

Town of Green Mountain Falls Planning Commission Regular Meeting Agenda

Tuesday, November 8, 2022 @ 6:30 PM In-person Meeting @ 10615 Green Mountain Falls Rd Green Mountain Falls, CO 80819

OR JOIN ZOOM MEETING:

https://us02web.zoom.us/j/85096115671?pwd=dW9sbUtBcG1kTkV3ajFhRzBXU2tlZz09

Meeting ID: 850 9611 5671; Passcode: 651531; Dial-in: 346-248-7799

	ITEM	DESIRED OUTCOME
1.	CALL TO ORDER/ROLL CALL	
2.	AUDIO CHECK	
3.	ADDITIONS, DELETIONS, OR CORRECTION TO THE AGENDA	Action Recommended
4.	PUBLIC COMMENT	Public Comment
5.	APPROVAL OF MINUTES - October 25, 2022, Meeting Minutes	Action Recommended
	NEW BUSINESS	Action
6.	Application 20221026: Fence at 7155 Maple St.	Recommended
7.	Public Hearing – 10685 Hondo Ave – CSU Pump Station Variances	Public Comment
8.	Application 20220707 a – f: Colorado Springs Utilities Pump Station at 10685 Hondo Ave.	Action Recommended
	OLD BUSINESS	
	Land Use Code Rewrite: a. Commission Discussion/Review	
9.	b. Public Comment	Public Comment
10.	OTHER BUSINESS	
11.	Adjournment	

^{**}Register for public comment by 4:00 PM the day of the meeting: planner@gmfco.us

Planning Commissioners: Lamar Mathews, Chair; Lisa Bonwell, Vice-chair; Ann Esch; Mike Frey; Rocco Blasi





Planning Commission October 25, 2022 6:30 p.m. In-Person and Zoom Meeting

Commissioners Present: Chair Lamar Mathews, Vice-chair Lisa Bonwell, Ann Esch, Rocco Blasi, Mike Frey

Commissioners Absent:

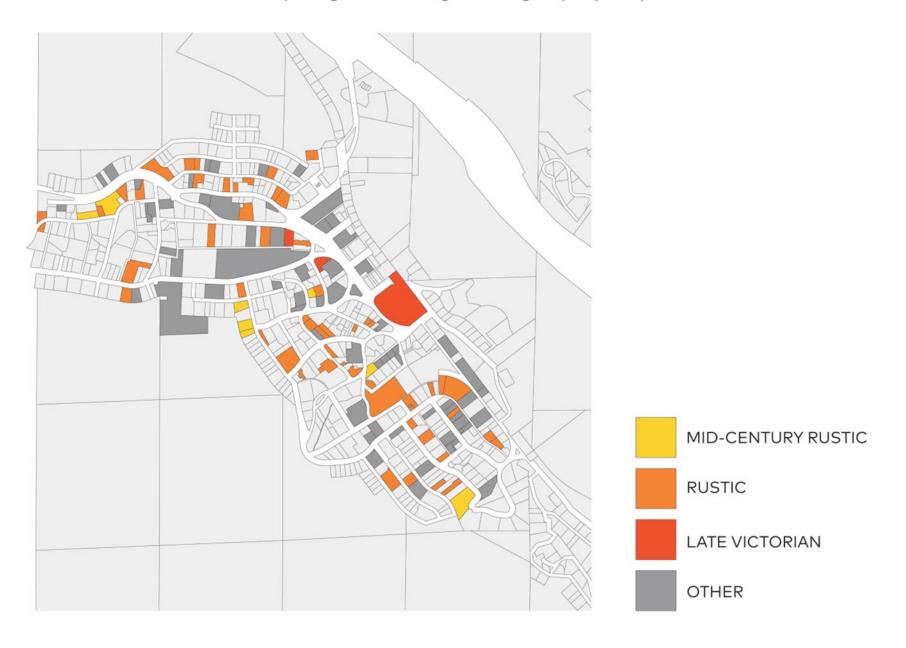
Board of Trustees Liaison: Mayor Todd Dixon

GMF Staff: Nate Scott (Town Clerk/Treasurer/Planner)

	Agenda Item	Motion/Discussion	M/S	LM	ΑE	LB	RB	MF
1.	CALL TO ORDER / Pledge of	Meeting called to order at 6:31						
	Allegiance/ROLL CALL	Ann Esch and Lisa Bonwell not in attendance yet.						
2.	AUDIO CHECK	Audio is good for Zoom participants.						
		Ann Esch arrives.	RB/MF	Α			А	А
		Motion to approve agenda with the correction of moving New Business ahead of Old Business.						
3.	ADDITIONS, DELETIONS, &							
	CORRECTIONS TO THE AGENDA	Lisa Bonwell arrives.						
		Ann Esch – expresses concern that she is not						
		receiving all the email messages being sent to the						
		rest of the commissioners.						
		Mayor Todd Dixon – Encourages the commission to						
4.	PUBLIC COMMENT	look at minor site plan section of the Land Use code.						
5.	APPROVAL OF MINUTES	·	RB/MF	Α	Α	Α	Α	Α
	- October 11, 2022 Meeting Minutes	Motion to approve minutes as submitted.						
	NEW BUSINESS							
6.	Presentation – GMF Historic Property	Mr. Stroope, along with guest Chelsea Rooney, gives						
	Survey – Jesse Stroope	a summary of the presentation (included as						

	attachment in minutes). General discussion about the definition of integrity, how this data can be used in the future. No formal action. Rocco Blasi presents reasons to not have paid town staff dedicated to planning. Suggests the commissioners do the "brunt of the work" in lieu of spending money towards planning staff. Discussion about past PC practices, when Town didn't have planning staff, including logistics of site visits, plan review. Discussion about staff's budget proposals for staffing and contract planning and how that might supplement staff/PC for more complicated applications. Motion to recommend to the Trustees to not hire a	RB/MF	A	A	A	A	A
7. Discussion for Recommendation –	town staff planner. Amended by Lisa Bonwell to include money to pay for a contract planner for						
Town staffing for Planning OLD BUSINESS	more complicated applications as needed.						
8. Land Use Code Rewrite							
	 a. Presentation of second draft, Land Use Code rewrite – Austin Flanagan Mr. Flanagan is not in attendance. The commission discussed Austin's latest draft comments. Discussion of the timeline and meeting expectations for public comment. b. Discussion – Project Updates Nate presented an update on project expenses. Discussion about upcoming meeting schedules. No formal action. 						
9. ADJOURNMENT	Meeting adjourned at 9:02 pm						

Very High and High Integrity by Style



2.3% of surveyed properties are Late Victorian of those,

15% have LOW Integrity 30% have MEDIUM Integrity 30% have HIGH Integrity 25% have VERY HIGH Integrity

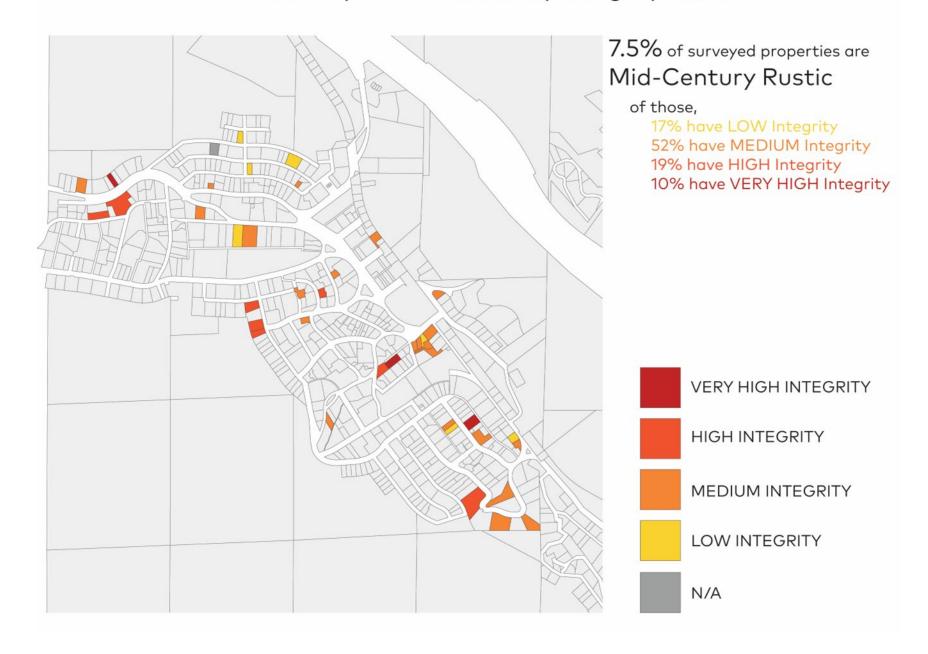
7.5% of surveyed properties are Mid-Century Rustic of those,

17% have LOW Integrity 52% have MEDIUM Integrity 19% have HIGH Integrity 10% have VERY HIGH Integrity

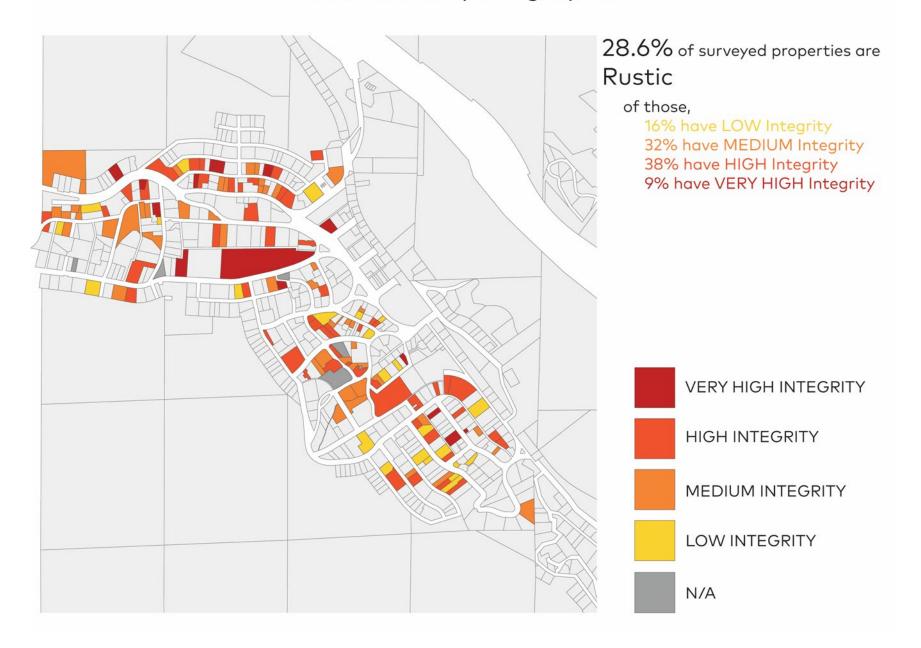
28.6% of surveyed properties are Rustic of those,

16% have LOW Integrity
32% have MEDIUM Integrity
38% have HIGH Integrity
9% have VERY HIGH Integrity

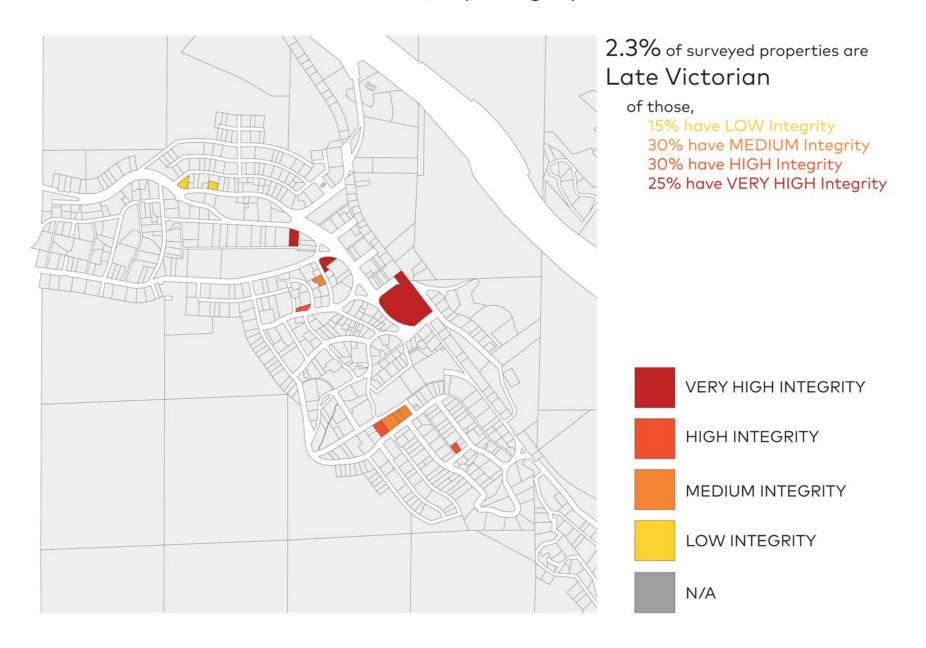
Mid-Century Rustic Parcels by Integrity Level



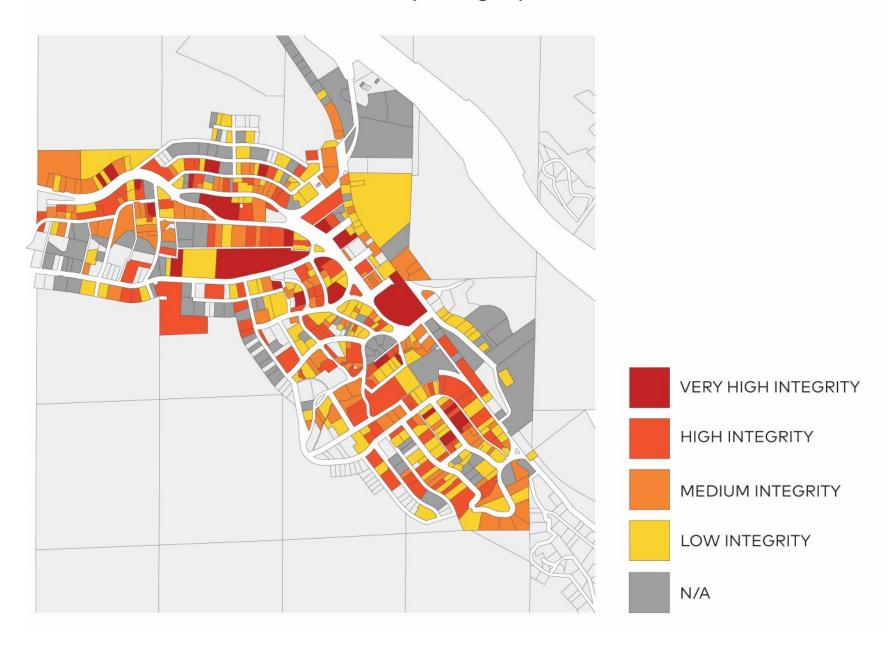
Rustic Parcels by Integrity Level



Late Victorian by Integrity Level



Parcel by Integrity Level





10516 Green Mountain Falls Road PO Box 524 Green Mountain Falls, CO 80819 www.gmfco.us

To: Planning Commission

From: Nate Scott, Town Clerk/Treasurer/Planner

Date: November 1, 2022

Re: 20221026 – Fence application for 7155 Maple St.

Background

The applicant and owner Christie Bellows is requesting the Planning Commission's consideration for an application for new fence construction. The application was received and paid for on October 26. The application does not need to be considered by Pikes Peak Regional Building Dept, as the fence will be less than 7 feet tall.

Planning Commission Recommended Actions:

• Review application for compliance with Green Mountain Falls Zoning and Land Use Code.

Project Summary

Per the applicant: I am requesting a permit to replace 86 feet of old fence along my driveway with a 6-foot-high solid privacy fence placed along the property line, as indicated on the Fence Line Exhibit drawing included in my packet. The placement of the fence will add width to the driveway and make it easier to turn the corner to access the garage, which sits at an angle on the property. The fence style will provide privacy between my property and the adjoining property. All properties are zoned R-1.

Materials:

- All wood will be cedar
- 4x4 posts set in concrete
- 2x4 support rails
- 6-inch pickets
- 2x6 top cap
- The fence will be stained and sealed either natural or brown

Per Town code, fences do not require a setback. The applicant has performed due diligence with survey work and documentation, and the plan is to change the fence line slightly so that it conforms to the property line. Since the applicant's address is Maple St., the location of this fence is to be considered the side yard, which has a maximum height of 6 feet.

Discussion

Article V (Fences), Sec. 16-504. Construction standards and maintenance.

- (a) Setback. Setbacks are not required for fences.
- (b) Height.
 - (1) Front yard. Any solid or lattice fence shall have a maximum height of forty-eight (48) inches. Any open fence shall have a maximum height of seventy-two (72) inches, with the exception of barbed wire fences in commercial and industrial areas.
 - (2) Side or back yard. Maximum height of any fence shall be seventy-two (72) inches, with the exception of barbed wire fences in commercial and industrial areas.

- (c) Materials.
 - (1) Fencing materials may include masonry, wood or metal. Corrugated metal is specifically prohibited.
 - (2) Natural fencing may include hedge rows, rock, adobe or tree lines.
- (d) Vision at corners. On corner lots, no fence, retaining wall, shrub, tree or similar obstruction shall be erected or maintained which obstructs the traffic vision.
- (e) Maintenance. All fences shall be properly maintained at all times to the satisfaction of the Board of Trustees. The Board of Trustees has the authority to order the painting, repair, rebuilding or removal of a fence and accompanying landscaping which constitutes a hazard to safety, health or welfare by reason of inadequate maintenance, construction or dilapidation. Notification shall be by certified mail. If, within thirty (30) days, the maintenance orders are not complied with, the Board of Trustees may order the fence removed at the owner's expense under the provisions of Subparagraph 16-708(n)(5)b. These maintenance standards refer to all fences, new as well as those in existence at the time of enactment of the ordinance codified in this Article. (Ord. 97-01)

Sec. 16-712. - Development plan requirements (w/ notes specific to this project).

- (1) The location, height, and dimensions of each existing and proposed structure in the development area and the uses to be contained therein. (see site plan)
- (2) The proper building setbacks and building area with reference to property lines, highways, or street rights-of-way; (in site plan)
- (3) The location and surfaces of all parking areas and the exact number of parking spaces; N/A
- (4) The location of watercourses and other natural historic features; N/A
- (5) The location of all pedestrian walks, malls, recreation, and other open spaces; N/A
- (6) The location, number, height, and square footage of freestanding identification signs; N/A
- (7) The location, height, size, and orientation of any required light standards; N/A
- (8) The location of all permanent accesses from publicly dedicated streets, roads, or highways; (see site plan)
- (9) The location, overlain on contours for the area, of all roadways, walkways, bridges, culverts, drainage easements, existing or contemplated, and green belts; N/A
- (10) The location of all footpaths, traffic islands, traffic devices and driveways, indicating the pedestrian and vehicular movement and control; N/A
- (11) The stages, if appropriate, in which the project will be developed; N/A and
- (12) A vicinity map to locate the development in relation to the community. (see attached site overview map) (Ord. 97-01)

Conclusion and Recommendation

Staff recommends approval of this project.

Recommended motion:

I move to approve permit 20221026, for a fence at 7155 Maple St, as submitted.



Town of Green Mountain Falls Land Use Approval Application Fence Permit

General Information

- This checklist serves as a guideline for submitting a request for Planning Commission review of a Fence Permit, per Section 16-707 GMF Zoning Code.
- Applicants are responsible for reviewing and understanding the Code.

Complete applications are subject to staff review till	me of two weeks (14 days) .			
Applicant				
Applicant: Christie Bellows				
Address:PO Box 547 GMF, CO 80819				
E-Mail:cbellows@q.com				
Phone: 719 684-9101				
_{Owner:} same as above				
Address:				
E-mail:				
Phone:				
Property Physical Property Address: 7155 Maple Street				
Type of Project: Fence	Zoning/Lot Size: R1/9600 Square Feet			
Hillside Overlay zone? Yes □ No ■	Land Survey/ILC Included: Yes ■ No □			
Certification & Signature APPLICANT'S STATEMENT: I understand the procedures and				
request and acknowledge an incomplete application will not be sched payment of fees, and submittal of accompanying materials does not technical and professional consulting expenses that may be incurred of invoiced expenses constitutes an incomplete application.	uled for public hearing. GMF Staff's acceptance of the application, constitute completeness. I further agree to reimburse the city for			
Certification: The undersigned applicant certifies under oath and under true and accurate to the best of their knowledge.	r penalties of perjury that the information found in the application is			
By checking this box, I agree to the certification statement and am typing my full name as an electronic signature.				
Applicant Signature Christill Bellow Date 10 - 21 - 22				
Owner Signature Christil Bellious Date 10-21-22				
Owner Signature	Date			
This document can be signed electronically using Adobe Reader DC for free.				

\$ 100 fee paid on 10/26/22; check # 5575

Christie Bellows 7155 Maple Street Green Mountain Falls, CO 80819

October 21, 2022

Planning Commission
Town of Green Mountain Falls

I am requesting a permit to replace 86 feet of old fence along my driveway with a 6 foot high solid privacy fence placed along the property line, as indicated on the Fence Line Exhibit drawing included in my packet. The placement of the fence will add width to the driveway and make it easier to turn the corner to access the garage, which sits at an angle on the property. The fence style will provide privacy between my property and the adjoining property. All properties are zoned R-1.

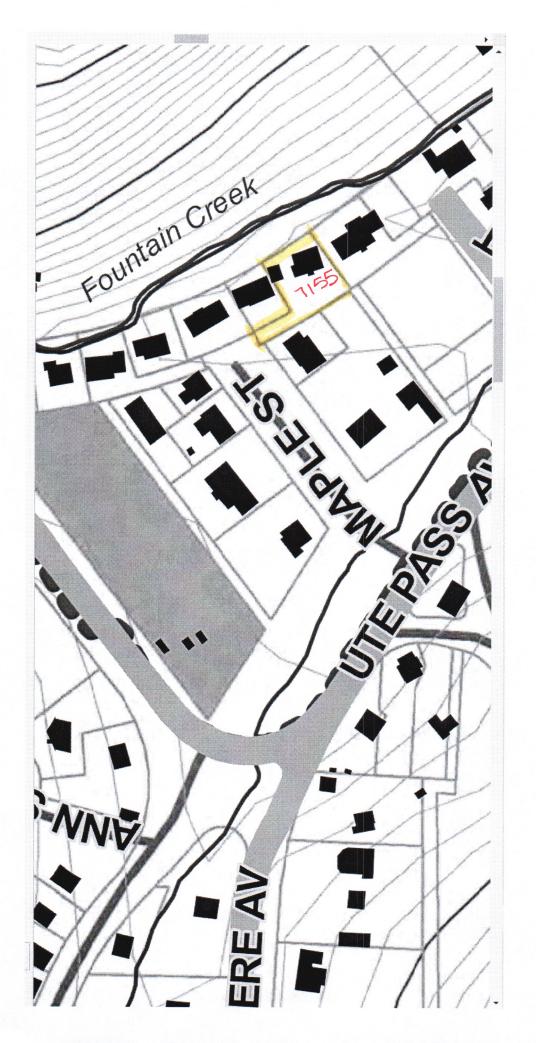
Materials for fence:

All wood will be cedar
4x4 posts set in concrete
2x4 support rails
6 inch pickets
2x6 top cap

The fence will be stained and sealed either natural or brown

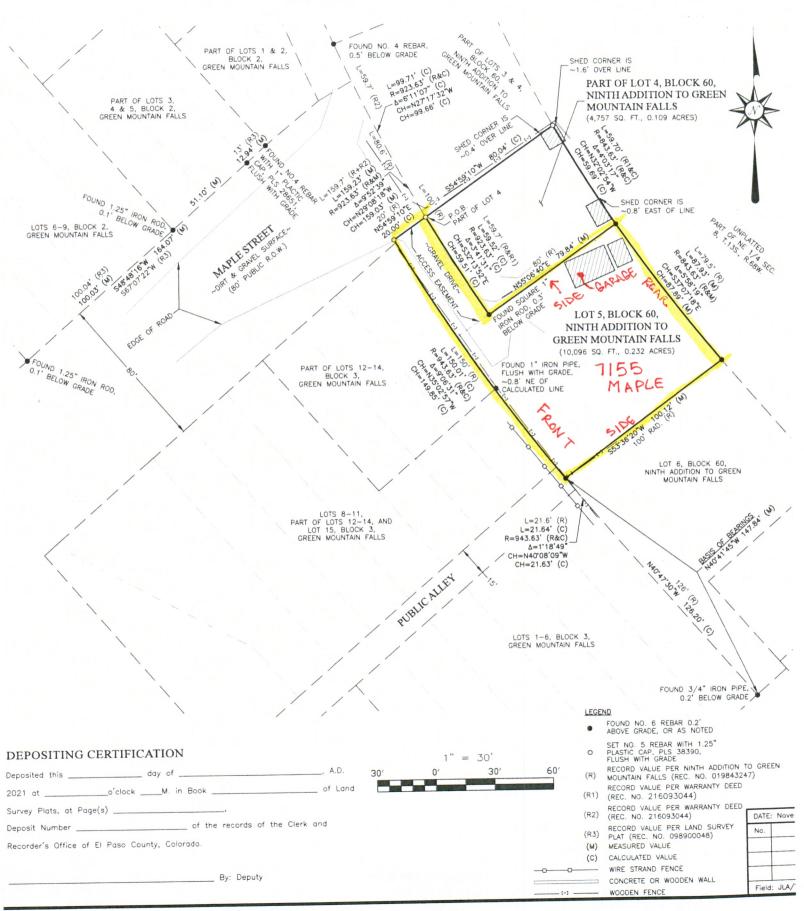
Thank you for your consideration,

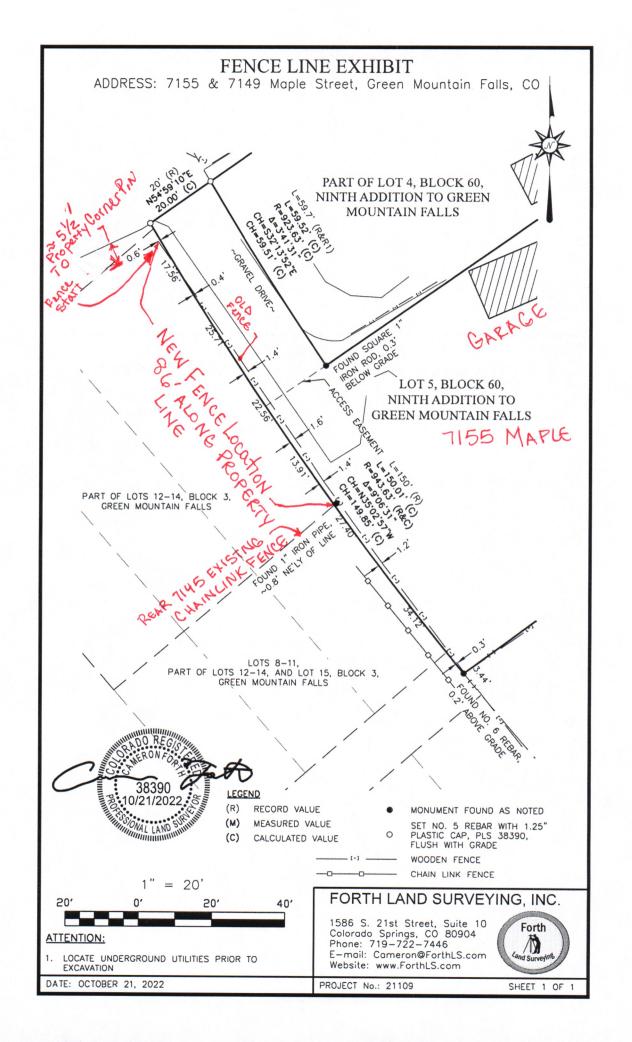
Christie Bellows

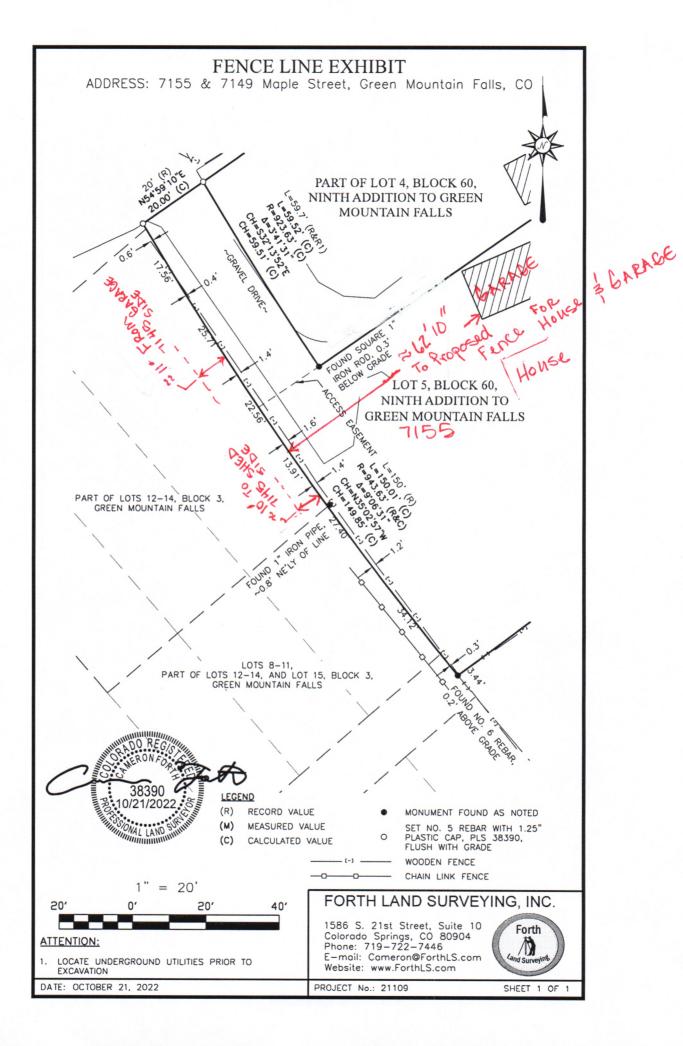


LAND SURVEY PLAT

A PORTION OF THE NORTHEAST QUARTER OF SECTION TOWNSHIP 13 SOUTH, RANGE 68 WEST OF THE 6 CITY OF GREEN MOUNTAIN FALLS, COUNTY OF EL PASC









10516 Green Mountain Falls Road PO Box 524 Green Mountain Falls, CO 80819 www.gmfco.us

To: Planning Commission

From: Nate Scott, Town Clerk/Treasurer/Planner

Date: November 1, 2022

Re: 20220707 – New pump station at 10685 Hondo Ave with the following applications:

20220707a: Variance for Sec. 16-306 (R-1 10,000 Single-Family Residential District) (b), permitted principal uses. This use will not be for a residential purpose, though could be considered a "public building" as it will be owned by a public utility and will serve the residents of Green Mountain Falls.

20220707b: Variance for Sec. 16-306 (R-1 10,000 Single-Family Residential District) (d) (4) a., 15-foot front setback. Due to the significant disruption to the hillside which would be necessary in order to move the structure further back, the design has a front setback of 12 feet from the street-facing (front) property line.

20220707c: Variance for Sec. 16-714 (Hillside Overlay Zone Requirements) c. (3) c., which states no building shall be closer than 25 feet from a major drainage way. This pump station will be approximately 15 feet from the drainage way in the right-of-way to the north of the structure.

20220707d: Variance for Sec. 16-714 (Hillside Overlay Zone Requirements) c. (3) b., which states no building shall be closer than 100 feet from a building on an adjoining lot. This pump station will be approximately 60 feet from the residence at 6985 Colorado St. and approximately 97 feet from the residence at 10675 Hondo Ave.

20220707e: Grading and Erosion Control Application

20220707f: Architectural and Zoning Review

Background

The applicant Dewberry Engineers, along with developer Colorado Springs Utilities (CSU) is requesting the Planning Commission's consideration for an application for a new pump station build along with the variances described above. The initial applications were received in June 2022 and paid for on August 23. The parties are also working through the process with all necessary permits through Pikes Peak Regional Building Department. Public notice for the variances was published in the Pikes Peak Courier and Town website on October 26, 2022 and posted at the project site and Town Hall on October 28, 2022. The applicant understands that all contractors must acquire a Town Business License.

Planning Commission Recommended Actions:

- Review proposed variances for compliance with Green Mountain Falls Zoning and Land Use Code.
- Review proposed Architectural and Zoning Application for compliance with Green Mountain Falls Zoning and Land Use Code.
- Review proposed Grading and Erosion Control Plan for compliance with Green Mountain Falls Zoning and Land Use Code.

Project Summary

The purpose of this Green Mountain Falls Pump Station project is to replace the existing below-grade pump station, which was constructed in 1986 and has reached the end of its useful life. The new pump station will be located at 10685 Hondo Ave. and will ensure reliable water service for residents and businesses in Green Mountain Falls. It will also provide a safer and more readily accessible working space for CSU, enabling more efficient maintenance and repair activities. CSU is currently finalizing an easement agreement with the property owner to allow the pump station to be built on the site.

Please refer to the included Land Suitability Analysis and other included documentation for more details.

Discussion

1 - Architectural and Zoning Application:

The electronic file maintained by Town Hall, *Official Town Zoning Map 2019*, shows the Zone District as R-1 for parcel 8308405014, and the lot area as 12,778 sq. feet. Therefor the setback requirements are:

- a. Front, fifteen (15) feet;
- b. Side, ten (10) feet;
- c. Rear, ten (10) feet.

Furthermore, the development conditions of minimum lot area (10,000 square feet) and minimum frontage (100 feet at the front setback line) are both met.

2 – Granting of Variances:

Sec. 16-709. Variances. (Staff comments in bold.)

- (a) No variance in the strict application of the provisions of this Land Use Code, including building requirements, signs, and fences, shall be recommended by the Planning Commission or approved by the Board of Trustees unless it finds that the following requirements and standards are satisfied. It is the intent of this Article that the variance be used only to overcome some exceptional physical condition of a parcel of land located within the neighborhood which poses practical difficulty to its development and prevents its owner from using the property as intended by this Land Use Code. Any variation granted shall be the minimum adjustment necessary for the reasonable use of the land.
- (b) The applicant must prove that the variance will not be contrary to the public interest and that practical difficulty and unnecessary hardship will result if it is not granted. In particular, the applicant shall establish and substantiate that the appeal for the variance conforms to the requirements and standards listed below:
 - (1) The granting of the variance shall be in harmony with the general purpose and intent of the regulations imposed by this Land Use Code on the district in which it is located and shall not be injurious to the neighborhood or otherwise detrimental to the public. This project is beneficial to public health, public safety, property value, and neighborhood aesthetics.
 - (2) The granting of the variance will not permit the establishment of any use which is not permitted in the district. The definition of the zoning district indicates that a "public building" could be considered as a special use. This application is for a use which will benefit and be "owned" essentially by the public as a utility.
 - (3) There must be proof of unique circumstances. There must exist special circumstances or conditions, fully described in the findings, applicable to the land or buildings for which the variance is sought, which circumstances or conditions are peculiar to such land or buildings in the neighborhood and which circumstances, or conditions are such that the strict application of the provisions of this Land Use Code would deprive the applicant of the reasonable use of such land or building. The unique circumstance in this case is that there is a very limited number of sites which would meet this utility's need.
 - (4) There must be proof of unnecessary hardship. It is not sufficient proof of hardship to show that greater profit would result if the variance were granted. Furthermore, the hardship complained of cannot be self-created; nor can it be established on this basis by one who purchases with or without knowledge of the restrictions; it must be suffered directly by the property in question; and evidence of variances granted

under similar circumstances shall not be considered. The unique circumstance listed above dictates a limited area to build, creating a hardship for this project.

- (5) The granting of the variance is necessary for the reasonable use of the land or building and the variance as granted by the Board of Trustees is the minimum variance that will accomplish this purpose. The report of the Planning Commission shall fully set forth the circumstances by which this Land Use Code would deprive the applicant of any reasonable use of his or her land. Mere reasonable loss in value shall not justify a variation; there must be a deprivation of beneficial use of land. This proposed use is reasonable for the R-1 zoning district based on precedent. The existing pump station, which this will replace, also has existed in an R-1 district.
- (6) The proposed variance will not impair an adequate supply of light and air to adjacent property, substantially increase the congestion in the public streets, increase the danger of fire, endanger the public safety, or substantially diminish or impair property values within the adjacent neighborhood. **Staff believes this requirement is met.**
- (7) The granting of the variance requested will not confer on the applicant any special privilege that is denied by this Land Use Code to other lands, structures, or buildings in the same district. One question staff had was regarding noise levels. Per Dewberry: The generator noise level will be 75 decibels or less at 23 feet. The generator is tested once a month for 15 minutes, typically this is scheduled for a day in the middle of the week and begins at 10 am. The pump station noise level will be less than 60 decibels. For normal operations the pump station will run intermittently and is not expected to run for more than 4 hours total a day. There is also a condensing unit that sits in the generator enclosure and will run intermittently during the warmer months (same decibels as the pump station noise level).

Based on this response from Dewberry, staff has no concerns with the noise, as the generator noise is minimal (once a month, during the day) and the "less than 60 decibels" meets the commercial limit of noise during the day. At night, it may exceed commercial limits by 5 decibels only. (Ref. article XII – Noise)

- (c) The Board of Trustees may prescribe any safeguard that it deems necessary to substantially secure the objectives of the regulations or provisions to which the variance applies.
- (d) Upon application, the Planning Commission, after giving notice as required by law, shall schedule a public hearing of the proposed variance. The Planning Commission shall consider and decide all proposed variations, taking into account the standards enumerated above.
- (e) Procedure. Procedures for variance hearings shall be the same as those for zoning and rezoning, with the exception of the publication requirement contained in Paragraph 16-711(f)(2) below, which shall not be required. (Ord. 97-01)

Regarding the variance to the 15-foot front setback, the applicant has designed the site with the maximum possible setback for feasibility. Additionally, there is additional buffer to the street because of the drainage ditch between the property line and street.

3 – Granting of Hillside Overlay Exemptions:

Considering the limited site options in town, staff believes that Colorado Springs Utilities and Dewberry have done due diligence in order to minimize the scope of variances and exemptions needed for this development. The "distance to other buildings" exemption is only three feet short of meeting the 100-foot requirement. The only other building within the 100-foot requirement is the cabin used by the owners who are granting the easement for the project. The "distance to drainage" requirement is exemption is for about 10 feet, and the developer will be improving drainage from the site with a culvert which has larger capacity via length and diameter specifications than what exists now.

4 - Conclusion and Recommendation

Staff recommends approval of all applications.



Dewberry Engineers Inc. 990 South Broadway, Suite 400 Denver, CO 80209-4275

303.825.1802 303.825.2322 fax www.dewberry.com

October 12, 2022

Town of Green Mountain Falls Attn: Nate Scott, Planner Town Hall 10615 Green Mountain Falls Road Green Mountain Falls, CO 80819

RE: Land Suitability Analysis

Dear Mr. Scott,

Dewberry Engineers is pleased to submit a Land Suitability Analysis and documentation for the Green Mountain Falls Pump Station (GMFPS) on behalf of Colorado Springs Utilities for review and comment. A Development Plan and Grading and Erosion Control Plan have been submitted with the Architectural and Zoning Review and Grading and Erosion Control Submittals respectively.

The purpose of the GMFPS project is to replace the existing below grade pump station. The existing pump station was constructed in 1986 and has reached the end of its useful life. The new pump station will be located at 10685 Hondo Avenue and will ensure reliable water service for residents and businesses in Green Mountain Falls. It will also provide a safer and more readily accessible working space for Colorado Springs Utilities enabling more efficient maintenance and repair activities. Colorado Springs Utilities is currently negotiating the terms of an easement with the property owner to allow the pump station to be built on the site.

The majority of 10685 Hondo Avenue slopes from south to north at approximately 45%. The site flattens out at the bottom of this hill and slopes at approximately 10% from west to east as shown on the Composite Map in Attachment A. There is an existing retaining wall on the east side of the site which allows the area at the bottom of the hill to be relatively less steep.

The ecosystem at the site is defined as mixed conifer by the Colorado Forest Service. The surrounding area is residential and relatively densely developed. The addition of the proposed building is expected to have minimal impact to wildlife habitat and migration corridors due to the high level of development already in the area.

The proposed building exterior will be construction of concrete, stone veneer, metal siding, and a standing seam metal roof. The building is not expected to increase wildfire potential in the area. An emergency diesel generator will sit in the enclosure adjacent to the pump station building. The diesel fuel tank will be a double containment tank and is not expected to increase wildfire risk in the area.

A geotechnical investigation and soils analysis were completed for the site. The results and recommendations are provided in Attachment B.

There is an existing drainageway on the north portion of the site and a retaining wall on the east side of the site. The site is otherwise undeveloped.

The proposed new pump station will be an above grade building that sits back into the hillside on the property. The building walls are designed to support the hillside on its south, east, and west sides. Two concrete retaining walls will be construction on the east side of the site to replace the existing retaining wall that has partially failed and allow for grading of a parking area to the north of the building. The existing culvert will be replaced with a new, longer culvert to allow the parking are to be expanded. A concrete headwall will be used at the west end of the culver to support the drainage channel. The

retaining walls will act at the headwalls on the east end. The concrete will be colored to blend with the building aesthetics. Drawing C-3 shows the items discussed above as well as proposed grading.

Excavation for the building will be accomplished using shoring and bracing to limit the extent of the excavation and its impacts on the surrounding area and to mitigate any concerns with the slope shifting during construction. The shoring and bracing system will be designed and stamped by a professional engineer registered in the State of Colorado. The shoring and bracing calculations will be provided during the construction phase of the project.

While the site presents difficulties for design and construction of the new pump station, the site and structure as designed should not create issues for the Green Mountain Falls community during construction or for the life of the building.

Please contact Sam Franzen at sfranzen@dewberry.com or 303-951-0618 with any questions or concerns.

Sincerely,

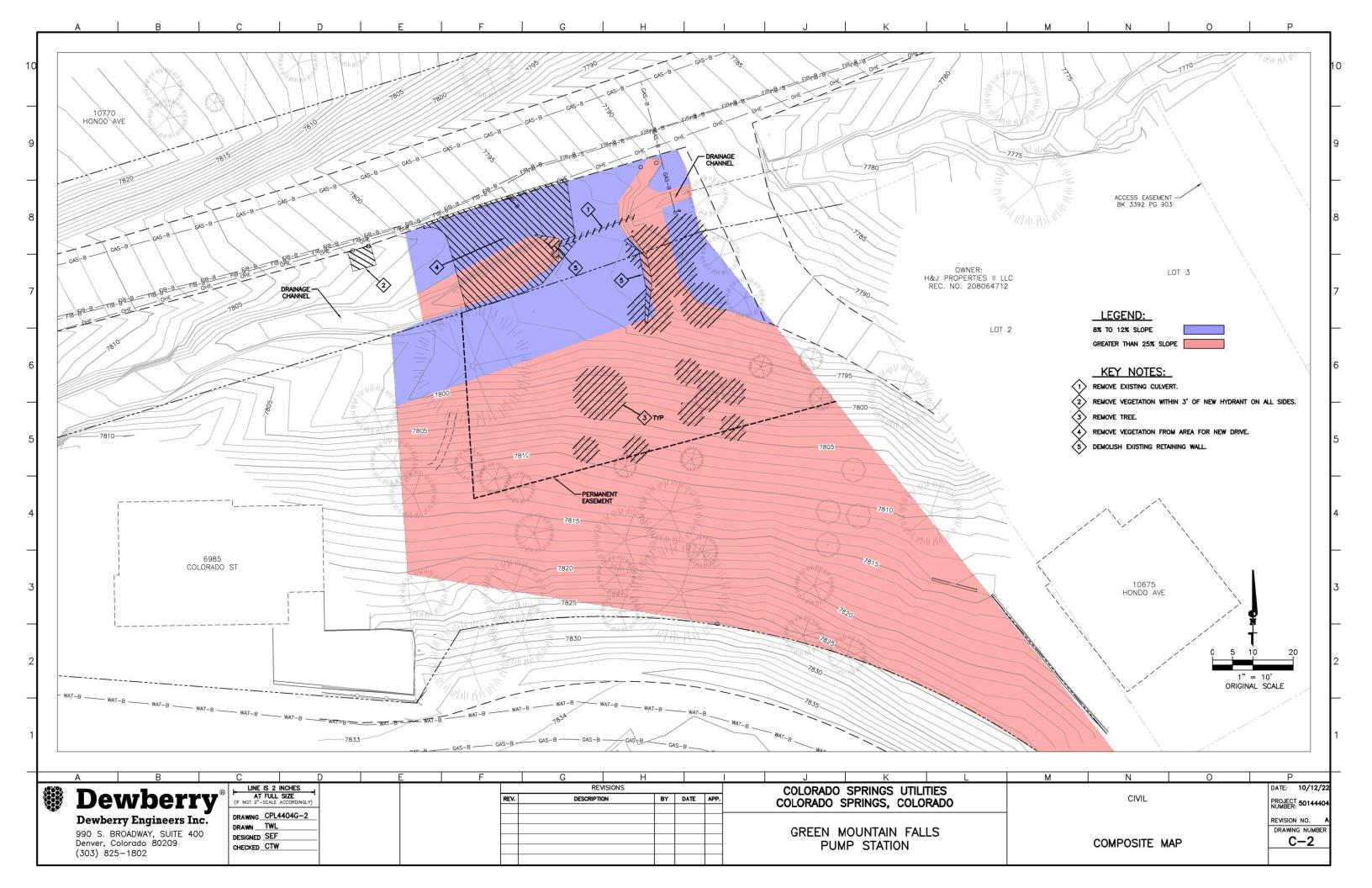
Sam Franzen

Project Engineer

San Zym



Attachment A – Composite Plan



Attachment B – Geotechnical Investigation Report



Green Mountain Falls Pump Station Green Mountain Falls, Colorado

April 20, 2022 Terracon Project No. 23215048A

Prepared for:

Dewberry Engineers, Inc Denver, Colorado

Prepared by:

Terracon Consultants, Inc. Colorado Springs, Colorado

Environmental Facilities Geotechnical Materials

April 20, 2022

Dewberry Engineers, Inc 990 South Broadway, Suite 400 Denver, Colorado 80209



Attn:

Mr. Chad Weaver

P: (303) 951-4275

E: cweaver@dewberry.com

Re:

Geotechnical Engineering Report Green Mountain Falls Pump Station Green Mountain Falls, Colorado Terracon Project No. 23215048A

Dear Mr. Weaver:

We have completed the Geotechnical Engineering services for the project referenced above. This study was performed in general accordance with Terracon Proposal No. P23215048 dated June 4, 2021. This report presents the findings of the subsurface exploration and provides geotechnical recommendations concerning earthwork and the design and construction of foundations, floor slabs, and pavements for the proposed project.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning this report or if we may be of further service, please contact us.

Sincerely,

Terracon Consultants, Inc.

Nick M. Novotny, P.G., C.E.G.

Project Geologist

Eric D. Bernhardt, P.

Senior Associate

Terracon Consultants, Inc. 4172 Center Park Drive Colorado Springs, Colorado 80916 P (719) 597 2116 F (719) 597 2117 terracon.com

REPORT TOPICS

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PROJECT DESCRIPTION	
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Laboratory Testing	4
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Fill Material Types	
Fill Compaction Requirements	
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Foundation Construction Considerations	
UTILITY RECOMMENDATIONS	
Utility Design Recommendations	
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Note: This report was originally delivered in a web-based format. **Orange Bold** text in the report indicates a referenced section heading. The PDF version also includes hyperlinks which direct the reader to that section and clicking on the **GeoReport** logo will bring you back to this page. For more interactive features, please view your project online at <u>client.terracon.com</u>.

Green Mountain Falls Pump Station ■ Green Mountain Falls, Colorado April 20, 2022 ■ Terracon Project No. 23215048A



FIGURES

GEOMODEL

ATTACHMENTS

EXPLORATION AND TESTING PROCEDURES PHOTOGRAPHY LOG SITE LOCATION AND EXPLORATION PLANS EXPLORATION RESULTS SUPPORTING INFORMATION

Note: Refer to each individual Attachment for a listing of contents.

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REPORT SUMMARY

Topic ¹	Overview Statement ²
Project Description	We understand the project consists of the construction of a new pump station structure and associated waterline.
Geotechnical Characterization	The subsurface conditions at the site generally consisted of existing fill materials consisting of sand with varying amounts of clay and gravel to depths of about 1.5 to 3.5 feet underlain by native sand soils with varying amounts of clay, silt, and gravel to depths of about 6 to 9 feet. Native sand soils were not encountered in Boring No. B-3. Sand soils were underlain by weathered granitic rock to the maximum depth explored of 23.5 feet.
	During our field exploration, auger refusal was encountered in Boring Nos. B-1 and B-2 at depths of about 22 to 23.5 feet.
	Groundwater was not encountered during our field exploration to the maximum depth explored of about 23.5 feet.
Shallow Foundations	The proposed pump station building may be supported on a shallow spread footing foundation bottomed on native sand soils, weathered granitic rock, or new engineered fill.
Retaining Walls	We understand the southern portion of the pump station will be constructed into the existing hill slope and is planned to have a below-grade retaining wall on the order of 12 to 16 feet in depth.
General Comments	This section contains important information about the limitations of this geotechnical engineering report.

- 1. If the reader is reviewing this report as a pdf, the topics above can be used to access the appropriate section of the report by simply clicking on the topic itself.
- 2. This summary is for convenience only. It should be used in conjunction with the entire report for design purposes.

Green Mountain Falls Pump Station Green Mountain Falls, Colorado

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INTRODUCTION

This report presents the results of our subsurface exploration and geotechnical engineering services performed for the proposed above grade pump station to be located in Green Mountain Falls, Colorado. The purpose of these services is to provide information and geotechnical engineering recommendations relative to:

- Subsurface soil and rock conditions
- Groundwater conditions
- Site preparation and earthwork
- Excavation considerations

- Slab-on-grade design and construction
- Seismic site classification per IBC
- Utility trench construction
- Foundation design and construction

The geotechnical engineering Scope of Services for this project included the advancement of three test borings to depths ranging from approximately 15 to 23½ feet below existing site grades. During our field exploration, auger refusal was encountered in Boring Nos. B-1 and B-2 at depths of 22 to 23.5 feet.

Maps showing the site and boring locations are shown in the **Site Location** and **Exploration Plan** sections, respectively. The results of the laboratory testing performed on soil and rock samples obtained from the site during the field exploration are included on the boring logs and as separate graphs in the **Exploration Results** section.

SITE CONDITIONS

The following description of site conditions is derived from our site visit in association with the field exploration and our review of publicly available geologic and topographic maps.

Item	Description		
Parcel Information	The site is located at 10472 Mountain Avenue in Green Mountain Falls, Colorado.		
Parcei illorillation	Approximate Location: 38.9303° N 105.0140° W See Site Location		

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Item	Description
Existing Improvements	The area of the proposed pump station currently consists of vacant land adjacent to an existing hill slope. An aggregate-surfaced road is located adjacent to the proposed pump station location.
Current Ground Cover	The current ground surface at the proposed pump station location consists of barren ground, moderately vegetated with native grasses and weeds. The current ground surface in the area of the proposed water line consists of an aggregate-surfaced roadway.
Existing Topography	The existing topography in the area of the proposed pump station location slopes down to the north with about 15 feet of elevation difference across the site.
	The existing topography in the area of the proposed waterline slopes down to the east at an approximate 15% grade.
	Surficial geologic conditions near the site, as mapped by the U.S. Geological Survey (USGS) (¹Wobus and Scott, 1977), consist of the Pike Peak Granite of Precambrian Age. The Pike Peak Granite in this area has been reported to consist of coarse-grained biotite and hornblende granite which weathers to rounded outcrops and coarse grus.
Geology	The geologic conditions presented in this section were obtained by locating the subject site on available large-scale geologic maps. Due to the scales involved, precise location of the site can be difficult to determine. In addition, the large-scale geologic maps describe only general trends. Local variations are possible and site specific geology may differ from those described above. A site-specific detailed geologic description is beyond the scope of this project; however, subsurface conditions encountered in our borings were generally consistent with mapped geologic conditions.

PROJECT DESCRIPTION

Our initial understanding of the project was provided in our proposal and was discussed during project planning, and our final understanding of the project conditions is as follows:

Item	Description	
	Our understanding of the project comes from:	
Information Provided	Email conversations between May 25, 2021 and present	
	"Exhibit A_Statement of Work_RFP-MR-159279" pdf file	

¹ Wobus, R.A. and Scott, G.R., 1977, **Reconnaissance geologic map of the Woodland Park quadrangle, Teller County, Colorado**, U.S. Geological Survey, Miscellaneous Field Studies Map MF-842, 1:24,000.

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Item	Description
Project Description	We understand the project consists of the construction of a new pump station structure and associated waterline.
Excavation Depths	We anticipate excavations of up to about 12 to 16 feet below existing site grades along the south side of the building with excavations on the order of about 3 feet for the north side of the building.
Building Construction	We understand the building will be of either pre-engineered metal or wood framing with cast-in-place concrete foundations.
Finished Floor Elevation	Unknown, anticipated to be with 2 feet of existing ground surface near the north side of the pump station structure.
Maximum Loads (Assumed)	 Columns: 20 to 100 kips Walls: 2 to 4 kips per linear foot (klf) Slabs: Up to 250 pounds per square foot (psf)
Grading/Slopes	Up to 16-feet of cut may be required to develop final grade for the southern portion of the proposed pump station structure.
Retaining Walls	We understand the southern portion of the pump station will be constructed into the existing hill slope and is planned to have a below-grade retaining wall on the order of 12 to 16 feet in depth.
Infrastructure	We anticipate installation of underground utilities with about 5 to 8 feet of the finished site grades.

GEOTECHNICAL CHARACTERIZATION

We have developed a general characterization of the subsurface conditions based upon our review of the subsurface exploration, laboratory data, geologic setting and our understanding of the project. This characterization, termed GeoModel, forms the basis of our geotechnical calculations and evaluation of site preparation and foundation options. Conditions encountered at each exploration point are indicated on the individual logs. The individual logs can be found in the **Exploration Results** section and the GeoModel can be found in the **Figures** section of this report.

As part of our analyses, we identified the following model layers within the subsurface profile. For a more detailed view of the model layer depths at each boring location, refer to the GeoModel.

Model Layer	Layer Name	General Description
1	Fill Materials	Existing fill materials consisting of sand and clay soils with varying amounts of gravel; various densities
2	Sand	Native sand soils with varying amounts of clay, silt and gravel; medium dense to very dense

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Model Layer	Layer Name	General Description
3	Bedrock	Granitic rock; hard to very hard

As noted in the **General Comments**, the characterization is based upon widely spaced borings at the site, and variations are likely. Stratification boundaries on the boring logs represent the approximate location of changes in soil and material types; in situ, the transition between materials may be gradual.

Groundwater Conditions

Groundwater was not encountered in the borings at the time of our field exploration. The borings were observed for the presence of groundwater during drilling and sampling. Groundwater level fluctuations occur due to seasonal variations in the amount of rainfall, runoff and other factors not evident at the time the boring was performed. Therefore, groundwater levels during construction or at other times in the life of the structure may be higher or lower than the levels indicated on the boring logs. The possibility of groundwater level fluctuations should be considered when developing the design and construction plans for the project.

Zones of perched and/or trapped groundwater may also occur at times in the subsurface soils overlying bedrock, on top of the bedrock surface or within permeable fractures in the bedrock materials. The location and amount of perched water is dependent upon several factors, including hydrologic conditions, type of site development, irrigation demands on or adjacent to the site, seasonal fluctuations, and weather conditions.

Laboratory Testing

Laboratory test results indicate the sand soils tested exhibit low compression when subjected to an applied load of 500 pounds per square foot (psf) at in-situ water contents. Samples of the granitic rock tested exhibit low compression when subjected to an applied load of 500 pounds per square foot (psf) at in-situ water contents.

The results of laboratory testing completed for this project can be found in the **Exploration Results** section of this report.

GEOTECHNICAL OVERVIEW

Based on the results of our field investigation, laboratory testing program and geotechnical analyses, development of the site is considered feasible from a geotechnical viewpoint provided that the conclusions and considerations provided herein are incorporated into the design and construction of the project.

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We have identified the following geotechnical conditions that could impact design and construction of the proposed project.

Existing Fill Materials

Between 1½ and 3½ feet of existing fill materials were encountered in Borings B-1 through B-3. The fill materials did not possess man-made debris to indicate fill but were characterized as possible fill due to their texture. The fill depths presented in the boring logs are approximate and the total depth, lateral extent, and composition of fill materials present on the site may not become evident until construction and should be expected to vary across the site.

We do not possess any information regarding whether the fill encountered was placed under the observation of a geotechnical engineer. There is an inherent risk for the owner that compressible fill or unsuitable material, within or buried by the fill, will not be discovered, resulting in movements that could cause distress to structures. Based on the results of our field exploration and laboratory testing, it is our opinion the fill materials should not be used to support foundations or floor slabs without complete removal and replacement with compacted structural fill. After removal, surfaces to receive structural fill should be prepared as recommended in the **Earthwork** section of this report.

We recommend existing fill soils be removed below planned utilities at this site and replaced as compacted, structural fill. Utilities should be designed with restrained joints and designed to accommodate potential differential movement should existing fill soils be left in place.

There exists the potential for construction debris and/or domestic trash to be encountered within the fill on some portions of the site. Because construction debris was not encountered in the borings drilled at this site, the potential risk for encountering construction debris and domestic trash is considered to be low. The fill materials should be observed for the presence of trash and debris during site grading and construction.

The existing fill materials can be reused as structural fill below foundations and floor slabs provided any deleterious materials are removed. Replacement can include overexcavating, moisture conditioning, and compacting the existing fill materials back in-place as structural fill. Further, some additional removal and replacement may be required if unsuitable or soft/loose materials are exposed during removal of the fill materials.

Shoring

We anticipate excavations of up to about 12 to 16 feet below existing site grades along the south side of the building. If excavations cannot be sloped in accordance with Occupational Safety and Health Administration (OSHA) recommendations, shoring will likely be required. The depth of excavation and location of adjacent utilities, and structures will influence the type of shoring system that may be used. A qualified shoring contractor should be contacted to design and install

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the shoring system. The individual contractor(s) should also be made aware of the possibility of shoring and plan for this during construction.

The earth pressure parameters provided in this report may be used for temporary shoring; however, the use of these parameters is at the discretion of the designer. It has been our experience that shoring designers have proprietary or various earth pressure diagrams to base the shoring design. It is up to the shoring designer to interpret the provided parameters.

EARTHWORK

Earthwork is anticipated to include removal of existing developments, generated debris, existing fill materials, and fill placement. Localized clearing and grubbing may also be required. The following sections provide recommendations for use in the preparation of specifications for the work. Recommendations include critical quality criteria, as necessary, to render the site in the state considered in our geotechnical engineering evaluation for foundations and floor slabs.

Site Preparation

Prior to placing fill, existing vegetation and root mat, if any, should be removed. Where encountered, complete stripping of the topsoil should be performed in the proposed new development areas. Stripped materials consisting of vegetation, unsuitable fills, and organic materials should be wasted from the site or used to revegetate landscaped areas after completion of grading operations. Any existing structures, underground utilities, and generated debris should be removed from below new developments.

All exposed surfaces should be free of mounds and depressions that could prevent uniform compaction. All below-grade structures that are removed from below new developments should be backfilled with compacted structural fill. Excavations to remove below grade structures should be benched to expose firm, approved materials prior to backfill placement or construction. Existing utilities to be abandoned (if any) should be removed within 10 feet of the proposed pump station building perimeter. Abandoned utilities to remain in place beyond the perimeter should be grouted and capped.

Although evidence of underground facilities such as grease pits and septic tanks were not observed during the site reconnaissance, such features could be encountered during construction. If unexpected fills or underground facilities are encountered, such features should be removed and the excavation thoroughly cleaned prior to backfill placement and/or construction.

Where practical, foundation and floor slab subgrades should be proof-rolled with an adequately loaded vehicle such as a fully-loaded tandem-axle dump truck. The proof-rolling should be performed under the direction of the Geotechnical Engineer. Areas excessively deflecting under the proof-roll should be delineated and subsequently addressed by the Geotechnical Engineer.

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The bottom of foundation over-excavations should also be probed with a metal T-probe to aid in locating loose, soft, or otherwise undesirable areas. Unacceptable areas delineated by the proof-roll or probing should be removed or mitigated in place prior to placing fill, foundation and slab concrete. Such areas should either be removed or modified by stabilizing with geotextile. Material that is determined to be excessively wet or dry should be removed, or moisture conditioned and re-compacted.

Fill Slopes

We understand a reconstructed fill slope may be performed as part of the pump station construction. Based on the provided site topography and grading plan, reconstructed slopes with gradients of up to about 2:1 (horizontal:vertical) are planned during construction. Where fill is placed on existing or temporary slopes steeper than 5H:1V, benches should be cut into the existing slopes prior to fill placement. The benches should have a minimum vertical face height of 1 foot and a maximum vertical face height of 3 feet and should be cut wide enough to accommodate compaction equipment. This benching will help provide a positive bond between the fill/ natural soils and rock and reduce the possibility of failure along the fill/natural soil and rock interface. We also recommend similar construction methods be implemented within other cut/fill transitions areas at the site.

Fill Material Types

Fill required to achieve design grades should be classified as structural fill and general fill. Structural fill is material used below or within 10 feet of structures. General fill is material used to achieve grade outside of these areas. Earthen materials used for structural and general fill should meet the following material property requirements:

Soil Type ¹	USCS Classification	Acceptable Locations for Placement
On-site sand soils	SC, SC-SM, SW	The on-site existing fill and native sand soils are considered acceptable for re-use as structural fill beneath foundations and floor slabs. The on-site sand soils may also be re-used as general fill outside of structural areas.
Granitic rock	N/A	The on-site granitic rock may be re-used as structural fill beneath foundations and floor slabs, and as general fill outside of structural areas provided it is processed to a soil like consistency with a maximum particle size of 3 inches.
Imported soils	Varies	Imported soils meeting the gradation parameters presented herein can be considered suitable for use as structural and/or general fill.

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Soil Type ¹	USCS Classification	Acceptable Locations for Placement
material should r	not be used, and fill should no	approved materials free of organic matter and debris. Frozen of the placed on a frozen subgrade. A sample of each material I Engineer for evaluation prior to use on this site.

Imported soils for use as structural and/or general fill should conform to the following:

Gradation	Percent finer by weight (ASTM C136)
3"	100
No. 4 Sieve	30-100
No. 200 Sieve	<35

Soil Properties	Value	
Liquid Limit	20 (max.)	
Plastic Index	10 (max.)	
Expansive Potential ¹	0.5 percent (max.)	

^{1.} Measured on a sample compacted to approximately 95 percent of the ASTM D698 maximum dry density at optimum water content. The sample is confined under a 150 psf surcharge and submerged.

Fill Compaction Requirements

Structural and general fill should meet the following compaction requirements.

Item	Structural Fill
Maximum lift	8 inches or less in loose thickness when heavy, self-propelled compaction equipment is used
thickness	4 to 6 inches in loose thickness when hand-guided equipment (i.e. jumping jack, plate compactor) is used
Minimum compaction requirements ^{1, 2, 3}	98% of the materials maximum dry density for foundations and floor slabs 100% of the materials maximum dry density for fills 6 feet in thickness or greater
Water content range ^{2, 4}	Within 3 percent of optimum water content (granular soils)

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Item Structural Fill

- We recommend engineered fill be tested for water content and compaction during placement. Should the
 results of the in-place density tests indicate the specified water or compaction limits have not been met, the
 area represented by the test should be reworked and retested as required until the specified water and
 compaction requirements are achieved.
- 2. Maximum dry density and optimum water content as determined by the Standard Proctor test (D698).
- 3. If the granular material is a coarse sand or gravel, or of a uniform size, or has a low fines content, compaction comparison to relative density may be more appropriate. In this case, granular materials should be compacted to at least 75% relative density (ASTM D4253 and D4254).
- 4. Water contents should be maintained low enough to allow for satisfactory compaction to be achieved without the compacted fill material becoming unstable under the weight of construction equipment or during proof-rolling. Indications of unstable soil can include pumping or rutting.

Grading and Drainage

All grades must provide effective drainage away from the pump station building during and after construction and should be maintained throughout the life of the structure. Water retained next to the building can result in soil movements greater than those discussed in this report. Greater movements can result in unacceptable differential floor slab and/or foundation movements, cracked slabs and walls, and roof leaks. The roof should have gutters/drains with downspouts that discharge onto splash blocks at a distance of at least 10 feet from the building.

Exposed ground should be sloped and maintained at a minimum 5% away from the building for at least 10 feet beyond the perimeter of the building. Locally, flatter grades may be necessary to transition ADA access requirements for flatwork. After building construction and landscaping have been completed, final grades should be verified to document effective drainage has been achieved. Grades around the structure should also be periodically inspected and adjusted, as necessary, as part of the structure's maintenance program. Where paving or flatwork abuts the structure, a maintenance program should be established to effectively seal and maintain joints and prevent surface water infiltration.

Earthwork Construction Considerations

Shallow excavations for the proposed structure are anticipated to be accomplished with conventional construction equipment. Deeper excavations that encounter granitic rock may become more difficult and necessitate the use of specialized equipment and/or techniques. Upon completion of filling and grading, care should be taken to maintain the subgrade water content prior to construction of foundations and floor slabs. Construction traffic over the completed subgrades should be avoided. The site should also be graded to prevent ponding of surface water on the prepared subgrades or in excavations. Water collecting over or adjacent to construction areas should be removed. If the subgrade freezes, desiccates, saturates, or is disturbed, the affected material should be removed, or the materials should be scarified, moisture conditioned, and recompacted prior to foundation or floor slab construction.

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Depending on seasonal groundwater fluctuations, groundwater may be encountered during construction and if encountered will likely cause difficulties. Dewatering of excavations and utility trenches may be required during construction. Groundwater seeping into excavations at this site could most likely be controlled by the use of well points or shallow trenches leading to a sump pit where the water could be removed by pumping; however, the requirements for properly dewatering excavations are beyond the scope of services provided for this project.

As a minimum, excavations should be performed in accordance with OSHA 29 CFR, Part 1926, Subpart P, "Excavations" and its appendices, and in accordance with any applicable local, and/or state regulations.

Construction site safety is the sole responsibility of the contractor who controls the means, methods, and sequencing of construction operations. Under no circumstances shall the information provided herein be interpreted to mean Terracon is assuming responsibility for construction site safety, or the contractor's activities; such responsibility shall neither be implied nor inferred.

FOUNDATION RECOMMENDATIONS

If the site has been prepared in accordance with the requirements noted in **Earthwork**, the following design parameters are applicable for shallow foundations.

Design Parameters – Compressive Loads

ltem	Description	
Foundation Subgrade Preparation	All existing fill must be removed, if encountered. Native sand soils should be scarified a minimum of 12 inches, moisture conditioned and compacted	
Maximum Net Allowable Bearing pressure 1, 2	3,000 psf	
Required Bearing Stratum ^{3,4}	Recompacted native sand soils, new engineered fill, or granitic rock	
Foundation Dimensions	Isolated footings: 24 inches Continuous footings: 18 inches	
Ultimate Passive Resistance ⁵ (equivalent fluid pressures)	300 pcf	
Ultimate Coefficient of Sliding Friction ⁶	0.40	
Minimum Embedment below Finished Grade	30 inches	

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Item	Description
Estimated Total Movement from Structural Loads ⁷	Less than about 1 inch
Estimated Differential Movement ^{7,8}	About ½ to ¾ of total movement

- 1. The maximum net allowable bearing pressure is the pressure in excess of the minimum surrounding overburden pressure at the foundation base elevation. An appropriate factor of safety has been applied. Values assume that exterior grades are no steeper than 20% within 10 feet of structures.
- Value provided is based on our project understanding noted in the Project Description. The foundation movement will depend upon the variations within the subsurface soil profile, the structural loading conditions, the embedment depth of the foundations, the thickness of compacted fill, the quality of the earthwork operations, and maintaining uniform soil water content throughout the life of the structure. The estimated movements are based on maintaining uniform soil water content during the life of the structure. Additional foundation movements could occur if water from any source infiltrates the foundation soils; therefore, proper drainage and irrigation practices should be incorporated into the design and operation of the facility. Failure to maintain soil water content and positive drainage will nullify the movement estimates provided above.
- 3. Unsuitable or soft/loose soils should be over-excavated and replaced per the recommendations presented in the Earthwork.
- 4. There exists a slight risk of differential movement between foundations bottomed in densified native sand soils or new engineered fill and foundations bottomed in granitic rock. Where foundations are not bottomed in granitic rock, we recommend scarifying the native sand soils a minimum of 12 inches and compacting to 98% of the material's maximum dry density.
- 5. Use of passive earth pressures require the sides of the excavation for the foundation to be nearly vertical and the concrete placed neat against these vertical faces or that the foundation forms be removed and compacted structural fill be placed against the vertical foundation face.
- 6. Can be used to compute sliding resistance where foundations are placed on suitable soil/materials. Should be neglected for foundations subject to net uplift conditions.
- 7. Embedment necessary to minimize the effects of frost and/or seasonal water content variations. For sloping ground, maintain depth below the lowest adjacent exterior grade within 5 horizontal feet of the structure.
- 8. Differential movements are as measured over a span of 50 feet.

Foundation Construction Considerations

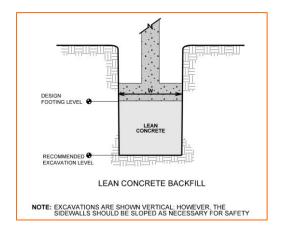
As noted in Earthwork, the foundation excavations should be evaluated under the direction of the Geotechnical Engineer. The base of all foundation excavations should be free of water and loose soil, prior to placing concrete. Concrete should be placed soon after excavating to reduce bearing soil disturbance. Care should be taken to prevent wetting or drying of the bearing materials during construction. Excessively wet or dry material or any loose/disturbed material in the bottom of the foundation excavations should be removed/reconditioned before foundation concrete is placed.

If unsuitable bearing soils are encountered at the base of the planned foundation excavation, the excavation should be extended deeper to suitable soils, and the foundations could bear directly

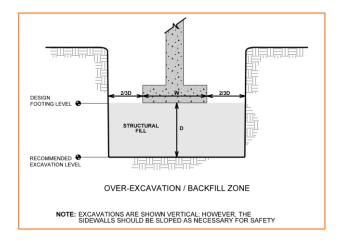
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on these soils at the lower level or on lean concrete backfill placed in the excavations. This is illustrated on the sketch below.



Over-excavation for structural fill placement below foundations should be conducted as shown below. The over-excavation should be backfilled up to the foundation base elevation with structural fill placed as recommended in the **Earthwork** section.



UTILITY RECOMMENDATIONS

The following sections present design and construction recommendations for the proposed utilities.

Utility Design Recommendations

Based on the geotechnical engineering analyses, subsurface exploration and laboratory test results, the proposed utilities may be constructed on and backfilled with native soils, processed

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on-site bedrock, or imported soils, provided the owner is willing to risk some potential movement, estimated to be on the order of 1 inch. Estimated movements require that utilities be constructed as recommended in the **Earthwork** section of this report. The recommendations of this report should be considered a minimum and may be superseded by the governing municipal specifications.

Utilities constructed on existing fill materials may have a higher risk of movement on the order of several inches more than utilities constructed on native soils or imported fill. Existing fill materials were encountered in some of our borings. Based on the reported bottom of pipe elevations it appears most, if not all, of the existing fill materials will be removed from below the proposed utilities during construction. However, to reduce the risk of additional movement, we recommend existing fill materials be removed where encountered below utilities and replaced with compacted fill. If the owner is willing to accept the risk of additional movement, on the order of several inches, utilities could be constructed on existing fill materials.

SEISMIC CONSIDERATIONS

The seismic design requirements for buildings and other structures are based on Seismic Design Category. Site Classification is required to determine the Seismic Design Category for a structure. The Site Classification is based on the upper 100 feet of the site profile defined by a weighted average value of either shear wave velocity, standard penetration resistance, or undrained shear strength in accordance with Section 20.4 of ASCE 7 and the International Building Code (IBC). Based on the soil/bedrock properties encountered at the site and as described on the exploration logs and results, it is our professional opinion that the **Seismic Site Classification is C**. Subsurface explorations at this site were extended to a maximum depth of 23½ feet. The site properties below the boring depth to 100 feet were estimated based on our experience and knowledge of geologic conditions of the general area. Additional deeper borings or geophysical testing may be performed to confirm the conditions below the current boring depth.

FLOOR SLABS

Design parameters for floor slabs assume the requirements for **Earthwork** have been followed. Specific attention should be given to positive drainage away from the pump station structure.

Floor Slabs-On-Grade Design Parameters

Item	Description
Floor Slab Support ¹	All existing fill must be removed, if encountered. Native sand soils should
	be scarified a minimum of 12 inches, moisture conditioned and compacted

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Item	Description	
Estimated Modulus of		
Subgrade Reaction ²	110 pounds per square inch per inch (psi/in) for point loads	

- 1. Floor slabs should be structurally independent of building footings or walls to reduce the possibility of floor slab cracking caused by differential movements between the slab and foundation.
- 2. Modulus of subgrade reaction is an estimated value based upon our experience with the subgrade condition, the requirements noted in **Earthwork**, and the floor slab support as noted in this table. It is provided for point loads. For large area loads the modulus of subgrade reaction would be lower.

The use of a vapor retarder should be considered beneath concrete slabs on grade covered with wood, tile, carpet, or other moisture sensitive or impervious coverings, or when the slab will support equipment sensitive to moisture. When conditions warrant the use of a vapor retarder, the slab designer should refer to ACI 302 and/or ACI 360 for procedures and cautions regarding the use and placement of a vapor retarder.

Saw-cut control joints should be placed in the slab to help control the location and extent of cracking. For additional recommendations refer to the ACI Design Manual. Joints or cracks should be sealed with a water-proof, non-extruding compressible compound specifically recommended for heavy duty concrete pavement and wet environments.

Where floor slabs are tied to perimeter walls or turn-down slabs to meet structural or other construction objectives, our experience indicates differential movement between the walls and slabs will likely be observed in adjacent slab expansion joints or floor slab cracks beyond the length of the structural dowels. The Structural Engineer should account for potential differential settlement through use of sufficient control joints, appropriate reinforcing or other means.

Floor Slab Construction Considerations

Finished subgrade, within and for at least 10 feet beyond the floor slab, should be protected from traffic, rutting, or other disturbance and maintained in a relatively moist condition until floor slabs are constructed. If the subgrade should become damaged or desiccated prior to construction of floor slabs, the affected material should be removed and structural fill should be added to replace the resulting excavation. Final conditioning of the finished subgrade should be performed immediately prior to placement of the floor slab support course.

The Geotechnical Engineer should approve the condition of the floor slab subgrades immediately prior to placement of the floor slab support course, reinforcing steel, and concrete. Attention should be paid to high traffic areas that were rutted and disturbed earlier, and to areas where backfilled trenches are located.

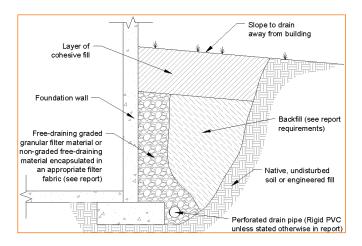
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BELOW-GRADE RETAINING WALL

Subsurface Drainage for Below-Grade Retaining Walls

We understand a below-grade retaining wall is planned for this project and will have a maximum depth of about 12 to 16 feet below existing grades. A perforated rigid plastic drain line installed behind the base of walls and extends below adjacent grade is recommended to prevent hydrostatic loading on the walls. The invert of a drain line around a below-grade building area or exterior retaining wall should be placed near foundation bearing level. The drain line should be sloped to provide positive gravity drainage to daylight or to a sump pit and pump. The drain line should be surrounded by clean, free-draining granular material having less than 5% passing the No. 200 sieve, such as No. 57 aggregate. The free-draining aggregate should be encapsulated in a filter fabric. The granular fill should extend to within 2 feet of final grade, where it should be capped with compacted cohesive fill to reduce infiltration of surface water into the drain system.



As an alternative to free-draining granular fill, a pre-fabricated drainage structure may be used. A pre-fabricated drainage structure is a plastic drainage core or mesh which is covered with filter fabric to prevent soil intrusion, and is fastened to the wall prior to placing backfill.

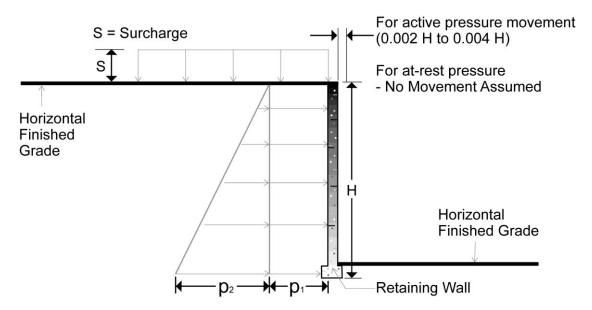
LATERAL EARTH PRESSURES

We understand a below-grade area is being considered for this project and that if constructed, it will have a maximum depth of 12 to 16 feet below existing grades. Reinforced concrete walls with unbalanced backfill levels on opposite sides should be designed for earth pressures at least equal to those indicated in the following table. Earth pressures will be influenced by structural design of the walls, conditions of wall restraint, methods of construction and/or compaction and the strength of the materials being restrained. Two wall restraint conditions are shown. Active earth pressure is commonly used for design of free-standing cantilever retaining walls and assumes wall movement. The "at-rest" condition assumes no wall movement. The recommended design

Green Mountain Falls Pump Station ■ Green Mountain Falls, Colorado April 20, 2022 ■ Terracon Project No. 23215048A



lateral earth pressures do not include a factor of safety and do not provide for possible hydrostatic pressure on the walls.



Lateral Earth Pressure Design Parameters			
Earth Pressure Condition ¹	Coefficient for Backfill Type ²	Surcharge Pressure ^{3, 4, 5} p ₁ (psf)	Equivalent Fluid Pressures (psf) ^{2, 4, 5}
Active (Ka)	0.44	(0.44)S	(55)H
At-Rest (Ko)	0.69	(0.69)S	(85)H
Passive (Kp)	2.77		(300)H

- 1. For active earth pressure, wall must rotate about base, with top lateral movements 0.002 H to 0.004 H, where H is wall height. For passive earth pressure, wall must move horizontally to mobilize resistance.
- 2. Uniform backfill behind the wall with a maximum slope of 22 degrees, compacted to at least 95% of the ASTM D 698 maximum dry density, rendering a maximum unit weight of 120 pcf.
- 3. Uniform surcharge, where S is surcharge pressure.
- 4. Loading from heavy compaction equipment is not included.
- 5. No safety factor is included in these values.
- 6. The above lateral earth pressures do not account for hydrostatic pressures. We recommend that a drain be installed behind the wall.

Applicable conditions to the above include:

- For active earth pressure, wall must rotate about base, with top lateral movements of about 0.002 H to 0.004 H, where H is wall height
- For passive earth pressure to develop, wall must move horizontally to mobilize resistance.

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- Uniform surcharge, where S is surcharge pressure
- In-situ soil backfill weight a maximum of 120 pcf
- Horizontal backfill, compacted to at least 95 percent of standard Proctor maximum dry density
- Loading from heavy compaction equipment not included
- No hydrostatic pressures acting on wall
- No dynamic loading
- No safety factor included in soil parameters

We recommend that a drain be installed behind retaining walls as recommended in the **Subsurface Drainage for Below-Grade Walls** section of this report. The above pressures do not include the influence of surcharge, equipment, or floor loading, which should be added. Heavy equipment should not operate within a distance closer than the exposed height of retaining walls to prevent lateral pressures more than those provided.

CORROSIVITY

The table below lists the results of laboratory soluble sulfate, soluble chloride, electrical resistivity, and pH testing. The values may be used to estimate potential corrosive characteristics of the onsite soils with respect to contact with the various underground materials which will be used for project construction.

Corrosivity Test Results Summary						
Sample Boring Depth Soil Description (feet)		Soluble Sulfate (mg/kg)	Soluble Chloride (mg/kg)	Electrical Resistivity ¹ (Ω-cm)	рН	
B-1	1-5	SC	79	50	3,589	7.72

^{1.} Laboratory electrical resistivity testing was performed on a saturated sample

We recommend a certified corrosion engineer be employed to determine the need for corrosion protection and to design appropriate protective measures. Results of water-soluble sulfate testing indicate samples of the on-site soils have an exposure class of S0 when classified in accordance with Table 19.3.1.1 of the American Concrete Institute (ACI) Design Manual. The results of the testing indicate ASTM Type I Portland Cement is suitable for project concrete in contact with on-site soils. However, if there is no (or minimal) cost differential, use of ASTM Type II Portland Cement is recommended for additional sulfate resistance of construction concrete. Concrete should be designed in accordance with the provisions of the ACI Design Manual, Section 318, Chapter 19.

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GENERAL COMMENTS

Our analysis and opinions are based upon our understanding of the project, the geotechnical conditions in the area, and the data obtained from our site exploration. Natural variations will occur between exploration point locations or due to the modifying effects of construction or weather. The nature and extent of such variations may not become evident until during or after construction. Terracon should be retained as the Geotechnical Engineer, where noted in this report, to provide observation and testing services during pertinent construction phases. If variations appear, we can provide further evaluation and supplemental recommendations. If variations are noted in the absence of our observation and testing services on-site, we should be immediately notified so that we can provide evaluation and supplemental recommendations.

Our Scope of Services does not include either specifically or by implication any environmental or biological (e.g., mold, fungi, bacteria) assessment of the site or identification or prevention of pollutants, hazardous materials or conditions. If the owner is concerned about the potential for such contamination or pollution, other studies should be undertaken.

Our services and any correspondence or collaboration through this system are intended for the sole benefit and exclusive use of our client for specific application to the project discussed and are accomplished in accordance with generally accepted geotechnical engineering practices with no third-party beneficiaries intended. Any third-party access to services or correspondence is solely for information purposes to support the services provided by Terracon to our client. Reliance upon the services and any work product is limited to our client, and is not intended for third parties. Any use or reliance of the provided information by third parties is done solely at their own risk. No warranties, either express or implied, are intended or made.

Site characteristics as provided are for design purposes and not to estimate excavation cost. Any use of our report in that regard is done at the sole risk of the excavating cost estimator as there may be variations on the site that are not apparent in the data that could significantly impact excavation cost. Any parties charged with estimating excavation costs should seek their own site characterization for specific purposes to obtain the specific level of detail necessary for costing. Site safety, and cost estimating including, excavation support, and dewatering requirements/design are the responsibility of others. If changes in the nature, design, or location of the project are planned, our conclusions and recommendations shall not be considered valid unless we review the changes and either verify or modify our conclusions in writing.

FIGURES

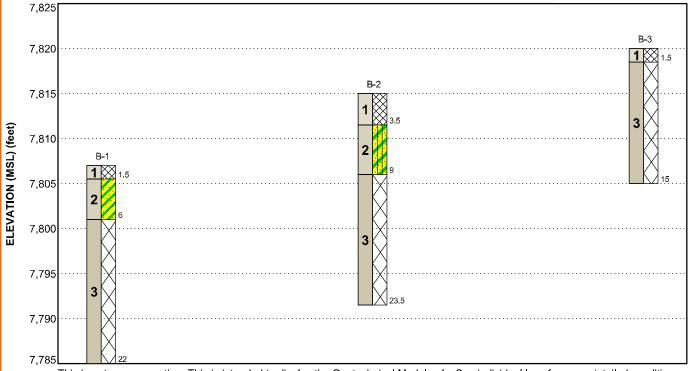
Contents:

GeoModel

GEOMODEL

Green Mountain Falls Pump Station ■ Green Mountain Falls, Colorado Terracon Project No. 23215048A





This is not a cross section. This is intended to display the Geotechnical Model only. See individual logs for more detailed conditions.

Model Layer	Layer Name	General Description
1	Fill	Existing fill materials consisting of sand with varying amounts of clay and gravel; various stiffnesses and densities
2	Native Sand	Native sand soils with varying amounts of clay, silt, and gravel; loose to very dense
3	Weathered Bedrock	Granitic bedrock; weathered to very hard

LEGEND



Silty Clayey Sand



Weathered Rock

NOTES:

Layering shown on this figure has been developed by the geotechnical engineer for purposes of modeling the subsurface conditions as required for the subsequent geotechnical engineering for this project. Numbers adjacent to soil column indicate depth below ground surface.

ATTACHMENTS

Green Mountain Falls Pump Station ■ Green Mountain Falls, Colorado April 20, 2022 ■ Terracon Project No. 23215048A



EXPLORATION AND TESTING PROCEDURES

Field Exploration

Boring Nos.	Boring Depth (feet)	Location				
B-1 and B-2	22 to 23½ ¹	Proposed pump station area				
B-3	15	Proposed utility area				

^{1.} Auger refusal was encountered in Boring Nos. B-1 and B-2 on granitic rock

Boring Layout and Elevations: We used handheld GPS equipment to locate borings with an estimated horizontal accuracy of ±20 feet. Ground Surface elevations were estimated using Google Earth at each of the boring locations.

Subsurface Exploration Procedures: We advanced the soil borings with a truck-mounted drill rig using continuous-flight augers. Four to five samples were obtained in the upper 10 feet of each boring and at intervals of 5 feet thereafter. In the split-barrel sampling procedure, a standard 2-inch outer diameter split-barrel sampling spoon was driven into the ground by a 140-pound automatic hammer falling a distance of 30 inches. The number of blows required to advance the sampling spoon the last 12 inches of a normal 18-inch penetration was recorded as the Standard Penetration Test (SPT) resistance value. The SPT resistance values, also referred to as N-values, are indicated on the boring logs at the test depths. A 3-inch outer diameter, split-barrel sampling spoon with 2.5-inch inner diameter, ring-lined sampler was used for sampling in the upper 14 feet. Ring-lined, split-barrel sampling procedures were similar to standard split-spoon sampling procedure; however, blow counts were recorded for 6-inch intervals for a total of 12 inches of penetration. Bulk samples of auger cuttings were also obtained in the upper 5 feet of each boring. The samples were placed in appropriate containers, taken to our soil laboratory for testing, and classified by a geotechnical engineer. Groundwater was not encountered within the borings at the time of drilling and sampling.

Our exploration team prepared field boring logs as part of standard drilling operations which included the sampling depths, penetration distances, and other relevant sampling information. Field logs include visual classifications of materials encountered during drilling, and our interpretation of subsurface conditions between samples. Final boring logs, prepared from field logs, represent the geotechnical engineer's interpretation, and include modifications based on observations and laboratory tests.

Laboratory Testing

The project engineer reviewed the field data and assigned laboratory tests to understand the engineering properties of the various soil strata, as necessary, for this project. Procedural

Green Mountain Falls Pump Station ■ Green Mountain Falls, Colorado April 20, 2022 ■ Terracon Project No. 23215048A



standards noted in this report are for reference to methodology in general. In some cases, variations to methods are applied as a result of local practice or professional judgment. The following testing was performed:

- Water content
- Dry unit weight
- Atterberg limits
- Grain size analyses
- Consolidation/expansion
- Chemical analyses pH, sulfates, chloride ion, and electrical resistivity

The laboratory testing program included examination of the soil samples by an engineer. Based on the material's texture and plasticity, we described and classified the soil samples in accordance with the Unified Soil Classification System.

SITE LOCATION AND EXPLORATION PLANS

Contents:

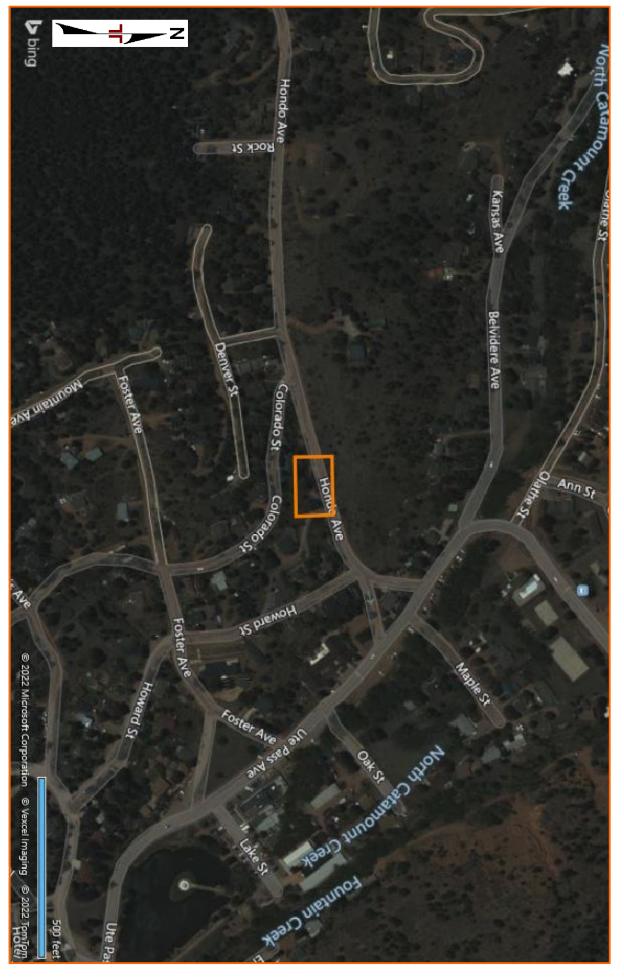
Site Location Plan Exploration Plan with Aerial Overlay

Note: All attachments are one page unless noted above.

EXPLORATION PLAN

Green Mountain Falls Pump Station
Green Mountain Falls, Colorado April 20, 2022
Terracon Project No. 23215048A

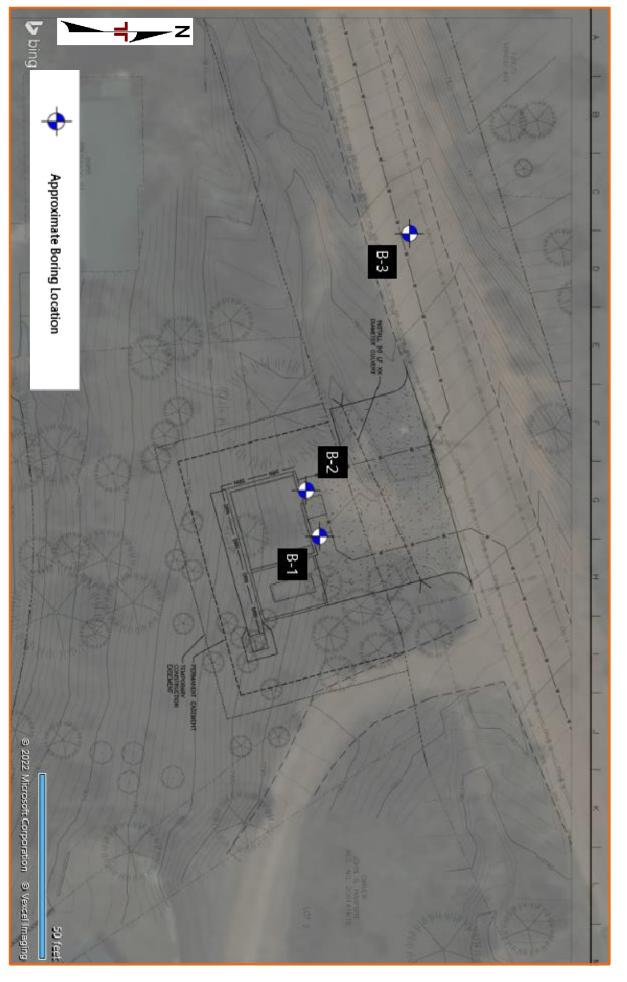




EXPLORATION PLAN WITH PROJECT OVERLAY

Green Mountain Falls Pump Station
Green Mountain Falls, Colorado April 20, 2022
Terracon Project No. 23215048A





EXPLORATION RESULTS

Contents:

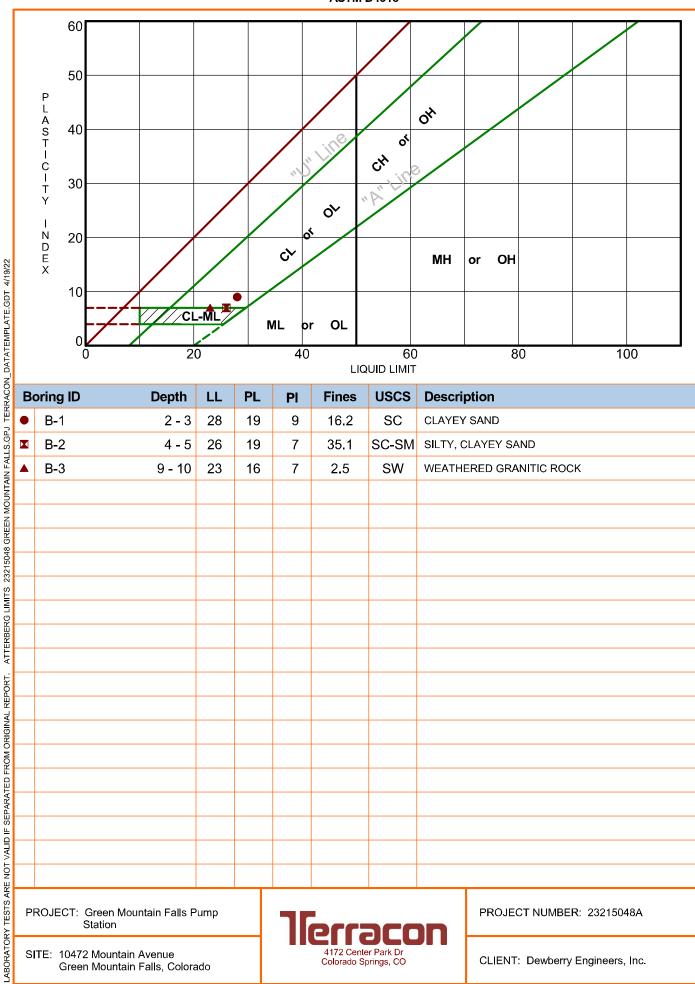
Boring Logs (B-1 through B-3) Atterberg Limits Grain Size Distribution Consolidation/Swell (2 pages) Corrosivity Laboratory Test Summary

Note: All attachments are one page unless noted above.

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL 23215048 GREEN MOUNTAIN FALLS. GPJ TERRACON DATATEMPLATE. GDT 4/19/22

ATTERBERG LIMITS RESULTS

ASTM D4318



Boring ID Depth		Depth	LL	PL	PI	Fines	USCS	Description
	B-1	2 - 3	28	19	9	16.2	SC	CLAYEY SAND
×	B-2	4 - 5	26	19	7	35.1	SC-SM	SILTY, CLAYEY SAND
A	B-3	9 - 10	23	16	7	2.5	SW	WEATHERED GRANITIC ROCK
í 2								
5								
i								

PROJECT: Green Mountain Falls Pump Station

SITE: 10472 Mountain Avenue Green Mountain Falls, Colorado

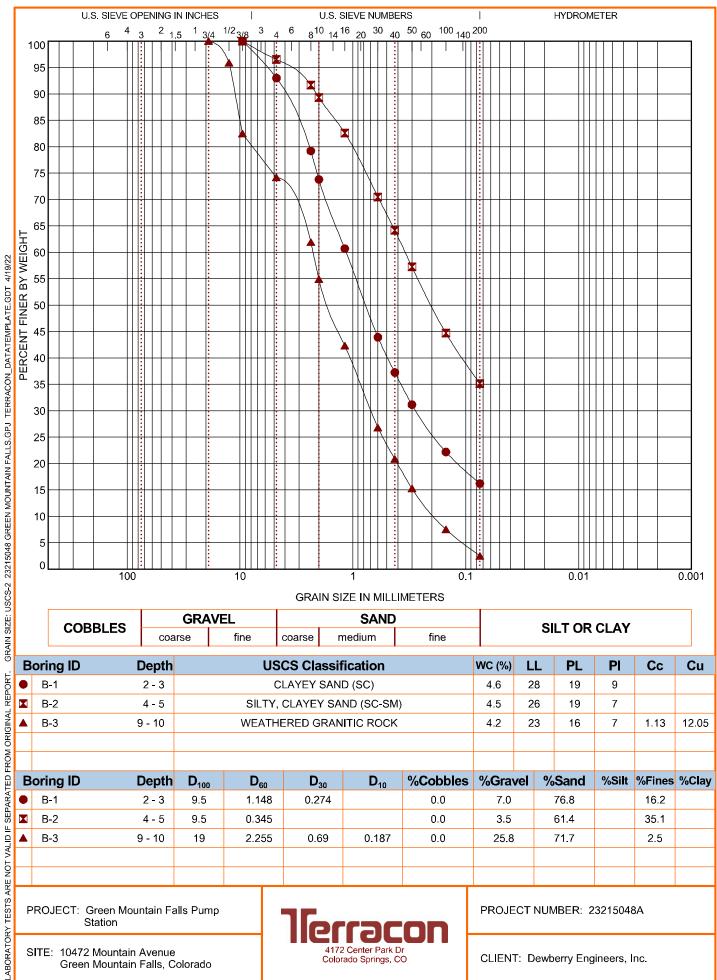


PROJECT NUMBER: 23215048A

CLIENT: Dewberry Engineers, Inc.

GRAIN SIZE DISTRIBUTION

ASTM D422 / ASTM C136



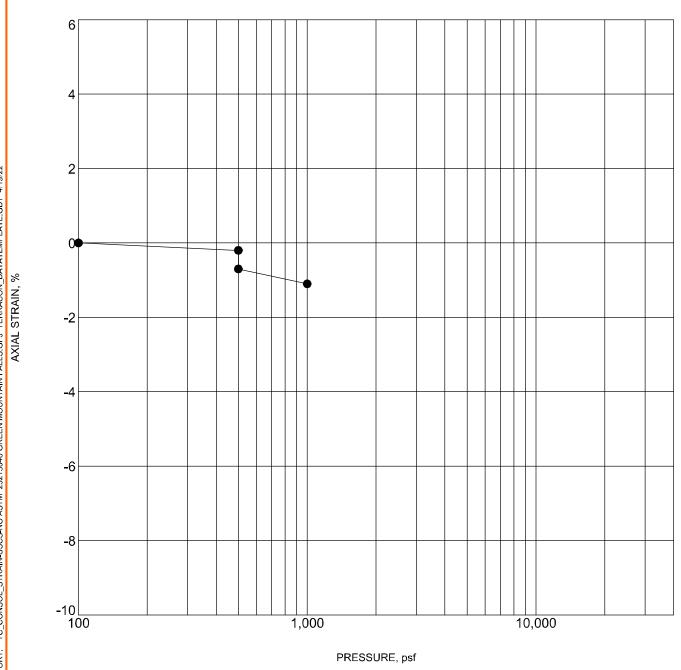
Colorado Springs, CO

CLIENT: Dewberry Engineers, Inc.

SITE: 10472 Mountain Avenue

Green Mountain Falls, Colorado

SWELL CONSOLIDATION TEST



Spe	cimen Id	entification	Classification	γ_d , pcf	WC, %
0	B-1	7 - 8 ft	WEATHERED GRANITIC ROCK	119	3.1

NOTES: Sample exhibited 0.5 percent compression when inundated at an applied pressure of 500 psf.

PROJECT: Green Mountain Falls Pump

Station

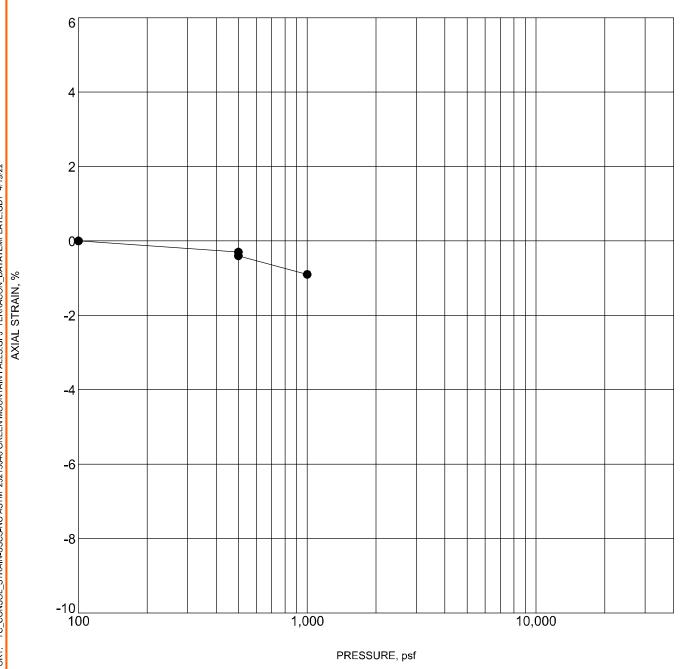
SITE: 10472 Mountain Avenue Green Mountain Falls, Colorado



PROJECT NUMBER: 23215048A

CLIENT: Dewberry Engineers, Inc.

SWELL CONSOLIDATION TEST



Specime	n Identification	Classification	γ_{d} , pcf	WC, %
O B-2	9 - 10 ft	WEATHERED GRANITIC ROCK	126	5.1

NOTES: Sample exhibited 0.1 percent compression when inundated at an applied pressure of 500 psf.

PROJECT: Green Mountain Falls Pump

Station

SITE: 10472 Mountain Avenue Green Mountain Falls, Colorado



PROJECT NUMBER: 23215048A

CLIENT: Dewberry Engineers, Inc.

750 Pilot Road, Suite F Las Vegas, Nevada 89119 (702) 597-9393



Client Project

Dewberry Engineers Inc Denver, Colorado Green Mountain Falls Pump Station (23215048A)

Sample Submitted By: Terracon (23) Date Received: 3/4/2022 Lab No.: 22-0199

Results of Corrosion Analysis

Sample Number	2
Sample Location	B-1
Sample Depth (ft.)	1.0-5.0
pH Analysis, ASTM D4972	7.72
Water Soluble Sulfate (SO4), ASTM D516	79
Chlorides, ASTM D 512, (ppm)	50
Resistivity (Saturated), ASTM G 57, (ohm-cm)	3589

Analyzed By:

Nathan Campo

Engineering Technician II

SUMMARY OF LABORATORY TEST RESULTS

Green Mountain Falls Pump Station - Green Mountain Falls, Colorado Terracon Project No. 23215048A

					_	_	_								_							_	_			
					B-3	B-3	B-3	B-3	B-3	B-2	B-2	B-2	B-2	B-2	B-2	B-2	B-1	B-1	B-1	B-1	B-1	<u>B</u> .	B-1	B-1	Boring No.	
					14	9	7	4	2	19	14	9	7	4	2	0	19	14	9	7	4	2	1-5	0	Depth (ft)	
													SC-SM	SC-SM	sc	SC					SC	sc	SC	SC	USCS Class.	
					4.0	4.2	2.1	3.9	2.8	7.7	6.0	5.1	5.6	4.5	4.5	6.6	6.0	4.8	4.3	3.3	4.3	4.6		3.2	Water Content (%)	Initial
					115	113		104		125	115	119	126	114	97	83	128	117	115	114	103	108			Density (pcf)	<u>.</u>
												0.5								0.5					Surcharge (ksf)	Swell/Con
												0.1								0.5					Swell (%)	Swell/Consolidation
						100								100								100			3/4"	Partic
						74								97								93			#4	Particle Size Distribution, Percent Passing by Weight
						55								89								74			#10	ution, Percen
						21								64								37			#40	t Passing by V
						ω								35								16			#200	/eight
						23								26								28			F	Atterbei
						7								7								9			2	Atterberg Limits
																							0.0079		Soluble Sulfates (%)	Water
																							0.005		Soluble Chlorides (%)	Water
																							7.72		PH	
																							3589		Resistivity (ohm.cm)	
					4	4	4	4	4	4	4	3,4	4	4	4	4	4	4	4	3,4	4	4		4	Remarks	

Initial Dry Density and Initial Water Content are in-situ values unless

* = Partially disturbed sample otherwise noted.

NV = no value NP = non-plastic = Compression/settlement

Remarks:

- Remolded Compacted density (about 95% of ASTM D698 maximum density near optimum moisture content) Remolded Compacted density (about 95% of ASTM D1557 maximum density near optimum moisture content)
- Water added to sample
- Minus #200 Only Dry density and/or moisture content determined from one ring of a multi-ring sample
- Moisture-Density Relationship Test Method ASTM D698/AASHTO T99
 Moisture-Density Relationship Test Method ASTM D1557/AASHTO T180



Page 1 of 1

SUPPORTING INFORMATION

Contents:

General Notes Unified Soil Classification System

Note: All attachments are one page unless noted above.

GENERAL NOTES

DESCRIPTION OF SYMBOLS AND ABBREVIATIONS

Green Mountain Falls Pump Station Green Mountain Falls, Colorado

Terracon Project No. 23215048A



SAMPLING	WATER LEVEL	FIELD TESTS				
NA - diff - d	Water Initially Encountered	N	Standard Penetration Test Resistance (Blows/Ft.)			
Auger Modified Dames & Moore Ring	Water Level After a Specified Period of Time	(HP)	Hand Penetrometer			
Sampler Standard	Water Level After a Specified Period of Time	(T)	Torvane			
Penetration Test	Cave In Encountered	(DCP)	Dynamic Cone Penetrometer			
	Water levels indicated on the soil boring logs are the levels measured in the borehole at the times indicated. Groundwater level variations will occur	uc	Unconfined Compressive Strength			
	over time. In low permeability soils, accurate determination of groundwater levels is not possible with short term water level	(PID)	Photo-Ionization Detector			
	observations.	(OVA)	Organic Vapor Analyzer			

DESCRIPTIVE SOIL CLASSIFICATION

Soil classification as noted on the soil boring logs is based Unified Soil Classification System. Where sufficient laboratory data exist to classify the soils consistent with ASTM D2487 "Classification of Soils for Engineering Purposes" this procedure is used. ASTM D2488 "Description and Identification of Soils (Visual-Manual Procedure)" is also used to classify the soils, particularly where insufficient laboratory data exist to classify the soils in accordance with ASTM D2487. In addition to USCS classification, coarse grained soils are classified on the basis of their in-place relative density, and fine-grained soils are classified on the basis of their consistency. See "Strength Terms" table below for details. The ASTM standards noted above are for reference to methodology in general. In some cases, variations to methods are applied as a result of local practice or professional judgment.

LOCATION AND ELEVATION NOTES

Exploration point locations as shown on the Exploration Plan and as noted on the soil boring logs in the form of Latitude and Longitude are approximate. See Exploration and Testing Procedures in the report for the methods used to locate the exploration points for this project. Surface elevation data annotated with +/- indicates that no actual topographical survey was conducted to confirm the surface elevation. Instead, the surface elevation was approximately determined from topographic maps of the area.

	STRENGTH TERMS												
Density determine	OF COARSE-GRA retained on No. 20 ed by Standard Pe Resistance	0 sieve.)	(50% Consistency d	SISTENCY OF FI 6 or more passing letermined by lab -manual procedur resista	BEDROCK								
Descriptive Term (Density)	Standard Penetration or N-Value Blows/Ft.	Ring Sampler Blows/Ft.	Descriptive Term (Consistency)	Unconfined Compressive Strength Qu, (tsf)	Standard Penetration or N-Value Blows/Ft.	Ring Sampler Blows/Ft.	Ring Sampler Blows/Ft.	Standard Penetration or N-Value Blows/Ft.	Descriptive Term (Consistency)				
Very Loose	0 - 3	0-6	Very Soft	less than 0.25	0 - 1	< 3	< 30	< 20	Weathered				
Loose	4 - 9	7 - 18	Soft	0.25 to 0.50	2 - 4	3 - 4	30 - 49	20 - 29	Firm				
Medium Dense	10 - 29	19 - 58	Medium Stiff	0.50 to 1.00	4 - 8	5 - 9	50 - 89	30 - 49	Medium Hard				
Dense	30 - 50	59 - 98	Stiff	1.00 to 2.00	8 - 15	10 - 18	90 - 119	50 - 79	Hard				
Very Dense	Very Dense > 50 <u>></u> 99			2.00 to 4.00	15 - 30	19 - 42	> 119	>79	Very Hard				
			Hard	> 4.00	> 30	> 42							

RELEVANCE OF SOIL BORING LOG

The soil boring logs contained within this document are intended for application to the project as described in this document. Use of these soil boring logs for any other purpose may not be appropriate.



		5	Soil Classification		
Criteria for Assigni	ing Group Symbols	and Group Names	Using Laboratory Tests A	Group Symbol	Group Name ^B
		Clean Gravels:	Cu ≥ 4 and 1 ≤ Cc ≤ 3 ^E	GW	Well-graded gravel ^F
	Gravels: More than 50% of	Less than 5% fines ^C	Cu < 4 and/or [Cc<1 or Cc>3.0] E	GP	Poorly graded gravel ^F
	coarse fraction retained on No. 4 sieve	Gravels with Fines:	Fines classify as ML or MH	GM	Silty gravel F, G, H
Coarse-Grained Soils: More than 50% retained	retained on No. 4 sieve	More than 12% fines C	Fines classify as CL or CH	GC	Clayey gravel ^{F, G, H}
on No. 200 sieve		Clean Sands:	Cu ≥ 6 and 1 ≤ Cc ≤ 3 ^E	SW	Well-graded sand □
	Sands: 50% or more of coarse	Less than 5% fines D	Cu < 6 and/or [Cc<1 or Cc>3.0] E	SP	Poorly graded sand
	fraction passes No. 4	Sands with Fines:	Fines classify as ML or MH	SM	Silty sand ^{G, H, I}
	sieve	More than 12% fines D	Fines classify as CL or CH	SC	Clayey sand ^{G, H, I}
		Ingraphic	PI > 7 and plots on or above "A"	CL	Lean clay K, L, M
	Silts and Clays:	Inorganic:	PI < 4 or plots below "A" line J	ML	Silt K, L, M
	Liquid limit less than 50	Organic:	Liquid limit - oven dried < 0.75	OL	Organic clay K, L, M, N
Fine-Grained Soils: 50% or more passes the		Organic.	Liquid limit - not dried	OL	Organic silt K, L, M, O
No. 200 sieve		Inorganic:	PI plots on or above "A" line	CH	Fat clay ^{K, L, M}
	Silts and Clays:	morganio.	PI plots below "A" line	MH	Elastic Silt K, L, M
	Liquid limit 50 or more	Organic:	Liquid limit - oven dried < 0.75	ОН	Organic clay K, L, M, P
		Organio.	Liquid limit - not dried	011	Organic silt K, L, M, Q
Highly organic soils:	Primarily	organic matter, dark in co	olor, and organic odor	PT	Peat

- A Based on the material passing the 3-inch (75-mm) sieve.
- ^B If field sample contained cobbles or boulders, or both, add "with cobbles or boulders, or both" to group name.
- Gravels with 5 to 12% fines require dual symbols: GW-GM well-graded gravel with silt, GW-GC well-graded gravel with clay, GP-GM poorly graded gravel with silt, GP-GC poorly graded gravel with clay.
- D Sands with 5 to 12% fines require dual symbols: SW-SM well-graded sand with silt, SW-SC well-graded sand with clay, SP-SM poorly graded sand with silt, SP-SC poorly graded sand with clay.

E Cu =
$$D_{60}/D_{10}$$
 Cc = $\frac{(D_{30})^2}{D_{10} \times D_{60}}$

- $^{\mbox{\it F}}$ If soil contains \geq 15% sand, add "with sand" to group name.
- ⁶ If fines classify as CL-ML, use dual symbol GC-GM, or SC-SM.

- HIf fines are organic, add "with organic fines" to group name.
- If soil contains ≥ 15% gravel, add "with gravel" to group name.
- Ji Atterberg limits plot in shaded area, soil is a CL-ML, silty clay.

 1. The shaded area is a CL-ML, silty clay.

 2. The shaded area is a CL-ML, silty clay.

 3. The shaded area is a CL-ML, silty clay.

 4. The shaded area is a CL-ML, silty clay.

 4. The shaded area is a CL-ML, silty clay.

 4. The shaded area is a CL-ML, silty clay.

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 5. The shaded area is a CL-ML, silty clay.

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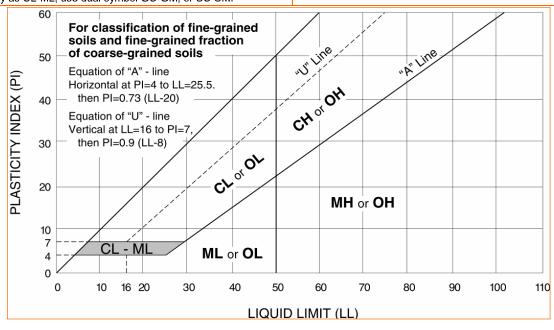
 6. The shaded area is a CL-ML, silty clay.

 6. The shaded area is a CL-ML, silty clay.

 6. The shaded area is a CL-ML, silty clay.

 6. The shaded area is a CL-ML, silty clay.

 6. The shaded area is a CL-ML, silty
- K If soil contains 15 to 29% plus No. 200, add "with sand" or "with gravel," whichever is predominant.
- Lef soil contains ≥ 30% plus No. 200 predominantly sand, add "sandy" to group name.
- MIf soil contains ≥ 30% plus No. 200, predominantly gravel, add "gravelly" to group name.
- NPI ≥ 4 and plots on or above "A" line.
- •PI < 4 or plots below "A" line.
- PI plots on or above "A" line.
- QPI plots below "A" line.





Town of Green Mountain Falls Land Use Approval Application Zoning Variance

General Information

- A zoning variance is a request to deviate from the requirements in the Green Mountain Falls Land Use and Zoning Code, as established in §16-709.
- This checklist is a guide to submitting a complete application and is not a substitute for all provisions in GMF Municipal Code. Applicants are responsible for reviewing and understanding the Code.
- Complete applications are subject to **four weeks (28 days)** GMF Staff review before appearing on Planning Commission and Board of Trustees agendas.

Applica	nt
Applicant	: Dewberry Engineers, Inc Sam Franzen
Address:	990 S Broadway, Denver, CO 80209
E-Mail:	sfranzen@dewberry.com
Phone:	303-951-0618
Owner:	Colorado Springs Utilities - Larysa Voronova
Address:	121 S Tejon St, Suite 200, Colorado Springs, CO 80947
E-mail:	lvoronova@csu.org
Phone:	719-668-3851

Property

Address: 10685 Hondo Ave, Green Mountain Falls, CO 80819							
Zoning Designation: R-1 10,000 Lot Size: 12,778 sqft							
Hillside Overlay zone? Yes ☒ No ☐	Land Survey Included: Yes 図 No □						

Certification & Signature

APPLICANT'S STATEMENT: I understand the procedures that apply to my request and acknowledge an incomplete application will not be processed or scheduled for public hearing until such time it is complete. GMF Town Staff's acceptance of the application, the payment of fees, and submittal of accompanying materials does not constitute completeness. I further agree to reimburse the city for technical and professional consulting expenses that may be incurred during the review of my request. Failure to reimburse the Town for invoiced expenses constitutes an incomplete application.

Certification: The undersigned applicant certifies under oath and under penalties of perjury that the information found in the application is true and accurate to the best of their knowledge.

Applicant Signature_	Sat Lyon	Date	10/12/2022
Owner Signature		Date_	
Owner Signature		Date_	

This document can be signed electronically using <u>Adobe Reader DC for free</u>.

Variance Checklist

The following checklist is a guideline for submitting a complete Variance Land Use Approval Application. Failure to provide information that address the standards and requirements in GMF Zoning Code could result in staff review delays. GMF Staff may require additional information in accordance with Town Code and Town Attorney's recommendation.

1. Variance Application & Petition

- a. Application, signed and dated by the applicant and property owner(s)
- b. Application fee
- c. Letter of explanation
 - i. Describe the proposed project in detail, referring to site plans and drawings as necessary
 - i. Describe the reason for pursuing a variance; include benefits to yourself, the neighborhood, and the Town.
 - ii. Explain how the variance would not be contrary to the public interest.
 - iii. Provide proof of unique circumstances or conditions and how the strict application of the provisions of GMF Zoning and Land Use Code would deprive the applicant of the reasonable use of such land or building as described in the Zoning Code §16-709
 - iv. Provide proof of unnecessary hardship as described in the Zoning Code §16-709

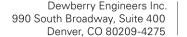
2. Development Plan

- a. Vicinity Map
- b. Total development plan area in acres or square feet
- c. Zoning setbacks
- a. North arrow
- b. Property boundaries and dimensions
- c. Existing and proposed lots and tract lines, with dimensions
- d. Existing and proposed topography (contour lines or slope)
- e. Show and label all access points to the property from adjacent streets and alleys
- f. Proposed grading plan and separate GECP application

3. Procedure:

- a. Consultation meeting with GMF Staff and draft plans
- b. Submit completed application and checklist materials electronically: planner@gmfco.us
- c. Submit appropriate fees to Town Clerk for receipt
- d. Work with GMF Staff to schedule public hearings

GMF Town Staff:	
□ Application	
□ Variance Petition	
□ Development Plan	
☐ Application fee	
Date Amount	\square Check # \square Credit Card







October 12, 2022

Town of Green Mountain Falls Attn: Nate Scott, Planner Town Hall 10615 Green Mountain Falls Road Green Mountain Falls, CO 80819

RE: Letter of Explanation for the Green Mountain Falls Pump Station

Dear Mr. Scott,

Dewberry Engineers is pleased to submit a Variance Application and documentation for non-residential use of a residentially zoned property for the Green Mountain Falls Pump Station (GMFPS) on behalf of Colorado Springs Utilities. The Variance Application and supporting documentation are provided for review and comment. A digital copy has also been emailed.

The site selected for the new GMFPS is 10685 Hondo Avenue. The property is owned by the same entity that owns the property at 6985 Colorado St directly to the west. Colorado Springs Utilities is currently negotiating the terms of an easement with the property owner to allow the pump station to be built on the site. The agreement and required Owner Signature will be submitted once the agreement is finalized.

This variance is being proposed because the selected site for the GMFPS is zone R-1 10,000 and this building is non-residential in nature.

A Study/Alternative Analysis (SAA) evaluated twelve sites within Green Mountain Falls as options for the new pump station. Identifying viable locations for the GMFPS was difficult due to the steep nature of the terrain, the majority of the land in GMF being privately owned residential property, and the necessity of selecting a site near the intersection of the pumped and gravity zones in Colorado Springs Utilities water system. The SAA concluded the most suitable site for GMFPS is 10685 Hondo Avenue west of Ute Pass Avenue which can be seen on the location and vicinity maps on the Development Plan cover sheet and drawing C-1, attached. Colorado Springs Utilities is currently negotiating an easement on the property for the pump station with the property owner.

The purpose of the GMFPS project is to replace the existing below grade pump station. The existing pump station was constructed in 1986 and has reached the end of its useful life. The new pump station will ensure reliable water service for residents and businesses in Green Mountain Falls. It will also provide a safer and more readily accessible working space for Colorado Springs Utilities enabling more efficient maintenance and repair activities.

The new pump station site also allows for parking for maintenance vehicles whereas at the existing site vehicles park on the road impeding traffic. The existing pump station is a below grade structure located at the intersection of Mountain Avenue and Spruce Avenue in existing easements on private properties and is directly adjacent to two residences. Space at the existing site is restricted and construction of a new pump station at the existing site is not feasible. The existing pump station will be demolished and abandoned once the new pump station is constructed and operating.

The new pump station will be an above grade building that sits back into the hillside on the property, see drawing C-3, attached. The building will be a single room that is 22'-8" by 18'-10". A 13'-8" by 17'-8" open topped enclosure for a backup emergency generator will be attached to the east side of the building. The building location on the site and arrangement can be seen on drawing C-3 and A-2, attached.

Generally, proposed site grading is designed to match existing drainage patterns as shown on drawing C-4, attached. The most significant grading changes occur where the pump station building is built into the hillside and in front of the building where a portion of the drainage channel is replaced with a culvert to allow the parking area to be expanded.

The building walls will be concrete covered with a veneer composed of natural stone facing on the bottom and pre-finished metal narrow batten siding above. The stone veneer will slope to match the grade around the building. The generator enclosure walls will be concrete covered with a natural stone veneer to match the building and capped with colored concrete wall caps. The building roof will be pre-finished metal standing seam that is the same color as the wall siding. The roof slants only to the east to minimize the view impacts from the neighboring properties. Stone and metal wall and roof finish colors will be primarily earth tones, browns, and grays selected to blend with the surrounding environment. A double man door will be installed on the north face of the building for access and to allow for equipment removal for maintenance. The generator enclosure will have a fabricated steel gate for access. The door and gate will be finished to blend with the building aesthetic. Building elevations can be seen on drawings A-3 and A-4, attached.

A parking area composed of Class 6 road base will be provided on the north side of the building and will be large enough to accommodate two Colorado Springs Utilities maintenance vehicles. Two concrete retaining walls will be construction on the east side of the site to replace the existing retaining wall that has partially failed and to allow for grading of the parking area. The concrete will be colored to blend with the building aesthetics and surrounding environment. Drawing C-3, attached, shows the items discussed above as well as the proposed grading.

The pump station will provide an integral service to Green Mountain Falls and its residents. Design of the building and site have focused on blending the structure with the aesthetics of the buildings in the area to minimize the impact of the structure on the surrounding environment.

Please contact Sam Franzen at sfranzen@dewberry.com or 303-951-0618 with any questions or concerns.

Sincerely,

Sam Franzen Project Engineer

Sait Zym





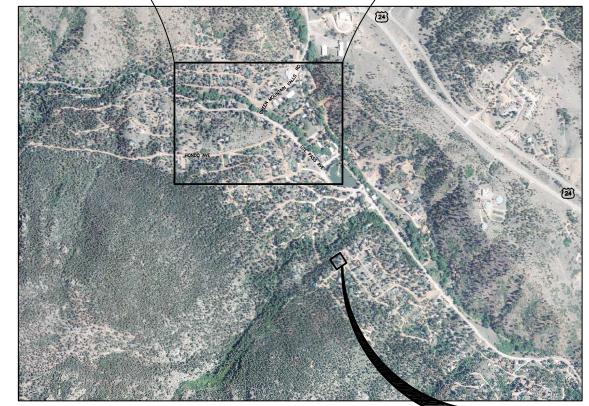
GREEN MOUNTAIN FALLS PUMP STATION

It's how we're all connected



GREEN MOUNTAIN FALLS
PUMP STATION PROJECT
LOCATION

LOCATION MAP
NO SCALE



VICINITY MAP
NO SCALE

EXISTING GREEN MOUNTAIN FALLS PUMP STATION TO BE DEMOLISHED

DEVELOPMENT PLAN
OCTOBER 2022

DRAWING INDEX

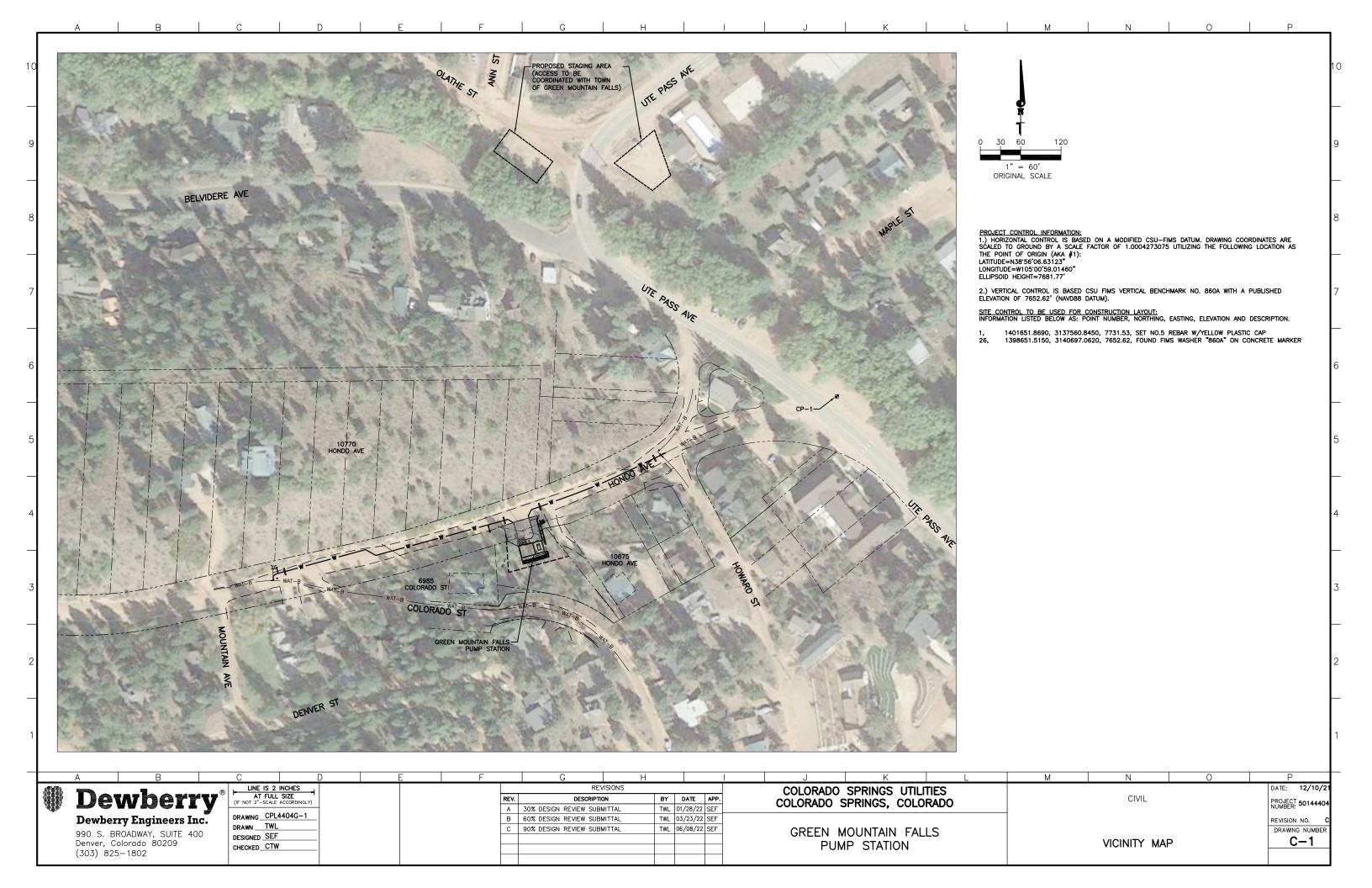
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GENERAL 	COVER AND INDEX	
CIVIL C-1 C-2 C-3 C-4 EC-1	VICINITY MAP DEMOLITION PLAN DEVELOPMENT PLAN ENLARGED GRADING PLAN EROSION CONTROL PLAN	
ARCHITECTURAL A-2 A-3 A-4	FLOOR PLAN & ROOF PLAN BUILDING ELEVATIONS BUILDING ELEVATIONS INTERIOR ELEVATIONS	

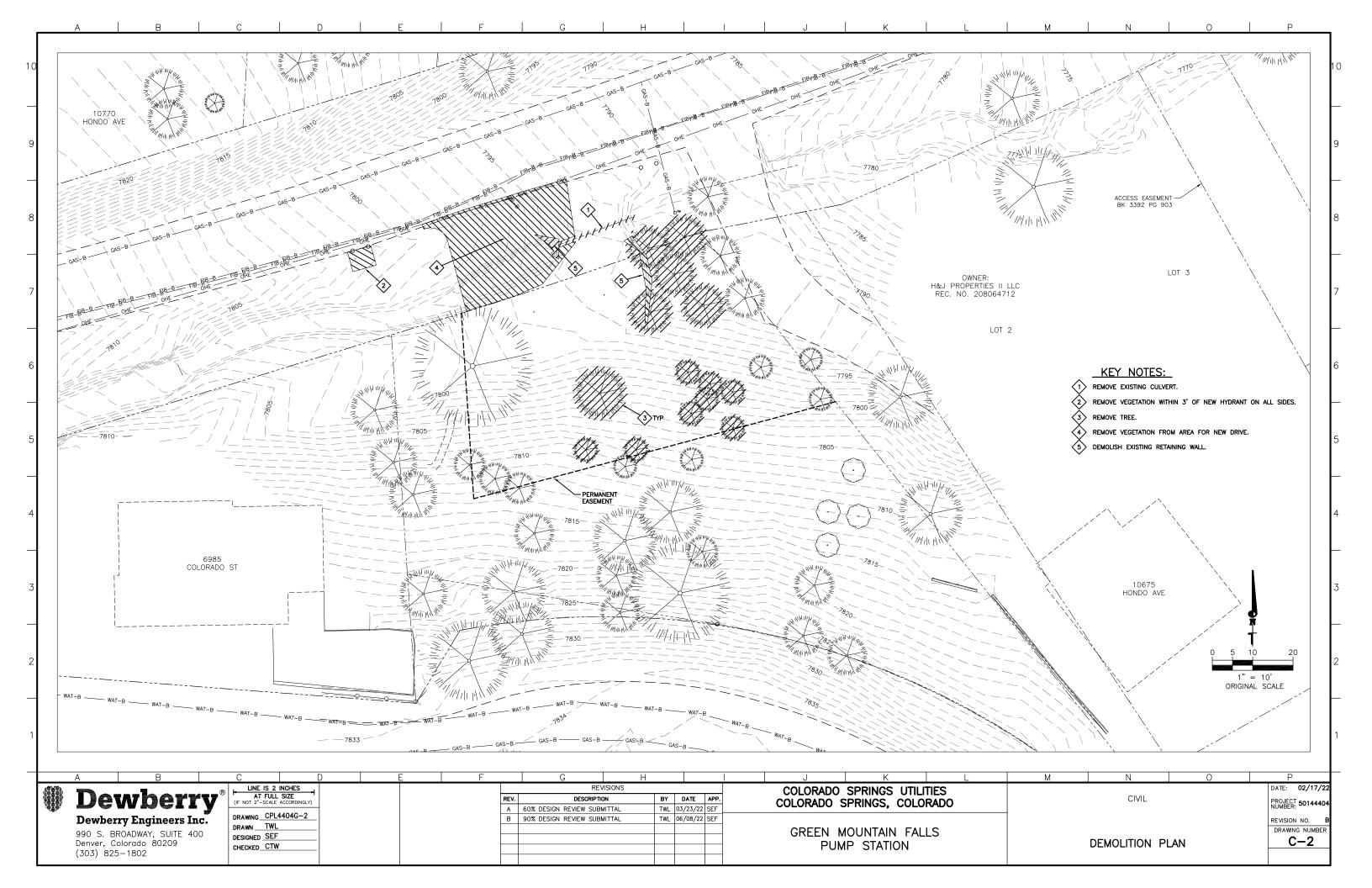
GMFPS Site Summary		
Site Area	12,778 sqft	
Setback Summary		
Front		
Required	15 feet	
Provided	12 feet*	
East Side		
Required	10 feet	
Provided	19	
West Side		
Required	10 feet	
Provided	17	
Back		
Required	10 feet	
Provided	50 feet	
*Front setback variance application submitted		

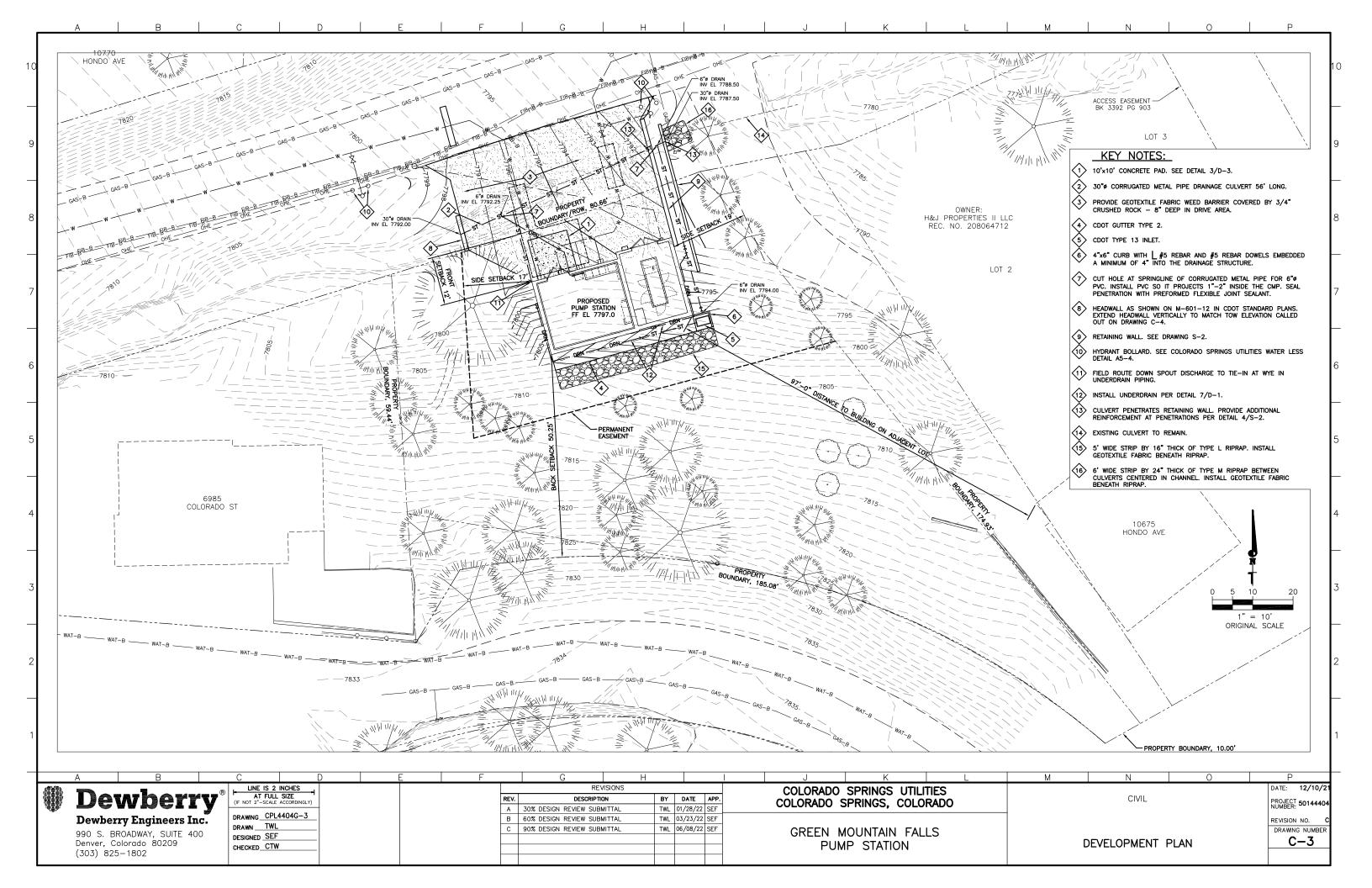


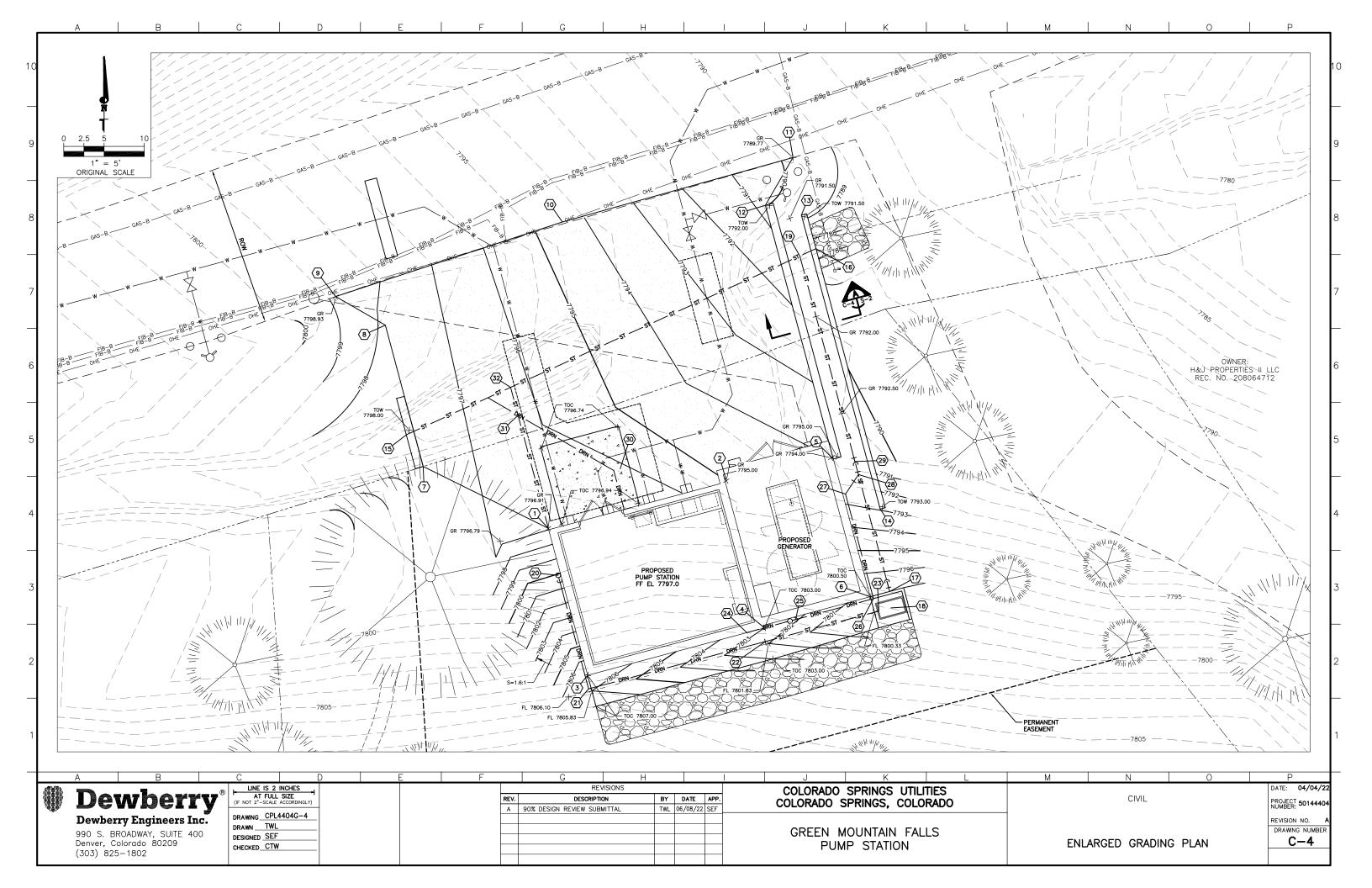
990 S. BROADWAY, SUITE 400 Denver, Colorado 80209 (303) 825-1802

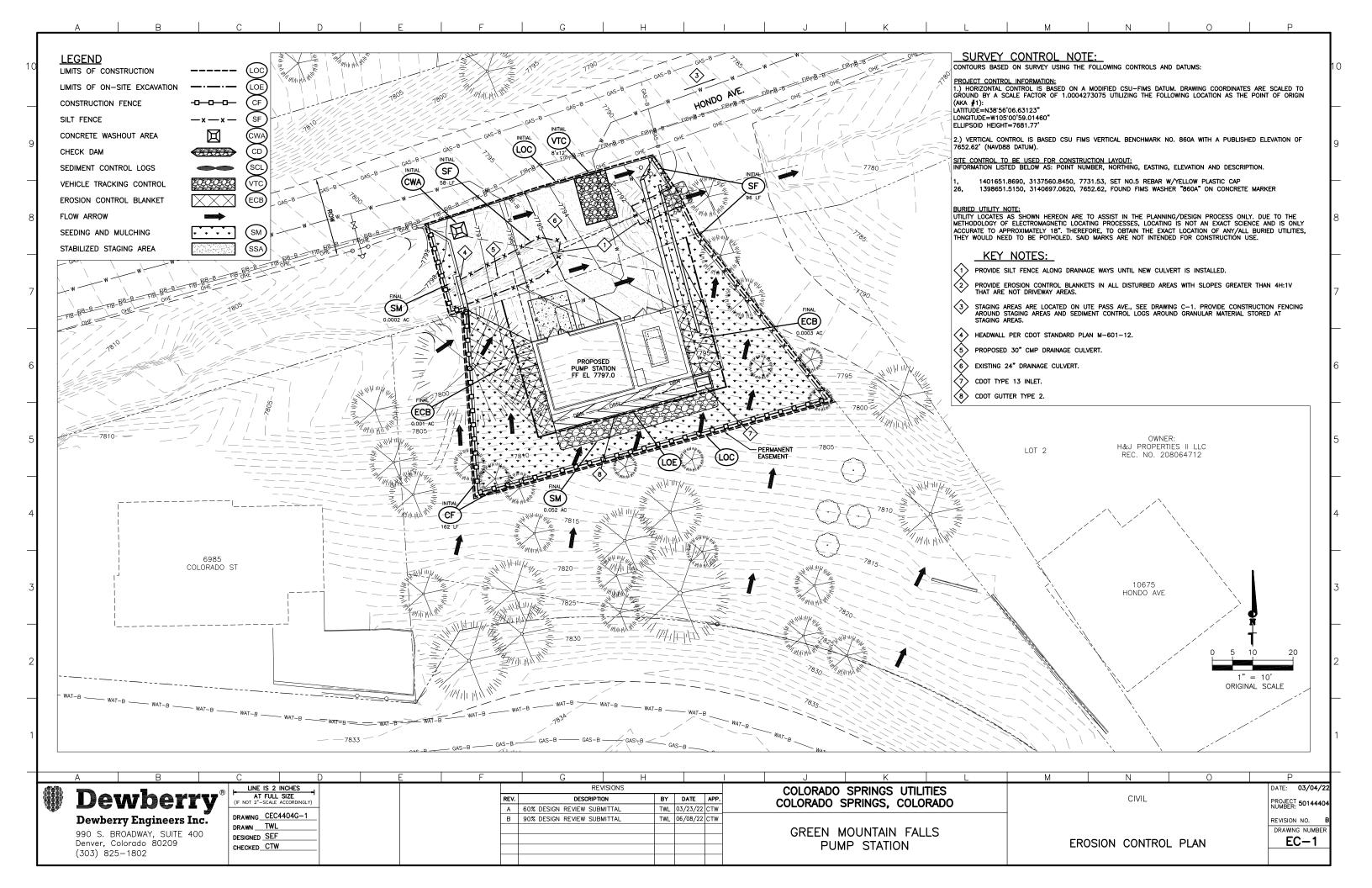


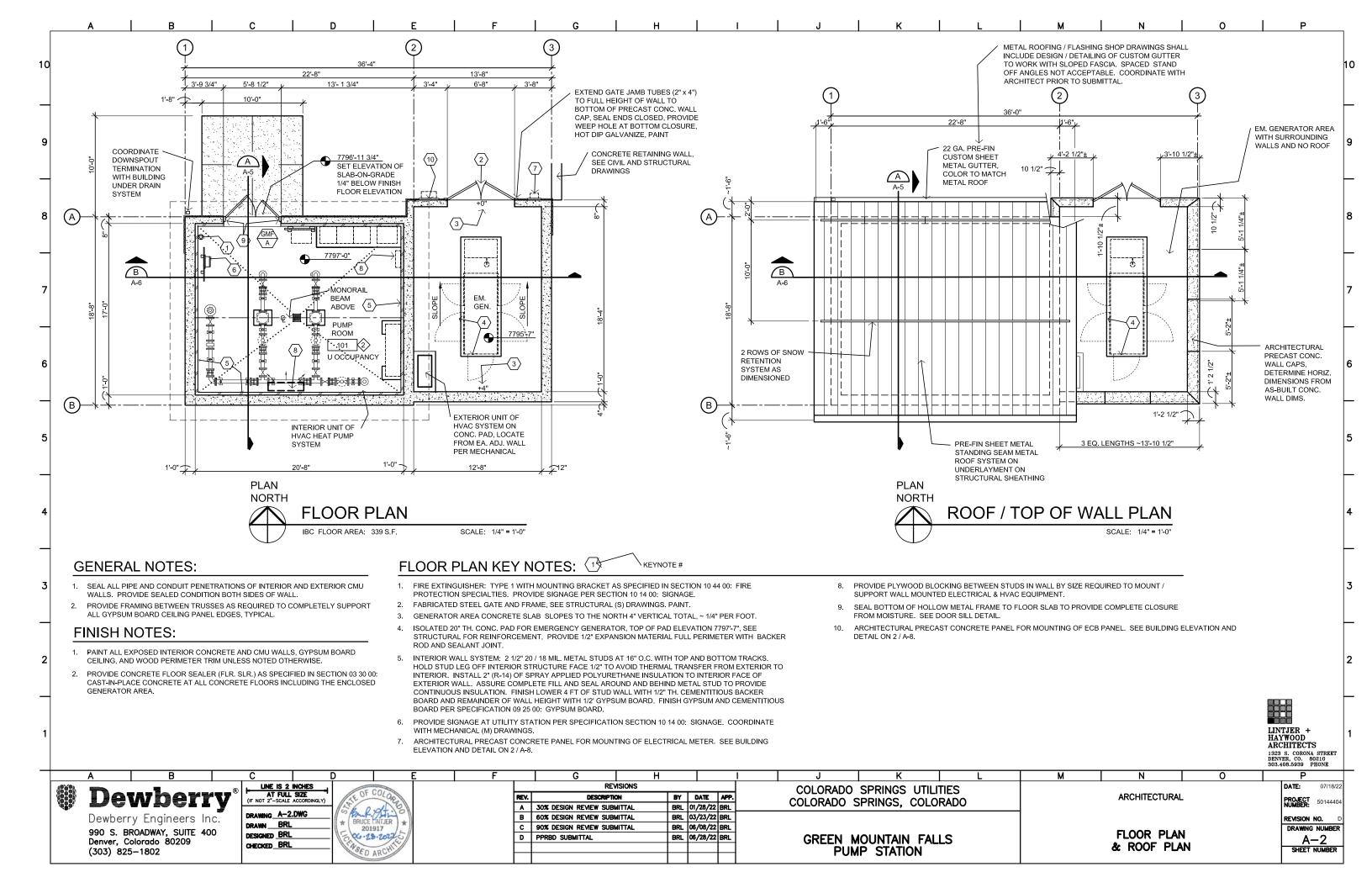


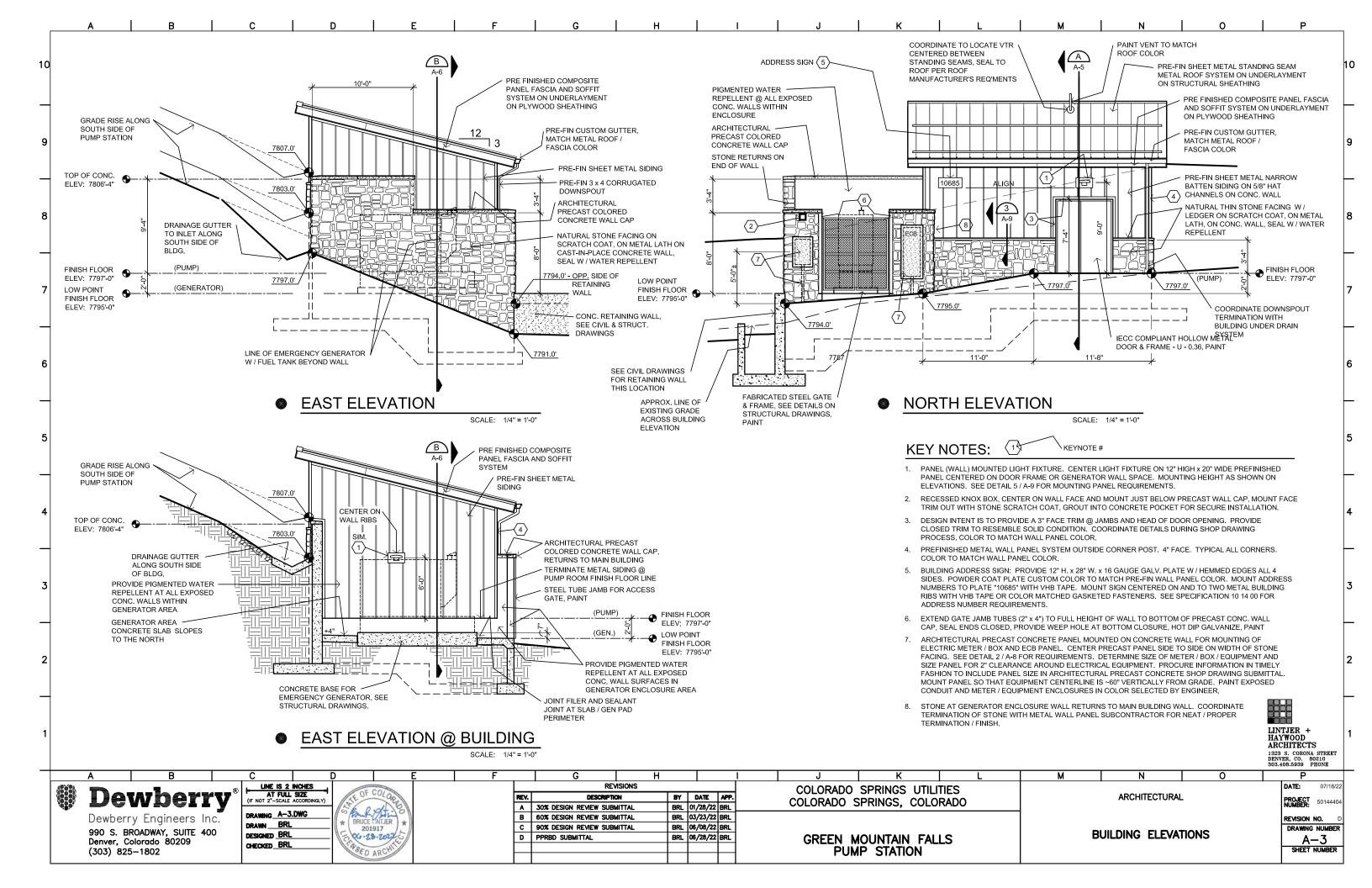


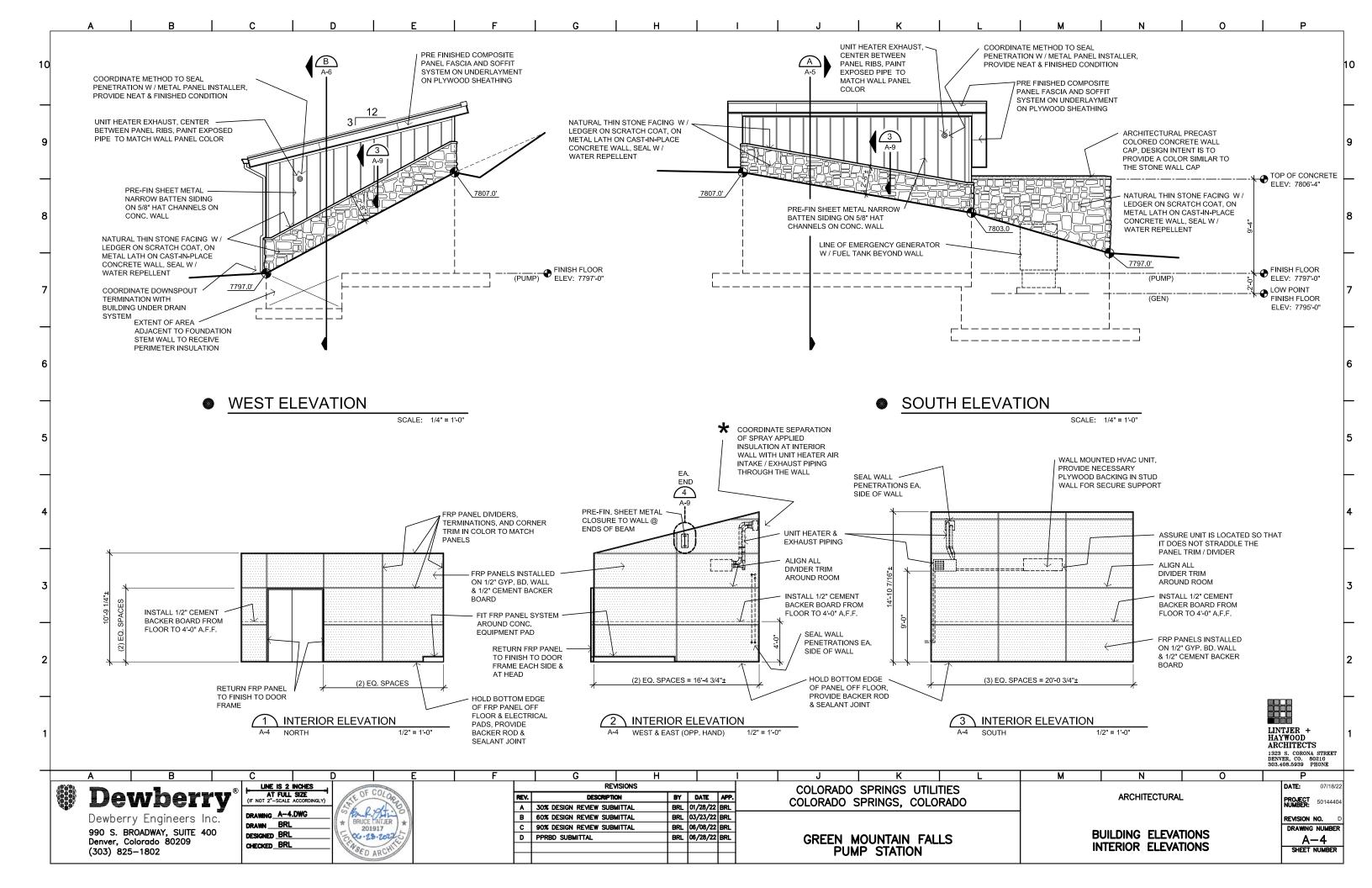














Town of Green Mountain Falls Land Use Approval Application Zoning Variance

General Information

- A zoning variance is a request to deviate from the requirements in the Green Mountain Falls Land Use and Zoning Code, as established in §16-709.
- This checklist is a guide to submitting a complete application and is not a substitute for all provisions in GMF Municipal Code. Applicants are responsible for reviewing and understanding the Code.
- Complete applications are subject to **four weeks (28 days)** GMF Staff review before appearing on Planning Commission and Board of Trustees agendas.

Applica	Applicant		
Applicant	: Dewberry Engineers, Inc Sam Franzen		
Address:	990 S Broadway, Denver, CO 80209		
E-Mail:	sfranzen@dewberry.com		
Phone:	303-951-0618		
Owner:	Colorado Springs Utilities - Larysa Voronova		
Address:	121 S Tejon St, Suite 200, Colorado Springs, CO 80947		
E-mail:	lvoronova@csu.org		
Phone:	719-668-3851		

Property

Address: 10685 Hondo Ave, Green Mountain Falls, CO 80819		
Zoning Designation: R-1 10,000	Lot Size: 12,778 sqft	
Hillside Overlay zone? Yes ☒ No ☐	Land Survey Included: Yes ⊠ No □	

Certification & Signature

APPLICANT'S STATEMENT: I understand the procedures that apply to my request and acknowledge an incomplete application will not be processed or scheduled for public hearing until such time it is complete. GMF Town Staff's acceptance of the application, the payment of fees, and submittal of accompanying materials does not constitute completeness. I further agree to reimburse the city for technical and professional consulting expenses that may be incurred during the review of my request. Failure to reimburse the Town for invoiced expenses constitutes an incomplete application.

Certification: The undersigned applicant certifies under oath and under penalties of perjury that the information found in the application is true and accurate to the best of their knowledge.

Applicant Signature	Sat Lyn	Date 10/12/2022
Owner Signature		Date
Owner Signature		Date

This document can be signed electronically using <u>Adobe Reader DC for free</u>.

Variance Checklist

The following checklist is a guideline for submitting a complete Variance Land Use Approval Application. Failure to provide information that address the standards and requirements in GMF Zoning Code could result in staff review delays. GMF Staff may require additional information in accordance with Town Code and Town Attorney's recommendation.

1. Variance Application & Petition

- a. Application, signed and dated by the applicant and property owner(s)
- b. Application fee
- c. Letter of explanation
 - i. Describe the proposed project in detail, referring to site plans and drawings as necessary
 - i. Describe the reason for pursuing a variance; include benefits to yourself, the neighborhood, and the Town.
 - ii. Explain how the variance would not be contrary to the public interest.
 - iii. Provide proof of unique circumstances or conditions and how the strict application of the provisions of GMF Zoning and Land Use Code would deprive the applicant of the reasonable use of such land or building as described in the Zoning Code §16-709
 - iv. Provide proof of unnecessary hardship as described in the Zoning Code §16-709

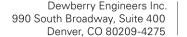
2. Development Plan

- a. Vicinity Map
- b. Total development plan area in acres or square feet
- c. Zoning setbacks
- a. North arrow
- b. Property boundaries and dimensions
- c. Existing and proposed lots and tract lines, with dimensions
- d. Existing and proposed topography (contour lines or slope)
- e. Show and label all access points to the property from adjacent streets and alleys
- f. Proposed grading plan and separate GECP application

3. Procedure:

- a. Consultation meeting with GMF Staff and draft plans
- b. Submit completed application and checklist materials electronically: planner@gmfco.us
- c. Submit appropriate fees to Town Clerk for receipt
- d. Work with GMF Staff to schedule public hearings

GMF Town Staff:				
□ Application				
□ Variance Petition				
□ Development Plan				
☐ Application fee				
Date Amount	□ Check # □ Credit Card			



303.825.1802 303.825.2322 fax www.dewberry.com



October 12, 2022

Town of Green Mountain Falls Attn: Nate Scott, Planner Town Hall 10615 Green Mountain Falls Road Green Mountain Falls, CO 80819

RE: Letter of Explanation for the Green Mountain Falls Pump Station

Dear Mr. Scott,

Dewberry Engineers is pleased to submit a Variance Application and documentation for the front setback requirements for the Green Mountain Falls Pump Station (GMFPS) on behalf of Colorado Springs Utilities. The Variance Application and supporting documentation are provided for review and comment.

The site selected for the new GMFPS is 10685 Hondo Avenue. The property is owned by the same entity that owns the property at 6985 Colorado St directly to the west. Colorado Springs Utilities is currently negotiating the terms of an easement with the property owner to allow the pump station to be built on the site. The agreement and required Owner Signature will be submitted once the agreement is finalized.

This variance is being proposed because the steepness of the hillside on the site limits where the building can be located specifically in relation to the front property and right of way line paralleling Hondo Ave as shown on drawing C-3 in the Development Plan, attached. The GMF Municipal Code requires a 15 foot setback for properties zoned R-1 10,000. The proposed building has been pushed back into the hillside on the site to limit its visibility to surrounding residences and provide as much setback from the front property as possible. However, only a 12 foot setback at the closest point from the front property line is able to be provided. Locating the building further into the hillside will require more disturbance of the hillside to accomplish construction and achieve the final grading required to route flow around the building. This will lead to the removal of additional vegetation and trees.

There is approximately 23 feet between the property/right of way line and edge of the existing road, so the proposed building will be setback 35 feet from the edge of road. The right of way is this wide to encompass the drainageway running parallel with Hondo Ave. Having the building 35 feet from the edge of the road limits its exposure to the public and surrounding properties.

The purpose of the GMFPS project is to replace the existing below grade pump station. The existing pump station was constructed in 1986 and has reached the end of its useful life. The new pump station will ensure reliable water service for residents and businesses in Green Mountain Falls. It will also provide a safer and more readily accessible working space for Colorado Springs Utilities enabling more efficient maintenance and repair activities.

The new pump station will be an above grade building that sits back into the hillside on the property, see drawing C-3, attached. The building will be a single room that is 22'-8" by 18'-10". A 13'-8" by 17'-8" open topped enclosure for a backup emergency generator will be attached to the east side of the building. The building location on the site and arrangement can be seen on drawing C-3 and A-2, attached.

Generally, proposed site grading is designed to match existing drainage patterns as shown on drawing C-4, attached. The most significant grading changes occur where the pump station building is built into the hillside and in front of the building where a portion of the drainage channel is replaced with a culvert to allow the parking area to be expanded.

The building walls will be concrete covered with a veneer composed of natural stone facing on the bottom and pre-finished metal narrow batten siding above. The stone veneer will slope to match the grade around the building. The generator enclosure walls will be concrete covered with a natural stone veneer to match the building and capped with colored concrete wall caps. The building roof will be pre-finished metal standing seam that is the same color as the wall siding. The roof slants only to the east to minimize the view impacts from the neighboring properties. Stone and metal wall and roof finish colors will be primarily earth tones, browns, and grays selected to blend with the surrounding environment. A double man door will be installed on the north face of the building for access and to allow for equipment removal for maintenance. The generator enclosure will have a fabricated steel gate for access. The door and gate will be finished to blend with the building aesthetic. Building elevations can be seen on drawings A-3 and A-4, attached.

A parking area composed of Class 6 road base will be provided on the north side of the building and will be large enough to accommodate two Colorado Springs Utilities maintenance vehicles. Two concrete retaining walls will be construction on the east side of the site to replace the existing retaining wall that has partially failed and to allow for grading of the parking area. The concrete will be colored to blend with the building aesthetics and surrounding environment. Drawing C-3, attached, shows the items discussed above as well as the proposed grading.

The pump station will provide an integral service to Green Mountain Falls and its residents. While the building is within the required front setback the large right of way space needed to accommodate the drainage channel to the north of the building means the building is setback 35 feet from the edge of the road.

Please contact Sam Franzen at sfranzen@dewberry.com or 303-951-0618 with any questions or concerns.

Sincerely,

Sam Franzen Project Engineer

San Zym





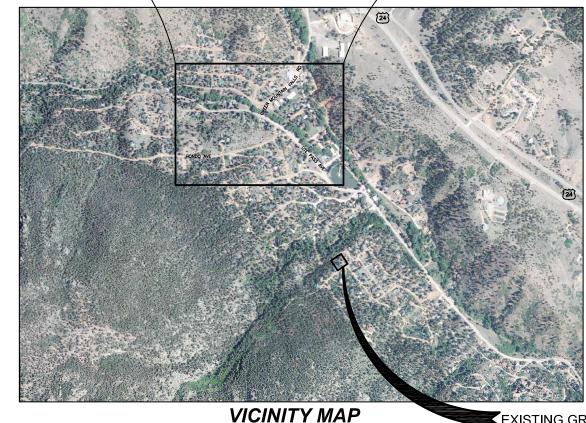
GREEN MOUNTAIN FALLS PUMP STATION

It's how we're all connected



GREEN MOUNTAIN FALLS
PUMP STATION PROJECT
LOCATION

LOCATION MAP
NO SCALE



NO SCALE

EXISTING GREEN MOUNTAIN FALLS PUMP STATION TO BE DEMOLISHED

DEVELOPMENT PLAN
OCTOBER 2022

DRAWING INDEX

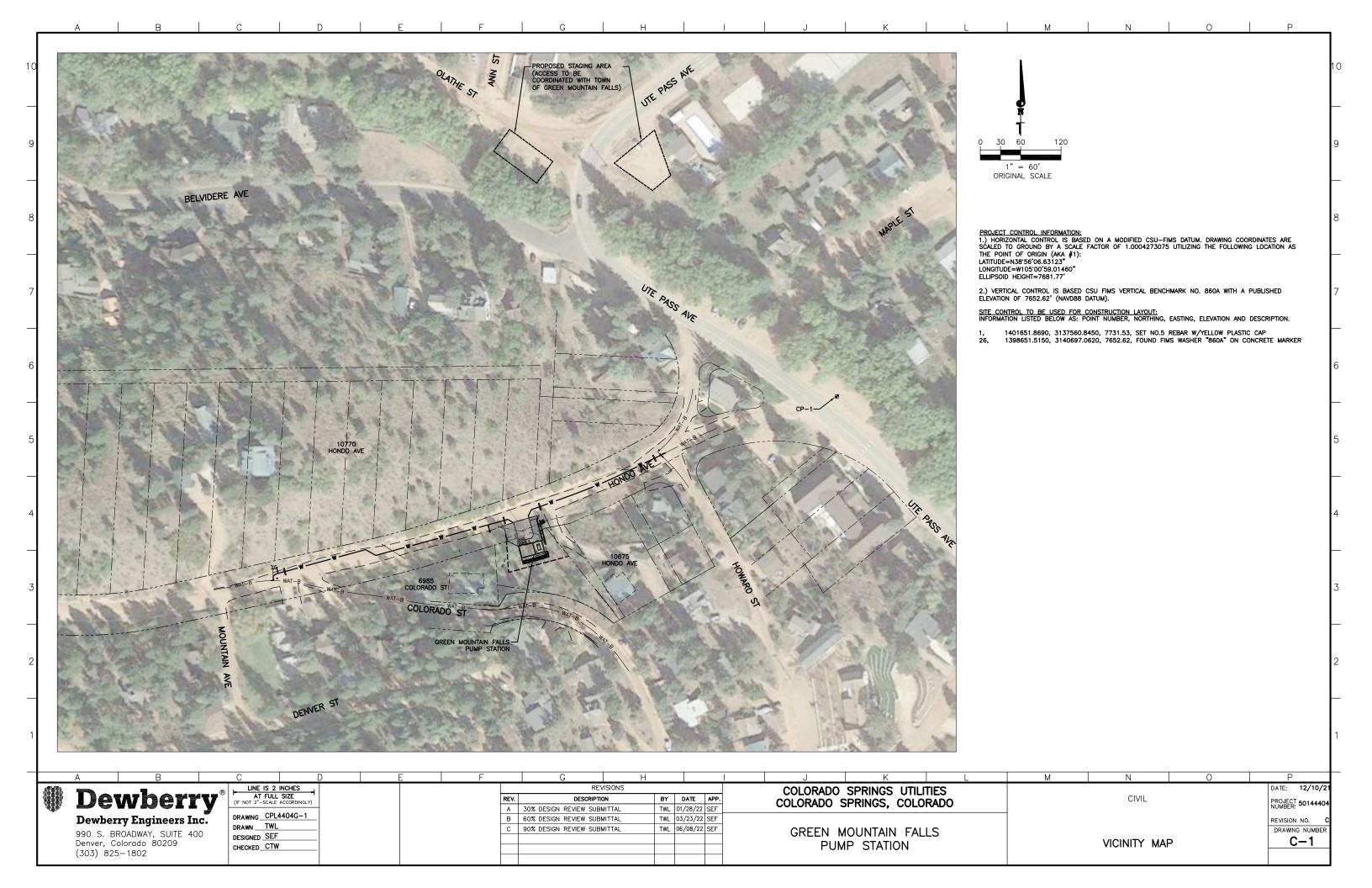
DWG NO	TITLE	
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CIVIL C-1 C-2 C-3 C-4 EC-1	VICINITY MAP DEMOLITION PLAN DEVELOPMENT PLAN ENLARGED GRADING PLAN EROSION CONTROL PLAN	
ARCHITECTURAL A-2 A-3 A-4	FLOOR PLAN & ROOF PLAN BUILDING ELEVATIONS BUILDING ELEVATIONS INTERIOR ELEVATIONS	

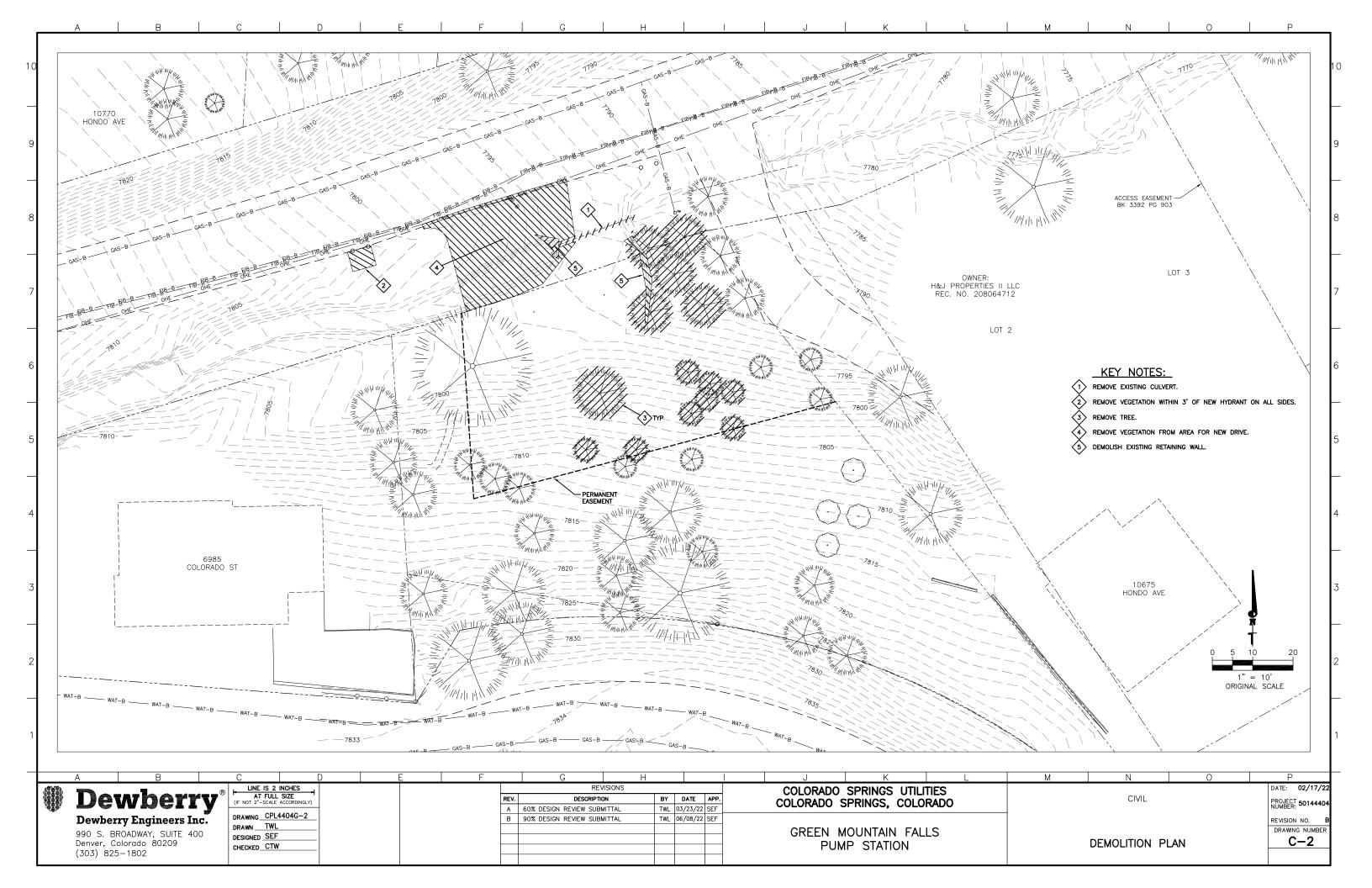
GMFPS Site Summary		
Site Area	12,778 sqft	
Setback	Summary	
Front		
Required	15 feet	
Provided	12 feet*	
East Side		
Required	10 feet	
Provided	19	
West Side		
Required	10 feet	
Provided	17	
Back		
Required	10 feet	
Provided	50 feet	
*Front setback application sul		

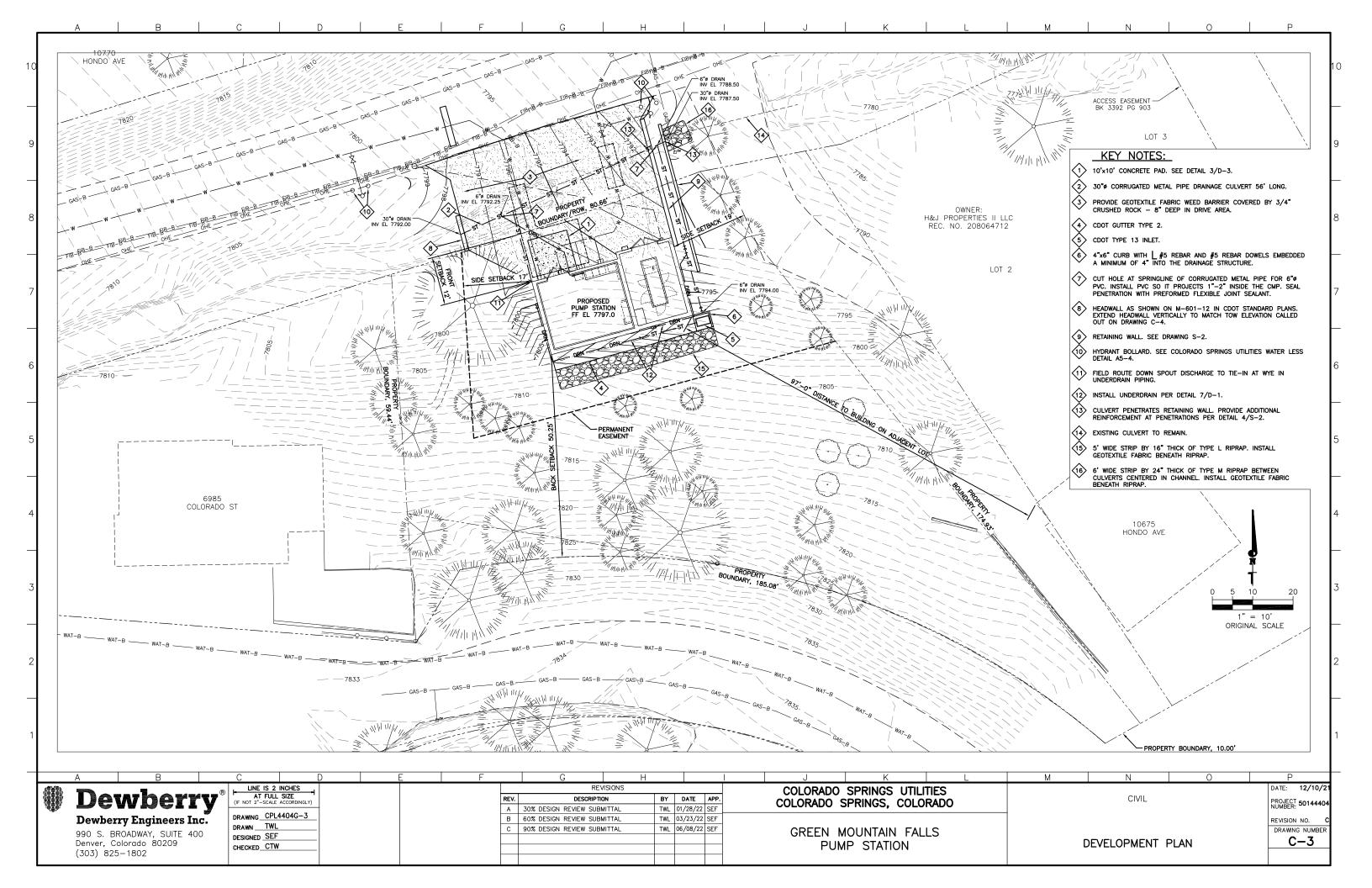


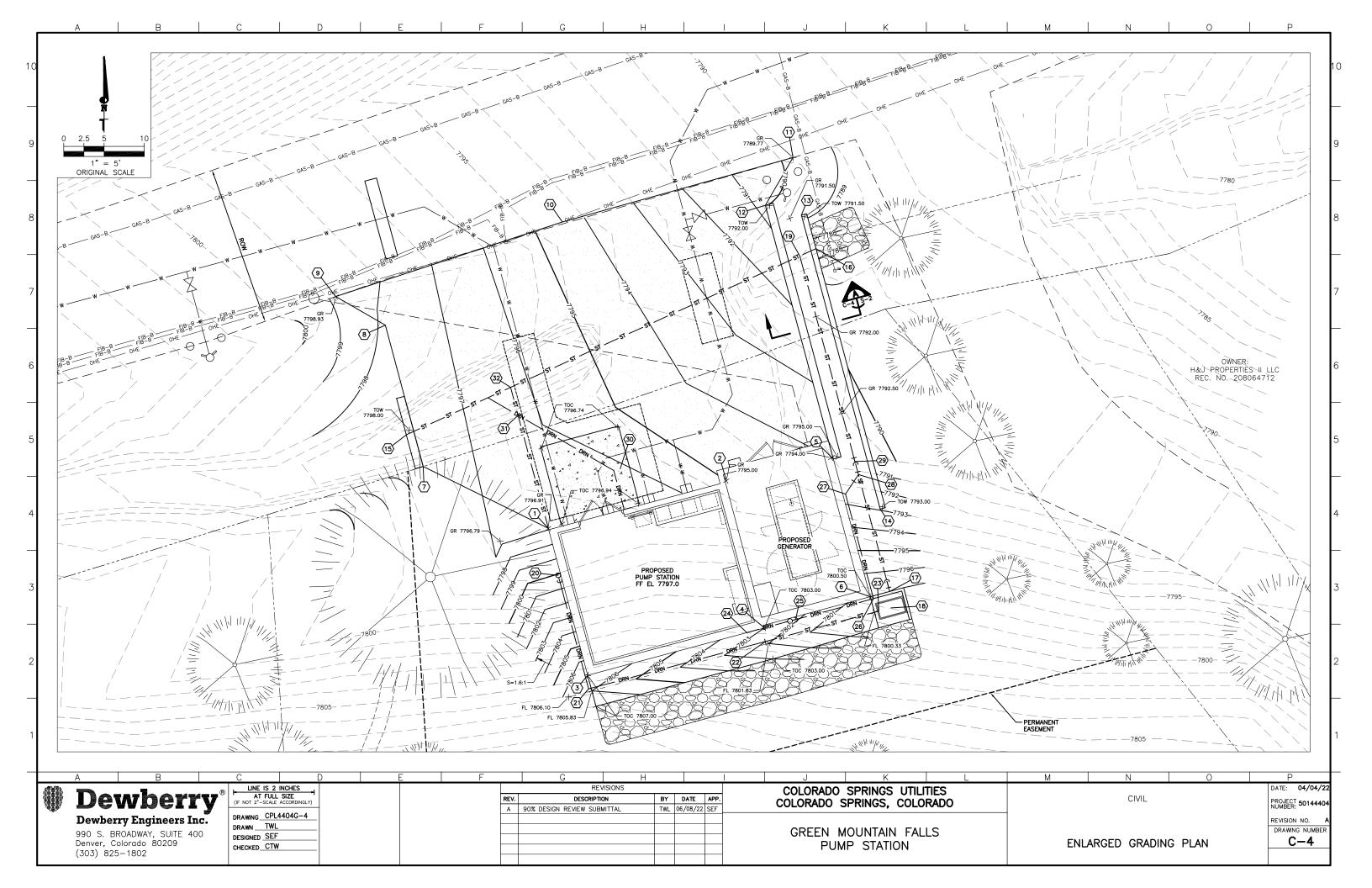
990 S. BROADWAY, SUITE 400 Denver, Colorado 80209 (303) 825-1802

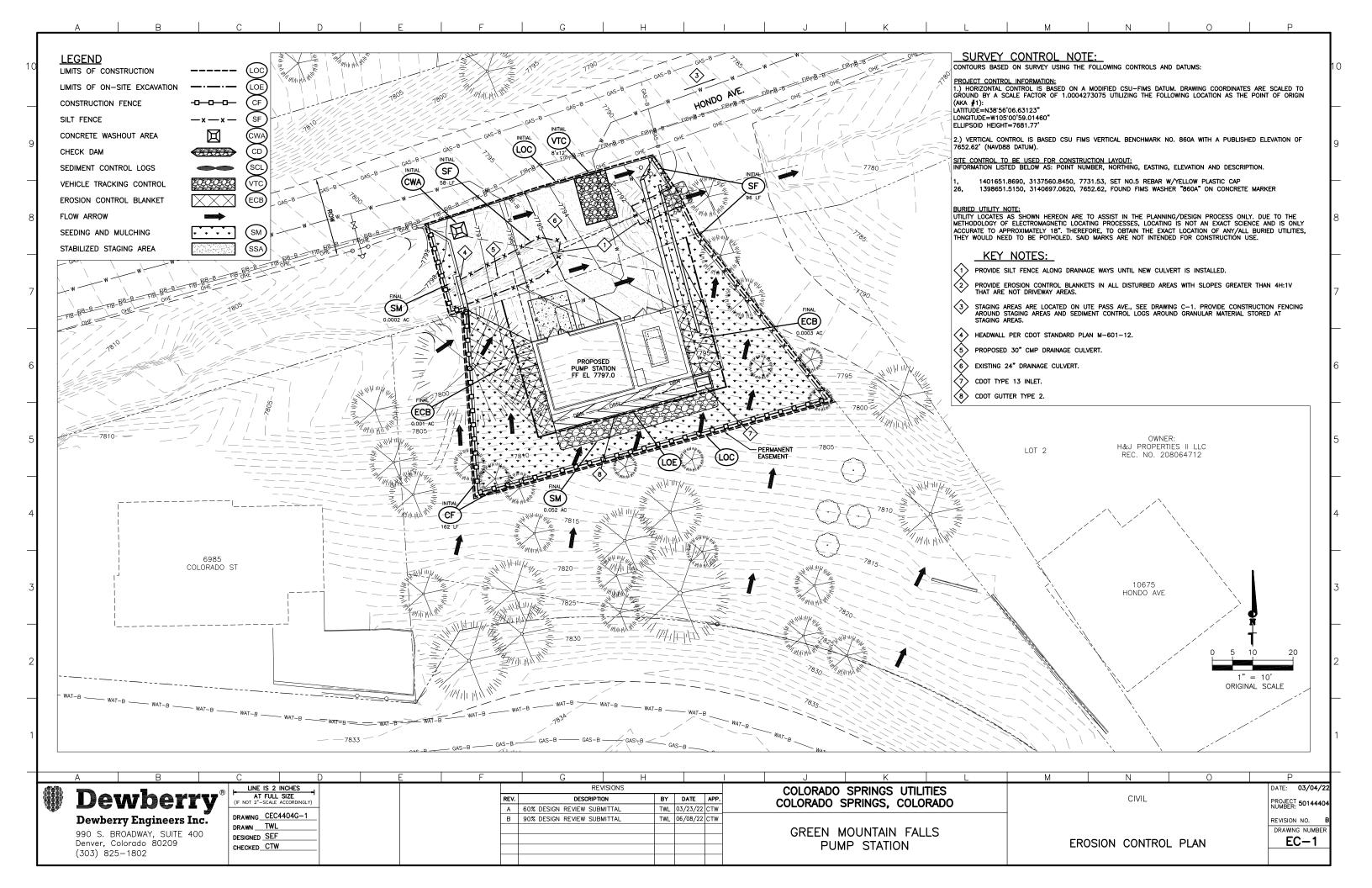


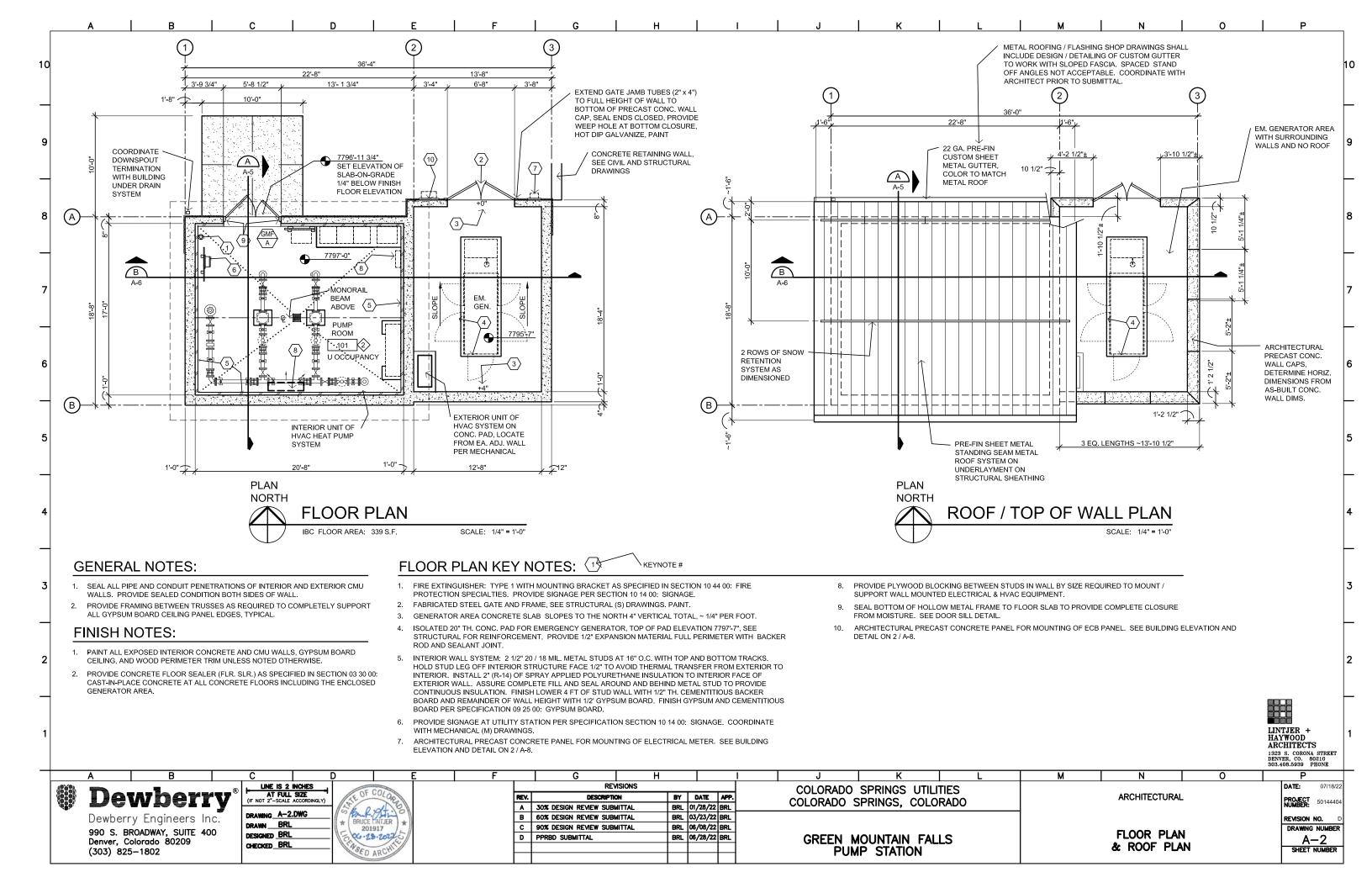


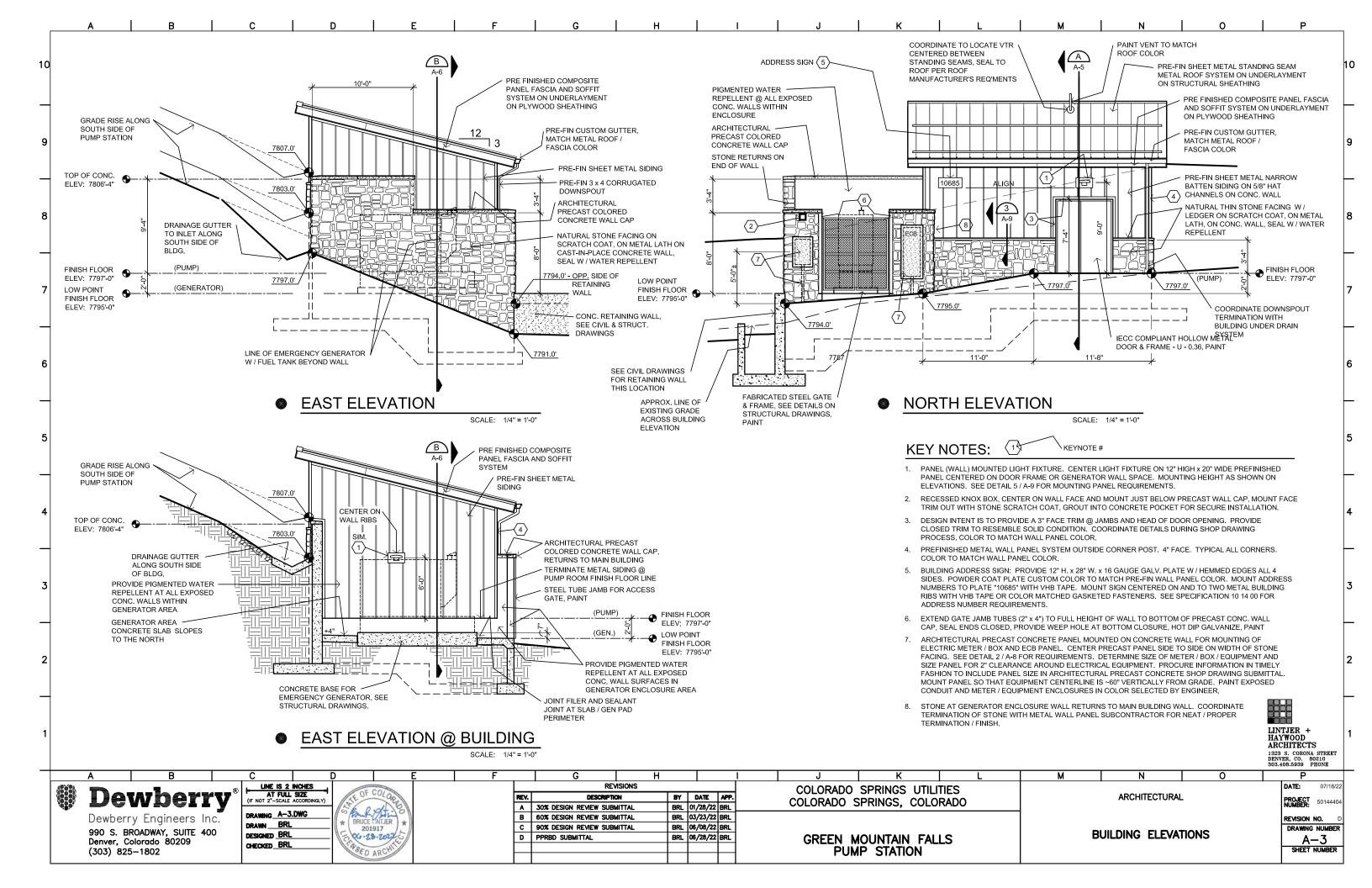


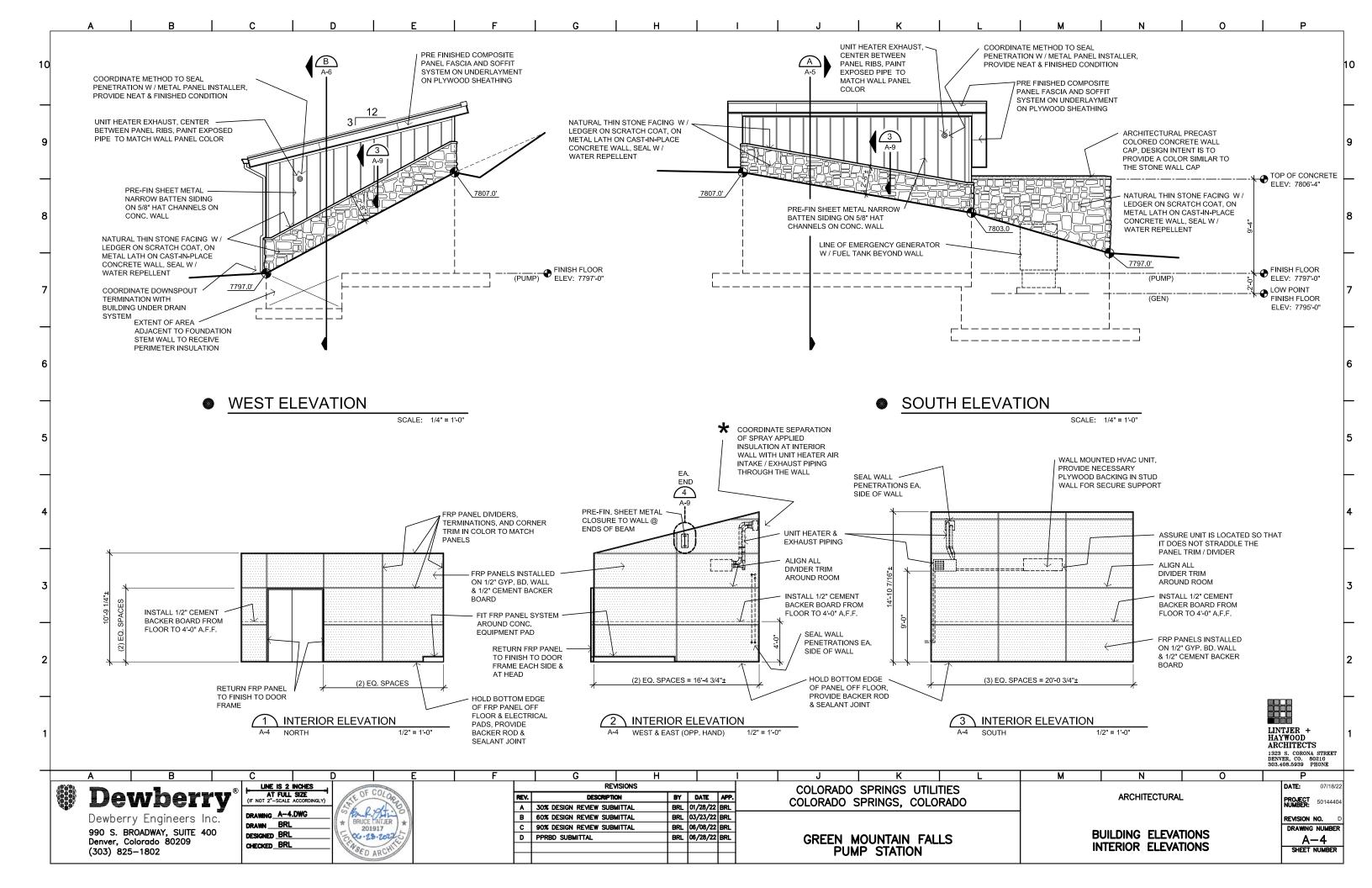














Town of Green Mountain Falls Land Use Approval Application Zoning Variance

General Information

- A zoning variance is a request to deviate from the requirements in the Green Mountain Falls Land Use and Zoning Code, as established in §16-709.
- This checklist is a guide to submitting a complete application and is not a substitute for all provisions in GMF Municipal Code. Applicants are responsible for reviewing and understanding the Code.
- Complete applications are subject to **four weeks (28 days)** GMF Staff review before appearing on Planning Commission and Board of Trustees agendas.

Applica	Applicant		
Applicant	: Dewberry Engineers, Inc Sam Franzen		
Address:	990 S Broadway, Denver, CO 80209		
E-Mail:	sfranzen@dewberry.com		
Phone:	303-951-0618		
Owner:	Colorado Springs Utilities - Larysa Voronova		
Address:	121 S Tejon St, Suite 200, Colorado Springs, CO 80947		
E-mail:	lvoronova@csu.org		
Phone:	719-668-3851		

Property

Address: 10685 Hondo Ave, Green Mountain Falls, CO 80819		
Zoning Designation: R-1 10,000	Lot Size: 12,778 sqft	
Hillside Overlay zone? Yes ☒ No ☐	Land Survey Included: Yes ☒ No ☐	

Certification & Signature

APPLICANT'S STATEMENT: I understand the procedures that apply to my request and acknowledge an incomplete application will not be processed or scheduled for public hearing until such time it is complete. GMF Town Staff's acceptance of the application, the payment of fees, and submittal of accompanying materials does not constitute completeness. I further agree to reimburse the city for technical and professional consulting expenses that may be incurred during the review of my request. Failure to reimburse the Town for invoiced expenses constitutes an incomplete application.

Certification: The undersigned applicant certifies under oath and under penalties of perjury that the information found in the application is true and accurate to the best of their knowledge.

Applicant Signature	Sat Lyn	Date 10/12/2022
Owner Signature		Date
Owner Signature		Date

This document can be signed electronically using <u>Adobe Reader DC for free</u>.

Variance Checklist

The following checklist is a guideline for submitting a complete Variance Land Use Approval Application. Failure to provide information that address the standards and requirements in GMF Zoning Code could result in staff review delays. GMF Staff may require additional information in accordance with Town Code and Town Attorney's recommendation.

1. Variance Application & Petition

- a. Application, signed and dated by the applicant and property owner(s)
- b. Application fee
- c. Letter of explanation
 - i. Describe the proposed project in detail, referring to site plans and drawings as necessary
 - i. Describe the reason for pursuing a variance; include benefits to yourself, the neighborhood, and the Town.
 - ii. Explain how the variance would not be contrary to the public interest.
 - iii. Provide proof of unique circumstances or conditions and how the strict application of the provisions of GMF Zoning and Land Use Code would deprive the applicant of the reasonable use of such land or building as described in the Zoning Code §16-709
 - iv. Provide proof of unnecessary hardship as described in the Zoning Code §16-709

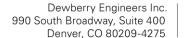
2. Development Plan

- a. Vicinity Map
- b. Total development plan area in acres or square feet
- c. Zoning setbacks
- a. North arrow
- b. Property boundaries and dimensions
- c. Existing and proposed lots and tract lines, with dimensions
- d. Existing and proposed topography (contour lines or slope)
- e. Show and label all access points to the property from adjacent streets and alleys
- f. Proposed grading plan and separate GECP application

3. Procedure:

- a. Consultation meeting with GMF Staff and draft plans
- b. Submit completed application and checklist materials electronically: planner@gmfco.us
- c. Submit appropriate fees to Town Clerk for receipt
- d. Work with GMF Staff to schedule public hearings

GMF Town Staff:					
□ Application					
□ Variance Petition					
□ Development Plan					
☐ Application fee					
Date Amount	_ □ Check # □ Credit Card				



303.825.1802 303.825.2322 fax www.dewberry.com



October 12, 2022

Town of Green Mountain Falls Attn: Nate Scott, Planner Town Hall 10615 Green Mountain Falls Road Green Mountain Falls, CO 80819

RE: Letter of Explanation - Hillside Overlay Waiver for the Green Mountain Falls Pump Station

Dear Mr. Scott,

Dewberry Engineers is pleased to submit a Waiver Application and documentation for two items in the Hillside Overlay requirements for the Green Mountain Falls Pump Station (GMFPS) on behalf of Colorado Springs Utilities. The first is Sec. 16-714.c.3.b which states no building shall be closer than 100 feet from a building on an adjoining lot. The second is 16-714.c.3.c which states no building shall be closer than 25 feet from a major drainage way. The Waiver Application and supporting documentation are provided for review and comment.

The site selected for the new GMFPS is 10685 Hondo Avenue. The property is owned by the same entity that owns the property at 6985 Colorado St directly to the west. Colorado Springs Utilities is currently negotiating the terms of an easement with the property owner to allow the pump station to be built on the site. The agreement and required Owner Signature will be submitted once the agreement is finalized.

This waiver for the first item is being proposed because the new pump station structure is approximately 60 feet from the residence at 6985 Colorado St and 97 feet from the residence at 10675 Hondo AveThe hillside overlay area in Green Mountain Falls is relatively densely populated and many of the existing residential structures are within 100 feet of structures on adjoining lots. The new pump station structure has been designed to be unobtrusive to the surrounding residences as much as possible by setting it into the hillside and selecting architectural finishes and colors so that it blends with the surrounding environment and structures. The new pump station building also sits below the residences on the adjoining lots and should not be in their view path across the valley. Additionally, the specified construction methods include shoring and bracing the excavation to limit its extent. The excavation for the pump station building will not affect neighboring properties.

The waiver on the second item is being proposed because the new pump station structure is approximately 15 feet, at its closest, to the drainage way located to the north of the building. Due to the steepness of the hillside on the lot it is not feasible to construct the building further into the hill than it is currently shown. The existing 24-inch diameter culvert is also being replaced with a 30-inch diameter culvert which will increase its overall capacity. The culvert length will also be increased, and it will run the entire length of the pump station. New headwalls will be installed at either end of the new culvert replacing the existing headwalls and stabilizing the channel in these areas.

The purpose of the GMFPS project is to replace the existing below grade pump station. The existing pump station was constructed in 1986 and has reached the end of its useful life. The new pump station will ensure reliable water service for residents and businesses in Green Mountain Falls. It will also provide a safer and more readily accessible working space for Colorado Springs Utilities enabling more efficient maintenance and repair activities.

The new pump station will be an above grade building that sits back into the hillside on the property, see drawing C-3, attached. The building will be a single room that is 22'-8" by 18'-10". A 13'-8" by 17'-8" open

Mr. Scott Green Mountain Falls Pump Station October 12, 2022

topped enclosure for a backup emergency generator will be attached to the east side of the building. The building location on the site and arrangement can be seen on drawing C-3 and A-2, attached.

The building walls will be concrete covered with a veneer composed of natural stone facing on the bottom and pre-finished metal narrow batten siding above. The stone veneer will slope to match the grade around the building. The generator enclosure walls will be concrete covered with a natural stone veneer to match the building and capped with colored concrete wall caps. The building roof will be pre-finished metal standing seam that is the same color as the wall siding. The roof slants only to the east to minimize the view impacts from the neighboring properties. Stone and metal wall and roof finish colors will be primarily earth tones, browns, and grays selected to blend with the surrounding environment. A double man door will be installed on the north face of the building for access and to allow for equipment removal for maintenance. The generator enclosure will have a fabricated steel gate for access. The door and gate will be finished to blend with the building aesthetic. Building elevations can be seen on drawings A-3 and A-4, attached.

The pump station will provide an integral service to Green Mountain Falls and its residents. While the building is within the required setback distances stipulated in the Hillside Overlay it has been designed to fit in with the surroundings and should not negatively affect adjacent residences or the Town.

Please contact Sam Franzen at sfranzen@dewberry.com or 303-951-0618 with any questions or concerns.

Sincerely,

Sam Franzen Project Engineer

Sat Zym





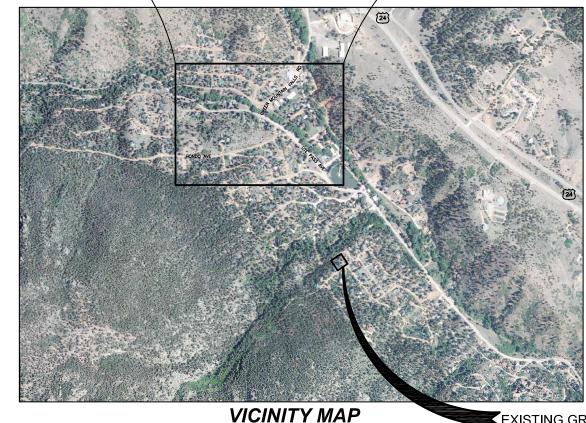
GREEN MOUNTAIN FALLS PUMP STATION

It's how we're all connected



GREEN MOUNTAIN FALLS
PUMP STATION PROJECT
LOCATION

LOCATION MAP
NO SCALE



NO SCALE

EXISTING GREEN MOUNTAIN FALLS PUMP STATION TO BE DEMOLISHED

DEVELOPMENT PLAN
OCTOBER 2022

DRAWING INDEX

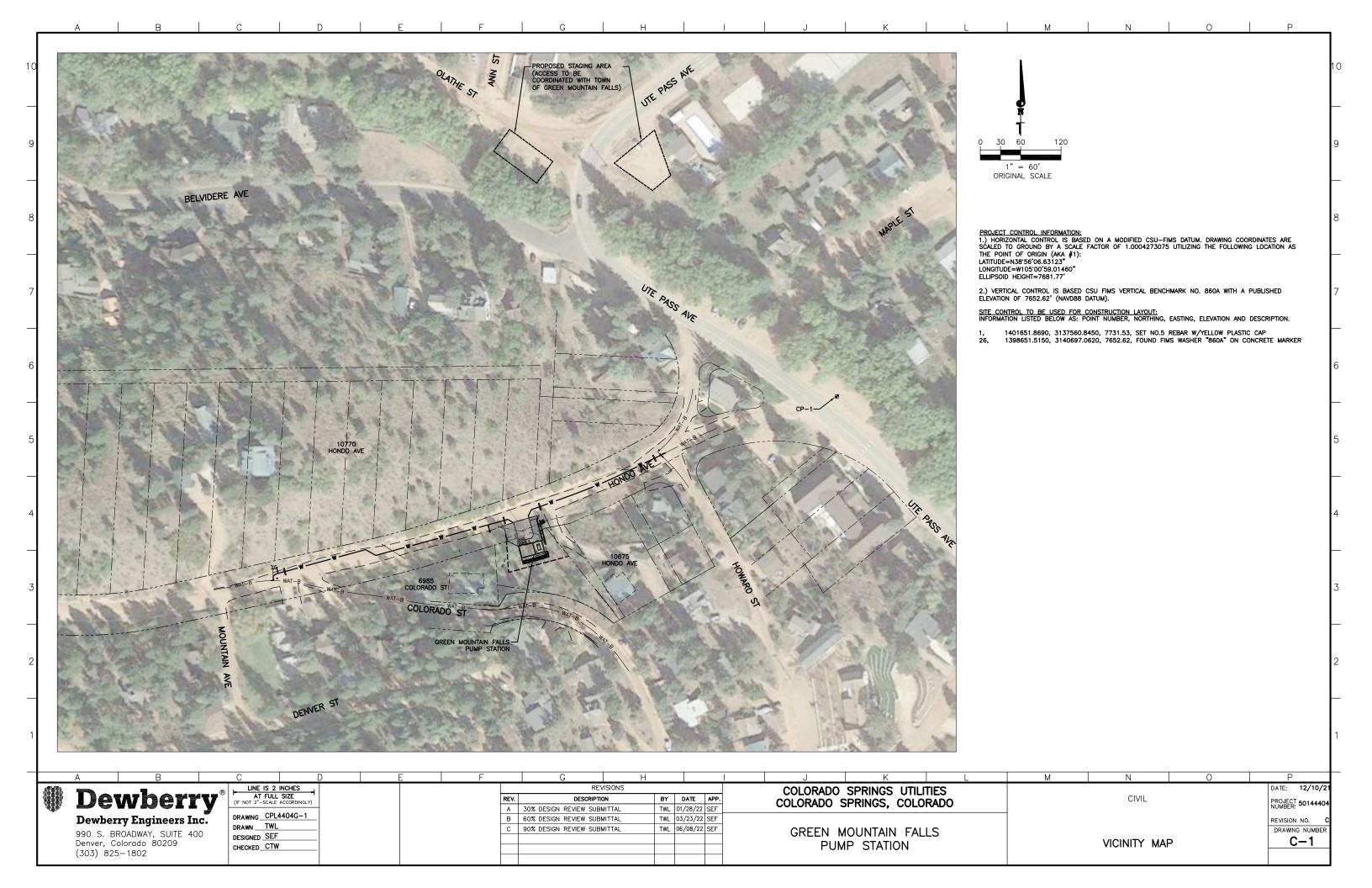
DWG NO	TITLE		
GENERAL 	COVER AND INDEX		
CIVIL C-1 C-2 C-3 C-4 EC-1	VICINITY MAP DEMOLITION PLAN DEVELOPMENT PLAN ENLARGED GRADING PLAN EROSION CONTROL PLAN		
ARCHITECTURAL A-2 A-3 A-4	FLOOR PLAN & ROOF PLAN BUILDING ELEVATIONS BUILDING ELEVATIONS INTERIOR ELEVATIONS		

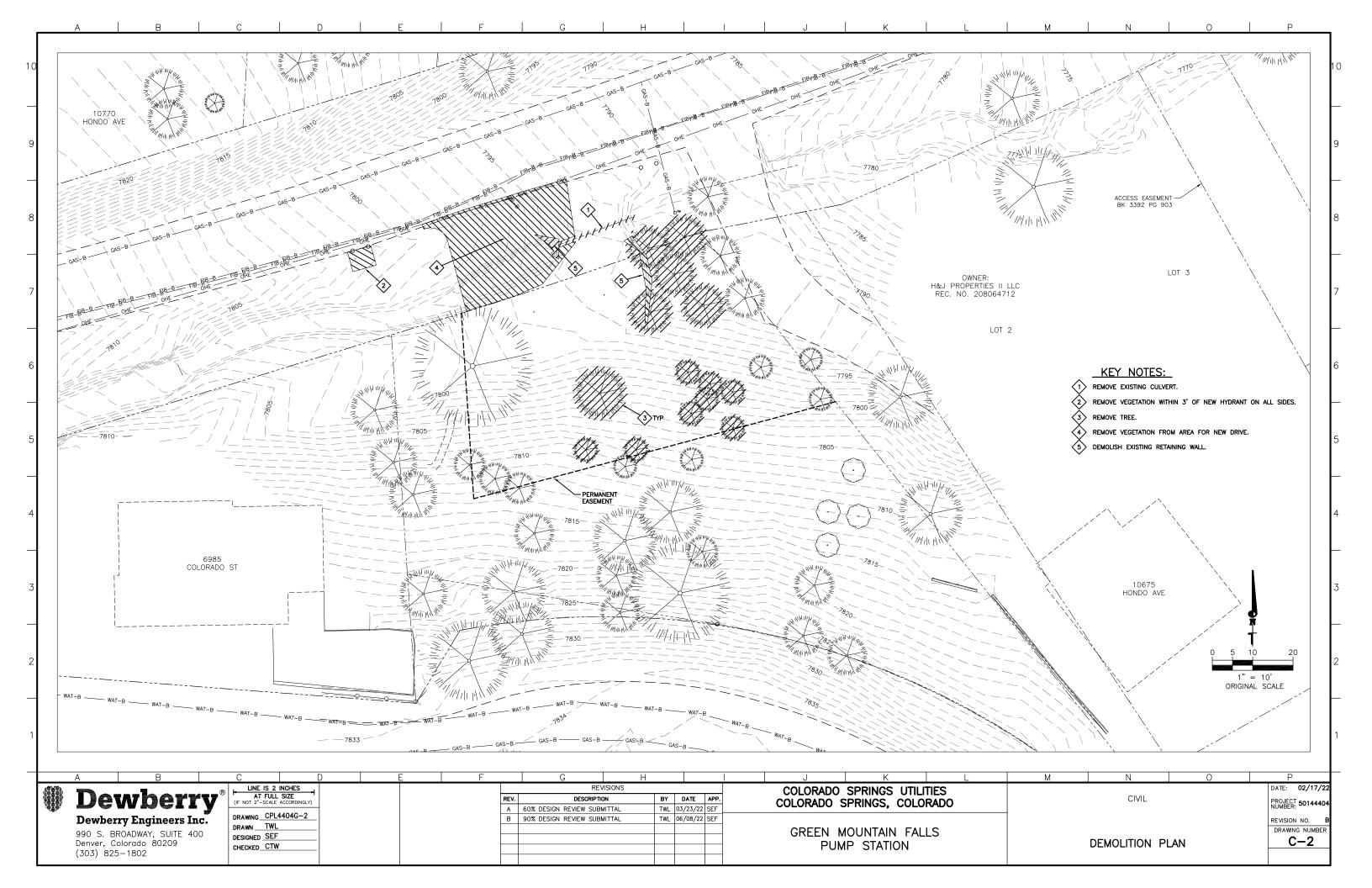
GMFPS Site Summary			
Site Area	12,778 sqft		
Setback	Setback Summary		
Front			
Required	15 feet		
Provided	12 feet*		
East Side			
Required	10 feet		
Provided	19		
West Side			
Required	10 feet		
Provided	17		
Back			
Required	10 feet		
Provided	50 feet		
*Front setback application sul			

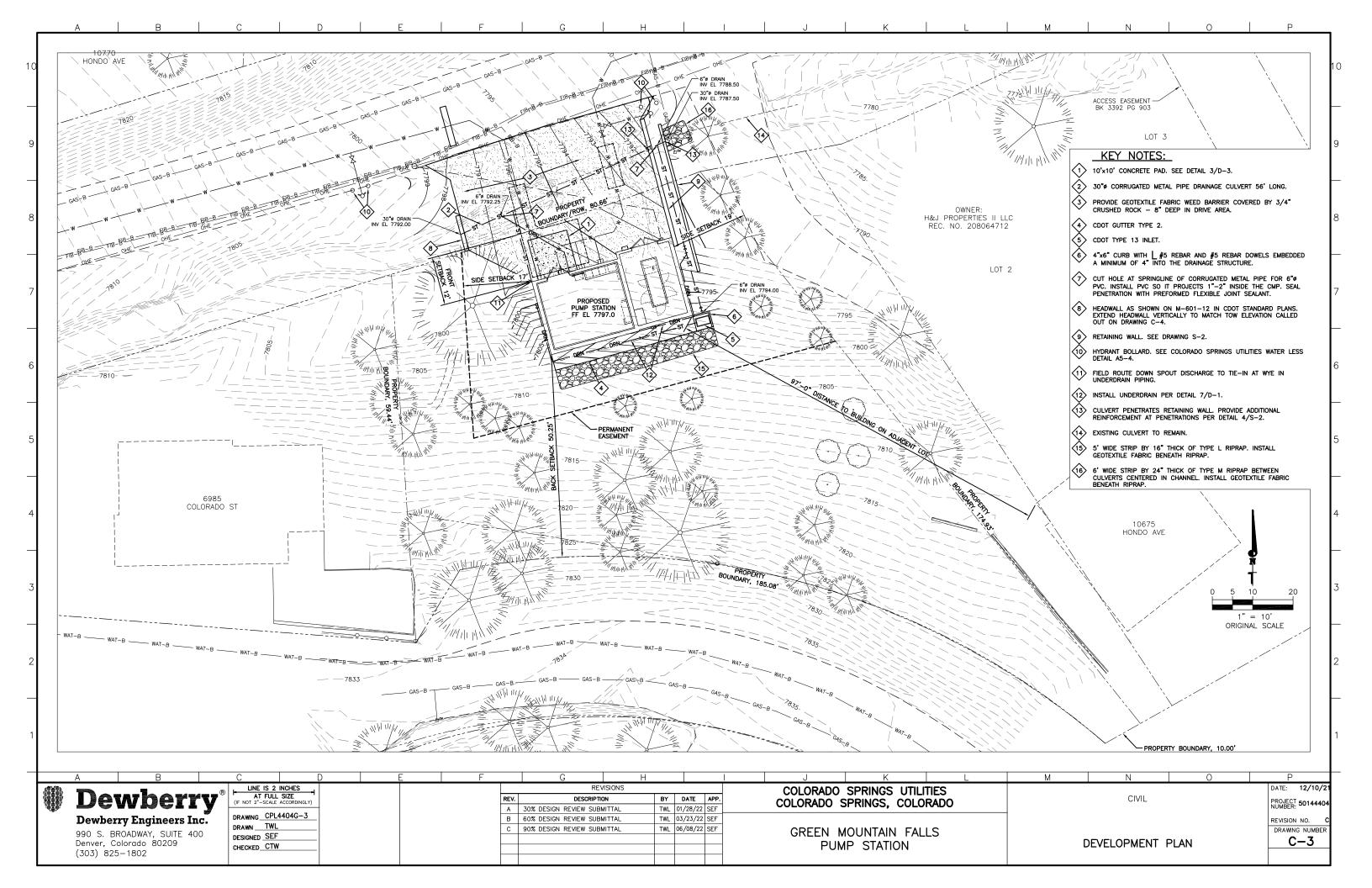


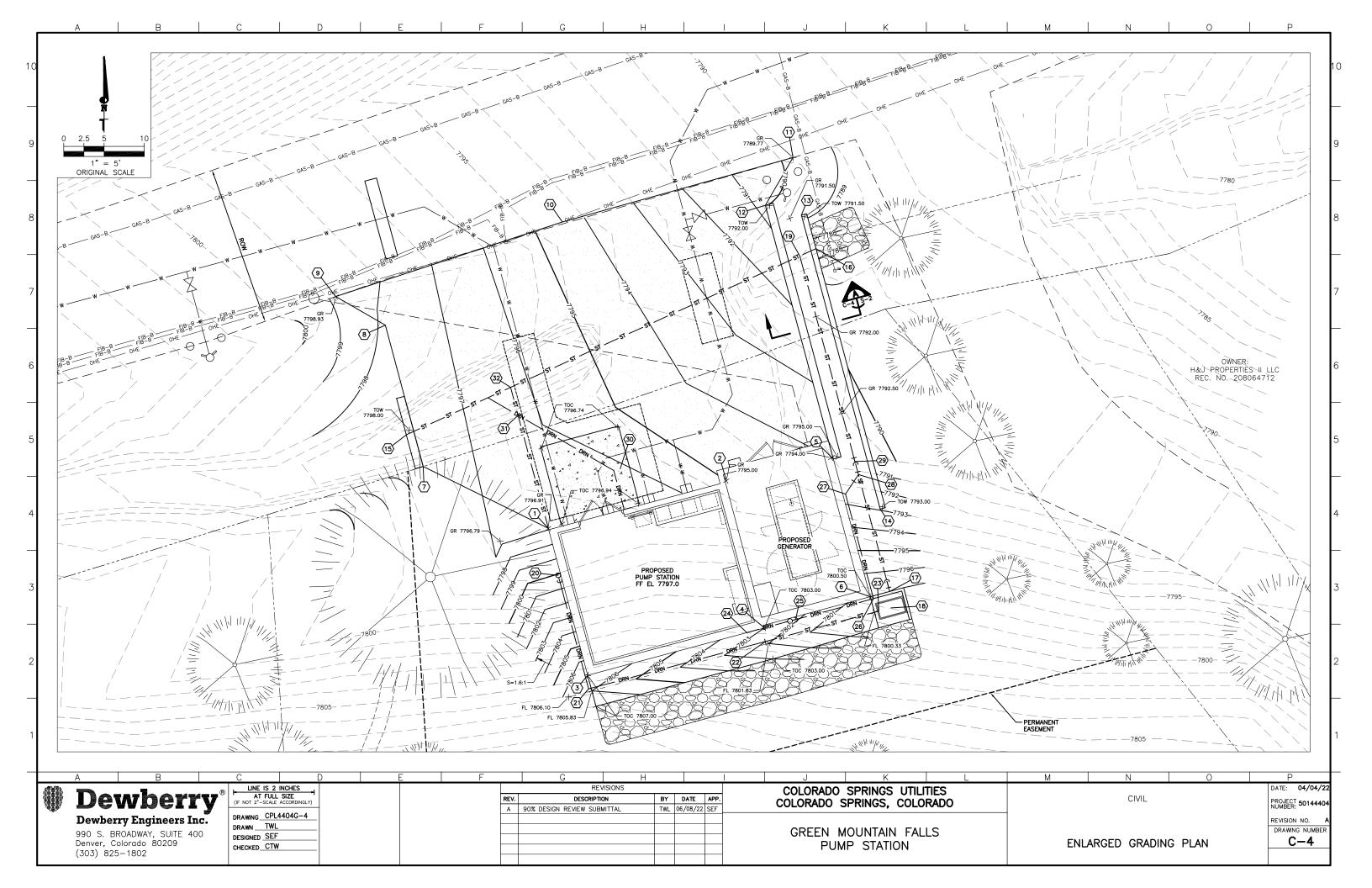
990 S. BROADWAY, SUITE 400 Denver, Colorado 80209 (303) 825-1802

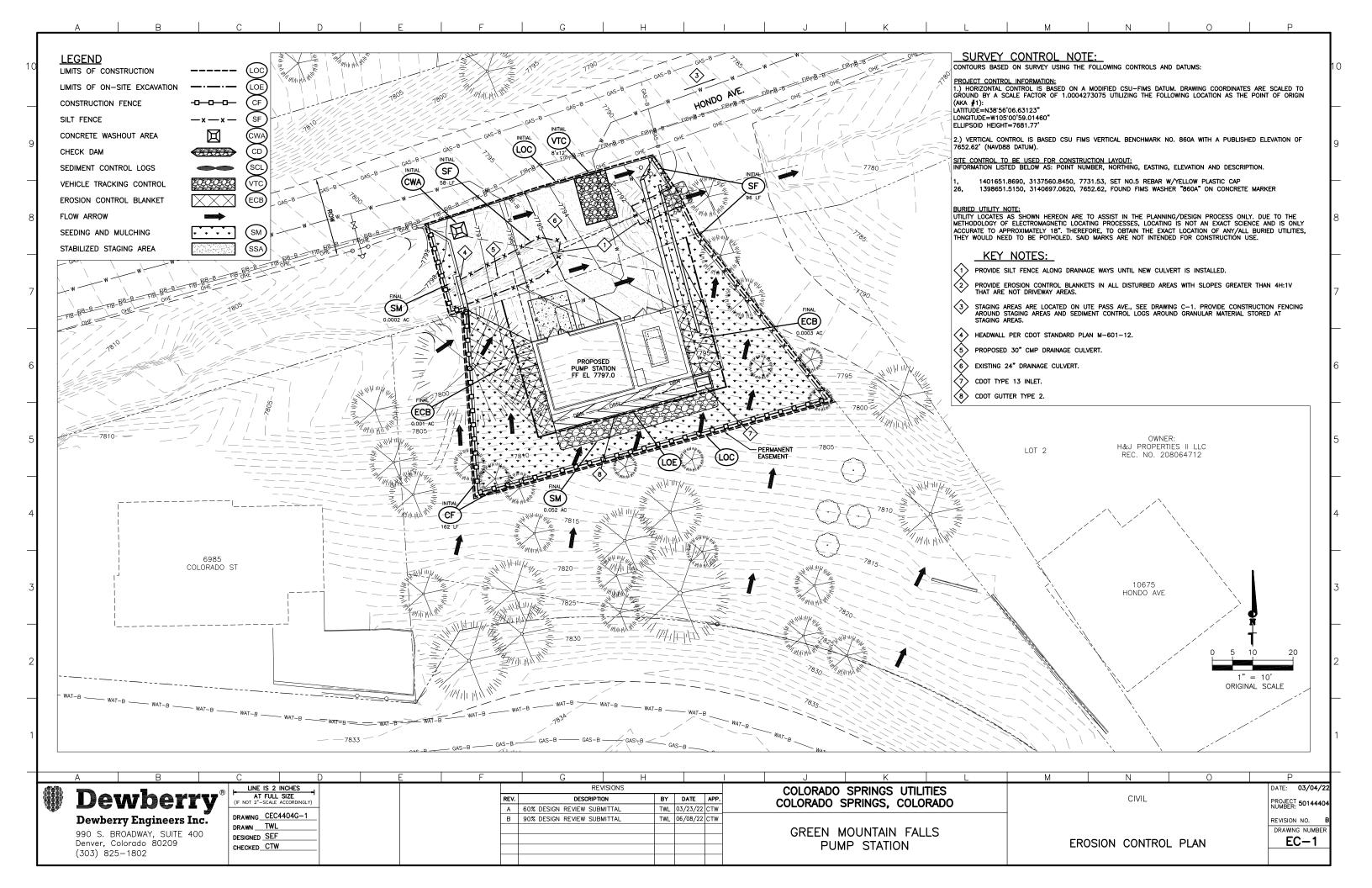


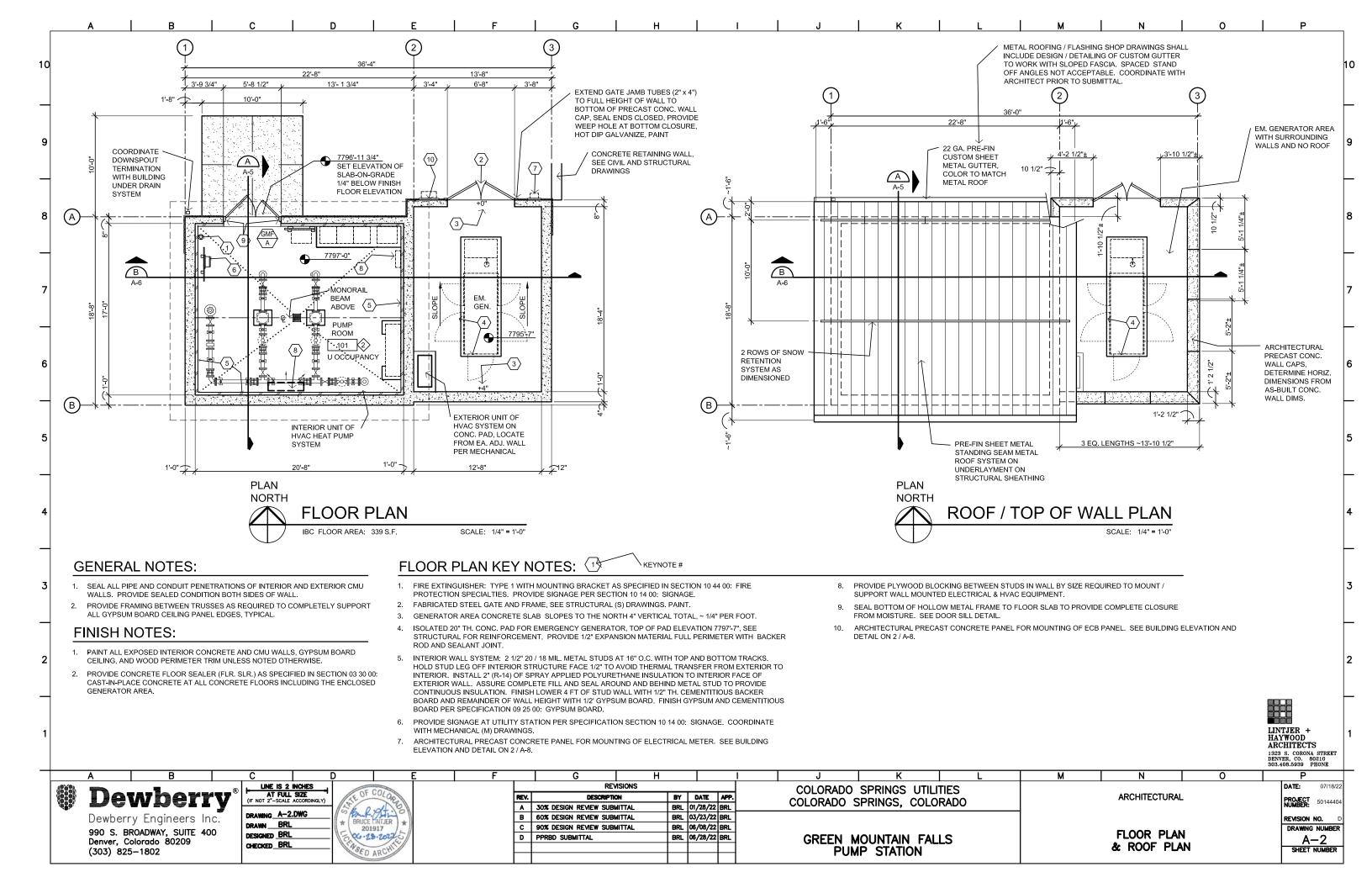


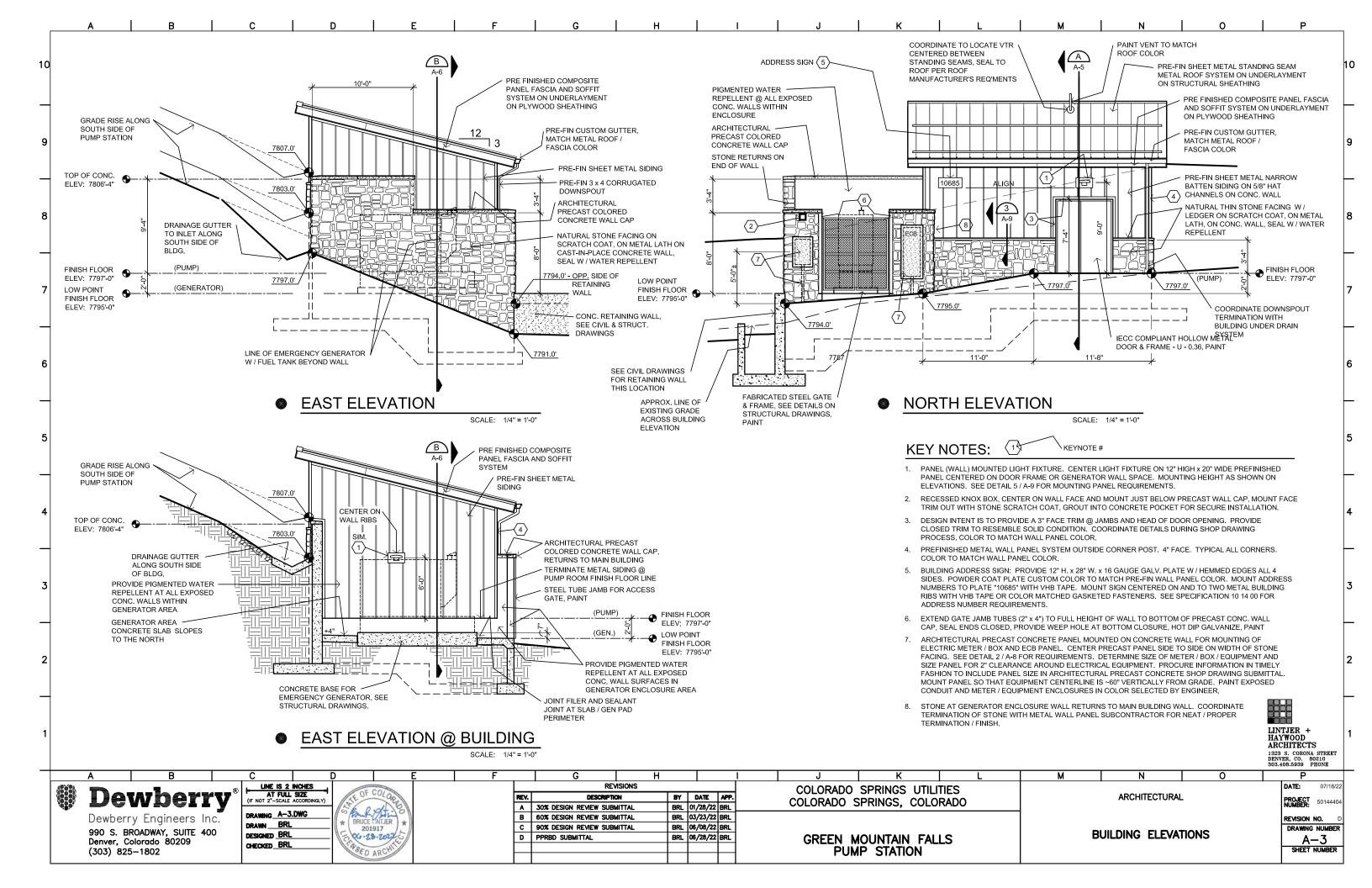


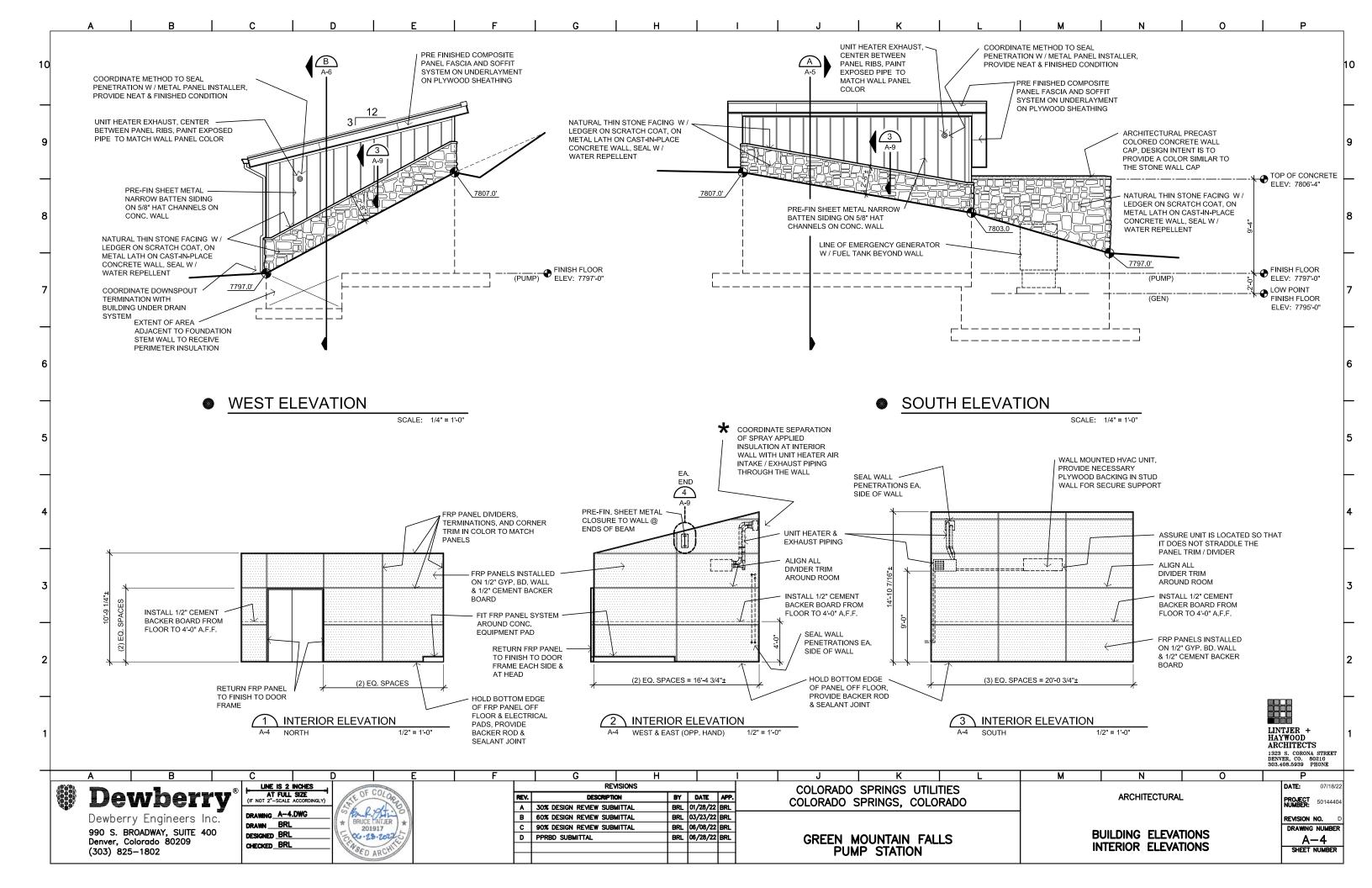














Town of Green Mountain Falls Land Use Approval Application Grading/ECP

General Information

- All applications for a Grading Permit/Erosion Control Plan will be reviewed for compliance with Chapter 17 Subdivision.
- The checklist is a guide and is not a substitute for all provisions in GMF Zoning Code. Applicants are responsible for understanding requirements and the procedure.
- Complete applications will receive a minimum staff review of two weeks (14 days) and may be subject to Town Engineer review, which can take an additional 2-3 weeks (14 -21 days).

Applicant Information

Applicant: Dewberry Engineers, Inc Sam Franzen
Address: 990 S Broadway, Suite 400, Denver, CO 80209
E-Mail:sfranzen@dewberry.com
Phone: 303-951-0618
Owner: Colorado Springs Utilities - Larysa Voronova
Address: 121 S Tejon St, Suite 200, Colorado Springs, CO 80947
E-mail: Ivoronova@csu.org
Phone: 719-668-3851

Property Information

Physical Address: 10685 Hondo Ave, Green Mountain Falls, CO 80819		
Amount of earth disturbance: ~3,700 sqft	Zoning Designation:R-1,_10,000_Single-Family	
Hillside Overlay zone? Yes ■ No □	Lot Size: 12,778 sqft	
FEMA FIRM Designation:	ILC or Survey Included: Yes ■ No □	

Certification & Signature

APPLICANT'S STATEMENT: I understand the procedures and requirements (pages 1 and 2 of this application) that apply to my request and acknowledge an incomplete application will not be scheduled for public hearing. GMF Staff's acceptance of the application, payment of fees, and submittal of accompanying materials does not constitute completeness. I further agree to reimburse the city for technical and professional consulting expenses that may be incurred during the review of my request. Failure to reimburse the Town for invoiced expenses constitutes an incomplete application.

Certification: The undersigned applicant certifies under oath and under penalties of perjury that the information found in the application is true and accurate to the best of their knowledge.

	men mie mage.			
By checking this box, I agr	ee to the certification	n statement and am typing my fo	ull name as an electronic signature.	
Applicant Signature	Sat Zym	Digitally signed by Sam Franzen Date: 2022.10.10 11:04:04-06'00'	Date_10/10/2022	
Owner Signature			Date	
Owner Signature			Date	

This document can be signed electronically using Adobe Reader DC for free.

Grading/ECP Checklist

The following checklist is a guideline for submitting a Land Use Approval Application for Grading and Erosion Control. GMF Staff may request additional information in accordance with Town Code, or by Town Engineer and Town Attorney's recommendation.

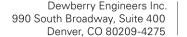
1. Application

- a. Application form, signed and dated by the applicant and/or owners
- b. Application fee
- c. Letter of explanation
 - i. Describe the proposed project in detail. Explain the purpose, referring to site plans and drawings, as necessary
 - ii. Statement of the estimated starting and completion dates for the grading work proposed, and for any landscape work that may be required
- **2. Development Plans –** GECP will be reviewed for compliance with §17-81 17-96
- a. Vicinity Map
- b. Existing and proposed buildings or structures
- c. Zoning setback distances and lot lines
- d. Details of all items and features pertaining to site preservation and improvements
- e. All access points to the property; location of all existing and proposed streets, roadways, driveways, easements, and rights-of-way
- f. The present contours of the site in dashed lines and the proposed contours in solid lines. Contour intervals shall not be less than two (2) feet. The source of topographical information shall be indicated
- g. Equipment staging and vehicle access routes
- h. The location of all drainage to, from and across the site, the location of intermittent and permanent springs, culverts and other drainage structure
- Details of any proposed drainage structures, cribbing, terraces and/or surface protection, not
 including vegetative cover required as a result of grading and required for the support of adjoining
 property

3. Procedure

- a. Electronic submittal of signed application and checklist materials: planner@gmfco.us
- b. Payment of fees to Town Clerk for receipt
- c. Upon determining an application is complete, staff will schedule for PC and/or BoT public hearing
- e. Engineering review of GECP may be required for final approval. GMF on-call engineering review can take several weeks. A failure to plan will not result in expedited review.

l GM	FT	ρwn Staff:
		Application
		Letter of Explanation
		Site Development Plan
		Application fee
		Date
		Application fee



303.825.1802 303.825.2322 fax www.dewberry.com



October 12, 2022

Town of Green Mountain Falls Attn: Nate Scott, Planner Town Hall 10615 Green Mountain Falls Road Green Mountain Falls, CO 80819

RE: Grading and Erosion Control and Landscaping Plans

Dear Mr. Scott,

Dewberry Engineers is pleased to submit the Grading and Erosion Control and Landscaping Plans and documentation for the Green Mountain Falls Pump Station (GMFPS) on behalf of Colorado Springs Utilities for review and comment.

The runoff patterns from the site are not significantly modified by proposed grading. Runoff will still travel from southwest to northeast across the site until it is collected in the drainageway in the right of way north of the site. Runoff that will run into the proposed building is intercepted by a gutter that discharges to an inlet that discharges to the drainage culvert beneath the drive area.

Additionally, an underdrain system collects water that has infiltrated into the soil and travelled down to the building foundation. The underdrain system discharges to the culvert under the parking area. Discharge from the underdrain system is expected to be intermittent as groundwater was not encountered in either of the boreholes on the site as shown in the geotechnical report.

The existing 24-inch culvert will be replaced with a new 30-inch culvert and extended to expand the parking area. The new culvert will have a greater capacity than the existing culvert.

Existing trees that will remain and seeding that will occur after the construction is complete are shown on drawing EC-1. Per the easement agreement between Colorado Springs Utilities and the property owner, the property owner will be compensated for trees that will be removed by the project. The property owner may use those funds to install and maintain landscaping as they deem necessary.

The Grading and Erosion Control Plans drawings are provided in Attachment A. Calculations for the runoff, gutter, inlet, culvert, and pipeline between the inlet and culvert are provided in Attachment B.

Sincerely,

Sam Franzen Project Engineer

Sait Lynn

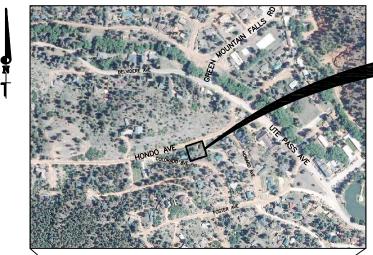
Attachment A – Grading and Erosion Control Plans





GREEN MOUNTAIN FALLS PUMP STATION

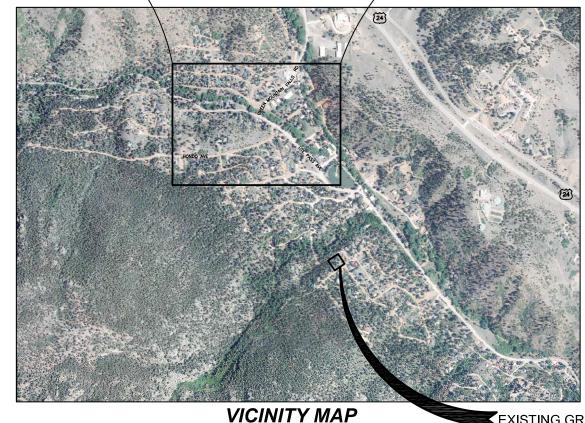
It's how we're all connected



GREEN MOUNTAIN FALLS
PUMP STATION PROJECT
LOCATION

LOCATION MAP

NO SCALE



NO SCALE

EXISTING GREEN MOUNTAIN FALLS PUMP STATION TO BE DEMOLISHED

Dewberry Engineers Inc.

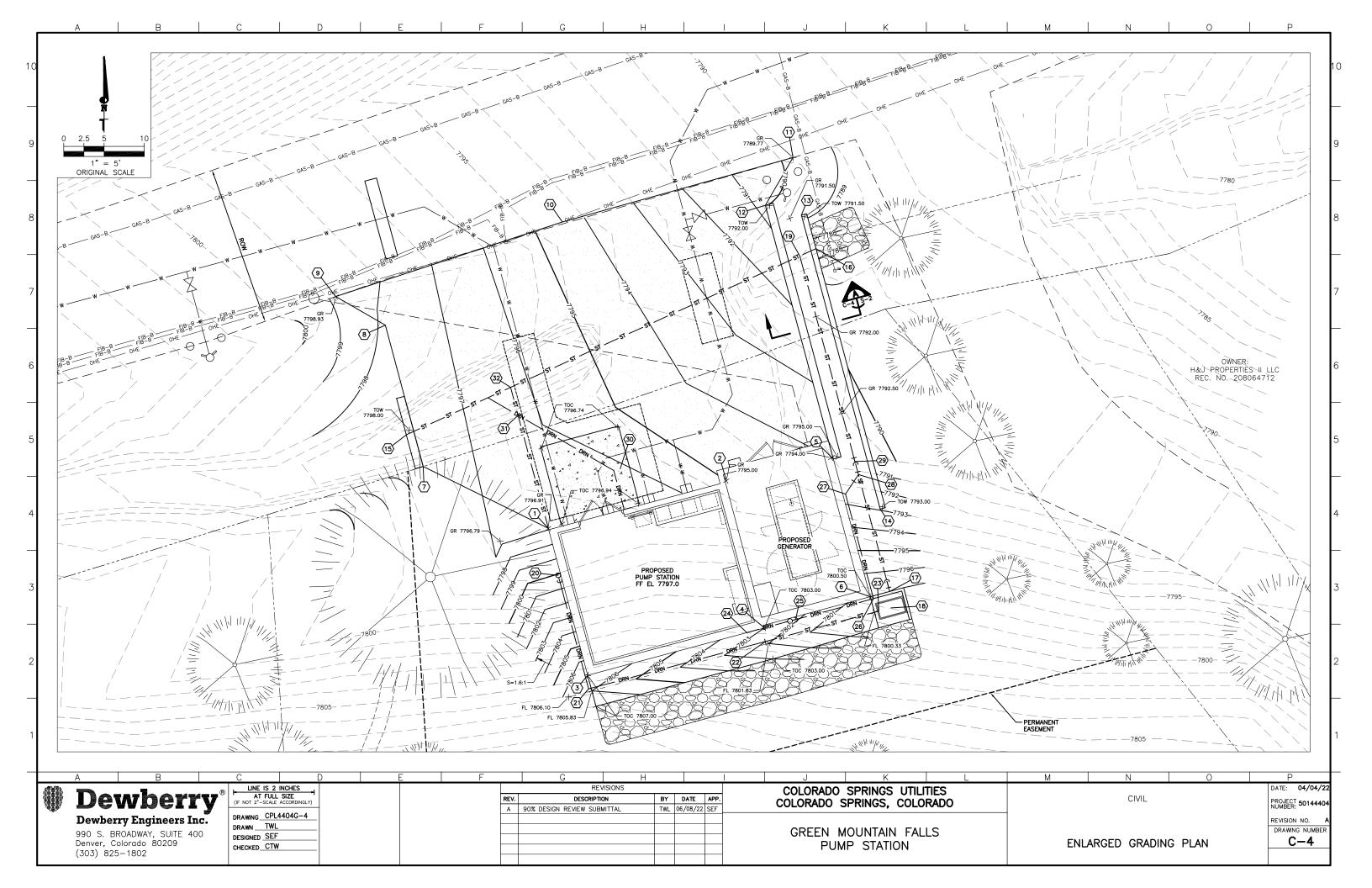
990 S. BROADWAY, SUITE 400 Denver, Colorado 80209 (303) 825-1802

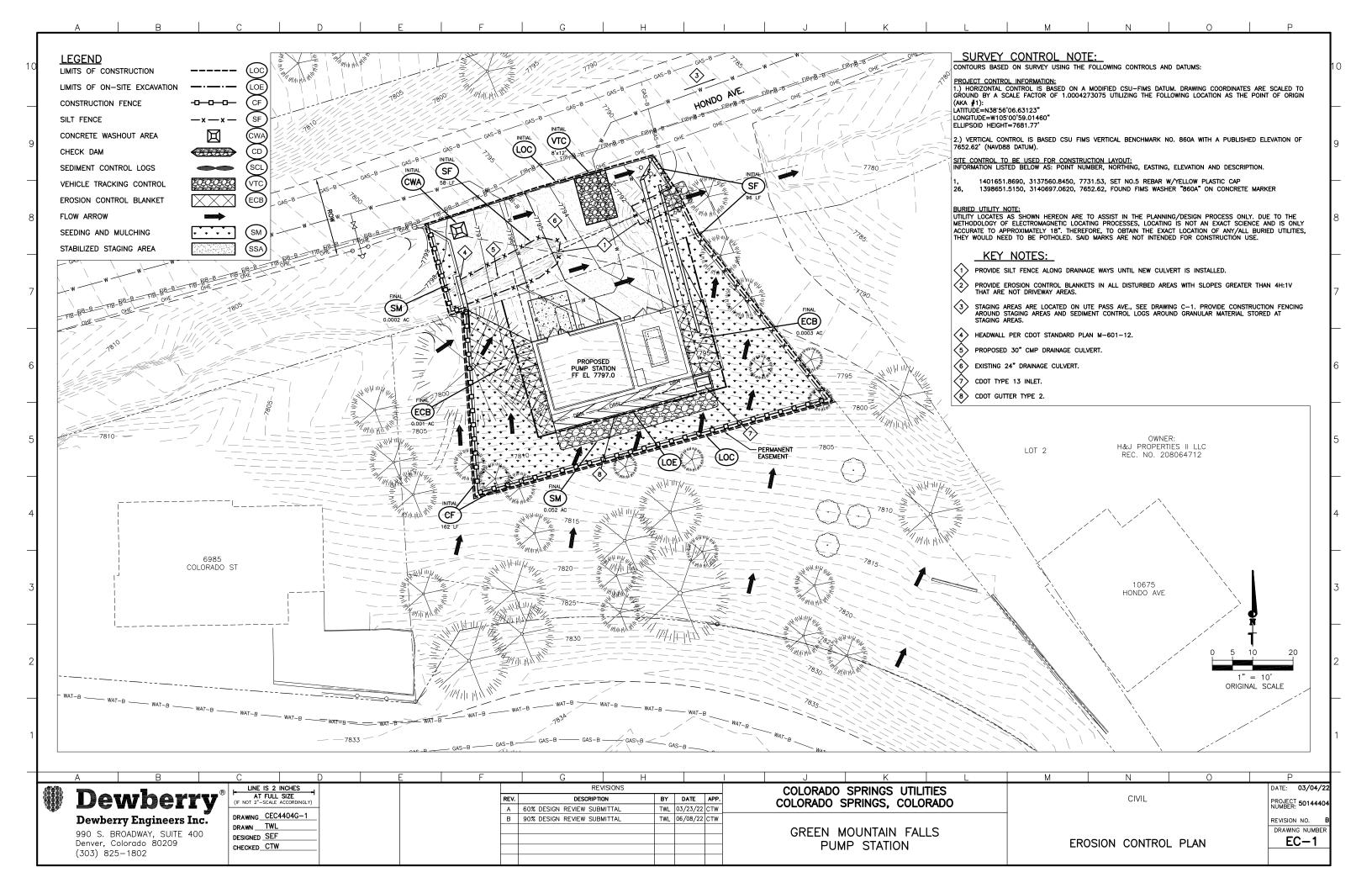
GRADING AND EROSION CONTROL PLANS OCTOBER 2022



ESTIMATED GRADING START DATE IS NOVEMBER 2022, ESTIMATED COMPLETION DATE IS JUNE 2023.







STANDARD GRADING & EROSION CONTROL NOTES EL VARIES 1. ANY LAND DISTURBANCE BY ANY OWNER, DEVELOPER, BUILDER, CONTRACTOR, OR OTHER PERSON SHALL COMPLY WITH THE BASIC GRADING, EROSION AND STORMWATER QUALITY CONTROL REQUIREMENTS AND GENERAL PROHIBITIONS Silt Fence (SF) SC-1 SC-1 Silt Fence (SF) T.O. WALL NOTED IN THE DRAINAGE CRITERIA MANUAL VOLUME 2. EL VARIES 2. NO CLEARING, GRADING, EXCAVATION, FILING OR OTHER LAND DISTURBING ACTIVITIES SHALL BE PERMITTED UNTIL SIGNOFF AND ACCEPTANCE OF THE GRADING PLAN AND EROSION AND STORMWATER QUALITY CONTROL PLAN IS RECEIVED FROM CITY ENGINEERING. FIN GRADE __ sr __ sr __ sr _ 3. THE INSTALLATION OF THE FIRST LEVEL OF TEMPORARY EROSION CONTROL FACILITIES AND BMPS SHALL BE INSTALLED AND INSPECTED PRIOR TO ANY EARTH DISTURBANCE OPERATIONS TAKING PLACE. CALL CITY STORMWATER INSPECTIONS, 385-5980, 48 HOURS PRIOR TO CONSTRUCTION. #5 @ 12" O.C., EA WAY, EA FACE SEDIMENT (MUD AND DIRT) TRANSPORTED ONTO A PUBLIC ROAD, REGARDLESS OF THE SIZE OF THE SITE, SHALL BE CLEANED AT THE END OF EACH DAY. COMPACT ANCHOR TRENCH BY HAND WITH A "JUMPING JACK" OR BY WHEEL ROLLING. COMPACTION SHALL BE SUCH THAT SILT FENCE RESISTS BEING PULLED OUT OF ANCHOR TRENCH BY HAND. EL VARIES T.O. WALL 4. SILT FENCE SHALL BE PULLED TIGHT AS IT IS ANCHORED TO THE STAKES. THERE SHOULD BE NO NOTICEABLE SAG BETWEEN STAKES AFTER IT HAS BEEN ANCHORED TO THE STAKES. CONCRETE WASH WATER SHALL NOT BE DISCHARGED TO OR ALLOWED TO RUNOFF TO STATE WATERS, INCLUDING ANY SURFACE OR SUBSURFACE STORM DRAINAGE SYSTEMS OR FACILITIES. EL VARIES FIN GRADE 6. SOIL EROSION CONTROL MEASURES FOR ALL SLOPES, CHANNELS, DITCHES, OR ANY DISTURBED LAND AREA SHALL SUIL EROSION CONTROL MEASURES FOR ALL SLOPES, CHANNELS, DITCHES, OR ANY DISTURBED LAND AREA SHALL BE COMPLETED WITHIN TWENTY-ONE (21) CALENDAR DAYS AFTER FINAL GRADING OR FINAL EARTH DISTURBANCE HAS BEEN COMPLETED. DISTURBED AREAS AND STOCKPILES WHICH ARE NOT AT FINAL GRADE BUT WILL REMAIN DORMANT FOR LONGER THAN 30 DAYS SHALL ALSO BE MULCHED WITHIN 21 DAYS AFTER INTERIM GRADING. AN AREA THAT IS GOING TO REMAIN IN AN INTERIM STATE FOR MORE THAN 60 DAYS SHALL ALSO BE SEEDED. ALL TEMPORARY SOIL EROSION CONTROL MEASURES AND BMPS SHALL BE MAINTAINED UNTIL PERMANENT SOIL EROSION CONTROL MEASURES AND BMPS SHALL BE MAINTAINED UNTIL PERMANENT SOIL EROSION CONTROL MEASURES AND BMPS SHALL BE MAINTAINED UNTIL PERMANENT SOIL EROSION 6. AT THE END OF A RUN OF SILT FENCE ALONG A CONTOUR, THE SILT FENCE SHOULD BE TURNED PERPENDICULAR TO THE CONTOUR TO CREATE A "J-HOOK." THE "J-HOOK." #5 x ___ EA FACE @12" O.C.. -#5 @ 12" O.C EA WAY 7. SILT FENCE SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITIES. SILT FENCE MAINTENANCE NOTES #5 @ 12" O.C., EA WAY, TOP & BOTTOM CONTROL MEASURES ARE IMPLEMENTED. THE GRADING AND EROSION CONTROL PLAN WILL BE SUBJECT TO RE-REVIEW AND RE-ACCEPTANCE BY THE CITY OF COLORADO SPRINGS ENGINEERING SHOULD ANY OF THE FOLLOWING OCCUR: GRADING DOES NOT COMMENCE WITHIN 12 MONTHS OF THE CITY ENGINEER'S ACCEPTANCE OF THE PLAN, A CHANGE IN PROPERTY OWNERSHIP, PROPOSED FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED TRANSPORTED. EL 7787.00 SILT FENCE T.O. SLAB WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE. 8. THE PLAN SHALL NOT SUBSTANTIALLY CHANGE THE DEPTH OF COVER, OR ACCESS TO UTILITY FACILITIES. ADDITIONALLY, THE PLAN SHALL NOT INCREASE OR DIVERT WATER TOWARDS UTILITY FACILITIES. ANY CHANGES TO UTILITY FACILITIES OF ACCOMMODATE THE PLAN, MUST BE DISCUSSED AND ACREED TO BY THE AFFECTED UTILITY PRIOR TO IMPLEMENTING THE PLAN. THE RESULTING COST TO RELOCATE OR PROTECT UTILITIES, OR PROVIDE INTERIM ACCESS IS AT THE EXPENSE OF THE PLAN APPLICANT. SEDIMENT ACCUMULATED UPSTREAM OF THE SILT FENCE SHALL BE REMOVED AS NEEDEL TO MAINTAIN THE FUNCTIONALITY OF THE BMP, TYPICALLY WHEN DEPTH OF ACCUMULATED 5. REPAIR OR REPLACE SILT FENCE WHEN THERE ARE SIGNS OF WEAR, SUCH AS SAGGING, TEARING, OR COLLAPSE. 7. WHEN SILT FENCE IS REMOVED, ALL DISTURBED AREAS SHALL BE COVERED WITH TOPSO SEEDED AND MULCHED OR OTHERWISE STABILIZED AS APPROVED BY LOCAL JURISDICTION. -ANTICIPATED STARTING AND COMPLETION TIME PERIOD OF SITE GRADING: FEBRUARY TO MAY 2019 EXPECTED DATE ON WHICH THE FINAL STABILIZATION WILL BE COMPLETED: JUNE 2019 SECTION A (DETAIL ADAPTED FROM TOWN OF PARKER, COLORADO AND CITY OF AURORA, NOT AVAILABLE IN AUTOCAD 2'-0" 1'-0" 8" 6" NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED. SF-1. SILT FENCE TOTAL AREA OF THE SITE TO BE CLEARED, EXCAVATED OR GRADED: 0.8 ACRES 7'-2" -RECEIVING WATERS NAME OF RECEIVING WATERS: COTTONWOOD CREEK Urban Drainage and Flood Control District SF-3 Urban Drainage and Flood Control District Urban Storm Drainage Criteria Manual Volume 3 9. REQUIRED RESEEDING SEED MIX PER THE DRAINAGE CRITERIA MANUAL VOLUME 1: DETAIL RETAINING WALL Recommended Seed Mix for all other Soils in Upland Areas SCALE: 3/4"=1'-0" Lbs PLS/Acre Lbs PLS/ Growth Form Common Name (Variety) Scientific Name Seeds/Lb SM-4 SM-4 **Vehicle Tracking Control (VTC)** Vehicle Tracking Control (VTC) Cool Bunch 680,000 0.6 1.2 Sheep fescue Festuca ovina Canby bluegrass Cool Bunch 926,000 0.5 1.0 Poa canbyi 154,000 5.7 11.4 Thickspike wheatgrass Elymus lanceolatus Cool Bunch STABILIZED CONSTRUCTION ENTRANCE/EXIT INSTALLATION NOTES SEE PLAN VIEW FOR -LOCATION OF CONSTRUCTION ENTRANCE(S)/EXIT(S). -TYPE OF CONSTRUCTION ENTRANCE(S)/EXITS(S) (WITH/WITHOUT WHEEL WASH, CONSTRUCTION WAT OR TRIA). 15.8 Cool Sod 110,000 7.9 Western wheatgrass (Arriba) Pascopyrum smithii Chondrosum gracile Sod 825,000 1.1 2.2 Blue grama (Hachita) Warm Sod/ Brus 389,000 1.0 2.0 Panicum virgatum Switchgrass (Pathfinder) Side-oats grama (Butte) Boutelou Sod 191,000 2.0 4.0 A STABILIZED CONSTRUCTION ENTRANCE/EXIT SHALL BE LOCATED AT ALL ACCESS POINTS WHERE VEHICLES ACCESS THE CONSTRUCTION SITE FROM PAVED RIGHT-OF-WAYS. curtipenduk 4. STABILIZED CONSTRUCTION ENTRANCE/EXIT SHALL BE INSTALLED PRIOR TO ANY LAND. DISTURBING ACTIVITIES. Cool 227,000 10.0 20.0 Annual rye Lolium multiflorum 5. A NON-WOVEN GEOTEXTILE FABRIC SHALL BE PLACED UNDER THE STABILIZED CONSTRUCTION ENTRANCE/EXIT PRIOR TO THE PLACEMENT OF ROCK. TOTAL 28.8 <u>57.6</u> 6. UNLESS OTHERWISE SPECIFIED BY LOCAL JURISDICTION, ROCK SHALL CONSIST OF DOT SECT. #703, AASHTO #3 COARSE AGGREGATE OR 6* (MINUS) RCCK. Wildflowers STABILIZED CONSTRUCTION ENTRANCE/EXIT MAINTENANCE NOTES Faillardia aristata 132,000 0.25 0.50 1,230,000 0.20 0.40 210,000 0.20 0.40 Purple prairie clove FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMP6 IN EFFECTIVE OPERATING CONDITION, INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY. purpurea 138,000 0.12 3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE. Gavfeather Liatris punctata 0.06 ---293,000 0.40 Linum lewisii 0.20 4 ROCK SHALL BE REAPPLIED OR REGRADED AS NECESSARY TO THE STABILIZED ENTRANCE/EXIT TO MAINTAIN A CONSISTENT DEPTH. Penstemor Penstemon strictus 592,000 0.20 0.40 Achillea millefoliun Yarrow 2,770,000 0.03 0.06 NOTE: MANY JURISECTIONS HAVE BUP DETAILS THAT VARY FROM UDECD STANDARD DETAILS CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DEFFERENCES ARE NOTED. TOTAL 1.14 2.28 (DETAILS ACAPTED FROM CITY OF BROOVERED, COLDRADO, NOT AVAILABLE N ALTOCAD) SECTION A VTC-1. AGGREGATE VEHICLE TRACKING CONTROL Urban Drainage and Flood Control District Urban Storm Drainage Criteria Manual Volume: Urban Drainage and Flood Control District Urban Storm Drainage Criteria Manual Volume 3 LINE IS 2 INCHES AT FULL SIZE (IF NOT 2"-SCALE ACCORDINGLY) REVISIONS DATE: 05/16/2 **COLORADO SPRINGS UTILITIES** Dewberry CIVIL REV. DESCRIPTION BY DATE APP. COLORADO SPRINGS, COLORADO PROJECT 5014440 90% DESIGN REVIEW SUBMITTAL TWL 06/08/22 CTW DRAWING CEC4404G-2 **Dewberry Engineers Inc.** REVISION NO. DRAWN STD DRAWING NUMBER GREEN MOUNTAIN FALLS 990 S. BROADWAY, SUITE 400 DESIGNED STD EC-2 **EROSION CONTROL DETAILS** Denver, Colorado 80209 PUMP STATION CHECKED CTW (303) 825-1802

Attachment B – Calculations



	_	_		
Cal	cul.	atio	n Sh	00

Designer Sam Faizen	Date 5/30/22	Checker	Date
Title GMF Drainage Cales			Job No
Subject			Sheet No/_of4

GMF Colvert

Exist

US Inv = 7790.60

DS Inv = 7788.17

Diameter= 24"

Length = 21.5'

Slope = 0.11 ft/ft

Capacity = 41.19cfs (full flow from FlowMaster)

New
Length = 56'
Diameter = 30"
DS INV = 7787.5
US INV = 7792.00
Stope = 0.080 FH/Ft
Capacity = 62.8 Fs (full Flow from Flow Master)

Other Pipe From Inlet US INV = 7792.00 DS INV = 7788.50 Length = 45'0" Slepe = G.078 Ft/A Diameter = 6"

Existing Culvert Calculations

	Existing 0	aivert Galculations
Project Description		
	Manning	
Friction Method	Formula	
Solve For	Full Flow	
Solve For	Capacity	
Input Data		
Roughness Coefficient	0.024	
Channel Slope	0.113 ft/ft	
Normal Depth	24.0 in	
Diameter	24.0 in	
Discharge	41.19 cfs	
Results		
Discharge	41.19 cfs	
Normal Depth	24.0 in	
Flow Area	3.1 ft ²	
Wetted Perimeter	6.3 ft	
Hydraulic Radius	6.0 in	
Top Width	0.00 ft	
Critical Depth	23.5 in	
Percent Full	100.0 %	
Critical Slope	0.101 ft/ft	
Velocity	13.11 ft/s	
Velocity Head	2.67 ft	
Specific Energy	4.67 ft	
Froude Number	(N/A)	
Maximum Discharge	44.31 cfs	
Discharge Full	41.19 cfs	
Slope Full	0.113 ft/ft	
Flow Type	Supercritical	
•		
GVF Input Data		
Downstream Depth	0.0 in	
Length	0.0 ft	
Number Of Steps	0	
GVF Output Data		
Upstream Depth	0.0 in	
Profile Description	N/A	
Profile Headloss	0.00 ft	
Average End Depth Over Rise	0.0 %	
Normal Depth Over Rise	100.0 %	
Downstream Velocity	Infinity ft/s	
Upstream Velocity	Infinity ft/s	
Normal Depth	24.0 in	
Critical Depth	23.5 in	
списа Берит		
Channel Slope	0.113 ft/ft	

New Culvert Calculations

Project Description		
Friction Method	Manning	
THEODIT PICCHOU	Formula	
Solve For	Full Flow Capacity	
Input Data		
	0.024	
Roughness Coefficient	0.024	
Channel Slope Normal Depth	0.080 ft/ft 30.0 in	
Diameter	30.0 in	
	62.84 cfs	
Discharge	02.04 CIS	
Results		
Discharge	62.84 cfs	
Normal Depth	30.0 in	
Flow Area	4.9 ft ²	
Wetted Perimeter	7.9 ft	
Hydraulic Radius	7.5 in	
Top Width	0.00 ft	
Critical Depth	28.9 in	
Percent Full	100.0 %	
Critical Slope	0.070 ft/ft	
Velocity	12.80 ft/s	
Velocity Head	2.55 ft	
Specific Energy	5.05 ft	
Froude Number	(N/A)	
Maximum Discharge	67.59 cfs	
Discharge Full	62.84 cfs	
Slope Full	0.080 ft/ft	
Flow Type	Undefined	
GVF Input Data		
Downstream Depth	0.0 in	
Length	0.0 ft	
Number Of Steps	0	
GVF Output Data		
Upstream Depth	0.0 in	
Profile Description	N/A	
Profile Headloss	0.00 ft	
Average End Depth Over Rise	0.0 %	
Normal Depth Over Rise	100.0 %	
Downstream Velocity	Infinity ft/s	
Upstream Velocity	Infinity ft/s	
Normal Depth	30.0 in	
Critical Depth	28.9 in	
Channel Slope	0.080 ft/ft	
Critical Slope	0.070 ft/ft	
C. deal Stope	3.370 1010	

Outlet Pipe from Inlet Calculations

Project Description		
Friction Method	Manning Formula	
Solve For	Full Flow Capacity	
Input Data		
Roughness Coefficient	0.010	
Channel Slope	0.078 ft/ft	
Normal Depth	6.0 in	
Diameter	6.0 in	
Discharge	2.04 cfs	
Results		
Discharge	2.04 cfs	
Normal Depth	6.0 in	
Flow Area	0.2 ft ²	
Wetted Perimeter	1.6 ft	
Hydraulic Radius	1.5 in	
Top Width	0.00 ft	
Critical Depth	6.0 in	
Percent Full	100.0 %	
Critical Slope	0.074 ft/ft	
Velocity	10.37 ft/s	
Velocity Head	1.67 ft	
Specific Energy	2.17 ft	
Froude Number	(N/A)	
Maximum Discharge	2.19 cfs	
Discharge Full	2.04 cfs	
Slope Full	0.078 ft/ft	
Flow Type	Critical	
GVF Input Data		
Downstream Depth	0.0 in	
Length	0.0 ft	
Number Of Steps	0	
GVF Output Data		
Upstream Depth	0.0 in	
Profile Description	N/A	
Profile Headloss	0.00 ft	
Average End Depth Over Rise	0.0 %	
Normal Depth Over Rise	100.0 %	
Downstream Velocity	Infinity ft/s	
Upstream Velocity	Infinity ft/s	
Normal Depth	6.0 in	
Critical Depth	6.0 in	
Channel Slope	0.078 ft/ft	
Critical Slope	0.074 ft/ft	



Calculation Shee

Designer	Date	Checker	 Date		
Title			 Job No		
			_	_	4

(1) Value from El Paso County

O= CIA C= Runoff Coefficient I = Rainfall Intensity (1/ha)
A = Area (acres)

Drainage Criteria Manual on Municode Versian Oct 31, 2018.

G= Flow (cfs)

Cio 0.70 (/4 acre residential lot with type C+D soils
Cio 0.60 (for 100 year storm event)

Cio 0.60 (for 10 yr storm event)

T(1)

Overland Flow Tc = 1.87(1.1-Ca) Lo.5 5-0.33

1 To 4.3 in/hr I 100 = 6.5 in/hr

C(1) 0,60

A= 3,500ft2 (measured andrawing)

L= 80 feet (measured from drawing)

5= 7835ft-7806ft = 0.36 fyr (Elevations from project soney)

Tz= 11.7 minutes

1.1" (assuming 05 cfs) From Flow Moster

Channel Flow V=1.44 R2/3-5 n=0.016 for gutters

R= A/p = 3 cos 6 = L1" cos(47) = 0.55/n = 0.05/+

5 = 7806-7799FL = 0.20FL/FL

V= 1.47 (0.05) 3 0.20 = 5.32 ft/s

Tc= 34.33 FL = 6.45 sec

Te Total = 11.7 min + 6.455 = 11.8 min

Calculation Sheet

Designer	Date	Checker	Date	
Title			Job No	
Subject			Shoot No	2 - 4

Q= CIA Q= 0.60 (4.3 1/hr) (0.08 acres) = 0.21 cfs

Que= 0.70 (6.5 in/hr) (0.08 acres) = 0,36 cfs

La This is less than the O.5 : Is assumed to calculate flow depth and hydraulic radius for the channel. The assumption is conservative.

Based on the above calculation a design flow of 0.5 cfs has been selected.

Triangular Channel Calculations

	illaligulai	Onamici Galculations
Project Description		
Friction Method	Manning	
	Formula	
Solve For	Normal Depth	
Input Data		
Roughness Coefficient	0.016	
Channel Slope	0.200 ft/ft	
Left Side Slope	12.000 H:V	
Right Side Slope	12.000 H:V	
Discharge	0.50 cfs	
Results		
Normal Depth	1.1 in	
Flow Area	0.1 ft ²	
Wetted Perimeter	2.2 ft	
Hydraulic Radius	0.5 in	
Top Width	2.15 ft	
Critical Depth	1.9 in	
Critical Slope	0.009 ft/ft	
Velocity	5.21 ft/s	
Velocity Head	0.42 ft	
Specific Energy	0.51 ft	
Froude Number	4.346	
Flow Type	Supercritical	
GVF Input Data		
Downstream Depth	0.0 in	
Length	0.0 ft	
Number Of Steps	0	
GVF Output Data		
Upstream Depth	0.0 in	
Profile Description	N/A	
Profile Headloss	0.00 ft	
Downstream Velocity	Infinity ft/s	
Upstream Velocity	Infinity ft/s	
Normal Depth	1.1 in	
Critical Depth	1.9 in	
Channel Slope	0.200 ft/ft	
Critical Slope	0.009 ft/ft	

Calculation Sheet

Designer	Date	Checker	Date	
Title			Job No	
Culticat			th	الله ا

Inlet Capacity Cheek

Oi = 3.0 Pd | F

Oi = inlet flow assumed to be 1.0 cfs worst case

P = perimeter of grate opening

= 2 × 225 in r 2 × 39.25 if CDOT Type /3 Inlet

= 123.5 in = 10.3 ft

ol = depth

F = Clogging factor = 2.0 for grate inlet area in sump

Table 7.1 El Paso County Drainage Criteria Manual

d= 0.10 ft=1.2 in L> depth required to push 0.5 cfs through inlet-grate



Town of Green Mountain Falls Land Use Approval Application Architectural Plan Review

General Information

- This checklist serves as a guideline for submitting a Zoning & Architectural Plan Review Land Use Approval application and is not a substitute for the provisions in GMF Municipal Code or any other rules that may apply.
- Applicants are responsible for reviewing and understanding the Code.
- Complete applications are subject to staff review time of two weeks (14 days).

Applicant			
Applicant: Dewberry Engineers, Inc Sam Franzen			
Address: 990 S Broadway, Denver, CO 80209			
E-Mail: sfranzen@dewberry.com			
Phone: 303-951-0618			
Owner: Colorado Springs Utilities - Larysa Voronova			
Address: 121 S Tejon St, Suite 200, Colorado Springs, CO 80947			
E-mail: Ivoronova@csu.org			
Phone: 719-668-3851			

Property

Physical Property Address: 10685 Hondo Ave, Green Mountain Falls, CO 80819		
Type of Plan Review: Architectural and Zoning Lot Size/Zoning: 12,778 sqft		
Hillside Overlay zone? Yes ☒ No ☐ Land Survey/ILC Included: Yes ☒ No ☐		

Certification & Signature

APPLICANT'S STATEMENT: I understand the procedures and requirements (pages 1 and 2 of this application) that apply to my request and acknowledge an incomplete application will not be scheduled for public hearing. GMF Staff's acceptance of the application, payment of fees, and submittal of accompanying materials does not constitute completeness. I further agree to reimburse the city for technical and professional consulting expenses that may be incurred during the review of my request. Failure to reimburse the Town for invoiced expenses constitutes an incomplete application.

Certification: The undersigned applicant certifies under oath and under penalties of perjury that the information found in the application is true and accurate to the best of their knowledge.

By checking this box, I agree to the certification statement and am typing my full name as an electronic signature.

Applicant Signature_	Dan Lynn	Date10/12/2022
Owner Signature		Date
Owner Signature		Date

This document can be signed electronically using Adobe Reader DC for free.

Plan Review Checklist

This checklist serves as a guideline for submitting a Zoning & Architectural Plan Review (APR) Land Use Approval application and is not a substitute for the provisions in Green Mountain Falls Municipal Code or any other rules that may apply. Applicants are expected to review, at a minimum §16, Zoning, §17, Subdivision, §18, Building Regulations.

APR is a general term for the review by the Planning Commission/Board of Trustees for zoning compliance and the evaluation of architectural compatibility, as outlined in §16-705.

1. Application & Petition

- a. Application, signed and dated by the applicant and property owner(s)
- b. Application fee
- c. Letter of explanation
 - i. Describe the purpose of the project (e.g., deck, SFH addition, exterior renovation, etc.) and describe project details, referring to site plans and drawings as necessary

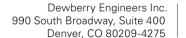
2. Development Plan

- a. Vicinity Map with streets and access points to the property
- b. Existing and proposed structures with zoning setbacks, property boundaries and dimensions
- c. The location of all drainage to, from and across the site, the location of intermittent and permanent springs, culverts and other drainage structure

3. Procedure:

- a. Electronic submittal of signed application and checklist materials: planner@gmfco.us
- b. Payment of fees to Town Clerk for receipt
- c. Upon determining an application is complete, staff will schedule for PC and/or BoT public hearing

GMF T	'own Staff:				
	Application				
	Letter of Expla	nation			
	Development I	Plan			
	Application fee	(Town Clerk)			
	Date	_ Amount	□ Check #	🗆 Credit Card	



303.825.1802 303.825.2322 fax www.dewberry.com



October 12, 2022

Town of Green Mountain Falls Attn: Nate Scott, Planner Town Hall 10615 Green Mountain Falls Road Green Mountain Falls, CO 80819

RE: Letter of Explanation for the Green Mountain Falls Pump Station

Dear Mr. Scott,

Dewberry Engineers is pleased to submit this letter of explanation and documentation for the Zoning & Architectural Plan Review Land Use Approval for the Green Mountain Falls Pump Station (GMFPS) on behalf of Colorado Springs Utilities for review and comment.

Separate variance requests have been submitted for non-residential use of a residentially zoned property, not meeting the required front setback, and for requirements in the Hillside Ordinance pertaining to distance to buildings on adjoining lots and distance to a major drainage way.

The purpose of the GMFPS project is to replace the existing below grade pump station. The existing pump station was constructed in 1986 and has reached the end of its useful life. The new pump station will ensure reliable water service for residents in Green Mountain Falls as well as the Town itself. It will also provide a safer and more readily accessible working space for Colorado Springs Utilities enabling more efficient maintenance and repair activities.

The site selected for the new GMFPS is 10685 Hondo Avenue. The property is owned by the same entity that owns the property at 6985 Colorado St directly to the west. Colorado Springs Utilities is currently negotiating the terms of an easement with the property owner to allow the pump station to be built on the site. The agreement and required Owner Signature will be submitted once the agreement is finalized. The site is zoned R-1 10,000. As mentioned above a variance has been submitted to allow non-residential use of a residentially zoned parcel.

The new pump station will be an above grade building that sits back into the hillside on the property, see drawing C-3 in the attached Development Plan. The building will be a single room that is 22'-8" by 18'-10". A 13'-8" by 17'-8" open topped enclosure for a backup emergency generator will be attached to the east side of the building. A gravel parking drive/area will be installed between Hondo Ave and the building. The parking will be used by Colorado Springs Utilities Operations and Maintenance personnel and as overflow parking for the 6985 Colorado St residence. The majority of the parking/drive area is in the right of way for Hondo Ave. The right of way area encompassed by the parking/drive area is currently either an existing parking/drive area or a drainage channel. The parking/drive area will be expanded by replacing the existing culvert with a longer culvert with greater capacity than the existing culvert. Expanding the parking/drive area does not reduce the useable right of way area. The building location on the site and arrangement can be seen on drawing C-3.

The exterior of the building has been designed to blend with the surrounding residential properties with similar features to many of the surrounding homes. The building walls will be concrete covered with a veneer composed of natural stone facing on the bottom and pre-finished metal narrow batten siding above. The stone veneer will slope to match the grade around the building. The generator enclosure walls will be concrete covered with a natural stone veneer to match the building and capped with colored concrete wall caps. The building roof will be pre-finished metal standing seam. The roof slants only to the

east to minimize the view impacts from the neighboring properties. The pre-finished metal siding and roof come with a 20 year warranty. Stone and metal wall and roof finish colors will be primarily earth tones, browns, and grays selected to blend with the surrounding environment. A double man door will be installed on the north face of the building for access and to allow for equipment removal. The generator enclosure will have a fabricated steel gate for access. The door and gate will be finished to blend with the building aesthetic. A plan view of the structure as well as building elevations can be seen on drawings A-2, A-3, and A-4 in the attached Development Plan.

Exterior lighting is provided above the man door and on the walls within the generator enclosure as shown on drawing E-11 in Attachment A. All fixtures will be down facing full cutoff fixtures and will be switched. The fixtures will only be left on when operations and maintenance staff are at the facility.

A gutter along the south wall of the building and an inlet at the southeast corner of the building will be installed to capture drainage coming down the hillside. Two concrete retaining walls will be constructed on the east side of the site to replace the existing retaining wall that has partially failed and allow for appropriate grading of the parking area. A concrete headwall will be constructed on the west end of the culvert to support the drainage channel. The concrete will be colored to blend with the building aesthetics. Drawing C-3 shows the items discussed above as well as proposed grading.

The pump station will provide an integral service to Green Mountain Falls and its residents. Design of the building and site have focused blending the structure with the aesthetics of the buildings in the area to minimize the impact of the structure on the surrounding environment.

Please contact Sam Franzen at sfranzen@dewberry.com or 303-951-0618 with any questions or concerns.

Sincerely,

Sam Franzen Project Engineer

Said Lynn





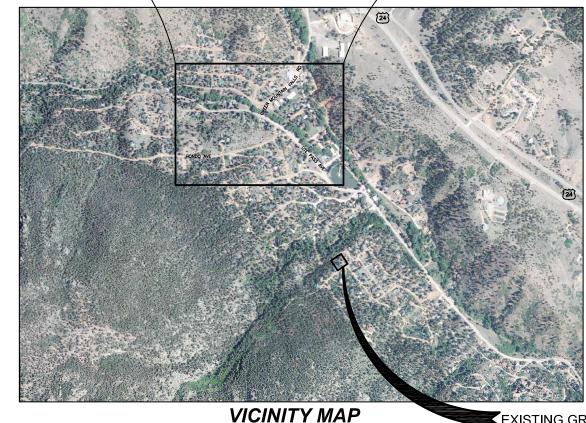
GREEN MOUNTAIN FALLS PUMP STATION

It's how we're all connected



GREEN MOUNTAIN FALLS
PUMP STATION PROJECT
LOCATION

LOCATION MAP
NO SCALE



NO SCALE

EXISTING GREEN MOUNTAIN FALLS PUMP STATION TO BE DEMOLISHED

DEVELOPMENT PLAN
OCTOBER 2022

DRAWING INDEX

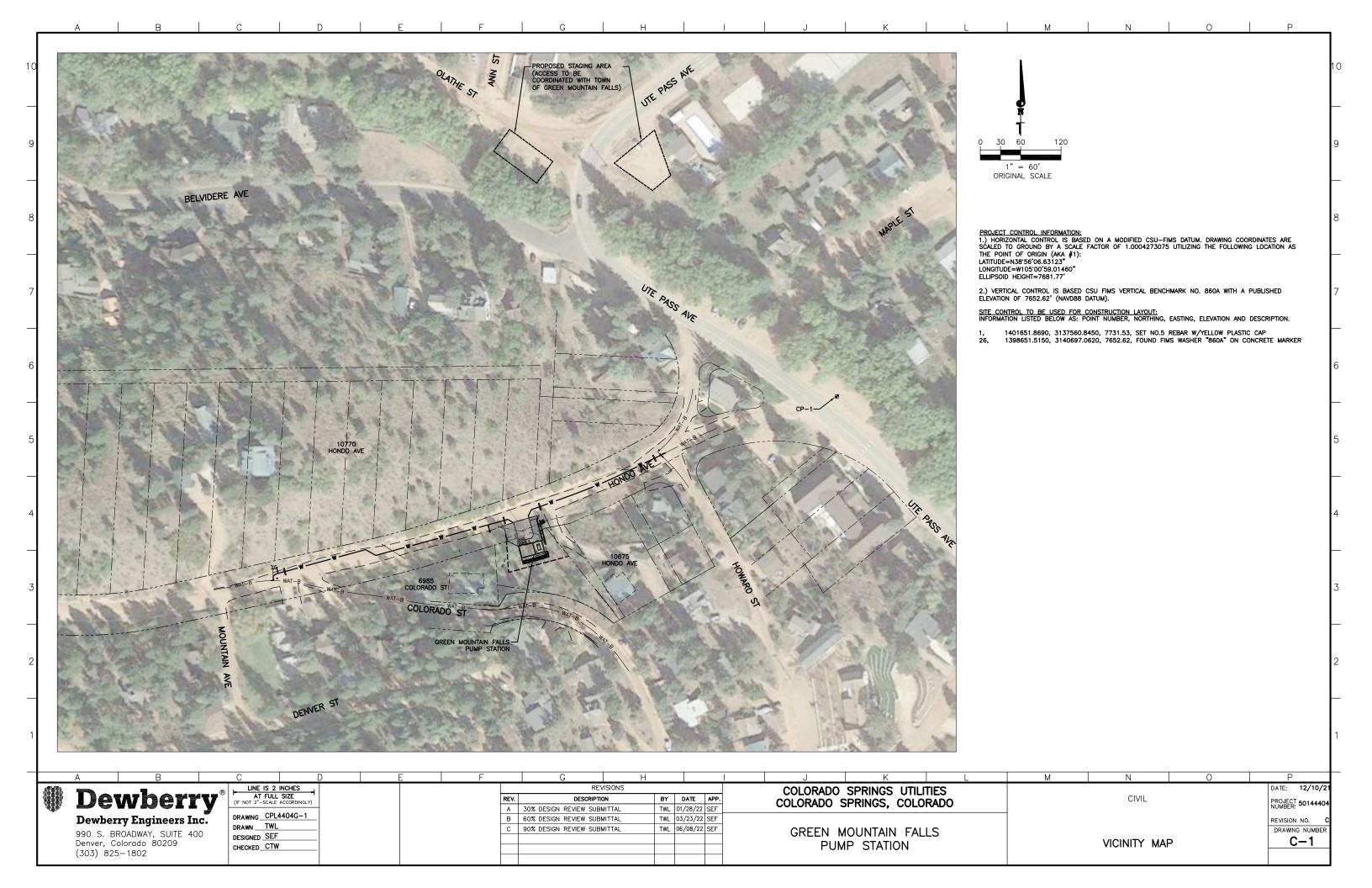
DWG NO	TITLE
GENERAL 	COVER AND INDEX
CIVIL C-1 C-2 C-3 C-4 EC-1	VICINITY MAP DEMOLITION PLAN DEVELOPMENT PLAN ENLARGED GRADING PLAN EROSION CONTROL PLAN
ARCHITECTURAL A-2 A-3 A-4	FLOOR PLAN & ROOF PLAN BUILDING ELEVATIONS BUILDING ELEVATIONS INTERIOR ELEVATIONS

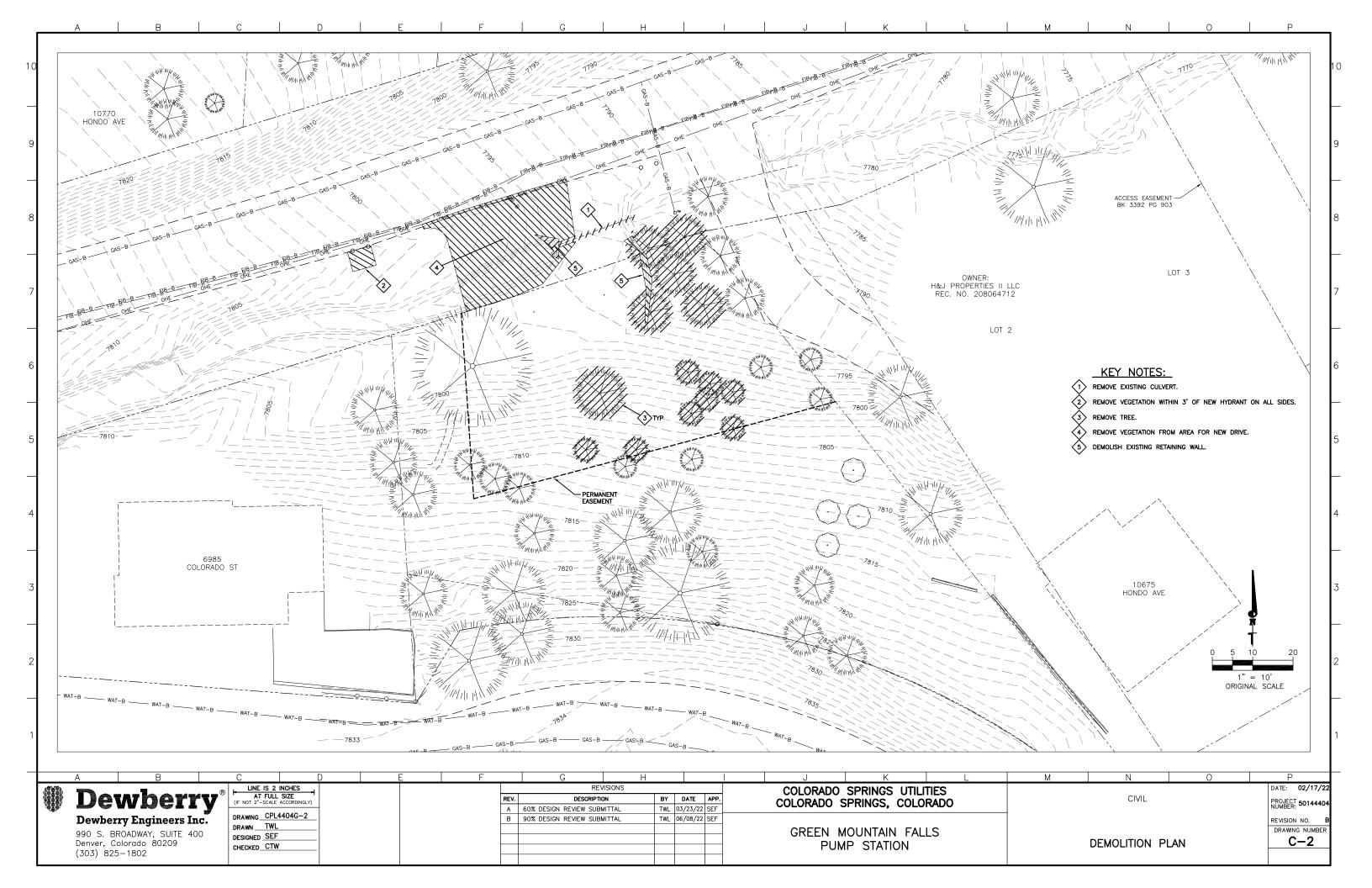
GMFPS Site Summary	
Site Area	12,778 sqft
Setback	Summary
Front	
Required	15 feet
Provided	12 feet*
East Side	
Required	10 feet
Provided	19
West Side	
Required	10 feet
Provided	17
Back	
Required	10 feet
Provided	50 feet
*Front setback application sul	

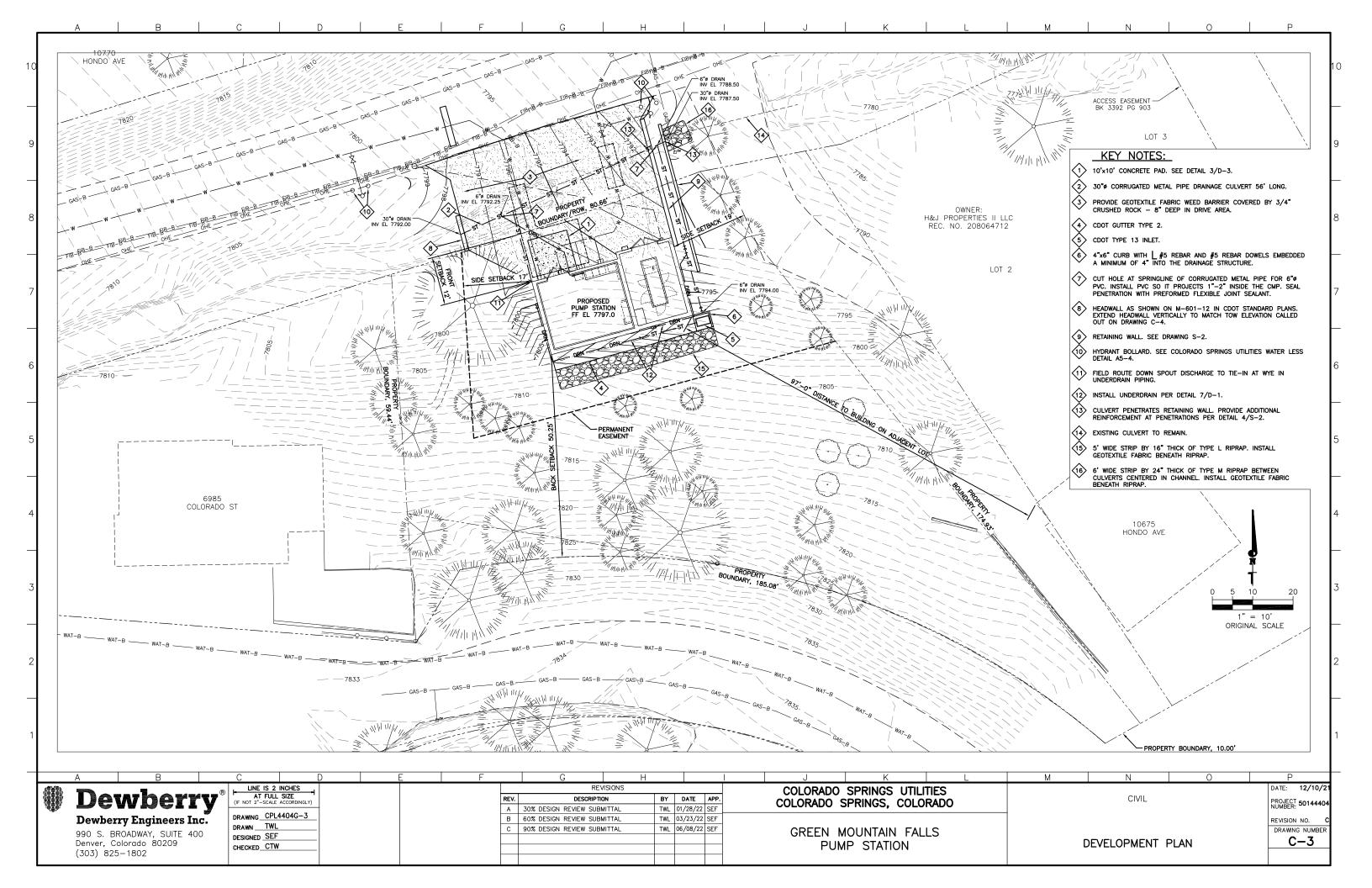


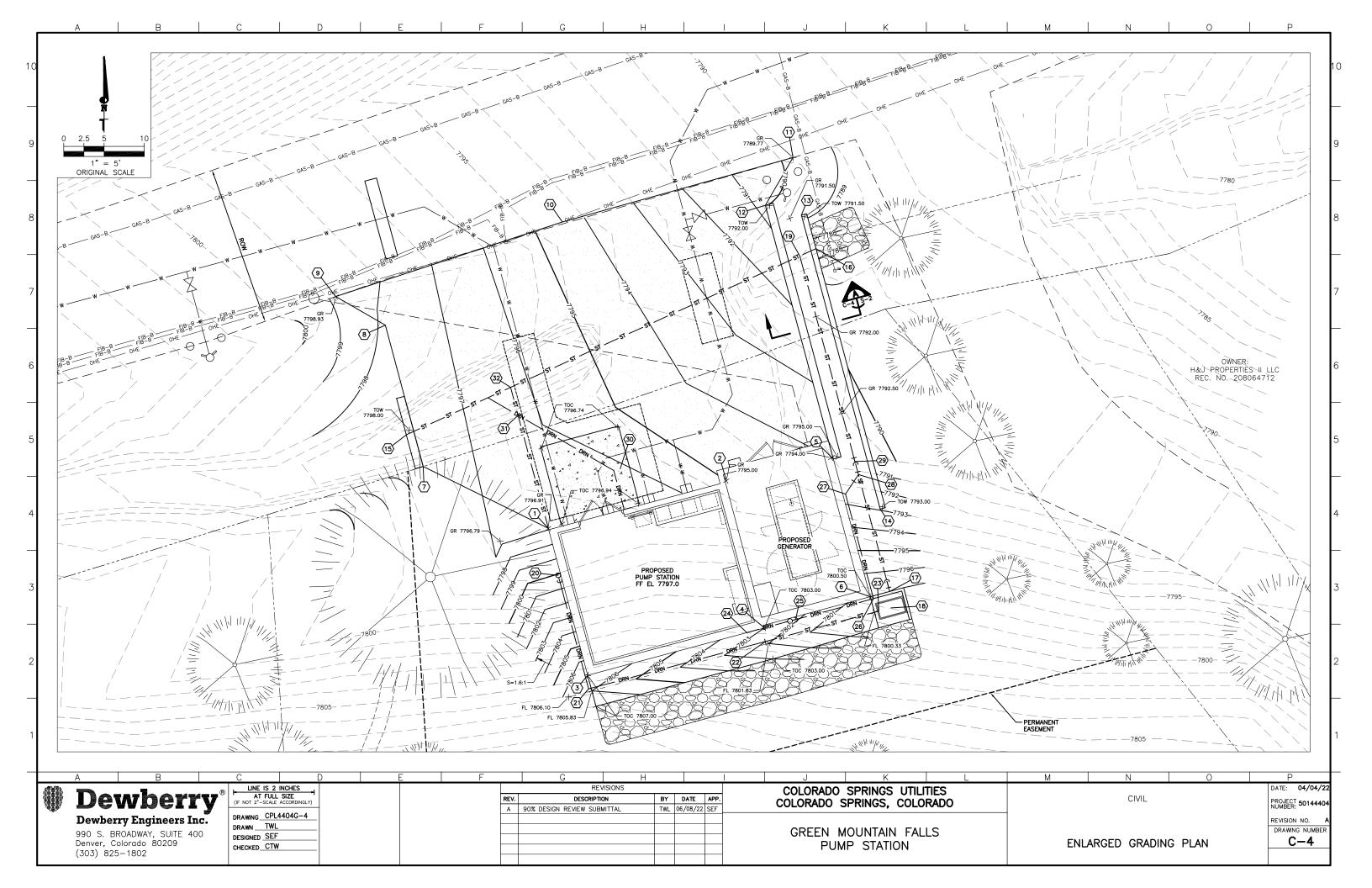
990 S. BROADWAY, SUITE 400 Denver, Colorado 80209 (303) 825-1802

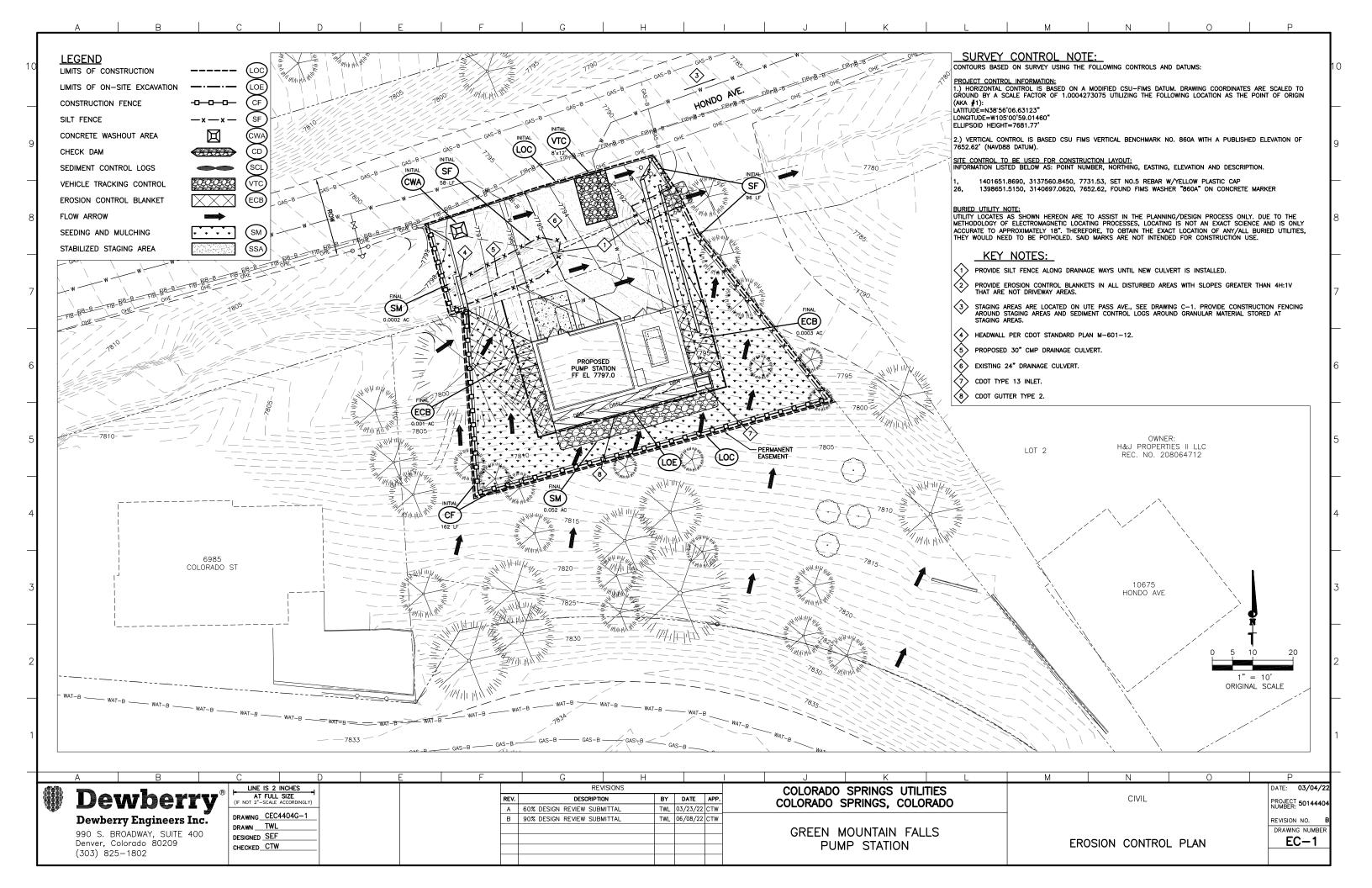


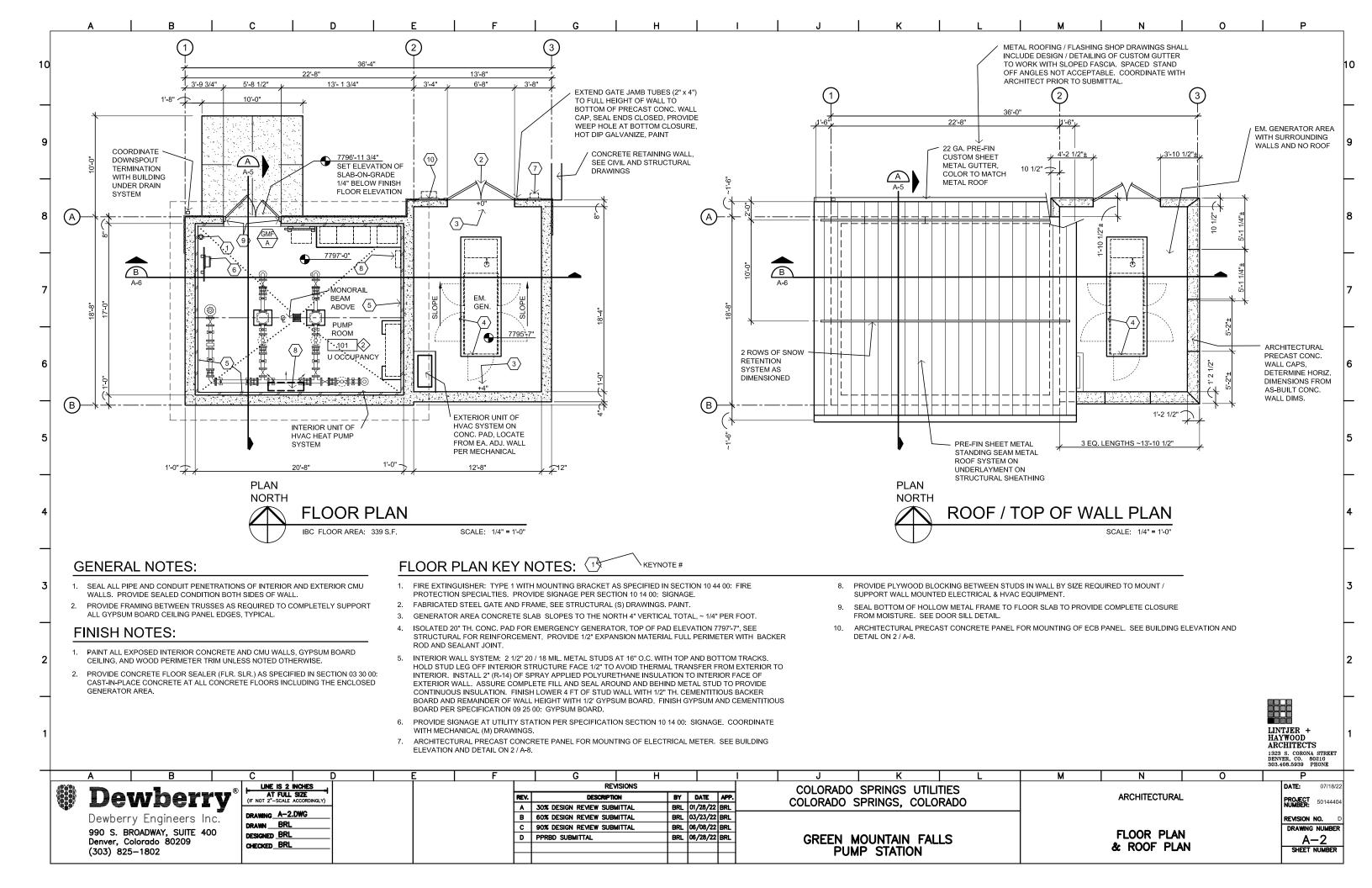


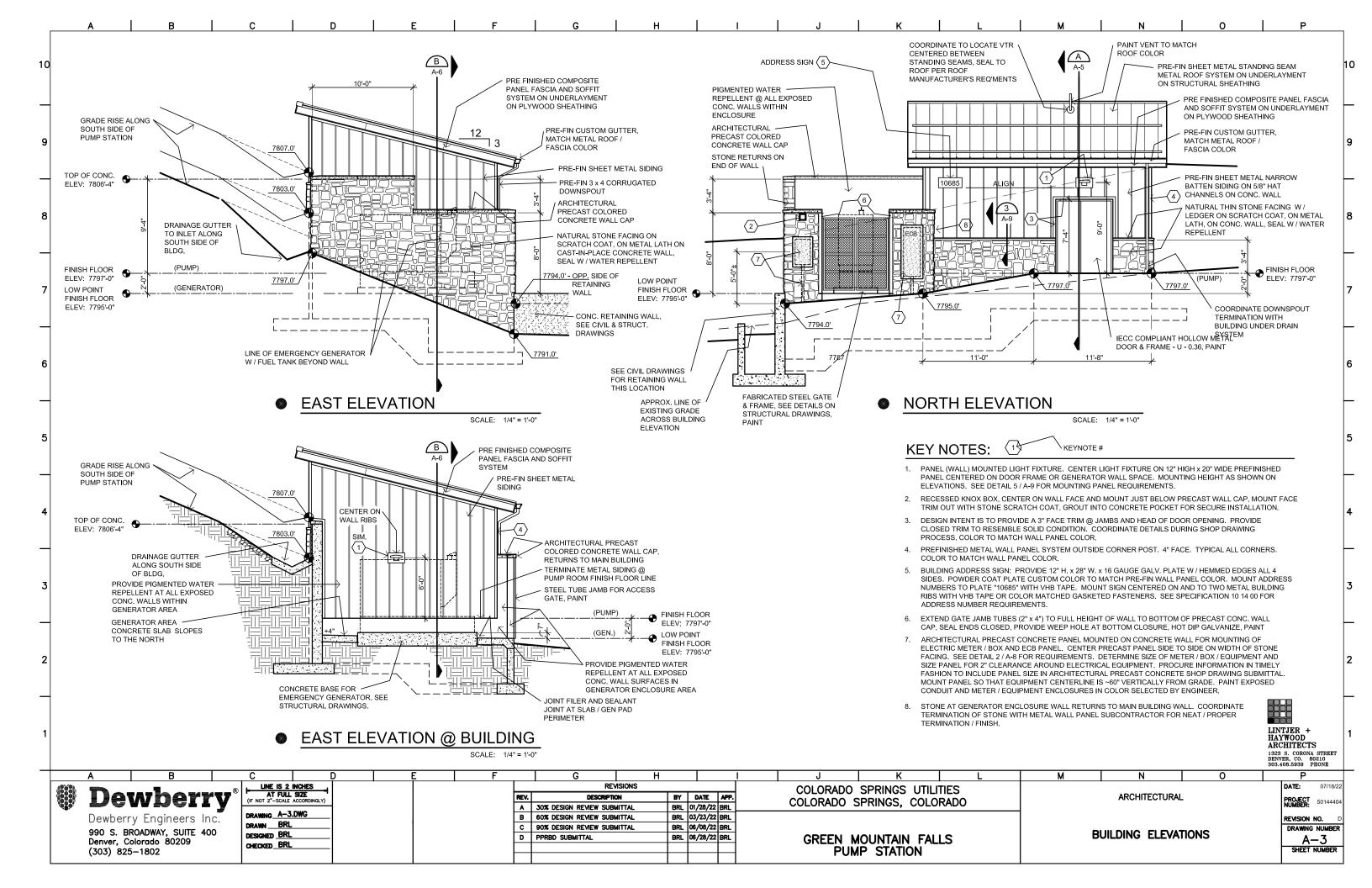


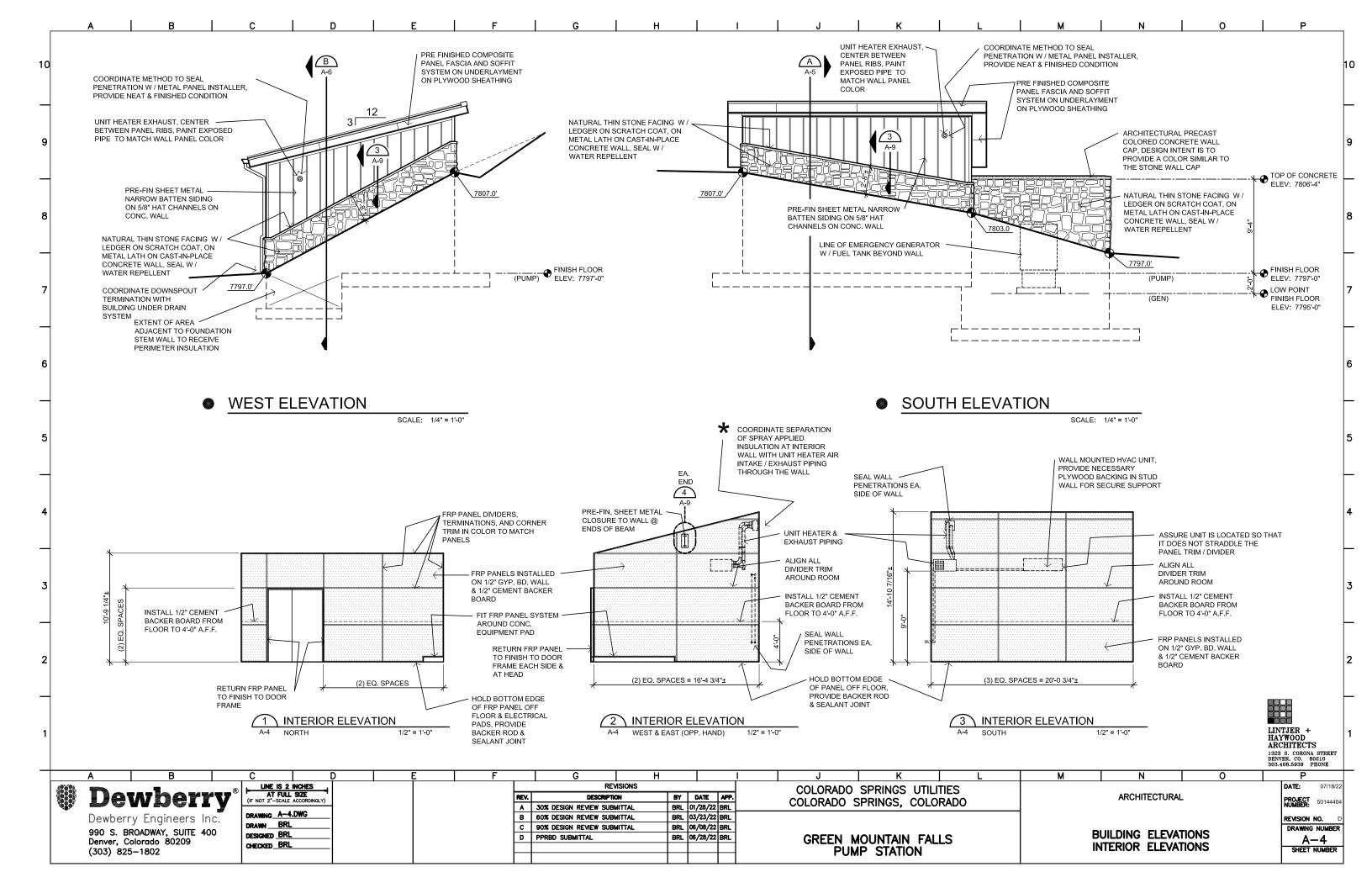












Green Mountain Falls Land Use Code November 2022 Draft

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Chapter 12: Land Use Code

Article 1: General Provisions

1. Applicability

After the effective date of this Land Use Code, all buildings, structures, and any portion thereof, and uses of land, whether existing or established after the effective date, shall be subject to the provisions of this Land Use Code, subject to the nonconformity provisions in Article 5:8.

2. Title and Short Title

This Chapter, as amended from time to time, shall be known and may be cited as the Town of Green Mountain Falls Land Use Code. It may also be referred to within this document as the "Land Use Code," "LUC," "Chapter 12," or "this Chapter."

3. Effective Date

This Chapter shall become effective on [insert].

4. Severability

If any of the provisions of this Land Use Code are declared invalid, the other provisions shall remain in full force and effect.

5. Official Zoning Map

- (a) The location and boundaries of the zoning districts are hereby established on a map entitled "Official Zoning Map," as it may be amended from time to time, which accompanies and is hereby incorporated in and made a part of this Land Use Code.
- (b) The Official Zoning Map shall be available on the Town's Website.

6. Transition Rules

(a) Development Approvals

- i. Any development approved under regulations in effect prior to the effective date of this Chapter may be carried out under the terms and conditions of the approval and the development standards in effect at the time of approval, provided the approval has not expired and the development complies with any applicable standards of this Chapter regarding ongoing operations and maintenance.
- ii. If the prior approval expires, is revoked, or otherwise becomes invalid, any subsequent development of the site shall be subject to the procedures and standards of this Chapter.

(b) Pending Applications

A development application that has been determined and documented to be complete pursuant to the Town Manager, prior to the effective date of this Chapter may be decided under the regulations in effect when the application was determined to be complete or may be reviewed and decided under this Chapter at the request of the applicant. Applications shall not be processed under a combination of prior regulations and this Chapter.

(c) Prior Violations

- i. If a development or activity in violation of the prior development regulations fully complies with this Chapter, it shall no longer be deemed a violation.
- ii. Unpaid fees and/or penalties from prior enforcement of violations are still valid and shall remain the responsibility of the violator under the prior regulations, unless otherwise waived by the Town.

Article 2: Districts

1. Zoning Districts

Zoning districts and associated purpose statements are established as shown in Table 2-1.

Table 2-1: Zoning Districts		
Zoning District Purpose Statement		
R-1 – Low-	The R-1 district is intended to accommodate low-density residential uses	
Density	with complementary accessory uses. It is further intended that such a	
Residential ¹	development be served with institutional uses and community facilities	
-	compatible with the character of the zone.	
R-2 – Medium-	The R-2 district is intended to accommodate medium-density residential	
Density	uses with a range of accessory, institutional, and community facility uses.	
Residential ²		
MX-1 – Mixed	The MX-1 district is intended to accommodate primarily commercial and	
Use ³	institutional uses with limited residential uses at a neighborhood scale.	
O – Open Space ⁴ The O district is intended to preserve a regional greenbelt of open spa		
	land, protect and restore the natural environment, and provide	
	opportunities for public recreational enjoyment and education.	
<mark>P⊎</mark> D – Planned	The PUD district is intended to encourage imaginative concepts in urban	
Unit	design and land development and grant substantial additional benefit to	
Development ⁵	the Town that would not otherwise be required by this LUC.	
DV - O –	The DV-O district is intended to promote a more expansive and vibrant	
Downtown Village	downtown area oriented for pedestrian use with high-quality architecture.	
Overlay ⁶		

¹ Combination of current R-1 and 5-A districts. It would lower the five-acre minimum lot size requirement substantially and broaden the district to a variety of low-density residential uses.

² Carry over of current R-2 district.

³ Combination of current B and PF districts. It would create a broader district that can be used for a variety of mixed-use developments.

⁴ Renaming of current PL district to allow both public and private open space in the same district.

⁵ Carry over of current PUD district.

⁶ New overlay to promote comprehensive plan goals.

Table 2-1: Zoning Districts			
Zoning District	Purpose Statement		
HP-O – Historic Preservation	The HP-O District is intended to protect, preserve, and enhance structures of cultural, social, economic, political, architectural, or historic		
Overlay ⁷			

2. District-Specific Standards

(a) Downtown Village Overlay⁸

The following standards shall apply to all new development in the DV-O district.

i. Parking

Developments in the DV-O district that contain at least 50 percent commercial uses may reduce the amount of parking required in Article 4:7 by 25 percent.

ii. Maximum Height

Developments in the DV-O district that contain at least 50 percent commercial uses may exceed the maximum height requirements in Article 4:1 by an additional 12 feet.

- iii. Pedestrian-Orientated Site Features
 - (1) To the maximum extent practicable, the area located outside of the right-of-way between a building and a street shall promote visual and pedestrian access onto the site and provide pedestrian-oriented amenities and landscaping to enhance the patron's or public's use of the space for passive activities such as resting, reading, and/or eating.
 - (2) At least one primary pedestrian entrance shall be provided for every façade facing a street.
- iv. Design
 - (1) Primary buildings shall be constructed of high quality, durable materials including but not limited to stone, brick, masonry, or wood.
 - (2) The use of asphalt shingles, imitation stone, imitation brick, exterior insulation finish systems (EIFS), or vinyl siding is prohibited on any street-facing building façade.
 - (3) Each street-facing façade, regardless of exterior wall plane setback, shall incorporate two or more of the following elements for every 60 horizontal feet:

-

⁷ New overlay to map historic preservation properties.

⁸ These standards are one part incentives and one part additional design requirements that seek to achieve the goals in the Comp Plan related to spurring additional pedestrian-oriented, high-quality development downtown.

- (a) Projections, recessions, or reveals such as, but not limited to, columns, pilasters, cornices, and bays, and having a change of wall plane that is a minimum of six inches in depth;
- (b) Change in texture and/or masonry patterns; and/or
- (c) Awnings or canopies extending at least four feet beyond the building face with a minimum vertical clearance of nine feet above the sidewalk. Glowing awnings (backlit, light showing through the material) are not permitted.
- (b) HP-O, Historic Preservation Overlay
 - i. Design Standards

The Standards for Rehabilitation and Guidelines of Rehabilitating Historic Buildings, a section of the Secretary of the Interior Standards for Historic Preservation, revised in 1990 as part of Department of the Interior Regulations (36 C.F.R. Part 67, Historic Preservation Certifications), as amended, shall be hereby adopted and be design requirements for the HP-O district, excepting any standards relating to aesthetic color schemes.

- ii. Maintenance Requirements
 - (1) The City intends to preserve from deliberate or inadvertent neglect the exterior portions of designated properties and all interior portions thereof whose maintenance is necessary to prevent deterioration of any exterior portion.
 - (2) No owner, lessee, or occupant of any historically designated property shall fail to prevent significant deterioration of the exterior of the structure or special feature beyond the condition of the structure on the effective date of the designating ordinance.

Article 3: Uses

- 1. Permitted Uses Table
 - (a) A "X" in a cell of the Permitted Use Table indicates that the use is permitted by right in that zoning district, subject to compliance with any Use-Specific Standards cross-referenced in the right-hand column of that line of the table.
 - (b) A "C" in a cell of the Permitted Use Table indicates that the use is permitted only after the petitioner obtains Conditional Use approval pursuant to Article 5:3(d), and subject to any Use-Specific Standards cross-referenced in the right-hand column of that line of the table.
 - (c) An "A" in a cell of the Permitted Use Table indicates that the use is permitted as an accessory use only in support of a permitted use on the site, and subject to any Use-Specific Standards cross-referenced in the right-hand column of that line of the table.

- (d) A "T" in a cell of the Permitted Use Table indicates that the use is permitted as a temporary use only after a temporary use permit is obtained pursuant to Article 5:3(f), and subject to any Use-Specific Standards cross-referenced in the right-hand column of that line of the table.
- (e) An "*" indicates that a Use-Specific Standard cross-referenced in the right-hand column of the table applies to the use.
- (f) A blank cell in the Permitted Use Table indicates that the use is not allowed in that zoning district.
- (g) When a proposed land use is not explicitly listed in Table 3-1: Permitted Use Table, the use in not permitted in any district.

2. Unlisted Uses

When a proposed primary, accessory, or temporary land use is not explicitly listed in the Permitted Uses Table, the use is not permitted in the Town, unless the Town Manager determines that it is included in the definition of a listed use or is so similar to a listed use that it shall be treated as the same use. The Town Manager shall make that determination based on a comparison of the size, scale, operating characteristics, multi-modal traffic impacts, storm drainage impacts, utility impacts, and neighborhood impacts of the proposed use with other uses listed in the Permitted Uses Table. The Town Manager's interpretation shall be made available to the public and shall be binding on future decisions of the Town until this LUC is amended to treat the use differently.

Table 3-1: Permitted Uses Table

X = use by right; C = conditional use; A = accessory use; T = temporary use; Blank cell = prohibited; Uses with an * = use-specific standards apply

Zoning Districts	R-1	R-2	MX-1	0	Use-Specific Standards				
Residential Uses									
Dwelling, Single Family Detached	X	X	С						
Dwelling, Attached	X	X	C						
Dwelling, Duplex	X	X	C						
Dwelling, Triplex	C	X	C						
Dwelling, Fourplex		C	C						
Dwelling, Multifamily		С	С						
Group Home, Large		С	C						
Group Home, Small		С	С						

Table 3-1: Permitted Uses Table

 $X = use\ by\ right;\ C = conditional\ use;\ A = accessory\ use;\ T = temporary\ use;\ Blank\ cell = prohibited;\ Uses\ with an * = use-specific\ standards\ apply$

R-1	R-2	MX-1	0	Use-Specific Standards
	C			Article 3:3(a)i
	C			
ivic Uses				
		X	C	
	C	X		
C	C	X	C	Article 3:3(b)i
		C		
		C		
		C		
X	X	X	X	
X	X	X		
	C	C		
				_
		C		Article 3:3(c)i
		C		
		C		
		X		
C	C	X		
C	С	X		
		C		
		C		
		X		
		С		
	C C C	C C C C C C C C C C C C C C C C C C C	C C C X X X X X X X X X X X X X X X X X	C C C X C C X X X X X X X X X X X X X X

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Zoning Districts	R-1	R-2	MX-1	0	Use-Specific Standards
Office			X		
Outdoor Entertainment or			X	C	
Recreation			Λ	C	
Parking Garage			C		
Parking Lot			C		
Retail, Small		С	X		
Retail, Large			C		
Restaurant		С	X		
Self Service Storage Facility			С		
Veterinary and Animal Services			C		
Utility, Communication, and	d Energy Us	es			
Commercial Wireless					
Telecommunications Service			C	C	
Communication Tower			С	C	
Utility, Major			C		
Utility, Minor	C	С	С	С	
Solar Collector, Ground- or Building-Mounted*	A	A	A		Article 3:3(d)i
Wind Energy Conversion System, Ground- or Building-Mounted*	A	A	A		Article 3:3(d)ii
Accessory Uses and Structu	ures				
Accessory Dwelling Unit*	A	A	A		Article 3:3(e)i
Barns, Sheds, and Outbuildings	A	A	A	C	
Drive-in Facility			A		
Electric Vehicle Charging Station		A	A		

Table 3-1: Permitted Uses Table

X = use by right; C = conditional use; A = accessory use; T = temporary use; Blank cell = prohibited; Uses with an * = use-specific standards apply

			l		TT G 100 G: 1 1
Zoning Districts	R-1	R-2	MX-1	О	Use-Specific Standards
Greenhouse	A	A			
Home Occupation*	A	A	A		Article 3:3(e)ii
Outdoor Eating Area*		A	A		
Urban Agriculture	A	A	A		
Recreational Vehicle Parking		A			
Short-Term Rental*	A	A	A		Article 3:3(e)v
Temporary Uses					
Carnival or Festival*			Т	Т	Article 3:3(e)iv
Food Truck			Т	T	
Garage Sale	Т	T			
Seasonal Sales			Т	Т	

3. Use-Specific Standards

- (a) Residential Uses
 - i. Manufactured Home Park
 - (1) Manufactured homes that are not installed on a permanent foundation shall be skirted with materials similar in color, texture, and appearance to the siding of the manufactured home.
 - (2) Anchorages and tie-downs shall be provided on each manufactured home space or lot to prevent overturning or uplift of the manufactured home.
 - (3) All yard areas and other open spaces not otherwise paved or occupied by structures shall be landscaped and maintained.
 - (4) In cases where the owner of a manufactured home community intends to change the use resulting in expiration or termination of resident occupancy, the owner shall mail each resident written notice of his intent at least 18 months prior to the change of use.
- (b) Public, Institutional, and Civic Uses
 - i. Community Garden

- (1) Greenhouses and hoop houses are limited to a maximum height of 15 feet, shall be located at least 10 feet from any lot line, and may not cover more than 25 percent of the property.
- (2) Retail sales shall be prohibited on the Community Garden site, except for the sale of produce grown on that site.
- (3) The site drainage and maintenance shall prevent water and fertilizer from draining onto adjacent property that is not part of the contiguous land in the urban agricultural use.
- (4) Refuse and compost areas shall be enclosed at ground level to be rodent-resistant.
- (5) No outdoor work activity that involves power equipment or generators may occur between sunset and sunrise.

(c) Commercial Uses

- i. Adult Entertainment
 - (1) All Adult Entertainment uses shall be located not less than 750 feet from an R-1 or R-2 district boundary, Place of Worship or School.
 - (2) No Adult Entertainment establishment shall locate within 750 feet of another Adult Entertainment use.
 - (3) For the purposes of this use the distance shall be a horizontal measurement from the nearest district boundary or lot line of a Place of Worship, School, or another Adult Entertainment use to the nearest point on the lot line of the lot where the Adult Entertainment use is proposed.
- (d) Utility, Communication, and Energy Uses
 - i. Ground- or Building-Mounted Solar Collectors

Accessory ground-mounted solar collectors shall:

- (1) Be set back at least six feet from the side and rear property line;
- (2) Not be located within an easement;
- (3) Be located so as to minimize glare visible from abutting properties;
- (4) Not exceed 15 feet in height with panels oriented in a vertical position; and
- (5) Be included in determining the maximum coverage of structures on the lot.
- ii. Wind Energy Conversion System (WECS), Ground or Building Mounted
 - (1) A ground-mounted WECS located on a single lot shall be set back from each property line at least 1.1 times the total height of the WECS.

- (2) A WECS that is placed on a primary or accessory structure and does not exceed the maximum height in the applicable zoning district shall meet the minimum setback for the primary or accessory structure in the zoning district where it is located.
- (3) The blades of a WECS placed on a primary building shall not extend beyond the property line in any operational position.
- (4) Each ground-mounted WECS with blades that spin on a horizontal axis and with a height of more than 100 feet shall not be located within 600 feet of any State wildlife management areas, wetlands, and flood control reservoirs.
- (e) Accessory Uses and Structures and Temporary Uses
 - i. Accessory Dwelling Unit
 - (1) Accessory Dwelling Units shall only be permitted on lots greater than 2,000 square feet.
 - (2) There shall be no more than one Accessory Dwelling Unit on a lot.
 - (3) An Accessory Dwelling Unit must not contain more than 1,000 square feet of gross floor area.
 - (4) No portion of a lot on which an Accessory Dwelling Unit is located may be subdivided from or legally described differently than, the lot containing the primary residential unit, and no portion of a structure containing an Accessory Dwelling Unit may have ownership different from the ownership of the primary dwelling unit.
 - (5) There shall be one additional off-street parking space provided for the Accessory Dwelling Unit.
 - (6) Recreational vehicles may not be used as Accessory Dwelling Units.

ii. Carnival or Festival

Parking and traffic mitigation requirements shall be determined by the Town Manager on a case-by-case basis.

iii. Home Occupations

- (1) The Home Occupation shall not involve internal or external alterations or construction features not normally found in dwellings.
- (2) Other than a member of the family residing in the dwelling unit, only one outside employee may be engaged in the Home Occupation.
- (3) Home occupations that involve the boarding animals shall be limited to six animals at any one time.

- (4) No Home Occupation may use a mechanical equipment or process that creates noise, vibration, glare, fumes, odors, or electrical interference detectable off the premises, including those that create visual or audible interference on any radio or television receiver located off the premises.
- (5) No exterior storage of equipment or materials in connection with the Home Occupation and no display of products, goods, or services that is visible from outside the dwelling unit are permitted.

iv. Outdoor Eating Area

Outdoor Eating Areas shall not interfere with pedestrian access to any public or private door, shall provide at least 36 inches wide of unobstructed sidewalk for pedestrian traffic, and shall not obstruct required parking or parking lot circulation.

v. Short-Term Rentals

- (1) Short-Term Rentals shall require a permit in accordance with Chapter 5 Article VII of the Town Municipal Code and meet all requirements therein.
- (2) The use of outdoor wood-burning fire pits shall be prohibited for all short-term rentals.

Article 4: Dimensional and Development Standards

1. Dimensional Standards

Dimensional standards are required as shown in Table 4-1.

Table 4-1: Dimensional Standards								
District	R-1 Lots < Lots > 10,000 sq. 10,000 sq. ft. ft.		R-2	MX-1	O			
Minimum Lot Dimensions	1	1	1	1				
Lot Area	5,000 sq. ft.	10,000 sq. ft.	4,000 sq. ft.	1,500 sq. ft.	None			
Lot Width	50 feet	100 feet	40 feet	None	None			
Minimum Building Setbacks in Feet								
Front	15	30	15	0	None			
Side	5	10	5; 0 with Firewall	5; 0 with Firewall	None			
Rear	10	20	10	5	None			
Maximum Building Height in Feet								
Primary Structure	35		35	45	25			
Accessory Structure	25		25	25	25			
Maximum Density								
Residential units per acre 12 units/acre 18 units/acre 16 units/acre None								

2. Setback from Waterways

No fences or structures shall be within five feet from any waterway including streams, river, creeks, gullies, springs, and washes, measured from the waterways highest seasonal point except as stated in Article 4:6(e)iii.

3. Application of Setbacks

- (a) No structure or use shall be located in a required setback or in areas designated for private or common open space on an approved Site Plan.
- (b) The required front setback shall be measured and provided from the right-of-way line or private roadway as applicable to the structure or use.
- (c) On a corner lot, the owner shall designate one street frontage as the front lot line, and all other street frontages shall be designated as side street lot line(s).
- (d) On corner lots where potential front and side lot lines create a continuous curve, a radial line intersecting the midpoint of the curve shall be deemed the boundary between the yards.

4. Exceptions to Dimensional Standards

- (a) Steeples, bell towers, chimneys, roof-mounted mechanical equipment, elevator equipment enclosures, and similar architectural and mechanical elements, may exceed the maximum height of the applicable zoning district by no more than six feet of the applicable maximum height.
- (b) Porches, balconies, canopies, stairways, steps, and necessary landings and decks, covered patios, enclosed courts, eaves, awnings, bay windows, fire escapes, chimneys, and steps may exceed the minimum setback of the applicable zoning district by no more than 33 percent of the depth of a minimum yard or setback that is required along a front, side, or rear lot line, but not closer than four feet to a side lot line.
- (c) Signs, fences, and gasoline pumps shall be permitted in front, side, or rear setbacks.

5. Fences

- (a) Barbed wire fencing is not permitted in any district.
- (b) Fences in a front yard shall not exceed 48 inches in height, except for fences in non-residential areas that are necessary for security as determined by the Town Manager.
- (c) Except as otherwise provided for within this Section, no fence shall exceed 72 inches in height, except for fences around tennis courts, baseball fields, or other similar public recreational uses.
- (d) Utility, Communication, and Energy uses shall be permitted fences up to 96 inches in height.
- (e) Fences shall only be constructed within the applicable property line and shall not be constructed on or over any public easements but may be constructed within a required setback.
- (f) All fences shall be maintained in good working order by the property owner. In the event that a fence has not been maintained or has been damaged, the Town may require the owner to repair or remove the fence

within 30 days of written notice or other reasonable time period as determined by the Town.

6. Sensitive Lands, Stormwater, and Drainage

(a) Applicability

This Section applies to all subdivision and site plan approvals unless the Town Manager determines that review at the site plan stage is not necessary because the application complies with avoidance and mitigation measures already applicable to the property due to prior development approvals.

(b) Administrative Adjustments

To better comply with the provisions of this Section while allowing for parcels to remain buildable, the Town Manager may adjust the minimum lot size or lot width dimensions by up to 25 percent upon a determination that doing so would result in minimal disturbance to sensitive lands.

(c) General Requirement

Development of lands that are subject to periodic inundation, subsidence of the earth's surface, high water table, or have difficult topography, unstable soils, wetlands, or other natural or human-created hazards to life or property shall be avoided to the maximum extent practicable.

(d) Wetlands

- i. When there is a substantial likelihood of a wetland existing on a property proposed for development, the Town Manager shall require, at the applicant's expense, a qualified consultant to study the property to determine the existence of a wetland and delineate the boundaries of the wetland on the applicable property.
- ii. No land-disturbing activity, mowing, or temporary or permanent structure shall be allowed within 25 feet of a Delineated Wetland.
- iii. A wetland buffer area extending 25 feet from a Delineated Wetland is required on all Delineated Wetlands.
- iv. Draining of a Delineated Wetland is prohibited.

(e) Stormwater

- i. Stormwater runoff from a construction site directed to a wetland shall be substantially free of silt and debris and shall be discharged at a rate that will not disturb vegetation or increase turbidity.
- ii. Increases in runoff from the 10-year and 100-year frequency storms due to development, redevelopment, or change of use activity on the site shall be detained within the development and released at a rate no greater than existed prior to the development.
- iii. No fences or structures shall be constructed across an open drainage channel or easement that will reduce or restrict the flow of water unless part of an approved retention or detention facility or a revocable permit has been approved to allow the fence or

structure. If a revocable permit is required, conditions attached to that permit may require mitigation of impacts related to the crossing.

iv. The Town may require any water course or stormwater management facility to be located within a dedicated drainage easement that provides sufficient width for maintenance.

(f) Drainage

- i. A stormwater management plan shall accompany an application for site plans involving an increase in impervious surface area except for accessory structures.
- ii. A stormwater management plan shall be prepared to address the impact a development will have on existing drainage facilities and to provide a basis for designing the storm drainage system within the development.

(g) Grading

Any land-disturbing activity that requires the grading of slopes, shall meet the following standards:

- i. All unarmored and structurally unretained graded slopes and fills shall be limited to a 3:1 grade (three feet horizontal to one foot vertical).
- ii. Any graded or fill slope which exceeds a 3:1 grade shall be required to use universally accepted armoring techniques, or retaining structures as approved by the Town Engineer or, at the developers expense, certification by a licensed professional engineer stating that the slopes can be stabilized by plantings, vegetative seeding, mulching. In the instance of slope cuts that involve rock formations it may be required to be certified by a registered geologist.
- iii. Any graded or fill slope which exceeds a 3:1 grade shall be terraced at twenty-foot vertical intervals. Slopes graded between 2:1 and 3:1 shall have a minimum bench width of five feet. Slopes steeper than 2:1 shall have a minimum bench width of five feet and may be required to have wider benches upon Town Engineer determination.
- iv. Any graded slope which exceeds a 3:1 grade shall be grade staked before grading process begins.
- v. Maximum slopes proposed within a minimum of twenty feet of an established property line or any required setback adjacent to a property line shall be 3:1 tying into existing grades along perimeter or property line of the site or retained via retaining walls or other acceptable measures.

(h) Wildfires

Unless waived by the Town Manager based on the applicant's demonstration of adequate alternative wildfire mitigation, the following

standards are required for all new development and substantial improvements to existing development that require a building permit.

- i. Vegetation and tree canopies shall maintain a minimum clearance of 10 feet from any structure.
- ii. New development in areas designed as a risk of seven and higher in the wildland urban interface risk map as amended by the CO-WRAP Colorado Wildfire Risk Assessment Portal shall meet the applicable standards of the most recent version of the International Wildland-Urban Interface Code.

(i) Floodplains

i. Applicability

All new development and substantial improvements to existing development in a Special Flood Hazard Area as delineated by the most recent report available from the Federal Emergency Management Agency (referred to as the "floodplain" hereafter) shall comply with the standards in this section. If a building or structure lies partly within the floodplain, these standards apply to the entire building or structure lying within any portion of the floodplain.

ii. Referral Agency

The Town shall forward all applications subject to these floodplain standards to the Regional Floodplain Administration at the Pikes Peak Regional Building Department for review with applicable federal, state, and local floodplain regulations.

iii. Standards

- (1) All structures shall be anchored to prevent flotation, collapse, or lateral movement of the structure.
- (2) All structures shall be constructed with materials and utility equipment resistant to flood damage below the Floodplain Grade.
- (3) All structures shall be constructed to minimize flood damage.
- (4) Electrical, heating, ventilation, plumbing, air conditioning equipment, utility meters, and other service facilities shall be located at or above the Floodplain Grade or designed so as to prevent water from entering or accumulating within the components below the Floodplain Grade. Water and sewer pipes, electrical and telephone lines, submersible pumps, and other waterproofed service facilities may be located below the Floodplain Grade.
- (5) New and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system.

- (6) New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the system.
- (7) On-site waste disposal systems shall be located and constructed to avoid impairment to them or contamination from them during flooding.
- (8) Materials which are flammable, hazardous, toxic, or explosive, or that in times of flooding could be harmful to human, animal, or plant life may not be produced, stored, or processed in a floodplain.

7. Parking

(a) Minimum Parking Required

The number of off-street parking shall be provided as shown in Table 4-2.

Table 4-2: Minimum Parking Required						
Use	Minimum Required Off Street Parking Spaces in All Districts					
Residential Uses						
Dwelling, Single Family Detached	1 per dwelling unit					
Dwelling, Attached	1 per dwelling unit					
Dwelling, Duplex	1 per dwelling unit					
Dwelling, Triplex	1 per dwelling unit					
Dwelling, Fourplex	1 per dwelling unit					
Dwelling, Multifamily	1.5 per dwelling unit					
Group Home, Large	1 per 400 sq. ft.					
Group Home, Small	1 per 400 sq. ft.					
Manufactured Home Park	1 per dwelling unit, plus one guest space per every 2 dwelling units					
Nursing Home	1 per 4 persons of design capacity					
Public, Institutional, and Civic Uses						
Art Gallery, Museum, and Library	1 per 1,000 sq. ft.					
Community Center	1 per 1,000 sq. ft.					
Community Garden	None					
Day Care Facility	1 per 6 persons of design capacity					
Funeral Home	2 plus 1 per 800 sq. ft.					
Medical Facility	1 per 600 sq. ft.					
Parks and Open Space	None					
Places of Worship	1 space per 5 seats in main assembly area					
School	3 spaces per 1,000 sq. ft.					
Commercial Uses						
Adult Entertainment	1 per 400 sq. ft.					
Animal Shelter	1 per 400 sq. ft.					
Automotive Center and Services	2 per service bay plus 1 per 200 sq. ft. of retail area					
Bar or Brewery	1 per 300 sq. ft. of service area					
Bed and Breakfast	1 per each guest room					
Business or Personal Service	1 per 300 sq. ft.					
Fast Food Restaurant	1 per 300 sq. ft.					
Fueling Station	1 per 250 sq. ft. of retail sales area					
Hotel or Motel	1 per 2 guest rooms					

Table 4-2: Minimum Parking Required						
Use	Minimum Required Off Street Parking Spaces in All Districts					
Indoor Entertainment or Recreation	1 per 400 sq. ft.					
Office	1 per 300 sq. ft.					
Outdoor Entertainment or Recreation	1 per 4 persons based on maximum capacity					
Parking Garage	None					
Parking Lot	None					
Retail, Small	1 per 250 sq. ft.					
Retail, Large	1 per 400 sq. ft.					
Restaurant	1 per 300 sq. ft.					
School	1 per every 15 students plus 1 per full-time employee					
Self Service Storage Facility	1 per 10 storage units					
Veterinary and Animal Services	1 per 400 sq. ft.					
Accessory Uses						
Accessory Dwelling Unit	1 per unit					
Short-term Rentals	1 per every two bedrooms					
Temporary Uses						

Determined on a case-by-case bases at time of permit issuance

(b) Unlisted Uses

For uses not listed in Table 4-2, the Town Manager is authorized to establish the minimum off-street parking requirement based off the listed use that is deemed most similar to the proposed use.

(c) Shared Parking

Where two or more uses listed share a Parking Lot or Garage, the total offstreet parking requirement for those uses shown in Table 4-2 may be reduced by 25 percent. The total off-street parking required shall be the sum of the shared uses parking requirements for the uses eligible to share parking minus 25 percent. Shared parking reductions shall be approved by the Town Manager.

(d) Parking Design and Layout

- i. General Use Requirements
 - (1) No required off-street parking or loading space shall be used for any purpose other than the parking of vehicles.
 - (2) Parking shall be prohibited in aisle ways, fire lanes or similar areas not officially designated for parking purposes. These areas shall be posted with "No Parking" signs and/or other means as required by the Town Manager.
 - (3) Required parking spaces and areas shall not be used for the sale, display or repair of motor vehicles or other goods and services unless authorized by a temporary use permit.
 - (4) Parking lots shall not be used for overnight occupancy and parking of recreational vehicles, campers, trailers, buses, vans, motor homes, moving vans, refrigerator trucks or similar vehicles, except as authorized by the Town Manager.

- ii. General Design Requirements
 - (1) Parking spaces shall be a minimum of 15 feet in length and 8 feet in width.
 - (2) All parking areas shall be properly graded for drainage and be surfaced with colored concrete, asphalt, or dust-free permeable materials such as permeable pavers, gravel, or other porous materials, or other surfacing as approved by the Town Manager.
 - (3) Parking areas shall be designed to minimize conflicts with pedestrians and vehicles.

iii. Location of Parking Areas

- (1) For single-family and duplex dwellings in all districts, offstreet parking areas shall be located in a garage or on a
- (2) For all other uses in all other zoning districts, off-street parking areas shall not be located between the front building façade and the adjacent street frontage.
- (3) When residential uses are located to the rear of a proposed commercial development on a corner site, parking and service areas may be located to the front or side of the building; provided, that they are adequately screened, so that the building acts as a buffer between the parking areas and residential uses.
- (4) Required off-street parking, loading, and vehicle stacking spaces shall be located on the same lot as the principal use, except as otherwise provided in Article 4:7(b).

iv. Minimizing Vehicular and Pedestrian Conflicts

- (1) Traffic control signs and/or striping shall be provided within all parking areas as necessary to minimize vehicular and pedestrian conflicts.
- (2) If vehicular and pedestrian conflicts are apparent, the Town Manager may require an alternative design of parking areas to resolve potential conflicts.

(e) Loading Berths

Buildings with over 15,000 gross square feet shall provide a loading berth of at least 10 feet by 25 feet unless the applicant can demonstrate that the use in question is not of the type to warrant a loading berth.

8. Signs

- (a) Purpose. The purpose of this Section is to:
 - i. Protect the right to free speech by the display of protected message(s) on a sign, while balancing this right against public interests of preserving and protecting the public, health, safety and welfare within the Town:

- ii. Reduce hazards that may be caused or worsened by driver, bicyclist, and pedestrian distraction caused by signs, especially those projecting along public rights-of-way or near roadway intersections;
- iii. Preserve and enhance the aesthetic and environmental values of the community, while at the same time providing adequate channels of communication to the public; and
- iv. Regulate signs in in a content-neutral manner in accordance with the Town's policy and intent in a manner consistent with the U.S. and Colorado Constitutions, laws, and court decisions.
- (b) Signs Not Regulated. This Section shall not apply to:
 - i. Signs of a duly constituted governmental body, required to be maintained by law or governmental order, rule or regulation, including without limitation traffic or similar regulatory devices, address numerals, legal notices, warnings at railroad crossings, and other instructional or regulatory signs concerning public health, safety and welfare provided, that the copy and size of the sign do not exceed the requirements of such law, order, rule or regulation.
 - ii. Decorations associated with any national, local, or religious holiday; provided, that such signs shall be displayed for not more than 60 days in any given year.
 - iii. Signs located inside a building at least four feet away from any window through which the sign could be viewed from outside the building.
- (c) Prohibited Signs. The following signs shall be prohibited:
 - i. Signs attached to a tree or utility pole whether on public or private property.
 - ii. Signs located within a public right-of-way.
 - iii. Signs located in the vision clearance triangle or at any location where it may obstruct, impair, obscure, interfere with the view of, or be confused with, any traffic control sign, signal or device, or where it may interfere with, mislead or confuse traffic.
 - iv. Flashing signs, signs emitting sound, rotating or moving signs, animated signs, signs with moving lights or signs that create the illusion of movement, except a sign whereon the current time or temperature is shown by intermittent lighting shall not be deemed to be a flashing sign. A sign that changes copy or color no more than once every four hours shall not be considered a flashing or moving sign.
 - v. Riders or attachments to signs.
- (d) General Requirements for All Signs
 - i. Unless otherwise provided for in this Section, signs may only be erected, altered, and maintained on the same lot as the permitted use(s) which the sign is appurtenant to.

- ii. All signs shall be maintained and kept in good repair, including without limitation, the repair of glass, plastic or other sign face material that is missing, broken, damaged, or deteriorated; and the repair of any pole, frame support, or similar structure that is broken, damaged, or deteriorated.
- (e) Number of Permitted Signs
 - i. A total of five signs are permitted per use except as stated in subsection ii below.
 - ii. The following signs shall be permitted in addition to the permitted signs allowed in each district:
 - (1) At each primary entrance to a residential subdivision, an additional two freestanding signs are permitted each with a maximum height of 6 feet and a maximum gross surface area 100 square feet.
 - (2) Signs located on sites where subdivision, development, redevelopment, initial construction or other major improvement of the property is under way shall be permitted an additional two freestanding, wall, or window signs that shall not exceed 64 square feet in total area nor 32 square feet per face and shall not exceed 8 feet in height.
- (f) Total Sign Area Allowed
 - i. On arterial street frontages, the maximum sign area shall be two square feet of sign area for each linear foot of building frontage for the first 100 feet, then one-half square feet of sign area for each linear foot of building frontage thereafter as measured along the building frontage (the longest building frontage with a public entrance), up to the limit in Subsection iii below.
 - ii. On all other street frontages, the maximum sign area shall be one square feet of sign area for each linear foot of building frontage for the first 200 feet of building frontage; then one-half square feet of sign area for each linear foot of building frontage thereafter as measured along the building frontage (the longest building frontage with a public entrance), up to the limit in Subsection iii below.
 - iii. Maximum total sign area per use shall not exceed 600 square feet in any case.
 - iv. No individual sign shall exceed 200 square feet.
 - v. Each tenant or business is permitted one blade sign up to a maximum of six square feet in addition to the signs listed in Subsections i through iv above.
- (g) Maximum Height
 - i. In the R-1 District, the maximum sign height shall be 6 feet.
 - ii. In all other districts, the maximum sign height shall be 12 feet.
- (h) Required Setback

Unless stated otherwise in this Section, all signs on private property must be set back four feet from any public right of way and may not be placed in street medians, corner sight triangles or within a parking space.

(i) Temporary Signs

- i. Two temporary signs are permitted per property.
- ii. Temporary signs shall not exceed 32 square feet in total surface area per use and shall comply with the applicable setback regulations for the district in which they are located.
- iii. Temporary signs shall remain in place for less than 30 days, except that the Town Manager may, for good cause, extend the time up to 30 additional days upon written application. Only one temporary sign per applicant shall be permitted to exceed the 30-day limit in any calendar year, except by Conditional Use.

(j) Illuminated Signs

Illuminated signs shall be shaded to avoid casting bright light upon property in any residential district or upon any public street, park, public facility, or hospital facility.

(k) Message Substitution

A noncommercial message may be substituted for a commercial message on any sign permitted by this Section.

9. Subdivision Standards

(a) Applicability

This Section shall apply to all subdivisions and land divisions located wholly or partially within the Town unless specifically exempted otherwise.

(b) Subdivision Name

The proposed name of a subdivision shall be approved by staff and shall not use a word that is the same as, similar to, or pronounced the same as a word in the name of any other subdivision in the Town except for common locational terms like hills, court, etc.

(c) Adequate Public Facilities

i. Purpose

This Section establishes standards for required infrastructure improvements associated with any subdivision. To be adequate, facilities must be appropriate in type, availability, and capacity.

ii. Facilities

(1) In a proposed subdivision, the required public facilities may include, but are not limited to, parks, boulevard trees, streets, sidewalks, public sanitary sewer and water extensions, storm water management facilities, soil erosion and sedimentation control, and monumentation. Other

- items that are necessary or material to the project, such as school sites, may be identified during the development approval process.
- (2) An applicant may seek to stage or phase development to link the timing of development with the adequacy of public facilities. However, the Board of Trustees shall consider the demand for adequate public facilities generated by subsequent phases of the development and must require a development agreement as to the design and construction of on-site or off-site public or private facility improvements to serve those subsequent phases.
- (3) No development shall be approved unless the public facilities in existence or to be constructed pursuant to an executed development agreement are adequate to handle the demand on those public facilities generated by the development.
- (4) All new development shall connect to the Town water supply system.

iii. Improvements and Easements

- (1) Required improvements reasonably related to the development shall be installed at the sole expense of the applicant. Assessment of costs to subsequent users or public participation may in certain instances be applicable to a proposed project.
- (2) Bonds or surety deposits shall be required in the amount necessary to cover the cost of installation, unless waived in the development agreement prior to commencing activity involving the installation of public improvements.
- (3) Any unexpended portion of a surety deposit shall be returned to the applicant upon satisfactory completion of the public improvements.
- (4) Easements and/or deeds shall be granted, and rights-of-way dedicated to the public by the applicant as part of the development approval process or through separate instrument, which shall be in a form approved by the Town Attorney.
 - (a) Drainage easements needed for stormwater management shall be provided.
 - (b) Utility easements required by the various public and private utilities shall be provided.

iv. Utilities

All new utilities shall be placed and maintained underground, unless determined by the Town that extraordinary circumstances related to the physical condition of the property render undergrounding impossible. Such utilities shall be constructed within street rights-of-way or within easements dedicated for such use.

v. Street Design

- (1) Street connections shall be provided to adjoining undeveloped and/or underdeveloped lands within and outside the Town to allow future development to connect to a public street system.
- (2) Street systems shall be designed to be through-streets. Permanent cul-de-sacs and dead-end streets shall only be used when topography, the presence of natural features, and/or vehicular safety factors make a vehicular connection impractical.
- (3) Alleys are permitted and encouraged and shall:
 - (a) Be a minimum width of 20 feet; and
 - (b) Be dedicated to the Town.

vi. Connectivity

- (1) Sidewalks shall be required along both sides of all arterial, collector, and local streets including cul-de-sacs, and within and along the frontage of all new development.
- (2) Sidewalks shall be constructed to comply with the Americans with Disabilities Act.
- (3) Sidewalks shall be constructed of durable, smooth, and skid resistant material and a minimum width of five feet.
- (4) Multi-use trails, separated from automobile traffic, at least 15 feet in width and approved by the Town Manager, may be used in lieu of the sidewalk requirement.

vii. Maintenance

- (1) Maintenance of newly installed public facilities shall remain with the applicant for a period of two years from final inspection or as otherwise defined in an owner contract or development agreement.
- (2) Following the expiration of the required maintenance period, the Town shall assume responsibility for maintenance and upkeep of public facilities upon the acceptance of such facilities in a form approved by the Town.

Article 5: Administration and Review Procedures

1. Summary Table of Review Procedures

Table 5-1 list the development application authorized by this Land Use Code, whether public notice is required, and the role of the Town review and decision-making bodies.

Table 5-1: Summary Table of Review Procedures
✓ = Required; R = Review and Recommendation; D = Review and Decision; A = Appeal; <>
= Public Hearing Required

= Public Hearing I		1	•	•				
Procedure	Land Use Code	Pre- Application	Notice	Review and Decision-Making Bodies				
	Reference	Conference		Town Manager	Planning Commission	Board of Trustees		
Development Per								
Minor Site Plan	Article 5:3(c)	✓		D	<a>			
Major Site Plan	Article 5:3(d)	✓	√	R	<d></d>	<a>		
Conditional Use Permit	Article 5:3(e)	✓	√	R	<r></r>	<d></d>		
Temporary Use Permit	Article 5:3(f)	✓		D	<a>			
Subdivision Proc		1		•				
Minor Subdivision	Article 5:4(b)	✓	✓	R	<d></d>	<a>		
Major Subdivision – Preliminary Plat	Article 5:4(c)	✓	✓	R	<d></d>	<a>		
Major Subdivision – Final Plat	Article 5:4(c)			R	<r></r>	<d></d>		
Ordinance Amendments								
Rezoning	Article 5:5(a)	✓	✓	R	<r></r>	<d></d>		
Rezoning to PUD	Article 5:5(b)	✓	✓	R	<r></r>	<d></d>		
LUC Text Amendment	Article 5:5(c)		✓	R	<r></r>	<d></d>		
Historic Preserva	tion							
Landmark and District Designation	Article 5:6(a)		✓	R	<d></d>	<a>		
Certificate of Approval	Article 5:6(b)			R	<d></d>	<a>		
Flexibility and Ro	elief							
Variance	Article 5:7(a)		✓	R	<d></d>	<a>		
Minor Modification	Article 5:7(b)			As required for associated application				
Appeals	Article 5:7(c)		✓	As indi	icated in this Ta	ble 5-1		

2. Common Procedures

(a) Purpose

This section describes the standard procedures and rules applicable to all development applications unless otherwise stated in this Land Use Code.

Application-specific procedures in Article 5:3 through Article 5:7 identify additional procedures and rules beyond those in this section.

(b) Pre-Application Conference

i. Purpose

The pre-application conference is intended to provide an opportunity for the applicant to meet with Town staff to review submittal requirements, review procedures, and applicable Code standards associated with the proposed development.

ii. Procedure

- (1) The applicant shall submit a request for a pre-application conference to the Planning Department on a form prescribed by the Town Manager.
- (2) Prior to scheduling the pre-application conference, the applicant shall submit the following:
 - (a) A written description of the project;
 - (b) Conceptual drawings showing the location, layout, and key elements of the proposed development;
 - (c) Specific uses, location of uses, and densities proposed;
 - (d) Proposed construction phasing, if applicable; and
 - (e) Location of required public improvements, if applicable.
- (3) When required or requested by the applicant, the Director shall schedule pre-application conferences and notify appropriate staff and the applicant of the time and location of the meeting.
- (4) Town staff attending the pre-application conference will identify initial concerns or issues the applicant should address related to the scope, features, and potential impacts of the project as they relate to this Chapter. Town staff will also indicate the approval procedures required for the proposed project.

(c) Application Submittal and Fees

- i. The application shall be submitted to the Planning Department on a form established by the Planning Department. The applicant bears the burden of demonstrating compliance with application requirements.
- ii. The Town Manager may waive certain submittal requirements in order to reduce the burden on the applicant and to tailor the requirements to the information necessary to review a particular application. The Town Manager may waive such requirements upon finding that the projected size, complexity, anticipated

- impacts, or other factors associated with the proposed development clearly, in their opinion, support such waiver.
- iii. Application fees shall be paid at the time of submittal according to the type of application on the development review fee schedule.The fee schedule shall be established by resolution of the Board of Trustees and reviewed periodically.
- iv. In the event the Town Manager determines that it is necessary to utilize the services of a consultant not on staff, the Town Manager may impose additional fees associated with such outside consultant. The Town Manager shall inform the applicant of the necessity to utilize the services of a consultant and the applicant may choose whether or not to proceed with the application.
- (d) Abandoned Applications and Withdrawal
 - i. If an application has not been resubmitted to address staff-noted deficiencies within three months, such application shall be deemed abandoned and all fees forfeited. The applicant may request three additional months to address staff-noted deficiencies.
 - ii. After an application has been accepted, the applicant may withdraw the application at any time by submitting a letter of withdrawal to the Director. An applicant is not entitled to a refund of application fees for withdrawn applications. However, the Town Manager may refund fees not expended during the first round of staff review if the application is withdrawn prior to preparation of any official written comments.
- (e) Minor Application Revisions

An applicant may revise an application after receiving notice of compliance deficiencies following staff review, or on requesting and receiving permission from the Board of Trustees after that body has reviewed, but not yet taken action on, the application. Revisions shall be limited to changes that directly respond to specific requests or suggestions made by staff or the Board of Trustees, as long as they constitute only minor additions, deletions, or corrections and do not include significant substantive changes to the development proposed in the application, as determined by the Town Manager. All other application revisions shall be processed as a new application.

(f) Concurrent Review

Where possible without creating an undue administrative burden on the Town's decision-making bodies and staff, this Land Use Code intends to accommodate the simultaneous processing of applications for different permits and approvals that may be required for the same development project in order to expedite the overall review process.

- (g) Town Manager Review and Decision
 - i. Department and Agency Referral Review

- (1) The Director shall distribute the complete application to the appropriate staff and other internal and external review agencies.
- (2) Such review agencies shall provide comments to the Director within 10 days following the distribution.
- ii. The Town Manager shall submit recommendations and comments to the applicant.
- iii. If an application is subject to the Town Manager review and recommendation per Table 5-1, Summary Table of Review Procedures, the Town Manager shall prepare a written staff report that summarizes the proposal, findings, and recommendations.
- iv. The Town Manager shall submit a copy of the staff report to the applicant and the applicable decision-making body, and shall make the staff report and related materials available for public review at least three calendar days prior to the hearing at which the application is scheduled to be heard.
- (h) Scheduling and Notice of Public Hearings
 - i. If an application is subject to a public hearing per Table 5-1, the Town Manager shall schedule the public hearing for either a regularly scheduled meeting or special meeting with the applicable body.
 - ii. All public hearings required by this Land Use Code shall be preceded by the notices identified in Table 5-1. Persons with specific issues or concerns regarding a proposed application are encouraged to contact the Planning Department in writing, by phone, or in person prior to the hearing.
 - iii. The Town shall be responsible for the accuracy of and proper publication and posting of notice of the public hearing. The applicant shall be responsible for mailing notice and maintaining the posted notice once posted on the site by the Town.
 - iv. Notice shall be either published, mailed, and/or posted depending on what is most appropriate for the application type.
 - (1) Required published or mailed notices shall:
 - (a) Identify the application type;
 - (b) Describe the nature and scope of the proposed project;
 - (c) Identify the location subject to the application;
 - (d) Identify the date, time, and location of the hearing being noticed;
 - (e) Identify where and when the application and associated materials may be inspected; and
 - (f) Indicate opportunity to appear at the public hearing.

- (2) Published notice shall appear in a newspaper of general circulation in the Town at least 15 days prior to the scheduled hearing.
- (3) Mailed notices shall be sent by the applicant via first-class mail to all property owners as listed in the records of the county tax assessor's office within 200 feet of the subject property, as measured from property boundaries. Certified mail notice shall be returned to the Town.
- v. Required posted notice shall include at least one sign on the subject property at least 15 days prior to the public hearing. The Town is responsible for posting the sign(s). The applicant is responsible for maintaining the sign(s) once erected. The sign(s) shall be clearly visible from adjacent streets or public rights-ofway and shall remain on the property until after the hearing.
- vi. The Town Manager may require additional signs based on access and configuration of the property.
- vii. Required posted notice shall:
 - (1) Identify the application type;
 - (2) Describe the nature and scope of the proposed project;
 - (3) Identify the date, time, and location of the hearing being noticed; and
 - (4) Identify a telephone number for additional information.
- viii. The applicant shall provide notice by certified mail, return receipt requested, to all mineral estate owners and lessees on the subject property for development applications in accordance with C.R.S. 24-65.5-103. Such notice shall be provided not less than 30 days prior to the initial public hearing, or not less than 30 days prior to the final decision if the application does not require a public hearing. The burden of determining mineral estate owners and lessees shall be on the applicant.
- (i) Review and Decision
 - i. The applicable review body shall approve, approve with conditions, or deny the application based on the approval criteria listed in this Section. The body may also continue the hearing.
 - ii. Decisions shall be in writing and shall clearly state reasons for the decision citing the applicable LUC provisions.
 - iii. General Approval Criteria

Decision-making bodies shall review all applications submitted pursuant to this LUC for compliance with the following criteria along with any other application-specific criteria:

- (1) Complies with applicable requirements including this Land Use Code, Town, State, and Federal law;
- (2) Consistent with any applicable adopted Town plans;

- (3) Promotes the public health, safety, and general welfare;
- (4) Minimizes or mitigates adverse impacts associated with the application;
- (5) Will not result in significant adverse impacts upon the natural environment including air, water, noise, stormwater management, wildlife, and vegetation, or such impacts will be substantially mitigated; and
- (6) Will not result in significant adverse impacts upon other property in the vicinity of the subject property.

(j) Post-Decision Actions and Limitations

i. Effective Date of Approval

Unless otherwise provided in this LUC, a decision made under this LUC shall be final 15 days from the date of the decision unless, prior to the expiration of that period, an appeal has been filed with the Town.

ii. Appeal

The applicant or an aggrieved party may file a written appeal regarding a decision made under this LUC, clearly stating the reasons for such appeal, within 15 days of the final action.

(k) Modifications to Approvals

- i. Development authorized by any approval under this article may incorporate minor changes from the approved plan, permit, or conditions of approval, as appropriate, without the need for a new application; provided, that the Town Manager determines that the proposed changes:
 - (1) Comply with the standards of this LUC;
 - (2) Are necessary to meet conditions of approval; and
 - (3) Would not significantly alter the function, form, intensity, character, demand on public facilities, or impact on adjacent properties as approved with the administrative site/architectural plan.
- ii. Any modification of an approved plan, permit, or condition of approval that the Town Manager determines does not meet the criteria of this section above shall require a new application that is submitted and reviewed in accordance with the full procedure and fee requirements applicable to the particular type of the original application.

(1) Expiration of Approvals

- i. An application approval shall be valid as authorization for the approved activity unless it expires in accordance with expiration time periods provided in this LUC or the approval itself.
- ii. A change in ownership of the land shall not affect the established expiration time period of an approval.

iii. The original decision-making body may grant extensions of the expiration time period for up to one year, following a written request that explains reasonable cause for such extension, prior to the expiration date. The final approval authority shall determine whether or not there is reasonable cause for the requested extension. Further extensions shall be subject to the approval of the decision-making body for the original petition.

(m) Limitation on Subsequent Similar Applications

Following denial of an application, the decision-making body shall not decide on applications that are the same or substantially similar within one year of the previous denial. This waiting period may be waived by the decision-making body provided that:

- i. There is a substantial change to circumstances, or new information available, relevant to the issues or facts considered during the previous application review; or
- ii. The new application is materially different from the previous application.

3. Development Permit Procedures

(a) Applicability

Development review is required prior to the issuance of a building permit and construction of physical improvements. Development review is required for all development except interior alterations or improvements that do not increase parking requirements or alter exterior portions of a building.

(b) General Requirements

- i. The requirements of this section shall be in addition to those in Table 5-1 and Article 5:2 including the criteria for approval for all applications in Article 5:2(i)iii.
- ii. During consideration of an application, the Town may consider alternative potential conditions, and no discussion of potential conditions shall be deemed an attempt or intent to impose any condition that would violate the State or Federal constitutions, statutes, or regulations. Discussions of potential conditions to mitigate the impacts of a development do not reflect actions by the Town unless and until the Town takes formal action to attach that condition to a development approval.
- iii. All conditions imposed by the Town as a part of the approval process shall be reasonably related to the anticipated impacts of the proposed development or land use and to the purposes of this Land Use Code.
- iv. Where mitigation of the impacts of a proposed plan or development requires an applicant to dedicate land or pay money to a public entity in an amount that is not calculated according to a

formula applicable to a broad class of applicants, any condition imposed shall include an individualized determination and shall be roughly proportional in nature and extent to the anticipated impacts of the proposed development, as shown through an individualized determination of impacts.

(c) Minor Site Plan

- i. Applicability
 - Aminor site plan is required for any of the following activities:
 - (1) Construction of accessory structures of less than 200 square feet;
 - (2) Construction of a sign, fence, or retaining wall;
 - (3) A change in use that involves or requires site improvements;
 - (4) Any expansion, alteration, or modification of a lawful nonconforming site feature or building;
 - (5) Commercial development that contains 5,000 square feet or less of new non-residential gross floor area;
 - (6) Residential development that contains five dwelling units or less;
 - (7) Expansions, alterations, or modifications that increase the gross floor area of an existing structure by no more than 25 percent; and
 - (8) The alteration of any vehicular parking area.

ii. Expiration

Approval of a minor site plan shall be effective for a maximum period of three years unless, upon petition by the petitioner, the win Manager grants an extension due to factors outside of the applicant's control.

(d) Major Site Plan

i. Applicability

A Major Site Plan is required for any development that exceeds the minor site plan review thresholds in Article 5:3(c)i.

ii. Expiration

Approval of a minor site plan shall be effective for a maximum period of three years unless, upon petition by the petitioner, the Town Manager grants an extension due to impacts on the development outside of the applicant's control, which caused such delay, but not including economic conditions.

(e) Conditional Use Permit

i. Applicability

No use classified as a Conditional Use in Table 3-1 may be conducted without first obtaining a Conditional Use permit under this Section. No Conditional Use shall be conducted except in compliance with all applicable provisions of this Land Use Code and with any conditions upon such conditional use approval.

ii. Additional Criteria

In addition to the criteria in Article 5:2(i)iii, applications for a Conditional Use permit shall also:

- (1) Be consistent with the purpose and intent of the zoning district in which it is located;
- (2) Be generally consistent with any related use-specific standards;
- (3) Be compatible with adjacent uses in terms of scale, site design, and operating characteristics (hours of operation, traffic generation, lighting, noise, odor, dust, and other external impacts); and
- (4) Provide adequate assurances of continuing maintenance.

iii. Expiration

A Conditional Use permit granted pursuant to the provisions of this section shall run with the land and shall continue to be valid upon a change of ownership of the site or structure that was the subject of the Conditional Use permit application. Any proposed revisions or changes to an approved Conditional Use permit application shall be submitted in the same manner, and subject to the same approval process, as the original review.

(f) Temporary Use Permit

i. Applicability

No use classified as a temporary use in Table 3-1 may be conducted without first obtaining a temporary use permit under this Section. No temporary use shall be conducted except in compliance with all applicable provisions of this Land Use Code and with any conditions upon such conditional use approval.

ii. Expiration

- (1) A temporary use permit shall be valid beginning on the date specified on the permit and shall remain valid for the time period indicated on the permit.
- (2) Before the expiration of a temporary use permit, the permittee shall disconnect all temporary uses and structures, and associated property and equipment, and free the temporary use site from all trash, litter, and debris to the satisfaction of the Town Manager.

4. Subdivision Procedures

- (a) General Requirements for All Subdivisions
 - Until a final plat of a subdivision has been approved in accordance with these regulations, no division of land either by recording a plat, conveyance, or other similar action which by definition constitutes a subdivision shall be permitted.
 - ii. The applicant shall not record a plat unless the plat has been approved by the Town. Any offer to sell, contract to sell, sale or deed of conveyance of a major or minor subdivision or any part thereof before a final plat, in full compliance with the provisions of these regulations, has been duly recorded in the office of the county recorder shall be a violation of this Land Use Code.
 - iii. All final plats, including amendments thereto, shall be recorded in the county to which the property is located.
- (b) Minor Subdivision⁹
 - i. Applicability

Minor subdivisions shall only be permitted when:

- (1) A plat has previously been approved for the property;
- (2) The proposed subdivision would create two or fewer lots or creates condominium units within a single plat;
- (3) The proposed subdivision would not require land dedication or dedication of public improvements; and
- (4) The application is for one of the following:
 - (a) Boundary or lot line adjustments to an approved final plat including lot line eliminations;
 - (b) Vacations that do not include improved streets;
 - (c) Condominiumization of units within an existing building;
 - (d) A minor change to an approved plat to address engineering or technical constraints with no material effect on the plat and no relocations of streets or rights-of-way; or
 - (e) Corrections of errors on an approved final plat.
- ii. Plat Submittal

Minor subdivisions shall require the submittal and approval of a final plat, replat, condominium plat, or amendment to an existing final plat as applicable. All plats approved as a minor subdivision shall be recorded.

iii. Additional Criteria

-

⁹ This amended procedure attempts to clarify which types of applications are eligible for a minor subdivision and eliminates procedures that were duplicative/contradictory (e.g., the current Code allows condominiumization through this process and its own process, same with vacations).

- (1) In addition to the criteria in Article 5:2(i)iii, applications for a minor subdivision shall also:
 - (a) Demonstrate that the layout of lots, streets, driveways, utilities, drainage facilities, and other services within the proposed subdivision meets the Town's standards related to health and safety and minimizes the amount of land disturbance, maximizes the amount of open space in the development, preserves existing trees/vegetation and riparian areas, protects critical wildlife habitat, and otherwise accomplishes the purposes and intent of this Land Use Code;
 - (b) Does not result in the creation of lots that cannot be built under this Chapter;
 - (c) Does not affect a recorded easement without approval from the easement holder;
 - (d) Provides all required in-lieu fees; and
 - (e) Will not limit the Town's ability to effectively provide facilities or services to all lots involved.
- (2) In addition to the criteria above, when a minor subdivision involves a vacation, the application shall also demonstrate that:
 - (a) No roadway proposed to be vacated would leave any adjoining land without a means of access to another public road; and
 - (b) A subdivision plat does not involve lots that have been sold or transferred; or, if there have been sales or transfers, no development on any lots in the subdivision and all of the owners agree to the vacation of the plat.
- (c) Major Subdivision
 - i. Applicability

A major subdivision is required for all land divisions that are not eligible for a minor subdivision.

- ii. Preliminary Plat
 - (1) A preliminary plat shall be required for all major subdivisions that shows the overall character, proposed layout of land, and provisions of facilities.
 - (2) Additional Criteria
 - (a) In addition to the criteria in Article 5:2(i)iii, applications for a preliminary plat shall also:

- (i) Provide lots, roads, driveways, utilities, drainage facilities, and other services that are designed to minimize the amount of land disturbance, maximize connectivity, maximize the amount of open space, and preserve sensitive areas;
- (ii) Provide adequate mitigation to areas in natural hazard areas and that proposed uses of these areas are compatible with such conditions;
- (iii) Show location of public water and sewer system connections;
- (iv) Provide a clear assumption of responsibility for maintaining roads, open spaces, and other public and common facilities in the subdivision; and
- (v) If proposed in phases, the plat proposes reasonable phasing for providing required infrastructure.
- (b) In addition to the criteria above, when a subdivision involves a vacation, the application shall also demonstrate that:
 - (i) No roadway proposed to be vacated would leave any adjoining land without a means of access to another public road; and
 - (ii) A subdivision plat does not involve lots that have been sold or transferred; or, if there have been sales or transfers, no development on any lots in the subdivision and all of the owners agree to the vacation of the plat.

iii. Final Plat

- (1) Following approval of a preliminary plat, a final plat shall be required for all major subdivisions that reflects any changes required at the preliminary plat stage and demonstrates conformance with the requirements of this LUC.
- (2) Additional Criteria

In addition to the criteria in Article 5:2(i)iii, applications for a final plat shall also demonstrate compliance with the approved preliminary plat including any conditions of approval.

- 5. Ordinance Amendment Procedures
 - (a) Rezoning
 - i. Applicability

A rezoning is required for all proposals requesting to change the zoning district classification of a parcel of real property to a different zoning district classification.

ii. Additional Criteria

In addition to the criteria in Article 5:2(i)iii, applications for a rezoning shall also:

- (1) Be consistent with the purposes of the underlying zoning district where the development is proposed;
- (2) Ensure that future uses on the subject property will be compatible in scale with uses on other properties in the vicinity of the subject property; and
- (3) Be consistent with the Town's economic development goals and objectives to bring positive growth and sustainable revenues to the Town.

(b) Rezoning to Planned Unit Development (PUD)

- i. Applicability
 - (1) The PUD procedure shall not be used when a conditional use, variance or rezoning to a base zoning district could achieve a similar result.
 - (2) An application to rezone to PUD may be submitted for any tract of land, or contiguous parcels of land, within any combination of zoning districts, held under single ownership or under unified control.
 - (3) The PUD shall be overlaid on the existing base district(s).

ii. Effect of Approval

The regulations of this LUC shall remain applicable to areas within a PUD district unless expressly modified by the approved PUD.

iii. Expiration

A PUD shall remain valid until a PUD is subsequently amended or rezoned to another zoning district.

iv. Map Revision

Following approval of a rezoning to PUD, the Official Zoning Map shall be revised to show the PUD overlay.

v. Recording

The PUD plan and zoning amendment shall be recorded with the County Clerk and Recorder.

vi. Additional Criteria

In addition to the criteria in Article 5:2(i)iii, applications for a rezoning to PUD shall also:

- (1) Address a unique situation, provide substantial benefits to the Town, or incorporate innovative design that achieves a higher quality standard than could otherwise be achieved through strict application of a base zoning district; and
- (2) Provide a variety of housing types and densities, if residential is proposed as part of the PUD.

vii. Minor Amendments

- (1) Minor amendments to an approved PUD plan may be approved by the Town Manager if the proposed amendments do not:
 - (a) Change the ratio of residential units to square feet of non-residential building square footage by more than 10 percent.
 - (b) Increase the number of residential units by more than 10 percent.
 - (c) Increase the gross square footage of non-residential building area by more than 10 percent.
 - (d) Change the allowed uses listed in the approved PUD plan.
 - (e) Change the number or location of vehicular access points in such a way that negatively impacts public safety or the flow of traffic into public streets.
- (2) Any amendment that is not considered minor shall require the same approval process as the creation of the PUD.

(c) Land Use Code Text Amendment

i. Applicability

The zoning text amendment procedure applies to all proposals requesting to change the text of this Land Use Code.

ii. Additional Criteria

In addition to the criteria in Article 5:2(i)iii, applications for a Land Use Code text amendment shall also:

- (1) Be compatible with current conditions and the character of current structures and uses in each zoning district;
- (2) Promote the most desirable use of land in each zoning district;
- (3) Promote the conservation of sensitive environmental features; and
- (4) Support responsible development and growth.
- 6. Historic Preservation 10
 - (a) Landmark and District Designation

¹⁰ These procedures replace the current historic preservation procedures for a more modern and simplified approach.

i. Relationship to Rezoning Procedure

Notwithstanding any explicit language stating otherwise, the process in this Article 5:6 shall apply to the designation of landmarks and historic districts.

ii. Mapping

Designated landmarks and historic districts shall be mapped as the HP-O district on the Official Zoning Map. References to the HP-O district and designated properties shall be synonymous.

iii. Application Submittal

Every owner of record shall consent to and sign the application for designation.

iv. Additional Criteria

In addition to the criteria in Article 5:2(i)iii, applications for the designation of landmarks shall be at least 50 years old and average at least 50 years old in the case of districts and meet at least one of the following criteria:

- (1) The landmark or district is associated with cultural, artistic, social, ethnic, economic, or political heritage.
- (2) It includes the site of a significant historic event.
- (3) It is identified with a person who significantly contributed to the cultural, artistic, social, ethnic, economic, or political heritage.
- (4) It portrays a historic era characterized by a distinctive architectural style.
- (5) It is identified as the work of an architect or master builder whose individual work has influenced the development of Town, County, the State of Colorado, or the United States.
- (6) It embodies elements of architectural design, detail, materials, or craftsmanship that represent a significant architectural innovation.

v. Limitation on Resubmittal of Applications

If an application for designation is denied, applications shall not be considered on a new application that is the same or substantially the same for one year from the date of the denial.

vi. Removal of a Designation.

- (1) Designations may be amended or rescinded by the same procedure set forth is this Article 5:6.
- (2) The Applicant must demonstrate that the designation no longer meets the criteria in this Article 5:6.

(b) Certificate of Approval

i. Applicability

- (1) General Requirements
 - (a) No person shall carry out or permit to be carried out on a designated property any addition, alteration, relocation or demolition of a building or other designated feature without first obtaining a certificate of approval except maintenance shall not require a certificate of approval.
 - (b) A certificate of approval shall not affect the zoning of the property and the property shall remain in the HP-O district as designated.

ii. Review Criteria

- (1) In addition to the criteria in Article 5:2(i)iii, applications for a certificate of approval shall meet the following criteria:
 - (a) Unless the application involves a demolition, the modification preserves, enhances, or restores and does not damage or destroy the exterior architectural features of the designated property;
 - (b) Unless the application involves a demolition, the modification does not adversely affect the special character or special historical, architectural, or aesthetic value of the designation; and
 - (c) The architectural style, arrangement, texture, and materials used on existing and proposed structures are compatible with the character of the existing designation and meet the applicable requirements of the HP-O district.
- (2) In addition to the requirements in Article 5:6(b)ii(1), when a certificate of approval includes the relocation of a designated structure, the following additional criteria shall be met:
 - (a) A structural report submitted by a licensed structural engineer adequately demonstrating that the structure can be moved without significant damage to its physical integrity; and
 - (b) A relocation plan that includes posting a bond, insurance, or other security, approved by the city attorney, sufficient to ensure safe relocation, preservation and repair, if required, of the structure.
- (3) In addition to the requirements in Article 5:6(b)ii(1), when a certificate of approval includes demolition of part or the entire designated structure, the following additional criteria shall be met:
 - (a) The structure or portion of the structure proposed for demolition is not structurally sound despite

- evidence of the owner's efforts to properly maintain the structure:
- (b) The structure or portion of the structure being demolished cannot be rehabilitated or reused on site to provide for any reasonable beneficial use of the property; and
- (c) The designated structure or portion of the structure being demolished will be replaced with a structure that meets the applicable standards of the HP-O district.

iii. Amendments

- (1) The Town Manager may approve an amendment to a certificate of approval when the amendment is minor, meets all of the applicable criteria for a certificate of approval and does not significantly alter the design or intent of the original approval.
- (2) All other amendments require new review and approval in accordance with this Article 5:6.

iv. Expiration

A certificate of approval shall be valid for two years from the date of approval. If work is not commenced within that time period, the certificate of approval shall lapse, and a new application must be submitted.

7. Flexibility and Relief Procedures

(a) Variance

i. Purpose

The variance procedure provides a mechanism to authorize variances from the development standards of this Land Use Code when it is demonstrated that such a variance will not be contrary to the public interest or the spirit of this Land Use Code, where, owing to special conditions, literal enforcement of this Land Use Code will result in practical difficulties or unnecessary hardship.

ii. Applicability

The variance procedure is required for applications seeking flexibility of a development standard, other than as provided in the minor modification process, from the development standards applicable to the zoning district in which the subject property is located. Applications that are denied a minor modification shall not be eligible for a variance.

iii. Additional Criteria

In addition to the criteria in Article 5:2(i)iii, applications for a variance shall also:

- (1) Not be injurious to the public health, safety, morals, and general welfare of the community;
- (2) Not substantially affect the use and value of the area adjacent to the property included in the variance; and
- (3) Sufficiently demonstrate that the strict application of the terms of this Land Use Code will result in practical difficulties in the use of the property, that the practical difficulties are peculiar to the property in question, and that the variance will relieve the practical difficulties.

(b) Minor Modification

i. Purpose

The minor modification procedure is intended to allow relatively small adjustments or deviations from the dimensional or numeric standards of Table 4-1 where strict application would result in practical difficulty or undue hardship preventing the use of the land as otherwise allowed by the Land Use Code. Minor modifications are intended to provide greater flexibility when necessary, without requiring a formal zoning amendment or variance.

ii. Applicability

- (1) A deviation from the requirements in Table 4-1 may be proposed as a minor modification.
- (2) Deviations under a minor modification may not exceed a 10 percent variation of the applicable requirements.

iii. Additional Criteria

In addition to the criteria in Article 5:2(i)iii, applications for a minor modification shall also:

- (1) Not create a hardship or adverse impacts on adjacent properties unless adequately mitigated;
- (2) Not be necessitated by the petitioner's actions; and
- (3) Be of a technical nature and required to compensate for an unusual site condition or to protect a sensitive resource, natural feature, or community asset.

(c) Appeals

- i. Appeal of any decision under this Land Use Code shall be held at a properly noticed public hearing.
- ii. In addition to the criteria in Article 5:2(i)iii, appeals shall consider any additional applicable criteria to which the decision was initially made under.
- iii. Appeals shall be reviewed for a clear error in the application of the relevant criteria to the application.
- iv. Any decision that has exhausted its remedies under this Land Use Code may be appealed to the district court having jurisdiction.

8. Nonconformities

(a) Purpose

The purpose of this Section is to regulate and limit the development and continued existence of uses, structures, lots, signs, and site features that were lawfully established prior to the effective date of this Land Use Code, but that no longer conform to the requirements of this Land Use Code. All such situations are collectively referred to in this section as "nonconformities."

(b) Requirements

- i. Authority to Continue
 - (1) Nonconformities may continue to be used and occupied, subject to regulations as to the maintenance in this Section, or unless such nonconformity is terminated as provided in this Section.
 - (2) Nonconformities shall not be modified in any way that increases the degree of nonconformity.
- ii. Determination of Legal Nonconformity Status

The burden of establishing the existence of a legal nonconformity shall be solely on the owner of the property containing the nonconformity.

iii. Maintenance

Maintenance of nonconformities are permitted and encouraged; provided, that the maintenance does not increase the degree of the nonconformity. Maintenance includes the following:

- (1) Repairs necessary to maintain and to correct any damage or deterioration to the structural soundness of, or the exterior or interior appearance of, a building or structure without expanding the height or footprint of the building or structure, unless compliant with this Land Use Code;
- (2) Maintenance of land to protect against and mitigate health and environmental hazards;
- (3) Repairs that are required to remedy unsafe conditions; and
- (4) Repairs necessary to comply with current building Land Use Code requirements.

iv. Destruction of a Nonconforming Structure

A nonconforming structure that has been damaged or destroyed by fire or other causes may be restored to its original condition; provided, that such work is commenced within one year of such event and has been completed or diligently pursued within 18 months of such event.

v. Nonconforming Lots

A nonconforming lot that was made nonconforming by virtue of enactment of this Land Use Code may be used for construction of a building allowed in the applicable zoning district; provided, that all other zoning district and dimensional standards are met.

vi. Nonconforming Parking

Any parking spaces or access to public rights-of-way lawfully existing on the effective date of this Land Use Code that are made nonconforming by virtue of enactment of this Land Use Code shall be allowed to continue; provided, that any change or expansion of any use or structure shall only be permitted if the additional number of parking spaces required by such change or expansion is provided in accordance with this Land Use Code.

(c) Illegal Nonconformities

An illegal nonconformity exists when:

- i. A nonconforming structure is destroyed or substantially destroyed or neglected by an intentional act of the owner or an agent without a proper permit. If this occurs, the nonconforming structure shall lose its nonconforming status and thereafter shall be required to be in conformity with existing Land Use Codes. If a nonconforming use was in the destroyed or substantially destroyed structure, the nonconforming use and all site improvements shall lose their nonconforming status and be required thereafter to come into compliance with existing Land Use Codes.
- ii. A use, structure, or site improvement occurs to a nonconformity without being lawfully authorized in accordance with the provisions of this section. Such use and/or structure shall therefore cease all operations until such time that the required plans and/or permits are approved.

9. Violations, Enforcement, and Penalties

(a) Violations

Each of the following activities is a violation of this Land Use Code:

- i. Any erection, construction, reconstruction, remodeling, alteration, maintenance, expansion, movement, or use of any building, structure, or sign, or development or subdivision of any land, in contravention of any provision of this Land Use Code or any regulation promulgated under this Land Use Code.
- ii. Any development, use, construction, remodeling, or other activity in any way generally inconsistent with the terms or conditions of any permit or approval required to engage in such activity, whether issued under or required by this Land Use Code.
- iii. Each day that a violation occurs or remains uncorrected shall constitute a separate and distinct violation of this Land Use Code.

(b) Remedies

- i. The Town Manager may deny or withhold all entitlements, including forms of authorization to use or develop any land, structure, or improvement, until an alleged violation, associated civil penalty or lien resulting from a previous final order related to such property, use, or development is corrected. This provision shall apply whether or not the current owner or applicant for the permit or other approval is responsible for the violation.
- ii. Whenever any building, structure or site or part thereof is being demolished, constructed, reconstructed, altered, or repaired in violation of this Land Use Code or in a manner that endangers life or property, the Town Manager is authorized to issue a stop-work order for the specific part of the work that is in violation or presents the hazard.
- iii. With or without revoking permits, the Town Manager may issue an order to stop work on any property on which there is an uncorrected violation of either a provision of this Land Use Code or a provision of an entitlement or other form of authorization issued under this Land Use Code.
- iv. The stop-work order shall be in writing and posted at the site of the work, and shall specify the alleged violations. After any such order has been posted, no work shall proceed on any building, other structure, or tract of land covered by such order, except to correct such violation or comply with the order.

(c) Penalties

- i. Violation of this Land Use Code may be punishable through imposition of a civil penalty as set forth in the Town's municipal Land Use Code.
- ii. The Town may seek injunctive relief or other appropriate relief in district court or other court of competent jurisdiction against any person who fails to comply with any provision of this Land Use Code or any requirement or condition imposed pursuant to this Land Use Code.
- iii. In any court proceedings in which the Town seeks a preliminary injunction, it shall be presumed that a violation of this Land Use Code is a real, immediate, and irreparable injury to the public; that the public will be irreparably injured by the continuation of the violation unless the violation is enjoined; and that there is no plain and adequate remedy at law for the subject Land Use Code violation.

(d) Abatement

The Town may abate any violation of this Land Use Code as follows:

- i. Before action is taken to abate a violation, a final warning notice shall be posted on the property and served personally or by first class United States mail to the owner of record of the property.
- ii. Unless this notice is appealed to the Board of Trustees within ten days of the posting of the final warning, the town shall proceed to abate the violation.
- iii. The Town shall keep an account of the cost, including incidental expenses, incurred by the Town in the abatement of any violation. The Town shall forward a bill for collection to the violator and owner of record of the property specifying the nature and costs of the work performed. For purposes of this section, the term "incidental expenses" shall include without limitation the actual expenses and costs to the Town in the preparation of the notices, specifications and contracts, work inspection, and interest from the date of completion at the rate prescribed by law for delinquent real property taxes.
- iv. The responsibility for payment of the charges for abatement as set forth in this section shall rest solely upon the owner of the property upon which the abatement occurred. When charges for abatement remain unpaid after 30 days from billing, the Town shall record a first and prior lien against the property, to be collected by the county treasurer in the same manner as property taxes.

(e) Cumulative Remedies

The remedies provided for violations of this Land Use Code, whether civil or criminal, shall be cumulative and in addition to any other remedy provided by law, and may be exercised in any order. The exercise of one remedy shall not preclude the exercise of any other available remedy.

Article 6: Efinitions

1. Rules of Construction

All words and terms used in this Land Use Code have their commonly accepted dictionary meaning unless they are specifically defined in this Land Use Code or the context in which they are used clearly indicates to the contrary. The following rules of construction apply:

- (a) All words used in the present tense include the future tense.
- (b) All words used in the singular number include the plural, and words in the plural number include the singular.
- (c) The masculine gender shall include the female and neutral.
- (d) The word "shall" is mandatory, and not discretionary, and the word "may" is permissive.
- (e) The word "building" shall include the word "structures."
- (f) The phrase "used for" includes the phrases "arranged for," "designed for," "intended for," "maintained for," and "occupied for."

- (g) The words "land," "property", "parcel," "premise," and "tract" are all interchangeable unless the context clearly indicates to the contrary.
- (h) The word "individual" includes a "firm," "association," "organization," "partnership," "trust," "company," or "corporation" as well as a single individual.

2. Definitions

ACCESS

A way or means of approach to provide physical vehicular entrance to a property.

ACCESSORY BUILDING, STRUCTURE OR USE

A building, structure or use located or conducted upon the same lot (or on a contiguous lot in the same ownership) as the primary building, structure or use to which it is related, that is clearly incidental to, and customarily found in connection with, such primary building or use and is operated and maintained for the benefit or convenience of the owners, occupants, employees, customers or visitors of the lot.

ACCESSORY DWELLING UNIT

A subordinate dwelling unit attached or detached from a primary structure, and located on the same lot or parcel, that provides basic requirements for living, sleeping, cooking, and sanitation. A manufactured home or recreational vehicle, travel trailer, camper, or similar vehicle shall not be used as a accessory dwelling unit.

ADULT ENTERTAINMENT

Adult bookstores, adult motion pictures theaters, adult mini-motion picture theaters, adult massage parlors, adult saunas, adult companionship establishments, adult health clubs, adult cabarets, adult novelty businesses, adult motion picture arcades, adult modeling studios, adult hotels or motels, adult body painting studios, and other adult establishments.

ANIMAL SHELTER

A facility that is operated for the purpose of providing for and promoting the welfare, protection, and humane treatment of animals, that is used to shelter at least 10 animals in a year, and that is operated by a government entity, humane society, animal welfare society, animal rescue group, or other nonprofit group. This use includes rescue horse facilities, regardless of the number of horses sheltered in a year.

ART GALLERY, MUSEUM, AND LIBRARY

A facility or area that is open to the public and is intended for the acquisition, preservation, study, and exhibition of works of artistic, historical, or scientific value.

AUTOMOTIVE CENTER AND SERVICES

An establishment that is engaged in both the retail sales of a limited or full range of vehicle parts and fuels and the repair and maintenance of automobiles and light trucks. Self service, automated, or full service car washes as a primary use of property are included in this.

BAR OR BREWERY

An establishment primarily engaged in the selling of drinks for consumption on the premises, where entertainment and the incidental sale of prepared food for consumption on the premises are permitted accessory uses. These establishments may charge a fee or admission charge for the entertainment provided. Included in this category are bars, beer gardens, discotheques, night clubs, taverns, hookah bars, and dance halls.

BARNS, SHEDS, AND OUTBUILDINGS

An accessory structure designed and constructed to primarily supplement agricultural operations. The structure shall not be a place of human habitation or a place of employment where products are processed, treated or packaged; nor shall it be a place used by the public.

BED AND BREAKFAST

The commercial rental of bedrooms within a private residence, providing temporary accommodations, and typically including a morning meal to overnight guests.

BOARD OF TRUSTEES

The Board of Trustees of the Town of Green Mountain Falls.

BUILDING

Any structure used or intended for supporting or sheltering any occupancy. Where roofed structures are separated from each other by party walls having no openings for passage, each portion so separated shall be deemed a separate building.

BUILDING, PRIMARY

A building in which is conducted, or that is intended to be conducted, the primary use of the lot on which it is located.

BUSINESS OR PERSONAL SERVICE

An establishment primarily engaged in providing services involving the care of a person or his or her apparel or rendering services to business establishments on a fee or contract basis, such as barber shops, clothing rental, tattoo or piercing parlor, photographic studios, cleaning and garment services (but not including power laundries or dry cleaning plants), coin operated laundries, advertising and mailing, building maintenance, office equipment rental and leasing, photo finishing, business supply services, computer programming/data processing services, locksmiths, and repair of business or household goods and equipment generally weighing less than 25 pounds.

CARNIVAL OR FESTIVAL

A temporary festival typically offering amusement rides, variety shows, or other entertainment.

COMMUNICATION TOWER

A tower structure and related equipment enabling the transmission of electronic signals via wired and wireless means.

COMMUNITY CENTER

A building or portion of a building used for nonprofit, cultural, educational, recreational, religious, or social activities that is open to the public or a designated part of the public, usually owned and operated by a public or nonprofit group or agency.

COMMUNITY GARDEN

The cultivation of food and/or horticultural crops, composting, aquaponics, aquaculture and/or hydroponics including but not limited to gardens, container gardens, edible landscapes, residential greenhouses, herb gardens, rooftop gardens, berry patches, vegetable gardens. All of which may include the production and sale of food products from food grown on the premises. Community Garden may be divided into separate plots for cultivation by one or more individuals or may be farmed collectively by members of the group and may include common areas maintained and used by group members.

COMMERCIAL WIRELESS TELECOMMUNICATIONS SERVICE

A facility that transmits and/or receives signals or waves radiated or captured by a wireless telecommunications antenna. It may include: antennas of all kinds including microwave dishes, horns, and other types of equipment for the transmission or reception of such signals, telecommunications tower or similar structures supporting said equipment, equipment buildings

or cabinets, parking area, and/or other accessory development in order to provide telecommunication services including cellular, personal communication services (PCS), specialized mobilized radio (SMR), enhanced specialized mobilized radio (ESMR), paging and similar services that are marketed to the general public. Non-commercial or broadcasting antennas are not considered to be wireless telecommunications utilities.

DAY CARE FACILITY

A licensed private or public establishment that for gain or otherwise, regularly provides one or more dependents with care, training, supervision, rehabilitation, or developmental guidance on a regular basis, for periods of less than 24 hours a day, in a place other than the dependent's home.

DEDICATION

The transfer of property interests from private to public ownership for a public purpose.

DELINEATED WETLAND

The area mapped as a wetland by a qualified consultant, in accordance with the approved Federal Wetland Delineation Manual and applicable regional supplement.

DEVELOPMENT

Any man-made change to improved or unimproved real estate, including a change in use or the creation of a subdivision.

DRIVE-IN FACILITY

An accessory use that by design, physical facilities, service, or by packaging procedures encourages or permits customers to receive services or obtain goods while remaining in their motor vehicles, but not including any use meeting the definition of Outdoor Entertainment or Recreation.

DWELLING, ATTACHED

A building containing three or more dwelling units arranged side by side, separated from each other by a firewall and having separate direct means of egress and ingress to each unit from the outside.

DWELLING, DUPLEX

A single building on a single lot containing two dwelling units.

DWELLING, FOURPLEX

A single building on a single lot containing four dwelling units.

DWELLING, MULTIFAMILY

A building containing five or more dwelling units on a single lot, including but not limited to apartments, cooperative apartments, and condominiums. Regardless of how rental units are equipped, any multifamily dwelling in which units are available for rental periods of one week or less shall be considered a hotel, motel, or short-term rental as applicable.

DWELLING UNIT

A single unit providing complete, independent living facilities, including permanent provisions for living, sleeping, eating, cooking, and sanitation.

DWELLING, SINGLE FAMILY DETACHED

A detached building, whether stick-built or manufactured, containing one dwelling unit located on a single lot.

DWELLING, TRIPLEX

A single building on a single lot containing three primary dwellings.

EASEMENT

A grant of one or more of the property rights by the property owner to and for use by the public, a corporation, or another individual or entity.

ELECTRIC VEHICLE CHARGING STATION

A facility or area where electric-powered or hybrid-powered motor vehicles can obtain electrical current to recharge batteries and that is accessory to a primary use of the property. This use can be incidental to any allowable use in any zone district.

FAÇADE

The exterior walls of a building exposed to public view from a public street. The wall visible from a public street or parking lot and used for the main public access or that has distinguishing architectural features will be considered the primary façade. A wall that is visible from a public street or parking lot serving the business center but not the main access to the building is considered the secondary façade.

FAST FOOD RESTAURANT

An establishment whose primary business is the sale of food and/or beverages in a ready to consume state for consumption within the restaurant building, within a motor vehicle parked on the premises, or off the premises as a carry out order, and whose principal method of operation involves serving food and/or beverages in edible containers or in paper, plastic, or other disposable containers.

FLOODPLAIN

That area within a Special Flood Hazard Area as delineated by the most recent report available from the Federal Emergency Management Agency.

FLOODPLAIN GRADE

The elevation of the regulatory flood plus two feet at any given location in the Special Flood Hazard Area.

FOOD TRUCK

A retail food establishment that is not intended to be permanent and is a motorized wheel vehicle, or a trailer that is licensed for use on public roadways, designed and equipped to serve food and beverages.

FUELING STATION

A facility where fuels like diesel, gasoline, ethanol, natural gas, electricity, and hydrogen; related supplies for motorists; and convenience foods and goods are sold. All services included in Automotive Center are excluded.

FUNERAL HOME

An establishment providing services such as preparing the human or animal dead for burial, cremating human remains, and arranging and managing funerals, and for which permitted accessory uses include a crematorium.

GARAGE

A detached accessory building or a portion of a primary building used for the parking and storage of vehicles, merchandise, or equipment, and that is not a separate commercial establishment open to the general public. When associated with a residential use in a residential district, it shall be limited to use for parking and storage of vehicles, noncommercial trailers, and household equipment.

GARAGE SALE

The sale of used household belongings at a residential dwelling or residential neighborhood including but not limited to "home sale," "estate sale," "attic sale," and "basement sale" and any other type of residential sale of tangible personal property.

GREENHOUSE

A building whose roof and sides are made largely of glass or other transparent or translucent material and in which the temperature and humidity can be regulated for the cultivation of delicate or out-of-season plants for subsequent sale, for personal enjoyment, or for the temporary storage or display of plant material.

GROUP HOME, SMALL

A residential dwelling or facility where eight or fewer persons, including staff, live as a single housekeeping unit providing care, supervision, and treatment for the exclusive use of citizens protected by the provisions of the federal Fair Housing Act Amendments of 1988, as defined in that Act and as interpreted by the courts, or by any similar legislation of the State, including but not limited to facilities providing housing for people with disabilities.

GROUP HOME, LARGE

A residential dwelling or facility where more than eight persons, including staff, live as a single housekeeping unit providing care, supervision, and treatment for the exclusive use of citizens protected by the provisions of the federal Fair Housing Act Amendments of 1988, as defined in that Act and interpreted by the courts, or by any similar legislation of the State, including but not limited to facilities providing housing for people with disabilities.

HEIGHT (OF A BUILDING)

The vertical distance above grade along the building front measured to the highest point of the coping of a flat roof, or to the deck line of a mansard roof, or to the average height between the eave and ridge of a gable, hip, or gambrel roof. Maximum height establishes the maximum height in feet above grade, allowed for structures within a given zoning district.

HOME OCCUPATION

Any gainful occupation or profession engaged in by the occupant of a dwelling unit at or from the dwelling unit.

HOTEL OR MOTEL

A building or series of buildings operated as an establishment providing accommodations in habitable units by prior arrangements, for compensation, for periods of thirty days at a time or less. This use may provide ancillary uses such as conference and meeting rooms, restaurants, bars, gift shops, and recreational facilities.

INDOOR ENTERTAINMENT OR RECREATION

A commercial recreation facility that provides completely enclosed or indoor entertainment or recreation space, such as racquet clubs, indoor skating rinks or swimming pools, bowling alleys, billiard, pool, or bingo parlors, amusement arcades, indoor archery ranges, indoor live or motion picture theaters, and fitness centers or gymnasiums, and where food or beverages may be served as an accessory use, but does not include any use meeting the definition of Adult Entertainment.

IMPERVIOUS SURFACE

Any surface artificially covered or hardened so as to prevent or impede the percolation or absorption of water into the ground, including but not limited to asphalt, concrete, roofing material, brick, plastic, gravel, or swimming pools.

LOT

The smallest unit of land division defined by plat or by metes and bounds description, that is not divided by a lot line, right-of-way, or other publicly owned land.

LOT AREA

The area contained within the lot lines of a lot, excluding any right-of-way or private street.

LOT LINE

A line of record bounding a lot that divides one lot from another lot or from a public or private street or any other public space. Where any portion of a lot extends onto a public right-of-way, the lot line shall be deemed to be the boundary of said right-of-way.

LOT WIDTH

A horizontal distance measured between the side lot lines.

LOT LINE, FRONT

A lot line separating a lot from the predominant public or private street or roadway right-of-way abutting the property, as determined by the Town.

LOT LINE, REAR

On a rectangular lot other than a corner lot, the lot line opposite and most distant from the front lot line; on a corner lot, an interior lot line that is designated at the time of development. Triangular shaped lots whose lot width narrows when moving away from the front lot line have no rear lot line. The rear lot line(s) on irregular shaped lots with more than four lot lines are those interior lot lines that, when the endpoints of the line(s) are connected, create a line exceeding the width at the building line.

LOT LINE, SIDE

Any lot line other than a front or rear lot line.

LOT OF RECORD

Any validly recorded lot that, at the time of its recording, complied with all applicable laws, ordinances, and regulations.

LOT SIZE

The minimum size lot, in square feet, for certain types of residential development, measured on a horizontal plane.

MANUFACTURED HOME

A building, fabricated in an off-site facility for installation or assembly at the building site, transportable in one or more sections, that, in the traveling mode, is eight feet or more in width or 40 feet or more in length, or when erected is 320 or more square feet in size, and is built on a permanent chassis and designed to be used as a dwelling for one family, with or without permanent foundation, when connected to the required utilities, and includes the plumbing, heating, air conditioning, and electrical system contained in the building.

MANUFACTURED HOME PARK

A residential development on a site that consists of two or more spaces for the placement of manufactured homes for dwelling or sleeping purposes, regardless of whether or not a fee is charged for the use of such space. This development is typified by a land-lease arrangement between the residents of the manufactured homes in the community and a single ownership entity or common owner(s) in a cooperative arrangement as opposed to a development that consists of individually owned lots subdivided for the placement of manufactured homes. A manufactured home park does not include real property used for the display and sale of manufactured homes, unless the manufactured homes for display or sale are permanently sited as model homes in the park, nor does it include a Recreational Vehicle Parking in which spaces are not intended for long-term occupancy.

MANUFACTURED HOME PARK LOT

A parcel of land in a manufactured home park used for the placement of a single manufactured home for the exclusive use of the residents of the manufactured home. The area of the lot for rezoning purposes shall not include any common or community open space. The area of the lot shall not include any land devoted to the development of streets (public or private) including any

land used for common sidewalk or walkway area located parallel and adjacent to a private street lying adjacent to the lot.

MEDICAL FACILITY

An establishment engaged in providing diagnostic services, extensive medical treatment (including surgical services) and other hospital services, as well as continuous nursing service, including general medical and surgical hospitals, specialty hospitals, medical laboratories, bio medical research and development, outpatient care facilities, medical schools and associated dormitories, medical appliance sales, and similar uses, but not including Veterinary and Animal Services.

MOBILE HOME

A non-HUD compliant structure built prior to June 15, 1976, on a permanent chassis, capable of being transported in one or more sections and designed to be used with or without a permanent foundation as a dwelling when connected to on-site utilities, but not including manufactured homes or recreational vehicles. Mobile homes are not permitted in the Town.

MULTI-USE TRAIL

A path physically separated from motor vehicle traffic, located either within a street right-of-way or a separate right-of-way or easement, and intended for use by some combination of bicyclists, pedestrians, equestrians, and other non-motor vehicle traffic.

NONCONFORMING LOT OF RECORD

Any validly recorded lot existing at the time this Land Use Code was adopted that does not comply with the minimum requirements of the district where it is located.

NONCONFORMING PARKING

Any development that does not provide the number of off-street parking spaces that would be required by this Land Use Code for a new development of the same type. The existence of parking spaces located outside of an approved driveway in the front or street side yard on a property in a residential district that were not approved through a lot and site development approval procedure do not constitute legal, nonconforming parking.

NONCONFORMING SIGN

Any sign established prior to the effective date of this Land Use Code that is not in full compliance with the Land Use Code.

NONCONFORMING STRUCTURE

A structure that does not comply with the height, setback, density, or floor area ratio requirements of the district where it is located.

NONCONFORMING USE

An activity using land or structures that would not be permitted to be established as a new use in the zone where it is located by the regulations of this Land Use Code.

NURSING HOME

An establishment primarily engaged in providing intermediate or long-term nursing and health related care to individuals.

OFFICE

A room or group of rooms used for managing the affairs of an establishment or for the non-retail, non-production conduct of affairs of a service, professional institution, or business nature including medical offices or clinics, studios for those involved in art, sculpture, and music including organizations operating on a membership basis for the promotion of the interests of the membership, including trade associations, business associations, professional membership

organizations, labor unions, or civic or fraternal organizations, but not including place of worship, hospitals, golf and country clubs, or credit unions.

OUTDOOR EATING AREA

Any group of tables, chairs, or other seating fixtures and appurtenances intended for the outdoor consumption of food or beverage by patrons, employees, or tenants, when located adjacent to an establishment having the same operator.

OUTDOOR ENTERTAINMENT OR RECREATION

A commercial recreation facility that is primarily an open-air facility, such as baseball fields, swimming pools, skating rinks, golf driving ranges, miniature golf facilities, drive-in theaters, amphitheaters, outdoor concert halls, racetracks, ranges (skeet, rifle, or archery), bowling alleys, and amusement parks.

PARKING LOT

A surface area whose purpose is to provide accessory or primary use parking spaces for motor vehicles, this category also includes community lots that are established to meet the parking needs in a residential area.

PARKING GARAGE

An above ground and/or belowground structure, or a part of a primary structure, designed for parking automobiles and light trucks and van, in which at least one level of parking is located above or below another level of parking in the same structure. This use does not include parking and storage facilities for recreational vehicles, boats, and trucks seven feet in height or greater.

PARKS AND OPEN SPACE

A publicly or privately owned open space area specifically defined or set aside for active and/or passive recreational uses. Parks and open space includes all landscaping, facilities and apparatus, playing fields, trails and buildings and structures that are consistent with general outdoor recreational purposes.

PLACES OF WORSHIP

A building or structure, or groups of buildings or structures, that by design and construction are primarily intended for the conducting of organized religious services and associated accessory uses.

PLANNING COMMISSION

The Planning Commission of the Town of Green Mountain Falls, which shall also act as the Board of Adjustment and Historic Preservation Board.

PLAT, FINAL

The final map on which an applicant's plan for the division of land for purposes of development is presented to the Town for approval and that, if approved, will be submitted to the County Recorder.

PLAT, PRELIMINARY

A draft map on which an applicant's plan for the division of land for purposes of development is presented to the Town for review and comment regarding compliance with this Land Use Code and other standards and regulations, prior to submittal of a Final Plat for approval.

PROPERTY OWNER

The fee owner of land, or the beneficial owner of land whose interest is primarily one of possession and enjoyment in contemplation of ultimate ownership. The term includes but is not limited to venders under a contract for deed.

RECREATIONAL VEHICLE

A temporary structure, less than 40 feet in length, that can be towed, hauled or driven and is primarily designed as temporary housing accommodations for recreational, camping or travel use including but not limited to travel trailers, truck campers, camping trailers and self-propelled motor homes.

RECREATIONAL VEHICLE PARKING

Storage of recreational vehicles at a residence as an accessory to the primary use of the property.

RESTAURANT

An establishment that sells food or beverages in a ready-to-consume state, in individual servings, that the customer consumes while seated at tables or counters located in or immediately adjacent to the building in which the use is located, and that may include carry-out service. This includes any portion of an establishment used for seating for the consumption of food on the premises that sells prepared food or beverages, such as a bakery, delicatessen, cafes, and coffee shops.

RETAIL ESTABLISHMENT

An establishment engaged in selling goods or merchandise to the general public for personal or household consumption and rendering services incidental to the sale of such goods, including furniture and appliance sales and business centers. These establishments are characterized by the following: 1) They buy and receive as well as sell merchandise; 2) They may process some products, but such processing is incidental or subordinate to the selling activities; and 3) They predominantly sell to customers for their own personal or household use.

RETAIL, SMALL

A retail establishment that is under 5,000 square feet gross floor area.

RETAIL, LARGE

A retail establishment that is over 5,000 square feet gross floor area.

SCHOOL

A public, parochial or private school which provides an educational program for one or more grades between grades 1 and 12 and which is commonly known as an elementary school, middle school, junior high school, senior high school or high school.

SEASONAL SALES

A building or structure used for the retail sales of Christmas trees, holiday décor and seasonal gifts, fresh fruits, vegetables, flowers, herbs, or plants. Such use may also involve the accessory sales of other unprocessed foodstuffs, home processed food products such as jams, jellies, pickles, sauces or baked goods, and homemade handicrafts. Such uses also include "pick your own" establishments where customers gather their own produce from the fields for purchase and off-site consumption.

SELF SERVICE STORAGE FACILITY

An establishment designed and used for the purpose of renting or leasing individual storage spaces to tenants who have sole private access to such space for storing personal property.

SHORT-TERM RENTAL

Short-Term Rentals shall be defined as stated in Chapter 5 Article VII of the Town Municipal Code.

SOLAR COLLECTOR, GROUND- OR BUILDING-MOUNTED

A photovoltaic (PV) panel, array of panels or other solar energy device, the primary purpose of which is to provide for the collection, inversion, storage, and distribution of solar energy for electricity generation, space heating, space cooling, or water heating. Ground-Mounted Solar Collector may be a principal or accessory use. Building-Mounted Solar Collector is an accessory

use. Building-Mounted Solar Collector includes agrivolatic systems and parking canopy solar systems.

SUBSTANTIAL IMPROVEMENT

Any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure before the start of construction of the improvement.

TOWN MANAGER

The Town Manager of the Town of Green Mountain Falls, or his or her authorized representative.

UTILITY, MAJOR

A facility providing an important regional utility service, such as water, sewer, or drainage, that normally entails construction of new buildings or structures, and that sometimes have employees on the site on an ongoing basis including but not limited to water towers, natural gas regulating stations, electric substations, water treatment plants, sewage treatment plants, above- or belowground reservoirs, regional stormwater detention ponds, electric power lines that transmit over 110 KV of power, and other large facilities that enable the provision of utility services to large geographic area or a large number of people. Major Utility does not include Geothermal Energy System, Ground- or Building-Mounted Solar Collector, or Ground- or Building-Mounted Wind Energy Conversion System (WECS).

UTILITY, MINOR

Equipment necessary to support utility services to development within the immediate vicinity and that involves only minor accessory structures, and that typically do not have employees located at the site on an ongoing basis including but not limited to electric transformer stations and service boxes, gas regulator stations, telephone service boxes, and well, water and sewer pumping stations, and related underground and aboveground pipes and wires, but excluding electric power transmission lines that transmit over 110 KV of power.

URBAN AGRICULTURE

The cultivation of food and/or horticulture crops, aquaponics, aquaculture, and/or hydroponics. Such use may include the production and sale of food products from food grown on the premises. Urban Agriculture includes the raising of small animals like bees for the purpose of producing honey but does not include slaughtering or selling meat or the keeping of any large animals.

VETERINARY AND ANIMAL SERVICES

A commercial establishment engaged in the practice of veterinary medicine, dentistry, or surgery, along with those providing animal related services such as kennels, grooming, or breeding services. A single instance of incidental breeding of a household animal is not included in this definition.

WIND ENERGY CONVERSION SYSTEM, GROUND- OR BUILDING-MOUNTED ("WECS")

All necessary devices that together convert wind energy into electricity, including the rotor, nacelle, generator, WECS Tower, electrical components, WECS foundation, transformer, and electrical cabling from the WECS Tower to the Substation(s).

