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**CITY COUNCIL AGENDA
WEDNESDAY, SEPTEMBER 21, 2022
250 NORTH 5TH STREET - AUDITORIUM
[VIRTUAL MEETING](#) - [LIVE STREAMED](#)
BROADCAST ON CABLE CHANNEL 191
5:30 PM – REGULAR MEETING**

Call to Order, Pledge of Allegiance, Moment of Silence

Proclamations

Proclaiming September 17 - 23, 2022 as Constitution Week in the City of Grand Junction

Appointments

To the Planning Commission

To the Parks and Recreation Advisory Board

Citizen Comments

Individuals may comment regarding items scheduled on the Consent Agenda and items not specifically scheduled on the agenda. This time may be used to address City Council about items that were discussed at a previous City Council Workshop.

Citizens have four options for providing Citizen Comments: 1) in person during the meeting, 2) virtually during the meeting (registration required), 3) via phone by leaving a message at 970-244-1504 until noon on Wednesday, September 21, 2022 or 4) submitting comments [online](#) until noon on Wednesday, September 21, 2022 by completing this form. Please reference the agenda item and all comments will be forwarded to City Council.

City Manager Report

Council Reports

CONSENT AGENDA

The Consent Agenda includes items that are considered routine and will be approved by a single motion. Items on the Consent Agenda will not be discussed by City Council, unless an item is removed for individual consideration.

1. Approval of Minutes

- a. Minutes of the September 7, 2022 Regular Meeting

2. Set Public Hearings

All ordinances require two readings. The first reading is the introduction of an ordinance and generally not discussed by City Council. Those are listed in Section 2 of the agenda. The second reading of the ordinance is a Public Hearing where public comment is taken. Those are listed below.

- a. Legislative
 - i. Introduction of an Ordinance Amending the Zoning and Development Code Section 21.06.040 Landscape, Buffering, and Screening Standards; Section 21.10.020 Terms Defined; Section 21.03.030 Measurements; Section 21.03.080 Mixed Use and Industrial Bulk Standards Summary Table; and Section 21.04.030 Use-Specific Standards of the Grand Junction Municipal Code and Setting a Public Hearing for October 5, 2022

3. Procurements

- a. Purchase of Lead Service Line Puller Equipment
- b. Authorize a Contract for the Odor Control Improvements Project

4. Resolutions

- a. A Resolution Adopting the North Avenue Enhanced Transit Corridor Study
- b. A Resolution Authorizing the City Manager to Submit a Grant Request to the State of Colorado Department of Local Affairs (DOLA) FY 2022 – 2023 Gray & Black Market Marijuana Enforcement Grant

REGULAR AGENDA

If any item is removed from the Consent Agenda by City Council, it will be considered here.

5. Public Hearings

a. Legislative

- i. An Ordinance Adding Chapter 13.40 Graywater Control Program
- ii. Ordinance Placing a Charter Amendment to Change the Authorized Length of Leases of City Property for Housing from 25 Up to 99 Years on the Election Ballot for the Special Municipal Election to be Held November 8, 2022
- iii. An Ordinance Creating the Housing Advisory Board

b. Quasi-judicial

- i. An Ordinance Vacating a 15-Foot x 325-Foot Strip of Land Located on a 144-Acre Parcel Located at 675 23 1/2 Road
- ii. An Ordinance Vacating a 0.13-Acre Portion of the Undeveloped G Road Public Right-of-Way on the Northeast Corner of Horizon Drive and G Road at 702 Horizon Drive
- iii. An Ordinance Rezoning 6.15 Acres from I-2 (General Industrial) to I-1 (Light Industrial), Located at 2415 Blue Heron Road

6. Non-Scheduled Citizens & Visitors

This is the opportunity for individuals to speak to City Council about items on tonight's agenda and time may be used to address City Council about items that were discussed at a previous City Council Workshop.

7. Other Business

8. Adjournment



City of Grand Junction, State of Colorado

Proclamation

Whereas, our Founding Fathers, in order to secure the blessings of liberty for themselves and their posterity, did ordain and establish a Constitution for the United States of America; and

Whereas, it is of the greatest importance that all citizens fully understand the provisions and principles contained in the Constitution in order to support, preserve, and defend it against all enemies; and

Whereas, signing of the Constitution provides an historic opportunity for all Americans to realize the achievements of the Framers of the Constitution and the rights, privileges, and responsibilities it affords; and

Whereas, the independence guaranteed to American citizens, whether by birth or naturalization, should be celebrated by appropriate ceremonies and activities during Constitution Week, September 17 through 23, as designated by proclamation of the President of the United States of America in accordance with Public Law 915.

NOW, THEREFORE, I, Anna Stout, by the power vested in me as Mayor of the City of Grand Junction, do hereby proclaim September 17 - 23, 2022 as

"Constitution Week"

in the City of Grand Junction and urge all our residents to reflect during that week on the many benefits of our Federal Constitution and American citizenship.

IN WITNESS WHEREOF, I have hereunto set my hand and caused to be affixed the official Seal of the City of Grand Junction this 21st day of September 2022.



A handwritten signature in black ink, appearing to read "Anna Stout".

Mayor



Grand Junction City Council

Regular Session

Item #

Meeting Date: September 21, 2022

Presented By: Amy Phillips, City Clerk

Department: City Clerk

Submitted By: Kerry Graves

Information

SUBJECT:

To the Planning Commission

RECOMMENDATION:

To appoint the interview committee's recommendation to the Planning Commission.

EXECUTIVE SUMMARY:

There is one full-term and one partial-term vacancy on the Planning Commission.

BACKGROUND OR DETAILED INFORMATION:

Sandra Weckerly and George Gatseos have terms expiring October 31, 2022. George did not reapply, which allowed Kim Herek, the 1st Alternate to the Planning Commission, to move to George's vacated position. Jimmie Phillips will move to the 1st Alternate position, leaving the 2nd Alternate position vacant.

FISCAL IMPACT:

N/A.

SUGGESTED MOTION:

I move to (appoint/not appoint) the interview committee's recommendation to the Planning Commission.

Attachments

None

GRAND JUNCTION CITY COUNCIL MINUTES OF THE REGULAR MEETING

September 7, 2022

Call to Order, Pledge of Allegiance, Moment of Silence

The City Council of the City of Grand Junction convened into regular session on the 7th day of September 2022 at 5:30 p.m. Those present were Mayor Pro Tem Abe Herman, Councilmembers Chuck McDaniel, Phillip Pe'a, Randall Reitz (virtual), Dennis Simpson, Rick Taggart and Council President Anna Stout.

Also present were City Manager Greg Caton, City Attorney John Shaver, City Clerk Amy Phillips, Deputy City Clerk Selestina Sandoval, Community Development Director Tamra Allen, Housing Manager Ashley Chambers, Utilities Director Randi Kim and Senior Planner Daniella Acosta.

Council President Stout called the meeting to order, and Councilmember Taggart led the Pledge of Allegiance, followed by a moment of silence.

Proclamations

Proclaiming September 15 - October 15, 2022 as Hispanic Heritage Month in the City of Grand Junction

Council President Stout read the proclamation and Sonia Gutierrez and Jorge Pantoja accepted the proclamation.

Appointments

To the Grand Junction Housing Authority

Councilmember McDaniel moved and Councilmember Pe'a seconded to appoint Bernie Buescher for a five-year term ending October 2027. Motion carried by unanimous voice vote.

To the Downtown Development Authority

Councilmember McDaniel moved and Mayor Pro Tem Herman seconded to reappoint Maria Rainsdon and to appoint Steven Boyd for four-year terms ending 2026. Motion carried by unanimous voice vote.

To the Urban Trails Committee

Mayor Pro Tem Herman moved and Councilmember Pe'a seconded to appoint Brent Starnes for a partial term ending 2024. Motion carried by unanimous voice vote.

Appointing Members to the Pedestrian and Bicycle Plan Steering Committee

Mayor Pro Tem Herman moved and Councilmember Simpson seconded to appoint the following members to the Pedestrian and Bicycle Plan Steering Committee: Jason Nguyen, Jack Byron, Matthew Lucero, Ian Thomas, Sarah Lubin, Marcos Ortiz, Gayle Dombow, Rogelio R. Chavez, Jr., JJ Johnson, Michael Hughes, Jody Visconti Clow, Lee Willcockson, Tammy Brislin, Lilly Grisafi, Jess S. Mitchell, Emily McCune, and Ken Scissors. Motion carried by unanimous voice vote.

Citizen Comments

Bruce Lohmiller spoke of the Mesa County Valley School District #51 meeting and the League of Women Voters Voter's Guide.

Kevin Bray spoke of his Colorado Mesa University (CMU) class for students in the Real Estate Program who were present to observe the entire meeting.

Mandy DeCino thanked Council for issuing a social proclamation for PACE Awareness Month and spoke of the HopeWest PACE Program.

Ethan Moore asked the City to hold CMU accountable for setting up stations to discard hazardous materials to avoid those items going to the landfill where he works.

Mary Kusak expressed concern of the loss of green space downtown for children to play at playgrounds because of the houseless community.

Robert Maloney concurred with Mary Kusak's comments and asked what City Council and the Police Department could do to resolve the issue.

Council Reports

City Manager Caton invited the public to the September 11th Remembrance at Fire Station #3 on September 11, 2022 at noon.

City Manager Report

Councilmember Pe'a gave an update on the Parks and Recreation Advisory Board.

Councilmember Simpson attended the Business Incubator Meeting.

Mayor Pro Tem Herman met with Dalida Bollig, Chief Executive Officer of the Business Incubator Center, and expressed his excitement to have her in that capacity.

Councilmember McDaniel gave updates on the Forestry Advisory Board and Grand Junction Housing Authority Board.

Council President Stout hosted an outreach event to the Spanish community and attended the Colorado State Fair for Mayor's Day.

CONSENT AGENDA

Mayor Pro Tem Herman moved and Councilmember Pe'a seconded to adopt Consent Agenda items #1 - #5, excluding item #5.a. Motion carried by unanimous voice vote.

1. Approval of Minutes

- a. Summary of the August 15, 2022 Workshop
- b. Minutes of the August 17, 2022 Regular Meeting
- c. Minutes of the August 24, 2022 Special Meeting

2. Set Public Hearings

- a. Legislative
 - i. Introduction of an Ordinance Creating the Housing Advisory Board and Setting a Public Hearing for September 21, 2022
 - ii. Introduction of an Ordinance Placing a Charter Amendment to Change the Authorized Length of Leases of City Property for Housing from 25 Up to 99 Years on the Election Ballot for the Special Municipal Election to Be Held November 8, 2022, and Setting a Public Hearing for September 21, 2022
- b. Quasi-judicial
 - i. Introduction of an Ordinance Rezoning 6.15 Acres from I-2 (General Industrial) to I-1 (Light Industrial), Located at 2415 Blue Heron Road and Setting a Public Hearing for September 21, 2022
 - ii. A Resolution Referring a Petition to the City Council for the Annexation of Lands to the City of Grand Junction, Colorado, Setting a Hearing on Such Annexation, Exercising Land Use Control, and Introducing Proposed Annexation Ordinance for the C 1/2 Road Gravel Pit Annexation of 27.83 Acres, Located at 2855 C 1/2 Road, and Setting a Public Hearing for October 19, 2022
 - iii. Introduction of an Ordinance Vacating a 0.13-Acre Portion of the Undeveloped G Road Public Right-of-Way on the Northeast Corner of Horizon Drive and G Road at 702 Horizon Drive and Setting a Public Hearing for September 21, 2022

- iv. Introduction of an Ordinance Vacating a 15 Foot x 325 Foot Strip of Land Located on a 144-Acre Parcel Located at 675 23 1/2 Road and Setting a Public Hearing for September 21, 2022

3. Agreements

- a. South Broadway Shoulder Improvement Project Memorandum of Understanding Between the City of Grand Junction and Mesa County
- b. Authorize the City Manager to Execute a Contract with Mesa County for Building Permitting, Inspection, and Contractor Licensing Services

4. Procurements

- a. Purchase Two Chip Seal Oil Storage Containers
- b. Contract Approval for the Architect/Engineer for the Orchard Mesa Pool Renovation

5. Resolutions

- a. A Resolution Calling a Special Election in the City of Grand Junction, Colorado Concerning and Providing for the Submission to the Electorate on November 8, 2022, Two Measures to Increase Taxes and Allow the City to Collect, Retain, and Spend Revenues as a Voter Approved Revenue Change Provided for and Defined by Article X, Section 20 of the Colorado Constitution, and One Measure to Amend the City Charter, and Other Details Relating Thereto – ***Moved to Regular Agenda***
- b. A Resolution to Vacate a 62.55 Square Foot Strip of a 14-Foot Multipurpose Easement on a 2.87-Acre Parcel Located at 600 Lawrence Avenue

REGULAR AGENDA

A Resolution Setting a Title and Submitting to the Electorate on November 8, 2022, a Measure to Increase the Lodging Tax by One Percent (1%) for Affordable Housing in the City of Grand Junction

At the August 1, 2022 City Council work session, there was discussion regarding the shortage of affordable housing in the City as well as strategies for funding affordable housing programs. One such strategy is to impose an excise tax on short-term rentals. Under Colorado law, any ballot issue to increase taxes must be considered and decided by voters. This resolution sets a ballot question to increase the lodging tax one percent (1%) and to seek voter authorization for the City of Grand Junction to retain and spend the tax revenue for the use and benefit of housing programs in the City, as determined by the City Council to be necessary, advantageous, and beneficial to the provision of

affordable, workforce housing. Because the lodging tax is almost universally paid by business and leisure travelers, it imposes little if any burden on City residents.

City Attorney Shaver gave a legal overview of this item and Housing Manager Ashley Chambers gave a more in-depth presentation. City Manager Caton spoke of the TABOR amounts.

Discussion included: how our lodgers tax compares to other municipalities, the increase of the Area Median Income (AMI) in the resolution from 80% to 100% (to increase funding opportunities for a greater population), defining affordable housing through AMI limits, this resolution providing a funding source for item 6.c. (A Resolution Creating an Affordable Housing Production Incentive for Affordable For Sale and For Rent Units in the City of Grand Junction), reallocating the existing tax instead of raising taxes, potential funding through the general fund on the front end to push this item back to the April election, urgency to move forward because of the housing shortage in the community, and the applicability of this tax to short-term rentals.

Public comment opened at 6:55 p.m.

Vara Kusal read a letter from the Horizon Drive Business Improvement District in opposition of the increase.

Kevin Bray spoke of the need for public engagement on this item.

Cody Kennedy expressed his concerns of how this increase impacts the houseless and refugee communities that live in hotels.

Emily Powell, Director of Housing Resources of Western Colorado, spoke to the affordable housing needs in relation to AMI levels created by the current economy and the importance of a stable local funding source.

Public comment closed at 7:04 p.m.

Conversation ensued regarding the affordable housing definition per Proposition 108 and adopting the resolution with a 60% AMI for rental and 80% for ownership.

Mayor Pro Tem Herman moved and Councilmember Pe'a seconded to adopt Resolution No. 71-22 with the original language plus TABOR notice language, a resolution setting a title and submitting to the electorate on November 8, 2022, a ballot question to increase the lodgers tax by 1% to fund affordable housing in the City of Grand Junction and publish in pamphlet form.

Comments were made regarding the need to reallocate current taxes and the concern of rushing this ballot item without public input.

Motion carried by roll call vote with Councilmembers Taggart and Simpson voting no.

Council took a break at 7:14 p.m.

The meeting resumed at 7:22 p.m.

A Resolution Setting a Title and Submitting to the Electorate on November 8, 2022, a Measure to Impose an Excise Tax of Eight Percent (8%) on the Amount Charged for Short-Term Rentals for Affordable Housing in the City of Grand Junction

The increased popularity of short-term rentals in the City has impacted both the availability and the price of long-term rentals, which coupled with higher prices on “for sale” homes have resulted in those in middle and lower-middle income brackets being unable to find affordable housing. The City Council therefore is considering referring to the November 8, 2022 election, a ballot measure to impose an excise tax of 8% of the amount charged for short-term rentals, as defined by the Grand Junction Municipal Code, including any off premise short-term rental used by any lodging business that does not pay a commercial property tax rate, with the revenue derived from the excise tax being allocated to provide long-term, workforce, or attainable/affordable housing and to fund other housing projects at City Council’s discretion.

City Attorney Shaver stated this item was identical to the previous, just adds another form of revenue, and opened the floor to Council’s questions.

Conversation resumed regarding the wording of the recitals in the resolution, concerns of the impact of the tax on short-term rental owners, impacts of short-term rentals on affordable housing in the community, and reverting to the original language of the resolution.

Public comment was opened at 7:30 p.m.

Tom LeValley spoke of his properties and how this tax would impact his short-term rentals.

Scott Beilfuss, member of Just Housing with Western Colorado Alliance, spoke of affordable housing issues in the community and advocated passing this resolution.

Arlo Miller, member of Just Housing with Western Colorado Alliance, stated that short-term rentals are contributing to the housing issues in Grand Junction and supported this resolution.

Kevin Cole spoke of tax reporting of short-term rentals in the City, recommended they work with Airbnb for tax collection and of the impacts of the tax increase on competition of short-term rentals in and outside of City limits.

Jeff Warner spoke of VRBO versus Airbnb tax collection and how it impacts the pricing of his short-term rental.

Public comment closed at 7:43 p.m.

Mayor Pro Tem Herman moved and Councilmember Simpson seconded to adopt Resolution No. 72-22, a resolution setting a title and submitting to the electorate on November 8, 2022, a ballot question to impose an excise tax of 8% on the amount charged for short-term rentals to fund affordable housing in the City of Grand Junction and publish in pamphlet form with original language plus the TABOR notice prior to the redline version.

Comments were made on the motion stating there are other means in which to fund affordable housing.

Motion carried by roll call vote with Councilmember Taggart voting no.

A Resolution Calling a Special Election in the City of Grand Junction, Colorado Concerning and Providing for the Submission to the Electorate on November 8, 2022, Two Measures to Increase Taxes and Allow the City to Collect, Retain, and Spend Revenues as a Voter Approved Revenue Change Provided for and Defined By Article X, Section 20 of the Colorado Constitution, and One Measure to Amend the City Charter, and Other Details Relating Thereto

The City Council has determined that an election shall be held on November 8, 2022, at which time there shall be submitted to the registered electors of the City three questions: two tax questions and one Charter amendment question. Each question is described in detail in separate resolutions and an ordinance which has been duly considered by the Council and, with the approval of this resolution, the City Council authorizes the City Clerk to enter into an agreement with the Mesa County Elections Department for the City to participate in a coordinated election being conducted by the County on November 8, 2022 (Election).

City Attorney John Shaver presented this item.

Councilmember McDaniel moved and Councilmember Pe'a seconded to adopt Resolution No. 69-22, a resolution calling a Special Election in the City of Grand Junction, Colorado concerning and providing for the submission to the Electorate on November 8, 2022, two measures to increase taxes and allow the City to collect, retain, and spend revenues as a voter approved revenue change provided for and defined by Article X, Section 20 of the Colorado Constitution, and one measure to amend the City Charter, and other details relating thereto. Motion carried by voice vote with Councilmember Taggart voting no.

A Resolution Creating An Affordable Housing Production Incentive for Affordable For Sale and For Rent Units in the City of Grand Junction

At the August 1 City Council workshop, a potential incentive for the production of affordable housing units was discussed. With the direction garnered from that

discussion, staff prepared a resolution for consideration that provides an incentive with the purpose of encouraging the development, both by non-profit and for-profit developers, of affordable housing units anywhere within the City of Grand Junction.

This incentive would waive all development impact fees (Transportation Capacity Payment or TCP, police, fire, parks) and plant investment fees (water, sewer) for units that are Affordable at 60% AMI or below for rental housing and 80% AMI and below for unit for sale. The incentive requires a commitment to maintain the affordability of the unit for at least 30 years, which is consistent with industry standards. The 60% AMI or below for rental housing and 80% AMI and below for units for sale is consistent with the City's more acute needs for housing. For the purposes of this incentive waiver, the City will backfill the lost revenue from the fees that would otherwise be due.

Community Development Director Tamra Allen presented this item.

Discussion included: Cap on annual equity appreciation versus equity share, making education programs available for homeowners who take advantage of the incentive, waiving water plant investment fees by other water providers and correction of stated rental limit amounts in the staff report in relation to AMI (30% of 60% AMI).

The public hearing opened at 8:05 p.m.

Cody Kennedy made comments related to how this resolution doesn't benefit small real estate investors.

Brian Shiu stated the City should expand their incentive program beyond this resolution.

Jeremy Nelson commented the 30-year time frame is too long and recommended an opt out provision, inquired about eligibility, and stacked incentive plausibility.

Emily Powell of Housing Resources of Western Colorado addressed the counseling availability recommendation and spoke to a cap versus equity share.

The public hearing closed at 8:20 p.m.

Conversation ensued regarding running the numbers to ensure the impact of the incentive is going to benefit developers, public engagement, the model of the incentive's intention to leverage up for a higher number of production, how this is just one of many tools available to incentivize development, unrestricted balance availability for these incentives and the time it would take for Council to approve an incentive and how that would impact a development.

Councilmembers concurred that they need more information before making a decision on the resolution.

Councilmember Reitz moved and Mayor Pro Tem Herman seconded to refer Resolution

No. 73-22, a resolution adopting an affordable housing production incentive, to the agenda committee and continue this item to a future workshop giving staff time to engage the development and non-profit community on how to create the best incentives. Motion carried by unanimous voice vote.

A Resolution Creating a Corridor Infill Incentive and Formula for Calculating the Incentive

The City has received requests from several market rate developers to contribute to their projects, including the Slate on 25 (168 units), The Junction by Richmark (257 Units), and The Lofts on Grand Avenue (78 units). The Grand Junction Chamber of Commerce has also requested the City expand its development incentives. At an August 1 workshop, City Council discussed and provided direction to staff to develop a new incentive policy that provides predictability and equity regarding who and to which projects are provided development incentives. This resolution addressed a proposed Corridor Infill Incentive that further encourages infill in and along corridors that are in and near the City's center utilizing a "level" approach to the offering of incentives that is relative to the cost of private investment.

Community Development Director Tamra Allen presented this item.

Discussion included: funding concerns of this program, lowering the bottom threshold of the incentive program, current eligible areas as defined by the resolution, possibility of adding Horizon Drive and Mesa Mall corridors as eligible areas, more details necessary on the types of projects that are eligible, targeting specific areas and incentivizing risk (investment) being the primary purpose, and the need for Council's discretion on proposed projects based on budget and value to the community instead of quantifiable eligibility that prevents flexibility.

Public comment was opened at 9:05 p.m.

Jeremy Nelson spoke in support of this item but stated he didn't feel the resolution benefited the smaller developments.

Brian Shiu said this incentive should be expanded to other areas of the city.

Public comment was closed at 9:10 p.m.

Conversation resumed regarding the concerns of subsidizing big business, restrictions on the types of eligible housing, and the purpose of infill to areas that may not be developed otherwise.

Councilmember Pe'a moved and Mayor Pro Tem Herman seconded to adopt Resolution No. 74-22, a Resolution Creating a New Corridor Infill Incentive and Formula for Calculating the Incentive.

There was discussion regarding adding the Horizon Drive corridor to the motion.

Motion was amended to include the Horizon Drive corridor and clarified to the Horizon Drive District. Motion carried by roll call vote with Councilmembers McDaniel, Reitz and Simpson voting no.

A break was taken at 9:31 p.m.

The meeting resumed at 9:40 p.m.

An Ordinance Regarding the Conjunction Junction, LLC/Richmark Real Estate Partners, LLC Redevelopment Agreement

The City Council was asked to authorize and confirm the redevelopment agreement ("Agreement") by and among Conjunction Junction LLC, a Colorado Limited Liability Company, or its successors and assigns as permitted in accordance with the Agreement, the City, and the Downtown Grand Junction Development Authority ("DDA") for the property located at 200 Rood Avenue ("Property"), Grand Junction, Colorado. The terms of the Agreement, include but are not limited to a) the City waiving or paying fees, as defined by the Agreement, in an amount not to exceed \$2,408,219.00 (\$2.4 million) for and on behalf of Conjunction for the redevelopment of the Property; and, b) the purchase of Rood Avenue right-of-way together with improvements thereto to be made by Conjunction; and c) a pledge by the DDA of tax increment, all as provided in the Agreement.

The \$2.4 million is a calculation of the total value of the incentive for the project. This valuation includes an estimate of the forgone sales and use tax revenues on construction materials as well. The net amount that may be directly paid by the City is \$1.75 million, which would include right-of-way purchase by the City. The fee rates will be set upon planning clearance and payment would occur at the end of the project.

City Manager Caton presented this item.

City Attorney Shaver clarified the Agreement between Richmark, the City and the DDA, and how the funding is subject to annual appropriations.

Conversation ensued regarding the 29-month term of the project and how Council and the DDA Board would have discretion to extend that term, TABOR requirements relating to the City paying itself and the DDA's contributions, and a breakdown of the funding request.

Tyler Richardson and Adam Frasier with Richmark Holdings presented on behalf of the applicant.

Conversation resumed regarding the demolition budget, projected rents of the units (120% AMI), the reasoning for forming a new LLC for this project, the timeline of

construction and lack of financials or personal guarantees provided on the project.

The public hearing opened at 10:25 p.m.

Nick Allen of Just Housing with Western Colorado Alliance, spoke of their mission and introduced other speakers from his organization that would be highlighting the organization's issues with this ordinance.

Constance Combs of Just Housing with Western Colorado Alliance spoke of how the housing crises has impacted her, and asked Council to vote no on this ordinance.

Scott Beilfuss of Just Housing with Western Colorado Alliance stated he supported the Richmark project but didn't agree with the City waiving their fees.

Arlo Miller of Just Housing with Western Colorado Alliance opposed the City contributing money to the Richmark project.

Mike Foster spoke in support of this ordinance to help redevelop the downtown area.

Brandon Stam, Executive Director of the DDA spoke in favor of this ordinance due to the impact of redeveloping the blighted area where it is proposed, and the positive impact on downtown businesses.

Cody Kennedy expressed excitement about this project.

Todd Schmidt is part of the construction team and spoke of the employment opportunities this project would create.

Richard Swingle spoke against the ordinance stating that tax dollars were being allocated for private business.

The public hearing closed at 10:51 p.m.

Council comments included: that the Richmark development aligns with the City's economic development goals, how the City is also working on the separate affordable housing issue, concerns of spending limited resources on this project, concerns with the agreement in terms of financial responsibility and exposure, how this project will help alleviate the housing shortage, the importance of the partnership with the DDA who approached City Council about this agreement, seeing this project as a catalyst project which creates economic development and housing, Richmark being highly recommended by the Greeley Mayor and City Manager where they have developments, the return on investment in funding this project instead of buying the vacant City Market as many residents have requested Council to do, and how incentives are not given if the project doesn't get completed.

Councilmember Pe'a moved and Councilmember Taggart seconded to adopt Ordinance

No. 5089, an ordinance approving the Conjunction Junction, LLC/Richmark Real Estate Partners, LLC redevelopment agreement for the property located at 200 Rood Avenue, Grand Junction, Colorado, on final passage and ordered final publication in pamphlet form. Motion carried by roll call vote with Councilmembers McDaniel and Simpson voting no.

An Ordinance Adding Chapter 13.40 Graywater Control Program

Colorado's Graywater Control regulations require that cities adopt an ordinance for gray water that specifies requirements, prohibitions, and standards for the use of graywater for non-drinking water purposes, to encourage the use of graywater, and to protect public health and water quality.

Given the late hour of the meeting, Council President Stout asked if this item could be continued. Councilmember Taggart moved and Councilmember Reitz seconded to continue this item to the September 21, 2022 City Council regular meeting. Motion carried by unanimous voice vote.

An Ordinance Rezoning 18.98 Acres from R-4 (Residential 4 du/ac) to R-8 (Residential 8 du/ac), Located at 2981 B 1/2 Road

Applicant CIA Investments, LLC, requested the rezone of one parcel totaling 18.98 acres from R-4 (Residential 4 du/ac) to R-8 (Residential 8 du/ac) located at 2981 B 1/2 Rd. The purpose of the rezone is to provide for medium-high density attached and detached dwellings, two-family dwellings and multifamily. R-8 is a transitional district between lower density single-family districts and higher density multifamily or business development. A mix of dwelling types is allowed in this district.

The requested R-8 zone district conforms with the Comprehensive Plan Land Use Map designation of Residential Medium. R-8 zone districts serve as a transitional district, which may act as a buffer between lower density single-family and commercial zones.

Senior Planner Daniella Acosta presented this item.

The public hearing opened at 11:18 p.m.

Vern Hill expressed concerns with the requested R-8 density rezone.

Pete Sanford spoke in opposition of the rezone.

Barbara Miles stated concerns that the existing infrastructure may not support the potential development of an R-8 zone.

Mark Miles spoke against this rezone due to the poorly maintained roads.

Melinda Hill said the rezone was out of character for the area and it lacked

infrastructure.

Mike Noha concurred that the rezone would not fit the rural character of the area.

Debbie Noha expressed concerns that her quality of life would be diminished if the rezone passed.

The public hearing closed at 11:38 p.m.

Tracey States with River City Consultants gave a rebuttal and addressed the Comprehensive Plan process and zoning along with the current infrastructure in the proposed rezone area.

Council comments included: the potential of the developer having more public engagement, R-8 being the lowest density a residential medium category will allow, what facts Council can consider in a quasi-judicial hearing, competing priorities in keeping the rural character of this area and demand for new housing driving the residential medium zone, the 2020 Comprehensive Plan being used as a guide, and respecting the recommendations of the Planning Commission.

Councilmember Simpson moved and Mayor Pro Tem Herman seconded to adopt Ordinance No. 5095, an ordinance rezoning one parcel totaling 18.98 acres from R-4 (Residential 4 du/ac) to R-8 (Residential 8 du/ac) located at 2981 B 1/2 Road on final passage and ordered final publication in pamphlet form. Motion carried by roll call vote with Councilmembers Taggart and Pe'a voting no.

Non-Scheduled Citizens & Visitors

There were none.

Other Business

There was none.

Adjournment

The meeting adjourned at 11:55 p.m.



Amy Phillips, CMC
City Clerk



Grand Junction City Council

Regular Session

Item #2.a.i.

Meeting Date: September 21, 2022
Presented By: Felix Landry, Planning Supervisor
Department: Community Development
Submitted By: Felix Landry, Planning Supervisor

Information

SUBJECT:

Introduction of an Ordinance Amending the Zoning and Development Code Section 21.06.040 Landscape, Buffering, and Screening Standards; Section 21.10.020 Terms Defined; Section 21.03.030 Measurements; Section 21.03.080 Mixed Use and Industrial Bulk Standards Summary Table; and Section 21.04.030 Use-Specific Standards of the Grand Junction Municipal Code and Setting a Public Hearing for October 5, 2022

RECOMMENDATION:

The Planning Commission heard this request at their August 23, 2022 meeting and voted (6-1) to recommend approval of the request, with the condition that significant trees status would not apply to cottonwood trees.

EXECUTIVE SUMMARY:

Section 21.06.040 of the Zoning and Development Code requires that site development include landscaping. Ordinance XXXX proposes revisions to the landscaping requirements. The ordinance balances many goals among them efficient water use; reasonable and successful maintenance practices; a robust tree canopy; diverse plantings; and distinctive site design.

Proposed revisions draw on stakeholder input from local landscape professionals and best practices for landscaping regulations in the Southwest. A Suitable Plants List is also provided for reference, and is a critical supplement to the proposed Code revisions. Primary changes include requirements to identify and protect Significant Trees during development. The changes also aim to maximize water conservation and use a higher proportion of native and climate appropriate plants. Adjustments to site design standards and planting requirements also aim to balance needs, improving plant health and reducing maintenance costs.

The proposed changes occur in Section 21.06.040 Landscape, Buffering, and Screening Standards; Section 21.10.020 Terms Defined; Section 21.03.030 Measurements; Section 21.03.080 Mixed Use and Industrial Bulk Standards Summary Table; and Section 21.04.030 Use-Specific Standards of the Grand Junction Municipal Code.

Significant discussion has occurred around this ordinance update. That discussion has impacted the content of the proposed ordinance. One topic of discussion which has continued into the public hearing process concerns significant trees, specifically whether or not Cottonwood trees can qualify as significant. The initial proposed ordinance that Planning Commission recommended for approval at the May 10th hearing included cottonwoods as potentially significant trees. The ordinance which Planning Commission recommended for approval at the August 23rd meeting also included Cottonwoods as potentially significant trees, however the Planning Commission's recommendation also included a condition to exclude Cottonwoods.

BACKGROUND OR DETAILED INFORMATION:

BACKGROUND

Section 21.06.040 of the Zoning and Development Code requires that site development include landscaping. The City applies those regulations on landscaping to all development proposals, excluding single-family homes and duplexes, in the City. That section of the Code is complemented by several other sections of the Code, such as those concerning wildlife and wildfire (GJMC 21.07.020).

The Community Development Department, in collaboration with the Parks and Recreation Department and their horticulture and forestry staff, has drafted revisions to the landscaping regulations. The proposed revisions include many minor adjustments. It also includes substantive changes. These revisions include stronger pathways to climate-appropriate landscaping, preservation of significant trees, and minimum levels of diversity within landscape plans.

The proposed regulations emerge from public discourse and public policy. These regulations have been discussed by the City's Development Roundtable, Forestry Board, City Council, and Planning Commission. Furthermore, these regulations will impact the process of development review, and the experiences of development professionals, residents, conservation advocates, and staff. Sustainability and quality of life also appear as overarching goals in the City's most recent Strategic Plans, the 2020 One Grand Junction Comprehensive Plan, and the 2021 Parks, Recreation, and Open Space (PROS) Master Plan.

The One Grand Junction Comprehensive Plan discusses water conservation extensively and identifies updating landscaping regulations as a means of achieving this goal. Plan Principle 8: Resource Stewardship identifies directs the City to "Evaluate landscaping standards to promote the use of native and/or drought-tolerant plant

materials, efficient irrigation, and appropriate soil amendments to support plant health and resiliency, and other water-conserving practices.” The Comprehensive Plan also speaks to the need to “manage the City’s urban forest,” promote “water-wise landscaping within the City,” and address “tree installation, replacement, and protection.” Likewise, the 2021 PROS Master Plan calls for the “championing a healthy tree canopy.”

To guide refinement of draft revisions, staff has conducted Planning Commission Workshops, a Forestry Board discussion, and a series of stakeholder sessions involving a Landscaping Taskforce comprised of community landscaping experts. A primary aim of these workshops was to clarify goals for the revision, choose between policy approaches, and to draw on local expertise to ensure that changes benefit the health and manageability of landscape installations in the future. General goals considered in workshop settings reflected the general goals of the revision, namely:

1. Eliminating discrepancies within the landscaping section and between the landscaping section and realistic design limitations.
2. Aligning landscaping requirements with strategic goals of sustainability, water conservation, and economic development where appropriate including a turf maximum.
3. Producing supplemental materials and codified equivalency matrices to make the landscaping section easy to use, including lists of species suitable for use on private property and in public rights-of-way.
4. Establishing incentives and requirements that limit vulnerability to hazards and reduce disturbance of ecologically- and culturally-valuable landscape features during development.

NOTIFICATION REQUIREMENTS

Notice was completed as required by Section 21.02.080(g). Notice of the public hearing was published on August 16, 2022 in the Grand Junction Daily Sentinel.

ANALYSIS

Existing Standards

The proposed changes to the landscaping requirement are broadly consistent with the existing approach to landscaping in the Zoning and Development Code. The standards continue to approach landscaping in four primary ways.

The first is by setting minimum standards for the portions of a development site that must be landscaped. The Code identifies the adjacent right-of-way, parking lots, screens, buffers, street frontages, and perimeter enclosures for residential subdivisions. Revisions retain this standard.

The second is a numerical approach to plantings. A minimum number of trees, shrubs, groundcover, and coverage of landscaped areas is based on improved area. Revisions

seek to make coverage more flexible through equivalencies and substitutions. Landscape plans must meet these minimum plant counts.

A third, and more limited, component of regulation concerns how development may plant, irrigate, and maintain sites. The manner in which landscaping is carried out must align with best practices as specified in the Code. The Ordinance addresses those requirements to reflect growth in best practices and the evolution of the City's planning goals.

Fourth, when a landscape plan is approved for a property, a property owner must maintain the site in perpetuity. While challenging to enforce, maintenance is crucial to landscape health in the long-term. The proposed revisions retain the general approach of requiring maintenance per plan. However, the revisions add a requirement for a viable, long-term maintenance strategy as an element of the approved plan. This allows for a more dynamic version of perpetual maintenance without allowing landscapes to fall into disrepair (see Plan Requirements below).

Balancing Goals

Proposed revisions to the landscaping standard reflect compromise along several lines. One area of compromise is between site development constraints, on one hand, and best planting practices on the other. Two illustrative examples follow. Further below, the essential changes to the code are enumerated in detail.

For a first example, consider the landscaped area in which trees are planted. Shade trees are unlikely to succeed in a planting area that is less than eight feet wide; if they do, they tend to damage adjacent concrete. However, the existing requirement provides for landscape strips as narrow as five feet or six feet, depending on context. Adjusting the minimum width to eight feet as proposed represents a compromise resolved in favor of long-term landscape health outcomes. In short, some landscaping areas may increase in size so that healthier trees result.

Another critical area of compromise occurs between tree canopy coverage and water conservation. Even among healthy and climate-appropriate trees, many require supplemental irrigation. Yet tree canopy is essential to a livable environment within City limits. Achieving both goals without compromise requires a level of design detail and care that may not be reasonably assumed to occur in all landscape design. Moreover, reducing turf is a primary mechanism for reducing water use, but successful trees are often linked to the presence of adjacent turf. These factors are related in complex and challenging ways.

The proposed requirements achieve both canopy and conservation goals where possible. One clear pathway is by creating a substantial requirement to retain existing, mature trees. Water conservation goals are also served directly by requiring irrigation plans as part of development review. Furthermore, a maximum turf coverage percentage with exceptions for function turf areas limit the opportunity for landscaping which requires high water consumption.

Applicability

The existing landscaping regulations do not apply to landscaping on properties with single family dwelling units or duplexes. The new regulations do not propose to regulate landscaping on properties with single family dwelling units or duplexes. Furthermore, these regulations will not require anyone property owner with a use that does require landscaping to update their existing landscaping unless they're proposing significant redevelopment on their property.

Water Conservation

The proposed regulations would reduce the amount of turf required and allowed for landscaping projects. Turf has been capped city wide at 15% of the overall landscaped area with an exception for function turf areas which may exceed 15% of the site. Functional turf has been defined and represents the only opportunity to install turf beyond the 15% maximum. Any language in this existing ordinance which allowed more than 15% turf has been removed or amended.

The proposed regulations also require that 90% of the proposed plants for any landscape plan have a xeric, xeric-low, xeric-medium, or low water need classification on the Suitable Plants List. Additionally, 25% of the plants proposed for a landscaping plan must have a native or native alternative classification on the Suitable Plants List.

These changes aim to facilitate landscaping options which respect the natural environment of the Grand Valley and present water supply issues, while also providing a landscaped urban environment suitable for residents to thrive.

Flexibility

A desire for increased flexibility on the part of licensed landscape architects—whose stamp is required for most landscape designs—has been voiced during the revision process and in the review of many development applications. Revisions respond to this interest in several ways. One is to clarify and expand conversion rates when substituting among trees, shrubs, and groundcover. This may facilitate more responsiveness of landscape architects to specific site conditions.

The code also addresses flexibility by clarifying and slightly reducing the ratio of required tree plantings to disturbed or improved area. This occurs in the context of other changes that would restrict flexibility of site design. Chiefly, significant tree regulations would increase the required number of plantings in the many cases where significant trees exist. Thus, the total number of required trees is reduced in some zone districts. Specifically, two-caliper inches of tree plantings (equal to one minimum-size shade tree) are now required for every 3,000 square feet of improved area for all single-family, multifamily, business, and commercial zones, compared to the existing requirement of one tree per 3,000 square feet. Trees continue to be required at existing rates of one per 40 linear feet for street frontage landscaping.

Significant Trees

Significant trees often feature in the landscaping regulations of Colorado jurisdictions. A minimum diameter of a tree at breast height (“caliper”) is identified in the regulation. Size varies among jurisdictions. The proposed definition for a significant tree herein is a tree exceeding 15 inches in diameter and identified on the Suitable Plants List. If a tree that currently exists on a property proposed for development meets those criteria, then it is a significant tree. Significant trees are not currently regulated by the City, but the proposed revision would introduce such regulations.

A development proposal would be required to identify and preserve 30% of any existing significant trees found on the property at the time of application. Removal of any significant trees would require a replacement at a rate of 1 new caliper inch of planted tree for every 2 inches of significant tree destroyed during development. The same ratio would apply remedially to any development that accidentally destroys a significant tree planned to be preserved.

This change is anticipated to resolve the recurring incidence of substantial canopy assets being lost during development. No credit is proposed to be extended for retaining significant trees. Rather, a strong requirement is proposed to ensure that more mature trees are retained or replaced. Because preserving significant trees may represent a substantial challenge for site design, this new regulation occurs alongside a minor reduction in the total number of trees required per area of disturbed property (see Flexibility above).

Suitable Plant List

A Suitable Plant list is provided as a reference document in this packet. Previously, this list was not a major element of regulations. The current code refers to a list of plants to be maintained by the Director GJMC 21.06.040(b)((4)). The attached list is a departure from the previous, shorter version of the list. The list is not an adopted part of the Zoning and Development Code; it is an administrative document that need not be adopted or revised by a decision of the City Council.

The list reflects a blend of inputs. One is best practice, drawing on the expertise of City staff and Landscaping Taskforce members. Another is common practice: almost all plants included on landscaping plans approved by the City since 2017 are included. Another is water conservation goals, as high-water use plants are generally not included.

The Suitable Plants List is proposed to become more important to the Zoning and Development Code. Substitutions of plants in the field would be restricted to those plants on the list. Perhaps most importantly, it is designed to serve as a menu for landscape architects. Landscape plans should consist of species found on the list. However, landscape plans can propose using plants that are not on the Suitable Plants List and provide adequate detail to substantiate the proposal. Plants approved by the Director may be administratively added to the Suitable Plants List.

City Forester and Trees in Right-of-Way

Private development is required to plant and maintain landscapes in the public right-of-way in many circumstances. An additional chapter of the Grand Junction Municipal Code (8.32 – Trees) addresses many of the relevant concerns for trees planted in the right-of-way. This revision clarifies the authority of the City Forester over landscaping in the right-of-way and the requirement for the City Forester's permission to remove any tree in the right-of-way. The Ordinance also continues to require one tree per 40 feet of street frontage landscaping. It adjusts the language for coverage of planting areas in the right-of-way to allow canopy coverage as a surface area coverage pathway.

Impervious Surfaces

Proposed revisions also address the need for pervious surface to allow groundwater to infiltrate soils. Pervious surface relates to both plant health and stormwater management. The regulation is to reduce the area of a development that is covered by impervious surfaces. One mechanism is direct, with the establishment of a maximum impervious surface coverage ("lot coverage"). Under today's regulations, lot coverage refers to the area covered by structures. This is revised to mean impervious surfaces, including pavement.

The maximum lot coverage is also revised in GJMC 21.03 – Zoning Districts. Previously, up to 100% of lots in commercial, industrial, and business districts could be covered by impervious surfaces (except R-O). The revision reduces this coverage to 80% in most cases. The exceptions are for B-2 (Downtown Business) zones, at 100% coverage, and CSR (Community Services and Recreation) zones, at 75% coverage. This is potentially impactful where certain uses often result in large masses of impervious surface, such as auto storage associated with automobile dealerships (General Retail Sales, Outdoor Operations, Display or Storage).

Diversity Requirements

Minor adjustments are made to ensure a minimum species diversity in landscape designs. Minimum diversity ratios for trees and shrubs reflect slight increases. The regulation is also revised to require diversity at the botanical level of genus, rather than of species, to ensure that numerical diversity requirements result in an appreciable diversity of planting survival conditions.

Best Horticultural Practices

As discussed above, the City's landscaping regulations address planting practices only to a moderate extent. This allows the Code to remain succinct and allows practitioners to operate based on their expertise. However, a series of essential requirements are proposed that may be critical to ensuring long-term plant survival and aesthetic outcomes. These include: reduced applications of weed fabric; removal of "orchard style parking island" options not viable for plant success; widened frontage strips and planting islands (to a minimum width of eight feet); requiring organic mulch for shrub beds; and setting minimum widths for planting holes.

Plan Requirements

The proposed changes add an additional certification prior to the issuance of a certificate of occupancy or a release of DIA funds. Currently, the city requires that the Landscape Architect who stamped the plans also certify that the installed landscaping complies with the approved landscaping plans. The proposed ordinance further requires that the property owner or irrigation installer certify that the irrigation system has adequate capacity to support the installed plants at installation as well as at maturity.

RECOMMENDATION AND FINDINGS OF FACT

After reviewing the proposed amendment to the Zoning and Development Code Section 21.06.040 Landscape, Buffering, and Screening Standards; Section 21.10.020 Terms Defined; Section 21.03.030 Measurements; Section 21.03.080 Mixed Use and Industrial Bulk Standards Summary Table; and Section 21.04.030 Use-Specific Standards of the Grand Junction Municipal Code the following findings of fact have been made:

1. The proposed amendments to the Zoning and Development Code are useful in that they ensure the health, safety, and general welfare of the public, and refine processes that assist in the logical and orderly development of the city as described in the background information of this report.
2. The proposed amendments to the Zoning and Development Code support the Comprehensive Plan.

Therefore, the Planning Commission recommended approval of the request with the following condition:

1. Condition: That the ordinance would prohibit Cottonwood trees from qualifying as significant trees.

FISCAL IMPACT:

There is no direct fiscal impact related to this request.

SUGGESTED MOTION:

I move to introduce an Ordinance Amending the Zoning and Development Code Section 21.06.040 Landscape, Buffering, and Screening Standards; Section 21.10.020 Terms Defined; Section 21.03.030 Measurements; Section 21.03.080 Mixed Use and Industrial Bulk Standards Summary Table; and Section 21.04.030 Use-Specific Standards of the Grand Junction Municipal Code and Set a Public Hearing for October 5, 2022.

Attachments

1. Exhibit 1 - Existing Code

2. Exhibit 2 - Landscaping Code Clean
3. Exhibit 3 - Landscaping Code Strike and Underline
4. Exhibit 4 - Suitable Plants List
5. Exhibit 5 - Summary of Engagement Process
6. Exhibit 7 - CommentLetters_Cottonwoods
7. Exhibit 6 - Draft Ordinance

21.06.040 Landscape, buffering and screening standards

(a) **Purpose and Goals.** The purpose of this section is to enhance the aesthetic appeal of new development **and contribute to a livable urban environment**. Landscaping reduces heat and glare, facilitates movement of traffic within parking areas, shades cars and parking surfaces reducing local and ambient temperatures, buffers and screens cars from adjacent properties, promotes natural percolation of surface waters, improves air quality, buffers and screens potentially incompatible uses from one another, and conserves the value of property and neighborhoods within the City.

(b) **General Landscape Standards.**

(1) All landscaping required by this code shall comply with the standards and requirements of this section. The landscaping requirements of this code shall not apply to a lot zoned for one or two dwellings. Landscaping for new developments shall occur in buffer areas, all interior parking areas, along the perimeter of the property, around new and existing structures, and along street frontages and within any right-of-way not used nor planned to be used for infrastructure.

(2) Plant Quantities. The amount of landscaping is based on gross area of proposed development.

(3) Landscaping Standards. All new development must install and maintain landscaping as required by this code. (See subsection (b)(1) of this section for an example of the landscaping requirements of this section.)

(i) On-site frontage landscaping may not apply in the B-2 zone downtown commercial. (See zone district standards.)

(ii) Landscaping in the abutting right-of-way is required in addition to overall site landscaping requirements.

(iii) Buffer landscaping is required in addition to overall site landscaping requirements.

(4) Acceptable Plant Material. Vegetation must be suitable for Grand Junction's climate and soils. The Director may allow the use of any plant if sufficient information is provided to show suitability including salt tolerance, sun and shade requirements based on planting locations, growth habit, etc. Noxious weeds are not allowed. (The Director will keep a list of suitable plants.)

(5) Minimum plant sizes are:

- (i) Shade tree, two-inch caliper (measured six inches above root ball) at time of planting. At maturity, a shade tree has a height and/or spread of 30 feet or greater. If two-inch caliper trees are not available due to seasonal shortages or shortages in desired varieties, the Director may approve the installation of smaller trees, provided the proportional difference in caliper inches is compensated for by installing additional trees. For example, the installation of six one-and-one-half-inch caliper shade trees would result in a shortfall of three caliper inches, which could be compensated for with two additional one-and-one-half-inch trees. However, a minimum caliper of one and one-half inches shall be required.
 - (ii) Ornamental tree, one-and-one-half-inch caliper (measured six inches above root ball) at time of planting. At maturity, an ornamental tree has a spread and height between 15 feet and 30 feet.
 - (iii) Evergreen tree, six feet tall at time of planting.
 - (iv) Deciduous shrub, five-gallon container.
 - (v) Evergreen shrub, five-gallon container.
 - (vi) Perennials and ground covers, one-gallon container.
 - (vii) Turf mix, native grasses and wild flower mix are the only vegetation that may be planted as seed.
- (6) Irrigation. All vegetation and landscaped areas must be provided with a permanent irrigation system.
- (i) Nonpotable irrigation water shall be used unless the Director allows the use of potable water.
 - (ii) An underground pressurized irrigation system and/or drip system is required for all landscape areas on the property and in any right-of-way.
 - (iii) If connected to a drinking water system, all irrigation systems require State-approved backflow prevention devices.
 - (iv) All irrigation for nonpotable irrigation water systems must have adequate filters easily accessible above ground or within an appropriately sized valve box.
 - (v) Native grasses must have a permanent irrigation source that is zoned separately from higher water demand landscapes. Once the grasses are established, irrigation to native grass areas can be reduced to a level that maintains coverage typical of the grass mix and to suppress weed growth.

(7) Landscape Plans and Equivalent Plants.

- (i) Landscape plans must identify the species and sizes of vegetation (SSID manual).
- (ii) All landscaping shall be installed as shown on the approved plan.
- (iii) An equivalent species may be substituted in the field without prior approval of the Director, provided a revised drawing is submitted to the Department. Plants are “equivalent” if they have the same growth habit and rate, same cover, leafing, shade characteristics and function, have similar water requirements, thrive in the same microclimate, soils and water conditions.
- (iv) All other changes to the landscape plan require prior approval from the Director.
- (v) All development plans shall designate required landscaping areas. Subdivision plats shall designate required landscaping areas.
- (vi) The owner shall keep each fire hydrant unobscured by plant material.
- (vii) Landscape plans shall be stamped by a licensed landscape architect. Inspection and compliance with approved landscape plan must be certified by a licensed landscape architect prior to issuance of a certificate of occupancy.

(8) Preservation of Significant Landscape Features. Existing landscape features such as escarpments, large or old trees or stands, heavy vegetative cover, ponds and bluffs shall be identified by the Director as part of the development review process. To the extent the Director deems practicable, such features shall be preserved by the final plans and to such extent, count toward landscape and open space area requirements. Features to be preserved shall be protected throughout site development. If a significant live feature which was to be preserved dies or is substantially damaged, the developer shall replace it with an equivalent feature as determined by the Director. No person shall kill or damage a landscape feature required to be preserved by this section. The developer shall protect trees from compaction under the canopy drip line of the tree unless the City Forester says otherwise.

- (i) During construction, fencing or similar barriers shall isolate and protect the landscape features to be preserved.
- (ii) All protection measures shall be clearly identified on the construction and landscape plans.
- (iii) No vehicles or equipment shall be driven or parked nor shall any materials be piled within the canopy drip line of any tree to be preserved.

(9) Protection of Landscape Areas. All landscape areas (except in the right-of-way where a street side curb does not exist) shall be protected from vehicles through the use of concrete curbing, large rocks, or other similar obstructions.

(10) Utility Lines. If the location of utilities conflicts with the landscaping provisions, the Director may approve an equivalent alternative.

- (i) Utility composite plans must be submitted with landscape plans.

- (ii) Trees which will grow to a height of greater than 15 feet at maturity shall not be planted under electrical lines.

- (iii) Ornamental and evergreen trees planted under an electrical line may count towards the total tree requirement.

(11) Sight Distance. The owner shall maintain all vegetation, fences, walls and berms so that there is no site distance hazard nor road or pedestrian hazard.

(12) Soil. Soil in landscape areas must be amended and all vegetation planted in accordance with good horticultural practices.

- (i) Details for the planting of trees, shrubs and other vegetation must be shown on the landscaping plans.

- (ii) Shrub beds adjacent to turf or native grass areas are to be edged with concrete, metal, brick or substantial wood material. Plastic and other light duty edgings are not allowed.

- (iii) Mulch and weed fabric are required for all shrub beds.

- (iv) The minimum square footage of planting area for a five-gallon evergreen or deciduous shrub is 16 square feet. These minimum square footages may be varied by a qualified professional.

(13) Trees.

- (i) Trees should not be planted near a light pole if eclipsing of light will occur at maturity. Placing light poles in the parking lot, away from landscape area and between parking bays, helps eliminate this conflict and should be considered.

- (ii) Tree canopies may overlap by up to 20 percent of the diameter of the tree at maturity. Tree clustering may be allowed with some species so long as clustering does not adversely affect the mature canopy.

- (iii) At planting, tree trunks must be reasonably straight with minimal doglegs.
- (iv) Wire baskets, burlap wrappings, rope, twine or any similar shipping materials shall be removed before planting.
- (v) The minimum square footage of planting area for a shade tree is 140 square feet. The Director may vary the minimum square footage.
- (vi) Species Diversity. The percent of any one type of tree that can be planted in a development shall be as follows:
 - (A) Zero through five trees: No limitation.
 - (B) Six to 21 trees: No more than 50 percent of one species.
 - (C) 21 or more trees: No more than 20 percent of one species.

(14) Shrubs.

- (i) Twenty-five percent of the required shrubs may be converted to turf based on one five-gallon shrub per 50 square feet of turf.
- (ii) Ten percent of the required shrubs may be converted to perennials and/or ground covers at a ratio of three one-gallon perennials and/or ground covers for one five-gallon shrub.
- (iii) Species Diversity. The percent of any one type of shrub that can be planted in a development shall be as follows:
 - (A) Ten through 19 shrubs: 50 percent.
 - (B) Twenty through 39 shrubs: 33 percent.
 - (C) Forty through 59 shrubs: 25 percent.
 - (D) 60 or more shrubs: 15 percent.
- (iv) When calculating tree and shrub quantities, any fraction of a shrub or tree or other requirement is rounded up to the next whole number.
- (v) With the approval of the Director, the number of shrubs may be reduced in exchange for additional trees or tree size at a rate of three shrubs per caliper inch.

(15) Maintenance. The owners, tenants and occupants for all new and existing uses in the City must:

(i) Maintain landscaping in a healthy, growing, neat and well-maintained condition.

(ii) Maintenance includes watering, weeding, pruning, pest control, trash and litter removal, replacement of dead or diseased plant material, reseeding and other reasonable efforts.

(iii) Any plant that dies must be replaced with an equivalent live plant within 90 days of notification or, if during the winter, by the next April 1st.

(iv) Hay mulch used during the preparation or establishment of landscaping must be certified weed-free by the Colorado Department of Agriculture.

(v) On his own or based on a citizen complaint, the Director may, without notice and without a warrant, walk on the landscaped portion of the property from time to time to inspect the condition of landscaping.

(vi) Between one and two years after installation of required landscaping, Code Enforcement shall conduct a site inspection to verify that all required landscaping has been maintained in a healthy, growing, neat and well-maintained condition. Property owners shall be notified of necessary corrective action for failure to comply with the maintenance provisions of this section.

(16) Public Right-of-Way. Except where a detached sidewalk exists or is proposed and approved (see subsection (b)(16)(iv) of this section), landscaping on public right-of-way shall not be counted toward any landscape or open space requirements of this code, unless specifically provided otherwise in this code.

(i) All unimproved right-of-way adjacent on the side abutting a development which is not in the City's one-year capital plan to be improved must be landscaped. All right-of-way landscaping shall be irrigated and maintained by the adjoining private property owner, unless the City agrees to accept it for maintenance. If it is to be maintained by the City, a separate irrigation system shall be provided.

(ii) At least 75 percent of the unpaved adjacent right-of-way shall be landscaped with turf, low shrubs or ground cover. The Director may vary the required landscaping to obtain a consistent appearance in the area or with existing or planned right-of-way landscaping.

(iii) The owner of the nearest property shall keep all rights-of-way, which are not hard surfaced, free of weeds, litter, junk, rubbish and obstructions. To prevent weed growth, erosion and blowing dust, right-of-way areas not covered by vegetation or

paving shall be covered with mulch, wood chips, bark chips, decorative rocks or cobble or similar natural materials, to be underlain by weed fabric or other barrier.

(iv) Where detached sidewalks exist, or are proposed, a maximum of 50 percent of the public right-of-way landscaping may be counted toward the total required landscaping. The right-of-way landscaping between the curb and sidewalk shall contain street trees spaced every 40 feet.

(v) The Director may allow decorative paving in landscaped areas in commercial or other high pedestrian traffic areas if the decorative paving is compatible with nearby right-of-way paving and landscaping.

(17) Pervious Coverage. Landscaped and buffer areas count toward the pervious area requirement.

(18) Authority.

(i) The Director shall decide all questions of soils, plant selection and care, irrigation installation and other vegetation and landscaping questions.

(ii) The Director may approve an applicant's request to vary from the required number and types of plants or landscaped area if:

(A) The number of trees exceeds 25 percent of the minimum number of trees; and/or

(B) Trees exceed the minimum caliper requirement by one inch or more; and/or

(C) Additional berming or other attractive buffering, public art, enhanced paving treatments for public plazas (brick or concrete pavers, tinted and stamped concrete, etc.) is provided. The Director may grant up to a 10 percent reduction of the square footage of improved area used to calculate the landscape requirement where these types of enhancements are included in a development.

(D) Additional trees or larger trees can be exchanged on a per-caliper-inch basis with three shrubs equaling one caliper inch. Credit for using larger trees would be based on a direct exchange of caliper inches. For example: 10 three-inch caliper trees equaling 30 caliper inches is the same as 15 two-inch caliper trees equaling 30 caliper inches; one two-inch caliper tree equals six shrubs. Trees may be substituted for shrubs, but shrubs may not be substituted for trees.

(E) If the total amount of required landscaping is provided, the Director may allow the owner to place the landscaping on another appropriate part of the lot.

(19) **Water Wise.** Because of Grand Junction's desert environment, water wise design and the use of xeric (low water use) plants are strongly encouraged. Water wise designs shall employ the seven basic principles of xeric design which include "comprehensive planning and design for low water use, creating practical turf areas, selecting low water use plants and organizing plants by water usage, using adequate soil prep, using water conserving mulches, irrigating efficiently and maintaining the landscape appropriately" (source: Denver Water Board).

(i) Low water use plants are encouraged for use in the "typical" urbanized landscape, especially where the plants can be irrigated (zoned) separately from higher water use plant material. This way of using xeric plants is compatible with any of the requirements of this code.

(ii) Landscaping designs that mimic the "desert" character of Grand Junction's setting are also encouraged, but must be carefully designed so that the basic requirements for shade, screening and buffering are met. Because of this, the Director must approve "desert" or xeric landscape plans as well as variances from the required plant coverage ratios. To further encourage xeriscaping, one-gallon xeric plants shall be equivalent to five-gallon traditional plants. Trees shall be installed in accordance with subsection (b) of this section.

(c) **Parking Lots.**

(1) **Interior Landscaping Requirement.** Landscaping is required in the interior of parking lots to direct traffic, to shade cars and structures, to reduce heat and glare and to screen cars from adjacent properties. The interior of all parking lots shall be landscaped as follows:

(i) One landscaped island, parallel to parking spaces, is required for each 20 parking spaces. In lieu of the standard landscape island, one "orchard style" landscape island may be used for every six parking spaces. The orchard style landscape islands shall be evenly spaced between end landscape islands. (See subsection (j) of this section.)

(ii) Landscape islands must be at least 140 square feet. The narrowest/smallest dimension of a parking lot island shall be eight feet, measured from back of curb to back of curb.

(iii) One landscaped divider island, parallel to the parking lot drive aisles, designed to prevent diagonal movement across the parking lot, shall be located for every three parking lot drive aisles.

(iv) A landscape island is required at the end of every row of parking spaces, regardless of length or number of spaces.

(v) Wheel stop barriers on all sides adjacent to the parking lot surface are required to protect landscape islands from vehicles.

(vi) A corner area (where it is not feasible to park a vehicle) may be considered an end island for the rows on the perimeter of the parking lot.

(vii) Landscaping of the interior of a parking lot shall include trees and shrubs.

(2) Parking Lot Perimeter. Landscaping is required around the entire perimeter of a parking lot to assist in the shading of cars, to assist in the abatement of heat and to reduce the amount of glare from glass and metal, and to assist in the screening of cars from adjacent properties. The perimeter of a parking lot is defined as the curb line defining the outer boundaries of the parking lot, including dumpster enclosures, bike racks, or other support facilities that are adjacent to the outer curb. Entry drives between a parking lot and the street, drives connecting two internal parking lots or building entry plazas are not included in the perimeter area.

(i) Screening shall occur between a street and a parking lot and street frontage landscape shall apply. (See subsections (c)(3) and (l) of this section.)

(ii) The minimum dimension allowed for the parking lot perimeter landscape strip is six feet. The width of a landscape strip can be modified by the Director, provided the intent of this section is met.

(iii) Landscaping along the perimeter of parking lots shall include trees and shrubs.

(iv) Parking lots shared by more than one owner shall be landscaped around the perimeter of the combined lots.

(3) Screening. All parking lots abutting rights-of-way, entry drives, and adjacent properties must be screened. For this subsection, a "screen" means a turf berm and/or shrubs.

(i) A 30-inch-high screen is required along 70 percent of parking lots abutting rights-of-way, entry drives, and adjacent properties, excluding curb cuts. The 30-inch screen shall be placed so as to maximize screening of the cars in the parking lot, when viewed from the right-of-way and shall be measured from the ground surface, or the elevation of the roadway if the adjacent road is higher than the property.

(ii) Screening shall not be required between parking lots on adjoining lots where the two lots are designed to function as one.

(iii) If a landscape area is 30 feet wide or greater between a parking lot and a right-of-way, the 30-inch-high screen is not required. This 30-foot-wide or greater area must be 100 percent covered in plant material within three years. Turf is allowed.

(iv) The Director may approve a screen wall between a parking lot and a right-of-way if the lot or parcel is unusually small.

(v) A screen wall must not be taller than 30 inches, unless the adjacent roadway is higher than the property, in which case the screen wall shall be 30 inches higher than the adjacent roadway.

(vi) Two five-gallon shrubs may be substituted for four linear feet of wall; shrubs must reach a height of at least 30 inches at maturity.

(vii) A column or jog or equivalent architectural feature is required for every 25 linear feet of wall.

(viii) The back of the wall must be at least 30 inches from the face of curb for bumper overhang.

(ix) Shrubs must be planted on the street side of the wall.

(x) There must be at least five feet between the right-of-way and the paved part of a parking lot to use a wall as a screen.

(xi) Wall elevations and typical cross sections must be submitted with the landscape plan at a minimum scale of one-half inch equals one foot.

(xii) Walls shall be solid masonry with finish on both sides. The finish may consist of stucco, brick, stone or similar material. Unfinished or merely painted concrete block is not permitted.

(xiii) Shrub plantings in front of a wall are not required in the B-2 downtown district.

(d) **Street Frontage Landscape.**

(1) Within all zones (except single-family uses in single-family, B-2 and form based zone districts), the owner shall provide and maintain a minimum 14-foot-wide street frontage landscape adjacent to the public right-of-way.

(2) A minimum of 75 percent of the street frontage landscape shall be covered by plant material at maturity.

(3) The Director may allow for up to 50 percent of the 14-foot-wide street frontage to be turf, or up to 100 percent turf coverage may be allowed if the parking lot setback from the right-of-way exceeds 30 feet. Low water usage turf is encouraged.

(4) All unimproved right-of-way adjacent to new development projects shall be landscaped and irrigated by the owner and/or homeowners' association as per subsection (b)(16) of this section.

(5) Landscaping within the street frontage shall include trees and shrubs. If detached walks are not provided with street trees, street trees shall be provided in the street frontage landscape, including one tree for every 40 feet of street frontage.

(6) Where detached walks are provided, a minimum street frontage landscape of five feet is acceptable.

(e) **Buffers.**

(1) Buffers shall be provided between different zoning districts as indicated in subsection (k) of this section.

(i) Seventy-five percent of each buffer area shall be landscaped with turf, low shrubs or ground cover.

(ii) One medium sized tree is required per every 40 linear feet of boundary between different zones.

(2) Exceptions.

(i) Where residential or collector streets or alleys separate zoning districts, the Director can require more landscaping instead of a wall or fence.

(ii) Where walkways, paths, or a body of water separates zoning districts, the Director may waive a fence or wall requirement provided the buffering objectives are met by private yards.

(iii) Where a railroad or other right-of-way separates zoning districts, the Director may waive the buffer strip if the buffering objectives are met without them.

(f) **Fences, Walls and Berms.**

(1) Fences and Walls. When a higher density or intensity zoning district abuts a lower density or intensity zone district, it is the responsibility of the higher density or intensity property to buffer the abutting zone district according to subsection (k) of this section. When an existing fence or wall substantially meets the requirements of this section, and

subsection (k) of this section requires the same form of buffering, an additional fence on the adjacent developing property shall not be required. However, if the new development requires the placement of a wall, and a fence exists on the adjacent property, the wall shall be required. If a wall is required and a fence is in place, the wall must be placed adjacent to the fence. (Subsection (k) of this section should be referenced to determine when a wall or a fence is required. The more stringent standard shall apply; i.e., if a wall is required and a fence is in place, the wall must be placed adjacent to the fence.) Fences must comply with GJMC [21.04.040\(i\)](#), any design guidelines and other conditions of approval. Fences and walls required by this section must meet the following:

- (i) Maximum height: six feet (outside of front setback, 30-inch solid height or four feet height if two-thirds open within the front setback and must meet all sight distance requirements).
- (ii) Fence type: solid wood or material with a similar appearance, finished on both sides.
- (iii) Wall type: solid masonry finished on both sides. Finish may consist of stucco, brick, stone or similar material but unfinished or merely painted concrete block is not permitted.
- (iv) Location: within three feet of the property line unless the space is needed to meet landscaping requirements.
- (v) A wall must have a column or other significant architectural feature every 30 feet of length.
- (vi) Any fence or wall over six feet in height requires a building permit.
- (vii) No person shall construct or maintain a fence or a wall without first getting a fence/wall permit from the Director.

(2) Berms. Minimum requirements for berms are as follows:

- (i) Maximum slope of 4:1 for turf areas and 3:1 for shrub beds; and
- (ii) To control erosion and dust, berm slopes must be stabilized with vegetation or by other means consistent with the requirements for the particular landscape area.

(g) Residential Subdivision Perimeter Enclosures.

(1) Intent. The decision-maker may require (where deemed necessary) perimeter enclosures (fences and/or walls) around all or part of the perimeter of a residential development. Perimeter enclosures shall be designed to meet the following objectives of

protecting public health, safety and welfare: screen negative impacts of adjoining land uses, including streets; protect privacy; maintain a consistent or complementary appearance with enclosures in the vicinity; maintain consistent appearance of the subdivision; and comply with corridor overlay requirements.

(2) Specifications. Unless specified otherwise at the time of final approval:

- (i) A perimeter enclosure includes fences, walls or berms, and combinations thereof, located within five feet of the exterior boundary of a development.
- (ii) The maximum height is six feet, including within front setbacks; however, an enclosure constructed on a berm shall not extend more than eight feet above the adjoining sidewalk or crown of road, whichever is lower.
- (iii) New enclosures shall be compatible with existing enclosures in the vicinity, if such enclosures meet the requirements of this code.
- (iv) A perimeter enclosure in excess of six feet is a structure and requires a building permit.
- (v) A perimeter wall must have a column or other significant architectural feature every 30 feet.

(3) Required Perimeter Enclosures. The decision-maker may require a perimeter enclosure as a condition of the final approval if:

- (i) Use or enjoyment of property within the development or in the vicinity of the development might be impaired without a perimeter enclosure.
- (ii) A perimeter enclosure is necessary to maintain a consistent and complementary appearance with existing or proposed perimeter enclosures in the vicinity.
- (iii) A perimeter enclosure is necessary to control ingress and egress for the development.
- (iv) A perimeter enclosure is necessary to promote the safety of the public or residents in the vicinity.
- (v) A perimeter enclosure is needed to comply with the purpose, objectives or regulations of the subdivision requirements.
- (vi) A perimeter enclosure is needed to comply with a corridor overlay district.

(vii) The Director will notify applicants of the need for a perimeter enclosure, if required.

(4) Design of Perimeter Enclosures. A complete landscape plan for the required landscape buffer and a detail drawing of the perimeter enclosure must be submitted at the time of final approval: perimeter enclosure detail at a scale of one-half inch equals one foot.

(5) Landscape Buffer. On the outside of a perimeter enclosure adjacent to a right-of-way, a 14-foot-wide landscape buffer shall be provided between the perimeter enclosure and the right-of-way for major and minor arterial streets and major or minor collectors. A five-foot-wide landscape buffer for side and rear yard perimeters shall be provided on all other streets between the perimeter enclosure and the right-of-way.

(i) Vegetation in the sight triangle (see TEDS, GJMC Title [29](#)) shall not exceed 30 inches in height at maturity;

(ii) In the landscape buffer, one tree per 40 linear feet of perimeter must be provided;

(iii) All perimeter enclosures and landscape buffers must be within a tract dedicated to and maintained by the homeowners' association. The perimeter enclosure and landscaping must be installed by the developer and made a part of the development improvements agreement;

(iv) A minimum of 75 percent of the landscape buffer area shall be covered by plant material at maturity. Turf may be allowed for up to 50 percent of the 14-foot-wide landscape strip, at the Director's discretion. Low water usage turf is encouraged;

(v) Where detached walks are provided, a minimum buffer of five feet shall be provided. In which case, the right-of-way parkway strip (area between the sidewalk and curb) will also be planted as a landscape buffer and maintained by the HOA.

(6) Construction of Perimeter Enclosures. The perimeter enclosure and required landscape buffer shall be installed by the developer and included in the development improvements agreement.

(7) Ownership and Maintenance. The developer shall refer to the perimeter enclosure in the covenants and restrictions and so that perpetual maintenance is provided for either that the perimeter enclosure be owned and maintained by the owners' association or by individual owners. The perimeter enclosure shall be identified on the plat.

(8) Alternative Construction and Ownership. If the decision-maker finds that a lot-by-lot construction, ownership and/or maintenance of a perimeter enclosure landscape strip

would meet all applicable objectives of this section and the design standards of GJMC [21.06.060](#), the final approval shall specify the type and size of materials, placement of fence posts, length of sections, and the like.

(9) Overlay District Conflicts. Where in conflict, the perimeter enclosure requirements or guidelines of approved overlay districts shall supersede the requirements of this section.

(10) Variances. Variances to this section and appeals of administrative decisions (where this code gives the Director discretionary authority) shall be referred to the Planning Commission.

(h) **I-1 and I-2 Zone Landscape.**

(1) Parking Lot Perimeter Landscape. Landscaping for the parking lot perimeter shall be per subsection (c)(2) of this section with the following addition:

(i) Turf may be allowed for up to 50 percent of the parking lot perimeter, at the Director's discretion. Low water usage turf is encouraged.

(ii) A minimum of 75 percent of the parking lot perimeter landscape shall be covered by plant material at maturity.

(2) Street Frontage Landscape. Landscaping for the street frontage shall be per subsection (d) of this section with the following additions:

(i) Vegetation in the sight triangle in the street frontage must not exceed 30 inches in height at maturity.

(ii) One tree for every 40 linear feet of street frontage (excluding curb cuts) must be provided, 80 percent of which must be shade trees.

(3) Public Right-of-Way Landscape. Landscaping for the public right-of-way shall be per subsection (b)(16) of this section.

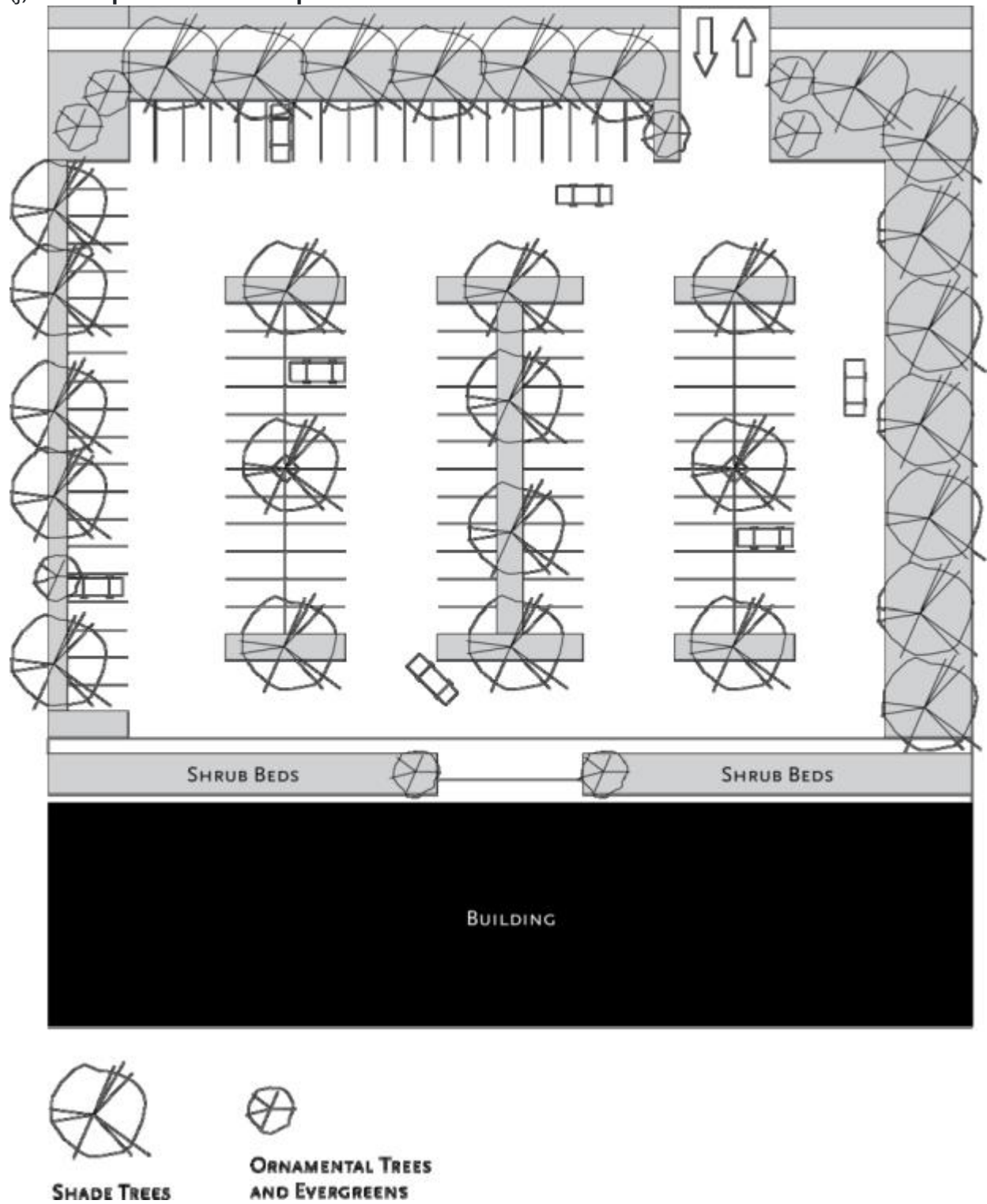
(4) Maintenance. Each owner or the owners' association shall maintain all landscaping.

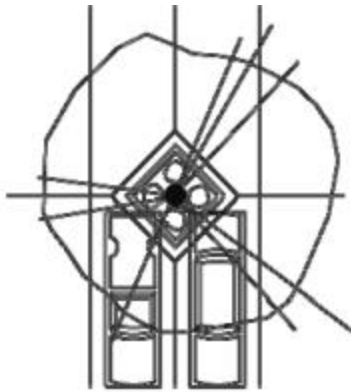
(5) Other Applicable Sections. The requirements of subsections (i), (j), (k) and (l) of this section shall also apply.

(i) **Landscaping Requirements.**

Zoning of Proposed Development	Landscape Requirement	Location of Landscaping on Site
Single-family residential (R zones)	As required for uses other than single-family residential; and as required in subsections (b)(16) and (g) of this section	As required for uses other than single-family residential; and landscape buffer and public right-of-way
R-5, R-8, R-12, R-16, R-24, R-0, B-1, C-1, C-2, I-O, CSR, MU	One tree per 2,500 square feet of improved area, with no more than 20 percent of the total being ornamental trees or evergreens. One five-gallon shrub per 300 square feet of improved area	Buffer, parking lot, street frontage perimeter, foundation plantings and public right-of-way
B-2	One tree per 2,500 square feet of improved area, with no more than 20 percent of the total being ornamental trees or evergreens. One five-gallon shrub per 300 square feet of improved area	Parking lot, park strip (in right-of-way)
I-1, I-2	As required in subsection (h) of this section and in other subsections of this section where applicable	Street frontage, parking lots, buffers and public right-of-way
MXR, MXG, MXS, MXOC	One tree per 3,000 square feet of improved area, with no more than 20 percent of the total being ornamental trees or evergreens. One five-gallon shrub per 300 square feet of improved area. Plantings must be evenly distributed throughout the development	Buffer, parking lot, street frontage perimeter, foundation plantings and public right-of-way
Facilities: mining, dairy, vineyard, sand or gravel operations, confined animal feeding operation, feedlot, forestry commercial, aviation or surface passenger terminal, pasture	One tree per 5,000 square feet of improved area. One five-gallon shrub per 600 square feet of improved area	Perimeter, buffer and public right-of-way

(j) **Example Tree Landscape Plan.**





6' X 6' SQUARE SHOWN
7' X 7' ALSO POSSIBLE

ORCHARD-STYLE LANDSCAPE ISLAND

(k) Buffering Between Zoning Districts.

Zoning of Proposed Development	Zoning of Adjacent Property															
	SF	R-5	R-8	R-12 R-16	R-24	R-O & MXOC	B-1	B-2	C-1	C-2 I-O	I-1	I-2	M-U	CSR	BP	MX
SF (Subdivisions)	-	-	-	-	-	-	F	-	F	W	W	W	F	-	F	
R-5	-	-	-	-	-	-	F	-	F	W	W	W	-	-	F	
R-8	-	-	-	-	-	F	F	-	F	W	W	W	F	-	F	
R-12 & R-16	-	-	-	-	-	-	F	-	W	W	W	W	F	-	F	
R-24	-	-	-	-	-	-	F	-	W	W	W	W	F	-	F	
RO & MXOC	A	A	A	A	A	-	A or F	-	A or F	W	W	W	A or F	-	A or F	
B-1	F	F	F	A or F	A or F	A or F	A or F	-	A or F	A or F	A or F	A or F	A or F	-	A or F	
B-2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
C-1	A&W	W	W	W	W	W	-	-	-	-	-	-	-	-	-	
C-2 & I-O	W	W	W	W	W	W	F	-	-	-	-	-	A or F	A or F	A or F	A&
I-1	W	W	W	W	W	W	F	-	-	-	-	-	A or F	B&W	A or F	B&
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M-U	A or F	A or F	A or F	A or F	A or F	A or F	A or F	-	A or F	A or F	A or F	A or F	-	-	-	
CSR3 ¹	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
BP	A or F	A or F	A or F	A or F	A or F	A or F	A or F	-	-	-	-	-	-	-	-	A
MXR-	-	-	-	-	-	-	F	-	-	W	W	W	F	-	F	
MXG-	-	-	-	-	-	-	F	-	-	W	W	W	F	-	F	
MXS-	-	-	-	-	-	-	F	-	-	W	W	W	F	-	F	

Notes

•A berm with landscaping is an alternative for a required fence or wall if the total height is a minimum of six feet.

Zoning of Proposed Development	Zoning of Adjacent Property															
	SF	R-5	R-8	R-12 R-16	R-24	R-O & MXOC	B-1	B-2	C-1	C-2 I-O	I-1	I-2	M-U	CSR	BP	MX

•Where alleys or streets separate different zone districts, the Director may approve increased landscaping rather than required fence.

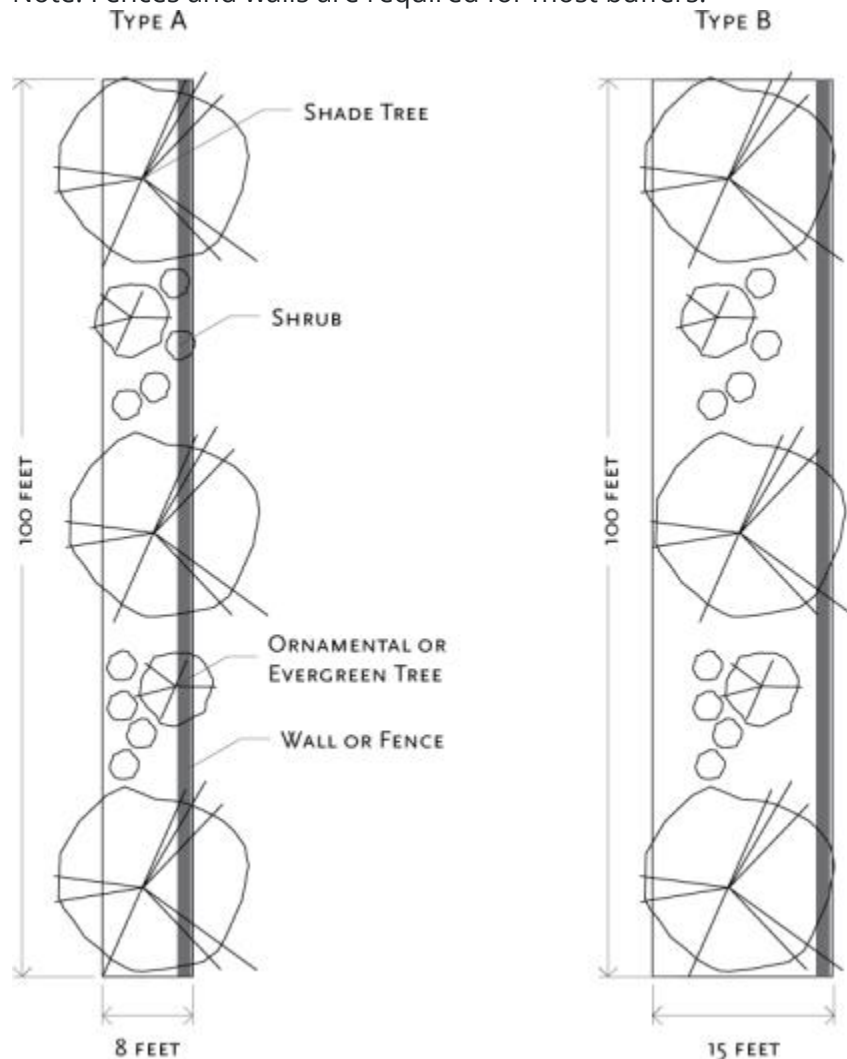
•The Director may modify this table based on the uses proposed in any zone district.

¹ Gravel operations subject to buffering adjacent to residential.

(l) **Buffer Requirements.**

Buffer Types	Landscaping Requirements	Location of Buffers on Site
Type A	Eight-foot-wide landscape strip with trees and shrubs	Between different uses
Type B	15-foot-wide landscape strip with trees and shrubs	Between different uses
Type F, W	Six-foot fence and wall (see subsection (f) of this section)	Between different uses

Note: Fences and walls are required for most buffers.



(Ord. 4646, 11-19-14; amended during 2010 codification; Ord. 4419, 4-5-10)

21.10.020 Terms defined.

Approved Street Trees for Grand Junction's Rights-of-Way means the list of trees, shrubs, vines, and evergreens in public rights-of-way maintained by the Forestry Board (see Section 8.32.020).

Buffer/Buffering means an object or area with landscaping, including trees, shrubs, a wall, fence, berm, or any combination thereof that serves as a visual and auditory screen between properties.

Colorado Nursery Act means C.R.S. Title 35 Article 26 as amended.

Caliper means the diameter of the tree trunk measured 4.5 feet above the ground on the uphill side of the tree or 6 inches above the root ball at time of planting.

Canopy drip line means the area directly located under the outer circumference of the tree branches from which water drips onto the ground.

Evergreen tree means any tree having foliage that persists and remains green throughout the year.

Functional Turf means an area of turf measuring no less than 30 feet in width and length with a minimum area 1,500 square feet for the purposes of common recreational uses open to the public, members of a neighborhood, or clients and/or customers of a commercial or office use.

Graywater treatment works means an arrangement of devices and structures used to: (a) collect graywater from within a building or a Facility; and (b) treat, neutralize, or stabilize graywater within the same building or Facility to the level necessary for its authorized uses. C.R.S 25-8-103(8.4)

Improved area means the developed portion of a property consisting of areas occupied by buildings, asphalt, concrete, gravel, or landscaped area. Where phased development is proposed, the improved area shall be identified and measured separately for each phase of development.

Lot coverage means that area of the lot or parcel which may be occupied by impervious surfaces.

Noxious or invasive species means non-native plants that have a recognized harmful impact on natural habitats and/or are likely to displace native plant species for light, space, soil moisture and nutrients, including those noxious species identified under the Colorado Noxious Weed Act codified at C.R.S. Title 35 Article 5.5, as amended.

Ornamental tree means a tree that has a height and spread between 15 feet and 30 feet at maturity.

Root ball means the mass formed by the roots of a plant and the soil surrounding them at the time of planting.

Rootzone means the area of the ground around the base of the tree where rooting occurs, as measured from the trunk to a distance twice the radius of the canopy drip line.

Shade tree means a tree that has a height and/or spread of 30 feet or greater at maturity.

Suitable Plant List means a list maintained by the Director of plant species and genera approved to be installed in accordance with this code.

Tree canopy coverage means the area of ground directly beneath the leaves and branches of trees.

Turf means grasses planted to form a dense growth of leaf blades and roots, such as Kentucky Blue Grass and similar species used for planting lawns.

Xeriscape or xeriscaping means landscape plantings that reduce the need for irrigation.

21.03.030 Measurements.

(e) Lot Coverage. Lot coverage is measured as the percentage of the total lot area covered by impervious surfaces. It is calculated by dividing the square footage of impervious surface by the square footage of the lot.

21.03.080 Mixed Use Standards.

Mixed Use and Industrial Bulk Standards Summary Table

	R-O	B-1	B-2	C-1	C-2	CSR	M-U	BP	I-O	I-1	I-2
Lot											
Area (min. ft. unless otherwise specified)	5,000	10,000	None	20,000	20,000	1 ac	1 ac	1 ac	1 ac	1 ac	1 ac
Width	50	50	None	50	50	100	100	100	100	100	100
Frontage	None	None	None	None	None	None	None	None	None	None	None
Setback											
Principal structure											
Front (min. ft.)	20	20	0	15	15	15	15	15	15	15	15

Side (min. ft.)	5	0	0	0	0	0	0	0	0	0	0
Side – abutting residential (min. ft.)	0	10	0	10	10	10	10	10	10	10	10
Rear (min. ft.)	10	15	0	10	10	10	10	10	10	10	10
Accessory structure											
Front (min. ft.)	25	25	25	25	25	25	25	25	25	25	25
Side (min. ft.)	3	0	0	0	0	0	0	0	0	0	0
Side – abutting residential (min. ft.)	0	5	0	5	5	5	5	5	5	5	0
Rear (min. ft.)	5	15	0	10	10	10	10	10	10	10	10
Other Dimensional Requirements											
Lot coverage (max.)	<u>70%</u>	80%	<u>100%</u>	80%	80%	75%	80%	80%	80%	90%	90%
Height (max. ft.)	40	40	80	65	65	65	65	65	65	50	50
Density (min. units per acre)	4	8	8	12	n/a	n/a	8	8	n/a	n/a	n/a
Density (max. units per acre)	None	16	None	24	None	None	24	24	None	None	None
** Gross floor area	10,000	15,000	None	None	None	None	None	None	None	None	None
Notes											
B-1: Max. gross floor area varies by use; retail – 15,000 sf (unless a CUP is approved), office 30,000											
B-2: Parking front setback for parking as a principal use – 30 ft., as an accessory use – 6 ft.											
C-1: Min. rear setback – 0 if an alley is present											
CSR: Maximum building height abutting residential – 40 ft.											

** Gross floor area calculated for maximum size may exclude eaves, covered or uncovered porches, upper story decks and balconies, breezeways, exterior covered stairwells and attached decorative walls which are less than or equal to three feet in height.

21.04.030 Use-Specific Standards

(g) Mini-Warehouse.

- (1) Purpose. This subsection sets standards for the establishment of safe and attractive mini-warehouse developments. These standards apply to all mini warehouses, including those that provide indoor and/or outdoor units.
- (2) Accessory Uses. Accessory uses may include living quarters for a resident manager or security and leasing offices.
- (3) Uses Prohibited.
 - (i) No owner, operator or lessee of any mini-warehouse or portion thereof shall offer for sale or sell any item of personal property, or conduct any type of commercial activity of any kind whatsoever, including such uses as sales, service and repair operations, manufacturing, or truck/equipment rentals, other than leasing of the units, or permit same to occur upon any area designated for the mini-warehouse use, except that estate or foreclosure sales held by the mini-warehouse owner or operator shall be allowed.
 - (ii) No outside storage shall be permitted except the storage of licensed vehicles within approved areas designated for such storage. This storage shall meet the requirements of GJMC 21.04.040.
- (4) Landscaping and Screening. All mini warehouses shall provide the following in addition to meeting standards of GJMC 21.06.040:
 - (ii) For outdoor mini-warehouse units, landscaping islands shall be provided at the end of each row of storage units when visible from the public right-of-way. Landscape islands shall be planted with shrubs that reach at least five feet of height at maturity.
- ~~(4)~~ (5) Off-Street Parking and Driveways Standards.
 - (i) Drive aisles within outdoor mini-warehouse facilities shall be a minimum of 26 feet wide for single-load aisles and 30 feet for double-load aisles.
 - (ii) A minimum of two parking spaces shall be provided adjacent to the primary entry structure.

(56) Architectural and Site Design Standards. All mini warehouses shall meet the following standards:

(i) Mini warehouses that front public rights-of-way shall provide a primary entry structure at the entrance of the development that meets the following standards:

(A) No parking shall be placed between the building and the street.

(B) Windows or similar architectural features shall cover at least 30 percent of the street-facing facade.

(C) Building materials such as brick, stone, wood, architectural-grade metal, or similar exterior shall be used.

(D) Two of the following features shall be utilized in the design of the primary entry structure:

a. Tower feature.

b. Facade articulations on the street-facing facade.

c. Roofline articulations in the street-facing facade.

d. Decorative lighting on the street-facing facade. This lighting must comply with all standards found in GJMC 21.06.080.

(ii) Any street-facing facade of each storage unit must be covered with building materials such as brick, stone, wood, architectural-grade metal, or similar exterior.

(67) Signage. All mini warehouses shall provide the following in addition to meeting standards of GJMC 21.06.070:

(i) Individual mini warehouses shall be clearly marked with numbers or letters identifying the individual units and a directory of the unit locations shall be posted at the entrance or office of the facility.

(ii) Signs or other advertising shall not be placed upon, attached to, or painted on any walls or fences required for landscaping and buffering in the mini-warehouse development.

21.06.040 Landscape, buffering and screening standards

(a) **Purpose and Goals.** The purpose of this section is to enhance the aesthetic appeal and context sensitivity of new development, achieve efficient use of water resources, expand urban tree canopy, and contribute to a livable urban environment. Landscaping reduces heat and glare, provides shade for citizens, reduces local and ambient temperatures, buffers and screens cars from adjacent properties, promotes natural percolation of surface waters, improves air quality, and conserves and enhances the value of property and neighborhoods within the City.

(b) **Authority.**

(1) The Director shall decide all questions of soils, plant selection and care, irrigation installation and other vegetation and landscaping questions, except for trees, shrubs, vines, and evergreens in the right-of-way. The City Forester shall decide all questions of plantings in the right-of-way.

(2) Variances to this section and appeals of administrative decisions (where this code gives the Director discretionary authority) shall be referred to the Planning Commission.

(c) **General Landscape Standards**

(1) **Compliance.** All landscaping required by this code shall comply with the standards and requirements of this section. Landscaping for new developments shall occur in buffer areas, all interior parking areas, along the perimeter of the property, around new and existing structures, and along street frontages and within any right-of-way not used for infrastructure.

(2) **Plant Quantities.** The amount of landscaping is based on the improved area of proposed development.

(3) **Landscaping Standards.** All new development must install, maintain, and protect landscaping as required by this code. (See subsection (k) of this section for an example of the landscaping requirements of this section.)

(i) The landscaping requirements of this code shall not apply to a lot on which the principal use is a single family residence or duplex. Requirements for residential subdivisions shall continue to apply.

(ii) Landscaping in the abutting right-of-way is required in addition to overall site landscaping requirements and must be installed and maintained as required by Section 21.06.040(b)(16) of this code.

(iii) Buffer landscaping is required in addition to overall site landscaping requirements as required by this Code.

(4) Acceptable Plant Material.

(i) Vegetation must be suitable for Grand Junction's climate and soils and shall be selected from the City of Grand Junction Suitable Plant List, to be maintained by the Director. Applicants may petition the inclusion of plants not found on the Suitable Plant List and shall provide sufficient information about the proposed species to facilitate review. The Suitable Plant List identifies the anticipated water needs of each plant species. The Director may allow the use of any plant if sufficient information is provided to show suitability including salt tolerance, sun and shade requirements based on planting locations, growth habit, etc. Noxious or invasive species are not allowed to be planted in development but may be preserved in development.

(A) The Director maintains the authority to not approve a plant species that appears on the Suitable Plant List if the Director deems it inappropriate under the planting conditions proposed in a development.

(iii) Plant materials shall meet or exceed the plant quality and species standards of the current American Standard for Nursery Stock and be consistent with the Colorado Nursery Act.

(iv) All plants proposed for installation shall be selected, spaced, and planted appropriately based upon their adaptability to the climatic, geologic, and topographical conditions of the project site.

(v) A minimum 25 percent of the proposed shrubs and ground cover shall be identified as native or native alternative on the Suitable Plants List, and 90 percent of the proposed shrubs and ground cover shall be identified as xeric, xeric-low, xeric-medium, or low water on the Suitable Plants List.

(vi) Turf not meeting the definition of functional turf shall not exceed 15 percent of any required landscaping area in the City of Grand Junction.

(vii) Functional turf may exceed the 15 percent maximum.

(5) Minimum Plant Sizes: All plants shall meet the following minimum plant sizes when installed.

(i) Shade tree, two caliper inches. If two caliper inch shade trees are not available due to seasonal shortages or shortages in desired varieties, the Director may approve the installation of smaller trees, provided the proportional difference in caliper inches is compensated for by installing additional trees. However, a minimum caliper of one and one-half inches shall be required.

(ii) Ornamental tree, one-and-one-half caliper inches.

(iii) Evergreen tree, two caliper inches and six feet tall at time of planting.

(iv) Shrub, #5 container.

(v) Perennials and ground covers, #5 container.

(vi) Turf mix, native grasses and wildflower mix are the only vegetation that may be planted as seed or by plugs. Turf may be planted as sod rolls

<u>Minimum Plant Sizes</u>	
<u>Planting Type</u>	<u>Size at Time of Planting</u>
<u>Shade Tree</u>	<u>Two caliper inches</u>
<u>Ornamental Tree</u>	<u>One-and-one-half caliper inches</u>
<u>Evergreen Tree</u>	<u>Two caliper inches and six feet tall</u>
<u>Shrub</u>	<u>#5 Container</u>
<u>Perennial</u>	<u>#1 Container</u>
<u>Groundcover</u>	<u>#1 Container</u>
<u>Turf</u>	<u>As seed, by plug, or as sod roll</u>

(7) Irrigation. All vegetation and landscaped areas must be provided with a permanent irrigation system including a system supplied by water from an approved graywater treatment works.

(i) Non-potable irrigation water shall be used if available for the proposed development area unless the Director allows the use of potable water.

- (ii) An underground pressurized irrigation system and/or drip system is required for all landscape areas.
- (iii) If connected to a potable water system, all irrigation systems require State-approved backflow prevention devices.
- (iv) All irrigation for non-potable irrigation water systems must have adequate filters easily accessible above ground or within an appropriately sized valve box.
- (v) Native grasses must have a permanent irrigation source that is zoned separately from higher water demand landscapes. Once the grasses are established, irrigation to native grass areas can be reduced to a level that maintains coverage typical of the grass mix and to suppress weed growth.
- (vi) Irrigation applied to trees shall be expanded or supplemented as appropriate to rootzone expansion over the life of the tree.

(8) Landscape Plans.

- (i) All applications for development shall identify the required landscaped areas and include a landscape plan in accordance with the requirements in this section.
- (ii) All landscaping shall be installed, maintained, and protected as shown on the approved plan.
- (iii) All changes to the landscape plan require prior written approval from the Director.
- (iv) An equivalent species may be substituted in the field with prior written approval of the Director. Plants are "equivalent" if they have the same growth habit and rate, same cover, leafing, shade characteristics and function, have similar water requirements as identified as the City of Grand Junction Suitable Plants List, and thrive in the same microclimate, soils and water conditions.
- (v) All development plans shall designate required landscaping areas.
- (vi) Landscape plans shall identify the species and sizes of vegetation.
- (vi) Landscape plans shall be stamped by a landscape architect licensed in the State of Colorado. Inspection and compliance with approved landscape plan must be certified by a licensed landscape architect prior to issuance of a certificate of occupancy, or the release of DIA security funds. Additionally, the property owner or irrigation installer must provide a letter describing that

adequate additional capacity exists in the irrigation system to support the landscaping materials at maturity prior to issuance of a certificate of occupancy or the release of DIA security funds.

(A) A licensed landscape architect is not required to produce landscape plans if the plans are submitted for a Minor Site Plan review unless required by State statute. All other requirements continue to apply to landscaping for Minor Site Plans.

(viii) All landscape plans shall include an irrigation plan. The irrigation plan shall comply with the standards in the SSID manual. See GJMC 21.06.010(c).

(ix) Utility composite plans must be submitted with landscape plans.

(x) Expansion of a developed site as defined in GJMC 21.02.100(f) that requires a Site Plan Review shall require a landscaping plan and correction of nonconforming landscaping as provided in GJMC 21.08.040.

(xi) Tree protection measures shall be clearly identified on the construction and landscape plans.

(xii) Wall and fence elevations and typical cross sections must be submitted with the landscape plan at a minimum scale of one-half inch equals one foot.

(8) Preservation of Significant Trees.

(i) Existing landscape features such as escarpments, large trees or stands, heavy vegetative cover, ponds and bluffs shall be identified by the Applicant as part of the development review process. This identification shall include a written inventory of significant trees to be produced with a landscaping plan. Any significant tree as defined in subsection (c) below shall be identified on the proposed landscaping plan.

(ii) All trees not identified as prohibited on the Suitable Plants List and that have a diameter that exceeds 15 caliper inches shall be considered significant.

(iii) Where significant trees exist on a property, no fewer than 30 percent of significant trees shall be preserved during development. Significant trees that are removed shall be replaced at a rate of one caliper inch of tree per two caliper inches of the significant tree to be removed, in addition to new tree plantings otherwise required by this Code. See GJMC 21.06.040(h)(6) for credit applied to preserved trees.

(iv) Significant trees to be preserved shall be visibly healthy and free from disease or parasite infection.

(v) Features to be preserved shall be protected throughout site development. No person shall kill or damage a landscape feature required to be preserved by this section. The developer shall protect trees from compaction.

(A) During construction, existing plant material to be preserved shall be enclosed by a temporary fence at least five feet outside the canopy dripline. In no case shall vehicles be parked, or materials or equipment be stored or stockpiled within the enclosed area.

(B) Irrigation shall be provided to trees preserved during construction of sufficient quantity to ensure their health and survival.

(C) If a significant tree which was to be preserved dies or is substantially damaged, the developer shall replace it at the rate of one newly planted tree per 2 caliper inches of damaged or destroyed tree.

(9) Protection of Landscape Areas. All landscape areas (except in the right-of-way where a street side curb does not exist) shall be protected from vehicles through the use of concrete curbing, large rocks, or other similar obstructions.

(10) Utility Lines. If the location of utilities conflicts with the landscaping provisions, the Director may approve an equivalent alternative.

(11) Sight Distance. The owner shall maintain all vegetation, fences, walls and berms so that there is no sight distance hazard nor road or pedestrian hazard (see TEDS).

(12) Soil and Planting Beds. Soil in landscape areas must be amended and all vegetation planted in accordance with good horticultural practices.

(i) Details for the planting of trees, shrubs and other vegetation must be shown on the landscaping plans.

(ii) Shrub beds adjacent to turf or native grass areas are to be edged with concrete, metal, brick or substantial wood material. Plastic and other light duty edgings are not allowed.

(iii) Organic mulch to a minimum of 3 inches is required for all shrub beds.

(iv) Prior to planting, compacted soils shall be transformed to a friable condition.

(v) Compost, soil amendments, or retained topsoil shall be incorporated into the soil to a minimum depth of 6 inches for tree and shrub plantings.

(13) Trees.

(i) Tree canopies may overlap by up to 30 percent of the diameter of the tree at maturity. Tree clustering may be allowed with some species so long as clustering does not adversely affect the mature canopy.

(ii) Trees which will grow to a height of greater than 25 feet at maturity shall not be planted under overhead electrical lines.

(iii) Weed fabric shall not be used within 8 feet of the base of a tree.

(iv) At planting, tree shall be healthy and free of disease. Tree trunks must be reasonably straight with minimal doglegs. Roots shall be checked prior to planting and corrected for optimal growth patterns.

(v) Wire baskets, burlap wrappings, rope, twine or any similar shipping materials shall be removed before planting.

(vi) Tree planting holes shall be of sufficient depth so that the flare of the tree above the root ball is no higher than 1 inch above grade.

(vii) Tree planting holes shall be of a diameter no less than three times the diameter of the tree's root ball at time of planting.

(viii) The minimum square footage of planting area for a shade tree is 140 square feet.

(ix) Ornamental trees shall be planted in a landscape strip that is no less than six feet in width (not including curb and gutter). Shade trees shall be planted in a landscape strip that is no less than eight feet in width (not including curb and gutter).

(x) Tree Diversity. The percent of any one type of tree that can be planted in a development shall be as follows:

(A) 0 through 5 trees: No limitation.

(B) 6 to 10 trees: No more than 50 percent of one genus.

(C) 11 to 20 trees: No more than 33 percent of one genus

(C) 21 or more trees: No more than 20 percent of one genus.

(xi) A minimum of 50 percent of proposed tree plantings shall be identified as preferred trees by the Plant List.

(xii) Trees shall not be planted near a light pole if eclipsing of light will occur at maturity. Placing light poles in the parking lot, away from landscape areas and between parking bays, helps eliminate this conflict and should be considered.

(xiii) When calculating tree quantities, any fraction of a tree is rounded up to the next whole number.

(14) Shrubs.

(i) A minimum 25 percent of the proposed shrubs and ground cover shall be identified as native or native alternative on the Suitable Plants List, and 90 percent of the proposed shrubs and ground cover shall be identified as xeric, xeric-low, xeric-medium, or low water on the Suitable Plants List.

(ii) Shrub Diversity. The percent of any one type of shrub that can be planted in a development shall be as follows:

(A) 10 through 19 shrubs: 50 percent per genus.

(B) 20 through 39 shrubs: 33 percent per genus.

(C) 40 or more shrubs: 25 percent per genus.

(iii) When calculating shrub quantities, any fraction of a shrub is rounded up to the next whole number.

(iv) The minimum area for planting an evergreen or deciduous shrub is 16 square feet.

(15) Maintenance:

(i) The owners, tenants, and occupants, including homeowners' associations, for all new and existing uses in the City must maintain landscaping in a healthy, growing, neat and well-maintained condition:

(A) Maintenance includes watering, weeding, pruning, fertilization, pest control, trash and litter removal, replacement of dead or diseased plant material, reseeding, and other reasonable efforts.

(B) Any plant that dies or substantially damaged due to improper maintenance must be replaced with an equivalent live plant within 90 days of plant death or by the next April 1st.

(iv) Hay mulch used during the preparation or establishment of landscaping must be certified weed-free by the Colorado Department of Agriculture.

(v) The Director or designee may from time to time, inspect the condition of landscaping wherever no reasonable expectation of privacy exists.

(A) The purpose of such site inspections shall be to verify that all required landscaping has been maintained in a healthy, growing, neat and well-maintained condition. Property owners shall be notified of necessary corrective action for failure to comply with the maintenance provisions of this section.

(vi) Maintenance of landscaping in unimproved rights-of-way shall be the responsibilities of owners, occupants, and tenants.

(v) Fire hydrants shall not be unobscured by plant material. Fire hydrants shall be visible from the center of the right-of-way at an angle of 45 degrees.

(vi) These requirements shall be specified in the articles of incorporation or bylaws for a homeowners' association whenever the homeowners' association is assigned the responsibility of maintaining landscape areas.

(16) Public Right-of-Way

(i) All unimproved right-of-way adjacent on the side abutting a development which is not in the City's ten-year capital plan to be improved must be landscaped. All right-of-way landscaping shall be irrigated and maintained by the adjoining private property owner, unless the City agrees to accept it for maintenance. If it is to be maintained by the City, a separate irrigation system shall be provided.

(ii) At least 75 percent of the unpaved adjacent right-of-way shall be landscaped with low shrubs or ground cover. No more than 15% of the right-of-way shall be landscaped with turf.

(iii) For the purpose of meeting minimum plant quantities, 50 percent of landscaping plantings on public right-of-way shall be counted toward the landscape or open space requirements of this code, unless specifically provided otherwise in this Code.

(iv) The owner of the nearest property shall keep all rights-of-way, which are not hard surfaced, free of weeds, litter, junk, rubbish, and obstructions. To prevent weed growth, erosion and blowing dust, right-of-way areas not covered by vegetation or paving shall be covered with organic mulch, wood chips, or similar natural materials.

(v) The right-of-way landscaping between the curb and sidewalk shall contain street trees spaced every 40 feet. Right-of-way landscaping shall be a minimum of eight feet wide in any direction.

(vi) No tree shall be removed from the public right-of-way without the approval of the City Forester. Trees removed from the right-of-way without approval shall be subject to penalties per GJMC 9.04.100.

(vii) Trees planted in the public right-of-way shall be of species identified on the list of Approved Street Trees for Grand Junction's Rights-of-Way.

(17) Pervious Coverage. Landscaped and buffer areas shall count toward the pervious surfaces included in lot coverage calculations.

(c) **Parking Lots.** The requirements of this subsection are applicable to all public and private parking areas but not to automobile display areas for automobile dealerships (General Retail Sales, Outdoor Operations, Display or Storage) and self-service storage as defined in GJMC 21.04.

(1) Interior Landscaping Requirement. Landscaping is required in the interior of parking lots to direct traffic, to shade cars and structures, to reduce heat and glare and to screen cars from adjacent properties. The interior of all parking lots shall be landscaped as follows:

(i) One landscaped island, parallel to parking spaces, is required for each 20 parking spaces

- (ii) Landscape islands must be at least 140 square feet. The narrowest/smallest dimension of a parking lot island shall be eight feet, measured from back of curb to back of curb.
- (iii) One landscaped divider island, parallel to the parking lot drive aisles, designed to prevent diagonal movement across the parking lot, shall be located for every three parking lot drive aisles.
- (iv) A landscape island is required at the end of every row of parking spaces, regardless of length or number of spaces.
- (v) A corner area (where it is not feasible to park a vehicle) may be considered an end island for the rows on the perimeter of the parking lot.
- (vi) Landscaping of the interior of a parking lot shall include trees and shrubs.
- (vii) To improve the management of stormwater runoff, structurally-sound permeable pavers may be used in parking areas, subject to the approval of the Director. Use of permeable pavers for ten parking stalls shall result in a reduction of one required parking stall per the required parking ratios in GJMC 21.06.050.
- (viii) Trees planted in parking lot islands shall be selected from those identified as Parking Lot Island Trees on the Plant List.
- (ix) A minimum 25 percent of the proposed shrubs and ground cover shall be identified as native or native alternative on the Suitable Plants List, and 90 percent of the proposed shrubs and ground cover shall be identified as xeric, xeric-low, xeric-medium, or low water on the Suitable Plants List.
- (x) The use of bioswales in parking lot designs is encouraged to facilitate stormwater management.

(2) **Parking Lot Perimeter.** Landscaping is required around the entire perimeter of a parking lot to assist in the abatement of heat and to reduce the amount of glare from glass and metal, and to assist in the screening of cars from adjacent properties. The perimeter of a parking lot is defined as the curb line defining the outer boundaries of the parking lot, including dumpster enclosures, bike racks, or other support facilities that are adjacent to the outer curb. Entry drives between a parking lot and the street, drives connecting two internal parking lots or building entry plazas are not included in the perimeter area. The requirements of this subsection are applicable to all public and private parking areas but not to automobile display areas for automobile dealerships (General Retail Sales,

Outdoor Operations, Display or Storage) and self-service storage as defined in GJMC 21.04.

(i) Screening shall occur between a street and a parking lot. When screening is required, street frontage landscape shall apply. (See subsections (c)(3) and (l) of this section.)

(ii) The minimum dimension allowed for the parking lot perimeter landscape strip is 8 feet.

(iii) Landscaping along the perimeter of parking lots shall include trees and shrubs.

(iv) Parking lots shared by more than one owner shall be landscaped around the perimeter of the combined lots.

(v) A minimum 25 percent of the proposed shrubs and ground cover shall be identified as native or native alternative on the Suitable Plants List, and 90 percent of the proposed shrubs and ground cover shall be identified as xeric, xeric-low, xeric-medium, or low water on the Suitable Plants List.

(3) Screening. All parking lots abutting rights-of-way, entry drives, and adjacent properties must be screened. For this subsection, a “screen” means a berm with appropriate groundcover or shrubs.

(i) A 30-inch-high screen is required along 70 percent of parking lots abutting rights-of-way, entry drives, and adjacent properties, excluding curb cuts. The 30-inch screen shall be placed so as to maximize screening of the cars in the parking lot, when viewed from the right-of-way and shall be measured from the ground surface, or the elevation of the roadway if the adjacent road is higher than the property.

(ii) Screening shall not be required between parking lots on adjoining lots where the two lots are designed to function as one.

(iii) If a landscape area is 30 feet wide or greater between a parking lot and a right-of-way, the 30-inch-high screen is not required. This 30-foot-wide or greater area must be 75 percent covered in plant material including tree canopy coverage, shrubs, and groundcover at maturity

(iv) A screen wall must not be taller than 30 inches, unless the adjacent roadway is higher than the property, in which case the screen wall shall be 30 inches higher than the adjacent roadway.

(v) The back of the wall must be at least 30 inches from the face of curb for bumper overhang.

(vi) Shrubs shall be planted on the street side of the wall.

(vii) There must be at least five feet between the right-of-way and the paved part of a parking lot to use a wall as a screen.

(viii) Walls shall be solid masonry with finish on both sides. The finish may consist of stucco, brick, stone, or similar material. Unfinished or merely painted concrete block is not permitted.

(ix) Shrub plantings in front of a wall are not required in the B-2 downtown district.

(x) A minimum 25 percent of the proposed shrubs and ground cover shall be identified as native or native alternative on the Suitable Plants List, and 90 percent of the proposed shrubs and ground cover shall be identified as xeric, xeric-low, xeric-medium, or low water on the Suitable Plants List.

(d) Street Frontage Landscape.

(1) Within all zones (except single-family uses in single-family, B-2 and form based zone districts), the owner shall provide and maintain a minimum 14-foot-wide street frontage landscape adjacent to the public right-of-way.

(2) A minimum of 75 percent of the street frontage landscape shall be covered by plant material at maturity.

(3) Landscaping within the street frontage shall include trees and shrubs. If detached walks are not provided with street trees, street trees shall be provided in the street frontage landscape, including one tree for every 40 feet of street frontage.

(4) A minimum 25 percent of the proposed shrubs and ground cover shall be identified as native or native alternative on the Suitable Plants List, and 90 percent of the proposed shrubs and ground cover shall be identified as xeric, xeric-low, xeric-medium, or low water on the Suitable Plants List.

(e) **Buffers.**

(1) Buffers shall be provided between different zoning districts as indicated in subsection (k) of this section.

(i) 75 percent of each buffer area shall be landscaped with shrubs or ground cover at maturity.

(ii) One tree is required per every 40 linear feet of boundary between different zones.

(iii) A minimum 25 percent of the proposed shrubs and ground cover shall be identified as native or native alternative on the Suitable Plants List, and 90 percent of the proposed shrubs and ground cover shall be identified as xeric, xeric-low, xeric-medium, or low water on the Suitable Plants List.

(2) Exceptions.

(i) Where residential or collector streets or alleys separate zoning districts, the Director can require more landscaping instead of a wall or fence.

(ii) Where walkways, paths, or a body of water separates zoning districts, the Director may waive a fence or wall requirement provided the buffering objectives are met by private yards.

(iii) Where a railroad or other right-of-way separates zoning districts, the Director may waive the buffer strip if the buffering objectives are met without them.

(f) **Fences, Walls and Berms.**

(1) Fences and Walls. When a higher density or intensity zoning district abuts a lower density or intensity zone district, it is the responsibility of the higher density or intensity property to buffer the abutting zone district according to subsection (k) of this section. When an existing fence or wall substantially meets the requirements of this section, and subsection (k) of this section requires the same form of buffering, an additional fence on the adjacent developing property shall not be required. However, if the new development requires the placement of a wall, and a fence exists on the adjacent property, the wall shall be required. If a wall is required and a fence is in place, the wall must be placed adjacent to the fence. (Subsection (k) of this section should be referenced to determine when a wall or a fence is required. The more stringent standard shall apply; i.e., if a wall is required and a fence is in place, the wall must be placed adjacent to the fence.) Fences must comply with GJMC 21.04.040(i), any design guidelines and other conditions of approval. Fences and walls required by this section must meet the following:

(i) Maximum height: six feet (outside of front setback, 30-inch solid height or four feet height if two-thirds open within the front setback and must meet all sight distance requirements).

(ii) Fence type: solid wood or material with a similar appearance, finished on both sides.

(iii) Wall type: solid masonry finished on both sides. Finish may consist of stucco, brick, stone or similar material but unfinished or merely painted concrete block is not permitted.

(iv) Location: within three feet of the property line unless the space is needed to meet landscaping requirements.

(v) A wall must have a column or other significant architectural feature every 30 feet of length.

(vi) Any fence or wall over six feet in height requires a building permit.

(vii) No person shall construct or maintain a fence or a wall without first getting a fence/wall permit from the Director.

(2) Berms. Minimum requirements for berms are as follows:

(i) Maximum slope of 4:1 for turf areas and 3:1 for shrub beds; and

(ii) To control erosion and dust, berm slopes must be stabilized with vegetation or by other means consistent with the requirements for the particular landscape area.

(g) Residential Subdivision Perimeter Enclosures.

(1) Intent. The Director may require perimeter enclosures (fences and/or walls) around all or part of the perimeter of a residential development. Perimeter enclosures shall be designed to meet the following objectives of protecting public health, safety and welfare: screen negative impacts of adjoining land uses, including streets; protect privacy; maintain a consistent or complementary appearance with enclosures in the vicinity; maintain consistent appearance of the subdivision; and comply with corridor overlay requirements.

(2) Applicability. When required by the Director, the standards of this subsection shall apply to all residential subdivisions as well as to all mixed-use subdivisions where the square footage of proposed residential uses exceeds the square footage of proposed non-residential uses.

(2) Specifications. Unless specified otherwise at the time of final approval:

- (i) A perimeter enclosure includes fences, walls or berms, and combinations thereof, located within five feet of the exterior boundary of a development.
- (ii) The maximum height is six feet, including within front setbacks; however, an enclosure constructed on a berm shall not extend more than eight feet above the adjoining sidewalk or crown of road, whichever is lower.
- (iii) New enclosures shall be compatible with existing enclosures in the vicinity if such enclosures meet the requirements of this code.
- (iv) A perimeter enclosure more than six feet in height is a structure and requires a building permit.
- (v) A perimeter wall must have a column or other significant architectural feature every 30 feet.
- (vi) A minimum 25 percent of the proposed shrubs and ground cover shall be identified as native or native alternative on the Suitable Plants List, and 90 percent of the proposed shrubs and ground cover shall be identified as xeric, xeric-low, xeric-medium, or low water on the Suitable Plants List.

(3) Required Perimeter Enclosures. The decision-maker may require a perimeter enclosure as a condition of the final approval if:

- (i) Use or enjoyment of property within the development or in the vicinity of the development might be impaired without a perimeter enclosure.
- (ii) A perimeter enclosure is necessary to maintain a consistent and complementary appearance with existing or proposed perimeter enclosures in the vicinity.
- (iii) A perimeter enclosure is necessary to control ingress and egress for the development.
- (iv) A perimeter enclosure is necessary to promote the safety of the public or residents in the vicinity.
- (v) A perimeter enclosure is needed to comply with the purpose, objectives or regulations of the subdivision requirements.

(vi) A perimeter enclosure is needed to comply with a corridor overlay district.

(5) Residential Subdivision Landscape Buffer. On the outside of a perimeter enclosure adjacent to a right-of-way, a 14-foot-wide (on average) landscape buffer shall be provided between the perimeter enclosure and the right-of-way for major and minor arterial streets and major or minor collectors. A five-foot-wide landscape buffer for side and rear yard perimeters shall be provided on all other streets between the perimeter enclosure and the right-of-way.

(i) In the landscape buffer, one tree per 40 linear feet of perimeter must be provided;

(ii) All perimeter enclosures and landscape buffers must be within a tract dedicated to and maintained by the homeowners' association. The perimeter enclosure and landscaping must be installed by the developer and made a part of the development improvements agreement;

(iii) A minimum of 75 percent of the landscape buffer area shall be covered by plant material including tree canopy coverage, shrubs, and groundcover at maturity.

(iv) A minimum 25 percent of the proposed shrubs and ground cover shall be identified as native or native alternative on the Suitable Plants List, and 90 percent of the proposed shrubs and ground cover shall be identified as xeric, xeric-low, xeric-medium, or low water on the Suitable Plants List.

(v) Where detached walks are provided, a minimum buffer of five feet shall be provided. In which case, the right-of-way parkway strip (area between the sidewalk and curb) will also be planted as a landscape buffer and maintained by the HOA.

(6) Construction of Perimeter Enclosures. The perimeter enclosure and required landscape buffer shall be installed by the developer and included in the development improvements agreement.

(7) Ownership and Maintenance. The developer shall refer to the perimeter enclosure in the covenants and restrictions and so that perpetual maintenance is provided for either that the perimeter enclosure be owned and maintained by the owners' association or by individual owners. The perimeter enclosure shall be identified on the plat.

(8) Alternative Construction and Ownership. If the Director finds that a lot-by-lot construction, ownership and/or maintenance of a perimeter enclosure landscape strip would meet all applicable objectives of this section and the design standards

of GJMC 21.06.060, approved plans shall note the type and size of materials, placement of fence posts, and length of sections.

(9) Overlay District Conflicts. Where in conflict, the perimeter enclosure requirements or guidelines of approved overlay districts shall supersede the requirements of this section.

(h) Substitutions. The requirements outlined in GJMC 21.06.040(i) above may be varied based at the following rates of substitution.

(1) Required trees may be substituted for shrubs and required shrubs may be substituted for trees at a rate of three shrubs equaling one caliper inch of tree. For example: 3 two-inch caliper trees equaling 6 caliper inches may be exchanged for 12 shrubs, or vice versa.

(i) No more than 30 percent of the number of trees required by GJMC 21.06.040(j) may be substituted for shrubs.

(2) Two #5 container shrubs may be substituted for four linear feet of wall when walls are required per GJMC 21.06.040(c)(3). Shrubs substituted for walls must reach a height of at least 30 inches at maturity.

(3) Ten percent of the required shrubs may be converted to perennials and/or ground covers at a ratio of three #1 container perennials and/or ground covers for one #5 container shrub.

(4) The number of shrubs may be reduced in exchange for additional trees or tree size at a rate of three shrubs per caliper inch.

(6) Existing trees preserved during development shall count toward the total tree requirement at a ratio of two caliper inches of preserved tree to one caliper inch of required tree plantings.

	Tree	Shrub	Groundcover/Perennials	Wall
Tree	Two caliper inches preserved tree to one caliper inch required	Three shrubs for one caliper inch of tree	n/a	n/a
Shrub	Three shrubs for one caliper inch of tree	n/a	Three #1 container perennials and/or ground cover for one #5	Two #5 container shrubs (minimum 30 inches in height) for four linear feet of wall

			container shrub	
Groundcover/Perennials	n/a	Three #1 container perennials and/or ground cover for one #5 container shrub	n/a	n/a
Wall	n/a	Two #5 container shrubs (minimum 30 inches in height) for four linear feet of wall	n/a	n/a

(i) **I-1 and I-2 Zone Landscape.**

(1) **Parking Lot Perimeter Landscape.** Landscaping for the parking lot perimeter shall be per subsection (c)(2) of this section with the following addition:

(i) A minimum of 75 percent of the parking lot perimeter landscape shall be covered by plant material including tree canopy, shrubs, and groundcover at maturity.

(ii) A minimum 25 percent of the proposed shrubs and ground cover shall be identified as native or native alternative on the Suitable Plants List, and 90 percent of the proposed shrubs and ground cover shall be identified as xeric, xeric-low, xeric-medium, or low water on the Suitable Plants List.

(2) **Street Frontage Landscape.** Landscaping for the street frontage shall be per subsection (d) of this section with the following additions:

(i) One tree for every 40 linear feet of street frontage (excluding curb cuts) must be provided, 70 percent of which must be shade trees.

(ii) A minimum 25 percent of the proposed shrubs and ground cover shall be identified as native or native alternative on the Suitable Plants List, and 90

percent of the proposed shrubs and ground cover shall be identified as xeric, xeric-low, xeric-medium, or low water on the Suitable Plants List.

(3) Public Right-of-Way Landscape. Landscaping for the public right-of-way shall be per subsection (b)(17) of this section.

(4) Maintenance. Each owner or the owners' association shall maintain all landscaping.

(5) Other Applicable Sections. The requirements of subsections (j) and (k) of this section shall also apply.

(i) **Landscaping Requirements.**

Zoning of Proposed Development	Landscape Requirement	Location of Landscaping on Site
Single-family residential (R zones)	As required for uses other than single-family residential; and as required in subsections (b)(16) and (g) of this section	As required for uses other than single-family residential; and landscape buffer and public right-of-way
R-5, R-8, R-12, R-16, R-24, R-0, B-1, C-1, C-2, I-O, CSR, MU	Two caliper inches of tree per 3,000 square feet of improved area, with no more than 40 percent of the total being ornamental trees or evergreens. One #5 container shrub per 450 square feet of improved area	Buffer, parking lot, street frontage perimeter, foundation plantings and public right-of-way
B-2	Two caliper inches of tree per 3,000 square feet of improved area, with no more than 40 percent of the total being ornamental trees or evergreens. One #5 container shrub per 450 square feet of improved area	Parking lot, park strip (in right-of-way)
I-1, I-2	As required in subsection (h) of this section and in other subsections of this section where applicable	Street frontage, parking lots, buffers and public right-of-way
MXR, MXG, MXS, MXOC	Two caliper inches of tree per 3,000 square feet of improved area, with no more than 40 percent	Buffer, parking lot, street frontage perimeter,

Zoning of Proposed Development	Landscape Requirement	Location of Landscaping on Site
	of the total being ornamental trees or evergreens. One #5 container shrub per 300 square feet of improved area. Plantings must be evenly distributed throughout the development	foundation plantings and public right-of-way
Facilities: mining, dairy, vineyard, sand or gravel operations, confined animal feeding operation, feedlot, forestry commercial, aviation or surface passenger terminal, pasture	Two caliper inches of tree per 5,000 square feet of improved area. One #5 container shrub per 600 square feet of improved area	Perimeter, buffer and public right-of-way

(j)

(k) **Buffering Between Zoning Districts.**

Zoning of Proposed Development	Zoning of Adjacent Property																	
	SF	R-5	R-8	R-12 R-16	R-24	R-O & MXOC	B-1	B-2	C-1	C-2 I-O	I-1	I-2	M-U	CSR	BP	MXR-	MXG-	MXS-
SF (Subdivisions)	-	-	-	-	-	-	F	-	F	W	W	W	F	-	F	-	-	-
R-5	-	-	-	-	-	-	F	-	F	W	W	W	-	-	F	-	-	-
R-8	-	-	-	-	-	F	F	-	F	W	W	W	F	-	F	A	-	-
R-12 & R-16	-	-	-	-	-	-	F	-	W	W	W	W	F	-	F	A	-	-
R-24	-	-	-	-	-	-	F	-	W	W	W	W	F	-	F	A	-	-
RO & MXOC	A	A	A	A	A	-	A or F	-	A or F	W	W	W	A or F	-	A or F	A	-	-
B-1	F	F	F	A or F	A or F	A or F	A or F	-	A or F	A or F	A or F	A or F	A or F	-	A or F	A	-	-
B-2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C-1	A&W	W	W	W	W	W	-	-	-	-	-	-	-	-	-	-	-	-
C-2 & I-O	W	W	W	W	W	W	F	-	-	-	-	-	A or F	A or F	A or F	A&W	-	-

Zoning of Proposed Development	Zoning of Adjacent Property																	
	SF	R-5	R-8	R-12 R-16	R-24	R-O & MXOC	B-1	B-2	C-1	C-2 I-O	I-1	I-2	M-U	CSR	BP	MXR-	MXG-	MXS-
I-1	W	W	W	W	W	W	F	-	-	-	-	-	A or F	B&W	A or F	B&W	A or F	A or F
I-2	B&W	W	W	W	W	W	F	-	-	-	-	-	A or F	B&W	A or F	B&W	A or F	A or F
M-U	A or F	A or F	A or F	A or F	A or F	A or F	A or F	-	A or F	A or F	A or F	A or F	-	-	-	-	-	-
CSR3 ¹	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BP	A or F	A or F	A or F	A or F	A or F	A or F	A or F	-	-	-	-	-	-	-	-	A or F	A or F	A or F
MXR-	-	-	-	-	-	-	F	-	-	W	W	W	F	-	F	-	-	-
MXG-	-	-	-	-	-	-	F	-	-	W	W	W	F	-	F	-	-	-
MXS-	-	-	-	-	-	-	F	-	-	W	W	W	F	-	F	-	-	-
Notes																		
•A berm with landscaping is an alternative for a required fence or wall if the total height is a minimum of six feet.																		
•Where alleys or streets separate different zone districts, the Director may approve increased landscaping rather than requiring a wall or fence.																		
•The Director may modify this table based on the uses proposed in any zone district.																		
¹ Gravel operations subject to buffering adjacent to residential.																		

(I) **Buffer Requirements.**

Buffer Types	Landscaping Requirements	Location of Buffers on Site
Type A	Eight-foot-wide landscape strip with trees and shrubs	Between different uses
Type B	15-foot-wide landscape strip with trees and shrubs	Between different uses
Type F, W	Six-foot fence and wall (see subsection (f) of this section)	Between different uses

Note: Fences and walls are required for most buffers.

(Ord. 4646, 11-19-14; amended during 2010 codification; Ord. 4419, 4-5-10)

21.10.020 Terms defined.

Approved Street Trees for Grand Junction's Rights-of-Way means the list of trees, shrubs, vines, and evergreens in public rights-of-way maintained by the Forestry Board (see Section 8.32.020).

Buffer/Buffering means an object or area with landscaping, including trees, shrubs, a wall, fence, berm, or any combination thereof that serves as a visual and auditory screen between properties.

Colorado Nursery Act means C.R.S. Title 35 Article 26 as amended.

Caliper means the diameter of the tree trunk measured 4.5 feet above the ground on the uphill side of the tree or 6 inches above the root ball at time of planting.

Canopy drip line means the area directly located under the outer circumference of the tree branches from which water drips onto the ground.

Evergreen tree means any tree having foliage that persists and remains green throughout the year.

Functional turf means an area of turf measuring no less than 30 feet in width and length with a minimum area 1,500 square feet for the purposes of common recreational uses open to the public, members of a neighborhood, or clients and/or customers of a commercial or office use.

Graywater treatment works means an arrangement of devices and structures used to: (a) collect graywater from within a building or a Facility; and (b) treat, neutralize, or stabilize graywater within the same building or Facility to the level necessary for its authorized uses. C.R.S 25-8-103(8.4)

Improved area means the developed portion of a property consisting of areas occupied by buildings, asphalt, concrete, gravel, or landscaped area. Where phased development is proposed, the improved area shall be identified and measured separately for each phase of development.

Lot coverage means that area of the lot or parcel which may be occupied by impervious surfaces.

Noxious or invasive species means non-native plants that have a recognized harmful impact on natural habitats and/or are likely to displace native plant species for light, space, soil moisture and nutrients, including those noxious species identified under the Colorado Noxious Weed Act codified at C.R.S. Title 35 Article 5.5, as amended.

Ornamental tree means a tree that has a height and spread between 15 feet and 30 feet at maturity.

Shade tree means a tree that has a height and/or spread of 30 feet or greater at maturity.

Suitable Plant List means a list maintained by the Director of plant species and genera approved to be installed in accordance with this code.

Root ball means the mass formed by the roots of a plant and the soil surrounding them at the time of planting.

Rootzone means the area of the ground around the base of the tree where rooting occurs, as measured from the trunk to a distance twice the radius of the canopy drip line.

Shade tree means a tree that has a height and/or spread of 30 feet or greater at maturity.

Suitable Plant List means a list maintained by the Director of plant species and genera approved to be installed in accordance with this code.

Tree canopy coverage means the area of ground directly beneath the leaves and branches of trees.

Turf means grasses planted to form a dense growth of leaf blades and roots, such as Kentucky Blue Grass and similar species used for planting lawns.

~~Water wise means landscape methods which conserve water through the use of drought-tolerant plants, planting and irrigation techniques.~~

Xeriscape or xeriscaping means landscape plantings that reduce the need for irrigation.

21.03.030 Measurements.

(e) Lot Coverage. Lot coverage is measured as the percentage of the total lot area covered by impervious surfaces. It is calculated by dividing the square footage of impervious surface by the square footage of the lot.

21.03.080 Mixed Use Standards.

Mixed Use and Industrial Bulk Standards Summary Table

	R-O	B-1	B-2	C-1	C-2	CSR	M-U	BP	I-O	I-1	I-2
Lot											
Area (min. ft. unless otherwise specified)	5,000	10,000	None	20,000	20,000	1 ac	1 ac	1 ac	1 ac	1 ac	1 ac
Width	50	50	None	50	50	100	100	100	100	100	100

Frontage	None	None	None	None	None	None	None	None	None	None	None
Setback											
Principal structure											
Front (min. ft.)	20	20	0	15	15	15	15	15	15	15	15
Side (min. ft.)	5	0	0	0	0	0	0	0	0	0	0
Side – abutting residential (min. ft.)	0	10	0	10	10	10	10	10	10	10	10
Rear (min. ft.)	10	15	0	10	10	10	10	10	10	10	10
Accessory structure											
Front (min. ft.)	25	25	25	25	25	25	25	25	25	25	25
Side (min. ft.)	3	0	0	0	0	0	0	0	0	0	0
Side – abutting residential (min. ft.)	0	5	0	5	5	5	5	5	5	5	0
Rear (min. ft.)	5	15	0	10	10	10	10	10	10	10	10
Other Dimensional Requirements											
Lot coverage (max.)	<u>70%</u>	<u>80%+100%</u>	<u>100%</u>	<u>80%+100%</u>	<u>80%+100%</u>	<u>75%+100%</u>	<u>80%+100%</u>	<u>80%+100%</u>	<u>80%+100%</u>	<u>90%+100%</u>	<u>90%+100%</u>
Height (max. ft.)	40	40	80	65	65	65	65	65	65	50	50
Density (min. units per acre)	4	8	8	12	n/a	n/a	8	8	n/a	n/a	n/a
Density (max. units per acre)	None	16	None	24	None	None	24	24	None	None	None
** Gross floor area	10,000	15,000	None	None	None	None	None	None	None	None	None
Notes											

B-1: Max. gross floor area varies by use; retail – 15,000 sf (unless a CUP is approved), office 30,000

B-2: Parking front setback for parking as a principal use – 30 ft., as an accessory use – 6 ft.

C-1: Min. rear setback – 0 if an alley is present

CSR: Maximum building height abutting residential – 40 ft.

****** Gross floor area calculated for maximum size may exclude eaves, covered or uncovered porches, upper story decks and balconies, breezeways, exterior covered stairwells and attached decorative walls which are less than or equal to three feet in height.

21.04.030 Use-Specific Standards

(g) Mini-Warehouse.

(1) Purpose. This subsection sets standards for the establishment of safe and attractive mini-warehouse developments. These standards apply to all mini-warehouses, including those that provide indoor and/or outdoor units.

(2) Accessory Uses. Accessory uses may include living quarters for a resident manager or security and leasing offices.

(3) Uses Prohibited.

(i) No owner, operator or lessee of any mini-warehouse or portion thereof shall offer for sale or sell any item of personal property, or conduct any type of commercial activity of any kind whatsoever, including such uses as sales, service and repair operations, manufacturing, or truck/equipment rentals, other than leasing of the units, or permit same to occur upon any area designated for the mini-warehouse use, except that estate or foreclosure sales held by the mini-warehouse owner or operator shall be allowed.

(ii) No outside storage shall be permitted except the storage of licensed vehicles within approved areas designated for such storage. This storage shall meet the requirements of GJMC 21.04.040.

(4) Landscaping and Screening. All mini-warehouses shall provide the following in addition to meeting standards of GJMC 21.06.040:

~~(i) A 30-inch-high by 10-foot-wide landscaped berm is required between storage units and the abutting public right-of-way. The berm shall include trees that are planted every 30 feet.~~

(ii) For outdoor mini-warehouse units, landscaping islands shall be provided at the end of each row of storage units when visible from the public right-of-way. Landscape islands shall be planted with shrubs that reach at least five feet of height at maturity.

(45) Off-Street Parking and Driveways Standards.

- (i) Drive aisles within outdoor mini-warehouse facilities shall be a minimum of 26 feet wide for single-load aisles and 30 feet for double-load aisles.
- (ii) A minimum of two parking spaces shall be provided adjacent to the primary entry structure.

(56) Architectural and Site Design Standards. All mini_-warehouses shall meet the following standards:

- (i) Mini_-warehouses that front public rights-of-way shall provide a primary entry structure at the entrance of the development that meets the following standards:

- (A) No parking shall be placed between the building and the street.
- (B) Windows or similar architectural features shall cover at least 30 percent of the street-facing facade.
- (C) Building materials such as brick, stone, wood, architectural-grade metal, or similar exterior shall be used.
- (D) Two of the following features shall be utilized in the design of the primary entry structure:
 - a. Tower feature.
 - b. Facade articulations on the street-facing facade.
 - c. Roofline articulations in the street-facing facade.
 - d. Decorative lighting on the street-facing facade. This lighting must comply with all standards found in GJMC 21.06.080.

- (ii) Any street-facing facade of each storage unit must be covered with building materials such as brick, stone, wood, architectural-grade metal, or similar exterior.

(67) Signage. All mini_-warehouses shall provide the following in addition to meeting standards of GJMC 21.06.070:

- (i) Individual mini_-warehouses shall be clearly marked with numbers or letters identifying the individual units and a directory of the unit locations shall be posted at the entrance or office of the facility.

- (ii) Signs or other advertising shall not be placed upon, attached to, or painted on any walls or fences required for landscaping and buffering in the mini-warehouse development.

21.06.040 Landscape, buffering and screening standards

(a) **Purpose and Goals.** The purpose of this section is to enhance the aesthetic appeal and context sensitivity of new development, achieve efficient use of water resources, expand urban tree canopy, and contribute to a livable urban environment. Landscaping reduces heat and glare, facilitates movement of traffic within parking areas, provides shade for citizens shades cars and parking surfaces, reduces local and ambient temperatures, buffers and screens cars from adjacent properties, promotes natural percolation of surface waters, improves air quality, buffers and screens potentially incompatible uses from one another, and conserves and enhances the value of property and neighborhoods within the City.

(b) ~~General Landscape Standards.~~ Authority.

(1) The Director shall decide all questions of soils, plant selection and care, irrigation installation and other vegetation and landscaping questions, except for trees, shrubs, vines, and evergreens in the right-of-way. The City Forester shall decide all questions of plantings in the right-of-way.

(2) Variances to this section and appeals of administrative decisions (where this code gives the Director discretionary authority) shall be referred to the Planning Commission.

C —General Landscape Standards

(1) Compliance. All landscaping required by this code shall comply with the standards and requirements of this section. ~~The landscaping requirements of this code shall not apply to a lot zoned for one or two dwellings.~~ Landscaping for new developments shall occur in buffer areas, all interior parking areas, along the perimeter of the property, around new and existing structures, and along street frontages and within any right-of-way not used ~~nor planned to be used~~ for infrastructure.

(2) Plant Quantities. The amount of landscaping is based on ~~gross area~~the improved area of proposed development.

(3) Landscaping Standards. All new development must install, ~~and~~ maintain, and protect landscaping as required by this code. (See subsection ~~(b)(1k)~~ of this section for an example of the landscaping requirements of this section.)

~~(i) On-site frontage landscaping may not apply in the B-2 zone downtown commercial. (See zone district standards.)~~

(i) The landscaping requirements of this code shall not apply to a lot on which the principal use is a single family residence or duplex. Requirements for residential subdivisions shall continue to apply.

(ii) Landscaping in the abutting right-of-way is required in addition to overall site landscaping requirements and must be installed and maintained as required by Section 21.06.040(b)(16) of this code.

(iii) Buffer landscaping is required in addition to overall site landscaping requirements as required by this Code.

(4) Acceptable Plant Material. ~~Vegetation must be suitable for Grand Junction's climate and soils. The Director may allow the use of any plant if sufficient information is provided to show suitability including salt tolerance, sun and shade requirements based on planting locations, growth habit, etc. Noxious weeds are not allowed. (The Director will keep a list of suitable plants.)~~

(i) Vegetation must be suitable for Grand Junction's climate and soils and shall be selected from the City of Grand Junction Suitable Plant List, to be maintained by the Director. Applicants may petition the inclusion of plants not found on the Suitable Plant List and shall provide sufficient information about the proposed species to facilitate review. The Suitable Plan List identifies the anticipated water needs of each plant species. The Director may allow the use of any plant if sufficient information is provided to show suitability including salt tolerance, sun and shade requirements based on planting locations, growth habit, etc. Noxious or invasive species are not allowed to be planted in development but may be preserved in development.

(A) The Director maintains the authority not to approve a plant species that appears on the Suitable Plant List if the Director deems it inappropriate under the planting conditions proposed in a development.

(iii) Plant materials shall meet or exceed the plant quality and species standards of the current American Standard for Nursery Stock and be consistent with the Colorado Nursery Act.

(iv) All plants proposed for installation shall be selected, spaced, and planted appropriately based upon their adaptability to the climatic, geologic, and topographical conditions of the project site.

(v) A minimum 25 percent of the proposed shrubs and ground cover shall be identified as native or native alternative on the Suitable Plants List, and 90 percent of the proposed shrubs and ground cover shall be identified as xeric, xeric-low, xeric-medium, or low water on the Suitable Plants List.

(vi) Turf not meeting the definition of functional turf shall not exceed 15 percent of any required landscaping area in the City of Grand Junction.

(vii) Functional turf may exceed the 15 percent maximum.

(5) Minimum ~~pPlant s~~Sizes ~~are~~: All plants shall meet the following minimum plant sizes when installed.

(i) Shade tree, two-~~inch~~ caliper inches ~~(measured six inches above root ball) at time of planting. At maturity, a shade tree has a height and/or spread of 30 feet or greater.~~ If two-~~inch~~ caliper inch shade trees are not available due to seasonal shortages or shortages in desired varieties, the Director may approve the installation of smaller trees, provided the proportional difference in caliper inches is compensated for by installing additional trees. ~~For example, the installation of six one-and-one-half-inch caliper shade trees would result in a shortfall of three caliper inches, which could be compensated for with two additional one-and-one-half-inch trees.~~ However, a minimum caliper of one and one-half inches shall be required.

(ii) Ornamental tree, one-and-one-half-~~inch~~ caliper inches ~~(measured six inches above root ball) at time of planting. At maturity, an ornamental tree has a spread and height between 15 feet and 30 feet.~~

(iii) Evergreen tree, two caliper inches and six feet tall at time of planting.

(iv) ~~Deciduous shrub~~Shrub, #5 container.

(v) ~~Evergreen shrub, five-gallon container.~~

(vi) Perennials and ground covers, #5 container.

(vii) Turf mix, native grasses and wild flower mix are the only vegetation that may be planted as seed or by plugs. Turf may planted as sod rolls

<u>Minimum Plant Sizes</u>	
<u>Planting Type</u>	<u>Size at Time of Planting</u>
<u>Shade Tree</u>	<u>Two caliper inches</u>
<u>Ornamental Tree</u>	<u>One-and-one-half caliper inches</u>
<u>Evergreen Tree</u>	<u>Two caliper inches and six feet tall</u>
<u>Shrub</u>	<u>#5 Container</u>
<u>Perennial</u>	<u>#1 Container</u>
<u>Groundcover</u>	<u>#1 Container</u>
<u>Turf</u>	<u>As seed, by plug, or as sod roll</u>

(~~6~~7) Irrigation. All vegetation and landscaped areas must be provided with a permanent irrigation system including a system supplied by water from an approved graywater treatment works.

(i) Non-potable irrigation water shall be used if available for the proposed development area unless the Director allows the use of potable water.

(ii) An underground pressurized irrigation system and/or drip system is required for all landscape areas. ~~on the property and in any right-of-way.~~

(iii) If connected to a ~~drinking-potable~~ water system, all irrigation systems require State-approved backflow prevention devices.

(iv) All irrigation for non-potable irrigation water systems must have adequate filters easily accessible above ground or within an appropriately sized valve box.

(v) Native grasses must have a permanent irrigation source that is zoned separately from higher water demand landscapes. Once the grasses are

established, irrigation to native grass areas can be reduced to a level that maintains coverage typical of the grass mix and to suppress weed growth.

(vi) Irrigation applied to trees shall be expanded or supplemented as appropriate to rootzone expansion over the life of the tree.

~~(78)~~ Landscape Plans ~~and Equivalent Plants.~~

(i) All applications for development shall identify the required landscaped areas and include a landscape plan in accordance with the requirements in this section. Landscape plans must identify the species and sizes of vegetation (SSID manual).

(ii) All landscaping shall be installed, maintained, and protected as shown on the approved plan.

(iii) All changes to the landscape plan require prior written approval from the Director.

~~(ivii)~~ An equivalent species may be substituted in the field with prior written approval of the Director without prior approval of the Director, provided a revised drawing is submitted to the Department. Plants are “equivalent” if they have the same growth habit and rate, same cover, leafing, shade characteristics and function, have similar water requirements as identified as the City of Grand Junction Suitable Plants List, and thrive in the same microclimate, soils and water conditions.

~~(iv)~~ All other changes to the landscape plan require prior approval from the Director.

(v) All development plans shall designate required landscaping areas. ~~Subdivision plats shall designate required landscaping areas.~~

~~(vi)~~ Landscape plans shall identify the species and sizes of vegetation. The owner shall keep each fire hydrant unobscured by plant material.

(vii) Landscape plans shall be stamped by a ~~licensed~~ landscape architect licensed in the State of Colorado. Inspection and compliance with approved landscape plan must be certified by a licensed landscape architect prior to issuance of a certificate of occupancy, or the release of DIA security funds. Additionally, the property owner or irrigation installer must provide a letter describing that adequate additional capacity exists in the irrigation system to support the landscaping materials at maturity prior to issuance of a certificate of occupancy or the release of DIA security funds.

(A) A licensed landscape architect is not required to produce landscape plans if the plans are submitted for a Minor Site Plan review unless required by State statute. All other requirements continue to apply to landscaping for Minor Site Plans.

(viii) All landscape plans shall include an irrigation plan. The irrigation plan shall comply with the standards in the SSID manual. See GJMC 21.06.010(c).

(ix) Utility composite plans must be submitted with landscape plans.

(x) Expansion of a developed site as defined in GJMC 21.02.100(f) that requires a Site Plan Review shall require a landscaping plan and correction of nonconforming landscaping as provided in GJMC 21.08.040.

(xi) Tree protection measures shall be clearly identified on the construction and landscape plans.

(xii) Wall and fence elevations and typical cross sections must be submitted with the landscape plan at a minimum scale of one-half inch equals one foot.

(8) Preservation of Significant ~~Trees~~Landscape Features.

(i) Existing landscape features such as escarpments, large ~~or old~~ trees or stands, heavy vegetative cover, ponds and bluffs shall be identified by the ~~Director~~Applicant as part of the development review process. This identification shall include a written inventory of significant trees to be produced with a landscaping plan. Any significant tree as defined in subsection (c) below shall be identified on the proposed landscaping plan. To the extent the Director deems practicable, such features shall be preserved by the final plans and to such extent, count toward landscape and open space area requirements. Features to be preserved shall be protected throughout site development. If a significant live feature which was to be preserved dies or is substantially damaged, the developer shall replace it with an equivalent feature as determined by the Director. No person shall kill or damage a landscape feature required to be preserved by this section. The developer shall protect trees from compaction under the canopy drip line of the tree unless the City Forester says otherwise.

(ii) All trees not identified as prohibited on the Suitable Plants List and that have a diameter that exceeds 15 caliper inches shall be considered significant. During construction, fencing or similar barriers shall isolate and protect the landscape features to be preserved.

~~(iii) Where significant trees exist on a property, no fewer than 30 percent of significant trees shall be preserved during development. Significant trees that are removed shall be replaced at a rate of one caliper inch of tree per two caliper inches of the significant tree to be removed, in addition to new tree plantings otherwise required by this Code. See GJMC 21.06.040(h)(6) for credit applied to preserved trees. All protection measures shall be clearly identified on the construction and landscape plans.~~

~~(ivii) Significant trees to be preserved shall be visibly healthy and free from disease or parasite infection. No vehicles or equipment shall be driven or parked nor shall any materials be piled within the canopy drip line of any tree to be preserved.~~

~~(v) Features to be preserved shall be protected throughout site development. No person shall kill or damage a landscape feature required to be preserved by this section. The developer shall protect trees from compaction.~~

~~(A) During construction, existing plant material to be preserved shall be enclosed by a temporary fence at least five feet outside the canopy dripline. In no case shall vehicles be parked, or materials or equipment be stored or stockpiled within the enclosed area.~~

~~(B) Irrigation shall be provided to trees preserved during construction of sufficient quantity to ensure their health and survival.~~

~~(C) If a significant tree which was to be preserved dies or is substantially damaged, the developer shall replace it at the rate of one newly planted tree per 2 caliper inches of damaged or destroyed tree.~~

(9) Protection of Landscape Areas. All landscape areas (except in the right-of-way where a street side curb does not exist) shall be protected from vehicles through the use of concrete curbing, large rocks, or other similar obstructions.

(10) Utility Lines. If the location of utilities conflicts with the landscaping provisions, the Director may approve an equivalent alternative.

~~(i) Utility composite plans must be submitted with landscape plans.~~

~~(ii) Trees which will grow to a height of greater than 15 feet at maturity shall not be planted under electrical lines.~~

~~(iii) Ornamental and evergreen trees planted under an electrical line may count towards the total tree requirement.~~

(11) Sight Distance. The owner shall maintain all vegetation, fences, walls and berms so that there is no sightsite distance hazard nor road or pedestrian hazard (see TEDS).

(12) Soil and Planting Beds. Soil in landscape areas must be amended and all vegetation planted in accordance with good horticultural practices.

(i) Details for the planting of trees, shrubs and other vegetation must be shown on the landscaping plans.

(ii) Shrub beds adjacent to turf or native grass areas are to be edged with concrete, metal, brick or substantial wood material. Plastic and other light duty edgings are not allowed.

(iii) Organic mMulch to a minimum of 3 inches and weed fabric areis required for all shrub beds.

(iv) ~~—The minimum square footage of planting area for a five-gallon evergreen or deciduous shrub is 16 square feet. These minimum square footages may be varied by a qualified professional. Prior to planting, compacted soils shall be transformed to a friable condition.~~

(v) Compost, soil amendments, or retained topsoil shall be incorporated into the soil to a minimum depth of 6 inches for tree and shrub plantings.

(13) Trees.

~~(i) —Trees should not be planted near a light pole if eclipsing of light will occur at maturity. Placing light poles in the parking lot, away from landscape area and between parking bays, helps eliminate this conflict and should be considered.~~

(ii) Tree canopies may overlap by up to 2030 percent of the diameter of the tree at maturity. Tree clustering may be allowed with some species so long as clustering does not adversely affect the mature canopy.

(ii) Trees which will grow to a height of greater than 25 feet at maturity shall not be planted under overhead electrical lines.

(iii) Weed fabric shall not be used within 8 feet of the base of a tree.

~~(iiiiv)~~ At planting, tree shall be healthy and free of disease. Tree trunks must be reasonably straight with minimal doglegs. Roots shall be checked prior to planting and corrected for optimal growth patterns.

(iv) Wire baskets, burlap wrappings, rope, twine or any similar shipping materials shall be removed before planting.

(vi) Tree planting holes shall be of sufficient depth so that the flare of the tree above the root ball is no higher than 1 inch above grade.

(vii) Tree planting holes shall be of a diameter no less than three times the diameter of the tree's root ball at time of planting.

(viii) The minimum square footage of planting area for a shade tree is 140 square feet. ~~The Director may vary the minimum square footage.~~

(ix) Ornamental trees shall be planted in a landscape strip that is no less than six feet in width (not including curb and gutter). Shade trees shall be planted in a landscape strip that is no less than eight feet in width (not including curb and gutter).

(xvi) SpeciesTree Diversity. The percent of any one type of tree that can be planted in a development shall be as follows:

(A) Zero through five trees: No limitation.

(B) Six to ten~~21~~ trees: No more than 50 percent of one species~~genus~~.

(C) Eleven to twenty trees: No more than 33 percent of one genus

(C) twenty-one~~21~~ or more trees: No more than 20 percent of one species~~genus~~.

(xi) A minimum of 50 percent of proposed tree plantings shall be identified as preferred trees by the Plant List.

(xii) Trees shall not be planted near a light pole if eclipsing of light will occur at maturity. Placing light poles in the parking lot, away from landscape areas and between parking bays, helps eliminate this conflict and should be considered.

(xiii) When calculating tree quantities, any fraction of a tree is rounded up to the next whole number.

(14) Shrubs.

(i) ~~Twenty-five percent of the required shrubs may be converted to turf based on one five-gallon shrub per 50 square feet of turf. A minimum 25~~

percent of the proposed shrubs and ground cover shall be identified as native or native alternative on the Suitable Plants List, and 90 percent of the proposed shrubs and ground cover shall be identified as xeric, xeric-low, xeric-medium, or low water on the Suitable Plants List.

~~(ii) Ten percent of the required shrubs may be converted to perennials and/or ground covers at a ratio of three one-gallon perennials and/or ground covers for one five-gallon shrub.~~

(iii) ShrubSpecies Diversity. The percent of any one type of shrub that can be planted in a development shall be as follows:

(A) ~~Ten~~10 through 19 shrubs: 50 percent per genus.

(B) ~~Twenty~~20 through 39 shrubs: 33 percent per genus.

(C) ~~40~~Forty or more through ~~59~~ shrubs: 25 percent per genus.

~~(D) 60 or more shrubs: 15 percent.~~

~~(iiv)~~ When calculating ~~tree and~~ shrub quantities, any fraction of a shrub ~~or tree or other requirement~~ is rounded up to the next whole number.

~~(iv) With the approval of the Director, the number of shrubs may be reduced in exchange for additional trees or tree size at a rate of three shrubs per caliper inch. The minimum area for planting an evergreen or deciduous shrub is 16 square feet.~~

(15) Maintenance:

~~(i)~~ The owners, tenants, and occupants, including homeowners' associations, for all new and existing uses in the City must maintain landscaping in a healthy, growing, neat and well-maintained condition:

~~(i) Maintain landscaping in a healthy, growing, neat and well-maintained condition.~~

~~(ii) (A)~~ Maintenance includes watering, weeding, pruning, fertilization, pest control, trash and litter removal, replacement of dead or diseased plant material, reseeding and other reasonable efforts.

~~(iii) (B)~~ Any plant that dies or substantially damaged due to improper maintenance must be replaced with an equivalent live plant within 90 days of notification plant death or, ~~if during the winter~~, by the next April 1st.

(iv) Hay mulch used during the preparation or establishment of landscaping must be certified weed-free by the Colorado Department of Agriculture.

(v) ~~On his own or based on a citizen complaint, the Director may, without notice and without a warrant, walk on the landscaped portion of the property from time to time to inspect the condition of landscaping. The Director or designee may from time to time, inspect the condition of landscaping wherever no reasonable expectation of privacy exists.~~

(A) The purpose of such site inspections shall be to verify that all required landscaping has been maintained in a healthy, growing, neat and well-maintained condition. Property owners shall be notified of necessary corrective action for failure to comply with the maintenance provisions of this section.

~~(vi) Between one and two years after installation of required landscaping, Code Enforcement shall conduct a site inspection to verify that all required landscaping has been maintained in a healthy, growing, neat and well-maintained condition. Property owners shall be notified of necessary corrective action for failure to comply with the maintenance provisions of this section. Maintenance of landscaping in unimproved rights-of-way shall be the responsibilities of owners, occupants, and tenants.~~

(v) Fire hydrants shall not be unobscured by plant material. Fire hydrants shall be visible from the center of the right-of-way at an angle of 45 degrees.

(vi) These requirements shall be specified in the articles of incorporation or bylaws for a homeowners' association whenever the homeowners' association is assigned the responsibility of maintaining landscape areas.

(16) Public Right-of-Way. ~~Except where a detached sidewalk exists or is proposed and approved (see subsection (b)(16)(iv) of this section), landscaping on public right-of-way shall not be counted toward any landscape or open space requirements of this code, unless specifically provided otherwise in this code.~~

(i) All unimproved right-of-way adjacent on the side abutting a development which is not in the City's ~~one~~ten-year capital plan to be improved must be landscaped. All right-of-way landscaping shall be irrigated and maintained by the adjoining private property owner, unless the City agrees to accept it for

maintenance. If it is to be maintained by the City, a separate irrigation system shall be provided.

(ii) At least 75 percent of the unpaved adjacent right-of-way shall be landscaped with turf, low shrubs or ground cover. ~~The Director may vary the required landscaping to obtain a consistent appearance in the area or with existing or planned right-of-way landscaping. No more than 15% of the right-of-way shall be landscaped with turf.~~

(iii) For the purpose of meeting minimum plant quantities, 50 percent of landscaping plantings on public right-of-way shall be counted toward the landscape or open space requirements of this code, unless specifically provided otherwise in this Code.

(iv) The owner of the nearest property shall keep all rights-of-way, which are not hard surfaced, free of weeds, litter, junk, rubbish and obstructions. To prevent weed growth, erosion and blowing dust, right-of-way areas not covered by vegetation or paving shall be covered with organic mulch, wood chips, ~~bark chips, decorative rocks or cobble~~, or similar natural materials, ~~to be underlain by weed fabric or other barrier.~~

(iv) ~~Where detached sidewalks exist, or are proposed, a maximum of 50 percent of the public right-of-way landscaping may be counted toward the total required landscaping. The right-of-way landscaping between the curb and sidewalk shall contain street trees spaced every 40 feet. The right-of-way landscaping between the curb and sidewalk shall contain street trees spaced every 40 feet. Right-of-way landscaping shall be a minimum of eight feet wide in any direction.~~

(vi) ~~The Director may allow decorative paving in landscaped areas in commercial or other high pedestrian traffic areas if the decorative paving is compatible with nearby right-of-way paving and landscaping. No tree shall be removed from the public right-of-way without the approval of the City Forester. Trees removed from the right-of-way without approval shall be subject to penalties per GJMC 9.04.100.~~

(vii) Trees planted in the public right-of-way shall be of species identified on the list of Approved Street Trees for Grand Junction's Rights-of-Way.

(17) Pervious Coverage. Landscaped and buffer areas shall count toward the pervious ~~area requirements~~surfaces included in lot coverage calculations.

~~(18) Authority.~~

~~(i) The Director shall decide all questions of soils, plant selection and care, irrigation installation and other vegetation and landscaping questions.~~

~~(ii) The Director may approve an applicant's request to vary from the required number and types of plants or landscaped area if:~~

~~(A) The number of trees exceeds 25 percent of the minimum number of trees; and/or~~

~~(B) Trees exceed the minimum caliper requirement by one inch or more; and/or~~

~~(C) Additional berming or other attractive buffering, public art, enhanced paving treatments for public plazas (brick or concrete pavers, tinted and stamped concrete, etc.) is provided. The Director may grant up to a 10 percent reduction of the square footage of improved area used to calculate the landscape requirement where these types of enhancements are included in a development.~~

~~(D) Additional trees or larger trees can be exchanged on a per-caliper-inch basis with three shrubs equaling one caliper inch. Credit for using larger trees would be based on a direct exchange of caliper inches. For example: 10 three-inch caliper trees equaling 30 caliper inches is the same as 15 two-inch caliper trees equaling 30 caliper inches; one two-inch caliper tree equals six shrubs. Trees may be substituted for shrubs, but shrubs may not be substituted for trees.~~

~~(E) If the total amount of required landscaping is provided, the Director may allow the owner to place the landscaping on another appropriate part of the lot.~~

~~(19) Water Wise. Because of Grand Junction's desert environment, water wise design and the use of xeric (low water use) plants are strongly encouraged. Water wise designs shall employ the seven basic principles of xeric design which include "comprehensive planning and design for low water use, creating practical turf areas, selecting low water use plants and organizing plants by water usage, using adequate soil prep, using water conserving mulches, irrigating efficiently and maintaining the landscape appropriately" (source: Denver Water Board).~~

~~(i) Low water use plants are encouraged for use in the "typical" urbanized landscape, especially where the plants can be irrigated (zoned) separately from higher water use plant material. This way of using xeric plants is compatible with any of the requirements of this code.~~

~~(ii) Landscaping designs that mimic the "desert" character of Grand Junction's setting are also encouraged, but must be carefully designed so that~~

~~the basic requirements for shade, screening and buffering are met. Because of this, the Director must approve "desert" or xeric landscape plans as well as variances from the required plant coverage ratios. To further encourage xeriscaping, one-gallon xeric plants shall be equivalent to five-gallon traditional plants. Trees shall be installed in accordance with subsection (b) of this section.~~

(c) **Parking Lots.** The requirements of this subsection are applicable to all public and private parking areas but not to automobile display areas for automobile dealerships (General Retail Sales, Outdoor Operations, Display or Storage) and self-service storage as defined in GJMC 21.04.

(1) Interior Landscaping Requirement. Landscaping is required in the interior of parking lots to direct traffic, to shade cars and structures, to reduce heat and glare and to screen cars from adjacent properties. The interior of all parking lots shall be landscaped as follows:

(i) One landscaped island, parallel to parking spaces, is required for each 20 parking spaces. ~~In lieu of the standard landscape island, one "orchard style" landscape island may be used for every six parking spaces. The orchard style landscape islands shall be evenly spaced between end landscape islands. (See subsection (j) of this section.)~~

(ii) Landscape islands must be at least 140 square feet. The narrowest/smallest dimension of a parking lot island shall be eight feet, measured from back of curb to back of curb.

(iii) One landscaped divider island, parallel to the parking lot drive aisles, designed to prevent diagonal movement across the parking lot, shall be located for every three parking lot drive aisles.

(iv) A landscape island is required at the end of every row of parking spaces, regardless of length or number of spaces.

~~(v) Wheel stop barriers on all sides adjacent to the parking lot surface are required to protect landscape islands from vehicles.~~

(vi) A corner area (where it is not feasible to park a vehicle) may be considered an end island for the rows on the perimeter of the parking lot.

(vii) Landscaping of the interior of a parking lot shall include trees and shrubs.

(vi) To improve the management of stormwater runoff, structurally-sound permeable pavers may be used in parking areas, subject to the approval of the Director. Use of permeable pavers for ten parking stalls shall result in a reduction of one required parking stall per the required parking ratios in GJMC 21.06.050.

(vii) Trees planted in parking lot islands shall be selected from those identified as Parking Lot Island Trees on the Plant List.

(vii) A minimum 25 percent of the proposed shrubs and ground cover shall be identified as native or native alternative on the Suitable Plants List, and 90 percent of the proposed shrubs and ground cover shall be identified as xeric, xeric-low, xeric-medium, or low water on the Suitable Plants List.

(ix) The use of bioswales in parking lot designs is encouraged to facilitate stormwater management.

(2) Parking Lot Perimeter. Landscaping is required around the entire perimeter of a parking lot ~~to assist in the shading of cars,~~ to assist in the abatement of heat and to reduce the amount of glare from glass and metal, and to assist in the screening of cars from adjacent properties. The perimeter of a parking lot is defined as the curb line defining the outer boundaries of the parking lot, including dumpster enclosures, bike racks, or other support facilities that are adjacent to the outer curb. Entry drives between a parking lot and the street, drives connecting two internal parking lots or building entry plazas are not included in the perimeter area. The requirements of this subsection are applicable to all public and private parking areas but not to automobile display areas for automobile dealerships (General Retail Sales, Outdoor Operations, Display or Storage) and self-service storage as defined in GJMC 21.04.

(i) Screening shall occur between a street and a parking lot. When screening is required, ~~and~~ street frontage landscape shall apply. (See subsections (c)(3) and (l) of this section.)

(ii) The minimum dimension allowed for the parking lot perimeter landscape strip is ~~six~~8 feet. The width of a landscape strip can be modified by the Director, provided the intent of this section is met.

(iii) Landscaping along the perimeter of parking lots shall include trees and shrubs.

(iv) Parking lots shared by more than one owner shall be landscaped around the perimeter of the combined lots.

(v) A minimum 25 percent of the proposed shrubs and ground cover shall be identified as native or native alternative on the Suitable Plants List, and 90 percent of the proposed shrubs and ground cover shall be identified as xeric, xeric-low, xeric-medium, or low water on the Suitable Plants List.

(3) Screening. All parking lots abutting rights-of-way, entry drives, and adjacent properties must be screened. For this subsection, a “screen” means a ~~turf~~ berm ~~and/or with appropriate groundcover or~~ shrubs.

(i) A 30-inch-high screen is required along 70 percent of parking lots abutting rights-of-way, entry drives, and adjacent properties, excluding curb cuts. The 30-inch screen shall be placed so as to maximize screening of the cars in the parking lot, when viewed from the right-of-way and shall be measured from the ground surface, or the elevation of the roadway if the adjacent road is higher than the property.

(ii) Screening shall not be required between parking lots on adjoining lots where the two lots are designed to function as one.

(iii) If a landscape area is 30 feet wide or greater between a parking lot and a right-of-way, the 30-inch-high screen is not required. This 30-foot-wide or greater area must be ~~100~~⁷⁵ percent covered in plant material including tree canopy coverage, shrubs, and groundcover at maturity within three years. ~~Turf is allowed.~~

~~(iv) The Director may approve a screen wall between a parking lot and a right-of-way if the lot or parcel is unusually small.~~

(iv) A screen wall must not be taller than 30 inches, unless the adjacent roadway is higher than the property, in which case the screen wall shall be 30 inches higher than the adjacent roadway.

~~(vi) Two five-gallon shrubs may be substituted for four linear feet of wall; shrubs must reach a height of at least 30 inches at maturity.~~

~~(vii) A column or jog or equivalent architectural feature is required for every 25 linear feet of wall.~~

(viii) The back of the wall must be at least 30 inches from the face of curb for bumper overhang.

(ix) Shrubs ~~shall~~^{must} be planted on the street side of the wall.

(viiix) There must be at least five feet between the right-of-way and the paved part of a parking lot to use a wall as a screen.

~~(xi) Wall elevations and typical cross sections must be submitted with the landscape plan at a minimum scale of one-half inch equals one foot.~~

(viiiixii) Walls shall be solid masonry with finish on both sides. The finish may consist of stucco, brick, stone or similar material. Unfinished or merely painted concrete block is not permitted.

(ixiii) Shrub plantings in front of a wall are not required in the B-2 downtown district.

(x) A minimum 25 percent of the proposed shrubs and ground cover shall be identified as native or native alternative on the Suitable Plants List, and 90 percent of the proposed shrubs and ground cover shall be identified as xeric, xeric-low, xeric-medium, or low water on the Suitable Plants List.

(d) **Street Frontage Landscape.**

(1) Within all zones (except single-family uses in single-family, B-2 and form based zone districts), the owner shall provide and maintain a minimum 14-foot-wide street frontage landscape adjacent to the public right-of-way.

(2) A minimum of 75 percent of the street frontage landscape shall be covered by plant material at maturity.

~~(3) The Director may allow for up to 50 percent of the 14-foot-wide street frontage to be turf, or up to 100 percent turf coverage may be allowed if the parking lot setback from the right-of-way exceeds 30 feet. Low water usage turf is encouraged.~~

~~(4) All unimproved right-of-way adjacent to new development projects shall be landscaped and irrigated by the owner and/or homeowners' association as per subsection (b)(16) of this section.~~

(35) Landscaping within the street frontage shall include trees and shrubs. If detached walks are not provided with street trees, street trees shall be provided in the street frontage landscape, including one tree for every 40 feet of street frontage.

(4) A minimum 25 percent of the proposed shrubs and ground cover shall be identified as native or native alternative on the Suitable Plants List, and 90 percent

of the proposed shrubs and ground cover shall be identified as xeric, xeric-low, xeric-medium, or low water on the Suitable Plants List.

~~(6) Where detached walks are provided, a minimum street frontage landscape of five feet is acceptable.~~

(e) **Buffers.**

(1) Buffers shall be provided between different zoning districts as indicated in subsection (k) of this section.

(i) ~~Seventy-five~~75 percent of each buffer area shall be landscaped with ~~turf,~~
~~low~~ shrubs or ground cover at maturity.

(ii) One ~~medium-sized~~ tree is required per every 40 linear feet of boundary between different zones.

(iii) A minimum 25 percent of the proposed shrubs and ground cover shall be identified as native or native alternative on the Suitable Plants List, and 90 percent of the proposed shrubs and ground cover shall be identified as xeric, xeric-low, xeric-medium, or low water on the Suitable Plants List.

(2) **Exceptions.**

(i) Where residential or collector streets or alleys separate zoning districts, the Director can require more landscaping instead of a wall or fence.

(ii) Where walkways, paths, or a body of water separates zoning districts, the Director may waive a fence or wall requirement provided the buffering objectives are met by private yards.

(iii) Where a railroad or other right-of-way separates zoning districts, the Director may waive the buffer strip if the buffering objectives are met without them.

(f) **Fences, Walls and Berms.**

(1) **Fences and Walls.** When a higher density or intensity zoning district abuts a lower density or intensity zone district, it is the responsibility of the higher density or intensity property to buffer the abutting zone district according to subsection (k) of this section. When an existing fence or wall substantially meets the requirements of this section, and subsection (k) of this section requires the same form of buffering, an additional fence on the adjacent developing property shall not be required. However, if the new development requires the placement of a wall, and a fence exists on the adjacent property, the wall shall be required. If a wall is

required and a fence is in place, the wall must be placed adjacent to the fence. (Subsection (k) of this section should be referenced to determine when a wall or a fence is required. The more stringent standard shall apply; i.e., if a wall is required and a fence is in place, the wall must be placed adjacent to the fence.) Fences must comply with GJMC [21.04.040\(i\)](#)~~21.04.040(i)~~, any design guidelines and other conditions of approval. Fences and walls required by this section must meet the following:

- (i) Maximum height: six feet (outside of front setback, 30-inch solid height or four feet height if two-thirds open within the front setback and must meet all sight distance requirements).
- (ii) Fence type: solid wood or material with a similar appearance, finished on both sides.
- (iii) Wall type: solid masonry finished on both sides. Finish may consist of stucco, brick, stone or similar material but unfinished or merely painted concrete block is not permitted.
- (iv) Location: within three feet of the property line unless the space is needed to meet landscaping requirements.
- (v) A wall must have a column or other significant architectural feature every 30 feet of length.
- (vi) Any fence or wall over six feet in height requires a building permit.
- (vii) No person shall construct or maintain a fence or a wall without first getting a fence/wall permit from the Director.

(2) Berms. Minimum requirements for berms are as follows:

- (i) Maximum slope of 4:1 for turf areas and 3:1 for shrub beds; and
- (ii) To control erosion and dust, berm slopes must be stabilized with vegetation or by other means consistent with the requirements for the particular landscape area.

(g) Residential Subdivision Perimeter Enclosures.

(1) Intent. The [Director](#)~~decision-maker~~ may require ~~(where deemed necessary)~~ perimeter enclosures (fences and/or walls) around all or part of the perimeter of a residential development. Perimeter enclosures shall be designed to meet the following objectives of protecting public health, safety and welfare: screen negative impacts of adjoining land uses, including streets; protect privacy; maintain a

consistent or complementary appearance with enclosures in the vicinity; maintain consistent appearance of the subdivision; and comply with corridor overlay requirements.

(2) Applicability. When required by the Director, the standards of this subsection shall apply to all residential subdivisions as well as to all mixed-use subdivisions where the square footage of proposed residential uses exceeds the square footage of proposed non-residential uses.

(2) Specifications. Unless specified otherwise at the time of final approval:

(i) A perimeter enclosure includes fences, walls or berms, and combinations thereof, located within five feet of the exterior boundary of a development.

(ii) The maximum height is six feet, including within front setbacks; however, an enclosure constructed on a berm shall not extend more than eight feet above the adjoining sidewalk or crown of road, whichever is lower.

(iii) New enclosures shall be compatible with existing enclosures in the vicinity, if such enclosures meet the requirements of this code.

(iv) A perimeter enclosure in excess of six feet is a structure and requires a building permit.

(v) A perimeter wall must have a column or other significant architectural feature every 30 feet.

(vi) A minimum 25 percent of the proposed shrubs and ground cover shall be identified as native or native alternative on the Suitable Plants List, and 90 percent of the proposed shrubs and ground cover shall be identified as xeric, xeric-low, xeric-medium, or low water on the Suitable Plants List.

(3) Required Perimeter Enclosures. The decision-maker may require a perimeter enclosure as a condition of the final approval if:

(i) Use or enjoyment of property within the development or in the vicinity of the development might be impaired without a perimeter enclosure.

(ii) A perimeter enclosure is necessary to maintain a consistent and complementary appearance with existing or proposed perimeter enclosures in the vicinity.

(iii) A perimeter enclosure is necessary to control ingress and egress for the development.

(iv) A perimeter enclosure is necessary to promote the safety of the public or residents in the vicinity.

(v) A perimeter enclosure is needed to comply with the purpose, objectives or regulations of the subdivision requirements.

(vi) A perimeter enclosure is needed to comply with a corridor overlay district.

~~(vii) The Director will notify applicants of the need for a perimeter enclosure, if required.~~

~~(4) Design of Perimeter Enclosures. A complete landscape plan for the required landscape buffer and a detail drawing of the perimeter enclosure must be submitted at the time of final approval: perimeter enclosure detail at a scale of one-half inch equals one foot.~~

(5) Residential Subdivision Landscape Buffer. On the outside of a perimeter enclosure adjacent to a right-of-way, a 14-foot-wide (on average) landscape buffer shall be provided between the perimeter enclosure and the right-of-way for major and minor arterial streets and major or minor collectors. A five-foot-wide landscape buffer for side and rear yard perimeters shall be provided on all other streets between the perimeter enclosure and the right-of-way.

~~(i) Vegetation in the sight triangle (see TEDS, GJMC Title 29) shall not exceed 30 inches in height at maturity;~~

(ii) In the landscape buffer, one tree per 40 linear feet of perimeter must be provided;

(iii) All perimeter enclosures and landscape buffers must be within a tract dedicated to and maintained by the homeowners' association. The perimeter enclosure and landscaping must be installed by the developer and made a part of the development improvements agreement;

~~(iiv) A minimum of 75 percent of the landscape buffer area shall be covered by plant material including tree canopy coverage, shrubs, and groundcover at maturity. Turf may be allowed for up to 50 percent of the 14-foot-wide landscape strip, at the Director's discretion. Low water usage turf is encouraged;~~

(iv) A minimum 25 percent of the proposed shrubs and ground cover shall be identified as native or native alternative on the Suitable Plants List, and 90 percent of the proposed shrubs and ground cover shall be identified as xeric, xeric-low, xeric-medium, or low water on the Suitable Plants List.

(v) Where detached walks are provided, a minimum buffer of five feet shall be provided. In which case, the right-of-way parkway strip (area between the sidewalk and curb) will also be planted as a landscape buffer and maintained by the HOA.

(6) Construction of Perimeter Enclosures. The perimeter enclosure and required landscape buffer shall be installed by the developer and included in the development improvements agreement.

(7) Ownership and Maintenance. The developer shall refer to the perimeter enclosure in the covenants and restrictions and so that perpetual maintenance is provided for either that the perimeter enclosure be owned and maintained by the owners' association or by individual owners. The perimeter enclosure shall be identified on the plat.

(8) Alternative Construction and Ownership. If the ~~Director~~decision-maker finds that a lot-by-lot construction, ownership and/or maintenance of a perimeter enclosure landscape strip would meet all applicable objectives of this section and the design standards of GJMC ~~21.06.060~~21.06.060, ~~the final approval approved plans~~ shall ~~note~~specify the type and size of materials, placement of fence posts, ~~and length of sections, and the like.~~

(9) Overlay District Conflicts. Where in conflict, the perimeter enclosure requirements or guidelines of approved overlay districts shall supersede the requirements of this section.

~~(10) Variances. Variances to this section and appeals of administrative decisions (where this code gives the Director discretionary authority) shall be referred to the Planning Commission.~~

(h) Substitutions. The requirements outlined in GJMC 21.06.040(i) above may be varied based at the following rates of substitution.

(1) Required trees may be substituted for shrubs and required shrubs may be substituted for trees at a rate of three shrubs equaling one caliper inch of tree. For example: 3 two-inch caliper trees equaling 6 caliper inches may be exchanged for 12 shrubs, or vice versa.

(i) No more than 30 percent of the number of trees required by GJMC 21.06.040(j) may be substituted for shrubs.

(2) Two #5 container shrubs may be substituted for four linear feet of wall when walls are required per GJMC 21.06.040(c)(3). Shrubs substituted for walls must reach a height of at least 30 inches at maturity.

(3) Ten percent of the required shrubs may be converted to perennials and/or ground covers at a ratio of three #1 container perennials and/or ground covers for one #5 container shrub.

(4) The number of shrubs may be reduced in exchange for additional trees or tree size at a rate of three shrubs per caliper inch.

(6) Existing trees preserved during development shall count toward the total tree requirement at a ratio of two caliper inches of preserved tree to one caliper inch of required tree plantings.

	<u>Tree</u>	<u>Shrub</u>	<u>Groundcover/Perennials</u>	<u>Wall</u>
<u>Tree</u>	<u>Two caliper inches preserved tree to one caliper inch required</u>	<u>Three shrubs for one caliper inch of tree</u>	<u>n/a</u>	<u>n/a</u>
<u>Shrub</u>	<u>Three shrubs for one caliper inch of tree</u>	<u>n/a</u>	<u>Three #1 container perennials and/or ground cover for one #5 container shrub</u>	<u>Two #5 container shrubs (minimum 30 inches in height) for four linear feet of wall</u>
<u>Groundcover/Perennials</u>	<u>n/a</u>	<u>Three #1 container perennials and/or ground cover for one #5 container shrub</u>	<u>n/a</u>	<u>n/a</u>
<u>Wall</u>	<u>n/a</u>	<u>Two #5 container shrubs (minimum 30 inches in height) for four linear feet of wall</u>	<u>n/a</u>	<u>n/a</u>

(iH) I-1 and I-2 Zone Landscape.

(1) Parking Lot Perimeter Landscape. Landscaping for the parking lot perimeter shall be per subsection (c)(2) of this section with the following addition:

~~(i) Turf may be allowed for up to 50 percent of the parking lot perimeter, at the Director's discretion. Low water usage turf is encouraged.~~

(ii) A minimum of 75 percent of the parking lot perimeter landscape shall be covered by plant material including tree canopy, shrubs, and groundcover at maturity.

(ii) A minimum 25 percent of the proposed shrubs and ground cover shall be identified as native or native alternative on the Suitable Plants List, and 90 percent of the proposed shrubs and ground cover shall be identified as xeric, xeric-low, xeric-medium, or low water on the Suitable Plants List.

(2) Street Frontage Landscape. Landscaping for the street frontage shall be per subsection (d) of this section with the following additions:

~~(i) Vegetation in the sight triangle in the street frontage must not exceed 30 inches in height at maturity.~~

~~(ii) One tree for every 40 linear feet of street frontage (excluding curb cuts) must be provided, 870 percent of which must be shade trees.~~

(ii) A minimum 25 percent of the proposed shrubs and ground cover shall be identified as native or native alternative on the Suitable Plants List, and 90 percent of the proposed shrubs and ground cover shall be identified as xeric, xeric-low, xeric-medium, or low water on the Suitable Plants List.

(3) Public Right-of-Way Landscape. Landscaping for the public right-of-way shall be per subsection (b)(176) of this section.

(4) Maintenance. Each owner or the owners' association shall maintain all landscaping.

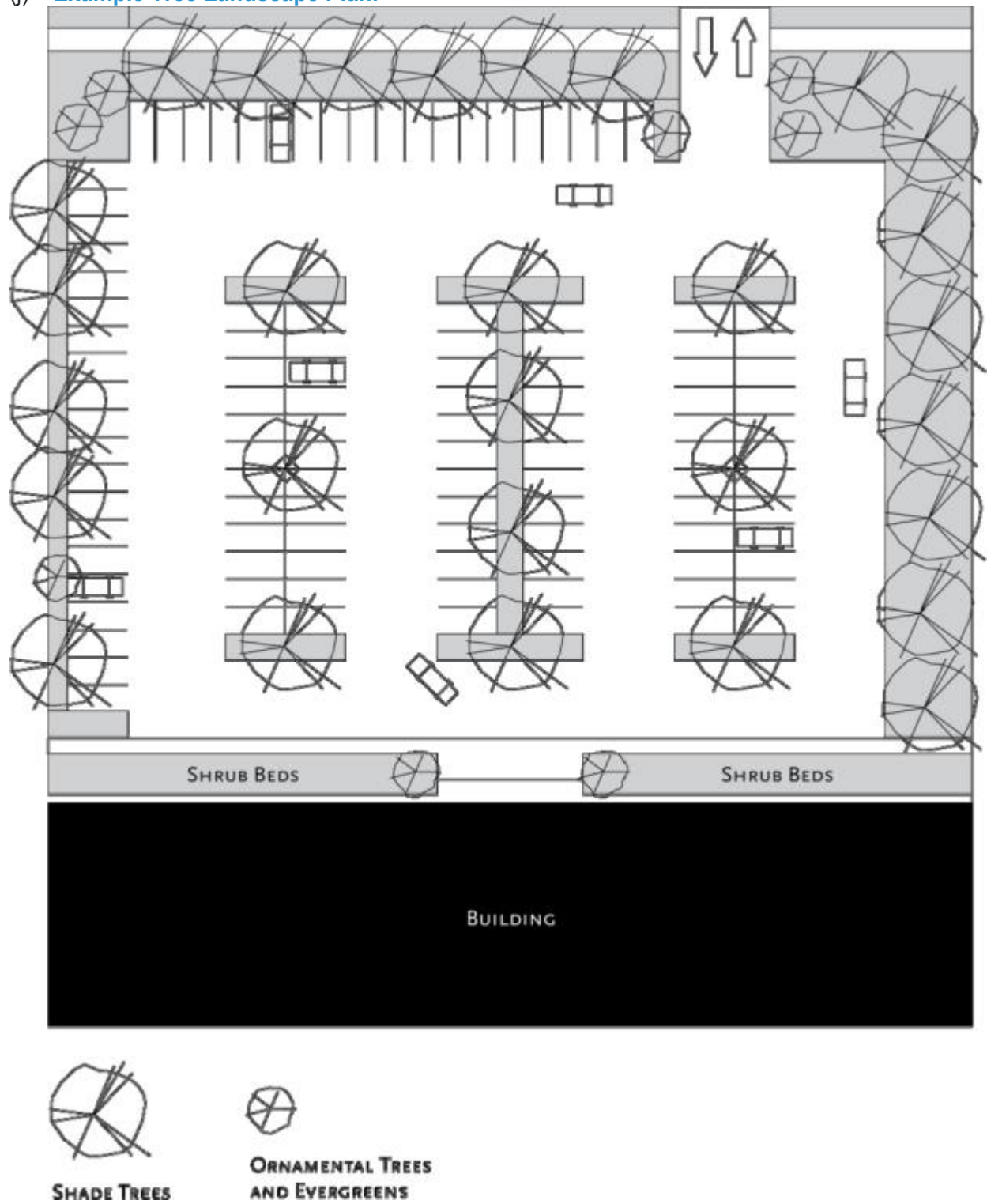
(5) Other Applicable Sections. The requirements of subsections ~~(i), (j), (k)~~ and (k) of this section shall also apply.

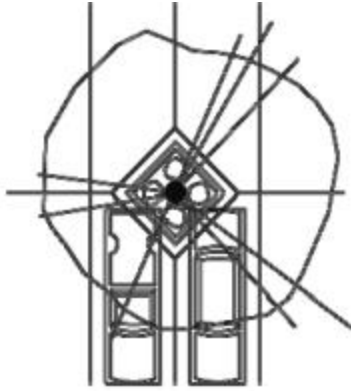
(i) Landscaping Requirements.

Zoning of Proposed Development	Landscape Requirement	Location of Landscaping on Site
Single-family residential (R zones)	As required for uses other than single-family residential; and as required in subsections (b)(16) and (g) of this section	As required for uses other than single-family residential; and landscape buffer and public right-of-way
R-5, R-8, R-12, R-16, R-24, R-0, B-1, C-1, C-2, I-O, CSR, MU	One Two caliper inches of tree per 2,500 3,000 square feet of improved area, with no more than 24 0 percent of the total being ornamental trees or evergreens. One five-gallon #5 container shrub per 450 300 square feet of improved area	Buffer, parking lot, street frontage perimeter, foundation plantings and public right-of-way
B-2	One Two caliper inches of tree per 2,500 3,000 square feet of improved area, with no more than 24 0 percent of the total being ornamental trees or evergreens. One five-gallon #5 container shrub per 450 300 square feet of improved area	Parking lot, park strip (in right-of-way)
I-1, I-2	As required in subsection (h) of this section and in other subsections of this section where applicable	Street frontage, parking lots, buffers and public right-of-way
MXR, MXG, MXS, MXOC	One Two caliper inches of tree per 3,000 square feet of improved area, with no more than 42 0 percent of the total being ornamental trees or evergreens. One five-gallon #5 container shrub per 300 square feet of improved area. Plantings must be evenly distributed throughout the development	Buffer, parking lot, street frontage perimeter, foundation plantings and public right-of-way
Facilities: mining, dairy, vineyard, sand or gravel operations, confined animal feeding operation, feedlot, forestry commercial, aviation or	One Two caliper inches of tree per 5,000 square feet of improved area. One five-gallon #5 container shrub per 600 square feet of improved area	Perimeter, buffer and public right-of-way

Zoning of Proposed Development	Landscape Requirement	Location of Landscaping on Site
surface passenger terminal, pasture		

(j) **Example Tree Landscape Plan.**





6' X 6' SQUARE SHOWN
7' X 7' ALSO POSSIBLE

ORCHARD-STYLE LANDSCAPE ISLAND

(k) Buffering Between Zoning Districts.

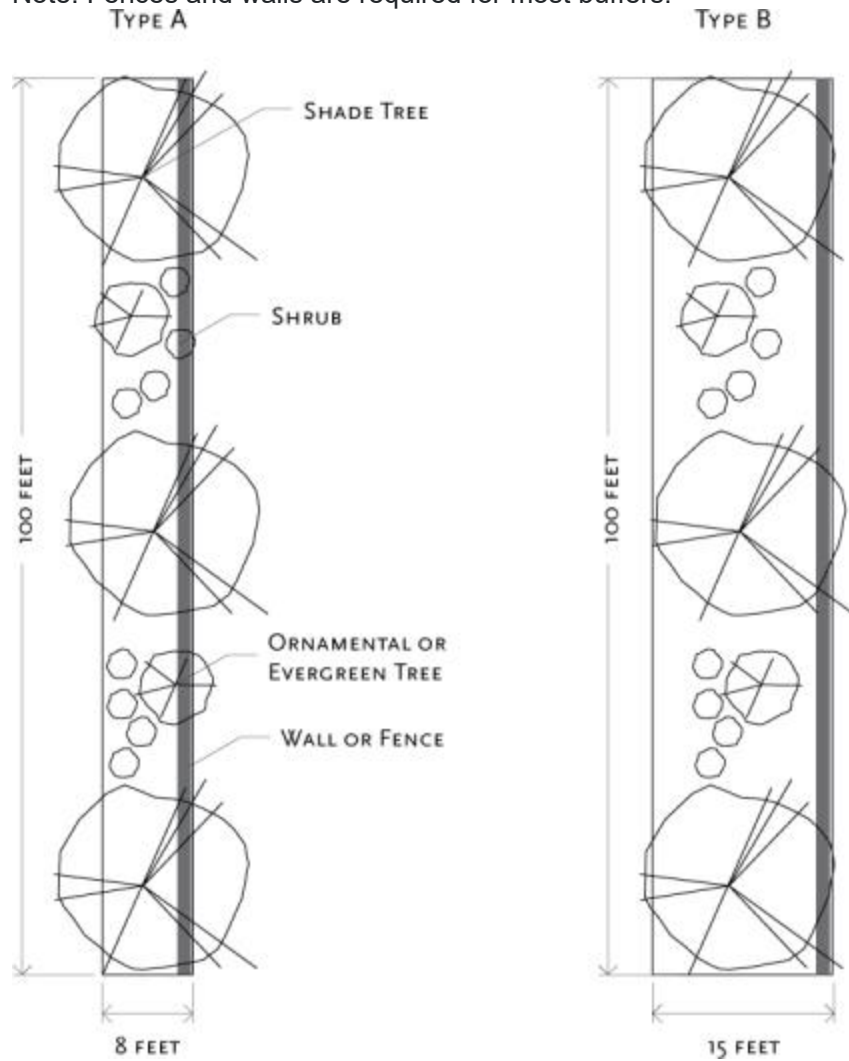
Zoning of Proposed Development	Zoning of Adjacent Property																	
	SF	R-5	R-8	R-12 R-16	R-24	R-O & MXOC	B-1	B-2	C-1	C-2 I-O	I-1	I-2	M-U	CSR	BP	MXR-	MXG-	MXS-
SF (Subdivisions)	-	-	-	-	-	-	F	-	F	W	W	W	F	-	F	-	-	-
R-5	-	-	-	-	-	-	F	-	F	W	W	W	-	-	F	-	-	-
R-8	-	-	-	-	-	F	F	-	F	W	W	W	F	-	F	A	-	-
R-12 & R-16	-	-	-	-	-	-	F	-	W	W	W	W	F	-	F	A	-	-
R-24	-	-	-	-	-	-	F	-	W	W	W	W	F	-	F	A	-	-
RO & MXOC	A	A	A	A	A	-	A or F	-	A or F	W	W	W	A or F	-	A or F	A	-	-
	F	F	F	A or F	A or F	A or F	A or F	-	A or F	A or F	A or F	A or F	A or F	-	A or F	A	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C-1	A&W	W	W	W	W	W	-	-	-	-	-	-	-	-	-	-	-	-
C-2 & I-O	W	W	W	W	W	W	F	-	-	-	-	-	A or F	A or F	A or F	A&W	-	-
I-1	W	W	W	W	W	W	F	-	-	-	-	-	A or F	B&W	A or F	B&W	A or F	A or F
I-2	B&W	W	W	W	W	W	F	-	-	-	-	-	A or F	B&W	A or F	B&W	A or F	A or F
M-U	A or F	A or F	A or F	A or F	A or F	A or F	A or F	-	A or F	A or F	A or F	A or F	-	-	-	-	-	-
CSR ^{3 1}	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Zoning of Proposed Development	Zoning of Adjacent Property																	
	SF	R-5	R-8	R-12 R-16	R-24	R-O & MXOC	B-1	B-2	C-1	C-2 I-O	I-1	I-2	M-U	CSR	BP	MXR-	MXG-	MXS-
BP	A or F	A or F	A or F	A or F	A or F	A or F	A or F	-	-	-	-	-	-	-	-	A or F	A or F	A or F
MXR-	-	-	-	-	-	-	F	-	-	W	W	W	F	-	F	-	-	-
MXG-	-	-	-	-	-	-	F	-	-	W	W	W	F	-	F	-	-	-
MXS-	-	-	-	-	-	-	F	-	-	W	W	W	F	-	F	-	-	-
Notes •A berm with landscaping is an alternative for a required fence or wall if the total height is a minimum of six feet. •Where alleys or streets separate different zone districts, the Director may approve increased landscaping rather than requiring a wall or fence. •The Director may modify this table based on the uses proposed in any zone district. ¹ Gravel operations subject to buffering adjacent to residential.																		

(l) **Buffer Requirements.**

Buffer Types	Landscaping Requirements	Location of Buffers on Site
Type A	Eight-foot-wide landscape strip with trees and shrubs	Between different uses
Type B	15-foot-wide landscape strip with trees and shrubs	Between different uses
Type F, W	Six-foot fence and wall (see subsection (f) of this section)	Between different uses

Note: Fences and walls are required for most buffers.



(Ord. 4646, 11-19-14; amended during 2010 codification; Ord. 4419, 4-5-10)

Common	Scientific Name	Plant Type
Indian Ricegrass	<i>Achnatherum (Oryzopsis) hymenocladum</i>	Grass, Ornamental
Big Bluestem	<i>Andropogon gerardii</i>	Grass, Ornamental
Sideoats Grama	<i>Bouteloua curtipendula</i>	Grass, Ornamental
Blue Grama Grass	<i>Bouteloua gracilis</i>	Grass, Ornamental
Karl Foerster Feather Reed Grass	<i>Calamagrostis acutiflora</i>	Grass, Ornamental
Desert Saltgrass	<i>Distichlis spicata</i>	Grass, Ornamental
Sand Love Grass	<i>Eragrostis trichodes</i>	Grass, Ornamental
Blue Oat Grass	<i>Helictotrichon sempervirens</i>	Grass, Ornamental
Chinese Silver Grass	<i>Miscanthus sinensis</i>	Grass, Ornamental
Little Bluestem	<i>Schizachyrium scoparium</i>	Grass, Ornamental
Mountain Alyssum	<i>Alyssum montanum</i>	Groundcover
Mt. Atlas Daisy	<i>Anacyclus pyrethrum</i> var. <i>depressus</i>	Groundcover
Small Leaf Pussytoes	<i>Antennaria parvifolia</i>	Groundcover
Bearberry or Kinnikinnick	<i>Arctostaphylos uva-ursi</i>	Groundcover
Mesa Verde Ice Plant	<i>Delosperma 'Kelaidis'</i>	Groundcover
Trailing Fleabane	<i>Erigeron flagellaris</i>	Groundcover
Sulfur Buckwheat	<i>Eriogonum umbellatum</i> var. <i>umbellatum</i>	Groundcover
Mat Penstemon	<i>Penstemon caespitosus</i>	Groundcover
Stonecrop species	<i>Sedum</i> spp.	Groundcover
Dwarf Ephedra	<i>Ephedra monosperma</i>	Groundcover, Evergreen
Texas Hummingbird Mint or Sonoran Sage	<i>Agastache cana</i>	Perennial
Sunset Hyssop or Licorice Mint	<i>Agastache rupestris</i>	Perennial
Rocky Mountain Columbine	<i>Aquilegia caerulea</i>	Perennial
Denver Gold Columbine	<i>Aquilegia chrysantha</i>	Perennial
Prickly Poppy	<i>Argemone polyanthemum</i>	Perennial
Fringed Sage	<i>Artemisia frigida</i>	Perennial
Seafoam Sage	<i>Artemisia versicolor</i> 'Seafoam'	Perennial
Butterfly Milkweed	<i>Asclepias tuberosa</i>	Perennial
Lavender Leaf Sundrops	<i>Calylophus lavandulifolius</i>	Perennial
Siberian Wall Flower	<i>Cheiranthus allionii</i>	Perennial
Hairy Golden Aster	<i>Chrysopsis villosa</i>	Perennial
Purple Coneflower	<i>Echinacea purpurea</i>	Perennial
Claret Cup Cactus	<i>Echinocereus triglochidiatus</i>	Perennial
Blanketflower	<i>Gaillardia aristata</i>	Perennial
Broom Snakeweed	<i>Gutierrezia sarothrae</i>	Perennial
Scarlet Bugler	<i>Ipomopsis aggregata</i>	Perennial
Munstead Lavender	<i>Lavandula angustifolia</i> 'Munstead'	Perennial
Oxeye Daisy	<i>Leucanthemum vulgare</i>	Perennial
Perennial Lupine	<i>Lupinus perennis</i>	Perennial
Colorado Four O'Clock or Desert Four O'Clock	<i>Mirabilis multiflora</i>	Perennial
Catmint	<i>Nepeta racemosa</i>	Perennial
Firecracker Penstemon	<i>Penstemon eatonii</i>	Perennial
Rocky Mountain Penstemon	<i>Penstemon strictus</i>	Perennial
Prairie Coneflower	<i>Ratibida columnifera</i>	Perennial
Grayheaded Coneflower	<i>Ratibida pinnata</i>	Perennial
Scarlet Globemallow	<i>Sphaeralcea coccinea</i>	Perennial
Desert Prince's Plume	<i>Stanleya pinnata</i>	Perennial
Prickly Thrift	<i>Acantholimon glumaceum</i>	Perennial/Ground Cover

Yarrow species	<i>Achillea spp.</i>	Perennial/Ground Cover
Colorado Desert Blue Star or Jone	<i>Amsonia jonesii</i>	Perennial/Ground Cover
Eastern Blue Star	<i>Amsonia tacernaemontana</i>	Perennial/Ground Cover
Poppy Mallow	<i>Callirhoe involucrata</i>	Perennial/Ground Cover
Lanceleaf Coreopsis	<i>Coreopsis lanceolata</i>	Perennial/Ground Cover
Moonbeam Coreopsis	<i>Coreopsis verticillata 'Moonbeam'</i>	Perennial/Ground Cover
Shasta Daisy	<i>Leucanthemum × superbum</i>	Perennial/Ground Cover
Blue Flax	<i>Linum lewisii</i>	Perennial/Ground Cover
Saskatoon Serviceberry	<i>Amelanchier alnifolia</i>	Shrub, Deciduous
Leadplant	<i>Amorpha canescens</i>	Shrub, Deciduous
False Indigo Bush	<i>Amorpha fruticosa</i>	Shrub, Deciduous
Dwarf False Indigo	<i>Amorpha nana</i>	Shrub, Deciduous
Powis Castle Sage	<i>Artemisia 'Powis Castle' [arboresc</i>	Shrub, Deciduous
Big Sagebrush	<i>Artemisia tridentata</i>	Shrub, Deciduous
Saltbush	<i>Atriplex canescens</i>	Shrub, Deciduous
Shadscale	<i>Atriplex confertifolia</i>	Shrub, Deciduous
Japanese Barberry	<i>Berberis thunbergii</i>	Shrub, Deciduous
Butterfly Bush or Summer Lilac	<i>Buddleja davidii</i>	Shrub, Deciduous
Winter Fat	<i>Ceratodites lanata or Krascheninni</i>	Shrub, Deciduous
Mountain Mahogany	<i>Cercocarpus ledifolius</i>	Shrub, Deciduous
Mountain Mahogany	<i>Cercocarpus montanus</i>	Shrub, Deciduous
Fernbush	<i>Chamaebatiaria millefolium</i>	Shrub, Deciduous
Gray Rabbitbrush	<i>Chrysothamnus nauseosus, or Eri</i>	Shrub, Deciduous
Yellow Rabbitbrush	<i>Chrysothamnus viscidiflorus</i>	Shrub, Deciduous
Spanish Broom	<i>Cytisus purgans</i>	Shrub, Deciduous
Scotch broom	<i>Cytisus scoparius</i>	Shrub, Deciduous
New Mexico Privet or Desert Olive	<i>Foresteria pubescens</i>	Shrub, Deciduous
Red Berry Mahonia	<i>Mahonia haematocarpa</i>	Shrub, Deciduous
Russian Sage	<i>Perovskia atriplicifolia</i>	Shrub, Deciduous
Littleleaf Mock Orange	<i>Philadelphus microphyllus</i>	Shrub, Deciduous
Ninebark	<i>Physocarpus opulifolius</i>	Shrub, Deciduous
Antelope Bitterbrush	<i>Purshia tridentata</i>	Shrub, Deciduous
Fragrant Sumac	<i>Rhus aromatica</i>	Shrub, Deciduous
Skunkbush sumac	<i>Rhus trilobata</i>	Shrub, Deciduous
Staghorn Sumac	<i>Rhus typhina</i>	Shrub, Deciduous
Greasewood	<i>Sarcobatus vermiculatus</i>	Shrub, Deciduous
Korean Lilac	<i>Syringa meyeri</i>	Shrub, Deciduous
Sand Sagebrush	<i>Artemisia filifolia</i>	Shrub, Evergreen
Cholla species	<i>Cylindropuntia spp.</i>	Shrub, Evergreen
Blue Stem Joint Fir	<i>Ephedra equistina</i>	Shrub, Evergreen
Mormon Tea	<i>Ephedra viridis</i>	Shrub, Evergreen
Common Broom	<i>Genista tinctoria</i>	Shrub, Evergreen
Red Yucca	<i>Hesperaloe parviflora</i>	Shrub, Evergreen
Desert Prickly Pear	<i>Opuntia phaeacantha</i>	Shrub, Evergreen
Prickly Pear species	<i>Opuntia spp.</i>	Shrub, Evergreen
Narrowleaf Yucca	<i>Yucca angustissima</i>	Shrub, Evergreen
Banana Yucca	<i>Yucca baccata</i>	Shrub, Evergreen
Soapweed Yucca	<i>Yucca glauca</i>	Shrub, Evergreen
Dwarf Yucca	<i>Yucca harrimaniae</i>	Shrub, Evergreen

Trident Maple	<i>Acer buergeranum</i>	Tree, Deciduous
Hedge Maple	<i>Acer campestre</i>	Tree, Deciduous
Amur Maple	<i>Acer ginnala</i>	Tree, Deciduous
Rocky Mountain Maple	<i>Acer glabrum</i>	Tree, Deciduous
Bigtooth Maple	<i>Acer grandidentatum</i>	Tree, Deciduous
Box Elder	<i>Acer negundo</i>	Tree, Deciduous
Tatarian Maple	<i>Acer tataricum</i>	Tree, Deciduous
Downy Serviceberry	<i>Amelanchier arborea</i>	Tree, Deciduous
Allegheny Serviceberry	<i>Amelanchier laevis</i>	Tree, Deciduous
Apple Serviceberry	<i>Amelanchier x grandiflora</i>	Tree, Deciduous
American Hornbeam	<i>Carpinus caroliniana</i>	Tree, Deciduous
Pignut Hickory	<i>Carya glabra</i>	Tree, Deciduous
Western Catalpa	<i>Catalpa speciosa</i>	Tree, Deciduous
Purple Catalpa	<i>Catalpa x erubescens</i>	Tree, Deciduous
Chinese Catalpa	<i>Catalpa ovata</i>	Tree, Deciduous
Common hackberry	<i>Celtis occidentalis</i>	Tree, Deciduous
Sugar Hackberry	<i>Celtis laevigata</i>	Tree, Deciduous
Redbud	<i>Cercis canadensis</i>	Tree, Deciduous
Desert Willow	<i>Chilopsis linearis</i>	Tree, Deciduous
American Fringetree	<i>Chionanthus virginicus</i>	Tree, Deciduous
American Smoketree	<i>Cotinus obovatus</i>	Tree, Deciduous
Morden Hawthorn	<i>Crataegus x mordenensis [laeviga</i>	Tree, Deciduous
Russian Hawthorn	<i>Crataegus ambigua</i>	Tree, Deciduous
Green Hawthorn	<i>Crataegus viridis</i>	Tree, Deciduous
Thornless Cockspur Hawthorn	<i>Crataegus crus-galli</i>	Tree, Deciduous
Washington Hawthorn	<i>Crataegus phaenopyrum</i>	Tree, Deciduous
Northern Downy Hawthorn	<i>Crataegus submollis</i>	Tree, Deciduous
Hardy Rubbertree	<i>Eucommia ulmoides</i>	Tree, Deciduous
Singleleaf Ash	<i>Fraxinus anomala</i>	Tree, Deciduous
Honeylocust	<i>Gleditsia triacanthos inermis</i>	Tree, Deciduous
Kentucky Coffeetree	<i>Gymnocladus dioicus</i>	Tree, Deciduous
Chinese flame tree	<i>Koelreuteria bipinnata</i>	Tree, Deciduous
Golden Rain Tree	<i>Koelreuteria paniculata</i>	Tree, Deciduous
Amur Maackia	<i>Maackia amurensis</i>	Tree, Deciduous
Osage Orange	<i>Maclura pomifera</i>	Tree, Deciduous
Crabapple cultivars	<i>Malus spp.</i>	Tree, Deciduous
Fruitless White Mulberry	<i>Morus alba</i>	Tree, Deciduous
Chinese Pistache	<i>Pistacia chinensis</i>	Tree, Deciduous
Ornamental Pear	<i>Pyrus spp.</i>	Tree, Deciduous
Swamp White Oak	<i>Quercus bicolor</i>	Tree, Deciduous
Texas Red Oak	<i>Quercus buckeyi</i>	Tree, Deciduous
Gambel Oak	<i>Quercus gambelii</i>	Tree, Deciduous
Lacey Oak	<i>Quercus glaucoides</i>	Tree, Deciduous
Bur Oak	<i>Quercus macrocarpa</i>	Tree, Deciduous
Northern Red Oak	<i>Quercus rubra</i>	Tree, Deciduous
Wavey Leaf Oak	<i>Quercus undulata</i>	Tree, Deciduous
Colorado Foothills Oak	<i>Quercus x maxei</i>	Tree, Deciduous
Sawtooth Oak	<i>Quercus accutissima</i>	Tree, Deciduous
Chinkapin Oak	<i>Quercus muehlenbergii</i>	Tree, Deciduous

New Mexico Locust	<i>Robinia neomexicana</i>	Tree, Deciduous
Japanese Pagodatree	<i>Styphnolobium japonica</i>	Tree, Deciduous
Peking Tree Lilac	<i>Syringa pekinensis</i>	Tree, Deciduous
Japanese Tree Lilac	<i>Syringa reticulata</i>	Tree, Deciduous
Hybrid Elm	<i>Ulmus spp.</i>	Tree, Deciduous
Japanese Zelkova	<i>Zelkova serrata</i>	Tree, Deciduous
Arizona Cypress	<i>Cupressus arizonica</i>	Tree, Evergreen
Utah Juniper	<i>Juniperus osteosperma</i>	Tree, Evergreen
Cologreen Juniper	<i>Juniperus scopulorum</i> 'Cologreen'	Tree, Evergreen
Gray Gleam Juniper	<i>Juniperus scopulorum</i> 'Gray Gleam'	Tree, Evergreen
Skyrocket Juniper	<i>Juniperus scopulorum</i> 'Skyrocket'	Tree, Evergreen
Wichita Blue Juniper	<i>Juniperus scopulorum</i> 'Wichita Blue'	Tree, Evergreen
Piñon Pine	<i>Pinus edulis</i>	Tree, Evergreen
Bosnian Pine	<i>Pinus heldreichii</i>	Tree, Evergreen
Austrian pine	<i>Pinus nigra</i>	Tree, Evergreen

Height (ft)	Spread (ft)	Water Needs	Native Status (CO / GJ)	Preferred Tree
2	1	xeric-low	native	
3-6	2-3	xeric-low	native	
1.5-2	1.5-2	low	native	
1-2	1.5-2	xeric-medium	native	
4	2	low	non-native	
1-3	indet.	xeric-low	native	
2-4	2-3	low-medium	native	
2-3	2-2.5	low-medium	non-native	
2-6	1-3.5	low-medium	non-native	
1.5-2.5	1-2	low-medium	native	
0.5	1-1.5	low	non-native	
.258	1	low-medium	non-native	
.25	.5	low	native	
1	2	low	native	
0.25	1.5	low-medium	native	
0.5	1	low	native	
1	1	low	native	
1	1	low-medium	native	
0.5	1-4	low-medium	varies by spp.	
1	3	xeric-low	non-native	
1.5-3	1-2	xeric-medium	non-native	
1.5-2	1-1.5	xeric-medium	non-native	
1-2	1-2	low	native	
2-2.5	1-2	low-medium	native	
1-3	1-2	xeric-low	native	
0.5-1.5	1.5-2	xeric-low	native	
0.5-1	1.5-2.5	low	non-native	
1.5	1.5	low	native	
1	1	low	native	
1	1-2	low-medium	non-native	
1	1-2	low	native	
2-5	1.5-2	low-medium	non-native	
0.5	1	low	native	
1	1	low-medium	native	
1.5	1.5	low	native	
1	1	low-medium	native	
1-1.5	1-1.5	low-medium	non-native	
1-2.5	1-3	low-medium	non-native	
1-2	1-2	low-medium	non-native	
1	2-3	low	native	
1-2	2-3	low-medium	non-native	
1	2	low	native	
2-3	2-3	low	native	
1-3	1-1.5	low-medium	native	
1-3	1-2	low-medium	non-native	
0.5-1	1	low	native	
2-6	1-2	low	native	
0.5	1	xeric	non-native	

1-3	1-3	xeric-low	varies by spp.
1	1-1.5	low	native
2-3	2-3	low	non-native
0.5-1	0.5-3	low-medium	native
1-2	1-1.5	low-medium	native
1-2	1-1.5	low-medium	non-native
1-2.5	1-3	low-medium	non-native
1.5	1	low	native
10-15	10-30	low-medium	native
2-3	2-2.5	xeric-medium	native
4-10	8-10	low	native
1-3	1-3	low-medium	native
2-3	1-2	low	non-native
1.5-6	1-5	xeric-low	native
3-4	3-4	low	native
1-3	1-3	low	native
2-6	3-7	xeric-medium	non-native
6-8	3-5	low-medium	non-native
1-3	1-3	low	non-native
8-12	4-8	low-medium	native
8-12	4-8	low-medium	native
6-8	6-8	xeric-low	non-native
4-7	4-7	low-medium	native
4-7	4-7	low-medium	native
2-3	4-6	low	non-native
4-8	4-8	low-medium	non-native
6-8	5-8	low	native
6-12	6-12	xeric-low	native
3-5	2-4	low-medium	non-native
2-3	2-3	low-medium	native
5-8	4-6	low-medium	native
6-12	6-12	low	native
2-6	6-10	low-medium	non-native
2-6	6-10	low-medium	native
15-25	20-30	low-medium	non-native
1.5-5	2-5	low	native
5-8	6-10	low-medium	non-native
3-4	3-4	low	native
2-7	2-7	xeric-low	Varies by spp.
4	6	xeric-low	non-native
2-3	3-6	xeric-low	native
2-3	2-3	low-medium	non-native
3-5	4-6	xeric-low	non-native
2-5	3-6	xeric-low	native
1-3	2-7	xeric-low	varies by spp.
3	3	low	native
1-3	2-3	low	native
2-3	2-3	low	non-native
3	1	low	native

30	30	medium	non-native	
30	15	medium	non-native	Yes
10-32	15	medium	non-native	
20	10-15	medium	native	
25	25	xeric-low	native	Yes
25-80	30-50	low	native	Yes
15-20	15-20	xeric-low	non-native	Yes
20	15	medium	non-native	
20-25	10-15	medium	non-native	
20	15	medium	non-native	
25	20-25	medium	non-native	
50	30	medium	non-native	
40-70	20-50	xeric-low	non-native	Yes
50	35	medium	non-native	Yes
25	25	medium	non-native	Yes
30-60	40-60	xeric-low	non-native	Yes
45	40	xeric-low	non-native	Yes
15-25	15-30	medium	non-native	Yes
20	20	xeric-low	non-native	
15	15	medium	non-native	
15-20	10-15	low	non-native	Yes
15-20	15-20	low	non-native	Yes
18-24	18-24	xeric	non-native	Yes
20-35	20-35	low	non-native	Yes
20	20	xeric	non-native	Yes
25	25	low	non-native	Yes
20	20	low	non-native	Yes
40	40	low	non-native	Yes
12	6	xeric	native	
60-80	60-80	xeric	non-native	Yes
60-80	40-55	xeric	non-native	Yes
30-40	30-40	low	non-native	
30-40	30-40	xeric	non-native	Yes
20-30	15-20	xeric	non-native	Yes
30	30	xeric	non-native	Yes
10-30	10-30	medium-high	non-native	Yes
30-50	30-50	low	non-native	Yes
35	20	xeric-low	non-native	Yes
20-50	20-35	low	non-native	Yes
45	36	medium	non-native	
35	35	xeric-low	non-native	Yes
20-25	10-12	xeric	native	Yes
30	25	xeric	non-native	
60-80	60-80	xeric	non-native	Yes
50-75	50-75	medium	non-native	
20	15	xeric	native	Yes
35	30	xeric	native	Yes
50	50	medium	non-native	
45	50	low	non-native	Yes

12-36	12-36	xeric	native	
50	40	xeric-low	non-native	Yes
15	12	xeric-low	non-native	Yes
25	20	xeric-low	non-native	Yes
30-60	20-40	xeric-low	non-native	Yes
50-80	50-80	xeric-low	non-native	Yes
30-40	15-25	xeric	non-native	Yes
20	10	xeric	native	Yes
15-20	5-7	xeric	native	Yes
10-15	4-6	xeric	native	Yes
15-20	4-6	xeric	native	Yes
18-23	4-8	xeric	native	Yes
18-25	12	low	native	Yes
30-40	20-30	low	non-native	Yes
40-60	30-40	low	non-native	Yes

Parking Lot Island Tree

Yes

Yes

Yes
Yes

Yes
Yes

Yes
Yes
Yes

Yes
Yes
Yes

Yes

Yes

Yes

Yes

Yes

Yes

Common

Siberian Elm
Russian Olive
Ash
Black Walnut
Leafy Spurge
Tree of Heaven
Ravenna Grass
Absinth wormwood
Bull Thistle
Canada Thistle
Chinese Clematis
Common Tansy
Giant Reed
Houndstongue
Japanese Knotweed
Knapweed spp.
Musk Thistle
Myrtle Spurge
Cypress Spurge
Oxeye Daisy
Perennial Pepperweed
Plumeless Thistle
Purple Loosestrife
Scentless chamomile
Scotch Thistle
Sulfur Cinquefoil
Syrian Bean Caper
Tamarisk
Toadflax
Hoary Cress
Yellow Starthistle

Technical

Ulmus pumila
Elaeagnus angustifolia
Fraxinus spp.
Juglans nigra
Euphorbia esula
Ailanthus altissima
Saccharum ravennae
Artemisia absinthium
Cirsium vulgare
Cirsium arvense
Clematis orientalis
Tanacetum vulgare
Arundo donax
Cynoglossum officinale
Polygonum Cuspidatum
Centaurea spp.
Carduus nutans
Euphorbia myrsinites
Euphorbia cyparissias
Chrysanthemum leucanthemu
Lepidium latifolium
Carduus acanthoides
Lythrum salicaria
Matricaria perforate
Onopordum acanthium
Potentilla recta
Zygophyllum fabago
Tamarisk parviflora & *Tamaris*
Linaria spp.
Cardaria draba
Centaurea solstitialis

Notes

Existing mature elms may be of value for preservation

Exception of Single leaf ash; *Fraxinus anomala*

Threat of thousand canker disease

im

ik ramosissima

Summary of Engagement Process – Landscaping Code Revision

Landscaping Taskforce Roster

Ted Ciavonne (PLA, Consultant, GJ)

Rob Breeden (PLA, Consultant, Fruita)

Julee Wolverton (PLA, Consultant, Montrose)

David Varner (Restoration Specialist)

Susan Carter (Master Gardener, CSU Tri-River Extension)

Ivan Geer (Principal Engineer, River City Consultants)

Doug MacDonald (Landscape Design, CMU)

Landscaping Taskforce Workshop Dates

1/27/2022

2/11/2022

2/25/2022

3/4/2022

.

Forestry Board Workshop Dates

2/3/2022

Planning Commission Workshop Dates

2/3/2022

3/3/2022

September 6, 2022

Dear City Council,

As the Chair of the City of Grand Junction Forestry Board and as the CSU Extension Area Horticulture and Natural Resource Agent that was asked by the city to be very involved with the landscape code revision, I want to pass on some information. This letter represents the Forestry Board. The Landscape Code has defined significant trees as 15" and larger though cottonwoods have been excluded from the category. The Board strongly opposes the removal of cottonwoods from the significant tree definition. Cottonwood is the only native deciduous shade species in the Grand Valley. It naturally grows along bodies of water and in moist areas which naturally exist and are present in manmade landscapes as well. Cottonwoods provide shade, help clean the air, provide wildlife habitat, and help stop erosion, slow flood water runoff, and increase water filtration just to name a few benefits. The Forestry board member unanimously voted that Cottonwoods should be in the consideration to be significant. The Forester or other appointed City official should have the opportunity to determine if a Cottonwood is significant and should be saved verses being biased against all cottonwood trees and removing them as well as other significant trees. Cottonwood trees are part of what makes this Colorado and very appropriate to plant and grow in moist areas!

Other References to Cottonwood's significance:

<https://www.monumentaltrees.com/en/trees/populusfremontii/records/>

<https://www.swcoloradowildflowers.com/Tree%20Enlarged%20Photo%20Pages/populus%20deltoides.htm>

<https://coloradoencyclopedia.org/article/cottonwood-trees>

In the code, it seems to be some confusion between significant trees, prohibited trees, and preferred trees. Significant trees are the trees over 15" that should be deemed by city staff if they are worth of saving in new development. Referred above to my statement about Cottonwood trees, but this should include any tree over 15". They should not only be xeric trees as it should depends on the situation and how much water availability is nearby. Currently only the very dry ones are listed, the forestry board disagrees with this. This should be based on site, right tree, right place and value of the tree. Canopy cover of a large tree will not be replaced by new trees in our life time.

Prohibited trees should be a list of noxious or obnoxious trees that should never be planted. However there are some of these like existing large Siberian elm trees that make up about 20% of our shade canopy, so the prohibited list does not mean that these should be cut down.

Preferred and suitable trees should be the tree lists that new tree species are selected from. These lists may not be all inclusive and will be amended as new suitable species are found for our area. Tree selection should be based on the situation, so sometime a drain ways, pond areas, areas of function turf are the right place to plant trees of higher water demands. <https://static.colostate.edu/client-files/csfs/pdfs/632.pdf>

With prolonged drought, the board feels it is a mistake to not require irrigation systems to be **designed by an Irrigation Engineer**. With the water issues we face across the west, we feel this is the time to start heading this way. Just because someone can install a system, does not mean they are trained to design it for future needs of the landscape including growing root systems, and to be the most efficiently designed as possible for conservation. I just had a client in today that felt that the Western Slope was not engaged with the water shortages of the West. This board has proved that the city can require certification, and it will happen. We have gone from 3 companies with ISA certified Arborists to 16 companies with more than 23 certified arborists working in Grand Junction. This has improved the professionalism of the industry and requiring Irrigation Engineers in the future will also improve the irrigation industry! I hear horror stories of incorrectly installed systems all the time. It can be corrected with appropriate design.

We appreciate the city council taking time to review the landscape code. Thank you for your time to consider our recommendations to Council.

Sincerely,

Susan L. Carter, ISA
Chair, City of Grand Junction Forestry Board
CSU Extension TRA Horticulture and Natural Resource Agent

From: [Robert Davis](#)
To: [Felix Landry](#)
Subject: Fw: Cottonwoods
Date: Thursday, September 8, 2022 2:03:32 PM
Attachments: [Outlook-jytbvfpn.png](#)
[Outlook-0ekatc33.png](#)
[Outlook-p4pwggx3.png](#)

Comments from Forestry Board member Mollie Higginbotham.

Rob

Rob Davis
City of Grand Junction Parks and Recreation
City Forester and Open Space Supervisor
Phone: 970-254-3825 | robd@gjcity.org
2529 High Country Court
Grand Junction, CO 81501
www.gjcity.org/forestry



From: Mollie Higginbotham <mphfrazzled@gmail.com>
Sent: Thursday, September 8, 2022 1:26 PM
To: Robert Davis <robd@gjcity.org>
Subject: Cottonwoods

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

Dear Rob, I'm so sorry I missed the last meeting! I do apologize!
As I understand it, the definition given by the planning dept. would not consider cottonwoods as a significant tree! I agree that this tree is too important to NOT be on that list! It is extremely important to our local environment, for humans and our local wildlife! It does sound like the wording for the watering requirements has been resolved! I hope I interpreted that correctly?

I am hoping to come to the October 5th City Council meeting to support our board and this issue!

Thanks for all of the communication and information!
Mollie Higginbotham.

September 6, 2022

Grand Junction City Council
250 North 5th Street
Grand Junction, CO 81501

RE: Planning Department Landscape Code update

Mayor Pro Tem and Members of City Council,

My name is Kamie Long and I am a member of the Grand Junction Forestry Board and a forester with the Colorado State Forest Service. Our Forestry Board Chair, Susan Carter, has been working with the Planning Department in regards to updating the landscape code and the Forestry board members have been able to provide some feedback.

I think there have been great strides made with this update however, I do not feel it is ready to be approved. There are some items that need to be addressed and clarified. I know putting this on hold for additional modifications can be frustrating to those who are working on it, but rushing the ordinance through without attending to these issues will be problematic in the future.

My two issues with the proposed ordinance or the Planning Departments recommendations are:

- 1) Limiting trees to only tree that are considered to have low or xeric water use can be considered as a significant tree,
- 2) Not specifying that new landscape plans cannot use plants from the prohibited list or clearly stating what list the other 50 percent of the landscape plants can be pulled from.

I support what is stated in the letter from Susan Carter to the City Council from the other Forestry Board members in regards to these issues and I wanted to add my voice to the concerns listed in those letters.

Cottonwood trees are a Colorado native tree that provides many benefits to our environment and to wildlife. They are also a large contributor to our existing urban canopy which is an important focus stated in our Parks and Recreation Open Space Master Plan. The purpose of the significant tree caveat for the Landscape Code revision is to protect large, mature trees in our community.

By limiting the significant tree list to trees that are only considered as low or xeric water use is reducing the ability of the City to maintain and protect our established urban canopy. Also, by created this stipulation, there are many other species of trees that would meet the size criteria but not the water limitation. Removing mature trees that have established themselves in the landscape and are adding value to the environment because they don't meet a limitation we put on them, it counterintuitive to maintaining our urban canopy.

Many trees that will be under consideration will be in naturalized areas where trees are not managed. Very few tree species will grow in these areas and get larger than 15 inches in diameter, two of the trees that will grow this large are not native and not usually desirable (Siberian elm and Russian olive). Cottonwood will grow in these areas and do many important things including provide shade, help clean the air, provide wildlife habitat, help stop erosion, slow flood water runoff, and increase water filtration to name a few environmental benefits. To remove cottonwood (and other trees with higher water use) from the list of trees that should be considered is a mistake and will weaken the intent of the code as very few other trees will fit this category and therefore will make the significant tree caveat pointless.

To the second concern, the code states that landscape design plans must use at least 50 percent of plant species from the City's preferred plant list. The other 50 percent can be any other plant except those on the noxious or invasive plant list. The City has a prohibited plant list and the code currently does not specify that plants cannot come from that list.

The prohibited plant list is comprised of plants that are either serious weeds or have the potential to have serious issues when planted in our high desert landscape. Plants are not put on this list on a whim. There are serious considerations before placing them on the list that includes potential insect or diseases that could impact the plant and other trees already in the landscape, and/or they have health issues that could increase the cost of care by the landowner. The plants on the list are there to encourage landscapers and homeowners to choose plants from the City's recommended plant list that includes plants that are known to do well in our environment.

The code as currently stated, would allow landscape planners to include plants from the prohibited plant list which goes against the purpose of the list. I highly recommend the City Council to have this loophole closed and update the code to state that plants from the prohibited list may not be including in any planting plan.

Again, I want to acknowledge that a tremendous amount of work has gone into updating the Landscape Code. However, the Planning Department has recommended that cottonwood trees not be considered as a significant tree and I and the Forestry Board see this as a huge error that could impact our urban tree canopy and our environment. The loophole that allows landscape plans to include plants from the prohibited list should be closed and stated that plants cannot be selected from this list.

Thank you for your time and consideration. I will be attending the City Council meeting that address the code update and will be happy to answer or clarify any of my statements.

Sincerely,

Kamie Long

Kamie Long
Grand Junction Forestry Board
Colorado State Forest Service

From: [Robert Davis](#)
To: [Felix Landry](#)
Subject: Fw: Vince Urbina; Forestry Board; Significant Trees
Date: Thursday, September 8, 2022 2:03:57 PM
Attachments: [Outlook-ba4d00ei.png](#)
[Outlook-uxtrrzdz.png](#)
[Outlook-q2uhotgy.png](#)

Vince Urbina's comments are below:

Rob

Rob Davis
City of Grand Junction Parks and Recreation
City Forester and Open Space Supervisor
Phone: 970-254-3825 | robd@gjcity.org
2529 High Country Court
Grand Junction, CO 81501
www.gjcity.org/forestry



From: Urbina,A Vince <Vince.Urbina@colostate.edu>
Date: Wed, Sep 7, 2022 at 4:45 PM
Subject: RE: Significant Trees
To: susan.carter <susan.carter@mesacounty.us>, Dan Komlo <dan.komlo26@gmail.com>
Cc: Robert Davis <robd@gjcity.org>, Bennett Boeschstein <boeschstein.bennett0@gmail.com>, William Cooper <bill@t4tree.com>, Long,Kamie <Kamie.Long@colostate.edu>, Molly Higginbotham <mphfrazzled@gmail.com>, Carter,Susan <Susan.Carter@colostate.edu>

Folks,

I read through the e-mail chain and reviewed the attachments. Here are my thoughts in no particular order.

- Since 2013, I have taught the ISA's Tree Risk Assessment Qualification course throughout the Rocky Mountain and Utah Chapters. I have communicated to all of my students that just because a tree has a structural problem or a particular trait that shouldn't automatically warrant removal. In many cases a problem can be mitigated and the tree can remain in place to provide all the benefits that Susan Carter alluded to in her letter. Trees are resilient, adaptable and in many cases can live over 100 years (including cottonwoods). Removing cottonwoods that would meet the significant criteria to remain is a short-sighted objective especially where they are growing in their native riparian habitat and it has taken them decades to achieve that size status.
- When I moved to GJ from Fort Collins in 1994, I was amazed at the number of Siberian elms growing in the city. I was not a fan of this tree on the Front Range. The longer I lived here the more I began to appreciate the tree for its tolerance of salty soils with

poor drainage. If regular pruning maintenance is applied to this tree species it can be an asset to any yard.

- I looked over the preferred tree list and noticed box elder. There is another native that grows naturally along the Colorado river in Glenwood Canyon. I would not classify it as a low water need tree.
- There are numerous genera mentioned on the suitable plant list. Each genus has an undesirable tree in it. I can think of *Acer saccharinum* – silver maple, *Salix matsudana* – globe willow as examples of non-preferred status.
- There are some genera that are not on the list that merit consideration: *Picea* (Colorado spruce, Black Hills spruce), *Aesculus* (Ohio & yellow buckeye), *Thuja* (arborvitae), *Cedrus* (Arizona cypress), *Prunus* (Newport, Mt. Saint Helens), *Platanus* (London plane tree) *Metasequoia* (dawn redwood), *Ulmus parvifolia* (Chinese elm). There are examples growing in the Grand Valley that are doing quite well.
- What about *Pinus ponderosa* - ponderosa pine another native that should be on the list.

Flying out of Grand Junction or looking at the city from vantage points like the Colorado National Monument should validate in most people's minds that large trees no matter what species are an asset to our community. I am all in when it comes to good planning documents. But I am a proponent of using wisdom and incorporating flexibility in these documents. I believe that removing cottonwood (i.e., natives) is an inflexible and unwise option. If you changed the significant tree size status to 20+ inches a lot of cottonwoods would qualify.

I am good with Susan Carter's letter.

Vince Urbina
ISA Certified Arborist, RM-1043A

September 7th, 2022

Dear City Council & Planning Commission,

On September 1st Felix Landry, Planning Supervisor, presented an update on the proposed Development Landscape Regulations coming before council for approval at the monthly City Forestry Board meeting and I have taken issue with a few of the items that are included in the final draft. Specifically: 1) The language defining significant trees and the preservation thereof; 2) the misuse of the City suitable plant species lists; and 3) the lack of professional licensing requirements for irrigation system design.

Let me preface my letter with my background. I am an ISA Certified Arborist with Tree Risk Assessment Qualifications and a degree in Landscape Architecture from Colorado State University currently serving on the Grand Junction Forestry Board. I have been a resident of the Grand Valley since 1995 and have structured my career in order to protect and enhance the landscapes of Grand Valley. With my diverse experience in the green industry starting as a landscape laborer and irrigation auditor, to an ecological restorationist and landscape designer, to a production arborist and now as a consulting and sales arborist; I am intimately familiar with what it takes to build smart, sustainable, water-wise landscapes here.

We are all well aware of the state of water in the Colorado River Basin. Increasing demand for a shrinking supply has required that we take a hard look at our water use, and in turn, our landscapes. However, we need to be very careful not to bite the hand that feeds us in our pursuit of water conservation- our urban forest. It is an indisputable fact that the shade trees provide aids in landscape water conservation. Trees also improve our quality of life, reduce household energy consumption, combat the heat island effect, are our best tool for climate amelioration, improve air & water quality, support wildlife, make the oxygen we breathe, buffer winds, reduce violence, shelter us from the deadly summer heat, improve drought resiliency, beautify our City, and add value to our properties. In short, our community would be miserable without our trees.

1. We must strive to preserve and promote our trees if our community is to thrive in an evermore uncertain future. To that end, the inclusion of an effective tree preservation clause in the new Landscape Regulations is paramount. As currently stated, the code reads: *“(ii) All trees not identified as prohibited on the Suitable Plants List and that have a diameter that exceeds 15 caliper inches shall be considered Significant. (iii) Where significant trees exist on a property, no fewer than 30 percent of significant trees shall be preserved during development.”*

Additionally, The Planning Commission is now advising the City Council to approve regulations with the exclusion of species in the *Populus* (Poplar) genus from the preservation clause. Basically, if it's any naturally growing tree (tamarisk, Russian olive, Siberian elm, or Cottonwood), you can remove it. So what significant trees are we trying to preserve exactly? Nobody will argue against tamarisk or Russian olive being bulldozed but the other two, while not ideal in a small backyard or along the street, do provide significant value for the landscape and community with intelligent site planning.

Developers should have to apply for an exception to tree preservation in order to remove a significant tree rather than have free rein to level any large tree that gets in their way. The way the significant tree portion of the code is currently worded, it is only marginally effective on scrape and build sites with legacy maintained landscapes (ash is on the prohibited list but that doesn't mean it isn't worth saving, does it?). It does nothing to preserve existing trees on vacant land, especially if the *Populus* genus is unprotected.

I would like to see *Populus* species included in the significant tree qualification and an exception made for Siberian elm as when the condition of the tree is strong enough to warrant preservation. I also would like

to see the elimination of the 30% required to be preserved and make ANY tree over 15" DBH (not T,RO) default to being preserved unless an exception is granted after review with a qualified Consulting Arborist/City Forester, Planning Dept. and the Design Team. While I realize the limitations that come with developing land and preserving trees, I encourage you to consider the irreplaceable value that large trees provide us. A new tree will take generations to recoup the value of the significant tree that was removed.

2. There is misapplied language in the proposed landscape regulations to encourage the planting of appropriate species but the way it is currently written does not accomplish that goal. As it reads "(xi) A minimum of 50 percent of proposed tree plantings shall be identified as preferred trees by the Plant List." Over decades of maintaining the urban forest of the Grand Valley, we arborists have developed a list of the species that grow well here in lieu of our alkaline, poorly draining, low organic matter soils, common pathogens, and low water availability. These trees are encompassed within the preferred plants list. Trees not on this list are not suitable for planting here and should not be allowed in new landscapes. We should require that ALL trees included in landscape designs be from the preferred plants list, not 50%. By allowing leeway, we are setting ourselves up for trees that will live a truncated life and present their new owners with costly plant health care challenges. Why would we allow developers to spec trees that cannot thrive here when there are better adapted species that also consume less water?

3. The greatest challenge to growing healthy landscapes in our environment is water delivery. If waterwise landscapes are to be a cornerstone of our revised landscape regulations (as they should be), then requiring a Certified Irrigation Designer (CID) to stamp all irrigation plans is necessary as the Landscape Architects who are currently responsible for such aspects of landscape design simply do not have the working knowledge necessary to optimize irrigation systems in our challenging site conditions. A CID can better specify which style of spray heads and emitters work best for the species being irrigated on a particular site's topography and soil type, balance flow rates across zones to minimize water waste, how to design zone layouts to accommodate for different water need plants most efficiently, and how best to program automated control systems for maximum water efficiency among many other nuanced details that add up to irrigation systems that don't waste water yet allow our plants to thrive.

The common pushback for including such a regulation in the development code is that- there is only one CID in the Grand Valley and the workload would overwhelm a single individual. But I encourage you to look at the effect of requiring all tree professionals licensed in the City to be Certified Arborists. Before that mandate was put in place, there were very few CAs working in Grand Junction. Now that we require ISA certification to receive a business license, the number of CAs has exploded and the quality and safety of tree work performed within the City has never been better. To ease the sting, I propose allowing for a 5 year transition period moving towards requiring all irrigation designs be approved by a CID.

While I applaud the planning commission for the improvements that have been made to ensure more intelligent and waterwise landscapes are designed and installed, I feel that with these few modifications, we can better ensure an effective water conscious ethos and produce the highest quality, lowest maintenance, healthiest landscapes for our communities. Which, out here in the high desert, is the basis of all that makes living here so great.

Thank you for your consideration,

William Cooper
ISA Certified Arborist, RM-8111A

The views and opinions expressed in this letter are my own

CITY OF GRAND JUNCTION, COLORADO

ORDINANCE NO. _____

AN ORDINANCE AMENDING THE ZONING AND DEVELOPMENT CODE SECTION 21.06.040 LANDSCAPE, BUFFERING, AND SCREENING STANDARDS; SECTION 21.10.020 TERMS DEFINED; SECTION 21.03.030 MEASUREMENTS; SECTION 21.03.080 MIXED USE AND INDUSTRIAL BULK STANDARDS SUMMARY TABLE; AND SECTION 21.04.030 USE-SPECIFIC STANDARDS OF THE GRAND JUNCTION MUNICIPAL CODE.

Recitals:

The City Council desires to maintain effective zoning and development regulations that implement the vision and goals of the Comprehensive Plan while being flexible and responsive to the community's desires and market conditions and has directed that the Code be reviewed and amended as necessary.

The amendments to the Zoning and Development Code eliminate (1) requirements that have been proven, over time, impractical, difficult or impossible to apply or enforce, and for which there are other safeguards in the Code furthering the intent of the provisions; (2) inconsistencies within the Code; (3) unnecessary regulations; or (4) duplicative information.

After public notice and public hearing as required by the Grand Junction Zoning and Development Code, the Grand Junction Planning Commission recommended approval of the proposed Code amendments.

After public notice and public hearing, the Grand Junction City Council finds that the proposed Code amendments are necessary to maintain effective regulations to implement the Comprehensive Plan.

NOW THEREFORE BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF GRAND JUNCTION THAT:

Sections 21.06.040 Landscape, Buffering, and Screening Standards; Section 21.10.020 Terms Defined; Section 21.03.030 Measurements; Section 21.03.080 Mixed Use and Industrial Bulk Standards Summary Table; and Section 21.04.030 Use-Specific Standards are amended as follows (deletions struck through, added language underlined):

21.10.020 Terms defined.

Approved Street Trees for Grand Junction's Rights-of-Way means the list of trees, shrubs, vines, and evergreens in public rights-of-way maintained by the Forestry Board (see Section 8.32.020).

Buffer/Buffering means an object or area with landscaping, including trees, shrubs, a wall, fence, berm, or any combination thereof that serves as a visual and auditory screen between properties.

Colorado Nursery Act means C.R.S. Title 35 Article 26 as amended.

Caliper means the diameter of the tree trunk measured 4.5 feet above the ground on the uphill side of the tree or 6 inches above the root ball at time of planting.

Canopy drip line means the area directly located under the outer circumference of the tree branches from which water drips onto the ground.

Evergreen tree means any tree having foliage that persists and remains green throughout the year.

Functional turf means an area of turf measuring no less than 30 feet in width and length with a minimum area 1,500 square feet for the purposes of common recreational uses open to the public, members of a neighborhood, or clients and/or customers of a commercial or office use.

Graywater treatment works means an arrangement of devices and structures used to: (a) collect graywater from within a building or a Facility; and (b) treat, neutralize, or stabilize graywater within the same building or Facility to the level necessary for its authorized uses. C.R.S 25-8-103(8.4)

Improved area means the developed portion of a property consisting of areas occupied by buildings, asphalt, concrete, gravel, or landscaped area. Where phased development is proposed, the improved area shall be identified and measured separately for each phase of development.

Lot coverage means that area of the lot or parcel which may be occupied by impervious surfaces.

Noxious or invasive species means non-native plants that have a recognized harmful impact on natural habitats and/or are likely to displace native plant species for light, space, soil moisture and nutrients, including those noxious species identified under the Colorado Noxious Weed Act codified at C.R.S. Title 35 Article 5.5, as amended.

Ornamental tree means a tree that has a height and spread between 15 feet and 30 feet at maturity.

Shade tree means a tree that has a height and/or spread of 30 feet or greater at maturity.

Suitable Plant List means a list maintained by the Director of plant species and genera approved to be installed in accordance with this code.

Root ball means the mass formed by the roots of a plant and the soil surrounding them at the time of planting.

Rootzone means the area of the ground around the base of the tree where rooting occurs, as measured from the trunk to a distance twice the radius of the canopy drip line.

Shade tree means a tree that has a height and/or spread of 30 feet or greater at maturity.

Suitable Plant List means a list maintained by the Director of plant species and genera approved to be installed in accordance with this code.

Tree canopy coverage means the area of ground directly beneath the leaves and branches of trees.

Turf means grasses planted to form a dense growth of leaf blades and roots, such as Kentucky Blue Grass and similar species used for planting lawns.

~~Water wise means landscape methods which conserve water through the use of drought-tolerant plants, planting and irrigation techniques.~~

Xeriscape or xeriscaping means landscape plantings that reduce the need for irrigation.

21.03.030 Measurements.

(e) Lot Coverage. Lot coverage is measured as the percentage of the total lot area covered by impervious surfaces. It is calculated by dividing the square footage of impervious surface by the square footage of the lot.

21.03.080 Mixed Use Standards.

Mixed Use and Industrial Bulk Standards Summary Table

	R-O	B-1	B-2	C-1	C-2	CSR	M-U	BP	I-O	I-1	I-2
Lot											
Area (min. ft. unless otherwise specified)	5,000	10,000	None	20,000	20,000	1 ac	1 ac	1 ac	1 ac	1 ac	1 ac
Width	50	50	None	50	50	100	100	100	100	100	100

Frontage	None	None	None	None	None	None	None	None	None	None	None
Setback											
Principal structure											
Front (min. ft.)	20	20	0	15	15	15	15	15	15	15	15
Side (min. ft.)	5	0	0	0	0	0	0	0	0	0	0
Side – abutting residential (min. ft.)	0	10	0	10	10	10	10	10	10	10	10
Rear (min. ft.)	10	15	0	10	10	10	10	10	10	10	10
Accessory structure											
Front (min. ft.)	25	25	25	25	25	25	25	25	25	25	25
Side (min. ft.)	3	0	0	0	0	0	0	0	0	0	0
Side – abutting residential (min. ft.)	0	5	0	5	5	5	5	5	5	5	0
Rear (min. ft.)	5	15	0	10	10	10	10	10	10	10	10
Other Dimensional Requirements											
Lot coverage (max.)	<u>70%</u>	<u>80%+100%</u>	<u>100%</u>	<u>80%+100%</u>	<u>80%+100%</u>	<u>75%+100%</u>	<u>80%+100%</u>	<u>80%+100%</u>	<u>80%+100%</u>	<u>90%+100%</u>	<u>90%+100%</u>
Height (max. ft.)	40	40	80	65	65	65	65	65	65	50	50
Density (min. units per acre)	4	8	8	12	n/a	n/a	8	8	n/a	n/a	n/a
Density (max. units per acre)	None	16	None	24	None	None	24	24	None	None	None
** Gross floor area	10,000	15,000	None	None	None	None	None	None	None	None	None
Notes											

B-1: Max. gross floor area varies by use; retail – 15,000 sf (unless a CUP is approved), office 30,000

B-2: Parking front setback for parking as a principal use – 30 ft., as an accessory use – 6 ft.

C-1: Min. rear setback – 0 if an alley is present

CSR: Maximum building height abutting residential – 40 ft.

** Gross floor area calculated for maximum size may exclude eaves, covered or uncovered porches, upper story decks and balconies, breezeways, exterior covered stairwells and attached decorative walls which are less than or equal to three feet in height.

21.04.030 Use-Specific Standards

(g) Mini-Warehouse.

(1) Purpose. This subsection sets standards for the establishment of safe and attractive mini-warehouse developments. These standards apply to all mini-warehouses, including those that provide indoor and/or outdoor units.

(2) Accessory Uses. Accessory uses may include living quarters for a resident manager or security and leasing offices.

(3) Uses Prohibited.

(i) No owner, operator or lessee of any mini-warehouse or portion thereof shall offer for sale or sell any item of personal property, or conduct any type of commercial activity of any kind whatsoever, including such uses as sales, service and repair operations, manufacturing, or truck/equipment rentals, other than leasing of the units, or permit same to occur upon any area designated for the mini-warehouse use, except that estate or foreclosure sales held by the mini-warehouse owner or operator shall be allowed.

(ii) No outside storage shall be permitted except the storage of licensed vehicles within approved areas designated for such storage. This storage shall meet the requirements of GJMC 21.04.040.

(4) Landscaping and Screening. All mini-warehouses shall provide the following in addition to meeting standards of GJMC 21.06.040:

~~(i) A 30-inch-high by 10-foot-wide landscaped berm is required between storage units and the abutting public right-of-way. The berm shall include trees that are planted every 30 feet.~~

(ii) For outdoor mini-warehouse units, landscaping islands shall be provided at the end of each row of storage units when visible from the public right-of-way. Landscape islands shall be planted with shrubs that reach at least five feet of height at maturity.

(45) Off-Street Parking and Driveways Standards.

- (i) Drive aisles within outdoor mini-warehouse facilities shall be a minimum of 26 feet wide for single-load aisles and 30 feet for double-load aisles.
- (ii) A minimum of two parking spaces shall be provided adjacent to the primary entry structure.

(56) Architectural and Site Design Standards. All mini_-warehouses shall meet the following standards:

- (i) Mini_-warehouses that front public rights-of-way shall provide a primary entry structure at the entrance of the development that meets the following standards:

- (A) No parking shall be placed between the building and the street.
- (B) Windows or similar architectural features shall cover at least 30 percent of the street-facing facade.
- (C) Building materials such as brick, stone, wood, architectural-grade metal, or similar exterior shall be used.
- (D) Two of the following features shall be utilized in the design of the primary entry structure:
 - a. Tower feature.
 - b. Facade articulations on the street-facing facade.
 - c. Roofline articulations in the street-facing facade.
 - d. Decorative lighting on the street-facing facade. This lighting must comply with all standards found in GJMC 21.06.080.

- (ii) Any street-facing facade of each storage unit must be covered with building materials such as brick, stone, wood, architectural-grade metal, or similar exterior.

(67) Signage. All mini_-warehouses shall provide the following in addition to meeting standards of GJMC 21.06.070:

- (i) Individual mini_-warehouses shall be clearly marked with numbers or letters identifying the individual units and a directory of the unit locations shall be posted at the entrance or office of the facility.

- (ii) Signs or other advertising shall not be placed upon, attached to, or painted on any walls or fences required for landscaping and buffering in the mini-warehouse development.

21.06.040 Landscape, buffering and screening standards

(a) **Purpose and Goals.** The purpose of this section is to enhance the aesthetic appeal and context sensitivity of new development, achieve efficient use of water resources, expand urban tree canopy, and contribute to a livable urban environment. Landscaping reduces heat and glare, facilitates movement of traffic within parking areas, provides shade for citizens shades cars and parking surfaces, reduces local and ambient temperatures, buffers and screens cars from adjacent properties, promotes natural percolation of surface waters, improves air quality, buffers and screens potentially incompatible uses from one another, and conserves and enhances the value of property and neighborhoods within the City.

(b) ~~General Landscape Standards.~~ Authority.

(1) The Director shall decide all questions of soils, plant selection and care, irrigation installation and other vegetation and landscaping questions, except for trees, shrubs, vines, and evergreens in the right-of-way. The City Forester shall decide all questions of plantings in the right-of-way.

(2) Variances to this section and appeals of administrative decisions (where this code gives the Director discretionary authority) shall be referred to the Planning Commission.

C —General Landscape Standards

(1) Compliance. All landscaping required by this code shall comply with the standards and requirements of this section. ~~The landscaping requirements of this code shall not apply to a lot zoned for one or two dwellings.~~ Landscaping for new developments shall occur in buffer areas, all interior parking areas, along the perimeter of the property, around new and existing structures, and along street frontages and within any right-of-way not used ~~nor planned to be used~~ for infrastructure.

(2) Plant Quantities. The amount of landscaping is based on ~~gross area~~the improved area of proposed development.

(3) Landscaping Standards. All new development must install, ~~and~~ maintain, and protect landscaping as required by this code. (See subsection ~~(b)(1k)~~ of this section for an example of the landscaping requirements of this section.)

~~(i) On-site frontage landscaping may not apply in the B-2 zone downtown commercial. (See zone district standards.)~~

(i) The landscaping requirements of this code shall not apply to a lot on which the principal use is a single family residence or duplex. Requirements for residential subdivisions shall continue to apply.

(ii) Landscaping in the abutting right-of-way is required in addition to overall site landscaping requirements and must be installed and maintained as required by Section 21.06.040(b)(16) of this code.

(iii) Buffer landscaping is required in addition to overall site landscaping requirements as required by this Code.

(4) Acceptable Plant Material. ~~Vegetation must be suitable for Grand Junction's climate and soils. The Director may allow the use of any plant if sufficient information is provided to show suitability including salt tolerance, sun and shade requirements based on planting locations, growth habit, etc. Noxious weeds are not allowed. (The Director will keep a list of suitable plants.)~~

(i) Vegetation must be suitable for Grand Junction's climate and soils and shall be selected from the City of Grand Junction Suitable Plant List, to be maintained by the Director. Applicants may petition the inclusion of plants not found on the Suitable Plant List and shall provide sufficient information about the proposed species to facilitate review. The Suitable Plan List identifies the anticipated water needs of each plant species. The Director may allow the use of any plant if sufficient information is provided to show suitability including salt tolerance, sun and shade requirements based on planting locations, growth habit, etc. Noxious or invasive species are not allowed to be planted in development but may be preserved in development.

(A) The Director maintains the authority not to approve a plant species that appears on the Suitable Plant List if the Director deems it inappropriate under the planting conditions proposed in a development.

(iii) Plant materials shall meet or exceed the plant quality and species standards of the current American Standard for Nursery Stock and be consistent with the Colorado Nursery Act.

(iv) All plants proposed for installation shall be selected, spaced, and planted appropriately based upon their adaptability to the climatic, geologic, and topographical conditions of the project site.

(v) A minimum 25 percent of the proposed shrubs and ground cover shall be identified as native or native alternative on the Suitable Plants List, and 90 percent of the proposed shrubs and ground cover shall be identified as xeric, xeric-low, xeric-medium, or low water on the Suitable Plants List.

(vi) Turf not meeting the definition of functional turf shall not exceed 15 percent of any required landscaping area in the City of Grand Junction.

(vii) Functional turf may exceed the 15 percent maximum.

(5) Minimum ~~pPlant s~~Sizes ~~are~~: All plants shall meet the following minimum plant sizes when installed.

(i) Shade tree, two-~~inch~~ caliper inches ~~(measured six inches above root ball) at time of planting. At maturity, a shade tree has a height and/or spread of 30 feet or greater.~~ If two-~~inch~~ caliper inch shade trees are not available due to seasonal shortages or shortages in desired varieties, the Director may approve the installation of smaller trees, provided the proportional difference in caliper inches is compensated for by installing additional trees. ~~For example, the installation of six one-and-one-half-inch caliper shade trees would result in a shortfall of three caliper inches, which could be compensated for with two additional one-and-one-half-inch trees.~~ However, a minimum caliper of one and one-half inches shall be required.

(ii) Ornamental tree, one-and-one-half-~~inch~~ caliper inches ~~(measured six inches above root ball) at time of planting. At maturity, an ornamental tree has a spread and height between 15 feet and 30 feet.~~

(iii) Evergreen tree, two caliper inches and six feet tall at time of planting.

(iv) ~~Deciduous shrub~~ Shrub, #5 container.

(v) ~~Evergreen shrub, five-gallon container.~~

(vi) Perennials and ground covers, #5 container.

(vii) Turf mix, native grasses and wild flower mix are the only vegetation that may be planted as seed or by plugs. Turf may planted as sod rolls

<u>Minimum Plant Sizes</u>	
<u>Planting Type</u>	<u>Size at Time of Planting</u>
<u>Shade Tree</u>	<u>Two caliper inches</u>
<u>Ornamental Tree</u>	<u>One-and-one-half caliper inches</u>
<u>Evergreen Tree</u>	<u>Two caliper inches and six feet tall</u>
<u>Shrub</u>	<u>#5 Container</u>
<u>Perennial</u>	<u>#1 Container</u>
<u>Groundcover</u>	<u>#1 Container</u>
<u>Turf</u>	<u>As seed, by plug, or as sod roll</u>

(~~6~~7) Irrigation. All vegetation and landscaped areas must be provided with a permanent irrigation system including a system supplied by water from an approved graywater treatment works.

(i) Non-potable irrigation water shall be used if available for the proposed development area unless the Director allows the use of potable water.

(ii) An underground pressurized irrigation system and/or drip system is required for all landscape areas. ~~on the property and in any right-of-way.~~

(iii) If connected to a ~~drinking-potable~~ water system, all irrigation systems require State-approved backflow prevention devices.

(iv) All irrigation for non-potable irrigation water systems must have adequate filters easily accessible above ground or within an appropriately sized valve box.

(v) Native grasses must have a permanent irrigation source that is zoned separately from higher water demand landscapes. Once the grasses are

established, irrigation to native grass areas can be reduced to a level that maintains coverage typical of the grass mix and to suppress weed growth.

(vi) Irrigation applied to trees shall be expanded or supplemented as appropriate to rootzone expansion over the life of the tree.

~~(78)~~ Landscape Plans ~~and Equivalent Plants.~~

(i) All applications for development shall identify the required landscaped areas and include a landscape plan in accordance with the requirements in this section. Landscape plans must identify the species and sizes of vegetation (SSID manual).

(ii) All landscaping shall be installed, maintained, and protected as shown on the approved plan.

(iii) All changes to the landscape plan require prior written approval from the Director.

~~(ivii)~~ An equivalent species may be substituted in the field with prior written approval of the Director without prior approval of the Director, provided a revised drawing is submitted to the Department. Plants are “equivalent” if they have the same growth habit and rate, same cover, leafing, shade characteristics and function, have similar water requirements as identified as the City of Grand Junction Suitable Plants List, and thrive in the same microclimate, soils and water conditions.

~~(iv)~~ All other changes to the landscape plan require prior approval from the Director.

(v) All development plans shall designate required landscaping areas. ~~Subdivision plats shall designate required landscaping areas.~~

~~(vi)~~ Landscape plans shall identify the species and sizes of vegetation. The owner shall keep each fire hydrant unobscured by plant material.

(vii) Landscape plans shall be stamped by a ~~licensed~~ landscape architect licensed in the State of Colorado. Inspection and compliance with approved landscape plan must be certified by a licensed landscape architect prior to issuance of a certificate of occupancy, or the release of DIA security funds. Additionally, the property owner or irrigation installer must provide a letter describing that adequate additional capacity exists in the irrigation system to support the landscaping materials at maturity prior to issuance of a certificate of occupancy or the release of DIA security funds.

(A) A licensed landscape architect is not required to produce landscape plans if the plans are submitted for a Minor Site Plan review unless required by State statute. All other requirements continue to apply to landscaping for Minor Site Plans.

(viii) All landscape plans shall include an irrigation plan. The irrigation plan shall comply with the standards in the SSID manual. See GJMC 21.06.010(c).

(ix) Utility composite plans must be submitted with landscape plans.

(x) Expansion of a developed site as defined in GJMC 21.02.100(f) that requires a Site Plan Review shall require a landscaping plan and correction of nonconforming landscaping as provided in GJMC 21.08.040.

(xi) Tree protection measures shall be clearly identified on the construction and landscape plans.

(xii) Wall and fence elevations and typical cross sections must be submitted with the landscape plan at a minimum scale of one-half inch equals one foot.

(8) Preservation of Significant ~~Trees~~Landscape Features.

(i) Existing landscape features such as escarpments, large ~~or old~~ trees or stands, heavy vegetative cover, ponds and bluffs shall be identified by the ~~Director~~Applicant as part of the development review process. ~~This identification shall include a written inventory of significant trees to be produced with a landscaping plan. Any significant tree as defined in subsection (c) below shall be identified on the proposed landscaping plan. To the extent the Director deems practicable, such features shall be preserved by the final plans and to such extent, count toward landscape and open space area requirements. Features to be preserved shall be protected throughout site development. If a significant live feature which was to be preserved dies or is substantially damaged, the developer shall replace it with an equivalent feature as determined by the Director. No person shall kill or damage a landscape feature required to be preserved by this section. The developer shall protect trees from compaction under the canopy drip line of the tree unless the City Forester says otherwise.~~

(ii) All trees not identified as prohibited on the Suitable Plants List and that have a diameter that exceeds 15 caliper inches shall be considered significant. ~~During construction, fencing or similar barriers shall isolate and protect the landscape features to be preserved.~~

~~(iii) Where significant trees exist on a property, no fewer than 30 percent of significant trees shall be preserved during development. Significant trees that are removed shall be replaced at a rate of one caliper inch of tree per two caliper inches of the significant tree to be removed, in addition to new tree plantings otherwise required by this Code. See GJMC 21.06.040(h)(6) for credit applied to preserved trees. All protection measures shall be clearly identified on the construction and landscape plans.~~

~~(ivii) Significant trees to be preserved shall be visibly healthy and free from disease or parasite infection. No vehicles or equipment shall be driven or parked nor shall any materials be piled within the canopy drip line of any tree to be preserved.~~

~~(v) Features to be preserved shall be protected throughout site development. No person shall kill or damage a landscape feature required to be preserved by this section. The developer shall protect trees from compaction.~~

~~(A) During construction, existing plant material to be preserved shall be enclosed by a temporary fence at least five feet outside the canopy dripline. In no case shall vehicles be parked, or materials or equipment be stored or stockpiled within the enclosed area.~~

~~(B) Irrigation shall be provided to trees preserved during construction of sufficient quantity to ensure their health and survival.~~

~~(C) If a significant tree which was to be preserved dies or is substantially damaged, the developer shall replace it at the rate of one newly planted tree per 2 caliper inches of damaged or destroyed tree.~~

(9) Protection of Landscape Areas. All landscape areas (except in the right-of-way where a street side curb does not exist) shall be protected from vehicles through the use of concrete curbing, large rocks, or other similar obstructions.

(10) Utility Lines. If the location of utilities conflicts with the landscaping provisions, the Director may approve an equivalent alternative.

~~(i) Utility composite plans must be submitted with landscape plans.~~

~~(ii) Trees which will grow to a height of greater than 15 feet at maturity shall not be planted under electrical lines.~~

~~(iii) Ornamental and evergreen trees planted under an electrical line may count towards the total tree requirement.~~

(11) Sight Distance. The owner shall maintain all vegetation, fences, walls and berms so that there is no sightsite distance hazard nor road or pedestrian hazard (see TEDS).

(12) Soil and Planting Beds. Soil in landscape areas must be amended and all vegetation planted in accordance with good horticultural practices.

(i) Details for the planting of trees, shrubs and other vegetation must be shown on the landscaping plans.

(ii) Shrub beds adjacent to turf or native grass areas are to be edged with concrete, metal, brick or substantial wood material. Plastic and other light duty edgings are not allowed.

(iii) Organic mMulch to a minimum of 3 inches and weed fabric areis required for all shrub beds.

(iv) ~~The minimum square footage of planting area for a five-gallon evergreen or deciduous shrub is 16 square feet. These minimum square footages may be varied by a qualified professional. Prior to planting, compacted soils shall be transformed to a friable condition.~~

(v) Compost, soil amendments, or retained topsoil shall be incorporated into the soil to a minimum depth of 6 inches for tree and shrub plantings.

(13) Trees.

~~(i) Trees should not be planted near a light pole if eclipsing of light will occur at maturity. Placing light poles in the parking lot, away from landscape area and between parking bays, helps eliminate this conflict and should be considered.~~

(ii) Tree canopies may overlap by up to 2030 percent of the diameter of the tree at maturity. Tree clustering may be allowed with some species so long as clustering does not adversely affect the mature canopy.

(ii) Trees which will grow to a height of greater than 25 feet at maturity shall not be planted under overhead electrical lines.

(iii) Weed fabric shall not be used within 8 feet of the base of a tree.

~~(iiiiv)~~ At planting, tree shall be healthy and free of disease. Tree trunks must be reasonably straight with minimal doglegs. Roots shall be checked prior to planting and corrected for optimal growth patterns.

(iv) Wire baskets, burlap wrappings, rope, twine or any similar shipping materials shall be removed before planting.

(vi) Tree planting holes shall be of sufficient depth so that the flare of the tree above the root ball is no higher than 1 inch above grade.

(vii) Tree planting holes shall be of a diameter no less than three times the diameter of the tree's root ball at time of planting.

(viii) The minimum square footage of planting area for a shade tree is 140 square feet. ~~The Director may vary the minimum square footage.~~

(ix) Ornamental trees shall be planted in a landscape strip that is no less than six feet in width (not including curb and gutter). Shade trees shall be planted in a landscape strip that is no less than eight feet in width (not including curb and gutter).

(xvi) SpeciesTree Diversity. The percent of any one type of tree that can be planted in a development shall be as follows:

(A) Zero through five trees: No limitation.

(B) Six to ten~~21~~ trees: No more than 50 percent of one species~~genus~~.

(C) Eleven to twenty trees: No more than 33 percent of one genus

(C) twenty-one~~21~~ or more trees: No more than 20 percent of one species~~genus~~.

(xi) A minimum of 50 percent of proposed tree plantings shall be identified as preferred trees by the Plant List.

(xii) Trees shall not be planted near a light pole if eclipsing of light will occur at maturity. Placing light poles in the parking lot, away from landscape areas and between parking bays, helps eliminate this conflict and should be considered.

(xiii) When calculating tree quantities, any fraction of a tree is rounded up to the next whole number.

(14) Shrubs.

(i) ~~Twenty-five percent of the required shrubs may be converted to turf based on one five-gallon shrub per 50 square feet of turf. A minimum 25~~

percent of the proposed shrubs and ground cover shall be identified as native or native alternative on the Suitable Plants List, and 90 percent of the proposed shrubs and ground cover shall be identified as xeric, xeric-low, xeric-medium, or low water on the Suitable Plants List.

~~(ii) Ten percent of the required shrubs may be converted to perennials and/or ground covers at a ratio of three one-gallon perennials and/or ground covers for one five-gallon shrub.~~

(iii) ShrubSpecies Diversity. The percent of any one type of shrub that can be planted in a development shall be as follows:

(A) ~~Ten~~10 through 19 shrubs: 50 percent per genus.

(B) ~~Twenty~~20 through 39 shrubs: 33 percent per genus.

(C) ~~40~~Forty or more through ~~59~~ shrubs: 25 percent per genus.

~~(D) 60 or more shrubs: 15 percent.~~

~~(iiv)~~ When calculating ~~tree and~~ shrub quantities, any fraction of a shrub ~~or tree or other requirement~~ is rounded up to the next whole number.

~~(iv) With the approval of the Director, the number of shrubs may be reduced in exchange for additional trees or tree size at a rate of three shrubs per caliper inch. The minimum area for planting an evergreen or deciduous shrub is 16 square feet.~~

(15) Maintenance:

~~(i)~~ The owners, tenants, and occupants, including homeowners' associations, for all new and existing uses in the City must maintain landscaping in a healthy, growing, neat and well-maintained condition:

~~(i) Maintain landscaping in a healthy, growing, neat and well-maintained condition.~~

~~(ii) (A)~~ Maintenance includes watering, weeding, pruning, fertilization, pest control, trash and litter removal, replacement of dead or diseased plant material, reseeding and other reasonable efforts.

~~(iii) (B)~~ Any plant that dies or substantially damaged due to improper maintenance must be replaced with an equivalent live plant within 90 days of notification plant death or, ~~if during the winter~~, by the next April 1st.

(iv) Hay mulch used during the preparation or establishment of landscaping must be certified weed-free by the Colorado Department of Agriculture.

~~(v) On his own or based on a citizen complaint, the Director may, without notice and without a warrant, walk on the landscaped portion of the property from time to time to inspect the condition of landscaping. The Director or designee may from time to time, inspect the condition of landscaping wherever no reasonable expectation of privacy exists.~~

~~(A) The purpose of such site inspections shall be to verify that all required landscaping has been maintained in a healthy, growing, neat and well-maintained condition. Property owners shall be notified of necessary corrective action for failure to comply with the maintenance provisions of this section.~~

~~(vi) Between one and two years after installation of required landscaping, Code Enforcement shall conduct a site inspection to verify that all required landscaping has been maintained in a healthy, growing, neat and well-maintained condition. Property owners shall be notified of necessary corrective action for failure to comply with the maintenance provisions of this section. Maintenance of landscaping in unimproved rights-of-way shall be the responsibilities of owners, occupants, and tenants.~~

~~(v) Fire hydrants shall not be unobscured by plant material. Fire hydrants shall be visible from the center of the right-of-way at an angle of 45 degrees.~~

~~(vi) These requirements shall be specified in the articles of incorporation or bylaws for a homeowners' association whenever the homeowners' association is assigned the responsibility of maintaining landscape areas.~~

(16) Public Right-of-Way. ~~Except where a detached sidewalk exists or is proposed and approved (see subsection (b)(16)(iv) of this section), landscaping on public right-of-way shall not be counted toward any landscape or open space requirements of this code, unless specifically provided otherwise in this code.~~

(i) All unimproved right-of-way adjacent on the side abutting a development which is not in the City's ~~one~~ten-year capital plan to be improved must be landscaped. All right-of-way landscaping shall be irrigated and maintained by the adjoining private property owner, unless the City agrees to accept it for

maintenance. If it is to be maintained by the City, a separate irrigation system shall be provided.

(ii) At least 75 percent of the unpaved adjacent right-of-way shall be landscaped with turf, low shrubs or ground cover. ~~The Director may vary the required landscaping to obtain a consistent appearance in the area or with existing or planned right-of-way landscaping. No more than 15% of the right-of-way shall be landscaped with turf.~~

(iii) For the purpose of meeting minimum plant quantities, 50 percent of landscaping plantings on public right-of-way shall be counted toward the landscape or open space requirements of this code, unless specifically provided otherwise in this Code.

(iv) The owner of the nearest property shall keep all rights-of-way, which are not hard surfaced, free of weeds, litter, junk, rubbish and obstructions. To prevent weed growth, erosion and blowing dust, right-of-way areas not covered by vegetation or paving shall be covered with organic mulch, wood chips, ~~bark chips, decorative rocks or cobble~~, or similar natural materials, ~~to be underlain by weed fabric or other barrier.~~

(iv) ~~Where detached sidewalks exist, or are proposed, a maximum of 50 percent of the public right-of-way landscaping may be counted toward the total required landscaping. The right-of-way landscaping between the curb and sidewalk shall contain street trees spaced every 40 feet. The right-of-way landscaping between the curb and sidewalk shall contain street trees spaced every 40 feet. Right-of-way landscaping shall be a minimum of eight feet wide in any direction.~~

(vi) ~~The Director may allow decorative paving in landscaped areas in commercial or other high pedestrian traffic areas if the decorative paving is compatible with nearby right-of-way paving and landscaping. No tree shall be removed from the public right-of-way without the approval of the City Forester. Trees removed from the right-of-way without approval shall be subject to penalties per GJMC 9.04.100.~~

(vii) Trees planted in the public right-of-way shall be of species identified on the list of Approved Street Trees for Grand Junction's Rights-of-Way.

(17) Pervious Coverage. Landscaped and buffer areas shall count toward the pervious area requirements surfaces included in lot coverage calculations.

~~(18) Authority.~~

~~(i) The Director shall decide all questions of soils, plant selection and care, irrigation installation and other vegetation and landscaping questions.~~

~~(ii) The Director may approve an applicant's request to vary from the required number and types of plants or landscaped area if:~~

~~(A) The number of trees exceeds 25 percent of the minimum number of trees; and/or~~

~~(B) Trees exceed the minimum caliper requirement by one inch or more; and/or~~

~~(C) Additional berming or other attractive buffering, public art, enhanced paving treatments for public plazas (brick or concrete pavers, tinted and stamped concrete, etc.) is provided. The Director may grant up to a 10 percent reduction of the square footage of improved area used to calculate the landscape requirement where these types of enhancements are included in a development.~~

~~(D) Additional trees or larger trees can be exchanged on a per-caliper-inch basis with three shrubs equaling one caliper inch. Credit for using larger trees would be based on a direct exchange of caliper inches. For example: 10 three-inch caliper trees equaling 30 caliper inches is the same as 15 two-inch caliper trees equaling 30 caliper inches; one two-inch caliper tree equals six shrubs. Trees may be substituted for shrubs, but shrubs may not be substituted for trees.~~

~~(E) If the total amount of required landscaping is provided, the Director may allow the owner to place the landscaping on another appropriate part of the lot.~~

~~(19) Water Wise. Because of Grand Junction's desert environment, water wise design and the use of xeric (low water use) plants are strongly encouraged. Water wise designs shall employ the seven basic principles of xeric design which include "comprehensive planning and design for low water use, creating practical turf areas, selecting low water use plants and organizing plants by water usage, using adequate soil prep, using water conserving mulches, irrigating efficiently and maintaining the landscape appropriately" (source: Denver Water Board).~~

~~(i) Low water use plants are encouraged for use in the "typical" urbanized landscape, especially where the plants can be irrigated (zoned) separately from higher water use plant material. This way of using xeric plants is compatible with any of the requirements of this code.~~

~~(ii) Landscaping designs that mimic the "desert" character of Grand Junction's setting are also encouraged, but must be carefully designed so that~~

~~the basic requirements for shade, screening and buffering are met. Because of this, the Director must approve "desert" or xeric landscape plans as well as variances from the required plant coverage ratios. To further encourage xeriscaping, one-gallon xeric plants shall be equivalent to five-gallon traditional plants. Trees shall be installed in accordance with subsection (b) of this section.~~

(c) **Parking Lots.** The requirements of this subsection are applicable to all public and private parking areas but not to automobile display areas for automobile dealerships (General Retail Sales, Outdoor Operations, Display or Storage) and self-service storage as defined in GJMC 21.04.

(1) Interior Landscaping Requirement. Landscaping is required in the interior of parking lots to direct traffic, to shade cars and structures, to reduce heat and glare and to screen cars from adjacent properties. The interior of all parking lots shall be landscaped as follows:

(i) One landscaped island, parallel to parking spaces, is required for each 20 parking spaces. ~~In lieu of the standard landscape island, one "orchard style" landscape island may be used for every six parking spaces. The orchard style landscape islands shall be evenly spaced between end landscape islands. (See subsection (j) of this section.)~~

(ii) Landscape islands must be at least 140 square feet. The narrowest/smallest dimension of a parking lot island shall be eight feet, measured from back of curb to back of curb.

(iii) One landscaped divider island, parallel to the parking lot drive aisles, designed to prevent diagonal movement across the parking lot, shall be located for every three parking lot drive aisles.

(iv) A landscape island is required at the end of every row of parking spaces, regardless of length or number of spaces.

~~(v) Wheel stop barriers on all sides adjacent to the parking lot surface are required to protect landscape islands from vehicles.~~

(vi) A corner area (where it is not feasible to park a vehicle) may be considered an end island for the rows on the perimeter of the parking lot.

(vii) Landscaping of the interior of a parking lot shall include trees and shrubs.

(vi) To improve the management of stormwater runoff, structurally-sound permeable pavers may be used in parking areas, subject to the approval of the Director. Use of permeable pavers for ten parking stalls shall result in a reduction of one required parking stall per the required parking ratios in GJMC 21.06.050.

(vii) Trees planted in parking lot islands shall be selected from those identified as Parking Lot Island Trees on the Plant List.

(vii) A minimum 25 percent of the proposed shrubs and ground cover shall be identified as native or native alternative on the Suitable Plants List, and 90 percent of the proposed shrubs and ground cover shall be identified as xeric, xeric-low, xeric-medium, or low water on the Suitable Plants List.

(ix) The use of bioswales in parking lot designs is encouraged to facilitate stormwater management.

(2) Parking Lot Perimeter. Landscaping is required around the entire perimeter of a parking lot ~~to assist in the shading of cars,~~ to assist in the abatement of heat and to reduce the amount of glare from glass and metal, and to assist in the screening of cars from adjacent properties. The perimeter of a parking lot is defined as the curb line defining the outer boundaries of the parking lot, including dumpster enclosures, bike racks, or other support facilities that are adjacent to the outer curb. Entry drives between a parking lot and the street, drives connecting two internal parking lots or building entry plazas are not included in the perimeter area. The requirements of this subsection are applicable to all public and private parking areas but not to automobile display areas for automobile dealerships (General Retail Sales, Outdoor Operations, Display or Storage) and self-service storage as defined in GJMC 21.04.

(i) Screening shall occur between a street and a parking lot. When screening is required, ~~and~~ street frontage landscape shall apply. (See subsections (c)(3) and (l) of this section.)

(ii) The minimum dimension allowed for the parking lot perimeter landscape strip is ~~six~~8 feet. The width of a landscape strip can be modified by the Director, provided the intent of this section is met.

(iii) Landscaping along the perimeter of parking lots shall include trees and shrubs.

(iv) Parking lots shared by more than one owner shall be landscaped around the perimeter of the combined lots.

(v) A minimum 25 percent of the proposed shrubs and ground cover shall be identified as native or native alternative on the Suitable Plants List, and 90 percent of the proposed shrubs and ground cover shall be identified as xeric, xeric-low, xeric-medium, or low water on the Suitable Plants List.

(3) Screening. All parking lots abutting rights-of-way, entry drives, and adjacent properties must be screened. For this subsection, a “screen” means a ~~turf~~ berm ~~and/or with appropriate groundcover or~~ shrubs.

(i) A 30-inch-high screen is required along 70 percent of parking lots abutting rights-of-way, entry drives, and adjacent properties, excluding curb cuts. The 30-inch screen shall be placed so as to maximize screening of the cars in the parking lot, when viewed from the right-of-way and shall be measured from the ground surface, or the elevation of the roadway if the adjacent road is higher than the property.

(ii) Screening shall not be required between parking lots on adjoining lots where the two lots are designed to function as one.

(iii) If a landscape area is 30 feet wide or greater between a parking lot and a right-of-way, the 30-inch-high screen is not required. This 30-foot-wide or greater area must be ~~100~~⁷⁵ percent covered in plant material including tree canopy coverage, shrubs, and groundcover at maturity within three years. ~~Turf is allowed.~~

~~(iv) The Director may approve a screen wall between a parking lot and a right-of-way if the lot or parcel is unusually small.~~

(iv) A screen wall must not be taller than 30 inches, unless the adjacent roadway is higher than the property, in which case the screen wall shall be 30 inches higher than the adjacent roadway.

~~(vi) Two five-gallon shrubs may be substituted for four linear feet of wall; shrubs must reach a height of at least 30 inches at maturity.~~

~~(vii) A column or jog or equivalent architectural feature is required for every 25 linear feet of wall.~~

(viii) The back of the wall must be at least 30 inches from the face of curb for bumper overhang.

(ix) Shrubs ~~shall~~^{must} be planted on the street side of the wall.

(viiix) There must be at least five feet between the right-of-way and the paved part of a parking lot to use a wall as a screen.

~~(xi) Wall elevations and typical cross sections must be submitted with the landscape plan at a minimum scale of one-half inch equals one foot.~~

(viiiixii) Walls shall be solid masonry with finish on both sides. The finish may consist of stucco, brick, stone or similar material. Unfinished or merely painted concrete block is not permitted.

(ixiii) Shrub plantings in front of a wall are not required in the B-2 downtown district.

(x) A minimum 25 percent of the proposed shrubs and ground cover shall be identified as native or native alternative on the Suitable Plants List, and 90 percent of the proposed shrubs and ground cover shall be identified as xeric, xeric-low, xeric-medium, or low water on the Suitable Plants List.

(d) **Street Frontage Landscape.**

(1) Within all zones (except single-family uses in single-family, B-2 and form based zone districts), the owner shall provide and maintain a minimum 14-foot-wide street frontage landscape adjacent to the public right-of-way.

(2) A minimum of 75 percent of the street frontage landscape shall be covered by plant material at maturity.

~~(3) The Director may allow for up to 50 percent of the 14-foot-wide street frontage to be turf, or up to 100 percent turf coverage may be allowed if the parking lot setback from the right-of-way exceeds 30 feet. Low water usage turf is encouraged.~~

~~(4) All unimproved right-of-way adjacent to new development projects shall be landscaped and irrigated by the owner and/or homeowners' association as per subsection (b)(16) of this section.~~

(35) Landscaping within the street frontage shall include trees and shrubs. If detached walks are not provided with street trees, street trees shall be provided in the street frontage landscape, including one tree for every 40 feet of street frontage.

(4) A minimum 25 percent of the proposed shrubs and ground cover shall be identified as native or native alternative on the Suitable Plants List, and 90 percent

of the proposed shrubs and ground cover shall be identified as xeric, xeric-low, xeric-medium, or low water on the Suitable Plants List.

~~(6) Where detached walks are provided, a minimum street frontage landscape of five feet is acceptable.~~

(e) **Buffers.**

(1) Buffers shall be provided between different zoning districts as indicated in subsection (k) of this section.

(i) ~~Seventy-five~~75 percent of each buffer area shall be landscaped with ~~turf,~~
~~low~~ shrubs or ground cover at maturity.

(ii) One ~~medium-sized~~ tree is required per every 40 linear feet of boundary between different zones.

(iii) A minimum 25 percent of the proposed shrubs and ground cover shall be identified as native or native alternative on the Suitable Plants List, and 90 percent of the proposed shrubs and ground cover shall be identified as xeric, xeric-low, xeric-medium, or low water on the Suitable Plants List.

(2) **Exceptions.**

(i) Where residential or collector streets or alleys separate zoning districts, the Director can require more landscaping instead of a wall or fence.

(ii) Where walkways, paths, or a body of water separates zoning districts, the Director may waive a fence or wall requirement provided the buffering objectives are met by private yards.

(iii) Where a railroad or other right-of-way separates zoning districts, the Director may waive the buffer strip if the buffering objectives are met without them.

(f) **Fences, Walls and Berms.**

(1) **Fences and Walls.** When a higher density or intensity zoning district abuts a lower density or intensity zone district, it is the responsibility of the higher density or intensity property to buffer the abutting zone district according to subsection (k) of this section. When an existing fence or wall substantially meets the requirements of this section, and subsection (k) of this section requires the same form of buffering, an additional fence on the adjacent developing property shall not be required. However, if the new development requires the placement of a wall, and a fence exists on the adjacent property, the wall shall be required. If a wall is

required and a fence is in place, the wall must be placed adjacent to the fence. (Subsection (k) of this section should be referenced to determine when a wall or a fence is required. The more stringent standard shall apply; i.e., if a wall is required and a fence is in place, the wall must be placed adjacent to the fence.) Fences must comply with GJMC [21.04.040\(i\)](#)~~21.04.040(i)~~, any design guidelines and other conditions of approval. Fences and walls required by this section must meet the following:

- (i) Maximum height: six feet (outside of front setback, 30-inch solid height or four feet height if two-thirds open within the front setback and must meet all sight distance requirements).
- (ii) Fence type: solid wood or material with a similar appearance, finished on both sides.
- (iii) Wall type: solid masonry finished on both sides. Finish may consist of stucco, brick, stone or similar material but unfinished or merely painted concrete block is not permitted.
- (iv) Location: within three feet of the property line unless the space is needed to meet landscaping requirements.
- (v) A wall must have a column or other significant architectural feature every 30 feet of length.
- (vi) Any fence or wall over six feet in height requires a building permit.
- (vii) No person shall construct or maintain a fence or a wall without first getting a fence/wall permit from the Director.

(2) Berms. Minimum requirements for berms are as follows:

- (i) Maximum slope of 4:1 for turf areas and 3:1 for shrub beds; and
- (ii) To control erosion and dust, berm slopes must be stabilized with vegetation or by other means consistent with the requirements for the particular landscape area.

(g) Residential Subdivision Perimeter Enclosures.

(1) Intent. The [Director](#)~~decision-maker~~ may require ~~(where deemed necessary)~~ perimeter enclosures (fences and/or walls) around all or part of the perimeter of a residential development. Perimeter enclosures shall be designed to meet the following objectives of protecting public health, safety and welfare: screen negative impacts of adjoining land uses, including streets; protect privacy; maintain a

consistent or complementary appearance with enclosures in the vicinity; maintain consistent appearance of the subdivision; and comply with corridor overlay requirements.

(2) Applicability. When required by the Director, the standards of this subsection shall apply to all residential subdivisions as well as to all mixed-use subdivisions where the square footage of proposed residential uses exceeds the square footage of proposed non-residential uses.

(2) Specifications. Unless specified otherwise at the time of final approval:

(i) A perimeter enclosure includes fences, walls or berms, and combinations thereof, located within five feet of the exterior boundary of a development.

(ii) The maximum height is six feet, including within front setbacks; however, an enclosure constructed on a berm shall not extend more than eight feet above the adjoining sidewalk or crown of road, whichever is lower.

(iii) New enclosures shall be compatible with existing enclosures in the vicinity, if such enclosures meet the requirements of this code.

(iv) A perimeter enclosure in excess of six feet is a structure and requires a building permit.

(v) A perimeter wall must have a column or other significant architectural feature every 30 feet.

(vi) A minimum 25 percent of the proposed shrubs and ground cover shall be identified as native or native alternative on the Suitable Plants List, and 90 percent of the proposed shrubs and ground cover shall be identified as xeric, xeric-low, xeric-medium, or low water on the Suitable Plants List.

(3) Required Perimeter Enclosures. The decision-maker may require a perimeter enclosure as a condition of the final approval if:

(i) Use or enjoyment of property within the development or in the vicinity of the development might be impaired without a perimeter enclosure.

(ii) A perimeter enclosure is necessary to maintain a consistent and complementary appearance with existing or proposed perimeter enclosures in the vicinity.

(iii) A perimeter enclosure is necessary to control ingress and egress for the development.

(iv) A perimeter enclosure is necessary to promote the safety of the public or residents in the vicinity.

(v) A perimeter enclosure is needed to comply with the purpose, objectives or regulations of the subdivision requirements.

(vi) A perimeter enclosure is needed to comply with a corridor overlay district.

~~(vii) The Director will notify applicants of the need for a perimeter enclosure, if required.~~

~~(4) Design of Perimeter Enclosures. A complete landscape plan for the required landscape buffer and a detail drawing of the perimeter enclosure must be submitted at the time of final approval: perimeter enclosure detail at a scale of one-half inch equals one foot.~~

(5) Residential Subdivision Landscape Buffer. On the outside of a perimeter enclosure adjacent to a right-of-way, a 14-foot-wide (on average) landscape buffer shall be provided between the perimeter enclosure and the right-of-way for major and minor arterial streets and major or minor collectors. A five-foot-wide landscape buffer for side and rear yard perimeters shall be provided on all other streets between the perimeter enclosure and the right-of-way.

~~(i) Vegetation in the sight triangle (see TEDS, GJMC Title 29) shall not exceed 30 inches in height at maturity;~~

(ii) In the landscape buffer, one tree per 40 linear feet of perimeter must be provided;

(iii) All perimeter enclosures and landscape buffers must be within a tract dedicated to and maintained by the homeowners' association. The perimeter enclosure and landscaping must be installed by the developer and made a part of the development improvements agreement;

~~(iiv) A minimum of 75 percent of the landscape buffer area shall be covered by plant material including tree canopy coverage, shrubs, and groundcover at maturity. Turf may be allowed for up to 50 percent of the 14-foot-wide landscape strip, at the Director's discretion. Low water usage turf is encouraged;~~

(iv) A minimum 25 percent of the proposed shrubs and ground cover shall be identified as native or native alternative on the Suitable Plants List, and 90 percent of the proposed shrubs and ground cover shall be identified as xeric, xeric-low, xeric-medium, or low water on the Suitable Plants List.

(v) Where detached walks are provided, a minimum buffer of five feet shall be provided. In which case, the right-of-way parkway strip (area between the sidewalk and curb) will also be planted as a landscape buffer and maintained by the HOA.

(6) Construction of Perimeter Enclosures. The perimeter enclosure and required landscape buffer shall be installed by the developer and included in the development improvements agreement.

(7) Ownership and Maintenance. The developer shall refer to the perimeter enclosure in the covenants and restrictions and so that perpetual maintenance is provided for either that the perimeter enclosure be owned and maintained by the owners' association or by individual owners. The perimeter enclosure shall be identified on the plat.

(8) Alternative Construction and Ownership. If the ~~Director~~decision-maker finds that a lot-by-lot construction, ownership and/or maintenance of a perimeter enclosure landscape strip would meet all applicable objectives of this section and the design standards of GJMC ~~21.06.060~~21.06.060, ~~the final approval~~ approved plans shall ~~note~~specify the type and size of materials, placement of fence posts, and length of sections, ~~and the like~~.

(9) Overlay District Conflicts. Where in conflict, the perimeter enclosure requirements or guidelines of approved overlay districts shall supersede the requirements of this section.

~~(10) Variances. Variances to this section and appeals of administrative decisions (where this code gives the Director discretionary authority) shall be referred to the Planning Commission.~~

(h) Substitutions. The requirements outlined in GJMC 21.06.040(i) above may be varied based at the following rates of substitution.

(1) Required trees may be substituted for shrubs and required shrubs may be substituted for trees at a rate of three shrubs equaling one caliper inch of tree. For example: 3 two-inch caliper trees equaling 6 caliper inches may be exchanged for 12 shrubs, or vice versa.

(i) No more than 30 percent of the number of trees required by GJMC 21.06.040(j) may be substituted for shrubs.

(2) Two #5 container shrubs may be substituted for four linear feet of wall when walls are required per GJMC 21.06.040(c)(3). Shrubs substituted for walls must reach a height of at least 30 inches at maturity.

(3) Ten percent of the required shrubs may be converted to perennials and/or ground covers at a ratio of three #1 container perennials and/or ground covers for one #5 container shrub.

(4) The number of shrubs may be reduced in exchange for additional trees or tree size at a rate of three shrubs per caliper inch.

(6) Existing trees preserved during development shall count toward the total tree requirement at a ratio of two caliper inches of preserved tree to one caliper inch of required tree plantings.

	<u>Tree</u>	<u>Shrub</u>	<u>Groundcover/Perennials</u>	<u>Wall</u>
<u>Tree</u>	<u>Two caliper inches preserved tree to one caliper inch required</u>	<u>Three shrubs for one caliper inch of tree</u>	<u>n/a</u>	<u>n/a</u>
<u>Shrub</u>	<u>Three shrubs for one caliper inch of tree</u>	<u>n/a</u>	<u>Three #1 container perennials and/or ground cover for one #5 container shrub</u>	<u>Two #5 container shrubs (minimum 30 inches in height) for four linear feet of wall</u>
<u>Groundcover/Perennials</u>	<u>n/a</u>	<u>Three #1 container perennials and/or ground cover for one #5 container shrub</u>	<u>n/a</u>	<u>n/a</u>
<u>Wall</u>	<u>n/a</u>	<u>Two #5 container shrubs (minimum 30 inches in height) for four linear feet of wall</u>	<u>n/a</u>	<u>n/a</u>

(iH) I-1 and I-2 Zone Landscape.

(1) Parking Lot Perimeter Landscape. Landscaping for the parking lot perimeter shall be per subsection (c)(2) of this section with the following addition:

~~(i) Turf may be allowed for up to 50 percent of the parking lot perimeter, at the Director's discretion. Low water usage turf is encouraged.~~

(ii) A minimum of 75 percent of the parking lot perimeter landscape shall be covered by plant material including tree canopy, shrubs, and groundcover at maturity.

(ii) A minimum 25 percent of the proposed shrubs and ground cover shall be identified as native or native alternative on the Suitable Plants List, and 90 percent of the proposed shrubs and ground cover shall be identified as xeric, xeric-low, xeric-medium, or low water on the Suitable Plants List.

(2) Street Frontage Landscape. Landscaping for the street frontage shall be per subsection (d) of this section with the following additions:

~~(i) Vegetation in the sight triangle in the street frontage must not exceed 30 inches in height at maturity.~~

~~(ii) One tree for every 40 linear feet of street frontage (excluding curb cuts) must be provided, 870 percent of which must be shade trees.~~

(ii) A minimum 25 percent of the proposed shrubs and ground cover shall be identified as native or native alternative on the Suitable Plants List, and 90 percent of the proposed shrubs and ground cover shall be identified as xeric, xeric-low, xeric-medium, or low water on the Suitable Plants List.

(3) Public Right-of-Way Landscape. Landscaping for the public right-of-way shall be per subsection (b)(176) of this section.

(4) Maintenance. Each owner or the owners' association shall maintain all landscaping.

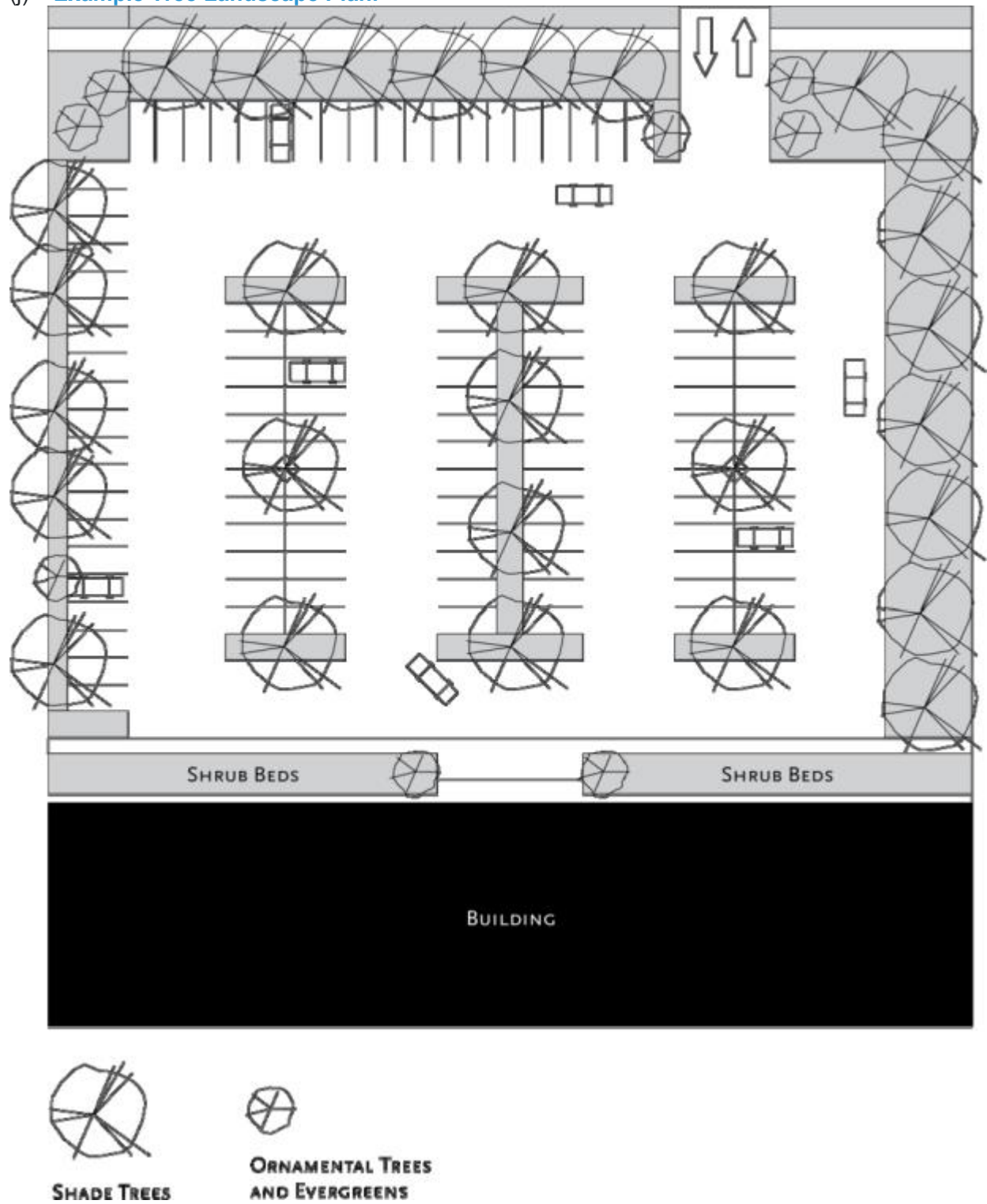
(5) Other Applicable Sections. The requirements of subsections ~~(i), (j), (k)~~ and (k) of this section shall also apply.

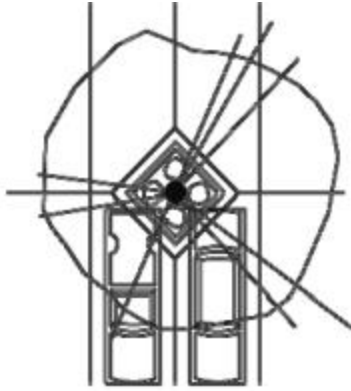
(i) Landscaping Requirements.

Zoning of Proposed Development	Landscape Requirement	Location of Landscaping on Site
Single-family residential (R zones)	As required for uses other than single-family residential; and as required in subsections (b)(16) and (g) of this section	As required for uses other than single-family residential; and landscape buffer and public right-of-way
R-5, R-8, R-12, R-16, R-24, R-0, B-1, C-1, C-2, I-O, CSR, MU	One Two caliper inches of tree per 2,500 3,000 square feet of improved area, with no more than 24 0 percent of the total being ornamental trees or evergreens. One five-gallon #5 container shrub per 450 300 square feet of improved area	Buffer, parking lot, street frontage perimeter, foundation plantings and public right-of-way
B-2	One Two caliper inches of tree per 2,500 3,000 square feet of improved area, with no more than 24 0 percent of the total being ornamental trees or evergreens. One five-gallon #5 container shrub per 450 300 square feet of improved area	Parking lot, park strip (in right-of-way)
I-1, I-2	As required in subsection (h) of this section and in other subsections of this section where applicable	Street frontage, parking lots, buffers and public right-of-way
MXR, MXG, MXS, MXOC	One Two caliper inches of tree per 3,000 square feet of improved area, with no more than 42 0 percent of the total being ornamental trees or evergreens. One five-gallon #5 container shrub per 300 square feet of improved area. Plantings must be evenly distributed throughout the development	Buffer, parking lot, street frontage perimeter, foundation plantings and public right-of-way
Facilities: mining, dairy, vineyard, sand or gravel operations, confined animal feeding operation, feedlot, forestry commercial, aviation or	One Two caliper inches of tree per 5,000 square feet of improved area. One five-gallon #5 container shrub per 600 square feet of improved area	Perimeter, buffer and public right-of-way

Zoning of Proposed Development	Landscape Requirement	Location of Landscaping on Site
surface passenger terminal, pasture		

(j) **Example Tree Landscape Plan.**





6' X 6' SQUARE SHOWN
7' X 7' ALSO POSSIBLE

ORCHARD-STYLE LANDSCAPE ISLAND

(k) Buffering Between Zoning Districts.

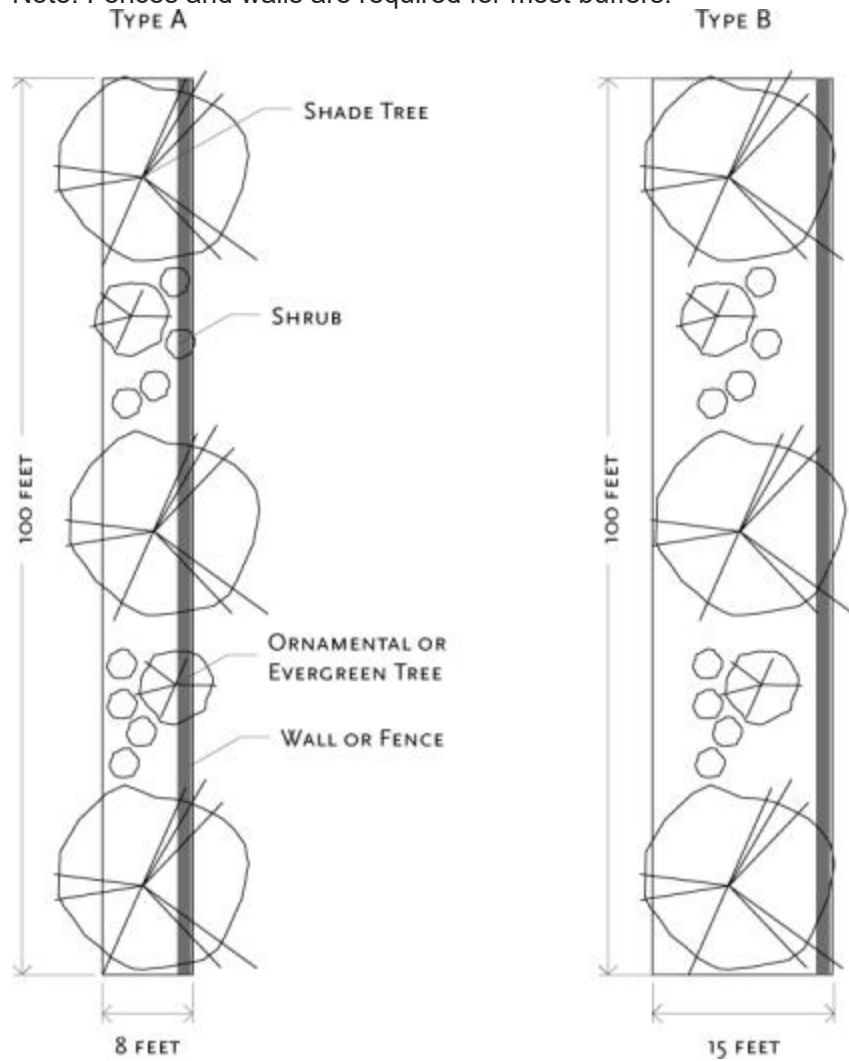
Zoning of Proposed Development	Zoning of Adjacent Property																	
	SF	R-5	R-8	R-12 R-16	R-24	R-O & MXOC	B-1	B-2	C-1	C-2 I-O	I-1	I-2	M-U	CSR	BP	MXR-	MXG-	MXS-
SF (Subdivisions)	-	-	-	-	-	-	F	-	F	W	W	W	F	-	F	-	-	-
R-5	-	-	-	-	-	-	F	-	F	W	W	W	-	-	F	-	-	-
R-8	-	-	-	-	-	F	F	-	F	W	W	W	F	-	F	A	-	-
R-12 & R-16	-	-	-	-	-	-	F	-	W	W	W	W	F	-	F	A	-	-
R-24	-	-	-	-	-	-	F	-	W	W	W	W	F	-	F	A	-	-
RO & MXOC	A	A	A	A	A	-	A or F	-	A or F	W	W	W	A or F	-	A or F	A	-	-
	F	F	F	A or F	A or F	A or F	A or F	-	A or F	A or F	A or F	A or F	A or F	-	A or F	A	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C-1	A&W	W	W	W	W	W	-	-	-	-	-	-	-	-	-	-	-	-
C-2 & I-O	W	W	W	W	W	W	F	-	-	-	-	-	A or F	A or F	A or F	A&W	-	-
I-1	W	W	W	W	W	W	F	-	-	-	-	-	A or F	B&W	A or F	B&W	A or F	A or F
I-2	B&W	W	W	W	W	W	F	-	-	-	-	-	A or F	B&W	A or F	B&W	A or F	A or F
M-U	A or F	A or F	A or F	A or F	A or F	A or F	A or F	-	A or F	A or F	A or F	A or F	-	-	-	-	-	-
CSR ^{3 1}	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Zoning of Proposed Development	Zoning of Adjacent Property																	
	SF	R-5	R-8	R-12 R-16	R-24	R-O & MXOC	B-1	B-2	C-1	C-2 I-O	I-1	I-2	M-U	CSR	BP	MXR-	MXG-	MXS-
BP	A or F	A or F	A or F	A or F	A or F	A or F	A or F	-	-	-	-	-	-	-	-	A or F	A or F	A or F
MXR-	-	-	-	-	-	-	F	-	-	W	W	W	F	-	F	-	-	-
MXG-	-	-	-	-	-	-	F	-	-	W	W	W	F	-	F	-	-	-
MXS-	-	-	-	-	-	-	F	-	-	W	W	W	F	-	F	-	-	-
Notes																		
•A berm with landscaping is an alternative for a required fence or wall if the total height is a minimum of six feet.																		
•Where alleys or streets separate different zone districts, the Director may approve increased landscaping rather than requiring a wall or fence.																		
•The Director may modify this table based on the uses proposed in any zone district.																		
1 Gravel operations subject to buffering adjacent to residential.																		

(l) **Buffer Requirements.**

Buffer Types	Landscaping Requirements	Location of Buffers on Site
Type A	Eight-foot-wide landscape strip with trees and shrubs	Between different uses
Type B	15-foot-wide landscape strip with trees and shrubs	Between different uses
Type F, W	Six-foot fence and wall (see subsection (f) of this section)	Between different uses

Note: Fences and walls are required for most buffers.



(Ord. 4646, 11-19-14; amended during 2010 codification; Ord. 4419, 4-5-10)



Grand Junction City Council

Regular Session

Item #3.a.

Meeting Date: September 21, 2022

Presented By: Randi Kim, Utilities Director

Department: Utilities

Submitted By: Randi Kim

Information

SUBJECT:

Purchase of Lead Service Line Puller Equipment

RECOMMENDATION:

Staff recommends the Purchasing Division to issue a purchase order for the procurement of a lead service line puller from Kobus, Inc. for the amount of \$72,137.

EXECUTIVE SUMMARY:

The City will be required to inventory and replace lead water service lines in accordance with the U.S. EPA Lead and Copper Rule. This request is to purchase a specialized lead service line puller from Kobus, Inc. for the amount of \$72,137.00

BACKGROUND OR DETAILED INFORMATION:

The City will be required to inventory and replace lead water service lines in accordance with the U.S. EPA Lead and Copper Rule. Replacing service lines typically requires either digging a trench to install the new service line or subcontracting with a company that can utilize trenchless boring to install the line. A pipeline puller is a compact, easy-to-use piece of equipment that offers a safer and cost-effective alternative to these methods. The equipment helps minimize impacts to private property.

A formal Invitation for Bids (IFB) was issued via BidNet (an online site for government agencies), posted on the City's Purchasing website, sent to the Grand Junction Chamber of Commerce, the Western Colorado Contractor's Association, and advertised in the Daily Sentinel. BidNet sent the bid notice to 765 vendors, and 21 of them downloaded the document. One vendor submitted a bid that was found to be

responsive and responsible in the following amount:

Kobus, Inc.	Galesburg, MI	\$72,137.00
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Purchasing Policy requires City Council approval if there are fewer than two responses to a solicitation of at least \$50,000.

Per Section 10.10 of the Purchasing Manual, all solicitation documents shall remain confidential until the Purchasing Division awards the contract.

FISCAL IMPACT:

This purchase is funded in the 2022 Adopted Budget for the Water Enterprise Fund.

SUGGESTED MOTION:

I move to (authorize/not authorize) the City Purchasing Division to issue a purchase order with Kobus, Inc. for the procurement of a specialized lead service line puller in the amount of \$72,137.00.

Attachments

None



Grand Junction City Council

Regular Session

Item #3.b.

Meeting Date: September 21, 2022
Presented By: Randi Kim, Utilities Director
Department: Utilities
Submitted By: Toby Thieman, Project Engineer

Information

SUBJECT:

Authorize a Contract for the Odor Control Improvements Project

RECOMMENDATION:

Authorize the City Purchasing Division to Execute a Construction Contract with Glacier Construction, Inc. for the Construction of the Odor Control Improvements Project in the Amount of \$4,997,000.00.

EXECUTIVE SUMMARY:

This request is to award a Construction Contract for the Odor Control Improvements Project. This project will install two odor reduction stations for the Sanitary Sewer System. Near the intersection of 5th Street and Riverside Parkway there will be a biotrickling filter and a carbon adsorber installed to remove odors. A second biotrickler filter location will be at the Persigo wastewater treatment plant, which will be larger but similar in design. These biotrickling filters will remove Hydrogen Sulfide (H₂S) from the sanitary sewer, which will be noticeably less offensive in smell but also reduce the highly corrosive gas which rapidly accelerates the aging of pipes, manholes, and equipment.

BACKGROUND OR DETAILED INFORMATION:

The City of Grand Junction operates a nearly 600-mile collection system that conveys wastewater to the Persigo Wastewater Treatment Plant. The flow of wastewater through the collection system has the potential to create gases that cause hazardous conditions and/or odors. The City has implemented several measures over the years to mitigate foul air within the wastewater system, including chemical dosing of the wastewater at the City Maintenance Campus. In 2019, the City retained Garver Engineering Consultants to perform an Odor Abatement Evaluation of the Persigo

WWTP and the collection system. The Odor Abatement Evaluation included review and mapping of the historical odor issues, chemical sampling, and evaluating the impact of growth on the system. The findings of the study identified high concentrations of hydrogen sulfide (H₂S) gas in portions of the collection system as the primary odorant of concern, which is highly corrosive and hazardous in high concentrations. The primary mitigation measures from the evaluation were installation of odor control stations that would ventilate and filter the air space within the sewer system. Two primary locations were identified for odor control stations, with one being at the Persigo Wastewater Treatment Plant and one near 5th Street.

This project involves construction of the two odor control stations and pipe modifications that will allow the stations to effectively ventilate the air space within the large diameter sewer interceptors. Removing the H₂S gas from the sewer at these two locations will reduce dangerous working environments for employees of the City, contractors, inspectors, and the public. Less corrosive gas in the manholes and sewer pipes will extend the life of the collection system and the infrastructure at the Persigo Wastewater Treatment Plant.

A formal Invitation for Bids was issued via BidNet (an online site for government agencies to post solicitations), posted on the City's Purchasing website, sent to the Grand Junction Chamber of Commerce, the Western Colorado Contractors Association, and advertised in The Daily Sentinel. Three companies submitted formal bids, which were found to be responsive and responsible in the following amounts:

<u>Contractor</u>	<u>Location</u>	<u>Amount</u>
Glacier Construction, Inc.	Centennial, CO	\$ 4,997,000.00
Velocity Constructors, Inc.	Englewood, CO	\$ 5,686,623.00
Myers & Sons Construction, LLC	Sacramento, CA	\$ 5,800,485.00

Per Section 10.10 of the Purchasing Manual, all solicitation documents shall remain confidential until the Purchasing Division awards the contract.

FISCAL IMPACT:

The 2022 Adopted Budget for the Sewer Fund allocated \$3.6 million for this project based on estimates at the time of budget adoption. This project includes specialty equipment and labor that has seen significant inflation over the past year, which is reflected in the bids received for the Odor Control Improvements project. Budget savings of \$1.68 million from the Tiara Rado Forcemain Project within the Sewer Fund are available to fund the increased costs of the Odor Control Improvements Project. The resulting total project budget of \$5.28 million will be sufficient to fund this

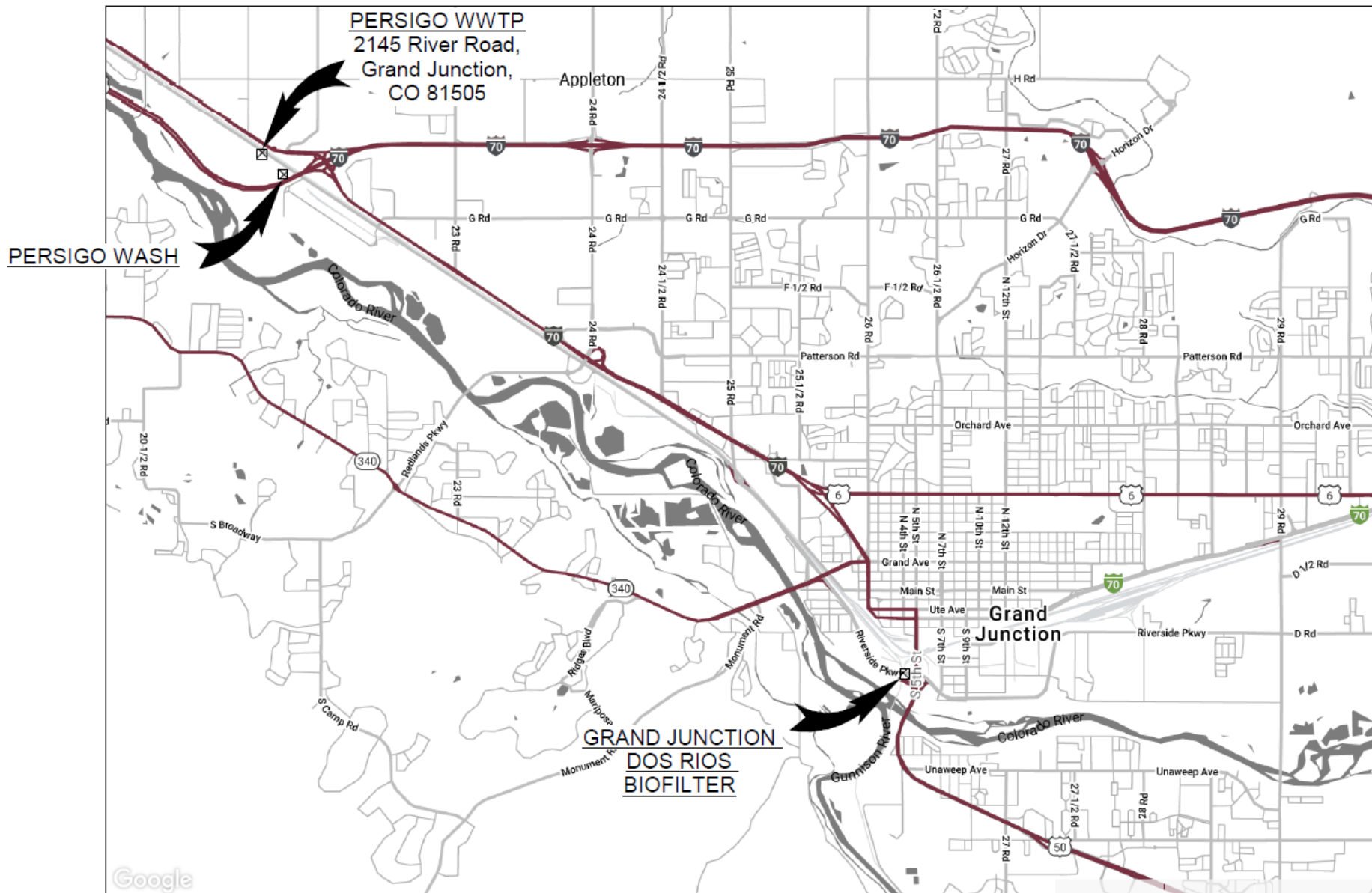
construction contract as well as geotechnical services and minor contract revisions for any changes that may arise during construction.

SUGGESTED MOTION:

I move to authorize the City Purchasing Division to enter into a Contract with Glacier Construction, Inc. for the Odor Control Improvements Project in the amount of \$4,997,000.

Attachments

1. Vicinity Map - Odor Control Improvements



ODOR CONTROL IMPROVEMENTS PROJECT



Grand Junction City Council

Workshop Session

Item #4.a.

Meeting Date: September 21, 2022

Presented By: Trent Prall

Department: Public Works - Streets

Submitted By: Trent Prall, Public Works Director

Information

SUBJECT:

A Resolution Adopting the North Avenue Enhanced Transit Corridor Study

EXECUTIVE SUMMARY:

North Avenue has served the community as a major arterial since its construction in the mid-1950s. While it has functioned well over the years as a corridor for cars, trucks and freight, it has lacked transit and pedestrian-friendly elements. Senate Bill 267 provided funding for transit related projects. Mesa County Regional Transportation Planning Office received \$1.5 million in SB267 funds. The project is twofold: 1) complete a comprehensive study to identify elements that would transform North Avenue into an Enhanced Transit Corridor and 2) construct selected improvements utilizing the remaining funding. The study has been completed and has proposed and prioritized a series of improvements. The proposed resolution adopts the findings of the study.

BACKGROUND OR DETAILED INFORMATION:

North Avenue has served as a major backbone for the City's transportation network since its construction in the mid-1950s. While CDOT constructed roadways, medians and gutters, most of the pedestrian and transit infrastructure has been added haphazardly as adjacent parcels developed and many segments still lack transit and pedestrian-friendly elements almost 70 years later.

Mesa County Regional Transportation Planning Office (RTPO) applied for and received \$1.5 million in transit-related funding made available by Senate Bill 267. The required 20% match, or \$375,000 was provided by the City of Grand Junction for a total estimated project of \$1,875,000 which was included in the 2022 budget. The project is twofold: 1) complete a comprehensive study to identify elements that would transform North Avenue into an Enhanced Transit Corridor and 2) construct selected improvements utilizing the remaining funding.

RTPO conducted the study portion of the project and the city is responsible for the final design and 2023 construction portion of the project.

The purpose of the Enhanced Transit Corridor Study was to define a long-term vision for North Avenue and identify a set of prioritized infrastructure projects to make the corridor more comfortable for people biking, walking, and taking transit. This plan encompassed North Avenue in its entirety, from 1st Street on the west end to I-70B on the east end, with the study area extending ½ mile to the north and south of North Avenue, where connecting streets are integral to the multimodal function of the corridor.

The study helped identify the needs as well as the priorities to direct SB267 Transit funding for construction of improvements and to secure and guide any additional funding to improve this corridor. The scope of work for the study required the consultant to analyze transit enhancements based on pedestrian access, traffic safety, bus stops, transit speed and reliability, and signal prioritization. The work also included development of conceptual design of the proposed improvements and estimated costs for the corridor. Public involvement was a key component to the development of the vision and included a walk audit, focus group meetings, a community meeting, an online survey as well as presentation to the Grand Valley Regional Transportation Committee. Based on the results of the study, two sections of the corridor are recommended for investment of the balance of the SB267 funding. The study also provided a 30% design of the multimodal path for the recommended funded segments of the corridor.

Study recommendations include:

1. Buildout of the Multi-Use Trail.
2. Pedestrian and Bicycle Safety Improvements
3. Complete Adjacent Sidewalk Network north and south of the corridor
4. New Pedestrian Crossings
5. New Bicycle Crossing
6. Transit – Bus Stop Improvements
7. Transit – Speed and Reliability Improvements.

An Action Plan identified segments to be upgraded. The study recommends that the remaining grant funding be used to buildout the following multi-use trails segments:

1. 28 ½ Road to 29 Road, North Side
2. 29 Road to 29 ½ Road, South Side

The completed study provides a publicly vetted plan and project prioritization that will effectively position the City to compete for additional funding opportunities, such as CDOT's new Greenhouse Gas Pollution Standard which is proposed for implementation in 2022. Grant opportunities are anticipated for projects that address goals such as: adding transit resources, improving pedestrian and bike access,

encouraging equitable transit-oriented development, and improving first and last mile connections to transit.

Following adoption, next steps include final design of the above-mentioned segments and right-of-way acquisition. Construction is proposed for late 2023 through the summer of 2024.

FISCAL IMPACT:

The City's match for the project was included in the 2022 adopted budget, however will not be used now until 2023 when the project construction will begin. The project is estimated at \$2,150,000 with funding from the CDOT SB 267 Transit funds of \$1,350,000 and this will be included in the 2023 proposed budget.

SUGGESTED ACTION:

I move to (adopt/deny) Resolution No. 70-22, a resolution adopting the North Avenue Enhanced Transit Corridor Study.

Attachments

1. North Avenue Enhanced Transit Corridor Plan Final
2. RES-North Ave Enhanced Transit Corridor Study 0901622

NORTH AVENUE



ENHANCED TRANSIT CORRIDOR STUDY

Final Report
June 2022



Vision for North Avenue

The vision for the North Avenue Enhanced Transit Corridor is to be a safe, multimodal corridor that is comfortable and easily accessible for people walking, biking, taking transit, and driving. The corridor will provide mobility and access to users of all ages and abilities to destinations along the corridor, efficient service for those traveling through the corridor, support efficient movement of goods, and connectivity to the City's surrounding transportation network. The corridor will foster existing business and future infill and redevelopment to accommodate a clean, vibrant, attractive, and well-maintained user experience.

Common Acronyms

ADA	Americans with Disabilities Act
AVL	Automatic Vehicle Locator
CAD	Computer-Aided Dispatch
CDOT	Colorado Department of Transportation
CMU	Colorado Mesa University
GJHS	Grand Junction High School
GVT	Grand Valley Transit
LPI	Leading Pedestrian Interval
LOS	Level of Service
NACTO	National Association of City Transportation Officials
ROW	Right-of-Way
RSA	Road Safety Audit
RTPO	Regional Transportation Planning Office
TEDS	Transportation and Engineering Design Standards
TSMO	Transportation Systems Management and Operations
TSP	Transit Signal Priority
VA	Veterans Administration

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1. Introduction

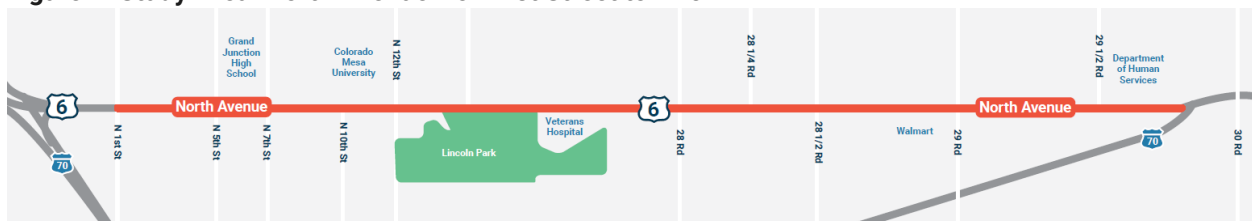
The Regional Transportation Planning Office (RTPO), City of Grand Junction, and Colorado Department of Transportation (CDOT) led an Enhanced Transit Corridor Study on North Avenue from 1st Street to the I-70 Business Loop. This document provides a summary of the Study, including several key components:

- Existing Conditions (Chapter 2)
- Outreach (Chapter 3)
- Corridor Vision (Chapter 4)
- Recommendations (Chapter 5)
- Action Plan (Chapter 6)

Study Area

The Study Area is shown in **Figure 1** and includes the 3.75 mile length of North Avenue from 1st Street on the west end to I-70B on the east end. North Avenue falls mostly within the City of Grand Junction, but some short segments east of 29 Road are in unincorporated Mesa County. Because North Avenue is a State Highway (US 6), the Colorado Department of Transportation (CDOT) owns and operates the road in collaboration with the City of Grand Junction and Mesa County. Additionally, Grand Valley Transit (GVT) operates several public transit bus routes along North Avenue.

Figure 1. Study Area: North Avenue from 1st Street to I-70B



Purpose and Goals

The purpose of this Corridor Study was to define a long-term vision for North Avenue and identify a set of prioritized infrastructure projects to make the corridor more comfortable for people biking, walking, and taking transit. While the entire cross section of the roadway was studied, the primary focus of this Study was on the areas outside the travel lanes, including the sidewalk, buffer area (between the sidewalk and curb), and bus stops.

Key Outcomes of The Corridor Study

- A community driven vision for North Avenue;
- Conceptual design and recommendations for improving bus stops along the corridor;
- Recommendations for long-term transit speed and reliability improvements;
- Conceptual design for a multiuse trail for the entire North Avenue corridor;
- Preliminary design for construction of the next high priority segment of multiuse trail;
- A prioritized list of long-term infrastructure projects aimed at making North Avenue safer and more comfortable to walk, bike, and access transit that can be implemented as funding becomes available.

Project Context

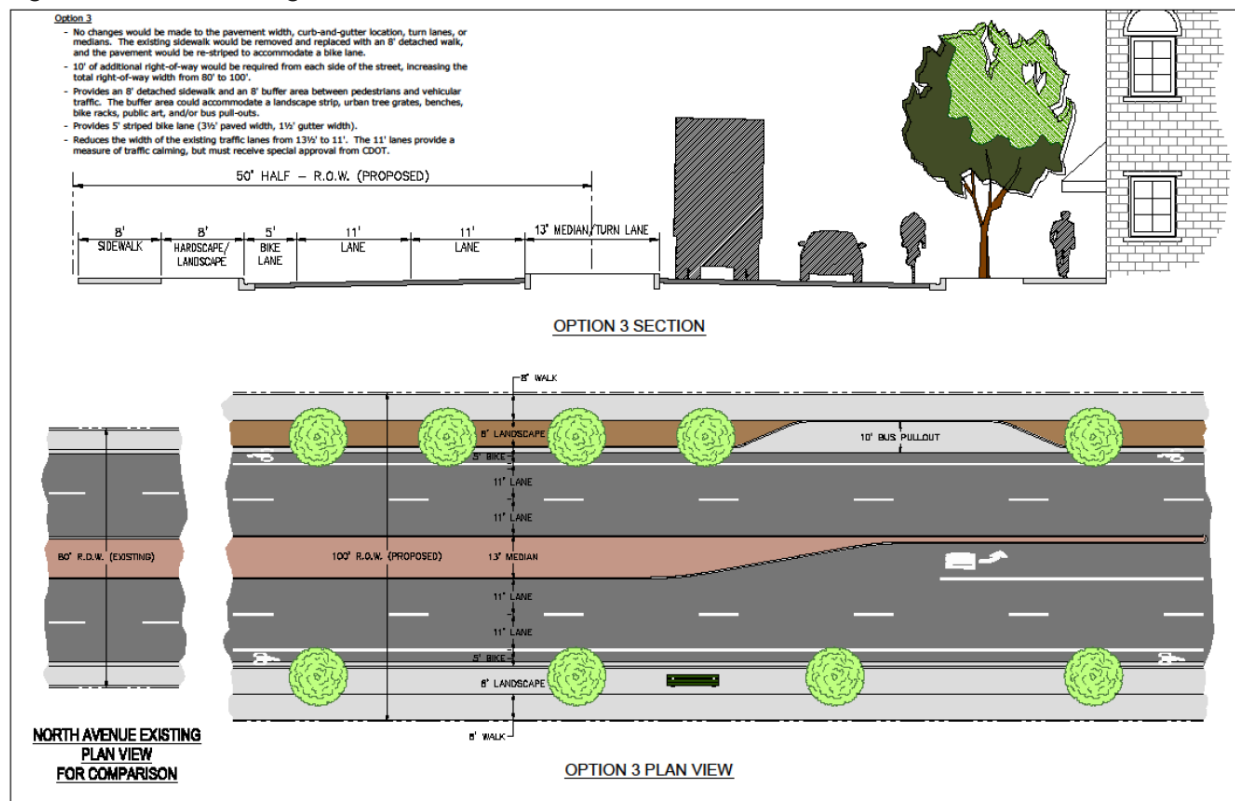
North Avenue is a highly traveled corridor by all modes of transportation. It is a State Highway (US 6) that transects the heart of the Grand Valley with many local and regional destinations. North Avenue has a long history as an important thoroughfare within the Grand Valley. Major destinations on or near North Avenue include: Grand Junction High School (GJHS), Colorado Mesa University (CMU), Lincoln Park (including Ralph Stocker Stadium and Suplizio Field), the Veterans Administration (VA) Medical Center, Walmart, Mesa County Community Services and Workforce Center, Mind Springs Behavioral Health Center, District 51 Career Center, and several human services providers. In addition to these, the bulk of the destinations on the corridor include an eclectic mix of private small, medium, and large businesses serving a variety of community needs. A mix of single-family homes, apartments, and mobile homes also flank the corridor.

The two GVT bus routes that serve North Avenue (Route 5 and Route 9) each have double the transit ridership of any other route in the GVT system. Additionally, between 2015 and 2019 there were 68 crashes in the corridor involving bicyclists and pedestrians, which speaks to both the high level of multimodal activity in the corridor and traffic safety concerns.

Project Background

In 2007 and 2011, The *North Avenue Corridor Plan* established a long-term vision for North Avenue that includes a parallel multiuse trail on both sides of the street with a landscaped buffer and on-street bike lanes, see **Figure 2**. That project also modified zoning standards, resulting in sidewalk and landscaping improvements at various locations across the corridor as properties redeveloped over the last decade.

Figure 2. Standard Design Identified for North Avenue in the 2011 *North Avenue Corridor Plan*



Relevant Plans

North Avenue has been identified as a key multimodal connection in several City and regional plans including:

- **One Grand Junction Comprehensive Plan (2020)** identifies North Avenue as a corridor to improve and enhance transit connections and equally prioritize transit with other modes to encourage use of transit, bicycling, and walking.
- **2045 Regional Transportation Plan (2020)** identifies North Avenue as an Enhanced Transit Corridor due to its high ridership and potential for transit-oriented development.
- **Grand Junction Circulation Plan (2018)** identifies North Avenue as an active transportation corridor.

Concurrent North Avenue Projects

While this Study was being developed CDOT was also finalizing the design phase of a North Avenue Improvement Project that impacts the curb-to-curb design of the roadway. That project included resurfacing the road, narrowing the inside travel lanes from 12.5' to 11', and installing new medians to control access, improve safety, and improve traffic flow. CDOT was also in the design process to eventually upgrade the traffic signals on North Avenue with more reliable and modern signal equipment.

2. Existing Conditions

An analysis of existing multimodal transportation conditions along the North Avenue corridor and surrounding area was conducted as part of this Study. The existing conditions analysis focused primarily on the transit, bicycle, and pedestrian networks. The analysis provides a baseline context for the Study and identified network gaps and potential issues to inform recommendations. Maps and graphics produced as part of the existing conditions analysis were presented to the public as part of the project outreach and are provided in **Appendix A**. A written summary of findings is provided in this chapter.

Transit

Appendix A includes a map of the transit network around North Avenue, including bus stop locations, average daily boardings by stop (in 2019), and charts showing the amenities by stop.

North Avenue is primarily served by GVT Routes 5 and 9, which each have double the transit ridership of any other route in the GVT system. Short segments of North Avenue are also served by Route 6, Route 7, and Route 10. With the exception of Route 1 (which operates on Main Street, 12th Street, and Horizon Drive) all GVT routes operate hourly service Monday through Saturday from about 5:15 AM to 8 PM. Due to the hourly frequencies, routes are scheduled to provide timed transfers at the three major transfer facilities in the Grand Valley: Downtown Transfer Station, West Transfer Station, and Clifton Transfer Station. Bustang and Bustang Outrider, which are managed by CDOT and provide daily service to Denver (via I-70), Durango (via US 50/ CO 145, and US 160), and communities in-between, also serve North Avenue, with a stop at the VA Medical Center.



Key Findings of Transit Analysis

- Route 5 and 9 that operate on North Avenue each have double the ridership of any other route in the GVT system.
- The highest boardings on North Avenue occur in the east end of the corridor.
- In 2019 stops between 28 ½ Road and 29 Road averaged over 20 boarding per day and the stop on 29 ½ Road at North Avenue averaged over 50 boardings per day, the highest in the corridor.
- 68% of bus stops on North Avenue are more than 200' from the nearest signalized crossing, increasing the likelihood of riskier pedestrian crossing behavior.
- Of the 24 bus stops on North Avenue, 60% have a bench, 44% have a trash bin, 32% have a shelter, and 0% have lighting or bike racks.
- Pre-COVID, Routes 5 and 9 had lower on-time performance than the other GVT routes, but on-time performance has improved since the pandemic likely due to decreased ridership.
- Based in interviews with bus drivers the two primary sources of delay for routes on North Avenue are from boarding (primarily from people who do not have their fare payment ready,

but also from people who need more time boarding, such as wheelchairs) and when buses must wait for gaps in traffic when reentering the travel lanes from a bus pullout.

Pedestrian Network

Appendix A shows a map of the pedestrian network along North Avenue and within a half mile of North Avenue. The width of the sidewalk and whether there is a buffer between the sidewalk and curb was mapped on both sides of North Avenue. The pedestrian network around North Avenue was also mapped based on available data provided by Mesa County, including where there are buffered sidewalks (which includes a buffer between the sidewalk and street), attached sidewalks (where there is no buffer between the street and sidewalk), and streets with no sidewalk.

Existing Sidewalk Condition Along North Avenue

Prior to the 2011 *North Avenue Corridor Plan*, the standard sidewalk design for North Avenue was the same as any other major arterial in Grand Junction, which was a 6' attached sidewalk. Following the 2011 *North Avenue Corridor Plan*, the standard design changed to an 8' sidewalk with an 8' buffer.

Existing conditions analysis revealed that the width of the sidewalk and presence of a buffer varies depending on the segment of the corridor. In 2016, the City improved most of the segment between 12th Street and 23rd Street to a width of 8' with an 8' landscaped buffer and pedestrian scale lighting. Several other sections have also been improved to this standard as private properties have been redeveloped, but most of these are short and discontinuous with other improved segments. As a result, most of the corridor continues to have a 5' or 6' attached sidewalk (see photo at right). A few sections are narrower than 5' (some as narrow as 2.5'), mostly on the south side between 9th Street and 13th Street. Many parts of the east end of the corridor between 28 ½ Road and I-70B have no sidewalk (see photo at right).



Key Findings of Sidewalk Condition Along North Avenue

- 26% of North Avenue has at least an 8' sidewalk, 52% has a sidewalk less than 8', and 22% of the corridor has no sidewalk (mostly east of 28 ½ Road).
- The majority of the sidewalk on the corridor is attached (with no buffer from the street), the exceptions primarily include the stretch between 12th Street and 23rd Street and few other short segments where private development has occurred since 2011.
- East of 29 Road about 65% of the north side of North Avenue and 80% of the south side is missing a sidewalk.

Key Findings of Surrounding Sidewalk Network

- See **Appendix A** for map of the surrounding sidewalk network.
- West of 28 Road the surrounding street network is generally well connected, and most streets have sidewalks.

- East of 28 Road the surrounding street network is more poorly connected, and many streets are missing sidewalks.
- Most streets missing sidewalks around North Avenue are local streets with lower traffic volumes and speeds, but three arterial or collector streets within a quarter mile of North Avenue were found to be missing sidewalks, which can pose a bigger barrier to pedestrian circulation:
 - 28 Road (between North Avenue and Gunnison Avenue)
 - 28 ½ Road (between Gunnison Avenue and Elm Avenue)
 - Elm Avenue (between 28 Road and 28 ½ Road)

Bicycle Network

The existing and planned bicycle network around North Avenue was mapped in **Appendix A**. Existing bicycle corridors that cross North Avenue include a mix of on-street bike lanes, signed bike routes, and off-street parallel multiuse trails (see **Appendix A** for visual example of each). Additionally, planned Active Transportation Corridors identified in the 2018 *Grand Junction Circulation Plan* are also mapped. The entire length of North Avenue is planned as an Active Transportation Corridor, and the section between 12th Street and 23rd Street has an existing off-street multiuse trail.

There are seven cross streets that intersect North Avenue with existing bikeways. All of the bikeways currently cross North Avenue at a signalized intersection except at 3rd Street. There are five additional streets planned as active transportation corridors or bikeways that intersect North Avenue, all planned at existing signalized intersections. As of publication the City of Grand Junction was initiating a citywide *Pedestrian and Bicycle Master Plan* that may refine the planned bike network across North Avenue.

Streets with Existing Bikeways that Intersect North Avenue

- 1st Street (bike lane)
- 3rd Street (bike lane)
- 10th Street (bike lane – south leg only)
- 12th Street (off-street trail – north leg only)
- 28 Road (bike lane)
- 28 ¾ Road (bike lane – north leg only)
- 29 Road (bike lane)

Streets Planned as Active Transportation Corridors that Intersect North Avenue

- 5th Street
- 7th Street
- 23rd Street
- 28 ¼ Road
- 29 ½ Road

Traffic

North Avenue includes two travel lanes in each direction, each at a width of 12.5', plus a 14' median (center line to center line) that is typically a left turn lane with a narrower median. As part of the US 6 North Avenue Improvements project planned by CDOT (to be implemented in 2022) additional median/access control will be added to more sections of North Avenue and the inside lanes will be narrowed to 11'.

Average traffic volumes on most of North Avenue in 2019 were between 20,000 and 25,000 vehicles per day. The segment with the highest daily volumes was east of 5th Street at 29,000 vehicles per day and the lowest was east of 29 Road at 17,000 vehicles per day. The posted speed on North Avenue is 30 mph between 1st Street and 12th Street, 35 mph from 12th Street to 29 Road, and 40 mph east of 29 Road.

A traffic analysis was not completed as part of this Study. However, CDOT completed a Transportation Systems Management and Operations (TSMO) analysis as part of the US 6 North Avenue Improvements project and found no significant traffic level of service (LOS) concerns under existing conditions or with forecast traffic through the year 2040.

Crash Analysis

Analysis was performed of all bicycle and pedestrian involved crashes that occurred along North Avenue over a five-year period between 2015 and 2019. A summary of the data is mapped and key findings illustrated in **Appendix A**.

Key Findings of Crash Analysis

- Between January, 2015 and December, 2019 there were 68 crashes on North Avenue involving a person walking or biking, an average of over one crash per month for five years.
- Eleven of these crashes resulted in severe bodily injury, including one fatality.
- Bicycle and pedestrian crashes were distributed along most of the North Avenue corridor.
- The highest concentration of pedestrian crashes occurred between 7th Street and 12th Street and between 28 Road and 29 Road.
- The highest concentration of bicycle crashes on North Avenue occurred around the intersections with 7th Street, 12th Street, and 28 Road.
- 52% of bicycle and pedestrian involved crashes on North Avenue were from drivers failing to yield right-of-way while turning (mostly from vehicles turning right onto North Avenue from a side street and striking a bicyclist or pedestrian in the crosswalk along North Avenue)
- However, only 36% of severe crashes involving a pedestrian or bicyclist were from a turning vehicle failing to yield right-of-way.
- 64% of severe bicycle and pedestrian involved crashes were from pedestrians or bicyclists crossing North Avenue who were struck by a vehicle, including crashes that involved:
 - Pedestrians crossing against the signal,
 - Pedestrians or bicyclists crossing not at a signalized crossing, or
 - Drivers that ran a red light.

Signal Spacing

The distance between traffic signals is an important measure of pedestrian safety and comfort along North Avenue. Given that North Avenue is typically five lanes across and heavily traveled (traffic volumes average about 20,000 to 25,000 vehicles a day along most of the corridor), traffic signals provide the safest locations for pedestrian connectivity across North Avenue. Frequent pedestrian crossings are important for pedestrians to access businesses on either side of the street, for students to go to/from school, and for transit users to conveniently get to and from bus stops. Locations with long gaps between signals present a potential barrier to pedestrian access, circulation, and safety along North Avenue. A map and findings of the signal spacing analysis along North Avenue is available in **Appendix A**.

Key Findings of Signal Spacing Analysis

- Most of North Avenue is defined by quarter-mile signal spacing, which is about a five-minute walk for pedestrians between signals.
- Three locations along North Avenue have greater than quarter-mile signal spacing and may present a barrier to pedestrians and bicyclists trying to cross North Avenue at these locations:
 - Between 1st Street and 5th Street (0.34 miles)
 - Between 12th Street and 23rd Street (0.75 miles)
 - Between 29 Road and 29 ½ Road (0.5 miles)

Multiuse Trail Analysis

As part of this Study an existing conditions analysis was performed along the corridor to identify challenges and opportunities specifically when considering the addition of a separated multiuse path along both sides of the roadway. A comprehensive summary of the analysis is provided in a technical memorandum in **Appendix B**. A concept plan for a multiuse trail along the length of both sides of North Avenue is mapped in 40-scale plan sheets in **Appendix C**. The concept plan also illustrates locations where barriers to implementing a multiuse trail occur as well as potential design solutions at those locations. Key findings of the multiuse trail existing conditions analysis are summarized below.



Key Findings of Multiuse Trail Existing Conditions Analysis

- Due to right-of-way constraints an estimated 130,000 square feet of property would need to be purchased or easements secured, with the highest concentration occurring between 1st Street and 12th Street.
- Approximately 30 businesses may have impacts to their existing privately owned off-street parking, including 20 locations between 1st Street and 12th Street, and 10 locations east of 28 ½ Road.
- There are approximately 184 business access points (driveways) along North Avenue and there appears to be an opportunity to consolidate some accesses along the corridor as part of the multiuse trail project.
- There are over 170 utility conflicts identified along North Avenue, with most being just spot conflicts.
- There are three direct conflicts with buildings, all between 8th Street and 11th Street.
- There are 115 other conflicts identified (signs, fences, benches, etc.), with the majority identified on the north side.

Walk Audit

The technical team for the Study performed a walk audit, which included walking a mile on the east end of the corridor (from 28 ½ Road to 29 ½ Road) and over a mile on the west/central part of the of the corridor (from 5th Street to 23rd Street) as well as riding two GVT buses along North Avenue. The walk audit exposed the team to the experience of a pedestrian and transit user on the corridor and helped

reveal additional barriers and opportunities as part of this Study. Key findings from the walk audit are summarized below.



Walk Audit Key Findings

- A lot of pedestrian and bicycle activity was observed corridor-wide even where there are no sidewalks.
- People were observed not crossing at signals (midblock) corridor-wide.
- An open irrigation ditch is present in the east end of the corridor where a sidewalk/ landscaped buffer might be located.
- Inconsistent pedestrian ramps were observed at crossings that may create challenges for people in wheelchairs and with strollers.
- There are gaps in the sidewalk network on the east end, despite pedestrian/ bicycle demand.
- Parking and building constraints on the west end may create challenges for widening the sidewalk.
- Bus service is infrequent (60-minute headways), which is problematic for riders who miss their bus, and overall does not provide viable bus service for many North Avenue users.
- A lot of students from GJHS and CMU were observed walking along North Avenue between 7th Street and 12th Street during lunch hour.
- There are frequent curb cuts and locations for pedestrian/ vehicle conflicts corridor-wide.
- Many pedestrian signals along North Avenue default to Don't Walk even when the parallel traffic signal is green.

Transit Signal Priority Assessment

An existing conditions analysis of the technology of the traffic signal system and buses that operate along North Avenue was performed to assess feasibility of implementing Transit Signal Priority (TSP) in the corridor. TSP is a technology that can extend the green time at traffic signals by several seconds when a bus is approaching and the signal is about to turn red in order to allow the bus to clear the signal without waiting for the next cycle. The analysis found that the signal system is compatible with TSP, and GVT could leverage its onboard Computer-Aided Dispatch (CAD)/ Automatic Vehicle Location (AVL) service. A complete summary of the TSP analysis, including recommendations, cost estimates, and considerations for implementing TSP in the North Avenue corridor is provided in **Appendix F**.

3. Outreach Summary

Guidance for developing a corridor vision and recommendations came from input provided by the public and key stakeholders as part of outreach events conducted during the Study. There were seven general ways the public and stakeholders provided input and guidance for this Study, including through:

1. A Project Technical Team
2. Online Public Survey
3. Open House
4. Pop Up Event
5. Canvassing Businesses
6. Focus Groups
7. Bus Driver Interviews

Project Technical Team

A project technical team made up of representatives of key agencies provided guidance and technical oversight to the project. The technical team was made up of four agencies: the Grand Valley Regional Transportation Planning Office (RTPO – which included Grand Valley Transit), the City of Grand Junction, Mesa County, and the Colorado Department of Transportation (CDOT). The technical team met formally nine times over the course of the project, conducted a walk audit, and was instrumental in guiding analysis and recommendations. The agendas, meeting notes, and presentations from the technical team meetings are provided separately.

Online Public Survey

An online public survey was conducted early in the project to understand how people are using North Avenue, barriers to walking, biking, and using transit on North Avenue, and to solicit input on the vision for the corridor. Over 290 people responded to the survey. A complete summary of survey findings is provided in **Appendix D**. Key findings are summarized below.

Key Findings of Online Survey

- When asked what segment people would most like to walk or bike on North Avenue, but don't feel comfortable doing so, over 50% of respondents said the segments between 7th Street and 28 Road, see **Figure 3**.
- When asked to select three words that describe their vision for North Avenue, the top choices included bicycle, safe, and clean, followed by sidewalks, walkable, and accessible, see **Figure 4**.
- When asked what transit stop amenities are most important at bus stops, lighting, and shelter were ranked highest.
- When asked what barriers prevent people from walking and biking on North Avenue, the top responses were not feeling comfortable walking and biking, followed by lack of lighting, lack of signalized crossings, and not feeling comfortable crossing at existing crosswalks.

Street Segment	Percentage
1st Street to 7th Street	20%
7th Street to 12th Street	26%
12th Street to 28 Road	27%
28 Road to 29 Road	17%
29 Road to I-70 B	10%

[illegible]

Public Open House

The project team hosted a public open house at the Lincoln Park Barn on November 16th, 2021 to present the goals of the project and existing conditions findings, as well as to solicit input from the public on their vision and priorities for the corridor. Over 40 people attended the open house and highlights of input received is provided below.



Highlights of Input Received at the Open House

- Safety is a priority
- Prefer pedestrian-oriented design
- Desire for protected bikeway
- Better bicycle and pedestrian crossings of North Avenue
- More multimodal accommodations
- Want North Avenue to be transit friendly
- Recommendations should support businesses on North Avenue
- Slow traffic

Pop Up Event

One pop-up event was held early in the project to intercept people going to a CMU football game at Ralph Stocker Stadium adjacent to North Avenue. The event was used to spread awareness about the project and distribute the project survey.

Canvassing Businesses

RTPO and City of Grand Junction staff canvassed businesses on North Avenue to inform them of the project, the online survey, and the public open house, and to drop off flyers in both English and Spanish for customers.

Focus Groups

Four focus groups were also held as part of the Study to get input from key agencies identified by the technical team as influential to North Avenue. The focus groups provided additional insight on existing barriers and the vision for the future of North Avenue. A brief summary of key outcomes of each focus group is provided below and a complete summary can be found in **Appendix E**.

The four focus groups included:

1. **Education Providers** (GJHS, D51 Career Center, CMU was invited but did not participate)
2. **North Avenue Businesses** (Habitat for Humanity, Latino Chamber of Commerce, Latino business owner, CMU student, North Avenue landowner)
3. **Human Services Providers** (Mind Springs, Ariel Clinical Services, Mesa County Workforce Center & Health Dept., Mesa County Public Health Trails, VA Medical Center)
4. **Urban Trails Committee**

Education Providers Focus Group Key Findings

- A lot of students use the bus, walk, and bike to the D51 Career Center.
- The D51 Career Center staff would like students to use transit and travel more on North Avenue but generally do not encourage it due to the gaps in the sidewalk system.
- A small group of GJHS students use the bus.
- GJHS students walk to restaurants on North Avenue at lunch, lots of kids walk/bike/skateboard to school, and many work at restaurants on North Avenue.
- Observe lots of families and people trying to cross North Avenue by foot near 29 ¼ Road (access to Bookcliff Middle School, bus stops, stores, trailer park).
- Need another crossing between 29 Road and 29 ½ Road.
- Some students will walk to a farther bus stop that has more amenities and a more comfortable waiting area.
- Having a comfortable/inviting space to wait for the bus is most important.
- Prioritize improving the sidewalk from 29 to 29 ½ Road, and 7th Street to 12th Street.

North Avenue Businesses Focus Group Key Findings

- Homeless presence detracts from people walking/ taking transit.
- Many residents live along North Avenue because they don't have a vehicle and are able to use transit.
- Observe a lot of people crossing the street midblock to get to a side where a sidewalk exists.
- Latino population not using the bus as much (bus stops feel unsafe, often have kids, bus does not operate in the evening, need material in Spanish).
- Campaigning in a fun way could introduce more people to the bus (ride the bus for a day, involve businesses, etc.).
- Vision for North Avenue
 - Safer/ connected bike facility.
 - Crossings needed (at Habitat Restore, near CMU, the VA Medical Center, near Walmart).
 - Improve traffic flow (signal progression) and bus pullouts help.
 - Improve attractiveness (greenery, banners, murals, branding, maintenance, lighting, etc.).
 - Supportive of multiuse path, some concern about impact to business parking.
 - Prioritize sidewalk improvements on the east end and filling sidewalk gaps.

Human Service Providers Focus Group Key Findings

- Biggest Barriers to more people walking/ biking/ riding transit:
 - Transit service is too infrequent.
 - Transit service is not direct enough to destinations (roundabout routes).
 - There are sidewalk gaps and lack of a bike facility.
 - People cross mid-block because distance is often too far to walk to a crosswalk.
- Vision for North Avenue
 - Wider sidewalks.
 - Traffic calming.
 - Improved bus stops: lighting, bus shelters, benches.
 - Landscaping and greenery.

- Prioritize improvements where there are sidewalk gaps, where people are walking, and at high bus ridership locations.
- There is a lot of pedestrian demand to cross near 29 ¼ Road.

Urban Trails Committee Focus Group Key Findings

- Support a multiuse trail for bikes to access businesses and services on North Avenue (main purpose would be to provide access and less so as a long through connection).
- Most people would not likely use an on-street bike lane on North Avenue that has no buffer/ barrier from traffic.
- A buffer is important for the multiuse trail.
- Recommend signage or better indication to drivers and other people that bikes may be on the side path, particularly at crossings.
- Potential areas to prioritize for improvement: around CMU, Walmart, and 28 ½ Road to 28 ¾ Road.
- Consider signage and green paint where bikes are to cross North Ave.
- Recommend additional lighting along the corridor.

Bus Driver Interviews

One-on-one interviews were held with two bus drivers that operate GVT buses along North Avenue to get an understanding of existing operations, preference on bus design features, and potential areas of delay. Questions were specifically asked about driver's preference regarding bus pullouts and the frequency of delay and main causes.

Bus Driver Interview Key Findings

- Bus Pullouts
 - Prefer pullouts (when well designed) to mitigate conflict with vehicles.
 - Desire longer tapers and deeper pullouts than how most of the pullouts on North Avenue are currently designed (would like pullouts designed like the new stop in front of U-Haul).
 - Loading area for wheelchairs needs to be deeper at some locations.
- Delay to Buses
 - Largest source of delay is loading/ unloading (often from passengers fumbling for change/ bus pass or wheelchairs).
 - Waiting to pull back into traffic from a pullout can occasionally delay the bus (typically adds about a minute of delay per run).
 - Traffic congestion/ signals do not cause delay (except at lunch hour westbound at 7th Street due to right-turning vehicles waiting for high volume of high school students to cross 7th Street).

4. Corridor Vision

The vision for the corridor was established by the technical team based on input received during the outreach process from the public and stakeholders, as well as the larger goals of the City of Grand Junction, the Mesa County RTPO, and CDOT.

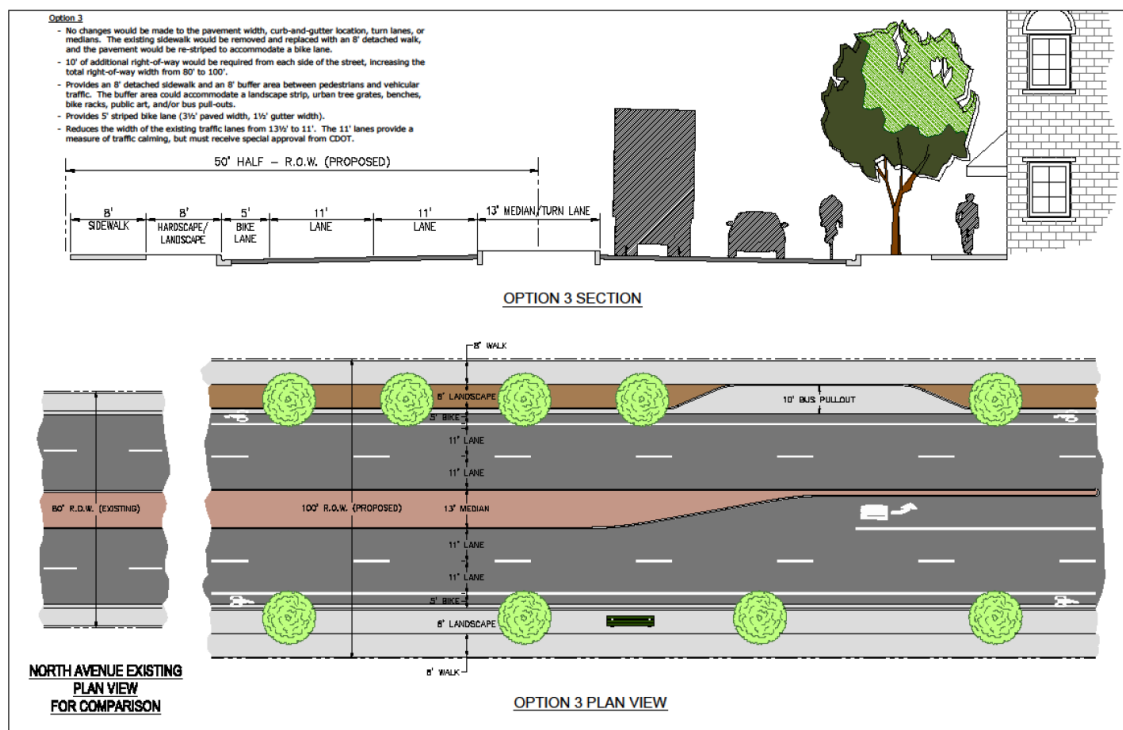
Vision Statement

The vision for the North Avenue Enhanced Transit Corridor is to be a safe, multimodal corridor that is comfortable and easily accessible for people walking, biking, taking transit, and driving. The corridor will provide mobility and access to users of all ages and abilities to destinations along the corridor, efficient service for those traveling through the corridor, support efficient movement of goods, and connectivity to the City's surrounding transportation network. The corridor will foster existing business and future infill and redevelopment to accommodate a clean, vibrant, attractive, and well-maintained user experience.

Cross Section

The cross section for the corridor, which was established by the 2011 *North Avenue Corridor Plan*, will remain largely the same as shown in **Figure 5**, with a few modifications as described below.

Figure 5. Standard design identified in the 2011 *North Avenue Corridor Plan*.



Key Attributes Unchanged from 2011 Vision:

- 11' travel lanes with a 13' median/ left turn lane (note: the width from inside edge like to inside edge line is 14' given there is a 6" buffer from the median to inside edge line on each side).

- 8' multiuse trail with an 8' landscaped buffer with pedestrian-scale lighting.
- Pullouts for bus stops where feasible.

Modifications from 2011 Vision:

- On segments of the corridor with right-turn only lanes (or where constraints necessitate an attached sidewalk) the multiuse path will be 10' wide and adjacent to the curb (instead of an 8' path with an 8' buffer) in order to minimize right-of-way (ROW) impacts.
- An outside edge line will be striped to indicate the edge of the outside travel lane (in most sections of North Avenue this will place the edge line 5' from the curb) and there would be no formal bike lane.
- The bus pullouts will be 13' wide from the outside travel lane to the curb to match standards in the Grand Junction Transportation and Engineering Design Manual (TEDS), which require at least 12' of width, instead of 10' wide from the edge of the gutter pan to the curb as shown in the previous plan.

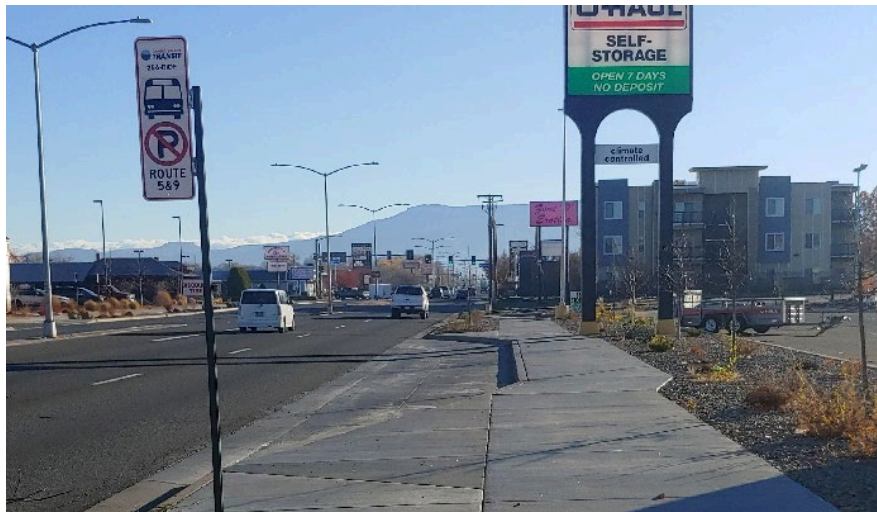
The updated cross-section vision for the North Avenue corridor reflecting these modifications from the original vision is shown in **Figure 6**.

Feedback provided by the public and stakeholders indicated that a 5' standard bike lane (as envisioned in the 2011 Plan) was not appropriate to provide the level of bicycle comfort and safety desired given the volume and speed of traffic on North Avenue, especially the volume of trucks and buses. A buffered lane or protected bike lane would be a more appropriate design along North Avenue, which cannot be added without moving the curb or repurposing travel lanes, both of which would have significant impacts (to cost, right-of way, left turn movements, and/or traffic flow). Instead, this Study recommends that the cross section include an outside edge line generally 5' from the curb to define the outside travel lane width at 11'. As part of the 2022 resurfacing project, CDOT will be restriping the travel lanes so the inside travel lanes will be 11', instead of 12.5' today, in accordance with the 2011 *North Avenue Corridor Plan* vision. Under this striping plan, an edge line could also be added that will define the outside travel lanes to a width of 11'.

An edge line would provide the following benefits that will help achieve the corridor vision:

- Narrow the outside travel lane from 14' (under CDOT's 2022 restriping plan) to 11'. Narrowing travel lanes has been proven to reduce speeds and mitigate the likelihood of speeding.¹
- Provide an additional buffer between traffic and the sidewalk, particularly in segments of the corridor where the sidewalk will remain attached due to right-of-way or other constraints.
- Allow bus pullouts to achieve the recommended 12' width from the outside travel lane without necessitating shifting the sidewalk at pullouts. As an example, the recently improved bus stop in front of the U-Haul at 2809 North Avenue is shown in **Figure 7**. This stop required shifting the alignment of the sidewalk by 2' around the stop to achieve a 12' wide pullout. Shifting the outside edge of the travel lane to be at least 2' further from the curb would negate the need to shift the alignment of the sidewalk around bus pullouts. It should also be noted that the sidewalk cannot be narrowed by 2' at bus pullouts because of the need to provide an 8' landing area for wheelchairs.

Figure 7. Example of sidewalk alignment shift at new bus stop near 2809 North Avenue.



¹ http://www.cmfclearinghouse.org/collateral/HSM_knowledge_document.pdf

5. Recommendations

The recommendations for the North Avenue Enhanced Transit Corridor Study are organized into eight general categories, with core recommendations for each category summarized below:

1. Buildout of the Multiuse Trail

- Complete buildout of an 8' multiuse trail with an 8' buffer on both sides of the street.
- Prioritize completing the trail on at least one side of North Avenue for the length of the corridor to provide continuity for people walking and biking.

2. Pedestrian & Bicycle Safety Improvements

- Investigate operational improvements to improve bicycle and pedestrian safety; suggestions to investigate include:
 - Prohibit right-on-red at cross streets
 - Longer "Walk" phase at cross streets
 - Leading pedestrian interval (LPI) signal phase
 - Protected left turn signal phase
 - Bicycle detection at traffic signals
 - Bicycle crossing signage and striping
- Conduct a bicycle and pedestrian safety study.

3. Complete Adjacent Sidewalk Network

- To improve access to transit along the corridor it is recommended to gradually complete the missing gaps in the sidewalk network within a quarter mile of North Avenue.
- Prioritize completing the sidewalk network on arterial and collector streets where traffic volumes and speeds are higher and the environment is less hospitable to pedestrians sharing the road with cars (recommend prioritizing segments of 28 Road, 28 ½ Road, and Elm Avenue that are missing sidewalks).

4. New Pedestrian Crossings

- To reduce segments of the corridor with long gaps between pedestrian crossings, evaluate the following three locations for a new signalized intersection along North Avenue: 15th Street, 21st Street, 29 ¼ Road.

5. New Bicycle Crossing

- Given the volume, speed, and number of traffic lanes on North Avenue, and the difficulty for bicyclists to safely cross at an unsignalized intersection it is recommended to improve the only unsignalized bicycle crossing in the corridor at 3rd Street to allow for safer and more comfortable crossing by bicyclists.

6. Transit – Bus Stop Improvements

- Bus stop improvements are recommended to improve transit access, safety, and the transit experience.
- Bus Stop Location - All transit stops in the corridor are recommended to be located on the far side of every signalized intersection and, to the extent feasible, be within 200' of

a crosswalk to improve pedestrian access and safety (this will require gradually relocating many of the existing bus stops on the corridor).

- Bus Stop Layout - All bus stops on North Avenue are recommended to be constructed with a bus pullout near-term as long as sufficient space is available.
- Bus Stop Amenities -
 - All bus stops will at a minimum have a landing pad that meets ADA requirements, signage with information on routes and schedule, and connections to the sidewalk.
 - Most bus stops are also recommended to include a shelter with lighting, dynamic signage with real-time bus information, a trash receptacle, and a bike rack.
- Bus Stop Branding – Bus stops are recommended to include branding that is cohesive with the overall corridor branding to clearly convey that transit and its associated amenities are a key part of the transportation landscape of North Avenue.

7. Transit – Speed & Reliability Improvements

- Increase frequency of service (highest priority) to reduce waiting time and make transit a viable option for more people.
- Convert to off-board fare payment or fare free service to mitigate delay caused by passengers finding fare payment.
- Implement transit signal priority (TSP) to decrease delay caused by red lights.
- Consider converting to in-line bus stops long term (instead of pullouts) to reduce delay from buses waiting for a gap to pull back into traffic.

8. Policy Recommendations

- Consolidate driveways and manage vehicle access through zoning.
- Amend Municipal Code so bicyclists do not have to dismount at street crossings.

1. Buildout of the Multiuse Trail

It is recommended to complete the buildout of the 8' multiuse trail with an 8' landscaped buffer along both sides of the length of the corridor as described in the vision. This will provide a more comfortable and inviting space for pedestrians, bicyclists, and transit users traveling along the corridor and increase multimodal access to businesses, services, schools, and homes on or near North Avenue. The multiuse trail, landscaped buffer, and pedestrian scale lighting will also help to beautify the corridor. Bus stop improvements should also be made (such as pullouts and shelter pads) as part of building out the multiuse trail. Bus stop location recommendations are provided later in this report. Efforts to consolidate driveways should also be explored as part of the final design process for implementing each multiuse trail segment. A corridor-wide concept plan was developed as part of this Study which identifies, at a



high-level, the path alignment and potential constraints to consider as part of final design and construction (see **Appendix C**). In general, the concept includes an 8' multiuse trail and 8' landscaped buffer, with potential deviations from this typical section in constrained locations or due to other factors as noted. Final alignment will be determined during 30% design or final design. Notable areas where the typical section may deviate include:

- Locations where there is not 16' of space between the curb and back of the sidewalk due to existing buildings, significant impacts to parking, or other constraints. These locations mostly occur between 1st Street and 12th Street and potential solutions are suggested in the concept design on a location-by-location basis, but would need to be fully explored as part of a more detailed engineering design process.
- Where there are right-turn only lanes, or other constraints that necessitate a short segment of attached sidewalk, the segment would include a 10' attached multiuse trail (with no buffer).
- The north side of North Avenue between 10th Street and 12th Street was identified as a critical bicycle link between the bike facilities on 10th Street and the existing 8' multiuse trail along the west side of 12th Street north of North Ave that is part of the CMU campus. This two-block segment is preliminarily envisioned to have both an 8' wide bike trail (with no buffer) and a 6' attached sidewalk to match the existing section along 12th Street. Final concept will be developed when this segment advances to 30% design.

Prioritizing Remaining Multiuse Trail Segments

In several sections of North Avenue the multiuse trail is considered complete. This includes the segment between 12th Street and 23rd Street on both the north and south sides that was completed by the City of Grand Junction in 2016. Because this segment is considered complete it was excluded from the prioritization analysis. Several other smaller segments scattered throughout the corridor have also been completed as part of private sector redevelopment projects. These completed segments were factored into the cost estimates.

Completion of the multiuse trail along both sides of North Avenue is likely to occur gradually over time as funding becomes available. Therefore, this project identified recommendations for how to prioritize the remaining segments that still need to be completed by dividing the corridor into roughly half-mile sections and separating out the north and south side. The corridor segments were divided into seven segments on the north side and seven segments on the south side for consideration:

1. 1st Street to 7th Street
2. 7th Street to 12th Street
3. 23rd Street to 28 Road
4. 28 Road to 28 ½ Road
5. 28 ½ Road to 29 Road
6. 29 Road to 29 ½ Road
7. 29 ½ Road to I-70B

Each segment will be considered a different project for estimating costs, but could be grouped into larger projects depending on future funding.

A set of evaluation criteria was established based on available data to help guide prioritization of each segment. A summary of evaluation criteria used for this analysis is provided in **Table 1**. While these criteria provided guidance to prioritization, other factors that are harder to measure were also considered, including key destinations, anecdotal observations of pedestrian and bicycle use, future private development plans, and connectivity of the network.

Table 1 Multiuse Trail Prioritization Evaluation Criteria

Criteria	Measure
<i>Pedestrian and Bicycle Demand</i>	- Average daily bus boardings in 2019 - Percent of survey respondents that indicated the segment as highest priority
<i>Traffic Safety</i>	Number of bicycle or pedestrian involved crashes between 2015 and 2019
<i>Missing Sidewalks</i>	Percent of segment without any sidewalk
<i>Anticipated Right-of-Way Impacts</i>	Percent of segment where 16' right-of-way (ROW) in the back of the curb is not available
<i>Anticipated Parking & Building Impacts</i>	Percent of segment where buildings or private parking is within 16' of curb and may be impacted

A summary of the evaluation criteria measures for each segment are provided in **Table 2**.

Table 2 Multiuse Trail Segment Analysis

Criteria	1st St - 7th St	7th St - 12th St	23rd St - 28 Rd	28 Rd - 28 1/2 Rd	28 1/2 Rd - 29 Rd	29 Rd - 29 1/2 Rd	29 1/2 Rd to I-70B
<i>Average Daily Bus Boardings</i>	16	12	30	26	127	23	18
<i>% Survey Respondents Highest Priority</i>	20%	26%	27%	17%	17%	10%	10%
<i>Bicycle and Pedestrian Crashes (2015 -2019)</i>	10	22	9	20	10	3	0
<i>North Side</i>							
<i>% Missing Sidewalk</i>	9%	0%	0%	7%	21%	53%	89%
<i>% Possible ROW Impacts</i>	42%	45%	1%	18%	22%	40%	40%
<i>% Parking & Building Impacts</i>	6%	11%	0%	0%	0%	5%	0%
<i>South Side</i>							
<i>% Missing Sidewalk</i>	0%	0%	0%	6%	32%	85%	72%
<i>% Possible ROW Impacts</i>	33%	27%	54%	19%	21%	39%	45%
<i>% Parking & Building Impacts</i>	12%	17%	0%	0%	3%	2%	10%

A high-level summary of criteria evaluation is provided in **Table 3**. This data shows that no one segment was the highest for all criteria. Instead, each segment had a mix of results. In general, the central part of the corridor has the highest demand (with the area around 28 ½ Road with the highest bus ridership),

the west and central areas have the highest concentration of bicycle and pedestrian crashes, the east end has the highest percentage of missing sidewalk, and the west end has the highest concentration of parking and building constraints. Some areas of the east end also have right-of-way constraints.

Table 3 Multiuse Trail Prioritization Analysis Summary

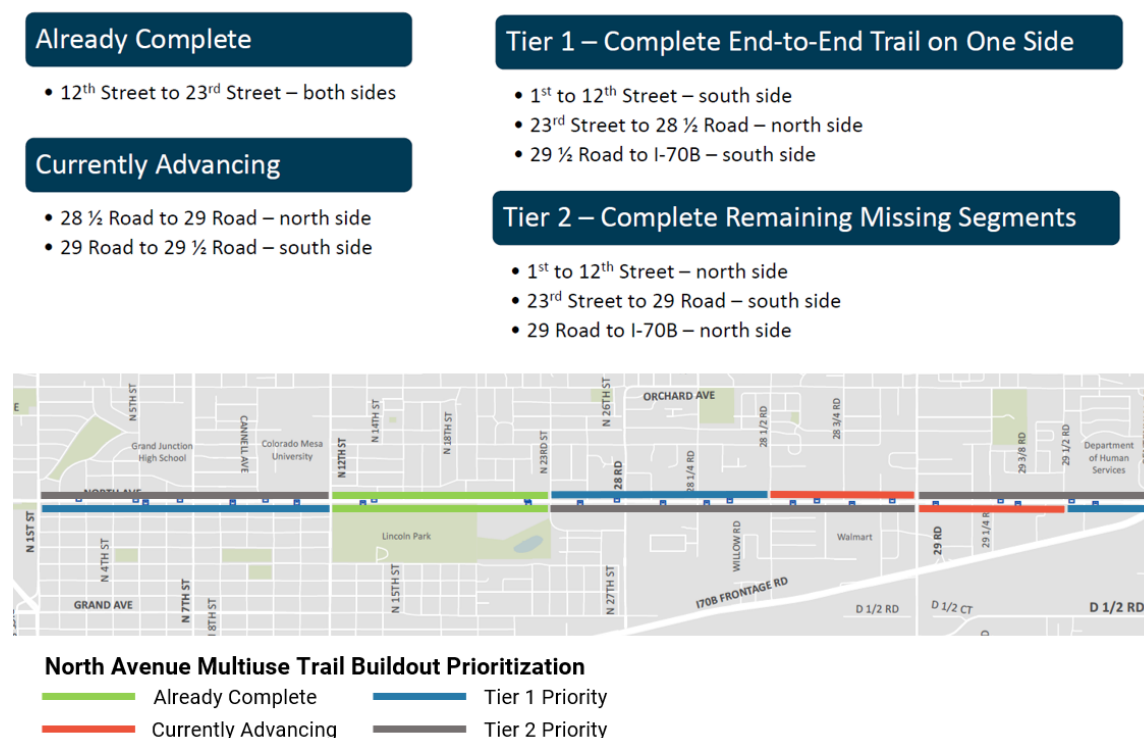
Criteria	1st St - 7th St	7th St - 12th St	23rd St – 28 Rd	28 Rd – 28 1/2 Rd	28 1/2 Rd - 29 Rd	29 Rd – 29 1/2 Rd	29 1/2 Rd to I-70B
<i>Demand</i>	Med	High	High	High	Very High	Med	Med
<i>Traffic Safety</i>	High	Very High	Very High	High	High	Med	Med
<i>North Side</i>							
<i>Missing Sidewalk</i>	Med	Med	Med	Med	High	Very High	Very High
<i>Minimal Impacts?</i>	Med	Med	Very High	High	High	Med	Med
<i>South Side</i>							
<i>Missing Sidewalk</i>	Med	Med	Med	Med	High	Very High	Very High
<i>Minimal Impacts?</i>	Med	Med	Very High	High	High	High	Med

Funding is available as part of this project to complete construction of about three quarters of a mile of multiuse trail on one side of the street. A core goal of this project was to identify the highest priority segment to advance to 30% engineering design. Based on available funding and the evaluation criteria, prioritization of each segment was divided into three tiers:

- Currently Advancing
- Tier 1 Priority
- Tier 2 Priority

Figure 8 shows which segments would be included in each tier, and also includes the segment between 12th Street and 23rd Street that was already complete.

Figure 8 Prioritization of Future Sections of Multiuse Trail



The highest priority segment, labeled “Currently Advancing” in **Figure 8**, that will enter 30% design concept as part of this project will include the segment between 28 ½ Road and 29 Road on the north side and 29 Road to 29 ½ Road on the south side. These sections were identified as high priority based on the existing high bus ridership, percent of the segment missing sidewalks, important nearby destinations (such as the D51 Career Center near 29 ¼ Road), and the opportunity for providing more linear connections from east to west along North Avenue. This was found to be a particularly significant missing gap for people walking and biking in the east end of the corridor as the parallel street network is not as well connected and has fewer sidewalks than in west end of the corridor. Concept design for the high priority segment is provided in **Appendix H**.

The next highest priority segments were included in Tier 1. These segments were included because together they would provide a continuous multiuse trail on at least one side for the end-to-end length of North Avenue. **The priority for building out the multiuse trail on North Avenue (Tier 1) will be to complete the trail on at least one side of the corridor for the length of the corridor to provide continuity for people walking and biking.** Segments in Tier 2 include the remaining segments not completed in Tier 1. Given that implementation and funding have not yet been secured for the Tier 1 and Tier 2 segments, it is possible that they will be completed in smaller phases. If this happens the half mile segments can be ranked based on the criteria listed above or other opportunities that emerge including funding source, private development, and right-of-way opportunities and constraints.

2. Pedestrian & Bicycle Safety Improvements

There were 68 pedestrian or bicycle involved crashes along the 3.75-mile stretch of North Avenue during the five-year study period (2015-2019). Additionally, safety emerged as one of the top priorities expressed by the public during the visioning process for the corridor.

In addition to completing the multiuse trail along North Avenue, additional recommendations are included to improve bicycle and pedestrian safety and comfort along North Avenue, which will improve access to transit and key destinations along North Avenue. Improving safety will be important to making the corridor more inviting for pedestrians and bicyclists.

There are two general recommendations to improve pedestrian and bicycle safety, which are summarized in more detail below:

1. Operational Safety Improvements
2. Conducting a Bicycle & Pedestrian Safety Study.

Operational Safety Improvements

The following operational improvements are recommended for consideration to improve pedestrian and bicycle safety along North Avenue. These recommendations are based on the crash analysis findings and limited field observations and are in alignment with proven safety countermeasures and industry best practices. These recommendations are general in nature, and, while in some instances potential locations are identified based on a corridor-wide analysis, a more detailed site-specific engineering study should be completed prior to implementation.

Prohibit Right on Red at Cross Streets

50% of all bicycle crashes in the corridor and 55% of all pedestrian crashes in the corridor involved a driver failing to yield to right-of-way while turning. Approximately 19% of bicycle and pedestrian crashes in the corridor involved a northbound or southbound driver making a right on red at a signalized intersection and striking a pedestrian or bicyclist in the crosswalk along North Avenue. The most common occurrence involved a right turning driver looking left for a gap in traffic along North Avenue and failing to look for a pedestrian or bicyclist to the right before proceeding.

Given the enhancements envisioned on the corridor that would increase the presence of bicyclists and pedestrians as well as the crash history, **it is recommended to consider prohibiting right turns on red at cross streets on North Avenue.**

Intersections with a crash history of right-turn-on-red pedestrian and bicycle crashes to consider for improvement include (this list is not exclusive of intersections to consider):

- 5th Street
- 12th Street
- 28 Road
- 28 ¼ Road
- 28 ½ Road

Section 2B.54 of the Manual for Uniform Traffic Control Devices (MUTCD) states several reasons when a No Turn on Red sign should be considered, including several that may apply to North Avenue intersections:

- “Geometrics or operational characteristics of the intersection that might result in unexpected conflicts.” (e.g., the multiuse trail could introduce unexpected conflicts).
- “An unacceptable number of pedestrian conflicts with right-turn-on-red maneuvers, especially involving children, older pedestrians, or persons with disabilities.” (the intersections with the most right-on-red pedestrian/bicycle crashes were 12th Street and 28 Road).
- “More than three right-turn-on-red accidents reported in a 12-month period for the particular approach.” (all crash data, including vehicle-vehicle crashes, and not just pedestrian and bicycle involved crashes, would need to be analyzed to determine if any locations meet this criteria)

Longer “Walk” Phase at Cross Streets

The default pedestrian signal at most cross streets on North Avenue is “Don’t Walk.” Even if a pedestrian crossing is called, the light will typically cycle out well before the green signal on North Avenue. **Figure 9** shows an example of this situation. To support increased bicycle and pedestrian use, reduce delay, and mitigate people crossing against the signal in the corridor it is recommended that these crossings default to the “Walk” phase and last until the parallel green phase along North Avenue cycles out. This change is particularly important to effectively supporting use by bicyclists on the parallel multiuse trail.

Figure 9. Example of *Don't Walk* phase with green signal on North Avenue.



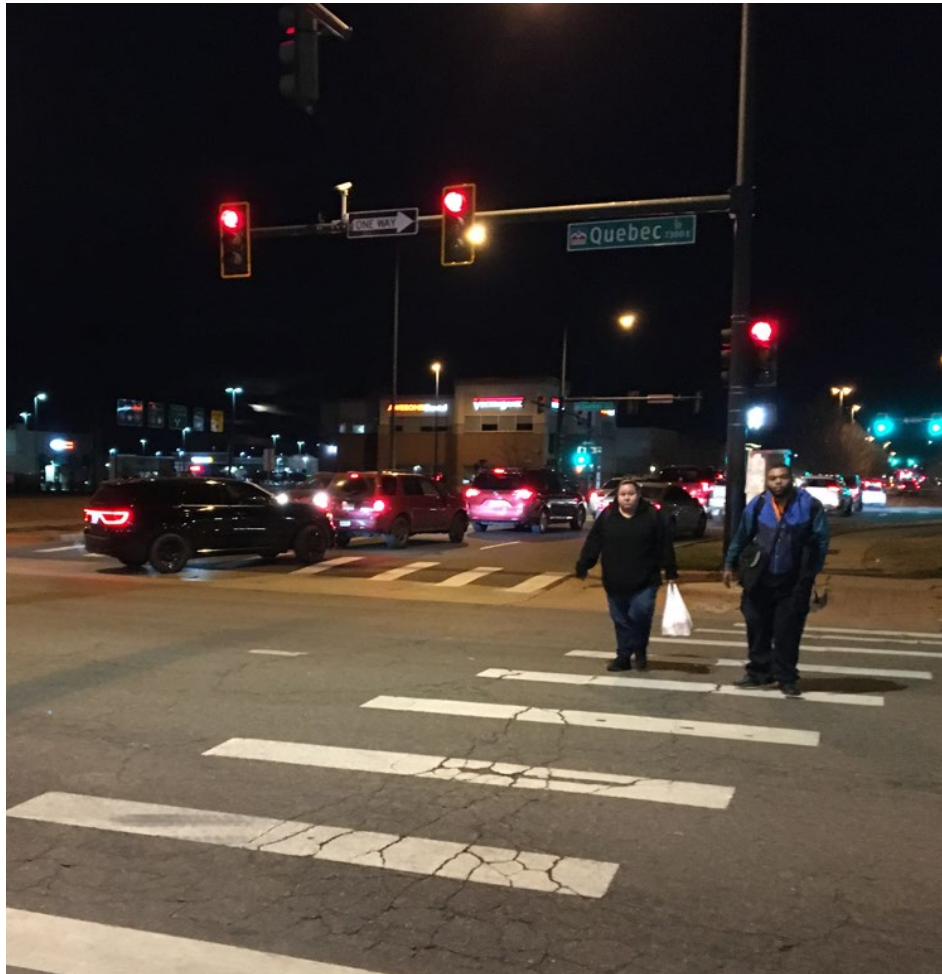
Intersections to consider for improvement:

- All signalized intersections

Leading Pedestrian Interval

Leading pedestrian interval (LPI) activates the pedestrian walk phase (at least 3-7 seconds) prior to activating the corresponding green phase for traffic. See **Figure 10** for an example of walk phase activated prior to a green signal for parallel traffic. LPI is applied at intersections to mitigate conflicts between pedestrians and right or left turning vehicles, by allowing time for the pedestrian to get far enough in the crosswalk to be more visible to turning vehicles. LPI could be considered for pedestrians crossing North Avenue at signalized intersections. Other agencies have prioritized LPI at intersections with a crash history of turning vehicles colliding with pedestrians, intersections with high pedestrian volumes, and intersections where vulnerable populations are likely to cross such as school-aged children or older adults. Implementation of LPI should consider the signal timing impacts on traffic movements.

Figure 10. Example of Leading Pedestrian Interval (LPI) signal phasing.



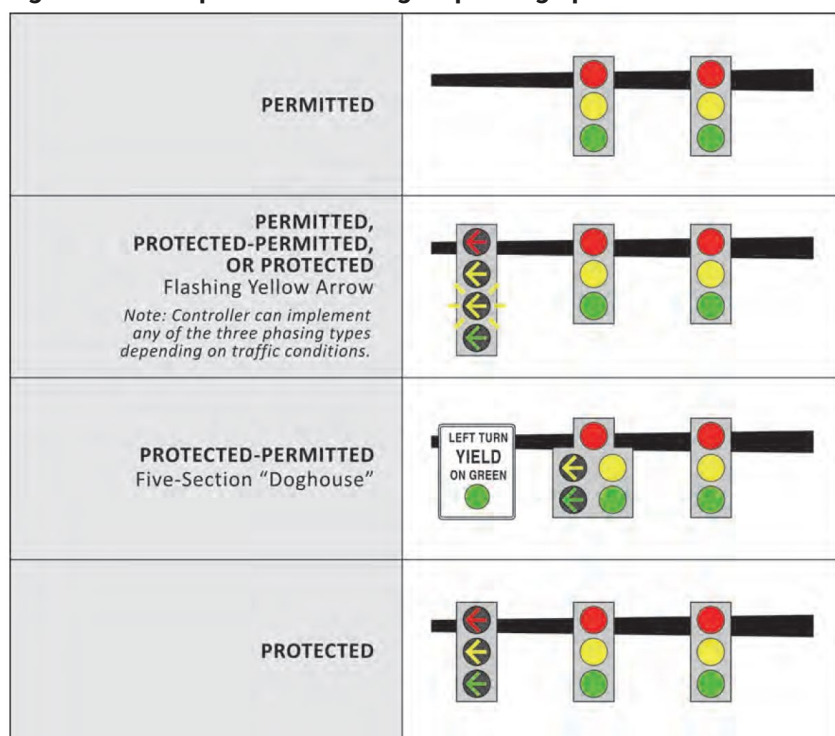
Locations with a crash history of vehicles turning onto North Avenue and striking a pedestrian in the crosswalk that may be mitigated by LPI across North Avenue include (this list is not exclusive of signalized intersections to consider LPI):

- 7th Street
- 10th Street
- 28 Road
- 28 ¼ Road

Protected Left Turn Phasing

Left turn only signal phase provides the left turn movement with an exclusive phase (green arrow) and is often used to mitigate left turn conflicts with the corresponding pedestrian phase. Many intersections along North Avenue have protected/permitted left turn phasing, whereby both a protected and permitted phase is provided. Other intersections are permitted-only. A more detailed engineering analysis that considers traffic operations impacts should be conducted prior to converting a left turn movement to a protected-only phase. Examples of the different types of left turn signal phasing are shown in **Figure 11**.

Figure 11. Example of left turn signal phasing options.



Source: NCHRP Report 812, Signal Timing Manual, 2nd Edition

Locations with a crash history of left turning vehicles failing to yield and striking a pedestrian or bicyclist in the crosswalk to consider adding or modifying the protected left turn phase include (but is not exclusive to):

- 7th Street (NB) – currently protected/permitted
- 10th Street (NB) – currently permitted-only (LPI may be an effective alternative here)
- 28 Road (WB) – currently protected/permitted
- 28 ½ Road (WB) – currently permitted-only

The frequency and direction of vehicle-to-vehicle broadside or angle crashes from a driver failing to yield right-of-way to oncoming traffic and making a left turn during a permitted phase should also be considered when evaluating whether to convert a left turn signal phase to protected-only.

Bicycle Detection at Traffic Signals

The traffic signals on North Avenue are coordinated to minimize delay to vehicles traveling along North Avenue. Most signals are semi-actuated, whereby the default setting is a green phase for traffic on North Avenue and cross streets are only activated when a vehicle is detected or a pedestrian call is made. Thus, a bicyclist attempting to cross North Avenue at one of these signalized intersections would not likely get a green signal unless a car or pedestrian were present. This situation could result in both a safety risk and inconvenience to the bicyclist.

Several existing or planned bike routes cross North Avenue, most at signalized intersections (the exception being 3rd Avenue, which is unsignalized). To improve the safety of bicyclists crossing North Avenue it is recommended where an existing or planned bike route crosses North Avenue at a signalized intersection, at a minimum, one of two modifications be made to accommodate bicycle flow across the intersection:

1. Bicycle detection should be installed so bicyclist can reliably call for the signal; or
2. The signal timing should be changed so the cross street is automatically called every cycle.

Locations where an existing bike route crosses North Avenue at a signalized intersection include:

- 1st Street
- 10th Street
- 12th Street
- 28 Road
- 28 $\frac{3}{4}$ Road
- 29 Road

Locations where a planned bike route crosses North Avenue at a signalized intersection include:

- 5th Street
- 7th Street
- 28 $\frac{1}{4}$ Road
- 29 $\frac{1}{2}$ Road

Existing bicycle corridors should be prioritized over planned corridors and CDOT and the City may also consider applying this change to all signalized intersections along North Avenue as bicyclists can (and may) use any City street, not just those that are designated bike corridors.

It should also be noted that the need for this change may be less important at busy cross streets where the signal is typically called every cycle (such as 12th Street or 29 Road), and more important at less busy crossings (such as 10th Street). Public comments showed that bicyclists not being detected was a particular issue at 10th Street. Given 10th Street is a low volume street, but important bicycle connection, this location should be the highest priority for making this change. Additionally, 5th Street is also being considered as an enhanced bicycle corridor and given it provides direct access to Grand Junction High School, may emerge as another high-priority location to make this improvement. As of publication the City was about to start on a citywide *Pedestrian and Bicycle Master Plan*, which could further identify high priority corridors and recommendations for bicycle and pedestrian crossings.

The most common example of bicycle detection at signals is through video and is often associated with a bicycle symbol in the pavement indicating where bicyclists should wait to call a signal, see **Figure 12**. Other bicycle detection technologies include a loop detector embedded in the pavement (similar to vehicle detection), user activated push buttons (similar to pedestrian push button, but reachable from a bike on-street), and microwave radar. The National Association of City Transportation Officials (NACTO) *Urban Bikeway Design Guide* provides guidance on installing bike detection at traffic signals

(<https://nacto.org/publication/urban-bikeway-design-guide/bicycle-signals/signal-detection-and-actuation/>).

Figure 12. Bike detection at a traffic signal.



Source: NACTO Urban Bikeway Design Guide

Bicycle Crossing Signing and Striping

50% of all bicycle crashes in the corridor and 55% of all pedestrian crashes in the corridor involved a driver failing to yield to right-of-way while turning. Many of these crashes are from drivers turning onto North Avenue from a driveway or side street. As additional segments of multiuse trail are added to North Avenue the volume of pedestrians and bicyclists are likely to increase. To help mitigate this crash type it is recommended to install pedestrian and bicycle crossing signs at busy cross streets and busy driveways to alert drivers to look for bicyclists and pedestrians before turning onto or off of North Avenue. One example of sign treatment is shown in **Figure 13**.

Figure 13. Custom sign at multiuse trail crossing on 28th Street in Boulder, CO.



It is also recommended to consider the use of stop bars and crosswalk markings at all side street intersections and major driveways with North Avenue to aide in driver yield compliance. The use of green paint at major driveways and crossings could also be considered as an additional treatment to indicate a bikeway crossing consistent with NACTO recommendations for crossing treatments (<https://nacto.org/publication/urban-bikeway-design-guide/bikeway-signing-marking/>).

Conduct a Bicycle & Pedestrian Safety Study

The crash analysis showed that in the five-year study period (2015-2019) there were 68 bicycle and pedestrian crashes on North Avenue (over the 3.75 miles). That equates to an average of just over one bicycle or pedestrian involved crash per month in the corridor during that time. Furthermore, safety was the most frequently cited theme to emerge from the public open house and community survey as part of the visioning exercise for the corridor.

While this Study provides high-level operational safety recommendations for the City, County, and CDOT to consider, it does not provide a comprehensive list of site-specific traffic safety countermeasures that a more thorough study would reveal. To improve traffic safety in the corridor for all modes it is recommended to conduct a bicycle and pedestrian safety study of the corridor using a Road Safety Audit (RSA) approach, which will identify a full suite of safety countermeasures.

The RSA would include the following:

- A comprehensive crash analysis (potentially using analysis outcomes already started by CDOT and as part of this Study).
- Interviews with traffic safety partners, such as the police department, fire department, council district representatives, local roadway engineers, and other relevant community groups or members to identify traffic safety concerns.
- A comprehensive site visit of the length of the corridor by foot and vehicle at different times of day by a diverse team of traffic engineers and traffic safety professionals to observe potential issues and identify potential solutions.
- A summary report of site specific and corridor-wide traffic safety countermeasures with a particular focus on bicycle and pedestrian safety.

Completion of an RSA would provide the City, County, and CDOT with both more specific and a comprehensive set of improvements to effectively address existing and potential safety issues in the corridor.

3. Complete Adjacent Sidewalk Network

The adjacent street network provides critical access between surrounding land uses and the transit system on North Avenue, which is important to supporting transit ridership on the corridor.

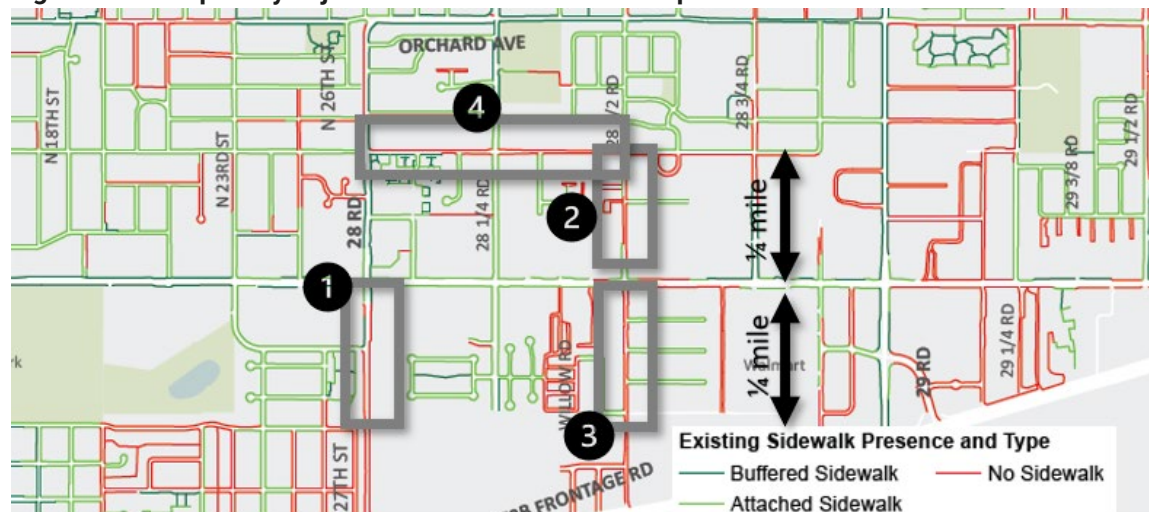
Existing conditions analysis showed that most of the street network around North Avenue has sidewalks. However, there are gaps in the network that were identified during the existing conditions analysis, most notably on the east half of the corridor. **To improve access to transit along the corridor it is recommended that the City gradually complete the missing gaps in the sidewalk network within a quarter mile of North Avenue.** A quarter mile is the distance that the majority of people will walk to access local transit.

Additionally, the City should prioritize completing the sidewalk network on arterial and collector streets over local streets, where traffic volumes and speeds are higher and the environment is less hospitable to pedestrians sharing the road with cars. Most of the arterial and collector streets within a quarter mile of North Avenue currently have sidewalks, with the exception of the following four locations. It is recommended to prioritize completing the sidewalk network along these four roadway segments adjacent to North Avenue, listed in order of priority and mapped in **Figure 14**, in order to improve access to transit:

1. 28 Road (between North Avenue and Gunnison Avenue)
2. 28 ½ Road (between North Avenue and Elm Avenue)
3. 28 ½ Road (between North Avenue and Gunnison Avenue)
4. Elm Avenue (between 28 Road and 28 ½ Road)

Sidewalks should be provided on both sides of these streets. 28 Road south of North Avenue does not currently have a sidewalk and would provide access to the Western Region One Source - resource center for veterans, which was identified by the technical team as an important transit destination near North Avenue. Additionally, 28 ½ Road does not have sidewalks north or south of North Avenue and is a critical connection between many affordable residential units near North Avenue. Note: the south side of Elm Avenue west of 28 ¼ Road is slated to be constructed in 2022.

Figure 14. Four priority adjacent street corridors to complete sidewalks.



4. New Pedestrian Crossings

Pedestrian crossings across North Avenue are important to facilitating pedestrian circulation and access to transit and businesses. All existing pedestrian crosswalks on North Avenue are at signalized intersections. This Study recommends that pedestrian crossings should be provided at all transit stops on North Avenue where feasible to provide a safe means to cross the street and mitigate pedestrians crossing midblock. In most cases, it is recommended to relocate transit stops that are far from a signalized crossing to a nearby existing signal (see Transit Improvements recommendation). However, in

some areas of the corridor where there are long gaps between signals, new signalized pedestrian crossing are recommended.

Due to high traffic volumes (20,000+ vehicles per day) and moderate speeds (posted at 30 - 40 mph) on North Avenue coupled with the desire to maintain traffic flow (for automobile traffic and transit buses) through a coordinated traffic signal system, both CDOT and the City of Grand Junction request that any new pedestrian crossing on North Avenue should be at a fully signalized intersection.

Analysis of the traffic signal spacing along North Avenue showed that most areas of the corridor have quarter-mile signal spacing. Quarter-mile transit stop spacing provides a balance between speed and access along the corridor. Using the average walking speed of 3 mph a pedestrian would need to walk no more than two and a half minutes out of the way to cross the street at a signal with quarter-mile signal spacing.

There are three locations along the corridor where signal spacing is longer than a quarter-mile:

- Between 1st Street and 5th Street (0.34 miles)
- Between 12th Street and 23rd Road (0.75 miles)
- Between 29 Road and 29 ½ Road (0.5 miles)

Given these gaps, input received from the public, stakeholders and technical team, and that any new crossing be fully signalized, **it is recommended that the City evaluate the following three locations for a new signalized intersection along North Avenue:**

- 15th Street
- 21st Street
- 29 ¼ Road

An evaluation would need to follow CDOT's *Pedestrian Crossing Installation Guide*, which includes collecting pedestrian and vehicle volume data. Since all of these would be new signals, the City could also consider conducting a full signal warrant analysis to evaluate the multimodal need. The City may also want to evaluate other locations near these crossings if these crossing are found not to meet the necessary signal warrant requirements, but other locations may. To ensure that pedestrian crossings are provided at most bus stops along the corridor, it is also recommended to relocate bus stops that are far from a signal to a signalized intersection (see Transit Improvements). An explanation of the reason each of the three recommended intersections would benefit from a new signalized crossing is provided below.

15th Street

15th Street is designated as a major collector street where it intersects North Avenue and is also a bike corridor north of Elm Avenue. A new traffic signal at this intersection would reduce the long gap between signals in this part of the corridor. It would also provide a connection for bicyclists and pedestrians traveling north-south along 15th Street to the multiuse trail on the south side of North Avenue along Lincoln Park. It would also allow for a new bus stop at this location improving transit access to the land uses to the north. Lastly, it would improve access for vehicle circulation between North Avenue and 15th Street, particularly for drivers making a southbound left.

21st Street

21st Street is near the bus stops on North Avenue that serves the VA Medical Center main entrance. A crossing here would reduce the long gap between signals in this part of the corridor. It would also provide a convenient crossing for people going between the VA Medical Center and the westbound bus stop as well as for staff and visitors at the hospital to access the restaurants across North Avenue from the Medical center. Several pedestrians were observed crossing in the vicinity of this location during a walk audit conducted as part of this project.

29 ¼ Road

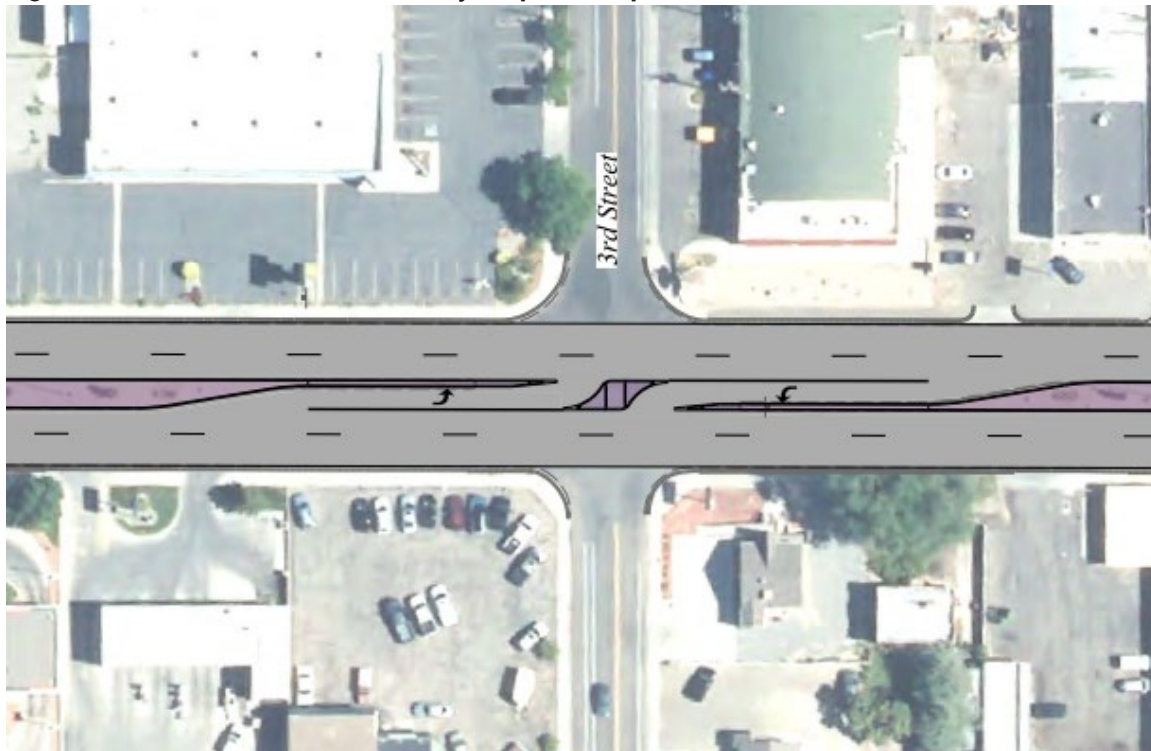
29 ¼ Road is a quarter-mile from the nearest signalized crossing and a new signal would reduce the signal spacing along this stretch to a quarter mile, consistent with most of the rest of the corridor. This location is also near an existing bus stop that provides access to the D51 career center, used by hundreds of high school students per year, many of which use the bus. Lastly, Bookcliff Middle School is located along 29 ¼ Road just north of North Avenue and the school's district includes locations south of North Avenue, including a residential mobile home park south of North Avenue at 29 ¼ Road. A new signalized crossing on North Avenue at 29 ¼ Road would allow students living in the mobile home park a safer connection across North Avenue to get to Bookcliff Middle School, as well as a safer crossing for bus riders, and people accessing the D51 Career Center.

5. New Bicycle Crossing

In addition to the recommendations for three new pedestrian crossings on North Avenue, 3rd Street is the only location along North Avenue where an existing bicycle facility crosses North Avenue at an unsignalized intersection. **Given the volume, speed, and number of traffic lanes on North Avenue, and the difficulty for bicyclists to safely cross at an unsignalized intersection it is recommended to improve the crossing at 3rd Street to allow for safer and more comfortable crossing by bicyclists.**

CDOT is currently planning to convert this intersection to three quarter movement with a center cut-through/ refuge median for bicycles as part of their planned overlay in 2022, see **Figure 15**. This will provide a more comfortable crossing for bicyclists as it would allow for a two-stage crossing (thus, bicyclists would only need to cross one direction of North Avenue at a time).

Figure 15. CDOT North Avenue Overlay Proposed Improvements at 3rd Street



It is recommended that this crossing be further enhanced by providing signs and pavement markings to direct bicycles to the planned median cut-through along North Avenue, including transitioning the bike lanes on 3rd Street to the center of the street at each approach to North Avenue, similar to the example from Tucson, AZ shown in **Figure 16**.

Figure 16. Example of a bike refuge median crossing approach treatment.



Source: NACTO Urban Bikeway Design Guide

6. Transit – Bus Stop Improvements

Several transit bus stop improvements are recommended to improve transit access, safety, and the transit experience. These recommendations are divided into the following categories:

1. Bus Stop Location
2. Bus Stop Standard Layout
3. Shelter Design and Specifications
4. Bus Stop Amenities
5. Branding

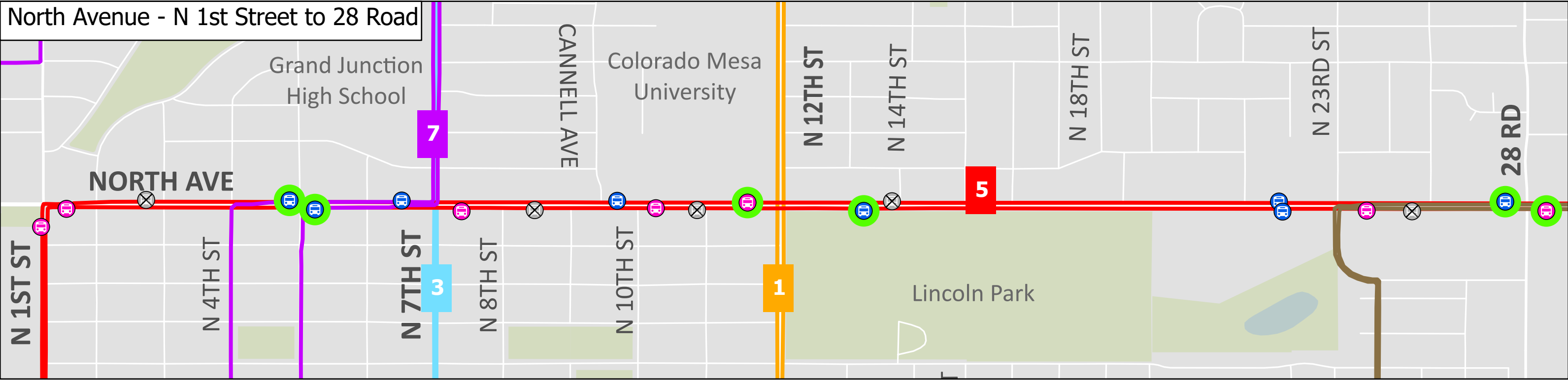
Bus Stop Location

It is recommended that all transit stops in the corridor be located on the far side of every signalized intersection and, to the extent feasible, be within 200' of a crosswalk.

People who use transit on North Avenue will need to cross North Avenue as part of at least one direction of their trip. Thus, locating bus stops close to signalized crossings will improve the safety and convenience of transit users in the corridor and reduce the likelihood of pedestrians attempting to cross North Avenue at unsignalized locations. The signal spacing in the corridor is generally a quarter mile, and quarter mile stop spacing will provide a good balance between maintaining transit speed (not stopping too frequently) and transit access (limiting walking distance to a stop). Lastly, far side stops are the preferred location for transit stops as they encourage pedestrians to cross behind, instead of in-front of, buses, result in fewer conflicts with turning vehicles, allow buses to clear the signal before stopping, and are more easily compatible with transit signal priority (TSP).

Per the corridor vision, bus pullouts are recommended where feasible at all stops in the corridor to mitigate traffic congestion and conflicts. However, it is recommended that in constrained environments where there may not be space to construct a pullout close to a signalized intersection that the City prioritize locating bus stops within 200' of a signal over providing a bus pullout farther away. In these situations, in-line bus stops may be appropriate.

A map of the approximate future locations consistent with the bus stop relocation recommendations is shown in **Figure 17**. This includes existing bus stops that do not need to move as well as existing bus stops that are recommended to be moved at some point in the future. In addition, the map provides recommended locations for future enhanced bus stops. These stops would have a larger shelter/ waiting area to accommodate higher ridership, and more amenities (i.e., bike racks, real time arrival information, etc.) and could be used for express service if implemented in the future. Bus stop locations may also be added or relocated from what is mapped if additional pedestrian crossings are added to the corridor.



LEGEND

Bus Stop Location

-  Future Stop Location (Exists Today)
-  Future Stop Location (New - Approximate Location)
-  Existing Stop Location to be Removed
-  Enhanced Stops



Figure 17

Recommended Bus Stop Locations on North Avenue

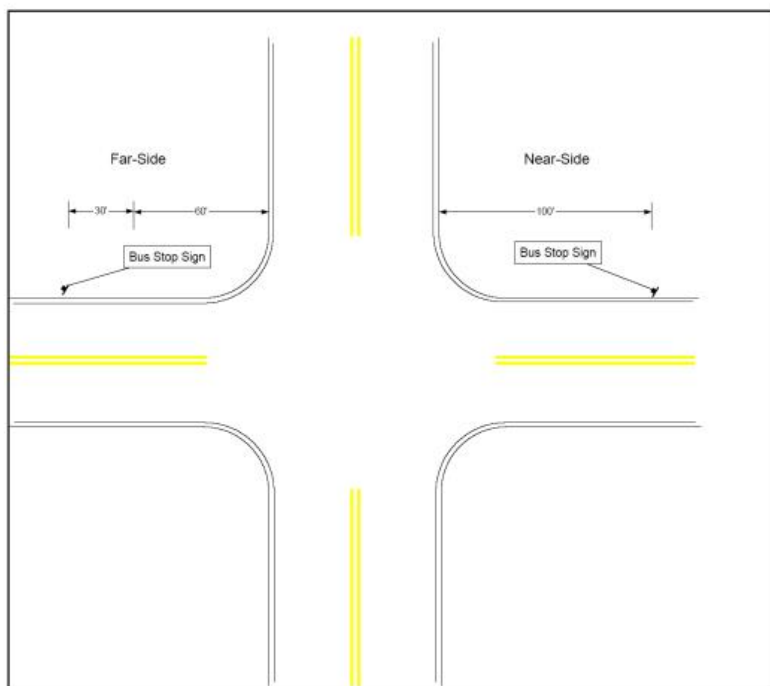
It should be noted that a few existing bus stops will remain in their current location despite being farther than 200' from a signal due to other factors. These include the following bus stop locations:

- Stocker Stadium (eastbound) – The proximity of the track at Stocker Stadium to the sidewalk prevents the sidewalk from being wide enough to support a bus stop closer to the signal at 12th Street.
- VA Medical Center (eastbound and westbound) – these stops were recently improved, are adjacent to the main hospital entrance and are within 350' of the signal at 23rd Street.
- D51 Career Center (eastbound) – this stop serves the D51 Career Center, is located where there is a long gap between signals, and is near 29 ¼ Road, which is recommended for a new signalized pedestrian crossing.

Stops should also be far enough from the intersection so buses are not blocking the intersection. The preferred placement of on-street stops in relation to intersections is shown in **Figure 18** and comes from Chapter 29.52 of the Grand Junction TEDS.

Figure 18: On-Street Stop Placement from Intersection for Grand Valley Transit (source: Chapter 29.52 of Grand Junction TEDS)

On-Street Transit Stops



The guidelines show that far-side stop locations should be 90' from the intersection (to the bus stop signpost) and 100' from the intersection for near-side stops.

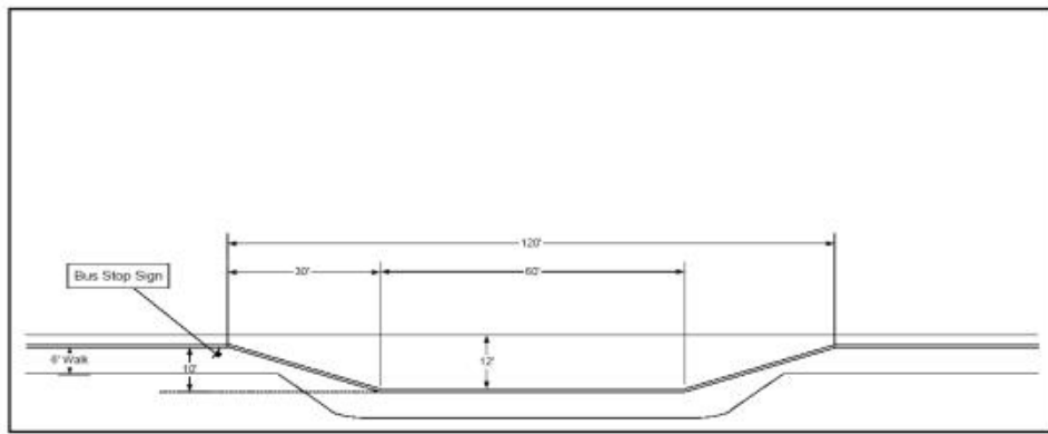
Bus Stop Standard Layout

This section defines the layout recommendations for bus stops on North Avenue.

Recommended Bus Pullout

Based on guidance from the project technical team, it is recommended that all bus stops on North Avenue be constructed with a bus pullout near-term as long as sufficient space is available. The recommended bus pullout, also known as an off-street transit turnout, for Grand Junction has been established in Grand Junction Transportation Engineering Design Standards (TEDS) Manual in Chapter 29.52 Transit Design Standards and Guidelines, as shown in **Figure 19**. Since this is an established standard, it is recommended as the project standard for North Avenue at stops where space is available for a bus pull-out.

Figure 19: Transit Turnout for Grand Valley Transit (source: Chapter 29.52 of Grand Junction TEDS Manual)



The recommended bus pullout is 120' in total length, consisting of 60' of linear curb space for bus loading and unloading and 30' each of entrance and exit taper. The pull-out is 12' wide from the curb to the edge of the outside travel lane. This design can accommodate one bus up to 40' in length. If there are future stops requiring multiple buses to occupy a stop at the same time, the length of the loading and unloading may need to be lengthened.

Bus Stop Elements – Layouts

Each bus stop has several programming elements that should be accommodated for within the layout including:

- Landing pad, required as part of the Americans with Disabilities Act (ADA), at a minimum of 5' wide by 8' deep (can include existing sidewalk area). The preferred location of the landing pad is recommended to be on the far side of the shelter, but it can be on the near side so long as it is aligned with the front door of the transit bus (where the wheelchair lift is located).
- Shelter or bench pad, which would need to be placed in such way as to retain pedestrian and wheelchair passage.
- Amenity pad for items such as trash can, information kiosk, bike racks, or other amenities.

It is recommended that all bus stops on North Avenue have a shelter. In some locations there may not be sufficient space for a shelter, in which case the stop should still include a sign and, if feasible, a bench.

The recommended and minimum widths for each element of the bus stop is provided below. Note that these are general and may vary depending on the final shelter design selected, and are based on GVT's desire to include advertisements as a revenue source on bus shelters:

- Landing Pad: 8' (deep) x 5' (wide)
- Shelter Pad: 8' x 16' (min. 6' x 10')
- Bench-Only Pad: 3' x 8' (min. 3' x 6')
- Amenity Pad: 6' x 8' (min. 3' x 5')

Standard design layouts are provided in **Figure 20** as general guidance for bus stop design on North Avenue. These include four scenarios depending on the space available:

1. Bus Pullout Unconstrained
2. Bus Pullout Constrained
3. In-Line Stop Unconstrained
4. In-Line Stop Constrained

In practice, the exact layout and dimensions of each amenity may vary depending on the individual stop.

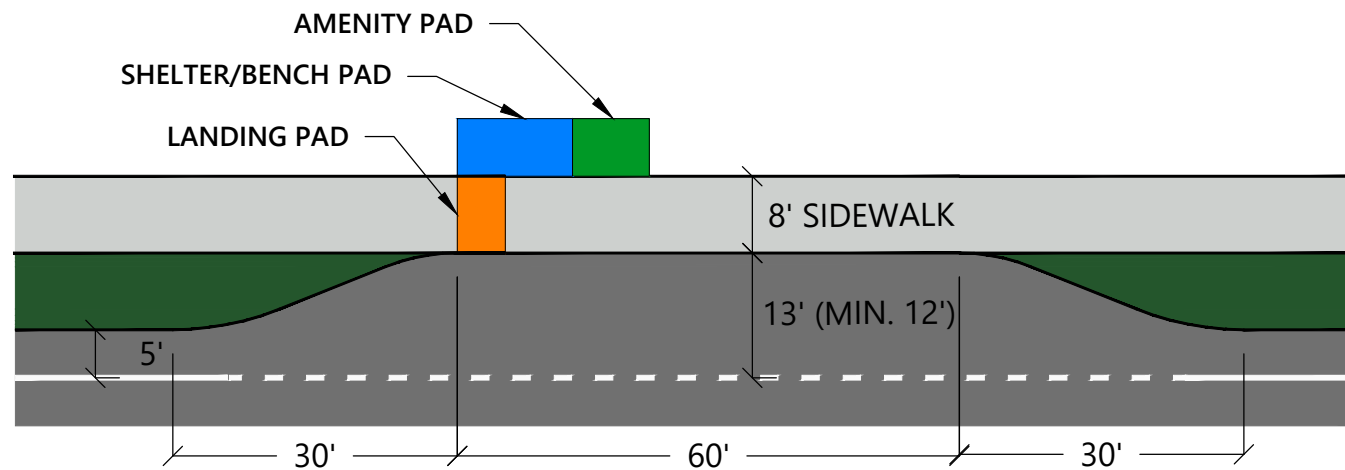
Stops with Bus Pullout: Unconstrained Location

This would occur where there is sufficient space for a bus pull-out and that also has enough right-of-way or an easement behind the sidewalk (unconstrained). This represents the ideal layout for a bus stop on North Avenue. When space is available, the stop would include a pullout and shelter behind the sidewalk.

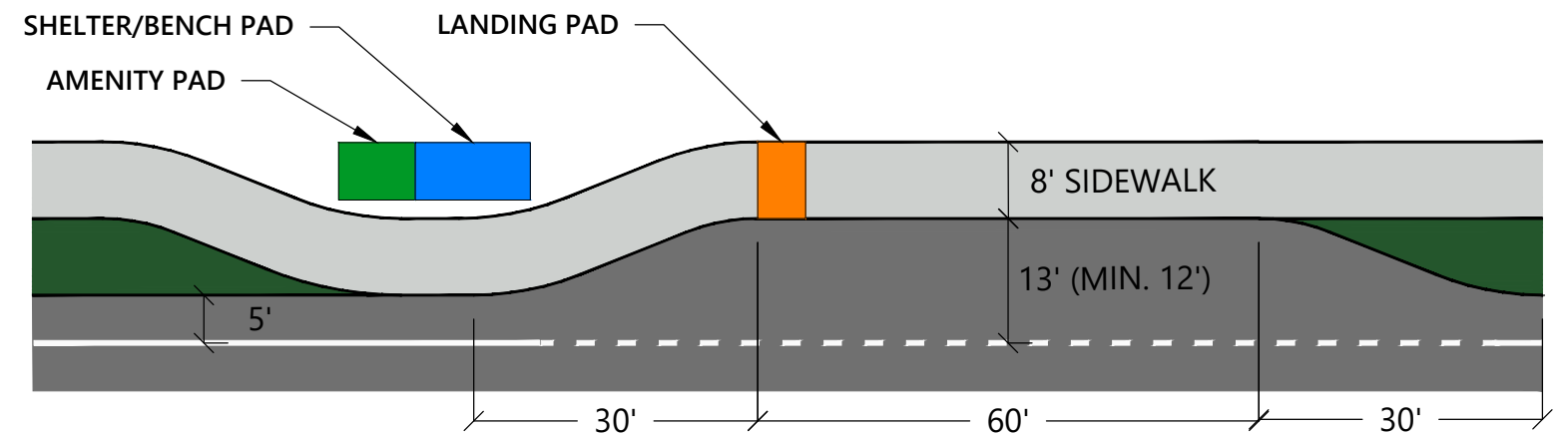
Stops with Pullouts: Constrained Location

For a bus stop where there is sufficient space for bus pullout but not enough right-of-way or an easement behind the sidewalk, the recommended layout is shown in **Figure 20**. This layout uses the far-side space beyond the bus pullout for a small shelter or a bench. The sidewalk would be designed to curve around the shelter to maintain a buffer for the shelter from the roadway. In this situation, the shelter/ bench could be oriented perpendicular to the sidewalk as shown in **Figure 20** or with an angled orientation behind the sidewalk facing the direction that traffic is coming from.

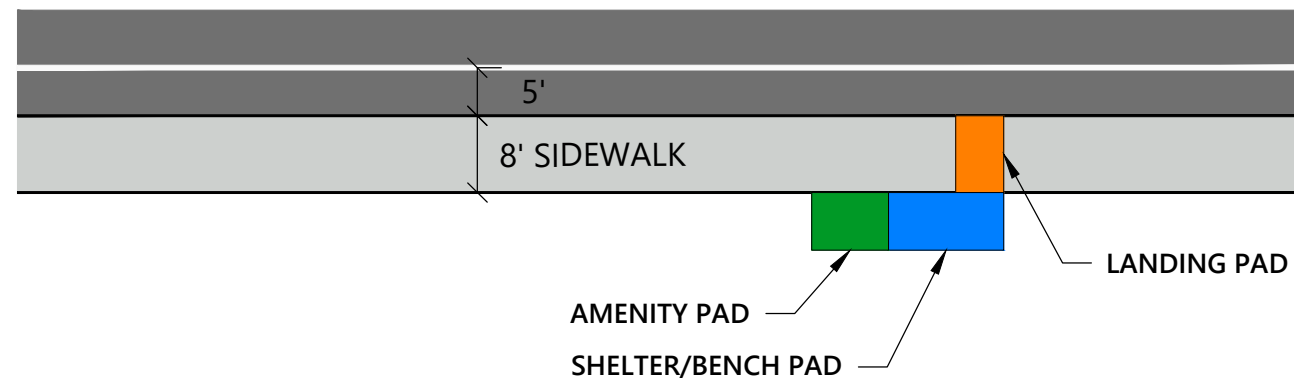
CADD FILE: C:\Users\velva\OneDrive - Fehr & Peers\North Avenue\0705-CorridorVision_Plan View.dwg
May 26, 2022



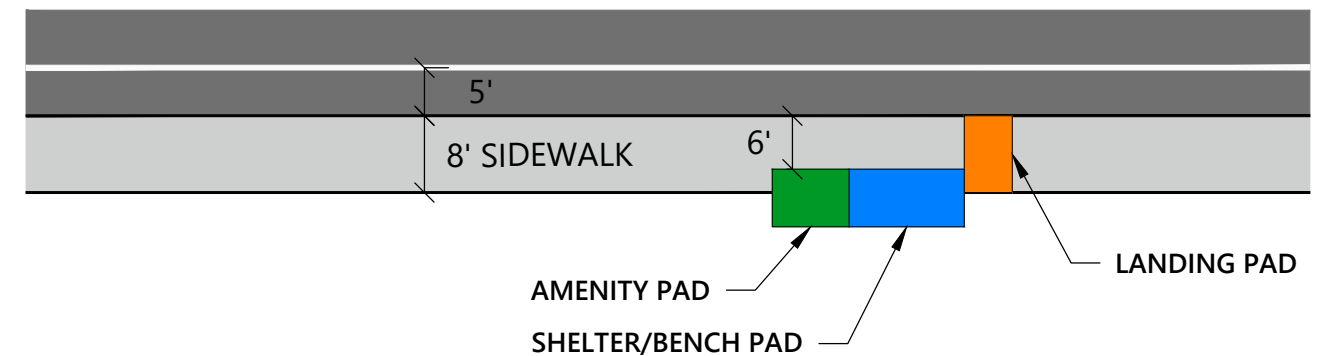
BUS PULLOUT - UNCONSTRAINED



BUS PULLOUT - CONSTRAINED



IN LINE STOP - UNCONSTRAINED



IN LINE STOP - CONSTRAINED

DIMENSIONS:

- LANDING PAD: 8' DEEP X 5' SIDE
- SHELTER PAD: 8' X 16' (MIN. 6' X 10')
- BENCH-ONLY PAD: 3' X 8' (MIN. 3' X 6')
- AMENITY PAD: 6' X 8' (MIN. 3' X 5')



CONCEPTUAL - NOT FOR CONSTRUCTION. ADDITIONAL
DETAILED ANALYSIS AND ENGINEERING DESIGN REQUIRED.

Figure 20
North Avenue Enhanced Transit Corridor Study
Bus Stop Configurations

In-Line Stops: Unconstrained Location

Where there is not sufficient space for a bus pullout, the bus stop would be an in-line stop. This will likely occur in locations where the sidewalk is adjacent to the curb (no buffer) due to right-of-way constraints. For in-line stops with some available right-of-way or an easement behind the sidewalk, the concept layout as shown in **Figure 20**, would include a shelter or bench behind the sidewalk.

In-Line Stops: Constrained Location

For in-line stops without sufficient right-of-way or an easement (constrained) behind the sidewalk for a shelter, a bench would only work if 6' of sidewalk clearance could be maintained for people walking and biking along the sidewalk as shown in **Figure 20**.

Shelter Design and Specifications

The recommended bus shelter design for North Avenue is a modern, configurable premanufactured kit from one of numerous manufacturers that offer standard bus shelter kits. This bus shelter kit approach (vs. designing, engineering, and bidding construction of a full custom solution) offers ease of procurement, simplified construction and installation, engineered solution designed for long-term serviceability and maintenance, and potential for customization and beautification through incorporation or addition of branding, unique design elements, or addition of public art through simple application of vinyl or additional of metal sculpture elements.

Specifications

The following bus shelter kit specifications are provided as an example that GVT could use when soliciting proposals from manufacturers. These are based on input received from the community survey, the project technical team, and GVT staff within the context of the North Avenue Corridor Vision:

- The main shelter structure shall be constructed using structural tubing, aluminum or approved equal and powder coated.
- The roof shall be cantilevered with a modern aesthetic.
- The requested color scheme will be determined as part of corridor branding process and shall be powder coated.
- The walls shall be a tempered safety glass, framed acrylic, or polycarbonate material that will be vandal and tamper resistant, retain translucence over time, and allow for possible application of vinyl graphics/ branding.
- The rear wall may also integrate a fixed position map case to accommodate a graphic/map.
- Sides of walls shall be no less than 6" from the ground as not to impede maintenance of snow, debris or general cleaning and to prevent potential water damage.
- The bus shelter roof components shall be modular in design and shall allow for roof components to be securely fastened to the shelter in a concealed and tamper-proof manner.
- All bus shelter structural components shall be clearly labeled and modular in design.
- Given the conceptual design, shelters shall be designed to minimize the collection of debris and trash, facilitate ease of cleaning and provide ample protection from inclement weather. Additionally, the bus shelter design and material selection should minimize graffiti and vandalism. Only materials that meet these guidelines will be considered.

- The structure should maximize shelter from rain, snow, wind and sun.
- Shelters should allow for the installation of the bench seat in addition to a minimum clear floor space of 30" wide and 48" deep inside the shelter for wheelchair access.
- The front of the shelter should be open for people using the shelter to clearly see buses approaching.
- Shelters should come in two configurations to accommodate stops with varying ridership demand and physical space constraint:
 - Medium shelter with an advertising panel (approximate footprint: 5-6' by 9'-12')
 - Large shelter with an advertising panel (approximate footprint: 6-8' by 12'-16')
- Shelters are required to incorporate lighting options for either solar panels or hard-wired connections. If powered by solar:
 - Advertising kiosk shall include 8 hours of solar powered illumination.
 - Shelter shall contain solar powered dusk to dawn roof illumination.
 - Batteries shall be securely attached and allow for a minimum of six (6) days of lighting autonomy in the event of a lack of solar exposure.
- Benches within the shelter will range in size from approximately 5' to 8' and will include bars to discourage using benches for sleeping. Benches will be powder coated to match shelter color scheme and will be made of similar materials as the shelter structure.
- Trash receptacles should be an option for incorporation and attachment to the shelter.

Possible Manufacturers

There are many regional and national manufacturers of bus stop shelter kits. A competitive procurement process would be needed before selecting a manufacturer. A few examples include:

- Tolar Mfg.
- Austin Mohawk
- Brasco International
- Handi-Hut

Examples

Some examples of contemporary bus shelter kits installed are shown in **Figure 21**. These same kit designs typically come in a variety of sizes and options that can be configured as needed.

Figure 21: Bus Shelter Prefabricated Kit Examples



Public Art

Once a bus shelter kit design has been selected, the shelter can become a canvas for a variety of interesting and compelling public art designs, which can be easily added to pre-fabricated shelter kits using vinyl graphics or metal (examples shown in **Figure 22**).

Figure 22: Examples of Public Art Added to Bus Shelters



Incorporation of Advertising

Most shelter kits will allow for the incorporation of advertising panels, which can help support transit system revenues, as shown in **Figure 23**. Bus shelter advertising may detract from the overall branding, in terms of cohesive and attractive look and feel, but it can be easily included. Advertising is already included in existing benches and shelters and is an important source of revenue to fund bus stop maintenance.

Figure 23: Examples of Bus Shelter Advertising Panels



Bus Stop Amenities

The package of passenger amenities at each stop will vary based on anticipated stop-level ridership demand and available space.

Minimum Amenity Package

The minimum bus stop amenity package is considered the bare minimum for each stop. Each stop will at a minimum include the following:

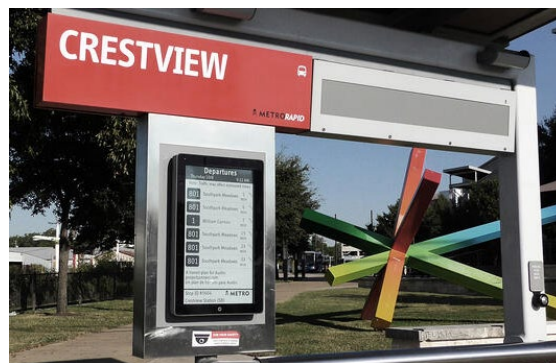
- Signage (static), including stop specific information on routes, and schedule (e.g., a sign could state that buses come at :15 and :45 past the hour from 6 AM to 8PM, etc.).
- Safe connections to pedestrian and bicycle infrastructure.
- 5' wide by 8' deep concrete landing pad.

Standard Amenity Package

Most bus stops on North Avenue will be designed to additionally have the following amenities so long as space allows:

- Signage (static), including stop specific information on routes.
- Safe connections to pedestrian and bicycle infrastructure.
- 5' wide by 8' deep concrete landing pad.
- Shelter and bench with full interior solar or hard-wired lighting package, possibly activated, or made brighter, by a push button for passengers.
- Dynamic signage that shows real-time bus arrival information (example of low-power e-reader technology shown in **Figure 24**).
- Trash receptacle.
- Single or double bike rack (at high boarding locations).

Figure 24 Example of Real-time Bus Sign
(source: E Ink)



Branding

Bus stops and their associated amenities present an opportunity to apply the branding of the North Avenue corridor to the elements of the stop. The brand should be cohesive with the overall corridor branding so as to clearly convey that transit and its associated amenities are a key part of the transportation landscape of North Avenue.

Bus Stop Branding Elements

As the overall corridor brand develops, bus stops provide many possibilities for applying the corridor brand to the bus stops and associated amenities including:

- Color, design, and materials of the shelter, bike racks, and trash receptacle elements (prefab kit elements, limited to what may be available from a manufacturer).
- Application of brand to the bus shelter vertical elements using vinyl graphics or metal elements attached to the shelter.
- Bus stop signage and signposts.
- All printed materials showing bus schedule website and map information.
- Wayfinding signage telling passengers how to get to nearby destinations.
- Bus branding (although this has broader fleet implications).

Examples

Examples of bus stop branding from other agencies are shown in **Figure 25**.

Figure 25: Bus Stop Branding Examples from Other Transit Agencies



Examples of four potential ideas for branding bus stops on North Avenue are shown in **Figure 26**. These images are examples of themes that could be applied to bus stops up and down North Avenue. The color scheme is consistent with the GVT palette and the intent would be to provide a brand that signifies North Avenue as an enhanced transit corridor, but is consistent with GVT branding. This type of branding could be applied as a vinyl to glass-paneled shelter and the metal frame of the shelters and benches could be powder coated with a consistent color scheme that matches the GVT color scheme.



Figure 26
North Avenue Bus Stop Branding Mockups

7. Transit - Speed & Reliability Recommendations

Analysis of the bus operations and traffic operations of the corridor, including interviews with bus drivers, identified the most common factors impacting speed and reliability of transit service in the corridor. In general, current transit service in the corridor does not regularly experience significant delay. CDOT conducted a TSMO analysis of existing and future traffic in the corridor and found no significant congestion related concerns in the corridor.

However, pre-COVID Routes 5 and 9, which serve North Avenue had lower on-time performance than other routes in the GVT system. This has improved largely due to a decrease in ridership. Interviews with two bus drivers in the corridor as well as field observations did identify several common causes of transit delay in the corridor when they occur. The most significant delay source is from passenger boarding, including passengers fumbling to find fare payment, and loading wheelchairs. Passenger boarding as a primary cause of delay would be consistent with better on-time performance observed on Routes 5 and 9 post-pandemic due to lower ridership on those routes (and the entire GVT system) since the onset of the pandemic.

Additionally, buses can occasionally be delayed (typically up to one minute per run) when waiting to pull back into traffic after stopping at a bus pullout. Due to the coordinated traffic system on North Avenue there are consistent gaps in traffic that bus drivers can use, but drivers may have to wait 20-30 seconds or more for a gap after stopping at a pullout.

Given these findings, four long-term improvements are recommended to improve transit speed and reliability in the corridor:

1. Increase Frequency of Service

One of the most effective actions GVT could take to improve transit reliability, grow ridership, and improve transit access in the North Avenue corridor is to increase frequency from every 60 minutes to every 30 minutes or better on Route 5 and/or Route 9. The current 60-minute frequencies are a significant barrier that prevents transit from being a viable transportation option for many people traveling in the corridor today.

2. Convert to Off-Board Fare Payment or Fare-Free Service

Converting to off-board fare payment or fare free service would allow passengers to board any door and would mitigate some delay caused by boarding and passengers finding fare payment. Off-board fare payment would necessitate installing ticket vending machines at all stops in the corridor so passengers can purchase a ticket prior to boarding (this is a common attribute of bus rapid transit systems), and can be expensive. Converting to fare-free or implementation of off-board fare payment would need further study to understand the feasibility and system-wide implications. Mobile ticketing could improve boarding speed, but because it still requires all passengers to board at one door and engage in payment, it would not improve speed and reliability as much as fare free or off-board fare payment.

3. Transit Signal Priority (TSP)

TSP would extend the green time at traffic signals by several seconds when a bus is approaching and the signal is about to turn red in order to allow the bus to clear the signal without waiting for the next cycle. A traffic analysis should be completed to understand impacts to side streets prior to implementation.

More detailed considerations and recommendations for implementing TSP in the North Avenue corridor is provided in a technical memorandum in **Appendix F**.

Key outcomes from the TSP analysis along North Avenue include:

- Recommendations for software technologies compatible with the existing infrastructure, including:
 - Infrared-Based System (similar to existing emergency vehicle Opticom)
 - GPS-Based System
- Two TSP options would be feasible with the existing technology:
 - Conditional: TSP would only be engaged when a bus is behind schedule
 - Unconditional: TSP would always be engaged when a bus passes by a signal.
- In other cities TSP has been demonstrated to improve bus travel times by 4% to 15% depending on the study and location.
- Next steps for how to implement TSP in the corridor is also provided.

4. Convert from Pullouts to In-Line Bus Stops

The two possible designs for bus stops along North Avenue are:

1. In-line stops, where the bus stops in the travel lane adjacent to the curb; and
2. Bus pullouts, where a shift in the curb provides a space for buses to “pull out” of the travel lane when stopping.

In the near term all bus stops in the corridor will be designed as pullouts to mitigate delay and conflicts to vehicle traffic. However, as ridership grows and service frequency increases in the future, these pullouts can be converted to in-line stations to improve transit speed and reliability in the corridor. There is no identified threshold for when this will occur as the decision to convert to in-line stops would be a policy choice made by the City, CDOT, and the community to prioritize transit speed over vehicle speed on North Avenue. However, transit ridership and transit delay would be key considerations in making this policy decision.

Prioritizing Speed & Reliability Improvements

Given that existing service operates at 60-minute frequencies, the priority should be to improve frequency to at least 30 minutes prior to implementing other speed and reliability improvements. Providing higher frequency will generally have a higher benefit to reducing delay to more riders than the three infrastructure recommendations provided above. However, it should be noted that GVT’s operating model relies significantly on timed transfers at the transit centers. Missed connections at the transit centers under the current schedule would result in 60-minute delays to passengers, which is significant. Therefore, if it is found that GVT routes on North Avenue are frequently missing connections at the transit centers due to delays incurred on North Avenue, implementing some or all of these speed and reliability recommendations prior to increasing frequencies may be warranted.

8. Policy Recommendations

Two policy recommendations are included to improve the safety and comfort of people walking, biking, and using transit in the North Avenue Corridor. These recommendations will help compliment the other operational and infrastructure recommendations in the corridor to achieve the corridor vision.

Consolidate Driveways and Manage Vehicle Access through Zoning

To reduce the frequency of curb cuts in the corridor it is recommended to consolidate driveways (including shared driveways for multiple businesses) and/or move driveways to side streets and alleys where feasible. This will reduce conflicts between vehicles and pedestrian and bicyclists along the planned multiuse trail. One of the most effective tools to implement this change is through zoning. Grand Junction currently has an overlay zone on North Avenue that requires consolidation of driveways as part of any redevelopment project. This tool is recognized as an important tool to managing access and improving the safety and comfort of people walking and biking along North Avenue. It is recommended to maintain this zoning tool into the future.

Amend the Municipal Code so Bicyclists Do Not Have to Dismount at Street Crossings

To support bicycle use of the existing and planned multiuse path along North Avenue it is recommended that the City revise language in existing ordinances and/or the Municipal Code to allow bicyclists to legally use crosswalks that are part of the planned multiuse trail along North Avenue without requiring them to dismount.

The Grand Junction Municipal Code section *10.04.1412 Operation of bicycles and other human-powered vehicles* includes the following text:

(10) (a) A person riding a bicycle or electrical assisted bicycle upon and along a sidewalk or pathway or across a roadway upon and along a crosswalk shall yield the right-of-way to any pedestrian and shall give an audible signal before overtaking and passing such pedestrian. A person riding a bicycle in a crosswalk shall do so in a manner that is safe for pedestrians.

(b) A person shall not ride a bicycle or electrical assisted bicycle upon and along a sidewalk or pathway or across a roadway upon and along a crosswalk where such use of bicycles or electrical assisted bicycles is prohibited by official traffic control devices or ordinances. A person riding a bicycle or electrical assisted bicycle shall dismount before entering any crosswalk where required by official traffic control devices or ordinances.

(c) A person riding or walking a bicycle or electrical assisted bicycle upon and along a sidewalk or pathway or across a roadway upon and along a crosswalk shall have all the rights and duties applicable to a pedestrian under the same circumstances, including, but not limited to, the rights and duties granted and required by GJMC [10.04.802](#).

Under this code, bicyclists may be required to dismount when crossing side streets in the crosswalk along North Avenue.

Furthermore, The Grand Junction Municipal Code section *10.04.704 Vehicle entering roadway*. includes the following text:

The driver of a vehicle about to enter or cross a roadway from any place other than another roadway shall yield the right-of-way to all vehicles approaching on the roadway to be entered or crossed. Any person who violates any provision of this section commits a traffic infraction.

(Ord. 4759, 9-6-17)

In the case of North Avenue, a bicyclist riding on the sidewalk and crossing a side street in the crosswalk could be considered a vehicle entering the roadway and therefore would need to yield to any vehicle in the street, even a car stopped at a STOP sign, unless they dismount. Several of the crashes on North Avenue involved a bicyclist that crossed a side street in the crosswalk and was hit by vehicle that had a stop sign. In many of these cases, the bicyclists was the one cited for not dismounting, despite crossing in a legal crosswalk and subsequently hit by a driver that had a STOP sign.

6. Action Plan

An action plan for implementing key recommendations identified for this project along with planning-level cost estimates are provided in **Table 4**. This includes identification of likely lead and partner agencies and a general time-frame for implementation based on a combination of project complexity, priority, and the logical sequence of actions.

The timeframe is divided into three general time periods and is a high-level estimate. Opportunities may emerge in the coming years to implement some projects sooner and others later:

- Short-Term: 1 – 2 years
- Mid-Term: 3 – 6 years
- Long-Term: 6+ Years

An estimated cost is included for recommended capital improvement projects, such as new sidewalk construction, new pedestrian crossings, and bus stop improvements, as well as recommended studies. For segments of the new multiuse trail where bus stops would be relocated, it is assumed that bus stop improvements would be made at the same time as the multiuse trail construction, therefore the cost of new bus pullouts is included (station area improvements, such as a shelter are not included in the multiuse trail estimate as those will vary by stop). Cost estimates are not included for most operational and policy recommendations given that these types of recommendations are not associated with specific projects that lend themselves to concrete costs. Cost estimates are also not provided for converting pullouts to in-line stops as costs for these recommendations are contingent on other factors and will vary depending on when and how they are implemented. The cost estimates are intended for planning purposes and it is recommended that more detailed project scoping and/or engineering analysis be conducted to refine the cost estimates closer to implementation.

Table 4 North Avenue ETC Implementation Action Plan and Cost Estimates.

Recommended Action/ Project	Implementation Lead (and Partner) Agency	Term	Planning-Level Cost Estimate
Multiuse Trail Buildout			
28 ½ Road to 29 Road, north side	City of Grand Junction	Short	\$600,000 - \$700,000
29 Road to 29 ½ Road, south side (1 bus pullout)	City of Grand Junction (Mesa County)	Short	\$900,000 - \$1,000,000
1st Street to 7th Street, south side	City of Grand Junction	Medium	\$800,000 - \$900,000
7th Street to 12th Street, south side (2 bus pullouts)	City of Grand Junction	Medium	\$900,000 - \$1,000,000
23rd Street to 28 Road, north side	City of Grand Junction	Medium	\$400,000 - \$500,000
28 Road to 28 ½ Road, north side (2 bus pullouts)	City of Grand Junction	Medium	\$800,000 - \$900,000
29 ½ Road to I-70B, south side (1 bus pullout)	City of Grand Junction (Mesa County)	Medium	\$600,000 - \$700,000
1st Street to 7th Street, north side	City of Grand Junction	Long	\$800,000 - \$900,000

Recommended Action/ Project	Implementation Lead (and Partner) Agency	Term	Planning-Level Cost Estimate
7th Street to 12th Street, north side (1 bus pullout)	City of Grand Junction	Long	\$700,000 - \$800,000
23rd Street to 28 Road, south side	City of Grand Junction	Long	\$400,000 - \$500,000
28 Road to 28 ½ Road, south side	City of Grand Junction	Long	\$600,000 - \$700,000
28 ½ Road to 29 Road, south side (1 bus pullout)	City of Grand Junction	Long	\$700,000 - \$800,000
29 Road to 29 ½ Road, north side (1 bus pullout)	City of Grand Junction (Mesa County)	Long	\$900,000 - \$1,000,000
29 ½ Road to I-70B, north side	City of Grand Junction (Mesa County)	Long	\$500,000 - \$600,000
Pedestrian & Bicycle Safety Improvements			
Operational Safety Improvements	City of Grand Junction (CDOT, Mesa County)	Short/ Medium	Operational
Bicycle and Pedestrian Safety Study	RTPO (City of Grand Junction, Mesa County, CDOT)	Short	\$75,000 - \$100,000
Adjacent Sidewalk Network			
28 Road from North Avenue to Gunnison Avenue	City of Grand Junction	Long	\$700,000 - \$800,000
28 ½ Road from North Avenue to Elm Avenue	City of Grand Junction	Long	\$700,000 - \$800,000
28 ½ Road from North Avenue to Gunnison Avenue	City of Grand Junction	Long	\$700,000 - \$800,000
Elm Avenue from 28 Road to 28 ½ Road	City of Grand Junction	Long	\$1,000,000 - \$1,100,000
New Signalized Pedestrian Crossings			
North Avenue and 29 ¼ Road (3-leg)	City of Grand Junction/ Mesa County (CDOT)	Medium	\$500,000 - \$750,000
North Avenue and 15th Street (3-leg)	City of Grand Junction (CDOT)	Medium/ Long	\$500,000 - \$750,000
North Avenue and 21st Street (4-leg)	City of Grand Junction (CDOT)	Long	\$500,000 - \$750,000
Transit – Bus Stop Improvements			
Move bus stops closer to traffic signals	GVT (City of Grand Junction, CDOT, Mesa County)	Short/Medium	Varies
Bus pullout	GVT (City of Grand Junction, CDOT, Mesa County)	Varies	\$100,000 – \$125,000
Bus shelter and pad (w. lighting and real time bus arrival information)	GVT (City of Grand Junction, Mesa County)	Short/Medium	\$30,000 - \$40,000
Bench and pad only	GVT (City of Grand Junction, Mesa County)	Short/Medium	\$2,000 - \$4,000
Amenity pad (with trash receptacle and a bike rack)	GVT (City of Grand Junction, Mesa County)	Short/Medium	\$2,000 - \$3,000

Recommended Action/ Project	Implementation Lead (and Partner) Agency	Term	Planning-Level Cost Estimate
Transit – Speed & Reliability Improvements			
<i>Increase frequency of service on North Avenue</i>	GVT	Short/ Medium	Operational
<i>Implement off-board fare payment or fare-free service</i>	GVT	Medium	Needs Further Study
<i>Transit signal priority</i>	GVT (City of Grand Junction, Mesa County)	Medium	\$200,000 - \$400,000
<i>Convert to in-line stops</i>	GVT/ City of Grand Junction (CDOT, Mesa County)	Long	Needs Further Study
Policy Recommendations			
<i>Consolidate driveways and access through zoning</i>	City of Grand Junction/ Mesa County	Short	N/A
<i>Amend municipal code related to biking on North Ave multiuse trail</i>	City of Grand Junction/ Mesa County	Short	N/A

CITY OF GRAND JUNCTION, COLORADO

RESOLUTION NO. _____-22

A RESOLUTION ADOPTING THE NORTH AVE ENHANCED TRANSIT CORRIDOR STUDY

Recitals

North Avenue has served the community as a major arterial since its construction in the mid-1950s. While it has functioned well over the years as a corridor for cars, trucks, and freight, it has lacked transit and pedestrian-friendly elements.

Mesa County Regional Transportation Planning Office (RTPO) applied for and received \$1.5 million in transit-related funding made available by Senate Bill 267. The required 20% match or \$375,000 was provided by the City for a total estimated project of \$1,875,000. The project has two purposes: 1) complete a comprehensive study to identify elements that would transform North Avenue into an Enhanced Transit Corridor and 2) construct selected improvements utilizing the remaining funding.

The Enhanced Transit Corridor Study defines a long-term vision for North Avenue and identifies a set of prioritized infrastructure improvements to make the corridor more comfortable for people biking, walking, and taking transit. The plan encompasses North Avenue in its entirety, from 1st Street on the west to I-70B on the east with the study area extending ½ mile to the north and south of North Avenue, where connecting streets are integral to the multimodal function of the corridor.

The study identifies the needs as well as the priorities to direct SB267 Transit funding for construction of improvements and to secure and guide any additional funding to improve the corridor. The study analyzes transit enhancements based on pedestrian access, traffic safety, bus stops, transit speed and reliability, and signal prioritization. Conceptual design of the proposed improvements and estimated costs for the corridor are also included in the study.

Public involvement was a key component to the development of the vision and included a walk audit, focus group meetings, a community meeting, and an online survey as well as presentation to the Grand Valley Regional Transportation Commission. Based on the results of the study, two sections of the corridor are recommended for investment of the balance of the SB267 funding. A 30% design for the two sections was also included.

Study recommendations include:

1. Buildout of the Multi-Use Trail
2. Pedestrian and Bicycle Safety Improvements
3. Complete Adjacent Sidewalk Network north and south of the corridor
4. New Pedestrian Crossings

5. New Bicycle Crossing
6. Transit – Bus Stop Improvements
7. Transit – Speed and Reliability Improvements

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF GRAND JUNCTION THAT:

The North Avenue Enhanced Transit Corridor Study, in the form of the document attached hereto, is hereby adopted as the policy of the City and shall be implemented as provided herein.

PASSED AND APPROVED this 21st day of September 2022.

Anna M. Stout
President of the City Council

ATTEST:

Amy Phillips
City Clerk



Grand Junction City Council

Regular Session

Item #4.b.

Meeting Date: September 21, 2022
Presented By: Matt Smith, Interim Police Chief
Department: Police
Submitted By: Matt Smith, Interim Police Chief

Information

SUBJECT:

A Resolution Authorizing the City Manager to Submit a Grant Request to the State of Colorado Department of Local Affairs (DOLA) FY 2022 – 2023 Gray & Black Market Marijuana Enforcement Grant

RECOMMENDATION:

Adopt a resolution authorizing the City Manager to submit a grant request to the Colorado Department of Local Affairs for the FY 2022-2023 Gray and Black Marijuana Enforcement Grant.

EXECUTIVE SUMMARY:

The Colorado Department of Local Affairs Gray & Black Market Marijuana Enforcement Grant is a formula grant opportunity intended to fund local enforcement efforts involving gray and black marijuana. Past grants have funded equipment, training, and overtime during illegal marijuana investigations. The purpose of this item is to consider an application for the FY 2022 - 2023 grant cycle.

BACKGROUND OR DETAILED INFORMATION:

This is an opportunity to apply for the Colorado Department of Local Affairs Gray and Black Market Marijuana Enforcement grant, which requires assurance of community priority. Applications cannot be submitted unless approved by the City Council. The grant has previously been an open process but has since become a formula grant based upon population, number of applications received and total dollars available.

In the FY 2021 - 2022 cycle, the Grand Junction Police Department was awarded \$34,003 out of \$900,000 total available dollars. For this year's grant cycle, the Colorado Department of Local Affairs again has total funding of \$900,000 available. City staff

estimates that the Police Department will receive an award in the range of \$20,000 - \$30,000 based upon historical allocation percentages of the total funding available. Historically, these grant dollars have been used to reimburse costs of personnel overtime, equipment and supplies, travel, medical expenses related to injury or exposure during a marijuana investigation, and the purchase of information or evidence. If funded in this cycle, staff would utilize these dollars towards similar expenditures.

FISCAL IMPACT:

If City Council authorizes the grant application and it is awarded, the grant revenue will be included in the proposed 2023 Budget.

SUGGESTED MOTION:

I move to (adopt/deny) Resolution No. 77-22, a resolution authorizing the City Manager to submit a grant request to the Department of Local Affairs (DOLA) for the Gray and Black Market Marijuana Enforcement Program.

Attachments

1. Resolution - 22-23 Gray&BlackMarketMarijuanaGrant

RESOLUTION NO. 22-##

A RESOLUTION SUPPORTING THE APPLICATION FOR A GRAY & BLACK MARKET MARIJUANA ENFORCEMENT GRANT FROM THE DEPARTMENT OF LOCAL AFFAIRS

Recitals:

City Council has considered and for the reasons stated, authorizes an application for a grant to provide financial assistance to the Grand Junction Police Department for the enforcement of gray and black market marijuana.

GJPD has been awarded this grant numerous times and would like to apply for the Gray and Black Market Marijuana Enforcement grant for the current cycle, which requires assurance of community priority. Applications cannot be submitted unless approved by the Grand Junction City Council.

The Colorado Department of Local Affairs has total funding of \$900,000 available (including program operations.) Although it is unknown at this time how much of the total \$900,000 the City would be awarded, the fiscal impact of this grant will allow for the reimbursement of personnel, overtime, equipment & supplies, travel, medical expenses related to injury or exposure during a marijuana investigation, and the purchase of information or evidence.

In the last grant period for the Gray and Black Market Marijuana Enforcement Program, City of Grand Junction Police Department was awarded \$34,003 to it as a formula calculation based off of the number of applicants and the population of City of Grand Junction. Staff estimates that this cycle will result in an approximate allocation of \$20,000 - 30,000 in formula grant award to help with the enforcement of illegal marijuana activities.

NOW, THEREFORE, BE IT HEREBY RESOLVED BY THE CITY COUNCIL OF THE CITY OF GRAND JUNCTION THAT:

- 1: The City Council of the City of Grand Junction strongly supports the application to DOLA to obtain funds needed to complete the Project. The City Manager is authorized and directed to work to finalize and timely submit such DOLA grant application.
- 2: If the grant is awarded, the City Council of the City of Grand Junction strongly supports the completion of the Project, and authorizes the City Manager to sign an appropriate grant agreement on behalf of the City as grantee of the DOLA grant.

This Resolution shall be in full force and effect from and after its passage and adoption.

Passed and adopted this ____ day of _____, 2022.

Anna Stout
President, Grand Junction City Council

ATTEST:

Amy Phillips
City Clerk



Grand Junction City Council

Regular Session

Item #5.a.i.

Meeting Date: September 21, 2022
Presented By: Randi Kim, Utilities Director
Department: Utilities
Submitted By: Randi Kim

Information

SUBJECT:

An Ordinance Adding Chapter 13.40 Graywater Control Program

RECOMMENDATION:

Staff recommends approval of the ordinance adding Chapter 13.40 Graywater Control Program.

EXECUTIVE SUMMARY:

Colorado's Graywater Control regulations require that cities adopt an ordinance for graywater that specifies requirements, prohibitions, and standards for the use of graywater for non-drinking purposes, to encourage the use of graywater, and to protect public health and water quality. This item introduces an Ordinance adding Chapter 13.40 Graywater Control Program and Setting a Public Hearing for September 21, 2022.

BACKGROUND OR DETAILED INFORMATION:

"Graywater" is defined as: the portion of wastewater that, before being treated or combined with other wastewater, is collected from fixtures within residential, commercial, or industrial buildings or institutional facilities for the purpose of being put to beneficial uses. Sources of graywater are limited to discharges from bathroom and laundry room sinks, bathtubs, showers, and laundry machines. Graywater does not include the wastewater from toilets, urinals, kitchen sinks, dishwashers, or non-laundry utility sinks.

Graywater use is regulated by the Colorado Department of Public Health and Environment under Regulation 86 – Graywater Control Regulation first promulgated June 30, 2015. As specified in the regulation, graywater is expected to carry human

pathogens with various risk levels and pathways that have the potential to be dangerous to public health. Therefore, the purpose of Regulation 86 is to describe requirements, prohibitions, and standards for the use of graywater for non-drinking water purposes, to encourage the use of graywater, and to protect public health and water quality.

Regulation 86 establishes the allowed users and allowed uses of graywater within the state of Colorado; establishes the minimum statewide standards for the location, design, construction, operation, installation, modification of graywater treatment works; and establishes the minimum ordinance or resolution requirements for a city, city and county, or county that chooses to authorize graywater use within its jurisdiction. Each local city, city and county, or county has the discretion to decide whether to adopt any of the graywater uses along with the associated minimum design criteria and control measures set forth in this regulation.

The proposed Ordinance would allow both uses for graywater authorized under Regulation 86; subsurface irrigation and indoor toilet/urinal flushing. Graywater use categories allowed by Regulation 86 and the proposed Ordinance include:

- Category A: Single family, subsurface irrigation
- Category B: Non-single family, subsurface irrigation
- Category C: Single family, indoor toilet and urinal flushing, subsurface irrigation
- Category D: Non-single family, indoor toilet and urinal flushing, subsurface irrigation

The proposed Ordinance addresses the minimum requirements of Regulation 86 including:

- Defining the legal boundaries of the local graywater control program as the City limits.
- Identifying the City as the local agency that is responsible for oversight and implementation of all graywater regulatory activities including, but not limited to, design review, inspection, enforcement, tracking, and complaints.
- Allowing the City to impose fees for administration and oversight of the Graywater Control Program.
- Requiring a searchable tracking mechanism for graywater treatment works that is indefinitely maintained by the City.
- Incorporating a graywater design criteria document (Attachment A).
- Requiring an operation and maintenance (O&M) manual for all graywater treatment works.
- Identifying the reporting requirements for graywater treatment works.

FISCAL IMPACT:

The proposed ordinance would allow the City to impose fees for administration and oversight of the Graywater Control Program.

SUGGESTED MOTION:

I move to (adopt/deny) Ordinance No. 5094, an ordinance adding Chapter 13.40 Graywater Control Program on final passage and order final publication in pamphlet form.

Attachments

1. Attachment A Graywater Design Criteria
2. Ordinance Graywater Control Program

ATTACHMENT A: GRAYWATER DESIGN CRITERIA

TABLE OF CONTENTS

1.0	Introduction
2.0	Definitions
3.0	Sizing Criteria
4.0	Design Criteria Applicable to All Graywater Treatment Works
5.0	Design Criteria for Indoor Toilet and Urinal Flushing Graywater Treatment Works
6.0	Design Criteria for Subsurface Irrigation Systems
7.0	Signage Requirements
8.0	Operations and Maintenance Manual

1.0 Introduction

This Graywater Design Criteria document contains the minimum requirements for all Graywater Treatment Works installed in the City of Grand Junction.

2.0 Definitions

Agricultural irrigation means irrigation of crops produced for direct human consumption, crops where lactating dairy animals forage, and trees that produce nuts or fruit intended for human consumption. This definition includes household gardens, fruit trees, and industrial hemp as defined by C.R.S. § 35-61-101.

Agronomic rate means the rate of application of nutrients to plants that is necessary to satisfy the nutritional requirements of the plants.

City means the City of Grand Junction, a Colorado home rule Municipality.

Closed sewerage system means either a permitted Domestic Wastewater Treatment Works, which includes a permitted and properly functioning On-site Wastewater Treatment System with a design capacity more than 2,000 gpd, or a properly functioning and approved or permitted OWTS with a design capacity of 2,000 gpd or less.

Commission means the Water Quality Control Commission 25-8-201, C.R.S.

Component means a subpart of a Graywater Treatment Works which may include multiple devices.

Cross-Connection means any connection that could allow any water, fluid, or gas such that the water quality could present an unacceptable health and/or safety

risk to the public, to flow from any pipe, plumbing fixture, or a customer's water system into a public water system's distribution system or any other part of the public water system through backflow.

Design means the process of selecting and documenting in writing the size, calculations, site specific data, location, equipment specification and configuration of treatment components that match site characteristics and Facility use.

Design flow means the estimated volume of graywater per unit of time for which a component or Graywater Treatment Works is designed.

Dispersed subsurface irrigation means a subsurface irrigation system including piping and emitters installed throughout an Irrigation Area.

Division means the Water Quality Control Division of the Colorado Department of Public Health and Environment.

Facility means any building, structure, or installation, or any combination thereof that uses graywater subject to a graywater control program (Program), is located on one or more contiguous or adjacent properties, and is owned or operated by the same person or legal entity. Facility is synonymous with the term operation.

Floodplain (100-year) means an area adjacent to a river or other watercourse which is subject to flooding as the result of the occurrence of a one hundred (100) year flood, and is so adverse to past, current or foreseeable construction or land use as to constitute a significant hazard to public or environmental health and safety or to property or is designated by the Federal Emergency Management Agency (FEMA) or National Flood Insurance Program (NFIP). In the absence of FEMA/NFIP maps, a professional engineer shall certify the floodplain elevations.

Floodway means the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one foot or as designated by the Federal Emergency Management Agency or National Flood Insurance Program. In the absence of FEMA/NFIP maps, a professional engineer shall certify the floodway elevation and location.

Graywater means that portion of wastewater that, before being treated or combined with other wastewater, is collected from fixtures within residential, commercial, or industrial buildings or institutional facilities for the purpose of being put to beneficial uses. Sources of graywater are limited to discharges from bathroom and laundry room sinks, bathtubs, showers, and laundry machines. Graywater does not include the wastewater from toilets, urinals, kitchen sinks, dishwashers, or nonlaundry utility sinks. C.R.S. 25-8-103(8.3)(a)

Graywater treatment works means an arrangement of devices and structures used to: (a) collect graywater from within a building or a Facility; and (b) treat, neutralize, or stabilize graywater within the same building or Facility to the level necessary for its authorized uses. C.R.S. 25-8-103(8.4)

Irrigation area means that area of ground consisting of soil, Mulch, gravel, and plant material to which water is directly applied by a graywater subsurface irrigation system.

Indirect connection means a waste pipe from a Graywater Treatment Works that does not connect directly with the closed sewerage system, but that discharges into the closed sewerage system through an air break or air gap into a trap, fixture, receptor, or interceptor.

Legally Responsible Party

(a) For a residential property, the Legally Responsible Party is the property owner.

(b) For a corporation, the Legally Responsible Party is a responsible corporate officer, either:

(1) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or

(2) the manager of operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated Facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for approval application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

(c) For a general or limited partnership or sole proprietorship, the Legally Responsible Party is the general partner, business matters partner or the proprietor, respectively.

(d) For a limited liability company, the responsible party shall be the manager or other authorized agent of the company and shall be a natural person.

(e) For a Municipality, State, Federal, or other public agency, the Legally Responsible Party is a principal executive officer or ranking elected official, either

(1) the chief executive officer of the agency, or

(2) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of EPA), or

(3) when the entity is the State of Colorado, the Commission.

Graywater control program (Program) is this ordinance and, as applicable, any rule(s), including implementation practices, regulation(s), standard(s) authorized by the City, and which follows the minimum requirements of this Chapter and other applicable law(s), rule(s) and regulation(s).

Local public health agency means any the Mesa County Colorado Health Department.

Modification means the alteration or replacement of any component of a Graywater Treatment Works that can affect the quality of the finished water, the rated capacity of a Graywater Treatment Works, the graywater use, alters the treatment process of a Graywater Treatment Works, or compliance with this regulation and the local graywater control program. This definition does not include normal operations and maintenance of a Graywater Treatment Works.

Mulch means organic material including but not limited to leaves, prunings, straw, pulled weeds, and wood chips.

Mulch basin means a type of irrigation or treatment field filled with Mulch or other approved permeable material of sufficient depth, length, and width to prevent ponding or runoff. A Mulch Basin may include a basin around a tree, a trough along a row of plants, or other shapes necessary for irrigation.

On-site wastewater treatment system or OWTS means an absorption system of any size or flow or a system or Facility for treating, neutralizing, stabilizing, or dispersing sewage generated in the vicinity, which system is not a part of or connected to a sewage treatment works. C.R.S. 25-10-103(12)

Percolation test means a subsurface soil test at the depth of a proposed Irrigation Area to determine the water absorption capability of the soil, the results of which are normally expressed as the rate at which one inch of water is absorbed. The rate is expressed in minutes per inch.

Potable water system means a system for the provision of water to the public for human consumption through pipes or other constructed conveyances, where

such system has less than fifteen service connections or regularly serves less than an average of at least 25 people daily at least 60 days per year.

Professional engineer means an engineer licensed in accordance with section 12-25-1, C.R.S.

Nuisance means the unreasonable, unwarranted and/or unlawful use of property, which causes inconvenience or damage to others, including to an individual or to the general public.

Public water system means a system for the provision of water to the public for human consumption through pipes or other constructed conveyances if such system has at least fifteen service connections or regularly serves an average of at least 25 individuals daily at least 60 days per year. A public water system is either a community water system or a non-community water system. Such term does not include any special irrigation district. Such term includes:

(a) Any collection, treatment, storage, and distribution facilities under control of the supplier of such system and used primarily in connection with such system.

(b) Any collection or pretreatment storage facilities not under such control, which are used primarily in connection with such system.

Regulation 86 means Colorado Department of Public Health and Environment Water Quality Control Commission Regulation no. 86 – Graywater Control Regulation, 5 CCR 1002-86.

Single family means a detached or attached structure, arranged and designed as a single-family residential unit intended to be occupied by not more than one family and that has separate water and sewer services connections from other dwelling units.

Site evaluation means a comprehensive analysis of soil and site conditions for a graywater Irrigation Area.

Soil horizon means layers in the soil column differentiated by changes in texture, color, redoximorphic features, bedrock, structure, consistence, and any other characteristic that affects water movement.

Soil profile test pit means a trench or other excavation used for access to evaluate the soil horizons for properties influencing effluent movement, bedrock, evidence of seasonal high ground water, and other information to be used in locating and designing a graywater Irrigation Area.

Soil structure means the naturally occurring combination or arrangement of primary soil particles into secondary units or peds; secondary units are characterized because of shape, size class, and grade (degree of distinctness).

Suitable soil means unsaturated soil in which the movement of water, air, and the growth of roots is sustained to support healthy plant life and conserve moisture. Soil criteria for graywater subsurface irrigation are further defined 6.0(b)(11)(i) of this document.

Subsurface irrigation means a discharge of graywater into soil a minimum of four inches (4”) and no deeper than twelve inches (12”) below the finished grade.

State means the State of Colorado or any of its agencies.

State waters means any and all surface and subsurface waters which are contained in or flow in or through this state, but does not include waters in sewage systems, waters in treatment works of disposal systems, waters in potable water distribution systems, and all water withdrawn for use until use and treatment have been completed.

Abbreviations and Acronyms. The following meanings are associated with the acronyms used in this chapter.

ANSI	American National Standards Institute
BK	Blocky
C.R.S.	Colorado Revised Statutes
CDPS	Colorado Discharge Permit System
FEMA	Federal Emergency Management Agency
gpd	gallons per day
GR	Granular
mg/L	milligrams per Liter
MPI	Minutes Per Inch
NFIP	National Flood Insurance Program
NSF	NSF International, formerly know as National Sanitation Foundation
O&M	Operations and Maintenance
OWTS	On-Site Wastewater Treatment System(s)
PR	Prismatic

3.0 Graywater Treatment Works – Sizing Criteria

(a) Sizing Criteria for all graywater treatment works

(1) Graywater treatment works must be sized appropriately using the following flow projection methods:

(i) Residential users: Flow to graywater treatment works must be calculated on the occupancy and the fixtures connected to the

graywater treatment works. The calculated graywater flow is the number of occupants multiplied by the estimate graywater flow in terms of gpd/occupant from the attached fixtures.

(A) The occupancy must be calculated based on a minimum of two (2) occupants for the first bedroom and one (1) occupant for each additional bedroom.

(B) The estimated graywater flow from each fixture is based on the design flow of the fixture or if the fixture's design flow is unknown then the estimated graywater flow per occupant is with based on the following gallons per day per occupant.

a. Traditional fixtures: 25 gpd/occupant for each shower, bathtub, and wash basin and 15 gpd/occupant for each clothes washer.

b. Water saving fixtures: 20 gpd/occupant for each shower, bathtub, and wash basin and 8 gpd/occupant for each clothes washer.

(ii) Non-residential users: Graywater treatment works must be sized in accordance with fixture or water use records taking into account the number of fixtures attached to the graywater treatment works.

4.0 Design Criteria Applicable to All Graywater Treatment Works

(a) All graywater treatment works must meet all design requirements of this regulation and meet any additional design requirements of the Colorado Plumbing Code.

(b) At minimum, all graywater treatment works must:

(1) Be constructed such that each treatment component or combination of multiple components has a design flow greater than the calculated peak graywater production, if upstream of the storage tank or if no tank is present.

(2) Include a diversion valve that directs graywater to either the graywater treatment works or a closed sewerage system. The diversion valve must be:

(i) Easily operable;

(ii) Clearly labeled;

(iii) Constructed of material that is durable, corrosion resistant, watertight;

(iv) Designed to accommodate the inlet and outlet pipes in a secure and watertight manner; and e. Indirectly connect the bypass line to the closed sewerage system.

(3) Not have any piping that allows the treatment process(es) or a storage tank to be bypassed prior to graywater use.

(4) Include a tank to collect and store graywater, except for a subsurface irrigation system that discharges to a mulch basin. The storage tank must:

(i) Be constructed of durable, non-absorbent, water-tight, and corrosion resistant materials;

(ii) Be closed and have access openings for inspection and cleaning;

(iii) Be vented;

(iv) For indoor tanks, be vented to the atmosphere outside of the house;

(v) For outdoor tanks, have a downturned screened vent;

(vi) Have an overflow line: i. with the same or larger diameter line as the influent line; ii. without a shut off valve; iii. that is trapped to prevent the escape of gas vapors from the tank; and iv. that is indirectly connected to the closed sewerage system;

(vii) Have a valved drain line with the same or larger diameter line as the influent line that is indirectly connected to the closed sewerage system;

(viii) Be a minimum of 50 gallons;

(ix) Be placed on a stable foundation;

(x) If located outdoors, not be exposed to direct sunlight; and

(xi) Have a permanent label that states “CAUTION! NON-POTABLE WATER. DO NOT DRINK.”

(5) For indoor toilet or urinal flushing systems (Categories C and D) graywater treatment works must have a backup potable water system connection. For subsurface irrigation systems (Categories A and B) graywater treatment works may, but are not required to, have a backup potable water system that provides potable irrigation water when graywater is not being produced or is produced in insufficient quantities. A backup potable water system connection must meet the following requirements:

(i) For non-public water system, potable water system connections: uncontrolled cross connections between a potable water system and

a graywater treatment works are prohibited. All cross connections must be protected by a reduced pressure principle backflow prevention zone assembly or an approved air gap.

(ii) For public water system, potable water system connections: uncontrolled cross connections between a public water system and a graywater treatment works are prohibited. The graywater treatment works design must protect the public water system from cross connections by meeting the requirements of Regulation #11: Colorado Primary Drinking Water Regulations.

(6) Not be used as a factor to reduce the design, capacity or soil treatment area requirements for OWTS or domestic wastewater treatment works.

(7) Have any wastewater from graywater treatment works (e.g., filter backwash water) be properly contained and disposed into a closed sewerage system or an approved Underground Injection Control (UIC) well.

(8) Have all graywater piping clearly distinguished and must be clearly labeled, including pipe identification and flow arrows.

(9) If located in a 100-year floodplain area, meet or exceed the requirements of FEMA and the local emergency agency. The graywater system must be designed to minimize or eliminate infiltration of floodwaters into the system and prevent discharge from the system into the floodwaters.

(10) Not be located in floodways.

(11) Be located within the confines of the legal property boundary and not within an easement;

5.0 Design Criteria for Indoor Toilet and Urinal Flushing Graywater Treatment Works

(a) All toilet and urinal flushing graywater systems must meet all design requirements of this regulation and meet any additional design requirements of the Colorado Plumbing Code.

(b) The following minimum design criteria are required for all graywater treatment works being used for single family, indoor toilet and urinal flushing graywater treatment works (Category C).

(1) All single family, indoor toilet and urinal flushing graywater treatment works must:

(i) Be certified under “Class R” of NSF/ANSI 350 Onsite Residential and Commercial Water Reuse Treatment Systems.

(ii) If a disinfection process is not part of NSF/ANSI 350-2011 equipment, include separate disinfection system equipment. For graywater treatment works that use sodium hypochlorite (bleach), the graywater treatment works must be capable of providing a free chlorine residual of 0.2 to 4.0 mg/L in the graywater throughout the indoor graywater plumbing system.

(iii) Include a dye injection system that is capable of providing a dye concentration that is visibly distinct from potable water.

(2) For Category C indoor toilet and urinal flushing graywater treatment works that are also capable of using graywater for subsurface irrigation, the system may be designed to allow graywater to be diverted to the subsurface irrigation graywater treatment works prior to the disinfection and dye process, however after the point of diversion the subsurface irrigation portion of the system must meet the requirements in section 6.0 of this document.

(c) The following minimum design criteria are required for all graywater treatment works being used for non-single family, indoor toilet and urinal flushing graywater treatment works (Category D).

(1) All non-single family, indoor toilet and urinal flushing graywater treatment works must:

(i) Be certified under “Class R” or “Class C” of NSF/ANSI 350 Onsite Residential and Commercial Water Reuse Treatment Systems. Required classification shall be dictated by the size of the graywater treatment works and if the graywater sources are residential or commercial as defined by NSF/ANSI 350.

(ii) If a disinfection process is not part of NSF/ANSI 350-2011 equipment, include a separate disinfection system equipment. A graywater treatment works must be capable of providing a free chlorine residual of 0.2 to 4.0 mg/L in the graywater throughout the indoor graywater plumbing system.

(iii) Include a dye injection system that is capable of providing a dye concentration that is visibly distinct from potable water.

(2) For Category D indoor toilet and urinal flushing graywater treatment works that are also capable of using graywater for subsurface irrigation, the system may be designed to allow graywater to be diverted to the subsurface irrigation graywater treatment works prior to the disinfection and dye process, however after the point of diversion the subsurface irrigation portion of the system must meet the requirements in Section 6.0.

(3) For graywater treatment works that have a capacity to receive greater than 2,000 gallons per day, the design must be prepared under the supervision of and submitted with the seal and signature of a professional engineer licensed to practice engineering in the State of Colorado in accordance with the requirements of the Colorado Department of Regulatory Agencies (DORA) – Division of Registrations.

6.0 Design Criteria for Subsurface Irrigation Systems

(a) All subsurface irrigation systems must meet all design requirements of this regulation and meet any additional design requirements of the Colorado Plumbing Code.

(b) The following minimum design criteria are required for all graywater treatment works being used for subsurface irrigation. All subsurface graywater irrigation systems must:

(1) Have the subsurface irrigation components of the graywater irrigation system installed a minimum of four inches (4") and a maximum of twelve inches (12") below the finished grade.

(2) Have the subsurface irrigation components of the graywater irrigation system installed in suitable soil, as defined in section 6.0(b)(11)(i).

(3) Have a minimum of twenty-four inches (24") of suitable soil between the subsurface irrigation components of the graywater irrigation system and any restrictive soil layer, bedrock, concrete, or the highest water table. Restrictive soil layers are soil types 4, 4A, and 5 in Table 6-2.

(4) Include controls, such as valves, switches, timers, and other controllers, as appropriate, to ensure the distribution of graywater throughout the entire irrigation zone.

(5) If utilizing emitters, the emitters be designed to resist root intrusion and be of a design recommended by the manufacturer for the intended graywater flow and use. Minimum spacing between emitters shall be sufficient to deliver graywater at an agronomic rate and to prevent surfacing or runoff.

(6) Have all irrigation supply lines be polyethylene tubing or PVC Class 200 pipe or better and Schedule 40 fittings. All joints shall be pressure tested at 40 psi (276 kPa), and shown to be drip tight for five minutes before burial. Drip feeder lines can be poly or flexible PVC tubing.

(7) Meet the following setback distances in Table 6-1.

Table 6-1: Graywater System Setback Requirements

Minimum Horizontal Distance Required from:	Graywater Storage Tank	Irrigation Field
Buildings	5 feet	2 feet
Property line adjoining private property	10 feet	10 feet
Property line adjoining private property with supporting property line survey	1.5 feet	1.5 feet
Water supply wells	50 feet	100 feet
Streams and lakes	50 feet	50 feet
Seepage Pits and cesspools	5 feet	5 feet
OWTS disposal field	5 feet	25 feet
OWTS tank	5 feet	10 feet
Domestic potable water service line	10 feet	10 feet
Public water main	10 feet	10 feet

(8) Be applied to an irrigation field located on slopes of less than thirty percent (30%) from horizontal.

(9) Comply with the following protocols for determining the size of the subsurface Irrigation Area:

(i) Site evaluation protocol conducted to determine the appropriate size of the Irrigation Area for all subsurface irrigation systems, except single family dispersed subsurface irrigation systems (Category A and C dispersed subsurface irrigation systems) that are sized using the Irrigation Area equation protocol as defined in section 6.0(b)(12)(i). This site evaluation must include:

(A) Site information, including:

a. A site map; and

b. Location of proposed graywater Irrigation Area in relation to physical features requiring setbacks in Table 6-1.

(B) Soil investigation to determine long-term acceptance rate of a graywater Irrigation Area as a design basis. This soil investigation must be completed by either:

a. A visual and tactile evaluation of soil profile test pit, or

b. A percolation test.

(10) Comply with the following standards for appropriate irrigation rates.

(i) Irrigation rates shall not exceed maximum allowable soil loading rates in Table 6-2 based on the finest textured soil in the twenty-four inches (24”) of suitable soil beneath the subsurface irrigation components.

Table 6-2: Soil Type Description and Maximum Hydraulic Loading Rate

Soil Type	USDA Soil Texture	USDA Structure Shape	USDA Soil Structure Grade	Percolation Rate (MPI)	Loading Rate for Graywater (gal./sq.ft./day)
0	Soil Type 1 with more than 35% Rock (>2mm); Soil Types 2-5 with more than 50% Rock (>2mm)	--	0 (Single Grain)	Less than 5	Not suitable without augmentation 1.0 with augmentation
1	Sand, Loamy Sand	--	0	5-15	Not suitable without augmentation 1.0 with augmentation
2	Sandy Loam, Loam, Silt Loam	PR BK GR	2 (Moderate) 3 (Strong)	16-25	0.8
2A	Sandy Loam, Loam, Silt Loam	PR, BK, GR 0 (none)	1 (Weak) Massive	26-40	0.6
3	Sandy Clay Loam, Clay Loam, Silty Clay Loam	PR, BK, GR	2, 3	41-60	0.4
3A	Sandy Clay Loam, Clay Loam, Silty Clay Loam	PR, BK, GR 0	1 Massive	61-75	0.2
4	Sandy Clay, Clay, Silty Clay	PR, BK, GR	2, 3	76-90	Not suitable
4A	Sandy Clay, Clay, Silty Clay	PR, BK, GR 0	1 Massive	91-120	Not suitable
5	Soil Types 2-4A	Platy	1, 2, 3	121+	Not suitable

(11) Be applied only to soils that comply with the following standards for soil suitability.

(i) Suitable soil may consist of original, undisturbed soil or original soil that is augmented. Not suitable soil may be augmented as needed to ensure suitable soil is used.

(ii) If the original soil is augmented, the mixture used for augmentation must meet the following criteria to ensure that suitable soil is achieved.

(A) The mixture must have an organic content that is at least five percent (5%) and no greater than ten percent (10%);

(B) The mixture must be a well blended mix of mineral aggregate (soil) and compost where the soil ratio depends on the requirements for the plant species; and

(C) The mineral aggregate must have the following gradation:

Table 6-3: Mineral Aggregate Gradation

Sieve Size	Percent Passing
3/8	100
No. 4	95 – 100
No. 10	75 – 90
No. 40	25 – 40
No. 100	4 – 10
No. 200	2 -5

(iii) If the original soil is augmented, the additional soil must be tilled into the native soil a minimum of six inches (6”) below irrigation application zone.

(iv) Soil types 0 and 1 must be augmented before use. Soil type 4, 4A, and 5 are not suitable for subsurface irrigation.

(12) Comply with the following protocols for determining the size of the subsurface Irrigation Area for single family, dispersed subsurface irrigation systems (Categories A and C dispersed subsurface irrigation systems):

(i) For graywater treatment works using subsurface Irrigation Areas not including mulch basins, use the following Irrigation Area equation protocol to determine the appropriate size of the Irrigation Area:

$$\text{LA} = \text{GW} / (\text{CF} \times \text{ET} \times \text{PF})$$

Where:

LA = Landscaped area (square feet); GW = Estimated graywater flow (gallons per week);

CF = 0.62 (square foot x inch / gallon) = ((7.48 gallons/ 1-cu-ft) / 12 inch/ft);

ET = Evapotranspiration rate (inch / week), as determined by USDA Natural Resources Conservation Service CO652.0408 “Figure CO4-1: Map of Colorado Climate Zones” dated April 1978, or weekly averages based on actual conditions;

PF = Plant factor, 0.5

ii) For graywater treatment works using mulch basin systems for subsurface irrigation, comply with the following minimum design criteria:

(A) Mulch shall be permeable enough to allow rapid infiltration of graywater.

(B) The minimum void space mulch basin volume must be either:

a. Three (3) times the anticipated average daily flow for graywater treatment works without a storage tank to allow for graywater volume surges and to prevent surfacing or runoff.

b. One and a half (1.5) times the anticipated average daily flow for graywater treatment works with storage tank meeting the design criteria in Section 3.0 Sizing Criteria.

(C) Piping to mulch basins must discharge a minimum of four inches (4”) below grade into a container for dispersal of graywater into the mulch basin. The container must be designed to have four inches (4”) of freefall between the invert of the discharge pipe and the mulch. The container must have an access lid for observation of flow and to check mulch levels.

(D) The mulch basin must have a minimum depth of twelve inches (12”) below grade and not more than twenty four (24”) below grade.

(E) A filter is not required.

iii) For graywater treatment works using dispersed irrigation systems for subsurface irrigation, comply with the following minimum design criteria:

(A) Include a cartridge filter, which must meet the following requirements:

- a. A minimum of 60 mesh;**
- b. Located between the storage tank and the irrigation system;**
- c. If a pump is being used to pressurize the graywater distribution system, the filter must be located after the pump.**

7.0 Signage Requirements

(a) All required notifications shall include posting of signs of sufficient size to be clearly read with the language below in the dominant language(s) expected to be spoken at the site.

(b) Signage for non-single family graywater treatment works (Categories B and D) shall comply with the following.

(1) A permanent warning sign must be visible at all fixtures from which graywater is collected. The signs must state that, "WATER FROM THIS FIXTURE IS REUSED. CHEMICALS, EXCRETA, PETROLEUM OILS AND HAZARDOUS MATERIALS MUST NOT BE DISPOSED DOWN THE DRAIN";

(2) Each room that contains graywater treatment works components must have a sign that says "CAUTION GRAYWATER TREATMENT WORKS, DO NOT DRINK, DO NOT CONNECT TO THE POTABLE DRINKING WATER SYSTEM. NOTICE: CONTACT BUILDING MANAGEMENT BEFORE PERFORMING ANY WORK ON THIS WATER SYSTEM."; and

(c) Signage for non-single family, subsurface irrigation non-single family graywater treatment works (Categories B and D) shall comply with the following.

(1) Each Irrigation Area must have a sign that says "CAUTION GRAYWATER BEING USED FOR IRRIGATION. DO NOT DRINK, DO NOT CONNECT TO THE POTABLE DRINKING WATER SYSTEM."

(d) Signage for non-single family, indoor toilet or urinal flushing, non-single family graywater treatment works (Category D) shall comply with the following:

(1) Each toilet and urinal must have a sign that says: “TO CONSERVE WATER, THIS BUILDING USES TREATED NON-POTABLE GRAYWATER TO FLUSH TOILETS AND URINALS.”

8.0 Operations and Maintenance Manual.

(a) The Operations and Maintenance Manual shall be referred to as the O&M manual. The O&M manual must include the following items:

(1) A graywater treatment works description including:

(i) equipment list

(ii) design basis data including but not limited to:

(A) design volumes;

(B) design flow rates of each component and service area;

(C) system as-built drawing; and

(D) process description.

(2) Maintenance information for the graywater treatment works including but not limited to:

(i) component maintenance schedule;

(ii) instructions for component repair, replacement, or cleaning;

(iii) replacement component source list;

(iv) testing and frequency for potable containment device; and

(v) instructions for periodic removal of residuals.

(3) Operational ranges for parameters including but not limited to:

(i) disinfectant concentration levels;

(ii) filter replacement parameters;

(iii) pressure ranges;

(iv) tank level; and

(v) valve status under normal operation.

(4) Step-by-step instructions for starting and shutting down the graywater treatment works including but not limited to:

(i) valve operation;

(ii) any electrical connections;

(iii) cleaning procedures;

(iv) visual inspection; and

(v) filter installation.

(5) A guide for visually evaluating the graywater treatment works and narrowing any problem scope based on alarm activations, effluent characteristics, system operation, and history.

(6) A list of graywater control measures in which the graywater treatment works must be operated.

1 **CITY OF GRAND JUNCTION, COLORADO**

2
3 **ORDINANCE NO. XXXX**

4
5 **AN ORDINANCE AMENDING TITLE 13 OF THE GRAND JUNCTION MUNICIPAL**
6 **CODE TO ADD CHAPTER 13.40 REGARDING A GRAYWATER CONTROL**
7 **PROGRAM IN THE CITY OF GRAND JUNCTION**

8
9 **Recitals:**

10 On May 11, 2015, the State of Colorado promulgated Regulation 86 – Graywater
11 Control Regulation (5 CCR 1002-86). Regulation 86 establishes the allowed uses and
12 users of graywater within the State; establishes the minimum state-wide standards for
13 the location, design, construction, operation, installation, modification of Graywater
14 Treatment Works; and establishes the minimum ordinance or resolution requirements
15 for a city, city and county, or county that chooses to authorize graywater use within its
16 jurisdiction.

17 The City of Grand Junction (“City”) enacted Title 13 of the Grand Junction
18 Municipal Code (“GJMC”) to establish standards for water supply, wastewater
19 management, and water conservation within the City, and to provide for the
20 management of the Persigo Wastewater Treatment Plant and 201 Planning Area for the
21 City and certain unincorporated areas of Mesa County. Title 13 defines water
22 conservation in the City as the practice of “eliminating water waste and making
23 beneficial water uses more efficient” (GJMC 13.36.020). Title 13 also identifies the
24 City’s goal to achieve “wise use of water for ordinary household uses and for outdoor
25 irrigation to a reasonable degree” (GJMC 13.36.090).

26 On June 20, 2012, the City adopted the Grand Valley Regional Water
27 Conservation Plan (“Water Conservation Plan”). The Water Conservation Plan advises
28 partners to “assist City and County Health Departments in distributing guidelines for
29 using graywater where legal and appropriate” (GJMC 45.04.390(g)).

30 On December 16, 2020, the City adopted the 2020 One Grand Junction
31 Comprehensive Plan (“Comprehensive Plan”). The Comprehensive Plan includes goals
32 for efficient and reliable management of water resources, including but not limited to the
33 promotion of water conservation (Comprehensive Plan Principle 8.1.a.), the protection
34 of water quality (Comprehensive Plan Principle 8.1.d.), and maximized water efficiency
35 in the construction of new buildings and the adaptive reuse of existing buildings (Plan
36 Principle 8.1.c.).

As provided by Regulation 86, a local city, city and county, or county with a local graywater control program has exclusive enforcement authority regarding compliance with the ordinance or resolution and, as applicable, rule. The City has not adopted a graywater control program by ordinance, resolution, or rule prior to this ordinance.

As directed by Title 13 of the GJMC, the Water Conservation Plan, and the Comprehensive Plan, and in the interest of advancing the public health, safety and welfare of the community, the City Council does hereby create Chapter 13.40 in Title 13 of the GJMC and does establish guidelines and standards for the design, construction, installation, repair, modification, maintenance, and use of graywater systems in the City.

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF GRAND JUNCTION THAT:

Chapter 13.40 shall be added to Title 13 of the Grand Junction Municipal Code as follows (additions shown in **bold** print):

Chapter 13.40 GRAYWATER CONTROL PROGRAM

13.40.010 Definitions

Agricultural irrigation means irrigation of crops produced for direct human consumption, crops where lactating dairy animals forage, and trees that produce nuts or fruit intended for human consumption. This definition includes household gardens, fruit trees, and industrial hemp as defined by C.R.S. 35-61-101.

Agronomic rate means the rate of application of nutrients to plants that is necessary to satisfy the nutritional requirements of the plants.

City means the City of Grand Junction, a Colorado home rule municipality.

Closed sewerage system means either a permitted Domestic Wastewater Treatment Works, which includes a permitted and properly functioning On-site Wastewater Treatment System (OWTS) with a design capacity more than 2,000 gpd, or a properly functioning and approved or permitted OWTS with a design capacity of 2,000 gpd or less.

Commission means the Water Quality Control Commission 25-8-201, C.R.S.

Component means a subpart of a Graywater Treatment Works which may include multiple devices.

Cross-Connection means any connection that could allow any water, fluid, or gas such that the water quality could present an unacceptable health and/or safety risk to the public, to flow from any pipe, plumbing fixture, or a customer's water

72 system into a public water system's distribution system or any other part of the
73 public water system through backflow.

74 ***Design*** means the process of selecting and documenting in writing the size,
75 calculations, site specific data, location, equipment specification and
76 configuration of treatment components that match site characteristics and
77 Facility use.

78 ***Design flow*** means the estimated volume of graywater per unit of time for which a
79 component or Graywater Treatment Works is designed.

80 ***Dispersed subsurface irrigation*** means a subsurface irrigation system including
81 piping and emitters installed throughout an Irrigation Area.

82 ***Division*** means the Water Quality Control Division of the Colorado Department of
83 Public Health and Environment.

84 ***Facility*** means any building, structure, or installation, or any combination thereof
85 that uses graywater subject to a graywater control program (Program), is located
86 on one or more contiguous or adjacent properties, and is owned or operated by
87 the same person or legal entity. Facility is synonymous with the term operation.

88 ***Floodplain (100-year)*** means an area adjacent to a river or other watercourse
89 which is subject to flooding as the result of the occurrence of a one hundred
90 (100) year flood, and is so adverse to past, current or foreseeable construction or
91 land use as to constitute a significant hazard to public or environmental health
92 and safety or to property or is designated by the Federal Emergency Management
93 Agency (FEMA) or National Flood Insurance Program (NFIP). In the absence of
94 FEMA/NFIP maps, a professional engineer shall certify the floodplain elevations.

95 ***Floodway*** means the channel of a river or other watercourse and the adjacent
96 land areas that must be reserved to discharge the base flood without
97 cumulatively increasing the water surface elevation more than one foot or as
98 designated by the Federal Emergency Management Agency or National Flood
99 Insurance Program. In the absence of FEMA/NFIP maps, a professional engineer
100 shall certify the floodway elevation and location.

101 ***Graywater*** means that portion of wastewater that, before being treated or
102 combined with other wastewater, is collected from fixtures within residential,
103 commercial, or industrial buildings or institutional facilities for the purpose of
104 being put to beneficial uses. Sources of graywater are limited to discharges from
105 bathroom and laundry room sinks, bathtubs, showers, and laundry machines.
106 Graywater does not include the wastewater from toilets, urinals, kitchen sinks,
107 dishwashers, or nonlaundry utility sinks. C.R.S. 25-8-103(8.3)(a)

Graywater Control Program (Program) is this ordinance and, as applicable, any rule(s), including implementation practices, regulation(s), standard(s) authorized by the City, and which follows the minimum requirements of this Chapter and other applicable law(s), rule(s) and regulation(s).

Graywater Treatment Works means an arrangement of devices and structures used to: (a) collect graywater from within a building or a Facility; and (b) treat, neutralize, or stabilize graywater within the same building or Facility to the level necessary for its authorized uses. C.R.S. 25-8-103(8.4)

Indirect connection means a waste pipe from a Graywater Treatment Works that does not connect directly with the closed sewerage system, but that discharges into the closed sewerage system through an air break or air gap into a trap, fixture, receptor, or interceptor.

Irrigation area means that area of ground consisting of soil, Mulch, gravel, and plant material to which water is directly applied by a graywater subsurface irrigation system.

Legally Responsible Party

(a) For a residential property, the Legally Responsible Party is the property owner.

(b) For a corporation, the Legally Responsible Party is a responsible corporate officer, either:

(1) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or

(2) the manager of operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated Facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for approval application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

(c) For a general or limited partnership or sole proprietorship, the Legally Responsible Party is the general partner, business matters partner or the proprietor, respectively.

(d) For a limited liability company, the responsible party shall be the manager or other authorized agent of the company and shall be a natural person.

(e) For a Municipality, State, Federal, or other public agency, the Legally Responsible Party is a principal executive officer or ranking elected official, either

(1) the chief executive officer of the agency, or

(2) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of EPA), or

(3) when the entity is the State of Colorado, the Commission.

Local Public Health Agency means any the Mesa County Colorado Health Department.

Modification means the alteration or replacement of any component of a Graywater Treatment Works that can affect the quality of the finished water, the rated capacity of a Graywater Treatment Works, the graywater use, alters the treatment process of a Graywater Treatment Works, or compliance with this regulation and the local graywater control program. This definition does not include normal operations and maintenance of a Graywater Treatment Works.

Mulch means organic material including but not limited to leaves, prunings, straw, pulled weeds, and wood chips.

Mulch basin means a type of irrigation or treatment field filled with Mulch or other approved permeable material of sufficient depth, length, and width to prevent ponding or runoff. A Mulch Basin may include a basin around a tree, a trough along a row of plants, or other shapes necessary for irrigation.

Non-single-family means any structure that is not a single-family structure.

Nuisance means the unreasonable, unwarranted and/or unlawful use of property, which causes inconvenience or damage to others, including to an individual or to the general public.

On-site Wastewater Treatment System (OWTS) means an absorption system of any size or flow or a system or Facility for treating, neutralizing, stabilizing, or dispersing sewage generated in the vicinity, which system is not a part of or connected to a sewage treatment works. C.R.S. 25-10-103(12)

Percolation test means a subsurface soil test at the depth of a proposed Irrigation Area to determine the water absorption capability of the soil, the results of which are normally expressed as the rate at which one inch of water is absorbed. The rate is expressed in minutes per inch.

Potable Water System means a system for the provision of water to the public for human consumption through pipes or other constructed conveyances, where such system has less than fifteen service connections or regularly serves less than an average of at least 25 people daily at least 60 days per year.

Professional Engineer (P.E.) means an engineer licensed in accordance with section 12-25-1, C.R.S.

Public Water System means a system for the provision of water to the public for human consumption through pipes or other constructed conveyances if such system has at least fifteen service connections or regularly serves an average of at least 25 individuals daily at least 60 days per year. A public water system is either a community water system or a non-community water system. Such term does not include any special irrigation district. Such term includes:

(a) Any collection, treatment, storage, and distribution facilities under control of the supplier of such system and used primarily in connection with such system.

(b) Any collection or pretreatment storage facilities not under such control, which are used primarily in connection with such system.

Regulation 86 means Colorado Department of Public Health and Environment Water Quality Control Commission Regulation no. 86 – Graywater Control Regulation, 5 CCR 1002-86.

Single-family means a detached or attached structure, arranged and designed as a single-family residential unit intended to be occupied by not more than one family and that has separate water and sewer services connections from other dwelling units.

Site Evaluation means a comprehensive analysis of soil and site conditions for a graywater Irrigation Area.

Soil Horizon means layers in the soil column differentiated by changes in texture, color, redoximorphic features, bedrock, structure, consistence, and any other characteristic that affects water movement.

Soil Profile Test Pit means a trench or other excavation used for access to evaluate the soil horizons for properties influencing effluent movement, bedrock, evidence of seasonal high ground water, and other information to be used in locating and designing a graywater Irrigation Area.

Soil Structure means the naturally occurring combination or arrangement of primary soil particles into secondary units or peds; secondary units are characterized because of shape, size class, and grade (degree of distinctness).

Suitable Soil means unsaturated soil in which the movement of water, air, and the growth of roots is sustained to support healthy plant life and conserve moisture. Soil criteria for graywater subsurface irrigation are further defined in Attachment A: Graywater Design Criteria.,

Subsurface irrigation means a discharge of graywater into soil a minimum of four inches (4”) and no deeper than twelve inches (12”) below the finished grade.

State means the State of Colorado or any of its agencies.

State Waters means any and all surface and subsurface waters which are contained in or flow in or through this state, but does not include waters in sewage systems, waters in treatment works of disposal systems, waters in potable water distribution systems, and all water withdrawn for use until use and treatment have been completed.

13.40.020 Abbreviations and Acronyms. The following meanings are associated with the acronyms used in this chapter.

ANSI	American National Standards Institute
BK	Blocky
C.R.S.	Colorado Revised Statutes
CDPS	Colorado Discharge Permit System
FEMA	Federal Emergency Management Agency
gpd	gallons per day
GR	Granular
mg/L	milligrams per Liter
MPI	Minutes Per Inch
NFIP	National Flood Insurance Program
NSF	NSF International, formerly known as National Sanitation Foundation
O&M	Operations and Maintenance
OWTS	On-Site Wastewater Treatment System(s)
PR	Prismatic

13.40.030 Purpose, Applicability, and Compliance

(a) Purpose. The purpose of this chapter is to:

(1) Establish a Graywater Control Program (Program) within the City of Grand Junction, Colorado.

(2) Reduce per capita water consumption in service of the City’s goals for water and wastewater management.

(3) Establish standards including requirements, prohibitions, and recommendations, for the use of graywater; and for the location, design, construction, operation, installation, and Modification of Graywater Treatment Works.

(4) Establish allowed users and uses of graywater within the City of Grand Junction.

(5) Assist the City in its effort to protect public health and water quality.

(b) Applicability. This Chapter applies to:

(1) Properties within the legal boundaries of the City as the same now exist or as the boundary may change over time.

(2) This Chapter does not apply to:

(i) Discharges pursuant to a Colorado Discharge Permit System (CDPS) or National Pollutant Discharge Elimination System Permit (NPDES) permit;

(ii) Wastewater that has been lawfully treated and released to state waters prior to subsequent use;

(iii) Wastewater that has lawfully been treated and used at a Domestic Wastewater Treatment Works for landscape irrigation or process uses;

(iv) On-site wastewater treatment works authorized under and operating in accordance with Regulation #43 (5 CCR 1002-43);

(v) Reclaimed wastewater authorized under and operating in accordance with Regulation #84 (5 CCR 1002-84);

(vi) Water used in an industrial process that is internally recycled in accordance with applicable law;

(vii) Graywater research activities exempted from graywater control regulations under C.R.S. 25-8-205.3; and

(viii) Lawful rainwater harvesting.

(c) Compliance.

All graywater uses and Graywater Treatment Works within the City's jurisdiction must comply with the minimum requirements of this Chapter, all applicable state and federal requirements for graywater system, and all requirements imposed by Mesa County Colorado Health department.

276 (1) Any Graywater Treatment Works installed prior to the effective date of
277 this regulation must be able to demonstrate they meet the minimum
278 requirements of this Chapter.

279 (2) Should the City Program be revoked or rescinded by the City, all
280 Graywater Treatment Works in the City's jurisdiction must within 365 days:

281 (i) If applicable, be regulated by Mesa County under a graywater
282 control program by which the County assumes authority over the
283 existing Graywater Treatment Works; or

284 (ii) Be physically removed or permanently disconnected in
285 accordance with local or state regulations.

286 (3) Should a property with a lawful Graywater Treatment Works be de-
287 annexed from the City of Grand Junction, the property owner must within
288 365 days

289 i (i) Ensure the Graywater Treatment Works complies with the
290 controlling jurisdiction of the property; or

291 (ii) Ensure the Graywater Treatment Works is physically removed or
292 permanently disconnected in accordance with applicable local and
293 state regulations.

294
295 (4) Graywater may be used only as allowed under and by the City Program.
296 Unauthorized graywater use and discharge(s) are prohibited.

297 (5) All Graywater Treatment Works installed in the City must:

298 (i) meet all requirements of Regulation 86 as may be amended, and

299 (ii) City Building Code, and

300 (iii) and any applicable federal law, state, City, and Mesa County
301 requirements.

302 (6) Graywater Treatment Works are prohibited from being installed in
303 properties that have new or existing On-Site Wastewater Treatment
304 Systems\ . Connection of the Graywater Treatment Works to the Persigo
305 Wastewater Treatment Plant is a requirement to own/operate a Graywater
306 Treatment Works.

307
308 **13.40.040 Materials Incorporated by Reference**

(a) Design criteria incorporated by reference and cited herein are included in Attachment A and are referred to herein as the Graywater Design Criteria.

(1) The Graywater Design Criteria shall be maintained in accordance with Regulation 86, as amended and the most recent version of the International Plumbing Code adopted by Mesa County.

(b) All materials referenced in and/or incorporated by reference in this ordinance may be examined at gjc.org or at the City Hall, Clerk's Office, 250 N 5th Street, Grand Junction, CO 81501.

13.40.050 Permitting, Inspection and Approval

(a) Permitting. Prior to approval for use, all Graywater Treatment Works must be approved by the City of Grand Junction.

(b) Inspection. Prior to approval for use, all Graywater Treatment Works must be inspected, verified, and accepted by the City of Grand Junction.

(c) Operation and Maintenance (O&M) Manual. All graywater systems must have an O&M manual. The O&M Manual shall fully comply with the O&M manual requirements, specifications and content all as provided in the Graywater Design Criteria.

13.40.060 Enforcement and Oversight

(a) Responsible Agency. The City Manager shall be responsible for oversight and implementation of this Chapter including, but not limited to, review, inspection, enforcement, tracking, and receipt of complaints.

(b) Enforcement. The City and its contractor the Mesa County Building Department (Building Department) are authorized to perform inspections and take enforcement actions to ensure compliance with this Chapter.

(1) Enforcement of this Chapter shall be in accordance with the duty(ies) set forth in GJMC 15.08.020.

(2) The Applicant shall install and maintain any Graywater Treatment Works within the City in accordance with the Graywater Design Criteria in Attachment A. The City Manager is authorized to perform inspection(s) and take enforcement action(s) to ensure compliance with this Chapter.

(3) The City shall provide an application for, and when a complete application is made, filed and fees are paid, review the proposed Graywater Treatment Works.

(4) The City shall review and approve, approve with conditions, or deny each application within 30 days of the City determining the application to be complete. An incomplete application will be denied.

13.40.070 Reporting Requirements and Tracking System

(a) Owners (or their Legally Responsible Party) of Category B and D Graywater Treatment Works are required to provide an annual self-certification of the legal status of their Graywater Treatment Works. The letter must contain the following:

(1) A statement indicating if the Graywater Treatment Works is still in operation;

(2) A certification that the Graywater Treatment Works is being operated in accordance with the operations and maintenance manual;

(3) A certification that no Modification(s) has(have) been made to the Graywater Treatment Works. If Modification(s) has(have) been made to the Graywater Treatment Works, the Modification(s) must be described in a written statement.

(4) Written attestation that the Graywater Treatment Works is overseen by an operator certified according to requirements of Regulation 100, 5 CCR 1003-2, if required.

(b) The owner or operator of a Graywater Treatment Works must report the following information to the City of Grand Junction for inclusion in a tracking system of Graywater Treatment Works. The information must be received within 30 days of the treatment works becoming operational:

(1) The legal address where the Graywater Treatment Works is located;

(2) The owner of the Graywater Treatment Works;

(3) A list of Graywater uses;

(4) A description of the Graywater Treatment Works; and

(5) Where required, the name and contact information for the certified operator associated with the Graywater Treatment Works.

(c) The owner or operator of a Graywater Treatment Works must report changes to any of these items must be reported to City of Grand Junction within 60 days of the changes.

13.40.080 Fees

(a) The City may impose fees for administration and oversight of the Graywater Control Program.

(b) Plan Review Fees and Planning Clearance Fees, Building Permit and Inspection Fees may be applicable as determined by the City Manager.

13.40.090 Graywater Use Categories.

The graywater use categories allowed are defined below. A Facility may have multiple Graywater Treatment Works if all applicable use and design requirements are satisfied.

(a) Category A: Single-family, subsurface irrigation

(1) Category A graywater use must meet the following:

(i) Allowed users: Single-family.

(ii) Allowed graywater sources: Graywater collected from bathroom and laundry room sinks, bathtubs, showers, and laundry machines.

(iii) Allowed uses: Outdoor, subsurface irrigation within the confines of the legal property boundary.

(iv) Design flow: The design flow for a single-family Graywater Treatment Works shall not exceed 400 gallons per day (gpd).

(b) Category B: Non-single-family, subsurface irrigation, 2,000 gallons per day (gpd) or less

(1) Category B graywater use must meet the following:

(i) Allowed users: Non-single-family users.

(ii) Allowed graywater sources: Graywater collected from bathroom and laundry room sinks, bathtubs, showers, and laundry machines.

(iii) Allowed uses: Outdoor, subsurface irrigation within the confines of the legal property boundary.

(iv) Design flow: The design flow for a non-single-family Graywater Treatment Works shall not exceed 2,000 gallons per day (gpd) for outdoor irrigation for the Facility.

(c) Category C: Single-family, indoor toilet and urinal flushing, subsurface irrigation

(1) Category C graywater use must meet the following:

411 (i) Allowed users: Single-family.

412 (ii) Allowed graywater sources: Graywater collected from bathroom
413 and laundry room sinks, bathtubs, showers, and laundry machines.

414 (iii) Allowed uses: Indoor toilet and urinal flushing and outdoor,
415 subsurface irrigation within the confines of the legal property
416 boundary.

417 (iv) Design flow: The design flow for a single-family Graywater
418 Treatment Works shall not exceed 400 gallons per day (gpd) for all
419 approved uses.

420
421 (d) Category D: Non-single-family, indoor toilet and urinal flushing, subsurface
422 irrigation

423 (1) Category D graywater use must meet the following:

424 (i) Allowed users: Non-single-family users.

425 (ii) Allowed graywater sources: Graywater collected from bathroom
426 and laundry room sinks, bathtubs, showers, and laundry machines.

427 (iii) Allowed uses: Indoor toilet and urinal flushing and outdoor,
428 subsurface irrigation within the confines of the legal property
429 boundary.

430 (iv) Design flow: There is no maximum design flow for a non-single
431 family Graywater Treatment Works for indoor toilet and urinal
432 flushing. There is no maximum design flow for wastewater from the
433 Facility that can go to a Closed Sewerage System. The design flow is
434 limited to 2,000 gallons per day (gpd) or less for outdoor irrigation
435 for the Facility.

436
437 **13.40.100 Design Criteria**

438 **(a) Design Criteria**

439 (1) All Graywater Treatment Works must meet the requirements of the
440 Graywater Design Criteria in effect at the time of installation of the system.
441 The Graywater Design Criteria is included in Attachment A. Attachment A is
442 incorporated by this reference as if fully set forth.

443 **(b) Sizing**

444 (1) Graywater Treatment Works must be sized appropriately using the flow
445 projection methods described in the Graywater Design Criteria.

446 (2) The size of Irrigation Areas must be determined using the sizing
447 protocols described in the Graywater Design Criteria.

448 **(c) System Modifications**

449 (1) Graywater Treatment Works requiring Modifications must be upgraded
450 to the requirements of the Graywater Design Criteria in effect at the time of
451 Modifications. All system Modifications must be approved by the City of
452 Grand Junction.

453
454 **13.40.110 Control Measures**

455 **(a) General control measures.**

456 **All Graywater Treatment Works and uses must be conducted in accordance with**
457 **the following control measures:**

458 (1) Graywater must be collected in a manner that minimizes the presence or
459 introduction of:

460 (i) Hazardous or toxic chemicals in the graywater to the greatest
461 extent possible;

462 (ii) Human excreta in the graywater to the greatest extent possible;

463 (iii) Household wastes; and

464 (iv) Animal or vegetable matter.

465 (2) Use of graywater is limited to the confines of the Facility from which the
466 graywater is derived.

467 (3) All graywater systems must have an operation and maintenance (O&M)
468 manual. The Graywater Treatment Works must be operated and maintained
469 in accordance with the O&M manual, including all manufacturer
470 recommended maintenance activities. See the Graywater Design Criteria
471 for O&M manual requirements.

472 (i) The O&M manual must remain with the Graywater Treatment
473 Works throughout the system's life and be updated based on each
474 Modification and approval made to the system.

475 (ii) The O&M manual must be transferred, upon change of ownership
476 or occupancy, to the new owner or tenant.

477 (iii) For Category D Graywater Treatment Works that have a capacity
478 to receive greater than 2,000 gallons per day (gpd), operational and
479 maintenance records must be maintained for a minimum of the past
480 five (5) years.

481 (4) The owner or operator of a Graywater Treatment Works must minimize
482 exposure of graywater to humans and domestic pets.

483 (5) Graywater use and Graywater Treatment Works must not create a
484 nuisance.

485 (6) Graywater may not be stored for more than 24 hours unless the
486 graywater has been treated by a Graywater Treatment Works. All Graywater
487 must be stored inside a tank(s) that meets the design requirements of the
488 Graywater Design Criteria.

489 (7) Temporary or semi-temporary connections from the Potable Water
490 System or public water system to the Graywater Treatment Works are
491 prohibited. Permanent connections from the Potable Water System or
492 public water system to the Graywater Treatment Works must meet the
493 design requirements of the Graywater Design Criteria.

494 (b) Subsurface irrigation system control measures. All subsurface irrigation
495 systems must be operated in accordance with the additional following control
496 measures:

497 (1) Agricultural irrigation with graywater is prohibited by Regulation 86 and
498 this Chapter.

499 (2) Irrigation with graywater is prohibited when the ground is frozen, plants
500 are dormant, during rainfall events, or the ground is saturated.

501 (3) Irrigation scheduling must be adjusted so that application rates are
502 closely matched with soil and weather conditions.

503 (4) Graywater must be applied in a manner that does not result in ponding,
504 runoff, or unauthorized discharge to state waters. For Dispersed
505 Subsurface Irrigation systems, the graywater must be applied at an
506 agronomic rate. For Mulch Basins systems, the graywater must not be
507 applied in excess of the soil adsorption rate.

508 (5) For Mulch Basin systems, Mulch must be replenished and undergo
509 periodic maintenance as needed to reshape or remove material to maintain
510 surge capacity and to prevent ponding and runoff.

511 (c) Control measures that apply to indoor toilet and urinal flushing graywater use
512 Indoor toilet and urinal flushing Graywater Treatment Works (Categories C and D)
513 must be operated in accordance with the following additional control measures.

(1) Graywater for toilet and urinal flushing use must be disinfected.

(a) Graywater Treatment Works that utilize chlorine for disinfection must have a minimum of 0.2 mg/L and a maximum of 4.0 mg/L of free chlorine residual throughout the indoor graywater plumbing system, including fixtures.

(b) Single-family Graywater Treatment Works that utilize non-chemical methods, such as UV, for disinfection must have a chlorine puck present in each toilet or urinal tank.

(2) Graywater for toilet and urinal flushing must be dyed with either blue or green food grade vegetable dye and be visibly distinct from potable water.

13.40.120 Certified Operator of Category D Systems

(a) Category D Non-single-family systems of over 2,000 gallons per day must be operated by qualified personnel who meet any applicable requirements of Regulation #100 the Water and Wastewater Facility Operators Certification Requirements (5 CCR 1003-2).

13.40.130 Nuisance

(a) It shall be unlawful and constitute a nuisance for any person to erect, install, or use a graywater system upon property located within the City without first having obtained a building permit, issued pursuant to this Chapter, for an approved, compliant graywater system.

(b) It shall be unlawful and constitute a nuisance for any person to collect or cause to be collected graywater from any sources except as otherwise expressly permitted under this Chapter.

(c) It shall be unlawful and constitute a nuisance for any person to use graywater, or conduct any graywater activity, upon property located within the City for any purpose except as otherwise expressly permitted this Chapter.

(d) It shall be unlawful and constitute a nuisance for any person to operate a graywater system or subsurface irrigation system without implementing the control measures provided in this Chapter.

13.40.140 Remedies for Noncompliance

(a) Compliance orders. Whenever the City determines that any activity is occurring which is not in compliance with a building permit and/or the

requirements of this Chapter, the City may issue a written compliance order to the Legally Responsible Party containing a compliance schedule (Schedule).

(1) The Schedule shall direct specific action(s) by the Legally Responsible Party including dates for the completion of the action(s). It shall be unlawful for any person to fail to comply with any compliance order.

(b) Suspension and revocation of permit. The City may suspend or revoke a building permit for violation of any provision of this chapter, violation of the permit, and/or misrepresentations by the permittee or the permittee's agents, employees, or independent contractors.

(c) Stop work orders. Whenever the City determines that any activity is occurring which is not in compliance with an approved permit and/or the requirements of this chapter, the City may order such activity stopped upon service of written notice upon the Legally Responsible Party. Any and all work or other activity(ies) under, or in reliance on a permit having issued, shall immediately stop until authorized in writing by the city to proceed.

(1) Service shall be by hand delivery or posting the property.

(2) If the Legally Responsible Party cannot be located, the notice to stop shall be posted in a conspicuous place upon the property where the activity is occurring.

(3) The notice shall state the nature of the violation.

(4) The notice shall not be removed until the violation has been cured or authorization to remove the notice has been issued by the city.

(5) It shall be unlawful for any person to fail to comply with a stop work order.

(d) Civil proceedings. In case of any violation of any provision of this chapter, or any amendment thereof, the city may, at its discretion, initiate civil proceedings, including administrative citations pursuant to chapter 8.25 of the GJMC injunction, mandamus, abatement, declaratory judgment or other appropriate actions or proceedings, to prevent, enjoin, abate, remove, or otherwise correct any such unlawful condition. Civil remedies provided for under this section are not exclusive and shall not preclude prosecution for criminal violations under the provisions of this chapter.

13.40.150 Severability

(a) The provisions of this Chapter are severable. If any portion of this Chapter should be declared invalid for any reason whatever, such decision shall not affect the remaining portions thereof.

586

587

588

589 Introduced on first reading the ____ day of ____ 2022 and ordered published in
590 pamphlet form.

591

592 Adopted on second reading this ____ day of ____ 2022 and ordered published in
593 pamphlet form.

594

595

596 ATTEST:

597

598

599

Anna M. Stout

600

President of City Council

601

602

603

Amy Phillips City Clerk



Grand Junction City Council

Regular Session

Item #5.a.ii.

Meeting Date: September 21, 2022
Presented By: John Shaver, City Attorney
Department: City Council
Submitted By: John Shaver

Information

SUBJECT:

Ordinance Placing a Charter Amendment to Change the Authorized Length of Leases of City Property for Housing from 25 Up to 99 Years on the Election Ballot for the Special Municipal Election to be Held November 8, 2022

RECOMMENDATION:

Conduct a public hearing, adopt and approve on second reading and pass for publication in pamphlet form an ordinance placing a Charter amendment to change the authorized length of leases on City property from 25 up to 99 years for affordable housing.

EXECUTIVE SUMMARY:

The City Council is considering an ordinance to present to the City voters to change the City Charter to allow the City to lease City property for up to 99 years for affordable housing. Increasing the possible lease term from 25 up to 99 years will benefit the public by allowing the highest and best use of certain property and in turn contribute to reducing the shortage of affordable housing in the community. Voter approval of the ballot question will only change the possible lease term for affordable housing on City property now owned or after acquired.

BACKGROUND OR DETAILED INFORMATION:

Pursuant to §151 of the Grand Junction City Charter, the Charter may be amended at any time in the manner provided by Article XX of the Constitution of the State of Colorado. The City Council has determined that the Charter provision limiting leases of public property to a term of 25 years may be unduly restrictive for the possible use of City property for affordable housing, and that increasing the term from 25 up to 99 years will benefit the public by allowing the highest and best use of certain property and

in turn contribute to reducing the shortage of affordable housing in the community. Leasing of any public property is permissive and within the sole and sound discretion of the City Council on terms it deems necessary and appropriate; amending the Charter will only change the possible lease term for affordable housing of City property now owned or after acquired. Therefore, the City Council is considering an ordinance to present to the City voters a change to the City Charter, allowing the voters to determine if amending the Charter as provided in this ordinance would be in the best interest of the City.

FISCAL IMPACT:

There is no direct fiscal impact as a result of this ordinance.

SUGGESTED MOTION:

I move to (adopt/deny) Ordinance No. 5096, an ordinance placing a Charter amendment on the November 8, 2022 ballot to change the authorized length of leases on City property from 25 up to 99 years for affordable housing, on final passage and order final publication in pamphlet form.

Attachments

1. ORD-Charter 124 amend to 99 years for affordable housing 091222

1 CITY OF GRAND JUNCTION, COLORADO

2 ORDINANCE NO. ____

3 AN ORDINANCE PLACING A CHARTER AMENDMENT TO CHANGE THE
4 AUTHORIZED LENGTH OF LEASES OF CITY PROPERTY FOR AFFORDABLE HOUSING
5 FROM TWENTY-FIVE UP TO NINETY-NINE YEARS ON THE ELECTION BALLOT FOR THE
6 SPECIAL MUNICIPAL ELECTION TO BE HELD THE 8th DAY OF NOVEMBER 2022

7 Recitals.

8 Pursuant to § 151 of the Grand Junction City Charter, the Charter may be
9 amended at any time in the manner provided by Article XX of the Constitution
10 of the State of Colorado.

11 The City Council has determined that the Charter provision limiting leases of
12 public property to a term of twenty-five years may be unduly restrictive for the
13 possible use of City property for affordable housing, and that increasing the
14 term from twenty-five up to ninety-nine years will benefit the public by allowing
15 the highest and best use of certain property and in turn contribute to reducing
16 the shortage of affordable housing in the community. Leasing of any public
17 property is permissive and within the sole and sound discretion of the City
18 Council on terms it deems necessary and appropriate; amending the Charter
19 will only change the possible lease term for affordable housing on City property
20 now owned or after acquired.

21 Therefore, the City Council desires to present to the City voters a change to the
22 City Charter, allowing the voters to determine if amending the Charter would be
23 in the best interest of the City.

24 NOW THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF GRAND
25 JUNCTION:

26 That a question of proposed amendment to Section 124 of the Charter to
27 increase the length of the allowed term of lease of certain City property from
28 twenty-five to ninety-nine years, as follows, be placed on the November 8, 2022,
29 ballot:

30 **City of Grand Junction**

31 **Shall there be an amendment to Article XIV, Section 124 of the City**
32 **Charter, as amended, to increase the authorized lease term for City**
33 **property, now owned or after acquired, from 25 years to a term not to**
34 **exceed 99 years when the property is to be used for affordable housing**
35 **project(s)?**

If approved, Section 124 will read, in relevant part (and without amendment of the balance of Section 124 as amended) as follows:

124. "No franchise, lease or right to use the streets or the public places, or property of the city, shall be granted by the city, except as in this Charter provided, for a period longer than twenty-five years; however, the City may, by and with adoption of an ordinance, lease certain City property, now owned or after acquired, for affordable housing for a term not to exceed ninety-nine years."

_____ **FOR THE AMENDMENT**

_____ **AGAINST THE AMENDMENT**

The ballot title is set based upon the requirements of the Colorado Constitution and the City Charter, all State statutes that might otherwise apply are hereby superseded to the extent of any inconsistencies or conflicts and, pursuant to Section 31-11-102, C.R.S., is an alternative to the provisions of State law. Any inconsistency or conflict is intended by the City Council and shall be deemed made pursuant to the authority of Article XX of the Colorado Constitution and the Charter.

Pursuant to Sections 31-10-1308, and 1-11-203.5 C.R.S., any election contest arising out of a ballot issue or ballot question election concerning the order of the ballot or the form or content of the ballot title shall be commenced by petition filed with the proper court within five days after the title of the ballot issue or ballot question is set, and for contest concerning the order of a ballot, within five days after the ballot order is set by the County Clerk.

The officers of the City are hereby authorized and directed to take all action necessary or appropriate to effectuate the provisions of this resolution.

If any section, paragraph, clause, or provision of this resolution shall for any reason be held to be invalid or unenforceable, the invalidity or unenforceability of such section, paragraph, clause, or provision shall in no manner affect any

65 remaining provisions of this resolution, the intent being that the same are
66 severable.

67 INTRODUCED ON FIRST READING AND ORDERED PUBLISHED THIS 7th DAY OF
68 SEPTEMBER 2022.

69 PASSED AND ADOPTED THIS 21ST DAY OF SEPTEMBER 2022.

70

71 _____
72 Anna M. Stout
73 President of the City Council
74

75

76 ATTEST:
77 _____
78 Amy Phillips
79 City Clerk



Grand Junction City Council

Regular Session

Item #5.a.iii.

Meeting Date: September 21, 2022

Presented By: Ashley Chambers, Housing Manager

Department: Community Development

Submitted By: Ashley Chambers, Housing Manager

Information

SUBJECT:

An Ordinance Creating the Housing Advisory Board

RECOMMENDATION:

Conduct a public hearing, adopt and approve on second reading and pass for publication in pamphlet form an ordinance creating a Housing Advisory Board.

EXECUTIVE SUMMARY:

The Housing Advisory Board ("Board" or "HAB") is being proposed in response to a generalized shortage of affordable housing in Grand Junction. The proposed purpose of the HAB includes advising on housing issues, strategies, goals, and policies in the City, studying and recommending to the City Council long and short-range goals for developing affordable and attainable/workforce housing, and studying and recommending ordinances, funding, and programs to address recognized and anticipated housing needs.

BACKGROUND OR DETAILED INFORMATION:

As discussed at the August 1, 2022, City Council workshop, staff is proposing the creation of a Housing Advisory Board. The proposed purpose of the HAB includes advising on housing issues, strategies, goals, and policies in the City, studying and recommending to the City Council long and short-range goals for developing affordable and attainable/workforce housing, and studying and recommending ordinances, funding, and programs to address recognized and anticipated housing needs.

The proposed and attached ordinance includes items such as the composition, meetings and purpose of the Board.

FISCAL IMPACT:

There is no fiscal impact related to this ordinance.

SUGGESTED MOTION:

I move to (adopt/deny) Ordinance No. 5097, an ordinance creating the Housing Advisory Board and publish in pamphlet form.

Attachments

1. ORD-Housing Advisory Board 091622

ORDINANCE NO. _____

**AN ORDINANCE TO AMEND THE GRAND JUNCTION MUNICIPAL CODE TO ADD
SECTION 2.38.010 *ET. SEQ.* TO CREATE THE GRAND JUNCTION HOUSING
ADVISORY BOARD**

RECITALS:

By and with this Ordinance the City Council amends the Grand Junction Municipal Code (GJMC or Code) to provide for the appointment of the Grand Junction Housing Advisory Board.

The Housing Advisory Board ("Board" or "HAB") is being proposed in response to a generalized shortage of affordable housing in Grand Junction. In addition to proposing the creation of the HAB to advise the City Council, the City Council has referred two ballot measures, which if approved by the voters, will help fund approaches to benefit housing programs in the City.

The Board's purposes include, but are not limited to, advising on housing issues, strategies, goals, and policies in the City, studying and recommending to the City Council long and short-range goals for developing affordable and attainable/workforce housing, and studying and recommending ordinances, funding, and programs to address recognized and anticipated housing needs.

At its September 21, 2022, meeting the City Council considered this Ordinance and determined that amendment of the Code to create and establish the Board is necessary and proper and does for the foregoing reasons adopt and approve this Ordinance as follows.

**NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF
GRAND JUNCTION, COLORADO:**

Section 2.38.010 *et. seq.* is added to the Grand Junction Municipal Code amendments are shown in bold type:

2.38.010 Appointment of members – Purpose and duties.

The President of the City Council, with the concurrence of a majority of the Council, shall appoint a Housing Advisory Board (HAB) which shall advise City Council and City staff and shall perform the following functions:

(a) advise on housing issues, strategies, goals, and policies in the City;

(b) study and recommend to the City Council long and short-range goals for developing affordable/attainable and workforce housing;

- 47 (c) study and recommend ordinances, funding, and programs to address
48 recognized and anticipated housing needs;
49
- 50 (d) develop and recommend, with community input, innovative approaches to
51 accomplish the City's housing goals, including tools for preserving
52 existing housing;
53
- 54 (e) advise the City Council concerning the impacts of city policy proposals on
55 housing affordability, diversity, and accessibility;
56
- 57 (f) review, and as deemed appropriate, develop and expand opportunities with
58 state and local housing agencies and providers and make
59 recommendations to the City Council;
60
- 61 (g) consult and coordinate with state and local housing agencies and other
62 city boards and commissions to develop and support the City's housing
63 goals;
64
- 65 (h) advise the City Council concerning an appropriate advocacy role for the
66 City in state and federal housing matters; and,
67
- 68 (i) act in an advisory capacity to the City Council including assisting in
69 initiatives to assist in implementation and development of housing
70 programs.
71

72 **2.38.020 Terms of members – *Ex officio* members.**
73

74 The President of the City Council, with the concurrence of a majority of the
75 Council, shall appoint eleven (11) members who are residents of the City to the
76 Housing Advisory Board. The Board shall include one (1) City Council member,
77 and four (4) members selected from the following educational/professional
78 disciplines and/or that have relevant experience in commercial finance/lending,
79 real estate development and construction. The Board shall include three (3) other
80 members who shall not require specific educational or professional experience.
81

82 The Grand Junction Housing Authority (GJHA), and two additional housing
83 organizations representing the continuum of housing needs shall each appoint
84 one member from each agency/board to serve on the Housing Advisory Board.
85 Those members are exempt from the requirement for City residency. The City
86 Council will solicit letters of interest from housing organizations other than the
87 GJHA. Based on the written expressions of interest, the City Council will
88 nominate organizations for membership on the Board.
89

90 All members, excluding the City Council member, shall serve three-year
91 staggered terms in accordance with the adopted bylaws of the Board. The City

Council member shall serve a one-year term but may be reappointed annually to coincide with the member's term on Council.

Members may be reappointed by City Council upon expiration of his/her term for a three-year term for a total of four terms. Ex-Officio members shall not be term limited.

2.38.030 Filling of Vacancies.

Appointments to fill vacancies on the Housing Advisory Board shall be for the unexpired term and shall be made in the same manner as other appointments.

2.38.040 Compensation and Removal of Members.

(a) No member of the Housing Advisory Board shall receive any compensation for such membership/service on the Board.

(b) Members of the Housing Advisory Board may be removed by action of the City Council for malfeasance or nonfeasance or for unexcused failure to attend three consecutive meetings of the Board. The Board may recommend such action to the Council.

Anna M. Stout
President of the Council

ATTEST:

Amy Phillips
City Clerk



Grand Junction City Council

Regular Session

Item #5.b.i.

Meeting Date: September 21, 2022
Presented By: Nicole Galehouse, Principal Planner
Department: Community Development
Submitted By: Nicole Galehouse, Principal Planner

Information

SUBJECT:

An Ordinance Vacating a 15-Foot x 325-Foot Strip of Land Located on a 144-Acre Parcel Located at 675 23 1/2 Road

RECOMMENDATION:

The Planning Commission heard this request at the August 23, 2022 meeting and voted (7-0) to recommend approval of the request.

EXECUTIVE SUMMARY:

The Applicant Foothills Housing 2 LLC, is requesting the vacation of a 15-foot strip of land in the middle of parcel #2945-052-17-001, 675 23 1/2 Rd, beginning at the western property line and going east approximately 325-feet. The vacation area contains approximately 0.11-acre of land.

The subject property is part of the Community Planned Development (also known as Mesa Trails development and formerly known as Three Arrows). The applicant is preparing development applications and the cleanup of this right-of-way is necessary for future development on the site.

BACKGROUND OR DETAILED INFORMATION:

BACKGROUND

The subject vacation area of 0.11 acres is located approximately 1/3 mile south of G Road along the western boundary of the subject property. The right-of-way was dedicated in 1955 "to the public" by Harland and Edna Anderson by deed at Reception #650525. This previously dedicated right-of-way does not align with any existing or planned roadways in this area, nor is there any infrastructure located on this property.

The subject property is part of the Community Planned Development (also known as Mesa Trails development and formerly known as Three Arrows). The applicant is preparing development applications and the cleanup of this right-of-way is necessary for future development on the site. The proposed vacated area will be incorporated into the overall site design. Given that the right-of-way does not connect to any other roadways, existing or proposed, and that the width of the right-of-way is inadequate for roadway construction, the Applicant is requesting the vacation of the right-of-way to accommodate the proposed planned development. As part of the Mesa Trails planned development, the Applicant is dedicating and constructing right-of-way as determined necessary during the plan review process.

NOTIFICATION REQUIREMENTS

Neighborhood Meeting

A Neighborhood Meeting was held on May 17, 2022, via Zoom virtual platform. There were four total participants including the applicant, city staff, and two members of the public.

Notice was completed consistent with the provisions in Section 21.02.080 (g) of the Zoning and Development Code. The subject property was posted with an application sign on June 10, 2022. Mailed notice of the public hearings before Planning Commission and City Council in the form of notification cards was sent to surrounding property owners within 500 feet of the subject property on August 12, 2022. The notice of this public hearing was published on August 16, 2022 in the Grand Junction Daily Sentinel.

ANALYSIS

The criteria for review are set forth in Section 21.02.100 (c) of the Zoning and Development Code. The purpose of this section is to permit the vacation of surplus rights-of-way and/or easements.

- (1) The Comprehensive Plan, Grand Valley Circulation Plan and other adopted plans and policies of the City;

The request to vacate 0.11 acres of existing public right-of-way does not conflict with the Comprehensive Plan, Grand Junction Circulation Plan or other adopted plans and policies of the City. Vacation of this right-of-way will have no impact on public facilities or services provided to the general public since it is not contemplated for any proposed roadway alignments and all circulation will be evaluated during the subdivision and/or site plan processes.

Further, the vacation request is consistent with the following goals and policies of the Comprehensive Plan:

Principal 3: Responsible and Managed Growth

Policy 4: Maintain and build infrastructure that supports urban development.

Policy 5: Plan for and ensure fiscally responsible delivery of City services and infrastructure.

Therefore, staff has found this criterion has been met.

- (2) No parcel shall be landlocked as a result of the vacation;

This request is to vacate existing public right-of-way which is not needed to provide access to the subject property. The property has multiple points of potential future access on G Road, 23 ½ Road, and Hwy 6 & 50, as well as future opportunities for connection to F ½ Road, F ¾ Road, and 23 ¾ Road. Therefore, staff has found that this criterion has been met.

- (3) Access to any parcel shall not be restricted to the point where access is unreasonable, economically prohibitive, or reduces or devalues any property affected by
the proposed vacation;

This vacation request does not impact access to any parcel and as such, staff finds this criterion has been met.

- (4) There shall be no adverse impacts on the health, safety, and/or welfare of the general community, and the quality of public facilities and services provided to any parcel of land shall not be reduced (e.g., police/fire protection and utility services;

There will be no impact to public facilities and services. Grand Valley Drainage District, Grand Valley Power, City of Grand Junction Fire, Ute Water, and Xcel Energy responded during the utility review that there was no objection to the vacation of this property. No comments were received from other review agencies. Staff therefore finds this criterion has been met.

- (5) The provision of adequate public facilities and services shall not be inhibited to any property as required in Chapter 21.06 GJMC; and

Neither staff nor utility providers have identified that this request will inhibit the provision of adequate public facilities and services. There will be ample opportunity during the site planning process to locate adequate public facilities and services. Staff finds that this criterion has been met.

- (6) The proposal shall provide benefits to the City such as reduced maintenance requirements, improved traffic circulation, etc.

This proposal will remove right-of-way that is not necessary for any City transportation networks, is not sufficient to produce any viable road right-of-way, and is not intended for construction. Approval of this request will allow for

the site to be developed in a more cohesive manner without having to avoid this strip of land that goes through the middle of the site. As such, Staff finds that this criterion has been met.

STAFF RECOMMENDATION AND FINDINGS OF FACT

After reviewing the Foothills Housing – Public Right-Of-Way Vacation, VAC-2022-396, located on a 144-acre parcel located at 675 23 ½ Road, the following findings of fact have been made:

The request conforms with Section 21.02.100 (c) of the Zoning and Development Code. Therefore, the Planning Commission recommends approval of the requested vacation.

FISCAL IMPACT:

Average value of property and right-of-way can range broadly. The City received an MAI Appraisal from a project within the general area in 2021 that provided a value of approximately \$62,905 per acre or \$1.44 per square foot. This request includes vacating approximately 4,875 square feet of right-of-way which would result in a value of approximately \$7,020. This estimation of value is for informational purposes only. No compensation is being requested for this vacation.

SUGGESTED MOTION:

I move to (adopt/deny) Ordinance No. 5098, an Ordinance to vacate a 15-foot x 325-foot strip of land located on a 144-acre parcel located at 675 23 1/2 Road and on final passage and order final publication in pamphlet form.

Attachments

1. Exhibit 1 - Foothills Housing ROW Vacation Development Application
2. Exhibit 2 - Foothills Housing ROW Vacation Aerial & Site Map
3. Exhibit 3 - Foothills Housing Site Sketch
4. ORD-Foothills Vacation Ordinance 082522

Development Application

We, the undersigned, being the owner's of the property adjacent to or situated in the City of Grand Junction, Mesa County, State of Colorado, as described herein do petition this:

Petition For:

Please fill in blanks below only for Zone of Annexation, Rezones, and Comprehensive Plan Amendments:

Existing Land Use Designation

Existing Zoning

Proposed Land Use Designation

Proposed Zoning

Property Information

Site Location:

Site Acreage:

Site Tax No(s):

Site Zoning:

Project Description:

Property Owner Information

Name:

Street Address:

City/State/Zip:

Business Phone #:

E-Mail:

Fax #:

Contact Person:

Contact Phone #:

Applicant Information

Name:

Street Address:

City/State/Zip:

Business Phone #:

E-Mail:

Fax #:

Contact Person:

Contact Phone #:

Representative Information

Name:

Street Address:

City/State/Zip:

Business Phone #:

E-Mail:

Fax #:

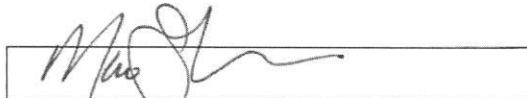
Contact Person:

Contact Phone #:

NOTE: Legal property owner is owner of record on date of submittal.

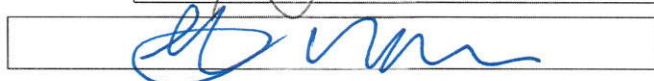
We hereby acknowledge that we have familiarized ourselves with the rules and regulations with respect to the preparation of this submittal, that the foregoing information is true and complete to the best of our knowledge, and that we assume the responsibility to monitor the status of the application and the review comments. We recognize that we or our representative(s) must be present at all required hearings. In the event that the petitioner is not represented, the item may be dropped from the agenda and an additional fee may be charged to cover rescheduling expenses before it can again be placed on the agenda.

Signature of Person Completing the Application



Date

Signature of Legal Property Owner



Date

Foothills Housing ROW Vacation VAC-2022-396



KNOW ALL MEN BY THESE PRESENTS: That, Foothills Housing 2 LLC, A Colorado Limited Liability Company is the owner of that real property located in Section 5, Township 1 South, Range 1 West, of the Ute Meridian, City of Grand Junction, Mesa County, Colorado being more particularly described as follows:

LOT 1, MOSAIC FACTORY HOUSING BUILDING SUBDIVISION, CITY OF GRAND JUNCTION
COUNTY OF MESA, STATE OF COLORADO
RECORDED AT RECEPTION No. 3010726

Said parcel contains 159.91 ACRES.

Said owner has by these presents laid out, platted and subdivided the above described real property, and designated the same as THREE ARROWS SUBDIVISION, in the City of Grand Junction, County of Mesa, State of Colorado, and hereby offers the following dedications and grants.

All streets, roads and Rights-of-Way are dedicated to the City of Grand Junction for the use of the public forever.

All Multipurpose Easements are dedicated to the City of Grand Junction as perpetual easements for City approved utilities including the installation, operation, maintenance and repair of said utilities and appurtenances which may include but are not limited to, electric lines, cable TV lines, natural gas pipelines, sanitary sewer lines, storm sewers, water lines, telephone lines, traffic control facilities, street lighting, landscaping, trees and grade structures.

All Pedestrian Easements are dedicated to the City of Grand Junction as perpetual easements for ingress and egress access use by the public forever for constructing, installing, maintaining and repairing a trail and for purposes of walking, running, wheelchairs (motorized and non-motorized), bicycling, and other non-motorized forms of transportation for commuting and recreational purposes with or without pets accompanying them.

All Easements include the right of ingress and egress on, along, over, under, through and across by the beneficiaries, their successors, or assigns, together with the right to trim or remove interfering trees and brush, and in Drainage and Detention/Retention easements or tracts, the right to dredge; provided however, that the beneficiaries/owners shall utilize the same in a reasonable and prudent manner. Furthermore, the owners of said lots or tracts hereby plotted shall not burden or overburden said easements by erecting or placing any improvements thereon which may impede the use of the easement and/or prevent the reasonable ingress and egress to and from the easement.

Said Owner states that all lienholders appear hereon.

IN WITNESS WHEREOF, said owner has caused his name to be hereunto subscribed

this 13th day of December, A.D. 2021.

by: [Signature]
For: Foothills Housing 2 LLC

NOTARY PUBLIC CERTIFICATION

STATE OF Colorado :

COUNTY OF Denver : ss

The foregoing instrument was acknowledged before me

this 13th day of December, A.D. 2021.

by: Stuart Bolero

Witness my hand and official seal

My Commission Expires 09-10-2022

JODIE MARIE BODVAKE
NOTARY PUBLIC
STATE OF COLORADO
NOTARY ID 20144039434
COMMISSION EXPIRES SEPTEMBER 10, 2022

[Signature]
Notary Public

ABBREVIATIONS:

N NORTH
S SOUTH
E EAST
W WEST
T TOWNSHIP
R RANGE
MCSM MESA COUNTY SURVEY MARKER
ROW RIGHT OF WAY
SIMS SURVEY INFORMATION MANAGEMENT SYSTEM
PLS PROFESSIONAL LAND SURVEYOR
No. NUMBER
GPS GLOBAL POSITIONING SYSTEM
ID IDENTIFICATION
SQ SQUARE
FT FEET
AVE. AVENUE
ST. STREET
CT. COURT
LN. LANE
DR. DRIVE
U.S. UNITED STATES
L.C.E. LIMITED COMMON ELEMENT
P.O.C. POINT OF COMMENCEMENT
P.O.B. POINT OF BEGINNING

CURVE LABEL ABBREVIATIONS:

RAD RADIUS
L ARC LENGTH
CHORD LONG CHORD DISTANCE
BRG LONG CHORD BEARING
Δ CURVE CENTRAL ANGLE

CITY USE BLOCK

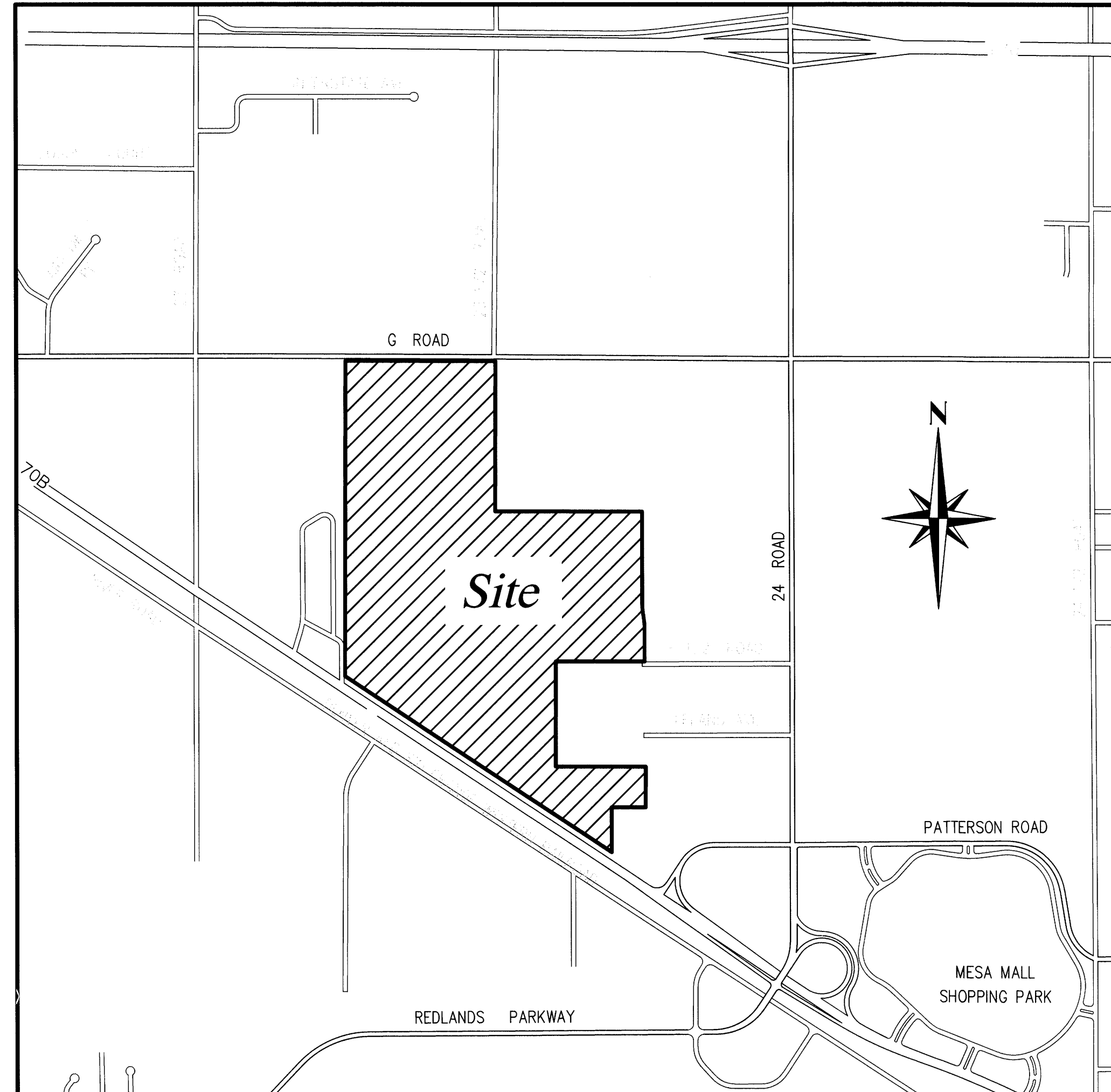
The below listed recording information for Associated Record Documents was not prepared under the professional land surveyor's responsible charge, Board Rule 6.2.1, State of Colorado

The recording information is to be completed by the City of Grand Junction personnel.

1. 5' and 10' Irrigation Easements are granted to _____ Reception Number 3012877

THREE ARROWS SUBDIVISION

BEING A REPLAT OF LOT 1 OF MOSAIC FACTORY HOUSING BUILDING SUBDIVISION
AS RECORDED AT RECEPTION NUMBER 3010726
AND SITUATED IN SECTION 5
TOWNSHIP 1 SOUTH, RANGE 1 WEST OF THE UTE MERIDIAN
CITY OF GRAND JUNCTION, COUNTY OF MESA, STATE OF COLORADO



VICINITY MAP: NOT TO SCALE

CLERK AND RECORDER'S CERTIFICATE

STATE OF COLORADO :

COUNTY OF MESA : ss

This plat was accepted for filing in the office of the Clerk and Recorder of Mesa County,

Colorado, at 2:54 o'clock p.m., on this 20 day of December 2021 and

was recorded at Reception No. 3012876

Drawer No. G3-94, and Fees \$30, \$3

Tina Peters
Clerk and Recorder

Kaitlin Snover
Deputy

CITY APPROVAL

THREE ARROWS SUBDIVISION, a subdivision of the City of Grand Junction, County of Mesa, State of Colorado, is hereby approved and dedications accepted this 16 day of December 2021.

[Signature]
City Manager

[Signature]
President of Council

TITLE CERTIFICATION

STATE OF COLORADO } ss
COUNTY OF MESA }

WE, LAND TITLE GUARANTEE, A TITLE INSURANCE COMPANY, AS DULY LICENSED IN THE STATE OF COLORADO, HEREBY CERTIFY THAT WE HAVE EXAMINED THE TITLE TO THE HEREON DESCRIBED PROPERTY, THAT WE FIND THE TITLE TO THE PROPERTY VESTED TO FOOTHILLS HOUSING 2 LLC, A COLORADO LIMITED LIABILITY COMPANY; THAT THE CURRENT TAXES HAVE BEEN PAID; THAT ALL MORTGAGES NOT SATISFIED OR RELEASED OF RECORD NOR OTHERWISE TERMINATED BY LAW ARE SHOWN HEREON AND THAT THERE ARE NO OTHER ENCUMBRANCES OF RECORD; THAT ALL EASEMENTS, RESERVATIONS AND RIGHTS OF WAY OF RECORD ARE SHOWN HEREON.

DATE: DECEMBER 15, 2021 BY: [Signature]
FOR: LAND TITLE GUARANTEE COMPANY
LAWRENCE J. VENT/EXAMINER

LIENHOLDER RATIFICATION

THE UNDERSIGNED, HEREBY CERTIFIES THAT IT IS A HOLDER OF A SECURITY INTEREST UPON THE PROPERTY HEREON DESCRIBED AND DOES HEREBY JOIN IN AND CONSENT TO THE DEDICATION OF THE LAND DESCRIBED IN SAID DEDICATION BY THE OWNERS THEREOF AND AGREE THAT ITS SECURITY INTEREST WHICH IS RECORDED AT RECEPTION NUMBER 2975196 OF THE PUBLIC RECORDS OF MESA COUNTY, COLORADO SHALL BE SUBORDINATED TO THE DEDICATIONS SHOWN HEREON.

BY SIGNATURE BELOW THE UNDERSIGNED HEREBY CERTIFIES IT HAS AUTHORITY TO SUBORDINATE SAID SECURITY INTEREST ON LIENHOLDER'S BEHALF, THIS 16 DAY OF December 2021.

BY: [Signature]

FOR: METROPOLITAN PARTNERS GROUP ADMINISTRATION, LLC

TITLE: Authorized Representative

NOTARY PUBLIC CERTIFICATION

STATE OF NY :

COUNTY OF NY : ss

The foregoing instrument was acknowledged before me

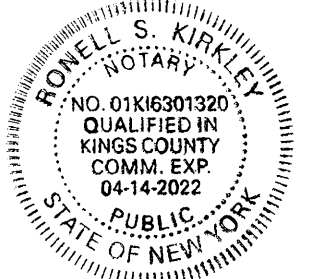
this 8th day of Dec, A.D. 2021.

by: Mikes Peet

Witness my hand and official seal

My Commission Expires 4-14-2022

[Signature]
Notary Public

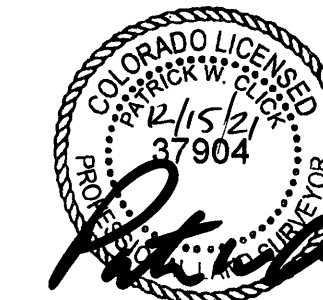


NOTES

- OWNERSHIP, RECORDED RIGHTS-OF-WAY, AND EASEMENT INFORMATION WAS DONE WITH A CURRENT TITLE POLICY BY LAND TITLE GUARANTEE COMPANY POLICY No. 0X65042070.3520657.
- BEARINGS ARE BASED ON THE EAST LINE OF NE¼ NW¼ SECTION 5, TOWNSHIP 1 SOUTH, RANGE 1 WEST OF THE UTE MERIDIAN. THE VALUE USED S00°08'35"W, WAS CALCULATED USING THE MESA COUNTY LOCAL COORDINATE SYSTEM. SURVEY MARKERS WERE FOUND AT THE NORTH AND SOUTH ENDS OF SAID LINE AS SHOWN HEREON.
- ACCORDING TO COLORADO LAW YOU MUST COMMENCE ANY LEGAL ACTION BASED 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.
- THIS SURVEY IS BASED ON THE DEED AS RECORDED AT RECEPTION NUMBER 2975194, OF THE MESA COUNTY RECORDS.
- PROPERTY SURVEYED HEREON IS SUBJECT TO WASTE WATER RIGHTS ALONG THE EAST LINE OF THE NW¼ NW¼ SECTION 5, TOWNSHIP 1 SOUTH, RANGE 1 WEST OF THE UTE MERIDIAN AS RECORDED AT RECEPTION NO. 42542. THE CALLED FOR WASTE DITCH NO LONGER EXISTS AND THE RIGHTS GRANTED ARE NOT A SURVEY MATTER.

SURVEYOR'S CERTIFICATION:

I, Patrick W. Click, do hereby certify that I am a registered land surveyor licensed under the laws of the State of Colorado, that this Plat is a true, correct and complete Final Plat of the THREE ARROWS SUBDIVISION, as laid out, platted, dedicated and shown hereon, that such Final Plat was made from an accurate survey of said property by me and under my supervision. Both conform to the standards of practice, statutes and laws of the State of Colorado to the best of my knowledge and belief. This statement is not a guaranty or warranty, either expressed or implied.



PATRICK W. CLICK
COLORADO REGISTERED LAND SURVEYOR PLS #37904

DECEMBER 15, 2021
DATE

LAND USE SUMMARY

LOTS	158.23 ACRES	99%
RIGHT OF WAY	1.68 ACRES	1%
TOTAL	159.91 ACRES	100%

THREE ARROWS SUBDIVISION
A REPLAT OF LOT 1 OF MOSAIC FACTORY HOUSING BUILDING SUBDIVISION
AS RECORDED AT RECEPTION NUMBER 3010726
AND SITUATED IN SECTION 5
TOWNSHIP 1 SOUTH, RANGE 1 WEST OF THE UTE MERIDIAN
CITY OF GRAND JUNCTION, COUNTY OF MESA, STATE OF COLORADO

JOB #: 2021-064 FIELD WORK: SL DRAWN BY: JW
DATE: 12/6/21 DRAWING NAME: THREE ARROWS CHECKED BY: PC

POLARIS SURVEYING

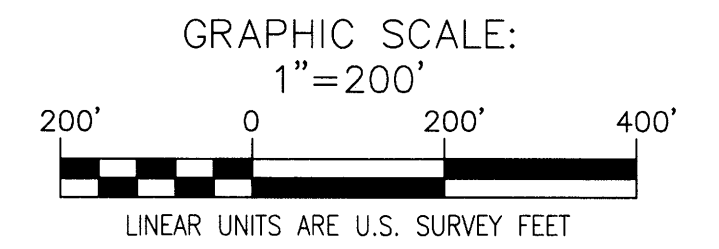
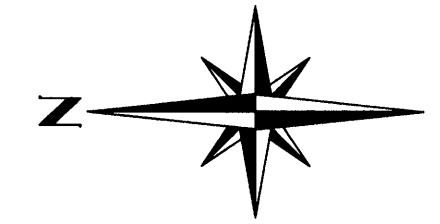
PATRICK W. CLICK P.L.S.
3194 MESA AVE. #B
GRAND JUNCTION, CO 81504
PHONE (970)434-7038

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Curve Table					
Curve #	Radius	Length	Delta	Chord Length	Chord Bearing
C1	500.00'	103.33'	011° 50' 25"	103.14'	S05° 51' 27"E
C2	440.00'	90.93'	011° 50' 25"	90.77'	S05° 51' 27"E
*C3	88.00'	9.72'	006° 19' 39"	9.71'	N68° 17' 27"W
C4	48.00'	35.88'	042° 49' 23"	35.05'	N43° 42' 56"W
C5	378.00'	106.78'	016° 11' 10"	106.43'	N14° 12' 39"W
*C6	52.00'	24.97'	027° 30' 59"	24.73'	N19° 52' 34"W
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* NON-TANGENT CURVE



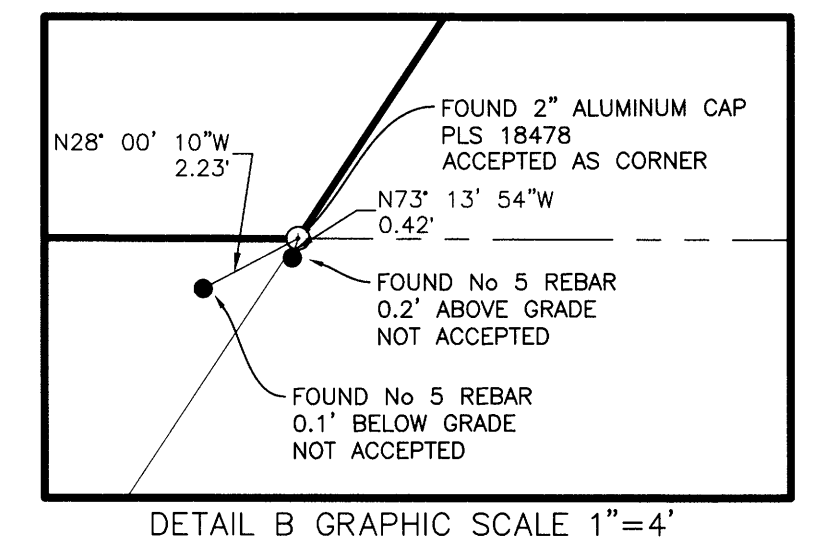
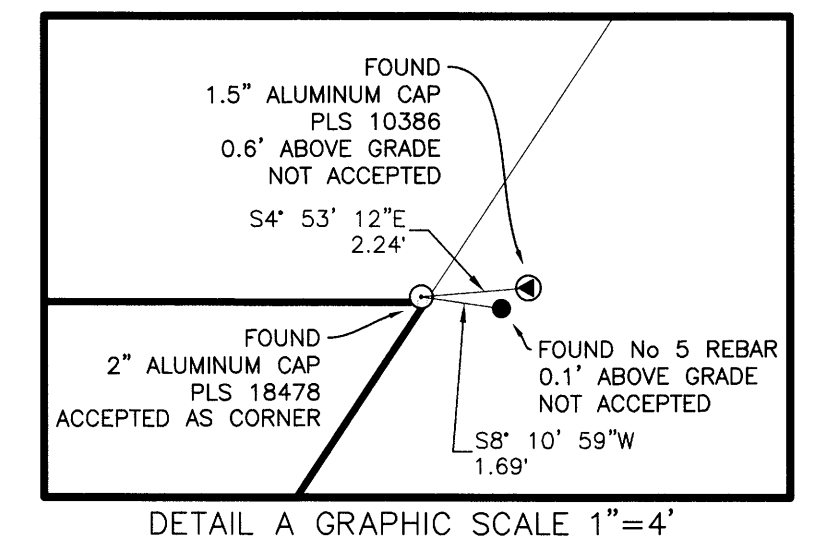
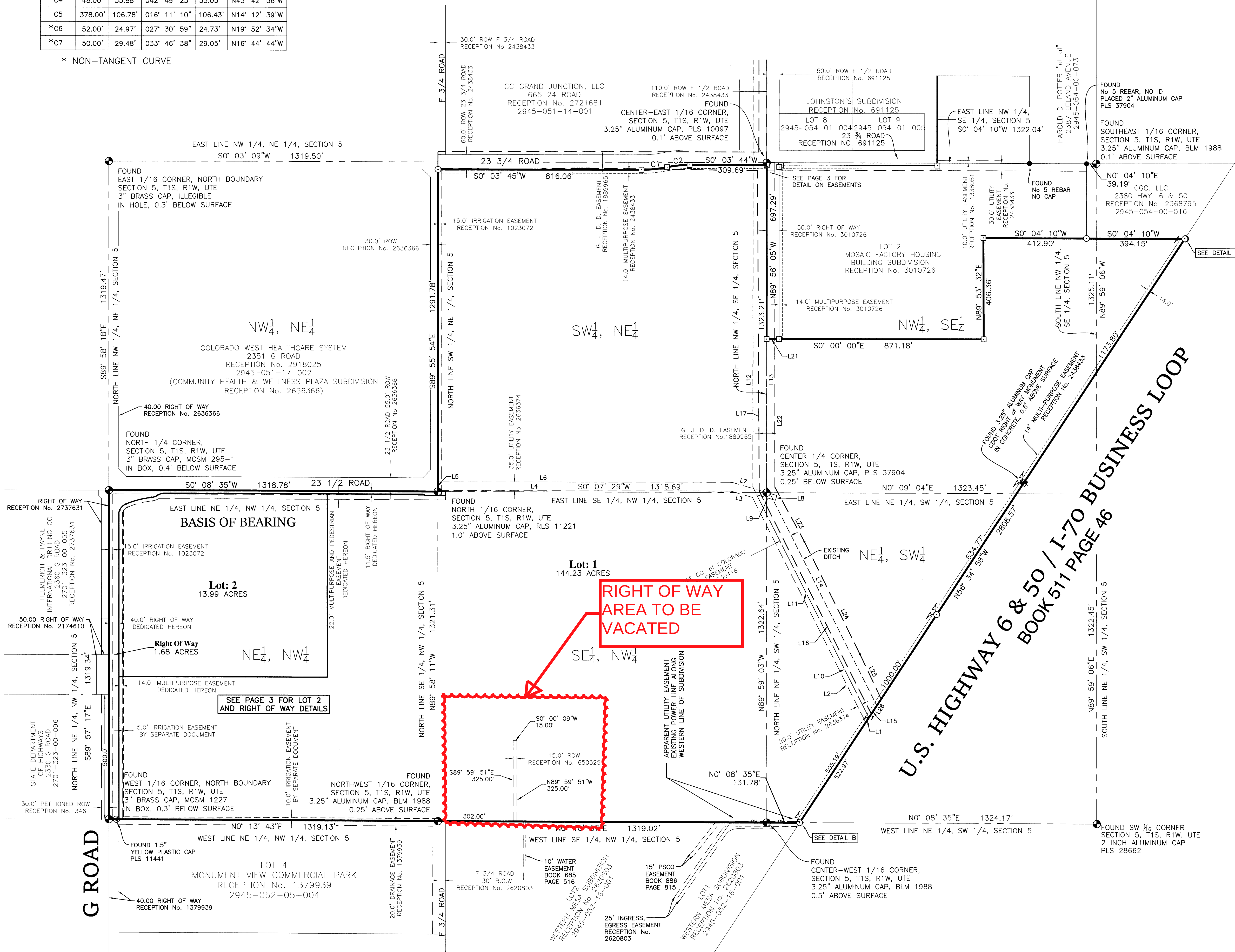
LEGEND:

FOUND SURVEY MARKER AS DESCRIBED
FOUND 2 INCH ALUMINUM CAP PLS 18478
RECOVERED No. 5 REBAR WITH 2 INCH ALUMINUM CAP PLS 37904

UTILITY EASEMENT		
Line #	Direction	Length
L1	N56° 34' 58"W	23.06'
L2	N63° 16' 35"E	1009.20'
L3	N16° 13' 30"E	90.06'
L4	N00° 02' 06"E	1175.31'
L5	S89° 55' 54"E	35.00'
L6	S00° 02' 06"W	1180.28'
L7	S16° 13' 30"W	186.66'
L8	N73° 46' 30"W	20.00'
L9	N16° 13' 30"E	78.27'
L10	S63° 16' 35"W	999.60'

G.J.D.D. EASEMENT		
Line #	Direction	Length
L16	N63° 18' 04"E	999.26'
L17	N89° 43' 55"E	1284.81'
L18	N00° 47' 32"E	410.51'
L19	S00° 03' 44"W	309.69'
L20	N89° 56' 05"W	697.29'
L21	S00° 00' 00"E	33.19'
L22	N89° 56' 51"W	593.97'
L23	S61° 36' 24"W	248.19'
L24	S63° 41' 10"W	503.48'
L25	S64° 48' 40"W	197.92'
L26	N56° 34' 58"W	71.48'

PUBLIC SERVICE CO. of COLORADO		
Line #	Direction	Length
L11	N63° 16' 35"E	1033.17'
L12	S89° 56' 05"E	1291.75'
L13	N89° 56' 05"W	1289.75'
L14	S63° 16' 35"W	981.47'
L15	N56° 34' 58"W	57.65'



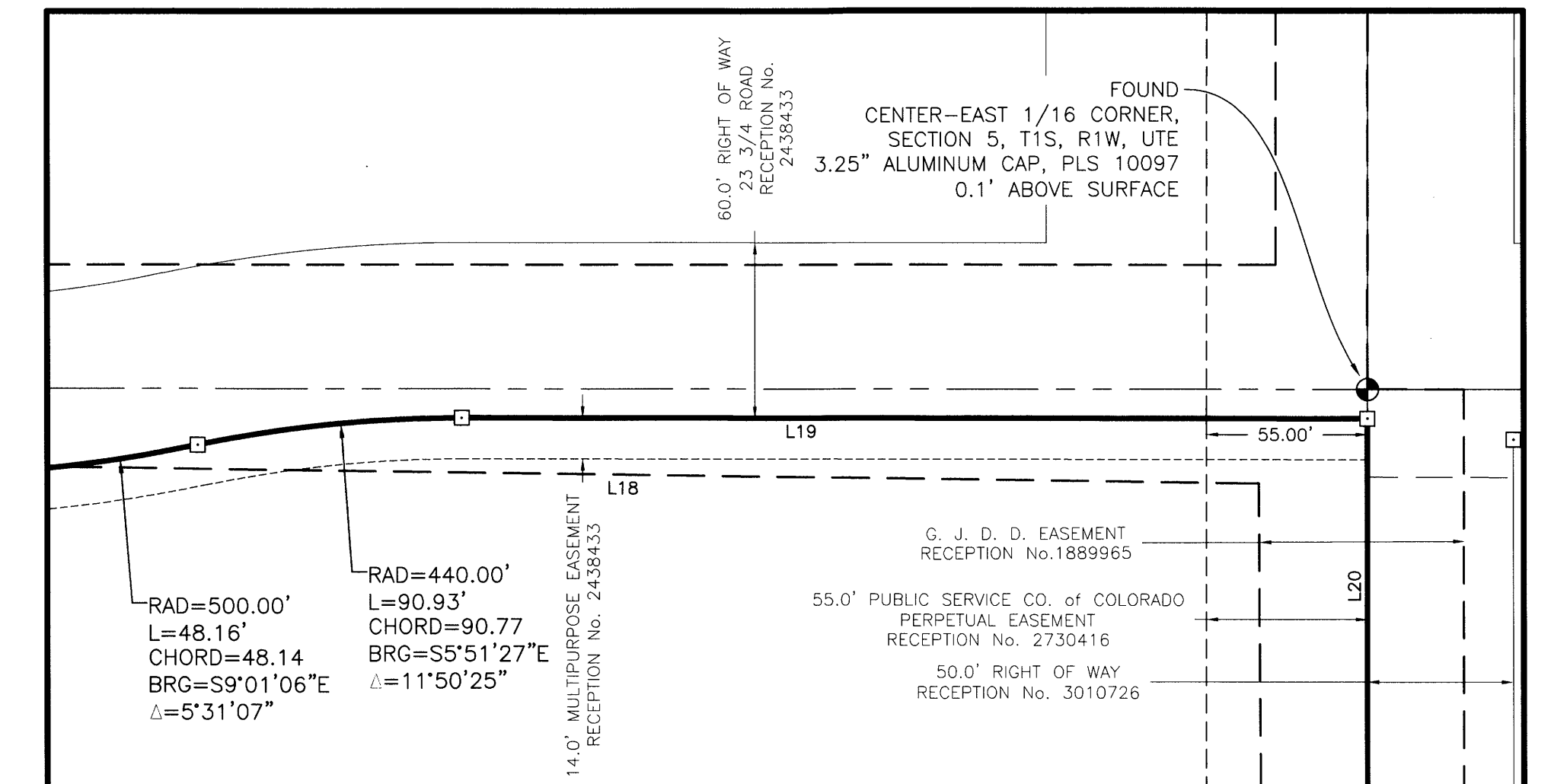
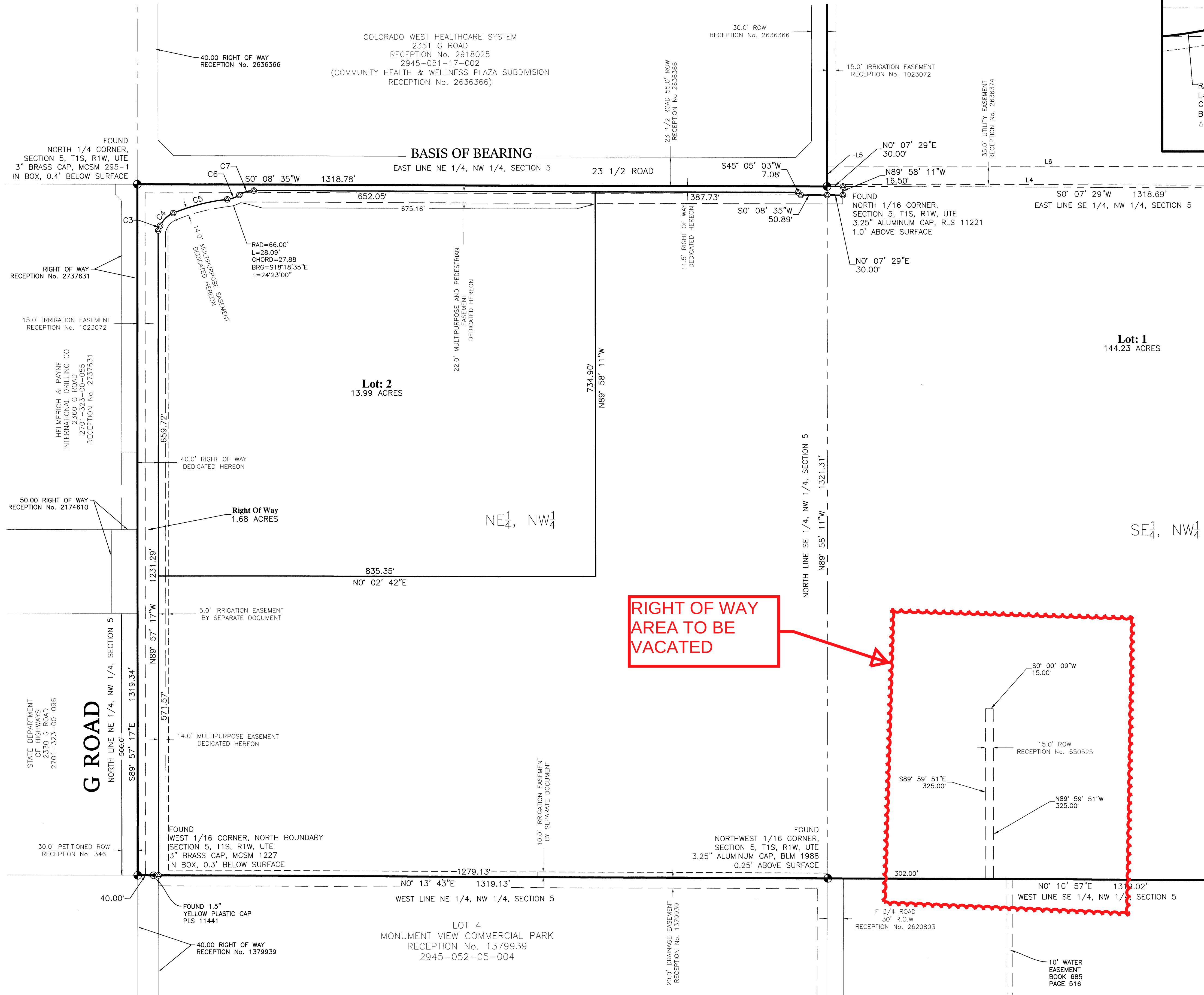
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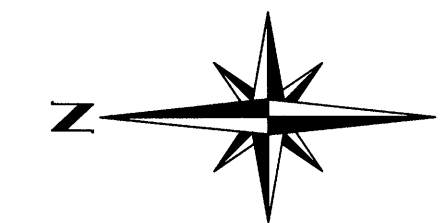
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1"=50' DETAIL FOR EASEMENTS



GRAPHIC SCALE:
1"=100'



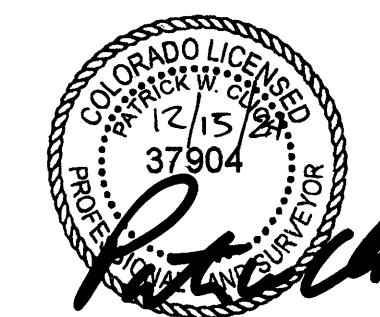
LINEAR UNITS ARE U.S. SURVEY FEET

LEGEND:

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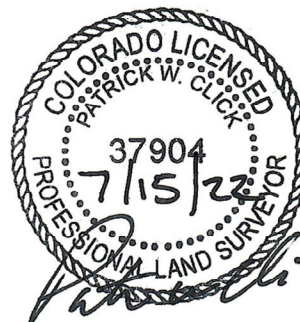
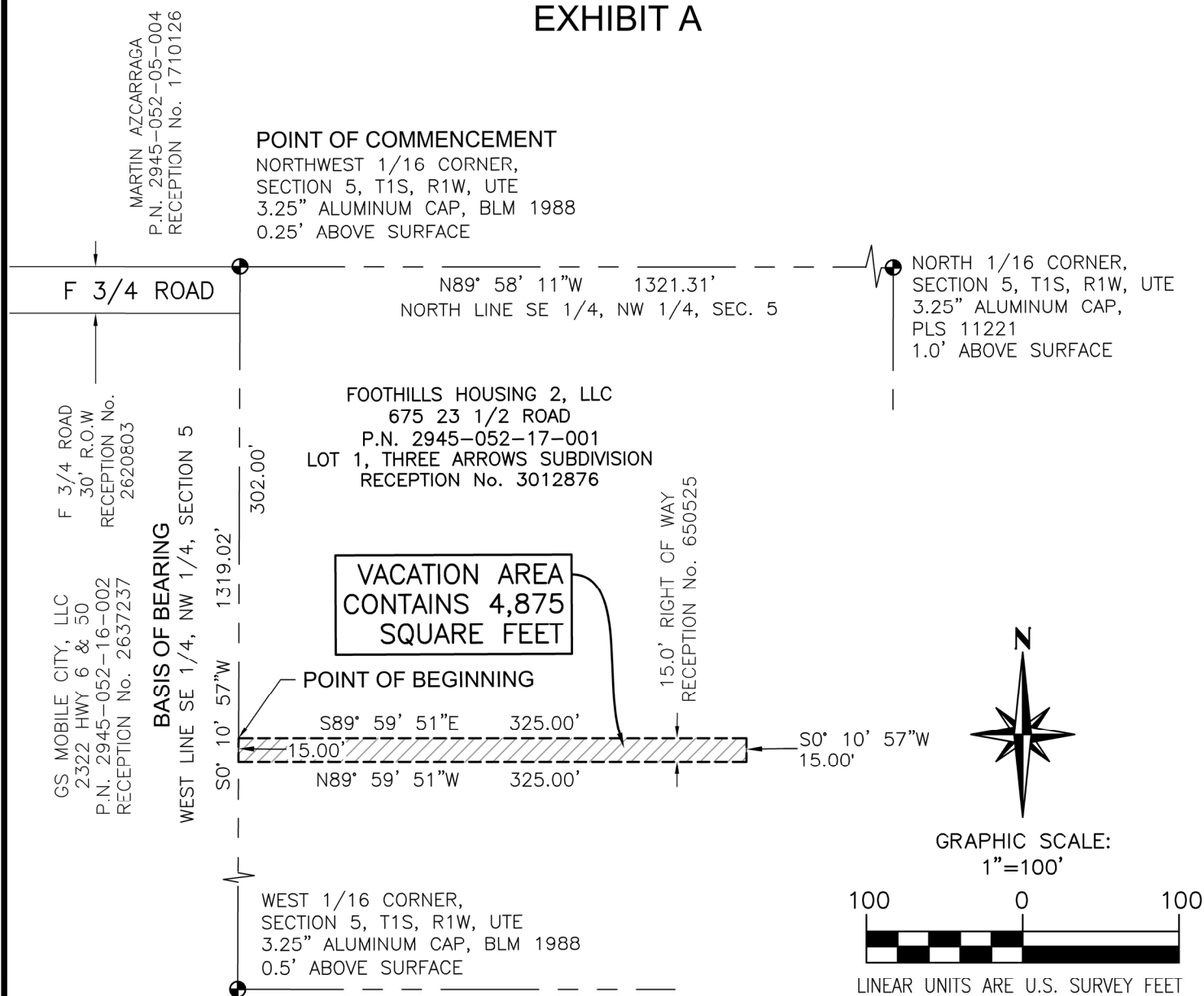
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POLARIS SURVEYING

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EXHIBIT A



POLARIS SURVEYING

PATRICK W. CLICK P.L.S.

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GRAND JUNCTION, CO 81504
PHONE (970)434-7038

CITY OF GRAND JUNCTION, COLORADO

ORDINANCE NO. _____

AN ORDINANCE VACATING PUBLIC RIGHT-OF-WAY

LOCATED AT 675 23 ½ ROAD, GRAND JUNCTION COLORADO

Recitals:

A vacation of public right-of-way has been requested by the developer, Stuart Borne, on behalf of Foothills Housing 2 LLC (Applicant), in anticipation of further subdividing and development of the property surrounding the right-of-way for Mesa Trails (fka Three Arrows) planned development. The to be vacated right-of-way does not align with any existing or planned roadways and does not contain any public infrastructure.

After public notice and public hearing as required by the Grand Junction Zoning & Development Code, and upon recommendation of approval by the Planning Commission, the Grand Junction City Council finds that the request to vacate certain rights-of-way conveyed at Reception No. 650525 Mesa County Clerk and Records Records, is consistent with the Comprehensive Plan, the Grand Valley Circulation Plan and Section 21.02.100 of the Grand Junction Municipal Code.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF GRAND JUNCTION THAT THE FOLLOWING DESCRIBED AND DEPICTED DEDICATED RIGHT-OF-WAY IS HEREBY VACATED.

A parcel of land for a 15.00 foot Right of Way as described at Reception Number 650525 of the Mesa County Records and situated in the Southeast Quarter of the Southwest Quarter of Section 5, Township 1 South, Range 1 West of the Ute Meridian, City of Grand Junction, Mesa County, Colorado being more particularly described as follows:

Commencing at the Northwest Sixteenth Corner of said Section 5 from whence the West Sixteenth Corner of said Section 5 bears S0°10'57"W a distance of 1319.02 feet for a Basis of Bearings with all bearings herein related thereto; thence S0°10'57"W along the West Line of the Southeast Quarter of the Northwest Quarter of said Section 5, a distance of 302.00 feet to the Point of Beginning; thence leaving said West Line S89°59'51"E a distance of 325.00 feet; thence S0°10'57"W a distance of 15.00 feet; thence N89°59'51"W a distance of 325.00 feet to said West Line; thence N0°10'57"E along said West Line a distance of 15.00 feet to the Point of Beginning.

Said parcel contains 4,875 square feet.

See Exhibit A.

Introduced on first reading this _____ day of _____, 2022 and ordered published in pamphlet form.

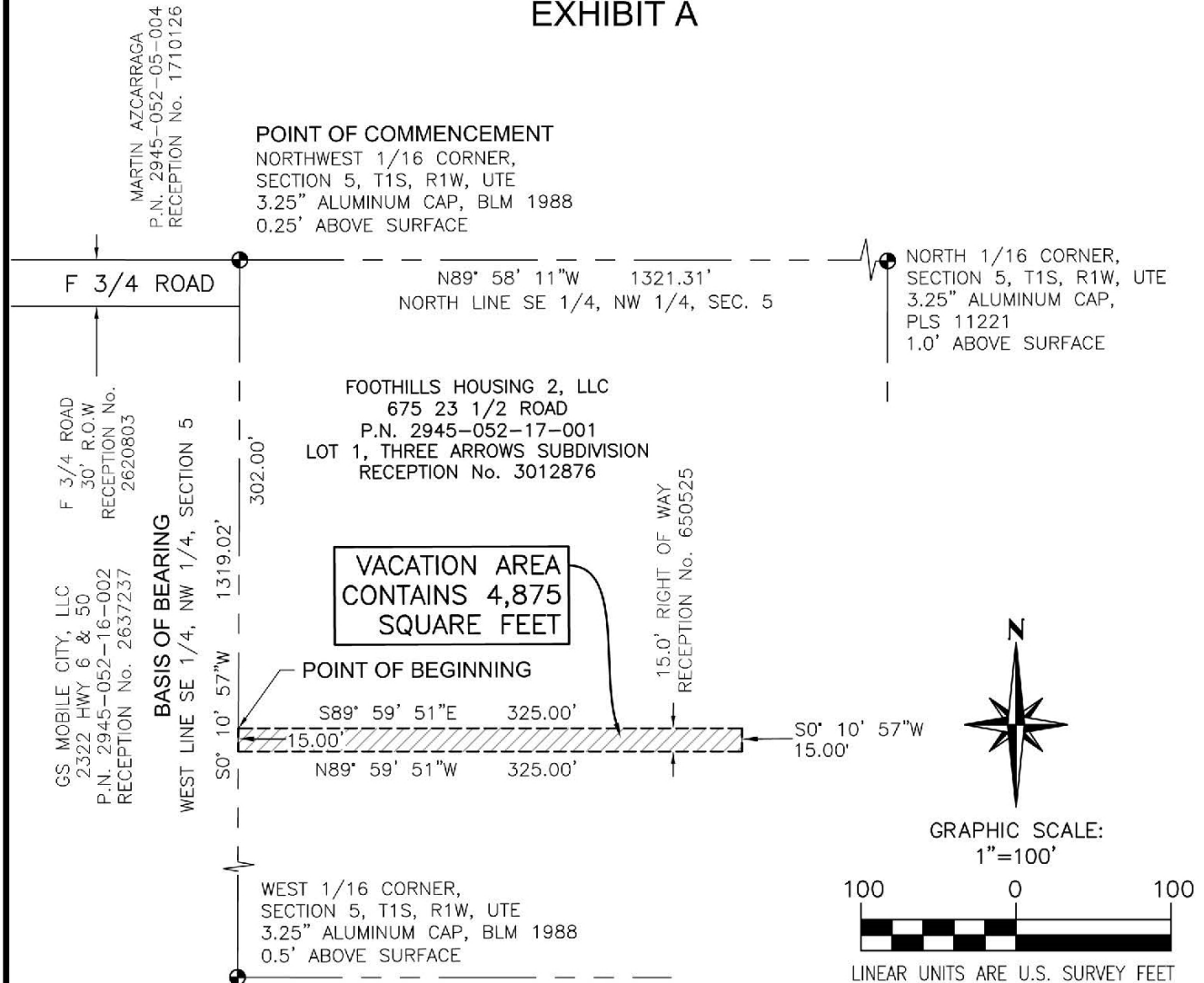
Adopted on second reading this _____ day of _____, 2022 and ordered published in pamphlet form.

ATTEST:

Amy Phillips
City Clerk

Anna M. Stout
President of City Council

EXHIBIT A



LEGAL DESCRIPTION SKETCH

RIGHT OF WAY VACATION

675 23 1/2 ROAD
GRAND JUNCTION, COLORADO

SE 1/4 NW 1/4 SECTION 5
T1S, R1W, UTE MERIDIAN
CITY OF GRAND JUNCTION, MESA COUNTY, COLORADO

DATE: 7/15/2022 JOB No. 2021-064



POLARIS SURVEYING

PATRICK W. CLICK P.L.S.

3194 MESA AVE
GRAND JUNCTION, CO 81504
PHONE (970)434-7038



Grand Junction City Council

Regular Session

Item #5.b.ii.

Meeting Date: September 21, 2022
Presented By: David Thornton, Principal Planner
Department: Community Development
Submitted By: David Thornton, Principal Planner

Information

SUBJECT:

An Ordinance Vacating a 0.13-Acre Portion of the Undeveloped G Road Public Right-of-Way on the Northeast Corner of Horizon Drive and G Road at 702 Horizon Drive

RECOMMENDATION:

The Planning Commission heard this request at their August 23, 2022 meeting and voted (7-0) to recommend approval of the request.

EXECUTIVE SUMMARY:

The Applicant, Sid Squirrell, is requesting the vacation of a portion of undeveloped G Road public Right-of-Way located in the southern portion of G Road along the north boundary of 702 Horizon Drive, beginning at Horizon Drive and going east for approximately 240 feet. The vacation area is approximately 25 feet in width and contains 0.13 acre of land.

The Applicant is currently in the process of a Simple Subdivision application review to develop a two-lot subdivision (2.58-acre Horizon Cache Subdivision) with lot 1 planned for a Starbucks restaurant and two other retail businesses on 1.45 acres in an existing C-1 (Light Commercial) zone district currently under review as a Site Plan application. As part of the subdivision process, new right-of-way (0.74 acres) will be granted to the City to accommodate the location of the necessary infrastructure for the future G Road roundabout on Horizon Drive.

BACKGROUND OR DETAILED INFORMATION:

BACKGROUND

The subject vacation area of 0.13 acres is located along the south side of G Road, beginning at Horizon Drive and going east for approximately 240 feet. This unused

portion of G Road is not needed for the public infrastructure planned for the future construction of G Road as a local street in this area. The remaining right-of-way of 44 feet in width accommodates the local street section planned.

The Applicant is currently in the process of a Simple Subdivision application review to develop a two-lot subdivision (2.58-acre Horizon Cache Subdivision) with lot 1 planned for a Starbucks restaurant and two other retail businesses on 1.45 acres in an existing C-1 (Light Commercial) zone district currently under review as a Site Plan application.

The proposed vacated area will be incorporated into the final design of the retail and restaurant land uses being planned and designed for this. G Road Right-of-way is currently wider than is needed. Therefore, the Applicant is requesting the vacation of the right-of-way to accommodate the proposed commercial development. In addition, the Applicant is dedicating, through the subdivision process, new right-of-way (0.74 acres) to the City to accommodate the location of the necessary infrastructure for the G Road round-about on Horizon Drive.

The G Road right-of-way contains existing utility infrastructure and improvements and therefore requires an easement be dedicated to accommodate such infrastructure. A condition of this right-of-way vacation is to require a multi-purpose easement be dedicated on the proposed Horizon Cache Subdivision plat for the entire vacated area. This easement will accommodate all existing and future utility infrastructure needing this easement area.

In addition, a new slope easement is necessary within the proposed vacated right-of-way area and, as a condition, also be dedicated on the proposed Horizon Cache Subdivision plat.

NOTIFICATION REQUIREMENTS

A Neighborhood Meeting was held on January 6, 2022, via Zoom virtual platform. There were seven total participants including the applicant, city staff and four members of the public.

Notice was completed consistent with the provisions in Section 21.02.080 (g) of the Zoning and Development Code. The subject property was posted with an application sign on February 2, 2022. Mailed notice of the public hearings before Planning Commission and City Council in the form of notification cards was sent to surrounding property owners within 500 feet of the subject property on August 12, 2022. The notice of this public hearing was published August 16, 2022, in the Grand Junction Daily Sentinel.

ANALYSIS

The criteria for review are set forth in Section 21.02.100 (c) of the Zoning and Development Code. The purpose of this section is to permit the vacation of surplus rights-of-way and/or easements.

(1) The Comprehensive Plan, Grand Valley Circulation Plan and other adopted plans and policies of the City;
the request to vacate 0.13 acres of existing public right-of-way does not conflict with the Comprehensive Plan, Grand Junction Circulation Plan or other adopted plans and policies of the City. Vacation of this right-of-way will have no impact on public facilities or services provided to the general public since a new easement is required to be granted to the City as part of the right-of-way vacation and proposed development. The remaining width of right-of-way will accommodate the local street construction.

Further, the vacation request is consistent with the following goals and policies of the Comprehensive Plan:

Principal 3: Responsible and Managed Growth

Policy 2: Encourage infill and redevelopment to leverage existing infrastructure.

Policy 4: Maintain and build infrastructure that supports urban development.

Policy 5: Plan for and ensure fiscally responsible delivery of City services and infrastructure.

Therefore, this criterion has been met.

(2) No parcel shall be landlocked as a result of the vacation;
This request is to vacate existing public right-of-way which is not needed to accommodate the future construction of a local residential street in G road at this location. As such, no parcels will be landlocked as a result of the proposed vacation request. Therefore, staff has found, with the granting of the vacated area as a multi-purpose easement accommodating area utility providers and a slope easement dedicated to accommodating future road construction, that this criterion will be met.

(3) Access to any parcel shall not be restricted to the point where access is unreasonable, economically prohibitive, or reduces or devalues any property affected by the proposed vacation;

This vacation request does not impact access to any parcel. Therefore, this criterion has been met.

(4) There shall be no adverse impacts on the health, safety, and/or welfare of the general community, and the quality of public facilities and services provided to any parcel of land shall not be reduced (e.g., police/fire protection and utility services; There will be no impact to public facilities and services and all utility providers will have access to a multi-purpose easement dedicated to the City, to provide services to properties in this vicinity. No comments concerning the proposed vacation were received from the utility review agencies or the adjacent property owners indicating issues or adverse impacts related to this request or the quality of services provided to

the property. Therefore, this criterion has been met.

(5) The provision of adequate public facilities and services shall not be inhibited to any property as required in Chapter 21.06 GJMC; and neither staff nor utility providers have identified that this request will inhibit the provision of adequate public facilities and services. Therefore, this criterion has been met.

(6) The proposal shall provide benefits to the City such as reduced maintenance requirements, improved traffic circulation, etc.

Maintenance requirements for the City will not substantially change as a result of the proposed vacation of G Road right-of-way when it is improved to a local street standard with the future development of 702 Horizon Drive. With the vacation, the Applicant can utilize the vacated area with the rest of the 702 Horizon Drive property as needed to accommodate additional circulation and buildable area in the lot's development.

It will also serve as a general clean-up of the property by removing under-improved right-of-way from the property that is no longer necessary, which will not only benefit the Applicant's overall site development but allow for a public right-of-way that is constructed to current infrastructure standards. As such, this criterion has been met.

RECOMMENDATION AND FINDINGS OF FACT

After reviewing the Horizon Cache – Public Right-Of-Way Vacation, VAC-2022-53, located at the Northeast Corner of Horizon Drive and G Road at 702 Horizon Drive, the following findings of fact have been made with the recommended conditions of approval:

The request conforms with Section 21.02.100 (c) of the Zoning and Development Code.

Conditions:

1. Dedication of certain interests in land for the G Road roundabout on Horizon Drive,
2. Dedication of a multi-purpose easement for the entire vacated area, and
3. Dedication of a new slope easement as found adequate by the City.

The ordinance vacating the right-of-way shall only be recorded upon these conditions being met and all fees for recording being paid by the applicant.

Therefore, Planning Commission recommended conditional approval of the requested vacation.

FISCAL IMPACT:

Average value of property and right-of-way can range broadly. The City received an MAI Appraisal from a project within the general area in 2021 that provided a value of approximately \$62,905 per acre or \$1.44 per square foot. This request includes vacating approximately 5,663 square feet of right-of-way which would result in a value

of approximately \$8,154. This estimation of value is for informational purposes only. No compensation is being requested for this vacation.

SUGGESTED MOTION:

I move to (adopt/deny) Ordinance No. 5099, and Ordinance vacating a portion of G Road Public Right-Of-Way located at the Northeast Corner of Horizon Drive and G Road at 702 Horizon Drive, vacated contingent on and subject to the applicant recording a plat for a two-lot subdivision known as the Horizon Cache Subdivision, which plat will include the following conditions:

1. Dedication of certain interests in land for the G Road roundabout on Horizon Drive,
2. Dedication of a multi-purpose easement for the entire vacated area, and
3. Dedication of a new slope easement as found adequate by the City.

On final passage and order final publication in pamphlet form.

Attachments

1. Development Application
2. Site Location & Aerial Photo Maps
3. Site Sketch ROW Vacation Area
4. Vacation Ordinance 702 Horizon Dr

Development Application

We, the undersigned, being the owner's of the property adjacent to or situated in the City of Grand Junction, Mesa County, State of Colorado, as described herein do petition this:

Petition For: 702 Horizon Dr.

Please fill in blanks below only for Zone of Annexation, Rezones, and Comprehensive Plan Amendments:

Existing Land Use Designation PD

Existing Zoning PD

Proposed Land Use Designation Commercial

Proposed Zoning C-1

Property Information

Site Location: 270 Horizon Dr. Grand Junction, CO 81501

Site Acreage: 2.46348

Site Tax No(s): 2945-012-00-93

Site Zoning: PD

Project Description: Vacating a strip of land on north side of subject property on GR.

Property Owner Information

Name: Emanuel Epstein Revocable Trust

Street Address: 3716 Mandarin Ave.

City/State/Zip: ZPH, FL 33541

Business Phone #: 727-320-7741

E-Mail: droning2282@gmail.com

Fax #:

Contact Person: Deb Schneide

Contact Phone #: 727-320-7704

Applicant Information

Name: Sid Squirrel

Street Address: 244 N. 7th St.

City/State/Zip: GR JCT, CO 81501

Business Phone #: 970-263-2948

E-Mail: Sid@sidcommercial.com

Fax #: 970-241-6263

Contact Person: Sid Squirrel

Contact Phone #: 970-260-0121

Representative Information

Name: Mark Austin

Street Address: 123 N. 7th St.

City/State/Zip: GR JCT, CO 81501

Business Phone #: 970-242-7540

E-Mail: MarkA@Austinville.com

Fax #: 970-255-1212

Contact Person: Mark Austin

Contact Phone #: 970-242-7540

NOTE: Legal property owner is owner of record on date of submittal.

We hereby acknowledge that we have familiarized ourselves with the rules and regulations with respect to the preparation of this submittal, that the foregoing information is true and complete to the best of our knowledge, and that we assume the responsibility to monitor the status of the application and the review comments. We recognize that we or our representative(s) must be present at all required hearings. In the event that the petitioner is not represented, the item may be dropped from the agenda and an additional fee may be charged to cover rescheduling expenses before it can again be placed on the agenda.

Signature of Person Completing the Application

Sid Squirrel

Date

1/12/22

Signature of Legal Property Owner

Debra Schneide

Date

1/19/22

General Project Report
for
702 Horizon Dr. Right of Way Vacation

Project Description (Location, Acreage, Proposed Use)

The purpose of this submittal is to obtain approval from the City of Grand Junction to vacate a right of way located at G Road and Horizon Drive. The project site is a 2.46-acre parcel located at 702 Horizon Drive in Grand Junction, Colorado. This property is located on the northeast corner of 27 ½ Road and G Road at Horizon Drive. The purpose of the proposed vacation is to even out the lot lines. The property and right of way location are depicted in the photo below:



Project Location

The property is currently zoned Project Development (PD) in the City of Grand Junction and lies next to the intersection of Horizon Drive and 27 ½ Road in an area composed of commercial properties. Adjacent properties and properties in the vicinity of the project site are zoned as Project Development (PD) or Light Commercial (C-1).

The applicant has requested the property be rezoned to Light Commercial (C-1) and is waiting for approval at this time.

The applicant is requesting a right of way vacation located at G Road and Horizon Drive.

Surrounding Land Uses and Zoning

The following adjacent properties are zoning accordingly:

DIRECTION	ZONING	CURRENT LAND USE
North	PD	Residential
North	C-1	Commercial

General Project Report
for
702 Horizon Dr. Right of Way Vacation

South	PD	Commercial
East	PD	Residential
West	C-1	Commercial

The City of Grand Junction's current zoning surrounding this parcel is shown below.



Current City of Grand Junction Zoning

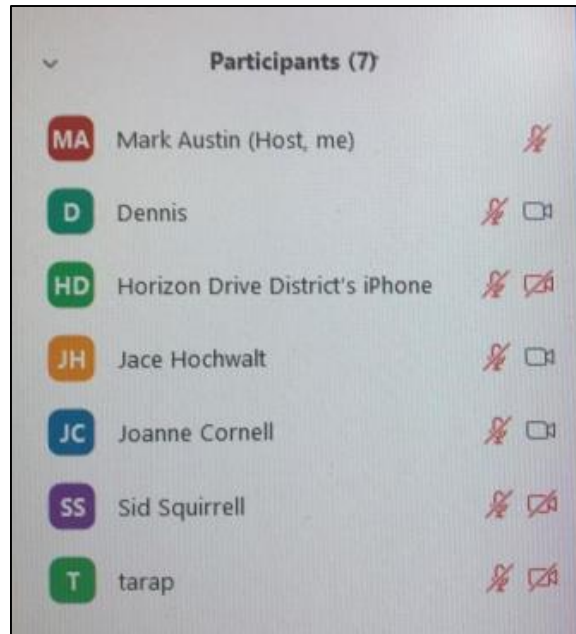


2020 Comprehensive Plan

General Project Report
for
702 Horizon Dr. Right of Way Vacation

Neighborhood Meeting

A virtual neighborhood meeting was held on January 6, 2022, via Zoom, at 5:33 P.M. for the rezone request for a 2.46-acre property located at the northeast corner of 27-1/2 Road and Horizon Drive in Grand Junction, Colorado. There were 7 participants in the Zoom meeting. A screen shot of the participant list is depicted below:



Participant List from Zoom Virtual Neighborhood Meeting

Site Access

The proposed rezone requests no changes to site access. The site is accessible from 27 ½ Road and Horizon Drive. A future development project will likely require an access point at 27 ½ Road and G Road.

Utilities

All utility services required for this project are currently located on, or adjacent to, the project site. No changes are proposed at this time for the rezone from PD to C-1.

An 8-inch PVC sanitary sewer line currently exists adjacent to the north side of the parcel on G Road. There is also an 8-inch PVC stubbed sanitary sewer line adjacent to the property on the southwest corner located along 27 ½ Road. A 15-inch PVC sanitary line exists on the west side of the parcel along Horizon Drive.

General Project Report
for
702 Horizon Dr. Right of Way Vacation

There are two 8-inch water lines owned by Ute Water that are adjacent to the property. One line is located on the east side of the property on 27 ½ Court and runs from 27 ½ Road to G Road. The second water line is adjacent to the north side of the property on G Road to Horizon Drive. There are two water mains owned by Ute Water within the vicinity of the property; an 18-inch water main adjacent to the south side of the property on 27 ½ Road, and a 12-inch water main located on the west side of the property on Horizon Drive.

Three flow hydrants exist within the vicinity of the property; on the northeast corner of 27 ½ Court at G Road, on the north side of the property on G Road, and one located on the northwest side of Horizon Dr. A test hydrant exists on the southeast corner of 27 ½ Road at 27 ½ Court. The water lines and hydrants owned by Ute Water are depicted in the image below:



Map of Ute Water Lines and Hydrant Locations

City water does not currently exist on this site. Future development would likely utilize the previously listed water lines owned by Ute Water. Exact water distribution system requirements are yet to be determined. No changes are proposed at this time.

Irrigation water is not present on the site, so use remains unchanged by proposed right of way vacation.

Development Schedule and Phasing

The project anticipates obtaining right of way vacation approval in late March or early April of 2022.

OWNERSHIP STATEMENT - TRUST

(a) Deborah Schneide ("Trust") is the owner of the following property:

(b) Northwest corner of 27 1/2 Road and Horizon Drive

A copy of the deed(s) evidencing the owner's interest in the property is attached. Any documents conveying any interest in the property to someone else by the owner is also attached.

I, (c) Deborah Schneide, am the Trustee for the Trust. I have the legal authority to bind the Trust to agreements concerning financial obligations and this property. I have attached the most recently recorded Statement of Authority of the Trust.

☒ My legal authority to bind the Trust both financially and concerning this property is unlimited.

☐ My legal authority to bind the Trust financially and/or concerning this property is limited in the following manner:

All other Trustees and their authority to bind the Trust are listed and described here:

NA

☒ Trust is the sole owner of the property.

☐ Trust owns the property with other(s). The other owners of the property are:

(d) NA

On behalf of Trust, I have reviewed the application for the (e) rezoning, single sub., ROW vacation

I understand the continuing duty to inform the City planner of any changes in my authority to bind the Trust or regarding any interest in the property, such as ownership, easement, right-of-way, encroachment, boundary disputes, lienholder and any other interest in the property.

☒ I and the Trustees have no knowledge of any possible conflicts between the boundary of the property and abutting properties.

☐ I and the Trustees have the following knowledge (indicate who has the knowledge) and evidence concerning possible boundary conflicts between the property and the abutting property(ies):

(f) NA

I swear under penalty of perjury that the information in this Ownership Statement is true, complete and correct.

Signature of Partnership representative: Deborah Schneide TTEE

Printed name of person signing: Deborah Schneide

State of Florida)

County of Pinellas) ss.

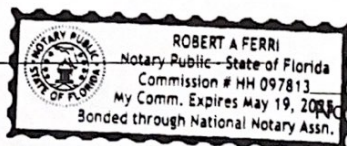
Subscribed and sworn to before me on this 19th day of January, 2022

by Robert A Ferri

Witness my hand and seal.

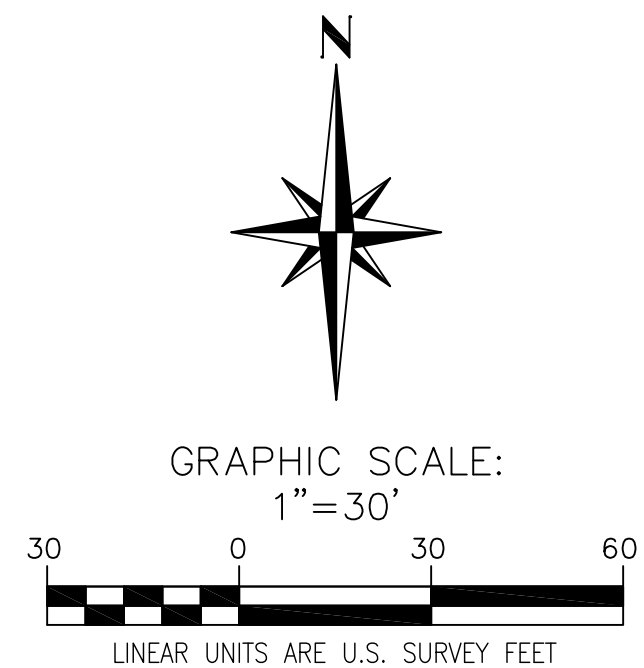
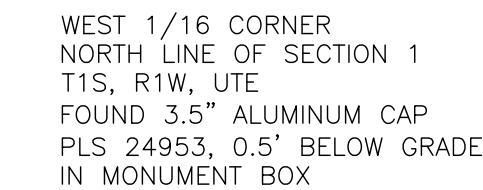
My Notary Commission expires on

05/19/2025



Robert A Ferri Notary Public Signature

SITUATED IN THE NE¼ NW¼ SECTION 1
TOWNSHIP 1 SOUTH, RANGE 1 WEST OF THE UTE MERIDIAN
CITY OF GRAND JUNCTION, COUNTY OF MESA, STATE OF COLORADO



LEGAL DESCRIPTION:

THAT PARCEL OF LAND LOCATED IN THE NORTHEAST QUARTER OF THE NORTHWEST QUARTER (NE¼ NW¼) OF SECTION 1, TOWNSHIP 1 SOUTH, RANGE 1 WEST OF THE UTE MERIDIAN IN GRAND JUNCTION, MESA COUNTY, COLORADO AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

PARCEL 1:

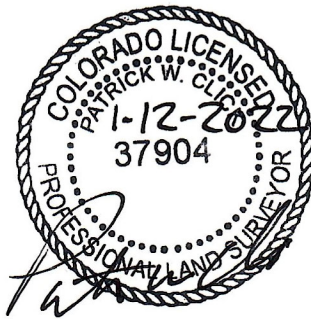
COMMENCING AT THE NORTH EAST CORNER OF THE NE¼ NW¼ OF SECTION 1, TOWNSHIP 1 SOUTH, RANGE 1 WEST OF THE UTE MERIDIAN, GRAND JUNCTION, MESA COUNTY, COLORADO, WHENCE THE SOUTHEAST CORNER OF SAID NE¼ NW¼ BEARS SOUTH 00°03'04" WEST A DISTANCE OF 1322.09 FEET, FOR A BASIS OF BEARINGS WITH ALL BEARINGS CONTAINED HEREIN RELATIVE THERETO; THENCE SOUTH 00°03'04" WEST A DISTANCE OF 230.05 FEET; THENCE NORTH 89°56'56" WEST A DISTANCE OF 40.00 FEET TO THE WEST RIGHT-OF-WAY LINE OF 27½ ROAD, AS DEFINED IN RECEPTION NO. 718654, MESA COUNTY RECORDS TO THE POINT OF BEGINNING; THENCE SOUTH 89°56'56" WEST A DISTANCE OF 133.81 FEET, TO THE POINT OF BEGINNING OF RIGHT-OF-WAY LINE AND THAT RIGHT-OF-WAY LINE DESCRIBED IN RECEPTION NO. 2075083, THENCE, ALONG SAID RIGHT-OF-WAY DESCRIBED IN RECEPTION NO. 2075083 THE FOLLOWING SEVEN (7) CURVES:

- (1) WITH A NON-TANGENT CURVE TURNING TO THE RIGHT HAVING A DELTA ANGLE OF 25°33'38", A RADIUS OF 173.00 FEET, AN ARC LENGTH OF 77.18 FEET, AND A CHORD LENGTH OF 76.54 FEET, WITH A CHORD BEARING OF SOUTH 32°53'46" WEST;
- (2) SOUTH 45°40'34" WEST A DISTANCE OF 86.77 FEET;
- (3) NORTH 89°49'12" WEST A DISTANCE OF 40.54 FEET;
- (4) NORTH 44°19'26" WEST A DISTANCE OF 52.62 FEET;
- (5) NORTH 39°45'00" WEST A DISTANCE OF 150.48 FEET;
- (6) NORTH 44°19'26" WEST A DISTANCE OF 272.90 FEET;
- (7) NORTH 00°02'16" WEST A DISTANCE OF 30.03 FEET; THENCE WITH A NON-TANGENT CURVE TURNING TO THE LEFT HAVING A DELTA ANGLE OF 03°44'08", A RADIUS OF 1332.77 FEET, AN ARC LENGTH OF 86.89 FEET, AND A CHORD LENGTH OF 86.88 FEET, WITH A CHORD BEARING OF NORTH 41°38'57" EAST, AND THENCE SOUTHERLY-OF-LEFT-TO-LEFT HORIZON DRIVE, AS DEDICATED IN RECEPTION NO. 813634; THENCE NORTH 89°59'29" EAST A DISTANCE OF 220.48 FEET, ALONG THE SOUTH RIGHT-OF-WAY LINE OF G ROAD AS DEDICATED IN RECEPTION NO. 1322383; THENCE SOUTH 00°00'00" EAST A DISTANCE OF 184.98 FEET; THENCE NORTH 89°59'54" EAST A DISTANCE OF 189.77 FEET TO THE POINT OF BEGINNING.

Said Parcel contains 2.46 Acres.

SURVEYOR'S CERTIFICATION:

I, Patrick W. Click, a registered Professional Land Surveyor in the State of Colorado, do hereby certify that this Plat represents a field survey completed by me and / or under my direct supervision. Both conform to the standards of practice, statutes and laws of the State of Colorado to the best of my knowledge and belief. This statement is not a guaranty or warranty, either expressed or implied.



COLORADO REGISTERED LAND SURVEYOR PLS #37904

IMPROVEMENT SURVEY

SITUATED IN THE NE¼ NW¼ SECTION 1
TOWNSHIP 1 SOUTH, RANGE 1 WEST OF THE UTE MERIDIAN
CITY OF GRAND JUNCTION, COUNTY OF MESA, STATE OF COLORADO

JOB #: 2021-138 FIELD WORK: KM DRAWN BY: PC
DATE: 1/12/2022 DRAWING NAME: G Road & Horizon CHECKED BY: PC

POLARIS SURVEYING

PATRICK W. CLICK P.L.S.

3194 MESA AVE. #B
GRAND JUNCTION, CO 81504
PHONE (970)434-7038

LEGAL SKETCH

POINT OF COMMENCEMENT
NORTH 1/4 CORNER
SECTION 1
T1S, R1W, UTE.

JOSHUA J. KILLIP
HALEY E. MACDHUIBH KILLIP
SALE DATED NOVEMBER 3, 2019
PARCEL No. 2945-012-00-008
RECEPTION No. 2938384

POINT OF BEGINNING

G ROAD

RIGHT OF WAY
RECEPTION No. 1322383
(TRACT No. 2)

BASIS OF BEARINGS

NORTH LINE NE1/4 NW1/4 SECTION 1
S89° 59' 53"W 1321.02'

210.00'
S0° 00' 07"E
20.00' 25.00'

N89° 59' 53"E 219.42'

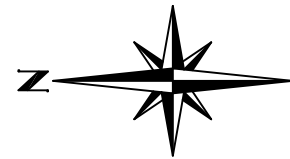
RIGHT OF WAY VACATION AREA CONTAINS 0.13 ACRES

S89° 59' 53"W 240.44'

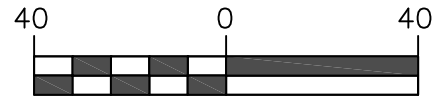
6' UTILITY EASEMENT
RECEPTION No. 1322382

EMANUEL EPSTEIN
REVOCABLE TRUST DATED JUNE 16, 2004
PARCEL No. 2945-012-00-093
RECEPTION No. 2954101

20' TELECOMMUNICATION
EASEMENT
RECEPTION No. 1639332



GRAPHIC SCALE:
1"=40'



JOB: 2021-138

LEGAL DESCRIPTION SKETCH

R.O.W. VACATION
AT G ROAD AND HORIZON DRIVE
GRAND JUNCTION, COLORADO

LOT 3 OF SECTION 1
T1S, R1W, UTE.
CITY OF GRAND JUNCTION
MESA COUNTY, COLORADO

POLARIS SURVEYING

PATRICK W. CLICK P.L.S.

3194 MESA AVE
GRAND JUNCTION, CO 81504
PHONE (970)434-7038

RAD=1960.00'
L=25.81'
CHORD=25.81
BRG=N39°12'26"E
Δ=0°45'16"

RAD=1960.00'
L=32.66'
CHORD=32.66
BRG=N40°03'43"E
Δ=0°57'17"

WEST 1/16 CORNER
NORTH LINE
OF SECTION 1
T1S, R1W, UTE.

HORIZON DRIVE
100.00' RIGHT OF WAY
RECEPTION No. 813634

Legal Description

A tract of land situated in Lot 3 of Section 1, Township 1 South, Range 1 West of the Ute Meridian, City of Grand Junction, County of Mesa, State of Colorado and being located entirely within the Right of Way as described at Reception Number 1322383 of the Mesa County Records, being more particularly described as follows:

The South 25.00 feet of the following described road right of way for G Road in Quit Claim Deed for Right of Way to the City of Grand Junction as recorded at Reception Number 1322383 of the Mesa County Records.

Tract No. 2: Beginning at the NE corner of Government Lot 3

(also referred to as the N1/4 corner of Section 1) thence S 89°59'53" W along the North Line of the NW1/4, with all bearings herein relative thereto, a distance of 210.00 feet to the TRUE POINT OF BEGINNING,

- thence S 00°00'07" E a distance of 45.00 feet;
- thence S 89°59'53" W a distance of 240.46 feet to a point on the Easterly Right-of-Way line of Horizon Drive;
- thence along said Easterly Right-of-Way line following the arc of a non-tangent curve to the left, the radius of which is 1960.00 feet and whose long chord bears N 39°40'58" E a distance of 58.47 feet to the North line of the NW1/4 of said Section 1;
- thence N 89°59'53" E along said North line of the NW1/4 a distance of 203.12 feet to the TRUE POINT OF BEGINNING.

Said South 25.00 feet of land contains 0.13 acres.

Legal description written by:

Patrick W. Click

Colorado licensed surveyor number 37904

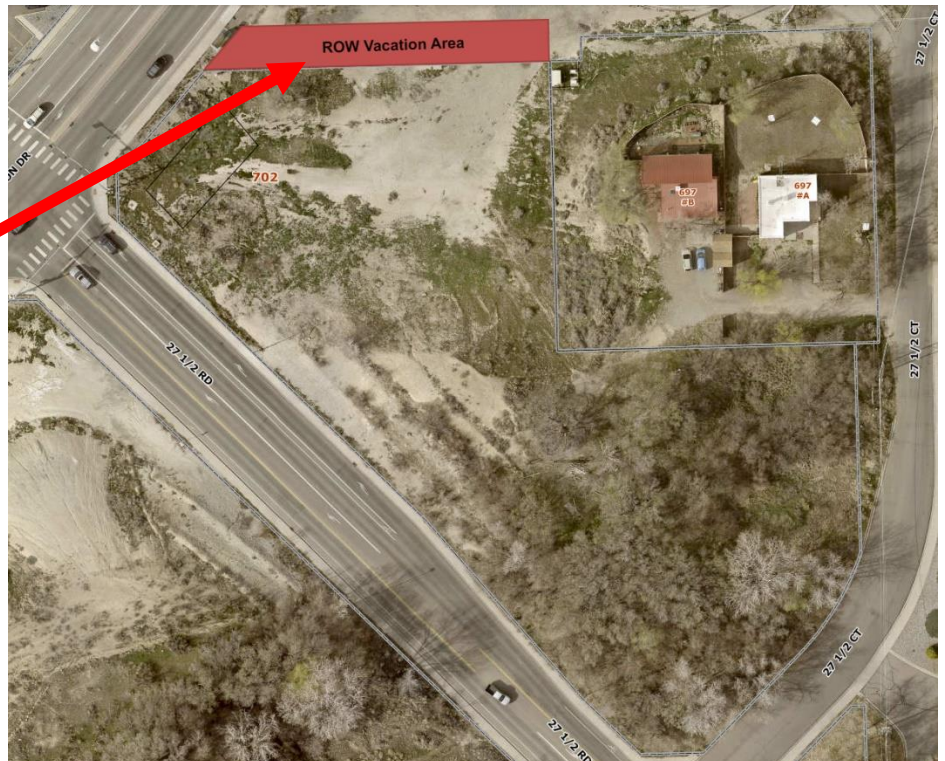
3194 Mesa Ave #B

Grand Junction, CO 81504

LOCATION MAPS



Portion of
G Road to be Vacated



LEGAL SKETCH

POINT OF
COMMENCEMENT
NORTH 1/4 CORNER
SECTION 1
T1S, R1W, UTE.

JOSHUA J. KILLIP
HALEY E. MACDHUIBH KILLIP
SALE DATED NOVEMBER 3, 2019
PARCEL No. 2945-012-00-008
RECEPTION No. 2938384

POINT OF BEGINNING

G ROAD

RIGHT OF WAY
RECEPTION No. 1322383
(TRACT No. 2)

BASIS OF BEARINGS

NORTH LINE NE1/4 NW1/4 SECTION 1
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N89° 59' 53"E 219.42'

RIGHT OF WAY VACATION AREA CONTAINS 0.13 ACRES

S89° 59' 53"W 240.44'

6' UTILITY EASEMENT
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EMANUEL EPSTEIN
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PARCEL No. 2945-012-00-093
RECEPTION No. 2954101

20' TELECOMMUNICATION
EASEMENT
RECEPTION No. 1639332



GRAPHIC SCALE:
1"=40'



JOB: 2021-138

LEGAL DESCRIPTION SKETCH

R.O.W. VACATION
AT G ROAD AND HORIZON DRIVE
GRAND JUNCTION, COLORADO

LOT 3 OF SECTION 1
T1S, R1W, UTE.
CITY OF GRAND JUNCTION
MESA COUNTY, COLORADO

POLARIS SURVEYING

PATRICK W. CLICK P.L.S.
3194 MESA AVE
GRAND JUNCTION, CO 81504
PHONE (970)434-7038

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WEST 1/16 CORNER
NORTH LINE
OF SECTION 1
T1S, R1W, UTE.

HORIZON DRIVE
100.00' RIGHT OF WAY
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LEGAL SKETCH

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POINT OF BEGINNING

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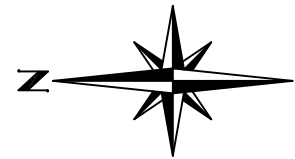
RIGHT OF WAY VACATION AREA CONTAINS 0.13 ACRES

S89° 59' 53"W 240.44'

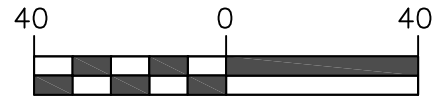
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GRAPHIC SCALE:
1"=40'



JOB: 2021-138

LEGAL DESCRIPTION SKETCH

R.O.W. VACATION
AT G ROAD AND HORIZON DRIVE
GRAND JUNCTION, COLORADO

LOT 3 OF SECTION 1
T1S, R1W, UTE.
CITY OF GRAND JUNCTION
MESA COUNTY, COLORADO

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WEST 1/16 CORNER
NORTH LINE
OF SECTION 1
T1S, R1W, UTE.

HORIZON DRIVE
100.00' RIGHT OF WAY
RECEPTION No. 813634

CITY OF GRAND JUNCTION, COLORADO

ORDINANCE NO. _____

**AN ORDINANCE VACATING A PORTION OF G ROAD RIGHT-OF-WAY AT 702
HORIZON DRIVE, GRAND JUNCTION, COLORADO**

Recitals:

Vacation of a portion of the G Road right-of-way has been requested by the developer of the property at 702 Horizon Drive. The vacation of right of way is in anticipation of subdividing and developing the abutting property to the south for future commercial development.

The proposed development is known as the Horizon Cache Subdivision. The Applicant is proposing a two-lot subdivision, which will require dedication of certain interests in land for the G Road roundabout on Horizon Drive as well as dedication of a multi-purpose easement on the Horizon Cache Subdivision plat for existing utility infrastructure which will remain in the vacated area described and a newly defined and described slope both of which will be dedicated on the Horizon Cache Subdivision plat. The easements, together with the completion of all platting and other requirements of the Grand Junction Zoning & Development Code (Code) shall be conditions precedent to the vacation of right of way contemplated by this Ordinance.

After public notice and public hearing as required by the Code, and with a recommendation of approval from the Planning Commission, the Grand Junction City Council finds that the request to vacate certain rights-of-way conveyed at Reception No. 1322383 Mesa County Clerk and Records Records, is consistent with the Comprehensive Plan, the Grand Junction Circulation Plan and Section 21.02.100 of the Grand Junction Code.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF GRAND JUNCTION THAT the following right-of-way as described herein and depicted on Exhibit A attached hereto, is hereby vacated contingent on and subject to the Applicant recording a plat for a two-lot subdivision known as the Horizon Cache Subdivision, which plat will include 1) dedication of certain interests in land for the G Road roundabout on Horizon Drive, 2) dedication of a multi-purpose easement for existing utility infrastructure which will remain in the vacated area described, and 3) dedication of a newly defined and described slope easement with the adequacy of all being determined by the City Manager or his designee.

The easements, together with the completion of all platting and other requirements of the Code shall be conditions precedent to the vacation of right of way contemplated by this Ordinance.

This Ordinance shall be recorded if and only if the Applicant satisfies each and every condition is the City's sole and exclusive satisfaction and the Applicant pays all recording fees and other applicable costs, expenses, and charges.

A tract of land situated in Lot 3 of Section 1, Township 1 South, Range 1 West of the Ute Meridian, City of Grand Junction, County of Mesa, State of Colorado and being located entirely within a portion of the Right of Way as described at Reception Number 1322383 of the Mesa County Records, being more particularly described as follows:

The South 25.00 feet of the following described road right of way for G Road in Quit Claim Deed for Right of Way to the City of Grand Junction as recorded at Reception Number 1322383 of the Mesa County Records.

Tract No. 2: Beginning at the NE corner of Government Lot 3

(also referred to as the N1/4 corner of Section 1) thence S 89°59'53" W along the North Line of the NW1/4, with all bearings herein relative thereto, a distance of 210.00 feet to the TRUE POINT OF BEGINNING,

- thence S 00°00'07" E a distance of 45.00 feet;
- thence S 89°59'53" W a distance of 240.46 feet to a point on the Easterly Right-of-Way line of Horizon Drive;
- thence along said Easterly Right-of-Way line following the arc of a non-tangent curve to the left, the radius of which is 1960.00 feet and whose long chord bears N 39°40'58" E a distance of 58.47 feet to the North line of the NW1/4 of said Section 1;
- thence N 89°59'53" E along said North line of the NW1/4 a distance of 203.12 feet to the TRUE POINT OF BEGINNING.

Said South 25.00 feet of land contains 0.13 acres, as herein described.

See Exhibit A.

Introduced on first reading this 7th day of September, 2022 and ordered published in pamphlet form.

Adopted on second reading this 21st day of September, 2022 and ordered published in pamphlet form.

ATTEST:

Amy Phillips
City Clerk

Anna M. Stout
President of City Council

LEGAL SKETCH





Grand Junction City Council

Regular Session

Item #5.b.iii.

Meeting Date: September 21, 2022

Presented By: Kristen Ashbeck, Principal Planner/CDBG Admin

Department: Community Development

Submitted By: Kristen Ashbeck

Information

SUBJECT:

An Ordinance Rezoning 6.15 Acres from I-2 (General Industrial) to I-1 (Light Industrial), Located at 2415 Blue Heron Road

RECOMMENDATION:

The Planning Commission heard the rezoning request at its August 23, 2022 meeting and voted (7-0) to recommend approval.

EXECUTIVE SUMMARY:

The Applicant, JGMS Government Services, LLC is requesting the rezone of one 6.15-acre parcel from I-2 (General Industrial) to I-1 (Light Industrial) located at 2415 Blue Heron Road. The requested I-1 zone district conforms with the Comprehensive Plan Land Use Map designation of Industrial.

BACKGROUND OR DETAILED INFORMATION:

BACKGROUND

The proposed rezone comprises one 6.15-acre parcel located at 2415 Blue Heron Road south of the Riverside Parkway at 24-1/4 Road. The parcel is Lot 1 of the Blue Heron Lake Industrial Park that was subdivided in 2004 and is currently zoned I-2 (General Industrial). There is presently one building of approximately 15,332 square feet on the site that was constructed in 2005. The property is adjacent to other industrial uses to the north and east that are all also zoned I-2. Properties to the west and south are owned by the City of Grand Junction, zoned CSR (Community Services and Recreation) and part of the riverfront trail system.

The 2020 One Grand Junction Comprehensive Plan classified the subject property and adjacent properties to the north and east with an Industrial land use classification and

the properties to the west and south as Parks and Open Space. The 2010 Comprehensive Plan Future Land Use Map also classified this area as Industrial and Park. Implementing zone districts for the Industrial Land Use classification per the 2020 Plan include I-1 (Light Industrial), I-2 (General Industrial), C-2 (General Commercial), and I-O (Industrial Office/Park). As such, the Comprehensive Plan land use classification of Industrial does support the rezone request to I-1 (Light Industrial).

While there aren't significant differences between the I-1 and I-2 zone districts, the Applicant is proposing the rezone to I-1 to provide more flexibility of allowed uses for the existing building and site. The property was recently purchased by JGMS Government Services, LLC with the intent of using the majority of the building for general offices which is not permitted in the existing I-2 zone district. An existing manufacturing use in the building would also remain. The proposed I-1 zoning would allow for both the manufacturing use to continue in the building and on the site but would also allow for the general office use.

NOTIFICATION REQUIREMENTS

A Neighborhood Meeting regarding the proposed rezone request was held virtually on March 3, 2022, in accordance with Section 21.02.080 (e) of the Zoning and Development Code. The Applicant's representative and City staff were present. There were no members of the public in attendance.

Notice was completed consistent with the provisions in Section 21.02.080 (g) of the Zoning and Development Code. The subject property was posted with an application sign and a notice of the public hearings before Planning Commission and City Council was mailed in the form of notification cards to surrounding property owners within 500 feet of the subject property, as well as neighborhood associations within 1,000 feet, on August 12, 2022. The notice of the Planning Commission public hearing was published on August 16, 2022, in the Grand Junction Daily Sentinel.

ANALYSIS

Pursuant to Section 21.02.140 of the Grand Junction Municipal Code, in order to maintain internal consistency between this code and the zoning maps, zoning map amendments must only occur if at least one of the five criteria listed below is met. Staff analysis of the criteria is found below each listed criterion.

(1) Subsequent events have invalidated the original premises and findings; and/or

The Comprehensive Plan Land Use Map identifies the subject property as Industrial which is a similar designation that has historically been identified on the property. Both the Applicant's proposed zoning of I-1, as well as the existing zoning of I-2 implement the Land Use Designation of Industrial. The existing zoning of I-2 continues to be valid zoning under the Comprehensive Plan, and staff has found no other subsequent events to have invalidated the original premise of the existing zoning.

(2) The character and/or condition of the area has changed such that the

amendment is consistent with the Plan; and/or

As previously indicated, the subject site has existed in its current state with a single building for 17 years. The adjacent industrial uses have been developed over the past 40+ years, with the building just east of this site having been constructed in 1975. The adjacent recreational open space and trails began to be established in the early 1990s as the Blue Heron section of the riverfront trail system. A railroad siding has served the industrial park since the mid-1970s, which certainly supports the industrial character of the businesses and uses in the area. The Applicant is requesting the zone change to be used for a wider variety of uses than are presently allowed in the I-2 zone district. The I-1 zone district provides for a wider variety of uses that support and complement the strictly industrial uses. However, generally, the character and/or condition of the area has not changed. Therefore, staff finds that this criterion has not been met.

(3) Public and community facilities are adequate to serve the type and scope of land use proposed; and/or

The subject property is within a long-established urban industrial area along the Riverside Parkway. Adequate public and community facilities and services are available and sufficient to serve uses associated with the I-1 zone district. The type and scope of land-use allowed within the I-1 zone district is similar in character and extent to the existing land-use of many nearby properties, which include light and heavy industrial and commercial uses. The subject site is currently served by Ute Water, Persigo Wastewater Treatment, and Xcel Energy (electricity and natural gas). The Mesa Mall commercial area is nearby just north of Highway 6&50. Multi-modal access to the site is gained from Riverside Parkway and pedestrian/bicycle access is available directly from the site to the trails around Blue Heron Lake. Based on the provision of adequate public utilities and community facilities to serve the rezone request, staff finds that this criterion has been met.

(4) An inadequate supply of suitably designated land is available in the community, as defined by the presiding body, to accommodate the proposed land use; and/or

There are not substantial differences between the I-1 and I-2 zone districts aside from the allowances of some uses. The I-1 zone district accounts for approximately 7.6% of City zoned land, whereas the I-2 zone district accounts for approximately 2.8% of City zoned land. In looking at the aerial photographs of this site over the past 5 years, the large building and site appear underutilized. Thus, staff believes that there may be better use of it in this area to be able to expand to the more diverse uses allowed within the I-1 zone district. As the Applicant has pointed out in the General Project Report, the Code definition for I-1 is a better fit for the site's current operations and facilities and is more accommodating for projected development and use that will support the growing employment base as well as a larger variety of the type of businesses in the area. However, while there may be a need for more diversification of uses in this area of the community, Citywide there is not an inadequate supply of suitably designated land to accommodate I-1 uses. Based on these considerations, staff finds that this criterion has not been met.

(5) The community or area, as defined by the presiding body, will derive benefits from the proposed amendment.

The site is well served by transportation infrastructure, utilities, and other community facilities, and is within close proximity to commercial and employment centers. The Applicant has stated there is a strong need in the community for the services offered by the property as well as for industrial facilities which provide functional office space. The I-1 zone district would allow for ongoing, balanced growth in the industrial area while maximizing the benefits of the riverfront area. As such, staff finds this criterion has been met.

The rezone criteria provide that the City must also find the request is consistent with the vision, goals, and policies of the Comprehensive Plan. Staff has found the request to be consistent with the following principle of the Comprehensive Plan:

Plan Principle 2: Strategies 1. and 3. Resilient and Diverse Economy – Foster a vibrant, diverse and resilient economy and promote business growth for a diverse and stable economic base.

RECOMMENDATION AND FINDINGS OF FACT

After reviewing the JGMS Government Services, LLC request, RZN-2022-459, rezoning Lot 1 of Blue Heron Lake Industrial Park, a 6.15-acre parcel, from I-2 (General Industrial) to I-1 (Light Industrial) for the property located at 2415 Blue Heron Road, the following findings of fact have been made:

1. The requested zone is consistent with the goals and policies of the Comprehensive Plan;
2. In accordance with Section 21.02.140 of the Grand Junction Zoning and Development Code, one or more of the criteria have been met.

Therefore, the Planning Commission recommended approval of the request.

FISCAL IMPACT:

There is no direct fiscal impact related to this request.

SUGGESTED MOTION:

I move to (adopt/deny) Ordinance No. 5100, an ordinance rezoning one parcel totaling 6.15 acres from I-2 (General Industrial) to I-1 (Light Industrial), located at 2415 Blue Heron Road on final passage and order final publication in pamphlet form.

Attachments

1. Development Application
2. Site Maps and Photos
3. ORD-Zoning Blue Heron 082522

General Project Report for 2415 Blue Heron Rd Rezone

2415 Blue Heron Rd.
Grand Junction, Co 81505

Prepared by and for:

JGMS Government Services, LLC

Project Description (Location, Acreage, Proposed use)

This site is contained within Mesa County Tax Parcel number 2945-092-24-006 and consists of approximately 6.51 acres located at 2415 Blue Heron Road, Grand Junction, Colorado 81505 as shown below in figure 1.



Figure 1: Location map of 2415 Blue Herron Rd.

This property is owned by JGMS Government Services, LLC (JGMS GS) and is currently zoned General Industrial (I-2). JGMS GS requests the property be given a zoning designation of Light Industrial (I-1) to allow for future uses that I-2 does not permit such as general offices.

This property occupies the western portion of Blue Heron Rd in an industrial area. Adjacent properties are zoned as I-2 with C-1 and C-2 to the north side of Riverside Parkway. There are properties to the north, east, and northwest that are currently zoned as I-1 as show in Figure 2.

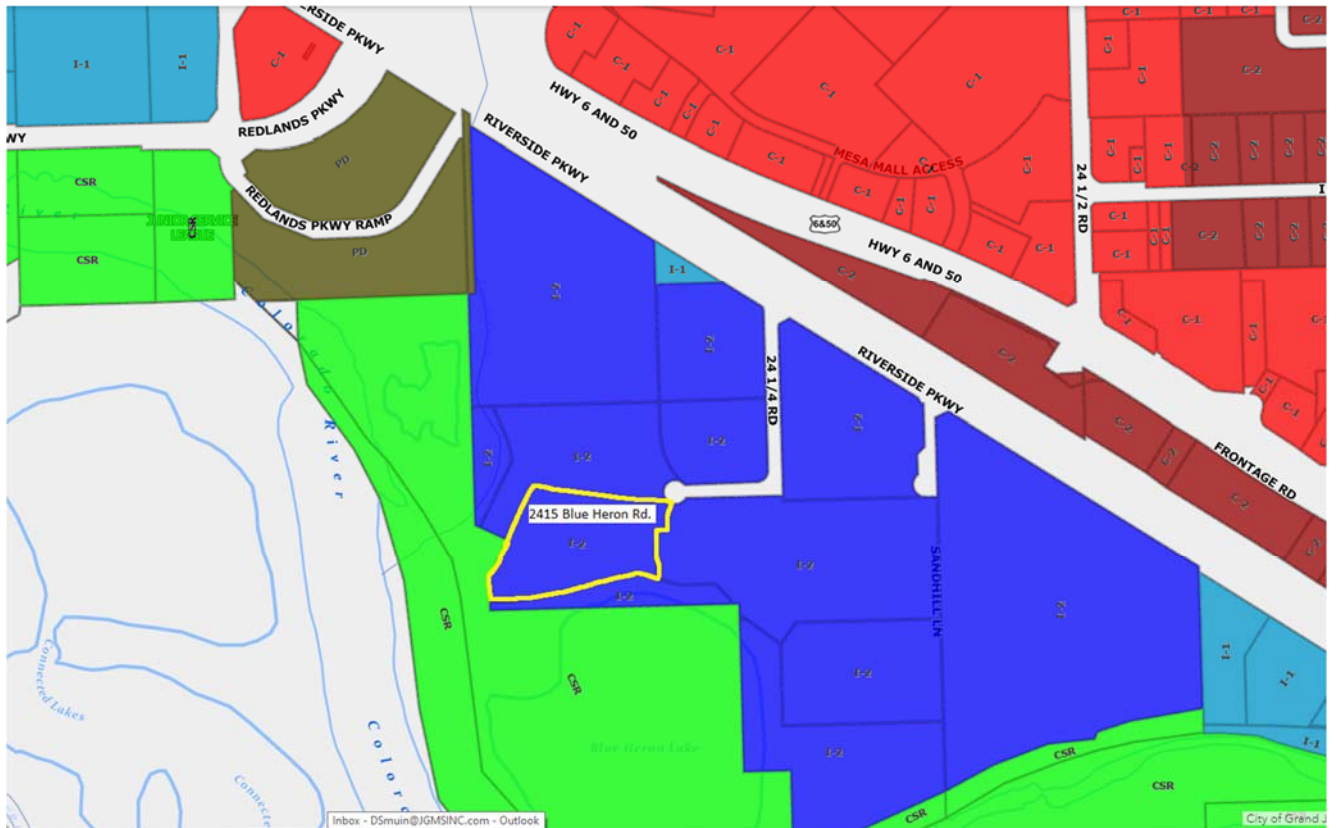


Figure 2. Current Zoning adjacent to 2415 Blue Heron Rd.

Surrounding Land Uses and Zoning

The following adjacent properties are zoned accordingly:

Direction	Zoning	Current Land Use
North	I-1, I-2	Industrial
East	I-2, I-2	Industrial
South	I-2, CSR	Industrial/Exempt
West	CRS	Exempt

Grand Junction City Growth Plan

The City's Growth Plan map calls for the adjacent properties to continue to be zoned as industrial. Only changes to the surrounding area is future rezoning of Redlands Parkway ramp from PD to Commercial as shown below in Figure 3.



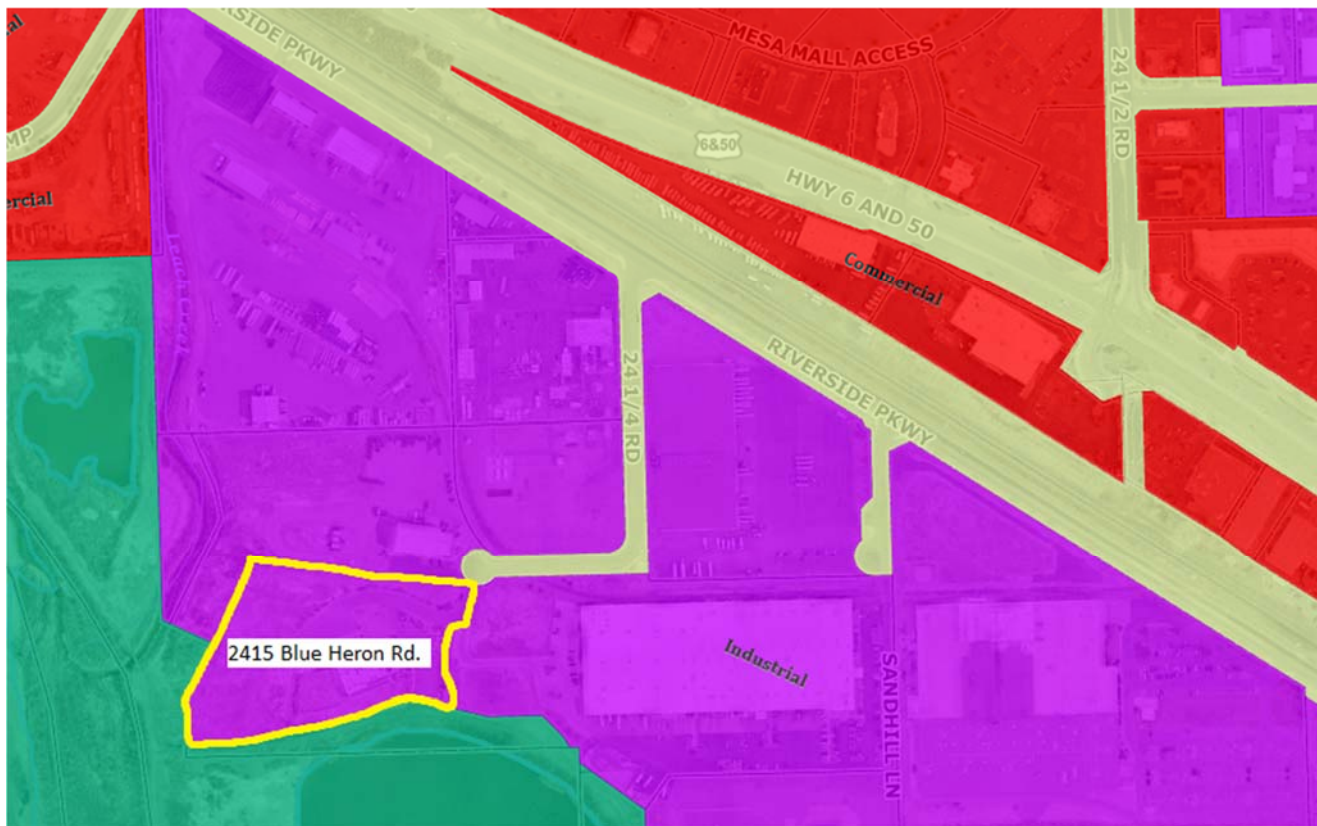


Figure 3: Grand Junction City's Growth Plan Map.

Site Access

Access to the site remains unchanged allowing access from Blue Heron Road.

Utilities

There are no changes to existing utilities needed for this project.

21.02.140 Code Amendment and Rezoning

In order to maintain internal consistency between code and zoning maps, map amendments must only occur if:

1. **Subsequent events have invalidated the original premise and findings; and/or**
 Response: The current code definition for I-2 is not fully adequate for the type of operation and existing facilities on this site. The future plan of the facility is to have more industrial uses and general office space to maximize the opportunity to highlight the riverfront area which is not allowed by I-2 but is allowed with I-1 zoning.



2. The character and/or condition of the area has changed such that the amendment is consistent with the Plan; and/or

Response: The City of Grand Junction/Mesa County Future Land Use Maps indicate a site zoning of Industrial. The applicant's request to rezone the property to I-1 is consistent with the City's 2020 One Grand Junction Comprehensive Plan.

3. Public and community facilities are adequate to serve the type and scope of land use proposed; and/or

Response: The rezone request will not modify or change any of the current public or community facilities needed to serve the property in question.

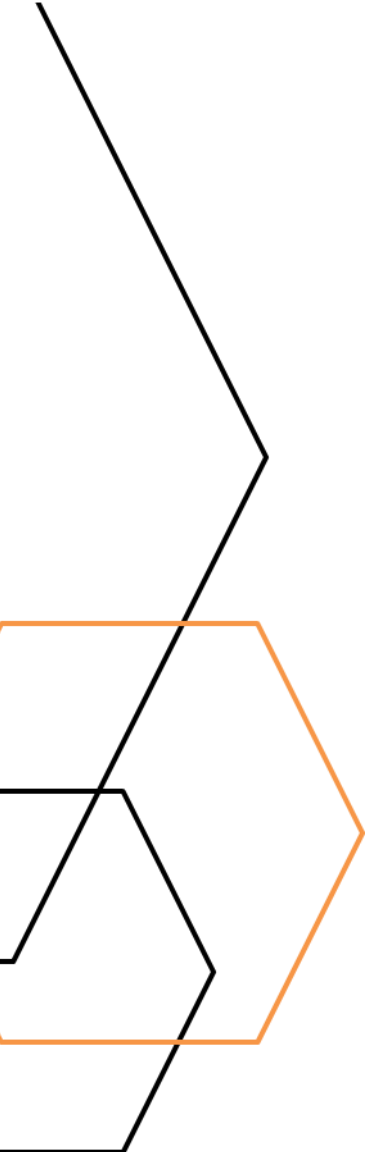
4. An inadequate supply of suitable designated land is available in the community, as defined by the presiding body, to accommodate the proposed land use; and/or

Response: The code definition for I-1 remains a better fit for the site's proposed operations and facilities. A rezone to I-1 remains consistent with the property's proposed use of industrial with general offices and with the City's 2022 Comprehensive Plan to maximize enjoyment and use of the Riverfront and Trail Transportation.

5. The community or area, as defined by the presiding body, will derive benefits from the proposed amendment.

Response: There is a strong need in the local community for the services offered by the property, as well as for industrial facilities which provide functional office space. The proposed rezone of the property in question remains consistent with the City's 2020 One Grand Junction Comprehensive Plan because it allows for ongoing, balanced growth in industrial areas while maximizing the benefits of the Riverfront area.





I-2 to I-1 Rezone

(General Industrial to Light Industrial)

2415 Blue Heron Road

ICSL Holding, LLC
March 2022

Site Location Map



Contact Information

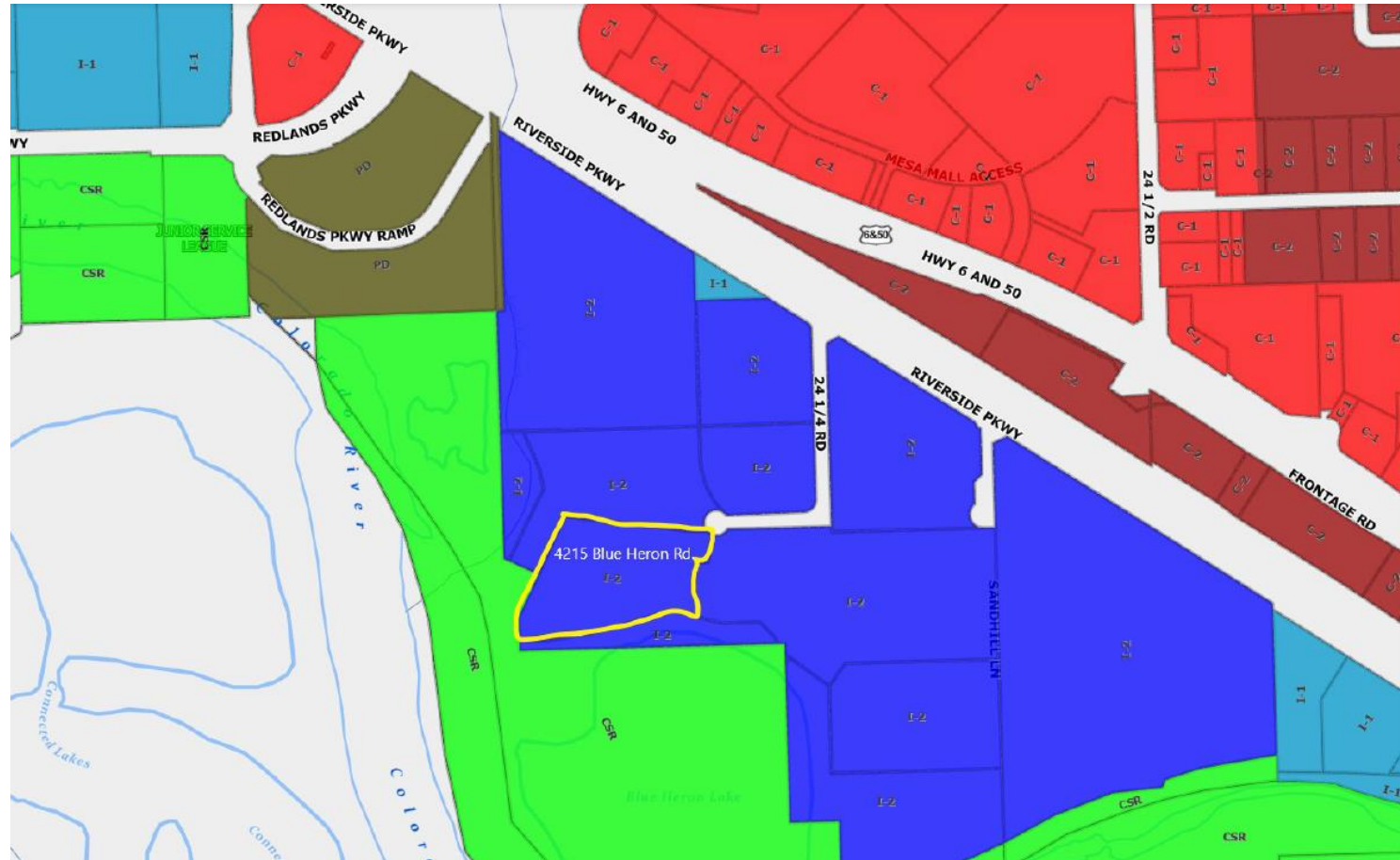
Ray Plienness, Member of ICSL, Holding LLC
336 Main Street GJ, CO 81501
970-640-5327

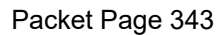


➤ Under Contract: 2415 Blue Heron Road

- 6.15 Acres
- Existing 15,332 sq. ft.
 - 6,664 office
 - 8,668 warehouse/manufacturing
- Currently Zoned I-2 (General Industrial)

Existing Zoning





Impacts of Rezoning to I-1



- Additional Traffic on 24 ¼ Road
 - Impact minimal. Site was already planned for an additional phase to include 20 additional parking spaces and a 4,000 sq. ft. building.
- Additional use of city's Riverfront Investment and potential for new organization to bike to work.

Analysis – Review Criteria:



1. Subsequent events have invalidated the original premises and findings; and/or
2. The character and/or condition of the area has changed such that the amendment is consistent with the Plan; and/or
3. **Public and community facilities are adequate to serve the type and scope of land use proposed; and/or**
4. An inadequate supply of suitably designated land is available in the community, as defined by the presiding body, to accommodate the proposed land use; and/or
5. **The community or area, as defined by the presiding body, will derive benefits from the proposed amendment.**

Questions????



- THANK YOU -

ICSL Holding, LLC

336 Main Street, Suite 207
Grand Junction, CO 81501
970-254-1354

OWNERSHIP STATEMENT - CORPORATION OR LIMITED LIABILITY COMPANY

(a) JGMS Government Services, LLC ("Entity") is the owner of the following property:

(b) 2415 Blue Heron Rd. Grand Junction, CO 81505

A copy of the deed(s) evidencing the owner's interest in the property is attached. Any documents conveying any interest in the property to someone else by the owner are also attached.

I am the (c) _____ for the Entity. I have the legal authority to bind the Entity regarding obligations and this property. I have attached the most recent recorded Statement of Authority of the Entity.

☒ My legal authority to bind the Entity both financially and concerning this property is unlimited.

☐ My legal authority to bind the Entity financially and/or concerning this property is limited as follows:

☒ The Entity is the sole owner of the property.

☐ The Entity owns the property with other(s). The other owners of the property are:

On behalf of Entity, I have reviewed the application for the (d) rezone

I have the following knowledge or evidence of a possible boundary conflict affecting the property:

(e) none.

I understand the continuing duty of the Entity to inform the City planner of any changes regarding my authority to bind the Entity and/or regarding ownership, easement, right-of-way, encroachment, lienholder and any other interest in the land.

I swear under penalty of perjury that the information in this Ownership Statement is true, complete and correct.

Signature of Entity representative: _____

Printed name of person signing: Jerome Gonzales, President of Managing Member J.G. Management Systems, Inc.

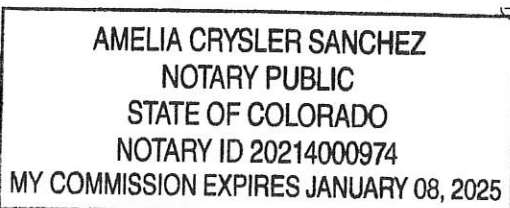
State of Colorado)

County of Mesa) ss.

Subscribed and sworn to before me on this 24 day of May, 2022
by Amelia Sanchez

Witness my hand and seal.

My Notary Commission expires on January 8, 2025



Notary Public Signature _____

Instructions

An ownership statement must be provided for each and every owner of the property.

- (a) Insert complete name of owner as it appears on deed by which it took title. If true name differs from that on the deed, please provide explanation by separate document
- (b) Insert legally sufficient description of land for which application has been made to the City for development. Include the Reception number or Book and Page for recorded information. Assessor's records and tax parcel numbers are not legally sufficient description. Attach additional sheet(s) as necessary, and reference attachment(s) here. If the legal description or boundaries do not match those on the plat, provide an explanation.
- (c) Insert title/capacity within the Entity of person who is signing.
- (d) Insert the type of development application request that has been made. Include all pending applications affecting the property.
- (e) Insert name of all other owners, if applicable.
- (f) Insert the type of development application request(s) that has/have been made. Include all pending development applications affecting the property.
- (g) Explain the conflict and/or possible conflict and describe the information and/or evidence available concerning the conflict and/or possible conflict. Attach copies of written evidence.

STATEMENT OF AUTHORITY
(38-30-172, C.R.S.)

1. This Statement of Authority relates to an entity named
JGMS Government Services, LLC
And is executed on behalf of the entity pursuant to the provisions of Section 38-30-172, C.R.S.
2. The type of entity is a: Limited liability company
3. The mailing address for the entity is:
336 Main Street; Suite 207, Grand Junction, CO 81501
4. The entity is formed under the laws Colorado
of: _____
5. The name of the person(s) authorized to execute instruments conveying, encumbering, or otherwise affecting title to real property on behalf of the entity is:
Jerome Gonzales, President of J.G. Management Systems, Inc., Managing Member
6. The authority of the foregoing person(s) to bind the entity is ☒ Not limited OR ☐ Limited as follows:

7. Other matters concerning the manner in which the entity deals with interest in real property:
None

Dated this 31st day of March, 2022.

JGMS Government Services, LLC, a Colorado limited liability company
By: J.G. Management Systems, Inc., Managing Member

By: _____

Jerome Gonzales, President

State of Colorado
County of Mesa

The foregoing instrument was acknowledged before me this 31st day of March, 2022, by Jerome Gonzales, President of J.G. Management Systems, Inc., Managing Member of JGMS Government Services, LLC, a Colorado limited liability company.

KASANDRA McPHERSON
NOTARY PUBLIC
STATE OF COLORADO
NOTARY ID #20154026737
My Commission Expires July 8, 2023

Witness my hand and official seal.

Notary Public

Statement of Authority

WARRANTY DEED

THIS DEED is to be effective the 31st day of March, 2022, and is made between JA Blue Heron, LLC, a Colorado limited liability company, the "Grantor" (whether one, or more than one), of the County of Mesa, State of Colorado, and JGMS Government Services, LLC, a Colorado limited liability company, the "Grantee" (whether one, or more than one), whose legal address is 336 Main Street; Suite 207, Grand Junction, Colorado 81501 of the County of Mesa, State of Colorado.

WITNESS, that the Grantor, for and in consideration of the sum of TWO MILLION SIX HUNDRED NINETY-SIX THOUSAND AND NO/100 Dollars (\$2,696,000.00), the receipt and sufficiency of which is hereby acknowledged, hereby grants, bargains, sells, conveys and confirms unto the Grantee and the Grantee's heirs and assigns forever, all the real property, together with any improvements thereon, located in the County of Mesa, State of Colorado, described as follows:

Lot 1,

BLUE HERON LAKE INDUSTRIAL PARK

County of Mesa, State of Colorado also known by street address as: 2415 Blue Heron Road, Grand Junction, CO 81505. For identification purposes only: Parcel no.: 2945-092-24-006

TOGETHER with all and singular the hereditaments and appurtenances thereunto belonging, or in anywise appertaining, the reversions, remainders, rents, issues and profits thereof, and all the estate, right, title, interest, claim and demand whatsoever of the Grantor, either in law or equity, of, in and to the above bargained premises, with the hereditaments and appurtenances;

TO HAVE AND TO HOLD the said premises above bargained and described, with the appurtenances, unto the Grantee and the Grantees' heirs and assigns forever. The Grantor, for the Grantor and the Grantors' heirs and assigns, does covenant, grant, bargain, and agree to and with the Grantee, and the Grantees' heirs and assigns; that at the time of the enrolling and delivery of these presents, the Grantor is well seized of the premises above described; has good, sure, perfect, absolute and indefeasible estate of inheritance, in law and in fee simple; and has good right, full power and lawful authority to grant, bargain, sell and convey the same in manner and form as aforesaid; and that the same are free and clear from all former and other grants, bargains, sales, liens, taxes, assessments, encumbrances and restrictions of whatever kind or nature whatsoever, except general taxes for the current and all subsequent years; and subject to: the statutory exceptions as set forth in § 38-30-113(5)(a), C.R.S.

The grantors shall and will WARRANT AND FOREVER DEFEND the above-bargained premises in the quiet and peaceable possession of the grantees, their heirs and assigns, against all and every person or persons lawfully claiming the whole or any part thereof.

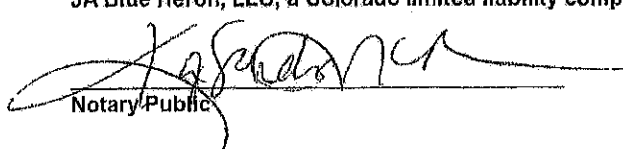
JA Blue Heron, LLC, a Colorado limited liability company

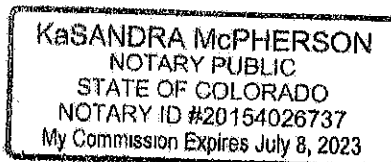
By: 

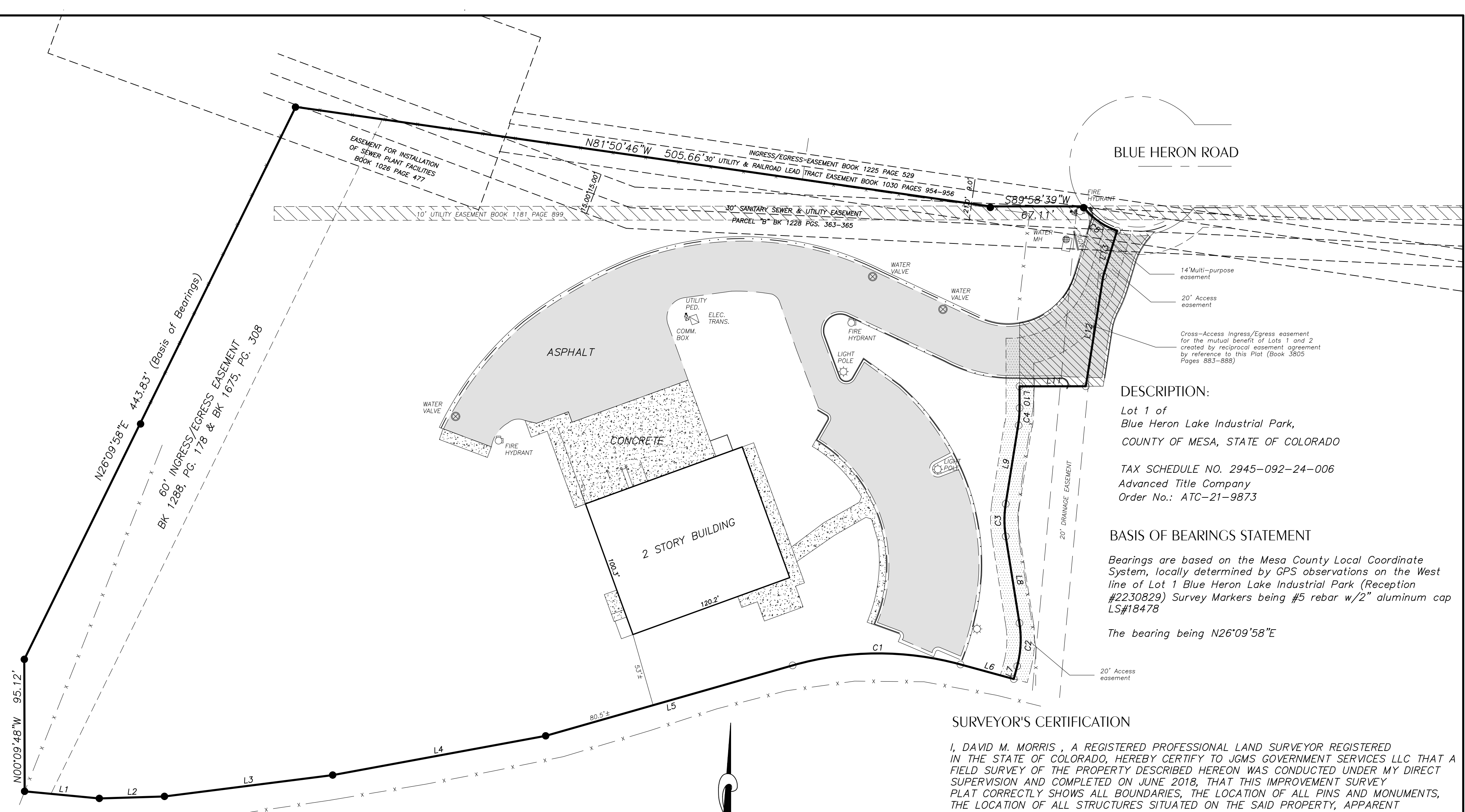
Jerry Gregory, Manager

STATE OF: Colorado }
COUNTY OF: Mesa } ss.

The foregoing instrument was acknowledged before me on the 30th day of March, 2022, by Jerry Gregory, Manager of JA Blue Heron, LLC, a Colorado limited liability company.


Notary Public





BLUE HERON ROAD

DESCRIPTION:
Lot 1 of
Blue Heron Lake Industrial Park,
COUNTY OF MESA, STATE OF COLORADO

TAX SCHEDULE NO. 2945-092-24-006
Advanced Title Company
Order No.: ATC-21-9873

BASIS OF BEARINGS STATEMENT

Bearings are based on the Mesa County Local Coordinate System, locally determined by GPS observations on the West line of Lot 1 Blue Heron Lake Industrial Park (Reception #2230829) Survey Markers being #5 rebar w/2" aluminum cap LS#18478

The bearing being N26°09'58"E

SURVEYOR'S CERTIFICATION

I, DAVID M. MORRIS, A REGISTERED PROFESSIONAL LAND SURVEYOR REGISTERED IN THE STATE OF COLORADO, HEREBY CERTIFY TO JGMS GOVERNMENT SERVICES LLC THAT A FIELD SURVEY OF THE PROPERTY DESCRIBED HEREON WAS CONDUCTED UNDER MY DIRECT SUPERVISION AND COMPLETED ON JUNE 2018, THAT THIS IMPROVEMENT SURVEY PLAT CORRECTLY SHOWS ALL BOUNDARIES, THE LOCATION OF ALL PINS AND MONUMENTS, THE LOCATION OF ALL STRUCTURES SITUATED ON THE SAID PROPERTY, APPARENT EASEMENTS AND THE SOURCE FROM WHICH THEY WERE OBTAINED, CONFLICTING BOUNDARY EVIDENCE, ANY FENCES, HEDGES OR WALLS ON OR WITHIN FIVE FEET OF BOTH SIDES OF ALL BOUNDARIES OF SAID PROPERTY, THE LOCATION OF ALL VISIBLE UTILITIES LOCATED ON SAID PROPERTY, ALL UNDERGROUND UTILITIES FOR WHICH THERE IS VISIBLE SURFACE EVIDENCE, AND THE AVAILABLE FROM THE COUNTY CLERK AND RECORDER OR FOR WHICH INFORMATION WAS MADE AVAILABLE.



LINE TABLE

LINE	BEARING	DISTANCE
L1	S84°34'25"E	54.07'
L2	N88°16'46"E	46.96'
L3	S82°45'43"W	122.39'
L4	N79°33'20"E	156.08'
L5	S74°04'34"W	185.14'
L6	N74°43'37"W	39.85'
L7	N14°56'38"E	9.59'
L8	S09°00'00"E	63.26'
L9	N09°00'00"E	58.03'
L10	N00°03'37"W	15.59'
L11	N89°56'23"E	47.76'
L12	N08°59'10"E	80.30'
L13	S16°56'13"W	34.35'

- LEGEND**
- ◆ FOUND MESA COUNTY SURVEY MARKER (A 3" Alloy Cap set in Concrete)
 - FOUND #5 REBAR 2" ALUMINUM CAP LS #18478
 - SET NO.5 REBAR W/CAP L.S. 30111

CURVE TABLE

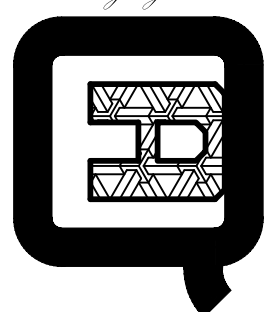
CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING	DELTA ANGLE
C1	225.00'	122.51'	121.00'	S89°40'28"W	31°11'47"
C2	75.00'	31.34'	31.11'	N02°58'19"E	23°56'24"
C3	75.00'	23.57'	23.47'	N00°00'00"W	18°00'13"
C4	75.00'	11.86'	11.85'	S04°28'12"W	9°03'44"
C5	50.00'	30.64'	30.16'	S54°25'51"E	35°06'27"

0 50 100 150
Per Colorado Statute number 38-51-106(l) all
Lineal Units used on this plat are U.S. Survey feet.

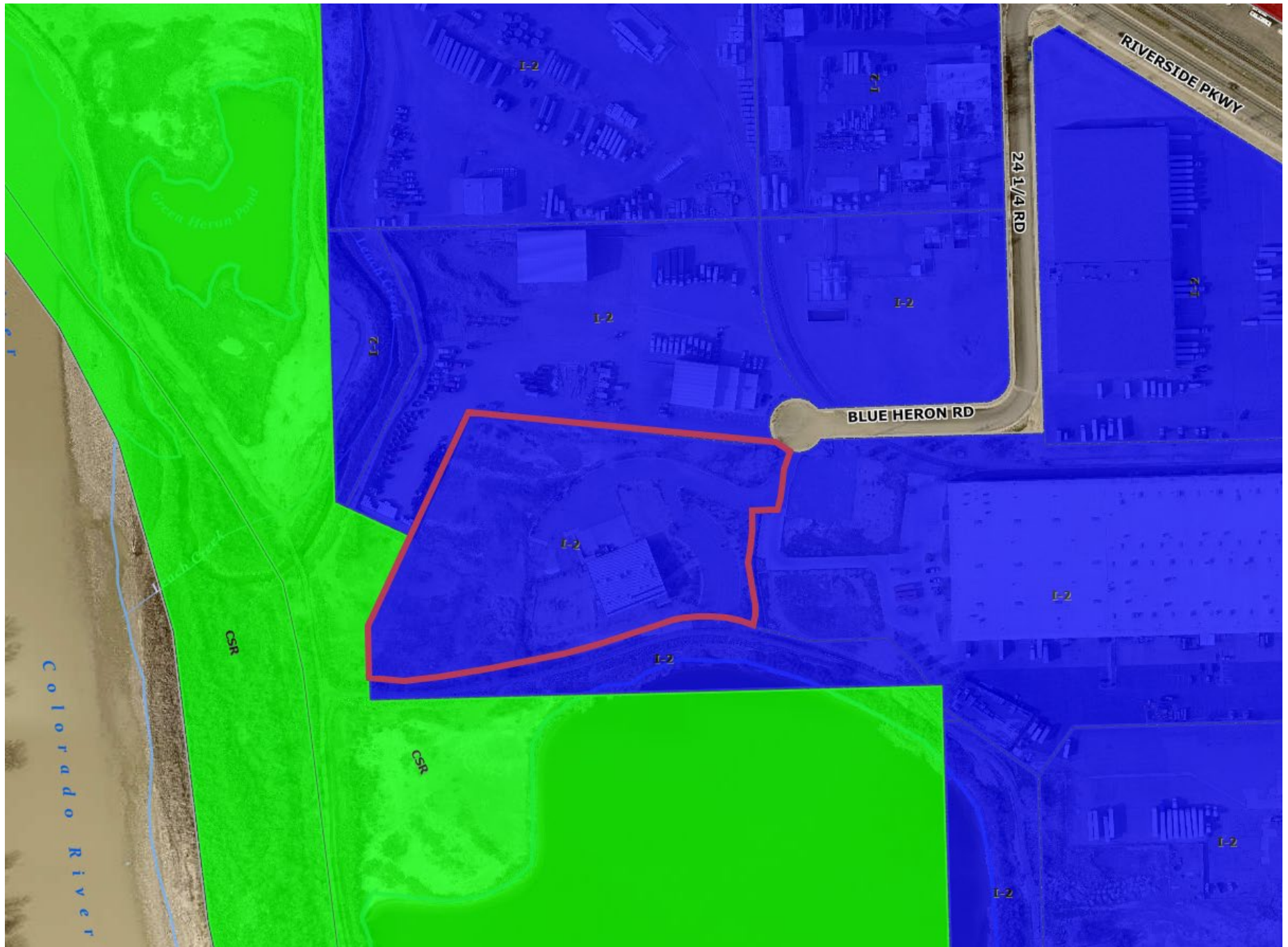
LAND SURVEY DEPOSITS
MESA COUNTY SURVEYORS OFFICE

DATE: _____

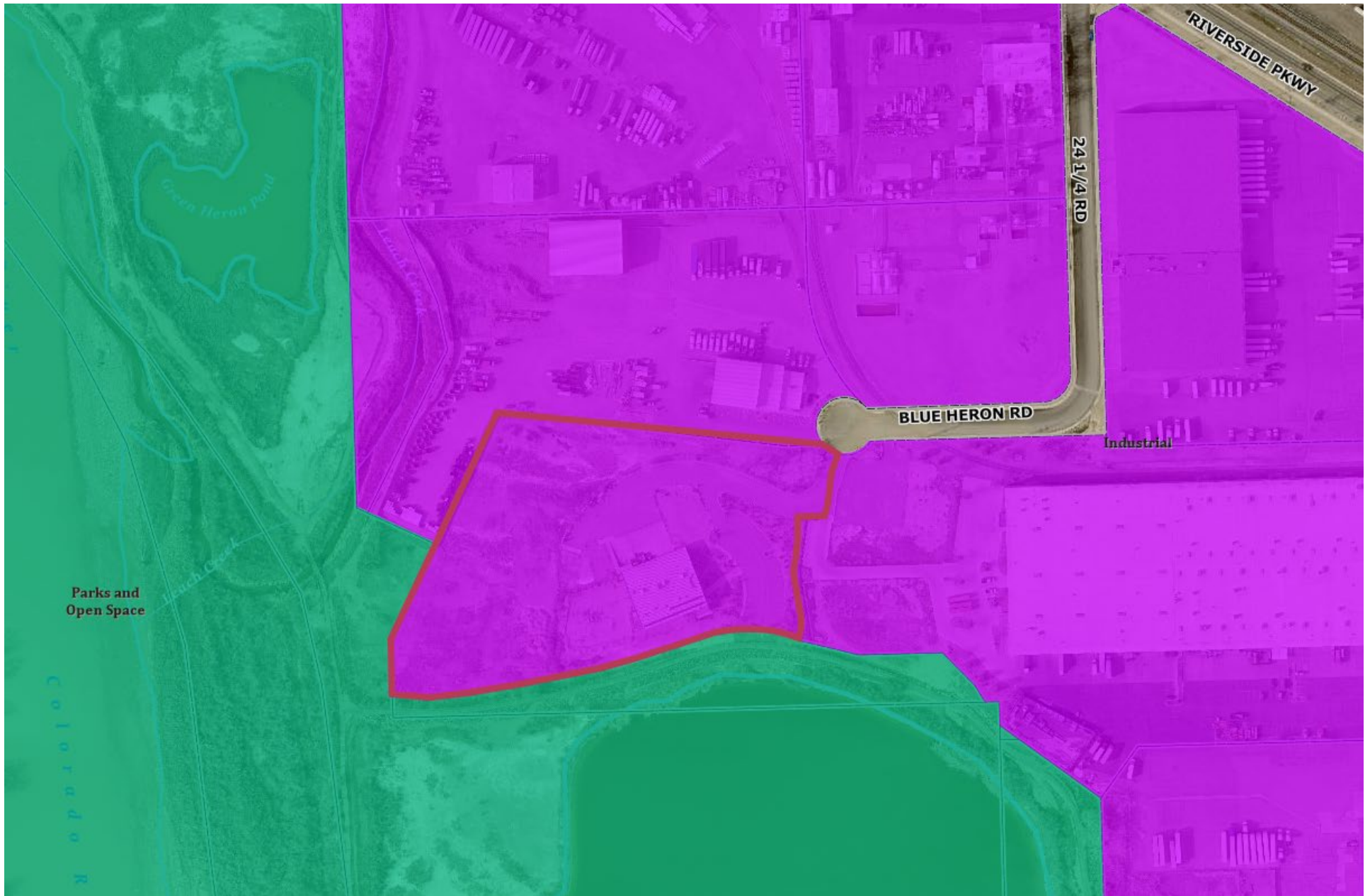
DEPOSIT NUMBER _____

IMPROVEMENT SURVEY		
2415 BLUE HERON ROAD, GRAND JUNCTION, CO 81505		
FOR: ICSL HOLDING, LLC	 Q.E.D. SURVEYING SYSTEMS, Inc. 2718 SIERRA VISTA RD Grand Junction, CO 81503-2232 (970) 241-2370 Fax: 241-7025	SURVEYED BY: MSM
ACAD ID: 2415 Blue Heron Rd		DRAWN BY: MEM
SCALE: 1" = 50'		CHECKED BY: DMM
DATE: 6/9/2022		SHEET NO.
		FILE: 2022-150

2415 Blue Heron Road Existing Zoning Map



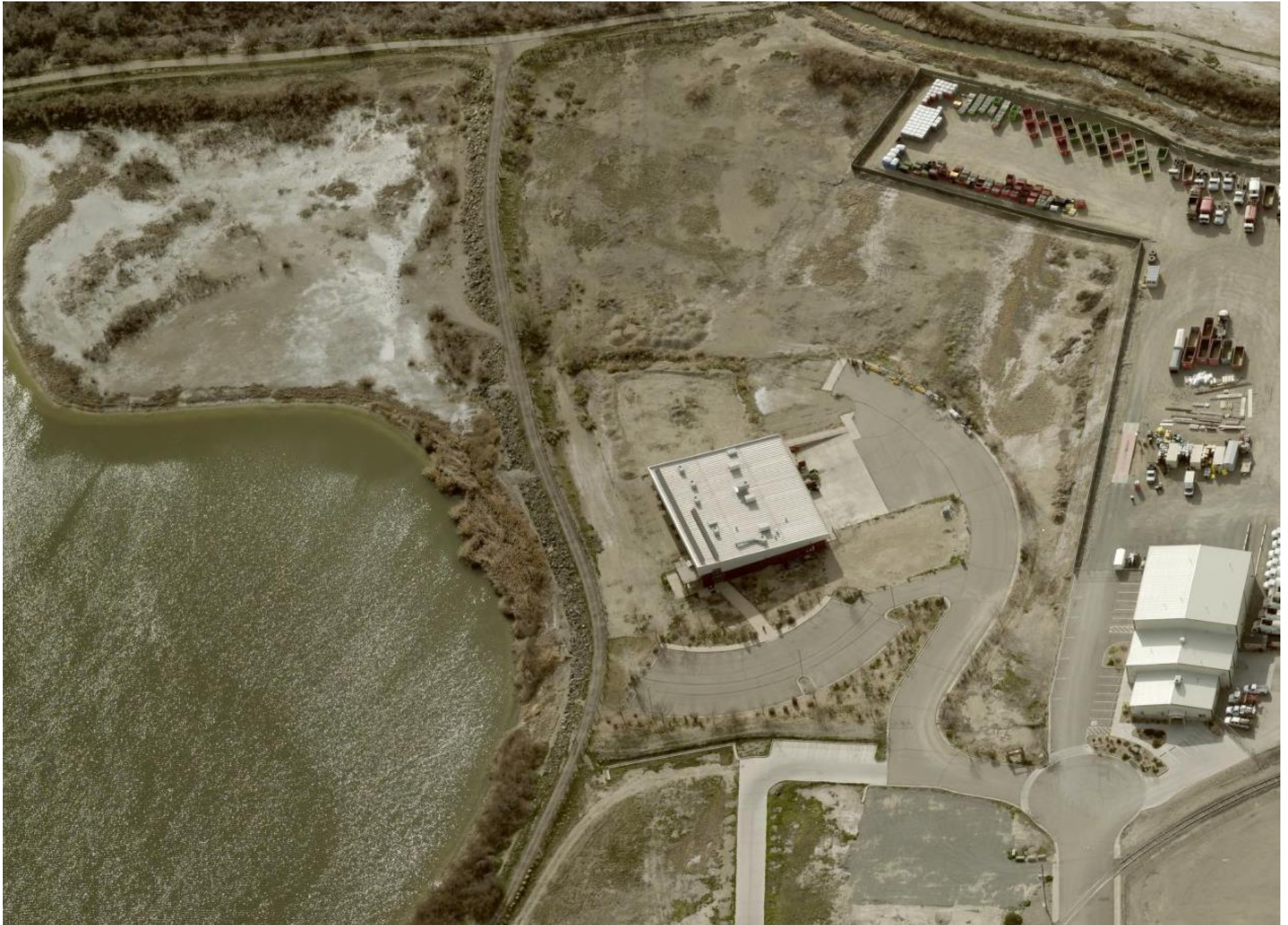
2415 Blue Heron Road Future Land Use Map



2415 Blue Heron Road Vicinity Map



2415 Blue Heron Road View from North at End of Blue Heron Road Cul-de-Sac



2415 Blue Heron Road Front of Existing Building



CITY OF GRAND JUNCTION, COLORADO

ORDINANCE NO. ____

**AN ORDINANCE REZONING LOT 1 OF BLUE HERON LAKE INDUSTRIAL PARK,
RECORDED AT RECEPTION NUMBER 2230829, A 6.15-ACRE PARCEL,
FROM I-2 (GENERAL INDUSTRIAL) TO I-1 (LIGHT INDUSTRIAL)
LOCATED AT 2415 BLUE HERON ROAD, GRAND JUNCTION, COLORADO**

Recitals:

JGMS Government Services, LLC (Owner) owns the 6.15-acre parcel located at 2415 Blue Heron Road (referred to herein and more fully described below as the "Property"). The Property is designated on the Comprehensive Plan Land Use Map as Industrial. The Owner requests that the property be rezoned from I-2 (General Industrial) to I-1 (Light Industrial).

After public notice and public hearing as required by the Grand Junction Zoning and Development Code, the Grand Junction Planning Commission recommended approval of zoning the Property to the I-1 (Light Industrial) zone district, finding that it conforms to and is consistent with the Comprehensive Plan Land Use designation of Industrial, the Comprehensive Plan's goals and policies, and is generally compatible with land uses located in the surrounding area.

After public notice and public hearing, the Grand Junction City Council finds that the I-1 (Light Industrial) zone district is in conformance with at least one of the stated criteria of §21.02.140 of the Grand Junction Zoning and Development Code.

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF GRAND JUNCTION THAT:

The Property, described as follows, shall be zoned I-1 (Light Industrial):

**LOT 1 BLUE HERON LAKE INDUSTRIAL PARK RECORDED AT RECEPTION
NUMBER 2230829, COUNTY OF MESA, STATE OF COLORADO.**

Introduced on first reading this ____ day of _____, 2022 and ordered published in pamphlet form.

Adopted on second reading this ____ day of _____, 2022 and ordered published in pamphlet form.

ATTEST:

Amy Phillips
City Clerk

Anna M. Stout
President of City Council