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### PLANNING COMMISSION AGENDA IN-PERSON/VIRTUAL HYBRID MEETING CITY HALL AUDITORIUM, 250 N 5<sup>th</sup> STREET TUESDAY, JULY 11, 2023 - 5:30 PM

Attend virtually: bit.ly/GJ-PC-7-11-23

#### Call to Order - 5:30 PM

### Consent Agenda

- Minutes of Previous Meeting(s)
- Consider a Request by Brian R. and Stephanie Bray for a Variance to the GJMC Section 21.06.010(e), Subdivision Infrastructure Standards Regarding the Provision of a Sanitary Sewer System for the Mustang Ridge Simple Subdivision Located at 880 26 1/2 Road.

### Regular Agenda

 Consider a Request by M & D Enterprises for a Conditional Use Permit to Allow Sand and Gravel Extraction on a Total of 27.8 acres in a CSR (Community Services and Recreation) Zone District Located at 2855 C 1/2 Road

#### Other Business

#### <u>Adjournment</u>

# GRAND JUNCTION PLANNING COMMISSION June 27, 2023, 5:30 PM MINUTES

The meeting of the Planning Commission was called to order at 5:32 p.m. by Commissioner Teske.

Those present were Planning Commissioners; Shanon Secrest, Sandra Weckerly, Kim Herek, JB Phillips, and Keith Ehlers.

Also present were Jamie Beard (City Attorney), Nicole Galehouse (Interim Planning Supervisor), Dave Thornton (Principal Planner), Madeline Robinson (Planning Technician), and Jacob Kaplan (Planning Technician).

There were 10 members of the public in attendance, and 1 virtually.

#### CONSENT AGENDA

#### 1. Approval of Minutes

Minutes of Previous Meeting(s) from May 23, 2023.

#### REGULAR AGENDA

#### 1. Knoll Ridge Rezone

RZN-2022-1895

Consider a request by Christopher and Patricia Jones, Property Owners, to rezone 1.54 acres from R-1 (Residential – 1 du/ac) to R-4 (Residential – 4 du/ac) located at 645 Knoll Ridge Lane.

The applicant requested that the item be continued to the July 25, 2023 Planning Commission.

#### Motion and Vote

Commissioner Secrest made the following motion "Mr. Chairman, on the Rezone request for the property located at 645 Knoll Ridge Lane, City file number RZN-2022-1895, I move that the Planning Commission continue this item to the July 25, 2023 Planning Commission Hearing."

Commissioner Phillips seconded; motion passed 6-0.

#### OTHER BUSINESS

#### ADJOURNMENT

Commissioner Ehlers moved to adjourn the meeting.

The vote to adjourn was 6-0.

The meeting adjourned at 5:35 p.m.



#### **Grand Junction Planning Commission**

#### Regular Session

Item #2.

Meeting Date: July 11, 2023

Presented By: Kristen Ashbeck, Principal Planner/CDBG Admin

<u>Department:</u> Community Development

Submitted By: Kristen Ashbeck, Principal Planner

#### Information

#### SUBJECT:

Consider a Request by Brian R. and Stephanie Bray for a Variance to the GJMC Section 21.06.010(e), Subdivision Infrastructure Standards Regarding the Provision of a Sanitary Sewer System for the Mustang Ridge Simple Subdivision Located at 880 26 1/2 Road.

#### RECOMMENDATION:

Staff recommends approval of the request.

#### **EXECUTIVE SUMMARY:**

The Applicants, Brian R. and Stephanie Bray, are requesting a variance to the subdivision infrastructure standards regarding the provision of a sanitary sewer system for the Mustang Ridge subdivision for their property located at 880 26 ½ Road. The property was recently annexed to the City of Grand Junction and zoned R-4 (Residential - 4 du/acre). Annexation was requested due to the applicants' desire to subdivide the property into two approximately 1-acre parcels for an additional single-family residence to be built on the new lot. The property does not presently have sewer service; the existing residence has a septic system. The variance request is to allow for the new lot to also be served by a septic system until such time as sewer service is available to the site.

#### BACKGROUND OR DETAILED INFORMATION:

The applicants, Brian R. and Stephanie Bray, are requesting a variance to the subdivision infrastructure standards regarding the provision of a sanitary sewer system for the Mustang Ridge subdivision for their property located at 880 26 ½ Road. The property was recently annexed to the City of Grand Junction and zoned R-4 (Residential - 4 du/acre). Annexation was requested due to the applicants' desire to subdivide the property into two approximately 1-acre parcels for an additional single-family residence to be built on the new lot.

There is no sewer service to this parcel and the existing home on the property has an On-Site Wastewater Treatment System (OWTS) in place. The applicants initially requested authorization to subdivide the property with written agreement, in accordance with GJMC 13.16.060, through the City Utilities Department, which was preliminarily approved for recommendation, but the request must be processed through two separate sections of the Grand Junction Municipal Code (GJMC) to obtain final approval. One is the formal process for a Sanitary Sewer Waiver as defined in GJMC Section 13.16.060(c)(4)(A), Persigo Wastewater Treatment Plant, Rule 4.7, to allow for the use of an Individual Sewage Disposal System (ISDS, also referred to as an OWTS) for the new lot created by the proposed Mustang Ridge subdivision. That process has started and will require approval of the City Council and the Mesa County Commissioners

The other process is that defined in Section 21.06.010(e), Infrastructure Standards, Sanitary Sewer System, which requires all new lots and uses to be served by a sewer system connected to a public wastewater treatment facility unless a variance is granted by the City Council upon recommendation by the Planning Commission.

The two processes are running concurrently, and it is anticipated that both considerations will be presented to City Council at one meeting, with the County Commission set to make its decision shortly thereafter.

Per the applicant's engineering analysis, the location of existing manholes in the vicinity require 1) an easement through other properties, or 2) are at a grade such that a sewer line connection would not meet slope standards, or 3) are too distant (appx ½ mile) for extension of sanitary sewer system to be cost effective at this time.

#### NOTIFICATION REQUIREMENTS

#### Neighborhood Meeting:

A Neighborhood Meeting regarding the Annexation, Zoning, and potential for a sewer variance was held in virtual format on January 12, 2023, in accordance with Section 21.02.080(e) of the Zoning and Development Code. The Applicant's representative and City staff were in attendance as well as three members of the public.

Notice was completed consistent with the provisions in Section 21.02.080(g) of the City's Zoning and Development Code. The subject property was posted with an application sign, mailed notice of the public hearings before Planning Commission and City Council in the form of notification cards was sent to surrounding property owners within 500 feet of the subject property, and the notice of the Planning Commission public hearing was published in the Grand Junction Daily Sentinel according to the Code.

An online public hearing was conducted through GJSpeaks; no public comments were received.

#### VARIANCE ANALYSIS

Section 21.06.010(e), Infrastructure Standards, Sanitary System, states that a request for a variance to the provision that all new lots and uses be served by a sewer system connected to a public wastewater treatment facility shall be processed in accordance with GJMC Section 21.02.200(c)(5) which is a reference to the criteria by which a variance is reviewed. However, for this type of request, only one of the criteria, criterion 5, is to be used in consideration of the request. This criterion reads as follows: (5) The variance is the minimum necessary to make possible the reasonable use of land or structures.

The request for this variance is only for one additional lot. The R-4 zoning would allow for future subdivision of either or both of the 1-acre lots, but this variance request does not consider any further subdivision of the property. As part of the approval by the City Council and the Mesa County Commissioners, the applicants must execute a Power of Attorney and an agreement with the City that, at such time sewer does become available to this property, the owners will participate in a sewer improvement district or, if the property is to be further subdivided, sewer service to all lots will be served by a sewer system connected to a public wastewater treatment facility as required by the Zoning and Development Code. In addition, the subdivision currently under review will create a vacant parcel and one additional residence is the minimum necessary to establish a reasonable use of the land.

Therefore, staff finds this criterion has been met.

#### FINDINGS OF FACT AND RECOMMENDATION

After reviewing the Mustang Ridge request for a variance to the subdivision infrastructure standards regarding the provision of a sanitary sewer system for the Mustang Ridge simple subdivision located at 880 26 ½ Road, staff finds that the variance criterion in GJMC Section 21.02.200(c)(5) has been met.

Therefore, Staff recommends approval of the request.

#### SUGGESTED MOTION:

Mr. Chairman, on VAR-2023-393, a request for a variance to the subdivision infrastructure standards regarding the provision of a sanitary sewer system for the Mustang Ridge simple subdivision located at 880 26 ½ Road, I move that the Planning Commission forward a recommendation of approval to City Council with the findings of fact as listed in the staff report.

#### Attachments

- Development Application
- Proposed Mustang Ridge Subdivision Plat
- Site Location Map and Photo
- Existing Sewer Service in Vicinity of Mustang Ridge Subdivision





Kurt Carson, P.E. Wastewater Services Manager City of Grand Junction Utilities 2145 River Road Grand Junction, CO 81505

RE: Request for preliminary approval of Sanitary Sewer Waiver 880 26 1/2 Road

Mr. Carson,

In regard to section 13.16.060(c)(4)(A) of the Grand Junction Municipal Code. We are requesting a preliminary approval of a Sanitary Sewer Waiver for the proposed future Lot 2 (see attached Plat) located 880 26 ½ Road. Our applicants, Brian R. and Stephanie Bray, are currently in the pre-submittal process for an annexation and simple subdivision with the City of Grand Junction. There is an existing house which will be located on proposed Lot 1 and has an existing OSWTS system in place. The parcel is currently 2.02 acres, and proposed Lot 2, the new parcel, will contain 1.02 acres.

The municipal code allows for a sanitary sewer waiver when the following two conditions exist.

A) The construction of a sewer line is impracticable

Reasons laid out below under examples A, B, C, D below.

B) Adequate disposal and treatment facilities exist as defined by current regulations (generally defined as the construction of an engineered ISDS);

Adequate disposal and treatment facilities means that a local package treatment plant is available and functioning or that an ISDS may be constructed, regularly pumped and disposed of at the plant in accordance with all State and County Health Department regulations;

Per the municipal code,

Examples of when sewer construction may be "impracticable" include but are not limited to:

(A) There is a low likelihood of a local sewer improvement district being formed in the near future based on the Manager's discussions of the formation of the same with the

benefiting owners, and the number and location of POAs to form a district is insufficient to create the same; or

The applicant does not have knowledge of any other POAs in adjacent properties. Through discussions with the current City of Grand Junction Wastewater Services Manager, the applicant does not believe it likely a sewer improvement district could be formed in the near future.

(B) The sewer line, to be constructed by the property owner, is in a location or with grades such that few if any other nearby properties can be efficiently served by the new line;

The nearest sewer main located at the intersection of Trappers Ct and Grand Vista Drive is more than 400 feet away (approx. 500 ft) with no legal access by easement or otherwise across adjacent private properties. Further the depth of the location of this manhole would not allow a sewer line to have a downhill gradient to the make the connection from applicant's property. One nearby property may be able to connect but all others along this line would likely have the same issue.



LEFT: Subject property shown with yellow boundary, closest legal access to sewer shown as dotted green line.

(C) The location of the closest (within 400 feet) sewer line is in a different drainage basin or is across a major street, waterway or similar impediment to the construction of a line such that the expense of the new line is wholly out of proportion to the average cost of extending residential service;

The nearest sewer line would require construction within road ROW of 26 ½ Road and Grand Vista Way of over 500'. The expense involved with the distance, removal and replacement of asphalt would be significantly more expensive than the average cost of extending residential service from the adjacent ROW.

(D) To construct pumping facilities and a force main would be too great an expense compared to participation in a future local improvement district;

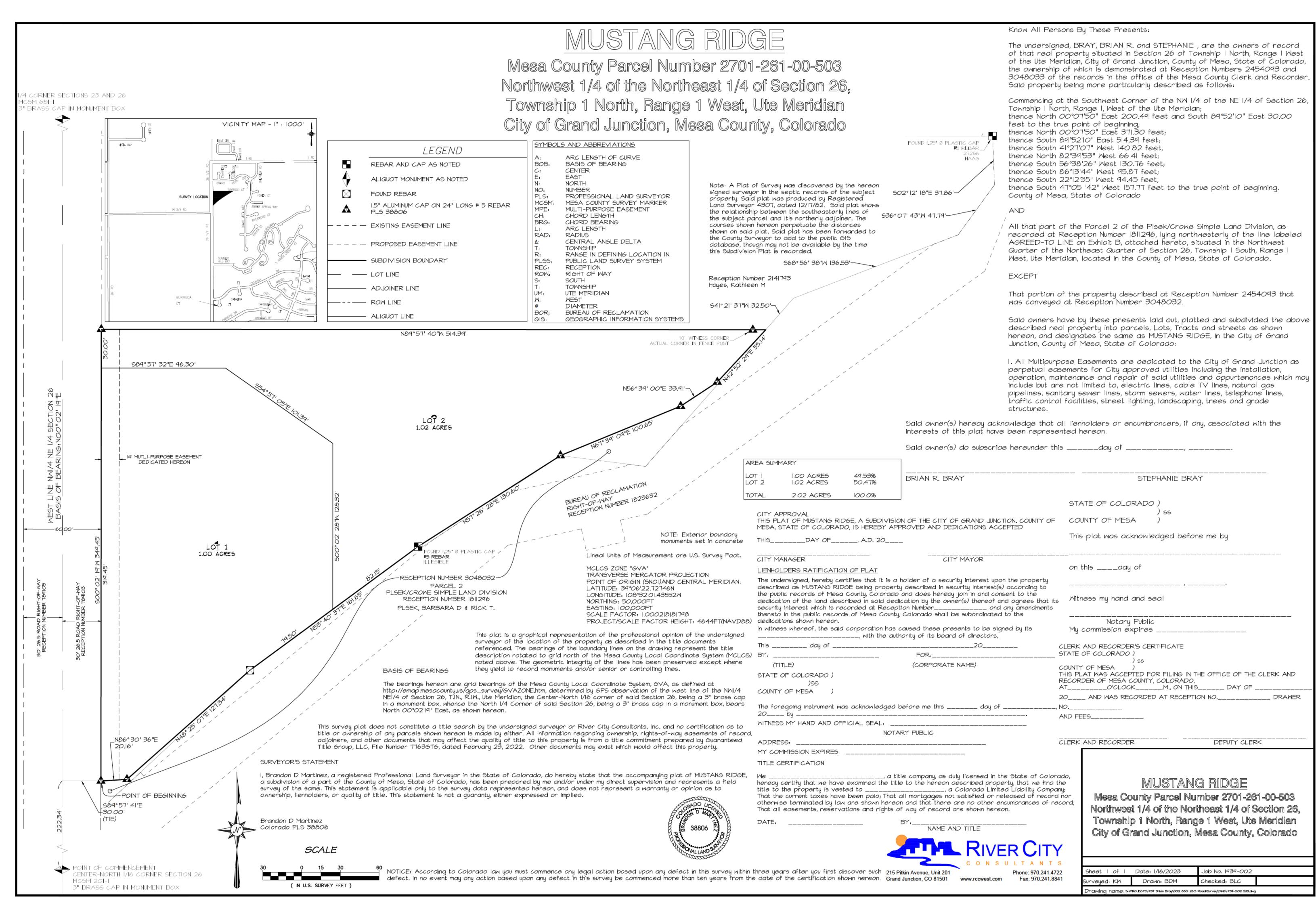
The most likely location of a future sewer main would be from the development of the parcel of property to the south. Properties on both side of this property have been developed into subdivisions. Per existing municipal code, utility extensions would be required at that time, which would bring the services directly to the property line. Participation in the future local improvement district would ensure that this property would be connected at that time.

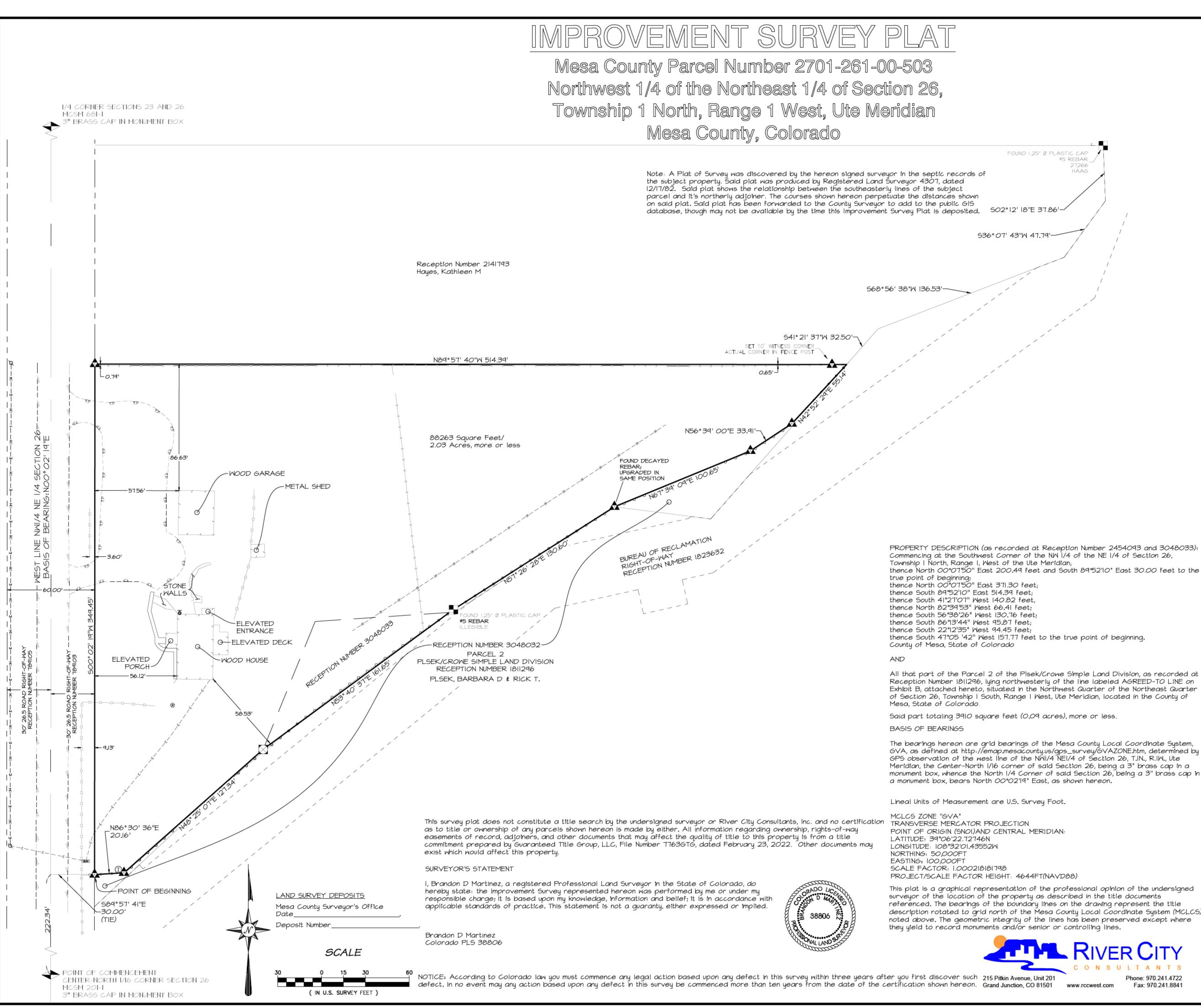
In accordance with 13.16.060(c)(4)(A) of the City of Grand Junction Municipal Code we are requesting a preliminary approval of a Sanitary Sewer Waiver for the creation of a future lot located at 880 26 ½ Road.

Your consideration of this requested is appreciated.

Sincerely,

Ivan D. Geer, P.E. igeer@rccwest.com





SYMBOLS AND ABBREVIATIONS ARC LENGTH OF CURVE BASIS OF BEARING CENTER NORTH NUMBER PROFESSIONAL LAND SURVEYOR MESA COUNTY SURVEY MARKER MULTI-PURPOSE EASEMENT CHORD LENGTH BRG: CHORD BEARING ARC LENGTH RADIUS CENTRAL ANGLE DELTA RANGE IN DEFINING LOCATION IN PUBLIC LAND SURVEY SYSTEM REC: RECEPTION ROW: RIGHT OF WAY TOWNSHIP UTE MERIDIAN WEST

BUREAU OF RECLAMATION

GEOGRAPHIC INFORMATION SYSTEMS

DIAMETER

## LEGEND

REBAR AND CAP AS NOTED

ALIQUOT MONUMENT AS NOTED

FOUND REBAR

I.5" ALUMINUM CAP ON 24" LONG # 5 REBAR PLS 38806

ELECTRIC BOX

GAS METER

----- EASEMENT LINE

— OVERALL PROPERTY BOUNDARY
— INTERNAL PARCEL LINE

ADJOINER LINE

———— EDGE OF ASPHALT

EDGE OF CONCRETE

-E- UNDERGROUND ELECTRIC LINE
-OHE- OVERHEAD ELECTRIC LINE

-X- WIRE FENCE

POWER POLE

f IRRIGATION PUMP

IRRIGATION MANHOLE

--IR---IRRIGATION LINE

## IMPROVEMENT SURVEY PLAT

Mesa County Parcel Number 2701-261-00-503 Northwest 1/4 of the Northeast 1/4 of Section 26, Township 1 North, Range 1 West, Ute Meridian Mesa County, Colorado

Sheet I of I	Date: 1/16/2023	Job No. 1939-002				
Surveyed: KM	Drawn: BDM	Checked: AKT				
Drawing name: 5.4PROJECT5V434 Brian Brayloo2 880 26.5 Road/Survey/DNGV434-002 15P.dng						

### MESA COUNTY REALTH DEPARTMENT 515 Patterson Road Grand Junction, Colorado 81501 Phone: 244-1750

# APPLICATION INDIVIDUAL SEWAGE DISPOSAL SYSTEM PERMIT

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Subdivision	I C	ot Block Filing	
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Applicant owner	Address		
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2.			
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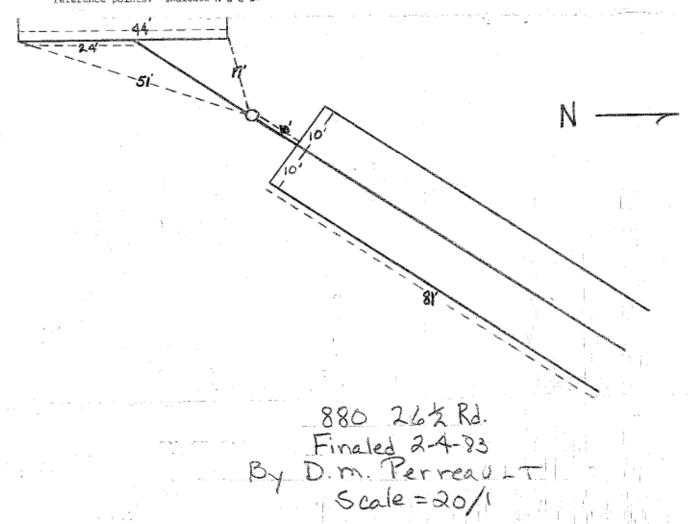
### SOIL EVALUATION

Ground Conditions:		
Depth to bedrock Mil	'	
	NW	•
Estimated high seasonal water tak		
Soil conditions consist of (indic	rate depth of each horizon): 0-4 - kul	Across a
and the little Contracts to 10.4	In to a live sout a little	
sit 14-6- accomp Hus	a for a form	
	·	
Alward Dette to house		
Larend	1 20 10	
Each perc hole was presoaked	times on 12-11-8 (date)	).
~ ^ 1	PERCOLATION RATES	
	DAME 17.23-42	
TESTED BY V- VOWAD	DATE (L-L)-8	

REF.	LOT	BLOCK	DEPTH OF PERC TEST	MEASUREMENTS	TOTAL MIN.	1	AVERAGE MIN/INCH RATE	H.S.G. W.T.**	COMMENTS
			D' 1. B' 2. G 3.	2/2 434 400 43 4600 70 72/20	2.25" 3" 2.5"	58 1 43 1 52 1	51/1	uoue	
REF	LOT	BLOCK	DEPTH OF PERC TEST	MEASUREMENTS	TOTAL MIN.	MIN/INCH	AVERAGE MIN/INCH RATE	H.S.G. W.T.**	COMMENTS
			1. 2. 3.	10 11 15 15 15 15 15 15 15 15 15 15 15 15		_			

<sup>\*</sup>This figure must be entered on the map and/or plot plan \*\*High Seasonal Ground Water Table

PLOT PLAN AND DESIGN FEATURES:
Include by measured distance location of wells, springs, potable water supply lines, cisterns, buildings, subsoil drains, lakes, water course, streams and dry gulches. Show location of system by triangulation from dwelling or other fixed reference points. Indicate N-S-E-B.



Finaled 2-4-83
D. m. Perreault
Scale = 20/1

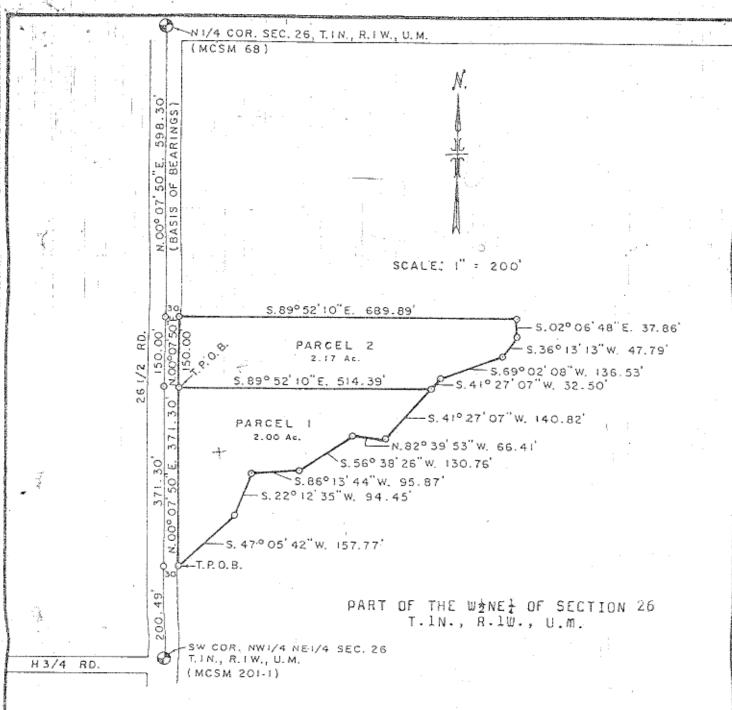
Packet Page 14

# Division of Environmental Health

Date 4/5/89

[]\$15.00 - Office []\$30.00 - Site Evaulation

Mesa County Health Department, 515 Patterson Road, Grand Junction, CO 81501 244-1750
Address 880 26/2 PQ 6 J. , CO Zip 81506
Re: Owner: Zlohn Crowe / Builde: Nam Frierd
Comments:
The prograd Construction will not interfere with the cristing IS.D.S.
with the creating IS.O.S.
Submit To: Clearance 15-
Building Department Approved Approved Sanitarian  Approved Sanitarian  Other Denied Sanitarian
Other Denied Sanitarian 4/5/n Sof



#### PARCEL 1

Commencing at the Southwest corner of the NW1NE1 of Section 26, Township 1 North, Range 1 West of the Ute Meridian; thence N.00°07'50"E. 200.49 feet and S.89°52'10"E. 30.00 feet to the TRUE POINT OF SEGIN-NING; thence N.00°07'50"E. 371.30 feet; thence S.89°52'10"E. 514.39 feet; thence S.41°27'07"W. 140.82 feet; thence N.82°39'53"W. 66.41 feet; thence S.55°38'26"W. 130.76 feet; thence S.86°13'44"W. 95.87 feet; thence S.22°12'35"W. 94.45 feet; thence S.47°05'42"W. 157.77 feet to the TRUE POINT OF SEGINNING. Contains 2 acres, more or less.

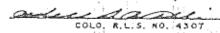
#### PARCEL 2

Commencing at the Southwest corner of the NWINEl of Section 26, Township l North, Range l West of the Ute Meridian; thence N.00°07'50"E. 571.79 feet and S.89°52'10"E. 30.00 feet to the TRUE POINT OF BEGINNING; thence N.00°07'50"E. 150.00 feet; thence S.89°52'10"E. 689.89 feet; thence S.02°06'48"E. 37.86 feet; thence S.36°13'13"W. 47.79 feet; thence S.59°02'08"W. 136.53 feet; thence S.41°27'07"W. 32.50 feet; thence N.89°52'10"W. 514.39 feet to the TRUE POINT OF BEGINNING. Contains 2.17 acres, more or less.



#### SURVEYOR'S CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD MOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER HY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEGGE AND BELIEF



116



1 1 4

UDELL'S WILLIAMS
751 Rood Avenue
GRAND JUNCTION, COLDRADO 81501

PLAT OF

SURVEY IN

UNE SEC. 26

T.ln., R.lw., U.m.

SUAVEZED BY: USW | DATE: 12/16/82 DRAWN BY: USW | DATE: 12/17/82

# MESA COUNTY HEALTH DEPARTMENT

515 PATTERSON ROAD, GRAND JUNCTION, COLORADO 81501 (303) 244-1743

KENNETH J. LAMPERT, M.D., M.P.H. DIRECTOR

December 23, 1982

Mr. and Mrs. Fred Plsek 872 26½ Road Grand Junction, CO 81501

Splitting 2.17 acres and 2.0 acres from 71 acres, 872 26 ₹ Road, Grand Junction, Colorado

Dear Mr. and Mrs. Plsek:

This certifies that an inspection of the individual sewage disposal system which serves the dwelling located at 872 264 Road, Grand Junction, Colorado was made on December 23, 1982. At the inspection, the system appeared to be functioning in a

Soils evaluations were conducted on the 2.0 and 2.17 acre parcels, proposed lots 1 and 2 respectively, located at 872 264 Road, Grand Junction, Colorado on December 23, 1982. Individual sewage disposal systems can be installed which meet the requirements of the Mesa County Individual Sewage Disposal Systesm Regulations. This department must be contacted beofre construction begins in order to obtain the necessary permits.

This information shall be attached to the Deed in case of transfer of property, so that proper procedures can be followed for an individual sewage disposal system before construction on said property.

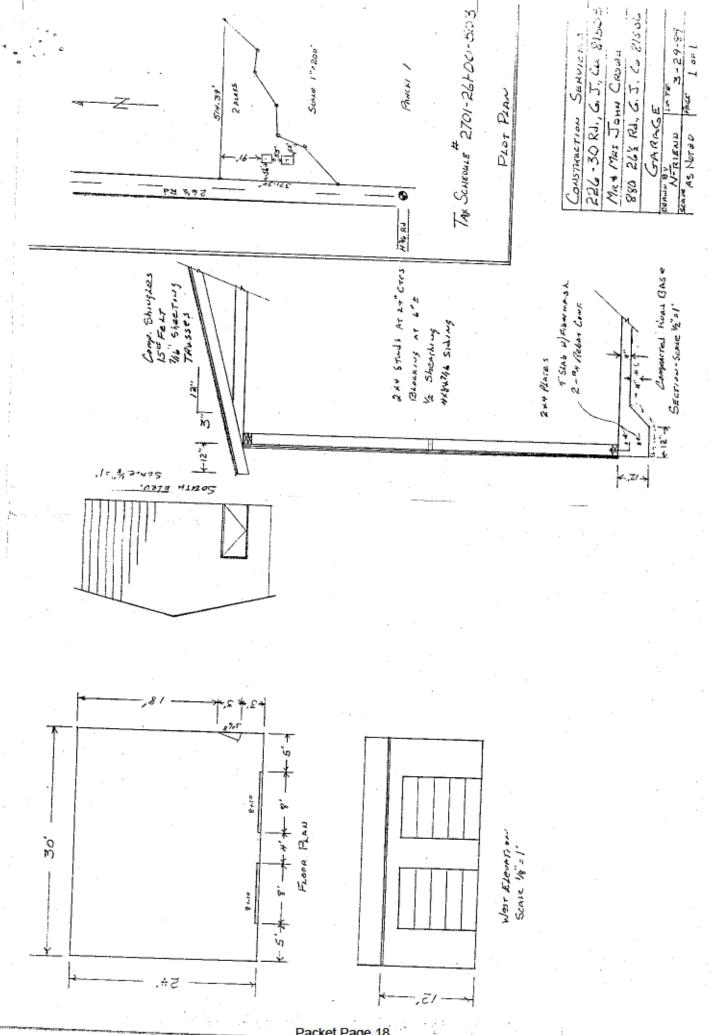
Any questions you may have should be directed to this office at 244-1750.

Sincerely,

Philip\j. Romeo Sanitarian

PJR:els

cc: Mesa County Planning Department





Kristen Ashbeck, Senior Planner Community Development City of Grand Junction 250 N. 5<sup>th</sup> Street Grand Junction, CO 81501

RE: Request for approval of Variance of Sanitary Sewer Waiver 880 26 1/2 Road

Ms. Ashbeck,

In regard to section 21.06.010(e) of the Grand Junction Municipal Code. We are requesting approval of a Sanitary Sewer Waiver for the proposed future Lot 2 (see attached Plat) located 880 26 ½ Road. Our applicants, Brian R. and Stephanie Bray, recently annexed and zoned this parcel to R-4 in the City limits and are currently in the process of a Simple Subdivision with the City of Grand Junction. There is an existing house which will be located on proposed Lot 1 and has an existing OSWTS system in place. The parcel is currently 2.02 acres, and proposed Lot 2, the new parcel, will contain 1.02 acres.

The municipal code allows for a sanitary sewer variance under the following conditions.

#### 12.02.200 Variance

- (c) **Approval Criteria.** A variance may be granted only if the applicant establishes that criterion 5 has been met:
  - (5) The variance is the minimum necessary to make possible the reasonable use of land or structures;

The property is currently 2 acres in the City limits with an R-4 zoning. Without the sewer variance the property cannot be subdivided to allow even one more home.

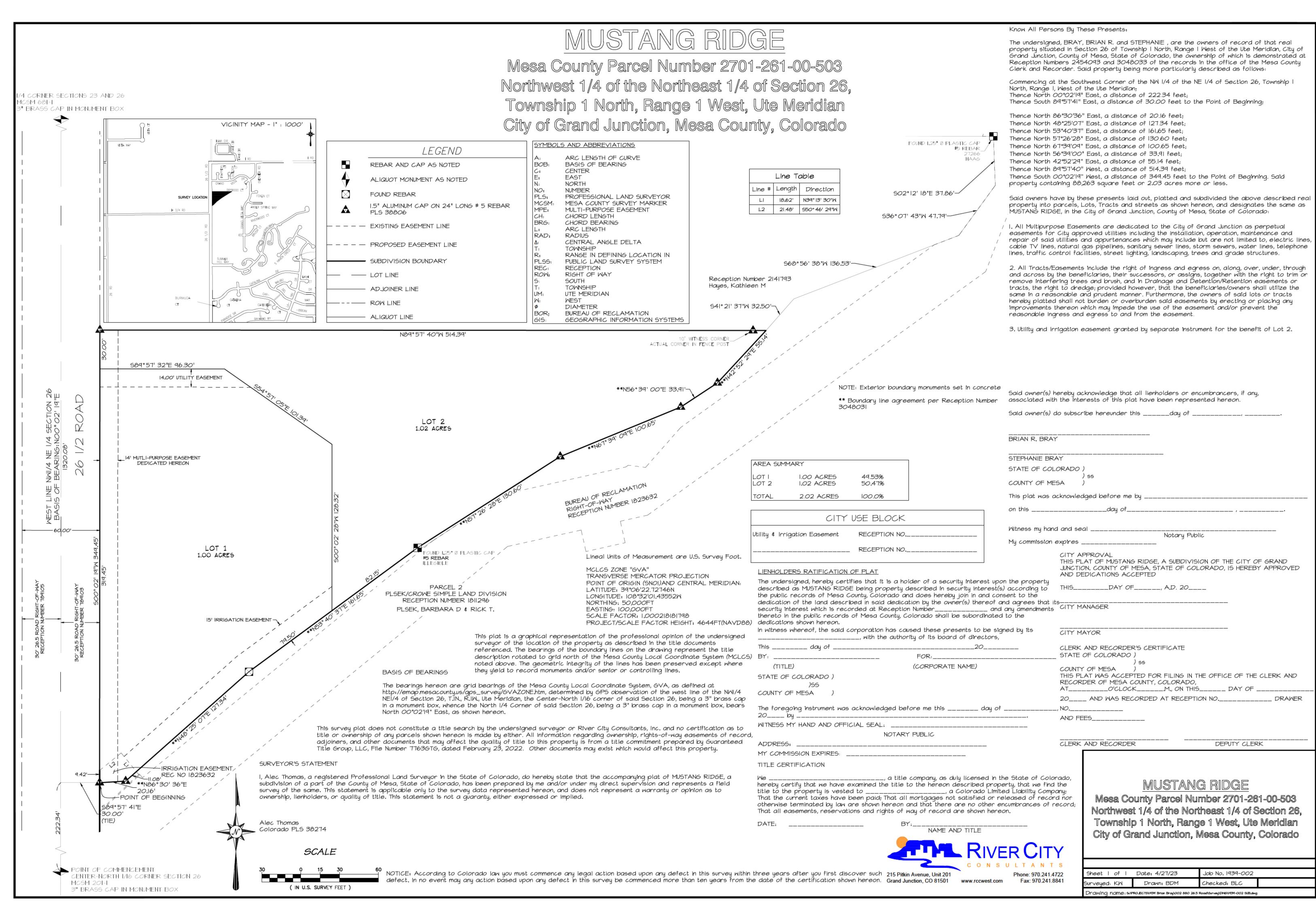
In accordance with 21.06.010(e) of the City of Grand Junction Municipal Code we are requesting a preliminary approval of a Sanitary Sewer Waiver for the creation of a future lot located at 880.26 ½ Road

Your consideration of this request is appreciated.

Sincerely,

Ivan D. Geer, P.E. igeer@rccwest.com

Attachments





Kurt Carson, P.E. Wastewater Services Manager City of Grand Junction Utilities 2145 River Road Grand Junction, CO 81505

RE: Request for preliminary approval of Sanitary Sewer Waiver 880 26 1/2 Road

Mr. Carson,

In regard to section 13.16.060(c)(4)(A) of the Grand Junction Municipal Code. We are requesting a preliminary approval of a Sanitary Sewer Waiver for the proposed future Lot 2 (see attached Plat) located 880 26 ½ Road. Our applicants, Brian R. and Stephanie Bray, are currently in the pre-submittal process for an annexation and simple subdivision with the City of Grand Junction. There is an existing house which will be located on proposed Lot 1 and has an existing OSWTS system in place. The parcel is currently 2.02 acres, and proposed Lot 2, the new parcel, will contain 1.02 acres.

The municipal code allows for a sanitary sewer waiver when the following two conditions exist.

A) The construction of a sewer line is impracticable

Reasons laid out below under examples A, B, C, D below.

B) Adequate disposal and treatment facilities exist as defined by current regulations (generally defined as the construction of an engineered ISDS);

Adequate disposal and treatment facilities means that a local package treatment plant is available and functioning or that an ISDS may be constructed, regularly pumped and disposed of at the plant in accordance with all State and County Health Department regulations;

Per the municipal code,

Examples of when sewer construction may be "impracticable" include but are not limited to:

(A) There is a low likelihood of a local sewer improvement district being formed in the near future based on the Manager's discussions of the formation of the same with the

benefiting owners, and the number and location of POAs to form a district is insufficient to create the same; or

The applicant does not have knowledge of any other POAs in adjacent properties. Through discussions with the current City of Grand Junction Wastewater Services Manager, the applicant does not believe it likely a sewer improvement district could be formed in the near future.

(B) The sewer line, to be constructed by the property owner, is in a location or with grades such that few if any other nearby properties can be efficiently served by the new line;

The nearest sewer main located at the intersection of Trappers Ct and Grand Vista Drive is more than 400 feet away (approx. 500 ft) with no legal access by easement or otherwise across adjacent private properties. Further the depth of the location of this manhole would not allow a sewer line to have a downhill gradient to the make the connection from applicant's property. One nearby property may be able to connect but all others along this line would likely have the same issue.



LEFT: Subject property shown with yellow boundary, closest legal access to sewer shown as dotted green line.

(C) The location of the closest (within 400 feet) sewer line is in a different drainage basin or is across a major street, waterway or similar impediment to the construction of a line such that the expense of the new line is wholly out of proportion to the average cost of extending residential service;

The nearest sewer line would require construction within road ROW of 26 ½ Road and Grand Vista Way of over 500'. The expense involved with the distance, removal and replacement of asphalt would be significantly more expensive than the average cost of extending residential service from the adjacent ROW.

To construct pumping facilities and a force main would be too great an expense compared to participation in a future local improvement district;

The most likely location of a future sewer main would be from the development of the parcel of property to the south. Properties on both side of this property have been developed into subdivisions. Per existing municipal code, utility extensions would be required at that time, which would bring the services directly to the property line. Participation in the future local improvement district would ensure that this property would be connected at that time.

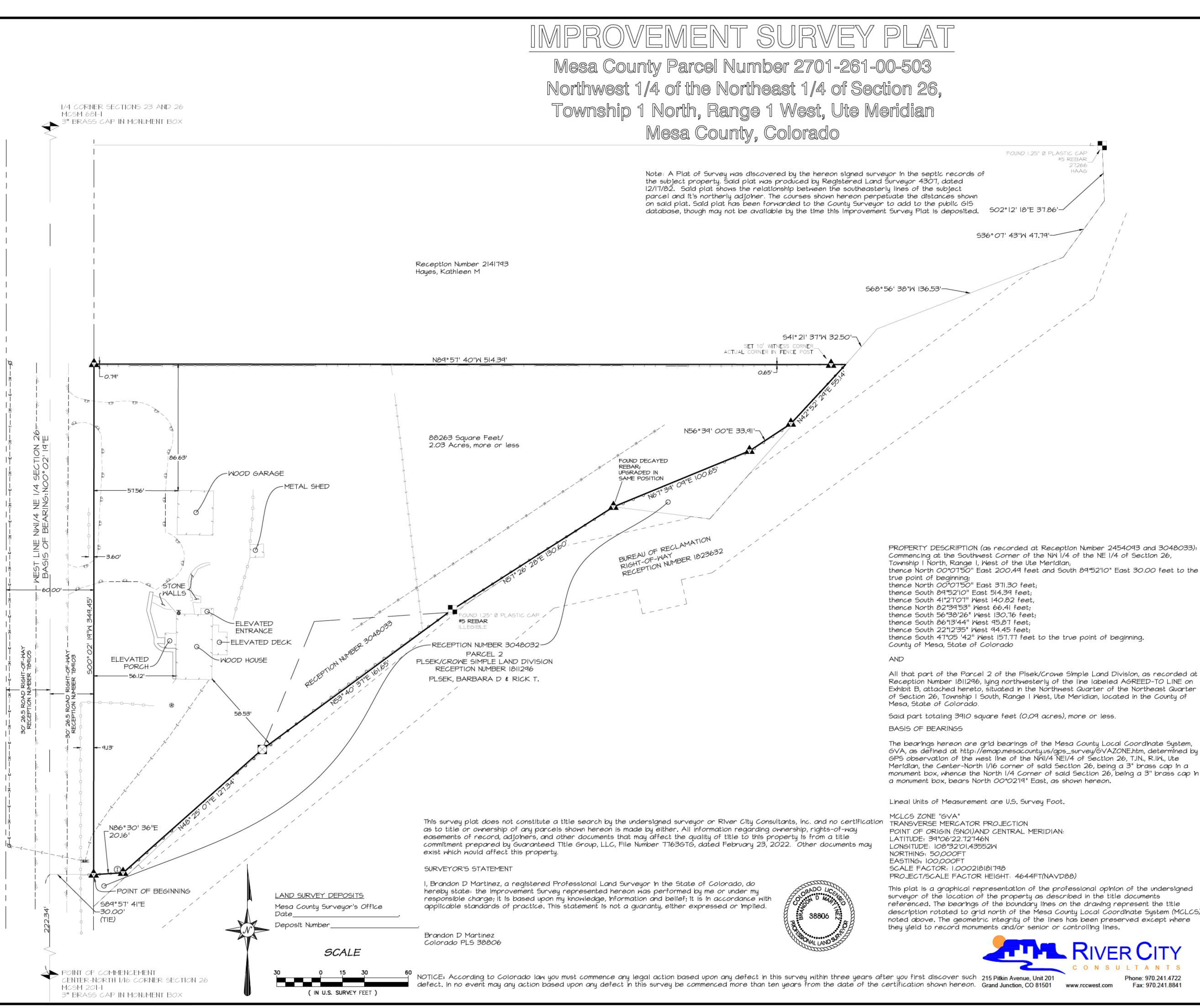
In accordance with 13.16.060(c)(4)(A) of the City of Grand Junction Municipal Code we are requesting a preliminary approval of a Sanitary Sewer Waiver for the creation of a future lot located at 880 26 1/2 Road.

Your consideration of this requested is appreciated.

Sincerely,

Ivan D. Geer, P.E.

igeer@rccwest.com



SYMBOLS AND ABBREVIATIONS ARC LENGTH OF CURVE BASIS OF BEARING CENTER NORTH NUMBER PROFESSIONAL LAND SURVEYOR MESA COUNTY SURVEY MARKER MULTI-PURPOSE EASEMENT CHORD LENGTH BRG: CHORD BEARING ARC LENGTH RADIUS CENTRAL ANGLE DELTA RANGE IN DEFINING LOCATION IN PUBLIC LAND SURVEY SYSTEM REC: RECEPTION ROW: RIGHT OF WAY TOWNSHIP UTE MERIDIAN WEST

BUREAU OF RECLAMATION

GEOGRAPHIC INFORMATION SYSTEMS

## LEGEND

REBAR AND CAP AS NOTED

ALIQUOT MONUMENT AS NOTED

FOUND REBAR

I.5" ALUMINUM CAP ON 24" LONG # 5 REBAR PLS 38806

DIAMETER

ELECTRIC BOX

---- EASEMENT LINE

OVERALL PROPERTY BOUNDARY

GAS METER

---- INTERNAL PARCEL LINE

ADJOINER LINE

———— EDGE OF ASPHALT
———— EDGE OF GRAVEL

EDGE OF CONCRETE

-E- UNDERGROUND ELECTRIC LINE

-OHE- OVERHEAD ELECTRIC LINE

☐─ WOOD FENCE☐─ CHAIN LINK FENCE

-X- WIRE FENCE

POWER POLE

(S) IRRIGATION PUMP

IRRIGATION MANHOLE

--R---R-- IRRIGATION LINE

## IMPROVEMENT SURVEY PLAT

Mesa County Parcel Number 2701-261-00-503 Northwest 1/4 of the Northeast 1/4 of Section 26, Township 1 North, Range 1 West, Ute Meridian Mesa County, Colorado

Sheet I of I	Date: 1/16/2023	Job No. 1939-002				
Surveyed: KM	Drawn: BDM	Checked: AKT				
Drawing name: 5.4PRO.ECT51494 Brian Brayloo2 880 26.5 Road/Survey/DNS1494-002 ISP drug						

### MESA COUNTY REALTH DEPARTMENT 515 Patterson Road Grand Junction, Colorado 81501 Phone: 244-1750

# APPLICATION INDIVIDUAL SEWAGE DISPOSAL SYSTEM PERMIT

No individual sewage dispose	al system shall be inst	talled on less than a 's acre par	co3
No permit shall be issued many	and a plot of Standard	to scale, has been submitted a	
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approved. (Sections 5 and	of the Mesa County Ta	dividual Sewage Disposal System	s
Regulations).	80		
1			
	70 and D. (	$A \wedge$	
Construction Address	62 Road		
Subdivision	I C	ot Block Filing	
Tax Schedule #2701-26-00	Downell Co.		
10x 0011000 #3/0/-26-000	Parcel Size: Leng		res 🖊
Owner Kuby Gowel	VIRGISIA PLANTESS	SAMe Phone	_
Applicant owner	Address		
Installer	Control of the contro	Phone	
	License f	Phone	
Description of house and	location information:		
' '			
2.			
DIRAS	E CHECK THE FOLLOWING	ENTRE ADDITION	
	AL CHECK THE POSITIONING	THAT APPLY	
Indicate depth of all wells	s located within 100 fe	et of the system	
Split Requested: YES NO_	(Splitting 2 -	avas from a total of III	3
Variance Requested: YES	TO THE STATE OF TH	cres from a total of ///, acr	es)
variance Requested: YES	NO (Indicate type		)
Distance to nearest communi	ty sewer system	1. \a.	
Was an effort made to conne	ct to community consul		
dana made to come	cc co community sewery	system? YESNO	
SYSTEM USE	,	WATER SUPPLY	
	AR-ROUND		
		PUBLIC SPRING	
	SONAL	CISTERN SURFACE	E
	dicate #Days/Year )		-
VAULT	"pale, redi"	WELLOTHER	
VAOLIT			
	4.73	· · · · · · · · · · · · · · · · · · ·	
3.	PROPOSED USE OF PROP	PERTY	
SINGLE FAMILY	7 13 .		1
	MULTI-FAMILY	COMMERCIAL	
Frame	# of Units	Type of Business	
Mobile	# of Bedrooms/Unit		
		Maximum Sewage Flow Rates	
3 # of Bedrooms	# of Units with	Number of Employees	
Clotheswasher	Clotheswasher	de la companya del companya de la companya de la companya del companya de la companya del la companya de la com	
Garbage Disposal			
	# of Units with	Hazardous Wastes Quantity	
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Basement Plumbing	Garpage Disposal	Type	
Passement Filmorny	Garbage Disposal	Type	
Proceeding Promoting	Basement Plumbing	Type Basement Plumbing	
Proceeding -			
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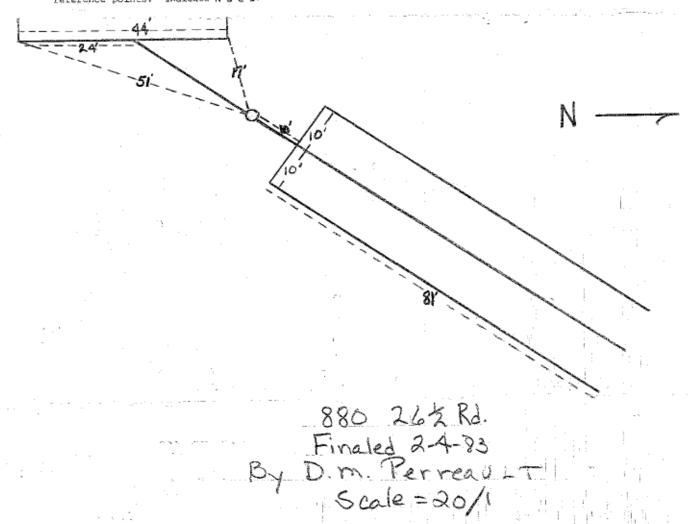
### SOIL EVALUATION

	4
Ground Conditions:	
Depth to bedrock MOW	
Depth to ground water table MWW	•
Retimated high seasonal water table ANAW	1. 1-
Soil conditions consist of (indicate depth of, each horizon): U-4 , Kul	score a
sit, 4-6- accords Hugh 6-9- fore found or find	
Alighe flore to house	
formand 1	
Each perc hole was presoaked 5 times on 12-11-8 (date).	
PERCOLATION RATES	
TESTED BY V. VOMIA DATE 12-23-82	
TESTED BY V. DOVING	

REF	LOT	BLOCK	DEPTH OF PERC TEST	MEASUREMENTS  0:80 : L:00	TOTAL MIN.	1	AVERAGE MIN/INCH RATE	H.S.G. W.T.**	COMMENTS
			D' 1. 3 2. 6 3.	2/2 - 434 55 43 - 46 w 70 - 72/20	2.25" 3" 2.5"	58 1 43 1 52 1	61/1	uone	
REE	LOT	BLOCK	DEPTH OF PERC TEST	MEASUREMENTS	TOTAL MIN. DROP/INCHES	MIN/INCH	AVERAGE MIN/INCH RATE	H.S.G. W.T.**	COMMENTS
			1. 2. 3.	10 21 22 22 22 22 22 22 22 22 22 22 22 22		_	- Annual Marie		

<sup>\*</sup>This figure must be entered on the mmp and/or plot plan \*\*High Seasonal Ground Water Table

PLOT PLAN AND DESIGN FEATURES:
Include by measured distance location of wells, springs, potable water supply lines, cisterns, buildings, subsoil drains, lakes, water course, streams and dry gulches. Show location of system by triangulation from dwelling or other fixed reference points. Indicate N-S-E-B.



Finaled 2-4-83
D. m. Perreault
Scale = 20/1

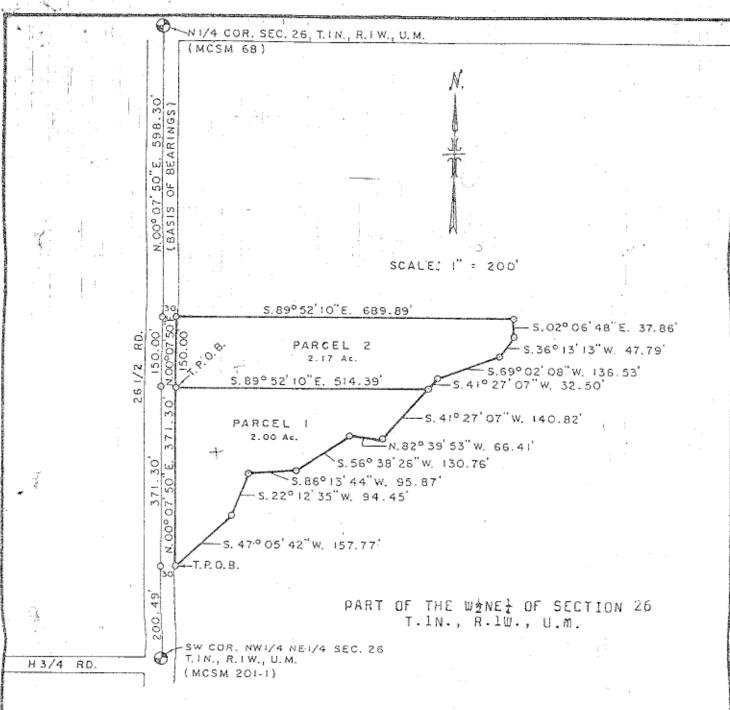
Packet Page 28

# Division of Environmental Health

Date 4/5/89

[] \$15.00 - Office [] \$30.00 - Site Evaulation

Mesa County Health Department, 515 Patterson Road, Grand Junction, CO 81501 244-1750
Address 880 26/2 RQ, 6.7. , CO Zip 81506
Re: Owner: Zohn Crave / Fuilder: Non Frierd
The proposal Construction will not interfere with the cristing IS.D.S.
with the creating I.S. O.S.
Submit To: Building Department Approved Approved Sanitarian  Clearance Approved Sanitarian  Other Submit To:  Approved Sanitarian  Submit To:  Approved Sanitarian  Most Sanitarian



#### PARCEL 1

Commencing at the Southwest corner of the NW1NE1 of Section 26, Township 1 North, Range 1 West of the Ute Meridian; thence N.00°07'50"E. 200.49 feet and S.89°52'10"E. 30.00 feet to the TRUE POINT OF SEGIN-NING; thence N.00°07'50"E. 371.30 feet; thence S.89°52'10"E. 514.39 feet; thence S.41°27'07"W. 140.82 feet; thence N.82°39'53"W. 66.41 feet; thence S.55°38'26"W. 130.76 feet; thence S.86°13'44"W. 95.87 feet; thence S.22°12'35"W. 94.45 feet; thence S.47°05'42"W. 157.77 feet to the TRUE POINT OF SEGINNING. Contains 2 acres, more or less.

#### PARCEL 2

Commencing at the Southwest corner of the NWINEl of Section 26, Township l North, Range l West of the Ute Meridian; thence N.00°07'50"E. 571.79 feet and S.89°52'10"E. 30.00 feet to the TRUE POINT OF BEGINNING; thence N.00°07'50"E. 150.00 feet; thence S.89°52'10"E. 689.89 feet; thence S.02°06'48"E. 37.86 feet; thence S.36°13'13"W. 47.79 feet; thence S.59°02'08"W. 136.53 feet; thence S.41°27'07"W. 32.50 feet; thence N.89°52'10"W. 514.39 feet to the TRUE POINT OF BEGINNING. Contains 2.17 acres, more or less.



#### SURVEYOR'S CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD MOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEGGE AND BELIEF

COLO. R.L.S. NO. 4307

116



1 1 4

UDELL'S WILLIAMS
751 Rood Avenue
GRAND JUNCTION, COLDRADO 81501

PLAT OF

SURVEY IN

WENET SEC. 26

T.ln., R.lw., U.m.

SURVEYED BY: USW | DATE: 12/15/82 DRAWN BY: USW | DATE: 12/17/82

# MESA COUNTY HEALTH DEPARTMENT

515 PATTERSON ROAD, GRAND JUNCTION, COLORADO 81501 (303) 244-1743

KENNETH J. LAMPERT, M.D., M.P.H. DIRECTOR

December 23, 1982

Mr. and Mrs. Fred Plsek 872 26½ Road Grand Junction, CO 81501

Splitting 2.17 acres and 2.0 acres from 71 acres, 872 26 ₹ Road, Grand Junction, Colorado

Dear Mr. and Mrs. Plsek:

This certifies that an inspection of the individual sewage disposal system which serves the dwelling located at 872 264 Road, Grand Junction, Colorado was made on December 23, 1982. At the inspection, the system appeared to be functioning in a

Soils evaluations were conducted on the 2.0 and 2.17 acre parcels, proposed lots 1 and 2 respectively, located at 872 264 Road, Grand Junction, Colorado on December 23, 1982. Individual sewage disposal systems can be installed which meet the requirements of the Mesa County Individual Sewage Disposal Systesm Regulations. This department must be contacted beofre construction begins in order to obtain the necessary permits.

This information shall be attached to the Deed in case of transfer of property, so that proper procedures can be followed for an individual sewage disposal system before construction on said property.

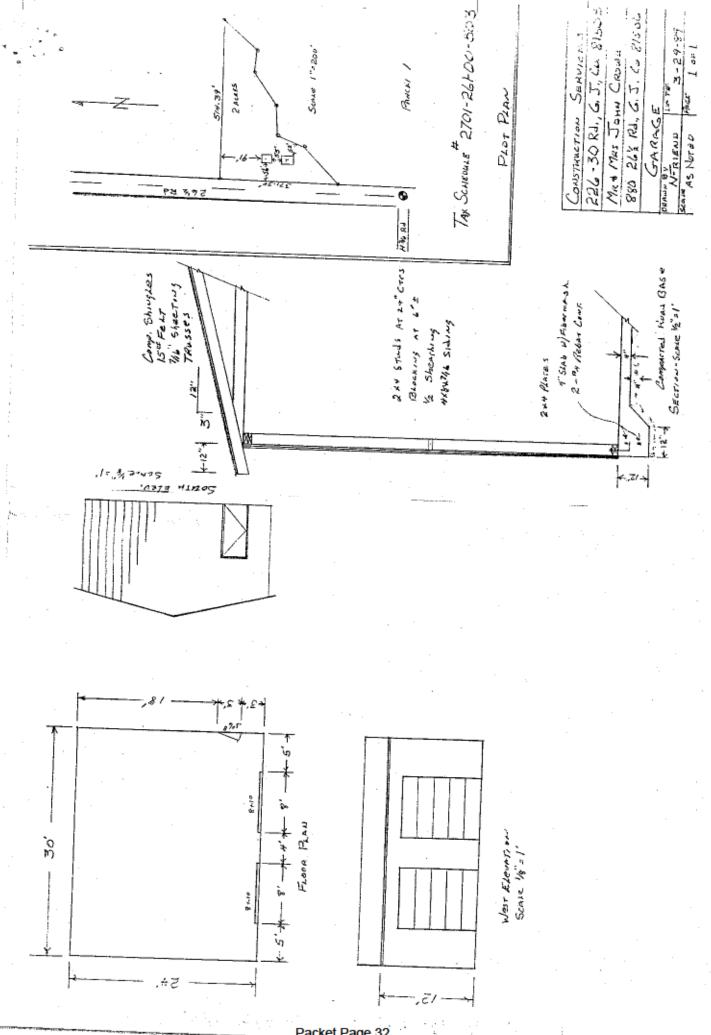
Any questions you may have should be directed to this office at 244-1750.

Sincerely,

Philip\j. Romeo Sanitarian

PJR:els

cc: Mesa County Planning Department



 From:
 Kurt Carson

 To:
 Tracy States

Cc: Kevin Bray; Brian Bray; Ivan Geer

Subject: RE: Preliminary Sewer Waiver Request - 880 26 1/2 Road, Proposed Lot 2

Date: Friday, January 27, 2023 4:02:42 PM

Attachments: <u>image001.png</u>

#### Tracey,

Thank you, this is helpful. I've reviewed your request for a preliminary approval of a septic waiver. I agree that this property meets the criteria in section 13.16.060(c)(4)(A) to be eligible for as septic waiver based on the information you have submitted in the attachment in your email. This would be sufficient to be approved for a septic waiver on the new lot once your ready to pull a septic permit. You may consider your septic waiver preliminarily approved as long as these conditions are the same when you request a formal septic waiver.

Regards, Kurt

From: Tracy States <tstates@rccwest.com> Sent: Thursday, January 26, 2023 8:28 AM

To: Kurt Carson < kurtc@gjcity.org>

Cc: Kevin Bray <kevinbray@brayandco.com>; Brian Bray <bri>drian@brayandco.com>; Ivan Geer

<igeer@rccwest.com>

Subject: Preliminary Sewer Waiver Request - 880 26 1/2 Road, Proposed Lot 2

\*\* - EXTERNAL SENDER. Only open links and attachments from known senders. DO NOT provide sensitive information. Check email for threats per risk training. - \*\*

Good morning, Kurt,

Please see the attached Sewer Waiver Request submitted on behalf of Brian and Stephanie Bray, with regards to the property located at 880 26 ½ Road, Grand Junction, CO. Please let me know if you have any questions or if anything else is required.

Thank you,

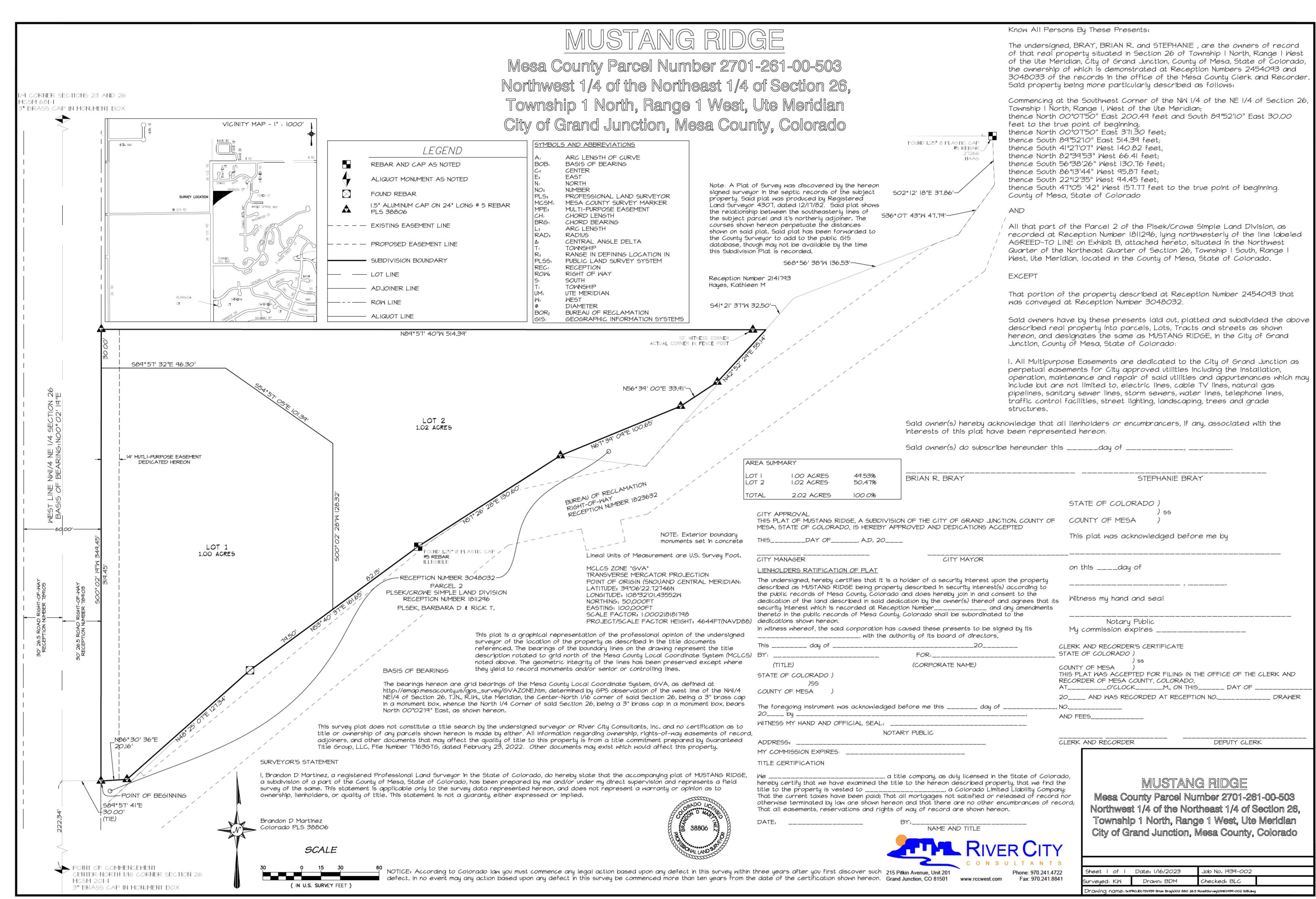
Tracy States Project Coordinator

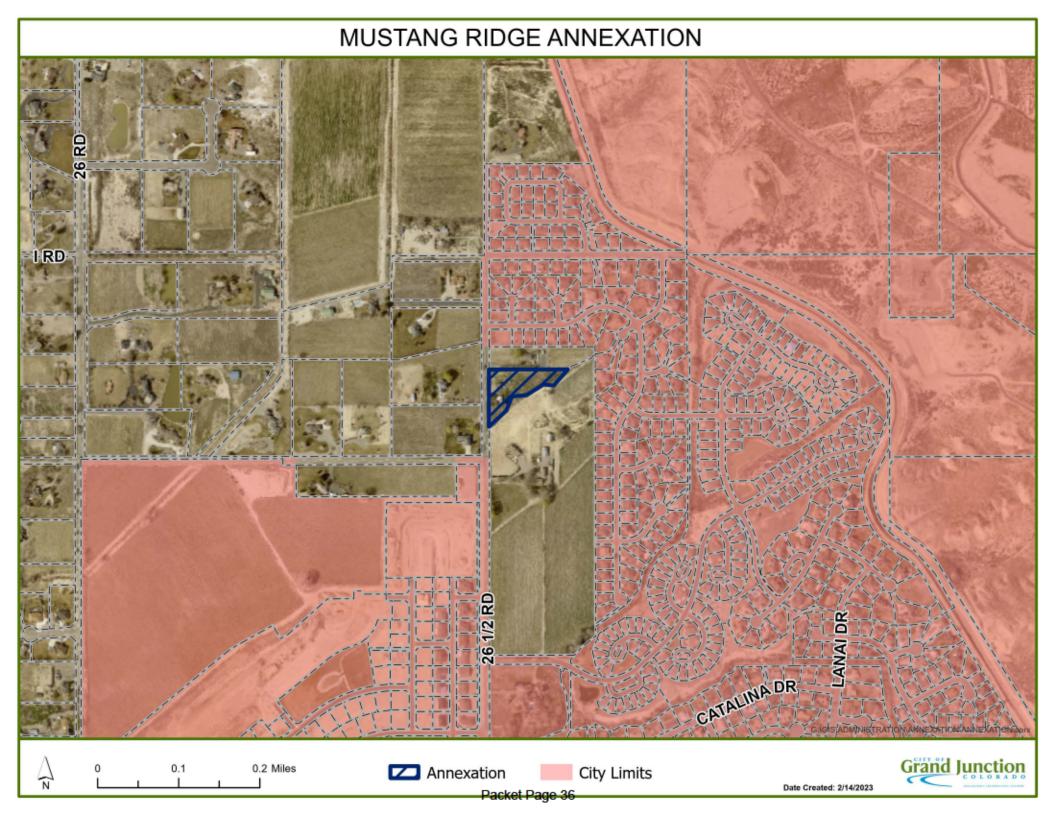


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MUSTANG RIDGE 1, 2 and 3 ANNEXATION SITE - LOOKING SOUTHEAST FROM 26 ½ ROAD



Per applicant's engineering analysis the location of existing manholes (blue circles) either require easement through other properties, are at a grade such that a sewer line connection would not meet slope standards, or are too distant (appx ½ mile) for extension of sanitary sewer system to be cost effective at this time



#### **Grand Junction Planning Commission**

#### Regular Session

Item #1.

Meeting Date: July 11, 2023

Presented By: Kristen Ashbeck, Principal Planner/CDBG Admin

**Department:** Community Development

Submitted By: Kristen Ashbeck, Principal Planner

#### Information

#### SUBJECT:

Consider a Request by M & D Enterprises for a Conditional Use Permit to Allow Sand and Gravel Extraction on a Total of 27.8 acres in a CSR (Community Services and Recreation) Zone District Located at 2855 C 1/2 Road

#### RECOMMENDATION:

Staff recommends conditional approval of the Conditional Use Permit.

#### **EXECUTIVE SUMMARY:**

The Applicant and owner of the parcel, M & D Enterprises, LLC, is proposing to establish a gravel extraction operation on the property located at 2855 C ½ Road along the north bank of the Colorado River just west of 29 Road. A Conditional Use Permit for the mining use is required in the Community Serviecs and Recreation (CSR) zone district.

#### BACKGROUND OR DETAILED INFORMATION:

#### Gravel Extraction Industry

Colorado Revised Statutes Title 34 governs mineral resources. Section 34-1-305, Preservation of Commercial Mineral Deposits for Extraction specifically states that "no board of county commissioners, governing body of any city and county, city, or town, or other governmental authority which has control over zoning shall, by zoning, rezoning, granting a variance, or other official action or inaction, permit the use of any area known to contain a commercial mineral deposit in a manner which would interfere with the present or future extraction of such deposit by an extractor."

Thus, the City complied with state statute when it zoned the property at the time of annexation to CSR which allowed for the gravel extraction to be conducted. The CSR zone district is consistent with the Comprehensive Plan as it implements the Residential

Medium land use category assigned to this property.

Sand and gravel are key building materials required for most development projects within the Grand Valley, including both public and private capital improvements projects. Road base, asphalt, concrete, and building foundations all depend on access to these materials. From a geologic perspective, accessible sand and gravel deposits are found most prominently near the Colorado River, making this site an important local resource for developers, builders, and contractors. Ongoing growth in the Grand Valley continues to increase demand for these materials and this proposed extraction operation would provide locally sourced materials to aid in meeting the demand as well as keep costs of raw materials lower due to its close proximity to growth areas.

#### 2020 One Grand Junction Comprehensive Plan and Pear Park Plan

The adopted Comprehensive Plan and the Pear Park Plan applicable to this site include goals and policies regarding the extraction of mineral resources and reclamation of mining sites.

#### Comprehensive Plan

The proposed mineral extraction use proposed for this parcel is consistent with the following section of the Comprehensive Plan:

Plan Principle 2: Resilient and Diverse Economy

Goal 3: Promote Business Growth for a Diverse and Stable Economic Base G. Continue to allow responsible mineral and resource extraction and processing as well as businesses that support these industries.

#### Pear Park Plan

The Pear Park Plan recognizes that gravel and sand are necessary resources for a community. It is needed for construction projects to serve a growing population and is essential to the local economy. The plan states that gravel deposits should be extracted according to a rational plan that avoids waste of the minerals and causes the least practicable disruption of the ecology and quality of life of the citizens of affected areas.

With input from the Pear Park area gravel industry and using the 1978 Mineral Resources Survey of Mesa County, a Pear Park Neighborhood Plan Mineral Resources Map was included as part of this Plan (see plan attached to staff report). The 1978 Mineral Resources Survey of Mesa County states that the "Colorado River terrace deposits exist in the Pear Park area and these deposits are about 12 to 22 feet thick with 10 to 15 feet of overburden." Gravel extraction in the planning area occurs along the north side of the river wherever access is available and practical. Much of the gravel is used for building materials and highway projects. This site is clearly shown on this map as a potential gravel resource area.

Mesa County and the City of Grand Junction are very interested in the reclamation of sites after the resources are removed. The Colorado Mined Land Reclamation Board has developed standards and procedures for reclamation plans. Within their authority,

the County and City work with mining permit applicants to identify appropriate uses and landscape forms for the reclamation plan. Preferred uses are those consistent with the adopted land use plan or providing quality recreation or open space and wildlife habitat opportunities.

#### Site Conditions

The 27.8-acre property is located at 2855 C ½ Road along the north bank of the Colorado River, just west of 29 Road. The owner/operator and permittee is M & D Enterprises, LLC.

The current site condition is predominantly vacant former agricultural land, with weeds/grasses groundcover and shrubby vegetation along the north bank of the Colorado River. Much of the existing vegetation along the river has been cleared in anticipation of construction of the future segment of the Riverfront Trail in this area. The site will be reclaimed to a groundwater lake and surrounding rangeland. Upon successful review of this Conditional Use Permit, a Colorado Division of Reclamation, Mining, and Safety (CDRMS) 112 Construction Material Reclamation Permit Operation Application will be submitted to the CDRMS for this project.

#### Operations Summary and Mining Plan

The C ½ Road gravel extraction operation (pit) will excavate, process, and send offsite construction materials from an 18.3-acre affected area. Much of the product from the C ½ Road pit will supply raw material for concrete production facilities in the area, especially to be used for City and private construction purposes in the vicinity.

The site will be mined over 10 years; day-to-day excavation will focus on one smaller area at a time and progressively shift around the area as time progresses. The operations will include screening, crushing, and conveying equipment in addition to large vehicles moving the mined materials.

Earthwork operations will begin at the south end and move to the north end of the site, maintaining the required setbacks from the Colorado River. The topsoil will be removed and stockpiled in berms around the perimeter of the excavation site. Next, the sands and gravel will be mined using track hoes, front-end loaders, and bulldozers. To process the sand and gravel, screens and crushers located near the center of the site will be utilized. Once the materials are processed, they will be piled onsite or loaded into trucks to be taken off site. No asphalt or concrete manufacturing will take place onsite. Given the high water table, material stockpiles will be established to allow for drying. After the sand and gravel have been removed, the area will be backfilled and compacted using the stockpiled overburden material, overburden from the next area to mined, and imported fill materials as needed. The project will be regraded to reflect the final grades depicted on the Reclamation Plan, including the establishment of the reclamation pond. A more detailed plan of operations will be provided with the State application.

Access for passenger vehicles used by the Applicant's staff will be from existing C 1/2

Road. Haul trucks leaving the site will use the same access to C ½ Road. The primary haul route will then go west on C ½ Road to 28 Road then north to Riverside Parkway or east on C ½ Road to 29 Road. There will be no left turns allowed onto 29 Road from C ½ Road.

Right-of-way width exists on C ½ Road for any future improvements needed to develop it as a Minor Collector as depicted on the Grand Junction Circulation Plan. A 14-foot multipurpose easement will be dedicated along C ½ Road as shown on the Site Plan. The proposed exhibit and legal description of the easement shall be provided to the City to be incorporated into a conveyance document prepared by the City for the applicant's signature.

#### Surrounding Land Use

The surrounding land uses include other vacant land as well as large lot single-family residential homes. All surrounding property is outside of City limits and zoned RSF-R (Residential Single Family Rural) in Mesa County. The site of the proposed gravel extraction operation was recently annexed into the City and zoned CSR which is an implementing zone district for the Residential Medium Land Use depicted in the Comprehensive Plan Future Land Use Map. Location of this operation within an existing rural area, with other nearby sand and gravel pits on the east side of 29 Road, the needed construction materials can be provided to public and private users at reasonable cost without disturbance of more densely populated residential neighborhoods, commercial corridors, or public spaces such as parks and schools.

#### Reclamation

Reclamation will occur as portions of the permit area are mined. Final reclamation of the permit area will occur after all mining activities have been completed. Final use of the permit area is proposed to be rangeland with a groundwater lake for the benefit of local wildlife or potentially recreational use due to its proximity to the Riverfront Trail. Once revegetation has been completed on the site, the drainage patterns will be improved since surface water runoff flows will be routed to the alluvial aquifer of the Colorado River directly via the lake in place following reclamation. No exposed soils or other disturbed ground will be present that will generate soil losses that are greater than pre-mine conditions. No other stormwater control structures such as detention basins will be needed during the life of or after the extraction operations until further development of the land. The total disturbance of the CUP area is 18.3 acres. The post-mining land use of rangeland and a lake will be compatible with the current existing land uses in the area but does not preclude the property from being rezoned and/or developed for residential use in the future.

The Reclamation Plan also shows the location of trails to be constructed on the site per the City's Active Transportation Corridor Map. One trail is to run east-west through the site as part of the Riverfront Trail system and the other is a north-south trail along the west side of the site that will connect the Riverfront Trail system to C-1/2 Road and will continue north along an unnamed natural channel under the jurisdiction of the Grand Valley Drainage District. The City will require easements for both trails and it is the

applicant's responsibility to construct both trails. It is anticipated that the north-south trail will not be constructed until the time of site reclamation, but an easement will be granted prior to commencement of mining operations. However, construction of the east-west trail is anticipated to occur prior to reclamation as the State of Colorado Division of Parks and Wildlife is presently designing that segment of the Riverfront Trail from the eastern edge of The Eddy property (just east of 27 ½ Road alignment) to 29 Road. Thus, a blanket easement to the City for trail construction across the entire 100-foot setback of the mined area from the Colorado River is required as a condition of approval, with the understanding a more specific easement will be granted to the City for the trail once an alignment is determined based on the trail design. If the City/State/Riverfront constructs the trail prior to reclamation, the applicant will still need to pay for the cost of construction of the portion that is on their property. The applicant may also opt to construct the trail themselves at any time if desired.

In addition to the Reclamation Plan, a Landscape Plan for the site has been submitted as part of the Site Plan Review process which indicates planting conditions during the gravel mining operations, including the provision of required street frontage landscaping and areas of natural vegetation to be undisturbed and retained.

Slopes in the extraction will be mined to their final 3:1 slope, therefore no backfilling will be required. Throughout the reclamation process, topsoil will be replaced to a depth of 0-24 inches (12 inches on average) on all disturbed areas except those areas that will become the groundwater lake and the access roads. Disturbed areas will be seeded with fertilizer and straw mulch applied.

#### Schedule

Mining will start as soon as all permits have been obtained and continue over the life of the pit which is anticipated to be up to 10 years, with an additional 2 years needed for reclamation.

#### Neighborhood Meeting

A Neighborhood Meeting was held on June 29, 2021 via the Zoom virtual platform. In addition to the applicant's representative and City staff, the meeting was attended by nine persons. Participants asked questions about future use of the property, dust and noise mitigation during mining operations, traffic and C ½ Road improvements.

#### ANALYSIS

#### Conditional Use Permit

Section 21.02.110(c) of the Zoning and Development Code outlines the criteria by which a Conditional Use Permit is reviewed. Analysis of the proposal relative to the criteria is included below.

(1) **District Standards.** The underlying zoning districts standards established in Chapter 21.03 GJMC, except density when the application is pursuant to GJMC 21.08.020(c);

The proposed development site and associated plans included with the CUP application indicate that all standards of the CSR zone district will be met. This proposal includes a concurrent Site Plan Review to be approved upon successful completion of the CUP application. The Site Plan will ensure compliance with all district standards. The most pertinent standards of the zone district are discussed below.

<u>Setbacks</u> – This section defines and requires measurements for the following parameters that apply to this application; lot area, lot width, street frontage, setbacks, building height, and story height. This section also defines and requires measurements for the following parameters, all of which are not applicable to this application; blank wall area, transparency, and density/intensity. There will not be any buildings on the site; thus, setbacks do not apply.

Development in a Mixed-Use Zone District (CSR) – Section 21.03.07(f) CSR: Community Services and Recreation, is relevant to this application, due to the property being zone CSR at the time of annexation. The purpose of CSR zoning is to provide public and private recreational facilities, schools, fire stations, libraries, fairgrounds, and other public/institutional uses and facilities. CSR zoning explicitly states that the district may be used for extractive operations, specifically gravel pits. The final primary postmine land use of the site as rangeland and a groundwater pond could provide recreational opportunities while also providing an open space corridor and habitat for some wildlife. Development of a gravel pit on this parcel will also act to limit development in an area susceptible to flooding, another goal of the CSR zone district designation. Mining operations on the zoned CSR will conform to the appropriate Code standards.

Given this analysis of zone district standards, Staff finds this criterion has been met.

(2) Use-Specific Standards. Section 21.04.030 (k) of the Zoning and Development Code outlines the criteria by which a mineral extraction operation such as this proposed gravel pit is reviewed.

Refer to the analysis included in the following section of the staff report. Based on the analysis, this criterion has been met.

(3) Availability of Complementary Uses. Other uses complementary to, and supportive of, the proposed project shall be available including, but not limited to: schools, parks, hospitals, business and commercial facilities, and transportation facilities.

The primary complementary use required for the gravel operations project is the transportation infrastructure, provided C ½ Road is improved as proposed. The applicant will pay for its share of the improvements along the frontage of their property prior to commencement of mining operations and the improvements will be completed by the City and Mesa County. Most of the truck traffic for the operations will be internal

to the area construction materials operations. Haul trucks will access C ½ Road when traveling to and from the mining site. No new roads will be required.

Staff finds this criterion has been met.

- (4) Compatibility with Adjoining Properties. Compatibility with and protection of neighboring properties through measures as outlined below.
  - (i) Protection of Privacy. The proposed plan shall provide reasonable visual and auditory privacy for all dwelling units located within and adjacent to the site. Fences, walls, barriers, and/or vegetation shall be arranged to protect and enhance the property and to enhance the privacy of on-site and neighboring occupants;

As indicated on the Site Plan to be approved with the CUP, setbacks from the permit boundaries, perimeter berms and screening fences will be used in order to protect the privacy of adjacent properties from the operations.

Staff finds this criterion has been met.

(ii) Protection of Use and Enjoyment. All elements of the proposed plan shall be designed and arranged to have a minimal negative impact on the use and enjoyment of adjoining property;

Gravel Extraction operations will be done in phases around the property to limit the amount of disturbed area at any given time. Activity is removed from the Colorado River to allow for the wildlife corridors. Except for areas to be cleared for construction of the Riverfront Trail, areas of existing vegetation within 100 feet of the Colorado River are preserved in the project as shown on the Landscape Plan. Environmental protection will be addressed further in the CDRMS 112 Application.

Staff finds this criterion has been met.

(iii) Compatible Design and Integration. All elements of a plan shall coexist in a harmonious manner with nearby existing and anticipated development. Elements to consider include: buildings, outdoor storage areas and equipment, utility structures, building and paving coverage, landscaping, lighting, glare, dust, signage, views, noise, and odors. The plan must ensure that noxious emissions and conditions not typical of land uses in the same zoning district will be effectively confined so as not to be injurious or detrimental to nearby properties.

Proposed screening fences and berms along the east and west property lines adjacent to existing residences will provide dust control, while operating hours, phased extraction, and appropriate setbacks all contribute to establishing site compatibility and integration. Since most of the mining will take place below the water table, material excavated from the mine will be inherently wet and thus poses

a low risk of generating excessive dust. Active dust suppression measures will also assist in preventing the generation of fugitive dust and the associated odors that may occur with dust migrating off-site, including the application of water for dust control on haul roads and excavation areas as needed. In addition, long term stockpiles will be vegetated to minimize water consumption for dust control as well as to prevent soil loss from said stockpiles.

The crushing/screening plant operation also uses water to control dust with water sprays at the entrance and on the screen deck. It is anticipated that the material will not require a large amount of water to control dust during processing due to its inherently wet nature. If additional dust suppression is needed at any time, additional watering will take place as determined by the Facility Manager and in accordance with GJMC.

The following Best Management Practices will be in place for the operation:

- All mining will occur below the existing topography, which will act to limit the migration of dust and air pollution from the site
- Disturbance footprint will be limited to the smallest for feasible operations
- Crushing and screening equipment will be equipped with water sprays in order to keep material wet
- Haul roads, processing and stockpile floors, and the mining area floor will be watered as needed
- e. Stockpiles will be maintained moist either from processing or from truck watering
- f. Stockpiles to be in place longer than 90 days will be seeded with the permanent seed mix

Placement of topsoil on reclaimed slopes will be seeded in the first favorable season following the placement of topsoil.

Any activity such as vehicular repair occurring before sunrise or after sundown will be on an as needed basis. Lighting for this purpose will be full cut-off fixtures as required by Code. Lights will not be in use between sundown and sunup during normal operations. This will prevent the generation of glare visible from off-site.

Solid and liquid waste will be managed through the Storm Water Management Plan (SWMP) and the Spill Prevention, Control, and Countermeasure Plan created in support of the CDRMS 112 Application. Fire hazards will be minimal at the site due to the nature of the material being handled, non-combustible sand and gravel. No hazardous material will be stored on the site. Compliance with the site development standards discussed herein will ensure compatibility with adjacent uses.

Processing equipment will be separated from the adjacent property by a distance of at least that of the nearest setback. Setbacks can be seen on the attached Site Plan/Excavation Plan. Design compatibility will be further addressed in the CDRMS

112 Application. As previously discussed, specific operational controls will minimize/mitigate any impacts on adjacent on neighboring properties such as noise, dust, lighting, and odor.

**Riverfront Trail.** If constructed prior to reclamation of the site, the adjacent public Riverfront Trail will be buffered from the gravel extraction operations at the site in several ways as listed below:

- All mining will occur below the existing topography, which will act to limit the impacts from the site on the trail.
- b. The existing vegetation between the trail and the mining pit will be undisturbed by operations, including the trees and bushes found along the CUP property's southern boundary.
- Disturbance footprint will be limited to the smallest for feasible operations.
- d. As shown on the Site Plan, the Riverfront Trail alignment will be within the 100foot setback from the edge of the Colorado River. This location will inherently provide a natural buffer with some existing vegetation retained between the trail and the mining operations.
- e. Mining will commence in the southern portion of the permit area and proceed northward. This means that as mining occurs, the disturbance will become progressively further from the trail, limiting the impacts to the trail with time.

Given this analysis, Staff finds this criterion has been met.

#### Use Specific Standards

Section 21.04.030 (k) of the Zoning and Development Code outlines the criteria by which a mineral extraction operation such as this proposed gravel pit is reviewed. The purpose of this subsection is to establish reasonable and uniform limitations, safeguards and controls to wisely utilize natural resources and to reclaim mined land.

Analysis of the proposal relative to the criteria is included below.

#### (1) Purpose.

- Gravel extraction and/or processing activities should occur on parcels of sufficient size so that extraction and reclamation can be undertaken while still protecting the health, safety and welfare of the citizens.
- (ii) Where gravel extraction and/or processing is adjacent to zoning or land uses other than I-1 or I-2, mining, handling and batch processing activities may be restricted, buffering may be required and/or disturbance/reclamation may be accelerated to be compatible with the adjacent zone or use.

The proposed gravel pit will be sited on 27.8 acres which is a large enough site to protect the health, safety, and welfare of the public and all activities can take place within the setbacks required by the regulations. Buffering measures include a 6-foot

screening fence around the property, landscaping along the C ½ Road frontage and a berm will provide a buffer to adjacent properties. Existing vegetation within setbacks will largely be left in place unless removal is required to implement elements of the Landscape and Site Plans.

#### (2) Procedure.

 (i) Commercial extraction of mineral deposits shall not begin or occur until an excavation and land reclamation plan have been approved in writing by the Colorado Mined Land Reclamation Board.

A Construction Materials Regular 112 Operation Reclamation Permit will be requested from the State of Colorado after a determination is made by the City to issue a Conditional Use Permit (CUP). The applicant would like assurance that the CUP can be issued before moving forward with the project and submitting the 112 Permit to the State.

(ii) A plan approved as part of a CUP and/or a reclamation/development schedule being followed under previous regulations fulfills this requirement.

There is no previous approved plan.

(iii) Asphalt, cement and/or other batch plant operations shall be subject to CUP requirements.

No asphalt, cement or batch plants will operate with this permit. All material is to be hauled off-site or to the nearby concrete/asphalt batch plant.

- (iv) A plan for a use under this subsection shall contain, in addition to those relevant requirements outlined for a CUP, the following standards (A) through (K), all of which Staff finds have been addressed.
  - (A) Detailed description of the method of extraction and reclamation to be employed, including any necessary accessory uses such as, but not limited to, crushers, batch plants and asphalt plants;

Of the total 27.8 acres, 18.3 acres will be mined for sand and gravel. While the site will be mined over 10 years, actual day-to-day excavation will focus on one smaller area at a time and progressively shift around the areas as time progresses. The operations will include screening, crushing, and conveying equipment for gravel processing in addition to the track hoes and front-end loaders. Refer to the previous section on the Operations and Mining Plan. A more detailed plan of operations which must be consistent with that described here will be provided with the State application.

(B) An extraction plan showing the areas to be mined, location of stockpile area, location of structures, general location of processing equipment, with accompanying time schedules, fencing if applicable, depth of deposit, tons in the deposit, and other pertinent information;

The proposed Site Plan depicts the extraction area. It is approximately 18 acres in total and averages 15 feet deep, with a higher concentration of gravel/cobbles near the southern portion of the site. The anticipated yield of sand and gravel is an estimated 450,000 tons over the projected 10 years. Topsoil and overburden materials will be moved to the east and west sides of the property, out of the floodway. Stockpiled materials and sand/gravel processing areas will generally be in the center of the site.

Reclamation of the site will be completed no more than two years after sand and gravel mining termination. The additional two years is required to deplete all stockpiled sand and gravel and complete reclamation efforts. Complete efforts include construction of the Riverfront Trail and the north-south trail if not yet constructed by that time.

(C) A detailed reclamation plan showing proposed reclamation with time schedules including, but not limited to, finish contours, grading, sloping, placement, and amount and type of revegetation, post-extraction land use plans and any other relevant information;

The reclamation and revegetation plan must follow requirements and guidelines of the applicable State permits and the City requirements. Reclamation will be completed a maximum of 12 years after the start of sand and gravel operations, and sooner if gravel operations conclude earlier than anticipated. In general, the facility will be returned to its original condition with an approximately 11.5-acre reclamation pond in the center of the property for wildlife habitat and drainage.

Once all sand and gravel resources have been mined and stockpile materials are depleted, the site will be graded to the final contours shown on the reclamation plan map. The sand and gravel mined areas will be backfilled and compacted with on-site overburden and imported fill if needed, excepting the reclamation pond area. All internal gravel haul roads will be eliminated. The site will have a slight gradient to the south, with slopes no greater than 1 percent. Based on local recommendations, the site will be revegetated with an appropriate mix of grasses that do not require irrigation.

 (D) Topography of the area with contour lines of sufficient detail to portray the direction and rate of slope of the land covered in the application;

Drawings identifying existing conditions and a reclamation plan are included with the CUP application. The slope of both the existing site and after reclamation will be 0.5 percent.

 (E) Type, character, and density of proposed vegetation both during excavation and as a component of rehabilitation;

The existing site is approximately 70 percent covered with vegetation that includes elm, knapweed, chicory, thistle, cheatgrass, bindweed, kochia, Russian olive, cottonwood, and tamarisk. Much of the existing vegetation is classified as noxious. As previously stated, the revegetation will be accomplished with a locally approved seed mix.

(F) The operator's estimated cost at each of the following segments of the reclamation process, including where applicable, backfilling, grading, reestablishing topsoil, planting, revegetation management, irrigation, protection of plants and soil prior to vegetation establishment and administrative cost;

The estimated costs are included in the applicant's General Project Report as summarized below, although they do not include the construction cost of trail(s):

Grading \$8,000
Planting \$7,000
Revegetation Management \$1,000
TOTAL ESTIMATED COST \$16,000

(G) A drainage plan and report prepared by a Colorado registered professional engineer with consideration of natural drainage, drainage during excavation and drainage after reclamation such that the proposed reclamation and excavation will have no adverse effect in excess of natural conditions. Where applicable, the Director may require a floodplain permit (see GJMC 21.07.010, Flood damage prevention);

A drainage report was included with the CUP application and reviewed by the City Development Engineer.

(H) Traffic analysis, which reviews road capacity and safety conditions/considerations for and within the neighborhood, as that term may be defined and applied by the Director. The Director may reduce or enlarge the neighborhood to be analyzed upon a finding of a hazard or hazardous condition. The traffic analysis shall generally conform to and address TEDS standards (GJMC Title 29) and shall include but not be limited to ingress/egress, parking and loading, on-site circulation, number of trucks per day and the capacity of roads, streets, bridges, intersections, etc.;

A traffic analysis was provided with the CUP application. Access to the site will remain a single point on C ½ Road at approximately the same location as existing access. Prior to approval of plans to begin the operations, the applicant will pay its share of the cost to make improvements to C ½ Road. The City and Mesa

County will share the remainder of the cost. The applicant is agreeable to this cost-sharing approach to improving C ½ Road.

 An erosion control plan for runoff and wind-blown sediments shall be provided for the mining operation and the reclamation;

A Stormwater Management Plan (SWMP) was included in the CUP/Site Plan Review application which details measures that will be undertaken to control erosion caused by runoff. The SWMP was reviewed by Mesa County Engineering and the applicant is required to obtain required permits prior to the City signing plans to begin operations.

 (J) Additional information that is required because of unique site features or characteristics may be required by the Public Works and Planning Departments;
 and

Trails per the City's Active Transportation Plan are shown on the Site Plan and Reclamation Plans. A 15-foot trail easement for the north-south trail will be dedicated to the City prior to plans being signed and commencement of mining operations. The north-south trail will be constructed by the applicant at time of reclamation. Construction of the Riverfront Trail may occur prior to reclamation. Therefore, the applicant is to provide a temporary 100-foot-wide blanket easement across the 100-foot river setback for mining operations at the time plans are to be signed to begin operations. A narrower easement will be provided at the time of trail construction, whether by the applicant, the City, or the Colorado Department of Wildlife and Parks. If constructed by others, the applicant is still required to pay its share of the construction cost.

(K) Upon approval, the excavation and reclamation plans shall be filed with the City and recorded with the Mesa County Clerk and Recorder. Any change in excavation or reclamation plan shall be prohibited unless amended through the Conditional Use Permit process.

The excavation and reclamation plans will be recorded as required by Code pending favorable action by the Planning Commission. If these plans change upon review and finalization with the State permit, the Applicant may be required to amend this CUP if approved.

#### (3) Standards.

The following standards (i) through (xxvi) are to be addressed by the Applicant, all of which Staff finds have been met.

(i) Mineral extraction, washing, crushing, cement and asphalt batch planting and other mined products related uses shall be subject to an approved excavation permit, well permit, air pollution permit, reclamation plan and any and all other permits, certifications or requirements of the State or federal agencies having jurisdiction as required;

The applicant understands that State and/or other applicable permit(s) will be a condition of approval for this CUP.

(ii) Excavation or deposit of overburden is not permitted within 30 feet of an abutting parcel, an easement, an irrigation ditch or canal or right-of-way unless by written agreement of the owner of such property, easement, irrigation ditch, canal or right-of-way;

A 30-foot setback will be maintained from property/permit boundary as indicated on the Site Plan provided with the CUP application.

(iii) Excavation within 125 feet of an existing residence is not permitted unless by written agreement of the owners and occupants of the residence. No rock crushing, asphalt/cement plant or other similar equipment or operations shall take place any closer than 250 feet of a residence. The Planning Commission may require a greater distance if the operation is abutting a residential zone district. Excavation, loading, handling, processing, and batch operations adjacent to residentially zoned parcels shall not exceed 65 decibels at the property line of any adjacent parcel;

There are three residences adjacent to the property and two residences and an Accessory Dwelling Unit (ADU) north of C ½ Road. A minimum 250-foot buffer will be provided between each residence and all rock crushing activities, and a minimum 125-foot buffer for all mining activities as shown on the Site Plan.

(iv) At a minimum, 100 feet greenbelt setback shall be provided from jurisdictional wetlands or navigable watercourses as the same are defined by the U.S. Army Corps of Engineers (USACE). The Director upon recommendation and consent of the USACE may vary this standard;

A 100-foot greenbelt setback is provided from the Colorado River along the southern edge of the property. This is the same as the 100-foot water setback detailed on the Site Plan. No wetland disturbance is planned at this time based on the Wetland Delineation Report included with the CUP application. Refinement would be necessary if a U.S. Army Corps of Engineers permit is required, but that appears unlikely.

(v) Existing trees and vegetation shall, to the extent practicable, be preserved and maintained in the required setback to protect against and reduce noise, dust and erosion. The Director may require vegetative screening and/or buffering in accordance with this code in order to minimize the impact to dissimilar adjacent uses or zoning districts; Existing trees and vegetation, to the extent practicable, will be preserved and maintained in required setbacks to protect against and reduce noise, dust, and erosion. Setbacks are shown on the Site Plan.

(vi) The owner or operator shall submit a traffic analysis;

As previously discussed, a traffic analysis was completed as part of the CUP application. Improvements to C ½ Road are required and the applicant shall share in the cost of the improvements as previously discussed.

(vii) The Director of Public Works may place restrictions on right-of-way use after review of the traffic analysis. Restrictions may include but are not limited to the owner or operator being be responsible for the extraordinary upgrade and maintenance of the designated haul route;

A haul road plan was included in the application. Access to and from the project site will be from C ½ Road only, with westbound trucks going left to 28 Road and north to Riverside Parkway and eastbound trucks going right to 29 Road. No left-hand turns are allowed on 29 Road.

(viii) Streets, bridges and highways designated as haul routes shall be maintained by the owner/operator in a reasonably clean condition. This may include, depending on local conditions, watering, oiling, or sweeping as determined by the Director;

Provided the operations plan and standard Best Management Practices are followed, this standard will be addressed.

(ix) Hours of operation shall be restricted to 6:00 a.m. to 6:00 p.m. The Director may authorize different hours; however, the Director may also restrict as part of the CUP the hours of operation near residential or urbanized areas;

The planned hours of operation will be 7:00 am to 5:30 pm, typically Monday through Friday. However, there are infrequent needs to provide some flexibility to work later into the night or perhaps on a weekend to accommodate work schedules when a project may need to be worked on at night or on a weekend (e.g. typically a City or other public project) to minimize disruption to traffic.

(x) In no event shall a slope of steeper than 2:1 be left for dry pits. A pit with a slope of 3:1 or steeper shall not exceed a depth of 10 feet. The floor of excavation pits, whether wet or dry, shall be left in a suitable condition;

The excavation of the gravel pit will follow these guidelines.

(xi) The owner/operator shall not excavate, store overburden or mined material or dike the property in such a manner as to increase any drainage or flooding on property not owned by the operator or damage public facilities and/or property; There is no offsite drainage generated by the site. All runoff occurring within the property will be contained in earth berms at the edge of the site.

(xii) Prior to starting operation, where the operation is adjacent to subdivided and/or developed commercial or residential property, the Director may require buffering and/or screening. Required fencing, screening and/or buffering shall not be removed until reclamation has been completed;

The site will have a minimum buffer of 30 feet around the entirety of the property and will also follow the required excavation and crushing buffers. A 6-foot screen fence will also be installed, not be removed until reclamation is complete. This information will be provided in greater detail in the CDRMS 112 application.

(xiii) After mining has been completed, the site shall not to be used to stockpile sand and/or gravel except in I-1 and I-2 with a CUP. In any event the owner/operator is to reclaim the site as rapidly as possible;

Once mining is complete, all processed materials will be removed and the site will be reclaimed per the plans approved with the CUP as well as the CDRMS 112 permit.

(xiv) Operations shall comply with the noise, vibration and other applicable standards and requirements of this code. If there are conflicting or competing provisions in this code, the most stringent shall apply;

Operations will work within the applicable standards of the Zoning and Development Code. This information will be provided in detailed documents to be included with the State permit application.

(xv) All air emissions shall comply with standards established by the Mesa County Health Department, State Health Department and Colorado Air Quality Control Commission;

This project will comply with all applicable standards. This information will be provided in detailed documents to be included with the State permit application and an Air Permit will be secured from the Colorado Department of Public Health and Environment as required.

(xvi) All water use and/or discharge shall conform to standards established by law and administered by the Environmental Protection Agency (EPA), the Colorado Department of Public Health and Environment (CDHPE), the City of Grand Junction and the Mesa County Health Department;

Water use and/or discharge will conform with applicable standards. This information will be provided in detailed documents to be included with the State permit application and permits from Mesa County and the Colorado Department of Public

Health and Environment (CDPHE) will be obtained prior to plans being signed by the City to begin mining operations.

(xvii) All slopes shall be stabilized. Land remaining at the natural water level must be revegetated in a manner compatible in type as/with the immediately prevailing area. Revegetation plans are required and shall minimally meet the standards of the Colorado Mine Land Reclamation Board;

A Reclamation Plan is included with the CUP application, and revegetation will take place as in accordance with State guidance. This information will be provided in detailed documents to be included with the State permit application.

(xviii) All disturbed areas shall be revegetated in accordance with the vegetation plan;

All disturbed areas will be revegetation with a suitable seed mix in accordance with the Reclamation Plan and State requirements. The State permit will include a revegetation plan. In addition, a Landscape Plan was submitted for the Site Plan Review that addresses this standard.

(xix) Following initial revegetation efforts, the revegetated area shall be maintained for a period of three years or until all vegetation is firmly established in the reclamation area;

The reclaimed area will be maintained for a period of three years to ensure that vegetation is firmly established. The CDRMS 112 Application will address this standard and includes the revegetation success criteria.

(xx) A timetable for reclamation shall be placed on each project. Timelines, including but not limited to milestones, if any, shall be dependent upon the type and size of reclamation effort;

Reclamation shall be completed approximately two years after mining operations are complete.

(xxi) Proof of a reclamation bond shall be submitted, along with the required reclamation plan;

A Reclamation Plan has been included with the CUP application materials and proof of a reclamation bond will be included as part of the conditions of approval. This information will be provided in detailed documents to be included with the State permit application.

(xxii) A development schedule shall be submitted describing the life span of the project in years (ranges are acceptable) and, if applicable, the years per phase;

The mining will take place in one phase lasting approximately ten years. Reclamation is expected to be completed two years after mining is completed.

- (xxiii) If the development schedule is not met the Conditional Use Permit:
  - (A) May be revoked;
  - (B) The Director may grant a two-year extension per request;
  - (C) The Planning Commission shall have the power, after hearing, to revoke any conditional use permit for any violation;
  - (D) Upon at least 10 days' written notice to the owner, the Planning Commission may hold a hearing to determine the nature and extent of the alleged violation, and shall have the power, upon showing of good cause, to revoke the permit and the plan and to require reclamation of the land;
  - (E) If not extended or revoked, a new application and extraction plan will need to be submitted and reviewed in the manner described in this subsection;
  - (F) An extension request shall provide information in writing detailing the reasons for the request. The Director shall consider the stated reasons, as well as the extent conditions have changed in the area, if any, before granting an extension;
  - (G) If a written request to extend the development schedule is submitted to the Director it shall include but not necessarily be limited to the factors and reasons for the requested extension. New conditions may be imposed as a part of the granting of an extension. New conditions, if any, may be appealed to the Planning Commission to be considered at a public hearing;
  - (H) The Director may forward any extension request to the Planning Commission;
  - Extension requests will be evaluated by the Director and/or Planning Commission on the same basis and with the same information as per the Conditional Use Permit process;

The Applicant understands that the development schedule shall be met and the parameters by which revocation and extension may occur.

(xxiv) If the use has not operated or if no material has been extracted in accordance with the development schedule or any extension thereof, the conditional use permit shall expire; The Applicant understands that the Conditional Use Permit shall expire if the use has not operated or if no material has been extracted within the development schedule.

(xxv) Signage for public safety is required; and

A freestanding sign will be erected near the proposed entrance at the north end of the project site to post State of Colorado required identification information. The sign will be less than 1.5 square feet.

(xxvi) Fencing around the perimeter of the property is required.

As indicated on the Site Plan, a 6-foot perimeter screening fence will be provided as part of the construction process. The fence will be removed when mining operations are complete, and the permit area is reclaimed.

#### Findings of Fact and Staff Recommendation

After reviewing the request for a Conditional Use Permit (CUP) to establish a gravel extraction operation on the property located on a 27.8-acre parcel at 2855 C ½ Road (parcel 2943-194-00-248), file number CUP-2021-616, the following findings of fact have been made:

 In accordance with Section 21.02.110 of the Grand Junction Zoning and Development Code, the criteria have been met.

Staff recommends approval of the request for a CUP to establish a gravel extraction operation on a 27.8-acre parcel at 2855 C ½ Road (parcel 2943-194-00-248), subject to the conditions listed below

- 1. The applicant shall obtain a Colorado Division of Reclamation, Mining, and Safety (CDRMS) 112 Construction Material Reclamation Permit Operation to include other related information and permits including proof of bond for reclamation and air quality permits as needed prior to commencement of mining operations. The Director shall determine if the permit and reclamation plan approved by the State meets all necessary standards as indicated in this report and in the GJMC. If the Director determines otherwise, the matter shall be reconsidered by the Planning Commission for approval and/or denial of the CUP for failure to meet the conditions.
- The applicant shall obtain all applicable Mesa County and CDPHE stormwater permits prior to plans being signed and commencement of mining operations on the site.
- 3. The applicant shall dedicate a temporary 100-foot-wide blanket easement across the southern portion of the site for construction of the east-west Riverfront Trail to be refined after design of the trail and prior to its construction, whether by the applicant, the City or the State of Colorado Department of Parks and Wildlife; a multipurpose easement along C ½ Road; and an easement for the north-south trail, prior to plans

being signed and commencement of mining operations on the site.

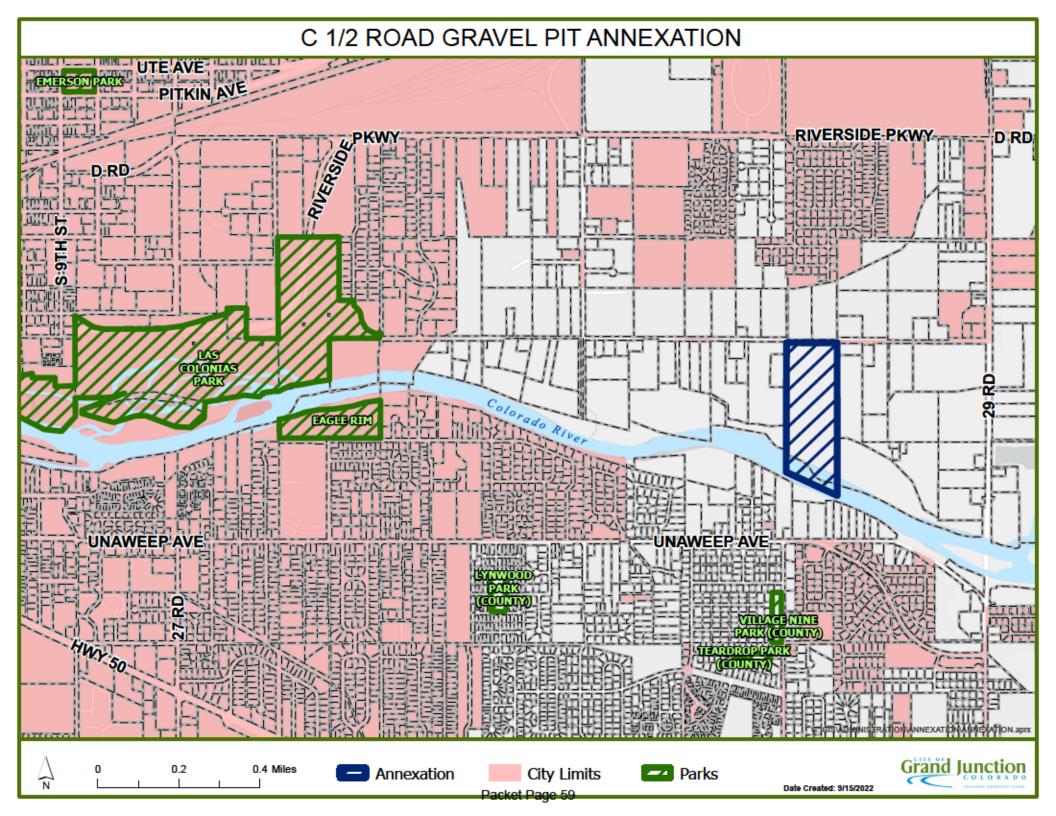
- 4. The applicant shall pay construction costs of the east-west Riverfront Trail through its property, even if constructed by others by either direct payment or by executing a Development Improvements Agreement (DIA) with security prior to plans being signed and commencement of mining operations on the site. The applicant may also opt to construct the trail subject to final design by the Colorado Department of Parks and Wildlife.
- The applicant shall pay its share of construction costs for the improvement of C ½
  Road in the amount of \$154,760 prior to plans being signed and commencement of
  mining operations on the site.
- 6. Per the Haul Route Map provided with the CUP application, trucks shall not make left turns from C ½ Road to 29 Road.

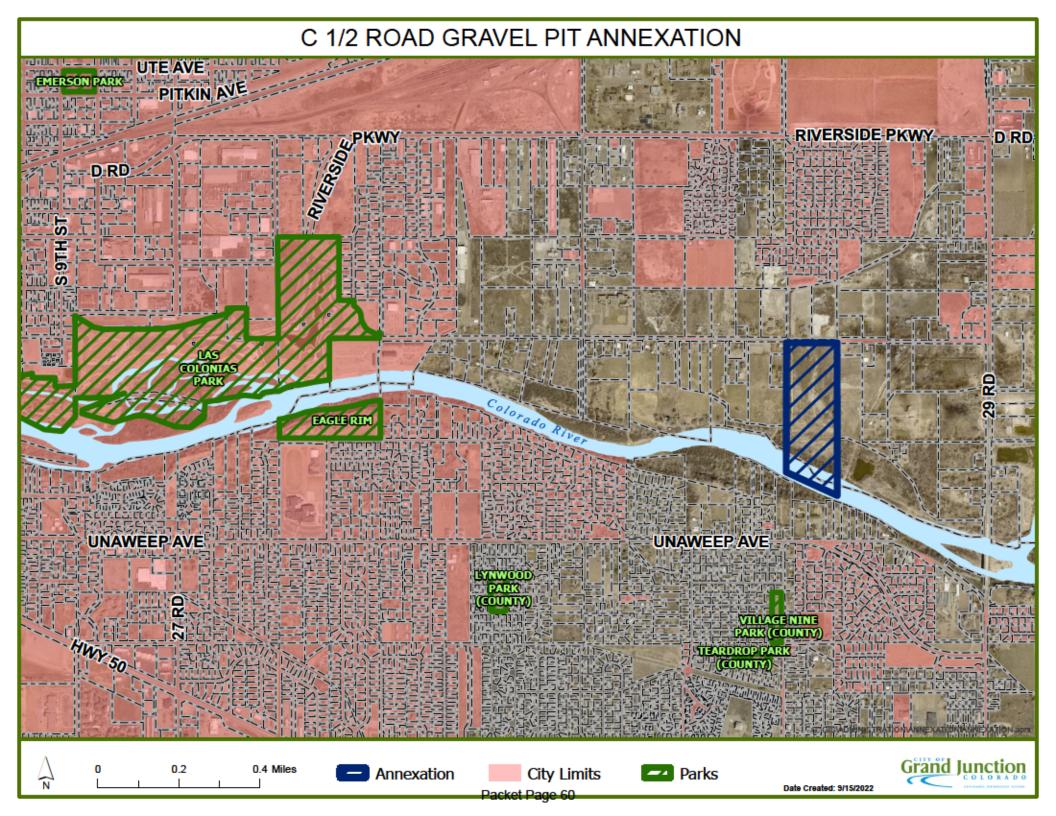
#### SUGGESTED MOTION:

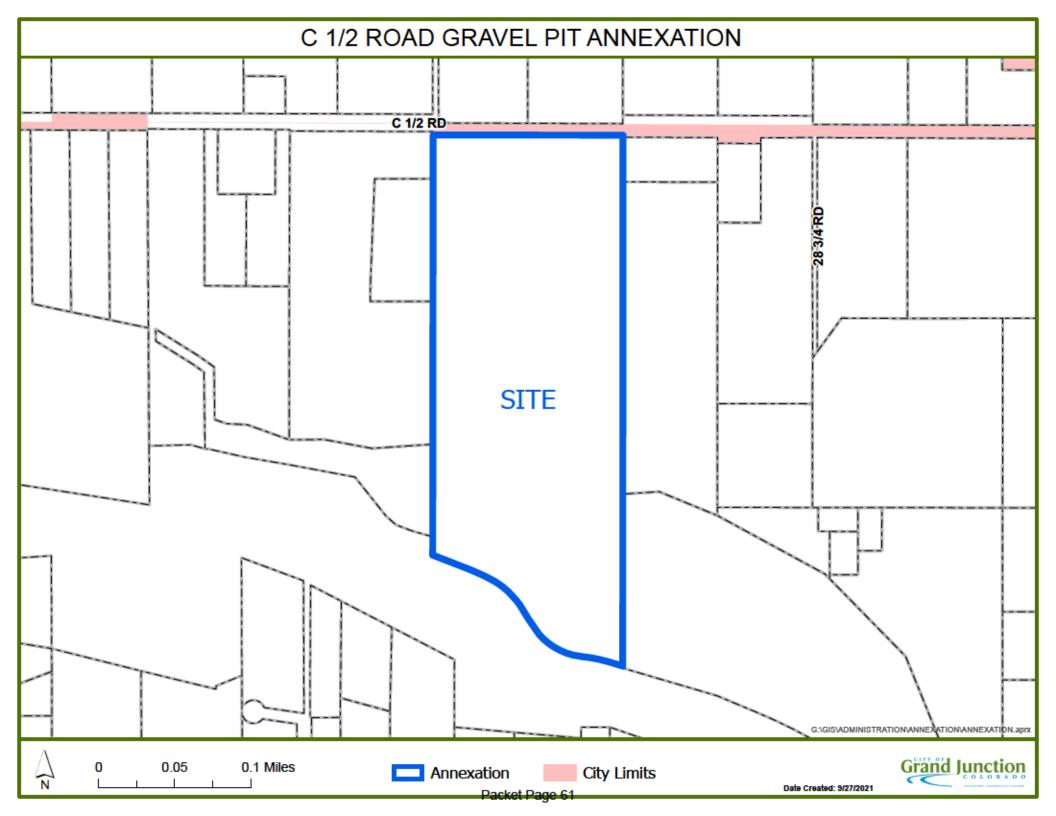
Chairman, on the C ½ Road Gravel Pit to establish a Conditional Use Permit for a mining excavation operation, file number CUP-2021-616, I move that the Planning Commission approve the CUP with the findings of fact and conditions listed in the staff report.

#### **Attachments**

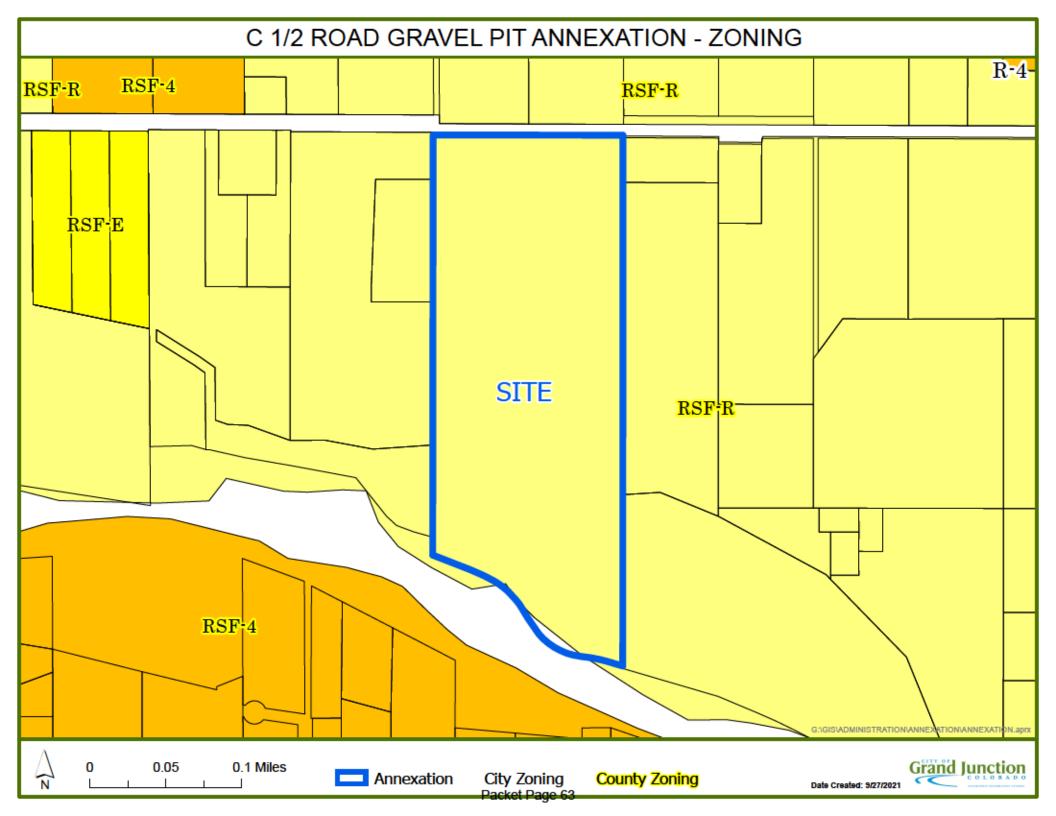
- Location Maps and Photos
- Application Materials with Neighborhood Meeting Notes
- Site, Grading and Drainage, Reclamation and Landscape Plans
- Haul Route Map
- Pear Park Plan Mineral Resources Map
- 6 Public Comments Received.

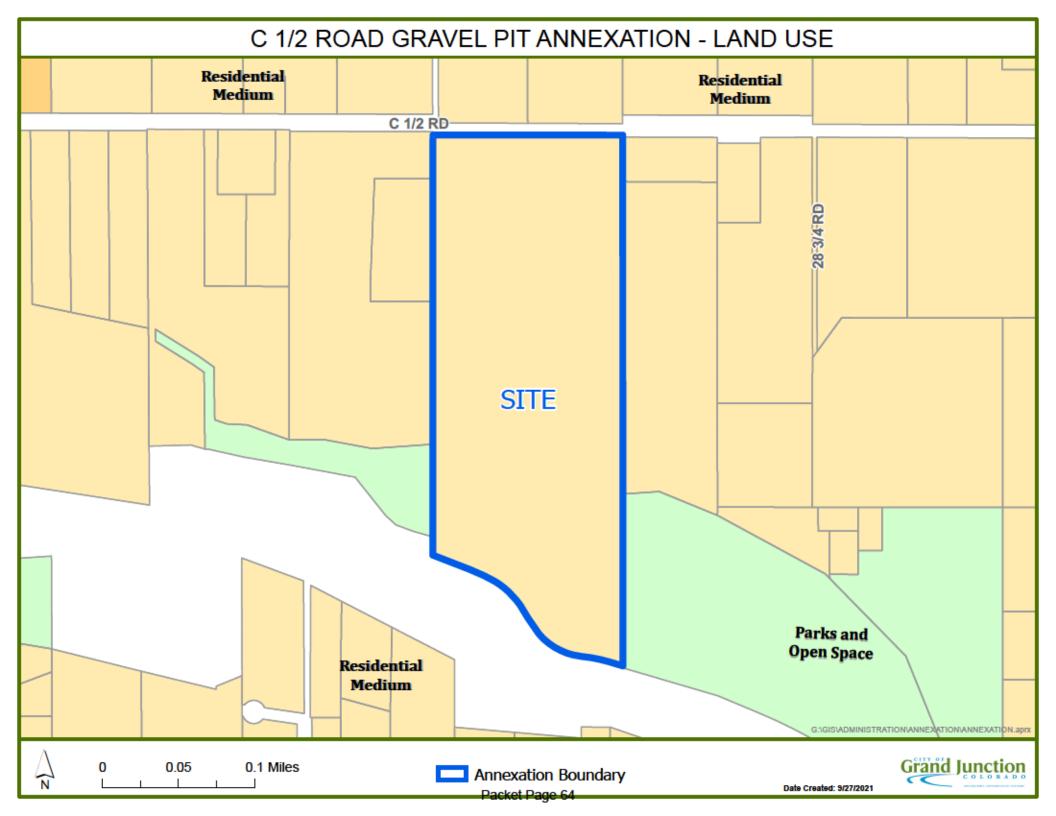


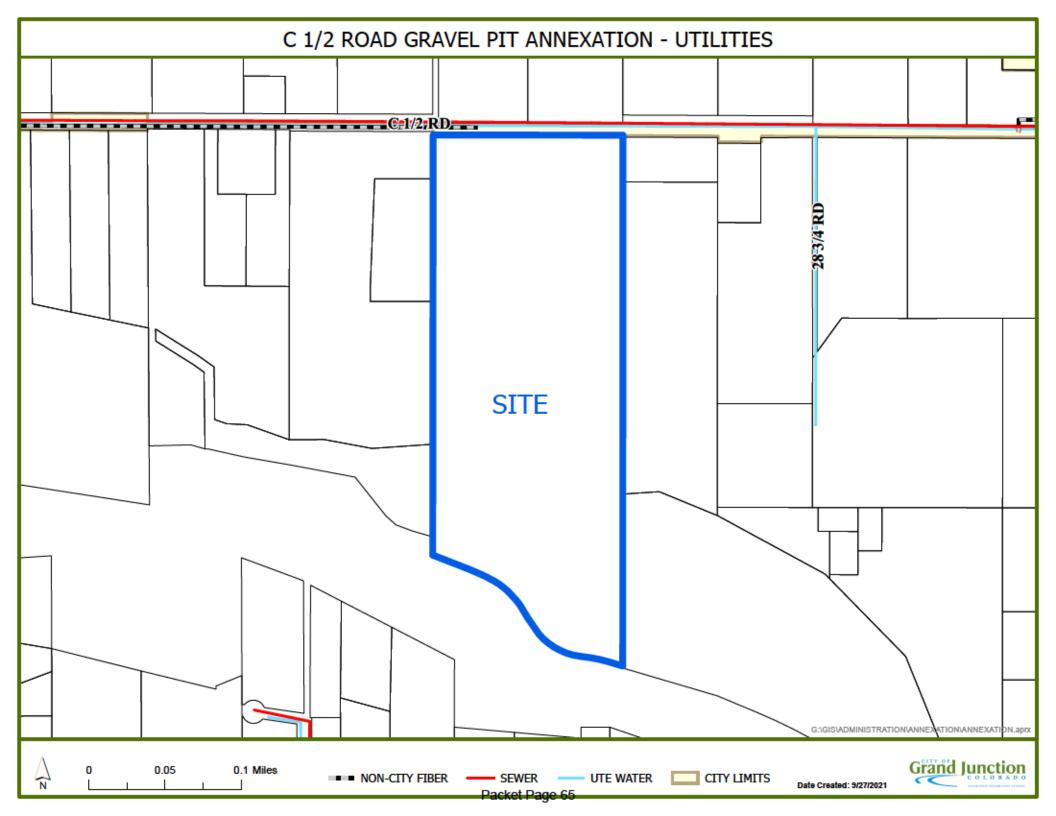




# C 1/2 ROAD GRAVEL PIT ANNEXATION C 1/2 RD SITE Grand Junction 0.05 0.1 Miles Annexation City Limits Date Created: 9/27/2021

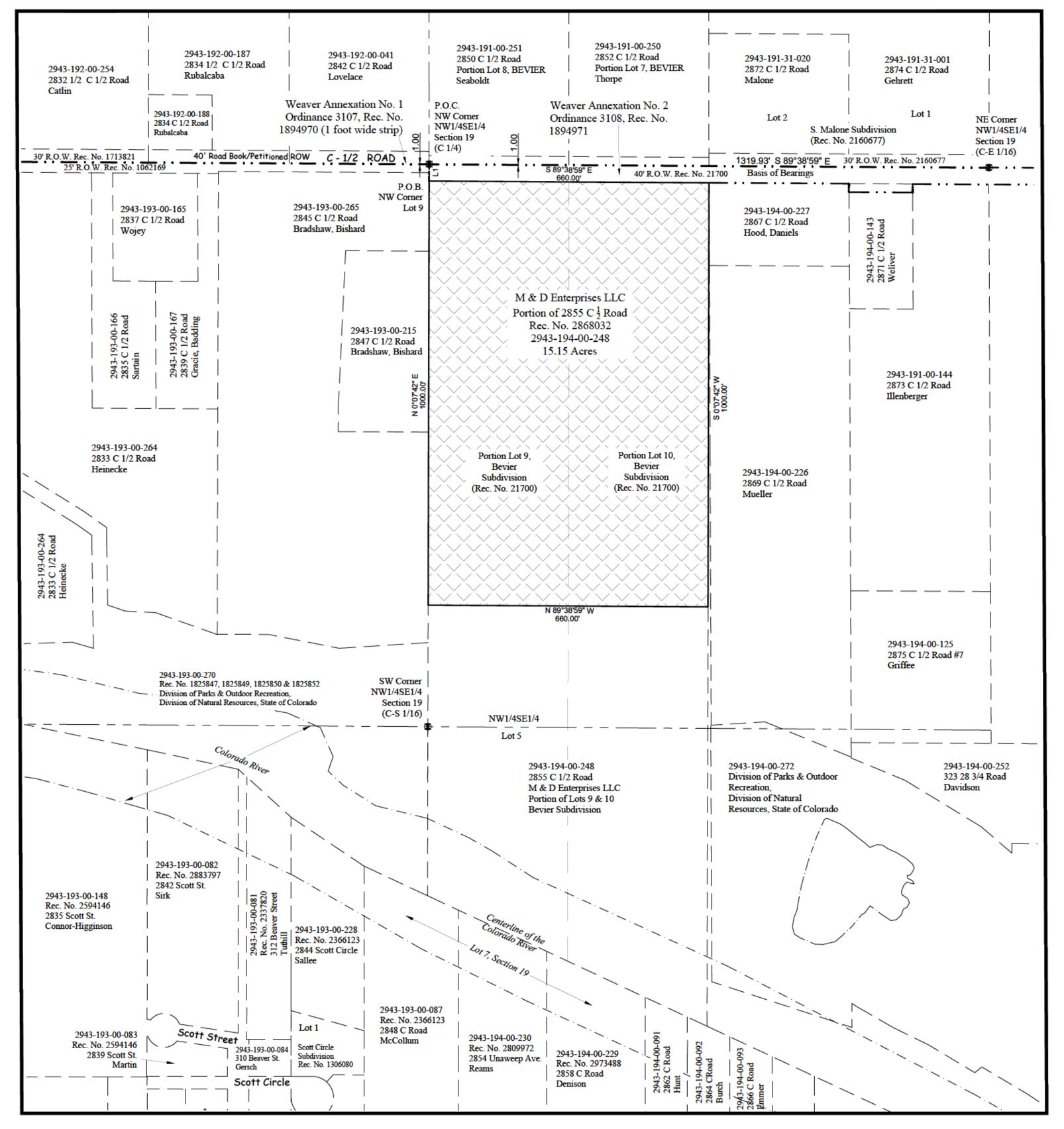




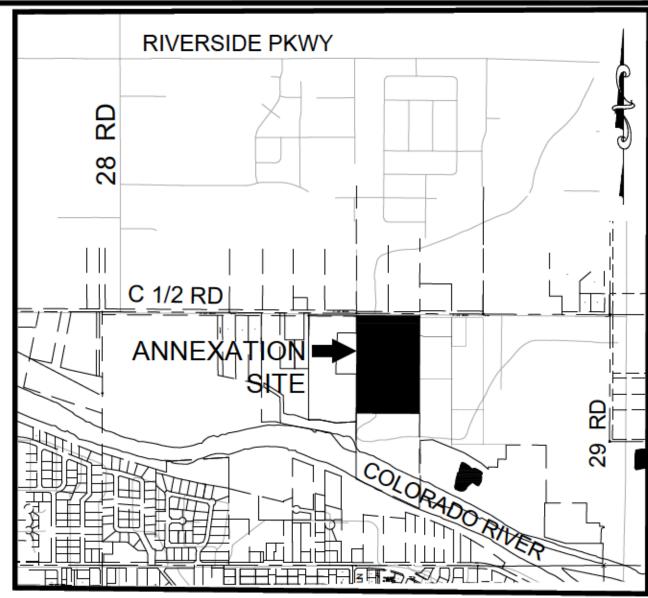


# C 1/2 Road Gravel Pit Annexation No. 1

Located in the NW1/4SE 1/4 of SECTION 19, TOWNSHIP 1 SOUTH, RANGE 1 EAST, UTE MERIDIAN, COUNTY OF MESA, STATE OF COLORADO



## THIS IS NOT A BOUNDARY SURVEY



# SITE LOCATION MAP

SCALE: 1" = 800

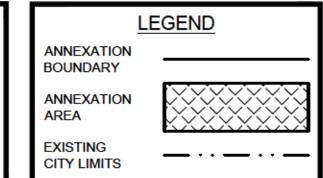
## LEGAL DESCRIPTION

A parcel of land being a portion of Lots 9 and 10, BEVIER SUBDIVISION, same as filed under Reception Number 21700, located in the Northwest Quarter of the Southeast Quarter (NW1/4SE1/4) of Section 19, Township 1 South, Range 1 East of the Ute Meridian, County of Mesa, State of Colorado and being more particularly described as follows:

Commencing at the NW Corner of said NW1/4SE1/4 and assuming the north line of said NW1/4SE1/4 bears S89°38'59"E with all other bearings herein being relative thereto; thence S0°07'42"W along the west line of said NW1/4SE1/4 a distance of 40.00 feet to the Northwest Corner of said Lot 9, BEVIER SUBDIVISION also being the southwest corner of WEAVER ANNEXATION No. 2, Ordinance Number 3108 same as filed under Reception Number 1894971 and being the Point of Beginning; thence S89°38'59"E along the south line of said WEAVER ANNEXATION No. 2 a distance of 660.00 feet to the Northeast Corner of said Lot 10, BEVIER SUBDIVISION, thence S0°07'42"W along the east line of said Lot 10 a distance of 1000.00 feet; thence N89°38'59"W a distance of 660.00 feet to a point on the west line of said Lot 9 BEVIER SUBDIVISION; thence N0°07'42"E along said west line of Lot 9 a distance of 1000.00 feet to the Point of Beginning.

Containing 15.15 Acres or 659995 Square Feet more or less as described.

### LINE TABLE S0°07'42"W 40.00'



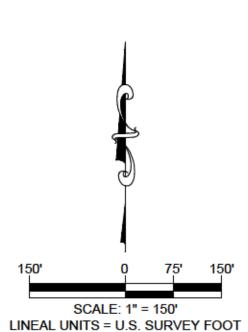
SURVEY ABBREVIATIONS		SQ. FT.	SQUARE FEET
		Δ=	CENTRAL ANGLE
P.O.C.	POINT OF COMMENCEMENT	RAD.	RADIUS
P.O.B.	POINT OF BEGINNING	ARC	ARC LENGTH
R.O.W.	RIGHT OF WAY	CHD.	CHORD LENGTH
SEC.	SECTION	CHB.	CHORD BEARING
TWP.	TOWNSHIP	BLK.	BLOCK
RGE.	RANGE	P.B.	PLAT BOOK
U.M.	UTE MERIDIAN	BK.	BOOK
NO.	NUMBER	PG.	PAGE
REC.	RECEPTION	HOR. DIS	T. HORIZONTAL DISTANCE

# AREAS OF ANNEXATION ANNEXATION PERIMETER 3320.00 F

CONTIGUOUS PERIMETER
AREA IN SQUARE FEET
AREA IN ACRES
AREA WITHIN R.O.W.
660.00 FT.
659995 FT<sup>2</sup>
15.15
0 SQ.FT.
0 ACRES

ORDINANCE NO.

EFFECTIVE DATE



THE DESCRIPTION(S) CONTAINED HEREIN HAVE BEEN DERIVED FROM SUBDIVISION PLAT, DEED DESCRIPTIONS & DEPOSIT SURVEYS AS THEY APPEAR IN THE OFFICE OF THE MESA COUNTY CLERK & RECORDER. THIS PLAT OF ANNEXATION DOES NOT CONSTITUTE A LEGAL BOUNDARY SURVEY, AND IS NOT INTENDED TO BE USED AS A MEANS OF ESTABLISHING OR VERIFYING PROPERTY BOUNDARY LINES.

RENEE BETH PARENT
STATE OF COLORADO - PL.S. NO. 38266
FOR THE CITY OF GRAND JUNCTION
333 WEST AVENUE - BLDG. C
GRAND JUNCTION, CO. 81501

NOTICE:
ACCORDING TO COLORADO LAW ANY LEGAL ACTION BASED UPON ANY DEFECT FOUND IN THIS SURVEY MUST COMMENCE WITHIN THREE (3) YEARS AFTER THE DISCOVERY OF SUCH DEFECT. IN NO EVENT MAY ANY ACTION BASED UPON ANY DEFECT FOUND IN THIS SURVEY BE COMMENCED MORE THAN TEN (10) YEARS FROM THE DATE OF THE CERTIFICATION SHOWN HEREON.

 DRAWN BY:
 R.B.P.
 DATE: 07/27/2022

 DESIGNED BY:
 R.B.P.
 DATE: 07/27/2022

 CHECKED BY:
 C.V.W.
 DATE: 07/28/2022

 APPROVED BY:
 R.B.P.
 DATE: 07/28/2022

150' 0 75' 150' SCALE: 1" = 150' LINEAL UNITS = U.S. SURVEY FOOT



PUBLIC WORKS
ENGINEERING DIVISION

## C 1/2 Road Gravel Pit Annexation No.

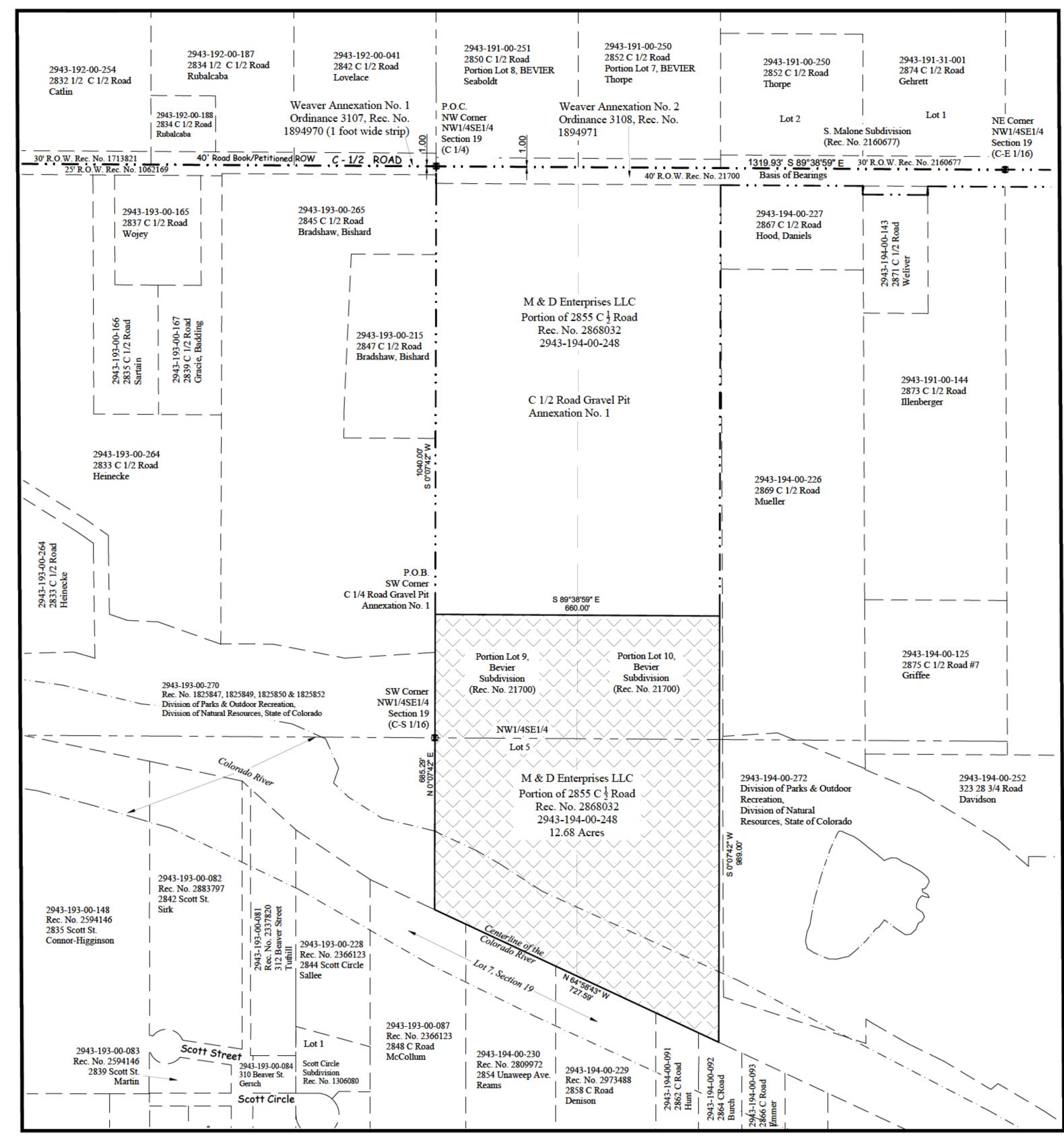
Located in the NW1/4SE1/4
SECTION 19, TOWNSHIP 1 SOUTH, RANGE 1 EAST,
UTE MERIDIAN, COUNTY OF MESA, STATE OF COLORADO

**1** 

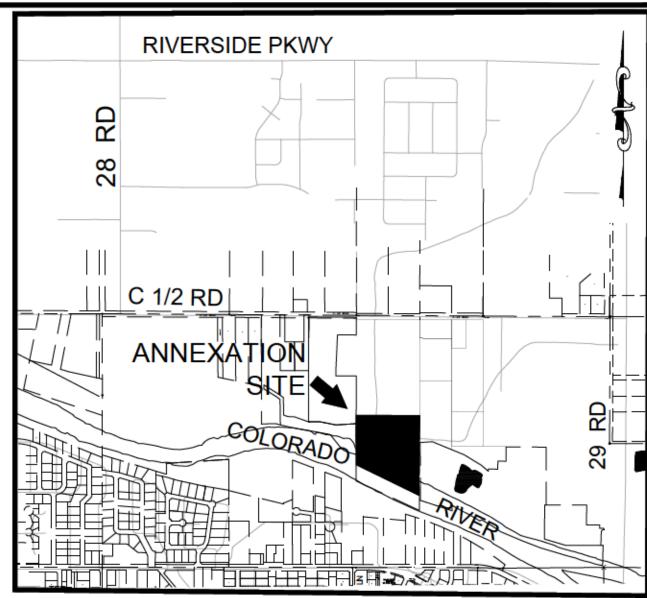
Packet Page 66

# C 1/2 Road Gravel Pit Annexation No. 2

Located in the NW1/4SE1/4 and Lot 5 of SECTION 19, TOWNSHIP 1 SOUTH, RANGE 1 EAST, UTE MERIDIAN, COUNTY OF MESA, STATE OF COLORADO



## THIS IS NOT A BOUNDARY SURVEY



## SITE LOCATION MAP

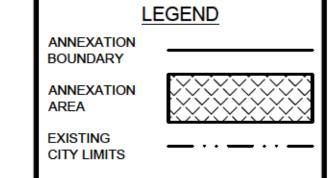
SCALE: 1" = 80

## LEGAL DESCRIPTION

A parcel of land being a portion of Lots 9 and 10, BEVIER SUBDIVISION, same as filed under Reception Number 21700, located in the Northwest Quarter of the Southeast Quarter (NW1/4SE1/4) and Lot 5 of Section 19, Township 1 South, Range 1 East of the Ute Meridian, County of Mesa, State of Colorado and being more particularly described as follows:

Commencing at the NW Corner of said NW1/4SE1/4 and assuming the north line of said NW1/4SE1/4 bears S89°38'59"E with all other bearings herein being relative thereto; thence S0°07'42"W along the west line of said NW1/4SE1/4 a distance of 1040.00 feet to the Northwest Corner of C 1/4 Road Gravel Pit ANNEXATION No. 1 being the Point of Beginning; thence S89°38'59"E along the south line of said C 1/4 Road Gravel Pit ANNEXATION No. 1 a distance of 660.00 feet to a point on the east line of said Lot 10, BEVIER SUBDIVISION, thence S0°07'42"W along the east line of said Lot 10 a distance of 989.00 feet to the southeast corner of said Lot 10 also being a point on the southerly line of said Lot 5, Section 19 and a point on the centerline of the Colorado River; thence N64°58'43"W along said centerline of the Colorado River a distance of 727.59 feet to the southwest corner of said Lot 9, BEVIER SUBDIVISION; thence N0°07'42"E along said west line of Lot 9 a distance of 685.29 feet to the Point of Beginning.

Containing 12.68 Acres or 552513 Square Feet more or less as described.

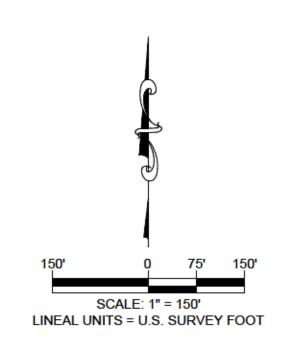


SURVEY ABBREVIATIONS		SQ. FT. Δ=	SQUARE FEET CENTRAL ANGLE
P.O.C.	POINT OF COMMENCEMENT	RAD.	RADIUS
P.O.B.	POINT OF BEGINNING	ARC	ARC LENGTH
R.O.W.	RIGHT OF WAY	CHD.	CHORD LENGTH
SEC.	SECTION	CHB.	CHORD BEARING
TWP.	TOWNSHIP	BLK.	BLOCK
RGE.	RANGE	P.B.	PLAT BOOK
U.M.	UTE MERIDIAN	BK.	BOOK
NO.	NUMBER	PG.	PAGE
REC.	RECEPTION	HOR. DIS	T. HORIZONTAL DISTANCE

# AREAS OF ANNEXATION ANNEXATION PERIMETER 3061.89 F CONTIGUOUS PERIMETER 660.00 FT AREA IN SQUARE FEET 552513 FT AREA IN ACRES 12.68 AREA WITHIN R.O.W. 0 SQ.FT. 0 ACRES



EFFECTIVE DATE



THE DESCRIPTION(S) CONTAINED HEREIN HAVE BEEN DERIVED FROM SUBDIVISION PLAT, DEED DESCRIPTIONS & DEPOSIT SURVEYS AS THEY APPEAR IN THE OFFICE OF THE MESA COUNTY CLERK & RECORDER. THIS PLAT OF ANNEXATION DOES NOT CONSTITUTE A LEGAL BOUNDARY SURVEY, AND IS NOT INTENDED TO BE USED AS A MEANS OF ESTABLISHING OR VERIFYING PROPERTY BOUNDARY LINES.

RENEE BETH PARENT
STATE OF COLORADO - PL.S. NO. 38266
FOR THE CITY OF GRAND JUNCTION
333 WEST AVENUE - BLDG. C
GRAND JUNCTION, CO. 81501

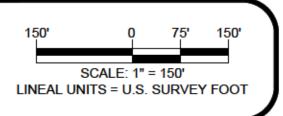
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 DRAWN BY:
 R.B.P.
 DATE: 07/27/2022

 DESIGNED BY:
 R.B.P.
 DATE: 07/27/2022

 CHECKED BY:
 C.V.W.
 DATE: 07/28/2022

 APPROVED BY:
 R.B.P.
 DATE: 07/28/2022





PUBLIC WORKS ENGINEERING DIVISION

## C 1/2 Road Gravel Pit Annexation No. 2

Located in the NW1/4SE1/4 and Lot 5
SECTION 19, TOWNSHIP 1 SOUTH, RANGE 1 EAST,
UTE MERIDIAN, COUNTY OF MESA, STATE OF COLORADO



Google Street View looking south from C 1/2 Road



## Austin Civil Group, Inc.

Land Planning • Civil Engineering • Development Services

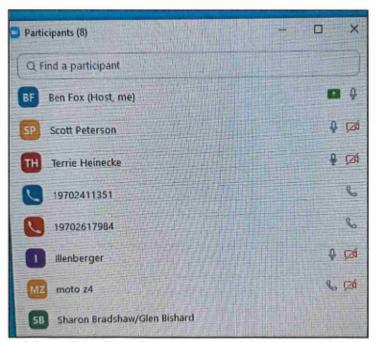
June 30, 2021

Mr. Scott Peterson Senior Planner City of Grand Junction Planning Division 250 North 5<sup>th</sup> Street Grand Junction, CO 81501

Re: C-1/2 Road Annexation / Rezone / Gravel Pit Conditional Use Neighborhood Meeting Summary

Dear Mr. Peterson,

The purpose of this letter is to notify the City of Grand Junction Planning Department that a virtual Neighborhood Meeting was conducted on June 29, 2021, via Zoom, at 5:30 P.M., for the Annexation / Rezone / Gravel Pit Conditional Use Permit for the 25-acre property located at 2855 C-1/2 Road in Grand Junction, Colorado. There were 8 participants in the Zoom display, however at least 9 individuals actively participated (two individuals used the same device), and there may have been more members sharing devices while listening in. A screen shot of the participant list is depicted below:



Participant List from Zoom Virtual Neighborhood Meeting

Mr. Scott Peterson June 30, 2021 Page 2 of 5

Listed below is a summary of the meeting items:

- Ben Fox presented an overview of the annexation and rezone process, including the need to annex and zone into the City of Grand Junction because of the Persigo Agreement. The proposed zoning for the property is Community Services and Recreation (CSR).
- 2. Ben Fox indicated that, if approved, the property would be developed into a sand and gravel mining operation by M & D Enterprises, LLC (the current landowner). Their goal would be to mine sand and gravel and then potentially construct a small subdivision where the sand and gravel was mined from the property. He also emphasized that the Neighborhood Meeting was purely for the proposed gravel pit, and that upon conclusion of gravel/sand mining operations any further development (i.e., future subdivision) would be at the owner's discretion and would require a separate development application. There will not be an asphalt or concrete batch plant on the property.
- Ben Fox stated the City of Grand Junction has requested a trail easement along the Colorado River and along the western edge of the project for future trails. This is one of at least two properties the City of Grand Junction is seeking to obtain easements from to complete the trail connection from Las Colonias Park to 29 Road.
- 4. Ben Fox indicated the topsoil material would be scraped off the site and used to create a screening berm between C-1/2 Road and the adjacent residential properties. The screening berm would be seeded to provide a visual and sound buffer to adjacent residential properties.
- Ben Fox indicated the southern half of the site is in the FEMA Floodway and because of this, material stockpiles, mining operations, and screening berms would be restricted in these areas.
- 6. Ben Fox stated the City's code required a 125-ft buffer from existing homes adjacent to excavation areas and a 250-ft buffer from homes adjacent to any gravel processing equipment, such as crushers. He also mentioned that anticipated hours of operation were 7:00 AM 5:30 PM.
- 7. Once Ben Fox had concluded the initial presentation, Scott Peterson provided the attendees a general overview of the planning process and detailed the two public hearings where members of the public would be able to provide their input or objections to the development.
- 8. Sharon Bradshaw and Glen Bishard expressed concerns regarding development after the cessation of sand/gravel operations. Ben Fox re-stated that the applicant expected 10 years of operations, after which the applicant would begin the approved site reclamation plan and consider their options, one of which was the development of a small subdivision.

Mr. Scott Peterson June 30, 2021 Page 3 of 5

- 9. Glen Bishard stated that the overview map depicting the future trail development appeared to be on his side of the ditch. Ben Fox clarified that the overview map was not an official site plan and that the applicant would construct any future paths (as required by the City) on their side of the ditch.
- 10. Multiple residents expressed concerns regarding dust and noise mitigation and impacts to fish and wildlife. Ben Fox replied that an appropriate environmental assessment and requisite local and state permits would be required as the project moved forward. He also stated that if the applicant/operator was found out of compliance with those dust/noise permits during recurring inspections (every two weeks), they may be shut down and that the enforcement penalties were substantial. Additionally, the City of Grand Junction has a noise restriction at the perimeter of the gravel mining operations that must be met, or the applicant could lose their right to mine.
- 11. Residents expressed concerns with the depth of mining as it relates to the existing water table. Ben Fox replied that current estimates for mining depth would be 10-15 feet and that the site did appear to have a shallow water table, but he could not provide precise details on the manner of mitigation. He did state that—in general—City, County, State, and Federal regulations governing gravel mining operations would be taken into account as the project moved forward and that the appropriate mitigation procedures would be followed.
- 12. Property owners also asked about the access location into the site. Ben Fox indicated the City of Grand Junction typically wants access locations to "align" with an existing access location or offset 150-ft from existing accesses. Ben Fox stated they were in the process of determining a specific access location. They were initially considering the western side of the property, but the trail easement requested by the City may cause this to be poor location.
- 13. Many property owners were concerned with traffic, especially with the number of bikes and pedestrians using C-1/2 Road since it is the Bike/Ped route between 29 Road and Las Colonias. The existing road does not have shoulders for these uses and the gravel truck traffic will be a problem. Ben Fox stated that a traffic study looking at these items had been conducted and indicated relatively low impact as of now, but the study will be reviewed as part of the application. The project will also pay "Traffic Impact Fees" to the City to help pay for offsite impacts from the project.
- 14. When questioned by several residents about needed improvements to C ½ Road, Scott Peterson explained that C-1/2 Road resides in Mesa County while the Traffic Impact Fees are paid primarily to the City of Grand Junction. As such, it can be a challenge to get both agencies to work and pay for street improvements. Scott indicated he would bring this up with planning and engineering staff, but at this time the majority of improvements would fall on Mesa County.

Mr. Scott Peterson June 30, 2021 Page 4 of 5

- 15. Resident Illenberger asked about the effects of traffic downstream from the project, particularly at Las Colonias and the apartments around that area. Scott Peterson explained that the City's intent was for bike and pedestrian-friendly trails to exist in the future and that construction of those trails was part of the process.
- 16. Ken and Terrie Heinecke expressed safety concerns about family, children, and heavy trucks running along the same narrow road and asked what they were supposed to do about it. Ben Fox and Scott Peterson acknowledged their concerns and explained that the planning commission has the right to put additional restrictions on the gravel pit operation. They also recommended they bring up those concerns at future public hearings.
- 17. Terrie Heinecke asked about historical properties and if the gravel pit would negatively affect those areas. Ben Fox indicated that he was not aware of any designated historical sites within the area, but explained that he would look into it as the project progressed and that an evaluation of impact to historical sites was part of the permitting process.
- 18. Linda McBride asked where the bike trail would run, asked about Las Colonias Park noise restrictions, and about bike path operating time restrictions. Scott Peterson answered that, while not directly connected with gravel pit operations, the City intends to eventually have a bike path along the Colorado River. Las Colonias and bike paths would fall under standard City noise restrictions. Ms. McBride also asked what the largest concern was in terms of pollutants, to which Ben Fox replied it would likely be small spills from trucks/mining equipment. She expressed that she was not happy about decisions to trash the City and valuable riverfront areas with gravel pits, and did not approve of a future subdivision in a rural area.
- 19. Ken Heinecke brought up concerns regarding the property's location within the 100-year floodplain and how that would affect open-pit gravel mining operations. If a flood were to happen, how would the flow of sediment off-site be mitigated? Ben Fox did not have a detailed answer to the question, but knew that it was partially accounted for in the Stormwater Management Plan and stated that he would investigate the issue further as they moved forward with a more concrete development plan.
- 20. Another resident expressed concerns with the existence of a bike path and people parking on their property near C ½ Rd street frontage to access the paths. Scott Peterson answered that it is technically illegal to park in those locations, so that should be dealt with by law enforcement.
- 21. Residents asked about the timing of the trail construction. Some were concerned with trespass if people walking along the trail had no place to go. Ben Fox indicated he expects the City to require, at a minimum, trail dedication. It is not clear when trail construction would occur, and that trespassing still remains trespassing.

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22. Towards the end of the meeting, Ben Fox re-emphasized that this was a preliminary Neighborhood Meeting designed to alert the public to a development application in the process of being submitted to the City for approval. Many specifics of the project had not yet been ironed out, and they should keep their comments/concerns in mind and bring them up at the upcoming hearings. Scott Peterson informed the attendees that they would be notified via letter of the times/locations of those future hearings.

In summary, the biggest issues for the project were dust/noise, environmental impacts, and traffic/bike/pedestrians along C-1/2 Road and how improvements could be made to accommodate those users.

It should be noted that Nathaniel Mueller (the direct westerly neighbor) emailed Austin Civil Group separately from the meeting and requested a pullout from the property to C ½ Road, a dedication of the southern portion of the property, and the withholding of funds for future road repairs. A copy of the email is attached.

Sincerely,

Austin Civil Group, Inc.

Benjamin Fox, E.I.T., Staff Engineer

From: Nathaniel Mueller < nathaniel.g.mueller@gmail.com >

Date: June 29, 2021 at 4:16:15 PM MDT

To: Mark Austin < MarkA@austincivilgroup.com >

Cc: pariahlaw@aol.com, Akcolomed <akcolomed@aol.com>

Subject: 2855 C 1/2 Rd neighborhood mtg.

Dear Mr. Austin and team,

We would like to thank you for hosting a neighborhood meeting concerning your re-zoning and future development of 2855 C 1/2 Rd. Giving notice for any changes in this area is greatly appreciated, particularly for such a large parcel in a part of town that contains a key bike vein and the Colorado River.

As your direct westerly neighbors, of 2869 C 1/2 Rd, we are certain that your activities will conform with best practices and relevant oversight guidelines. We are of the impression that the property is to initially be used as a gravel pit. Considering that the project at 2855 C 1/2 appears to have a long timeline, we would hope that you consider our three requests, as we believe they would benefit the surrounding properties as well as benefit the local community as a whole.

The three requests are, as follows:

- 1. **Expand the pullout onto C 1/2 Rd.** In the interest of safety for drivers and potential licensees entering and exiting the property, a dedicated turn lane should be created appurtenant to the road.
- 2. Dedicate the southern portion of the property. It would appear that the majority of the land on the northern bank of the Colorado River is already held by the James M. Robb State park, and future plans of civic development appear to include a bike path that would run the length of the river through the Grand Valley. Currently, C 1/2 Rd. is the major bicycle thoroughfare in the area. 2855 C 1/2Rd. appears to be the last property that actually touches the river. We request a dedication of the southern portion of 2855 to the relevant entity. The benefits of safety and community development opportunities, we hope, appear obvious in this respect.
- 3. Withhold funds for future road repairs. With C 1/2 Rd. already buckling in many spots, increased road usage by larger vehicles could lead to accelerated damage in the coming years. While we are aware that use permits and taxes for undertaking such a project tend to be funneled into road and highway maintenance, the proposed use at 2855 would be distinct among other properties in the area. We hope that a certain amount can be voluntarily withheld in order to cover repairs once the gravel pit is exhausted.

Thank you for your time, and welcome to the neighborhood.

Sincerely,

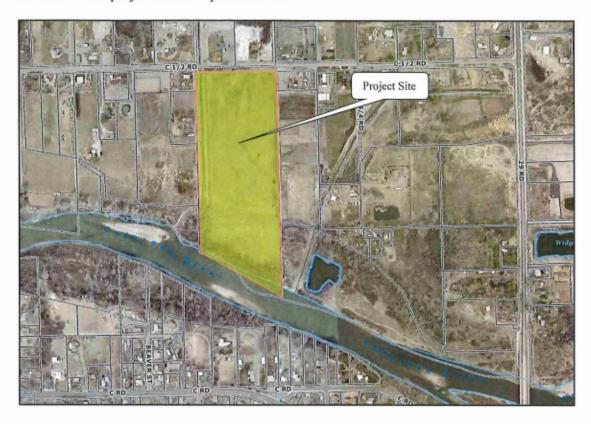
Nathaniel Mueller (808)224-6951

## OWNERSHIP STATEMENT - CORPORATION OR LIMITED LIABILITY COMPANY

(a) M&D Enterprises LLC	("Entity") is the owner of the following property:
(b) 2855 C 1/2 Road, Grand Junction, CO 81501	
A copy of the deed(s) evidencing the owner's interest in interest in the property to someone else by the owner are	the property is attached. Any documents conveying any e also attached.
I am the (c) Representative for the En	tity. I have the legal authority to bind the Entity regarding recent recorded Statement of Authority of the Entity.
My legal authority to bind the Entity both financially an	
My legal authority to bind the Entity financially and/or	concerning this property is limited as follows:
The Entity is the sole owner of the property.	
OThe Entity owns the property with other(s). The other	owners of the property are:
On behalf of Entity, I have reviewed the application for th	e (d) Gravel Pit
I have the following knowledge or evidence of a possible	boundary conflict affecting the property:
(e)	
I understand the continuing duty of the Entity to inform th the Entity and/or regarding ownership, easement, right-or land.	e City planner of any changes regarding my authority to bind f-way, encroachment, lienholder and any other interest in the
I swear under penalty of perjury that the information in thi	is Ownership Statement is true, complete and correct.
Signature of Entity representative: Mouth Rz	Martin Azcarraga
Printed name of person signing:	Martin Azcarraga
State of Colorado	) TERESA K. HALL
County of Mesa	NOTARY PUBLIC STATE OF COLORADO NOTARY ID #20164026677
Subscribed and sworn to before me on this 22 d	ay of, 20, 20
by North Azcarragg	
Witness my hand and seal.	1
My Notary Commission expires on Tuly	Thesa 1 hell
Not	ary Public Signature

#### Project Description (Location, Acreage, Proposed Use):

The purpose of this submittal is to obtain approval from the City of Grand Junction and applicable agencies to construct a gravel pit with associated parking and landscaping. The location of the project site is depicted below:



The 2855 C ½ Road property consists of approximately 27.8 acres. The applicant proposes to annex the property into the City of Grand Junction with a rezone from RSF-R (Residential Single Family – Rural) to CSR (Community Services and Recreation) to allow a gravel extraction operation. A conditional use permit (CUP) will be required after the annexation and zoning in order to move forward with the gravel pit. According to the 2020 Comprehensive Plan, the property is adjacent to Parks and Open Space, which would allow for a CSR zoning. The property consists of agricultural land with a covering of native grasses.

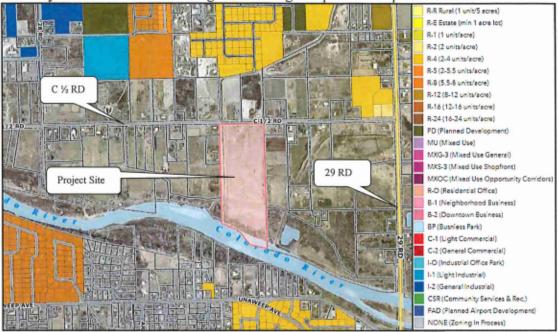
#### Surrounding Land Uses and Zoning:

The following adjacent properties are zoned accordingly:

DIRECTION ZONING CURRENT LAND USE
North: RSF-R Residential
South: N/A Colorado River

East: RSF-R Residential/Agricultural West RSF-R Residential/Agricultural

The City of Grand Junction zoning surrounding this parcel is depicted below:



Current City of Grand Junction Zoning



Future Land Use 2020 Comprehensive Plan

#### Gravel Extraction in the Grand Valley:

The proposed gravel extraction project will last for ten (10) years with an additional two (2) years dedicated to complete site reclamation. Sand and gravel are key building materials required for the majority of development projects within the Grand Valley, to include both private and public capital improvement projects. Road base, asphalt, concrete, building foundations, etc., all depend on access to these materials. From a geologic perspective, accessible sand and gravel deposits are found most prominently near the Colorado River, making this site an important local resource for developers, builders, and contractors. Recent growth within the Grand Valley continues to increase demand for these materials and this project seeks to provide locally-sourced materials to aid in meeting that demand.

#### Site Access:

Access to the property is gained from a single-family gravel driveway in the middle of the north edge of the property. A rebuild of the driveway to meet anticipated access requirements will be part of this project. It will remain the only single access point to C ½ Road and in approximately the same location as the existing access. A pending agreement between Mesa County, the City of Grand Junction, and the applicant is being developed in which costs for C ½ Road upgrades will be split evenly into thirds among the respective parties. The applicant is agreeable to the pending agreement at this time.

#### ROW/Easements:

The existing ROW is 40' from the subject property line to the opposite property line at approximately the center of pavement. A 14' multi-purpose easement has been proposed along existing street frontage. Reference the Site Plan for details. The Active Transportation Corridor map shows a future trail on the west side of the parcel and another one near the river at the southern edge of the property. Appropriate easements will be granted for these trails as a condition of approval once City personnel have determined the exact location of the proposed trail.

#### **Utilities:**

All utility services required for this project are currently located on, or adjacent to, the project site.

Sanitary Sewer: There is an existing 8" VCP sanitary sewer line that runs along C ½ Road fronting the property. This project will not need to tap into the system as there will be no new buildings constructed on the property.

<u>Domestic Water</u>: Ute Water services the area and a water main is located along C ½ Road.

Stormwater & Drainage: The site is within Grand Valley Drainage District and currently drains south toward the Colorado river. An open drainage ditch ("No Name Drain") owned by GVDD runs south along the western edge of the property before emptying into the Colorado River. Permanent water quality control and stormwater BMPs will be

provided for the project. The proposed gravel excavation operation will serve as a dewatering pond during and after construction.

<u>Irrigation Water</u>: The parcel is serviced by Grand Valley Irrigation Company and currently flood irrigates the existing pasture from north to south. If gravel extraction is approved, existing irrigation water will be used to irrigate the required landscaping as outlined in the Landscape Plan. More shares can be purchased and turned out of the MC045 headgate at request of ownership.

Dry Utilities: Electrical service and gas are provided by Grand Valley Power.

#### Parking:

The design number of spaces for parking was taken from the city off-street required parking as 1 space per employee. The applicant intends to have 3 employees onsite for extraction operations. Please consider that the site will be mined in smaller, staged segments over 10 years, so there will be adequate vacant space across the parcel for employee parking.

# Response to Development Regulations 21.04.30 (k) Use Specific Standards: Mineral Extraction, Washing, Crushing, Cement Batch Plants and Asphalt Plants

- Purpose. The purpose of this subsection is to establish reasonable and uniform limitations, safeguards and controls to wisely utilize natural resources and to reclaim mined land.
  - (i) Gravel extraction and/or processing activities should occur on parcels of sufficient size so that extraction and reclamation can be undertaken while still protecting the health, safety and welfare of the citizens.

<u>Response</u>: The parcel is large enough that all activities can take place within the setbacks required by these regulations. Buffering measures include landscaping, screening fences, and berms surrounding the proposed facility.

(ii) Where gravel extraction and/or processing is adjacent to zoning or land uses other than I-1 or I-2, mining, handling and batch processing activities may be restricted, buffering may be required and/or disturbance/reclamation may be accelerated to be compatible with the adjacent zone or use.

<u>Response</u>: Setbacks—as displayed on the Site Plan—will be adhered to. A 6-ft screening fence is proposed along the property boundary. Landscape buffering is employed on street frontage, and a berm helps buffer adjacent properties. Existing vegetation within setbacks will largely be left in place unless removal is required to implement the Landscape Plan or Site Plan.

(2) Procedure.

2855 C 1/2 Road Gravel Pit

(i) Commercial extraction of mineral deposits shall not begin or occur until an excavation and land reclamation plan have been approved in writing by the Colorado Mined Land Reclamation Board.

Response: A Construction Materials Regular 112 Operation Reclamation Permit will be requested from the State of Colorado after a determination is made by the City of Grand Junction to issue a Conditional Use Permit (CUP). The applicant would like assurance that a CUP can be issued before moving forward with the project and submitting the 112 Permit to the State of Colorado.

(ii) A plan approved as part of a CUP and/or a reclamation/development schedule being followed under previous regulations fulfills this requirement.

Response: An excavation and reclamation plan meeting the above requirement is included with this submittal application.

(iii) Asphalt, cement and/or other batch plant operations shall be subject to CUP requirements.

Response: There will be no batch plants for this project.

- (iv) A plan for a use under this subsection shall contain, in addition to those relevant requirements outlined for a CUP, the following:
  - (A) Detailed description of the method of extraction and reclamation to be employed, including any necessary accessory uses such as, but not limited to, crushers, batch plants and asphalt plants;

Response: Of the total 27.8-acres within the project, 18.3-acres will be mined for sand and gravel. While the site will be mined over 10 years, actual day-to-day excavation will focus on one smaller area at a time and progressively shift around the area as time progresses.

The sand and gravel pit operations will have screening, crushing, and conveying equipment for the gravel processing in addition to the trackhoes and front-end loaders.

Earthwork operations will begin at the south end and move to the north end of the site. Appropriate setbacks for the Colorado River are accounted for. The topsoil will be removed and stockpiled in berms around the perimeter of the excavation site. Next, the sands and gravel will be mined using trackhoes, front-end loaders, and bulldozers. To process the sand and gravel, screens and crushers located near the center of the project area will be utilized. Once the materials are processed, they will be piled onsite or loaded into trucks and trucked offsite. Given the high water table, material stockpiles will be established to allow for drying. After the sand and gravel have been removed, the area will be backfilled and compacted

2855 C 1/2 Road Gravel Pit

using the stockpiled overburden material, the overburden from the next mining area, and imported fill materials. The project area will be regraded to reflect the final grades depicted on the Reclamation Plan, including the establishment of the reclamation pond.

A more detailed plan of operations will be provided with the State application.

(B) An extraction plan showing the areas to be mined, location of stockpile area, location of structures, general location of processing equipment, with accompanying time schedules, fencing if applicable, depth of deposit, tons in the deposit and other pertinent information;

Response: The proposed Site Plan depicts the extraction area. It is approximately 18 acres in total and averages 15 feet deep, with a higher concentration of gravel/cobbles near the southern portion. The anticipated yield of sand and gravel is an estimated 450,000 tons over the projected 10 years. Topsoil and overburden materials will be moved to the east and west sides of the property, out of the floodway. Stockpiled materials and sand/gravel processing areas will generally be in the center of the project site.

Reclamation of the site will be completed no more than 2 years after sand and gravel mining termination. The additional two years is required to deplete all stockpiled sand and gravel and complete reclamation efforts. Complete reclamation efforts include easements for future City trail systems and the construction of those trails—payment for which has not yet been determined—if not already constructed by that time.

(C) A detailed reclamation plan showing proposed reclamation with time schedules including, but not limited to, finish contours, grading, sloping, placement, and amount and type of revegetation, post-extraction land use plans and any other relevant information:

Response: The reclamation and revegetation plan will follow requirements and guidelines of the applicable state permits. A reclamation plan drawing, included with this conditional use permit application, depicts much of the information above. Reclamation will be completed a maximum of 12 years after the start of sand and gravel operations, and sooner if gravel operations conclude earlier than anticipated. In general, the facility will be returned to its original condition with a ~11.5-acre reclamation pond in the center of the property for wildlife habitat and drainage.

Once all sand and gravel have been mined and stockpile materials are depleted, the site will be graded to the final contours proposed on the reclamation plan map. The sand and gravel mined areas will be backfilled and compacted with onsite overburden and imported fill if needed, excepting the reclamation pond area. All internal gravel haul roads will be eliminated. The site will have a slight gradient

to the south, with slopes no greater than 1%. The US Department of Agriculture, Natural Resource Conservation Service (NRCS), indicates the existing site soils are fair to poor topsoil. Based on local recommendations from the CPW Revegetation Guide, the site will be revegetated using a mix of Western wheatgrass, Intermediate wheatgrass, Smooth Brome, and Perennial Rye applied at 28.5 PLS (pure live seed) per acre if drilled and 57 PLS per acre if broadcast. This mix does not require irrigation.

(D) Topography of the area with contour lines of sufficient detail to portray the direction and rate of slope of the land covered in the application;

Response: Drawings identifying the existing conditions and reclamation plan, included with this conditional use permit application, are attached which depict the information requested. The slope on the existing site is approximately 0.5% to the south. The slope of the land after reclamation will be approximately 0.5% to the south side of the property.

 (E) Type, character, and density of proposed vegetation both during excavation and as a component of rehabilitation;

Response: The existing site is approximately 70% covered with vegetation. The vegetation on the site consists of Siberian elm, Russian knapweed, chicory, Russian thistle, cheatgrass, bindweed, kochia, Russian olive, cottonwood, and tamarisk. Much of the vegetative cover is classified as noxious. The type of vegetation for reclamation will be a mix of Western wheatgrass, Intermediate Wheatgrass, Smooth Brome, and Perennial Rye applied at 28.5 PLS (pure live seed) per acre if drilled and 57 PLS per acre if broadcast, as recommended by the CPW Revegetation Guide found in Appendix 13.1 of the Mesa County Design Standards. This mix does not require irrigation and appears to meet the requirements of 2 CCR 407-4.

(F) The operator's estimated cost at each of the following segments of the reclamation process, including where applicable, backfilling, grading, reestablishing topsoil, planting, revegetation management, irrigation, protection of plants and soil prior to vegetation establishment and administrative cost;

#### Response:

ITEM	QUAN	RATE	TOTAL
Grading	LS	\$ 8,000	\$8,000
Planting	20 acres	\$350	\$7,000
Revegetation Management	20 acres	\$50	\$1,000
<b>Total Estimated Cost</b>			\$16,000

(G) A drainage plan and report prepared by a Colorado registered professional engineer with consideration of natural drainage, drainage during excavation and drainage after reclamation such that the proposed reclamation and excavation

will have no adverse effect in excess of natural conditions. Where applicable, the Director may require a floodplain permit (see GJMC <u>21.07.010</u>, Flood damage prevention);

<u>Response</u>: A drainage report has been prepared and is included with this conditional use permit application request.

(H) Traffic analysis, which reviews road capacity and safety conditions/considerations for and within the neighborhood, as that term may be defined and applied by the Director. The Director may reduce or enlarge the neighborhood to be analyzed upon a finding of a hazard or hazardous condition. The traffic analysis shall generally conform to and address TEDS standards (GJMC Title 29) and shall include but not be limited to ingress/egress, parking and loading, on-site circulation, number of trucks per day and the capacity of roads, streets, bridges, intersections, etc.;

Response: A traffic analysis review plan has been prepared and is included with this conditional use permit application request. Access to the site will remain a single point on C 1/2 Road at approximately the same location as existing access. A Cost Share Agreement is currently pending between Mesa County, the City of Grand Junction, and the applicant for C ½ Road Improvements. The applicant is agreeable to the execution of the existing Cost Share Agreement at this time.

(I) An erosion control plan for runoff and wind-blown sediments shall be provided for the mining operation and the reclamation;

Response: A Stormwater Management Plan (SWMP) is attached as a condition of approval.

(J) Additional information that is required because of unique site features or characteristics may be required by the Public Works and Planning Departments; and

Response: A 15-ft wide trail easement has been added to the Site Plan as part of the City's Active Transportation Plan. The easement dedication and trail construction will be required during the reclamation stage as a Condition of Approval. If constructed now, this segment would remain a stand-alone segment with nothing to connect with, and it may be located in an unfavorable location. Because the Riverfront Trail needs to be constructed in a manner that facilitates pedestrian movement across adjacent parcels, the applicant believes it best to wait for the City of Grand Junction to better define the exact trail location. This trail easement includes both the north-south and east-west segments as outlined on the City Transportation Map.

(K) Upon approval, the excavation and reclamation plans shall be filed with the City and recorded with the Mesa County Clerk and Recorder. Any change in

excavation or reclamation plan shall be prohibited unless amended through the conditional use permit process.

The excavation and reclamation plans will be filed with the City and recorded with the Mesa County Clerk and Recorder upon approval.

#### (3) Standards.

(i) Mineral extraction, washing, crushing, cement and asphalt batch planting and other mined products related uses shall be subject to an approved excavation permit, well permit, air pollution permit, reclamation plan and any and all other permits, certifications or requirements of the State or federal agencies having jurisdiction as required;

Response: The applicant understands that State and/or other applicable permit(s) will be a condition of approval for this CUP.

(ii) Excavation or deposit of overburden is not permitted within 30 feet of an abutting parcel, an easement, an irrigation ditch or canal or right-of-way unless by written agreement of the owner of such property, easement, irrigation ditch, canal or right-of-way;

<u>Response</u>: A setback of 30-feet for excavation or deposit of overburden has been established from abutting parcels, easements, irrigation ditches, canals, and rights-of-ways as shown on the Site Plan.

(iii) Excavation within 125 feet of an existing residence is not permitted unless by written agreement of the owners and occupants of the residence. No rock crushing, asphalt/cement plant or other similar equipment or operations shall take place any closer than 250 feet of a residence. The Planning Commission may require a greater distance if the operation is abutting a residential zone district. Excavation, loading, handling, processing and batch operations adjacent to residentially zoned parcels shall not exceed 65 decibels at the property line of any adjacent parcel;

Response: There are three residences adjacent to the property and two residences north of C ½ Road. A minimum 250-ft buffer will be provided between each residence and all rock crushing activities, and a minimum 125-ft buffer for all mining activities as shown on the Site Plan.

(iv) At a minimum, 100 feet greenbelt setback shall be provided from jurisdictional wetlands or navigable watercourses as the same are defined by the U.S. Army Corps of Engineers (USACE). The Director upon recommendation and consent of the USACE may vary this standard;

Response: A 100-ft greenbelt setback is provided from the Colorado River along the southern edge of the property. This is the same as the 100-ft water setback detailed

on the Site Plan. No wetland disturbance is planned at this time based on the Wetland Delineation Report (included). Refinement would be necessary if a U.S. Army Corps of Engineers permit is required, but that appears unlikely.

(v) Existing trees and vegetation shall, to the extent practicable, be preserved and maintained in the required setback to protect against and reduce noise, dust and erosion. The Director may require vegetative screening and/or buffering in accordance with this code in order to minimize the impact to dissimilar adjacent uses or zoning districts;

<u>Response:</u> Existing trees and vegetation, to the extent practicable, will be preserved and maintained in required setbacks to protect against and reduce noise, dust, and erosion. Setbacks are shown on the Site Plan.

(vi) The owner or operator shall submit a traffic analysis;

Response: A traffic analysis has been prepared and is included with this submittal. A Cost Share Agreement is currently pending between Mesa County, the City of Grand Junction, and the applicant for C ½ Road Improvements. The applicant is agreeable to the execution of the existing Cost Share Agreement at this time.

(vii) The Director of Public Works may place restrictions on right-of-way use after review of the traffic analysis. Restrictions may include but are not limited to the owner or operator being be responsible for the extraordinary upgrade and maintenance of the designated haul route;

Response: A haul road plan has been included with this submittal. Access to and from the project site will be from C 1/2 Road only.

(viii) Streets, bridges and highways designated as haul route shall be maintained by the owner/operator in a reasonably clean condition. This may include, depending on local conditions, watering, oiling, or sweeping as determined by the Director;

Response: C ½ Road and 28 Road will be maintained by the owner/operator in a reasonably clean condition.

(ix) Hours of operation shall be restricted to 6:00 a.m. to 6:00 p.m. The Director may authorize different hours; however, the Director may also restrict as part of the CUP the hours of operation near residential or urbanized areas;

Response: The planned hours of operation are 7:00 a.m. to 5:30 p.m.

(x) In no event shall a slope of steeper than 2:1 be left for dry pits. A pit with a slope of 3:1 or steeper shall not exceed a depth of 10 feet. The floor of excavation pits, whether wet or dry, shall be left in a suitable condition;

Response: The excavation of the gravel pit will follow these guidelines.

(xi) The owner/operator shall not excavate, store overburden or mined material or dike the property in such a manner as to increase any drainage or flooding on property not owned by the operator or damage public facilities and/or property;

Response: There is no offsite drainage onto the property, and all runoff occurring within the property will be contained in earth berms at the edge of the site.

(xii) Prior to starting operation, where the operation is adjacent to subdivided and/or developed commercial or residential property, the Director may require buffering and/or screening. Required fencing, screening and/or buffering shall not be removed until reclamation has been completed;

Response: The site will have a minimum buffer of 30' around the entirety of the property, and will also follow the required excavation and crushing buffers. A 6-ft screening fence will also be installed, not to be removed until reclamation is complete. This information will be provided in detailed documents to be included with the State permit application.

(xiii) After mining has been completed, the site shall not to be used to stockpile sand and/or gravel except in I-1 and I-2 with a CUP. In any event the owner/operator is to reclaim the site as rapidly as possible;

<u>Response:</u> Once mining is complete all processed materials will be removed and the site will be reclaimed.

(xiv) Operations shall comply with the noise, vibration and other applicable standards and requirements of this code. If there are conflicting or competing provisions in this code, the most stringent shall apply;

Response: Operations will work within the applicable standards in the City of Grand Junction Zoning and Development Code. This information will be provided in detailed documents to be included with the State permit application.

(xv) All air emissions shall comply with standards established by the Mesa County Health Department, State Health Department and Colorado Air Quality Control Commission;

Response: This project will comply with all applicable standards. This information will be provided in detailed documents to be included with the State permit application.

(xvi) All water use and/or discharge shall conform to standards established by law and administered by the Environmental Protection Agency (EPA), the Colorado

Department of Public Health and Environment (CDHPE), the City of Grand Junction and the Mesa County Health Department;

<u>Response:</u> Water use and/or discharge will conform with applicable standards. This information will be provided in detailed documents to be included with the State permit application.

(xvii) All slopes shall be stabilized. Land remaining at the natural water level must be revegetated in a manner compatible in type as/with the immediately prevailing area. Revegetation plans are required and shall minimally meet the standards of the Colorado Mine Land Reclamation Board;

Response: A reclamation plan is included with this submittal, and revegetation will take place as in accordance with 2 CCR 407-4 Rule 3.1.10. This information will be provided in detailed documents to be included with the State permit application.

(xviii) All disturbed areas shall be revegetated in accordance with the vegetation plan;

Response: All disturbed areas will be revegetated with a suitable seed mix in accordance with 2 CCR 407-4. This information will be provided in detailed documents to be included with the State permit application.

(xix) Following initial revegetation efforts, the revegetated area shall be maintained for a period of three years or until all vegetation is firmly established in the reclamation area;

<u>Response:</u> The reclaimed area will be maintained for a period of 3 years to ensure that vegetation is firmly established.

(xx) A timetable for reclamation shall be placed on each project. Time lines, including but not limited to milestones, if any, shall be dependent upon the type and size of reclamation effort;

Response: Reclamation shall be completed approximately two years after mining operations are complete.

(xxi) Proof of a reclamation bond shall be submitted, along with the required reclamation plan;

Response: A reclamation plan has been included with this submittal, and proof of a reclamation bond will be included as part of the conditions of approval. This information will be provided in detailed documents to be included with the State permit application.

(xxii) A development schedule shall be submitted describing the life span of the project in years (ranges are acceptable) and, if applicable, the years per phase;

Response: The mining will take place in one phase lasting approximately ten years. Reclamation is expected to be completed two years after mining is completed.

- (xxiii) If the development schedule is not met the conditional use permit:
  - (A) May be revoked;
  - (B) The Director may grant a two-year extension per request;
  - (C) The Planning Commission shall have the power, after hearing, to revoke any conditional use permit for any violation;
  - (D) Upon at least 10 days' written notice to the owner, the Planning Commission may hold a hearing to determine the nature and extent of the alleged violation, and shall have the power, upon showing of good cause, to revoke the permit and the plan and to require reclamation of the land;
  - (E) If not extended or revoked, a new application and extraction plan will need to be submitted and reviewed in the manner described in this subsection;
  - (F) An extension request shall provide information in writing detailing the reasons for the request. The Director shall consider the stated reasons, as well as the extent conditions have changed in the area, if any, before granting an extension;
  - (G) If a written request to extend the development schedule is submitted to the Director it shall include but not necessarily be limited to the factors and reasons for the requested extension. New conditions may be imposed as a part of the granting of an extension. New conditions, if any, may be appealed to the Planning Commission to be considered at a public hearing;
  - (H) The Director may forward any extension request to the Planning Commission;
  - (I) Extension requests will be evaluated by the Director and/or Planning Commission on the same basis and with the same information as per the conditional use permit process;
- (xxiv) If the use has not operated or if no material has been extracted in accordance with the development schedule or any extension thereof, the conditional use permit shall expire;
- (xxv) Signage for public safety is required

<u>Response</u>: A freestanding sign will be erected near the proposed entrance at the north end of the project site to post State of Colorado required identification information. The sign will be less than 1.5 square feet.

(xxvi) Fencing around the perimeter of the property is required.

Response: A 6-foot perimeter screening fence will be provided as part of the construction process, as shown on the Site Plan.

#### Conditional Use Permit Approval Criteria. (GJMC 21.02.110(c))

The application shall demonstrate that the proposed development will comply with the following:

 District Standards. The underlying zoning districts standards established in Chapter <u>21.03</u> GJMC, except density when the application is pursuant to GJMC <u>21.08.020(c)</u>;

Response: The CSR zone district implements the future land use designation of Conservation/Mineral Extraction and is therefore an appropriate option. The proposed development meets the standards outlined in the Mixed Use and Industrial Bulk Standards Summary Table for CSR. Setbacks and other dimensional requirements are shown on the Site Plan.

- (2) Specific Standards. The use-specific standards established in Chapter <u>21.04</u> GJMC; Response: See page 3 above.
- (3) Availability of Complementary Uses. Other uses complementary to, and supportive of, the proposed project shall be available including, but not limited to: schools, parks, hospitals, business and commercial facilities, and transportation facilities;

Response: The above services and facilities are available within the local area.

- (4) Compatibility with Adjoining Properties. Compatibility with and protection of neighboring properties through measures such as:
  - (i) Protection of Privacy. The proposed plan shall provide reasonable visual and auditory privacy for all dwelling units located within and adjacent to the site. Fences, walls, barriers and/or vegetation shall be arranged to protect and enhance the property and to enhance the privacy of on-site and neighboring occupants;

<u>Response:</u> Screening fences and setbacks are provided for in the Site Plan. Additionally, operating hours are within the allowable timeframe.

(ii) Protection of Use and Enjoyment. All elements of the proposed plan shall be designed and arranged to have a minimal negative impact on the use and enjoyment of adjoining property;

Response: Gravel extraction operations will be done in phases around the property to limit the amount of disturbed area at any given time. Activity is removed from the Colorado River to allow for the passage of native wildlife. Those areas of thick vegetation and trees within 100-ft of the Colorado River are preserved in the project as shown on the Site Plan.

(iii) Compatible Design and Integration. All elements of a plan shall coexist in a harmonious manner with nearby existing and anticipated development. Elements to consider include: buildings, outdoor storage areas and equipment, utility structures, building and paving coverage, landscaping, lighting, glare, dust, signage, views, noise, and odors. The plan must ensure that noxious emissions and conditions not typical of land uses in the same zoning district will be effectively confined so as not to be injurious or detrimental to nearby properties.

Response: Screening fences, dust control, operating hours, phased extraction, and appropriate setbacks all contribute to the above items. Additionally, the project will last up to 10 years, meaning that it will not be a permanent fixture in the local area.

## Grand Junction Fire Department New Development Fire Flow Form

Instructions to process the application: Step 1) Applicant's engineer should first fill out all items in Section A. Step 2) Deliver/mail this form to the appropriate water purveyor. The water supplier signs and provides the required information of Section B. Step 3) Deliver/mail the completed and fully signed form to the City or County Planning Department. Department.

#### SECTION A

	Date: 02-16-21
	Project Name: 2855 C 1/2 Road
	Project Street Address: 2855 C 1/2 Road Grand Junction
	Assessor's Tax Parcel Number: 2943-194-00-248
	Project Owner Name: M&D Enterprises LLC
	City or County project file #:
	Name of Water Purveyor: Ute Water
	Applicant Name/Phone Number: M&D Enterprises
	Applicant E-mail:
	If the project includes one or more one or two-family dwelling(s):  a. The maximum fire area (see notes below) for each one or two family dwelling will be N/A square feet.  b. All dwelling units will , will not include an approved automatic sprinkler system.  Comments:
	If the project includes a building other than one and two-family dwelling(s):  a. List the fire area and type of construction (See International Building Code [IBC] for all buildings used to determine the minimum fire flow requirements:  N/A
	b. List each building that will be provided with an approved fire sprinkler system:
	List the minimum fire flow required for this project (based on Appendix B and C in the International Fire Code[IFC]): 0 gpm
Cor	mments: Gravel Pit with no buildings and typical equipment operations

#### Note:

**Fire Area:** The aggregate floor area enclosed and bounded by fire walls, fire barriers, exterior walls or horizontal assemblies of a building. Areas of the building not provided with surrounding walls shall be included in the fire area if such areas are included within the horizontal projection of the roof or floor next above.

Fire Flow Rule: The City's Fire Code<sup>3</sup> sets minimum fire flows for all structures. In general, at <u>least</u> 1000 g.p.m. at 20 p.s.i. is required for residential one or two family dwellings up to 3,600 square feet (sf) of fire area. For dwellings greater than 3,600 sf of fire area or all commercial structures, the minimum fire flow is 1,500 gpm at 20 p.s.i. (See Fire Flow Guidance Packet<sup>4</sup>. Inadequate fire flows are normally due to water supply pipes that are too small or too little water pressure, or a combination of both.

Applicant/Project Engineer: Refer to City of Grand Junction most recently adopted IFC, Appendix B and C, [IFC 2012], to determine the minimum fire flow required for this project, based on the Water Purveyor's information (i.e., location, looping and size of water lines; water pressure at the site, etc.) and the type, density and location of all structures. Base your professional judgment on the City approved utility plans and Water Provider information shown on this Form. Each time the utility plans/other information relating to treated water changes, resubmit this form just as you did the first time.

\*End of Section A. Section B continues on the next page\*

## Grand Junction Fire Department New Development Fire Flow Form

#### SECTION B

[To be completed by the Water Supplier]

Attach fire flow test data for the hydrants Failure to attach the fire flow test data and/or diagram may delay your project review.

1.	Circle the name of the water supplier: Ute Clifton Grand Junction
2.	List the approximate location, type and size of supply lines for this project, or attach a map with the same information:
	SEE ATTACHED MAP. THE DISTRICT HAS AN EXISTING 3-INCH IN C.5; NEAREST EXISTING FIRE HYDRANTS ARE IN 29 RD
	AND 28 RD NEAR C.5 (APPROX 1/2 MILE FROM PROJECT SITE).
3.	Attach the fire flow test data @ 20 p.s.i. for the fire hydrants nearest to the development/project that must be use to termine available fire flow. Test data is to be completed within the previous 12 months or year. Identify the fire hydrants
us	ed to determine the fire flow:
SE	EE ATTACHED RESULTS
[0	r: 1. attach a map or diagram with the same information, or 2. attach a map/diagram with flow modeling information.]
	If new lines are needed (or if existing lines must be looped) to supply the required fire flows, or if more information is
	eded to state the available minimum g.p.m. @ 20 p.s.i. residual pressure, please list what the applicant/developer must do
or	obtain:
D.	int Name and Title of Water Supplier Employee completing this Form:
L	the Name and Title of water Supplier Employee completing this Form.
DI	JSTY KRIEGSHAUSER MAINTENANCE II/HYDRANT MAINTENANCE Date: 2/17/2021
С	ontact phone/E-mail of Water Supplier: 970-256-2882 hydrant@utewater.org
**	************************
	te: Based on the facts and circumstances, the Fire Chief may require the applicant/developer to engage an engineer 5 to
	rify/certify that the proposed water system improvements, as reflected in the approved utility plans submitted in support the application/development, will provide the minimum fire flows to all structures in this project. If required, a State
	Colorado Licensed Professional Engineer shall submit a complete stamped-seal report to the Grand Junction Fire
	partment. All necessary support documentation shall be included.

<sup>&</sup>lt;sup>1</sup> There are three drinking water suppliers: Ute Water 970-242-7491, Clifton Water 970-434-7328 and City of Grand Junction water 970-244-1572.

Address: City - 250 N 5th St, Grand Junction, CO 81501; County - PO Box 20000, Grand Junction, CO 81502

<sup>3</sup> International Fire Code, 2012 Edition

<sup>4</sup> http://www.gjcity.org/residents/public-safety/fire-department/fire-prevention-and-contractors/

<sup>5</sup> City Code defines engineer as one who is licensed as a P.E. by the state of Colorado.

# Fire Flow Hydrant Master With Graph

Report Generated by: IMS by Hurco Technologies Inc.

Test Hydrant: 3396

District: Sub-Division:

Cross Street: Location:

Address: 365

Page: 1



Company Name: Ute Water Conservancy District

Address: 2190 H 1/4 Rd
City: Grand Junction
State: Colorado
Zip: 81505

Work Order: 997

29 RD

Operator: DUSTY K, JOE I, JESSE K.

Test Date:8/7/20	10:30 am
NFPA Clas	ssification:
Blue	AA

Test did not reach recommended drop of 25% per NFPA 291

4216.14

Latitude: 715000.925 Longitude: 4326111.053 Elevation: 4599.17

State X / Y: \_\_\_\_\_

Pumpers: Nozzles: Open Dir:

Manuf: MuellerInstalled: 01/01/2005Vandal Proof:Model: Centurion 5 1/4Main Size: 0.00Bury Depth: 0.00

 Flow Hydrant
 Flow Device
 Diameter
 GPM
 Gallon Used

 1:
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 2.5" Hose Monster
 2.50
 1118.83
 5594.15

 2:
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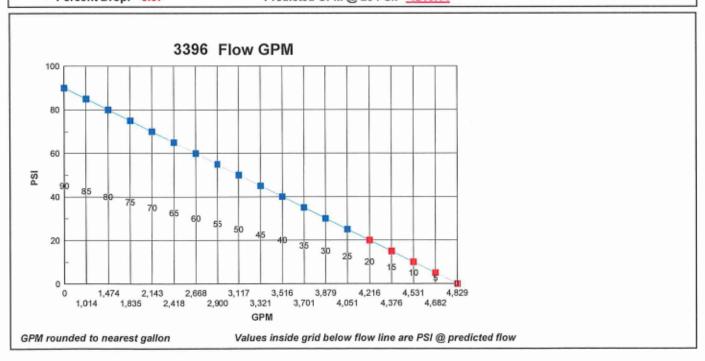
Pitot / Nozzle PSI: 44.00
Static PSI: 90.00
Residual PSI: 84.00
Percent Drop: 6.67 Pr

Total Gallons Used: 5594.15

Max GPM during test: 1,118.83

Elapsed Time Min:Sec: 5 : 0

Predicted GPM @ 20 PSI: 4216.14



#### Chapter 28.68 STANDARD FORMS

## POST-CONSTRUCTION STORMWATER CONTROL OPERATIONS AND MAINTENANCE AGREEMENT

THIS	ΛG	REE	MENT	' is made	and ent	ered i	nto this	16th	day of	February .
20:21		by	and	between	M&	D Ent	erprises	LLC		
(hereii	nafte	er the	"Lanc	lowner").	and the	City	of Gran	d Junction,	Colorado	(hereinafter
"Muni										

#### RECITALS

The Landowner is the owner of the following real property:

hereinafter referred to as "the Property."

The Landowner is developing the Property;

The Municipality and the Landowner, on behalf of all successors and assigns, agree that the health, safety, and welfare of the residents of the Municipality and the protection and maintenance of water quality require that on-site stormwater Best Management Practices be constructed and maintained on the Property.

For the purposes of this agreement, the following definitions shall apply:

BMP - "Best Management Practice;" activities, facilities, designs, measures or procedures used to manage stormwater impacts from land development, to protect and maintain water quality and groundwater recharge and to otherwise meet the purposes of the Municipal Stormwater Pollution Prevention Ordinance, including but not limited to infiltration trenches, seepage pits, filter strips, bioretention, wet ponds, permeable paving, grassed swales, forested buffers, sand filters and detention basins.

As part of the approval of the development of the property, the Municipality will review and approve a Final Drainage Report which will implement Post-Construction Storm Water Management BMPs required by the Municipal Stormwater Pollution Prevention Ordinance.

The purpose of this Agreement is to insure the adequate maintenance, operation and repair of the storm water management facilities, in perpetuity, by the owners of the property served by these facilities.

The Landowner desires to subject and place upon the Property the covenants and servitudes set forth herein which shall run with the Property and be binding on all parties having any right, title, or interests in the Property or any part thereof, their heirs, personal representatives, successors and assigns, and shall inure to the benefit of each owner thereof.

NOW, THEREFORE, in consideration of the foregoing promises, the mutual covenants contained herein and the following terms and conditions, the parties hereto agree as follows:

- The BMPs shall be constructed by the Landowner in accordance with the plans and specifications shown and described in the Final Drainage Report.
- 2. The Landowner shall operate and maintain in perpetuity the BMP(s) as shown and described on the Final Drainage Report in good working order as reasonably determined by the Municipality and in accordance with the specific maintenance requirements noted on the Final Drainage Report. The Landowner shall cause the BMP(s) to be inspected annually by a Qualified Erosion Control Specialist to ensure good working order and shall send a report from said inspection to the Municipality annually, on or before December 31st of each year.
- 3. The Landowner hereby grants a perpetual easement to the Municipality, its authorized agents and employees, to enter upon the Property, at reasonable times and upon presentation of proper identification, to inspect the BMP(s) whenever it deems necessary. The Municipality shall make reasonable efforts to notify the Landowner prior to entering the Property.
- 4. In the event the Landowner fails to operate and maintain the BMP(s) as shown and described on the Final Drainage Report in good working order as reasonably determined by the Municipality, the Municipality or its representatives may enter upon the Property and take action to maintain and/or repair and/or reconstruct said BMP(s). It is expressly understood and agreed that the Municipality is under no obligation to maintain or repair said facilities, and in no event shall this Agreement be construed to impose any such obligation on the Municipality.
- 5. In the event the Municipality, pursuant to this Agreement, performs work of any nature, or expends any funds in performance of said work for labor, use of equipment, supplies, materials, and the like, the Landowner shall reimburse the Municipality for all reasonable expenses (direct and indirect) incurred within 10 days of receipt of invoice from the Municipality.
- 6. The intent and purpose of this Agreement is to ensure the proper maintenance of the onsite BMP(s) by the Landowner. This Agreement shall not be deemed to create or effect any additional liability of any party for damage alleged to result from or be caused by stormwater runoff.
- 7. The Municipality may conduct routine inspections of the BMP(s) to verify their continued adequate functioning. The Municipality may also inspect the BMP(s) in the event of reported or suspected failure to function adequately. These inspection activities shall not absolve the Landowner of its obligation to maintain the BMPs in perpetuity or to provide the Municipality with the required Landowner inspection report.
- This Agreement shall not be interpreted or deemed to limit the authority, privilege
  or right of the Municipality pursuant to any duly enacted ordinance of the
  Municipality, charter provision, statute or any duly granted federal or state water
  discharge permit.

Notifications and reports made under this Agreement shall be provided to the City at:

Mr. Chris Spears Street Systems Supervisor 250 N 5<sup>th</sup> Street-Grand Junction, CO 81501

and to the Landowner at:

This Agreement shall be recorded in the Mesa County, Colorado land records and shall, once recorded, constitute a covenant running with the Property and shall be an equitable servitude binding on present and subsequent owners of the Property in whole or in part, and their administrators, executors, assigns, heirs and successors in interest, in perpetuity.

ATTEST:	
WITNESS the following signatures and	seals:
(SEAL)	For the City of Grand Junction:
(SEAL)	For the Landowner:
ATTEST:	
(Cit	y of Grand Junction)
foregoing Agreement bearing date of the common date	terms in my said County and State.  HIS 2200 2002  TERESA K. HALL
NOTARY PUBLIC	(SEAL) NOTARY PUBLIC STATE OF COLORADO
(g) City of Grand Junction Stormwater	Construction Refigible #20164026677 Construction Refigible நடுவர்று Report.

# Final Drainage Report For 2855 C ½ Road Site Plan

2855 C ½ Road Grand Junction, Colorado

M&D Enterprises LLC PO Box 2072 Grand Junction, CO 81502

Prepared By:
Austin Civil Group, Inc.
123 North 7th Street, Ste 300
Grand Junction, Colorado 81501
(970) 242-7540

ACG JOB#: 1161.0003

Date: May 2, 2022

I hereby certify this Final Drainage Report (plan) for the gravel pit located at 2855 C ½ Road in Grand Junction, Colorado was prepared by me (or under my direct supervision) in accordance with the provisions of the Stormwater Management Manual for the owners thereof, I understand the City of Grand Junction does not and will not assume liability for drainage facilities designed by others.

Mark Austin Registered Professional Engineer State of Colorado No. 29778



M&D Enterprises LLC, hereby certify the drainage facilities for the gravel pit shall be constructed according to the design presented in this report. I understand that the City of Grand Junction does not and will not assume liability for the drainage facilities designed and/or certified by my engineer. I understand the City of Grand Junction reviews drainage plans but cannot on behalf myself guarantee that final drainage design will me and/or their successor and/or assigns of the future liability for improper design. I understand that approval of the Plan does not imply approval of my engineer's drainage design.

I further understand that as the owner of the property, I am responsible for the maintenance of the stormwater drainage pipes, inlets, detention and water quality facilities. These facilities will require routine maintenance in order to minimize damage that may result from flooding or ponding water.

2-16-2 Date

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III.	DRAINAGE ANALYSIS AND DESIGN CRITERIA	,
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#### I. INTRODUCTION

## A. Background

- .......... 1. Identify report preparer and purpose.
- This report is prepared by Austin Civil Group, Inc. and the purpose of the report is for a gravel pit at 2855 C ½ Road in Grand Junction, Colorado.
- ......2. Identify date of letter with previous City/County comments.

The City of Grand Junction provided comments on this site in 2019 as part of a general meeting and in October 2021 during Round 1 of the Conditional Use Permit review.

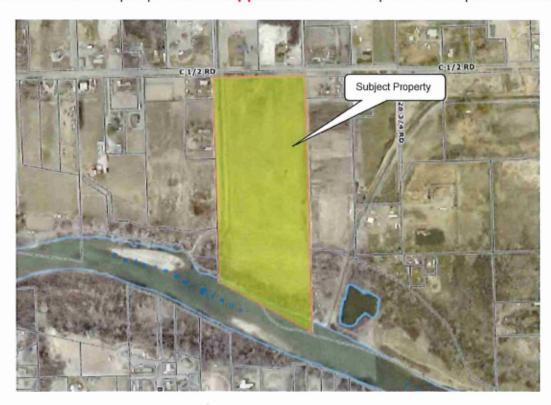
## B. Project Location

- ....... 1. Identify Township, Range, and Section.
- Lots 9 & 10 Bevier Subdivision, Section 19, Township 1 S, Range 1 East, Ute Meridian.
- ......2. Identify adjacent street.

The subject property is located south of C 1/2 Road, between Las Colonias and 29 Road.

......... 3. Reference to General Location Map.

A general location map is provided in Appendix A and is depicted in the photo below:



2855 C ½ Road Site Plan Final Drainage Report ACG#: 1161.0003

#### C. Property Description

.......2. Describe existing ground cover, vegetation, soils, topography and slopes. The 27.8-acre project site is primarily used for agricultural purposes and consists of a large field covered with typical pasture grasses.

The site slopes to the south towards the Colorado river that runs along the south end of the property. A copy of the 2016 City of Grand Junction 2-ft GIS contour map of the site is depicted below:



Project Site Location with 2016 GIS 2-ft Contour Data

Soils on the property have been classified by the US Department of Agriculture Soil Conservation Service and consist of Massadona silty clay loam (Ba), Green River silty clay

2855 C ½ Road Site Plan Final Drainage Report ACG#: 1161.0003

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loam (Be), Green River clay loam (Gm), and Bebeevar and Green River soils (Ro). These soils have slow infiltration rates and are classified as hydrologic soil type 'C' soil.

Appendix B of this report provides more information from the NRCS report.

.........3. Describe existing drainage facilities, such as channels, detention areas, or structures.

"No Name Drain", a Grand Valley Drainage District facility, runs north to south along the western edge of the property before emptying into the Colorado River.

- .........4. Describe existing irrigation facilities, such as ditches, head-gates, or diversions. Grand Valley Irrigation Company does not currently deliver irrigation water to the property, but it could be available from Headgate MC045 with purchase.
- ......5. Identify proposed types of land use and encumbrances.

  The project will develop the property into a gravel pit. There are no known encumbrances that will impact the design of the facility.

## D. Previous Investigations

........... 1. Identify drainage master plans that include the project area, including floodplain studies.

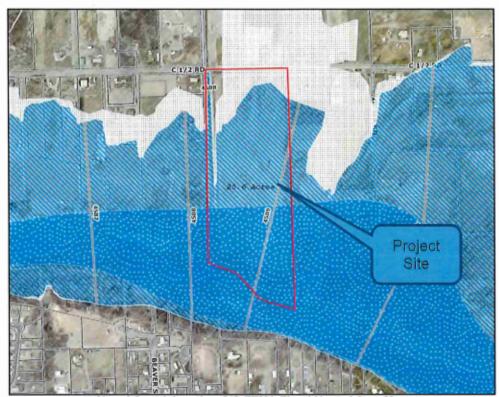
The subject property is not located in an area that is part of a drainage master plan. It is part of Sub Basin #113, a 233-acre area between Indian Wash (west) and Lewis Wash (east).



2855 C ½ Road Site Plan Final Drainage Report ACG#: 1161.0003

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The subject property is located within a FEMA designated flood hazard areas according to the Flood Insurance Rate Map Panel 08077C0817F with an effective date of 7/6/2010. Approximately the southern third of the lot is in the floodway, with about a third being in the 1% AEP zone, and the rest in the 0.2% AEP zone. An excerpt from the FIRM map is included in **Appendix C** of this report.



City of Grand Junction GIS FEMA Flood Hazard Area Map

Identify drainage reports for adjacent development.

ACG is not aware of any drainage reports for adjacent development.

#### II. DRAINAGE SYSTEM DESCRIPTION

#### A. Existing Drainage Conditions

.......... 1. Describe existing topography and provide map with contours extending a minimum of 100 feet beyond property limits.

The site slopes gently to the south at a grade of 0.5-1.0%. Runoff generally flows south and discharges into an irrigation tailwater ditch that runs approximately east-to-west along the southern end of the property and discharges into the Colorado river via the southwest corner.

2855 C ½ Road Site Plan Final Drainage Report ACG#: 1161.0003

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Listed below is a copy of the City of Grand Junction GIS database map depicting the project location and 2-ft contour data that extends beyond the property limits:



Project Site Location with 2016 GIS 2-ft Contour Data

.......... 2. Identify major drainage way or outfall drainage way and describe map showing location of proposed development within the drainage ways.

There are no major drainage ways or outfalls on the subject property. The majority of runoff from the property surface discharges into a small tailwater ditch along the south side of the property, and then into the Colorado river. No Name Drain primarily services properties to the north, passes through the property, and drains into the Colorado River through the southwest corner.

.......... 3. Identify pre-developed drainage patterns and describe map showing predeveloped sub-basins and concentrated discharge locations. Provide calculations of predeveloped peak flows entering and leaving the site.

The project site has two historic drainage basin areas. A drawing identifying the predevelopment (historic) drainage basins and conditions for the project site is provided in **Appendix D** of this report and described below.

2855 C 1/2 Road Site Plan Final Drainage Report ACG#: 1161.0003

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Basin H-1, approximately 22.26-acres in size, consists of the entire site except for the open ditch of No Name Drain along the western side of the property. Drainage from this basin area flows south and then off the property near the southwest corner.

Basin H-2, 1.96-acres in size, consists of the portion of the site surrounding No Name Drain. Drainage from this basin exits the southwest corner of the property and flows into the Colorado River.

The Rational Method as defined in Section 700 of the SWMM manual was used to calculate maximum rate of runoff for the historic site conditions for the 10-yr and 100-yr storm events based on hydrologic soil group "C". Historic runoff calculations are summarized below and detailed information is provided in **Appendix F**.

TABLE 1: Historic / Pre-Development Runoff Calculations

	Basin	Size (ac)	Storm Event	"C" Value	Runoff (cfs)
	H-1	22.26	10-Yr	0.26	4.0
ı	П-1	22.26	100-Yr	0.51	16.4
	H-2	1.06	10-Yr	0.26	0.3
	П-2	1.96	100-Yr	0.51	1.6

## B. Master Drainage Plan

.......... 1. Describe location of the project relative to a previously prepared master drainage plan, including drainage plans prepared for adjacent development.

ACG is not aware of any master drainage plans in the vicinity.

## C. Offsite Tributary Area

......... 1. Identify all offsite drainage basins that are tributary to the project.

The subject property historically receives water almost exclusively from rainfall. No Name Drain, an open ditch, flows south along the west edge of the property and serves as stormwater conveyance to the Colorado river for properties to the north. It exits the property via the western boundary, approximately 300-ft north of the Colorado River. There is no significant offsite runoff from other properties to the east due to a minor berm along the eastern fenceline. An east-west roadside ditch along C ½ Road prevents runoff from entering the northern property boundary. That runoff is conveyed west along C ½ Road.

......2. Identify assumptions regarding existing and future land use and effects of offsite detention on peak flows.

Surrounding land parcels have been developed for residential, agricultural, or wildlife habitat. Provided their land use and zoning remains the same, there is no reason to believe there would be any increases in peak flows from adjacent land improvements. No

2855 C ½ Road Site Plan Final Drainage Report ACG#: 1161.0003

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Name Drain, the primary conveyance structure in the vicinity, is approximately 5-ft deep and 10-ft wide and is unlikely to be overwhelmed without significant future development of the surrounding area which exceeds the scope of this report.

## D. Proposed Drainage System Description

The only offsite stormwater conveyed through the site is contained within No Name Drain from entry to exit. The proposed drainage system will keep No Name Drain unchanged. Additionally, runoff from C ½ Road is collected in the roadside ditch along the north of the property and conveyed west in the same manner as historically.

......2. Identify sub-basins and describe, in general terms, how onsite stormwater is collected and conveyed through the site for each location where stormwater is discharged from the site.

Developed drainage conditions will collect the majority of onsite stormwater into the reclamation pond where it will recharge into the groundwater table. Approximately 3-acres along the southern portion of the site will sheet flow south to the Colorado River.

Subbasin D-1.1, approximately 9.34-acres in size, consists of the land area in the sand and gravel mining area. This excludes D-2 (No Name Drain) and the area south of the proposed Riverfront Trail. Drainage from this basin area sheet flows into the reclamation pond where it will recharge into the groundwater table.

Subbasin D-1.2, 11.50-acres in size, consists of the surface area of the reclamation pond created by sand and gravel extraction. The pond will contain exposed groundwater and any additional contributing stormwater will recharge into the groundwater table.

Subbasin D-1.3, 1.43-acres in size, consists of the portion of the site south of the proposed Riverfront trail. Drainage from this basin sheet flows south into the Colorado River.

Basin D-2, 1.96-acres in size, consists of the portion of the site surrounding No Name Drain. Drainage from this basin exits the southwest corner of the property and flows directly into the Colorado River. Historic runoff calculations are summarized below and detailed information is provided in **Appendix F**.

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TABLE 2: Developed Runoff Calculations

Basin	Size (ac)	Storm Event	"C" Value	Runoff (cfs)
D-1.1	9.34	10-Yr	0.28	N/A
D-1.1	9.34	100-Yr	0.52	
D 4.0 44.50		10-Yr	0.92	N/A
D-1.2	11.50	100-Yr	0.96	
D-1.3 1.43		10-Yr	0.32	0.8
D-1.3	1.43	100-Yr	0.54	2.7
D-2	1.96	10-Yr	0.26	0.3
D-2	1.90	100-Yr	0.51	1.6

<sup>.......\* 3.</sup> Describe detention volumes, release rates and pool elevations.

No detention or retention is proposed for this project as no improvements, other than the large pond and reclaimed undeveloped land adjacent to the pond, are proposed.

.......\* 4. Identify the difference in elevation between pond invert and the groundwater table.

No site improvements other than the reclamation pond and Riverfront trail are proposed for this project. The reclamation pond will be approximately 11.5-acres and 10-15 feet deep which will expose groundwater. The existing groundwater table averages 3-6 feet below ground surface. Appropriate State of Colorado permits will be applied for pending CUP approval.

..........5. Describe how stormwater is discharged from the site, including both concentrated and dispersed discharges.

The majority of onsite stormwater—approximately 19.3-acres—will flow into the reclamation pond. The pond's water level will fluctuate based on the level of the adjacent river. Basin D-2 (No Name Drain) discharges near the southwest corner. Subbasin D-1.3 sheet flows south to the Colorado River.

.......6. Describe stormwater quality facilities.

The majority of drainage is directed into the pond with no discharge, and therefore the reclamation pond is not a water quality facility. Subbasin D-1.3 and Basin D-2 will drain in the same manner as historically.

\* 7. Describe maintenance access aspects of design.

Maintenance access will be through the north property boundary in the same location as historical.

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* 8. Describe easements and tracts for drainage purposes, including limitation on use.
The project is not proposing any drainage easements or tracts for the reclamation area.
E. Drainage Facility Maintenance
* 1. Identify responsible parties for maintenance of each drainage and water quality facility.
The property owner, currently M $\&$ D Enterprises, will be responsible for maintenance of drainage facilities.
* 2. Identify general maintenance activities and schedules.
General maintenance activities include regularly scheduled clearing of brush and sediment from roadside ditches and other drainage ways. No Name Drain will continue to be maintained by GVDD.
III. DRAINAGE ANALYSIS AND DESIGN CRITERIA
A. Regulations
1. Identify that analysis and design was prepared in accordance with the provisions of the Manual.
Analysis and design was prepared in accordance with the Stormwater Management Manual.
<ol><li>Identify other regulations or criteria which have been used to prepare analysis and design.</li></ol>
None.
B. Development Criteria
There are no design constraints on this project.
2. Identify drainage constraints placed on the project, such as from major street alignments, utilities, existing structures, and other developments.
There are no design constraints on this project.

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Analysis and design was prepared in accordance with the SWMM, which requires analysis for the 10-yr and 100-yr storm events using the Rational Method.	C. Hydrologic Criteria (If Manual was followed without deviation, then a statement to that effect is all that is required. Otherwise provide the following information where the criteria used deviates from the Manual.)
rainfall intensity or design storm.  Peak runoff for the project was determined in accordance with the 2007 SWMM using the rational method for the 10-yr and 100-yr storm events.	
rational method for the 10-yr and 100-yr storm events.	
The Manual was followed which calls for analysis for the 10-yr and 100-yr storm events.	, ,
No other deviations occurred.  D. Hydraulic Criteria (If Manual was followed without deviation, then a statement to that effect is all that is required. Otherwise provide the following information where the criteria used deviates from the Manual.)  Hydraulic analysis and design was prepared in accordance with the Stormwater Management Manual. * 1. Identify type(s) of streets within and adjacent to development and source for allowable street capacity.  No street improvements are proposed by this project.	The Manual was followed which calls for analysis for the 10-yr and 100-yr storm events.
D. Hydraulic Criteria (If Manual was followed without deviation, then a statement to that effect is all that is required. Otherwise provide the following information where the criteria used deviates from the Manual.)  Hydraulic analysis and design was prepared in accordance with the Stormwater Management Manual.  ** 1. Identify type(s) of streets within and adjacent to development and source for allowable street capacity.  No street improvements are proposed by this project.  ** 2. Identify which type(s) of storm inlets were analyzed or designed and source for allowable capacity.  There are no storm inlets are proposed by this project.  ** 3. Identify which type of storm sewers which were analyzed or designed and Manning's n-values used.	3. Identify how and why any other deviations from the Manual occurred.
effect is all that is required. Otherwise provide the following information where the criteria used deviates from the Manual.)  Hydraulic analysis and design was prepared in accordance with the Stormwater Management Manual.	No other deviations occurred.
Management Manual. * 1. Identify type(s) of streets within and adjacent to development and source for allowable street capacity.  No street improvements are proposed by this project. * 2. Identify which type(s) of storm inlets were analyzed or designed and source for allowable capacity.  There are no storm inlets are proposed by this project. * 3. Identify which type of storm sewers which were analyzed or designed and Manning's n-values used.	effect is all that is required. Otherwise provide the following information where the criteria
Allowable street capacity.  No street improvements are proposed by this project. * 2. Identify which type(s) of storm inlets were analyzed or designed and source for allowable capacity.  There are no storm inlets are proposed by this project. * 3. Identify which type of storm sewers which were analyzed or designed and Manning's n-values used.	
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for allowable capacity.  There are no storm inlets are proposed by this project. * 3. Identify which type of storm sewers which were analyzed or designed and Manning's n-values used.	No street improvements are proposed by this project.
* 3. Identify which type of storm sewers which were analyzed or designed and Manning's n-values used.	
Manning's n-values used.	There are no storm inlets are proposed by this project.
No storm sewers are proposed by this project.	
	No storm sewers are proposed by this project.

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* 4. Identify which method was used to determine detention volume requirements and how allowable release rates were determined.
The project does not require detention volume requirements as no improvements are proposed.
* 5. Identify how the capacity of open channels and culverts were determined.
The 18-inch culvert to be replaced beneath the gravel pit entry road (along the roadside ditch) was calculated using the Rational Method. It assumed a Manning's Coefficient of 0.012 with a 0.5% slope to provide a discharge of 8.05 cfs.
* 6. Identify any special analysis or design requirements not contained with the Manual.  None
7. Identify how and why any other deviations from the Manual occurred. None.
E. Variance from Criteria    1. Identify any provisions of the Manual for which a variance is requested.  None.
2. Identify pre-existing conditions which cause the variance request. None.
*IV. POST CONSTRUCTION STORMWATER MANAGEMENT. See Manual Section 1600 for requirements. The Final Drainage Plan and the Construction SWMP (see SWMM Section 1500) meets the requirements of the MS4s Permit. In general, this section identifies permanent BMP practices to control the discharge of pollutants after construction is complete.
*A. Stormwater Quality Control Measures
* 1. Describe the post-construction BMPs to control discharge of pollutants from the project site.
Because there is no discharge from the reclamation pond, it functions as a BMP to filter sediment.
* 2. If compensating detention is provided, discuss practices to address water quality from area not tributary to detention area.  None.

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* 3. If underground detention is proposed, discuss how water quality facilities will be provided on the surface.
No underground detention is proposed.
4. If proprietary BMPs are proposed, provide the justification and sizing requirements (see SWMM Section 1603.3).
No proprietary BMP's are proposed at this time.
*B. Calculations
1. Provide methods and calculations for WQCV, sediment storage, and water quality outlet structure.  None.
V. CONCLUSIONS
A. Compliance with Manual Compliance with Manual and other approved documents, such as drainage plans and floodplain studies.
This report has been prepared in accordance with the Manual.
B. Design Effectiveness Effectiveness of drainage design to control impacts of storm runoff.
The facility has been designed to comply with SWMM requirements for mitigation of stormwater runoff.
C. Areas in Flood Hazard Zone
Meet requirements of Floodplain Regulations: Mesa County Land Development Code, Section 7.13; City of Grand Junction Zoning and Development Code, Section 7.1.
The project site is located within a FEMA designated hazard area and appears to meet all necessary requirements.
D. Variances from Manual Applicant shall identify any requested variances and provide basis for approving variance. If no variances are requested, applicant shall state that none are requested.
None.

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#### VII. REFERENCES

.......... Provide a reference list of all criteria, master plans, drainage reports, and technical information used.

- Stormwater Management Manual, (SWMM), Mesa County and the City of Grand Junction, December 31, 2007.
- Flood Map Service Center, FEMA Floodplain Mapping Information at http://msc.fema.gov/portal
- 3. <u>United States Department of Agriculture Natural Resources Conservation</u>
  Service, http://websoilsurvey.nrcs.usda.gov/app/.
- Final Drainage Report 12<sup>th</sup> and Patterson Center Subdivision, Galloway and Company, Inc., December 24, 2014.
- Grand Valley Stormwater Management Master Plan, (GV-SWMMP), Williams Engineering, May 2000.
- Urban Drainage and Flood Control Technical Memorandum on Water Quality
   Orifice Sizing Equation for EURV and QQCV Detention Basins, dated July 13, 2010,
   by Ken MacKenzie

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## APPENDIX A

# **Location Map**



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# Traffic Impact Analysis

# C<sup>1</sup>/<sub>2</sub> Road Pit

Material Extraction

2855 C½ Rd.

Grand Junction, CO



February 19, 2021



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#### **Table of Contents**

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6	Auxiliary Lane Evaluation on C½ Rd. at Project Access	9
7	Recommendations	a



#### 1 Introduction

This report provides the assumptions and results of the traffic analysis (Study) for the proposed C½ Rd. material extraction pit (Project). Due to low Project trip generation, the scope of this study is relatively small and is similar to what Mesa County would define as a Level 2 study, The Project is located at 2855 C½ Rd. in Grand Junction, Colorado. The traffic study methodology was reviewed and accepted by the city of Grand Junction (Rick Dorris) and Mesa County (Sean Yates).

The City would annex the property from County to City and the Grand Junction development review process would be used. The County owns most of C½ Road. But there was an annexation for the south part C½ Rd ROW and it includes the south edge of pavement. Access approval will be part of the City review process.

The following sections describe the project location, characteristics of the existing access, traffic volumes, and auxiliary turn lane warrants.

#### 2 Project Location & Site Access Characteristics

The Project is located between C½ Rd. and the Colorado River, near 28¾ Rd., as shown on Figure 1.

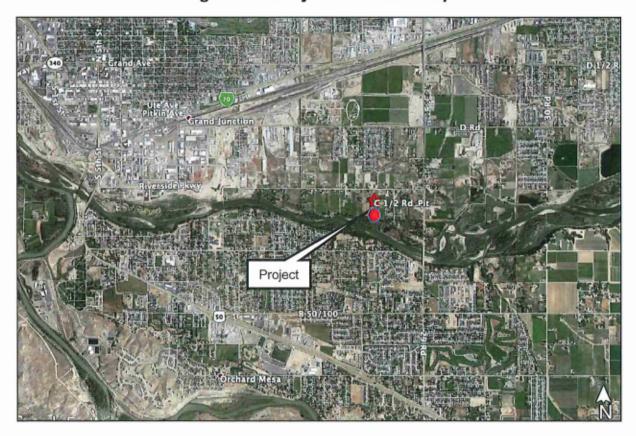


Figure 1 – Project Location Map



The following image shows the site boundary and some setback constraints. The preliminary site plan concept was not available.

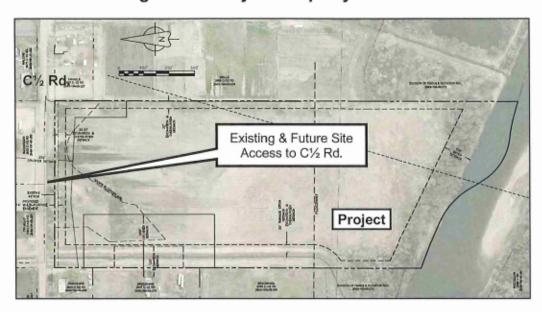


Figure 2 - Project Property Limits

#### Adjacent Access points

Figure 3 shows the existing driveways and side roads on C½ Rd. within 1000-ft from the Project access.

- (1) 855-ft west, private driveway on south side
- (2) 795-ft west, private driveway on north side
- (3) 645-ft west, private driveway on north side
- (4) 350-ft west, private driveway on south side
- (5) 328-ft west, private driveway on north side
- (6) 268-ft west, private driveway on north side
- (7) 183-ft east, private driveway on north side
- (8) 295-ft east, private driveway on north side
- (9) 487-ft east, private driveway on south side
- (10) 545-ft east, private driveway on north side
- (11) 590-ft east, private driveway on south side
- (12) 638-ft east, private driveway on south side
- (13) 680-ft east, private driveway on north side
- (14) 772-ft east, private driveway on south side
- (15) 926-ft east, private driveway on south side
- (16) 998-ft east, 283/4 Rd. on south side







#### **Access Sight Distance**

The following table shows the required and observed sight distance for the Project Site access to C½ Rd. This is a two-lane road with posted speed of 35 mph, but this Study assumed a travel speed of 40 mph. Figures 4 and 5 show the existing sight distance. This is a straight and flat road, so sight distance is adequate in both directions.

Table 1 – Sight Distance Evaluation on C1/2 Rd.

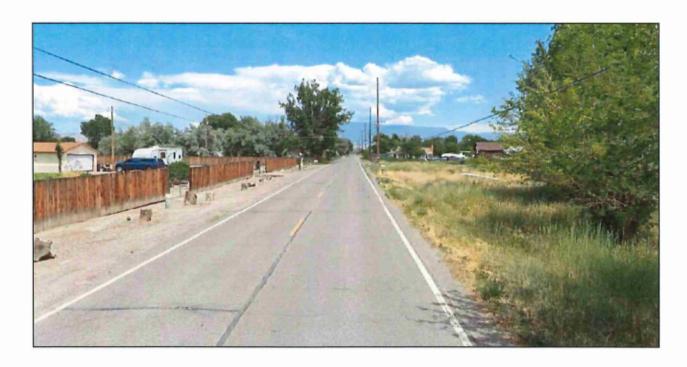
	nated Sight Dis ed on field measu		Required Sight Distance @ 40 mph	Existing Exceeds Required?
CI/ Dd Assess	To West	Over 1,320-ft	Stopping = 325-ft.	YÉS
C½ Rd. Access	To East	Over 1,320-ft	Entering = 680-ft (multi-unit truck)	YES



Figure 4 - Sight View to West



Figure 5 – Sight View to East





#### 3 Project Trip Generation

The ITE Trip Generation Manual does not contain data for material extraction pits so the trip generation was based on data provided by The Vice President of MA Concrete Construction, Inc. provided detailed operational and trip related information in the form of a questionnaire (see attachments). This information included these facts:

- Operating Period = 10 years (2021 2031)
- Operating Time = 8 hours per day, 5 days per week
- Production Amount = 45,000 tons per year

The following table summarizes the Project trip characteristics. The calculation includes consideration of large vehicles by converting large vehicle trips to "passenger car equivalents" (PCE), as shown in the State Highway Access Code. Therefore, the total trips shown are more than the number of actual vehicles.

Table 2 – Project Trip Generation Calculation (PCE)

tion		Purpose	Workers	Other Site Visits	Material I	fauling		
Trip		Vehicle Type	Passenger vehicle	Small Trucks ( < 20 ft)	Medium Trucks (20-40 ft)	Large Trucks ( > 40 ft)		al Peak ur Trips
Ē	Passenger Car Eq	uivalent Factor	1	1	2	3		
	Actual Number of Vehicles Per Day		3	2	5	5		
	PCE Number of Vehicles per day		3	2	10	15		
-	Work Hours per day		n/a	8	8	8		
	PCE Number of Vehicles per hour	3	0	1	2			
2	AM Book Boded Trips	PCE in	3	1	1	2	7	AM in
O.	AM Peak Period Trips	PCE out	0	1	1	2	4	AM out
	DM Book Boded Trice	PCE in	0	1	1	2	4	PM in
	PM Peak Period Trips	PCE out	3	1	1	2	7	PM out

Peak Hour Trip Generation Calculation Table

### 4 Project Trip Distribution & Assignment

When considering the larger context of the community, the developer estimated the following general trip distribution values into and out of the Study Area.

- 10% North
- 5% South
- 10% East
- 75% West

The intersection of  $C\frac{1}{2}$  Rd. & 29 Rd. has limited capacity to accommodate outbound (eastbound to northbound) left turning movements of large vehicles. In addition, Mesa County data indicates that there were 10 crashes in 4 years at this intersection. Therefore, the City and County will likely restrict outbound left turning truck traffic at this intersection with a truck route plan that uses  $C\frac{1}{2}$  Rd & 28 Rd. to/from Riverside Pkwy for most outbound traffic.

Project Trip distributions at the Project access would be as follows when considering the general distributions and the truck route plan. See the attachments for a diagram of distributions on the road network.



#### Outbound at Access

- 95% to the west on C½ Rd., which included outbound trips associated with north, east, and west.
- 5% to the east on C½ Rd., which included outbound trips associated with south.

#### Inbound at Access

- 75% from the west on C½ Rd., which includes inbound trips associated with west.
- 25% from the east on C½ Rd., which includes inbound trips associated with north, south, and east.

Project trip assignments at the Project access would be as follows when considering the general distributions and the truck route plan. Due to the low volume of Project trips, it was necessary to round up the values for each movement to have a logical representation in whole numbers.

Table 3 – Project Peak Hour Trip Assignment at Site Access (vph-pce)

Peak	Northb	ound	Westbo	ound	Eastbound		
Hours	Left	Right	Left	Thru	Thru	Right	
AM	4	1	2	0	0	5	
PM	7	1	1	0	0	3	

#### 5 Existing & Future Traffic Volumes on C½ Rd

#### Study Area & Traffic Counts

The Study Area will include the intersection of C½ Rd & Project Access. Peak hour traffic counts were taken at two existing adjacent intersections on Tuesday January 26, 2021, including C½ Road & 28 Rd and C½ Road & 29 Rd. Please see the attached count summaries.

The two-way, peak-hour traffic volumes on C½ Rd. were as follows. This Study will use the higher volumes for through traffic at the Project Access.

- Just west of 29 Rd.: AM = 65 vph, PM = 56 vph
- Just east of 28 Rd.: AM = 44 vph, PM = 50 vph

The existing one-way traffic volumes at the Project Access were:

- AM: eastbound = 23 vph & westbound = 42 vph
- PM: eastbound = 37 vph & westbound = 19 vph

#### Future Background Traffic Volumes

The Study will use the Regional Travel Demand Model (RTPO) data as a basis for the following growth rate assumption for C½ Rd. (see attachments for more detail). The Regional Model does not include C½ Rd., so the growth rate used in this Study was



the average of other adjacent roads that are included in the model. The analysis year was 2031, due to the 10-year service life of the Project.

Table 4 – C1/2 Rd. Traffic Growth Factor Calculation

#### Road Segment Growth Factor Calculation Summary

		ΑI	T	Period Growth	Ave Annual	10 year Growth
Road	Segment	2018	2045	Factor	Growth Rate (%)	factor (2021-2031)
C 1/2 Rd.*	28 Rd. to 29 Rd.	n/a	n/a	1.49	1.47	1.360
Riverside Pkwy.	West of 28 Rd.	15,165	24,265	1.60	1.76	1.443
Riverside Pkwy.	East of 28 Rd.	12,970	21,356	1.65	1.86	1.473
Riverside Pkwy.	West of 29 Rd.	12,251	17,637	1.44	1.36	1.328
Riverside Pkwy.	East of 29 Rd.	13,784	21,077	1.53	1.59	1.393
29 Rd.	North & South of C 1/2 Rd	18,210	23,336	1.28	0.92	1.212
29 Rd.	North of Riverside Pkwy	19,644	27,818	1.42	1.30	1.312

Period = 27

Inverse period = 0.037037037

Ave of 6 = 1.49

1.360

\*Use average of the other 6 available model data points

The following table show the future through traffic volumes on C½ Rd when the growth factor was applied to existing traffic volumes.

Table 5 – C1/2 Rd. Traffic Volumes in 2031

Direction	AM Peak	PM Peak
Eastbound	32	51
Westbound	58	26
Total (2-way)	90	77

#### Future Total Traffic Volumes on (Weekday Background + Project)

Future total traffic is the sum of project trips and background traffic, as shown in the following table.

Table 6 – 2040 Peak-Hour Total Traffic Volumes (vph) At Site Access Point

		North	bound	West	bound	Eastbound		
Peak Hour	Condition	Left	Right	Left	Thru	Thru	Right	
	Future Background Traffic	0	0	0	58	32	0	
AM	Project Traffic	4	1	2	0	0	5	
	Total	4	1	2	58	32	5	
	Future Background Traffic	0	0	0	26	51	0	
PM	Project Traffic	7	1	1	0	0	3	
	Total	7	1	1	26	51	3	



#### 6 Auxiliary Lane Evaluation on C½ Rd. at Project Access

C½ Rd. has a posted speed limit of 35 mph, but this Study will assume a travel speed of 40 mph. This section provides recommendations for turn lanes based on the requirements of Grand Junction's TEDS. There are not any requirements for acceleration lanes, but there are criteria to determine the need for deceleration lanes. DDHV is defined as the one-way traffic volume in through lane that conflicts with the turning movement.

A right turn deceleration lane is not warranted if DDHV is less than 400 vph. In this case, the highest eastbound through volume would be 51 vph. This is well below the threshold and a right turn deceleration lane is not warranted. This is also supported by the low right turn volume of 5 vph-pce.

A left turn deceleration lane is not warranted if DDHV is less than 600 vph. In this case, the highest eastbound through volume would be 58 vph. This is well below the threshold and a left turn deceleration lane is not warranted. This is also supported by the low left turn volume of 2 vph-pce.

#### 7 Recommendations

The Project Access should be designed to accommodate large vehicles that would enter and exit the site. Turn Lanes are not warranted on C½ Rd for the following reasons:

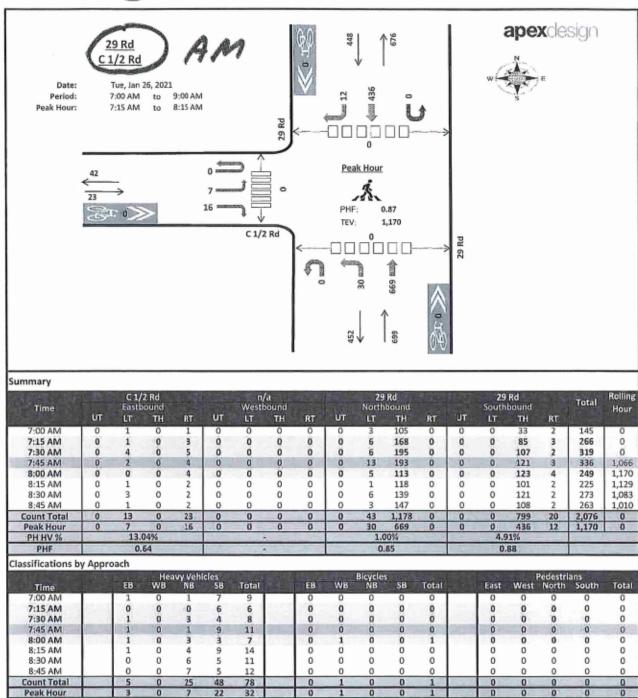
- No conflicts with existing adjacent access points on C½ Rd.,
- Nearly unlimited intersection sight distance,
- Very low Project trip generation,
- · Very low through traffic volumes on C1/2 Rd.,
- Relatively low speed limit on C½ Rd.,
- Background and Project traffic volumes well below turn lane volume warrants.



# **Attachments**



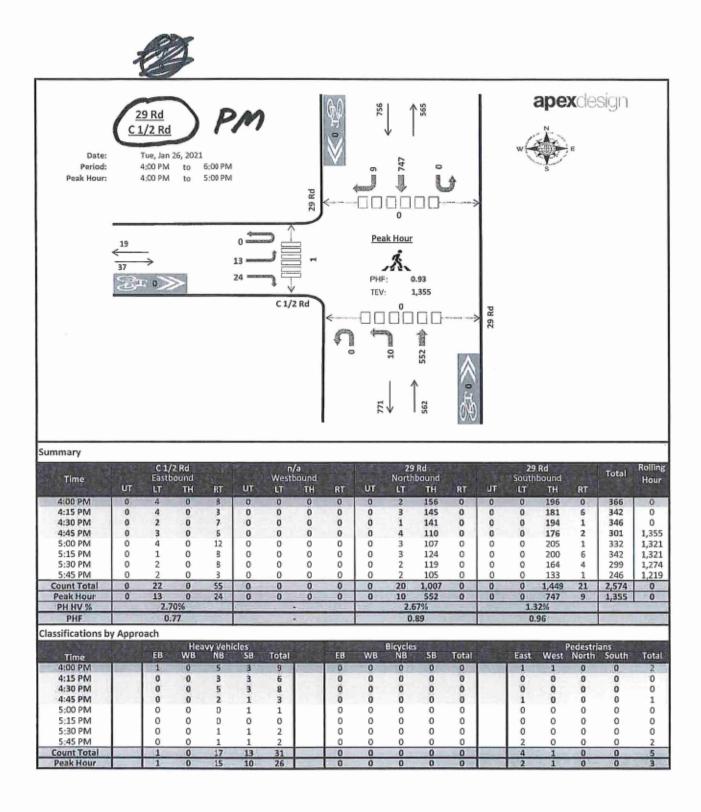




Existing Traffic Counts

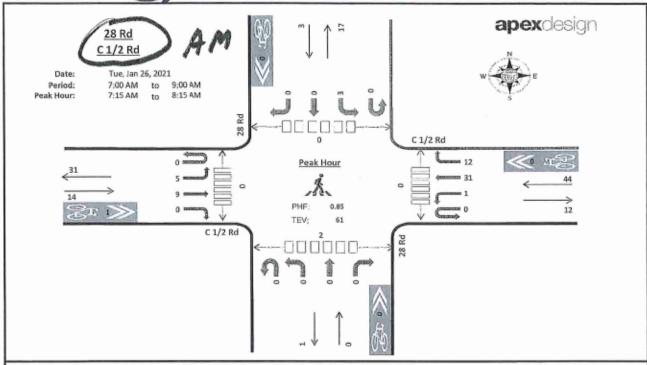
Nathan Warren: (720) 660-4048 nathan.warren@apexdesignpc.com

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Nathan Warren: (720) 660-4048 nathan.warren@apexdesignpc.com





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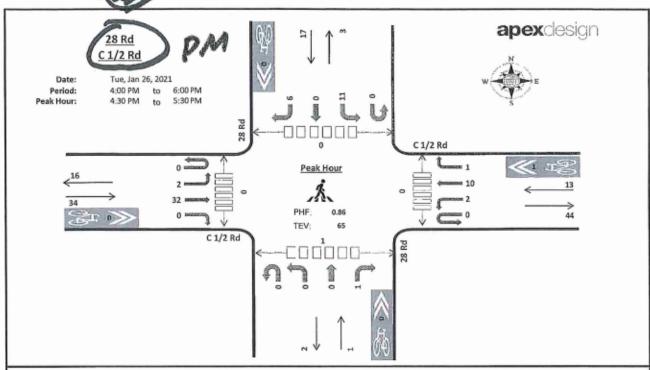
		C 1/	2 Rd			C 1/	2 Rd			28	Rd		227	28	Rd		Total	Rolling
Time	Eastbound			Westbound			Northbound				South	bound		iotai	Hour			
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT.	LT	TH	RT		
7;00 AM	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	3	0
7:15 AM	0	1	0	0	0	0	5	6	0	0	.0	0	0	1	0	0	13	0
7:30 AM	0	2	4	0	0	0	10	1	0	0	0	0	0	1	0	0	18	0
7:45 AM	0	0	2	0	0	0	10	3	0	0	0	0	0	0	0	0	15	49
8:00 AM	0	2	3	0	0	1	6	2	0	0	0	0	0	1	0	0	15	61
8;15 AM	0	2	2	0	0	0	2	1	0	0	0	0	0	1	0	0	8	56
8:30 AM	0	0	2	0	0	1	4	0	0	0	1	0	0	0	0	0	8	46
8:45 AM	0	1	3	0	0	0	6	2	0	0	0	0	0	2	0	2	16	47
Count Total	0	9	17	0	0	2	44	15	0	0	1	0	0	6	0	2	96	0
Peak Hour	0	5	9	0	0	1	31	12	0	0	0	0	0	3	0	0	61	0
PH HV %		7.1	4%		-	2.7	7%				-			0,0	10%	430		
PHF		0.	58			0.	85							0.	75	THE PER	1520	

C	assi	ficat	ions	by	Approach
---	------	-------	------	----	----------

		Hea	vy Vehi	icles					Bicycles						Pedest	rians	
Time	EB	WB	NB	SB	Total		EB	WB	NB	SB	Total		East	West	North	South	Total
7;00 AM	1	0	0	0	1	$\neg$	0	0	0	0	0		0	0	0	0	0
7:15 AM	0	1	0	0	1		0	0	0	0	0		0	0	0	0	0
7:30 AM	0	0	0	0	0	100	0	0	0	0	0		0	0	0	2	2
7:45 AM	0	0	0	0	0		1	0	0	0	1		0	0	0	0	0
8:00 AM	1	0	0	0	1		0	0	0	0	0		0	0	0.	0	0
8:15 AM	0	1	0	1	2		0	0	0	0	0		0	0	2	0	2
8:30 AM	0	2	1	0	2		0	0	0	0	0		0	0	0	0	0
8;45 AM	0	1	0	1	2		0	0	0	0	0		0	0	0	0	0
Count Total	2	4	1	2	9	PRA I	1	0	0	0	1		0	0	2	2	4
Peak Hour	1	1	0	0	2		1	0	0	0	1	THE	0	0	0	2	2

Nathan Warren: (720) 660-4048 nathan.warren@apexdesignpc.com





511	m	m	-	EV/
Su			G.	ŧΨ

0.05	5		2 Rd				2 Rd				Rd		To 3	28			Total	Rolling
Time		Eastb	ound			West	bound			North	bound			South	bound			Hour
	UT	LT	TH	RT	ur	LT	TH	RT	UT	LT	TH	RT	LT	LT	TH	RT		
4:00 PM	0	0	8	2	0	0	2	1	0	0	0	0	0	2	0	1	16	0
4:15 PM	0	1	3	0	0	0	1	1	0	0	0	0	0	0	0	1	7	0
4:30 PM	0	1	8	0	0	0	1	0	0	0	0	0	0	3	0	3	16	. 0
4:45 PM	0	0	9	0	0	1	2	1	0	0	0	1	.0	4	- 0	1	19	58
5:00 PM	0	0	8	0	0	0	3	0	0	0	0	0	0	3	0	1	.15	57
5:15 PM	0	1	7	0	0	1	4	0	0	.0	0	0	0	1	.0	1	15	65
5:30 PM	0	1	7	0	0	0	2	1	0	0	0	0	0	4	1	0	16	65
5:45 PM	0	0	1	0	0	0	1	0	0	0	0	0	0	2	0	0	4	50
Count Total	0	4	51	2	0	2	16	4	0	0	0	1	.0	19	1	8	108	0
Peak Hour	0	2	32	0	0	2	10	1	0	0	0	1	0	11	0	6	65	0
PH HV %		0.0	10%			0.0	10%			0.0	10%		TETTO:	0.0	0%	Trail 1	40.00	
PHF		0.	94			0.	65			0.	25	14.0	77.70	0.	71			

Classificat	ions b	эу А	pproach
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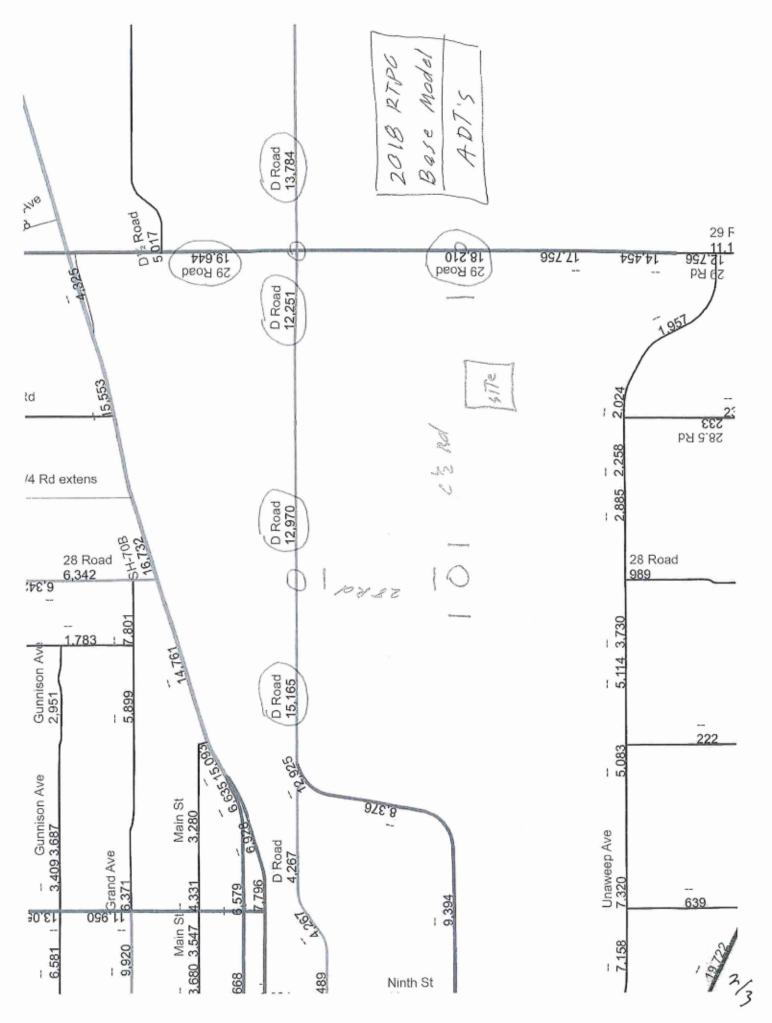
			Hea	vy Vehi	cles				- 1	Bicycles					Pedest	rians	
Time		EB	WB	NB	SB	Total		EB	WB	NB	58	Total	East	West	North	South	Total
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Peak Hour	1000	0	0	0	0	0		0	1	0	0	1	0	0	0	1	1

Nathan Warren: (720) 660-4048 nathan.warren@apexdesignpc.com

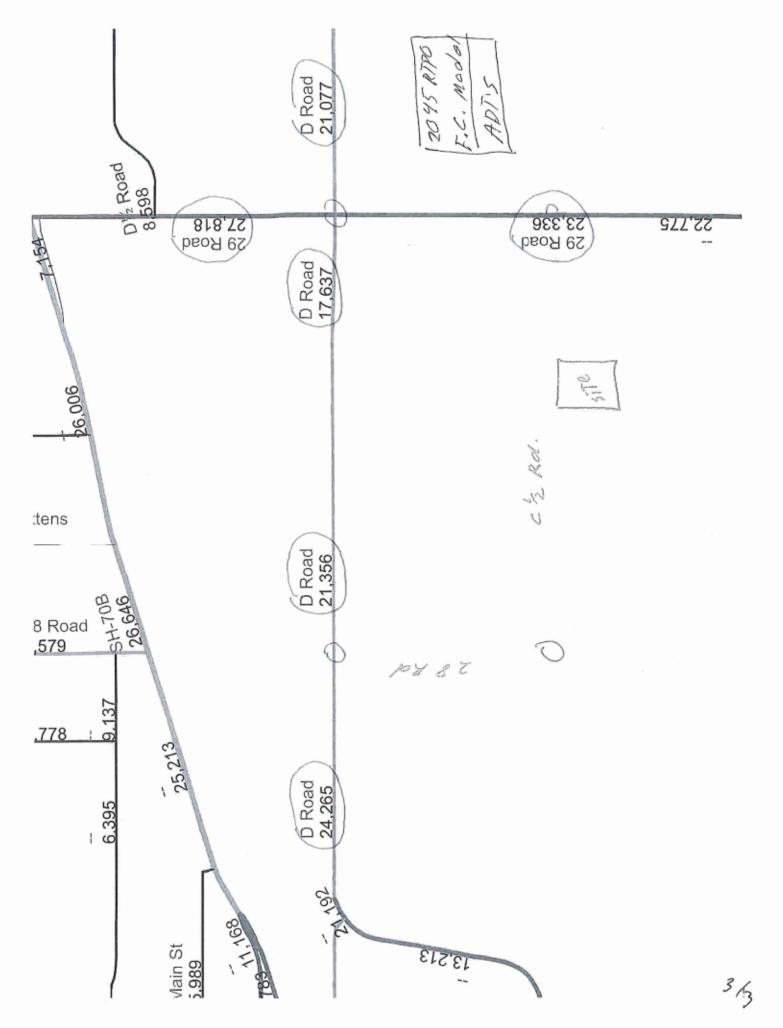
Road Segment Growth Factor Calculation Summary

		ADT	T	Period Growth	Ave Annual	10 year Growth
Road	Segment	2018	2045	Factor	Growth Rate (%)	factor (2021-2031)
C 1/2 Rd.*	West of 28 Rd.	n/a	n/a	1.49	1.47	1.360
C 1/2 Rd.*	East of 28 Rd.	n/a	n/a	1.49	1.47	1.360
C 1/2 Rd.*	West of 29 Rd.	n/a	n/a	1.49	1.47	1.360
28 Rd.*	South of Riverside Pkwy	n/a	n/a	1.49	1.47	1.360
28 Rd.*	North of C 1/2 Rd.	n/a	n/a	1.49	1.47	1.360
Riverside Pkwy.	West of 28 Rd.	15,165	24,265	1.60	1.76	1.443
Riverside Pkwy.	East of 28 Rd.	12,970	21,356	1.65	1.86	1.473
Riverside Pkwy.	West of 29 Rd.	12,251	17,637	1.44	1.36	1.328
Riverside Pkwy.	East of 29 Rd.	13,784	21,077	1.53	1.59	1.393
29 Rd.	North & South of C 1/2 Rd	18,210	23,336	1.28	0.92	1.212
29 Rd.	North of Riverside Pkwy	19,644	27,818	1.42	1.30	1.312
Period = 27	27		Ave of 6 =	1.49	1.47	1.360

Inverse period = 0.037037037 \*Use average of the other 6 available model data points



Packet Page 129



Packet Page 130

# Gravel Pit & Mining Production Questionnaire

Please provide as much information as possible and attach appropriate documents.
Project Name: C1/2 Road Pit
Project Location/Address: 2855 C 1/2 Rd
Company Name: M.A. Convete Constaction, Tre.
Person Completing this Form: -Name: Andy Azcaraga
-Title: Vice President
-Phone Number: 970 - 243 - 3221
-Date: /-Z-21
Overall Production Schedule
How many different production phases will occur before pit closes?
2. What are the years and production amounts?
Phase Range of Years Production Amount (Tons per Year)
1 thru_1045,000
2thru
3thru
Please complete one of the following pages of detailed

# Information from Similar Sites

Please provide any information or data from similar sites that could be used to support the information on these data sheets.

information for each Phase

# Detailed Information - Phase 1

Production Years: thru	0_		
Limiting Factor for annual production (permit, etc): (please attach appropriate document if available)	None		
Does the Production Rate vary over the course of the year:	No		
If so, provide the following information for three possible production periods	If not, put your an column	swers in the average	
		Production Periods	
Manual and all	Low	Average	High
Months of the year for each period:	thru	thru	thru
Daily Trip Generation  Number of on-site workers per day:  On-site worker arrival time (s):  On-site worker departure time (s):		3 7:30 5:00	
Number of other site visits per day (Maintenance, deliveries, fueling, customers, supervisors ,etc)		2	
Number of large dump trucks per day greater than 40-ft long)	***************************************	5	
Number of medium dump trucks per day (between 20-ft & 40-ft long)		5	
Number of small trucks per day (less han 20-ft long)	No. of the Control of		
lumber of Work days per week		5	
lumber of Work hours per day	White comments to the same of	8	
rip Distribution			
6 of trips to/from North		10	
6 of trips to/from South 6 of trips to/from East		5	
6 of trips to/from East 6 of trips to/from West		10	
P- will froot	=100%	=100%	=100%

Subject:

Re: C 1/2 Rd pit traffic study

Date:

Friday, February 5, 2021 at 10:08:21 AM Mountain Standard Time

From:

Sean Yeates

To:

Skip Hudson

CC:

Rick Dorris, Mark Austin, Scott Mai

Attachments: 29 Rd & C.5 Rd City Limits.pdf

Crash History C'2 Rd = 29 Rd.

Skip,

It looks like this intersection is fully within the city (see attached).

There aren't any discernible crash patterns attributable to any intersection deficiency.

Sean

On Thu, Feb 4, 2021 at 11:20 AM Sean Yeates <sean.yeates@mesacounty.us> wrote:

I agree that analysis commensurate with the anticipated impacts is appropriate.

Based on the crash data, there were at least 10 crashes in 4 years at the intersection of 29 Rd & C-1/2 Rd.

We will definitely want to continue to keep this intersection on the radar of city/county budget makers.

Sean

On Thu, Feb 4, 2021, 11:04 AM Skip Hudson <skip@skiphudson.com> wrote:

Sean - please read the email chain below and let me know your thoughts. Thanks.

Respectfully,

Skip Hudson, PE

Turnkey Consulting LLC / Cardinal Farms Group LLC / Skip Hudson LLC / 970-314-4888

From: Rick Dorris <rickdo@gicity.org>

Date: Thursday, February 4, 2021 at 8:00 AM To: Skip Hudson < skip@skiphudson.com > Cc: Mark Austin < marka@austincivilgroup.com >

Subject: RE: C 1/2 Rd pit traffic study

Page 1 of 4

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75%.	15.44	Praje	ect Try	o Distributio	(1)

Packet Page 134



Consultants in Natural Resources and the Environment

## Wetland Delineation Report 2855 C ½ Road Mesa County, Colorado

Prepared for-

Austin Civil Group, Inc. 123 North 7th Street, Suite 300 Grand Junction, Colorado 81501 (970) 242-7540

Prepared by-

ERO Resources Corporation 1842 Clarkson Street Denver, Colorado 80218 (303) 830-1188 ERO Project #20-166

September 2, 2022

#### Executive Summary

Austin Civil Group, Inc. retained ERO Resources Corporation (ERO) to provide a wetland delineation for the 2855 C ½ Road Project in Mesa County, Colorado. Austin Civil Group, Inc. proposes to develop the parcel near the intersection of 29 Road and C ½ Road. ERO conducted a wetland delineation to facilitate compliance with the Clean Water Act (CWA).

The CWA protects the chemical, physical, and biological quality of waters of the U.S. (WOTUS). The U.S. Army Corps of Engineers' (Corps) Regulatory Program administers and enforces Section 404 of the CWA. Under Section 404, a Corps permit is required for the discharge of dredged or fill material into wetlands and other WOTUS (streams, ponds, and other waterbodies). On June 22, 2020, the Environmental Protection Agency (EPA) and Corps' Navigable Waters Protection Rule (NWPR) to define "waters of the United States" became effective in 49 states and in all U.S. territories (EPA 2020). A preliminary injunction was granted for Colorado. On March 2, 2021, the United States Court of Appeals for the 10th Circuit vacated the stay on the NWPR in Colorado, thereby ruling the NWPR effective in Colorado. After April 23, 2021, jurisdiction of wetlands and other potential WOTUS in Colorado was to be determined using the NWPR. However, on August 30, 2021, the Arizona District Court remanded and vacated the NWPR. In response, the EPA and Corps have halted implementation of the NWPR and, until further notice, are interpreting WOTUS consistent with the pre-2015 regulatory regime (also referred to as the "Rapanos" guidelines). As such, the identification of WOTUS in this report follows the Rapanos guidelines. Potential rulings and guidance in the future could change the results of this report regarding the jurisdictional status of waters and wetlands in the project area. While ERO may provide its opinion on the likely jurisdictional status of wetlands and waters, the Corps will make the final determination of jurisdiction based on the current rulings.

Under the Rapanos guidelines, the Corps considers traditionally navigable waters (TNWs), wetlands adjacent to a TNW, and tributaries to TNWs that are relatively permanent waters (RPWs) and their abutting wetlands jurisdictional waters. Other wetlands and waters that are not TNWs or RPWs will require a significant nexus evaluation to determine their jurisdiction. A significant nexus evaluation assesses the flow characteristics and functions of a tributary and its adjacent wetlands to determine if they significantly affect the chemical, physical, or biological integrity of downstream TNWs.

Regarding the No-Name Drain, any maintenance or operation-related actions (such as cleaning, which may involve removing accumulated wetland vegetation) by the Grand Valley Drainage District are authorized by the Corps under NWP 3 or a maintenance exemption.

The aquatic resource findings include:

- · Total survey area of about 25.23 acres;
- 1 wetland (primarily palustrine emergent) totaling 0.020 acre; and
- 1 tributary drain (No Name Drain) 0.259 acres; and
- 1 perennial waterway (Colorado River) totaling 1.090 acres.

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#### Appendices

Appendix A Photo Log

Appendix B USGS Soil Map

Appendix C Routine Wetland Determination Datasheets

Wetland Delineation Report 2855 C ½ Road Mesa County, Colorado

September 2, 2022

#### Introduction

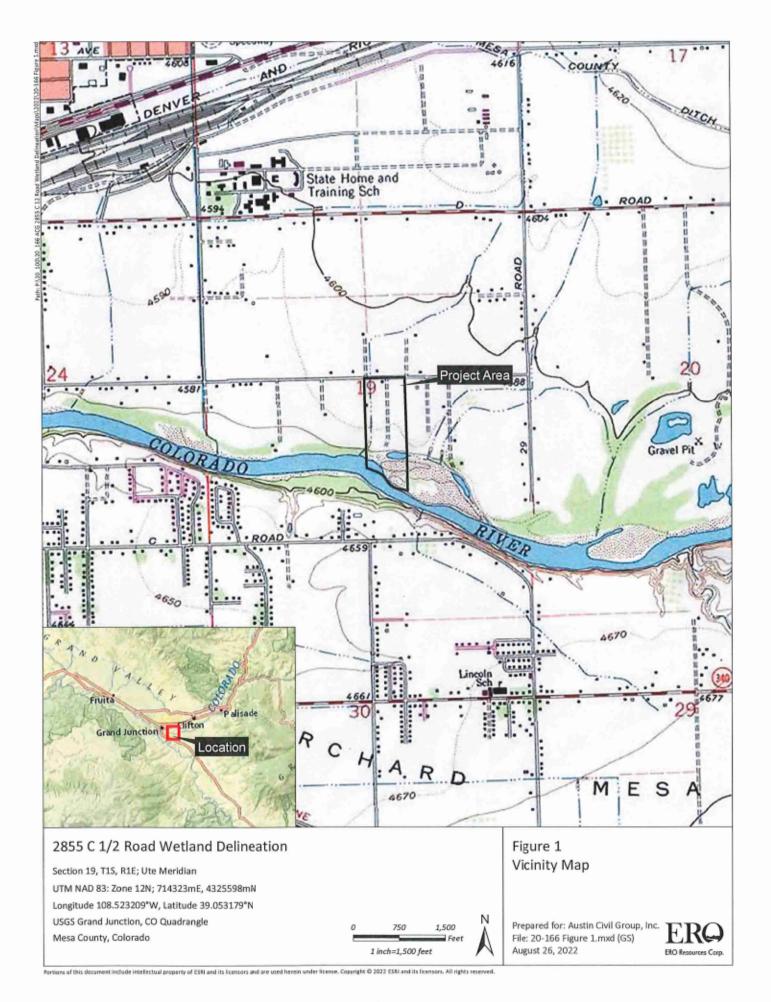
Austin Civil Group Inc. retained ERO Resources Corporation (ERO) to provide a wetland delineation for the 2855 C ½ Road Project in Mesa County, Colorado. Austin Civil Group, Inc. proposes to develop the parcel near the intersection of 29 Road and C ½ Road (project area; Figure 1). There are concerns that the proposed project would result in the placement of dredged or fill material into wetlands and other waters that are subject to U.S. Army Corps of Engineers (Corps) jurisdiction (jurisdictional). ERO assessed the project area for potential isolated wetlands, jurisdictional wetlands, and other waters of the U.S. (WOTUS).

The CWA protects the chemical, physical, and biological quality of waters of the U.S. (WOTUS). The U.S. Army Corps of Engineers' (Corps) Regulatory Program administers and enforces Section 404 of the CWA. Under Section 404, a Corps permit is required for the discharge of dredged or fill material into wetlands and other WOTUS (streams, ponds, and other waterbodies). On June 22, 2020, the Environmental Protection Agency (EPA) and Corps' Navigable Waters Protection Rule (NWPR) to define "waters of the United States" became effective in 49 states and in all U.S. territories (EPA 2020). A preliminary injunction was granted for Colorado. On March 2, 2021, the United States Court of Appeals for the 10th Circuit vacated the stay on the NWPR in Colorado, thereby ruling the NWPR effective in Colorado. After April 23, 2021, jurisdiction of wetlands and other potential WOTUS in Colorado was to be determined using the NWPR. However, on August 30, 2021, the Arizona District Court remanded and vacated the NWPR. In response, the EPA and Corps have halted implementation of the NWPR and, until further notice, are interpreting WOTUS consistent with the pre-2015 regulatory regime (also referred to as the "Rapanos" guidelines). As such, the identification of WOTUS in this report follows the Rapanos guidelines. Potential rulings and guidance in the future could change the results of this report regarding the jurisdictional status of waters and wetlands in the project area. While ERO may provide its opinion on the likely jurisdictional status of wetlands and waters, the Corps will make the final determination of jurisdiction based on the current rulings.

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ERO Project #20-166

1



Any maintenance or operation-related actions (such as cleaning, which may involve removing accumulated wetland vegetation) by the Grand Valley Drainage District are authorized by the Corps under NWP 3 or a maintenance exemption.

#### Location

The project area is in Section 19, Township 1 South, Range 1 East of the Ute Meridian, Grand Junction, CO Quadrangle; Mesa County, Colorado (Figure 1). The UTM coordinates of the approximate center of the project area are UTM NAD 83: Zone 12N; 714323mE, 4325598mN of UTM NAD 83: Zone 12N. The longitude/latitude of the project area is 108.523209°W/39.053179°N. The elevation of the project area is approximately 4,550 feet above sea level. Photos of the project area are in Appendix A.

#### Project Area Description

The project area encompasses about 25.23 acres in the Colorado River Valley in Mesa County, Colorado. The project area is near the intersection of 29 Road and C ½ Road. The project area is characterized by formerly irrigated fields (Photos 1 and 2), a former home site location (Photo 3) and associated outbuildings, disturbed Siberian elm/Russian olive open woodlands, an open drain (No Name Drain; Photo 4), and a narrow wetland fringe along the Colorado River (Photos 5 and 6).

#### Vegetation

The project area's ecological context includes both native and introduced species and is characterized by the following communities.

Formerly irrigated fields and associated agricultural disturbed areas – Occurs throughout most of the project area (Photos 1 through 3). The former home site is at the north-central portion of the project area and is primarily weedy and bare. The structures included a house and two outbuildings. Siberian elm (Ulnus pumila) is the predominant overstory species; and Russian knapweed (Acroptilon repens), chicory (Cichorium intybus), Russian thistle (Salsola), sericea lespedeza (Lespedeza perenne), and white goosefoot (Chenopodium album) are dominant herbaceous species. Additional weeds observed include cheatgrass (Bromus techtorum), bindweed (Convolvulus arvensis), and kochia (Bassia scoparia).

River fringe/wetland areas – Wetland areas and the riparian fringe along the Colorado River are characterized by an overstory of Russian olive (Elaeagnus angustifolia) and cottonwood (Populus deltoides) trees and sprouts of tamarisk (Tamarix ramosissima) (Photo 5 and 6). The wetland areas include herbaceous species such as scouring rush (Equisetum hyemale), American licorice (Glycyrrhiza lepidota), Canadian horseweed (Erigeron canadensis), reed canarygrass (Phalaris arundinacea), and Baltic rush (Juncus balticus).

No Name Drain and access road – No Name Drain and associated access road run along the far west side of the project area (Photo 4). The No Name Drain is approximately 20 feet wide at ground level and

5 feet deep at its deepest. The drain has been recently maintained and is primarily unvegetated. Some weedy species such as kochia, bindweed, and horseweed are present.

#### Soils

Five soil types are mapped by the U.S. Geological Survey (USGS) in the project area (none are characterized by the U.S. Department of Agriculture, Natural Resources Conservation Service (NRCS) as hydric; USGS 2020; Table 1). See Appendix B for a soil map of the project area.

Table 1. Soils mapped in the project area.

Map Unit Symbol	Map Unit Name	Acres in Project Area	Percent in Project Area
999	Water	1.9	7.5
Ва	Massadona silty clay loam, 0 to 2 percent slopes	3.5	13.6
BaS	Massadona silty clay loam, saline surface, 0 to 2 percent slopes	0.3	1.2
Ве	Green River silty clay loam, 0 to 2 percent slopes	6.3	24.2
Gm	Green River clay loam, 0 to 2 percent slopes	7.8	30.2
Ro	Bebeevar and Green River soils, and Riverwash, 0 to 2 percent slopes	6.0	23.3
otals		25.8	100

#### Methods

#### Wetland Delineation

On July 28, 2020, Aleta Powers, an environmental scientist with ERO, surveyed the project area for potential isolated wetlands, jurisdictional wetlands, and other WOTUS (2020 field survey). Prior to the 2020 field survey, ERO reviewed USGS quadrangle topographic maps and aerial photography to identify mapped streams and areas of open water that could indicate wetlands or WOTUS.

ERO conducted the wetland delineation following the methods for routine on-site wetland determinations as described in the 1987 Corps of Engineers Wetlands Delineation Manual (Environmental Laboratory 1987) and used methods in the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0) (Corps 2008) to record data on vegetation, soils, and hydrology on routine determination forms (Appendix C). The Corps defines wetlands as "areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas" (33 Code of Federal Regulations (CFR) 328.2(c)). Wetland boundaries were determined by a visible change in vegetation community, soils, topographic changes, and other visible distinctions between wetlands and uplands.

The wetland indicator status of plant species was identified using the *National Wetland Plant List* (Lichvar et al. 2016), taxonomy was determined using *Flora of Colorado* (Ackerfield 2015), and

nomenclature was determined using the *PLANTS Database* (NRCS 2020). Soil pits were completed to 20 inches or to impenetrable resistance. If present, hydric soils were classified using field observation for hydric soil indicators accepted by the Corps. Where soil data were collected, soil texture was determined and a Munsell soil color chart was used for soil color analysis.

Intermittent, ephemeral, and perennial drainages with characteristics of a defined streambed, streambank, ordinary high water mark (OHWM), and other erosional features also were identified. The OHWM identifies the lateral jurisdictional limits of nonwetland WOTUS. Federal jurisdiction over nonwetland WOTUS extends to the OHWM, defined in 33 CFR 328.3 as "the line on the shore established by fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of the soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas." The Corps defines "stream bed" as "the substrate of the stream channel between the OHWMs. The substrate may be bedrock or inorganic particles that range in size from clay to boulders."

The boundaries of identified wetlands and other characteristics of potential WOTUS were mapped using a Trimble Global Positioning System (GPS) unit. Data were differentially corrected using the CompassCom base station. All differential correction was completed using Trimble Pathfinder Office 5.9 software. GPS data were incorporated using ESRI® ArcGIS Desktop software.

#### Wetland Classification

Delineated wetlands were classified according to the U.S. Fish and Wildlife Service's (Service) Cowardin classification system (Cowardin et al. 1979) combined with a hydrogeomorphic (HGM) approach (Brinson 1993). The HGM approach assesses the chemical, physical, and biological functions of wetlands based on geomorphic setting, water source, and hydrodynamics. HGM classes found in Colorado are mineral soil flats, organic soil flats, riverine, lacustrine fringe, slope, and depressional. The Cowardin classification uses a hierarchical structure of systems, subsystems, and classes to classify both wetlands and deepwater habitats. Wetlands with persistent or nonpersistent vegetation are classified in the Cowardin system as palustrine, which typically includes wetlands referred to as marshes, fens, wet meadows, and sloughs. The palustrine system also includes small, shallow, permanent, or intermittent water bodies such as ponds. Palustrine wetlands may be situated shoreward of lakes and river channels, on river floodplains, in isolated catchments, or on slopes (Cowardin et al. 1979). Under the palustrine system, wetlands are classified as emergent (erect, rooted, herbaceous, and usually perennial hydrophytes that remain standing until at least the next growing season); scrub-shrub (woody vegetation less than 20 feet tall); or forested (woody vegetation 20 feet or taller). In wetlands where more than one wetland type occurs, the wetland type of the largest area is used. For example, an area that is predominantly palustrine emergent (PEM) wetlands but also contains a small amount of palustrine scrub-shrub (PSS) wetlands would be categorized as PEM wetlands.

The Cowardin riverine system includes wetlands and deepwater habitats contained within a channel, with the exception of wetlands dominated by trees, shrubs, and emergent vegetation. The riverine

system usually contains flowing water and is bounded on the landward side by uplands, channel banks, or other wetlands. Within the riverine system, wetlands are divided into the tidal, lower perennial (low gradient and slow water), upper perennial (high gradient and fast water), and intermittent subsystems. Within these subsystems, riverine wetlands are further classified as unconsolidated bottom, aquatic bed, streambed, rocky shore, unconsolidated shore, and emergent wetland (nonpersistent). During the wetland delineation, ERO classified the wetlands as PEM and PSS. Open waters/drainages were classified as lower perennial.

#### Jurisdictional Assessment

To assist the Corps in making a preliminary jurisdictional determination, ERO reviewed the proximity and potential surface water connection of wetlands to known jurisdictional WOTUS using aerial photo interpretation and information from the wetland survey. Wetland 1 directly adjoins the Colorado River and is presumed jurisdictional. Please note that any maintenance or operation-related actions (such as cleaning, which may involve removing accumulated wetland vegetation) by the Grand Valley Drainage District are authorized by the Corps under NWP 3 or a maintenance exemption.

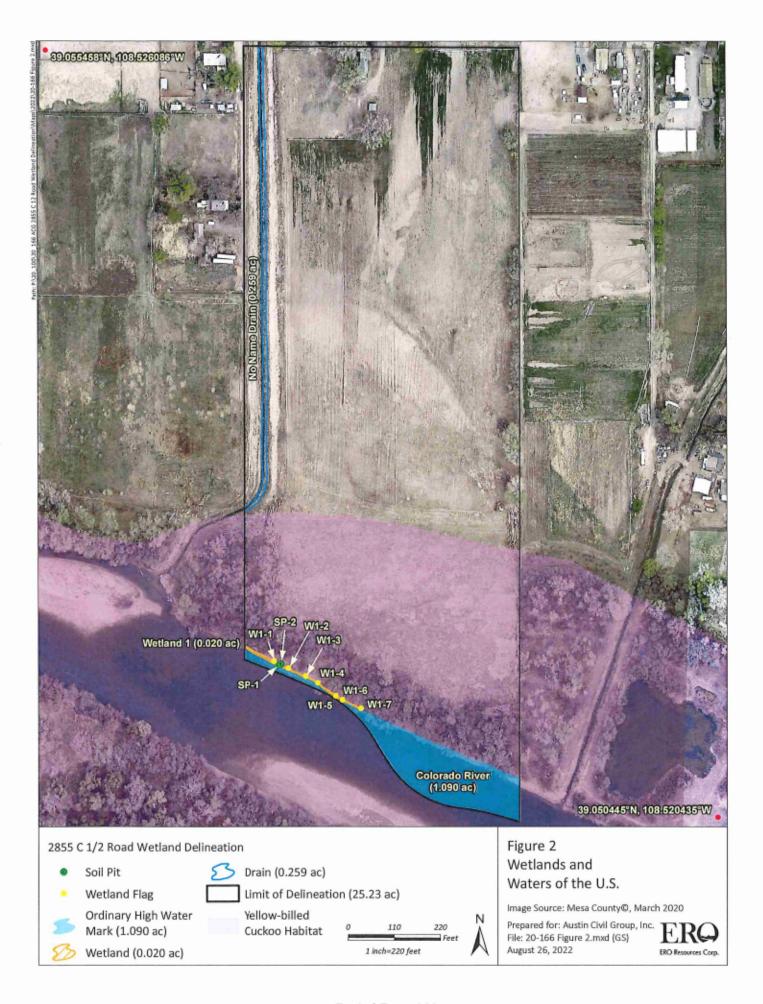
#### **Description of Wetlands and Other Waters**

ERO assessed the project area for wetlands and other WOTUS as described below. Data were collected to document the characteristics of uplands and wetlands, and the transition areas between them. Each potential WOTUS was given a name (Figure 2). Each data point/soil pit was given a label that corresponds to a location shown on Figure 2 and routine wetland determination forms in Appendix C. The following sections contain information on potential surface water connections of wetlands and other WOTUS within the project area. Table 2 provides a summary of the mapped areas, including Cowardin classification and HGM for each feature. Approximately 1.349 acres of open water and 0.020 acre of wetlands occur within the project area (Figure 2).

Table 2. Wetland area, Cowardin classification and HGM.

Water/ Wetland ID	Longitude	Latitude	Feature Size (acre)	Cowardin Classification	нсм
Colorado River			1.090	Riverine- Perennial	Lower perennial
No Name Drain			0.259		
		Other Water Total	1.349		
Wetland 1	108.524140 W	39.051439 N	0.020	PPEM	Riverine
		Wetland Total	0.020		

PPEM = palustrine persistent emergent



# Waters of the U.S.

### No Name Drain

No Name Drain bounds the project area on the west side and is shown on the USGS Grand Junction, CO topographic quadrangle as a perennial drainage (solid blue line). This drain is owned, operated and regularly maintained by the Grand Valley Drainage District. No Name Drain intersects the project area at the northwest corner and continues down the west side of the project area curving off to the west and draining south into the Colorado River.

## Colorado River

The Colorado River is shown on the USGS Grand Junction, CO topographic quadrangle as a perennial drainage. In the project area, the river is about 250 feet wide at the OHWM and has relatively low sinuosity. The river supports a series of riffles and pools, and the depth was estimated to be 1 to 10 feet with a cobble bottom. Indicators of the OHWM observed in the field included evidence of inundation, prevalence of persistent perennial vegetation, and sediment benching.

## Wetlands

# Wetland 1- Colorado River Fringe

Wetland 1 (0.020 acre; Figure 2) is a seasonally flooded riparian fringe along the Colorado River characterized by an overstory of Russian olive ([FAC]), cottonwood, and sprouts of tamarisk. The wetland is located at the southwestern portion of the project area and extends east along the Colorado River. The herbaceous stratum is dominated by scouring rush (Facultative Wetland (FACW)), American licorice (Facultative (FAC)), Canadian horseweed (Facultative Upland (FACU)), reed canarygrass (FACW), and Baltic rush (FACW). One soil pit (SP-1) was collected in Wetland 1, and SP-2 was collected in uplands near the northern edge of Wetland 1. The wetland is situated along the riparian fringe of the Colorado River, allowing it to support wetland vegetation. Areas to the east of Wetland 1 supported sparse upland herbaceous vegetation in the understory (cheatgrass, intermediate wheatgrass), with similar overstory as wetland areas (primarily Russian olive).

SP-1 supported the three indicators needed to constitute a wetland. Dominant vegetation at SP-1 consisted of scouring rush (FACW) as well as American licorice (FAC) and met the requirements for hydrophytic vegetation. Hydric soils were present (S5) and consisted of mostly sand deposited at the river banks. A sandy loam of 10YR4/2 was present from 0 to 2 inches, and a 90 percent 10YR4/2 with 10 percent 10YR4/6 concentrations in the matrix.

SP-2 did not meet the criteria required to constitute a wetland. This soil pit was situated on slopes above Wetland 1. The vegetation is a mix of scouring rush (FACW), American licorice (FAC), Canadian horseweed (FACU), and lower percentages of reed canarygrass (FACW). The soil pit dug at SP-2 revealed 20 inches of sandy loam, of 10YR5/3 matrix from 0 to 20 inches. No hydric soil was present, and no wetland hydrology was present.

ERO used the change in slope as well as a change in dominance from wetland vegetation (scouring rush) to upland vegetation (Canadian horseweed) as indication of the wetland boundary.

# Threatened, Endangered, Proposed, and Candidate Species

ERO reviewed the project area for threatened, endangered, proposed, and candidate (TEPC) species, protected under the Endangered Species Act (ESA) (Service-IPaC 2022). This summary information is provided for general context; impacts to these species will depend on the activity proposed to take place on the parcel, the boundaries of which are not known at this time. It is likely that this information will need to be refined if a Corps permit is needed for the proposed activities.

Eight TEPC species were identified as having the potential to occur in the project area, discussed below and shown in Table 3. There is no mapped habitat for threatened or endangered species in or near the project area. The gray wolf (Canis lupis) is most likely to be present in wilderness and remote areas; the project area is surrounded by residential development and municipal infrastructure. The proposed action does not include a predator management program; therefore, the gray wolf does not need to be analyzed. The monarch butterfly, Danaus plexippus is included on the IPAC as having potential habitat in the project area. This species may occur due to presence of potentially suitable habitat (milkweed); however, monarch butterfly is a candidate for listing on the ESA, and analysis is not required.

The river is also designated critical habitat for the Yellow-billed Cuckoo (*Coccyzus americanus*). Most of the critical habitat mapped in the project area does not have the physical and biological factors needed to be classified as suitable habitat as it is dominated by annual weeds and is in disturbed condition.

The Colorado River and its 100-year floodplain in the project area is designated critical habitat for the Colorado pikeminnow (*Ptychocheilus lucius*) and the razorback sucker (*Xyrauchen texanus*). These species may be affected if activities occur in the floodplain of the river, or in "live water" in the river itself. Other Colorado River TEPC fish species, including the endangered bonytail chub (*Gila elegans*), and humpback chub (*Gila cypha*), are not likely to be impacted by the project as there would be no depletions as a result of the project. There is no suitable habitat in the project area for Colorado hookless cactus (*Sclerocactus glaucus*).

Table 3. TEPC species with potential to occur in the project area.

Common Name	Scientific Name	Status*	Habitat	Habitat Present or Potential to be Affected by Project?
Mammals				
Gray wolf	Canis lupus	E	Wolves can thrive in a wide range of habitats; a highly adaptable species that occurs in temperate forests, mountains, and grasslands	No - this project does not include a predator management program
Insects				
Monarch Butterflly	Danaus plexippus	С	Grasslands with milkweed	Yes- Mixed grasses and milkweed habitat may be present in wet areas along drain or river
Birds				
Yellow-billed Cuckoo	Coccyzus americanus	Т	Deciduous riparian woodlands, with dense cottonwood and willow, and sometimes tamarisk.	Yes; a portion of the mapped proposed critical habitat does not have the physical or biological characteristics necessary for critical habitat classification.
Fish				•
Bonytail chub	Gila elegans	E	Found within the Colorado River and its tributaries.	No; may be affected by depletions to downstream habitat
Colorado pikeminnow (=squawfish)	Ptychocheilus lucius	E	Found within the Colorado River and its tributaries.	Designated critical habitat in Colorado River and 100-year floodplain in project area.
Humpback chub	Gila cypha	E	Found within the Colorado River and its tributaries.	No; may be affected by depletions to downstream habitat
Razorback sucker	Xyrauchen texanus	E	Found within the Colorado River and its tributaries.	Designated critical habitat in Colorado River and 100-year floodplain in project area.
Flowering Plants				
Colorado hookless cactus	Sclerocactus glaucus	Т	On exposed gravel-covered clay hills; in saltbrush or sagebrush flats; or in pinyon-juniper woodlands.	No

Source: Service-IPaC 2022

# Yellow-Billed Cuckoo

The western yellow-billed cuckoo is listed as "threatened" under the ESA. The species breeds in large blocks of riparian habitat; in particular, mature cottonwood woodlands with dense understory foliage. Based on historical accounts, the species was localized and uncommon along Colorado drainages while being locally common in other western areas. The species was probably never common in western Colorado and is now extremely rare. Proposed critical habitat is mapped along the southern end of the

10

project area (Service-IPaC 2020; Figure 2). The riparian area includes mature dense cottonwood habitat about 100 feet wide along the river. Suitability of the habitat is likely low for the species, due to the narrow width. However, consultation with the US Fish and Wildlife Service would be required prior to development within the mapped critical habitat.

# References

- Ackerfield, J. 2015. Flora of Colorado. 1st edition. Botanical Research Institute of Texas. Fort Worth, TX.
- Brinson, M.M. 1993. A hydrogeomorphic classification of wetlands. Technical Report WRP-DE-4, U.S. Army Engineers Waterways Experiment Station, Vicksburg, MS.
- Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deepwater habitats of the United States. Department of the Interior, U.S. Fish and Wildlife Service, Office of Biological Services Program. No. FWS/OBS-79/31.
- Environmental Laboratory. 1987. Corps of Engineers Wetland Delineation Manual, Technical Report 7-87-1, U.S. Army Engineer Waterways Experiment Station. Vicksburg, MS.
- Lichvar, R.W., D.L. Banks, W.N. Kirchner, and N.C. Melvin. 2016. *The National Wetland Plant List*: 2016 wetland ratings. *Phytoneuron* 2016-30:1-17. Published April 28, 2016. ISSN 2153 733X.
- U.S. Army Corps of Engineers (Corps). 2008. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region. U.S. Army Research and Development Center. Vicksburg, MS.
- U.S. Department of Agriculture, Natural Resources Conservation Service (NRCS). 2020. The PLANTS Database. http://plants.usda.gov. National Plant Data Team, Greensboro, NC 27401-4901 USA.
- U.S. Fish and Wildlife Service (USFWS)-Information for Planning and Conservation (IPaC) Database. 2022. https://ecos.fws.gov/ipac/. Last accessed September 2022.
- U.S. Geological Survey (USGS). 2020. Web soil survey for: Mesa County Area, Colorado. https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx.

Appendix A Photo Log

# Appendix A - Photo Log Wetland Delineation Report, 2855 C ½ Road, Mesa County, Colorado July 28, 2020

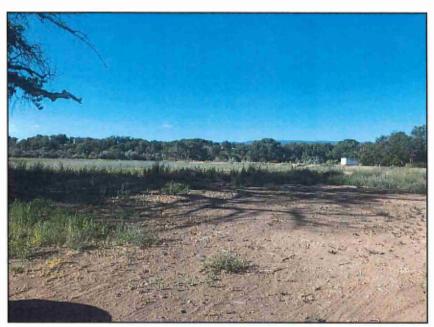


Photo 1. Overview of property from the northern project area, view south.



Photo 2. Overview of project area from the southern end, view north.

# Appendix A - Photo Log Wetland Delineation Report, 2855 C ½ Road, Mesa County, Colorado July 28, 2020 and August 22, 2022

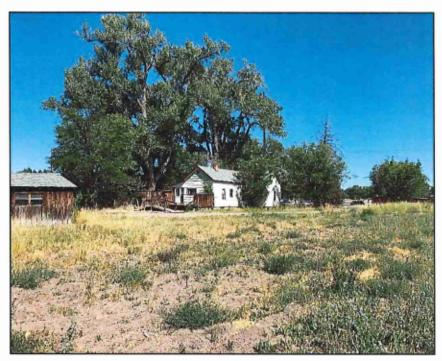


Photo 3. Homesite, view northeast from the northern project area.

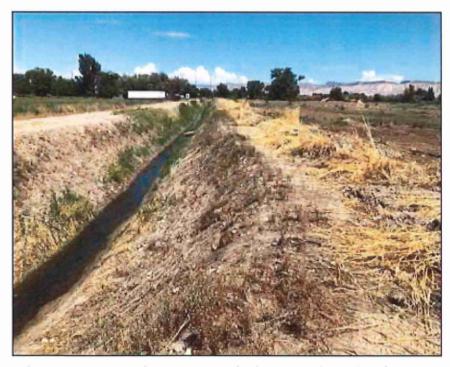


Photo 4. No name drain, view north along west boundary (August 2022)

# Appendix A - Photo Log Wetland Delineation Report, 2855 C ½ Road, Mesa County, Colorado July 28, 2020

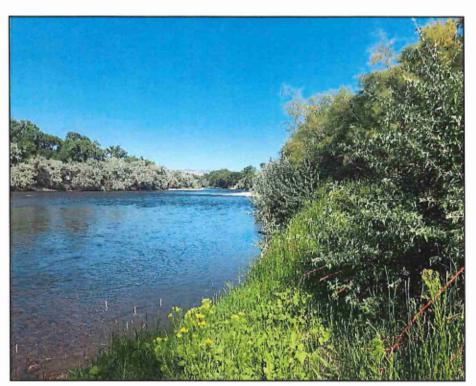
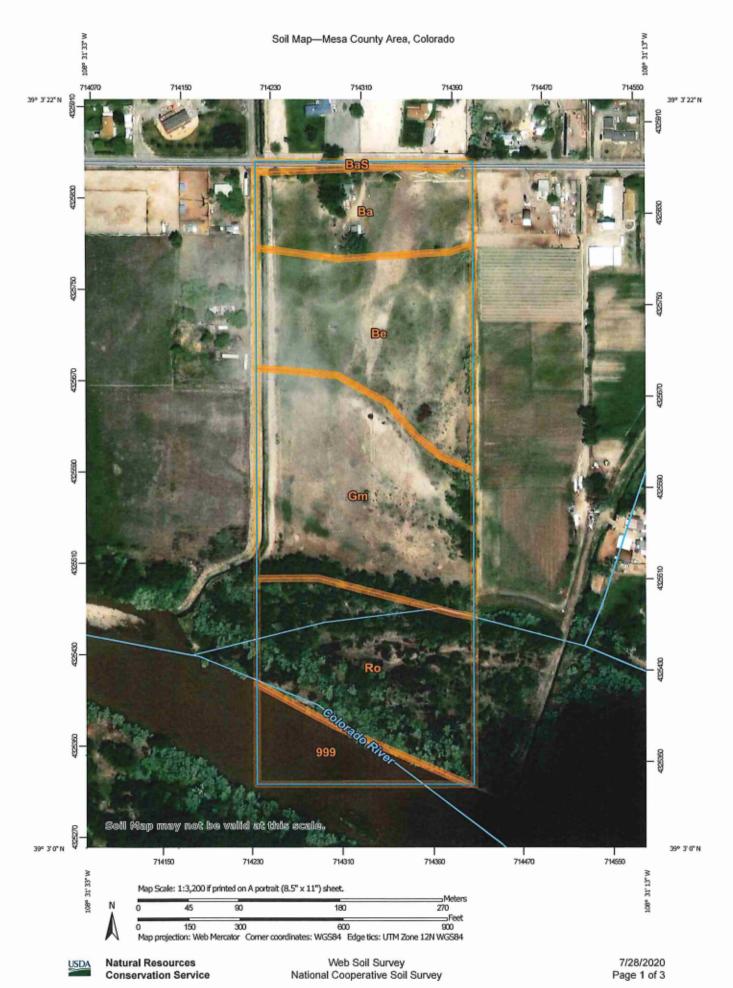


Photo 5. Wetland 1 along the Colorado River at the southern project area, view west.



Photo 6. Wetland 1 along the Colorado River at the southern project area, view southeast.

Appendix B USGS Soil Map



NSDA NSDA

# MAP LEGEND

MAP INFORMATION

Area of I	Area of Interest (AOI)	æ	Spoil Area
	Area of Interest (AOI)	Q	Stony Spot
Soils	Soil Man I Init Dolumons	8	Very Stony Spot
	Soil Map Unit lines	\$	Wet Spot
1	Soil Map Unit Doint	◁	Other
	Soil Map Offit Politis	;	Special Line Featur
Specia	Special Point Features		

contrasting soils that could have been shown at a more detailed misunderstanding of the detail of mapping and accuracy of soil Enlargement of maps beyond the scale of mapping can cause line placement. The maps do not show the small areas of The soil surveys that comprise your AOI were mapped at Waming: Soil Map may not be valid at this scale. scale.

Please rely on the bar scale on each map sheet for map measurements. Source of Map: Natural Resources Conservation Service Coordinate System: Web Mercator (EPSG:3857) Web Soil Survey URL:

Maps from the Web Soil Survey are based on the Web Mercator distance and area. A projection that preserves area, such as the projection, which preserves direction and shape but distorts Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required. This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Mesa County Area, Colorado Version 11, Jun 8, 2020 Survey Area Data:

Date(s) aerial images were photographed: Sep 13, 2010—Aug 1:50,000 or larger.

Soil map units are labeled (as space allows) for map scales

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor

shifting of map unit boundaries may be evident.

# Ires

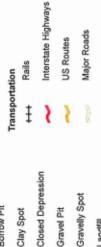
# Streams and Canals Water Features

Borrow Pit

Blowout

9

Clay Spot





Gravelly Spot

Gravel Pit

0









Marsh or swamp

Lava Flow

Landfill

Mine or Quarry

Ø¢.















Slide or Slip

# Web Soil Survey

# **Map Unit Legend**

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
999	Water	1.9	7.5%
Ва	Massadona silty clay loam, 0 to 2 percent slopes	3.5	13.6%
BaS	Massadona silty clay loam, saline surface, 0 to 2 percent slopes	0.3	1.1%
Ве	Green River silty clay loam, 0 to 2 percent slopes	6.3	24.2%
Gm	Green River clay loam, 0 to 2 percent slopes	7.8	30.2%
Ro	Bebeevar and Green River soils, and Riverwash, 0 to 2 percent slopes	6.0	23.3%
Totals for Area of Interest		25.9	100.0%

**Appendix C Routine Wetland Determination Datasheets** 

# WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: 70-166 ACL 7865 CYZ ROAD City/County: Mcsa	County Sampling Date: 7/79/70					
Applicant/Owner: Austin Civil Euroup	State: 6 Sampling Point: SP-1					
Investigator(s): A Powtrs, & Powtrs Section, Township, Range: S19 F15, R1E						
Landform (hillslope, terrace, etc.): Local relief (concave, concave, concav						
Subregion (LRR): D Lat: 39.051439 N						
Soil Map Unit Name: Bebernar and Green River soils, and Riverwash 0.74	•					
Are climatic / hydrologic conditions on the site typical for this time of year? Yes No						
	Normal Circumstances" present? Yes No					
Are Vegetation, Soil, or Hydrology naturally problematic? (If ne	eded, explain any answers in Remarks.)					
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.						
Hydrophytic Vegetation Present?  Yes No Is the Sampled						
Hudric Soil Present?	V					
Wetland Hydrology Present? Yes No within a Wetlan	d? Yes _/\ No					
Demodes:						
Slopes 3% Stoward vive	0					
conditions somewhat driver than no	mal					
VEGETATION – Use scientific names of plants.						
Absolute Dominant Indicator Tree Stratum (Plot size:) % Cover Species? Status	Dominance Test worksheet:					
	Number of Dominant Species That Are OBL, FACW, or FAC: (A)					
1	,					
3	Total Number of Dominant Species Across All Strata:  (B)					
4.	, , ,					
= Total Cover	Percent of Dominant Species That Are OBL, FACW, or FAC: 00 (A/B)					
Sapling/Shrub Stratum (Plot size:)						
1.	Prevalence Index worksheet:  Total % Cover of: Multiply by:					
2	OBL species x 1 =					
3	FACW species x 2 =					
5	FAC species x 3 =					
= Total Cover	FACU species x 4 =					
Herb Stratum (Plot size: 500)	UPL species x 5 =					
1. Typisch hynde 40 Y Frew	Column Totals: (A) (B)					
2. Of Vacour rhiza Olepidota 15 Y FAC						
3. For igleson cumultinsis 2 N FACIL	Prevalence Index = B/A =					
4. Phalavis arnhumaca 2 N FACW	Hydrophytic Vegetation Indicators:					
5. Juneus taltions 2 N Parw	✓ Dominance Test is >50%					
6	Prevalence Index is ≤3.0¹     Morphological Adaptations¹ (Provide supporting)					
7	data in Remarks or on a separate sheet)					
8	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)					
Woody Vine Stratum (Plot size:)						
1	<sup>1</sup> Indicators of hydric soil and wetland hydrology must					
2	be present, unless disturbed or problematic.					
= Total-Cover	Hydrophytic					
% Bare Ground in Herb Stratum % Cover of Biotic Crust	Vegetation Present? Yes No					
Remarks:						

Sampling Point: Sf - L

					, соппп	the absence		
Depth Matrix (inches) Color (moist)	%	Color (moist)	x Feature:	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks	
0 16471110	100	Color (moist)	%	Type	LOC		-	
0 0 1000011		10U0 A / 10	10		- A	Sandy		
2-20 104841:	2 90	10424/6	10	<u> </u>	_14_	Sandi	4 10am	
							0	
							1	
<sup>1</sup> Type: C=Concentration, D=D	epletion, RM=	=Reduced Matrix, CS	S=Covered	or Coate	d Sand Gr	ains. <sup>2</sup> Loc	ation: PL=Pore Lining, M=Ma	trix.
Hydric Soil Indicators: (App							for Problematic Hydric Soils	
Histosol (A1)		∠ Sandy Redo	ox (S5)			1 cm M	luck (A9) (LRR C)	
Histic Epipedon (A2)		Stripped Ma					luck (A10) (LRR B)	
Black Histic (A3)		Loamy Muc	ky Minera	l (F1)		Reduce	ed Vertic (F18)	
Hydrogen Sulfide (A4)		Loamy Gley	yed Matrix	(F2)			arent Material (TF2)	
Stratified Layers (A5) (LR	RC)	Depleted M				Other (	Explain in Remarks)	
1 cm Muck (A9) (LRR D)	78.445	Redox Dark						
Depleted Below Dark Surf	, ,	Depleted Da				31	Alberton be the constaller and	
Thick Dark Surface (A12) Sandy Mucky Mineral (S1		Redox Depression Vernal Pool		-8)			of hydrophytic vegetation and nydrology must be present,	
Sandy Mucky Milleral (S1) Sandy Gleyed Matrix (S4)		veinai Pooi	is (F9)				sturbed or problematic.	
Restrictive Layer (if present)						unioss di	starbed or problematic.	
Type:							. /	
Depth (inches):						Hydric Soil	Present? Yes No	
			-	- 0				
V SAN	An 50	ils-depos	31-70	ral	@ VI	in ta	nks	
V - 2011.	0.0		97.0		100	Choo		
HYDROLOGY								
HYDROLOGY  Wetland Hydrology Indicator	rs:							
Wetland Hydrology Indicato								uired)
		d; check all that appl	v)			Secon	dary Indicators (2 or more req	uired)
Wetland Hydrology Indicator		d; check all that appl	y)(B11)			Secon	dary Indicators (2 or more req ater Marks (B1) (Riverine)	
Wetland Hydrology Indicator Primary Indicators (minimum of Surface Water (A1) High Water Table (A2)		d; check all that appl Salt Crust Biotic Crus	y) (B11) st (B12)			<u>Secon</u> W	dary Indicators (2 or more req ater Marks (B1) (Riverine) ediment Deposits (B2) (Riveri	
Wetland Hydrology Indicator  Primary Indicators (minimum of Surface Water (A1)  High Water Table (A2)  Saturation (A3)	of one required	d; check all that appl Salt Crust Biotic Crus Aquatic In	y) (B11) st (B12) vertebrate	s (B13)	· · · · · · · · · · · · · · · · · · ·	<u>Secon</u> W Se	dary Indicators (2 or more req ater Marks (B1) (Riverine) ediment Deposits (B2) (Riveri rift Deposits (B3) (Riverine)	
Wetland Hydrology Indicator  Primary Indicators (minimum of the control of the co	of one required	d; check all that appl Salt Crust Biotic Crus Aquatic In	y) (B11) st (B12) vertebrate Sulfide Od	s (B13) dor (C1)		<u>Secon</u> W Se Di Di Di	dary Indicators (2 or more req fater Marks (B1) (Riverine) ediment Deposits (B2) (Riveri rift Deposits (B3) (Riverine) rainage Patterns (B10)	
Wetland Hydrology Indicator  Primary Indicators (minimum of the control of the co	of one required verine) Nonriverine)	d; check all that appl Salt Crust Biotic Crus Aquatic In Hydrogen X Oxidized F	y) (B11) st (B12) vertebrate Sulfide O	s (B13) dor (C1) res along	Living Roo	Secon W Se De De De ts (C3) De	dary Indicators (2 or more req later Marks (B1) (Riverine) ediment Deposits (B2) (Riveri rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2)	
Wetland Hydrology Indicator  Primary Indicators (minimum of the control of the co	of one required verine) Nonriverine)	d; check all that appl Salt Crust Biotic Crus Aquatic In Hydrogen Coxidized F	y) (B11) st (B12) vertebrate Sulfide Oc Rhizosphe of Reduce	s (B13) dor (C1) res along d Iron (C4	Living Roo	Secon  W Se De De De ts (C3) De	dary Indicators (2 or more req fater Marks (B1) (Riverine) ediment Deposits (B2) (Riveri rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) rayfish Burrows (C8)	ne)
Wetland Hydrology Indicator  Primary Indicators (minimum of the second o	of one required verine) Nonriverine) verine)	d: check all that appl Salt Crust Biotic Crus Aquatic In Hydrogen Coxidized F Presence	y) (B11) st (B12) vertebrate Sulfide Oc Rhizosphe of Reduce	s (B13) dor (C1) res along d d Iron (C4 on in Tilled	Living Roo	Secon  W Se De De ts (C3) De Co Se	dary Indicators (2 or more req fater Marks (B1) (Riverine) ediment Deposits (B2) (Riveri rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) rayfish Burrows (C8) aturation Visible on Aerial Ima	ne)
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Wetland Hydrology Indicator  Primary Indicators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriv Sediment Deposits (B2) (I Drift Deposits (B3) (Nonriv Surface Soil Cracks (B6) Inundation Visible on Aeri Water-Stained Leaves (B5) Field Observations:	of one required verine) Nonriverine) verine) al Imagery (B	d; check all that appl  Salt Crust Biotic Crust Aquatic Int Hydrogen Coxidized F Presence Recent Iro Thin Muck Other (Exp	y) (B11) st (B12) vertebrate Sulfide Or Rhizosphe of Reduce on Reducti s Surface ( plain in Re	s (B13) dor (C1) res along d Iron (C4 on in Tilled C7) marks)	Living Roo ) I Soils (C6	Secon  W Se Di Di ts (C3) Di Se Secon	dary Indicators (2 or more reg fater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) rayfish Burrows (C8) aturation Visible on Aerial Imag	ne)
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Wetland Hydrology Indicator  Primary Indicators (minimum of the second o	verine) Nonriverine) verine) al Imagery (B'	d; check all that appl  Salt Crust Biotic Crust Aquatic Int Hydrogen Coxidized F Presence Recent Iro Thin Muck Other (Exp	y) (B11) st (B12) vertebrate Sulfide Oc Rhizosphe of Reduce on Reducti Surface ( plain in Re ches): ches):	s (B13) dor (C1) res along d Iron (C4 on in Tilled C7) marks)	Living Roo ) I Soils (C6	Secon  W Se Di Di ts (C3) Di Se Secon	dary Indicators (2 or more required atter Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) rayfish Burrows (C8) aturation Visible on Aerial Imagellow Aquitard (D3) AC-Neutral Test (D5)	ne)
Wetland Hydrology Indicator Primary Indicators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonrive Sediment Deposits (B2) (Indicated Soil Cracks (B6) Inundation Visible on Aeric Water-Stained Leaves (B5) Field Observations: Surface Water Present? Water Table Present? Saturation Present?	verine) Nonriverine) verine) al Imagery (B'	d; check all that appl  Salt Crust Biotic Crust Aquatic Int Hydrogen Coxidized F Presence Recent Iro Thin Muck Other (Exp	y) (B11) st (B12) vertebrate Sulfide Oc Rhizosphe of Reduce on Reducti Surface ( plain in Re ches): ches):	s (B13) dor (C1) res along d Iron (C4 on in Tilled C7) marks)	Living Roo i) d Soils (C6	Secon   W   Secon   W   Secon   W   Secon   Decon   Decon   Decon   Decon   Secon   Secon	dary Indicators (2 or more required atter Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) rayfish Burrows (C8) aturation Visible on Aerial Imagellow Aquitard (D3) AC-Neutral Test (D5)	ne)
Wetland Hydrology Indicator  Primary Indicators (minimum of Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonrive Sediment Deposits (B2) (Nonrive Surface Soil Cracks (B6)  Inundation Visible on Aeric Water-Stained Leaves (B5)  Field Observations:  Surface Water Present?  Water Table Present?  Saturation Present?  (includes capillary fringe)	verine) Nonriverine) verine) al Imagery (B'	d; check all that appl  Salt Crust Biotic Crust Aquatic Int Hydrogen Coxidized F Presence Recent Iro Thin Muck Other (Exp	y) (B11) st (B12) vertebrate Sulfide Oc Rhizosphe of Reduce on Reducti Surface ( plain in Re ches): ches):	s (B13) dor (C1) res along d Iron (C4 on in Tilled C7) marks)	Living Roo i) d Soils (C6	Secon   W   Secon   W   Secon   W   Secon   Decon   Decon   Decon   Decon   Secon   Secon	dary Indicators (2 or more required atter Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) rayfish Burrows (C8) aturation Visible on Aerial Imagellow Aquitard (D3) AC-Neutral Test (D5)	ne)
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Wetland Hydrology Indicator  Primary Indicators (minimum of Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonrive Sediment Deposits (B2) (Indicators (B3))  Drift Deposits (B3) (Nonrive Surface Soil Cracks (B6)  Inundation Visible on Aeric Water-Stained Leaves (B3)  Field Observations:  Surface Water Present?  Water Table Present?  Saturation Present?  (includes capillary fringe)  Describe Recorded Data (stress	verine) Nonriverine) verine) al Imagery (B. 9)  Yes Yes Yes am gauge, mo	d; check all that appl  Salt Crust Biotic Crust Aquatic In Hydrogen Coxidized F Presence Recent Iro Thin Muck Other (Exp	y) (B11) st (B12) vertebrate Sulfide Oc Rhizosphe of Reduce on Reducti s Surface ( plain in Re ches): ches): photos, pr	s (B13) dor (C1) res along d Iron (C4 on in Tilled C7) marks)	Living Roo i) i Soils (C6	Secon	dary Indicators (2 or more required atter Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) rayfish Burrows (C8) aturation Visible on Aerial Imagellow Aquitard (D3) AC-Neutral Test (D5)	ne)
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# WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: 70 - 166 ACG 7855 C/72 POATO City/County: Mapplicant/Owner: Aushin (ivi) Croup Investigator(s): A Powers   Section, Towns Landform (hillslope, terrace, etc.): When terrace   Local relief (colorsubregion (LRR): D   Lat: 39.051449 N   Soil Map Unit Name: Rebetivar and terral Review 5015, and Revenues to the climatic / hydrologic conditions on the site typical for this time of year? Yes   X   Are Vegetation   N   Soil   N   or Hydrology   N   significantly disturbed? Are Vegetation   N   Soil   N   or Hydrology   N   naturally problematic?  SUMMARY OF FINDINGS - Attach site map showing sampling p	State: Sampling Point: State: Sampling Point: State:
Hydrophytic Vegetation Present? Yes No Is the S.	ampled Area
Hydric Soil Present?  Yes No X  within a	wetland? Yes No_X
wetland Hydrology Present? Yes No	
Remarks: 201 from Water (Active), 2-31 higher	Man Sp. 1
VEGETATION – Use scientific names of plants.	
Absolute Dominant Inc	
Tree Stratum (Plot size:)	Number of Dominant Species
1	That Are OBL, FACW, or FAC: (A)
	Total Number of Dominant Species Across All Strata: (B)
3	Species Across All Strata: (B)
4	Percent of Dominant Species
Sapling/Shrub Stratum (Plot size:)	That Are OBL, FACW, or FAC:
1	Prevalence Index worksheet:
2.	Total % Cover of: Multiply by:
3.	OBL species x 1 =
4.	
5.	FAC species x 3 =
= Total Cover	
Herb Stratum (Plot size:)	UPL species x 5 =
1. Equisetin hymate 10 Y F	ACW   Column Totals: (A) (B)
2. Go Ignon Canadunio 10 Y P	AM
	Prevalence Index = B/A =
(1.()	Hydrophytic Vegetation Indicators:
5. 0 0 0	Dominance Test is >50%
6	Prevalence Index is ≤3.01
7	Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
8	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
Woody Vine Stratum (Plot size:)	,,,
1	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
2	be present, unless disturbed or problematic.
= Total Cover	Hydrophytic
-11	Vegetation
% Bare Ground in Herb Stratum % Cover of Biotic Crust	Present? Yes No No No
Remarks:	
Veg-sparser	

	eeded to document the indicator or confi	The absence of mulcators.
Depth Matrix (inches) Color (molst) %	Redox Features  Color (moist) % Type¹ Loc²	TextureRemarks
	Color (moist) 76 Type Loc	
0-20 104R513 100 -		- Sandy loan
<sup>1</sup> Type: C=Concentration, D=Depletion, RM=Re	duced Matrix, CS=Covered or Coated Sand	Grains. <sup>2</sup> Location: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators: (Applicable to all LR		Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol (A1)	Sandy Redox (S5)	1 cm Muck (A9) (LRR C)
Histic Epipedon (A2)	Stripped Matrix (S6)	2 cm Muck (A10) (LRR B)
Black Histic (A3)	Loamy Mucky Mineral (F1)	Reduced Vertic (F18)
Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)	Red Parent Material (TF2)
Stratified Layers (A5) (LRR C)	Depleted Matrix (F3)	Other (Explain in Remarks)
1 cm Muck (A9) (LRR D)	Redox Dark Surface (F6)	
Depleted Below Dark Surface (A11)     Thick Dark Surface (A12)	Depleted Dark Surface (F7)     Redox Depressions (F8)	3Indicators of hydrophytic vegetation and
Sandy Mucky Mineral (S1)	Vernal Pools (F9)	wetland hydrology must be present,
Sandy Gleyed Matrix (S4)	volitai i volis (i v)	unless disturbed or problematic,
Restrictive Layer (if present):		Interest and an experience of
Type:	_	
Depth (inches):	_	Hydric Soil Present? Yes No X
Pamarke:		
No hydruz son	2 lud	
70000		
HYDROLOGY		
Wetland Hydrology Indicators:		
welland hydrology indicators:		
Primary Indicators (minimum of one required; cl		Secondary Indicators (2 or more required)
Primary Indicators (minimum of one required; cl Surface Water (A1)	Salt Crust (B11)	Water Marks (B1) (Riverine)
Primary Indicators (minimum of one required; cl Surface Water (A1) High Water Table (A2)	Salt Crust (B11) Biotic Crust (B12)	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine)
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Primary Indicators (minimum of one required; cl Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine)	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1)	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10)
Primary Indicators (minimum of one required; cl Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine)	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living R	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Oots (C3) Dry-Season Water Table (C2)
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# M & D Enterprises

2855 C  $\frac{1}{2}$  Road Grand Junction, Colorado 81501 (970) 243-3221

PLANS FOR CONSTRUCTION OF

# C-1/2 ROAD GRAVEL PIT

MARCH 29, 2023



 $\frac{\text{VICINITY}}{\text{NTS}}$  MAP

LOCATION

# GENERAL CONSTRUCTION NOTES

- 1. Contractor shall contact Mark Barslund, City of Grand Junction's development inspector, at (970) 201—1362, and Josh Martinez, Mesa County Stormwater, a minimum of 72 hours in advance, for a pre—construction meeting prior to beginning
- Locations of existing utilities shown on these plans are approximate only. Contractor is to contact affected utility for specific locations before digging.
- The Contractor shall notify the engineer if unanticipated conditions area encountered during completion of the work which require modifications to the contract drawings. The engineer can be reached at 970-242-7540.
- 4. Contractor shall give 48—hour notice to all authorized inspectors, superintendents, or person in charge of public and private utilities affected by his operations prior commencement of work. Contractor shall assure himself that all construction permits are current.
- Contractor shall confine his construction operations to the right—of—way,
  easements, and lots, as shown on plans and plat. Any damage to private facilities
  outside these limits shall be repaired by the Contractor at no expense to the Owner.
- 6. In the event of a discrepancy between the construction notes contained herein and the notes and details in the City of Grand Junction Standard Contract Documents for Capital Improvements Construction manual, the City's manual shall control.
- 7. All work within Mesa County Right—of—Way shall required a "Work in the Right—of—Way" Permit.

# NO.

# TITLE

COVER SITE AND EXCAVATION PLAN GRADING AND DRAINAGE PLAN RECLAMATION PLAN

VEHICLE ACCESS ANALYSIS

FUGITIVE DUST CONTROL PLAN

C2

C3

C4

C5

- 1. Before stripping of the site preparation for overlot grading, the surface is to be pre—wet to control dust.
- 2. Any stockpiles of stripping materials are to be periodically sprayed with water or a crusting agent to stabilize potentially wind blown material.
- 3. Haul road both into and around the site are to be sprayed as needed to suppress dust.
- 4. The Storm Water Management Plan and permit shall be obtained and kept onsite before starting any construction work. Gravel pads are to be constructed at the entrances to the site to help in removing mud from the wheels of haulage trucks before they enter onto C 1/2 Road.
- 5. Trucks hauling import fill are to be tarped to aid in the control of airborne dust.



ACCEPTANCE BLOCK

THE CITY OF GRAND JUNCTION REVIEW CONSTITUTES GENERAL COMPLIANCE WITH THE CITY'S DEVELOPMENT STANDARDS, SUBJECT TO THESE PLANS BEING SEALED, SIGNED, AND DATED BY THE PROFESSIONAL OF RECORD. REVIEW BY THE CITY DOES NOT CONSTITUTE APPROVAL OF THE PLAN DESIGN. THE CITY NETHER ACCEPTS NOR ASSUMES ANY LIABILITY FOR ERRORS OR OMISSIONS. ERRORS IN THE DESIGN OR CALCULATIONS REMAIN THE RESPONSIBILITY OF THE

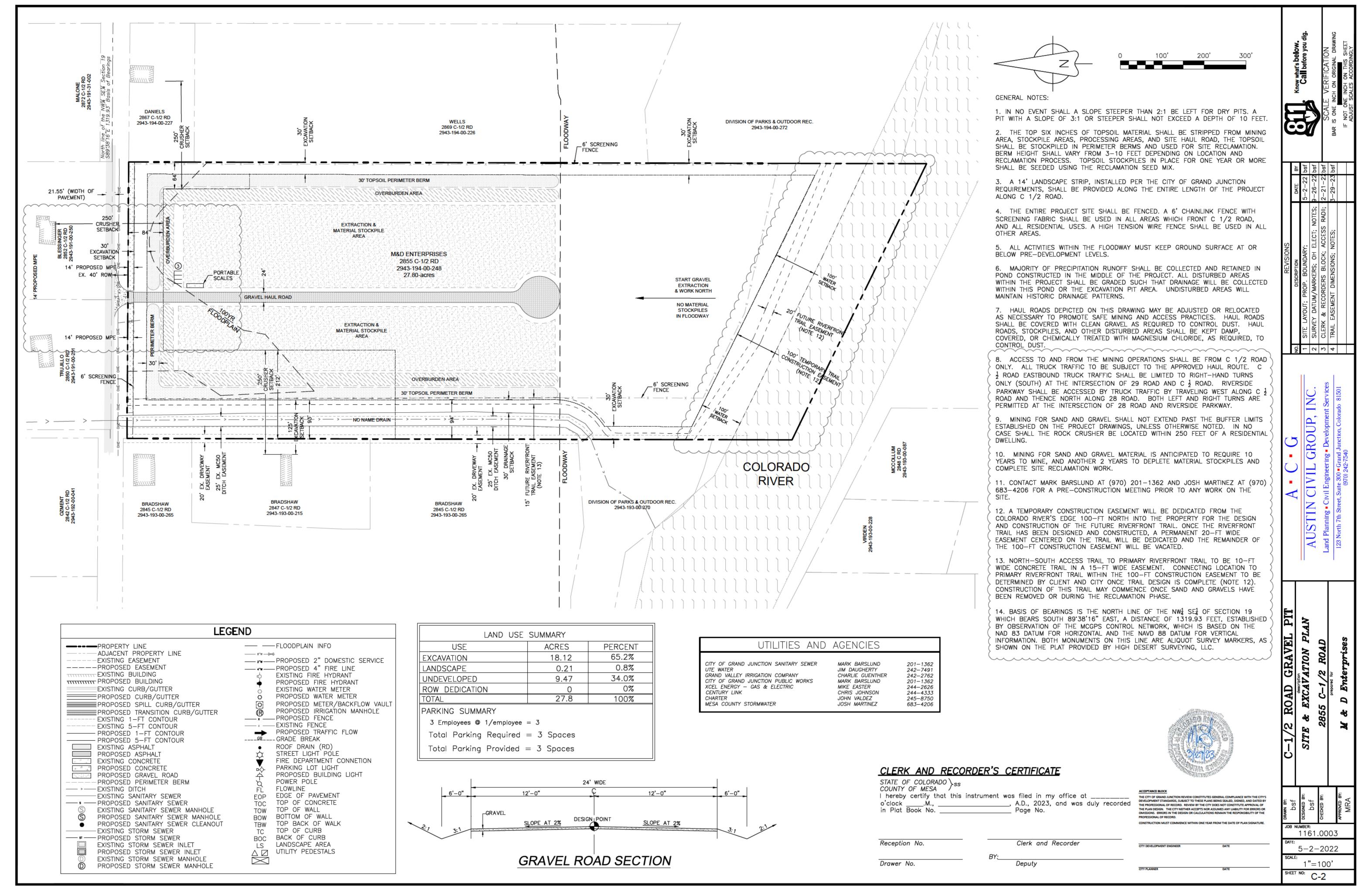
CONSTRUCTION MUST COMMENCE WITHIN ONE YEAR FROM THE DATE OF PLAN SIGNATURE

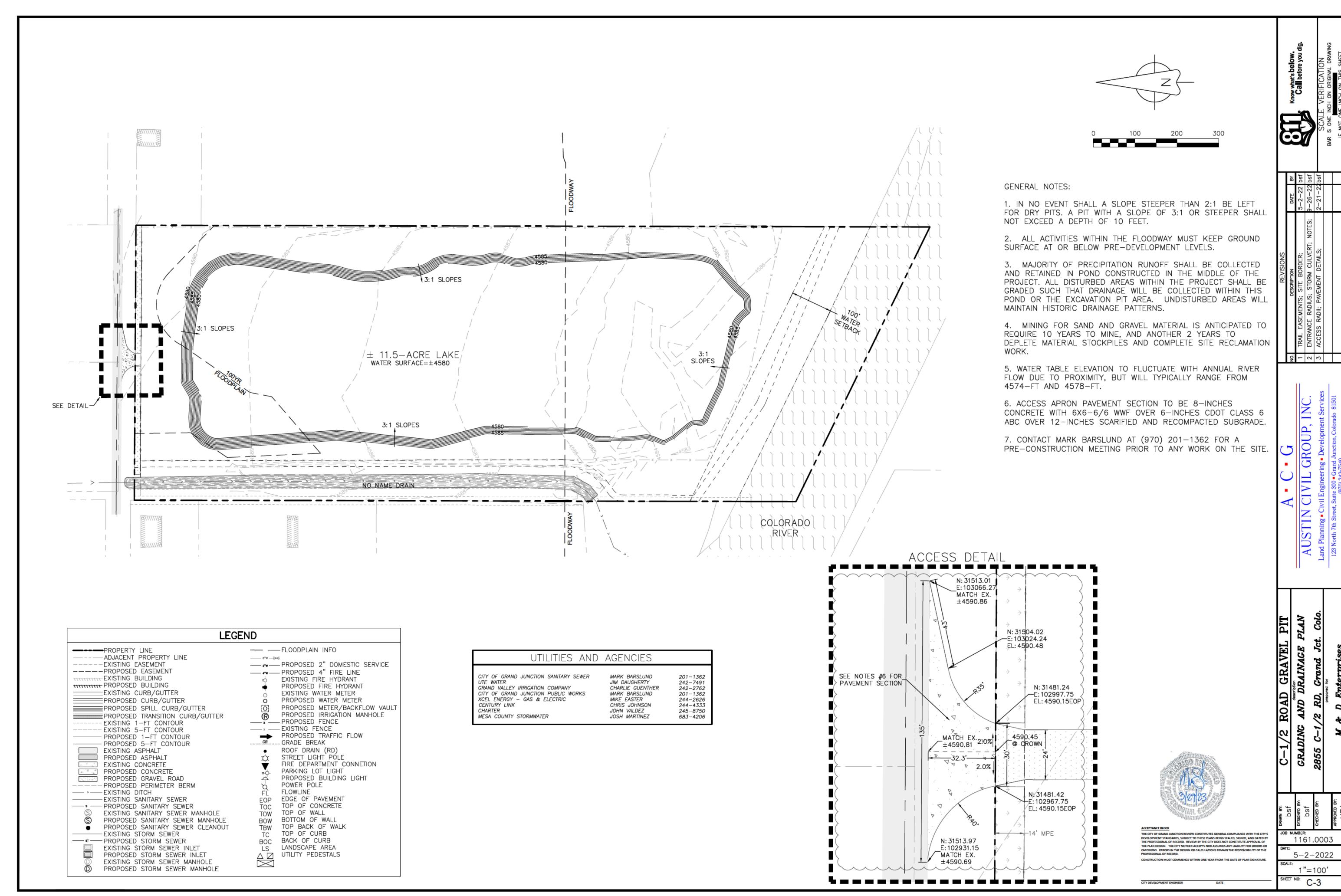
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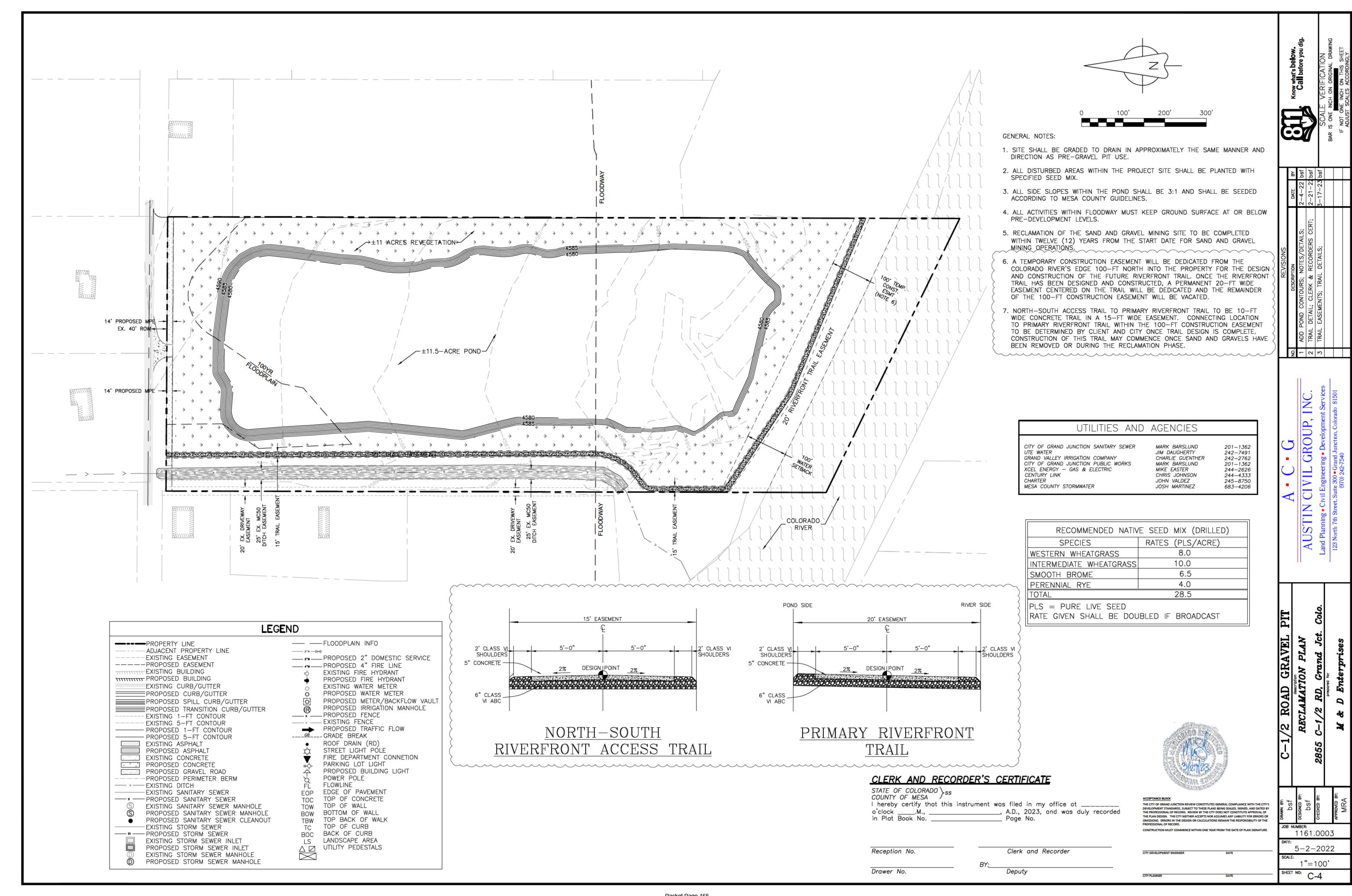
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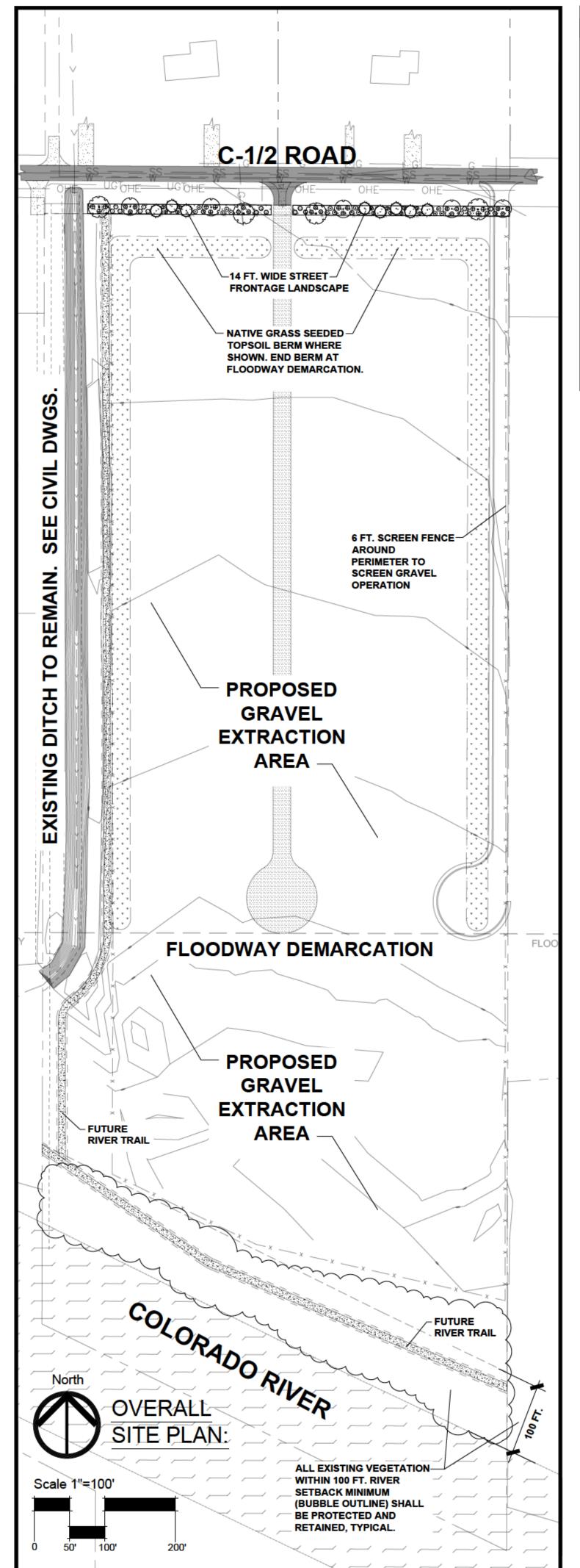
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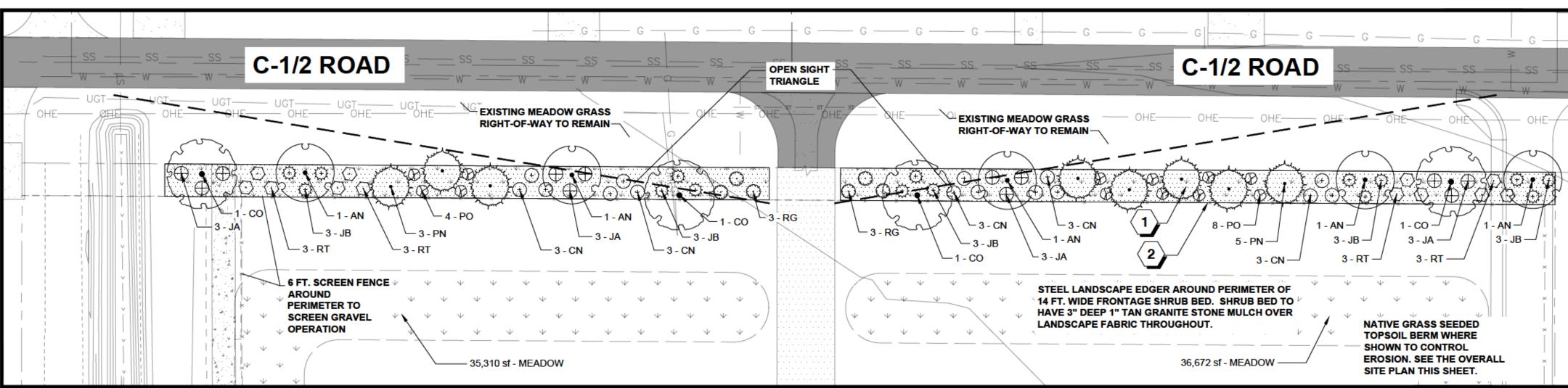
Packet Page 162







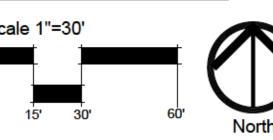




# LANDSCAPE LEGEND:

EVERGREEN TREES	CODE	QTY	BOTANICAL / COMMON NAME	SIZE
Joseph Control of the	PN	8	PINUS NIGRA AUSTRIAN PINE 40` TALL, 20` SPREAD, GREEN EVERGREEN	6 FT. B&B
LARGE SHADE TREES	CODE	QTY	BOTANICAL / COMMON NAME	SIZE
	СО	4	CELTIS OCCIDENTALIS 'PRAIRIE PRIDE' PRAIRIE PRIDE HACKBERRY 40' TALL, 30' SPREAD, YELLOW FALL COLOR	2" CALIPER
SMALL ORNAMENTAL TREES	CODE	QTY	BOTANICAL / COMMON NAME	SIZE
	AN	5	ACER NEGUNDO 'SENSATION' SENSATION BOX ELDER MAPLE 25' TALL, 25' SPREAD, RED FALL COLOR	1.5" CALIPER
EVERGREEN SHRUBS	CODE	QTY	BOTANICAL / COMMON NAME	SIZE
+	CN	15	CHRYSOTHAMNUS NAUSEOSUS GRAVEOLENS TALL GREEN RABBITBRUSH 5` TALL, 5` SPREAD, YELLOW FALL FLOWERS.	5 GALLON
	JA	12	JUNIPERUS SABINA `ARCADIA` ARCADIA JUNIPER 2` TALL, 6` SPREAD, GREEN EVERGREEN	5 GALLON
<del>\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\</del>	JB	15	JUNIPERUS SABINA `BROADMOOR` BROADMOOR JUNIPER 2` TALL, 6` SPREAD, HORIZONTAL GREEN EVERGREEN	5 GALLON
DECIDUOUS SHRUBS	CODE	QTY	BOTANICAL / COMMON NAME	SIZE
	РО	12	PHYSOCARPUS OPULIFOLIUS 'DIABOLO' DIABLO NINEBARK 5' TALL, 5' WIDE, PURPLE FOLIAGE	5 GALLON
	RG	6	RHUS AROMATICA `GRO-LOW` GRO-LOW FRAGRANT SUMAC 2` TALL, 6` SPREAD, ORANGE FALL COLOR	5 GALLON
$\langle \cdot \rangle$	RT	12	RHUS TRILOBATA THREE-LEAF SUMAC 6` TALL, 6` SPREAD, ORANGE FALL COLOR.	5 GALLON
GROUND COVERS	CODE	QTY	BOTANICAL / COMMON NAME	SIZE
			DRYLAND NATIVE GRASS	
	MEADOW	71,982 SF	SEE THE SEED MIX, APPLICATION RATE, AND SEEDING NOTES ON SHEET L-2. NON-IRRIGATED GRASS MIX.	-

# LANDSCAPE PLAN C-1/2 ROAD FRONTAGE:



61945 Nighthawk Road Montrose, CO 81403 office: 970.249.9392 cell: 970.417.1779 julee@juleewolverton.com

Julee Wolverton,

Landscape Architect



COMPLIANCE WITH THE CITY'S DEVELOPMENT STANDARDS, SUBJECT TO

THESE PLANS BEING SEALED, SIGNED, AND DATED BY THE PROFESSIONAL OF

RECORD. REVIEW BY THE CITY DOES NOT CONSTITUTE APPROVAL OF THE PLAN DESIGN. THE CITY NEITHER ACCEPTS NOR ASSUMES ANY LIABILITY

FOR ERRORS OR OMISSIONS. ERRORS IN THE DESIGN OR CALCULATIONS

CONSTRUCTION MUST COMMENCE WITHIN ONE YEAR FROM THE DATE OF

REMAIN THE RESPONSIBILITY OF THE PROFESSIONAL OF RECORD.

ACCEPTANCE BLOCK

PLAN SIGNATURE.

SHEET TITLE *LANDSCAPE* THE CITY OF GRAND JUNCTION REVIEW CONSTITUTES GENERAL PLAN & NOTES

SHEET No.

03/14/23

L-7

# SITE LEGEND:

REFERENCE NOTES SCHEDULE				
SYMBOL	DESCRIPTION	QTY		
1)	1" TAN GRANITE STONE MULCH 3" DEEP OVER LANDSCAPE FABRIC.	7,994 SF		
(2)	STEEL EDGER, COL-MET MFG. BROWN COLOR, INSTALL WITH MFG STAKES PER MFG RECOMMENDATIONS.	1,200 LF		

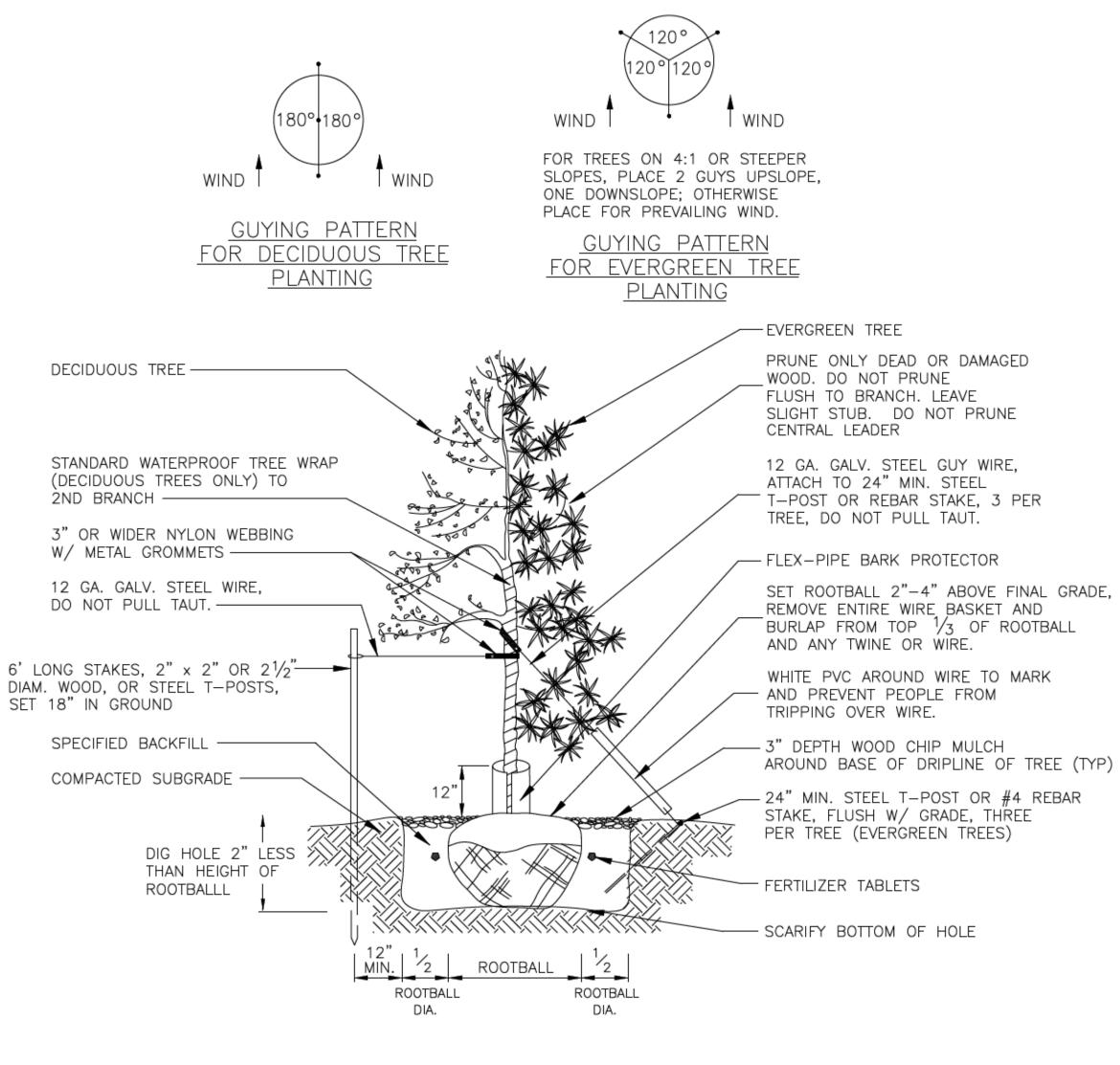
CITY OF GRAND JUNCTION LANDSCAPE REQUIREMENTS: STREET FRONTAGE LANDSCAPE & PERIMETER BERM

1 TREE PER 40 LF OF STREET FRONTAGE REQUIRED:

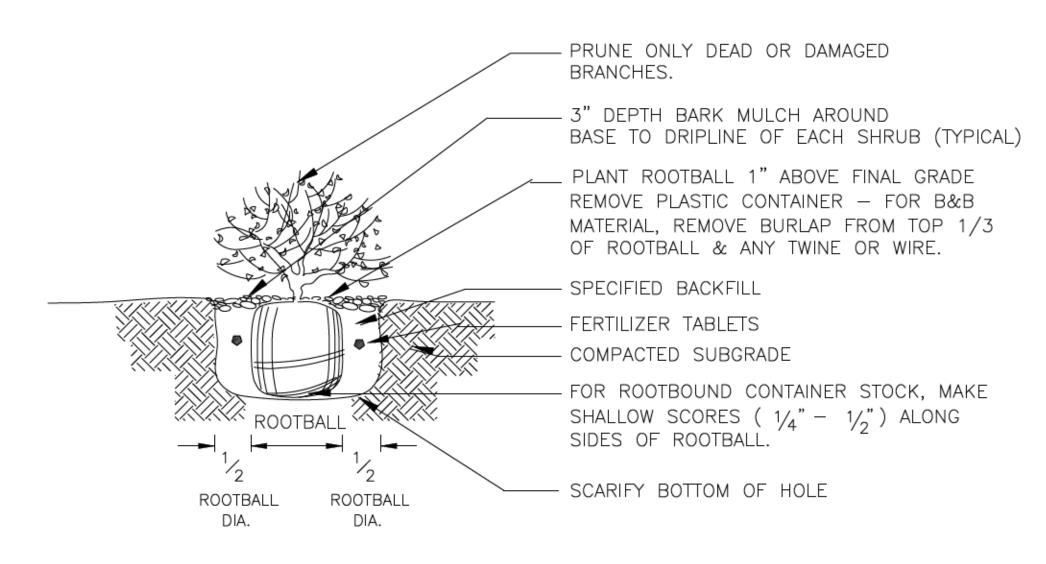
660 LF C-1/2 ROAD FRONTAGE= 17 TREES REQUIRED 71,981 SF PERIMETER LANDSCAPE BERM NORTH OF THE FLOODWAY DEMARCATION LINE.

17 TOTAL 2" CALIPER & 6 FT. B&B TREES PROVIDED 72 TOTAL 5—GALLON SHRUBS PROVIDED 7,994 SF STONE MULCH SHRUB BED AREA 71,981 SF NON-IRRIGATED MEADOW GRASS PERIMETER TOPSOIL BERM.

# LANDSCAPE DETAILS:









# **SEEDING NOTES:**

- SEED TOPSOIL BERM AS IT IS COMPLETED.
- SOIL PREP: GRADE TOPSOIL TO A REASONABLE EVEN, SMOOTH, LOOSE SEED BED. ROTOTILL IN 3-5 CY/1,000 SF OF SOIL CONDITIONER. SLOPE SURFACES SHOULD BE ROUGHENED TO PROVIDE SEED POCKETS FOR INCREASED GERMINATION.
- 3. SEE THE SEED MIX FOR SEED TYPE AND APPLICATION RATE. SEED SHALL BE APPLIED BY MEANS OF A DROP SEEDER OR CYCLONE SEEDER. DIVIDE THE SEED IN TWO EQUAL PARTS AND SOW HALF OF THE SEED BY CROSSING THE AREA NORTH TO SOUTH AND THE OTHER HALF BY CROSSING EAST TO WEST AT DOUBLE THE RATE REQUIRED FOR DRILL SEEDING. SEED SHALL BE RAKED OR DRAGGED INTO THE SOIL TO A DEPTH OF 1/2". CARE SHOULD BE TAKEN TO INSURE UNIFORM COVERAGE OF SEED.
- 4. DO NOT SEED DURING WINDY CONDITIONS. ANY AREAS DISTURBED AFTER SEEDING OPERATIONS SHALL BE RESEEDED AT CONTRACTOR'S EXPENSE.
- 5. FOR SLOPES 3:1 OR GENTLER, SEEDED AREAS SHALL BE MULCHED WITH WOOD CHIPS, STRAW, OR HYDRO-MULCH. FOR SLOPES 3:1 OR GREATER, SEEDED AREAS REQUIRE AN EROSION CONTROL BLANKET OVER SEEDED AREAS. INSTALL EROSION CONTROL BLANKET PER THE MFG. RECOMMENDATIONS IN THE PROPER DIRECTION WITH RECOMMENDED OVERLAPS AND STAKES.
- 6. PROTECT ALL SEEDED AREAS FROM DAMAGE UNTIL GRASS AREAS ARE ESTABLISHED.
- 7. RE-SEED BARE AREAS AS NEEDED THROUGHOUT THE GROWING SEASON UNTIL AREA IS 100% FSTABI ISHED.

# NON-IRRIGATED DRYLAND SEED MIX:

WESTERN WHEATGRASS 'ARRIBA'	8.0 LBS PLS/ACRE
INTERMEDIATE WHEATGRASS 'RUSH'	10.0 LBS PLS/ACRE
SMOOTH BROME 'LINCOLN'	6.5 LBS PLS/ACRE
PERENNIAL RYE	4.0 LBS PLS/ACRE

\*\*\*PLANT GRASS SEED ONLY IN EARLY SPRING AND FALL (BETWEEN SPRING THAW & MAY 1, OR AFTER AUGUST 1 UNTIL CONSISTEN GROUND FREEZE).

# "COL-MET" MFG COMMERCIAL GRADE STEEL EDGER. BROWN POWDERCOAT FINISH. SECURE AND INSTALL PER MFG RECOMMENDATIONS WITH LAP JOINTS & STAKES SPECIFIED MULCH 3" DEEP OVER LANDSCAPE FABRIC UNDISTURBED SUBGRADE STEEL EDGER AS SHOWN ON THE DRAWINGS. SPECIFIED MULCH 3" DEEP OVER LANDSCAPE FABRIC

# LANDSCAPE NOTES:

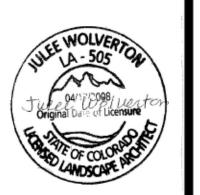
- INSTALL A NEW UNDERGROUND AUTOMATIC DRIP IRRIGATION SYSTEM FOR THE STREET FRONTAGE LANDSCAPE. INSTALL A BACKFLOW PREVENTER WITH LOCKABLE ENCLOSURE, AND A PEDESTAL MOUNT IRRIGATION CONTROLLER.
- 2. TOPSOIL SHALL BE RELOCATED FROM ON-SITE EXCAVATION AREAS INTO ALL OF THE LANDSCAPE AREAS TO BE PLANTED WITH TREES, SHRUBS, AND GRASS. THERE SHALL BE A MINIMUM OF 8" OF TOPSOIL IN ALL SHRUB BED AREAS. NO TOPSOIL SHALL BE REMOVED FROM THE SITE.
- 3. SOIL PREPARATION FOR LANDSCAPE AREAS SHALL BE ORGANIC MATTER (100% DECOMPOSED WOOD CHIPS OR "MESA MAGIC" SOIL AMENDMENT) APPLIED AT A RATE OF 3-5 CY/1000 SF., AND TILLED TO A DEPTH OF 6"-8", AND FINE GRADED THROUGHOUT ALL AREAS TO BE LANDSCAPED.
- 4. WHEN INSTALLING EACH PLANT, PLANT MIX SHALL BE COMPRISED OF 1 PART SOIL CONDITIONER (DECOMPOSED BARK MULCH OR "BACK-TO-EARTH" ACIDIFIER PRODUCT) TO 2 PARTS TOPSOIL. OVER EXCAVATE THE PLANTING HOLES TWO TIMES THE DIAMETER OF THE ROOTBALL. FILL WITH PLANT MIX. ROOTING HORMONE SUCH AS INDOL 3 BUTERIC ACID SHALL BE USED FOR ALL TREES & SHRUBS.
- 5. "COL-MET" BROWN STEEL EDGER SHALL ENCLOSE LANDSCAPE SHRUB BEDS WHERE SHOWN. INSTALL PER THE MANUFACTURER'S RECOMMENDATIONS.
- 6. SHRUB BEDS SHALL HAVE "DEWITT PRO 5" WEED BARRIER FABRIC OR APPROVED EQUAL INSTALLED UNDER MULCH UNLESS NOTED OTHERWISE OVERLAP SEAMS MIN. 4" AND ATTACH FABRIC IN PLACE WITH 8" LONG STAPLES AT MAX. 4' ON CENTER. SPECIFIED STONE MULCH SHALL BE PLACED THREE INCHES DEEP OVER THE LANDSCAPE FABRIC THROUGHOUT.
- 7. WHEN PLANTING TREES OR SHRUBS: THOROUGHLY SOAK PLANTING HOLE WHILE BACKFILLING. PRUNE DEAD OR DAMAGED BRANCHES IMMEDIATELY AFTER PLANTING. FERTILIZE WITH AGRIFORM 21 GRAM PLANT TABLETS, 20-10-5. 6 TABLETS PER TREE, AND 3 PER SHRUB.
- 8. SHREDDED CEDAR BARK MULCH SHALL BE PLACED AROUND THE DRIPLINE OF EACH PLANT TO MAINTAIN MOISTURE, 3 FT. DIAMETER AROUND TREES, AND 1 FT. DIAMETER AROUND SHRUBS. DO NOT LET BARK MULCH TOUCH THE BASE AND STEM OF EACH PLANT KEEP CLEAR 2".
- 9. ALL DECIDUOUS TREES SHALL BE STAKED WITH (2) 6 FT. T—POSTS. ALL EVERGREEN TREES SHALL BE STAKED WITH (3) 2 FT. T—POSTS. ALL POSTS SHALL BE GUYED TO THE TREE WITH 12 GA. WIRE ENCASED IN RUBBER HOSE.
- 10. ALL TREES WITHIN THE SIGHT TRIANGLES SHALL BE LIMBED UP TO A HEIGHT OF 8 FT. AS THE TREE GROWS, AND THIS CLEARANCE SHALL BE MAINTAINED.
- 11. LOCATE AND MARK LOCATIONS OF ALL UTILITIES PRIOR TO COMMENCING WORK.
  DO NOT PLANT ANY TREES OR SHRUBS DIRECTLY OVER BURIED UTILITY LINES, OR ANY
  TREES UNDER OVERHEAD UTILITY LINES.
- 12. PLANT MATERIAL WAS CHOSEN FOR ITS SPECIFIC VARIETY, HEIGHT, AND COLOR. ANY PLANT MATERIAL SUBSTITUTIONS MUST BE APPROVED BY THE LANDSCAPE ARCHITECT PRIOR TO CONSTRUCTION.
- 13. ALL PLANT MATERIAL SHALL BE GROWN IN A NURSERY IN ACCORDANCE WITH PROPER HORTICULTURAL PRACTICE. PLANTS SHALL BE HEALTHY, WELL-BRANCHED, AND VIGOROUS WITH A GROWTH HABIT NORMAL TO THE SPECIES AND VARIETY, AND FREE OF DISEASES, INSECTS, AND INJURIES.

REVISIONS BY

Julee Wolverton, Landscape Architect



61945 Nighthawk Road Montrose, CO 81403 office: 970.249.9392 cell: 970.417.1779 julee@juleewolverton.com



C-1/2 Road Gravel Pit Landscape Plan Grand Junction, Colorado

DATE 03/14/23

SHEET TITLE

LANDSCAPE NOTES AND DETAILS

SHEET No.

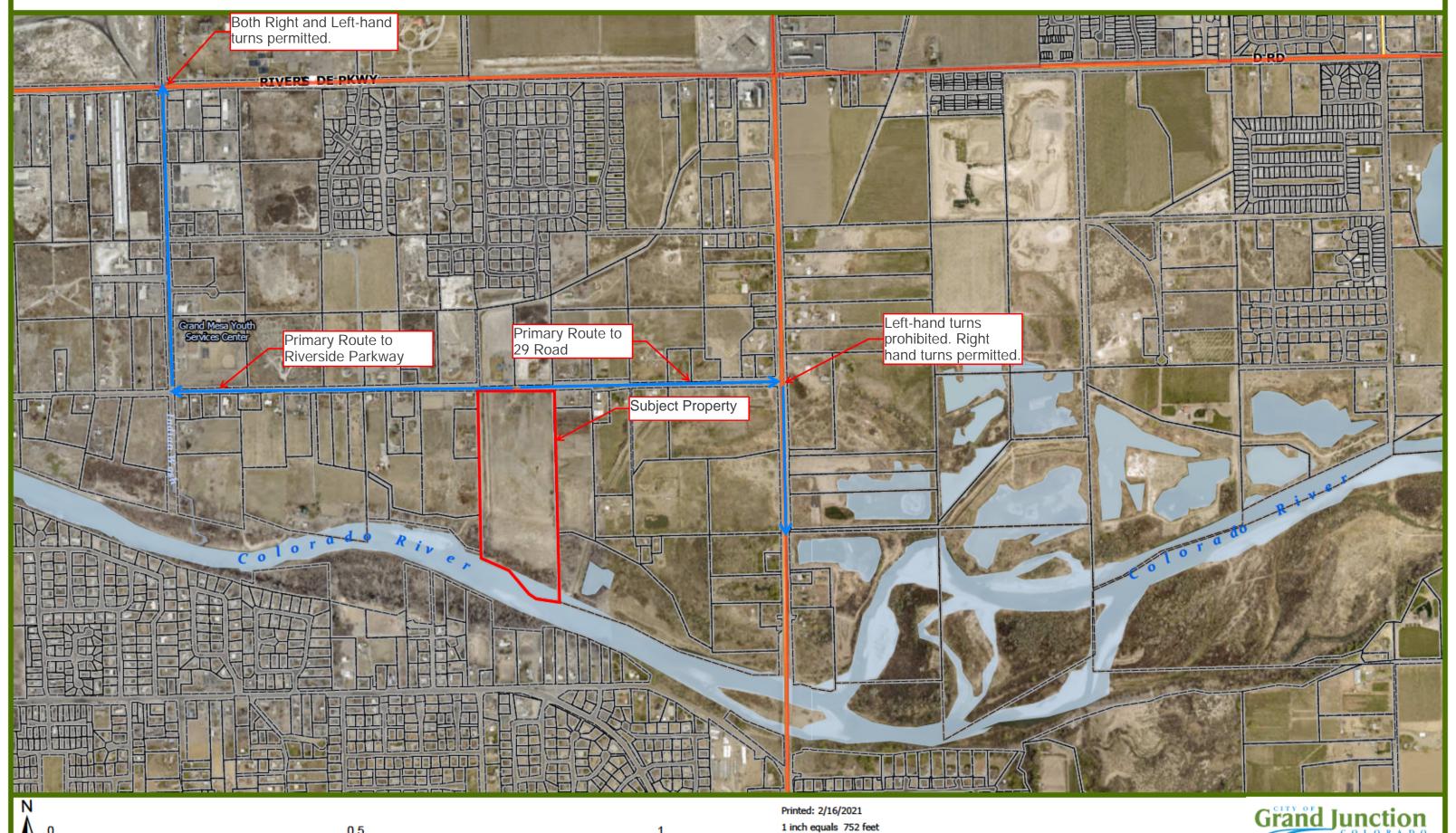
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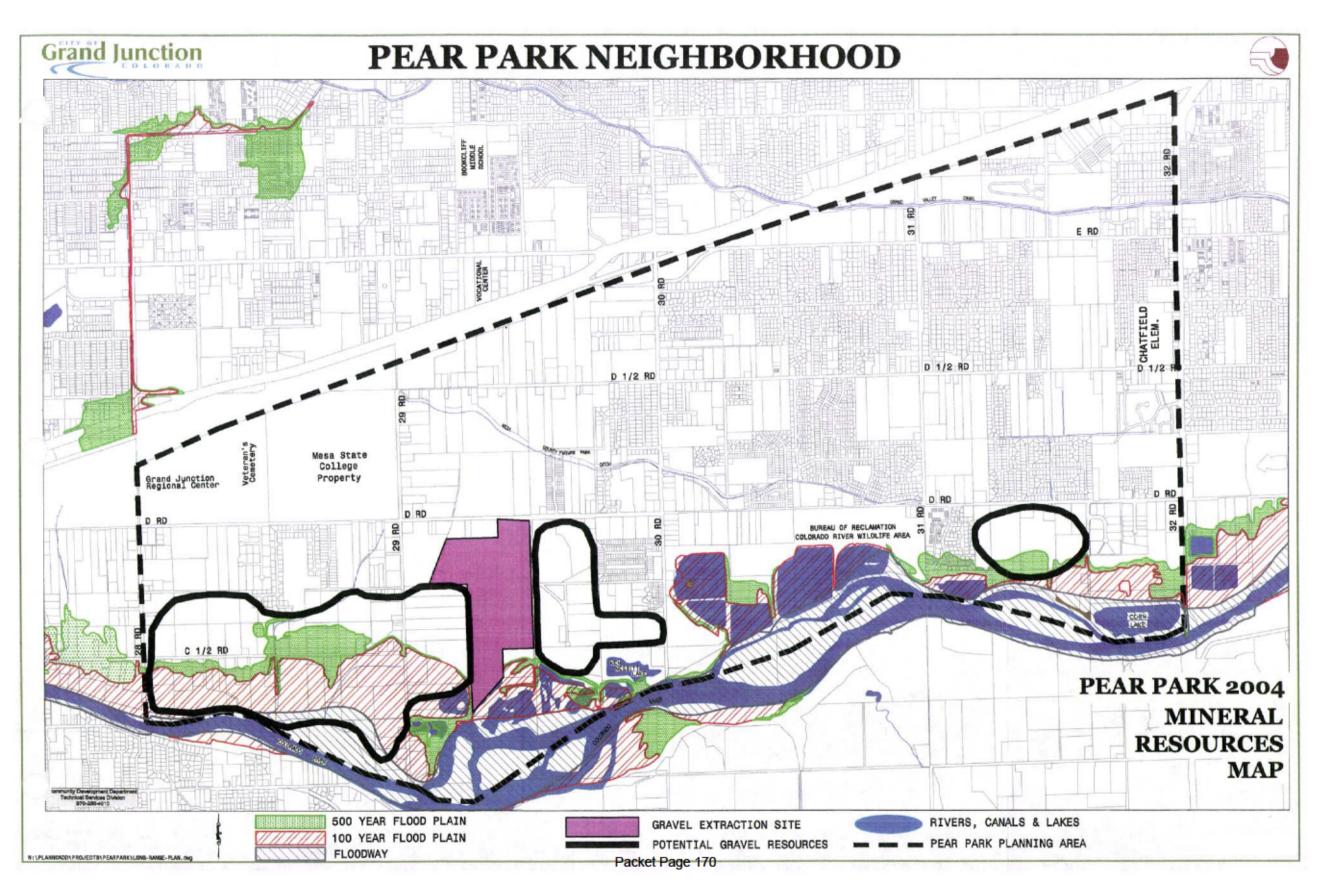
Packet Page 168

ACCEPTANCE BLOCK
THE CITY OF GRAND JUNCTION REVIEW CONSTITUTES GENERAL
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PLAN SIGNATURE.

# City of Grand Junction



Scale: 1:9,028



\*\* - EXTERNAL SENDER. Only open links and attachments from known senders. DO NOT provide sensitive information. Check email for threats per risk training. - \*\*

September 25, 2022

To Dave Thornton, Planner davidth@gjcity.org

Re: ANX-2022-613- C 1/2 Road

Public Comment

Dear Commission, Counsel and Owners,

We own the property immediately east of the proposed project and share the property line. Our vacant agricultural land is located at 2869 C ½ Road. We have met with a representative of the proposed annexation company, discussed their project and the anticipated time-line for this mineral extraction project. We are generally in favor of the annexation / changed use application.

Our goal is for the project to benefit the owners as well as the neighborhood and community at large. We propose and request the following provisions be considered by the Commission and City Counsel as part of the annexation request:

A. The proposed site is one of two properties between Las Colonias Park and 29 Road which is blocking the extension of the James M Robb bike trail. We request that after extraction and remediation processes are complete, the owner cede a sufficient amount of their private land to the State of Colorado to permit the extension of the bike trail through this stretch of river front.

The current bike access route is on C ½ Road, a narrow and rough stretch of the trail which places both bikers and drivers at risk. With the proposed extraction processes in place, more heavy trucks will be required to remove the minerals and thus increase traffic on the roadway. Because the project could take years to exhaust the resources, we request the river-front be extracted and remediated first to possibly permit the extension of the bike trail system. This will remove bikes from C ½ Road and nearly complete the bike system from Loma to Palisade.

- B. The working hours of the project should be limited to ½ hour after sunrise until ½ hour before sunset. This will minimize noise and traffic which impacts the adjacent landowners.
- C. A dedicated acceleration and deceleration lane should be required on C ½ Road near the entrance to the work site. This road has already been neglected, but with the increased use by heavy vehicles, it can be anticipated to suffer more structural fatigue. Having either a center turn lane or expanded shoulder on the south roadside will reduce the ongoing damage to the existing road.

With these requests being addressed and considered by the Planners and City Counsel, we welcome the beneficial use of the property by our neighbors.

Respectfully,

Amy Mueller, Nathaniel Mueller and Greg Mueller, owners 2869 C 1/2 Road, Grand Junction, CO

Telephone: 970.245.1227 Facsimile: 970.245.1257

I wasn't sure where to comment or what to do if I can't attend the hearing.

I own a house across the river from this project on Unaweep Ave(C road). When I bought, one of the reasons was the rural/residential area zoning. We have lots of wildlife over here including Eagles, Bears, Deer, Fox, etc that I feel would be impacted by this gravel pit project due to noise and increased traffic over there.

Thank you for taking my comment.

Ryan Lowe 2850 Unaweep Ave

ANX-2022-613--C 1/2 Road Gravel Pit Annexation 2855 C 1/2 Road

Sent from my iPhone

# Kristen Ashbeck

From:

David Thornton

Sent:

Monday, September 26, 2022 9:21 AM

To:

Greg Mueller

Cc:

So,; Nathaniel Mueller; Kristen Ashbeck; Trenton Prall; Rick Dorris; Tamra Allen

Subject:

RE: ANX-2022-613- C 1/2 Road

Good Morning Amy, Nathaniel and Greg,

Thank you for your comments. All of your comments are related directly with the proposed CUP (file #CUP-2021-616) that is also going through the Development Review Process with the City, These comments can be considered as conditions to the Conditional Use Permit (CUP) request for the gravel extraction land use. I have copied Kristen Ashbeck, project manager on the gravel extraction CUP request so she now has your comments for that review and consideration. The annexation of a property only considers whether or not the land should become part of the city limits and must meets the Colorado State statutory requirements for annexation. With the annexation of land State law requires the city to zone it within 90 days of the annexation's effective date. By request of the petitioner, the city is considering the CSR zone district which implements the City's' Comprehensive Plan for the property.

Thanks again for your comments and Kristen will incorporate them into her review and file for the proposed CUP. Kristen can be reached at 970-244-1491. Or kristena@gicity.org

Respectfully,

Dave

David Thornton, AICP
Principal Planner
Community Development Department
City of Grand Junction
www.gicity.org

Phone: 970-244-1450





From: Greg Mueller <pariahlaw@aol.com> Sent: Sunday, September 25, 2022 1:35 PM To: David Thornton <davidth@gjcity.org>

Cc: So, <akcolomed@aol.com>; Nathaniel Mueller <nathaniel.g.mueller@gmail.com>

Subject: Re: ANX-2022-613- C 1/2 Road

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September 25, 2022

To Dave Thornton, Planner davidth@gicity.org

Re: ANX-2022-613- C 1/2 Road

Public Comment

Dear Commission, Counsel and Owners,

We own the property immediately east of the proposed project and share the property line. Our vacant agricultural land is located at 2869 C ½ Road. We have met with a representative of the proposed annexation company, discussed their project and the anticipated time-line for this mineral extraction project. We are generally in favor of the annexation / changed use application.

Our goal is for the project to benefit the owners as well as the neighborhood and community at large. We propose and request the following provisions be considered by the Commission and City Counsel as part of the annexation request:

A. The proposed site is one of two properties between Las Colonias Park and 29 Road which is blocking the extension of the James M Robb bike trail. We request that after extraction and remediation processes are complete, the owner cede a sufficient amount of their private land to the State of Colorado to permit the extension of the bike trail through this stretch of river front.

The current bike access route is on C ½ Road, a narrow and rough stretch of the trail which places both bikers and drivers at risk. With the proposed extraction processes in place, more heavy trucks will be required to remove the minerals and thus increase traffic on the roadway. Because the project could take years to exhaust the resources, we request the river-front be extracted and remediated first to possibly permit the extension of the bike trail system. This will remove bikes from C ½ Road and nearly complete the bike system from Loma to Palisade.

- B. The working hours of the project should be limited to ½ hour after sunrise until ½ hour before sunset. This will minimize noise and traffic which impacts the adjacent landowners.
- C. A dedicated acceleration and deceleration lane should be required on C ½ Road near the entrance to the work site. This road has already been neglected, but with the increased use by heavy vehicles, it can be anticipated to suffer more structural fatigue. Having either a center turn lane or expanded shoulder on the south roadside will reduce the ongoing damage to the existing road.

With these requests being addressed and considered by the Planners and City Counsel, we welcome the beneficial use of the property by our neighbors.

Respectfully,

Amy Mueller, Nathaniel Mueller and Greg Mueller, owners 2869 C 1/2 Road, Grand Junction, CO

Telephone: 970.245.1227 Facsimile: 970.245.1257

Email: pariahlaw@aol.com

# Kristen Ashbeck

From:

David Thornton

Sent:

Monday, September 26, 2022 2:31 PM

To:

Kristen Ashbeck

Subject:

FW: [Grand Junction Speaks] Comment submitted for: C 1/2 Road Gravel Pit Annexation

This comments is more about the CUP application than it is for the annexation.

Thanks, Dave

From: Daniella Acosta <daniellaa@gjcity.org>
Sent: Monday, September 26, 2022 2:29 PM
To: David Thornton <davidth@gjcity.org>

Subject: Fwd: [Grand Junction Speaks] Comment submitted for: C 1/2 Road Gravel Pit Annexation

This GJ Speaks commented was routed to me instead of you.

Get Outlook for iOS

From: Grand Junction Speaks <no-reply@gjspeaks.org>
Sent: Monday, September 26, 2022 1:29:32 PM
To: Daniella Acosta <daniellaa@gjcity.org>

Subject: [Grand Junction Speaks] Comment submitted for: C 1/2 Road Gravel Pit Annexation

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The following comment has been submitted for C 1/2 Road Gravel Pit Annexation by Sandra Reams:

Hi, I live at 2854 Unaweep Ave. directly south of the proposed application. I purchased this property 5 years ago. I knew the parcel of land in question was zoned for residential single family-Rural development. The back of my property butts up against the Colorado River. My views are incredible.. the solitude is good for the soul... and wildlife is abundant. I can't imagine the constant beeping noise and sounds from the rock haulers. I am retired. I spend a lot of time outside. My windows are open in the summer. I am concerned for my

mental health. I am sensitive to annoying noises. i.e. trucks backing up. I am concerned for the wildlife. They have no say but I can tell you they would not be happy !!! I am concerned about the traffic increase on C 1/2 Rd. There are no sidewalks or bike lanes. C 1/2 is used by pedestrians and cyclist to access river trail and new park system. The new apartments west of the land application also have increased the road usage. C 1/2 is now being used as a short cut to D Rd off of 29 Rd. Surely there is somewhere else in the valley that gravel can be found. This application for land use would be a nuisance to all neighbors above and below the Colorado River and those traveling sans vehicles. Thank you SReams

You can approve or reject the comment here.

This email was delivered by gjspeaks.org

# Kristen Ashbeck

From:

David Thornton

Sent:

Tuesday, September 27, 2022 8:38 AM

To:

Ryan Lowe

Cc:

Kristen Ashbeck

Subject:

RE: ANX-2022-613--C 1/2 Road Gravel Pit Annexation 2855 C 1/2 Road

Thanks Ryan for your comments. I have copied another Planner in Community Development that is reviewing the actual Gravel Pit development application. It will be going to public hearing soon and all those who received notice for this annexation will also receive notice of the hearing date for the gravel pit/extraction use that will require a Conditional Use Permit (CUP) and that is considered by Planning Commission in a public hearing as well.

Kristen Ashbeck now has your comments for that review and consideration. The annexation of a property only considers whether or not the land should become part of the city limits and must meet the Colorado State statutory requirements for annexation. With the annexation of land State law requires the city to zone it within 90 days of the annexation's effective date. By request of the petitioner, the Planning Commission and later City Council, are considering the CSR (Community Services and Recreation) zone district which implements the City's' Comprehensive Plan for the property. The CSR zoning permits residential uses, but at a density of one dwelling unit per five acres. It permits gravel extraction with a CUP.

Thanks again for your comments and Kristen will incorporate them into her review and file for the proposed CUP. Kristen can be reached at 970-244-1491. Or kristena@gjcity.org

Respectfully,

Dave

David Thornton, AICP
Principal Planner
Community Development Department
City of Grand Junction
www.gjcity.org
Phone: 970-244-1450

----Original Message----

From: Ryan Lowe <raniac84@gmail.com>
Sent: Monday, September 26, 2022 8:30 PM
To: David Thornton <davidth@gicity.org>

Subject: ANX-2022-613--C 1/2 Road Gravel Pit Annexation 2855 C 1/2 Road

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Hello David-