DOUGLAS COUNTY
COLORADO

Minor Development
Staff Report

DATE: JULY 31, 2024

TO: DOUGLAS COUNTY BOARD OF COUNTY COMMISSIONERS

THROUGH: DOUGLAS J. DEBORD, COUNTY MANAGER

FROM: TERENCE T. QUINN, AICP, DIRECTOR OF COMMUNITY DEVELOPMENT

CC: TREVOR BEDFORD, AICP, SENIOR PLANNER
JEANETTE BARE, AICP, CURRENT PLANNING MANAGER
STEVEN E. KOSTER, AICP, ASSISTANT DIRECTOR OF PLANNING SERVICES

SUBJECT: **HAYSTACK HILLS MINOR DEVELOPMENT**

PROJECT FILE: SB2024-005

OWNER:
JD CAPITAL, LLC
6665 BETHANY PLACE
DENVER, CO 80224

REPRESENTATIVE:
KEVIN ARCHER, ARCHER & ASSOCIATES
105 WILCOX STREET
CASTLE ROCK, CO 80104

PLANNING COMMISSION HEARING:	**AUGUST 5, 2024 @ 6:00 PM**
BOARD OF COUNTY COMMISSIONERS HEARING:	**AUGUST 13, 2024 @ 2:30 PM**

I. EXECUTIVE SUMMARY

The applicant is requesting approval of a minor development final plat for subdivision of a 17.06-acre parcel into three residential lots and one public right-of-way tract. The site is located approximately 1,600 feet west of the intersection of Haystack Road and Lake Gulch Road in the vicinity of Castle Rock and within the Rural Residential (RR) zone district.

The single-family residential lots are proposed to be 5.33-acres, 5.20-acres, and 6.38-acres in size. A portion of Haystack Road is currently within a prescriptive right-of-way. As requested by Public Works Engineering, the applicant will formally convey the 0.15-acres of Haystack Road right-of-way to Douglas County via the plat.

The public hearing before the Planning Commission is scheduled for August 5, 2024. Staff will provide an update to the Board regarding the Planning Commission's recommendation at the August 13 Board hearing.

II. REQUEST

A. Request

Approval of a minor development final plat for three single-family residential lots and public right-of-way.

B. Process

A residential minor development application is processed pursuant to Article 6 of the *Douglas County Subdivision Resolution (DCSR).* Article 6 states the intent of the process is "to provide a streamlined review process for the creation of ten or fewer single-family residential lots."

Per Section 604.08 of the *DCSR*, "The Board shall evaluate the minor development final plat, staff report, referral agency comments, applicant responses, the Planning Commission recommendation, and public comment and testimony, and shall approve, approve with conditions, continue, table for further study, remand to the Planning Commission, or deny the minor development final plat. The Board's action shall be based on the evidence presented; compliance with adopted County standards, regulations, and policies; and other guidelines."

C. Location

The site is located approximately 1,600 feet west of the intersection of Haystack Road and Lake Gulch Road. A vicinity map, zoning map, and aerial map are attached to the staff report and show the general location of the project area.

D. Project Description

The applicant is requesting a minor development final plat to subdivide a 17.06-acre parcel into three single-family residential lots and provide for the fee simple ownership of a portion of Haystack Road to which the County currently has prescriptive ownership interest. The lots are proposed to be 5.33-acres, 5.20-acres, and 6.38-acres in size, conforming in size to the Rural Residential zone district. An existing home is present on proposed Lot 3. The three lots will share a single point of access from Haystack Road. Lots will be served by individual well and septic systems.

The applicant is dedicating right-of-way for Haystack Road along the northwest edge of the property as a portion of Haystack Road is constructed within a prescriptive right-of-way.

Project Details	
Zoning	Rural Residential
Gross Site Acreage	17.06 acres
Residential Lots	3 single-family detached
Right-of-way	0.15 acres
Gross Density	1 dwelling unit/5.69 acres

III. CONTEXT

A. Background

The property is a metes and bounds lot that is zoned Rural Residential. A single-family residence was constructed on the property in 1971 and will remain on proposed Lot 3.

B. Adjacent Land Uses and Zoning

The site is located on the southeast side of Haystack Road and is surrounded by other properties within the RR zone district. Abutting properties on the southeastern side of Haystack Road are unsubdivided and of similar in size to the existing property. Abutting properties on the northwest side of Haystack Road are platted as part the Haystack Acres subdivision and include lots ranging in size from 3.09 acres to 8.51 acres.

	Zoning	Land Use
North	Rural Residential (RR)	Single-family residential
East	Rural Residential (RR)	Single-family residential
South	Rural Residential (RR)	Single-family residential
West	Rural Residential (RR)	Single-family residential

IV. PHYSICAL SITE CHARACTERISTICS

A. Site Characteristics and Constraints

The site contains one single-family dwelling that is located on proposed Lot 3. The site is vegetated with native grasses, Gambel Oak, Ponderosa Pine, Douglas-Fir and Juniper. The site slopes upwards mostly towards the south and east, away from Haystack Road with a minor ridge generally along the eastern property line. There are no site constraints present that would preclude development of the site.

B. Access

Access for the proposed lots will be from an existing driveway off of Haystack Road. The applicant has provided a shared maintenance agreement for the driveway that will be recorded concurrent with the minor development plat. A portion of prescriptive right of way for Haystack Road will be formally conveyed to the County with the plat.

C. Soils and Geology

The Class 3 Geologic Hazards map as described within the Douglas County 2040 Comprehensive Master Plan (CMP) identifies a Slope Failure area along the minor ridge that is generally along the eastern property line. The applicant provided a supplemental exhibit to show areas with steep slopes and minor ridge to demonstrate that there is sufficient area on each lot to construct a residence while avoiding constrained areas. The application was reviewed by the Colorado Geological Survey (CGS). CGS responded to the referral request with no comments. The Douglas County Conservation District responded to the referral request with 4information noting that alternative construction techniques may be necessary to mitigate soil limitations. The applicant will complete investigation and analysis of individual building sites at building permit.

D. Drainage and Erosion

A Phase III Drainage Report was submitted by the applicant and reviewed by Douglas County Public Works Engineering. The report indicates that all runoff will drain into existing natural drainageways and that no future storm water detention will be required. Drainage, Erosion and Sediment Control (DESC) Plans for the future residences will be required to be submitted at the time of building permits. A Subdivision Improvements Agreement (SIA) is not required for the development.

E. Floodplain

No 100-year floodplain is present on the site.

F. Wildlife

The CMP Wildlife Resources map shows the site as having moderate habitat value for wildlife. The site is not located within an overland connection, wildlife movement corridor, or wildlife crossing area. Colorado Parks and Wildlife (CPW) did not respond to the referral request. Proposed condition #3 requires CPW literature be made available to prospective homeowners concerning the possible presence of wildlife.

G. Historic Preservation

The Douglas County Historic Preservation Board (HPB) provided referral comments on the application. The HPB reviewed a Class I File and Literature Review provided by the applicant that did not identify any known cultural resources on site. As noted in proposed condition #4, the applicant shall take all reasonable care during construction activity to monitor for subsurface artifacts and notify Douglas County in the event of such discovery.

H. Wildland Fire Mitigation

The applicant worked with Douglas County Wildfire Mitigation to develop a scope of work for wildfire mitigation on the property. Douglas County Wildfire Mitigation reviewed the scope of work and found it to be acceptable. Mitigation will be accomplished at the time of individual building permit.

V. PROVISION OF SERVICES

A. Schools

The Douglas County School District (DCSD) reviewed the proposal. No school land dedication is required for this project due to the limited amount of land the development would generate. As indicated in proposed condition #1, cash-in-lieu in the amount of $500 per new residential lot created will be required at the time of recordation of the minor development plat.

B. Fire Protection

Castle Rock Fire and Rescue Department (CRFD) provides fire and emergency medical services to the site. CRFD provided comments with the recommendation that access roads are able to withstand the fire apparatus weight. All building and fire code requirements, including wildfire mitigation, must be complied with for issuance of building permits on the lots.

C. Sheriff Services

The Douglas County Sheriff's Office (DCSO) provides emergency services to the site. The Office of Emergency Management responded with no concerns. No response was received from DCSO or DCSO E911.

D. Water

The development is proposed to be served by individual wells on each lot. The Colorado Division of Water Resources (CDWR) has reviewed the application and stated the proposed water supply is adequate and can be provided without causing material injury to existing water rights. The County's water consultant reviewed the water supply documentation provided and indicated that adequate water exists to serve the subdivision. The applicant clarified its narrative to indicate that the existing well on proposed Lot 3 will serve that lot only. Two additional wells will be drilled to serve the other two lots.

E. Sanitation

Sanitation service for the new lot will be provided by an on-site wastewater treatment system (OWTS). The applicant provided a septic feasibility investigation for the two new lots. The Douglas County Health Department (DCHD) reviewed this information and responded with no further comments. Specific septic designs and septic use permits will be required at the time of building permit.

F. Utilities

CORE Electric Cooperative is the electrical service provider to the property and requested language added to the exhibit regarding the 15-foot utility easement dedication along Haystack Road. CORE also requested utility easements be dedicated over existing facilities via separate instrument prior the minor development plat. The requested easements are shown on the minor development plat. Proposed Condition

#5 will require that the easements over existing CORE facilities are recorded prior to recordation of the minor development plat.

The project was also referred to AT&T, Black Hills Energy, CenturyLink, Comcast and Xcel Energy. AT&T, CenturyLink and Xcel Energy do not object to the proposal while Comcast and Black Hills Energy provided no response to the referral request.

G. Dedications

A 0.15-acre right-of-way dedication for Haystack Road will be conveyed to Douglas County via the minor development plat. A portion of Haystack Road is currently within a prescriptive right-of-way.

H. Parks, Trails, and Open Space

As identified by proposed condition #2, a one-time cash-in-lieu payment of $250 per new residential lot is required per Article 10, Section 1003.06 of the Subdivision Resolution.

I. Subdivision Improvements

The intent of the County's minor development process is "to provide a streamlined review process for the creation of ten or fewer single-family residential lots." Per the *DCSR*, specific engineering reports, studies, and construction plans are required to be submitted and finally accepted or approved by Public Works Engineering with a minor development application. Cost estimates for the public and private improvements are generated from the approved construction plans and incorporated into the subdivision improvements agreement-intergovernmental agreement (SIA) for the plat.

Minimal improvements are required for the Haystack Hills Minor Development. All engineering reports and studies for the plat have been reviewed by Public Works Engineering and found to be in compliance with required criteria. No SIA is required for this project as no public improvements are required.

VI. PUBLIC NOTICE AND INPUT

Courtesy notices were mailed to abutting property owners and no comments were received.

All referral agency comments are outlined in the Referral Agency Response Summary attached to the staff report. The applicant has provided responses to referral comments within a separate letter included in the staff report appendix.

Required public notice for the minor development final plat was accomplished in accordance with Section 608.02 of the DCSR.

VII. PLANNING COMMISSION HEARING

The Planning Commission is scheduled to hear the proposal at its August 5, 2024, public hearing. Staff will provide an update on the Planning Commission hearing on the record at the Board of County Commissioners public hearing.

VIII. STAFF ANALYSIS

Per Article 603 of the *DCSR*, a minor development final plat may be approved upon the finding by the Board of County Commissioners that the following standards have been met:

603.01 Conforms with the goals, objectives, and policies of the Master Plan.
Staff Comment: The property is within the Castle Rock Municipal Planning Area as identified in Section 2 of the CMP. *The* CMP *states that while approval criteria for land use applications require a finding of compliance with the* CMP, *"…the competing values of the Plan must be balanced through the public review process to achieve the larger vision of the community." As such, the* CMP *acknowledges its own competing values, and that implementation can only be achieved through the balancing of community values during the review process. The Objectives and Policies under Goal 2-5 discuss preservation of natural resources and mitigating the visual impacts on natural terrain. The proposed minor development maintains existing topography and will utilize existing natural drainage patterns.*

Additional sections of the CMP are applicable based upon site specific features. Consistent with Goal 5-1, the proposed subdivision was reviewed in cooperation with existing service providers, authorities, municipalities, and districts to ensure adequate community resources exist.

Section 9 of the CMP relates to Wildlife. According to Map 9.1 - Wildlife Resources, the proposed subdivision is located in an area of moderate habitat value, however, the site does not contain wildlife habitat conservation areas, overland connections, wildlife movement corridors, or wildlife crossing areas.

603.02 Addresses the design elements established in Section 404 – Preliminary Plan, herein.
Staff Comment: The minor development is in conformance with the design elements.

Per Section 404.01 – Lots are of an appropriate size and are capable of meeting minimum zone district standards such as minimum lot size, setbacks, and off-street parking.

Per Section 404.02 – Geotechnical conditions have been reviewed and there are no geologic hazards or unusual geotechnical constraints present that would preclude the proposed residential use and density.

Per Section 404.03 – Lots are oriented in a manner consistent with the surrounding subdivision and do not create conflicts with surrounding land uses. Lots located across Haystack Road in Haystack Acres are similar in size to the proposed minor development.

Per Section 404.04 – No roadway improvements are necessary. The plat proposes to dedicate right-of-way for Haystack Road, which is partially located within a prescriptive right-of-way. Site drainage is minimal and will use existing natural drainageways; storm water detention will not be required.

Per Section 404.05 – The site's natural terrain and vegetation will remain largely undisturbed given the proposed lot sizes.

Per Section 404.06 – No cultural resources were identified during the cultural resource review. The developer will notify Douglas County in the event of a discovery during construction activities.

Per Section 404.07 – The proposed lots will access to Haystack Road via a shared driveway. The property is rural in character and within this context limited opportunities for pedestrian connections and other connections to shopping or employment are available.

Per Section 404.08 – Recommendations within technical studies will be implemented through the building permit process, specifically wildfire mitigation and site specific soil investigations and foundation design.

603.03 Conforms with Section 18A, Water Supply - Overlay District, of the Zoning Resolution.

Staff Comment: DCZR Section 1803A establishes approval standards to be used in the evaluation of land use applications reviewed under Section 18A. The Division of Water Resources and County water consultant have reviewed the minor development request and required water documentation and have determined that the supply is adequate to serve the subdivision. The applicant will record a declaration of restrictive covenants tying all Denver Basin groundwater beneath the property for future uses of the property (proposed condition #1).

1803A.01 The applicant has demonstrated that the water rights can be used for the proposed use(s).

Staff comment: The applicant has submitted documentation that demonstrates adjudicated water rights are available to adequately serve the subdivision. The CDWR has reviewed the application and stated the proposed water supply is adequate and can be provided without causing material injury to existing water rights. The County's water consultant reviewed the water supply documentation provided and indicated that adequate water exists to serve the subdivision. The applicant has verified

that the existing well will serve the home on proposed Lot 3. Two new wells will be drilled to serve the other lots.

1803A.02 The reliability of a renewable right has been analyzed and is deemed sufficient by the County based on its priority date within the Colorado System of Water Rights Administration.

Staff comment: No renewable water rights are proposed as part of the application.

1803A.03 The Water Plan is deemed adequate and feasible by the County to ensure that water supply shortages will not occur due to variations in the hydrologic cycle.

Staff comment: The applicant has submitted documentation that demonstrates adjudicated water rights are available to adequately serve the subdivision including varying hydrologic conditions. Individual groundwater wells will serve the subdivision.

1803A.04 The Water Plan is sufficient to meet the demand applicable to the project based on the minimum water demand standards in Section 1805A herein.

Staff comment: The applicant has submitted documentation that demonstrates adjudicated water rights are available to adequately serve the presumed water demand of 3-acre feet per year for the development.

603.04 Provides for a public wastewater collection and treatment system, and, if other methods of wastewater collection and treatment are proposed, such systems shall comply with State and local laws and regulations.

Staff Comment: Wastewater treatment will be provided by OWTS. The County Health Department had no comments on the applicant's septic suitability report. An approved septic design and septic use permit will be required at the time of building permit request foreach new lots.

603.05 Identifies all areas of the proposed subdivision which may involve soil or topographical conditions presenting hazards or requiring special precautions and that the proposed uses of these areas are compatible with such conditions.

Staff Comment: The CGS reviewed the proposed subdivision and responded with no comment. No special mitigation or no build zoned will be required. Standard geotechnical explorations of individual building sites will be required as part of the building permit process.

603.06 Provides adequate drainage improvements.

Staff Comment: A Phase III Drainage Report was submitted by the applicant and reviewed by Public Works Engineering. The report notes that drainage will use existing natural drainageways and therefore no future storm water detention will be required.

603.07 Provides adequate transportation improvements.
Staff Comment: The applicant submitted a traffic impact letter that has been reviewed and accepted as adequate by Public Works Engineering. The lots will take access of off an existing driveway connecting to Haystack Road. No additional improvements are required. The minor development final plat conveys a portion of prescriptive right-of-way for Haystack Road to the County.

603.08 Protects significant cultural, archaeological, natural, and historical resources, and unique landforms.
Staff Comment: No unique landforms are associated within the property. Further, there are no known archeological or paleontological resources onsite. The applicant will take care to look for any such items during development and construction of the site.

603.09 Demonstrates the extraction of any known commercial mining deposit shall not be impeded.
Staff Comment: There are no known commercial mining deposits on this property.

603.10 Has available all necessary services, including fire and police protection, recreation facilities, utility service facilities, streets, and open space to serve the proposed subdivision.
Staff Comment: All such services are available to the parcel. Fire protection is provided by Castle Rock Fire and Rescue Department, and the Douglas County Sheriff's Office provides police protection. Utility service facilities are provided by AT&T, CORE Electric Cooperative, Xcel Energy, Comcast, and Century Link.

VIII. STAFF ASSESSMENT

Staff has evaluated the minor development final plat request in accordance with Article 6 of the *DCSR*. Should the Board of County Commissioners find that the approval standards for the minor development final plat are met, the following proposed conditions should be considered for inclusion in its motion:

1. Prior to recordation of the minor development final plat, the applicant shall record a declaration of restrictive covenants for water as required by the Water Supply Overlay District.

2. Prior to recordation of the minor development final plat, the applicant shall provide payment in the amount of $1,000.00 to the Douglas County School District for cash-in-lieu fees.

3. Prior to recordation of the minor development final plat, the applicant shall provide payment in the amount of $500.00 to Douglas County for parks cash-in-lieu fees.

4. Concurrent with recordation of the minor development final plat, easements requested by CORE for existing facilities shall be recorded.

5. Concurrent with recordation of the minor development final plat, the shared driveway access and maintenance agreement shall be recorded.

6. Colorado Parks and Wildlife literature shall be made available to prospective homeowners concerning the possible presence of wildlife and shall be available at all times.

7. During construction activity within the development, the applicant, its successors and assigns shall take all reasonable care to watch for historic resources, paleontological resources, and other cultural history resources and shall immediately notify Douglas County in the event of such discovery.

8. Prior to recordation of the minor development final plat, technical corrections to the plat exhibit shall be made to the satisfaction of Douglas County.

9. All commitments and promises made by the applicant or the applicant's representative during the public hearing and/or agreed to in writing and included in the public record have been relied upon by the Board of County Commissioners in approving the application; therefore, such approval is conditioned upon the applicant's full satisfaction of all such commitments and promises.

ATTACHMENTS **PAGE**

DOUGLAS COUNTY
COLORADO

Department of Community Development

www.douglas.co.us

Planning Services

LAND USE APPLICATION

Please fill in this application form completely. An incomplete application will not be processed.

Note: Neither the Planning Commission nor the Board of County Commissioners should be contacted regarding an open application.

OFFICE USE ONLY

PROJECT FILE #:

PROJECT NAME:

PROJECT TYPE: Minor Subdivision

PLANNING FEES:

MARKETING NAME:

SITE ADDRESS: 2808 Haystack Court

ENGINEERING FEES:

OWNER(S):

Name(s): JD Capital, LLC

TOTAL FEES:

Address: 6665 Bethany Place, Denver, CO 80224

Phone: 303-217-1533

RELATED PROJECTS:

Email: ryanscohimes@gmail.com

AUTHORIZED REPRESENTATIVE *(requires notarized letter of authorization if other than owner)*

Name: David E Archer and Associates, Inc Kevin Archer

Address: 105 Wilcox St, Castle Rock, CO 80104

Phone: 303-688-4642

Email: karcher@davidearcher.com

LEGAL DESCRIPTION:

Subdivision Name: NA

Filing #: NA Lot #: NA Block #: NA Section #: 13 Township: 8S Range: 67W

STATE PARCEL NUMBER(S): 2505-133-00-019

ZONING:

Present Zoning: RR Proposed Zoning: RR Gross Acreage: 17

Gross Site Density (DU per AC): 0.17 # of Lots or Units Proposed: 3

SERVICE PROVIDERS:

Fire District: Castle Rock Fire Metro District: NA Gas: Black Hills

Water: Well Sewer: Septic Electric: Core

Roads: ☐ Public ☐ Private (please explain):

To the best of my knowledge, the information contained on this application is true and correct. ***I have received the County's information sheet regarding the Preble's Meadow Jumping Mouse.***

Applicant Signature

1-5-24

Date

DAVID E. ARCHER & ASSOCIATES, INC.
PROFESSIONAL LAND SURVEYORS & ENGINEERS
105 Wilcox Street * Castle Rock, CO 80104
PHONE (303) 688-4642 * FAX (303) 688-4675 * karcher@davidearcher.com

NARRATIVE
FOR
HAYSTACK HILLS MINOR DEVELOPMENT
2808 HAYSTACK ROAD

JD Capital, LLC the owners of 2808 Haystack Road would like to process a Minor Development for their 17.00 acre property. The property is zoned RR and will be subdivided into three lots with at least 5 acres each and a 30' wide strip along Haystack Road dedicated for additional ROW. There is currently a residence on the property and with the proposed development there could be two additional residences constructed.

The Approval Standards for a Minor Development are outlined in Section 603 of Article 6 of the Douglas County Subdivision Resolution. The approval standards are discussed below.

603.01 Conforms with the goals, objectives, and policies of the Master plan.
The project is in the Castle Rock Municipal Planning Area. The property is in the existing RR Zone district and is a use by right.

603.02 Addresses the design elements established in Section 404 – Preliminary Plan, herein.

404.1 Lots are of an appropriate size and configuration for the site's characteristics and intended uses, and otherwise capable of meeting minimum zone district standards such as lot size, setbacks, and off-street parking.
The lots are about 5 acres in size providing adequate room to meet all the Rural Residential zoning criteria.

404.2 Geologic hazards, floodplains, wildfire, or other hazardous conditions are mitigated or avoided.
The site contains no geologic hazard areas, or floodplains. There are some steeper areas within the property located along drainage areas. While no build areas are not specifically defined each future home site will undergo a site specific determination as to the suitability of the home location.

404.3 Conflicts between proposed and surrounding land uses are minimized through lot and tract orientation, setbacks, landscaping, or other buffering techniques.
There are no anticipated conflicts with the surrounding properties. There is no special landscaping or buffering proposed.

404.4 Streets and stormwater facilities are laid out with the ability to meet the Douglas County Roadway Design and Construction Standards, Storm Drainage Design and

Technical Criteria Manual, and other applicable County regulations.
The proposed subdivision will be accessed from Haystack at the existing driveway location. Drainage through the site will follow natural existing drainage ways.

404.5 Elements of the site's natural terrain, drainageways, riparian areas, and vegetation are preserved or integrated into the subdivision layout.
The proposed layout of 5 acre lots allows for the preservation of drainage ways and allows most of the natural terrain to remain undisturbed.

404.6 Archeological and historical resources of special significance are protected.
There are no known archeological or historic resources on the site.

404.7 Opportunities for safe and convenient vehicular, pedestrian, and other connections within the subdivision and adjacent neighborhoods, shopping, employment, and recreational areas are provided.
Connection to the exiting road system will provide access to the shopping and recreation facilities in the area. There are no existing trails in the immediate area.

404.08 Specific recommendations of other required development reports or technical studies are implemented.
Recommendations provided in the Soils report, Traffic study, and drainage report will be followed.

603.03 Conforms with Section 18A, Water Supply - Overlay District, of the Zoning Resolution.
Water availability has been confirmed through the attached water supply report. There is an existing well that serves the existing house. This well will remain and two new wells will be drilled. There will be a total of three wells on the property, one existing and two new wells.

603.04 Provides for a public wastewater collection and treatment system, and, if other methods of wastewater collection and treatment are proposed, such systems shall comply with State and local laws and regulations.
Onsite Wastewater Treatment Systems (OWTS), are proposed and will be permitted, installed, and operated in compliance with our current Douglas County Health Department OWTS regulations.

603.05 Identifies all areas of the proposed subdivision which may involve soil or topographical conditions presenting hazards or requiring special precautions and that the proposed uses of these areas are compatible with such conditions.
The site has some steeper areas and these areas may require specialized construction methods if chosen as a location for construction by a future lot owner. Site specific investigations will be performed for the actual home location as normally required by the Douglas County Building Department.

603.06 Provides adequate drainage improvements.
Drainage improvements required for this site will be minimal. The property does have two drainage ways that run through the site from the south to the north. The drainage ways are generally shallow swales that are well vegetated and uneroded. In the northern portion of the site there is an area where the western swale has some areas where head cutting has occurred. This area will remain free from any development.

603.07 Provides adequate transportation improvements.
Public Transportation improvements are not required per the provided Traffic Letter. The existing and future two homes will still be accessed from the existing driveway.

603.08 Protects significant cultural, archaeological, natural, and historical resources, and unique landforms.
There are no significant cultural, archaeological, natural, historical resources, or unique landforms on the property.

603.09 Demonstrates the extraction of any known commercial mining deposit shall not be impeded.
There are no commercial mining deposits on the site.

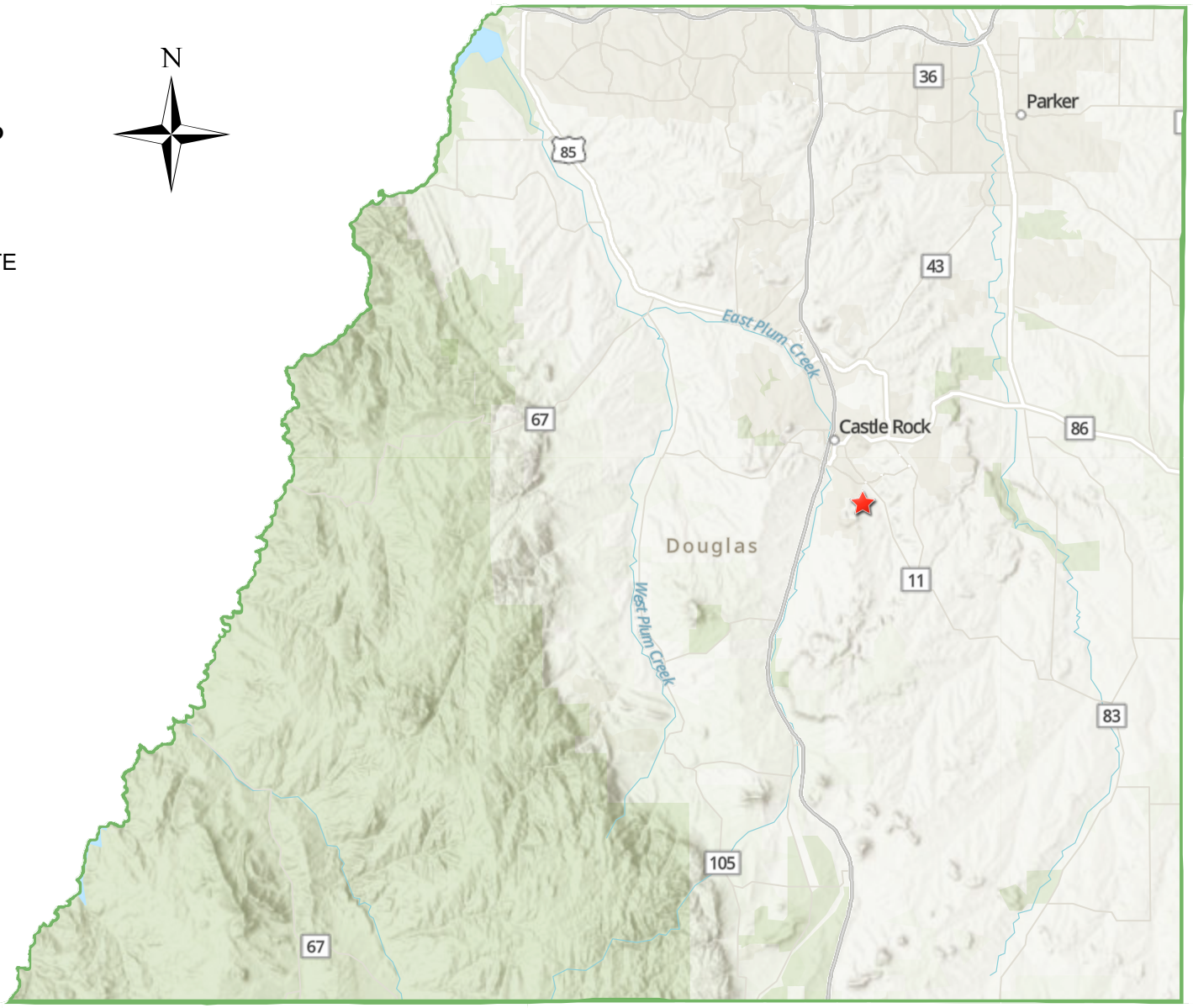
603.10 Has available all necessary services, including fire and police protection, recreation facilities, utility service facilities, streets, and open space to serve the proposed subdivision.
The property currently has all the necessary services in place. The proposed development will not require any additional services above what would normally be provided.

Haystack Hills

SB2024-005
VICINITY MAP

LEGEND

PROJECT SITE



County of Douglas, CO, Esri, HERE, Garmin, SafeGraph, FAO, METI/NASA, USGS, EPA, NPS, Esri, NASA, NGA, USGS

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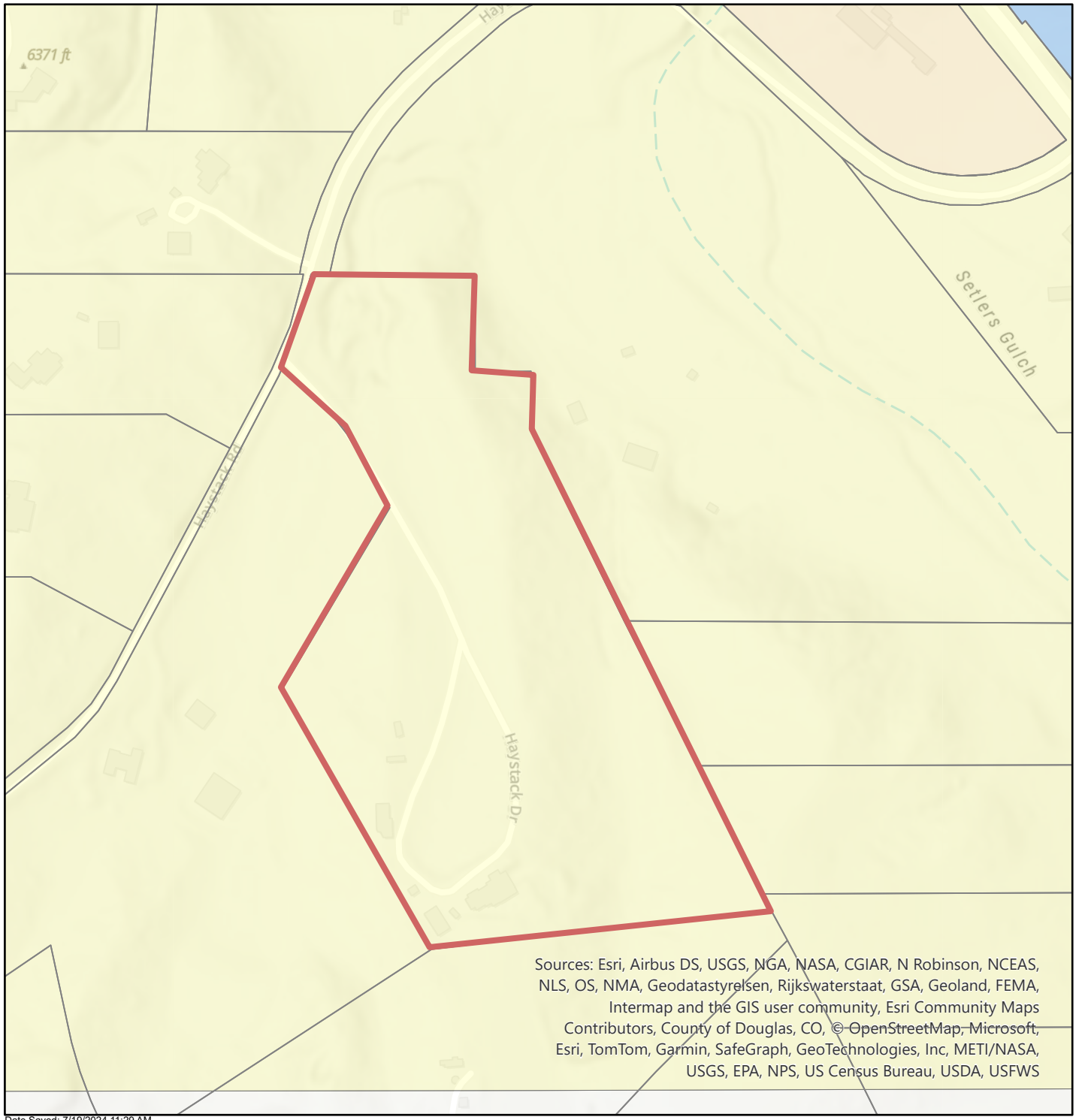
Haystack Hills

SB2024-005
Zoning Map

N

LEGEND

- PROJECT SITE
- Parcels - PARCELS
- A1 - AGRICULTURAL ONE
- LRR - LARGE RURAL RESIDENTIAL
- RR - RURAL RESIDENTIAL
- CTY



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Haystack Hills

SB2024-005
Aerial Map

N

LEGEND
- PROJECT SITE
- Parcels - PARCELS

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Project Name: Haystack Hills
Project File #: SB2024-005
Date Sent: 04/11/2024 **Date Due:** 05/09/2024

Agency	Date Received	Agency Response	Response Resolution
Addressing Analyst	07/23/2024	Received: *Proposed addresses are:* *Lot 1 – 2800 HAYSTACK ROAD* *Lot 2 – 2804 HAYSTACK ROAD* *Existing address to remain:* *Lot 3 – 2808 HAYSTACK ROAD* *Proposed addresses are not to be used for any purpose other than for plan review until after this project is approved. Proposed addresses are subject to changes as necessary for 911 dispatch and life safety purposes.* *Addresses are recorded by Douglas County following all necessary approvals. Contact DCAddressing@douglas.co.us or 303.660.7411 with questions.*	No Response Necessary
Assessor	04/23/2024	No Comment:	No Response Necessary
AT&T Long Distance - ROW	04/11/2024	Received: This is in response to your eReferral with a utility map showing any buried AT&T Long Line Fiber Optics near Haystack Dr Castle Rock, Colorado. The Earth map shows the project area in red and based on the address and/or map you provided, there should be NO conflicts with the AT&T Long Lines, as we do not have facilities in that area.	No Response Necessary
Black Hills Energy		No Response Received:	No Response Necessary
Building Services	04/19/2024	No Comment:	No Response Necessary

Castle Rock Fire and Rescue Department	04/15/2024	Updated 05/12/24: The two statements in the review are for the Town of Castle Rock requirements and are not specific to Douglas County ORDINANCE NO. O-019-002. These requirements will be removed and the amended fire code for the county will be followed specific to fire department access as outlined in county Ordinance NO: O-019- 002. However, recommendations are to ensure the access roads are able to withstand the fire apparatus weight of Castle Rock Fire and Rescue Departments KME apparatus 73,500 lbs. B. Chambers, Fire Marshal Town of Castle Rock May 21, 2024. Received: Fire apparatus access roads that are dead-ends or cul-de-sacs in excess of 600-feet (182.88 mm) in length shall require an approved automatic sprinkler system to be installed in all structures in accordance with the requirements of Sections 903.3.1.1, 903.3.1.2 or 903.3.1.3.Exception: The Fire Code Official may waive the requirement of an automatic sprinkler system if all of the following requirements are met:1.Fire hydrant is on a looped water distribution system; and2.Access road meets IFC Section 503.2 of the Castle Rock Transportation Design Criteria Manual; and3.Structures that are ? 5,000 total square feet, including all floors and garage; and4.Within the Standards of Cover benchmark response time. All Fire Department Access roads must be a minimum of 20 feet wide and constructed of all weather material (asphalt or concrete) capable supporting 80,000 lbs. where the length of the access road exceeds 150 feet, an approved	Applicant has paved the driveway to meet requested weight capacity. Castle Rock Fire has verified with the County's Chief Building Official that sprinklering of homes will not be required. A turnaround is also not required.

Project Name: Haystack Hills
Project File #: SB2024-005
Date Sent: 04/11/2024 **Date Due:** 05/09/2024

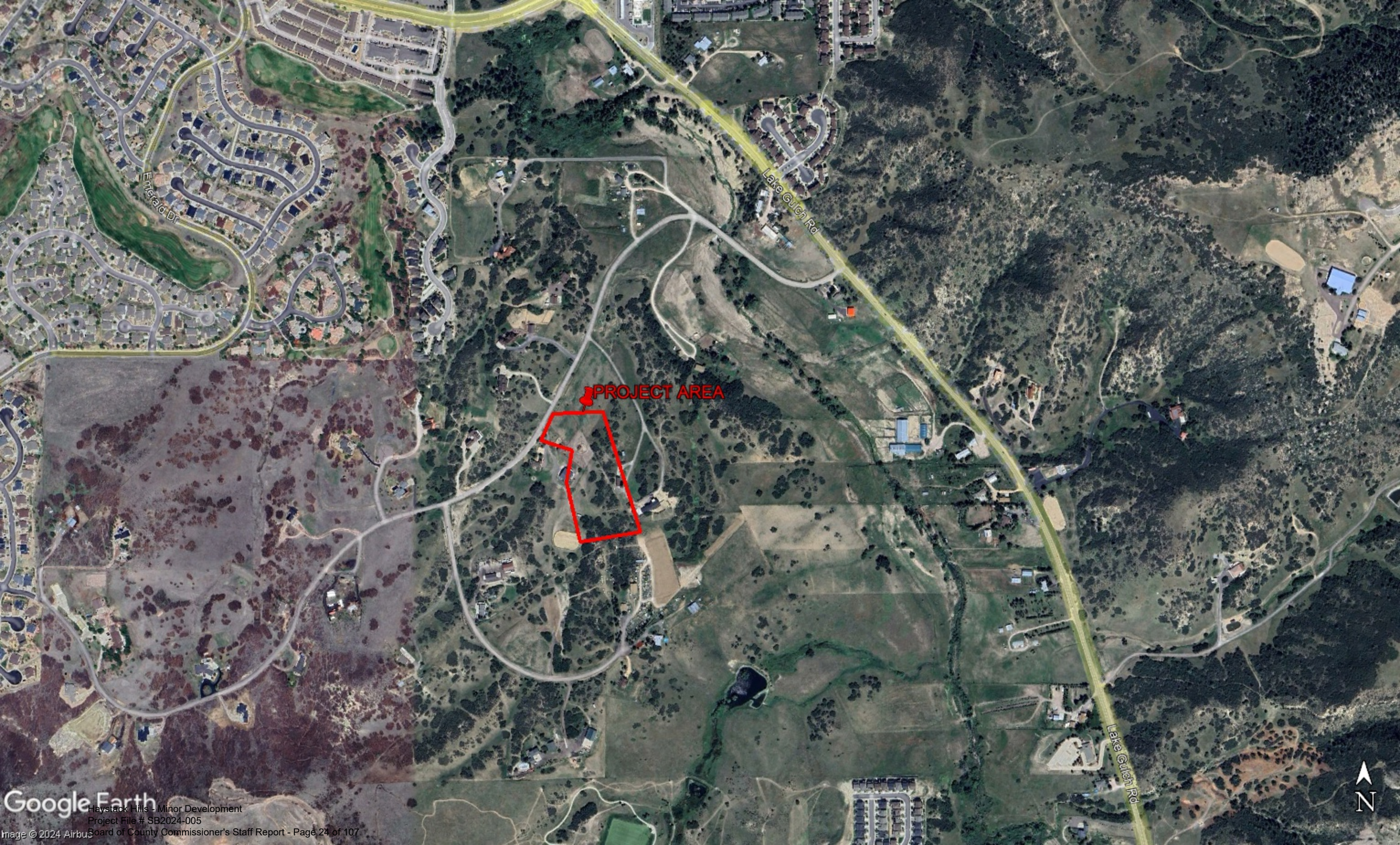
Agency	Date Received	Agency Response	Response Resolution
		turnaround must be installed within 150 feet of the furthest point. This will apply to driveways in excess of 150 feet as well.	
CenturyLink	04/19/2024	Received: CenturyLink of Colorado, Inc. d/b/a CENTURYLINK ("CenturyLink") has reviewed the request for the subject vacation and has determined that it has no objections with respect to the areas proposed for vacation as shown and/or described on Exhibit "A", said Exhibit "A" attached hereto and incorporated by this reference. It is the intent and understanding of CenturyLink that this Vacation shall not reduce our rights to any other existing easement or rights we have on this site or in the area. This vacation response is submitted WITH THE STIPULATION that if CenturyLink facilities are found and/or damaged within the vacated area as described, the Applicant will bear the cost of relocation and repair of said facilities.	No response necessary.
Colorado Division of Water Resources	04/16/2024	Received: See attached letter Summary of Comments: CDWR's opinion is that the proposed water supply is adequate and can be provided without causing injury to other water rights.	No Response Necessary
Colorado Geological Survey	05/03/2024	No Comment:	No Response Necessary
Colorado Parks and Wildlife (East DC - Dist 549)		No Response Received:	No Response Necessary
Comcast		No Response Received:	No Response Necessary

Project Name: Haystack Hills
Project File #: SB2024-005
Date Sent: 04/11/2024 **Date Due:** 05/09/2024

Agency	Date Received	Agency Response	Response Resolution
CORE Electric Cooperative	05/02/2024	Received: CORE will require the applicant add dedication easement language to the plat and dedicate a 15-foot utility easement as shown on the markup. In addition, CORE will require the applicant to grant CORE a 15-foot easement for the existing overhead electric facilities prior to replat by separate document.	Applicant has added the requested general purpose utility easement along Haystack Road to the minor development plat. Other requested easements will be added by separate instrument prior to recordation.
Douglas County Conservation District	04/25/2024	Received: See attached letter Summary of Comments: Douglas County Conservation District noted soil conditions that may require alternative construction techniques.	Site specific soil investigations will be required at the time of building permit issuance.
Douglas County Health Department	05/06/2024	Updated 7/30/2024 Onsite Wastewater Treatment Systems (OWTS) - Proposed Subdivision Proper wastewater management promotes effective and responsible water use, protects potable water from contaminants, and provides appropriate collection, treatment, and disposal of waste, which protects public health and the environment. DCHD has no objection to the proposed subdivision being served by Onsite Wastewater Treatment Systems (OWTS), provided the systems are permitted, installed, and operated in compliance with our current OWTS regulation.	No Response Necessary. Applicant provided a soil suitability analysis relative to the use of septic systems on the two new lots. The Health Department will require engineered septic designs and a septic use permit at the time of building permit request.
Douglas County Historic Preservation	05/02/2024	Received: Please see attached comments. Summary of Comments: Upon reviewing the Class I File and Literature Review, the Douglas County Curator has no further comments. Provided recommendations to follow in the event that artifacts are discovered on site.	The standard condition of approval related to discovery of cultural resources has proposed.

Project Name: Haystack Hills
Project File #: SB2024-005
Date Sent: 04/11/2024 **Date Due:** 05/09/2024

Agency	Date Received	Agency Response	Response Resolution
Douglas County Parks and Trails		No Response Received:	No Response Necessary
Douglas County School District RE 1	04/11/2024	Received: See attached letter Summary of Comments: DCSD requests cash-in-lieu fee of $500 per new residential lot prior to recordation of the minor development plat.	Applicant will pay cash-in-lieu fee prior to recordation of the minor development plat.
Engineering Services	05/08/2024	Received: See attached letter Summary of Comments: Requested language regarding the shared access easement and utility easements. Provided information that a DESC Plan will be needed for each lot. Provided information that the shared driveway must be upgraded with the first building permit.	Applicant provided requested easement language and acknowledged requirements. Driveway maintenance agreement will be recorded with the final plat.
Office of Emergency Management	04/11/2024	Received: OEM has no concerns with this project.	No Response Necessary
Open Space and Natural Resources	04/15/2024	No Comment:	No Response Necessary
Rural Water Authority of Douglas County		No Response Received:	No Response Necessary
Sheriff's Office		No Response Received:	No Response Necessary
Sheriff's Office E911		No Response Received:	No Response Necessary
Town of Castle Rock	04/16/2024	No Comment:	No Response Necessary
Wildfire Mitigation		No Response Received:	No Response Necessary
Xcel Energy-Right of Way & Permits	04/11/2024	Received: Public Service Company of Colorado's (PSCo) Right of Way & Permits Referral Desk has reviewed the plan for Haystack Hills and currently has no apparent conflict. As a safety precaution, PSCo would like to remind the developer to call the Utility Notification Center by dialing 811 for utility locates prior to construction.	No response Necessary.


PROJECT AREA
Emerald Dr
Lake Gulch Rd
Lake Gulch Rd
Google Earth
Image © 2024 Airbus
N

HAYSTACK HILLS
MINOR DEVELOPEMENT PLAT
LOCATED IN THE S 1/2 OF SECTION 13, TOWNSHIP 8 SOUTH, RANGE 67 WEST OF THE 6TH P.M., COUNTY OF DOUGLAS, STATE OF COLORADO.
SHEET 1 OF 2
3 RESIDENTIAL LOTS AND 1 R.O.W. TRACT- 17.10 ACRES
SB2024-XXXX

DEDICATION STATEMENT:

The undersigned, being all the owners, mortgagees, beneficiaries of deeds of trust and holders of other interests in the land described herein, have laid out, subdivided and platted said lands into lots, tracts, streets and easements as shown hereon under the name and subdivision of Dykstra Subdivision. The utility easements shown hereon are hereby dedicated for public utilities and cable communication systems and other purposes as shown hereon. The entities responsible for providing the services for which the easements are established are hereby granted the perpetual right of ingress and egress from and to adjacent properties for installation, maintenance and replacement of utility lines and related facilities. Haystack Road is dedicated and conveyed to Douglas County, CO, in fee simple absolute, with marketable title, for public uses and purposes. The utility easements shown hereon are dedicated and conveyed to Douglas County, CO for public uses and purposes.

Owners:

JD Capital LLC

_____

State of Colorado)
) SS.
County of Douglas)

Acknowledged before me this _____ day of _____, 2024, by xxxxxx for JD Capital LLC..

My commission expires: _____

Witness my hand and seal

_____
Notary Public

State of Colorado)
) SS.
County of Douglas)

Acknowledged before me this _____ day of _____, 2024, by Agnes Marie Falconer.

My commission expires: _____

Witness my hand and seal

_____
Notary Public

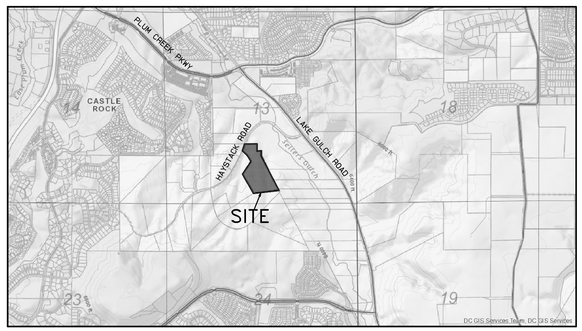
NOTES:

1. Bearings are assumed and based on the consideration that the Southeast line of Described Parcel, bears S25°48'53"E as shown hereon between the identified monuments.
2. The purpose of this replat is to create 3 Lots, and Tract A to add right-of-way for Haystack Road.
3. On-site Wastewater Treatement Systems (OWTS) are required for each lot at time of building permit. Preliminary soils tests indicate that engineered OWTS will most likely be required.

LEGAL DESCRIPTION:

All that part of the South 1/2 of Section 13, Township 8 South, Range 67 West of the 6th Principal Meridian, Douglas County Colorado, described as follows:

Beginning at the Northeast corner of the Southeast 1/4 of the Southwest 1/4 of said Section 13;
Thence Southeasterly along a straight line from the Northeast corner of the Southeast 1/4 of the Southwest 1/4 of Section 13 to the Southeast corner of the Northwest 1/4 of the Northeast 1/4 of Section 24, Township 8 South, Range 67 West of the 6th P.M., a distance of 1075 feet, more or less, to a point which is 1891.39 feet Northwesterly of the Southeast corner of the Northwest 1/4 of the Northeast 1/4 of Section 24 as measured along last described line;
Thence on an angle to the right of 110°44'06", a distance of 689.69 feet;
Thence on an angle to the right of 66°14'58", a distance of 602.38 feet to the True Point of Beginning;
Thence on an angle to the right of 61°00'03" a distance of 425.71 feet; Thence on an angle to the left of 61°19'32" a distance of 173.30 feet; Thence on an angle to the left of 07°19'14" a distance of 61.92 feet;
Thence on an angle to the left of 09°18'47" a distance of 126.17 feet to the centerline of a 60 foot wide roadway easement (Haystack Road);
Thence Northeasterly on an angle to the right of 73°39'16" along said centerline along the arc of a curve to the left a distance of 198.46 feet, said curve has a radius of 654.01 feet, to a point of tangent;
Thence along said tangent, along said centerline a distance of 20 feet to a point on the North line of the South 1/2 of the South 1/2 of the Northeast 1/4 of the Southwest 1/4 of Section 13, which point is 430 feet West of the Northeast corner of the South 1/2 of the South 1/2 of the Northeast 1/4 of the Southwest 1/4 of Section 13; Thence on an angle to the right of 79°30'00" along the North line of the South 1/2 of the South 1/2 of the Northeast 1/4 of the Southwest 1/4 of Section 13 a distance of 325.65 feet; Thence Southerly along a line which is 104.35 feet West of and parallel to the East line of the Northeast 1/4 of the Southwest 1/4 a distance of 208.71 feet;
Thence Easterly and parallel to the North line of the South 1/2 of the South 1/2 of the Northeast 1/4 of the Southwest 1/4 a distance of 104.35 feet to the East line of the Northeast 1/4 of the Southwest 1/4;
Thence Southerly along said East line a distance of 121.70 feet to the Point of Beginning.
County of Douglas, State of Colorado.



VICINITY MAP
SCALE: 1"=2000'

GRAPHIC SCALE 1"=2000'
0 2000 4000 6000

N

APPLICANT INFORMATION:

RYAN DYKSTRA
6665 EAST BETHANY PLACE
DENVER, CO 80224

SUMMARY TABLE

	AREA	PERCENT
LOTS	16.95 AC.	99.1%
RIGHT-OF-WAY	0.15 AC.	0.9%
TOTAL	17.10 AC.	100.0%

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

TITLE VERIFICATION:

We Land Title Guarantee Company do hereby certify that we have examined the title of all land platted hereon and that title to such land is in the dedicator(s) free and clear of all liens, taxes and encumbrances:

Land Title Guarantee Company

By: _____ Date: _____

Title: _____

State of Colorado)
) SS.
County of Douglas)

Acknowledged before me this _____ day of _____, 2022, by

_____ as _____.

My commission expires: _____

Witness my hand and seal

_____
Notary Public

PLANNING COMMISSION:

The minor development final plat SB2023-xxx was reviewed by the Planning Commission on _____.

_____ _____
Planning Director, on behalf of the Planning Commission Date

BOARD OF COUNTY COMMISSIONERS:

This plat was approved for filing by the Board of County Commissioners of Douglas County, CO, on the _____ day of _____, 20____, subject to any conditions specified hereon. Silverheels Drive and utility easements are accepted.

All expenses incurred with respect to improvements for all utility services, paving, grading, landscaping, curbs, gutters, sidewalks, road lighting, road signs, flood protection devices, drainage structures, and all other improvements that may be required shall be the responsibility of the subdivider and not Douglas County.

This acceptance does not guarantee that the soil conditions, subsurface geology, groundwater conditions or flooding conditions of any lot shown hereon are such that a building permit, well permit or sewage disposal permit will be issued.

_____
Chair, Board of Douglas County Commissioners

CLERK AND RECORDER:

STATE OF COLORADO
COUNTY OF DOUGLAS

I hereby certify that this plat was filed in my office on this _____ day of _____, 2024 A.D., at _____ a.m./p.m., and was recorded at Reception Number _____.

_____
Douglas County Clerk and Recorder

SURVEYOR:

I, Darrell E. Roberts, a duly registered Professional Land Surveyor in the State of Colorado, do hereby certify that this plat truly and correctly represents the results of a survey made on xxxx xx, 20xx, by me or under my direct supervision and that all monuments exist as shown hereon; that mathematical closure errors are less than 1:50,000 (second order); and that said plat has been prepared in full compliance with all applicable laws of the State of Colorado dealing with monuments, subdivisions or surveying of land and all applicable provisions of the Douglas County Subdivision Resolution. This certification is based on my knowledge, information, and belief and is not a guaranty or warranty, either express or implied.

I attest the above on this _____ day of _____, 2022.

_____
Darrell E Roberts for and on behalf of David E. Archer & Assoc. Inc.,
Colorado Registered Professional Land Surveyor # 36057

REVISIONS

DAVID E. ARCHER & ASSOCIATES, INC.
LAND DEVELOPMENT CONSULTING
SURVEYING & ENGINEERING
PHONE (303) 688-4642
105 WILCOX ST. CASTLE ROCK, COLORADO 80104

SCALE
DATE 01-05-24
DR'N. DMH CKD.
AP'VD.

TITLE
DYKSTRA SUBDIVISION
MINOR SUBDIVISION PLAT
LOCATED IN SECTION 13, TOWNSHIP 8 SOUTH, RANGE 67 WEST OF THE 6TH P.M., DOUGLAS COUNTY, COLORADO.

CLIENT
RYAN DYKSTRA

Sheet 1 of 2

JOB NUMBER
22-0478

G:\Drawings\2022\22-0478\Plat\Minor Subdivision.pro Mon Jan 29 08:46:00 2024

HAYSTACK HILLS

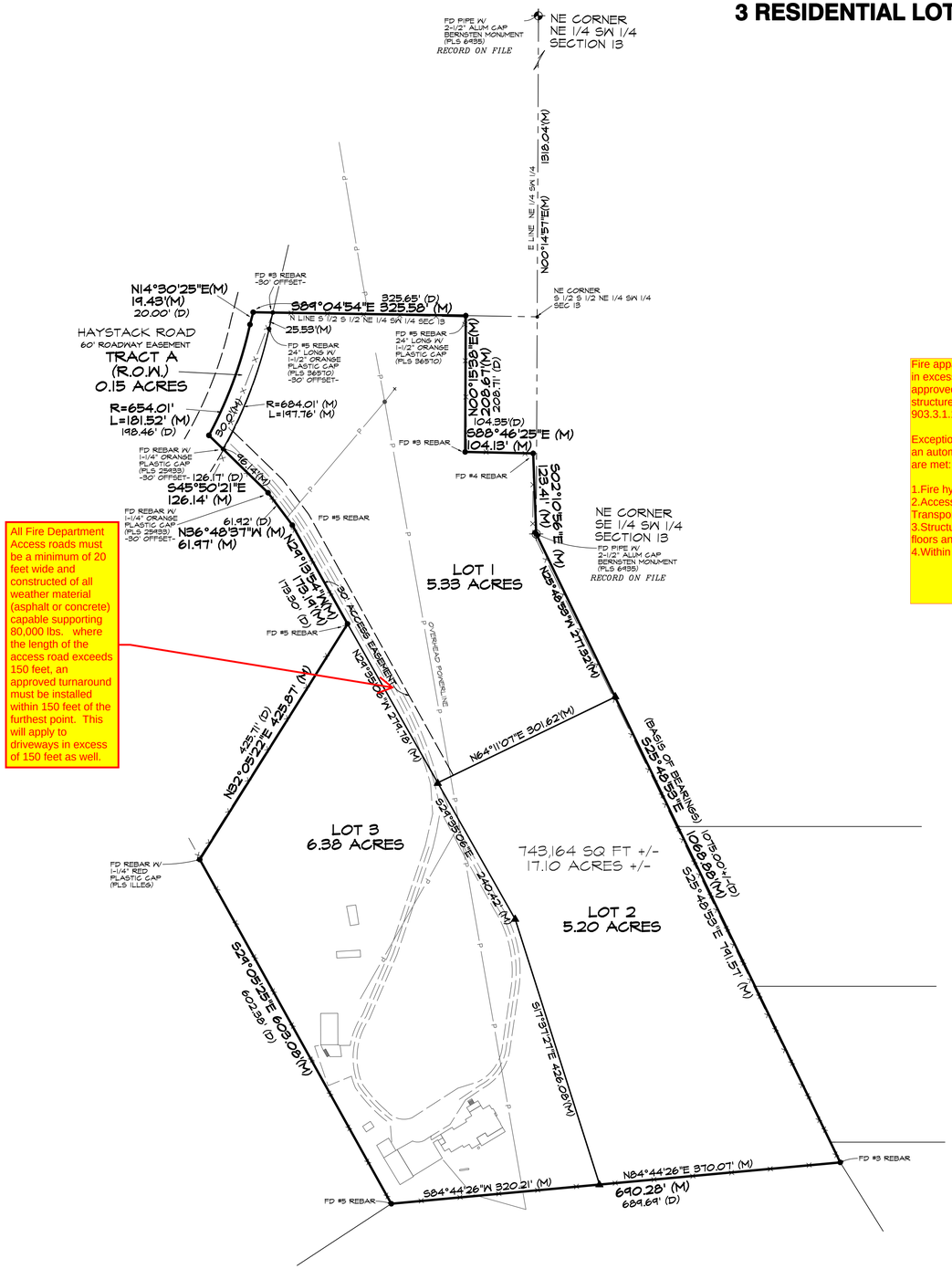
MINOR DEVELOPEMENT PLAT

LOCATED IN THE S 1/2 OF SECTION 13, TOWNSHIP 8 SOUTH, RANGE 67 WEST OF THE 6TH P.M., COUNTY OF DOUGLAS, STATE OF COLORADO.

SHEET 2 OF 2

3 RESIDENTIAL LOTS AND 1 R.O.W. TRACT- 17.10 ACRES

SB2024-XXXX

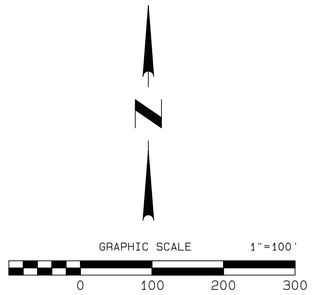


All Fire Department Access roads must be a minimum of 20 feet wide and constructed of all weather material (asphalt or concrete) capable supporting 80,000 lbs. where the length of the access road exceeds 150 feet, an approved turnaround must be installed within 150 feet of the furthest point. This will apply to driveways in excess of 150 feet as well.

Fire apparatus access roads that are dead-ends or cul-de-sacs in excess of 600-feet (182.88 mm) in length shall require an approved automatic sprinkler system to be installed in all structures in accordance with the requirements of Sections 903.3.1.1, 903.3.1.2 or 903.3.1.3.

Exception: The Fire Code Official may waive the requirement of an automatic sprinkler system if all of the following requirements are met:

1.Fire hydrant is on a looped water distribution system; and
2.Access road meets IFC Section 503.2 of the Castle Rock Transportation Design Criteria Manual; and
3.Structures that are ≤ 5,000 total square feet, including all floors and garage; and
4.Within the Standards of Cover benchmark response time.



LEGEND:

- ▲ Set #5 Rebar (24" Long)with 1-1/2" Pink Plastic Cap (PLS 36057)
- ● Found Property Corner as shown.
- Easement as Noted

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

REVISIONS

DAVID E. ARCHER & ASSOCIATES, INC.
LAND DEVELOPMENT CONSULTING
SURVEYING & ENGINEERING
PHONE (303) 688-4642
105 WILCOX ST. CASTLE ROCK, COLORADO 80104

SCALE	1"=100'
DATE	01-05-24
DR'N.	DMH
CK'D.	
AP'VD.	

TITLE: DYKSTRA SUBDIVISION MINOR SUBDIVISION PLAT LOCATED IN SECTION 13, TOWNSHIP 8 SOUTH, RANGE 67 WEST OF THE 6TH P.M., DOUGLAS COUNTY, COLORADO.

CLIENT: RYAN DYKSTRA

Sheet 2 of 2 | JOB NUMBER 22-0478

G:\Drawings\2022\22-0478\Plat\Minor Subdivision.pro Mon Jan 29 08:46:46 2024

4/19/2024

Trevor Bedford, AICP
100 Third Street
Castle Rock, CO 80104

P861607
No Reservations/No Objection

SUBJECT: Request for approval of a development to create three lots at 2808 Haystack RD, Castle Rock, CO.

To Whom It May Concern:

CenturyLink of Colorado, Inc. d/b/a CENTURYLINK ("CenturyLink") has reviewed the request for the subject vacation and has determined that it has no objections with respect to the areas proposed for vacation as shown and/or described on Exhibit "A", said Exhibit "A" attached hereto and incorporated by this reference.

It is the intent and understanding of CenturyLink that this Vacation shall not reduce our rights to any other existing easement or rights we have on this site or in the area.

This vacation response is submitted WITH THE STIPULATION that if CenturyLink facilities are found and/or damaged within the vacated area as described, the Applicant will bear the cost of relocation and repair of said facilities.

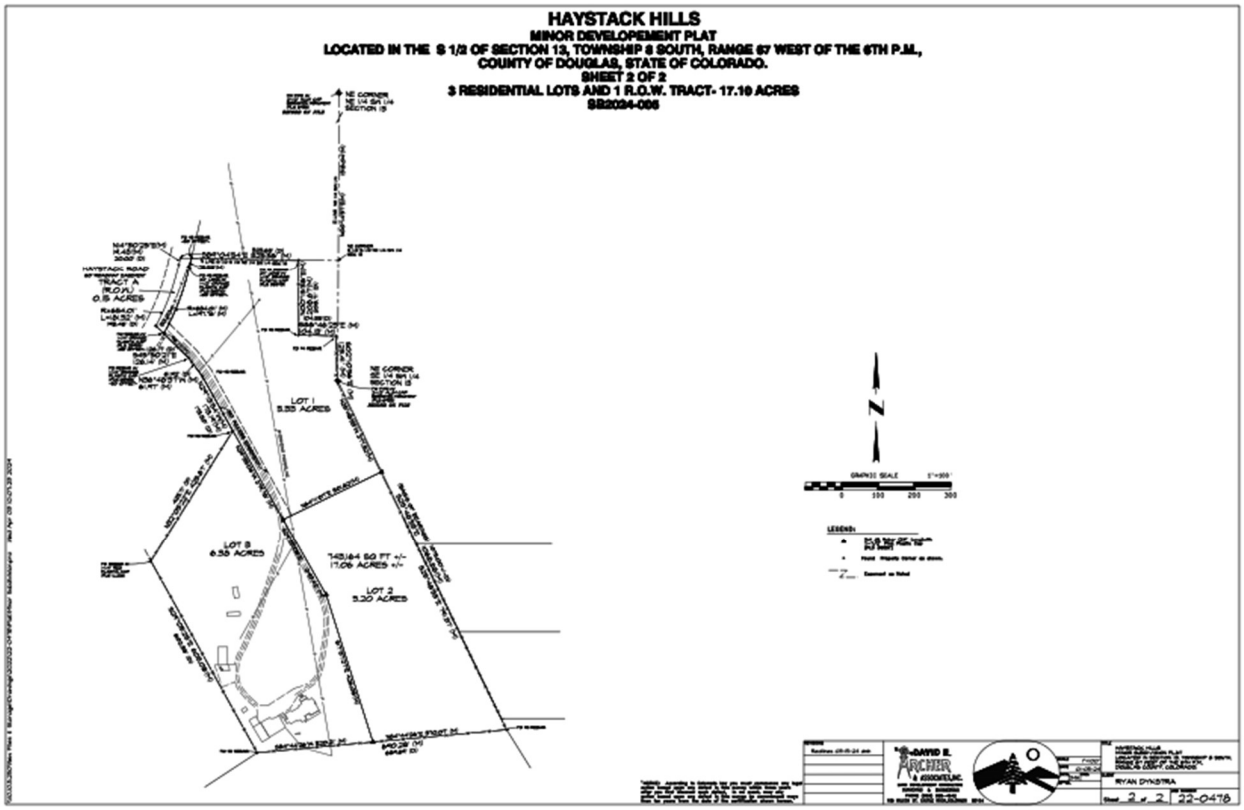
If you have any questions please contact Phil Hackler at (432) 288-08418 or Phil.Hackler@lumen.com.

Sincerely yours,

/s/

CenturyLink Right of Way Team

EXHIBIT A


HAYSTACK HILLS
MINOR DEVELOPEMENT PLAT
LOCATED IN THE S 1/2 OF SECTION 13, TOWNSHIP 8 SOUTH, RANGE 67 WEST OF THE 6TH P.M.,
COUNTY OF DOUGLAS, STATE OF COLORADO.
SHEET 2 OF 2
3 RESIDENTIAL LOTS AND 1 R.O.W. TRACT- 17.19 ACRES
SB2024-005
LOT 1
5.55 ACRES
LOT 2
5.30 ACRES
LOT 3
6.50 ACRES
745144 SQ FT +/-
17.06 ACRES +/-
N
GRAPHIC SCALE
0
100
200
300
LEGEND:
DAVID E. ARCHER & ASSOCIATES, INC.
RYAN DYKSTRA
Sheet 2 of 2
22-0476

COLORADO
Division of Water Resources
Department of Natural Resources

April 16, 2024

Trevor Bedford
Douglas County Planning Department
Transmission via email: tbedford@douglas.co.us

RE: Haystack Hills Subdivision
Case No. SB2024-005
Part of the S ½, Section 13, T8S, R67W, 6th P.M.
Water Division 1, Water District 8

Dear Trevor Bedford,

We have reviewed the submittal documents related to Haystack Hills Subdivision, concerning the above referenced proposal to subdivide approximately 17.06 acres into three single-family residential lots of 5.33 acres (Lot 1), 5.20 acres (Lot 2), and 6.38 acres (Lot 3).

Water Supply Demand

Based on a March 15, 2024 Water Resource Report from James J. Petrock of Hayes Poznanovic Korver LLC ("Report") the estimated annual water requirements totals 0.6 acre-feet/year/lot for in-house use for two single family homes, 0.4 acre-feet/year/lot for irrigation of up to 8,000 square-feet per lot and 0.1 acre-feet/year/lot for the watering of 8 large domestic animals, totaling 1.1 acre-feet/year/lot. The total annual demand for the subdivision would be 3.3 acre-feet.

Source of Water Supply

The proposed water source is individual on lot wells constructed in the nontributary Lower Dawson aquifer operating pursuant to the decreed in case no. 2023CW3023. The decree in case no. 2023CW3023 quantified the amount of water underlying the subject 17-acre parcel. The following amounts of water were determined to be available underlying the 17-acre parcel:

Aquifer	Annual amount available for 17 acres based on 100 year allocation approach (acre-feet)	Total Amount (acre-feet)	Type
Lower Dawson	3.4	340	Nontributary
Denver	9.39	939	Nontributary
Arapahoe	9.68	968	Nontributary
Laramie-Fox Hills	3.82	382	Nontributary

The decree in case no. 2023CW3023 allows for the groundwater to be used for domestic, including in-house use, commercial, irrigation, livestock watering, fire protection, augmentation and replacement purposes, including storage.

There is an existing well on the property operating under permit no. 42197. This well is constructed in the nontributary Denver aquifer and is permitted for domestic use for an annual appropriation of 1 acre-foot. Well permit no. 42197 appears to be located on proposed Lot 3

and according to the decree in case no. 2023CW3023 will continue to be operated under its existing permit. According to the Report well permit no. 42197 is not proposed to be used for any of the proposed lots, however it will be sold with the lot the well is located on.

The proposed source of water for this subdivision is a bedrock aquifer in the Denver Basin. The State Engineer's Office does not have evidence regarding the length of time for which this source will be a physically and economically viable source of water. According to 37-90-137(4)(b)(I), C.R.S., "Permits issued pursuant to this subsection (4) shall allow withdrawals on the basis of an aquifer life of one hundred years." Based on this **allocation** approach, the annual amounts of water decreed in case no. 2023CW3023 are equal to one percent of the total amount, as determined by rules 8.A and 8.B of the Statewide Nontributary Ground Water Rules, 2 CCR 402-7. Therefore, the water may be withdrawn in those annual amounts for a maximum of 100 years.

Applications for on lot well permits, submitted by entities other than the water court Applicant in case no. 2023CW3023 (JD Capital, LLC) must include evidence that the Applicant has acquired the right to the portion of the water being requested on the application.

Additional Comments

The Applicant should be aware that any proposed detention pond for this project must meet the requirements of a "storm water detention and infiltration facility" as defined in section 37-92-602(8), C.R.S., otherwise the structure may be subject to administration by this office. The Applicant should review DWR's *Administrative Statement Regarding the Management of Storm Water Detention Facilities and Post-Wildland Fire Facilities in Colorado*, attached, to ensure that the notification, construction and operation of the proposed structure meets statutory and administrative requirements. The Applicant is encouraged to use *Colorado Stormwater Detention and Infiltration Facility Notification Portal* to meet the notification requirements, located at https://maperture.digitaldataservices.com/gvh/?viewer=cswdif.

State Engineer's Office Opinion

Based upon the above and pursuant to Section 30-28-136(1)(h)(I), C.R.S., it is our opinion that the proposed water supply is adequate and can be provided without causing injury to decreed water rights.

Our opinion that the water supply is **adequate** is based on our determination that the amount of water required annually to serve the subdivision is currently physically available, based on current estimated aquifer conditions.

Our opinion that the water supply can be **provided without causing injury** is based on our determination that the amount of water that is legally available on an annual basis, according to the statutory **allocation** approach, for the proposed uses is greater than the annual amount of water required to supply existing water commitments and the demands of the proposed subdivision.

Our opinion is qualified by the following:

The Division 1 Water Court has retained jurisdiction over the final amount of water available pursuant to the above-referenced decree, pending actual geophysical data from the aquifer.

The amounts of water in the Denver Basin aquifer, and identified in this letter, are calculated based on estimated current aquifer conditions. The source of water is from a

non-renewable aquifer, the allocations of which are based on a 100 year aquifer life. The county should be aware that the economic life of a water supply based on wells in a given Denver Basin aquifer may be less than the 100 years used for allocation due to anticipated water level declines. We recommend that the county determine whether it is appropriate to require development of renewable water resources for this subdivision to provide for a long-term water supply.

Should you or the Applicant have any questions, please contact me at this office at 303-866-3581 x8246 or ioana.comaniciu@state.co.us

Sincerely,

Ioana Comaniciu, P.E.
Water Resource Engineer

Ec: Subdivision file: 31294
File permit no. 42197

HAYSTACK HILLS
MINOR DEVELOPEMENT PLAT
LOCATED IN THE S 1/2 OF SECTION 13, TOWNSHIP 8 SOUTH, RANGE 67 WEST OF THE 6TH P.M., COUNTY OF DOUGLAS, STATE OF COLORADO.
SHEET 1 OF 2
3 RESIDENTIAL LOTS AND 1 R.O.W. TRACT- 17.06 ACRES
SB2024-005

DEDICATION STATEMENT:

The undersigned, being all the owners, mortgagees, beneficiaries of deeds of trust and holders of other interests in the land described herein, have laid out, subdivided and platted said lands into lots, tracts, streets and easements as shown hereon under the name and subdivision of Haystack Hills. Tract A is dedicated and conveyed to Douglas County, Colorado, in fee simple absolute, with marketable title, for public uses and purposes.

OWNER:

JD Capital LLC, A Colorado Limited Liability Company.

_____
Ryan Dystra Member

State of Colorado)
) SS.
County of Douglas)

Acknowledged before me this _____ day of _____, 2024, by Ryan Dykstra for JD Capital LLC. A Colorado Limited Liability Company.

My commission expires: _____

Witness my hand and seal

_____
Notary Public

NOTES:

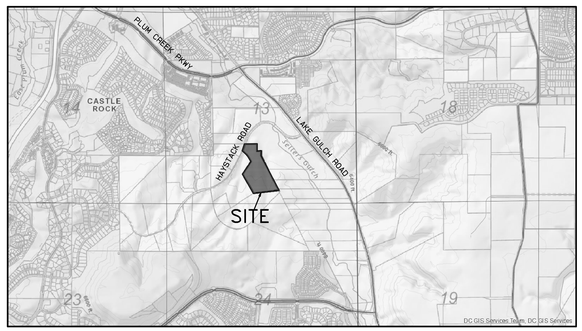
1. Bearings are assumed and based on the consideration that the Southeast line of Described Parcel, bears S25°48'53"E as shown hereon between the identified monuments.
2. The purpose of this replat is to create 3 Lots, and Tract A to add right-of-way for Haystack Road.
3. On-site Wastewater Treatement Systems (OWTS) are required for each lot at time of building permit. Preliminary soils tests indicate that engineered OWTS will most likely be required.
4. Maintenance responsibiliities for the Access Easement will be provided by a maintenance agreement.
5. Tract A is dedicated as right-of-way to Douglas County.

ADD DEDICATION OF UTILITY EASEMENTS TO CONFORM WITH SUBDIVISION REQUIREMENTS

LEGAL DESCRIPTION:

All that part of the South 1/2 of Section 13, Township 8 South, Range 67 West of the 6th Principal Meridian, Douglas County Colorado, described as follows:

Beginning at the Northeast corner of the Southeast 1/4 of the Southwest 1/4 of said Section 13;
Thence Southeasterly along a straight line from the Northeast corner of the Southeast 1/4 of the Southwest 1/4 of Section 13 to the Southeast corner of the Northwest 1/4 of the Northeast 1/4 of Section 24, Township 8 South, Range 67 West of the 6th P.M., a distance of 1075 feet, more or less, to a point which is 1891.39 feet Northwesterly of the Southeast corner of the Northwest 1/4 of the Northeast 1/4 of Section 24 as measured along last described line;
Thence on an angle to the right of 110°44'06", a distance of 689.69 feet;
Thence on an angle to the right of 66°14'58", a distance of 602.38 feet to the True Point of Beginning;
Thence on an angle to the right of 61°00'03" a distance of 425.71 feet; Thence on an angle to the left of 61°19'32" a distance of 173.30 feet; Thence on an angle to the left of 07°19'14" a distance of 61.92 feet;
Thence on an angle to the left of 09°18'47" a distance of 126.17 feet to the centerline of a 60 foot wide roadway easement (Haystack Road);
Thence Northeasterly on an angle to the right of 73°39'16" along said centerline along the arc of a curve to the left a distance of 198.46 feet, said curve has a radius of 654.01 feet, to a point of tangent;
Thence along said tangent, along said centerline a distance of 20 feet to a point on the North line of the South 1/2 of the South 1/2 of the Northeast 1/4 of the Southwest 1/4 of Section 13, which point is 430 feet West of the Northeast corner of the South 1/2 of the South 1/2 of the Northeast 1/4 of the Southwest 1/4 of Section 13; Thence on an angle to the right of 79°30'00" along the North line of the South 1/2 of the South 1/2 of the Northeast 1/4 of the Southwest 1/4 of Section 13 a distance of 325.65 feet; Thence Southerly along a line which is 104.35 feet West of and parallel to the East line of the Northeast 1/4 of the Southwest 1/4 a distance of 208.71 feet;
Thence Easterly and parallel to the North line of the South 1/2 of the South 1/2 of the Northeast 1/4 of the Southwest 1/4 a distance of 104.35 feet to the East line of the Northeast 1/4 of the Southwest 1/4;
Thence Southerly along said East line a distance of 121.70 feet to the Point of Beginning.
County of Douglas, State of Colorado.



VICINITY MAP
SCALE: 1"=2000'

GRAPHIC SCALE 1"=2000'
0 2000 4000 6000

N

APPLICANT INFORMATION:

RYAN DYKSTRA
6665 EAST BETHANY PLACE
DENVER, CO 80224

SUMMARY TABLE

	AREA	PERCENT
LOTS	16.95 AC.	99.1%
RIGHT-OF-WAY	0.15 AC.	0.9%
TOTAL	17.06 AC.	100.0%

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

TITLE VERIFICATION:

We Land Title Guarantee Company do hereby certify that we have examined the title of all land platted hereon and that title to such land is in the dedicator(s) free and clear of all liens, taxes and encumbrances:

Land Title Guarantee Company

By: _____ Date: _____

Title: _____

State of Colorado)
) SS.
County of Douglas)

Acknowledged before me this _____ day of _____, 202_, by _____ as _____.

My commission expires: _____

Witness my hand and seal

_____
Notary Public

PLANNING COMMISSION:

The minor development final plat SB2023-005 was reviewed by the Planning Commission on _____.

_____ _____
Planning Director, on behalf of the Planning Commission Date

BOARD OF COUNTY COMMISSIONERS:

This plat was approved for filing by the Board of County Commissioners of Douglas County, CO, on the _____ day of _____, 20____, subject to any conditions specified hereon. Tract A is accepted.

All expenses incurred with respect to improvements for all utility services, paving, grading, landscaping, curbs, gutters, sidewalks, road lighting, road signs, flood protection devices, drainage structures, and all other improvements that may be required shall be the responsibility of the subdivider and not Douglas County.

This acceptance does not guarantee that the soil conditions, subsurface geology, groundwater conditions or flooding conditions of any lot shown hereon are such that a building permit, well permit or sewage disposal permit will be issued.

_____
Chair, Board of Douglas County Commissioners

CLERK AND RECORDER:

STATE OF COLORADO
COUNTY OF DOUGLAS

I hereby certify that this plat was filed in my office on this _____ day of _____, 2024 A.D., at _____ a.m./p.m., and was recorded at Reception Number _____.

_____
Douglas County Clerk and Recorder

SURVEYOR:

I, Darrell E. Roberts, a duly registered Professional Land Surveyor in the State of Colorado, do hereby certify that this plat truly and correctly represents the results of a survey made on November 11, 2022, and I have reviewed all data associated with this survey of the hereon described property , Douglas County , Colorado. This survey has been reviewed and accepted by myself as being under my responsible charge at this time and that all monuments exist as shown hereon; that mathematical closure errors are less than 1:50,000 (second order); and that said plat has been prepared in full compliance with all applicable laws of the State of Colorado dealing with monuments, subdivisions or surveying of land and all applicable provisions of the Douglas County Subdivision Resolution. This certification is based on my knowledge, information, and belief and is not a guaranty or warranty, either express or implied.

I attest the above on this _____ day of _____, 202_.

_____
Darrell E Roberts for and on behalf of David E. Archer & Assoc. Inc.,
Colorado Registered Professional Land Surveyor # 36057

REVISIONS
Redlines 03-15-24 dmh

DAVID E. ARCHER & ASSOCIATES, INC.
LAND DEVELOPMENT CONSULTING
SURVEYING & ENGINEERING
PHONE (303) 688-4642
105 WILCOX ST. CASTLE ROCK, COLORADO 80104

SCALE
DATE 01-05-24
DR'N. DMH CKD.
AP'VD.

TITLE
HAYSTACK HILLS
MINOR SUBDIVISION PLAT
LOCATED IN SECTION 13, TOWNSHIP 8 SOUTH, RANGE 67 WEST OF THE 6TH P.M., DOUGLAS COUNTY, COLORADO.

CLIENT
RYAN DYKSTRA

Sheet 1 of 2

JOB NUMBER
22-0478

\\10.10.5.250\New Files & Storage\Drawings\2022\22-0478\Plat\Minor Subdivision.pro Wed Apr 03 10:15:24 2024

HAYSTACK HILLS

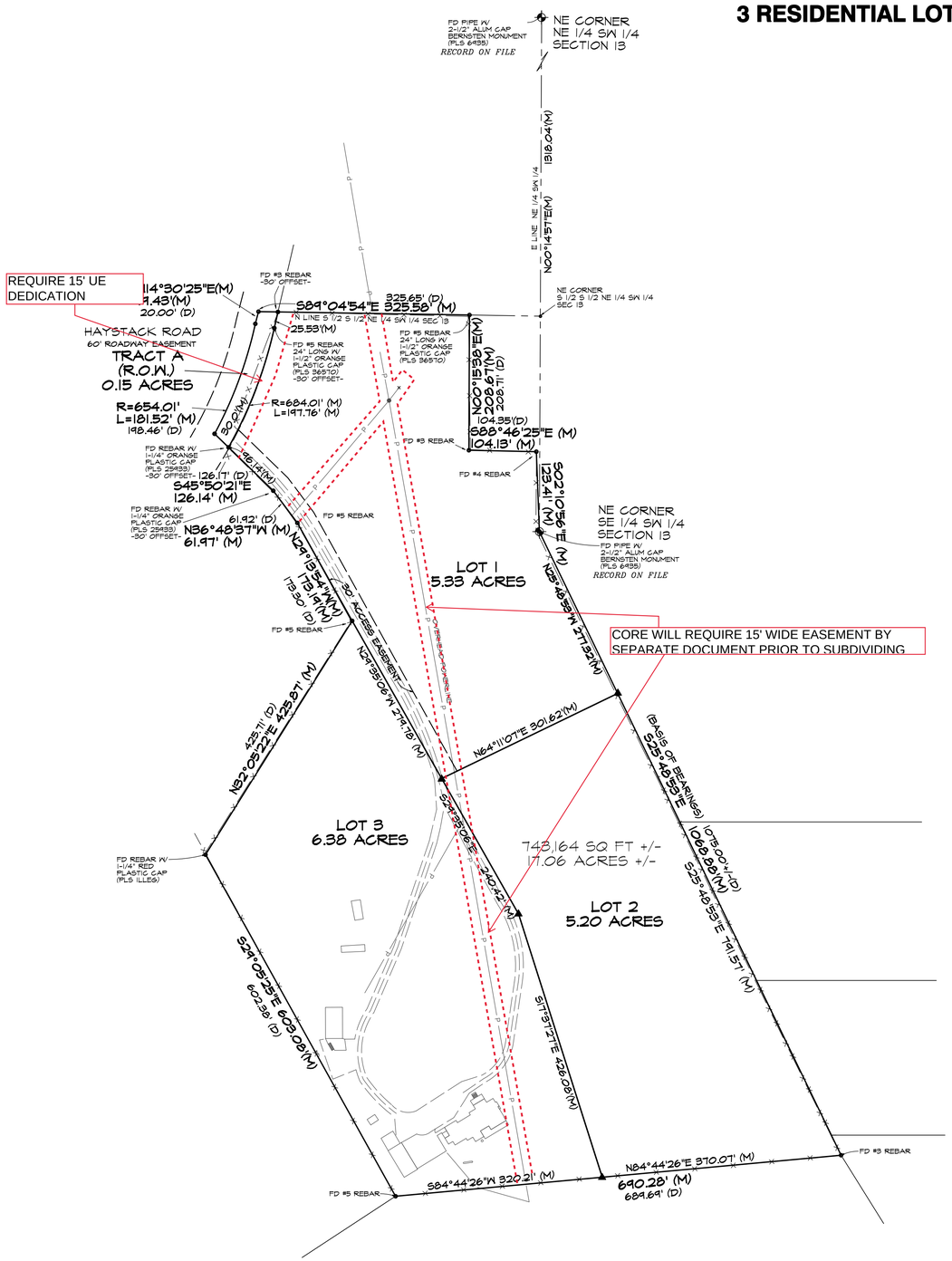
MINOR DEVELOPEMENT PLAT

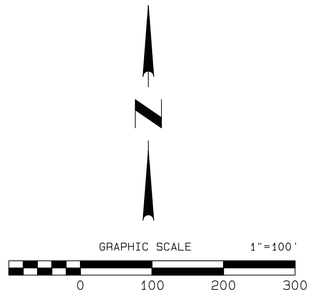
LOCATED IN THE S 1/2 OF SECTION 13, TOWNSHIP 8 SOUTH, RANGE 67 WEST OF THE 6TH P.M., COUNTY OF DOUGLAS, STATE OF COLORADO.

SHEET 2 OF 2

3 RESIDENTIAL LOTS AND 1 R.O.W. TRACT- 17.10 ACRES

SB2024-005





LEGEND:

- ▲ Set #5 Rebar (24" Long)with 1-1/2" Pink Plastic Cap (PLS 36057)
- ● Found Property Corner as shown.
- —Z— Easement as Noted

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

REVISIONS
Redlines 03-15-24 dmh

DAVID E. ARCHER & ASSOCIATES, INC.
LAND DEVELOPMENT CONSULTING
SURVEYING & ENGINEERING
PHONE (303) 688-4642
105 WILCOX ST. CASTLE ROCK, COLORADO 80104

SCALE	1"=100'
DATE	01-05-24
DR'N. DMH	CKD.
AP'VD.	

TITLE: HAYSTACK HILLS MINOR SUBDIVISION PLAT LOCATED IN SECTION 13, TOWNSHIP 8 SOUTH, RANGE 67 WEST OF THE 6TH P.M., DOUGLAS COUNTY, COLORADO.

CLIENT: RYAN DYKSTRA

Sheet 2 of 2 | JOB NUMBER 22-0478

\\10.10.5.250\New Files 4 Storage\Drawings\2022\22-0478\Plat\Minor Subdivision.pro Wed Apr 03 10:01:23 2024

DOUGLAS COUNTY
COLORADO

www.douglas.co.us

Department of Community Development
Planning Services

REFERRAL RESPONSE REQUEST

Date Sent: April 11, 2024 Comments due by: May 9, 2024

Project Name:	Haystack Hills
Project File #:	SB2024-005
Project Summary:	This is a request for a minor development to create three lots on approximately 17.06 acres. The property is zoned Rural Residential and is located on the south side of Haystack Road, approximately 1,500 feet west of its intersection with Lake Gulch Road. The lots are proposed to be 5.33 acres, 5.20 acres, and 6.38 acres in size.

Information on the identified development proposal located in Douglas County is enclosed. Please review and comment in the space provided.

☐	No Comment	
☐	Please be advised of the following concerns:	
X☐	See letter attached for detail.	
Agency:	Douglas County Conservation District	**Phone #:** 303 218 2622
Your Name:	David Shohet, President	**Your Signature:** David Shohet
	(please print)	**Date:** 4/22/2024

Agencies should be advised that failure to submit written comments prior to the due date, or to obtain the applicant's written approval of an extension, will result in written comments being accepted for informational purposes only.

Sincerely,

Trevor Bedford, Project Planner

Enclosures

100 Third Street, Castle Rock, Colorado 80104 · 303.660.7460 · Fax 303.660.9550

DOUGLAS
—CONSERVES—
DOUGLAS COUNTY CONSERVATION DISTRICT
PO Box 688 / 7519A E. Hwy 86 Franktown, CO 80116 / Phone 303-218-2622

DATE: 4/16/24

RE: SB2024-005 Haystack Hills

According to U.S.D.A. Natural Resources Conservation Service (NRCS) soils survey, soils at Haystack Hills, hereafter referred to as "on-site," are somewhat limited to very limited for dwellings with (page 29) and without basements (p 33) due to flooding, shrink-swell, slope, large stones, and depth to hard bedrock, and very limited for small commercial buildings (p 37) due to flooding, slope, large stones, and shrink-swell. Due to the limitations on the above soils on the site, alternatives to mitigate the limitations of the soil should be included in the engineering design or construction techniques.

According to NRCS soils survey, soils on-site are somewhat limited to very limited for streets and roads (p 29) due to slope, unstable excavation walls, depth to saturated zone, depth to hard bedrock, large stones, and flooding, and somewhat limited to very limited for shallow excavations (p 33) due to frost action, slope, large stones, unstable excavation walls, depth to saturated zone, depth to hard bedrock, and flooding. Due to the limitations on the above soils on the site, alternatives to mitigate the limitations of the soil should be included in the engineering design or construction techniques.

According to NRCS soils survey, soils on-site are very limited for septic tanks and absorption fields (p 42) due to slow water movement, depth to bedrock, slope, flooding, seepage, and filtering capacity. Due to the limitations on the above soils on the site, alternatives to mitigate the limitations of the soil should be included in the engineering design or construction techniques.

Topsoil should be stripped to a depth of 6 inches and all stockpiles should have side slopes no steeper than 3:1 and seeded. All disturbed areas should be seeded and mulched with weed free hay mulch at 4,000 lbs/acre. All disturbed areas should be reseeded between the planting dates of Nov. 1-April 30. Grass seed should be drilled at a depth of ¼ to ½ inch deep and if broadcasted, double the rate.

The Douglas County Conservation District recommends disturbed land be revegetated within 45 days of disturbance. Recommended reseeding dates are November 1 to May 1, when soil is not frozen.

DOUGLAS
—CONSERVES—
DOUGLAS COUNTY CONSERVATION DISTRICT
PO Box 688 / 7519A E. Hwy 86 Franktown, CO 80116 / Phone 303-218-2622

The Conservation District recommends using a phased grading approach. By limiting the area being graded to 15 acres or less and seeding with native grasses the land area disturbed is minimized. The development site is 17.06 acres.

There is no Integrated Noxious Weed Control plan and it is recommended that an integrated weed management program be reviewed and approved by the Douglas County Weed Inspector and/or Weed Advisory board, the County Extension Agent, NRCS, or a qualified weed management professional prior to the land use authority approval.

Vehicle tracking control stations need to be installed at all entrance and exit points on the site. The station should consist of a pad of 3 to 6-inch rock or a vehicle control pad/mat to strip mud from tires prior to vehicles leaving the construction site to prevent spreading of noxious weeds.

The channels of many of the major streams are not stable and undergo substantial shifts in alignment during flood events. Upstream development increases the magnitude and frequency of local flooding. Floods that exceed the computed 100-year storm do regularly occur. The Conservation District does not support development proposals that are located in or near drainages or development that disturbs wetlands.

Silt fences or other forms of erosion barriers need to be planned and installed as a temporary sediment control device used on construction sites to protect water quality.

The Douglas County Conservation District strongly recommends that Low Impact Development (LID) techniques be implemented for economic and conservation benefits.

Thank you for the opportunity to review this project. Direct any questions to the District Manager, at Admin@DouglasConserves.org or (303) 218 – 2622.

United States Department of Agriculture

NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Castle Rock Area, Colorado

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require

alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

Contents

How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

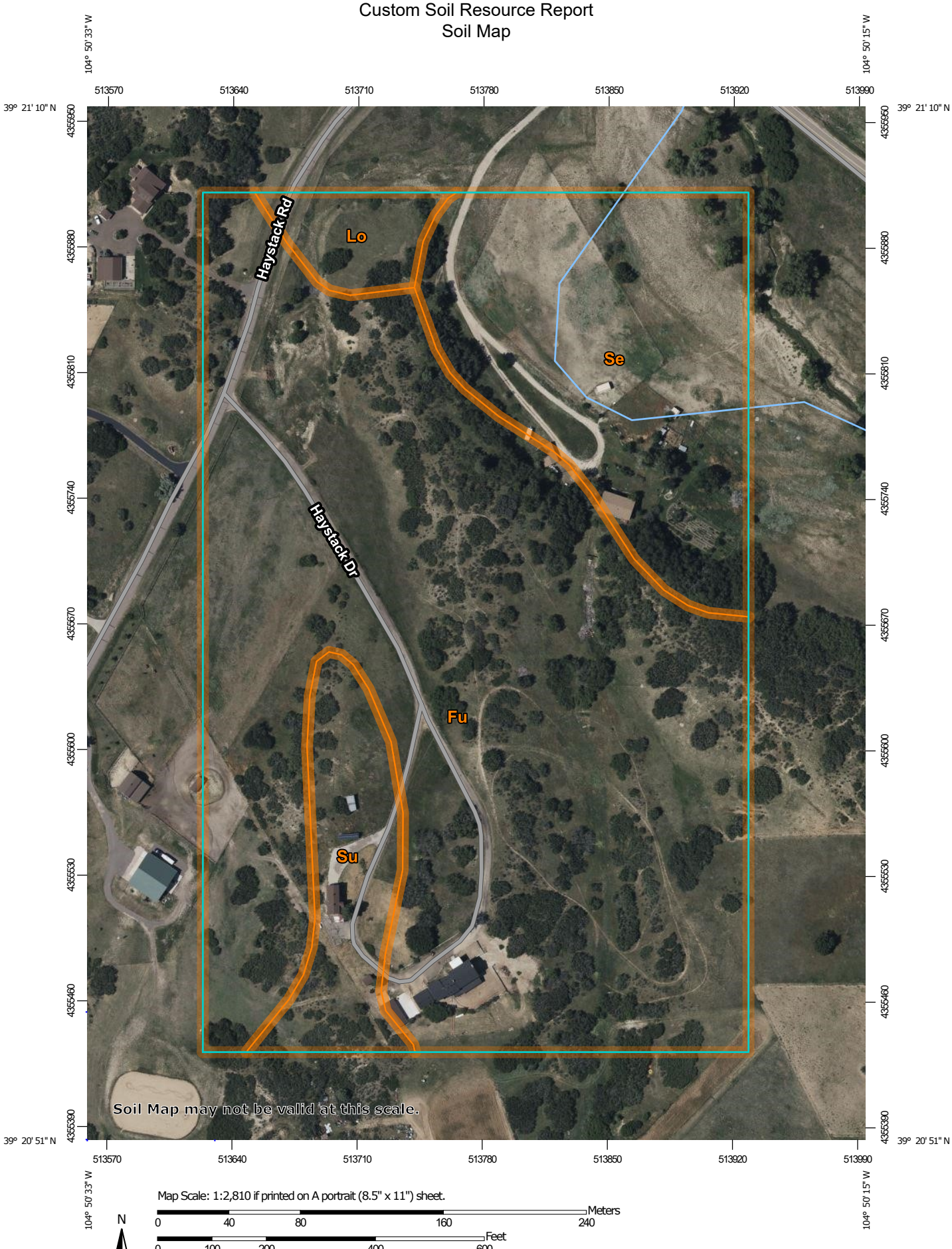
Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.


104° 50' 33" W
104° 50' 15" W
513570
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513710
513780
513850
513920
513990
39° 21' 10" N
39° 20' 51" N
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Soil Map may not be valid at this scale.
Map Scale: 1:2,810 if printed on A portrait (8.5" x 11") sheet.
N
Meters
0 40 80 160 240
Feet
0 100 200 400 600
Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 13N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Castle Rock Area, Colorado
Survey Area Data: Version 16, Aug 24, 2023

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Mar 1, 2023—Sep 1, 2023

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

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
Fu	Fondis-Kutch association	25.0	68.8%
Lo	Loamy alluvial land	1.1	2.9%
Se	Sandy wet alluvial land	7.6	20.9%
Su	Stony rough land	2.6	7.3%
Totals for Area of Interest		**36.3**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The

delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Castle Rock Area, Colorado

Fu—Fondis-Kutch association

Map Unit Setting

National map unit symbol: jqyq
Elevation: 5,500 to 6,800 feet
Mean annual precipitation: 15 to 19 inches
Mean annual air temperature: 47 to 50 degrees F
Frost-free period: 120 to 135 days
Farmland classification: Not prime farmland

Map Unit Composition

Fondis and similar soils: 50 percent
Kutch and similar soils: 35 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Fondis

Setting

Landform: Valley sides, draws
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Eolian deposits over coarse-silty outwash derived from arkose

Typical profile

H1 - 0 to 7 inches: loam
H2 - 7 to 24 inches: clay
H3 - 24 to 60 inches: sandy clay loam

Properties and qualities

Slope: 5 to 15 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 15 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: High (about 9.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: C
Ecological site: R049XB208CO - Clayey Foothill
Hydric soil rating: No

Description of Kutch

Setting

Down-slope shape: Linear

Across-slope shape: Linear
Parent material: Fine-textured residuum weathered from calcareous shale

Typical profile

H1 - 0 to 6 inches: sandy loam
H2 - 6 to 32 inches: clay
H3 - 32 to 36 inches: weathered bedrock

Properties and qualities

Slope: 5 to 40 percent
Depth to restrictive feature: 20 to 40 inches to paralithic bedrock
Drainage class: Well drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 15 percent
Gypsum, maximum content: 2 percent
Maximum salinity: Nonsaline to slightly saline (0.0 to 4.0 mmhos/cm)
Available water supply, 0 to 60 inches: Low (about 5.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: D
Ecological site: R049XB208CO - Clayey Foothill
Hydric soil rating: No

Minor Components

Bresser

Percent of map unit: 5 percent
Hydric soil rating: No

Newlin

Percent of map unit: 5 percent
Hydric soil rating: No

Hilly gravelly land

Percent of map unit: 4 percent
Hydric soil rating: No

Aquic haplustolls

Percent of map unit: 1 percent
Landform: Swales
Hydric soil rating: Yes

Lo—Loamy alluvial land

Map Unit Setting

National map unit symbol: jqzb
Elevation: 7,000 to 8,000 feet
Mean annual precipitation: 17 to 19 inches
Mean annual air temperature: 44 to 46 degrees F
Frost-free period: 115 to 120 days
Farmland classification: Not prime farmland

Map Unit Composition

Loamy alluvial land: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Loamy Alluvial Land

Setting

Landform: Flood plains, swales
Down-slope shape: Linear
Across-slope shape: Linear

Typical profile

H1 - 0 to 20 inches: sandy loam
H2 - 20 to 40 inches: stratified loamy sand to clay loam
H3 - 40 to 60 inches: sand and gravel

Properties and qualities

Slope: 1 to 5 percent
Drainage class: Well drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.20 to 6.00 in/hr)
Depth to water table: About 48 to 72 inches
Frequency of flooding: Frequent
Calcium carbonate, maximum content: 5 percent
Maximum salinity: Nonsaline to slightly saline (0.0 to 4.0 mmhos/cm)
Available water supply, 0 to 60 inches: Moderate (about 6.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4w
Hydrologic Soil Group: C
Ecological site: R049XY036CO - Overflow
Hydric soil rating: No

Minor Components

Sampson
Percent of map unit: 7 percent
Hydric soil rating: No

Bresser
Percent of map unit: 7 percent
Hydric soil rating: No

Sandy alluvial land
Percent of map unit: 5 percent

Fluvaquentic haplustolls
Percent of map unit: 1 percent
Landform: Terraces
Hydric soil rating: Yes

Se—Sandy wet alluvial land

Map Unit Setting
National map unit symbol: jr04
Elevation: 5,500 to 6,600 feet
Mean annual precipitation: 15 to 19 inches
Mean annual air temperature: 48 to 50 degrees F
Frost-free period: 120 to 135 days
Farmland classification: Not prime farmland

Map Unit Composition
Sandy wet alluvial land: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Sandy Wet Alluvial Land

Setting
Landform: Drainageways, flood plains
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Weathered alluvium derived from arkose

Typical profile
H1 - 0 to 6 inches: coarse sand
H2 - 6 to 60 inches: stratified coarse sand to sandy loam

Properties and qualities
Slope: 1 to 4 percent
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): High to very high (6.00 to 20.00 in/hr)
Depth to water table: About 0 to 24 inches

Frequency of flooding: Frequent
Available water supply, 0 to 60 inches: Very low (about 2.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8w
Hydrologic Soil Group: D
Hydric soil rating: No

Minor Components

Loamy wet alluvial land

Percent of map unit: 9 percent
Hydric soil rating: No

Sandy alluvial land

Percent of map unit: 9 percent
Hydric soil rating: No

Fluventic haplaquolls

Percent of map unit: 2 percent
Landform: Terraces
Hydric soil rating: Yes

Su—Stony rough land

Map Unit Setting

National map unit symbol: jr0b
Elevation: 5,500 to 6,600 feet
Mean annual precipitation: 15 to 19 inches
Mean annual air temperature: 49 to 51 degrees F
Frost-free period: 120 to 135 days
Farmland classification: Not prime farmland

Map Unit Composition

Stony rough land: 75 percent
Minor components: 25 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Stony Rough Land

Setting

Landform: Hills, mesas, knobs
Landform position (three-dimensional): Side slope, base slope, crest
Down-slope shape: Linear
Across-slope shape: Linear

Typical profile

H1 - 0 to 6 inches: flaggy loam
H2 - 6 to 30 inches: flaggy clay loam
H3 - 30 to 34 inches: unweathered bedrock

Properties and qualities

Slope: 5 to 40 percent
Depth to restrictive feature: 20 to 40 inches to lithic bedrock
Drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Calcium carbonate, maximum content: 2 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Low (about 3.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: D
Ecological site: R048AY237CO - Stony Loam
Hydric soil rating: No

Minor Components

Fondis

Percent of map unit: 10 percent
Hydric soil rating: No

Crowfoot

Percent of map unit: 5 percent
Hydric soil rating: No

Peyton

Percent of map unit: 5 percent
Hydric soil rating: No

Pring

Percent of map unit: 5 percent
Hydric soil rating: No

Soil Information for All Uses

Suitabilities and Limitations for Use

The Suitabilities and Limitations for Use section includes various soil interpretations displayed as thematic maps with a summary table for the soil map units in the selected area of interest. A single value or rating for each map unit is generated by aggregating the interpretive ratings of individual map unit components. This aggregation process is defined for each interpretation.

Building Site Development

Building site development interpretations are designed to be used as tools for evaluating soil suitability and identifying soil limitations for various construction purposes. As part of the interpretation process, the rating applies to each soil in its described condition and does not consider present land use. Example interpretations can include corrosion of concrete and steel, shallow excavations, dwellings with and without basements, small commercial buildings, local roads and streets, and lawns and landscaping.

Dwellings With Basements

ENG - Engineering

Dwellings are single-family houses of three stories or less. For dwellings with basements, the foundation is assumed to consist of spread footings of reinforced concrete built on undisturbed soil at a depth of about 7 feet.

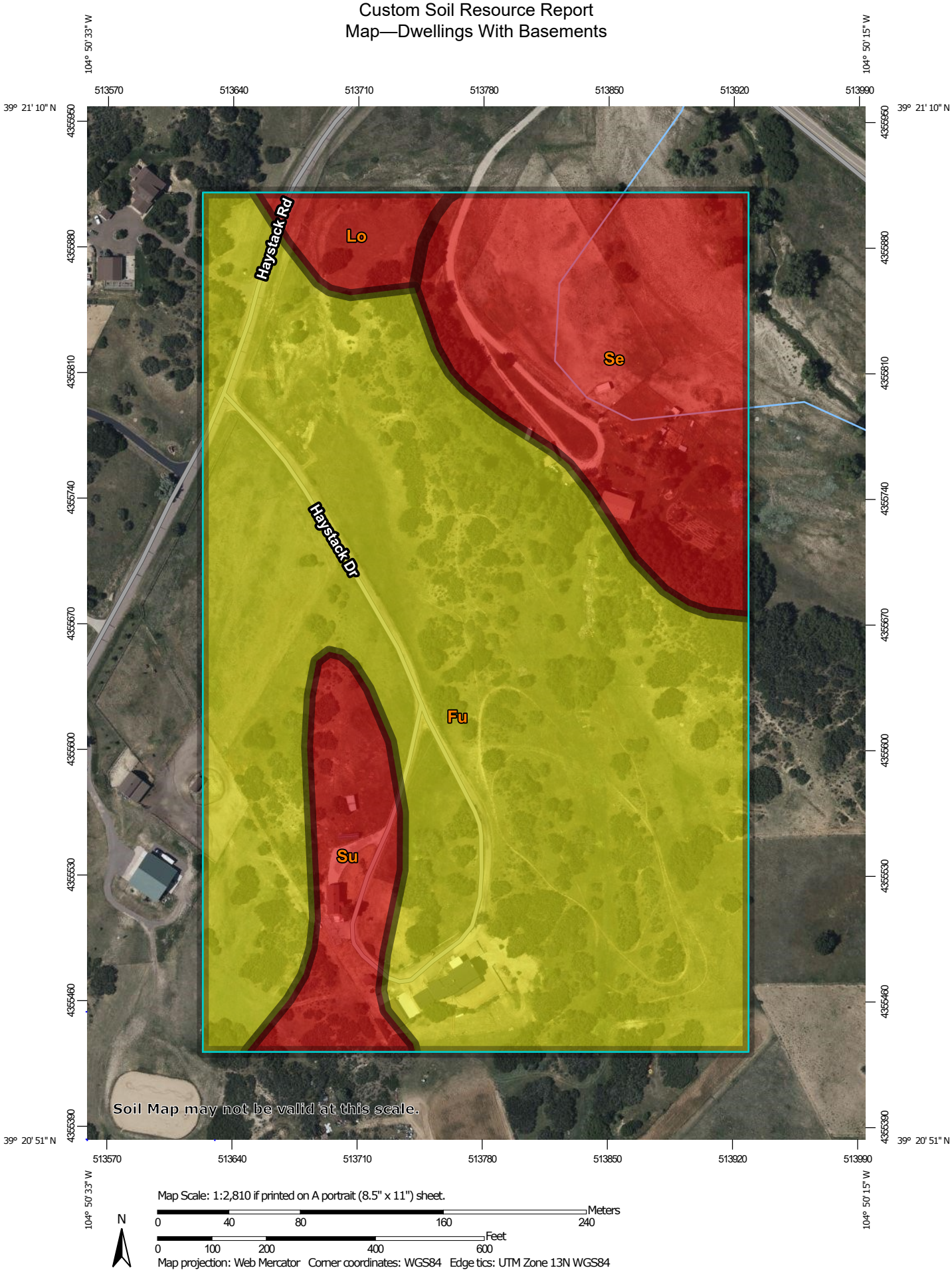
The ratings for dwellings are based on the soil properties that affect the capacity of the soil to support a load without movement and on the properties that affect excavation and construction costs. The properties that affect the load-supporting capacity include depth to a water table, ponding, flooding, subsidence, linear extensibility (shrink-swell potential), and compressibility. Compressibility is inferred from the Unified classification of the soil. The properties that affect the ease and amount of excavation include depth to a water table, ponding, flooding, slope, depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, and the amount and size of rock fragments.

The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect the specified use. "Not limited" indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. "Somewhat limited" indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. "Very limited" indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

The map unit components listed for each map unit in the accompanying Summary by Map Unit table in Web Soil Survey or the Aggregation Report in Soil Data Viewer are determined by the aggregation method chosen. An aggregated rating class is shown for each map unit. The components listed for each map unit are only those that have the same rating class as listed for the map unit. The percent composition of each component in a particular map unit is presented to help the user better understand the percentage of each map unit that has the rating presented.

Other components with different ratings may be present in each map unit. The ratings for all components, regardless of the map unit aggregated rating, can be viewed by generating the equivalent report from the Soil Reports tab in Web Soil Survey or from the Soil Data Mart site. Onsite investigation may be needed to validate these interpretations and to confirm the identity of the soil on a given site.



Map Scale: 1:2,810 if printed on A portrait (8.5" x 11") sheet.

N

Meters
0 40 80 160 240

Feet
0 100 200 400 600

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 13N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils

Soil Rating Polygons
- Very limited
- Somewhat limited
- Not limited
- Not rated or not available

Soil Rating Lines
- Very limited
- Somewhat limited
- Not limited
- Not rated or not available

Soil Rating Points
- Very limited
- Somewhat limited
- Not limited
- Not rated or not available

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Castle Rock Area, Colorado
Survey Area Data: Version 16, Aug 24, 2023

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Mar 1, 2023—Sep 1, 2023

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

Tables—Dwellings With Basements

Map unit symbol	Map unit name	Rating	Component name (percent)	Rating reasons (numeric values)	Acres in AOI	Percent of AOI
Fu	Fondis-Kutch association	Somewhat limited	Fondis (50%)	Slope (0.16)	25.0	68.8%
				Shrink-swell (0.01)		
Lo	Loamy alluvial land	Very limited	Loamy alluvial land (80%)	Flooding (1.00)	1.1	2.9%
				Depth to saturated zone (0.15)		
Se	Sandy wet alluvial land	Very limited	Sandy wet alluvial land (80%)	Flooding (1.00)	7.6	20.9%
				Depth to saturated zone (1.00)		
Su	Stony rough land	Very limited	Stony rough land (75%)	Depth to hard bedrock (1.00)	2.6	7.3%
				Slope (1.00)		
				Large stones (0.74)		
Totals for Area of Interest					**36.3**	**100.0%**

Rating	Acres in AOI	Percent of AOI
Somewhat limited	25.0	68.8%
Very limited	11.3	31.2%
Totals for Area of Interest	**36.3**	**100.0%**

Rating Options—Dwellings With Basements

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

Dwellings Without Basements

ENG - Engineering

Dwellings are single-family houses of three stories or less. For dwellings without basements, the foundation is assumed to consist of spread footings of reinforced concrete built on undisturbed soil at a depth of 2 feet or at the depth of maximum frost penetration, whichever is deeper.

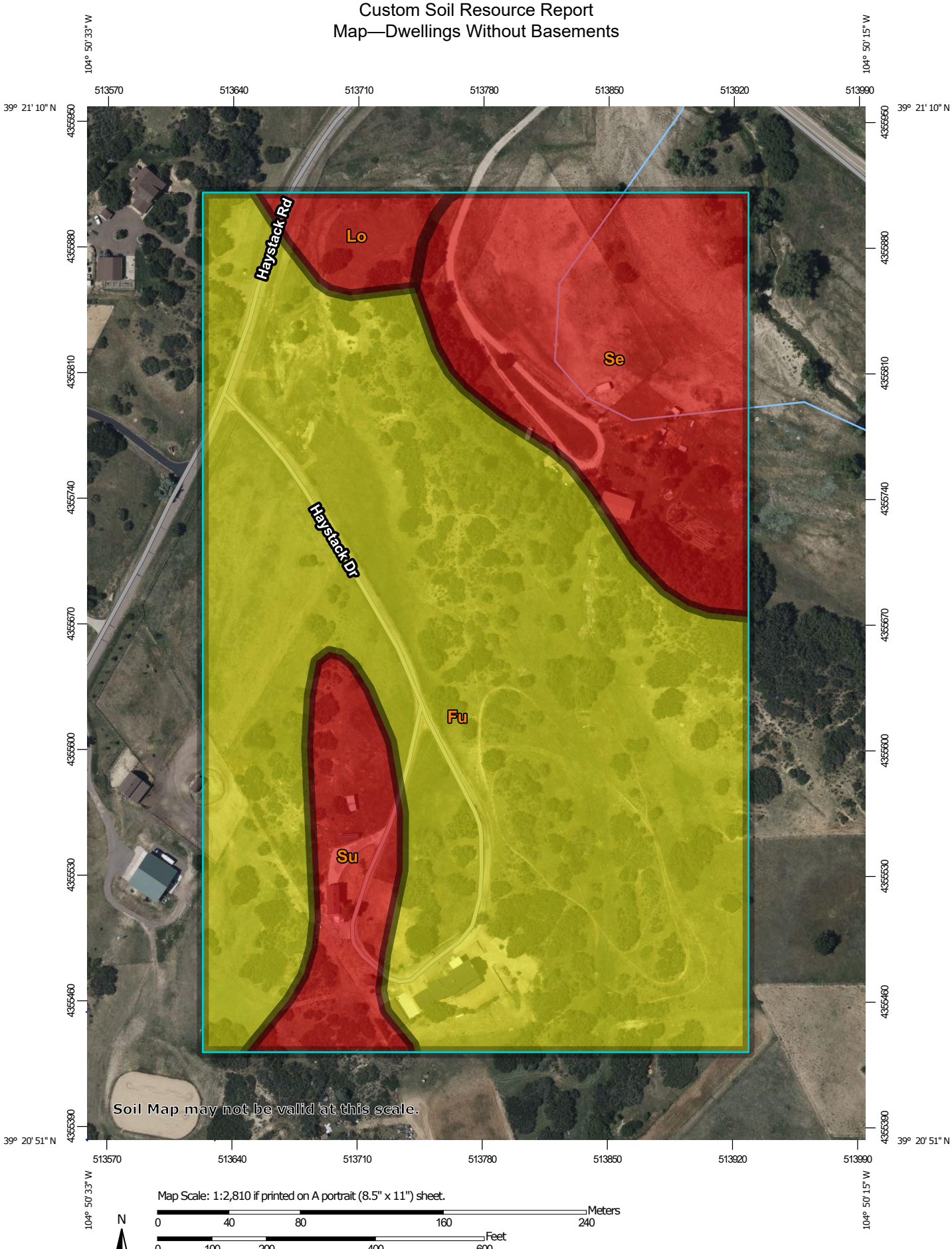
The ratings for dwellings are based on the soil properties that affect the capacity of the soil to support a load without movement and on the properties that affect excavation and construction costs. The properties that affect the load-supporting capacity include depth to a water table, ponding, flooding, subsidence, linear extensibility (shrink-swell potential), and compressibility. Compressibility is inferred from the Unified classification of the soil. The properties that affect the ease and amount of excavation include depth to a water table, ponding, flooding, slope, depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, and the amount and size of rock fragments.

The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect the specified use. "Not limited" indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. "Somewhat limited" indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. "Very limited" indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

The map unit components listed for each map unit in the accompanying Summary by Map Unit table in Web Soil Survey or the Aggregation Report in Soil Data Viewer are determined by the aggregation method chosen. An aggregated rating class is shown for each map unit. The components listed for each map unit are only those that have the same rating class as listed for the map unit. The percent composition of each component in a particular map unit is presented to help the user better understand the percentage of each map unit that has the rating presented.

Other components with different ratings may be present in each map unit. The ratings for all components, regardless of the map unit aggregated rating, can be viewed by generating the equivalent report from the Soil Reports tab in Web Soil Survey or from the Soil Data Mart site. Onsite investigation may be needed to validate these interpretations and to confirm the identity of the soil on a given site.



Map Scale: 1:2,810 if printed on A portrait (8.5" x 11") sheet.

N

Meters
0 40 80 160 240

Feet
0 100 200 400 600

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 13N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils

Soil Rating Polygons
- Very limited
- Somewhat limited
- Not limited
- Not rated or not available

Soil Rating Lines
- Very limited
- Somewhat limited
- Not limited
- Not rated or not available

Soil Rating Points
- Very limited
- Somewhat limited
- Not limited
- Not rated or not available

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

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This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Castle Rock Area, Colorado
Survey Area Data: Version 16, Aug 24, 2023

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Mar 1, 2023—Sep 1, 2023

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

Tables—Dwellings Without Basements

Map unit symbol	Map unit name	Rating	Component name (percent)	Rating reasons (numeric values)	Acres in AOI	Percent of AOI
Fu	Fondis-Kutch association	Somewhat limited	Fondis (50%)	Shrink-swell (0.42)	25.0	68.8%
				Slope (0.16)		
Lo	Loamy alluvial land	Very limited	Loamy alluvial land (80%)	Flooding (1.00)	1.1	2.9%
Se	Sandy wet alluvial land	Very limited	Sandy wet alluvial land (80%)	Flooding (1.00)	7.6	20.9%
				Depth to saturated zone (1.00)		
Su	Stony rough land	Very limited	Stony rough land (75%)	Slope (1.00)	2.6	7.3%
				Large stones (0.74)		
				Depth to hard bedrock (0.46)		
Totals for Area of Interest					**36.3**	**100.0%**

Rating	Acres in AOI	Percent of AOI
Somewhat limited	25.0	68.8%
Very limited	11.3	31.2%
Totals for Area of Interest	**36.3**	**100.0%**

Rating Options—Dwellings Without Basements

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

Local Roads and Streets

ENG - Engineering

Local roads and streets have an all-weather surface and carry automobile and light truck traffic all year. They have a subgrade of cut or fill soil material; a base of gravel, crushed rock, or soil material stabilized by lime or cement; and a surface of flexible material (asphalt), rigid material (concrete), or gravel with a binder. The ratings are based on the soil properties that affect the ease of excavation and grading and the traffic-supporting capacity. The properties that affect the ease of excavation and grading are depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, depth to a water table, ponding, flooding, the amount of

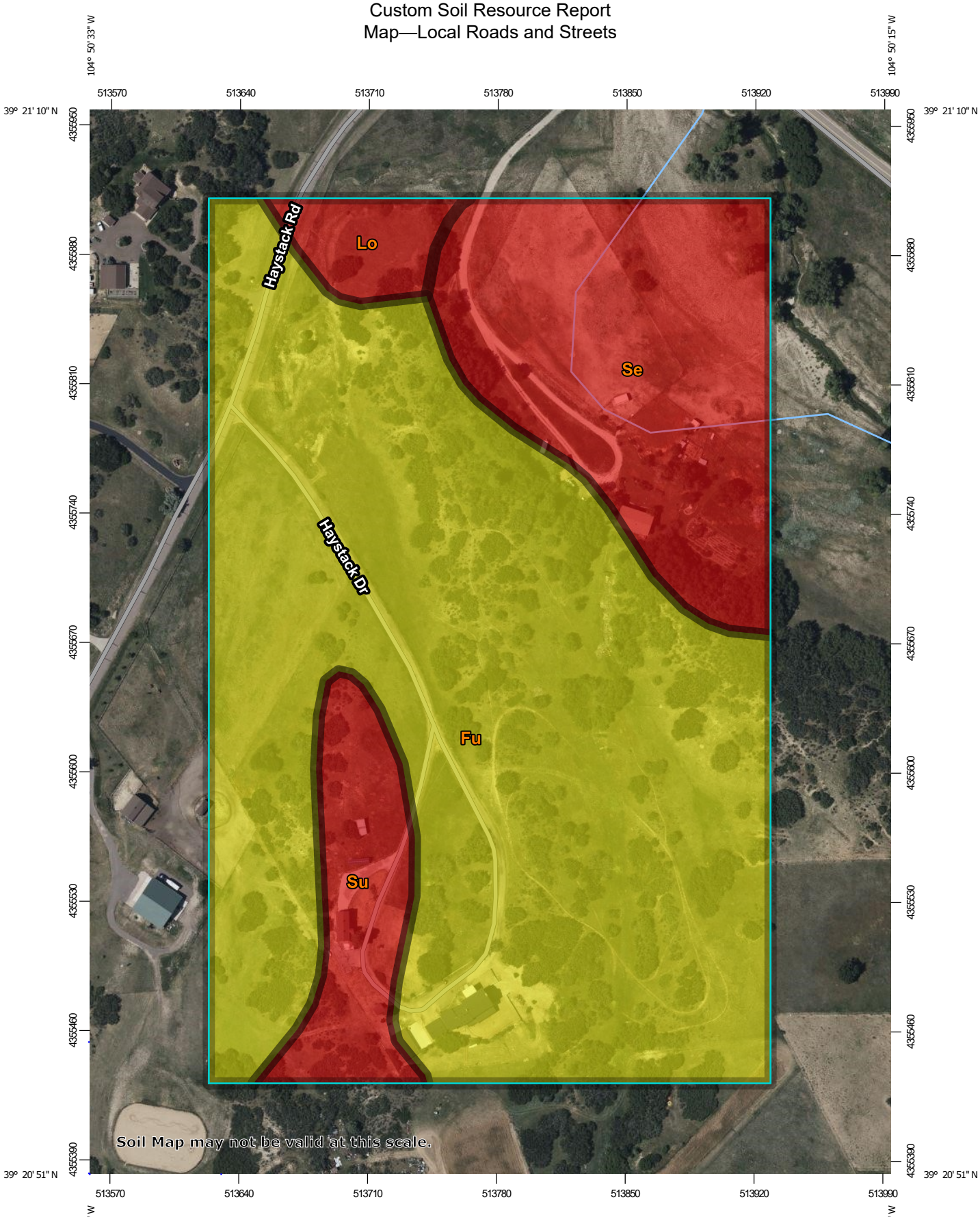
large stones, and slope. The properties that affect the traffic-supporting capacity are soil strength (as inferred from the AASHTO group index number), subsidence, linear extensibility (shrink-swell potential), the potential for frost action, depth to a water table, and ponding.

The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect the specified use. "Not limited" indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. "Somewhat limited" indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. "Very limited" indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

The map unit components listed for each map unit in the accompanying Summary by Map Unit table in Web Soil Survey or the Aggregation Report in Soil Data Viewer are determined by the aggregation method chosen. An aggregated rating class is shown for each map unit. The components listed for each map unit are only those that have the same rating class as listed for the map unit. The percent composition of each component in a particular map unit is presented to help the user better understand the percentage of each map unit that has the rating presented.

Other components with different ratings may be present in each map unit. The ratings for all components, regardless of the map unit aggregated rating, can be viewed by generating the equivalent report from the Soil Reports tab in Web Soil Survey or from the Soil Data Mart site. Onsite investigation may be needed to validate these interpretations and to confirm the identity of the soil on a given site.



Map Scale: 1:2,810 if printed on A portrait (8.5" x 11") sheet.

N

Meters: 0 40 80 160 240

Feet: 0 100 200 400 600

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 13N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils

Soil Rating Polygons
- Very limited
- Somewhat limited
- Not limited
- Not rated or not available

Soil Rating Lines
- Very limited
- Somewhat limited
- Not limited
- Not rated or not available

Soil Rating Points
- Very limited
- Somewhat limited
- Not limited
- Not rated or not available

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Castle Rock Area, Colorado
Survey Area Data: Version 16, Aug 24, 2023

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Mar 1, 2023—Sep 1, 2023

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

Tables—Local Roads and Streets

Map unit symbol	Map unit name	Rating	Component name (percent)	Rating reasons (numeric values)	Acres in AOI	Percent of AOI
Fu	Fondis-Kutch association	Somewhat limited	Fondis (50%)	Frost action (0.50)	25.0	68.8%
				Shrink-swell (0.42)		
				Low strength (0.19)		
				Slope (0.16)		
Lo	Loamy alluvial land	Very limited	Loamy alluvial land (80%)	Flooding (1.00)	1.1	2.9%
				Frost action (0.50)		
Se	Sandy wet alluvial land	Very limited	Sandy wet alluvial land (80%)	Flooding (1.00)	7.6	20.9%
				Depth to saturated zone (1.00)		
Su	Stony rough land	Very limited	Stony rough land (75%)	Slope (1.00)	2.6	7.3%
				Large stones (0.74)		
				Frost action (0.50)		
				Depth to hard bedrock (0.46)		
Totals for Area of Interest					**36.3**	**100.0%**

Rating	Acres in AOI	Percent of AOI
Somewhat limited	25.0	68.8%
Very limited	11.3	31.2%
Totals for Area of Interest	**36.3**	**100.0%**

Rating Options—Local Roads and Streets

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

Shallow Excavations

ENG - Engineering

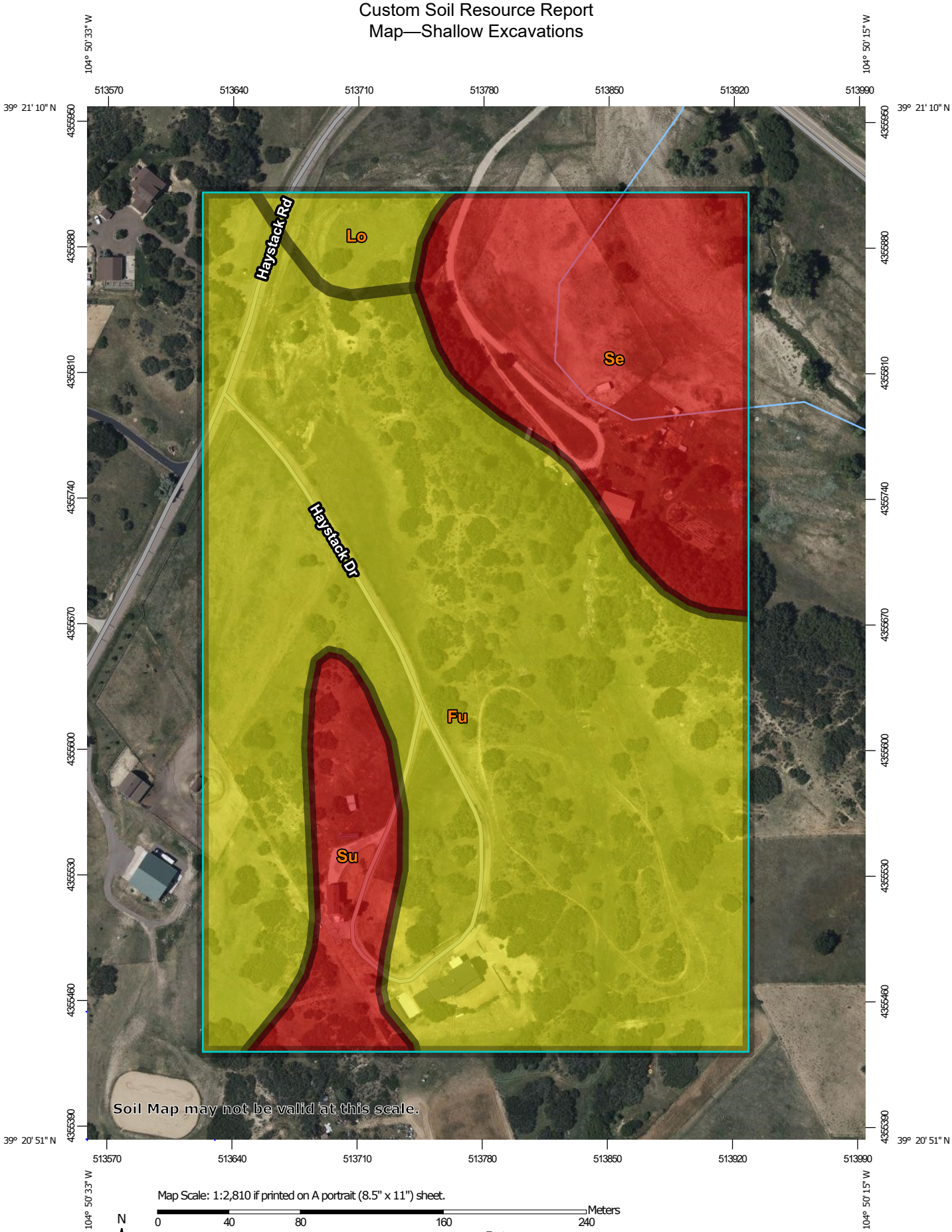
Shallow excavations are trenches or holes dug to a maximum depth of 5 or 6 feet for graves, utility lines, open ditches, or other purposes. The ratings are based on the soil properties that influence the ease of digging and the resistance to sloughing. Depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, the amount of large stones, and dense layers influence the ease of digging, filling, and compacting. Depth to the seasonal high water table, flooding, and ponding may restrict the period when excavations can be made. Slope influences the ease of using machinery. Soil texture, depth to the water table, and linear extensibility (shrink-swell potential) influence the resistance to sloughing.

The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect the specified use. "Not limited" indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. "Somewhat limited" indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. "Very limited" indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

The map unit components listed for each map unit in the accompanying Summary by Map Unit table in Web Soil Survey or the Aggregation Report in Soil Data Viewer are determined by the aggregation method chosen. An aggregated rating class is shown for each map unit. The components listed for each map unit are only those that have the same rating class as listed for the map unit. The percent composition of each component in a particular map unit is presented to help the user better understand the percentage of each map unit that has the rating presented.

Other components with different ratings may be present in each map unit. The ratings for all components, regardless of the map unit aggregated rating, can be viewed by generating the equivalent report from the Soil Reports tab in Web Soil Survey or from the Soil Data Mart site. Onsite investigation may be needed to validate these interpretations and to confirm the identity of the soil on a given site.


104° 50' 33" W
104° 50' 15" W
513570
513640
513710
513780
513850
513920
513990
39° 21' 10" N
39° 20' 51" N
4355950
4355880
4355810
4355740
4355670
4355600
4355530
4355460
4355390
Haystack Rd
Haystack Dr
Lo
Se
Fu
Su
Soil Map may not be valid at this scale.
Map Scale: 1:2,810 if printed on A portrait (8.5" x 11") sheet.
N
Meters
0 40 80 160 240
Feet
0 100 200 400 600
Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 13N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils

Soil Rating Polygons
- Very limited
- Somewhat limited
- Not limited
- Not rated or not available

Soil Rating Lines
- Very limited
- Somewhat limited
- Not limited
- Not rated or not available

Soil Rating Points
- Very limited
- Somewhat limited
- Not limited
- Not rated or not available

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Castle Rock Area, Colorado
Survey Area Data: Version 16, Aug 24, 2023

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Mar 1, 2023—Sep 1, 2023

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

Tables—Shallow Excavations

Map unit symbol	Map unit name	Rating	Component name (percent)	Rating reasons (numeric values)	Acres in AOI	Percent of AOI
Fu	Fondis-Kutch association	Somewhat limited	Fondis (50%)	Dusty (0.30)	25.0	68.8%
				Slope (0.16)		
				Too clayey (0.13)		
				Unstable excavation walls (0.01)		
Lo	Loamy alluvial land	Somewhat limited	Loamy alluvial land (80%)	Flooding (0.80)	1.1	2.9%
				Depth to saturated zone (0.15)		
				Dusty (0.02)		
				Unstable excavation walls (0.01)		
Se	Sandy wet alluvial land	Very limited	Sandy wet alluvial land (80%)	Depth to saturated zone (1.00)	7.6	20.9%
				Unstable excavation walls (1.00)		
				Flooding (0.80)		
Su	Stony rough land	Very limited	Stony rough land (75%)	Depth to hard bedrock (1.00)	2.6	7.3%
				Slope (1.00)		
				Large stones (0.74)		
				Dusty (0.28)		
				Unstable excavation walls (0.01)		
Totals for Area of Interest					**36.3**	**100.0%**

Rating	Acres in AOI	Percent of AOI
Somewhat limited	26.0	71.8%
Very limited	10.2	28.2%
Totals for Area of Interest	**36.3**	**100.0%**

Rating Options—Shallow Excavations

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

Small Commercial Buildings

ENG - Engineering

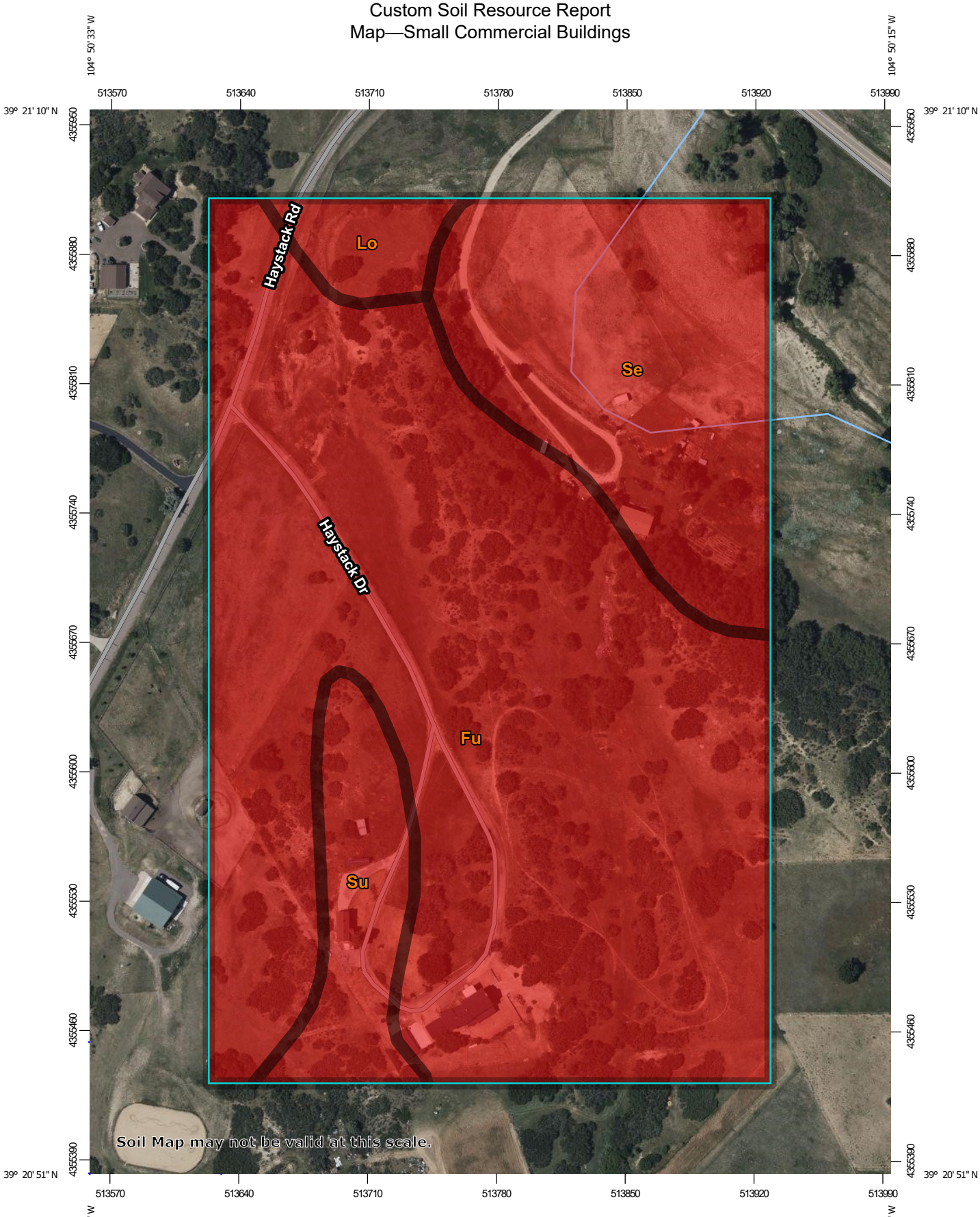
Small commercial buildings are structures that are less than three stories high and do not have basements. The foundation is assumed to consist of spread footings of reinforced concrete built on undisturbed soil at a depth of 2 feet or at the depth of maximum frost penetration, whichever is deeper. The ratings are based on the soil properties that affect the capacity of the soil to support a load without movement and on the properties that affect excavation and construction costs. The properties that affect the load-supporting capacity include depth to a water table, ponding, flooding, subsidence, linear extensibility (shrink-swell potential), and compressibility (which is inferred from the Unified classification of the soil). The properties that affect the ease and amount of excavation include flooding, depth to a water table, ponding, slope, depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, and the amount and size of rock fragments.

The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect the specified use. "Not limited" indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. "Somewhat limited" indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. "Very limited" indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

The map unit components listed for each map unit in the accompanying Summary by Map Unit table in Web Soil Survey or the Aggregation Report in Soil Data Viewer are determined by the aggregation method chosen. An aggregated rating class is shown for each map unit. The components listed for each map unit are only those that have the same rating class as listed for the map unit. The percent composition of each component in a particular map unit is presented to help the user better understand the percentage of each map unit that has the rating presented.

Other components with different ratings may be present in each map unit. The ratings for all components, regardless of the map unit aggregated rating, can be viewed by generating the equivalent report from the Soil Reports tab in Web Soil Survey or from the Soil Data Mart site. Onsite investigation may be needed to validate these interpretations and to confirm the identity of the soil on a given site.



Map Scale: 1:2,810 if printed on A portrait (8.5" x 11") sheet.

N

Meters: 0 40 80 160 240

Feet: 0 100 200 400 600

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 13N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils

Soil Rating Polygons
- Very limited
- Somewhat limited
- Not limited
- Not rated or not available

Soil Rating Lines
- Very limited
- Somewhat limited
- Not limited
- Not rated or not available

Soil Rating Points
- Very limited
- Somewhat limited
- Not limited
- Not rated or not available

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

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Survey Area Data: Version 16, Aug 24, 2023

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Mar 1, 2023—Sep 1, 2023

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

Tables—Small Commercial Buildings

Map unit symbol	Map unit name	Rating	Component name (percent)	Rating reasons (numeric values)	Acres in AOI	Percent of AOI
Fu	Fondis-Kutch association	Very limited	Fondis (50%)	Slope (1.00)	25.0	68.8%
				Shrink-swell (0.42)		
			Kutch (35%)	Slope (1.00)		
				Shrink-swell (0.50)		
Lo	Loamy alluvial land	Very limited	Loamy alluvial land (80%)	Flooding (1.00)	1.1	2.9%
Se	Sandy wet alluvial land	Very limited	Sandy wet alluvial land (80%)	Flooding (1.00)	7.6	20.9%
				Depth to saturated zone (1.00)		
Su	Stony rough land	Very limited	Stony rough land (75%)	Slope (1.00)	2.6	7.3%
				Large stones (0.74)		
				Depth to hard bedrock (0.46)		
Totals for Area of Interest					**36.3**	**100.0%**

Rating	Acres in AOI	Percent of AOI
Very limited	36.3	100.0%
Totals for Area of Interest	**36.3**	**100.0%**

Rating Options—Small Commercial Buildings

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

Sanitary Facilities

Sanitary Facilities interpretations are tools designed to guide the user in site selection for the safe disposal of sewage and solid waste. Example interpretations include septic tank absorption fields, sewage lagoons, and sanitary landfills.

Septic Tank Absorption Fields

ENG - Engineering

Septic tank absorption fields are areas in which effluent from a septic tank is distributed into the soil through subsurface tiles or perforated pipe. Only that part of the soil between depths of 24 and 60 inches is evaluated. The ratings are based on the soil properties that affect absorption of the effluent, construction and maintenance of the system, and public health. Saturated hydraulic conductivity (Ksat), depth to a water table, ponding, depth to bedrock or a cemented pan, and flooding affect absorption of the effluent. Stones and boulders, ice, and bedrock or a cemented pan interfere with installation. Subsidence interferes with installation and maintenance. Excessive slope may cause lateral seepage and surfacing of the effluent in downslope areas.

Some soils are underlain by loose sand and gravel or fractured bedrock at a depth of less than 4 feet below the distribution lines. In these soils the absorption field may not adequately filter the effluent, particularly when the system is new. As a result, the ground water may become contaminated.

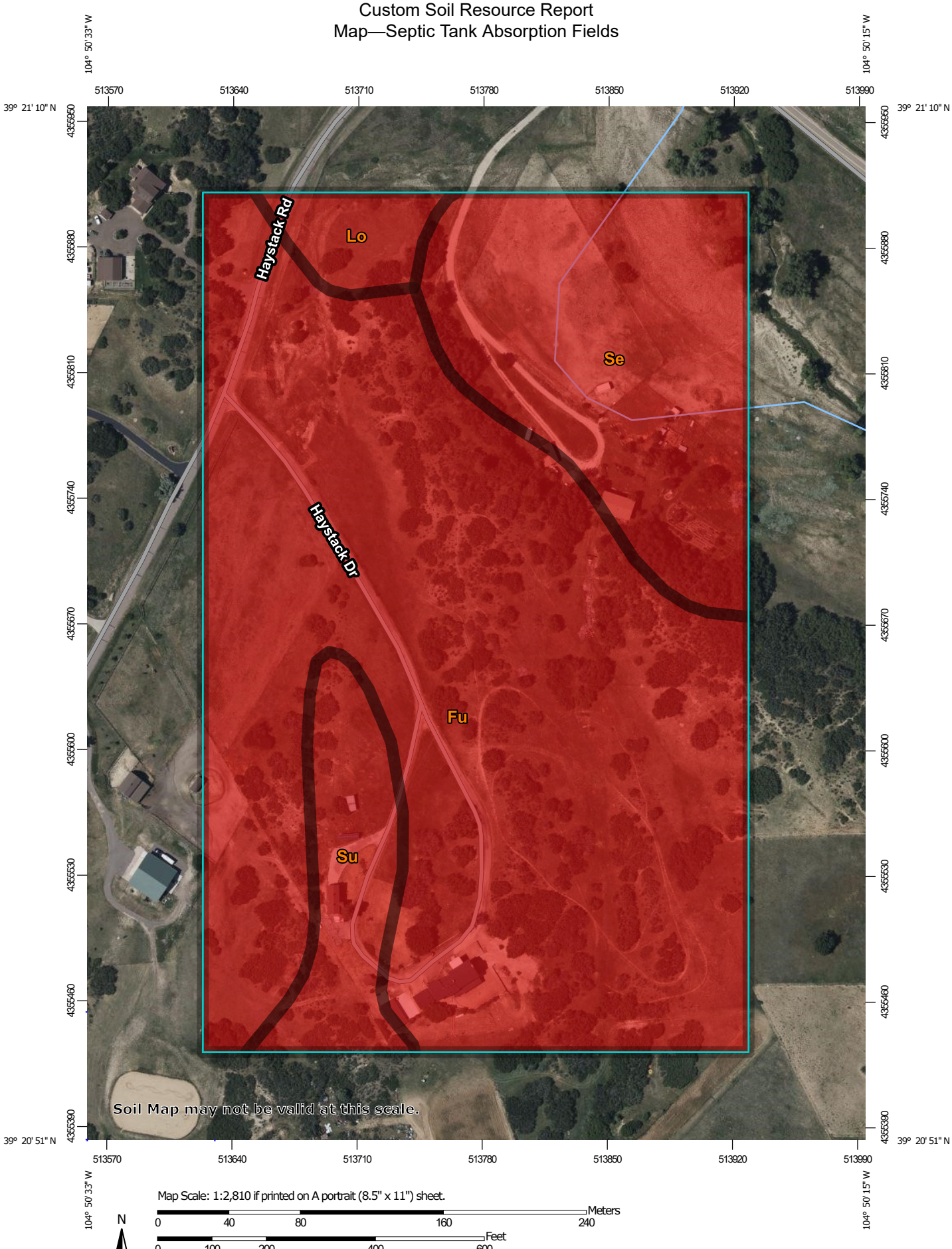
The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect the specified use. "Not limited" indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. "Somewhat limited" indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. "Very limited" indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

The map unit components listed for each map unit in the accompanying Summary by Map Unit table in Web Soil Survey or the Aggregation Report in Soil Data Viewer are determined by the aggregation method chosen. An aggregated rating class is shown for each map unit. The components listed for each map unit are only those that have the same rating class as listed for the map unit. The percent composition of each component in a particular map unit is presented to help the user better understand the percentage of each map unit that has the rating presented.

Other components with different ratings may be present in each map unit. The ratings for all components, regardless of the map unit aggregated rating, can be viewed by generating the equivalent report from the Soil Reports tab in Web Soil

Survey or from the Soil Data Mart site. Onsite investigation may be needed to validate these interpretations and to confirm the identity of the soil on a given site.



Map Scale: 1:2,810 if printed on A portrait (8.5" x 11") sheet.

N

Meters
0 40 80 160 240

Feet
0 100 200 400 600

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 13N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils

Soil Rating Polygons
- Very limited
- Somewhat limited
- Not limited
- Not rated or not available

Soil Rating Lines
- Very limited
- Somewhat limited
- Not limited
- Not rated or not available

Soil Rating Points
- Very limited
- Somewhat limited
- Not limited
- Not rated or not available

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

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Please rely on the bar scale on each map sheet for map measurements.

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Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

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Soil Survey Area: Castle Rock Area, Colorado
Survey Area Data: Version 16, Aug 24, 2023

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Mar 1, 2023—Sep 1, 2023

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

Tables—Septic Tank Absorption Fields

Map unit symbol	Map unit name	Rating	Component name (percent)	Rating reasons (numeric values)	Acres in AOI	Percent of AOI
Fu	Fondis-Kutch association	Very limited	Fondis (50%)	Slow water movement (1.00)	25.0	68.8%
				Slope (0.16)		
			Kutch (35%)	Slow water movement (1.00)		
				Depth to bedrock (1.00)		
				Slope (1.00)		
Lo	Loamy alluvial land	Very limited	Loamy alluvial land (80%)	Flooding (1.00)	1.1	2.9%
				Seepage, bottom layer (1.00)		
				Depth to saturated zone (0.40)		
Se	Sandy wet alluvial land	Very limited	Sandy wet alluvial land (80%)	Flooding (1.00)	7.6	20.9%
				Depth to saturated zone (1.00)		
				Filtering capacity (1.00)		
				Seepage, bottom layer (1.00)		
Su	Stony rough land	Very limited	Stony rough land (75%)	Depth to bedrock (1.00)	2.6	7.3%
				Slope (1.00)		
				Large stones (0.74)		
				Slow water movement (0.72)		
Totals for Area of Interest					**36.3**	**100.0%**

Rating	Acres in AOI	Percent of AOI
Very limited	36.3	100.0%
Totals for Area of Interest	**36.3**	**100.0%**

Rating Options—Septic Tank Absorption Fields

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

References

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May 2, 2024

Trevor Bedford, AICP
Planning Services
100 Third Street
Castle Rock, CO 80104
303-660-7460 (main)

Re: SB2024-005 Haystack Hills

Dear Mr. Bedford:

This letter provides comments regarding the request for a minor development to create three lots on approximately 17.06 acres. The property is zoned Rural Residential and is located on the south side of Haystack Road, approximately 1,500 feet west of its intersection with Lake Gulch Road. The lots are proposed to be 5.33 acres, 5.20 acres, and 6.38 acres in size.

Upon reviewing the Class I File and Literature Review by ERO Resources Corp., the Douglas County Curator has no further comments.

There is potential for buried archaeological resources related to prehistoric activities in the project area and potential for the discovery of subsurface cultural deposits during ground moving activities. Should buried artifacts and features be discovered, we recommend completion of the appropriate Colorado Office of Archaeology and Historic Preservation (OAHP) Data Management and Historic and/or Prehistoric Component forms, following OAHP guidelines, with accompanying sketch maps and photographs. Completed forms are submitted to OAHP to ensure that Douglas County's historic or prehistoric data is included in the Colorado OAHP state-wide database of cultural resources.

Thank you in advance for your attention to the preservation and protection of Douglas County's cultural resources for future generations.

Sincerely,

Brittany Cassell

Brittany Cassell, Curator

620 Wilcox Street
Castle Rock, Colorado 80104

April 11th, 2024

Trevor Bedford
Douglas County Planning Services
100 Third Street
Castle Rock, CO 80104
tbedford@douglas.co.us

RE: Haystack Hills, Minor Development Residential Plat (SB2024-005)

Dear Mr. Bedford,

Thank you for the opportunity to respond to the above referenced application. It is our understanding that the applicant is requesting approval of a minor development plat to subdivide the referenced property into 3 residential lots and 1 right-of-way tract. The 17.06-acre site is zoned Rural Residential (RR) and is generally located west of the intersection of Haystack Road and Lake Gulch Road.

On behalf of Douglas County School District, we have a couple comments regarding this application. DCSD has calculated the amount of school site land dedication required for students generated by the proposal. A total of 3 students are expected from the development requiring a total land dedication requirement of 0.071-acres. Since this amount of land dedication is smaller than DCSD's minimum site requirements DCSD would request cash-in-lieu of land.

CASH-IN-LIEU CALCULATION
STUDENT GENERATION

PROJECT NAME: HAYSTACK HILLS MINOR DEVELOPMENT PLAT-RESIDENTIAL (SB2024-005)

DU/	ACRES		DENSITY		
3	17.06		0.18		
			Generation	Number	
STUDENT GENERATION RATES	No. of DU's		Rate	of Students	
ELEMENTARY	3	X	0.54	2	
MIDDLE SCHOOL	3	X	0.15	0	
HIGH SCHOOL	3	X	0.31	1	
				3	
				Required	
			School	Land	
	Number		Acreage	Dedication	
SCHOOL LAND DEDICATION	of Students		Per Student	Acreage	
ELEMENTARY	2	X	0.018	0.029	
MIDDLE SCHOOL	0	X	0.030	0.014	
HIGH SCHOOL	1	X	0.030	0.028	
			TOTAL	0.071	

Pursuant to Section 1004.05.4 of the Douglas County Subdivision Resolution states, "For residential minor development final plat or replats creating 10 or fewer residential lots, the minimum cash-in-lieu fee shall be $500 per each new residential lot." Section 1004.06 of the Douglas County Subdivision Resolution states, "The conveyance of land or payment of fees obtained through the County's dedication requirement shall be required prior to the recordation of the first final plat for the subdivision."

Assuming the applicant agrees with the payment of these fee requirements, DCSD has no objection to approval of this application. Thank you for your support of our mutual constituents.

Sincerely,
Shavon Caldwell
Planning Manager, DCSD Planning & Construction

shavon.caldwell@dcsdk12.org
scaldwell2@dcsdk12.org

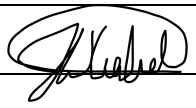
office: 303.387.0417
mobile: 720.428.1170

REFERRAL RESPONSE REQUEST

Date Sent: April 11, 2024 Comments due by: May 9, 2024

Project Name:	Haystack Hills
Project File #:	SB2024-005
Project Summary:	This is a request for a minor development to create three lots on approximately 17.06 acres. The property is zoned Rural Residential and is located on the south side of Haystack Road, approximately 1,500 feet west of its intersection with Lake Gulch Road. The lots are proposed to be 5.33 acres, 5.20 acres, and 6.38 acres in size.

Information on the identified development proposal located in Douglas County is enclosed. Please review and comment in the space provided.

☐	No Comment	
☐	Please be advised of the following concerns:	
☒	See letter attached for detail.	
Agency: PW - Engineering		**Phone #:** (303) 660-7490
Your Name: Jacob Gabel *(please print)*		**Your Signature:**  **Date:** 5/8/2024

Agencies should be advised that failure to submit written comments prior to the due date, or to obtain the applicant's written approval of an extension, will result in written comments being accepted for informational purposes only.

Sincerely,

Trevor Bedford, Project Planner

Enclosures

MEMORANDUM

To: Trevor Bedford, Senior Planner

CC: Kevin Archer, PE, David Archer and Associates

From: Jacob Gabel, Development Review Engineer

Date: 5/8/2024

RE: Haystack Hills Subdivision: DV2024-078

Initial Submittal:	4-11-2024
1st Engineering response letter:	5-8-2024

The Douglas County Department of Public Works Engineering has reviewed the 9474 N Rampart Range Rd Solar Project and has the following comments:

General

1. Please be aware that a DESC Plan will be needed for each lot and that the first lot to be built upon will need to build the driveway to shared driveway standards.
2. Please be aware that the Engineering Review fees are still outstanding.

Plat

3. Please be aware that the language for the shared access easement must be included as part of this plat, as such, please remove Note #4.
4. Is there a particular reason why the utility easement language was removed? It may be worthwhile to have the shared access easement be a shared access and utility easement.
5. In the Planning Commission acceptance section, it appears that the SB# is incorrect, please amend to SB2024-005.

With the next submittal, please enclose a written response to these comments. Please let me know if you have any questions.

Trevor Bedford

From: Jacob Gabel
Sent: Friday, June 28, 2024 10:48 AM
To: Realtor Ryan Dykstra; karcher
Cc: Trevor Bedford
Subject: Haystack Hills Subdivision: DV2024-078

Good Morning!

Engineering has reviewed the revised plan for the above reference project and has the following comments:

1. The County requests that language be added that states that the shared access and utility easement is meant only for the three lots and is not intended for future subdivision.
2. It is assumed that the easement will be recorded before the minor subdivision plat. If so, is the assumption correct that the easement will be recorded with a legal description exhibit and a map exhibit?

Please be sure to include the DV# in the subject line for faster processing. If you have any questions, please let me know, I'm happy to help.

Sincerely,

Jacob

Jacob Gabel | Development Review Engineer
Douglas County Department of Public Works Engineering
Engineering Services
Address | 100 Third St., Castle Rock, CO 80104
Main | 303-660-7490
Email | jgabel@douglas.co.us

Right of Way & Permits

1123 West 3rd Avenue
Denver, Colorado 80223
Telephone: 303.285.6612
violeta.ciocanu@xcelenergy.com

April 11, 2024

Douglas County Planning Services
100 Third Street
Castle Rock, CO 80104

Attn: Trevor Bedford

Re: Haystack Hills, Case # SB2024-005

Public Service Company of Colorado's (PSCo) Right of Way & Permits Referral Desk has reviewed the plan for **Haystack Hills** and currently has **no apparent conflict**.

As a safety precaution, PSCo would like to remind the developer to call the Utility Notification Center by dialing 811 for utility locates prior to construction.

Violeta Ciocanu (Chokanu)
Right of Way and Permits
Public Service Company of Colorado dba Xcel Energy
Office: 303-285-6612 – Email: violeta.ciocanu@xcelenergy.com

DOUGLAS COUNTY
HEALTH DEPARTMENT COLORADO

July 30, 2024

Trevor Bedford
100 Third St.
Castle Rock, CO 80104

RE: SB2024-005

Dear Mr. Bedford,

Thank you for the opportunity to review and comment on the request to subdivide a property into 3 single-family residential lots. Douglas County Health Department (DCHD) staff have reviewed the application for compliance with pertinent environmental and public health regulations. After reviewing the application, DCHD has the following comment(s).

Onsite Wastewater Treatment Systems (OWTS) - Proposed Subdivision
Proper wastewater management promotes effective and responsible water use, protects potable water from contaminants, and provides appropriate collection, treatment, and disposal of waste, which protects public health and the environment. *DCHD has no objection to the proposed subdivision being served by Onsite Wastewater Treatment Systems (OWTS), provided the systems are permitted, installed, and operated in compliance with our current OWTS regulation.*

Please feel free to contact me at 720-907-4888 or bfreyer@douglas.co.us if you have any questions about our comments.

Sincerely,

Brent Freyer
Environmental Health Specialist II
Douglas County Health Department

DAVID E. ARCHER & ASSOCIATES, INC.
PROFESSIONAL LAND SURVEYORS & ENGINEERS
105 Wilcox Street * Castle Rock, CO 80104
PHONE (303) 688-4642 * FAX (303) 688-4675 * karcher@davidearcher.com

June 13, 2024
Job No. 22-0478

Trevor Bedford, AICP
Senior Planner
Department of Community Development
Planning Services
100 Third Street
Castle Rock, Co 80104

RE: Haystack Hills Subdivision SB2024-005
Response to Referral Comments

Dear Trevor,

We have received the referral comments on the Haystack Hills Subdivision. The following is our written response to those comments.

GENERAL COMMENT:

1. The Courtesy Notice fee of $6.30 is still outstanding. This can be paid over the phone by contacting 303-660-7460.
   I understand that this fee has been paid.

NARRATIVE:

2. Please clarify the intended use of the existing well in the narrative. If three additional wells are proposed, there do not appear to be water rights for 4 wells to the Lower Dawson Aquifer. The existing well should either be used to serve the lot it is on or be abandoned.
   The narrative has been revised.

REFERRAL AGENCY HIGHLIGHTS:

3. Douglas County Parks, Trails and Buildings Grounds will review the project at the referral period. Per *DCSR* Article 1003.06, the minimum cash-in-lieu fee for each new residential lot within a minor development plat is $250. Payment of parks cashin-lieu fees are required after approval by the Board of County Commissioners, but before recordation
   Understood and agree.
4. The Douglas County School District (DCSD) will review the project at the referral period. Per *DCSR* Article 1004.05.4, the minimum cash-in-lieu fee for each new residential lot within a minor development plat is $500. Payment of DCSD cash-inlieu fees are required after approval by the Board of County Commissioners, but before recordation.
   Understood and agree.
5. It is understood that a wildfire mitigation plan is in process. This will be needed prior to scheduling public hearings.
   The wild Fire plan is being prepared.

6. It is understood that a weed management plan is in process. This will be needed prior to scheduling public hearings.
   Working to get a weed management plan completed.
7. See attachments for referral agency comments. It is typically best to work directly with any referral agency to address and comments or questions.
   Working with each agency to address comments see information below.

Referral Agencies

Castle Rock Fire and Rescue Department
The driveway will be upgraded to meet their requirements.

CenturyLink
We understand that it is the Applicants responsibility to repair or relocate any CenturyLink Facilities damaged as a result of the subdivision.

Core Electric Cooperative
We have provided CORE the easement requested for the existing facilities that will be recorded prior to plating. We have also provided the requested easement along Haystack Road to be dedicated with the plat.

Douglas County School District
Agree to the $500 Cash -in lieu.

Engineering Services
See Letter

All other referral agencies had no comment or do not require a response.

Please feel free to contact me if you have any other comments.

Thank you,

Kevin E. Archer, P.E.

DAVID E. ARCHER & ASSOCIATES, INC.
PROFESSIONAL LAND SURVEYORS & ENGINEERS
105 Wilcox Street * Castle Rock, CO 80104
PHONE (303) 688-4642 * FAX (303) 688-4675 * karcher@davidearcher.com

June 13, 2024
Job No. 22-0478

Jacob Gabel
Development Review Engineer
Department of Public Works Engineering
Engineering Services
100 Third Street
Castle Rock, Co 80104

RE: Haystack Hills Subdivision DV2024-078
Response to comments

Dear Jacob,

We have received comments you had on the Haystack Hills Subdivision. The following is our written response to those comments.

General

1. Please be aware that a DESC Plan will be needed for each lot and that the first lot to be built upon will need to build the driveway to shared driveway standards.
   We understand that each lot will require a DESC plan for each building permit. There is an existing driveway but it will be upgraded with the first new building permit as needed.
2. Please be aware that the Engineering Review fees are still outstanding.
   It is my understanding that these fees have been paid.

Plat

3. Please be aware that the language for the shared access easement must be included as part of this plat, assuch, please remove Note #4.
   We are drafting a Maintenance Agreement that will be recorded prior to the plat recordation, so I added a place for the reception number. That agreement will be provided for your review.
4. Is there a particular reason why the utility easement language was removed? It may be worthwhile to have the shared access easement be a shared access and utility easement.
   This has been revised to Access and Utility.
5. In the Planning Commission acceptance section, it appears that the SB# is incorrect, please amend toSB2024-005.
   This has been corrected.

Please feel free to contact me if you have any other comments.

Thank you,

Kevin E. Archer, P.E.

DAVID E. ARCHER & ASSOCIATES, INC.
PROFESSIONAL LAND SURVEYORS & ENGINEERS
105 Wilcox Street * Castle Rock, CO 80104
PHONE (303) 688-4642 * FAX (303) 688-4675 * karcher@davidearcher.com

April 2, 2024
Job No. 22-0478

Ryan Dykstra
6665 East Bethany Place
Denver, CO 80224

RE: Traffic Impact letter for the proposed Haystack Hills Subdivision.

Dear Ryan,

A traffic letter was requested by Douglas County as part of the Minor Subdivision process. This letter is intended to serve as that letter.

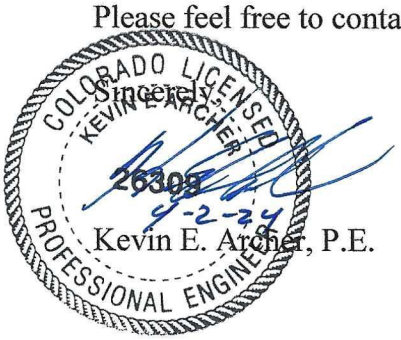
The proposed subdivision Haystack Hills is located at 2808 Haystack Road. Haystack Road ties into Lake Gulch on the east side and McCracken Lane on the west. The access to McCracken Lane is however, a gated emergency access only. There are 34 properties that currently use Haystack Road for access.

The proposed Haystack Hills Subdivision will add an additional 2 lots to Haystack Road.

Haystack Road was improved from gravel to pavement with the construction of Haystack Acres. The road is 20 feet of asphalt pavement and is maintained by Douglas County. Haystack Road is a Rural Local type III roadway and has a capacity of 400 Vehicle Trips per Day.

All properties accessed from Haystack Road are residential properties that will generate 10 vehicle trips per day. The road currently see a total of 340 trips per day and with the proposed Haystack Hills Subdivision an additional 20 trips will be added for a total expected 360 trips per day. Although approaching the Rural Local Type III road capacity it is still below the design capacity.

Please feel free to contact me if you need any additional information.



Sincerely,

Kevin E. Archer, P.E.

HAYES POZNANOVIC KORVER LLC
ATTORNEYS AT LAW

700 17TH STREET, SUITE 1800
DENVER, COLORADO 80202

TELEPHONE (303) 825-1980

FACSIMILE (303) 825-1983

March 15, 2024

Jacob Gabel and Trevor Bedford
Douglas County Community Development

TBedford@douglas.co.us

Re: 2802 Haystack Road Subdivision- Water Supply Plan/Ownership report J.D. Capital LLC

Gentlemen:
This report provides our opinion as to ownership of the water rights herein described and as to the adequacy of the water rights for the proposed development of a 17 acre parcel located generally in the S ½ Section 13, T 8 South Range 67 West, 6th PM, Douglas County, Colorado, aka 2808 haystack Road, Castle Rock CO, 80104 ("Subject Property")

The Subject Property is owned in fee title, by J.D. Capital LLC, based upon Douglas County Real Property Records, and will be divided into 3 approximately equal acreage lots. The Water Supply for the property is also owned and marketable, by J.D. Capital based upon Decree of the Water Court, Water Division One, in Case 23 CW 2023, in the name of J.D. Capital LLC, entered on August 31, 2023. As of the date of this report, J.D. Capital owns the Decreed Water Rights.

Determined Annual Amounts

The following volumes were quantified for use. Re-use and successive use for domestic and in house use, commercial, irrigation, stock watering fire protection, augmentation and replacement purposes, including storage, off and on the property. All of the groundwater identified below is non-tributary and no augmentation plan is required.

Aquifer	Annual Volume (100years)	Total Volume
Lower Dawson	3.3 acre feet	340 acre feet
Denver	9.39 acre feet	930 acre feet
Arapahoe	9.68 acre feet	960 acre feet
Laramie Fox Hills	3.82 acre feet	382 acre feet

Water Supply Plan

The Lower Dawson aquifer will be used for up to 3 wells, each well withdrawing up to 1.1 acre foot per year for 100years, 3.3 acre feet total. Uses will be as follows:

- .6 acre feet per year in-house use/ 2 single family homes
- .4 acre feet for irrigation of 8000 sq. ft lawns.gardens
- .1 acre feet/year – 8 large domestic animals
- 1.1 acre feet [per year total use per lot per well.

Existing Water Supply

One non tributary Denver aquifer well (Permit 42197) currently exists on the Subject Property. The well will not be used for the subdivided lots but will be sold with the lot upon which it is located. Applicant will apply for well permits as needed and all groundwater underlying the lots will be conveyed with the lots as sold.

Respectfully submitted,

HAYES POZNANOVIC KORVER LLC

James J. Petrock

DISTRICT COURT, WATER DIVISION 1, COLORADO Weld County Courthouse P.O. Box 2038 Greeley, CO 80632	DATE FILED: August 31, 2023 10:13 AM CASE NUMBER: 2023CW3023 **▲ COURT USE ONLY ▲**
CONCERNING THE APPLICATION FOR UNDERGROUND WATER RIGHTS OF J.D. CAPITAL LLC, A COLORADO LIMITED LIABILITY COMPANY, Applicant, IN DOUGLAS COUNTY	Case Number: 2023CW3023
FINDINGS OF FACT, CONCLUSIONS OF LAW, RULING OF THE REFEREE, AND JUDGMENT AND DECREE	

A claim for underground water rights was filed in this case on March 16, 2023. All matters contained in the application having been reviewed, such testimony having been taken and evidence presented as was necessary, and being otherwise fully advised in the premises, it is hereby the Findings of Fact, Conclusions of Law, Ruling of the Referee, and Judgment and Decree, as follows:

FINDINGS OF FACT

1. Name and address of Applicant:

   JD Capital LLC
   6665 East Bethany Place
   Denver CO 80224

2. Statements of Opposition: No statements of opposition were filed and the time for filing such statements has expired.

3. Subject Matter Jurisdiction: Timely and adequate notice of the application was published as required by statute, and the Court has jurisdiction over the subject matter of this proceeding and over the parties affected hereby, whether they have appeared or not.

4. Consultation: The Water Referee consulted with the Division Engineer, as required by C.R.S. § 37-92-302(4), on June 12, 2023, and the Division Engineer filed their summary of consultation on June 30, 2023. The amounts herein are consistent with and conform to the values and amounts referenced in the State Engineer's Determinations of Facts dated July 13, 2023.

GROUNDWATER RIGHTS

5. Aquifers and Location of Groundwater: Applicant is granted a decree for rights to groundwater in the nontributary Lower Dawson, Denver, Arapahoe, and Laramie-Fox Hills aquifers underlying 17 acres generally located in the S1/2 of Section 13, Township 8 South, Range 67 West of the 6th P.M., also known as 2808 Haystack Road, Castle Rock, CO, 80104, as shown on **Exhibit A** ("Subject Property").

6. Well Locations, Pumping Rates, and Annual Amounts: The groundwater may be withdrawn at rates of flow necessary to withdraw the amounts decreed herein. The groundwater will be withdrawn through any number of wells necessary, to be located at any location on the Subject Property. Applicant waives any 600-foot spacing rule for wells located on the Subject Property, but must satisfy C.R.S. § 37-90-137(4), for wells owned by others on adjacent properties. The following average annual amounts are available for withdrawal subject to the Court's retained jurisdiction in this matter and are based on a 100-year withdrawal period.

Aquifer	Saturated Thickness	Annual Amount (acre-feet)	Total Amount (acre-Feet)
Lower Dawson (NT)	100	3.4	340
Denver (NT)	325	9.39	939
Arapahoe (NT)	335	9.68	968
Laramie-Fox Hills (NT)	150	3.82	382

7. Well Permits: There is one existing well on the Subject Property operating under Well Permit No. 42197, completed into the nontributary Denver Aquifer, which will continue operating under its existing permit. Additional well permits will be applied for prior to construction of additional wells.

8. Decreed Uses: The groundwater decreed herein will be used, reused, and successively used for domestic, including in-house use, commercial, irrigation, livestock watering, fire protection, and augmentation and replacement purposes, including storage, both on and off the Subject Property.

9. Estimated Average Pumping Rate and Well Depths: Wells will withdraw the subject groundwater at rates of flow necessary to withdraw the entire decreed annual amounts of groundwater. The well depths will conform to the locations of the subject aquifers as referenced in the State Engineer's Determination of Facts for each aquifer or actual aquifer characteristics.

10. Final Average Annual Amounts of Withdrawal:

    10.1 Final determination of the applicable average saturated sand thicknesses and resulting average annual amounts available to Applicant will be made pursuant to the retained jurisdiction of this Court, as described in Paragraph 21 below. In the event this decree is not reopened for a further quantitative determination, the

findings herein are final and controlling. The Court shall use the acre-foot amounts in Paragraph 6 until a final determination of water rights is made.

10.2 The allowed annual amount of groundwater which may be withdrawn through the wells specified above and any additional wells, pursuant to C.R.S. § 37-90-137(10), may exceed the average annual amount of withdrawal, as long as the total volume of water withdrawn through such wells and any additional wells therefor subsequent to the date of this decree does not exceed the product of the number of years since the date of the issuance of any well permits or the date of this decree, whichever is earliest in time, multiplied by the average annual amount of withdrawal, as specified above or as determined pursuant to the retained jurisdiction of the Court. However, amounts set forth in well permits will not be exceeded.

11. Source of Groundwater and Limitations on Consumption:

11.1 The groundwater to be withdrawn from the Lower Dawson, Denver, Arapahoe, and Laramie-Fox Hills aquifers is "nontributary groundwater" as defined in §37-90-103(10.5), C.R.S., and in the Denver Basin Rules, the withdrawal of which will not, within 100 years of continuous withdrawal, deplete the flow of a natural stream, including a natural stream as defined in C.R.S. §§37-82-101(2) and 37-92-102(1)(b), at an annual rate greater than 1/10 of 1% of the annual rate of withdrawal.

11.2 Applicant may not consume more than 98% of the annual quantity of water withdrawn from the nontributary aquifers. The relinquishment of 2% of the annual amount of water withdrawn to the stream system, as required by the Denver Basin Rules effective January 1, 1986, may be satisfied by any method selected by the Applicant and satisfactory to the State Engineer, so long as Applicant can demonstrate that an amount equal to 2% of such withdrawals (by volume) has been relinquished to the stream system.

11.3 There is unappropriated groundwater available for withdrawal from the subject aquifers beneath the Subject Property, and the vested water rights of others will not be materially injured by such withdrawals as described herein. Withdrawals hereunder are allowed on the basis of an aquifer life of 100 years, assuming no substantial artificial recharge within 100 years. No material injury to vested water rights of others will result from the issuance of permits for the subject wells or the exercise of the rights and limitations specified in this decree.

12. Additional Wells and Well Fields:

12.1 Applicant may construct additional and replacement wells in order to maintain levels of production, to meet water supply demands or to recover the entire amount of groundwater in the subject aquifers underlying the Subject Property, as

described herein. As additional wells are planned, applications shall be filed in accordance with C.R.S. § 37-90-137(10).

12.2 Two or more wells constructed into the aquifer shall be considered a well field. In effecting production of water from such well field, Applicant may produce the entire amount which may be produced hereunder through any combination of wells within the well field.

12.3 In considering applications for permits and for additional wells to withdraw the groundwater, which is the subject of this decree, the State Engineer shall be bound by this decree and shall issue said permits in accordance with provisions of C.R.S. § 37-90-137(4) and (10).

12.4 In the event that the allowed average annual amounts decreed herein are adjusted pursuant to the retained jurisdiction of the Court, Applicant shall obtain permits to reflect such adjusted average annual amounts prior to withdrawing the adjusted amounts. Subsequent permits for any wells herein shall likewise reflect any such adjustment of the average annual amounts decreed herein.

13. Conditions for Well Operation and Construction:

For each well constructed pursuant to this decree, Applicant shall comply with the following conditions:

13.1 A totalizing flow meter shall be installed on the well discharge pipe prior to withdrawing any water therefrom and shall be maintained and operational at all times for the life of the well. Applicant shall keep accurate records of all withdrawals by the well, make any calculations necessary, and submit such records to the Water Division 1 Engineer upon request.

13.2 The entire length of the open bore hole shall be geophysically surveyed prior to casing and copies of the geophysical log submitted to the Division of Water Resources. Applicant may provide a geophysical log from an adjacent well or test hole, pursuant to Rule 9A of the Statewide Rules and acceptable to the State Engineer, which fully penetrates the aquifer, in satisfaction of the above requirement.

13.3 Groundwater production shall be limited to the specific identified aquifer. Plain, unperforated casing must be installed and properly grouted to prevent withdrawal from or intermingling of water from zones other than those for which the well was designed.

13.4 Each well shall be permanently identified by its permit number, this Water Court Case Number, and the name of the producing aquifer on the above-ground portion of the well casing or on the pump house.

14. Failure of Applicant or successors in interest to comply with the terms of the decree may result in an order of the Division Engineer's office to curtail or eliminate pumping of the well. This decree shall be recorded in the real property records of Douglas County so that a title examination of the property, or any part thereof, shall reveal to all future purchasers the existence of this decree.

CONCLUSIONS OF LAW

15. Full and adequate notice of the application was given, and the Court has jurisdiction over the subject matter and over the parties whether they have appeared or not.

16. The application for a decree confirming Applicant's right to withdraw and use all unappropriated groundwater from the nontributary aquifers beneath the Subject Property as described herein pursuant to C.R.S. § 37-90-137(4), should be granted, subject to the provisions of this decree.

17. The Water Court has jurisdiction over this proceeding pursuant to C.R.S. § 37-90-137(6). This Court concludes as a matter of law that the application herein is one contemplated by law pursuant to C.R.S. § 37-90-137(4). The application for a decree confirming Applicant's right to withdraw and use all unappropriated groundwater from the nontributary aquifers beneath the Subject Property as described herein pursuant to C.R.S. § 37-90-137(4), should be granted, subject to the provisions of this decree. The determination of groundwater rights herein need not include a date of initiation of the withdrawal project. C.R.S. § 37-92-305(11).

JUDGMENT AND DECREE

18. The Findings of Fact and Conclusions of Law set forth above are hereby incorporated into the terms of this Ruling and Decree as if the same were fully set forth herein.

19. Applicant and/or successors may withdraw the subject groundwater herein through wells to be permitted by the State Engineer's Office located anywhere on the Subject Property in the average annual amounts and at the estimated average rates of flow specified herein, subject to the limitations herein and the retained jurisdiction by this Court.

20. The groundwater rights described in the Findings of Fact are hereby approved, confirmed and adjudicated, including and subject to the terms and conditions specified herein. No owners of or persons entitled to use water under a vested water right or decreed conditional water right will be injured or injuriously affected by the pumping of Applicant's groundwater resources as decreed herein.

21. Retained Jurisdiction:

    21.1 The Court retains jurisdiction as necessary to adjust the average annual amounts of groundwater available under the Subject Property to conform to actual local aquifer characteristics as determined from adequate information obtained from

wells, pursuant to C.R.S. § 37-92-305(11). Within 60 days after completion of any well decreed herein or any test hole(s), Applicant, or any successor in interest to these water rights shall serve copies of such log(s) upon the State Engineer.

21.2 At such time as adequate data is available, any person, including the State Engineer, may invoke the Court's retained jurisdiction to make a Final Determination of Water Right. Within four months of notice that the retained jurisdiction for such purpose has been invoked, the State Engineer shall use the information available to him to make a final determination of water rights findings. The State Engineer shall submit such finding to the Water Court and the Applicant.

21.3 If no protest to such finding is made within 60 days, the Final Determination of Water Rights shall be incorporated into the decree by the Water Court. In the event of a protest, or in the event the State Engineer makes no determination within four months, such final determination shall be made by the Water Court after notice and hearing.

22. The groundwater rights decreed herein are vested property rights appurtenant to the Subject Property and shall remain appurtenant unless expressly severed by conveyance to someone other than the property owner. If any deed for the Subject Property is silent to the conveyance of the water rights decreed herein, it is assumed that the water rights have been conveyed as an appurtenance to the Subject Property, unless all or part of the water rights have been previously severed.

Date: August 9, 2023

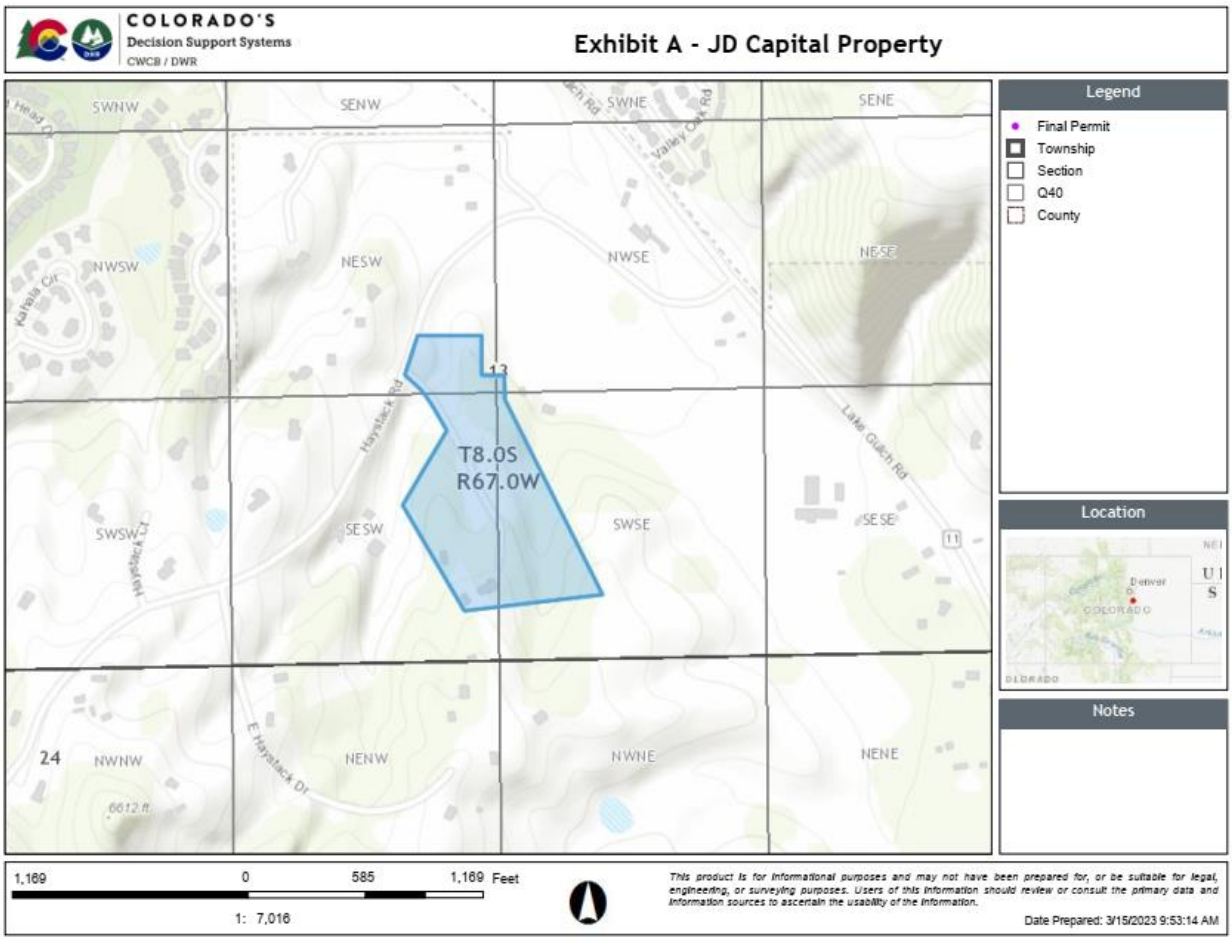
John S. Cowan
Water Referee
Water Division One

The Court finds that no protest was filed in this matter. The foregoing is confirmed and is made the judgment and decree of this Court.

Date: August 31, 2023

_____

Shannon Lyons
Alternate Water Judge
Water Division One



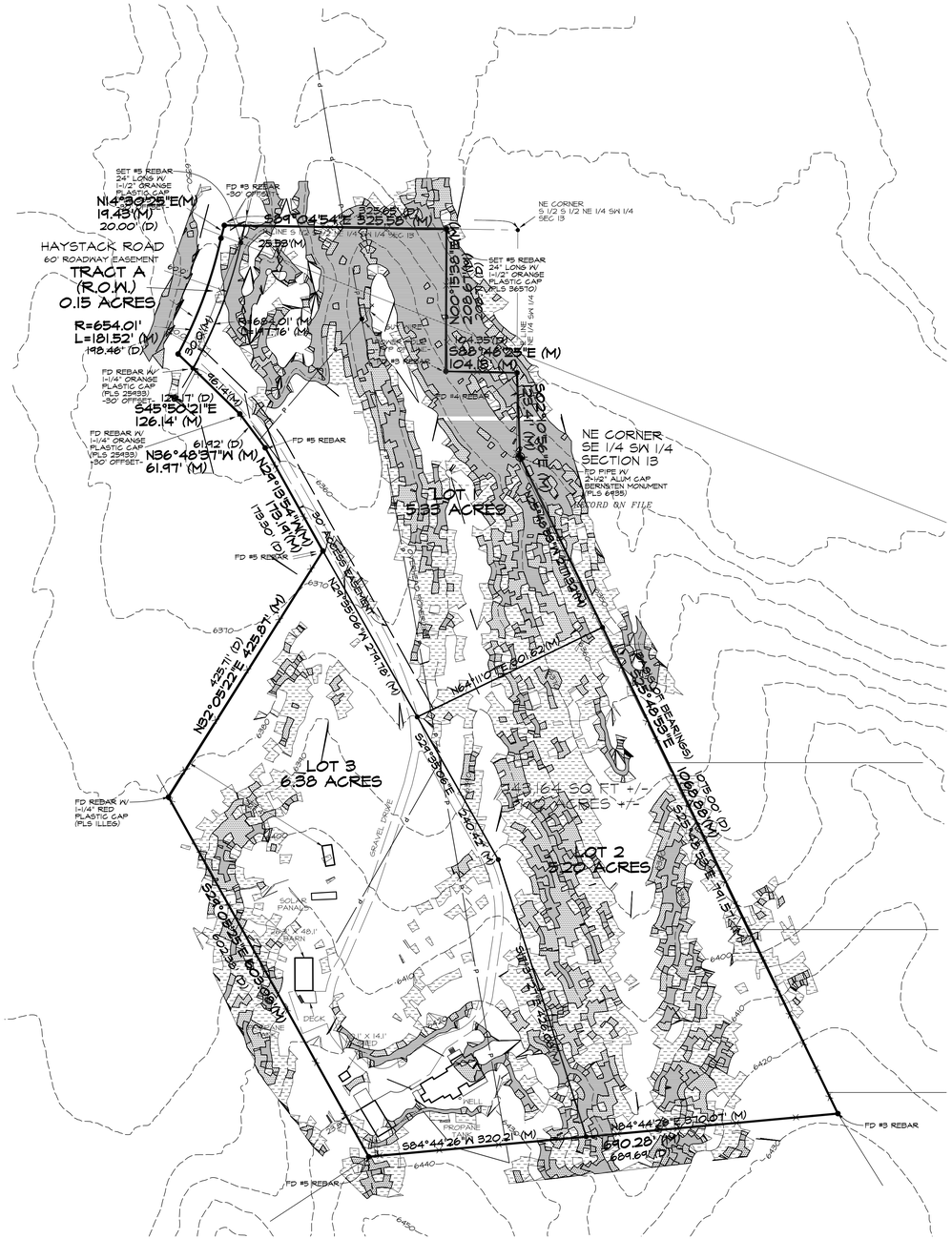
JD Capital
23CW3023

EXHIBIT A

SUPPLEMENTAL PLAT EXHIBIT

2808 HAYSTACK ROAD

IN SECTION 13, T8S, R67W, 6TH P.M., DOUGLAS COUNTY, COLORADO



=15% - 20% Slope

=20% - 25% Slope

=25% or Greater Slope

N

GRAPHIC SCALE 1"=100'

0 100 200 300

(D) = DEEDED DIMENSION

(M) = FIELD MEASURED

=Existing 10' Contour Interval

= FENCE LINE

REVISIONS			
	DAVID E. ARCHER & ASSOCIATES, INC. LAND DEVELOPMENT CONSULTING SURVEYING & ENGINEERING PHONE (303) 688-4642 105 WILCOX ST. CASTLE ROCK, COLORADO 80104	SCALE 1"=100'	TITLE SUPPLEMENTAL PLAT EXHIBIT 2808 HAYSTACK ROAD Located in Section 13, Township 8 South, Range 67 West of the 6th P.M., Douglas County, Colorado.
		DATE 01-05-24	
		DR'N. TDH CK'D.	CLIENT RYAN DYKSTRA
		APV'D.	
		Sheet 1 of 1	JOB NUMBER 22-0478

G:\Drawings\2022\22-0478\Plat\SUPPLEMENTAL EXHIBIT.pro
Fri Jan 26 15:58:53 2024

HAYSTACK HILLS
MINOR DEVELOPEMENT PLAT
LOCATED IN THE S 1/2 OF SECTION 13, TOWNSHIP 8 SOUTH, RANGE 67 WEST OF THE 6TH P.M., COUNTY OF DOUGLAS, STATE OF COLORADO.
SHEET 1 OF 2
3 RESIDENTIAL LOTS AND 1 R.O.W. TRACT- 17.06 ACRES
SB2024-005

DEDICATION STATEMENT:

The undersigned, being all the owners, mortgagees, beneficiaries of deeds of trust and holders of other interests in the land described herein, have laid out, subdivided and platted said lands into lots, tracts, streets and easements as shown hereon under the name and subdivision of Haystack Hills. The utility easements shown hereon are hereby dedicated for public utilities and cable communication systemsand other purposes as shown hereon. The entities responsible for providing the services for witch the easements are established are hereby granted the perpetual right of ingress and egress from and to adjacent properties for installation, maintinance and replacement of utility lines and related facilities. Tract A is dedicated and conveyed to Douglas County, Colorado, in fee simple absolute, with marketable title, for public uses and purposes.

OWNER:

JD Capital LLC, A Colorado Limited Liability Company.

_____
Ryan Dystra Member

State of Colorado)
) SS.
County of Douglas)

Acknowledged before me this _____ day of _____, 2024, by Ryan Dykstra for JD Capital LLC. A Colorado Limited Liability Company.

My commission expires: _____

Witness my hand and seal

_____
Notary Public

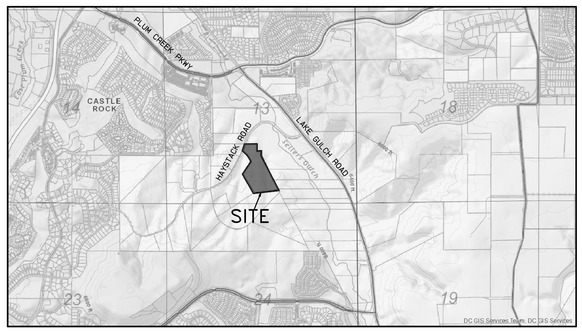
NOTES:

1. Bearings are assumed and based on the consideration that the Southeast line of Described Parcel, bears S25°48'53"E as shown hereon between the identified monuments.
2. The purpose of this replat is to create 3 Lots, and Tract A to add right-of-way for Haystack Road.
3. On-site Wastewater Treatement Systems (OWTS) are required for each lot at time of building permit. Preliminary soils tests indicate that engineered OWTS will most likely be required.
4. Maintenance responsibiliities for the Access Easement will be provided by a Maintinance Agreement recorded at Reception Number _____
5. Tract A is dedicated as right-of-way to Douglas County.

LEGAL DESCRIPTION:

All that part of the South 1/2 of Section 13, Township 8 South, Range 67 West of the 6th Principal Meridian, Douglas County Colorado, described as follows:

Beginning at the Northeast corner of the Southeast 1/4 of the Southwest 1/4 of said Section 13;
Thence Southeasterly along a straight line from the Northeast corner of the Southeast 1/4 of the Southwest 1/4 of Section 13 to the Southeast corner of the Northwest 1/4 of the Northeast 1/4 of Section 24, Township 8 South, Range 67 West of the 6th P.M., a distance of 1075 feet, more or less, to a point which is 1891.39 feet Northwesterly of the Southeast corner of the Northwest 1/4 of the Northeast 1/4 of Section 24 as measured along last described line;
Thence on an angle to the right of 110°44'06", a distance of 689.69 feet;
Thence on an angle to the right of 66°14'58", a distance of 602.38 feet to the True Point of Beginning;
Thence on an angle to the right of 61°00'03" a distance of 425.71 feet; Thence on an angle to the left of 61°19'32" a distance of 173.30 feet; Thence on an angle to the left of 07°19'14" a distance of 61.92 feet;
Thence on an angle to the left of 09°18'47" a distance of 126.17 feet to the centerline of a 60 foot wide roadway easement (Haystack Road);
Thence Northeasterly on an angle to the right of 73°39'16" along said centerline along the arc of a curve to the left a distance of 198.46 feet, said curve has a radius of 654.01 feet, to a point of tangent;
Thence along said tangent, along said centerline a distance of 20 feet to a point on the North line of the South 1/2 of the South 1/2 of the Northeast 1/4 of the Southwest 1/4 of Section 13, which point is 430 feet West of the Northeast corner of the South 1/2 of the South 1/2 of the Northeast 1/4 of the Southwest 1/4 of Section 13; Thence on an angle to the right of 79°30'00" along the North line of the South 1/2 of the South 1/2 of the Northeast 1/4 of the Southwest 1/4 of Section 13 a distance of 325.65 feet; Thence Southerly along a line which is 104.35 feet West of and parallel to the East line of the Northeast 1/4 of the Southwest 1/4 a distance of 208.71 feet;
Thence Easterly and parallel to the North line of the South 1/2 of the South 1/2 of the Northeast 1/4 of the Southwest 1/4 a distance of 104.35 feet to the East line of the Northeast 1/4 of the Southwest 1/4;
Thence Southerly along said East line a distance of 121.70 feet to the Point of Beginning.
County of Douglas, State of Colorado.



VICINITY MAP
SCALE: 1"=2000'

GRAPHIC SCALE 1"=2000'
0 2000 4000 6000

N

APPLICANT INFORMATION:

RYAN DYKSTRA
6665 EAST BETHANY PLACE
DENVER, CO 80224

SUMMARY TABLE

	AREA	PERCENT
LOTS	16.91 AC.	99.1%
RIGHT-OF-WAY	0.15 AC.	0.9%
TOTAL	17.06 AC.	100.0%

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

TITLE VERIFICATION:

We Land Title Guarantee Company do hereby certify that we have examined the title of all land platted hereon and that title to such land is in the dedicator(s) free and clear of all liens, taxes and encumbrances:

Land Title Guarantee Company

By: _____ Date: _____

Title: _____

State of Colorado)
) SS.
County of Douglas)

Acknowledged before me this _____ day of _____, 202_, by

_____ as _____.

My commission expires: _____

Witness my hand and seal

_____
Notary Public

PLANNING COMMISSION:

The minor development final plat SB2024-005 was reviewed by the Planning

Commission on _____.

_____ _____
Planning Director, on behalf of the Planning Commission Date

BOARD OF COUNTY COMMISSIONERS:

This plat was approved for filing by the Board of County Commissioners of Douglas County, CO, on the _____ day of _____, 20_____, subject to any conditions specified hereon.
Tract A is accepted.

All expenses incurred with respect to improvements for all utility services, paving, grading, landscaping, curbs, gutters, sidewalks, road lighting, road signs, flood protection devices, drainage structures, and all other improvements that may be required shall be the responsibility of the subdivider and not Douglas County.

This acceptance does not guarantee that the soil conditions, subsurface geology, groundwater conditions or flooding conditions of any lot shown hereon are such that a building permit, well permit or sewage disposal permit will be issued.

_____
Chair, Board of Douglas County Commissioners

CLERK AND RECORDER:

STATE OF COLORADO
COUNTY OF DOUGLAS

I hereby certify that this plat was filed in my office on this _____ day

of _____, 2024 A.D., at _____ a.m./p.m., and was recorded at

Reception Number _____.

_____
Douglas County Clerk and Recorder

SURVEYOR:

I, Darrell E. Roberts, a duly registered Professional Land Surveyor in the State of Colorado, do hereby certify that this plat truly and correctly represents the results of a survey made on November 11, 2022, and I have reviewed all data associated with this survey of the hereon described property , Douglas County , Colorado. This survey has been reviewed and accepted by myself as being under my responsible charge at this time and that all monuments exist as shown hereon; that mathematical closure errors are less than 1:50,000 (second order); and that said plat has been prepared in full compliance with all applicable laws of the State of Colorado dealing with monuments, subdivisions or surveying of land and all applicable provisions of the Douglas County Subdivision Resolution. This certification is based on my knowledge, information, and belief and is not a guaranty or warranty, either express or implied.

I attest the above on this _____ day of _____, 202_.

_____
Darrell E Roberts for and on behalf of David E. Archer & Assoc. Inc.,
Colorado Registered Professional Land Surveyor # 36057

REVISIONS
Redlines 03-15-24 dmh

DAVID E. ARCHER & ASSOCIATES, INC.
LAND DEVELOPMENT CONSULTING
SURVEYING & ENGINEERING
PHONE (303) 688-4642
105 WILCOX ST. CASTLE ROCK, COLORADO 80104

SCALE
DATE 01-05-24
DR'N. DMH CKD.
AP'VD.

TITLE
HAYSTACK HILLS
MINOR SUBDIVISION PLAT
LOCATED IN SECTION 13, TOWNSHIP 8 SOUTH, RANGE 67 WEST OF THE 6TH P.M., DOUGLAS COUNTY, COLORADO.

CLIENT
RYAN DYKSTRA

Sheet 1 of 2 JOB NUMBER 22-0478

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HAYSTACK HILLS

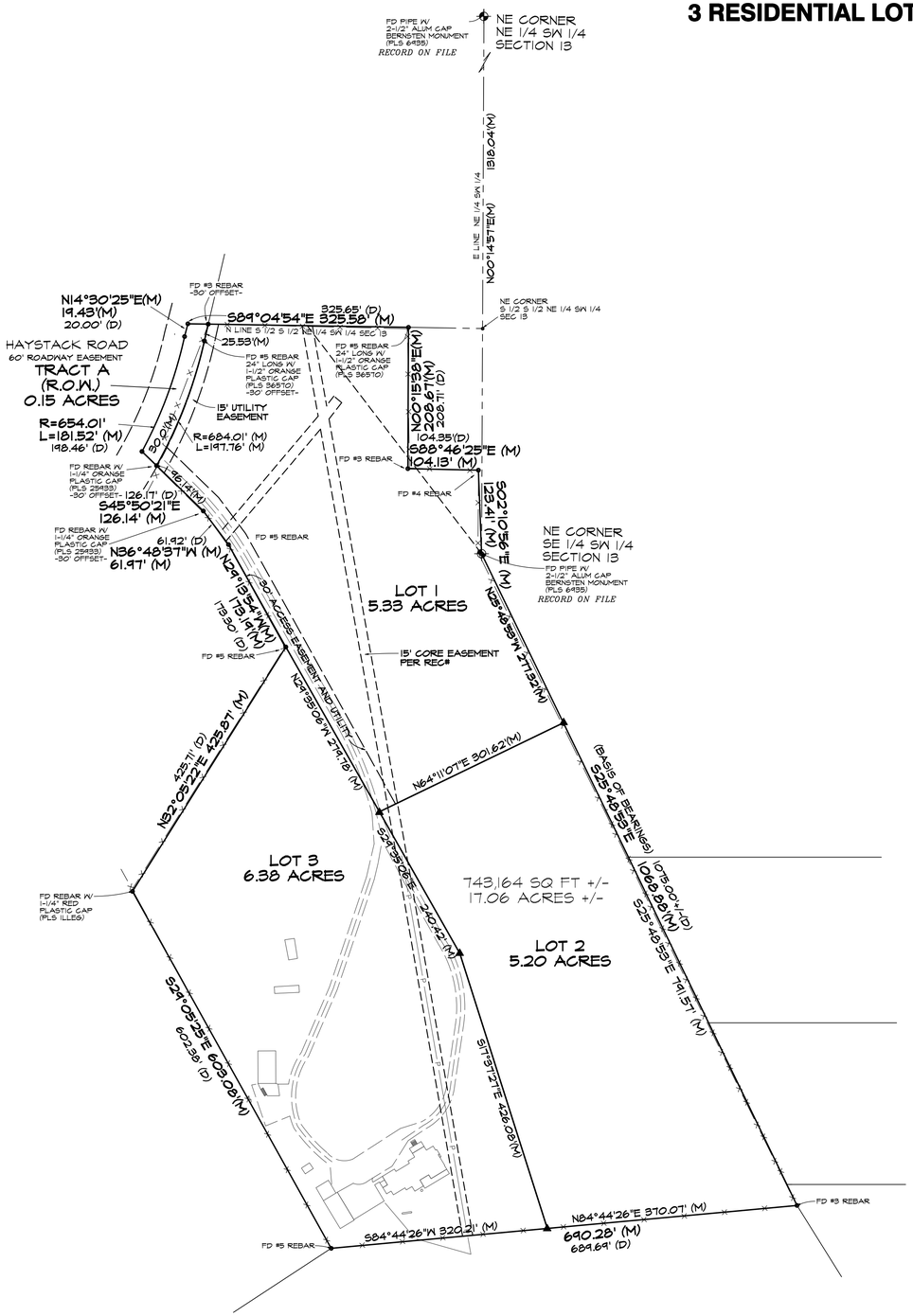
MINOR DEVELOPEMENT PLAT

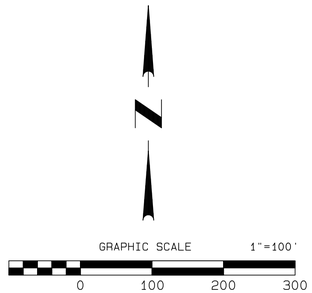
LOCATED IN THE S 1/2 OF SECTION 13, TOWNSHIP 8 SOUTH, RANGE 67 WEST OF THE 6TH P.M., COUNTY OF DOUGLAS, STATE OF COLORADO.

SHEET 2 OF 2

3 RESIDENTIAL LOTS AND 1 R.O.W. TRACT- 17.06 ACRES

SB2024-005





LEGEND:

- ▲ Set #5 Rebar (24" Long)with 1-1/2" Pink Plastic Cap (PLS 36057)
- ● Found Property Corner as shown.
- —Z— Easement as Noted

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

REVISIONS
Redlines 03-15-24 dmh

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LAND DEVELOPMENT CONSULTING
SURVEYING & ENGINEERING
PHONE (303) 688-4642
105 WILCOX ST. CASTLE ROCK, COLORADO 80104

SCALE	1"=100'
DATE	01-05-24
DR'N. DMH	CKD.
AP'VD.	

TITLE: HAYSTACK HILLS MINOR SUBDIVISION PLAT LOCATED IN SECTION 13, TOWNSHIP 8 SOUTH, RANGE 67 WEST OF THE 6TH P.M., DOUGLAS COUNTY, COLORADO.

CLIENT: RYAN DYKSTRA

Sheet 2 of 2 | JOB NUMBER 22-0478

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