed during construction activities. Common-sense practices regarding heat/spark sources, particularly in dry conditions, should be followed. Avoiding parking hot vehicles on dry shrubs and other logical avoidance practices will be followed (also see stipulations in Table 6).

9.4 Notification of BLM

The City will notify the BLM and appropriate landowners regarding the schedule and scope of work for construction of the trail as well as for future major maintenance activities. A preconstruction meeting will be held with the City, its contractors, environmental monitors, and agency representatives to review environmental and land use compliance for the project.

Ninety-day notice is required for maintenance activities except where there are rare plant populations; in those cases, the BLM requires notice during the March preceding any work to be done.

9.5 Emergencies

The City will contact the BLM as soon as possible upon mobilization to complete emergency repairs. The City will provide the BLM with a list of structures and activities to be completed, disturbance limits, access routes to be used, and timeframe for implementation.

Emergency access will be allowed during any time of the year. In the event of an emergency, the City and its contractor(s) will notify the BLM as soon as possible but no later than 24 hours. The City will meet with the BLM on-site after an emergency to determine the required rehabilitation work and to establish a rehabilitation schedule.

If emergency access to the trail is required during wet weather, or if other maintenance activities result in the removal of vegetation or substantial vehicle impacts on existing native vegetation, revegetation of disturbed areas will be completed as directed by the BLM. Reclamation and revegetation will be implemented, as required, as soon as practical after any emergency road access or maintenance work needed to repair the trail.

If emergency maintenance is required during the winter or spring months, care will be taken to minimize erosion and sedimentation to the extent practicable, and effects will be mitigated

after the emergency has been resolved in coordination with the affected land management agency or landowner.

10.0 References

BLM. 2017. BLM GJFO Integrated Weed Management Plan.

Colorado Department of Agriculture (CDA). 2020. Colorado Noxious Weed (Including Watch List), effective October 2020. https://drive.google.com/file/d/0Bxn6NtpJWc9JRFE3LW1RWFVXY1E/view?resourcekey=0-WalETB5Qp3zCjfRnar5t3g.

CNHP 2016. Recommended Best Management Practices for Managing Noxious Weeds on Sites with Rare Plants. http://www.cnhp.colostate.edu/download/documents/2016/BMP_Noxious_Weeds_on_Sites_with_Rare_Plants_CMui_SPanjabi_May_2016.pdf. May.

ERO. 2022a. Cultural Resource Survey Monument Connector Trail Mesa County, Colorado BLM GJFO CRIR 15922-01. December.

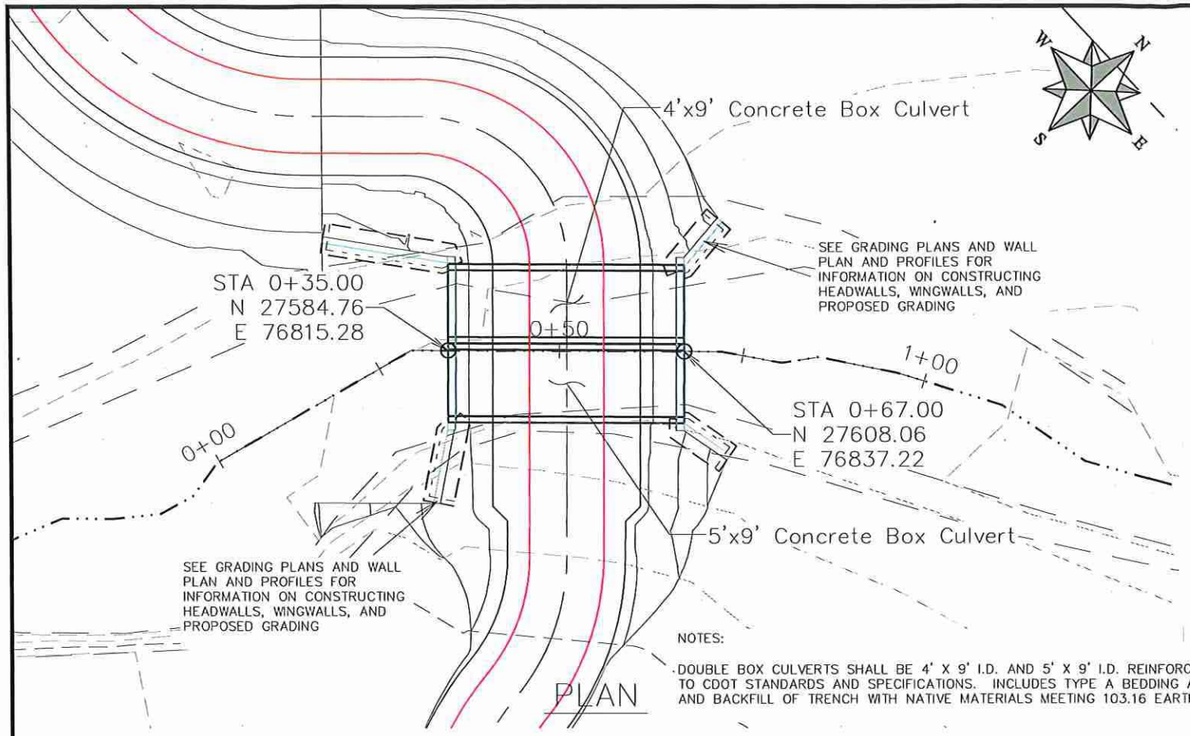
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Western Slope Paleontological Services, LTD (WSP). 2022. Paleontological Resources Survey Report for the Proposed "City of Grand Junction—Monument Connector Trail" in Mesa County, Colorado. August.

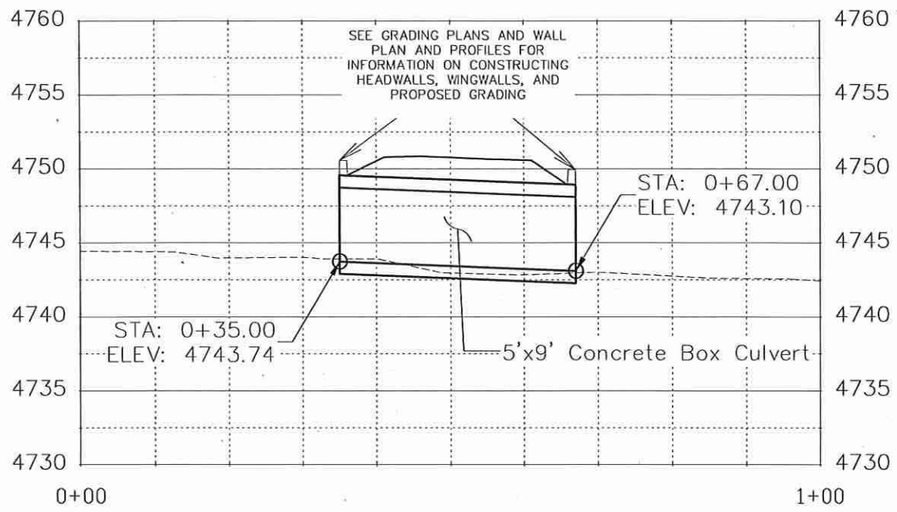
APPENDIX A
Typical Details and Roll Plot



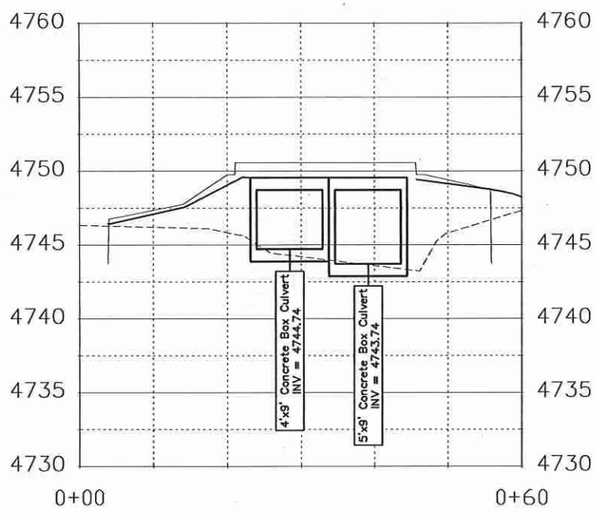
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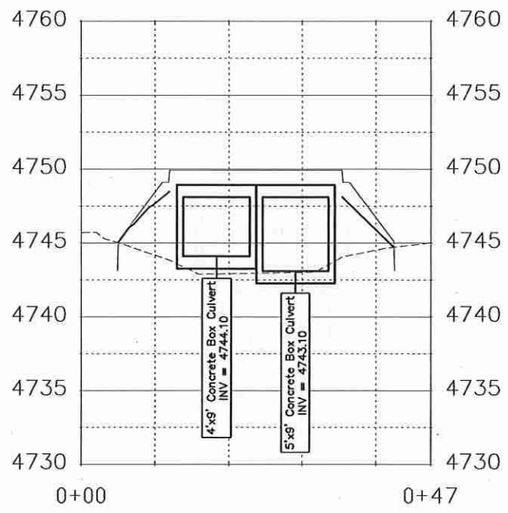
- DOUBLE BOX CULVERTS SHALL BE 4' X 9' I.D. AND 5' X 9' I.D. REINFORCED CONCRETE CONFORMING TO CDOT STANDARDS AND SPECIFICATIONS. INCLUDES TYPE A BEDDING AND HAUNCHING MATERIAL AND BACKFILL OF TRENCH WITH NATIVE MATERIALS MEETING 103.16 EARTH BACKFILL MATERIAL.



PROFILE



UPSTREAM CROSS SECTION



DOWNSTREAM CROSS SECTION

DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2023
DESIGNED BY KA DATE 2023
CHECKED BY KA DATE 2023
APPROVED BY KA DATE 2023

SCALES:
PLAN & PROFILE
HORIZONTAL: 1" = 20'
VERTICAL: 1" = 5'

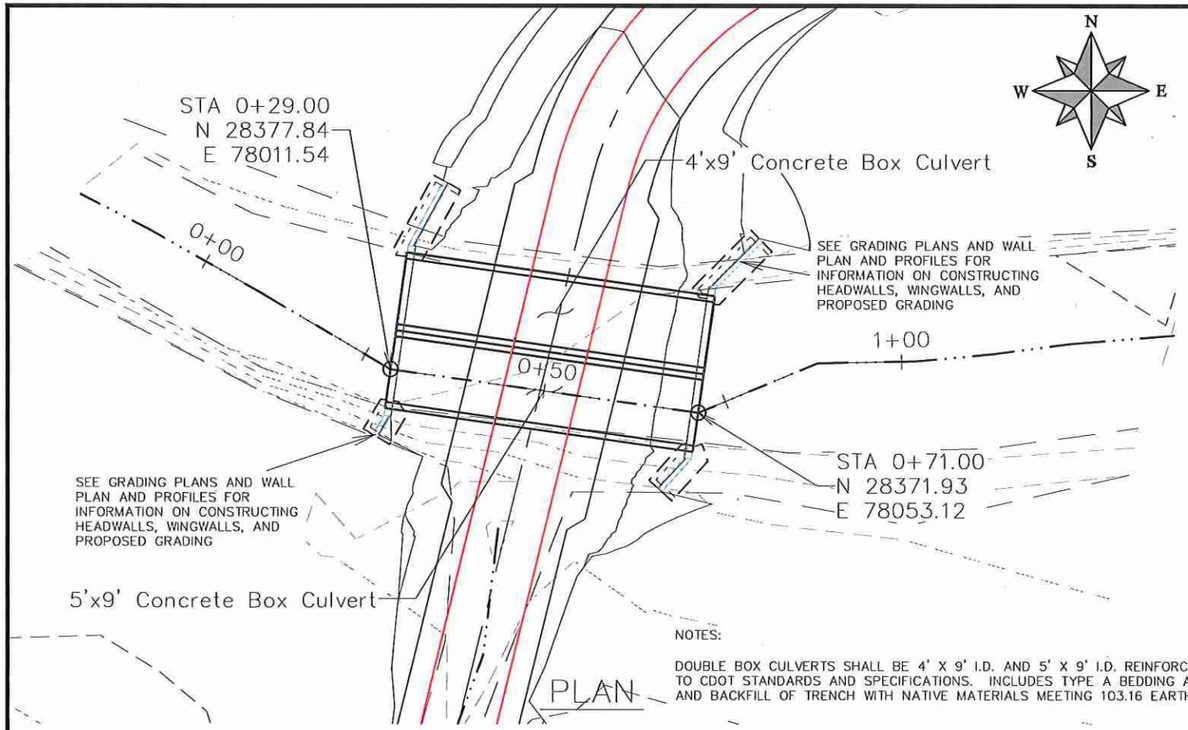
CITY OF Grand Junction COLORADO

PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT PHASE 2
BOX CULVERT PLAN & PROFILE – 1
November 8, 2023

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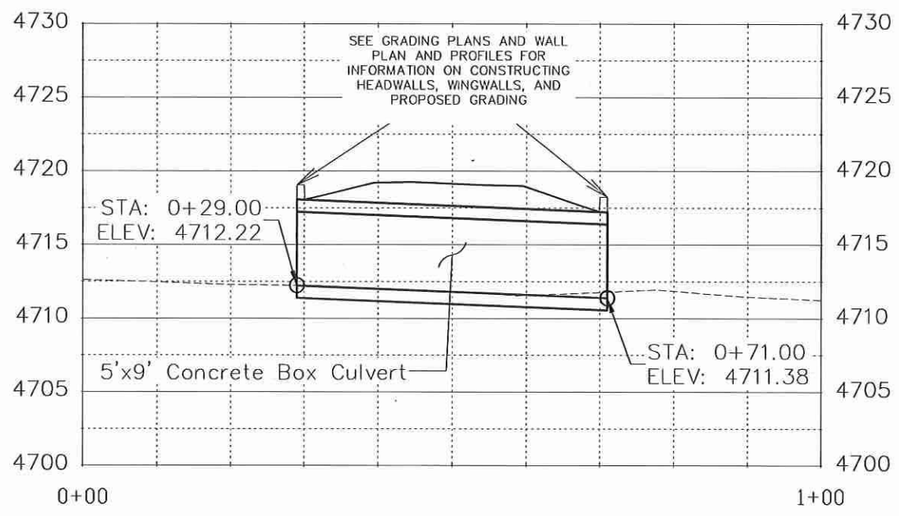
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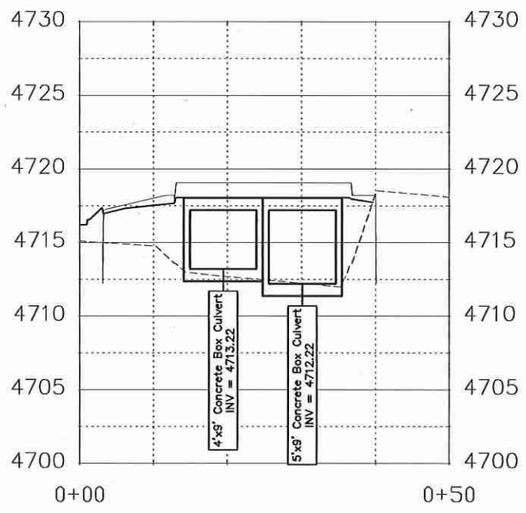
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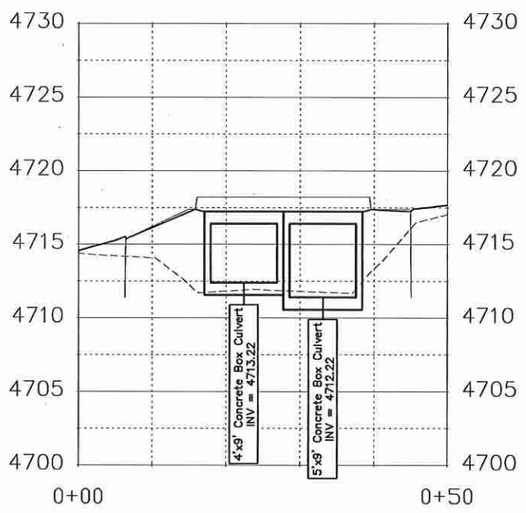
DOUBLE BOX CULVERTS SHALL BE 4' X 9' I.D. AND 5' X 9' I.D. REINFORCED CONCRETE CONFORMING TO CDOT STANDARDS AND SPECIFICATIONS. INCLUDES TYPE A BEDDING AND HAUNCHING MATERIAL AND BACKFILL OF TRENCH WITH NATIVE MATERIALS MEETING 103.16 EARTH BACKFILL MATERIAL.



PROFILE



UPSTREAM CROSS SECTION



DOWNSTREAM CROSS SECTION

DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2023
DESIGNED BY KA DATE 2023
CHECKED BY KA DATE 2023
APPROVED BY KA DATE 2023

SCALES:
PLAN & PROFILE
HORIZONTAL: 1" = 20'
VERTICAL: 1" = 5'

CITY OF Grand Junction COLORADO

PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT PHASE 2
BOX CULVERT PLAN & PROFILE – 2
November 8, 2023

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MONUMENT CORRIDOR SHARED-USE-PATH PHASE 2 ALIGNMENT 3/13/2023



APPENDIX B
Design Features and BMP's Committed to by the City of Grand Junction

The following are applicant-committed design features.

General/Notification

M&E-14: A pre-construction meeting will be held with the BLM before and to facilitate implementation of plans and ensure compliance with stipulations or conditions of approval. The BLM will be notified at least 48 hours prior to construction or reclamation work. 90-day notice is required for any maintenance activities. except where there are rare plant populations; in those cases, BLM requires additional 90-days' notice no later than the March preceding any work to be done.

R-11: Project design should take into consideration any existing vegetation surrounding the project that can be used for visual screening. Care should be taken to preserve the integrity of the vegetation and the vegetation should remain standing and undamaged when the cut-and-fill slopes are recontoured.

A-10: Improve engine technology (Tier 2 or better) for all mobile and non-road diesel engines to reduce NOx, PM, CO, and VOC emissions.

A-24: Utilize dust suppression techniques on unpaved surfaces including watering, chemical suppressants, and gravel.

A-30: Reduce unnecessary vehicle idling to reduce combustion emissions, ozone formation, visibility impacts, and fuel consumption.

A-32: Restrict surface disturbing activities to periods when wind speeds are less than 25 mph.

S-17: Native vegetation and soils will be protected and disturbance to them will be minimized.

H-6: Before activities take place, every pad, access road, or facility site will have an approved surface drainage plan for establishing positive management of surface water drainage, to reduce erosion and sediment transport. The drainage plan will include adaptive BMPs, monitoring, maintenance and reporting. BMPs may include run-on/run-off controls such as surface pocking

or re-vegetation, ditches or berms, basins, and other control methods to reduce erosion. Pre-construction drainage BMPs will be installed as appropriate.

H-36: Limit surface disturbance near drainage features and minimize surface disturbance on steep slopes, fragile soils, saline soils, and Mancos shale derived soils.

H-43: Maintain appropriate vegetative/riparian buffers around water features to slow runoff and trap sediments and protect water quality. A minimum buffer distance should be 200 meters or greater where site conditions warrant.

M&E-44: Dust from vehicular traffic, equipment operations, or wind events will be controlled as needed. No application of surfactants or dust agents will proceed without BLM approval. In areas with soils mapped as Mancos shale, application of water on native road surfaces will be limited, to minimize mobilization of selenium. In such areas, alternate dust abatement measures such as proper road surfacing and maintenance, and speed limits will be used, subject to BLM approval.

M&E-61: Cut and fill slopes will be protected against erosion by contour grading, microbasins or other measures approved by the BLM. Well anchored BMPs such as biodegradable matting, weed-free bales or wattles may also be used on cut-and-fill slopes and along drainages to protect against soil movement.

VR-10: Ensure that seed used for revegetation as well as straw and hay bales used for erosion control are certified free of noxious weeds.

V-14: Perform final reclamation recontouring of all disturbed areas, including access roads, to the original contour or a contour that blends with the surrounding topography.

WEED-11: Minimize soil disturbance. To the extent practicable, native vegetation should be retained in and around project activity areas, and soil disturbance kept to a minimum.

WEED-19: Remove mud, dirt, and plant parts from project equipment before moving it into a project area. Seeds and plant parts shall be collected and incinerated when practical, or washed off in an approved containment area.

WEED-25: Clean all equipment (power or high-pressure cleaning) of all mud, dirt, and plant parts before leaving the project site if operating in areas infested

with weeds. Seeds and plant parts shall be collected and incinerated when possible.

WEED-26: When seeding has been specified for construction and maintenance activities, seed all disturbed soil (except travel route) soon after work is completed.

WEED-27: Use a certified weed-free seed mix suitable for local environmental conditions that includes fast, early growing (preferably native) species to provide quick revegetation. Consider applying weed-free mulch with seeding. (SOP)

WEED-28: Periodically inspect roads and rights-of-way for noxious weeds. Train staff to recognize weeds and report locations to the local weed specialist. Follow-up with treatment when needed.

WEED-29: When reclaiming roads, treat weeds before roads are made impassable. Inspect and follow up based on initial inspection and documentation.

WEED-30: To avoid weed infestations, create and maintain healthy plant communities whenever possible, including utility rights-of-ways, roadsides, scenic overlooks, trailheads, and campgrounds.

CR-4: The National Historic Preservation Act, as amended, requires that if newly discovered historic or archaeological materials or other cultural resources are identified during project implementation, work in that area must stop and the BLM Authorized Officer must be notified immediately. Within five working days the BLM Authorized Officer will inform the proponent as to: a) Whether the materials appear eligible for the National Register of Historic Places; b) The mitigation measures the proponent will likely have to undertake before the site could be used (assuming in situ preservation is not practicable), (36 CFR 800.13); and c) A timeframe for the BLM Authorized Officer to complete an expedited review under 36 CFR 800.11 to confirm, through the State Historic Preservation Office, that the BLM Authorized Officer's findings were correct and mitigation was appropriate.

S-2: When saturated soil conditions existing on access roads or location, or when road rutting becomes deeper than 3 inches, construction shall be halted until soil material dries out or is frozen sufficiently for construction to proceed without undue damage and erosion to soils, roads and locations.

S-3: Topsoil shall not be placed while in a frozen or muddy condition, when the subgrade is excessively wet, or in a condition that may otherwise be detrimental to proper grading or proposed sodding or seeding.

FWS-51: Noise reduction techniques and designs will be used to reduce noise from compressors or other motorized equipment.

Additional Site-specific BMPs are as follows:

BR-5 Biological Monitors will be employed for construction activities in the following locations for the following species: Colorado hookless cactus, within 60 meters of documented populations.

BR-6 Should any previously unknown populations of the Federally listed plants be discovered, City's contractor will inform City and the BLM to assure compliance with the Endangered Species Act (ESA), and consultation with the U.S. Fish and Wildlife Service (USFWS) and ensuing mitigation can proceed to ensure timely completion of the proposed project.

BR-7 Biological monitors will be employed to conduct migratory bird surveys for any vegetation clearing required during the time period May 15 to July 15.

Additional general design features incorporated in the proposed action are listed below:

• All staff, contractors, and volunteers responsible for any element of on-the-ground work will receive environmental awareness training before being allowed to work on this project. Training will include (a) information on the legal and biological status of CHC, (b) the habitats important to the species, , (c) awareness of mandatory conservation/avoidance measures, (d) information on fines and penalties for damaging or directly impacting CHC, and (e) reporting procedures should any violation occur. • The City will hire BLM approved biologic monitors to protect plants during construction and maintenance activities

• Any unrecorded/new cactus documented during construction will be avoided, and the minimization measures and design features will be applied to these individuals.

• All tools and equipment used for trail construction will be cleaned to prevent weed infestations. Disturbed areas will be reseeded with a BLM-approved seed mix.

• The City will monitor for the presence of noxious weeds and treat noxious weeds in coordination with BLM

• The BLM and City will coordinate to close and potentially rehabilitate social trails near CHC.

• The City will coordinate with the BLM for needed trail maintenance on BLM-managed lands.

Long-term maintenance of the Monument Trail will be performed by the City throughout the life of the trail system. Maintenance will include repair of erosion-control features, culverts, noxious weed treatments, and trail clearing as needed.

CHC normally blooms in April through May, and populations fluctuate over time, requiring new surveys to determine appropriate avoidance activities. Any future construction or maintenance work on the Monument Trail will be coordinated with BLM ecologists, who will determine the extent of monitoring and survey that is required. The BLM will be notified in the fall prior to any planned maintenance work so that spring surveys can take place for CHC in the project area. Only ground-disturbing activities will require BLM coordination.

Paleontological Resources

PR-1 Culvert installation in PYFC 4/5 level areas of the Morrison Formation, Summerville Formation, or Entrada Sandstone. The Unanticipated Discovery Plan below outlines procedures to follow in the event that paleontological resources are encountered during ground-disturbing and other construction activities in the absence of a paleontological resources monitor:

1. Upon discovery/excavation of significant paleontological resources, immediately stop construction activities and inform the on-site construction foreman/supervisor of discovery. Do not attempt to remove the fossils.

2. The construction foreman/supervisor should contact the appropriate personnel (BLM, City, etc.) immediately and notify them of the discovery.

3. A salvage/recovery plan should be formulated with help of a BLM-permitted paleontologist. Construction activities in the area of discovery

should be ceased until fossil salvage/recovery is completed and the area is cleared by the appropriate personnel.

4. Areas that were previously excavated in the project area (including associated spoils piles) should be inspected for additional paleontological resources. Paleontological monitoring during subsequent construction activities should be considered for the remainder of the project.

Soils

S-1 All soils compacted by movement of construction vehicles and equipment, will be 1.) loosened and leveled harrowing or disking to approximate pre-construction contours and 2.) reseeded with certified weed-free native grasses and mulched (except in cultivated fields). The specific seed mix(s) and rate(s) of application will be determined by the BLM (see seed tables in the EA Restoration Section).

Traffic

T-1 The contractor will make all necessary provisions for conformance with federal, state and local traffic safety standards and will conduct construction operations so as to offer the least possible obstruction and inconvenience to public traffic.

Water Quality

WQ-1 Construction activities will be performed by methods that prevent entrance or accidental spillage of solid matter, contaminants debris, and other objectionable pollutants and wastes into flowing streams or dry water courses, lakes and underground water sources. Such pollutants and wastes include, but are not restricted to, refuse, garbage, cement, concrete, sanitary waste, industrial waste, radioactive substances, oil and other petroleum products, aggregate processing tailings, mineral salts and thermal pollution.

APPENDIX C
Herbicides Approved for Use on BLM Lands

Herbicides Formulations Approved for Use on Lands The BLM Administers in the 17 Western States

Update: April 4, 2019

Restrictions associated with exisitng Environmental Impact Statements and individual Environmental Assessments (EA) at the present time, may restrict the use of individual herbicide active ingredients allowed for a particular project within that state. Refer to current EAs prior to selecting the active ingredient(s) and subsequent formulation(s).

Refer to the complete label prior to considering the use of any herbicide formulation. Just because it has a Federal registration, it may not be registered in a particular State, for example California. Label changes can also impact the intended use through, such things as, creation or elimination of Special Local Need (SLN) or 24 (C) registrations, changes in application sites, rates and timing of application, county restrictions, etc.

ACTIVE INGREDIENT	TRADE NAME	MANUFACTURER	EPA REG. NUMBER
Aminopyralid	Milestone	Dow AgroSciences	62719-519
Aminopyralid + 2,4-D	ForeFront HL	Dow AgroSciences	62719-630
	GrazonNext HL	Dow AgroSciences	62719-628
Aminopyralid + Clopyralid	Sendero	Dow AgroSciences	62719-645
Aminopyralid + Metsulfuron methyl	Chaparral	Dow AgroSciences	62719-597
	Opensight	Dow AgroSciences	62719-597
Aminopyralid + Triclopyr	Capstone	Dow AgroSciences	62719-572
Bromacil	Alligare Bromacil 80	Alligare, LLC	81927-4
	Ceannard Bromacil 80DF	Ceannard, Inc.	58035-19
	Hyvar X	Bayer Environmental Science	432-1546
	Hyvar X	DuPont Crop Protection	352-287
	Hyvar X-L	Bayer Environmental Science	432-1548
	Hyvar X-L	DuPont Crop Protection	352-346
Bromacil + Diuron	Alligare Bromacil/Diuron 40/40	Alligare, LLC	81927-3
	Ceannard Diuron/Bromacil 80 DF	Ceannard, Inc.	58035-18
	DiBro 2+2	Nufarm Americas Inc.	228-227
	DiBro 4+2	Nufarm Americas Inc.	228-386
	DiBro 4+4	Nufarm Americas Inc.	228-235
	Krovar I DF	Bayer Environmental Science	432-1551
	Krovar I DF	DuPont Crop Protection	352-505
	Weed Blast 4G	SSI Maxim	34913-19
	Weed Blast Res. Weed Cont.	Loveland Products Inc.	34704-576

ACTIVE INGREDIENT	TRADE NAME	MANUFACTURER	EPA REG. NUMBER
Chlorsulfuron	Alligare Chlorsulfuron 75	Alligare, LLC	81927-43
	Chlorsulfuron E-Pro 75 WDG	Nufarm Americas Inc.	79676-72
	Nufarm Chlorsulf SPC 75 WDG Herbicide	Nufarm Americas Inc.	228-672
	Telar XP	Bayer Environmental Science	432-1561
	Telar XP	DuPont Crop Protection	352-654
Clopyralid	Alligare Clopyralid 3	Alligare, LLC	81927-14
	CleanSlate	Nufarm Americas Inc.	228-491
	Pyramid R&P	Albaugh, LLC (Albuagh, Inc/Agri Star)	42750-94
	Reclaim	Dow AgroSciences	62719-83
	Spur	Albaugh, LLC (Albuagh, Inc/Agri Star)	42750-89
	Stinger	Dow AgroSciences	62719-73
	Transline	Dow AgroSciences	62719-259
Clopyralid + 2, 4-D	Alligare Cody Herbicide	Alligare, LLC	81927-28
	Commando	Albaugh, LLC (Albuagh, Inc/Agri Star)	42750-92
	Curtail	Dow AgroSciences	62719-48
	Cutback	Nufarm Americas Inc.	71368-72
2, 4-D	2,4-D 4# Amine Weed Killer	UAP-Platte Chem. Co.	34704-120
	2,4-D Amine	Helena Agri-Enterprises, LLC (Helena Chemical Company)	5905-72
	2,4-D Amine 4	Albaugh, LLC (Albuagh, Inc/Agri Star)	42750-19
	2,4-D Amine 4	Helena Agri-Enterprises, LLC (Helena Chemical Company)	42750-19-5905
	2,4-D LV 4	Albaugh, LLC (Albuagh, Inc/Agri Star)	42750-15
	2,4-D LV 6 Ester	Nufarm Americas Inc.	228-95
	2,4-D LV4	Helena Agri-Enterprises, LLC (Helena Chemical Company)	5905-90
	2,4-D LV 6	Albaugh, LLC (Albuagh, Inc/Agri Star)	42750-20
	2,4-D LV6	Helena Agri-Enterprises, LLC (Helena Chemical Company)	42750-20-5905
	2,4-D LV6	Helena Agri-Enterprises, LLC (Helena Chemical Company)	5905-93
	Alliagre 2,4-D Amine	Alligare, LLC	81927-38
	Alligare 2,4-D LV 6	Alligare, LLC	81927-39
	Aqua-Kleen	Nufarm Americas Inc.	71368-4
	Aqua-Kleen	Nufarm Americas Inc.	228-378
	Barrage HF	Helena Agri-Enterprises, LLC (Helena Chemical Company)	5905-529
	Barrage LV Ester	Helena Agri-Enterprises, LLC (Helena Chemical Company)	5905-504
	Base Camp Amine 4	Wilbur-Ellis Co., LLC (Wilbur-Ellis Co.)	71368-1-2935
	Base Camp LV6	Wilbur-Ellis Co., LLC (Wilbur-Ellis Co.)	2935-553
	Broadrange 55	Wilbur-Ellis Co., LLC (Wilbur-Ellis Co.)	2217-813-2935

ACTIVE INGREDIENT	TRADE NAME	MANUFACTURER	EPA REG. NUMBER
2,4-D - continued	Clean Amine	Loveland Products Inc.	34704-120
	Clean Crop Amine 4	UAP-Platte Chem. Co.	34704-5 CA
	Clean Crop Low Vol 6 Ester	UAP-Platte Chem. Co.	34704-125
	Clean Crop LV-4 ES	UAP-Platte Chem. Co.	34704-124
	Combelt 4 lb. Amine	Van Diest Supply Co.	11773-2
	Combelt 4# LoVol Ester	Van Diest Supply Co.	11773-3
	Combelt 6# LoVol Ester	Van Diest Supply Co.	11773-4
	D-638	Albaugh, LLC (Albuagh, Inc/Agri Star)	42750-36
	Esteron 99C	Nufarm Americas Inc.	62719-9-71368
	Five Star	Albaugh, LLC (Albuagh, Inc/Agri Star)	42750-49
	Formula 40	Nufarm Americas Inc.	228-357
	Freelexx	Dow AgroSciences	62719-634
	HardBall	Helena Agri-Enterprises, LLC (Helena Chemical Company)	5905-549
	Hi-Dep	PBI Gordon Corp.	2217-703
	Low Vol 4 Ester Weed Killer	Loveland Products Inc.	34704-124
	Low Vol 6 Ester Weed Killer	Loveland Products Inc.	34704-125
	Opti-Amine	Helena Agri-Enterprises, LLC (Helena Chemical Company)	5905-501
	Platoon	Nufarm Americas Inc.	228-145
	Rugged	WinField-United (WinField Solutions, LLC)	1381-247
	Saber	Loveland Products Inc.	34704-803
	Salvo	Loveland Products Inc.	34704-609
	Salvo LV Ester	UAP-Platte Chem. Co.	34704-609
	Savage DS	Loveland Products Inc.	34704-606
	Savage DS	UAP-Platte Chem. Co.	34704-606
	Shredder 2,4-D LV4	WinField-United (WinField Solutions, LLC)	1381-102
	Shredder Amine 4	WinField-United (WinField Solutions, LLC)	1381-103
	Solution Water Soluble	Nufarm Americas Inc.	228-260
	Solve 2,4-D	Albaugh, LLC (Albuagh, Inc/Agri Star)	42750-22
	Unison	Helena Agri-Enterprises, LLC (Helena Chemical Company)	5905-542
	Weedar 64	Nufarm Americas Inc.	71368-1
	WEEDestroy AM-40	Nufarm Americas Inc.	228-145
	Weedone LV-4	Nufarm Americas Inc.	228-139-71368
	Weedone LV-4 Solventless	Nufarm Americas Inc.	71368-14
	Weedone LV-6	Nufarm Americas Inc.	71368-11
	Whiteout 2,4-D	Loveland Products, Inc.	34704-1032
Dicamba	Alligare Cruise Control	Alligare, LLC	42750-40-81927
	Alligare Dicamba 4 Herbicide	Alligare, LLC	81927-55
	Banvel	Arysta LifeScience N.A. Corp.	66330-276
	Clarity	BASF Corporation	7969-137
	Diablo	Nufarm Americas Inc.	228-379
	Dicamba DMA	Albaugh, LLC (Albuagh, Inc/Agri Star)	42750-40

ACTIVE INGREDIENT	TRADE NAME	MANUFACTURER	EPA REG. NUMBER
Dicamba - continued	Kam-Ba	Drexel Chemical Company	19713-624
	Rifle	Loveland Products Inc.	34704-861
	Sterling Blue	WinField-United (WinField Solutions, LLC)	7969-137-1381
	Topeka	Rotam North America, Inc.	83100-34-83979
	Vanquish	Syngenta	100-884
	Vanquish Herbicide	Nufarm Americas Inc.	228-397
	Vision	Helena Agri-Enterprises, LLC (Helena Chemical Company)	5905-576
Dicamba + 2, 4-D	Alligare Dicamba + 2,4-D DMA	Alligare, LLC	81927-42
	Brash	WinField-United (WinField Solutions, LLC)	1381-202
	Brush-Rhap	Helena Agri-Enterprises, LLC (Helena Chemical Company)	5905-568
	Cimarron MAX - Part B	Bayer Environmental Science	432-1555
	Cimarron MAX - Part B	DuPont Crop Protection	352-615
	KambaMaster	Nufarm Americas Inc.	71368-34
	Latigo	Helena Agri-Enterprises, LLC (Helena Chemical Company)	5905-564
	Outlaw	Helena Agri-Enterprises, LLC (Helena Chemical Company)	5905-574
	Range Star	Albaugh, LLC (Albuagh, Inc/Agri Star)	42750-55
	Rifle-D	Loveland Products Inc.	34704-869
	Veteran 720	Nufarm Americas Inc.	228-295
	Weedmaster	Nufarm Americas Inc.	71368-34
Dicamba + Diflufenzopyr	Distinct	BASF Corporation	7969-150
	Overdrive	BASF Corporation	7969-150
NOTE: In accordance with the Record of Decision for the *Vegetation Treatments Using Herbicides on Bureau of Land Management* Lands in 17 Western *States Programmatic Environmental Impact Statement (PEIS), the aerial application of this herbicide* is prohibited.			
Diquat	Alligare Diquat Herbicide	Alligare, LLC	81927-43
	Diquat E-AG 2L	Nufarm Americas Inc.	79676-75
	Diquat E-Pro 2L	Nufarm Americas Inc.	79676-75
	Diquat SPC 2L Herbicide	Nufarm Americas Inc.	228-675
	Nufarm Diquat 2L Herbicide	Nufarm Americas Inc.	228-675
	Reward	Syngenta Professional Products	100-1091
Diuron	Alligare Diuron 4L	Alligare, LLC	81927-44
	Alligare Diuron 80DF	Alligare, LLC	81927-12
	Ceannard Diuron 80DF	Ceannard, Inc.	58035-16
	Direx 4L	DuPont Crop Protection	352-678
	Direx 4L	Makhteshim Agan of N. A. (ADAMA)	66222-54
	Diuron 4L	Drexel Chemical Company	19713-36

ACTIVE INGREDIENT	TRADE NAME	MANUFACTURER	EPA REG. NUMBER
Diuron - continued	Diuron 4L	Loveland Products Inc.	34704-854
	Diuron 4L	Makhteshim Agan of N. A. (ADAMA)	66222-54
	Diuron 80	Drexel Chemical Company	19713-274
	Diuron 80 WDG	Loveland Products Inc.	34704-648
	Diuron 80DF	WinField-United (WinField Solutions, LLC)	9779-318
	Diuron 80WDG	UAP-Platte Chem. Co.	34704-648
	Karmex DF	DuPont Crop Protection	352-692
	Karmex DF	Makhteshim Agan of N. A. (ADAMA)	66222-51
	Karmex IWC	DuPont Crop Protection	352-692
	Karmex XP	DuPont Crop Protection	352-692
	Parrot 4L	Makhteshim Agan of N. A. (ADAMA)	66222-54
	Parrot DF	Makhteshim Agan of N. A. (ADAMA)	66222-51
Fluridone	Alligare Fluridone	Alligare, LLC	81927-45
	Avast!	SePRO	67690-30
	Fluridone 4L	Albaugh, LLC (Albuagh, Inc/Agri Star)	42750-280
	Sonar AS	SePRO	67690-4
	Sonar Precision Release	SePRO	67690-12
	Sonar Q	SePRO	67690-3
	Sonar SRP	SePRO	67690-3
Fluroxypyr	Alligare Flagstaff	Alligare, LLC	81927-61
	Alligare Fluroxypyr	Alligare, LLC	66330-385-81927
	Comet Selective	Nufarm Americas Inc.	71368-87
	Vista XRT	Dow AgroSciences	62719-586
Fluroxypyr + 2,4-D + Dicamba	E-2 Herbicide	Nufarm Americas Inc.	228-442
Fluroxypyr + Clopyralid	Truslate Selective Herbicide	Nufarm Americas Inc.	71368-86
Fluroxypyr + Picloram	Alligare Triumph XTR Herbicide	Alligare , LLC	81927-64
	Sunmount	Dow AgroSciences	62719-480
	Trooper Pro	Nufarm Americas Inc.	228-599
Fluroxypyr + Triclopyr	Alligare Cleargraze Pasture Herbicide	Alligare, LLC	81927-65
	PastureGard	Dow AgroSciences	62719-637
Glyphosate	Accord Concentrate	Dow AgroSciences	62719-324
	Accord SP	Dow AgroSciences	62719-322
	Accord XRT	Dow AgroSciences	62719-517
	Accord XRT II	Dow AgroSciences	62719-556
	Alligare Dryphosate 75SG	Alligare, LLC	81927-60
	Alligare Glyphosate 4 PLUS	Alligare, LLC	81927-9
	Alligare Glyphosate 5.4	Alligare, LLC	81927-8
	Aqua Neat	Nufarm Americas Inc.	228-365

ACTIVE INGREDIENT	TRADE NAME	MANUFACTURER	EPA REG. NUMBER
Glyphosate - continued	Aqua Star	Albaugh, LLC (Albuagh, Inc/Agri Star)	42750-59
	Aquamaster	Monsanto	524-343
	AquaPro Aquatic Herbicide	SePRO Corporation	62719-324-67690
	Buccaneer	Tenkoz	55467-10
	Buccaneer Plus	Tenkoz	55467-9
	Credit Xtreme	Nufarm Americas Inc.	71368-81
	Foresters	Nufarm Americas Inc.	228-381
	Gly Star Gold	Albaugh, LLC (Albuagh, Inc/Agri Star)	42750-61
	Gly Star Original	Albaugh, LLC (Albuagh, Inc/Agri Star)	42750-60
	Gly Star Plus	Albaugh, LLC (Albuagh, Inc/Agri Star)	42750-61
	Gly Star Pro	Albaugh, LLC (Albuagh, Inc/Agri Star)	42750-61
	Gly-4	Universal Crop Protection Alliance	42750-60-72693
	Gly-4 Plus	Universal Crop Protection Alliance	72693-1
	Gly-4 Plus	Universal Crop Protection Alliance	42750-61-72693
	GlyphoMate 41	PBI/Gordon Corporation	2217-847
	Glypro	Dow AgroSciences	62719-324
	Glypro Plus	Dow AgroSciences	62719-322
	Honcho	Monsanto	524-445
	Honcho Plus	Monsanto	524-454
	Imitator Aquatic	Drexel Chemical Company	19713-623
	Imitator DA	Drexel Chemical Company	19713-586
	Imitator Plus	Drexel Chemical Company	19713-526
	KleenUp Pro	Loveland Products, Inc.	34704-890
	Mad Dog Plus	Loveland Products, Inc.	34704-890
	Makaze	Loveland Products, Inc.	34704-890
	Mirage	Loveland Products Inc.	34704-889
	Mirage Herbicide	UAP-Platte Chem. Co.	524-445-34704
	Mirage Plus	Loveland Products Inc.	34704-890
	Rattler	Helena Agri-Enterprises, LLC (Helena Chemical Company)	524-445-5905
	Razor	Nufarm Americas Inc.	228-366
	Razor Pro	Nufarm Americas Inc.	228-366
	Rodeo	Dow AgroSciences	62719-324
	Roundup Custom	Monsanto	524-343
	Roundup Original	Monsanto	524-445
	Roundup Original II	Monsanto	524-454
	Roundup Original II CA	Monsanto	524-475
	Roundup PROMAX	Monsanto	524-579
	Roundup PRO	Monsanto	524-475
	Roundup PRO Concentrate	Monsanto	524-529
	Roundup PRO Dry	Monsanto	524-505
	Showdown	Helena Agri-Enterprises, LLC (Helena Chemical Company)	71368-25-5905

ACTIVE INGREDIENT	TRADE NAME	MANUFACTURER	EPA REG. NUMBER
Glyphosate + 2, 4-D	Campaign	Monsanto	524-351
	Imitator + 2,4-D	Drexel Chemical Company	19713-635
	Landmaster BW	Albaugh, LLC (Albuagh, Inc/Agri Star)	42570-62
	Landmaster BW	Monsanto	524-351
Hexazinone	Pronone 10G	Pro-Serve	33560-21
	Pronone 25G	Pro-Serve	33560-45
	Pronone MG	Pro-Serve	33560-21
	Pronone Power Pellet	Pro-Serve	33560-41
	Velosa	Helena Agri-Enterprises, LLC (Helena Chemical Company)	5905-579
	Velpar DF	DuPont Crop Protection	352-581
	Velpar DF VU	Bayer Environmental Science	432-1576
	Velpar L	DuPont Crop Protection	352-392
	Velpar L VU	Bayer Environmental Science	432-1573
	Velpar ULW	DuPont Crop Protection	352-450
Hexazinone + Sulfometuron methyl	Oustar	Bayer Environmental Science	432-1553
	Oustar	DuPont Crop Protection	352-603
	Westar	Bayer Environmental Science	432-1558
	Westar	DuPont Crop Protection	352-626
NOTE: In accordance with the Record of Decision for the *Vegetation Treatments Using Herbicides on Bureau of Land Management Lands in 17 Western States Programmatic Environmental Impact Statement (PEIS), the aerial application of this herbicide* is prohibited.			
Imazapic	Alligare Panoramic 2SL	Alligare, LLC	66222-141-81927
	Nufarm Imazapic 2SL	Nufarm Americas Inc.	71368-99
	Open Range G	Wilbur-Ellis Co., LLC (Wilbur-Ellis Co.)	2935-557
	Plateau	BASF Corporation	241-365
Imazapyr	Alligare Ecomazapyr 2SL	Alligare, LLC	81927-22
	Alligare Imazapyr 4SL	Alligare, LLC	81927-24
	Alligare Rotary 2 SL	Alligare, LLC	
	Arsenal	BASF Corporation	241-346
	Arsenal Applicators Conc.	BASF Corporation	241-299
	Arsenal PowerLine	BASF Corporation	241-431
	Chopper	BASF Corporation	241-296
	EZ-JECT Copperhead Herbicide Shells	EZ-JECT, Inc.	83220-2
	Habitat	BASF Corporation	241-426
	Habitat Herbicide	SePRO	241-426-67690
	Polaris	Nufarm Americas Inc.	228-534
	Polaris AC	Nufarm Americas Inc.	241-299-228
	Polaris AC	Nufarm Americas Inc.	228-480
	Polaris AC Complete	Nufarm Americas Inc.	228-570

ACTIVE INGREDIENT	TRADE NAME	MANUFACTURER	EPA REG. NUMBER
Imazapyr - continued	Polaris AQ	Nufarm Americas Inc.	241-426-228
	Polaris Herbicide	Nufarm Americas Inc.	241-346-228
	Polaris RR	Nufarm Americas Inc.	241-273-228
	Polaris SP	Nufarm Americas Inc.	228-536
	Polaris SP	Nufarm Americas Inc.	241-296-228
	SSI Maxim Arsenal 0.5G	SSI Maxim Co., Inc.	34913-23
	SSI Maxim Arsenal 5.0 G	SSI Maxim Co., Inc.	34913-24
	Stalker	BASF Corporation	241-398
Imazapyr + Diuron	Alligare Mojave 70 EG	Alligare, LLC	81927-25
	Imazuron	Nufarm Americas Inc.	228-654
	Sahara DG	BASF Corporation	241-372
	SSI Maxim Topsite 2.5G	SSI Maxim Co., Inc.	34913-22
Imazapyr + Metsulfuron methyl	Lineage Clearstand	Bayer Environmental Science	432-1578
	Lineage Clearstand	DuPont Crop Protection	352-766
Imazapyr + Sulfometuron methyl +	Lineage HWC	Bayer Environmental Science	432-1577
Metsulfuron methyl	Lineage HWC	DuPont Crop Protection	352-765
	Lineage Prep	Bayer Environmental Science	432-1579
	Lineage Prep	DuPont Crop Protection	352-767
NOTE: In accordance with the Record of Decision for the *Vegetation Treatments Using Herbicides on Bureau of Land Management* Lands in 17 Western *States Programmatic Environmental Impact Statement (PEIS), the aerial application of this herbicide* is prohibited.			
Metsulfuron methyl	Alligare MSM 60	Alligare, LLC	81927-7
	AmTide MSM 60DF Herbicide	AmTide, LLC	83851-3
	Cimarron MAX - Part A	Bayer Environmental Science	432-1555
	Cimarron MAX - Part A	DuPont Crop Protection	352-615
	Escort XP	Bayer Environmental Science	432-1549
	Escort XP	DuPont Crop Protection	352-439
	Patriot	Nufarm Americas Inc.	228-391
	PureStand	Nufarm Americas Inc.	71368-38
	Rometsol	Rotam North America, Inc.	831000-2-83979
Metsulfuron methyl + Chlorsulfuron	Cimarron Plus	Bayer Environmental Science	432-1572
	Cimarron Plus	DuPont Crop Protection	352-670
	Cimarron X-tra	DuPont Crop Protection	352-669
Picloram	Alligare Picloram 22K	Alligare, LLC	81927-18
	Grazon PC	Dow AgroSciences	62719-181
	OutPost 22K	Dow AgroSciences	62719-6
	Tordon 22K	Dow AgroSciences	62719-6
	Tordon K	Dow AgroSciences	62719-17

ACTIVE INGREDIENT	TRADE NAME	MANUFACTURER	EPA REG. NUMBER
Picloram - continued	Triumph 22K	Albaugh, LLC (Albuagh, Inc/Agri Star)	42750-79
	Triumph K	Albaugh, LLC (Albuagh, Inc/Agri Star)	42750-81
	Trooper 22K	Nufarm Americas Inc.	228-535
Picloram + 2, 4-D	Alligare Picloram + D	Alligare, LLC	81927-16
	Graslan L	Dow AgroSciences	62719-655
	Grazon P+D	Dow AgroSciences	62719-182
	GunSlinger	Albaugh, LLC (Albuagh, Inc/Agri Star)	42750-80
	HiredHand P+D	Dow AgroSciences	62719-182
	Pathway	Dow AgroSciences	62719-31
	Tordon 101 Mixture	Dow AgroSciences	62719-5
	Tordon RTU	Dow AgroSciences	62719-31
	Trooper P + D	Nufarm Americas Inc.	228-530
Picloram + 2, 4-D + Dicamba	Trooper Extra	Nufarm Americas Inc.	228-586
Rimsulfuron	Alligare Laramie 25DF	Alligare, LLC	81927-57
	Hinge	Rotam Borth America, Inc.	83100-40-83979
	Matrix SG	Dupont Crop Protection	352-768
Sulfometuron methyl	Alligare SFM 75	Alligare, LLC	81927-26
	Oust XP	Bayer Environmenatl Science	432-1552
	Oust DF	DuPont Crop Protection	352-401
	Oust XP	DuPont Crop Protection	352-601
	Spyder	Nufarm Americas Inc.	228-408
NOTE: In accordance with the Record of Decision for the *Vegetation Treatments Using Herbicides on Bureau of Land Management* Lands in 17 Western *States Programmatic Environmental Impact Statement (PEIS), the aerial application of this herbicide* is prohibited.			
Sulfometuron methyl + Chlorsulfuron	Landmark XP	Bayer Environmental Science	432-1560
	Landmark XP	DuPont Crop Protection	352-645
NOTE: In accordance with the Record of Decision for the *Vegetation Treatments Using Herbicides on Bureau of Land Management* Lands in 17 Western *States Programmatic Environmental Impact Statement (PEIS), the aerial application of this herbicide* is prohibited.			

ACTIVE INGREDIENT	TRADE NAME	MANUFACTURER	EPA REG. NUMBER
Sulfometuron methyl + Metsulfuron methyl	Alligare SFM Extra	Alligare, LLC	81927-5
	Oust Extra	Bayer Environmental Science	432-1557
	Oust Extra	DuPont Crop Protection	352-622
	Spyder Extra Selective	Nufarm Americas Inc.	228-690
NOTE: In accordance with the Record of Decision for the *Vegetation Treatments Using Herbicides on Bureau of Land Management* Lands in 17 Western *States Programmatic Environmental Impact Statement (PEIS), the aerial application of this herbicide* is prohibited.			
Tebuthiuron	Alligare Tebuthiuron 20 P	Alligare, LLC	81927-41
	Alligare Tebuthiuron 80 WG	Alligare, LLC	81927-37
	Spike 20P	Dow AgroSciences	62719-121
	Spike 80DF	Dow AgroSciences	62719-107
	SpraKil S-5 Granules	SSI Maxim Co., Inc.	34913-10
Tebuthiuron + Diuron	SpraKil SK-13 Granular	SSI Maxim Co., Inc.	34913-15
	SpraKil SK-26 Granular	SSI Maxim Co., Inc.	34913-16
Triclopyr	Alligare Boulder 6.3	Alligare, LLC	81927-54
	Alligare Triclopry 4	Alligare, LLC	81927-11
	Alligare Triclopyr 3	Alligare, LLC	81927-13
	Element 3A	Dow AgroSciences	62719-37
	Element 4	Dow AgroSciences	62719-40
	Forestry Garlon XRT	Dow AgroSciences	62719-553
	Garlon 3A	Dow AgroSciences	62719-37
	Garlon 4	Dow AgroSciences	62719-40
	Garlon 4 Ultra	Dow AgroSciences	62719-527
	Pathfinder II	Dow AgroSciences	62719-176
	Relegate	Nufarm Americas Inc.	228-521
	Relegate RTU	Nufarm Americas Inc.	228-522
	Remedy	Dow AgroSciences	62719-70
	Remedy Ultra	Dow AgroSciences	62719-552
	Renovate 3	SePRO Corporation	62719-37-67690
	Renovate OTF	SePRO Corporation	67690-42
	Tahoe 3A	Nufarm Americas Inc.	228-520
	Tahoe 4E	Nufarm Americas Inc.	228-385
	Tahoe 4E Herbicide	Nufarm Americas Inc.	228-517
	Triclopyr RTU	Albaugh, LLC (Albuagh, Inc/Agri Star)	42750-173
	Trycera	Helena Agri-Enterprises, LLC (Helena Chemical Company)	5906-580
	Vastlan	Dow AgroSciences	62719-687

ACTIVE INGREDIENT	TRADE NAME	MANUFACTURER	EPA REG. NUMBER
Triclopyr + 2, 4-D	Alligare Everett	Alligare, LLC	81927-29
	Aquasweep	Nufarm Americas Inc.	228-316
	Candor	Nufarm Americas Inc.	228-565
	Crossbow	Dow AgroSciences	62719-260
Triclopyr + Clopyralid	Alligare Prescott Herbicide	Alligare, LLC	81927-30
	Brazen	Nufarm Americas Inc.	228-564
	Redeem R&P	Dow AgroSciences	62719-337

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CITY OF Grand Junction COLORADO

Purchasing Division

ADDENDUM NO. 1

DATE: **August 28, 2024**
FROM: **City of Grand Junction Purchasing Division**
TO: **All Offerors**
RE: **Monument Connect Phase 2 Multi-Modal Concrete Path Construction**

Offerors responding to the above referenced solicitation are hereby instructed that the requirements have been clarified, modified, superseded, and supplemented as to this date as hereinafter described.

Please make note of the following clarifications:

1. **The Cross-section sheets have been added to the Construction Drawings (See Link)**
   Construction Drawings Monument Connect Phase 2 Addendum 1

2. **Question:** Precast Concrete Block Retaining Wall #28
   a. Will the city require a 3rd party engineer to stamp a wall design?
   Answer: N0

   b. Leveling pad, Drain, and Non-woven Geotextile fabric specs?
   Answer: Leveling pad made of Type B Granular Stabilization material per City Spec 103.15, 6 inches thick, 18 inches wider than base block; Drainpipe to be 6 inch diameter perforated (behind wall) and non-perforated (to daylight) ADS single-wall highway pipe or approved equal; Geotextile Fabric to be ADS Geosynthetics 0801T nonwoven geotextile or approved equal.

   c. Face texture, Limestone or Ledgestone?
   Answer: Ledgestone face texture, color to match existing Redi-rock block wall just west of the bike park.

3. **Question:** Page 12 calls for 24" x 6' Caissons while bid schedule calls for 18" x 6'?
   Answer: Note on page 36 of the drawings has been updated to show 18 inch diameter caissons.

4. **Question:** SP-7 "Sandstone boulders will be measured by the plan linear feet" while bid schedule calls out 'EACH"
   Answer: Stone boulders shall be quantified by EACH. The specifications have been updated.

5. **Question:** Item #8 3x3 area inlet, any details. Height, wall thickness, frame and grate style?
   Answer: Area inlet shall be a Type D Inlet (see CDOT M-604-11 standard plan). Height from pipe invert to top of grating shall be 4 ft; grate style shall be standard inlet grate.

6. **Question:** Plan set pages 45-47 call for to "Construct Bike Path (1ft wide concrete 6" thick…."
   Answer: This has been revised to state, "10-FT WIDE CONCRETE…"

7. **Question:** Item #30 Rip Rap 100 CY, is this meant for pipes #1,12, and 15? Page 48 in plan set calls Rip Rap "Included in Cost of Pipe"
Answer: Item 30 is intended to be the riprap for these three pipe outlets.

8. **Question:** Erosion Logs 4000LF, does this include the removal after vegetation is established?
Answer: No, removal will be performed by others after vegetation is established.

a. Can Compacted earthen berms be used in lieu of logs?
Answer: Yes, in areas where there is enough room for the berm to remain within City ROW. Berms are not allowed in areas near Colorado Hookless Cactus (see Special Provision 5, last paragraph on page 3 for these locations.

b. If so, can we add a line item for berms?
Answer: Yes, a line item for Compacted Earthen Berms has been added to the Bid Schedule, and quantities for the Erosion Logs have been reduced.

9. **Question:** STA 28+05 to STA 33+69 calls for a 30' ramp at 1/12 followed by a 10' resting area at 1/33.

a. There is concern that the resting area don't meet ADA?
Answer: This trail is classified as a bicycle path and therefore does not need to meet ADA requirements. We would like to limit the maximum vertical grade to 8.33%.

b. This is a challenge for machine pour, what are allowable tolerances?
Answer: The maximum vertical grade of the trail shall be 8.33%. The resting areas may be adjusted by +/- 0.0833% or +/- 0.5/12, as long as the steep areas remain at 8.33% (1/12) or less.

10. **Question:** Winter Concrete holds its own challenges

a. Would a winter shutdown be an option?
Answer: A winter shutdown may be allowed as long as project completion occurs on or before March 31, 2025.

b. Are blanket marks and staining an issue?
Answer: If concrete is placed in temperatures below 40 degrees, blankets shall be used per City Specs. Blanket marks and staining may be avoided if a winter shutdown is allowed. See answer to question 10a.

11. **Question:** Where is Item #36 – Colored Concrete Curb and Gutter located on the plans?
Answer: This item is not included in this Project; It has been deleted.

12. **Question:** I have included the 4 headwalls, toe walls and center walls which attach to each end of the two precast CBC, the wingwall footings with toe walls (4 ea) and the wingwalls (4 ea). The drawings do not indicate any inlet or outlet aprons.

In working on the cast-in-place portion of the precast concrete culverts and cannot find the correct yardage shown on Item #29, Concrete wall (Class D) with a quantity of 95 cy.

My conservative calculations are significantly less (30%) than the bid item. Is there a concrete scope that I am missing for that line item?

Answer: The quantities of the Concrete Wall (Class D) will be updated. See attached revised Bid Schedule.

13. **Question:** How many Calander Days are in the contract?
    Answer: The Calendar Days will be established when the Notice To Proceed is given to the awarded contract. See the answer to question 14.

14. **Question**: Can the project start date and completion date be extended to accommodate the holiday schedule and the project seeding requirements, to the Spring (March 31st) of 2025?
    Answer: The start date will be established as soon as possible following the contract approval by City Council on September 18. The completion date is now March 31, 2025.

Attachments:
Revised Bid Schedule – Addendum 1 (Must use this when submitting your bid)
Revised Special Provisions – Addendum 1
Revised Construction Drawings – Addendum 1 (Click on Link)
Construction Drawings Monument Connect Phase 2 Addendum 1

The original solicitation for the project noted above is amended as noted. All other conditions of the subject remain the same.

Respectfully,

Dolly Daniels, Senior Buyer
City of Grand Junction, Colorado

3. Contractor's Bid Form ADDENDUM No. 1

Project: IFB-5491-24-DD "Monument Connect – Phase 2 Multi-modal Concrete Path Construction"

Bid Date: _____

Bidding Company: _____

Name of Authorized Agent: _____

Email _____

Telephone _____ Address_____

City_____State_____Zip_____

The undersigned Bidder, in compliance with the Invitation for Bids, having examined the Instruction to Bidders, General Contract Conditions, Statement of Work, Specifications, and any and all Addenda thereto, having investigated the location of, and conditions affecting the proposed work, hereby proposes to furnish all labor, materials and supplies, and to perform all work for the Project in accordance with Contract Documents, within the time set forth and at the prices stated below. These prices are to cover all expenses incurred in performing the work required under the Contract Documents, of which this Contractor's Bid Form is a part.

The undersigned Contractor does hereby declare and stipulate that this offer is made in good faith without collusion or connection to any person(s) providing an offer for the same work, and that it is made in pursuance of, and subject to, all terms and conditions of the Instructions to Bidders, the Specifications, and all other Solicitation Documents, all of which have been examined by the undersigned.

The Contractor also agrees that if awarded the Contract, to provide insurance certificates within ten (10) working days of the date of Notification of Award. Submittal of this offer will be taken by the Owner as a binding covenant that the Contractor will be prepared to complete the project in its entirety.

The Owner reserves the right to make the award on the basis of the offer deemed most favorable, to waive any formalities or technicalities and to reject any or all offers. It is further agreed that this offer may not be withdrawn for a period of sixty (60) calendar days after closing time. Submission of clarifications and revised offers automatically establish a new thirty day (30) period.

Prices in the bid proposal have not knowingly been disclosed with another provider and will not be prior to award.

- Prices in this bid proposal have been arrived at independently, without consultation, communication or agreement for the purpose of restricting competition.
- No attempt has been made nor will be to induce any other person or firm to submit a bid proposal for the purpose of restricting competition.
- The individual signing this bid proposal certifies they are a legal agent of the offeror, authorized to represent the offeror and is legally responsible for the offer with regard to supporting documentation and prices provided.
- Direct purchases by the City of Grand Junction are tax exempt from Colorado Sales or Use Tax. Tax exempt No. 98-03544. The undersigned certifies that no Federal, State, County or Municipal tax will be added to the above quoted prices.
- City of Grand Junction payment terms shall be Net 30 days.
- Prompt payment discount of _____ percent of the net dollar will be offered to the Owner if the invoice is paid within _____ days after the receipt of the invoice. The Owner reserves the right to take into account any such discounts when determining the bid award that are no less than Net 10 days.

RECEIPT OF ADDENDA: the undersigned Contractor acknowledges receipt of Addenda to the Solicitation, Specifications, and other Contract Documents.

State number of Addenda received: _____.

It is the responsibility of the Bidder to ensure all Addenda have been received and acknowledged.

By signing below, the Undersigned agree to comply with all terms and conditions contained herein.

Company: _____

Authorized Signature: _____

Title:_____

The undersigned Bidder proposes to subcontract the following portion of Work:

Name & address of Sub-Contractor	Description of work to be performed	% of Contract

The undersigned Bidder acknowledges the right of the City to reject any and all Bids submitted and to waive informalities and irregularities therein in the City's sole discretion.

By submission of the Bid, each Bidder certifies, and in the case of a joint Bid each party thereto certifies as to his own organization, that this Bid has been arrived at independently, without collusion, consultation, communication, or agreement as to any matter relating to this Bid with any other Bidder or with any competitor.

Bid Schedule: Monument Connect Trail - Phase 2 - Addendum 1

Item No.	CDOT, City Ref.	Description	Quantity	Units	Unit Price	Total Price
1	102.10	Reinforced Concrete Pipe (RCP) (76-inch x 48-inch Horizontal Elliptical) (Includes bedding, material and install)	80.	Lin. Ft.	$ _____	$ _____
2	102.10	Reinforced Concrete Pipe (RCP) (48-inch) (Includes bedding, material and install)	24.	Lin. Ft.	$ _____	$ _____
3	102.10	Reinforced Concrete Pipe (RCP) (24-inch) (Includes bedding, material and install)	144.	Lin. Ft.	$ _____	$ _____
4	102.10	Reinforced Concrete Pipe (RCP) (18-inch) (Includes bedding, material and install)	72.	Lin. Ft.	$ _____	$ _____
5	102.10	Reinforced Concrete Pipe (RCP) (12-inch) (Includes bedding, material and install)	24.	Lin. Ft.	$ _____	$ _____
6	102.10	Reinforced Concrete Box Culvert (CBC) (9 ft wide by 4 ft high (Delivery from Rinker Materials, bedding and Install Only)	74.	Lin. Ft.	$ _____	$ _____
7	102.10	Reinforced Concrete Box Culvert (CBC) (9 ft wide by 5 ft high (Delivery from Rinker Materials, bedding and Install Only)	74.	Lin. Ft.	$ _____	$ _____
8	102.13	Area Inlet (Type D, H = 4 FT) (CDOT M-604-11)	1.	Each	$ _____	$ _____
9	201	Clearing and Grubbing	5.2	Acre	$ _____	$ _____
10	202	Removal of Tree (2" dia.)	6.	Each	$ _____	$ _____
11	203	Unclassified Excavation (Complete in Place)	2,700.	Cu. Yd.	$ _____	$ _____
12	208	Erosion Logs (12 inch)	1,210.	Lin. Ft.	$ _____	$ _____
13	208	Compacted Earthen Berms	2,790.	Lin. Ft.	$ _____	$ _____
14	208	Aggregate Bag	10.	Each	$ _____	$ _____
15	208	Concrete Washout Structure	2.	Each	$ _____	$ _____
16	208	Vehicle Track Pad	3.	Each	$ _____	$ _____
17	208	BMP Swale Berms	32.	Each	$ _____	$ _____
18	209	Dust Abatement	Lump	Sum	- - -	$ _____
19	210	Reset Sign	1.	Each	$ _____	$ _____
20	210	Adjust existing metal post and rail fence at bike park	Lump	Sum	- - -	$ _____
21	212	Seeding (Native) (Hydroseed) (Use Seed Mixes Specified Based on Property Owner - City or BLM)	4.5	Acre	$ _____	$ _____
22	216	Soil Retention Blanket (Coconut) (As Needed Where Disturbed Slope is Greater Than 3:1)	1,000.	Sq. Yd.	$ _____	$ _____
23	304	Granular Stabilization Material (Type B) (Crushed Rock) (As Needed in Excavations Where Unstable Bottom Exists)	20.	Ton	$ _____	$ _____
24	304	Aggregate Base Course (Class 6) (12 inch thick shoulders)	3,411.	Ton	$ _____	$ _____
25	304	Aggregate Base Course (Class 3) (subgrade stabilization as needed)	500.	Cu. Yd.	$ _____	$ _____

Bid Schedule: Monument Connect Trail - Phase 2 - Addendum 1

Item No.	CDOT, City Ref.	Description	Quantity	Units	Unit Price	Total Price
26	306	Reconditioning (12 inches deep)	20,253.	Sq. Yd.	$ _____	$ _____
27	306	Singletrack Trail (3-ft wide) (Complete in Place)	880.	Lin. Ft.	$ _____	$ _____
28	504	Precast Concrete Block Retaining Wall System (includes all necessary appurtenances, work, etc. to complete).	508.	FSF	$ _____	$ _____
29	504	Concrete Wall (Class D) per M and S Standard M-601-20 (Wall Design Height 3' to 7' per plan). (Includes associated headwall, and toe walls) Work shall include approximately 3750 lbs. Reinforcing Steel (Epoxy Coated), 75 sy Structural Concrete Coating (Exterior of wall), 35 cy Structural Backfill (Class 1) and any necessary appurtenances to complete work.	26.	Cu. Yd.	$ _____	$ _____
30	506	Riprap (D_{50} = 12 inch)	100.	Cu. Yd.	$ _____	$ _____
31	506	Landscape Boulders (Site Access Control)	112.	Each	$ _____	$ _____
32	514	Detectable Warning (Cast Iron, Wet Set) (2 ft x 2 ft)	15.	Each	$ _____	$ _____
33	601	Cast-in-Place Concrete Footings to support shade structures (1.5 ft diameter, 6 ft drilled into ground, including rebar per details)	24.	LF	$ _____	$ _____
34	608	Colored Concrete Sidewalk (6" Thick) to include 6" of Class 6 Aggregate Base Course	10,167.	Sq. Yd.	$ _____	$ _____
35	608	Colored Concrete Curb Ramp to include 6" of Class 6 Aggregate Base Course	150.	Sq. Yd.	$ _____	$ _____
36	608	Colored Concrete Pad for Benches (6 inch thick)(Includes 6 inch thick Class 6 ABC) (Location To Be Decided)	18.	Sq. Yd.	$ _____	$ _____
37	620	Portable Sanitary Facility	2.		$ _____	$ _____
38	625	Construction Surveying (Includes As-Built Drawings)	Lump	Sum	- - -	$ _____
39	626	Mobilization	Lump	Sum	- - -	$ _____
40	630	Traffic Control (Complete in Place)	Lump	Sum	- - -	$ _____
MCR		Minor Contract Revisions	- - -	- - -	- - -	$ 60,000.00

Bid Amount: **$** _____

Bid Amount:

_____ **dollars**

CITY OF GRAND JUNCTION
DEPARTMENT OF PUBLIC WORKS AND UTILITIES
ENGINEERING DIVISION

Monument Connect Trail - Phase 2 Project

SPECIAL PROVISIONS

GENERAL:

The descriptions of the pay items listed in the Bid Schedule for this Project may not agree with those listed in the Standard Specifications. Payment for all Work performed, as required in the Contract Documents, will be in accordance with the items and units listed in the Bid Schedule.

STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION:

The ***City of Grand Junction Standard Specifications for Road and Bridge Construction*** are hereby modified or supplemented for this Project by the following modifications to ***The Standard Specifications for Road and Bridge Construction***, State Department of Highways, Division of Highways, State of Colorado:

SP-1 SECTION 203 – POTHOLING

Section 203 of the Standard Specifications is hereby revised for this project as follows:

Subsection 203.05(g) shall include the following:

All potholing shall be accomplished using noninvasive, vacuum equipment. All potholing methods and locations shall be preapproved by the Project Engineer. Any potholing that has not been preapproved by the Project Engineer shall be at the Contractor's expense.

SP-2 SECTION 203 – PROOF ROLLING

Section 203 of the Standard Specifications is hereby revised for this project as follows:

Delete Subsection 203.11(f)

In Subsection 203.12, delete the pay item Proof Rolling and add the following:

Proof Rolling will not be measured and paid for separately but shall be included in the work.

SP-3 SECTION 206 – EXCAVATION AND BACKFILL FOR STRUCTURES

Section 206 of the Standard Specifications is hereby revised for this project as follows:

Subsection 206.07 shall include the following:

Structure excavation and structure backfill required for all manholes, valve boxes, inlets, walls, pipes, culverts, utility conduits, extensions, removed pipes and removed conduits will not be measured and paid for separately but shall be included in the work.

SP-4 SECTION 212 – SEEDING

Section 212 of the Standard Specifications is hereby revised for this project as follows:

Subsection 212.02 shall include the following:

City-owned Lands Seed mix shall be:

Common Name	Scientific Name	PLS (lbs/acre)
Indian Ricegrass	Achnatherum hymenoides	1.0
Thickspike Wheatgrass	Elymus lanceolatus	2.3
Western Wheatgrass	Pascopyrum smithii	7.5
Bluebunch Wheatgrass	Pseudoroegneria spicata	2.3
Slender Wheatgrass	Elymus trachycaulus	9.5
Red Mexican Hat	Ratibida columnifera	0.5
Blanket Flower	Gaillardia	1.5
Western Yarrow	Achillea millefolium	0.5
	TOTAL	**25.00**

BLM-owned Lands Seed mix shall be:

Greasewood Flats, Desert Scrubland

Common Name	Scientific Name	Variety	Percentage of Mix (%)	PLS (lbs/acre)
Western Wheatgrass	Pascopyrum smithii	Arriba, Rosana	35	9.5
Bottlebrush Squirreltail	Elymus elymoides	VNS	22	5.8
Alkali Sacaton	Sporobolus airoides	VNS	1	0.27
Sand Dropseed	Sporobolus cryptandrus	VNS	<1	0.09
Shadscale	Atriplex confertifolia	VNS	17	4.5
Four-wing Saltbush	Atriplex canescens	Source N of CO-NM line or above 5,000 ft	23	6.2

Common Name	Scientific Name	Variety	Percentage of Mix (%)	PLS (lbs/acre)
Scarlet Globemallow	Sphaeralcea coccinea	VNS	2	0.47
	TOTAL			**25.00**

Must be able to verify source. Double seeding rate for broadcast seeding. All seed shall be certified weed free.

Contractor shall reference the Plan of Development (Appendix C of the Solicitation) for Reclamation Procedures outlined in Section 4.6.

SP-5 SECTION 240 – BIOLOGICAL, PALEOLOGICAL, AND CULTURAL MANAGEMENT

Section 240 of the Standard Specifications is hereby revised for this project as follows:

Environmental Awareness Training. All staff, contractors, and volunteers responsible for any element of on-the-ground work will receive environmental awareness training prior to being allowed to work on this project. Training will include:

a) information on the legal and biological status of Colorado Hookless Cactus (CHC);
b) the habitats important to the species;
c) awareness of mandatory conservation/avoidance measures;
d) information on fines and penalties for damaging or directly impacting CHC;
e) and reporting procedures if any violation occur.

Cultural Stipulations. Any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by the contractor on public or Federal land shall be immediately reported to the Project Engineer. The Contractor shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Project Engineer. An evaluation of the discovery will be made by the City's Environmental Consultant to determine appropriate actions to prevent the loss of significant cultural or scientific values. The City will be responsible for the cost of evaluation, and any decision as to proper mitigation measures will be made by the BLM after consulting with the City.

The environmental survey identified several populations of CHC in the vicinity of the project limits (within 200 feet of construction and access roads). As part of the BLM ROW and Temporary Use Easements, there are Stipulations to be followed (see Appendix C of the Solicitation), and the Contractor shall coordinate with the City's Biological Monitor when working within the buffer zone around the surveyed CHCs. These zones include the paved trail construction from Station 57+00 to 63+25, Station 71+00 to 76+00, and Station 79+25 to 84+00, including the construction access road at Station 71+60 connecting to Monument Road.

SP-6 SECTION 250 – FIRE PROTECTION PLAN

Section 250 of the Standard Specifications is hereby revised for this project as follows:

A. *Fire Protection Plan.* Prior to start of work, the Contractor shall submit a Fire Control Plan in writing to the Engineer for approval. The plan shall include the following:

1) The name and contact information of a Fire Control Coordinator who shall be assigned to the project.
2) A list of numbers to call in case of a fire, including 911 (or the equivalent in the area).
3) A complete list, including storage locations, of all tools and equipment the Contractor will use in the event of a fire within project limits.
4) Methods that will be employed if a fire is encountered or started during construction activities within the project limits.
5) Specific fire prevention precautions, and the required firefighting equipment, for every activity which has the potential for starting a fire. At a minimum the plan shall address prevention planning related to the use of heavy equipment, vehicles, hand tools, storage and parking areas.
6) Specific precautions for fueling operations.
7) Provisions for field safety meetings. The Contractor shall conduct field safety meetings (also known as toolbox or tailgate meetings) at least once per week. The Contractor shall encourage participation by all persons working at the project site. Participants shall discuss specific fire prevention precautions for construction activities.

B. Equipment and Procedures.

1) Fire Boxes. Fire boxes shall contain tools and equipment that shall be used exclusively for controlling or suppressing fires which occur due to construction activities on project sites. Each fire box shall contain, as a minimum, the following:

   a) five round-pointed shovels,
   b) two double-bitted axes,
   c) three pulaskis or mattocks, and
   d) two backpack pumps

2) Welding. If welding at field locations is required, the welding shall be done at a location where all flammable material has been cleared away for a distance of 16 feet around the area.
3) Spark Arrestors. All diesel and gasoline powered engines, both mobile and stationary, shall be equipped with serviceable spark arrestors.
4) Power Saws. Each gasoline power saw shall be provided with a spark screen and a muffler in good condition. Spill-proof metal safety cans shall be used for refueling.

5) Storage and Parking Areas. Batch plant areas, equipment service areas, parking areas, gas and oil drum storage areas, and explosive storage areas shall be cleared of all flammable materials for a distance of 50 feet. Small stationary engine sites shall be cleared of all flammable material for a distance of 17 feet. Other mitigation methods may be used as approved by the Engineer. No construction vehicles or equipment shall be parked on dry brush.

C. *Fire Control Coordinator Responsibilities*. The Fire Control Coordinator shall:

1) Implement the Fire Control Plan.
2) Monitor, manage, and adjust the Fire Control Plan as needed as construction work progresses.
3) Document in a letter to the Engineer changes to the Fire Control Plan.
4) Immediately contact firefighting authorities when a fire is started due to construction activities within project limits.
5) Coordinate fire control and suppression activities until authorities arrive, including the evacuation of staff.
6) When the Fire Control Coordinator cannot be on the project site, he shall designate a person who is on site to serve as the Fire Control Coordinator. The Fire Control Coordinator, or his designee, shall be on site at all times that work is being performed.

D. *Costs.* All costs associated with the preparation and implementation of the Plan and compliance with all fire protection provisions and requirements will not be measured and paid for separately but shall be included in the work.

SP-7 SECTION 506 – STONE BOULDERS

Section 506 of the Standard Specifications is hereby revised for this project as follows:

Subsection 506.01 shall include the following:

This work includes installation of stone boulders in the construction access zones shown on the plans. Each feature contains a variable number of boulders from off-site sources. Work includes the selection of suitable boulders, transport, and placement of approved boulders into distinct features as shown on the plans to block vehicle access after construction is completed.

Construction shall be limited to areas as shown on the plans or as agreed to by the Engineer.

Subsection 506.02 shall include the following:

Boulders for use in the trailhead improvements shall be angular or subrounded on the sides and top, and 24 inches to 36 inches in diameter (measured on the A-axis (minimum

dimension), and a height of 16 inches minimum (after installation). Exposed surface of installed boulders shall not show machine-caused scarring or breakage. Boulders are to be tan/red sandstone. Examples of this type of boulder can be seen at “The Rock Shop”, 800 S 15th Street, Grand Junction – Burnt Autumn and Redstone Red boulders.

Contractor shall submit sample to Engineer prior to acquisition.

Subsection 506.03 shall include the following:

Boulders are to be placed where indicated on the drawings or as approved by the Engineer. The nature of the selected rock will require excavation of a pit 1/3 to 1/2 the height of the rock in the position the rock is to be placed. Backfill following placement, and compact.

Subsection 506.04 shall include the following:

Sandstone Boulders will be measured by the number of boulders installed in the field, including and all labor, materials equipment, and transportation of materials required to complete the work.

Subsection 506.05 shall include the following:

The accepted quantities of Sandstone Boulders will be paid for at the contract unit price for each of the items listed below that appear in the bid schedule.

Pay Item	**Pay Unit**
Stone Boulders for access control	Each

Work shall include all boulder transport, handling, and placement.

SP-8 SECTION 601 – CONCRETE

Section 601 of the Standard Specifications is hereby revised for this project as follows:

Subsection 601.02, Classification:

CONCRETE SHALL MEET THE FOLLOWING REQUIREMENTS:

- 4,500 PSI Compressive at 28 Days
- 6% air ±1.5%
- Slump 4”, Loads exceeding 6” shall be rejected
- Maximum Water Cement Ratio no greater than 0.45.

Subsection 601.06, Batching:

This CDOT Specification has been added to this Project:

The Contractor shall furnish a batch ticket (delivery ticket) with each load for all concrete. Concrete delivered without a batch ticket containing complete information as specified shall be rejected. The Contractor shall collect and complete the batch ticket at the placement site and deliver all batch tickets to the Engineer or his representative at the end of each day. The Engineer or his representative shall have access to the batch tickets at any time during the placement. The following information shall be provided on each ticket:

1. Suppliers name and date
2. Truck number
3. Project name and location
4. Concrete class and designation number
5. Cubic yards batched
6. Type brand and amount of each admixture
7. Type, brand, and amount of cement and fly ash
8. Weights of fine and coarse aggregates
9. Moisture of fine and coarse aggregates
10. Gallons of batch water

The contractor shall add the following information to the batch ticket at time of placement:

1. Gallons of water added by the truck operator.
2. Number of revolutions of the drum for mixing
3. Discharge time

STANDARD SPECIFICATIONS FOR CONSTRUCTION OF WATER LINES, SANITARY SEWERS, STORM DRAINS, UNDERDRAINS AND IRRIGATION SYSTEMS

The City of Grand Junction ***Standard Specifications for Construction of Water Lines, Sanitary Sewers, Storm Drains, Underdrains and Irrigation Systems*** are hereby modified for this Project as follows:

SP-9 SECTION 103 – REMOVALS, EXCAVATION, BACKFILLING & RESTORATION

Section 103 of the Standard Specifications is hereby revised for this project as follows:

Subsection 103.16, Earth Backfill Material, shall include the following:

> Native material excavated on site shall be used for backfill on all pipelines and appurtenances above the bedding and haunching material unless the native material is too wet and/or otherwise unsuitable for backfill as determined by the Project Engineer or the Project Inspector. In such case, imported trench backfill material, or other approved material, shall be used and paid for per ton of material supplied, placed and compacted. The Contractor will be required to

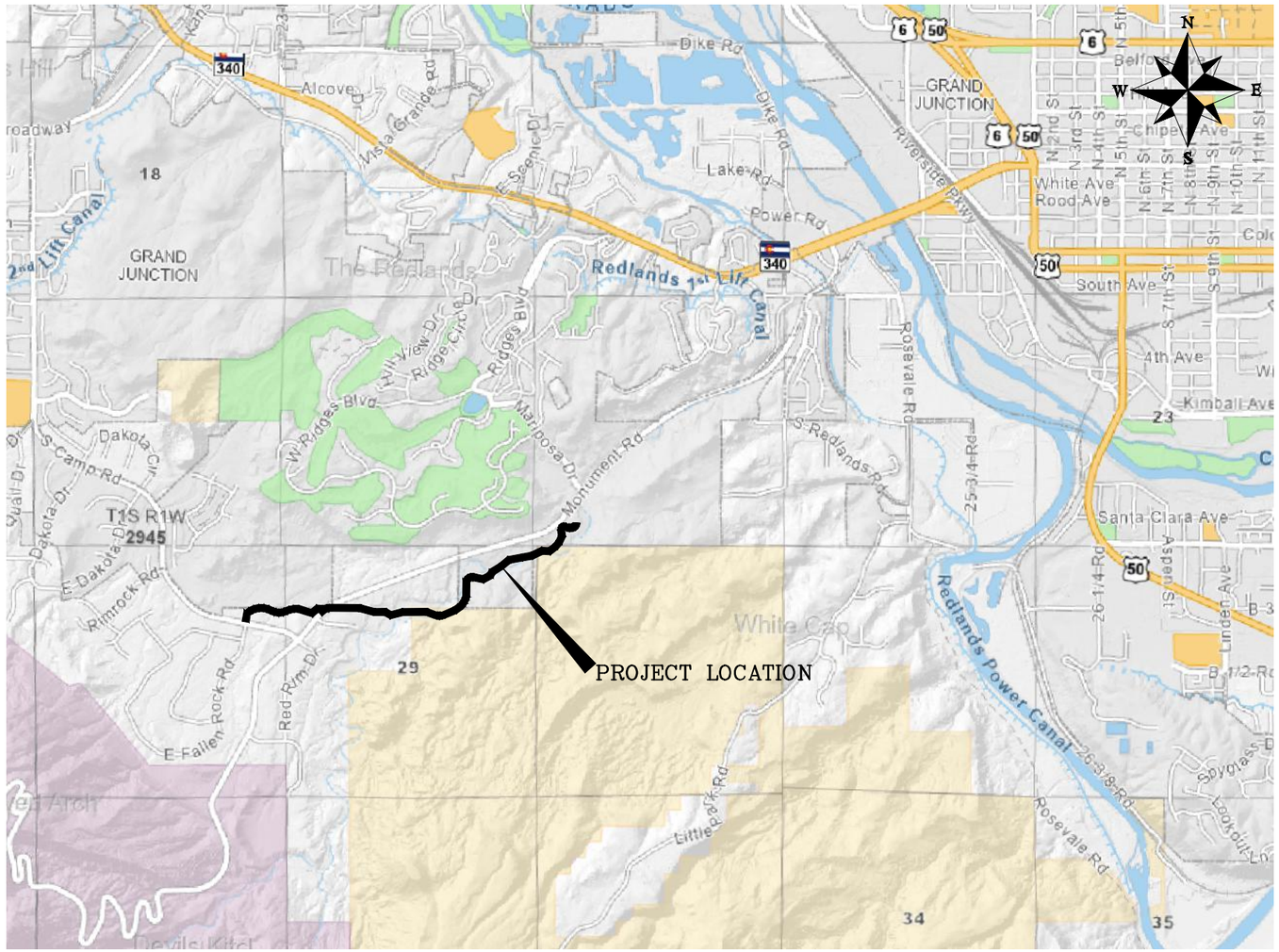
salvage useable materials from the project excavations and mix the useable material with imported trench backfill prior to placing backfill in the trench. The contract price for “Imported Trench Backfill” shall include the disposal of the unsuitable material.

PROJECT NO. G2208

CITY OF GRAND JUNCTION
MONUMENT CONNECT TRAIL PHASE 2

August 27, 2024

ADDENDUM 1 – August 27, 2024



VICINITY MAP

0 1500 3000

SHEET LIST

1	COVER SHEET
2	STANDARD ABBREVIATIONS LEGENDS AND SYMBOLS
3	CONTROL PLAN
4	SUMMARY OF APPROXIMATE QUANTITIES
5	SUMMARY OF EARTHWORK QUANTITIES
6	BOX CULVERT PLAN & PROFILE
7	WING WALL PLAN AND PROFILE
8	WING WALL PLAN AND PROFILE
9	RETAINING WALL PLAN AND PROFILE
10	RETAINING WALL PLAN AND PROFILE
11	PATH TYPICAL CROSS SECTIONS
12	POST FOUNDATION DETAIL
13	PLAN AND PROFILE KEY MAP
14-47	TRAIL PLAN AND PROFILES
48	PIPE TABLE
49	SINGLE TRACK PLAN
50-65	TRAIL CROSS SECTIONS (ADDENDUM 1)
66-84	STORM WATER MANAGEMENT PLAN

NOTE: NOTIFY AFFECTED UTILITY VENDOR 48 HOURS PRIOR TO EXCAVATIONS THAT WILL EXPOSE UTILITY LINES. THE COVER SHEET WILL HAVE A LISTING OF UTILITY VENDORS AND TELEPHONE NUMBERS.

	DESCRIPTION	DATE
REVISION 1	CROSS SECTIONS	– 8/26/2024
REVISION 2		–
REVISION 3		–
REVISION 4		–

811 Know what's below. Call before you dig.

CITY OF Grand Junction COLORADO

Public Works
Engineering Division

n:\EngProj\g2208 (monument connect phase iii)\60CAD\00DESIGN\COVER SHEET.dwg – PLOTTED 8/27/2024 7:39:55 AM

ABBREVIATIONS

AASHTO	AMERICAN ASSOCIATION OF STATE HIGHWAY & TRANSPORTATION OFFICIALS
ABC	AGGREGATE BASE COURSE
AC	ASBESTOS CEMENT
AP	ANGLE POINT
ASB	ANCHORED STRAW BALES
ASP	ALUMINIZED STEEL PIPE
ASTM	AMERICAN SOCIETY FOR TESTING MATERIALS
AWWA	AMERICAN WATER WORKS ASSOCIATION
BC	BACK OF CURB
BF	BUTTERFLY VALVE
BOW	BACK OF WALK
BCR	BEGIN CURB RETURN
BOT	BOTTOM
BSWMP	BETTER STORM WATER MANAGEMENT PRACTICES
CH	CHORD
CAP	CORRUGATED ALUMINUM PIPE
CDOT	COLORADO DEPARTMENT OF TRANSPORTATION
CI	CAST IRON
C,G,& SW	CURB, GUTTER & SIDEWALK
℄	CENTER LINE
CL	CLEAR
CMP	CORRUGATED METAL PIPE
CO	CLEAN OUT
COMB	COMBINATION (AS IN STORM SEWER AND SANITARY SEWER)
CONC	CONCRETE
CSM	CITY SURVEY MONUMENT
CSP	CORRUGATED STEEL PIPE
CU	COPPER
DI	DUCTILE IRON
DWY	DRIVEWAY
E	ELECTRIC
ECR	END CURB RETURN
EG	EDGE OF GUTTER
EL	ELEVATION
EP	EDGE OF PAVEMENT
EX	EXISTING
FB	FULL BODY
FC	FACE OF CURB
FG	FINISHED GRADE
℄	FLOW LINE
FL	FLANGE
FM	FORCE MAIN
FO	FIBER OPTICS
FS	FAR SIDE
FTG	FOOTING
G	GAS
GB	GRADE BREAK
GM	GAS METER
GV	GATE VALVE
HBP	HOT BITUMINOUS PAVEMENT
HDPE	HIGH DENSITY POLYETHYLENE
INV	INVERT
IRR	IRRIGATION
L	LENGTH OF ARC
LC	LONG CHORD
LF	LINEAR FEET
LL	LONG ARC
LS	SHORT ARC
LT	LEFT
MB	MAILBOX
MCSM	MESA COUNTY SURVEY MONUMENT
MH	MANHOLE
MJ	MECHANICAL JOINT
MW	MILL WRAP
N/A	NOT APPLICABLE
NIC	NOT IN CONTRACT
NOP	NO ONE PERSON
NRCP	NON-REINFORCED CONCRETE PIPE
NS	NEAR SIDE
NTS	NOT TO SCALE
OHP	OVERHEAD POWER
OHT	OVERHEAD TELEPHONE
PC	POINT OF CURVATURE
PCC	POINT OF COMPOUND CURVATURE
PE	POLYETHYLENE
PERF	PERFORATED
PI	POINT OF INTERSECTION
PIP	PLASTIC IRRIGATION PIPE
POC	POINT ON CURVE
POT	POINT ON TANGENT
PR	PROPOSED
PRC	POINT OF REVERSE CURVATURE
PT	POINT OF TANGENCY
PVC	POLYVINYL CHLORIDE
R	RADIUS
RCP	REINFORCED CONCRETE PIPE
REQ'D	REQUIRED
RG	RESTRAINED GLANDS
RL	LONG RADIUS
ROW	RIGHT OF WAY
RP	RADIUS POINT
RR	RAIL ROAD
RS	SHORT RADIUS
RT	RIGHT
S	SLOPE
SAN	SANITARY
SC	SHORT CHORD
SCD	STANDARD CONTRACT DOCUMENTS
SCH	SCHEDULE
SF	SILT FENCE
SL	SECTION LINE
SSRB	STANDARD SPECIFICATIONS FOR ROAD & BRIDGE CONSTRUCTION
SSUU	STANDARD SPECIFICATIONS FOR CONSTRUCTION OF UNDERGROUND UTILITIES
STA	STATION
STL	STEEL
STM	STORM
T	TELEPHONE
TAN	LENGTH OF TANGENT
TC	TOP OF CURB
TH	TEST HOLE
TV	TELEVISION
(TYP)	TYPICAL
UU	UNDERGROUND UTILITIES
VC	VERTICAL CURVE
VCP	VITRIFIED CLAY PIPE
VPC	VERTICAL POINT OF CURVATURE
VPCC	VERTICAL POINT OF COMPOUND CURVATURE
VPRC	VERTICAL POINT OF REVERSE CURVATURE
VPI	VERTICAL POINT OF INTERSECTION
VPT	VERTICAL POINT OF TANGENCY
W	WATER
Δ	DELTA ANGLE

LEGEND

BSWMP DRAINAGE BASIN BOUNDARY

BSWMP ANCHORED STRAW BALES — ASB ASB ASB ASB ASB ASB ASB

BSWMP SILT FENCE — SF SF SF SF SF SF SF

BUILDING

CONCRETE CURB AND GUTTER — 2" CURB AND GUTTER

7" C, G, & SW

CONCRETE CURB,GUTTER, & SIDEWALK

CONCRETE DITCH — CONCRETE

CONCRETE SIDEWALK — 4" SW

CULVERT — 18" RCP

EARTH DITCH — EARTH EARTH EARTH

EDGE OF GRAVEL

EDGE OF PAVEMENT

FENCE (HT & MATL NOTED) — 6' CHAINLINK

GUARD RAIL — R R R R R R

HATCHING: INDICATES ASPHALT REMOVAL

HATCHING: INDICATES CONCRETE REMOVAL

HATCHING: INDICATES STAGING AREA — ~STAGING AREA~

LINE (CENTER OF IMPROVEMENTS) — CENTERLINE

LINE (CITY LIMITS) — CITY LIMITS

LINE (CONTROL) — CONTROL LINE

LINE (EASEMENT)

LINE (MONUMENT/SECTION) — MONUMENT/SECTION LINE

LINE (PROPERTY)

LINE (RIGHT OF WAY)

MATCH LINE — MATCH LINE

PIPE (IRRIGATION) — 4" IRR

PIPE (SIPHON) — 4" SIPHON

PROPOSED CONCRETE CURB AND GUTTER

PROPOSED CONCRETE CURB,GUTTER,& SIDEWALK

PROPOSED CONCRETE SIDEWALK

PROPOSED "WET" UTILITIES (CONSTRUCTION NOTE WILL INDICATE TYPE, SIZE, AND MATERIAL OF NEW MAIN) — 8" PVC SANITARY SEWER

ALL PROPOSED FEATURES NOT SHOWN IN LEGEND WILL BE SHOWN THE SAME AS THEIR EXISTING COUNTERPART, BUT INDICATED BY BOLDER LINETYPE

RAIL ROAD

RETAINING WALL — 1' RETAINING WALL

STRIPING (CONTINUOUS WHITE) — WHITE

STRIPING (DASHED WHITE) — WHITE

STRIPING (CONTINUOUS YELLOW) — YELLOW

STRIPING (DASHED YELLOW) — YELLOW

TOP OF SLOPE — 4580

CONTOUR LINES (SHOWN BETWEEN TOP & TOE)

TOE OF SLOPE — 4570

TRAFFIC DETECTOR LOOP

UTILITY LINE (ABANDON) (THIS CASE A WATER LINE) — W (ABANDONED) 8" W

UTILITY LINE (CABLE TV) — TV TV

UTILITY LINE (ELECTRIC) — E E

UTILITY LINE (FIBER OPTIC) — FO QWEST FO

UTILITY LINE (GAS) — G 1 1/4" MW G

UTILITY LINE (HIGH VOLTAGE OVERHEAD POWER) — HVOHP

UTILITY LINE (OVERHEAD POWER) — OHP

UTILITY LINE (OVERHEAD TELEPHONE) — OHT

UTILITY LINE (SANITARY SEWER) — 8" SAN

UTILITY LINE (SANITARY SEWER FORCE MAIN) — 8" FM

UTILITY LINE (SANITARY SEWER SERVICE) — SS

UTILITY LINE (STORM SEWER) — 8" STM

UTILITY LINE (STORM SEWER, PERFORATED) — 6" PERF

UTILITY LINE (STORM/SANITARY SEWER SEWER COMBINATION) — 18" COMB

UTILITY LINE (TELEPHONE) — T T

UTILITY LINE (WATER) — W 8" W

SYMBOLS

BENCH MARK — A

CATCH BASIN

CLEAN OUT — SSCO

CURB STOP

FIRE HYDRANT

GUY WIRE ANCHOR

HEADGATE

IRRIGATION PUMP — IP

MAILBOX — MB

MANHOLE (ELECTRIC) — E

MANHOLE (GAS) — G

MANHOLE (SANITARY/STORM)

MANHOLE (TELEPHONE) — T

MANHOLE (TV) — TV

MANHOLE (WATER) — W

METER (GAS) — GM

METER (WATER)

PEDESTAL (TELEPHONE)

PEDESTAL (TV) — TV

PROPERTY PIN — PIN

PULL BOX

REDUCER FITTING

SIGN OR POST (SIGN TYPE NOTED) — STOP

SPRINKLER HEAD

STREET LIGHT

SURVEY MONUMENT (CITY) — CSM

SURVEY MONUMENT (TYPE NOTED) — MCSM

TEST HOLE — TH #1

TRAFFIC PAINT MARKING

TRAFFIC SIGNAL POLE AND MAST ARM — TS

UTILITY POLE

VALVE (GAS) — GV

VALVE (IRRIGATION) — IRR

VALVE (WATER)

VEGETATION (HEDGE OR BUSH)

VEGETATION (TREE STUMP)

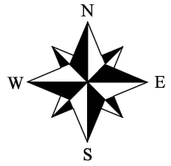
VEGETATION (TREE) (CALIPER SIZE NOTED) — 6"

WATER HYDRANT — WH

WEIR

YARD LIGHT

NORTH ARROW:



BAR SCALE:

GRAPHIC SCALE

10 0 20 60

(IN FEET)
1 inch = 20 ft.

DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES:

SEE PLAN FOR SCALE INFO

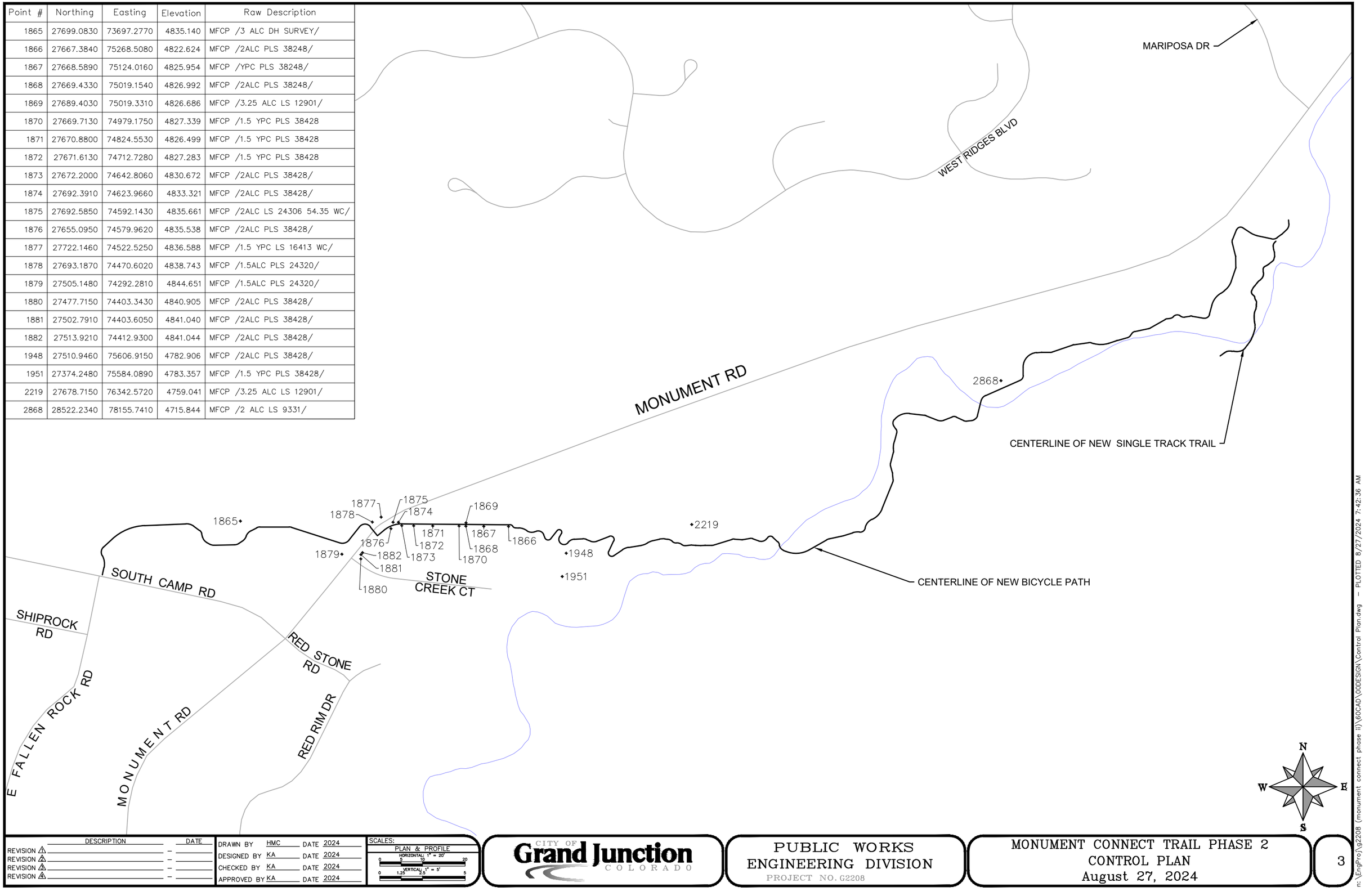
CITY OF Grand Junction COLORADO

PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
STANDARD ABBREVIATIONS LEGENDS AND SYMBOLS
August 27, 2024

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Point #	Northing	Easting	Elevation	Raw Description
1865	27699.0830	73697.2770	4835.140	MFCP /3 ALC DH SURVEY/
1866	27667.3840	75268.5080	4822.624	MFCP /2ALC PLS 38248/
1867	27668.5890	75124.0160	4825.954	MFCP /YPC PLS 38248/
1868	27669.4330	75019.1540	4826.992	MFCP /2ALC PLS 38248/
1869	27689.4030	75019.3310	4826.686	MFCP /3.25 ALC LS 12901/
1870	27669.7130	74979.1750	4827.339	MFCP /1.5 YPC PLS 38428
1871	27670.8800	74824.5530	4826.499	MFCP /1.5 YPC PLS 38428
1872	27671.6130	74712.7280	4827.283	MFCP /1.5 YPC PLS 38428
1873	27672.2000	74642.8060	4830.672	MFCP /2ALC PLS 38428/
1874	27692.3910	74623.9660	4833.321	MFCP /2ALC PLS 38428/
1875	27692.5850	74592.1430	4835.661	MFCP /2ALC LS 24306 54.35 WC/
1876	27655.0950	74579.9620	4835.538	MFCP /2ALC PLS 38428/
1877	27722.1460	74522.5250	4836.588	MFCP /1.5 YPC LS 16413 WC/
1878	27693.1870	74470.6020	4838.743	MFCP /1.5ALC PLS 24320/
1879	27505.1480	74292.2810	4844.651	MFCP /1.5ALC PLS 24320/
1880	27477.7150	74403.3430	4840.905	MFCP /2ALC PLS 38428/
1881	27502.7910	74403.6050	4841.040	MFCP /2ALC PLS 38428/
1882	27513.9210	74412.9300	4841.044	MFCP /2ALC PLS 38428/
1948	27510.9460	75606.9150	4782.906	MFCP /2ALC PLS 38428/
1951	27374.2480	75584.0890	4783.357	MFCP /1.5 YPC PLS 38428/
2219	27678.7150	76342.5720	4759.041	MFCP /3.25 ALC LS 12901/
2868	28522.2340	78155.7410	4715.844	MFCP /2 ALC LS 9331/



DESCRIPTION	DATE
REVISION 1	–
REVISION 2	–
REVISION 3	–
REVISION 4	–

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APPROVED BY KA DATE 2024

SCALES:
PLAN & PROFILE
HORIZONTAL: 1" = 20'
VERTICAL: 1" = 5'

CITY OF Grand Junction COLORADO

PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
CONTROL PLAN
August 27, 2024

3

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Item No.	CDOT, City Ref.	Description	Quantity	Units
1	102.10	Reinforced Concrete Pipe (RCP) (76-inch x 48-inch Horizontal Elliptical) (Includes bedding, material and install)	80.	Lin. Ft.
2	102.10	Reinforced Concrete Pipe (RCP) (48-inch) (Includes bedding, material and install)	24.	Lin. Ft.
3	102.10	Reinforced Concrete Pipe (RCP) (24-inch) (Includes bedding, material and install)	144.	Lin. Ft.
4	102.10	Reinforced Concrete Pipe (RCP) (18-inch) (Includes bedding, material and install)	72.	Lin. Ft.
5	102.10	Reinforced Concrete Pipe (RCP) (12-inch) (Includes bedding, material and install)	24.	Lin. Ft.
6	102.10	Reinforced Concrete Box Culvert (CBC) (9 ft wide by 4 ft high (Delivery from Rinker Materials, bedding and Install Only)	74.	Lin. Ft.
7	102.10	Reinforced Concrete Box Culvert (CBC) (9 ft wide by 5 ft high (Delivery from Rinker Materials, bedding and Install Only)	74.	Lin. Ft.
8	102.13	Area Inlet (Type D, H = 4 FT) (CDOT M-604-11)	1.	Each
9	201	Clearing and Grubbing	5.2	Acre
10	202	Removal of Tree (2" dia.)	6.	Each
11	203	Unclassified Excavation (Complete in Place)	2,700.	Cu. Yd.
12	208	Erosion Logs (12 inch)	1,210.	Lin. Ft.
13	208	Compacted Earthen Berms	2,790.	Lin. Ft.
14	208	Aggregate Bag	10.	Each
15	208	Concrete Washout Structure	2.	Each
16	208	Vehicle Track Pad	3.	Each
17	208	BMP Swale Berms	32.	Each
18	209	Dust Abatement	Lump	Sum
19	210	Reset Sign	1.	Each
20	210	Adjust existing metal post and rail fence at bike park	Lump	Sum
21	212	Seeding (Native) (Hydroseed) (Use Seed Mixes Specified Based on Property Owner - City or BLM)	4.5	Acre
22	216	Soil Retention Blanket (Coconut) (As Needed Where Disturbed Slope is Greater Than 3:1)	1,000.	Sq. Yd.
23	304	Granular Stabilization Material (Type B) (Crushed Rock) (As Needed in Excavations Where Unstable Bottom Exists)	20.	Ton
24	304	Aggregate Base Course (Class 6) (12 inch thick shoulders)	3,411.	Ton
25	304	Aggregate Base Course (Class 3) (subgrade stabilization as needed)	500.	Cu. Yd.
26	306	Reconditioning (12 inches deep)	20,253.	Sq. Yd.
27	306	Singletrack Trail (3-ft wide) (Complete in Place)	880.	Lin. Ft.
28	504	Precast Concrete Block Retaining Wall System (includes all necessary appurtenances, work, etc. to complete).	508.	FSF
29	504	Concrete Wall (Class D) per M and S Standard M-601-20 (Wall Design Height 3' to 7' per plan). (Includes associated headwall, and toe walls) Work shall include approximately 3750 lbs. Reinforcing Steel (Epoxy Coated), 75 sy Structural Concrete Coating (Exterior of wall), 35 cy Structural Backfill (Class 1) and any necessary appurtenances to complete work.	26.	Cu. Yd.
30	506	Riprap (D_{50} = 12 inch)	100.	Cu. Yd.
31	506	Landscape Boulders (Site Access Control)	112.	Each
32	514	Detectable Warning (Cast Iron, Wet Set) (2 ft x 2 ft)	15.	Each
33	601	Cast-in-Place Concrete Footings to support shade structures (1.5 ft diameter, 6 ft drilled into ground, including rebar per details)	24.	LF
34	608	Colored Concrete Sidewalk (6" Thick) to include 6" of Class 6 Aggregate Base Course	10,167.	Sq. Yd.
35	608	Colored Concrete Curb Ramp to include 6" of Class 6 Aggregate Base Course	150.	Sq. Yd.
36	608	Colored Concrete Pad for Benches (6 inch thick)(Includes 6 inch thick Class 6 ABC) (Location To Be Decided)	18.	Sq. Yd.
37	620	Portable Sanitary Facility	2.	
38	625	Construction Surveying (Includes As-Built Drawings)	Lump	Sum
39	626	Mobilization	Lump	Sum
40	630	Traffic Control (Complete in Place)	Lump	Sum

DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES: NO SCALE

CITY OF Grand Junction COLORADO

PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
SUMMARY OF APPROXIMATE QUANTITIES
August 27, 2024

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SUMMARY OF EARTHWORK QUANTITIES

INDEX Book	INDEX Page	INDEX Sheet		PROJECT TOTAL CU. YD.	PROJECT TOTAL *As Const.*
			203-00010 UNCLASSIFIED EXCAVATION (CIP)		
			ROADWAY (QUANTITY CALCULATED FROM CIVIL3D)		
			Monument Connect Trail - Phase 2	2694	
			ADDITION OF CONCRETE AND PAVING PRISM	0	
			REMOVAL OF PAVEMENT REMOVAL PAY ITEMS	0	
			SUBTOTAL:	2694	
			SUBTOTAL:	0	
			SUBTOTAL:	0	
			TOTAL FOR PAY QUANTITIES	**2694**	
			EMBANKMENT MATERIAL (CIP) (FOR INFORMATION ONLY)	**CU. YD.**	
			QUANTITY CALCULATED FROM CIVIL3D		
			Monument Connect Trail - Phase 2	7310	
			REMOVAL OF CONCRETE PAVING AND SHOULDER WITH BASE PRISM	-5110	
			TOTAL	**2200**	

INDEX Book	INDEX Page	INDEX Sheet	**ROADWAY QUANTITIES BALANCE (FOR INFORMATION ONLY)**	PROJECT TOTAL CU. YD.	PROJECT TOTAL *As Const.*
			Total Unclassified Excavation	2694	
			Total Embankment (net)	2200	
			EMBANKMENT TIMES FACTOR 1.2	2640	
			Import Material (Material to be Imported by Contractor)	-54	

NOTES:

TOP 4 INCHES OF ALL EMBANKMENT SHALL BE FREE OF DEBRIS AND ROCKS OR CLODS GREATER THAN 3 INCHES IN DIAMETER, AND SHALL BE SUITABLE AS NATIVE TOPSOIL.
ALL IMPORTED EMBANKMENT MATERIAL SHALL MEET A MINIMUM OF R-VALUE = 40.

DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

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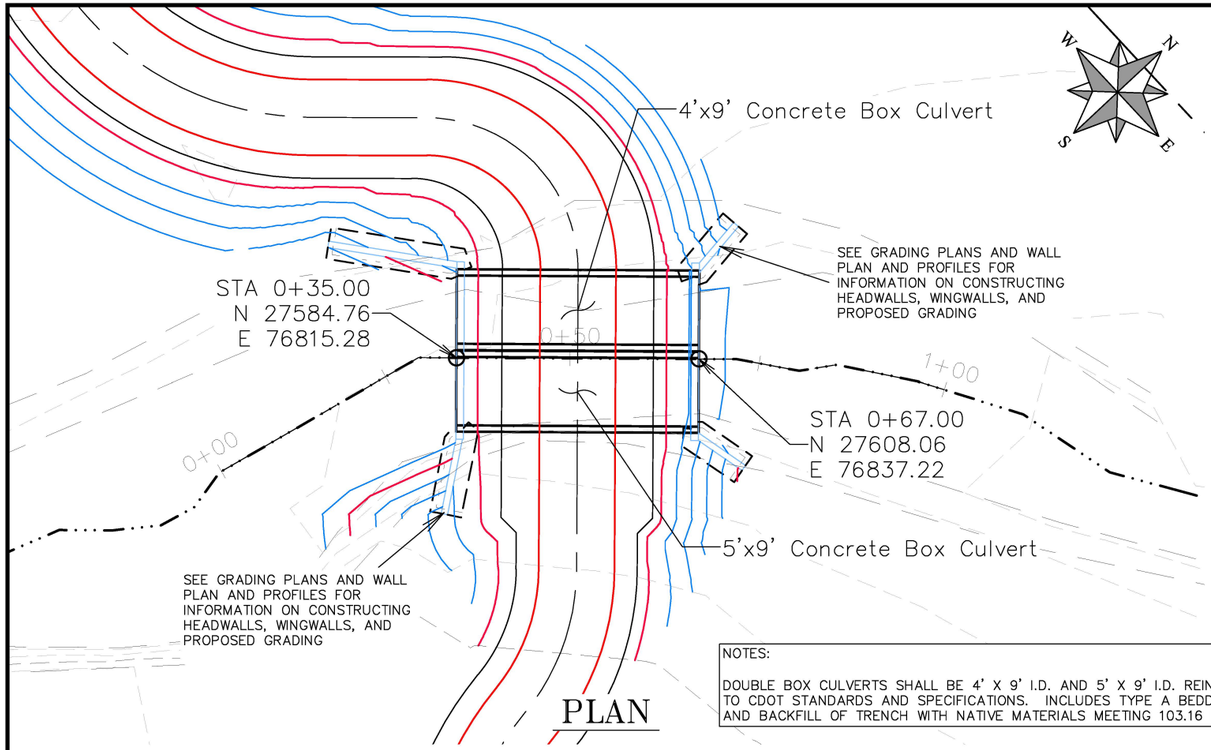
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CITY OF Grand Junction COLORADO

PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
SUMMARY OF EARTHWORK QUANTITIES
August 27, 2024

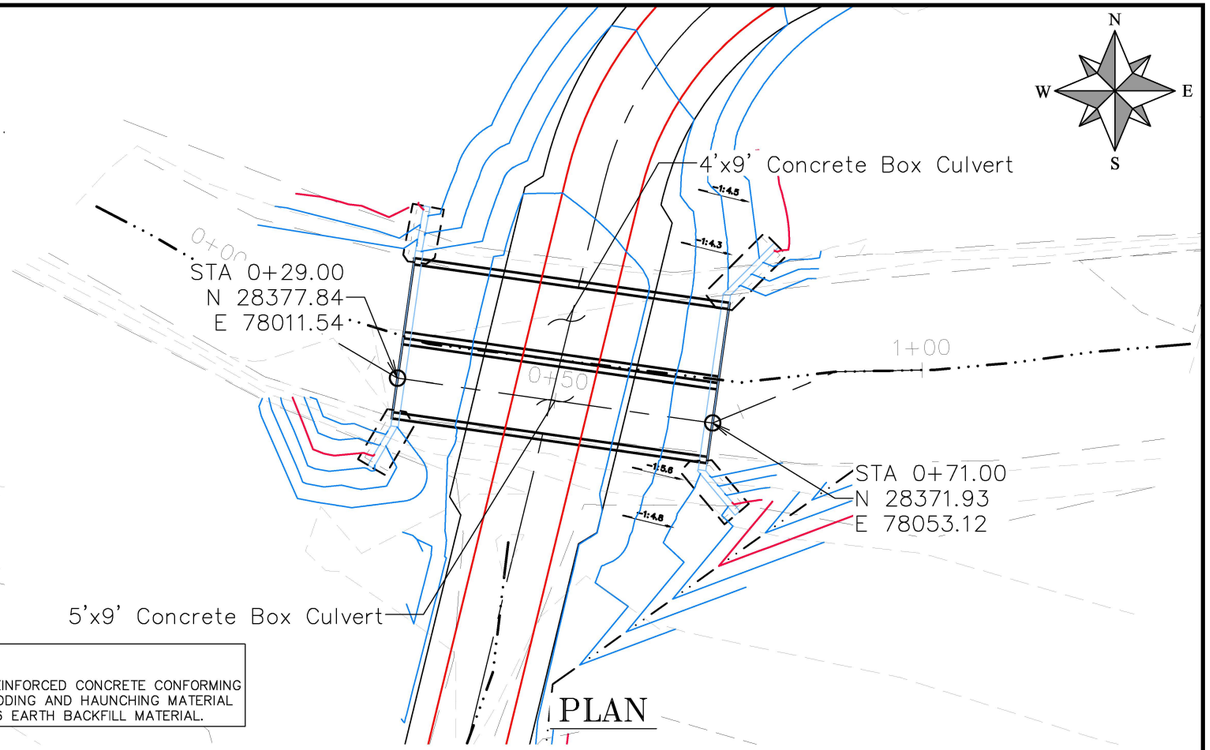
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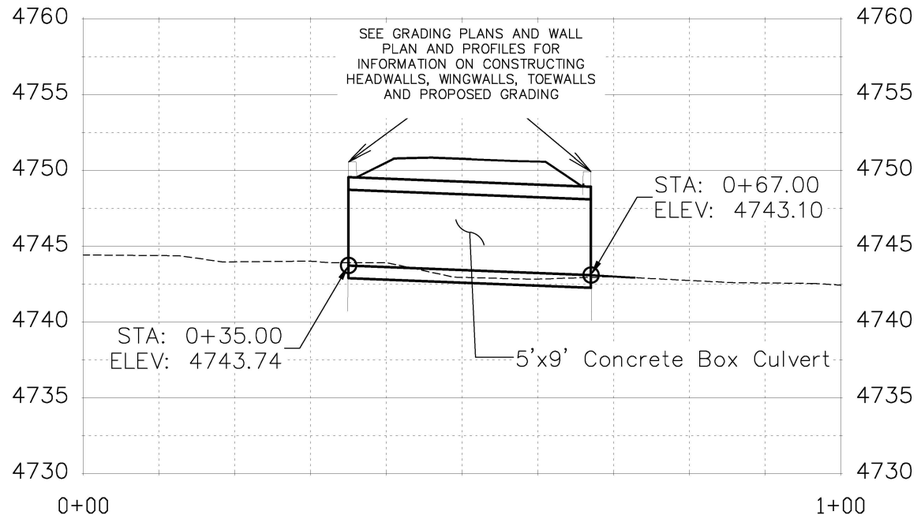
PLAN

NOTES:

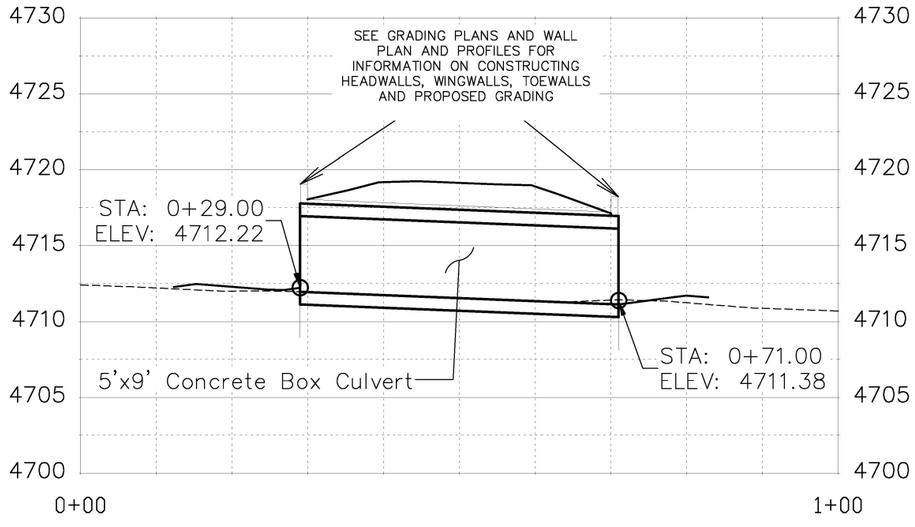
DOUBLE BOX CULVERTS SHALL BE 4' X 9' I.D. AND 5' X 9' I.D. REINFORCED CONCRETE CONFORMING TO CDOT STANDARDS AND SPECIFICATIONS. INCLUDES TYPE A BEDDING AND HAUNCHING MATERIAL AND BACKFILL OF TRENCH WITH NATIVE MATERIALS MEETING 103.16 EARTH BACKFILL MATERIAL.



PLAN



PROFILE



PROFILE

DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2024
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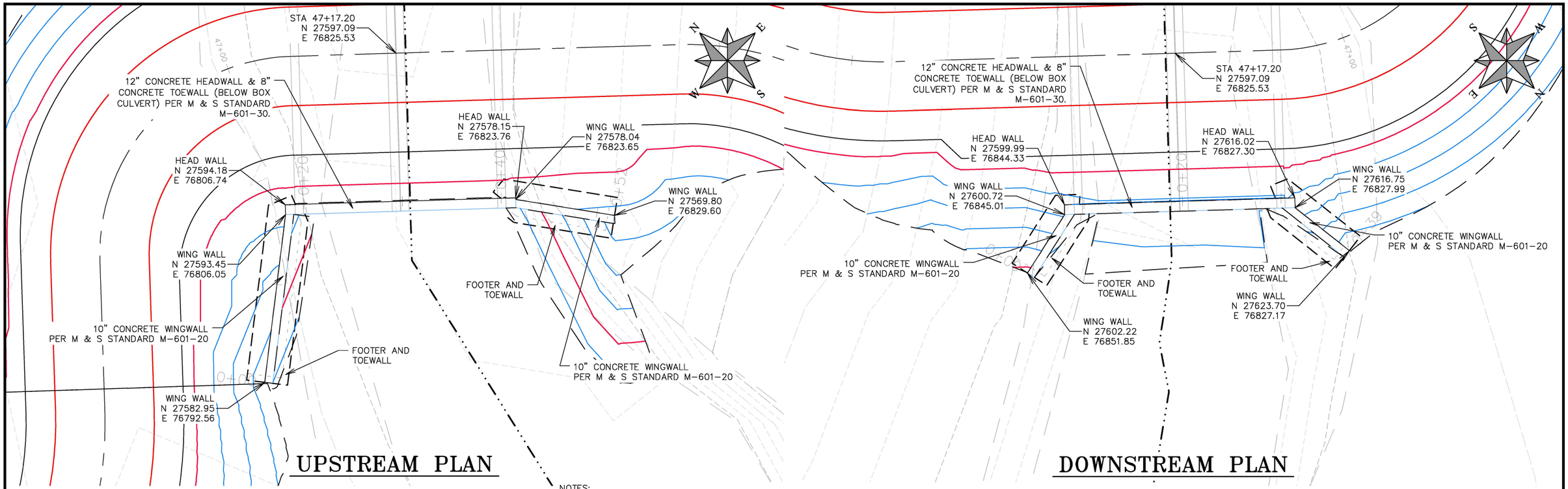
SCALES:
PLAN & PROFILE
HORIZONTAL: 1" = 20'
VERTICAL: 1" = 5'

CITY OF Grand Junction COLORADO

PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

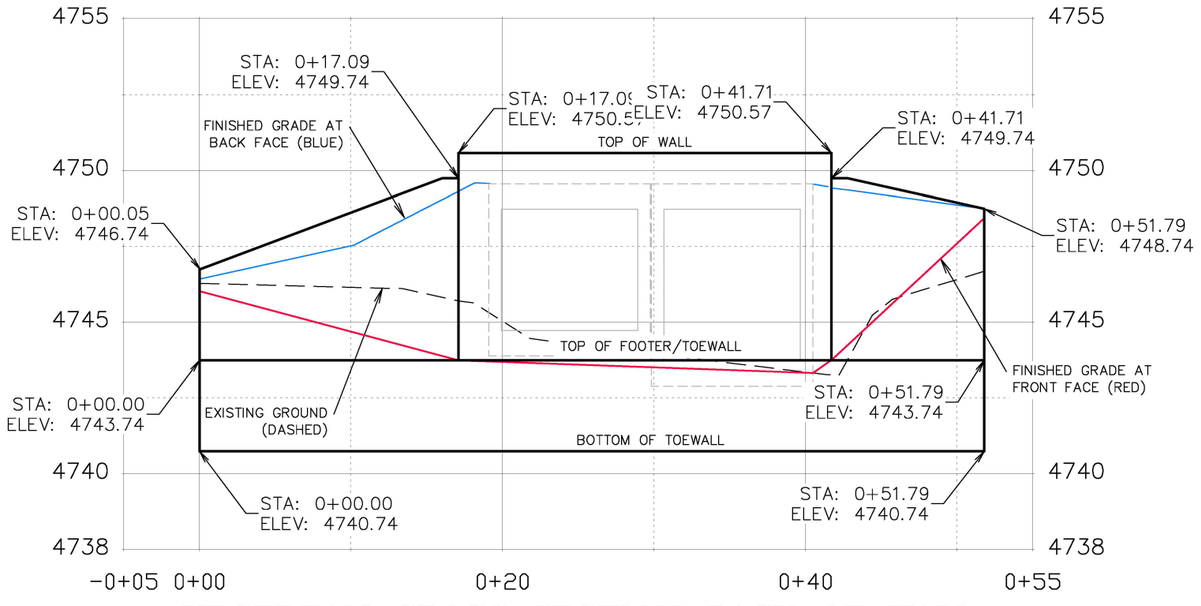
MONUMENT CONNECT TRAIL PHASE 2
BOX CULVERT PLAN & PROFILE
August 27, 2024

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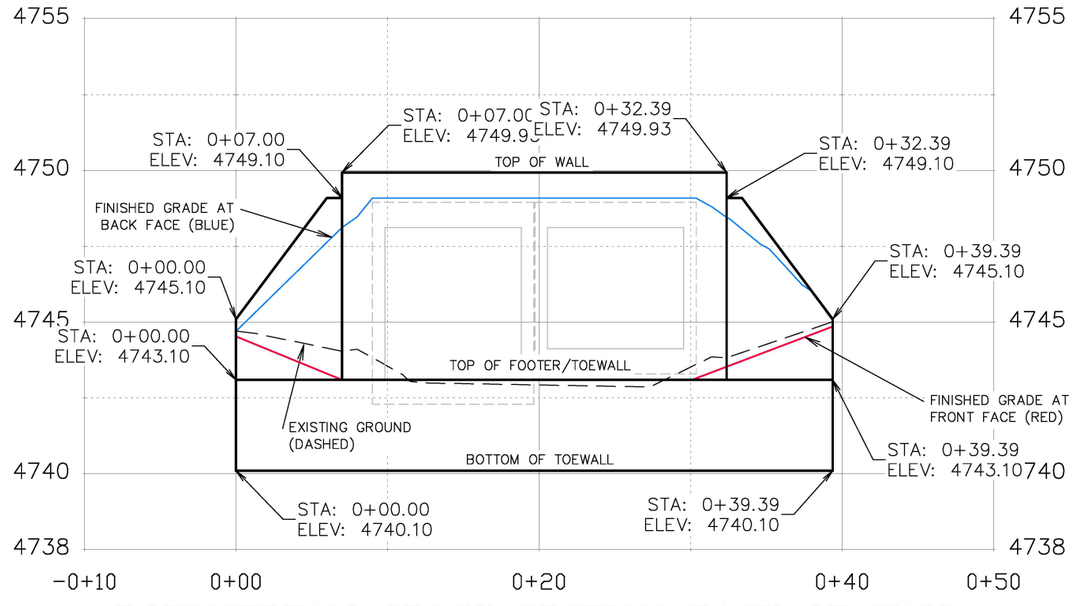


NOTES:

DOUBLE BOX CULVERTS SHALL BE 4' X 9' I.D. AND 5' X 9' I.D. REINFORCED CONCRETE CONFORMING TO CDOT STANDARDS AND SPECIFICATIONS. INCLUDES TYPE A BEDDING AND HAUNCHING MATERIAL AND BACKFILL OF TRENCH WITH NATIVE MATERIALS MEETING 103.16 EARTH BACKFILL MATERIAL.



UPSTREAM CROSS SECTION BACK OF WALL



DOWNSTREAM CROSS SECTION BACK OF WALL

DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

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SCALES:
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HORIZONTAL: 1" = 10'
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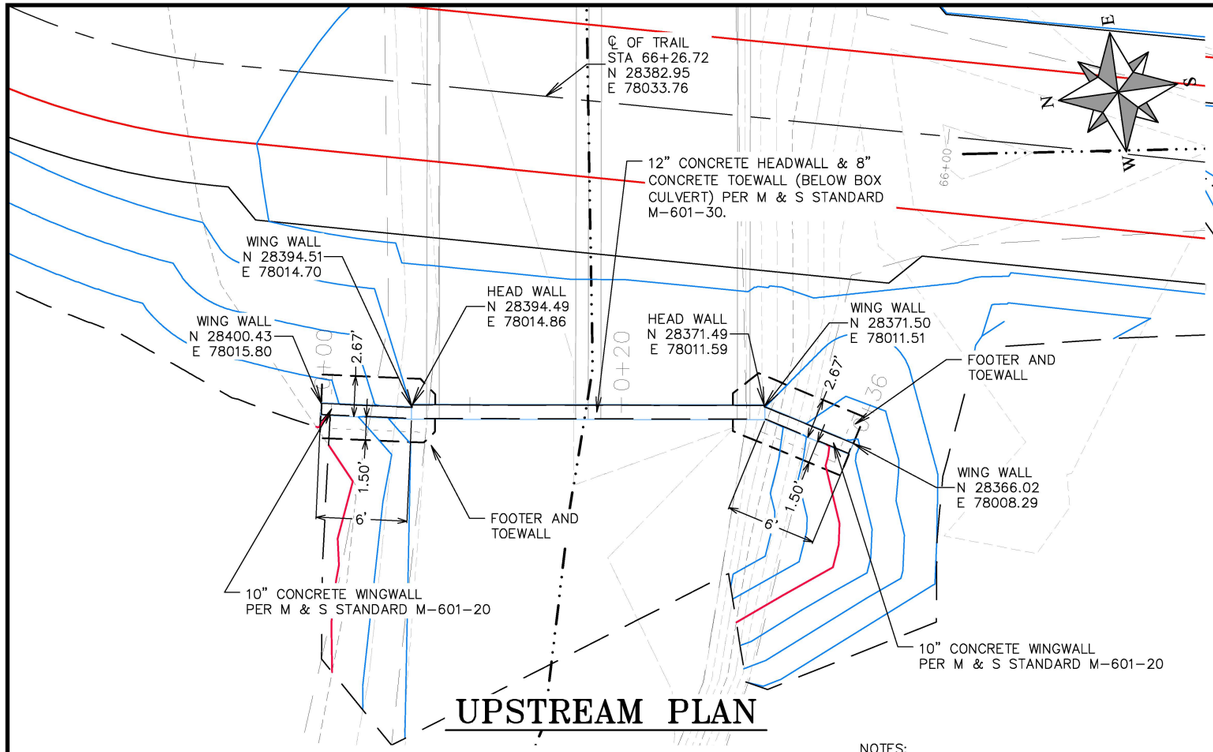
CITY OF Grand Junction COLORADO

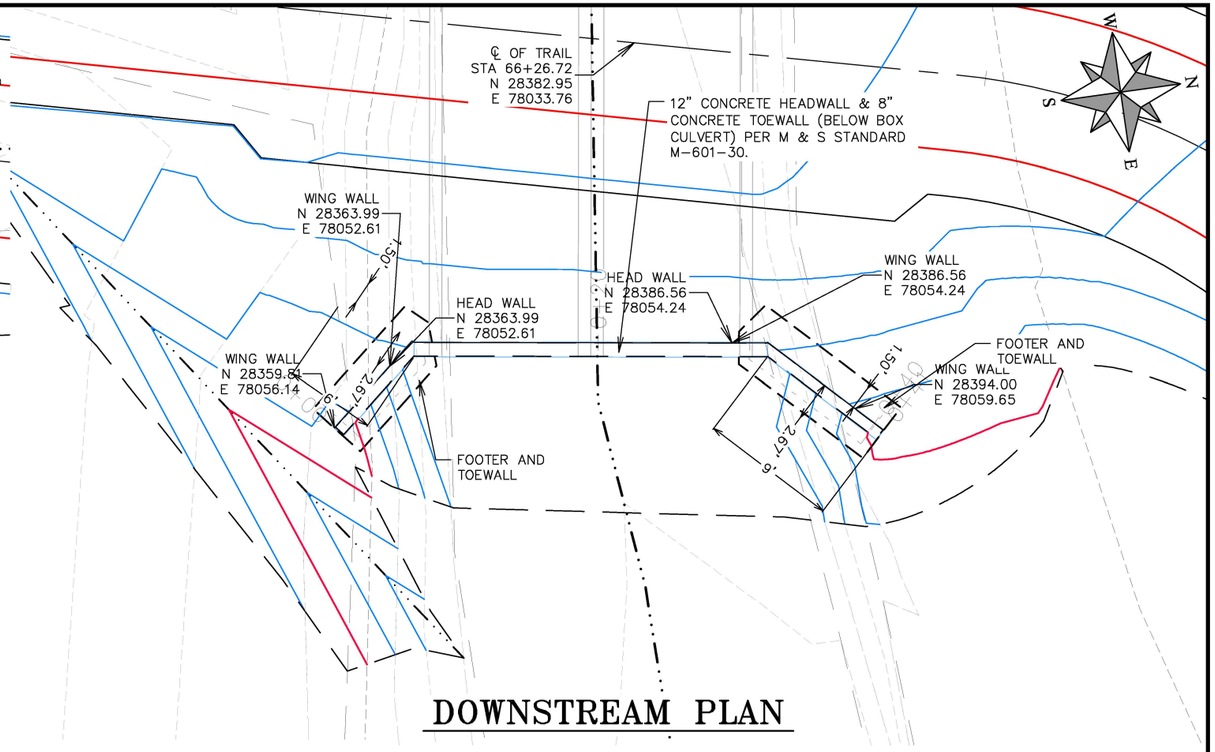
PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
WING WALL PLAN AND PROFILE
August 27, 2024

7

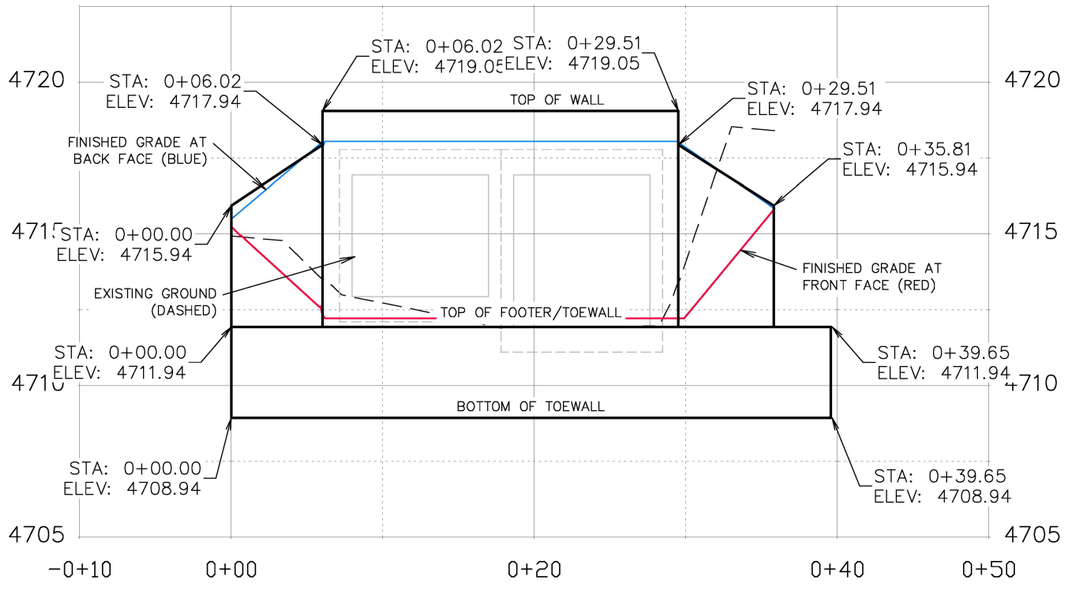
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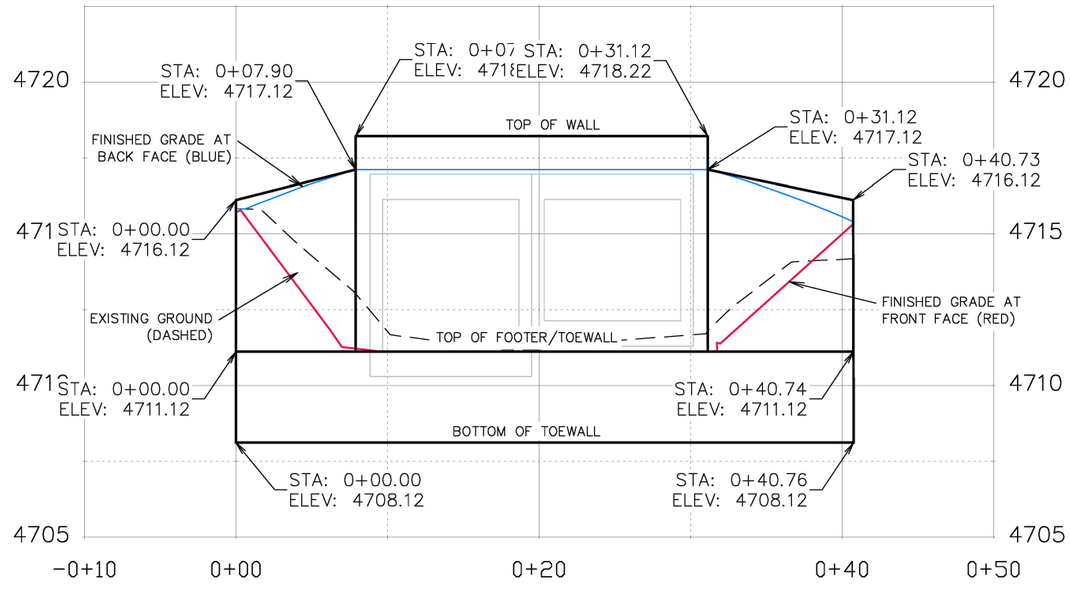


NOTES:

DOUBLE BOX CULVERTS SHALL BE 4' X 9' I.D. AND 5' X 9' I.D. REINFORCED CONCRETE CONFORMING TO CDOT STANDARDS AND SPECIFICATIONS. INCLUDES TYPE A BEDDING AND HAUNCHING MATERIAL AND BACKFILL OF TRENCH WITH NATIVE MATERIALS MEETING 103.16 EARTH BACKFILL MATERIAL.



UPSTREAM CROSS SECTION BACK OF WALL



DOWNSTREAM CROSS SECTION BACK OF WALL

DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

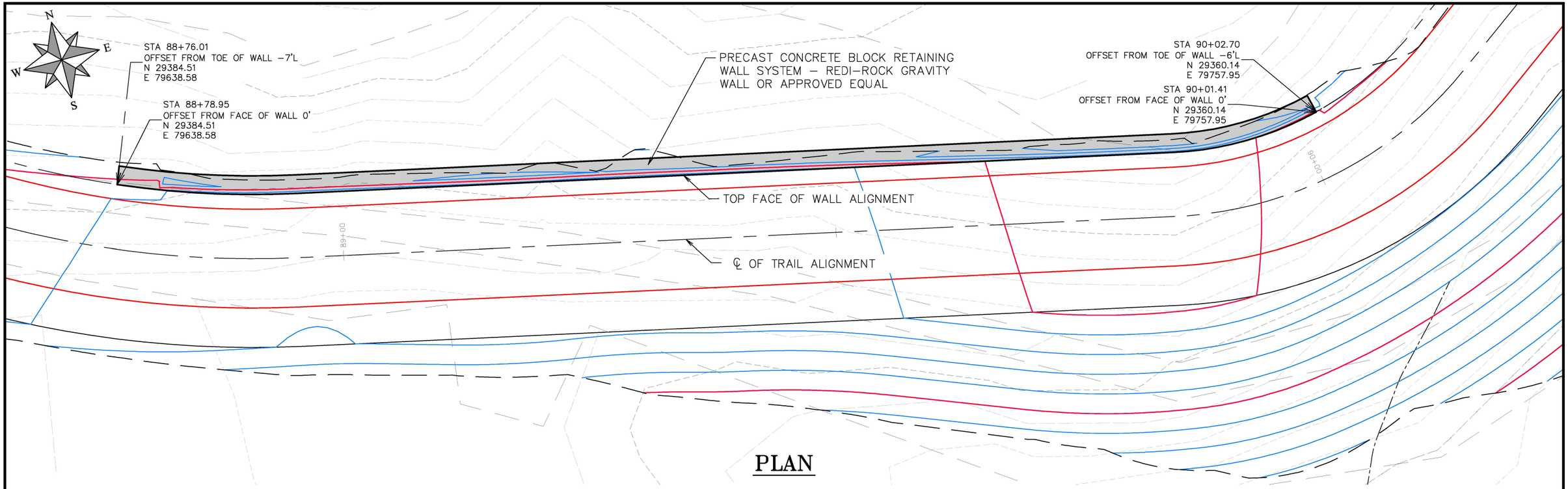
SCALES:
PLAN & PROFILE
HORIZONTAL: 1" = 10'
VERTICAL: 1" = 2.5'

CITY OF Grand Junction COLORADO

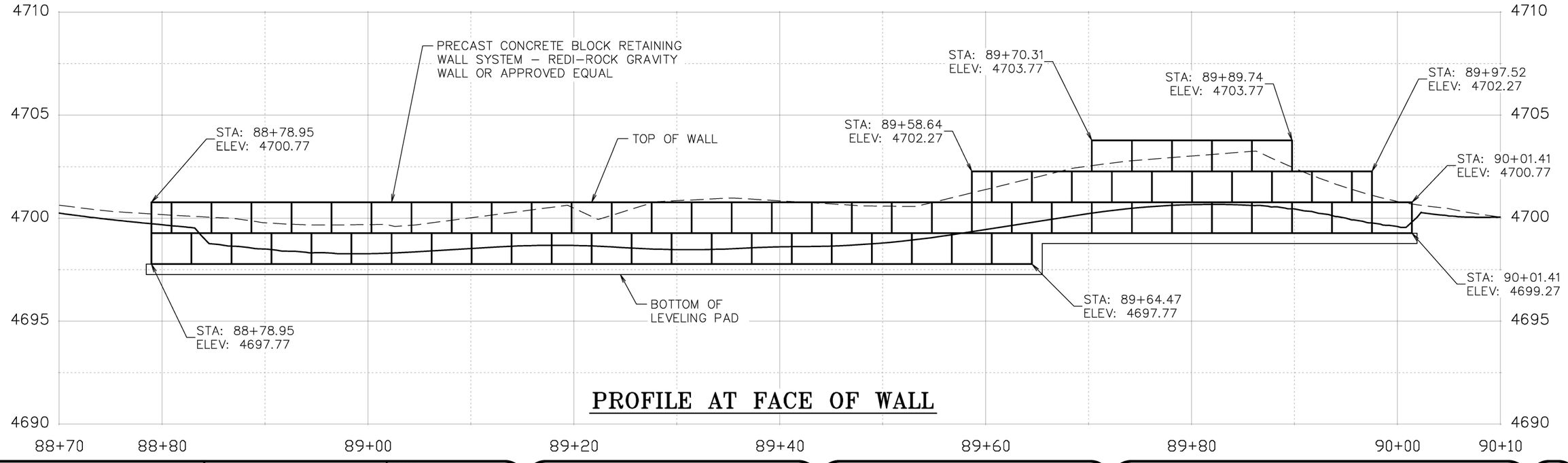
PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
WING WALL PLAN AND PROFILE
August 27, 2024

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PLAN



PROFILE AT FACE OF WALL

DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

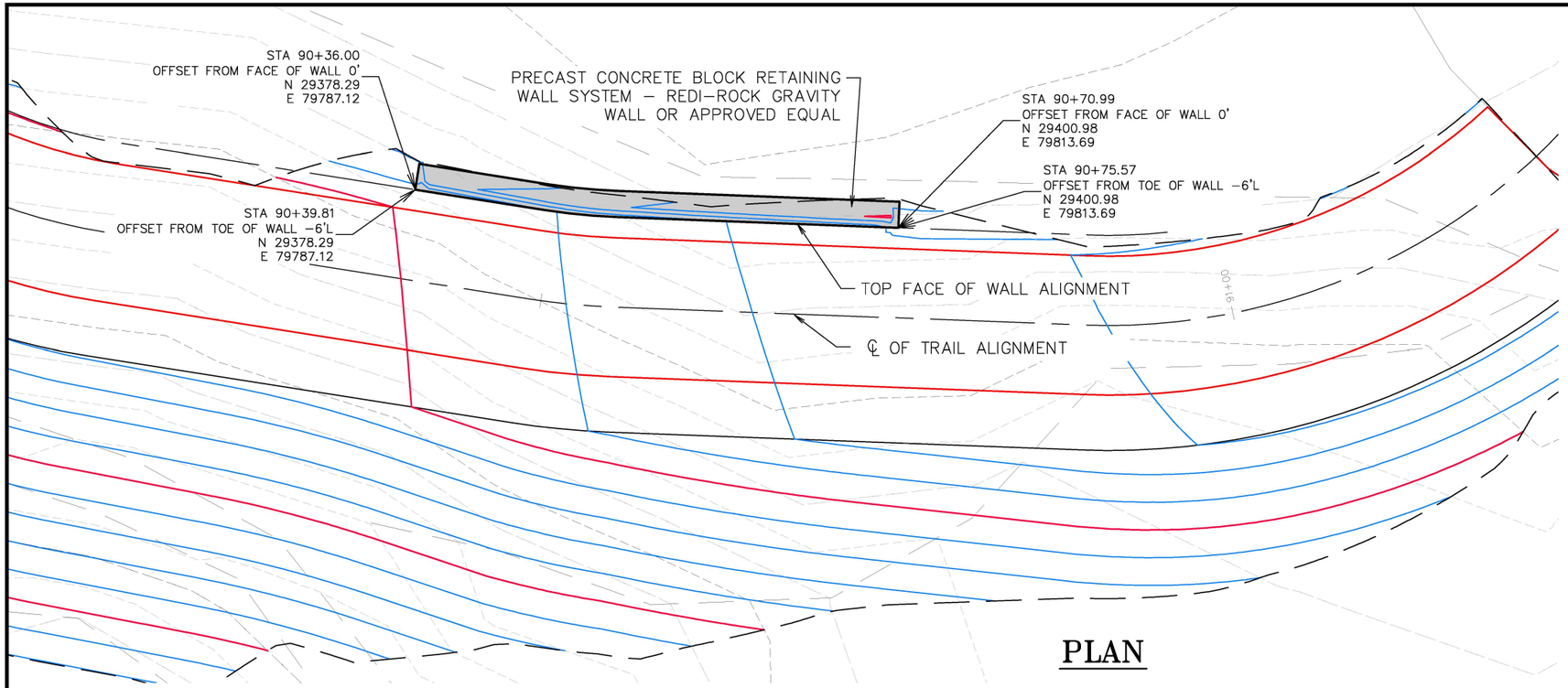
SCALES:
PLAN & PROFILE
HORIZONTAL: 1" = 10'
VERTICAL: 1" = 5'

CITY OF Grand Junction COLORADO

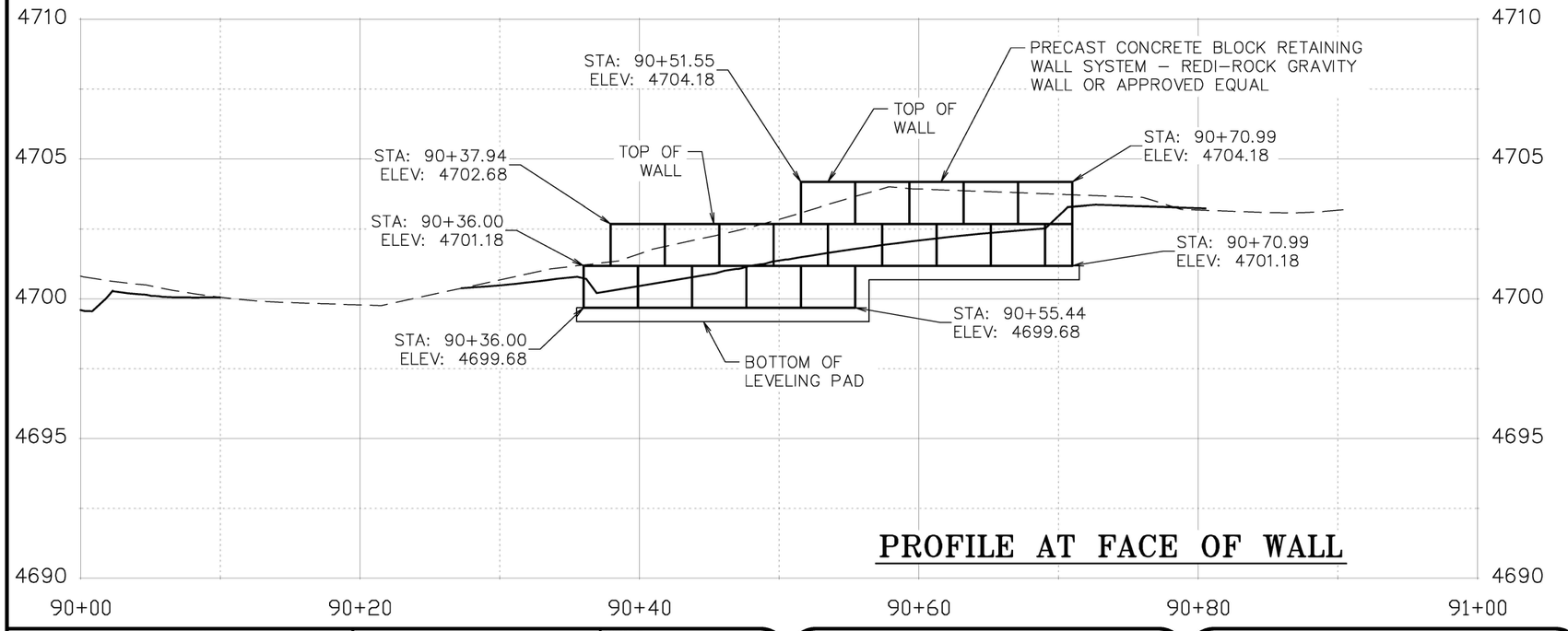
PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
RETAINING WALL PLAN AND PROFILE
August 27, 2024

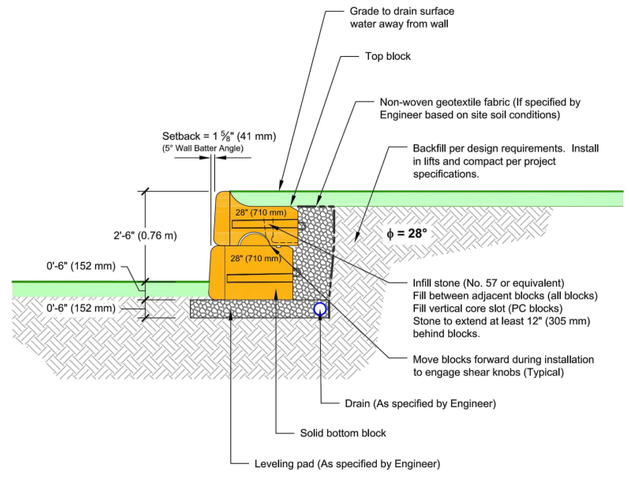
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PLAN



PROFILE AT FACE OF WALL



DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES:
PLAN & PROFILE
HORIZONTAL: 1" = 10'
VERTICAL: 1" = 5'

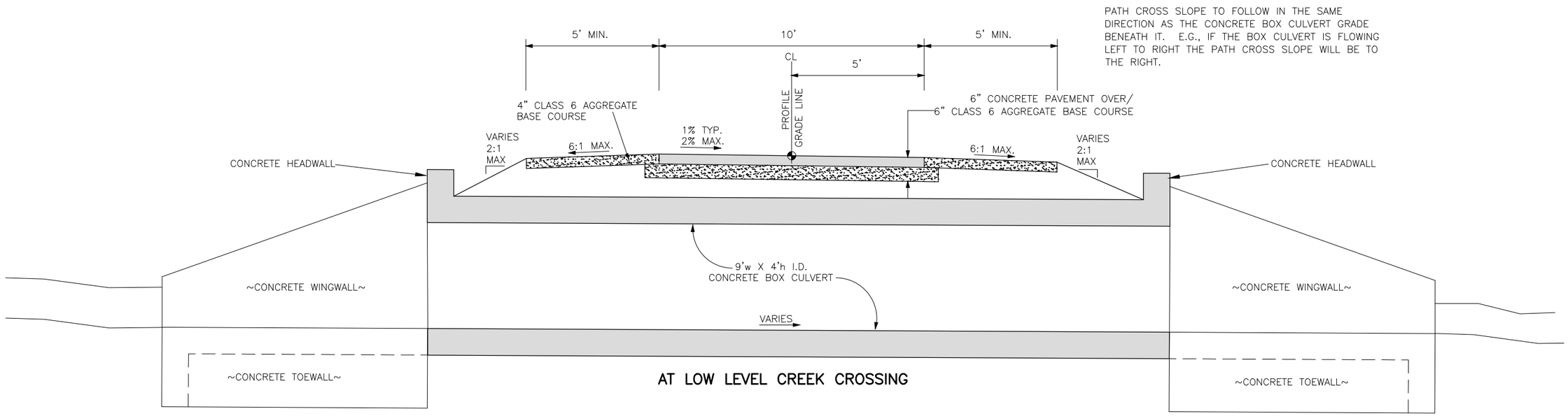
CITY OF Grand Junction COLORADO

PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
RETAINING WALL PLAN AND PROFILE
August 27, 2024

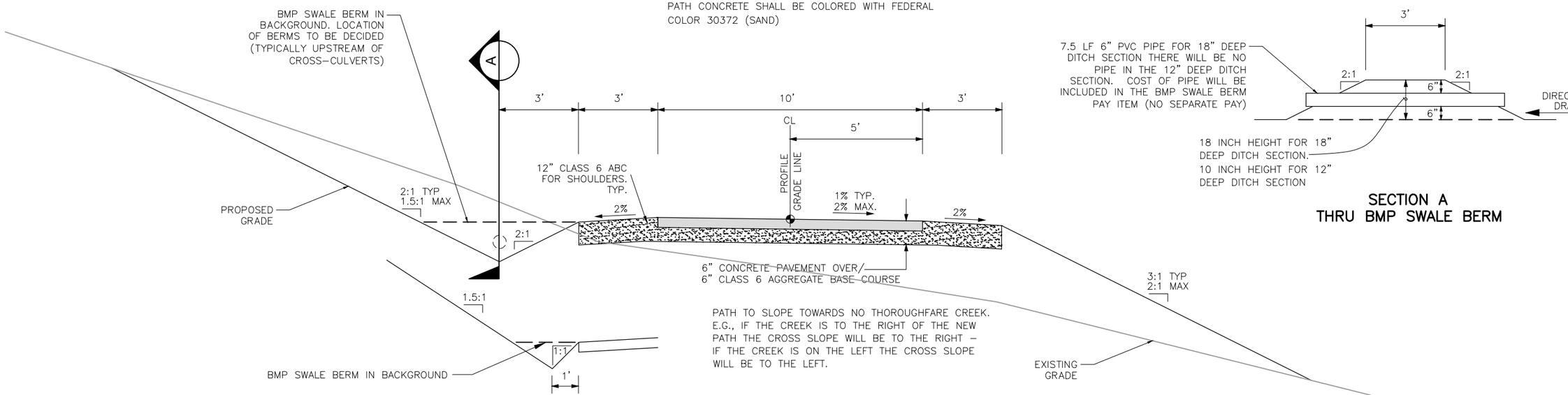
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PATH CROSS SLOPE TO FOLLOW IN THE SAME DIRECTION AS THE CONCRETE BOX CULVERT GRADE BENEATH IT. E.G., IF THE BOX CULVERT IS FLOWING LEFT TO RIGHT THE PATH CROSS SLOPE WILL BE TO THE RIGHT.



AT LOW LEVEL CREEK CROSSING

NOTE:
PATH CONCRETE SHALL BE COLORED WITH FEDERAL COLOR 30372 (SAND)



TYPCAL CROSS SECTION

SECTION A THRU BMP SWALE BERM

DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES:
PLAN & PROFILE
HORIZONTAL 0 10 20 40
VERTICAL 0 4 8

CITY OF Grand Junction COLORADO

PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
PATH TYPICAL CROSS SECTIONS
August 27, 2024

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FOUNDATION NOTES

1. CAISSON CONCRETE SHALL BE AIR ENTRAINED CLASS BZ IN ACCORDANCE WITH SECTION 503 OF THE STANDARD SPECIFICATIONS.
2. REINFORCING STEEL SHALL BE GRADE 60 IN ACCORDANCE WITH SECTION 602 OF THE STANDARD SPECIFICATIONS.
3. ALL REINFORCING STEEL SHALL BE NON COATED.
4. CAISSONS SHALL BE PLACED AGAINST UNDISTURBED EARTH.

DESIGN DATA

CAISSON CONCRETE:
CLASS BZ CONCRETE: f'c = 4,000 psi
REINFORCING STEEL: fy = 60,000 psi

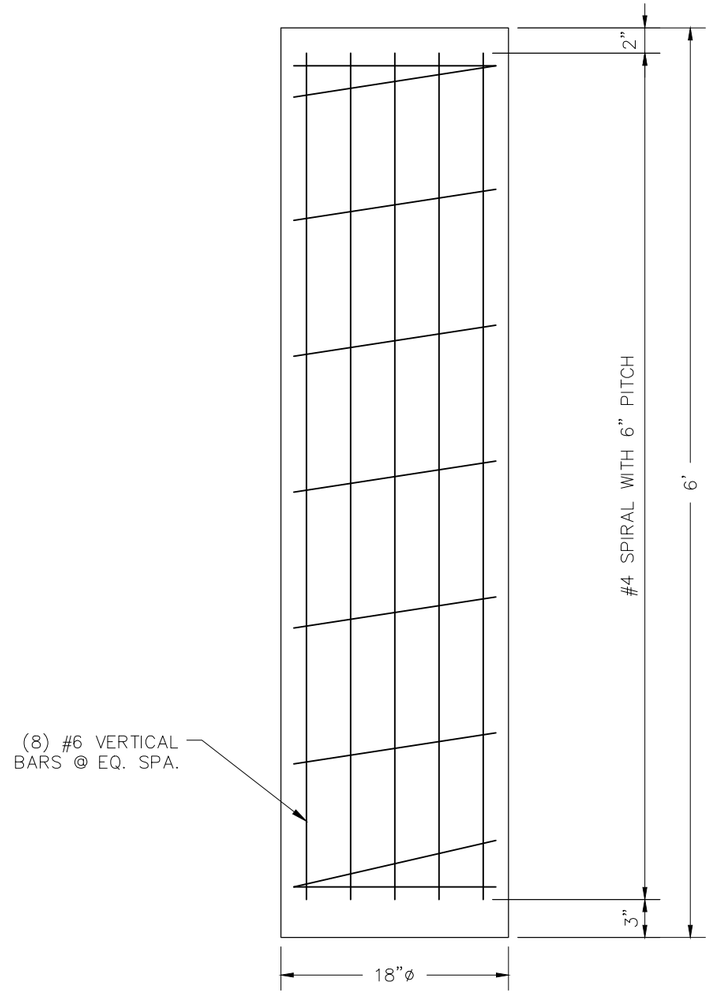
DESIGN WIND SPEED = 115 mph

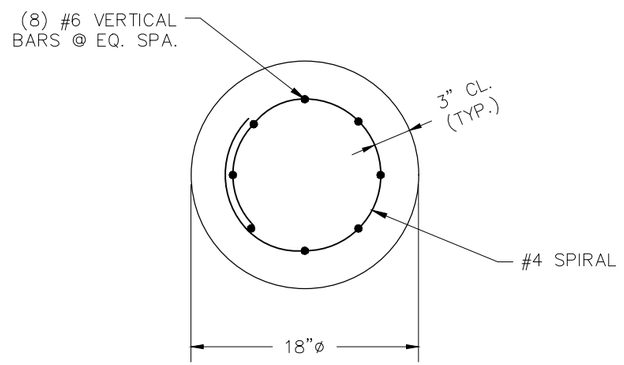
THE DESIGNS HEREIN ASSUME THAT THE FOUNDATIONS ARE INSTALLED WINTHIN THE NATIVE SOIL WITH THE FOLLOWING PARAMETERS:

MEDIUM DENSE COHESIONLESS SOIL:
SOIL DENSITY, γ = 110 pcf
SOIL COHESION = 750 psf
SF = 1.25 FOR FLEXURAL RESISTANCE

CONTACT THE ENGINEER IF ANY OF THE FOLLOWING SOIL CONDITIONS ARE ENCOUNTERED DURING DRILLING:

(A) THE SOIL HAS A HIGH ORGANIC CONTENT OR CONSISTS OF SATURATED SILT AND CLAY.
(B) THE SITE WON'T SUPPORT THE WEIGHT OF THE DRILLING RIG.
(C) THE FOUNDATION SOILS ARE NOT HOMOGENOUS.
(D) FIRM BEDROCK IS ENCOUNTERED.





DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES: NO SCALE

CITY OF Grand Junction COLORADO

PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
POST FOUNDATION DETAIL
August 27, 2024

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DESCRIPTION	DATE
REVISION 1	–
REVISION 2	–
REVISION 3	–
REVISION 4	–

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES:
PLAN
HORIZONTAL: 1" = 500'
0 125 250 500

CITY OF Grand Junction COLORADO

PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
PLAN AND PROFILE KEY MAP
August 27, 2024

13

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S CAMP RD

N 27504.70
E 72869.97
EL 61.12

1+16.50
N 27496.89
E 72886.63
EL 63.20

Pipe – (1)
SEE SHEET 48
FOR PIPE TABLE

N 27546.78
E 72880.57
EL 60.28

1+69.99
N 27545.89
E 72894.30
EL 60.87

DAYLIGHT LINE

2+39.05
N 27592.81
E 72944.98
EL 57.87

2945-301-13-001
CITY OF GRAND JUNCTION

N 27623.68
E 72968.17
EL 56.42

SHEET 15

N 27538.99
E 72900.68
EL 60.25

N 27502.47
E 72898.10
EL 61.14

0+44.33
N 27427.10
E 72897.36
EL 62.45

0+13.13
N 27396.57
E 72890.91
EL 63.40

CONSTRUCT BIKE
PATH PER TYPICAL
CROSS SECTION

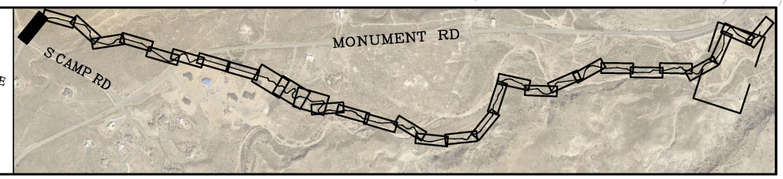
N 27586.49
E 72951.46
EL 57.34

MATCH LINE

N 27406.14
E 72903.05
EL 61.93

DETECTABLE
WARNING PLATES
(5 TOTAL)

KEYMAP
1" = 1500'



VPI=0+13.13
EL=4863.20

VPI=0+44.35
VPI EL=4862.45
LP=0+46.37
LP EL=4862.55
AD=4.67%
K=3.99
VC=18.61

VPC=
0+35.04
EL=4862.71

VPT=
0+53.65
EL=4862.62

VPI=1+08.03
VPI EL=4864.13
HP=1+04.10
HP EL=4863.62
AD=-12.35%
K=2.84
SSD=71.34
VC=35.07

VPC=
0+90.50
EL=4863.29

VPT=
1+25.57
VPI=1+25.57
EL=4862.81

VPI=2+47.61
VPI EL=4857.50
LP=2+65.75
LP EL=4857.05
AD=1.87%
K=19.45
VC=36.28

VPC=
VPI=2+29.47
EL=4858.29

VPT=
2+65.75
EL=4857.05

-2.21%
1.83%
-4.35%
-2.49%

FINISHED GRADE
EXISTING GROUND
12in Concrete Pipe

4890
4880
4870
4860
4850

0+00
1+00
2+00
3+00

DESCRIPTION	DATE
REVISION 1	–
REVISION 2	–
REVISION 3	–
REVISION 4	–

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES:
PLAN & PROFILE
HORIZONTAL: 1" = 20'
VERTICAL: 1" = 5'

CITY OF Grand Junction COLORADO

PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
TRAIL PLAN AND PROFILE
August 27, 2024

PP01

14

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2945-292-00-125
AZCARRAGA MARTIN

2945-301-13-001
CITY OF GRAND JUNCTION

4+50.87
N 27672.43
E 73136.53
EL 55.57

DAYLIGHT LINE

CONSTRUCT BIKE PATH PER TYPICAL CROSS SECTION

R300.00'

MATCH LINE

SHEET 14

SHEET 16

KEYMAP
1" = 1500'

MONUMENT RD

S CAMP RD

VPI=3+30.87
VPI EL=4855.43
LP=3+54.40
LP EL=4855.46
AD=2.60%
K=19.92
VC=51.79

VPC= 3+04.97 EL=4856.07

VPT= VPI=3+56.7 3+56.76 EL=4855 EL=4855.46

VPI=4+94.58
VPI EL=4855.62
HP=4+76.64
HP EL=4855.60
AD=-2.03%
K=19.95
SSD=347.25
VC=40.55

VPC= VPI=4+74.3 4+74.30 EL=4855 EL=4855.60

VPT= 5+14.85 EL=4855.23

VPI=5+78.45 EL=4853.91

FINISHED GRADE

EXISTING GROUND

0.12%

-2.08%

4880 4870 4860 4850 4840

3+00 4+00 5+00 6+00

DESCRIPTION	DATE
REVISION 1	–
REVISION 2	–
REVISION 3	–
REVISION 4	–

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES:
PLAN & PROFILE
HORIZONTAL 1" = 20'
VERTICAL 1" = 5'

CITY OF Grand Junction COLORADO

PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
TRAIL PLAN AND PROFILE
August 27, 2024

PP02

15

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2945-292-00-125
AZCARRAGA MARTIN

CONSTRUCT BIKE PATH PER TYPICAL CROSS SECTION

6+93.32
N 27682.34
E 73378.78
EL 51.82

7+40.18
N 27669.02
E 73422.80
EL 49.23

7+84.33
N 27643.07
E 73458.51
EL 46.63

8+05.29
N 27626.04
E 73469.99
EL 45.39

8+26.85
N 27605.11
E 73475.19
EL 44.12

8+68.72
N 27573.05
E 73500.18
EL 44.28

8+89.21
N 27563.41
E 73518.27
EL 44.69

9+14.80
N 27557.54
E 73542.89
EL 43.39

R70.00'
R30.00'
R50.00'
R50.00'

DAYLIGHT LINE

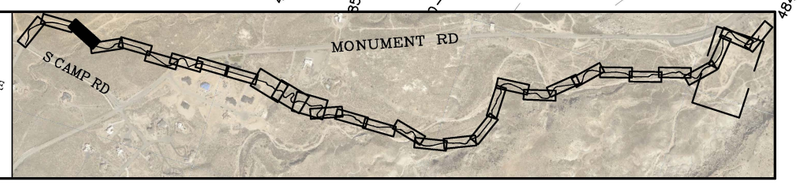
Pipe - (2)
SEE SHEET 48
FOR PIPE TABLE

SHEET 16
SHEET 17

MATCH LINE
MATCH LINE

2945-301-13-001
CITY OF GRAND JUNCTION

KEYMAP
1" = 1500'



VPI=6+97.92
VPI EL=4851.72
HP=6+90.25
HP EL=4851.87
AD=-3.98%
K=3.85
SSD=174.75
VC=15.33
VPC= 6+90.25
EL=4851.87
VPT= 7+05.58
EL=4851.27

VPI=8+37.10
VPI EL=4843.52
LP=8+44.16
LP EL=4843.78
AD=8.08%
K=3.94
VC=31.85
VPC= 8+21.17
EL=4844.45
VPT= 8+53.03
EL=4843.88

VPI=8+89.09
VPI EL=4844.69
HP=8+83.58
HP EL=4844.47
AD=-7.26%
K=3.96
SSD=105.90
VC=28.76
VPC= 8+74.71
EL=4844.37

EXISTING GROUND
FINISHED GRADE

-1.83%
-5.90%
2.23%

48in Concrete Pipe

4870
4860
4850
4840
4830

6+00
7+00
8+00
9+00

DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES:
PLAN & PROFILE
HORIZONTAL: 1" = 20'
VERTICAL: 1" = 5'

CITY OF Grand Junction COLORADO

PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
TRAIL PLAN AND PROFILE
August 27, 2024

PP03

16

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MATCH LINE

R50.00'

9+00

9+25

9+50

9+75

10+00

10+25

10+50

10+75

11+00

11+25

11+50

11+75

12+00

R40.00'

R60.00'

R50.00'

MATCH LINE

SHEET 16

SHEET 18

DAYLIGHT LINE

+89.21
563.41
518.27
44.69

9+14.80
N 27557.54
E 73542.89
EL 43.39

Pipe – (3)
SEE SHEET 48
FOR PIPE TABLE

10+33.71
N 27560.15
E 73661.77
EL 41.07

11+65.69
N 27641.38
E 73758.94
EL 40.91

12+04.09
N 27659.16
E 73792.97
EL 41.36

11+22.39
N 27609.76
E 73730.74
EL 42.06

10+85.01
N 27581.14
E 73707.64
EL 42.37

10+61.63
N 27568.32
E 73688.09
EL 42.62

CONSTRUCT BIKE
PATH PER TYPICAL
CROSS SECTION

2945-301-13-001
CITY OF GRAND JUNCTION

2945-292-01-001
CITY OF GRAND JUNCTION

KEYMAP
1" = 1500'

S CAMP RD

MONUMENT RD

4840

4841

4842

4843

4844

4845

4846

4847

VPT=
9+03.47
EL=4843.97

VPC=
9+41.49
EL=4841.38

VPI=9+65.59
VPI EL=4839.56
LP=9+71.13
LP EI=4840.26
AD=12.29%
K=3.92
VC=48.19

VPT=
9+89.68
EL=4840.70

VPC=
10+04.62
EL=4841.40

VPI=10+13.62
VPI EL=4841.83
HP=10+13.94
HP EI=4841.62
AD=–9.07%
K=1.98
SSD=82.27
VC=17.99

VPC=
10+22.61
EL=4841.43

VPI=10+32.38
VPI EL=4841.00
LP=10+31.28
LP EI=4841.24
AD=9.86%
K=1.98
VC=19.53

VPT=
10+42.14
EL=4841.54

VPC=
10+59.84
EL=4842.52

VPI=10+70.74
VPI EL=4843.12
HP=10+70.69
HP EI=4842.82
AD=–11.03%
K=1.98
SSD=71.17
VC=21.79

VPC=
10+81.63
EL=4842.52

VPI=10+90.92
VPI EL=4842.00
LP=10+92.58
LP EI=4842.22
AD=9.39%
K=1.98
VC=18.58

VPT=
11+00.20
EL=4842.36

VPI=11+08.45
VPI EL=4842.68
HP=11+07.84
HP EI=4842.51
AD=–8.31%
K=1.98
SSD=88.19
VC=16.49

VPT=
11+16.70
EL=4842.31

VPC=
11+45.95
EL=4840.99

VPI=11+51.54
VPI EL=4840.75
LP=11+54.80
LP EI=4840.80
AD=5.65%
K=1.98
VC=11.18

VPT=
11+57.13
EL=4840.81

–5.07%

–7.74%

4.74%

5.55%

–4.50%

1.16%

FINISHED GRADE

EXISTING GROUND

12in Concrete Pipe

4870
4860
4850
4840
4830

9+00
10+00
11+00
12+00

DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES:
PLAN & PROFILE
HORIZONTAL: 1" = 20'
VERTICAL: 1" = 5'

CITY OF Grand Junction COLORADO

PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
TRAIL PLAN AND PROFILE
August 27, 2024

PP04

17

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2945-292-00-125
AZCARRAGA MARTIN

2945-292-01-001
CITY OF GRAND JUNCTION

CONSTRUCT BIKE PATH PER TYPICAL CROSS SECTION

SHEET 17

SHEET 19

MATCH LINE

MATCH LINE

12+23.29
N 27663.71
E 73811.44
EL 41.58

12+04.09
N 27659.16
E 73792.97
EL 41.36

13+94.50
N 27663.96
E 73982.65
EL 48.63

14+02.28
N 27663.37
E 73990.40
EL 48.80

14+10.07
N 27661.58
E 73997.97
EL 48.96

R40.00'

R50.00'

KEYMAP
1" = 1500'

S CAMP RD

MONUMENT RD

VPI=12+45.30
VPI EL=4841.81
LP=12+28.25
LP EI=4841.64
AD=9.26%
K=3.68
VC=34.09

VPI=12+81.96
VPI EL=4845.57
HP=13+00.54
HP EI=4845.52
AD=-10.51%
K=3.73
SSD=82.87
VC=39.23

VPI=13+25.16
VPI EL=4845.48
LP=13+02.93
LP EI=4845.52
AD=4.79%
K=9.86
VC=47.17

VPI=14+37.69
VPI EL=4850.81
HP=14+30.29
HP EI=4849.34
AD=-11.15%
K=9.59
SSD=113.09
VC=106.95

VPI=15+01.71
VPI EL=4846.75
LP=15+12.26
LP EI=4846.33
AD=2.25%
K=9.39
VC=21.10

VPC= 12+28.25
EL=4841.64

VPT= 12+62.35
EL=4843.56

VPC= 13+01.58
EL=4845.52

VPT= 13+48.75
EL=4846.58

VPC= 13+84.21
EL=4848.24

VF,VPC= 14+91.16
EL=4847.41

4.67%

4870
4860
4850
4840
4830

12+00
13+00
14+00
15+00

DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES:
PLAN & PROFILE
HORIZONTAL: 1" = 20'
VERTICAL: 1" = 5'

CITY OF Grand Junction COLORADO

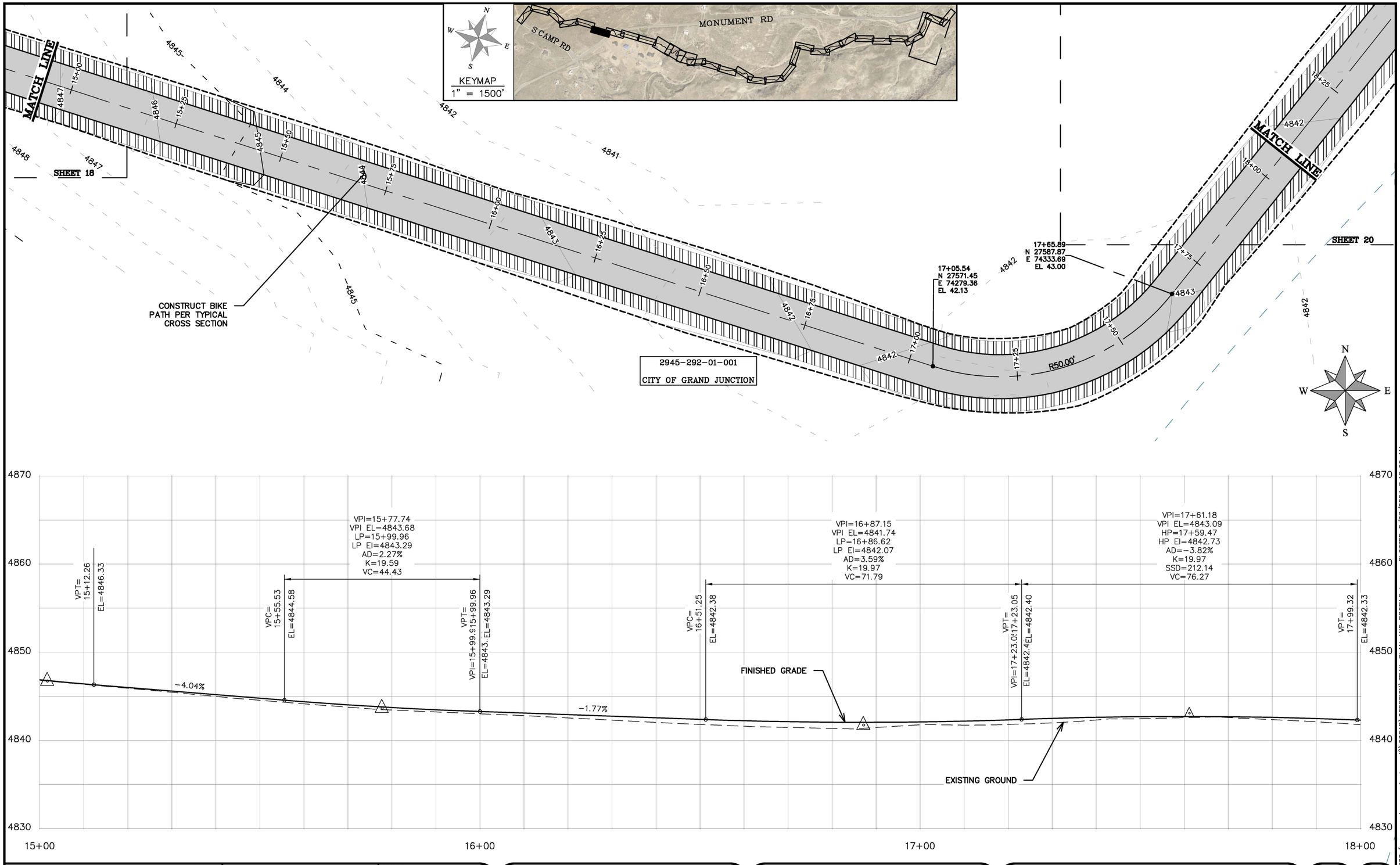
PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
TRAIL PLAN AND PROFILE
August 27, 2024

PP05

18

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DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES:
PLAN & PROFILE
HORIZONTAL: 1" = 20'
VERTICAL: 1" = 5'

CITY OF Grand Junction COLORADO

PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
TRAIL PLAN AND PROFILE
August 27, 2024

PP06 | 19

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2945-292-01-001
CITY OF GRAND JUNCTION

Pipe – (4)
SEE SHEET 48
FOR PIPE TABLE

18+65.30
N 27665.55
E 74395.72
EL 41.01

CONSTRUCT BIKE PATH PER TYPICAL CROSS SECTION
SHEET 19

MATCH LINE

19+36.61
N 27665.90
E 74457.95
EL 39.36

DETECTABLE WARNING PLATES (5 TOTAL)

DETECTABLE WARNING PLATES (5 TOTAL)

MFCP /1.5ALC PLS 24320/
N 27693.1870
E 74470.60
EL 4838.74

MONUMENT RD

Pipe – (5)
SEE SHEET 48
FOR PIPE TABLE

21+10.81
N 27672.70
E 74588.39
EL 34.43

MATCH LINE

MFCP /2ALC PLS 38428/
N 27655.0950
E 74579.96
EL 4838.54

SHEET 21

20+53.39
N 27644.57
E 74538.67
EL 35.84

20+04.38
N 27613.42
E 74500.83
EL 37.34

2945-292-07-001
2310 STONE CREEK CT
MCLEROY ZACHARY KEITH

KEYMAP
1" = 1500'
MONUMENT RD
S CAMP RD

VPI=19+81.64
VPI EL=4837.57
LP=19+95.79
LP EL=4837.41
AD=2.88%
K=9.84
VC=28.30

VPI=20+05.34
VPI EL=4837.31
HP=19+95.79
HP EL=4837.41
AD=-1.93%
K=9.89
SSD=353.64
VC=19.11

VPI=20+89.11
VPI EL=4834.76
LP=20+96.53
LP EL=4834.64
AD=1.50%
K=9.87
VC=14.83

VPI=19+25.39
EL=4839.81

VPC=
19+67.49
EL=4838.13

VPT=
19+95.79
EL=4837.41

VPT=
20+14.90
EL=4837.02

VPC=
20+81.70
EL=4834.98

VPT=
20+96.53
EL=4834.64

FINISHED GRADE
EXISTING GROUND
-2.00%
-3.99%
-3.04%
12in Concrete Pipe
12in Concrete Pipe

4860
4850
4840
4830
4825
18+00
19+00
20+00
21+00

DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES:
PLAN & PROFILE
HORIZONTAL: 1" = 20'
VERTICAL: 1" = 5'

CITY OF Grand Junction COLORADO

PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
TRAIL PLAN AND PROFILE
August 27, 2024

PP07

20

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MFCP /2ALC LS 24306 54.35 WC/
N 27692.5850
E 74592.14
EL 4835.66

2945-292-00-127
CITY OF GRAND JUNCTION

MFCP /2ALC PLS 38428/
N 27692.3910
E 74623.97
EL 4833.32

21+68.23
N 27682.18
E 74644.73
EL 31.37

2945-292-00-045
2320 MONUMENT RD
ORACLE GALE LLC

CONSTRUCT BIKE PATH PER TYPICAL CROSS SECTION

SHEET 20

SHEET 22

21+10.81
N 27672.70
E 74588.39
EL 34.43

R165.00'

MATCH LINE

MATCH LINE

MFCP /2ALC PLS 38428/
N 27672.2000
E 74642.81
EL 4830.67

MFCP /1.5 YPC PLS 38428
N 27671.6130
E 74712.73
EL 4827.28

2945-292-07-002
2312 STONE CREEK CT
INGERSOLL ERIC

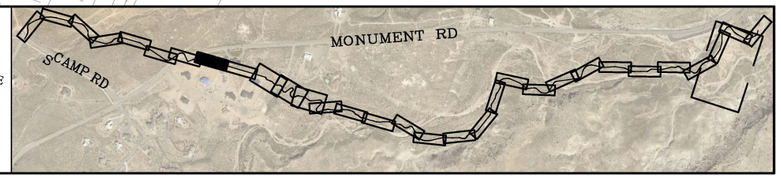
MFCP /2ALC PLS 38428/
N 27655.0950
E 74579.96
EL 4835.54

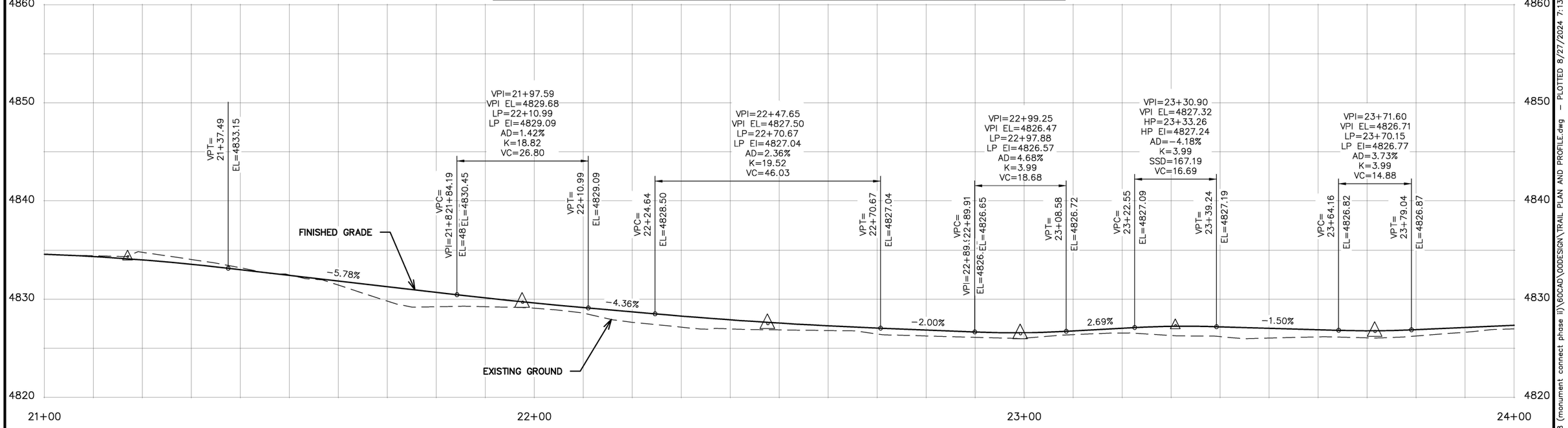
MFCP /1.5 YPC PLS 38428
N 27670.8800
E 74824.55
EL 4826.50

2945-292-07-001
2310 STONE CREEK CT
MCLEROY ZACHARY KEITH

2945-292-07-003
2314 STONE CREEK CT
JOHNSON JOSHUA

KEYMAP
1" = 1500'





DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES:
PLAN & PROFILE
HORIZONTAL 1" = 20'
VERTICAL 1" = 5'

CITY OF Grand Junction COLORADO

PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
TRAIL PLAN AND PROFILE
August 27, 2024

PP08

21

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SHEET 21

MATCH LINE

2945-292-00-045
2320 MONUMENT RD
ORACLE GALE LLC

CONSTRUCT BIKE PATH PER TYPICAL CROSS SECTION

2945-292-00-112
2332 MONUMENT RD
HUNDTOFT THOMAS J

MFCP /3.25 ALC LS 12901/
N 27689.4030
E 75019.33
EL 4826.69

SHEET 23

MATCH LINE

24+00 24+25 24+50 24+75 25+00 25+25 25+50 25+75 26+00 26+25 26+50 26+75 27+00

4826 4825

MFCP /1.5 YPC PLS 38428
N 27669.7130
E 74979.18
EL 4827.34

MFCP /2ALC PLS 38248/
N 27669.4330
E 75019.15
EL 4826.99

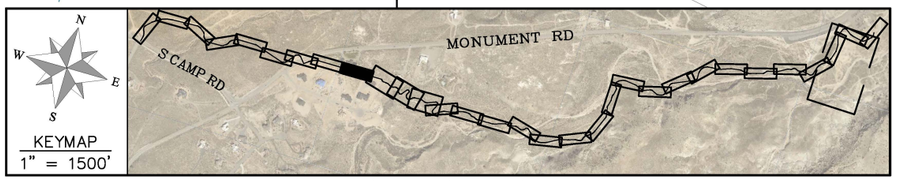
MFCP /YPC PLS 38248/
N 27668.5890
E 75124.02
EL 4825.95

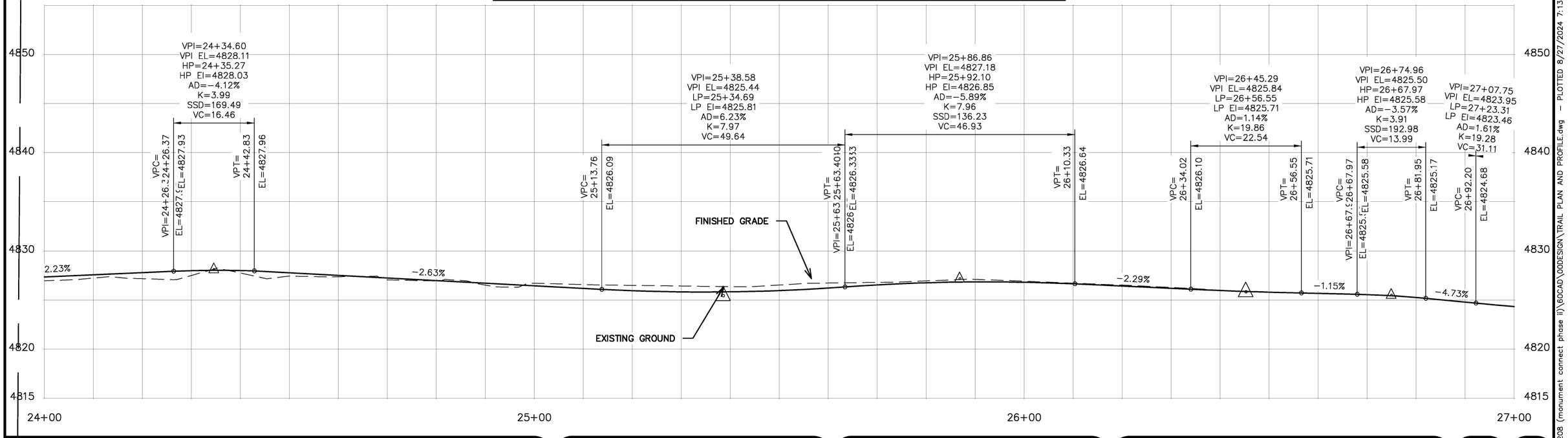
4825 4825 4825 4825

2945-292-07-003
2314 STONE CREEK CT
JOHNSON JOSHUA

2945-292-07-004
2316 STONE CREEK CT
TRUST AGREEMENT RICHARD N MIZE

2945-292-07-005
2318 STONE CREEK CT
GERMAN KENDAL P





DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES:
PLAN & PROFILE
HORIZONTAL: 1" = 20'
VERTICAL: 1" = 5'

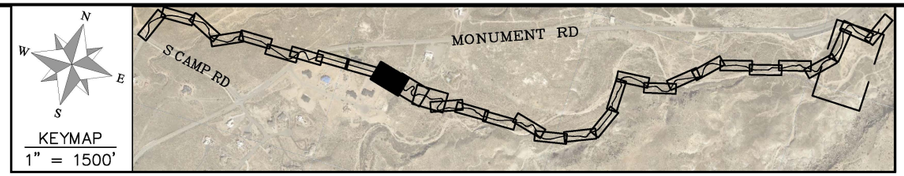
CITY OF Grand Junction COLORADO

PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
TRAIL PLAN AND PROFILE
August 27, 2024

PP09 | 22

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SHEET 25

SHEET 22

MATCH LINE

MATCH LINE

2945-292-00-112
2332 MONUMENT RD
HUNDTOFT THOMAS J

CONSTRUCT BIKE PATH PER TYPICAL CROSS SECTION

27+99.91
N 27677.64
E 75276.39
EL 21.90

28+10.00
N 27675.08
E 75286.04
EL 21.06

28+20.09
N 27668.17
E 75293.25
EL 20.22

28+59.81
N 27658.16
E 75329.64
EL 17.45

28+85.39
N 27653.43
E 75354.68
EL 15.85

AREA INLET
(TYPE D, H=4')
(CDOT M-604-11)

29+55.49
N 27635.47
E 75419.75
EL 10.84

29+68.03
N 27639.28
E 75431.69
EL 10.03

29+94.10
N 27637.67
E 75457.12
EL 8.08

R20.00'
R82.65'
R50.00'
R350.00'

28+29.97
N 27661.37
E 75300.28
EL 19.40

28+39.86
N 27658.71
E 75309.70
EL 19.11

29+10.97
N 27641.30
E 75377.08
EL 13.77

29+33.23
N 27633.56
E 75397.76
EL 12.40

MFCP /2ALC PLS 38248/
N 27667.3840
E 75268.51
EL 4822.62

Pipe - (6)
SEE SHEET 48
FOR PIPE TABLE

2945-292-07-005
2318 STONE CREEK CT
GERMAN KENDAL P

2945-292-06-002
2312 MONUMENT RD
CITY OF GRAND JUNCTION

2945-292-07-006
2320 STONE CREEK CT
ZAMAN SHAHREAR

DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES:
PLAN
HORIZONTAL 1" = 20'
0 5 10 20

CITY OF Grand Junction COLORADO

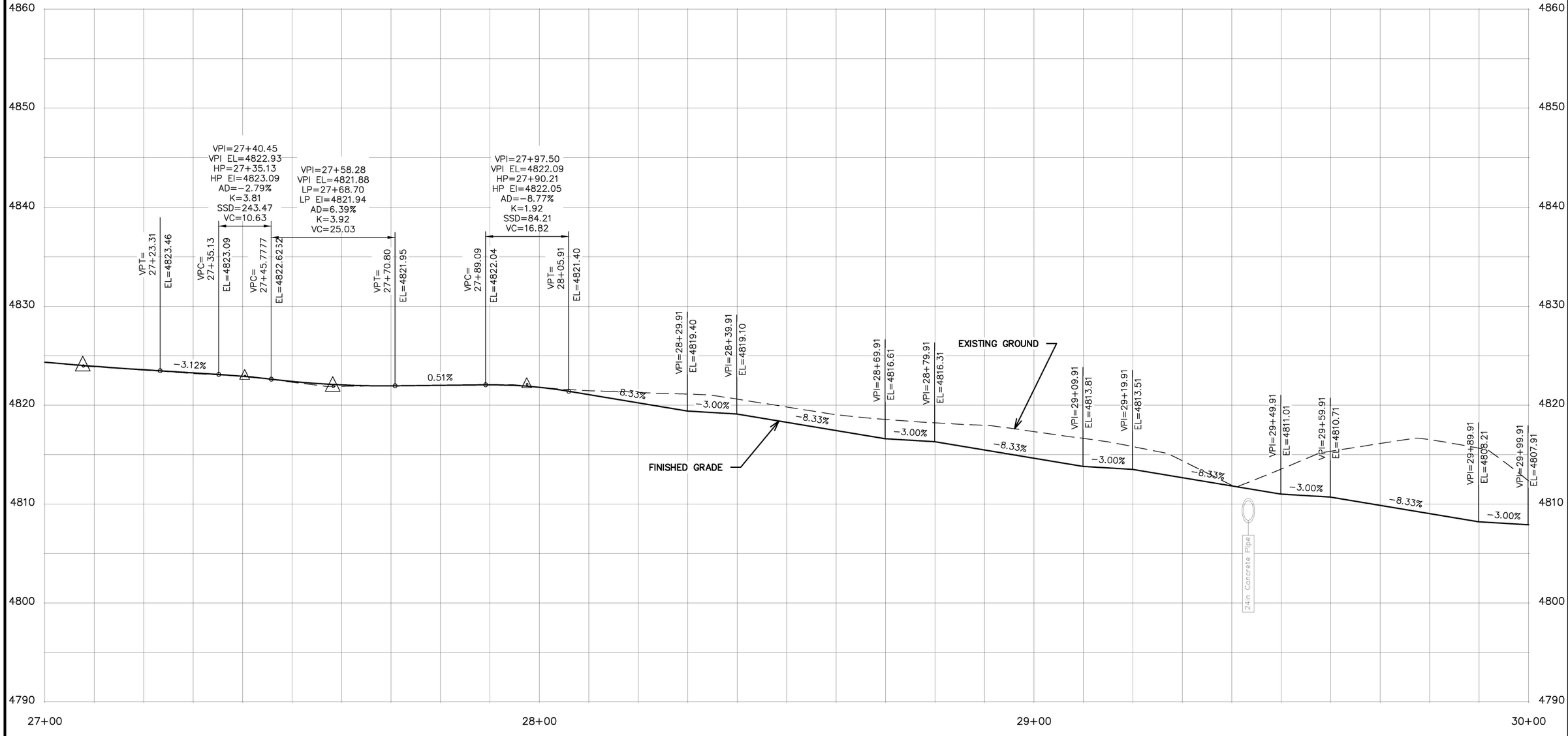
PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
TRAIL PLAN AND PROFILE
August 27, 2024

PP10A

23

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DESCRIPTION	DATE
REVISION 1	–
REVISION 2	–
REVISION 3	–
REVISION 4	–

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES:
PLAN & PROFILE
HORIZONTAL 1" = 20'
VERTICAL 1" = 5'

CITY OF Grand Junction COLORADO

PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
TRAIL PLAN AND PROFILE
August 27, 2024

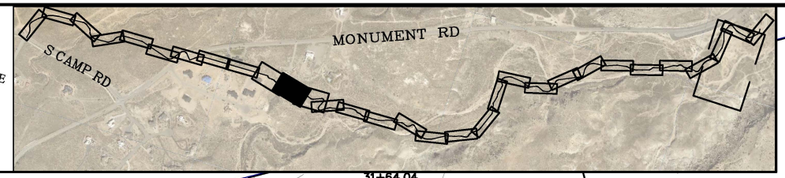
PP10B

24

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SHEET 23

KEYMAP
1" = 1500'



2945-292-00-112
2332 MONUMENT RD
HUNDTOFT THOMAS J

2945-292-06-002
2312 MONUMENT RD
CITY OF GRAND JUNCTION

CONSTRUCT BIKE PATH PER TYPICAL CROSS SECTION

29+94.10
N 27637.67
E 75457.12
EL 8.08

29+68.03
N 27639.28
E 75431.69
EL 10.03

29+55.49
N 27635.47
E 75419.75
EL 10.84

30+20.18
N 27619.25
E 75474.72
EL 8.22

31+84.04
N 27646.10
E 75573.80
EL 96.37

31+86.28
N 27626.46
E 75578.74
EL 94.52

31+41.80
N 27642.91
E 75553.80
EL 97.69

33+91.47
N 27594.67
E 75703.81
EL 81.01

33+41.87
N 27592.05
E 75654.28
EL 83.69

33+20.51
N 27586.46
E 75633.83
EL 85.47

32+09.95
N 27605.63
E 75567.50
EL 93.08

32+99.15
N 27572.90
E 75617.54
EL 86.71

32+54.55
N 27566.27
E 75577.48
EL 89.89

30+81.80
N 27595.92
E 75516.49
EL 2.15

30+40.19
N 27600.75
E 75482.33
EL 5.09

30+60.99
N 27588.55
E 75498.02
EL 3.35

29+33.23
N 27633.56
E 75397.76
EL 12.40

MATCH LINE

MATCH LINE

R35.00'
R50.00'
R15.00'
R20.00'
R50.00'
R30.00'

Pipe - (6)
SEE SHEET 48
FOR PIPE TABLE

Pipe - (7)
SEE SHEET 48
FOR PIPE TABLE

MFCP /2ALC PLS 38428/
N 27510.9460
E 75606.92
EL 4782.91

2945-292-07-006
2320 STONE CREEK CT
ZAMAN SHAHREAR

SHEET 27

DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES:
PLAN
HORIZONTAL: 1" = 20'
0 5 10 20

CITY OF Grand Junction COLORADO

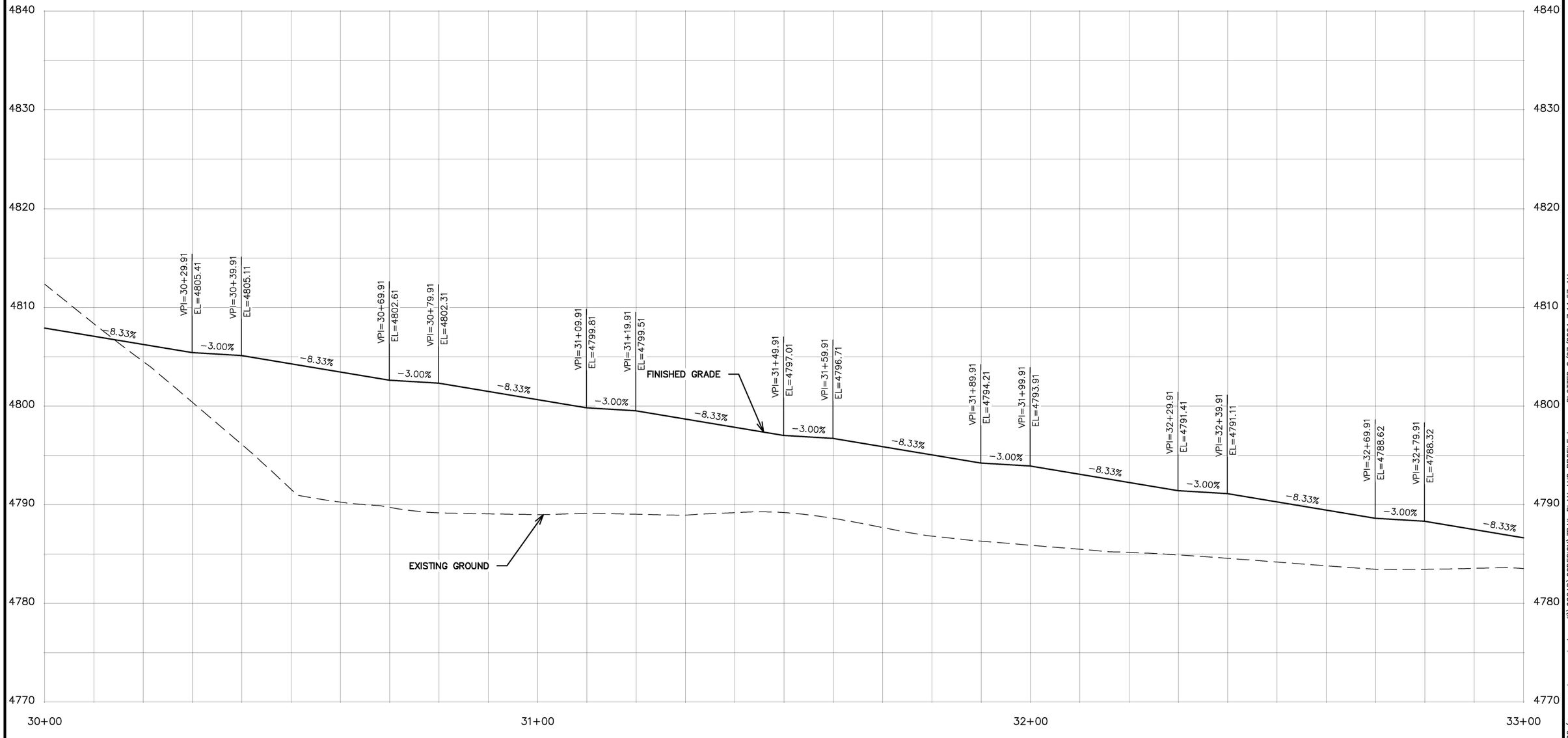
PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
TRAIL PLAN AND PROFILE
August 27, 2024

PP11A

25

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DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES:
PLAN & PROFILE
HORIZONTAL: 1" = 20'
VERTICAL: 1" = 5'

CITY OF Grand Junction COLORADO

PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

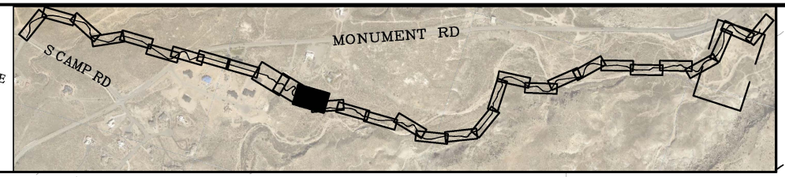
MONUMENT CONNECT TRAIL PHASE 2
TRAIL PLAN AND PROFILE
August 27, 2024

PP11B

26

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KEYMAP
1" = 1500'



CONSTRUCT BIKE PATH PER TYPICAL CROSS SECTION

SHEET 25

SHEET 29

33+41.87
N 27592.05
E 75654.28
EL 83.69

33+91.47
N 27594.67
E 75703.81
EL 81.01

34+13.26
N 27591.11
E 75725.13
EL 80.14

34+39.51
N 27581.29
E 75749.48
EL 79.01

34+77.08
N 27581.00
E 75786.17
EL 77.56

34+58.30
N 27577.65
E 75767.80
EL 78.16

35+55.95
N 27609.35
E 75859.76
EL 76.11

35+79.78
N 27604.28
E 75881.63
EL 74.98

33+20.51
N 27586.46
E 75633.83
EL 85.47

34+02.36
N 27594.06
E 75714.67
EL 80.58

32+99.15
N 27572.90
E 75617.54
EL 86.71

36+03.60
N 27582.10
E 75885.01
EL 73.86

36+70.83
N 27521.40
E 75856.13
EL 68.72

37+22.92
N 27496.18
E 75885.32
EL 67.87

36+96.88
N 27497.67
E 75861.12
EL 68.30

R50.00'
R20.00'
MATCH LINE

Pipe - (7)
SEE SHEET 48
FOR PIPE TABLE

MFCP /2ALC PLS 38428/
N 27510.9460
E 75606.92
EL 4782.91

DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES:
PLAN
HORIZONTAL: 1" = 20'
0 5 10 20

CITY OF Grand Junction COLORADO

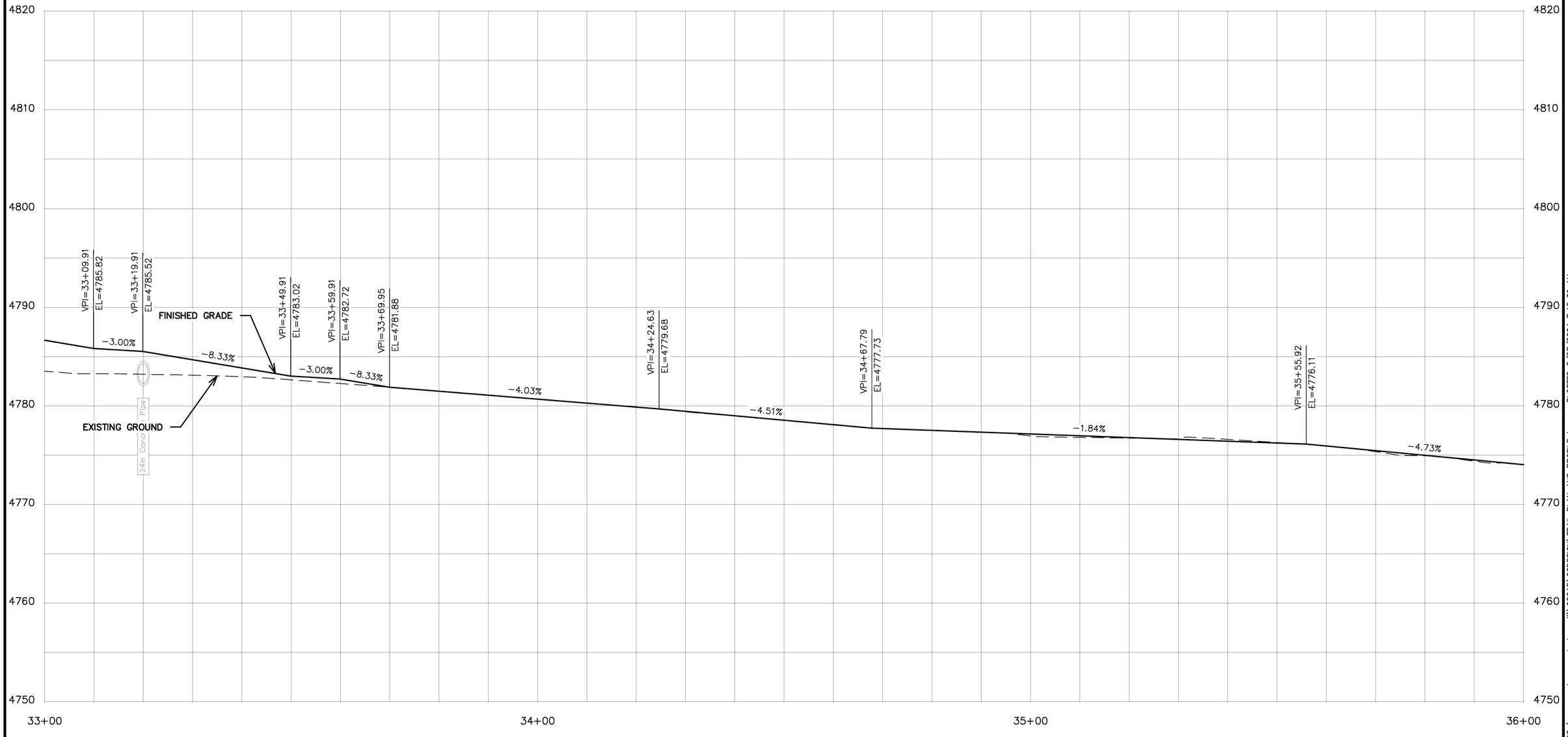
PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
TRAIL PLAN AND PROFILE
August 27, 2024

PP12A

27

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DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES:
PLAN & PROFILE
HORIZONTAL: 1" = 20'
VERTICAL: 1" = 5'

CITY OF Grand Junction COLORADO

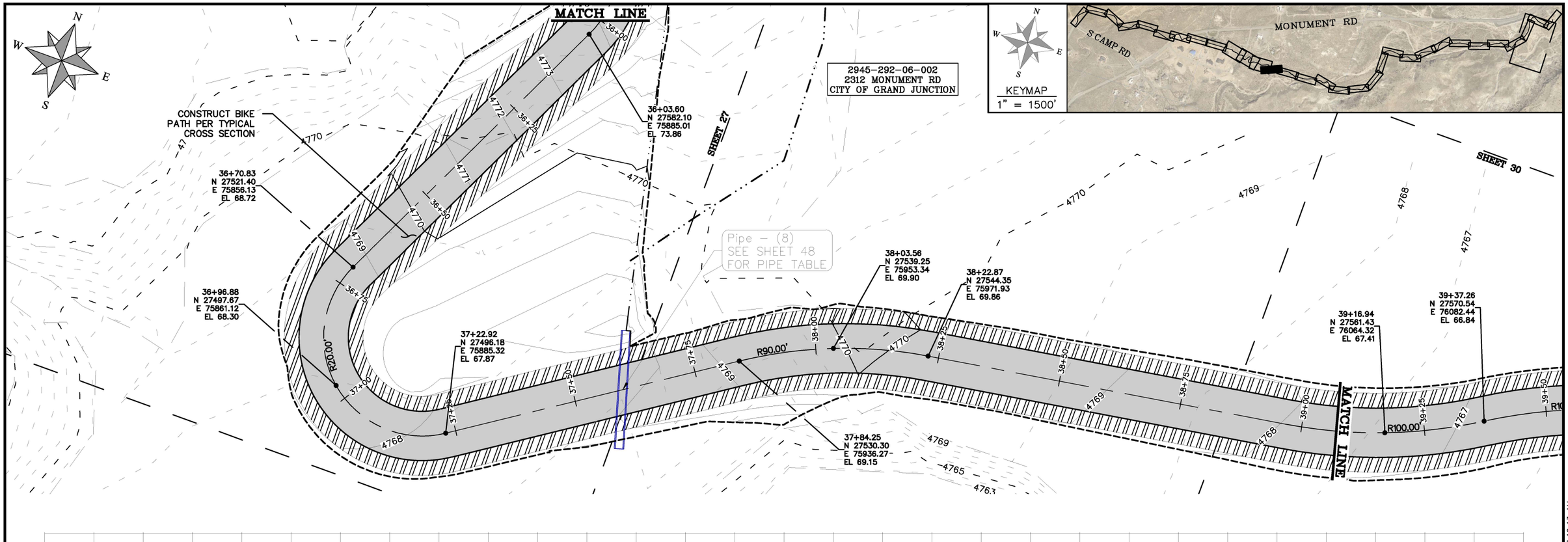
PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
TRAIL PLAN AND PROFILE
August 27, 2024

PP12B

28

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DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES:
PLAN & PROFILE
HORIZONTAL: 1" = 20'
VERTICAL: 1" = 5'

CITY OF Grand Junction COLORADO

PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
TRAIL PLAN AND PROFILE
August 27, 2024

PP13

29

n:\EngPro\g2208 (monument connect phase ii)\60CAD\00DESIGN\TRAIL PLAN AND PROFILE.dwg — PLOTTED 8/27/2024 7:16:13 AM

2945-292-06-002
2312 MONUMENT RD
CITY OF GRAND JUNCTION

SHEET 29

SHEET 31

MATCH LINE

MATCH LINE

39+16.94
N 27561.43
E 76064.32
EL 67.41

39+37.26
N 27570.54
E 76082.44
EL 66.84

39+71.88
N 27583.76
E 76114.26
EL 65.62

39+54.57
N 27578.53
E 76097.78
EL 66.36

40+11.22
N 27592.38
E 76152.64
EL 63.69

40+27.83
N 27594.66
E 76169.08
EL 63.22

40+44.45
N 27594.19
E 76185.66
EL 62.76

40+59.66
N 27592.50
E 76200.78
EL 62.34

40+74.24
N 27588.80
E 76214.83
EL 61.94

40+88.83
N 27581.22
E 76227.23
EL 61.53

40+94.42
N 27577.64
E 76231.53
EL 61.38

41+05.61
N 27572.22
E 76241.25
EL 61.06

41+16.80
N 27570.72
E 76252.27
EL 60.44

41+34.23
N 27568.59
E 76269.48
EL 58.95

41+51.65
N 27560.72
E 76284.92
EL 57.88

41+63.08
N 27555.72
E 76295.13
EL 57.59

41+74.51
N 27554.88
E 76306.45
EL 57.30

42+05.47
N 27558.47
E 76337.20
EL 56.50

42+08.58
N 27558.67
E 76340.31
EL 56.42

42+11.70
N 27558.54
E 76343.43
EL 56.34

R100.00'

R40+25

R50.00'

R30.00'

CONSTRUCT BIKE PATH PER TYPICAL CROSS SECTION

KEYMAP
1" = 1500'

MONUMENT RD

S CAMP RD

VPI=39+57.44
VPI EL=4766.28
HP=39+34.36
HP EL=4766.92
AD=-2.40%
K=19.26
SSD=300.37
VC=46.15

VPC= 39+34.36 EL=4766.92

VPT= 39+80.51 EL=4765.09

VPI=40+03.63
VPI EL=4763.89
LP=40+26.76
LP EL=4763.25
AD=2.40%
K=19.26
VC=46.25

VPT= 40+26.76 EL=4763.25

VPI=41+11.02
VPI EL=4760.92
HP=41+00.38
HP EL=4761.21
AD=-5.74%
K=3.71
SSD=126.35
VC=21.29

VPC= 41+00.38 EL=4761.21

VPT= 41+21.67 EL=4760.02

VPI=41+44.87
VPI EL=4758.05
LP=41+55.94
LP EL=4757.77
AD=5.96%
K=3.72
VC=22.13

VPC= 41+33.81 EL=4758.98

VPT= 41+55.94 EL=4757.77

FINISHED GRADE

EXISTING GROUND

-2.78%

-8.54%

4790 4780 4770 4760 4750

39+00 40+00 41+00 42+00

DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES:
PLAN & PROFILE
HORIZONTAL: 1" = 20'
VERTICAL: 1" = 5'

CITY OF Grand Junction COLORADO

PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
TRAIL PLAN AND PROFILE
August 27, 2024

PP14

30

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2945-294-00-001

BLM

SHEET 30

SHEET 32

MATCH LINE

MATCH LINE

CONSTRUCT BIKE PATH PER TYPICAL CROSS SECTION

42+11.70
N 27558.54
E 76343.43
EL 56.34

42+08.58
N 27558.67
E 76340.31
EL 56.42

42+05.47
N 27558.47
E 76337.20
EL 56.50

42+34.78
N 27556.45
E 76366.41
EL 55.75

42+33.73
N 27556.53
E 76365.36
EL 55.78

42+35.82
N 27556.57
E 76367.46
EL 55.73

42+89.46
N 27557.00
E 76421.06
EL 54.35

42+90.35
N 27557.01
E 76421.95
EL 54.33

42+88.57
N 27556.98
E 76420.17
EL 54.37

42+62.26
N 27555.83
E 76393.88
EL 55.05

42+63.27
N 27555.83
E 76394.90
EL 55.02

42+64.04
N 27555.85
E 76395.66
EL 55.00

43+33.04
N 27556.80
E 76464.62
EL 53.79

43+28.38
N 27556.50
E 76459.97
EL 53.87

43+37.70
N 27557.82
E 76469.16
EL 53.71

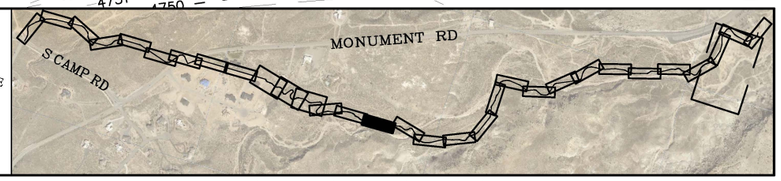
44+53.00
N 27591.63
E 76579.39
EL 52.23

44+58.46
N 27592.75
E 76584.74
EL 52.04

44+63.93
N 27592.88
E 76590.20
EL 51.85

R30.00'

KEYMAP
1" = 1500'



NOTE:
CONTRACTOR SHALL KEEP WITHIN THE 35FT WIDE ROW (TEMP & PERMANENT) ON THIS SEGMENT THROUGH BLM PARCEL.

VPI=42+90.38
VPI EL=4754.32
HP=???
HP EI=???
AD=1.42%
K=19.83
SSD=???
VC=28.19

VPC= 42+76.28
EL=4754.69

VPT= 43+04.48
EL=4754.16

VPI=43+37.70
VPI EL=4753.79
HP=43+25.70
HP EI=4753.92
AD=−1.73%
K=13.85
SSD=395.37
VC=24.01

VPC= 43+25.70
EL=4753.92

VPC= 43+49.71
EL=4753.444

VPI=43+70.94
VPI EL=4752.83
HP=???
HP EI=???
AD=2.14%
K=19.84
SSD=???
VC=42.46

VPT= 43+92.17
EL=4752.68

VPI=44+52.88
VPI EL=4752.23
HP=44+26.15
HP EI=4752.43
AD=−2.70%
K=19.78
SSD=272.66
VC=53.45

VPC= 44+26.15
EL=4752.43

VPT= 44+79.60
EL=4751.32

VPI=45+08.60
VPI EL=4750.32
HP=???
HP EI=???
AD=4.59%
K=3.98
SSD=???
VC=18.25

VPC= 44+99.48
EL=4750.63

−2.56%
−1.14%
−0.73%
−3.44%

FINISHED GRADE

EXISTING GROUND

4780
4770
4760
4750
4745

42+00
43+00
44+00
45+00

DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES:
PLAN & PROFILE
HORIZONTAL: 1" = 20'
VERTICAL: 1" = 5'

CITY OF Grand Junction COLORADO

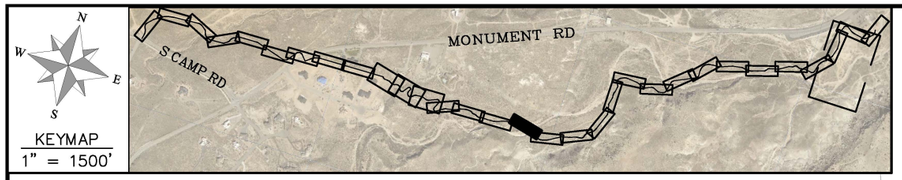
PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
TRAIL PLAN AND PROFILE
August 27, 2024

PP15

31

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N
W
E
S

Pipe – (9)
SEE SHEET 48
FOR PIPE TABLE

Pipe – (10)
SEE SHEET 48
FOR PIPE TABLE

SHEET 31

SHEET 33

MATCH LINE

MATCH LINE

45+15.27
N 27590.19
E 76641.41
EL 50.40

45+59.19
N 27597.03
E 76684.80
EL 50.68

45+66.81
N 27597.25
E 76692.39
EL 50.68

45+74.43
N 27595.56
E 76699.80
EL 50.69

46+13.15
N 27582.23
E 76736.15
EL 50.70

46+36.55
N 27580.87
E 76759.18
EL 50.72

46+59.95
N 27592.45
E 76779.13
EL 50.73

46+75.08
N 27603.49
E 76789.47
EL 50.73

46+90.82
N 27609.81
E 76803.44
EL 50.74

47+06.56
N 27604.38
E 76817.78
EL 50.75

47+46.02
N 27577.33
E 76846.51
EL 50.71

47+56.30
N 27569.15
E 76852.65
EL 50.69

47+66.58
N 27559.38
E 76855.69
EL 50.67

47+87.37
N 27540.38
E 76863.55
EL 50.63

48+08.16
N 27527.72
E 76879.75
EL 50.59

48+22.77
N 27522.01
E 76893.20
EL 50.36

45+11.92
N 27589.85
E 76638.08
EL 50.36

45+08.56
N 27589.89
E 76634.73
EL 50.32

R30.00'

R30.00'

R40.00'

R20.00'

R30.00'

R40'

CONSTRUCT BIKE PATH PER TYPICAL CROSS SECTION

NOTE:
CONTRACTOR SHALL KEEP WITHIN THE 35FT WIDE ROW (TEMP & PERMANENT) ON THIS SEGMENT THROUGH BLM PARCEL – AREA AROUND CBC SHALL REMAIN WITHIN 50FT WIDE ROW.

VPT=
45+17.73
EL=4750.43

VPI=47+06.51
EL=4750.75

VPI=48+10.35
VPI EL=4750.59
HP=47+94.31
HP EL=4750.62
AD=–1.66%
K=19.31
SSD=416.07
VC=32.08

VPC=
47+94.31
EL=4750.62

FINISHED GRADE

EXISTING GROUND

1.16%

0.05%

0.00%

–0.20%

4'x9' Concrete Box Culvert

5'x9' Concrete Box Culvert

4770
4760
4750
4740
4735

45+00
46+00
47+00
48+00

DESCRIPTION	DATE
REVISION 1	–
REVISION 2	–
REVISION 3	–
REVISION 4	–

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES:
PLAN & PROFILE
HORIZONTAL: 1" = 20'
VERTICAL: 1" = 5'

CITY OF Grand Junction COLORADO

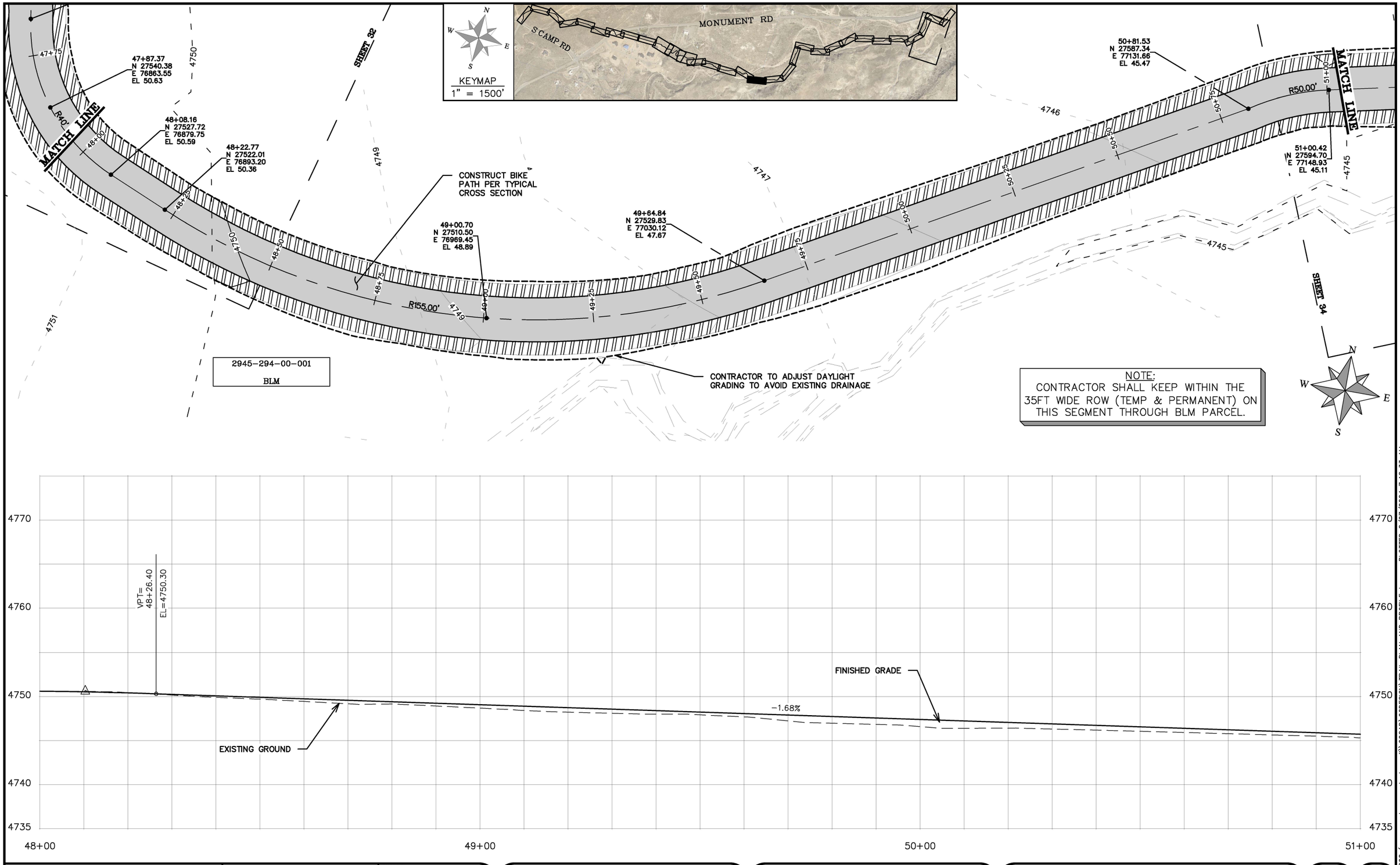
PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
TRAIL PLAN AND PROFILE
August 27, 2024

PP16

32

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DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES:
PLAN & PROFILE
HORIZONTAL: 1" = 20'
VERTICAL: 1" = 5'

CITY OF Grand Junction COLORADO

PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
TRAIL PLAN AND PROFILE
August 27, 2024

PP17

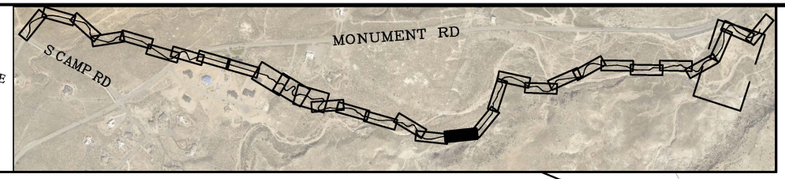
33

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2945-294-00-001
BLM

2945-291-00-126
CITY OF GRAND JUNCTION

KEYMAP
1" = 1500'



MATCH LINE

51+00.42
N 27594.70
E 77148.93
EL 45.11

51+78.08
N 27611.23
E 77224.82
EL 45.82

51+82.42
N 27612.36
E 77229.01
EL 45.86

51+86.76
N 27613.64
E 77233.16
EL 45.90

52+45.82
N 27631.10
E 77289.58
EL 46.44

52+65.91
N 27634.53
E 77309.34
EL 46.63

52+86.00
N 27634.12
E 77329.40
EL 46.22

53+08.21
N 27641.86
E 77349.68
EL 45.76

53+30.43
N 27661.22
E 77359.82
EL 45.30

53+63.77
N 27690.67
E 77374.58
EL 44.62

53+97.11
N 27710.07
E 77401.33
EL 43.93

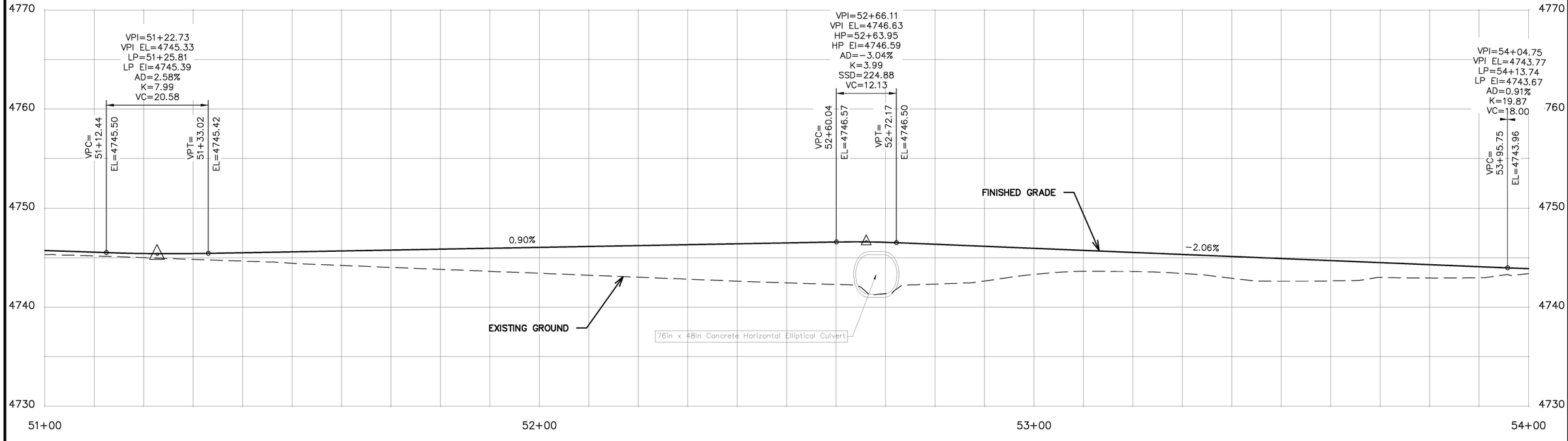
R50.00'
R100.00'
R100.00'
R30.00'
R70.00'
R115.00'

CONSTRUCT BIKE PATH PER TYPICAL CROSS SECTION

SHEET 33
SHEET 35

NOTE:
CONTRACTOR SHALL KEEP WITHIN THE 35FT WIDE ROW (TEMP & PERMANENT) ON THIS SEGMENT THROUGH BLM PARCEL.

Pipe – (11)
SEE SHEET 48
FOR PIPE TABLE



DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES:
PLAN & PROFILE
HORIZONTAL: 1" = 20'
VERTICAL: 1" = 5'

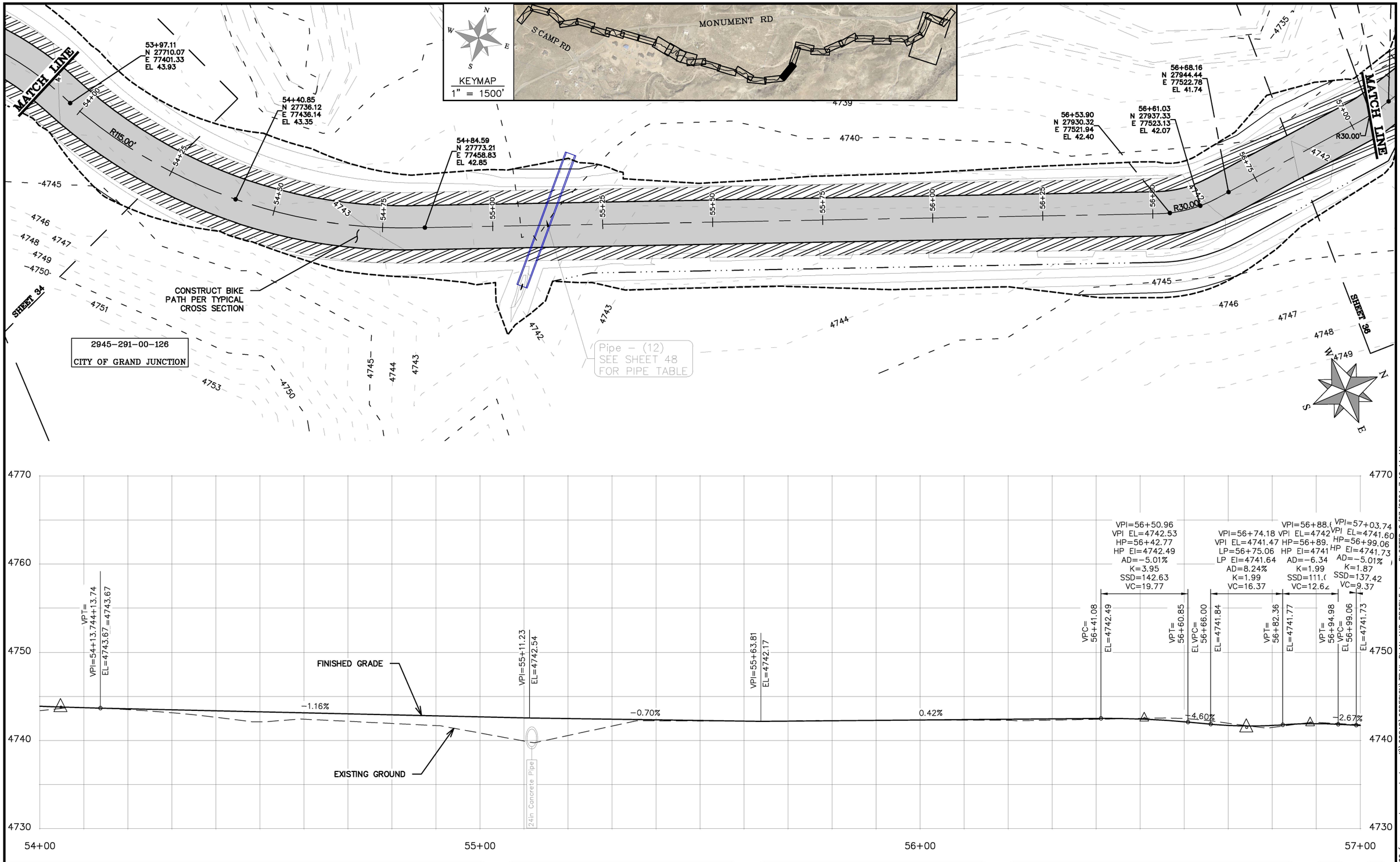
CITY OF Grand Junction COLORADO

PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
TRAIL PLAN AND PROFILE
August 27, 2024

PP18 | 34

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DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES:
PLAN & PROFILE
HORIZONTAL: 1" = 20'
VERTICAL: 1" = 5'

CITY OF Grand Junction COLORADO

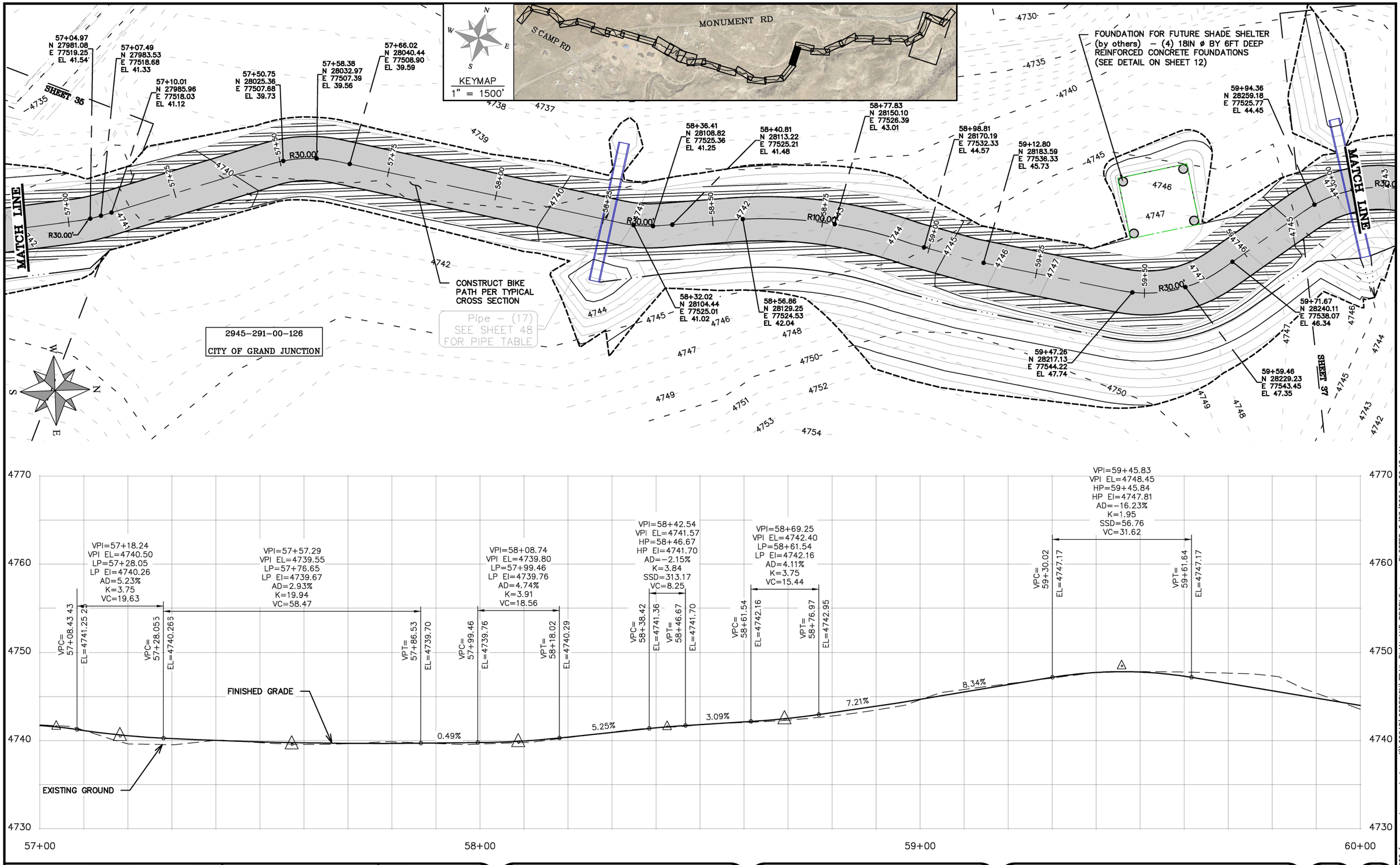
PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
TRAIL PLAN AND PROFILE
August 27, 2024

PP19

35

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DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES:
PLAN & PROFILE
HORIZONTAL: 1" = 20'
VERTICAL: 1" = 5'

CITY OF Grand Junction COLORADO

PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
TRAIL PLAN AND PROFILE
August 27, 2024

PP20 | 36

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2945-291-00-126
CITY OF GRAND JUNCTION

2945-291-00-125
2395 MONUMENT RD
CITY OF GRAND JUNCTION

60+88.70
N 28324.92
E 77577.58
EL 36.59

61+33.67
N 28328.62
E 77622.02
EL 32.84

CONSTRUCT BIKE PATH PER TYPICAL CROSS SECTION

62+20.02
N 28318.80
E 77707.82
EL 28.01

62+23.95
N 28318.10
E 77711.68
EL 27.90

62+27.87
N 28316.91
E 77715.41
EL 27.84

60+43.73
N 28302.30
E 77539.15
EL 40.33

60+35.28
N 28296.35
E 77533.15
EL 41.04

60+14.82
N 28279.04
E 77522.93
EL 42.74

R100.00'

R30.00'

R30.00'

SHEET 36

SHEET 38

Pipe - (18)
SEE SHEET 48
FOR PIPE TABLE

MATCH LINE

MATCH LINE

KEYMAP
1" = 1500'

MONUMENT RD

S CAMP RD

FINISHED GRADE

EXISTING GROUND

-8.33%

-5.44%

2.16%

VPC=
62+03.33
EL=4728.91

VPI=62+33.20
VPI EL=4727.31
LP=62+45.85
LP EL=4727.77
AD=7.56%
K=7.91
VC=59.74

VPT=
62+63.07
EL=4727.96

VPC=
62+83.65
EL=4728.40

VPI=63+12.81
VPI EL=4729.04
HP=63+00.88
HP EL=4728.59
AD=-7.37%
K=7.91
SSD=119.35
VC=58.31

4760
4750
4740
4730
4720

60+00
61+00
62+00
63+00

DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES:
PLAN & PROFILE
HORIZONTAL: 1" = 20'
VERTICAL: 1" = 5'

CITY OF Grand Junction COLORADO

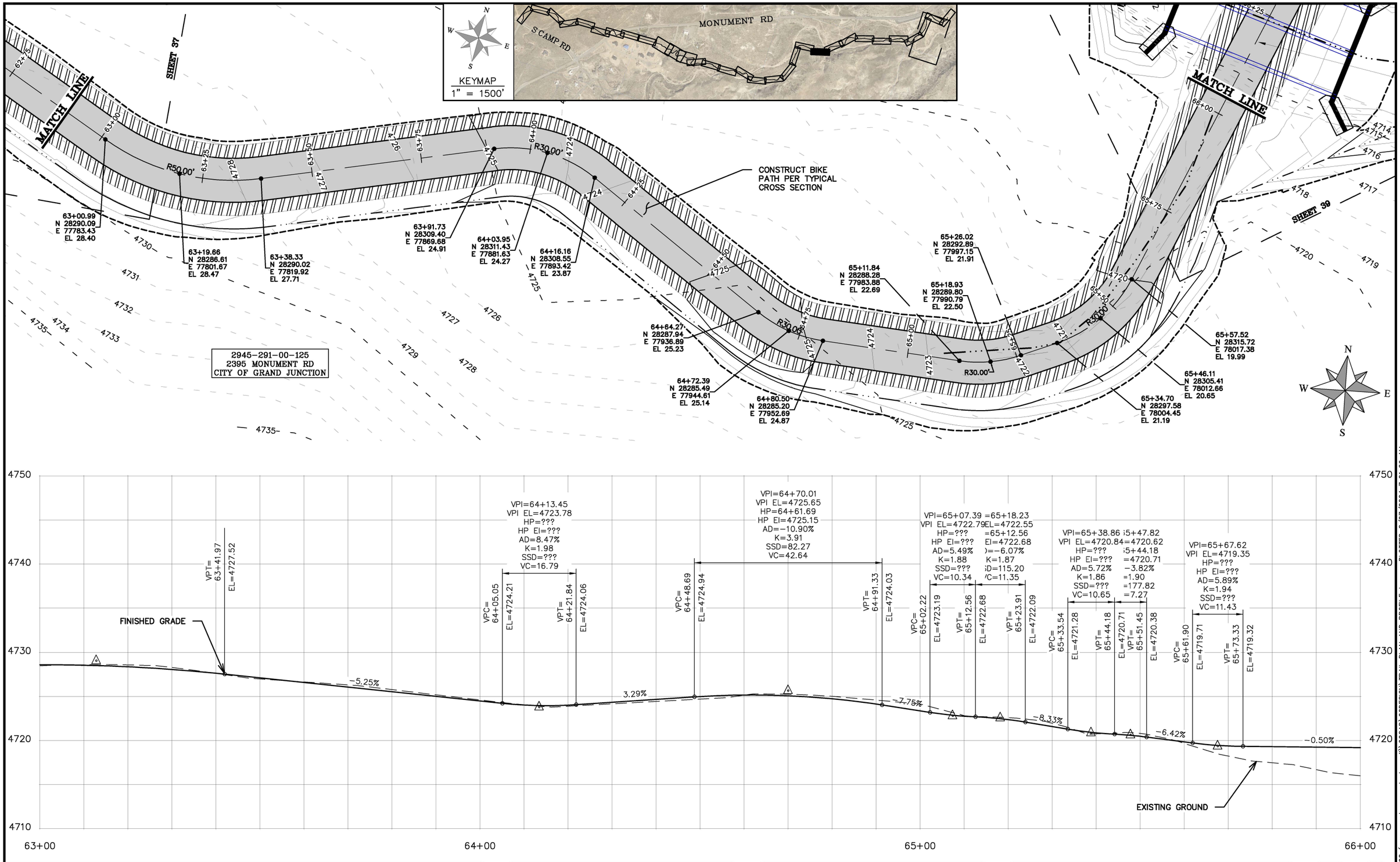
PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
TRAIL PLAN AND PROFILE
August 27, 2024

PP21

37

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DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES:
PLAN & PROFILE
HORIZONTAL: 1" = 20'
VERTICAL: 1" = 5'

CITY OF Grand Junction COLORADO

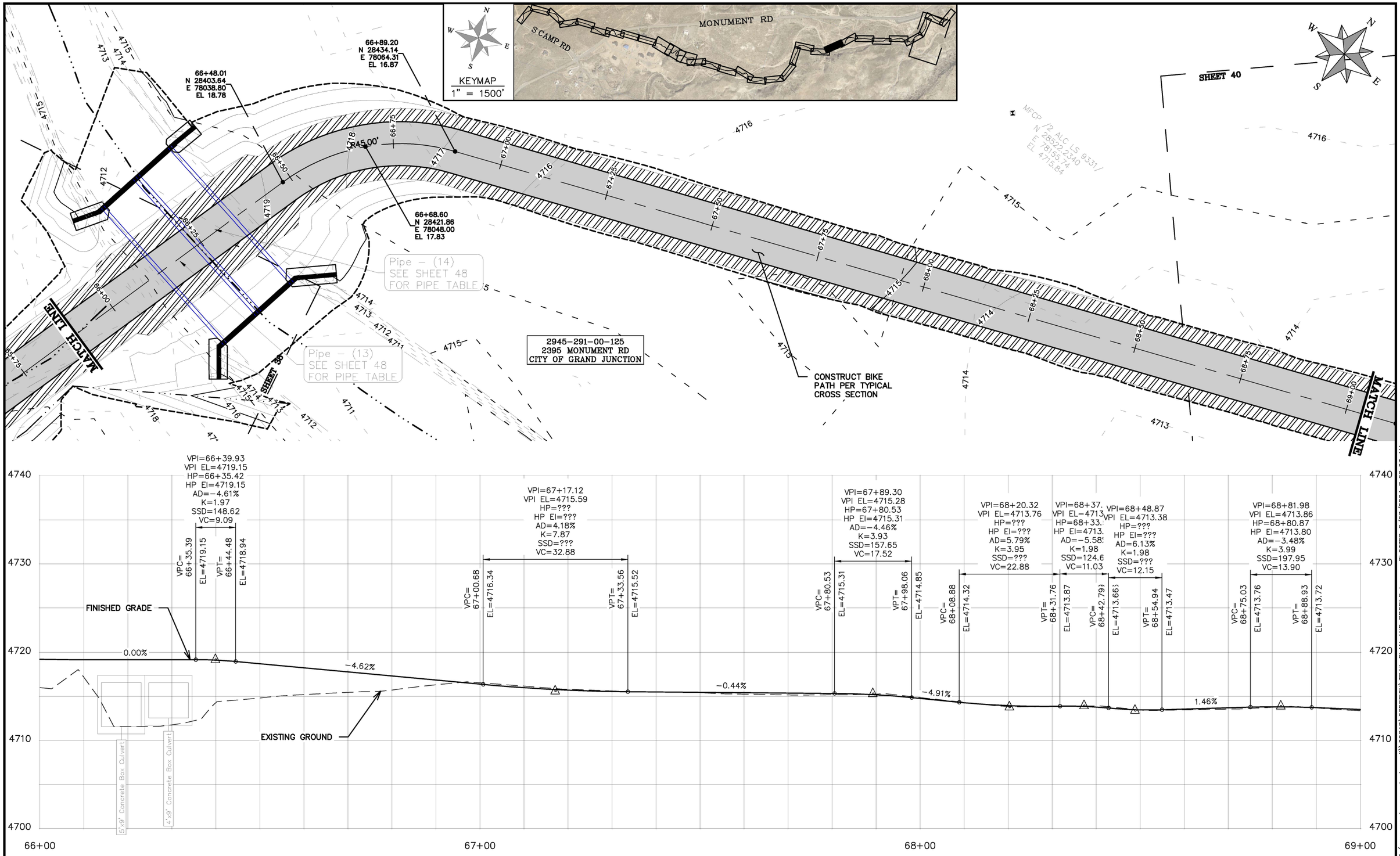
PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
TRAIL PLAN AND PROFILE
August 27, 2024

PP22

38

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DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES:
PLAN & PROFILE
HORIZONTAL 1" = 20'
VERTICAL 1" = 5'

CITY OF Grand Junction COLORADO

PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
TRAIL PLAN AND PROFILE
August 27, 2024

PP23

39

n:\Engpro\g2208 (monument connect phase ii)\60CAD\00DESIGN\TRAIL PLAN AND PROFILE.dwg – PLOTTED 8/27/2024 7:22:03 AM

2945-291-00-125
2395 MONUMENT RD
CITY OF GRAND JUNCTION

69+95.89
N 28601.19
E 78285.62
EL 14.34

70+59.67
N 28659.15
E 78308.45
EL 14.26

71+23.45
N 28685.98
E 78364.68
EL 12.37

69+46.31
N 28551.61
E 78285.62
EL 13.45

69+11.69
N 28524.18
E 78267.76
EL 13.26

69+29.00
N 28535.25
E 78280.76
EL 13.07

R85.00'
R30.00'
R30.00'

CONSTRUCT BIKE
PATH PER TYPICAL
CROSS SECTION

MATCH LINE
MATCH LINE

SHEET 39
SHEET 41

KEYMAP
1" = 1500'

MONUMENT RD
S CAMP RD

VPI=69+82.98
VPI EL=4714.39
HP=69+87.32
HP EL=4714.37
AD=-2.95%
K=3.99
SSD=231.39
VC=11.74

VPC=
69+77.10
EL=4714.24

VPT=
69+88.85
EL=4714.37

VPI=70+52.53
VPI EL=4714.50
HP=70+48.26
HP EL=4714.42
AD=-4.37%
K=3.98
SSD=160.72
VC=17.41

VPC=
70+43.83
EL=4714.40

VPT=
70+61.23
EL=4714.21

-2.02%
2.57%
-0.38%
1.11%
-2.96%

EXISTING GROUND
FINISHED GRADE

4740
4730
4720
4710
4700

69+00
70+00
71+00
72+00

DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES:
PLAN & PROFILE
HORIZONTAL: 1" = 20'
VERTICAL: 1" = 5'

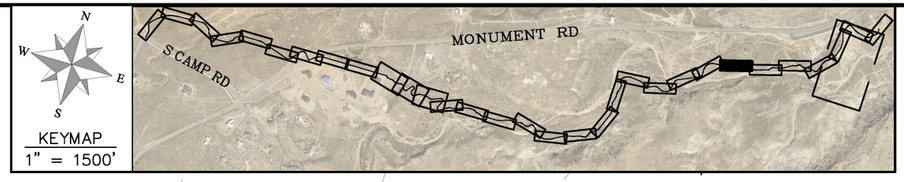
CITY OF Grand Junction COLORADO

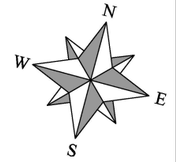
PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
TRAIL PLAN AND PROFILE
August 27, 2024

PP24 | 40

n:\EngProj\g2208 (monument connect phase iii)\60CAD\00DESIGN\TRAIL PLAN AND PROFILE.dwg — PLOTTED 8/27/2024 7:22:39 AM





SHEET 40

MATCH LINE

SHEET 42

MATCH LINE

72+04.85
N 28687.99
E 78446.00
EL 9.96

72+09.79
N 28688.39
E 78450.92
EL 9.81

72+14.73
N 28689.60
E 78455.70
EL 9.66

R30.00'

2945-291-00-125
2395 MONUMENT RD
CITY OF GRAND JUNCTION

73+43.33
N 28731.17
E 78577.40
EL 5.98

73+46.21
N 28731.97
E 78580.17
EL 5.93

73+49.10
N 28732.50
E 78583.00
EL 5.89

R30.00'

CONSTRUCT BIKE PATH PER TYPICAL CROSS SECTION

74+37.97
N 28744.64
E 78671.04
EL 5.29

74+44.16
N 28744.85
E 78677.22
EL 5.50

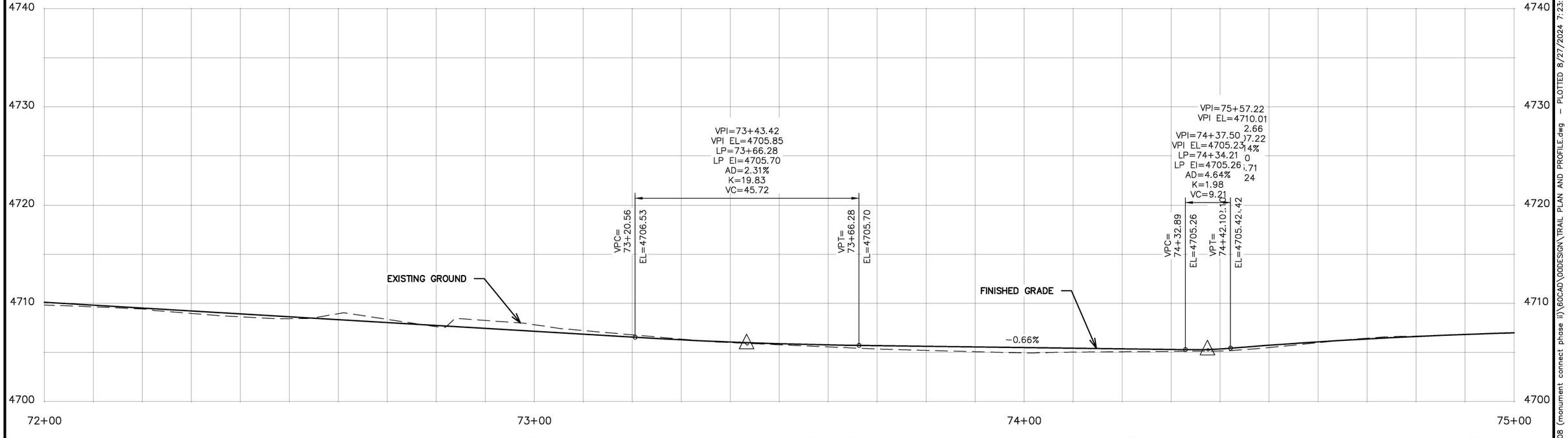
74+50.36
N 28743.79
E 78683.31
EL 5.73

74+66.75
N 28739.32
E 78699.08
EL 6.27

R30.00'

72+00 73+00 73+25 73+50 73+75 74+00 74+25 74+50 75+00

4700 4705 4706 4707 4708 4709 4710



DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES:
PLAN & PROFILE
HORIZONTAL: 1" = 20'
VERTICAL: 1" = 5'

CITY OF Grand Junction COLORADO

PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
TRAIL PLAN AND PROFILE
August 27, 2024

PP25

41

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2945-291-00-125
2395 MONUMENT RD
CITY OF GRAND JUNCTION

SHEET 41

SHEET 43

MATCH LINE

MATCH LINE

75+11.11
N 28733.68
E 78742.92
EL 7.12

75+55.47
N 28741.05
E 78786.50
EL 7.11

76+02.36
N 28755.60
E 78831.08
EL 6.15

76+09.18
N 28757.57
E 78837.60
EL 5.93

76+05.77
N 28756.62
E 78834.33
EL 6.04

76+70.29
N 28773.87
E 78896.50
EL 3.05

76+90.35
N 28785.05
E 78912.70
EL 2.64

76+80.32
N 28778.10
E 78905.54
EL 2.60

77+06.94
N 28798.44
E 78922.51
EL 3.08

77+17.82
N 28805.87
E 78930.37
EL 3.02

77+28.70
N 28810.03
E 78940.36
EL 2.69

Pipe - (15)
SEE SHEET 48
FOR PIPE TABLE

R150.00'

R150.00'

R30.00'

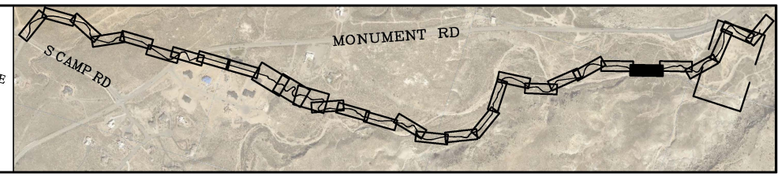
R30.00'

CONSTRUCT BIKE PATH PER TYPICAL CROSS SECTION

2945-282-00-001
BLM

NOTE:
CONTRACTOR SHALL KEEP WITHIN THE 22FT WIDE ROW (TEMP & PERMANENT) ON THIS SEGMENT THROUGH BLM PARCEL.

KEYMAP
1" = 1500'



VPI=76+82.64
VPI EL=4702.29
LP=76+84.48
LP EI=4702.55
AD=10.44%
K=1.97
VC=20.61

VPI=77+08.12
VPI EL=4703.38
HP=77+09.92
HP EI=4703.10
AD=-7.63%
K=3.97
SSD=102.25
VC=30.34

VPC=
76+72.34
EL=4702.93

VPT=
76+72.34
EL=4702.93

VPT=
76+92.955
EL=4702.733

VPT=
77+23.28
EL=4702.87

FINISHED GRADE

EXISTING GROUND

-3.37%

18in Concrete Pipe

4730
4720
4710
4700
4690

75+00
76+00
77+00
78+00

DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES:
PLAN & PROFILE
HORIZONTAL: 1" = 20'
VERTICAL: 1" = 5'

CITY OF Grand Junction COLORADO

PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
TRAIL PLAN AND PROFILE
August 27, 2024

PP26

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n:\EngPro\g2208 (monument connect phase ii)\60CAD\00DESIGN\TRAIL PLAN AND PROFILE.dwg - PLOTTED 8/27/2024 7:23:49 AM

NOTE:
CONTRACTOR SHALL KEEP WITHIN THE 22FT WIDE ROW (TEMP & PERMANENT) ON THIS SEGMENT THROUGH BLM PARCEL – AREA AROUND CBC SHALL REMAIN WITHIN 35FT WIDE ROW.

Pipe – (16)
SEE SHEET 48
FOR PIPE TABLE

2945-282-00-001
BLM

N
W E
S

SHEET 42

MATCH LINE

78+11.77
N 28827.60
E 79021.55
EL 99.89

78+20.86
N 28830.83
E 79030.01
EL 99.58

78+16.31
N 28828.89
E 79025.90
EL 99.73

CONSTRUCT BIKE PATH PER TYPICAL CROSS SECTION

79+22.44
N 28880.95
E 79118.36
EL 95.36

79+27.77
N 28883.16
E 79123.21
EL 95.65

79+33.11
N 28884.47
E 79128.37
EL 95.93

79+53.16
N 28887.68
E 79148.17
EL 97.00

79+62.54
N 28890.59
E 79157.04
EL 97.07

79+71.91
N 28896.08
E 79164.59
EL 96.69

79+75.55
N 28898.65
E 79167.16
EL 96.47

79+95.85
N 28907.26
E 79185.13
EL 95.25

80+16.16
N 28902.73
E 79204.52
EL 94.24

80+23.51
N 28898.77
E 79210.72
EL 94.00

80+34.65
N 28894.64
E 79221.00
EL 93.78

80+45.80
N 28894.51
E 79232.07
EL 93.67

80+78.27
N 28900.16
E 79264.05
EL 93.39

80+83.42
N 28900.62
E 79269.18
EL 93.34

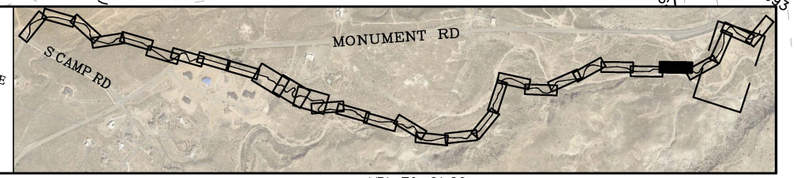
80+88.58
N 28900.19
E 79274.32
EL 93.30

SHEET 44

MATCH LINE

R30.00'

KEYMAP
1" = 1500'



VPI=78+53.89 EL=4698.48
VPI EL=4698.47=78+57.28
LP=78+57.00 EL=4698.46
LP EL=4698.46 =-17.71%
AD=3.14% K=0.84
K=1.98 SD=44.95
VC=6.23 C=14.86
VPC= 78+50.77
VPT= 78+57.00
EL=4698.46

VPI=78+79.44
VPI EL=4695.80
LP=78+87.02
LP EL=4695.23
AD=10.91%
K=1.39
VC=15.15
T= 78+71.87+71.87
EL=4697.19 69
VPC= 78+87.022
EL=4695.233

VPI=79+00.17
VPI EL=4694.17
LP=79+02.87
LP EL=4694.59
AD=13.44%
K=1.96
VC=26.29
VPT= 79+13.31
EL=4694.87

VPI=79+61.00
VPI EL=4697.26
HP=79+59.32
HP EL=4697.10
AD=-8.16%
K=1.99
SSD=89.58
VC=16.19
VPC= 79+52.90
EL=4696.99
VPT= 79+69.10
EL=4696.86

VPI=80+18.52
VPI EL=4693.90
LP=80+38.33
LP EL=4693.74
AD=5.10%
K=7.76
VC=39.60
VPC= 79+98.72
EL=4695.08
VPT= 80+38.33
EL=4693.74

VPI=80+97.44
VPI EL=4693.22
HP=80+89.55
HP EL=4693.29
AD=-1.99%
K=7.93
SSD=341.67
VC=15.79
VPC= 80+89.55
EL=4693.29

FINISHED GRADE
EXISTING GROUND
5.36%
-5.99%
-0.87%
76in x 48in Concrete Horizontal Elliptical Culvert

4720 4710 4700 4690 4680

78+00 79+00 80+00 81+00

DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES:
PLAN & PROFILE
HORIZONTAL 1" = 20'
0 10 20
VERTICAL 1" = 5'
0 1.25 2.5 5

CITY OF Grand Junction COLORADO

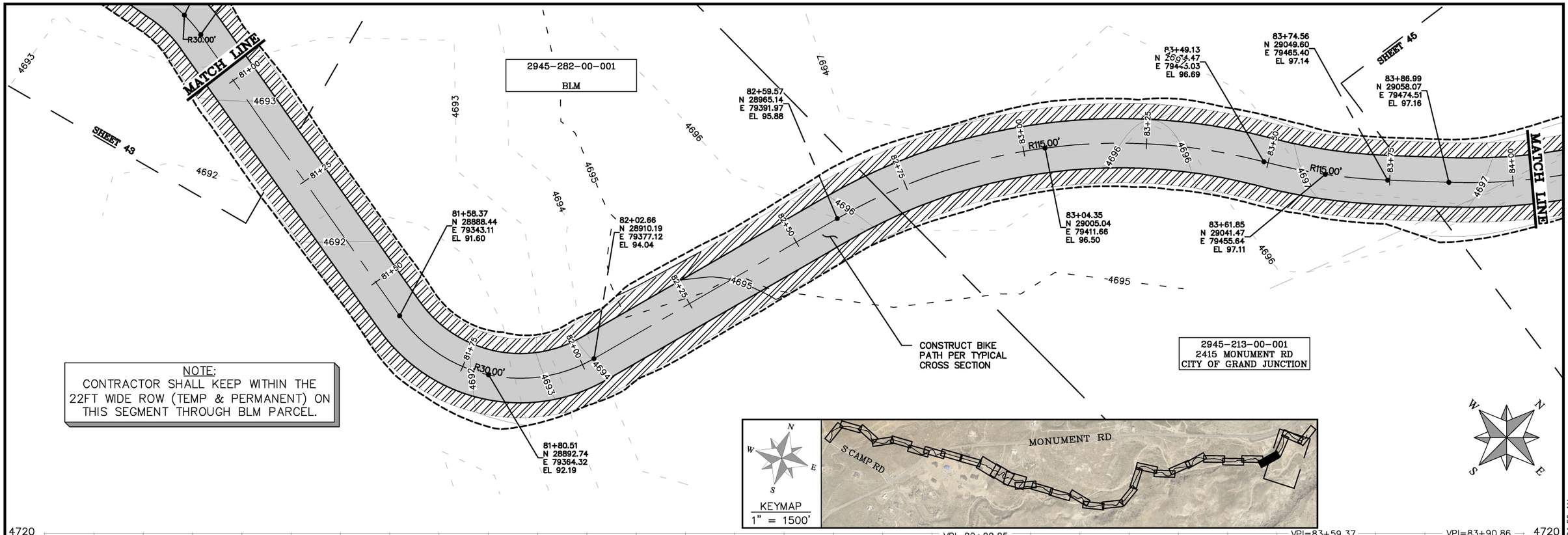
PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
TRAIL PLAN AND PROFILE
August 27, 2024

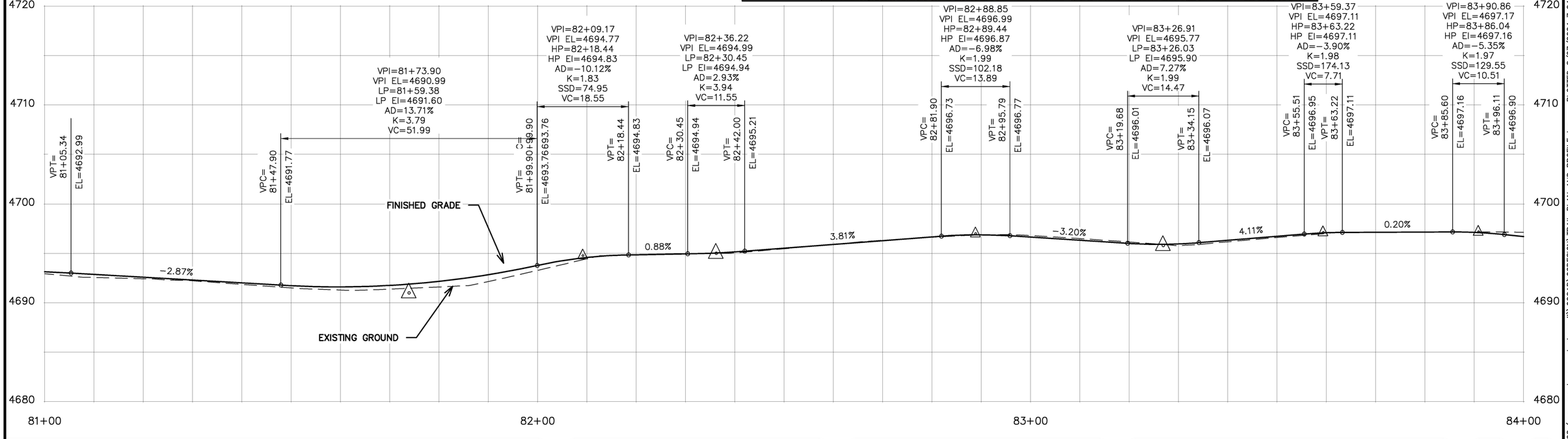
PP27

43

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NOTE:
CONTRACTOR SHALL KEEP WITHIN THE 22FT WIDE ROW (TEMP & PERMANENT) ON THIS SEGMENT THROUGH BLM PARCEL.



DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES:
PLAN & PROFILE
HORIZONTAL: 1" = 20'
VERTICAL: 1" = 5'

CITY OF Grand Junction COLORADO

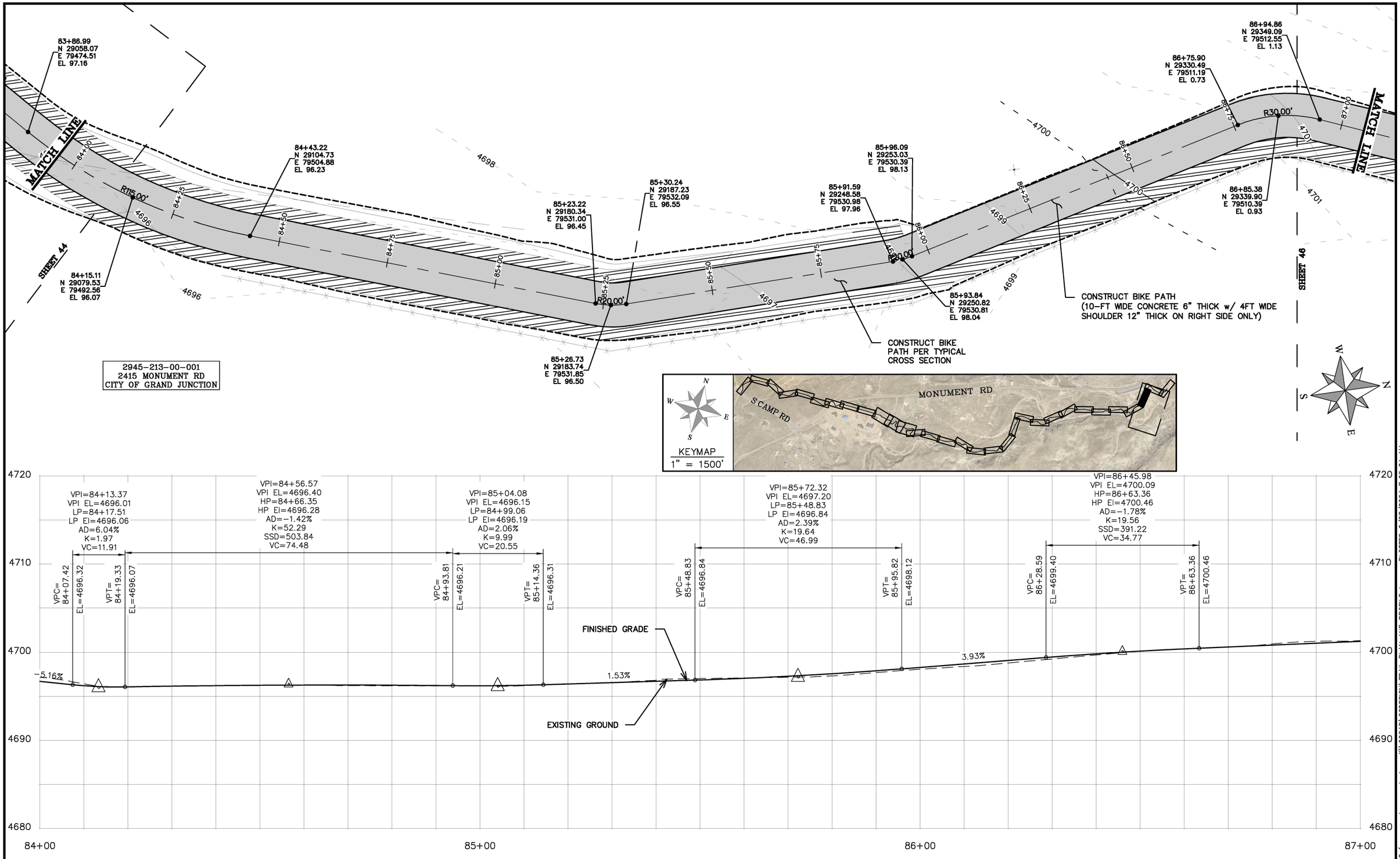
PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
TRAIL PLAN AND PROFILE
August 27, 2024

PP28

44

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DESCRIPTION	DATE
REVISION 1	–
REVISION 2	–
REVISION 3	–
REVISION 4	–

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES:
PLAN & PROFILE
HORIZONTAL: 1" = 20'
VERTICAL: 1" = 5'

CITY OF Grand Junction COLORADO

PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
TRAIL PLAN AND PROFILE
August 27, 2024

PP29

45

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2945-213-00-001
2415 MONUMENT RD
CITY OF GRAND JUNCTION

88+01.62
N 29418.33
E 79573.23
EL 3.62

REMOVE AT LEAST 10FT OF EXISTING RAILING TO NEAREST POST

CONSTRUCT BIKE PATH
(10-FT WIDE CONCRETE 6" THICK w/ 4FT WIDE SHOULDER 12" THICK ON RIGHT SIDE ONLY)

PRECAST CONCRETE BLOCK RETAINING WALL SYSTEM - REDI-ROCK GRAVITY WALL OR APPROVED EQUAL. SEE SHEET 9-10 FOR PLAN, PROFILE & SECTION.

90+49.26
N 29378.60
E 79798.59
EL 0.79

87+57.43
N 29406.99
E 79536.27
EL 2.75

87+79.52
N 29421.40
E 79552.07
EL 4.05

REMOVE AT LEAST 22FT OF EXISTING RAILING TO NEAREST POST

88+58.32
N 29386.98
E 79620.47
EL 0.00

88+76.86
N 29378.21
E 79636.78
EL 98.84

88+95.41
N 29372.60
E 79654.43
EL 98.15

90+18.23
N 29360.33
E 79773.50
EL 99.29

90+01.34
N 29353.53
E 79758.18
EL 99.43

89+84.45
N 29353.60
E 79741.42
EL 0.48

R25.00'
R100.00'
R40.00'

MATCH LINE
MATCH LINE

SHEET 45
SHEET 47

KEYMAP
1" = 1500'
MONUMENT RD
S CAMP RD

VPI=87+51.41
VPI EL=4702.33
LP=87+42.99
LP EI=4702.16
AD=4.85%
K=3.47
VC=16.83
VPC= 87+42.99
EL=4702.16
VPT= 87+59.82
EL=4702.91

VPI=87+81.51
VPI EL=4704.34
HP=87+84.63
HP EI=4704.12
AD=-9.89%
K=1.97
SSD=76.92
VC=19.48
VPC= 87+71.77
EL=4703.70
VPT= 87+91.25
EL=4704.01

VPI=88+19.52
VPI EL=4702.95
HP=88+13.01
HP EI=4703.20
AD=-3.51%
K=3.71
SSD=195.87
VC=13.01
VPC= 88+13.01
EL=4703.20
VPT= 88+26.03
EL=4702.47

VPI=88+68.99
VPI EL=4699.20
LP=88+74.36
LP EI=4698.95
AD=2.92%
K=3.68
VC=10.74
VPC= 88+63.63
EL=4699.59
VPT= 88+74.36
EL=4698.95

VPI=88+95.45
VPI EL=4698.01
LP=88+96.86
LP EI=4698.14
AD=7.53%
K=1.99
VC=14.96
VPC= 88+87.97
EL=4698.34
VPT= 89+02.93
EL=4698.23

VPI=89+16.7
VPI EL=4698.
HP=89+16.4
HP EI=4698.
AD=-6.31%
K=1.99
SSD=111.5
VC=12.58
VPC= 89+10.42
EL=4698.46
VPC= 89+23.00
EL=4698.45

VPI=89+29.00
VPI EL=4698.25
LP=89+29.51
LP EI=4698.34
AD=6.02%
K=1.99
VC=12.00
VPT= 89+35.00
EL VPC= 89+40.25
EL=4698.49

VPI=89+47.49
VPI EL=4698.50
LP=89+40.25
LP EI=4698.49
AD=7.54%
K=1.92
VC=14.48
VPT= 89+54.73
EL=4699.05

VPI=89+81.74
VPI EL=4701.10
HP=89+80.20
HP EI=4700.54
AD=-16.95%
K=1.58
SSD=52.57
VC=26.72
VPC= 89+68.38
EL=4700.10

VPI=90+04.70
VPI EL=4699.06
LP=90+10.86
LP EI=4699.20
AD=9.92%
K=1.93
VC=19.18
VPC= 89+95.11
EL=4699.84

FINISHED GRADE
EXISTING GROUND

2.14%
6.64%
-3.71%
-7.64%
-4.52%
3.06%
7.70%

4730
4720
4710
4700
4690

87+00
88+00
89+00
90+00

DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES:
PLAN & PROFILE
HORIZONTAL 1" = 20'
VERTICAL 1" = 5'

CITY OF Grand Junction COLORADO

PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
TRAIL PLAN AND PROFILE
August 27, 2024

PP30 | 46

n:\EngPro\g2208 (monument connect phase ii)\60CAD\00DESIGN\TRAIL PLAN AND PROFILE.dwg - PLOTTED 8/27/2024 7:26:09 AM

MATCH LINE

90+01.34
N 29353.53
E 79758.18
EL 99.43

90+18.23
N 29360.33
E 79773.50
EL 99.29

90+49.26
N 29378.60
E 79798.59
EL 0.79

90+55.17
N 29382.35
E 79803.15
EL 1.28

90+89.31
N 29405.56
E 79828.19
EL 2.94

90+52.22
N 29380.41
E 79800.93
EL 1.03

91+09.28
N 29421.89
E 79839.40
EL 3.38

91+29.24
N 29441.44
E 79842.51
EL ???

R40.00'

R45.00'

SHEET 46

PRECAST CONCRETE BLOCK RETAINING WALL SYSTEM – REDI-ROCK GRAVITY WALL OR APPROVED EQUAL. SEE SHEET 9-10 FOR PLAN, PROFILE & SECTION.

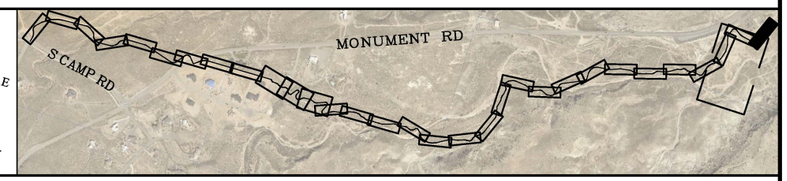
CONTRACTOR TO DOWEL #4 REBAR 12" ON CENTER TO EXISTING TRAIL PRIOR TO POUR OF NEW TRAIL CONCRETE.

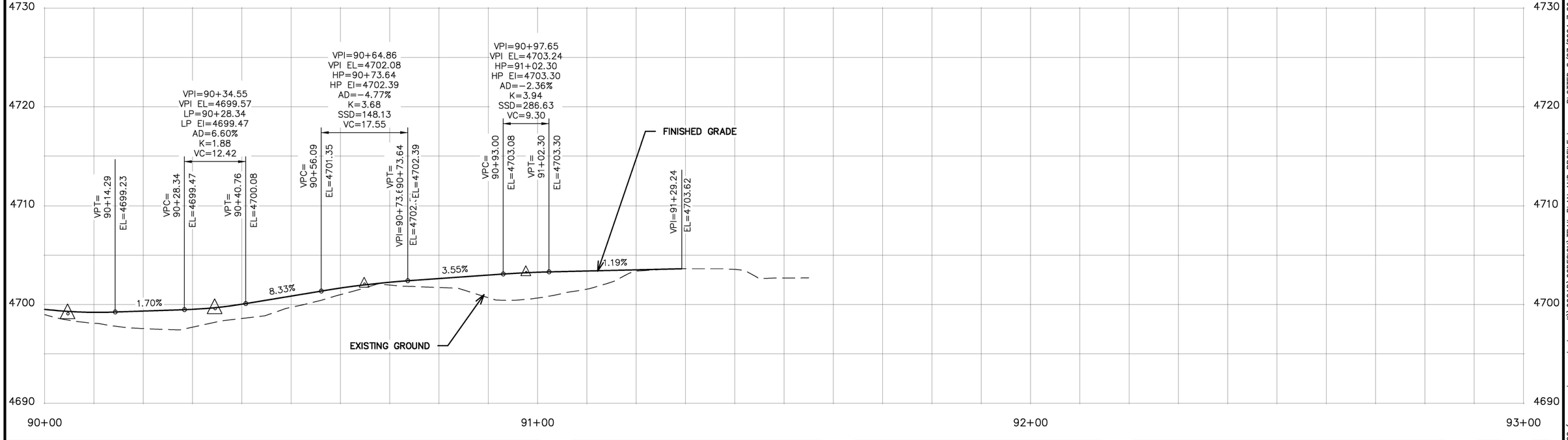
CONSTRUCT BIKE PATH
(10-FT WIDE CONCRETE 6" THICK w/ 4FT WIDE SHOULDER 12" THICK ON RIGHT SIDE ONLY)

CONSTRUCT BIKE PATH PER TYPICAL CROSS SECTION

2945-213-00-001
2415 MONUMENT RD
CITY OF GRAND JUNCTION

KEYMAP
1" = 1500'





DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES:
PLAN & PROFILE
HORIZONTAL: 1" = 20'
VERTICAL: 1" = 5'

CITY OF Grand Junction COLORADO

PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
TRAIL PLAN AND PROFILE
August 27, 2024

PP31

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	Pipe Table					
	Pipe Name	Size	Length	Slope	Invert In	Invert Out
*	Pipe – (1)	12in Concrete Pipe	24 FT	2.87%	4861.75	4861.07
	Pipe – (2)	48in Concrete Pipe	32 FT	0.50%	4838.20	4838.04
	Pipe – (3)	12in Concrete Pipe	24 FT	2.00%	4839.09	4838.61
	Pipe – (4)	12in Concrete Pipe	24 FT	2.00%	4838.34	4837.86
	Pipe – (5)	12in Concrete Pipe	24 FT	2.00%	4835.60	4835.12
	Pipe – (6)	24in Concrete Pipe	32 FT	0.50%	4808.40	4808.24
	Pipe – (7)	24in Concrete Pipe	24 FT	2.00%	4782.52	4782.04
	Pipe – (8)	18in Concrete Pipe	24 FT	2.00%	4765.62	4765.14
+	Pipe – (9)	4'x9' Concrete Box Culvert	32 FT	2.00%	4744.74	4744.10
+	Pipe – (10)	5'x9' Concrete Box Culvert	32 FT	2.00%	4743.74	4743.10
	Pipe – (11)	76in x 48in Concrete Horizontal Elliptical Culvert	56 FT	0.49%	4741.44	4741.16
*	Pipe – (12)	24in Concrete Pipe	32 FT	3.25%	4739.77	4738.73
+	Pipe – (13)	5'x9' Concrete Box Culvert	42 FT	2.00%	4711.96	4711.12
+	Pipe – (14)	4'x9' Concrete Box Culvert	42 FT	2.00%	4712.96	4712.12
*	Pipe – (15)	18in Concrete Pipe	32 FT	3.47%	4700.77	4699.66
	Pipe – (16)	76in x 48in Concrete Horizontal Elliptical Culvert	56 FT	0.23%	4691.94	4691.81
	Pipe – (17)	24 inch Concrete Pipe	32 FT	1.50%	4737.67	4737.19
	Pipe – (18)	24 inch Concrete Pipe	32 FT	1.00%	4740.05	4739.73

NOTE: * PROVIDE RIPRAP (D_{50} = 12") AT PIPE OUTFALL

\+ PRECAST CONCRETE BOX CULVERTS PROVIDED BY CITY. CONTRACTOR TO LOAD ON TRUCK AND UNLOAD AT SITE.

DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES: PLAN & PROFILE
HORIZONTAL: 1" = 20'
VERTICAL: 1" = 5'

CITY OF Grand Junction COLORADO

PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
PIPE TABLE
August 27, 2024

PP32

48

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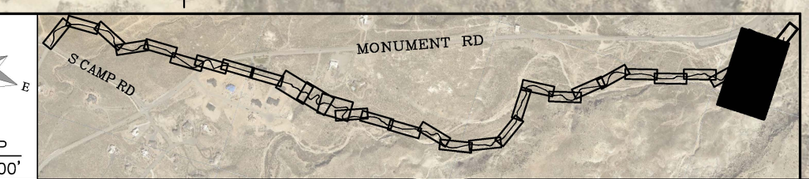
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BLM

2945-213-00-001
2415 MONUMENT RD
CITY OF GRAND JUNCTION

CONSTRUCT 880 LF OF SINGLE-TRACK TRAIL - NATIVE SOIL, 3 FT WIDE, CROSS-SLOPE TO DRAIN.

CONNECT SINGLE-TRACK TRAIL TO SOFT SHOULDER USING MAXIMUM SLOPE OF 11% NATIVE EMBANKMENT MAY BE USED

KEYMAP
1" = 1500'



DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES:
PLAN
HORIZONTAL: 1" = 50'
0 12.5 25 50

CITY OF Grand Junction COLORADO

PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
SINGLE TRACK PLAN
August 27, 2024

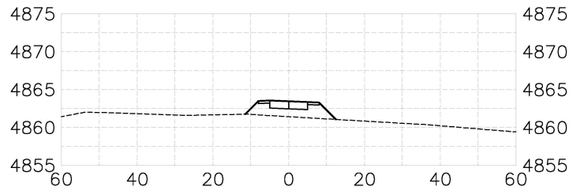
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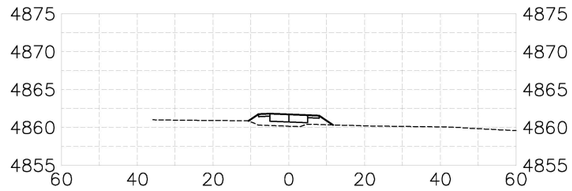
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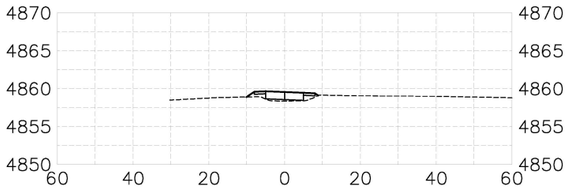
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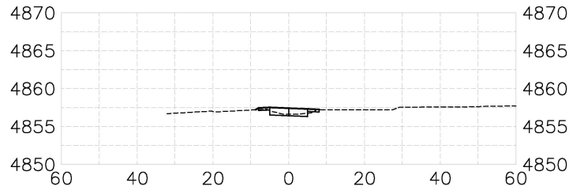
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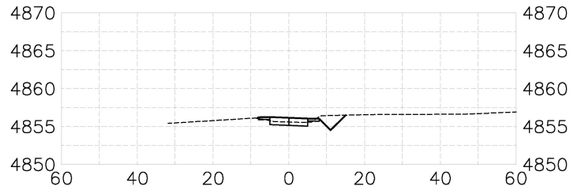
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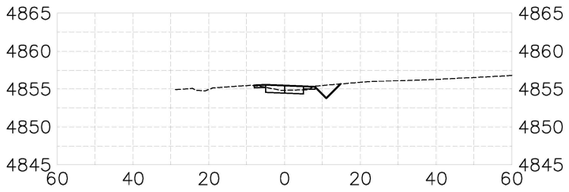
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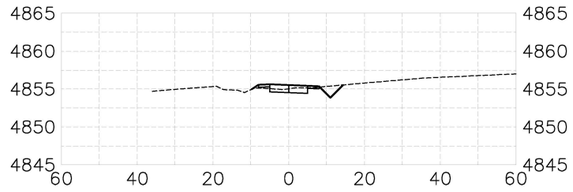
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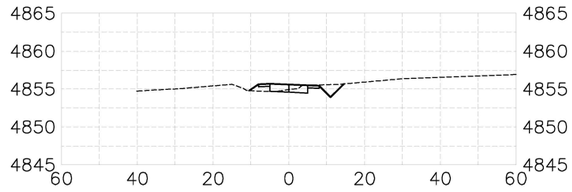
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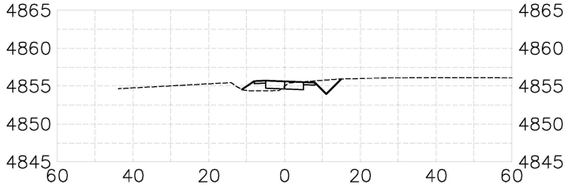
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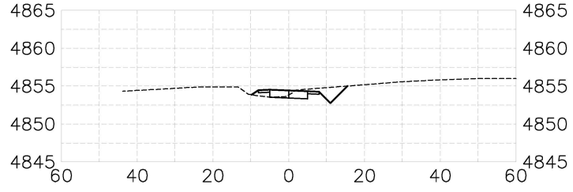
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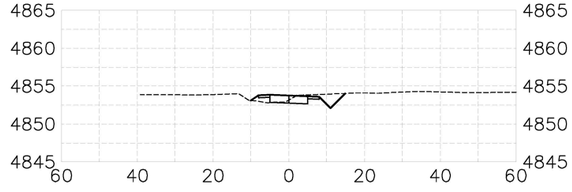
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5+00.00



5+50.00



6+00.00

DESCRIPTION	DATE
REVISION 1 CROSS SECTIONS	08/27/2024
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

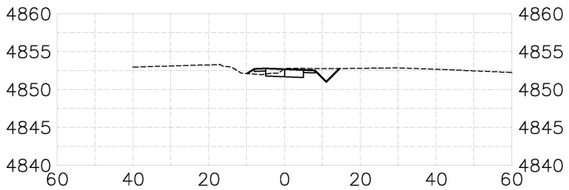
SCALES:
PLAN & PROFILE
HORIZONTAL: 1" = 40'
VERTICAL: 1" = 20'

CITY OF Grand Junction COLORADO

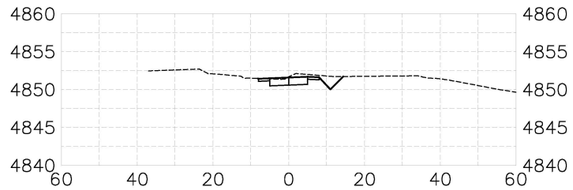
PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
TRAIL CROSS SECTION – (1)
August 27, 2024

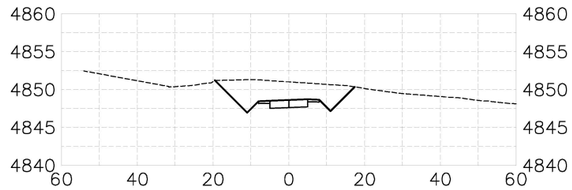
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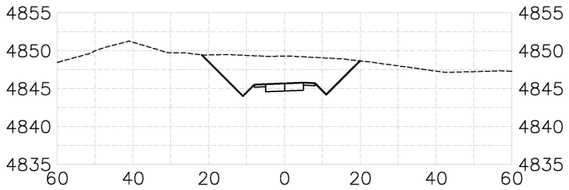
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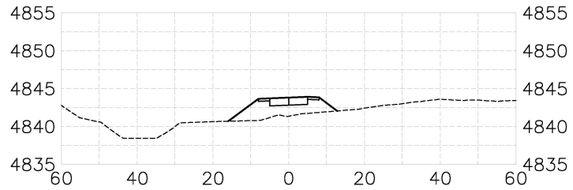
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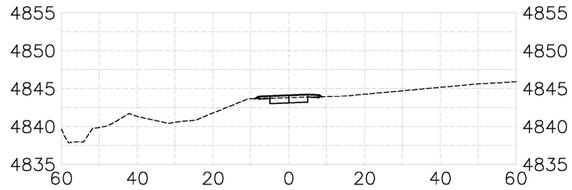
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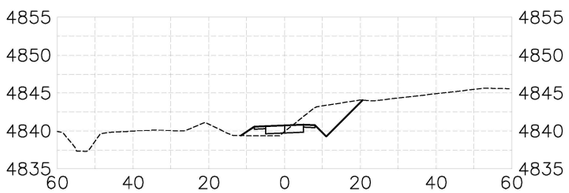
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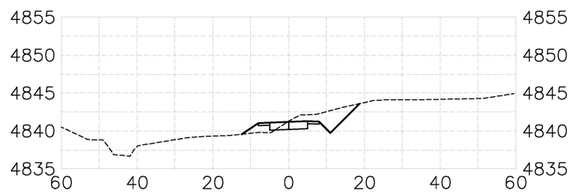
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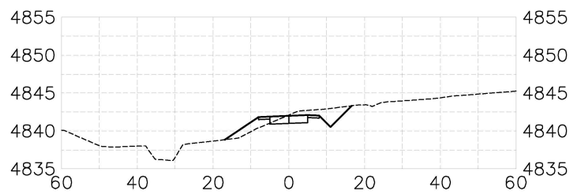
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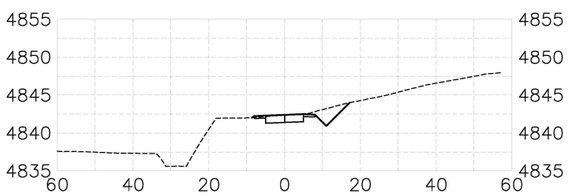
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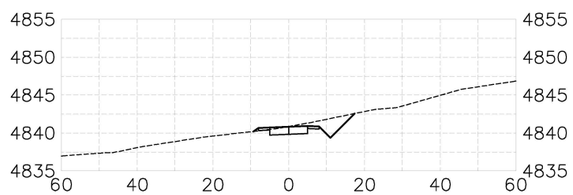
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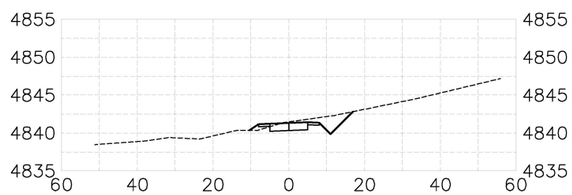
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11+00.00



11+50.00



12+00.00

DESCRIPTION	DATE
REVISION 1 CROSS SECTIONS	08/27/2024
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

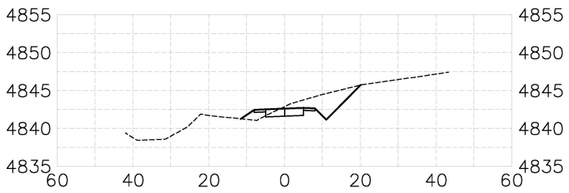
SCALES:
PLAN & PROFILE
HORIZONTAL: 1" = 40'
VERTICAL: 1" = 20'

CITY OF Grand Junction COLORADO

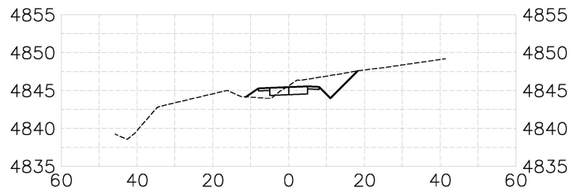
PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
TRAIL CROSS SECTION – (2)
August 27, 2024

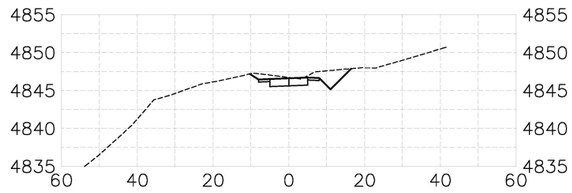
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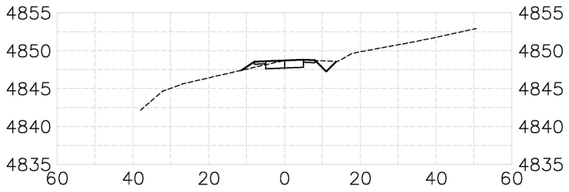
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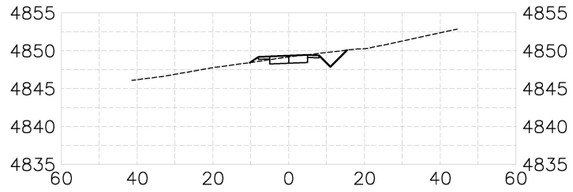
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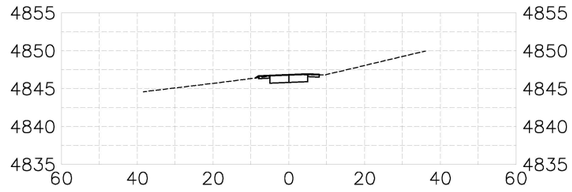
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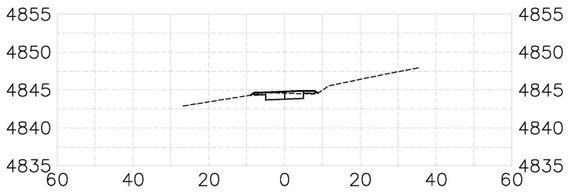
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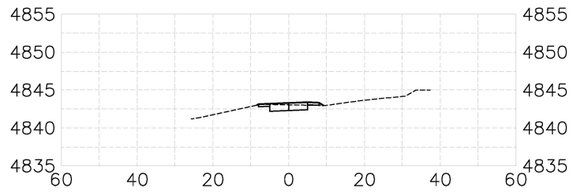
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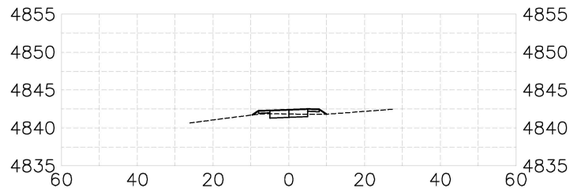
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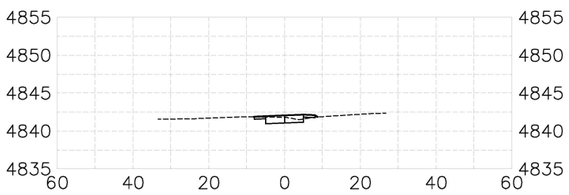
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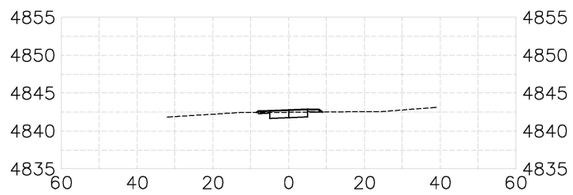
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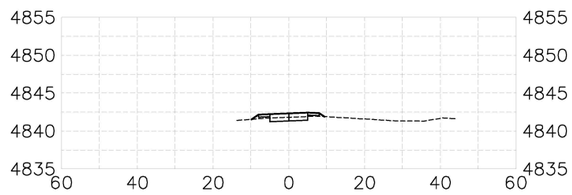
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17+50.00



18+00.00

DESCRIPTION	DATE
REVISION 1 CROSS SECTIONS	08/27/2024
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2024
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APPROVED BY KA DATE 2024

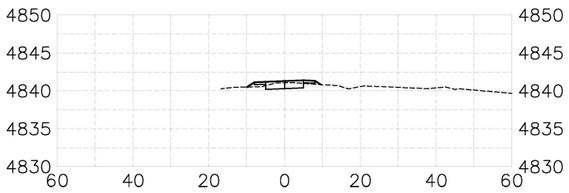
SCALES:
PLAN & PROFILE
HORIZONTAL: 1" = 40'
VERTICAL: 1" = 20'

CITY OF Grand Junction COLORADO

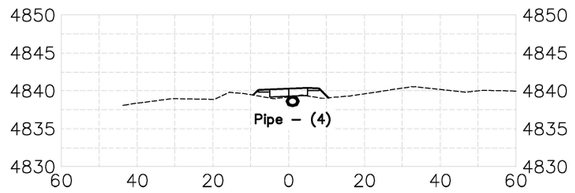
PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
TRAIL CROSS SECTION – (3)
August 27, 2024

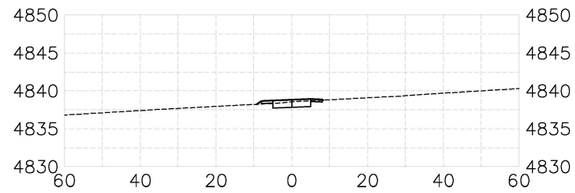
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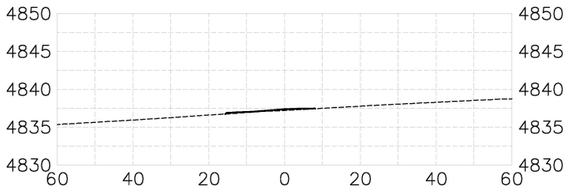
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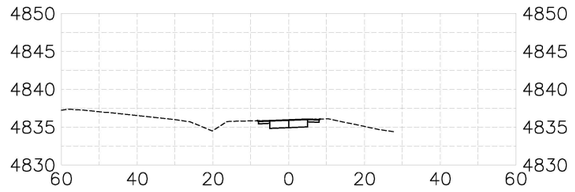
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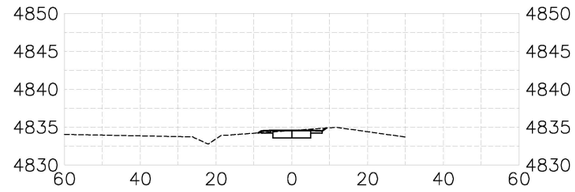
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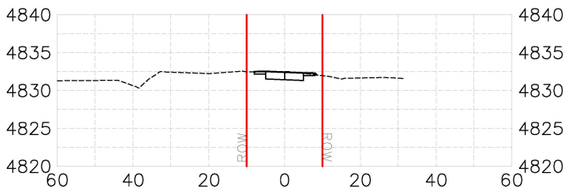
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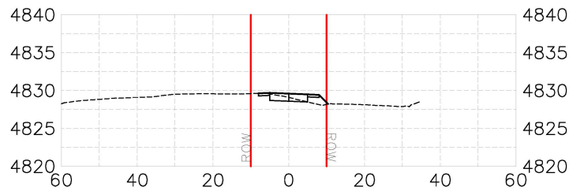
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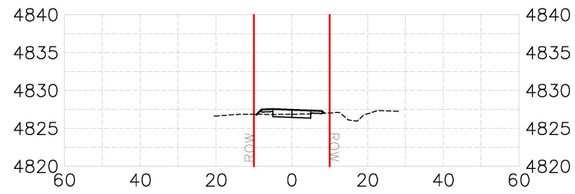
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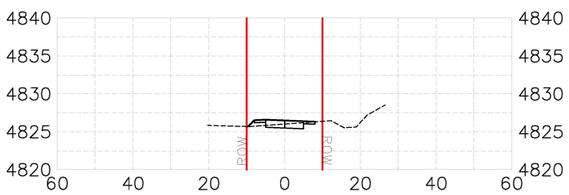
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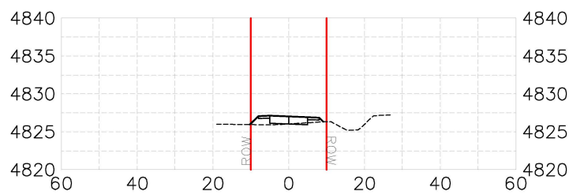
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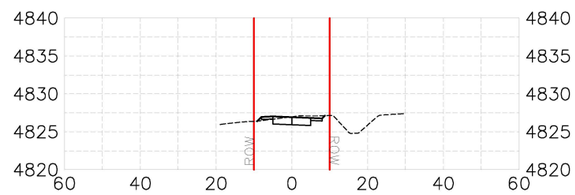
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23+00.00



23+50.00



24+00.00

DESCRIPTION		DATE
REVISION 1	CROSS SECTIONS	08/27/2024
REVISION 2		
REVISION 3		
REVISION 4		

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

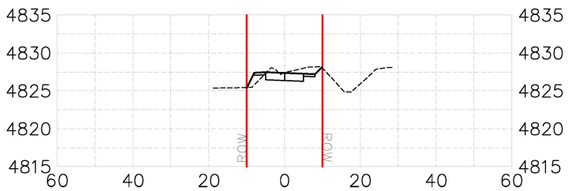
SCALES:
PLAN & PROFILE
HORIZONTAL: 1" = 40'
VERTICAL: 1" = 20'

CITY OF Grand Junction COLORADO

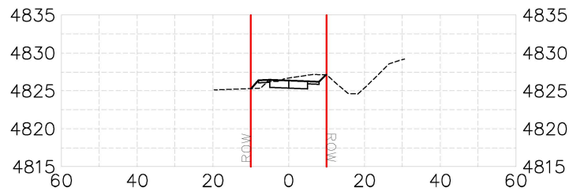
PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
TRAIL CROSS SECTION – (4)
August 27, 2024

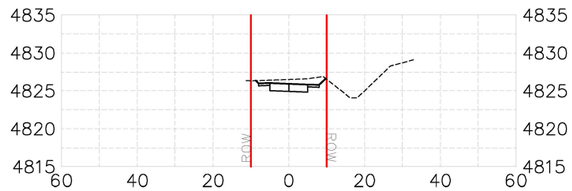
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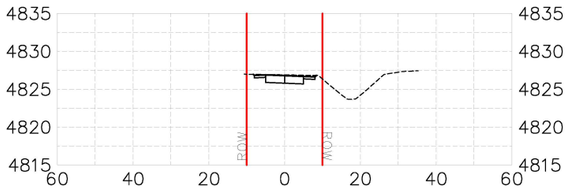
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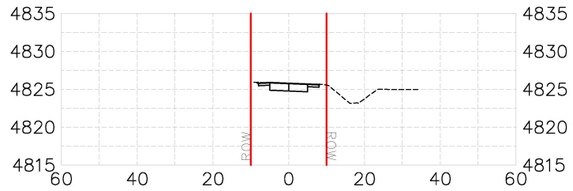
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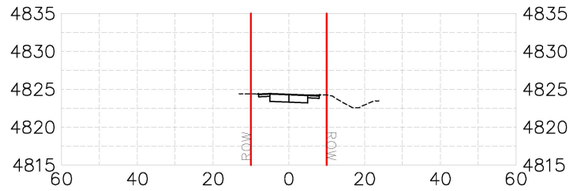
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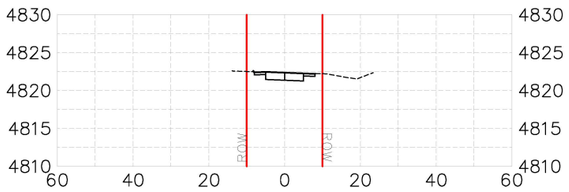
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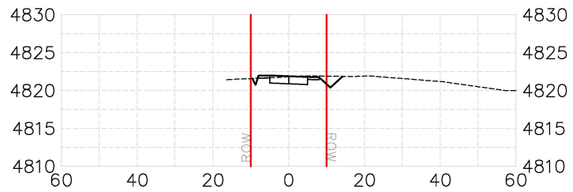
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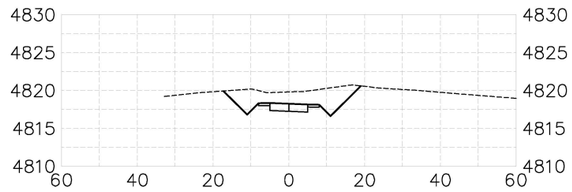
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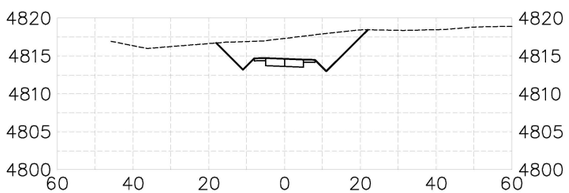
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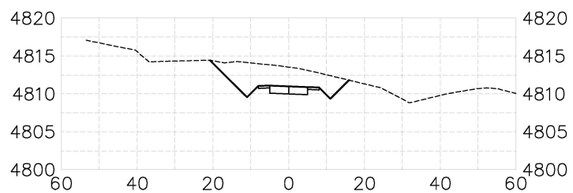
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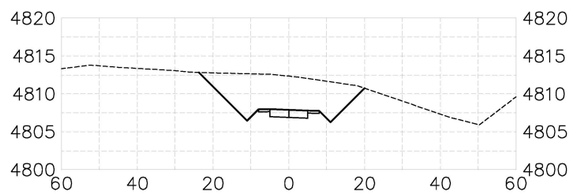
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29+00.00



29+50.00



30+00.00

DESCRIPTION	DATE
REVISION 1 CROSS SECTIONS	08/27/2024
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

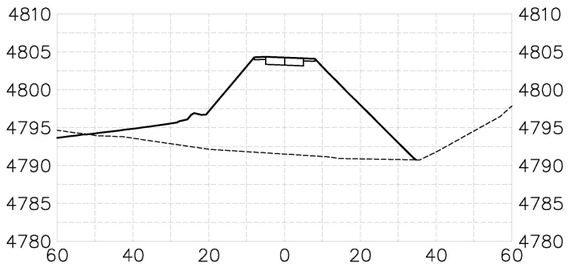
SCALES:
PLAN & PROFILE
HORIZONTAL: 1" = 40'
VERTICAL: 1" = 20'

CITY OF Grand Junction COLORADO

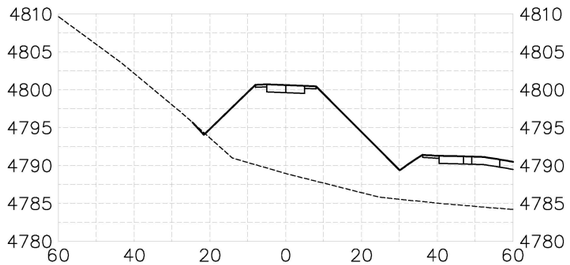
PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
TRAIL CROSS SECTION – (5)
August 27, 2024

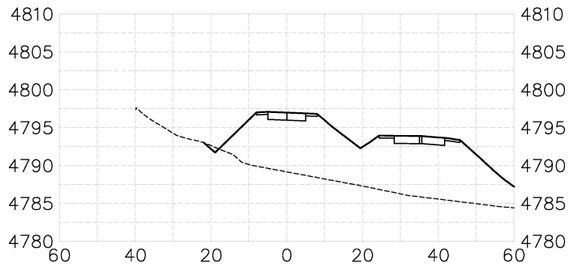
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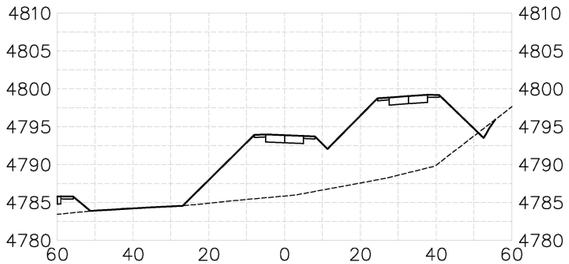
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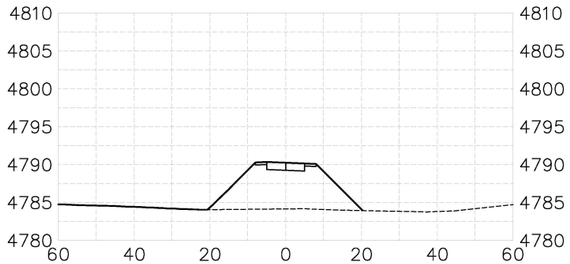
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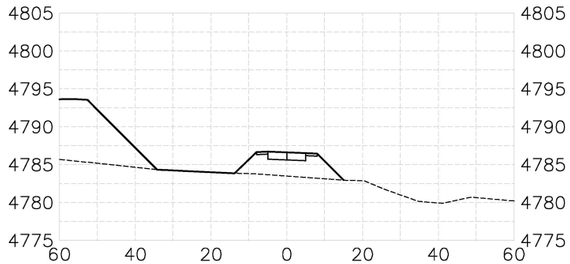
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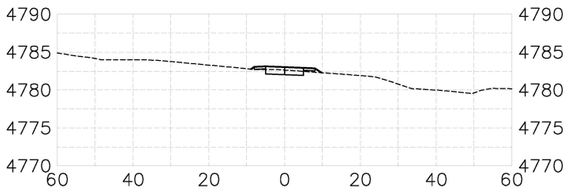
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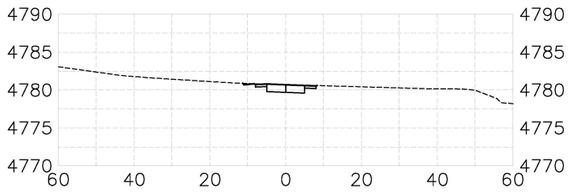
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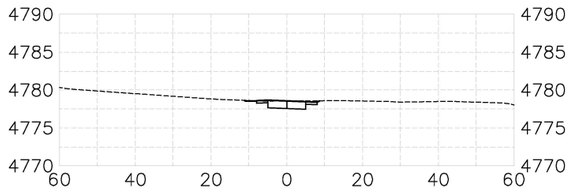
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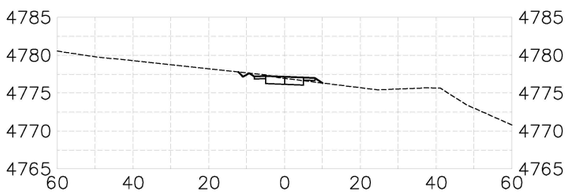
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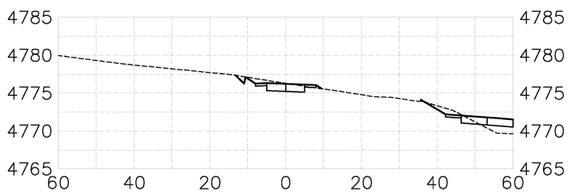
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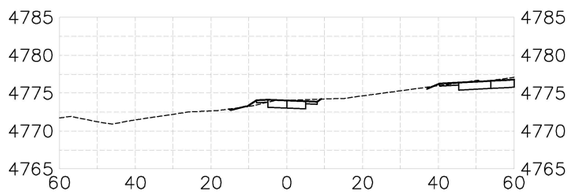
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35+00.00



35+50.00



36+00.00

DESCRIPTION	DATE
REVISION 1 CROSS SECTIONS	08/27/2024
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

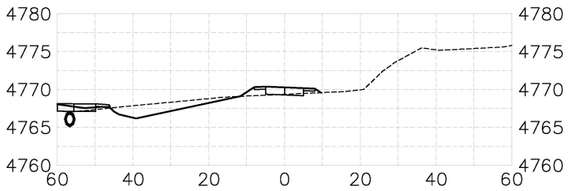
SCALES:
PLAN & PROFILE
HORIZONTAL: 1" = 40'
VERTICAL: 1" = 20'

CITY OF Grand Junction COLORADO

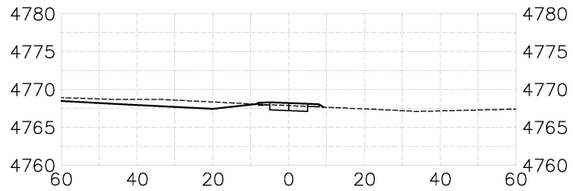
PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
TRAIL CROSS SECTION – (6)
August 27, 2024

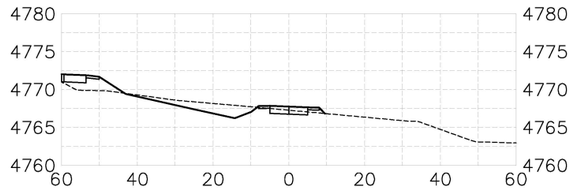
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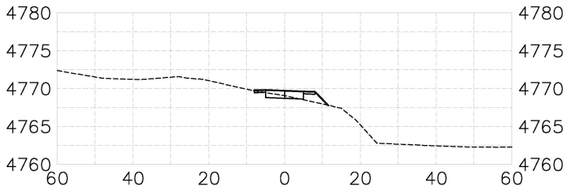
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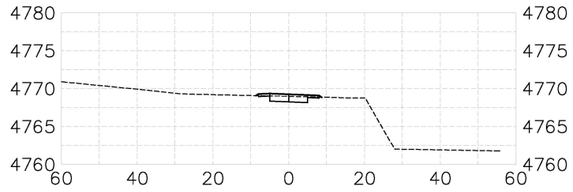
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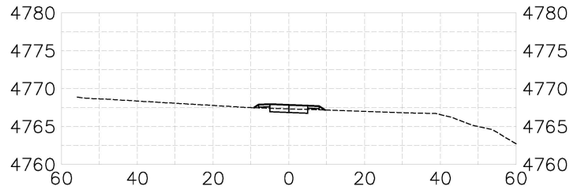
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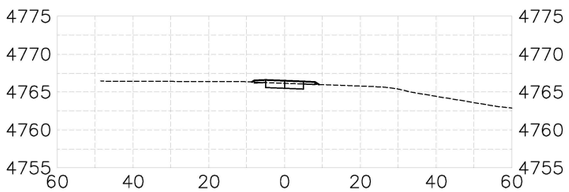
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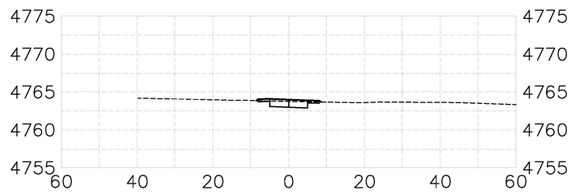
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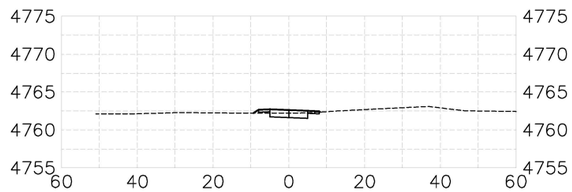
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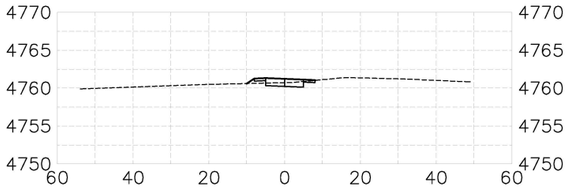
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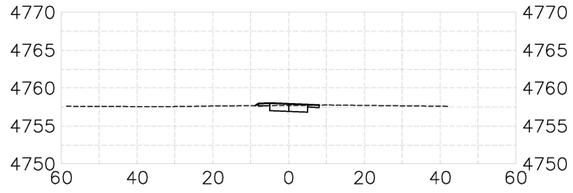
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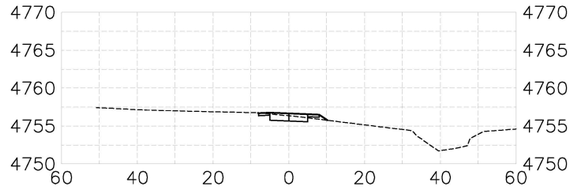
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41+00.00



41+50.00



42+00.00

DESCRIPTION	DATE
REVISION 1 CROSS SECTIONS	08/27/2024
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

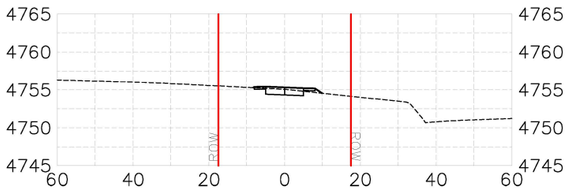
SCALES:
PLAN & PROFILE
HORIZONTAL: 1" = 40'
VERTICAL: 1" = 20'

CITY OF Grand Junction COLORADO

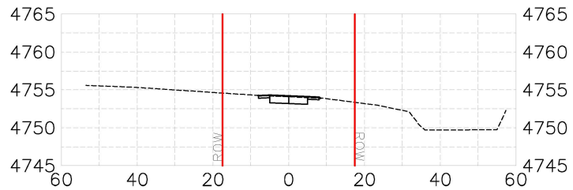
PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
TRAIL CROSS SECTION – (7)
August 27, 2024

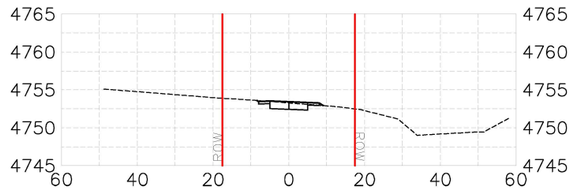
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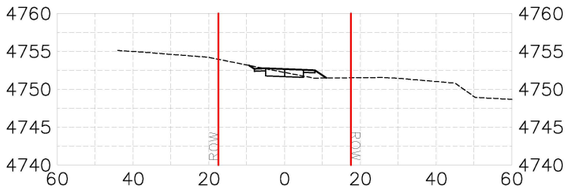
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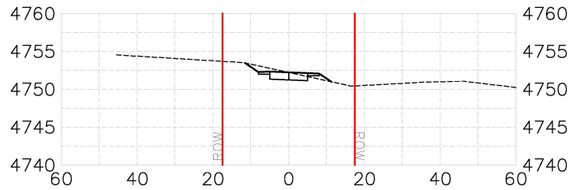
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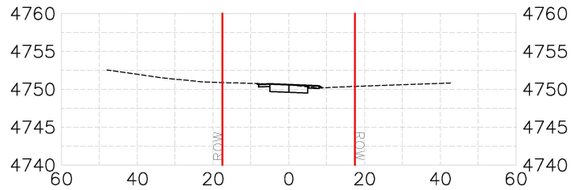
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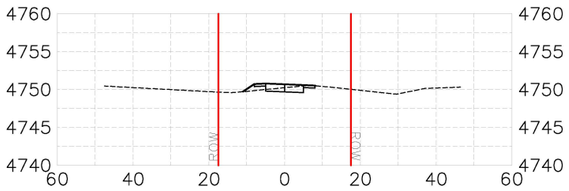
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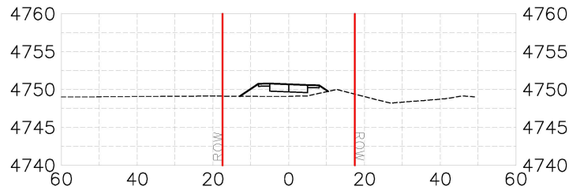
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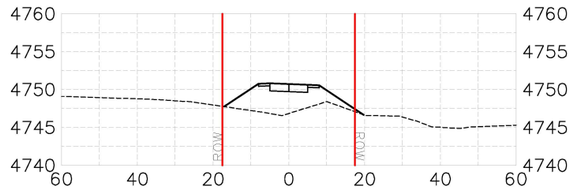
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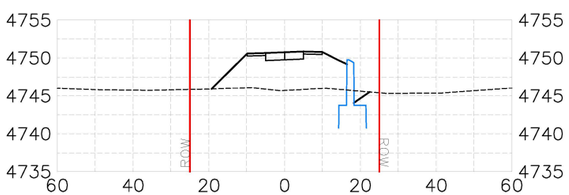
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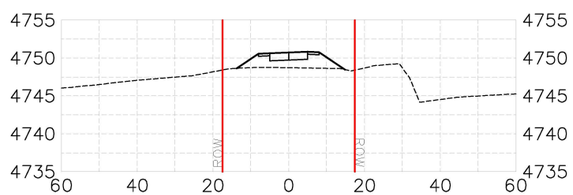
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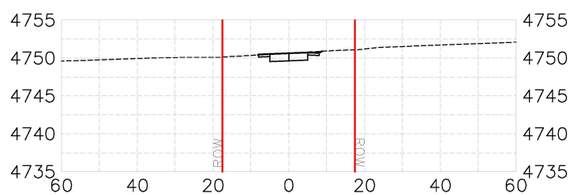
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47+00.00



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48+00.00

DESCRIPTION	DATE
REVISION 1 CROSS SECTIONS	08/27/2024
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES:
PLAN & PROFILE
HORIZONTAL: 1" = 40'
VERTICAL: 1" = 20'

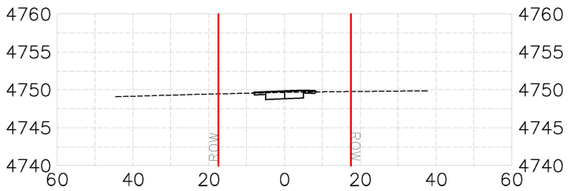
CITY OF Grand Junction COLORADO

PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

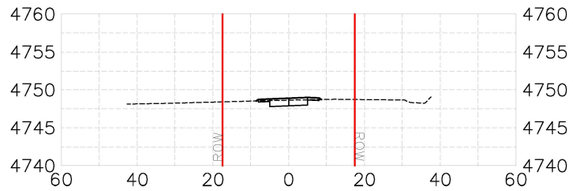
MONUMENT CONNECT TRAIL PHASE 2
TRAIL CROSS SECTION – (8)
August 27, 2024

57

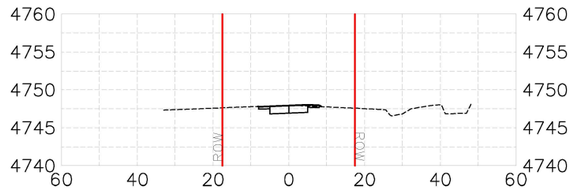
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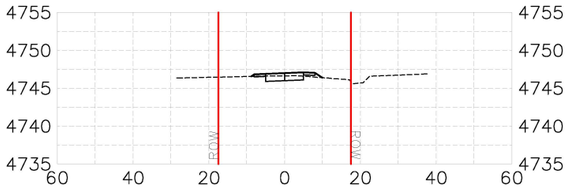
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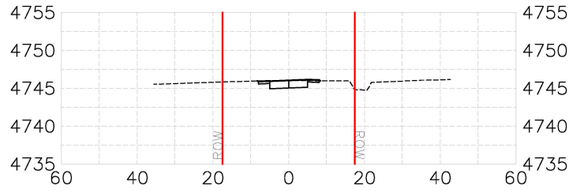
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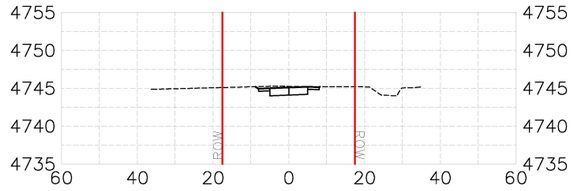
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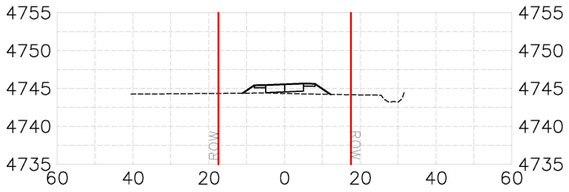
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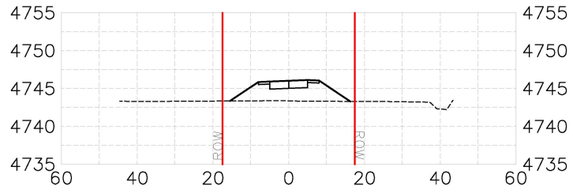
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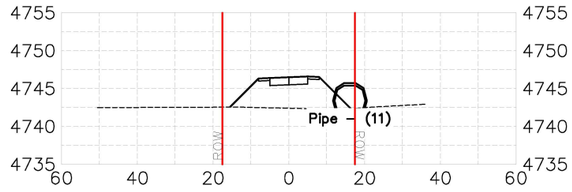
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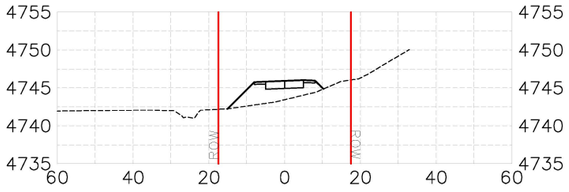
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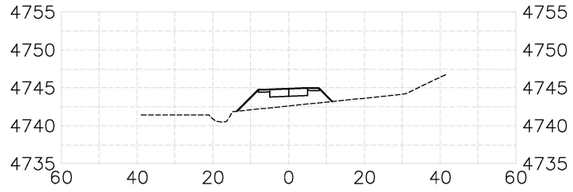
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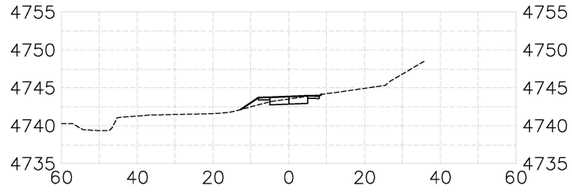
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53+00.00



53+50.00



54+00.00

DESCRIPTION	DATE
REVISION 1 CROSS SECTIONS	08/27/2024
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

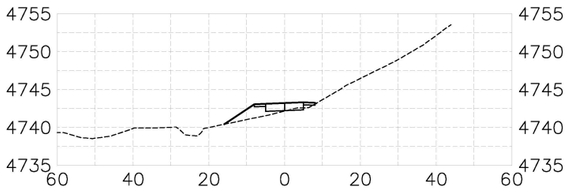
SCALES:
PLAN & PROFILE
HORIZONTAL: 1" = 40'
VERTICAL: 1" = 20'

CITY OF Grand Junction COLORADO

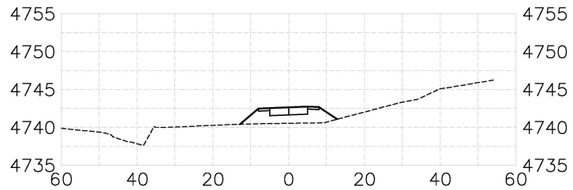
PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
TRAIL CROSS SECTION – (9)
August 27, 2024

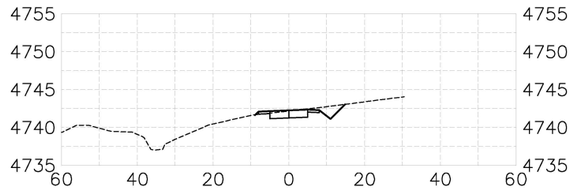
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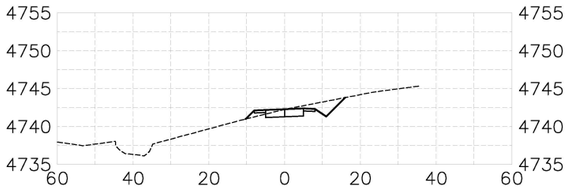
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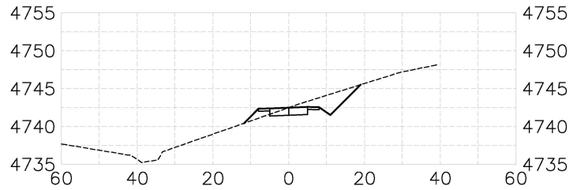
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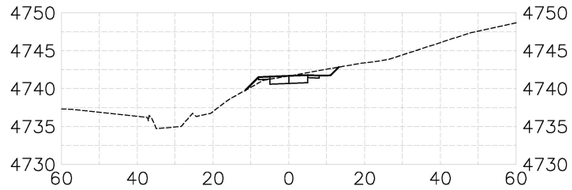
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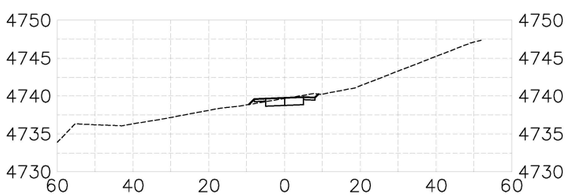
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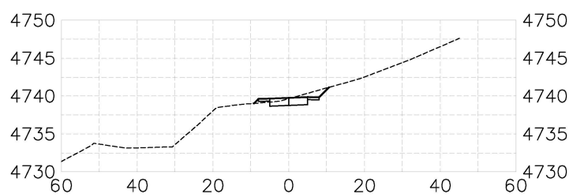
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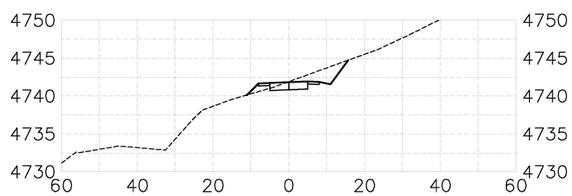
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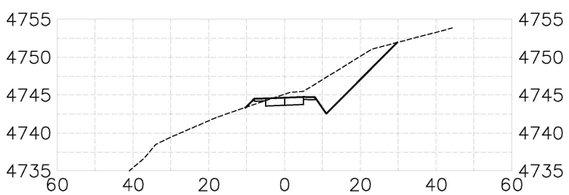
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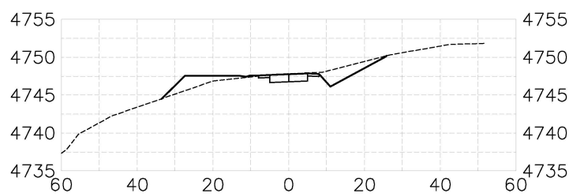
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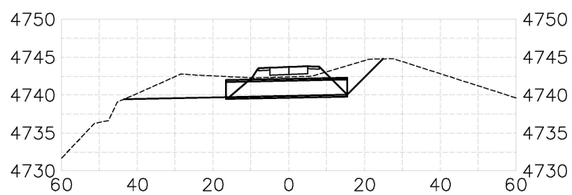
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59+00.00



59+50.00



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DESCRIPTION	DATE
REVISION 1 CROSS SECTIONS	08/27/2024
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

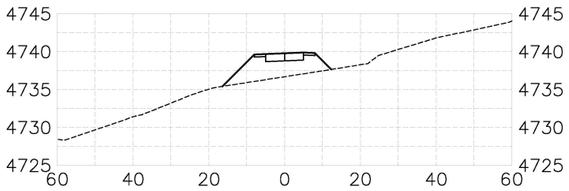
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HORIZONTAL: 1" = 40'
VERTICAL: 1" = 20'

CITY OF Grand Junction COLORADO

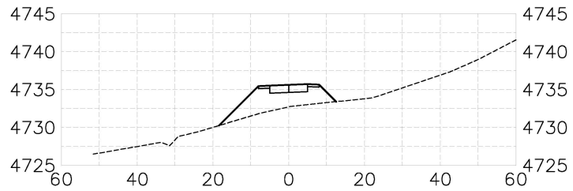
PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
TRAIL CROSS SECTION – (10)
August 27, 2024

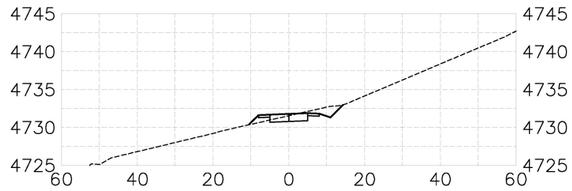
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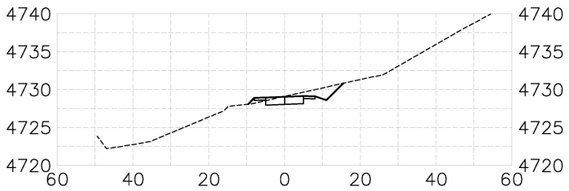
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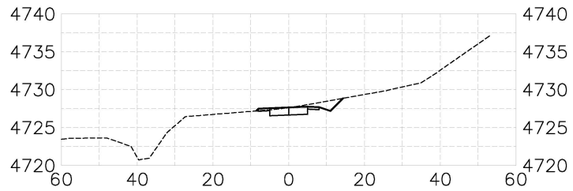
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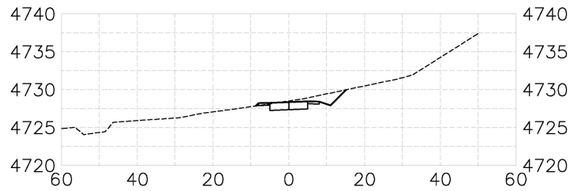
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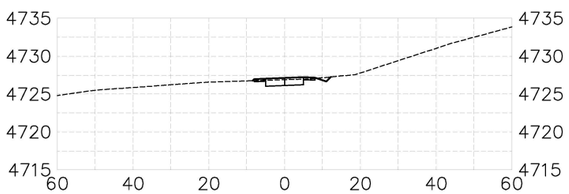
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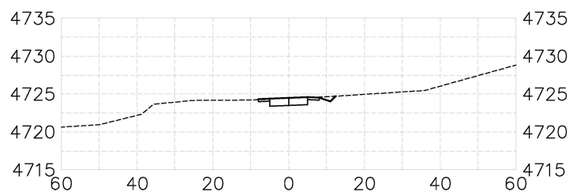
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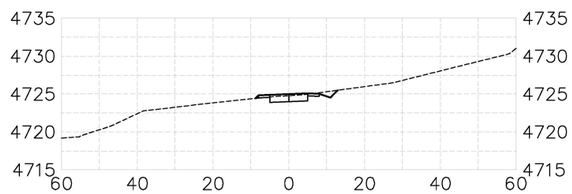
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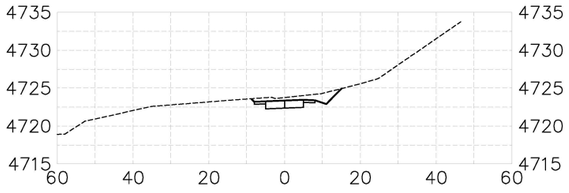
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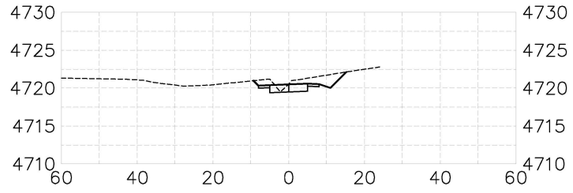
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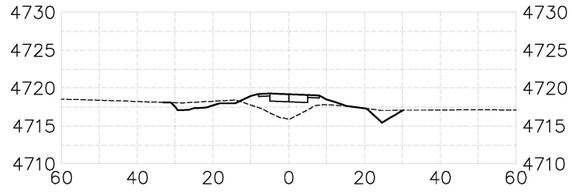
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66+00.00

DESCRIPTION	DATE
REVISION 1 CROSS SECTIONS	08/27/2024
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

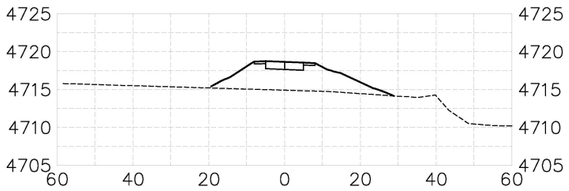
SCALES:
PLAN & PROFILE
HORIZONTAL: 1" = 40'
VERTICAL: 1" = 20'

CITY OF Grand Junction COLORADO

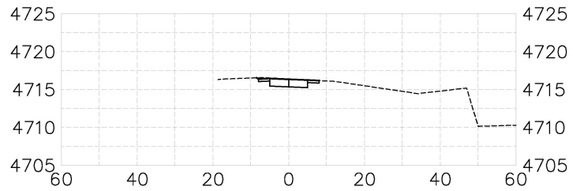
PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
TRAIL CROSS SECTION – (11)
August 27, 2024

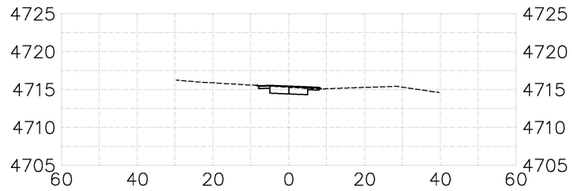
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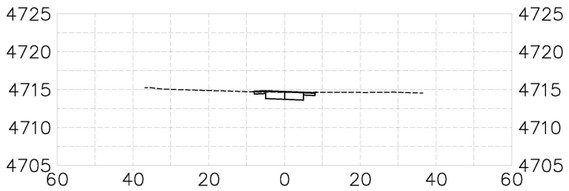
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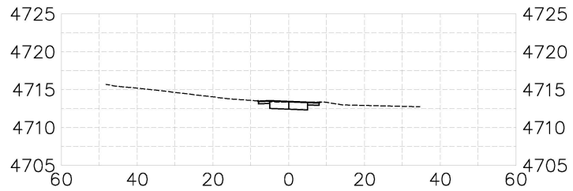
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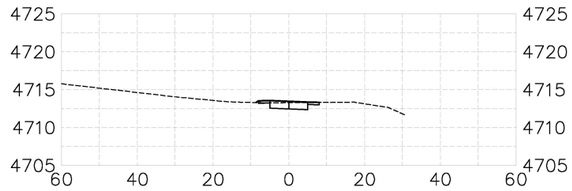
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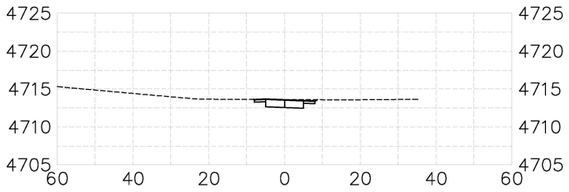
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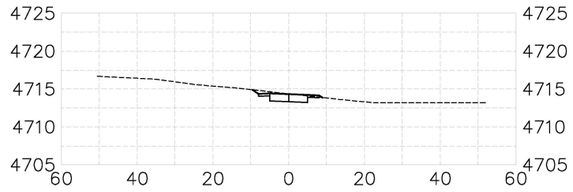
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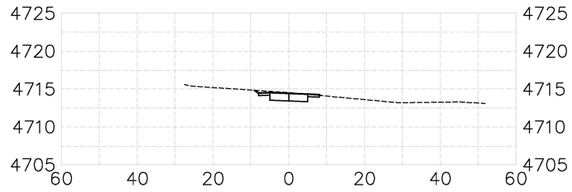
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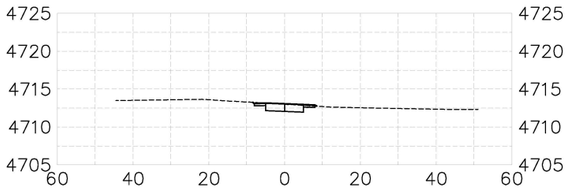
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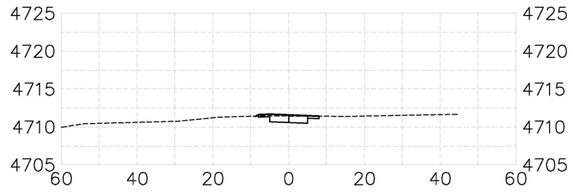
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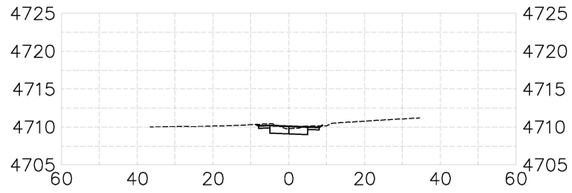
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71+00.00



71+50.00



72+00.00

DESCRIPTION	DATE
REVISION 1 CROSS SECTIONS	08/27/2024
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

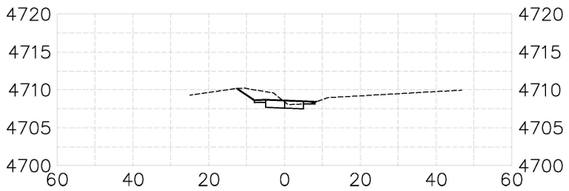
SCALES:
PLAN & PROFILE
HORIZONTAL: 1" = 40'
VERTICAL: 1" = 20'

CITY OF Grand Junction COLORADO

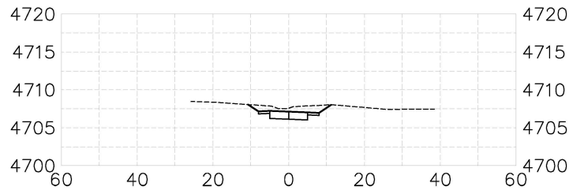
PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
TRAIL CROSS SECTION – (12)
August 27, 2024

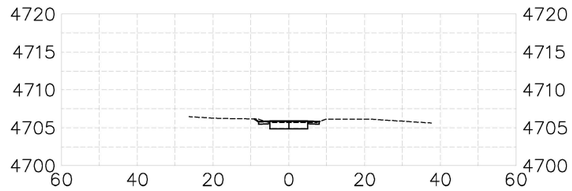
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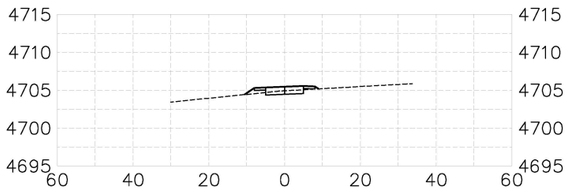
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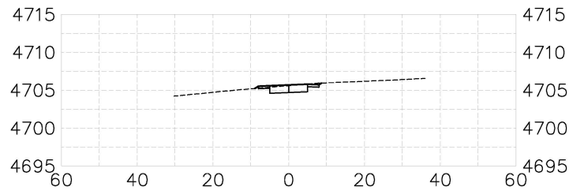
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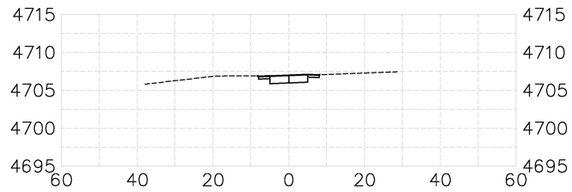
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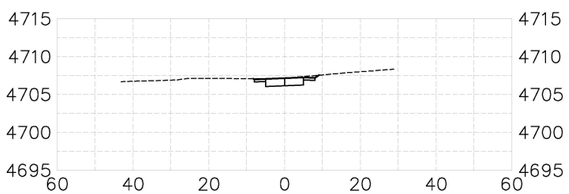
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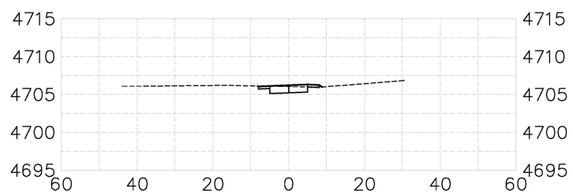
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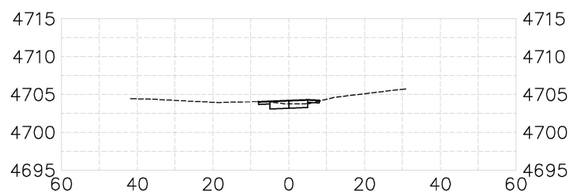
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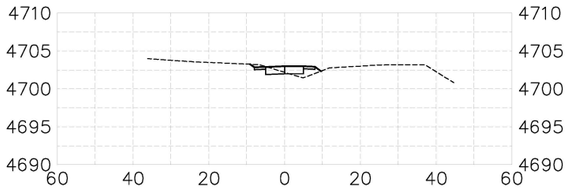
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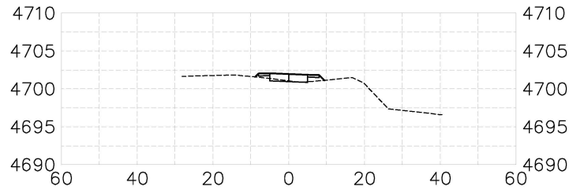
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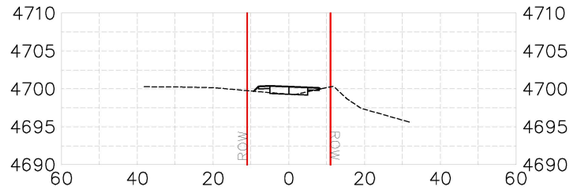
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77+00.00



77+50.00



78+00.00

DESCRIPTION	DATE
REVISION 1 CROSS SECTIONS	– 08/27/2024
REVISION 2	–
REVISION 3	–
REVISION 4	–

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

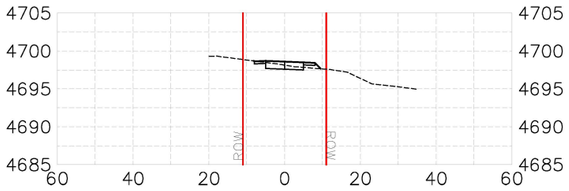
SCALES:
PLAN & PROFILE
HORIZONTAL: 1" = 40'
VERTICAL: 1" = 20'

CITY OF Grand Junction COLORADO

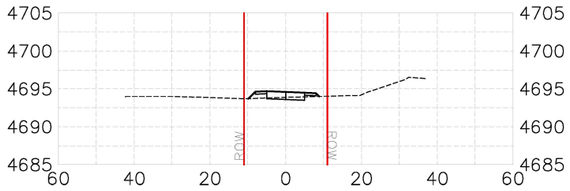
PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
TRAIL CROSS SECTION – (13)
August 27, 2024

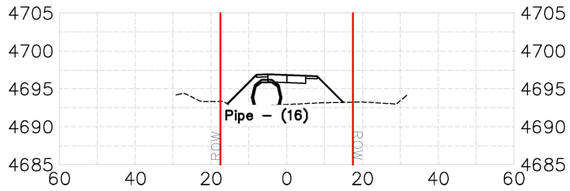
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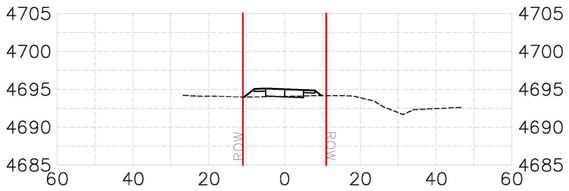
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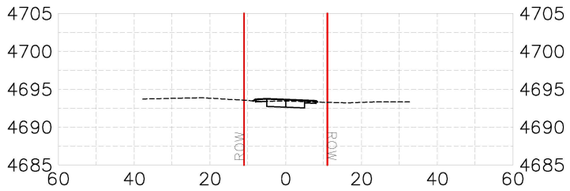
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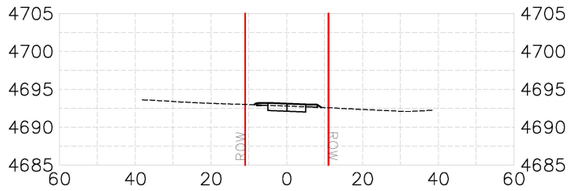
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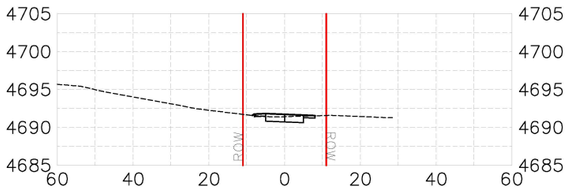
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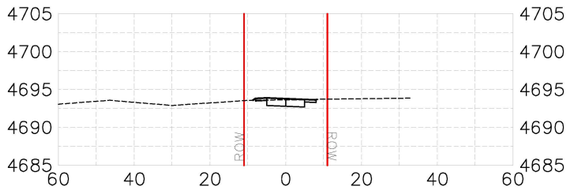
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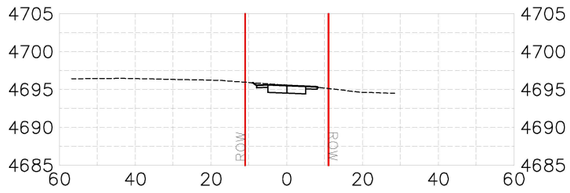
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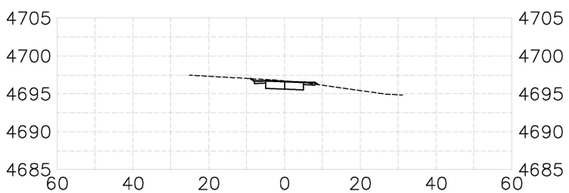
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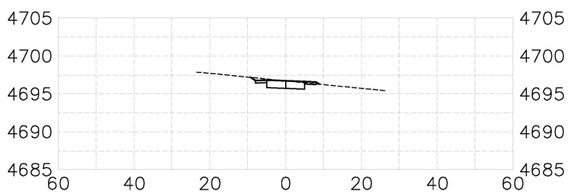
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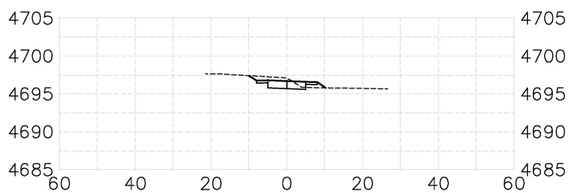
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83+00.00



83+50.00



84+00.00

DESCRIPTION		DATE
REVISION 1	CROSS SECTIONS	08/27/2024
REVISION 2		
REVISION 3		
REVISION 4		

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

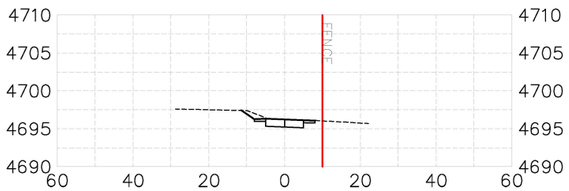
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HORIZONTAL: 1" = 40'
VERTICAL: 1" = 20'

CITY OF Grand Junction COLORADO

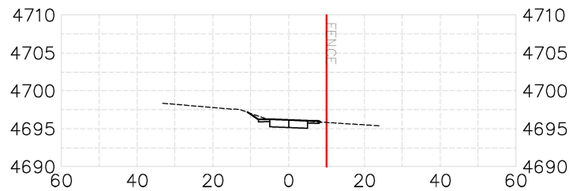
PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
TRAIL CROSS SECTION – (14)
August 27, 2024

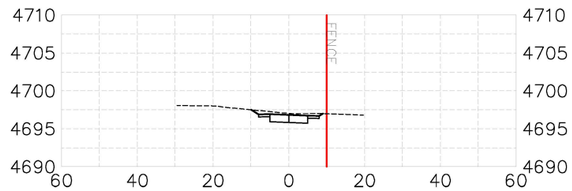
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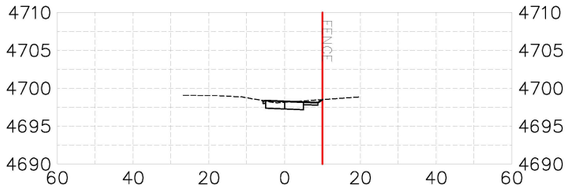
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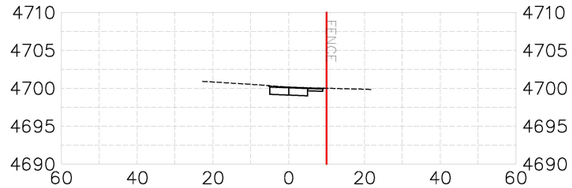
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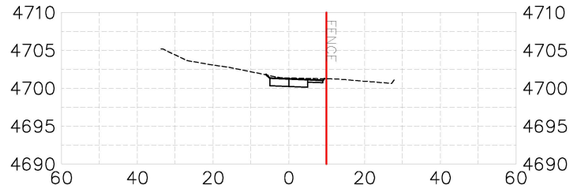
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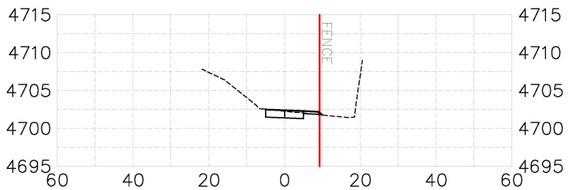
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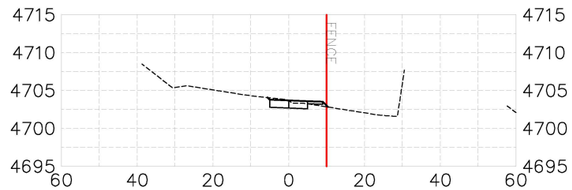
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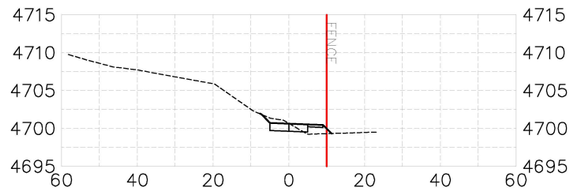
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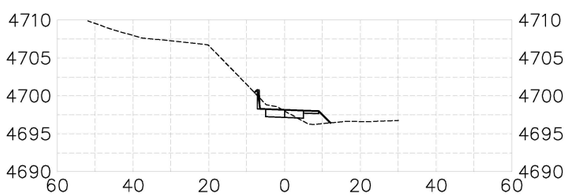
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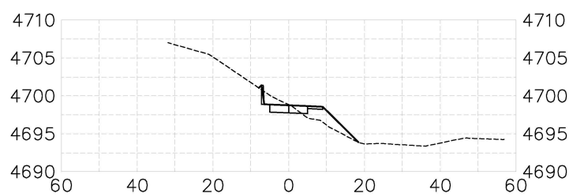
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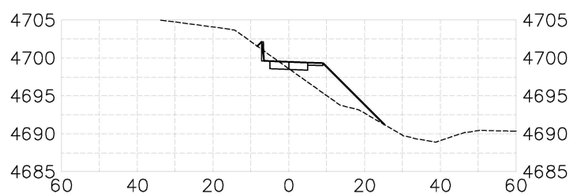
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90+00.00

DESCRIPTION	DATE
REVISION 1 CROSS SECTIONS	08/27/2024
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

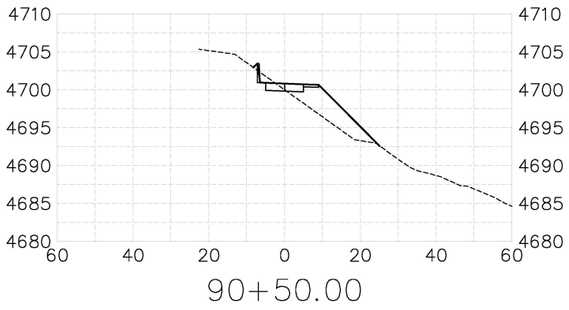
SCALES:
PLAN & PROFILE
HORIZONTAL: 1" = 40'
VERTICAL: 1" = 20'

CITY OF Grand Junction COLORADO

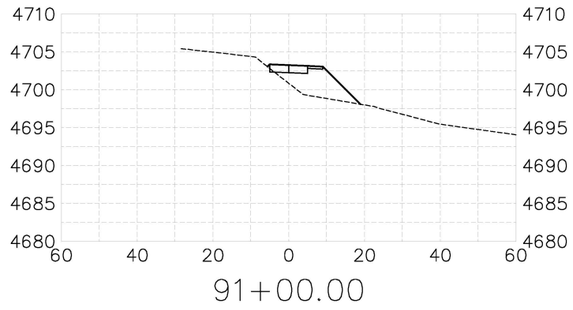
PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
TRAIL CROSS SECTION – (15)
August 27, 2024

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91+00.00

DESCRIPTION	DATE
REVISION 1 CROSS SECTIONS	08/27/2024
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES:
PLAN & PROFILE
HORIZONTAL: 1" = 40'
VERTICAL: 1" = 20'

CITY OF Grand Junction COLORADO

PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
TRAIL CROSS SECTION – (16)
August 27, 2024

65

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CONSTRUCTION ACCESS & STAGING AREA

CONCRETE WASHOUT

VEHICLE TRACKING PAD

Pipe – (1)

CHECK DAM (TYP.)

APPROXIMATE LIMITS OF DISTURBANCE

2945-301-13-001
CITY OF GRAND JUNCTION

2945-292-00-125
AZCARRAGA MARTIN

CHECK DAM IN SWALE (TYP.)

APPROXIMATE LIMITS OF DISTURBANCE

CHECK DAM IN SWALE (TYP.)

2945-301-13-001
CITY OF GRAND JUNCTION

DESCRIPTION	DATE
REVISION 1	–
REVISION 2	–
REVISION 3	–
REVISION 4	–

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES:
PLAN
HORIZONTAL: 1" = 20'
0 5 10 20

CITY OF Grand Junction COLORADO

PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
STORM WATER MANAGEMETN PLAN
August 27, 2024

SW01

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2945-292-00-125
AZCARRAGA MARTIN

PERIMETER CONTROL (STRAW WATTLE OR BERM) (TYP.)

CHECK DAM IN SWALE (TYP.)

APPROXIMATE LIMITS OF DISTURBANCE

2945-301-13-001
CITY OF GRAND JUNCTION

PERIMETER CONTROL (STRAW WATTLE OR BERM) (TYP.)

Pipe – (2)

CHECK DAM IN SWALE (TYP.)

2945-292-01-001
CITY OF GRAND JUNCTION

APPROXIMATE LIMITS OF DISTURBANCE

Pipe – (3)

PERIMETER CONTROL (STRAW WATTLE OR BERM) (TYP.)

CHECK DAM IN SWALE (TYP.)

2945-301-13-001
CITY OF GRAND JUNCTION

DESCRIPTION	DATE
REVISION 1	–
REVISION 2	–
REVISION 3	–
REVISION 4	–

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES:
PLAN
HORIZONTAL: 1" = 20'
0 5 10 20

CITY OF Grand Junction COLORADO

PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
STORM WATER MANAGEMETN PLAN
August 27, 2024

SW02

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2945-292-00-125
AZCARRAGA MARTIN

APPROXIMATE LIMITS OF DISTURBANCE

CHECK DAM IN SWALE (TYP.)

2945-292-01-001
CITY OF GRAND JUNCTION

APPROXIMATE LIMITS OF DISTURBANCE

PERIMETER CONTROL (STRAW WATTLE OR BERM) (TYP.)

DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES:
PLAN
HORIZONTAL: 1" = 20'
0 5 10 20

CITY OF Grand Junction COLORADO

PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
STORM WATER MANAGEMETN PLAN
August 27, 2024

SW03

68

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Pipe – (4)

PERIMETER CONTROL (STRAW WATTLE OR BERM) (TYP.)

Pipe – (5)

APPROXIMATE LIMITS OF DISTURBANCE

MFCP /1.5ALC PLS 24320/
N 27693.1870
E 74470.60
EL 4838.74

2945-292-01-001
CITY OF GRAND JUNCTION

MFCP /2ALC PLS 38428/
N 27655.0950
E 74579.96
EL 4835.54

2945-292-07-001
2310 STONE CREEK CT
MCLEROY ZACHARY KEITH

PERIMETER CONTROL (STRAW WATTLE OR BERM) (TYP.)

MFCP /2ALC LS 24306 54.35 WC/
N 27692.5850
E 74592.14
EL 4835.66

2945-292-00-127
CITY OF GRAND JUNCTION

2945-292-00-045
2320 MONUMENT RD
ORACLE GALE LLC

APPROXIMATE LIMITS OF DISTURBANCE

MFCP /2ALC PLS 38428/
N 27692.3910
E 74623.97
EL 4833.32

MFCP /2ALC PLS 38428/
N 27672.2000
E 74642.81
EL 4830.67

MFCP /1.5 YPC PLS 38428
N 27671.6130
E 74712.73
EL 4827.28

2945-292-07-002
2312 STONE CREEK CT
INGERSOLL ERIC

MFCP /2ALC PLS 38428/
N 27655.0950
E 74579.96
EL 4835.54

2945-292-07-001
2310 STONE CREEK CT
MCLEROY ZACHARY KEITH

PERIMETER CONTROL (STRAW WATTLE) (TYP.)

MFCP /1.5 YPC PLS 38428
N 27670.8800
E 74824.55
EL 4826.50

2945-292-07-003
2314 STONE CREEK CT
JOHNSON JOSHUA

DESCRIPTION	DATE
REVISION 1	–
REVISION 2	–
REVISION 3	–
REVISION 4	–

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES:
PLAN
HORIZONTAL 1" = 20'
0 5 10 20

CITY OF Grand Junction COLORADO

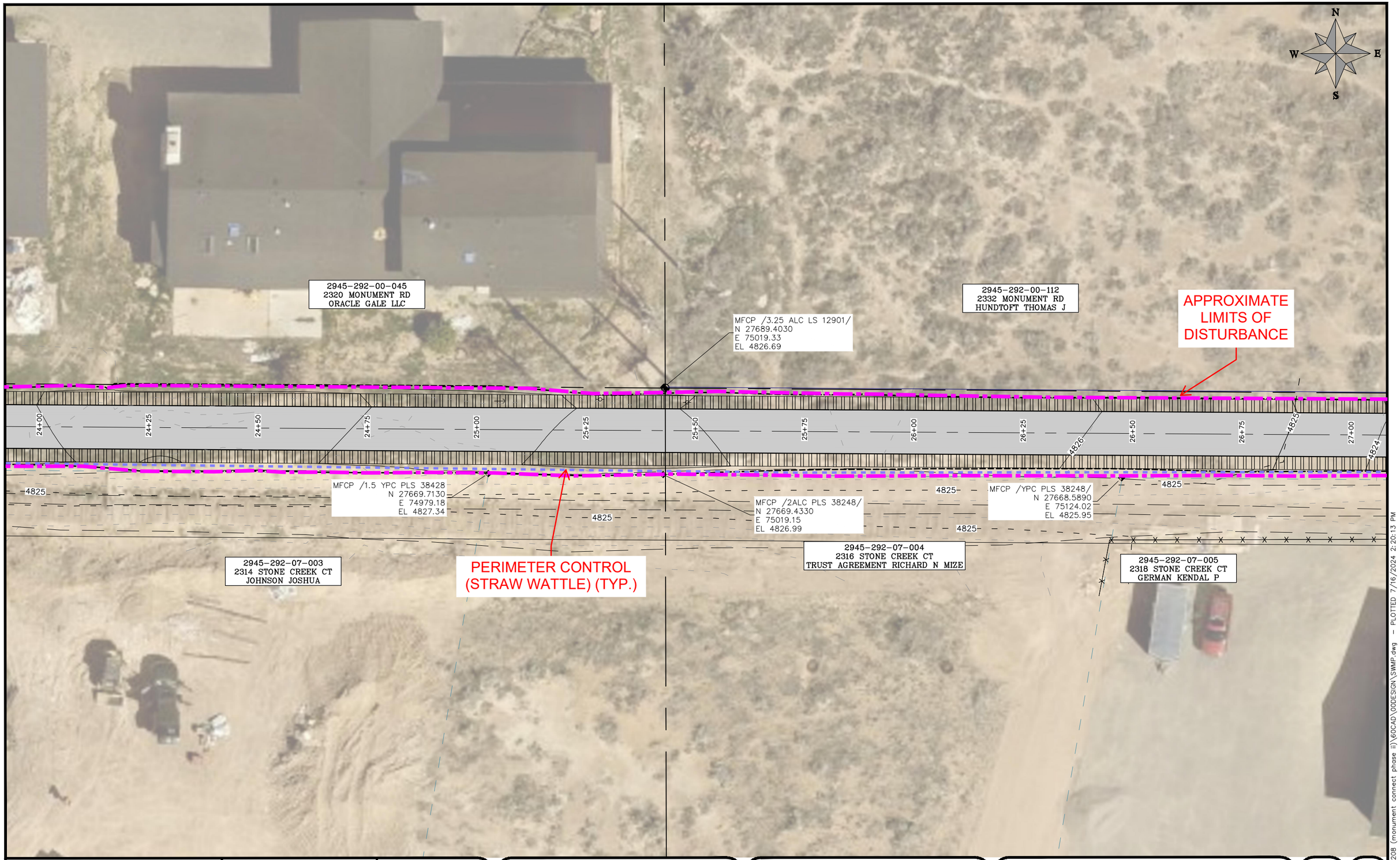
PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
STORM WATER MANAGEMETN PLAN
August 27, 2024

SW04

69

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DESCRIPTION	DATE
REVISION 1	–
REVISION 2	–
REVISION 3	–
REVISION 4	–

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES:
PLAN
HORIZONTAL 1" = 20'
0 5 10 20

CITY OF Grand Junction COLORADO

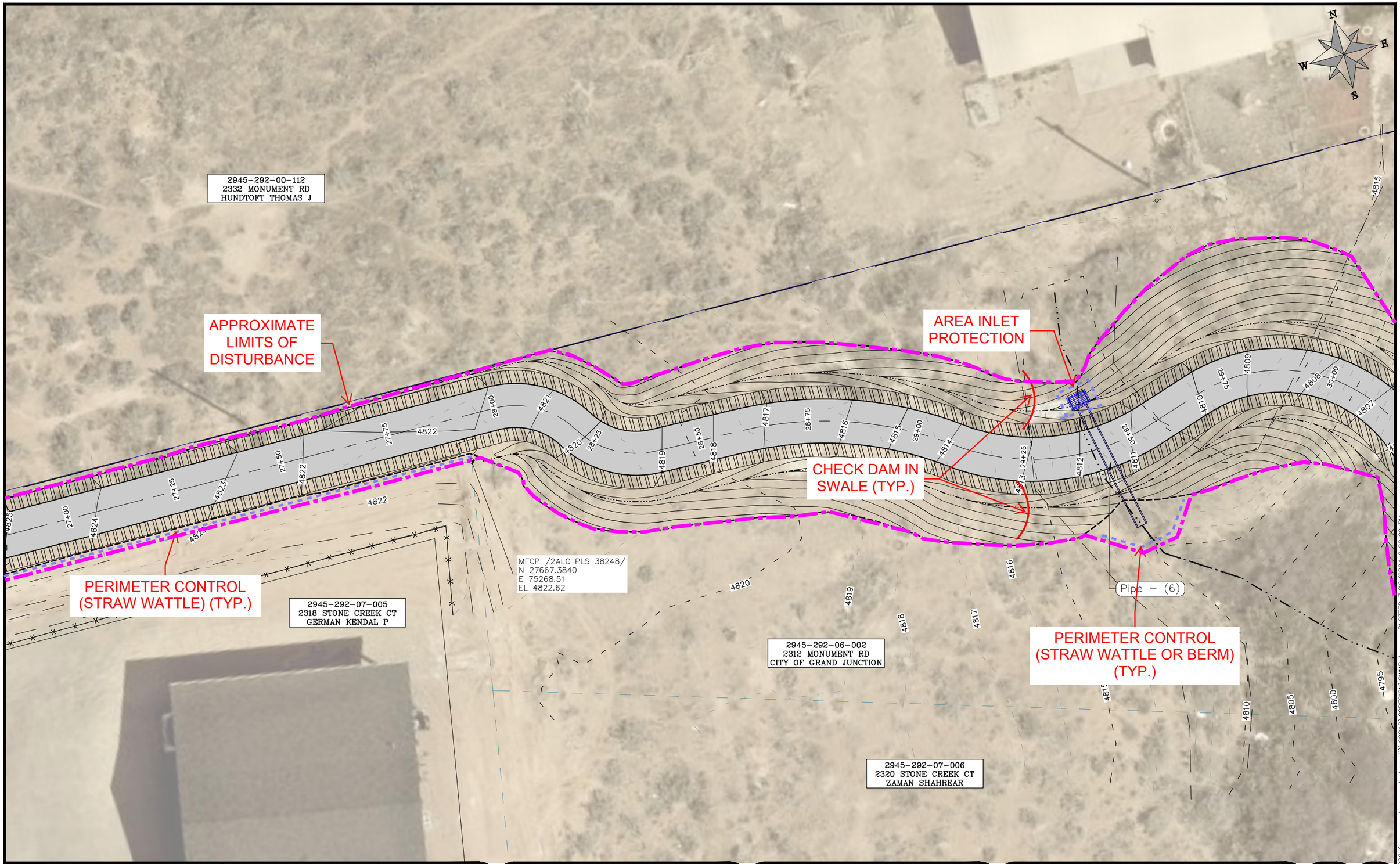
PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
STORM WATER MANAGEMETN PLAN
August 27, 2024

SW05

70

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DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES:
PLAN
HORIZONTAL 1" = 20'
0 5 10 20

CITY OF Grand Junction COLORADO

PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
STORM WATER MANAGEMETN PLAN
August 27, 2024

SW06

71

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2945-292-00-126
2328 MONUMENT RD
GRAND JUNCTION GEM & MINERAL CLUB INC

2945-292-00-112
2332 MONUMENT RD
HUNDTOFT THOMAS J

2945-292-06-002
2312 MONUMENT RD
CITY OF GRAND JUNCTION

PERIMETER CONTROL
(STRAW WATTLE OR BERM)
(TYP.)

APPROXIMATE
LIMITS OF
DISTURBANCE

AREA INLET
PROTECTION

CHECK DAM IN
SWALE (TYP.)

CHECK DAM IN
SWALE (TYP.)

Pipe – (6)

Pipe – (7)

PERIMETER CONTROL
(STRAW WATTLE OR BERM)
(TYP.)

PERIMETER CONTROL
(STRAW WATTLE) (TYP.)

15'-3 1/2" 16'-6 1/2" 16'-8 1/4" 2'-9 3/4" 16'-8 1/4" 16'-6 1/2" 11 3/4" 2'-9 3/4"

MFCP /2ALC PLS 38428/
N 27510.9460
E 75606.92
EL 4782.91

2945-292-07-006
2320 STONE CREEK CT
ZAMAN SHAHREAR

DESCRIPTION	DATE
REVISION 1	–
REVISION 2	–
REVISION 3	–
REVISION 4	–

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES:
PLAN
HORIZONTAL 1" = 20'
0 5 10 20

CITY OF Grand Junction COLORADO

PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
STORM WATER MANAGEMETN PLAN
August 27, 2024

SW07

72

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2945-292-06-002
2312 MONUMENT RD
CITY OF GRAND JUNCTION

N
W
E
S

PERIMETER CONTROL
(STRAW WATTLE OR BERM)
(TYP.)

APPROXIMATE
LIMITS OF
DISTURBANCE

Pipe – (7)

MFCP /2ALC PLS 38428/
N 27510.9460
E 75606.92
EL 4782.91

PERIMETER CONTROL
(STRAW WATTLE OR BERM)
(TYP.)

DESCRIPTION	DATE
REVISION 1	–
REVISION 2	–
REVISION 3	–
REVISION 4	–

DRAWN BY	HMC	DATE	2024
DESIGNED BY	KA	DATE	2024
CHECKED BY	KA	DATE	2024
APPROVED BY	KA	DATE	2024

SCALES:
PLAN
HORIZONTAL: 1" = 20'
0 5 10 20

CITY OF Grand Junction COLORADO

PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
STORM WATER MANAGEMETN PLAN
August 27, 2024

SW08

73

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2945-292-06-002
2312 MONUMENT RD
CITY OF GRAND JUNCTION

CHECK DAM IN SWALE (TYP.)

PERIMETER CONTROL (STRAW WATTLE OR BERM) (TYP.)

APPROXIMATE LIMITS OF DISTURBANCE

Pipe – (8)

2945-292-06-002
2312 MONUMENT RD
CITY OF GRAND JUNCTION

APPROXIMATE LIMITS OF DISTURBANCE

DESCRIPTION	DATE
REVISION 1	–
REVISION 2	–
REVISION 3	–
REVISION 4	–

DRAWN BY	HMC	DATE	2024
DESIGNED BY	KA	DATE	2024
CHECKED BY	KA	DATE	2024
APPROVED BY	KA	DATE	2024

SCALES:
PLAN
HORIZONTAL: 1" = 20'
0 5 10 20

CITY OF Grand Junction COLORADO

PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
STORM WATER MANAGEMETN PLAN
August 27, 2024

SW09

74

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2945-294-00-001
BLM

APPROXIMATE LIMITS OF DISTURBANCE

PERIMETER CONTROL (STRAW WATTLE) (TYP.)

2945-294-00-001
BLM

Pipe – (9)

Pipe

APPROXIMATE LIMITS OF DISTURBANCE

PERIMETER CONTROL (STRAW WATTLE) (TYP.)

PERIMETER CONTROL (STRAW WATTLE) (TYP.)

CHECK DAM IN SWALE (TYP.)

DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES:
PLAN
HORIZONTAL: 1" = 20'
0 5 10 20

CITY OF Grand Junction COLORADO

PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
STORM WATER MANAGEMETN PLAN
August 27, 2024

SW10

75

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2945-294-00-001
BLM

APPROXIMATE LIMITS OF DISTURBANCE

PERIMETER CONTROL (STRAW WATTLE) (TYP.)

2945-292-00-065
2370 MONUMENT RD
COOPER DAVID

2945-291-00-126
CITY OF GRAND JUNCTION

2945-294-00-001
BLM

APPROXIMATE LIMITS OF DISTURBANCE

PERIMETER CONTROL (STRAW WATTLE) (TYP.)

PERIMETER CONTROL (STRAW WATTLE) (TYP.)

Pipe – (11)

DESCRIPTION	DATE
REVISION 1	–
REVISION 2	–
REVISION 3	–
REVISION 4	–

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES:
PLAN
HORIZONTAL: 1" = 20'
0 5 10 20

CITY OF Grand Junction COLORADO

PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
STORM WATER MANAGEMETN PLAN
August 27, 2024

SW11

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PERIMETER CONTROL (STRAW WATTLE OR BERM) (TYP.)

Pipe – (12)

APPROXIMATE LIMITS OF DISTURBANCE

2945-291-00-126
CITY OF GRAND JUNCTION

PERIMETER CONTROL (STRAW WATTLE OR BERM) (TYP.)

Pipe – (17)

APPROXIMATE LIMITS OF DISTURBANCE

2945-291-00-126
CITY OF GRAND JUNCTION

DESCRIPTION	DATE
REVISION 1	–
REVISION 2	–
REVISION 3	–
REVISION 4	–

DRAWN BY	HMC	DATE	2024
DESIGNED BY	KA	DATE	2024
CHECKED BY	KA	DATE	2024
APPROVED BY	KA	DATE	2024

SCALES:
PLAN
HORIZONTAL: 1" = 20'
0 5 10 20

CITY OF Grand Junction COLORADO

PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
STORM WATER MANAGEMETN PLAN
August 27, 2024

SW12

77

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PERIMETER CONTROL (STRAW WATTLE OR BERM) (TYP.)

2945-291-00-126
CITY OF GRAND JUNCTION

2945-291-00-125
2395 MONUMENT RD
CITY OF GRAND JUNCTION

APPROXIMATE LIMITS OF DISTURBANCE

CHECK DAM IN SWALE (TYP.)

Pipe – (18)

CHECK DAM IN SWALE (TYP.)

APPROXIMATE LIMITS OF DISTURBANCE

2945-291-00-125
2395 MONUMENT RD
CITY OF GRAND JUNCTION

DESCRIPTION	DATE
REVISION 1	–
REVISION 2	–
REVISION 3	–
REVISION 4	–

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES:
PLAN
HORIZONTAL: 1" = 20'
0 5 10 20

CITY OF Grand Junction COLORADO

PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
STORM WATER MANAGEMETN PLAN
August 27, 2024

SW13

78

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PERIMETER CONTROL (STRAW WATTLE OR BERM) (TYP.)

APPROXIMATE LIMITS OF DISTURBANCE

CHECK DAM IN SWALE (TYP.)

Pipe – (13)

Pipe – (14)

2945-291-00-125
2395 MONUMENT RD
CITY OF GRAND JUNCTION

MFOP /2 ALC LS 9331/
N 28522.2340
E 78155.74
EL 4715.84

APPROXIMATE LIMITS OF DISTURBANCE

2945-291-00-125
2395 MONUMENT RD
CITY OF GRAND JUNCTION

DESCRIPTION	DATE
REVISION 1	–
REVISION 2	–
REVISION 3	–
REVISION 4	–

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES:
PLAN
HORIZONTAL: 1" = 20'
0 5 10 20

CITY OF Grand Junction COLORADO

PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
STORM WATER MANAGEMETN PLAN
August 27, 2024

SW14

79

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APPROXIMATE LIMITS OF DISTURBANCE

2945-291-00-125
2395 MONUMENT RD
CITY OF GRAND JUNCTION

2945-291-00-125
2395 MONUMENT RD
CITY OF GRAND JUNCTION

Pipe – (15)

APPROXIMATE LIMITS OF DISTURBANCE

PERIMETER CONTROL (STRAW WATTLE OR BERM) (TYP.)

PERIMETER CONTROL (STRAW WATTLE) (TYP.)

2945-282-00-001
BLM

DESCRIPTION	DATE
REVISION 1	–
REVISION 2	–
REVISION 3	–
REVISION 4	–

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES:
PLAN
HORIZONTAL: 1" = 20'
0 5 10 20

CITY OF Grand Junction COLORADO

PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
STORM WATER MANAGEMETN PLAN
August 27, 2024

SW15

80

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2945-282-00-001
BLM

Pipe – (16)

APPROXIMATE LIMITS OF DISTURBANCE

PERIMETER CONTROL (STRAW WATTLE) (TYP.)

2945-282-00-001
BLM

APPROXIMATE LIMITS OF DISTURBANCE

PERIMETER CONTROL (STRAW WATTLE) (TYP.)

2945-213-00-001
2415 MONUMENT RD
CITY OF GRAND JUNCTION

DESCRIPTION	DATE
REVISION 1	–
REVISION 2	–
REVISION 3	–
REVISION 4	–

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES:
PLAN
HORIZONTAL: 1" = 20'
0 5 10 20

CITY OF Grand Junction COLORADO

PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
STORM WATER MANAGEMETN PLAN
August 27, 2024

SW16

81

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APPROXIMATE LIMITS OF DISTURBANCE

2945-213-00-001
2415 MONUMENT RD
CITY OF GRAND JUNCTION

APPROXIMATE LIMITS OF DISTURBANCE

PERIMETER CONTROL (STRAW WATTLE OR BERM) (TYP.)

DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES: PLAN HORIZONTAL 1" = 20'

CITY OF Grand Junction COLORADO

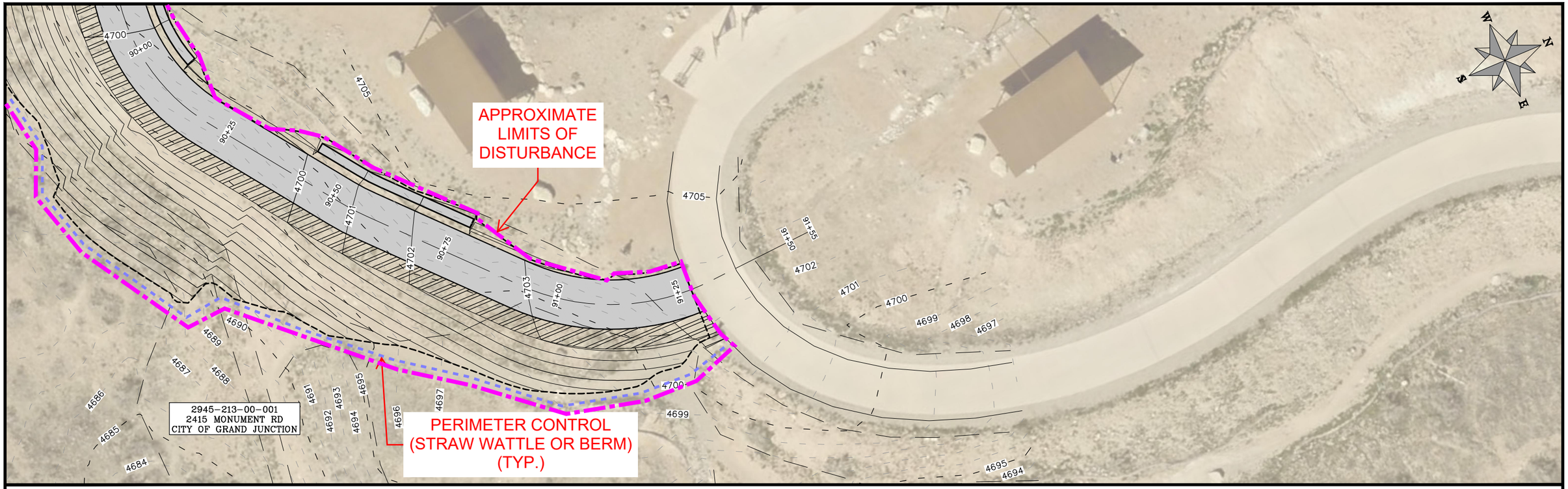
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ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
STORM WATER MANAGEMETN PLAN
August 27, 2024

SW17

82

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DESCRIPTION	DATE
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REVISION 3	–
REVISION 4	–

DRAWN BY HMC DATE 2024
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APPROVED BY KA DATE 2024

SCALES:
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HORIZONTAL: 1" = 20'
0 5 10 20

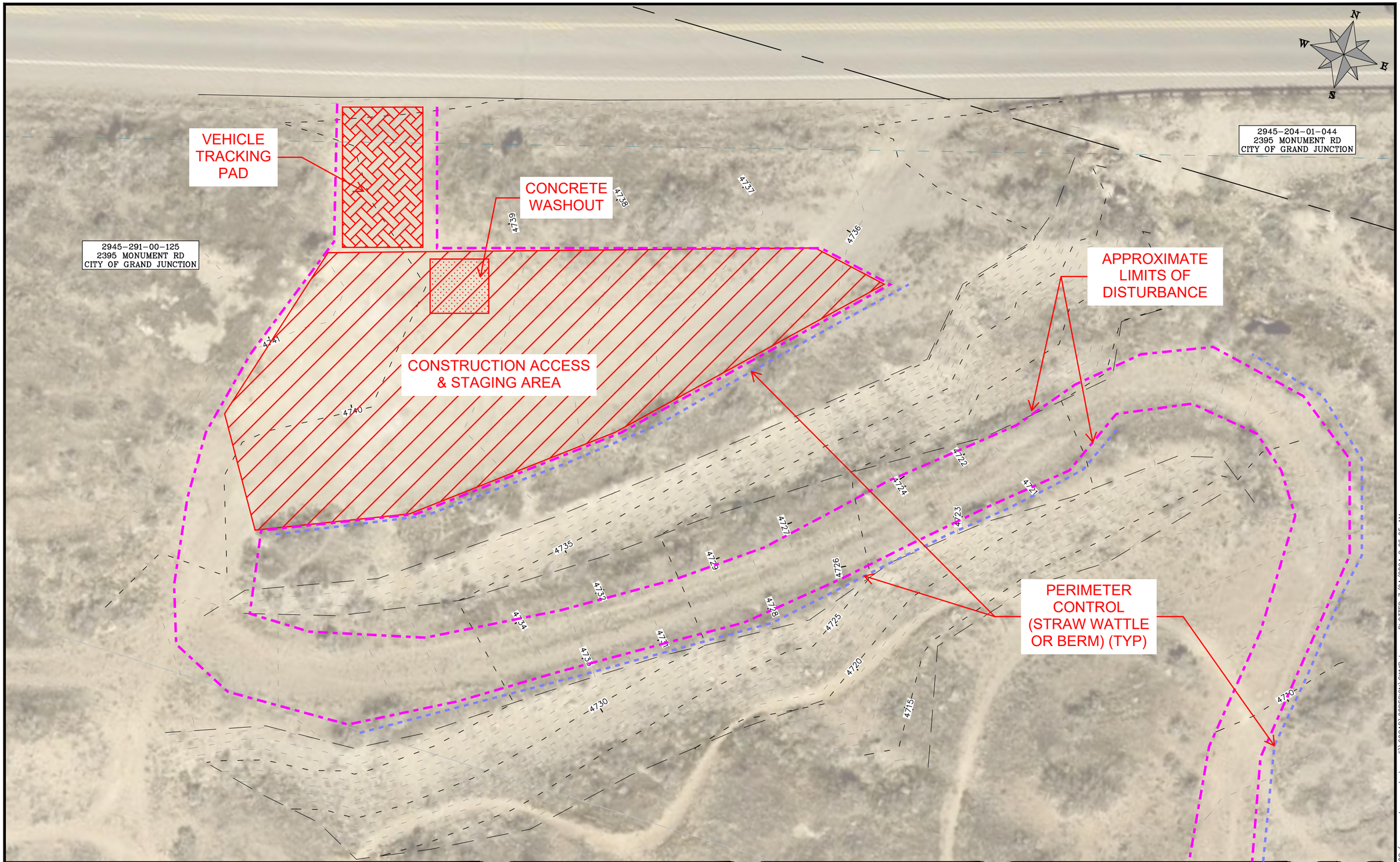
CITY OF Grand Junction COLORADO

PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
STORM WATER MANAGEMETN PLAN
August 27, 2024

SW18

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DESCRIPTION	DATE
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REVISION 2	–
REVISION 3	–
REVISION 4	–

DRAWN BY HMC DATE 2024
DESIGNED BY KA DATE 2024
CHECKED BY KA DATE 2024
APPROVED BY KA DATE 2024

SCALES:
PLAN
HORIZONTAL: 1" = 20'
0 5 10 20

CITY OF Grand Junction COLORADO

PUBLIC WORKS
ENGINEERING DIVISION
PROJECT NO. G2208

MONUMENT CONNECT TRAIL PHASE 2
STORM WATER MANAGEMENT PLAN
August 27, 2024

SW19 | **84**

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CITY OF Grand Junction COLORADO

Purchasing Division

ADDENDUM NO. 2

DATE: August 29, 2024
FROM: City of Grand Junction Purchasing Division
TO: All Offerors
RE: Monument Connect Phase 2 Multi-Modal Concrete Path Construction

Offerors responding to the above referenced solicitation are hereby instructed that the requirements have been clarified, modified, superseded, and supplemented as to this date as hereinafter described.

Please make note of the following clarifications:

1. **Revised Bid Schedule to update the quantities in Item #29. Use this revised bid schedule when submitting your bid. – Attached**

2. **Question:** Per item 9 on addendum 1, the ramp portions need to be 8.33% or less. However, the design grade is 8.33%. This would be the theoretical minimum slope that is achievable. CDOT and ADA guidelines (I understand this is not an ADA compliant trail) recommend for any design slope to be designed at 0.5% – 0.83% less than the maximum tolerated slope because they understand there should be variance considered with concrete construction. This isn't finish carpentry, concrete has a very limited time once it's been placed to be molded and finished before it is no longer plastic. If the maximum tolerated slope is the same as the theoretical minimum achievable slope of 8.33% that leaves absolutely no room for error with a material that gives very little time before it sets and is no longer workable. With CDOT and the ADA guidelines acknowledgement of this concern, I ask the City to recognize this concern and provide a similar tolerance. Otherwise, we are setting the contractor up for failure.
   Answer: For Clarification, the contractor may use a tolerance of -0.5% slope for the steepest design slopes (Station 28+39.91 to 33+69.95 and Station 90+40.76 to 90+56.09), meaning the constructed slope can vary from 8.33% to 7.83%. If the lower tolerance slope is constructed, the contractor shall assure that all toes of slope are within City ROW or property.

The original solicitation for the project noted above is amended as noted. All other conditions of the subject remain the same.

Respectfully,

Dolly Daniels

Dolly Daniels, Senior Buyer
City of Grand Junction, Colorado

3. Contractor's Bid Form Addendum # 2

Project: IFB-5491-24-DD "Monument Connect – Phase 2 Multi-modal Concrete Path Construction"

Bid Date: _____

Bidding Company: _____

Name of Authorized Agent: _____

Email _____

Telephone _____ Address_____

City_____State_____Zip_____

The undersigned Bidder, in compliance with the Invitation for Bids, having examined the Instruction to Bidders, General Contract Conditions, Statement of Work, Specifications, and any and all Addenda thereto, having investigated the location of, and conditions affecting the proposed work, hereby proposes to furnish all labor, materials and supplies, and to perform all work for the Project in accordance with Contract Documents, within the time set forth and at the prices stated below. These prices are to cover all expenses incurred in performing the work required under the Contract Documents, of which this Contractor's Bid Form is a part.

The undersigned Contractor does hereby declare and stipulate that this offer is made in good faith without collusion or connection to any person(s) providing an offer for the same work, and that it is made in pursuance of, and subject to, all terms and conditions of the Instructions to Bidders, the Specifications, and all other Solicitation Documents, all of which have been examined by the undersigned.

The Contractor also agrees that if awarded the Contract, to provide insurance certificates within ten (10) working days of the date of Notification of Award. Submittal of this offer will be taken by the Owner as a binding covenant that the Contractor will be prepared to complete the project in its entirety.

The Owner reserves the right to make the award on the basis of the offer deemed most favorable, to waive any formalities or technicalities and to reject any or all offers. It is further agreed that this offer may not be withdrawn for a period of sixty (60) calendar days after closing time. Submission of clarifications and revised offers automatically establish a new thirty day (30) period.

Prices in the bid proposal have not knowingly been disclosed with another provider and will not be prior to award.

- Prices in this bid proposal have been arrived at independently, without consultation, communication or agreement for the purpose of restricting competition.
- No attempt has been made nor will be to induce any other person or firm to submit a bid proposal for the purpose of restricting competition.
- The individual signing this bid proposal certifies they are a legal agent of the offeror, authorized to represent the offeror and is legally responsible for the offer with regard to supporting documentation and prices provided.
- Direct purchases by the City of Grand Junction are tax exempt from Colorado Sales or Use Tax. Tax exempt No. 98-03544. The undersigned certifies that no Federal, State, County or Municipal tax will be added to the above quoted prices.
- City of Grand Junction payment terms shall be Net 30 days.
- Prompt payment discount of _____ percent of the net dollar will be offered to the Owner if the invoice is paid within _____ days after the receipt of the invoice. The Owner reserves the right to take into account any such discounts when determining the bid award that are no less than Net 10 days.

RECEIPT OF ADDENDA: the undersigned Contractor acknowledges receipt of Addenda to the Solicitation, Specifications, and other Contract Documents.

State number of Addenda received: _____.

It is the responsibility of the Bidder to ensure all Addenda have been received and acknowledged.

By signing below, the Undersigned agree to comply with all terms and conditions contained herein.

Company: _____

Authorized Signature: _____

Title:_____

The undersigned Bidder proposes to subcontract the following portion of Work:

Name & address of Sub-Contractor	Description of work to be performed	% of Contract

The undersigned Bidder acknowledges the right of the City to reject any and all Bids submitted and to waive informalities and irregularities therein in the City's sole discretion.

By submission of the Bid, each Bidder certifies, and in the case of a joint Bid each party thereto certifies as to his own organization, that this Bid has been arrived at independently, without collusion, consultation, communication, or agreement as to any matter relating to this Bid with any other Bidder or with any competitor.

Bid Schedule: Monument Connect Trail - Phase 2 - Addendum 2

Item No.	CDOT, City Ref.	Description	Quantity	Units	Unit Price	Total Price
1	102.10	Reinforced Concrete Pipe (RCP) (76-inch x 48-inch Horizontal Elliptical) (Includes bedding, material and install)	80.	Lin. Ft.	$ _____	$ _____
2	102.10	Reinforced Concrete Pipe (RCP) (48-inch) (Includes bedding, material and install)	24.	Lin. Ft.	$ _____	$ _____
3	102.10	Reinforced Concrete Pipe (RCP) (24-inch) (Includes bedding, material and install)	144.	Lin. Ft.	$ _____	$ _____
4	102.10	Reinforced Concrete Pipe (RCP) (18-inch) (Includes bedding, material and install)	72.	Lin. Ft.	$ _____	$ _____
5	102.10	Reinforced Concrete Pipe (RCP) (12-inch) (Includes bedding, material and install)	24.	Lin. Ft.	$ _____	$ _____
6	102.10	Reinforced Concrete Box Culvert (CBC) (9 ft wide by 4 ft high (Delivery from Rinker Materials, bedding and Install Only)	74.	Lin. Ft.	$ _____	$ _____
7	102.10	Reinforced Concrete Box Culvert (CBC) (9 ft wide by 5 ft high (Delivery from Rinker Materials, bedding and Install Only)	74.	Lin. Ft.	$ _____	$ _____
8	102.13	Area Inlet (Type D, H = 4 FT) (CDOT M-604-11)	1.	Each	$ _____	$ _____
9	201	Clearing and Grubbing	5.2	Acre	$ _____	$ _____
10	202	Removal of Tree (2" dia.)	6.	Each	$ _____	$ _____
11	203	Unclassified Excavation (Complete in Place)	2,700.	Cu. Yd.	$ _____	$ _____
12	208	Erosion Logs (12 inch)	1,210.	Lin. Ft.	$ _____	$ _____
13	208	Compacted Earthen Berms	2,790.	Lin. Ft.	$ _____	$ _____
14	208	Aggregate Bag	10.	Each	$ _____	$ _____
15	208	Concrete Washout Structure	2.	Each	$ _____	$ _____
16	208	Vehicle Track Pad	3.	Each	$ _____	$ _____
17	208	BMP Swale Berms	32.	Each	$ _____	$ _____
18	209	Dust Abatement	Lump	Sum	- - -	$ _____
19	210	Reset Sign	1.	Each	$ _____	$ _____
20	210	Adjust existing metal post and rail fence at bike park	Lump	Sum	- - -	$ _____
21	212	Seeding (Native) (Hydroseed) (Use Seed Mixes Specified Based on Property Owner - City or BLM)	4.5	Acre	$ _____	$ _____
22	216	Soil Retention Blanket (Coconut) (As Needed Where Disturbed Slope is Greater Than 3:1)	1,000.	Sq. Yd.	$ _____	$ _____
23	304	Granular Stabilization Material (Type B) (Crushed Rock) (As Needed in Excavations Where Unstable Bottom Exists)	20.	Ton	$ _____	$ _____
24	304	Aggregate Base Course (Class 6) (12 inch thick shoulders)	3,411.	Ton	$ _____	$ _____
25	304	Aggregate Base Course (Class 3) (subgrade stabilization as needed)	500.	Cu. Yd.	$ _____	$ _____

Bid Schedule: Monument Connect Trail - Phase 2 - Addendum 2

Item No.	CDOT, City Ref.	Description	Quantity	Units	Unit Price	Total Price
26	306	Reconditioning (12 inches deep)	20,253.	Sq. Yd.	$ _____	$ _____
27	306	Singletrack Trail (3-ft wide) (Complete in Place)	880.	Lin. Ft.	$ _____	$ _____
28	504	Precast Concrete Block Retaining Wall System (includes all necessary appurtenances, work, etc. to complete).	508.	FSF	$ _____	$ _____
29	504	Concrete Wall (Class D) per M and S Standard M-601-20 (Wall Design Height 3' to 6' per plan). (Includes associated headwall, and toe walls) Work shall include approximately 6,000 lbs. Reinforcing Steel (Epoxy Coated), 130 sy Structural Concrete Coating (Exposed wall), 84 cy Structural Backfill (Class 1) and any necessary appurtenances to complete work.	64.	Cu. Yd.	$ _____	$ _____
30	506	Riprap (D_{50} = 12 inch)	100.	Cu. Yd.	$ _____	$ _____
31	506	Landscape Boulders (Site Access Control)	112.	Each	$ _____	$ _____
32	514	Detectable Warning (Cast Iron, Wet Set) (2 ft x 2 ft)	15.	Each	$ _____	$ _____
33	601	Cast-in-Place Concrete Footings to support shade structures (1.5 ft diameter, 6 ft drilled into ground, including rebar per details)	24.	LF	$ _____	$ _____
34	608	Colored Concrete Sidewalk (6" Thick) to include 6" of Class 6 Aggregate Base Course	10,167.	Sq. Yd.	$ _____	$ _____
35	608	Colored Concrete Curb Ramp to include 6" of Class 6 Aggregate Base Course	150.	Sq. Yd.	$ _____	$ _____
36	608	Colored Concrete Pad for Benches (6 inch thick)(Includes 6 inch thick Class 6 ABC) (Location To Be Decided)	18.	Sq. Yd.	$ _____	$ _____
37	620	Portable Sanitary Facility	2.		$ _____	$ _____
38	625	Construction Surveying (Includes As-Built Drawings)	Lump	Sum	- - -	$ _____
39	626	Mobilization	Lump	Sum	- - -	$ _____
40	630	Traffic Control (Complete in Place)	Lump	Sum	- - -	$ _____
MCR		Minor Contract Revisions	- - -	- - -	- - -	$ 60,000.00

Bid Amount: **$** _____

Bid Amount:

_____ **dollars**

CITY OF Grand Junction COLORADO

Purchasing Division

ADDENDUM NO. 2

DATE: August 29, 2024
FROM: City of Grand Junction Purchasing Division
TO: All Offerors
RE: Monument Connect Phase 2 Multi-Modal Concrete Path Construction

Offerors responding to the above referenced solicitation are hereby instructed that the requirements have been clarified, modified, superseded, and supplemented as to this date as hereinafter described.

Please make note of the following clarifications:

1. **Revised Bid Schedule to update the quantities in Item #29. Use this revised bid schedule when submitting your bid. – Attached**

2. **Question:** Per item 9 on addendum 1, the ramp portions need to be 8.33% or less. However, the design grade is 8.33%. This would be the theoretical minimum slope that is achievable. CDOT and ADA guidelines (I understand this is not an ADA compliant trail) recommend for any design slope to be designed at 0.5% – 0.83% less than the maximum tolerated slope because they understand there should be variance considered with concrete construction. This isn't finish carpentry, concrete has a very limited time once it's been placed to be molded and finished before it is no longer plastic. If the maximum tolerated slope is the same as the theoretical minimum achievable slope of 8.33% that leaves absolutely no room for error with a material that gives very little time before it sets and is no longer workable. With CDOT and the ADA guidelines acknowledgement of this concern, I ask the City to recognize this concern and provide a similar tolerance. Otherwise, we are setting the contractor up for failure.
   Answer: For Clarification, the contractor may use a tolerance of -0.5% slope for the steepest design slopes (Station 28+39.91 to 33+69.95 and Station 90+40.76 to 90+56.09), meaning the constructed slope can vary from 8.33% to 7.83%. If the lower tolerance slope is constructed, the contractor shall assure that all toes of slope are within City ROW or property.

The original solicitation for the project noted above is amended as noted. All other conditions of the subject remain the same.

Respectfully,

Dolly Daniels

Dolly Daniels, Senior Buyer
City of Grand Junction, Colorado

3. Contractor's Bid Form Addendum # 2

Project: IFB-5491-24-DD "Monument Connect – Phase 2 Multi-modal Concrete Path Construction"

Bid Date: 09/04/2024

Bidding Company: Dirtworks Construction, LLC

Name of Authorized Agent: Branden D. Hughes

Email dirtworksconstruction@gmail.com

Telephone (970) 256-1691 **Address** 1010 21 1/2 Road

City Grand Junction **State** CO **Zip** 81505

The undersigned Bidder, in compliance with the Invitation for Bids, having examined the Instruction to Bidders, General Contract Conditions, Statement of Work, Specifications, and any and all Addenda thereto, having investigated the location of, and conditions affecting the proposed work, hereby proposes to furnish all labor, materials and supplies, and to perform all work for the Project in accordance with Contract Documents, within the time set forth and at the prices stated below. These prices are to cover all expenses incurred in performing the work required under the Contract Documents, of which this Contractor's Bid Form is a part.

The undersigned Contractor does hereby declare and stipulate that this offer is made in good faith without collusion or connection to any person(s) providing an offer for the same work, and that it is made in pursuance of, and subject to, all terms and conditions of the Instructions to Bidders, the Specifications, and all other Solicitation Documents, all of which have been examined by the undersigned.

The Contractor also agrees that if awarded the Contract, to provide insurance certificates within ten (10) working days of the date of Notification of Award. Submittal of this offer will be taken by the Owner as a binding covenant that the Contractor will be prepared to complete the project in its entirety.

The Owner reserves the right to make the award on the basis of the offer deemed most favorable, to waive any formalities or technicalities and to reject any or all offers. It is further agreed that this offer may not be withdrawn for a period of sixty (60) calendar days after closing time. Submission of clarifications and revised offers automatically establish a new thirty day (30) period.

Prices in the bid proposal have not knowingly been disclosed with another provider and will not be prior to award.

- Prices in this bid proposal have been arrived at independently, without consultation, communication or agreement for the purpose of restricting competition.
- No attempt has been made nor will be to induce any other person or firm to submit a bid proposal for the purpose of restricting competition.
- The individual signing this bid proposal certifies they are a legal agent of the offeror, authorized to represent the offeror and is legally responsible for the offer with regard to supporting documentation and prices provided.
- Direct purchases by the City of Grand Junction are tax exempt from Colorado Sales or Use Tax. Tax exempt No. 98-03544. The undersigned certifies that no Federal, State, County or Municipal tax will be added to the above quoted prices.
- City of Grand Junction payment terms shall be Net 30 days.
- Prompt payment discount of N/A percent of the net dollar will be offered to the Owner if the invoice is paid within N/A days after the receipt of the invoice. The Owner reserves the right to take into account any such discounts when determining the bid award that are no less than Net 10 days.

RECEIPT OF ADDENDA: the undersigned Contractor acknowledges receipt of Addenda to the Solicitation, Specifications, and other Contract Documents.

State number of Addenda received: 2.

It is the responsibility of the Bidder to ensure all Addenda have been received and acknowledged.

By signing below, the Undersigned agree to comply with all terms and conditions contained herein.

Company: Dirtworks Construction, LLC

Authorized Signature: BDH

Title: Owner/President

The undersigned Bidder proposes to subcontract the following portion of Work:

Name & address of Sub-Contractor	Description of work to be performed	% of Contract
Mays Concrete	concrete	45%
HIGH DESERT SURVEYING	SURVEYING	3%
CC ENTERPRISES	TRAFFIC CONTROL	1%

The undersigned Bidder acknowledges the right of the City to reject any and all Bids submitted and to waive informalities and irregularities therein in the City's sole discretion.

By submission of the Bid, each Bidder certifies, and in the case of a joint Bid each party thereto certifies as to his own organization, that this Bid has been arrived at independently, without collusion, consultation, communication, or agreement as to any matter relating to this Bid with any other Bidder or with any competitor.

Bid Schedule: Monument Connect Trail - Phase 2 - Addendum 2

Item No.	CDOT, City Ref.	Description	Quantity	Units	Unit Price	Total Price
1	102.10	Reinforced Concrete Pipe (RCP) (76-inch x 48-inch Horizontal Elliptical) (Includes bedding, material and install)	80.	Lin. Ft.	$ 583.00	$ 46,640.00
2	102.10	Reinforced Concrete Pipe (RCP) (48-inch) (Includes bedding, material and install)	24.	Lin. Ft.	$ 245.00	$ 5,880.00
3	102.10	Reinforced Concrete Pipe (RCP) (24-inch) (Includes bedding, material and install)	144.	Lin. Ft.	$ 85.00	$ 12,240.00
4	102.10	Reinforced Concrete Pipe (RCP) (18-inch) (Includes bedding, material and install)	72.	Lin. Ft.	$ 58.00	$ 4,176.00
5	102.10	Reinforced Concrete Pipe (RCP) (12-inch) (Includes bedding, material and install)	24.	Lin. Ft.	$ 54.00	$ 1,296.00
6	102.10	Reinforced Concrete Box Culvert (CBC) (9 ft wide by 4 ft high (Delivery from Rinker Materials, bedding and Install Only)	74.	Lin. Ft.	$ 400.00	$ 29,600.00
7	102.10	Reinforced Concrete Box Culvert (CBC) (9 ft wide by 5 ft high (Delivery from Rinker Materials, bedding and Install Only)	74.	Lin. Ft.	$ 400.00	$ 29,600.00
8	102.13	Area Inlet (Type D, H = 4 FT) (CDOT M-604-11)	1.	Each	$ 6,500.00	$ 6,500.00
9	201	Clearing and Grubbing	5.2	Acre	$ 1,500.00	$ 7,800.00
10	202	Removal of Tree (2" dia.)	6.	Each	$ 100.00	$ 600.00
11	203	Unclassified Excavation (Complete in Place)	2,700.	Cu. Yd.	$ 8.00	$ 21,600.00
12	208	Erosion Logs (12 inch)	1,210.	Lin. Ft.	$ 5.50	$ 6,655.00
13	208	Compacted Earthen Berms	2,790.	Lin. Ft.	$ 2.00	$ 5,580.00
14	208	Aggregate Bag	10.	Each	$ 30.00	$ 300.00
15	208	Concrete Washout Structure	2.	Each	$ 1,200.00	$ 2,400.00
16	208	Vehicle Track Pad	3.	Each	$ 800.00	$ 2,400.00
17	208	BMP Swale Berms	32.	Each	$ 500.00	$ 16,000.00
18	209	Dust Abatement	Lump	Sum	---	$ 2,100.00
19	210	Reset Sign	1.	Each	$ 250.00	$ 250.00
20	210	Adjust existing metal post and rail fence at bike park	Lump	Sum	---	$ 1,500.00
21	212	Seeding (Native) (Hydroseed) (Use Seed Mixes Specified Based on Property Owner - City or BLM)	4.5	Acre	$ 5,000.00	$ 22,500.00
22	216	Soil Retention Blanket (Coconut) (As Needed Where Disturbed Slope is Greater Than 3:1)	1,000.	Sq. Yd.	$ 5.25	$ 5,250.00
23	304	Granular Stabilization Material (Type B) (Crushed Rock) (As Needed in Excavations Where Unstable Bottom Exists)	20.	Ton	$ 48.00	$ 960.00
24	304	Aggregate Base Course (Class 6) (12 inch thick shoulders)	3,411.	Ton	$ 26.50	$ 90,391.50
25	304	Aggregate Base Course (Class 3) (subgrade stabilization as needed)	500.	Cu. Yd.	$ 45.00	$ 22,500.00

Bid Schedule: Monument Connect Trail - Phase 2 - Addendum 2

Item No.	CDOT, City Ref.	Description	Quantity	Units	Unit Price	Total Price
26	306	Reconditioning (12 inches deep)	20,253.	Sq. Yd.	$ 1.50	$ 30,379.50
27	306	Singletrack Trail (3-ft wide) (Complete in Place)	880.	Lin. Ft.	$ 4.50	$ 3,960.00
28	504	Precast Concrete Block Retaining Wall System (includes all necessary appurtenances, work, etc. to complete).	508.	FSF	$ 58.50	$ 29,718.00
29	504	Concrete Wall (Class D) per M and S Standard M-601-20 (Wall Design Height 3' to 6' per plan). (Includes associated headwall, and toe walls) Work shall include approximately 6,000 lbs. Reinforcing Steel (Epoxy Coated), 130 sy Structural Concrete Coating (Exposed wall), 84 cy Structural Backfill (Class 1) and any necessary appurtenances to complete work.	64.	Cu. Yd.	$ 1,860.00	$ 119,040.00
30	506	Riprap (D_{50} = 12 inch)	100.	Cu. Yd.	$ 45.00	$ 4,500.00
31	506	Landscape Boulders (Site Access Control)	112.	Each	$ 75.00	$ 8,400.00
32	514	Detectable Warning (Cast Iron, Wet Set) (2 ft x 2 ft)	15.	Each	$ 161.00	$ 2,415.00
33	601	Cast-in-Place Concrete Footings to support shade structures (1.5 ft diameter, 6 ft drilled into ground, including rebar per details)	24.	LF	$ 158.00	$ 3,792.00
34	608	Colored Concrete Sidewalk (6" Thick) to include 6" of Class 6 Aggregate Base Course	10,167.	Sq. Yd.	$ 55.45	$ 563,760.15
35	608	Colored Concrete Curb Ramp to include 6" of Class 6 Aggregate Base Course	150.	Sq. Yd.	$ 108.60	$ 16,290.00
36	608	Colored Concrete Pad for Benches (6 inch thick)(Includes 6 inch thick Class 6 ABC) (Location To Be Decided)	18.	Sq. Yd.	$ 71.35	$ 1,284.30
37	620	Portable Sanitary Facility	2.		$ 500.00	$ 1,000.00
38	625	Construction Surveying (Includes As-Built Drawings)	Lump Sum		---	$ 38,570.00
39	626	Mobilization	Lump Sum		---	$ 64,000.00
40	630	Traffic Control (Complete in Place)	Lump Sum		---	$ 7,500.00
MCR		Minor Contract Revisions	---	---	---	$ 60,000.00
					Bid Amount:	$ 1,299,327.45

Bid Amount:

ONE MILLION, TWO HUNDRED NINETY NINE THOUSAND, THREE HUNDRED TWENTY SEVEN DOLLARS + 45/100.

AIA® Document A310™ – 2010

Bid Bond

Bond Number: BND1011080-00

CONTRACTOR:
(Name, legal status and address)
Dirtworks Comstruction, LLC
1010 1/2 Rd.
Grand Junction, CO 81505

SURETY:
(Name, legal status and principal place of business)
Fair American Insurance and Reinsurance Company
365 Northridge Road, Suite 250
Atlanta, GA 30350

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

Any singular reference to Contractor, Surety, Owner or other party shall be considered plural where applicable.

OWNER:
(Name, legal status and address)
City of Grand Junction
250 N. 5th Street
Grand Junction, CO 81501

BOND AMOUNT: Five Percent of Amount Bid, Penal Sum Not to Exceed One Hundred Thousand and No/100 Dollars (5% NTE $100,000.00)

PROJECT:
(Name, location or address, and Project number, if any)
IFB-5491-24-DD Monument Connect - Phase 2
Multi-Modal Concrete Path Construction

Project Number, if any:
IFB-5491-24-DD

The Contractor and Surety are bound to the Owner in the amount set forth above, for the payment of which the Contractor and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, as provided herein. The conditions of this Bond are such that if the Owner accepts the bid of the Contractor within the time specified in the bid documents, or within such time period as may be agreed to by the Owner and Contractor, and the Contractor either (1) enters into a contract with the Owner in accordance with the terms of such bid, and gives such bond or bonds as may be specified in the bidding or Contract Documents, with a surety admitted in the jurisdiction of the Project and otherwise acceptable to the Owner, for the faithful performance of such Contract and for the prompt payment of labor and material furnished in the prosecution thereof; or (2) pays to the Owner the difference, not to exceed the amount of this Bond, between the amount specified in said bid and such larger amount for which the Owner may in good faith contract with another party to perform the work covered by said bid, then this obligation shall be null and void, otherwise to remain in full force and effect. The Surety hereby waives any notice of an agreement between the Owner and Contractor to extend the time in which the Owner may accept the bid. Waiver of notice by the Surety shall not apply to any extension exceeding sixty (60) days in the aggregate beyond the time for acceptance of bids specified in the bid documents, and the Owner and Contractor shall obtain the Surety's consent for an extension beyond sixty (60) days.

If this Bond is issued in connection with a subcontractor's bid to a Contractor, the term Contractor in this Bond shall be deemed to be Subcontractor and the term Owner shall be deemed to be Contractor.

When this Bond has been furnished to comply with a statutory or other legal requirement in the location of the Project, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. When so furnished, the intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

Signed and sealed this 4th day of September , 2024 .

Hayley A. Hughes
(Witness)

Jennifer Pace
(Witness)

Dirtworks Comstruction, LLC
(Principal) *(Seal)*

(Title) OWNER/PRESIDENT

Fair American Insurance and Reinsurance Company
(Surety) *(Seal)*

(Title) Stefan E. Tauger , Attorney In Fact

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FAIR AMERICAN INSURANCE AND REINSURANCE COMPANY

One Liberty Plaza, 165 Broadway, New York, NY 10006

POWER OF ATTORNEY

Know all men by these Presents, that Fair American Insurance and Reinsurance Company ("Company"), a New York corporation, had made, constituted and appointed, and by these presents does make, constitute and appoint, Stefan E. Tauger of Parker, Colorado; Arthur S. Johnson of Atlanta, Georgia; James E. Feldner of West Lake, Ohio; Jeffery L. Booth of Blacklick, Ohio; Melanie J. Stokes of Atlanta, Georgia; Scott E. Stoltzner of Birmingham, Alabama; Jason S. Centrella of Jacksonville, Florida; or Alane Skaff of Tampa, Florida, EACH as its true and lawful attorney-in-fact to sign, execute, seal, deliver for, and on behalf of the said Company, and as its act and deed any place in the United States any and all surety, bonds, undertakings, recognizances and contracts of suretyship to be given to all obligees provided that no bond or undertaking or contract of suretyship executed under this authority shall exceed in amount of the sum of $7,000,000 (Seven Million Dollars), any single instance. Provided, however, that this power of attorney limits the acts of those named herein; and they shall have no authority to bind the Company except in the manner stated and to the extent of any limitation herein.

This Power of Attorney is granted and is signed and sealed by facsimile under and by the authority of the following Resolutions adopted pursuant to due authorization by the Board of Directors of the Company on the 2nd day of February 2016.

RESOLVED, that the President, Chairman, or any Senior Vice President or Vice President of the Company, in conjunction with any Senior Vice President or Vice President, be, and that each or any of them hereby is, authorized to appoint Attorneys-in-fact of the Company as may be necessary to act on behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all bonds, undertakings, recognizances, contracts of suretyship and other surety obligations. Such Attorneys-in-fact, subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Company by their signature and execution of any such instruments and to attach thereto the seal of the Company. When so executed such instruments shall be as binding as if signed by the President and attested by the Secretary.

FURTHER RESOLVED, that any and all Powers of Attorney and Certified Copies of such Powers of Attorney and certification in respect thereto, granted and executed by the President or Senior Vice President, in conjunction with any Senior Vice President or Vice President of the Company, shall be binding on the Company to the same extent as if all signatures therein were manually affixed, even though one or more of any such signatures thereon may be facsimile.

IN WITNESS WHEREOF, the Company has caused its official seal to be hereto affixed, and these presents to be sealed with its corporate seal and duly attested to by the President and this Vice President this **18th** day **of August 2023**.

Fair American Insurance and Reinsurance Company

By: _____
Christopher O'Gwen, President and CEO

By: _____
Paul J. Clauss, Vice President

STATE of NEW YORK
COUNTY of NEW YORK

On **August 18, 2023** before me, the above named President and Vice President, personally appeared, who proved to me on the basis of satisfactory evidence to be the persons whose names are subscribed to the within instrument and acknowledged to me that they executed the same in their authorized capacities, that they know the seal of Fair American Insurance and Reinsurance Company, and that their signatures and the seals of Fair American Insurance and Reinsurance Company were duly affixed and subscribed to said instrument by the authority and direction of the Company. I certify under PENALTY OF PERJURY under the laws of the State of New York that the foregoing paragraph is true and correct.

GREGG JUDD NOTARY PUBLIC STATE OF NEW YORK Qualified in New York County 02EN6351223 MY COMMISSION EXPIRES 11/28/2024

WITNESS my hand and official seal.

Signature _____ (Seal)

I, Christopher O'Gwen, the undersigned, an Officer of Fair American Insurance and Reinsurance Company, a New York Corporation, DO HEREBY CERTIFY that the foregoing and attached Power of Attorney is a true and correct copy of the original power of attorney, and do hereby further certify that the said Powers are still in force and effect.

Signed and sealed at the City of New York. Dated the 4th day of September, 2024.

_____
Christopher O'Gwen, President and CEO

Bond # BND1011080-00

No. **7489**

OP ID: SS

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 08/30/2024

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Beckner Power Insurance, Inc. 2415 F Road #B P.O. Box 1329 Grand Junction, CO 81502-1329 Shari L. Shear	CONTACT NAME: Shari Shear PHONE (A/C, No, Ext): 970-242-6136 FAX (A/C, No): 970-242-8293 E-MAIL ADDRESS: shari@bpigj.com PRODUCER CUSTOMER ID #: DIRTW-1
INSURED Dirtworks Construction LLC 1010 21 1/2 Rd Grand Junction, CO 81505	INSURER(S) AFFORDING COVERAGE — NAIC # INSURER A : United Fire & Casualty INSURER B : Pinnacol Assurance INSURER C : INSURER D : INSURER E : INSURER F :

COVERAGES **CERTIFICATE NUMBER:** **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS		
A	GENERAL LIABILITY [X] COMMERCIAL GENERAL LIABILITY [ ] CLAIMS-MADE [X] OCCUR [X] Pollution GEN'L AGGREGATE LIMIT APPLIES PER: [ ] POLICY [X] PRO-JECT [ ] LOC	X	X	60349358	04/06/2024	04/06/2025	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG Pollution	$ $ $ $ $ $ $	1,000,000 100,000 5,000 1,000,000 2,000,000 2,000,000 100,000
A	AUTOMOBILE LIABILITY [X] ANY AUTO [ ] ALL OWNED AUTOS [ ] SCHEDULED AUTOS [ ] HIRED AUTOS [ ] NON-OWNED AUTOS	X	X	60349358	04/06/2024	04/06/2025	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (PER ACCIDENT)	$ $ $ $	1,000,000
A	[X] UMBRELLA LIAB [X] OCCUR [ ] EXCESS LIAB [ ] CLAIMS-MADE [ ] DEDUCTIBLE [X] RETENTION $ 10000			60349358	04/06/2024	04/06/2025	EACH OCCURRENCE AGGREGATE	$ $	1,000,000 1,000,000
B	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? Y / N [ ] (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	N / A	X	4151863	11/01/2023	11/01/2024	WC STATU-TORY LIMITS [X] OTH-ER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	$ $ $	1,000,000 1,000,000 1,000,000
A	Equipment			60349358	04/06/2024	04/06/2025	Rented eq Installat		100,000 25,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)
RE: IFB-5491-24-DD Monument Connect Phase 2 - Multi-Modal concrete path construction

CERTIFICATE HOLDER

City of Grand Junction
250 N 5th St
Grand Junction, CO 81501

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE
Shari L. Shear

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AIA® Document A312™ – 2010

Performance Bond

Bond Number: BND1010390-00

CONTRACTOR:
(Name, legal status and address)

Dirtworks Construction, LLC
1010 21 ½ Rd
Grand Junction, CO 81505

OWNER:
(Name, legal status and address)

City of Grand Junction, Colorado
250 N. 5th Street
Grand Junction, CO 81501

CONSTRUCTION CONTRACT
Date: 09/27/24

Amount: $1,299,327.45

Description:
(Name and location)

Monument Connect – Phase 2 Multi-Modal Concrete Path Construction
IFB-5491-24-DD

BOND
Date: 09/30/24
(Not earlier than Construction Contract Date)

Amount: $1,299,327.45

Modifications to this Bond: ☐ None ☑ See Section 16

SURETY:
(Name, legal status and principal place of business)

Fair American Insurance and Reinsurance Company
365 Northridge Rd., Ste. 400
Atlanta, GA 30350

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

Any singular reference to Contractor, Surety, Owner or other party shall be considered plural where applicable.

AIA Document A312–2010 combines two separate bonds, a Performance Bond and a Payment Bond, into one form. This is not a single combined Performance and Payment Bond.

CONTRACTOR AS PRINCIPAL		**SURETY**	
Company:	*(Corporate Seal)*	Company:	*(Corporate Seal)*
Dirtworks Construction, LLC		Fair American Insurance and Reinsurance Company	
Signature:		Signature:	
Name and Title: HAYLEY A. HUGHES, OFFICER		Name and Title: Stefan E. Tauger , Attorney In Fact	

(Any additional signatures appear on the last page of this Performance Bond.)

(FOR INFORMATION ONLY — Name, address and telephone)

AGENT or BROKER:

OWNER'S REPRESENTATIVE:
(Architect, Engineer or other party:)

§ 1 The Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to the Owner for the performance of the Construction Contract, which is incorporated herein by reference.

§ 2 If the Contractor performs the Construction Contract, the Surety and the Contractor shall have no obligation under this Bond, except when applicable to participate in a conference as provided in Section 3.

§ 3 If there is no Owner Default under the Construction Contract, the Surety's obligation under this Bond shall arise after

.1 the Owner first provides notice to the Contractor and the Surety that the Owner is considering declaring a Contractor Default. Such notice shall indicate whether the Owner is requesting a conference among the Owner, Contractor and Surety to discuss the Contractor's performance. If the Owner does not request a conference, the Surety may, within five (5) business days after receipt of the Owner's notice, request such a conference. If the Surety timely requests a conference, the Owner shall attend. Unless the Owner agrees otherwise, any conference requested under this Section 3.1 shall be held within ten (10) business days of the Surety's receipt of the Owner's notice. If the Owner, the Contractor and the Surety agree, the Contractor shall be allowed a reasonable time to perform the Construction Contract, but such an agreement shall not waive the Owner's right, if any, subsequently to declare a Contractor Default;

.2 the Owner declares a Contractor Default, terminates the Construction Contract and notifies the Surety; and

.3 the Owner has agreed to pay the Balance of the Contract Price in accordance with the terms of the Construction Contract to the Surety or to a contractor selected to perform the Construction Contract.

§ 4 Failure on the part of the Owner to comply with the notice requirement in Section 3.1 shall not constitute a failure to comply with a condition precedent to the Surety's obligations, or release the Surety from its obligations, except to the extent the Surety demonstrates actual prejudice.

§ 5 When the Owner has satisfied the conditions of Section 3, the Surety shall promptly and at the Surety's expense take one of the following actions:

§ 5.1 Arrange for the Contractor, with the consent of the Owner, to perform and complete the Construction Contract;

§ 5.2 Undertake to perform and complete the Construction Contract itself, through its agents or independent contractors;

§ 5.3 Obtain bids or negotiated proposals from qualified contractors acceptable to the Owner for a contract for performance and completion of the Construction Contract, arrange for a contract to be prepared for execution by the Owner and a contractor selected with the Owner's concurrence, to be secured with performance and payment bonds executed by a qualified surety equivalent to the bonds issued on the Construction Contract, and pay to the Owner the amount of damages as described in Section 7 in excess of the Balance of the Contract Price incurred by the Owner as a result of the Contractor Default; or

§ 5.4 Waive its right to perform and complete, arrange for completion, or obtain a new contractor and with reasonable promptness under the circumstances:

.1 After investigation, determine the amount for which it may be liable to the Owner and, as soon as practicable after the amount is determined, make payment to the Owner; or

.2 Deny liability in whole or in part and notify the Owner, citing the reasons for denial.

§ 6 If the Surety does not proceed as provided in Section 5 with reasonable promptness, the Surety shall be deemed to be in default on this Bond seven days after receipt of an additional written notice from the Owner to the Surety demanding that the Surety perform its obligations under this Bond, and the Owner shall be entitled to enforce any remedy available to the Owner. If the Surety proceeds as provided in Section 5.4, and the Owner refuses the payment or the Surety has denied liability, in whole or in part, without further notice the Owner shall be entitled to enforce any remedy available to the Owner.

§ 7 If the Surety elects to act under Section 5.1, 5.2 or 5.3, then the responsibilities of the Surety to the Owner shall not be greater than those of the Contractor under the Construction Contract, and the responsibilities of the Owner to the Surety shall not be greater than those of the Owner under the Construction Contract. Subject to the commitment by the Owner to pay the Balance of the Contract Price, the Surety is obligated, without duplication, for

.1 the responsibilities of the Contractor for correction of defective work and completion of the Construction Contract;

.2 additional legal, design professional and delay costs resulting from the Contractor's Default, and resulting from the actions or failure to act of the Surety under Section 5; and

.3 liquidated damages, or if no liquidated damages are specified in the Construction Contract, actual damages caused by delayed performance or non-performance of the Contractor.

§ 8 If the Surety elects to act under Section 5.1, 5.3 or 5.4, the Surety's liability is limited to the amount of this Bond.

§ 9 The Surety shall not be liable to the Owner or others for obligations of the Contractor that are unrelated to the Construction Contract, and the Balance of the Contract Price shall not be reduced or set off on account of any such unrelated obligations. No right of action shall accrue on this Bond to any person or entity other than the Owner or its heirs, executors, administrators, successors and assigns.

§ 10 The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders and other obligations.

§ 11 Any proceeding, legal or equitable, under this Bond may be instituted in any court of competent jurisdiction in the location in which the work or part of the work is located and shall be instituted within two years after a declaration of Contractor Default or within two years after the Contractor ceased working or within two years after the Surety refuses or fails to perform its obligations under this Bond, whichever occurs first. If the provisions of this Paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable.

§ 12 Notice to the Surety, the Owner or the Contractor shall be mailed or delivered to the address shown on the page on which their signature appears.

§ 13 When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. When so furnished, the intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

§ 14 Definitions

§ 14.1 Balance of the Contract Price. The total amount payable by the Owner to the Contractor under the Construction Contract after all proper adjustments have been made, including allowance to the Contractor of any amounts received or to be received by the Owner in settlement of insurance or other claims for damages to which the Contractor is entitled, reduced by all valid and proper payments made to or on behalf of the Contractor under the Construction Contract.

§ 14.2 Construction Contract. The agreement between the Owner and Contractor identified on the cover page, including all Contract Documents and changes made to the agreement and the Contract Documents.

§ 14.3 Contractor Default. Failure of the Contractor, which has not been remedied or waived, to perform or otherwise to comply with a material term of the Construction Contract.

§ 14.4 Owner Default. Failure of the Owner, which has not been remedied or waived, to pay the Contractor as required under the Construction Contract or to perform and complete or comply with the other material terms of the Construction Contract.

§ 14.5 Contract Documents. All the documents that comprise the agreement between the Owner and Contractor.

§ 15 If this Bond is issued for an agreement between a Contractor and subcontractor, the term Contractor in this Bond shall be deemed to be Subcontractor and the term Owner shall be deemed to be Contractor.

§ 16 Modifications to this bond are as follows:

** Notwithstanding any language to the contrary in this bond, the related contract documents or referenced statues, increases in the contract amount and/or any increases in the penal sum, herein, shall be limited to 15% of the initial contract price, both singly and in the aggregate without the express written consent of surety. And, any refusal by surety to provide such consent shall not be considered as a default by surety or principal in the bonds or the contract.
** Surety's liability under this bond is limited as it pertains to any express or implied warranty provisions to which Principal is obligated, by contract and/or statute, to a period of one year after subject work is performed.

(Space is provided below for additional signatures of added parties, other than those appearing on the cover page.)

CONTRACTOR AS PRINCIPAL		SURETY	
Company:	*(Corporate Seal)*	Company:	*(Corporate Seal)*
Signature:		Signature:	
Name and Title:		Name and Title:	
Address		Address	

CAUTION: You should sign an original AIA Contract Document, on which this text appears in RED. An original assures that changes will not be obscured.

AIA® Document A312™ – 2010

Payment Bond

Bond Number: BND1010390-00

CONTRACTOR:
(Name, legal status and address)
Dirtworks Construction, LLC
1010 21 ½ Rd
Grand Junction, CO 81505

SURETY:
(Name, legal status and principal place of business)
Fair American Insurance and Reinsurance Company
365 Northridge Rd., Ste. 400
Atlanta, GA 30350

OWNER:
(Name, legal status and address)
City of Grand Junction, Colorado
250 N. 5th Street
Grand Junction, CO 81501

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

Any singular reference to Contractor, Surety, Owner or other party shall be considered plural where applicable.

AIA Document A312–2010 combines two separate bonds, a Performance Bond and a Payment Bond, into one form. This is not a single combined Performance and Payment Bond.

CONSTRUCTION CONTRACT
Date: 09/27/24

Amount: $1,299,327.45

Description:
(Name and location)
Monument Connect – Phase 2 Multi-Modal Concrete Path Construction
IFB-5491-24-DD

BOND
Date: 09/30/24
(Not earlier than Construction Contract Date)

Amount: $1,299,327.45

Modifications to this Bond: ☐ None ☑ See Section 18

CONTRACTOR AS PRINCIPAL		**SURETY**	
Company:	*(Corporate Seal)*	Company:	*(Corporate Seal)*
Dirtworks Construction, LLC		Fair American Insurance and Reinsurance Company	
Signature: _____		Signature: _____	
Name and Title:		Name and Title:	Stefan E. Tauger , Attorney In Fact

(Any additional signatures appear on the last page of this Payment Bond.)

(FOR INFORMATION ONLY — Name, address and telephone)

AGENT or BROKER:

OWNER'S REPRESENTATIVE:
(Architect, Engineer or other party:)

§ 1 The Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to the Owner to pay for labor, materials and equipment furnished for use in the performance of the Construction Contract, which is incorporated herein by reference, subject to the following terms.

§ 2 If the Contractor promptly makes payment of all sums due to Claimants, and defends, indemnifies and holds harmless the Owner from claims, demands, liens or suits by any person or entity seeking payment for labor, materials or equipment furnished for use in the performance of the Construction Contract, then the Surety and the Contractor shall have no obligation under this Bond.

§ 3 If there is no Owner Default under the Construction Contract, the Surety's obligation to the Owner under this Bond shall arise after the Owner has promptly notified the Contractor and the Surety (at the address described in Section 13) of claims, demands, liens or suits against the Owner or the Owner's property by any person or entity seeking payment for labor, materials or equipment furnished for use in the performance of the Construction Contract and tendered defense of such claims, demands, liens or suits to the Contractor and the Surety.

§ 4 When the Owner has satisfied the conditions in Section 3, the Surety shall promptly and at the Surety's expense defend, indemnify and hold harmless the Owner against a duly tendered claim, demand, lien or suit.

§ 5 The Surety's obligations to a Claimant under this Bond shall arise after the following:

§ 5.1 Claimants, who do not have a direct contract with the Contractor,

.1 have furnished a written notice of non-payment to the Contractor, stating with substantial accuracy the amount claimed and the name of the party to whom the materials were, or equipment was, furnished or supplied or for whom the labor was done or performed, within ninety (90) days after having last performed labor or last furnished materials or equipment included in the Claim; and

.2 have sent a Claim to the Surety (at the address described in Section 13).

§ 5.2 Claimants, who are employed by or have a direct contract with the Contractor, have sent a Claim to the Surety (at the address described in Section 13).

§ 6 If a notice of non-payment required by Section 5.1.1 is given by the Owner to the Contractor, that is sufficient to satisfy a Claimant's obligation to furnish a written notice of non-payment under Section 5.1.1.

§ 7 When a Claimant has satisfied the conditions of Sections 5.1 or 5.2, whichever is applicable, the Surety shall promptly and at the Surety's expense take the following actions:

§ 7.1 Send an answer to the Claimant, with a copy to the Owner, within sixty (60) days after receipt of the Claim, stating the amounts that are undisputed and the basis for challenging any amounts that are disputed; and

§ 7.2 Pay or arrange for payment of any undisputed amounts.

§ 7.3 The Surety's failure to discharge its obligations under Section 7.1 or Section 7.2 shall not be deemed to constitute a waiver of defenses the Surety or Contractor may have or acquire as to a Claim, except as to undisputed amounts for which the Surety and Claimant have reached agreement. If, however, the Surety fails to discharge its obligations under Section 7.1 or Section 7.2, the Surety shall indemnify the Claimant for the reasonable attorney's fees the Claimant incurs thereafter to recover any sums found to be due and owing to the Claimant.

§ 8 The Surety's total obligation shall not exceed the amount of this Bond, plus the amount of reasonable attorney's fees provided under Section 7.3, and the amount of this Bond shall be credited for any payments made in good faith by the Surety.

§ 9 Amounts owed by the Owner to the Contractor under the Construction Contract shall be used for the performance of the Construction Contract and to satisfy claims, if any, under any construction performance bond. By the Contractor furnishing and the Owner accepting this Bond, they agree that all funds earned by the Contractor in the performance of the Construction Contract are dedicated to satisfy obligations of the Contractor and Surety under this Bond, subject to the Owner's priority to use the funds for the completion of the work.

§ 10 The Surety shall not be liable to the Owner, Claimants or others for obligations of the Contractor that are unrelated to the Construction Contract. The Owner shall not be liable for the payment of any costs or expenses of any Claimant under this Bond, and shall have under this Bond no obligation to make payments to, or give notice on behalf of, Claimants or otherwise have any obligations to Claimants under this Bond.

§ 11 The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders and other obligations.

§ 12 No suit or action shall be commenced by a Claimant under this Bond other than in a court of competent jurisdiction in the state in which the project that is the subject of the Construction Contract is located or after the expiration of one year from the date (1) on which the Claimant sent a Claim to the Surety pursuant to Section 5.1.2 or 5.2, or (2) on which the last labor or service was performed by anyone or the last materials or equipment were furnished by anyone under the Construction Contract, whichever of (1) or (2) first occurs. If the provisions of this Paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable.

§ 13 Notice and Claims to the Surety, the Owner or the Contractor shall be mailed or delivered to the address shown on the page on which their signature appears. Actual receipt of notice or Claims, however accomplished, shall be sufficient compliance as of the date received.

§ 14 When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. When so furnished, the intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

§ 15 Upon request by any person or entity appearing to be a potential beneficiary of this Bond, the Contractor and Owner shall promptly furnish a copy of this Bond or shall permit a copy to be made.

§ 16 Definitions

§ 16.1 Claim. A written statement by the Claimant including at a minimum:

.1 the name of the Claimant;
.2 the name of the person for whom the labor was done, or materials or equipment furnished;
.3 a copy of the agreement or purchase order pursuant to which labor, materials or equipment was furnished for use in the performance of the Construction Contract:
.4 a brief description of the labor, materials or equipment furnished;
.5 the date on which the Claimant last performed labor or last furnished materials or equipment for use in the performance of the Construction Contract;
.6 the total amount earned by the Claimant for labor, materials or equipment furnished as of the date of the Claim;
.7 the total amount of previous payments received by the Claimant; and
.8 the total amount due and unpaid to the Claimant for labor, materials or equipment furnished as of the date of the Claim.

§ 16.2 Claimant. An individual or entity having a direct contract with the Contractor or with a subcontractor of the Contractor to furnish labor, materials or equipment for use in the performance of the Construction Contract. The term Claimant also includes any individual or entity that has rightfully asserted a claim under an applicable mechanic's lien or similar statute against the real property upon which the Project is located. The intent of this Bond shall be to include without limitation in the terms "labor, materials or equipment" that part of water, gas, power, light, heat, oil, gasoline, telephone service or rental equipment used in the Construction Contract, architectural and engineering services required for performance of the work of the Contractor and the Contractor's subcontractors, and all other items for which a mechanic's lien may be asserted in the jurisdiction where the labor, materials or equipment were furnished.

§ 16.3 Construction Contract. The agreement between the Owner and Contractor identified on the cover page, including all Contract Documents and all changes made to the agreement and the Contract Documents.

§ 16.4 Owner Default. Failure of the Owner, which has not been remedied or waived, to pay the Contractor as required under the Construction Contract or to perform and complete or comply with the other material terms of the Construction Contract.

§ 16.5 Contract Documents. All the documents that comprise the agreement between the Owner and Contractor.

§ 17 If this Bond is issued for an agreement between a Contractor and subcontractor, the term Contractor in this Bond shall be deemed to be Subcontractor and the term Owner shall be deemed to be Contractor.

§ 18 Modifications to this bond are as follows:

** Notwithstanding any language to the contrary in this bond, the related contract documents or referenced statues, increases in the contract amount and/or any increases in the penal sum, herein, shall be limited to 15% of the initial contract price, both singly and in the aggregate without the express written consent of surety. And, any refusal by surety to provide such consent shall not be considered as a default by surety or principal in the bonds or the contract.
** Surety's liability under this bond is limited as it pertains to any express or implied warranty provisions to which Principal is obligated, by contract and/or statute, to a period of one year after subject work is performed.

(Space is provided below for additional signatures of added parties, other than those appearing on the cover page.)

CONTRACTOR AS PRINCIPAL		**SURETY**	
Company:	*(Corporate Seal)*	Company:	*(Corporate Seal)*
Signature:		Signature:	
Name and Title:		Name and Title:	
Address		Address	

CAUTION: You should sign an original AIA Contract Document, on which this text appears in RED. An original assures that changes will not be obscured.

FAIR AMERICAN INSURANCE AND REINSURANCE COMPANY
One Liberty Plaza, 165 Broadway, New York, NY 10006
POWER OF ATTORNEY

Know all men by these Presents, that Fair American Insurance and Reinsurance Company ("Company"), a New York corporation, had made, constituted and appointed, and by these presents does make, constitute and appoint, Stefan E. Tauger of Parker, Colorado; Arthur S. Johnson of Atlanta, Georgia; James E. Feldner of West Lake, Ohio; Jeffery L. Booth of Blacklick, Ohio; Melanie J. Stokes of Atlanta, Georgia; Scott E. Stoltzner of Birmingham, Alabama; Jason S. Centrella of Jacksonville, Florida; or Alane Skaff of Tampa, Florida, EACH as its true and lawful attorney-in-fact to sign, execute, seal, deliver for, and on behalf of the said Company, and as its act and deed any place in the United States any and all surety, bonds, undertakings, recognizances and contracts of suretyship to be given to all obligees provided that no bond or undertaking or contract of suretyship executed under this authority shall exceed in amount of the sum of $7,000,000 (Seven Million Dollars), any single instance. Provided, however, that this power of attorney limits the acts of those named herein; and they shall have no authority to bind the Company except in the manner stated and to the extent of any limitation herein.

This Power of Attorney is granted and is signed and sealed by facsimile under and by the authority of the following Resolutions adopted pursuant to due authorization by the Board of Directors of the Company on the 2nd day of February 2016.

RESOLVED, that the President, Chairman, or any Senior Vice President or Vice President of the Company, in conjunction with any Senior Vice President or Vice President, be, and that each or any of them hereby is, authorized to appoint Attorneys-in-fact of the Company as may be necessary to act on behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all bonds, undertakings, recognizances, contracts of suretyship and other surety obligations. Such Attorneys-in-fact, subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Company by their signature and execution of any such instruments and to attach thereto the seal of the Company. When so executed such instruments shall be as binding as if signed by the President and attested by the Secretary.

FURTHER RESOLVED, that any and all Powers of Attorney and Certified Copies of such Powers of Attorney and certification in respect thereto, granted and executed by the President or Senior Vice President, in conjunction with any Senior Vice President or Vice President of the Company, shall be binding on the Company to the same extent as if all signatures therein were manually affixed, even though one or more of any such signatures thereon may be facsimile.

IN WITNESS WHEREOF, the Company has caused its official seal to be hereto affixed, and these presents to be sealed with its corporate seal and duly attested to by the President and this Vice President this 18th day of August 2023.

Fair American Insurance and Reinsurance Company

By: _____
Christopher O'Gwen, President and CEO

By: _____
Paul J. Clauss, Vice President

STATE of NEW YORK
COUNTY of NEW YORK

On August 18, 2023 before me, the above named President and Vice President, personally appeared, who proved to me on the basis of satisfactory evidence to be the persons whose names are subscribed to the within instrument and acknowledged to me that they executed the same in their authorized capacities, that they know the seal of Fair American Insurance and Reinsurance Company, and that their signatures and the seals of Fair American Insurance and Reinsurance Company were duly affixed and subscribed to said instrument by the authority and direction of the Company. I certify under PENALTY OF PERJURY under the laws of the State of New York that the foregoing paragraph is true and correct.

GREGORY ENGLEHARD NOTARY PUBLIC STATE OF NEW YORK Qualified in New York County 02EN6351223 MY COMMISSION EXPIRES 11/28/2024

WITNESS my hand and official seal.

Signature _____ (Seal)

I, Christopher O'Gwen, the undersigned, an Officer of Fair American Insurance and Reinsurance Company, a New York Corporation, DO HEREBY CERTIFY that the foregoing and attached Power of Attorney is a true and correct copy of the original power of attorney, and do hereby further certify that the said Powers are still in force and effect.

Signed and sealed at the City of New York. Dated the 30th day of September, 2024.

_____
Christopher O'Gwen, President and CEO

Bond # BND1010390-00

No. **7713**

OP ID: SS

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)
10/02/2024

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Beckner Power Insurance, Inc. 2415 F Road #B P.O. Box 1329 Grand Junction, CO 81502-1329 Shari L. Shear	CONTACT NAME: Shari Shear PHONE (A/C, No, Ext): 970-242-6136 FAX (A/C, No): 970-242-8293 E-MAIL ADDRESS: shari@bpigj.com PRODUCER CUSTOMER ID #: DIRTW-1
INSURED Dirtworks Construction LLC 1010 21 1/2 Rd Grand Junction, CO 81505	INSURER(S) AFFORDING COVERAGE — NAIC # INSURER A : United Fire & Casualty INSURER B : Pinnacol Assurance INSURER C : INSURER D : INSURER E : INSURER F :

COVERAGES **CERTIFICATE NUMBER:** **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS		
A	GENERAL LIABILITY X COMMERCIAL GENERAL LIABILITY CLAIMS-MADE X OCCUR X Pollution GEN'L AGGREGATE LIMIT APPLIES PER: POLICY X PRO-JECT LOC	X	X	60349358	04/06/2024	04/06/2025	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG Pollution	$ $ $ $ $ $ $	1,000,000 100,000 5,000 1,000,000 2,000,000 2,000,000 100,000
A	AUTOMOBILE LIABILITY X ANY AUTO ALL OWNED AUTOS SCHEDULED AUTOS HIRED AUTOS NON-OWNED AUTOS	X	X	60349358	04/06/2024	04/06/2025	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (PER ACCIDENT)	$ $ $ $	1,000,000
A	X UMBRELLA LIAB X OCCUR EXCESS LIAB CLAIMS-MADE DEDUCTIBLE X RETENTION $ 10000			60349358	04/06/2024	04/06/2025	EACH OCCURRENCE AGGREGATE	$ $	1,000,000 1,000,000
B	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? Y / N (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	N / A	X	4151863	11/01/2023	11/01/2024	WC STATU-TORY LIMITS X OTH-ER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	$ $ $	1,000,000 1,000,000 1,000,000
A	Equipment			60349358	04/06/2024	04/06/2025	Rented eq Installat		100,000 25,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)
RE: IFB-5491-24-DD Monument Connect Phase 2 - Multi-Modal concrete path construction

CERTIFICATE HOLDER

City of Grand Junction
250 N 5th St
Grand Junction, CO 81501

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE
Shari L. Shear

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