AGENDA
OURAY CITY COUNCIL

Tuesday, June 20, 2023 - 6:00 PM

Ouray Community Center
320 6th Ave
Ouray, CO 81427

VIRTUAL OPTION - https://zoom.us/j/9349389230
Meeting ID: 934 938 9230 Passcode: 491878 Or dial: 408 638 0968 or 669 900 6833

Ouray City Council Regular Meeting

- Changes to this agenda can be found on the bulletin board at City Hall
- Electronic copies of the Council Packet are available on the City website at www.cityofouray.com. A hard copy of the Packet is also available at the Administrative Office for interested citizens.
- Notice is hereby given that a majority or quorum of the Planning Commission, Ouray Economic Development Committee, Beautification Committee, Tourism Advisory Committee, Main Streets Committee, and/or Parks and Recreation Committee may be present at the above noticed City Council meeting to discuss any or all of the matters on the agenda below for Council consideration

1. CALL TO ORDER
2. ROLL CALL
3. PLEDGE OF ALLEGIANCE
4. PUBLIC HEARING - Preliminary Plan for Subd: Ouray Waterview Subdivision Lot 2 Lot Split: Lot: 2A S: 25 T: 44 R: 8; and Subd: Ouray Waterview Subdivision Lot 2 Lot Split: Lot: 2B S: 25 T: 44 R: 8
5. APPROVAL OF MINUTES - June 5, 2023 Meeting
6. CITIZENS' COMMUNICATION
7. CITY COUNCIL REPORTS/INFORMATION - Tamara Gulde, Peggy Lindsey, John Wood, Josh Smith, and Ethan Funk
8. DEPARTMENT REPORTS
    a. City Administrator
    b. Director of Finance and Administration
    c. Information Technology Director
    d. Communications and Community Engagement Coordinator
9. CONSENT AGENDA
    - Special Events Permit Application - Ouray Volunteer Fire Department, Fellin Park, July 3rd
    - Special Events Permit Application - Elks Lodge #492, July 3rd & 4th
10. ACTION ITEMS
    a. Preliminary Plan for Subd: Ouray Waterview Subdivision Lot 2 Lot Split: Lot: 2A S: 25 T: 44 R: 8; and Subd: Ouray Waterview Subdivision Lot 2 Lot Split: Lot: 2B S: 25 T: 44 R: 8
    b. Agreement with Short Elliott Hendrickson Inc. for Community Development Services
11. DISCUSSION ITEM - Future Agenda Items
12. EXECUTIVE SESSION - For a conference with the City Attorney for the purpose of receiving legal advice on specific legal questions concerning material changes to new five-year Ice Park Management Agreement under C.R.S. § 24-6-402(4)(b); and to determine positions relative to matters that may be subject to negotiations, developing strategy for negotiations, and/or instructing negotiators, under C.R.S. § 24-6-402(4)(e)
13. ADJOURNMENT

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PO Box 468
Ouray, Colorado 81427

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TO: Ouray City Council
FROM: Lily Oswald, Community Development Director
DATE: May 25, 2023
FOR: June 20, 2023
SUBJECT: Waterview PUD – Preliminary Plat Application Staff Report

PROJECT GEOGRAPHY

Table 1. Project Geography

Application Summary	This Preliminary Plat Planned Unit Development (PUD) is for residential development on two (2) vacant lots north of the Biota Building. The general intent of the PUD is to develop 65 affordable, owner-occupied residential units via single-family homes, duplexes, and triplexes with (3) in-unit home childcare opportunities in the first phase. *This PUD is proposed in two (2) phases of development to align with the City's Waste Water Treatment Facility upgrade – both phases are included in the Sketch Plan application. This application is proposed from Rural Homes, LLC, and refers to this project as the "Waterview PUD."*	
Address	250 Uncompahgre Street	
Parcel Number(s)	451725113001 and 451725113002	
Legal Description	Subd: Ouray Waterview Subdivision Lot 2 Lot Split Lot: 2A S: 25 T: 44 R: 8; and Subd: Ouray Waterview Subdivision Lot 2 Lot Split Lot: 2B S: 25 T: 44 R: 8	
Applicant/Owner	Paul Major (on behalf of Ouray Homes LLC)	
Zoning	C-2 – Commercial Industrial (north of Skyrocket)	
Existing Use	Vacant	
Proposed Use	New construction of various dwelling unit types in two phases via PUD	
Site Size	9.21 acres	
Adjacent Land Uses		
North:	R-2; Single-Family Residential (Chautauqua Lane)	
South:	C-2; Industrial (Biota Building)	
East:	C-2; Vacant	
West:	Uncompahgre River	
Located Within National or Local Historic District Boundary		No
Located Within Commercial Historic Boundary		No

Table 2. Zone District Dimensional Requirements (C-2, north of Skyrocket Creek)

Requirement	Zone District Standards	Proposed/Existing
Minimum Lot Area	7,100 sq.ft.	**See Exhibit C of lot sizes by unit type** Average proposed lot: 3,833 sq.ft.
Maximum Density	3,550 sq.ft./D.U., 1,183 sq.ft./L.U.	Total lot size: 401,188 sq. ft./3,550 = 113 total dwelling units ***allowed*** Proposed: 65 dwelling units (roughly 7 DUs/acre)
Minimum Setbacks		*TBD with Building Permit*
Maximum Floor Area	15,000 sq.ft.	*TBD with Building Permit* See Exhibit C for Unit Type by Square Feet for both phases = Avg. floor area: 1,299 sq.ft.
Maximum Site Coverage	40% for residential use 50% for mixed use 60% for commercial use	Will not exceed 40%
Maximum Building Impervious Surface Site Coverage	80% for any use	Will not exceed 80%
Maximum Height	35 ft.	27' 6"
Parking	Two (2) Spaces per Residential Unit	Two (2) Spaces per Single-Family Dwelling Units, Duplex Units, and "end" Triplex Units Three (3) Spaces per Single-Family Dwelling Unit with in-unit childcare One (1) Space per "middle" Triplex Units Twenty-four (24) additional on-street parking spaces provided
PUD Open Space Coverage	20%	23% (See Exhibit F)

BACKGROUND

The Applicant received Sketch Plan approval for the property at a Planning Commission meeting on March 21, 2023. The Applicant submitted a Preliminary Plat application for the Planned Unit Development (PUD) per Ouray Municipal Code process. This PUD is for residential development on two (2) vacant lots north of the Biota Building. The general intent of the PUD is to develop 65 affordable, owner-occupied residential units via single-family homes, duplexes, and triplexes with (3) in-unit home childcare opportunities in the Phase 1 (see Exhibits G, I & J). These units will be deed restricted in perpetuity. The Preliminary Plat application proposes a new internal road to access the northernmost proposed lots and landscaped connections to the existing River Trail (located in Phase 1 and Phase 2) as well as Open Space tracts dedicated to the City.

The *goals, timeline, design and intent remains the same as the Waterview PUD Sketch Plan application as presented during the January 10, 2023 and March 21, 2023 Planning Commission hearings.*

The Ouray City Council has supported the pursuit of grant funding through HB21-1271 (administered through the Colorado Department of Local Affairs) to fund public infrastructure and to keep this project as affordable as possible. The City was notified of a grant award of $1,050,000 to help fund infrastructure for this project. This funding must be used by April of 2024.

Foundation to PUD Variations

The Planned Unit Development ("**PUD**") regulations in the Ouray Municipal Code ("**OMC**") §7-8 establish the following Statement of Objectives of Development ("**PUD Objective**"):

> *"The intent of this section is to promote the Planned Unit Development Act of 1972 and encourage innovative developments with unique and valued community attributes. PUDs allow for consideration of development proposals that differ from required development improvements identified in the OMC. PUDs offer different options to the applicant when planning and obtaining City approval for their development. PUDs allow flexibility with respect to dimensional requirements and increased densities under certain conditions or circumstances. PUDs encourage conservation of a site's natural characteristics, innovative residential, commercial and industrial development plans which will result in a more efficient use of open space and provide affordable housing for year around residents."*

OMC §7-8-D establishes the following applicable dimensional requirements and densities:

The dimensional requirements for various PUD items may differ from what is required in the OMC if the City Council determines such deviations will promote the public health, safety and welfare.

The proposed variations to the code as a result of this PUD are summarized in Table 3 below:

Table 3. Requested PUD Variations

OMC Section	OMC Standard Requirement	Requested PUD Variation
7-5-E-4-d-iii-1	*Single Family Dwellings shall be not less than 24 feet in width and 32 feet in length.*	Some units proposed: Width: **16 feet** per specifications of factory partner (compliant with building codes)
7-5-E-4-f-i	*Two off-street parking spaces per dwelling unit.*	Proposed: **2** parking spaces per single-family dwelling unit, duplex unit, and end-triplex unit; **3** parking spaces per in-unit childcare single-family dwelling unit; **1** parking space per middle-triplex unit; **24** additional off-street parking spaces in proposed internal road.
7-5-D	*Minimum Lot Area - (C-2) north of Skyrocket: 7,100 square feet*	(See Exhibit C for proposed lots and sizes) Average proposed lot size: **3**,**833** square feet
7-5-D	*Minimum Side Setback - (C-2) north of Skyrocket: 5 feet*	Duplex and Triplex dwelling units will have proper fire separation to meet state and local building codes; however, these shared party walls will result in **0-foot** side setbacks in these lots.

Process to Create a PUD

The Planning Commission is a recommending body for the Preliminary Plat phase of PUD applications. The City Council must make final PUD decision(s) during the consideration of Preliminary and Final Plat phases.
OMC §7-8-E: Procedures, states "*PUDs shall be reviewed in accordance with the same procedures for review of subdivisions as found in Subsection 7-7-C*" and *"preliminary and final PUD plan shall comply with all requirements for a preliminary and final subdivision plat**, to the extent applicable."***

The procedures for reviewing a PUD include the following Subdivision steps:

1. **Sketch PUD** with Planning Commission review and determination pursuant to the Subdivision Sketch Plan in OMC §7-7-C-2.
2. **Preliminary PUD** with Planning Commission review and recommendation to the City Council for determination pursuant to the Subdivision Preliminary Plat in OMC §7-7-C-3.
3. **Final PUD** with Planning Commission review and recommendation to the City Council for determination pursuant to the Subdivision Final Plat in OMC §7-7-C-4.

CRITERIA FOR DECISION

1. **OMC §7-8-B establishes the following primary PUD criteria for decision:**
   A. A PUD shall be in general conformity with the City Community Plan
   B. A PUD shall be consistent with the PUD Objective
   C. Compliance with the Colorado Planned Unit Development Act of 1972
   D. A PUD shall have a minimum of 1 unit or lot

2. **OMC §7-7-D-2 establishes the Requirements and Data on Preliminary Plats.**

3. **OMC §7-7-E establishes typical Subdivision Design Standards.**

STAFF ANALYSIS: PUD CRITERIA FOR DECISION

1. A. General Conformity with the Ouray Community Plan

Staff finds this PUD proposal aligns with numerous goals and strategies of the Ouray Community Plan 2021. The proposed development aims to provide homes for affordable housing AMI levels appropriate to serve the greater Ouray community and to diversify the housing available in Ouray as well as provide attainable housing solutions for year-round local residents and employees. Some applicable goals and strategies from the Community Plan are outlined below.

- Housing Goal H-1-A: "*assure attainable housing is permanently affordable utilizing deed restrictions or other available tools*" (Ouray Community Plan, pg. 16).
- Housing Goal H-1-B: *"consider amending the LUC and the city adopted building regulations to provide robust incentives for the development of attainable housing in the community"* (pg. 16).
- Housing Goal H-1-B-vi: *"allowing for homes with a high density on one or more lots, including reducing lot sizes, frontages and setbacks to facilitate small home development"* (pg. 16).
- Housing Goal H-1-E: "*support and encourage attainable rental and for-sale housing throughout the community in a variety of unit types and densities in all the city zoning districts, live-work units, small homes, multi-family developments, dormitory or 'POD' style units, and other unit types that provide for attainable housing*" (pg. 17).
- Housing Goal H-1-G: "*explore public/private partnerships to provide attainable housing*" (pg. 17).
- Housing Goal H-1-I: "*support, encourage and require new development to provide a variety of bedroom mixes, unit sizes, dwelling types, rental and ownership structures, and attainability limits that are based on an updated community housing needs assessment*" (pg. 17).
- Housing Goal H-1-Q: "*strive to provide attainable housing for 50% of the local workforce in the city*" (pg. 18).
- Housing Goal H-1-R: "*evaluate annexations and PUDs to provide attainable housing*" (pg. 18).
- Housing Goal H-2: "*cooperate and work with the Town of Ridgway, Ouray County, DOLA, the development community, and other entities to plan and develop attainable housing*" (pg. 18).
- Housing Goal H-3-D: "*promote energy efficient and 'green building' techniques to reduce household energy consumption, utility bills, and help maintain long-term affordability in new housing*" (pg. 19).
- Housing Goal H-3-F: "*strive to provide housing located in close proximity to existing or planned infrastructure, services, intermodal transit connections, sidewalks, trails and employment*" (pg. 19).
- Life Long Learning Goal LL-3-A: "*support incentives or programs to provide affordable daycare facilities throughout the city, such as land donations, fee and tap waivers, streamlined review processes, zoning allowances, or the formation or expansion of non-profits that provide childcare*" (pg. 21).
- Community Health Goal CH-1-C: "*promote, develop, improve and maintain city recreational assets for active living, such as hiking at Box Canyon Park, walking the Uncompahgre River Walk Trail, hiking on the Perimeter Trail or swimming, water aerobics and the gym at the Hot Springs Pool*" (pg. 26).
- Land Use Goal LU-1-A-iv-b: "*consider allowing for the reduced lot size only if a primary dwelling unit or an ADU is provided that is deed restricted to provide housing to employees working within the geographic boundary of Ouray County*" (pg. 32).
- Land Use Goal LU-1-A-xv: "*encourage attainable housing to be provided in existing RV parks, light industrial, commercial and other properties through LUC and other incentives*" (pg. 34).
- Economic Development Goal ED-2-L: "*encourage and incentivize the provision of attainable housing; childcare; desired community amenities; connectivity and a high quality of life to drive economic resiliency*" (pg. 51).
- Energy Goal RE-6: "*encourage and support other alternative energy uses in the city, including solar, wind,*

ground source heat pumps and biomass energy production" (pg. 74).

- The Future Land Use Map illustrates this site as **Mixed Land Use** (pg. 40). Mixed Land Use is oriented for "*multi-family dwellings with limited commercial uses, to be determined*" (pg. 42). Description/Character include:
    - *Provide incentives to maximize housing units, such as height increases via PUD, increases in density, scale and mass, and site coverage, and reduced parking.*
    - *Consider requiring a certain percentage of deed restricted housing units in exchange for incentives to ensure long-term affordability.*
    - *Allow limited and service commercial uses provided significant housing is provided.*
    - *Enhance and embrace River Park corridor and overall trail connectivity* (pg. 42).

1. B. Consistency with the PUD Objective

Key elements of the PUD objective include:

- Encourage innovative developments with unique and valued community attributes.
- Allow for consideration of development proposals that differ from required development improvements identified in the OMC.
- Offer different options to the applicant when planning and obtaining City approval for their development.
- Allow flexibility with respect to dimensional requirements and increased densities under certain conditions or circumstances.

"PUDs encourage conservation of a site's natural characteristics, innovative residential, commercial and industrial development plans which will result in a more efficient use of open space and provide affordable housing for year-round residents" (OMC §7-8-A). Staff finds the Applicant is seeking to create an innovative use of space as a PUD on the currently vacant lot. The PUD process provides an opportunity for the Applicant to seek flexibility with the dimensional standards in order to provide long-term attainable housing solutions and effective use of space, both of which are primary goals of the community under the adopted Plan.

1. C. Compliance with the Colorado PUD Act

The key requirements of the Colorado PUD Act have been incorporated into the PUD section of the OMC. A development improvements agreement will be drafted by the Applicant and executed by the City as part of the Building Permit process and prior to the Final Plat phase of the PUD to ensure infrastructure installation, maintenance, building standards, engineering standards, etc. are met and coordinated throughout the development process. This document will additionally ensure the infrastructure development remains compliant with the Colorado PUD Act.

1. D. Minimum Density

The minimum density of one unit or lot has been met.

STAFF ANALYSIS: REQUIRED DATA ON PRELIMINARY PLATS (OMC §7-7-D-2)

The data and information outlined in §**7-7-D-2** for Preliminary Plats has been met for this application among the various items submitted (see Exhibits A, D, E, & F). The information contained in this section ranges from a scale, north arrow, location of lot lines, elevation contours, and utility plans.

The final site grading plan, proposed sewer and water lines connections, storm drainage systems, the location, pipe sizes, valves, discharge points, and access points will be coordinated with the City's Public Works Department at a preconstruction meeting prior to the Final Plat application.

STAFF ANALYSIS: TYPICAL SUBDIVISION DESIGN STANDARDS (OMC §7-7-E)

General Design Standards:

As discussed above, this project is in general conformance with the goals and strategies identified in the 2021 Ouray Community Plan and the future land use map contained in the Community Plan. This project is designed as a phased approach in an effort to not over-burden the City's infrastructure capacity. This project was designed with phased density to complement the surrounding subdivision/land uses and surrounding open spaces. This project maintains access, layout, and terms identified for the variety of berm/utility/ditch easements located on the site. This project gives consideration to the preservation and connection of open spaces and the Uncompahgre River and trail.

Streets and Circulation:
The prior-plotted Uncompahgre Street will serve as immediate access from Highway 550 to this site. The Applicant proposes improving a section of Uncompahgre Street to match the improvement of the proposed new internal street for the project and will work with the City on this improvement. The continuation of Uncompahgre Street west of what is proposed in this project will be a future discussion for the City Council.
The new, proposed internal street, "Waterview Street" features 2 driving lanes, a parallel parking area adjacent to Lots 3 through 21, curbs, and 5-foot sidewalks on both sides (see Exhibit D).
The proposed internal street meets City Infrastructure Standards and has been coordinated with the City Public Works, County EMS, Fire Department, and School District to ensure proper access and width.
There is an additional emergency access identified between Lots 43 and 44 ("Tract G") which will be closed to public use, but available to the City Public Works Department, Fire Department, and County EMS for emergency access.
Staff note: "Waterview Street" may have to be renamed in future submittals and as a condition of this preliminary plat (see Exhibit B).

Lots:
The project proposes 65 lots for residential unit development and various tracts for dedication to the City and easement holders. The depth and width of the proposed lots range in size, and provide for off-street parking and multi-family dwelling unit access where applicable (see Exhibit A). All of the proposed lots are considered accessible and developable. Phase 2 lots feature northern lots larger in size, with greater rear setbacks to provide a landscape buffer between the Waterview PUD and the Chautauqua subdivision.

Water, Fire Protection and Sewer Systems:
Utility infrastructure is available and present. The project proposes connections to the existing water and sewer lines to meet code requirements and infrastructure standards. *Water and sewer connections will continue to be coordinated with the Public Works Department.* Unless otherwise agreed upon by the City Council, the applicant shall also be required to pay tap investment fees for all water and sewer tap connections as proposed in the preliminary plat.
The Preliminary Plat documents were distributed to the Ouray County EMS, Ouray Fire Department, Public Works Department, and Ouray School for review and consideration of proposed connections, easements, fire hydrants, and drainage. Comments received have been compiled in Exhibit K.

Drainage, Hazard Mitigation, and Snow Storage:
This site has minimal slope and existing hazards. This site is not directly located within an identified Flood Hazard Area. Although hazard mitigation drainage will be minimal for this project, the Applicant had a Geotechnical Engineering Study completed for the proposed development to help guide foundation setting, grading, retention areas, and drainage to best serve the future residents of this PUD (see Exhibit L).
Since this project does include additional paved roads and infrastructure, snow storage areas will be coordinated with the Public Works department to ensure the open space tracts and remainder of Uncompahgre Street area can host the snow accumulation for the PUD.

Plat Notes and Monuments:
Final Plat notes shall be reviewed and revised as necessary by City Council and the Planning Commission during the Final Plat phase. Monuments are present from the original Waterview Subdivision plat (Reception No. 211406, see Exhibit H). Additional monuments will be placed according to code as part of this project's infrastructure.
The dedicated Tracts and areas as shown on the submitted Preliminary Plat documents will be considered by the City Council and applicable agencies to ensure proper mitigation and responsibilities are coordinated and agreed upon.

Parks, Trails, Open Space, Recreation Facilities, Common Areas:
This project proposes areas for public open space and connections to the Uncompahgre River Trail (see Exhibit E).
The common areas and open spaces included in this application are dedicated to the City of Ouray, which will have to be discussed further by the City Council.
The Applicant amended the original Sketch Plan application of this project to enhance the landscape corridor of the eastern side of the lot, near Highway 550, as recommended by the Planning Commission.
This project proposes 5-foot wide, ADA-compliant sidewalks within the PUD as part of the greater ROW design.

The park dedication requirement per subsection 14-g. is less than 2 acres, which does not meet the minimum area for a city park. Therefore, the code would require the applicant to pay a fee-in-lieu of $1,203.00 per new lot (65 new lots proposed x $1,203 = $78,195) prior to the recording the Final Plat. *Staff recommends waiving the public park fee-in-lieu as permitted by section 14.i.ii. of the code due to the goals of this affordable housing project, the PUD meets the Open Space coverage requirements of the code, and because the project proposes installation of connections to recreational areas and public park areas. This fee may be reduced by City Council consideration and approval.*

PUBLIC NOTICE

Public noticing requirements per the OMC have been met for this Preliminary Plat application. Public notice was posted at City Hall on May 24, 2023, published in the Plaindealer on June 1, 2023, and posted on the property on June 2, 2023. No public comments were directed to the Planning Commission for their May 23, 2023 hearing; one (1) public comment has been received by staff for the Preliminary Plat application for City Council (see Exhibit M).

STAFF RECOMMENDATION

OMC §7-7-C-3 establishes the following Subdivision Process for Preliminary Plats:

> "d. City staff will prepare a report detailing their review findings and include any reports from review professionals. The report shall provide development information and detail compliance with all applicable City requirements, regulations or standards.
>
> g. The City Council shall consider the preliminary plat and supporting documentation, the City staff report and the Planning Commission recommendation within 30 days. The City Council shall approve, conditionally approve, or deny the preliminary plat within 30 days of considering the application."

The Waterview PUD Preliminary Plat was reviewed with the City's adopted municipal code, applicable community adopted plans and ordinances, the Ouray Community Plan, Public Works Department, Ouray County EMS, and Ouray Fire Department. As outlined in the above Staff Analyses, this application meets the standard design and plat requirements for the Preliminary Plat phase.

Staff recommends the City Council carefully consider the attached Exhibits, the project's goals, and this staff report. After hearing the staff report and any testimony at the hearing, the Council should discuss the PUD and Preliminary Plat Criteria for Decision and general conformance with the Community Plan. Staff finds this project meets many goals and actions outlined in the Ouray Community Plan, meets the goals set forth in the OMC, and has met the standards set out by the OMC while requesting deviations from the C-2 dimensional standards, *as an anticipated part of the PUD process.*

The Planning Commission recommended approval of the Waterview PUD Preliminary Plat during their hearing on May 23, 2023 with the following conditions of approval:

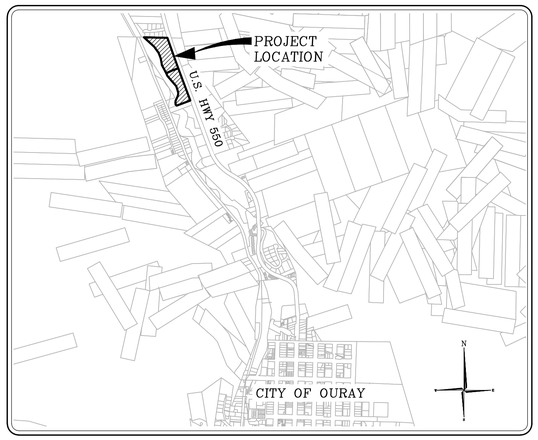
- Approve the deviations to the OMC standards outlined in Table 3 of this report
- Satisfy the comments outlined in the Staff Comment Memo prior to filing a Final Plat (Exhibit B)

Attachments:

Exhibit A: Waterview Affordable Housing Subdivision – Preliminary Plat Draft
Exhibit B: Preliminary Plat Staff Comment Memorandum
Exhibit C: Waterview PUD – Lot & Unit Summary Tables
Exhibit D: Waterview PUD – Engineered Plans
Exhibit E: Waterview PUD – Landscape Plan
Exhibit F: Waterview PUD – Example Land Use & Coverage (Phase 1)
Exhibit G: Ouray County 2023 AMI Levels (60% - 120% AMI) by Household Size
Exhibit H: Waterview Lot 2 Lot Split Plat (Reception No. 211406)
Exhibit I: Waterview PUD – Updated Sketch Plan Application Narrative
Exhibit J: Waterview PUD – Original Applicant Narrative and Project Information
Exhibit K: Interdepartmental Comments Received
Exhibit L: Geotechnical Engineering Study Proposed Waterview Development (Lambert)
Exhibit M: Public Comments Received (Chautauqua HOA)

WATERVIEW AFFORDABLE HOUSING SUBDIVISION OF LOT 2A & 2B OF OURAY WATERVIEW SUBDIVISION LOT 2 LOT SPLIT

LOCATED IN THE CITY OF OURAY, COLORADO



VICINITY MAP

SCALE : 1" = 1500'
CITY OF OURAY, COLORADO

GENERAL DEDICATIONS:

1. TRACT A, TRACT B, TRACT E AND TRACT H, as shown hereon, are hereby dedicated to the City of Ouray as open space.
2. TRACT C AND TRACT J, as shown hereon, are hereby dedicated to the City of Ouray for purpose of public right of way.
3. TRACT D AND TRACT F, as shown hereon, are hereby dedicated to the City of Ouray for the purpose of ingress and egress, installation, operation, maintenance, reconstruction, replacement, improvement and removal of stormwater detention facilities.
4. TRACT G (EMERGENCY ACCESS), as shown hereon, is hereby dedicated to the City of Ouray for the purpose of emergency ingress and egress.
5. The fifteen (15) foot wide utility easement, as shown hereon, is hereby dedicated to all public utilities, and City of Ouray approved private utilities, for the purpose of ingress and egress, installation, operation, maintenance, reconstruction, replacement, improvement and removal of underground electric distribution lines, telecommunications facilities, cable TV, gas lines, water lines and sewer lines, together with their related equipment.
6. The fifteen (15) foot wide pedestrian access easement, as shown hereon, is hereby dedicated to the City of Ouray for the purpose of pedestrian ingress and egress.

PLAT NOTES:

1. Lots and Tracts within this subdivision are subject to the Covenants, Conditions and Restrictions as recorded in the Office of Ouray County, Clerk and Recorder under Reception No._____.

CERTIFICATE OF SURVEYOR:

I hereby state that this survey and plat were prepared from field notes of an actual survey performed by me or under my direct responsibility, supervision and checking, and from documents recorded in the Office of the Ouray County, Colorado, Clerk and Recorder, and that, in my professional opinion, they are true and correct to the best of my knowledge, belief and information based on the standards of care of Professional Land Surveyors practicing in the State of Colorado. This survey is not a guaranty or warranty, either expressed or implied.

PRELIMINARY FOR REVIEW

Robert Goff, Jr., P.L.S. Date
Colorado Registration No. 38007

TITLE COMPANY'S CERTIFICATE

I, _____, a _____ representing _____, certify that I have examined title to the described land dedication to the City of Ouray, Colorado, and that the parties executing the dedication are the owners thereof in fee simple, and the dedicated land is free and clear of all liens and encumbrances except as provided for in title committment number_____dated _____.

_____
Name

_____
Title

Executed this _____ day of _____, 2023

CERTIFICATE OF OWNERS
KNOW ALL MEN BY THESE PRESENTS:

That Ouray Homes, LLC. whose address is P.O. Box 4222, Telluride, Colorado, 81434, being the legal and record owner of LOTS 2A and 2B of the OURAY WATERVIEW SUBDIVISION LOT 2 LOT SPLIT, as recorded in the Office of the Ouray County, Colorado, Clerk and Recorder under Reception Number 211406;

Has caused the same to be subdivided and replatted under the name WATERVIEW AFFORDABLE HOUSING SUBDIVISION OF LOT 2A & 2B OF OURAY WATERVIEW SUBDIVISION LOT 2 LOT SPLIT.

THIS PLAT IS HEREBY EXECUTED BY THE FOLLOWING PARTIES:

OURAY HOMES, LLC.

By _____
Paul Major, Manager

STATE OF :
SS:
COUNTY OF :

The foregoing instrument was acknowledged before me by Paul Major, Manager, Ouray Homes, LLC. on this _____ day of _____ 2023, for the aforementioned purposes.

_____ _____
My Commission Expires Notary Public

ATTORNEY'S CERTIFICATE

I, _____, an attorney at law duly licensed to practice before the courts of record of Colorado, do hereby certify that I have examined the title to all land herein platted and that title to such lands in the dedicators and owners, and that the property dedicated hereon has been dedicated free and clear of all liens and encumbrances, except as follows:

Dated this _____ day of _____, 2023

By:_____
Attorney at Law

APPROVAL OF PLANNING COMMISSION:

Approved by the City of Ouray Planning Commission this _____ day of _____ A.D., 20___.

_____
Chairperson

APPROVAL OF CITY COUNCIL:

Approved by the Ouray City Council this _____ day of _____ A.D., 20___.

_____
Mayor

LAND USE TABLE

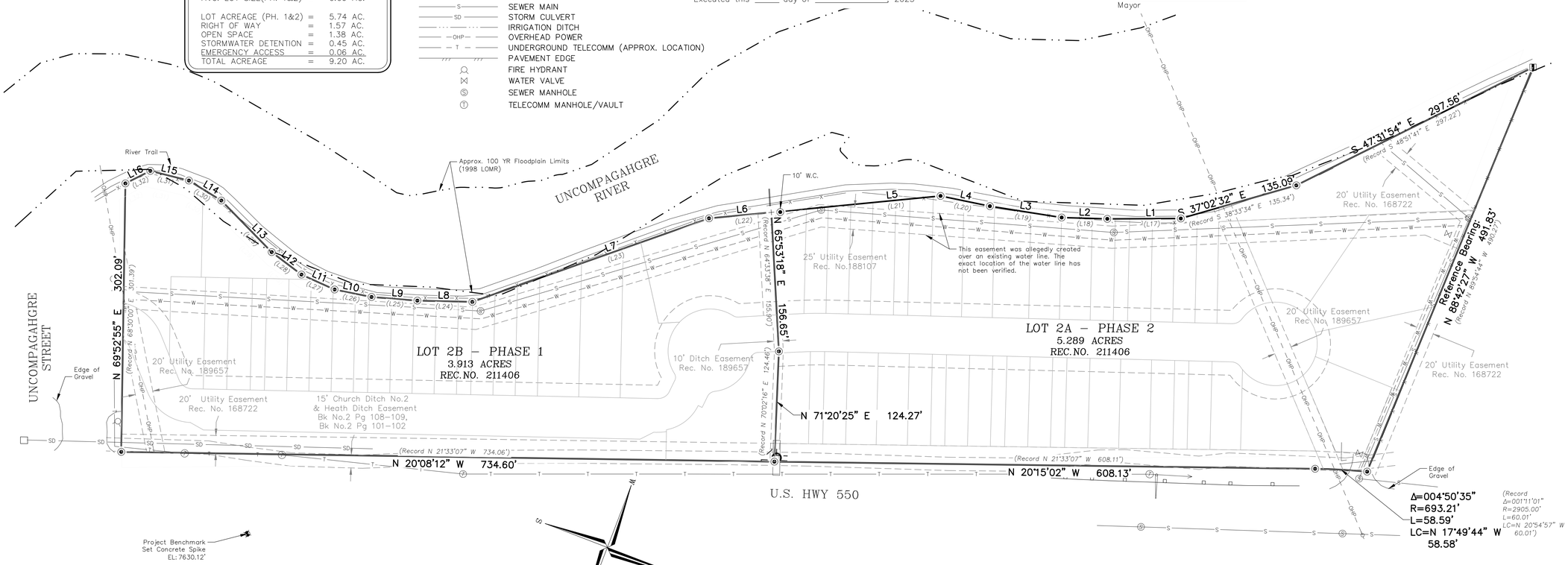
# RESIDENTIAL LOTS		
PHASE 1	=	22 LOTS
PHASE 2	=	43 LOTS
TOTAL	=	65 LOTS
AVG. LOT SIZE(PH. 1&2)	=	0.09 AC.
LOT ACREAGE (PH. 1&2)	=	5.74 AC.
RIGHT OF WAY	=	1.57 AC.
OPEN SPACE	=	1.38 AC.
STORMWATER DETENTION	=	0.45 AC.
EMERGENCY ACCESS	=	0.06 AC.
TOTAL ACREAGE	=	9.20 AC.

LEGEND

- WATER MAIN
- SEWER MAIN
- STORM CULVERT
- IRRIGATION DITCH
- OVERHEAD POWER
- UNDERGROUND TELECOMM (APPROX. LOCATION)
- PAVEMENT EDGE
- FIRE HYDRANT
- WATER VALVE
- SEWER MANHOLE
- TELECOMM MANHOLE/VAULT

LINE TABLE (Measured)		
LINE	BEARING	LENGTH
L1	S 21°13'26" E	82.66'
L2	S 19°21'34" E	51.36'
L3	S 12°02'10" E	81.76'
L4	S 09°17'05" E	56.63'
L5	S 26°31'41" E	191.18'
L6	S 26°31'41" E	70.43'
L7	S 40°26'50" E	282.29'
L8	S 19°40'08" E	61.84'
L9	S 16°28'18" E	51.69'
L10	S 09°30'25" E	42.39'
L11	S 03°14'35" W	40.85'
L12	S 16°05'14" W	41.95'
L13	S 24°42'22" W	81.04'
L14	S 10°39'07" W	42.85'
L15	S 06°55'10" E	44.78'
L16	S 47°43'14" E	31.39'

LINE TABLE (Record RN 211406)		
LINE	BEARING	LENGTH
(L17)	S 22°39'59" E	82.71'
(L18)	S 20°42'17" E	51.32'
(L19)	S 13°19'50" E	81.90'
(L20)	S 10°44'19" E	56.48'
(L21)	S 27°54'14" E	191.35'
(L22)	S 27°54'14" E	70.30'
(L23)	S 41°47'36" E	282.57'
(L24)	S 21°03'43" E	61.53'
(L25)	S 17°54'59" E	52.32'
(L26)	S 10°43'03" E	41.78'
(L27)	S 01°43'43" W	40.66'
(L28)	S 14°50'16" W	42.16'
(L29)	S 23°21'17" W	81.17'
(L30)	S 09°21'24" W	42.88'
(L31)	S 08°16'18" E	44.77'
(L32)	S 49°46'10" E	31.49'



Units shown hereon = U.S. Survey Feet

Bearings are based on the north line of LOT 2A, OURAY WATERVIEW SUBDIVISION LOT 2 LOT SPLIT, Rec. No. 211406. The ends of said line having been monumented as shown hereon. (Assumed reference bearing = N 88°42'27" W)

DESCRIPTION OF MONUMENTS

- Set 5/8" x 24" rebar with a 1–1/2" aluminum cap stamped PLS 38007
- Found 5/8" rebar with a 2" aluminum cap stamped PLS 31160
- Found 5/8" rebar with a 1–1/2" aluminum cap stamped PLS 10738
- Position for Corner – Monument Not Found or Set

STATE OF COLORADO)
SS
OURAY COUNTY)
I hereby state that this instrument was filed for record at ____O'clock __M _____ 20___ and duly filed.
Reception Number _____ Fee$ _____
_____, Recorder
By _____ Deputy

NOTICE:

According to the laws of the State of Colorado, any legal action based upon any defect in this survey must commence within three years after such defect was first discovered. In no event may any action based upon any defect in this survey be commenced more than ten years from the date of the certification shown hereon.

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970.247.1705

WATERVIEW AFFORDABLE HOUSING SUBDIVISION PLAT

CITY OF OURAY, COLORADO

SHEET 1 OF 3

PREPARED BY:	RA	CHECKED BY:	RT
PROJECT NO.	21-116	SCALE:	AS SHOWN
DATE:	5/9/2023		

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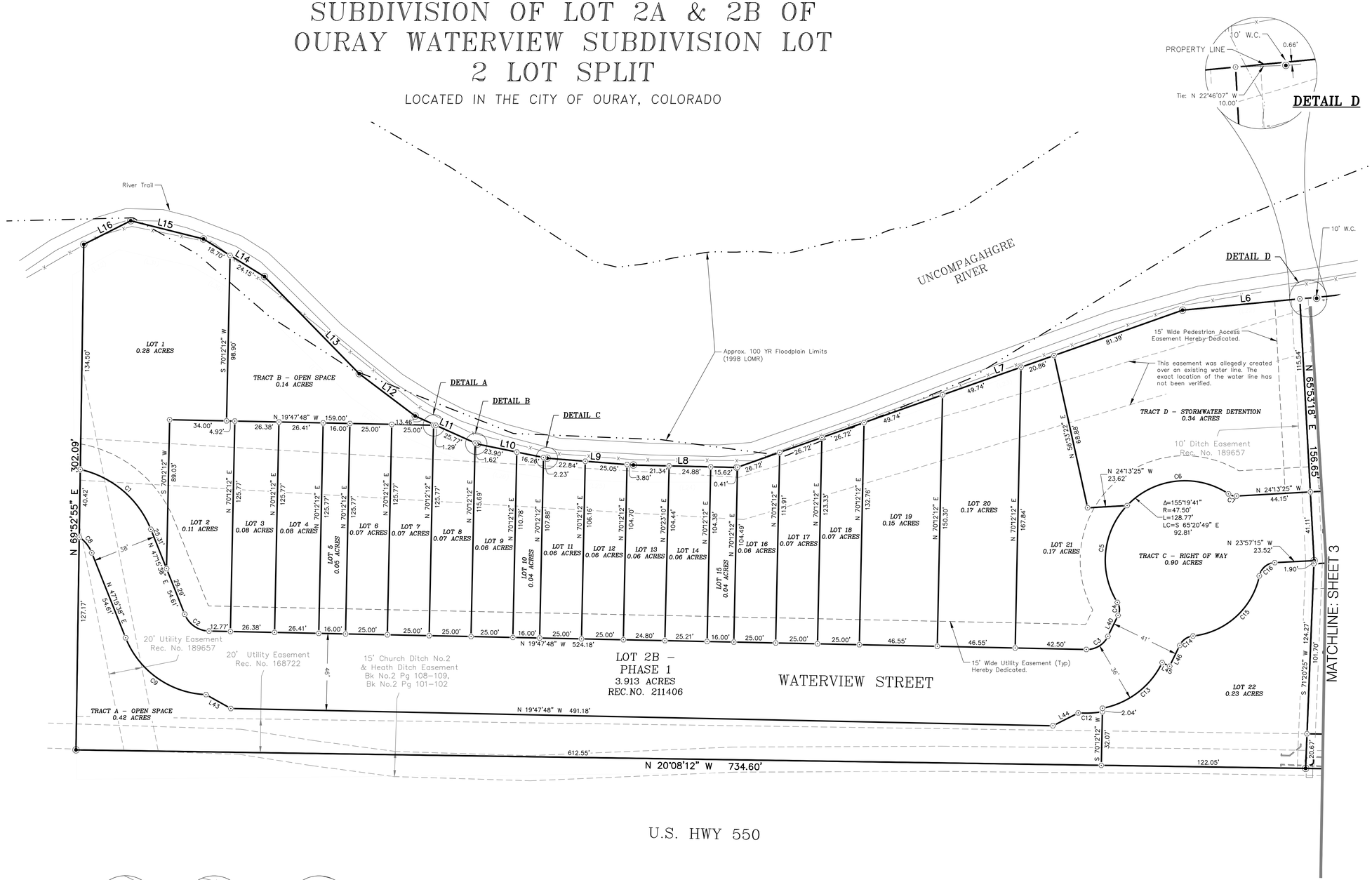
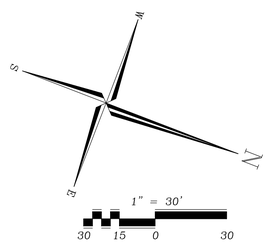
WATERVIEW AFFORDABLE HOUSING
SUBDIVISION OF LOT 2A & 2B OF
OURAY WATERVIEW SUBDIVISION LOT
2 LOT SPLIT

LOCATED IN THE CITY OF OURAY, COLORADO

LINE TABLE		
LINE	BEARING	LENGTH
L6	S 26°31'41" E	70.43'
L7	S 40°26'50" E	282.29'
L8	S 19°40'08" E	61.84'
L9	S 16°28'18" E	51.69'
L10	S 09°30'25" E	42.39'
L11	S 03°14'35" W	40.85'
L12	S 16°05'14" W	41.95'
L13	S 24°42'22" W	81.04'
L14	S 10°39'07" W	42.85'
L15	S 06°55'10" E	44.78'
L16	S 47°43'14" E	31.39'
L40	N 85°07'12" W	13.88'
L43	N 08°16'33" E	17.02'
L44	N 47°52'09" W	17.00'
L45	N 04°52'48" E	5.00'
L46	N 85°07'12" W	13.88'

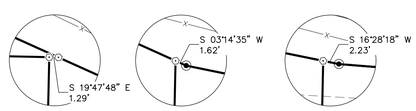
CURVE TABLE					
CURVE	DELTA	RADIUS	LENGTH	CHORD	LENGTH
C1	55°28'06"	59.39	57.50	S 19°19'29" W	55.28'
C2	67°03'26"	16.00	18.73	N 13°43'55" E	17.68'
C3	65°19'24"	14.00	15.96	N 52°27'30" W	15.11'
C4	57°53'28"	8.00	8.08	S 65°56'04" W	7.74'
C5	75°31'30"	47.50	62.61	N 74°45'06" E	58.18'
C6	79°48'11"	47.50	66.16	N 27°35'04" W	60.94'
C7	36°32'27"	8.00	5.10	N 5°57'11" W	5.02'
C8	33°17'29"	21.00	12.20	N 30°36'54" E	12.03'
C9	65°58'38"	54.00	62.18	N 14°16'20" E	58.80'
C12	11°31'53"	52.00	10.47	N 25°33'44" W	10.45'
C13	53°19'27"	50.00	46.53	N 58°27'28" W	44.87'
C14	57°53'28"	10.00	10.10	S 56°10'28" E	9.68'
C15	71°56'48"	45.50	57.13	N 63°12'08" W	53.45'
C16	74°57'07"	10.00	13.08	S 61°41'58" E	12.17'





Units shown hereon = U.S. Survey Feet

Bearings are based on the north line of LOT 2A, OURAY WATERVIEW SUBDIVISION LOT 2 LOT SPLIT, Rec. No. 211406. The ends of said line having been monumented as shown hereon. (Assumed reference bearing = N 88°42'27" W)



DETAIL A DETAIL B DETAIL C

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WATERVIEW AFFORDABLE HOUSING SUBDIVISION PHASE 1 PLAT

CITY OF OURAY, COLORADO

SHEET 2 OF 3

PREPARED BY:	RA	CHECKED BY:	RT
PROJECT NO.	21-116	SCALE: AS SHOWN	DATE: 5/9/2023

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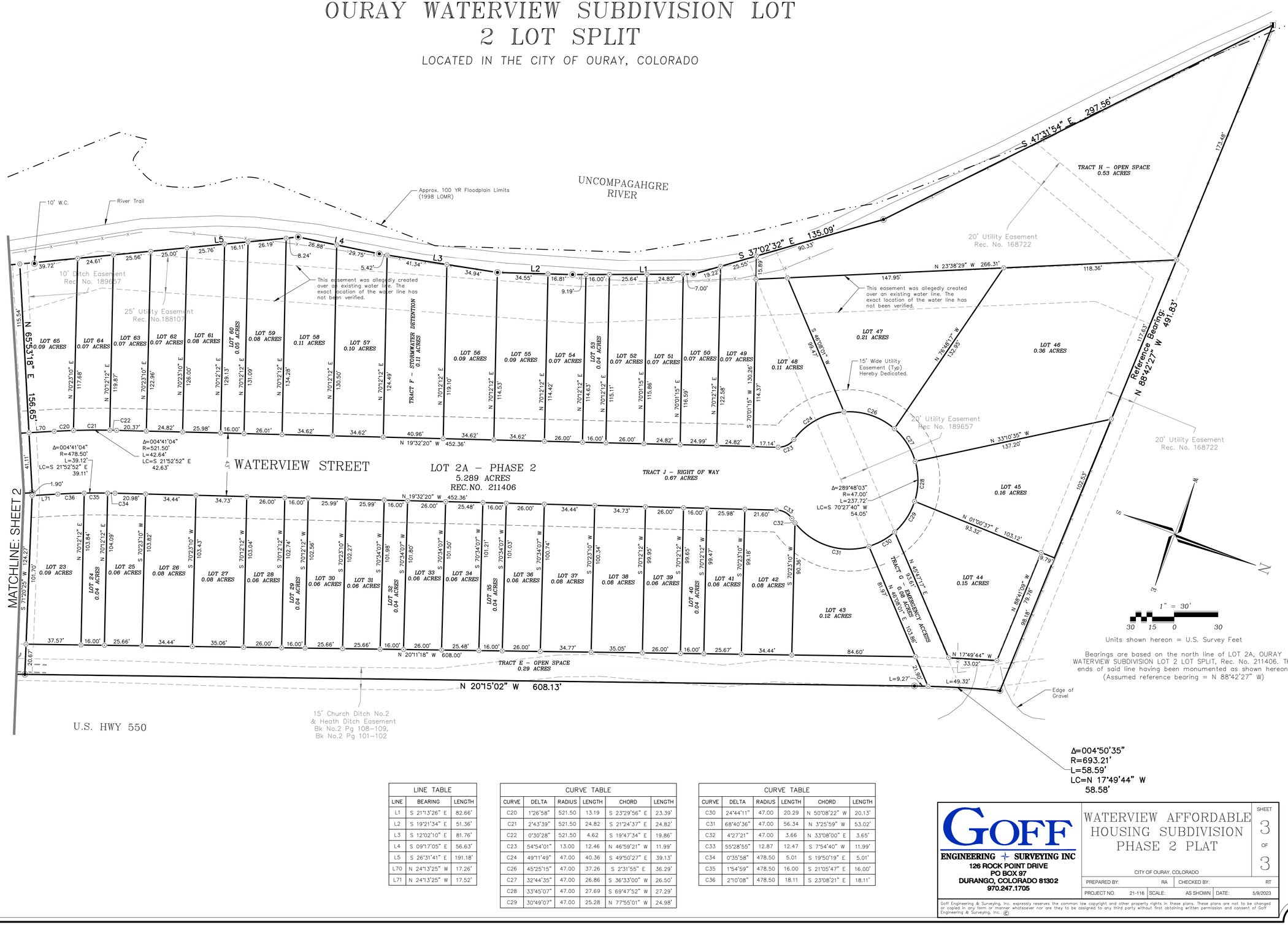
WATERVIEW AFFORDABLE HOUSING SUBDIVISION OF LOT 2A & 2B OF OURAY WATERVIEW SUBDIVISION LOT 2 LOT SPLIT

LOCATED IN THE CITY OF OURAY, COLORADO



Bearings are based on the north line of LOT 2A, OURAY WATERVIEW SUBDIVISION LOT 2 LOT SPLIT, Rec. No. 211406. The ends of said line having been monumented as shown hereon. (Assumed reference bearing = N 88°42'27" W)

LINE TABLE		
LINE	BEARING	LENGTH
L1	S 21°13'26" E	82.66'
L2	S 19°21'34" E	51.36'
L3	S 12°02'10" E	81.76'
L4	S 09°17'05" E	56.63'
L5	S 26°31'41" E	191.18'
L70	N 24°13'25" W	17.26'
L71	N 24°13'25" W	17.52'

CURVE TABLE					
CURVE	DELTA	RADIUS	LENGTH	CHORD	LENGTH
C20	1°26'58"	521.50	13.19	S 23°29'56" E	23.39'
C21	2°43'39"	521.50	24.82	S 21°24'37" E	24.82'
C22	0°30'28"	521.50	4.62	S 19°47'34" E	19.86'
C23	54°54'01"	13.00	12.46	N 46°59'21" W	11.99'
C24	49°11'49"	47.00	40.36	S 49°50'27" E	39.13'
C26	45°25'15"	47.00	37.26	S 2°31'55" E	36.29'
C27	32°44'35"	47.00	26.86	S 36°33'00" W	26.50'
C28	33°45'07"	47.00	27.69	S 69°47'52" W	27.29'
C29	30°49'07"	47.00	25.28	N 77°55'01" W	24.98'

CURVE TABLE					
CURVE	DELTA	RADIUS	LENGTH	CHORD	LENGTH
C30	24°44'11"	47.00	20.29	N 50°08'22" W	20.13'
C31	68°40'36"	47.00	56.34	N 3°25'59" W	53.02'
C32	4°27'21"	47.00	3.66	N 33°08'00" E	3.65'
C33	55°28'55"	12.87	12.47	S 7°54'40" W	11.99'
C34	0°35'58"	478.50	5.01	S 19°50'19" E	5.01'
C35	1°54'59"	478.50	16.00	S 21°05'47" E	16.00'
C36	2°10'08"	478.50	18.11	S 23°08'21" E	18.11'

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WATERVIEW AFFORDABLE HOUSING SUBDIVISION PHASE 2 PLAT

CITY OF OURAY, COLORADO

SHEET 3 OF 3

PREPARED BY:	RA	CHECKED BY:	RT
PROJECT NO.	21-116	SCALE:	AS SHOWN
DATE:	5/9/2023		

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www.cityofouray.com

MEMORANDUM

TO: Paul Major, on behalf of Ouray Homes LLC ("Applicant")

FROM: Lily Oswald, City of Ouray Community Development Director ("Staff")

DATE: May 18, 2023

SUBJECT: Waterview PUD – Preliminary Plat Application Staff Review Comments

This memorandum provides initial staff comments to the Waterview PUD Preliminary Plat application, received by the City of Ouray on May 1, 2023. This memorandum serves as initial comments to the submitted materials for the Waterview Preliminary Plat PUD and does not represent exhaustive City comments or conditions to this application.

1. Ouray County has a Waterview Lane, Waterview Court, and Waterview Cove. Staff has coordinated with the County's Road and Bridge Department and EMS and has concerns of the duplicative nature of the proposed "Waterview Street" and recommends changing this street name.
    a. *Applicant must coordinate final proposed street name prior to final plat filing, installation of street signage, or official addressing.*
    b. *If amended, all construction documents, plats, and related materials must reflect the updated street name.*
2. Correct all titles of documents to reflect "City of Ouray" not "Town of Ouray."
    a. *Example: engineered construction cover sheet.*
3. Correct all documents to reflect "Uncompahgre Street" and "Uncompahgre River" where mislabeled.
    a. *Example: engineered construction sheets.*
4. All construction document and future submittals must match layout and design of the submitted "Waterview Affordable Housing Subdivision" Preliminary Plat.
    a. *Phase 2 lot numbers must be corrected in future submittals. Example: engineered construction documents display incorrect phase 2 lot numbers.*
5. Applicant must coordinate a preconstruction meeting with the City of Ouray Public Works Department, City Administrator, Community Development Department, and Fire Department to ensure installation of infrastructure is a concerted effort which aligns with all departmental timelines, capacities, and standards.
    a. *Access to City and private utilities along the west side of proposed lots 49 through 65 and 2 through 21 must be maintained with no structures developed along the 25-foot utility easement as shown (Reception No. 188107 and 211406).*
6. Applicant must draft a Development Improvements Agreement for the associated infrastructure, standards, timelines, and improvements for this project.
    a. *Agreement must be approved by the City Attorney, City Administrator and associated bodies and executed accordingly.*
    b. *Agreement must be mutually-executed prior to filing a Final Plat as part of the Building Permit process once proposed infrastructure is finalized.*

7. Applicant must receive written approval or an access permit from the Colorado Department of Transportation for any access to Highway 550 directly from subject lot and for any new street serving the subdivision that intersects said highway prior to filing a Final Plat application.
8. Final Plat must reiterate the plat notes and easement descriptions included in the Waterview Lot 2 Lot Split Plat (Reception No. 211406) by reference.
9. Once preliminary plat approval has been granted from the Ouray City Council, the Applicant must work with the City to coordinate a joint meeting with the City Council, City Attorney, City Administrator, and Planning Commission to discuss terms and responsibility of the deed restrictions associated with this project.

Ouray Waterview Unit Mix - Phase 1

By Lot

Lot #	Home Type	Bedrooms and Baths	Configure	Garage, Shed or Home Childcare	Home Sq. Footage	Garage Sq. Footage	Parking Spaces	Lot Size
1	Torrey	3 bdr/3 bth	Single Family	Home Childcare	1,984	-	3	12,251
2	Antero	2 bdr/2 bth	Duplex	Shed	1,024	-	2	4,590
3	Shavano	3 bdr/2 bth	Duplex	Shed	1,216	-	2	3,318
4	Shavano	3 bdr/2 bth	Triplex	Shed	1,216	-	2	3,321
5	Antero	2 bdr/2 bth	Triplex	Shed	1,024	-	1	2,012
6	Shavano	3 bdr/2 bth	Triplex	Shed	1,216	-	2	3,144
7	Shavano	3 bdr/2 bth	Duplex	Shed	1,216	-	2	3,145
8	Shavano	3 bdr/2 bth	Duplex	-	1,216	-	2	3,025
9	Shavano	3 bdr/2 bth	Triplex	-	1,216	-	2	2,827
10	Antero	2 bdr/2 bth	Triplex	-	1,024	-	1	1,749
11	Shavano	3 bdr/2 bth	Triplex	-	1,216	-	2	2,672
12	Shavano	3 bdr/2 bth	Duplex	-	1,216	-	2	2,636
13	Shavano	3 bdr/2 bth	Duplex	-	1,216	-	2	2,609
14	Shavano	3 bdr/2 bth	Triplex	-	1,216	-	2	2,615
15	Antero	2 bdr/2 bth	Triplex	-	1,024	-	1	1,670
16	Shavano	3 bdr/2 bth	Triplex	-	1,216	-	2	2,730
17	Antero	2 bdr/2 bth	Duplex	-	1,024	-	2	2,966
18	Shavano	3 bdr/2 bth	Duplex	Shed	1,216	-	2	3,201
19	Torrey	3 bdr/3 bth	Single Family	Garage	1,600	384	2	6,587
20	Torrey	3 bdr/3 bth	Single Family	Garage	1,600	384	2	7,404
21	Torrey	3 bdr/3 bth	Single Family	Home Childcare	1,984	-	3	7,465
22	Torrey	3 bdr/3 bth	Single Family	Home Childcare	1,984	-	3	9,962
Total				**Total:**	**28,864**	**768**	**44**	**91,899**
				Average:	**1,312**		**Average:**	**4,177**

Ouray Waterview Unit Mix - Phase 2

By Lot

Lot #	Home Type	Bedrooms and Baths	Configure	Garage, Shed or Home Childcare	Home Sq. Footage	Garage Sq. Ft.	Parking Spaces	Lot Size
65	Shavano	3 bdr/2 bth	Duplex	Shed	1,216		2	4,077
64	Antero	2 bdr/2 bth	Duplex	Shed	1,024		2	2,922
63	Antero	2 bdr/2 bth	Duplex	Shed	1,024		2	3,058
62	Shavano	3 bdr/2 bth	Duplex	Shed	1,216		2	3,089
61	Shavano	3 bdr/2 bth	Triplex	Shed	1,216		2	3,271
60	Antero	2 bdr/2 bth	Triplex	Shed	1,024		1	2,118
59	Shavano	3 bdr/2 bth	Triplex	Shed	1,216		2	3,433
58	Torrey	3 bdr/3 bth	Single Family	Shed	1,600		2	4,616
57	Torrey	3 bdr/3 bth	Single Family	Shed	1,600		2	4,410
56	Torrey	3 bdr/3 bth	Single Family	Shed	1,600		2	4,044
55	Torrey	3 bdr/3 bth	Single Family	Shed	1,600		2	3,963
54	Shavano	3 bdr/2 bth	Triplex	Shed	1,216		2	2,956
53	Antero	2 bdr/2 bth	Triplex	Shed	1,024		1	1,875
52	Shavano	3 bdr/2 bth	Triplex	Shed	1,216		2	2,962
51	Shavano	3 bdr/2 bth	Duplex	Shed	1,216		2	2,884
50	Antero	2 bdr/2 bth	Duplex	Shed	1,024		2	2,992
49	Antero	2 bdr/2 bth	Duplex	Shed	1,024		2	3,112
48	Shavano	3 bdr/2 bth	Duplex	Shed	1,216		2	4,663
47	Torrey	3 bdr/3 bth	Single Family	Garage	1,600	384	2	9,138
46	Torrey	3 bdr/3 bth	Single Family	Garage	1,600	384	2	15,905
45	Torrey	3 bdr/3 bth	Single Family	Garage	1,600	384	2	7,079
44	Torrey	3 bdr/3 bth	Single Family	Garage	1,600	384	2	6,409
43	Torrey	3 bdr/3 bth	Single Family	Garage	1,600	384	2	5,181
42	Torrey	3 bdr/3 bth	Single Family	Shed	1,600		2	3,376
41	Shavano	3 bdr/2 bth	Triplex	Shed	1,216		2	2,547
40	Antero	2 bdr/2 bth	Triplex	Shed	1,024		1	1,629
39	Shavano	3 bdr/2 bth	Triplex	Shed	1,216		2	2,577
38	Torrey	3 bdr/3 bth	Single Family	Shed	1,600		2	3,494
37	Torrey	3 bdr/3 bth	Single Family	Shed	1,600		2	3,479
36	Shavano	3 bdr/2 bth	Triplex	Shed	1,216		2	2,623
35	Antero	2 bdr/2 bth	Triplex	Shed	1,024		1	1,618
34	Shavano	3 bdr/2 bth	Triplex	Shed	1,216		2	2,583
33	Shavano	3 bdr/2 bth	Triplex	Shed	1,216		2	2,643
32	Antero	2 bdr/2 bth	Triplex	Shed	1,024		1	1,630
31	Shavano	3 bdr/2 bth	Triplex	Shed	1,216		2	2,637
30	Shavano	3 bdr/2 bth	Triplex	Shed	1,216		2	2,645
29	Antero	2 bdr/2 bth	Triplex	Shed	1,024		1	1,642
28	Shavano	3 bdr/2 bth	Triplex	Shed	1,216		2	2,675
27	Torrey	3 bdr/3 bth	Single Family	Shed	1,600		2	3,602
26	Torrey	3 bdr/3 bth	Single Family	Shed	1,600		2	3,569
25	Shavano	3 bdr/2 bth	Triplex	Shed	1,216		2	2,666
24	Antero	2 bdr/2 bth	Triplex	Shed	1,024		1	1,702
23	Shavano	3 bdr/2 bth	Triplex	Shed	1,216		2	3,741
Total				**Total:**	**55,552**	**1,920**	**79**	**157,235**
				Average:	**1,292**		**Average:**	**3,657**
				Both Phases:				
				Average:	**1,299**		**Average:**	**3,833**

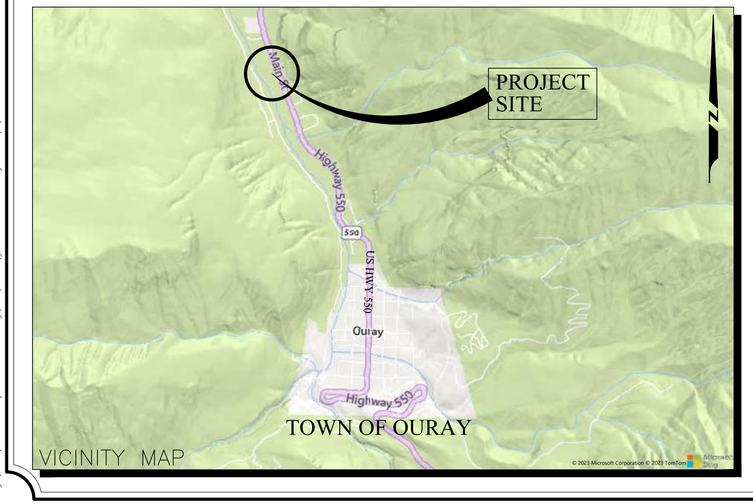
WATERVIEW AFFORDABLE HOUSING SUBDIVISION TOWN OF OURAY, COLORADO

PROJECT CONTACT LIST				
AGENCY	ROLE	NAME	PHONE	EMAIL
OURAY HOMES, LLC	OWNERS REPRESENTATIVE	PAUL MAJOR	(970) 209-2880	paul@ruralhomesproject.co
GOFF ENGINEERING	PROJECT ENGINEER	ROB HARRIES	(970) 247-1705	rharries@goffengineering.com
TOWN OF OURAY	PUBLIC WORKS DIRECTOR			
	INSPECTOR			
SAN MIGUEL POWER AUTHORITY (SMPA)	ELECTRIC UTILITY			
BLACK HILLS ENERGY	GAS UTILITY			
	TELECOMM UTILITY			
CONTRACTOR	PROJECT SUPERINTENDENT			
CONTRACTOR	PROJECT MANAGER			

Sheet List Table	
Sheet #	Sheet Title
G1.01	COVER SHEET
G1.02	CONSTRUCTION NOTES
G2.01	TYPICAL ROADWAY SECTIONS
RD1.00	EX. CONDITIONS
RD1.01	OVERALL SITE PLAN
RD1.02	PHASE 1 SITE PLAN
RD1.03	PHASE 2 SITE PLAN
RD2.01	UNCOMPAGHRE ST. PLAN & PROFILE
RD2.02	WATERVIEW ST. PHASE 1 PLAN & PROFILE
RD2.03	WATERVIEW ST. PHASE 1 CDS PLAN & PROFILE
RD2.04	WATERVIEW ST. PHASE 2 PLAN & PROFILE
RD2.05	WATERVIEW ST. PHASE 2 CDS PLAN & PROFILE
RD3.01	UNCOMPAGHRE ST. CROSS SECTION
RD3.02	WATERVIEW ST. PHASE 1 CROSS SECTION
RD3.03	WATERVIEW ST. PHASE 1 CROSS SECTION
RD3.04	WATERVIEW ST. PHASE 2 CROSS SECTION
RD3.05	WATERVIEW ST. PHASE 2 CROSS SECTION
SS1.01	SEWER A PLAN & PROFILE
W1.01	WATER A PLAN & PROFILE
W1.02	WATER B PLAN & PROFILE
SD1.01	STORM DRAIN A PLAN & PROFILE
SD1.02	IRRIGATION CULVERT PLAN & PROFILE
SD1.03	STORM DRAIN B PLAN & PROFILE
DU1.01	PHASE 1 DRY UTILITIES

ABBREVIATION LEGEND

ABC	AGGREGATE BASE COURSE	L	LEFT
BOW	FINISH GROUND AT BASE OF WALL	LP	LOW POINT
BVCE	BEGINNING VERTICAL CURVE ELEVATION	LPEA	LA PLATA ELECTRIC ASSOCIATION
BVCS	BEGINNING VERTICAL CURVE STATION	LVC	LENGTH OF VERTICAL CURVE
CDOT	COLORADO DEPARTMENT OF TRANSPORTAION	MAX	MAXIMUM
CEN	CENTER	MIN	MINIMUM
CL	CENTERLINE	MUTCD	MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES
CMP	CORRUGATED METAL PIPE	N	NORTHING
CP	CONTROL POINT	PC	POINT OF CURVATURE
DIA	DIAMETER	PE	POLYETHYLENE
DIP	DUCTILE IRON PIPE	PGL	PROFILE GRADE LINE
DMH	DRAINAGE MANHOLE	PI	POINT OF INTERSECTION
d_{50}	MEDIAN STONE SIZE	PT	POINT OF TANGENCY
E	EASTING	PVI	POINT OF VERTICAL INTERSECTION
EG	EXISTING GROUND	R	RADIUS
ELEV	ELEVATION	RT	RIGHT
EOC	EDGE OF CONCRETE	RCP	REINFORCED CONCRETE PIPE
EOP	EDGE OF PAVEMENT	R/W	RIGHT-OF-WAY
ESMT	EASEMENT	SD	STORM DRAIN
EVCE	ENDING VERTICAL CURVE ELEVATION	SMPA	SAN MIGUEL POWER AUTHORITY
EVCS	ENDING VERTICAL CURVE STATION	SSMH	SANITARY SEWER MANHOLE
EX	EXISTING	SS	SANITARY SEWER
FES	FLARED END SECTION	STA	STATION
FG	FINISHED GROUND	TB	THRUST BLOCKING
FL	FLOW LINE	TBOC	TOP BACK OF CURB
FO	FIBER OPTIC	TEMP	TEMPORARY
FS	FINISHED SURFACE	TOR	TOWN OF RIDGWAY
GB	GRADE BREAK	TOW	TOP OF WALL RETAINING
HMA	HOT MIX ASPHALT	(TYP)	TYPICAL
HP	HIGH POINT	W/	WITH
INV	INVERT		
LC	LONG CHORD	±	APPROXIMATE
		℄	CENTERLINE
		Δ	INTERIOR ANGLE
		ϕ	DIAMETER



VICINITY MAP

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

Legend of Civil Features

Existing Features

LINETYPES
- WATER MAIN (SIZE NOTED) —8W— —8W—
- SEWER MAIN (SIZE NOTED) —10S— —
- SEWER FORCEMAIN —FM—
- STORM CULVERT (SIZE NOTED) —24D—
- IRRIGATION —IRR—
- UNDERGROUND POWER —P—
- OVERHEAD POWER —OHP—
- UNDERGROUND FIBER OPTIC —FO—
- UNDERGROUND TELECOMM — T —
- OVERHEAD TV/TELE —OHT—
- WATERCOURSE FLOWLINE
- UNDERGROUND GAS —G—
- FENCE/GEOTEXTILE FABRIC —X—X—
- PAVEMENT EDGE
- GRAVEL/DIRT ROAD
- RAILROAD TRACK
- GUARDRAIL
- ROCK WALL
- STRUCTURAL RETAINING WALL
- SAWCUT LINE

STORM DRAIN CATEGORY
- CULVERT END SECTION
- INLET TYPE 'R'
- INLET GENERAL/AREA DRAIN
- INLET TYPE 'D'/TYPE 'C'
- STORMDRAIN MANHOLE

ELECTRIC CATEGORY
- ELECTRIC TRANSMISSION TOWER
- TRANSFORMER
- ELECTRIC PEDESTAL/VAULT
- POWER MANHOLE
- ELECTRIC METER
- ELECTRIC OUTLET
- TRANSFORMER ON POLE
- POLE MOUNTED STREET LIGHT
- HIGH MAST LIGHT
- LUMINAIRE (MISC)
- UTILITY POLE
- UTILITY POLE ANCHOR

TRAFFIC SIGNAL CATEGORY
- TRAFFIC SIGNAL POLE W/ MAST ARM
- TRAFFIC SIGNAL CONTROL PANEL
- PEDESTRIAN POLE

GAS/OIL CATEGORY
- GAS WELLHEAD
- GAS VALVE
- GAS METER
- GAS VAULT/RISER
- PROPANE TANK

WATER CATEGORY
- WATER MANHOLE – WELLHEAD
- BLOW OFF ASSEMBLY
- WATER METER
- FIRE HYDRANT
- WATER VALVE
- HOSE BIB / YARD HYDRANT
- PUMP

SANITARY SEWER CATEGORY
- SEWER MANHOLE
- SEWER CLEANOUT
- SEPTIC TANK

DITCH/WATERWAY CATEGORY
- CHECK DAM
- DIVERSION BOX
- FLUME
- FLOW GAUGE
- HEADGATE
- SPRING
- WETLAND AREA
- WATERWAY MISC (SEE NOTE)

FENCE CATEGORY
- POST/BOLLARD
- FENCE GATE

GEOLOGY CATEGORY
- TEST HOLE
- BOULDER
- MINE SHAFT

ROADWAY CATEGORY
- GUARDRAIL END SECTION

LANDSCAPE/CAMPING CATEGORY
- CONIFEROUS TREE (DIA. NOTED) 18"
- DECIDUOUS TREE (DIA. NOTED) 18"
- SHRUB/VEGETATION LIMIT
- SWING SET
- TEETER TOTTER
- JUNGLE GYM
- BENCH/TABLE
- GRILL/FIRE RING
- SPRINKLER HEAD
- IRRIGATION VALVE

MISCELLANEOUS TOPO CATEGORY
- WASTE SITE/GRAVE
- ARCH SITE/AREA OF CONCERN
- MISC.POINT (SEE DESCRIPTION)
- CAMPSITE
- MAILBOX

RAILROAD CATEGORY
- RR SIGN/SIGNAL/SWITCH

STRUCTURE CATEGORY
- BRIDGE DRAIN/COLUMN

TELECOMMUNICATION CATEGORY
- TELECOMM RISER
- TELECOMM MANHOLE/VAULT
- ANTENNAE

SIGN CATEGORY
- SIGN (GENERAL)
- SIGN (CLASS 1 OR 2)
- SIGN (CLASS 3)
- BILLBOARD
- DELINEATOR
- SIGN W/ BEACON

SURVEY CATEGORY
- RIGHT OF WAY MARKER
- AERIAL PANEL POINT
- CONTROL MONUMENT (HARN)
- BENCHMARK
- SECTION CORNER
- PROPERTY PIN
- USGS MARKER
- NOAA MARKER
- BLM MARKER
- WITNESS CORNER
- TOWNSHIP CORNER
- CONTROL MONUMENT FEDERAL
- CONTROL MONUMENT LOCAL/PLSS
- TRACT CORNER

PROPOSED FEATURES

- ASPHALT SURFACING
- CONCRETE SURFACING
- GRAVEL SURFACING
- RIP-RAP SURFACING
- SEWER MAIN (SIZE NOTED) 8S
- STORM DRAIN CULVERT
- WATER MAIN 10W
- SEWER FORCEMAIN FM
- GAS LINE G
- LIMITS OF GRADING
- WATER METER
- FIRE HYDRANT
- WATER VALVE
- BEND FITTING & THRUST BLOCK
- CURB STOP
- FINISHED GRADE 28.86
- STREET SIGN
- STORM MANHOLE
- CLEANOUT
- SEWER MANHOLE
- STORM INLET (TYPE 16)
- STORM INLET (TYPE R)
- STORM INLET (TYPE D)
- STORM INLET (TYPE C)
- DETAIL # A-3.1
- SHEET #

Existing Features	Proposed Features	SURVEY LINE TYPES
CENTERLINE	CENTERLINE	
LOTLINE	LOTLINE	
RIGHT OF WAY	RIGHT OF WAY	
EASEMENT	EASEMENT	
	PARCEL BOUNDARY	

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WATERVIEW AFFORDABLE HOUSING SUBDIVISION
OURAY, COLORADO

Issue Record:
SCHEMATIC 05-05-2023

Revisions:

Project Number: 21-116
Drawn By: JAE
Designed by: RSH
Checked By: RSH

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COVER SHEET

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PROJECT GENERAL NOTES:

1. ALL CONSTRUCTION SHALL BE PER CITY OF OURAY SPECIFICATIONS AND DESIGN STANDARDS FOR INFRASTRUCTURE CONSTRUCTION – FEBRUARY 9 2023, WITH ANY ADDENDA ADOPTED THEREAFTER TO DATE OF PRELIMINARY PLAT APPROVAL. (HEREAFTER OURAY'S INFRASTRUCTURE STANDARDS, UNLESS OTHERWISE SPECIFIED).
2. LOCATION AND DEPTH OF SEWER AND WATER LINES ARE APPROXIMATE AND BASED ON BEST AVAILABLE INFORMATION. CONTRACTOR IS REQUIRED TO FIELD VERIFY PRECISE LOCATION AND DEPTH PRIOR TO CONSTRUCTION.

GENERAL WATER NOTES:

1. ALL EQUIPMENT, MATERIALS, INSTALLATION, TESTING, AND INSPECTIONS SHALL BE IN ACCORDANCE TO THESE PLANS, OURAY'S INFRASTRUCTURE STANDARDS (STANDARD SPECIFICATIONS – WATER LINE CONSTRUCTION, WATER DISTRIBUTION SYSTEM – MINIMUM DESIGN STANDARDS & STANDARD SPECIFICATIONS – WATER SERVICE CONNECTIONS), AS WELL AS COLORADO DEPARTMENT OF HEALTH STANDARDS.
2. ALL FITTINGS SHALL BE FLANGE END.
3. ALL GATE VALES SHALL BE FLANGE BY MECHANICAL JOINT.

GENERAL SEWER NOTES:

1. ALL EQUIPMENT, MATERIALS, INSTALLATION, TESTING, AND INSPECTIONS SHALL BE IN ACCORDANCE TO THESE PLANS, OURAY'S INFRASTRUCTURE STANDARD (SEWER MAINS – STANDARD SPECIFICATIONS & SEWER SYSTEM SPECIFICATIONS – MINIMUM DESIGN STANDARDS) AS WELL AS COLORADO DEPARTMENT OF HEALTH STANDARDS.

GENERAL DRY UTILITIES NOTES:

1. POWER, GAS AND TELECOMMUNICATION INFRASTRUCTURE HAS BEEN DIAGRAMMATICALLY DEPICTED ON THE DRY UTILITY PLANS WITHIN THIS PLAN SET.

GRADING AND SITE PREPARATION

1. ALL EQUIPMENT, MATERIALS, INSTALLATION, TESTING, AND INSPECTIONS SHALL BE IN ACCORDANCE WITH THESE PLANS, OURAY'S INFRASTRUCTURE STANDARD (STANDARD SPECIFICATIONS –EXCAVATION, BACKFILL, AND COMPACTION).

STORM WATER MANAGEMENT NOTES:

1. ALL EQUIPMENT, MATERIALS, INSTALLATION, TESTING, AND INSPECTIONS SHALL BE IN ACCORDANCE WITH OURAY'S INFRASTRUCTURE STANDARDS AND THE DRAINAGE MASTER PLAN, AS AMENDED.
2. STORM CULVERTS TO BE ADS–N12 O.A.E.

ROADWAY SURFACING NOTES:

1. THE FOLLOWING APPLICATION RATES WERE USED FOR DEVELOPING THE APPROXIMATE PLAN QUANTITIES:

   AGGREGATE BASE COURSE (ABC) – 133 POUNDS PER CUBIC FOOT

TESTING AND INSPECTION REQUIREMENTS

1. ALL TESTING AND INSPECTIONS SHALL BE IN ACCORDANCE WITH OURAY'S INFRASTRUCTURE STANDARDS.

GEOTECHNICAL

1. "GEOTECHNICAL ENGINEERING STUDY PROPOSED WATERVIEW DEVELOPMENT OURAY, COLORADO" BY LAMBERT AND ASSOCIATES. FEBRUART 3, 2023 IS CONSIDERED A PART OF THE PROJECT CONSTRUCTION DOCUMENTS. CONTRACTOR SHALL REVIEW AND ADHERE TO ALL CONDITIONS AND REQUIREMENTS CONTAINED THEREIN.

SUMMARY OF APPROXIMATE QUANTITIES

MATERIAL QUANTITY NOTES:

1. SUMMARY OF APPROXIMATE QUANTITIES IS FURNISHED FOR INFORMATIONAL PURPOSES ONLY. CONTRACTOR IS RESPONSIBLE FOR REVIEWING CONTRACT DOCUMENTS AND DEVELOPING MATERIAL QUANTITIES AS A BASIS FOR BID PRICING.
2. AUTOCAD DRAWINGS AND DIGITAL TERRAIN MODELS WILL BE FURNISHED TO CONTRACTOR AS REQUESTED TO FACILITATE DEVELOPING MATERIAL QUANTITY TAKEOFF AND SURVEY LAYOUT

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OURAY, COLORADO

Issue Record:
SCHEMATIC 05-05-2023

Revisions:

Project Number: 21-116
Drawn By: JAE
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CONSTRUCTION NOTES

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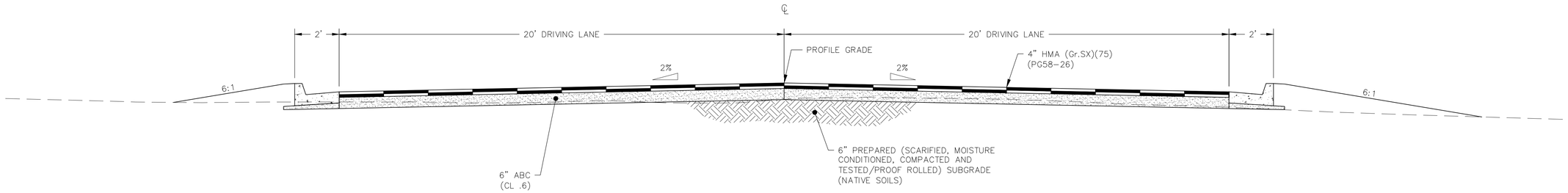
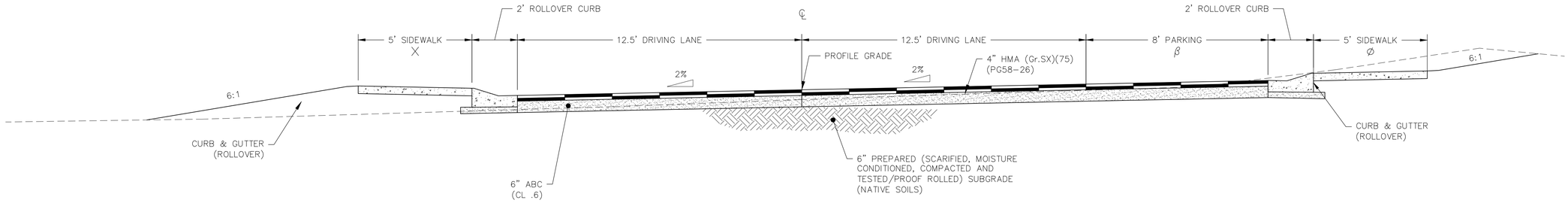
UNCOMPAHGRE STREET SECTION



TYPICAL STREET SECTION



NOTES:
1. STATIONING REFERENCES LIP OF GUTTER (L.O.G.)

2% CROSS SLOPE

TABULATION OF VARYING WIDTHS FOR WATERVIEW STREET, PHASE 1				
STATION	DESCRIPTION	X	β	ø
0+35.04	BOP	5'	0'	0'
1+77.68	BEGIN LANE TRANSITION	5'	0'	0'
1+92.68	END LANE TRANSITION	5'	8'	0'
6+81.86	BEGIN LANE TRANSITION	5'	8'	0'
6+96.86	END LANE TRANSITION	5'	0'	0'
7+42.37	START RIGHT SIDEWALK	5'	0'	5'
7+55.93	REFER TO CDS PLAN & PROFILE	–	–	–

ROADWAY DESIGN CRITERIA
Reference manuals:
1. AASHTO "A Policy on Geometric Design of Highways"
2. City of Ouray, "Specifications and Design Standards for Infrastructure Construction"

CLASS=LOW SPEED URBAN RESIDENTIAL STREET
DESIGN VOLUME = < 400 VEH/DAY)
DESIGN SPEED = 25 MPH
MIN. CL CURVE RADIUS=107 FT (Table 3-13b)
MIN. STOPPING SIGHT DISTANCE=155 FT (table 3-34)
K(min)=12 (through roads)
MINIMUM vertical curve length=100 feet (per COD) for STOP controlled intersections.

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TYPICAL ROADWAY SECTIONS

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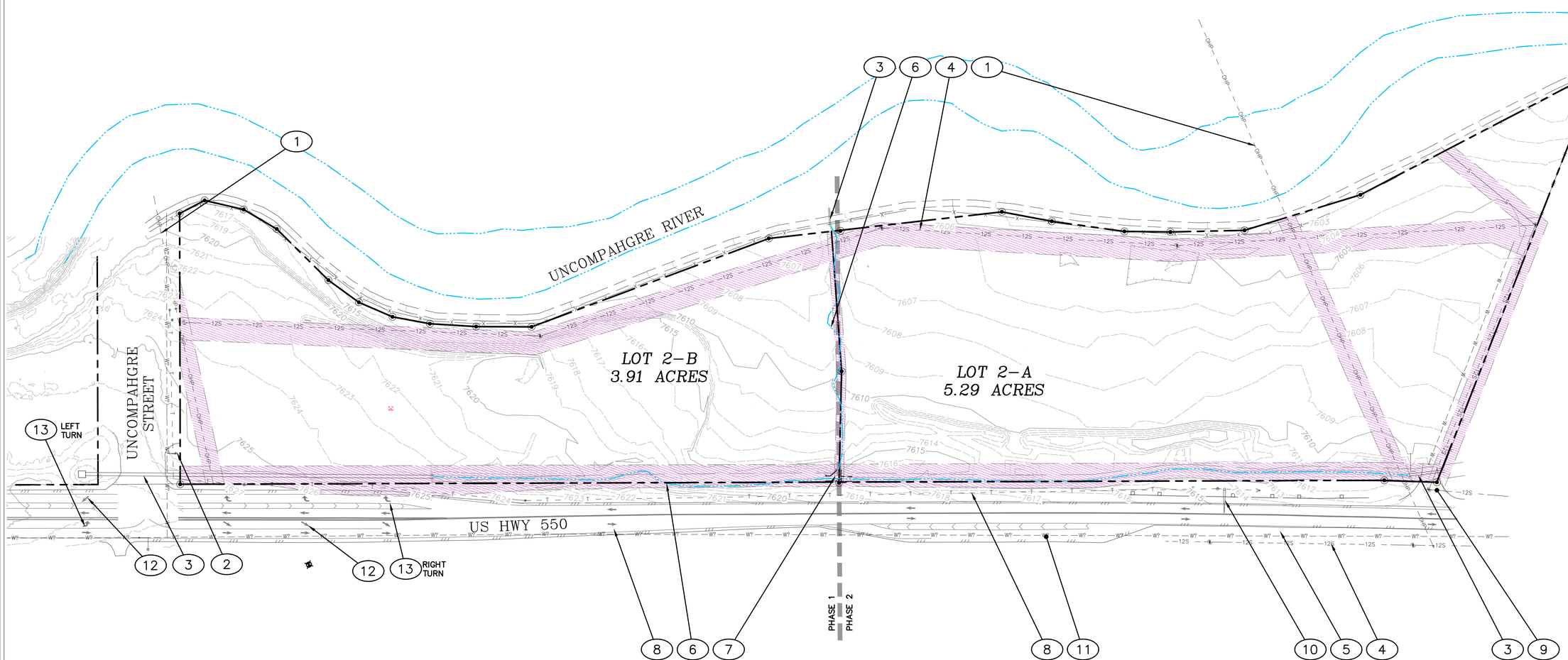
EXISTING CONDITIONS:

1. OVERHEAD POWER.
2. FIRE HYDRANT.
3. IRRIGATION CULVERT.
4. SANITARY SEWER MAIN.
5. WATERMAIN.
6. IRRIGATION DITCH.
7. HEADGATE STRUCTURE.
8. TELCOMM.
9. EMERGENCY ACCESS ENTRANCE AND EGRESS, TO REMAIN.
10. CDOT SIGN
11. VEHICLE CHAINING/PARKING AREA.
12. ACCELERATION LANE.
13. DECELERATION LANE.

GRAPHIC SCALE

0 30 60 FEET 120 180

0 ¼ ½ ¾ 1 INCHES 2 3



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RD1.00

EX. CONDITIONS

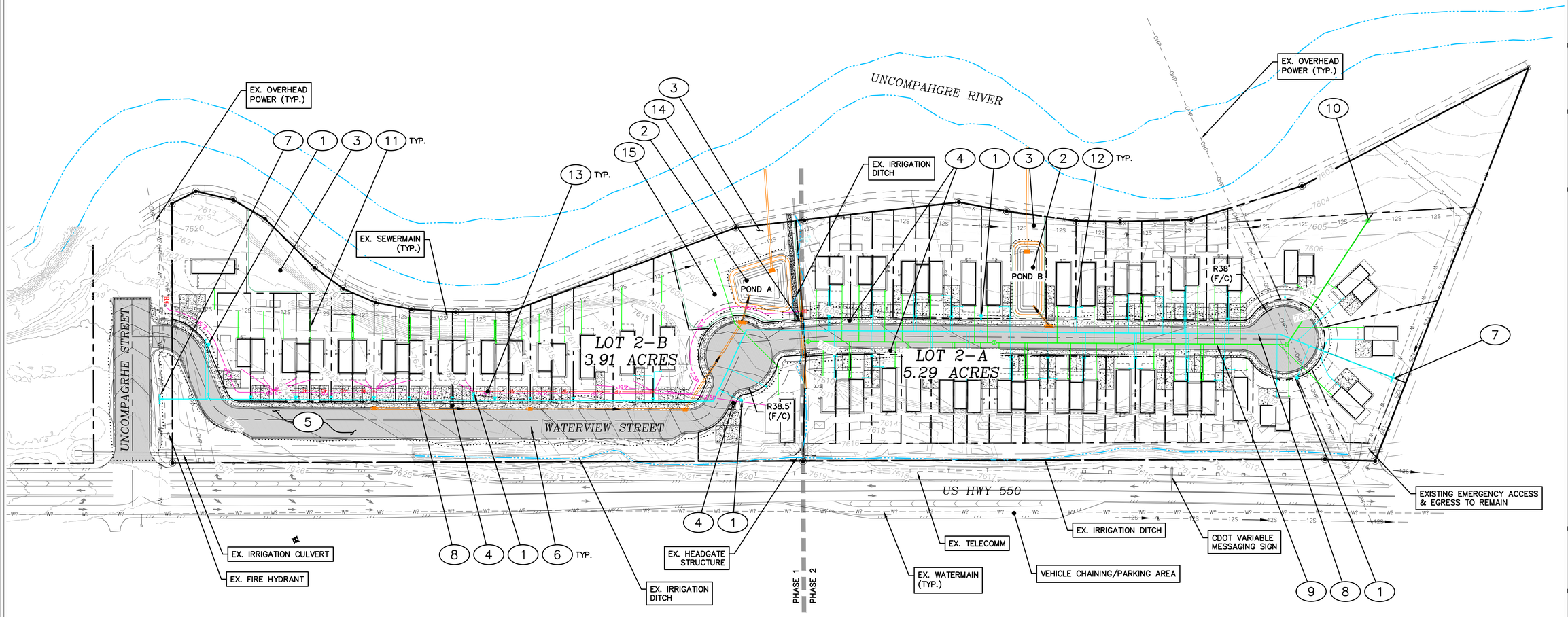
CONSTRUCTION KEYNOTES:

1. PROPOSED FIRE HYDRANT
2. PROPOSED STORMWATER TREATMENT FACILITY.
3. PROPOSED LANDSCAPE PUBLIC AREA TO RIVER TRAIL.
4. PROPOSED 5FT CONCRETE SIDEWALK.
5. PROPOSED ROADWAY.
6. PROPOSED STORM DRAIN.
7. 8" WATERMAIN CONNECTION TO EXISTING WATERMAIN.
8. PROPOSED 8" WATERMAIN.
9. PROPOSED 8" SEWER MAIN.
10. SANITARY SEWER MANHOLE CONNECTION TO EX. 12" SEWER MAIN.
11. NEW SEWER SERVICE. TWO-WAY CLEANOUT WITHIN 5FT OF FOUNDATION.
12. NEW WATER SERVICE.
13. CONCRETE DRIVEWAY AREA PER DETAIL.
14. PROPOSED IRRIGATION DITCH CULVERT WITH HEADWALLS PER DETAIL.
15. RIVER WALK ACCESS.

GRAPHIC SCALE

0 30 60 FEET 120 180

0 ¼ ½ ¾ 1 INCHES 2 3



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RD1.01

OVERALL SITE PLAN

(##) CONSTRUCTION KEYNOTES:

1. PROPOSED FIRE HYDRANT.
2. PROPOSED STORMWATER TREATMENT FACILITY/SNOW STORAGE AREA.
3. PROPOSED LANDSCAPE PUBLIC AREA TO RIVER TRAIL/SNOW STORAGE AREA.
4. PROPOSED 5FT CONCRETE SIDEWALK.
5. PROPOSED ROADWAY.
6. PROPOSED STORM DRAIN.
7. 8" WATERMAIN CONNECTION TO EXISTING WATERMAIN.
8. NEW SEWER SERVICE. TWO-WAY CLEANOUT WITHIN 5FT OF FOUNDATION.
9. NEW WATER SERVICE.
10. PROPOSED IRRIGATION DITCH CULVERT WITH HEADWALLS PER DETAIL.
11. STORMWATER POND OUTLET STRUCTURE PER DETAILS.
12. CONCRETE DRIVEWAY AREA PER DETAILS.
13. RIVER WALK ACCESS.

GRAPHIC SCALE
0 15 30 FEET 60 90
0 ¼ ½ ¾ 1 INCHES 2 3

EX. OVERHEAD POWER (TYP.)
7 1 3 8 TYP.
12 TYP.
EX. SEWERMAIN (TYP.)
UNCOMPAHGRE RIVER
10 11 2 13 3 4 1

LOT 1 12251 SF
LOT 2 4590 SF
LOT 3 3318 SF
LOT 4 3321 SF
LOT 5 2012 SF
LOT 6 3144 SF
LOT 7 3145 SF
LOT 8 3025 SF
LOT 9 2827 SF
LOT 10 1749 SF
LOT 11 2672 SF
LOT 12 2636 SF
LOT 13 2609 SF
LOT 14 2615 SF
LOT 15 1670 SF
LOT 16 2730 SF
LOT 17 2966 SF
LOT 18 3201 SF
LOT 19 6587 SF
LOT 20 7404 SF
LOT 21 7465 SF
LOT 2-B 3.91 ACRES
OPEN SPACE A 14878 SF
LOT 22 9962 SF

PC: 0+35.04
PT: 0+79.19
PC: 1+35.79
PT: 1+77.68
PT: 7+43.33
PC: 7+00.58
R38.5' F/C

0+00 1+00 2+00 3+00 4+00 5+00 6+00 7+00

UNCOMPAHGRE STREET
WATERVIEW STREET
US HWY 550

ASSUMED LOCATION EX. WATERMAIN
EX. FIRE HYDRANT
EX. IRRIGATION CULVERT
EX. WATERMAIN (TYP.)
9 TYP.
4 1 6 TYP.
EX. IRRIGATION DITCH
EX. IRRIGATION DITCH
EX. HEADGATE STRUCTURE

PHASE 1
PHASE 2

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WATERVIEW AFFORDABLE HOUSING SUBDIVISION

OURAY, COLORADO

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PHASE 1 SITE PLAN

CONSTRUCTION KEYNOTES:

1. PROPOSED FIRE HYDRANT.
2. PROPOSED STORMWATER TREATMENT FACILITY/SNOW STORAGE AREA.
3. PROPOSED LANDSCAPE PUBLIC AREA TO RIVER TRAIL/SNOW STORAGE AREA.
4. PROPOSED 5FT CONCRETE SIDEWALK.
5. PROPOSED ROADWAY.
6. PROPOSED STORM DRAIN.
7. 8" WATERMAIN CONNECTION TO EXISTING WATERMAIN.
8. NEW SEWER SERVICE. TWO-WAY CLEANOUT WITHIN 5FT OF FOUNDATION.
9. NEW WATER SERVICE.
10. PROPOSED SEWER MANHOLE CONNECTION TO EX. 12" SEWER MAIN.
11. STORMWATER POND OUTLET STRUCTURE PER DETAILS.
12. CONCRETE DRIVEWAY AREA PER DETAILS.

UNCOMPAHGRE RIVER

EX. SEWERMAIN (TYP.)

EX. OVERHEAD POWER (TYP.)

1 3 11 2 6 9 TYP. 4 12 TYP. 8 TYP. 1 7 10

GRAPHIC SCALE
0 15 30 FEET 60 90
0 ¼ ½ ¾ 1 INCHES 2 3

OPEN SPACE A 14878 SF

CULVERT FOR IRRIGATION CONVEYANCE

LOT 23 4077 SF | LOT 24 2922 SF | LOT 25 3058 SF | LOT 26 3089 SF | LOT 27 3271 SF | LOT 28 2116 SF | LOT 29 3433 SF | LOT 30 4616 SF | LOT 31 4410 SF | OPEN SPACE B 4988 SF | LOT 32 4044 SF | LOT 33 3963 SF | LOT 34 2956 SF | LOT 35 1875 SF | LOT 36 2962 SF | LOT 37 2884 SF | LOT 38 2992 SF | LOT 39 3112 SF | LOT 40 4663 SF | LOT 41 9138 SF | LOT 42 15905 SF

PC: 0+94.45 PT: 1+35.33

0+00 1+00 2+00 3+00 4+00 5+00 6+00

WATERVIEW STREET 5

LOT 2-A
5.29 ACRES

LOT 65 3741 SF | LOT 64 1702 SF | LOT 63 2666 SF | LOT 62 3569 SF | LOT 61 3602 SF | LOT 60 2675 SF | LOT 59 1642 SF | LOT 58 2645 SF | LOT 57 2637 SF | LOT 56 1630 SF | LOT 55 2643 SF | LOT 136 2583 SF | LOT 53 1618 SF | LOT 52 2623 SF | LOT 51 3479 SF | LOT 50 3494 SF | LOT 49 2577 SF | LOT 48 1629 SF | LOT 47 2547 SF | LOT 46 3376 SF | LOT 45 5181 SF | LOT 44 6409 SF | LOT 43 7079 SF | LOT 22 9962 SF

OPEN SPACE C 3714 SF

R38' F/C

US HWY 550

EX. TELECOMM

EX. IRRIGATION DITCH

VEHICLE CHAINING/PARKING AREA

CDOT VARIABLE MESSAGING SIGN

EX. WATERMAIN (TYP.)

EXISTING EMERGENCY ACCESS & EGRESS TO REMAIN

PHASE 1 PHASE 2

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OURAY, COLORADO

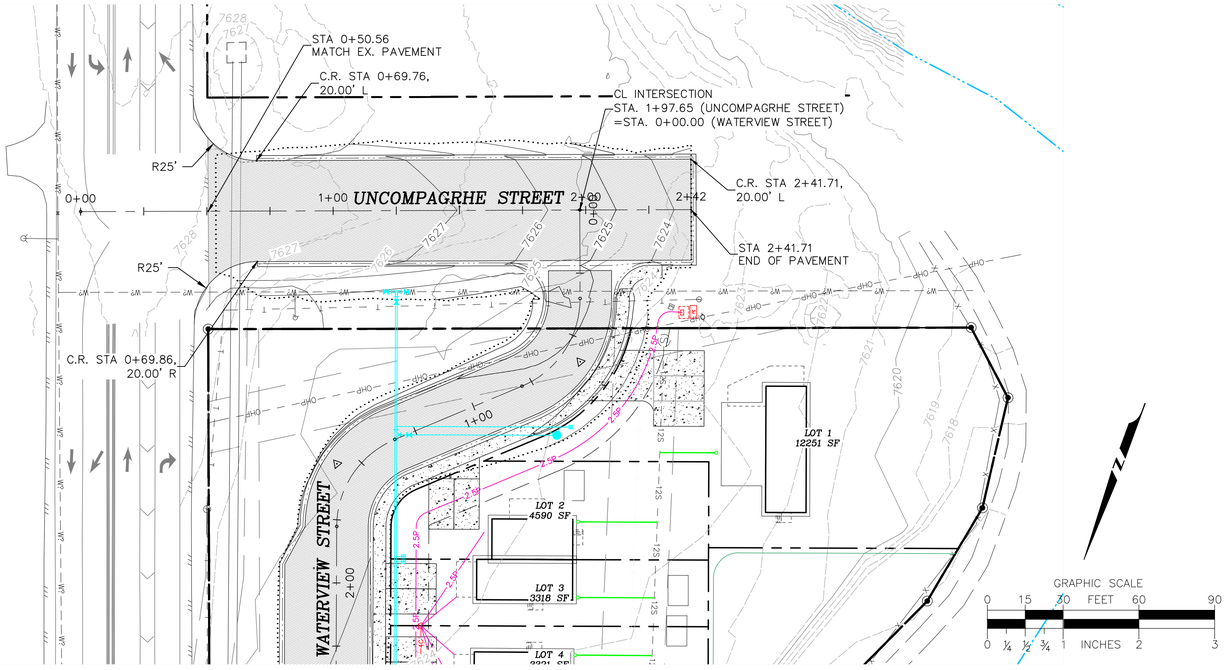
Issue Record:
SCHEMATIC 03-13-2023

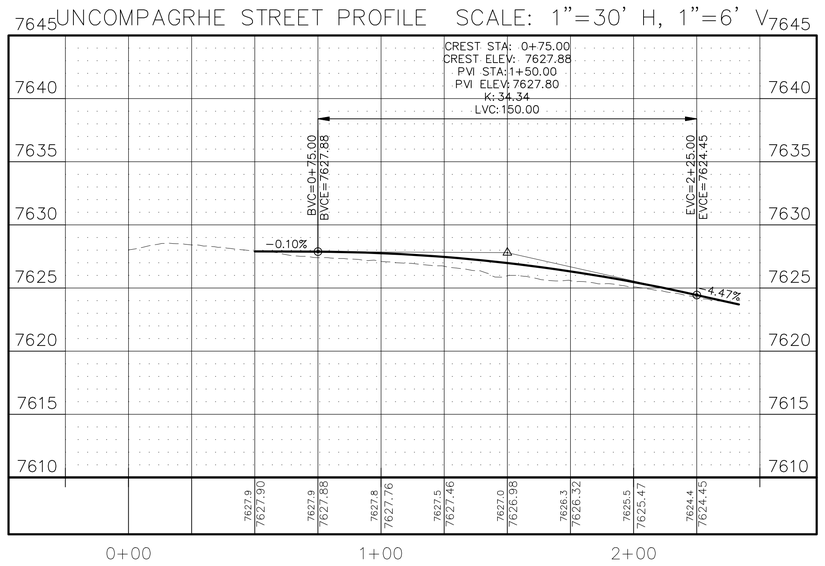
Revisions:

Project Number: 21-116
Drawn By: JAE
Designed by: RSH
Checked By: RSH

Sheet
RD1.03

PHASE 2 SITE PLAN





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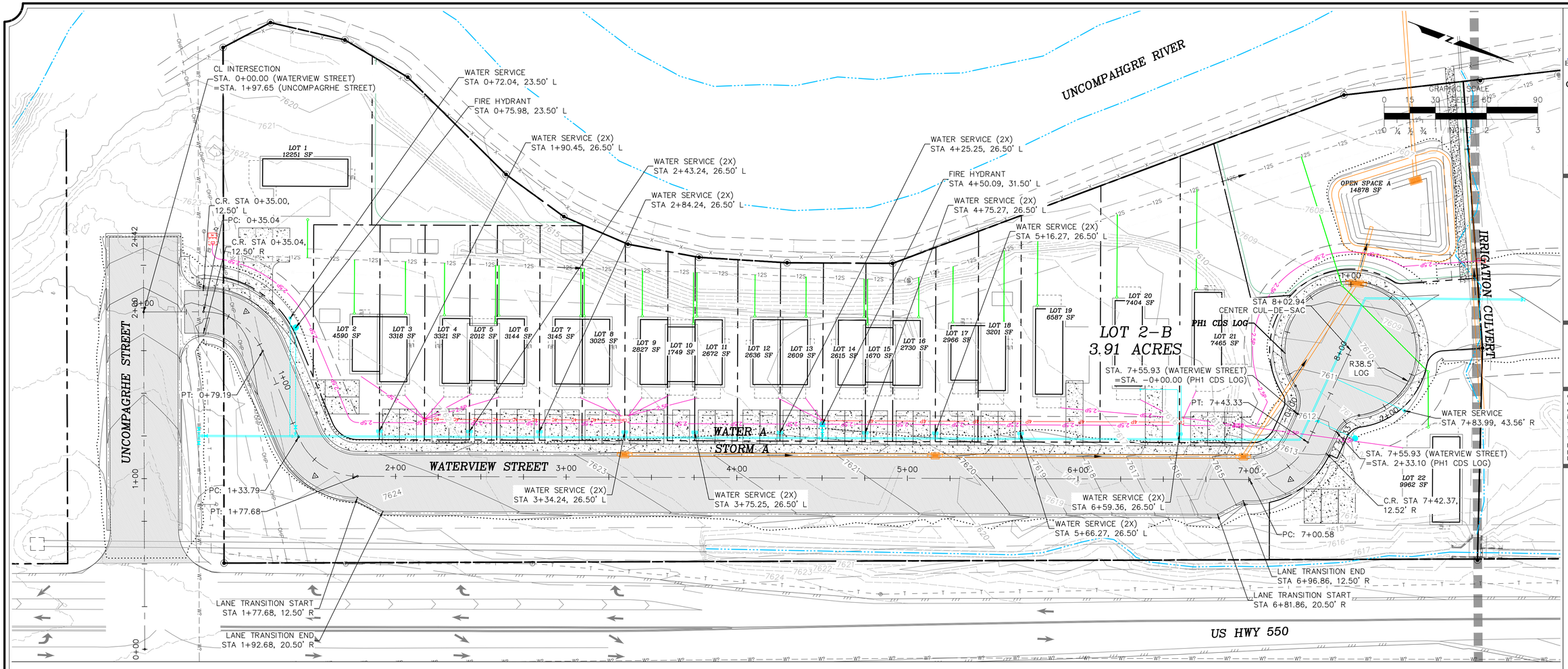
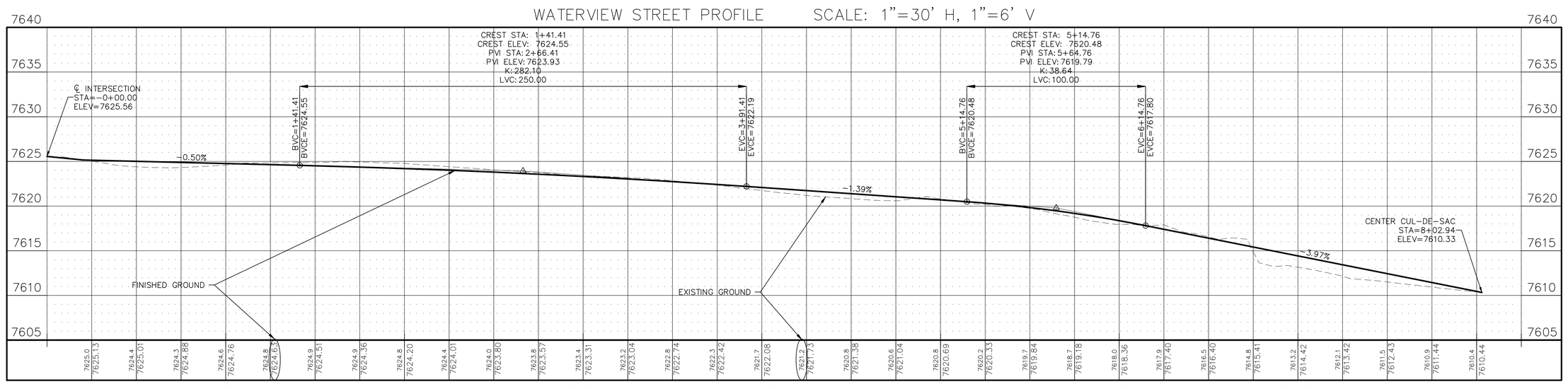
UNCOMPAGHRE ST. PLAN & PROFILE





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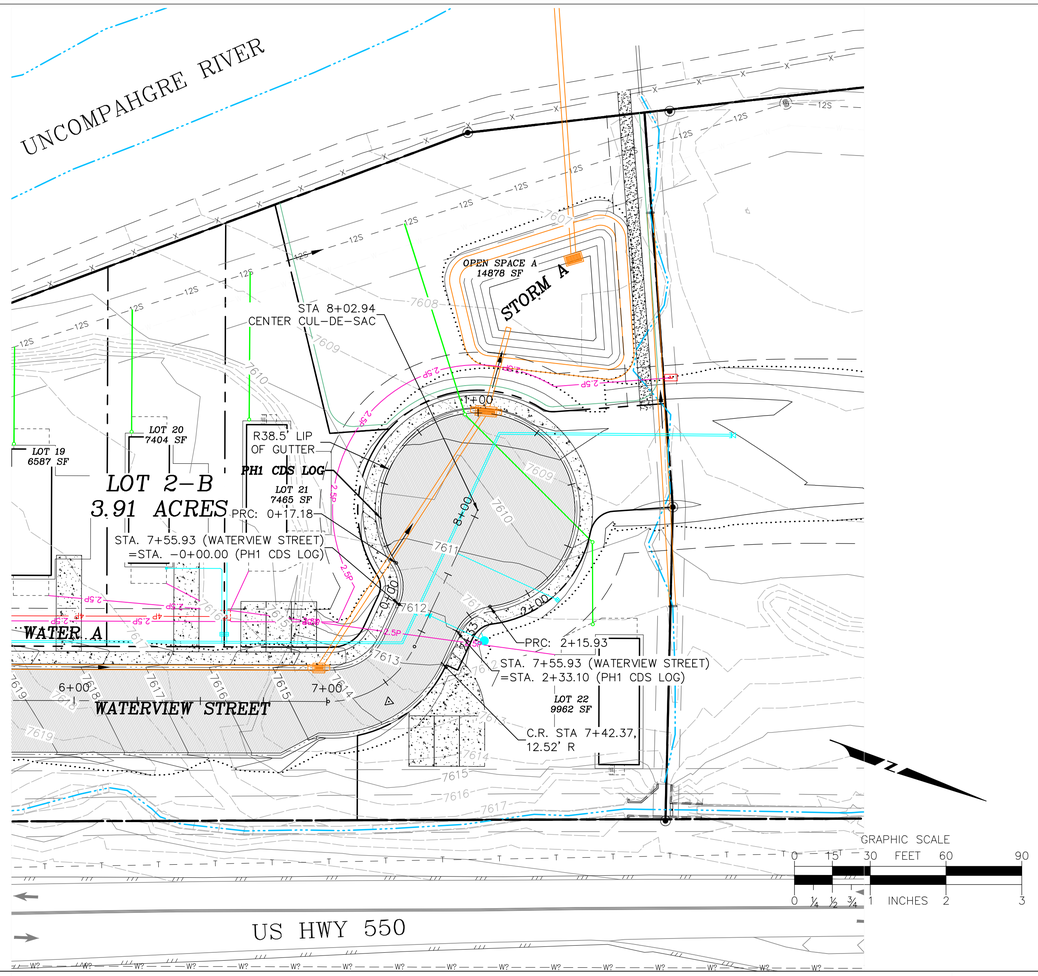
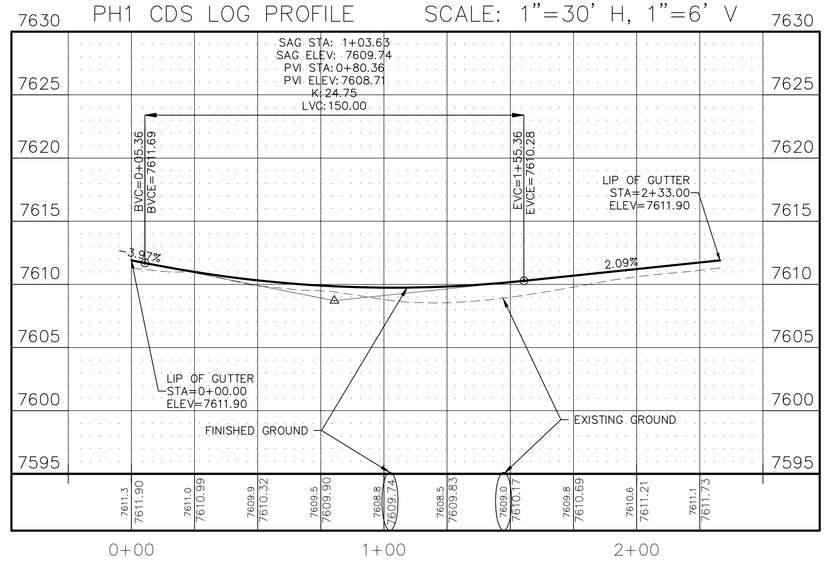
WATERVIEW ST. PHASE 1 PLAN & PROFILE





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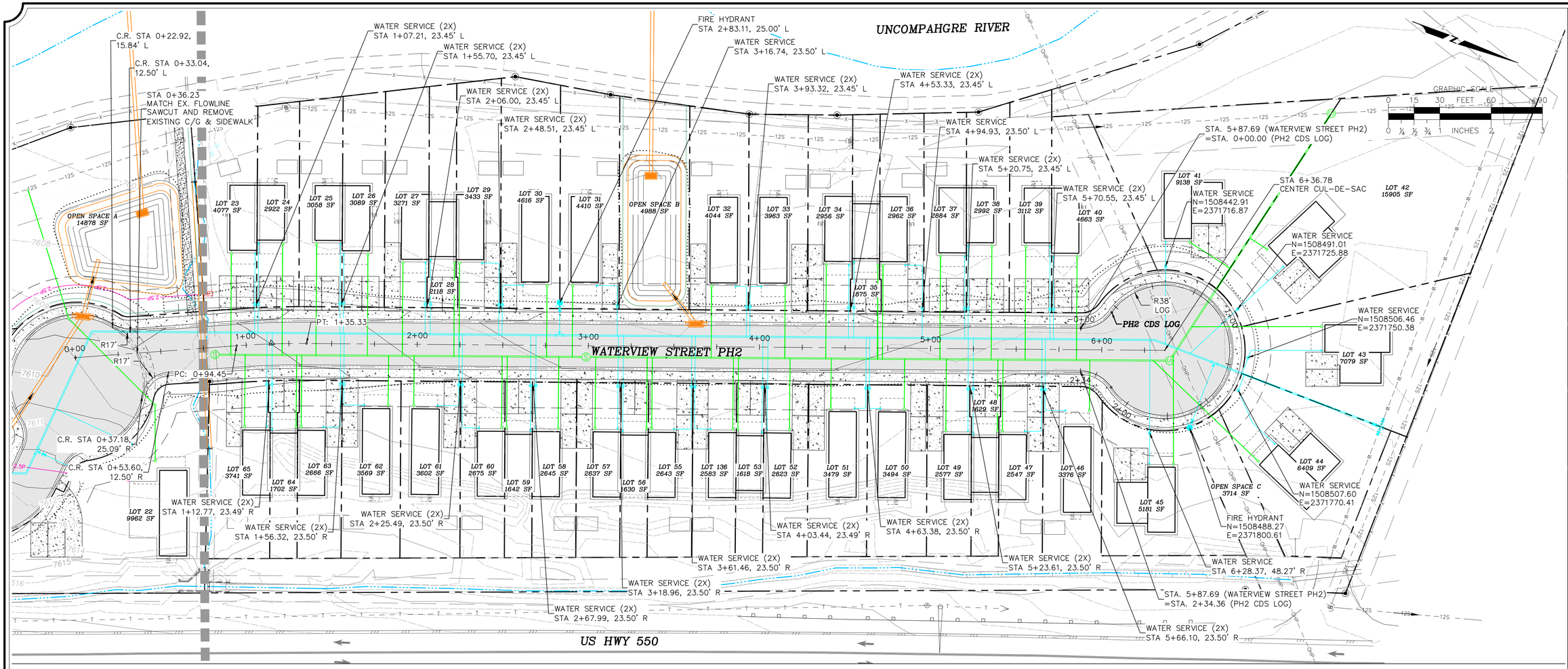
WATERVIEW ST. PHASE 1 CDS PLAN & PROFILE



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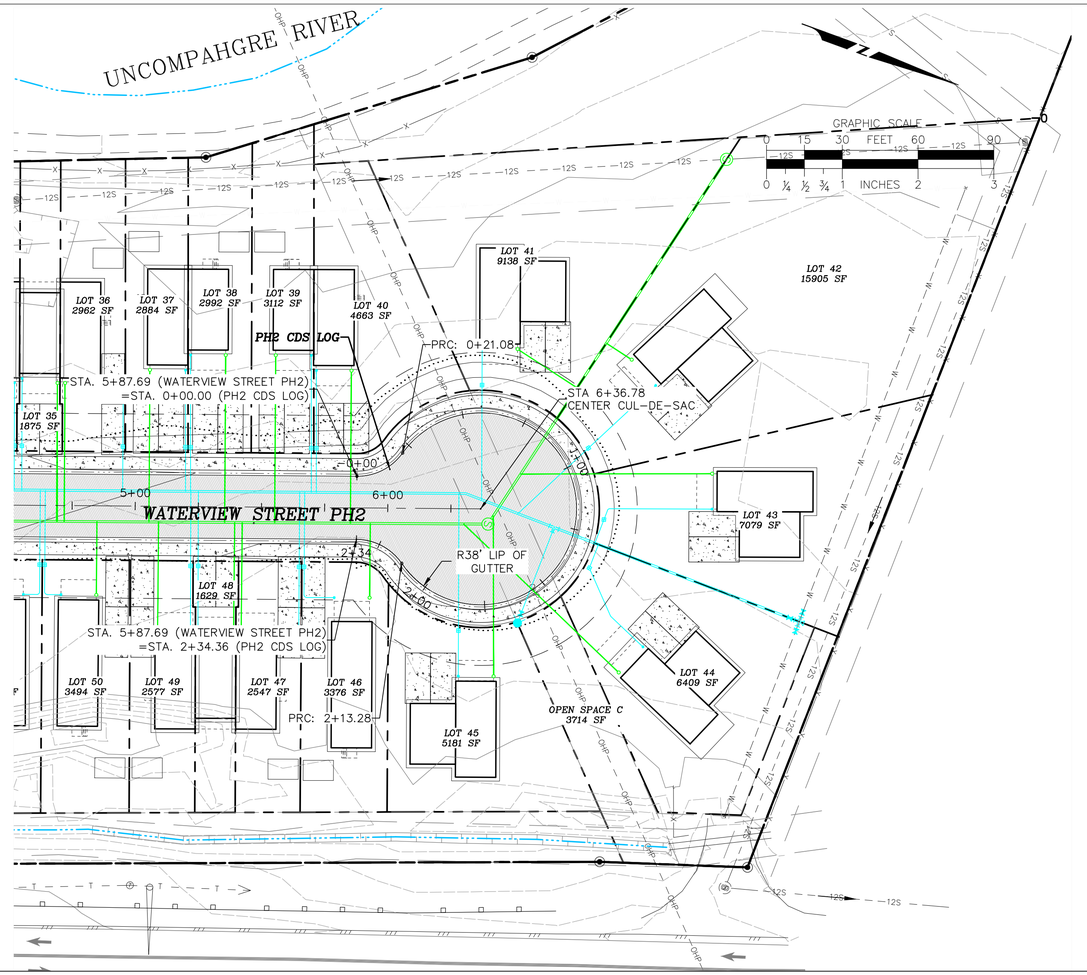
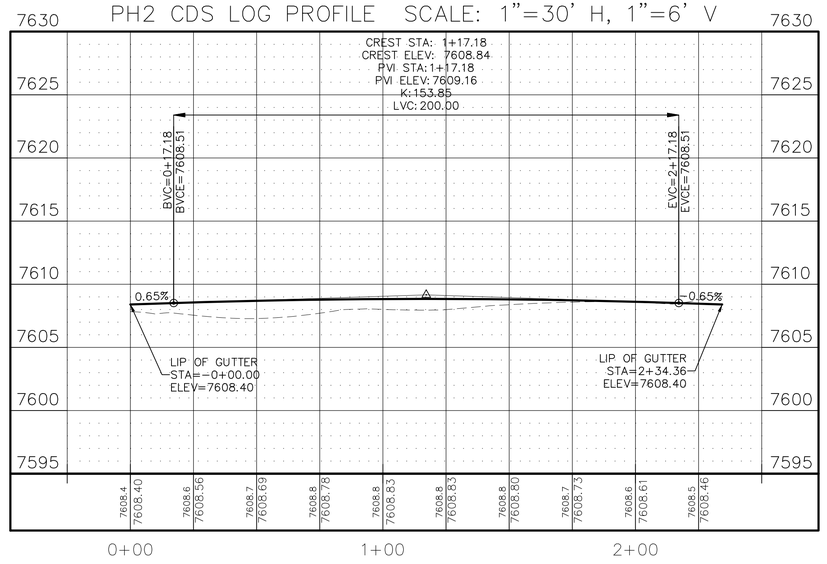
WATERVIEW ST. PHASE 2 PLAN & PROFILE



PH2 CDS LOG PROFILE SCALE: 1"=30' H, 1"=6' V



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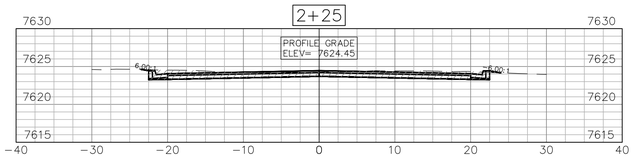
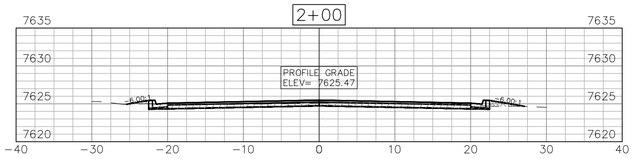
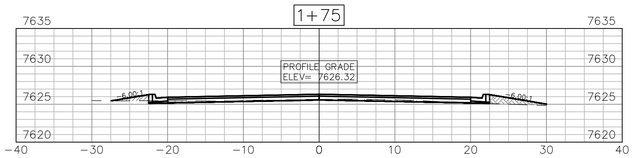
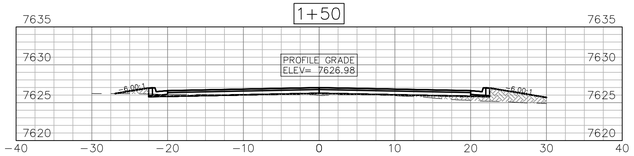
Sheet **RD2.05**

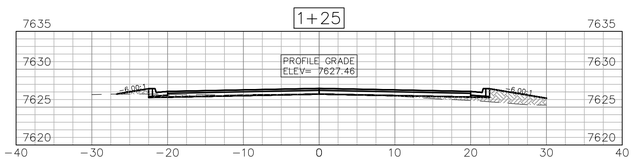
WATERVIEW ST. PHASE 2 CDS PLAN & PROFILE

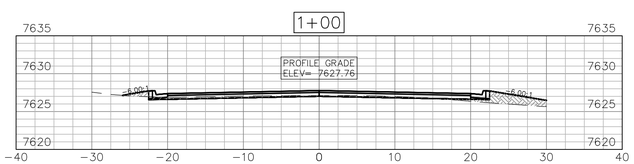


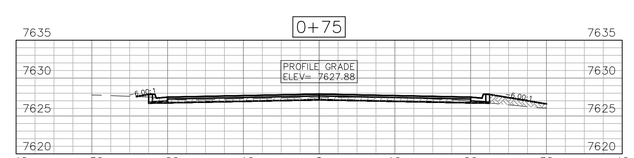












UNCOMPAGRHE STREET EARTHWORK TABULATION

Station	Fill Area (SF)	Cut Area (SF)	Fill Volume (CY)	Cut Volume (CY)	Cumulative Fill Vol (CY)	Cumulative Cut Vol (CY)
0+75.00	6.67	17.05	0.00	0.00	0.00	0.00
1+00.00	11.75	6.96	8.53	11.12	8.53	11.12
1+25.00	15.64	4.09	12.68	5.12	21.21	16.23
1+50.00	17.93	2.09	15.54	2.86	36.75	19.10
1+75.00	7.50	6.02	11.77	3.76	48.53	22.85
2+00.00	2.31	21.87	4.54	12.91	53.07	35.77
2+25.00	0.16	39.24	1.14	28.29	54.21	64.06

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HOUSING SUBDIVISION

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Designed by: RSH
Checked By: RSH

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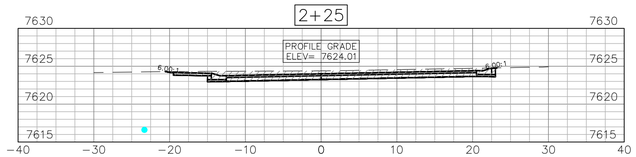
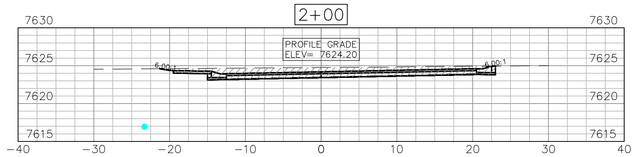
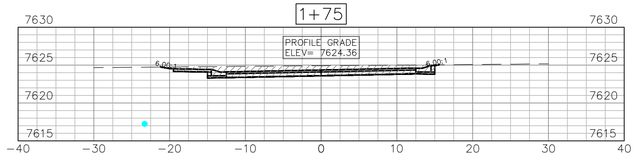
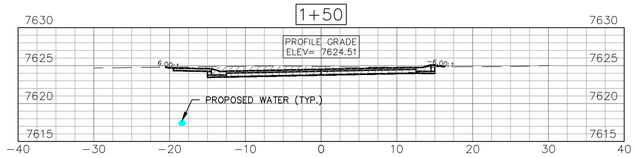
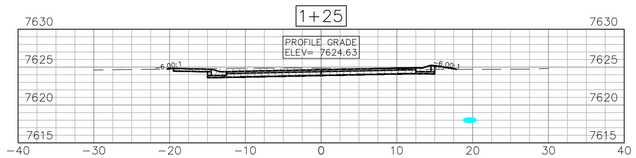
**UNCOMPAGHRE ST.
CROSS SECTION**

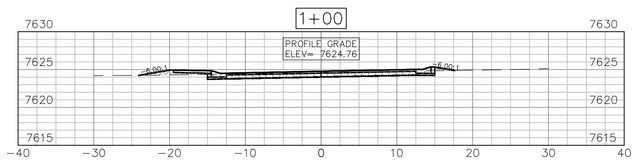


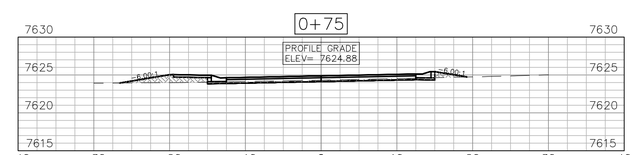


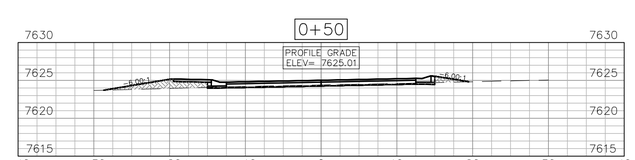


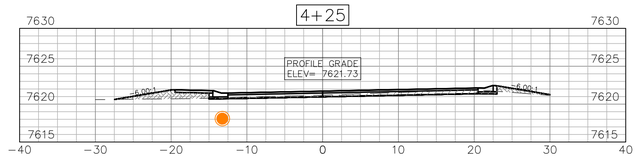


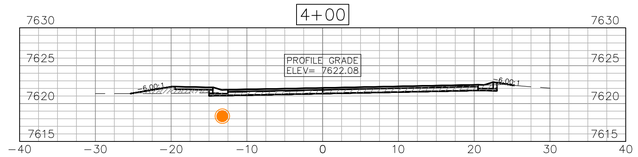


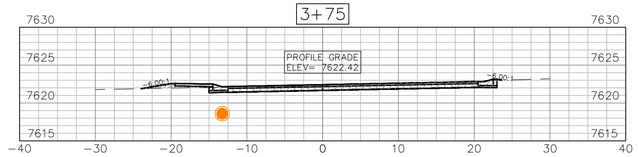


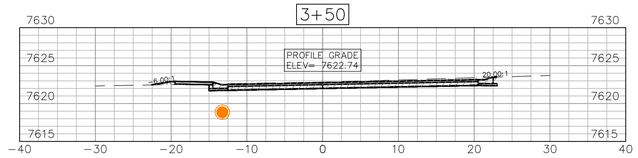


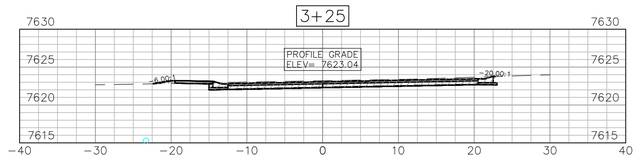


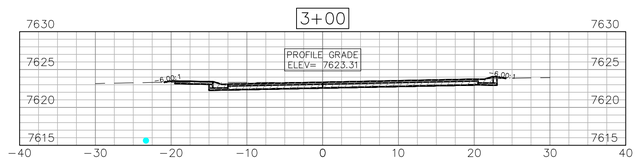


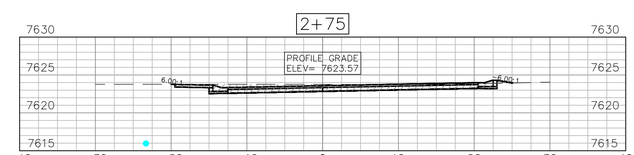


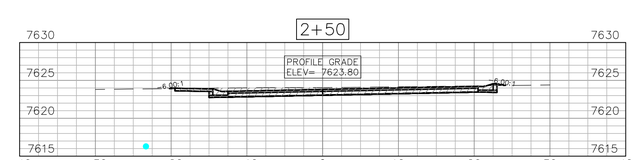


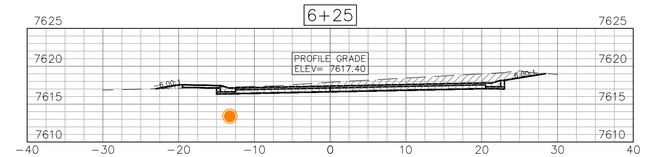


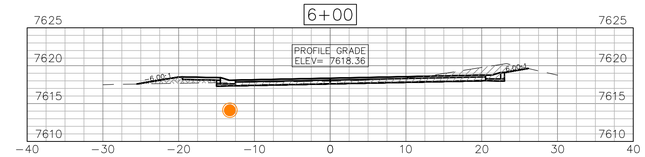


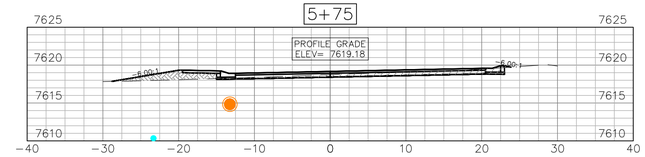


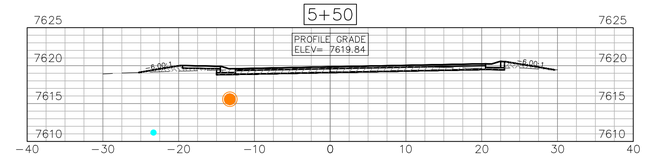


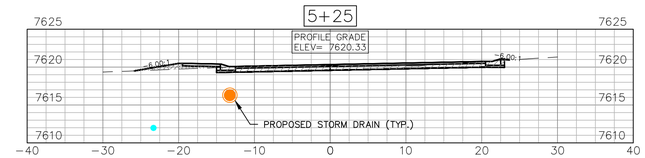


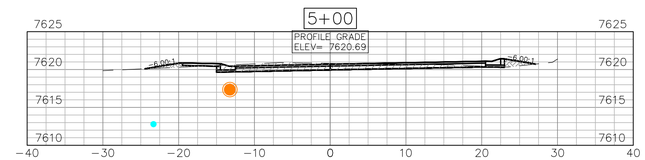


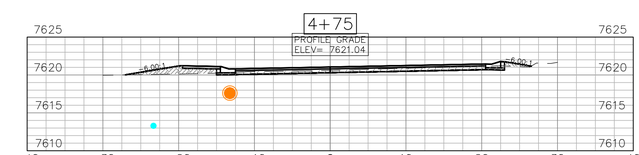


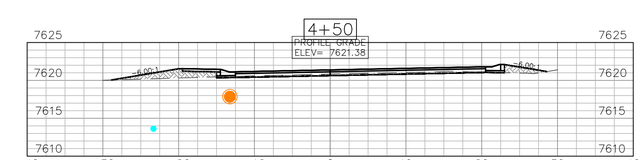












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WATERVIEW AFFORDABLE HOUSING SUBDIVISION

OURAY, COLORADO

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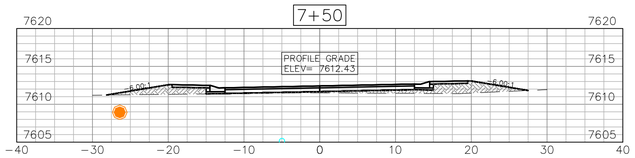
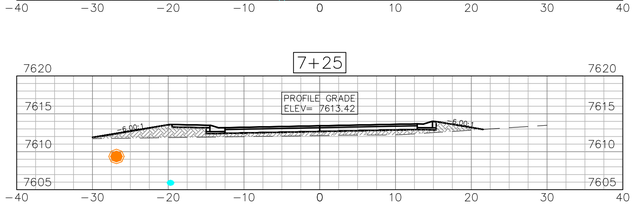
Project Number:	21-116
Drawn By:	JAE
Designed by:	RSH
Checked By:	RSH

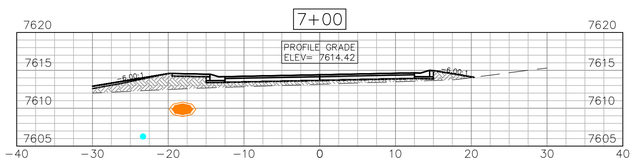
Sheet

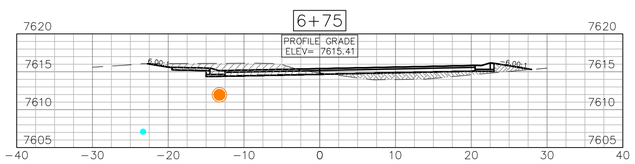
RD3.02

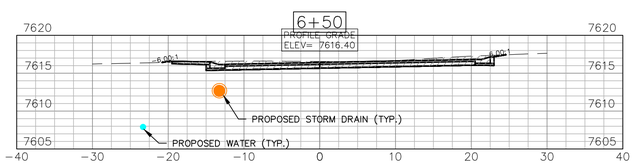
WATERVIEW ST. PHASE 1 CROSS SECTION











WATERVIEW STREET EARTHWORK TABULATION

Station	Fill Area (SF)	Cut Area (SF)	Fill Volume (CY)	Cut Volume (CY)	Cumulative Fill Vol (CY)	Cumulative Cut Vol (CY)
0+50.00	11.41	4.23	0.00	0.00	0.00	0.00
0+75.00	8.61	5.82	12.67	4.64	12.67	4.64
1+00.00	3.32	17.36	5.84	10.75	18.51	15.39
1+25.00	0.73	28.88	1.87	21.40	20.38	36.79
1+50.00	0.14	35.89	0.50	28.58	20.88	65.37
1+75.00	0.00	42.59	0.09	34.18	20.97	99.55
2+00.00	0.00	51.76	0.00	43.69	20.97	143.24
2+25.00	0.00	46.54	0.00	45.51	20.97	188.75
2+50.00	0.13	38.98	0.06	39.59	21.03	228.34
2+75.00	0.38	34.74	0.24	34.13	21.27	262.47
3+00.00	0.28	32.43	0.31	31.10	21.58	293.57
3+25.00	0.60	35.49	0.41	31.45	21.99	325.02
3+50.00	0.75	34.76	0.63	32.52	22.61	357.54
3+75.00	2.32	28.09	1.42	29.10	24.03	386.64
4+00.00	5.22	18.41	3.49	21.53	27.52	408.16
4+25.00	11.36	11.09	7.67	13.66	35.20	421.82
4+50.00	13.07	6.61	11.31	8.20	46.51	430.02
4+75.00	8.28	13.87	9.89	9.49	56.39	439.50
5+00.00	4.07	25.54	5.72	18.25	62.11	457.75
5+25.00	3.93	23.11	3.70	22.52	65.82	480.27
5+50.00	6.20	20.55	4.69	20.21	70.50	500.48
5+75.00	9.88	14.35	7.44	16.16	77.95	516.64
6+00.00	4.66	28.98	6.73	20.06	84.68	536.70
6+25.00	0.99	56.78	2.61	39.70	87.29	576.40
6+50.00	0.11	39.36	0.51	44.51	87.80	620.91
6+75.00	17.07	24.84	7.96	29.72	95.76	650.63
7+00.00	40.41	0.00	26.61	11.50	122.37	662.13
7+25.00	36.23	0.00	27.44	0.00	149.81	662.13
7+50.00	28.90	0.00	28.82	0.00	178.63	662.13

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WATERVIEW AFFORDABLE HOUSING SUBDIVISION

OURAY, COLORADO

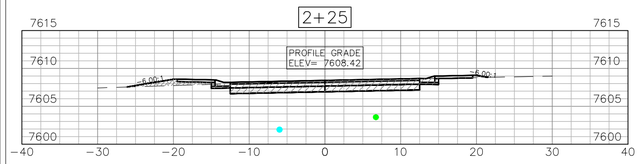
Issue Record:
SCHEMATIC 05-05-2023

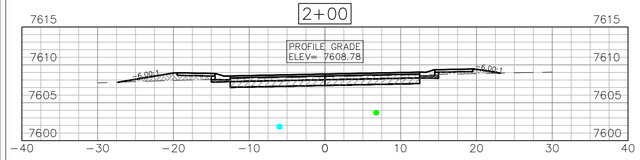
Revisions:

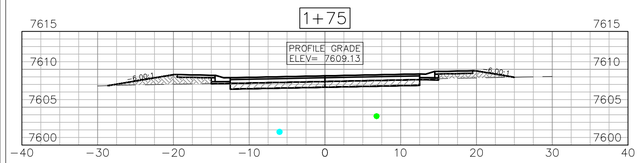
Project Number: 21-116
Drawn By: JAE
Designed by: RSH
Checked By: RSH

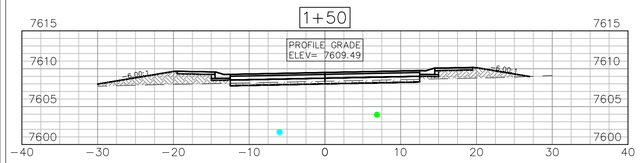
Sheet
RD3.03

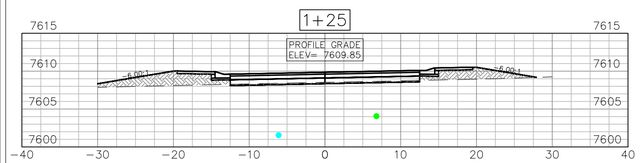
WATERVIEW ST. PHASE 1 CROSS SECTION

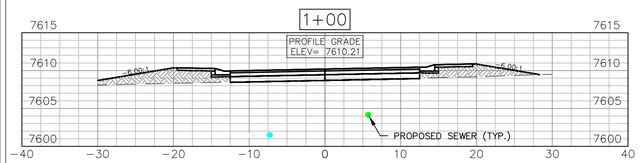


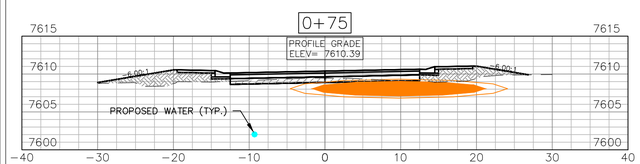


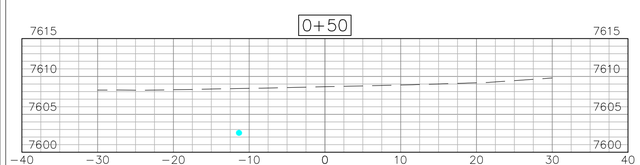


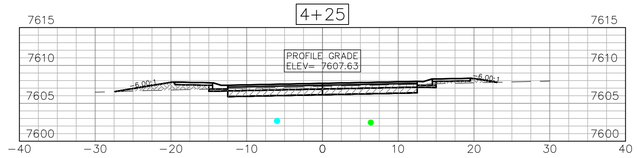


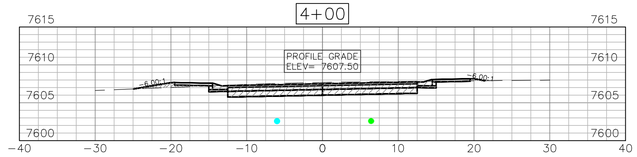


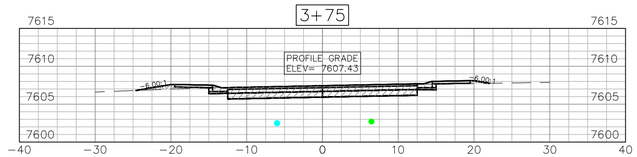


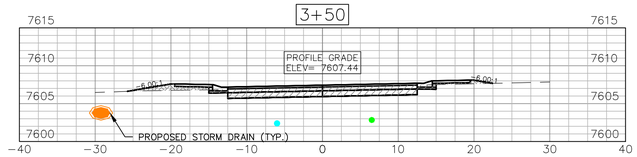


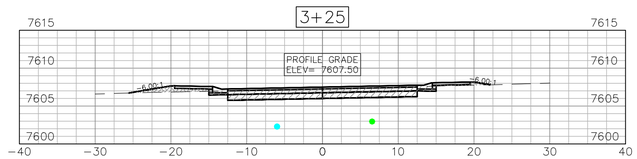


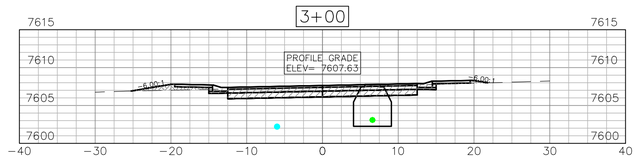


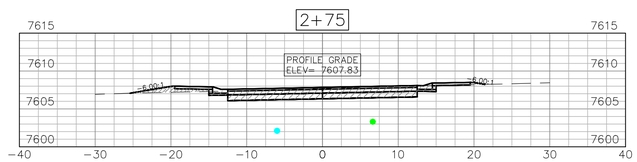


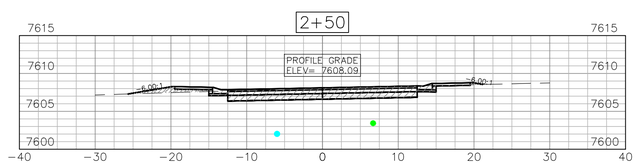


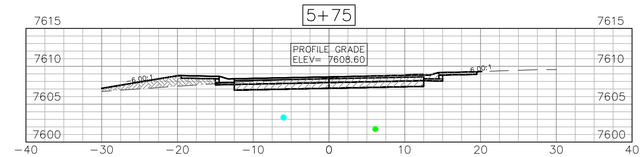


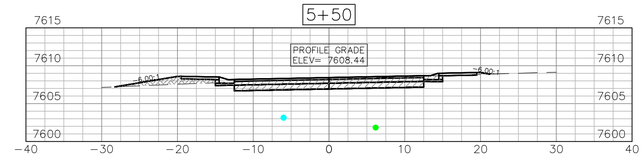


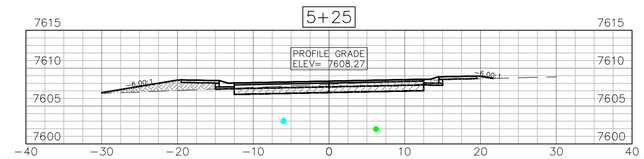


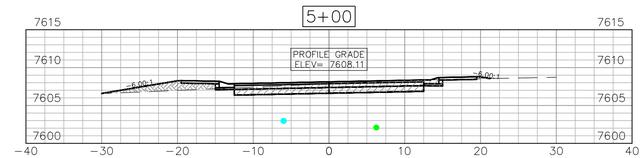


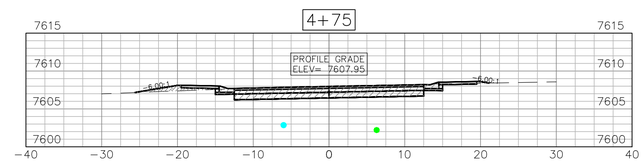


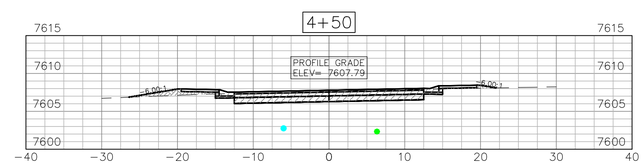












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WATERVIEW AFFORDABLE HOUSING SUBDIVISION

OURAY, COLORADO

Issue Record:

SCHEMATIC	05-05-2023

Revisions:

Project Number:	21-116
Drawn By:	JAE
Designed by:	RSH
Checked By:	RSH

Sheet

RD3.04

WATERVIEW ST. PHASE 2 CROSS SECTION

WATERVIEW STREET PH2 EARTHWORK TABULATION

Station	Fill Area (SF)	Cut Area (SF)	Fill Volume (CY)	Cut Volume (CY)	Cumulative Fill Vol (CY)	Cumulative Cut Vol (CY)
0+50.00	0.00	0.00	0.00	0.00	0.00	0.00
0+75.00	32.92	10.11	15.24	4.68	15.24	4.68
1+00.00	38.81	1.17	33.21	5.22	48.45	9.90
1+25.00	34.91	4.45	34.46	2.60	82.90	12.50
1+50.00	28.96	8.78	29.69	6.12	112.60	18.63
1+75.00	15.37	20.49	20.52	13.55	133.12	32.18
2+00.00	9.05	30.58	11.31	23.64	144.43	55.82
2+25.00	5.04	38.74	6.52	32.09	150.95	87.91
2+50.00	4.28	39.77	4.32	36.35	155.27	124.26
2+75.00	4.51	37.46	4.07	35.76	159.34	160.02
3+00.00	4.81	35.63	4.32	33.84	163.65	193.86
3+25.00	5.54	34.78	4.79	32.60	168.45	226.45
3+50.00	6.34	32.77	5.50	31.27	173.94	257.73
3+75.00	3.11	40.84	4.38	34.08	178.32	291.81
4+00.00	2.89	45.59	2.78	40.01	181.10	331.82
4+25.00	9.35	29.29	5.67	34.66	186.77	366.48
4+50.00	5.53	36.39	6.89	30.41	193.66	396.89
4+75.00	3.78	43.38	4.31	36.93	197.97	433.82
5+00.00	11.01	33.81	6.85	35.73	204.82	469.55
5+25.00	12.79	29.16	11.02	29.15	215.84	498.70
5+50.00	7.59	34.92	9.43	29.67	225.27	528.37
5+75.00	13.41	38.60	9.72	34.04	234.99	562.41

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WATERVIEW AFFORDABLE HOUSING SUBDIVISION

OURAY, COLORADO

Issue Record:

SCHEMATIC	05-05-2023

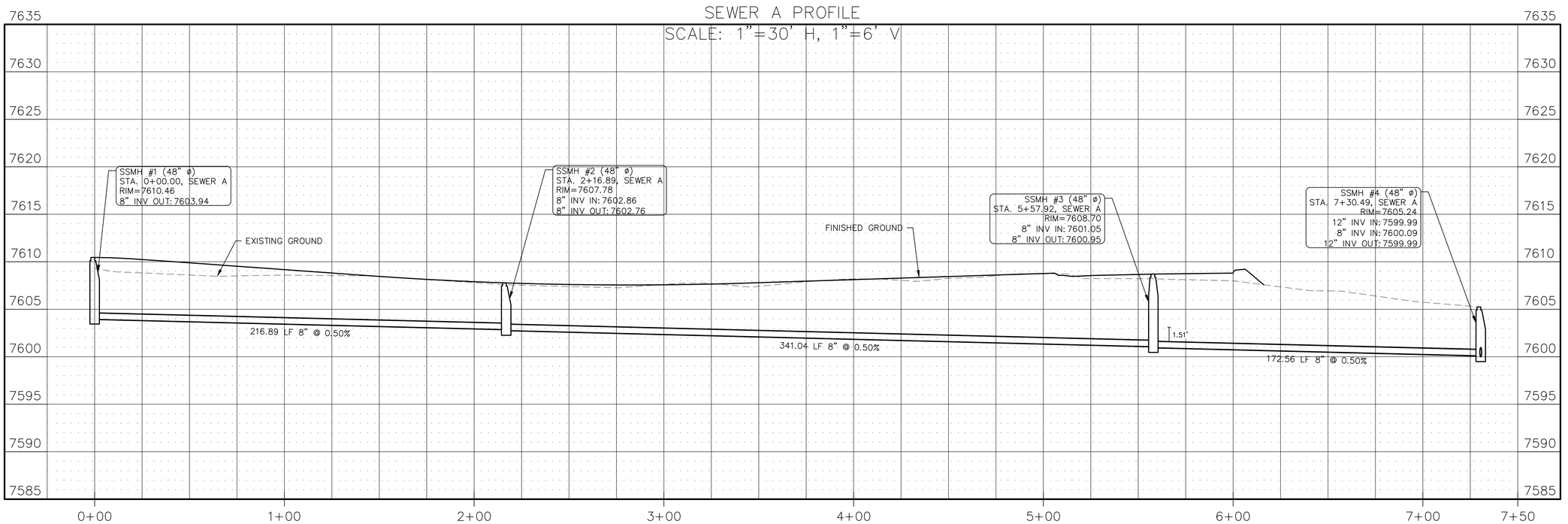
Revisions:

Project Number:	21-116
Drawn By:	JAE
Designed by:	RSH
Checked By:	RSH

Sheet

RD3.05

WATERVIEW ST. PHASE 2 CROSS SECTION



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WATERVIEW AFFORDABLE HOUSING SUBDIVISION

OURAY, COLORADO

Issue Record:
SCHEMATIC 05-05-2023

Revisions:

Project Number: 21-116
Drawn By: JAE
Designed by: RSH
Checked By: RSH

Sheet
SS1.01

SEWER A PLAN & PROFILE

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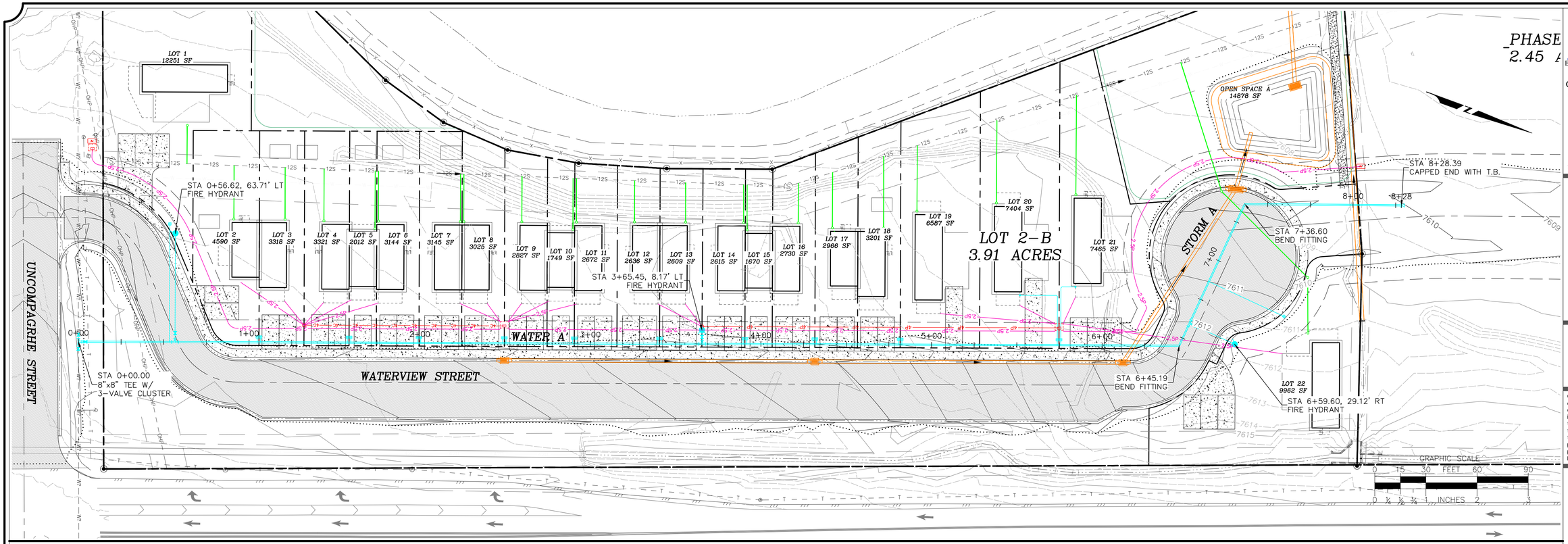
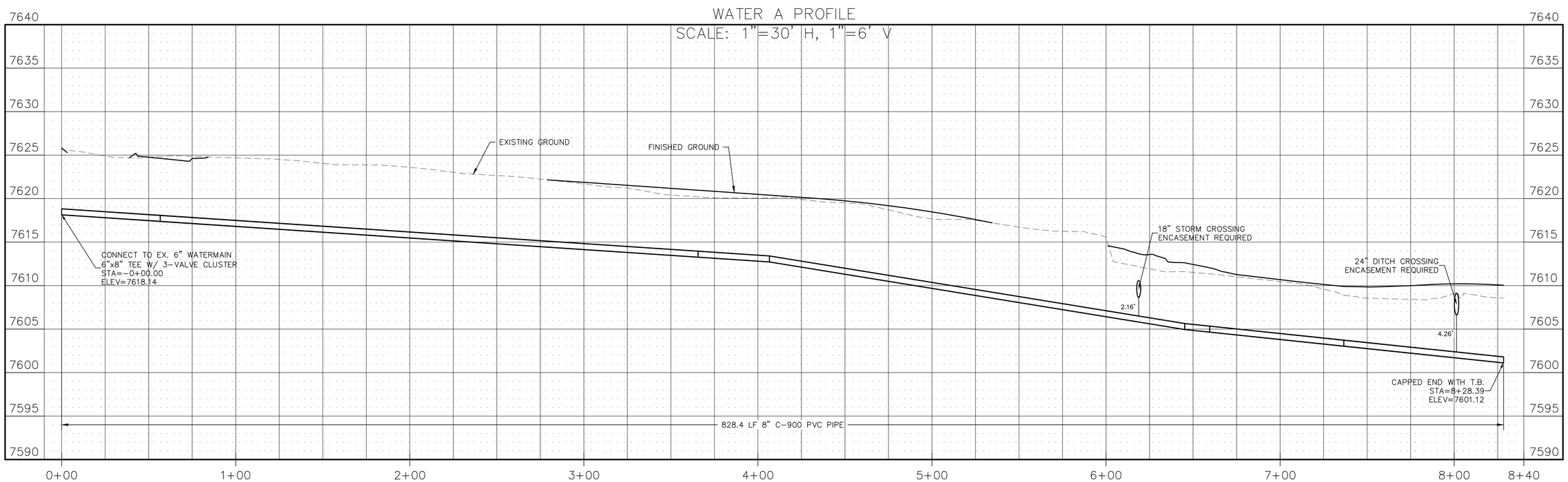


WATER A PROFILE

SCALE: 1"=30' H, 1"=6' V



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WATERVIEW AFFORDABLE HOUSING SUBDIVISION

OURAY, COLORADO

Issue Record:
SCHEMATIC 05-05-2023

Revisions:

Project Number: 21-116
Drawn By: JAE
Designed by: RSH
Checked By: RSH

Sheet
W1.01

WATER A PLAN & PROFILE

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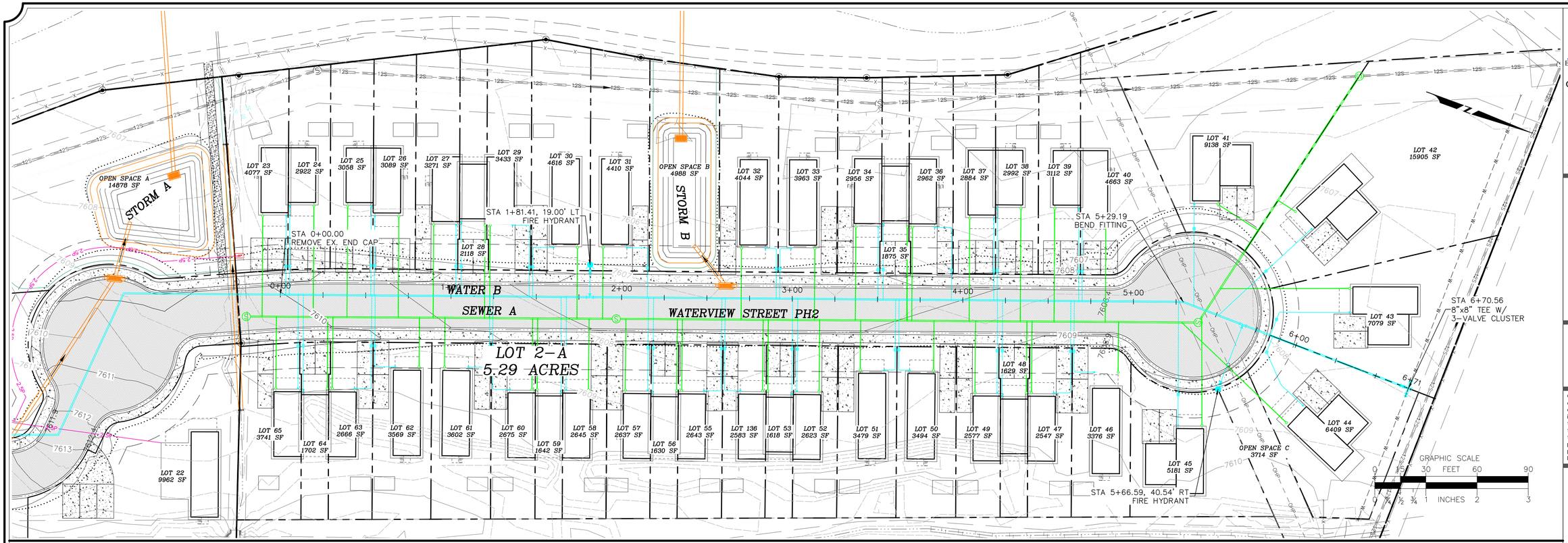

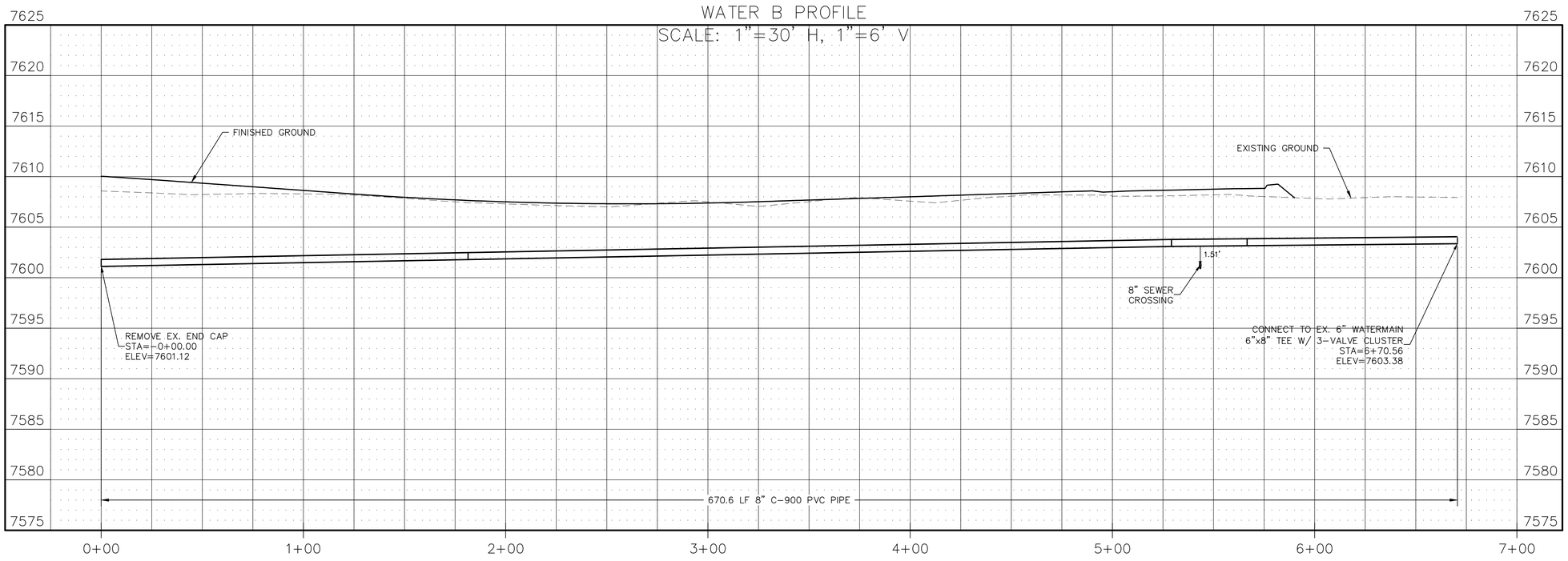

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WATERVIEW AFFORDABLE HOUSING SUBDIVISION

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Project Number: 21-116
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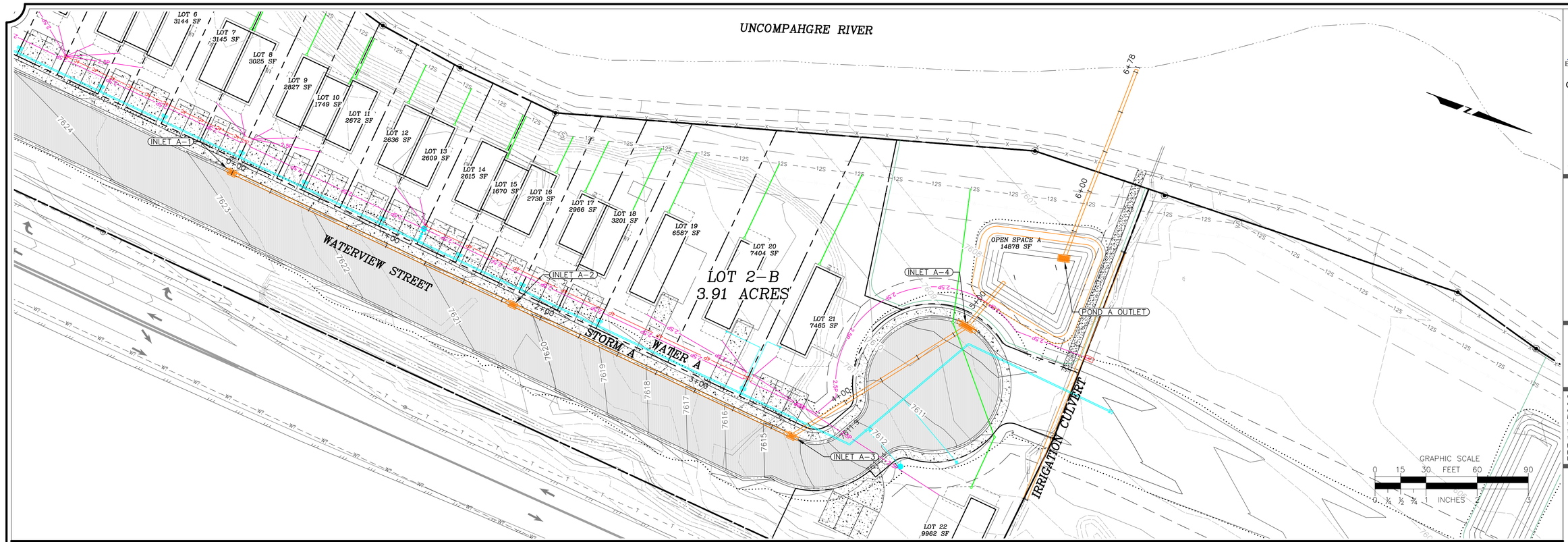
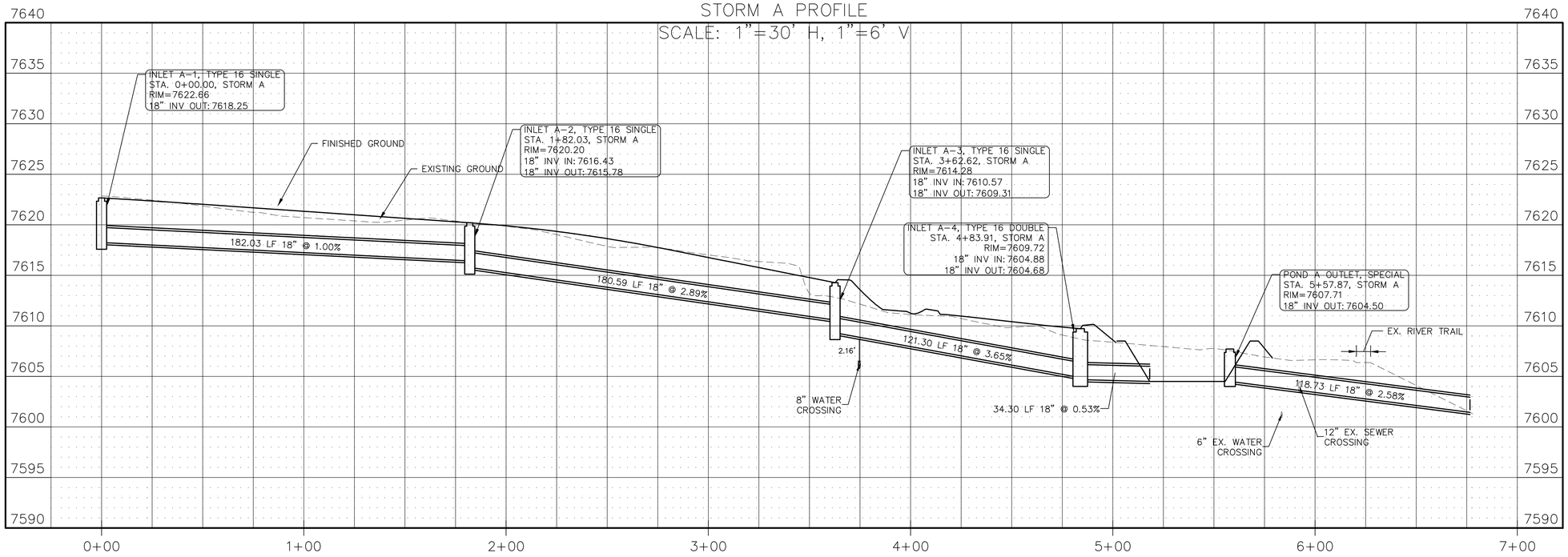
Designed by: RSH
Checked By: RSH

Sheet
W1.02

WATER B PLAN & PROFILE

G:\2021\21-116 ouray affordable housing\cad\sheets\w1.02 water b plan & profile.dwg DATE:5/9/2023 USER:ENGLISH PLOT SCALE=1:1





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WATERVIEW AFFORDABLE HOUSING SUBDIVISION

OURAY, COLORADO

Issue Record:
SCHEMATIC 05-05-2023

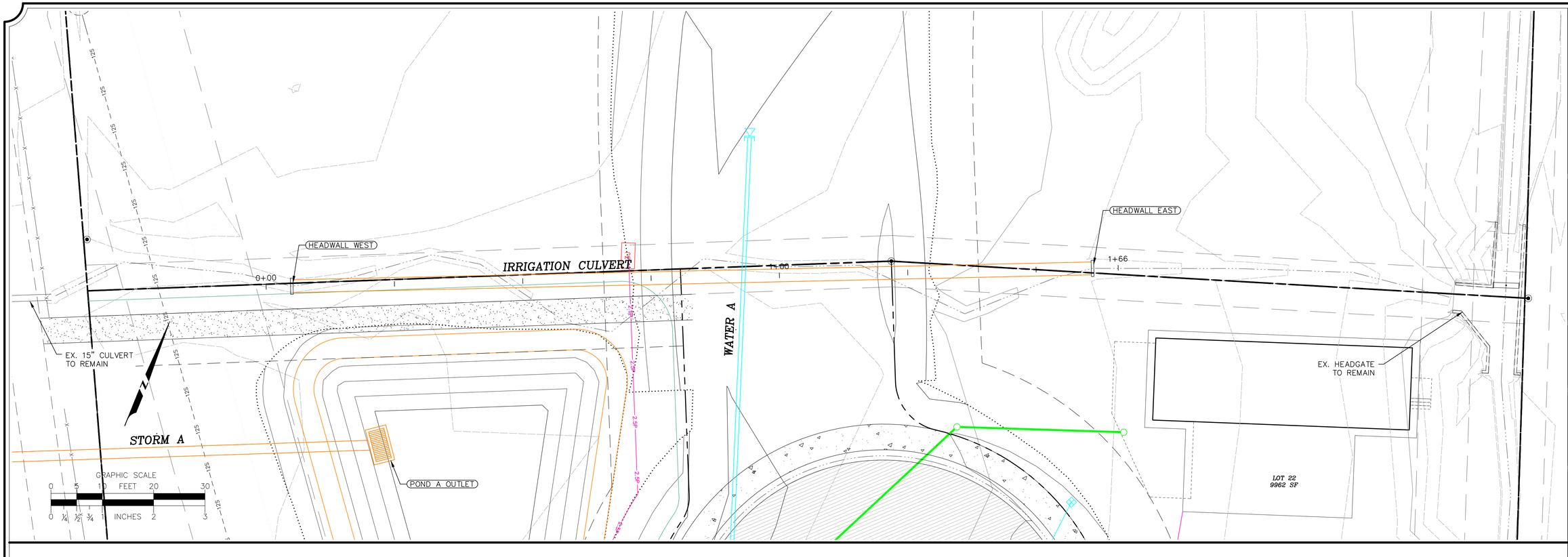
Revisions:

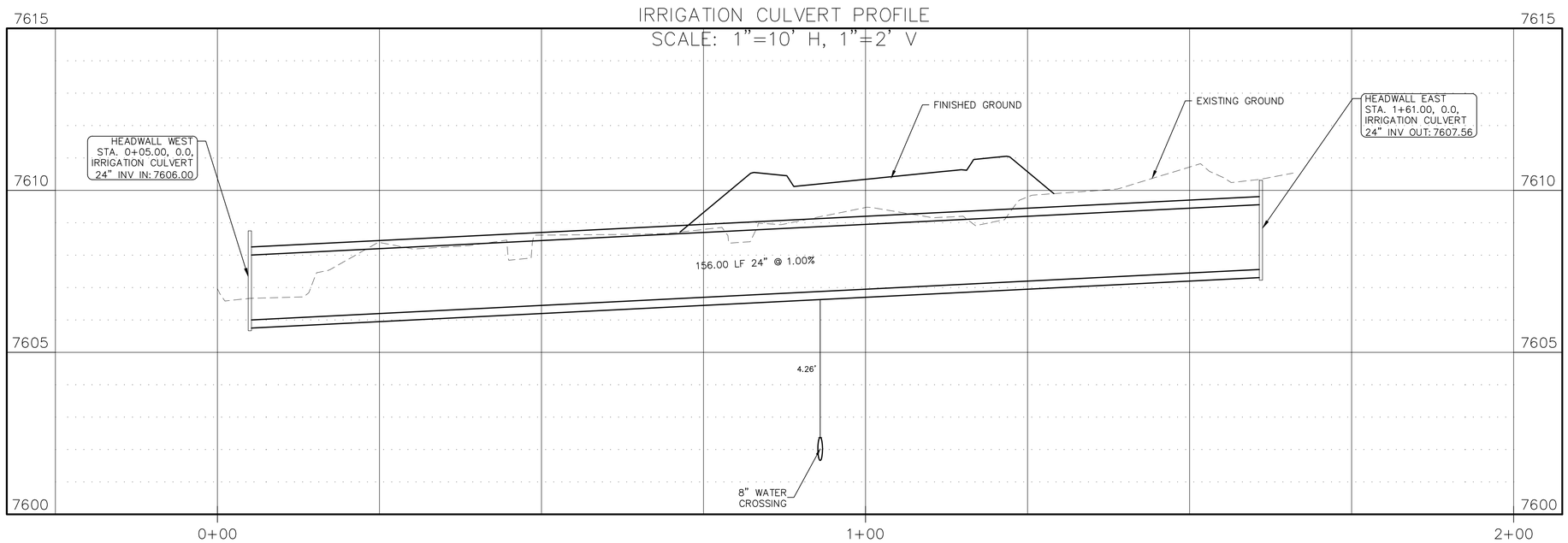
Project Number:	21-116
Drawn By:	JAE
Designed by:	RSH
Checked By:	RSH

Sheet
SD1.01

STORM DRAIN A PLAN & PROFILE

g:\2021\21-116 ouray affordable housing\cad\sheets\sd1.01 storm drain a plan & profile.dwg DATE:5/9/2023 USER:JENGLISH PLOT SCALE=1:1





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WATERVIEW AFFORDABLE HOUSING SUBDIVISION

OURAY, COLORADO

Issue Record:

SCHEMATIC	05-05-2023

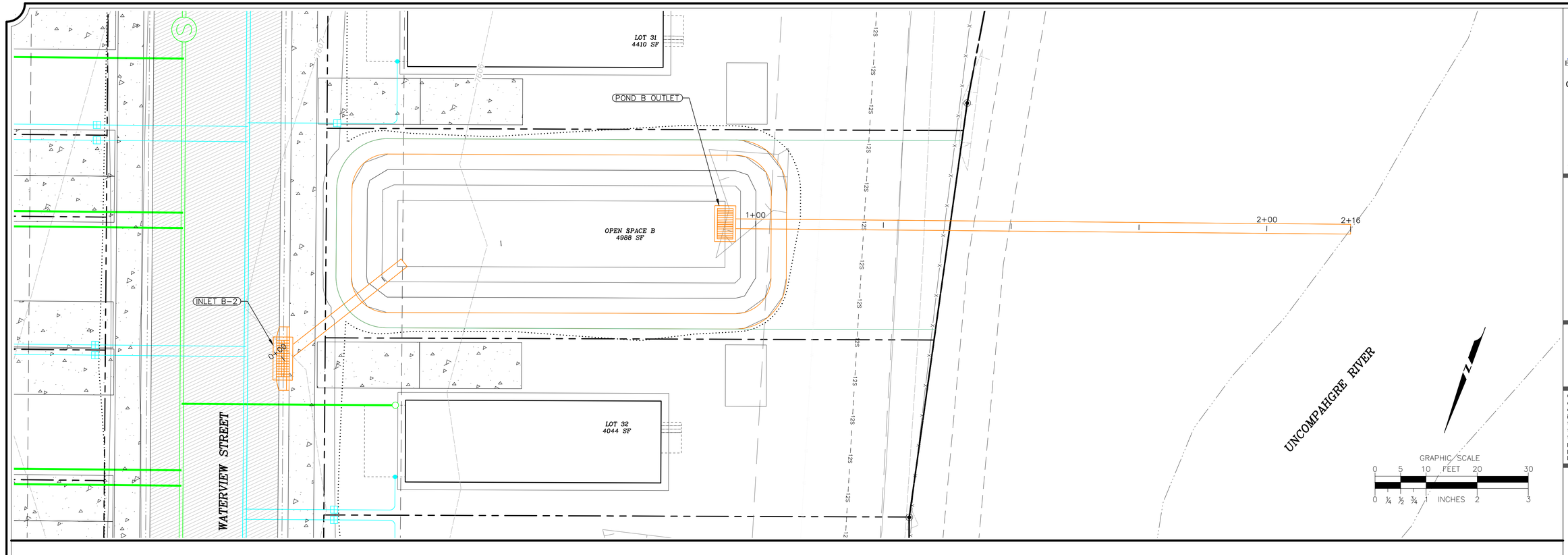
Revisions:

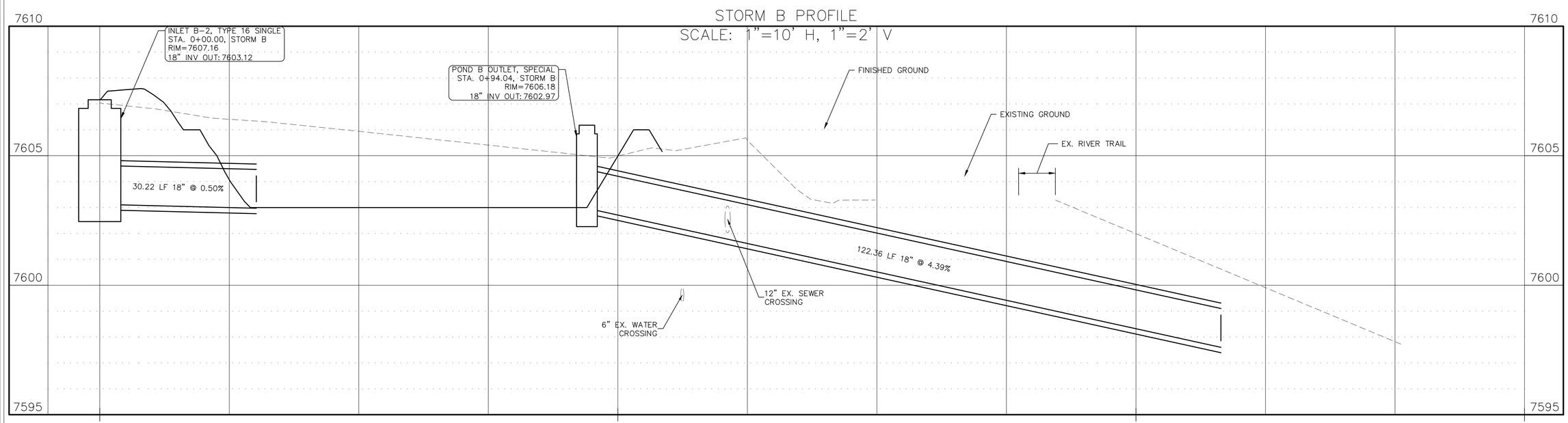
Project Number:	21-116
Drawn By:	JAE
Designed by:	RSH
Checked By:	RSH

Sheet
SD1.02

IRRIGATION CULVERT PLAN & PROFILE

G:\2021\21-116 ouray affordable housing\cad\sheets\sd1.02 irrigation culvert plan & profile.dwg DATE: 5/9/2023 USER: JENGLISH PLOT SCALE=1:1





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WATERVIEW AFFORDABLE HOUSING SUBDIVISION

OURAY, COLORADO

Issue Record:
SCHEMATIC 05-05-2023

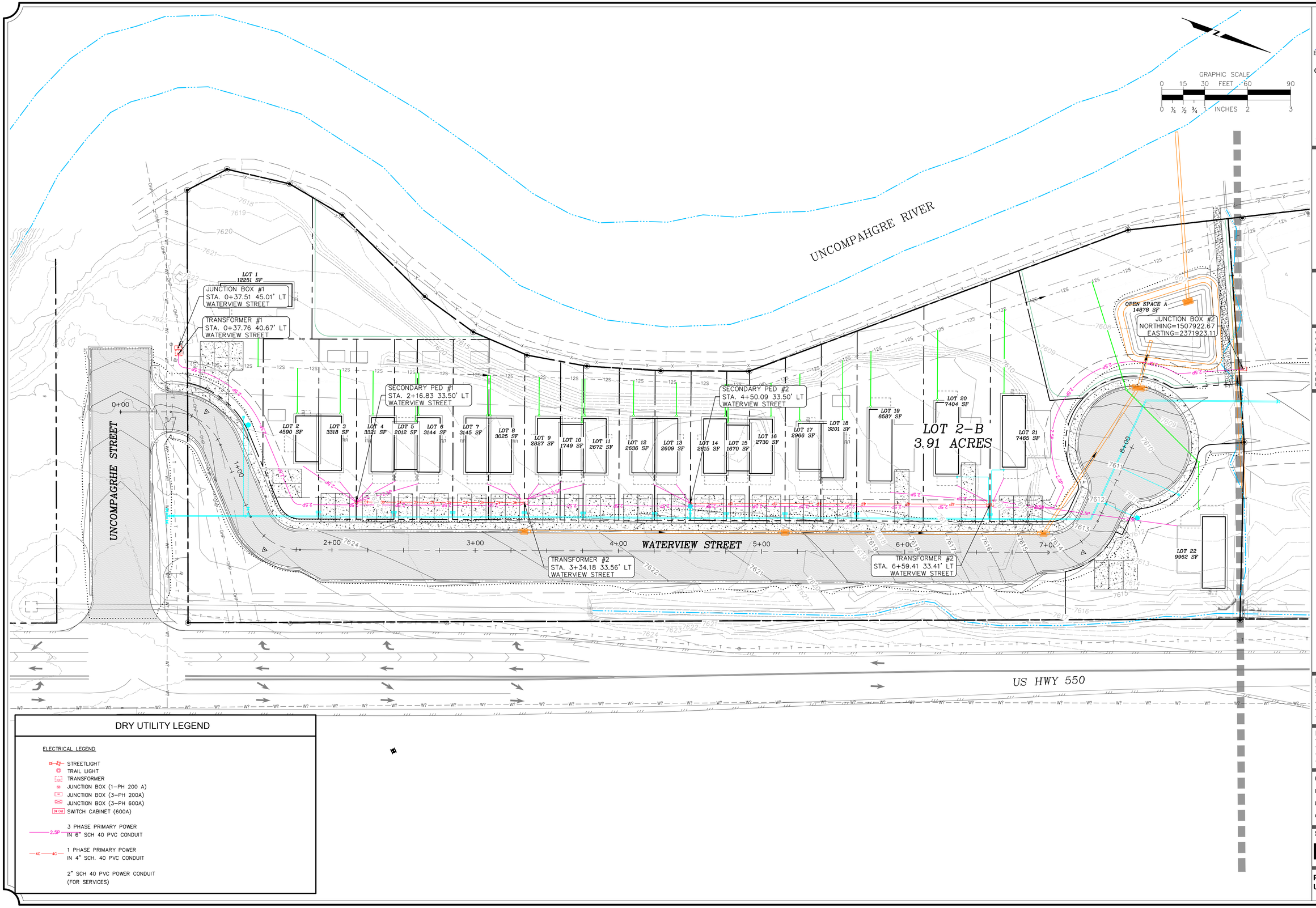
Revisions:

Project Number: 21-116
Drawn By: JAE
Designed by: RSH
Checked By: RSH

Sheet
SD1.03

STORM DRAIN B PLAN & PROFILE

G:\2021\21-116 ouray affordable housing\cad\sheets\sd1.03 storm drain b plan & profile.dwg DATE:5/9/2023 USER:JENGLISH PLOT SCALE=1:1



DRY UTILITY LEGEND

ELECTRICAL LEGEND

- STREETLIGHT
- TRAIL LIGHT
- TRANSFORMER
- JUNCTION BOX (1–PH 200 A)
- JUNCTION BOX (3–PH 200A)
- JUNCTION BOX (3–PH 600A)
- SWITCH CABINET (600A)

2.5P — 3 PHASE PRIMARY POWER IN 6" SCH 40 PVC CONDUIT

4C — 4C — 1 PHASE PRIMARY POWER IN 4" SCH. 40 PVC CONDUIT

2" SCH 40 PVC POWER CONDUIT (FOR SERVICES)

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WATERVIEW AFFORDABLE HOUSING SUBDIVISION

OURAY, COLORADO

Issue Record:

SCHEMATIC	05-05-2023

Revisions:

Project Number:	21-116
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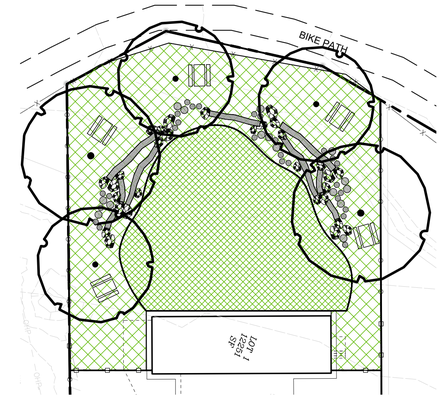
Designed by:	RSH
Checked By:	RSH

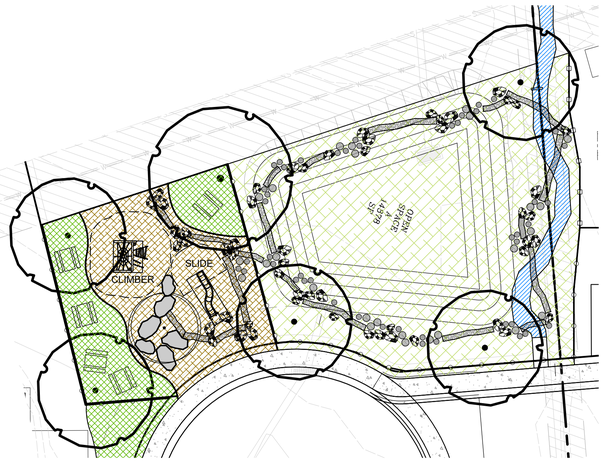
Sheet

DU1.01

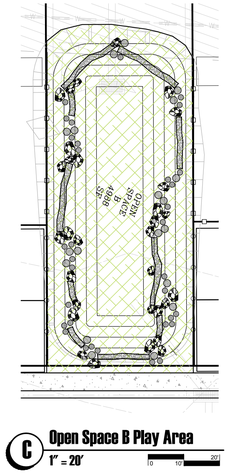
PHASE 1 DRY UTILITIES



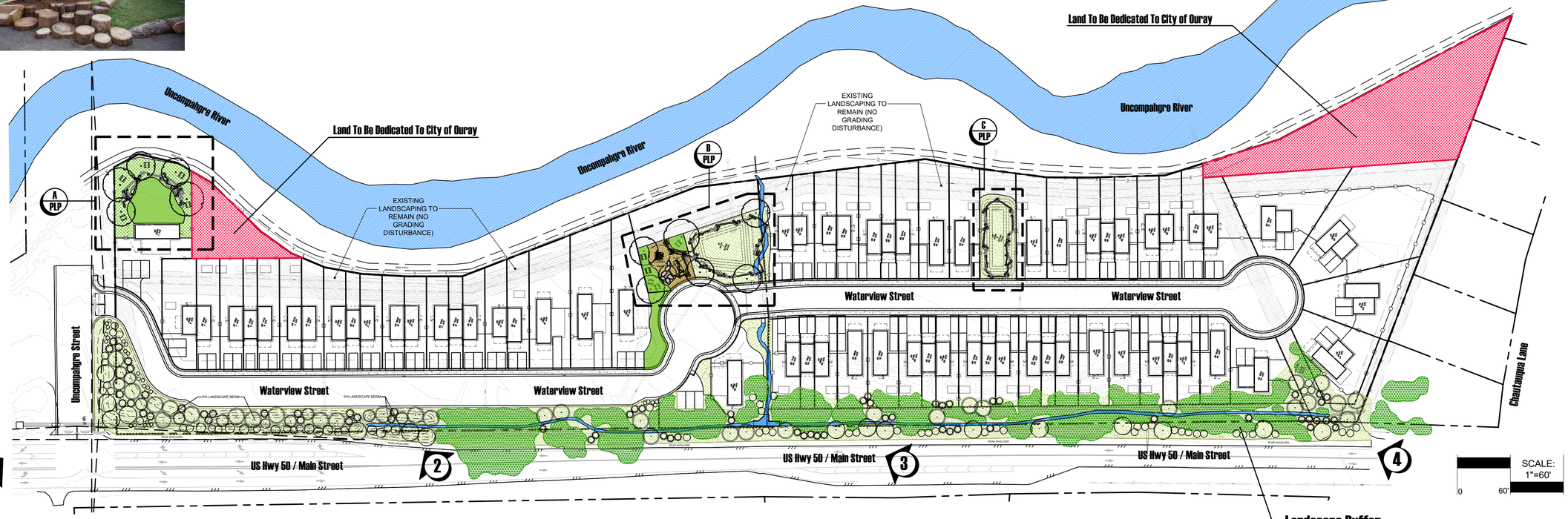
A Lot 1 Play Area
1" = 20'



B Open Space A Play Area
1" = 20'



C Open Space B Play Area
1" = 20'

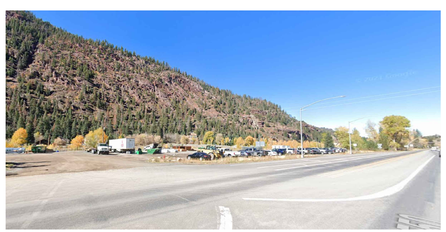


Landscape Buffer

MUCH OF THE EXISTING LANDSCAPE ALONG THE HIGHWAY IS IN HEALTHY CONDITION AND PROVIDES AN EXCELLENT BASIS FOR BUFFERING THE VISUAL IMPACTS OF THE DEVELOPMENT. SOME DEAD TREES AND SHRUBS DO EXIST AND WILL BE REMOVED AS PART OF THE INITIAL LANDSCAPE TREATMENT. WHERE VOIDS ARE CREATED FROM THIS DEAD WOOD REMOVAL NEW PLANTS WILL BE ADDED. THE PROPOSED LANDSCAPE PLAN IS TO SUPPLEMENT THE EXISTING PLANT MATERIAL WITH NEW PLANTS THAT WILL ACHIEVE AN EFFECTIVE LANDSCAPE BUFFER. THE FOLLOWING EXISTING PLANT SPECIES HAVE BEEN OBSERVED AND ALL HEALTHY PLANTS SHALL REMAIN UNDISTURBED:

NATIVE TREES AND SHRUBS	
COMMON NAME	BOTANICAL NAME
WILLOW	SALIX
OAK	QUERCUS
BIRCH	BETULA
COTTONWOOD	POPULUS
PINE	PINUS
MAPLE, BOXELDER	ACER
BLACKBERRY/	RUBUS
DEWBERRY	RUBUS
RASPBERRY	RUBUS
SPRUCE	PICEA
FIR	ABIES
SERVICEBERRY	AMELANCHIER
JERSEY TEA	CEANOTHUS
DOGWOOD	CORNUS
JUNIPER, RED CEDAR	JUNIPERUS
ELDERBERRY	SAMBUCUS

NOTES:
1. GROUNDCOVER FOR THE LANDSCAPE BUFFER AREA WILL CONSIST OF LOCALLY PROCESSED WOOD CHIPS.
2. NATIVE GRASS SEED SHALL BE BROADCAST ONTO THE FOREST FLOOR INTO THE WOOD CHIPS TO CREATE A LOW VEGETATIVE COVER.
3. IRRIGATION FOR THE PROJECT WILL BE FROM AN UNDERGROUND PRESSURIZED SYSTEM FROM THE DOMESTIC WATER SUPPLY AND SHALL BE OPERATED BY A SMART CONTROLLER.
4. LARGE FALLEN LOGS (OVER 12"Ø) SHALL REMAIN IN PLACE AND BE USED TO NATURALIZE THE AREA.
5. ALL DEAD WOOD LESS THAN 12"Ø TO BE REMOVED AND CHIPPED ON-SITE FOR RE-USE AS MULCH IN THE LANDSCAPE.



1 View 1 - Existing Condition

2 View 2 - Existing Condition

3 View 3 - Existing Condition

4 View 4 - Existing Condition

Preliminary
Not For Construction

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Project Name:

Ouray Waterview
Ouray, Colorado

Client:

Paul Major
Ouray Homes, LLC
PO Box 4222
Telluride, CO 81435
970-209-2880
paul@ruralhomesproject.co

Landscape Architect:

NVISION DESIGN STUDIO, INC.
677 25 Road Grand Junction, CO 81505
Phone: 970.210.2155 Email: rb@nviz.biz
Web: www.nviz.biz
Landscape Architecture | Visual Simulation | Graphic Design

Registration:

Robert A. Breeden
LA 462
03/31/2008
Original Date of Licensure
STATE OF COLORADO
LICENSED LANDSCAPE ARCHITECT

Legend

- PROPOSED SHRUBS/PERENNIALS/ ORNAMENTAL GRASSES
- PROPOSED DECIDUOUS TREES
- PROPOSED EVERGREEN SHRUBS
- PROPOSED EVERGREEN TREES
- EXISTING TREES
- NATIVE GRASS SEED
- TURF GRASS SOD
- WOOD CHIPS
- EXISTING STREAM TO REMAIN
- FENCE 1 - 3'H SPLIT RAIL
- FENCE 2 - 6' PRIVACY

IN PROGRESS
FOR INTERNAL REVIEW ONLY

ACCEPTANCE BLOCK
THE CITY OF OURAY 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 NEITHER ACCEPTS NOR ASSUMES ANY LIABILITY FOR ERRORS OR OMISSIONS. ERRORS IN THE DESIGN OR CALCULATIONS REMAIN THE RESPONSIBILITY OF THE PROFESSIONAL OF RECORD. CONSTRUCTION MUST COMMENCE WITHIN ONE YEAR FROM THE DATE OF PLAN SIGNATURE.

CITY PLANNER DATE

Sheet Title:

Preliminary Landscape Plan

Project: Ouray Waterview
Date: May 15, 2023
Scale: 1" = 60'
Sheet: PLP
North

LAND USE TABLE	
PRIVATE PARCELS	2.11 acres
Town Parcels (open space)	0.90 acres (~23%)
Town Parcels (Right of Way)	0.90 acres (~23%)
Total	3.91 acres

Surface tabulation	
Roofs	0.455 acres
hardscape surfacing	0.955 acres
native ground/landscaping	2.5 acres
Total	3.91 acres

GRAPHIC SCALE
0 15 30 FEET 60 90
0 ¼ ½ ¾ 1 INCHES 2 3

LOT 1 12251 SF
LOT 2 4590 SF
LOT 3 3318 SF
LOT 4 3321 SF
LOT 5 2012 SF
LOT 6 3144 SF
LOT 7 3145 SF
LOT 8 3025 SF
LOT 9 2827 SF
LOT 10 1749 SF
LOT 11 2672 SF
LOT 12 2636 SF
LOT 13 2609 SF
LOT 14 2615 SF
LOT 15 1670 SF
LOT 16 2730 SF
LOT 17 2966 SF
LOT 18 3201 SF
LOT 19 6587 SF
LOT 20 7404 SF
LOT 21 7465 SF
LOT 2-B 3.91 ACRES

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WATERVIEW AFFORDABLE HOUSING SUBDIVISION

OURAY, COLORADO

Issue Record:
SCHEMATIC 09-06-2023

Revisions:

Project Number: 21-116
Drawn By: JAE
Designed by: RSH
Checked By: RSH

Sheet
RD1.02

PHASE 1 SITE PLAN

Ouray County

Home Purchasing Price Based on Mortgage (Examples)

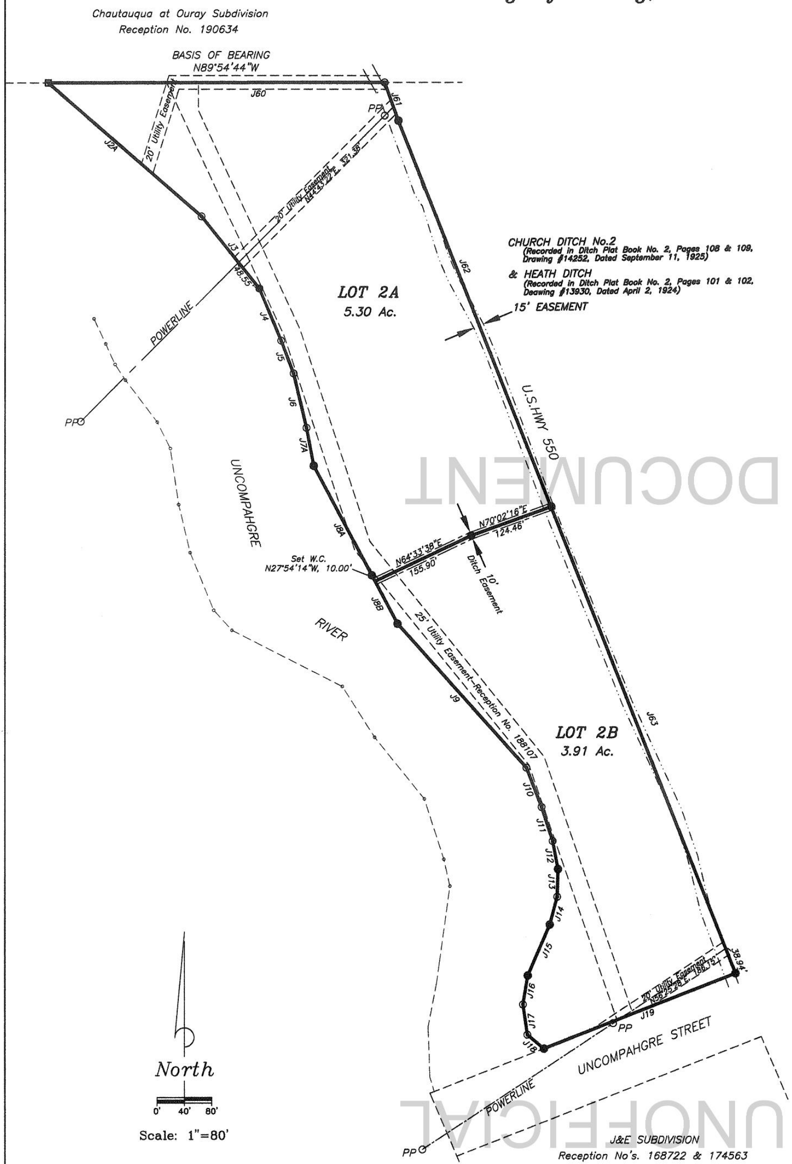
Household Area Median Income (AMI)	Household Size (Persons)	Household Income (Maximum)	Ouray Homes Preferred Lender - 5.5% interest rate; 30 year fixed amortized; buyers pays 10% down payment cost
120 -100%	1	$ 78,225	$ 333,494
	3	$ 100,575	$ 428,777
	5	$ 120,750	$ 514,785
Area Median Income (AMI)	Household Size (Persons)	Household Income (1) (Maximum)	Ouray Homes Preferred Lender - 4.9% interest rate; 30 year fixed amortized; buyers receives 10% down payment assistance
100-81%	1	$ 65,188	$ 277,912
	3	$ 83,813	$ 357,314
	5	$ 100,625	$ 428,988
Area Median Income (AMI)	Household Size (Persons)	Household Income (1) (Maximum)	Ouray Homes Preferred Homes - 2.5% interest rate; 30 year fixed amortized; buyers receives $25,000 down payment assistance
80% and less	1	$ 52,150	$ 320,180
	3	$ 67,050	$ 411,659
	5	$ 80,500	$ 494,234

For Illustrative Purposes Only

OURAY WATERVIEW SUBDIVISION LOT 2 LOT SPLIT

Also being a Lot Split of East Part of Lot 3, J&E Subdivision

City of Ouray, Colorado



LEGEND

- Found #5 Rebar & 1.5" Aluminum Survey Cap – LS 10738
- Found #5 Rebar & 2" Aluminum Survey Cap – LS 31160
- Set #5 Rebar & 2" Aluminum Survey Cap – LS 31160

Line	Bearing	Distance
J2A	S48°51'41"E	297.22'
J3	S38°33'34"E	135.34'
J4	S22°39'59"E	82.71'
J5	S20°42'17"E	51.32'
J6	S13°19'50"E	81.90'
J7A	S10°44'19"E	56.48'
J8A	S27°54'14"E	191.35'
J8B	S27°54'14"E	70.30'
J9	S41°47'36"E	282.57'
J10	S21°03'43"E	61.53'
J11	S17°54'59"E	52.32'
J12	S10°43'03"E	41.78'
J13	S01°43'43"W	40.66'
J14	S14°50'16"W	42.16'
J15	S23°21'17"W	81.17'
J16	S09°21'24"W	42.88'
J17	S08°16'18"E	44.77'
J18	S49°46'10"E	31.49'
J19	N68°30'00"E	301.39'
J60	N89°54'44"W	490.27'
J61	Δ=1°11'01" R=2905.00' L=60.01'	
J62	S21°33'07"E	608.11'
J63	S21°33'07"E	734.06'

PLAT NOTE:
Access to Highway 550 from Lot 2A is subject to State Highway Access Code.

CERTIFICATE OF OWNERSHIP AND DEDICATION:
KNOW ALL MEN BY THESE PRESENTS, that the undersigned owners of said property, located in the City of Ouray, State of Colorado, being described as Lot 2 of the Ouray Waterview Subdivision per Reception No. 189657 in the office of the Ouray County Clerk and Recorder.
HAVE BY THESE PRESENTS, caused to be laid out, platted and subdivided the above described into lots, as shown on this plat, under the name and style of Ouray Waterview Subdivision Lot 2 Lot Split and do hereby grant, dedicate and convey to the City of Ouray, State of Colorado, perpetual utility easements as shown hereon, across Lots 2A & 2B. We do hereby grant, dedicate and convey the 15' Irrigation Easement and the 10' Ditch Easement, as shown hereon, for the purposes of installation, maintenance, repair & replacement of water pipelines, transmission and related structures and facilities, together with all rights of reasonable access for such purposes, to the benefit of Richard P. Jossi, successors, heirs and assigns.

Owners: J&E Investment Corporation, A Colorado Corporation
By: ______________________
Richard P. Jossi, President

STATE OF Colorado)
) ss
COUNTY OF Ouray)
The foregoing signature was acknowledged before me this 11 day of October A.D., 2013, by Richard Jossi
My commission expires May 10, 2016
Witness my hand and seal ______________________
Notary Public

DEBRA L OVERTON
NOTARY PUBLIC
STATE OF COLORADO
NOTARY ID 20124029248
COMMISSION EXPIRES MAY 10, 2016

CERTIFICATE OF LIEN HOLDERS:
The undersigned holders of mortgages, which encumber the land subdivided, hereby agree to the subdivision and dedications.
1st Mortgage: ______________________
by: ______________________
2nd Mortgage: ______________________
by: ______________________

STATE OF ________)
) ss
COUNTY OF ________)
The foregoing signature was acknowledged before me this ____ day of ________ A.D., 20__, by ________
My commission expires ______________________
Witness my hand and seal ______________________
Notary Public

no lien holders

ATTORNEY'S CERTIFICATE:
I certify that I have examined the title to the platted property and that the record owners and holders of encumbrances affecting the property have executed this plat and joined in the subdivision and reservation of easements, subject to easements of record at B74 P189, B114 P71, B183 P906; Deed recorded at Recp. # 164682; Plat & [illegible] Agreement 189657 & 168756; Easement Recp # 188107 & 172403 all as disclosed and according to Title Commit No ABB85003380 [illegible] Natl title ins. Co
______________ 26376 12/05/2013
Attorney at Law Registration No. Date

APPROVAL OF PLANNING COMMISSION:
Approved by the City of Ouray Planning Commission this 7th day of October A.D., 2013
____
Chairman

APPROVAL OF CITY COUNCIL:
Approved by the Ouray City Council this 10th day of October A.D., 2013.
____
Mayor

APPROVAL OF CITY ATTORNEY:
Approved for recording this 17th day of December A.D., 2013 by Kathryn Sellars, City Attorney.
______________ 36242 12/17/13
Attorney at Law Registration No. Date

BASIS OF BEARING:
The bearing between the northeast corner of Lot 2, Ouray Waterview Subdivision, defined by a rebar & cap, LS 31160 and the northwest corner of said Lot 2, defined by a rebar & cap, LS 31160, is assumed to be N89°54'44"W as shown on the Ouray Waterview Subdivision Plat recorded at Reception No. 168722 in the records of the Ouray County Clerk & Recorder.

SURVEYOR'S CERTIFICATE:
I, Robert A. Larson, a Registered Land Surveyor in the State of Colorado, do hereby certify that this plat accurately represents to the best of my knowledge and information a survey made by me or under my direct supervision, and that said survey conforms to all State laws and standards for property boundaries.
______________________ 9-13-13
Robert A. Larson LS 31160 Date SEAL

RECORDER'S CERTIFICATE:
This plat was filed for record in the office of the Clerk and Recorder of Ouray County at 2:48 P.M., on the 6 day of January A.D., 2014, in Book ____, Page ____, Reception No. 211406.
By ______________________ Deputy
County Clerk and Recorder

SEAL

NOTICE: According to Colorado Law you must commence any legal action upon any defect in this survey within three years after you first discovered such defect. In no event, may any action based upon any defect in this survey be commenced more than ten years from the date of the certification shown hereon.

		J&E Investment Corporation Richard P. Jossi, President Ouray, Colorado 81427	
SURVEYED BY R.A.L.	DATE 7/19/2013	Disk	MONADNOCK MINERAL SERVICES 342-7TH Ave. – P.O. Box 85, Ouray, Colorado 81427 PLS 31160 – CPC 4682
DRAWN BY T.A.P.	SCALE 1"=80'	ACCT. NO. J13027	SHEET 1 of 1

UNOFFICIAL DOCUMENT

RECEPTION#: 211406, 01/06/2014 at 02:48:48 PM, 1 OF 1 PAGES, Total Fees: $11.00 MICHELLE NAUER, OURAY COUNTY, CO. CLERK & RECORDER

Dear City of Ouray Planning & Zoning Commission,

I am writing to request an amendment to the approved Sketch Plan that was presented to the Commission Tuesday January 10, 2023. The amended Waterview Subdivision Sketch Plan remains substantially similar to the approved Sketch Plan in terms of project density, unit type, and overall intent and mission of the PUD.

In fact, this amended plan is better aligned with our goal to build affordable and attainable housing for the workforce, as it eliminates some major cost components of the horizontal development plan and responds to the feedback provided by the P&Z on January 10. The updated scheme eliminates the need to introduce new water and sewer mains into Phase 1. Additionally, it eliminates the need to construct a retaining wall where the previous layout of the road interfaced with topography on the western property boundary. The next paragraph of this letter outlines the specific changes that I would like the commission to consider. I would like to highlight that the updated plan provides space to incorporate the feedback that we heard from the Commission in the January hearing, in that it provides space to include a vegetative buffer between the project and the highway.

The most substantial change in the amended Sketch Plan before you is the layout of the primary subdivision access road in Phase 1 that is designed to be built in the southern portion of the property. In the new plan, you will notice a chicane, serpentine curve, in the road that runs from the southern property boundary on Uncompahgre Street northeast into the subdivision. This alternative road layout has a number of benefits. Primarily, the road eliminates the need to construct an alley. In the initial sketch plan, the alley was proposed to be a reduced width of 12 feet and function only as a one-way alley. As we developed the engineering, we discovered that we did not have enough space in the project site to include an alley, as it would need to be built over the existing ditch easement and we would need to culvert the ditch, which must remain exposed to daylight. The chicane road creates space to place residential units on the western side of the property.

This new layout has a number of benefits. The homes' front facades face the highway, which would give a more 'friendly' first impression of the project. As opposed to having off-street parking being the primary view of the subdivision from the highway, now there is room to build a vegetative screen, a public street and right of way, and the view of the homes will be inviting, with front porches and more dynamic front facades. Secondly, the chicane road will keep traffic moving slowly. The green hatch on the site plan shows the travel path of a fire truck, built to state and federal standards.

In terms of reducing the overall project's infrastructure cost, which in turn reduces the per-unit cost of each home, there is now no need to construct extensions of water and sewer mains for Phase 1. The easement will run in the rear of the phase 1 lots and we can run shorter laterals directly from that easement. Additionally, there is no need to design a retaining wall, as notated in the January sketch plan.

There are minor changes to the number of units and project density. Phase 1 of Waterview will now include three home-based childcare units. Two of those units will be located around the central roundabout and a third will face Uncompahgre Street where we can design a turnaround and drop off. Situating the home care units near these roundabouts and central nodes of the PUD would be a great benefit for maintaining proper traffic flow and providing areas for pick-up and drop off.

Before proceeding with our Preliminary Plat application, we felt that it was important to discuss these changes with the Planning & Zoning Commission. We look forward to continuing to develop this project. Finally, we are excited to have the support of the City through the HB1271 IHOI Affordable Housing Incentives Grant Program. The City has been awarded $1,050,000 which will go a long way towards helping us achieve our mission of building affordable housing for the Ouray County workforce. This is a big win for the City of Ouray.

Thank you and I look forward to discussing these changes with you next Tuesday March 21 at the P&Z meeting.

Sincerely,

David Bruce
Project Manager
Rural Homes: For Sale, For Locals
Waterview PUD

Rural Homes Sketch Plan
Ouray Waterview Application

to: Lily Oswald, Ouray Community Development Director
Silas Clark, Ouray City Administrator
from: David Bruce, Project Manager Rural Homes LLC

Delivered electronically via email to clarkes@cityofouray.com & oswaldl@cityofouray.com on October 21, 2022

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p4-5	What is the Rural Homes Model?
p6-9	Rural Homes Project Portfolio
p10	Fading West
p11	All-electric & solar photo-voltaic program
p12	Sketch Plan Application

Supporting Documentation:

Deed of Ownership -
"1_31734_Ouray Waterview_CHIFO Deed of Trust signed"
"85007577_Ouray Land Closing documents"

Existing Conditions Survey -
"220829_Existing Conditions Map"

Sketch Plan - Schematic Design Document -
"Waterview SD 10-20-2022"

Mission Statement

There is a lack of affordable housing in mountain communities across Colorado. According to the Mountain Migration Report conducted across six counties with tourism-driven economies, the pandemic led to record-high home purchase and rent prices, accompanied by a sharp decrease in unit availability.

Ouray is not immune to these trends. Small business owners, the school district, and local government (all of whom have representatives on the *Rural Homes Ouray Committee*) all struggle to find employees. They cite a lack of housing options as the primary reason. Without the development of new housing options priced for the local workforce, the community of Ouray will struggle to keep businesses open and provide key services. Multiple *Rural Homes Ouray Committee* members have noted that they currently spend an unsustainable amount of time trying to locate housing for prospective and current employees, and this is one of the main reasons they wanted to become part of the Committee. The problem is apparent throughout Colorado, but magnified in land-constrained and desirable locations such as Ouray, which is why it is a perfect location for a project spearheaded by Rural Homes.

What is the Rural Homes Model?

There is a gap between what a teacher earns, what a teacher can afford, and the prices of homes that are available in the market (see graph below). Teachers are not alone, countless essential workers across Colorado face this dilemma. **Rural Homes aims to reduce the cost to build rural housing.**

By integrating donated land, factory-manufactured construction, and low-cost construction finance into a toolkit, we are restructuring the way affordable housing can be built for our region's essential workforce: teachers, medical professionals, immigrants, federal employees that earn between 60-120% of Area Median Income (AMI). Our ambition is to inform and refine a model that minimizes the cost of building single-family homes so that it can be replicated and scaled across rural Colorado. By adding new building stock to a housing market that is saturated with old, dilapidated homes or inflated by vacation markets, we are addressing key determinants of public health and long-term economic sustainability in the region.

Our approach tries to whittle down the cost of construction by combining pre-fabricated off-site home building, low-interest construction finance, offsetting the cost of land, and connecting qualified home buyers with low-interest lenders and down payment assistance.

What is the Rural Homes Model? *Continued*

Cost of Capital
Partners across Colorado's community organizations and philanthropic entities are interested in new approaches to building affordable housing. We've raised construction finance loans with 0.5% interest and below by working with philanthropic funders such as: The Colorado Health Foundation, El Pomar Foundation, Donnell Kay Foundation, Kenneth King Foundation, Caring for Colorado, Dakota Foundation and Boettcher Foundation.

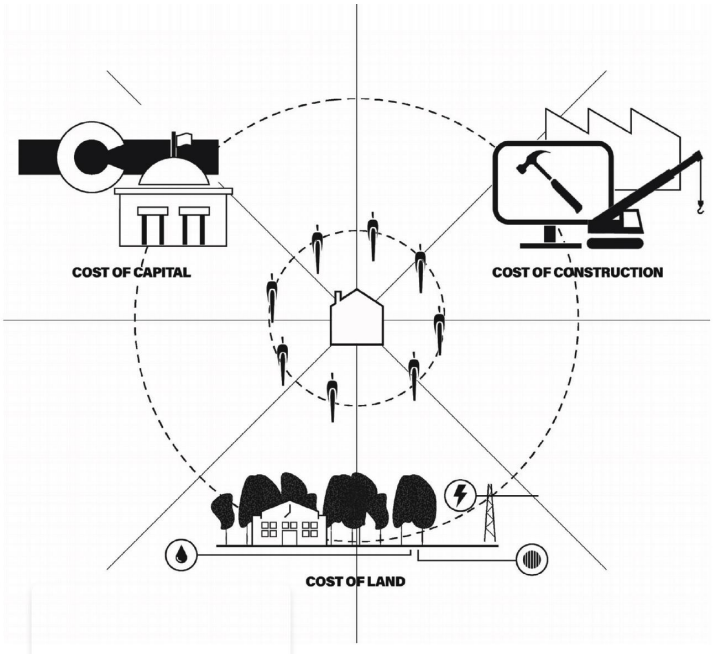
Furthermore, the Department of Local Affairs and The Division of Housing have matched the philanthropic dollars donated to the projects. We are also pursuing additional ""gap financing" funding to subsidize additional costs such as infrastructural improvements related to the project with the goal of reducing the final price of each unit built.

Cost of Land
We can reduce the overall property values of our homes by securing land donations from municipal entities like towns or counties, or by securing funding to purchase land from private donors and state organizations. San Miguel County has donated land for development in Norwood, and philanthropic funding has been offered for land in Ridgway. Here is Ouray, we have taken advantage of the opportunity to buy one of the last major parcels in the City and are searching for avenues to off-set the cost of purchase. The ideal site has strict criteria in order to control the per-unit costs of building the homes. They are flat, infill, and adjacent to existing civic infrastructure in order to minimize grading, new street construction, or the extension of water and sewer lines.

Cost of Construction
Standard stick-built construction is expensive and wasteful: on average, 30% of the material purchased for home construction ends up in a dumpster. In addition to this, the local labor force is (mostly) involved in high-end home construction, so even if subcontractors are compelled to work on affordable housing, the market sets a price of labor too expensive to build affordably.

By partnering with innovative Colorado companies such as Fading West (modular construction) and Simple Homes (panelized construction), we can significantly lower these on-site construction costs. For instance, Fading West builds 85% of the homes in their factory and ships them to the site in parts, allowing us to not only lock in prices on 85% of the house 8 months before construction, but also to save money on subcontractors by reducing the time it takes to assemble the house.

Community Led Process
Each project is guided by a community design process that integrates the strength of each community to build new neighborhoods that improve economic, social, cultural, health, and environmental outcomes. Networks of residents, local governments, affordable housing advocates, business owners and government officials are all required to build places that reflect the desires of the community.



RH Portfolio:

Wetterhorn Homes Ridgway

Under Construction - 14 Townhomes
Expected move-in April 2023

RH Portfolio:

Wetterhorn Homes Ridgway

Under Construction - 14 Townhomes
Expected move-in April 2023

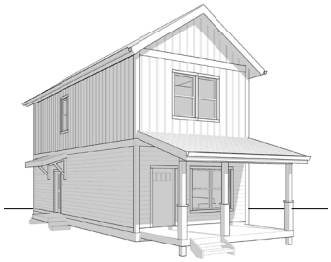
RH Portfolio:

Pinion Park Norwood

Under Construction - 10 Townhomes, 14 Single-Family Detached Homes
Expected move-in January 2022

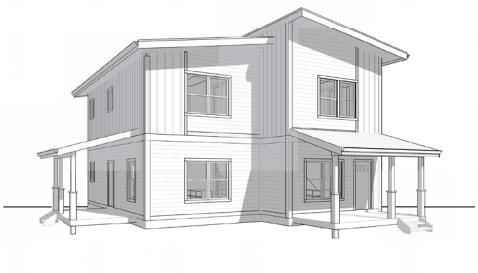
RH Portfolio: Pinion Park Norwood

Under Construction - 10 Townhomes, 14 Single-Family Detached Homes
Expected move-in January 2022



The Wilson
Farmhouse Gable
3 Bedrooms
3 Bathrooms
Detached
1216 square feet
8' x 12' shed
Rooftop Solar
Air Conditioning
Electric Vehicle-ready
Raw water tap
GE appliances
Fiber internet

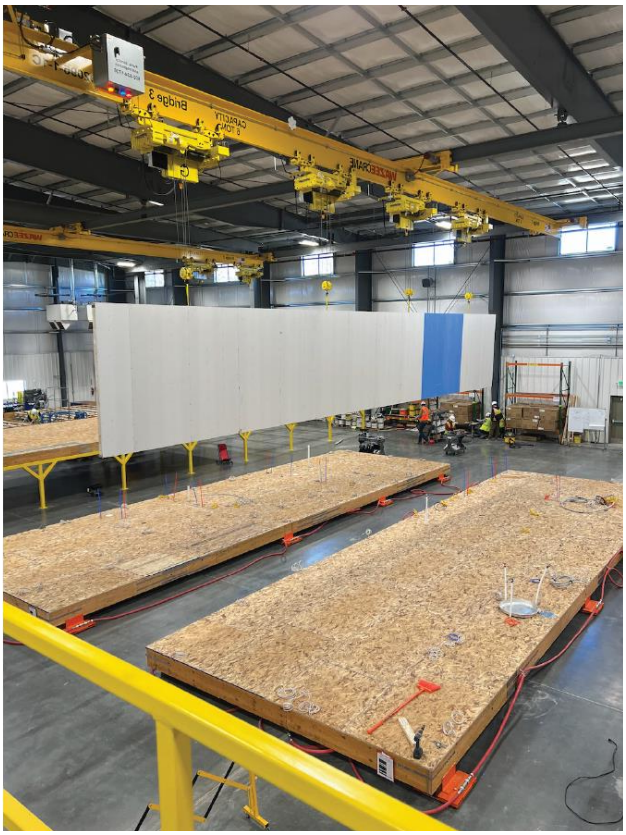
The Hastings
Farmhouse Gable
3 Bedrooms
3 Bathrooms
Detached
1648 square feet
18' x 24' garage
Rooftop Solar
Air Conditioning
Electric Vehicle-ready
Raw water tap
GE appliances
Fiber internet

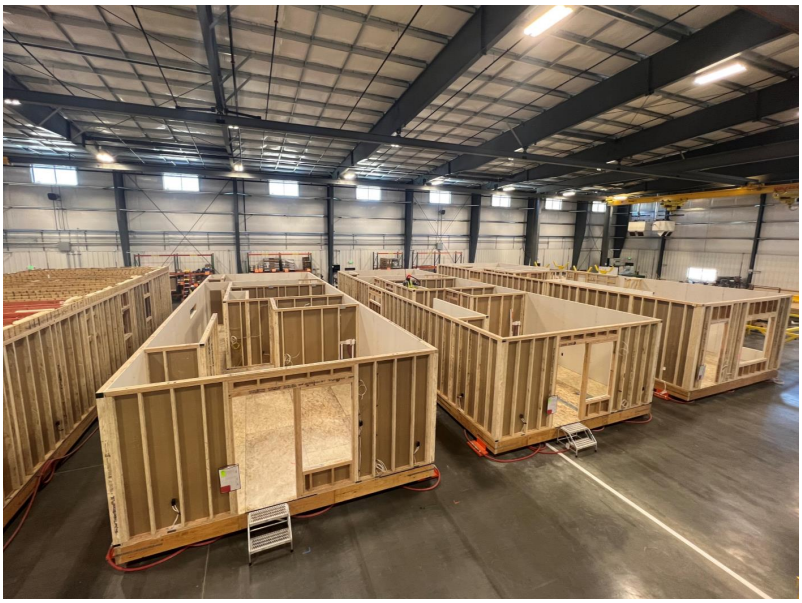


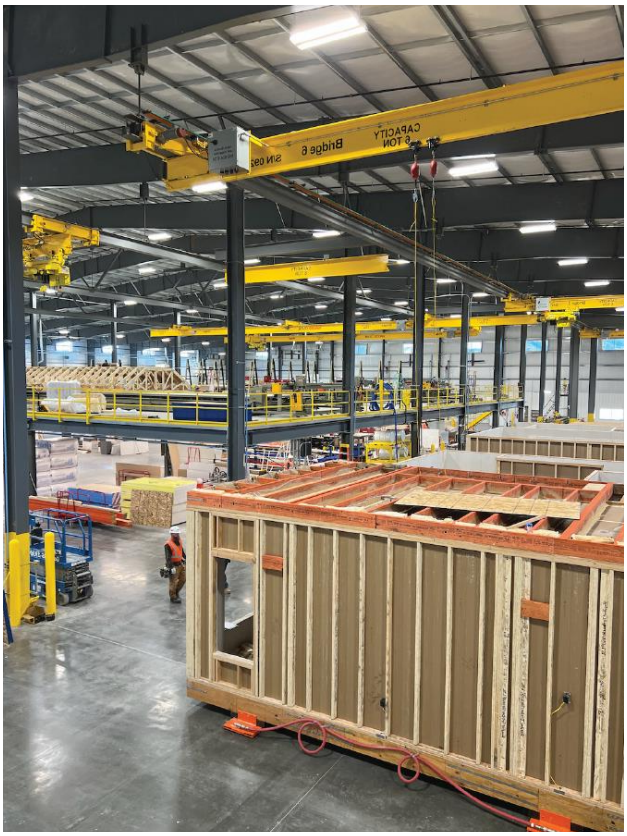
The Sunshine
Mountain Modern
2 Bedrooms
2 Bathrooms
Attached
1024 square feet
10' x 16' shed
Rooftop Solar
Air Conditioning
Electric Vehicle-ready
Raw water tap
GE appliances
Fiber internet

The McKee
Mountain Modern
3 Bedrooms
3 Bathrooms
Attached
1216 square feet
10' x 20' shed
Rooftop Solar
Air Conditioning
Electric Vehicle-ready
Raw water tap
GE appliances
Fiber internet

Strategic Partner

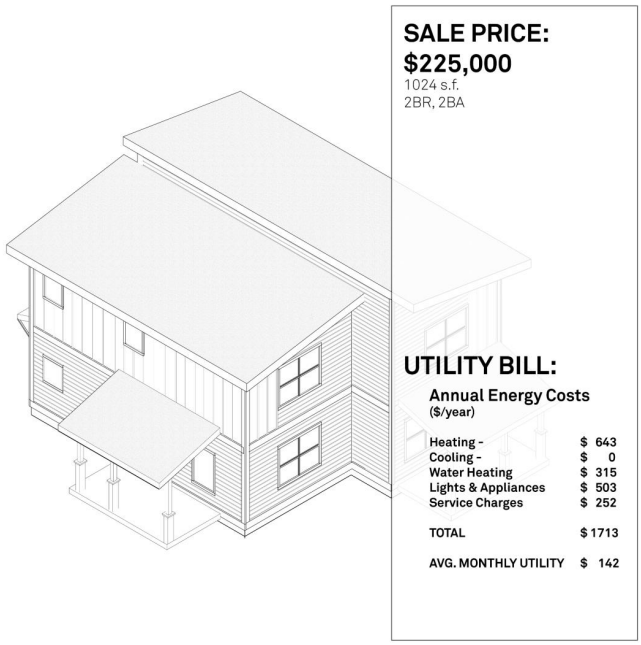


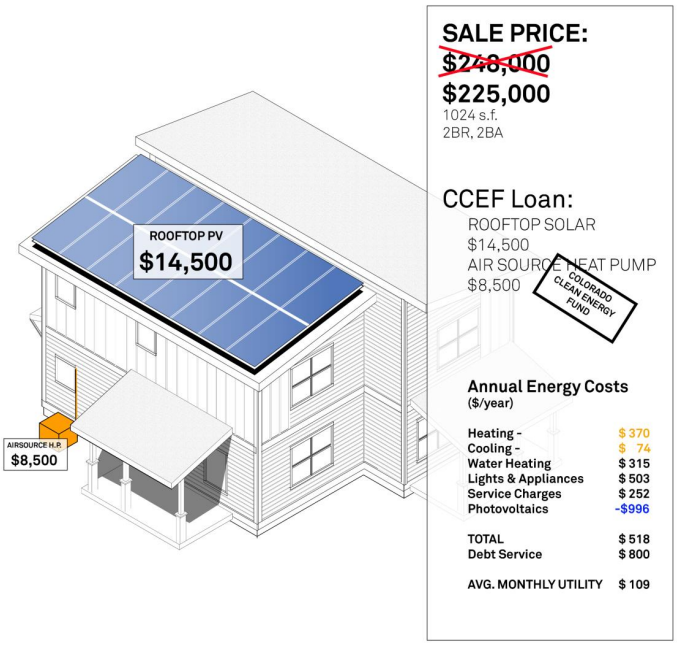




Strategic Partner

Colorado Clean Energy Fund





Pinion Park Pilots Tariff On-Bill Financing for Solar & Air Source Heat Pumps

Rooftop solar provides direct benefits to homeowners, including reduced utility bills, increased property values, and lower carbon footprints. However, the benefits of rooftop solar are only realized by middle- and higher-income homeowners due to the additional upfront costs of purchasing and installing a system. Homeowners at all income levels deserve access to the benefits of rooftop solar. Eliminating the financing hurdle is the key to extending the benefits of solar to lower income homeowners.

Tariff On-Bill Financing (TOBF) provides an opportunity to integrate solar into for-sale construction that is priced for affordable and workforce markets. TOBF can realize the benefits of rooftop solar without requiring lower income families to take on an additional loan to finance the system. In concept, with TOBF, a homeowner pays off the cost of the solar system through their utility bill payments and sees a reduced electrical bill because of rooftop solar power generation. All homeowners pay electric bills. The key is to finance the system at a rate and term that ensures the monthly utility bill is lower than the alternative without the system.

Rural Homes (RH) is developing a proposal with the Colorado Clean Energy Fund (CCEF) and Elemental Energy (EE) to install solar on Pinion Park homes. The program will achieve homeowner savings on their monthly utility bills by up to 25%. In some cases that could be $100 or more per month in electric utility bills savings. Once the loan is paid in full and the TOBF payments are expired (well before the usable end of life for the system) then the homeowner's savings increase further.

This program proposes to pilot a TOBF approach in partnership with San Miguel Power Association for the Norwood Pinion Park affordable housing project. Pinion Park broke ground on the construction of for-sale single family and townhouse homes in March 2022, and homeowners will move-in September 2022.

Every Pinion Park home is designed to be constructed as all-electric and will be wired for electric vehicle charging. The spirit of this development is to provide ownership pathways to working community members. Providing equitable access to energy efficiency, solar and other bill savings is imperative to every income homeowner.

The Pinion Park rooftop photo-voltaic (PV) solar systems will be financed by the Colorado Clean Energy Fund, with loan payments administered via a surcharge on the homeowner's monthly utility bill. The system design will be done by Elemental Energy. Installation will be done by CAM Electronic a sub-contractor of Stryker Construction, the general contractor for Pinion Park. Both the installation and financing of the solar system will be seamless does not require the homeowner take on any additional financing. Roof orientations at Pinion Park will allow for up to 7-10kW per home.

Every homeowner deserves equitable access to lower utility bills and clean energy.

Ouray Waterview
Sketch Plan

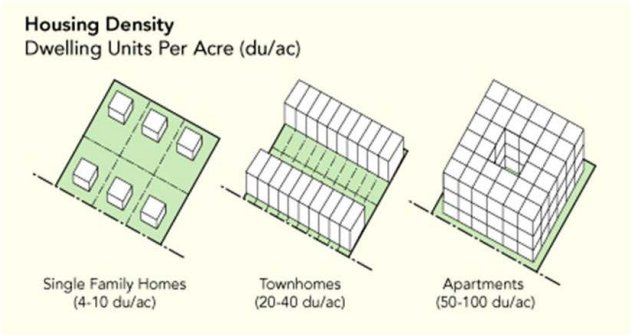
Deed of Ownership:
Please refer to the attached documents:
-85007577_Ouray Land Closing documents
-1_31734_Ouray Waterview_CHIFO Deed of Trust signed

Total Acreage of Property:
9.21 acres

Uses & Project Program:
The Ouray Waterview Subdivision Sketch Plan proposes 67 units. Units will include Single Family Dwellings and Townhomes. Townhomes will not exceed clusters of three units (duplexes & triplexes). Unit uses will also include in-unit home-childcare. Additionally, the site will be programmed with streets that contain on-street parking and alleys in a Right of Way. We intend to dedicate the Right of Way to the City of Ouray for ownership and maintenance upon successful and accepted completion of the horizontal development. Finally, the proposal includes recreational green space, planted open space, and storm water detention ponds that will be programmed as landscape spaces. These green spaces will occur on the western fringe of the lot with a direct adjacency to the existing river trail in order to provide future residents with a direct connection to the trail. We intend to dedicate all green space to Ouray Parks & Recreation for long term ownership & maintenance.

Current Zoning; Future Zoning:
Current: C-2 Commercial-Industrial; Future: Planned Unit Development within C-2 Commercial Industrial

Density:
7.27 Dwelling Units/Acre



Existing Conditions Survey:
Please see **Appendix 1: 220829_Existing Conditions Map** for existing utility easements & infrastructure

Utilities:
Water: We will request to tap into Ouray's municipal water service. Typical maximum daily water demand per single family homes is 350 gallons per day per unit during the summer season. This estimate includes 50 GPD for outside irrigation. These volumes are typically 100 GDP higher than actual measured flows and are used for planning purposes. Given this 350 GDP figure, the Waterview Subdivision would generate a demand of 23,450 gallons per day of water.

Sewer: We understand that there are planned service upgrades to the City's sewer treatment plant and that may cause limitations to project timing, or a project delivery in two phases. Once the capacity of the sewer treatment plant can handle the project, we will request to tap into Ouray's municipal sewer service. We estimate that these units will generate 300 gallons of sewage per day.

Electric: There appears to be available overhead power lines to tap into electric service. We have not yet engages SMPA for a service engineering request.

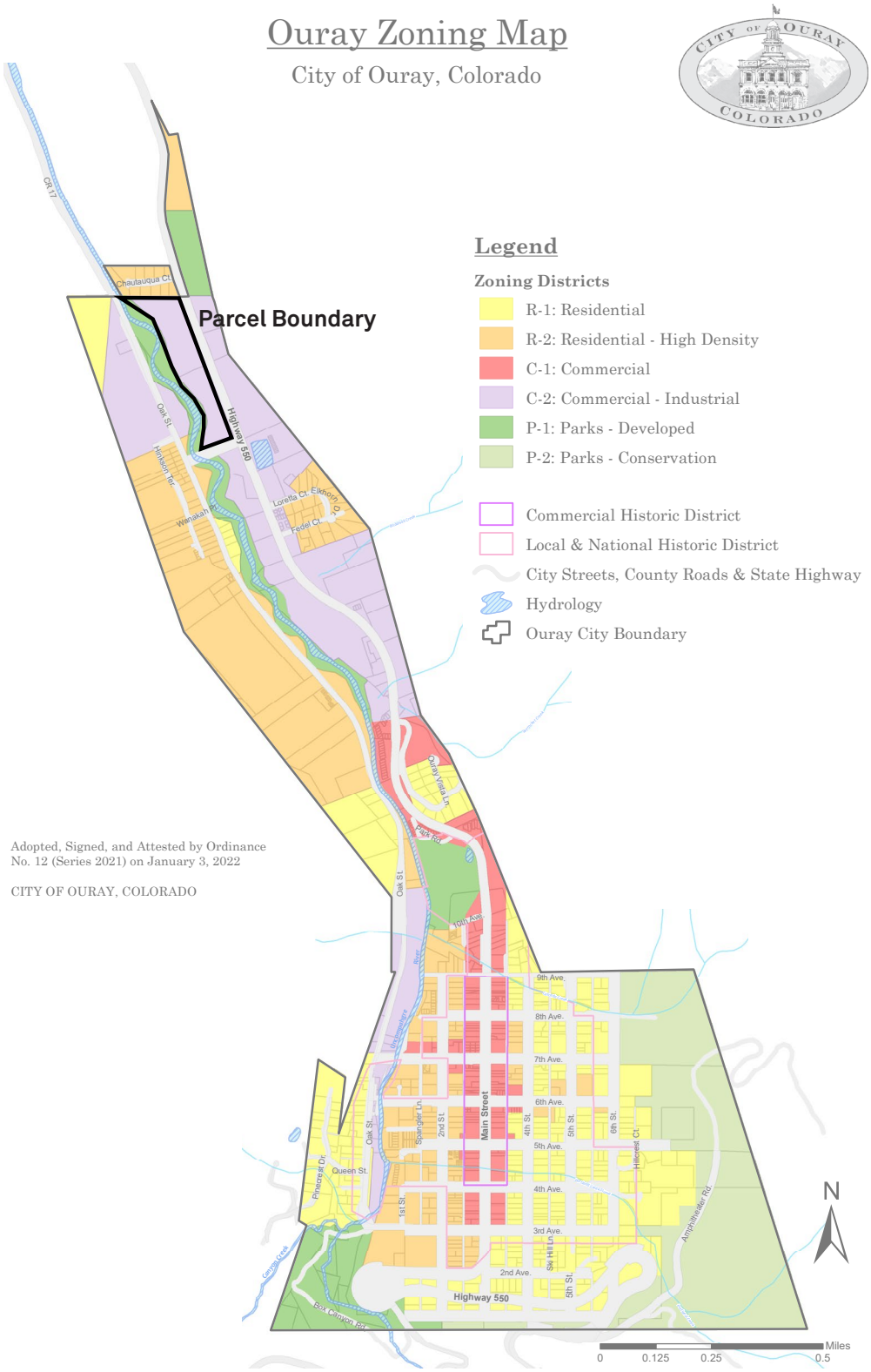
Natural gas: The subdivision's units will not require natural gas services. Homes will be all-electric and provided with air-source heat pumps.

Fiber: The project will be connected to broadband Internet. The provider is currently unknown.

Ditch: We have reached out to the owner of the ditch company and have the support to drop a culvert in the ditch that runs east-west between Lots 2A & 2B in order to cross the ditch with our road that runs north-south

Current Zoning

C-2: Commercial- Industrial



Current zoning district is **C-2 Commercial-Industrial**. Zoning will remain C-2 Commercial-Industrial but we will pursue a Planned Unit Development (PUD) pursuant to Ouray Land Use Code section (7-8). Please see the next page for 7-8 excerpts.

7-8 Planned Unit Developments (PUD)

A. Statement of Objectives of Development

The intent of this section is to promote the Planned Unit Development Act of 1972 and **encourage innovative developments with unique and valued community attributes.** PUD's allow for consideration of development proposals that differ from required development improvements identified in the OLUC. PUD's offer different options to the applicant when planning and obtaining City approval for their development. PUD's allow flexibility with respect to dimensional requirements and increased densities under certain conditions or circumstances. PUD's encourage conservation of a site's natural characteristics, innovative residential, commercial and industrial development plans which will result in a more efficient use of open space and provide affordable housing for year around residents.

B. Criteria for a Planned Unit Development (PUD)

1. A PUD shall be in general conformity with the City Community Plan and consistent with the objectives as stated in Subsection A above.
2. Compliance with the Colorado Planned Unit Development Act of 1972.
3. A PUD shall have a minimum of 1 unit or lot.

C. Permitted Uses

1. Recreational Facilities and "permitted" and "conditional uses" in the zone or zones in which the PUD is located shall be permitted when approved as part of the Planned Unit Development.

Permitted uses in C-2 include: "Any use allowed in R-1, R-2 or C-1 Districts" "Multi-Family Dwellings" "Duplexes" "Single-family dwellings"

2. Residences may be clustered into duplexes or multi-family residences.

D. Dimensional Requirements and Densities

1. The dimensional requirements for various PUD items may differ from what is required in the OLUC if the Planning Commission determines that such deviations will promote the public health, safety and welfare.
2. Residential PUD's may have additional residential units for each acre in the PUD, above what would be allowed otherwise in the zoning district or districts involved.
3. A minimum of 20% of the gross area of the PUD must be preserved as parks or open space.

E. Procedures

1. Planned Unit Developments (PUD) shall be reviewed in accordance with the same procedures for review of subdivisions as found in Subsection 7-7-C.
2. The preliminary and final PUD plan shall comply with all requirements for a preliminary and final subdivision plat, to the extent applicable.
3. A public notice of the hearing on the preliminary planned development plan and any substantial amendments thereto, shall be given by publishing a notice and posting a notice on the property at least 15 days prior to the hearing.

F. Required Improvements and Standards

1. PUD plans shall comply with design standards in Subsection 7-7-E and provide construction improvements as required for subdivisions in Subsection 7-7-F, unless granted otherwise by the Planning Commission.
2. PUD development improvement agreements and required securities must comply with Subsection 7-7-F-2.

G. Additional Requirements:

1. Other information necessary to show compliance with the requirements of this subsection shall also be submitted with the Planned Unit Development plan. Where appropriate, parameters, limits or specifications may be approved in lieu of exact locations, numbers and sizes.
2. The PUD plan may be also enforced in accordance with and in the same manner as the provisions of the Planned Unit Development Act of 1972, as amended. C.R.S. 24-67-101, et. seq.

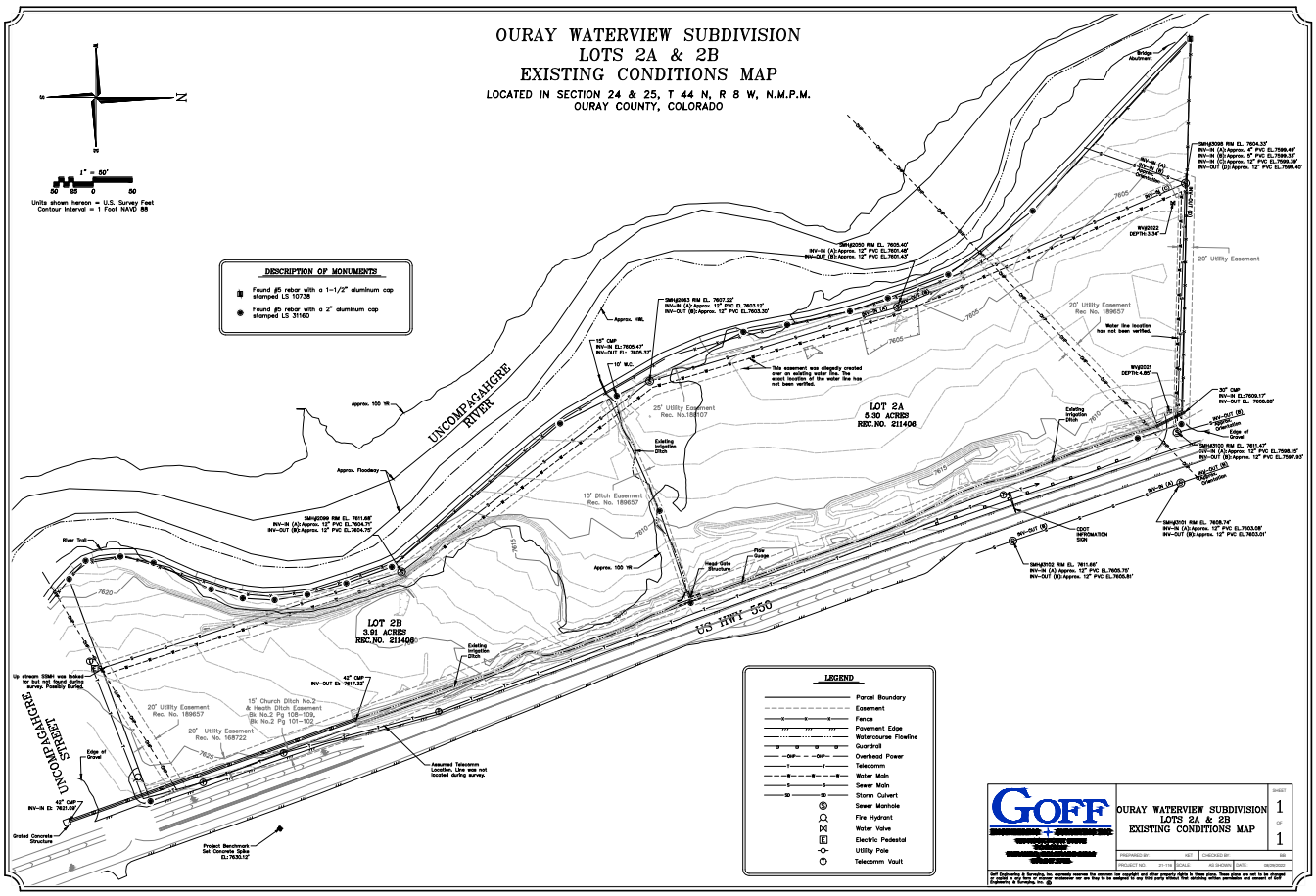
3. Approval of a PUD by the City is purely discretionary. If the City and applicant do not agree on all required conditions and the plan, the City may deny approval, or the City may unilaterally impose conditions. If the applicant does not accept all conditions, that development must adhere to standard subdivision and zoning requirements.

Aerial Site Overview

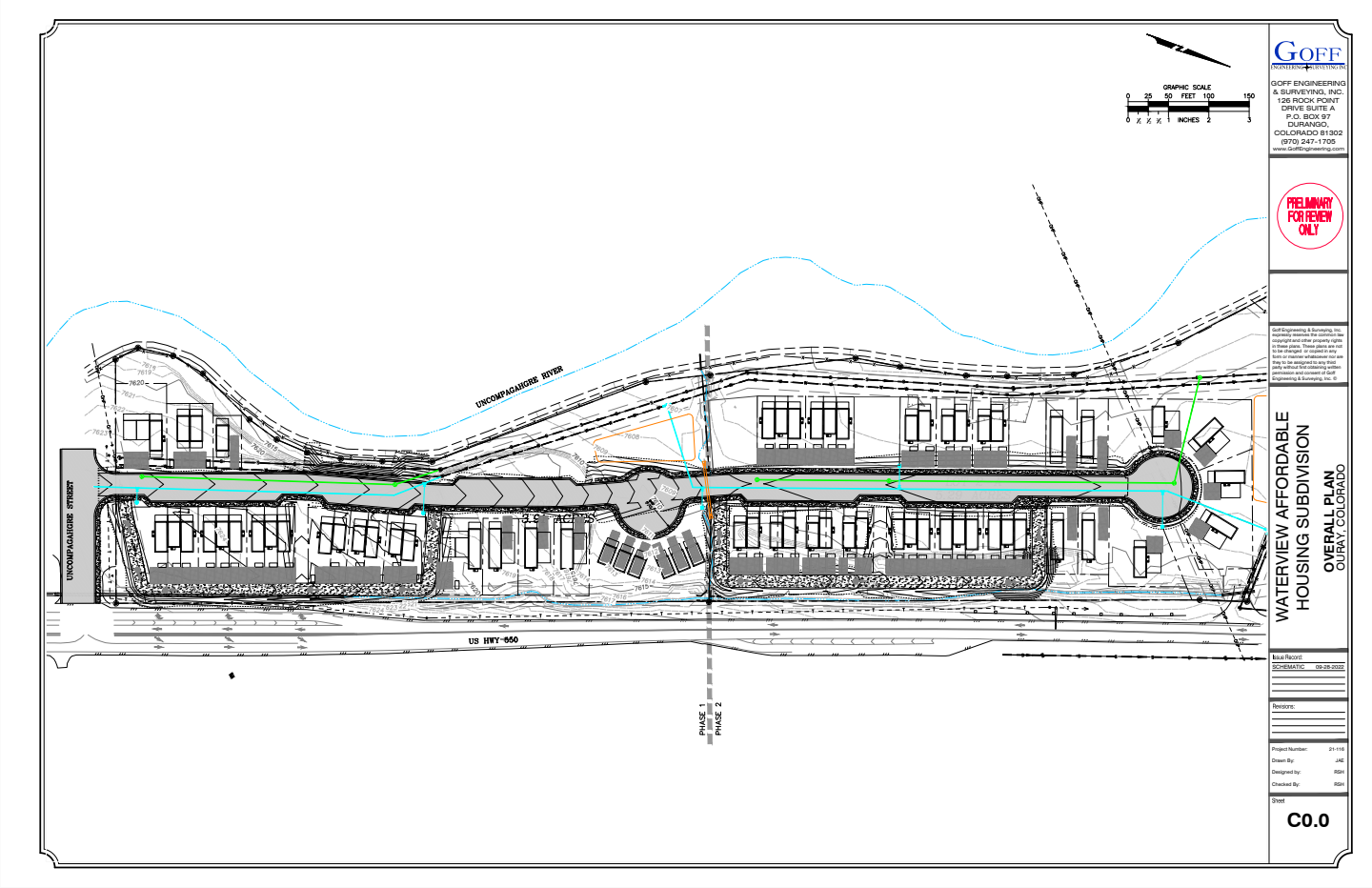
September 2021

Existing Conditions Survey

August 29 2022



Please refer to the attachment **“220829_Existing Conditions Map”**



Please refer to the attachment **"Waterview SD 10-20-2022"**

The attachment is a four page document that shows the schematic proposal in detail.

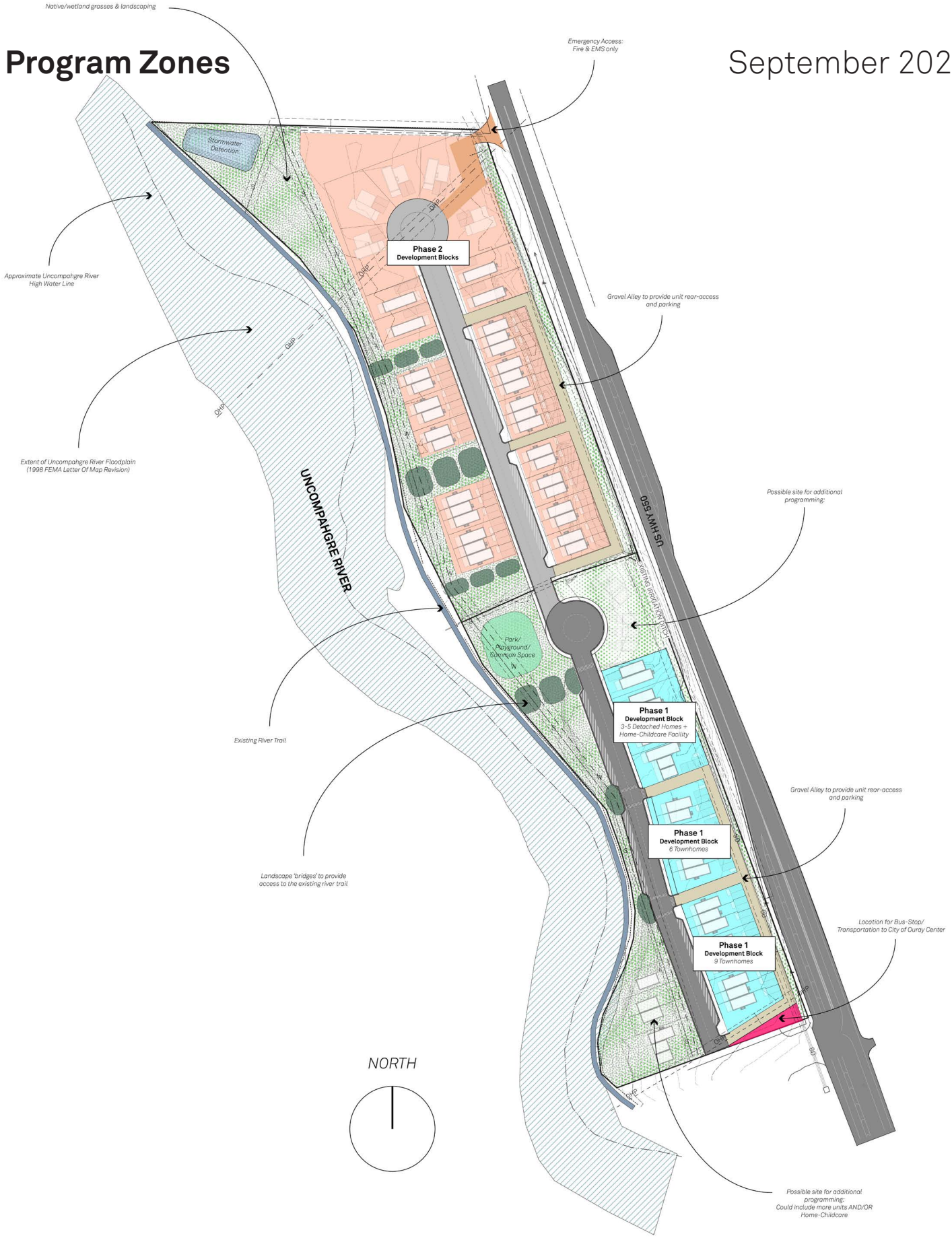
Street name: We do not currently have a proposed street name. We will put this question to the Ouray Housing Committee.

Street dimensions: The proposed street section will include two 12' drive lanes and one 8' on-street parking lane. All units have been provided with 2 off-street parking stalls dimensioning 10'x20'. The alley is proposed as a one-way at 14' wide.

A school bus stop could be located in the center of the site at the first round-about or at the southern end of the site between the alley and Uncompahgre Street.

Program Zones

September 2022



Green denotes open green space, blue is a possible phase 1, orange is a possible phase 2. Note that detention ponds have moved from this diagram to the SD set. The SD set is the latest plan set and is what our civil engineer has proposed.

Before

After

Gmail

Lily Oswald <loswald@cityofouray.com>

Waterview PUD Preliminary Plat Review // Comments

Ruth Stewart <rstewart.ocems@gmail.com> Thu, May 18, 2023 at 9:37 AM
Reply-To: rstewart@ouraycountyco.gov
To: Lily Oswald <loswald@cityofouray.com>

Hi Lily,

While understanding that my boss, Kim would be the one to provide any official feedback from EMS, she is currently out of the country and won't be back prior to your meeting so I'll pass on the couple thoughts I have but also encourage you to follow up with her after her return on May 29th.

The three things that I can see on the plans or would like to mention simply from experience are these:
1) I would encourage a different name for 'Uncompahgre street' as there is an 'Uncompahgre court' in Dallas Meadows and unfortunately having very similarly names streets in entirely different areas of the county has caused problems in the past. So if possible, I would love to see a name that isn't fundamentally the same as another one in the area.
2) The plans don't make it clear to me whether any on-street parking is allowed or not but I would just like to make sure that the cul-de-sacs are large enough for an ambulance to turn around regardless of the parking situation. Obviously this means that if parking is allowed in the cul-de-sacs then they would need to be larger. If there is always through access to the emergency egress road this would be less important though still potentially quite helpful.
3) And this one is purely from experience but please plan any address markers to be visible AT NIGHT with nothing more than headlights on a car or possibly a porch light. All to many buildings have addresses that are difficult to see even during daylight or if visible during daylight are in an entirely unlit area at night making locating a specific home quite difficult.

Those would be my few thoughts, feel free to reach out with any further questions or for clarification.

Regards,

—Ruth

Ruth Stewart
Paramedic
Ouray County Emergency Medical Services
P.O.Box 124
251 Railroad street
Ridgway, CO 81432
Office: 970-325-7275
Fax: 970-325-9967

[Quoted text hidden]

Lambert and Associates

CONSULTING GEOTECHNICAL ENGINEERS AND MATERIAL TESTING

GEOTECHNICAL ENGINEERING STUDY

PROPOSED WATERVIEW DEVELOPMENT

OURAY, COLORADO

Prepared for:

OURAY HOMES LLC

PROJECT NUMBER: M22059GE

FEBRUARY 3, 2023

P.O. Box 3986
Grand Junction, CO 81502
(970) 245 6506

P.O. Box 45
Montrose, CO 81402
(970) 249 2154

Lambert and Associates

CONSULTING GEOTECHNICAL ENGINEERS AND MATERIAL TESTING

February 3, 2023

Ouray Homes LLC
P.O. Box 4222
Telluride, Colorado

Attention: Mr. Paul Major

PN: M22059GE

Subject: Geotechnical Engineering Study for the Proposed Waterview Development Ouray, Colorado

Mr. Major:

Lambert and Associates is pleased to present our geotechnical engineering study for the subject project. The field study was completed on October 10, 2022. The laboratory study was completed on December 1, 2022. The analysis was performed and the report prepared from December 1, 2022 through February 3, 2023. Our geotechnical engineering report is attached.

We are available to provide material testing services for soil and concrete and provide foundation excavation observations during construction. We recommend that Lambert and Associates, the geotechnical engineer, for the project provide material testing services to maintain continuity between design and construction phases.

If you have any questions concerning the geotechnical engineering aspects of your project please contact us. Thank you for the opportunity to perform this study for you.

Respectfully submitted,

LAMBERT AND ASSOCIATES

Daniel R. Lambert, P.E.

P.O. Box 3986
Grand Junction, CO 81502
(970) 245 6506

P.O. Box 45
Montrose, CO 81402
(970) 249 2154

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SWELL-CONSOLIDATION TESTS	Figures B1-B4
DIRECT SHEAR STRENGTH TESTS	Figure B5
GEOLOGY DISCUSSION SOUTHWEST COLORADO GEOLOGY	Appendix C
GENERAL GEOTECHNICAL ENGINEERING CONSIDERATIONS	Appendix D

1.0 INTRODUCTION

This report presents the results of the geotechnical engineering study we conducted for the proposed Waterview Development. The study was conducted at the request of Mr. Paul Major, Ouray Homes LLC, in general accordance with our proposal for geotechnical engineering services dated August 13, 2022.

The conclusions, suggestions and recommendations presented in this report are based on the data gathered during our site and laboratory study and on our experience with similar soil conditions. Factual data gathered during the field and laboratory work are summarized in Appendices A and B.

1.1 Proposed Construction

It is our understanding the proposed construction is to include residential structures, associated paved parking and drive areas and associated utilities.

1.2 Scope of Services

Our services included geotechnical engineering field and laboratory studies, analysis of the acquired data and report preparation for the proposed site. The scope of our services is outlined below.

- The field study consisted of describing and sampling the soil materials encountered in six (6) small diameter continuous flight auger advanced test borings.

- The materials encountered in the test borings were described and samples retrieved for the subsequent laboratory study.

- The laboratory study included tests of select soil samples obtained during the field study to help assess:

. the soil strength potential (internal friction angle and cohesion) of samples tested,
. the swell and expansion potential of the samples tested,
. the settlement/consolidation potential of the samples tested,
. the moisture content and density of samples tested,
. the moisture content-dry density relationship (Proctor) test of the subgrade support soil

sample tested,
. the soil support characteristics of pavement subgrade material samples.

- This report presents our geotechnical engineering comments, suggestions and recommendations for planning and design of site development including:
. viable foundation types for the conditions encountered,
. allowable bearing pressures for the foundation types,
. lateral earth pressure recommendations for design of laterally loaded walls,
. geotechnical engineering considerations and recommendations for concrete slab on grade floors,
. geotechnical engineering considerations and recommendations for compacted structural fill and
. several roadway pavement section thickness alternatives.

- Our comments, suggestions and recommendations are based on the subsurface soil and ground water conditions encountered during our site and laboratory studies.

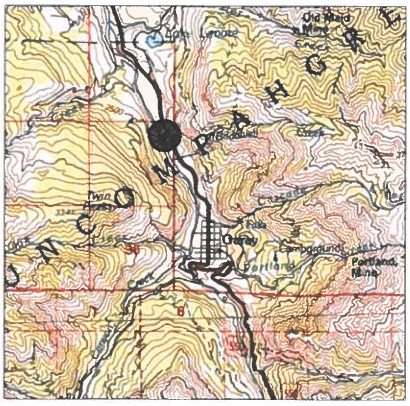
- Our study did not include any environmental or geologic hazard issues.

2.0 SITE CHARACTERISTICS

Site characteristics include observed existing and pre-existing site conditions that may influence the geotechnical engineering aspects of the proposed site development.

2.1 Site Location

The site is located west of U.S. Hwy 550, north of Uncompahgre Street, east of the Uncompahgre River, Ouray, Colorado.



● Indicates Approximate Project Location

Figure 1. Project Location Sketch

2.2 Site Conditions

The site is currently undeveloped. The site is relatively flat exhibiting positive surface drainage in the north and west directions. The site is bordered to the west by the Uncompahgre River, to the east by U.S. Hwy 550. The southern portion of the site has been elevated with fill material.

2.3 Subsurface Conditions

The subsurface exploration consisted of observing, describing and sampling the soil materials encountered in six (6) small diameter auger advanced test borings. The approximate locations of the test borings are shown on Figure 2.

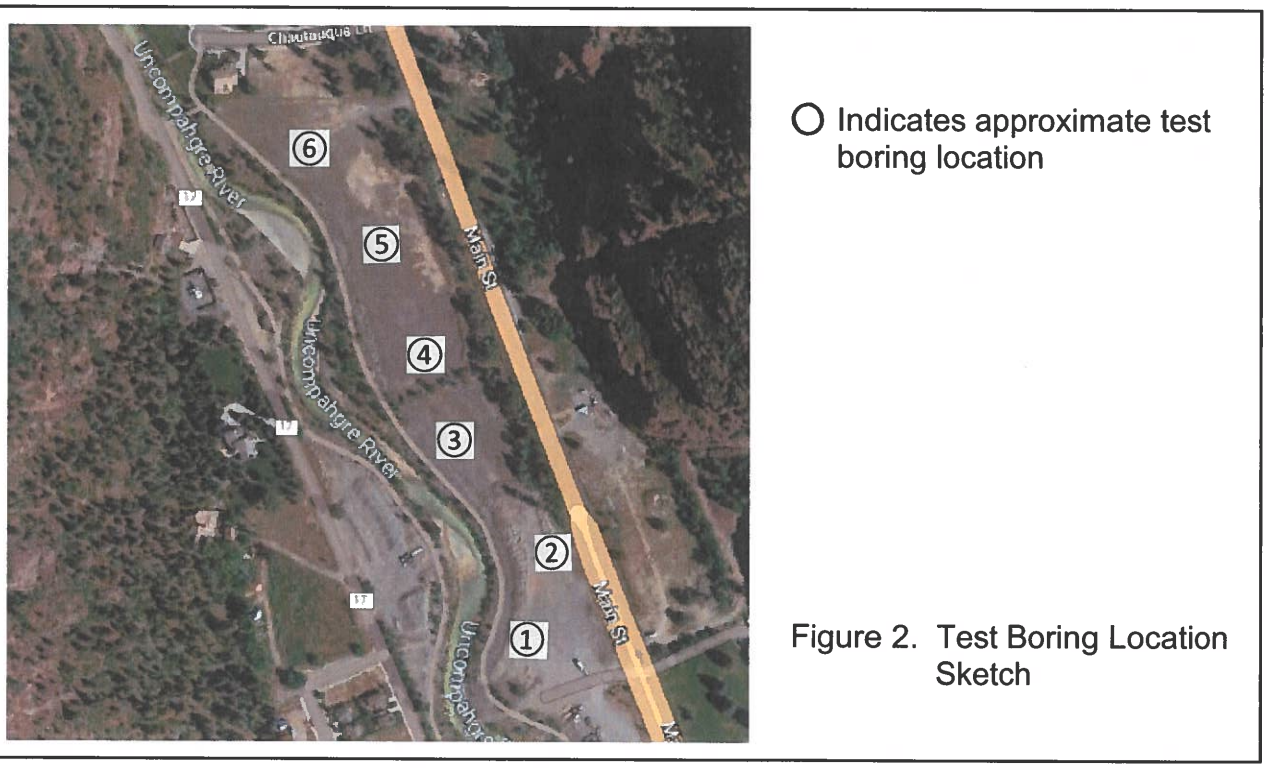


Figure 2. Test Boring Location Sketch

The logs describing the soil materials encountered in the test borings are presented in Appendix A.

The soil materials encountered within the test borings generally consisted of granular fill material underlain by silty sands and gravels with cobbles. Approximately four (4) to six and one half (6-1/2) feet of fill material was encountered on the southern portion of the site. Increased moisture contents were observed at approximate depths of twelve and one half (12-

1/2) to thirteen (13) feet below existing site grades.

At the time of our field study the proposed development site was not irrigated. It has been our experience that after the site is developed and once landscape irrigation begins the free subsurface water level may tend to rise. In some cases the free subsurface water level rise, as a result of landscape irrigation and other development influences, can be fairly dramatic and the water level may become shallow.

It is difficult to predict if unexpected subsurface conditions will be encountered during construction. Since such conditions may be found, we suggest that the owner and the contractor make provisions in their budget and construction schedule to accommodate unexpected subsurface conditions.

2.4 Site Geology

A brief discussion of the general geology of the area near the site is presented in Appendix C. The surface geology of the site was determined by observation of the surface conditions at the site and observing the soils encountered in the test borings on the site.

2.5 Seismicity

According to the International Building Code, 2018 Edition, and based on the subsurface conditions encountered and the assumption that the soils described in the test borings are likely representative of the top 100 feet of the soil profile, we recommend that the site soil profile be S_C, Very dense soil and soft rock.

3.0 PLANNING AND DESIGN CONSIDERATIONS

A geologic hazard study was not requested as part of the scope of this report.

All of the suggestions and design parameters presented in this report are based on high quality craftsmanship, care during construction and post construction cognizance of the potential for swell or settlement of the site support materials and appropriate post construction maintenance.

All construction excavations should be sloped to prevent excavation wall collapse. We suggest that as a minimum the excavation walls should be sloped at an inclination of one-and-one-half (1-1/2) to one (1) (horizontal to vertical) or flatter. The area above the foundation

excavations should be observed at least daily for evidence of slope movement during construction. If evidence of slope movement is observed we should be contacted immediately.

We anticipate that excavation and fill placement operations may be associated with the proposed site development. Excavations in the area which generate vertical or sloped exposures should be kept to a minimum.

Excavations which result in cut slopes with a vertical height greater than about four (4) feet or with a slope or structure above should be analyzed on a site specific basis. Temporary excavation cut slopes in competent material should not exceed a one-and-one-half to one (1 -1/2 to 1) (horizontal to vertical) inclination. All construction excavations should conform to Occupational Safety and Health Administration (OSHA) standards or safer. All permanent slopes should be constructed with inclinations of three to one or flatter.

Generally, fill material placed on a site surface which will be used to support structures or additional fill material should be placed so that the contact between the existing site surface and the added fill material will be strong enough to support the added load. This should be addressed on a site and fill area specific basis. The technique recommended will be based on the site configuration, the finished fill configuration the actual material to be used for the fill material and the size of the area thus constructed. Frequently the preparation of the site area to receive fill material will include removing organic and loose near surface native material in the area to receive fill material, placing the material in thin horizontal lifts which are compacted at the appropriate moisture content. Some fill areas could benefit from the installation of a subsurface drain system at the fill material/natural material contact. We are available to, and recommend that, we discuss this with you and provide site and fill specific recommendations when this portion of your development plan merits the additional study.

4.0 ON-SITE DEVELOPMENT CONSIDERATIONS

We anticipate that the subsurface water elevation may fluctuate with seasonal and other varying conditions. Excavations may encounter subsurface water and soils that tend to cave or yield. If water is encountered it may be necessary to dewater construction excavations to provide more suitable working conditions. Excavations should be well braced or sloped to prevent wall collapse. Federal, state and local safety codes should be observed. All construction excavations should conform to Occupational Safety and Health Administration (OSHA) standards or safer.

The site construction surface should be graded to drain surface water away from the site

excavations. Surface water should not be allowed to accumulate in excavations during construction. Accumulated water could negatively influence the site soil conditions. Construction surface drainage should include swales, if necessary to divert surface water away from the construction excavations.

Organic soil materials in areas to receive fill material or structure components should be removed. The organic soil materials are not suitable for support of the structure or structural components.

Man placed fill material may exist on site. The quality of any man placed fill encountered appears to be suitable to support structures, however, unknown portions of the fill material may not be suitable for support of the structure or structural components. The man placed fill material should be observed in each excavation prior to the placement of additional fill material or structural components. Fill material that is not suitable for use should be removed and replaced with compacted structural fill prior to supporting building or building components on the fill.

The soil materials exposed in the bottom of the excavations may be moist and may become yielding under construction traffic during construction. It may be necessary to use techniques for placement of fill material or foundation concrete which limits construction traffic in the vicinity of the very moist soil material. If yielding should occur during construction it may be necessary to construct a subgrade stabilization fill blanket or similar to provide construction traffic access. The subgrade stabilization blanket may include over excavating the subgrade soils one (1) to several feet and replacing with aggregate subbase course type material. The stabilization blanket may also include geotextile stabilization fabric at the bottom of the excavation prior to placement of aggregate subbase course stabilization fill. Other subgrade stabilization techniques may be available. We are available to discuss this with you.

It has been our experience that sites in developed areas may contain existing subterranean structures or poor quality man placed fill. If subterranean structures or poor quality man placed fill are suspected or encountered, they should be removed and replaced with compacted structural fill as discussed under COMPACTED STRUCTURAL FILL below.

5.0 FOUNDATION RECOMMENDATIONS

Geotechnical engineering considerations which influence the foundation design and construction recommendations presented below are discussed in Appendix D.

We have analyzed spread footing foundations as potential foundation systems for the proposed residential structures. These are discussed below. Due to the number of possible foundation types available and design and construction techniques there may be design alternatives which we have not presented in this report. We are available to discuss other foundation types.

We recommend that each entire structure be supported on only one foundation type. Combining foundation types will result in differential and unpredictable foundation performance between the varying foundation types. We recommend that the structure footprint not be traversed by the cut/fill contact which would result in a portion of the structure underlain by fill material and part of the structure underlain by materials exposed by excavated cut. If this condition will exist please contact us so that we can revise our recommendations to accommodate the cut/fill contact scenario.

All of the design parameters presented below are based on techniques performed by an experienced competent contractor and high quality craftsmanship and care during construction. We recommend post construction cognizance of the volume change potential of the near surface soil materials and the need for appropriate post construction maintenance.

The spread footing recommendations include recommended design and construction techniques to reduce the influence of movement of the soil materials supporting the foundation but should not be interpreted as solutions for completely mitigating the potential for movement from the support soil material volume change.

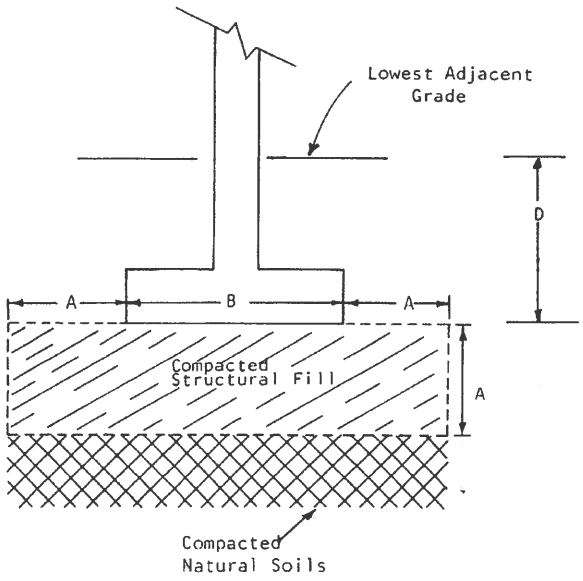
Exterior column supports should be supported by foundations incorporated into the foundation system of the structure not supported on flatwork. Column supports placed on exterior concrete flatwork may move if the support soils below the concrete slab on grade become wetted and swell or freeze and raise or settle. Differential movement of the exterior columns may cause stress to accumulate in the supported structure and translate into other portions of the structure.

5.1 Spread Footing Foundations

In our analysis it was necessary to assume that the material encountered in the test borings extended throughout the building site and to a depth below the maximum depth of the influence of the foundations. We should be contacted to observe the soil materials exposed in the foundation excavations prior to placement of foundations to verify the assumptions made during our analysis.

The bottom of the foundation excavations should be thoroughly cleaned and observed when excavated. Any loose or disturbed material exposed in the foundation excavation should be removed or compacted prior to placing foundation concrete.

The bottom of the foundation excavations should be compacted prior to placing compacted structural fill or foundation concrete. We suggest the materials exposed be compacted to at least ninety (90) percent of the materials moisture content-dry density relationship (Proctor) test, ASTM D1557. Excavation compaction is to help reduce the influence of any disturbance that may occur during the excavation operations. Any areas of loose, low density or yielding soils evidenced during the excavation compaction operation should be removed and replaced with compacted structural fill. Caution should be exercised during the excavation compaction operations. Excess rolling or compacting may increase pore pressure of the subgrade soil material and degrade the integrity of the support soils. Loose or disturbed material in the bottom of the foundation excavations which are intended to support structural members will likely result in large and unpredictable amounts of settlement, if the loose or disturbed material is not removed or compacted.



B = Footing Width
A = Compacted Structural Fill Thickness and Fill Width Beyond Footing Edge
D = Footing Embedment Below Lowest Adjacent Grade

Figure 3. Conceptual Sketch of Footing Subgrade Treatment and Embedment Concept

The bottom of any footings exposed to freezing temperatures should be placed below the maximum depth of frost penetration for the area. Refer to the local building code for details.

All footings should be appropriately proportioned to reduce the post construction differential settlement. Footings for large localized loads should be designed for bearing pressures and footing dimensions in the range of adjacent footings to reduce the potential for differential settlement. We are available to discuss this with you.

Foundation walls should be reinforced for geotechnical engineering purposes. The structural engineer should be consulted for foundation design. The structural engineering reinforcing design tailored for this project will be more appropriate than the suggestions

presented above.

The structure may be founded on spread footings. We recommend the use of a blanket of structure fill material beneath the spread footing foundation members. Spread footings may be placed either on the natural undisturbed soils or on a blanket of compacted structural fill. The blanket of compacted structural fill is to help provide uniform support for the footings and to help reduce the theoretical calculated post construction settlement. The theoretical calculated post construction settlement and associated fill thickness supporting the footings are presented below.

We suggest that you consider the foundation be supported on a blanket of compacted structural fill. The blanket of compacted structural fill should be approximately one (1) foot thick to help mask the influence of volume change soil materials supporting the footings. The blanket of compacted structural fill will not prevent movement of the footings from volume change in the support soil materials but will mask the influence of volume changes of the soils supporting the footings. If the footings are supported on a blanket of compacted structural fill the blanket of compacted structural fill should extend beyond each edge of each footing a distance at least equal to the fill thickness. This concept is shown on Figure 3. Geotechnical engineering recommendations for constructing compacted structural fill are presented below.

Fill sections below foundation members may benefit from the inclusion of a subgrade stabilization fabric such as a Mirafi 500X or similar placed on prepared subgrade material prior to the placement of the compacted fill materials

All footings should have a minimum depth of embedment of at least one (1) foot below the lowest adjacent grade when placed either on the natural undisturbed soils or a blanket of compacted structural fill. Deeper embedment will be needed for footings exposed to exterior climate. Other characteristics may influence embedment. The embedment concept is shown on Figure 3.

We suggest the continuous spread footing members with widths of two (2) feet or less and a minimum one (1) foot embedment be designed using an allowable bearing capacity of 1,975 pounds per square foot.

We suggest the isolated spread footing members with widths of three (3) feet or less and a minimum one (1) foot embedment be designed using an allowable bearing capacity of 1,750 pounds per square foot.

The bearing capacity will depend on the minimum depth of embedment of the bottom of the footings below the lowest adjacent grade and the support characteristics of the soils supporting the foundation.

The bearing capacity may be increased by twenty (20) percent for transient loads such as wind and seismic loads.

It is our opinion that footings exposed to frost or freezing ground influences and all exterior footings should be embedded to frost depth or deeper. Interior footings should have a minimum depth of embedment of at least one (1) foot on all sides to provide a more predictable long term performance of the footing. We understand that construction techniques typically used in the area may result in some of the footings in the crawl space constructed without significant embedment of the bottom of the footing below the lowest adjacent grade. For this reason we have provided design values for footings constructed with little or no embedment. It is our opinion that the performance of footing constructed without embedment may be influenced by erosion, temperature changes, moisture content changes, swell potential of the soil supporting the footings and weathering of the soils supporting the footings and will have a less predictable settlement response than footings with embedment.

Exterior footings and footings with uneven backfill may result in movement of the footings. Embedment of the footings on all sides will help reduce the potential for movement of footings with uneven backfill. We do not recommend exterior footings or footings with uneven backfill be constructed without a minimum depth of embedment of the bottom of the footing below the lowest adjacent grade of at least one (1) foot on all sides of the interior footings and frost depth for exterior footings.

The minimum depth of embedment is sufficient only to develop the bearing capacity for design purposes and does not account for frost influences. Actual design and construction should result in interior footings with one (1) foot or more embedment and exterior footings with frost depth or more embedment. Typically deeper embedment will increase bearing capacity and decrease post construction settlement and decrease the influence of expansive soils.

The soil samples tested had measured swell pressures of less than 100 to approximately 400 pounds per square foot, however, the actual swell pressure of the support materials could be greater. When wetted the site soil materials may have the ability to raise supported foundation members with loads less than the swell pressure. The foundation design should be as rigid as possible with as high of a dead load as can be available. The greater the dead load on the footings the less the potential for movement from the foundation soils should they become wetted. If the soils become wetted they will swell and will raise the foundation portions

supported on the wetted soils. If the structure is supported on spread footings the owner must realize that post construction movement of the footings is likely. We are available to discuss the implications of supporting foundations on swelling soils.

Interior column loads supported on spread footings which are structurally connected to the other foundation members will provide more uniform performance of the interior footings with respect to the other foundation members and will help reduce the potential differential settlement between interior and exterior foundation members. The foundation walls should be designed to act as beams to distribute stresses associated with the swelling volume changes of soils. The beam design should be addressed by the project structural engineer.

Exterior column supports should be supported by foundations incorporated into the foundation system of the structure not supported on flatwork. Column supports placed on exterior concrete flatwork may move if the support soils below the concrete slab on grade become wetted and swell or freeze and raise or settle. Differential movement of the exterior columns may cause stress to accumulate in the supported structure and translate into other portions of the structure.

The calculated theoretical estimated post construction settlement and swell potential may be reduced by placing the footings on a blanket of compacted structural fill. The calculated theoretical estimated post construction settlement and associated thickness of compacted structural fill are presented below.

THICKNESS OF COMPACTED STRUCTURAL FILL SUPPORTING FOOTINGS	CALCULATED THEORETICAL ESTIMATED POST CONSTRUCTION SETTLEMENT FOR CONTINUOUS SPREAD FOOTINGS (INCHES)
0 feet	7/8 to 1-1/8
1 foot	1/2 to 3/4
2 feet	3/8 to 1/2

THICKNESS OF COMPACTED STRUCTURAL FILL SUPPORTING FOOTINGS	CALCULATED THEORETICAL ESTIMATED POST CONSTRUCTION SETTLEMENT FOR ISOLATED SPREAD FOOTINGS (INCHES)
0 feet	7/8 to 1-1/8
1 foot	5/8 to 7/8
2 feet	3/8 to 5/8

The calculated theoretical settlement estimated values above are appropriate for continuous spread footings with a width of about two (2) feet or less and isolated spread footings with a width of about three (3) feet or less. Larger footings should be analyzed on a footing, load and width specific basis.

Footings should be sized so that each footing is in a similar size and load range as nearby footings to encourage similar performance. Very large footings or heavily loaded footings will influence the support soil materials to a deeper depth than small or lightly loaded footings and therefore will have different post construction performance characteristics.

The calculated settlement estimates are theoretical only. Actual settlement could vary throughout the site and with time.

If the footings are supported on a blanket of compacted structural fill, the blanket of compacted structural fill should extend beyond each edge of each footing a distance at least equal to the fill thickness. This concept is shown on Figure 3. Compacted Structural Fill is discussed in Section 8.0 below.

The site soil samples tested have measured swell pressures of less than 100 to approximately 400 pounds per square foot, however, the actual swell pressure of the support material could be greater. This swell pressure was measured for soils at the initial moisture content of the soil sample tested. The swell potential of the site soil materials could vary significantly and could be greater than that measured. The measured swell pressure may be influenced by disturbance of the sample during the sampling operation and the soil suction potential and initial moisture content.

Changes in the initial moisture content will significantly influence the swell pressure of the site soils. If the initial moisture content of the foundation soils is less than that of the test sample the actual swell pressures will likely be significantly higher than measured. If the initial moisture content of the foundation soils is greater than that of the test sample the actual swell pressures may be less than measured.

The bottom of the foundation excavations should be thoroughly cleaned and observed by the project Geotechnical Engineer or his representative when excavated. Any loose or disturbed material exposed in the foundation excavation should be removed or remedied prior to additional construction.

We recommend that we be contacted to observe the foundation excavations and backfill operations during construction to verify the soil support conditions and our assumptions upon

which our recommendations are based. If necessary we may revise our recommendations based on our observations. We are available to provide material testing services during the construction phase of the project.

If lightly loaded structure members are supported on spread footings on expansive soil material then the owner must realize that post construction movement of the footings is likely. These lightly loaded areas of the footing should be designed with sufficient structural integrity to resist the forces from swelling soils.

Foundation members that will have significantly small or low dead loads, such as foundations beneath wall openings such as doorways, may be provided with a strengthened grade beam and/or positive separation between the foundation concrete and the underlying soil materials. That separation may be provided by using commercial void form material. We recommend that the structural engineer be consulted concerning the void form design concept.

If the void form design concept is part of the foundation design we suggest that the foundation design may consider including a four (4) to six (6) inch corrugated paper void form material beneath the footings in the lightly loaded portions of the foundation. The corrugated paper void forms provide temporary support for foundation concrete during construction. The low strength of the void form material is intended to allow the underlying soil materials to expand into the void form thereby exerting less or no uplift pressure on the foundation in the areas it is used. We are available to discuss the implications of supporting foundations on swelling soils.

6.0 INTERIOR FLOOR SLAB DISCUSSION

It is our understanding that, as currently planned, the floor may be either a concrete slab on grade or a supported structural floor. The natural soils that will support interior floor slabs are stable at their natural moisture content. However, the owner should realize that when wetted, the site soils may experience volume changes. The site soil samples tested had measured swell pressures of less than 100 to approximately 400 pounds per square foot and associated magnitudes of up to 0.3 percent of the wetted soil volume at a surcharge load of 100 pounds per square foot and the actual swell pressure could be greater.

The recommendations in this report do not address a monolithic floor slab/footing combination. The design and construction characteristics of the monolithic floor slab need geotechnical engineering design parameters tailored specifically for a monolithic slab and integral footing. Generally this type foundation/floor combination in this area with these site conditions does not perform as well as other choices.

Conditions which vary from those encountered during our field study may become apparent during excavation. We should be contacted to observe the conditions exposed at concrete slab on grade subgrade elevation to verify the assumptions made during the preparation of this report and to provide additional geotechnical engineering suggestions and recommendations as needed.

Engineering design dealing with swelling soils is an art which is still developing. The owner is cautioned that the soils on this site may have swelling potential and concrete slab on grade floors and other lightly loaded members may experience movement when the supporting soils become wetted. We suggest you consider floors suspended from the foundation systems as structural floors or a similar design that will not be influenced by subgrade volume changes. If the owner is willing to accept the risk of possible damage from swelling soils supporting concrete slab on grade floors, the following recommendations to help reduce the damage from swelling soils should be followed. These recommendations are based on generally accepted design and construction procedures for construction on soils that tend to experience volume changes when wetted and are intended to help reduce the damage caused by swelling soil materials. Lambert and Associates does not intend that the owner, or the owner's consultants should interpret these recommendations as a solution to the problems of swelling soils, but as measures to reduce the influence of swelling soils.

The shallow soil materials tested have a low to moderate volume change potential under light loading conditions. Concrete slab on grade floors may experience movement when supported by the natural onsite soils. Concrete slab on grade floors will perform best if designed to tolerate movement introduced by the subgrade soil materials.

Concrete flatwork, such as concrete slab on grade floors, should be underlain by compacted structural fill. The layer of compacted fill should be at least one (1) foot thick or thicker and constructed as discussed under COMPACTED STRUCTURAL FILL below. A one (1) foot thick or thicker blanket of structural fill material beneath the concrete flatwork is not sufficient to entirely mask the settlement or swell potential of the subgrade soil material but will only provide better subgrade conditions for construction. The concrete slab on grade should be designed by a structural engineer to be compatible with the site soil conditions.

The natural soil materials exposed in the areas supporting concrete slab on grade floors should be kept very moist during construction prior to placement of concrete slab on grade floors. This is to help increase the moisture regime of the potentially expansive soils supporting floor slabs and help reduce the expansion potential of the soils. We are available to discuss this concept with you.

Concrete slab on grade floors should be provided with a positive separation, such as a slip joint, from all bearing members and utility lines to allow their independent movements and to help reduce possible damage that could be caused by movement of soils supporting interior slabs. The floor slab should be constructed as a floating slab. All water and sewer pipe lines should be isolated from the slab. Any equipment placed on the floating floor slab should be constructed with flexible joints to accommodate future movement of the floor slab with respect to the structure. We suggest partitions constructed on the concrete slab on grade floors be provided with a void space above or below the partitions to relieve stresses induced by elevation changes in the floor slab.

Floor slabs should not contact/extend directly over foundations or foundation members. Floor slabs which directly contact foundations or foundation members will likely experience post construction movement as a result of foundation movements. We are available to discuss this with you.

The concrete slabs should be scored or jointed to help define the locations of any cracking. We recommend that joint spacing be designed as outlined in ACI 224R. In addition joints should be scored in the floors a distance of about three (3) feet from, and parallel to, the walls.

It should be noted that when curing fresh concrete experiences shrinkage. This shrinkage almost always results in some cracks in the finished concrete. The actual shrinkage depends on the configuration and strength of the concrete and placing and finishing techniques. The recommended joints discussed above are intended to help define the location of the cracks but should not be interpreted as a solution to shrinkage cracks. The owner must understand that concrete flatwork will contain shrinkage cracks after curing and that all of the shrinkage cracks may not be located in control joints. Some cracking at random locations may occur.

If moisture migration through the concrete slab on grade floors will adversely influence the performance of the floor or floor coverings we suggest that a moisture barrier may be installed beneath the floor slab to help discourage capillary and vapor moisture rise through the floor slab. The moisture barrier may consist of a heavy plastic membrane, six (6) mil or greater, protected on the top and bottom by clean sand. The clean sand will help to protect the plastic from puncture. The layer of clean sand on the top of the plastic membrane will help the overlying concrete slab cure properly. According to the American Concrete Institute, proper curing requires at least three (3) to six (6) inches of clean sand between the plastic membrane and the bottom of the concrete. The plastic membrane should be lapped and taped or glued and protected from punctures during construction.

If the moisture content of the slab on grade floor will be influencial to the performance of the

future floor coverings then the moisture content of the slab can be measured. We are available to monitor the floor slab moisture content prior to the installation of the floor covering. If this service is needed please contact us during the construction phase of the project.

The Portland Cement Association suggests that welded wire reinforcing mesh is not necessary in concrete slab on grade floors when properly jointed. It is our opinion that welded wire mesh may help improve the integrity of the slab on grade floors. We suggest that concrete slab on grade floors should be reinforced, for geotechnical purposes, with at least 6 x 6 - W2.9 x W2.9 (6 x 6 - 6 x 6) welded wire mesh positioned midway in the slab. The structural engineer should be contacted for structural design of floor slabs.

7.0 PAVEMENT SECTION DESIGN RECOMMENDATIONS

It is our understanding that the proposed development will include paved parking and drive areas. The paved areas will include asphalt paved parking areas, concrete paved aprons and concrete sidewalks. Our pavement section analysis was based on estimated traffic volumes, laboratory test results of the soils sampled during our field study, and on our experience on similar projects. The traffic volume used in our analysis assumed 18,000 pound equivalent single axle loads (ESALs) of 100,000 and 200,000 repetitions for a twenty (20) year life. Our analysis included pavement sections based on dynamic loading as discussed in the Colorado Department of Transportation 2014 Pavement Design Manual.

7.1 Subgrade Preparation

Proper performance of the subgrade support soils requires surface preparation, scarification and moisture conditioning, compaction, and surface and subsurface drainage during construction prior to placement of the overlying pavement section materials.

Subgrade preparation may result in areas which yield under construction traffic. If yielding areas are encountered during subgrade preparation in the paved areas, the subgrade material may be overexcavated to a depth of about one foot below the subgrade elevation or more if needed and backfilled with a compacted structural fill. The structural fill material may aid in construction of the paved areas subgrade. The structural fill material should be an aggregate subbase course or aggregate base course type material placed and compacted as discussed below.

All organic and other deleterious material should be removed from the areas proposed for pavement section construction. The soils exposed by the removal of the organic materials should be scarified to a depth of about twelve (12) inches, moisture conditioned to

approximately three (3) to six (6) percent above optimum moisture content, and compacted to at least ninety (90) percent of maximum dry density as defined by ASTM D1557, modified moisture content-dry density relationship (Proctor) test. The moisture conditioning may require addition of water, or air drying if the soil is too moist, in either case, the material should be sufficiently mixed to promote a uniform soil moisture content. The soils should be compacted using machinery designed for soil compaction. Wheel rolling with loaded equipment and other techniques may not provide a uniform, properly compacted roadway subgrade.

Utility trench backfill in areas supporting pavement or other structural components should be placed in thin lifts and compacted to at least ninety (90) percent of the maximum dry density as defined by ASTM D1557 to subgrade elevation.

After the subgrade soils have been prepared the surface should be crowned or surface graded in the same orientation as the proposed final surface of the asphalt pavement. The reason for this is to promote water migration away from the roadway more readily. If the subgrade soil surface is not graded to properly drain, water may accumulate within the pavement section soils. The increased moisture content and subsequent soil strength decrease may promote pavement section support degradation. If a full section asphalt concrete design is used, the subgrade soils should be graded parallel the final asphalt concrete surface for drainage so that a uniform asphalt concrete thickness exists.

7.2 Aggregate Sub-Base and Base Course Material Characteristics and Placement

Specific aggregate types and sources for potential use on the project were not known at the time of the preparation of this report. Our analysis assumed that the proposed aggregate base course would consist of a Class 6 type material, and the aggregate sub-base course would consist of a Class 2 type material, as designated in the "Colorado Department of Highways Standard Specification for Road and Bridge Construction", 1991. If it is desirable to use material which does not meet these criteria we should be contacted to assess the specific material characteristics of the proposed road base and provide additional pavement design sections for differing materials.

The aggregate sub-base and base course materials should be placed on the prepared subgrade soils as soon as possible after the subgrade soils are compacted and graded to drain. Placement of the aggregate materials will help limit the influence of construction and other traffic on the subgrade soil conditions.

The aggregate materials should not be allowed to become segregated either at the source, prior to hauling to the project site, or during the placement of the materials. The coarser

aggregate sub-base soils have a greater tendency to become segregated, particularly during the grading and placement operations. Segregated sub-base and base course do not provide as uniform support as well blended materials.

The sub-base and base course materials should be moisture conditioned and compacted to at least ninety-five (95) percent of maximum dry density as defined by ASTM D1557, modified moisture-content-dry density relationship (Proctor) test.

7.3 Asphalt Concrete Materials and Placement

The asphalt concrete should be prepared using a mix design which has been prepared by a professional engineer experienced in asphalt concrete materials. The mix design should establish, as a minimum, the quality of the aggregates used, asphalt concrete material properties, asphalt cement content, mix and lay down temperatures. Either the Marshall Method or Hveem Stabilometer method of mix design may be used for the mix design preparation. We suggest that the asphalt concrete be compacted to between ninety-two (92) and ninety-six (96) percent of the maximum mix design density.

Aggregate shape maximum size and particle size distribution are important factors influencing the performance of an asphalt concrete mix. Crushed aggregate with fractured faces and angular shapes tend to interlock and provide an asphalt concrete with high strength and limited flexibility. Natural aggregates with rounded shapes tend to provide an asphalt concrete which is more flexible and may have lower strengths than mixes produced with angular shaped aggregates. Incorrect particle or grain size distribution of the aggregate used to manufacture the asphalt concrete can result in poor performance of the in-place asphalt mix. The grain size distribution of the mix aggregate will influence the size and volume of voids and the stability of the asphalt mix. Verification of the asphalt mix design aggregate properties and the asphalt concrete mix should be performed by testing prior to and during the paving operation.

7.4 Flexible Pavement Design Sections

Based upon the soil materials encountered during the drilling operations, a "CBR" value of 10 was used in our analysis. Alternative pavement sections are presented below. The pavement thickness sections below are based on the Design Nomograph for Flexible Pavements as recommended in the Colorado Department of Transportation 2014 pavement Design Manual.

Construction traffic may have a greater influence on the performance of the pavement section than the commercial use after construction. The design recommendations presented below are based on typical post construction commercial use and do not include accommodation for

heavy loading as a result of construction traffic. It may be beneficial to consider partial pavement section construction for use during on-site development construction with the section repaired and completed after the heavy construction traffic use has ended. This technique may provide a more serviceable and structurally acceptable pavement for the completed project.

PAVEMENT THICKNESS DESIGN SECTIONS
*ESAL = 100,000

Asphalt Concrete (inches)	Aggregate Base Course Class 6 or Similar (inches)	Aggregate Subbase Course Class 2 or Similar (inches)	Reconditioned Subgrade (inches)
3	4	4	12
3	7	0	12

PAVEMENT THICKNESS DESIGN SECTIONS
*ESAL = 200,000

Asphalt Concrete (inches)	Aggregate Base Course Class 6 or Similar (inches)	Aggregate Subbase Course Class 2 or Similar (inches)	Reconditioned Subgrade (inches)
3	4	7	12
3	9-1/2	0	12
4	6	0	12

* Equivalent 18,000 pounds single axle load

Pavement thickness design section of less than three (3) inches of asphalt over aggregate base course may be used, although, because of the shorter life before maintenance and the relatively poor long term performance, we suggest that this be considered as an intermediate design section only. If a lesser design section is used we suggest you consider a later asphalt overlay of appropriate thickness to extend the life of the pavement section. The overlay should be constructed prior to any visible distress occurring in the pavement.

The asphalt concrete pavement should be placed on the prepared support section as soon as possible so that interim traffic does not decrease the integrity of the support section.

7.5 Rigid Pavement Thickness Design Recommendations

Our pavement thickness recommendations for rigid Portland cement concrete pavement are based on an assumed traffic volume, a modulus of rupture of 650 psi and a modulus of subgrade reaction obtained from the California Bearing Ratio test performed on the subgrade soil sample obtained during our field study. A modulus of subgrade reaction of 170 psi/inch was used in our analysis.

The rigid pavement may be designed using a concrete thickness of four and one half (4-1/2) inches for an estimated 18,000 pounds equivalent single axle load (ESAL) less than 100,000.

Concrete sidewalks should have a nominal thickness of four (4) inches if no vehicle traffic will be allowed on them. The concrete sidewalks and aprons may be placed on a leveling course of aggregate base course material. The leveling course should be at least four (4) inches thick and compacted as discussed above for aggregate base course. We suggest the use of rigid pavement in areas where heavy vehicles will be accelerating, decelerating or turning sharply, such as the aprons for the trash dumpster enclosures and any areas in the bus drop off/pick up areas where the buses will be turning.

The concrete should be supported on prepared subgrade which is at least twelve (12) inches thick. The prepared subgrade should consist of either compacted structural fill to establish subgrade elevation or natural soils which are scarified to a depth of twelve (12) inches, moisture conditioned to approximately two (2) to four (4) percent above optimum moisture content and recompacted to at least ninety (90) percent of the maximum dry density as defined by ASTM D1557, modified moisture content-dry density relationship test. If during subgrade preparation any loose or yielding area or any areas of poorly constructed man-placed fill are encountered they should be removed and replaced with compacted structural fill. Suggestions for constructing compacted structural fill are presented below.

The Portland cement concrete should be from an approved concrete mix design stating the proportions and mixtures of the mix. We recommend verification of the mix design prior to paving. The coarse and fine aggregate used in the concrete mix should be tested for their suitability for use as concrete aggregate.

The concrete pavement should be appropriately jointed and structurally reinforced to help control the location of cracking. The structural engineer should be contacted to provide

structural design recommendations or structural reinforcement and joint design of the concrete pavement.

8.0 COMPACTED STRUCTURAL FILL

Material characteristics desirable for compacted structural fill are discussed in Appendix D. Areas that are over excavated or slightly below grade should be backfilled to grade with properly compacted structural fill or concrete, not loose fill material. If backfilled with other than compacted structural fill material or concrete there will be significant post construction settlement proportional to the amount of loose material.

If the on site granular soil materials are used as compacted structural fill the soils should be moisture conditioned to within approximately two (2) percent of optimum moisture content and compacted to at least ninety (90) percent of the maximum dry density as defined by ASTM D1557, modified moisture-density relationship (Proctor) test. The soil materials should be placed in thin lifts about six (6) inches in compacted thickness and compacted. Care should be taken so that areas of the natural on site soils which have appreciable expansive fine grained portions are not used for compacted structural fill material.

All areas to receive compacted structural fill should be properly prepared prior to fill placement. The preparation should include removal of all organic or deleterious material. The areas to receive fill material should be compacted after the organic deleterious material has been removed prior to placing the fill material. The area may need to be moisture conditioned for compaction. Any areas of soft, yielding, or low density soil, evidenced during the excavation compaction operation should be removed. The area excavated to receive fill should be moisture conditioned to wet of optimum moisture content as part of the preparation to receive fill. Fill should be moisture conditioned, placed in thin lifts not exceeding six (6) inches in compacted thickness and compacted to at least ninety (90) percent of maximum dry density as defined by ASTM D1557, modified moisture content-dry density (Proctor) test.

After placement of the structural fill the surface should not be allowed to dry prior to placing concrete or additional fill material. This may be achieved by periodically moistening the surface of the compacted structural fill as needed to prevent drying of the structural fill. We are available to discuss this with you.

The soil materials exposed in the bottom of the excavation may be very moist and may become yielding under construction traffic during construction. It may be necessary to use techniques for placement of fill materials or foundation concrete which limit construction traffic

in the very moist soil materials. If yielding should occur during construction it may be necessary to construct a subgrade stabilization fill blanket or similar to provide construction traffic access. We are available to discuss this with you.

We recommend that the geotechnical engineer or his representative be present during the excavation compaction and fill placement operations to observe and test the material.

9.0 LATERAL EARTH PRESSURES

Laterally loaded walls supporting soil, such as basement walls, will act as retaining walls and should be designed as such. Walls that are designed to deflect and mobilize the internal soil strength should be designed for active earth pressures. Walls that are restrained so that they are not able to deflect to mobilize internal soil strength should be designed for at-rest earth pressures. The values for the lateral earth pressures will depend on the type of soil retained by the wall, backfill configuration and construction technique. If the backfill is not compacted the lateral earth pressures will be very different from those noted below.

Lateral earth pressure (L.E.P.) values are presented below:

	Level Backfill with on-site soils (pounds per cubic foot per foot of depth)
Active L.E.P.	68
At-rest L.E.P.	88
Passive L.E.P.	228

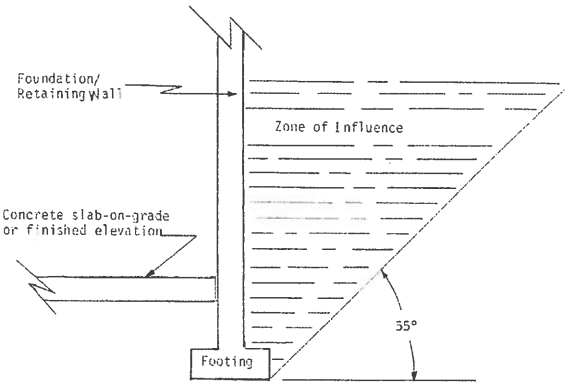


Figure 5. Backfill Zone of Influence Concept

The soil samples tested had measured swell pressures of less than 100 to approximately 400 pounds per square foot however the actual swell pressure of the backfill material could be greater. If the retained soils should become moistened after construction the soil may swell against retaining walls. The walls should be designed to resist the swell pressure of the soil materials if these are used as part of the backfill within the zone of influence. The zone of influence concept is presented on Figure 5.

The above lateral earth pressures may be

reduced by overexcavating the wall backfill area beyond the zone of influence and backfilling with crushed rock type material. The zone of influence concept is presented below.

The lateral earth pressure design parameters may change significantly if the area near the wall is loaded or surcharged or is sloped. If any of these conditions occur we should be contacted for additional design parameters tailored to the specific site and structure conditions.

Suggested lateral earth pressure (L.E.P.) values if the backfill is overexcavated beyond the zone of influence and backfilled with crushed rock are presented below.

	Level Backfill with crushed rock material (pounds per cubic foot per foot of depth)
Active L.E.P.	25
At-rest L.E.P.	40

If the area behind a wall retaining soil material is sloped we should be contacted to provide lateral earth pressure design values tailored for the site specific sloped conditions.

Resistant forces used in the design of the walls will depend on the type of soil that tends to resist movement. We suggest that you consider a coefficient of friction of 0.20 for the on site soil.

The lateral earth pressure values provided above, for design purposes, should be treated as equivalent fluid pressures. The lateral earth pressures provided above are for level well drained backfill and do not include surcharge loads or additional loading as a result of compaction of the backfill. Unlevel or non-horizontal backfill either in front of or behind walls retaining soils will significantly influence the lateral earth pressure values. Care should be taken during construction to prevent construction and backfill techniques from overstressing the walls retaining soils. Backfill should be placed in thin lifts and compacted, as discussed in this report to realize the lateral earth pressure values.

Walls retaining soil should be designed and constructed so that hydrostatic pressure will not accumulate or will not affect the integrity of the walls. Drainage plans should include a subdrain behind the wall at the bottom of the backfill to provide positive drainage. Exterior retaining walls should be provided with perimeter drain or weep holes to help provide an outlet for collected water behind the wall. The ground surface adjacent to the wall should be sloped to permit rapid drainage of rain, snow melt and irrigation water away from the wall backfill. Sprinkler systems should not be installed directly adjacent to retaining or basement walls.

10.0 DRAIN SYSTEM

A drain system should be provided around building spaces below the finished grade and behind any walls retaining soil. The drain systems are to help reduce the potential for hydrostatic pressure to develop behind retaining walls. A sketch of the drain system is shown below.

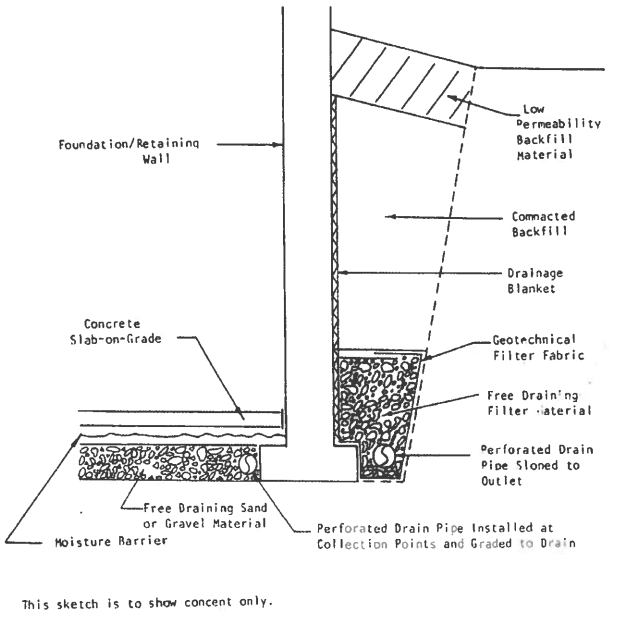


Figure 6. Conceptual Sketch of Foundation Drain System

Subdrains should consist of a three (3) or four (4) inch diameter perforated rigid pipe surrounded by a filter. The filter should consist of a filter fabric or a graded material such as washed concrete sand or pea gravel. If sand or gravel is chosen the pipe should be placed in the middle of about four (4) cubic feet of aggregate per linear foot of pipe. The drain system should be sloped to positive gravity outlets. If the drains are daylighted the drains should be provided with all weather outlets and the outlets should be maintained to prevent them from being plugged or frozen. We do not recommend that the drains be discharged to dry well type structures. Dry well structures may tend to fail if the surrounding soil material becomes wetted and swells or if the ground water rises to a elevation of or above the discharge elevation in the dry well. We should be called to observe the soil exposed in the excavations and to verify the details of the drain system.

11.0 CRAWL SPACE CONSIDERATIONS

We anticipate that moist conditions may exist in crawl space areas during wetter seasons. We suggest that if it is desired to reduce the influence of water in the crawl space area a foundation drain should be installed as discussed above.

The surface of the crawl space may be provided with a layer of about six (6) inches of clean washed gravel or an impervious geotextile fabric to reduce the inconvenience of very moist or muddy crawl space conditions if these should occur. The crawl space should be adequately vented to reduce the potential for humidity to accumulate in the crawl space area.

12.0 BACKFILL

Backfill areas and utility trench backfill should be constructed such that the backfill will not settle after completion of construction, and that the backfill is relatively impervious for the upper few feet. The backfill material should be free of trash and other deleterious material. It should be moisture conditioned and compacted to at least ninety (90) percent relative compaction using a modified moisture content-dry density (Proctor) relationship test (ASTM D1557). Only enough water should be added to the backfill material to allow proper compaction. Do not pond, puddle, float or jet backfill soil materials.

Improperly placed backfill material will allow water migration more easily than properly recompacted fill. Improperly compacted fill is likely to settle, creating a low surface area which further enhances water accumulation and subsequent migration to the foundation soils.

Improperly placed backfill will allow water to migrate along the utility trench or backfill areas to gain access to the subgrade support soils with subsequent mobilization of the swell or settlement mechanism resulting in movement of the supported structure. Moisture migration could also result in the inconvenience of free water in the crawl space.

Backfill placement techniques should not jeopardize the integrity of existing structural members. We recommend recently constructed concrete structural members be appropriately cured prior to adjacent backfilling.

13.0 SURFACE DRAINAGE

The foundation soil materials should be prevented from becoming wetted after construction. Post construction wetting of the soil support soil materials can initiate swell potential or settlement potential as well as decrease the bearing capacity of the support soil materials. Protecting the foundation from wetting can be aided by providing positive and rapid drainage of surface water away from the structure.

The final grade of the ground surface adjacent to the structure should have a well defined slope away from the foundation walls on all sides. The ability to establish proper site surface drainage away from the structure foundation system may be influenced by the existing topography, existing structure elevations and the grades and elevations of the ground surface adjacent to the proposed structure. We suggest where possible a minimum fall of the surface grade away from the structure be that which will accommodate other project grading constraints and provide rapid drainage of surface water away from the structure. If there are no other project constraints we suggest a fall of about one (1) foot in the first ten (10) feet

away from the structure foundation. Appropriate surface drainage should be maintained for the life of the project. Future landscaping plans should include care and attention to the potential influence on the long term performance of the foundation and/or crawl space if improper surface drainage is not maintained.

Roof runoff should be collected in appropriate roof drainage collection devices, such as eve gutters or similar, and directed to discharge in appropriate roof drainage systems. Roof runoff should not be allowed to fall on or near foundations, backfill areas, flatwork, paved areas or other structural members. Downspouts and faucets should discharge onto splash blocks that extend beyond the limits of the backfill areas. Splash blocks should be sloped away from the foundation walls. Snow storage areas should not be located next to the structure. Proper surface drainage should be maintained from the onset of construction through the proposed project life.

If significant water concentration and velocity occurs erosion may occur. Erosion protection may be considered to reduce soil erosion potential. A landscape specialist or civil engineer should be consulted for surface drainage design, erosion protection and landscaping considerations.

14.0 LANDSCAPE IRRIGATION

An irrigation system should not be installed next to foundations, concrete flatwork or paved areas. If an irrigation system is installed, the system should be placed so that the irrigation water does not fall or flow near foundations, flatwork or pavements. The amount of irrigation water should be controlled.

We recommend that wherever possible xeriscaping concepts be used. Generally, the xeriscape includes planning and design concepts which will reduce irrigation water. The reason we suggest xeriscape concepts for landscaping is because the reduced landscape water will decrease the potential for water to influence the long term performance of the structure foundations and flatwork. Many publications are available which discuss xeriscape. Colorado State University Cooperative Extension has several useful publications and most landscape architects are familiar with the subject. Montrose Botanical Society has a Botanical Garden, 1800 Pavilion Drive, south of Niagara Drive, Montrose, Colorado, that has a very good exhibit with examples and information regarding successful xeriscape concepts.

Due to the expansive nature of the soils tested we suggest that the owner consider landscaping with only native vegetation which requires only natural precipitation to survive. Additional irrigation water will greatly increase the likelihood of damage to the structure as a

result of volume changes of the material supporting the structure.

Impervious geotextile material may be incorporated into the project landscape design to reduce the potential for irrigation water to influence the foundation soils.

15.0 SOIL CORROSIVITY TO CONCRETE

Our scope of services did not include performing chemical tests to help identify the potential for soil corrosivity to concrete.

It has been our experience that much of the soils in the area contain sufficient water soluble sulfate content to be corrosive to concrete. We suggest sulfate resistant cement be used in concrete which will be in contact with the on-site soils. American Concrete Institute recommendations for sulfate resistant cement based on the water soluble sulfate content should be used.

16.0 RADON CONSIDERATIONS

Our experience indicates that many of the soils in western Colorado produce small quantities of radon gas. Radon gas may tend to collect in closed poorly ventilated structures. Radon considerations are presented in Appendix D.

17.0 POST DESIGN CONSIDERATIONS

The project geotechnical engineer should be consulted during construction of the project to observe site conditions and open excavations during construction and to provide materials testing of soil and concrete.

This subsurface soil and foundation condition study is based on limited sampling; therefore, it is necessary to assume that the subsurface conditions do not vary greatly from those encountered in the field study. Our experience has shown that significant variations are likely to exist and can become apparent only during additional on site excavation. For this reason, and because of our familiarity with the project, Lambert and Associates should be retained to observe foundation excavations prior to foundation construction, to observe the geotechnical engineering aspects of the construction and to be available in the event any unusual or unexpected conditions are encountered. The cost of the geotechnical engineering observations and material testing during construction or additional engineering consultation is not included in the fee for this report. We recommend that your construction budget include site visits early during construction schedule for the project geotechnical engineer to observe

foundation excavations and for additional site visits to test compacted soil.

We recommend that the observation and material testing services during construction be retained by the owner or the owner's engineer or architect, not the contractor, to maintain third party credibility. We are experienced and available to provide material testing services. We have included a copy of a report prepared by Van Gilder Insurance which discusses testing services during construction. It is our opinion that the owner, architect and engineer be familiar with the information. If you have any questions regarding this concept please contact us.

We suggest that your construction plans and schedule include provisions for geotechnical engineering observations and material testing during construction and your budget reflect these provisions.

It is difficult to predict if unexpected subsurface conditions will be encountered during construction. Since such conditions may be found, we suggest that the owner and the contractor make provisions in their budget and construction schedule to accommodate unexpected subsurface conditions.

17.1 Structural Fill Quality

It is our understanding that the proposed development may include compacted structural fill. The quality of compacted structural fill will depend on the type of material used as structural fill, fill lift thickness, fill moisture condition and compactive effort used during construction of the structural fill. Engineering observation and testing of structural fill is essential as an aid to safeguard the quality and performance of the structural fill.

Fill materials placed on sloped areas require special placement techniques that key the fill materials unto the underlying support materials. These techniques include a toe key at the toe contact of the slope fill and benching the fill/natural contact up the slope into the competent natural material. The placing technique will also include subdrains at several locations to intercept subsurface water and route it away from the fill materials. We are available to discuss these techniques with you and your earthwork contractor.

Testing of the structural fill normally includes tests to determine the grain size distribution, swell potential and moisture-density relationship of the fill material to verify the material suitability for use as structural fill. As the material is placed the in-place moisture content and dry density are tested to indicate the relative compaction of the placed structural fill. We recommend that your budget include provisions for observation and testing of structural fill

during construction.

Testing of the compacted fill material should include tests of the moisture content and density of the fill material placed and compacted prior to placement of additional fill material. We suggest that a reasonable number of density tests of the fill material can best be determined on a site, material and construction basis although as a guideline we suggest one test per about each 300 to 500 square feet of each lift of fill material. Utility trench backfill may need to be tested about every 100 linear feet of lift of backfill.

17.2 Concrete Quality

It is our understanding current plans include reinforced structural concrete for foundations and walls and may include concrete slabs on grade and pavement. To insure concrete members perform as intended, the structural engineer should be consulted and should address factors such as design loadings, anticipated movement and deformations.

The quality of concrete is influenced by proportioning of the concrete mix, placement, consolidation and curing. Desirable qualities of concrete include compressive strength, water tightness and resistance to weathering. Engineering observations and testing of concrete during construction is essential as an aid to safeguard the quality of the completed concrete.

Testing of the concrete is normally performed to determine compressive strength, entrained air content, slump and temperature. We recommend that your budget include provisions for testing of concrete during construction. We suggest that a reasonable frequency of concrete tests can best be determined on a site, materials and construction specific basis although as a guideline American Concrete Institute, ACI, suggests one test per about each fifty (50) cubic yards or portion thereof per day of concrete material placed.

18.0 LIMITATIONS

It is the owner's and the owner's representatives' responsibility to read this report and become familiar with the recommendations and suggestions presented. We should be contacted if any questions arise concerning the geotechnical engineering aspects of this project as a result of the information presented in this report.

The scope of services for this study does not include either specifically or by implication any environmental or biological (such as mold, fungi, bacteria, etc.) Assessment of the site or identification or prevention of pollutants, hazardous materials or conditions. If the owner is concerned about the potential for such contamination or pollution, other studies should be

performed.

The recommendations outlined above are based on our understanding of the currently proposed construction. We are available to discuss the details of our recommendations with you and revise them where necessary. This geotechnical engineering report is based on the proposed site development and scope of services as provided to us by Mr. Paul Major, Ouray Homes LLC, the type of construction planned, existing site conditions at the time of the field study, and on our findings. Should the planned, proposed use of the site be altered, Lambert and Associates must be contacted, since any such changes may make our suggestions and recommendations inappropriate. This report should be used ONLY for the planned development for which this report was tailored and prepared, and ONLY to meet information needs of the owner and the owner's representatives. In the event that any changes in the future design or location of the building are planned, the conclusions and recommendations contained in this report shall not be considered valid unless the changes are reviewed and conclusions of this report are modified or verified in writing. It is recommended that the geotechnical engineer be provided the opportunity for a general review of the final project design and specifications in order that the earthwork and foundation recommendations may be properly interpreted and implemented in the design and specifications.

This report does not provide earthwork specifications. We can provide guidelines for your use in preparing project specific earthwork specifications. Please contact us if you need these for your project.

This report presents both suggestions and recommendations. The suggestions are presented so that the owner and the owner's representatives may compare the cost to the potential risk or benefit for the suggested procedures.

This report contains suggestions and recommendations which are intended to work in concert with recommendations provided by the other design team members to provide somewhat predictable foundation performance. If any of the recommendations are not included in the design and construction of the project it may result in unpredictable foundation performance or performance different than anticipated. We recommend that we be requested to provide geotechnical engineering observation and materials testing during the construction phase of the project as discussed in this report. The purpose for on site observation and testing by us during construction is to help provide continuity of service from the planning of the project through the construction of the project. This service will also allow us to revise our recommendations if conditions occur or are discovered during construction that were not evidenced during the initial study. We suggest that the owner and the contractor make provisions in their construction budget and construction schedule to accommodate unexpected

subsurface conditions.

We represent that our services were performed within the limits prescribed by you and with the usual thoroughness and competence of the current accepted practice of the geotechnical engineering profession in the area. No warranty or representation either expressed or implied is included or intended in this report or our contract. We are available to discuss our findings with you. If you have any questions please contact us. The supporting data for this report is included in the accompanying figures and appendices.

This report is a product of Lambert and Associates. Excerpts from this report used in other documents may not convey the intent or proper concepts when taken out of context, or they may be misinterpreted or used incorrectly. Reproduction, in part or whole, of this document without prior written consent of Lambert and Associates is prohibited.

This report and information presented can be used only for this site, for this proposed development, and only for the client for whom our work was performed. Any other circumstances are not appropriate applications of this information. Other development plans will require project specific review by us.

Please call when further consultation or observations and tests are required.

If you have any questions concerning this report or if we may be of further assistance, please contact us.

Respectfully submitted,

LAMBERT AND ASSOCIATES

Daniel R. Lambert, P.E.
Project Engineer

APPENDIX A

The field study was performed on October 10, 2022. The field study consisted of logging and sampling the soils encountered in six (6) test borings. The approximate locations of the test borings are shown on Figure 2. The log of the soils encountered in the test borings are presented on Figures A2 through A7.

The test borings were logged by Lambert and Associates and samples of significant soil types were obtained.

The engineering field description and major soil classification are based on our interpretation of the materials encountered and are prepared according to the Unified Soil Classification System, ASTM D2488. The description and classification which appear on the test boring log is intended to be that which most accurately describes a given interval of the test boring (frequently an interval of several feet). Occasionally discrepancies occur in the Unified Soil Classification System nomenclature between an interval of the soil log and a particular sample in the interval. For example, an interval on the test boring log may be identified as a silty sand (SM) while one sample taken within the interval may have individually been identified as a sandy silt (ML). This discrepancy is frequently allowed to remain to emphasize the occurrence of local textural variations in the interval.

The stratification lines presented on the logs are intended to present our interpretation of the subsurface conditions encountered in the test boring. The stratification lines represent the approximate boundary between soil types and the transition may be gradual.

KEY TO LOG OF TEST BORING

Date Drilled: **Field Engineer:** **Boring Number:**

Location: **Elevation:**

Diameter: **Total Depth:** **Depth to Water at Time of Drilling:**

Symbol	Depth	Sample Type	Sample N	Soil Description	Laboratory Test Results
	0			Sand, silty, medium dense, moist, tan (SM)	Notes in this column indicate tests performed and test results if not plotted.
				Unified Soil Classification	
				Indicates Bulk Bag Sample	DD: Indicates dry density in pounds per cubic foot
		C		Indicates Drive Sample	MC: Indicates moisture content as percent of dry unit weight
	5			Incicates Sampler Type:	LL: Indicates Liquid Limit
				C - Modified California SS - Standard Split Spoon H - Hand Sampler	PL: Indicates Plastic Limit
					PI: Indicates Plasticity Index
			7/6	Indicates seven blows required to drive the sampler six (6) inches with a hammer that weighs one hundred forty pounds and is dropped thirty inches.	
	10			BOUNCE: Indicates no further penetration occurred with additional blows with the hammer	
				NR: Indicates no sample recovered	
				CAVED: Indicates depth the test boring caved after drilling	
	15			▼ Indicates the location of free subsurface water when measured	
				CLAY SILT SAND GRAVEL FORMATION SANDSTONE	Note: Symbols are often used only to help visually identify the described information presented on the log.
	20				
	25				

Project Name: Waterview Development - Ouray **Project Number:** M22059GE **Figure:** A1

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LOG OF TEST BORING

Date Drilled: October 10, 2022 **Field Engineer:** DRL **Boring Number:** 1

Location: See test boring location diagram **Elevation:**

Diameter: 4 inches **Total Depth:** 15 feet **Depth to Water at Time of Drilling:** None Encountered

Symbol	Depth	Sample Type	Sample N	Soil Description	Laboratory Test Results
	0			Fill Material - Gravel, sand, cobbles * Intermittent Clayey Sand Lenses	
	5	Bulk			Swell/Consolidation Test: DD: 123 pcf MC: 5.6%
	10	Bulk		Sand, clayey, gravels, dense, moist, brown, gray * Increased Cobble * Increased Moisture Observed	
	15			Bottom of Test Boring at 15 feet	
	20				
	25				

Project Name: Waterview Development - Ouray **Project Number:** M22059GE **Figure:** A2

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CONSULTING GEOTECHNICAL ENGINEERS AND MATERIAL TESTING

LOG OF TEST BORING

Date Drilled: October 10, 2022 **Field Engineer:** DRL **Boring Number:** 2

Location: See test boring location diagram **Elevation:**

Diameter: 4 inches **Total Depth:** 9 feet **Depth to Water at Time of Drilling:** None Encountered

Symbol	Depth	Sample Type	Sample N	Soil Description	Laboratory Test Results
	0			Fill Material - Gravel, sand, cobbles * Intermittent Clayey Sand Lenses	
	5	Bulk		Sand, clayey, gravels, dense, moist, brown, gray * Increased Cobble	Direct Shear Test: DD: 114 pcf MC: 14.0%
	10			Auger Refusal at 9 feet	
	15				
	20				
	25				

Project Name: Waterview Development - Ouray **Project Number:** M22059GE **Figure:** A3

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CONSULTING GEOTECHNICAL ENGINEERS AND MATERIAL TESTING

LOG OF TEST BORING

Date Drilled: October 10, 2022 **Field Engineer:** DRL **Boring Number:** 3

Location: See test boring location diagram **Elevation:**

Diameter: 4 inches **Total Depth:** 10-1/2 feet **Depth to Water at Time of Drilling:** None Encountered

Symbol	Depth	Sample Type	Sample N	Soil Description	Laboratory Test Results
	0			Fill Material - Gravel, sand, cobbles * Intermittent Clayey Sand Lenses	
	5				
	10			Sand, clayey, gravels, dense, moist, brown, gray * Increased Cobble	
	15			Auger Refusal at 10-1/2 feet	
	20				
	25				

Project Name: Waterview Development - Ouray **Project Number:** M22059GE **Figure:** A4

Lambert and Associates

CONSULTING GEOTECHNICAL ENGINEERS AND MATERIAL TESTING

LOG OF TEST BORING

Date Drilled: October 10, 2022 **Field Engineer:** DRL **Boring Number:** 4

Location: See test boring location diagram **Elevation:**

Diameter: 4 inches **Total Depth:** 15 feet **Depth to Water at Time of Drilling:** None Encountered

Symbol	Depth	Sample Type	Sample N	Soil Description	Laboratory Test Results
	0			Sand, clayey, gravels, dense, moist, brown, gray	
				* Increased Cobble	
	5	Bulk			Swell/Consolidation Test: DD: 124 pcf MC: 6.3%
	10	Bulk			Swell/Consolidation Test: DD: 126 pcf MC: 5.9%
				* Increased Moisture Observed	
	15			Bottom of Test Boring at 15 feet	
	20				
	25				

Project Name: Waterview Development - Ouray **Project Number:** M22059GE **Figure:** A5

Lambert and Associates

CONSULTING GEOTECHNICAL ENGINEERS AND MATERIAL TESTING

LOG OF TEST BORING

Date Drilled: October 10, 2022 **Field Engineer:** DRL **Boring Number:** 5

Location: See test boring location diagram **Elevation:**

Diameter: 4 inches **Total Depth:** 5 feet **Depth to Water at Time of Drilling:** None Encountered

Symbol	Depth	Sample Type	Sample N	Soil Description	Laboratory Test Results
	0			Sand, clayey, gravels, dense, moist, brown, gray * Increased Cobble	
	5			Auger Refusal at 5 feet	
	10				
	15				
	20				
	25				

Project Name: Waterview Development - Ouray **Project Number:** M22059GE **Figure:** A6

Lambert and Associates

CONSULTING GEOTECHNICAL ENGINEERS AND MATERIAL TESTING

LOG OF TEST BORING

Date Drilled: October 10, 2022 **Field Engineer:** DRL **Boring Number:** 6

Location: See test boring location diagram **Elevation:**

Diameter: 4 inches **Total Depth:** 15 feet **Depth to Water at Time of Drilling:** None Encountered

Symbol	Depth	Sample Type	Sample N	Soil Description	Laboratory Test Results
	0			Sand, clayey, gravels, dense, moist, brown, gray	
				* Increased Cobble	
	5	Bulk			Swell/Consolidation Test: DD: 125 pcf MC: 6.1%
	10			* Increased Moisture Observed	
				* Intermittent Silty Sand Lense	
	15			Bottom of Test Boring at 15 feet	
	20				
	25				

Project Name: Waterview Development - Ouray **Project Number:** M22059GE **Figure:** A7

Lambert and Associates

CONSULTING GEOTECHNICAL ENGINEERS AND MATERIAL TESTING

APPENDIX B

The laboratory study consisted of performing:

- Moisture content and dry density tests,
- Swell-consolidation tests, and
- Direct Shear Strength tests.

It should be noted that samples obtained did experience some disturbance during the sampling operations. The test results obtained using these samples are used only as indicators of the in situ soil characteristics.

TESTING

Moisture Content and Dry Density

Moisture content and dry density were determined for each sample tested of the samples obtained. The moisture content was determined according to ASTM Test Method D2216 by obtaining the moisture sample from the drive sleeve. The dry density of the sample was determined by using the wet weight of the entire sample tested. The results of the moisture and dry density determinations are presented on the logs of borings, Figures A2 through A7.

Swell Tests

Loaded swell tests were performed on drive samples obtained during the field study. These tests are performed in general accordance with ASTM Test Method D2435 to the extent that the same equipment and sample dimensions used for consolidation testing are used for the determination of expansion. A sample is subjected to static surcharge, water is introduced to produce saturation, and volume change is measured as in ASTM Test Method D2435. Results are reported as percent change in sample height.

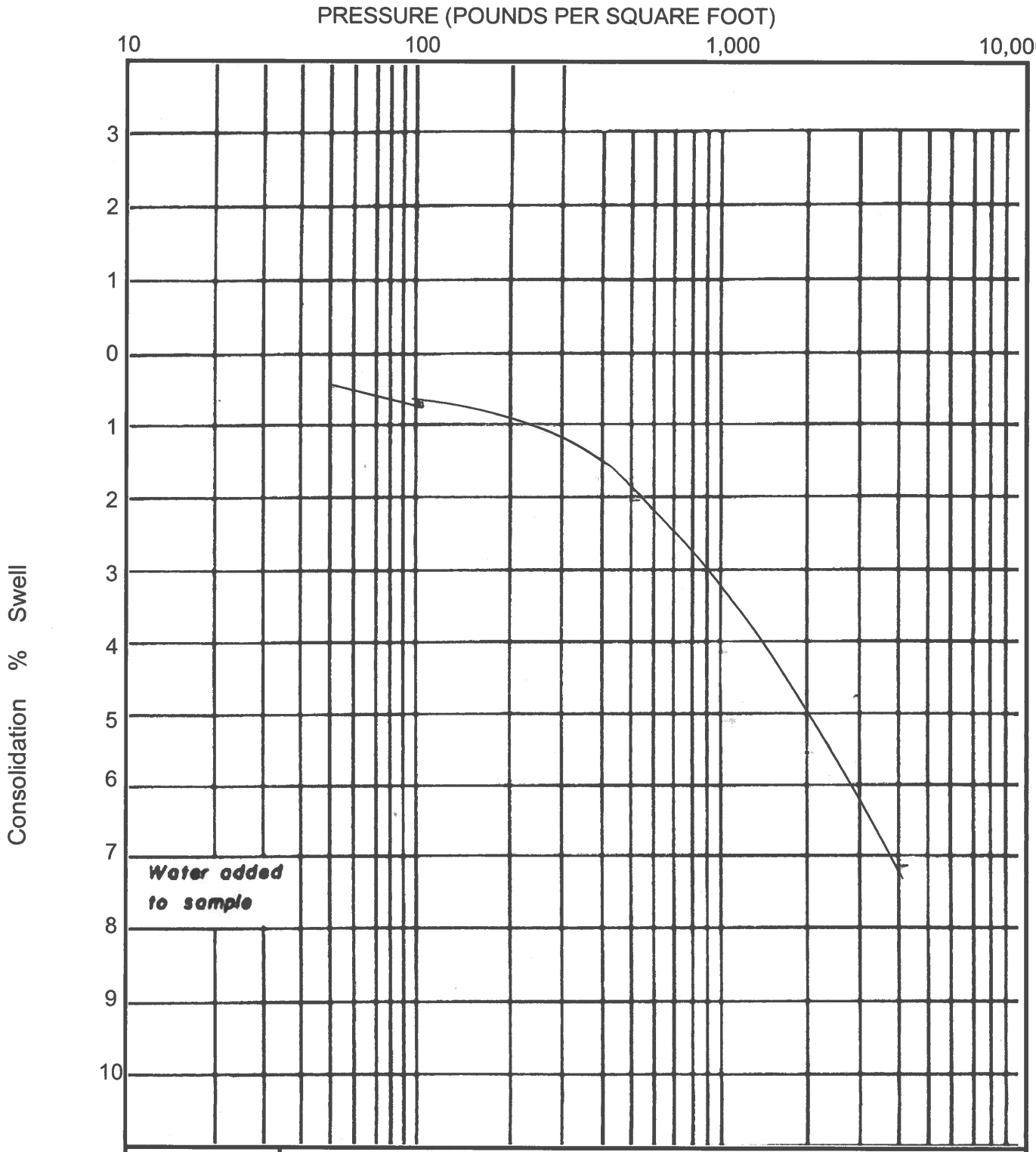
Consolidation Tests

One dimensional consolidation properties of drive samples were evaluated according to the provisions of ASTM Test Method D2435. Water was added in all cases during the test. Exclusive of special readings during consolidation rate tests, readings during an increment of load were taken regularly until the change in sample height was less than 0.001 inch over a two hour period. The results of the swell-consolidation load test are summarized on Figures B1 through B4, swell-consolidation tests.

It should be noted that the graphic presentation of consolidation data is a presentation of volume change with change in axial load. As a result, both expansion and consolidation can be illustrated.

Direct Shear Strength Tests

Direct shear strength properties of drive samples were evaluated in general accordance with testing procedures defined by ASTM Test Method D3080. The results of the direct shear strength test are summarized on Figure B5, direct shear test.

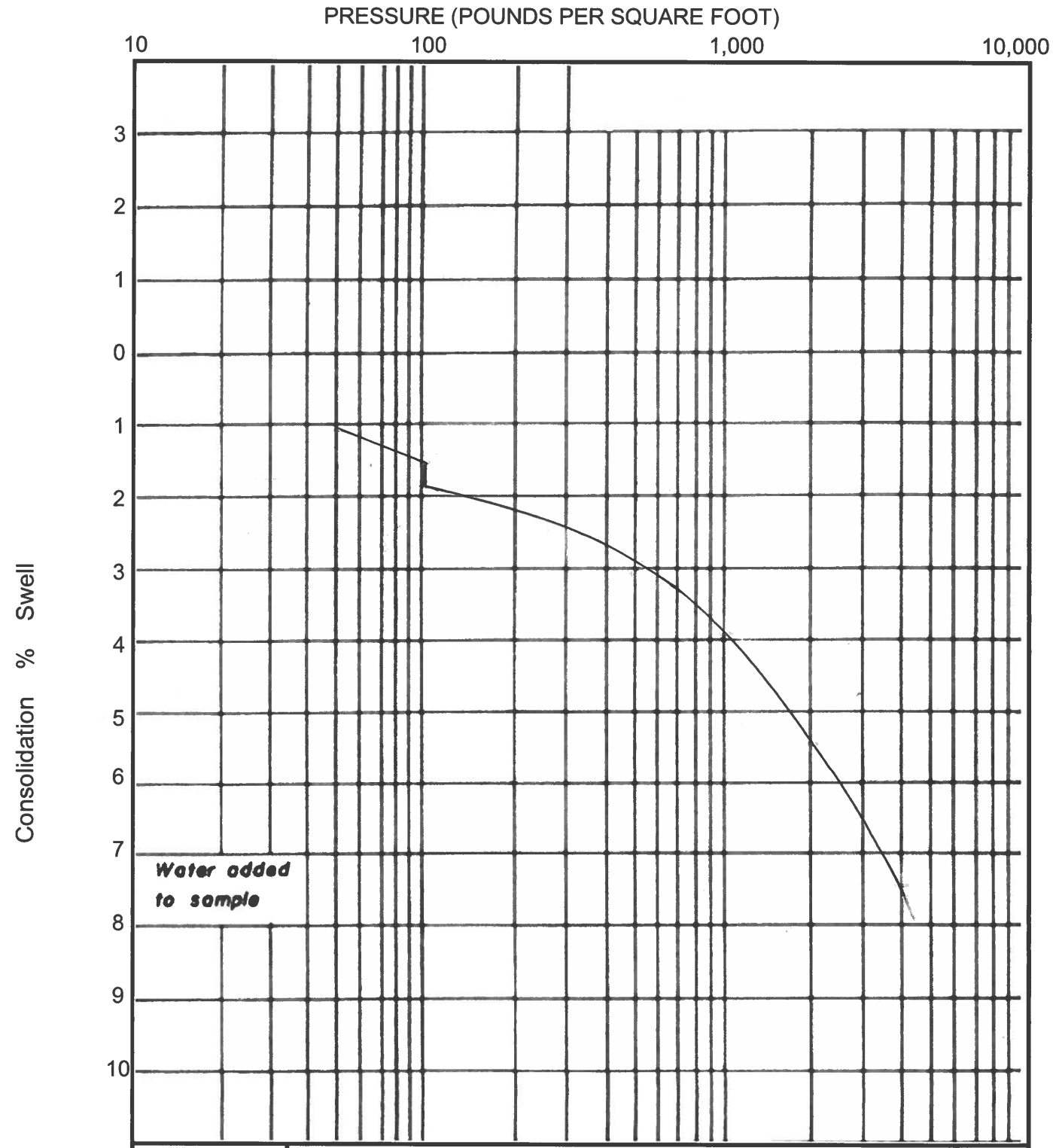


	SUMMARY OF TEST RESULTS				
Boring No. 1 Depth 5 ft	Moisture Content %	Dry Density PCF	Height in	Diameter In	Swell Pressure PSF
Initial	5.6	123	1.00	1.94	± 300
Final	13.1	133	0.928	1.94	
Soil Description	Sand, gravel, clayey, brown				

SWELL-CONSOLIDATION TEST

Lambert and Associates

Project No.	M22059GE
Date:	February 3, 2023
Figure:	B1

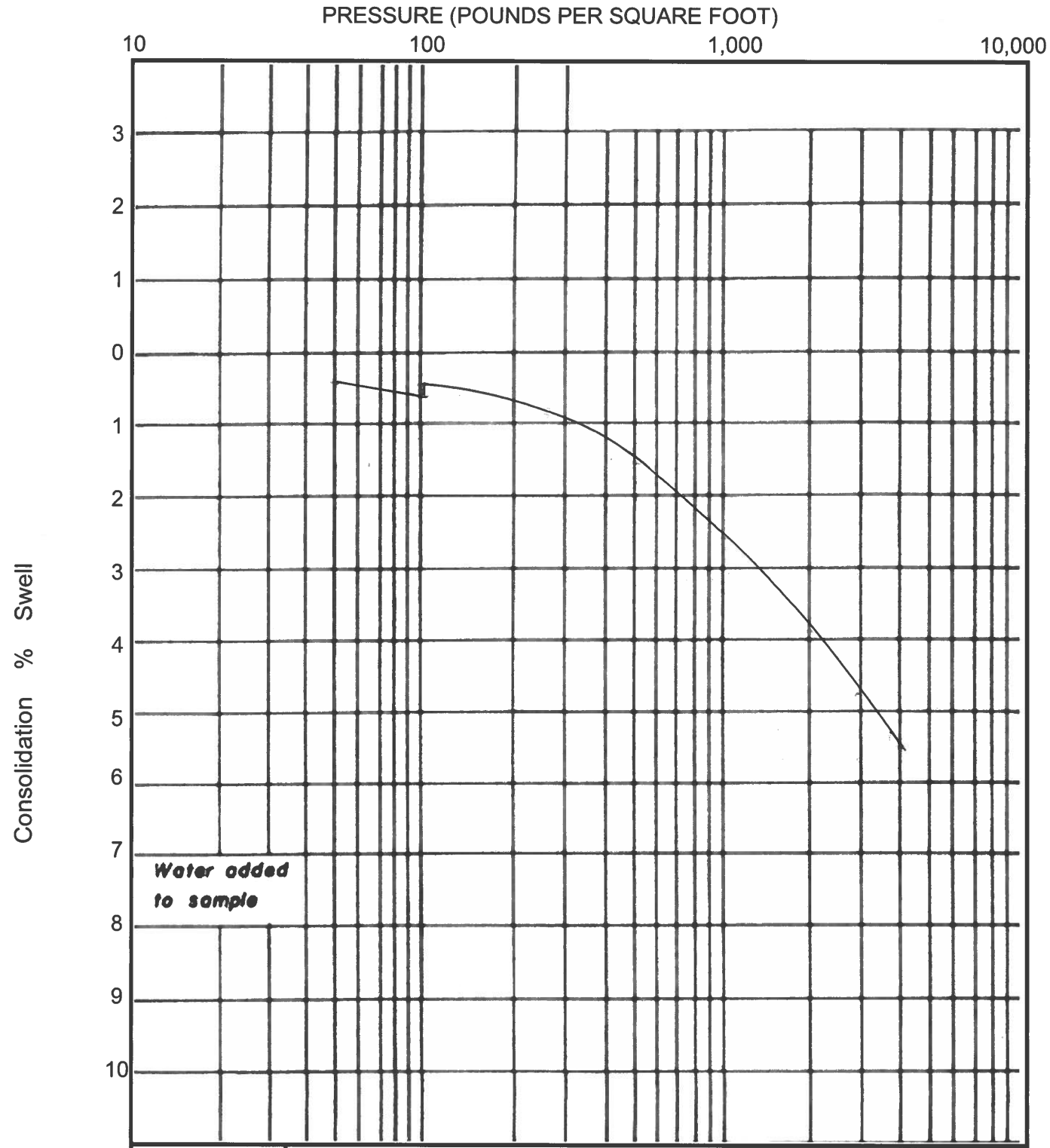


	SUMMARY OF TEST RESULTS				
Boring No. 4 Depth 5 ft	Moisture Content %	Dry Density PCF	Height in	Diameter In	Swell Pressure PSF
Initial	6.3	124	1.00	1.94	≤ 100
Final	12.8	133	0.927	1.94	
Soil Description	Sand, gravel, clayey, brown				

SWELL-CONSOLIDATION TEST

Lambert and Associates

Project No.	M22059GE
Date:	February 3, 2023
Figure:	B2

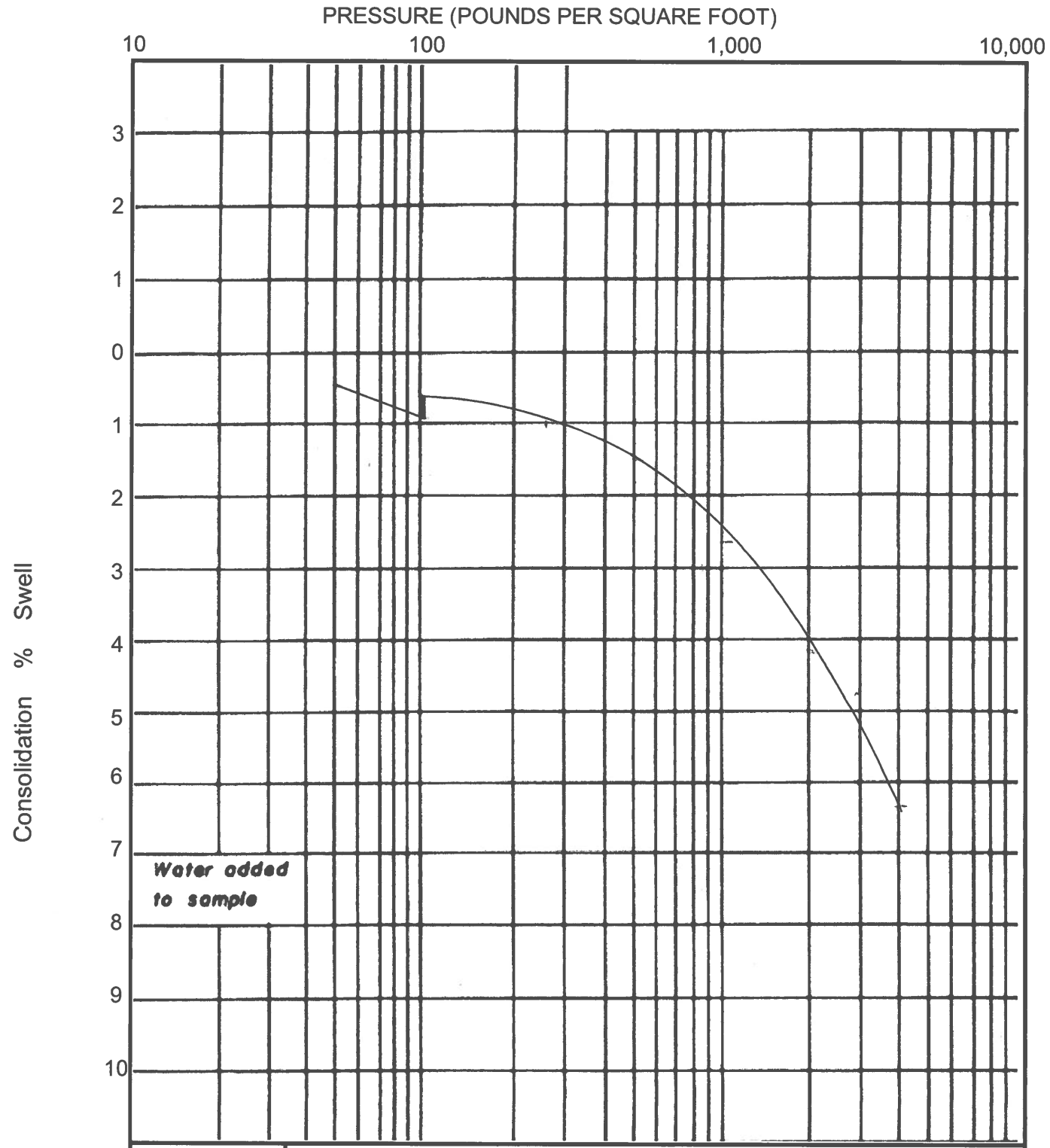


	SUMMARY OF TEST RESULTS				
Boring No. 4 Depth 10 ft	Moisture Content %	Dry Density PCF	Height in	Diameter In	Swell Pressure PSF
Initial	5.9	126	1.00	1.94	± 300
Final	12.2	135	0.945	1.94	
Soil Description	Sand, gravel, clayey, brown				

SWELL-CONSOLIDATION TEST

Lambert and Associates

Project No.	M22059GE
Date:	February 3, 2023
Figure:	B3



	SUMMARY OF TEST RESULTS				
Boring No. 6 Depth 5 ft	Moisture Content %	Dry Density PCF	Height in	Diameter In	Swell Pressure PSF
Initial	6.1	125	1.00	1.94	± 400
Final	12.5	134	0.937	1.94	
Soil Description	Sand, gravel, clayey, brown				

SWELL-CONSOLIDATION TEST

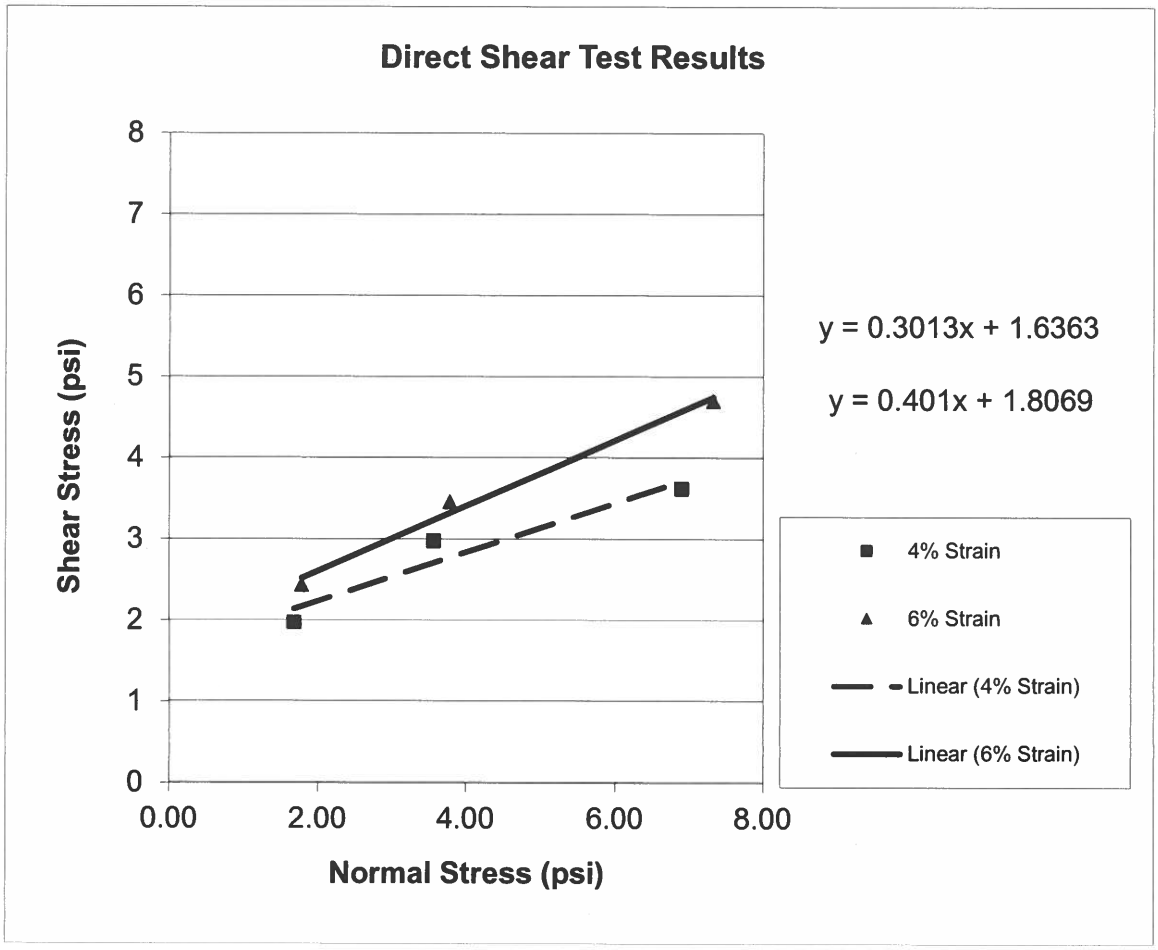
Lambert and Associates

Project No.	M22059GE
Date:	February 3, 2023
Figure:	B4

Lambert and Associates

CONSULTING GEOTECHNICAL ENGINEERS AND MATERIAL TESTING

Project:	Waterview Development	**Project Number:**	M22059GE	**Date Sampled:**	10/10/2022
Location:	Ouray, CO	**Sample Source:**	TB 2 @ 5 ft	**Lab Sample #:**	4343
Sample Description:	Sand, gravel, clayey, brown	**Date Tested:**	11/16/2022	**Tested By:**	AC



% Strain	Cohesion (psf)	Friction Angle (deg)
4	236	17
6	260	22

Project No.:	M22059GE
Date:	February 3, 2023
Figure:	B5

APPENDIX C

GEOLOGY DISCUSSION
SOUTHWEST COLORADO GEOLOGY

Southwest Colorado exhibits many geologic features formed by a multitude of geologic processes. Regional inundation, uplift, volcanism and glaciation are responsible for some of the complex geology of the region. Many theories and speculations concerning the mode of occurrence of the regions's geology have been presented over the years. This cursory discussion of the geology of southwest Colorado presents some theories accepted by the geologic community, but is only intended to introduce the basic concepts and restraints that arise due to geologic activity.

Prior to the formation of the Rocky Mountains southwest Colorado was a primarily a flat lying region with little topographic expression. The North American continent was experiencing many episodes of deposition. The Transcontinental Sea was transgressing and regressing across the continent, these transgressions and regressions are the cause for such diverse rock types. The stratigraphic column in southwestern Colorado expresses rock types from variable depositional environments. Limestones are formed in deeper water, sandstones are formed in beach and tidal flat environments, while arkosic sandstone and conglomerates are formed in alluvial plains and fans. Particle size and mineralogic content in rock units are related to the depositional environment. A sandstone or conglomerate would not be likely to form in a deep sea environment because there would not be enough energy to carry such large particles a great distance from the source lands. As one observes the stratigraphic column of southwest Colorado a siltstone may be overlain by a sandstone which is in turn overlain by a siltstone. This represents a regressional then transgressional sequence. Many such sequences or combinations of other rock units are exhibited throughout southwest Colorado.

The final regression of the sea may have been caused by orogenic activity and uplift. This uplift was not confined to Colorado, it was a regional uplift that occurred in many stages. The uplift is what caused the formation of the ancestral rockies. The Larimide Orogenic episode is responsible for the formation of the San Juan dome. (Note: The San Juan dome theory is not accepted by the entire geologic community. It is used here for descriptive purposes). The San Juan dome was essentially an upwarp of the stratigraphy formed by sedimentation during the Transcontinental Sea. An actual dome probably never

existed due to erosion during the uplift. The idea being that a dome of sediments and rock units would have existed had erosion and diastrophism not taken place. The orientation of bedding planes forms a radial pattern around the San Juan region which seems to vindicate this theory.

The stresses need to "upwarp" this large area were obviously tremendous. Locally occurring stresses may not be sufficient to move this quantity of material, global tectonics, directly or indirectly, may have been involved. Compression of the entire North American plate could have occurred. The magnitude of the stresses and the deep seated origin of these stresses also have caused extensive volcanism. Colorado has many large remnants of Calderas that were active during the orogenic activity. The Silverton and Lake City Calderas are the largest in the San Juan region. Activity in the Silverton Caldera has been estimated (radiometrically) to have occurred 22 million years ago. Calderas of this magnitude are believed to have formed by the collapse of epierogenic magma chambers. Volcanic and metamorphic rock bodies are common in the San Juan region, many of these units are related to the orogenic activity in the region.

Faults associated with local orogenic activity are another common geologic feature found in southwestern Colorado. As stated previously, extreme stresses were probably associated with the formation of the San Juan Mountains and may be responsible for deep-seated volcanic and metamorphic processes. These stresses had to be released, the geologic mode for stress release is faulting. Diastrophic activity in the area today is quite low, the lack of seismic activity indicates that stresses are not currently being released. An explanation for the loss of stresses is through faulting.

The last episode of regional geologic activity in the area was glaciation. The most recent period of glacial activity ended approximately 10,000 years ago. Glacial activity is responsible for much of the topographic expression in the area. "U-Shaped" valleys, moraine deposits, tarns, (glacial formed lakes), and rock glaciers are the most prominent features which are found in southwestern Colorado as a result of glacial activity. The valley configurations are a result of the erosional activity of the glaciers. Moraine deposits developed during the glacial activity. Rock glaciers are moving masses of rock which are thought to have an ice core which may be the last remnant of glacial ice. As the surbsurface ice core moves and melts, the overlying mass of rock also moves.

APPENDIX D

GENERAL GEOTECHNICAL ENGINEERING CONSIDERATIONS

D1.0 INTRODUCTION

Appendix D presents general geotechnical engineering considerations for design and construction of structures which will be in contact with soils. The discussion presented in this appendix are referred to in the text of the report and are intended as tutorial and supplemental information to the appropriate sections of the text of the report.

D2.0 FOUNDATION RECOMMENDATIONS

Two criteria for any foundation which must be satisfied for satisfactory foundation performance are:

- contact stresses must be low enough to preclude shear failure of the foundation soils which would result in lateral movement of the soils from beneath the foundation, and
- settlement or heave of the foundation must be within amounts tolerable to the superstructure.

The soils encountered during our field study have varying engineering characteristics that may influence the design and construction considerations of the foundations. The characteristics include swell potential, settlement potential, bearing capacity and the bearing conditions of the soils supporting the foundations. The general discussion below is intended to increase the readers familiarity with characteristics that can influence any structure.

D2.1 Swell Potential

Some of the materials encountered during our field study at the anticipated foundation depth may have swell potential. Swell potential is the tendency of the soil to increase in volume when it becomes wetted. The volume change occurs as moisture is absorbed into the soil and water molecules become attached to or adsorbed by the individual clay platlets. Associated with the process of volume change is swell pressure. The swell pressure is the force the soil applies on its surroundings when moisture is absorbed into the soil. Foundation design considerations concerning swelling soils include structure tolerance to movement and dead load pressures to help restrict uplift. The structure's tolerance to movement should be addressed by the structural engineer and is dependent upon many facets of the design including the overall structural concept and the building material. The uplift forces or pressure due to wetted clay soils can be addressed by designing the foundations with a minimum dead load and/or placing the foundations on a blanket of compacted structural fill. The compacted structural fill blanket will increase the dead load on the swelling foundations soils and will increase the separation of the foundation from the swelling soils. Suggestions and

recommendations for design dead load and compacted structural fill blanket are presented below. Compacted structural fill recommendations are presented under COMPACTED STRUCTURAL FILL below.

D2.2 Settlement Potential

Settlement potential of a soil is the tendency for the soil to experience volume change when subjected to a load. Settlement is characterized by downward movement of all or a portion of the supported structure as the soil particles move closer together resulting in decreased soil volume. Settlement potential is a function of;

- foundation loads,
- depth of footing embedment,
- the width of the footing, and
- the settlement potential or compressibility of the influenced soil.

Foundation design considerations concerning settlement potential include the amount of movement tolerable to the structure and the design and construction concepts to help reduce the potential movement. The settlement potential of the foundation can be reduced by reducing foundation pressures and/or by placing the foundations on a blanket of compacted structural fill. The anticipated post construction settlement potential and suggested compacted fill thickness recommendations are based on site specific soil conditions and are presented in the text of the report.

D2.3 Soil Support Characteristics

The soil bearing capacity is a function of;

- the engineering properties of the soil material supporting the foundations,
- the foundation width,
- the depth of embedment of the bottom of the foundation below the
- lowest adjacent grade,
- the influence of the ground water, and
- the amount of settlement tolerable to the structure.

Soil bearing capacity and associated minimum depth of embedment are presented in the text of the report.

The foundation for the structure should be placed on relatively uniform bearing conditions. Varying support characteristics of the soils supporting the foundation may result in nonuniform or differential performance of the foundation. Soils encountered at foundation depths may contain cobbles and boulders. The cobbles and boulders encountered at foundation depths may apply point loads on the foundation resulting in nonuniform bearing conditions. The

surface of the formational material may undulate throughout the building site. If this is the case it may result in a portion of the foundation for the structure being placed on the formational material and a portion of the foundation being placed on the overlying soils. Varying support material will result in nonuniform bearing conditions. The influence of nonuniform bearing conditions may be reduced by placing the foundation members on a blanket of compacted structural fill. Suggestions and recommendations for constructing compacted structural fill are presented under COMPACTED STRUCTURAL FILL below and in the text of the report.

D3.0 COMPACTED STRUCTURAL FILL

Compacted structural fill is typically a material which is constructed for direct support of structures or structural components.

There are several material characteristics which should be examined before choosing a material for potential use as compacted structural fill. These characteristics include;

- the size of the larger particles,
- the engineering characteristics of the fine grained portion of material matrix,
- the moisture content that the material will need to be for compaction with respect to the existing initial moisture content,
- the organic content of the material, and
- the items that influence the cost to use the material.

Compacted fill should be a non-expansive material with the maximum aggregate size less than about two (2) inches and less than about twenty five (25) percent coarser than three quarter (3/4) inch size.

The reason for the maximum size is that larger sizes may have too great an influence on the compaction characteristics of the material and may also impose point loads on the footings or floor slabs that are in contact with the material. Frequently pit-run material or crushed aggregate material is used for structural fill material. Pit-run material may be satisfactory, however crushed aggregate material with angular grains is preferable. Angular particles tend to interlock with each other better than rounded particles.

The fine grained portion of the fill material will have a significant influence on the performance of the fill. Material which has a fine grained matrix composed of silt and/or clay which exhibits expansive characteristics should be avoided for use as structural fill. The moisture content of the material should be monitored during construction and maintained near optimum moisture content for compaction of the material.

Soil with an appreciable organic content may not perform adequately for use as structural fill material due to the compressibility of the material and ultimately due to the decay of the

organic portion of the material.

D4.0 RADON CONSIDERATIONS

Information presented in "Radon Reduction in New Construction, An Interim Guide: OPA-87-009 by the Environmental Protection Agency dated August 1987 indicates that currently there are no standard soil tests or specific standards for correlating the results of soil tests at a building site with subsequent indoor radon levels. Actual indoor levels can be affected by construction techniques and may vary greatly from soil radon test results. Therefore it is recommended that radon tests be conducted in the structure after construction is complete to verify the actual radon levels in the home.

We suggest that you consider incorporating construction techniques into the development to reduce radon levels in the residential structures and provide for retrofitting equipment for radon gas removal if it becomes necessary.

Measures to reduce radon levels in structures include vented crawl spaces with vapor barrier at the surface of the crawl space to restrict radon gas flow into the structure or a vented gravel layer with a vapor barrier beneath a concrete slab-on-grade floor to allow venting of radon gas collected beneath the floor and to restrict radon gas flow through the slab-on-grade floor into the structure. These concepts are shown on Figure D1.

If you have any questions or would like more information about radon, please contact us or the State Health Department at 303-692-3030.

CHAUTAUQUA SUBDIVISION HOMEOWNERS ASSOCIATION

2505 CHAUTAUQUA LANE OURAY, CO 81427

Friday, April 28, 2023

Ouray City Council
Mayor Ethan Funk
Mayor Pro Tem, Josh Smith
Ms. Tamara Gulde, Council Member
Ms. Peggy Lindsey, Council Member
Mr. K. John wood, Council Member

Dear Mayor and Members of the City of Ouray City Council:

On behalf of the Chautauqua Subdivision Homeowners Association (the "HOA") and as President of that organization, I am writing you with comments regarding the Waterview PUD preliminary plat application (the "Application"), which is to be considered by you at a regular meeting.

We are writing in support of the approval of the Application; however, we do have some concerns and request that you consider them in your deliberations.

We believe you should consider approving the Application in two stages, not in one, as is being proposed, since Phase 2 must wait until the completion of the expansion of the sewer system.

This extensive 9.2-acre development can overburden Ouray, especially since the developer proposes that the City maintain streets, open areas, and water retention ponds after completing what will be the most significant development in Ouray's history. The project, if approved, will increase the area's population density, inevitably leading to increased demands for additional police and fire protection and public services such as roads, water supply, sewage, garbage collection, and other utilities.

While we recognize the need for affordable housing, we must also ensure that any development in our small town is done responsibly and sustainably. The responsible thing to do is to approve Phase 1 of this development, which is, as previously stated, all that Ouray's infrastructure allows for now. There is plenty of time and ability to adjust to the second phase based on the experience gained from the first phase.

Ouray must understand the community's housing needs and develop a plan to build affordable housing that meets Ouray's needs instead of unnecessarily approving in advance more affordable housing than Ouray's current infrastructure can accommodate.

There is a need for caution. Overbuilding affordable housing in a small town can negatively impact the City if there is an economic downturn. The increased population can strain existing infrastructure, such as roads, public services, and the local job market, which can lead to a decrease in property values and reduce the money available to the City to fund other projects and services.

By taking a phased approach, we can better understand the impact of affordable housing on our community. This approach will allow us to make informed decisions to ensure that any future development is in line with the needs and desires of our community. It will also allow us to address any potential issues or concerns that may become apparent from Phase 1.

It also does not make sense to us to rush forward and prematurely approve both phases of this project at a time when the only evidence we have relative to affordable housing is anecdotal. The City recently commissioned a housing needs study to be done by Economic and Planning Systems, Inc. at the cost of $38,500. The purpose of this study is to understand the housing needs within the City quote: "...to understand the specific housing needs within the City, to understand the local market needs, how the City can play a role in meeting these needs, and how to prioritize investment and other actions." Phase 2 for this project should be deferred until the completion of the study, and delivery of the study to the City Council and the citizens of Ouray, with an opportunity for public discussion on the study's results.

The two-phased approach will not only allow us the learn from the first phase. It will give the City time to see and learn independently from other affordable housing projects, such as Pinion Park in Norwood and Wetterhorn in Ridgway. For example, does the City know the lottery results for Pinion Park? What was the number of qualified lottery buyers for that 24-unit development? How many of those lottery winners closed and moved in? We have learned from other instances that construction can go awry and a two-phase approval appears to be the most sustainable course of action.

Should you choose not to approve this project in two phases but instead to approve it all at once, we ask that you be cognizant of and consider the City zoning regulations requirements of Section 6 "Commercial – Industrial District – C-2 (a) Purpose. "Each use will be required to mitigate its particular negative impacts determined to exist so as to provide for the reasonable enjoyment of adjacent properties." In its Sketch Plan approval, the Planning Commission chose to overlook this regulation as it affects adjacent Chautauqua homeowners. We request that the City and the developer meet with adjoining property owners and make a good-faith effort to address the project's negative impacts as currently planned. The Ouray City ordinance requires this whether the development is residential or industrial.

The Planning Commission addressed the negative impact this project will have on motorists driving along Highway 550 with the backyards of the affordable houses facing Highway 550 but ignored the same adverse effects that the project has on adjacent Chautauqua properties.

Let's work together in the best interest of everyone.

We thank you for considering our concerns and request that this letter be part of the public record of the City Council meeting to be held regarding the Waterview PUD.

With kindest regards,

David P. Smith

David P. Smith
President, Chautauqua Subdivision HOA

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With kindest regards,

David P. Smith

David P. Smith
President, Chautauqua Subdivision HOA

Ouray City Council Regular Meeting

Monday, June 5, 2023 6:00 PM
Ouray Community Center, 320 6th Ave, Ouray, CO 81427

Ethan Funk:	Present
Tamara Gulde:	Present
Peggy Lindsey:	Present
Josh Smith:	Present
K. John Wood:	Present

Also present were: City Administrator Silas Clarke, Public Works Director Joe Coleman, Tourism and Destination Marketing Director Kailey Rhoten, IT Director Rich Willis, Accounting Specialist Julie Lancaster and City Attorney Carol Viner.

1. **CALL TO ORDER**

Mayor Funk called the meeting to order at 6:00 pm.

2. **Consideration of a Request from Councilor John Wood to Participate in this Meeting Remotely, per Resolution 4, Series 2022 - Remote Participation Policy for Council Members**

Motion to allow Councilor Wood to participate remotely. This motion, made by Peggy Lindsey and seconded by Josh Smith, Carried.

Ethan Funk: Yea, Tamara Gulde: Yea, Peggy Lindsey: Yea, Josh Smith: Yea, K. John Wood: Abstain (With Conflict)

3. **ROLL CALL**

4. **PLEDGE OF ALLEGIANCE**

The Pledge of Allegiance was recited.

5. **Ouray County Pride Proclamation**

Mayor Funk read the proclamation.

6. **PUBLIC HEARINGS**

a. New Liquor License Application - Ouray Ice House (for Public Hearing and Action Items)

Mayor Funk opened the floor for public comment. Since there were no comments, Mayor Funk closed the floor.

b. New Liquor License Application - The Yankee Girl (for public hearing and action item)

Mayor Funk opened the floor for public comment. Since there were no comments, Mayor Funk closed the floor.

7. **APPROVAL OF MINUTES**

Motion to approve minutes as presented. This motion, made by Tamara Gulde and seconded by Josh Smith, Carried.

Ethan Funk: Yea, Tamara Gulde: Yea, Peggy Lindsey: Yea, Josh Smith: Yea, K. John Wood: Yea

a. Minutes 5-15-23

b. Minutes 5-18-23 Special Meeting

8. **CEREMONIAL/INFORMATIONAL**

a. OIPI - Post Season Report

Peter O'Neil highlighted the Ice Park's post-season report. Councilor Gulde praised the report format, saying it was very readable and visually appealing. Councilor Wood asked Mr. O'Neil to elaborate on what the intervention statistics represented. Mr. O'Neil said those represent each time a ranger talks with a guest about wearing all the required gear, ensuring they have a secure anchor or other potential issues, and noting that the data shows an increase in ranger interactions with climbers in the park.

b. Ouray Ice Park Management and Operations Model Implementation

Peter O'Neil felt that the Ice Park staff are doing a great job managing the park and would like to continue their work with another 10 year management agreement.

9. **CITIZENS' COMMUNICATION**

Mayor Funk opened the floor for public comment. Mark Orgren thanked the council for the wastewater and water treatment plants, but had concerns about historic preservation, and said the current style of the Waterview Homes project is not compatible with the historic character of Ouray. Mayor Funk closed the floor.

10. **CITY COUNCIL REPORTS/INFORMATION - Tamara Gulde, Peggy Lindsey, John Wood, Josh Smith, and Ethan Funk**

Councilor Gulde - OEDC meeting coming up on June 8th. Micro-grant awards have been given out. Seats are available on the OEDC. Ice Park Sustainability Working Group meeting on June 15th. The next IPAT meeting will be on August 2nd. Attended Friends of Hot Springs Pool and Fitness Center meeting on May 17th. Arrived late for the Six Basins Meet 'n Greet, but had a good conversation with members afterwards. Attended Twin Peaks grand opening on June 4th.
Councilor Lindsey - Beautification Committee is not meeting in June. On June 3rd, mulch was delivered to city parks. A group of volunteers spread it in 2.5 hours. Ouray Trail Group and Woman's Club came to help. On June 13th, hanging baskets will be arriving, and flowers for planters arrive on June 14th.
Councilor Wood - TAC meeting. Business tips and best practices slide show available from Ms. Rhoten in the City Tourism Office. The OIPI Board Meeting focused on Box Canyon Road. Met with Frank Robertson to discuss the relationship between Eric Jacobson and OIPI.
Mayor Pro Tem Smith - Attended CML Outreach meeting in Montrose last week. The majority of nearby communities are struggling with water and sewer treatment and affordable housing. PARC is meeting tomorrow. Gunnison Valley Transportation Group is still waiting on grant funding for bus service from CDOT, estimating bus service won't start until after the 4th of July. Western Slope Schools Collaborative made a $10,000 donation, asking for free student rides at certain portions of the year.
Mayor Funk - met with Paul Major to discuss his Norwood housing project. Ouray Fuels Meeting went well. The Forest Service is very interested in helping with fire mitigation. Worked with Mr. Clarke on the strategic plan. Attended the Six Basins event. Councilor Wood asked when the council would meet and discuss more about the strategic plan. Mr. Clarke said the next steps will be putting timelines on the action items, creating budgets, and identifying partners; looking to finalize the document in late summer.

11. **DEPARTMENT REPORTS**

a. City Administrator

Mr. Clarke reported that a contract agreement for gym equipment maintenance should be delivered tomorrow. Waterview PUD story pole demonstration happening on June 15, showing the heights of houses. Fellin Park restroom will need to move. San Juan Room partition company is in receivership, reviewing what to do going forward. CDPHE inspection on water and wastewater treatment construction projects; inspectors happy with progress and timeline. Spring Branch Forestry motion from the prior meeting did not authorize the Mayor to execute the agreement, so Mr. Clarke's signature is being ratified as an action item later on the agenda. The IGA with Ouray County is being reviewed and will be on a future agenda. Parks and Trails Master Plan contractor DHM will have a booth at the concert in the park on June 8th for community review and feedback. The Box Canon geothermal line is now complete, and the Oak Street Bridge has been overlaid. All Points Transit, the company managing the new bus service, is looking for more drivers. Mayor Pro Tem Smith asked if the story pole exercise would be viewed from Chautauqua Lane. Mr. Clarke said it would. Councilor Gulde asked when the climbing wall would be back in the gym. Mr. Clarke said within a couple of weeks. Councilor Wood asked if he could meet with Mr. Clarke and Mayor Pro Tem Smith about the Fellin Park restrooms when he is in town, since he won't be able to attend the scheduled meeting.

b. Police Chief

Report in packet.

c. Fire Chief

Report in packet.

d. Public Works Director

Mr. Coleman reported that the mag chloride application is still scheduled for Tuesday and Wednesday this week. Blasting work is to be completed for the Water Treatment Plant, starting as soon as next Monday. WENS notification will be sent out before blasting. Councilor Gulde asked if the yellow curbs were scheduled to be painted. Mr. Coleman said it is scheduled to happen after the mag chloride application.

e. City Resources Director

Report in packet. Mr. Clarke reported that the 2nd full time parks maintenance position has been filled, and the seasonal gardener position as well. Councilor Wood asked for an update on the Community Development Director hire. Mr. Clarke responded that 8 applications have been received, but he wants to seek out more applications and possibly hire a recruiter.

f. Tourism and Destination Marketing Director

Ms. Rhoten shared highlights from her report. Councilor Lindsey thanked Ms. Rhoten for the work she's doing.

12. **CONSENT AGENDA**

Motion to approve the Consent Agenda. This motion, made by K. John Wood and seconded by Peggy Lindsey, Carried.

Ethan Funk: Yea, Tamara Gulde: Yea, Peggy Lindsey: Yea, Josh Smith: Yea, K. John Wood: Yea

a. Liquor License Renewal - Mi Mexico Restaurant

b. Liquor License Renewal - Outlaw Restaurant

c. Liquor License Renewal & Change of Ownership - Imogene FB LLC dba Dead Canary

13. **ACTION ITEMS**

a. Placement of Public Restroom on City Property near Via Ferrata Entrance per Operations Agreement with OIPI and FOVF and to Authorize Purchase of the Restroom through the City with Ownership by FOVF through $50,000 Grant

Motion to approve placement of restroom and authorize purchase of the restroom with ownership by Friends of the Ouray Via Ferrata. This motion, made by K. John Wood and seconded by Tamara Gulde, Carried.

Ethan Funk: Yea, Tamara Gulde: Yea, Peggy Lindsey: Yea, Josh Smith: Yea, K. John Wood: Yea

Mayor Funk explained the City's role in ordering and installing the prefab restroom for Friends of the Via Ferrata, since the restroom would be on City property and the City can access state pricing.

b. Ratification of City Administrator's Signature on Agreement with Spring Branch Forestry, LLC

Motion to ratify Mr. Clarke's signature on the Spring Branch Forestry agreement. This motion, made by Josh Smith and seconded by Tamara Gulde, Carried.

Ethan Funk: Yea, Tamara Gulde: Yea, Peggy Lindsey: Yea, Josh Smith: Yea, K. John Wood: Yea

c. New Liquor License Application - Ouray Ice House (for Public Hearing and Action Items)

Motion to approve the liquor license for Ouray Ice House. This motion, made by K. John Wood and seconded by Josh Smith, Carried.

Ethan Funk: Yea, Tamara Gulde: Yea, Peggy Lindsey: Yea, Josh Smith: Yea, K. John Wood: Yea

Councilor Lindsey asked the applicants what they would be doing with the liquor license. Mark Rozich said they sell coffee in the morning, and want to expand into afternoon business with pizza.

d. New Liquor License Application - The Yankee Girl (for public hearing and action item)

Motion to approve the Yankee Girl liquor license. This motion, made by Peggy Lindsey and seconded by Tamara Gulde, Carried.

Ethan Funk: Yea, Tamara Gulde: Yea, Peggy Lindsey: Yea, Josh Smith: Yea, K. John Wood: Abstain (With Conflict)

Councilor Wood recused himself since he owns the property.

e. Consideration of Appointment - Consiglio, Nate - PARC Committee Application

Motion to approve Nate Consiglio to Parks and Recreation Committee. This motion, made by Josh Smith and seconded by K. John Wood, Carried.

Ethan Funk: Yea, Tamara Gulde: Yea, Peggy Lindsey: Yea, Josh Smith: Yea, K. John Wood: Yea

f. Grant Award - IHOI-INC032 Ouray Waterview PUD Infrastructure

Motion to approve and sign grant award IHOI-INC032. This motion, made by Tamara Gulde and seconded by Josh Smith, Carried.

Ethan Funk: Yea, Tamara Gulde: Yea, Peggy Lindsey: Yea, Josh Smith: Yea, K. John Wood: Yea

Councilor Wood asked what infrastructure is being included. Mr. Clarke said it included streets, curbs, gutters, storm sewers, and extending the water main, but does not include tap fees.

14. **DISCUSSION ITEMS**

a. Future Agenda Items

July 5th at 4pm Rural Homes work session about deed restrictions. Also inviting Planning Commission and Board of County Commissioners.

b. EQR - Ad-Hoc Committee Recommendations 4.24.2023

Mayor Funk presented the proposed changes from the EQR committee. Council directed staff to take the recommendations and turn them into an ordinance for future consideration.

c. Powder House Box Cañon Sign Painting and Roof Repair

Council directed staff to investigate costs for roof replacement. Council asked if OIPI could paint the mural sign on the building just as it is now. Mr. O'Neil said that was acceptable.

d. OIPI Management Agreement Last Minute Changes

Council decided to hold an executive session at the end of the June 20th meeting to direct staff to negotiate with Mr. Jacobson and OIPI. Councilor Lindsey asked why the City was not included in the agreement. Mr. O'Neil said the Park's pro bono lawyer wanted to get an agreement in place in the case of Mr. Jacobson's passing to allow the Ice Park to continue operating, but didn't want to work on behalf of the City.

15. **EXECUTIVE SESSION - None**

16. **ADJOURNMENT**

Motion to adjourn at 8:07 pm. This motion, made by Peggy Lindsey and seconded by Josh Smith, Carried.

Ethan Funk: Yea, Tamara Gulde: Yea, Peggy Lindsey: Yea, Josh Smith: Yea, K. John Wood: Yea

_____

Ethan Funk, Mayor

ATTEST:

_____

Melissa M. Drake, City Clerk

CERTIFICATION

I, Julie Lancaster, do hereby certify that I am an employee of the City of Ouray, Ouray County, State of Colorado, and that the above minutes are a true and correct summary of the meeting of the Ouray City Council held on Monday, June 5, 2023. I further certify that the meeting was duly called and held, and that a quorum was present.

Dated this Monday, June 5, 2023.

_____

Julie Lancaster

ELEMENT ENGINEERING LLC
DILIGENT • INNOVATIVE • RESPONSIVE

ENGINEER'S PROGRESS REPORT

Date: June 14, 2023

To: City of Ouray

From: Element Engineering

Job No. 0041.0001

RE: Monthly Engineers Report **New Items Bold**

PROJECT CONSTRUCTION PROGRESS UPDATE

The Owner-Contractor agreement has been signed and approved. The Owner-Engineer agreement for construction has also been signed and approved. Construction phase services will start with the construction kickoff meeting scheduled for April 20th at 11:00 AM. The Notice to Proceed, which starts the construction timeline will be set for April 20th.

Initial mobilization, site clearing, and structure location coordination has begun. Weekly construction progress meetings are being held on Thursdays at 1:00 PM. Site visits were held with Aslan, Element, and LOuray staff during the weeks of April 24th and May 1st.

As construction proceeds, this section will include updates on the contractor's two-week look-ahead schedule and overall schedule. This section will also include reporting on milestones such as concrete pours, equipment installation, testing, and inspection.

Onsite blasting commenced on June 12 and will proceed throughout the week of June 12th and June 19th. Submittal and RFI processing are ongoing. Element's construction services manager was onsite for initial blasting operations and will continue to be onsite as necessary. Construction plans for the tank relocation, as approved by the city, have been completed and distributed.

PROJECT CONSTRUCTION BUDGET TRACKING

This section will include reporting on the construction budget as the project proceeds and monthly pay applications are reviewed and approved. A summary of the project budget at the writing of this report is shown below:

90% GMP Amount	$	12,630,965.47
Owner's Contingency	$	252,619.31
Total Contract Price	**$**	**12,883,584.78**

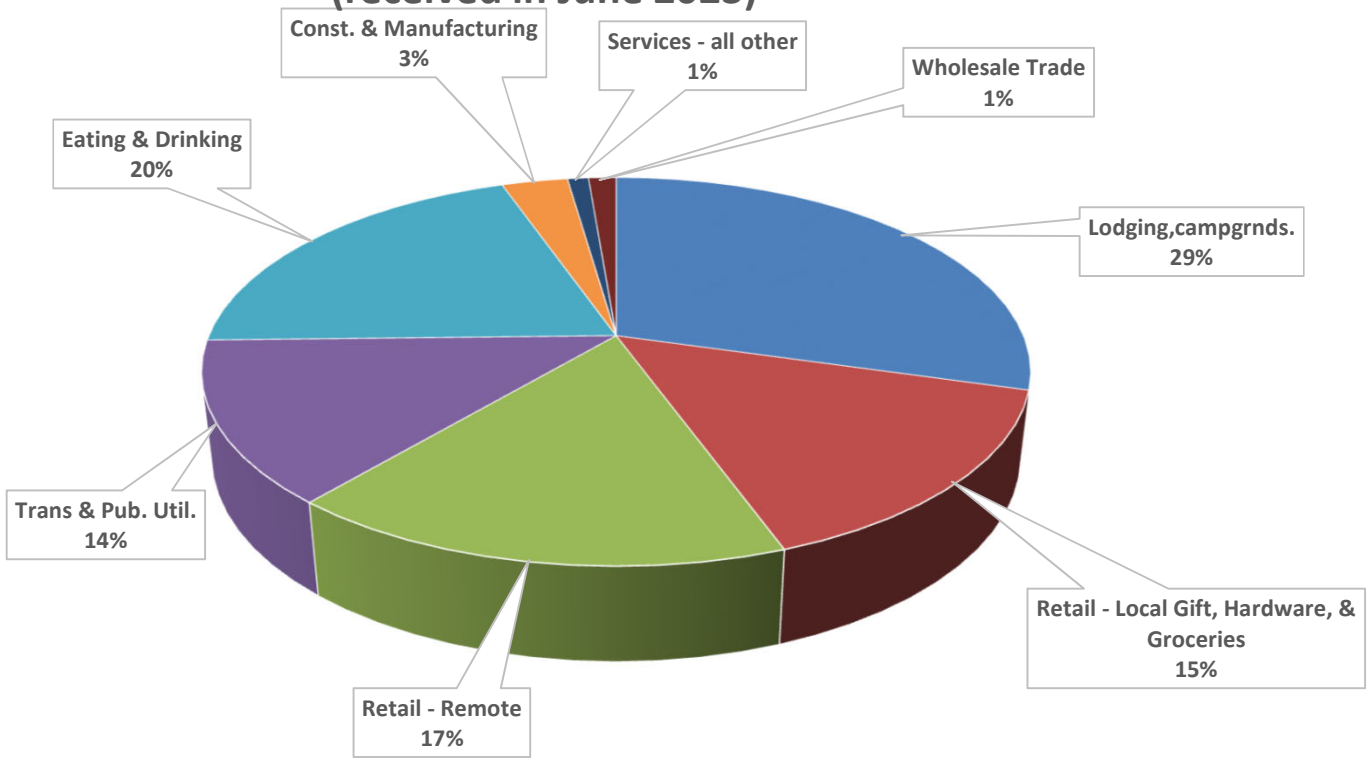
WAYFINDING MEETING

We are at our final stages of our new signage around town and are down to our final designs. We are inviting the public to join Tangram Design to hear about the process of how we got to where we are, questions, feedback, and discussion.

JUNE 29, 2023 **3:30 - 5:00 PM**

AT THE WRIGHT OPERA HOUSE

City of Ouray
April 2023 Sales Tax Revenues by Business Category
(received in June 2023)



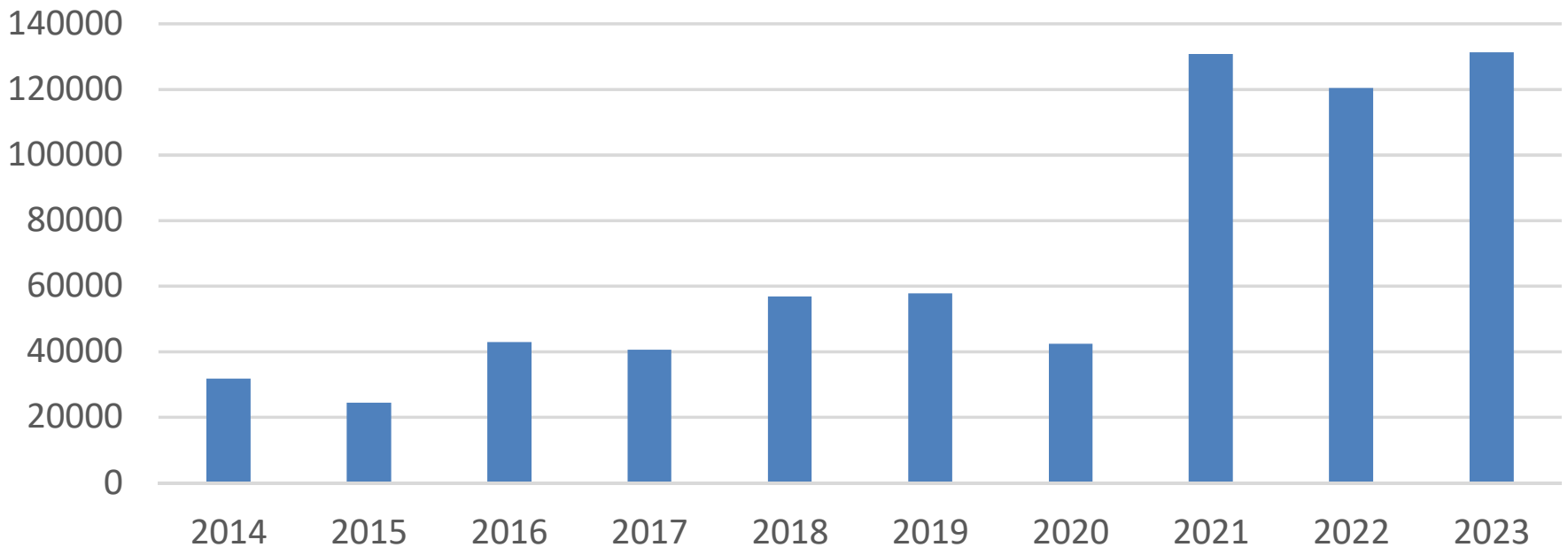
CITY OF OURAY

2023 MONTHLY SALES TAX REVENUES BY BUSINESS CATEGORY

(1) Month tax received from State of Colorado, representing sales from two months earlier (e.g. tax shown as APRIL is mostly from FEBRUARY)

2023 SALES TAX REVENUES BY BUSINESS CATEGORY							
	(1) Funds received by City in: July (mostly re: May)						
Business Category	January	February	March	April	May	June	
Lodging,campgrnds.	$ 26,318.81	$ 49,002.77	$ 60,276.11	$ 55,728.49	$ 55,334.62	$ 38,687.23	
Retail - Local Gift, Hardware, & Groce	$ 23,149.55	$ 39,030.97	$ 35,654.83	$ 26,647.60	28,173.68	$ 19,727.70	
Retail - Remote	$ 24,538.24	$ 25,093.62	$ 14,747.70	$ 17,585.84	25,875.89	$ 21,954.01	
Trans & Pub. Util.	11,808.23	13,673.78	15,715.67	15,749.48	13,868.64	17,675.31	
Eating & Drinking	18,958.81	27,276.64	32,116.12	24,642.34	26,573.43	26,319.69	
Const. & Manufacturing	2,164.96	5,198.58	4,857.24	1,735.20	2,909.64	4,033.77	
Services - all other	2,857.90	3,975.15	1,823.96	2,079.81	3,589.73	1,284.88	
Wholesale Trade	1,352.95	1,844.32	2,193.74	1,767.56	2,035.82	1,688.72	
TOTAL	**$ 111,149.45**	**$ 165,095.83**	**$ 167,385.37**	**$ 145,936.32**	**$ 158,361.45**	**$ 131,371.31**	
Business Category	July	August	September	October	November	December	Year-to-date
Lodging,campgrnds.							$ 285,348.03
Retail - Local Gift, Hardware, & Groceries							$ 172,384.33
Retail - Remote							$ 129,795.30
Trans & Pub. Util.							88,491.11
Eating & Drinking							155,887.03
Const. & Manufacturing							20,899.39
Services - all other							15,611.43
Wholesale Trade							10,883.11
TOTAL	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	$ 879,299.73

CITY OF OURAY
APRIL SALES TAX REVENUE COMPARISON
Over Past 10 Years



Notes: Figures represent revenue received in June
Sales Tax increased from 3% to 4% on January 1, 2016

CITY OF OURAY

SALES TAX REVENUES BY BUSINESS CATEGORY 2014-2023

SALES TAX REVENUES BY BUSINESS CATEGORY

	Funds received by City in June **(mostly re: April)** of:									
Business Category	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Lodging,campgrnds.	$ 4,129.27	$ 5,713.82	$ 7,959.86	$ 9,353.06	$ 15,781.67	$ 11,514.27	$ 2,831.80	$ 33,563.58	$ 28,128.12	$ 38,687.23
Retail - Local Gift, Hardware, & Groceries						13,537.82	8,465.09	21,834.25	$ 21,674.57	$ 19,727.70
Retail - Remote						8,713.63	16,707.24	28,992.24	$ 23,101.37	$ 21,954.01
Retail - groceries,liquor, candy, hardw	3,892.26	4,644.97	8,745.64	8,387.46	10,046.92					
Retail - gift, souvenir, variety, books	2,908.93	1,603.97	2,507.83	2,681.75	3,943.88					
Trans & Pub. Util.	6,148.71	5,873.47	6,940.37	6,413.38	6,840.62	7,682.91	8,448.08	9,972.94	10,377.29	17,675.31
Eating & Drinking	9,151.89	3,785.44	10,148.08	7,961.21	13,890.19	9,778.52	2,444.33	24,070.59	27,580.09	26,319.69
Const. & Manufacturing	4,179.43	2,022.64	5,467.05	3,839.77	5,196.67	5,063.81	2,075.69	8,061.11	6,415.68	4,033.77
Services - all other	402.81	501.76	869.00	1,352.58	764.53	616.97	1,344.14	1,836.37	1,714.48	1,284.88
Finance, Ins. Real Estate	897.84	271.92	256.98	497.65	275.38					
Wholesale Trade	33.00	43.46	141.45	94.49	240.45	970.54	129.34	2,535.90	1,476.27	1,688.72
Mining	-	-		-	-					
All Other	57.03	74.13	-	-	-					
TOTAL	**$ 31,801.17**	**$ 24,535.58**	**$ 43,036.26**	**$ 40,581.35**	**$ 56,980.31**	**$ 57,878.47**	**$ 42,445.71**	**$ 130,866.98**	**$ 120,467.87**	**$ 131,371.31**
					$11,527.28 out-of-period	$2,826.22 out-of-period	$7,507.37 out-of-period	$3,491.16 out-of-period	$6,974.01 out-of-period	$16,790.35 out-of-period

Year to Date Sales Tax Comparison

			Percentage Change from 2022
April 2022 Activity	$	120,467.87	
April 2023 Activity	$	131,371.31	**9.05%**
Jan-Apr 2022 Activity	$	587,947.82	
Jan-Apr 2023 Activity	$	603,054.45	**2.57%**

Ouray Lodging Occ. Tax Collection Summary

ROOMS	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	23 vs 22
Month											
January	4349	5712	5826	5113	5782	6196	6245	5936	7718	7609	-1.41%
February	3874	4816	5226	4509	5085	5593	4641	7189	7776	5906	-24.05%
March	2949	3394	3638	3499	4763	4152	1952	6993	6782	7164	5.63%
April	1836	2236	2660	2411	3080	2857	32	4941	4285	3535	-17.50%
May	4149	5047	5850	5939	7396	7894	3111	11093	10002		
June	10718	12015	13521	14494	14578	15026	12736	17520	16180		
July	17248	19171	19960	20248	19802	19482	20444	20509	16551		
August	15198	16477	16949	17344	17613	18629	16919	20798	17825		
September	13377	15478	16149	16526	17743	18498	17564	13517	18930		
October	6450	7937	7691	7762	7462	9407	12877	12038	12080		
November	1936	2141	2113	2674	2856	3237	3864	3199	3196		
December	3696	3656	3382	4226	5038	4268	5153	5237	3998		
Total Rooms	85780	98080	102965	104745	111198	115239	105538	128970	125323	24214	

DOLLARS											
January	$11,848	$15,867	$15,819	$13,795	$16,294	$22,444	$25,204	$27,107	$29,038	$36,828	26.83%
February	$10,430	$12,468	$13,908	$12,648	$14,021	$19,580	$18,464	$28,191	$36,284	$29,725	-18.08%
March	$7,945	$9,240	$9,505	$9,529	$12,884	$14,526	$6,834	$27,858	$30,334	$30,035	-0.99%
April	$4,975	$5,701	$6,633	$6,294	$8,090	$8,312	$107	$18,324	$18,466	$15,192	-17.73%
May	$11,357	$13,876	$15,372	$15,734	$19,031	$22,068	$7,922	$41,033	$43,131		
June	$28,419	$31,431	$34,498	$36,654	$36,236	$62,392	$51,634	$100,852	$98,839		
July	$44,740	$47,884	$49,767	$50,344	$49,371	$110,244	$114,230	$138,864	$131,139		
August	$40,035	$41,643	$41,801	$42,090	$43,236	$90,952	$92,809	$127,157	$122,778		
September	$35,960	$40,336	$41,704	$41,965	$44,480	$79,505	$93,050	$98,575	$119,099		
October	$17,556	$21,385	$20,717	$20,355	$19,711	$37,511	$60,690	$54,480	$74,824		
November	$5,092	$5,136	$5,802	$7,079	$7,000	$10,367	$15,399	$14,134	$14,566		
December	$9,918	$9,571	$9,590	$11,882	$13,622	$17,593	$24,892	$29,038	$23,554		
Total Dollars	$228,275	$254,538	$265,116	$268,369	$283,976	$495,494	$511,234	$705,613	$742,052	$111,780	

Data represents rooms and dollars for month in which lodging activity occurred.
LOT report and payment are due by 20th of following month.
"ROOMS" data includes exempt rooms.

OURAY LODGING OCCUPANCY TRENDS

Based on Lodging Occupation Tax Collections

	2021				2022				2023			
	Avail. Rooms + RVs, Unfurnished Cabins	Rooms Rented	Occ.%	*Exempt Rooms*	Avail. Rooms + RVs, Unfurnished Cabins	Rooms Rented	Occ.%	*Exempt Rooms*	Avail. Rooms + RVs, Unfurnished Cabins	Rooms Rented	Occ.%	*Exempt Rooms*
January	16357	5936	36.3%	*61*	17411	5237	30.1%	*0*	20375	7609	37.3%	*469*
February	17752	7189	40.5%	*209*	16580	7776	46.9%	*0*	16623	5915.36	35.6%	*386*
March	18804	6993	37.2%	*364*	17657	6782	38.4%	*7*	18899	7164	37.9%	*341*
April	16716	4941	29.6%	*191*	16620	4172	25.1%	*31*	16866	3535	21.0%	*0*
May	20240	11093	54.8%	*213*	21206	10002	47.2%	*57*				
June	21576	17520	81.2%	*88*	20577	16180	78.6%	*13*				
July	22375	20509	91.7%	*121*	20677	16551	80.0%	*432*				
August	23292	20798	89.3%	*215*	21613	17825	82.5%	*53*				
September	19088	13517	70.8%	*209*	21327	18930	88.8%	*47*				
October	17778	12038	67.7%	*95*	20398	12080	59.2%	*10*				
November	13529	3199	23.6%	*54*	15776	3196	20.3%	*260*				
December	17411	5237	30.1%	*12*	17828	5050	28.3%	*4*				
Total	224918	128970	57.3%	*1832*	227670	123781	52.1%	*914*	72763	24223.36	32.9%	*1196*

Data represents rooms for month in which lodging activity occurred.
LOT report and payment are due by 20th of following month.
"Rooms Rented" columns includes exempt rooms.
"*Exempt Rooms*" columns are for memo purposes only.

2023 Lodging Occupation Tax, By Business Category

AVAILABLE ROOMS	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Hotel, Motel	12,801	10,038	11,725	10,915									45,479
Bed and Breakfast	1,072	996	719	616									3,403
House, Townhouse, Condo (1)	3,929	3,265	3,882	2,845									13,921
RV Space, Unfurnished Cabin	2,573	2,324	2,573	2,490									9,960
Total Rooms	20,375	16,623	18,899	16,866	-	-	-	-	-	-	-	-	72,763
												Prior YTD	68,208

.

ROOMS RENTED	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Hotel, Motel	5,130	4,180	5,202	2,622									17,134
Bed and Breakfast	413	235	226	116									990
House, Townhouse, Condo (1)	1,171	845	1,015	247									3,278
RV Space, Unfurnished Cabin	895	655	721	550									2,821
Total Rooms	7,609	5,915	7,164	3,535	-	-	-	-	-	-	-	-	24,223
												Prior YTD	24,042

DOLLARS	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
													-
Hotel, Motel	$ 24,080.77	$ 20,935.36	$ 20,807.99	$ 12,210.47									$ 78,034.59
Bed and Breakfast	$ 2,078.19	$ 1,506.37	$ 1,231.12	$ 540.46									$ 5,356.14
House, Townhouse, Condo (1)	$ 9,520.90	$ 6,630.79	$ 6,889.70	$ 1,537.72									$ 24,579.11
RV Space, Unfurnished Cabin	$ 1,147.90	$ 652.97	$ 1,105.79	$ 903.05									$ 3,809.71
Total Dollars	$ 36,827.76	$ 29,725.49	$ 30,034.60	$ 15,191.70	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 111,779.55
												Prior YTD	114,061.29

Down 2% YTD

(1) For a property that is marketed as a stand-alone short-term rental, for which there are no hotel/motel ammenities offered.
Data represents rooms for month in which lodging activity occurred.
LOT report and payment are due by 20th of following month.
"Rooms Rented" columns includes exempt rooms.

Activity Month	2022	2023	% Change from 2022	YTD % Change
January	$ 27,661.19	$ 36,761.93	32.9%	32.9%
February	$ 32,883.88	$ 27,499.97	-16.4%	6.1%
March	$ 28,220.99	$ 23,074.54	-18.2%	-1.6%
April	$ 7,217.41	$ 6,674.51	-7.5%	-2%
May	$ 23,933.67			
June	$ 72,625.26			
July	$ 109,220.30			
August	$ 90,863.82			
September	$ 83,065.86			
October	$ 41,028.93			
November	$ 9,274.82			
December	$ 29,333.34			
Grand Total	**$ 555,329.49**	**$ 94,010.95**		

Revenue by Fund	2022	YTD 2023	Cumulative
Affordable/Attainable Housing	$ 277,664.74	$ 47,005.48	**$ 324,670.22**
Water Capital Improvements	$ 138,832.37	$ 23,502.74	**$ 162,335.11**
Sewer Capital Improvements	$ 138,832.37	$ 23,502.74	**$ 162,335.11**
Cumulative Total Raised			**$ 649,340.44**

Affordable Housing Revenue and Expenses	2022	YTD 2023	Cumulative
Total Raised	$ 277,664.74	$ 47,005.48	**$ 324,670.22**
Total Spent	$ (110,000.00)	$ (30,778.75)	**$ (140,778.75)**
Total Remaining	$ 167,664.74	$ 16,226.73	**$ 183,891.47**

Average 2023 YTD Income Reported Per Property	**$ 6,258.76**
Average 2023 YTD Excise Tax Paid Per Property	**$ 938.81**

Check Date	Payee	Amount	Description
4/20/2022	Home Trust of Ouray County	$ 10,000.00	2022 Operating funds
1/4/2023	Home Trust of Ouray County	$ 100,000.00	734 4th St
2/1/2023	Home Trust of Ouray County	$ 20,000.00	2023 Operating funds
4/26/2023	Economic & Planning Systems Inc	$ 3,847.50	Housing needs analysis
5/24/2023	Economic & Planning Systems Inc	$ 3,505.00	Housing needs analysis
6/7/2023	Buckhorn Engineering	$ 3,426.25	Cascade Park Geohazard Assessment

City of Ouray Hot Springs Pool and Fitness Center - Visitor and Revenue Trends

(Source: Point of Sale Software)

VISITORS	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	% change from 2022
January	7,496	9,160	9,287	36	9,392	8,553	8,149	4,961	5,258	6,871	30.68%
February	6,177	7,158	9,095	13	7,342	5,970	7,836	4,824	6,660	5,599	-15.93%
March	7,832	10,045	10,087	58	10,468	9,118	3,638	7,697	8,621	7,148	-17.09%
April	4,277	5,691	6,195	16	7,048	5,481	-	7,104	5,249	4,693	-10.59%
May	10,040	11,798	12,065	2,984	13,346	11,397	-	11,580	9,549	10,602	11.03%
June	18,294	20,970	22,404	18,175	24,764	24,525	1,540	25,977	20,156		
July	29,009	32,485	36,116	37,483	35,943	36,986	6,416	30,994	26,286		
August	21,625	22,377	22,353	25,486	23,936	23,274	12,622	22,179	19,101		
September	10,617	14,334	9,258	16,065	16,397	14,833	11,946	13,612	14,652		
October	6,473	7,360	62	9,834	8,771	9,596	10,699	9,368	10,135		
November	6,576	6,878	49	7,077	7,043	6,920	4,644	6,782	5,354		
December	7,158	7,646	47	10,753	9,046	8,174	4,439	6,317	6,510		
TOTAL YEAR	**135,574**	**155,902**	**137,018**	**127,980**	**173,496**	**164,827**	**71,929**	**151,395**	**137,531**	**34,913**	

REVENUE	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	% change from 2022
January	$ 70,853.78	$ 84,848.13	$ 85,983.09	$ 2,189.00	$ 89,885.46	$ 95,701.53	$ 99,306.81	$ 66,989.85	$ 63,150.43	$ 96,783.56	53.26%
February	$ 58,070.40	$ 62,350.28	$ 78,569.69	$ 724.00	$ 70,970.13	$ 65,918.59	$ 97,215.12	$ 61,086.55	$ 85,924.20	$ 112,926.04	31.43%
March	$ 73,228.30	$ 92,289.88	$ 84,745.80	$ 1,012.00	$ 102,232.15	$ 108,526.39	$ 47,810.30	$ 106,419.45	$ 126,759.01	$ 120,467.93	-4.96%
April	$ 35,578.60	$ 50,940.75	$ 52,112.54	$ 2,234.00	$ 72,957.12	$ 62,025.47	$ -	$ 98,819.49	$ 152,003.71	$ 133,097.92	-12.44%
May	$ 90,214.50	$ 109,383.77	$ 108,047.29	$ 123,474.60	$ 155,881.40	$ 138,237.34	$ -	$ 162,720.12	$ 143,279.82	$ 208,335.74	45.40%
June	$ 175,517.27	$ 186,061.57	$ 211,853.56	$ 166,974.02	$ 317,542.31	$ 311,093.17	$ 19,273.04	$ 352,538.72	$ 321,377.13	$ -	
July	$ 278,448.14	$ 300,620.51	$ 332,026.16	$ 479,802.39	$ 455,519.84	$ 474,330.32	$ 74,169.01	$ 428,489.09	$ 452,460.99	$ -	
August	$ 196,542.94	$ 194,321.61	$ 198,465.34	$ 326,151.96	$ 308,882.04	$ 295,953.46	$ 165,977.58	$ 312,872.14	$ 316,183.52	$ -	
September	$ 93,619.70	$ 127,909.15	$ 80,149.87	$ 184,807.92	$ 200,777.07	$ 188,131.33	$ 158,666.78	$ 186,412.51	$ 238,796.90	$ -	
October	$ 56,515.76	$ 63,216.05	$ 2,737.00	$ 82,537.92	$ 99,235.68	$ 120,843.43	$ 145,302.53	$ 131,806.01	$ 170,555.12	$ -	
November	$ 55,891.66	$ 54,218.80	$ 1,796.25	$ 62,435.74	$ 84,885.49	$ 83,976.37	$ 58,403.16	$ 88,639.21	$ 84,930.60	$ -	
December	$ 73,048.24	$ 74,421.59	$ 1,957.00	$ 112,212.40	$ 111,645.98	$ 105,050.32	$ 60,304.81	$ 79,891.78	$ 94,844.99	$ -	
TOTAL YEAR	**$ 1,257,529.29**	**$ 1,400,582.09**	**$ 1,238,443.59**	**$ 1,544,555.95**	**$ 2,070,414.67**	**$ 2,049,787.72**	**$ 926,429.14**	**$ 2,076,684.92**	**$ 2,250,266.42**	**$ 671,611.19**	

Visitors are down 1% YTD
Revenue is up 17.6% YTD

CITY OF OURAY BOX CAŇON FALLS VISITOR CENTER - VISITOR AND REVENUE TRENDS

VISITORS

	2018		2019		2020		2021		2022		2023		Incr./Decr. Visitors	23 vs. 22 %
MAY	6048		4065				8454		7619		6044		(1,575)	-20.67%
JUNE	11793		13729		9252		20138		17165					
JULY	17819		20914		21473		23929		20702					
AUGUST	11737		13872		17086		15821		14428					
SEPTEMBER	8914		9903		14033		12245		13207					
OCTOBER	3963		5721		10540		8022		9416					
TOTAL VISITORS	**60,274**		**68,204**		**72,494**		**88,696**		**82,827**				**(1,372)**	

REVENUES

	2018		2019		2020		2021		2022		2023		Incr./Decr.	23 vs. 22
	Adm.	Conc.	Adm.	Conc.	Adm.	Conc.	Adm.	Conc.	Adm.	Conc.	Adm.	Conc.	$	%
MAY	$ 25,699.50	$ 2,682.41	$ 21,118.11	$ 2,427.75			$ 37,554.63	$ 4,489.23	$ 33,477.00	$ 4,754.40	$ 37,736.00	$ 3,803.27	$ 3,307.87	8.65%
JUNE	$ 50,013.95	$ 5,058.44	$ 62,137.51	$ 6,338.97	$ 41,263.44	$ 2,884.13	$ 86,023.51	$ 11,273.73	$ 72,989.00	$ 8,865.86				
JULY	$ 75,561.60	$ 7,576.29	$ 89,005.01	$ 8,540.88	$ 92,936.75	$ 5,933.87	$ 102,023.52	$ 12,507.75	$ 87,714.00	$ 10,907.87				
AUGUST	$ 50,370.69	$ 5,159.73	$ 59,804.50	$ 5,944.70	$ 75,438.78	$ 5,170.58	$ 68,804.43	$ 8,937.53	$ 61,701.00	$ 8,385.38				
SEPTEMBER	$ 39,016.59	$ 3,853.74	$ 43,140.50	$ 4,469.76	$ 62,818.85	$ 4,760.34	$ 54,165.46	$ 7,832.49	$ 56,163.00	$ 7,721.29				
OCTOBER	$ 17,605.00	$ 2,358.41	$ 24,735.00	$ 2,398.45	$ 46,641.76	$ 3,253.98	$ 35,177.89	$ 4,531.50	$ 41,064.00	$ 5,773.08				
TOTAL $	**$ 258,267.33**	**$ 26,689.02**	**$ 299,940.63**	**$ 30,120.51**	**$ 319,099.58**	**$ 22,002.90**	**$ 384,124.45**	**$ 49,614.46**	**$ 354,402.00**	**$ 46,439.77**	**$ 37,736.00**	**$ 3,803.27**	**$ 4,216.52**	

Admission rate increased by $1.00 in 2018

opened May 12, 2023
Admission rate increased by $2.00 in 2023

CITY OF OURAY VISITOR CENTER - REVENUE TRENDS

REVENUES

	2022	2023	Incr./Decr.	23 vs. 22
	Concessions	Concessions		
January		$ 281.95	$ 281.95	
February		$ 236.84	$ 236.84	
March		$ 399.38	$ 399.38	
April		$ 455.75	$ 455.75	
May		$ 1,836.13	$ 1,836.13	
June				
July	$ 1,125.80			
August	$ 1,965.90			
September	$ 2,491.66			
October	$ 1,658.05			
November	$ 501.36			
December	$ 595.45			
TOTAL $	**$ 8,338.22**	**$ 3,210.05**	**$ 3,210.05**	

May - Jun 2023 IT Highlights

- Kiosks completed and physically secured at the Visitor Center. These are 3 Kiosk iPads set to access the VisitOuray website and affiliated links. Slide show movie presentation set on screens while not in use.
- Cameras reestablished on Pool slide and camera moved to new Snack Shack location.
- New antenna installed at Via Ferrata camera for better reception
- Speed dials and addressbook entries for staff numbers pushed to Polycom phones.
- All physical and virtual servers upgrades completed. The change was from 2012 R2 to Microsoft Server 2019 for long term bug and security updates support. Replication and backups verified. Audit controls turned on.
- Recycling of old electronics was completed.
- PD archive search software was reconfigured and the main database moved from a desktop computer to a server
- City GIS map connection made to iWorq community development software project.
- Monitoring was added to another battery backup location to obtain better information about power outages.

CCEC Report

Friday, 06.16.2023

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Project Updates

Main Street Program Application Progress

1. An on-site visit will be conducted on Thursday, Jun 22, 2023 from 9:00 am to 1:00 pm with DOLA representatives Traci Stoffel, Cory Nicholson, Jessica Rupe, and possibly Patrick Rondinelli. This will include a tour of Ouray before attending the Main Street Steering Committee meeting. During this tour we will assess our Main Street challenges and how to best address them.
2. The Main Street Steering Committee will meet on Thursday, Jun 22, 2023 at 11:30 am. During this meeting we will vote on officers, approve bylaws, meet the DOLA reps, look at our Strategic Plan, and discuss the Main Street goals and challenges.

City Updates

Website

1. At the time of this report, there are 130 registered businesses, with a couple of additions that will be input after the paperwork is processed. A listing of registered businesses can be found on the Business Registration & Licensing page. The list includes their Registration #, Business Name, industry, phone number, and website address if provided. They are grouped by Industry alphabetically. A new column has been added to show if the annual renewal has been completed.
2. A Press Release was posted by the City of Ouray PIO, written by the Department of Local Affairs regarding the City of Ouray being accepted to the Colorado Main Street Program. This was added to our City website in Latest News on 3/31/23.

Autumn Bailey
Communications and Community Engagement Coordinator C | 970.318.6788 E | ABailey@cityofouray.com

3. A Press Release was posted by the City of Ouray PIO regarding the blasting operations occurring for the Water Treatment Plant. This was added to our City website in Latest News on 6/8/23 and will expire within three weeks of posting.

4. A new "Latest News" article was created titled "WENS Alerts & Updates". As we have had a few public messages go out utilizing the WENS system it became apparent that a space should be created for public viewing of these messages. When the message only pertains to a specific geographic area we were receiving feedback that people who work within that area were not receiving the message. This is due to their registered address within WENS being outside of the designated area for that message. It is our hope that this "Latest News" article will be a helpful resource to point people towards for questions or updates on WENS messages.

5. The "Alert" popup has been heavily utilized and appears to be receiving great feedback as a quick resource for important information.

6. Calendar events are updated daily and are viewable on the homepage of our new website.

7. Work continues to be done on pages that need updating. Thank you to everyone for their assistance and patience in this process!

Ouray Economic Development Committee

1. The Ouray Economic Development Committee (OEDC) will be celebrating the recent 2023 Micro-Grant Program success with donors meeting the awardees from this round of funding at a gathering on June 27. The OEDC received 16 applications with over $70k in requests. With the help of donors, they were able to award $27,500 to 13 applicants. Sending special thanks to our donors: Citizen's State Bank, Ouray Chamber, San Juan Mountain Guides, The Robertsons, and The Lauderdales. The remaining 3 applicants received letters with ways to better improve their application request for the next round of micro-grants.

Meetings and Training

1. Attended the Main Street Historic Preservation Month Webinar on Thursday, May 18 and learned about how to better preserve or assist with facade improvements in a manner that showcases proper design choices and materials for the era of the historic building.

2. Attended the West Region PIO Call on Thursday, May 18 and received updates on regional events and PIO communications.

3. Attended a meeting with DOLA on May 24 to learn about the DOLA Grants Portal. Traci Stoffel walked me through the process of completing the necessary steps to have our Main Streets Program mini-grants and scholarship funds requested for funding. Ouray's Main Street mini-grant was fully executed and notified to us on June 1. The scholarship was also fully executed and notified to us on June 6. This was mucho sooner than expected as we thought we would need to wait for the next funding window. As Traci said, "We must have hit the lull before the end-of-fiscal-year storm."

4. Attended the Main Street Historic Preservation Month Webinar on Thursday, May 25. There is a recently launched new ERA program with a maximum of $5M project. ($$$)! This FOA (attached) utilizes a simplified application process and will award fixed-amount grants. This grant mechanism significantly reduces financial reporting requirements associated with larger DOE awards. Recipients are responsible for accomplishing their proposed work. There is no cost match associated with this program. Click here for more information.

5. Attended the Main Street Manager Orientation on Thursday, May 31.

6. Attended Tiny Town Talk on Tuesday, June 2. This is with Downtown Colorado for municipalities with a populous under 1,000. Right now the focus is on DCI Districts Legislation Update. This is a reminder that the CML Annual Conference is June 25-28 in Aurora.

7. Attended the Regional Partners Update on Wednesday, June 7. This was with Kailey Rhoten and representatives form surrounding areas to discuss upcoming events, marketing strategies, and how we can collaborate together or help each other out. This will be an ongoing meeting once per season at the beginning of each season.

8. Attended the OEDC meeting on June 8.

UPCOMING CLOSURES:

Monday, June 19 · Juneteenth · City Offices Closed

Tuesday, July 4 · Independence Day · City Offices Closed

Upcoming Events

- Saturday, June 17 · 10:00 am – 2:00 pm · **Community Cleanup Day**
  - 10:00 AM - 2:00 PM | Four large **dumpsters** will be available in the RV Catchment Basin parking lot off of west 9th Avenue.
  - 10:00 AM - 2:00 PM | **E-Waste Recycle Day**. Drop Lock-Bin is located in front of City Hall.
  - 12:00 PM - 4:00 PM | Paint Drop-off at Rotary Park hosted by **PaintCare.org**
- **Sunday, June 18 · Father's Day**
- **Monday, June 19 · Juneteenth - City Offices Closed**
- Monday, June 19 · 11:00 am – 1:00 pm · **Community Mental Health Training** Hosted by **Woman's Club of Ouray County (WCOC)**
- Monday, June 19 · 5:00 – 7:00 pm · **Community Mental Health Training** Hosted by **Woman's Club of Ouray County (WCOC)**
- Tuesday, June 20 · 4:30 – 6:30 pm · **Tourism Advisory Committee Meeting (TAC)**
- **Tuesday, June 20 · 6:00 – 8:00 pm · City Council Regular Meeting**
- Wednesday, June 21 · 6:00 – 8:00 pm · **Ouray Ice Park Inc Board Meeting (OIPI)**
- June 22 – 25 · **Ouray International Film Festival - Fourth Annual Summer Festival**
- Thursday, June 22 · 6:00 – 9:00 pm · **Mountain Air Music Series**
- Friday, June 23 · 6:30 – 11:45 pm · Movie in the Park hosted by **The Ouray International Film Festival**
- Thursday, June 29 · 6:00 – 9:00 pm · **Mountain Air Music Series**
- Friday, June 30 · 9:00 am – 3:00 pm · **Woman's Club of Ouray County (WCOC) Annual Rummage Sale**
- Saturday, July 1 · 9:00 am – 2:00 pm · **Woman's Club of Ouray County (WCOC) Annual Rummage Sale**

Not an all-inclusive list. Please see cityofouray.com for the calendar of events.

*Events are subject to change. Check calendars or verify with the host.

Autumn Bailey
Communications and Community Engagement Coordinator C | 970.318.6788 E | ABailey@cityofouray.com

DR 8439 (09/28/18)
COLORADO DEPARTMENT OF REVENUE
Liquor Enforcement Division
(303) 205-2300

Application for a Special Events Permit

Departmental Use Only

In order to qualify for a Special Events Permit, You **Must Be Nonprofit and One of the Following** (See back for details.)

- [x] Social
- [ ] Athletic
- [ ] Philanthropic Institution
- [ ] Fraternal
- [ ] Chartered Branch, Lodge Or Chapter
- [ ] Political Candidate
- [ ] Patriotic
- [ ] Of A National Organization Or Society
- [ ] Municipality Owning Arts Facilities
- [ ] Political
- [ ] Religious Institution

LIAB	Type of Special Event Applicant is Applying for:	
2110	[x] Malt, Vinous And Spirituous Liquor	$25.00 Per Day
2170	[ ] Fermented Malt Beverage (3.2 Beer)	$10.00 Per Day

DO NOT WRITE IN THIS SPACE
Liquor Permit Number

1. Name of Applicant Organization or Political Candidate: Ouray Volunteer Fire Department
State Sales Tax Number (Required): 98-05775

2. Mailing Address of Organization or Political Candidate (include street, city/town and ZIP)
Po Box 468
Ouray, CO 81427

3. Address of Place to Have Special Event (include street, city/town and ZIP)
Fellin Park
1200 Main St
Ouray Co 81427

	Name	Date of Birth	Home Address (Street, City, State, ZIP)	Phone Number
4. Pres./Sec'y of Org. or Political Candidate	Adam Kunz			
5. Event Manager	Adam Kunz			

6. Has Applicant Organization or Political Candidate been Issued a Special Event Permit this Calendar Year?
[x] NO [ ] YES HOW MANY DAYS? _____

7. Is premises now licensed under state liquor or beer code?
[x] NO [ ] YES TO WHOM? _____

8. Does the Applicant Have Possession or Written Permission for the Use of The Premises to be Licensed? [ ] Yes [ ] No

List Below the Exact Date(s) for Which Application is Being Made for Permit

Date	Date	Date	Date	Date
7/3/23				
Hours From 10 a.m.	Hours From .m.	Hours From .m.	Hours From .m.	Hours From .m.
To 11:59 p.m.	To .m.	To .m.	To .m.	To .m.

Oath of Applicant

I declare under penalty of perjury in the second degree that I have read the foregoing application and all attachments thereto, and that all information therein is true, correct, and complete to the best of my knowledge.

Signature	Title	Date
	Fire Chief	4/21/23

Report and Approval of Local Licensing Authority (City or County)

The foregoing application has been examined and the premises, business conducted and character of the applicant is satisfactory, and we do report that such permit, if granted, will comply with the provisions of Title 44, Article 5, C.R.S., as amended.

THEREFORE, THIS APPLICATION IS APPROVED.

Local Licensing Authority (City or County)	[ ] City [ ] County	Telephone Number of City/County Clerk

Signature	Title	Date

DO NOT WRITE IN THIS SPACE - FOR DEPARTMENT OF REVENUE USE ONLY

Liability Information

License Account Number	Liability Date	State	Total
		-750 (999)	$

(Instructions on Reverse Side)

DR 8439 (09/19/19)
COLORADO DEPARTMENT OF REVENUE
Liquor Enforcement Division
(303) 205-2300

Application for a Special Events Permit

Departmental Use Only

In order to qualify for a Special Events Permit, You Must Be a Qualifying Organization Per 44-5-102 C.R.S. and One of the Following (See back for details.)

- ☐ Social
- ☒ Fraternal
- ☐ Patriotic
- ☐ Political
- ☐ Athletic
- ☐ Chartered Branch, Lodge or Chapter
- ☐ National Organization or Society
- ☐ Religious Institution
- ☐ Philanthropic Institution
- ☐ Political Candidate
- ☐ Municipality Owned Arts Facilities

LIAB	Type of Special Event Applicant is Applying for:	
2110	☒ Malt, Vinous And Spirituous Liquor	$25.00 Per Day
2170	☐ Fermented Malt Beverage	$10.00 Per Day

DO NOT WRITE IN THIS SPACE
Liquor Permit Number

1. Name of Applicant Organization or Political Candidate: Ouray Elks Lodge 4th of July
State Sales Tax Number (Required): 04-01748-0002

2. Mailing Address of Organization or Political Candidate (include street, city/town and ZIP): 421 Main St Ouray Co 81427

3. Address of Place to Have Special Event (include street, city/town and ZIP): Same

4. Authorized Representative of Qualifying Organization or Political Candidate: Bette Maureen
Date of Birth:
Phone Number:

Authorized Representative's Mailing Address (if different than address provided in Question 2.)

5. Event Manager
Date of Birth:
Phone Number:

Event Manager Home Address (Street, City, State, ZIP): 339 2nd St Ouray Co 81427
Email Address of Event Manager:

6. Has Applicant Organization or Political Candidate been Issued a Special Event Permit this Calendar Year?
☐ No ☐ Yes How many days? _____

7. Is the premises for which your event is to be held currently licensed under the Colorado Liquor or Beer codes?
☐ No ☒ Yes License Number _____

8. Does the Applicant Have Possession or Written Permission for the Use of The Premises to be Licensed? ☐ Yes ☐ No

List Below the Exact Date(s) for Which Application is Being Made for Permit

Date 7-3-23 Hours From 2 p.m. To .m.	Date 7-4-23 Hours From .m. To 12 a.m.	Date Hours From .m. To .m.	Date Hours From .m. To .m.	Date Hours From .m. To .m.
Date Hours From .m. To .m.	Date Hours From .m. To .m.	Date Hours From .m. To .m.	Date Hours From .m. To .m.	Date Hours From .m. To .m.
Date Hours From .m. To .m.	Date Hours From .m. To .m.	Date Hours From .m. To .m.	Date Hours From .m. To .m.	Date Hours From .m. To .m.

Oath of Applicant

I declare under penalty of perjury in the second degree that I have read the foregoing application and all attachments thereto, and that all information therein is true, correct, and complete to the best of my knowledge.

Signature	Title	Date
Bette Maureen	ER	5-30-23

Report and Approval of Local Licensing Authority (City or County)

The foregoing application has been examined and the premises, business conducted and character of the applicant is satisfactory, and we do report that such permit, if granted, will comply with the provisions of Title 44, Article 5, C.R.S., as amended.

THEREFORE, THIS APPLICATION IS APPROVED.

Local Licensing Authority (City or County)	☐ City ☐ County	Telephone Number of City/County Clerk

Signature	Title	Date

DO NOT WRITE IN THIS SPACE - FOR DEPARTMENT OF REVENUE USE ONLY

Liability Information

License Account Number	Liability Date	State	Total
		-750 (999)	$

320 6th Avenue
PO Box 468
Ouray, Colorado 81427

970.325.7211
Fax 970.325.7212
www.cityofouray.com

TO: Ouray City Council
FROM: Lily Oswald, Community Development Director
DATE: May 25, 2023
FOR: June 20, 2023
SUBJECT: Waterview PUD – Preliminary Plat Application Staff Report

PROJECT GEOGRAPHY

Table 1. Project Geography

Application Summary	This Preliminary Plat Planned Unit Development (PUD) is for residential development on two (2) vacant lots north of the Biota Building. The general intent of the PUD is to develop 65 affordable, owner-occupied residential units via single-family homes, duplexes, and triplexes with (3) in-unit home childcare opportunities in the first phase. *This PUD is proposed in two (2) phases of development to align with the City's Waste Water Treatment Facility upgrade – both phases are included in the Sketch Plan application. This application is proposed from Rural Homes, LLC, and refers to this project as the "Waterview PUD."*	
Address	250 Uncompahgre Street	
Parcel Number(s)	451725113001 and 451725113002	
Legal Description	Subd: Ouray Waterview Subdivision Lot 2 Lot Split Lot: 2A S: 25 T: 44 R: 8; and Subd: Ouray Waterview Subdivision Lot 2 Lot Split Lot: 2B S: 25 T: 44 R: 8	
Applicant/Owner	Paul Major (on behalf of Ouray Homes LLC)	
Zoning	C-2 – Commercial Industrial (north of Skyrocket)	
Existing Use	Vacant	
Proposed Use	New construction of various dwelling unit types in two phases via PUD	
Site Size	9.21 acres	
Adjacent Land Uses		
North:	R-2; Single-Family Residential (Chautauqua Lane)	
South:	C-2; Industrial (Biota Building)	
East:	C-2; Vacant	
West:	Uncompahgre River	
Located Within National or Local Historic District Boundary		No
Located Within Commercial Historic Boundary		No

Table 2. Zone District Dimensional Requirements (C-2, north of Skyrocket Creek)

Requirement	Zone District Standards	Proposed/Existing
Minimum Lot Area	7,100 sq.ft.	**See Exhibit C of lot sizes by unit type** Average proposed lot: 3,833 sq.ft.
Maximum Density	3,550 sq.ft./D.U., 1,183 sq.ft./L.U.	Total lot size: 401,188 sq. ft./3,550 = 113 total dwelling units ***allowed*** Proposed: 65 dwelling units (roughly 7 DUs/acre)
Minimum Setbacks		*TBD with Building Permit*
Maximum Floor Area	15,000 sq.ft.	*TBD with Building Permit* See Exhibit C for Unit Type by Square Feet for both phases = Avg. floor area: 1,299 sq.ft.
Maximum Site Coverage	40% for residential use 50% for mixed use 60% for commercial use	Will not exceed 40%
Maximum Building Impervious Surface Site Coverage	80% for any use	Will not exceed 80%
Maximum Height	35 ft.	27' 6"
Parking	Two (2) Spaces per Residential Unit	Two (2) Spaces per Single-Family Dwelling Units, Duplex Units, and "end" Triplex Units Three (3) Spaces per Single-Family Dwelling Unit with in-unit childcare One (1) Space per "middle" Triplex Units Twenty-four (24) additional on-street parking spaces provided
PUD Open Space Coverage	20%	23% (See Exhibit F)

BACKGROUND

The Applicant received Sketch Plan approval for the property at a Planning Commission meeting on March 21, 2023. The Applicant submitted a Preliminary Plat application for the Planned Unit Development (PUD) per Ouray Municipal Code process. This PUD is for residential development on two (2) vacant lots north of the Biota Building. The general intent of the PUD is to develop 65 affordable, owner-occupied residential units via single-family homes, duplexes, and triplexes with (3) in-unit home childcare opportunities in the Phase 1 (see Exhibits G, I & J). These units will be deed restricted in perpetuity. The Preliminary Plat application proposes a new internal road to access the northernmost proposed lots and landscaped connections to the existing River Trail (located in Phase 1 and Phase 2) as well as Open Space tracts dedicated to the City.

The *goals, timeline, design and intent remains the same as the Waterview PUD Sketch Plan application as presented during the January 10, 2023 and March 21, 2023 Planning Commission hearings.*

The Ouray City Council has supported the pursuit of grant funding through HB21-1271 (administered through the Colorado Department of Local Affairs) to fund public infrastructure and to keep this project as affordable as possible. The City was notified of a grant award of $1,050,000 to help fund infrastructure for this project. This funding must be used by April of 2024.

Foundation to PUD Variations

The Planned Unit Development ("**PUD**") regulations in the Ouray Municipal Code ("**OMC**") §7-8 establish the following Statement of Objectives of Development ("**PUD Objective**"):

> *"The intent of this section is to promote the Planned Unit Development Act of 1972 and encourage innovative developments with unique and valued community attributes. PUDs allow for consideration of development proposals that differ from required development improvements identified in the OMC. PUDs offer different options to the applicant when planning and obtaining City approval for their development. PUDs allow flexibility with respect to dimensional requirements and increased densities under certain conditions or circumstances. PUDs encourage conservation of a site's natural characteristics, innovative residential, commercial and industrial development plans which will result in a more efficient use of open space and provide affordable housing for year around residents."*

OMC §7-8-D establishes the following applicable dimensional requirements and densities:

The dimensional requirements for various PUD items may differ from what is required in the OMC if the City Council determines such deviations will promote the public health, safety and welfare.

The proposed variations to the code as a result of this PUD are summarized in Table 3 below:

Table 3. Requested PUD Variations

OMC Section	OMC Standard Requirement	Requested PUD Variation
7-5-E-4-d-iii-1	*Single Family Dwellings shall be not less than 24 feet in width and 32 feet in length.*	Some units proposed: Width: **16 feet** per specifications of factory partner (compliant with building codes)
7-5-E-4-f-i	*Two off-street parking spaces per dwelling unit.*	Proposed: **2** parking spaces per single-family dwelling unit, duplex unit, and end-triplex unit; **3** parking spaces per in-unit childcare single-family dwelling unit; **1** parking space per middle-triplex unit; **24** additional off-street parking spaces in proposed internal road.
7-5-D	*Minimum Lot Area - (C-2) north of Skyrocket: 7,100 square feet*	(See Exhibit C for proposed lots and sizes) Average proposed lot size: **3**,**833** square feet
7-5-D	*Minimum Side Setback - (C-2) north of Skyrocket: 5 feet*	Duplex and Triplex dwelling units will have proper fire separation to meet state and local building codes; however, these shared party walls will result in **0-foot** side setbacks in these lots.

Process to Create a PUD

The Planning Commission is a recommending body for the Preliminary Plat phase of PUD applications. The City Council must make final PUD decision(s) during the consideration of Preliminary and Final Plat phases.
OMC §7-8-E: Procedures, states "*PUDs shall be reviewed in accordance with the same procedures for review of subdivisions as found in Subsection 7-7-C*" and *"preliminary and final PUD plan shall comply with all requirements for a preliminary and final subdivision plat**, to the extent applicable."***

The procedures for reviewing a PUD include the following Subdivision steps:

1. **Sketch PUD** with Planning Commission review and determination pursuant to the Subdivision Sketch Plan in OMC §7-7-C-2.
2. **Preliminary PUD** with Planning Commission review and recommendation to the City Council for determination pursuant to the Subdivision Preliminary Plat in OMC §7-7-C-3.
3. **Final PUD** with Planning Commission review and recommendation to the City Council for determination pursuant to the Subdivision Final Plat in OMC §7-7-C-4.

CRITERIA FOR DECISION

1. **OMC §7-8-B establishes the following primary PUD criteria for decision:**
   A. A PUD shall be in general conformity with the City Community Plan
   B. A PUD shall be consistent with the PUD Objective
   C. Compliance with the Colorado Planned Unit Development Act of 1972
   D. A PUD shall have a minimum of 1 unit or lot

2. **OMC §7-7-D-2 establishes the Requirements and Data on Preliminary Plats.**

3. **OMC §7-7-E establishes typical Subdivision Design Standards.**

STAFF ANALYSIS: PUD CRITERIA FOR DECISION

1. A. General Conformity with the Ouray Community Plan

Staff finds this PUD proposal aligns with numerous goals and strategies of the Ouray Community Plan 2021. The proposed development aims to provide homes for affordable housing AMI levels appropriate to serve the greater Ouray community and to diversify the housing available in Ouray as well as provide attainable housing solutions for year-round local residents and employees. Some applicable goals and strategies from the Community Plan are outlined below.

- Housing Goal H-1-A: "*assure attainable housing is permanently affordable utilizing deed restrictions or other available tools*" (Ouray Community Plan, pg. 16).
- Housing Goal H-1-B: *"consider amending the LUC and the city adopted building regulations to provide robust incentives for the development of attainable housing in the community"* (pg. 16).
- Housing Goal H-1-B-vi: *"allowing for homes with a high density on one or more lots, including reducing lot sizes, frontages and setbacks to facilitate small home development"* (pg. 16).
- Housing Goal H-1-E: "*support and encourage attainable rental and for-sale housing throughout the community in a variety of unit types and densities in all the city zoning districts, live-work units, small homes, multi-family developments, dormitory or 'POD' style units, and other unit types that provide for attainable housing*" (pg. 17).
- Housing Goal H-1-G: "*explore public/private partnerships to provide attainable housing*" (pg. 17).
- Housing Goal H-1-I: "*support, encourage and require new development to provide a variety of bedroom mixes, unit sizes, dwelling types, rental and ownership structures, and attainability limits that are based on an updated community housing needs assessment*" (pg. 17).
- Housing Goal H-1-Q: "*strive to provide attainable housing for 50% of the local workforce in the city*" (pg. 18).
- Housing Goal H-1-R: "*evaluate annexations and PUDs to provide attainable housing*" (pg. 18).
- Housing Goal H-2: "*cooperate and work with the Town of Ridgway, Ouray County, DOLA, the development community, and other entities to plan and develop attainable housing*" (pg. 18).
- Housing Goal H-3-D: "*promote energy efficient and 'green building' techniques to reduce household energy consumption, utility bills, and help maintain long-term affordability in new housing*" (pg. 19).
- Housing Goal H-3-F: "*strive to provide housing located in close proximity to existing or planned infrastructure, services, intermodal transit connections, sidewalks, trails and employment*" (pg. 19).
- Life Long Learning Goal LL-3-A: "*support incentives or programs to provide affordable daycare facilities throughout the city, such as land donations, fee and tap waivers, streamlined review processes, zoning allowances, or the formation or expansion of non-profits that provide childcare*" (pg. 21).
- Community Health Goal CH-1-C: "*promote, develop, improve and maintain city recreational assets for active living, such as hiking at Box Canyon Park, walking the Uncompahgre River Walk Trail, hiking on the Perimeter Trail or swimming, water aerobics and the gym at the Hot Springs Pool*" (pg. 26).
- Land Use Goal LU-1-A-iv-b: "*consider allowing for the reduced lot size only if a primary dwelling unit or an ADU is provided that is deed restricted to provide housing to employees working within the geographic boundary of Ouray County*" (pg. 32).
- Land Use Goal LU-1-A-xv: "*encourage attainable housing to be provided in existing RV parks, light industrial, commercial and other properties through LUC and other incentives*" (pg. 34).
- Economic Development Goal ED-2-L: "*encourage and incentivize the provision of attainable housing; childcare; desired community amenities; connectivity and a high quality of life to drive economic resiliency*" (pg. 51).
- Energy Goal RE-6: "*encourage and support other alternative energy uses in the city, including solar, wind,*

ground source heat pumps and biomass energy production" (pg. 74).

- The Future Land Use Map illustrates this site as **Mixed Land Use** (pg. 40). Mixed Land Use is oriented for "*multi-family dwellings with limited commercial uses, to be determined*" (pg. 42). Description/Character include:
    - *Provide incentives to maximize housing units, such as height increases via PUD, increases in density, scale and mass, and site coverage, and reduced parking.*
    - *Consider requiring a certain percentage of deed restricted housing units in exchange for incentives to ensure long-term affordability.*
    - *Allow limited and service commercial uses provided significant housing is provided.*
    - *Enhance and embrace River Park corridor and overall trail connectivity* (pg. 42).

1. B. Consistency with the PUD Objective

Key elements of the PUD objective include:

- Encourage innovative developments with unique and valued community attributes.
- Allow for consideration of development proposals that differ from required development improvements identified in the OMC.
- Offer different options to the applicant when planning and obtaining City approval for their development.
- Allow flexibility with respect to dimensional requirements and increased densities under certain conditions or circumstances.

"PUDs encourage conservation of a site's natural characteristics, innovative residential, commercial and industrial development plans which will result in a more efficient use of open space and provide affordable housing for year-round residents" (OMC §7-8-A). Staff finds the Applicant is seeking to create an innovative use of space as a PUD on the currently vacant lot. The PUD process provides an opportunity for the Applicant to seek flexibility with the dimensional standards in order to provide long-term attainable housing solutions and effective use of space, both of which are primary goals of the community under the adopted Plan.

1. C. Compliance with the Colorado PUD Act

The key requirements of the Colorado PUD Act have been incorporated into the PUD section of the OMC. A development improvements agreement will be drafted by the Applicant and executed by the City as part of the Building Permit process and prior to the Final Plat phase of the PUD to ensure infrastructure installation, maintenance, building standards, engineering standards, etc. are met and coordinated throughout the development process. This document will additionally ensure the infrastructure development remains compliant with the Colorado PUD Act.

1. D. Minimum Density

The minimum density of one unit or lot has been met.

STAFF ANALYSIS: REQUIRED DATA ON PRELIMINARY PLATS (OMC §7-7-D-2)

The data and information outlined in §**7-7-D-2** for Preliminary Plats has been met for this application among the various items submitted (see Exhibits A, D, E, & F). The information contained in this section ranges from a scale, north arrow, location of lot lines, elevation contours, and utility plans.

The final site grading plan, proposed sewer and water lines connections, storm drainage systems, the location, pipe sizes, valves, discharge points, and access points will be coordinated with the City's Public Works Department at a preconstruction meeting prior to the Final Plat application.

STAFF ANALYSIS: TYPICAL SUBDIVISION DESIGN STANDARDS (OMC §7-7-E)

General Design Standards:

As discussed above, this project is in general conformance with the goals and strategies identified in the 2021 Ouray Community Plan and the future land use map contained in the Community Plan. This project is designed as a phased approach in an effort to not over-burden the City's infrastructure capacity. This project was designed with phased density to complement the surrounding subdivision/land uses and surrounding open spaces. This project maintains access, layout, and terms identified for the variety of berm/utility/ditch easements located on the site. This project gives consideration to the preservation and connection of open spaces and the Uncompahgre River and trail.

Streets and Circulation:
The prior-plotted Uncompahgre Street will serve as immediate access from Highway 550 to this site. The Applicant proposes improving a section of Uncompahgre Street to match the improvement of the proposed new internal street for the project and will work with the City on this improvement. The continuation of Uncompahgre Street west of what is proposed in this project will be a future discussion for the City Council.
The new, proposed internal street, "Waterview Street" features 2 driving lanes, a parallel parking area adjacent to Lots 3 through 21, curbs, and 5-foot sidewalks on both sides (see Exhibit D).
The proposed internal street meets City Infrastructure Standards and has been coordinated with the City Public Works, County EMS, Fire Department, and School District to ensure proper access and width.
There is an additional emergency access identified between Lots 43 and 44 ("Tract G") which will be closed to public use, but available to the City Public Works Department, Fire Department, and County EMS for emergency access.
Staff note: "Waterview Street" may have to be renamed in future submittals and as a condition of this preliminary plat (see Exhibit B).

Lots:
The project proposes 65 lots for residential unit development and various tracts for dedication to the City and easement holders. The depth and width of the proposed lots range in size, and provide for off-street parking and multi-family dwelling unit access where applicable (see Exhibit A). All of the proposed lots are considered accessible and developable. Phase 2 lots feature northern lots larger in size, with greater rear setbacks to provide a landscape buffer between the Waterview PUD and the Chautauqua subdivision.

Water, Fire Protection and Sewer Systems:
Utility infrastructure is available and present. The project proposes connections to the existing water and sewer lines to meet code requirements and infrastructure standards. *Water and sewer connections will continue to be coordinated with the Public Works Department.* Unless otherwise agreed upon by the City Council, the applicant shall also be required to pay tap investment fees for all water and sewer tap connections as proposed in the preliminary plat.
The Preliminary Plat documents were distributed to the Ouray County EMS, Ouray Fire Department, Public Works Department, and Ouray School for review and consideration of proposed connections, easements, fire hydrants, and drainage. Comments received have been compiled in Exhibit K.

Drainage, Hazard Mitigation, and Snow Storage:
This site has minimal slope and existing hazards. This site is not directly located within an identified Flood Hazard Area. Although hazard mitigation drainage will be minimal for this project, the Applicant had a Geotechnical Engineering Study completed for the proposed development to help guide foundation setting, grading, retention areas, and drainage to best serve the future residents of this PUD (see Exhibit L).
Since this project does include additional paved roads and infrastructure, snow storage areas will be coordinated with the Public Works department to ensure the open space tracts and remainder of Uncompahgre Street area can host the snow accumulation for the PUD.

Plat Notes and Monuments:
Final Plat notes shall be reviewed and revised as necessary by City Council and the Planning Commission during the Final Plat phase. Monuments are present from the original Waterview Subdivision plat (Reception No. 211406, see Exhibit H). Additional monuments will be placed according to code as part of this project's infrastructure.
The dedicated Tracts and areas as shown on the submitted Preliminary Plat documents will be considered by the City Council and applicable agencies to ensure proper mitigation and responsibilities are coordinated and agreed upon.

Parks, Trails, Open Space, Recreation Facilities, Common Areas:
This project proposes areas for public open space and connections to the Uncompahgre River Trail (see Exhibit E).
The common areas and open spaces included in this application are dedicated to the City of Ouray, which will have to be discussed further by the City Council.
The Applicant amended the original Sketch Plan application of this project to enhance the landscape corridor of the eastern side of the lot, near Highway 550, as recommended by the Planning Commission.
This project proposes 5-foot wide, ADA-compliant sidewalks within the PUD as part of the greater ROW design.

The park dedication requirement per subsection 14-g. is less than 2 acres, which does not meet the minimum area for a city park. Therefore, the code would require the applicant to pay a fee-in-lieu of $1,203.00 per new lot (65 new lots proposed x $1,203 = $78,195) prior to the recording the Final Plat. *Staff recommends waiving the public park fee-in-lieu as permitted by section 14.i.ii. of the code due to the goals of this affordable housing project, the PUD meets the Open Space coverage requirements of the code, and because the project proposes installation of connections to recreational areas and public park areas. This fee may be reduced by City Council consideration and approval.*

PUBLIC NOTICE

Public noticing requirements per the OMC have been met for this Preliminary Plat application. Public notice was posted at City Hall on May 24, 2023, published in the Plaindealer on June 1, 2023, and posted on the property on June 2, 2023. No public comments were directed to the Planning Commission for their May 23, 2023 hearing; one (1) public comment has been received by staff for the Preliminary Plat application for City Council (see Exhibit M).

STAFF RECOMMENDATION

OMC §7-7-C-3 establishes the following Subdivision Process for Preliminary Plats:

> "d. City staff will prepare a report detailing their review findings and include any reports from review professionals. The report shall provide development information and detail compliance with all applicable City requirements, regulations or standards.
>
> g. The City Council shall consider the preliminary plat and supporting documentation, the City staff report and the Planning Commission recommendation within 30 days. The City Council shall approve, conditionally approve, or deny the preliminary plat within 30 days of considering the application."

The Waterview PUD Preliminary Plat was reviewed with the City's adopted municipal code, applicable community adopted plans and ordinances, the Ouray Community Plan, Public Works Department, Ouray County EMS, and Ouray Fire Department. As outlined in the above Staff Analyses, this application meets the standard design and plat requirements for the Preliminary Plat phase.

Staff recommends the City Council carefully consider the attached Exhibits, the project's goals, and this staff report. After hearing the staff report and any testimony at the hearing, the Council should discuss the PUD and Preliminary Plat Criteria for Decision and general conformance with the Community Plan. Staff finds this project meets many goals and actions outlined in the Ouray Community Plan, meets the goals set forth in the OMC, and has met the standards set out by the OMC while requesting deviations from the C-2 dimensional standards, *as an anticipated part of the PUD process.*

The Planning Commission recommended approval of the Waterview PUD Preliminary Plat during their hearing on May 23, 2023 with the following conditions of approval:

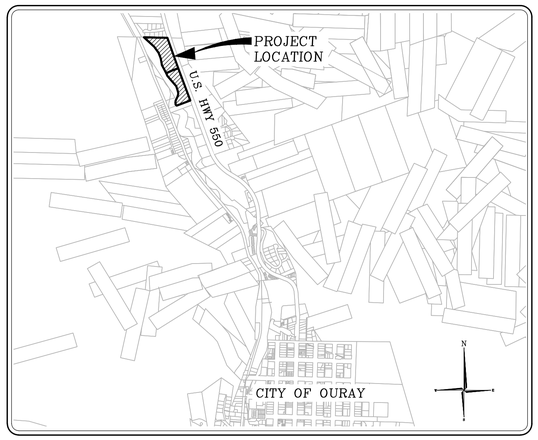
- Approve the deviations to the OMC standards outlined in Table 3 of this report
- Satisfy the comments outlined in the Staff Comment Memo prior to filing a Final Plat (Exhibit B)

Attachments:

Exhibit A: Waterview Affordable Housing Subdivision – Preliminary Plat Draft
Exhibit B: Preliminary Plat Staff Comment Memorandum
Exhibit C: Waterview PUD – Lot & Unit Summary Tables
Exhibit D: Waterview PUD – Engineered Plans
Exhibit E: Waterview PUD – Landscape Plan
Exhibit F: Waterview PUD – Example Land Use & Coverage (Phase 1)
Exhibit G: Ouray County 2023 AMI Levels (60% - 120% AMI) by Household Size
Exhibit H: Waterview Lot 2 Lot Split Plat (Reception No. 211406)
Exhibit I: Waterview PUD – Updated Sketch Plan Application Narrative
Exhibit J: Waterview PUD – Original Applicant Narrative and Project Information
Exhibit K: Interdepartmental Comments Received
Exhibit L: Geotechnical Engineering Study Proposed Waterview Development (Lambert)
Exhibit M: Public Comments Received (Chautauqua HOA)

WATERVIEW AFFORDABLE HOUSING SUBDIVISION OF LOT 2A & 2B OF OURAY WATERVIEW SUBDIVISION LOT 2 LOT SPLIT

LOCATED IN THE CITY OF OURAY, COLORADO



VICINITY MAP

SCALE : 1" = 1500'
CITY OF OURAY, COLORADO

GENERAL DEDICATIONS:

1. TRACT A, TRACT B, TRACT E AND TRACT H, as shown hereon, are hereby dedicated to the City of Ouray as open space.
2. TRACT C AND TRACT J, as shown hereon, are hereby dedicated to the City of Ouray for purpose of public right of way.
3. TRACT D AND TRACT F, as shown hereon, are hereby dedicated to the City of Ouray for the purpose of ingress and egress, installation, operation, maintenance, reconstruction, replacement, improvement and removal of stormwater detention facilities.
4. TRACT G (EMERGENCY ACCESS), as shown hereon, is hereby dedicated to the City of Ouray for the purpose of emergency ingress and egress.
5. The fifteen (15) foot wide utility easement, as shown hereon, is hereby dedicated to all public utilities, and City of Ouray approved private utilities, for the purpose of ingress and egress, installation, operation, maintenance, reconstruction, replacement, improvement and removal of underground electric distribution lines, telecommunications facilities, cable TV, gas lines, water lines and sewer lines, together with their related equipment.
6. The fifteen (15) foot wide pedestrian access easement, as shown hereon, is hereby dedicated to the City of Ouray for the purpose of pedestrian ingress and egress.

PLAT NOTES:

1. Lots and Tracts within this subdivision are subject to the Covenants, Conditions and Restrictions as recorded in the Office of Ouray County, Clerk and Recorder under Reception No._____.

CERTIFICATE OF SURVEYOR:

I hereby state that this survey and plat were prepared from field notes of an actual survey performed by me or under my direct responsibility, supervision and checking, and from documents recorded in the Office of the Ouray County, Colorado, Clerk and Recorder, and that, in my professional opinion, they are true and correct to the best of my knowledge, belief and information based on the standards of care of Professional Land Surveyors practicing in the State of Colorado. This survey is not a guaranty or warranty, either expressed or implied.

PRELIMINARY FOR REVIEW

Robert Goff, Jr., P.L.S. Date
Colorado Registration No. 38007

TITLE COMPANY'S CERTIFICATE

I, _____, a _____ representing _____, certify that I have examined title to the described land dedication to the City of Ouray, Colorado, and that the parties executing the dedication are the owners thereof in fee simple, and the dedicated land is free and clear of all liens and encumbrances except as provided for in title committment number_____dated _____.

_____
Name

_____
Title

Executed this _____ day of _____, 2023

CERTIFICATE OF OWNERS
KNOW ALL MEN BY THESE PRESENTS:

That Ouray Homes, LLC. whose address is P.O. Box 4222, Telluride, Colorado, 81434, being the legal and record owner of LOTS 2A and 2B of the OURAY WATERVIEW SUBDIVISION LOT 2 LOT SPLIT, as recorded in the Office of the Ouray County, Colorado, Clerk and Recorder under Reception Number 211406;

Has caused the same to be subdivided and replatted under the name WATERVIEW AFFORDABLE HOUSING SUBDIVISION OF LOT 2A & 2B OF OURAY WATERVIEW SUBDIVISION LOT 2 LOT SPLIT.

THIS PLAT IS HEREBY EXECUTED BY THE FOLLOWING PARTIES:

OURAY HOMES, LLC.

By _____
Paul Major, Manager

STATE OF :
SS:
COUNTY OF :

The foregoing instrument was acknowledged before me by Paul Major, Manager, Ouray Homes, LLC. on this _____ day of _____ 2023, for the aforementioned purposes.

_____ _____
My Commission Expires Notary Public

ATTORNEY'S CERTIFICATE

I, _____, an attorney at law duly licensed to practice before the courts of record of Colorado, do hereby certify that I have examined the title to all land herein platted and that title to such lands in the dedicators and owners, and that the property dedicated hereon has been dedicated free and clear of all liens and encumbrances, except as follows:

Dated this _____ day of _____, 2023

By:_____
Attorney at Law

APPROVAL OF PLANNING COMMISSION:

Approved by the City of Ouray Planning Commission this _____ day of _____ A.D., 20___.

_____
Chairperson

APPROVAL OF CITY COUNCIL:

Approved by the Ouray City Council this _____ day of _____ A.D., 20___.

_____
Mayor

LAND USE TABLE

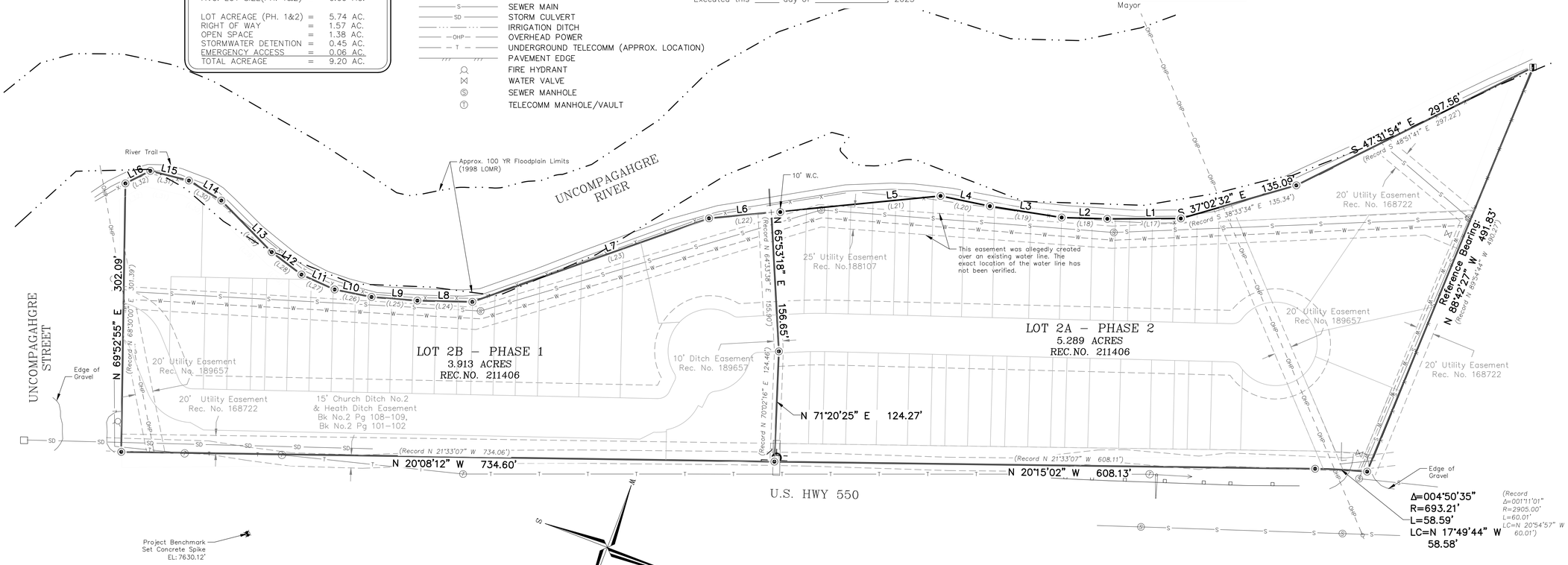
# RESIDENTIAL LOTS		
PHASE 1	=	22 LOTS
PHASE 2	=	43 LOTS
TOTAL	=	65 LOTS
AVG. LOT SIZE(PH. 1&2)	=	0.09 AC.
LOT ACREAGE (PH. 1&2)	=	5.74 AC.
RIGHT OF WAY	=	1.57 AC.
OPEN SPACE	=	1.38 AC.
STORMWATER DETENTION	=	0.45 AC.
EMERGENCY ACCESS	=	0.06 AC.
TOTAL ACREAGE	=	9.20 AC.

LEGEND

- WATER MAIN
- SEWER MAIN
- STORM CULVERT
- IRRIGATION DITCH
- OVERHEAD POWER
- UNDERGROUND TELECOMM (APPROX. LOCATION)
- PAVEMENT EDGE
- FIRE HYDRANT
- WATER VALVE
- SEWER MANHOLE
- TELECOMM MANHOLE/VAULT

LINE TABLE (Measured)		
LINE	BEARING	LENGTH
L1	S 21°13'26" E	82.66'
L2	S 19°21'34" E	51.36'
L3	S 12°02'10" E	81.76'
L4	S 09°17'05" E	56.63'
L5	S 26°31'41" E	191.18'
L6	S 26°31'41" E	70.43'
L7	S 40°26'50" E	282.29'
L8	S 19°40'08" E	61.84'
L9	S 16°28'18" E	51.69'
L10	S 09°30'25" E	42.39'
L11	S 03°14'35" W	40.85'
L12	S 16°05'14" W	41.95'
L13	S 24°42'22" W	81.04'
L14	S 10°39'07" W	42.85'
L15	S 06°55'10" E	44.78'
L16	S 47°43'14" E	31.39'

LINE TABLE (Record RN 211406)		
LINE	BEARING	LENGTH
(L17)	S 22°39'59" E	82.71'
(L18)	S 20°42'17" E	51.32'
(L19)	S 13°19'50" E	81.90'
(L20)	S 10°44'19" E	56.48'
(L21)	S 27°54'14" E	191.35'
(L22)	S 27°54'14" E	70.30'
(L23)	S 41°47'36" E	282.57'
(L24)	S 21°03'43" E	61.53'
(L25)	S 17°54'59" E	52.32'
(L26)	S 10°43'03" E	41.78'
(L27)	S 01°43'43" W	40.66'
(L28)	S 14°50'16" W	42.16'
(L29)	S 23°21'17" W	81.17'
(L30)	S 09°21'24" W	42.88'
(L31)	S 08°16'18" E	44.77'
(L32)	S 49°46'10" E	31.49'



Units shown hereon = U.S. Survey Feet

Bearings are based on the north line of LOT 2A, OURAY WATERVIEW SUBDIVISION LOT 2 LOT SPLIT, Rec. No. 211406. The ends of said line having been monumented as shown hereon. (Assumed reference bearing = N 88°42'27" W)

DESCRIPTION OF MONUMENTS

- Set 5/8" x 24" rebar with a 1–1/2" aluminum cap stamped PLS 38007
- Found 5/8" rebar with a 2" aluminum cap stamped PLS 31160
- Found 5/8" rebar with a 1–1/2" aluminum cap stamped PLS 10738
- Position for Corner – Monument Not Found or Set

STATE OF COLORADO)
SS
OURAY COUNTY)
I hereby state that this instrument was filed for record at ____O'clock __M _____ 20___ and duly filed.
Reception Number _____ Fee$ _____
_____, Recorder
By _____ Deputy

NOTICE:

According to the laws of the State of Colorado, any legal action based upon any defect in this survey must commence within three years after such defect was first discovered. In no event may any action based upon any defect in this survey be commenced more than ten years from the date of the certification shown hereon.

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970.247.1705

WATERVIEW AFFORDABLE HOUSING SUBDIVISION PLAT

CITY OF OURAY, COLORADO

SHEET 1 OF 3

PREPARED BY:	RA	CHECKED BY:	RT
PROJECT NO.	21-116	SCALE:	AS SHOWN
DATE:	5/9/2023		

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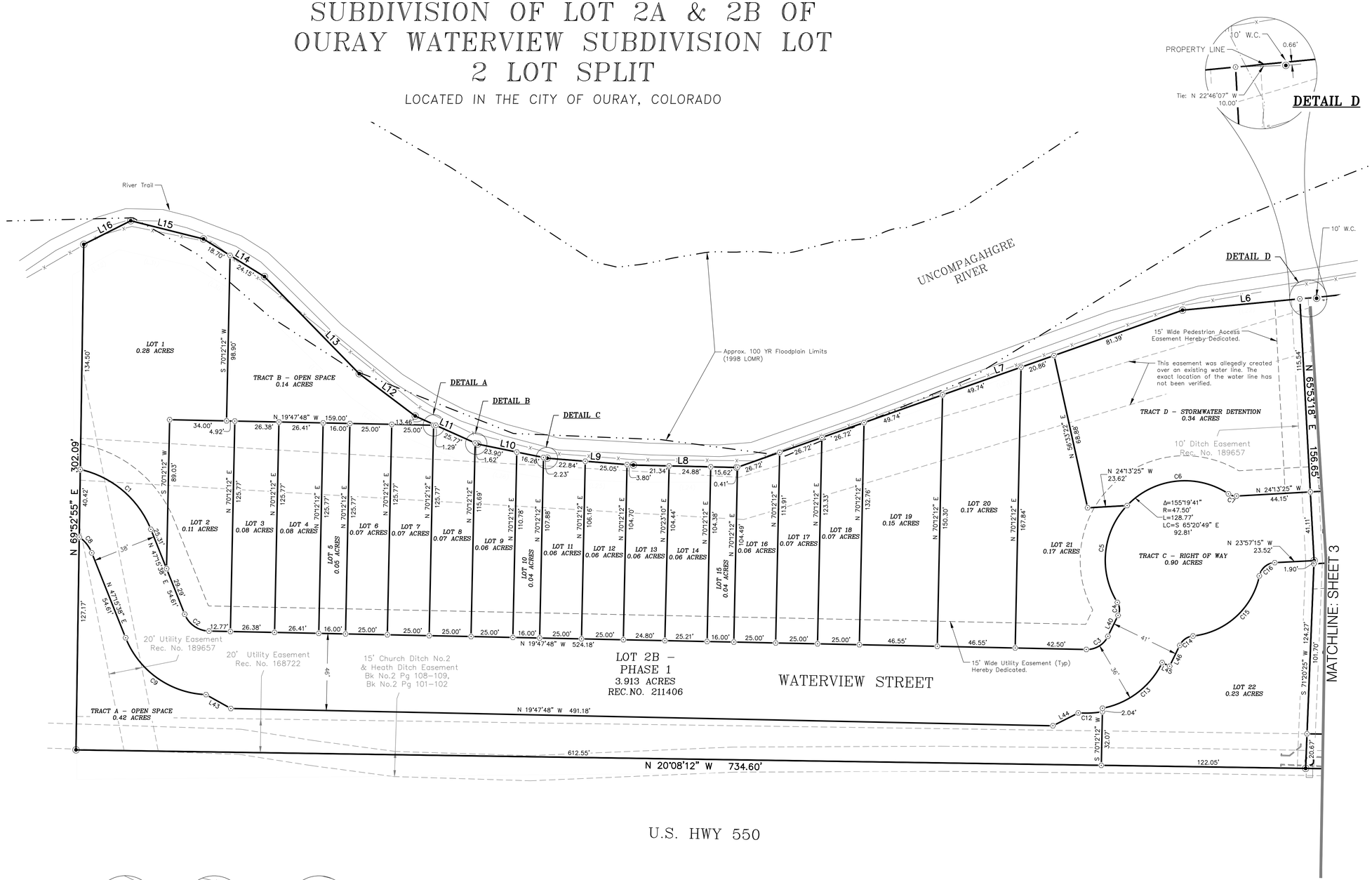
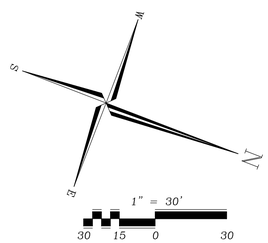
WATERVIEW AFFORDABLE HOUSING
SUBDIVISION OF LOT 2A & 2B OF
OURAY WATERVIEW SUBDIVISION LOT
2 LOT SPLIT

LOCATED IN THE CITY OF OURAY, COLORADO

LINE TABLE		
LINE	BEARING	LENGTH
L6	S 26°31'41" E	70.43'
L7	S 40°26'50" E	282.29'
L8	S 19°40'08" E	61.84'
L9	S 16°28'18" E	51.69'
L10	S 09°30'25" E	42.39'
L11	S 03°14'35" W	40.85'
L12	S 16°05'14" W	41.95'
L13	S 24°42'22" W	81.04'
L14	S 10°39'07" W	42.85'
L15	S 06°55'10" E	44.78'
L16	S 47°43'14" E	31.39'
L40	N 85°07'12" W	13.88'
L43	N 08°16'33" E	17.02'
L44	N 47°52'09" W	17.00'
L45	N 04°52'48" E	5.00'
L46	N 85°07'12" W	13.88'

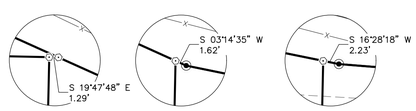
CURVE TABLE					
CURVE	DELTA	RADIUS	LENGTH	CHORD	LENGTH
C1	55°28'06"	59.39	57.50	S 19°19'29" W	55.28'
C2	67°03'26"	16.00	18.73	N 13°43'55" E	17.68'
C3	65°19'24"	14.00	15.96	N 52°27'30" W	15.11'
C4	57°53'28"	8.00	8.08	S 65°56'04" W	7.74'
C5	75°31'30"	47.50	62.61	N 74°45'06" E	58.18'
C6	79°48'11"	47.50	66.16	N 27°35'04" W	60.94'
C7	36°32'27"	8.00	5.10	N 5°57'11" W	5.02'
C8	33°17'29"	21.00	12.20	N 30°36'54" E	12.03'
C9	65°58'38"	54.00	62.18	N 14°16'20" E	58.80'
C12	11°31'53"	52.00	10.47	N 25°33'44" W	10.45'
C13	53°19'27"	50.00	46.53	N 58°27'28" W	44.87'
C14	57°53'28"	10.00	10.10	S 56°10'28" E	9.68'
C15	71°56'48"	45.50	57.13	N 63°12'08" W	53.45'
C16	74°57'07"	10.00	13.08	S 61°41'58" E	12.17'





Units shown hereon = U.S. Survey Feet

Bearings are based on the north line of LOT 2A, OURAY WATERVIEW SUBDIVISION LOT 2 LOT SPLIT, Rec. No. 211406. The ends of said line having been monumented as shown hereon. (Assumed reference bearing = N 88°42'27" W)



DETAIL A DETAIL B DETAIL C

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WATERVIEW AFFORDABLE HOUSING SUBDIVISION PHASE 1 PLAT

CITY OF OURAY, COLORADO

SHEET 2 OF 3

PREPARED BY:	RA	CHECKED BY:	RT
PROJECT NO.	21-116	SCALE: AS SHOWN	DATE: 5/9/2023

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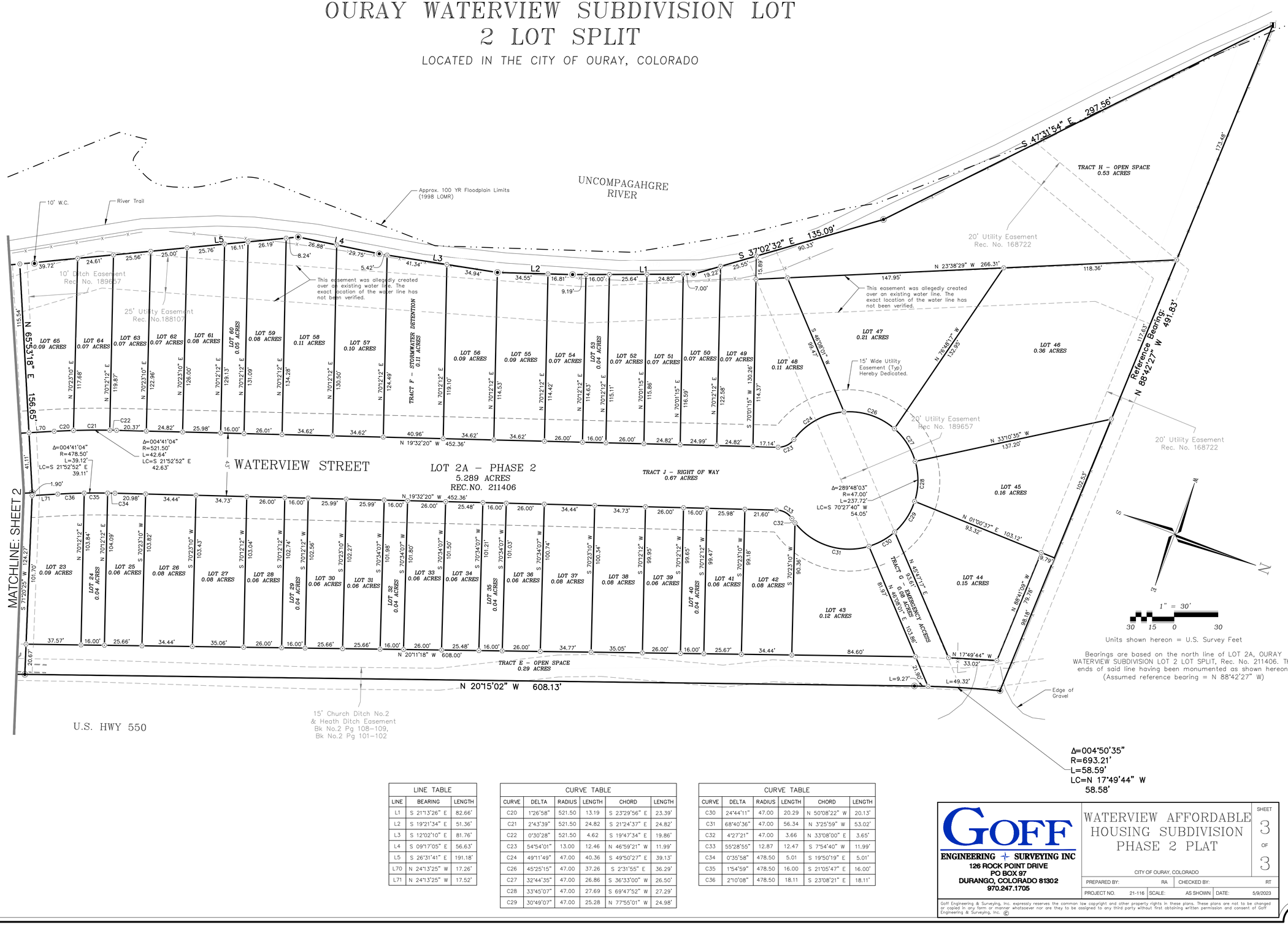
WATERVIEW AFFORDABLE HOUSING SUBDIVISION OF LOT 2A & 2B OF OURAY WATERVIEW SUBDIVISION LOT 2 LOT SPLIT

LOCATED IN THE CITY OF OURAY, COLORADO



Bearings are based on the north line of LOT 2A, OURAY WATERVIEW SUBDIVISION LOT 2 LOT SPLIT, Rec. No. 211406. The ends of said line having been monumented as shown hereon. (Assumed reference bearing = N 88°42'27" W)

LINE TABLE		
LINE	BEARING	LENGTH
L1	S 21°13'26" E	82.66'
L2	S 19°21'34" E	51.36'
L3	S 12°02'10" E	81.76'
L4	S 09°17'05" E	56.63'
L5	S 26°31'41" E	191.18'
L70	N 24°13'25" W	17.26'
L71	N 24°13'25" W	17.52'

CURVE TABLE					
CURVE	DELTA	RADIUS	LENGTH	CHORD	LENGTH
C20	1°26'58"	521.50	13.19	S 23°29'56" E	23.39'
C21	2°43'39"	521.50	24.82	S 21°24'37" E	24.82'
C22	0°30'28"	521.50	4.62	S 19°47'34" E	19.86'
C23	54°54'01"	13.00	12.46	N 46°59'21" W	11.99'
C24	49°11'49"	47.00	40.36	S 49°50'27" E	39.13'
C26	45°25'15"	47.00	37.26	S 2°31'55" E	36.29'
C27	32°44'35"	47.00	26.86	S 36°33'00" W	26.50'
C28	33°45'07"	47.00	27.69	S 69°47'52" W	27.29'
C29	30°49'07"	47.00	25.28	N 77°55'01" W	24.98'

CURVE TABLE					
CURVE	DELTA	RADIUS	LENGTH	CHORD	LENGTH
C30	24°44'11"	47.00	20.29	N 50°08'22" W	20.13'
C31	68°40'36"	47.00	56.34	N 3°25'59" W	53.02'
C32	4°27'21"	47.00	3.66	N 33°08'00" E	3.65'
C33	55°28'55"	12.87	12.47	S 7°54'40" W	11.99'
C34	0°35'58"	478.50	5.01	S 19°50'19" E	5.01'
C35	1°54'59"	478.50	16.00	S 21°05'47" E	16.00'
C36	2°10'08"	478.50	18.11	S 23°08'21" E	18.11'

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WATERVIEW AFFORDABLE HOUSING SUBDIVISION PHASE 2 PLAT

CITY OF OURAY, COLORADO

SHEET 3 OF 3

PREPARED BY:	RA	CHECKED BY:	RT
PROJECT NO.	21-116	SCALE:	AS SHOWN
DATE:	5/9/2023		

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www.cityofouray.com

MEMORANDUM

TO: Paul Major, on behalf of Ouray Homes LLC ("Applicant")

FROM: Lily Oswald, City of Ouray Community Development Director ("Staff")

DATE: May 18, 2023

SUBJECT: Waterview PUD – Preliminary Plat Application Staff Review Comments

This memorandum provides initial staff comments to the Waterview PUD Preliminary Plat application, received by the City of Ouray on May 1, 2023. This memorandum serves as initial comments to the submitted materials for the Waterview Preliminary Plat PUD and does not represent exhaustive City comments or conditions to this application.

1. Ouray County has a Waterview Lane, Waterview Court, and Waterview Cove. Staff has coordinated with the County's Road and Bridge Department and EMS and has concerns of the duplicative nature of the proposed "Waterview Street" and recommends changing this street name.
    a. *Applicant must coordinate final proposed street name prior to final plat filing, installation of street signage, or official addressing.*
    b. *If amended, all construction documents, plats, and related materials must reflect the updated street name.*
2. Correct all titles of documents to reflect "City of Ouray" not "Town of Ouray."
    a. *Example: engineered construction cover sheet.*
3. Correct all documents to reflect "Uncompahgre Street" and "Uncompahgre River" where mislabeled.
    a. *Example: engineered construction sheets.*
4. All construction document and future submittals must match layout and design of the submitted "Waterview Affordable Housing Subdivision" Preliminary Plat.
    a. *Phase 2 lot numbers must be corrected in future submittals. Example: engineered construction documents display incorrect phase 2 lot numbers.*
5. Applicant must coordinate a preconstruction meeting with the City of Ouray Public Works Department, City Administrator, Community Development Department, and Fire Department to ensure installation of infrastructure is a concerted effort which aligns with all departmental timelines, capacities, and standards.
    a. *Access to City and private utilities along the west side of proposed lots 49 through 65 and 2 through 21 must be maintained with no structures developed along the 25-foot utility easement as shown (Reception No. 188107 and 211406).*
6. Applicant must draft a Development Improvements Agreement for the associated infrastructure, standards, timelines, and improvements for this project.
    a. *Agreement must be approved by the City Attorney, City Administrator and associated bodies and executed accordingly.*
    b. *Agreement must be mutually-executed prior to filing a Final Plat as part of the Building Permit process once proposed infrastructure is finalized.*

7. Applicant must receive written approval or an access permit from the Colorado Department of Transportation for any access to Highway 550 directly from subject lot and for any new street serving the subdivision that intersects said highway prior to filing a Final Plat application.
8. Final Plat must reiterate the plat notes and easement descriptions included in the Waterview Lot 2 Lot Split Plat (Reception No. 211406) by reference.
9. Once preliminary plat approval has been granted from the Ouray City Council, the Applicant must work with the City to coordinate a joint meeting with the City Council, City Attorney, City Administrator, and Planning Commission to discuss terms and responsibility of the deed restrictions associated with this project.

Ouray Waterview Unit Mix - Phase 1

By Lot

Lot #	Home Type	Bedrooms and Baths	Configure	Garage, Shed or Home Childcare	Home Sq. Footage	Garage Sq. Footage	Parking Spaces	Lot Size
1	Torrey	3 bdr/3 bth	Single Family	Home Childcare	1,984	-	3	12,251
2	Antero	2 bdr/2 bth	Duplex	Shed	1,024	-	2	4,590
3	Shavano	3 bdr/2 bth	Duplex	Shed	1,216	-	2	3,318
4	Shavano	3 bdr/2 bth	Triplex	Shed	1,216	-	2	3,321
5	Antero	2 bdr/2 bth	Triplex	Shed	1,024	-	1	2,012
6	Shavano	3 bdr/2 bth	Triplex	Shed	1,216	-	2	3,144
7	Shavano	3 bdr/2 bth	Duplex	Shed	1,216	-	2	3,145
8	Shavano	3 bdr/2 bth	Duplex	-	1,216	-	2	3,025
9	Shavano	3 bdr/2 bth	Triplex	-	1,216	-	2	2,827
10	Antero	2 bdr/2 bth	Triplex	-	1,024	-	1	1,749
11	Shavano	3 bdr/2 bth	Triplex	-	1,216	-	2	2,672
12	Shavano	3 bdr/2 bth	Duplex	-	1,216	-	2	2,636
13	Shavano	3 bdr/2 bth	Duplex	-	1,216	-	2	2,609
14	Shavano	3 bdr/2 bth	Triplex	-	1,216	-	2	2,615
15	Antero	2 bdr/2 bth	Triplex	-	1,024	-	1	1,670
16	Shavano	3 bdr/2 bth	Triplex	-	1,216	-	2	2,730
17	Antero	2 bdr/2 bth	Duplex	-	1,024	-	2	2,966
18	Shavano	3 bdr/2 bth	Duplex	Shed	1,216	-	2	3,201
19	Torrey	3 bdr/3 bth	Single Family	Garage	1,600	384	2	6,587
20	Torrey	3 bdr/3 bth	Single Family	Garage	1,600	384	2	7,404
21	Torrey	3 bdr/3 bth	Single Family	Home Childcare	1,984	-	3	7,465
22	Torrey	3 bdr/3 bth	Single Family	Home Childcare	1,984	-	3	9,962
Total				**Total:**	**28,864**	**768**	**44**	**91,899**
				Average:	**1,312**		**Average:**	**4,177**

Ouray Waterview Unit Mix - Phase 2

By Lot

Lot #	Home Type	Bedrooms and Baths	Configure	Garage, Shed or Home Childcare	Home Sq. Footage	Garage Sq. Ft.	Parking Spaces	Lot Size
65	Shavano	3 bdr/2 bth	Duplex	Shed	1,216		2	4,077
64	Antero	2 bdr/2 bth	Duplex	Shed	1,024		2	2,922
63	Antero	2 bdr/2 bth	Duplex	Shed	1,024		2	3,058
62	Shavano	3 bdr/2 bth	Duplex	Shed	1,216		2	3,089
61	Shavano	3 bdr/2 bth	Triplex	Shed	1,216		2	3,271
60	Antero	2 bdr/2 bth	Triplex	Shed	1,024		1	2,118
59	Shavano	3 bdr/2 bth	Triplex	Shed	1,216		2	3,433
58	Torrey	3 bdr/3 bth	Single Family	Shed	1,600		2	4,616
57	Torrey	3 bdr/3 bth	Single Family	Shed	1,600		2	4,410
56	Torrey	3 bdr/3 bth	Single Family	Shed	1,600		2	4,044
55	Torrey	3 bdr/3 bth	Single Family	Shed	1,600		2	3,963
54	Shavano	3 bdr/2 bth	Triplex	Shed	1,216		2	2,956
53	Antero	2 bdr/2 bth	Triplex	Shed	1,024		1	1,875
52	Shavano	3 bdr/2 bth	Triplex	Shed	1,216		2	2,962
51	Shavano	3 bdr/2 bth	Duplex	Shed	1,216		2	2,884
50	Antero	2 bdr/2 bth	Duplex	Shed	1,024		2	2,992
49	Antero	2 bdr/2 bth	Duplex	Shed	1,024		2	3,112
48	Shavano	3 bdr/2 bth	Duplex	Shed	1,216		2	4,663
47	Torrey	3 bdr/3 bth	Single Family	Garage	1,600	384	2	9,138
46	Torrey	3 bdr/3 bth	Single Family	Garage	1,600	384	2	15,905
45	Torrey	3 bdr/3 bth	Single Family	Garage	1,600	384	2	7,079
44	Torrey	3 bdr/3 bth	Single Family	Garage	1,600	384	2	6,409
43	Torrey	3 bdr/3 bth	Single Family	Garage	1,600	384	2	5,181
42	Torrey	3 bdr/3 bth	Single Family	Shed	1,600		2	3,376
41	Shavano	3 bdr/2 bth	Triplex	Shed	1,216		2	2,547
40	Antero	2 bdr/2 bth	Triplex	Shed	1,024		1	1,629
39	Shavano	3 bdr/2 bth	Triplex	Shed	1,216		2	2,577
38	Torrey	3 bdr/3 bth	Single Family	Shed	1,600		2	3,494
37	Torrey	3 bdr/3 bth	Single Family	Shed	1,600		2	3,479
36	Shavano	3 bdr/2 bth	Triplex	Shed	1,216		2	2,623
35	Antero	2 bdr/2 bth	Triplex	Shed	1,024		1	1,618
34	Shavano	3 bdr/2 bth	Triplex	Shed	1,216		2	2,583
33	Shavano	3 bdr/2 bth	Triplex	Shed	1,216		2	2,643
32	Antero	2 bdr/2 bth	Triplex	Shed	1,024		1	1,630
31	Shavano	3 bdr/2 bth	Triplex	Shed	1,216		2	2,637
30	Shavano	3 bdr/2 bth	Triplex	Shed	1,216		2	2,645
29	Antero	2 bdr/2 bth	Triplex	Shed	1,024		1	1,642
28	Shavano	3 bdr/2 bth	Triplex	Shed	1,216		2	2,675
27	Torrey	3 bdr/3 bth	Single Family	Shed	1,600		2	3,602
26	Torrey	3 bdr/3 bth	Single Family	Shed	1,600		2	3,569
25	Shavano	3 bdr/2 bth	Triplex	Shed	1,216		2	2,666
24	Antero	2 bdr/2 bth	Triplex	Shed	1,024		1	1,702
23	Shavano	3 bdr/2 bth	Triplex	Shed	1,216		2	3,741
Total				**Total:**	**55,552**	**1,920**	**79**	**157,235**
				Average:	**1,292**		**Average:**	**3,657**
				Both Phases:				
				Average:	**1,299**		**Average:**	**3,833**

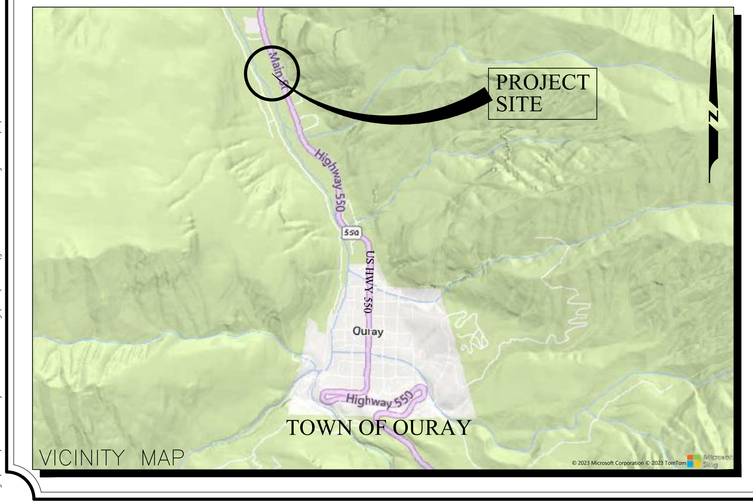
WATERVIEW AFFORDABLE HOUSING SUBDIVISION TOWN OF OURAY, COLORADO

PROJECT CONTACT LIST				
AGENCY	ROLE	NAME	PHONE	EMAIL
OURAY HOMES, LLC	OWNERS REPRESENTATIVE	PAUL MAJOR	(970) 209-2880	paul@ruralhomesproject.co
GOFF ENGINEERING	PROJECT ENGINEER	ROB HARRIES	(970) 247-1705	rharries@goffengineering.com
TOWN OF OURAY	PUBLIC WORKS DIRECTOR			
	INSPECTOR			
SAN MIGUEL POWER AUTHORITY (SMPA)	ELECTRIC UTILITY			
BLACK HILLS ENERGY	GAS UTILITY			
	TELECOMM UTILITY			
CONTRACTOR	PROJECT SUPERINTENDENT			
CONTRACTOR	PROJECT MANAGER			

Sheet List Table	
Sheet #	Sheet Title
G1.01	COVER SHEET
G1.02	CONSTRUCTION NOTES
G2.01	TYPICAL ROADWAY SECTIONS
RD1.00	EX. CONDITIONS
RD1.01	OVERALL SITE PLAN
RD1.02	PHASE 1 SITE PLAN
RD1.03	PHASE 2 SITE PLAN
RD2.01	UNCOMPAGHRE ST. PLAN & PROFILE
RD2.02	WATERVIEW ST. PHASE 1 PLAN & PROFILE
RD2.03	WATERVIEW ST. PHASE 1 CDS PLAN & PROFILE
RD2.04	WATERVIEW ST. PHASE 2 PLAN & PROFILE
RD2.05	WATERVIEW ST. PHASE 2 CDS PLAN & PROFILE
RD3.01	UNCOMPAGHRE ST. CROSS SECTION
RD3.02	WATERVIEW ST. PHASE 1 CROSS SECTION
RD3.03	WATERVIEW ST. PHASE 1 CROSS SECTION
RD3.04	WATERVIEW ST. PHASE 2 CROSS SECTION
RD3.05	WATERVIEW ST. PHASE 2 CROSS SECTION
SS1.01	SEWER A PLAN & PROFILE
W1.01	WATER A PLAN & PROFILE
W1.02	WATER B PLAN & PROFILE
SD1.01	STORM DRAIN A PLAN & PROFILE
SD1.02	IRRIGATION CULVERT PLAN & PROFILE
SD1.03	STORM DRAIN B PLAN & PROFILE
DU1.01	PHASE 1 DRY UTILITIES

ABBREVIATION LEGEND

ABC	AGGREGATE BASE COURSE	L	LEFT
BOW	FINISH GROUND AT BASE OF WALL	LP	LOW POINT
BVCE	BEGINNING VERTICAL CURVE ELEVATION	LPEA	LA PLATA ELECTRIC ASSOCIATION
BVCS	BEGINNING VERTICAL CURVE STATION	LVC	LENGTH OF VERTICAL CURVE
CDOT	COLORADO DEPARTMENT OF TRANSPORTAION	MAX	MAXIMUM
CEN	CENTER	MIN	MINIMUM
CL	CENTERLINE	MUTCD	MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES
CMP	CORRUGATED METAL PIPE	N	NORTHING
CP	CONTROL POINT	PC	POINT OF CURVATURE
DIA	DIAMETER	PE	POLYETHYLENE
DIP	DUCTILE IRON PIPE	PGL	PROFILE GRADE LINE
DMH	DRAINAGE MANHOLE	PI	POINT OF INTERSECTION
d_{50}	MEDIAN STONE SIZE	PT	POINT OF TANGENCY
E	EASTING	PVI	POINT OF VERTICAL INTERSECTION
EG	EXISTING GROUND	R	RADIUS
ELEV	ELEVATION	RT	RIGHT
EOC	EDGE OF CONCRETE	RCP	REINFORCED CONCRETE PIPE
EOP	EDGE OF PAVEMENT	R/W	RIGHT-OF-WAY
ESMT	EASEMENT	SD	STORM DRAIN
EVCE	ENDING VERTICAL CURVE ELEVATION	SMPA	SAN MIGUEL POWER AUTHORITY
EVCS	ENDING VERTICAL CURVE STATION	SSMH	SANITARY SEWER MANHOLE
EX	EXISTING	SS	SANITARY SEWER
FES	FLARED END SECTION	STA	STATION
FG	FINISHED GROUND	TB	THRUST BLOCKING
FL	FLOW LINE	TBOC	TOP BACK OF CURB
FO	FIBER OPTIC	TEMP	TEMPORARY
FS	FINISHED SURFACE	TOR	TOWN OF RIDGWAY
GB	GRADE BREAK	TOW	TOP OF WALL RETAINING
HMA	HOT MIX ASPHALT	(TYP)	TYPICAL
HP	HIGH POINT	W/	WITH
INV	INVERT		
LC	LONG CHORD	±	APPROXIMATE
		℄	CENTERLINE
		Δ	INTERIOR ANGLE
		ϕ	DIAMETER



VICINITY MAP

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

Legend of Civil Features

Existing Features

LINETYPES
- WATER MAIN (SIZE NOTED) —8W— —8W—
- SEWER MAIN (SIZE NOTED) —10S— —
- SEWER FORCEMAIN —FM—
- STORM CULVERT (SIZE NOTED) —24D—
- IRRIGATION —IRR—
- UNDERGROUND POWER —P—
- OVERHEAD POWER —OHP—
- UNDERGROUND FIBER OPTIC —FO—
- UNDERGROUND TELECOMM — T —
- OVERHEAD TV/TELE —OHT—
- WATERCOURSE FLOWLINE
- UNDERGROUND GAS —G—
- FENCE/GEOTEXTILE FABRIC —X—X—
- PAVEMENT EDGE
- GRAVEL/DIRT ROAD
- RAILROAD TRACK
- GUARDRAIL
- ROCK WALL
- STRUCTURAL RETAINING WALL
- SAWCUT LINE

STORM DRAIN CATEGORY
- CULVERT END SECTION
- INLET TYPE 'R'
- INLET GENERAL/AREA DRAIN
- INLET TYPE 'D'/TYPE 'C'
- STORMDRAIN MANHOLE

ELECTRIC CATEGORY
- ELECTRIC TRANSMISSION TOWER
- TRANSFORMER
- ELECTRIC PEDESTAL/VAULT
- POWER MANHOLE
- ELECTRIC METER
- ELECTRIC OUTLET
- TRANSFORMER ON POLE
- POLE MOUNTED STREET LIGHT
- HIGH MAST LIGHT
- LUMINAIRE (MISC)
- UTILITY POLE
- UTILITY POLE ANCHOR

TRAFFIC SIGNAL CATEGORY
- TRAFFIC SIGNAL POLE W/ MAST ARM
- TRAFFIC SIGNAL CONTROL PANEL
- PEDESTRIAN POLE

GAS/OIL CATEGORY
- GAS WELLHEAD
- GAS VALVE
- GAS METER
- GAS VAULT/RISER
- PROPANE TANK

WATER CATEGORY
- WATER MANHOLE – WELLHEAD
- BLOW OFF ASSEMBLY
- WATER METER
- FIRE HYDRANT
- WATER VALVE
- HOSE BIB / YARD HYDRANT
- PUMP

SANITARY SEWER CATEGORY
- SEWER MANHOLE
- SEWER CLEANOUT
- SEPTIC TANK

DITCH/WATERWAY CATEGORY
- CHECK DAM
- DIVERSION BOX
- FLUME
- FLOW GAUGE
- HEADGATE
- SPRING
- WETLAND AREA
- WATERWAY MISC (SEE NOTE)

FENCE CATEGORY
- POST/BOLLARD
- FENCE GATE

GEOLOGY CATEGORY
- TEST HOLE
- BOULDER
- MINE SHAFT

ROADWAY CATEGORY
- GUARDRAIL END SECTION

LANDSCAPE/CAMPING CATEGORY
- CONIFEROUS TREE (DIA. NOTED) 18"
- DECIDUOUS TREE (DIA. NOTED) 18"
- SHRUB/VEGETATION LIMIT
- SWING SET
- TEETER TOTTER
- JUNGLE GYM
- BENCH/TABLE
- GRILL/FIRE RING
- SPRINKLER HEAD
- IRRIGATION VALVE

MISCELLANEOUS TOPO CATEGORY
- WASTE SITE/GRAVE
- ARCH SITE/AREA OF CONCERN
- MISC.POINT (SEE DESCRIPTION)
- CAMPSITE
- MAILBOX

RAILROAD CATEGORY
- RR SIGN/SIGNAL/SWITCH

STRUCTURE CATEGORY
- BRIDGE DRAIN/COLUMN

TELECOMMUNICATION CATEGORY
- TELECOMM RISER
- TELECOMM MANHOLE/VAULT
- ANTENNAE

SIGN CATEGORY
- SIGN (GENERAL)
- SIGN (CLASS 1 OR 2)
- SIGN (CLASS 3)
- BILLBOARD
- DELINEATOR
- SIGN W/ BEACON

SURVEY CATEGORY
- RIGHT OF WAY MARKER
- AERIAL PANEL POINT
- CONTROL MONUMENT (HARN)
- BENCHMARK
- SECTION CORNER
- PROPERTY PIN
- USGS MARKER
- NOAA MARKER
- BLM MARKER
- WITNESS CORNER
- TOWNSHIP CORNER
- CONTROL MONUMENT FEDERAL
- CONTROL MONUMENT LOCAL/PLSS
- TRACT CORNER

PROPOSED FEATURES

- ASPHALT SURFACING
- CONCRETE SURFACING
- GRAVEL SURFACING
- RIP-RAP SURFACING
- SEWER MAIN (SIZE NOTED) 8S
- STORM DRAIN CULVERT
- WATER MAIN 10W
- SEWER FORCEMAIN FM
- GAS LINE G
- LIMITS OF GRADING
- WATER METER
- FIRE HYDRANT
- WATER VALVE
- BEND FITTING & THRUST BLOCK
- CURB STOP
- FINISHED GRADE 28.86
- STREET SIGN
- STORM MANHOLE
- CLEANOUT
- SEWER MANHOLE
- STORM INLET (TYPE 16)
- STORM INLET (TYPE R)
- STORM INLET (TYPE D)
- STORM INLET (TYPE C)
- DETAIL # A-3.1
- SHEET #

Existing Features	Proposed Features	SURVEY LINE TYPES
CENTERLINE	CENTERLINE	
LOTLINE	LOTLINE	
RIGHT OF WAY	RIGHT OF WAY	
EASEMENT	EASEMENT	
	PARCEL BOUNDARY	

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WATERVIEW AFFORDABLE HOUSING SUBDIVISION
OURAY, COLORADO

Issue Record:
SCHEMATIC 05-05-2023

Revisions:

Project Number: 21-116
Drawn By: JAE
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Sheet
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COVER SHEET

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PROJECT GENERAL NOTES:

1. ALL CONSTRUCTION SHALL BE PER CITY OF OURAY SPECIFICATIONS AND DESIGN STANDARDS FOR INFRASTRUCTURE CONSTRUCTION – FEBRUARY 9 2023, WITH ANY ADDENDA ADOPTED THEREAFTER TO DATE OF PRELIMINARY PLAT APPROVAL. (HEREAFTER OURAY'S INFRASTRUCTURE STANDARDS, UNLESS OTHERWISE SPECIFIED).
2. LOCATION AND DEPTH OF SEWER AND WATER LINES ARE APPROXIMATE AND BASED ON BEST AVAILABLE INFORMATION. CONTRACTOR IS REQUIRED TO FIELD VERIFY PRECISE LOCATION AND DEPTH PRIOR TO CONSTRUCTION.

GENERAL WATER NOTES:

1. ALL EQUIPMENT, MATERIALS, INSTALLATION, TESTING, AND INSPECTIONS SHALL BE IN ACCORDANCE TO THESE PLANS, OURAY'S INFRASTRUCTURE STANDARDS (STANDARD SPECIFICATIONS – WATER LINE CONSTRUCTION, WATER DISTRIBUTION SYSTEM – MINIMUM DESIGN STANDARDS & STANDARD SPECIFICATIONS – WATER SERVICE CONNECTIONS), AS WELL AS COLORADO DEPARTMENT OF HEALTH STANDARDS.
2. ALL FITTINGS SHALL BE FLANGE END.
3. ALL GATE VALES SHALL BE FLANGE BY MECHANICAL JOINT.

GENERAL SEWER NOTES:

1. ALL EQUIPMENT, MATERIALS, INSTALLATION, TESTING, AND INSPECTIONS SHALL BE IN ACCORDANCE TO THESE PLANS, OURAY'S INFRASTRUCTURE STANDARD (SEWER MAINS – STANDARD SPECIFICATIONS & SEWER SYSTEM SPECIFICATIONS – MINIMUM DESIGN STANDARDS) AS WELL AS COLORADO DEPARTMENT OF HEALTH STANDARDS.

GENERAL DRY UTILITIES NOTES:

1. POWER, GAS AND TELECOMMUNICATION INFRASTRUCTURE HAS BEEN DIAGRAMMATICALLY DEPICTED ON THE DRY UTILITY PLANS WITHIN THIS PLAN SET.

GRADING AND SITE PREPARATION

1. ALL EQUIPMENT, MATERIALS, INSTALLATION, TESTING, AND INSPECTIONS SHALL BE IN ACCORDANCE WITH THESE PLANS, OURAY'S INFRASTRUCTURE STANDARD (STANDARD SPECIFICATIONS –EXCAVATION, BACKFILL, AND COMPACTION).

STORM WATER MANAGEMENT NOTES:

1. ALL EQUIPMENT, MATERIALS, INSTALLATION, TESTING, AND INSPECTIONS SHALL BE IN ACCORDANCE WITH OURAY'S INFRASTRUCTURE STANDARDS AND THE DRAINAGE MASTER PLAN, AS AMENDED.
2. STORM CULVERTS TO BE ADS–N12 O.A.E.

ROADWAY SURFACING NOTES:

1. THE FOLLOWING APPLICATION RATES WERE USED FOR DEVELOPING THE APPROXIMATE PLAN QUANTITIES:

   AGGREGATE BASE COURSE (ABC) – 133 POUNDS PER CUBIC FOOT

TESTING AND INSPECTION REQUIREMENTS

1. ALL TESTING AND INSPECTIONS SHALL BE IN ACCORDANCE WITH OURAY'S INFRASTRUCTURE STANDARDS.

GEOTECHNICAL

1. "GEOTECHNICAL ENGINEERING STUDY PROPOSED WATERVIEW DEVELOPMENT OURAY, COLORADO" BY LAMBERT AND ASSOCIATES. FEBRUART 3, 2023 IS CONSIDERED A PART OF THE PROJECT CONSTRUCTION DOCUMENTS. CONTRACTOR SHALL REVIEW AND ADHERE TO ALL CONDITIONS AND REQUIREMENTS CONTAINED THEREIN.

SUMMARY OF APPROXIMATE QUANTITIES

MATERIAL QUANTITY NOTES:

1. SUMMARY OF APPROXIMATE QUANTITIES IS FURNISHED FOR INFORMATIONAL PURPOSES ONLY. CONTRACTOR IS RESPONSIBLE FOR REVIEWING CONTRACT DOCUMENTS AND DEVELOPING MATERIAL QUANTITIES AS A BASIS FOR BID PRICING.
2. AUTOCAD DRAWINGS AND DIGITAL TERRAIN MODELS WILL BE FURNISHED TO CONTRACTOR AS REQUESTED TO FACILITATE DEVELOPING MATERIAL QUANTITY TAKEOFF AND SURVEY LAYOUT

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Revisions:

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CONSTRUCTION NOTES

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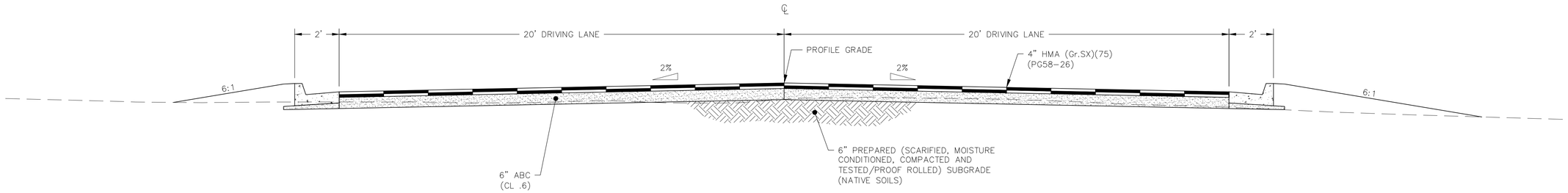
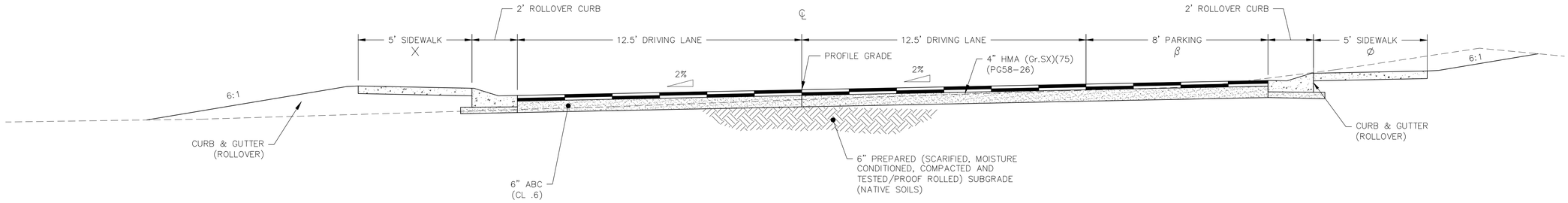
UNCOMPAHGRE STREET SECTION



TYPICAL STREET SECTION



NOTES:
1. STATIONING REFERENCES LIP OF GUTTER (L.O.G.)

2% CROSS SLOPE

TABULATION OF VARYING WIDTHS FOR WATERVIEW STREET, PHASE 1				
STATION	DESCRIPTION	X	β	ø
0+35.04	BOP	5'	0'	0'
1+77.68	BEGIN LANE TRANSITION	5'	0'	0'
1+92.68	END LANE TRANSITION	5'	8'	0'
6+81.86	BEGIN LANE TRANSITION	5'	8'	0'
6+96.86	END LANE TRANSITION	5'	0'	0'
7+42.37	START RIGHT SIDEWALK	5'	0'	5'
7+55.93	REFER TO CDS PLAN & PROFILE	–	–	–

ROADWAY DESIGN CRITERIA
Reference manuals:
1. AASHTO "A Policy on Geometric Design of Highways"
2. City of Ouray, "Specifications and Design Standards for Infrastructure Construction"

CLASS=LOW SPEED URBAN RESIDENTIAL STREET
DESIGN VOLUME = < 400 VEH/DAY)
DESIGN SPEED = 25 MPH
MIN. CL CURVE RADIUS=107 FT (Table 3-13b)
MIN. STOPPING SIGHT DISTANCE=155 FT (table 3-34)
K(min)=12 (through roads)
MINIMUM vertical curve length=100 feet (per COD) for STOP controlled intersections.

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WATERVIEW AFFORDABLE HOUSING SUBDIVISION
OURAY, COLORADO

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TYPICAL ROADWAY SECTIONS

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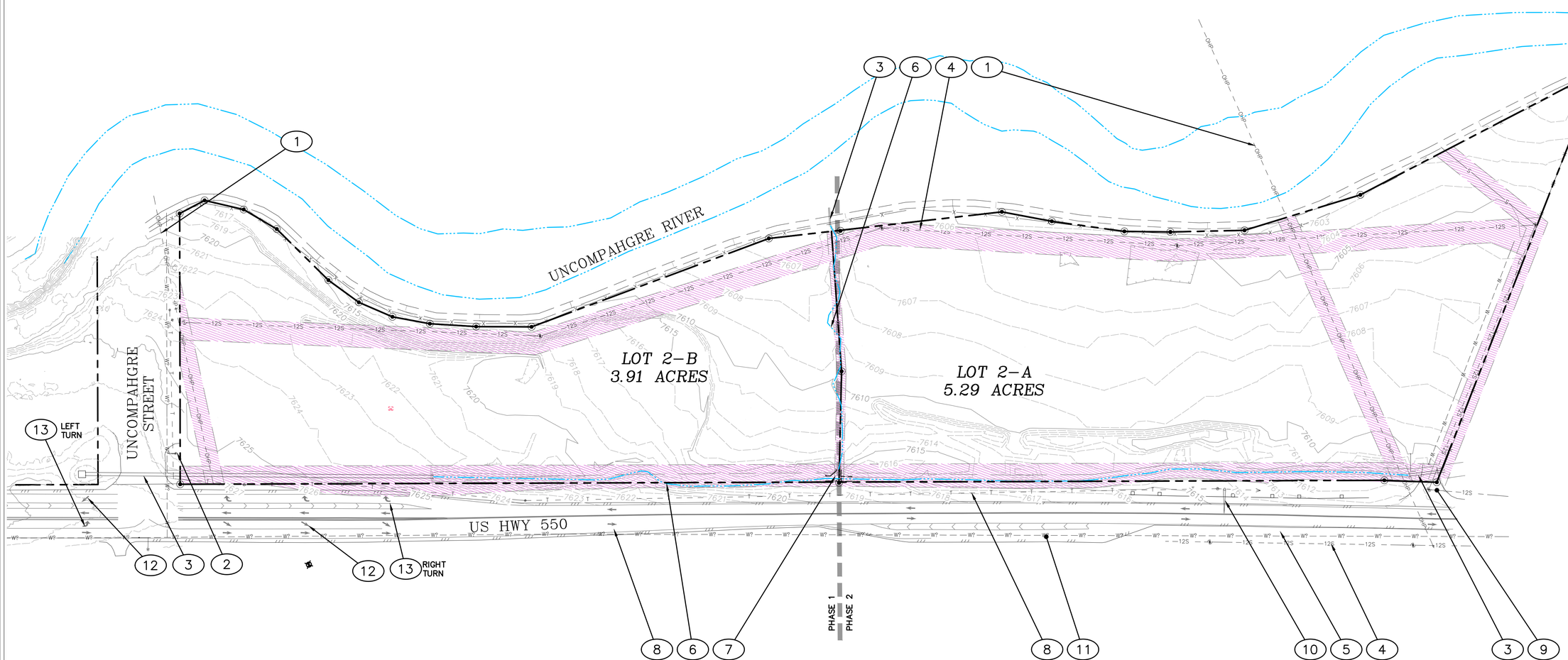
EXISTING CONDITIONS:

1. OVERHEAD POWER.
2. FIRE HYDRANT.
3. IRRIGATION CULVERT.
4. SANITARY SEWER MAIN.
5. WATERMAIN.
6. IRRIGATION DITCH.
7. HEADGATE STRUCTURE.
8. TELCOMM.
9. EMERGENCY ACCESS ENTRANCE AND EGRESS, TO REMAIN.
10. CDOT SIGN
11. VEHICLE CHAINING/PARKING AREA.
12. ACCELERATION LANE.
13. DECELERATION LANE.

GRAPHIC SCALE

0 30 60 FEET 120 180

0 ¼ ½ ¾ 1 INCHES 2 3



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RD1.00

EX. CONDITIONS

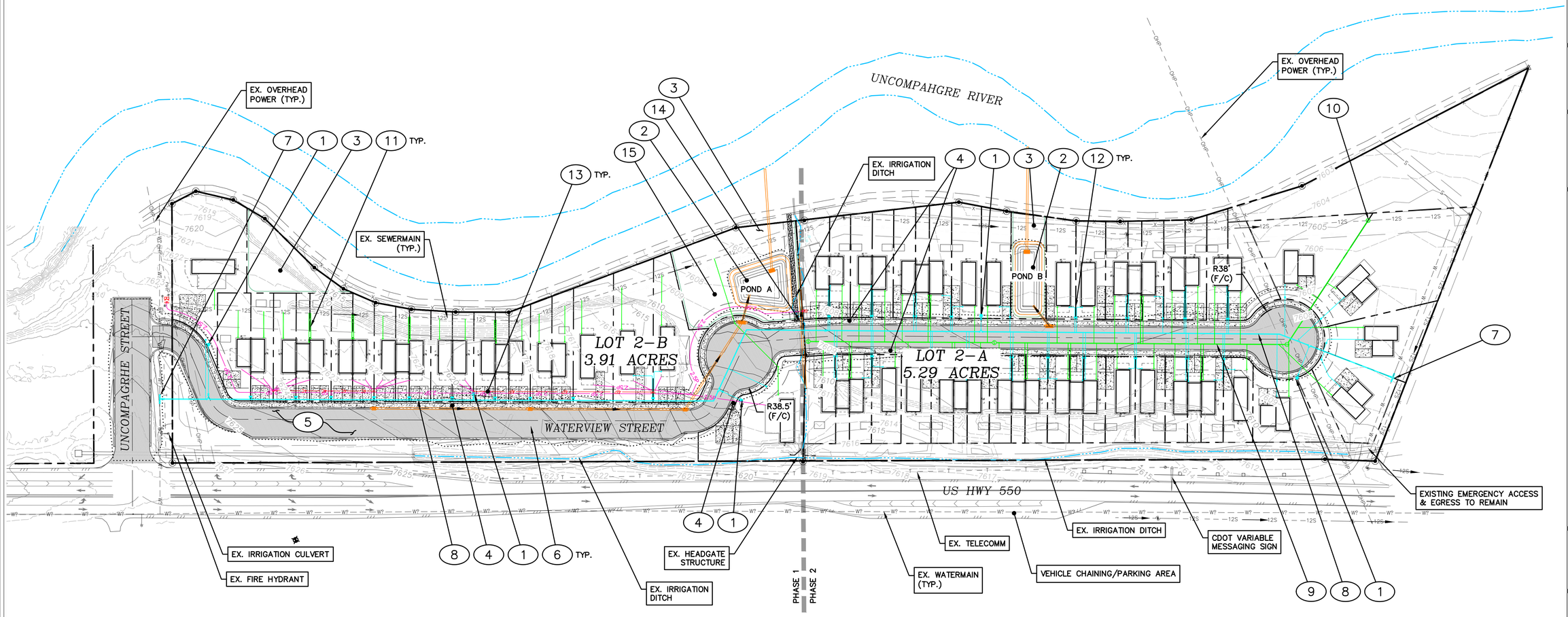
CONSTRUCTION KEYNOTES:

1. PROPOSED FIRE HYDRANT
2. PROPOSED STORMWATER TREATMENT FACILITY.
3. PROPOSED LANDSCAPE PUBLIC AREA TO RIVER TRAIL.
4. PROPOSED 5FT CONCRETE SIDEWALK.
5. PROPOSED ROADWAY.
6. PROPOSED STORM DRAIN.
7. 8" WATERMAIN CONNECTION TO EXISTING WATERMAIN.
8. PROPOSED 8" WATERMAIN.
9. PROPOSED 8" SEWER MAIN.
10. SANITARY SEWER MANHOLE CONNECTION TO EX. 12" SEWER MAIN.
11. NEW SEWER SERVICE. TWO-WAY CLEANOUT WITHIN 5FT OF FOUNDATION.
12. NEW WATER SERVICE.
13. CONCRETE DRIVEWAY AREA PER DETAIL.
14. PROPOSED IRRIGATION DITCH CULVERT WITH HEADWALLS PER DETAIL.
15. RIVER WALK ACCESS.

GRAPHIC SCALE

0 30 60 FEET 120 180

0 ¼ ½ ¾ 1 INCHES 2 3



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RD1.01

OVERALL SITE PLAN

(##) CONSTRUCTION KEYNOTES:

1. PROPOSED FIRE HYDRANT.
2. PROPOSED STORMWATER TREATMENT FACILITY/SNOW STORAGE AREA.
3. PROPOSED LANDSCAPE PUBLIC AREA TO RIVER TRAIL/SNOW STORAGE AREA.
4. PROPOSED 5FT CONCRETE SIDEWALK.
5. PROPOSED ROADWAY.
6. PROPOSED STORM DRAIN.
7. 8" WATERMAIN CONNECTION TO EXISTING WATERMAIN.
8. NEW SEWER SERVICE. TWO-WAY CLEANOUT WITHIN 5FT OF FOUNDATION.
9. NEW WATER SERVICE.
10. PROPOSED IRRIGATION DITCH CULVERT WITH HEADWALLS PER DETAIL.
11. STORMWATER POND OUTLET STRUCTURE PER DETAILS.
12. CONCRETE DRIVEWAY AREA PER DETAILS.
13. RIVER WALK ACCESS.

GRAPHIC SCALE
0 15 30 FEET 60 90
0 ¼ ½ ¾ 1 INCHES 2 3

EX. OVERHEAD POWER (TYP.)
7 1 3 8 TYP.
12 TYP.
EX. SEWERMAIN (TYP.)
UNCOMPAHGRE RIVER
10 11 2 13 3 4 1

LOT 1 12251 SF
LOT 2 4590 SF
LOT 3 3318 SF
LOT 4 3321 SF
LOT 5 2012 SF
LOT 6 3144 SF
LOT 7 3145 SF
LOT 8 3025 SF
LOT 9 2827 SF
LOT 10 1749 SF
LOT 11 2672 SF
LOT 12 2636 SF
LOT 13 2609 SF
LOT 14 2615 SF
LOT 15 1670 SF
LOT 16 2730 SF
LOT 17 2966 SF
LOT 18 3201 SF
LOT 19 6587 SF
LOT 20 7404 SF
LOT 21 7465 SF
LOT 2-B 3.91 ACRES
OPEN SPACE A 14878 SF
LOT 22 9962 SF

PC: 0+35.04
PT: 0+79.19
PC: 1+35.79
PT: 1+77.68
PT: 7+43.33
PC: 7+00.58
R38.5' F/C

0+00 1+00 2+00 3+00 4+00 5+00 6+00 7+00

UNCOMPAHGRE STREET
WATERVIEW STREET
US HWY 550

ASSUMED LOCATION EX. WATERMAIN
EX. FIRE HYDRANT
EX. IRRIGATION CULVERT
EX. WATERMAIN (TYP.)
9 TYP.
4 1 6 TYP.
EX. IRRIGATION DITCH
EX. IRRIGATION DITCH
EX. HEADGATE STRUCTURE

PHASE 1
PHASE 2

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WATERVIEW AFFORDABLE HOUSING SUBDIVISION

OURAY, COLORADO

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PHASE 1 SITE PLAN

CONSTRUCTION KEYNOTES:

1. PROPOSED FIRE HYDRANT.
2. PROPOSED STORMWATER TREATMENT FACILITY/SNOW STORAGE AREA.
3. PROPOSED LANDSCAPE PUBLIC AREA TO RIVER TRAIL/SNOW STORAGE AREA.
4. PROPOSED 5FT CONCRETE SIDEWALK.
5. PROPOSED ROADWAY.
6. PROPOSED STORM DRAIN.
7. 8" WATERMAIN CONNECTION TO EXISTING WATERMAIN.
8. NEW SEWER SERVICE. TWO-WAY CLEANOUT WITHIN 5FT OF FOUNDATION.
9. NEW WATER SERVICE.
10. PROPOSED SEWER MANHOLE CONNECTION TO EX. 12" SEWER MAIN.
11. STORMWATER POND OUTLET STRUCTURE PER DETAILS.
12. CONCRETE DRIVEWAY AREA PER DETAILS.

UNCOMPAHGRE RIVER

EX. SEWERMAIN (TYP.)

EX. OVERHEAD POWER (TYP.)

1 3 11 2 6 9 TYP. 4 12 TYP. 8 TYP. 1 7 10

GRAPHIC SCALE
0 15 30 FEET 60 90
0 ¼ ½ ¾ 1 INCHES 2 3

OPEN SPACE A 14878 SF

CULVERT FOR IRRIGATION CONVEYANCE

LOT 23 4077 SF | LOT 24 2922 SF | LOT 25 3058 SF | LOT 26 3089 SF | LOT 27 3271 SF | LOT 28 2116 SF | LOT 29 3433 SF | LOT 30 4616 SF | LOT 31 4410 SF | OPEN SPACE B 4988 SF | LOT 32 4044 SF | LOT 33 3963 SF | LOT 34 2956 SF | LOT 35 1875 SF | LOT 36 2962 SF | LOT 37 2884 SF | LOT 38 2992 SF | LOT 39 3112 SF | LOT 40 4663 SF | LOT 41 9138 SF | LOT 42 15905 SF

PC: 0+94.45 PT: 1+35.33

0+00 1+00 2+00 3+00 4+00 5+00 6+00

WATERVIEW STREET 5

LOT 2-A
5.29 ACRES

LOT 65 3741 SF | LOT 64 1702 SF | LOT 63 2666 SF | LOT 62 3569 SF | LOT 61 3602 SF | LOT 60 2675 SF | LOT 59 1642 SF | LOT 58 2645 SF | LOT 57 2637 SF | LOT 56 1630 SF | LOT 55 2643 SF | LOT 136 2583 SF | LOT 53 1618 SF | LOT 52 2623 SF | LOT 51 3479 SF | LOT 50 3494 SF | LOT 49 2577 SF | LOT 48 1629 SF | LOT 47 2547 SF | LOT 46 3376 SF | LOT 45 5181 SF | LOT 44 6409 SF | LOT 43 7079 SF | LOT 22 9962 SF

OPEN SPACE C 3714 SF

R38' F/C

US HWY 550

EX. TELECOMM

EX. IRRIGATION DITCH

VEHICLE CHAINING/PARKING AREA

CDOT VARIABLE MESSAGING SIGN

EX. WATERMAIN (TYP.)

EXISTING EMERGENCY ACCESS & EGRESS TO REMAIN

PHASE 1 PHASE 2

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WATERVIEW AFFORDABLE HOUSING SUBDIVISION

OURAY, COLORADO

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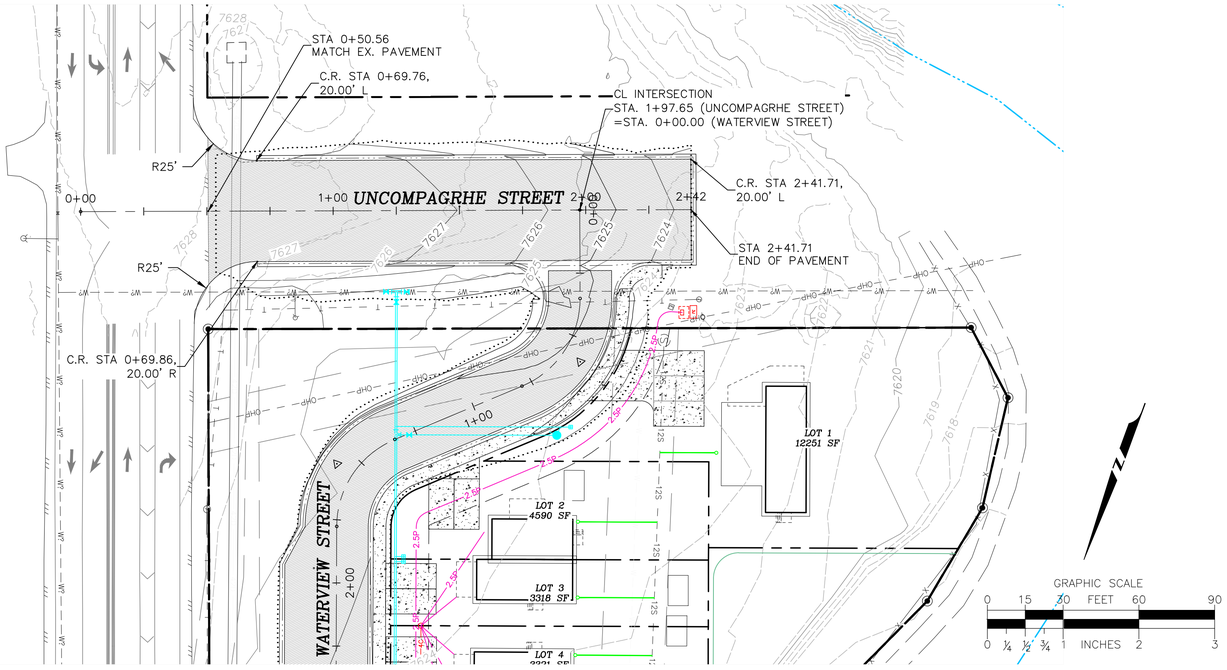
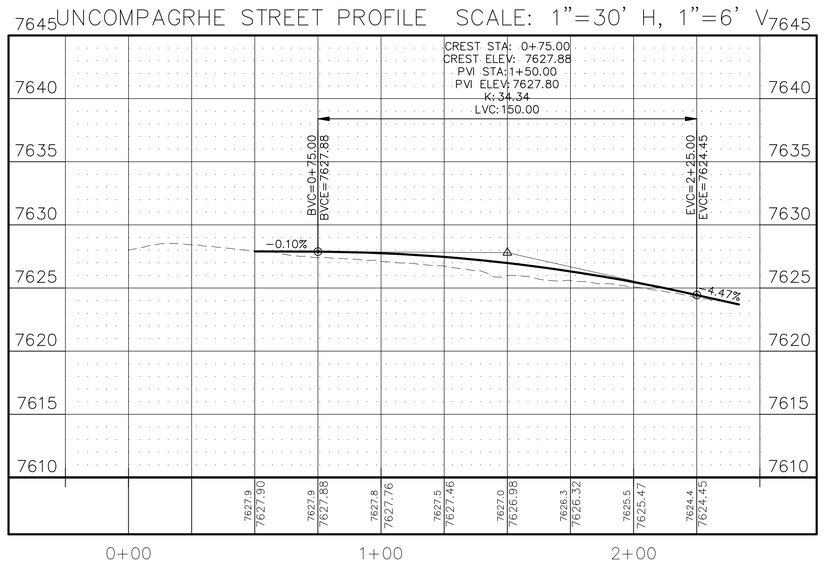
PHASE 2 SITE PLAN





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Revisions:

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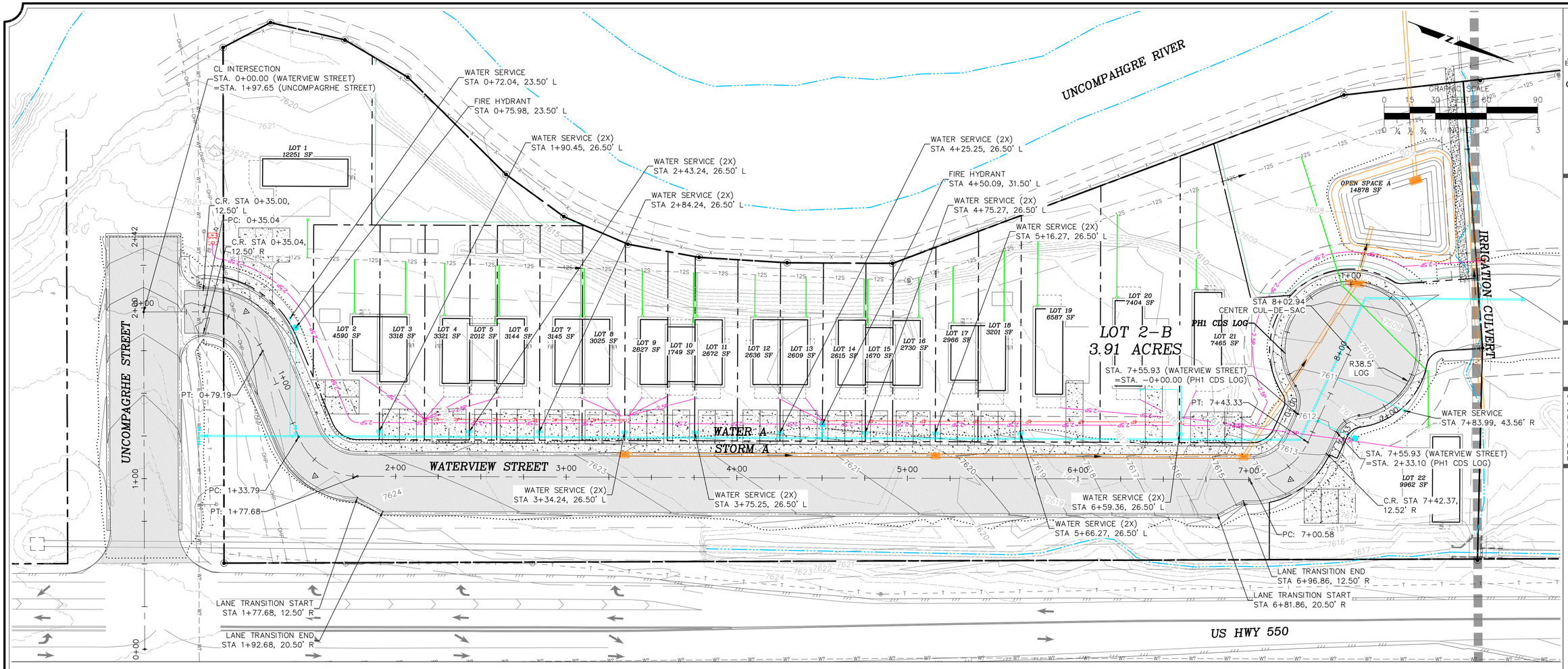
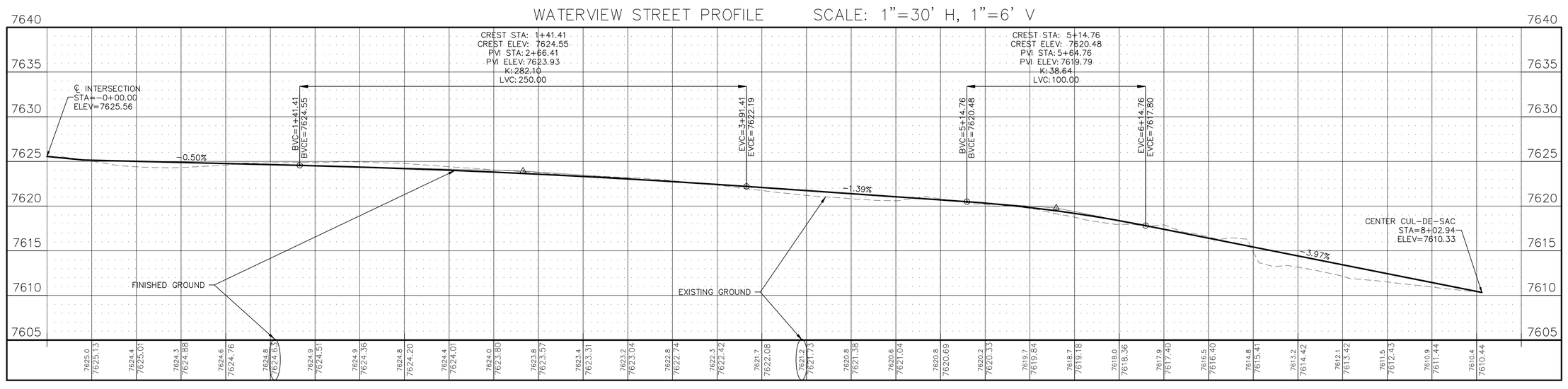
Drawn By:	JAE
Designed by:	RSH
Checked By:	RSH

Sheet
RD2.01

UNCOMPAGHRE ST. PLAN & PROFILE





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WATERVIEW AFFORDABLE HOUSING SUBDIVISION

OURAY, COLORADO

Issue Record:

SCHEMATIC	03-13-2023

Revisions:

Project Number:	21-116
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Checked By:	RSH

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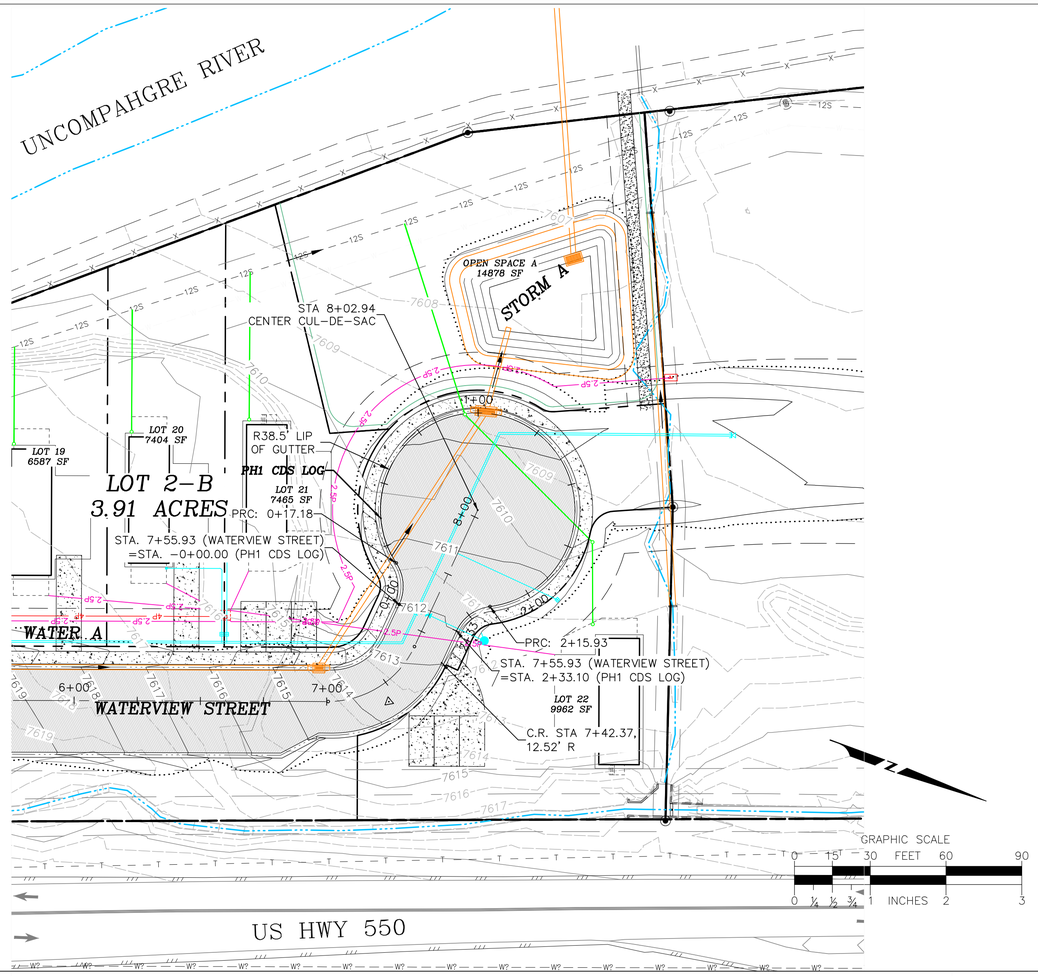
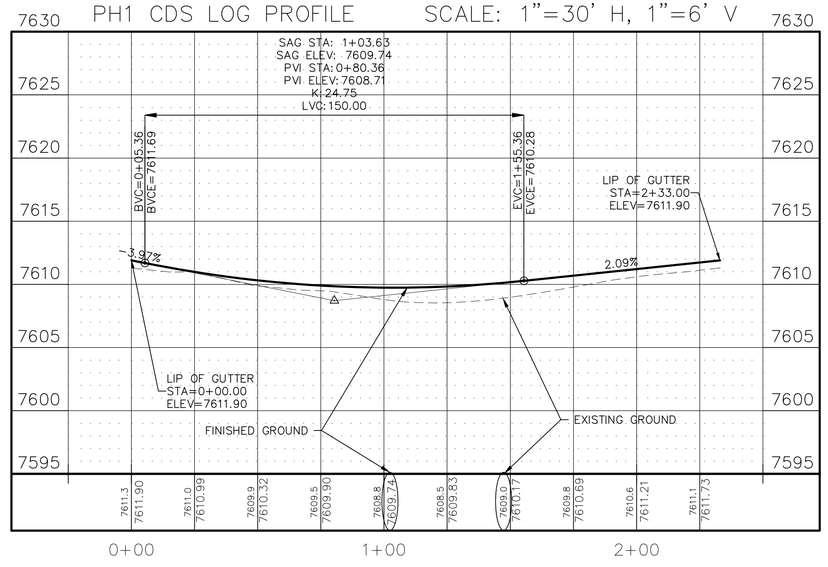
RD2.02

WATERVIEW ST. PHASE 1 PLAN & PROFILE





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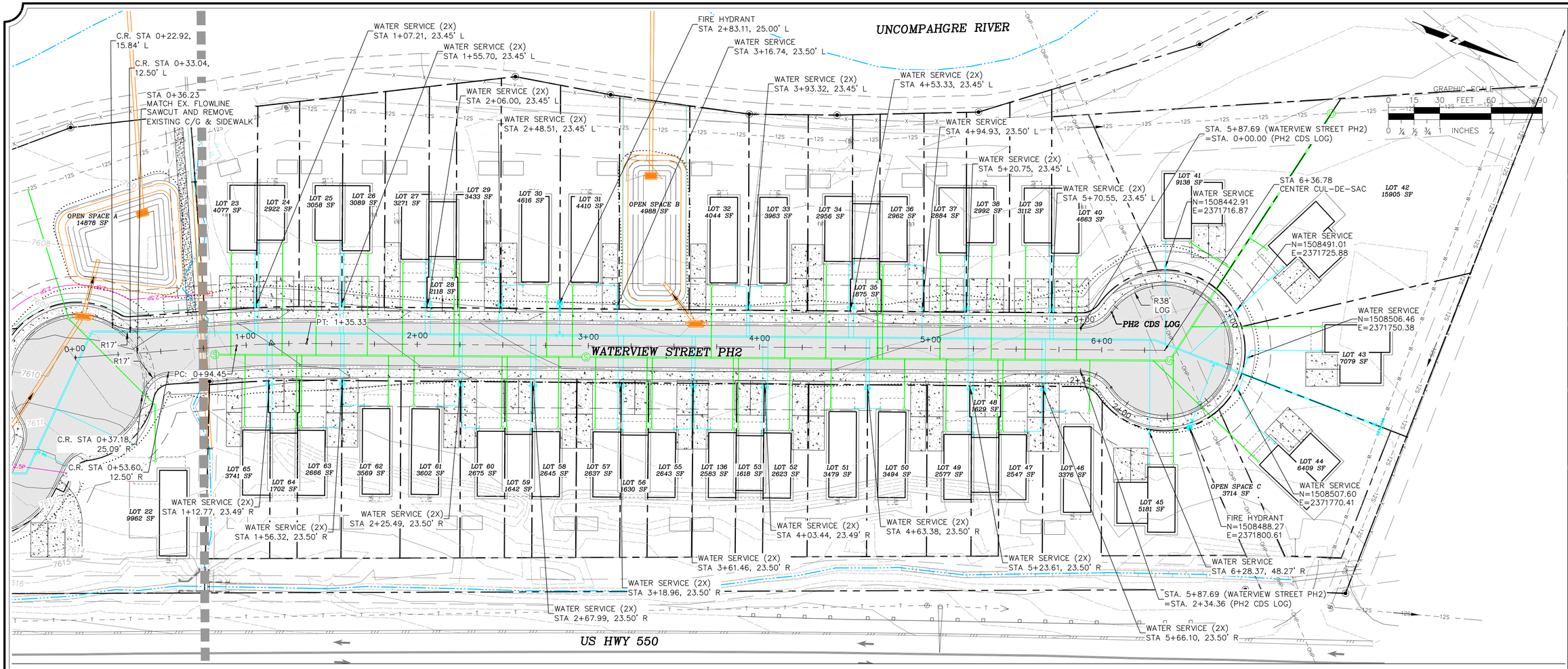
RD2.03

WATERVIEW ST. PHASE 1 CDS PLAN & PROFILE



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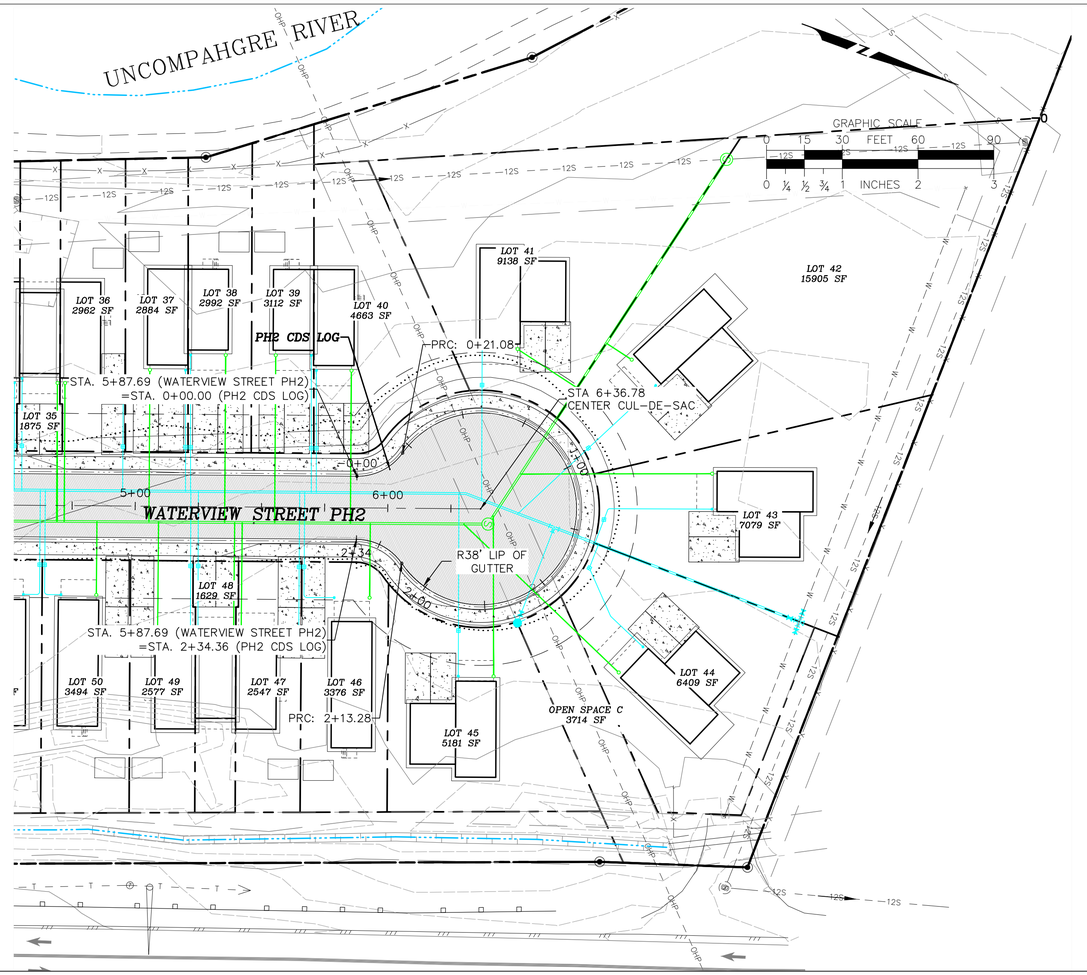
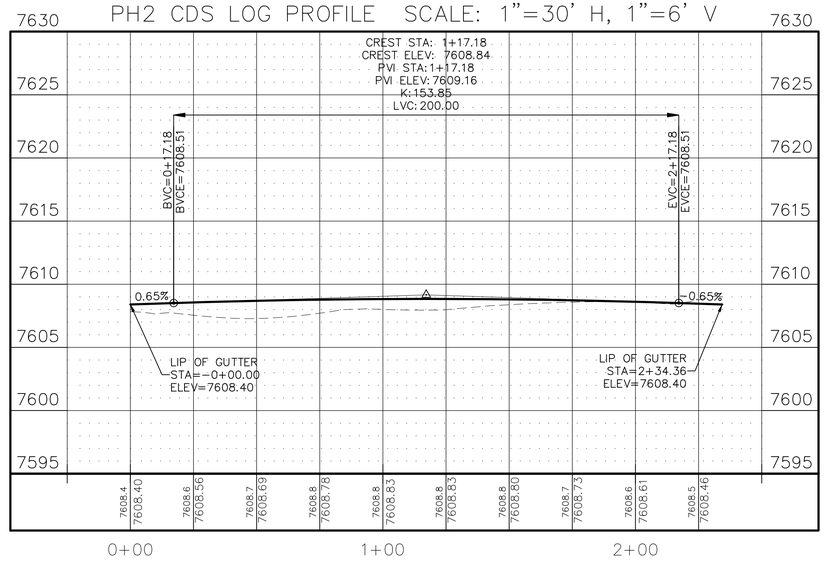
RD2.04

WATERVIEW ST. PHASE 2 PLAN & PROFILE



PH2 CDS LOG PROFILE SCALE: 1"=30' H, 1"=6' V



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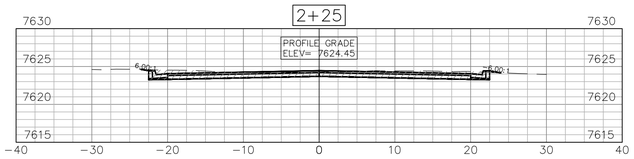
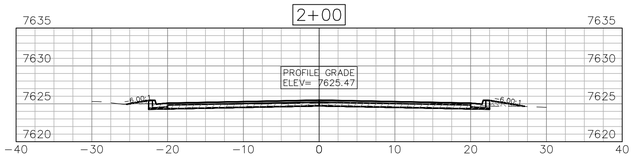
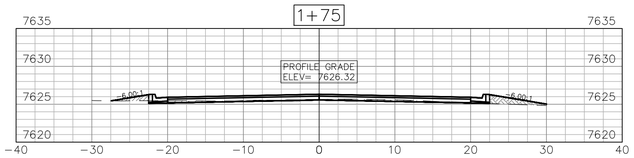
Checked By:	RSH

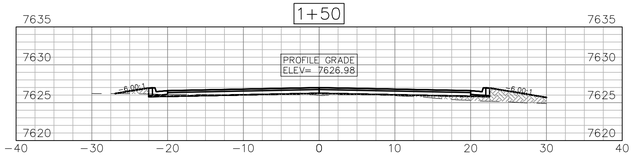
Sheet **RD2.05**

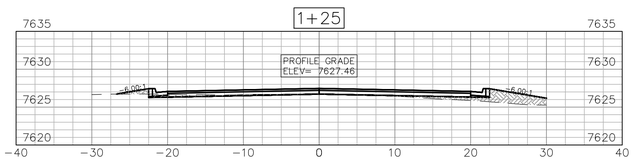
WATERVIEW ST. PHASE 2 CDS PLAN & PROFILE

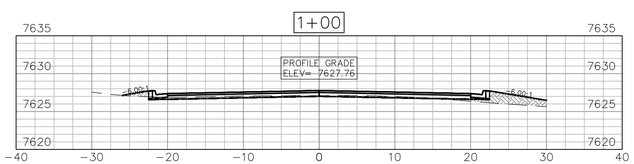


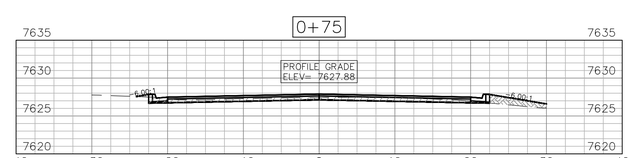












UNCOMPAGRHE STREET EARTHWORK TABULATION

Station	Fill Area (SF)	Cut Area (SF)	Fill Volume (CY)	Cut Volume (CY)	Cumulative Fill Vol (CY)	Cumulative Cut Vol (CY)
0+75.00	6.67	17.05	0.00	0.00	0.00	0.00
1+00.00	11.75	6.96	8.53	11.12	8.53	11.12
1+25.00	15.64	4.09	12.68	5.12	21.21	16.23
1+50.00	17.93	2.09	15.54	2.86	36.75	19.10
1+75.00	7.50	6.02	11.77	3.76	48.53	22.85
2+00.00	2.31	21.87	4.54	12.91	53.07	35.77
2+25.00	0.16	39.24	1.14	28.29	54.21	64.06

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WATERVIEW AFFORDABLE
HOUSING SUBDIVISION

OURAY, COLORADO

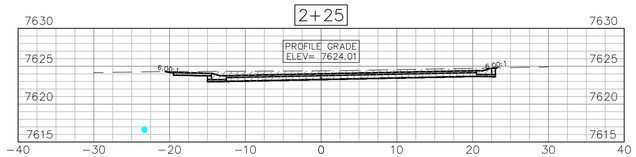
Issue Record:
SCHEMATIC 05-05-2023

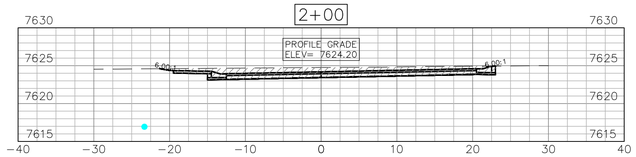
Revisions:

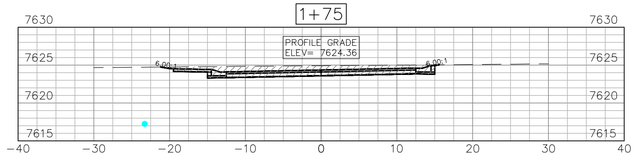
Project Number: 21-116
Drawn By: JAE
Designed by: RSH
Checked By: RSH

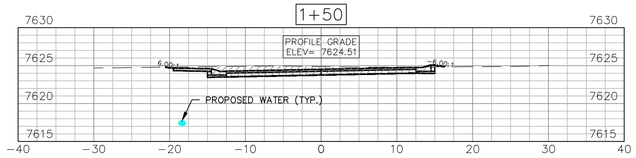
Sheet
RD3.01

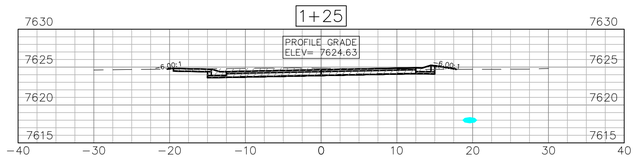
**UNCOMPAGHRE ST.
CROSS SECTION**

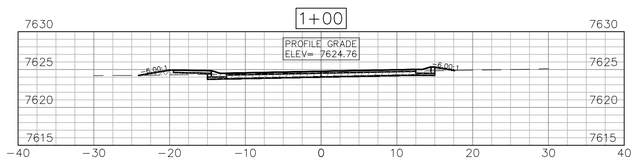


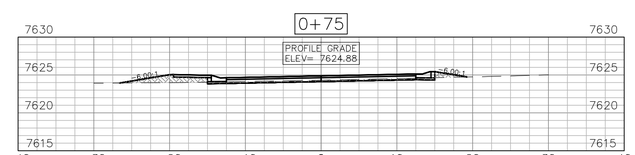


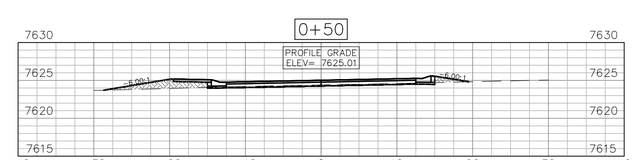


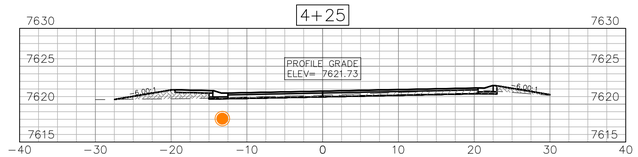


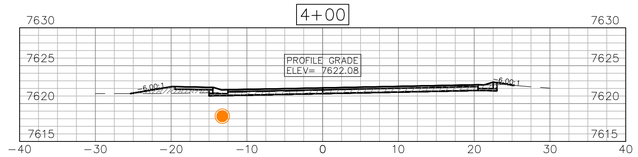


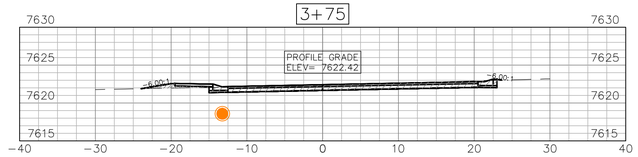


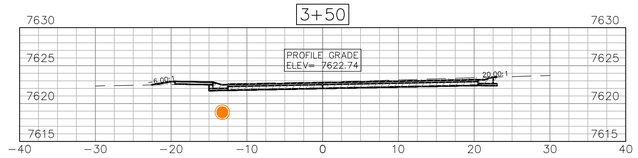


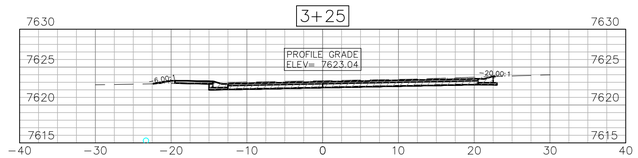


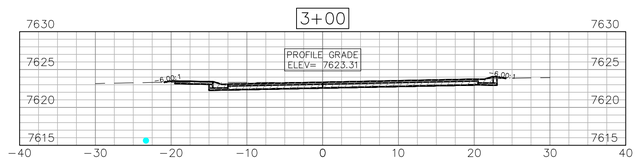


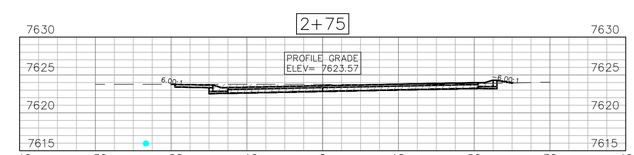


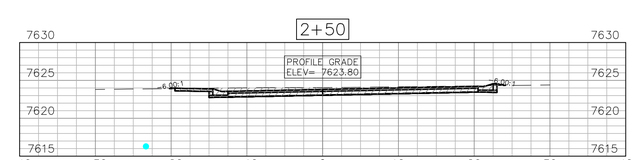


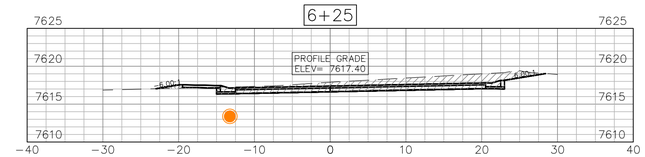


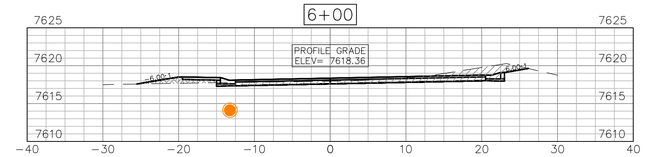


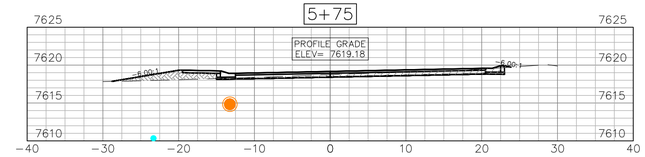


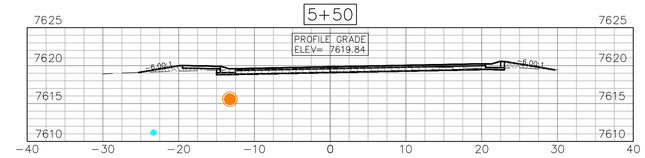


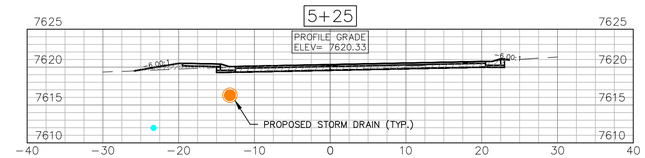


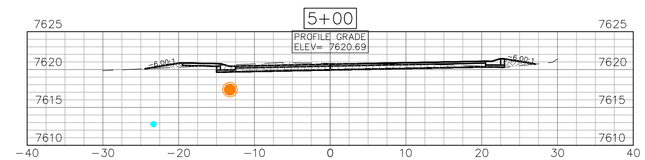


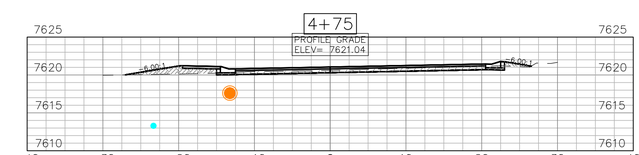


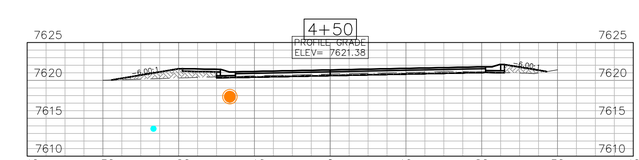












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WATERVIEW AFFORDABLE HOUSING SUBDIVISION

OURAY, COLORADO

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Designed by:	RSH
Checked By:	RSH

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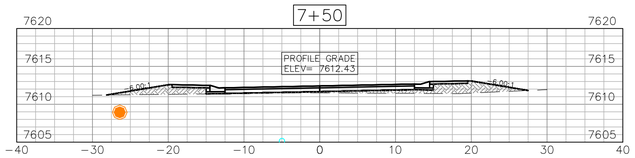
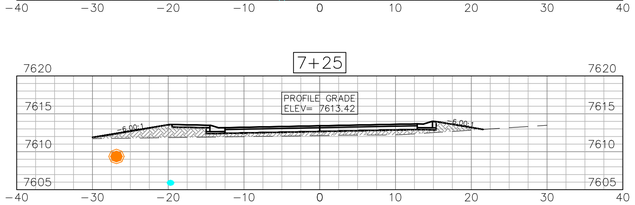
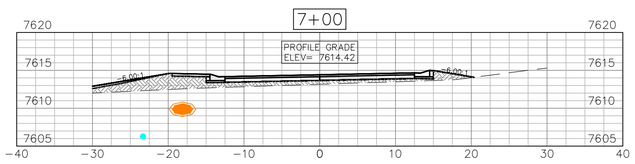
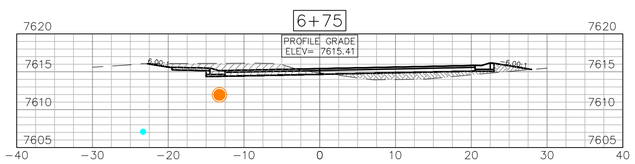
RD3.02

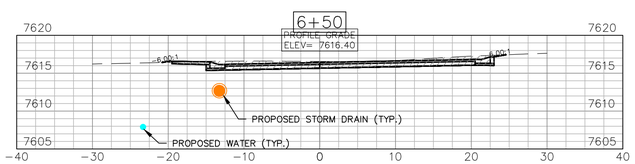
WATERVIEW ST. PHASE 1 CROSS SECTION











WATERVIEW STREET EARTHWORK TABULATION

Station	Fill Area (SF)	Cut Area (SF)	Fill Volume (CY)	Cut Volume (CY)	Cumulative Fill Vol (CY)	Cumulative Cut Vol (CY)
0+50.00	11.41	4.23	0.00	0.00	0.00	0.00
0+75.00	8.61	5.82	12.67	4.64	12.67	4.64
1+00.00	3.32	17.36	5.84	10.75	18.51	15.39
1+25.00	0.73	28.88	1.87	21.40	20.38	36.79
1+50.00	0.14	35.89	0.50	28.58	20.88	65.37
1+75.00	0.00	42.59	0.09	34.18	20.97	99.55
2+00.00	0.00	51.76	0.00	43.69	20.97	143.24
2+25.00	0.00	46.54	0.00	45.51	20.97	188.75
2+50.00	0.13	38.98	0.06	39.59	21.03	228.34
2+75.00	0.38	34.74	0.24	34.13	21.27	262.47
3+00.00	0.28	32.43	0.31	31.10	21.58	293.57
3+25.00	0.60	35.49	0.41	31.45	21.99	325.02
3+50.00	0.75	34.76	0.63	32.52	22.61	357.54
3+75.00	2.32	28.09	1.42	29.10	24.03	386.64
4+00.00	5.22	18.41	3.49	21.53	27.52	408.16
4+25.00	11.36	11.09	7.67	13.66	35.20	421.82
4+50.00	13.07	6.61	11.31	8.20	46.51	430.02
4+75.00	8.28	13.87	9.89	9.49	56.39	439.50
5+00.00	4.07	25.54	5.72	18.25	62.11	457.75
5+25.00	3.93	23.11	3.70	22.52	65.82	480.27
5+50.00	6.20	20.55	4.69	20.21	70.50	500.48
5+75.00	9.88	14.35	7.44	16.16	77.95	516.64
6+00.00	4.66	28.98	6.73	20.06	84.68	536.70
6+25.00	0.99	56.78	2.61	39.70	87.29	576.40
6+50.00	0.11	39.36	0.51	44.51	87.80	620.91
6+75.00	17.07	24.84	7.96	29.72	95.76	650.63
7+00.00	40.41	0.00	26.61	11.50	122.37	662.13
7+25.00	36.23	0.00	27.44	0.00	149.81	662.13
7+50.00	28.90	0.00	28.82	0.00	178.63	662.13

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WATERVIEW AFFORDABLE HOUSING SUBDIVISION

OURAY, COLORADO

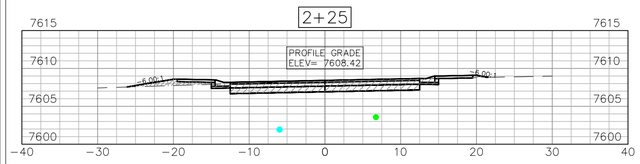
Issue Record:
SCHEMATIC 05-05-2023

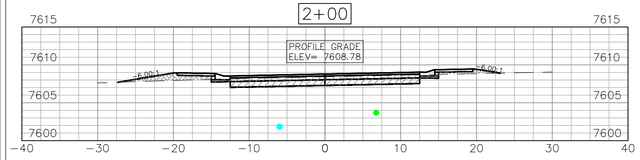
Revisions:

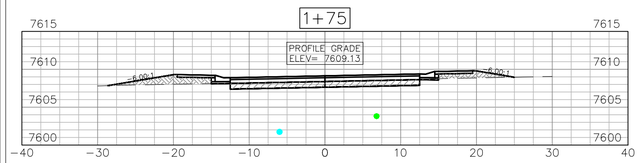
Project Number: 21-116
Drawn By: JAE
Designed by: RSH
Checked By: RSH

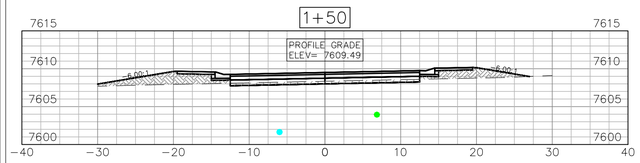
Sheet
RD3.03

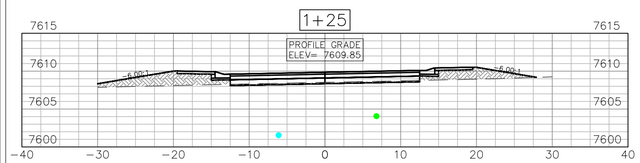
WATERVIEW ST. PHASE 1 CROSS SECTION

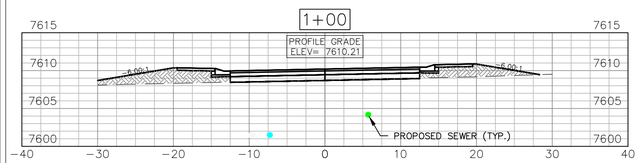


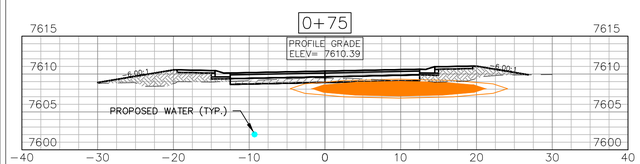


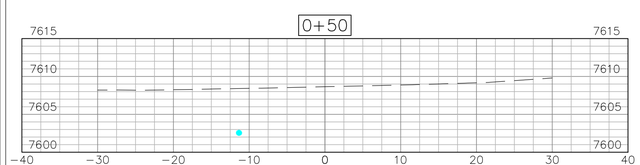


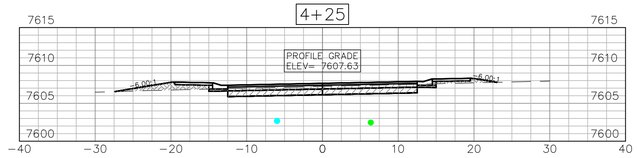


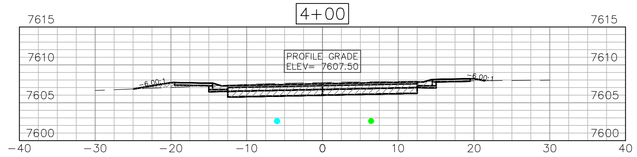


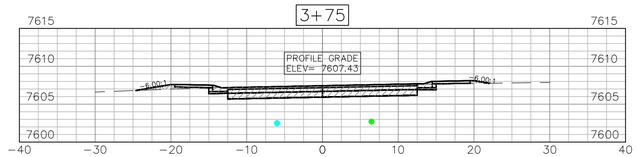


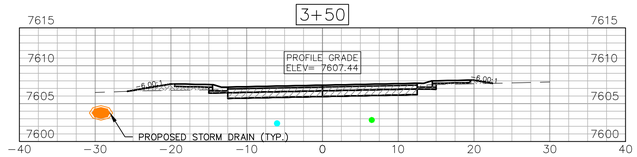


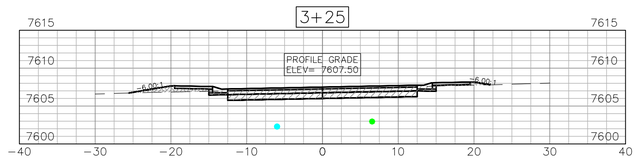


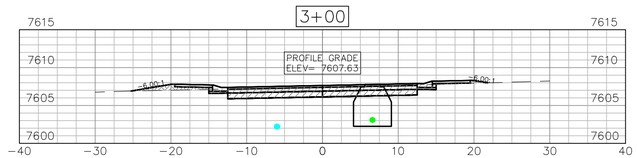


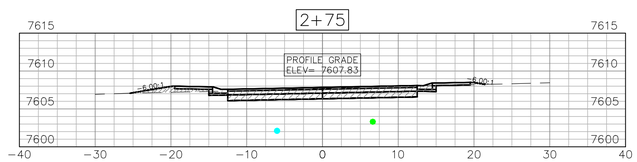


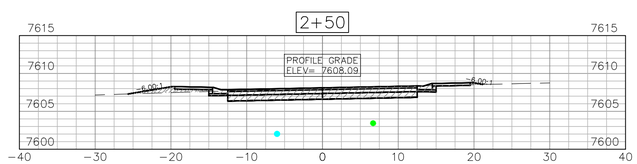


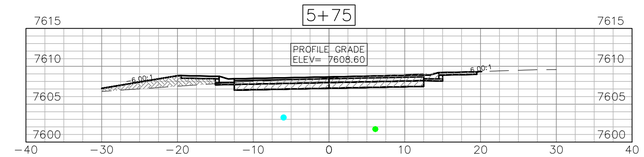


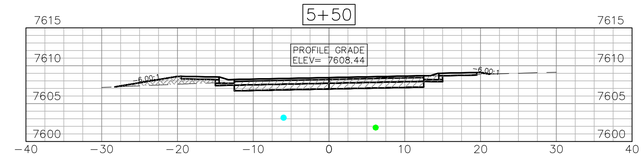


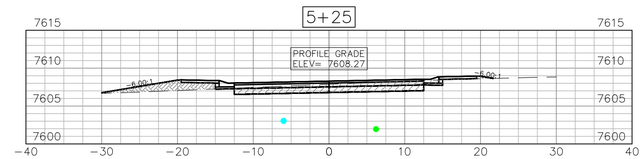


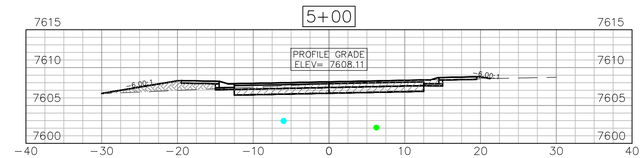


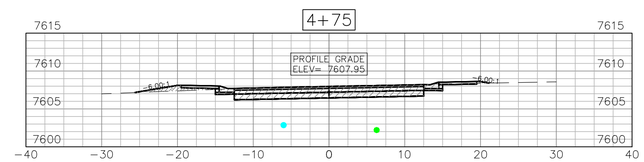


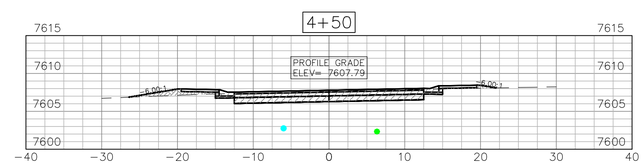












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WATERVIEW AFFORDABLE HOUSING SUBDIVISION

OURAY, COLORADO

Issue Record:

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Revisions:

Project Number:	21-116
Drawn By:	JAE
Designed by:	RSH
Checked By:	RSH

Sheet

RD3.04

WATERVIEW ST. PHASE 2 CROSS SECTION

WATERVIEW STREET PH2 EARTHWORK TABULATION

Station	Fill Area (SF)	Cut Area (SF)	Fill Volume (CY)	Cut Volume (CY)	Cumulative Fill Vol (CY)	Cumulative Cut Vol (CY)
0+50.00	0.00	0.00	0.00	0.00	0.00	0.00
0+75.00	32.92	10.11	15.24	4.68	15.24	4.68
1+00.00	38.81	1.17	33.21	5.22	48.45	9.90
1+25.00	34.91	4.45	34.46	2.60	82.90	12.50
1+50.00	28.96	8.78	29.69	6.12	112.60	18.63
1+75.00	15.37	20.49	20.52	13.55	133.12	32.18
2+00.00	9.05	30.58	11.31	23.64	144.43	55.82
2+25.00	5.04	38.74	6.52	32.09	150.95	87.91
2+50.00	4.28	39.77	4.32	36.35	155.27	124.26
2+75.00	4.51	37.46	4.07	35.76	159.34	160.02
3+00.00	4.81	35.63	4.32	33.84	163.65	193.86
3+25.00	5.54	34.78	4.79	32.60	168.45	226.45
3+50.00	6.34	32.77	5.50	31.27	173.94	257.73
3+75.00	3.11	40.84	4.38	34.08	178.32	291.81
4+00.00	2.89	45.59	2.78	40.01	181.10	331.82
4+25.00	9.35	29.29	5.67	34.66	186.77	366.48
4+50.00	5.53	36.39	6.89	30.41	193.66	396.89
4+75.00	3.78	43.38	4.31	36.93	197.97	433.82
5+00.00	11.01	33.81	6.85	35.73	204.82	469.55
5+25.00	12.79	29.16	11.02	29.15	215.84	498.70
5+50.00	7.59	34.92	9.43	29.67	225.27	528.37
5+75.00	13.41	38.60	9.72	34.04	234.99	562.41

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WATERVIEW AFFORDABLE HOUSING SUBDIVISION

OURAY, COLORADO

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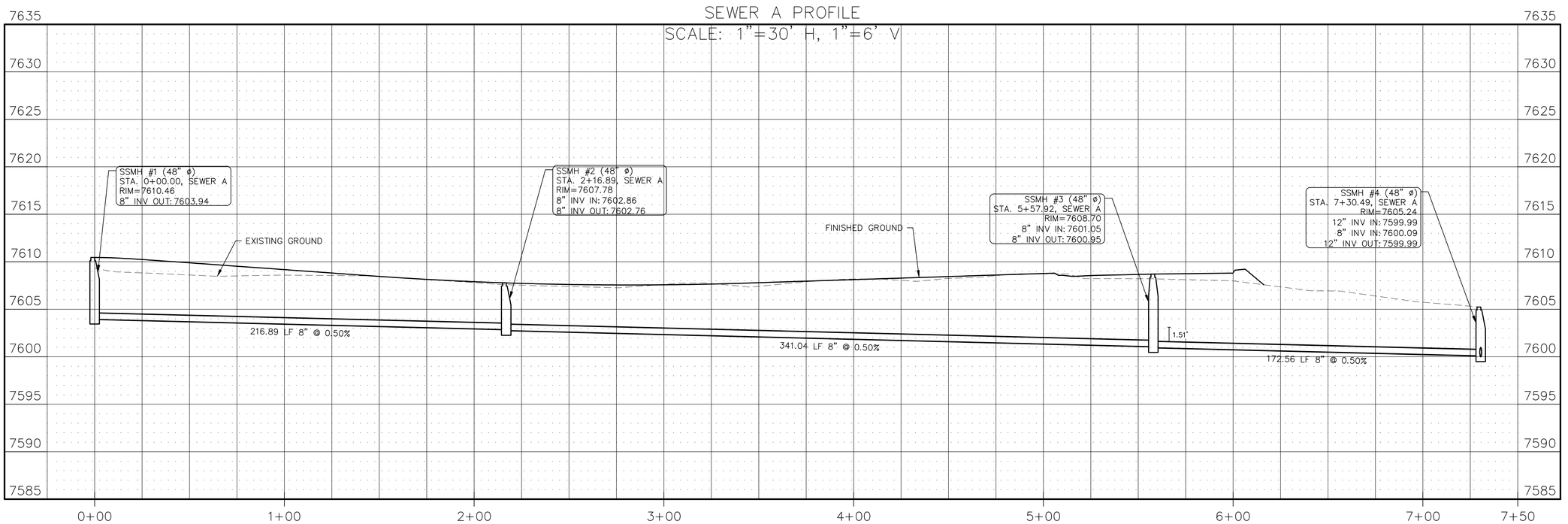
Drawn By:	JAE
Designed by:	RSH
Checked By:	RSH

Sheet

RD3.05

WATERVIEW ST. PHASE 2 CROSS SECTION



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WATERVIEW AFFORDABLE HOUSING SUBDIVISION

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Designed by: RSH
Checked By: RSH

Sheet
SS1.01

SEWER A PLAN & PROFILE

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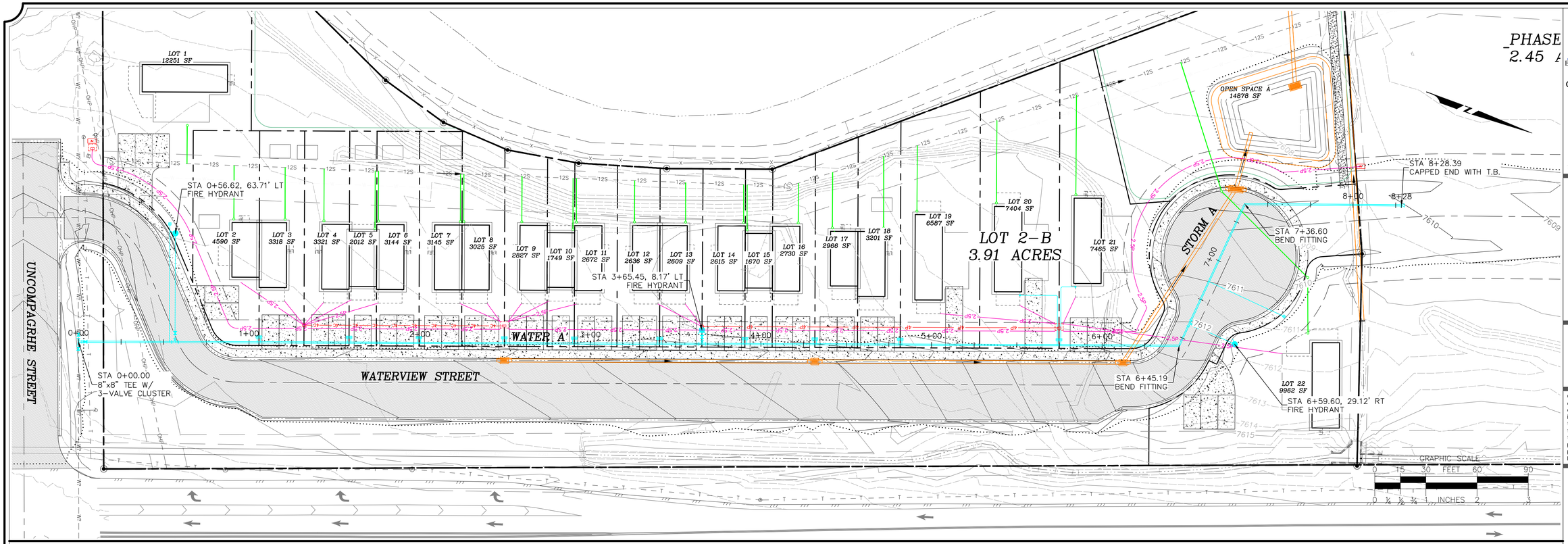
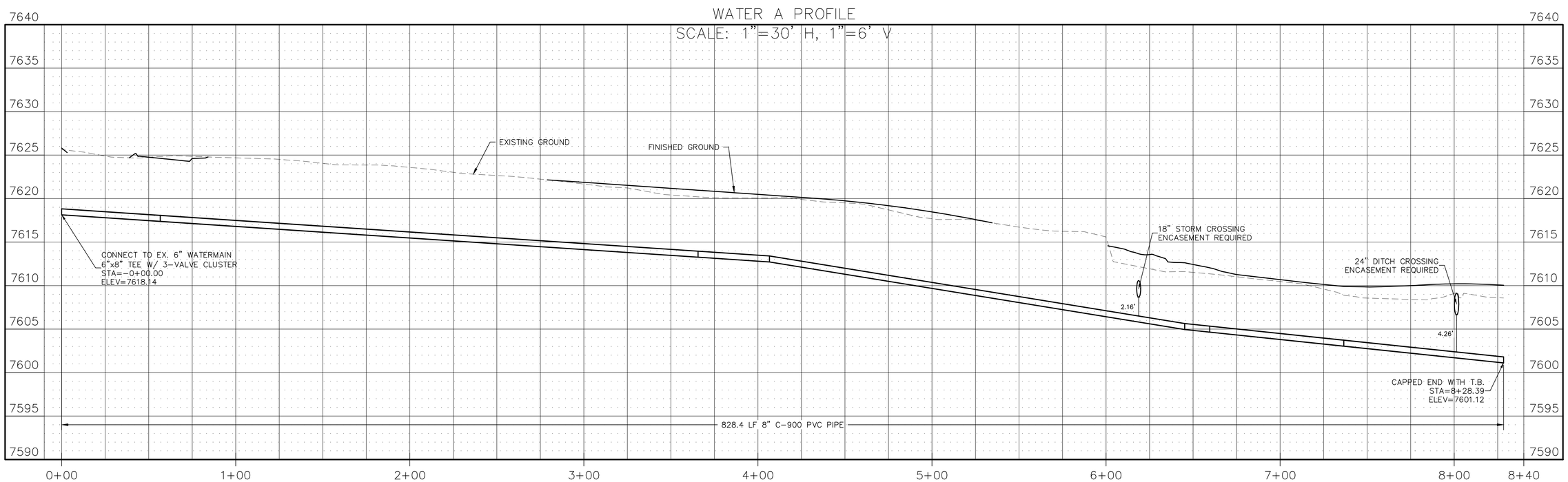


WATER A PROFILE

SCALE: 1"=30' H, 1"=6' V



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WATERVIEW AFFORDABLE HOUSING SUBDIVISION

OURAY, COLORADO

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Project Number: 21-116
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Designed by: RSH
Checked By: RSH

Sheet
W1.01

WATER A PLAN & PROFILE

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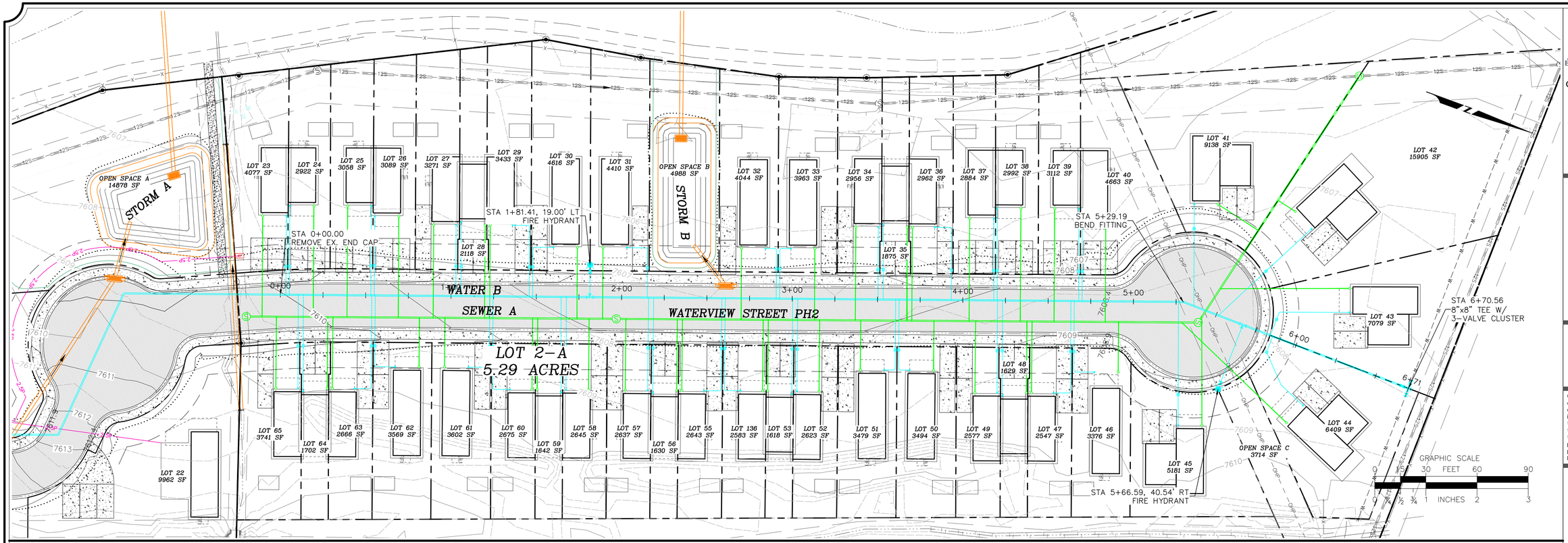

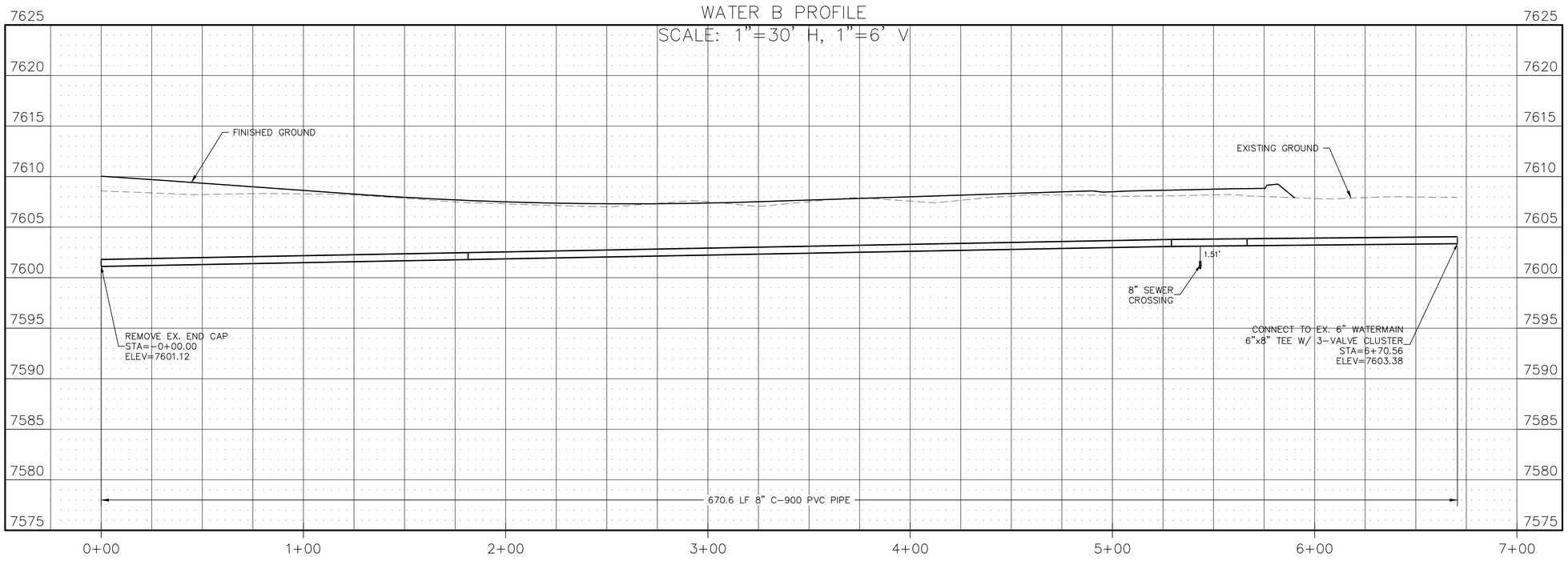

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WATERVIEW AFFORDABLE HOUSING SUBDIVISION

OURAY, COLORADO

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Designed by: RSH
Checked By: RSH

Sheet
W1.02

WATER B PLAN & PROFILE

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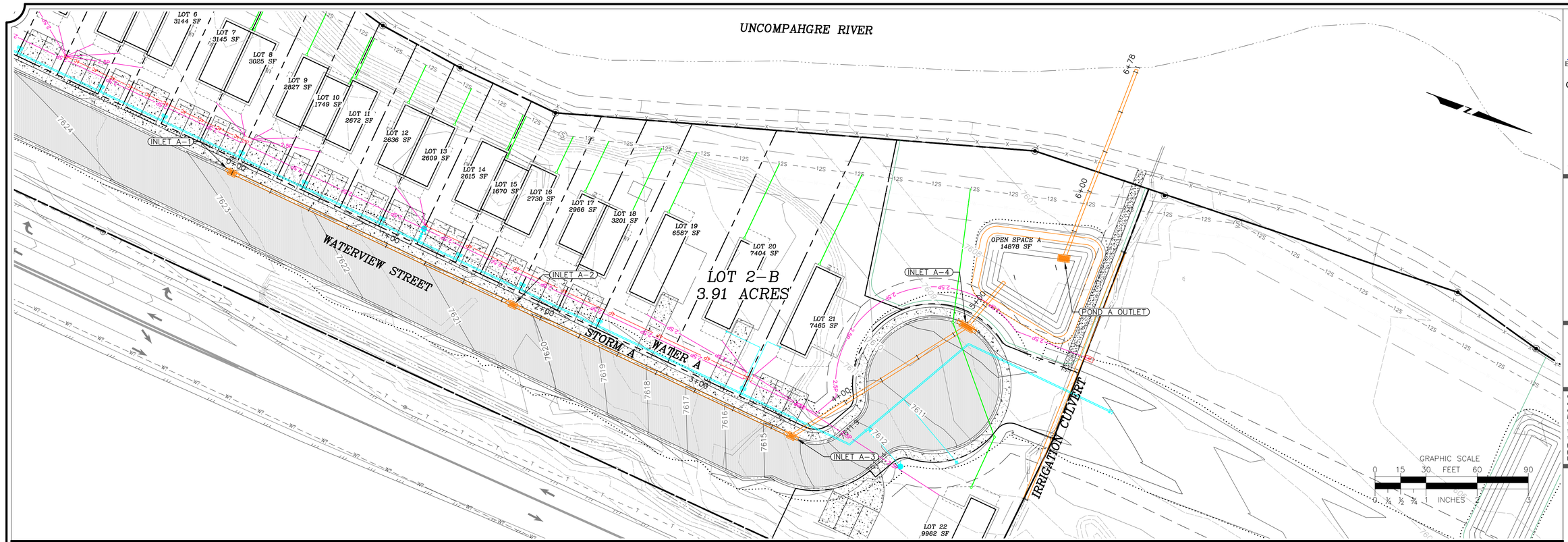

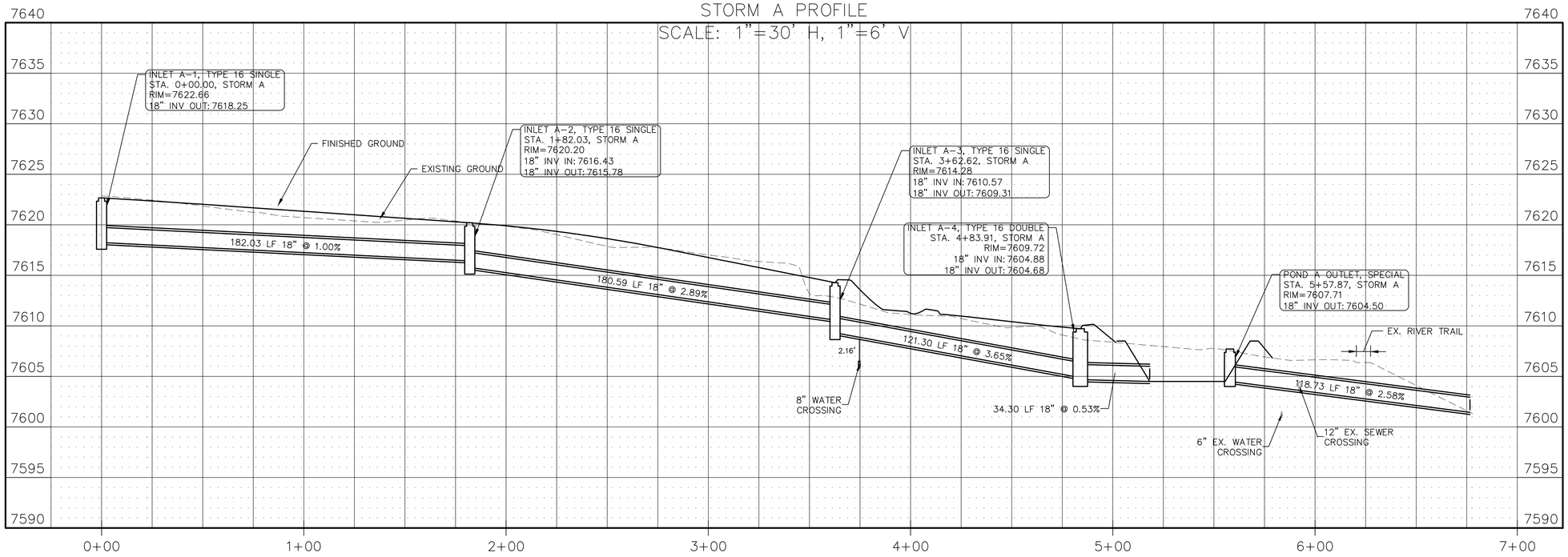

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WATERVIEW AFFORDABLE HOUSING SUBDIVISION

OURAY, COLORADO

Issue Record:
SCHEMATIC 05-05-2023

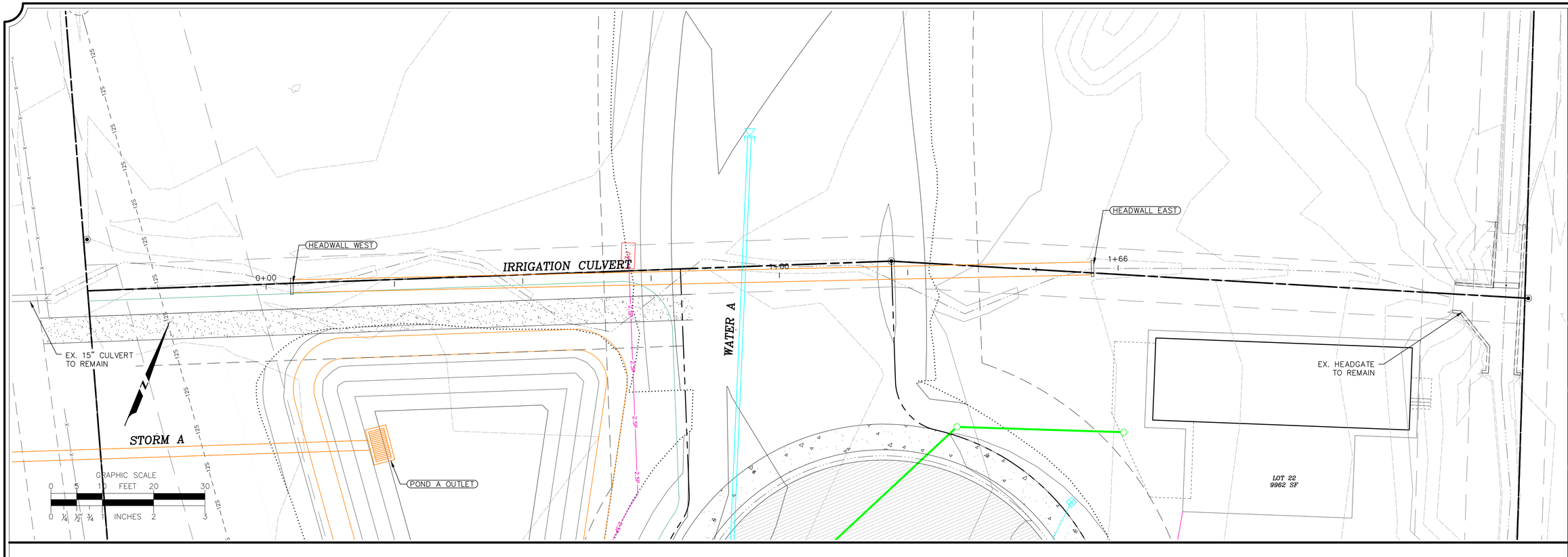
Revisions:

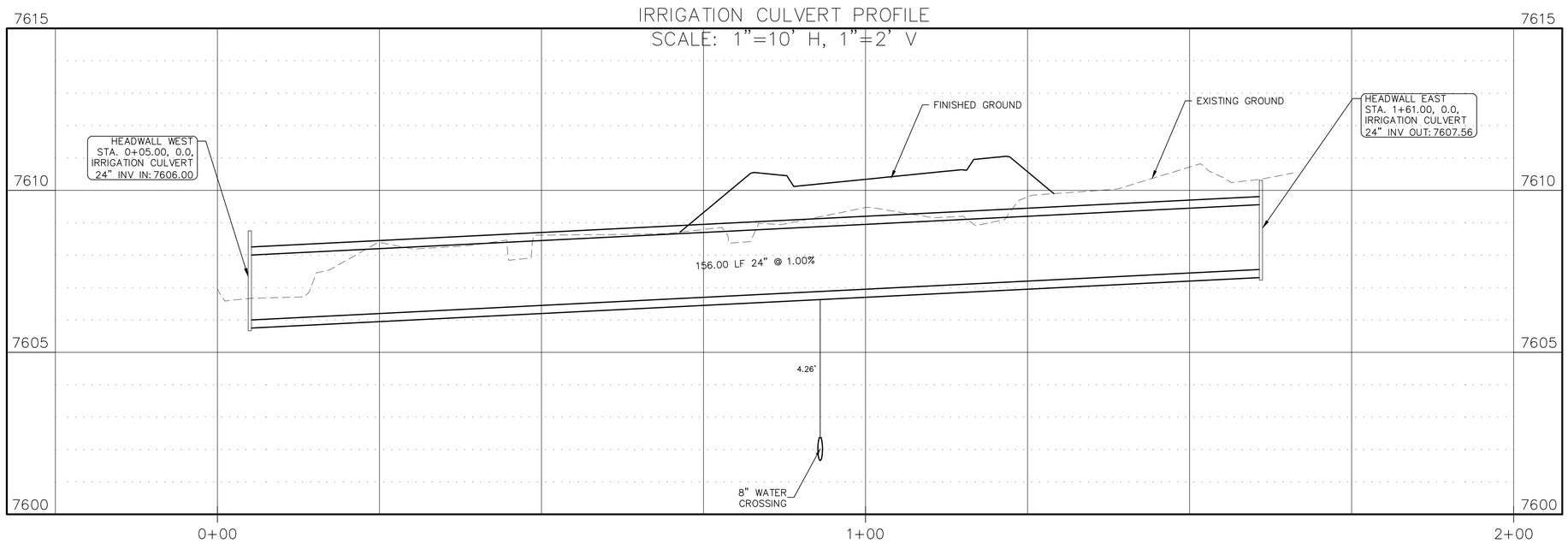
Project Number:	21-116
Drawn By:	JAE
Designed by:	RSH
Checked By:	RSH

Sheet
SD1.01

STORM DRAIN A PLAN & PROFILE

g:\2021\21-116 ouray affordable housing\cad\sheets\sd1.01 storm drain a plan & profile.dwg DATE:5/9/2023 USER:JENGLISH PLOT SCALE=1:1





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WATERVIEW AFFORDABLE HOUSING SUBDIVISION

OURAY, COLORADO

Issue Record:

SCHEMATIC	05-05-2023

Revisions:

Project Number:	21-116
Drawn By:	JAE
Designed by:	RSH
Checked By:	RSH

Sheet
SD1.02

IRRIGATION CULVERT PLAN & PROFILE

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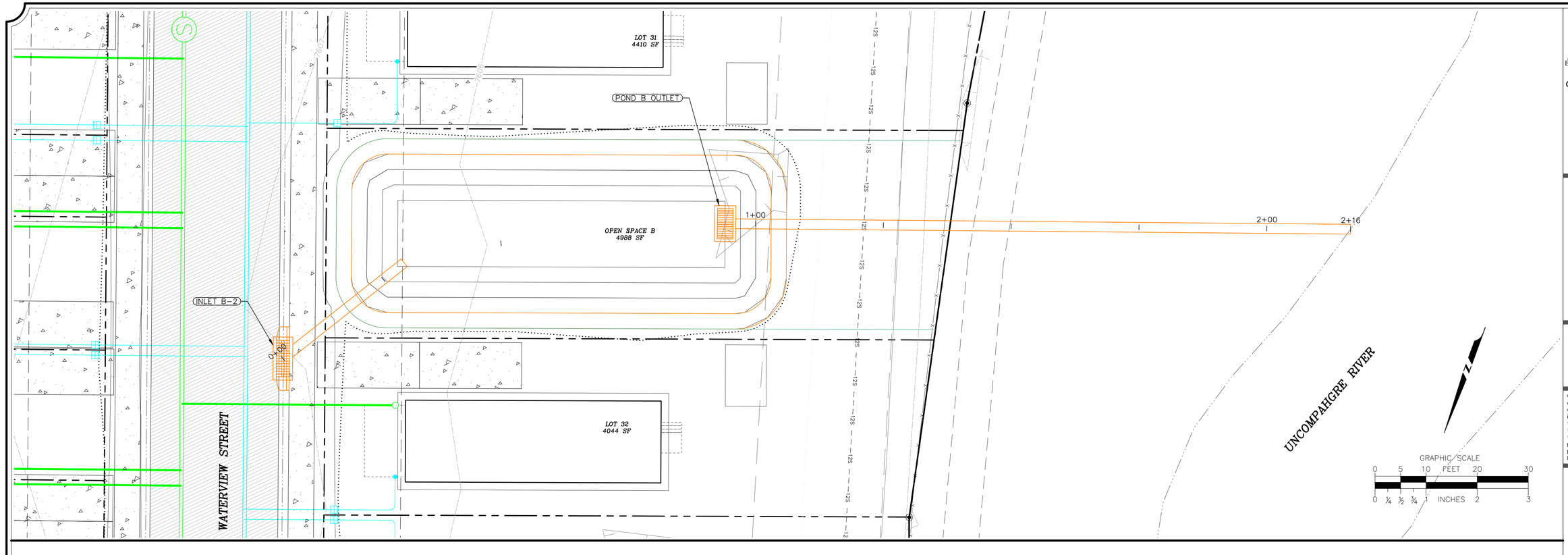

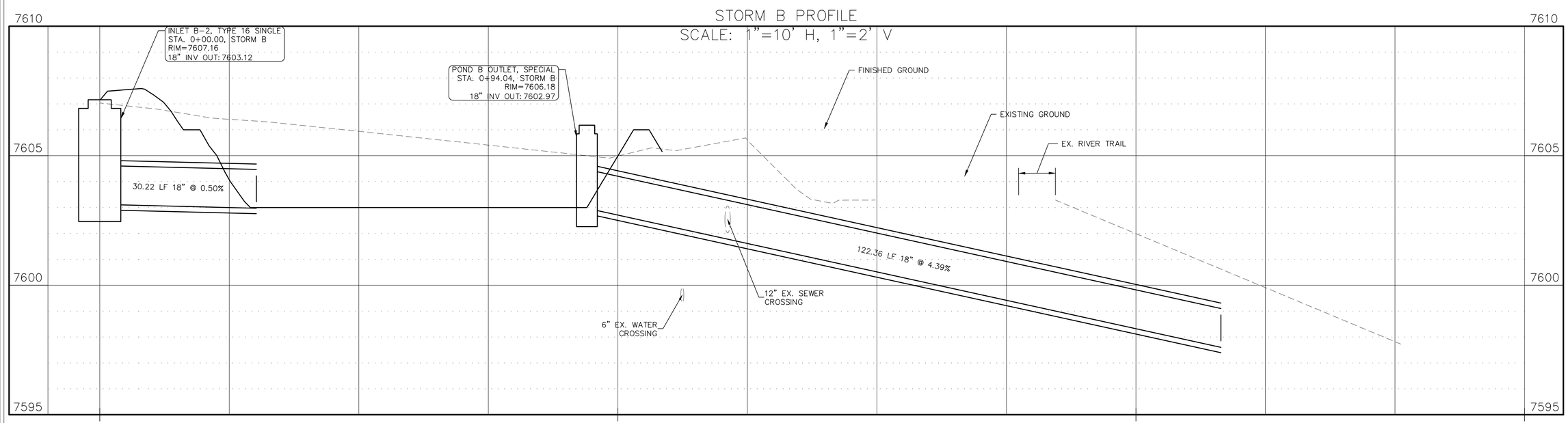

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Drawn By: JAE
Designed by: RSH
Checked By: RSH

Sheet
SD1.03

STORM DRAIN B PLAN & PROFILE

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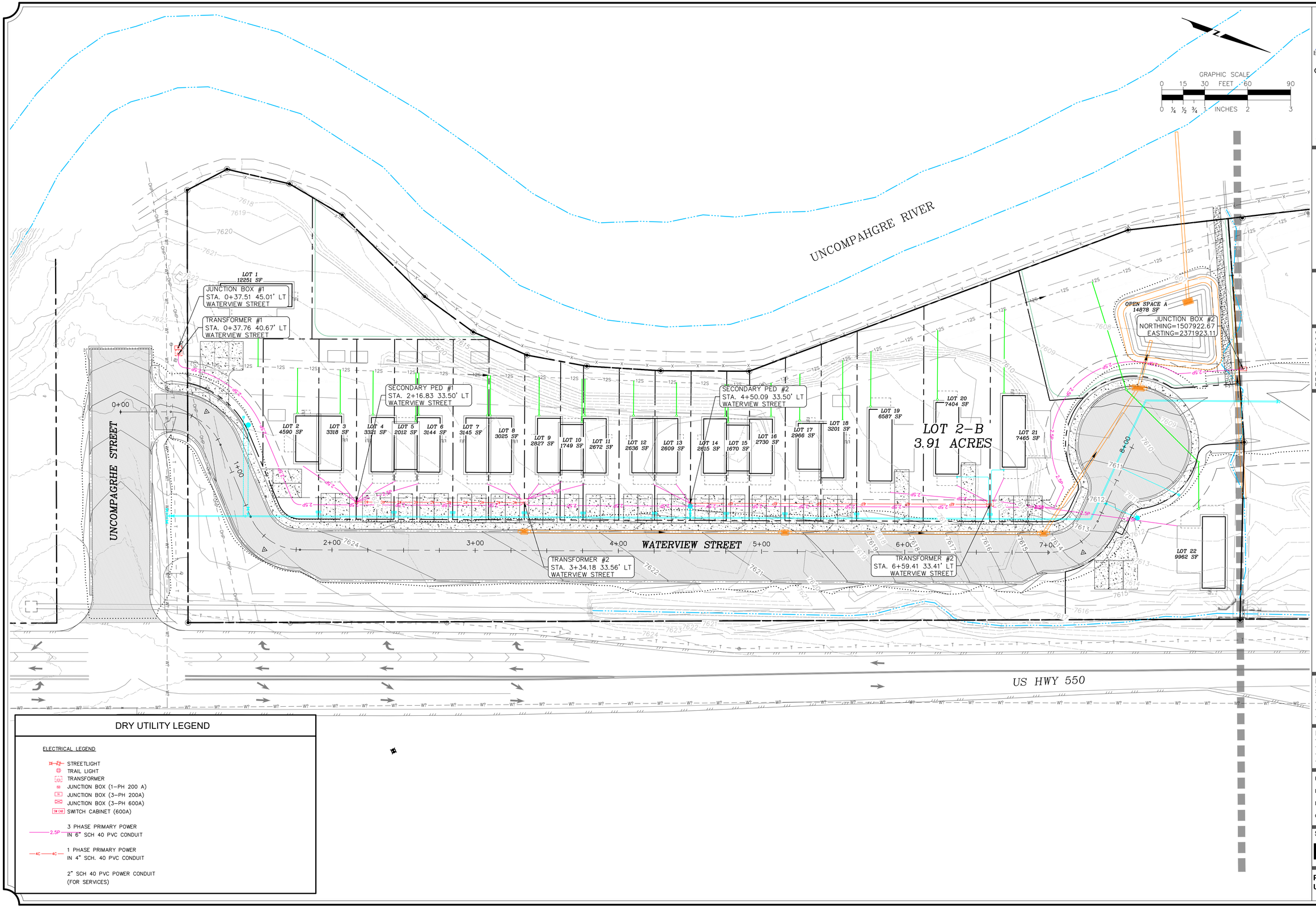

DRY UTILITY LEGEND

ELECTRICAL LEGEND

- STREETLIGHT
- TRAIL LIGHT
- TRANSFORMER
- JUNCTION BOX (1–PH 200 A)
- JUNCTION BOX (3–PH 200A)
- JUNCTION BOX (3–PH 600A)
- SWITCH CABINET (600A)

2.5P — 3 PHASE PRIMARY POWER IN 6" SCH 40 PVC CONDUIT

4C — 4C — 1 PHASE PRIMARY POWER IN 4" SCH. 40 PVC CONDUIT

2" SCH 40 PVC POWER CONDUIT (FOR SERVICES)

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WATERVIEW AFFORDABLE HOUSING SUBDIVISION

OURAY, COLORADO

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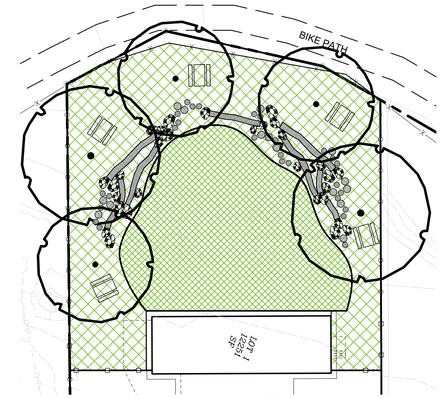
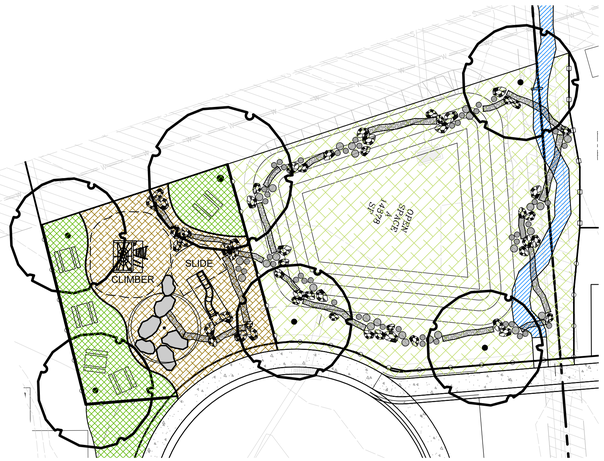
Sheet

DU1.01

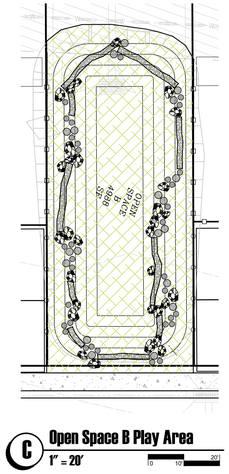
PHASE 1 DRY UTILITIES



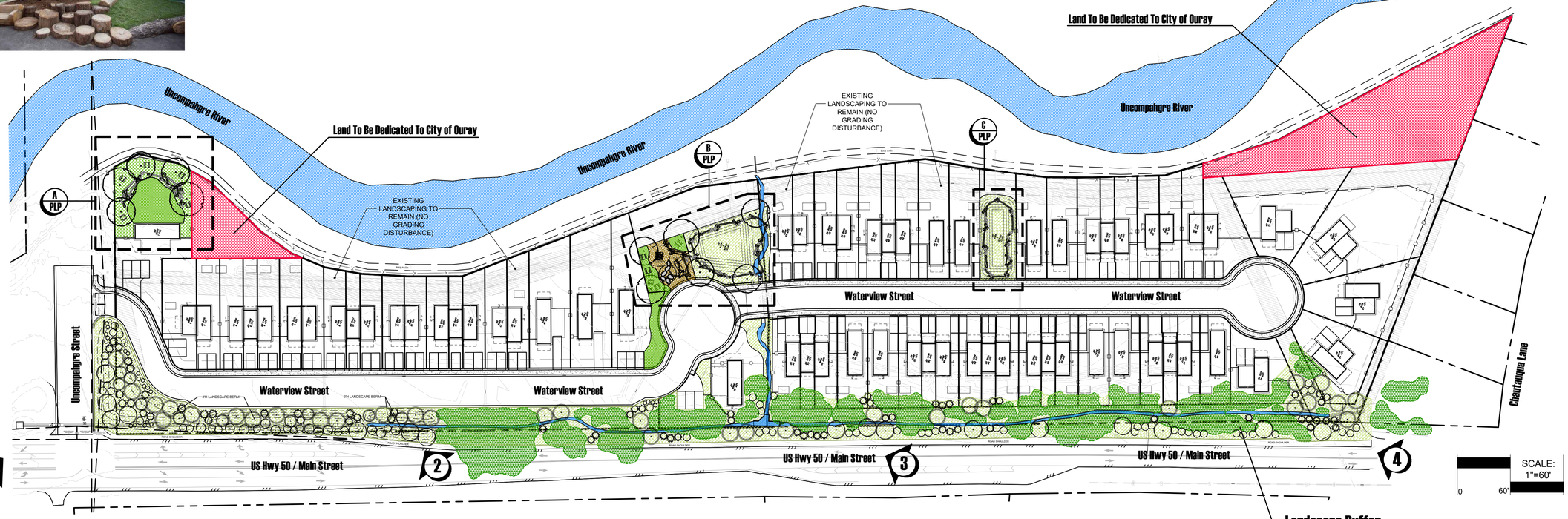
A Lot 1 Play Area
1" = 20'



B Open Space A Play Area
1" = 20'



C Open Space B Play Area
1" = 20'

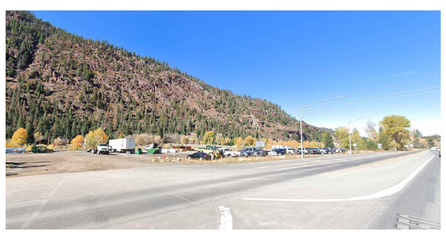


Landscape Buffer

MUCH OF THE EXISTING LANDSCAPE ALONG THE HIGHWAY IS IN HEALTHY CONDITION AND PROVIDES AN EXCELLENT BASIS FOR BUFFERING THE VISUAL IMPACTS OF THE DEVELOPMENT. SOME DEAD TREES AND SHRUBS DO EXIST AND WILL BE REMOVED AS PART OF THE INITIAL LANDSCAPE TREATMENT. WHERE VOIDS ARE CREATED FROM THIS DEAD WOOD REMOVAL NEW PLANTS WILL BE ADDED. THE PROPOSED LANDSCAPE PLAN IS TO SUPPLEMENT THE EXISTING PLANT MATERIAL WITH NEW PLANTS THAT WILL ACHIEVE AN EFFECTIVE LANDSCAPE BUFFER. THE FOLLOWING EXISTING PLANT SPECIES HAVE BEEN OBSERVED AND ALL HEALTHY PLANTS SHALL REMAIN UNDISTURBED:

NATIVE TREES AND SHRUBS	
COMMON NAME	BOTANICAL NAME
WILLOW	SALIX
OAK	QUERCUS
BIRCH	BETULA
COTTONWOOD	POPULUS
PINE	PINUS
MAPLE, BOXELDER	ACER
BLACKBERRY/	RUBUS
DEWBERRY	RUBUS
RASPBERRY	RUBUS
SPRUCE	PICEA
FIR	ABIES
SERVICEBERRY	AMELANCHIER
JERSEY TEA	CEANOTHUS
DOGWOOD	CORNUS
JUNIPER, RED CEDAR	JUNIPERUS
ELDERBERRY	SAMBUCUS

NOTES:
1. GROUNDCOVER FOR THE LANDSCAPE BUFFER AREA WILL CONSIST OF LOCALLY PROCESSED WOOD CHIPS.
2. NATIVE GRASS SEED SHALL BE BROADCAST ONTO THE FOREST FLOOR INTO THE WOOD CHIPS TO CREATE A LOW VEGETATIVE COVER.
3. IRRIGATION FOR THE PROJECT WILL BE FROM AN UNDERGROUND PRESSURIZED SYSTEM FROM THE DOMESTIC WATER SUPPLY AND SHALL BE OPERATED BY A SMART CONTROLLER.
4. LARGE FALLEN LOGS (OVER 12"Ø) SHALL REMAIN IN PLACE AND BE USED TO NATURALIZE THE AREA.
5. ALL DEAD WOOD LESS THAN 12"Ø TO BE REMOVED AND CHIPPED ON-SITE FOR RE-USE AS MULCH IN THE LANDSCAPE.



1 View 1 - Existing Condition

2 View 2 - Existing Condition

3 View 3 - Existing Condition

4 View 4 - Existing Condition

Preliminary
Not For Construction

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Project Name:

Ouray Waterview
Ouray, Colorado

Client:

Paul Major
Ouray Homes, LLC
PO Box 4222
Telluride, CO 81435
970-209-2880
paul@ruralhomesproject.co

Landscape Architect:

NVISION DESIGN STUDIO, INC.
677 25 Road Grand Junction, CO 81505
Phone: 970.210.2155 Email: rb@nviz.biz
Web: www.nviz.biz
Landscape Architecture | Visual Simulation | Graphic Design

Registration:

Robert A. Breeden
LA 462
03/31/2008
Original Date of Licensure
STATE OF COLORADO
LICENSED LANDSCAPE ARCHITECT

Legend

- PROPOSED SHRUBS/PERENNIALS/ ORNAMENTAL GRASSES
- PROPOSED DECIDUOUS TREES
- PROPOSED EVERGREEN SHRUBS
- PROPOSED EVERGREEN TREES
- EXISTING TREES
- NATIVE GRASS SEED
- TURF GRASS SOD
- WOOD CHIPS
- EXISTING STREAM TO REMAIN
- FENCE 1 - 3'H SPLIT RAIL
- FENCE 2 - 6' PRIVACY

IN PROGRESS
FOR INTERNAL REVIEW ONLY

ACCEPTANCE BLOCK
THE CITY OF OURAY 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 NEITHER ACCEPTS NOR ASSUMES ANY LIABILITY FOR ERRORS OR OMISSIONS. ERRORS IN THE DESIGN OR CALCULATIONS REMAIN THE RESPONSIBILITY OF THE PROFESSIONAL OF RECORD. CONSTRUCTION MUST COMMENCE WITHIN ONE YEAR FROM THE DATE OF PLAN SIGNATURE.

CITY PLANNER DATE

Sheet Title:

Preliminary Landscape Plan

Project: Ouray Waterview
Date: May 15, 2023
Scale: 1" = 60'
Sheet: PLP
North

LAND USE TABLE	
PRIVATE PARCELS	2.11 acres
Town Parcels (open space)	0.90 acres (~23%)
Town Parcels (Right of Way)	0.90 acres (~23%)
Total	3.91 acres

Surface tabulation	
Roofs	0.455 acres
hardscape surfacing	0.955 acres
native ground/landscaping	2.5 acres
Total	3.91 acres

GRAPHIC SCALE
0 15 30 FEET 60 90
0 ¼ ½ ¾ 1 INCHES 2 3

LOT 1 12251 SF
LOT 2 4590 SF
LOT 3 3318 SF
LOT 4 3321 SF
LOT 5 2012 SF
LOT 6 3144 SF
LOT 7 3145 SF
LOT 8 3025 SF
LOT 9 2827 SF
LOT 10 1749 SF
LOT 11 2672 SF
LOT 12 2636 SF
LOT 13 2609 SF
LOT 14 2615 SF
LOT 15 1670 SF
LOT 16 2730 SF
LOT 17 2966 SF
LOT 18 3201 SF
LOT 19 6587 SF
LOT 20 7404 SF
LOT 21 7465 SF
LOT 2-B 3.91 ACRES

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WATERVIEW AFFORDABLE HOUSING SUBDIVISION

OURAY, COLORADO

Issue Record:
SCHEMATIC 09-06-2023

Revisions:

Project Number: 21-116
Drawn By: JAE
Designed by: RSH
Checked By: RSH

Sheet
RD1.02

PHASE 1 SITE PLAN

Ouray County

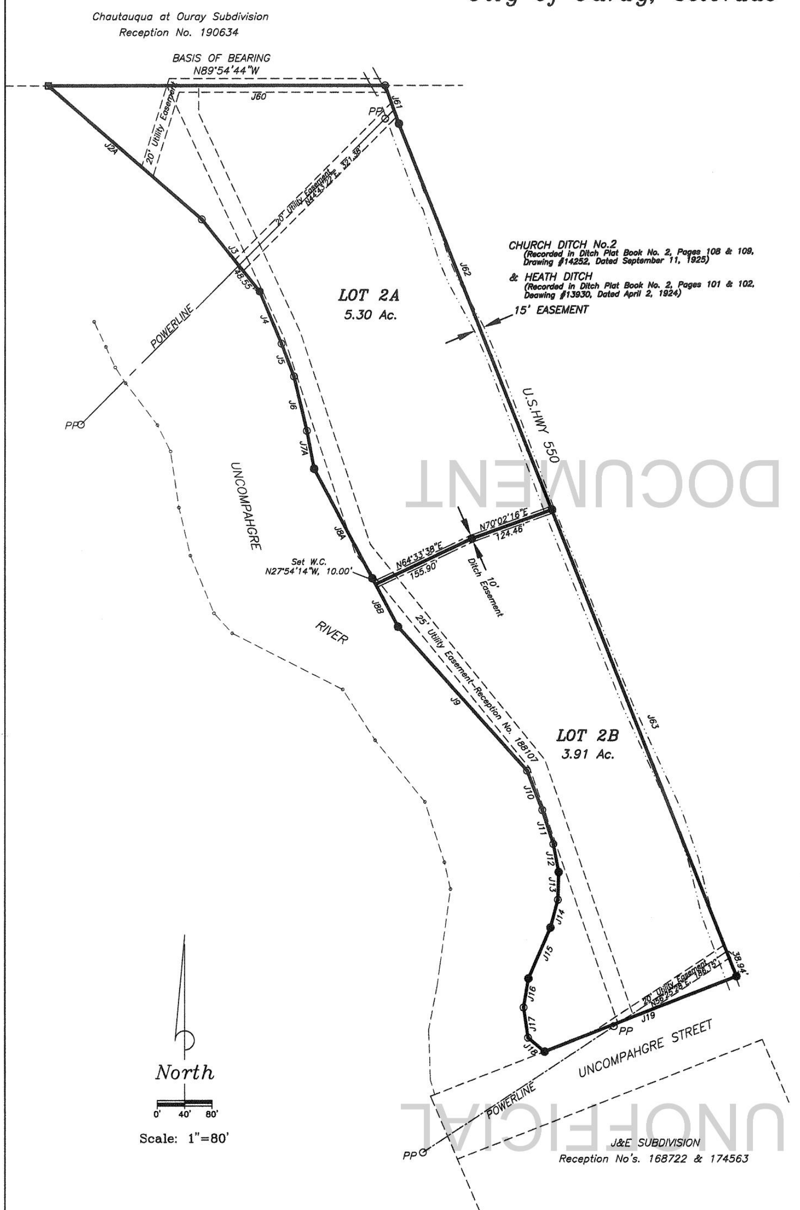
Home Purchasing Price Based on Mortgage (Examples)

Household Area Median Income (AMI)	Household Size (Persons)	Household Income (Maximum)	Ouray Homes Preferred Lender - 5.5% interest rate; 30 year fixed amortized; buyers pays 10% down payment cost
120 -100%	1	$ 78,225	$ 333,494
	3	$ 100,575	$ 428,777
	5	$ 120,750	$ 514,785
Area Median Income (AMI)	Household Size (Persons)	Household Income (1) (Maximum)	Ouray Homes Preferred Lender - 4.9% interest rate; 30 year fixed amortized; buyers receives 10% down payment assistance
100-81%	1	$ 65,188	$ 277,912
	3	$ 83,813	$ 357,314
	5	$ 100,625	$ 428,988
Area Median Income (AMI)	Household Size (Persons)	Household Income (1) (Maximum)	Ouray Homes Preferred Homes - 2.5% interest rate; 30 year fixed amortized; buyers receives $25,000 down payment assistance
80% and less	1	$ 52,150	$ 320,180
	3	$ 67,050	$ 411,659
	5	$ 80,500	$ 494,234

For Illustrative Purposes Only

OURAY WATERVIEW SUBDIVISION LOT 2 LOT SPLIT

Also being a Lot Split of East Part of Lot 3, J&E Subdivision
City of Ouray, Colorado



CERTIFICATE OF OWNERSHIP AND DEDICATION:
KNOW ALL MEN BY THESE PRESENTS, that the undersigned owners of said property, located in the City of Ouray, State of Colorado, being described as Lot 2 of the Ouray Waterview Subdivision per Reception No. 189657 in the office of the Ouray County Clerk and Recorder.
HAVE BY THESE PRESENTS, caused to be laid out, platted and subdivided the above described into lots, as shown on this plat, under the name and style of Ouray Waterview Subdivision Lot 2 Lot Split and do hereby grant, dedicate and convey to the City of Ouray, State of Colorado, perpetual utility easements as shown hereon, across Lots 2A & 2B. We do hereby grant, dedicate and convey the 15' Irrigation Easement and the 10' Ditch Easement, as shown hereon, for the purposes of installation, maintenance, repair & replacement of water pipelines, transmission and related structures and facilities, together with all rights of reasonable access for such purposes, to the benefit of Richard P. Jossi, successors, heirs and assigns.

Owners: J&E Investment Corporation, A Colorado Corporation
By: [signature]
Richard P. Jossi, President

STATE OF Colorado)
) ss
COUNTY OF Ouray)
The foregoing signature was acknowledged before me this 11 day of October A.D., 2013, by Richard Jossi
My commission expires May 10, 2016
Witness my hand and seal [signature]
Notary Public

DEBRA L OVERTON
NOTARY PUBLIC
STATE OF COLORADO
NOTARY ID 20124029248
COMMISSION EXPIRES MAY 10, 2016

CERTIFICATE OF LIEN HOLDERS:
The undersigned holders of mortgages, which encumber the land subdivided, hereby agree to the subdivision and dedications.
1st Mortgage:______
by:______
2nd Mortgage:______
by:______

STATE OF ______)
) ss
COUNTY OF ______)
The foregoing signature was acknowledged before me this ____ day of ______ A.D., 20__, by ______
My commission expires ______
Witness my hand and seal ______
Notary Public

no lien holders

ATTORNEY'S CERTIFICATE:
I certify that I have examined the title to the platted property and that the record owners and holders of encumbrances affecting the property have executed this plat and joined in the subdivision and reservation of easements, [illegible handwritten additions]
[signature] 26376 12/05/2013
Attorney at Law Registration No. Date

APPROVAL OF PLANNING COMMISSION:
Approved by the City of Ouray Planning Commission this 7th day of October A.D., 2013
[signature]
Chairman

APPROVAL OF CITY COUNCIL:
Approved by the Ouray City Council this 10th day of October A.D., 2013.
[signature]
Mayor

APPROVAL OF CITY ATTORNEY:
Approved for recording this 17th day of December A.D., 2013 by Kathryn Sellars, City Attorney.
[signature] 36242 12/17/13
Attorney at Law Registration No. Date

BASIS OF BEARING:
The bearing between the northeast corner of Lot 2, Ouray Waterview Subdivision, defined by a rebar & cap, LS 31160 and the northwest corner of said Lot 2, defined by a rebar & cap, LS 31160, is assumed to be N89°54'44"W as shown on the Ouray Waterview Subdivision Plat recorded at Reception No. 168722 in the records of the Ouray County Clerk & Recorder.

SURVEYOR'S CERTIFICATE:
I, Robert A. Larson, a Registered Land Surveyor in the State of Colorado, do hereby certify that this plat accurately represents to the best of my knowledge and information a survey made by me or under my direct supervision, and that said survey conforms to all State laws and standards for property boundaries.
[signature] 9-13-13
Robert A. Larson LS 31160 Date SEAL

RECORDER'S CERTIFICATE:
This plat was filed for record in the office of the Clerk and Recorder of Ouray County at 2:48 P.M., on the 6 day of January A.D., 2014, in Book ____, Page ____, Reception No. 211406.
By [signature] Deputy
Deputy County Clerk and Recorder

SEAL

NOTICE: According to Colorado Law you must commence any legal action upon any defect in this survey within three years after you first discovered such defect. In no event, may any action based upon any defect in this survey be commenced more than ten years from the date of the certification shown hereon.

LEGEND

- Found #5 Rebar & 1.5" Aluminum Survey Cap – LS 10738
- Found #5 Rebar & 2" Aluminum Survey Cap – LS 31160
- Set #5 Rebar & 2" Aluminum Survey Cap – LS 31160

Line	Bearing	Distance
J2A	S48°51'41"E	297.22'
J3	S38°33'34"E	135.34'
J4	S22°39'59"E	82.71'
J5	S20°42'17"E	51.32'
J6	S13°19'50"E	81.90'
J7A	S10°44'19"E	56.48'
J8A	S27°54'14"E	191.35'
J8B	S27°54'14"E	70.30'
J9	S41°47'36"E	282.57'
J10	S21°03'43"E	61.53'
J11	S17°54'59"E	52.32'
J12	S10°43'03"E	41.78'
J13	S01°43'43"W	40.66'
J14	S14°50'16"W	42.16'
J15	S23°21'17"W	81.17'
J16	S09°21'24"W	42.88'
J17	S08°16'18"E	44.77'
J18	S49°46'10"E	31.49'
J19	N68°30'00"E	301.39'
J60	N89°54'44"W	490.27'
J61	Δ=1°11'01" R=2905.00'	L=60.01'
J62	S21°33'07"E	608.11'
J63	S21°33'07"E	734.06'

PLAT NOTE:
Access to Highway 550 from Lot 2A is subject to State Highway Access Code.

J&E Investment Corporation
Richard P. Jossi, President
Ouray, Colorado 81427

SURVEYED BY	DATE	Disk	MONADNOCK MINERAL SERVICES 342–7TH Ave. – P.O. Box 85, Ouray, Colorado 81427 PLS 31160 – CPC 4682	
R.A.L.	7/19/2013			
DRAWN BY	SCALE		ACCT. NO.	
T.A.P.	1"=80'		J13027	SHEET 1 of 1

RECEPTION#: 211406, 01/06/2014 at 02:48:48 PM, 1 OF 1 PAGES, Total Fees: $11.00 MICHELLE NAUER, OURAY COUNTY, CO. CLERK & RECORDER

theCountyRecorder - Print Page
8/2/22, 2:06 PM
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Dear City of Ouray Planning & Zoning Commission,

I am writing to request an amendment to the approved Sketch Plan that was presented to the Commission Tuesday January 10, 2023. The amended Waterview Subdivision Sketch Plan remains substantially similar to the approved Sketch Plan in terms of project density, unit type, and overall intent and mission of the PUD.

In fact, this amended plan is better aligned with our goal to build affordable and attainable housing for the workforce, as it eliminates some major cost components of the horizontal development plan and responds to the feedback provided by the P&Z on January 10. The updated scheme eliminates the need to introduce new water and sewer mains into Phase 1. Additionally, it eliminates the need to construct a retaining wall where the previous layout of the road interfaced with topography on the western property boundary. The next paragraph of this letter outlines the specific changes that I would like the commission to consider. I would like to highlight that the updated plan provides space to incorporate the feedback that we heard from the Commission in the January hearing, in that it provides space to include a vegetative buffer between the project and the highway.

The most substantial change in the amended Sketch Plan before you is the layout of the primary subdivision access road in Phase 1 that is designed to be built in the southern portion of the property. In the new plan, you will notice a chicane, serpentine curve, in the road that runs from the southern property boundary on Uncompahgre Street northeast into the subdivision. This alternative road layout has a number of benefits. Primarily, the road eliminates the need to construct an alley. In the initial sketch plan, the alley was proposed to be a reduced width of 12 feet and function only as a one-way alley. As we developed the engineering, we discovered that we did not have enough space in the project site to include an alley, as it would need to be built over the existing ditch easement and we would need to culvert the ditch, which must remain exposed to daylight. The chicane road creates space to place residential units on the western side of the property.

This new layout has a number of benefits. The homes' front facades face the highway, which would give a more 'friendly' first impression of the project. As opposed to having off-street parking being the primary view of the subdivision from the highway, now there is room to build a vegetative screen, a public street and right of way, and the view of the homes will be inviting, with front porches and more dynamic front facades. Secondly, the chicane road will keep traffic moving slowly. The green hatch on the site plan shows the travel path of a fire truck, built to state and federal standards.

In terms of reducing the overall project's infrastructure cost, which in turn reduces the per-unit cost of each home, there is now no need to construct extensions of water and sewer mains for Phase 1. The easement will run in the rear of the phase 1 lots and we can run shorter laterals directly from that easement. Additionally, there is no need to design a retaining wall, as notated in the January sketch plan.

There are minor changes to the number of units and project density. Phase 1 of Waterview will now include three home-based childcare units. Two of those units will be located around the central roundabout and a third will face Uncompahgre Street where we can design a turnaround and drop off. Situating the home care units near these roundabouts and central nodes of the PUD would be a great benefit for maintaining proper traffic flow and providing areas for pick-up and drop off.

Before proceeding with our Preliminary Plat application, we felt that it was important to discuss these changes with the Planning & Zoning Commission. We look forward to continuing to develop this project. Finally, we are excited to have the support of the City through the HB1271 IHOI Affordable Housing Incentives Grant Program. The City has been awarded $1,050,000 which will go a long way towards helping us achieve our mission of building affordable housing for the Ouray County workforce. This is a big win for the City of Ouray.

Thank you and I look forward to discussing these changes with you next Tuesday March 21 at the P&Z meeting.

Sincerely,

David Bruce
Project Manager
Rural Homes: For Sale, For Locals
Waterview PUD

Rural Homes Sketch Plan
Ouray Waterview Application

to: Lily Oswald, Ouray Community Development Director
Silas Clark, Ouray City Administrator
from: David Bruce, Project Manager Rural Homes LLC

Delivered electronically via email to clarkes@cityofouray.com & oswaldl@cityofouray.com on October 21, 2022

Table of Contents

p3	Mission Statement
p4-5	What is the Rural Homes Model?
p6-9	Rural Homes Project Portfolio
p10	Fading West
p11	All-electric & solar photo-voltaic program
p12	Sketch Plan Application

Supporting Documentation:

Deed of Ownership -
"1_31734_Ouray Waterview_CHIFO Deed of Trust signed"
"85007577_Ouray Land Closing documents"

Existing Conditions Survey -
"220829_Existing Conditions Map"

Sketch Plan - Schematic Design Document -
"Waterview SD 10-20-2022"

Mission Statement

There is a lack of affordable housing in mountain communities across Colorado. According to the Mountain Migration Report conducted across six counties with tourism-driven economies, the pandemic led to record-high home purchase and rent prices, accompanied by a sharp decrease in unit availability.

Ouray is not immune to these trends. Small business owners, the school district, and local government (all of whom have representatives on the *Rural Homes Ouray Committee*) all struggle to find employees. They cite a lack of housing options as the primary reason. Without the development of new housing options priced for the local workforce, the community of Ouray will struggle to keep businesses open and provide key services. Multiple *Rural Homes Ouray Committee* members have noted that they currently spend an unsustainable amount of time trying to locate housing for prospective and current employees, and this is one of the main reasons they wanted to become part of the Committee. The problem is apparent throughout Colorado, but magnified in land-constrained and desirable locations such as Ouray, which is why it is a perfect location for a project spearheaded by Rural Homes.

What is the Rural Homes Model?

There is a gap between what a teacher earns, what a teacher can afford, and the prices of homes that are available in the market (see graph below). Teachers are not alone, countless essential workers across Colorado face this dilemma. **Rural Homes aims to reduce the cost to build rural housing.**

By integrating donated land, factory-manufactured construction, and low-cost construction finance into a toolkit, we are restructuring the way affordable housing can be built for our region's essential workforce: teachers, medical professionals, immigrants, federal employees that earn between 60-120% of Area Median Income (AMI). Our ambition is to inform and refine a model that minimizes the cost of building single-family homes so that it can be replicated and scaled across rural Colorado. By adding new building stock to a housing market that is saturated with old, dilapidated homes or inflated by vacation markets, we are addressing key determinants of public health and long-term economic sustainability in the region.

Our approach tries to whittle down the cost of construction by combining pre-fabricated off-site home building, low-interest construction finance, offsetting the cost of land, and connecting qualified home buyers with low-interest lenders and down payment assistance.

What is the Rural Homes Model? *Continued*

Cost of Capital
Partners across Colorado's community organizations and philanthropic entities are interested in new approaches to building affordable housing. We've raised construction finance loans with 0.5% interest and below by working with philanthropic funders such as: The Colorado Health Foundation, El Pomar Foundation, Donnell Kay Foundation, Kenneth King Foundation, Caring for Colorado, Dakota Foundation and Boettcher Foundation.

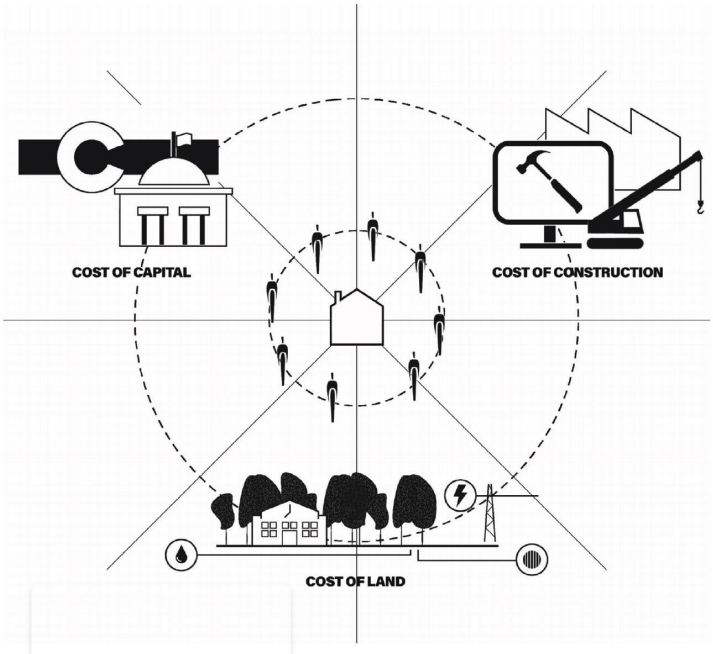
Furthermore, the Department of Local Affairs and The Division of Housing have matched the philanthropic dollars donated to the projects. We are also pursuing additional ""gap financing" funding to subsidize additional costs such as infrastructural improvements related to the project with the goal of reducing the final price of each unit built.

Cost of Land
We can reduce the overall property values of our homes by securing land donations from municipal entities like towns or counties, or by securing funding to purchase land from private donors and state organizations. San Miguel County has donated land for development in Norwood, and philanthropic funding has been offered for land in Ridgway. Here is Ouray, we have taken advantage of the opportunity to buy one of the last major parcels in the City and are searching for avenues to off-set the cost of purchase. The ideal site has strict criteria in order to control the per-unit costs of building the homes. They are flat, infill, and adjacent to existing civic infrastructure in order to minimize grading, new street construction, or the extension of water and sewer lines.

Cost of Construction
Standard stick-built construction is expensive and wasteful: on average, 30% of the material purchased for home construction ends up in a dumpster. In addition to this, the local labor force is (mostly) involved in high-end home construction, so even if subcontractors are compelled to work on affordable housing, the market sets a price of labor too expensive to build affordably.

By partnering with innovative Colorado companies such as Fading West (modular construction) and Simple Homes (panelized construction), we can significantly lower these on-site construction costs. For instance, Fading West builds 85% of the homes in their factory and ships them to the site in parts, allowing us to not only lock in prices on 85% of the house 8 months before construction, but also to save money on subcontractors by reducing the time it takes to assemble the house.

Community Led Process
Each project is guided by a community design process that integrates the strength of each community to build new neighborhoods that improve economic, social, cultural, health, and environmental outcomes. Networks of residents, local governments, affordable housing advocates, business owners and government officials are all required to build places that reflect the desires of the community.



RH Portfolio:

Wetterhorn Homes Ridgway

Under Construction - 14 Townhomes
Expected move-in April 2023

RH Portfolio:

Wetterhorn Homes Ridgway

Under Construction - 14 Townhomes
Expected move-in April 2023

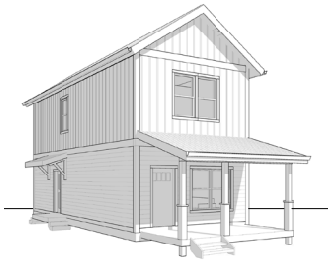
RH Portfolio:

Pinion Park Norwood

Under Construction - 10 Townhomes, 14 Single-Family Detached Homes
Expected move-in January 2022

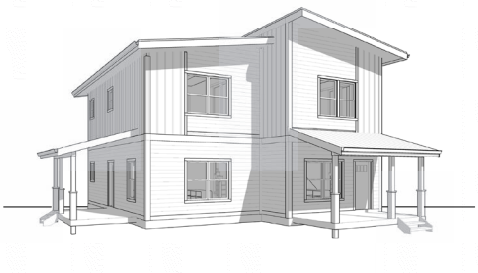
RH Portfolio: Pinion Park Norwood

Under Construction - 10 Townhomes, 14 Single-Family Detached Homes
Expected move-in January 2022



The Wilson
Farmhouse Gable
3 Bedrooms
3 Bathrooms
Detached
1216 square feet
8' x 12' shed
Rooftop Solar
Air Conditioning
Electric Vehicle-ready
Raw water tap
GE appliances
Fiber internet

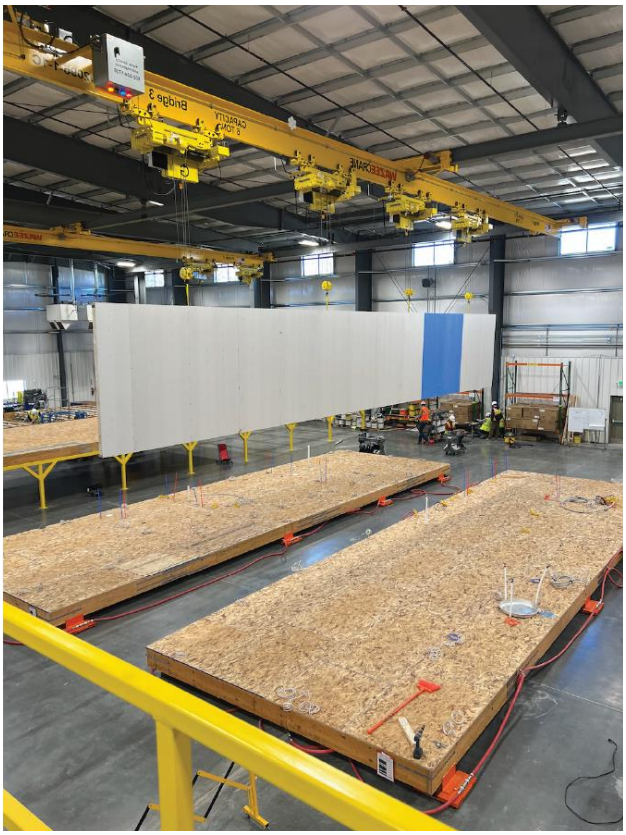
The Hastings
Farmhouse Gable
3 Bedrooms
3 Bathrooms
Detached
1648 square feet
18' x 24' garage
Rooftop Solar
Air Conditioning
Electric Vehicle-ready
Raw water tap
GE appliances
Fiber internet

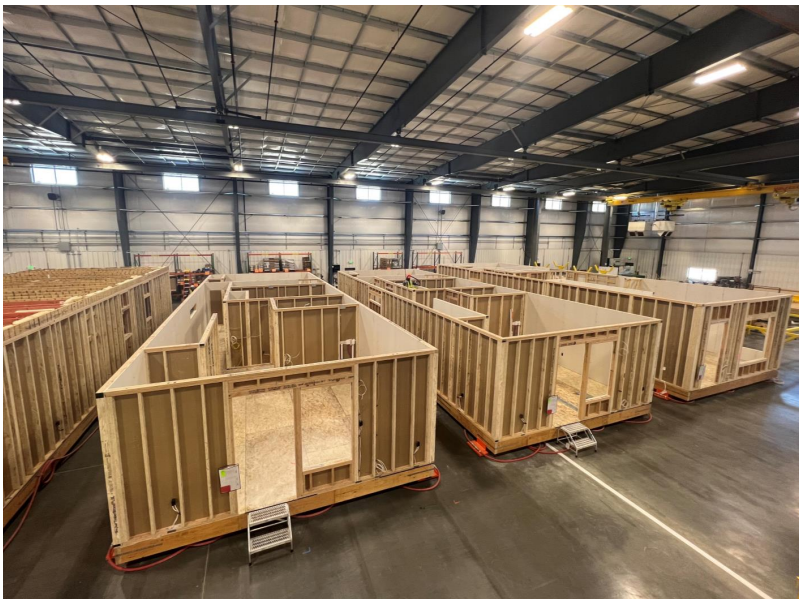


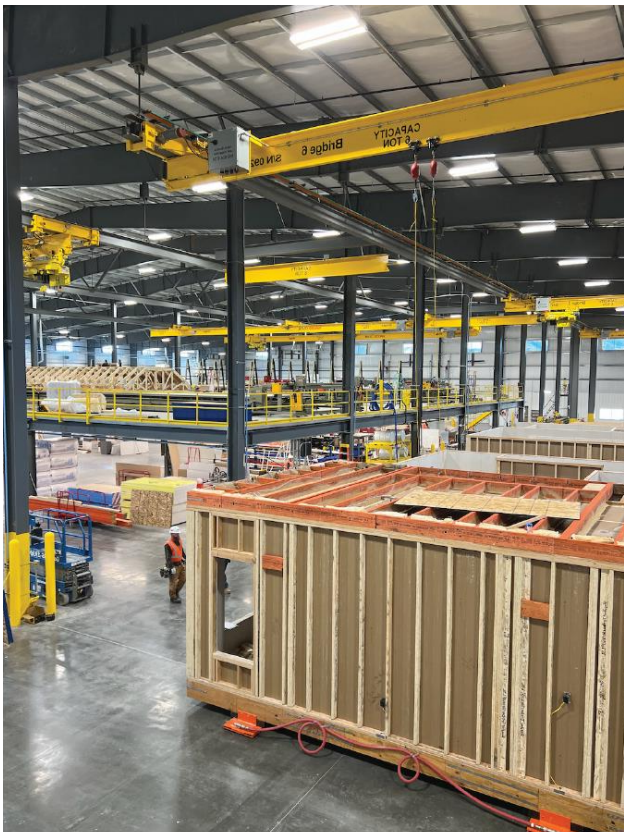
The Sunshine
Mountain Modern
2 Bedrooms
2 Bathrooms
Attached
1024 square feet
10' x 16' shed
Rooftop Solar
Air Conditioning
Electric Vehicle-ready
Raw water tap
GE appliances
Fiber internet

The McKee
Mountain Modern
3 Bedrooms
3 Bathrooms
Attached
1216 square feet
10' x 20' shed
Rooftop Solar
Air Conditioning
Electric Vehicle-ready
Raw water tap
GE appliances
Fiber internet

Strategic Partner

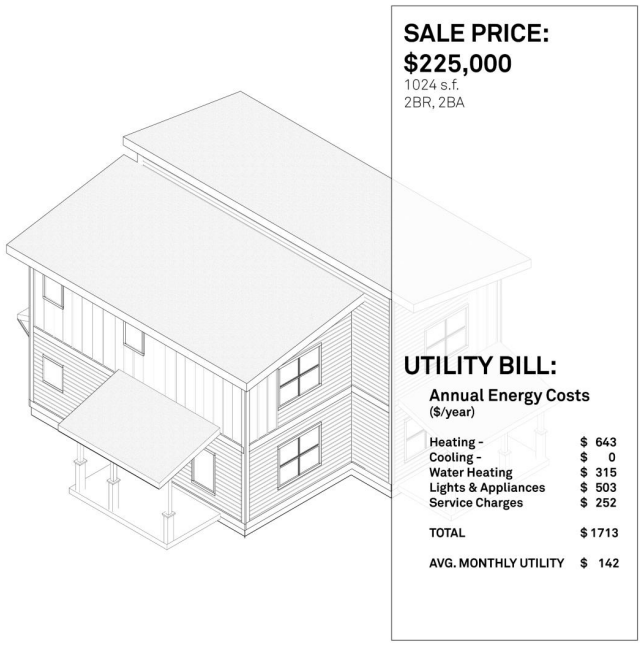


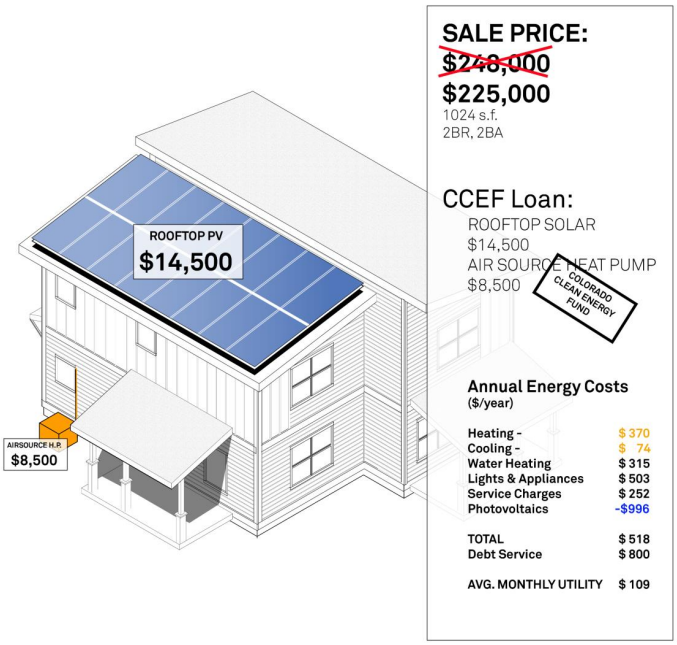




Strategic Partner

Colorado Clean Energy Fund





Pinion Park Pilots Tariff On-Bill Financing for Solar & Air Source Heat Pumps

Rooftop solar provides direct benefits to homeowners, including reduced utility bills, increased property values, and lower carbon footprints. However, the benefits of rooftop solar are only realized by middle- and higher-income homeowners due to the additional upfront costs of purchasing and installing a system. Homeowners at all income levels deserve access to the benefits of rooftop solar. Eliminating the financing hurdle is the key to extending the benefits of solar to lower income homeowners.

Tariff On-Bill Financing (TOBF) provides an opportunity to integrate solar into for-sale construction that is priced for affordable and workforce markets. TOBF can realize the benefits of rooftop solar without requiring lower income families to take on an additional loan to finance the system. In concept, with TOBF, a homeowner pays off the cost of the solar system through their utility bill payments and sees a reduced electrical bill because of rooftop solar power generation. All homeowners pay electric bills. The key is to finance the system at a rate and term that ensures the monthly utility bill is lower than the alternative without the system.

Rural Homes (RH) is developing a proposal with the Colorado Clean Energy Fund (CCEF) and Elemental Energy (EE) to install solar on Pinion Park homes. The program will achieve homeowner savings on their monthly utility bills by up to 25%. In some cases that could be $100 or more per month in electric utility bills savings. Once the loan is paid in full and the TOBF payments are expired (well before the usable end of life for the system) then the homeowner's savings increase further.

This program proposes to pilot a TOBF approach in partnership with San Miguel Power Association for the Norwood Pinion Park affordable housing project. Pinion Park broke ground on the construction of for-sale single family and townhouse homes in March 2022, and homeowners will move-in September 2022.

Every Pinion Park home is designed to be constructed as all-electric and will be wired for electric vehicle charging. The spirit of this development is to provide ownership pathways to working community members. Providing equitable access to energy efficiency, solar and other bill savings is imperative to every income homeowner.

The Pinion Park rooftop photo-voltaic (PV) solar systems will be financed by the Colorado Clean Energy Fund, with loan payments administered via a surcharge on the homeowner's monthly utility bill. The system design will be done by Elemental Energy. Installation will be done by CAM Electronic a sub-contractor of Stryker Construction, the general contractor for Pinion Park. Both the installation and financing of the solar system will be seamless does not require the homeowner take on any additional financing. Roof orientations at Pinion Park will allow for up to 7-10kW per home.

Every homeowner deserves equitable access to lower utility bills and clean energy.

Ouray Waterview
Sketch Plan

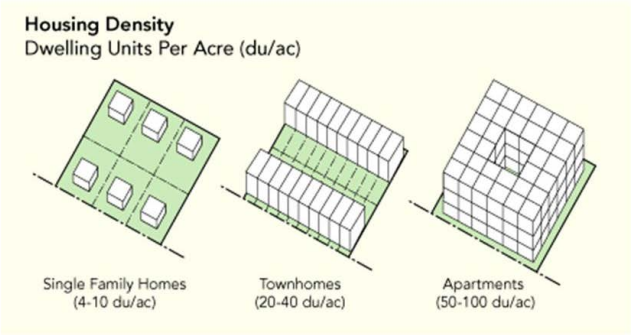
Deed of Ownership:
Please refer to the attached documents:
-85007577_Ouray Land Closing documents
-1_31734_Ouray Waterview_CHIFO Deed of Trust signed

Total Acreage of Property:
9.21 acres

Uses & Project Program:
The Ouray Waterview Subdivision Sketch Plan proposes 67 units. Units will include Single Family Dwellings and Townhomes. Townhomes will not exceed clusters of three units (duplexes & triplexes). Unit uses will also include in-unit home-childcare. Additionally, the site will be programmed with streets that contain on-street parking and alleys in a Right of Way. We intend to dedicate the Right of Way to the City of Ouray for ownership and maintenance upon successful and accepted completion of the horizontal development. Finally, the proposal includes recreational green space, planted open space, and storm water detention ponds that will be programmed as landscape spaces. These green spaces will occur on the western fringe of the lot with a direct adjacency to the existing river trail in order to provide future residents with a direct connection to the trail. We intend to dedicate all green space to Ouray Parks & Recreation for long term ownership & maintenance.

Current Zoning; Future Zoning:
Current: C-2 Commercial-Industrial; Future: Planned Unit Development within C-2 Commercial Industrial

Density:
7.27 Dwelling Units/Acre



Existing Conditions Survey:
Please see **Appendix 1: 220829_Existing Conditions Map** for existing utility easements & infrastructure

Utilities:
Water: We will request to tap into Ouray's municipal water service. Typical maximum daily water demand per single family homes is 350 gallons per day per unit during the summer season. This estimate includes 50 GPD for outside irrigation. These volumes are typically 100 GDP higher than actual measured flows and are used for planning purposes. Given this 350 GDP figure, the Waterview Subdivision would generate a demand of 23,450 gallons per day of water.

Sewer: We understand that there are planned service upgrades to the City's sewer treatment plant and that may cause limitations to project timing, or a project delivery in two phases. Once the capacity of the sewer treatment plant can handle the project, we will request to tap into Ouray's municipal sewer service. We estimate that these units will generate 300 gallons of sewage per day.

Electric: There appears to be available overhead power lines to tap into electric service. We have not yet engages SMPA for a service engineering request.

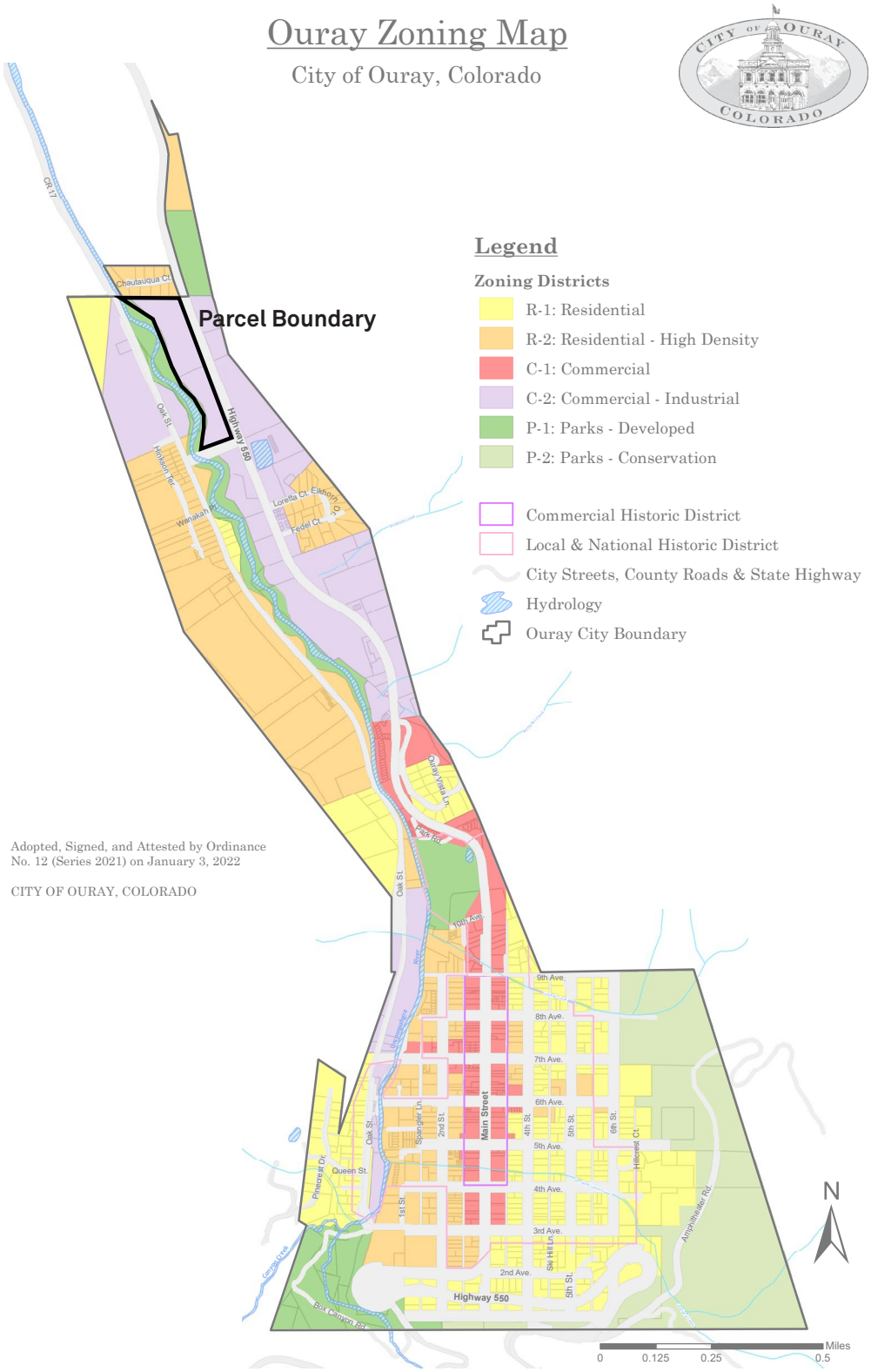
Natural gas: The subdivision's units will not require natural gas services. Homes will be all-electric and provided with air-source heat pumps.

Fiber: The project will be connected to broadband Internet. The provider is currently unknown.

Ditch: We have reached out to the owner of the ditch company and have the support to drop a culvert in the ditch that runs east-west between Lots 2A & 2B in order to cross the ditch with our road that runs north-south

Current Zoning

C-2: Commercial- Industrial



Current zoning district is **C-2 Commercial-Industrial**. Zoning will remain C-2 Commercial-Industrial but we will pursue a Planned Unit Development (PUD) pursuant to Ouray Land Use Code section (7-8). Please see the next page for 7-8 excerpts.

7-8 Planned Unit Developments (PUD)

A. Statement of Objectives of Development

The intent of this section is to promote the Planned Unit Development Act of 1972 and **encourage innovative developments with unique and valued community attributes.** PUD's allow for consideration of development proposals that differ from required development improvements identified in the OLUC. PUD's offer different options to the applicant when planning and obtaining City approval for their development. PUD's allow flexibility with respect to dimensional requirements and increased densities under certain conditions or circumstances. PUD's encourage conservation of a site's natural characteristics, innovative residential, commercial and industrial development plans which will result in a more efficient use of open space and provide affordable housing for year around residents.

B. Criteria for a Planned Unit Development (PUD)

1. A PUD shall be in general conformity with the City Community Plan and consistent with the objectives as stated in Subsection A above.
2. Compliance with the Colorado Planned Unit Development Act of 1972.
3. A PUD shall have a minimum of 1 unit or lot.

C. Permitted Uses

1. Recreational Facilities and "permitted" and "conditional uses" in the zone or zones in which the PUD is located shall be permitted when approved as part of the Planned Unit Development.

Permitted uses in C-2 include: "Any use allowed in R-1, R-2 or C-1 Districts" "Multi-Family Dwellings" "Duplexes" "Single-family dwellings"

2. Residences may be clustered into duplexes or multi-family residences.

D. Dimensional Requirements and Densities

1. The dimensional requirements for various PUD items may differ from what is required in the OLUC if the Planning Commission determines that such deviations will promote the public health, safety and welfare.
2. Residential PUD's may have additional residential units for each acre in the PUD, above what would be allowed otherwise in the zoning district or districts involved.
3. A minimum of 20% of the gross area of the PUD must be preserved as parks or open space.

E. Procedures

1. Planned Unit Developments (PUD) shall be reviewed in accordance with the same procedures for review of subdivisions as found in Subsection 7-7-C.
2. The preliminary and final PUD plan shall comply with all requirements for a preliminary and final subdivision plat, to the extent applicable.
3. A public notice of the hearing on the preliminary planned development plan and any substantial amendments thereto, shall be given by publishing a notice and posting a notice on the property at least 15 days prior to the hearing.

F. Required Improvements and Standards

1. PUD plans shall comply with design standards in Subsection 7-7-E and provide construction improvements as required for subdivisions in Subsection 7-7-F, unless granted otherwise by the Planning Commission.
2. PUD development improvement agreements and required securities must comply with Subsection 7-7-F-2.

G. Additional Requirements:

1. Other information necessary to show compliance with the requirements of this subsection shall also be submitted with the Planned Unit Development plan. Where appropriate, parameters, limits or specifications may be approved in lieu of exact locations, numbers and sizes.
2. The PUD plan may be also enforced in accordance with and in the same manner as the provisions of the Planned Unit Development Act of 1972, as amended. C.R.S. 24-67-101, et. seq.

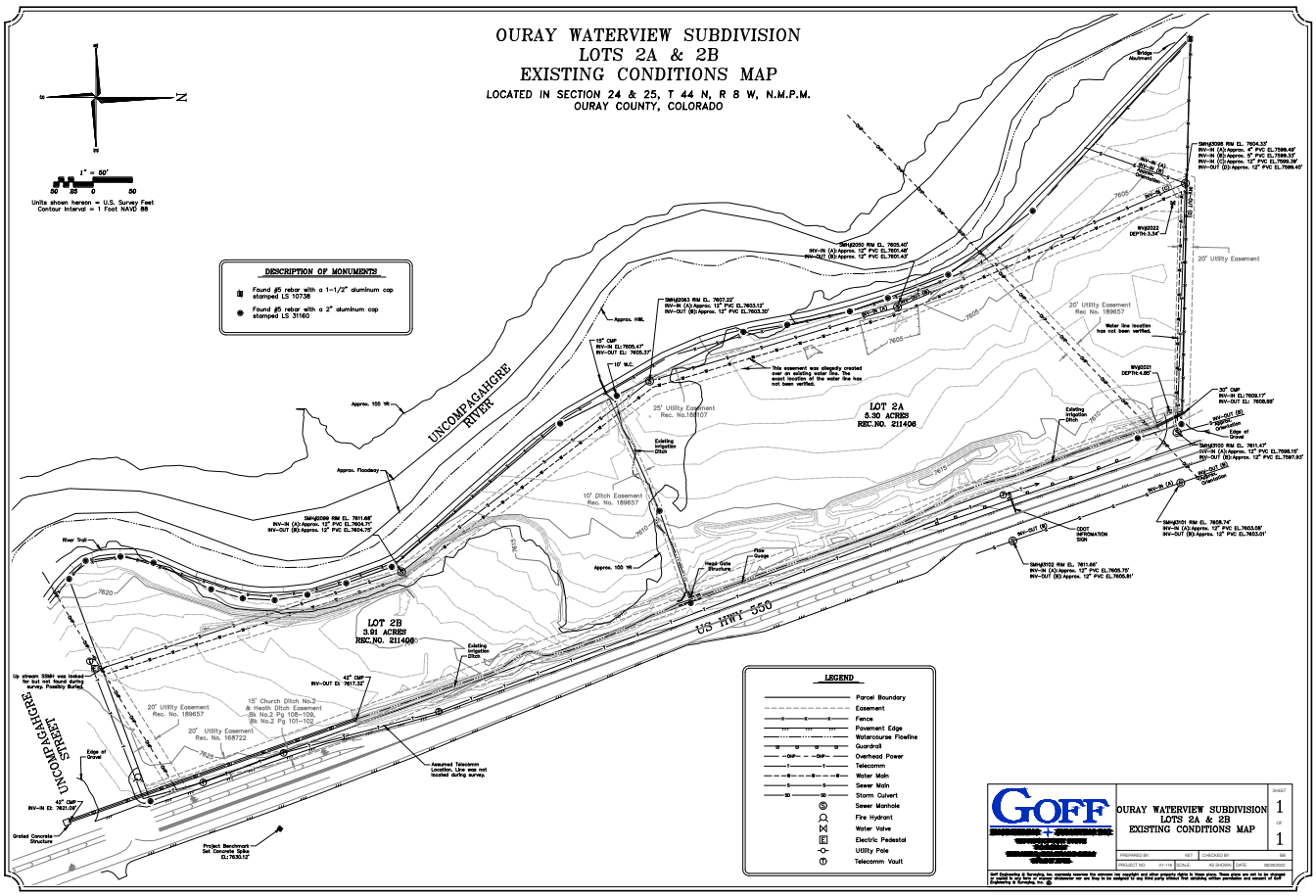
3. Approval of a PUD by the City is purely discretionary. If the City and applicant do not agree on all required conditions and the plan, the City may deny approval, or the City may unilaterally impose conditions. If the applicant does not accept all conditions, that development must adhere to standard subdivision and zoning requirements.

Aerial Site Overview

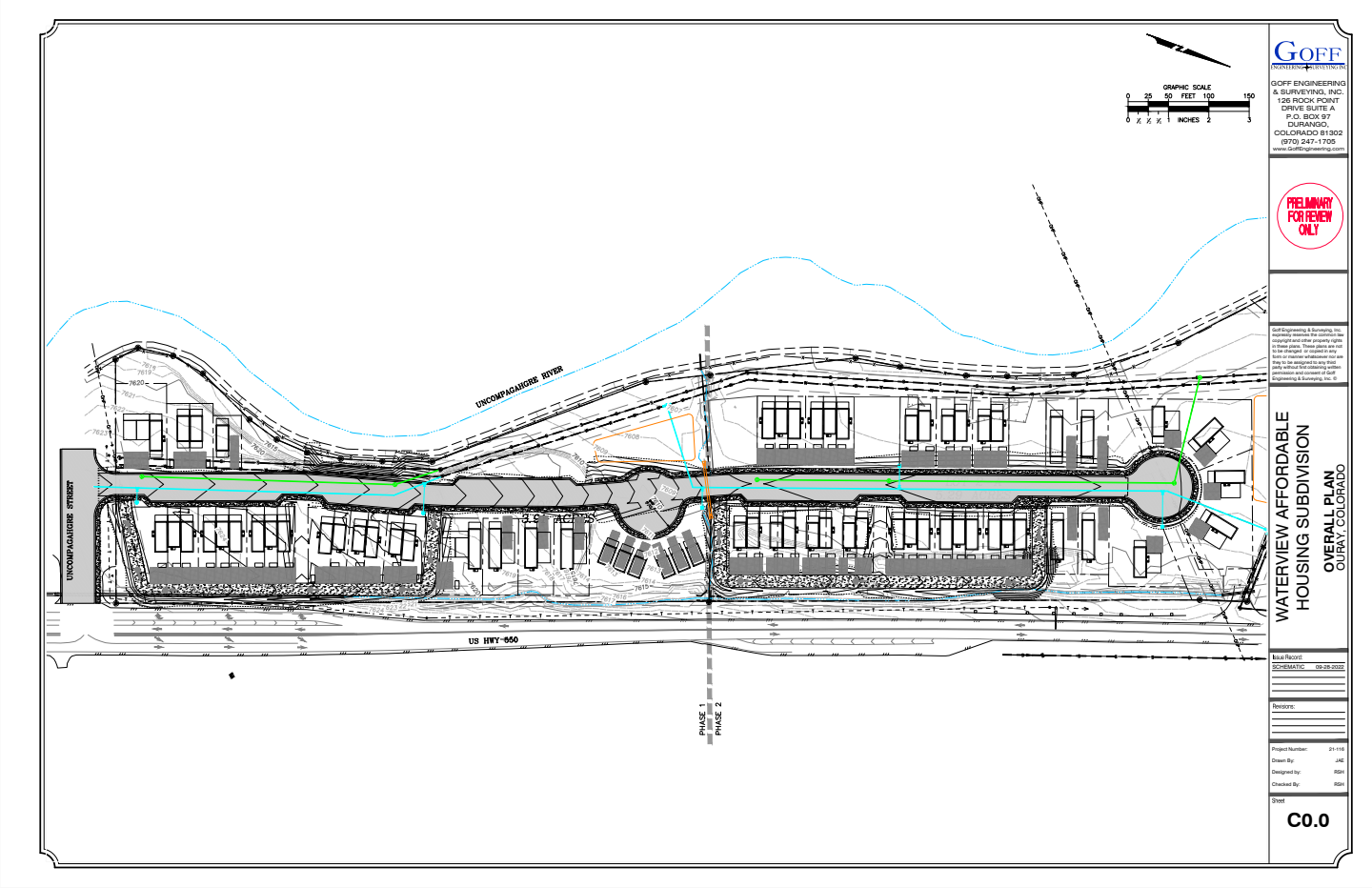
September 2021

Existing Conditions Survey

August 29 2022



Please refer to the attachment **“220829_Existing Conditions Map”**



Please refer to the attachment **"Waterview SD 10-20-2022"**

The attachment is a four page document that shows the schematic proposal in detail.

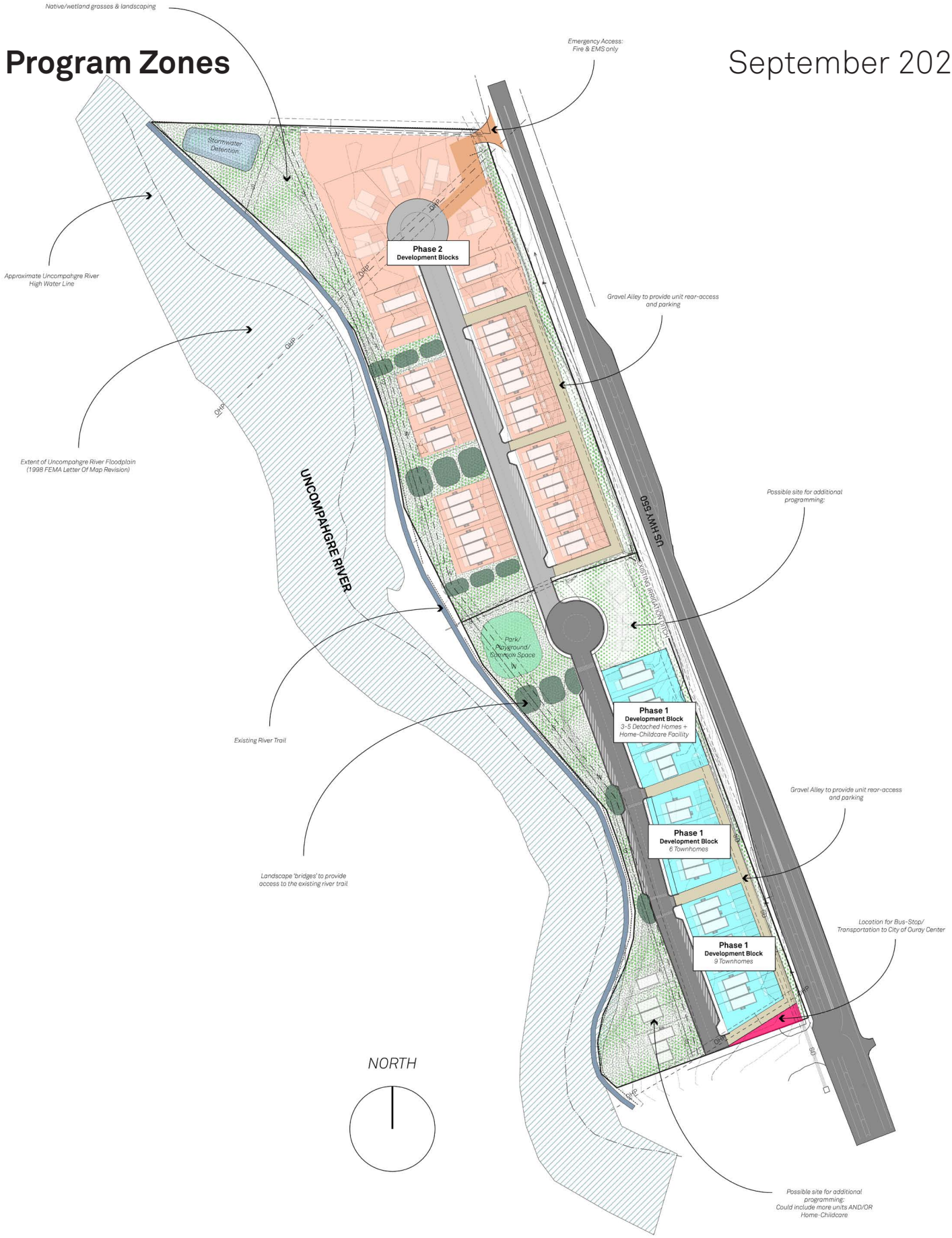
Street name: We do not currently have a proposed street name. We will put this question to the Ouray Housing Committee.

Street dimensions: The proposed street section will include two 12' drive lanes and one 8' on-street parking lane. All units have been provided with 2 off-street parking stalls dimensioning 10'x20'. The alley is proposed as a one-way at 14' wide.

A school bus stop could be located in the center of the site at the first round-about or at the southern end of the site between the alley and Uncompahgre Street.

Program Zones

September 2022



Green denotes open green space, blue is a possible phase 1, orange is a possible phase 2. Note that detention ponds have moved from this diagram to the SD set. The SD set is the latest plan set and is what our civil engineer has proposed.

Before

After

Gmail

Lily Oswald <loswald@cityofouray.com>

Waterview PUD Preliminary Plat Review // Comments

Ruth Stewart <rstewart.ocems@gmail.com> Thu, May 18, 2023 at 9:37 AM
Reply-To: rstewart@ouraycountyco.gov
To: Lily Oswald <loswald@cityofouray.com>

Hi Lily,

While understanding that my boss, Kim would be the one to provide any official feedback from EMS, she is currently out of the country and won't be back prior to your meeting so I'll pass on the couple thoughts I have but also encourage you to follow up with her after her return on May 29th.

The three things that I can see on the plans or would like to mention simply from experience are these:
1) I would encourage a different name for 'Uncompahgre street' as there is an 'Uncompahgre court' in Dallas Meadows and unfortunately having very similarly names streets in entirely different areas of the county has caused problems in the past. So if possible, I would love to see a name that isn't fundamentally the same as another one in the area.
2) The plans don't make it clear to me whether any on-street parking is allowed or not but I would just like to make sure that the cul-de-sacs are large enough for an ambulance to turn around regardless of the parking situation. Obviously this means that if parking is allowed in the cul-de-sacs then they would need to be larger. If there is always through access to the emergency egress road this would be less important though still potentially quite helpful.
3) And this one is purely from experience but please plan any address markers to be visible AT NIGHT with nothing more than headlights on a car or possibly a porch light. All to many buildings have addresses that are difficult to see even during daylight or if visible during daylight are in an entirely unlit area at night making locating a specific home quite difficult.

Those would be my few thoughts, feel free to reach out with any further questions or for clarification.

Regards,

—Ruth

Ruth Stewart
Paramedic
Ouray County Emergency Medical Services
P.O.Box 124
251 Railroad street
Ridgway, CO 81432
Office: 970-325-7275
Fax: 970-325-9967

[Quoted text hidden]

Lambert and Associates

CONSULTING GEOTECHNICAL ENGINEERS AND MATERIAL TESTING

GEOTECHNICAL ENGINEERING STUDY

PROPOSED WATERVIEW DEVELOPMENT

OURAY, COLORADO

Prepared for:

OURAY HOMES LLC

PROJECT NUMBER: M22059GE

FEBRUARY 3, 2023

P.O. Box 3986
Grand Junction, CO 81502
(970) 245 6506

P.O. Box 45
Montrose, CO 81402
(970) 249 2154

Lambert and Associates

CONSULTING GEOTECHNICAL ENGINEERS AND MATERIAL TESTING

February 3, 2023

Ouray Homes LLC
P.O. Box 4222
Telluride, Colorado

Attention: Mr. Paul Major

PN: M22059GE

Subject: Geotechnical Engineering Study for the Proposed Waterview Development Ouray, Colorado

Mr. Major:

Lambert and Associates is pleased to present our geotechnical engineering study for the subject project. The field study was completed on October 10, 2022. The laboratory study was completed on December 1, 2022. The analysis was performed and the report prepared from December 1, 2022 through February 3, 2023. Our geotechnical engineering report is attached.

We are available to provide material testing services for soil and concrete and provide foundation excavation observations during construction. We recommend that Lambert and Associates, the geotechnical engineer, for the project provide material testing services to maintain continuity between design and construction phases.

If you have any questions concerning the geotechnical engineering aspects of your project please contact us. Thank you for the opportunity to perform this study for you.

Respectfully submitted,

LAMBERT AND ASSOCIATES

Daniel R. Lambert, P.E.

P.O. Box 3986
Grand Junction, CO 81502
(970) 245 6506

P.O. Box 45
Montrose, CO 81402
(970) 249 2154

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1.0 INTRODUCTION

This report presents the results of the geotechnical engineering study we conducted for the proposed Waterview Development. The study was conducted at the request of Mr. Paul Major, Ouray Homes LLC, in general accordance with our proposal for geotechnical engineering services dated August 13, 2022.

The conclusions, suggestions and recommendations presented in this report are based on the data gathered during our site and laboratory study and on our experience with similar soil conditions. Factual data gathered during the field and laboratory work are summarized in Appendices A and B.

1.1 Proposed Construction

It is our understanding the proposed construction is to include residential structures, associated paved parking and drive areas and associated utilities.

1.2 Scope of Services

Our services included geotechnical engineering field and laboratory studies, analysis of the acquired data and report preparation for the proposed site. The scope of our services is outlined below.

- The field study consisted of describing and sampling the soil materials encountered in six (6) small diameter continuous flight auger advanced test borings.

- The materials encountered in the test borings were described and samples retrieved for the subsequent laboratory study.

- The laboratory study included tests of select soil samples obtained during the field study to help assess:

. the soil strength potential (internal friction angle and cohesion) of samples tested,
. the swell and expansion potential of the samples tested,
. the settlement/consolidation potential of the samples tested,
. the moisture content and density of samples tested,
. the moisture content-dry density relationship (Proctor) test of the subgrade support soil

sample tested,
. the soil support characteristics of pavement subgrade material samples.

- This report presents our geotechnical engineering comments, suggestions and recommendations for planning and design of site development including:
. viable foundation types for the conditions encountered,
. allowable bearing pressures for the foundation types,
. lateral earth pressure recommendations for design of laterally loaded walls,
. geotechnical engineering considerations and recommendations for concrete slab on grade floors,
. geotechnical engineering considerations and recommendations for compacted structural fill and
. several roadway pavement section thickness alternatives.

- Our comments, suggestions and recommendations are based on the subsurface soil and ground water conditions encountered during our site and laboratory studies.

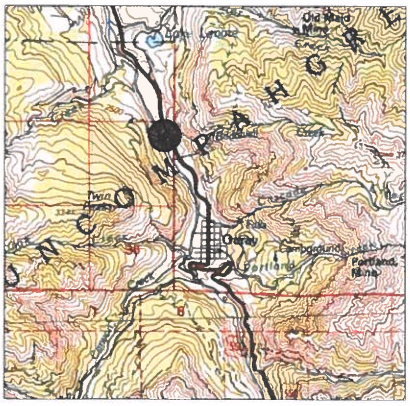
- Our study did not include any environmental or geologic hazard issues.

2.0 SITE CHARACTERISTICS

Site characteristics include observed existing and pre-existing site conditions that may influence the geotechnical engineering aspects of the proposed site development.

2.1 Site Location

The site is located west of U.S. Hwy 550, north of Uncompahgre Street, east of the Uncompahgre River, Ouray, Colorado.



● Indicates Approximate Project Location

Figure 1. Project Location Sketch

2.2 Site Conditions

The site is currently undeveloped. The site is relatively flat exhibiting positive surface drainage in the north and west directions. The site is bordered to the west by the Uncompahgre River, to the east by U.S. Hwy 550. The southern portion of the site has been elevated with fill material.

2.3 Subsurface Conditions

The subsurface exploration consisted of observing, describing and sampling the soil materials encountered in six (6) small diameter auger advanced test borings. The approximate locations of the test borings are shown on Figure 2.

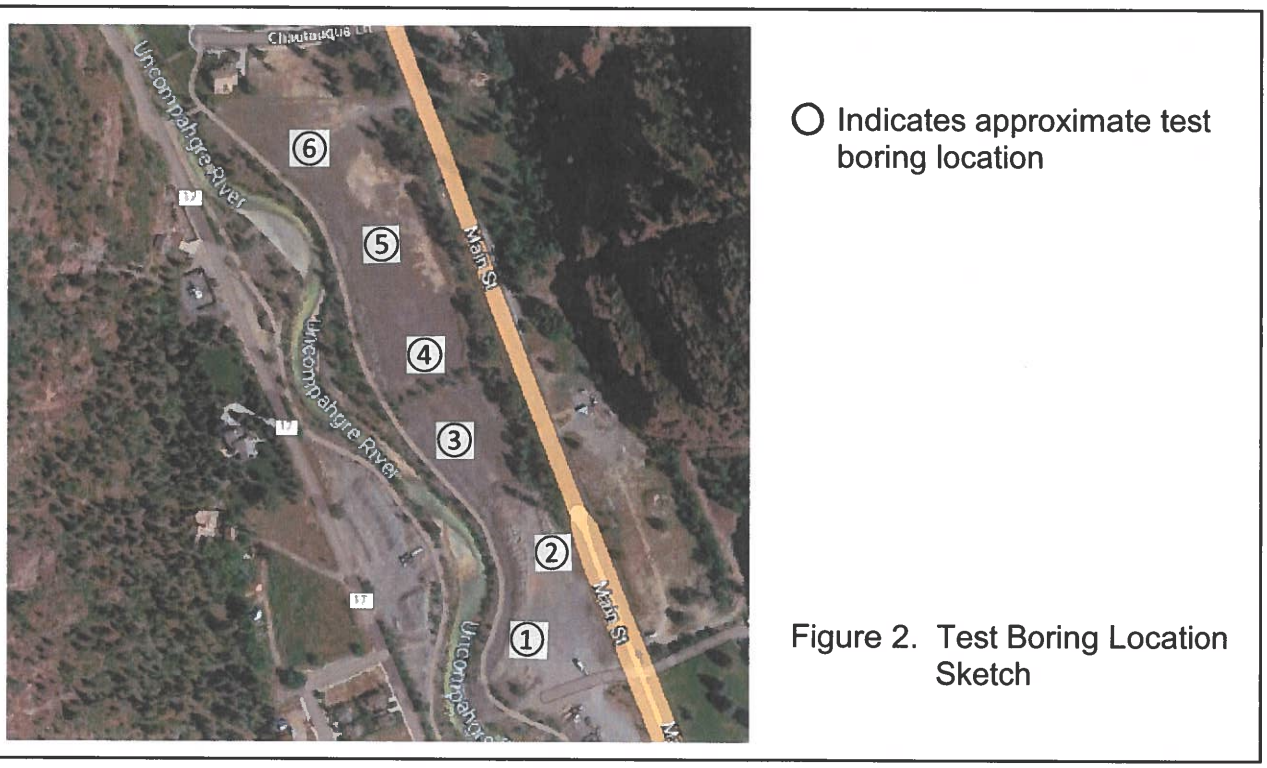


Figure 2. Test Boring Location Sketch

The logs describing the soil materials encountered in the test borings are presented in Appendix A.

The soil materials encountered within the test borings generally consisted of granular fill material underlain by silty sands and gravels with cobbles. Approximately four (4) to six and one half (6-1/2) feet of fill material was encountered on the southern portion of the site. Increased moisture contents were observed at approximate depths of twelve and one half (12-

1/2) to thirteen (13) feet below existing site grades.

At the time of our field study the proposed development site was not irrigated. It has been our experience that after the site is developed and once landscape irrigation begins the free subsurface water level may tend to rise. In some cases the free subsurface water level rise, as a result of landscape irrigation and other development influences, can be fairly dramatic and the water level may become shallow.

It is difficult to predict if unexpected subsurface conditions will be encountered during construction. Since such conditions may be found, we suggest that the owner and the contractor make provisions in their budget and construction schedule to accommodate unexpected subsurface conditions.

2.4 Site Geology

A brief discussion of the general geology of the area near the site is presented in Appendix C. The surface geology of the site was determined by observation of the surface conditions at the site and observing the soils encountered in the test borings on the site.

2.5 Seismicity

According to the International Building Code, 2018 Edition, and based on the subsurface conditions encountered and the assumption that the soils described in the test borings are likely representative of the top 100 feet of the soil profile, we recommend that the site soil profile be S_C, Very dense soil and soft rock.

3.0 PLANNING AND DESIGN CONSIDERATIONS

A geologic hazard study was not requested as part of the scope of this report.

All of the suggestions and design parameters presented in this report are based on high quality craftsmanship, care during construction and post construction cognizance of the potential for swell or settlement of the site support materials and appropriate post construction maintenance.

All construction excavations should be sloped to prevent excavation wall collapse. We suggest that as a minimum the excavation walls should be sloped at an inclination of one-and-one-half (1-1/2) to one (1) (horizontal to vertical) or flatter. The area above the foundation

excavations should be observed at least daily for evidence of slope movement during construction. If evidence of slope movement is observed we should be contacted immediately.

We anticipate that excavation and fill placement operations may be associated with the proposed site development. Excavations in the area which generate vertical or sloped exposures should be kept to a minimum.

Excavations which result in cut slopes with a vertical height greater than about four (4) feet or with a slope or structure above should be analyzed on a site specific basis. Temporary excavation cut slopes in competent material should not exceed a one-and-one-half to one (1 -1/2 to 1) (horizontal to vertical) inclination. All construction excavations should conform to Occupational Safety and Health Administration (OSHA) standards or safer. All permanent slopes should be constructed with inclinations of three to one or flatter.

Generally, fill material placed on a site surface which will be used to support structures or additional fill material should be placed so that the contact between the existing site surface and the added fill material will be strong enough to support the added load. This should be addressed on a site and fill area specific basis. The technique recommended will be based on the site configuration, the finished fill configuration the actual material to be used for the fill material and the size of the area thus constructed. Frequently the preparation of the site area to receive fill material will include removing organic and loose near surface native material in the area to receive fill material, placing the material in thin horizontal lifts which are compacted at the appropriate moisture content. Some fill areas could benefit from the installation of a subsurface drain system at the fill material/natural material contact. We are available to, and recommend that, we discuss this with you and provide site and fill specific recommendations when this portion of your development plan merits the additional study.

4.0 ON-SITE DEVELOPMENT CONSIDERATIONS

We anticipate that the subsurface water elevation may fluctuate with seasonal and other varying conditions. Excavations may encounter subsurface water and soils that tend to cave or yield. If water is encountered it may be necessary to dewater construction excavations to provide more suitable working conditions. Excavations should be well braced or sloped to prevent wall collapse. Federal, state and local safety codes should be observed. All construction excavations should conform to Occupational Safety and Health Administration (OSHA) standards or safer.

The site construction surface should be graded to drain surface water away from the site

excavations. Surface water should not be allowed to accumulate in excavations during construction. Accumulated water could negatively influence the site soil conditions. Construction surface drainage should include swales, if necessary to divert surface water away from the construction excavations.

Organic soil materials in areas to receive fill material or structure components should be removed. The organic soil materials are not suitable for support of the structure or structural components.

Man placed fill material may exist on site. The quality of any man placed fill encountered appears to be suitable to support structures, however, unknown portions of the fill material may not be suitable for support of the structure or structural components. The man placed fill material should be observed in each excavation prior to the placement of additional fill material or structural components. Fill material that is not suitable for use should be removed and replaced with compacted structural fill prior to supporting building or building components on the fill.

The soil materials exposed in the bottom of the excavations may be moist and may become yielding under construction traffic during construction. It may be necessary to use techniques for placement of fill material or foundation concrete which limits construction traffic in the vicinity of the very moist soil material. If yielding should occur during construction it may be necessary to construct a subgrade stabilization fill blanket or similar to provide construction traffic access. The subgrade stabilization blanket may include over excavating the subgrade soils one (1) to several feet and replacing with aggregate subbase course type material. The stabilization blanket may also include geotextile stabilization fabric at the bottom of the excavation prior to placement of aggregate subbase course stabilization fill. Other subgrade stabilization techniques may be available. We are available to discuss this with you.

It has been our experience that sites in developed areas may contain existing subterranean structures or poor quality man placed fill. If subterranean structures or poor quality man placed fill are suspected or encountered, they should be removed and replaced with compacted structural fill as discussed under COMPACTED STRUCTURAL FILL below.

5.0 FOUNDATION RECOMMENDATIONS

Geotechnical engineering considerations which influence the foundation design and construction recommendations presented below are discussed in Appendix D.

We have analyzed spread footing foundations as potential foundation systems for the proposed residential structures. These are discussed below. Due to the number of possible foundation types available and design and construction techniques there may be design alternatives which we have not presented in this report. We are available to discuss other foundation types.

We recommend that each entire structure be supported on only one foundation type. Combining foundation types will result in differential and unpredictable foundation performance between the varying foundation types. We recommend that the structure footprint not be traversed by the cut/fill contact which would result in a portion of the structure underlain by fill material and part of the structure underlain by materials exposed by excavated cut. If this condition will exist please contact us so that we can revise our recommendations to accommodate the cut/fill contact scenario.

All of the design parameters presented below are based on techniques performed by an experienced competent contractor and high quality craftsmanship and care during construction. We recommend post construction cognizance of the volume change potential of the near surface soil materials and the need for appropriate post construction maintenance.

The spread footing recommendations include recommended design and construction techniques to reduce the influence of movement of the soil materials supporting the foundation but should not be interpreted as solutions for completely mitigating the potential for movement from the support soil material volume change.

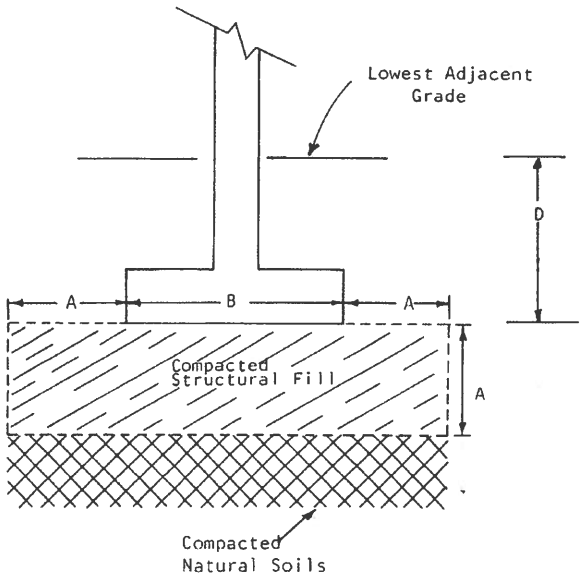
Exterior column supports should be supported by foundations incorporated into the foundation system of the structure not supported on flatwork. Column supports placed on exterior concrete flatwork may move if the support soils below the concrete slab on grade become wetted and swell or freeze and raise or settle. Differential movement of the exterior columns may cause stress to accumulate in the supported structure and translate into other portions of the structure.

5.1 Spread Footing Foundations

In our analysis it was necessary to assume that the material encountered in the test borings extended throughout the building site and to a depth below the maximum depth of the influence of the foundations. We should be contacted to observe the soil materials exposed in the foundation excavations prior to placement of foundations to verify the assumptions made during our analysis.

The bottom of the foundation excavations should be thoroughly cleaned and observed when excavated. Any loose or disturbed material exposed in the foundation excavation should be removed or compacted prior to placing foundation concrete.

The bottom of the foundation excavations should be compacted prior to placing compacted structural fill or foundation concrete. We suggest the materials exposed be compacted to at least ninety (90) percent of the materials moisture content-dry density relationship (Proctor) test, ASTM D1557. Excavation compaction is to help reduce the influence of any disturbance that may occur during the excavation operations. Any areas of loose, low density or yielding soils evidenced during the excavation compaction operation should be removed and replaced with compacted structural fill. Caution should be exercised during the excavation compaction operations. Excess rolling or compacting may increase pore pressure of the subgrade soil material and degrade the integrity of the support soils. Loose or disturbed material in the bottom of the foundation excavations which are intended to support structural members will likely result in large and unpredictable amounts of settlement, if the loose or disturbed material is not removed or compacted.



B = Footing Width
A = Compacted Structural Fill Thickness and Fill Width Beyond Footing Edge
D = Footing Embedment Below Lowest Adjacent Grade

Figure 3. Conceptual Sketch of Footing Subgrade Treatment and Embedment Concept

The bottom of any footings exposed to freezing temperatures should be placed below the maximum depth of frost penetration for the area. Refer to the local building code for details.

All footings should be appropriately proportioned to reduce the post construction differential settlement. Footings for large localized loads should be designed for bearing pressures and footing dimensions in the range of adjacent footings to reduce the potential for differential settlement. We are available to discuss this with you.

Foundation walls should be reinforced for geotechnical engineering purposes. The structural engineer should be consulted for foundation design. The structural engineering reinforcing design tailored for this project will be more appropriate than the suggestions

presented above.

The structure may be founded on spread footings. We recommend the use of a blanket of structure fill material beneath the spread footing foundation members. Spread footings may be placed either on the natural undisturbed soils or on a blanket of compacted structural fill. The blanket of compacted structural fill is to help provide uniform support for the footings and to help reduce the theoretical calculated post construction settlement. The theoretical calculated post construction settlement and associated fill thickness supporting the footings are presented below.

We suggest that you consider the foundation be supported on a blanket of compacted structural fill. The blanket of compacted structural fill should be approximately one (1) foot thick to help mask the influence of volume change soil materials supporting the footings. The blanket of compacted structural fill will not prevent movement of the footings from volume change in the support soil materials but will mask the influence of volume changes of the soils supporting the footings. If the footings are supported on a blanket of compacted structural fill the blanket of compacted structural fill should extend beyond each edge of each footing a distance at least equal to the fill thickness. This concept is shown on Figure 3. Geotechnical engineering recommendations for constructing compacted structural fill are presented below.

Fill sections below foundation members may benefit from the inclusion of a subgrade stabilization fabric such as a Mirafi 500X or similar placed on prepared subgrade material prior to the placement of the compacted fill materials

All footings should have a minimum depth of embedment of at least one (1) foot below the lowest adjacent grade when placed either on the natural undisturbed soils or a blanket of compacted structural fill. Deeper embedment will be needed for footings exposed to exterior climate. Other characteristics may influence embedment. The embedment concept is shown on Figure 3.

We suggest the continuous spread footing members with widths of two (2) feet or less and a minimum one (1) foot embedment be designed using an allowable bearing capacity of 1,975 pounds per square foot.

We suggest the isolated spread footing members with widths of three (3) feet or less and a minimum one (1) foot embedment be designed using an allowable bearing capacity of 1,750 pounds per square foot.

The bearing capacity will depend on the minimum depth of embedment of the bottom of the footings below the lowest adjacent grade and the support characteristics of the soils supporting the foundation.

The bearing capacity may be increased by twenty (20) percent for transient loads such as wind and seismic loads.

It is our opinion that footings exposed to frost or freezing ground influences and all exterior footings should be embedded to frost depth or deeper. Interior footings should have a minimum depth of embedment of at least one (1) foot on all sides to provide a more predictable long term performance of the footing. We understand that construction techniques typically used in the area may result in some of the footings in the crawl space constructed without significant embedment of the bottom of the footing below the lowest adjacent grade. For this reason we have provided design values for footings constructed with little or no embedment. It is our opinion that the performance of footing constructed without embedment may be influenced by erosion, temperature changes, moisture content changes, swell potential of the soil supporting the footings and weathering of the soils supporting the footings and will have a less predictable settlement response than footings with embedment.

Exterior footings and footings with uneven backfill may result in movement of the footings. Embedment of the footings on all sides will help reduce the potential for movement of footings with uneven backfill. We do not recommend exterior footings or footings with uneven backfill be constructed without a minimum depth of embedment of the bottom of the footing below the lowest adjacent grade of at least one (1) foot on all sides of the interior footings and frost depth for exterior footings.

The minimum depth of embedment is sufficient only to develop the bearing capacity for design purposes and does not account for frost influences. Actual design and construction should result in interior footings with one (1) foot or more embedment and exterior footings with frost depth or more embedment. Typically deeper embedment will increase bearing capacity and decrease post construction settlement and decrease the influence of expansive soils.

The soil samples tested had measured swell pressures of less than 100 to approximately 400 pounds per square foot, however, the actual swell pressure of the support materials could be greater. When wetted the site soil materials may have the ability to raise supported foundation members with loads less than the swell pressure. The foundation design should be as rigid as possible with as high of a dead load as can be available. The greater the dead load on the footings the less the potential for movement from the foundation soils should they become wetted. If the soils become wetted they will swell and will raise the foundation portions

supported on the wetted soils. If the structure is supported on spread footings the owner must realize that post construction movement of the footings is likely. We are available to discuss the implications of supporting foundations on swelling soils.

Interior column loads supported on spread footings which are structurally connected to the other foundation members will provide more uniform performance of the interior footings with respect to the other foundation members and will help reduce the potential differential settlement between interior and exterior foundation members. The foundation walls should be designed to act as beams to distribute stresses associated with the swelling volume changes of soils. The beam design should be addressed by the project structural engineer.

Exterior column supports should be supported by foundations incorporated into the foundation system of the structure not supported on flatwork. Column supports placed on exterior concrete flatwork may move if the support soils below the concrete slab on grade become wetted and swell or freeze and raise or settle. Differential movement of the exterior columns may cause stress to accumulate in the supported structure and translate into other portions of the structure.

The calculated theoretical estimated post construction settlement and swell potential may be reduced by placing the footings on a blanket of compacted structural fill. The calculated theoretical estimated post construction settlement and associated thickness of compacted structural fill are presented below.

THICKNESS OF COMPACTED STRUCTURAL FILL SUPPORTING FOOTINGS	CALCULATED THEORETICAL ESTIMATED POST CONSTRUCTION SETTLEMENT FOR CONTINUOUS SPREAD FOOTINGS (INCHES)
0 feet	7/8 to 1-1/8
1 foot	1/2 to 3/4
2 feet	3/8 to 1/2

THICKNESS OF COMPACTED STRUCTURAL FILL SUPPORTING FOOTINGS	CALCULATED THEORETICAL ESTIMATED POST CONSTRUCTION SETTLEMENT FOR ISOLATED SPREAD FOOTINGS (INCHES)
0 feet	7/8 to 1-1/8
1 foot	5/8 to 7/8
2 feet	3/8 to 5/8

The calculated theoretical settlement estimated values above are appropriate for continuous spread footings with a width of about two (2) feet or less and isolated spread footings with a width of about three (3) feet or less. Larger footings should be analyzed on a footing, load and width specific basis.

Footings should be sized so that each footing is in a similar size and load range as nearby footings to encourage similar performance. Very large footings or heavily loaded footings will influence the support soil materials to a deeper depth than small or lightly loaded footings and therefore will have different post construction performance characteristics.

The calculated settlement estimates are theoretical only. Actual settlement could vary throughout the site and with time.

If the footings are supported on a blanket of compacted structural fill, the blanket of compacted structural fill should extend beyond each edge of each footing a distance at least equal to the fill thickness. This concept is shown on Figure 3. Compacted Structural Fill is discussed in Section 8.0 below.

The site soil samples tested have measured swell pressures of less than 100 to approximately 400 pounds per square foot, however, the actual swell pressure of the support material could be greater. This swell pressure was measured for soils at the initial moisture content of the soil sample tested. The swell potential of the site soil materials could vary significantly and could be greater than that measured. The measured swell pressure may be influenced by disturbance of the sample during the sampling operation and the soil suction potential and initial moisture content.

Changes in the initial moisture content will significantly influence the swell pressure of the site soils. If the initial moisture content of the foundation soils is less than that of the test sample the actual swell pressures will likely be significantly higher than measured. If the initial moisture content of the foundation soils is greater than that of the test sample the actual swell pressures may be less than measured.

The bottom of the foundation excavations should be thoroughly cleaned and observed by the project Geotechnical Engineer or his representative when excavated. Any loose or disturbed material exposed in the foundation excavation should be removed or remedied prior to additional construction.

We recommend that we be contacted to observe the foundation excavations and backfill operations during construction to verify the soil support conditions and our assumptions upon

which our recommendations are based. If necessary we may revise our recommendations based on our observations. We are available to provide material testing services during the construction phase of the project.

If lightly loaded structure members are supported on spread footings on expansive soil material then the owner must realize that post construction movement of the footings is likely. These lightly loaded areas of the footing should be designed with sufficient structural integrity to resist the forces from swelling soils.

Foundation members that will have significantly small or low dead loads, such as foundations beneath wall openings such as doorways, may be provided with a strengthened grade beam and/or positive separation between the foundation concrete and the underlying soil materials. That separation may be provided by using commercial void form material. We recommend that the structural engineer be consulted concerning the void form design concept.

If the void form design concept is part of the foundation design we suggest that the foundation design may consider including a four (4) to six (6) inch corrugated paper void form material beneath the footings in the lightly loaded portions of the foundation. The corrugated paper void forms provide temporary support for foundation concrete during construction. The low strength of the void form material is intended to allow the underlying soil materials to expand into the void form thereby exerting less or no uplift pressure on the foundation in the areas it is used. We are available to discuss the implications of supporting foundations on swelling soils.

6.0 INTERIOR FLOOR SLAB DISCUSSION

It is our understanding that, as currently planned, the floor may be either a concrete slab on grade or a supported structural floor. The natural soils that will support interior floor slabs are stable at their natural moisture content. However, the owner should realize that when wetted, the site soils may experience volume changes. The site soil samples tested had measured swell pressures of less than 100 to approximately 400 pounds per square foot and associated magnitudes of up to 0.3 percent of the wetted soil volume at a surcharge load of 100 pounds per square foot and the actual swell pressure could be greater.

The recommendations in this report do not address a monolithic floor slab/footing combination. The design and construction characteristics of the monolithic floor slab need geotechnical engineering design parameters tailored specifically for a monolithic slab and integral footing. Generally this type foundation/floor combination in this area with these site conditions does not perform as well as other choices.

Conditions which vary from those encountered during our field study may become apparent during excavation. We should be contacted to observe the conditions exposed at concrete slab on grade subgrade elevation to verify the assumptions made during the preparation of this report and to provide additional geotechnical engineering suggestions and recommendations as needed.

Engineering design dealing with swelling soils is an art which is still developing. The owner is cautioned that the soils on this site may have swelling potential and concrete slab on grade floors and other lightly loaded members may experience movement when the supporting soils become wetted. We suggest you consider floors suspended from the foundation systems as structural floors or a similar design that will not be influenced by subgrade volume changes. If the owner is willing to accept the risk of possible damage from swelling soils supporting concrete slab on grade floors, the following recommendations to help reduce the damage from swelling soils should be followed. These recommendations are based on generally accepted design and construction procedures for construction on soils that tend to experience volume changes when wetted and are intended to help reduce the damage caused by swelling soil materials. Lambert and Associates does not intend that the owner, or the owner's consultants should interpret these recommendations as a solution to the problems of swelling soils, but as measures to reduce the influence of swelling soils.

The shallow soil materials tested have a low to moderate volume change potential under light loading conditions. Concrete slab on grade floors may experience movement when supported by the natural onsite soils. Concrete slab on grade floors will perform best if designed to tolerate movement introduced by the subgrade soil materials.

Concrete flatwork, such as concrete slab on grade floors, should be underlain by compacted structural fill. The layer of compacted fill should be at least one (1) foot thick or thicker and constructed as discussed under COMPACTED STRUCTURAL FILL below. A one (1) foot thick or thicker blanket of structural fill material beneath the concrete flatwork is not sufficient to entirely mask the settlement or swell potential of the subgrade soil material but will only provide better subgrade conditions for construction. The concrete slab on grade should be designed by a structural engineer to be compatible with the site soil conditions.

The natural soil materials exposed in the areas supporting concrete slab on grade floors should be kept very moist during construction prior to placement of concrete slab on grade floors. This is to help increase the moisture regime of the potentially expansive soils supporting floor slabs and help reduce the expansion potential of the soils. We are available to discuss this concept with you.

Concrete slab on grade floors should be provided with a positive separation, such as a slip joint, from all bearing members and utility lines to allow their independent movements and to help reduce possible damage that could be caused by movement of soils supporting interior slabs. The floor slab should be constructed as a floating slab. All water and sewer pipe lines should be isolated from the slab. Any equipment placed on the floating floor slab should be constructed with flexible joints to accommodate future movement of the floor slab with respect to the structure. We suggest partitions constructed on the concrete slab on grade floors be provided with a void space above or below the partitions to relieve stresses induced by elevation changes in the floor slab.

Floor slabs should not contact/extend directly over foundations or foundation members. Floor slabs which directly contact foundations or foundation members will likely experience post construction movement as a result of foundation movements. We are available to discuss this with you.

The concrete slabs should be scored or jointed to help define the locations of any cracking. We recommend that joint spacing be designed as outlined in ACI 224R. In addition joints should be scored in the floors a distance of about three (3) feet from, and parallel to, the walls.

It should be noted that when curing fresh concrete experiences shrinkage. This shrinkage almost always results in some cracks in the finished concrete. The actual shrinkage depends on the configuration and strength of the concrete and placing and finishing techniques. The recommended joints discussed above are intended to help define the location of the cracks but should not be interpreted as a solution to shrinkage cracks. The owner must understand that concrete flatwork will contain shrinkage cracks after curing and that all of the shrinkage cracks may not be located in control joints. Some cracking at random locations may occur.

If moisture migration through the concrete slab on grade floors will adversely influence the performance of the floor or floor coverings we suggest that a moisture barrier may be installed beneath the floor slab to help discourage capillary and vapor moisture rise through the floor slab. The moisture barrier may consist of a heavy plastic membrane, six (6) mil or greater, protected on the top and bottom by clean sand. The clean sand will help to protect the plastic from puncture. The layer of clean sand on the top of the plastic membrane will help the overlying concrete slab cure properly. According to the American Concrete Institute, proper curing requires at least three (3) to six (6) inches of clean sand between the plastic membrane and the bottom of the concrete. The plastic membrane should be lapped and taped or glued and protected from punctures during construction.

If the moisture content of the slab on grade floor will be influencial to the performance of the

future floor coverings then the moisture content of the slab can be measured. We are available to monitor the floor slab moisture content prior to the installation of the floor covering. If this service is needed please contact us during the construction phase of the project.

The Portland Cement Association suggests that welded wire reinforcing mesh is not necessary in concrete slab on grade floors when properly jointed. It is our opinion that welded wire mesh may help improve the integrity of the slab on grade floors. We suggest that concrete slab on grade floors should be reinforced, for geotechnical purposes, with at least 6 x 6 - W2.9 x W2.9 (6 x 6 - 6 x 6) welded wire mesh positioned midway in the slab. The structural engineer should be contacted for structural design of floor slabs.

7.0 PAVEMENT SECTION DESIGN RECOMMENDATIONS

It is our understanding that the proposed development will include paved parking and drive areas. The paved areas will include asphalt paved parking areas, concrete paved aprons and concrete sidewalks. Our pavement section analysis was based on estimated traffic volumes, laboratory test results of the soils sampled during our field study, and on our experience on similar projects. The traffic volume used in our analysis assumed 18,000 pound equivalent single axle loads (ESALs) of 100,000 and 200,000 repetitions for a twenty (20) year life. Our analysis included pavement sections based on dynamic loading as discussed in the Colorado Department of Transportation 2014 Pavement Design Manual.

7.1 Subgrade Preparation

Proper performance of the subgrade support soils requires surface preparation, scarification and moisture conditioning, compaction, and surface and subsurface drainage during construction prior to placement of the overlying pavement section materials.

Subgrade preparation may result in areas which yield under construction traffic. If yielding areas are encountered during subgrade preparation in the paved areas, the subgrade material may be overexcavated to a depth of about one foot below the subgrade elevation or more if needed and backfilled with a compacted structural fill. The structural fill material may aid in construction of the paved areas subgrade. The structural fill material should be an aggregate subbase course or aggregate base course type material placed and compacted as discussed below.

All organic and other deleterious material should be removed from the areas proposed for pavement section construction. The soils exposed by the removal of the organic materials should be scarified to a depth of about twelve (12) inches, moisture conditioned to

approximately three (3) to six (6) percent above optimum moisture content, and compacted to at least ninety (90) percent of maximum dry density as defined by ASTM D1557, modified moisture content-dry density relationship (Proctor) test. The moisture conditioning may require addition of water, or air drying if the soil is too moist, in either case, the material should be sufficiently mixed to promote a uniform soil moisture content. The soils should be compacted using machinery designed for soil compaction. Wheel rolling with loaded equipment and other techniques may not provide a uniform, properly compacted roadway subgrade.

Utility trench backfill in areas supporting pavement or other structural components should be placed in thin lifts and compacted to at least ninety (90) percent of the maximum dry density as defined by ASTM D1557 to subgrade elevation.

After the subgrade soils have been prepared the surface should be crowned or surface graded in the same orientation as the proposed final surface of the asphalt pavement. The reason for this is to promote water migration away from the roadway more readily. If the subgrade soil surface is not graded to properly drain, water may accumulate within the pavement section soils. The increased moisture content and subsequent soil strength decrease may promote pavement section support degradation. If a full section asphalt concrete design is used, the subgrade soils should be graded parallel the final asphalt concrete surface for drainage so that a uniform asphalt concrete thickness exists.

7.2 Aggregate Sub-Base and Base Course Material Characteristics and Placement

Specific aggregate types and sources for potential use on the project were not known at the time of the preparation of this report. Our analysis assumed that the proposed aggregate base course would consist of a Class 6 type material, and the aggregate sub-base course would consist of a Class 2 type material, as designated in the "Colorado Department of Highways Standard Specification for Road and Bridge Construction", 1991. If it is desirable to use material which does not meet these criteria we should be contacted to assess the specific material characteristics of the proposed road base and provide additional pavement design sections for differing materials.

The aggregate sub-base and base course materials should be placed on the prepared subgrade soils as soon as possible after the subgrade soils are compacted and graded to drain. Placement of the aggregate materials will help limit the influence of construction and other traffic on the subgrade soil conditions.

The aggregate materials should not be allowed to become segregated either at the source, prior to hauling to the project site, or during the placement of the materials. The coarser

aggregate sub-base soils have a greater tendency to become segregated, particularly during the grading and placement operations. Segregated sub-base and base course do not provide as uniform support as well blended materials.

The sub-base and base course materials should be moisture conditioned and compacted to at least ninety-five (95) percent of maximum dry density as defined by ASTM D1557, modified moisture-content-dry density relationship (Proctor) test.

7.3 Asphalt Concrete Materials and Placement

The asphalt concrete should be prepared using a mix design which has been prepared by a professional engineer experienced in asphalt concrete materials. The mix design should establish, as a minimum, the quality of the aggregates used, asphalt concrete material properties, asphalt cement content, mix and lay down temperatures. Either the Marshall Method or Hveem Stabilometer method of mix design may be used for the mix design preparation. We suggest that the asphalt concrete be compacted to between ninety-two (92) and ninety-six (96) percent of the maximum mix design density.

Aggregate shape maximum size and particle size distribution are important factors influencing the performance of an asphalt concrete mix. Crushed aggregate with fractured faces and angular shapes tend to interlock and provide an asphalt concrete with high strength and limited flexibility. Natural aggregates with rounded shapes tend to provide an asphalt concrete which is more flexible and may have lower strengths than mixes produced with angular shaped aggregates. Incorrect particle or grain size distribution of the aggregate used to manufacture the asphalt concrete can result in poor performance of the in-place asphalt mix. The grain size distribution of the mix aggregate will influence the size and volume of voids and the stability of the asphalt mix. Verification of the asphalt mix design aggregate properties and the asphalt concrete mix should be performed by testing prior to and during the paving operation.

7.4 Flexible Pavement Design Sections

Based upon the soil materials encountered during the drilling operations, a "CBR" value of 10 was used in our analysis. Alternative pavement sections are presented below. The pavement thickness sections below are based on the Design Nomograph for Flexible Pavements as recommended in the Colorado Department of Transportation 2014 pavement Design Manual.

Construction traffic may have a greater influence on the performance of the pavement section than the commercial use after construction. The design recommendations presented below are based on typical post construction commercial use and do not include accommodation for

heavy loading as a result of construction traffic. It may be beneficial to consider partial pavement section construction for use during on-site development construction with the section repaired and completed after the heavy construction traffic use has ended. This technique may provide a more serviceable and structurally acceptable pavement for the completed project.

PAVEMENT THICKNESS DESIGN SECTIONS
*ESAL = 100,000

Asphalt Concrete (inches)	Aggregate Base Course Class 6 or Similar (inches)	Aggregate Subbase Course Class 2 or Similar (inches)	Reconditioned Subgrade (inches)
3	4	4	12
3	7	0	12

PAVEMENT THICKNESS DESIGN SECTIONS
*ESAL = 200,000

Asphalt Concrete (inches)	Aggregate Base Course Class 6 or Similar (inches)	Aggregate Subbase Course Class 2 or Similar (inches)	Reconditioned Subgrade (inches)
3	4	7	12
3	9-1/2	0	12
4	6	0	12

* Equivalent 18,000 pounds single axle load

Pavement thickness design section of less than three (3) inches of asphalt over aggregate base course may be used, although, because of the shorter life before maintenance and the relatively poor long term performance, we suggest that this be considered as an intermediate design section only. If a lesser design section is used we suggest you consider a later asphalt overlay of appropriate thickness to extend the life of the pavement section. The overlay should be constructed prior to any visible distress occurring in the pavement.

The asphalt concrete pavement should be placed on the prepared support section as soon as possible so that interim traffic does not decrease the integrity of the support section.

7.5 Rigid Pavement Thickness Design Recommendations

Our pavement thickness recommendations for rigid Portland cement concrete pavement are based on an assumed traffic volume, a modulus of rupture of 650 psi and a modulus of subgrade reaction obtained from the California Bearing Ratio test performed on the subgrade soil sample obtained during our field study. A modulus of subgrade reaction of 170 psi/inch was used in our analysis.

The rigid pavement may be designed using a concrete thickness of four and one half (4-1/2) inches for an estimated 18,000 pounds equivalent single axle load (ESAL) less than 100,000.

Concrete sidewalks should have a nominal thickness of four (4) inches if no vehicle traffic will be allowed on them. The concrete sidewalks and aprons may be placed on a leveling course of aggregate base course material. The leveling course should be at least four (4) inches thick and compacted as discussed above for aggregate base course. We suggest the use of rigid pavement in areas where heavy vehicles will be accelerating, decelerating or turning sharply, such as the aprons for the trash dumpster enclosures and any areas in the bus drop off/pick up areas where the buses will be turning.

The concrete should be supported on prepared subgrade which is at least twelve (12) inches thick. The prepared subgrade should consist of either compacted structural fill to establish subgrade elevation or natural soils which are scarified to a depth of twelve (12) inches, moisture conditioned to approximately two (2) to four (4) percent above optimum moisture content and recompacted to at least ninety (90) percent of the maximum dry density as defined by ASTM D1557, modified moisture content-dry density relationship test. If during subgrade preparation any loose or yielding area or any areas of poorly constructed man-placed fill are encountered they should be removed and replaced with compacted structural fill. Suggestions for constructing compacted structural fill are presented below.

The Portland cement concrete should be from an approved concrete mix design stating the proportions and mixtures of the mix. We recommend verification of the mix design prior to paving. The coarse and fine aggregate used in the concrete mix should be tested for their suitability for use as concrete aggregate.

The concrete pavement should be appropriately jointed and structurally reinforced to help control the location of cracking. The structural engineer should be contacted to provide

structural design recommendations or structural reinforcement and joint design of the concrete pavement.

8.0 COMPACTED STRUCTURAL FILL

Material characteristics desirable for compacted structural fill are discussed in Appendix D. Areas that are over excavated or slightly below grade should be backfilled to grade with properly compacted structural fill or concrete, not loose fill material. If backfilled with other than compacted structural fill material or concrete there will be significant post construction settlement proportional to the amount of loose material.

If the on site granular soil materials are used as compacted structural fill the soils should be moisture conditioned to within approximately two (2) percent of optimum moisture content and compacted to at least ninety (90) percent of the maximum dry density as defined by ASTM D1557, modified moisture-density relationship (Proctor) test. The soil materials should be placed in thin lifts about six (6) inches in compacted thickness and compacted. Care should be taken so that areas of the natural on site soils which have appreciable expansive fine grained portions are not used for compacted structural fill material.

All areas to receive compacted structural fill should be properly prepared prior to fill placement. The preparation should include removal of all organic or deleterious material. The areas to receive fill material should be compacted after the organic deleterious material has been removed prior to placing the fill material. The area may need to be moisture conditioned for compaction. Any areas of soft, yielding, or low density soil, evidenced during the excavation compaction operation should be removed. The area excavated to receive fill should be moisture conditioned to wet of optimum moisture content as part of the preparation to receive fill. Fill should be moisture conditioned, placed in thin lifts not exceeding six (6) inches in compacted thickness and compacted to at least ninety (90) percent of maximum dry density as defined by ASTM D1557, modified moisture content-dry density (Proctor) test.

After placement of the structural fill the surface should not be allowed to dry prior to placing concrete or additional fill material. This may be achieved by periodically moistening the surface of the compacted structural fill as needed to prevent drying of the structural fill. We are available to discuss this with you.

The soil materials exposed in the bottom of the excavation may be very moist and may become yielding under construction traffic during construction. It may be necessary to use techniques for placement of fill materials or foundation concrete which limit construction traffic

in the very moist soil materials. If yielding should occur during construction it may be necessary to construct a subgrade stabilization fill blanket or similar to provide construction traffic access. We are available to discuss this with you.

We recommend that the geotechnical engineer or his representative be present during the excavation compaction and fill placement operations to observe and test the material.

9.0 LATERAL EARTH PRESSURES

Laterally loaded walls supporting soil, such as basement walls, will act as retaining walls and should be designed as such. Walls that are designed to deflect and mobilize the internal soil strength should be designed for active earth pressures. Walls that are restrained so that they are not able to deflect to mobilize internal soil strength should be designed for at-rest earth pressures. The values for the lateral earth pressures will depend on the type of soil retained by the wall, backfill configuration and construction technique. If the backfill is not compacted the lateral earth pressures will be very different from those noted below.

Lateral earth pressure (L.E.P.) values are presented below:

	Level Backfill with on-site soils (pounds per cubic foot per foot of depth)
Active L.E.P.	68
At-rest L.E.P.	88
Passive L.E.P.	228

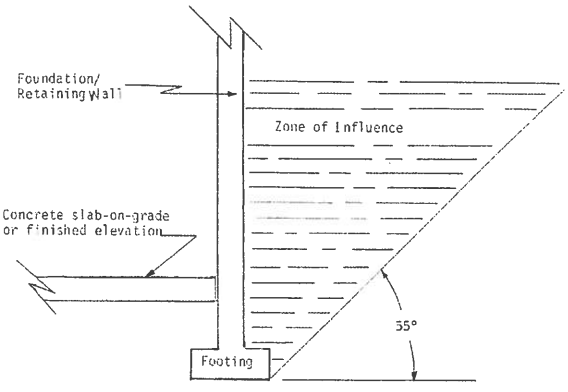


Figure 5. Backfill Zone of Influence Concept

The soil samples tested had measured swell pressures of less than 100 to approximately 400 pounds per square foot however the actual swell pressure of the backfill material could be greater. If the retained soils should become moistened after construction the soil may swell against retaining walls. The walls should be designed to resist the swell pressure of the soil materials if these are used as part of the backfill within the zone of influence. The zone of influence concept is presented on Figure 5.

The above lateral earth pressures may be

reduced by overexcavating the wall backfill area beyond the zone of influence and backfilling with crushed rock type material. The zone of influence concept is presented below.

The lateral earth pressure design parameters may change significantly if the area near the wall is loaded or surcharged or is sloped. If any of these conditions occur we should be contacted for additional design parameters tailored to the specific site and structure conditions.

Suggested lateral earth pressure (L.E.P.) values if the backfill is overexcavated beyond the zone of influence and backfilled with crushed rock are presented below.

	Level Backfill with crushed rock material (pounds per cubic foot per foot of depth)
Active L.E.P.	25
At-rest L.E.P.	40

If the area behind a wall retaining soil material is sloped we should be contacted to provide lateral earth pressure design values tailored for the site specific sloped conditions.

Resistant forces used in the design of the walls will depend on the type of soil that tends to resist movement. We suggest that you consider a coefficient of friction of 0.20 for the on site soil.

The lateral earth pressure values provided above, for design purposes, should be treated as equivalent fluid pressures. The lateral earth pressures provided above are for level well drained backfill and do not include surcharge loads or additional loading as a result of compaction of the backfill. Unlevel or non-horizontal backfill either in front of or behind walls retaining soils will significantly influence the lateral earth pressure values. Care should be taken during construction to prevent construction and backfill techniques from overstressing the walls retaining soils. Backfill should be placed in thin lifts and compacted, as discussed in this report to realize the lateral earth pressure values.

Walls retaining soil should be designed and constructed so that hydrostatic pressure will not accumulate or will not affect the integrity of the walls. Drainage plans should include a subdrain behind the wall at the bottom of the backfill to provide positive drainage. Exterior retaining walls should be provided with perimeter drain or weep holes to help provide an outlet for collected water behind the wall. The ground surface adjacent to the wall should be sloped to permit rapid drainage of rain, snow melt and irrigation water away from the wall backfill. Sprinkler systems should not be installed directly adjacent to retaining or basement walls.

10.0 DRAIN SYSTEM

A drain system should be provided around building spaces below the finished grade and behind any walls retaining soil. The drain systems are to help reduce the potential for hydrostatic pressure to develop behind retaining walls. A sketch of the drain system is shown below.

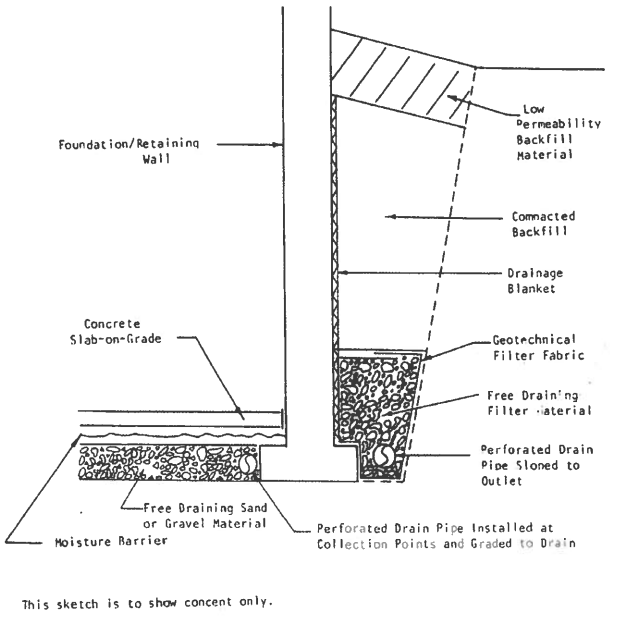


Figure 6. Conceptual Sketch of Foundation Drain System

Subdrains should consist of a three (3) or four (4) inch diameter perforated rigid pipe surrounded by a filter. The filter should consist of a filter fabric or a graded material such as washed concrete sand or pea gravel. If sand or gravel is chosen the pipe should be placed in the middle of about four (4) cubic feet of aggregate per linear foot of pipe. The drain system should be sloped to positive gravity outlets. If the drains are daylighted the drains should be provided with all weather outlets and the outlets should be maintained to prevent them from being plugged or frozen. We do not recommend that the drains be discharged to dry well type structures. Dry well structures may tend to fail if the surrounding soil material becomes wetted and swells or if the ground water rises to a elevation of or above the discharge elevation in the dry well. We should be called to observe the soil exposed in the excavations and to verify the details of the drain system.

11.0 CRAWL SPACE CONSIDERATIONS

We anticipate that moist conditions may exist in crawl space areas during wetter seasons. We suggest that if it is desired to reduce the influence of water in the crawl space area a foundation drain should be installed as discussed above.

The surface of the crawl space may be provided with a layer of about six (6) inches of clean washed gravel or an impervious geotextile fabric to reduce the inconvenience of very moist or muddy crawl space conditions if these should occur. The crawl space should be adequately vented to reduce the potential for humidity to accumulate in the crawl space area.

12.0 BACKFILL

Backfill areas and utility trench backfill should be constructed such that the backfill will not settle after completion of construction, and that the backfill is relatively impervious for the upper few feet. The backfill material should be free of trash and other deleterious material. It should be moisture conditioned and compacted to at least ninety (90) percent relative compaction using a modified moisture content-dry density (Proctor) relationship test (ASTM D1557). Only enough water should be added to the backfill material to allow proper compaction. Do not pond, puddle, float or jet backfill soil materials.

Improperly placed backfill material will allow water migration more easily than properly recompacted fill. Improperly compacted fill is likely to settle, creating a low surface area which further enhances water accumulation and subsequent migration to the foundation soils.

Improperly placed backfill will allow water to migrate along the utility trench or backfill areas to gain access to the subgrade support soils with subsequent mobilization of the swell or settlement mechanism resulting in movement of the supported structure. Moisture migration could also result in the inconvenience of free water in the crawl space.

Backfill placement techniques should not jeopardize the integrity of existing structural members. We recommend recently constructed concrete structural members be appropriately cured prior to adjacent backfilling.

13.0 SURFACE DRAINAGE

The foundation soil materials should be prevented from becoming wetted after construction. Post construction wetting of the soil support soil materials can initiate swell potential or settlement potential as well as decrease the bearing capacity of the support soil materials. Protecting the foundation from wetting can be aided by providing positive and rapid drainage of surface water away from the structure.

The final grade of the ground surface adjacent to the structure should have a well defined slope away from the foundation walls on all sides. The ability to establish proper site surface drainage away from the structure foundation system may be influenced by the existing topography, existing structure elevations and the grades and elevations of the ground surface adjacent to the proposed structure. We suggest where possible a minimum fall of the surface grade away from the structure be that which will accommodate other project grading constraints and provide rapid drainage of surface water away from the structure. If there are no other project constraints we suggest a fall of about one (1) foot in the first ten (10) feet

away from the structure foundation. Appropriate surface drainage should be maintained for the life of the project. Future landscaping plans should include care and attention to the potential influence on the long term performance of the foundation and/or crawl space if improper surface drainage is not maintained.

Roof runoff should be collected in appropriate roof drainage collection devices, such as eve gutters or similar, and directed to discharge in appropriate roof drainage systems. Roof runoff should not be allowed to fall on or near foundations, backfill areas, flatwork, paved areas or other structural members. Downspouts and faucets should discharge onto splash blocks that extend beyond the limits of the backfill areas. Splash blocks should be sloped away from the foundation walls. Snow storage areas should not be located next to the structure. Proper surface drainage should be maintained from the onset of construction through the proposed project life.

If significant water concentration and velocity occurs erosion may occur. Erosion protection may be considered to reduce soil erosion potential. A landscape specialist or civil engineer should be consulted for surface drainage design, erosion protection and landscaping considerations.

14.0 LANDSCAPE IRRIGATION

An irrigation system should not be installed next to foundations, concrete flatwork or paved areas. If an irrigation system is installed, the system should be placed so that the irrigation water does not fall or flow near foundations, flatwork or pavements. The amount of irrigation water should be controlled.

We recommend that wherever possible xeriscaping concepts be used. Generally, the xeriscape includes planning and design concepts which will reduce irrigation water. The reason we suggest xeriscape concepts for landscaping is because the reduced landscape water will decrease the potential for water to influence the long term performance of the structure foundations and flatwork. Many publications are available which discuss xeriscape. Colorado State University Cooperative Extension has several useful publications and most landscape architects are familiar with the subject. Montrose Botanical Society has a Botanical Garden, 1800 Pavilion Drive, south of Niagara Drive, Montrose, Colorado, that has a very good exhibit with examples and information regarding successful xeriscape concepts.

Due to the expansive nature of the soils tested we suggest that the owner consider landscaping with only native vegetation which requires only natural precipitation to survive. Additional irrigation water will greatly increase the likelihood of damage to the structure as a

result of volume changes of the material supporting the structure.

Impervious geotextile material may be incorporated into the project landscape design to reduce the potential for irrigation water to influence the foundation soils.

15.0 SOIL CORROSIVITY TO CONCRETE

Our scope of services did not include performing chemical tests to help identify the potential for soil corrosivity to concrete.

It has been our experience that much of the soils in the area contain sufficient water soluble sulfate content to be corrosive to concrete. We suggest sulfate resistant cement be used in concrete which will be in contact with the on-site soils. American Concrete Institute recommendations for sulfate resistant cement based on the water soluble sulfate content should be used.

16.0 RADON CONSIDERATIONS

Our experience indicates that many of the soils in western Colorado produce small quantities of radon gas. Radon gas may tend to collect in closed poorly ventilated structures. Radon considerations are presented in Appendix D.

17.0 POST DESIGN CONSIDERATIONS

The project geotechnical engineer should be consulted during construction of the project to observe site conditions and open excavations during construction and to provide materials testing of soil and concrete.

This subsurface soil and foundation condition study is based on limited sampling; therefore, it is necessary to assume that the subsurface conditions do not vary greatly from those encountered in the field study. Our experience has shown that significant variations are likely to exist and can become apparent only during additional on site excavation. For this reason, and because of our familiarity with the project, Lambert and Associates should be retained to observe foundation excavations prior to foundation construction, to observe the geotechnical engineering aspects of the construction and to be available in the event any unusual or unexpected conditions are encountered. The cost of the geotechnical engineering observations and material testing during construction or additional engineering consultation is not included in the fee for this report. We recommend that your construction budget include site visits early during construction schedule for the project geotechnical engineer to observe

foundation excavations and for additional site visits to test compacted soil.

We recommend that the observation and material testing services during construction be retained by the owner or the owner's engineer or architect, not the contractor, to maintain third party credibility. We are experienced and available to provide material testing services. We have included a copy of a report prepared by Van Gilder Insurance which discusses testing services during construction. It is our opinion that the owner, architect and engineer be familiar with the information. If you have any questions regarding this concept please contact us.

We suggest that your construction plans and schedule include provisions for geotechnical engineering observations and material testing during construction and your budget reflect these provisions.

It is difficult to predict if unexpected subsurface conditions will be encountered during construction. Since such conditions may be found, we suggest that the owner and the contractor make provisions in their budget and construction schedule to accommodate unexpected subsurface conditions.

17.1 Structural Fill Quality

It is our understanding that the proposed development may include compacted structural fill. The quality of compacted structural fill will depend on the type of material used as structural fill, fill lift thickness, fill moisture condition and compactive effort used during construction of the structural fill. Engineering observation and testing of structural fill is essential as an aid to safeguard the quality and performance of the structural fill.

Fill materials placed on sloped areas require special placement techniques that key the fill materials unto the underlying support materials. These techniques include a toe key at the toe contact of the slope fill and benching the fill/natural contact up the slope into the competent natural material. The placing technique will also include subdrains at several locations to intercept subsurface water and route it away from the fill materials. We are available to discuss these techniques with you and your earthwork contractor.

Testing of the structural fill normally includes tests to determine the grain size distribution, swell potential and moisture-density relationship of the fill material to verify the material suitability for use as structural fill. As the material is placed the in-place moisture content and dry density are tested to indicate the relative compaction of the placed structural fill. We recommend that your budget include provisions for observation and testing of structural fill

during construction.

Testing of the compacted fill material should include tests of the moisture content and density of the fill material placed and compacted prior to placement of additional fill material. We suggest that a reasonable number of density tests of the fill material can best be determined on a site, material and construction basis although as a guideline we suggest one test per about each 300 to 500 square feet of each lift of fill material. Utility trench backfill may need to be tested about every 100 linear feet of lift of backfill.

17.2 Concrete Quality

It is our understanding current plans include reinforced structural concrete for foundations and walls and may include concrete slabs on grade and pavement. To insure concrete members perform as intended, the structural engineer should be consulted and should address factors such as design loadings, anticipated movement and deformations.

The quality of concrete is influenced by proportioning of the concrete mix, placement, consolidation and curing. Desirable qualities of concrete include compressive strength, water tightness and resistance to weathering. Engineering observations and testing of concrete during construction is essential as an aid to safeguard the quality of the completed concrete.

Testing of the concrete is normally performed to determine compressive strength, entrained air content, slump and temperature. We recommend that your budget include provisions for testing of concrete during construction. We suggest that a reasonable frequency of concrete tests can best be determined on a site, materials and construction specific basis although as a guideline American Concrete Institute, ACI, suggests one test per about each fifty (50) cubic yards or portion thereof per day of concrete material placed.

18.0 LIMITATIONS

It is the owner's and the owner's representatives' responsibility to read this report and become familiar with the recommendations and suggestions presented. We should be contacted if any questions arise concerning the geotechnical engineering aspects of this project as a result of the information presented in this report.

The scope of services for this study does not include either specifically or by implication any environmental or biological (such as mold, fungi, bacteria, etc.) Assessment of the site or identification or prevention of pollutants, hazardous materials or conditions. If the owner is concerned about the potential for such contamination or pollution, other studies should be

performed.

The recommendations outlined above are based on our understanding of the currently proposed construction. We are available to discuss the details of our recommendations with you and revise them where necessary. This geotechnical engineering report is based on the proposed site development and scope of services as provided to us by Mr. Paul Major, Ouray Homes LLC, the type of construction planned, existing site conditions at the time of the field study, and on our findings. Should the planned, proposed use of the site be altered, Lambert and Associates must be contacted, since any such changes may make our suggestions and recommendations inappropriate. This report should be used ONLY for the planned development for which this report was tailored and prepared, and ONLY to meet information needs of the owner and the owner's representatives. In the event that any changes in the future design or location of the building are planned, the conclusions and recommendations contained in this report shall not be considered valid unless the changes are reviewed and conclusions of this report are modified or verified in writing. It is recommended that the geotechnical engineer be provided the opportunity for a general review of the final project design and specifications in order that the earthwork and foundation recommendations may be properly interpreted and implemented in the design and specifications.

This report does not provide earthwork specifications. We can provide guidelines for your use in preparing project specific earthwork specifications. Please contact us if you need these for your project.

This report presents both suggestions and recommendations. The suggestions are presented so that the owner and the owner's representatives may compare the cost to the potential risk or benefit for the suggested procedures.

This report contains suggestions and recommendations which are intended to work in concert with recommendations provided by the other design team members to provide somewhat predictable foundation performance. If any of the recommendations are not included in the design and construction of the project it may result in unpredictable foundation performance or performance different than anticipated. We recommend that we be requested to provide geotechnical engineering observation and materials testing during the construction phase of the project as discussed in this report. The purpose for on site observation and testing by us during construction is to help provide continuity of service from the planning of the project through the construction of the project. This service will also allow us to revise our recommendations if conditions occur or are discovered during construction that were not evidenced during the initial study. We suggest that the owner and the contractor make provisions in their construction budget and construction schedule to accommodate unexpected

subsurface conditions.

We represent that our services were performed within the limits prescribed by you and with the usual thoroughness and competence of the current accepted practice of the geotechnical engineering profession in the area. No warranty or representation either expressed or implied is included or intended in this report or our contract. We are available to discuss our findings with you. If you have any questions please contact us. The supporting data for this report is included in the accompanying figures and appendices.

This report is a product of Lambert and Associates. Excerpts from this report used in other documents may not convey the intent or proper concepts when taken out of context, or they may be misinterpreted or used incorrectly. Reproduction, in part or whole, of this document without prior written consent of Lambert and Associates is prohibited.

This report and information presented can be used only for this site, for this proposed development, and only for the client for whom our work was performed. Any other circumstances are not appropriate applications of this information. Other development plans will require project specific review by us.

Please call when further consultation or observations and tests are required.

If you have any questions concerning this report or if we may be of further assistance, please contact us.

Respectfully submitted,

LAMBERT AND ASSOCIATES

Daniel R. Lambert, P.E.
Project Engineer

APPENDIX A

The field study was performed on October 10, 2022. The field study consisted of logging and sampling the soils encountered in six (6) test borings. The approximate locations of the test borings are shown on Figure 2. The log of the soils encountered in the test borings are presented on Figures A2 through A7.

The test borings were logged by Lambert and Associates and samples of significant soil types were obtained.

The engineering field description and major soil classification are based on our interpretation of the materials encountered and are prepared according to the Unified Soil Classification System, ASTM D2488. The description and classification which appear on the test boring log is intended to be that which most accurately describes a given interval of the test boring (frequently an interval of several feet). Occasionally discrepancies occur in the Unified Soil Classification System nomenclature between an interval of the soil log and a particular sample in the interval. For example, an interval on the test boring log may be identified as a silty sand (SM) while one sample taken within the interval may have individually been identified as a sandy silt (ML). This discrepancy is frequently allowed to remain to emphasize the occurrence of local textural variations in the interval.

The stratification lines presented on the logs are intended to present our interpretation of the subsurface conditions encountered in the test boring. The stratification lines represent the approximate boundary between soil types and the transition may be gradual.

KEY TO LOG OF TEST BORING

Date Drilled: **Field Engineer:** **Boring Number:**

Location: **Elevation:**

Diameter: **Total Depth:** **Depth to Water at Time of Drilling:**

Symbol	Depth	Sample Type	Sample N	Soil Description	Laboratory Test Results
	0			Sand, silty, medium dense, moist, tan (SM)	Notes in this column indicate tests performed and test results if not plotted.
				Unified Soil Classification	
				Indicates Bulk Bag Sample	DD: Indicates dry density in pounds per cubic foot
		C		Indicates Drive Sample	MC: Indicates moisture content as percent of dry unit weight
	5			Incicates Sampler Type:	LL: Indicates Liquid Limit
				C - Modified California SS - Standard Split Spoon H - Hand Sampler	PL: Indicates Plastic Limit
					PI: Indicates Plasticity Index
			7/6	Indicates seven blows required to drive the sampler six (6) inches with a hammer that weighs one hundred forty pounds and is dropped thirty inches.	
	10			BOUNCE: Indicates no further penetration occurred with additional blows with the hammer	
				NR: Indicates no sample recovered	
				CAVED: Indicates depth the test boring caved after drilling	
	15			▼ Indicates the location of free subsurface water when measured	
				CLAY SILT SAND GRAVEL FORMATION SANDSTONE	Note: Symbols are often used only to help visually identify the described information presented on the log.
	20				
	25				

Project Name: Waterview Development - Ouray **Project Number:** M22059GE **Figure:** A1

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LOG OF TEST BORING

Date Drilled: October 10, 2022 **Field Engineer:** DRL **Boring Number:** 1

Location: See test boring location diagram **Elevation:**

Diameter: 4 inches **Total Depth:** 15 feet **Depth to Water at Time of Drilling:** None Encountered

Symbol	Depth	Sample Type	Sample N	Soil Description	Laboratory Test Results
	0			Fill Material - Gravel, sand, cobbles * Intermittent Clayey Sand Lenses	
	5	Bulk			Swell/Consolidation Test: DD: 123 pcf MC: 5.6%
	10	Bulk		Sand, clayey, gravels, dense, moist, brown, gray * Increased Cobble * Increased Moisture Observed	
	15			Bottom of Test Boring at 15 feet	
	20				
	25				

Project Name: Waterview Development - Ouray **Project Number:** M22059GE **Figure:** A2

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CONSULTING GEOTECHNICAL ENGINEERS AND MATERIAL TESTING

LOG OF TEST BORING

Date Drilled: October 10, 2022 **Field Engineer:** DRL **Boring Number:** 2

Location: See test boring location diagram **Elevation:**

Diameter: 4 inches **Total Depth:** 9 feet **Depth to Water at Time of Drilling:** None Encountered

Symbol	Depth	Sample Type	Sample N	Soil Description	Laboratory Test Results
	0			Fill Material - Gravel, sand, cobbles * Intermittent Clayey Sand Lenses	
	5	Bulk		Sand, clayey, gravels, dense, moist, brown, gray * Increased Cobble	Direct Shear Test: DD: 114 pcf MC: 14.0%
	10			Auger Refusal at 9 feet	
	15				
	20				
	25				

Project Name: Waterview Development - Ouray **Project Number:** M22059GE **Figure:** A3

Lambert and Associates

CONSULTING GEOTECHNICAL ENGINEERS AND MATERIAL TESTING

LOG OF TEST BORING

Date Drilled: October 10, 2022 **Field Engineer:** DRL **Boring Number:** 3

Location: See test boring location diagram **Elevation:**

Diameter: 4 inches **Total Depth:** 10-1/2 feet **Depth to Water at Time of Drilling:** None Encountered

Symbol	Depth	Sample Type	Sample N	Soil Description	Laboratory Test Results
	0			Fill Material - Gravel, sand, cobbles * Intermittent Clayey Sand Lenses	
	5				
	10			Sand, clayey, gravels, dense, moist, brown, gray * Increased Cobble	
	15			Auger Refusal at 10-1/2 feet	
	20				
	25				

Project Name: Waterview Development - Ouray **Project Number:** M22059GE **Figure:** A4

Lambert and Associates

CONSULTING GEOTECHNICAL ENGINEERS AND MATERIAL TESTING

LOG OF TEST BORING

Date Drilled: October 10, 2022 **Field Engineer:** DRL **Boring Number:** 4

Location: See test boring location diagram **Elevation:**

Diameter: 4 inches **Total Depth:** 15 feet **Depth to Water at Time of Drilling:** None Encountered

Symbol	Depth	Sample Type	Sample N	Soil Description	Laboratory Test Results
	0			Sand, clayey, gravels, dense, moist, brown, gray	
				* Increased Cobble	
	5	Bulk			Swell/Consolidation Test: DD: 124 pcf MC: 6.3%
	10	Bulk			Swell/Consolidation Test: DD: 126 pcf MC: 5.9%
				* Increased Moisture Observed	
	15			Bottom of Test Boring at 15 feet	
	20				
	25				

Project Name: Waterview Development - Ouray **Project Number:** M22059GE **Figure:** A5

Lambert and Associates

CONSULTING GEOTECHNICAL ENGINEERS AND MATERIAL TESTING

LOG OF TEST BORING

Date Drilled: October 10, 2022 **Field Engineer:** DRL **Boring Number:** 5

Location: See test boring location diagram **Elevation:**

Diameter: 4 inches **Total Depth:** 5 feet **Depth to Water at Time of Drilling:** None Encountered

Symbol	Depth	Sample Type	Sample N	Soil Description	Laboratory Test Results
	0			Sand, clayey, gravels, dense, moist, brown, gray * Increased Cobble	
	5			Auger Refusal at 5 feet	
	10				
	15				
	20				
	25				

Project Name: Waterview Development - Ouray **Project Number:** M22059GE **Figure:** A6

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CONSULTING GEOTECHNICAL ENGINEERS AND MATERIAL TESTING

LOG OF TEST BORING

Date Drilled: October 10, 2022 **Field Engineer:** DRL **Boring Number:** 6

Location: See test boring location diagram **Elevation:**

Diameter: 4 inches **Total Depth:** 15 feet **Depth to Water at Time of Drilling:** None Encountered

Symbol	Depth	Sample Type	Sample N	Soil Description	Laboratory Test Results
	0			Sand, clayey, gravels, dense, moist, brown, gray	
				* Increased Cobble	
	5	Bulk			Swell/Consolidation Test: DD: 125 pcf MC: 6.1%
	10			* Increased Moisture Observed	
				* Intermittent Silty Sand Lense	
	15			Bottom of Test Boring at 15 feet	
	20				
	25				

Project Name: Waterview Development - Ouray **Project Number:** M22059GE **Figure:** A7

Lambert and Associates

CONSULTING GEOTECHNICAL ENGINEERS AND MATERIAL TESTING

APPENDIX B

The laboratory study consisted of performing:

- Moisture content and dry density tests,
- Swell-consolidation tests, and
- Direct Shear Strength tests.

It should be noted that samples obtained did experience some disturbance during the sampling operations. The test results obtained using these samples are used only as indicators of the in situ soil characteristics.

TESTING

Moisture Content and Dry Density

Moisture content and dry density were determined for each sample tested of the samples obtained. The moisture content was determined according to ASTM Test Method D2216 by obtaining the moisture sample from the drive sleeve. The dry density of the sample was determined by using the wet weight of the entire sample tested. The results of the moisture and dry density determinations are presented on the logs of borings, Figures A2 through A7.

Swell Tests

Loaded swell tests were performed on drive samples obtained during the field study. These tests are performed in general accordance with ASTM Test Method D2435 to the extent that the same equipment and sample dimensions used for consolidation testing are used for the determination of expansion. A sample is subjected to static surcharge, water is introduced to produce saturation, and volume change is measured as in ASTM Test Method D2435. Results are reported as percent change in sample height.

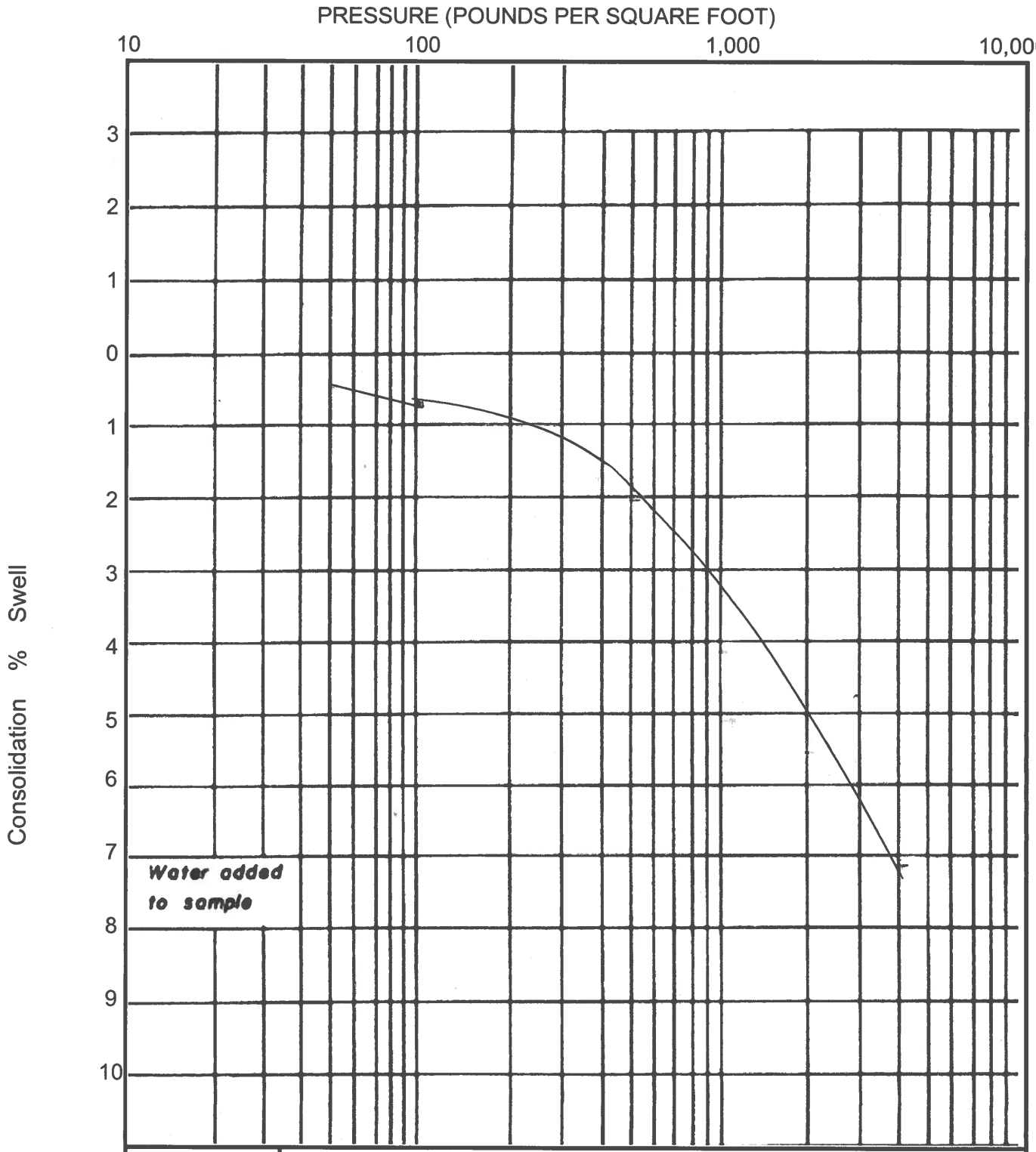
Consolidation Tests

One dimensional consolidation properties of drive samples were evaluated according to the provisions of ASTM Test Method D2435. Water was added in all cases during the test. Exclusive of special readings during consolidation rate tests, readings during an increment of load were taken regularly until the change in sample height was less than 0.001 inch over a two hour period. The results of the swell-consolidation load test are summarized on Figures B1 through B4, swell-consolidation tests.

It should be noted that the graphic presentation of consolidation data is a presentation of volume change with change in axial load. As a result, both expansion and consolidation can be illustrated.

Direct Shear Strength Tests

Direct shear strength properties of drive samples were evaluated in general accordance with testing procedures defined by ASTM Test Method D3080. The results of the direct shear strength test are summarized on Figure B5, direct shear test.

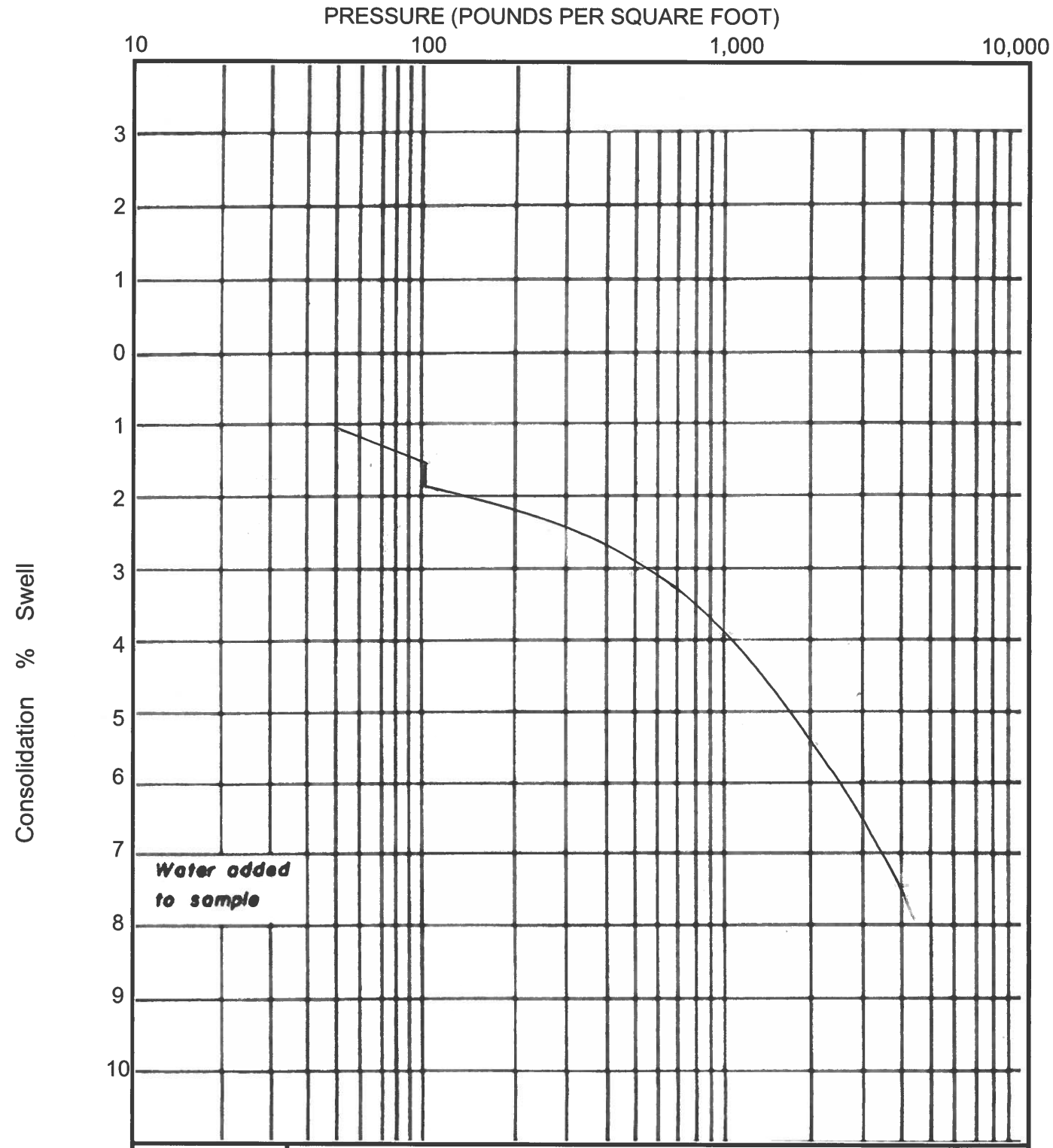


	SUMMARY OF TEST RESULTS				
Boring No. 1 Depth 5 ft	Moisture Content %	Dry Density PCF	Height in	Diameter In	Swell Pressure PSF
Initial	5.6	123	1.00	1.94	± 300
Final	13.1	133	0.928	1.94	
Soil Description	Sand, gravel, clayey, brown				

SWELL-CONSOLIDATION TEST

Lambert and Associates

Project No.	M22059GE
Date:	February 3, 2023
Figure:	B1

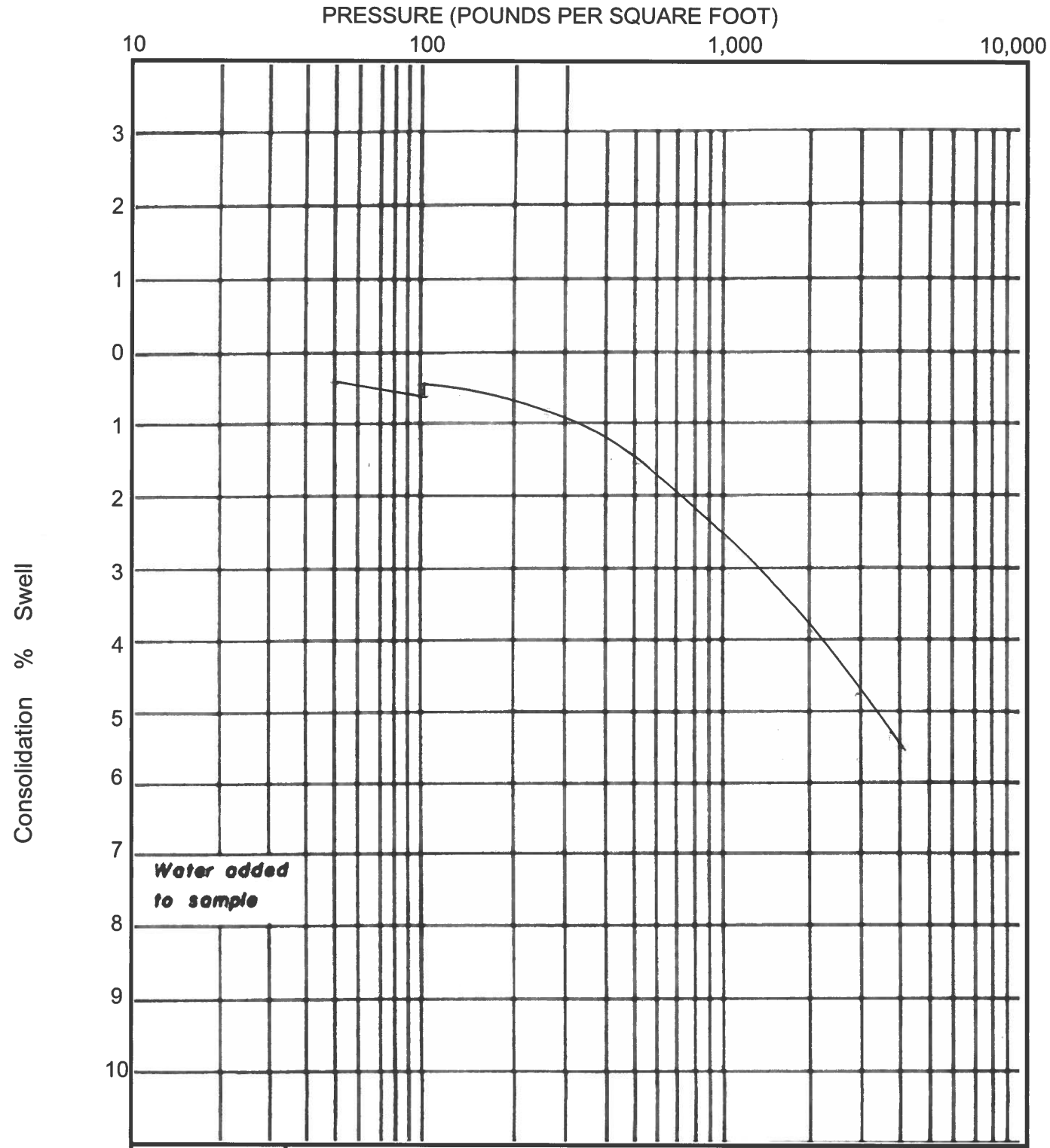


	SUMMARY OF TEST RESULTS				
Boring No. 4 Depth 5 ft	Moisture Content %	Dry Density PCF	Height in	Diameter In	Swell Pressure PSF
Initial	6.3	124	1.00	1.94	≤ 100
Final	12.8	133	0.927	1.94	
Soil Description	Sand, gravel, clayey, brown				

SWELL-CONSOLIDATION TEST

Lambert and Associates

Project No.	M22059GE
Date:	February 3, 2023
Figure:	B2

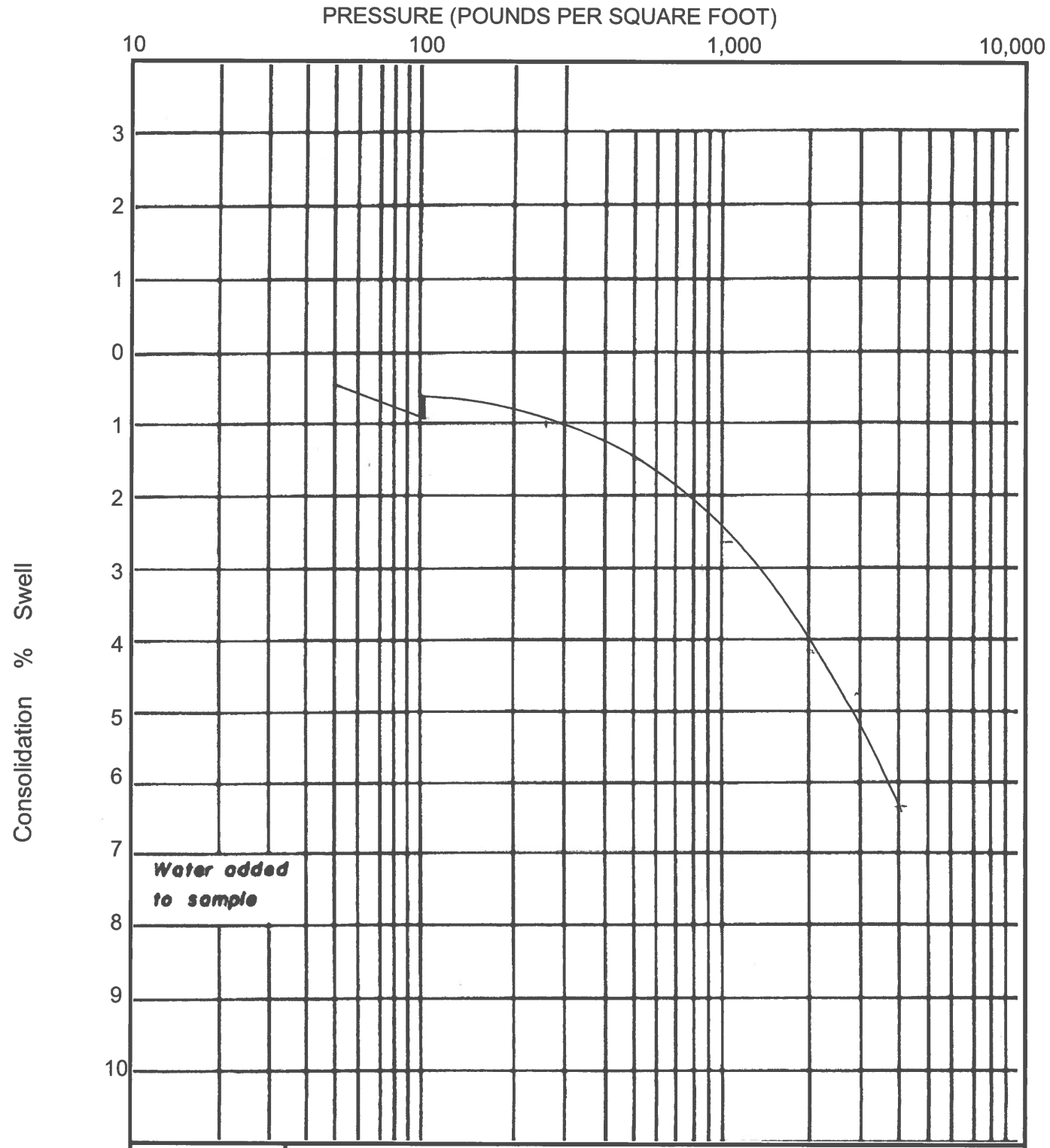


	SUMMARY OF TEST RESULTS				
Boring No. 4 Depth 10 ft	Moisture Content %	Dry Density PCF	Height in	Diameter In	Swell Pressure PSF
Initial	5.9	126	1.00	1.94	± 300
Final	12.2	135	0.945	1.94	
Soil Description	Sand, gravel, clayey, brown				

SWELL-CONSOLIDATION TEST

Lambert and Associates

Project No.	M22059GE
Date:	February 3, 2023
Figure:	B3



	SUMMARY OF TEST RESULTS				
Boring No. 6 Depth 5 ft	Moisture Content %	Dry Density PCF	Height in	Diameter In	Swell Pressure PSF
Initial	6.1	125	1.00	1.94	± 400
Final	12.5	134	0.937	1.94	
Soil Description	Sand, gravel, clayey, brown				

SWELL-CONSOLIDATION TEST

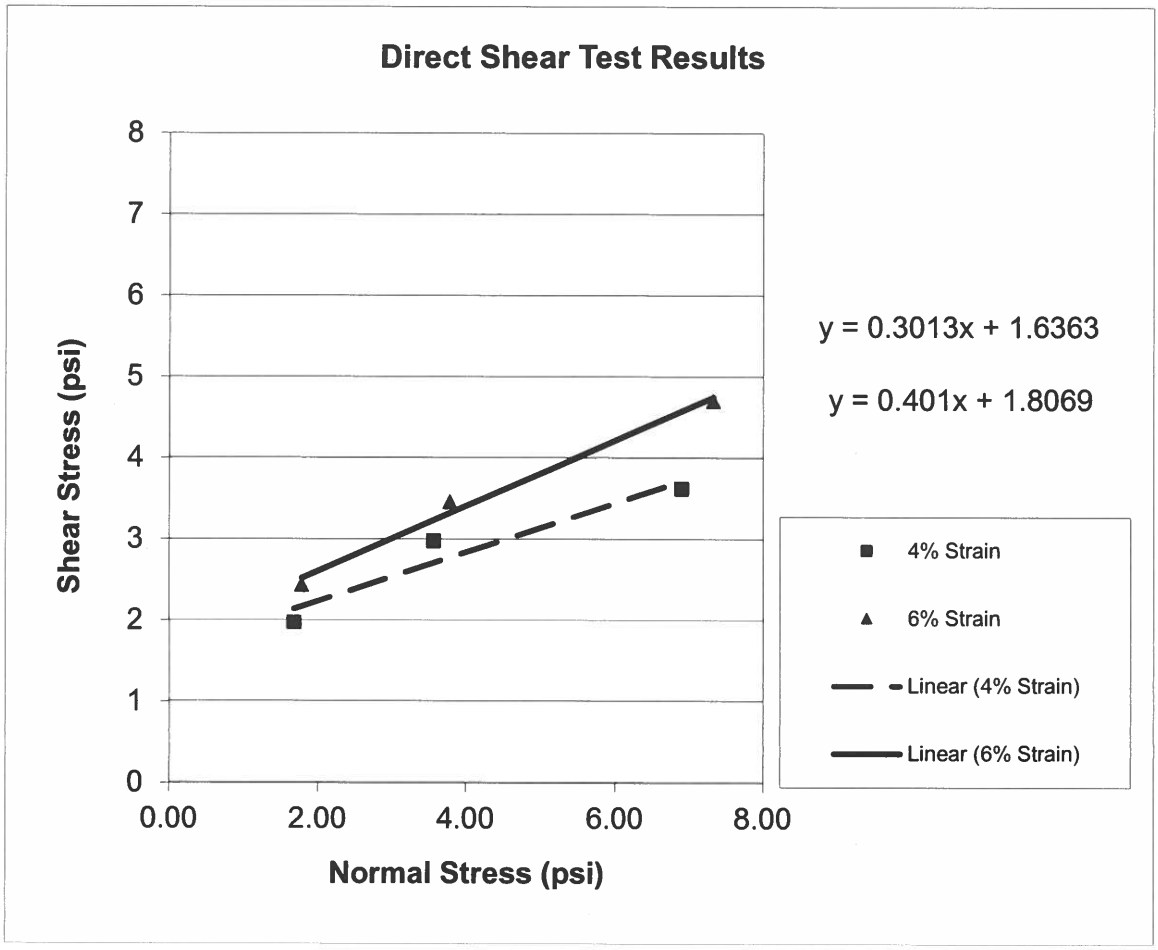
Lambert and Associates

Project No.	M22059GE
Date:	February 3, 2023
Figure:	B4

Lambert and Associates

CONSULTING GEOTECHNICAL ENGINEERS AND MATERIAL TESTING

Project:	Waterview Development	**Project Number:**	M22059GE	**Date Sampled:**	10/10/2022
Location:	Ouray, CO	**Sample Source:**	TB 2 @ 5 ft	**Lab Sample #:**	4343
Sample Description:	Sand, gravel, clayey, brown	**Date Tested:**	11/16/2022	**Tested By:**	AC



% Strain	Cohesion (psf)	Friction Angle (deg)
4	236	17
6	260	22

Project No.:	M22059GE
Date:	February 3, 2023
Figure:	B5

APPENDIX C

GEOLOGY DISCUSSION
SOUTHWEST COLORADO GEOLOGY

Southwest Colorado exhibits many geologic features formed by a multitude of geologic processes. Regional inundation, uplift, volcanism and glaciation are responsible for some of the complex geology of the region. Many theories and speculations concerning the mode of occurrence of the regions's geology have been presented over the years. This cursory discussion of the geology of southwest Colorado presents some theories accepted by the geologic community, but is only intended to introduce the basic concepts and restraints that arise due to geologic activity.

Prior to the formation of the Rocky Mountains southwest Colorado was a primarily a flat lying region with little topographic expression. The North American continent was experiencing many episodes of deposition. The Transcontinental Sea was transgressing and regressing across the continent, these transgressions and regressions are the cause for such diverse rock types. The stratigraphic column in southwestern Colorado expresses rock types from variable depositional environments. Limestones are formed in deeper water, sandstones are formed in beach and tidal flat environments, while arkosic sandstone and conglomerates are formed in alluvial plains and fans. Particle size and mineralogic content in rock units are related to the depositional environment. A sandstone or conglomerate would not be likely to form in a deep sea environment because there would not be enough energy to carry such large particles a great distance from the source lands. As one observes the stratigraphic column of southwest Colorado a siltstone may be overlain by a sandstone which is in turn overlain by a siltstone. This represents a regressional then transgressional sequence. Many such sequences or combinations of other rock units are exhibited throughout southwest Colorado.

The final regression of the sea may have been caused by orogenic activity and uplift. This uplift was not confined to Colorado, it was a regional uplift that occurred in many stages. The uplift is what caused the formation of the ancestral rockies. The Larimide Orogenic episode is responsible for the formation of the San Juan dome. (Note: The San Juan dome theory is not accepted by the entire geologic community. It is used here for descriptive purposes). The San Juan dome was essentially an upwarp of the stratigraphy formed by sedimentation during the Transcontinental Sea. An actual dome probably never

existed due to erosion during the uplift. The idea being that a dome of sediments and rock units would have existed had erosion and diastrophism not taken place. The orientation of bedding planes forms a radial pattern around the San Juan region which seems to vindicate this theory.

The stresses need to "upwarp" this large area were obviously tremendous. Locally occurring stresses may not be sufficient to move this quantity of material, global tectonics, directly or indirectly, may have been involved. Compression of the entire North American plate could have occurred. The magnitude of the stresses and the deep seated origin of these stresses also have caused extensive volcanism. Colorado has many large remnants of Calderas that were active during the orogenic activity. The Silverton and Lake City Calderas are the largest in the San Juan region. Activity in the Silverton Caldera has been estimated (radiometrically) to have occurred 22 million years ago. Calderas of this magnitude are believed to have formed by the collapse of epierogenic magma chambers. Volcanic and metamorphic rock bodies are common in the San Juan region, many of these units are related to the orogenic activity in the region.

Faults associated with local orogenic activity are another common geologic feature found in southwestern Colorado. As stated previously, extreme stresses were probably associated with the formation of the San Juan Mountains and may be responsible for deep-seated volcanic and metamorphic processes. These stresses had to be released, the geologic mode for stress release is faulting. Diastrophic activity in the area today is quite low, the lack of seismic activity indicates that stresses are not currently being released. An explanation for the loss of stresses is through faulting.

The last episode of regional geologic activity in the area was glaciation. The most recent period of glacial activity ended approximately 10,000 years ago. Glacial activity is responsible for much of the topographic expression in the area. "U-Shaped" valleys, moraine deposits, tarns, (glacial formed lakes), and rock glaciers are the most prominent features which are found in southwestern Colorado as a result of glacial activity. The valley configurations are a result of the erosional activity of the glaciers. Moraine deposits developed during the glacial activity. Rock glaciers are moving masses of rock which are thought to have an ice core which may be the last remnant of glacial ice. As the surbsurface ice core moves and melts, the overlying mass of rock also moves.

APPENDIX D

GENERAL GEOTECHNICAL ENGINEERING CONSIDERATIONS

D1.0 INTRODUCTION

Appendix D presents general geotechnical engineering considerations for design and construction of structures which will be in contact with soils. The discussion presented in this appendix are referred to in the text of the report and are intended as tutorial and supplemental information to the appropriate sections of the text of the report.

D2.0 FOUNDATION RECOMMENDATIONS

Two criteria for any foundation which must be satisfied for satisfactory foundation performance are:

- contact stresses must be low enough to preclude shear failure of the foundation soils which would result in lateral movement of the soils from beneath the foundation, and
- settlement or heave of the foundation must be within amounts tolerable to the superstructure.

The soils encountered during our field study have varying engineering characteristics that may influence the design and construction considerations of the foundations. The characteristics include swell potential, settlement potential, bearing capacity and the bearing conditions of the soils supporting the foundations. The general discussion below is intended to increase the readers familiarity with characteristics that can influence any structure.

D2.1 Swell Potential

Some of the materials encountered during our field study at the anticipated foundation depth may have swell potential. Swell potential is the tendency of the soil to increase in volume when it becomes wetted. The volume change occurs as moisture is absorbed into the soil and water molecules become attached to or adsorbed by the individual clay platlets. Associated with the process of volume change is swell pressure. The swell pressure is the force the soil applies on its surroundings when moisture is absorbed into the soil. Foundation design considerations concerning swelling soils include structure tolerance to movement and dead load pressures to help restrict uplift. The structure's tolerance to movement should be addressed by the structural engineer and is dependent upon many facets of the design including the overall structural concept and the building material. The uplift forces or pressure due to wetted clay soils can be addressed by designing the foundations with a minimum dead load and/or placing the foundations on a blanket of compacted structural fill. The compacted structural fill blanket will increase the dead load on the swelling foundations soils and will increase the separation of the foundation from the swelling soils. Suggestions and

recommendations for design dead load and compacted structural fill blanket are presented below. Compacted structural fill recommendations are presented under COMPACTED STRUCTURAL FILL below.

D2.2 Settlement Potential

Settlement potential of a soil is the tendency for the soil to experience volume change when subjected to a load. Settlement is characterized by downward movement of all or a portion of the supported structure as the soil particles move closer together resulting in decreased soil volume. Settlement potential is a function of;

- foundation loads,
- depth of footing embedment,
- the width of the footing, and
- the settlement potential or compressibility of the influenced soil.

Foundation design considerations concerning settlement potential include the amount of movement tolerable to the structure and the design and construction concepts to help reduce the potential movement. The settlement potential of the foundation can be reduced by reducing foundation pressures and/or by placing the foundations on a blanket of compacted structural fill. The anticipated post construction settlement potential and suggested compacted fill thickness recommendations are based on site specific soil conditions and are presented in the text of the report.

D2.3 Soil Support Characteristics

The soil bearing capacity is a function of;

- the engineering properties of the soil material supporting the foundations,
- the foundation width,
- the depth of embedment of the bottom of the foundation below the
- lowest adjacent grade,
- the influence of the ground water, and
- the amount of settlement tolerable to the structure.

Soil bearing capacity and associated minimum depth of embedment are presented in the text of the report.

The foundation for the structure should be placed on relatively uniform bearing conditions. Varying support characteristics of the soils supporting the foundation may result in nonuniform or differential performance of the foundation. Soils encountered at foundation depths may contain cobbles and boulders. The cobbles and boulders encountered at foundation depths may apply point loads on the foundation resulting in nonuniform bearing conditions. The

surface of the formational material may undulate throughout the building site. If this is the case it may result in a portion of the foundation for the structure being placed on the formational material and a portion of the foundation being placed on the overlying soils. Varying support material will result in nonuniform bearing conditions. The influence of nonuniform bearing conditions may be reduced by placing the foundation members on a blanket of compacted structural fill. Suggestions and recommendations for constructing compacted structural fill are presented under COMPACTED STRUCTURAL FILL below and in the text of the report.

D3.0 COMPACTED STRUCTURAL FILL

Compacted structural fill is typically a material which is constructed for direct support of structures or structural components.

There are several material characteristics which should be examined before choosing a material for potential use as compacted structural fill. These characteristics include;

- the size of the larger particles,
- the engineering characteristics of the fine grained portion of material matrix,
- the moisture content that the material will need to be for compaction with respect to the existing initial moisture content,
- the organic content of the material, and
- the items that influence the cost to use the material.

Compacted fill should be a non-expansive material with the maximum aggregate size less than about two (2) inches and less than about twenty five (25) percent coarser than three quarter (3/4) inch size.

The reason for the maximum size is that larger sizes may have too great an influence on the compaction characteristics of the material and may also impose point loads on the footings or floor slabs that are in contact with the material. Frequently pit-run material or crushed aggregate material is used for structural fill material. Pit-run material may be satisfactory, however crushed aggregate material with angular grains is preferable. Angular particles tend to interlock with each other better than rounded particles.

The fine grained portion of the fill material will have a significant influence on the performance of the fill. Material which has a fine grained matrix composed of silt and/or clay which exhibits expansive characteristics should be avoided for use as structural fill. The moisture content of the material should be monitored during construction and maintained near optimum moisture content for compaction of the material.

Soil with an appreciable organic content may not perform adequately for use as structural fill material due to the compressibility of the material and ultimately due to the decay of the

organic portion of the material.

D4.0 RADON CONSIDERATIONS

Information presented in "Radon Reduction in New Construction, An Interim Guide: OPA-87-009 by the Environmental Protection Agency dated August 1987 indicates that currently there are no standard soil tests or specific standards for correlating the results of soil tests at a building site with subsequent indoor radon levels. Actual indoor levels can be affected by construction techniques and may vary greatly from soil radon test results. Therefore it is recommended that radon tests be conducted in the structure after construction is complete to verify the actual radon levels in the home.

We suggest that you consider incorporating construction techniques into the development to reduce radon levels in the residential structures and provide for retrofitting equipment for radon gas removal if it becomes necessary.

Measures to reduce radon levels in structures include vented crawl spaces with vapor barrier at the surface of the crawl space to restrict radon gas flow into the structure or a vented gravel layer with a vapor barrier beneath a concrete slab-on-grade floor to allow venting of radon gas collected beneath the floor and to restrict radon gas flow through the slab-on-grade floor into the structure. These concepts are shown on Figure D1.

If you have any questions or would like more information about radon, please contact us or the State Health Department at 303-692-3030.

CHAUTAUQUA SUBDIVISION HOMEOWNERS ASSOCIATION

2505 CHAUTAUQUA LANE OURAY, CO 81427

Friday, April 28, 2023

Ouray City Council
Mayor Ethan Funk
Mayor Pro Tem, Josh Smith
Ms. Tamara Gulde, Council Member
Ms. Peggy Lindsey, Council Member
Mr. K. John wood, Council Member

Dear Mayor and Members of the City of Ouray City Council:

On behalf of the Chautauqua Subdivision Homeowners Association (the "HOA") and as President of that organization, I am writing you with comments regarding the Waterview PUD preliminary plat application (the "Application"), which is to be considered by you at a regular meeting.

We are writing in support of the approval of the Application; however, we do have some concerns and request that you consider them in your deliberations.

We believe you should consider approving the Application in two stages, not in one, as is being proposed, since Phase 2 must wait until the completion of the expansion of the sewer system.

This extensive 9.2-acre development can overburden Ouray, especially since the developer proposes that the City maintain streets, open areas, and water retention ponds after completing what will be the most significant development in Ouray's history. The project, if approved, will increase the area's population density, inevitably leading to increased demands for additional police and fire protection and public services such as roads, water supply, sewage, garbage collection, and other utilities.

While we recognize the need for affordable housing, we must also ensure that any development in our small town is done responsibly and sustainably. The responsible thing to do is to approve Phase 1 of this development, which is, as previously stated, all that Ouray's infrastructure allows for now. There is plenty of time and ability to adjust to the second phase based on the experience gained from the first phase.

Ouray must understand the community's housing needs and develop a plan to build affordable housing that meets Ouray's needs instead of unnecessarily approving in advance more affordable housing than Ouray's current infrastructure can accommodate.

There is a need for caution. Overbuilding affordable housing in a small town can negatively impact the City if there is an economic downturn. The increased population can strain existing infrastructure, such as roads, public services, and the local job market, which can lead to a decrease in property values and reduce the money available to the City to fund other projects and services.

By taking a phased approach, we can better understand the impact of affordable housing on our community. This approach will allow us to make informed decisions to ensure that any future development is in line with the needs and desires of our community. It will also allow us to address any potential issues or concerns that may become apparent from Phase 1.

It also does not make sense to us to rush forward and prematurely approve both phases of this project at a time when the only evidence we have relative to affordable housing is anecdotal. The City recently commissioned a housing needs study to be done by Economic and Planning Systems, Inc. at the cost of $38,500. The purpose of this study is to understand the housing needs within the City quote: "...to understand the specific housing needs within the City, to understand the local market needs, how the City can play a role in meeting these needs, and how to prioritize investment and other actions." Phase 2 for this project should be deferred until the completion of the study, and delivery of the study to the City Council and the citizens of Ouray, with an opportunity for public discussion on the study's results.

The two-phased approach will not only allow us the learn from the first phase. It will give the City time to see and learn independently from other affordable housing projects, such as Pinion Park in Norwood and Wetterhorn in Ridgway. For example, does the City know the lottery results for Pinion Park? What was the number of qualified lottery buyers for that 24-unit development? How many of those lottery winners closed and moved in? We have learned from other instances that construction can go awry and a two-phase approval appears to be the most sustainable course of action.

Should you choose not to approve this project in two phases but instead to approve it all at once, we ask that you be cognizant of and consider the City zoning regulations requirements of Section 6 "Commercial – Industrial District – C-2 (a) Purpose. "Each use will be required to mitigate its particular negative impacts determined to exist so as to provide for the reasonable enjoyment of adjacent properties." In its Sketch Plan approval, the Planning Commission chose to overlook this regulation as it affects adjacent Chautauqua homeowners. We request that the City and the developer meet with adjoining property owners and make a good-faith effort to address the project's negative impacts as currently planned. The Ouray City ordinance requires this whether the development is residential or industrial.

The Planning Commission addressed the negative impact this project will have on motorists driving along Highway 550 with the backyards of the affordable houses facing Highway 550 but ignored the same adverse effects that the project has on adjacent Chautauqua properties.

Let's work together in the best interest of everyone.

We thank you for considering our concerns and request that this letter be part of the public record of the City Council meeting to be held regarding the Waterview PUD.

With kindest regards,

David P. Smith

David P. Smith
President, Chautauqua Subdivision HOA

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With kindest regards,

David P. Smith

David P. Smith
President, Chautauqua Subdivision HOA

CITY OF OURAY
Professional Service Agreement

THIS AGREEMENT is entered into effective this 6th day of June, 2023 by and between:

The City of Ouray, a Colorado home rule municipal corporation (the City); and,

Short-Elliot-Hendrickson Inc. a foreign Corporation with its principal place of business located at 3535 Vadnais Center Dr., St. Paul, MN 55110, (the Contractor).

NOW THEREFORE, in consideration of the mutual representations, promises and conditions contained herein, the parties agree as follows.

1. SCOPE OF CONTRACTOR SERVICES. The Contractor agrees to provide services in accordance with the Scope of Contractor Services attached and incorporated as Exhibit A. To the extent any terms contained in Exhibit A conflict with the terms of this Professional Services Agreement, the latter controls.

2. TERM OF AGREEMENT. The term of this agreement shall begin on the effective date above and continue until termination of this agreement by either party with three days written notice or if the services are not completed, this agreement will expire on December 31, 2023 at which time the City and the Contractor will either negotiate a new agreement to complete the services, extend this agreement or their relationship under this agreement will terminate.

3. FEES FOR SERVICES. In consideration of the services to be performed pursuant to this agreement the City will pay the Contractor a sum on an hourly basis as set forth in Exhibit A but in no event shall the fees exceed twenty-thousand dollars ($20,000.00) without entering a new contract.

4. PAYMENT FOR SERVICES. The Contractor shall submit a detailed invoice to the City describing the professional services rendered. The invoice shall

DRAFT

document the hours spent on the project identifying by work category and subcategory the work performed for the period, the hours worked by employee, and the hourly rate charged for that work. The City shall have access to backup payroll documentation identifying individual employee, date, and hours worked. The City shall pay the invoice within thirty (30) days of receipt unless the work or the documentation therefore is unsatisfactory. Payments made after thirty (30) days may be assessed an interest charge of one percent (1%) per month unless the delay in payment resulted from unsatisfactory work or documentation.

5. CITY REPRESENTATIVE. The City designates the City Administrator as its representative and authorizes him to make all necessary and proper decisions with reference to this agreement. All requests for contract interpretations, changes, clarifications, or instructions shall be directed to the City representative.

6. INDEPENDENT CONTRACTOR. The services to be performed by the Contractor are those of an independent contractor and not as an employee of the City. Nothing in this agreement shall constitute or be construed as a creation of a partnership or joint venture between the City and the Contractor, or their successors or assigns. No agent or employee of the Contractor shall be or shall be deemed to be the employee or agent of the City. The City is interested only in the results obtained under this agreement; the manner and means of conducting the work are under the sole control of the Contractor. None of the benefits provided by the City to its employees, including, but not limited to, worker compensation insurance and unemployment compensation insurance, are available from the City to the employees of the Contractor. The Contractor will be solely and entirely responsible for its acts and for the acts of its agents, employees, and subcontractors during the performance of this agreement. The Contractor will pay all federal and state income tax on any moneys paid pursuant to this agreement.

7. INSURANCE. The Contractor agrees to procure and maintain, at its own cost, a policy or policies of insurance as called for in this agreement. Insurance shall be procured and maintained with forms and insurers acceptable to the City. All coverage shall be continuously maintained during the term of this

agreement. Each shall be primary insurance and any insurance carried by the City, its officers, or its employees, shall be excess and not contributory insurance to that provided by the Contractor. The Contractor shall provide the City with certificates of insurance, or other acceptable evidence, showing the required coverages. The City reserves the right to request and receive a certified copy of any policy.

a. The Contractor shall procure and maintain the minimum insurance coverage listed below.

    i. Workers' compensation insurance to cover obligations imposed by the Workers' Compensation Act of Colorado and any other applicable laws for any employee of the Contractor engaged in the performance of work under this agreement.

    ii. Professional liability errors and omissions or general liability coverage, as appropriate, with minimum limit of One Million Dollars ($1,000,000.00).

b. The Contractor shall not be relieved of any liability, claims, demands, or other obligations assumed pursuant to this agreement by reason of its failure to procure or maintain insurance, or by reason of its failure to procure or maintain insurance in sufficient amounts, duration, or types.

c. Failure on the part of the Contractor to procure or maintain policies providing the required coverages, conditions, and minimum limits shall constitute a material breach of contract upon which the City may immediately terminate this contract, or at its discretion the City may procure or renew any such policy or any extended reporting period thereto and may pay any and all premiums in connection therewith, and all monies so paid by the City shall be repaid by the Contractor upon demand, or the City may offset the cost of the premiums against any monies due to the Contractor.

d. The Contractor shall be responsible for any deductible under any policy required above.

8. GOVERNMENTAL IMMUNITY. The Contractor understands and acknowledges that the City relies on and does not waive or intend to waive by any portion of this agreement any provision of the Colorado Governmental Immunity Act, C.R.S. § 24-10-101, *et seq*.

9. INDEMNIFICATION. To the fullest extent permitted by law, the Contractor agrees to indemnify and hold harmless the City, its officers, employees, insurers, and self-insurance pool, from and against liability for damage, including attorney fees and costs, arising out of death or bodily injury to persons or damage to property, caused by the negligence or fault of the Contractor or any third party under the control or supervision of the Contractor, but not for any amounts that are greater than that represented by the degree or percentage of negligence or fault attributable to the Contractor or the Contractor's agents, representatives, subcontractors, or suppliers.

10. ASSIGNMENT. The Contractor shall neither assign any responsibilities nor delegate any duties arising under this agreement without the prior written consent of the City.

11. PAYMENTS BY CITY. Any payments of money by the City pursuant to this agreement shall be subject to the annual appropriations of money.

12. LEGAL COMPLIANCE. The Contractor shall comply with all laws, ordinances, rules, and regulations relating to the performance of this agreement, use of public places and safety of persons and property.

13. FURTHER ASSURANCES. Each party agrees to take such actions and sign such documents, certificates and instruments reasonably requested by the other party to complete the transactions contemplated by this agreement and to enable the requesting party to enjoy the full benefits conferred upon such party by this agreement.

14. ENTIRE AGREEMENT. This instrument contains the entire agreement between the parties, and no statements, promises, or inducements made by either party or agent of either party that are not contained in this written contract

shall be valid or binding. This contract may not be enlarged, modified, or altered except in writing signed by the parties and endorsed on this agreement. Each person signing the contract warrants that they have authority to bind the City or Contractor.

15. BINDING EFFECT. This agreement shall inure to the benefit of and be binding on the parties, their heirs, executors, administrators, assignees, and successors.

16. SEVERABILITY. If any part, term, or provision of this contract is held by the courts to be illegal or in conflict with any law of the State of Colorado, the validity of the remaining portions or provisions shall not be affected, and the rights and obligations of the parties shall be construed and enforced as if the contract did not contain the part, term, or provision held to be invalid.

17. GOVERNING LAW. This agreement shall be governed by the laws of the State of Colorado, both as to interpretation and performance. The courts of the State of Colorado shall have exclusive jurisdiction to resolve any disputes arising out of this agreement and venue shall be in Ouray County, Colorado.

18. WAIVER. No waiver of any breach of this agreement shall be held to be a waiver of any other or subsequent breach. All remedies afforded in this contract shall be taken and construed as cumulative, that is, in addition to every other remedy provided therein or by law.

19. COUNTERPARTS. This agreement may be executed in any number of counterparts, each of which shall be deemed to be an original, but all of which together shall constitute but one and the same instrument.

20. PRONOUNS. Wherever in this agreement, words, including pronouns, are used in the masculine, they shall be read and construed in the feminine or neuter whenever they would so apply, and wherever in this agreement, words, including pronouns, are used in the singular or plural, they shall be read and construed in the plural or singular, respectively, wherever they would so apply.

IN WITNESS WHEREOF, the City and the Contractor have signed this agreement effective the day and year first written above.

Signatures on Following Page

CITY OF OURAY:

_____
Ethan Funk, Mayor

Attest:

_____
Melissa M. Drake, City Clerk

CONTRACTOR:

_____
Nancy L. Dosdall, AICP

Exhibit A to Professional Services Agreement with SEH

Agreement for Professional Services

This Agreement is effective as of June 6, 2023, between City of Ouray (Client) and Short Elliott Hendrickson Inc. (Consultant).

This Agreement authorizes and describes the scope, schedule, and payment conditions for Consultant's work on the Project described as: **Ouray On Call Planning**

Client's Authorized Representative: Silas Clarke
Address: P.O. Box 468/320 6th Ave, Ouray, Colorado, 81427, United States
Telephone: 19703257060 **email:** sclarke@cityofouray.com

Project Manager: Nancy Dosdall
Address: 934 Main Avenue, Unit C, Durango, Colorado 81301
Telephone: 19704591165 **email:** ndosdall@sehinc.com

Scope: The Basic Services to be provided by Consultant as set forth herein are provided subject to the attached General Conditions of the Agreement for Professional Services (General Conditions Rev. 05.15.22), which is incorporated by reference herein and subject to Exhibits attached to this Agreement.

On call planning services as directed by City Manager.

Schedule: As directed and needed.

The fee is hourly including expenses and equipment.
The estimated fee is subject to a not-to-exceed amount of $20,000 including expenses and equipment.

The payment method, basis, frequency and other special conditions are set forth in attached Exhibit A-1.

This Agreement for Professional Services, attached General Conditions, Exhibits and any Attachments (collectively referred to as the "Agreement") supersedes all prior contemporaneous oral or written agreements and represents the entire understanding between Client and Consultant with respect to the services to be provided by Consultant hereunder. In the event of a conflict between the documents, this document and the attached General Conditions shall take precedence over all other Exhibits unless noted below under "Other Terms and Conditions". The Agreement for Professional Services and the General Conditions (including scope, schedule, fee and signatures) shall take precedence over attached Exhibits. This Agreement may not be amended except by written agreement signed by the authorized representatives of each party.

Other Terms and Conditions: Other or additional terms contrary to the General Conditions that apply solely to this project as specifically agreed to by signature of the Parties and set forth herein:
None

Short Elliott Hendrickson Inc.	**City of Ouray**
By: _____	By: _____
Full Name:	Full Name:
Title: _____	Title: _____

Exhibit A-1
to Agreement for Professional Services
Between City of Ouray (Client)
and
Short Elliott Hendrickson Inc. (Consultant)
Dated June 6, 2023

Payments to Consultant for Services and Expenses Using the Hourly Basis Option

The Agreement for Professional Services is amended and supplemented to include the following agreement of the parties:

A. Hourly Basis Option

The Client and Consultant select the hourly basis for payment for services provided by Consultant. Consultant shall be compensated monthly. Monthly charges for services shall be based on Consultant's current billing rates for applicable employees plus charges for expenses and equipment.

Consultant will provide an estimate of the costs for services in this Agreement. It is agreed that after 90% of the estimated compensation has been earned and if it appears that completion of the services cannot be accomplished within the remaining 10% of the estimated compensation, Consultant will notify the Client and confer with representatives of the Client to determine the basis for completing the work.

Compensation to Consultant based on the rates is conditioned on completion of the work within the effective period of the rates. Should the time required to complete the work be extended beyond this period, the rates shall be appropriately adjusted.

B. Expenses

The following items involve expenditures made by Consultant employees or professional consultants on behalf of the Client. Their costs are not included in the hourly charges made for services but instead are reimbursable expenses required in addition to hourly charges for services and shall be paid for as described in this Agreement:

1. Transportation and travel expenses.
2. Long distance services, dedicated data and communication services, teleconferences, Project Web sites, and extranets.
3. Lodging and meal expense connected with the Project.
4. Fees paid, in the name of the Client, for securing approval of authorities having jurisdiction over the Project.
5. Plots, Reports, plan and specification reproduction expenses.
6. Postage, handling and delivery.
7. Expense of overtime work requiring higher than regular rates, if authorized in advance by the Client.
8. Renderings, models, mock-ups, professional photography, and presentation materials requested by the Client.
9. All taxes levied on professional services and on reimbursable expenses.
10. Other special expenses required in connection with the Project.
11. The cost of special consultants or technical services as required. The cost of subconsultant services shall include actual expenditure plus 10% markup for the cost of administration and insurance.

The Client shall pay Consultant monthly for expenses.

C. Equipment Utilization

The utilization of specialized equipment, including automation equipment, is recognized as benefiting the Client. The Client, therefore, agrees to pay the cost for the use of such specialized equipment on the project. Consultant invoices to the Client will contain detailed information regarding the use of specialized equipment on the project and charges will be based on the standard rates for the equipment published by Consultant.

The Client shall pay Consultant monthly for equipment utilization.

General Conditions of the Agreement for Professional Services

SECTION I – SERVICES OF CONSULTANT

A. General

1. Consultant agrees to perform professional services as set forth in the Agreement for Professional Services or Supplemental Letter Agreement ("Services"). Nothing contained in this Agreement shall create a contractual relationship with or a cause of action in favor of a third party against either the Client or the Consultant. The Consultant's services under this Agreement are being performed solely for the Client's benefit, and no other party or entity shall have any claim against the Consultant because of this Agreement or the performance or nonperformance of services hereunder.

B. Schedule

1. Unless specific periods of time or dates for providing services are specified, Consultant's obligation to render Services hereunder will be for a period which may reasonably be required for the completion of said Services.
2. If Client has requested changes in the scope, extent, or character of the Project or the Services to be provided by Consultant, the time of performance and compensation for the Services shall be adjusted equitably. The Client agrees that Consultant is not responsible for damages arising directly or indirectly from delays beyond Consultant's control. If the delays resulting from such causes increase the cost or the time required by Consultant to perform the Services in accordance with professional skill and care, then Consultant shall be entitled to a equitable adjustment in schedule and compensation.

C. Additional Services

1. If Consultant determines that any services it has been directed or requested to perform are beyond the scope as set forth in the Agreement or that, due to changed conditions or changes in the method or manner of administration of the Project, Consultant's effort required to perform its services under this Agreement exceeds the stated fee for the Services, then Consultant shall promptly notify the Client regarding the need for additional Services. Upon notification and in the absence of a written objection, Consultant shall be entitled to additional compensation for the additional Services and to an extension of time for completion of additional Services absent written objection by Client.
2. Additional Services, including delivery of documents, CAD files, or information not expressly included as deliverables, shall be billed in accord with agreed upon rates, or if not addressed, then at Consultant's standard rates.

D. Suspension and Termination

1. If Consultant's services are delayed or suspended in whole or in part by Client, or if Consultant's services are delayed by actions or inactions of others for more than 60 days through no fault of Consultant, then Consultant shall be entitled to either terminate its agreement upon seven days written notice or, at its option, accept an equitable adjustment of compensation provided for elsewhere in this Agreement to reflect costs incurred by Consultant.
2. This Agreement may be terminated by either party upon seven days written notice should the other party fail substantially to perform in accordance with its terms through no fault of the party initiating the termination.
3. This Agreement may be terminated by either party upon thirty days' written notice without cause. All provisions of this Agreement allocating responsibility or liability between the Client and Consultant shall survive the completion of the Services hereunder and/or the termination of this Agreement.
4. In the event of termination, Consultant shall be compensated for Services performed prior to termination date, including charges for expenses and equipment costs then due and all termination expenses.

SECTION II – CLIENT RESPONSIBILITIES

A. General

1. The Client shall, in proper time and sequence and where appropriate to the Project, at no expense to Consultant, provide full information as to Client's requirements for the Services provided by Consultant and access to all public and private lands required for Consultant to perform its Services.
2. The Consultant is not a municipal advisor and therefore Client shall provide its own legal, accounting, financial and insurance counseling, and other special services as may be required for the Project. Client shall provide to Consultant all data (and professional interpretations thereof) prepared by or services performed by others pertinent to Consultant's Services, such as previous reports; sub-surface explorations; laboratory tests and inspection of samples; environmental assessment and impact statements, surveys, property descriptions; zoning; deed; and other land use restrictions; as-built drawings; and electronic data base and maps. The costs associated with correcting, creating or recreating any data that is provided by the Client that contains inaccurate or unusable information shall be the responsibility of the Client.
3. Client shall provide prompt written notice to Consultant whenever the Client observes or otherwise becomes aware of any changes in the Project or any defect in Consultant's Services. Client shall promptly examine all studies, reports, sketches, opinions of construction costs, specifications, drawings, proposals, change orders, supplemental agreements, and other documents presented by Consultant and render the necessary decisions and instructions so that Consultant may provide Services in a timely manner.
4. Client shall require all utilities with facilities within the Project site to locate and mark said utilities upon request, relocate and/or protect said utilities to accommodate work of the Project, submit a schedule of the necessary relocation/protection activities to the Client for review, and comply with agreed upon schedule. Consultant shall not be liable for damages which arise out of Consultant's reasonable reliance on the information or services furnished by utilities to Client or others hired by Client.
5. Consultant shall be entitled to rely on the accuracy and completeness of information or services furnished by the Client or others employed by the Client and shall not be liable for damages arising from reasonable reliance on such materials. Consultant shall promptly notify the Client if Consultant discovers that any information or services furnished by the Client is in error or is inadequate for its purpose.
6. Client agrees to reasonably cooperate, when requested, to assist Consultant with the investigation and addressing of any complaints made by Consultant's employees related to inappropriate or unwelcomed actions by Client or Client's employees or agents. This shall include, but not be limited to, providing access to Client's employees for Consultant's investigation, attendance at hearings, responding to inquiries and providing full access to Client files and information related to Consultant's employees, if any. Client agrees that Consultant retains the absolute right to remove any of its employees from Client's facilities if Consultant, in its sole discretion, determines such removal is advisable. Consultant, likewise, agrees to reasonably cooperate with Client with respect to the foregoing in connection with any complaints made by Client's employees.
7. Client acknowledges that Consultant has expended significant effort and expense in training and developing Consultant's employees. Therefore, during the term of this Agreement and for a period of two years after the termination of this Agreement or the completion of the Services under this Agreement, whichever is longer, Client shall not directly or indirectly: (1) hire, solicit or encourage any employee of Consultant to leave the employ of Consultant; (2) hire, solicit or encourage any consultant or independent contractor to cease work with Consultant; or (3) circumvent Consultant by conducting business directly with its employees. The two-year period set forth in this section shall be extended commensurately with any amount of time during which Client has violated its terms.

SECTION III – PAYMENTS

A. Invoices

1. Undisputed portions of invoices are due and payable within 30 days. Client must notify Consultant in writing of any disputed items within 15 days from receipt of invoice. Amounts due Consultant will be increased at the rate of 1.0% per month (or the maximum rate of
2. interest permitted by law, if less) for invoices 30 days past due. Consultant reserves the right to retain Services or deliverables until all invoices are paid in full. Consultant will not be liable for any claims of loss, delay, or damage by Client for reason of withholding Services, deliverables, or Instruments of Service until all invoices are paid in full. Consultant shall be entitled to recover all reasonable costs and

disbursements, including reasonable attorney's fees, incurred in connection with collecting amounts owed by Client.

3. Should taxes, fees or costs be imposed, they shall be in addition to Consultant's agreed upon compensation.
4. Notwithstanding anything to the contrary herein, Consultant may pursue collection of past due invoices without the necessity of any mediation proceedings.

SECTION IV – GENERAL CONSIDERATIONS

A. Standards of Performance

1. The standard of care for all professional engineering and related services performed or furnished by Consultant under this Agreement will be the care and skill ordinarily exercised by members of Consultant's profession practicing under similar circumstances at the same time and in the same locality. Consultant makes no warranties, express or implied, under this Agreement or otherwise, in connection with its Services.
2. Consultant neither guarantees the performance of any Contractor nor assumes responsibility for any Contractor's failure to furnish and perform the work in accordance with its construction contract or the construction documents prepared by Consultant. Client acknowledges Consultant will not direct, supervise or control the work of construction contractors or their subcontractors at the site or otherwise. Consultant shall have no authority over or responsibility for the contractor's acts or omissions, nor for its means, methods, or procedures of construction. Consultant's Services do not include review or evaluation of the Client's, contractor's or subcontractor's safety measures, or job site safety or furnishing or performing any of the Contractor's work.
3. Consultant's Opinions of Probable Construction Cost are provided if agreed upon in writing and made on the basis of Consultant's experience and qualifications. Consultant has no control over the cost of labor, materials, equipment or service furnished by others, or over the Contractor's methods of determining prices, or over competitive bidding or market conditions, Consultant cannot and does not guarantee that proposals, bids or actual construction cost will not vary from Opinions of Probable Construction Cost prepared by Consultant. If Client wishes greater assurance as to construction costs, Client shall employ an independent cost estimator.

B. Indemnity for Environmental Issues

1. Consultant is not a user, generator, handler, operator, arranger, storer, transporter, or disposer of hazardous or toxic substances. Therefore the Client agrees to hold harmless, indemnify, and defend Consultant and Consultant's officers, directors, subconsultant(s), employees and agents from and against any and all claims; losses; damages; liability; and costs, including but not limited to costs of defense, arising out of or in any way connected with, the presence, discharge, release, or escape of hazardous or toxic substances, pollutants or contaminants of any kind at the site.

C. Limitations on Liability

1. The Client hereby agrees that to the fullest extent permitted by law, Consultant's total liability to the Client for all injuries, claims, losses, expenses, or damages whatsoever arising out of or in any way related to the Project or this Agreement from any cause or causes including, but not limited to, Consultant's negligence, errors, omissions, strict liability, breach of contract or breach of warranty shall not exceed five hundred thousand dollars ($500,000). In the event Client desires limits of liability in excess of those provided in this paragraph, Client shall advise Consultant in writing and agree that Consultant's fee shall increase by 1% for each additional five hundred thousand dollars of liability limits, up to a maximum limit of liability of five million dollars ($5,000,000).
2. Neither Party shall be liable to the other for consequential damages, including without limitation lost rentals; increased rental expenses; loss of use; loss of income; lost profit, financing, business, or reputation; and loss of management or employee productivity, incurred by one another or their subsidiaries or successors, regardless of whether such damages are foreseeable and are caused by breach of contract, willful misconduct, negligent act or omission, or other wrongful act of either of them. Consultant expressly disclaims any duty to defend Client for any alleged actions or damages.
3. It is intended by the parties to this Agreement that Consultant's Services shall not subject Consultant's employees, officers or directors to any personal legal exposure for the risks associated with this Agreement. The Client agrees that as the Client's sole and exclusive remedy, any claim, demand or suit shall be directed and/or asserted only against Consultant, and not against any of Consultant's individual employees, officers or directors, and Client knowingly waives all such claims against Consultant individual employees, officers or directors.
4. Causes of action between the parties to this Agreement pertaining to acts or failures to act shall be deemed to have accrued, and the applicable statutes of limitations shall commence to run, not later than either the date of Substantial Completion for acts or failures to act occurring prior to substantial completion or the date of issuance of the final invoice for acts or failures to act occurring after Substantial Completion. In no event shall such statutes of limitations commence to run any later than the date when the Services are substantially completed.

D. Assignment

1. Neither party to this Agreement shall transfer, sublet or assign any rights under, or interests in, this Agreement or claims based on this Agreement without the prior written consent of the other party. Any assignment in violation of this subsection shall be null and void.

E. Dispute Resolution

1. Any dispute between Client and Consultant arising out of or relating to this Agreement or the Services (except for unpaid invoices which are governed by Section III) shall be submitted to mediation as a precondition to litigation unless the parties mutually agree otherwise. Mediation shall occur within 60 days of a written demand for mediation unless Consultant and Client mutually agree otherwise.
2. Any dispute not settled through mediation shall be settled through litigation in the state and county where the Project at issue is located.

SECTION V – INTELLECTUAL PROPERTY

A. Proprietary Information

1. All documents, including reports, drawings, calculations, specifications, CADD materials, computers software or hardware or other work product prepared by Consultant pursuant to this Agreement are Consultant's Instruments of Service ("Instruments of Service"). Consultant retains all ownership interests in Instruments of Service, including all available copyrights.
2. Notwithstanding anything to the contrary, Consultant shall retain all of its rights in its proprietary information including without limitation its methodologies and methods of analysis, ideas, concepts, expressions, inventions, know how, methods, techniques, skills, knowledge, and experience possessed by Consultant prior to, or acquired by Consultant during, the performance of this Agreement and the same shall not be deemed to be work product or work for hire and Consultant shall not be restricted in any way with respect thereto. Consultant shall retain full rights to electronic data and the drawings, specifications, including those in electronic form, prepared by Consultant and its subconsultants and the right to reuse component information contained in them in the normal course of Consultant's professional activities.

B. Client Use of Instruments of Service

1. Provided that Consultant has been paid in full for its Services, Client shall have the right in the form of a nonexclusive license to use Instruments of Service delivered to Client exclusively for purposes of constructing, using, maintaining, altering and adding to the Project. Consultant shall be deemed to be the author of such Instruments of Service, electronic data or documents, and shall be given appropriate credit in any public display of such Instruments of Service.
2. Records requests or requests for additional copies of Instruments of Services outside of the scope of Services, including subpoenas directed from or on behalf of Client are available to Client subject to Consultant's current rate schedule. Consultant shall not be required to provide CAD files or documents unless specifically agreed to in writing as part of this Agreement.

C. Reuse of Documents

1. All Instruments of Service prepared by Consultant pursuant to this Agreement are not intended or represented to be suitable for reuse by the Client or others on extensions of the Project or on any other Project. Any reuse of the Instruments of Service without written consent or adaptation by Consultant for the specific purpose intended will be at the Client's sole risk and without liability or legal exposure to Consultant; and the Client shall release Consultant from all claims arising from such use. Client shall also defend, indemnify, and hold harmless Consultant from all claims, damages, losses, and expenses including attorneys' fees arising out of or resulting from reuse of Consultant documents without written consent.

Exhibit B, SEH Standard Rate Table	
Job Title	**Hourly Group Rate***
Engineering Intern	$80-$90
Administrative Assistant	$100-$130
Landscape Architect	$125-$140
Senior Landscape Architect	$140-$160
Graduate Engineer	$115-$130
Planner	$115-$130
Land Surveyor	$100-$125
Professional Surveyor	$125-$150
Architect	$140-$165
Scientist	$100-$125
Community Development Specialist	$135-$165
Senior Scientist	$160-$180
Project Engineer	$140-$160
Senior Scientist II	$165- $180
Senior Planner I	$165- $180
Senior Engineer I	$160-$180
Senior Engineer II	$175-$190
Senior Engineer II/Principal	$200-$210
Senior Community Development Specialist	$180-$210
Senior Planner II	$210-$230
RPCL/Principal	$225-$250
Sub-Consultants	Cost + 10%
Equipment Per Hour	**Rate**
Tier 3 Drone	$ 150.00
Survey Vehicle or Field Vehicle	$ 5.00
3D Scanner (SX-10)	$ 40.00
Robotic Total Station	$ 35.00
GPS - Survey Grade	$ 35.00
Magnetometer	$ 12.50
ATV/UTV	$ 15.00
All Vehicles: Std IRS Mileage Rate	$0.625 / mile
All other expenses	At cost + 10%
* If Client requests additional services beyond 6/30/2023, they agree to renegotiate rates	

Future Agenda Items/Work Sessions

- Land Use and Sign Codes (SET A DATE AT MEETING):
    - Lodging Establishments (Special Use License)
    - Impact Fees
    - Parking Standards and Requirements

- Affordable Housing EQR Utility Offset Program

- Adopt Updated Zoning Map (Overlay District) with Land Use Code Update

- EPS Housing Needs Assessment Preliminary Findings & Strategy (Thursday, June 22 at 1:00 pm)

- Alcohol at the pool (Late August Work Session to Determine Direction to Staff)

- (Non-Land Use) Code Revisions

- Additional Fee & Fine Schedules

- Workforce & Attainable Housing

- Alcohol – Entertainment/Consumption District on Main Street (In discussions)

- Water Conservation Incentive

- OIPI Water Use Agreement

- Dark Sky Ordinance

- Huckstering Permit Re-examine Permit and Fees