DOUGLAS COUNTY
COLORADO

Final Plat Staff Report

Date:	June 10, 2026
To:	Douglas County Board of County Commissioners
Through:	Douglas J. DeBord, County Manager
From:	Kati Carter, AICP, Director of Community Development
CC:	Trevor Bedford, AICP, Senior Planner Jeanette Bare, AICP, Current Planning Manager Steve Koster, AICP, Deputy Director of Community Development
Subject:	**Ramblewood Final Plat**
Project File:	**SB2026-009**

Board of County Commissioners Land Use Meeting: **June 23, 2026 @ 2:30 p.m.**

I. EXECUTIVE SUMMARY

The request is for approval of a final plat for 68 single-family detached residential lots, two agricultural lots, eight tracts, and associated public roads on approximately 176.8 acres in the Ramblewood Planned Development (PD). The site is located on the south side of Hilltop Road, across from its intersection with Merryvale Trail. Access will occur via Hilltop Road with a secondary access to the south via Alpine Drive. Water and sewer service will be provided through inclusion into the Parker Water and Sanitation District (PWSD).

This property is within the Northeast Subarea as identified by the 2040 Comprehensive Master Plan.

II. APPLICATION INFORMATION

A. Applicants

Hilltop Jam, LLC
2554 Aspen Drive
Park City, UT 84060

Bradley A Whittlesey & Joan V Whittlesey
4700 E Princeton Ave
Englewood, CO 80113

B. Applicant's Representative

Dan Sheldon
6900 E Bellview Avenue, Suite 300
Greenwood Village, CO 80111

C. Request

The request is for approval of a final plat consisting of 68 single-family detached lots, two agricultural lots, eight tracts, and associated roads on approximately 176.8 acres.

D. Process

A final plat application is processed pursuant to Article 5 of the Douglas County Subdivision Resolution (DCSR). Article 5 states the intent of the process is "To provide for the review of the final engineering plans, the subdivision improvement agreement, public dedications, and other legal agreements."

Per Section 504.06 of the DCSR. "The Board shall evaluate the final plat, staff report, referral agency comments, applicant responses, and public comment and testimony, and shall approve, approve with conditions, continue, table for further study, or deny the final plat. The Board's action shall be based on the evidence presented, compliance with adopted County standards, regulations, and policies, and other guidelines."

E. Location

The project is located on the south side of Hilltop Road, across from its intersection with Merryvale Trail.

F. Project Description

The applicant is requesting approval to subdivide approximately 177 acres into 68 single-family residential lots, two agricultural lots, and eight tracts within the Ramblewood PD. Proposed lot sizes for the single-family residential lots range from 13,499 square-feet to 26,560 square-feet. The agricultural lots will be 53.128 acres and 28.635 acres.

Tracts A, B, C, E, and F will be owned and maintained by the Ramblewood Metropolitan District as open space tracts that will provide buffers to adjacent properties. The tracts will also allow for drainage improvements, with Tracts A, C, and E also allowing for utilities.

Tract G is an internal open space tract that will be owned and maintained by the Ramblewood Metropolitan District and allow for open space, drainage, and utilities and will serve as a buffer between lots in this subdivision.

Tract H is for a public park and open space and will be owned and maintained by the Ramblewood Metropolitan District.

Proposed Tract D will be used for open space, utilities, and drainage. This tract will be privately owned as a director's parcel and maintained by the Ramblewood Metropolitan District. When the director's parcel is no longer needed, the tract will be conveyed to the Ramblewood Metropolitan District in accordance with plat note 9.

Access to the subdivision is proposed to be primarily via Hilltop Road, with a secondary access to Alpine Drive. Direct access to lots will be via the internal public roadways, Freerider Point, Halfpipe Place, Derailer Street, and Railbender Street. These public roads will be dedicated to Douglas County via the final plat. The applicant will also dedicate 80 feet of right-of-way for Alpine Drive.

Non-exclusive 15-foot utility easements are proposed along all internal roadways and along Hilltop Road. A secondary drainage easement will be dedicated to Douglas County over Tracts A, B, C, D, E, and F for backup drainage maintenance purposes.

The final plat exhibit and proposal generally conform to the approved preliminary plan.

Project Details

Zoning	Ramblewood PD
Gross Site Acreage	176.795 Acres
Residential Lots	68 Single-Family and 2 Large Lot Residential and Agricultural
Tracts	8 Tracts
Public Roadways	4
Gross Density	1 dwelling per 2.52 acres

III. CONTEXT

A. Background

The property has been historically zoned and used for agriculture. The surrounding properties to the west, south, and east are part of the Hidden Village subdivision, which was rezoned from agricultural to residential in 1970. These properties are now zoned Rural Residential (RR) to the south and west and Estate Residential (ER) to the east.

The subject property was rezoned from Agricultural One (A-1) and Rural Residential (RR) to the Ramblewood PD in August 2025. A preliminary plan for Ramblewood was approved by the Board of County Commissioners in March 2026.

B. Adjacent Land Uses and Zoning

The property is primarily surrounded by residential and agricultural properties.

Zoning and Land Use

	Zoning	Land Use
North	Rural Residential and Open Space	Single-Family Residential and Open Space Tracts
South	Estate Residential	Single-Family Residential
East	Estate Residential and Rural Residential	Single-Family Residential
West	Rural Residential and Agricultural One	Single-Family Residential and Agricultural

IV. PHYSICAL SITE CHARACTERISTICS

A. Site Characteristics and Constraints

The northern portion of the site generally slopes to the north towards Hilltop Road. The southern portion of the site has varying topography, generally sloping to the south towards Alpine Drive.

B. Access

The subdivision will be primarily accessed via Hilltop Road with a secondary access from Alpine Drive to the south. Hilltop Road is a major arterial roadway that will be widened by Douglas County in the future. Alpine Drive is currently an unpaved road with plans for the County to pave it in the future. Internal public roadways will be constructed to access individual lots.

The applicant submitted a traffic impact study that was accepted by Douglas County. The applicant is dedicating 80 feet of right-of-way for Alpine Drive. The applicant will additionally be required to construct access improvements from Hilltop Road and contribute towards the paving of Alpine Drive.

C. Soils and Geology

The CMP Class 3 Hazards and Environmental Constraints map indicated no constraints on the site. Colorado Geologic Survey (CGS) responded to the referral request with no objection noting that there were no unusual geologic conditions or constraints within the proposed subdivision area that would preclude residential use and density.

D. Drainage and Erosion

A Phase III Drainage Report, GESC Plan and Report, and Construction Documents have been reviewed by Engineering and found to be acceptable. Two drainage ponds will be constructed with one pond in Tract A and one pond in Tract C. Douglas County will be granted primary drainage easements for access to these ponds as well as secondary drainage easements over Tracts A, B, C, D, E, and F. A blanket access easement is also granted to Douglas County for access in the event that the drainage easements do not provide sufficient access. Specific improvements are identified in the Subdivision Improvements Agreement (SIA).

E. Floodplain

A portion of the agricultural planning areas contain floodplain. There is sufficient space to construct residences outside of the floodplain on the agricultural lots. Any future structures on these lots will be evaluated for impacts to the floodplain at building permit.

F. Wildlife

The CMP Wildlife resources map identifies the site as having low habitat value. The applicant provided and ecological resources survey of the site that concluded no threatened or endangered species, or their obvious habitat were seen on the property. The project includes open space buffers on the east and west sides of the single-family residential lots and wildlife friendly fencing adjacent to open space.

G. Historic Preservation

The applicant provided a Class II cultural resources survey for review. Douglas County Historic Preservation responded to the referral request with no further comments and reminded the applicant to be mindful of any cultural resources or features they may encounter during construction.

V. PROVISION OF SERVICES

A. Schools

The Douglas County School District indicated in its referral comments that the project generates a land dedication requirement of 1.579 acres. Since this is smaller than DCSD's minimum school site size, DCSD requests cash-in-lieu of land dedication. This equates to a cash-in-lieu contribution of $126,110 based on an appraisal of the property. The applicant has requested that this fee be due prior to issuance of the first building permit within this plat. DCSD stated no objection to that request in their referral response.

B. Fire Protection

The proposed central water services will support fire protection services. South Metro Fire Rescue (SMFR) responded to the referral request with no objection to the final plat.

C. Sheriff Services

The Douglas County Sheriff's Office (DCSO) provides emergency services to the site. The Office of Emergency Management responded to the referral request with no comment. DCSO and DCSO E911 did not respond to the referral request.

D. Water

All lots will be served by central water by PWSD. The applicant has provided a will-serve letter from PWSD indicating that the district is committed to serving the lots. A condition of approval of the Ramblewood Preliminary Plan was that the applicant would provide evidence of inclusion into PWSD prior to the Board's consideration of

the first final plat within the Ramblewood PD. The applicant provided an executed Inclusion Agreement with PWSD that indicates that the inclusion is subject to final plat approval by Douglas County. As such, the court ordered inclusion has not been filed. The applicant has requested to modify the original condition so that the court order for inclusion into PWSD will be provided prior to recordation of this final plat (proposed condition #1).

E. Sanitation

The 68 single-family residential lots will be served with central sewer services by PWSD through an IGA between Ramblewood Metropolitan District, PWSD, and the Pinery Water and Wastewater District (PWWD). The two agricultural lots are proposed to be served by septic, but will have the option to connect to central sewer services if desired. The Douglas County Health Department (DCHD) responded to the referral request with a favorable recommendation for water service and sewage disposal.

The Preliminary Plan approval included a condition of approval that required the applicant to submit and receive approval for a Location and Extent for an off-site gravity sewer line. The Planning Commission reviewed the Location and Extent and voted to approve the request 8-0 at its June 1, 2026, public hearing.

F. Utilities

Utility service is provided by CORE Electric and Xcel Energy. CORE Electric requested the addition of a plat note which the applicant has incorporated. Xcel Energy responded to the referral request noting future applications for natural gas service and that separate easements could be required.

G. Dedications

The following dedications are accomplished with this final plat.

Roads	The internal roads are dedicated to Douglas County as public roadways. 80 feet of right of way is dedicated for Alpine Drive to Douglas County.
Tracts	Tracts A, B, C, E, F, G, and H will be dedicated to the Ramblewood Metropolitan District for ownership and maintenance for open space, drainage, utilities, and park facilities. Tract D will be privately owned as a director's parcel and dedicated to the Ramblewood Metropolitan District for maintenance for drainage, open space and utilities. Tract D will be conveyed to the Ramblewood Metropolitan District when it is no longer needed as a director's parcel in accordance with plat note 9.

Drainage and Blanket Access Easements	Drainage easements will be dedicated to Douglas County. Secondary drainage easements will be dedicated to Douglas County over Tracts A, B, C, D, E, and F. A Blanket access easement over the subdivision will be dedicated to Douglas County.
Utilities	Douglas County will accept general purpose utility easements.

H. Parks, Trails, and Open Space

Douglas County Parks, Trails, and Building Grounds reviewed the proposal. The applicant is responsible for a land dedication of 3.15 acres based on Article 10 of the DCSR. The applicant will construct a public park and has included park improvements in the SIA to receive credits for this requirement. The plat includes a 1.5-acre park that will be constructed on Tract H. This park will be open to the public and owned and maintained by the Ramblewood Metro District. Based on the appraised value of the land, the remaining 1.65 acres would require a cash-in-lieu payment of $131,781. The applicant will provide onsite park improvements totaling $573,198.34 in-lieu of fees. Park improvements are included in the SIA. The plat also contains approximately 56.5 acres of additional open space tracts that will serve as areas for trails, drainage and buffers to neighboring properties.

I. Subdivision Improvements

The intent of the County's final plat process is "to provide for the review of the final engineering plans, the subdivision improvements agreement, public dedications, and other legal agreements." Per the DCSR and the Douglas County Roadway Design and Construction Standards, specific engineering reports, studies, and construction plans are required to be submitted with a final plat application and finally accepted by Engineering prior to plat approval. Further, Colorado Revised Statute 30-28-133 (5) provides that:

No subdivision shall be approved under Section 30-28-110(3) and (4) until such data, surveys, analyses, studies, plans, and designs as may be required by this section and by the county planning commission or the board of county commissioners have been submitted, reviewed, and found to meet all sound planning and engineering requirements of the county contained in its subdivision regulations.

Cost estimates for the public and private improvements are generated from the construction plans and incorporated into the SIA for the plat. Required improvements for Ramblewood include internal subdivision roads, two detention ponds and other subdivision drainage facilities, park improvements, and water and sanitary sewer improvements.

VI. PUBLIC NOTICE AND INPUT

Courtesy notices of an application in process were mailed to abutting landowners. As of the writing of this staff report, four members of the public responded with support for the project. All referral agency comments are outlined in the Referral Agency Response Report and the Referral Response Letters attached to this staff report.

VII. STAFF ANALYSIS

Per Article 503 of the DCSR, a final plat may be approved upon the finding by the Board of County Commissioners that the following standards have been met:

503.01: Conforms with the goals, objectives, and policies of the Master Plan.
Staff Comment: The property is located within the Northeast Subarea as identified in Section 3 of the 2040 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 Ramblewood final plat attempts to balance the competing values of the CMP.

Goals, objectives, and policies within Section 3 often discuss open space and wildlife (Policy 3-1E.1, Policy 3-2A.2, Policy 3-2D.1, Policy 3-3E.6), compatibility with the natural and rural characteristics of the area (Objective 3-2A, Objective 3-2B, Policy 3-2B.1, Policy 3-3E.1, Policy 3-3E.2, Policy 3-3E.3, Policy 3-3E.7) and availability of services including central water and sewer services (Policy 3-3E.2 and Policy 3-3E.3).

The applicant has identified open space buffers and trails and as a part of the PD will require wildlife fencing on properties adjacent to open space. The single-family residential lots have been clustered on the northern portion of the property to preserve open space buffers and natural features to limit land disturbance while providing large enough lots to take existing vegetation into account when siting homes. Additionally, the project will be served by central water for all lots and central sewer services for the 68 single-family lots while the two agricultural lots will have the option to connect to central sewer services if desired.

Policy 3-3E.1 states that "A maximum gross density of one dwelling unit per 2.5 acres is supported in the Northeast Subarea where it is logical infill, where approximately 50 percent of the property boundary is adjacent to zoned lands or parcel sizes consistent with the proposed development, and where site characteristics generally support it." This project has a gross density of one dwelling unit per 2.5 acres. In their narrative, the applicant states that they believe the project's overall density and layout of lots and opens space tracts are consistent with adjacent land use patterns.

503.02: Addresses the design elements established in Article 4, Section 404.
Staff Comment: The proposed subdivision is in conformance with the design elements. Proposed lot sizes allow for setbacks that conform to the requirements of the Ramblewood PD. The site has no Class 3 geologic hazards. Subdivision wide drainage and grading concepts have been reviewed and accepted by Douglas County Engineering on a preliminary basis. The applicant will take care to protect archaeological and historical resources if uncovered during construction. Vehicular, pedestrian, and bicycle access is provided through the inclusion of internal streets and trails.

503.03: 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 CDWR has reviewed the request and has determined that the supply is adequate. The applicant will be required to provide evidence of inclusion into PWSD prior to recordation of this final plat.

> **1803A.01 The applicant has demonstrated that the water rights can be used for the proposed uses.**
> *Staff Comment: The will-serve letter and other documentation from PWSD demonstrates that the water rights owned by PWSD can be used for the proposed uses within the subdivision.*
>
> **1803A.02 The reliability of a renewable right has been analyzed and is deemed sufficient by the County based on its priority dates within the Colorado System of Water Rights Administration.**
> *Staff Comment: No renewable water rights are proposed to serve the development.*
>
> **1803A.03 The Water Plan is deemed adequate and feasible by the County to ensure that water supply shortage will not occur due to variations in the hydrologic cycle.**
> *Staff Comment: A Water Plan is not required for review of proposed water service by a District.*
>
> **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: A Water Plan is not required for review of proposed water service by a District.*

503.04 Provides for a public wastewater collection and treatment system and, if other methods of wastewater collection and treatment are proposed, such systems comply with State and local laws and regulations.
Staff Comment: Sanitation Services will be provided by the PWWD through an IGA with PWSD and the Ramblewood Metro District. At Preliminary Plan, a condition of approval was included in the motion that the applicant would provide evidence of inclusion into PWSD prior to the Board's consideration of the first final plat within the Ramblewood PD.

The applicant has provided a copy of the executed Inclusion Agreement with PWSD. However, the inclusion is subject to the County's approval of the final plat. As such, the court ordered inclusion has not been filed. The applicant has requested to modify this condition so that the court order of inclusion into PWSD will be provided prior to recordation of this final plat.

In addition, the construction of an off-site sewer line is necessary to extend sewer services to the subdivision. The Preliminary Plan approval included a condition that the applicant receive approval of a Location and Extent for the sewer line prior to the Board's consideration of the first final plat within the Ramblewood PD. This application was approved by the Planning Commission at its June 1, 2026, public hearing as Project File LE2026-007.

503.05 Identifies all areas of the proposed subdivision, which may involve soil or topographical conditions presenting hazards or requiring special precautions and the proposed uses of these areas are compatible with such conditions.
Staff Comment: A geotechnical study was provided by the applicant and reviewed by Colorado Geologic Survey (CGS). CGS responded to the referral request with no objection noting that there were no unusual geologic conditions or constraints within the proposed subdivision area that would preclude residential use and density.

503.06 Provides adequate drainage improvements.
Staff Comment: A Phase III Drainage Report, GESC Plan and Report and Construction Documents have been reviewed by Engineering and found to be acceptable. Two drainage ponds will be constructed with one pond in Tract A and one pond in Tract C. Douglas County will be granted primary drainage easements for access to these ponds as well as secondary drainage easements over Tracts A, B, C, D, E, and F. A blanket access easement is also granted to Douglas County for access in the event that the drainage easements do not provide sufficient access.

503.07 Provides adequate transportation improvements.
Staff Comment: Engineering has reviewed and accepted the traffic impact study provided with the final plat.

503.08 Protects significant cultural, archaeological, natural, and historical resources and unique landforms.
Staff Comment: No unique landforms are located within the subject property. 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 a discovery. The applicant provided a Class II cultural resources survey that was reviewed and accepted by the Douglas County Curator.

503.09 Has available all necessary services, including fire and police protection, recreation facilities, utility services, streets, and open space to serve the proposed subdivision.

Staff Comment: The proposed subdivision will be served by South Metro Fire, the Douglas County Sheriff's Office, the Douglas County School District, CORE Electric Cooperative, Xcel Energy, Comcast and CenturyLink. Public streets are proposed within the project. A 1.5-acre public park is proposed along with approximately 56.5 acres of additional open space and a trail system. The public park, along with park improvements identified within the SIA, will be provided to satisfy park land dedication requirements. Cash-in-lieu of school land dedication in the amount of $126,110 will be paid prior to issuance of the first building permit for a residential unit within the subdivision.

VIII. STAFF ASSESSMENT

Staff has evaluated the final plat request in accordance with Article 5 of the DCSR. The final plat is consistent with the use and development standards in the Ramblewood PD. Should the Board find that the approval standards for the final plat are met, the following proposed conditions should be considered for inclusion in the motion:

1. Prior to recordation of the final plat, evidence that the court ordered inclusion of the property into the Parker Water and Sanitation District has occurred shall be submitted to Douglas County.

2. Prior to the issuance of the first building permit for a residential unit in this final plat, the applicant shall pay cash-in-lieu of land dedication to the Douglas County School District in the amount of $126,110.

3. 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 and complete appropriate Colorado Office of Archaeology and Historic Preservation data management forms in the event of such discovery.

4. During construction activity within the development, the applicant, its successors and assigns shall conduct a burrowing owl study if any earth moving will take place between March 15 and October 31.

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

6. All commitments and promises made by the applicant or the applicant's representative during the public meeting 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**

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DOUGLAS COUNTY
COLORADO

Land Use Application

Please complete, sign, and date this application. Return it with the required items on the Submittal Checklist to planningsubmittals@douglas.co.us. Submittals may also be mailed or submitted in person to Planning Resources.

PROJECT INFORMATION

Project Type: Subdivision - Final Plat

Marketing Name: Ramblewood

Presubmittal Review Project Number: PS2026-002

PROJECT SITE

Address: Two parcels directly south of the intersection of Hilltop Road and Merryvale Trail

State Parcel Number(s): Parcel 1: 2347-061-00-001; Parcel 2: 2347-063-00-001

Subdivision/Block#/Lot# *(if platted)*:

PROPERTY OWNER(S)

Name(s): Parcel 1 Owner: Hilltop Jam, LLC; Parcel 2 Owners: Bradley A. & Joan V. Whittlesey

Address: Parcel 1 Owner: 2554 Aspen Spring Drive, Park City, UT 84060; Parcel 2 Owners: 4700 E. Princeton Ave, Englewood, CO 80113

Phone: Parcel 1 Owner: 435-649-6686; Parcel 2 Owners: 720-205-6441

Email: Parcel 1 Owner: jahapc@yahoo.com; Parcel 2 Owners: brad.whittlesey@gmail.com, whittlejv@gmail.com

AUTHORIZED REPRESENTATIVE

Name: Dan Sheldon

Company: Miller United Real Estate

Address: 6900 E. Belleview Ave, Suite 300, Greenwood Village, CO 80111

Phone: 303-886-2838

Email: dsheldon@miller-united.com

A notarized Letter of Authorization is required from the property owner, unless the owner is acting as the representative.

ACKNOWLEDGMENT

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*.

Daniel R. Sheldon — Applicant's Signature

January 29, 2026 — Date

NOTICE: Douglas County Planning does not charge "Approval" fees. Douglas County communicates through our official email accounts ending in @douglas.co.us; beware of phishing scams using similar addresses. If you have questions or concerns about the validity of an email or invoice, please call our public outreach and assistance team at 303-660-7460 or email planning@douglas.co.us.

Project Number (Office Use Only): SB2026-009

PREBLE'S MEADOW JUMPING MOUSE

What is the Preble's Meadow Jumping Mouse?

The Preble's Meadow Jumping Mouse is a rare mouse designated by the United States Fish and Wildlife Service as a "threatened species" under the Endangered Species Act. The federal threatened species designation prohibits the unlawful "take" of the Preble's Meadow Jumping Mouse or its habitat.

Where does the mouse live?

The Preble's Meadow Jumping Mouse lives primarily in heavily vegetated riparian habitats. In Douglas County, the mouse has been located in or near many drainages, including tributaries and the mainstream reaches of East and West Plum Creek. However, any stream reach or potential habitat within Douglas County may be subject to the requirements of the Endangered Species Act. The mouse has also been found in Boulder, Elbert, El Paso, Jefferson, and Larimer counties and in parts of Wyoming.

What activities may be considered a violation of the Endangered Species Act?

In its listing decision, the United States Fish and Wildlife Service identified activities that may result in violation of the Endangered Species Act to include:

- Unauthorized or unpermitted collection, handling, harassing, or taking of the species;
- Activities that directly or indirectly result in the actual death or injury death of the mouse, or that modify the known habitat of the species, thereby significantly modifying essential behavioral patterns (e.g., plowing, mowing, or cutting; conversion of wet meadow or riparian habitats to residential, commercial, industrial, recreational areas, or cropland; overgrazing; road and trail construction; water development or impoundment; mineral extraction or processing; off-highway vehicle use; and, hazardous material cleanup or bioremediation); and;
- The application or discharge of agrichemicals or other pollutants and pesticides onto plants, soil, ground water, or other surfaces in violation of label directions or any use following Service notification that such use, application or discharge is likely to harm the species; would be evidence of unauthorized use, application or discharge.

How to determine if a proposed activity would violate the Endangered Species Act.

Any questions regarding whether an activity will impact the Preble's Meadow Jumping Mouse or its habitat should be directed to:

Field Office Supervisor
USFWS Colorado ES Field Office (MS 65412)
Denver Federal Center
PO Box 25486
Denver, CO 80225-0486
303-236-4773
ColoradoES@fws.gov

Where to find more information on the Preble's Meadow Jumping Mouse.

More information from the US Fish and Wildlife Service can be found at: https://ecos.fws.gov/ecp/species/4090

Any approval given by Douglas County does not obviate the need to comply with applicable federal, state, or local laws and/or regulations.

NORRIS DESIGN
PEOPLE + PLACEMAKING
1101 Bannock Street
Denver, Colorado 80204
303.892.1166

May 18, 2026

Douglas County, Department of Community Development
100 Third Street, #220
Castle Rock, CO 80104

RE: APPLICATION FOR RAMBLEWOOD FINAL PLAT

Dear Douglas County Department of Community Development,

On behalf of Miller-United, Norris Design is pleased to present the following proposal to plat 176.8 acres as 8 tracts, 68 single-family residential lots, and 2 agricultural lots on the subject property known as Ramblewood. The subject site is composed of two separate parcels of land: the 16.9-acre Hilltop JAM LLC Parcel (County Parcel #: 2347-061-00-001) and the 159.2-acre Whittlesey Parcel (County Parcel #: 2347-063-00-001). The two parcels were recently rezoned as the Ramblewood Planned Development (Reception #2025045524) on September 26, 2025. The Final Plat is preceded by the Ramblewood Preliminary Plan (Case Number #SB2025-040), which was approved by the Board of County Commissioners on March 10, 2026. The site is bordered by Hilltop Road to the north, Alpine Drive to the southwest, and residential homes to the west, east, and southeast.

PROJECT TEAM

Owner:
Hilltop JAM LLC
2554 Aspen Springs Drive
Park City, UT 84060
435.649.6686
Contact: James Helfand
jahapc@yahoo.com

Applicant:
Miller United Real Estate, LLC
6900 E. Belleview Avenue, Suite 300
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303.886.2838
Contact: Dan Sheldon
dsheldon@miller-united.com

Civil Engineer/Surveyor:
LJA Engineering
1765 West 121st Avenue, Suite 300
Westminster, CO 80234
303.421.4224
Contact: Kevin Lovelace, PE
klovelace@lja.com

Owner:
Bradley A. Whittlesey & Joan V. Whittlesey
4700 E Princeton Ave
Englewood, CO 80113
720.205.6441
Contact: Brad Whittlesey
Brad.whittlesey@gmail.com

Planner and Landscape Architect:
Norris Design
1101 Bannock Street
Denver, Colorado 80204
303.892.1166
Contact: Sarah Tengen
stengen@norris-design.com

Traffic Engineer:
SM Rocha, LLC
8700 Turnpike Drive, Suite 240
Westminster, Colorado 80031
303.458.9798 Ext. 106
Contact: Stephen Simon
stephen@smrocha.com

BACKGROUND

The Hilltop JAM LLC Parcel, located in the east half of Section 6, Township 7 South, Range 65 West of the 6th principal meridian, County of Douglas, State of Colorado, lies vacant of structures and paved roads. Directly adjacent to the south lies the Whittlesey Parcel, located in the southwest quarter and the southeast quarter of Section 6, Township 7 South, Range 65 West of the 6th principal meridian, County of Douglas, State of Colorado, and is additionally vacant of any structures and paved roads.

The intent of the proposed Final Plat is to plat the Hilltop JAM LLC Parcel and Whittlesey Parcel as one property with 8 tracts, 68 clustered single-family residential lots and 2 agricultural, or ranch lots, resulting in an overall site density of 0.39 dwelling units per acre. Both parcels were recently rezoned under the Ramblewood PD (Reception #2025045524) which requires a maximum site density of 0.39 dwelling units per acre; this equates to a density of 1 unit per 2.53 acres. The Hilltop JAM LLC Parcel lies within Planning Area A and is zoned single-family residential with a maximum density of 0.88 dwelling units per acre. The Whittlesey Parcel lies within Planning Areas A, B, and C. The majority of the Whittlesey Parcel lies within Planning Area B and is zoned agricultural with a maximum density of 0.02 dwelling units per acre. All tracts will be owned and maintained by the Ramblewood Metro District.

The focus of this application is establishing single-family residential cluster lots within Planning Area A, establishing the two ranch lots of Planning Area B, and the provision of related infrastructure in one phase.

PROJECT DESCRIPTION

The Final Plat proposes primary access (Halfpipe Place) to be achieved from Hilltop Road to the north with secondary, or emergency access, from Alpine Drive to the south. Improvements to the intersection of Halfpipe Place and Hilltop Road shall be the responsibility of the property owners and their assigns. The Site will be connected by a network of streets with a detached walk on one side providing pedestrian circulation. A trail network has been designed providing recreational opportunity and additional connectivity to Site amenities including the mail kiosk, ponds, parks, open space, and view corridors. Freerider Point/Freerider Way and Derailer Street intersect Halfpipe Place and provide access to the single-family lots proposed on the northern half of the site. Railbender Street intersects Halfpipe Place by following the natural ridgeline and existing dirt road where possible to support secondary access. Cul-de-sacs are proposed to allow the street network to work with the natural grade and minimize disturbance of the land while providing safe and effective circulation. Fire hydrants shall be provided along Halfpipe Place, Freerider Point/Freerider Way, and Derailer Street to serve the Site and surrounding neighborhoods. Although not required, a fire vehicle turnaround will be provided along Railbender Street which will support fire life safety measures both on Site and in the surrounding area. All proposed roadways will be owned and maintained by Douglas County.

As the site abuts Hilltop Road, which is a Major Arterial, a Sound Study was provided at the time of Preliminary Plan. A Traffic Impact Study has been included with this application. Prior to the recordation of the Final Plat, the owners and their assigns shall be responsible for their fair share contribution towards the paving of Alpine Drive pursuant to the agreed upon amount contained in the recorded Ramblewood Planned Development. The owners and their assigns shall also dedicate

public right-of-way for Hilltop Road, as determined by the County, and 80 feet of public right-of-way for Alpine Drive.

The proposed single-family residential lots have been designed to minimize development impact to the site and its adjacent communities. The 68 lots are clustered to the northern half of the Site with large open space buffers. These lots are in line with the density (0.88 du/ac), boundary, use, and standards of Planning Area A as stated in the Ramblewood PD. The 2 ranch lots are in line with the density (0.02 du/ac), boundary, use and standards of Planning Area B as stated in the Ramblewood PD. The overall site density (0.39 du/ac) is consistent with both the Ramblewood PD and CMP Northeast Subarea.

The proposed Final Plat includes over 60 acres for parks, open space, and trails. The park is an approximately 1.5-acre public park (owned and maintained by the approved Ramblewood Metropolitan District). Local and Regional Park and Trail dedication requirements shall meet the criteria provided in Article 10, Section 1003.11.1, 1003.11.2,1003.11.3, and 1003.11.4 of the Douglas County Subdivision Resolution, as amended.

Utilities including water, storm sewer, and sanitary sewer shall be provided to the lots via underground lines and routes designed in compliance with Douglas County Engineering Standards. Offsite sewer extensions are being pursued through a Location & Extent Application to be reviewed by Douglas County. Two detention ponds shall be provided on site – one south of Hilltop Road, north of Freerider Point/Freerider Way and one south of Freerider Point/Freerider Way, north of the ranch lots.

PROVISION OF SERVICES

Metro District

With the Ramblewood PD, the Ramblewood Metro District was approved and shall be responsible for the provision of Site services.

Schools

The Douglas County School District has provided a Will Serve Letter for the development. As the land dedication requirement anticipated from the Student Generation is smaller than the District's minimum school site requirement, the District has requested cash-in-lieu of land dedication to be paid pursuant to an agreement with the Douglas County School District, at the time of recordation of the Final Plat.

Fire Protection Service

As the Site is located within the jurisdictional boundaries of South Metro Fire Rescue, the Fire District will provide fire prevention, fire suppression, emergency medical, and special team response services to the property. The applicant has provided a Will Serve Letter from South Metro Rescue and a Wildfire Mitigation Plan with this application.

Water and Sanitation

Parker Water and Sanitation District (PWSD) has provided a Will Serve Letter describing its willingness and ability to serve the development. Central Water will be provided to all lots through an Inclusion Agreement with Parker Water and Sanitation District. Additionally, through the

Inclusion Agreement, Central Sewer will be provided to the 68 clustered lots, while the owner of the 2 ranch lots will have the option to connect to PWSD or handle sewer by Onsite Wastewater Treatment Systems (OWTS). The project team has agreements for a gravity sewer outfall to the Pinery Water & Wastewater District (via an agreement with PWSD) whereby Pinery Water & Wastewater District (PWWD) would be the wholesale provider of sanitary sewer, and Parker Water & Sanitation District would be the retail provider. Through the agreements with PWWD and PWSD, we are able to eliminate the need for a lift station facility. The project team's Inclusion Agreement with PWSD was read and approved at the PWSD Board Meeting May 14, 2026.

PHYSICAL SITE CONSIDERATIONS

Site Characteristics and Constraints

The northernmost portion of the Site, (the Hilltop JAM) is generally sloped to the north, towards Hilltop Road. The rest of the Site (the Whittlesey Parcel) has varying topography, but it is generally sloped to the south, towards Alpine Drive.

Soils and Geology

A Soil Study and Geological Hazard Report has been included with this application.

Floodplain and Drainage

Although a small portion of the southern half of the Site is located within a floodplain, it is intended the floodplain is left undisturbed. A Phase III Drainage Report is included with the Final Plat application. Detention ponds are proposed with this application.

Wildlife

The CMP Wildlife Resources Map identifies the Site as having a low habitat value. No environmentally hazardous, sensitive, or natural resource areas are found on the Site. An Ecological Resources Survey of the Site was performed at the time of the rezoning and concluded that no threatened or endangered species or their obvious habitat were seen on the property.

A Class II Cultural Resources Survey is included with this application.

It is worth reiterating that the Final Plan proposes a design in line with the standards and buffers from Ramblewood PD, limiting the development disturbance on the Site, retaining significant open space and much of the natural environment remains undisturbed.

COMPLIANCE WITH THE DOUGLAS COUNTY COMPREHENSIVE MASTER PLAN (CMP)

Under the Douglas County Comprehensive Master Plan, the Site is identified within the Northeast Subarea and classified under Section 3 – Nonurban Land Use. The proposed development complies with several objectives and policies of the Comprehensive Master Plan, notably:

- Policy 3-1E.1: *Identify and set aside, through the land use and development review processes, important open spaces in tracts or easements, where appropriate.*
    - The Final Plat proposes a layout of clustered lots which allows significant open space buffers along the project's edge exceeding those required in Ramblewood PD. The Ramblewood PD established open space buffers of Planning Area D and Planning Area E. The Final Plat exceeds these requirements by proposing additional

open space between the single-family lots and these Planning Areas. Planning Area D established an open space buffer of 300 ft along the site's western edge. The proposed plan adds over 100 ft of additional open space buffer between Planning Area D and the nearest single-family lot line. Planning Area E established an open space buffer of 200 ft along the site's eastern edge. The proposed plan adds over 50 ft of additional open space buffer between Planning Area E and the nearest single-family lot line. The result is a plan which provides even more open space buffer from adjacent residential properties than is required by the zoning to ensure that the site is developed in thoughtful, context sensitive manner.

- Objective 3-2A: *Ensure the character and intensity of development is appropriate for the Nonurban Area.*
    - The Final Plat proposes residential development with a gross density of one dwelling unit per 2.5 acres complying with the maximum allowable density of the Northeast Subarea, one dwelling unit per 2.5 acres. The proposed density is also consistent with adjacent parcels zoned Estate Residential directly to the east and south of the property. Open space is incorporated throughout the plan to conserve the natural character of the Site. The plan provides open space buffers along the Site's boundaries, which surpass the requirements of the PD for buffers from Hilltop Road and neighboring property lines.

- Policy 3-2A.2: *Where possible, fencing should be wildlife friendly, in accordance with standards recommended by the Colorado Division of Wildlife.*
    - Per a commitment of the approved PD, wildlife friendly fencing shall be provided adjacent to open spaces in Planning Area A at the time of construction. Lots 69 and 70, specifically including the northern property line, are not subject to the wildlife friendly fencing requirements as they are within Planning Areas B and C.

- Objective 3-2B: *Design development to conserve and showcase important natural and rural features.*
    - The proposed Final Plat conserves natural Site features by clustering 68 of the proposed 70 lots to the northern half of the Site. The clustered lots ensure preservation of important natural features along the Site's edge and accommodation of significant open space to reinforce the area's rural character. Clustering lots ensures minimal natural land is disturbed. The proposed 2 ranch lots in the southern half of the Site support rural features commonly found in Douglas County.

- Policy 3-2B.1: *Use building envelopes, clustering, and other site design techniques, where appropriate, to direct building away from environmentally and visually sensitive lands.*
    - The proposed Final Plat proposes clustering lots with significant open space buffers along the site's edges to direct building away from environmentally and visually sensitive lands.

- Policy 3-2D.1: *Require the provision of open space and trail corridors within residential development to promote recreation and exercise opportunities.*

- The proposed Final Plat provides nearly 60 acres of open space and trail corridors to provide future residents with recreation and exercise opportunities.

- Objective 3-2D: *Encourage Rural development that supports healthy communities.*
  - The proposed Final Plat includes nearly 60 acres of open space and a trail network to encourage human interaction with nature. A public park shall be provided centrally located to the clustered lots.

- Policy 3-2D.3: *Develop local trail systems and a regional, interconnected system of multi-use trails that link communities, recreation areas, open space, neighborhood trails, and trail systems, including those outside of Douglas County.*
  - The proposed Final Plat includes public trails linking the community to recreation areas, open space, and programmed park area.

- Policy 3-3E.1: *A maximum gross density of one dwelling unit per 2.5 acres is supported in the Northeast Subarea where it is logical infill, where approximately 50 percent of the property boundary is adjacent to zoned lands or parcel sizes consistent with the proposed development, and where site characteristics can generally support it.*
  - The proposed Final Plat meets the maximum gross density of one dwelling unit per 2.5 acres as supported in the Northeast Subarea. The Final Plat establishes single-family residential and agricultural lots which are consistent with the existing uses of all properties adjacent to the Site.
  -
- Policy 3-3E.2: *A maximum gross density of one dwelling unit per 2.5 acres is supported in the Northeast Subarea where there is adequate public infrastructure to support the proposed development and where the other goals, objectives, and policies of the Plan have been met.*
  - Adequate public infrastructure is available to support the proposed Final Plat. A Traffic Impact Study, as well as Will Serve letters from the Douglas County School District, South Metro Fire and Rescue, and Parker Water and Sanitation are included with this application.

- Policy 3-3E.3: *Encourage connections to central water and sewer district systems, when possible.*
  - Central water and sewer will be provided to all lots per an Inclusion Agreement with the Parker Water and Sanitation District. Additionally, Central Sewer will be provided to the 68 clustered lots, while the owner of the 2 ranch lots will have the option to connect to PWSD or handle sewer by Onsite Wastewater Treatment Systems (OWTS).

- Policy 3-3E.5: *New development within the Northeast Subarea should be designed to minimize the removal of vegetation and to use trees and landforms to screen development, where possible. Additional trees and vegetation should be planted, where necessary and appropriate, to screen development.*
  - To minimize removal of vegetation, the Final Plat proposes majority of the lots to be clustered in the northern half of the site with ample open space buffers to

Hilltop Road and the adjacent communities. Where possible, existing vegetation shall be preserved.

- Policy 3-3E.6: *Maintain natural drainages for wildlife movement, where possible, and provide open space linkages within and between large-lot developments.*
  - Recognizing the sensitivity of adjacent properties, the proposed Final Plat builds on the commitments to open space buffers along the Site's edges adjacent to large-lot developments, as written in the Ramblewood PD, and will provide wildlife friendly fencing where applicable at construction. Lots 69 and 70, specifically including the northern property line, are not subject to the wildlife friendly fencing requirements.

- Policy 3-3E.7: *Development along existing roads in the Northeast Subarea should be carefully sited and designed to minimize visual impacts, particularly of distant Front Range Mountain views and open meadows.*
  - While primary access to the Site is proposed from Hilltop Road, the proposed Plan does not include lots within 200' of Hilltop Road to ensure a visually appealing front door, respecting the views of homes located across Hilltop Road to the north. It should also be noted that the lots closest to Hilltop Road are oriented so that future homes will be front facing Hilltop Road, providing a more visually pleasing view from the north.

COMPLIANCE WITH THE DOUGLAS COUNTY SUBDIVISION RESOLUTION (DCSR)

Douglas County Subdivision Resolution – Section 503

A Final Plat application is processed pursuant to Article 5 of the Douglas County Subdivision Resolution (DCSR). Per DCSR Section 503, *A final plat may be approved upon the finding by the Board that the final plat:*

- *503.01 Conforms with the goals, objectives, and policies of the Master Plan.*
  - As evidenced in the section above, the Ramblewood Final Plat conforms with the goals, objectives, and policies of the Douglas County Comprehensive Master Plan.

- *503.02 Addresses the design elements established in Article 4, Section 404.*
  - *404.01 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 proposed lots are of an appropriate size and configuration for the site's characteristics and intended uses and are in compliance with the standards of the Ramblewood PD.

  - *404.02 Geologic hazards, floodplains, wildfire, or other hazardous conditions are mitigated and avoided.*
    - No geologic hazards or other hazardous conditions are identified. Although a small portion of the southern half of the Site is located within a floodplain, it is intended that the floodplain be left undisturbed. A Wildfire Mitigation Plan is included with this application.

- *404.03 Conflicts between proposed and surrounding land uses are minimized through lot and tract orientation, setbacks, landscaping, or other buffering techniques.*
  - Ramblewood lot sizes were designed with open space buffers and respect to the natural environment in mind. Clustering lots mitigates disturbance of existing vegetation and provides greater buffers to adjacent lots. The plan exceeds the designated open space planning areas as outlined in the Ramblewood PD. The proposed Final Plat provides nearly 60 acres of open space and trail corridors to provide future residents with recreation and exercise opportunities. The proposed Final Plat meets the maximum gross density of one dwelling unit per 2.5 acres as supported in the Northeast Subarea. The Final Plat establishes single-family residential and agricultural lots which are consistent with the existing uses of all properties adjacent to the Site.

- *404.04 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.*
  - Streets and stormwater facilities are laid out in compliance with the applicable County regulations.

- *404.05 Elements of the site's natural terrain, drainageways, riparian areas, and vegetation are preserved or integrated into the subdivision layout.*
  - The subdivision is laid out in a manner which respects the natural features of the site and preserves the site's natural terrain, existing drainageways, riparian areas, and vegetation as much as possible.

- *404.06 Archeological and historical resources of special significance are protected.*
  - A Class II Cultural Resources Survey is included with this application.

- *404.07 Opportunities for safe and convenient vehicular, pedestrian, and other connections within the subdivision and adjacent neighborhoods, shopping, employment, and recreational areas are provided.*
  - The proposed streets and trail network offer future residents safe and convenient vehicular and pedestrian connections within the subdivision including the centrally located public park. The subdivision's location along Hilltop Road offers future residents vehicular connections to the range of shopping, employment, and recreational areas in the nearby Town of Parker and the other surrounding areas.

- *404.08 Specific recommendations of other required development reports or technical studies are implemented.*
  - The Final Plat application includes the following required development reports:
    - Phase III Drainage Report
    - Traffic Impact Study
    - Final Roadway and Stormwater Construction Plans

- Overall Utility Plan
- Water and Sanitary Sewer Plans
- Grading, Erosion, and Sediment Control Report and Plan

- *503.03 Conforms with Section 18A, Water Supply - Overlay District, of the Zoning Resolution.*
  - A Will Serve letter from Parker Water and Sanitation District is included with this application. An Inclusion Agreement with PWSD was approved by the PWSD Board on May 14, 2026.

- *503.04 Provides for a public wastewater collection and treatment system and, if other methods of wastewater collection and treatment are proposed, such systems comply with State and local laws and regulations.*
  - Public wastewater collection and treatment for the 68 single-family detached lots shall be provided by Parker Water and Sanitation District (through the Pinery Water & Wastewater District as the wholesale provider). Additionally, through the Inclusion Agreement, Central Sewer will be provided to the 68 clustered lots, while the owner of the 2 ranch lots will have the option to connect to PWSD or handle sewer by Onsite Wastewater Treatment Systems (OWTS).

- *503.05 Identifies all areas of the proposed subdivision, which may involve soil or topographical conditions presenting hazards or requiring special precautions and the proposed uses of these areas are compatible with such conditions.*
  - A Soil Suitability and Geographical Hazard Report has been included with this application in compliance with Sections 408.02 and 408.03.

- *503.06 Provides adequate drainage improvements.*
  - Detention will be provided in accordance with current stormwater management practices as required by Douglas County Storm Drainage and Technical Criteria Manual. A Phase III Drainage Report is included with this application.

- *503.07 Provides adequate transportation improvements.*
  - With this application, the necessary roads are provided to access the neighborhood and provide secondary, emergency access to Ramblewood as well as the surrounding communities.

- *503.08 Protects significant cultural, archaeological, natural, and historical resources and unique landforms.*

  No cultural, archaeological, natural or historical resources and unique landforms were identified on the project site, as documented in the Ecological Resources Survey conducted with the rezoning application and the Cultural Resources Survey conducted with this application.

- *503.09 Has available all necessary services, including fire and police protection, recreation facilities, utility services, streets, and open space to serve the proposed subdivision.*
  - The proposed application has all available services, including fire and police protection, utility services, street maintenance, recreation facilities, and open spaces

NORRIS DESIGN
PEOPLE + PLACEMAKING
1101 Bannock Street
Denver, Colorado 80204
303.892.1166

needed to serve future residents. Applicable will serve letters are included in this submittal.

- Although not required for this site plan, a fire truck turnaround shall be provided to serve Ramblewood and provided fire mitigation infrastructure to the benefit of the surrounding area. Fire hydrants located throughout the development will serve the Site and also support fire life safety measures for the surrounding communities.
- A Public Park shall be programmed and designed in accordance with the neighborhood character and future resident.
- Trails will connect open space to the proposed public park and vice versa.
- Streets have been designed with minimal impact to the natural grade of the site and provided only where necessary for safety and circulation.

We believe the proposed Final Plat advances the County's goals and objectives for this particular property through an appropriate infill of homes designed to fit in, not stand out, in respect to the established neighborhoods the site lies between. The proposed Final Plat complies with the Site zoning under the Ramblewood PD, proposing single-family residential in the northern half of the Site with large open space buffers and agricultural uses in the southern half of the Site.

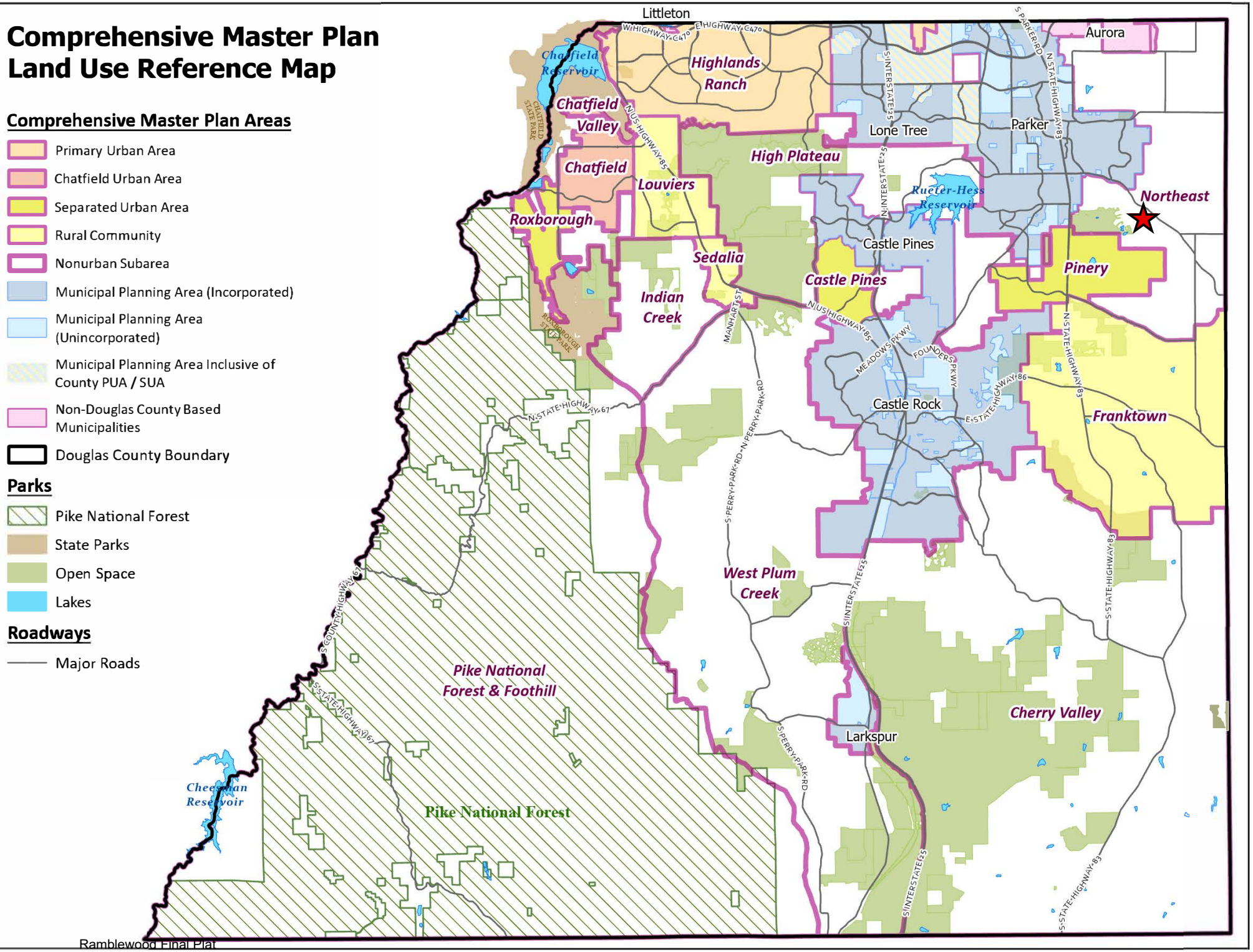
Our team looks forward to continuing our work with Douglas County throughout the review process for this Final Plat. Please contact me at stengen@norris-design.com or 303.892.1166 should you have any questions or concerns.

Thank you,

Sarah Tengen

Sarah Tengen
Project Manager

Comprehensive Master Plan Land Use Reference Map



Comprehensive Master Plan Areas

- Primary Urban Area
- Chatfield Urban Area
- Separated Urban Area
- Rural Community
- Nonurban Subarea
- Municipal Planning Area (Incorporated)
- Municipal Planning Area (Unincorporated)
- Municipal Planning Area Inclusive of County PUA / SUA
- Non-Douglas County Based Municipalities
- Douglas County Boundary

Parks

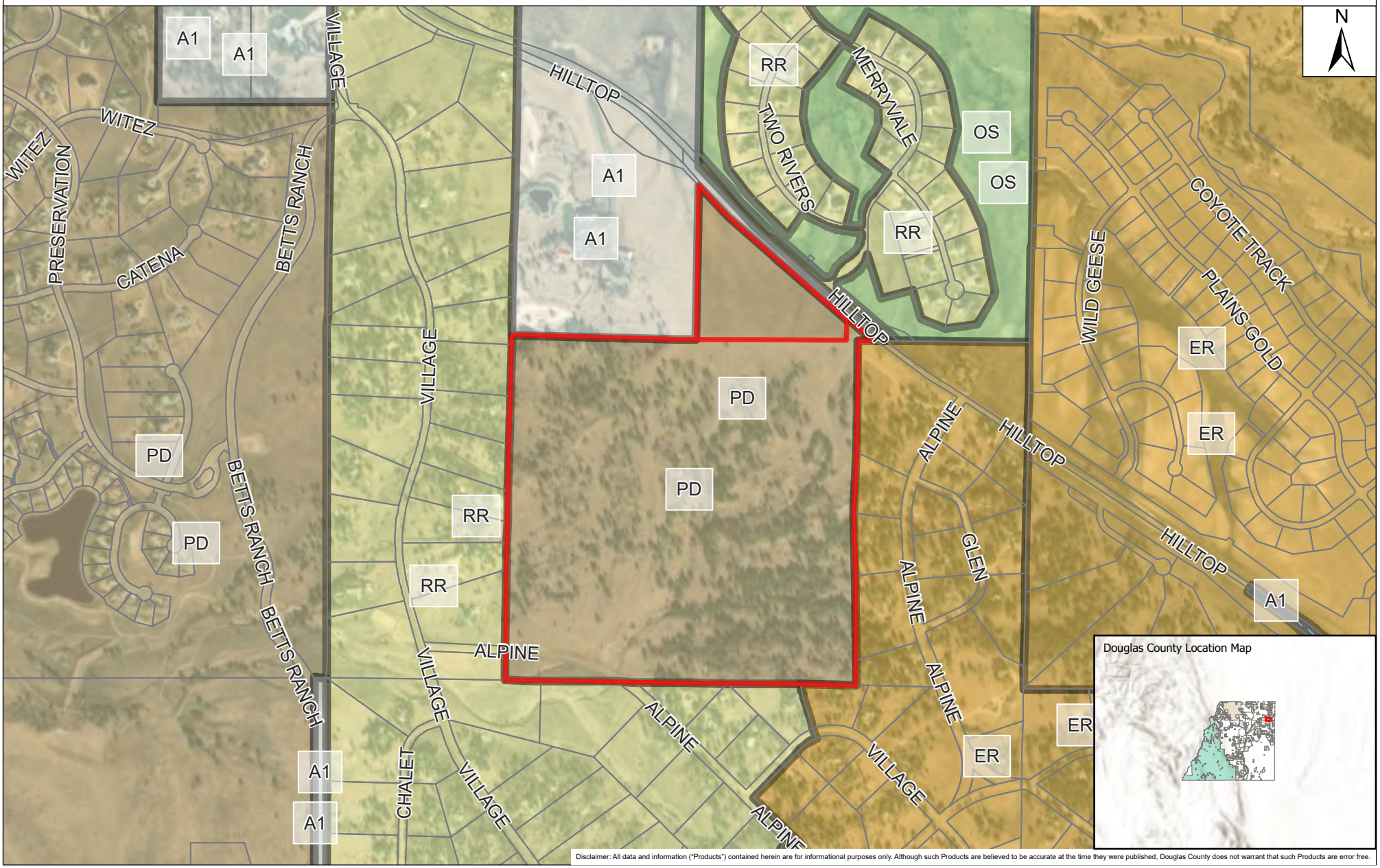
- Pike National Forest
- State Parks
- Open Space
- Lakes

Roadways

- Major Roads

SB2026-009 Ramblewood Final Plat

DOUGLAS COUNTY COLORADO



Disclaimer: All data and information ("Products") contained herein are for informational purposes only. Although such Products are believed to be accurate at the time they were published, Douglas County does not warrant that such Products are error free.

Date Saved: 2/9/2026 9:55 AM

PD - PLANNED DEVELOPMENT
A1 - AGRICULTURAL ONE
OS - OPEN SPACE CONSERVATION
RR - RURAL RESIDENTIAL
PARCELS
ER - ESTATE RESIDENTIAL

SB2026-009 Ramblewood Final Plat

DOUGLAS COUNTY COLORADO



Date Saved: 2/9/2026 9:57 AM

PD - PLANNED DEVELOPMENT
OS - OPEN SPACE CONSERVATION
PARCELS
A1 - AGRICULTURAL ONE
RR - RURAL RESIDENTIAL
ER - ESTATE RESIDENTIAL

Project Name: Ramblewood
Project File #: SB2026-009
Date Sent: 03/18/2026 **Date Due:** 04/15/2026

Agency	Date Received	Agency Response	Response Resolution
Addressing Analyst	04/07/2026	No Comment (Verbatim)	No response necessary.
Assessor	04/02/2026	Received: Please be aware of the following comments: Please make sure ownership blocks match actual ownership. Current Owners for R0622871 is BRADLEY A WHITTLESEY & JOAN V WHITTLESEY and Owners for R0620578 is Hilltop Jam LLC please make sure appropriate ownership blocks match ownership at time of recording. Rablewood Metro District does not need to sign as owner unless they own one of the parent parcels. Notes 8 and 9 are not valid we are unable to dedicate ownership to a private entity via a plat. This ownership will need to be conveyed via a separate deed. Note 10 Tract C is not listed as being dedicated to Ramblewood Metro District but the plat table does list ownership being Ramblewood metro district. Portions of Lots 55,65,66 may be in mixed ownership due to overlapping multiple parent parcels with different owners. Lots in the NE ¼ would have a different owner than lots in the SE ¼ due to current ownership. (Verbatim)	Notes and Tracts have been revised to meet requirements. Ownership will match ownership at time of recording. Applicant understands additional deeds will be required to account for mixed ownership of Lots 55, 65, and 66.
AT&T Long Distance - ROW		No Response Received:	No response necessary.
Building Services	03/25/2026	No Comment(Verbatim)	No response necessary.
CenturyLink		No Response Received:	No response necessary.

Project Name: Ramblewood
Project File #: SB2026-009
Date Sent: 03/18/2026 **Date Due:** 04/15/2026

Agency	Date Received	Agency Response	Response Resolution
Cherry Creek Basin Water Quality Authority	03/30/2026	Received: The Cherry Creek Basin Water Quality Authority (Authority) acknowledges notification from Douglas County that the proposed development plans for SB2026-009, Ramblewood Final Plat have been or will be reviewed by Douglas County for compliance with the applicable Regulation 72 construction and post-construction requirements. Based on the Authority's current policy, the Authority will no longer routinely conduct a technical review and instead the Authority will defer to Douglas County's review and ultimate determination that the proposed development plans comply with Regulation 72. If a technical review of the proposed development plan is needed, please contact LandUseReferral@ccbwqa.org. The review may include consultation with the Authority's Technical Manager to address specific questions or to conduct a more detailed Land Use Review, if warranted. (Verbatim)	No response necessary

Project Name: Ramblewood
Project File #: SB2026-009
Date Sent: 03/18/2026 **Date Due:** 04/15/2026

Agency	Date Received	Agency Response	Response Resolution
Colorado Division of Water Resources	04/08/2026	Received: See Letter: We have reviewed the documentation from Referral SB2026-009 relating to the Final Plat for Ramblewood Subdivision. Based on our review, there have been no changes to the demands or proposed water supply source for the Ramblewood Subdivision. Attached are letters dated April 8, 2025 and May 12, 2025 that were previously sent by our office during the review of ZR2024-031. The May 12, 2025 letter provided an opinion that the water supply for the subdivision is adequate and can be provided without causing injury to decreed water rights, so long as the District is committed to serving the lots.	No response necessary

Project Name: Ramblewood
Project File #: SB2026-009
Date Sent: 03/18/2026 **Date Due:** 04/15/2026

Agency	Date Received	Agency Response	Response Resolution
Colorado Geological Survey	04/15/2026	Received: Trevor/Douglas County Planning, I find no response or acknowledgement among the Ramblewood final plat referral documents to the Colorado Geological Survey's SB2025-040 preliminary plan review comments, so our 12/8/2025 advisory comments remain valid: No unusual geologic conditions or geotechnical constraints are present within the proposed Ramblewood subdivision area (approximate location 39.4674, -104.7087) that would preclude the proposed residential use and density. CGS therefore has no objection to approval of the Ramblewood plat. AGW's Geotechnical Due Diligence Study, Hilltop 177, Douglas County, Colorado (AGW Project No. 245004, October 9, 2024) contains a valid preliminary characterization of subsurface conditions and makes appropriate preliminary recommendations for mitigating, through overexcavation and replacement as a properly placed and compacted structural fill, the site's expansive soils and shallow, expansive claystone bedrock. CGS agrees (page 4) that "overexcavation depths between 10 and 12 feet below lowest foundation elevation should be expected." -- Jill Carlson, Engineering geologist, Colorado Geological Survey, carlson@mines.edu(Verbatim)	No response necessary
Comcast		No Response Received:	No response necessary.

Project Name: Ramblewood
Project File #: SB2026-009
Date Sent: 03/18/2026 **Date Due:** 04/15/2026

Agency	Date Received	Agency Response	Response Resolution
CORE Electric Cooperative	04/14/2026	Received: CORE Electric Cooperative approves the plat. CORE will require the following language be added to the plat notes. No improvements that conflict with or interfere with construction, maintenance or access to utilities shall be placed within the utility easements. Prohibited improvements include, but are not limited to, permanent structures, buildings, counter-forts, decks, attached porches, attached stairs, window wells, air conditioning units, retaining walls/components and other objects that may interfere with the utility facilities or access, use and maintenance thereof. (Verbatim)	Requested note has been added
Douglas County Health Department	03/31/2026	Received: Based the narrative letter, DCHD is providing a favorable recommendation regarding the proposed method of sewage disposal via Ramble wood Metro District/Inclusion Agreement with the Parker Water and Sanitation District. (Verbatim)	No response necessary
Douglas County Historic Preservation	04/17/2026	Received: See Letter Summary: Requested Class II Cultural Resources Survey	Class II Cultural Resources survey was submitted and accepted by Historic Preservation
Douglas County Parks and Trails	03/23/2026	Received: Applicant would be responsible for meeting parkland dedication as outlined in Article 10 of the Douglas County Subdivision Resolution.	Applicant will provide a 1.5-acre park with improvements identified in the SIA to meet dedication requirements of Article 10.
Douglas County School District RE 1	04/16/2026	Received: See Letter Summary: Requested $126,110 in cash-in-lieu of land dedication prior to issuance of first building permit.	Cash-in-lieu of land dedication will be provided. Applicant requested that this is done prior to issuance of first building permit.

Project Name: Ramblewood
Project File #: SB2026-009
Date Sent: 03/18/2026 **Date Due:** 04/15/2026

Agency	Date Received	Agency Response	Response Resolution
Engineering Services	04/16/2026	Received: See attached comments on GESC Plan Summary: Requested modifications and additional information for drainage and traffic signage.	Applicant revised plans and reports. All comments have been addressed.
Hidden Village POA		No Response Received:	No response necessary.
Mile High Flood District		No Response Received:	No response necessary.
Office of Emergency Management	03/27/2026	No Comment (Verbatim)	No response necessary.
Parker Water & Sanitation District	04/14/2026	Received: Please note PWSD will require this project to be included in the Parker Water & Sanitation district prior to any reviews being completed. (Verbatim)	PWSD approved the inclusion into the district. Applicant acknowledged future permitting requirement with PWSD.
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.
South Metro Fire Rescue	03/25/2026	Received: South Metro Fire Rescue (SMFR) has reviewed the provided documents and has no objection to the proposed final plat. Applicants and Contractors are encouraged to contact SMFR regarding the applicable permit requirements for the proposed project. (Verbatim)	No response necessary
The Pinery HOA	04/15/2026	No Comment (Verbatim)	No response necessary.
Town of Parker Development Review		No Response Received:	No response necessary.
Town of Parker Public Works		No Response Received:	No response necessary.
Wildfire Mitigation		No Response Received:	No response necessary.

Project Name: Ramblewood
Project File #: SB2026-009
Date Sent: 03/18/2026 **Date Due:** 04/15/2026

Agency	Date Received	Agency Response	Response Resolution
Xcel Energy-Right of Way & Permits	04/06/2026	Received: Public Service Company of Colorado's (PSCo) Right of Way and Permits Referral Desk has reviewed the Final Plat for Ramblewood. As always, thank you for the opportunity to take part in the review process. The property owner/developer/contractor must complete the application process for any new natural gas service via Building and Remodeling | Partner Resources | Xcel Energy. It is then the responsibility of the developer to contact the Xcel Designer assigned to the project for approval of design details. Additional easements may need to be acquired by separate document. The Designer must contact the appropriate Right-of-Way Agent. As a safety precaution, PSCo would like to remind the developer to contact Colorado 811 for utility locates prior to construction. (Verbatim)	Applicant acknowledged information

Trevor Bedford

From: Matz - DNR, Michael <michael.matz@state.co.us>
Sent: Wednesday, April 8, 2026 4:00 PM
To: Trevor Bedford
Cc: Javier Vargas-Johnson - DNR
Subject: Referral SB2026-009 (Ramblewood Subdivision Final Plat)
Attachments: ZR2024-031 (1st Letter).pdf; ZR2024-031 (2nd Letter).pdf

Caution: This email originated outside the organization. Be cautious with links and attachments.

Good afternoon,

We have reviewed the documentation from Referral SB2026-009 relating to the Final Plat for Ramblewood Subdivision.

Based on our review, there have been no changes to the demands or proposed water supply source for the Ramblewood Subdivision.

Attached are letters dated April 8, 2025 and May 12, 2025 that were previously sent by our office during the review of ZR2024-031.

The May 12, 2025 letter provided an opinion that the water supply for the subdivision is adequate and can be provided without causing injury to decreed water rights, so long as the District is committed to serving the lots.

Thank you for the opportunity to review.

Best,

Mike Matz, P.E.
Water Resources Engineer

P 303.866.3581 x 8241
1313 Sherman Street, Room 821, Denver, CO 80203
michael.matz@state.co.us | www.colorado.gov/water

COLORADO
Division of Water Resources
Department of Natural Resources

April 8, 2025

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

Re: Ramblewood Subdivision - Planned Development Rezone
Case Number: ZR2024-031
Applicants: Hilltop Jam, LLC and Bradley & Joan Whittlesey
Part of Sec. 6, Twp. 7S, Rng. 65W, 6th P.M., Douglas County
Water Division 1, Water District 8

Dear Trevor Bedford,

We have received your March 18, 2025 proposal to rezone and subdivide 176.794 +/- acres located in Sec. 6, Twp. 7S, Rng. 65W, 6th P.M., Douglas County (Parcel ID No. 234706100001 and 234706300001). This application proposes rezoning from Agricultural-1 to Planned Development and subdividing the 176.794 +/- acres into seventy lots of varying size, with the remaining 60 +/- acres being open space. Two of the lots will be primarily agricultural in use, with Ranch Lot 1 being 25 acres in size and Ranch Lot 2 being 58 acres in size.

Water Supply Demand

68 Lots in area PA-A

The annual water demand per single family equivalent (SFE) for the 68 lots located in area PA-A of the proposed subdivision is 92.4 acre-feet/year as shown in the table below:

Use	Demand (af/yr/sfe)	No. Units	Total Demand (af/yr)
Indoor/Outdoor residential	1.1	68	74.8
Outdoor non-residential (irrigation of 6.86 acres)	-	-	17.6
-	-	**Total**	**92.4**

2 Lots in area PA-B

Water demands for the two lots (Ranch Lot 1 and Ranch Lot 2) located in area PA-B of the proposed subdivision are unknown. The application documents indicate these two lots will be mainly used for agricultural purposes, with an allowance for up to two residential dwelling units in area PA-B.

Source of Water Supply

68 Lots in area PA-A

The proposed water supplier for the 68 single-family lots located in area PA-A of the proposed subdivision is service provided by the Parker Water and Sanitation District (District). A conditional "will-serve" letter dated January 17, 2025 indicates that the District is willing to serve the proposed subdivision, conditioned upon compliance with all the District Rules and Regulations, Standard and Specifications, and/or conditions specific to the property; including payment of the appropriate fees and any charges related to water and/or sanitation service, as established from time to time by the District Directors. Service from the District is also conditional upon successful completion of the property inclusion into the District service area.

According to the "will-serve" letter, the District has a combination of decreed Denver Basin supplies, junior and senior tributary water rights, and storage rights in Rueter-Hess Reservoir totaling 71,920 af/yr. The anticipated yield of these rights in an average or dry year is 41,134 af/yr, which exceeds the estimated buildout demand of 23,500 af/yr.

The majority of the District's supply is water from Denver Basin bedrock aquifers. 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 section 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 in the District's decrees 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.

The Applicant has indicated that a portion of the Denver Basin groundwater underlying the Southern 160 acres that was decreed in case no. 07CW0107 by the Division 1 Water Court will be conveyed to the District in return for providing water service. Similarly, a portion of the Denver Basin groundwater (which has not yet been decreed or claimed) underlying the 17 acres to the North will also be conveyed to the District. The Applicant intends to convey an estimated total 92.4 af/year of Denver Basin groundwater from the Lower Dawson, Denver, Arapahoe, and Laramie-Fox Hills aquifers to the District in order to offset the anticipated demand from the subdivision.

The groundwater underlying the 160 acre property was adjudicated in case no. 07CW0107 for domestic, industrial, commercial, irrigation, stock watering,

recreational, fire protection, and augmentation purposes, both on and off the subject property. Table 1 summarizes the amounts quantified in each aquifer in case no. 07CW0107, the amount estimated underlying the undecreed 17 acres, and the amounts estimated to be conveyed to the District:

Aquifer	Annual amount from 07CW0107 underlying 160 acres (100 year aquifer allocation)	Annual amount available estimated by Applicant underlying 17 acres (100 year aquifer allocation)	Annual amount estimated to be conveyed to the District from 07CW01007[1] and the undecreed 17 acres[2]	Type
Lower Dawson	32.0	3.6	- 1.8[2]	NT*
Denver	70.7	8.5	35.4[1] 4.3[2]	NT*
Arapahoe	68.0	7.2	51.0[1] 5.4[2]	NT*
Laramie Fox-Hills	46.8	5.0	- 2.5[2]	NT*
Total	**217.5**	**24.3**	**86.4[1]** **14.0[2]**	-

*Nontributary

2 Lots in area PA-B

The proposed water supply for the 2 lots located in area PA-B are on-lot domestic wells. It is unclear what specific aquifer source will supply these 2 lots.

A review of our records does not show any permitted wells located on the subject property. However, well permit no. 31958 (located on an adjacent property) was decreed in case no. W-5628 by the Division 1 Water Court as Bowman Well No. 31958

for domestic, stock watering, and agricultural irrigation uses on approximately 80 acres in the E ½ of the NW ¼ of Sec. 6, Twp. 7S, Rng. 65W. Well no. 31958 has an appropriation based on the law as it existed before the enactment of Senate Bill 73-213 and is known as a "Pre-213 Well" and the well currently claims all Upper Dawson groundwater underlying the subject property.

State Engineer's Office Opinion

Based upon the above and pursuant to section 30-28-136(1)(h)(I), this office has not received information sufficient to render an opinion regarding whether the proposed water supply is adequate and can be provided without causing injury to decreed water rights. Prior to further review of the subdivision water supply plan, the following information is required:

1. Clarify the proposed uses and aquifer source for Ranch Lots 1 and 2.

Additional Comments

The applicant should be aware that any proposed detention pond for this development, must meet the requirements of a "storm water detention and infiltration facility" as defined in section 37-92-602(8), Colorado Revised Statutes, 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 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, located at https://maperture.digitaldataservices.com/gvh/?viewer=cswdif, to meet the notification requirements.

Please contact Mike Matz at 303-866-3581 x8241 or at michael.matz@state.co.us with any questions.

Sincerely,

Ioana Comaniciu, P.E.

Water Resources Engineer

Ec: Referral no. 33884

COLORADO
Division of Water Resources
Department of Natural Resources

May 12, 2025

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

Re: Ramblewood Subdivision - Planned Development Rezone (2nd Letter)
Case Number: ZR2024-031
Applicants: Hilltop Jam, LLC and Bradley & Joan Whittlesey
Part of Sec. 6, Twp. 7S, Rng. 65W, 6th P.M., Douglas County
Water Division 1, Water District 8

Dear Trevor Bedford,

We have received your March 18, 2025 proposal and additional information provided on May 1, 2025 to rezone and subdivide 176.794 +/- acres located in Sec. 6, Twp. 7S, Rng. 65W, 6th P.M., Douglas County (Parcel ID No. 234706100001 and 234706300001). This application proposes rezoning from Agricultural-1 to Planned Development and subdividing the 176.794 +/- acres into seventy lots of varying size, with the remaining 60 +/- acres being open space. Two of the lots will be primarily agricultural in use, with Ranch Lot 1 being 25 acres in size and Ranch Lot 2 being 58 acres in size.

Our office previously provided comments in a letter dated April 8, 2025. The comments contained in this 2nd letter supersede those that were previously provided.

Water Supply Demand

68 Lots in area PA-A

The annual water demand per single family equivalent (SFE) for the 68 lots located in area PA-A of the proposed subdivision is 92.4 acre-feet/year as shown in the table below:

Use	Demand (af/yr/sfe)	No. Units	Total Demand (af/yr)
Indoor/Outdoor residential	1.1	68	74.8
Outdoor non-residential (irrigation of 6.86 acres)	-	-	17.6
-	-	**Total**	**92.4**

2 Lots in area PA-B

The application documents indicate that Ranch Lot 1 and Ranch Lot 2 will be mainly used for agricultural purposes, with an allowance for up to two residential dwelling units in area PA-B. The annual water demand for Ranch Lot 1 and Ranch Lot 2 located in area PA-B of the proposed subdivision is estimated to be 3.5 acre-feet/year as shown in the table below:

Use	Demand (af/yr/lot)	No. Lots	Total Demand (af/yr)
Indoor residential	0.2	2	0.4
Residential irrigation (30,000 SF)	1.5	2	3.0
Domestic animal watering (4 animals)	0.05	2	0.1
-	-	**Total**	**3.5**

Source of Water Supply

68 Lots in area PA-A

The proposed water supplier for the 68 single-family lots located in area PA-A of the proposed subdivision is service provided by the Parker Water and Sanitation District (District). A conditional "will-serve" letter dated January 17, 2025 indicates that the District is willing to serve the proposed subdivision, conditioned upon compliance with all the District Rules and Regulations, Standard and Specifications, and/or conditions specific to the property; including payment of the appropriate fees and any charges related to water and/or sanitation service, as established from time to time by the District Directors. Service from the District is also conditional upon successful completion of the property inclusion into the District service area.

According to the "will-serve" letter, the District has a combination of decreed Denver Basin supplies, junior and senior tributary water rights, and storage rights in Rueter-Hess Reservoir totaling 71,920 af/yr. The anticipated yield of these rights in an average or dry year is 41,134 af/yr, which exceeds the estimated buildout demand of 23,500 af/yr.

The majority of the District's supply is water from Denver Basin bedrock aquifers. 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 section 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 in the District's decrees 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.

The Applicant has indicated that a portion of the Denver Basin groundwater underlying the Southern 160 acres that was decreed in case no. 07CW0107 by the Division 1 Water Court will be conveyed to the District in return for providing water service. Similarly, a portion of the Denver Basin groundwater (which has not yet been decreed or claimed) underlying the 17 acres to the North will also be conveyed to the District. The Applicant intends to convey an estimated total 92.4 af/year of Denver Basin groundwater from the Lower Dawson, Denver, Arapahoe, and Laramie-Fox Hills aquifers to the District in order to offset the anticipated demand from the subdivision.

The groundwater underlying the 160 acre property was adjudicated in case no. 07CW0107 for domestic, industrial, commercial, irrigation, stock watering, recreational, fire protection, and augmentation purposes, both on and off the subject property. Table 1 summarizes the amounts quantified in each aquifer in case no. 07CW0107, the amount estimated underlying the undecreed 17 acres, and the amounts estimated to be conveyed to the District:

Aquifer	Annual amount from 07CW0107 underlying 160 acres (100 year aquifer allocation)	Annual amount available estimated by Applicant underlying 17 acres (100 year aquifer allocation)	Annual amount estimated to be conveyed to the District from 07CW01007[1] and the undecreed 17 acres[2]	Type
Lower Dawson	32.0	3.6	- 1.8[2]	NT*
Denver	70.7	8.5	35.4[1] 4.3[2]	NT*
Arapahoe	68.0	7.2	51.0[1] 5.4[2]	NT*
Laramie Fox-Hills	46.8	5.0	-	NT*

			2.5[2]	
Total	**217.5**	**24.3**	**86.4**[1] **14.0**[2]	-

*Nontributary

2 Lots in area PA-B

The proposed water supply for the 2 lots located in area PA-B are on-lot domestic wells. According to the additional information provided by the Applicant on May 1, 2025, 2 acre-feet per year of Lower Dawson ground water decreed under Water Court Division 1 case no. 07CW0107 will be conveyed to each lot (Ranch Lot 1 and Ranch Lot 2). The Lower Dawson aquifer under the subject property is considered to be non-tributary.

Applications for on lot well permits, submitted by an entity other than the original decree holder must include evidence that the applicant has acquired the right to the portion of water being requested on the application.

State Engineer's Office Opinion

Based upon the above and pursuant to section 30-28-136(1)(h)(I) and section 30-28-136(1)(h)(II), 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, **so long as the District is committed to serving the 68 lots**.

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 water rights, 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.

Additional Comments

The applicant should be aware that any proposed detention pond for this development, must meet the requirements of a "storm water detention and infiltration facility" as defined in section 37-92-602(8), Colorado Revised Statutes, 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 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, located at https://maperture.digitaldataservices.com/gvh/?viewer=cswdif, to meet the notification requirements.

Please contact Mike Matz at 303-866-3581 x8241 or at michael.matz@state.co.us with any questions.

Sincerely,

Ioana Comaniciu, P.E.
Water Resources Engineer

Ec: Referral no. 33884

April 15, 2026

Trevor Bedford
Douglas County Department of Community Development
Planning Services Division
100 Third St., Castle Rock, CO 80104

Re: SB2026-009, Ramblewood - Final Plat

Dear Mr. Bedford,

This letter provides comments regarding the request for a final plat consisting of 68 single-family residential lots, 2 agricultural lots, and 9 tracts.

At this time the Curator has no further recommendations. If there are future development plans that involve any ground disturbance a Class II survey will need to be conducted to evaluate for cultural resources before any disturbance occurs. A Class I file search does not fulfill a cultural survey. A walking pedestrian survey would be recommended before any ground disturbance.

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

Trevor Bedford

From: Steve Shoultz
Sent: Tuesday, May 19, 2026 12:45 PM
To: Trevor Bedford; Nick Giauque
Subject: RE: Ramblewood Final Plat | PLD Requirement SB2026-009

Follow Up Flag: Follow up
Flag Status: Flagged

Hey Trevor,

This plan would sufficiently satisfy any cash-in-lieu or land dedication requirements for this project.

Thank you,

Steve Shoultz, CPRE | Director
Douglas County Department of Parks and Recreation
Address | 9651 S. Quebec St., Littleton, CO 80130
Phone | Office 720-733-6990
Email | sshoultz@DouglasCO.gov

From: Trevor Bedford <tbedford@douglasco.gov>
Sent: Tuesday, May 19, 2026 11:33 AM
To: Nick Giauque <ngiauque@douglasco.gov>
Cc: Steve Shoultz <sshoultz@douglasco.gov>
Subject: RE: Ramblewood Final Plat | PLD Requirement SB2026-009

Nick,

I have a park budget and concept plan here for Ramblewood. Can you take a look at this and see if this is acceptable to offset their cash-in-lieu requirements?
Their requirement is 3.15 acres. They are providing a 1.5 acre park that will be open to the public, so that should leave them with 1.65 acres.
We are accepting an appraisal of $79,867 per acre, so that comes out to $131,781 to cover the 1.65 acres.
Let me know if you have any questions. They are trying to get to a hearing in June, so they are asking if it's possible to get this reviewed quickly.

Thank you,

Trevor Bedford, AICP | Senior Planner
Douglas County Department of Community Development
Planning Services Division
Address | 100 Third St., Castle Rock, CO 80104
Direct | 303.814.4372 **Main** | 303.660.7460
Email tbedford@douglasco.gov

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620 Wilcox Street
Castle Rock, Colorado 80104

May 19, 2026

Trevor Bedford, AICP | Senior Planner
Douglas County Department of Community Development
Planning Services Division
Address | 100 Third St., Castle Rock, CO 80104
Direct | 303.814.4372 Main | 303.660.7460
Email tbedford@douglas.co.us

RE: Ramblewood Final Plat (SB2026-009)-Revised Appraisal

Dear Mr. Bedford,

Thank you for the opportunity to respond to the above referenced application. It is our understanding that the applicant is requesting to subdivide approximately 176 acres into 70 residential lots and eight tracts. The property is generally located south of the Hilltop Road and Village Road intersection.

CASH-IN-LIEU CALCULATION
STUDENT GENERATION

PROJECT NAME: RAMBLEWOOD FINAL PLAT (SB2026-009)				
DU/	ACRES		DENSITY	
70	116.086		0.60	
			Generation	Number
STUDENT GENERATION RATES	No. of DU's		Rate	of Students
ELEMENTARY	70	X	0.52	36
MIDDLE SCHOOL	70	X	0.15	11
HIGH SCHOOL	70	X	0.29	20
			TOTAL	67
				Required
			School	Land
	Number		Acreage	Dedication
SCHOOL LAND DEDICATION	of Students		Per Student	Acreage
ELEMENTARY	36	X	0.018	0.655
MIDDLE SCHOOL	11	X	0.030	0.315
HIGH SCHOOL	20	X	0.030	0.609
			TOTAL	1.579

DCSD has calculated the amount of school site land requirement for students generated by the proposed planned development. A total of 67 students are expected from the development (as proposed) generating a land dedication requirement of 1.579-acres. Since this is smaller than DCSD's minimum school site size and since the applicant has stated in their project summary that cash-in-lieu of land dedication will be paid at final plat, DCSD requests cash-in-lieu of land dedication.

As per Article 1004.05.3 of the Douglas County Subdivision Regulations, “The cash-in-lieu fee shall be equivalent to the full market value of the acreage required for school land dedication. Value shall be based on anticipated market value after completion of platting. The applicant shall submit a proposal for the cash-in-lieu fee and supply the information necessary for the Board to evaluate the adequacy of the proposal. This information shall include at least one appraisal of the property by a qualified appraiser.” And as per Article 1004.06, “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….”

The applicant has provided DCSD and Douglas County with a revised valuation of the property. The new valuation of the ~176.7941-acre property is $14,120,000. This equals a per acre value of $79,867. Based on the calculated school land dedication requirement of 1.579 acres the required cash in lieu of land dedication fee is $126,110. DCSD requests that this fee be paid, in full, directly to Douglas County School District, prior to Douglas County issuing a building permit for the first residential unit in the Ramblewood Final Plat.

Assuming neither the applicant nor Douglas County object to these fees DCSD has no objection to the proposed project. DCSD looks forward to future collaboration with the applicant and Douglas County on this proposal.

Shavon Caldwell, Planning Manager
DCSD Planning & Construction
scaldwell2l@dcsdk12.org
303.387.0417

Trevor Bedford

From: Chuck Smith
Sent: Thursday, June 4, 2026 10:56 AM
To: Trevor Bedford
Subject: RE: Ramblewood Final Plat SB2026-009 | Submittal 4

Follow Up Flag: Follow up
Flag Status: Flagged

Hi Trevor – all my comments on the plat have been addressed - thanks

---

From: Trevor Bedford <tbedford@douglasco.gov>
Sent: Thursday, June 4, 2026 10:39 AM
To: Chuck Smith <CSmith@douglasco.gov>
Subject: RE: Ramblewood Final Plat SB2026-009 | Submittal 4

Chuck,

Have all of your comments been addressed for this plat? They told me earlier this week that they addressed your redlines here but I haven't seen anything from them.

Thank you,

Trevor Bedford, AICP | Senior Planner
Douglas County Department of Community Development
Planning Services Division
Address | 100 Third St., Castle Rock, CO 80104
Direct | 303.814.4372 **Main** | 303.660.7460
Email tbedford@douglasco.gov

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Trevor Bedford

From: Chuck Smith
Sent: Friday, June 5, 2026 1:46 PM
To: Dan Sheldon; Glenn Nier; Troy Bowser; Parker DelPonte; Kevin Lovelace; gbanks@norris-design.com; Daniel Jennings
Cc: Trevor Bedford
Subject: RE: Ramblewood Final Plat SB2026-009 | Submittal 4

Good Afternoon All – Traffic has reviewed the submittal and indicated that their comments have been addressed.

Thanks

From: Chuck Smith
Sent: Thursday, May 28, 2026 2:13 PM
To: 'Dan Sheldon' <dsheldon@miller-united.com>; 'Glenn Nier' <glenn.nier@pultegroup.com>; 'Troy Bowser' <troy.bowser@pulte.com>; 'Parker DelPonte' <parker.delponte@pultegroup.com>; 'Kevin Lovelace' <klovelace@lja.com>; 'gbanks@norris-design.com' <gbanks@norris-design.com>; 'Daniel Jennings' <djennings@norris-design.com>
Cc: Trevor Bedford <tbedford@douglasco.gov>
Subject: RE: Ramblewood Final Plat SB2026-009 | Submittal 4

All – we have reviewed the latest submittal and have attached our redlines – thanks and if you have any questions, please let me know

RAMBLEWOOD

LOCATED IN SECTION 6, TOWNSHIP 7 SOUTH, RANGE 65 WEST OF THE 6TH P.M., COUNTY OF DOUGLAS, STATE OF COLORADO

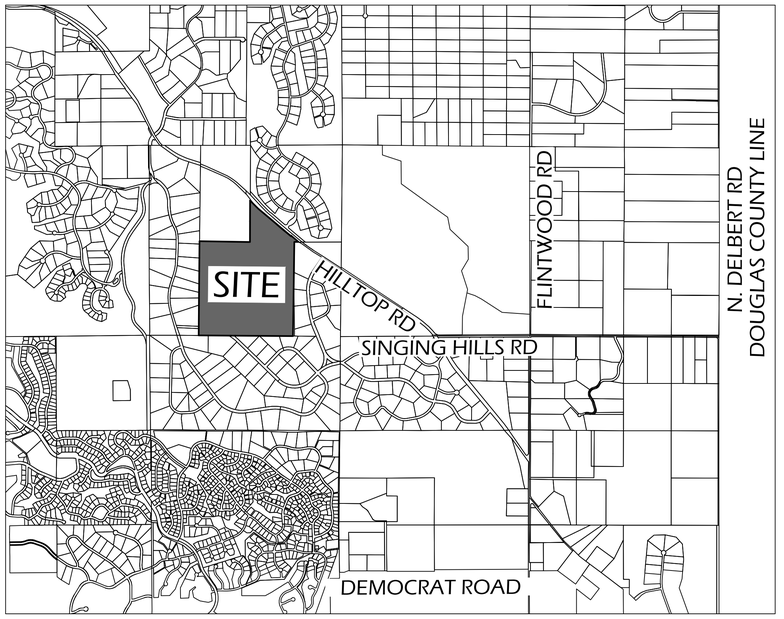
176.795 ACRES - 70 RESIDENTIAL LOTS - 8 TRACTS / SB2026-009

LEGAL DESCRIPTION

A PARCEL OF LAND LOCATED IN THE SOUTHWEST QUARTER AND THE SOUTHEAST QUARTER OF SECTION 6, TOWNSHIP 7 SOUTH, RANGE 65 WEST OF THE 6TH PRINCIPAL MERIDIAN, COUNTY OF DOUGLAS, STATE OF COLORADO, MORE PARTICULARLY DESCRIBED AS FOLLOWS: (THE BASIS OF BEARINGS FOR THIS DESCRIPTION IS SOUTH 00°00'27" WEST ALONG THE WEST LINE OF THE SOUTHWEST QUARTER OF SAID SECTION 6)
COMMENCING AT THE WEST QUARTER CORNER OF SAID SECTION 6;
THENCE SOUTH 88°58'23" EAST ALONG THE NORTH LINE OF THE SOUTHWEST QUARTER OF SAID SECTION 6 A DISTANCE OF 1426.97 FEET TO A POINT ON THE EAST BOUNDARY LINE OF HIDDEN VILLAGE FILING NUMBER ONE, A SUBDIVISION FILED WITH THE DOUGLAS COUNTY CLERK AND RECORDER'S OFFICE AND RECORDED APRIL 29, 1966 AT RECEPTION NO. 125234;
THENCE SOUTH 01°03'11" WEST ALONG THE EAST BOUNDARY LINE OF SAID HIDDEN VILLAGE FILING NUMBER ONE A DISTANCE OF 12.62 FEET TO THE SOUTHWEST CORNER OF A PARCEL OF LAND DESCRIBED BY DEED RECORDED DECEMBER 26, 1995 AT RECEPTION NO. 9561360 FILED IN THE DOUGLAS COUNTY CLERK AND RECORDER'S OFFICE, SAID POINT BEING THE POINT OF BEGINNING;
THENCE SOUTH 88°26'07" EAST ALONG THE SOUTH LINE OF THE PARCEL DESCRIBED AT SAID RECEPTION NO. 9561360 A DISTANCE OF 1408.26 FEET TO THE SOUTHEAST CORNER OF SAID PARCEL, SAID POINT ALSO BEING THE SOUTHWEST CORNER OF A PARCEL OF LAND DESCRIBED BY DEED RECORDED DECEMBER 26, 1995 AT RECEPTION NO. 9561359 FILED IN THE DOUGLAS COUNTY CLERK AND RECORDER'S OFFICE;
THENCE SOUTH 89°42'56" EAST ALONG THE SOUTH LINE OF THE PARCEL OF LAND DESCRIBED AT SAID RECEPTION NO. 9561359 AND THE SOUTH LINE OF A PARCEL OF LAND DESCRIBED BY DEED RECORDED JUNE 8, 1995 AT RECEPTION NO. 9525595 FILED IN THE DOUGLAS COUNTY CLERK AND RECORDER'S OFFICE A DISTANCE OF 1148.46 FEET TO THE SOUTHWEST CORNER OF A PARCEL OF LAND DESCRIBED BY DEED RECORDED MAY 5, 1995 AT RECEPTION NO. 9519762 FILED IN THE DOUGLAS COUNTY CLERK AND RECORDER'S OFFICE;
THENCE NORTH 00°57'00" EAST ALONG THE WEST LINE OF THE PARCEL OF LAND DESCRIBED AT SAID RECEPTION NO. 9519762 AND THE WEST LINE OF A PARCEL OF LAND DESCRIBED BY DEED RECORDED MAY 5, 1995 AT RECEPTION NO. 9519760 FILED IN THE DOUGLAS COUNTY CLERK AND RECORDER'S OFFICE A DISTANCE OF 176.40 FEET, SAID POINT ALSO BEING ON THE SOUTHWESTERLY RIGHT OF WAY LINE OF HILLTOP ROAD;
THENCE SOUTH 49°24'37" EAST ALONG THE SOUTHWESTERLY RIGHT OF WAY LINE OF HILLTOP ROAD AS DESCRIBED AT SAID RECEPTION NO. 9519760 (AND ALONG SAID DESCRIBED COURSE EXTENDED SOUTHEASTERLY) A DISTANCE OF 272.68 FEET TO A POINT ON THE NORTH LINE OF LOT 98, HIDDEN VILLAGE FILING NO. 4, A SUBDIVISION FILED WITH THE DOUGLAS COUNTY CLERK AND RECORDER AND RECORDED NOVEMBER 12, 1968 AT RECEPTION NO. 131583;
THENCE NORTH 89°42'56" WEST ALONG THE NORTH LINE OF SAID LOT 98 A DISTANCE OF 118.17 FEET TO THE NORTHWEST CORNER OF SAID LOT 98;
THENCE SOUTH 01°16'51" WEST ALONG THE WEST LINE OF SAID HIDDEN VILLAGE FILING NO. 4 A DISTANCE OF 2633.91 FEET TO THE SOUTHWEST CORNER OF LOT 102 OF SAID HIDDEN VILLAGE FILING NO. 4, SAID POINT ALSO BEING ON THE NORTH LINE OF LOT 58-A, HIDDEN VILLAGE FILING NO. 2, 2ND AMENDMENT, A SUBDIVISION FILED IN THE DOUGLAS COUNTY CLERK AND RECORDER'S OFFICE AND RECORDED APRIL 13, 2005 AT RECEPTION NO. 2005032337;
THENCE NORTH 89°04'32" WEST ALONG THE NORTH LINE OF SAID HIDDEN VILLAGE FILING NO. 2, 2ND AMENDMENT A DISTANCE OF 950.95 FEET TO THE NORTHWEST CORNER OF LOT 59-A OF SAID HIDDEN VILLAGE FILING NO. 2, 2ND AMENDMENT;
THENCE NORTH 89°01'58" WEST ALONG THE NORTH LINE OF HIDDEN VILLAGE FILING NUMBER TWO, A SUBDIVISION FILED IN THE DOUGLAS COUNTY CLERK AND RECORDER'S OFFICE AND RECORDED FEBRUARY 23, 1966 AT RECEPTION NO. 127014 A DISTANCE OF 1686.96 FEET TO THE SOUTHEAST CORNER OF TRACT B OF HIDDEN VILLAGE FILING NUMBER ONE AMENDED, A SUBDIVISION FILED IN THE DOUGLAS COUNTY CLERK AND RECORDER'S OFFICE AND RECORDED AUGUST 2, 1966 AT RECEPTION NO. 125878;
THENCE NORTH 01°03'11" EAST ALONG THE EAST BOUNDARY OF SAID HIDDEN VILLAGE FILING NUMBER ONE AMENDED AND THE EAST LINE OF SAID HIDDEN VILLAGE FILING NUMBER ONE A DISTANCE OF 2634.49 FEET TO THE POINT OF BEGINNING.

A PARCEL OF LAND LOCATED IN THE EAST HALF OF SECTION 6, TOWNSHIP 7 SOUTH, RANGE 65 WEST OF THE SIXTH PRINCIPAL MERIDIAN, COUNTY OF DOUGLAS, STATE OF COLORADO, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE EAST QUARTER CORNER OF SAID SECTION 6;
THENCE NORTH 89°37'37" WEST ALONG THE NORTH LINE OF THE SOUTHEAST QUARTER OF SAID SECTION 6, 1401.02 FEET TO THE POINT OF BEGINNING, SAID POINT BEING ON A LINE 63.72 FEET WEST OF AND PARALLEL WITH THE EAST LINE OF THE WEST HALF OF THE SOUTHEAST QUARTER OF SAID SECTION 6;
THENCE SOUTH 00°17'50" WEST ALONG SAID LINE, 10.98 FEET;
THENCE SOUTH 89°37'54" WEST, 1148.45 FEET;
THENCE NORTH 00°01'01" WEST, 25.84 FEET TO THE SOUTH LINE OF THE NORTHEAST QUARTER OF SAID SECTION 6, SAID POINT BEING SOUTH 89°37'37" EAST, 123.96 FEET FROM THE SOUTHWEST CORNER OF THE NORTHEAST QUARTER OF SAID SECTION 6;
THENCE CONTINUING NORTH 00°01'01" WEST, 1175.26 FEET TO THE SOUTH RIGHT-OF-WAY LINE OF HILLTOP ROAD; THENCE ALONG SAID SOUTH RIGHT-OF-WAY LINE THE FOLLOW TWO (2) COURSES:
1. THENCE SOUTH 36°30'00" EAST, 180.00 FEET;
2. THENCE SOUTH 50°03'47" EAST, 1359.35 FEET TO A LINE 63.72 FEET WEST OF AND PARALLEL WITH THE EAST LINE OF THE WEST HALF OF THE NORTHEAST QUARTER OF SAID SECTION 6;
THENCE SOUTH 00°17'50" WEST ALONG SAID LINE, 165.42 FEET TO THE POINT OF BEGINNING;
LESS AND EXCEPT THAT PORTION CONVEYED BY SPECIAL WARRANTY DEED RECORDED OCTOBER 3, 2023 UNDER RECEPTION NO. 2023042659, COUNTY OF DOUGLAS, STATE OF COLORADO.



VICINITY MAP
SCALE: 1" = 2000'

DEVELOPER	CIVIL ENGINEER	SURVEYOR
MILLER UNITED 6900 E. BELLVIEW AVE. GREENWOOD VILLAGE, CO 80111 PHONE: (303) 799-6300 CONTACT: DAN SHELDON	LJA ENGINEERING, INC. 1765 WEST 121ST AVE., SUITE 300 WESTMINSTER, CO 80234 PHONE: (303) 421-4224 CONTACT: KEVIN LOVELACE	LJA SURVEYING, INC 2725 ROCKY MOUNTAIN AVE., SUITE 450 LOVELAND, CO 80538 PHONE: (970) 340-2414 CONTACT: J.R. MCGEHEE

dedication statement will need to include the ROW dedication for Alpine Drive

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 RAMBLEWOOD. 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.

OWNER: MU HILLTOP LLC, A COLORADO LIMITED LIABILITY COMPANY

BY: _____, AS _____
OF MU HILLTOP LLC, A COLORADO LIMITED LIABILITY COMPANY.

STATE OF COLORADO)
) SS.
COUNTY OF DOUGLAS)

ACKNOWLEDGED BEFORE ME THIS _____ DAY OF _____ A.D., _____ BY _____
(NAME)
MY COMMISSION EXPIRES: _____

WITNESS MY HAND AND OFFICIAL SEAL: _____
NOTARY PUBLIC

OWNER: RAMBLEWOOD METROPOLITAN DISTRICT

BY: _____, AS _____
OF RAMBLEWOOD METROPOLITAN DISTRICT.

STATE OF COLORADO)
) SS.
COUNTY OF DOUGLAS)

ACKNOWLEDGED BEFORE ME THIS _____ DAY OF _____ A.D., _____ BY _____
(NAME)
MY COMMISSION EXPIRES: _____

WITNESS MY HAND AND OFFICIAL SEAL: _____
NOTARY PUBLIC

PLANNING COMMISSION

THE PRELIMINARY PLAN SB2025-040 FOR THIS FINAL PLAT WAS REVIEWED BY THE PLANNING COMMISSION ON FEBRUARY 23, 2026.

_____ _____
PLANNING DIRECTOR, ON BEHALF OF THE PLANNING COMMISSION — DATE

SURVEYOR'S CERTIFICATE

I, JOHN ROBERT MCGEHEE, 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 FEBRUARY 4, 2026 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 _____, 20___.

_____
JOHN ROBERT MCGEHEE
COLORADO REGISTERED PLS NO. 38219
FOR AND ON BEHALF OF LJA SURVEYING, INC.

FOR REVIEW ONLY

Certification needs to Dedication Sheet

SHEET INDEX

SHEET	SHEET TITLE
1	COVER 1
2	COVER 2
3	OVERALL
4	LOT DETAILS
5	LOT DETAILS
6	LOT DETAILS
7	LOT DETAILS

ACCEPTANCE CERTIFICATE

THE DEDICATION OF TRACTS B, D, E, F, G, H, AND I ARE HEREBY ACCEPTED FOR OWNERSHIP AND MAINTENANCE BY THE RAMBLEWOOD METROPOLITAN DISTRICT.

BY: _____

TITLE: _____

STATE OF COLORADO)
) SS.
COUNTY OF _____)

ACKNOWLEDGED BEFORE ME THIS _____ DAY OF _____, 20___ BY _____

AS _____ OF _____.

MY COMMISSION EXPIRES: _____

WITNESS MY HAND AND OFFICIAL SEAL

_____
NOTARY PUBLIC

THE DEDICATION OF TRACTS C IS HEREBY ACCEPTED FOR OWNERSHIP BY MU HILLTOP LLC, A COLORADO LIMITED LIABILITY COMPANY AND MAINTENANCE BY THE RAMBLEWOOD METROPOLITAN DISTRICT.

BY: _____

TITLE: _____

STATE OF COLORADO)
) SS.
COUNTY OF _____)

ACKNOWLEDGED BEFORE ME THIS _____ DAY OF _____, 20___ BY _____

AS _____ OF _____.

MY COMMISSION EXPIRES: _____

WITNESS MY HAND AND OFFICIAL SEAL

_____
NOTARY PUBLIC

THE DEDICATION OF TRACT A IS HEREBY ACCEPTED FOR OWNERSHIP AND MAINTENANCE BY MU HILLTOP LLC, A COLORADO LIMITED LIABILITY COMPANY.

BY: _____

TITLE: _____

STATE OF COLORADO)
) SS.
COUNTY OF _____)

ACKNOWLEDGED BEFORE ME THIS _____ DAY OF _____, 20___ BY _____

AS _____ OF _____.

MY COMMISSION EXPIRES: _____

WITNESS MY HAND AND OFFICIAL SEAL

_____
NOTARY PUBLIC

TITLE VERIFICATION

WE_____, 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.

COMPANY NAME: COMMONWEALTH LAND TITLE INSURANCE COMPANY

BY: _____
NAME — DATE

TITLE: _____

STATE OF COLORADO)
) SS.
COUNTY OF DOUGLAS)

ACKNOWLEDGED BEFORE ME THIS _____ DAY OF _____ A.D. 2026 BY _____

MY COMMISSION EXPIRES: _____

WITNESS MY HAND AND OFFICIAL SEAL: _____
NOTARY PUBLIC

BOARD OF COUNTY COMMISSIONERS

THIS PLAT WAS APPROVED FOR FILING BY THE BOARD OF COUNTY COMMISSIONERS OF DOUGLAS COUNTY, CO, ON THE _____ DAY OF _____, 202__, SUBJECT TO ANY CONDITIONS SPECIFIED HEREON. THE DEDICATIONS OF UTILITY EASEMENTS, DRAINAGE AND BLANKET ACCESS EASEMENTS, HALFPIPE PLACE, FREERIDER POINT, FREERIDER WAY, DERAILER STREET, RAILBENDER STREET, AND ALPINE DRIVE ARE HEREBY 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

LJA SURVEYING
4700 S. Syracuse Street
Suite 500
Denver, CO 80237
303-390-8510
www.lja.com

Date: 3/18/2026 | Job No.: 1084-0006 | Sheet: 1 of 7

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RAMBLEWOOD

LOCATED IN SECTION 6, TOWNSHIP 7 SOUTH, RANGE 65 WEST OF THE 6TH P.M., COUNTY OF DOUGLAS, STATE OF COLORADO

176.795 ACRES - 70 RESIDENTIAL LOTS - 8 TRACTS / SB2026-009

GENERAL NOTES

1. 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.

2. ANY PERSON WHO KNOWINGLY REMOVES, ALTERS OR DEFACES ANY PUBLIC LAND SURVEY MONUMENT OR LAND BOUNDARY MONUMENT OR ACCESSORY, COMMITS A CLASS TWO (2) MISDEMEANOR PURSUANT TO STATE STATUTE 18–4-508, C.R.S.

3. THIS SURVEY DOES NOT CONSTITUTE A TITLE SEARCH BY LJA SURVEYING TO DETERMINE OWNERSHIP OR EASEMENTS OF RECORD. FOR ALL INFORMATION REGARDING EASEMENTS, RIGHTS-OF-WAY, AND TITLE OF RECORD, LJA SURVEYING RELIED UPON THE TITLE REPORT PREPARED BY LAND TITLE GUARANTEE COMPANY, ORDER NUMBER ABC70847001-4, WITH AN EFFECTIVE DATE OF JANUARY 16, 2026 AT 5:00 P.M. AND THE TITLE REPORT PREPARED BY LAND TITLE GUARANTEE COMPANY, ORDER NUMBER ABC70847009-4, WITH AN EFFECTIVE DATE OF JANUARY 26, 2026 AT 5:00 P.M.

4. THE LINEAL UNIT USED IN THE PREPARATION OF THIS SURVEY IS THE U.S. SURVEY FOOT AS DEFINED BY THE UNITED STATES DEPARTMENT OF COMMERCE, NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY.

5. BASIS OF BEARINGS: THE EAST LINE OF THE SOUTHWEST QUARTER OF SECTION 6, TOWNSHIP 7 SOUTH, RANGE 65 WEST OF THE 6TH P.M. BEING ASSUMED TO BEAR NORTH 00°19'46" EAST, SAID LINE BEING MONUMENTED ON THE NORTH BY THE CENTER QUARTER CORNER OF SAID SECTION 6 BEING A 3.25" ALUMINUM CAP STAMPED "1994 PLS 12405" (0.3' ABOVE GROUND), AND ON THE SOUTH BY THE SOUTH QUARTER CORNER OF SAID SECTION 6 BEING A FOUND 3.25" ALUMINUM CAP STAMPED "1991 PLS 12405" (0.5' ABOVE GROUND) WITH ALL BEARINGS CONTAINED HEREIN RELATIVE THERETO.

6. FLOODPLAIN: THE SURVEYED PROPERTY IS LOCATED WITHIN ZONE X, OTHER AREAS — DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN, AS IDENTIFIED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) ON FLOOD INSURANCE RATE MAP (FIRM) — MAP NUMBER 08035C0202F AND 08035C0204F WITH A MAP REVISED DATE OF OF SEPTEMBER 30, 2005.

7. UTILITY EASEMENTS: FIFTEEN FOOT (15') WIDE UTILITY EASEMENTS AS SHOWN HEREON ARE DEDICATED FOR THE INSTALLATION, MAINTENANCE AND REPLACEMENT OF ELECTRIC, GAS, TELEVISION, CABLE AND TELECOMMUNICATIONS FACILITIES. PERMANENT STRUCTURES, IMPROVEMENTS, OBJECTS, BUILDINGS, WELLS, WATER METERS AND OTHER OBJECTS THAT MAY INTERFERE WITH THE UTILITY FACILITIES OR USE THEREOF (INTERFERING OBJECTS) SHALL NOT BE PERMITTED WITHIN SAID UTILITY EASEMENTS AND THE UTILITY PROVIDERS, AS GRANTEES, MAY REMOVE ANY INTERFERING OBJECTS AT NO COST TO SUCH GRANTEES, INCLUDING, WITHOUT LIMITATION, VEGETATION. PUBLIC SERVICE COMPANY OF COLORADO (PSCO) AND ITS SUCCESSORS RESERVE THE RIGHT TO REQUIRE ADDITIONAL EASEMENTS AND TO REQUIRE THE PROPERTY OWNER TO GRANT PSCO AN EASEMENT ON ITS STANDARD FORM.

8. TRACT A IS HEREBY DEDICATED TO MU HILLTOP LLC, A COLORADO LIMITED LIABILITY COMPANY FOR THE USE OF DRAINAGE AND OPEN SPACE. SAID TRACT WILL ALSO BE MAINTAINED BY MU HILLTOP LLC, A COLORADO LIMITED LIABILITY COMPANY.

9. TRACT C IS HEREBY DEDICATED TO MU HILLTOP LLC, A COLORADO LIMITED LIABILITY COMPANY FOR THE USE OF DRAINAGE, OPEN SPACE AND UTILITIES. SAID TRACT WILL BE MAINTAINED BY THE RAMBLEWOOD METROPOLITAN DISTRICT.

10. TRACTS B, D, E, F, G, H, AND I ARE HEREBY DEDICATED TO THE RAMBLEWOOD METROPOLITAN DISTRICT FOR USE OF DRAINAGE, OPEN SPACE AND UTILITIES. SAID TRACTS WILL ALSO BE MAINTAINED BY THE RAMBLEWOOD METROPOLITAN DISTRICT.

11. PRIMARY DRAINAGE EASEMENTS ARE DEDICATED TO DOUGLAS COUNTY AND SHALL REMAIN FREE OF OBSTRUCTION.

LAND USE SUMMARY CHART				
TYPE	LOTS	SQ. FT.	ACRES	%
LOT AREA - RESIDENTIAL	70	4,568,435	104.877	59.32%
PUBLIC RIGHT-OF-WAY AREA		488,282	11.209	6.34%
TRACTS - (9)		2,644,453	60.708	34.34%
TOTALS		7,701,170	176.795	100.00%

TRACT SUMMARY CHART					
TRACT	USE	OWNED	MAINTAINED	SQ. FT.	ACRES
TRACT A	DRAINAGE, OPEN SPACE	OWNER	OWNER	119,341	2.740
TRACT B	DRAINAGE, OPEN SPACE, UTILITIES	METRO DISTRICT	METRO DISTRICT	89,268	2.049
TRACT C	DRAINAGE, OPEN SPACE, UTILITIES	OWNER	METRO DISTRICT	10,071	0.231
TRACT D	DRAINAGE, OPEN SPACE, PARK, UTILITIES	METRO DISTRICT	METRO DISTRICT	1,139,439	26.158
TRACT E	DRAINAGE, OPEN SPACE	METRO DISTRICT	METRO DISTRICT	42,974	0.987
TRACT F	DRAINAGE, OPEN SPACE, UTILITIES	METRO DISTRICT	METRO DISTRICT	186,741	4.287
TRACT G	DRAINAGE, OPEN SPACE, UTILITIES	METRO DISTRICT	METRO DISTRICT	44,590	1.024
TRACT H	DRAINAGE, OPEN SPACE, UTILITIES	METRO DISTRICT	METRO DISTRICT	946,689	21.733
TRACT I	OPEN SPACE, PARK	METRO DISTRICT	METRO DISTRICT	65,340	1.500
			TOTAL AREA	2,644,453	60.708



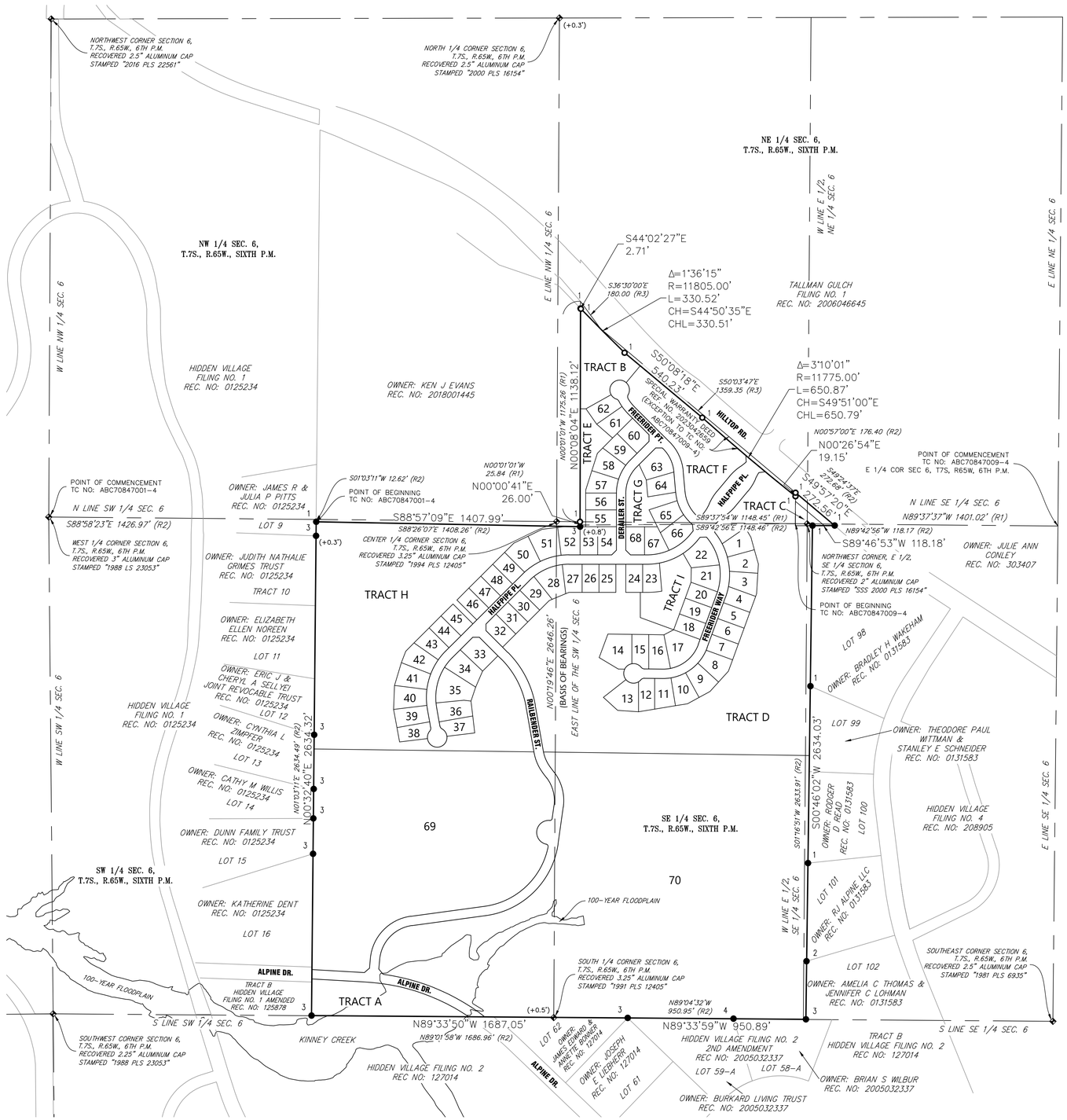
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LJA SURVEYING
4700 S. Syracuse Street
Suite 500
Denver, CO 80237
303-390-8510
www.lja.com

RAMBLEWOOD

LOCATED IN SECTION 6, TOWNSHIP 7 SOUTH, RANGE 65 WEST OF THE 6TH P.M., COUNTY OF DOUGLAS, STATE OF COLORADO

176.795 ACRES - 70 RESIDENTIAL LOTS - 8 TRACTS / SB2026-009



MONUMENT SYMBOL LEGEND

	ALL MONUMENTS WERE RECOVERED FLUSH WITH THE GROUND UNLESS NOTED OTHERWISE
✥	RECOVERED SECTION CORNER AS NOTED HEREON
1 ○	SET 18" LONG NO. 5 REBAR WITH 1.25" ORANGE PLASTIC CAP STAMPED "LJA SURVEYING PLS 38219" FLUSH WITH GROUND
1 ●	RECOVERED NO. 5 REBAR WITH 2" GREEN PLASTIC CAP STAMPED "FRONTIER SURVEY 30830"
2 ●	RECOVERED NO. 5 REBAR WITH 1" ALUMINUM CAP STAMPED "RLS 4440"
3 ●	RECOVERED IRON ROD WITH NO CAP
4 ●	RECOVERED NO. 5 REBAR WITH YELLOW PLASTIC CAP STAMPED "PLS 29052"
(R1)	DIMENSION PER RECEPTION NO. 2023042659 WITHIN LAND TITLE GUARANTEE COMPANY TITLE COMMITMENT ORDER NUMBER ABC70847009-4.
(+0.3')	DENOTES POSITION OF RECOVERED MONUMENT ABOVE (+) OR BELOW (-) SURROUNDING GROUND

LEGEND

- S.E. = SANITARY SEWER EASEMENT HEREBY GRANTED
- D.E. = PRIMARY DRAINAGE EASEMENTS HEREBY DEDICATED TO DOUGLAS COUNTY
- D.U.E. = DRY UTILITY EASEMENT HEREBY GRANTED
- U.E. = UTILITY EASEMENT HEREBY GRANTED
- REC. NO: = RECEPTION NUMBER
- P.W.S.D.E. = PARKER WATER & SANITATION DISTRICT EASEMENT
- (BEARING/DISTANCE R1) = BEARING, DISTANCE OR CURVE LABEL FROM TITLE COMMITMENT NO. ABC70847009-4 LEGAL DESCRIPTION
- (BEARING/DISTANCE R2) = BEARING, DISTANCE OR CURVE LABEL FROM TITLE COMMITMENT NO. ABC70847001-4 LEGAL DESCRIPTION
- (BEARING/DISTANCE R3) = BEARING, DISTANCE OR CURVE LABEL FROM RIGHT-OF-WAY DEED RECEPTION NO. 2023042659 LEGAL DESCRIPTION

300 0 150 300
SCALE
1 inch = 300 ft.

FOR REVIEW ONLY

FOR AND ON BEHALF OF LJA SURVEYING, INC.

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Date:	Job No:	Sheet:
3/18/2026	1084-0006	3 of 7

RAMBLEWOOD

LOCATED IN SECTION 6, TOWNSHIP 7 SOUTH, RANGE 65 WEST OF THE 6TH P.M., COUNTY OF DOUGLAS, STATE OF COLORADO

176.795 ACRES - 70 RESIDENTIAL LOTS - 8 TRACTS / SB2026-009

NE 1/4 SEC. 6,
T.7S., R.65W., SIXTH P.M.

MATCH TO RIGHT

MATCH TO LEFT

SEE SHEET 3

SEE SHEET 3

MATCH TO SHEET 6

MATCH TO SHEET 6

HILLTOP ROAD
(R.O.W. VARIES)

DERAILER ST.
(50' PUBLIC R.O.W.)

FREERIDER PT.
(50' PUBLIC R.O.W.)

MERRYVALE TR.

TRACT B
89,268 SF
2.049 AC

TRACT E
42,974 SF
0.987 AC

TRACT F
186,741 SF
4.287 AC

TRACT G
44,590 SF
1.024 AC

TRACT D
1,139,439 SF
26.158 AC

TRACT C
10,071 SF
0.231 AC

55 14,647 SF 0.336 AC
56 14,761 SF 0.339 AC
57 15,523 SF 0.356 AC
58 16,988 SF 0.390 AC
59 14,757 SF 0.339 AC
60 17,043 SF 0.391 AC
61 15,179 SF 0.348 AC
62 14,885 SF 0.342 AC
63 20,329 SF 0.467 AC
64 14,902 SF 0.342 AC
65 16,672 SF 0.383 AC
66 18,084 SF 0.415 AC

TALLMAN GULCH
FILING NO. 1
REC. NO: 2006046645

OWNER: KEN J EVANS
REC. NO: 2018001445

SPECIAL WARRANTY DEED
REF. NO. 2023042659
(EXCEPTION TO TC NO:
ABC70847009-4)

check sight distance at this intersection

the invert and outlet will need to be maintained by the Metro District - Douglas County will maintain the inlets

MONUMENT SYMBOL LEGEND

ALL MONUMENTS WERE RECOVERED FLUSH WITH THE GROUND UNLESS NOTED OTHERWISE

- RECOVERED SECTION CORNER AS NOTED HEREON
- 1 SET 18" LONG NO. 5 REBAR WITH 1.25" ORANGE PLASTIC CAP STAMPED "LJA SURVEYING PLS 38219" FLUSH WITH GROUND
- 1 RECOVERED NO. 5 REBAR WITH 2" GREEN PLASTIC CAP STAMPED "FRONTIER SURVEY 30830"
- 2 RECOVERED NO. 5 REBAR WITH 1" ALUMINUM CAP STAMPED "RLS 4440"
- 3 RECOVERED IRON ROD WITH NO CAP
- 4 RECOVERED NO. 5 REBAR WITH YELLOW PLASTIC CAP STAMPED "PLS 29052"

(-0.3') DENOTES POSITION OF RECOVERED MONUMENT ABOVE (+) OR BELOW (-) SURROUNDING GROUND

LEGEND

S.E. = SANITARY SEWER EASEMENT HEREBY GRANTED
D.E. = PRIMARY DRAINAGE EASEMENTS HEREBY DEDICATED TO DOUGLAS COUNTY
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(BEARING/DISTANCE R3) = BEARING, DISTANCE OR CURVE LABEL FROM RIGHT-OF-WAY DEED RECEPTION NO. 2023042659 LEGAL DESCRIPTION

KEY MAP
N.T.S.

HILLTOP RD.
S4
S5
S6
S7
ALPINE RD.

LINE TABLE		
LINE	BEARING	LENGTH
L1	N00°00'41"E	26.00'
L9	N66°16'02"E	24.73'
L10	S88°25'53"W	33.11'
L11	N03°22'00"W	34.44'
L12	S83°10'43"W	34.44'

CURVE TABLE					
CURVE	LENGTH	RADIUS	DELTA	CHORD BEARING	CHORD LENGTH
C7	18.80'	25.00'	43°05'13"	N48° 38' 35"W	18.36
C8	252.45'	52.00'	278°09'43"	N68° 53' 40"E	68.12
C9	25.54'	25.00'	58°31'33"	S01° 17' 15"E	24.44
C12	284.15'	325.00'	50°05'38"	S64° 57' 11"W	275.18

SCALE
1 inch = 50 ft.

FOR REVIEW ONLY

FOR AND ON BEHALF OF
LJA SURVEYING, INC.

LJA SURVEYING
4700 S. Syracuse Street
Suite 500
Denver, CO 80237
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Date: 3/18/2026 | Job No.: 1084-0006 | Sheet: 4 of 7

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RAMBLEWOOD

LOCATED IN SECTION 6, TOWNSHIP 7 SOUTH, RANGE 65 WEST OF THE 6TH P.M., COUNTY OF DOUGLAS, STATE OF COLORADO

176.795 ACRES - 70 RESIDENTIAL LOTS - 8 TRACTS / SB2026-009

SEE SHEET 3

OWNER: KEN J EVANS
REC. NO: 2018001445

NW 1/4 SEC. 6,
T.7S., R.65W., SIXTH P.M.

CENTER 1/4 CORNER SECTION 6,
T.7S., R.65W., 6TH P.M.
RECOVERED 3.25" ALUMINUM CAP
STAMPED "1994 PLS 12405"

N00°01'01"W
1175.26' (R1)

N00°08'04"E
11.38.12'

L1

N00°01'01"W
25.84' (R1)

NORTH LINE OF THE SW 1/4 SEC. 6

S88°57'09"E 1407.99'
1335.01'
S88°26'07"E 1408.26' (R2)

OWNER: JAMES R & JULIA P PITTS
REC. NO: 0125234

LOT 9

TRACT 10

OWNER: JUDITH NATHALIE GRIMES TRUST
REC. NO: 0125234

SW 1/4 SEC. 6,
T.7S., R.65W., SIXTH P.M.

HIDDEN VILLAGE FILING NO. 1
REC. NO: 0125234

N01°03'11"E 2634.49' (R2)
N00°32'40"E 2634.32'
N00°32'40"E 1211.76'

SEE SHEET 3

LOT 11

OWNER: ELIZABETH ELLEN NOREEN
REC. NO: 0125234

OWNER: ERIC J & CHERYL A SELLYEI JOINT REVOCABLE TRUST
REC. NO: 0125234

LOT 12

FOR REVIEW ONLY

FOR AND ON BEHALF OF
LJA SURVEYING, INC.

LEGEND

S.E. = SANITARY SEWER EASEMENT HEREBY GRANTED
D.E. = PRIMARY DRAINAGE EASEMENTS HEREBY DEDICATED TO DOUGLAS COUNTY
D.U.E. = DRY UTILITY EASEMENT HEREBY GRANTED
U.E. = UTILITY EASEMENT HEREBY GRANTED
REC. NO: = RECEPTION NUMBER
P.W.S.D.E. = PARKER WATER & SANITATION DISTRICT EASEMENT
(BEARING/DISTANCE R1) = BEARING, DISTANCE OR CURVE LABEL FROM TITLE COMMITMENT NO. ABC70847009-4 LEGAL DESCRIPTION
(BEARING/DISTANCE R2) = BEARING, DISTANCE OR CURVE LABEL FROM TITLE COMMITMENT NO. ABC70847001-4 LEGAL DESCRIPTION
(BEARING/DISTANCE R3) = BEARING, DISTANCE OR CURVE LABEL FROM RIGHT-OF-WAY DEED RECEPTION NO. 2023042659 LEGAL DESCRIPTION

MONUMENT SYMBOL LEGEND

ALL MONUMENTS WERE RECOVERED FLUSH WITH THE GROUND UNLESS NOTED OTHERWISE

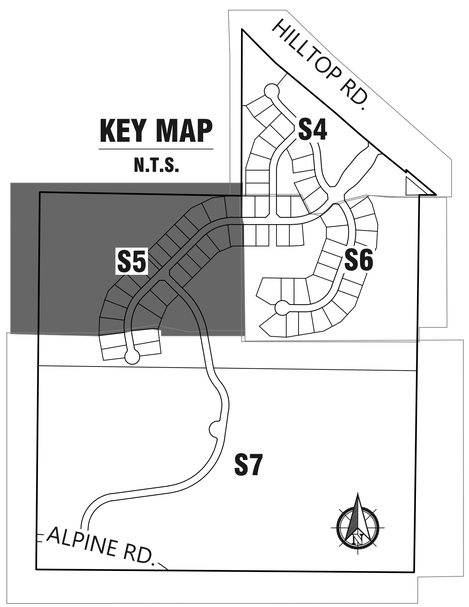
- RECOVERED SECTION CORNER AS NOTED HEREON
- 1 SET 18" LONG NO. 5 REBAR WITH 1.25" ORANGE PLASTIC CAP STAMPED "LJA SURVEYING PLS 38219" FLUSH WITH GROUND
- 1 RECOVERED NO. 5 REBAR WITH 2" GREEN PLASTIC CAP STAMPED "FRONTIER SURVEY 30830"
- 2 RECOVERED NO. 5 REBAR WITH 1" ALUMINUM CAP STAMPED "RLS 4440"
- 3 RECOVERED IRON ROD WITH NO CAP
- 4 RECOVERED NO. 5 REBAR WITH YELLOW PLASTIC CAP STAMPED "PLS 29052"
- (-0.3') DENOTES POSITION OF RECOVERED MONUMENT ABOVE (+) OR BELOW (-) SURROUNDING GROUND

LINE TABLE		
LINE	BEARING	LENGTH
L1	N00°00'41"E	26.00'
L5	N83°08'00"E	178.52'
L6	N84°31'35"E	150.00'
L7	S83°13'39"E	37.56'

TRACT H
946,689 SF
21.733 AC

check sight distance at this intersection

KEY MAP
N.T.S.



40	18,472 SF	0.424 AC	
41	17,798 SF	0.409 AC	
42	17,632 SF	0.405 AC	
43	15,177 SF	0.348 AC	
44	13,500 SF	0.310 AC	
45	13,500 SF	0.310 AC	
46	13,500 SF	0.310 AC	
47	13,500 SF	0.310 AC	
48	13,500 SF	0.310 AC	
49	13,501 SF	0.310 AC	
50	19,470 SF	0.447 AC	
51	21,495 SF	0.493 AC	
52	16,674 SF	0.383 AC	
27	14,657 SF	0.336 AC	
28	19,416 SF	0.446 AC	
29	14,560 SF	0.334 AC	
30	13,500 SF	0.310 AC	
31	13,500 SF	0.310 AC	
32	14,687 SF	0.337 AC	
33	19,099 SF	0.438 AC	
34	19,628 SF	0.451 AC	
35	26,560 SF	0.610 AC	

HALFPIPE PL. (50' PUBLIC R.O.W.)
RAILBENDER ST. (50' PUBLIC R.O.W.)

TRACT D
1,139,439 SF
26.158 AC

(BASIS OF BEARINGS)
N00°19'46"E 2646.26'
EAST LINE OF THE SW 1/4 SEC. 6

S89°14'35"E 284.91'
TEMPORARY CONSTRUCTION EASEMENT
N89°14'35"W 241.13'
N10°54'09"E 378.36'
S10°54'09"W 377.80'

MATCH TO SHEET 7
MATCH TO SHEET 6

SCALE
1 inch = 50 ft.

LJA SURVEYING
4700 S. Syracuse Street
Suite 500
Denver, CO 80237
303-390-8510
www.lja.com

Date: 3/18/2026 | Job No.: 1084-0006 | Sheet: 5 of 7

I:\JOB FOLDERS\1084\1084-0006\SURVEY\06 CAD\PRODUCTION FILES\1084-0006_RAMBLEWOOD - SHEETS PRINTED ON: 3/18/2026 2:45 PM

RAMBLEWOOD

LOCATED IN SECTION 6, TOWNSHIP 7 SOUTH, RANGE 65 WEST OF THE 6TH P.M., COUNTY OF DOUGLAS, STATE OF COLORADO

176.795 ACRES - 70 RESIDENTIAL LOTS - 8 TRACTS / SB2026-009

MATCH TO SHEET 4

MATCH TO SHEET 5

MATCH TO SHEET 7

SEE SHEET 3

DERAILER ST. (50' PUBLIC R.O.W.)

HALFPIPE PL. (50' PUBLIC R.O.W.)

FREERIDER WAY (50' PUBLIC R.O.W.)

TRACT I
65,340 SF
1.500 AC

TRACT D
1,139,439 SF
26.158 AC

SE 1/4 SEC. 6, T.7S., R.65W., SIXTH P.M.

OWNER: BRADLEY H WAKEHAM
REC. NO: 0131583

HIDDEN VILLAGE FILING NO. 4
REC. NO: 208905

LEGEND

- S.E. = SANITARY SEWER EASEMENT HEREBY GRANTED
- D.E. = PRIMARY DRAINAGE EASEMENTS HEREBY DEDICATED TO DOUGLAS COUNTY
- D.U.E. = DRY UTILITY EASEMENT HEREBY GRANTED
- U.E. = UTILITY EASEMENT HEREBY GRANTED
- REC. NO: = RECEPTION NUMBER
- P.W.S.D.E. = PARKER WATER & SANITATION DISTRICT EASEMENT
- (BEARING/DISTANCE R1) = BEARING, DISTANCE OR CURVE LABEL FROM TITLE COMMITMENT NO. ABC70847009-4 LEGAL DESCRIPTION
- (BEARING/DISTANCE R2) = BEARING, DISTANCE OR CURVE LABEL FROM TITLE COMMITMENT NO. ABC70847001-4 LEGAL DESCRIPTION
- (BEARING/DISTANCE R3) = BEARING, DISTANCE OR CURVE LABEL FROM RIGHT-OF-WAY DEED RECEPTION NO. 2023042659 LEGAL DESCRIPTION

MONUMENT SYMBOL LEGEND

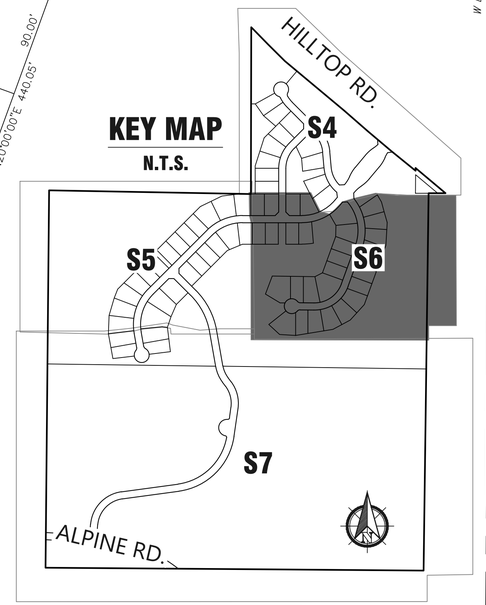
ALL MONUMENTS WERE RECOVERED FLUSH WITH THE GROUND UNLESS NOTED OTHERWISE

- RECOVERED SECTION CORNER AS NOTED HEREON
- 1 SET 18" LONG NO. 5 REBAR WITH 1.25" ORANGE PLASTIC CAP STAMPED "LJA SURVEYING PLS 38219" FLUSH WITH GROUND
- 1 RECOVERED NO. 5 REBAR WITH 2" GREEN PLASTIC CAP STAMPED "FRONTIER SURVEY 30830"
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- 4 RECOVERED NO. 5 REBAR WITH YELLOW PLASTIC CAP STAMPED "PLS 29052"
- (-0.3') DENOTES POSITION OF RECOVERED MONUMENT ABOVE (+) OR BELOW (-) SURROUNDING GROUND

LINE TABLE		
LINE	BEARING	LENGTH
L10	S88°25'53"W	33.11'

CURVE TABLE					
CURVE	LENGTH	RADIUS	DELTA	CHORD BEARING	CHORD LENGTH
C1	21.60'	25.00'	49°30'26"	S66° 00' 49"W	20.94
C2	253.23'	52.00'	279°00'53"	N00° 46' 02"E	67.53
C3	21.60'	25.00'	49°30'26"	S64° 28' 45"E	20.94
C12	284.15'	325.00'	50°05'38"	S64° 57' 11"W	275.18

KEY MAP
N.T.S.



SCALE
1 inch = 50 ft.

FOR AND ON BEHALF OF
LJA SURVEYING, INC.

LJA SURVEYING
4700 S. Syracuse Street
Suite 500
Denver, CO 80237
303-390-8510
www.lja.com

Date: 3/18/2026 | Job No.: 1084-0006 | Sheet: 6 of 7

I:\JOB FOLDERS\1084\1084-0006\SURVEY\06 CAD\PRODUCTION FILES\1084-0006_RAMBLEWOOD - SHEETS PRINTED ON: 3/18/2026 2:45 PM

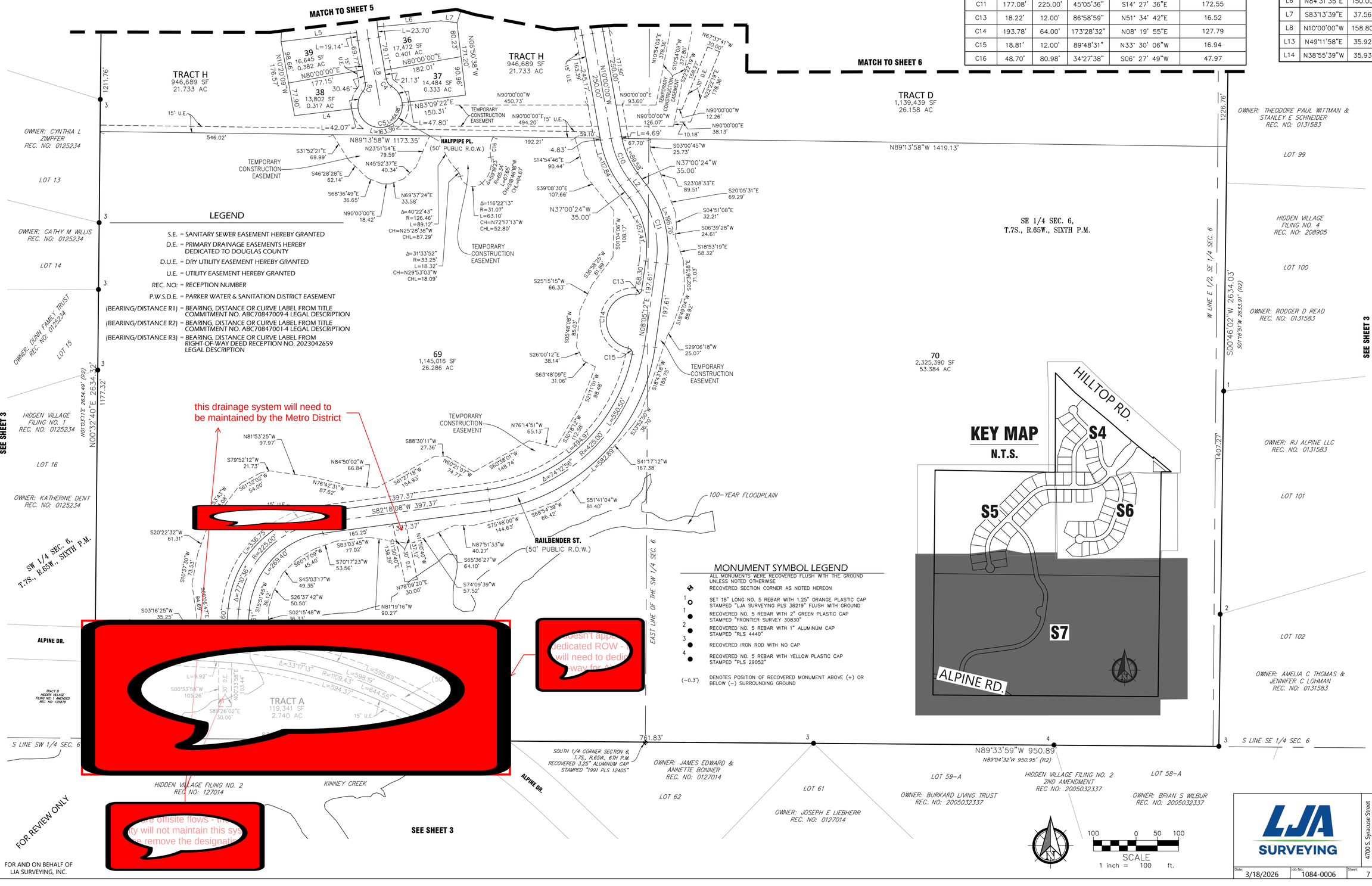
RAMBLEWOOD

LOCATED IN SECTION 6, TOWNSHIP 7 SOUTH, RANGE 65 WEST OF THE 6TH P.M., COUNTY OF DOUGLAS, STATE OF COLORADO

176.795 ACRES - 70 RESIDENTIAL LOTS - 8 TRACTS / SB2026-009

CURVE TABLE					
CURVE	LENGTH	RADIUS	DELTA	CHORD BEARING	CHORD LENGTH
C4	21.60'	25.00'	49°30'26"	S34° 45' 13"E	20.94
C5	253.23'	52.00'	279°00'53"	S80° 00' 00"W	67.53
C6	21.60'	25.00'	49°30'26"	N14° 45' 13"E	20.94
C10	106.05'	225.00'	27°00'24"	S23° 30' 12"E	105.08
C11	177.08'	225.00'	45°05'36"	S14° 27' 36"E	172.55
C13	18.22'	12.00'	86°58'59"	N51° 34' 42"E	16.52
C14	193.78'	64.00'	173°28'32"	N08° 19' 55"E	127.79
C15	18.81'	12.00'	89°48'31"	N33° 30' 06"W	16.94
C16	48.70'	80.98'	34°27'38"	S06° 27' 49"W	47.97

LINE TABLE		
LINE	BEARING	LENGTH
L2	S37°00'24"E	35.00'
L3	S05°07'31"W	101.33'
L4	S83°09'22"W	150.00'
L5	N83°08'00"E	178.52'
L6	N84°31'35"E	150.00'
L7	S83°13'39"E	37.56'
L8	N10°00'00"W	158.80'
L13	N49°11'58"E	35.92'
L14	N38°55'39"W	35.93'



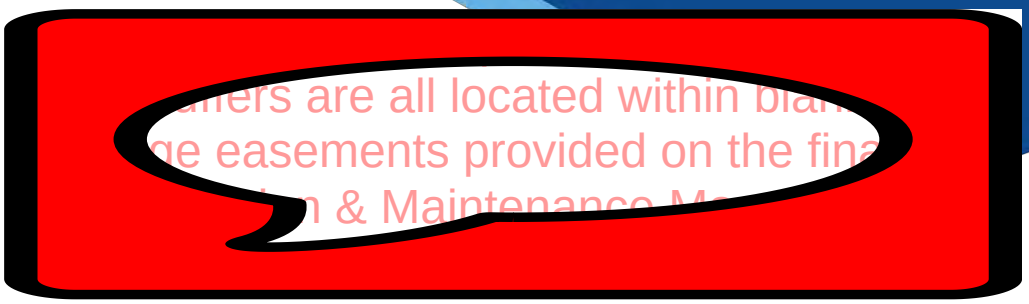
FOR REVIEW ONLY

FOR AND ON BEHALF OF LJA SURVEYING, INC.

LJA SURVEYING
4700 S. Syracuse Street
Suite 500
Denver, CO 80237
303-390-8510
www.lja.com

Date: 3/18/2026 | Job No.: 1084-0006 | Sheet: 7 of 7

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Phase III Drainage Report
for
Ramblewood Filing No. 1
Douglas County, Colorado

Prepared for:

Miller United Real Estate, LLC
6900 E. Belleview Ave, Suite 300
Greenwood Village, CO 80111
Contact: Dan Sheldon
Contact Email: dsheldon@miller-united.com

By:

LJA ENGINEERING

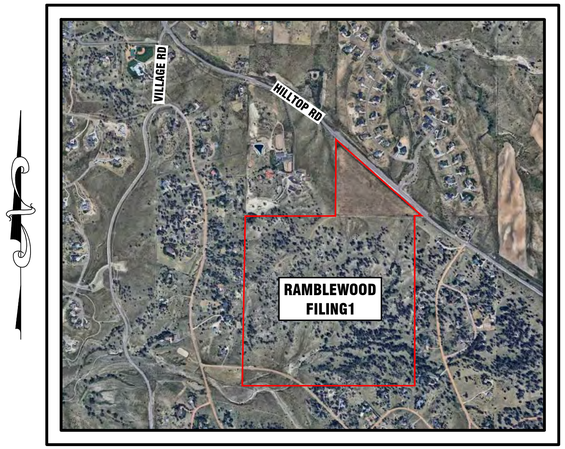
1765 West 121st Avenue, Suite 300
Westminster, CO 80234
Contact: Kevin Lovelace
Contact Email: klovelace@lja.com

Date: February 20, 2026

RAMBLEWOOD FILING NO. 1

GRADING, EROSION, AND SEDIMENT CONTROL (GESC) PLAN

A PORTION OF LAND LOCATED IN SECTION 5, TOWNSHIP 7 SOUTH, RANGE 65 WEST OF THE 6TH PRINCIPAL MERIDIAN
COUNTY DOUGLAS, STATE OF COLORADO



VICINITY MAP
1" = 1000'

Sheet List Table

Sheet Number	Sheet Title
1	Cover Sheet
2	Initial GESC Plan
3	Initial GESC Plan
4	Initial GESC Plan
5	Initial GESC Plan
6	Interim GESC Plan
7	Interim GESC Plan
8	Interim GESC Plan
9	Interim GESC Plan
10	Interim GESC Plan
11	Final GESC Plan
12	Final GESC Plan
13	Final GESC Plan
14	Final GESC Plan
15	Final GESC Plan
16	Details Sheet
17	Details Sheet
18	Details Sheet

THE GRADING, EROSION, AND SEDIMENT CONTROL (GESC) PLAN INCLUDED HEREIN HAS BEEN PLACED IN THE DOUGLAS COUNTY FILE FOR THIS PROJECT AND APPEARS TO FULFILL APPLICABLE DOUGLAS COUNTY GRADING, EROSION, AND SEDIMENT CONTROL CRITERIA, AS AMENDED. ADDITIONAL GRADING, EROSION AND SEDIMENT CONTROL MEASURES MAY BE REQUIRED OF THE PERMITTEE(S) DUE TO UNFORESEEN EROSION PROBLEMS OR IF THE SUBMITTED GESC PLAN DOES NOT FUNCTION AS INTENDED. THE REQUIREMENTS OF THIS GESC PLAN SHALL RUN WITH THE LAND AND BE THE OBLIGATION OF THE PERMITTEE(S), UNTIL SUCH TIME AS THE GESC PLAN IS PROPERLY COMPLETED, MODIFIED, OR VOIDED.

DEVELOPER

MILLER UNITED
6900 E. BELLVIEW AVE
GREENWOOD VILLAGE, CO 80111
PHONE: (303) 799-6300
CONTACT: DAN SHELDON

CIVIL ENGINEER

LJA ENGINEERING, INC.
1765 WEST 121ST AVE, SUITE 300
WESTMINSTER, CO 80234
PHONE: (303) 421-4224
CONTACT: KEVIN LOVELACE

SURVEYOR

LJA SURVEYING, INC
1765 WEST 121ST AVE, SUITE 300
WESTMINSTER, CO 80234
PHONE: (303) 358-7002
CONTACT: DEREK BROWN

PLANNER/LANDSCAPE

NORRIS DESIGN
1101 BANNOCK ST.
DENVER, CO 80204
PHONE: (303) 892-1166
CONTACT: SARAH TENGEN

GEOTECHNICAL ENGINEER

A.G. WASSENAAR
3211 SOUTH ZUNI ST.
ENGLEWOOD, CO 80110
PHONE: (303) 759-8100
CONTACT: ASHLEY MCDANIELS, P.E.

AGENCY LIST

DOUGLAS COUNTY
100 THIRD STREET
CASTLE ROCK, CO 80104
PHONE: (303) 660-7460
CONTACT: CHUCK SMITH

PARKER WATER & SANITATION DISTRICT
19801 E. MAIN STREET
PARKER, CO 80138
PHONE: (313) 841-4627
CONTACT: JAROD BAYLIE

CORE ELECTRIC COOPERATIVE
5496 US-85
SEDALIA, CO 80135
PHONE: (800) 332-9540

BASIS OF BEARINGS:

THE NORTH LINE OF THE NORTHWEST QUARTER OF SECTION 6, TOWNSHIP 7 SOUTH, RANGE 65 WEST OF THE SIXTH PRINCIPAL MERIDIAN, COUNTY OF DOUGLAS, STATE OF COLORADO. ASSUMED TO BEAR NORTH 89°29'26" WEST BASED ON NAD83 (2011) COLORADO STATE PLANE CENTRAL ZONE (502) COORDINATES, BEING MONUMENTED AT THE WEST BY 3 INCH ALUMINUM CAP STAMPED "1988 PLS 23053" AND AT THE EAST END BY A 3.25" ALUMINUM CAP STAMPED "1994 PLS 112405."

PROJECT BENCHMARK:

NGS BENCHMARK Z-336
ELEVATION = 6612.35' (NAVD 88)

SITE BENCHMARK:
CENTER SECTION CORNER OF SECTION 6-T7S-R65W
ELEVATION = 6398.76 (NAVD 88)

ELEVATION OF GROUND TOPOGRAPHIC SURVEY CONTOUR INTERVALS ARE 1 FOOT



ENGINEERING CERTIFICATION NOTE:

THE GRADING, EROSION, AND SEDIMENT CONTROL PLAN INCLUDED HEREIN HAS BEEN PREPARED UNDER MY DIRECT SUPERVISION IN ACCORDANCE WITH THE REQUIREMENTS OF THE GRADING, EROSION, AND SEDIMENT CONTROL (GESC) CRITERIA MANUAL OF DOUGLAS COUNTY, AS AMENDED.

DYLAN HARDY
LJA ENGINEERING

ASSISTANT DIRECTOR OF DEVELOPMENT REVIEW

DATE

THESE CONSTRUCTION DRAWINGS HAVE BEEN REVIEWED BY DOUGLAS COUNTY FOR GRADING, EROSION, AND SEDIMENT CONTROL IMPROVEMENTS ONLY

ENGINEERING DIVISION ACCEPTANCE BLOCK

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Suite 300
Westminster, CO 80234
303-421-4224 • www.lja.com

No.	Rev. Date:	Revision Type:
1		
2		
3		
4		
5		
6		

Designed: PAV
Prepared: JT
Approved: DKH

Job No.: CO1084-0006
Scale Horiz: N/A
Scale Vert: N/A

Sheet: 1 of 18
Date: February 20, 2026

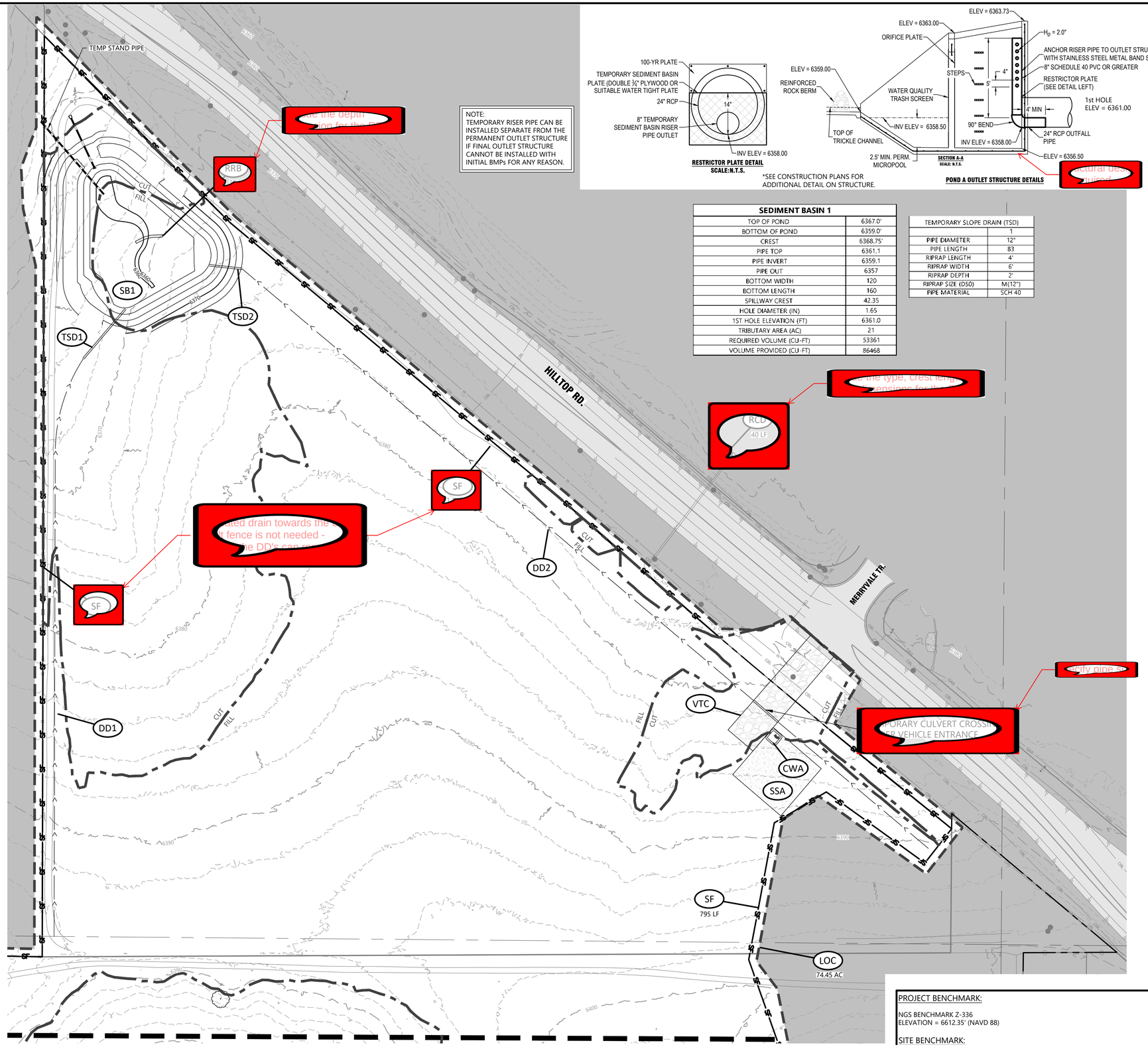
Proj. Name: Ramblewood Filing No. 1
Location: Douglas County, Colorado
Plan Set: Grading, Erosion, and Sediment Control (GESC) Plan
Sheet Name: Cover Sheet

NOT FOR CONSTRUCTION

Know what's below.
Call before you dig.

No. 1

I:\JOB FOLDERS\1084\1084-0006\CIVIL\PROD\GESC\M-COVER PRINTED ON: 2/20/2026 2:41 PM



NOTE:
TEMPORARY RISER PIPE CAN BE INSTALLED SEPARATE FROM THE PERMANENT OUTLET STRUCTURE IF FINAL OUTLET STRUCTURE CANNOT BE INSTALLED WITH INITIAL BMPs FOR ANY REASON.

RESTRICTOR PLATE DETAIL
SCALE: N.T.S.

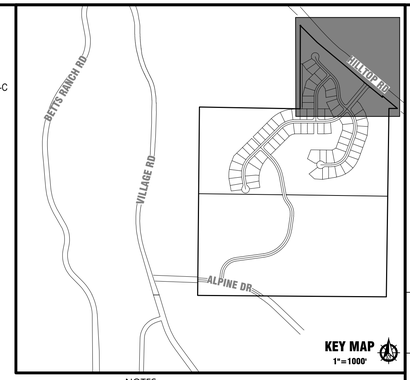
SECTION A-A
SCALE: N.T.S.

*SEE CONSTRUCTION PLANS FOR ADDITIONAL DETAIL ON STRUCTURE.

POND A OUTLET STRUCTURE DETAILS

SEDIMENT BASIN 1	
TOP OF POND	6367.0'
BOTTOM OF POND	6359.0'
CREST	6368.75'
PIPE TOP	6361.1
PIPE INVERT	6359.1
PIPE OUT	6357
BOTTOM WIDTH	120
BOTTOM LENGTH	160
SPILLWAY CREST	42.35
HOLE DIAMETER (IN)	1.65
1ST HOLE ELEVATION (FT)	6361.0
TRIBUTARY AREA (AC)	21
REQUIRED VOLUME (CU-FT)	53361
VOLUME PROVIDED (CU-FT)	86468

TEMPORARY SLOPE DRAIN (TSD)	
	1
PIPE DIAMETER	12"
PIPE LENGTH	83
RIPRAP LENGTH	4'
RIPRAP WIDTH	6'
RIPRAP DEPTH	2'
RIPRAP SIZE (D50)	M(12")
PIPE MATERIAL	SCH 40



KEY MAP
1"=1000'

NOTES
1. SHADED BMPS WERE INSTALLED IN INITIAL STAGE AND SHALL BE LEFT IN PLACE IN INTERIM STAGE UNLESS OTHERWISE NOTED.
2. ALL INTERIM EROSION AND SEDIMENT CONTROL BMPS INCLUDING DRILL SEEDING AND CRIMP MULCHING OF DISTURBED AREAS, MUST BE INSTALLED, INSPECTED, AND APPROVED BY THE COUNTY PRIOT TO THE ISSUANCE OF A RIGHT-OF-WAY USE AND CONSTRUCTION PERMIT FOR THE PURPOSE OF PAVING OR INSTALLATION OF CURB AND GUTTER.
3. SEE CONSTRUCTION PLANS FOR DETAILS OF PERMANENT DRAINAGE FACILITIES SUCH AS DETENTION FACILITIES, WATER QUALITY FACILITIES, CULVERTS, STORM DRAINS, AND OUTLET PROTECTION.
4. STORM SEWER SYSTEM SHALL BE CLEAN AS NECESSARY TO REDUCE SEDIMENT BUILDUP AND PRESERVE CAPACITY, RECOMMEND REMOVING SEDIMENT IF MORE THAN ¼ OF THE PIPE DIAMETER IS FULL OF SEDIMENT.

GESC PLAN LEGEND

XX	INSTALLED IN A PREVIOUS PHASE
CF	CONSTRUCTION FENCE
CWA	CONCRETE WASHOUT AREA
DD	DIVERSION DITCH
IP	INLET PROTECTION
RRB	REINFORCED ROCK BERM
SB	SEDIMENT BASIN
TSD	TEMPORARY SLOPE DRAIN
ST	SEDIMENT TRAP
SCL	SEDIMENT CONTROL LOG
SM	SEEDING AND MULCHING
SF	SILT FENCE
SSA	STABILIZED STAGING AREA
SR	SURFACE ROUGHENING
VTC	VEHICLE TRACKING CONTROL
LOC	LIMITS OF CONSTRUCTION
RCD	ROCK CHECK DAM
TOP	TEMPORARY OUTLET PROTECTION
CUT	CUT/FILL LINE
FILL	
	PROPERTY LINE
	DRAINAGE FLOW ARROW

DIVERSION DITCHES (DD)				
	LENGTH (FT)	SLOPE (%)	TYPE	LINING
1	737	3.72	A	ECB
2	1094	1.44	A	ECB
3	517	6.62	A	ECB
4	1218	4.31	A	ECB

PROJECT BENCHMARK:

NGS BENCHMARK Z-336
ELEVATION = 6612.35' (NAVD 88)

SITE BENCHMARK:
CENTER SECTION CORNER OF SECTION 6-T7S-R65W
ELEVATION = 6398.76 (NAVD 88)

ELEVATION OF GROUND TOPOGRAPHIC SURVEY CONTOUR INTERVALS ARE 1 FOOT

60 0 30 60
SCALE
1 inch = 60 ft.

ASSISTANT DIRECTOR OF DEVELOPMENT REVIEW

DATE

THESE CONSTRUCTION DRAWINGS HAVE BEEN REVIEWED BY DOUGLAS COUNTY FOR GRADING, EROSION, AND SEDIMENT CONTROL IMPROVEMENTS ONLY

ENGINEERING DIVISION ACCEPTANCE BLOCK

LJA
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Suite 300
Westminster, CO 80234
303-421-4224 • www.lja.com

Revision Type:

No.	Rev. Date:
1	
2	
3	
4	
5	
6	

Designed: PAV
Prepared: JT
Approved: DKH
Job No.: CO1084-0006
Scale Horiz: 1" = 60'
Scale Vert: N/A
Sheet: 2 of 18
Date: February 20, 2026

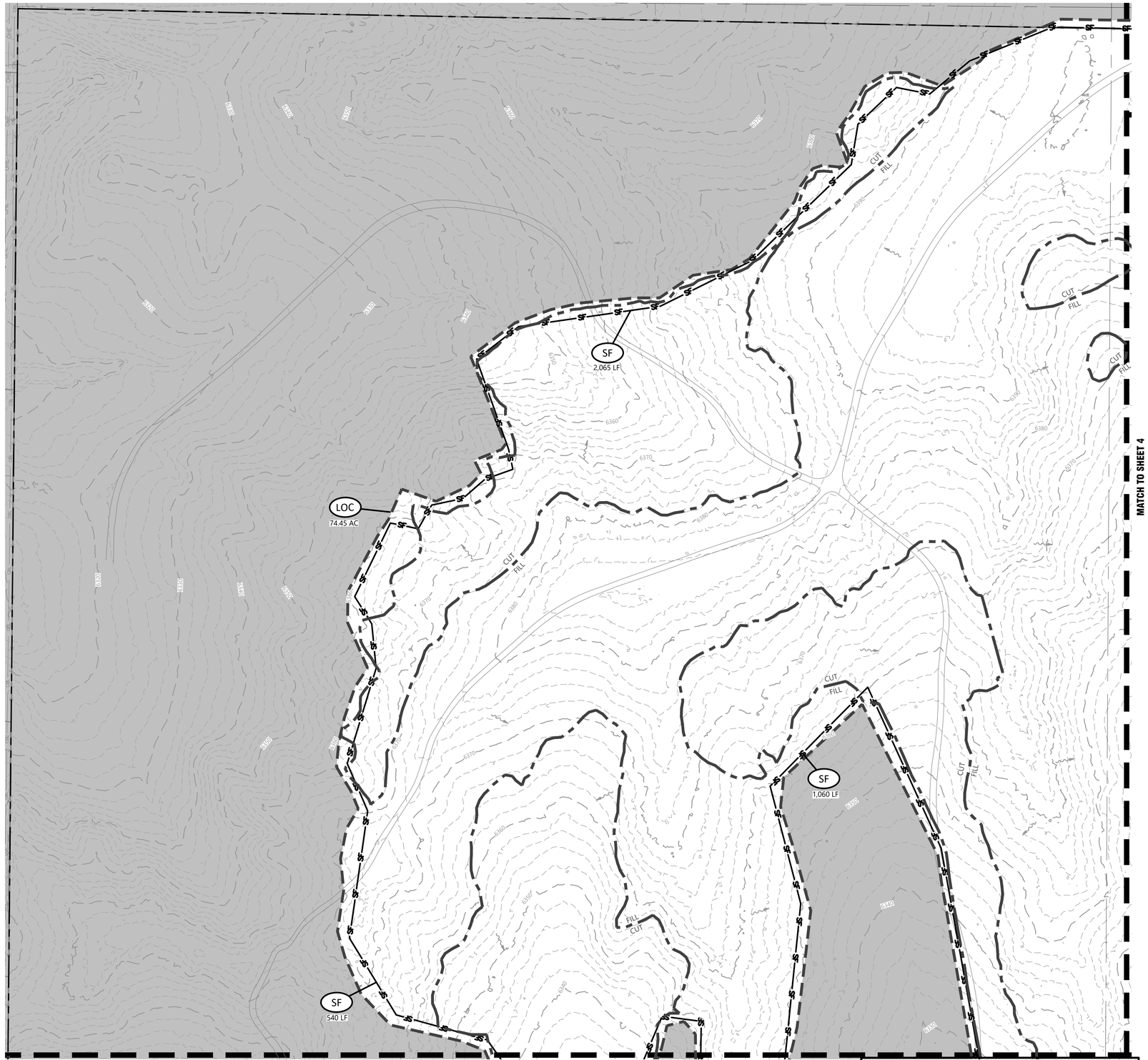
Proj. Name: Ramblewood Filing No. 1
Location: Douglas County, Colorado
Plan Set: Grading, Erosion, and Sediment Control (GESC) Plan
Sheet Name: Initial GESC Plan

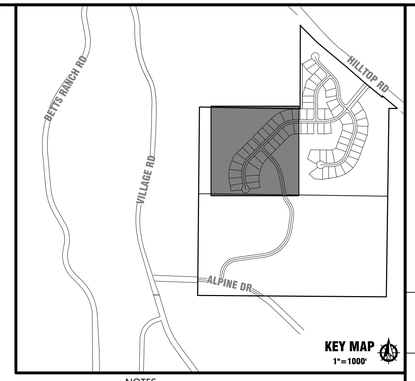
NOT FOR CONSTRUCTION

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

No. 2

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KEY MAP
1"=1000'

NOTES
1. SHADED BMPS WERE INSTALLED IN INITIAL STAGE AND SHALL BE LEFT IN PLACE IN INTERIM STAGE UNLESS OTHERWISE NOTED.
2. ALL INTERIM EROSION AND SEDIMENT CONTROL BMPS INCLUDING DRILL SEEDING AND CRIMP MULCHING OF DISTURBED AREAS, MUST BE INSTALLED, INSPECTED, AND APPROVED BY THE COUNTY PRIOT TO THE ISSUANCE OF A RIGHT-OF-WAY USE AND CONSTRUCTION PERMIT FOR THE PURPOSE OF PAVING OR INSTALLATION OF CURB AND GUTTER.
3. SEE CONSTRUCTION PLANS FOR DETAILS OF PERMANENT DRAINAGE FACILITIES SUCH AS DETENTION FACILITIES, WATER QUALITY FACILITIES, CULVERTS, STORM DRAINS, AND OUTLET PROTECTION.
4. STORM SEWER SYSTEM SHALL BE CLEAN AS NECESSARY TO REDUCE SEDIMENT BUILDUP AND PRESERVE CAPACITY, RECOMMEND REMOVING SEDIMENT IF MORE THAN ¼ OF THE PIPE DIAMETER IS FULL OF SEDIMENT.

GESC PLAN LEGEND

XX	INSTALLED IN A PREVIOUS PHASE
CF	CONSTRUCTION FENCE
CWA	CONCRETE WASHOUT AREA
DD	DIVERSION DITCH
IP	INLET PROTECTION
RRB	REINFORCED ROCK BERM
SB	SEDIMENT BASIN
TSD	TEMPORARY SLOPE DRAIN
ST	SEDIMENT TRAP
SCL	SEDIMENT CONTROL LOG
SM	SEEDING AND MULCHING
SF	SILT FENCE
SSA	STABILIZED STAGING AREA
SR	SURFACE ROUGHENING
VTC	VEHICLE TRACKING CONTROL
LOC	LIMITS OF CONSTRUCTION
RCD	ROCK CHECK DAM
TOP	TEMPORARY OUTLET PROTECTION
CUT/FILL	CUT/FILL LINE
	PROPERTY LINE
	DRAINAGE FLOW ARROW

PROJECT BENCHMARK:

NGS BENCHMARK Z-336
ELEVATION = 6612.35' (NAVD 88)

SITE BENCHMARK:
CENTER SECTION CORNER OF SECTION 6-T7S-R65W
ELEVATION = 6398.76 (NAVD 88)

ELEVATION OF GROUND TOPOGRAPHIC SURVEY CONTOUR INTERVALS ARE 1 FOOT

60 0 30 60
SCALE
1 inch = 60 ft.

ASSISTANT DIRECTOR OF DEVELOPMENT REVIEW

DATE

THESE CONSTRUCTION DRAWINGS HAVE BEEN REVIEWED BY DOUGLAS COUNTY FOR GRADING, EROSION AND SEDIMENT CONTROL IMPROVEMENTS ONLY

ENGINEERING DIVISION ACCEPTANCE BLOCK

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No.	Rev. Date:	Revision Type:
1		
2		
3		
4		
5		
6		

Designed: PAV
Prepared: JT
Approved: DKH

Job No.: CO1084-0006
Scale Horiz: 1" = 60'
Scale Vert: N/A

Sheet: 3 of 18
Date: February 20, 2026

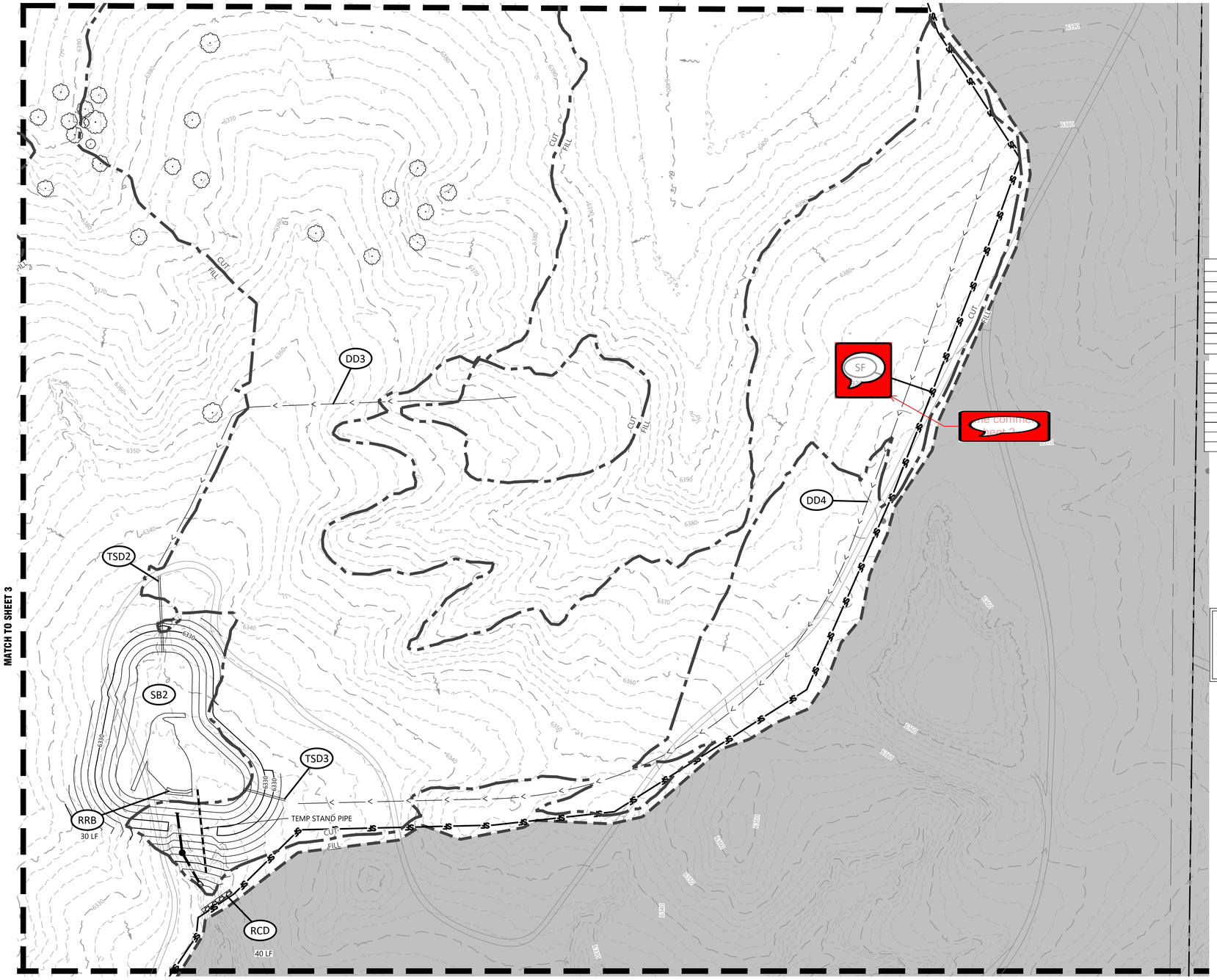
Proj. Name: Ramblewood Filing No. 1
Location: Douglas County, Colorado
Plan Set: Grading, Erosion, and Sediment Control (GESC) Plan
Sheet Name: Initial GESC Plan

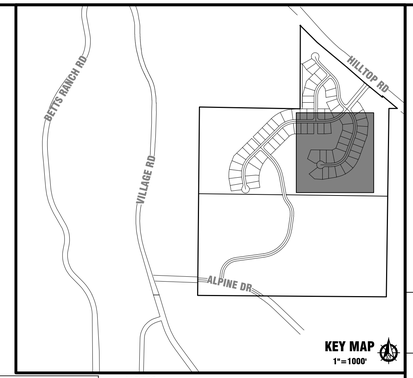
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No. 3

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TEMPORARY SLOPE DRAIN (TSD)	
	2
PIPE DIAMETER	12"
PIPE LENGTH	88
RIPRAP LENGTH	4'
RIPRAP WIDTH	6'
RIPRAP DEPTH	2'
RIPRAP SIZE (D50)	M(12")
PIPE MATERIAL	SCH 40

TEMPORARY SLOPE DRAIN (TSD)	
	3
PIPE DIAMETER	12"
PIPE LENGTH	50
RIPRAP LENGTH	4'
RIPRAP WIDTH	6'
RIPRAP DEPTH	2'
RIPRAP SIZE (D50)	M(12")
PIPE MATERIAL	SCH 40

NOTES
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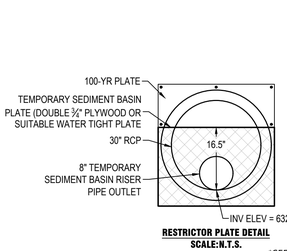
GESC PLAN LEGEND

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CF	CONSTRUCTION FENCE
CWA	CONCRETE WASHOUT AREA
DD	DIVERSION DITCH
IP	INLET PROTECTION
RRB	REINFORCED ROCK BERM
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VTC	VEHICLE TRACKING CONTROL
LOC	LIMITS OF CONSTRUCTION
RCD	ROCK CHECK DAM
TOP	TEMPORARY OUTLET PROTECTION
CUT	CUT/FILL LINE
FILL	
	PROPERTY LINE
	DRAINAGE FLOW ARROW

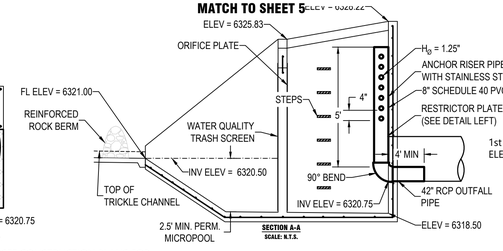
NOTE:
TEMPORARY RISER PIPE CAN BE INSTALLED SEPARATE FROM THE PERMANENT OUTLET STRUCTURE IF FINAL OUTLET STRUCTURE CANNOT BE INSTALLED WITH INITIAL BMPs FOR ANY REASON.

DIVERSION DITCHES (DD)				
	LENGTH (FT)	SLOPE (%)	TYPE	LINING
1	737	3.72	A	ECB
2	1094	1.44	A	ECB
3	517	6.62	A	ECB
4	1218	4.31	A	ECB

SEDIMENT BASIN 1	
TOP OF POND	6330
BOTTOM OF POND	6321
CREST	6328.4
PIPE TOP	6323.1
PIPE INVERT	6321.1
PIPE OUT	6318
BOTTOM WIDTH	70
BOTTOM LENGTH	165
SPILLWAY CREST	6328.4
HOLE DIAMETER (IN)	1.25
1ST HOLE ELEVATION (FT)	6323.0
TRIBUTARY AREA (AC)	38
REQUIRED VOLUME (CU-FT)	21867
VOLUME PROVIDED (CU-FT)	160349



RESTRICTOR PLATE DETAIL
SCALE:N.T.S.



SECTION A-A
SCALE: N.T.S.

POND B OUTLET STRUCTURE DETAILS

*SEE CONSTRUCTION PLANS FOR ADDITIONAL DETAIL ON STRUCTURE.

INITIAL SEDIMENT BASIN OUTLET STRUCTURES ARE INTENDED TO BE BUILT PER THE FINAL POND DESIGN STRUCTURES INCLUDED WITH THE INFRASTRUCTURE CONSTRUCTION DOCUMENTS. IF THIS STRUCTURE IS UNABLE TO BE CONSTRUCTED UP-FRONT, THE ALTERNATIVE TEMPORARY SEDIMENT BASIN RISER PIPE SHALL BE CONSTRUCTED AS SHOWN, AWAY FROM THE ULTIMATE OUTLET STRUCTURE, SUCH THAT FUTURE CONSTRUCTION OF THE OUTLET STRUCTURE DOES NOT DISTURB THE FUNCTIONALITY OF THE BMP

PROJECT BENCHMARK:

NGS BENCHMARK Z-336
ELEVATION = 6612.35' (NAVD 88)

SITE BENCHMARK:
CENTER SECTION CORNER OF SECTION 6-T7S-R65W
ELEVATION = 6398.76 (NAVD 88)

ELEVATION OF GROUND TOPOGRAPHIC SURVEY CONTOUR INTERVALS ARE 1 FOOT

N

60 0 30 60
SCALE
1 inch = 60 ft.

ASSISTANT DIRECTOR OF DEVELOPMENT REVIEW

DATE

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No.	Rev. Date:	Revision Type:
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Designed: PAV
Prepared: JT
Approved: DKH
Job No.: CO1084-0006
Scale Horiz: 1" = 60'
Scale Vert: N/A
Sheet: 4 of 18
Date: February 20, 2026

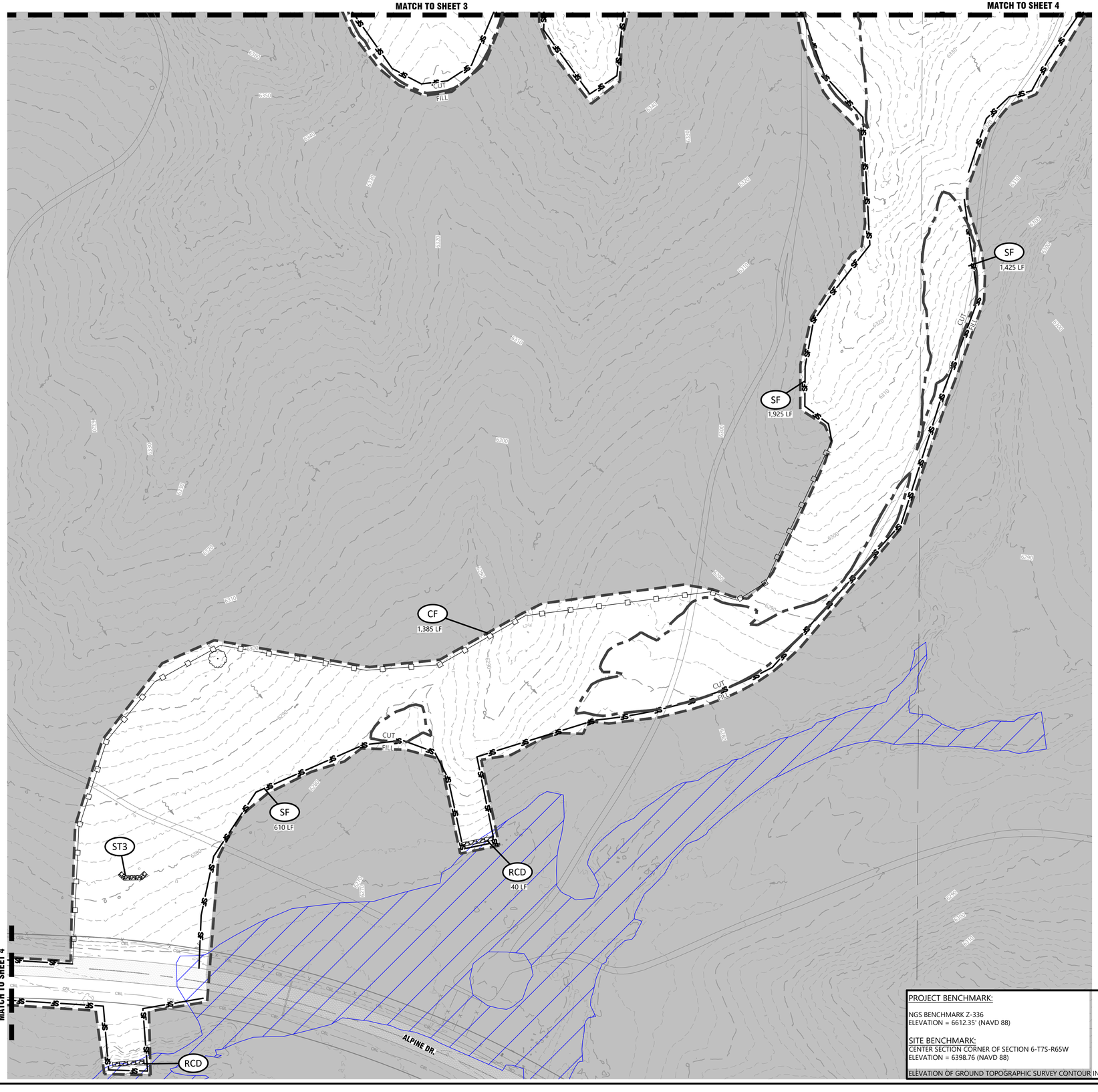
Proj. Name: Ramblewood Filing No. 1
Location: Douglas County, Colorado
Plan Set: Grading, Erosion, and Sediment Control (GESC) Plan
Sheet Name: Initial GESC Plan

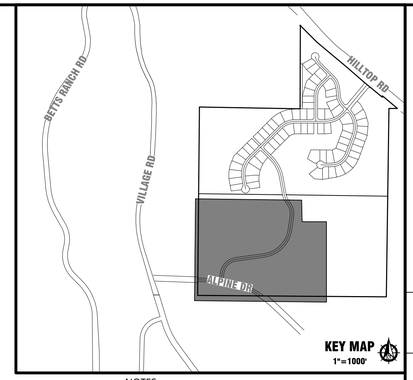
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No. 4

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KEY MAP
1"=1000'

NOTES
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4. STORM SEWER SYSTEM SHALL BE CLEAN AS NECESSARY TO REDUCE SEDIMENT BUILDUP AND PRESERVE CAPACITY, RECOMMEND REMOVING SEDIMENT IF MORE THAN $\frac{1}{4}$ OF THE PIPE DIAMETER IS FULL OF SEDIMENT.

GESC PLAN LEGEND

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FILL	
	PROPERTY LINE
	DRAINAGE FLOW ARROW

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Designed: PAV
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Job No.: CO1084-0006
Scale Horiz: 1" = 60'
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Sheet: 5 of 18
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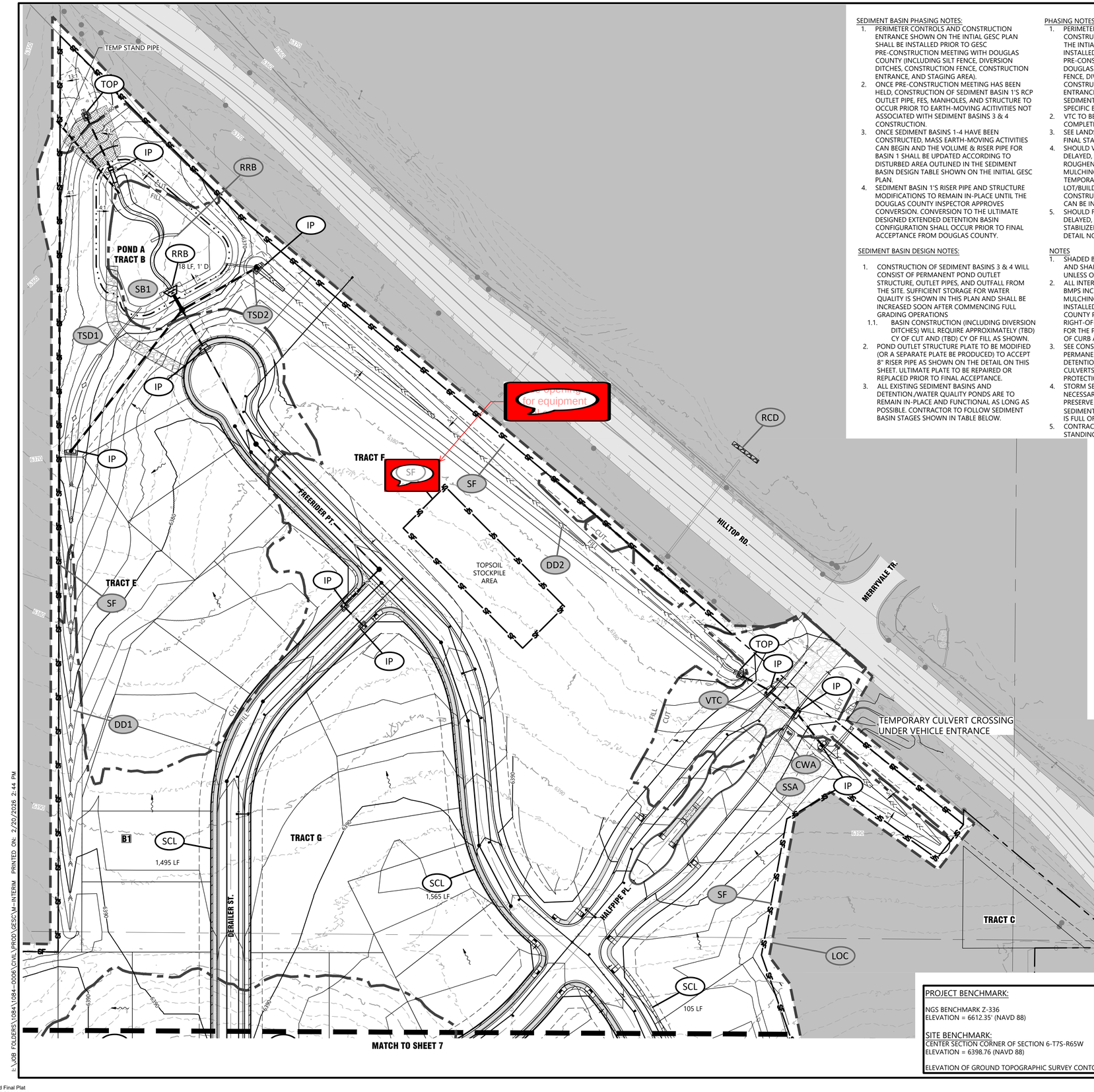
Proj. Name: Ramblewood Filing No. 1
Location: Douglas County, Colorado
Plan Set: Grading, Erosion, and Sediment Control (GESC) Plan
Sheet Name: Initial GESC Plan

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No. 5

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SEDIMENT BASIN PHASING NOTES:

1. PERIMETER CONTROLS AND CONSTRUCTION ENTRANCE SHOWN ON THE INTIAL GESC PLAN SHALL BE INSTALLED PRIOR TO GESC PRE-CONSTRUCTION MEETING WITH DOUGLAS COUNTY (INCLUDING SILT FENCE, DIVERSION DITCHES, CONSTRUCTION FENCE, CONSTRUCTION ENTRANCE, AND STAGING AREA).
2. ONCE PRE-CONSTRUCTION MEETING HAS BEEN HELD, CONSTRUCTION OF SEDIMENT BASIN 1'S RCP OUTLET PIPE, FES, MANHOLES, AND STRUCTURE TO OCCUR PRIOR TO EARTH-MOVING ACITIVITIES NOT ASSOCIATED WITH SEDIMENT BASINS 3 & 4 CONSTRUCTION.
3. ONCE SEDIMENT BASINS 1-4 HAVE BEEN CONSTRUCTED, MASS EARTH-MOVING ACTIVITIES CAN BEGIN AND THE VOLUME & RISER PIPE FOR BASIN 1 SHALL BE UPDATED ACCORDING TO DISTURBED AREA OUTLINED IN THE SEDIMENT BASIN DESIGN TABLE SHOWN ON THE INITIAL GESC PLAN.
4. SEDIMENT BASIN 1'S RISER PIPE AND STRUCTURE MODIFICATIONS TO REMAIN IN-PLACE UNTIL THE DOUGLAS COUNTY INSPECTOR APPROVES CONVERSION. CONVERSION TO THE ULTIMATE DESIGNED EXTENDED DETENTION BASIN CONFIGURATION SHALL OCCUR PRIOR TO FINAL ACCEPTANCE FROM DOUGLAS COUNTY.

SEDIMENT BASIN DESIGN NOTES:

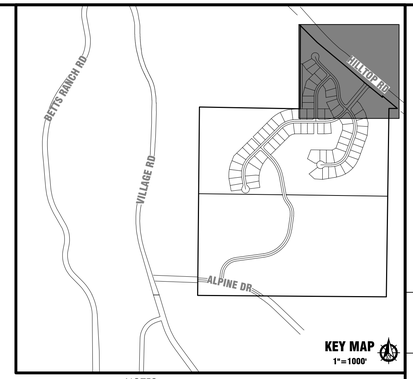
1. CONSTRUCTION OF SEDIMENT BASINS 3 & 4 WILL CONSIST OF PERMANENT POND OUTLET STRUCTURE, OUTLET PIPES, AND OUTFALL FROM THE SITE. SUFFICIENT STORAGE FOR WATER QUALITY IS SHOWN IN THIS PLAN AND SHALL BE INCREASED SOON AFTER COMMENCING FULL GRADING OPERATIONS
   1.1. BASIN CONSTRUCTION (INCLUDING DIVERSION DITCHES) WILL REQUIRE APPROXIMATELY (TBD) CY OF CUT AND (TBD) CY OF FILL AS SHOWN.
2. POND OUTLET STRUCTURE PLATE TO BE MODIFIED (OR A SEPARATE PLATE BE PRODUCED) TO ACCEPT 8" RISER PIPE AS SHOWN ON THE DETAIL ON THIS SHEET. ULTIMATE PLATE TO BE REPAIRED OR REPLACED PRIOR TO FINAL ACCEPTANCE.
3. ALL EXISTING SEDIMENT BASINS AND DETENTION,/WATER QUALITY PONDS ARE TO REMAIN IN-PLACE AND FUNCTIONAL AS LONG AS POSSIBLE. CONTRACTOR TO FOLLOW SEDIMENT BASIN STAGES SHOWN IN TABLE BELOW.

PHASING NOTES:

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2. VTC TO BE REMOVED UPON COMPLETION OF PAVING OPERATIONS.
3. SEE LANDSCAPE PLAN FOR ADDITIONAL FINAL STABILIZATION MEASURES.
4. SHOULD VERTICAL CONSTRUCTION BE DELAYED, INTERIM SURFACE ROUGHENING AND SEEDING AND MULCHING SHALL BE IMPLEMENTED TO TEMPORARILY STABILIZE ALL DISTURBED LOT/BUILDING AREAS UNTIL FINAL CONSTRUCTION AND LANDSCAPING CAN BE INSTALLED.
5. SHOULD FINAL LANDSCAPING BE DELAYED, ALL INTERIM SWALES SHALL BE STABILIZED PER DOUGLAS COUNTY GESC DETAIL NO. 9 (DIVERSION DITCHES).

NOTES

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5. CONTRACTORS IS RESPONSIBLE FOR DRAINING STANDING WATER FROM CUT BACK CURBS.



NOTES

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ELEVATION = 6612.35' (NAVD 88)

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CENTER SECTION CORNER OF SECTION 6-T7S-R65W
ELEVATION = 6398.76 (NAVD 88)

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SCALE
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ASSISTANT DIRECTOR OF DEVELOPMENT REVIEW

DATE

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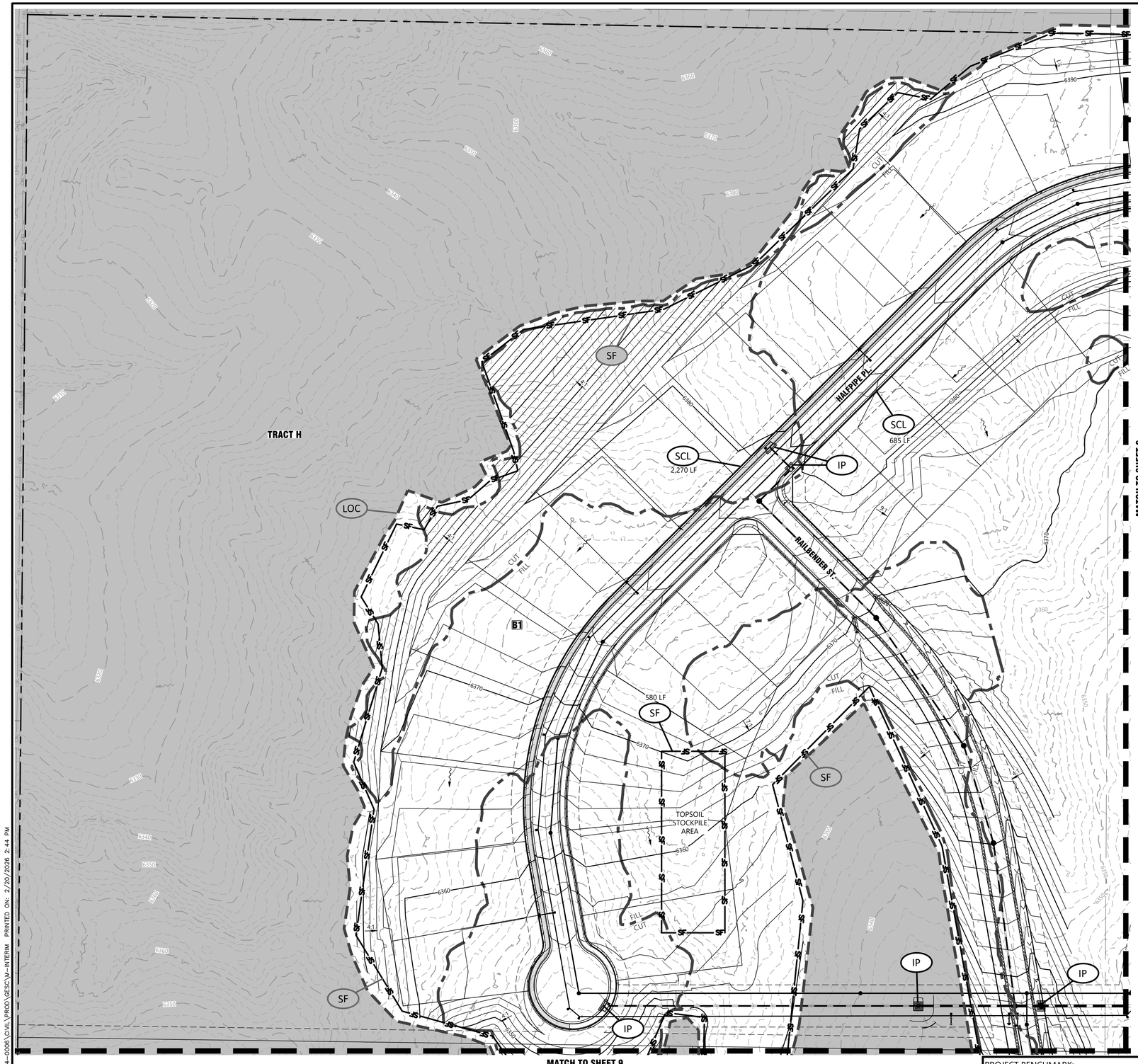
Proj. Name: Ramblewood Filing No. 1
Location: Douglas County, Colorado
Plan Set: Grading, Erosion, and Sediment Control (GESC) Plan
Sheet Name: Interim GESC Plan

NOT FOR CONSTRUCTION

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No. 6

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PHASING NOTES:

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3. SEE LANDSCAPE PLAN FOR ADDITIONAL FINAL STABILIZATION MEASURES.
4. SHOULD VERTICAL CONSTRUCTION BE DELAYED, INTERIM SURFACE ROUGHENING AND SEEDING AND MULCHING SHALL BE IMPLEMENTED TO TEMPORARILY STABILIZE ALL DISTURBED LOT/BUILDING AREAS UNTIL FINAL CONSTRUCTION AND LANDSCAPING CAN BE INSTALLED.
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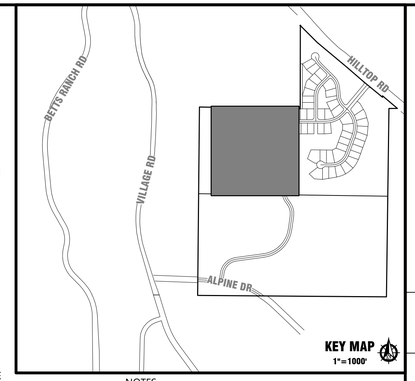
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5. CONTRACTORS IS RESPONSIBLE FOR DRAINING STANDING WATER FROM CUT BACK CURBS.

SEDIMENT BASIN DESIGN NOTES:

1. CONSTRUCTION OF SEDIMENT BASINS 3 & 4 WILL CONSIST OF PERMANENT POND OUTLET STRUCTURE, OUTLET PIPES, AND OUTFALL FROM THE SITE. SUFFICIENT STORAGE FOR WATER QUALITY IS SHOWN IN THIS PLAN AND SHALL BE INCREASED SOON AFTER COMMENCING FULL GRADING OPERATIONS
   1.1. BASIN CONSTRUCTION (INCLUDING DIVERSION DITCHES) WILL REQUIRE APPROXIMATELY (TBD) CY OF CUT AND (TBD) CY OF FILL AS SHOWN.
2. POND OUTLET STRUCTURE PLATE TO BE MODIFIED (OR A SEPARATE PLATE BE PRODUCED) TO ACCEPT 8" RISER PIPE AS SHOWN ON THE DETAIL ON THIS SHEET. ULTIMATE PLATE TO BE REPAIRED OR REPLACED PRIOR TO FINAL ACCEPTANCE.
3. ALL EXISTING SEDIMENT BASINS AND DETENTION/WATER QUALITY PONDS ARE TO REMAIN IN-PLACE AND FUNCTIONAL AS LONG AS POSSIBLE. CONTRACTOR TO FOLLOW SEDIMENT BASIN STAGES SHOWN IN TABLE BELOW.

SEDIMENT BASIN PHASING NOTES:

1. PERIMETER CONTROLS AND CONSTRUCTION ENTRANCE SHOWN ON THE INTIAL GESC PLAN SHALL BE INSTALLED PRIOR TO GESC PRE-CONSTRUCTION MEETING WITH DOUGLAS COUNTY (INCLUDING SILT FENCE, DIVERSION DITCHES, CONSTRUCTION FENCE, CONSTRUCTION ENTRANCE, AND STAGING AREA).
2. ONCE PRE-CONSTRUCTION MEETING HAS BEEN HELD, CONSTRUCTION OF SEDIMENT BASIN 1'S RCP OUTLET PIPE, FES, MANHOLES, AND STRUCTURE TO OCCUR PRIOR TO EARTH-MOVING ACTIVITIES NOT ASSOCIATED WITH SEDIMENT BASINS 3 & 4 CONSTRUCTION.
3. ONCE SEDIMENT BASINS 1-4 HAVE BEEN CONSTRUCTED, MASS EARTH-MOVING ACTIVITIES CAN BEGIN AND THE VOLUME & RISER PIPE FOR BASIN 1 SHALL BE UPDATED ACCORDING TO DISTURBED AREA OUTLINED IN THE SEDIMENT BASIN DESIGN TABLE SHOWN ON THE INITIAL GESC PLAN.
4. SEDIMENT BASIN 1'S RISER PIPE AND STRUCTURE MODIFICATIONS TO REMAIN IN-PLACE UNTIL THE DOUGLAS COUNTY INSPECTOR APPROVES CONVERSION. CONVERSION TO THE ULTIMATE DESIGNED EXTENDED DETENTION BASIN CONFIGURATION SHALL OCCUR PRIOR TO FINAL ACCEPTANCE FROM DOUGLAS COUNTY.



NOTES

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4. STORM SEWER SYSTEM SHALL BE CLEAN AS NECESSARY TO REDUCE SEDIMENT BUILDUP AND PRESERVE CAPACITY. RECOMMEND REMOVING SEDIMENT IF MORE THAN ¼ OF THE PIPE DIAMETER IS FULL OF SEDIMENT.

GESC PLAN LEGEND

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CWA	CONCRETE WASHOUT AREA
DD	DIVERSION DITCH
IP	INLET PROTECTION
RRB	REINFORCED ROCK BERM
SB	SEDIMENT BASIN
TSD	TEMPORARY SLOPE DRAIN
ST	SEDIMENT TRAP
SCL	SEDIMENT CONTROL LOG
SM	SEEDING AND MULCHING
SF	SILT FENCE
SSA	STABILIZED STAGING AREA
SR	SURFACE ROUGHENING
VTC	VEHICLE TRACKING CONTROL
LOC	LIMITS OF CONSTRUCTION
RCD	ROCK CHECK DAM
TOP	TEMPORARY OUTLET PROTECTION
CUT / FILL	CUT/FILL LINE
	PROPERTY LINE
	DRAINAGE FLOW ARROW

PROJECT BENCHMARK:

NGS BENCHMARK Z-336
ELEVATION = 6612.35' (NAVD 88)

SITE BENCHMARK:

CENTER SECTION CORNER OF SECTION 6-T7S-R65W
ELEVATION = 6398.76 (NAVD 88)

ELEVATION OF GROUND TOPOGRAPHIC SURVEY CONTOUR INTERVALS ARE 1 FOOT

60 0 30 60
SCALE
1 inch = 60 ft.

ASSISTANT DIRECTOR OF DEVELOPMENT REVIEW

DATE

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ENGINEERING DIVISION ACCEPTANCE BLOCK

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No.	Rev. Date:	Revision Type:
1		
2		
3		
4		
5		
6		

Designed: PAV
Prepared: JT
Approved: DKH

Job No.: CO1084-0006
Scale Horiz: 1" = 60'
Scale Vert: N/A

Sheet: 7 of 18
Date: February 20, 2026

Proj. Name: Ramblewood Filing No. 1
Location: Douglas County, Colorado
Plan Set: Grading, Erosion, and Sediment Control (GESC) Plan
Sheet Name: Interim GESC Plan

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No. 7

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PHASING NOTES:

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2. VTC TO BE REMOVED UPON COMPLETION OF PAVING OPERATIONS.
3. SEE LANDSCAPE PLAN FOR ADDITIONAL FINAL STABILIZATION MEASURES.
4. SHOULD VERTICAL CONSTRUCTION BE DELAYED, INTERIM SURFACE ROUGHENING AND SEEDING AND MULCHING SHALL BE IMPLEMENTED TO TEMPORARILY STABILIZE ALL DISTURBED LOT/BUILDING AREAS UNTIL FINAL CONSTRUCTION AND LANDSCAPING CAN BE INSTALLED.
5. SHOULD FINAL LANDSCAPING BE DELAYED, ALL INTERIM SWALES SHALL BE STABILIZED PER DOUGLAS COUNTY GESC DETAIL NO. 9 (DIVERSION DITCHES).

NOTES

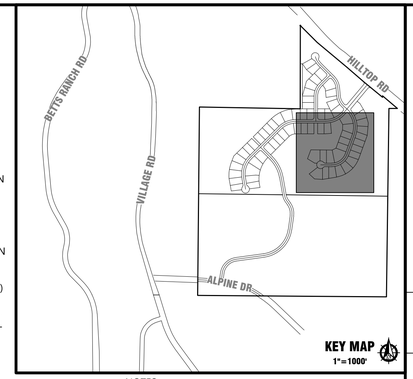
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PROJECT BENCHMARK:

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ASSISTANT DIRECTOR OF DEVELOPMENT REVIEW

DATE

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No.	Rev. Date:	Revision Type:
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Designed: PAV
Prepared: JT
Approved: DKH
Job No.: CO1084-0006
Scale Horiz: 1" = 60'
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Sheet: 8 of 18
Date: February 20, 2026

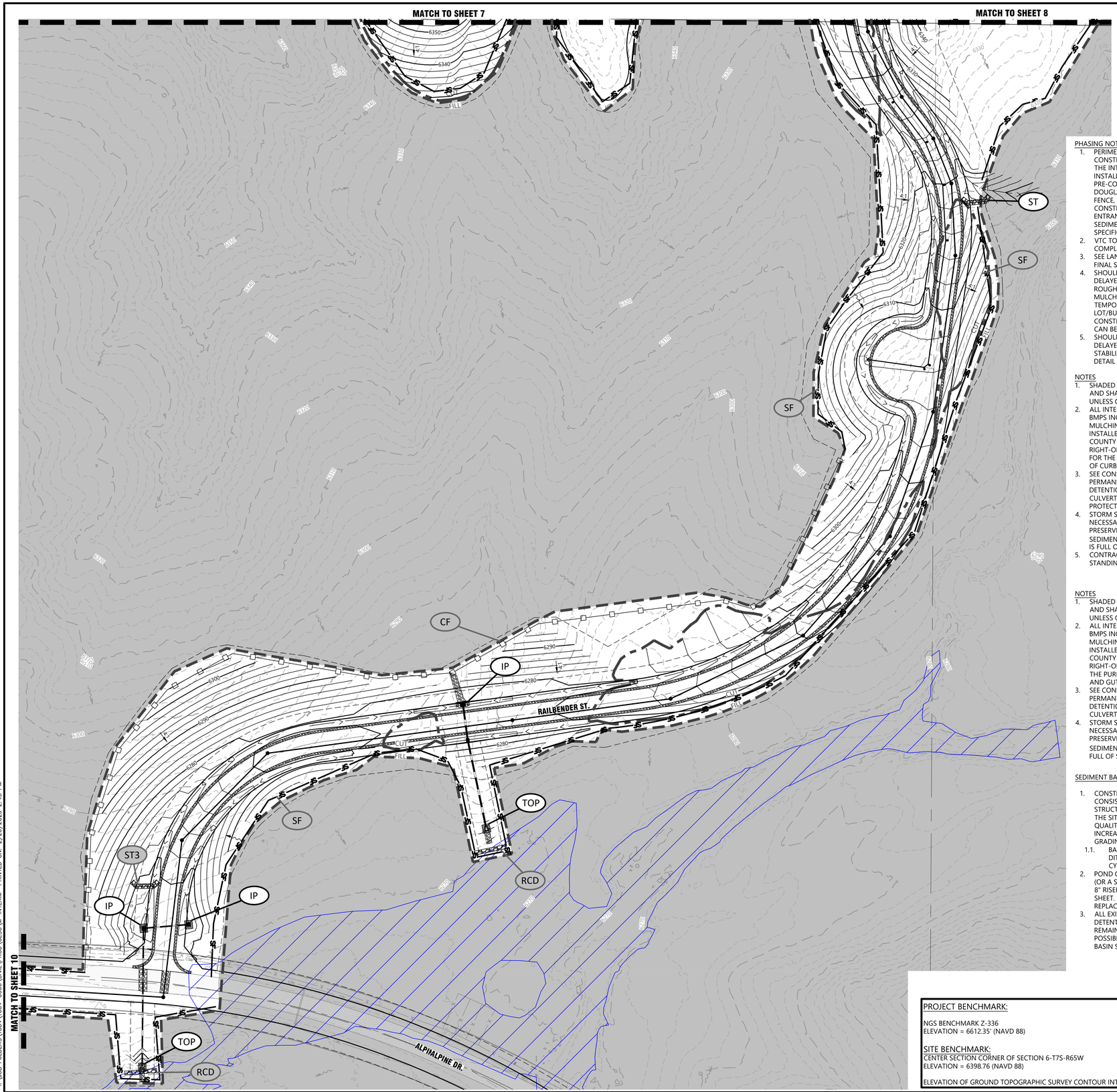
Proj. Name: Ramblewood Filing No. 1
Location: Douglas County, Colorado
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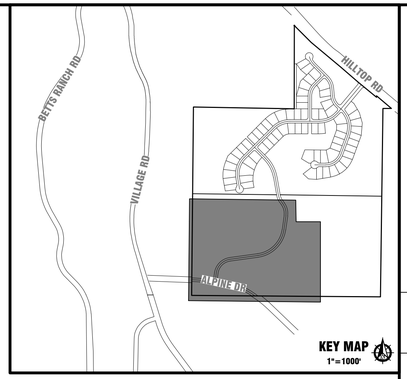
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No. 8

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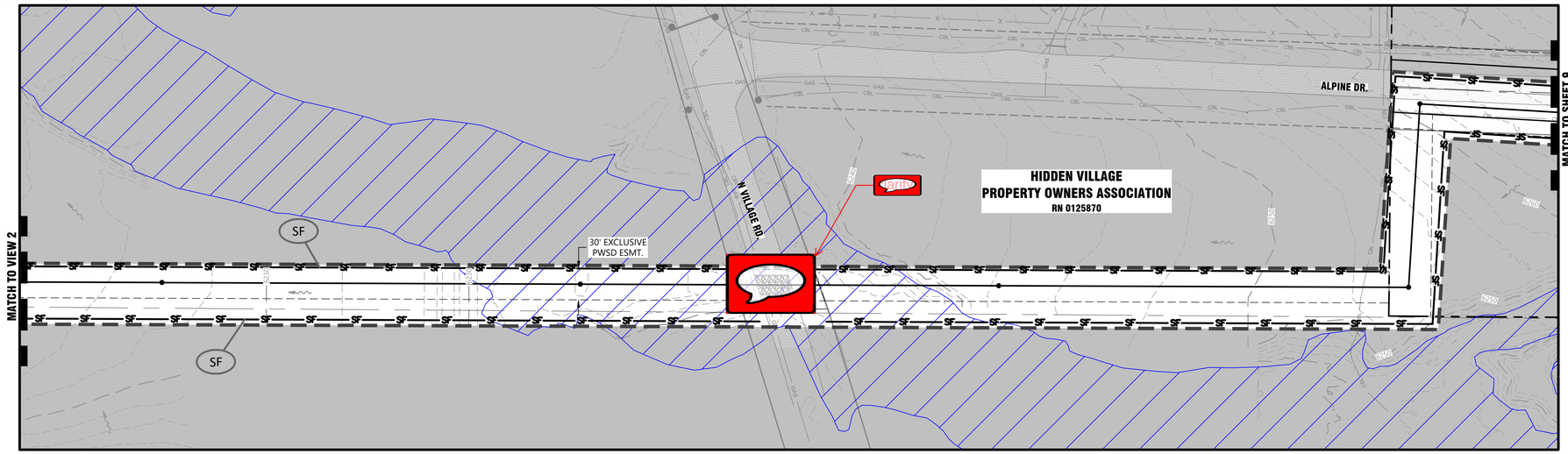
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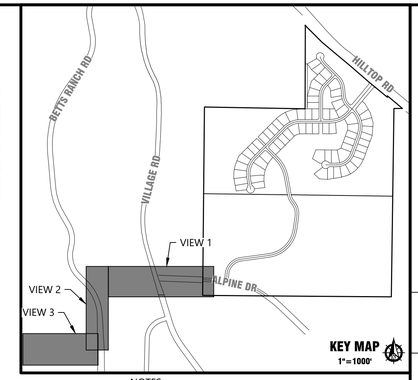
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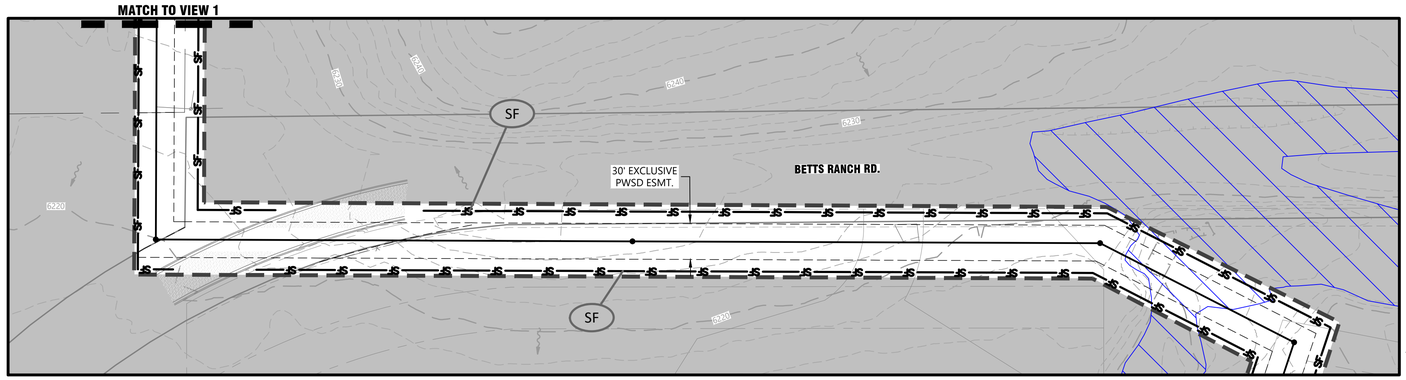
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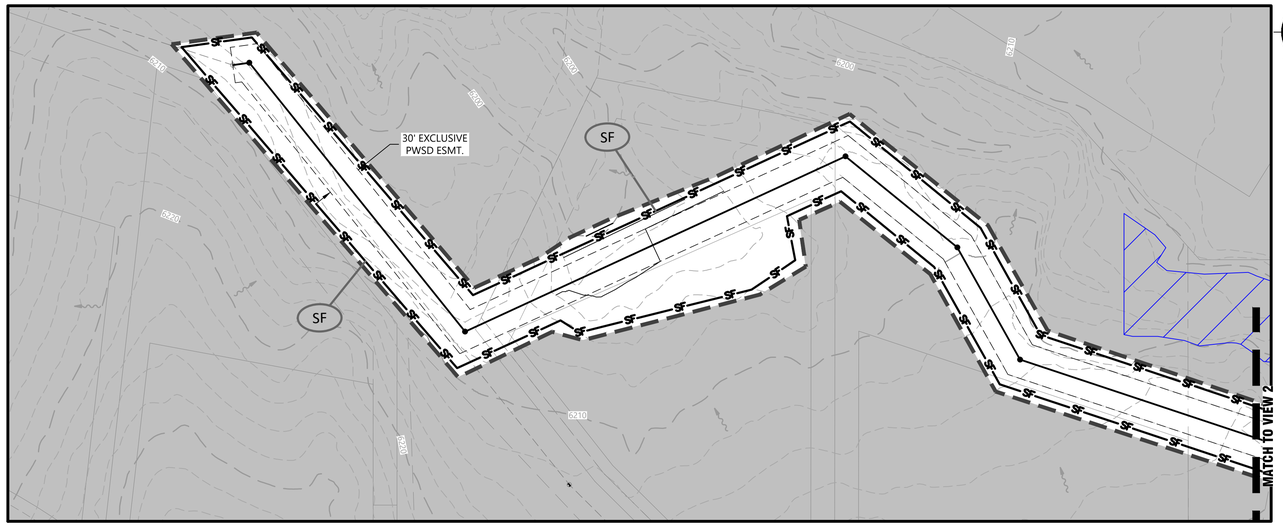
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VIEW 2



VIEW 3

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2. ONCE PRE-CONSTRUCTION MEETING HAS BEEN HELD, CONSTRUCTION OF SEDIMENT BASIN 1'S RCP OUTLET PIPE, FES, MANHOLES, AND STRUCTURE TO OCCUR PRIOR TO EARTH-MOVING ACITIVITIES NOT ASSOCIATED WITH SEDIMENT BASINS 3 & 4 CONSTRUCTION.
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4. SEDIMENT BASIN 1'S RISER PIPE AND STRUCTURE MODIFICATIONS TO REMAIN IN-PLACE UNTIL THE DOUGLAS COUNTY INSPECTOR APPROVES CONVERSION. CONVERSION TO THE ULTIMATE DESIGNED EXTENDED DETENTION BASIN CONFIGURATION SHALL OCCUR PRIOR TO FINAL ACCEPTANCE FROM DOUGLAS COUNTY.

PHASING NOTES:

1. PERIMETER CONTROLS AND CONSTRUCTION ENTRANCE SHOWN ON THE INTIAL GESC PLAN SHALL BE INSTALLED PRIOR TO GESC PRE-CONSTRUCTION MEETING WITH DOUGLAS COUNTY (INCLUDING SILT FENCE, DIVERSION DITCHES, CONSTRUCTION FENCE, CONSTRUCTION ENTRANCE, AND STAGING AREA). SEE SEDIMENT BASIN PHASING NOTES FOR SPECIFIC BASIN DETAILS (SHEET 3 OF 11)
2. VTC TO BE REMOVED UPON COMPLETION OF PAVING OPERATIONS.
3. SEE LANDSCAPE PLAN FOR ADDITIONAL FINAL STABILIZATION MEASURES.
4. SHOULD VERTICAL CONSTRUCTION BE DELAYED, INTERIM SURFACE ROUGHENING AND SEEDING AND MULCHING SHALL BE IMPLEMENTED TO TEMPORARILY STABILIZE ALL DISTURBED LOT/BUILDING AREAS UNTIL FINAL CONSTRUCTION AND LANDSCAPING CAN BE INSTALLED.
5. SHOULD FINAL LANDSCAPING BE DELAYED, ALL INTERIM SWALES SHALL BE STABILIZED PER DOUGLAS COUNTY GESC DETAIL NO. 9 (DIVERSION DITCHES).

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4. STORM SEWER SYSTEM SHALL BE CLEAN AS NECESSARY TO REDUCE SEDIMENT BUILDUP AND PRESERVE CAPACITY. RECOMMEND REMOVING SEDIMENT IF MORE THAN ¼ OF THE PIPE DIAMETER IS FULL OF SEDIMENT.
5. CONTRACTORS IS RESPONSIBLE FOR DRAINING STANDING WATER FROM CUT BACK CURBS.

GESC PLAN LEGEND

XX	INSTALLED IN A PREVIOUS PHASE
CF	CONSTRUCTION FENCE
CWA	CONCRETE WASHOUT AREA
DD	DIVERSION DITCH
IP	INLET PROTECTION
RRB	REINFORCED ROCK BERM
SB	SEDIMENT BASIN
TSD	TEMPORARY SLOPE DRAIN
ST	SEDIMENT TRAP
SCL	SEDIMENT CONTROL LOG
SM	SEEDING AND MULCHING
SF	SILT FENCE
SSA	STABILIZED STAGING AREA
SR	SURFACE ROUGHENING
VTC	VEHICLE TRACKING CONTROL
LOC	LIMITS OF CONSTRUCTION
RCD	ROCK CHECK DAM
TOP	TEMPORARY OUTLET PROTECTION
CUT	CUT/FILL LINE
FILL	
	PROPERTY LINE
	DRAINAGE FLOW ARROW

PROJECT BENCHMARK:

NGS BENCHMARK Z-336
ELEVATION = 6612.35' (NAVD 88)

SITE BENCHMARK:
CENTER SECTION CORNER OF SECTION 6-T7S-R65W
ELEVATION = 6398.76 (NAVD 88)

ELEVATION OF GROUND TOPOGRAPHIC SURVEY CONTOUR INTERVALS ARE 1 FOOT

60 0 30 60
SCALE
1 inch = 60 ft.

es and open cut trenches

ASSISTANT DIRECTOR OF DEVELOPMENT REVIEW

DATE

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No.	Rev. Date:	Revision Type:
1		
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4		
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6		

Designed: PAV
Prepared: JT
Approved: DKH
Job No.: CO1084-0006
Scale Horiz: 1" =
Scale Vert: N/A
Sheet: 10 of 18
Date: February 20, 2026

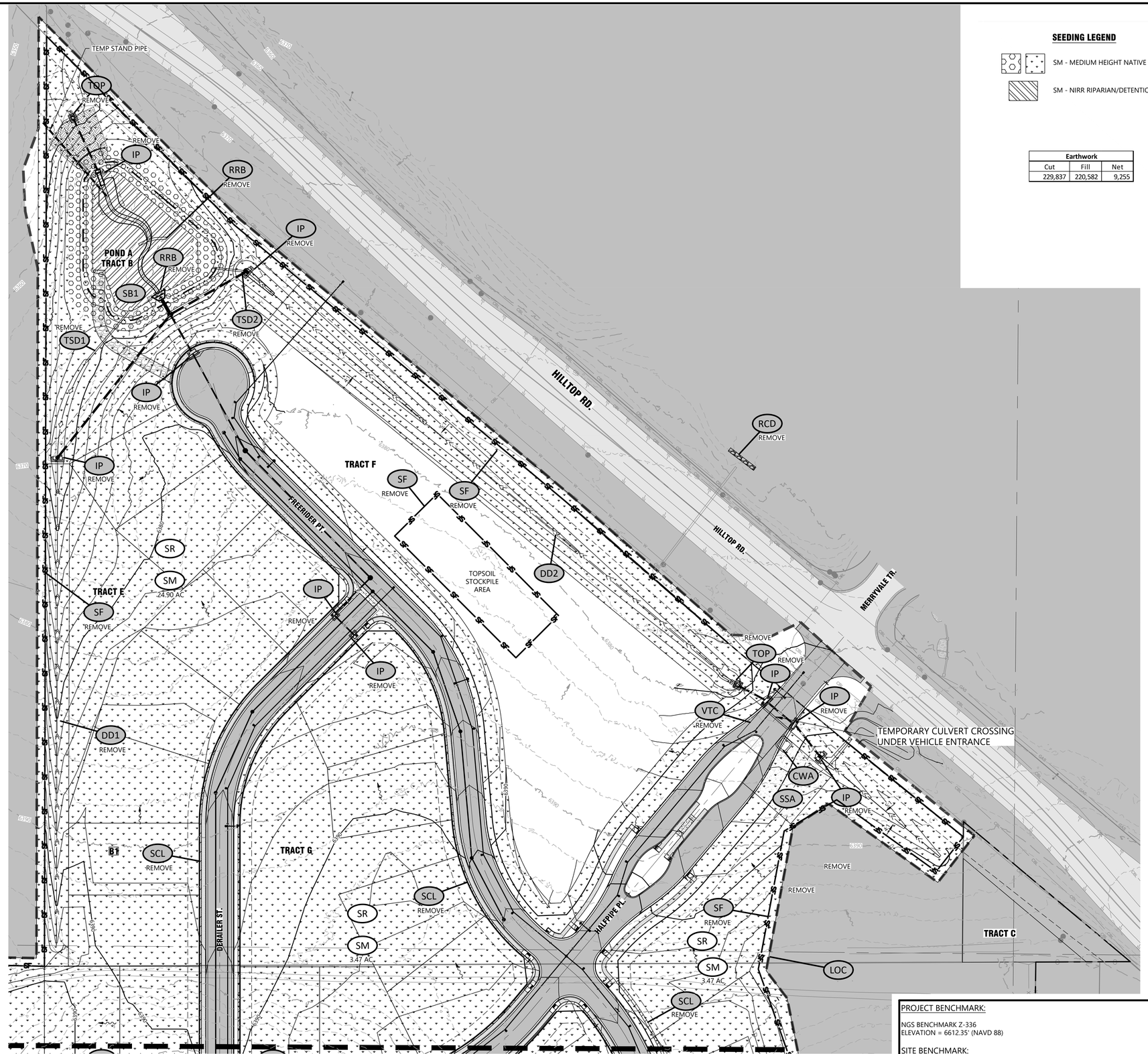
Proj. Name: Ramblewood Filing No. 1
Location: Douglas County, Colorado
Plan Set: Grading, Erosion, and Sediment Control (GESC) Plan
Sheet Name: Interim GESC Plan

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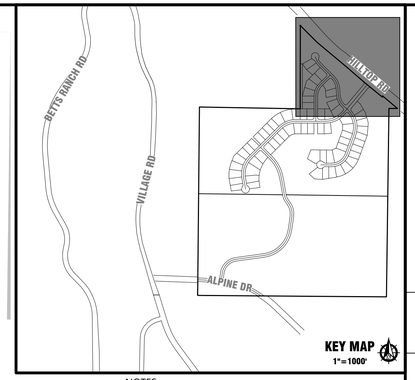


SEEDING LEGEND

SM - MEDIUM HEIGHT NATIVE SEED

SM - NIRR RIPARIAN/DETENTION NATIVE

Earthwork		
Cut	Fill	Net
229,837	220,582	9,255



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GESC PLAN LEGEND

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CWA	CONCRETE WASHOUT AREA
DD	DIVERSION DITCH
IP	INLET PROTECTION
RRB	REINFORCED ROCK BERM
SB	SEDIMENT BASIN
TSD	TEMPORARY SLOPE DRAIN
ST	SEDIMENT TRAP
SCL	SEDIMENT CONTROL LOG
SM	SEEDING AND MULCHING
SF	SILT FENCE
SSA	STABILIZED STAGING AREA
SR	SURFACE ROUGHENING
VTC	VEHICLE TRACKING CONTROL
LOC	LIMITS OF CONSTRUCTION
RCD	ROCK CHECK DAM
TOP	TEMPORARY OUTLET PROTECTION
CUT	CUT/FILL LINE
FILL	
	PROPERTY LINE
	DRAINAGE FLOW ARROW

PROJECT BENCHMARK:

NGS BENCHMARK Z-336
ELEVATION = 6612.35' (NAVD 88)

SITE BENCHMARK:
CENTER SECTION CORNER OF SECTION 6-T7S-R65W
ELEVATION = 6398.76 (NAVD 88)

ELEVATION OF GROUND TOPOGRAPHIC SURVEY CONTOUR INTERVALS ARE 1 FOOT

SCALE
1 inch = 60 ft.

ASSISTANT DIRECTOR OF DEVELOPMENT REVIEW

DATE

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Job No.: CO1084-0006
Scale Horiz: 1" = 60'
Scale Vert: N/A

Sheet: 11 of 18
Date: February 20, 2026

Designed: PAV
Prepared: JT
Approved: DKH

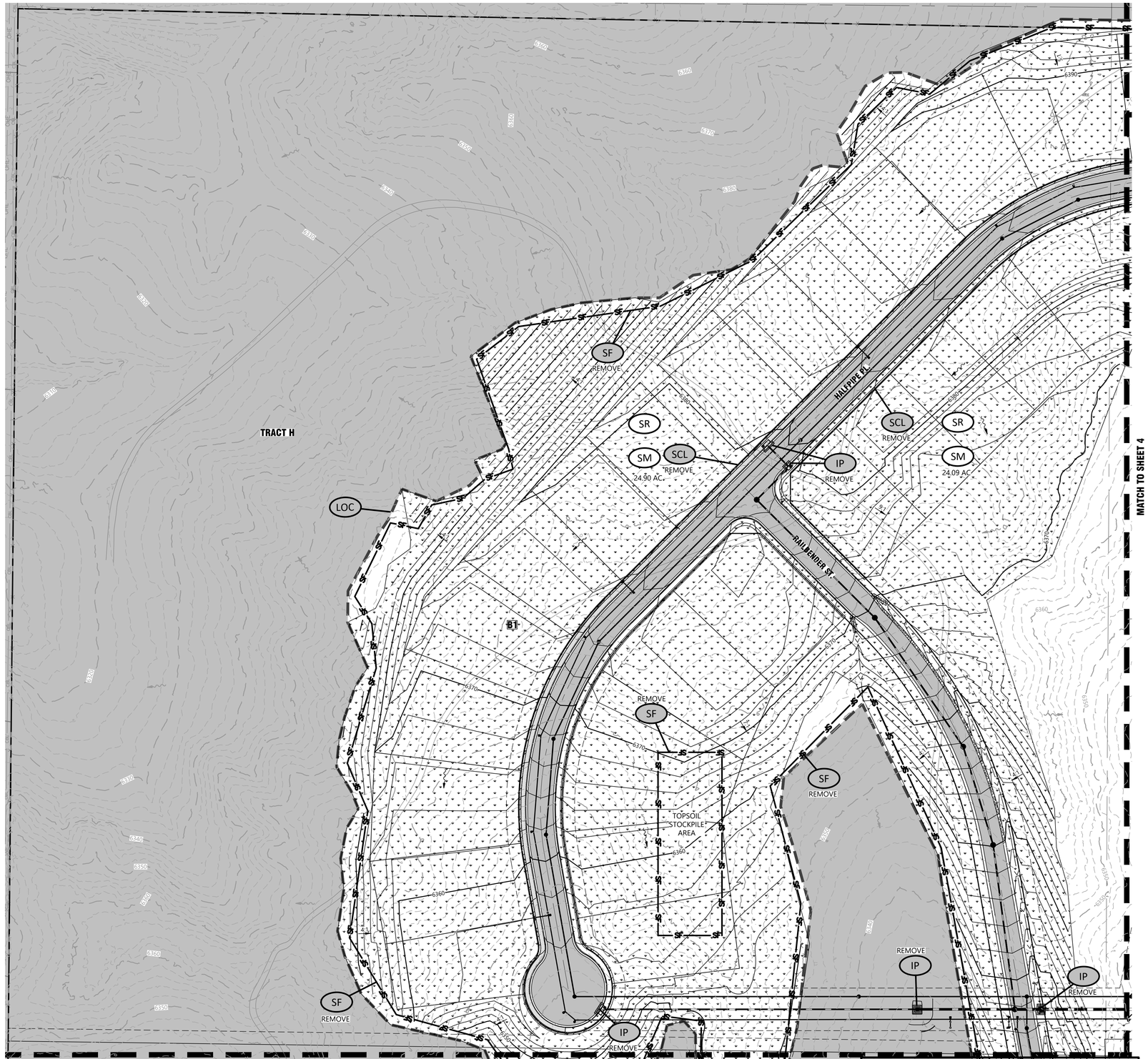
Proj. Name: Ramblewood Filing No. 1
Location: Douglas County, Colorado
Plan Set: Grading, Erosion, and Sediment Control (GESC) Plan
Sheet Name: Final GESC Plan

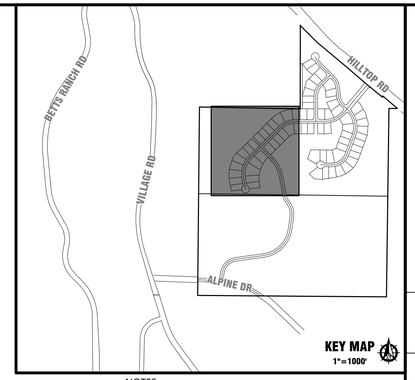
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KEY MAP
1"=1000'

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GESC PLAN LEGEND

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LOC	LIMITS OF CONSTRUCTION
RCD	ROCK CHECK DAM
TOP	TEMPORARY OUTLET PROTECTION
CUT	CUT/FILL LINE
FILL	
	PROPERTY LINE
	DRAINAGE FLOW ARROW

SEEDING LEGEND

SM - MEDIUM HEIGHT NATIVE SEED

SM - NIRR RIPARIAN/DETENTION NATIVE

Earthwork		
Cut	Fill	Net
229,837	220,582	9,255

PROJECT BENCHMARK:

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60 0 30 60
SCALE
1 inch = 60 ft.

ASSISTANT DIRECTOR OF DEVELOPMENT REVIEW

DATE

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Designed: PAV
Prepared: JT
Approved: DKH

Job No.: CO1084-0006
Scale Horiz: 1" = 60'
Scale Vert: N/A

Sheet: 12 of 18
Date: February 20, 2026

Proj. Name: Ramblewood Filing No. 1
Location: Douglas County, Colorado
Plan Set: Grading, Erosion, and Sediment Control (GESC) Plan
Sheet Name: Final GESC Plan

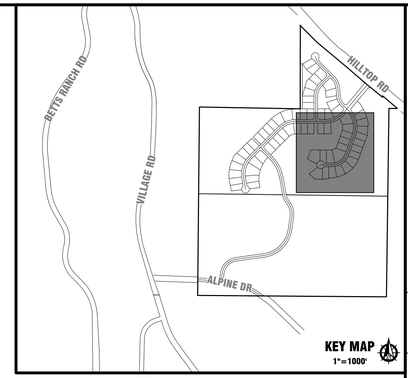
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CUT / FILL	CUT/FILL LINE
	PROPERTY LINE
	DRAINAGE FLOW ARROW

SEEDING LEGEND

	SM - MEDIUM HEIGHT NATIVE SEED
	SM - NIRR RIPARIAN/DETENTION NATIVE

Earthwork		
Cut	Fill	Net
229,837	220,582	9,255

PROJECT BENCHMARK:

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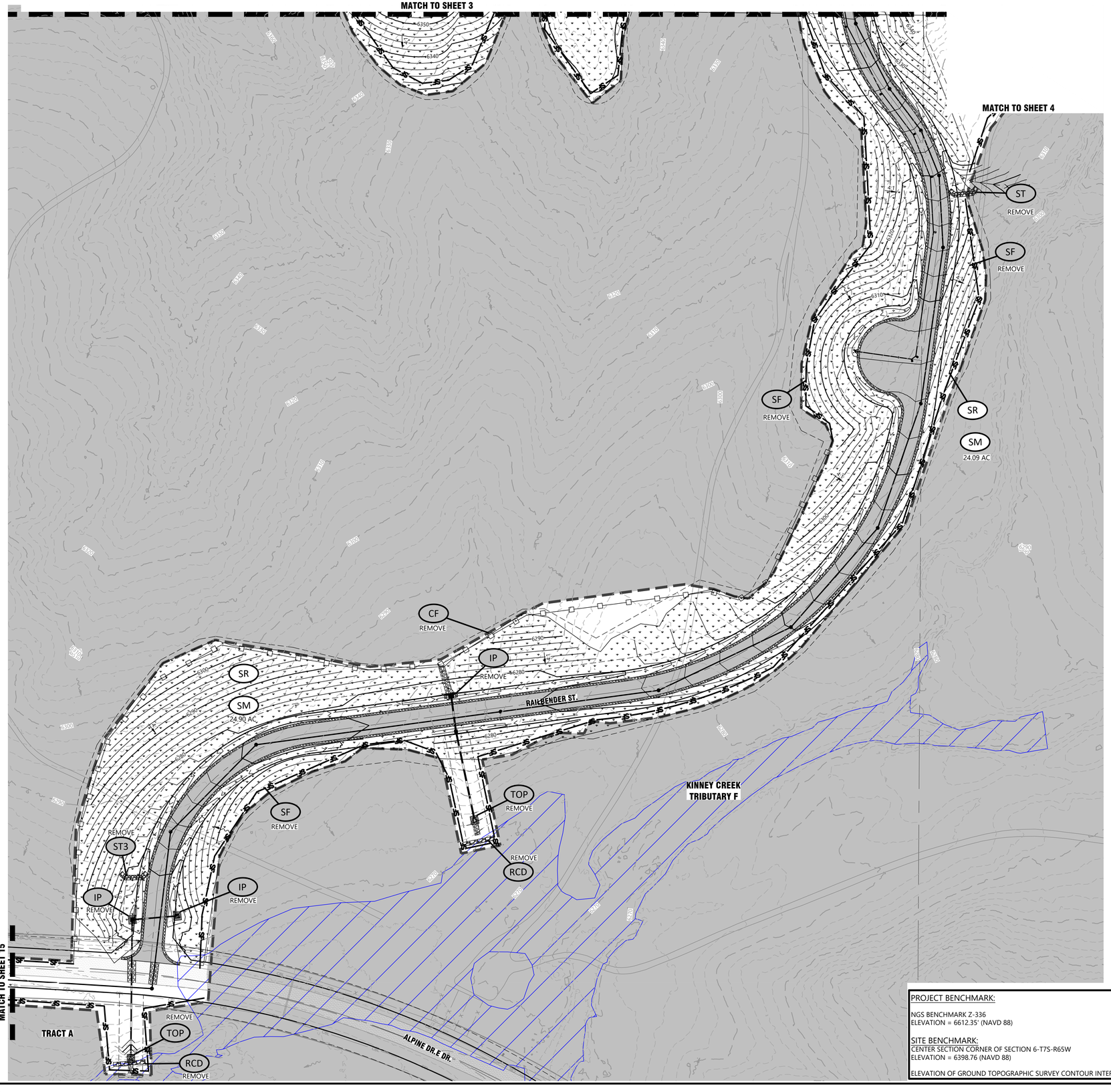
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Location: Douglas County, Colorado
Plan Set: Grading, Erosion, and Sediment Control (GESC) Plan
Sheet Name: Final GESC Plan

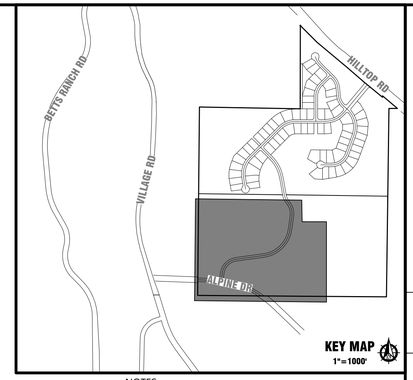
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Earthwork		
Cut	Fill	Net
229,837	220,582	9,255

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GESC PLAN LEGEND

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	SM	SEEDING AND MULCHING
SF	SF	SILT FENCE
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	LOC	LIMITS OF CONSTRUCTION
	RCD	ROCK CHECK DAM
	TOP	TEMPORARY OUTLET PROTECTION
CUT		CUT/FILL LINE
FILL		PROPERTY LINE
		DRAINAGE FLOW ARROW

SEEDING LEGEND

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SM - NIRR RIPARIAN/DETENTION NATIVE

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60 0 30 60
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Sheet: 14 of 18
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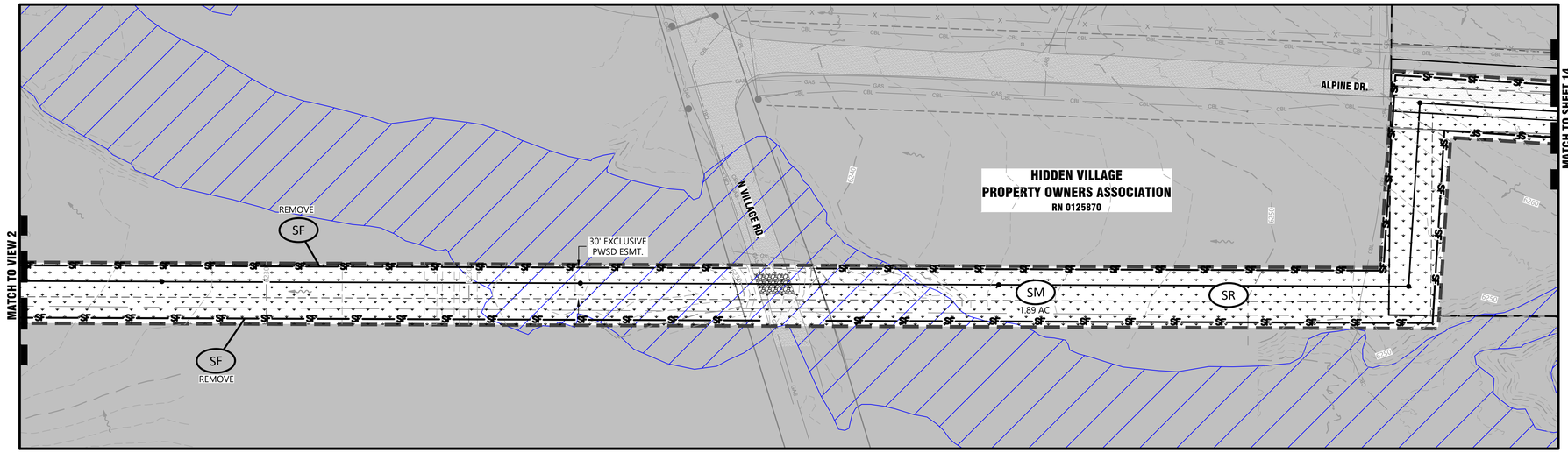
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Sheet Name: Final GESC Plan

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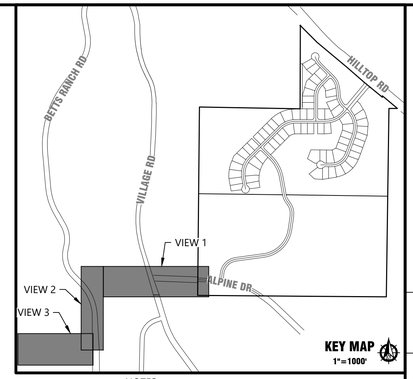
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VIEW 1

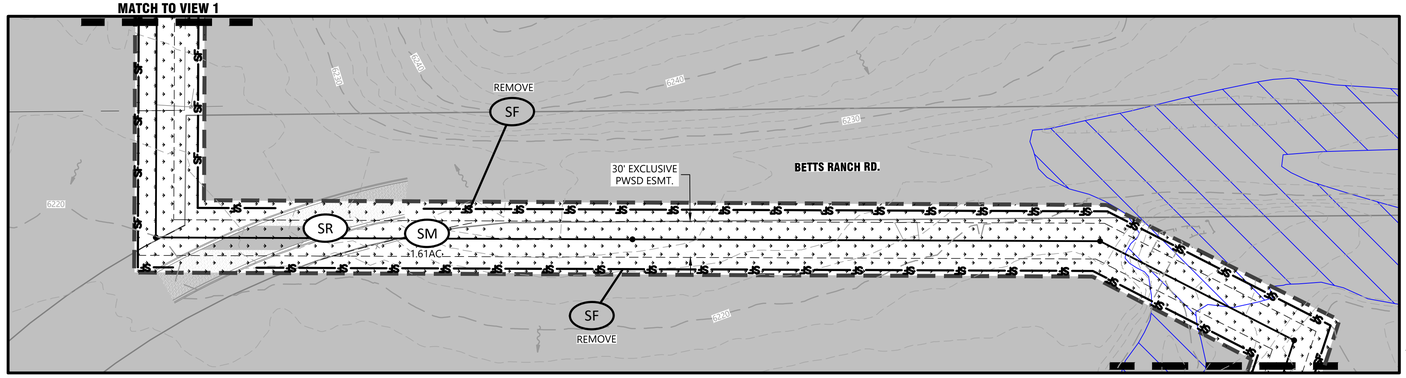


KEY MAP
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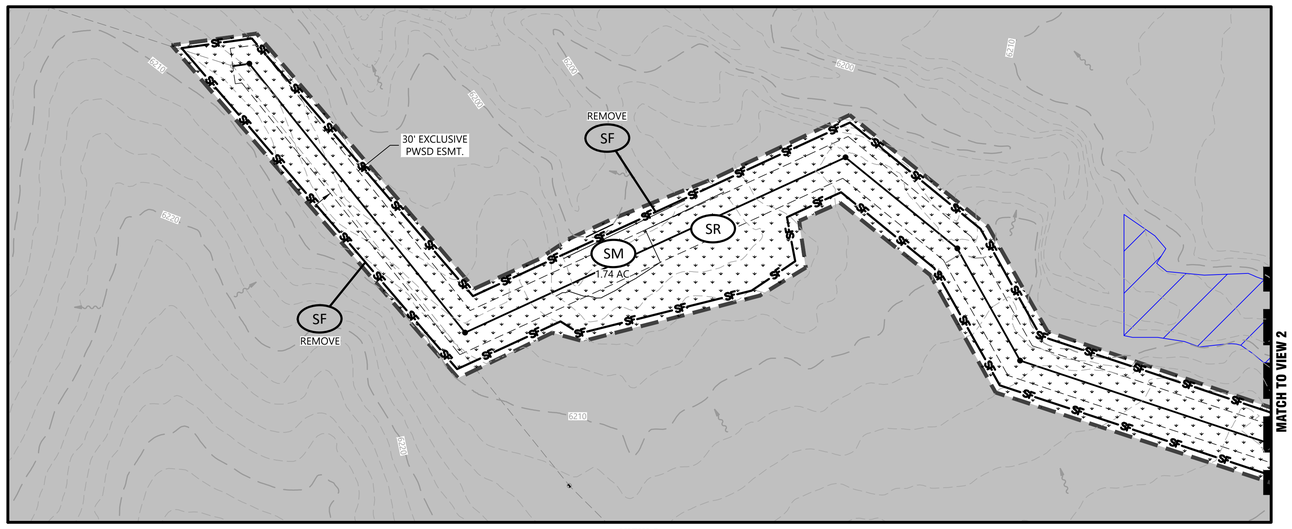
Earthwork		
Cut	Fill	Net
229,837	220,582	9,255

MATCH TO VIEW 1



VIEW 2

MATCH TO VIEW 3



VIEW 3

GESC PLAN LEGEND

XX	INSTALLED IN A PREVIOUS PHASE
CF	CONSTRUCTION FENCE
CWA	CONCRETE WASHOUT AREA
DD	DIVERSION DITCH
IP	INLET PROTECTION
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SB	SEDIMENT BASIN
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ASSISTANT DIRECTOR OF DEVELOPMENT REVIEW

DATE

THESE CONSTRUCTION DRAWINGS HAVE BEEN REVIEWED BY DOUGLAS COUNTY FOR GRADING, EROSION AND SEDIMENT CONTROL IMPROVEMENTS ONLY

ENGINEERING DIVISION ACCEPTANCE BLOCK

LJA
1765 W. 121st Avenue
Suite 300
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No.	Rev. Date:	Revision Type:
1		
2		
3		
4		
5		
6		

Designed: PAV
Prepared: JT
Approved: DKH

Job No.: CO1084-0006
Scale Horiz: 1" =
Scale Vert: N/A

Sheet: 15 of 18
Date: February 20, 2026

Proj. Name: Ramblewood Filing No. 1
Location: Douglas County, Colorado
Plan Set: Grading, Erosion, and Sediment Control (GESC) Plan
Sheet Name: Final GESC Plan

NOT FOR CONSTRUCTION

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

No. 15

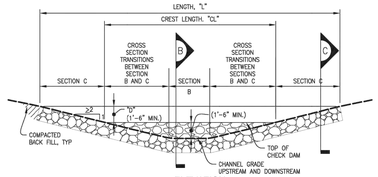
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GRADING, EROSION, AND SEDIMENT CONTROL (GESC) GENERAL NOTES

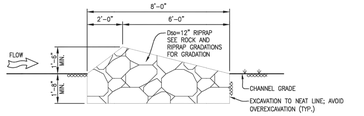
1. THE DOUGLAS COUNTY ENGINEER'S SIGNATURE AFFIXED TO THIS DOCUMENT INDICATES THE DOUGLAS COUNTY PUBLIC WORKS ENGINEERING HAS REVIEWED THE DOCUMENT AND FOUND IT IN GENERAL COMPLIANCE WITH THE DOUGLAS COUNTY GRADING, EROSION AND SEDIMENT CONTROL (GESC) CRITERIA MANUAL. THE DOUGLAS COUNTY DIRECTOR OF ENGINEERING SERVICES, THROUGH ACCEPTANCE OF THIS DOCUMENT, ASSUMES NO RESPONSIBILITY (OTHER THAN AS STATED ABOVE) FOR THE COMPLETENESS AND/OR ACCURACY OF THESE DOCUMENTS.
2. THE ADEQUACY OF THIS GESC PLAN LIES WITH THE ORIGINAL DESIGN ENGINEER.
3. THE GESC PLAN SHALL BE CONSIDERED VALID FOR THREE (3) YEARS FROM THE DATE OF ACCEPTANCE BY DOUGLAS COUNTY, AFTER WHICH TIME THE PLAN SHALL BE VOID AND WILL BE SUBJECT TO RE-REVIEW AND RE-ACCEPTANCE BY DOUGLAS COUNTY.
4. ALL MATERIALS AND WORKMANSHIP SHALL BE SUBJECT TO INSPECTION BY THE DOUGLAS COUNTY PUBLIC WORKS ENGINEERING. DOUGLAS COUNTY RESERVES THE RIGHT TO ACCEPT OR REJECT ANY SUCH MATERIALS AND WORKMANSHIP THAT DOES NOT CONFORM TO THE GESC MANUAL, GESC PLAN OR GESC PERMIT.
5. THE PLACEMENT OF EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (BMPs) SHALL BE IN ACCORDANCE WITH THE DOUGLAS COUNTY ACCEPTED GESC PLAN AND THE DOUGLAS COUNTY GESC MANUAL, AS AMENDED.
6. ANY VARIATION IN MATERIAL, TYPE OR LOCATION OF EROSION AND SEDIMENT CONTROL BMPs FROM THE DOUGLAS COUNTY ACCEPTED GESC PLAN WILL REQUIRE APPROVAL FROM AN ACCOUNTABLE REPRESENTATIVE OF THE DOUGLAS COUNTY PUBLIC WORKS ENGINEERING.
7. AFTER THE GESC PLAN HAS BEEN ACCEPTED, THE GESC PERMIT APPLIED FOR, FEES AND FISCAL SECURITY SUBMITTED TO THE COUNTY, AND THE GESC FIELD MANUAL OBTAINED AND REVIEWED, THE CONTRACTOR MAY INSTALL THE INITIAL-STAGE EROSION AND SEDIMENT CONTROL BMPs INDICATED ON THE ACCEPTED GESC PLAN.
8. THE FIRST BMP TO BE INSTALLED ON THE SITE SHALL BE CONSTRUCTION FENCE, MARKERS, OR OTHER APPROVED MEANS OF DEFINING THE LIMITS OF CONSTRUCTION, INCLUDING CONSTRUCTION LIMITS ADJACENT TO STREAM CORRIDORS AND OTHER AREAS TO BE PRESERVED.
9. AFTER INSTALLATION OF THE INITIAL-STAGE EROSION AND SEDIMENT CONTROL BMPs, THE PERMITTEE SHALL CALL THE DOUGLAS COUNTY ENGINEERING PERMITS STAFF AT 303-660-7487 TO SCHEDULE A PRECONSTRUCTION MEETING AT THE PROJECT SITE. THE REQUEST SHALL BE MADE A MINIMUM OF THREE BUSINESS DAYS PRIOR TO THE REQUESTED MEETING TIME. NO CONSTRUCTION ACTIVITIES SHALL BE PLANNED WITHIN 24 HOURS AFTER THE PRECONSTRUCTION MEETING.
10. THE OWNER OR OWNER'S REPRESENTATIVE, THE GESC MANAGER, THE GENERAL CONTRACTOR, AND THE GRADING SUBCONTRACTOR, IF DIFFERENT FROM THE GENERAL CONTRACTOR, MUST ATTEND THE PRECONSTRUCTION MEETING. IF ANY OF THE REQUIRED PARTICIPANTS FAIL TO ATTEND THE PRECONSTRUCTION MEETING, OR IF THE GESC FIELD MANUAL IS NOT ON SITE, OR IF THE INSTALLATION OF THE INITIAL BMPs ARE NOT APPROVED BY THE DOUGLAS COUNTY EROSION CONTROL INSPECTOR, THE APPLICANT WILL HAVE TO PAY A REINSPECTION FEE, ADDRESS ANY PROBLEMS WITH BMP INSTALLATION, AND CALL TO RESCHEDULE THE MEETING, WITH A CORRESPONDING DELAY IN THE START OF CONSTRUCTION. DOUGLAS COUNTY STRONGLY ENCOURAGES THE APPLICANT TO HAVE THE ENGINEER OF RECORD AT THE PRECONSTRUCTION MEETING.
11. CONSTRUCTION SHALL NOT BEGIN UNTIL THE DOUGLAS COUNTY EROSION CONTROL INSPECTOR APPROVES THE INSTALLATION OF THE INITIAL BMPs AND THE APPROVED GESC PERMIT IS PICKED UP FROM THE COUNTY AND IS IN-HAND ON THE SITE. THE COMPLETED PERMIT WILL BE AVAILABLE WITHIN 24-HOURS AFTER THE INSTALLATION OF THE INITIAL BMPs ARE APPROVED.
12. THE GESC MANAGER SHALL STRICTLY ADHERE TO THE DOUGLAS COUNTY-APPROVED LIMITS OF CONSTRUCTION AT ALL TIMES. THE DOUGLAS COUNTY PUBLIC WORKS ENGINEERING MUST APPROVE ANY CHANGES TO THE LIMITS OF CONSTRUCTION AND, AT THE DISCRETION OF THE ENGINEERING DIVISION, ADDITIONAL EROSION/SEDIMENT CONTROLS MAY BE REQUIRED IN ANY ADDITIONAL AREAS OF CONSTRUCTION.
13. THE MAXIMUM AREA OF CONSTRUCTION SHALL BE LIMITED TO 40 ACRES (70 ACRES IF APPROVED FOR SOIL MITIGATION OPERATIONS) TO REDUCE THE AMOUNT OF LAND DISTURBED AT ANY ONE TIME. LARGER SITES SHALL BE DIVIDED INTO PHASES THAT ARE EACH 40 (OR 70) ACRES OR LESS IN SIZE. THESE PROJECTS SHALL CONDUCT GRADING ACTIVITIES IN ACCORDANCE WITH THE ACCEPTED GESC PLAN. BMP INSTALLATION AND APPROVAL BY DOUGLAS COUNTY AT THE START AND COMPLETION OF EACH PHASE SHALL BE CONDUCTED IN ACCORDANCE WITH THE PROCEDURES OUTLINED IN THE GESC MANUAL AND/OR GESC FIELD MANUAL.
14. PRIOR TO ANY CONSTRUCTION ACTIVITY, THE PERMITTEE SHALL VERIFY THE LOCATION OF EXISTING UTILITIES. FOR INFORMATION, CONTACT THE UTILITY NOTIFICATION CENTER OF COLORADO (UNCC) AT 811, 1-800-922-1987, OR WWW.COLORADO811.ORG.
15. NATURAL VEGETATION SHALL BE RETAINED AND PROTECTED WHEREVER POSSIBLE. EXPOSURE OF SOIL TO EROSION BY REMOVAL OR DISTURBANCE OF VEGETATION SHALL BE LIMITED TO THE AREA REQUIRED FOR IMMEDIATE CONSTRUCTION OPERATIONS.
16. THE GESC PERMIT SHALL BE VALID FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF ISSUANCE.
17. A COPY OF THE GESC PERMIT, ACCEPTED GESC PLANS AND THE GESC FIELD MANUAL SHALL BE ON SITE AT ALL TIMES.
18. THE GESC MANAGER SHALL BE RESPONSIBLE FOR ENSURING THAT THE SITE REMAINS IN COMPLIANCE WITH THE GESC PERMIT AND SHALL BE THE PERMITTEE'S CONTACT PERSON WITH THE COUNTY FOR ALL MATTERS PERTAINING TO THE GESC PERMIT. THE GESC MANAGER SHALL BE PRESENT AT THE SITE THE MAJORITY OF THE TIME AND SHALL BE AVAILABLE THROUGH A 24-HOUR CONTACT NUMBER. IN THE EVENT THAT THE CONTRACTOR'S GESC MANAGER IS NOT ON SITE AND CANNOT BE REACHED DURING A VIOLATION, THE ALTERNATE GESC MANAGER SHALL BE CONTACTED. IF NEITHER THE GESC MANAGER NOR ALTERNATE GESC MANAGER CAN BE CONTACTED DURING ANY VIOLATION, A STOP WORK ORDER MAY BE ISSUED.
19. ALL CONSTRUCTION TRAFFIC MUST ENTER/EXIT THE SITE THROUGH THE DOUGLAS COUNTY-APPROVED ACCESS POINT. A VEHICLE TRACKING CONTROL PAD IS REQUIRED AT ALL ACCESS POINTS ON THE SITE. ADDITIONAL STABILIZED CONSTRUCTION ENTRANCES MAY BE ADDED WITH AUTHORIZATION FROM THE DOUGLAS COUNTY PUBLIC WORKS ENGINEERING.
20. THE GESC MANAGER IS RESPONSIBLE FOR CLEANUP OF SEDIMENT OR CONSTRUCTION DEBRIS TRACKED ONTO ADJACENT PAVED AREAS. PAVED AREAS INCLUDING STREETS ARE TO BE KEPT CLEAN THROUGHOUT BUILD-OUT AND SHALL BE CLEANED, WITH A STREET SWEEPER OR SIMILAR DEVICE, AT FIRST NOTICE OF ACCIDENTAL TRACKING OR AT THE DISCRETION OF THE DOUGLAS COUNTY EROSION CONTROL INSPECTOR. STREET WASHING IS NOT ALLOWED. DOUGLAS COUNTY RESERVES THE RIGHT TO REQUIRE ADDITIONAL MEASURES TO ENSURE AREA STREETS ARE KEPT FREE OF SEDIMENT AND/OR CONSTRUCTION DEBRIS.
21. APPROVED EROSION AND SEDIMENT CONTROL BMPs SHALL BE MAINTAINED AND KEPT IN GOOD REPAIR FOR THE DURATION OF THIS PROJECT. AT A MINIMUM, THE GESC MANAGER SHALL INSPECT ALL BMPs IN ACCORDANCE WITH THE ACCEPTED GESC PLAN AND GESC MANUAL. LEVEL III VIOLATIONS SHALL BE CORRECTED IMMEDIATELY AFTER THE PERMITTEE(S) NOTICE THE VIOLATION(S) OR ARE NOTIFIED OF THE VIOLATION(S). GENERALLY DOUGLAS COUNTY WILL REINSPECT FOR COMPLIANCE WITHIN 48 HOURS OF NOTIFICATION OF LEVEL III VIOLATIONS. LEVEL II VIOLATIONS SHALL BE CORRECTED IMMEDIATELY, OR AS DIRECTED BY A DOUGLAS COUNTY EROSION CONTROL INSPECTOR. ACCUMULATED SEDIMENT AND CONSTRUCTION DEBRIS SHALL BE REMOVED AND PROPERLY DISPOSED.
22. STRAW BALES ARE NOT A DOUGLAS COUNTY ACCEPTED SEDIMENT CONTROL BMP.
23. TOPSOIL SHALL BE STRIPPED AND STOCKPILED IN THE LOCATION SHOWN ON THE ACCEPTED GESC PLAN. THE GESC MANAGER SHALL SCHEDULE AN INSPECTION WITH THE DOUGLAS COUNTY EROSION CONTROL INSPECTOR AS SOON AS TOPSOIL STRIPPING IS COMPLETED. FAILURE TO SCHEDULE SUCH INSPECTION OR FAILURE TO STOCKPILE TOPSOIL SHALL RESULT IN ISSUANCE OF A STOP WORK ORDER. THE STOP WORK ORDER SHALL REMAIN IN PLACE UNTIL TOPSOIL IS STOCKPILED ON SITE OR APPROPRIATE SOIL AMENDMENTS ARE STOCKPILED ON SITE.
24. THE ACCEPTED GESC PLAN MAY REQUIRE CHANGES OR ALTERATIONS AFTER APPROVAL TO MEET CHANGING SITE OR PROJECT CONDITIONS OR TO ADDRESS INEFFICIENCIES IN DESIGN OR INSTALLATION. THE GESC MANAGER SHALL OBTAIN PRIOR APPROVAL FROM THE DESIGN ENGINEER AND DOUGLAS COUNTY PUBLIC WORKS ENGINEERING FOR ANY PROPOSED CHANGES.
25. LINING OF TEMPORARY SWALES AND DITCHES SHALL BE IN ACCORDANCE WITH THE GESC CRITERIA MANUAL.
26. NO PERMANENT EARTH SLOPES GREATER THAN 3:1 SHALL BE ALLOWED.
27. ANY SETTLEMENT OR SOIL ACCUMULATIONS BEYOND THE LIMITS OF CONSTRUCTION DUE TO GRADING OR EROSION SHALL BE REPAIRED IMMEDIATELY BY THE GESC MANAGER. THE GESC MANAGER SHALL BE HELD RESPONSIBLE FOR OBTAINING ACCESS RIGHTS TO ADJACENT PROPERTY, IF NEEDED, AND REMEDIATING ANY ADVERSE IMPACTS TO ADJACENT WATERWAYS, WETLANDS, PROPERTIES, ETC. RESULTING FROM WORK DONE AS PART OF THIS PROJECT.
28. A WATER SOURCE SHALL BE AVAILABLE ON SITE DURING EARTHWORK OPERATIONS AND UTILIZED AS REQUIRED TO MINIMIZE DUST FROM EARTHWORK EQUIPMENT AND WIND.
29. SOILS THAT WILL BE STOCKPILED FOR MORE THAN THIRTY (30) DAYS SHALL BE SEEDED AND MULCHED WITHIN FOURTEEN (14) DAYS OF STOCKPILE CONSTRUCTION. NO STOCKPILES SHALL BE PLACED WITHIN ONE HUNDRED (100) FEET OF A DRAINAGE WAY UNLESS APPROVED BY THE DOUGLAS COUNTY PUBLIC WORKS ENGINEERING.
30. ALL CHEMICAL OR HAZARDOUS MATERIAL SPILLS WHICH MAY ENTER WATERS OF THE STATE OF COLORADO, WHICH INCLUDE BUT ARE NOT LIMITED TO, SURFACE WATER, GROUND WATER AND DRY GULLIES OR STORM SEWER LEADING TO SURFACE WATER, SHALL BE IMMEDIATELY REPORTED TO THE CDPHE PER CRS 25-8-601, AND DOUGLAS COUNTY. RELEASES OF PETROLEUM PRODUCTS AND CERTAIN HAZARDOUS SUBSTANCES LISTED UNDER THE FEDERAL CLEAN WATER ACT (40 CFR PART 116) MUST BE REPORTED TO THE NATIONAL RESPONSE CENTER AS WELL AS THE CDPHE. CONTACT INFORMATION FOR CDPHE, DOUGLAS COUNTY AND THE NATIONAL RESPONSE CENTER CAN BE FOUND IN APPENDIX A OF THE GESC MANUAL, AS AMENDED. SPILLS THAT POSE AN IMMEDIATE RISK TO HUMAN LIFE SHALL BE REPORTED TO 911. FAILURE TO REPORT AND CLEAN UP ANY SPILL MAY RESULT IN ISSUANCE OF A STOP WORK ORDER.
31. ALL WORK ON SITE SHALL STAY A MINIMUM OF ONE HUNDRED (100) FEET AWAY FROM ANY DRAINAGEWAY, WETLAND, ETC. UNLESS OTHERWISE NOTED ON AN ACCEPTED DOUGLAS COUNTY GESC PLAN.
32. ALL PROJECTS SHALL BALANCE EARTHWORK QUANTITIES ON SITE. IN THE EVENT A VARIANCE IS GRANTED BY THE COUNTY DIRECTOR OF ENGINEERING SERVICES TO ALLOW IMPORT OR EXPORT OF MATERIAL, THE PERMITTEE SHALL HAVE A GESC PERMIT IN HAND FOR THE IMPORT OR EXPORT SITE PRIOR TO ANY TRANSPORTING OF EARTHEN MATERIAL. THE GESC MANAGER SHALL NOTIFY THE DOUGLAS COUNTY EROSION CONTROL INSPECTOR OF THE LOCATION AND PERMIT NUMBERS OF BOTH THE EXPORTING AND IMPORTING SITES PRIOR TO ANY IMPORT/ EXPORT OPERATIONS.
33. THE USE OF REBAR, STEEL STAKES OR STEEL FENCE POSTS FOR STAKING OR SUPPORT OF ANY EROSION OR SEDIMENT CONTROL BMP IS PROHIBITED (EXCEPT STEEL TEE-POSTS FOR USE IN SUPPORTING CONSTRUCTION FENCE).
34. THE CLEANING OF CONCRETE DELIVERY TRUCK CHUTES IS RESTRICTED TO APPROVED CONCRETE WASH OUT LOCATIONS ON THE JOB SITE. THE DISCHARGE OF WATER CONTAINING WASTE CONCRETE TO THE STORM SEWER SYSTEM IS PROHIBITED. ALL CONCRETE WASTE SHALL BE PROPERLY CLEANED UP AND DISPOSED AT AN APPROPRIATE LOCATION.
35. ALL DEWATERING ON SITE SHALL BE COORDINATED WITH A DOUGLAS COUNTY EROSION CONTROL INSPECTOR AND BE FREE OF SEDIMENT IN ACCORDANCE WITH THE GESC MANUAL.
36. ALL PERMANENT INSTALLATIONS OF PIPES FOR STORM SEWERS, SLOPE DRAINS, AND CULVERTS, TOGETHER WITH RIPRAP APRONS OR OTHER INLET AND OUTLET PROTECTION, REQUIRE INSPECTION BY DOUGLAS COUNTY PUBLIC WORKS ENGINEERING (SEPARATE FROM GESC INSPECTIONS).
37. ALL DISTURBED AREAS SHALL BE DRILL SEEDED AND CRIMP MULCHED IN ACCORDANCE WITH THE GESC CRITERIA MANUAL WITHIN THIRTY (30) DAYS OF INITIAL EXPOSURE OR WITHIN FOURTEEN (14) DAYS OF SUBSTANTIAL COMPLETION (AS DEFINED BY DOUGLAS COUNTY) OF AN AREA, WHICHEVER IS LESS. THIS MAY REQUIRE MULTIPLE MOBILIZATIONS FOR SEEDING AND MULCHING.
38. ALL SLOPES STEEPER THEN 4:1 REQUIRE EROSION CONTROL BLANKETING.
39. HYDRAULIC SEEDING AND HYDRAULIC MULCHING ARE NOT AN ACCEPTABLE METHOD OF SEEDING OR MULCHING IN DOUGLAS COUNTY.
40. NO CURB AND GUTTER PERMITS SHALL BE ISSUED UNTIL ALL DISTURBED AREAS ARE DRILL SEEDED AND CRIMP MULCHED.
41. NO PAVING PERMITS SHALL BE ISSUED UNTIL ALL INTERIM INLET PROTECTION IS INSTALLED AND APPROVED BY THE EROSION CONTROL INSPECTOR.
42. A GESC INSPECTION SHALL BE CONDUCTED FOR CERTIFICATE OR TEMPORARY CERTIFICATE OF OCCUPANCY OR INITIAL ACCEPTANCE.
43. GESC MANAGER SHALL PROVIDE AND MAINTAIN PORTABLE TOILETS AND TRASH DUMPSTERS FOR THE PROJECT.

DETAIL NO.	SHEET NO.			
1	1		CD	CHECK DAM
2	1		CB	COMPOST BLANKET
3	1		CFB	COMPOST FILTER BERM
4	1		CWA	CONCRETE WASHOUT AREA
5	1		CF	CONSTRUCTION FENCE
6	1		CM	CONSTRUCTION MARKER
7	1		CS	CURB SOCK
8	1		DW	DEWATERING
9	1		DD	DIVERSION DITCH
10	2		ECB	EROSION CONTROL BLANKET
11	2		IP	INLET PROTECTION
12	2		RCD	REINFORCED CHECK DAM
13	2		RRB	REINFORCED ROCK BERM
14	2		RRC	RRB FOR CULVERT PROTECTION
15	2		SB	SEDIMENT BASIN
16	3		SCL	SEDIMENT CONTROL LOG
17	3		ST	SEDIMENT TRAP
18	3		SM	SEEDING AND MULCHING
19	3		SF	SILT FENCE
20	3		SSA	STABILIZED STAGING AREA
21	3		SR	SURFACE ROUGHENING
22	3		TSD	TEMPORARY SLOPE DRAIN
23	3		TSC	TEMPORARY STREAM CROSSING
24	3		TER	TERRACING
25	3		VTC	VEHICLE TRACKING CONTROL
26	3		WW	VTC WITH WHEEL WASH
1				ROCK AND RIPRAP GRADATIONS
			LOC	LIMITS OF CONSTRUCTION

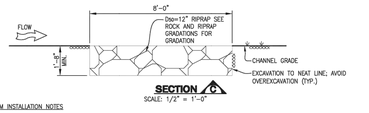
BMP LEGEND



ELEVATION
SCALE: 1" = 5'-0"



SECTION B
SCALE: 1/2" = 1'-0"



SECTION A
SCALE: 1/2" = 1'-0"

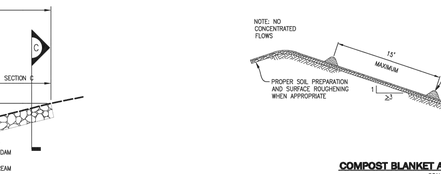
CHECK DAM INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
   - LOCATIONS OF CHECK DAMS.
   - CHECK DAM TYPE (CHECK DAM OR REINFORCED CHECK DAM).
   - LENGTH, "L", CREST LENGTH, "CL", AND DEPTH, "D".
2. CHECK DAMS INDICATED ON INITIAL GESC PLAN SHALL BE INSTALLED AFTER CONSTRUCTION FENCE, BUT PRIOR TO ANY UPSTREAM LAND-DISTURBING ACTIVITIES.
3. RIPRAP UTILIZED FOR CHECK DAMS SHALL HAVE A D_{50} MEDIAN STONE SIZE OF 12".
4. RIPRAP PAD SHALL BE TRENCHED INTO THE GROUND A MINIMUM OF 1'-6".
5. THE ENDS OF THE CHECK DAM SHALL BE A MINIMUM OF 1'-6" HIGHER THAN THE CENTER OF THE CHECK DAM.

CHECK DAM MAINTENANCE NOTES

1. THE RECOMMENDED INSPECTION FREQUENCY FOR CHECK DAMS IS WEEKLY, DURING AND AFTER ANY STORM EVENT AND MAKE REPAIRS OR CLEAN OUT AS NECESSARY.
2. SEDIMENT ACCUMULATED UPSTREAM OF CHECK DAMS SHALL BE REMOVED WHEN THE SEDIMENT DEPTH UPSTREAM OF CHECK DAM IS WITHIN 1/2 OF THE HEIGHT OF THE CREST.
3. CHECK DAMS ARE TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND VEGETATED COVER IS APPROVED BY THE COUNTY.
4. WHEN CHECK DAMS ARE REMOVED, EXCAVATIONS SHALL BE FILLED WITH SUITABLE COMPACTED BACKFILL. ANY DISTURBED AREA SHALL BE SEEDED AND MULCHED AND COVERED WITH EROSION CONTROL BLANKET OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE COUNTY.

CD CHECK DAM 1



COMPOST BLANKET AND COMPOST FILTER BERM
SCALE: 1" = 5'-0"

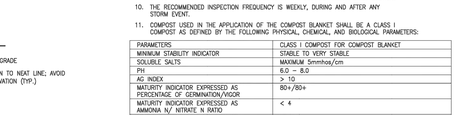
COMPOST BLANKET NOTES:

1. SEE PLAN VIEW FOR AREA OF COMPOST BLANKET.
2. MAY BE USED IN PLACE OF STRAW MULCH OR EROSION CONTROL BLANKET IN AREAS WHERE ACCESS IS DIFFICULT DUE TO LANDSCAPING OR OTHER OBJECTS OR IN AREAS WHERE A SMOOTH TURF GRASS FINISH IS DESIRED.
3. SHALL ONLY BE UTILIZED IN AREAS WHERE SHEET FLOW CONDITIONS PREVAIL; SHALL BE PROHIBITED IN AREAS OF POSSIBLE CONCENTRATED FLOW.
4. SOIL PREPARATION SHALL BE COMPLETE PER THE SPECIFICATIONS OUTLINED IN THESE CRITERIA PRIOR TO APPLICATION.
5. WHEN TURF GRASS FINISH IS NOT DESIRED, SURFACE ROUGHENING ON SLOPES SHALL TAKE PLACE PRIOR TO APPLICATION.
6. SHALL BE EVENLY APPLIED AT A DEPTH OF 2 INCH.
7. MAYBE APPLIED UTILIZING PNEUMATIC BLOWER, OR BY HAND.
8. SEEDING SHALL BE DRILLED PRIOR TO THE APPLICATION OF COMPOST OR SEED MAY BE COMBINED AND BLOWN WITH THE PNEUMATIC BLOWER.
9. COMPOST FILTER BERM SHALL BE UTILIZED ON SLOPES WITH A MAXIMUM SPACING OF 15 FEET PER THE REQUIREMENTS FOUND IN THE COMPOST FILTER BERM SECTION.
10. THE RECOMMENDED INSPECTION FREQUENCY IS WEEKLY, DURING AND AFTER ANY STORM EVENT.
11. COMPOST USED IN THE APPLICATION OF THE COMPOST BLANKET SHALL BE A CLASS I COMPOST AS DEFINED BY THE FOLLOWING PHYSICAL, CHEMICAL, AND BIOLOGICAL PARAMETERS:

PARAMETERS	CLASS I COMPOST FOR COMPOST BLANKET
MINIMUM STABILITY INDICATOR	STABLE TO VERY STABLE
SOLUBLE SALTS	MAXIMUM 5mmhos/cm
PH	6.0 – 8.0
AG INDEX	> 10
MATURITY INDICATOR EXPRESSED AS PERCENTAGE OF GERMINATION/VIGOR	80+/80+
MATURITY INDICATOR EXPRESSED AS AMMONIA N/ NITRATE N RATIO	< 4
MATURITY INDICATOR EXPRESSED AS CARBON TO NITROGEN RATIO	20:1
TESTED FOR CLOPYRALID	YES/NEGATIVE RESULT
MOISTURE CONTENT	30–60 %
ORGANIC MATTER CONTENT	25–45 % OF DRY WEIGHT
PARTICLE SIZE DISTRIBUTION	3" (75mm) 100% PASSING 1" (25mm) 95% TO 100% PASSING ¾" (19mm) 85% TO 90% PASSING ⅜" (9.5mm) 50% TO 60% PASSING #4 20 TO 35% PASSING
PRIMARY, SECONDARY NUTRIENTS; TRACE ELEMENT	MUST BE REPORTED
TESTING AND TEST REPORT SUBMITTAL REQUIREMENTS	STA + CLOPYRALID
ORGANIC MATTER PER CUBIC YARD	MUST REPORT
CHEMICAL CONTAMINANTS	MEET OR EXCEED US EPA CLASS A STANDARD, 40 CFR 503.1 TABLES 1 & 3 LEVELS
MINIMUM MANUFACTURING/PRODUCTION REQUIREMENT	FULLY PERMITTED UNDER COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT, HAZARDOUS MATERIALS AND WASTE MANAGEMENT DIVISION
RISK FACTOR RELATING TO PLANT GERMINATION AND HEALTH	LOW

NOTE: CLOPYRALID IS THE COMMON NAME OF A HERBICIDE THAT KILLS BROAD-LEAVED WEEDS SUCH AS DANDELIONS, CLOVER AND THISTLE.

CB COMPOST BLANKET 2



EROSION CONTROL BLANKET (ECB) LINED
LONGITUDINAL SLOPE 0.5% TO 33%
SCALE: 1/2" = 1'-0"

COMPOST FILTER BERM NOTES:

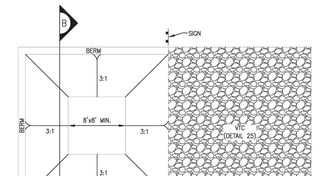
1. SEE PLAN VIEW FOR LENGTH OF COMPOST FILTER BERM.
2. SHALL BE APPLIED TO ALL SLOPES RECEIVING A COMPOST BLANKET AT 15' INCREMENTS.
3. FILTER BERMS SHALL RUN PARALLEL TO THE CONTOUR.
4. FILTER BERMS SHALL BE A MINIMUM OF 1' H x 2' W.
5. FILTER BERMS SHALL BE APPLIED UTILIZING PNEUMATIC BLOWER, OR BY HAND.
6. SHALL ONLY BE UTILIZED IN AREAS WHERE SHEET FLOW CONDITIONS PREVAIL; SHALL BE PROHIBITED IN AREAS OF POSSIBLE CONCENTRATED FLOW.
7. SOIL PREPARATION SHALL BE COMPLETE PER THE SPECIFICATIONS OUTLINED IN THESE CRITERIA PRIOR TO APPLICATION.
8. WHEN TURF GRASS FINISH IS NOT DESIRED, SURFACE ROUGHENING ON SLOPES SHALL TAKE PLACE PRIOR TO APPLICATION.
9. SEEDING SHALL BE DRILLED BEFORE THE APPLICATION OF COMPOST OR SEED MAY BE COMBINED AND BLOWN WITH THE PNEUMATIC BLOWER.
10. THE RECOMMENDED INSPECTION FREQUENCY IS WEEKLY, DURING AND AFTER ANY STORM EVENT.
11. COMPOST USED IN THE APPLICATION OF THE COMPOST BLANKET SHALL BE A CLASS I COMPOST AS DEFINED BY THE FOLLOWING PHYSICAL, CHEMICAL, AND BIOLOGICAL PARAMETERS:

PARAMETERS	CLASS I COMPOST FOR COMPOST FILTER BERM
MINIMUM STABILITY INDICATOR	STABLE TO VERY STABLE
SOLUBLE SALTS	MAXIMUM 5mmhos/cm
PH	6.0 – 8.0
AG INDEX	> 10
MATURITY INDICATOR EXPRESSED AS PERCENTAGE OF GERMINATION/VIGOR	80+/80+
MATURITY INDICATOR EXPRESSED AS AMMONIA N/ NITRATE N RATIO	< 4
MATURITY INDICATOR EXPRESSED AS CARBON TO NITROGEN RATIO	20:1
TESTED FOR CLOPYRALID	YES/NEGATIVE RESULT
MOISTURE CONTENT	25–45 % OF DRY WEIGHT
PARTICLE SIZE DISTRIBUTION	3" (75mm) 100% PASSING 1" (25mm) 95% TO 100% PASSING ¾" (19mm) 85% TO 90% PASSING ⅜" (9.5mm) 50% TO 60% PASSING #4 20 TO 35% PASSING
PRIMARY, SECONDARY NUTRIENTS; TRACE ELEMENT	MUST BE REPORTED
TESTING AND TEST REPORT SUBMITTAL REQUIREMENTS	STA + CLOPYRALID
ORGANIC MATTER PER CUBIC YARD	MUST REPORT
CHEMICAL CONTAMINANTS	MEET OR EXCEED US EPA CLASS A STANDARD, 40 CFR 503.1 TABLES 1 & 3 LEVELS
MINIMUM MANUFACTURING/PRODUCTION REQUIREMENT	FULLY PERMITTED UNDER COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT, HAZARDOUS MATERIALS AND WASTE MANAGEMENT DIVISION
RISK FACTOR RELATING TO PLANT GERMINATION AND HEALTH	LOW

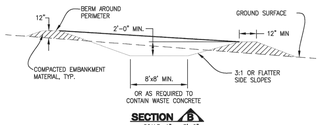
NOTE: IF A BIOSOLID COMPOST IS TO BE UTILIZED IT SHALL BE PRODUCED BY A FACILITY IN POSSESSION OF A VALID NOTICE OF AUTHORIZATION (NOA) FOR THE UNRESTRICTED USE AND DISTRIBUTION BY THE COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT. THE NOA SHALL BE PROVIDED UPON REQUEST TO DOUGLAS COUNTY.

NOTE: A LAB TEST DETAILING THE CHEMICAL, PHYSICAL, AND BIOLOGICAL PARAMETERS SHALL BE PROVIDED UPON REQUEST BY DOUGLAS COUNTY.

CFB COMPOST FILTER BERM 3



PLAN
SCALE: 1" = 5'-0"



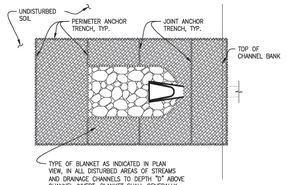
SECTION B
SCALE: 1" = 5'-0"

CONCRETE WASHOUT AREA INSTALLATION NOTES

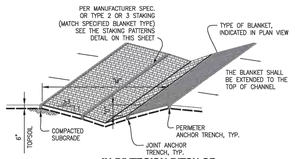
1. SEE PLAN VIEW FOR:
   - LOCATIONS OF CONCRETE WASHOUT AREA.
2. THE CONCRETE WASHOUT AREA SHALL BE INSTALLED PRIOR TO ANY CONCRETE PLACEMENT ON SITE.
3. VEHICLE TRACKING CONTROL (DETAIL 25) IS REQUIRED AT THE ACCESS POINT.
4. SIGNS SHALL BE PLACED AT THE CONSTRUCTION ENTRANCE, AT THE WASHOUT AREA, AND ELSEWHERE AS NECESSARY TO CLEARLY INDICATE THE LOCATION OF THE CONCRETE WASHOUT AREA TO OPERATORS OF CONCRETE TRUCKS AND PUMP RIGS.
5. EXCAVATED MATERIAL SHALL BE UTILIZED IN PERIMETER BERM CONSTRUCTION.
6. DURABLE PORTABLE CONCRETE WASHOUT BASINS OR TUBS MAY BE USED WITH THE APPROVAL OF THE EROSION CONTROL INSPECTOR.

CONCRETE WASHOUT AREA MAINTENANCE NOTES

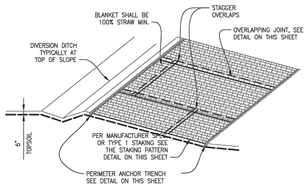
1. THE CONCRETE WASHOUT AREA SHALL BE REPAIRED AND ENLARGED OR CLEANED OUT AS NECESSARY TO MAINTAIN CAPACITY FOR WASTED CONCRETE.
2. AT THE END OF CONSTRUCTION, ALL CONCRETE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF AT AN APPROVED WASTE SITE.
3. WHEN THE CONCRETE WASHOUT AREA IS REMOVED, THE DISTURBED AREA SHALL BE DRILL SEEDED A



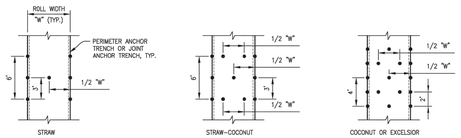
IN DISTURBED AREAS OF STREAMS AND DRAINAGE CHANNELS
SCALE: 1" = 5'-0"



IN DIVERSION DITCH OR SMALL DITCH DRAINAGEWAY
SCALE: 1" = 5'-0"

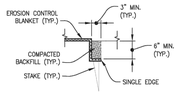


OUTSIDE OF STREAMS AND DRAINAGE CHANNELS
SCALE: 1" = 5'-0"

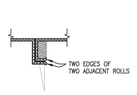


STAKING PATTERNS
SCALE: 1" = 5'-0"

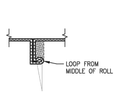
SHALL BE IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATION. IF NO MANUFACTURER'S SPECIFICATION IS AVAILABLE USE THE ACCEPTABLE STAKING PATTERN (AS SHOWN ABOVE),



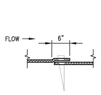
PERIMETER ANCHOR TRENCH
SCALE: 1" = 1'-0"



JOINT ANCHOR TRENCH
SCALE: 1" = 1'-0"



INTERMEDIATE ANCHOR TRENCH
SCALE: 1" = 5'-0"



OVERLAPPING JOINT
SCALE: 1" = 1'-0"



WOOD STAKE DETAIL
SCALE: 1" = 1'-0"
MINIMUM THICKNESS 1/2"

EROSION CONTROL BLANKET INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
   - LOCATION OF PERIMETER OF EROSION CONTROL BLANKET.
   - TYPE OF BLANKET (STRAW, STRAW-COCONUT, COCONUT, OR EXCELSIOR).
   - AREA "A" IN SQUARE YARDS OF EACH TYPE OF BLANKET.
2. ALL EROSION CONTROL BLANKETS AND NETTING SHALL BE MADE OF 100% NATURAL AND BIODEGRADABLE MATERIAL; NO PLASTIC OR OTHER SYNTHETIC MATERIAL, EVEN IF PHOTO DEGRADABLE, SHALL BE ALLOWED.
3. IN AREAS WHERE EROSION CONTROL BLANKET IS SHOWN ON THE PLANS, THE PERMITTEE SHALL PLACE TOPSOIL AND PERFORM FINAL GRADING, SURFACE PREPARATION, AND SEEDING BELOW THE BLANKET IN ACCORDANCE WITH THE REQUIREMENTS OF DETAIL 12, SEEDING AND MULCHING. SUBGRADE SHALL BE SMOOTH AND MOIST PRIOR TO BLANKET INSTALLATION AND THE BLANKET SHALL BE IN FULL CONTACT WITH SUBGRADE. NO GAPS OR VOIDS SHALL EXIST UNDER THE BLANKET.
4. PERIMETER ANCHOR TRENCH SHALL BE USED AT OUTSIDE PERIMETER OF ALL BLANKET AREAS.
5. JOINT ANCHOR TRENCH SHALL BE USED TO JOIN ROLLS OF BLANKETS TOGETHER (LONGITUDINALLY AND TRANSVERSELY) FOR ALL BLANKET INSTALLATIONS IN A DRAINAGEWAY EXCEPT STRAW, WHICH MAY USE AN OVERLAPPING JOINT.
6. INTERMEDIATE ANCHOR TRENCH SHALL BE USED AT SPACING OF ONE-HALF THE ROLL LENGTH FOR COCONUT AND EXCELSIOR BLANKETS.
7. THE OVERLAPPING JOINT DETAIL SHALL BE USED TO JOIN ROLLS OF BLANKETS TOGETHER FOR BLANKETS ON SLOPES.
8. MATERIAL SPECIFICATIONS OF EROSION CONTROL BLANKET SHALL CONFORM TO TABLE 7.1.

EROSION CONTROL BLANKET INSTALLATION NOTES – CONTINUED

9. ANY AREAS OF SEEDING AND MULCHING DISTURBED IN THE PROCESS OF INSTALLING EROSION CONTROL BLANKET SHALL BE RESEEDED AND MULCHED IN ACCORDANCE WITH DETAIL 18.
10. SEE DRAINAGE DESIGN PLANS FOR MAJOR DRAINAGEWAY STABILIZATION MEASURES THAT MAY EXCEED THE DESIGN CONDITIONS ASSOCIATED WITH THE DETAILS ABOVE.
11. METAL STAKES OR STAPLES MAY BE USED FOR EROSION CONTROL BLANKET INSTALLATIONS OUTSIDE OF DRAINAGE CHANNELS.

TABLE 7.1 – EROSION CONTROL BLANKET TYPE

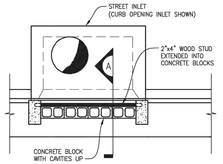
TYPE	COCONUT CONTENT	STRAW CONTENT	EXCELSIOR CONTENT	NETTING MIN.
STRAW*	–	100%	–	DOUBLE/NATURAL
STRAW-COCONUT	30% MIN.	70% MAX.	–	DOUBLE/NATURAL
COCONUT	100%	–	–	DOUBLE/NATURAL
EXCELSIOR	–	–	100%	DOUBLE/NATURAL

* FOR OUTSIDE OF STREAMS AND DRAINAGE CHANNELS

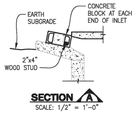
EROSION CONTROL BLANKET MAINTENANCE NOTES

1. THE RECOMMENDED INSPECTION FREQUENCY FOR EROSION CONTROL BLANKETS IS WEEKLY, DURING AND AFTER ANY STORM EVENT AND MAKE REPAIRS AS NECESSARY.
2. EROSION CONTROL BLANKET IS TO BE LEFT IN PLACE UNLESS REQUESTED TO BE REMOVED BY THE COUNTY.
3. ANY EROSION CONTROL BLANKET PULLED OUT, TORN, OR OTHERWISE DAMAGED SHALL BE RE-INSTALLED. ANY SUBGRADE AREAS BELOW THE BLANKET THAT HAVE ERODED TO CREATE A VOID UNDER THE BLANKET, OR THAT REMAIN DEVOID OF GRASS SHALL BE REPAIRED, RESEEDED AND MULCHED AND THE EROSION CONTROL BLANKET REINSTALLED.

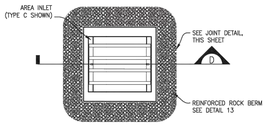
ECB **EROSION CONTROL BLANKET** 10



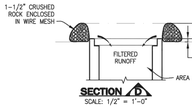
INTERIM CONFIGURATION (BEFORE PAVING) STREET INLET - PLAN
SCALE: 1/2" = 1'-0"



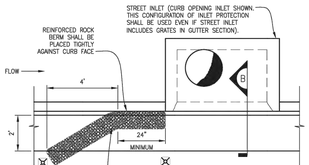
SECTION A
SCALE: 1/2" = 1'-0"



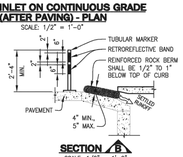
AREA INLET - PLAN
SCALE: 1/2" = 1'-0"



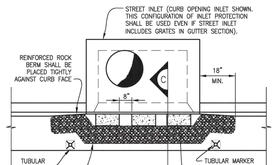
SECTION D
SCALE: 1/2" = 1'-0"



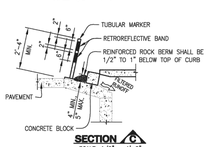
STREET INLET ON CONTINUOUS GRADE (AFTER PAVING) - PLAN
SCALE: 1/2" = 1'-0"



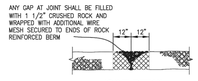
SECTION B
SCALE: 1/2" = 1'-0"



STREET INLET IN SUMP (AFTER PAVING) - PLAN
SCALE: 1/2" = 1'-0"



SECTION C
SCALE: 1/2" = 1'-0"



JOINT DETAIL
SCALE: 1/2" = 1'-0"

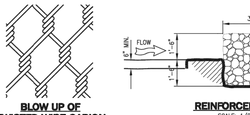
INLET PROTECTION INSTALLATION NOTES

1. INTERIM CONFIGURATION OF INLET PROTECTION IN STREETS SHALL BE INSTALLED WITHIN 48-HOURS OF POURING INLET. INLET PROTECTION (AFTER PAVEMENT) SHALL BE INSTALLED WITHIN 48 HOURS AFTER PAVING IS PLACED.
2. INLET PROTECTION AT AREA INLETS SHALL BE INSTALLED WITHIN 48-HOURS OF POURING INLET.
3. CRUSHED ROCK SHALL BE FRACTURED FACE (ALL SIDES) AND SHALL COMPLY WITH GRADATION SHOWN ON ROCK AND RIPRAP GRADATIONS (1-1/2").
4. WIRE MESH SHALL BE FABRICATED OF 20 GAUGE WIRE TWISTED INTO A MESH WITH A MAXIMUM OPENING OF 1.0 INCH (COMMONLY TERMED "CHICKEN WIRE"). ROLL WIDTH SHALL BE 48-INCHES.
5. WIRE MESH SHALL BE SECURED USING "HOG RINGS" OR WIRE TIES AT 6-INCH CENTERS ALONG ALL JOINTS AND AT 2-INCH CENTERS ON ENDS OF BERM.
6. REINFORCED ROCK BERM SHALL BE CONSTRUCTED IN ONE PIECE OR SHALL BE CONSTRUCTED USING JOINT DETAIL.
7. TUBULAR MARKERS SHALL MEET REQUIREMENTS OF MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), AS AMENDED.
8. THE TOP OF REINFORCED ROCK BERM SHALL BE 1/2"-1" BELOW TOP OF CURB.

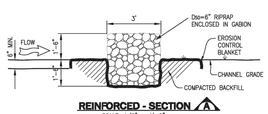
INLET PROTECTION MAINTENANCE NOTES

1. THE RECOMMENDED INSPECTION FREQUENCY FOR INLET PROTECTION IS WEEKLY, DURING AND AFTER ANY STORM EVENT AND MAKE REPAIRS OR CLEAN OUT AS NECESSARY. MORE FREQUENT INSPECTIONS AND REPAIRS MAY BE REQUIRED DURING WINTER CONDITIONS DUE TO FREEZE/THAW PROBLEMS.
2. SEDIMENT ACCUMULATED UPSTREAM OF INLET PROTECTION SHALL BE REMOVED WHEN THE SEDIMENT DEPTH UPSTREAM OF ROCK BERM IS WITHIN 2-1/2 INCHES OF THE CREST.
3. INLET PROTECTION IS TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND GRASS COVER IS APPROVED, UNLESS THE COUNTY APPROVES EARLIER REMOVAL OF INLET PROTECTION IN STREETS.
4. WHEN INLET PROTECTION AT AREA INLETS ARE REMOVED, THE DISTURBED AREA SHALL BE DRILL SEEDED AND CRIMP MULCHED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE COUNTY.

IP **INLET PROTECTION** 11



BLOW UP OF TWISTED WIRE GABION
SCALE: NTS



REINFORCED - SECTION A
SCALE: 1/2" = 1'-0"

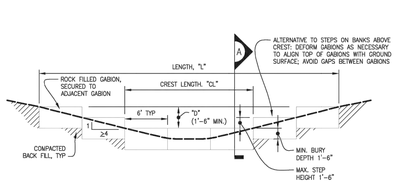
REINFORCED CHECK DAM INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
   - LOCATIONS OF CHECK DAMS.
   - CHECK DAM TYPE (CHECK DAM OR REINFORCED CHECK DAM).
   - LENGTH, "L", CREST LENGTH, "CL", AND DEPTH, "D".
2. CHECK DAMS INDICATED ON INITIAL GESC PLAN SHALL BE INSTALLED AFTER CONSTRUCTION FENCE, BUT PRIOR TO ANY UPSTREAM LAND-DISTURBING ACTIVITIES.
3. REINFORCED CHECK DAMS, GABIONS SHALL HAVE GALVANIZED TWISTED WIRE NETTING WITH A MAXIMUM OPENING DIMENSION OF 4-1/2" AND A MINIMUM WIRE THICKNESS OF 0.10". WIRE "HOG RINGS" AT 4" SPACING OR OTHER APPROVED MEANS SHALL BE USED AT ALL GABION SEAMS AND TO SECURE THE GABION TO THE ADJACENT GABION.
4. THE CHECK DAM SHALL BE TRENCHED INTO THE GROUND A MINIMUM OF 1'-6".
5. EROSION BLANKET SHALL BE PLACED IN THE REINFORCED CHECK DAM TRENCH EXTENDING A MINIMUM OF 1'-6" ON BOTH THE UPSTREAM AND DOWNSTREAM SIDES OF THE REINFORCED CHECK DAM.

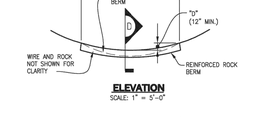
REINFORCED CHECK DAM MAINTENANCE NOTES

1. THE RECOMMENDED INSPECTION FREQUENCY FOR CHECK DAMS IS WEEKLY, DURING AND AFTER ANY STORM EVENT AND MAKE REPAIRS OR CLEAN OUT AS NECESSARY.
2. SEDIMENT ACCUMULATED UPSTREAM OF CHECK DAMS SHALL BE REMOVED WHEN THE SEDIMENT DEPTH UPSTREAM OF CHECK DAM IS WITHIN 1/2 OF THE HEIGHT OF THE CREST.
3. CHECK DAMS ARE TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND GRASS COVER IS APPROVED BY THE COUNTY.
4. WHEN CHECK DAMS ARE REMOVED, EXCAVATIONS SHALL BE FILLED WITH SUITABLE COMPACTED BACK FILL. ANY DISTURBED AREA SHALL BE DRILL SEEDED AND CRIMP MULCHED AND COVERED WITH EROSION CONTROL BLANKET OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE COUNTY.

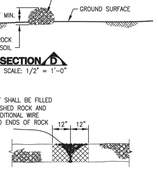
RCD **REINFORCED CHECK DAM** 12



ELEVATION
SCALE: 1" = 5'-0"



SECTION D
SCALE: 1/2" = 1'-0"



JOINT DETAIL
SCALE: 1/2" = 1'-0"

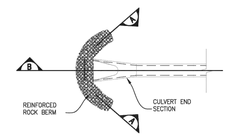
REINFORCED ROCK BERM INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
   - LOCATIONS OF REINFORCED ROCK BERMS.
   - LENGTH, "L", AND DEPTH, "D" DIMENSIONS.
2. REINFORCED ROCK BERM SECTION APPLIES TO CULVERT INLET FILTER AND INLET PROTECTION.
3. CRUSHED ROCK SHALL BE FRACTURED FACE (ALL SIDES) AND SHALL COMPLY WITH GRADATION SHOWN ON ROCK AND RIPRAP GRADATIONS (1-1/2").
4. WIRE MESH SHALL BE FABRICATED OF 20 GAUGE WIRE TWISTED INTO A MESH WITH A MAXIMUM OPENING OF 1.0 INCH (COMMONLY TERMED "CHICKEN WIRE"). ROLL WIDTH SHALL BE 48-INCHES.
5. WIRE MESH SHALL BE SECURED USING "HOG RINGS" OR WIRE TIES AT 6-INCH CENTERS ALONG ALL JOINTS AND AT 2-INCH CENTERS ON ENDS OF BERM.
6. FOR CONCENTRATED FLOW AREAS THE ENDS OF THE REINFORCED ROCK BERM SHALL BE 12" HIGHER THAN THE CENTER OF THE BERM.

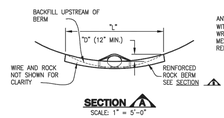
REINFORCED ROCK BERM MAINTENANCE NOTES

1. THE RECOMMENDED INSPECTION FREQUENCY FOR REINFORCED ROCK BERM IS WEEKLY, DURING AND AFTER ANY STORM EVENT AND MAKE REPAIRS OR CLEAN OUT AS NECESSARY.
2. SEDIMENT ACCUMULATED UPSTREAM OF REINFORCED ROCK BERM SHALL BE REMOVED WHEN THE SEDIMENT DEPTH UPSTREAM OF FILTER IS WITHIN 5 INCHES OF THE CREST.
3. REINFORCED ROCK BERMS ARE TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND GRASS COVER IS APPROVED.
4. WHEN REINFORCED ROCK BERMS ARE REMOVED, ANY DISTURBED AREA SHALL BE DRILL SEEDED AND CRIMP MULCHED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE COUNTY.

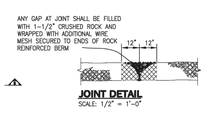
RRB **REINFORCED ROCK BERM** 13



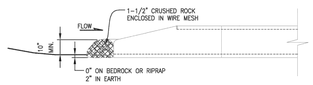
PLAN
SCALE: 1" = 5'-0"



SECTION A
SCALE: 1" = 5'-0"



JOINT DETAIL
SCALE: 1/2" = 1'-0"



SECTION B
SCALE: 1/2" = 1'-0"

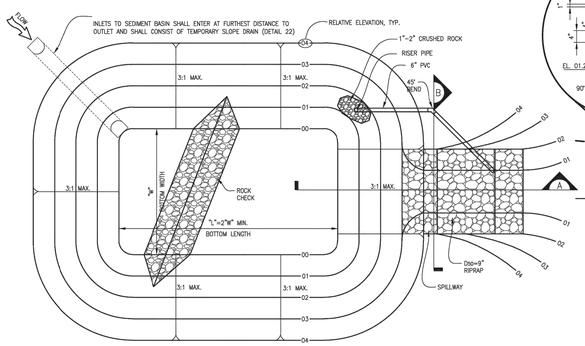
INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
   - LOCATIONS OF CULVERT INLET FILTERS.
   - LENGTH, "L", AND DEPTH, "D".
2. CRUSHED ROCK SHALL BE FRACTURED FACE (ALL SIDES) AND SHALL COMPLY WITH GRADATION SHOWN ON ROCK AND RIPRAP GRADATIONS (1-1/2").
3. WIRE MESH SHALL BE FABRICATED OF 20 GAUGE WIRE TWISTED INTO A MESH WITH A MAXIMUM OPENING OF 1.0 INCH (COMMONLY TERMED "CHICKEN WIRE"). ROLL WIDTH SHALL BE 48-INCHES.
4. WIRE MESH SHALL BE SECURED USING "HOG RINGS" OR WIRE TIES AT 6-INCH CENTERS ALONG ALL JOINTS AND AT 2-INCH CENTERS ON ENDS OF BERM.
5. THE ENDS OF THE REINFORCED ROCK BERM SHALL BE 12" HIGHER THAN THE CENTER OF THE BERM.

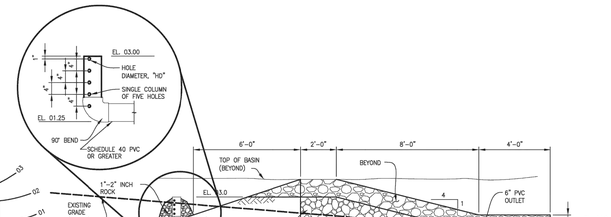
MAINTENANCE NOTES

1. THE RECOMMENDED INSPECTION FREQUENCY FOR RRB FOR CULVERT PROTECTION IS WEEKLY, DURING AND AFTER ANY STORM EVENT AND MAKE REPAIRS OR CLEAN OUT AS NECESSARY.
2. SEDIMENT ACCUMULATED UPSTREAM OF RRB FOR CULVERT PROTECTION SHALL BE REMOVED WHEN THE SEDIMENT DEPTH UPSTREAM OF FILTER IS 1/2 THE HEIGHT OF THE REINFORCED ROCK BERM.
3. RRB FOR CULVERT PROTECTION ARE TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND GRASS COVER IS APPROVED BY THE COUNTY.
4. WHEN RRB FOR CULVERT PROTECTION ARE REMOVED, ANY DISTURBED AREA SHALL BE DRILL SEEDED AND CRIMP MULCHED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE COUNTY.

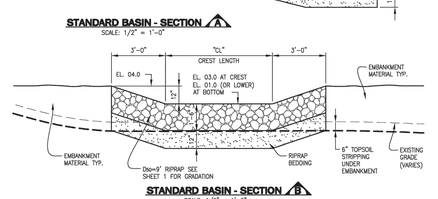
RRC **RRB FOR CULVERT PROTECTION** 14



STANDARD BASIN - PLAN
SCALE: 1" = 5'-0"



STANDARD BASIN - SECTION A
SCALE: 1/2" = 1'-0"



STANDARD BASIN - SECTION B
SCALE: 1/2" = 1'-0"

SEDIMENT BASIN INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
   - LOCATION OF SEDIMENT BASIN.
   - TYPE OF BASIN (STANDARD BASIN OR NON-STANDARD BASIN),
   - FOR STANDARD BASIN, CREST LENGTH, "CL", BOTTOM WIDTH, "W", AND HOLE DIAMETER, "HD".
   - FOR NON-STANDARD BASIN, SEE CONSTRUCTION DRAWINGS FOR DESIGN OF BASIN INCLUDING RISER HEIGHT, "H", NUMBER OF COLUMNS, "N", HOLE DIAMETER, "HD", AND PIPE DIAMETER "D".
2. FOR STANDARD BASIN, BOTTOM DIMENSION MAY BE MODIFIED AS LONG AS BOTTOM AREA IS NOT REDUCED.
3. SEDIMENT BASINS INDICATED ON INITIAL GESC PLAN SHALL BE INSTALLED PRIOR TO ANY OTHER LAND-DISTURBING ACTIVITY.
4. EMBANKMENT MATERIAL SHALL CONSIST OF SOIL FREE OF DEBRIS, ORGANIC MATERIAL, AND ROCKS OR CONCRETE GREATER THAN 3 INCHES AND SHALL HAVE A MINIMUM OF 15 PERCENT BY WEIGHT PASSING THE NO. 200 SIEVE.
5. EMBANKMENT MATERIAL SHALL BE COMPACTED TO AT LEAST 95 PERCENT OF MAXIMUM DENSITY WITHIN 2 PERCENTAGE POINTS OF OPTIMUM DENSITY IN ACCORDANCE WITH ASTM D698.
6. PIPE SCH 40 OR GREATER SHALL BE USED.
7. THE DETAILS SHOWN ON THIS SHEET PERTAIN TO STANDARD SEDIMENT BASIN(S) IDENTIFIED ON THE GESC PLAN VIEW DRAWINGS USED FOR DRAINAGE AREAS LESS THAN 15 ACRES. SEE CONSTRUCTION DRAWINGS FOR EMBANKMENT, STORAGE VOLUME, SPILLWAY, OUTLET, AND OUTLET PROTECTION DETAILS FOR ANY SEDIMENT BASIN(S) THAT HAVE BEEN INDIVIDUALLY DESIGNED FOR DRAINAGE AREAS LARGER THAN 15 ACRES.

SEDIMENT BASIN MAINTENANCE NOTES

1. THE RECOMMENDED INSPECTION FREQUENCY FOR SEDIMENT BASIN IS WEEKLY, DURING AND AFTER ANY STORM EVENT AND MAKE REPAIRS OR CLEAN OUT AS NECESSARY.
2. SEDIMENT ACCUMULATED IN SEDIMENT BASIN SHALL BE REMOVED WHEN THE SEDIMENT DEPTH IS 1.0 FOOT.
3. SEDIMENT BASINS ARE TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND GRASS COVER IS APPROVED BY THE COUNTY.
4. IF SEDIMENT BASINS ARE REMOVED, THE DISTURBED AREA SHALL BE SEEDED AND MULCHED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE COUNTY.

SIZING INFORMATION FOR STANDARD SEDIMENT BASIN

Upstream Drainage Area (rounded to nearest acre), (ac)	Basin Bottom Width (W), (ft)	Spillway Crest Length (CL), (ft)	Hole Diameter (HD), (in)
1	16	2.0	7/16
2	22	4.0	5/8
3	27	6.0	3/4
4	31	8.0	7/8
5	35	10.0	1.0
6	38	12.0	1 1/8
7	41	14.0	1 1/4
8	44	16.0	1 1/4
9	47	18.0	1 3/8
10	49	20.0	1 3/8
11	52	22.0	1 1/2
12	54	24.0	1 1/2
13	56	26.0	1 5/8
14	59	28.0	1 5/8
15	61	30.0	1 5/8

SB **SEDIMENT BASIN** 15

Sheet Revisions		
1	DOUGLAS COUNTY REISSUE	1/17

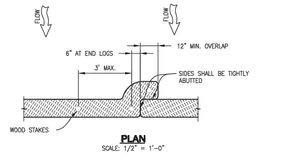
NOTE: SCALES SHOWN ARE FOR 24"x36" SHEETS; ADJUST ACCORDINGLY FOR 11"x17" SHEETS.

DOUGLAS COUNTY COLORADO

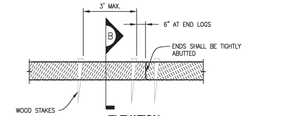
GESC GRADING, EROSION, AND SEDIMENT CONTROL

GESC PLAN STANDARD NOTES AND DETAILS

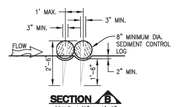
SHEET 2 OF 3



PLAN
SCALE: 1/2" = 1'-0"



ELEVATION
SCALE: 1/2" = 1'-0"



SECTION B
SCALE: 1/2" = 1'-0"

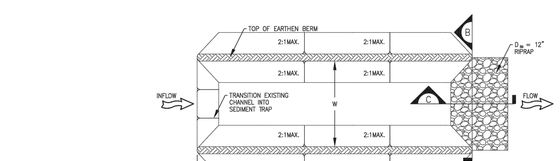
SEDIMENT CONTROL LOG INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
   - LOCATION AND LENGTH OF SEDIMENT CONTROL LOG.
2. SEDIMENT CONTROL LOGS INDICATED ON INITIAL GESC PLAN SHALL BE INSTALLED PRIOR TO ANY LAND-DISTURBING ACTIVITIES.
3. SEDIMENT CONTROL LOGS SHALL CONSIST OF STRAW, COMPOST, EXCELSIOR, OR COCONUT FIBER.
4. NOT FOR USE IN CONCENTRATED FLOW AREAS.
5. THE SEDIMENT CONTROL LOG SHALL BE TRENCHED INTO THE GROUND A MINIMUM OF 2".

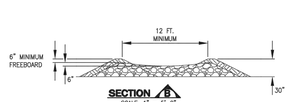
SEDIMENT CONTROL LOG MAINTENANCE NOTES

1. THE RECOMMENDED INSPECTION FREQUENCY FOR SEDIMENT CONTROL LOGS IS DAILY, DURING AND AFTER ANY STORM EVENT AND MAKE REPAIRS OR CLEAN OUT UPSTREAM SEDIMENT AS NECESSARY.
2. SEDIMENT ACCUMULATED UPSTREAM OF SEDIMENT CONTROL LOGS SHALL BE REMOVED WHEN THE UPSTREAM SEDIMENT DEPTH IS WITHIN ½ THE HEIGHT OF THE CREST OF LOG.
3. SEDIMENT CONTROL LOG SHALL REMAIN IN PLACE UNTIL THE VEGETATIVE COVER IS APPROVED BY THE EROSION CONTROL INSPECTOR. IF ANY DISTURBED AREA EXISTS AFTER REMOVAL, IT SHALL BE DRILL SEEDED AND CRIMP MULCHED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE COUNTY.

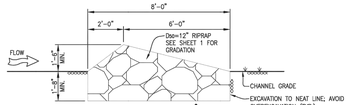
SCL **SEDIMENT CONTROL LOG** 16



PLAN
SCALE: 1" = 5'-0"



SECTION B
SCALE: 1" = 5'-0"



SECTION C
SCALE: 1" = 1'-0"

SEDIMENT TRAP INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
   - LOCATION, LENGTH AND WIDTH OF SEDIMENT TRAP.
2. SEDIMENT TRAPS INDICATED ON INITIAL GESC PLAN SHALL BE INSTALLED PRIOR TO ANY LAND-DISTURBING ACTIVITIES.
3. SEDIMENT TRAP BERM SHALL BE CONSTRUCTED FROM MATERIAL FROM EXCAVATION. THE BERM SHALL BE COMPACTED TO 95% OF THE MAXIMUM DENSITY IN ACCORDANCE WITH ASTM D698.
4. RIPRAP OUTLET SHALL BE CONSTRUCTED WITH D_{50} =12" RIPRAP WITH A MINIMUM OVERFLOW OF 6".
5. THE TOP OF THE EARTHEN BERM SHALL BE A MINIMUM OF 6" HIGHER THAN THE TOP OF THE RIPRAP OUTLET STRUCTURE.
6. THE ENDS OF THE RIPRAP OUTLET STRUCTURE SHALL BE MINIMUM OF 6" HIGHER THAN THE CENTER OF THE OUTLET STRUCTURE.

SEDIMENT TRAP MAINTENANCE NOTES

1. THE RECOMMENDED INSPECTION FREQUENCY FOR SEDIMENT TRAPS IS WEEKLY, DURING AND AFTER ANY STORM EVENT AND MAKE REPAIRS OR CLEAN OUT UPSTREAM SEDIMENT AS NECESSARY.
2. SEDIMENT ACCUMULATED UPSTREAM OF RIPRAP SHALL BE REMOVED WHEN THE UPSTREAM SEDIMENT DEPTH IS WITHIN ½ THE HEIGHT OF THE RIPRAP OUTLET STRUCTURE.
3. SEDIMENT TRAPS SHALL REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND GRASS COVERAGE IS APPROVED BY THE COUNTY.
4. WHEN SEDIMENT TRAPS ARE REMOVED THE DISTURBED AREA SHALL BE DRILLED SEEDED AND CRIMP MULCHED OR STABILIZED IN A MANNER APPROVED BY THE COUNTY.

ST **SEDIMENT TRAP** 17

SEEDING AND MULCHING INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
   - AREA OF SEEDING AND MULCHING.
   - TYPE OF SEED MIX (PERMANENT, TEMPORARY, OR LOW-GROWTH).
2. ALL BRANDS FURNISHED SHALL BE FREE FROM SUCH NOXIOUS SEEDS AS RUSSIAN OR CANADIAN THISTLE, COARSE FESCUE, EUROPEAN BINDWEED, JOHNSON GRASS, KNAP WEED AND LEAFY SPURGE.
3. THE SEEDER SHALL FURNISH TO THE CONTRACTOR A SIGNED STATEMENT CERTIFYING THAT THE SEED FURNISHED IS FROM A LOT THAT HAS BEEN TESTED BY A RECOGNIZED LABORATORY. SEED WHICH HAS BECOME WET, MOLDY, OR OTHERWISE DAMAGED IN TRANSIT OR IN STORAGE WILL NOT BE ACCEPTABLE. SEED TICKETS SHALL BE PROVIDED TO DOUGLAS COUNTY UPON REQUEST.
4. DRILL SEEDING MIX SHALL CONFORM TO THE TABLE ON THE RIGHT:
5. IF THE SEED AVAILABLE ON THE MARKET DOES NOT MEET THE MINIMUM PURITY AND GERMINATION PERCENTAGES SPECIFIED, THE SUBCONTRACTOR MUST COMPENSATE FOR A LESSER PERCENTAGE OF PURITY OR GERMINATION BY FURNISHING SUFFICIENT ADDITIONAL SEED TO EQUAL THE SPECIFIED PRODUCT. THE TAGS FROM THE SEED MIXES MUST BE SUPPLIED TO THE CONTRACTOR AND FORWARDED TO THE DOUGLAS COUNTY EROSION CONTROL INSPECTOR.
6. THE FORMULA USED FOR DETERMINING THE QUANTITY OF PURE LIVE SEED (PLS) SHALL BE (POUNDS OF SEED) X (PURITY) X (GERMINATION) = POUNDS OF PURE LIVE SEED (PLS).
7. PERMANENT SEED MIX SHALL BE USED UNLESS OTHERWISE APPROVED BY THE COUNTY.
8. ALL AREAS TO BE SEEDED AND MULCHED SHALL HAVE NATIVE TOPSOIL OR APPROVED SOIL AMENDMENTS SPREAD TO A DEPTH OF AT LEAST 6 INCHES (LOOSE DEPTH). HAUL ROADS AND OTHER COMPACTED AREAS SHALL BE LOOSENED TO A DEPTH OF 6 INCHES PRIOR TO SPREADING TOPSOIL.
9. SOIL IS TO BE THOROUGHLY LOOSENED (TILLED) TO A DEPTH OF AT LEAST 6 INCHES PRIOR TO SEEDING. THE TOP 6 INCHES OF THE SEED BED SHALL BE FREE OF ROCKS GREATER THAN 4 INCHES AND SOIL CLODS GREATER THAN 2 INCHES. SEEDING OVER ANY COMPACTED AREAS THAT HAVEN'T BEEN THOROUGHLY LOOSENED SHALL BE REJECTED.
10. SEED IS TO BE APPLIED USING A MECHANICAL DRILL TO A DEPTH NOT LESS THAN 1/4 INCH AND NOT MORE THAN 3/4 INCH. ROW SPACING SHALL BE NO MORE THAN 6 INCHES. MATERIAL USED FOR MULCH SHALL CONSIST OF LONG-STEMMED STRAW. AT LEAST 50 PERCENT OF THE MULCH, BY WEIGHT, SHALL BE 10 INCHES OR MORE IN LENGTH. MULCH SHALL BE APPLIED AND MECHANICALLY ANCHORED TO A DEPTH OF AT LEAST 2 INCHES. MULCH SHALL BE APPLIED AT A RATE OF 4000 LB. OF STRAW PER ACRE.
11. IF THE PERMITTEE DEMONSTRATES TO THE COUNTY THAT IT IS NOT POSSIBLE TO DRILL SEED, SEED IS TO BE UNIFORMLY BROADCAST AT TWO TIMES THE DRILLED RATE, THEN LIGHTLY HARROWED TO PROVIDE A SEED DEPTH OF APPROXIMATELY 1/4 INCH, THEN ROLLED TO COMPACT, THEN MULCHED AS SPECIFIED ABOVE.
12. SEEDING AND MULCHING SHALL BE COMPLETED WITHIN 30 DAYS OF INITIAL EXPOSURE OR 14 DAYS AFTER GRADING IS SUBSTANTIALLY COMPLETE IN A GIVEN AREA (AS DEFINED BY THE COUNTY). THIS MAY REQUIRE MULTIPLE MOBILIZATIONS FOR SEEDING AND MULCHING.
13. MULCH SHALL BE APPLIED WITHIN 24-HOURS OF SEEDING.
14. TACKIFIER SHOULD BE UTILIZED TO HELP PREVENT STRAW DISPLACEMENT.

DOUGLAS COUNTY PERMANENT DRILL SEEDING MIX

SPECIES	VARIETY	NOTES	% IN MIX	POUNDS OF PLS PER ACRE
BIG BLUESTEM	KAW	PNWS	10	1.1
YELLOW INDIANGRASS	CHEYENNE	PNWS	10	1
SWITCHGRASS	BLACKWELL	PNWS	10	0.4
SIDEOATS GRAMA	VAUGHN	PNWB	10	0.9
WESTERN WHEATGRASS	ARRIBA	PNCS	10	1.6
BLUE GRAMA	HACHITA	PNWB	10	0.3
THICKSPIKE WHEATGRASS	CRITANA	PNCS	10	1
PRAIRIE SANDREED	GOSHEN	PNWS	10	0.7
GREEN NEEDLEGRASS	LODORM	PNCB	10	1
SLENDER WHEATGRASS	PRYOR	PNCB	5	0.6
STREAMBANK WHEATGRASS	SODAR	PNCS	5	0.6
			TOTAL	9.2

DOUGLAS COUNTY TEMPORARY DRILL SEEDING MIX

SPECIES	VARIETY	NOTES	% IN MIX	POUNDS OF PLS PER ACRE
SMOOTH BROMEGRASS	LINCOLN	PICS	30	3.9
INTERMEDIATE WHEATGRASS	OAHE	PICS	30	4.5
PUBESCENT WHEATGRASS	LUNA	PICS	30	4.2
ANNUAL RYEGRASS	N/A	AICB	10	0.8
			TOTAL	13.4

DOUGLAS COUNTY LOW-GROWTH DRILL SEEDING MIX

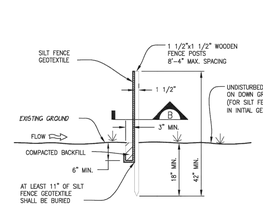
SPECIES	VARIETY	NOTES	% IN MIX	POUNDS OF PLS PER ACRE
BUFFALOGRASS	TEXOKA	PNWS	20	3.2
BLUE GRAMA	HACHITA	PNWB	20	0.6
WESTERN WHEATGRASS	ARRIBA	PNCS	20	3.2
SIDEOATS GRAMA	VAUGHN	PNWB	20	1.8
THICKSPIKE WHEATGRASS	CRITANA	PNCS	10	1
STREAMBANK WHEATGRASS	SODAR	PNCS	10	1.2
			TOTAL	11.0

NOTES:
P=PERENNIAL
A=ANNUAL
N=NATIVE
I=INTRODUCED
W=WARM SEASON
C=COOL SEASON
S=SOD FORMER
B=BUNCHGRASS

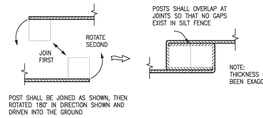
SEEDING AND MULCHING MAINTENANCE NOTES

1. SEEDED AND MULCHED AREAS SHALL BE INSPECTED FOR REQUIRED COVERAGE MONTHLY FOR A PERIOD OF TWO YEARS FOLLOWING INITIAL SEEDING. REPAIRS AND RE-SEEDING AND MULCHING SHALL BE UNDERTAKEN AFTER THE FIRST GROWING SEASON FOR ANY AREAS FAILING TO MEET THE REQUIRED COVERAGE.
2. REQUIRED COVERAGE FOR STANDARD, OPEN SPACE AND LOW GROWTH SEED MIXES SHALL BE DEFINED AS FOLLOWS:
   1. THREE (3) PLANTS PER SQUARE FOOT WITH A MINIMUM HEIGHT OF 3 INCHES. THE 3 PLANTS PER SQUARE FOOT SHALL BE OF THE VARIETY AND SPECIES FOUND IN THE DOUGLAS COUNTY-APPROVED MIX.
   2. NO BARE AREAS LARGER THAN 4 SQUARE FEET (TWO-FEET BY TWO-FEET OR EQUIVALENT).
   3. FREE OF ERODED AREAS.
   4. FREE FROM INFESTATION OF NOXIOUS WEEDS IN ACCORDANCE WITH SECTION 6.4 OF THE GESC MANUAL.
3. REQUIRED COVERAGE FOR TURF GRASS AREAS SHALL BE DEFINED AS FOLLOWS:
   1. AT LEAST 80% VEGETATIVE COVER OF GRASS SPECIES PLANTED.
   2. NO BARE AREAS LARGER THAN 4 SQUARE FEET (TWO-FEET BY TWO-FEET OR EQUIVALENT).
   3. FREE OF ERODED AREAS.
   4. FREE FROM INFESTATION OF NOXIOUS WEEDS IN ACCORDANCE WITH SECTION 6.4 OF THE GESC MANUAL.
4. RILL AND GULLY EROSION SHALL BE FILLED WITH TOPSOIL PRIOR TO RESEEDING. THE RESEEDING METHOD SHALL BE APPROVED BY THE COUNTY.

SM **SEEDING AND MULCHING** 18



ELEVATION
SCALE: 1" = 1'-0"



JOINTS - SECTION A
SCALE: N.T.S.

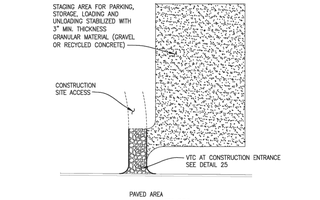
SILT FENCE INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
   - LOCATION AND LENGTH OF FENCE.
2. ANCHOR TRENCH SHALL BE EXCAVATED WITH TRENCHER, OR WITH SILT FENCE INSTALLATION MACHINE; NO ROAD GRADERS, BACKHOES, ETC. SHALL BE USED. TRENCH SHALL BE COMPACTED BY HAND, WITH "JUMPING JACK", OR BY WHEEL ROLLING. COMPACTION SHALL BE SUCH THAT SILT FENCE RESISTS BEING PULLED OUT OF ANCHOR TRENCH BY HAND.
3. SILT FENCE GEOTEXTILE SHALL MEET THE FOLLOWING REQUIREMENTS:
   - 6-TO 12-GALLONS PER MINUTE PER SQUARE FOOT FLOW CAPACITY.
   - 90 LB. TENSILE STRENGTH PER ASTM D4632.
   - UV DESIGN AT 500 HRS MIN. 70% STRENGTH RETAINED PER ASTM D4355.
4. SILT FENCE INDICATED ON INITIAL GESC PLAN SHALL BE INSTALLED PRIOR TO ANY LAND-DISTURBING ACTIVITIES.

SILT FENCE MAINTENANCE NOTES

1. THE RECOMMENDED INSPECTION FREQUENCY FOR SILT FENCE IS DAILY, DURING AND AFTER ANY STORM EVENT AND MAKE REPAIRS OR CLEAN OUT UPSTREAM SEDIMENT AS NECESSARY.
2. SEDIMENT ACCUMULATED UPSTREAM OF SILT FENCE SHALL BE REMOVED WHEN THE UPSTREAM SEDIMENT REACHES A DEPTH OF 6-INCHES.
3. SILT FENCE SHALL BE REMOVED WHEN THE UPSTREAM DISTURBED AREA IS STABILIZED AND GRASS COVER IS APPROVED BY THE COUNTY. IF ANY DISTURBED AREA EXISTS AFTER REMOVAL, IT SHALL BE SEEDED AND MULCHED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE COUNTY.

SF **SILT FENCE** 19



PLAN
SCALE: 1" = 40'-0"

STABILIZED STAGING AREA INSTALLATION NOTES

1. SEE PLAN VIEW FOR GENERAL LOCATION OF STAGING AREA. CONTRACTOR MAY MODIFY LOCATION AND SIZE OF STABILIZED STAGING AREA WITH COUNTY APPROVAL.
2. STABILIZED STAGING AREA SHALL BE LARGE ENOUGH TO FULLY CONTAIN PARKING, STORAGE, AND UNLOADING AND LOADING OPERATIONS.
3. IF REQUIRED BY THE COUNTY, SITE ACCESS ROADS SHALL BE STABILIZED IN THE SAME MANNER AS THE STAGING AREA.
4. STAGING AREA SHALL BE STABILIZED PRIOR TO ANY OTHER OPERATIONS ON THE SITE.
5. THE STABILIZED STAGING AREA SHALL CONSIST OF A MINIMUM OF 3" OF GRANULAR MATERIAL (GRAVEL OR RECYCLED CONCRETE).

STABILIZED STAGING AREA MAINTENANCE NOTES

1. THE RECOMMENDED INSPECTION FREQUENCY FOR THE STABILIZED STAGING AREA IS WEEKLY, DURING AND AFTER ANY STORM EVENT AND MAKE REPAIRS OR CLEAN OUT UPSTREAM SEDIMENT AS NECESSARY.
2. GESC MANAGER SHALL PROVIDE ADDITIONAL THICKNESS OF GRANULAR MATERIAL IF ANY RUTTING OCCURS OR UNDERLYING SUBGRADE BECOMES EXPOSED.
3. STABILIZED STAGING AREA SHALL BE ENLARGED IF NECESSARY TO CONTAIN PARKING, STORAGE, AND UNLOADING AND LOADING OPERATIONS.
4. ANY ACCUMULATED DIRT OR MUD SHALL BE REMOVED FROM THE SURFACE OF THE STABILIZED STAGING AREA.
5. THE STABILIZED STAGING AREA SHALL BE REMOVED AT THE END OF CONSTRUCTION. THE GRANULAR MATERIAL SHALL BE REMOVED OR, IF APPROVED BY THE COUNTY, USED ON SITE, AND THE AREA TOPSOILED, DRILL SEEDED AND CRIMP MULCHED OR OTHERWISE STABILIZED.

SSA **STABILIZED STAGING AREA** 20

ELEVATION
SCALE: 1/2" = 1'-0"

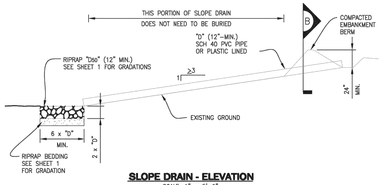
SURFACE ROUGHENING INSTALLATION NOTES

1. SURFACE ROUGHENING SHALL BE PROVIDED ON ALL FINISHED GRADES (SLOPES AND "FLAT" AREAS) WITHIN 2 DAYS OF COMPLETION OF FINISHED GRADE (FOR AREAS NOT RECEIVING TOPSOIL) OR WITHIN 2 DAYS OF TOPSOIL PLACEMENT.
2. AREAS WHERE BUILDING FOUNDATIONS, PAVEMENT, OR SOD IS TO BE PLACED WITHIN 7-DAYS OF FINISHED GRADING DO NOT NEED TO BE SURFACE ROUGHENED.
3. DISTURBED SURFACES SHALL BE ROUGHENED USING RIPPING OR TILLING EQUIPMENT ON THE CONTOUR OR TRACKING UP AND DOWN A SLOPE USING EQUIPMENT TREADS.

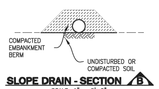
SURFACE ROUGHENING MAINTENANCE NOTES

1. THE RECOMMENDED INSPECTION FREQUENCY FOR SURFACE ROUGHENING IS WEEKLY, DURING AND AFTER ANY STORM EVENT, AND MAKE REPAIRS.
2. VEHICLES AND EQUIPMENT SHALL GENERALLY BE CONFINED TO ACCESS DRIVES AND SHALL NOT BE DRIVEN OVER AREAS THAT HAVE BEEN SURFACE ROUGHENED.
3. IN NON-TURF GRASS FINISHED AREAS, SEEDING AND MULCHING SHALL TAKE PLACE DIRECTLY OVER SURFACE ROUGHENED AREAS WITHOUT FIRST SMOOTHING OUT THE SURFACE.
4. IN AREAS NOT SEEDED AND MULCHED AFTER SURFACE ROUGHENING, SURFACES SHALL BE RE-ROUGHENED AS NECESSARY TO MAINTAIN GROOVE DEPTH AND SMOOTH OVER ANY RILL EROSION.

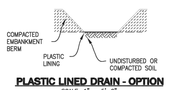
SR **SURFACE ROUGHENING** 21



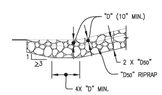
SLOPE DRAIN - ELEVATION
SCALE: 1" = 5'-0"



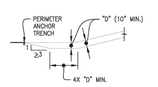
SLOPE DRAIN - SECTION B
SCALE: 1" = 5'-0"



PLASTIC LINED DRAIN - OPTION
SCALE: 1" = 5'-0"



TERMINATION OF RIPRAP LINED SLOPE DRAIN
SCALE: 1" = 5'-0"



TERMINATION OF PLASTIC LINED SLOPE DRAIN
SCALE: 1" = 5'-0"

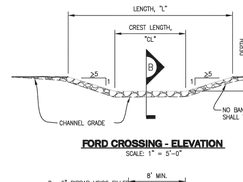
SLOPE DRAIN INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
   - LOCATION AND LENGTH OF SLOPE DRAIN.
   - PIPE DIAMETER, "D", AND RIPRAP SIZE, "Dso".
2. SLOPE DRAIN DIMENSIONS SHALL BE CONSIDERED MINIMUM DIMENSIONS; CONTRACTOR MAY ELECT TO INSTALL LARGER FACILITIES. ANY DAMAGE TO SLOPE OR SLOPE DRAIN DURING RUNOFF EVENTS SHALL BE THE CONTRACTOR'S RESPONSIBILITY.
3. SLOPE DRAINS INDICATED ON INITIAL GESC PLAN SHALL BE INSTALLED PRIOR TO ANY STRUCTURE LAND-DISTURBING ACTIVITIES.
4. FOR TEMPORARY SLOPE DRAINS, PIPE MAY BE INSTALLED ON TOP OF SLOPE; HOWEVER, 12" MIN. COVER AT TOP OF SLOPE SHALL BE PROVIDED.
5. A RIPRAP PAD SHALL BE PLACED AT THE OUTFALL OF THE SLOPE DRAIN.

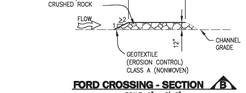
SLOPE DRAIN MAINTENANCE NOTES

1. THE RECOMMENDED INSPECTION FREQUENCY FOR SLOPE DRAINS IS WEEKLY, DURING AND AFTER ANY STORM EVENT AND MAKE REPAIRS AS NECESSARY.
2. TEMPORARY SLOPE DRAINS ARE TO REMAIN IN PLACE UNTIL NO LONGER NEEDED, BUT SHALL BE REMOVED PRIOR TO THE END OF CONSTRUCTION. WHEN SLOPE DRAINS ARE REMOVED, THE DISTURBED AREA SHALL BE DRILL SEEDED AND CRIMP MULCHED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE COUNTY.

TSD **TEMPORARY SLOPE DRAIN** 22



FORD CROSSING - ELEVATION
SCALE: 1" = 5'-0"



FORD CROSSING - SECTION B
SCALE: 1" = 5'-0"

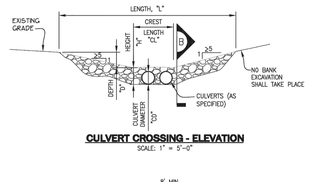
TEMPORARY STREAM CROSSING INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
   - LOCATIONS OF TEMPORARY STREAM CROSSING.
   - STREAM CROSSING TYPE (FORD OR CULVERT).
   - FOR FORD CROSSING: LENGTH, "L", CREST LENGTH, "CL", AND DEPTH, "D".
   - FOR CULVERT CROSSING : LENGTH, "L", CREST LENGTH, "CL", CROSSING HEIGHT, "H", DEPTH, "D", CULVERT DIAMETER, "CD", AND NUMBER, TYPE AND CLASS OR GAUGE OF CULVERTS.
2. TEMPORARY STREAM CROSSING DIMENSIONS, DSO, AND NUMBER OF CULVERTS INDICATED (FOR CULVERT CROSSING) SHALL BE CONSIDERED MINIMUM DIMENSIONS; ENGINEER MAY ELECT TO INSTALL LARGER FACILITES. ANY DAMAGE TO STREAM CROSSING OR EXISTING STREAM CHANNEL DURING BASEFLOW OR FLOOD EVENTS SHALL BE THE CONTRACTOR'S RESPONSIBILITY.
3. SEE ROCK AND RIPRAP GRADATIONS FOR RIPRAP AND 1-1/2" CRUSHED ROCK GRADATIONS.
4. FOR A TEMPORARY STREAM CROSSING THAT WILL CARRY LOADS, THE TEMPORARY STREAM CROSSING MUST BE DESIGNED BY THE DESIGN ENGINEER.

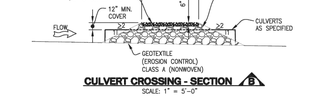
TEMPORARY STREAM CROSSING MAINTENANCE NOTES

1. THE RECOMMENDED INSPECTION FREQUENCY FOR TEMPORARY STREAM CROSSINGS IS WEEKLY, DURING AND AFTER ANY STORM EVENT AND MAKE REPAIRS OR CLEAN OUT UPSTREAM SEDIMENT AS NECESSARY.
2. SEDIMENT ACCUMULATED UPSTREAM OF TEMPORARY STREAM CROSSINGS SHALL BE REMOVED WHEN THE SEDIMENT DEPTH UPSTREAM OF CROSSING IS WITHIN 6-INCHES OF THE CREST (FORD CROSSING) OR GREATER THAN AN AVERAGE DEPTH OF 12-INCHES (CULVERT CROSSING).
3. TEMPORARY STREAM CROSSINGS ARE TO REMAIN IN PLACE UNTIL NO LONGER NEEDED, BUT SHALL BE REMOVED PRIOR TO THE END OF CONSTRUCTION.
4. WHEN TEMPORARY STREAM CROSSINGS ARE REMOVED, THE DISTURBED AREA SHALL BE DRILL SEEDED AND CRIMP MULCHED AND COVERED WITH EROSION CONTROL BLANKET OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE COUNTY.

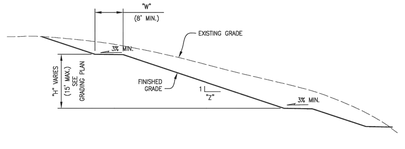
TSC **TEMPORARY STREAM CROSSING** 23



CULVERT CROSSING - ELEVATION
SCALE: 1" = 5'-0"



CULVERT CROSSING - SECTION B
SCALE: 1" = 5'-0"



ELEVATION
SCALE: 1/2" = 1'-0"

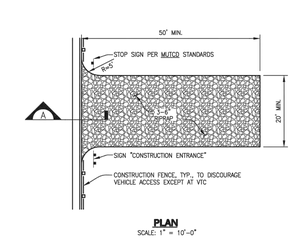
TERRACING INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
   - WIDTH, "W", AND SLOPE, "Z".
2. TERRACING IS NOT REQUIRED FOR SLOPES OF 4 TO 1 OR FLATTER.
3. EARTH (VEGETATED) SLOPES STEEPER THAN 3 TO 1 ARE NOT ALLOWED ON THE SITE.

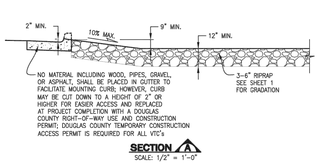
TERRACING MAINTENANCE NOTES

1. THE RECOMMENDED INSPECTION FREQUENCY FOR TERRACING IS WEEKLY, DURING AND AFTER ANY STORM EVENT AND MAKE REPAIRS OR CLEAN OUT UPSTREAM SEDIMENT AS NECESSARY.
2. ANY RILL EROSION OCCURRING ON SLOPES SHALL BE REPAIRED AND RESEEDED AND MULCHED IN ACCORDANCE WITH DETAIL 18.

TER **TERRACING** 24



PLAN
SCALE: 1" = 10'-0"



SECTION A
SCALE: 1/2" = 1'-0"

VEHICLE TRACKING CONTROL INSTALLATION NOTES

1. VEHICLE TRACKING CONTROL PADS SHALL BE INSTALLED AT EVERY ACCESS POINT TO SITE.
2. VEHICLE TRACKING CONTROL PADS SHALL CONSIST OF HARD, DENSE, DURABLE STONE, ANGULAR IN SHAPE AND RESISTANT TO WEATHERING. ROUNDED STONE OR BOULDERS WILL NOT BE ACCEPTABLE. THE STONES SHALL BE 3" WITH A MAXIMUM SIZE OF 4". THE STONE SHALL HAVE A SPECIFIC GRAVITY OF AT LEAST 2.6. CONTROL OF GRADATION WILL BE BY VISUAL INSPECTIONS.
3. ANY CRACKED OR DAMAGED CURB AND GUTTER AND SIDEWALK SHALL BE REPLACED BY PERMITTEE.
4. A DOUGLAS COUNTY TEMPORARY CONSTRUCTION ACCESS PERMIT IS REQUIRED FOR EACH POINT ONTO DOUGLAS COUNTY R.O.W.
5. A STOP SIGN INSTALLED IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), AS AMENDED, SHALL BE INSTALLED FOR EXITING TRAFFIC AT THE VTC.

VEHICLE TRACKING CONTROL MAINTENANCE NOTES

1. THE RECOMMENDED INSPECTION FREQUENCY FOR VEHICLE TRACKING CONTROL IS DAILY. GRAVEL SURFACE SHALL BE CLEAN AND LOOSE ENOUGH TO RUT SLIGHTLY UNDER WHEEL LOADS AND CAUSE LOOSE GRAVEL TO DISLODGE MUD FROM TIRES. WHEN GRAVEL BECOMES COMPACTED OR FILLED WITH SEDIMENT SO THAT THE EFFECTIVENESS OF THE PAD IS DIMINISHED, CONTRACTOR SHALL RIP, TURN OVER, OR OTHERWISE LOOSEN GRAVEL, PLACE ADDITIONAL NEW GRAVEL, OR REPLACE WITH NEW GRAVEL AS NECESSARY TO RESTORE EFFECTIVENESS.
2. VEHICLE TRACKING CONTROL SHALL BE REMOVED AT THE END OF CONSTRUCTION. THE GRAVEL MATERIAL REMOVED OR, IF APPROVED BY THE COUNTY, USED ON SIT

DOUGLAS COUNTY
COLORADO

Department of Public Works Engineering
Engineering Services

www.douglas.co.us

July 30, 2024

Mr. Evan Fischgrund, P.E.
Regional Engineer, Southwest Region
Advanced Drainage Systems, Inc.
6800 Smith Road
Denver, CO 80207

Subject: Extension of Conditional Approval for Trial Period of Advanced Drainage Systems, Inc. HP Storm Polypropylene Pipe for Storm Drainage Applications in Unincorporated Douglas County

Dear Mr. Fischgrund:

Douglas County has agreed to administratively grant an extension to the Trial Period for ADS HP Storm Pipe applications within Douglas County. The Trial period will now run to **May 18, 2026,** instead of May 18, 2024.

Douglas County will allow the limited use of polypropylene pipe for storm sewer applications within the public Right-of-Way as an alternative to reinforced concrete pipe (RCP) for a trial period of two years. Douglas County currently requires that RCP be used within public easements and right-of-way, as outlined in Section 9.2.1 of the Douglas County Storm Drainage Design and Technical Criteria Manual. The following conditions and requirements will apply to the trial period:

- The use of polypropylene pipe for storm sewer applications will be limited to local and collector roadway classifications.
- Polypropylene pipe ranging in diameter form 18-inch to 60-inch will be allowed.
- Conformance with the following standards and/or specifications:
  - ASTM F2881 – Standard Specification for 12-to-60-inch (300 t0 1500 mm) Polypropylene (PP) Dual Wall Pipe and Fittings for Non-Pressure Storm Sewer Applications.
  - ASTM D2321 – Underground Installation for Thermoplastic Pipe for Sewers and Other Gravity-Flow Applications.
  - ASTM F477 – Elastomeric Seals (Gaskets) for Joining Plastic Pipe.

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100 Third Street, Castle Rock, Colorado 80104 • 303.660.7490

- ASTM D3212 – Standard Specification for Joints for Drain and Sewer Plastic Pipes Using Flexible Elastomeric Seals.
- Colorado Department of Transportation (CDOT) Standard Plan M-603-4, Sheet 2

- Minimum and maximum pipe cover shall be based on CDOT M-603-4, Sheet 2.

- The minimum cover specified on CDOT M-603-4, Sheet 2, is based on the pipe strength and required installation and bedding conditions. The required minimum depth will likely be determined during the construction drawing review process and based on hydraulics and keeping the pipe a minimum depth below the pavement section. The pavement section includes surface material, base course, depth of moisture treatment and compaction, or excavation and replacement of subgrade material to mitigate for swelling soils.

- Transition to RCP at an upstream manhole prior to surface outfalls into detention facilities, open channels, swales, etc.

- Water-stop gasket/band at all inlets, manholes, or structure connections.

- Douglas County will require that deflection testing by use of a mandrel be completed by the contractor or an independent agency, approved by Douglas County, and paid for by the contractor or owner/developer. Deflection testing shall be done prior to paving and not less than thirty days after installation. The maximum allowable deflection shall not exceed 5% during the testing. Pipes 36-inch in diameter and larger may be entered and deflection levels measured directly. This allows for specific equipment such as Go/No Go sticks, cut to 95% of the inside diameter. If using a mandrel, it shall be a nine (or greater odd number) arm mandrel and shall be sized and inspected by the Douglas County Engineering Inspector prior to testing.

- Pipe through which the mandrel does not pass will be considered unacceptable, shall be re-laid, and then retested consistent with the testing requirements.

- Douglas County will require video inspection be completed by the contractor or an independent agency, approved by Douglas County, and paid for by the contractor or owner/developer. Video inspection will be required prior to initial and final warranty acceptance. Additional mandrel testing may be required if areas of concern are identified during the video inspection.

- Douglas County will require the contractor to coordinate with ADS representatives regarding on-site preconstruction consultation and site visits

during construction. When Douglas County feels comfortable with contractor capability, proficiency, and/or Douglas County Inspections staff familiarity with installation practices, this requirement can be re-evaluated.

- Douglas County will allow the use of joint deflections up to 3 degrees of deflection within proposed storm lines in lieu of manholes on curved streets. The designer will need to coordinate with ADS pipe on the design of the joint deflections to replace manholes.

To our knowledge, the only manufacturer of polypropylene pipe is Advanced Drainage Systems, Inc. If another manufacturer can provide polypropylene pipe that meets the above referenced specifications, conditions, and requirements, that product may be allowed, as well.

Upon expiration of the trial period, Douglas County will evaluate the permanent acceptance of polypropylene pipe for storm sewer pipe applications. That evaluation will be based on, but not limited to, performance, proficiency of contractors, input of County Inspections staff, and any other relative considerations.

We look forward to beginning this trial period and working cooperatively with ADS, Inc., contractors, engineers, and developers to ensure successful installations and long-term performance.

Sincerely,

Janet R. Herman, P.E.
Public Works Director

Cc: Matt Williams, P.E., CFM, Assistant Director of Public Works Engineering
Dan Roberts, P.E., Assistant Director of Public Works Operations
Pete George, P.E., Engineering Inspections Supervisor
Art Griffith, P.E., Transportation Capital Improvements Project Manager
Sean Owens, P.E., Special Projects Manager

RAMBLEWOOD FILING NO. 1

STREET & STORM SEWER CONSTRUCTION PLANS

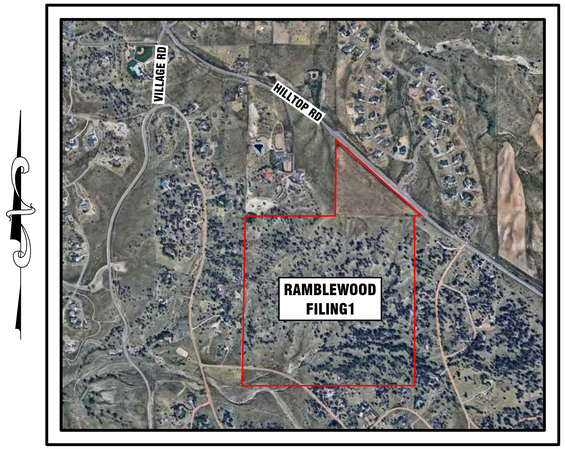
LOCATED IN SECTION 6, TOWNSHIP 7 SOUTH, RANGE 65 WEST OF THE SIXTH PRINCIPAL MERIDIAN, COUNTY OF DOUGLAS, STATE OF COLORADO

LEGEND

- Property Line
- Right of Way Line
- Centerline
- Easement Line
- Lot Line
- Site Line
- Sight Distance Line
- Top of Embankment
- 100-YR W.S.E.
- Phase Line
- Retaining Wall
- Prop. Asphalt Pavement
- Prop. Asphalt Mill & Overlay
- Prop. Concrete Pavement
- Prop. Concrete Walk
- Prop. Crushed Fines
- Ex. Concrete Walk
- Ex. Asphalt Pavement
- Sight Distance Area
- FEMA Floodplain Limits
- Sanitary Sewer Line
- Water Line
- Storm Sewer Line
- SS — Ex. Sanitary Line
- W — W — Ex. Water Line
- STM — Ex. Storm Sewer Line
- IRR — Ex. Irrigation Pipe
- FO — Ex. Fiber Optic Line
- G — Ex. Gas Line
- T — T — Ex. Telephone Line
- OHUT — Ex. Overhead Electric
- X — Ex. Fence
- SS — SS — Sanitary Service Line
- WS — WS — Water Service Line
- Sanitary Sewer Manhole
- Fire Hydrant
- Thrust Block
- Water Valve
- Water Meter
- Storm Manhole
- Ex. Sanitary Sewer Manhole
- Ex. Water Valve
- Ex. Fire Hydrant
- Ex. Storm Manhole
- Ex. Street Light
- Ex. Sign
- Prop. Street Light
- Prop. Sign
- 5280 — Proposed Major Contour
- Proposed Minor Contour
- 5280 — Existing Major Contour
- Existing Minor Contour
- DBO Major Contour
- DBO Minor Contour

GENERAL ABBREVIATIONS

A.E.	ACCESS EASEMENT
BKL	BIKE LANE
BL CONST	BASELINE OF CONSTRUCTION
BS	BOTTOM ELEVATION OF RISE
B.S.I.	BY SEPARATE INSTRUMENT
CDS	CUL-DE-SAC
CE	CURB EXTENSION
CL	CENTERLINE
CT	CURB TRANSITION
CWN	CROWN
DBO	DESIGN BY OTHERS
DC	MEDIAN CURB & GUTTER
D.E.	DRAINAGE EASEMENT
DIST.	DISTANCE
D.U.E.	DRAINAGE & UTILITY EASEMENT
EOA	EDGE OF ASPHALT
EOP	EDGE OF PAVEMENT
E.A.E.	EMERGENCY ACCESS EASEMENT
E.ATT.E.	EXISTING AT&T EASEMENT
E.P.E.	EXISTING PIPELINE EASEMENT
ESMT.	EASEMENT
FES	FLARED END SECTION
FGB	FINISHED GROUND AT BOTTOM WALL ELEVATION
FGT	FINISHED GROUND AT TOP WALL ELEVATION
FH	FIRE HYDRANT
FL	FLOWLINE
FV	FIELD VERIFY
G	FINISHED GROUND
G.E.	GAS EASEMENT
G.O.E.	GAS & OIL EASEMENT
GV	GATE VALVE
HP	HIGH POINT
I.E.	IRRIGATION EASEMENT
LL	LOT LINE
LP	LOW POINT
LS	LANDSCAPING
LTWD	LITTLE THOMPSON WATER DISTRICT
MC	MOUNTABLE CURB & GUTTER
MH	MANHOLE
MSE	MECHANICALLY STABILIZED EARTH
P	PAVEMENT
P&P	PLAN & PROFILE
P.A.E.	PUBLIC ACCESS EASEMENT
PC	POINT OF CURVATURE
PCC	POINT OF COMPOUND CURVATURE
PCR	POINT OF CURB RETURN
PERF.	PERFORATED
PGL	PROFILE GRADE LINE
PI	POINT OF INFLECTION
PISWD	PINERY WATER & WASTEWATER DISTRICT
PRC	POINT OF REVERSE CURVATURE
PWSD	PARKER WATER & SANITATION DISTRICT
PT	POINT OF TANGENCY
RELOC	TO BE RELOCATED
R.O.W.	RIGHT OF WAY
RN	RECORDING NUMBER
S.E.	SANITARY EASEMENT
SD.E.	SIGHT DISTANCE EASEMENT
SEC	SECTION LINE
SL	SANITARY LINE
SS	SANITARY SERVICE
SW	SIDEWALK
SW.E.	SIDEWALK EASEMENT
TB	THRUST BLOCK
TC	TOP OF CURB
TEMP.	TEMPORARY
TRANS.	TRANSITION
TR.E.	TRANSPORTATION EASEMENT
TS	TOP ELEVATION OF RISER
UD	UNDERDRAIN
U.E.	UTILITY EASEMENT
U.G.E	UTILITY & GAS EASEMENT
VC	VERTICAL CURB & GUTTER
W.E.	WATER EASEMENT
WL	WATER LINE
WS	WATER SERVICE
W.S.W.	WATER SURFACE ELEVATION
WV	WATER VALVE



VICINITY MAP
1" = 1000'

...d plan set. These Sheets are ava...
...County web site at:
...s.co.us/dra...

Sheet List Table

Sheet Number	Sheet Title
1	Cover Sheet
2	Notes Sheet
3	Overall Plan
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6	Master Utility Plan
7	Master Utility Plan
8	Master Utility Plan
9	Master Utility Plan
10	Utility Crossings Plan
11	Overlot Grading Plan
12	Overlot Grading Plan
13	Overlot Grading Plan
14	Overlot Grading Plan
15	Signing and Striping Plan
16	Signing and Striping Plan - Hilltop Road
17	P&P - Street & Storm - Halfpipe Place
18	P&P - Street & Storm - Halfpipe Place
19	P&P - Street & Storm - Halfpipe Place
20	P&P - Street & Storm - Halfpipe Place
21	P&P - Street & Storm - Halfpipe Place
22	P&P - Street & Storm - Halfpipe Place
23	P&P - Street & Storm - Freerider Point
24	P&P - Street & Storm - Freerider Point
25	P&P - Street & Storm - Freerider Way
26	P&P - Street & Storm - Freerider Way
27	P&P - Street & Strom - Derailer Street
28	P&P - Street & Storm - Derailer Street
29	P&P - Street & Storm - Railbender Street
30	P&P - Street & Storm - Railbender Street
31	P&P - Street & Storm - Railbender Street
32	P&P - Street & Storm - Railbender Street
33	P&P - Street & Storm - Railbender Street
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35	P&P - Street & Storm - Stormline 5
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37	P&P - Street & Storm - Stormlines 7 & 8 & 9
38	Private Detention Pond A
39	Private Detention Pond A Forebay
40	Private Detention Pond A Outlet
41	Private Detention Pond B
42	Private Detention Pond B Forebay
43	Private Detention Pond B Outlet
44	Detail Sheet
45	Detail Sheet
46	Detail Sheet
47	Detail Sheet
48	Detail Sheet
49	Detail Sheet

DEVELOPER
MILLER UNITED
6900 E. BELLVIEW AVE
GREENWOOD VILLAGE, CO 80111
PHONE: (303) 799-6300
CONTACT: DAN SHELDON

CIVIL ENGINEER
LJA ENGINEERING, INC.
1765 WEST 121ST AVE, SUITE 300
WESTMINSTER, CO 80234
PHONE: (303) 421-4224
CONTACT: KEVIN LOVELACE

SURVEYOR
LJA SURVEYING, INC
1765 WEST 121ST AVE, SUITE 300
WESTMINSTER, CO 80234
PHONE: (303) 358-7002
CONTACT: DEREK BROWN

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NORRIS DESIGN
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DENVER, CO 80204
PHONE: (303) 892-1166
CONTACT: SARAH TENGEN

GEOTECHNICAL ENGINEER
A.G. WASSENAAR
3211 SOUTH ZUNI ST.
ENGLEWOOD, CO 80110
PHONE: (303) 759-8100
CONTACT: ASHLEY MCDANIELS, P.E.

AGENCY LIST

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100 THIRD STREET
CASTLE ROCK, CO 80104
PHONE: (303) 660-7460
CONTACT: CHUCK SMITH

PARKER WATER & SANITATION DISTRICT
19801 E. MAIN STREET
PARKER, CO 80138
PHONE: (313) 841-4627
CONTACT: JAROD BAYLIE

CORE ELECTRIC COOPERATIVE
5496 US-85
SEDALIA, CO 80135
PHONE: (800) 332-9540

Remove CDOT Curb Ra... details and replace with D... County Curb Ramp Deta...

PROJECT BENCHMARK:

NGS BENCHMARK Z-336
ELEVATION = 6612.35' (NAVD 88)

SITE BENCHMARK:

CENTER SECTION CORNER OF SECTION 6-T7S-R65W
ELEVATION = 6398.76 (NAVD 88)

ELEVATION OF GROUND TOPOGRAPHIC SURVEY CONTOUR INTERVALS ARE 1 FOOT

BASIS OF BEARINGS:

THE NORTH LINE OF THE NORTHWEST QUARTER OF SECTION 6, TOWNSHIP 7 SOUTH, RANGE 65 WEST OF THE SIXTH PRINCIPAL MERIDIAN, COUNTY OF DOUGLAS, STATE OF COLORADO. ASSUMED TO BEAR NORTH 89°29'26" WEST BASED ON NAD83 (2011) COLORADO STATE PLANE CENTRAL ZONE (502) COORDINATES, BEING MONUMENTED AT THE WEST BY 3 INCH ALUMINUM CAP STAMPED "1988 PLS 23053" AND AT THE EAST END BY A 3.25" ALUMINUM CAP STAMPED "1994 PLS 112405."

ENGINEERING CERTIFICATION NOTE:

THESE CONSTRUCTION PLANS FOR RAMBLEWOOD FILING NO. 1 WERE PREPARED BY ME (OR UNDER MY DIRECT SUPERVISION) IN ACCORDANCE WITH THE REQUIREMENTS OF DOUGLAS COUNTY'S ROADWAY DESIGN AND CONSTRUCTION STANDARDS, STORM DRAINAGE DESIGN AND TECHNICAL CRITERIA, AND THE GRADING, EROSION AND SEDIMENT CONTROL MANUAL.

DYLAN HARDY, PE
LJA ENGINEERING

ASSISTANT DIRECTOR OF DEVELOPMENT REVIEW

DATE

THESE CONSTRUCTION DRAWINGS HAVE BEEN REVIEWED BY DOUGLAS COUNTY FOR STREET AND DRAINAGE IMPROVEMENTS ONLY

ENGINEERING DIVISION ACCEPTANCE BLOCK

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Revision Type:

No.	Rev. Date:
1	
2	
3	
4	
5	
6	

Designed: TBS
Prepared: CGM
Approved: DKH
Sheet: 1 of 49
Date: February 20, 2026
Job No.: 1084-0006
Scale Horiz: N/A
Scale Vert: N/A

Proj. Name: Ramblewood Filing No. 1
Location: Douglas County, Colorado
Plan Set: Street & Storm Sewer Construction Plans
Sheet Name: Cover Sheet

NOT FOR CONSTRUCTION

Know what's below. Call before you dig.

No. 1

I:_JOB FOLDERS\1084\1084-0006\CIVIL\PROD\CD - STR-STM\M-COVER PRINTED ON: 2/20/2026 3:56 PM

Add note that '
SIGNS SHALL
DOUGLAS CO

Change to W14-1

There needs to be 2 northeast bound approach lanes here (dedicated left turn lane and combined through/right turn lane.

Locate STOP signs closure to the apex of the radius (typ)

Change to

Make the highlight
text a separate no

Remove the W14-2 and add W14-1

"sign symbol and call-out speed limit
ations"

DOUGLAS COUNTY SIGNAGE AND STRIPING:

1. ALL SIGNAGE AND STRIPING FOR PUBLIC AND/OR PRIVATE ROADWAYS OR BICYCLE TRAILS OPEN TO PUBLIC TRAVEL SHALL CONFORM TO THE MOST RECENT VERSION OF THE MANUAL ON UNIFORM TRAFFFIC CONTROL DEVICES (MUTCD), THE COLORADO SUPPLEMENTAL MUTCD, AND THE DOUGLAS COUNTY SIGNAGE AND STRIPING SUPPLEMENTALS. STREET NAMES SHOWN ARE FOR INFORMATION ONLY. FOR ACCEPTED STREET NAMES, REFER TO THE RECORDED FINAL PLAT FOR THIS SUBDIVISION.
2. STRIPING MATERIAL WILL BE:
   - 2.1. LONG LINE: "WATERBORNE PAINT" PER CDOT SPECIFICATIONS WITH GLASS BEADS PER DOUGLAS COUNTY SPECIFICATIONS.
   - 2.2. WORD AND SYMBOL LEGEND: THERMOPLASTIC
3. ALL PAVEMENT MARKINGS ARE SUBJECT TO MATERIAL CHANGES DUE TO SEASON AND\OR WEATHER. TEMPORARY MARKING MATERIALS MAY BE REQUIRED. SPECIFIED FINAL PAVEMENT MARKING MATERIALS SHALL BE INSTALLED WHEN SEASON \ WEATHER ALLOW.
4. ALL SIGN POSTS INSTALLED IN HARDSCAPE RAISED MEDIANS SHALL BE INSTALLED USING THE KLEEN BREAK MODEL 425 SIGN POST COUPLER (PART #XKB42520-G) FROM XCESSORIES SQUARED DEVELOPMENT AND MANUFACTURING INC. REFER TO DOUGLAS COUNTY STANDARD DRAWING SS-9.
5. PRIOR TO PLACEMENT OF ANY HARDSCAPE MATERIAL, A 4" DIAMETER PVC SLEEVE WITH A TEMPORARY COVER SHALL BE INSTALLED AT ALL SIGN POST AND DELINEATOR LOCATIONS.

SEE SHEET 16 FOR HILLTOP RD. SIGNING & STRIPING PLAN

SIGNING & STRIPING LEGEND

STREET NAME / STOP — R1-1, 30" X 30" UNLESS OTHERWISE NOTED

R4-7, 24" X 30"

R2-1, 24" X 30"

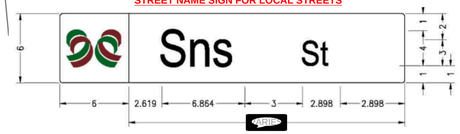
MAINTENANCE VEHICLES ONLY

W11-2, 30" X 30"

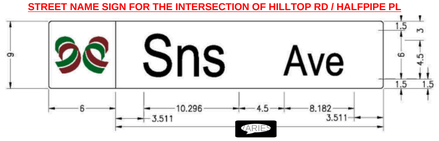
DEAD END / NO OUTLET

DEAD END → W14-1a

STREET NAME SIGN FOR LOCAL STREETS



STREET NAME SIGN FOR THE INTERSECTION OF HILLTOP RD / HALFPIPE PL



JAMES R PITTS & JULIA P PITTS RN 0125234

JUDITH NATHALIE GRIMES TRUST RN 0125234

ELIZABETH ELLEN NOREEN RN 0125234

ERIC J SELLYEI & CHERYL A SELLYEI JOINT REVOCABLE TRUST RN 0125234

CYNTHIA L ZIMPFER RN 0125234

HIDDEN VILLAGE FILING NO. 1 RN 125234

CATHY M WILLIS RN 0125234

DUNN FAMILY TRUST RN 0125234

KATHERINE DENT RN 0125870

HIDDEN VILLAGE PROPERTY OWNERS ASSOCIATION RN 0125870

BRADLEY H WAKEH RN 0131583

RODGER D READ RN 0131583

JAMES EDWARD BONNER & ANNETTE BONNER RN 0127014

JOSEPH E LIEBHERR RN 0127014

BURKARD LIVING TRUST RN 2005032337

BRIAN S WILBUR RN 2005032337

POND A

POND B

TRACT A

TRACT B

TRACT C

TRACT D

TRACT E

TRACT G

TRACT H

TRACT I

FREERIDER LN.

MERRYVALE TR.

DERAILER ST.

HALFPIPE PL.

FREERIDER WY.

RAILBENDER ST.

HILLTOP RD.

N VILLAGE RD.

ALPINE DR.

KINNEY CREEK

KINNEY CREEK TRIBUTARY F

69

70

SCALE
1 inch = 200 ft.

PROJECT BENCHMARK:

NGS BENCHMARK Z-336
ELEVATION = 6612.35' (NAVD 88)

SITE BENCHMARK:
CENTER SECTION CORNER OF SECTION 6-T7S-R65W
ELEVATION = 6398.76 (NAVD 88)

ELEVATION OF GROUND TOPOGRAPHIC SURVEY CONTOUR INTERVALS ARE 1 FOOT

ASSISTANT DIRECTOR OF DEVELOPMENT REVIEW

DATE

PUBLIC WORKS ENGINEERING DIRECTOR

DATE

THESE CONSTRUCTION DRAWINGS HAVE BEEN REVIEWED BY DOUGLAS COUNTY FOR SIGNAGE AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

NOT FOR CONSTRUCTION

Know what's below. Call before you dig.

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Westminster, CO 80234
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Revision Type:

No.	Rev. Date:
1	
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4	
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6	

Designed: TBS
Prepared: DL
Approved: DKH

Job No.: 1084-0006
Scale Horiz: 1" = 200'
Scale Vert: N/A

Sheet: 15 of 49
Date: February 20, 2026

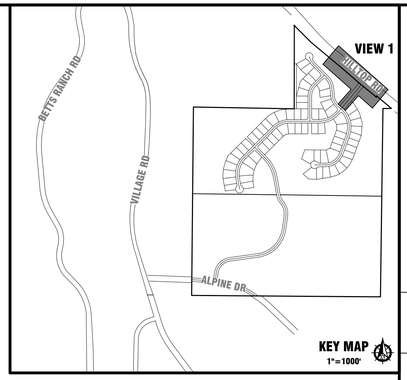
Proj. Name: Ramblewood Filing No. 1
Location: Douglas County, Colorado
Plan Set: Street & Storm Sewer Construction Plans
Sheet Name: Signing and Striping Plan

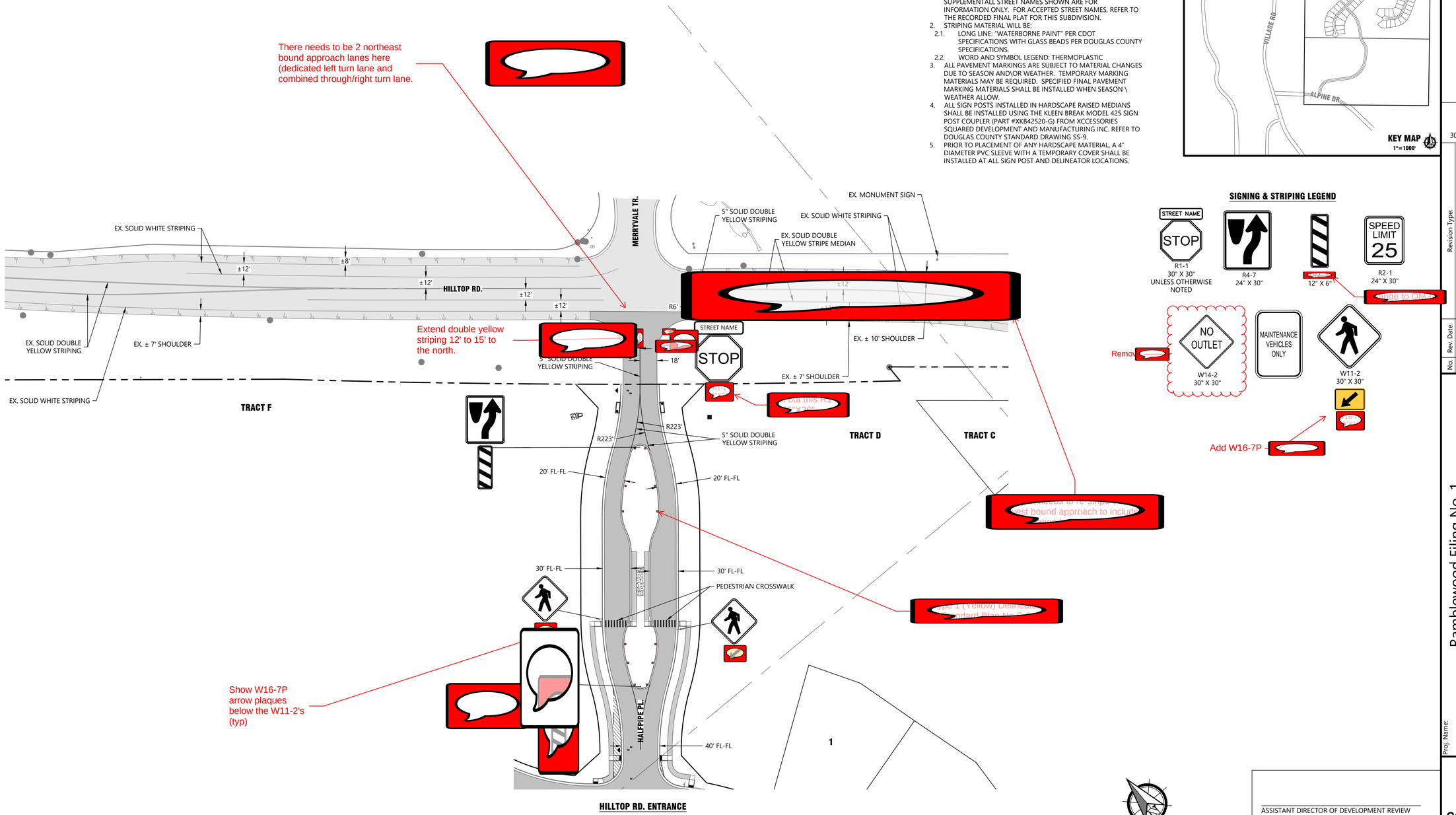
No. 15

I:\JOB FOLDERS\1084\1084-0006\CIVIL\PROD\CD - STR-STM\M-SIGN-STRIPE PRINTED ON: 2/20/2026 4:01 PM

DOUGLAS COUNTY SIGNAGE AND STRIPING:

1. ALL SIGNAGE AND STRIPING FOR PUBLIC AND/OR PRIVATE ROADWAYS, WALKWAYS OR BICYCLE TRAILS OPEN TO PUBLIC TRAVEL SHALL CONFORM TO THE MOST RECENT VERSION OF THE FEDERAL MANUAL ON UNIFORM TRAFFFIC CONTROL DEVICES (MUTCD), THE COLORADO SUPPLEMENTAL MUTCD, AND THE DOUGLAS COUNTY SIGNAGE AND STRIPING SUPPLEMENTALL STREET NAMES SHOWN ARE FOR INFORMATION ONLY. FOR ACCEPTED STREET NAMES, REFER TO THE RECORDED FINAL PLAT FOR THIS SUBDIVISION.
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3. ALL PAVEMENT MARKINGS ARE SUBJECT TO MATERIAL CHANGES DUE TO SEASON AND\OR WEATHER. TEMPORARY MARKING MATERIALS MAY BE REQUIRED. SPECIFIED FINAL PAVEMENT MARKING MATERIALS SHALL BE INSTALLED WHEN SEASON \ WEATHER ALLOW.
4. ALL SIGN POSTS INSTALLED IN HARDSCAPE RAISED MEDIANS SHALL BE INSTALLED USING THE KLEEN BREAK MODEL 425 SIGN POST COUPLER (PART #XKB42520-G) FROM XCCESSORIES SQUARED DEVELOPMENT AND MANUFACTURING INC. REFER TO DOUGLAS COUNTY STANDARD DRAWING SS-9.
5. PRIOR TO PLACEMENT OF ANY HARDSCAPE MATERIAL, A 4" DIAMETER PVC SLEEVE WITH A TEMPORARY COVER SHALL BE INSTALLED AT ALL SIGN POST AND DELINEATOR LOCATIONS.





SIGNING & STRIPING LEGEND

50 0 25 50

SCALE
1 inch = 50 ft.

PROJECT BENCHMARK:

NGS BENCHMARK Z-336
ELEVATION = 6612.35' (NAVD 88)

SITE BENCHMARK:
CENTER SECTION CORNER OF SECTION 6-T7S-R65W
ELEVATION = 6398.76 (NAVD 88)

ELEVATION OF GROUND TOPOGRAPHIC SURVEY CONTOUR INTERVALS ARE 1 FOOT

ASSISTANT DIRECTOR OF DEVELOPMENT REVIEW

DATE

PUBLIC WORKS ENGINEERING DIRECTOR

DATE

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Revision Type:

No.	Rev. Date:
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Job No.: 1084-0006 | Sheet: 16 of 49
Scale Horiz: 1" = 50' | Date: February 20, 2026
Scale Vert: N/A

Designed: TBS
Prepared: DL
Approved: DKH

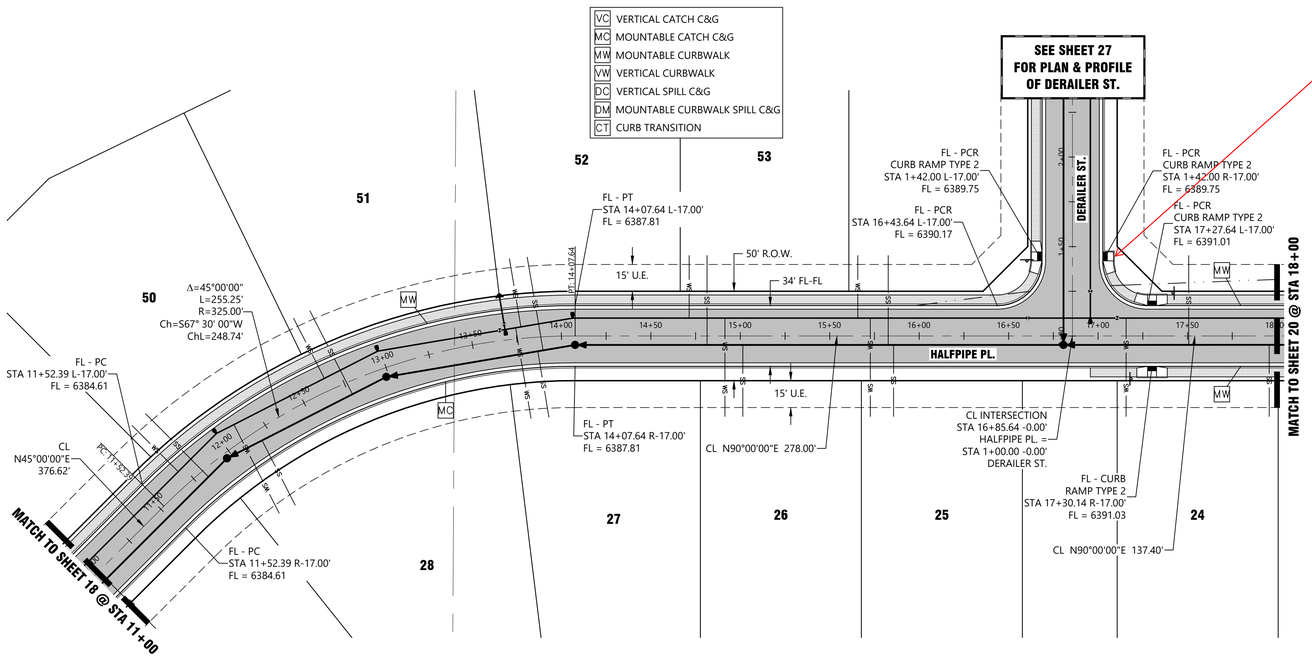
Proj. Name: Ramblewood Filing No. 1
Location: Douglas County, Colorado
Plan Set: Street & Storm Sewer Construction Plans
Sheet Name: Signing and Striping Plan - Hilltop Road

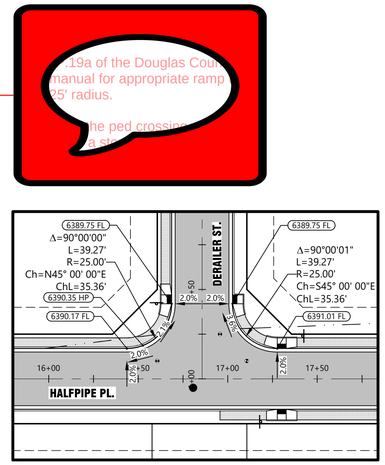
NOT FOR CONSTRUCTION

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

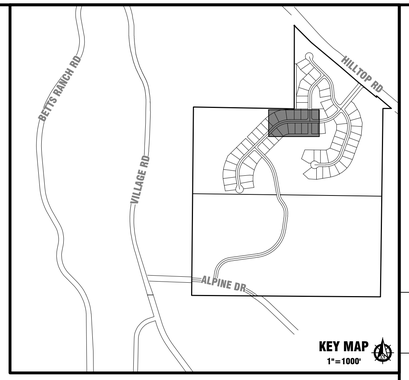
No. 16

I:\JOB FOLDERS\1084\1084-0006\CIVIL\PROD\CD - STR-STM\M-SIGN-STRIPE PRINTED ON: 2/20/2026 4:02 PM



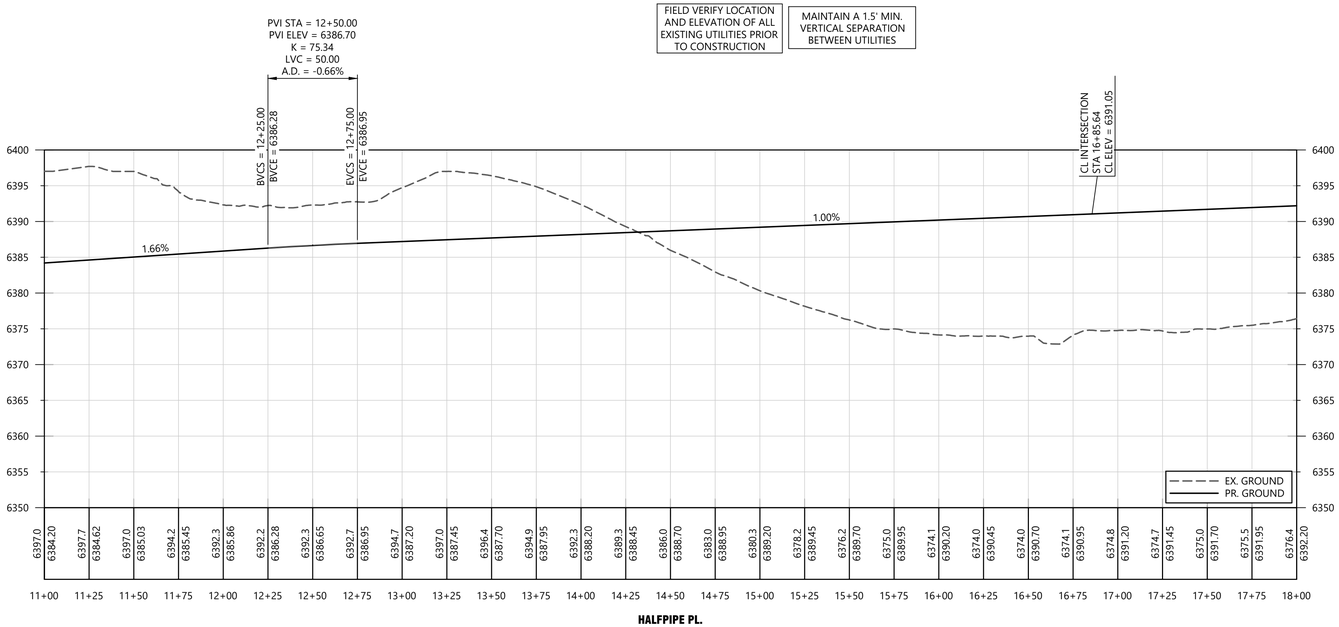


CURB RETURN
SCALE: 1" =40'



NOTES:

1. REFER TO RAMBLEWOOD FILING NO. 1, STREET & STORM SEWER CONSTRUCTION PLANS FOR STREET AND STORM SEWER DESIGN INFORMATION.
2. SEE SHEET 2 FOR TYPICAL STREET SECTIONS.
3. SEE SHEET 1 FOR LEGEND AND GENERAL ABBREVIATIONS.
4. REFER TO RAMBLEWOOD FILING NO. 1, PARKER WATER & SANITATION CONSTRUCTION PLANS FOR WATER & SANITARY SEWER DESIGN INFORMATION.
5. SEE SHEET 10 FOR UTILITY CROSSING INFORMATION.
6. CONTRACTOR SHALL ROTATE ALL SANITARY SEWER MANHOLES TO PROVIDE 1' MINIMUM CLEARANCE BETWEEN MANHOLE LID MAINS AND LIP OF GUTTER OR EDGE OF CURB.
7. MIN. DISTANCE BETWEEN WATER AND LIP OF GUTTER SHALL BE 5' AND MIN. DISTANCE BETWEEN CENTER OF SANITARY MH AND LIP OF GUTTER 1'.
8. ALL OFF-STREET SANITARY SEWER MANHOLES SHALL HAVE SEALED & LOCKING LIDS.
9. SANITARY MANHOLES 20' OR GREATER SHALL HAVE INTERMEDIATE PLATFORMS PER PWSD DETAIL S3.6



FIELD VERIFY LOCATION AND ELEVATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION

MAINTAIN A 1.5' MIN. VERTICAL SEPARATION BETWEEN UTILITIES

01 UTILITY CROSSING SEE SHEET 10 FOR INFO

PROJECT BENCHMARK:

NGS BENCHMARK Z-336
ELEVATION = 6612.35' (NAVD 88)

SITE BENCHMARK:
CENTER SECTION CORNER OF SECTION 6-T7S-R65W
ELEVATION = 6398.76 (NAVD 88)

ELEVATION OF GROUND TOPOGRAPHIC SURVEY CONTOUR INTERVALS ARE 1 FOOT

SCALE
1 inch = 40 ft.

ASSISTANT DIRECTOR OF DEVELOPMENT REVIEW

DATE

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Designed: TBS
Prepared: DL
Approved: DKH
Job No.: 1084-0006
Scale Horiz: 1" = 40'
Scale Vert: 1" = 10'
Sheet: 19 of 49
Date: February 20, 2026

Proj. Name: Ramblewood Filing No. 1
Location: Douglas County, Colorado
Plan Set: Street & Storm Sewer Construction Plans
Sheet Name: P&P - Street & Storm - Halfpipe Place

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No. 19

I:\JOB FOLDERS\1084\1084-0006\CIVIL\PROD\CD - STR-STM\PP-HALFPIP PLACE PRINTED ON: 2/20/2026 3:37 PM

LEGEND

H = ALLOWABLE HEIGHT OF COVER OVER THE TOP OF THE PIPE, EXCLUDING PAVEMENT THICKNESS.

THE MINIMUM COVER SHALL BE THE DIMENSIONS SHOWN IN THE TABLE BELOW OR THE ENTIRE PAVEMENT STRUCTURE THICKNESS AS DEFINED IN SPECIFICATION 101.02, WHICHEVER IS GREATER.

THE MINIMUM COVER IN THE TABLE BELOW IS MEASURED FROM THE TOP OF THE PIPE TO THE BOTTOM OF THE PAVEMENT: HMA OR PCCP

FILL HEIGHTS AND DESIGN ASSUMPTIONS ARE BASED ON AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 8TH EDITION, SECTION 12, AND AASHTO T180 MINIMUM RELATIVE COMPACTION OF 95%

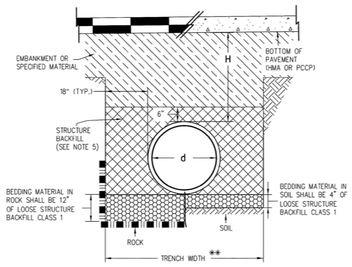
FILL HEIGHTS ARE BASED ON AASHTO M330 FOR POLYPROPYLENE TYPE S PIPES WITH OUTER, CORRUGATED WALLS AND SMOOTH INNER LINEARS.

L_1 = LENGTH OF PIPE TO BE MEASURED WHEN PLACED IN ACCORDANCE WITH SECTION 624.

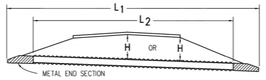
L_2 = LENGTH OF PIPE TO BE MEASURED WHEN PLACED IN ACCORDANCE WITH SECTION 603.

M = THE MINIMUM SPACING BETWEEN THE OUTSIDE WALLS OF MULTIPLE PIPES OR END SECTIONS IS 18" OR ½(d), WHICHEVER IS GREATER.

d = INNER DIAMETER OF PIPE.

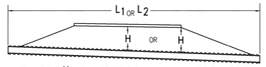


INSTALLATION OF PIPE



NOTE: USE THE H THAT IS GREATER FOR MAXIMUM ALLOWABLE FILL HEIGHT.

PIPE WITH END SECTIONS



NOTE: USE THE H THAT IS GREATER FOR MAXIMUM ALLOWABLE FILL HEIGHT.

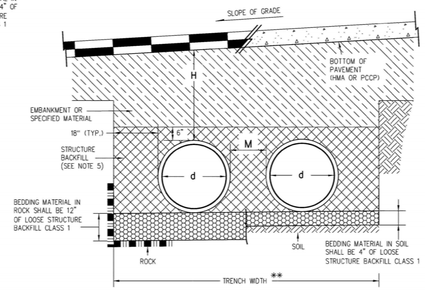
PIPE WITHOUT END SECTIONS

		POLYPROPYLENE (PP) FINAL FILL HEIGHTS		
		H MAXIMUM COVER (FT.)		
PIPE DIA. d (IN.)	H MIN. COVER (FT.)	FLOWABLE FILL COMP.	CDOT CLASS 3 AND A-1, A-3 95%	CDOT CLASS 1, 2, AND A-2-4, A-2-5 95%
12	1	41	28	20
15	1	42	29	21
18	1	44	30	22
24	1	30	21	16
30	1	39	27	19
36	1	28	20	14
42	1	30	21	15
48	1	29	20	14
60	2	29	20	14

MINIMUM AND MAXIMUM COVER

GENERAL NOTES

1. ALL PIPES SHALL MEET THE REQUIREMENTS OF AASHTO M330 FOR POLYPROPYLENE TYPE S FOR POLYPROPYLENE PIPE (PP) WITH SMOOTH INNER SURFACE.
2. WHEN A PIPE IS TO BE EXTENDED, THE SAME PIPE MATERIAL AND SIZE AS IN THE ORIGINAL INSTALLATION SHALL BE USED.
3. MINIMUM COVER FOR TEMPORARY/CONSTRUCTION LOADS SHALL BE PROVIDED DURING CONSTRUCTION TO PROTECT THE PIPE FROM DAMAGE AS SHOWN THE IN TABLE. FINAL MAXIMUM COVER HEIGHTS (H) SHALL NOT BE EXCEEDED DURING CONSTRUCTION.
4. WHEN INSTALLING A GUARDRAIL OR A SIGN POST DIRECTLY ABOVE A PIPE, THE POST'S BOTTOM MUST BE AT LEAST 1 FOOT ABOVE THE TOP OF THE PIPE. THE HOLE FOR THE POST SHALL BE DRILLED INTO THE SOIL.
5. STRUCTURE BACKFILL MATERIAL SHALL BE CLASS 1.
6. FOR PIPES 24 INCHES OR LESS IN DIAMETER, H MIN. MAY BE REDUCED TO ONE FOOT FOR LOW VOLUME APPROACH ROADS NOT ON STATE HIGHWAYS.
7. FOR FLOWABLE FILL INSTALLATIONS, REFER TO SECTION 206.02(A)4. CONTRACTOR SHALL BE RESPONSIBLE TO MAINTAIN PROPER PIPE ALIGNMENT AND PREVENT DISPLACEMENT DUE TO PIPE BOUYANCY.



INSTALLATION OF MULTIPLE PIPES

NOTE: M IS 12 INCHES FOR DIAMETERS (d) UP TO AND INCLUDING 24 INCHES AND d/2 FOR GREATER DIAMETERS.

** TRENCH WIDTH ASSUMES STABLE IN-SITU SIDE WALL

NOMINAL PIPE DIAMETER (IN.)	MINIMUM COVER (IN.) FOR INDICATED AXLE LOADS (KIPS)			
	18.0-50.0	50.0-75.0	75.0-110.0	110.0-150.0
24 - 36	24.0	30.0	36.0	36.0
42 - 48	36.0	36.0	42.0	48.0
54 - 60	36.0	36.0	42.0	48.0

MINIMUM COVER FOR CONSTRUCTION LOADS

Computer File Information		Sheet Revisions		
Creation Date: 07/31/19		Date:	Comments	
Designer Initials: JBK	(R-X)	03/07/22	Separated the previous M-603-4, Corrugated Polyethylene Pipe (AASHTO M252) and Corrugated Polypropylene (AASHTO M330) sheet into 2 separate sheets. Revised the Legend and Gen. Notes. Deleted the "Construction Minimum Cover for Pipe" detail and incorporated its dimensions in to the tables and installation of Pipes details.	
Last Modification Date: 03/07/22	(R-X)			
Detailer Initials: LTA	(R-X)			
CAD Ver.: MicroStation V8 Scale: Not to Scale Units: English	(R-X)			

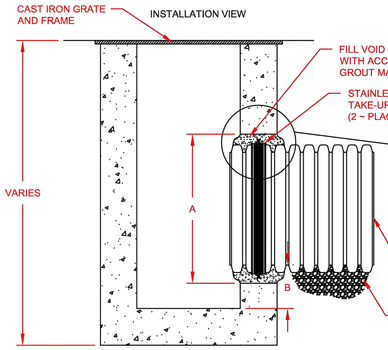
Colorado Department of Transportation
2829 West Howard Place
CDOT HQ, 3rd Floor
Denver, CO 80204
Phone: 303-757-9021 FAX: 303-757-9868
Construction Engineering Services JBK

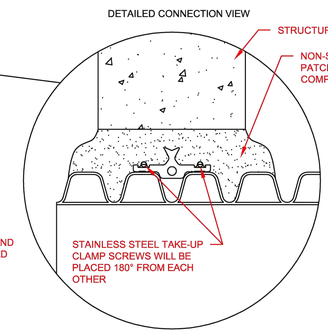
CORRUGATED POLYPROPYLENE PIPE (AASHTO M330)

Issued by the Project Development Branch: July 31, 2019

STANDARD PLAN NO.
M-603-4
Standard Sheet No. 2 of 2
Project Sheet Number:

12"-60" HP STORM WATERSTOP GROUTED MANHOLE CONNECTION (DUAL WALL)





PIPE SIZE	PIPE OD	"A" MIN. HOLE Ø	"B" MIN. DISTANCE FROM PIPE INVERT TO STRUCTURE INVERT	ADS PRODUCT CODE
12" (300mm)	14.5" (368mm)	19.50" (495mm)	3.7" (94mm)	1202PS
15" (375mm)	17.6" (447mm)	23.00" (584mm)	4.0" (102mm)	1502PS
18" (450mm)	21.2" (538mm)	26.50" (673mm)	4.2" (107mm)	1802PS
21" (525mm)	24.8" (630mm)	30.25" (768mm)	4.5" (114mm)	2102PS
24" (600mm)	27.8" (706mm)	33.25" (845mm)	4.5" (114mm)	2402PS
30" (750mm)	35.1" (892mm)	40.50" (1029mm)	5.2" (132mm)	3002PS
36" (900mm)	41.1" (1044mm)	47.00" (1194mm)	5.5" (140mm)	3602PS
42" (1050mm)	47.7" (1212mm)	53.00" (1346mm)	5.7" (145mm)	4202PS
48" (1200mm)	53.6" (1361mm)	59.00" (1499mm)	5.7" (145mm)	4802PS
60" (1500mm)	66.3" (1684mm)	72.00" (1829mm)	6.4" (163mm)	6002PS

NOTES:

PERFORMANCE HIGHLY DEPENDENT ON INSTALLATION. CONTRACTOR MUST ENSURE MANHOLE GASKET IS UNIFORMLY SEATED AROUND STRUCTURE ADAPTER. EXTRA PRECAUTIONS MUST BE TAKEN TO PREVENT DIFFERENTIAL SETTLEMENT BETWEEN THE PIPE AND MANHOLE.

INSTALLATION RECOMMENDATIONS ARE ALSO SPECIFIED IN INSTALLATION GUIDE 1.05: WATERSTOP INSTALLATION

© 2016 ADS, INC

ADVANCED DRAINAGE SYSTEMS, INC. ("ADS") HAS PREPARED THIS DETAIL BASED ON INFORMATION PROVIDED TO ADS. THIS DRAWING IS INTENDED TO DEPICT THE COMPONENTS AS REQUESTED. ADS HAS NOT PERFORMED ANY ENGINEERING OR DESIGN SERVICES FOR THIS PROJECT, NOR HAS ADS INDEPENDENTLY VERIFIED THE INFORMATION SUPPLIED. THE INSTALLATION DETAILS PROVIDED HEREIN ARE GENERAL RECOMMENDATIONS AND ARE NOT SPECIFIC FOR THIS PROJECT. THE DESIGN ENGINEER SHALL REVIEW THESE DETAILS PRIOR TO CONSTRUCTION. IT IS THE DESIGN ENGINEERS RESPONSIBILITY TO ENSURE THE DETAILS PROVIDED HEREIN MEETS OR EXCEEDS THE APPLICABLE NATIONAL, STATE, OR LOCAL REQUIREMENTS AND TO ENSURE THAT THE DETAILS PROVIDED HEREIN ARE ACCEPTABLE FOR THIS PROJECT.

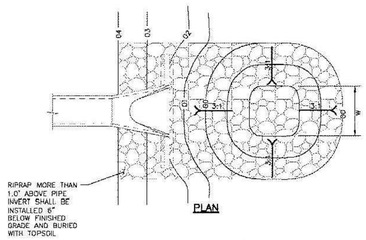
REV.	DESCRIPTION	BY	MM/DD/YY	CHK'D
3	ADDED METRIC UNITS AND RENAMED	TJR	01/30/16	

12"-60" HP STORM MH GROUTED WATERSTOP

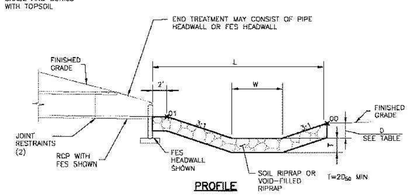
DRAWING NUMBER: STD-206A

ADS Advanced Drainage Systems, Inc. 4640 TRUEMAN BLVD HILLIARD, OHIO 43026

DRAWN BY: JAB
DATE: 4/3/09
APP'D BY:
SCALE: NTS
SHEET: 1 OF 1



PLAN

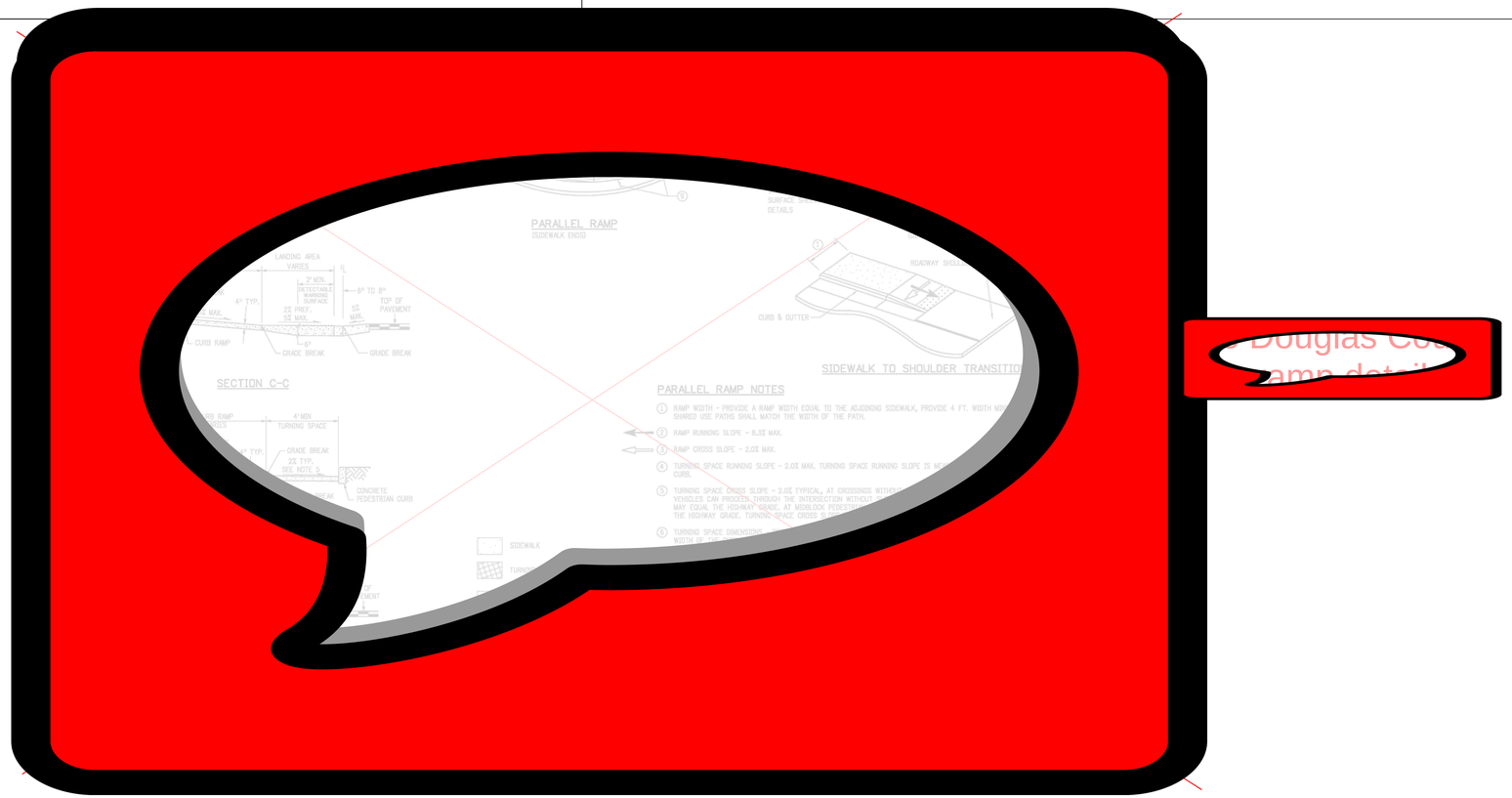


PROFILE

PIPE SIZE OR BOX HEIGHT	D	W*	L
18" - 24"	1'-0"	4'	15'
30" - 36"	1'-6"	6'	20'
42" - 48"	2'-0"	7'	24'
54" - 60"	2'-6"	8'	28'
66" - 72"	3'-0"	9'	32'

* IF OUTLET PIPE IS A BOX CULVERT WITH A WIDTH GREATER THAN W, THEN W = CULVERT WIDTH

Figure 9-37. Low tailwater riprap basin



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No.	Rev. Date:	Revision Type:
1		
2		
3		
4		
5		
6		

Designed: TBS
Prepared: PAV
Approved: DKH

Job No.: 1084-0006
Scale Horiz: N/A
Scale Vert: N/A

Sheet: 48 of 49
Date: February 20, 2026

Proj. Name: Ramblewood Filing No. 1
Location: Douglas County, Colorado
Plan Set: Street & Storm Sewer Construction Plans
Sheet Name: Detail Sheet

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Know what's below. Call before you dig.

No. 48

I:\JOB FOLDERS\1084\1084-0006\CIVIL\PROD\CD - STR-STM\M-DETAILS PRINTED ON: 2/19/2026 6:33 PM

RAMBLEWOOD FILING NO. 1

STREET & STORM SEWER CONSTRUCTION PLANS

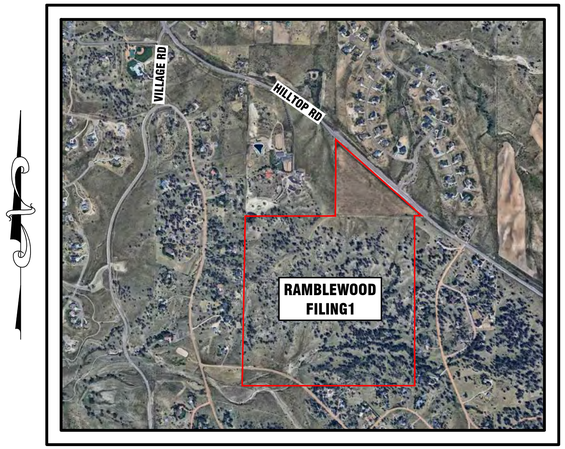
LOCATED IN SECTION 6, TOWNSHIP 7 SOUTH, RANGE 65 WEST OF THE SIXTH PRINCIPAL MERIDIAN, COUNTY OF DOUGLAS, STATE OF COLORADO

LEGEND

- Property Line
- Right of Way Line
- Centerline
- Easement Line
- Lot Line
- Site Line
- Sight Distance Line
- Top of Embankment
- 100-YR W.S.E.
- Phase Line
- Retaining Wall
- Prop. Asphalt Pavement
- Prop. Asphalt Mill & Overlay
- Prop. Concrete Pavement
- Prop. Concrete Walk
- Prop. Crushed Fines
- Ex. Concrete Walk
- Ex. Asphalt Pavement
- Sight Distance Area
- FEMA Floodplain Limits
- Sanitary Sewer Line
- Water Line
- Storm Sewer Line
- SS Ex. Sanitary Line
- W W Ex. Water Line
- STM Ex. Storm Sewer Line
- IRR Ex. Irrigation Pipe
- FO Ex. Fiber Optic Line
- G Ex. Gas Line
- T T Ex. Telephone Line
- OHUT Ex. Overhead Electric
- X Ex. Fence
- SS SS Sanitary Service Line
- WS WS Water Service Line
- Sanitary Sewer Manhole
- Fire Hydrant
- Thrust Block
- Water Valve
- Water Meter
- Storm Manhole
- Ex. Sanitary Sewer Manhole
- Ex. Water Valve
- Ex. Fire Hydrant
- Ex. Storm Manhole
- Ex. Street Light
- Ex. Sign
- Prop. Street Light
- Prop. Sign
- 5280 Proposed Major Contour
- Proposed Minor Contour
- 5280 Existing Major Contour
- Existing Minor Contour
- DBO Major Contour
- DBO Minor Contour

GENERAL ABBREVIATIONS

A.E.	ACCESS EASEMENT
BKL	BIKE LANE
BL CONST	BASELINE OF CONSTRUCTION
BS	BOTTOM ELEVATION OF RISE
B.S.I.	BY SEPARATE INSTRUMENT
CDS	CUL-DE-SAC
CE	CURB EXTENSION
CL	CENTERLINE
CT	CURB TRANSITION
CWN	CROWN
DBO	DESIGN BY OTHERS
DC	MEDIAN CURB & GUTTER
D.E.	DRAINAGE EASEMENT
DIST.	DISTANCE
D.U.E.	DRAINAGE & UTILITY EASEMENT
EOA	EDGE OF ASPHALT
EOP	EDGE OF PAVEMENT
E.A.E.	EMERGENCY ACCESS EASEMENT
E.ATT.E.	EXISTING AT&T EASEMENT
E.P.E.	EXISTING PIPELINE EASEMENT
ESMT.	EASEMENT
FES	FLARED END SECTION
FGB	FINISHED GROUND AT BOTTOM WALL ELEVATION
FGT	FINISHED GROUND AT TOP WALL ELEVATION
FH	FIRE HYDRANT
FL	FLOWLINE
FV	FIELD VERIFY
G	FINISHED GROUND
G.E.	GAS EASEMENT
G.O.E.	GAS & OIL EASEMENT
GV	GATE VALVE
HP	HIGH POINT
I.E.	IRRIGATION EASEMENT
LL	LOT LINE
LP	LOW POINT
LS	LANDSCAPING
LTWD	LITTLE THOMPSON WATER DISTRICT
MC	MOUNTABLE CURB & GUTTER
MH	MANHOLE
MSE	MECHANICALLY STABILIZED EARTH
P	PAVEMENT
P&P	PLAN & PROFILE
P.A.E.	PUBLIC ACCESS EASEMENT
PC	POINT OF CURVATURE
PCC	POINT OF COMPOUND CURVATURE
PCR	POINT OF CURB RETURN
PERF.	PERFORATED
PGL	PROFILE GRADE LINE
PI	POINT OF INFLECTION
PISWD	PINERY WATER & WASTEWATER DISTRICT
PRC	POINT OF REVERSE CURVATURE
PWSD	PARKER WATER & SANITATION DISTRICT
PT	POINT OF TANGENCY
RELOC	TO BE RELOCATED
R.O.W.	RIGHT OF WAY
RN	RECORDING NUMBER
S.E.	SANITARY EASEMENT
SD.E.	SIGHT DISTANCE EASEMENT
SEC	SECTION LINE
SL	SANITARY LINE
SS	SANITARY SERVICE
SW	SIDEWALK
SW.E.	SIDEWALK EASEMENT
TB	THRUST BLOCK
TC	TOP OF CURB
TEMP.	TEMPORARY
TRANS.	TRANSITION
TR.E.	TRANSPORTATION EASEMENT
TS	TOP ELEVATION OF RISER
UD	UNDERDRAIN
U.E.	UTILITY EASEMENT
U.G.E	UTILITY & GAS EASEMENT
VC	VERTICAL CURB & GUTTER
W.E.	WATER EASEMENT
WL	WATER LINE
WS	WATER SERVICE
W.S.W.	WATER SURFACE ELEVATION
WV	WATER VALVE



VICINITY MAP
1" = 1000'

[redacted] plan set. These Sheets are [redacted]
County web site at:
[redacted].co.us/[redacted]

Sheet List Table

Sheet Number	Sheet Title
1	Cover Sheet
2	Notes Sheet
3	Overall Plan
4	Demolition Plan
5	Master Utility Plan
6	Master Utility Plan
7	Master Utility Plan
8	Master Utility Plan
9	Master Utility Plan
10	Utility Crossings Plan
11	Overlot Grading Plan
12	Overlot Grading Plan
13	Overlot Grading Plan
14	Overlot Grading Plan
15	Signing and Striping Plan
16	Signing and Striping Plan - Hilltop Road
17	P&P - Street & Storm - Halfpipe Place
18	P&P - Street & Storm - Halfpipe Place
19	P&P - Street & Storm - Halfpipe Place
20	P&P - Street & Storm - Halfpipe Place
21	P&P - Street & Storm - Halfpipe Place
22	P&P - Street & Storm - Halfpipe Place
23	P&P - Street & Storm - Freerider Point
24	P&P - Street & Storm - Freerider Point
25	P&P - Street & Storm - Freerider Way
26	P&P - Street & Storm - Freerider Way
27	P&P - Street & Strom - Derailer Street
28	P&P - Street & Storm - Derailer Street
29	P&P - Street & Storm - Railbender Street
30	P&P - Street & Storm - Railbender Street
31	P&P - Street & Storm - Railbender Street
32	P&P - Street & Storm - Railbender Street
33	P&P - Street & Storm - Railbender Street
34	P&P - Street & Storm - Stormlines 1 & 2 & 3
35	P&P - Street & Storm - Stormline 5
36	P&P - Street & Storm - Stormline 6
37	P&P - Street & Storm - Stormlines 7 & 8 & 9
38	Private Detention Pond A
39	Private Detention Pond A Forebay
40	Private Detention Pond A Outlet
41	Private Detention Pond B
42	Private Detention Pond B Forebay
43	Private Detention Pond B Outlet
44	Detail Sheet
45	Detail Sheet
46	Detail Sheet
47	Detail Sheet
48	Detail Sheet
49	Detail Sheet

DEVELOPER
MILLER UNITED
6900 E. BELLVIEW AVE
GREENWOOD VILLAGE, CO 80111
PHONE: (303) 799-6300
CONTACT: DAN SHELDON

CIVIL ENGINEER
LJA ENGINEERING, INC.
1765 WEST 121ST AVE, SUITE 300
WESTMINSTER, CO 80234
PHONE: (303) 421-4224
CONTACT: KEVIN LOVELACE

SURVEYOR
LJA SURVEYING, INC
1765 WEST 121ST AVE, SUITE 300
WESTMINSTER, CO 80234
PHONE: (303) 358-7002
CONTACT: DEREK BROWN

PLANNER/LANDSCAPE
NORRIS DESIGN
1101 BANNOCK ST.
DENVER, CO 80204
PHONE: (303) 892-1166
CONTACT: SARAH TENGEN

GEOTECHNICAL ENGINEER
A.G. WASSENAAR
3211 SOUTH ZUNI ST.
ENGLEWOOD, CO 80110
PHONE: (303) 759-8100
CONTACT: ASHLEY MCDANIELS, P.E.

AGENCY LIST

DOUGLAS COUNTY
100 THIRD STREET
CASTLE ROCK, CO 80104
PHONE: (303) 660-7460
CONTACT: CHUCK SMITH

PARKER WATER & SANITATION DISTRICT
19801 E. MAIN STREET
PARKER, CO 80138
PHONE: (313) 841-4627
CONTACT: JAROD BAYLIE

CORE ELECTRIC COOPERATIVE
5496 US-85
SEDALIA, CO 80135
PHONE: (800) 332-9540

Remove CDOT Curb Ra[redacted]
details and replace with D[redacted]
County Curb Ramp Deta[redacted]

PROJECT BENCHMARK:

NGS BENCHMARK Z-336
ELEVATION = 6612.35' (NAVD 88)

SITE BENCHMARK:

CENTER SECTION CORNER OF SECTION 6-T7S-R65W
ELEVATION = 6398.76 (NAVD 88)

ELEVATION OF GROUND TOPOGRAPHIC SURVEY CONTOUR INTERVALS ARE 1 FOOT

BASIS OF BEARINGS:

THE NORTH LINE OF THE NORTHWEST QUARTER OF SECTION 6, TOWNSHIP 7 SOUTH, RANGE 65 WEST OF THE SIXTH PRINCIPAL MERIDIAN, COUNTY OF DOUGLAS, STATE OF COLORADO. ASSUMED TO BEAR NORTH 89°29'26" WEST BASED ON NAD83 (2011) COLORADO STATE PLANE CENTRAL ZONE (502) COORDINATES, BEING MONUMENTED AT THE WEST BY 3 INCH ALUMINUM CAP STAMPED "1988 PLS 23053" AND AT THE EAST END BY A 3.25" ALUMINUM CAP STAMPED "1994 PLS 112405."

ENGINEERING CERTIFICATION NOTE:

THESE CONSTRUCTION PLANS FOR RAMBLEWOOD FILING NO. 1 WERE PREPARED BY ME (OR UNDER MY DIRECT SUPERVISION) IN ACCORDANCE WITH THE REQUIREMENTS OF DOUGLAS COUNTY'S ROADWAY DESIGN AND CONSTRUCTION STANDARDS, STORM DRAINAGE DESIGN AND TECHNICAL CRITERIA, AND THE GRADING, EROSION AND SEDIMENT CONTROL MANUAL.

DYLAN HARDY, PE
LJA ENGINEERING

ASSISTANT DIRECTOR OF DEVELOPMENT REVIEW

DATE

THESE CONSTRUCTION DRAWINGS HAVE BEEN REVIEWED BY DOUGLAS COUNTY FOR STREET AND DRAINAGE IMPROVEMENTS ONLY

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Revision Type:

No.	Rev. Date:
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3	
4	
5	
6	

Designed: TBS
Prepared: CGM
Approved: DKH
Sheet: 1 of 49
Date: February 20, 2026
Job No.: 1084-0006
Scale Horiz: N/A
Scale Vert: N/A

Proj. Name: Ramblewood Filing No. 1
Location: Douglas County, Colorado
Plan Set: Street & Storm Sewer Construction Plans
Sheet Name: Cover Sheet

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No. 1

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Add note that '
SIGNS SHALL
DOUGLAS CO

Change to W14-1

Make the highligh
text a separate no

There needs to be 2 northeast bound approach lanes here (dedicated left turn lane and combined through/right turn lane.

Locate STOP signs closure to the apex of the radius (typ)

Change to

Remove the W14-2 and add W14-1

DOUGLAS COUNTY SIGNAGE AND STRIPING:

1. ALL SIGNAGE AND STRIPING FOR PUBLIC AND/OR PRIVATE ROADWAYS OR BICYCLE TRAILS OPEN TO PUBLIC TRAVEL SHALL CONFORM TO THE MOST RECENT VERSION OF THE MANUAL ON UNIFORM TRAFFFIC CONTROL DEVICES (MUTCD), THE COLORADO SUPPLEMENTAL MUTCD, AND THE DOUGLAS COUNTY SIGNAGE AND STRIPING SUPPLEMENTALS. STREET NAMES SHOWN ARE FOR INFORMATION ONLY. FOR ACCEPTED STREET NAMES, REFER TO THE RECORDED FINAL PLAT FOR THIS SUBDIVISION.
2. STRIPING MATERIAL WILL BE:
   - 2.1. LONG LINE: "WATERBORNE PAINT" PER CDOT SPECIFICATIONS WITH GLASS BEADS PER DOUGLAS COUNTY SPECIFICATIONS.
   - 2.2. WORD AND SYMBOL LEGEND: THERMOPLASTIC
3. ALL PAVEMENT MARKINGS ARE SUBJECT TO MATERIAL CHANGES DUE TO SEASON AND\OR WEATHER. TEMPORARY MARKING MATERIALS MAY BE REQUIRED. SPECIFIED FINAL PAVEMENT MARKING MATERIALS SHALL BE INSTALLED WHEN SEASON \ WEATHER ALLOW.
4. ALL SIGN POSTS INSTALLED IN HARDSCAPE RAISED MEDIANS SHALL BE INSTALLED USING THE KLEEN BREAK MODEL 425 SIGN POST COUPLER (PART #XKB42520-G) FROM XCESSORIES SQUARED DEVELOPMENT AND MANUFACTURING INC. REFER TO DOUGLAS COUNTY STANDARD DRAWING SS-9.
5. PRIOR TO PLACEMENT OF ANY HARDSCAPE MATERIAL, A 4" DIAMETER PVC SLEEVE WITH A TEMPORARY COVER SHALL BE INSTALLED AT ALL SIGN POST AND DELINEATOR LOCATIONS.

SEE SHEET 16 FOR HILLTOP RD. SIGNING & STRIPING PLAN

SIGNING & STRIPING LEGEND

STREET NAME / STOP — R1-1, 30" X 30" UNLESS OTHERWISE NOTED

R4-7, 24" X 30"

OM3-L

SPEED LIMIT 25 — R2-1, 24" X 30"

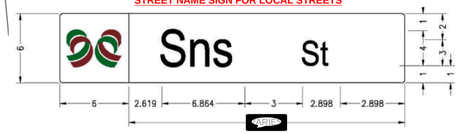
MAINTENANCE VEHICLES ONLY

W11-2, 30" X 30"

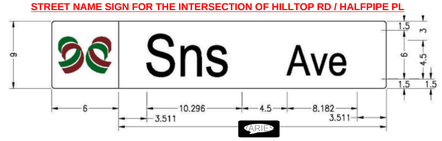
DEAD END / NO OUTLET

W14-1a

STREET NAME SIGN FOR LOCAL STREETS



STREET NAME SIGN FOR THE INTERSECTION OF HILLTOP RD / HALFPIPE PL



JAMES R PITTS & JULIA P PITTS RN 0125234

JUDITH NATHALIE GRIMES TRUST RN 0125234

ELIZABETH ELLEN NOREEN RN 0125234

ERIC J SELLYEI & CHERYL A SELLYEI JOINT REVOCABLE TRUST RN 0125234

CYNTHIA L ZIMPFER RN 0125234

HIDDEN VILLAGE FILING NO. 1 RN 125234

CATHY M WILLIS RN 0125234

DUNN FAMILY TRUST RN 0125234

KATHERINE DENT RN 0125870

HIDDEN VILLAGE PROPERTY OWNERS ASSOCIATION RN 0125870

BRADLEY H WAKEH RN 0131583

RODGER D READ RN 0131583

JAMES EDWARD BONNER & ANNETTE BONNER RN 0127014

JOSEPH E LIEBHERR RN 0127014

BURKARD LIVING TRUST RN 2005032337

BRIAN S WILBUR RN 2005032337

POND A · POND B · TRACT B · TRACT C · TRACT D · TRACT E · TRACT G · TRACT H · TRACT I · TRACT A

HALFPIPE PL · HALFPIPE CT · RAILBENDER ST · DERAILER ST · FREERIDER WY · MERRYVALE TR. · HILLTOP RD. · N VILLAGE RD. · ALPINE DR.

KINNEY CREEK · KINNEY CREEK TRIBUTARY F

69 · 70

SCALE 1 inch = 200 ft. (200 0 100 200)

PROJECT BENCHMARK:

NGS BENCHMARK Z-336
ELEVATION = 6612.35' (NAVD 88)

SITE BENCHMARK:
CENTER SECTION CORNER OF SECTION 6-T7S-R65W
ELEVATION = 6398.76 (NAVD 88)

ELEVATION OF GROUND TOPOGRAPHIC SURVEY CONTOUR INTERVALS ARE 1 FOOT

ASSISTANT DIRECTOR OF DEVELOPMENT REVIEW

DATE

PUBLIC WORKS ENGINEERING DIRECTOR

DATE

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4	
5	
6	

Designed: TBS
Prepared: DL
Approved: DKH

Job No.: 1084-0006
Scale Horiz: 1" = 200'
Scale Vert: N/A

Sheet: 15 of 49
Date: February 20, 2026

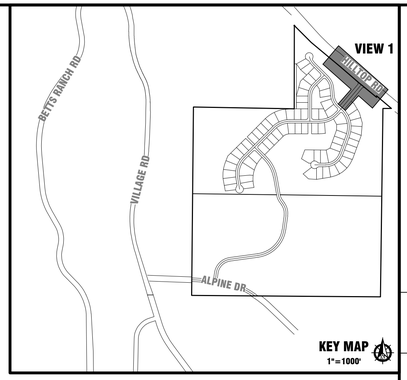
Proj. Name: Ramblewood Filing No. 1
Location: Douglas County, Colorado
Plan Set: Street & Storm Sewer Construction Plans
Sheet Name: Signing and Striping Plan

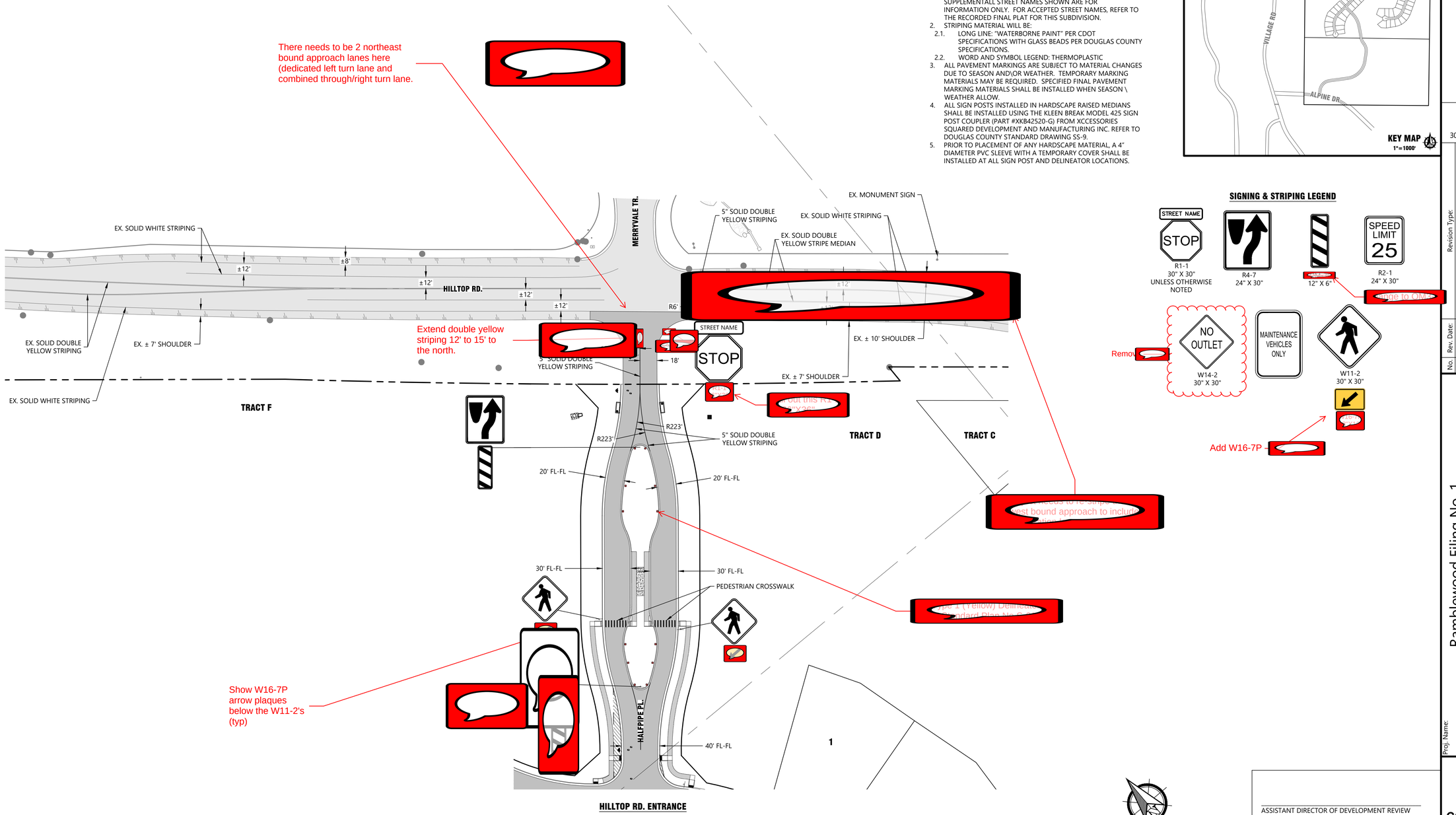
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I:\JOB FOLDERS\1084\1084-0006\CIVIL\PROD\CD - STR-STM\M-SIGN-STRIPE PRINTED ON: 2/20/2026 4:01 PM

DOUGLAS COUNTY SIGNAGE AND STRIPING:

1. ALL SIGNAGE AND STRIPING FOR PUBLIC AND/OR PRIVATE ROADWAYS, WALKWAYS OR BICYCLE TRAILS OPEN TO PUBLIC TRAVEL SHALL CONFORM TO THE MOST RECENT VERSION OF THE FEDERAL MANUAL ON UNIFORM TRAFFFIC CONTROL DEVICES (MUTCD), THE COLORADO SUPPLEMENTAL MUTCD, AND THE DOUGLAS COUNTY SIGNAGE AND STRIPING SUPPLEMENTALL STREET NAMES SHOWN ARE FOR INFORMATION ONLY. FOR ACCEPTED STREET NAMES, REFER TO THE RECORDED FINAL PLAT FOR THIS SUBDIVISION.
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4. ALL SIGN POSTS INSTALLED IN HARDSCAPE RAISED MEDIANS SHALL BE INSTALLED USING THE KLEEN BREAK MODEL 425 SIGN POST COUPLER (PART #XKB42520-G) FROM XCCESSORIES SQUARED DEVELOPMENT AND MANUFACTURING INC. REFER TO DOUGLAS COUNTY STANDARD DRAWING SS-9.
5. PRIOR TO PLACEMENT OF ANY HARDSCAPE MATERIAL, A 4" DIAMETER PVC SLEEVE WITH A TEMPORARY COVER SHALL BE INSTALLED AT ALL SIGN POST AND DELINEATOR LOCATIONS.





PROJECT BENCHMARK:

NGS BENCHMARK Z-336
ELEVATION = 6612.35' (NAVD 88)

SITE BENCHMARK:

CENTER SECTION CORNER OF SECTION 6-T7S-R65W
ELEVATION = 6398.76 (NAVD 88)

ELEVATION OF GROUND TOPOGRAPHIC SURVEY CONTOUR INTERVALS ARE 1 FOOT

ASSISTANT DIRECTOR OF DEVELOPMENT REVIEW

DATE

PUBLIC WORKS ENGINEERING DIRECTOR

DATE

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Job No.: 1084-0006 | Sheet: 16 of 49
Scale Horiz: 1" = 50' | Date: February 20, 2026
Scale Vert: N/A

Designed: TBS
Prepared: DL
Approved: DKH

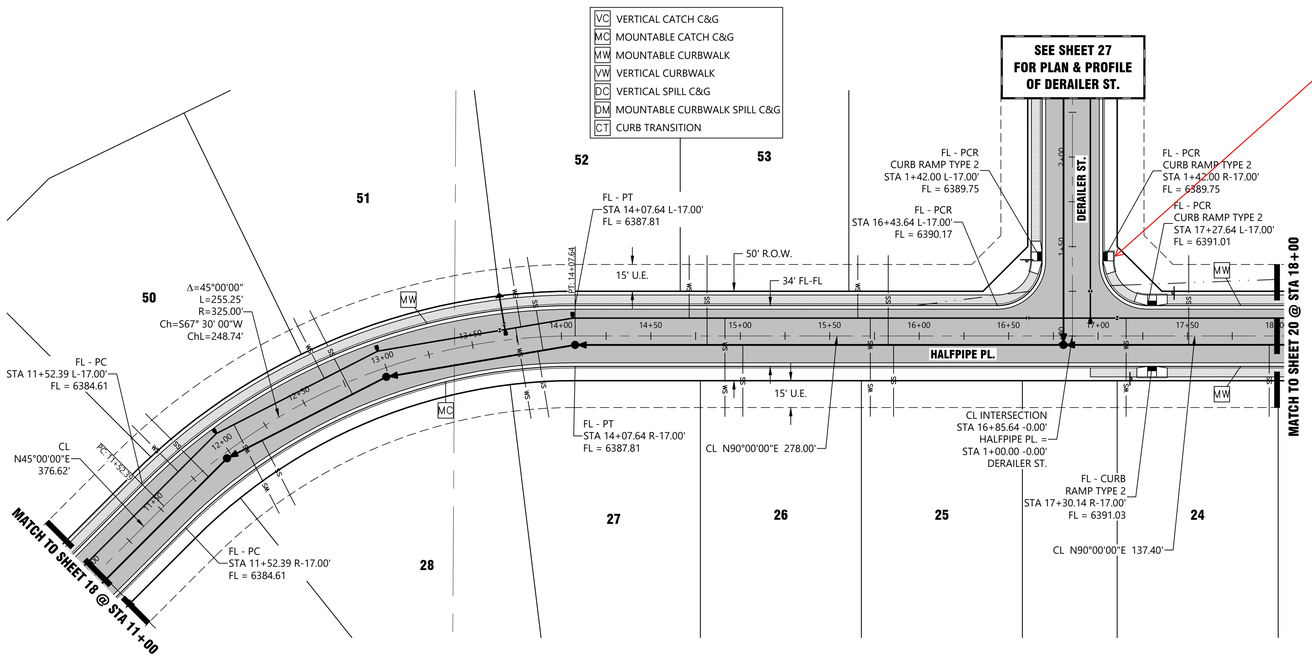
Proj. Name: Ramblewood Filing No. 1
Location: Douglas County, Colorado
Plan Set: Street & Storm Sewer Construction Plans
Sheet Name: Signing and Striping Plan - Hilltop Road

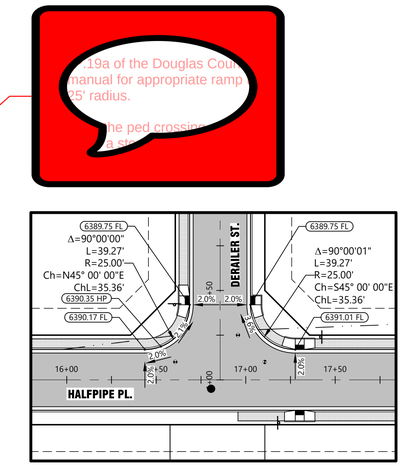
NOT FOR CONSTRUCTION

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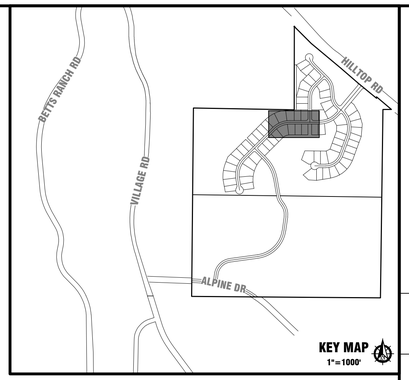
No. 16

I:\JOB FOLDERS\1084\1084-0006\CIVIL\PROD\CD - STR-STM\M-SIGN-STRIPE PRINTED ON: 2/20/2026 4:02 PM



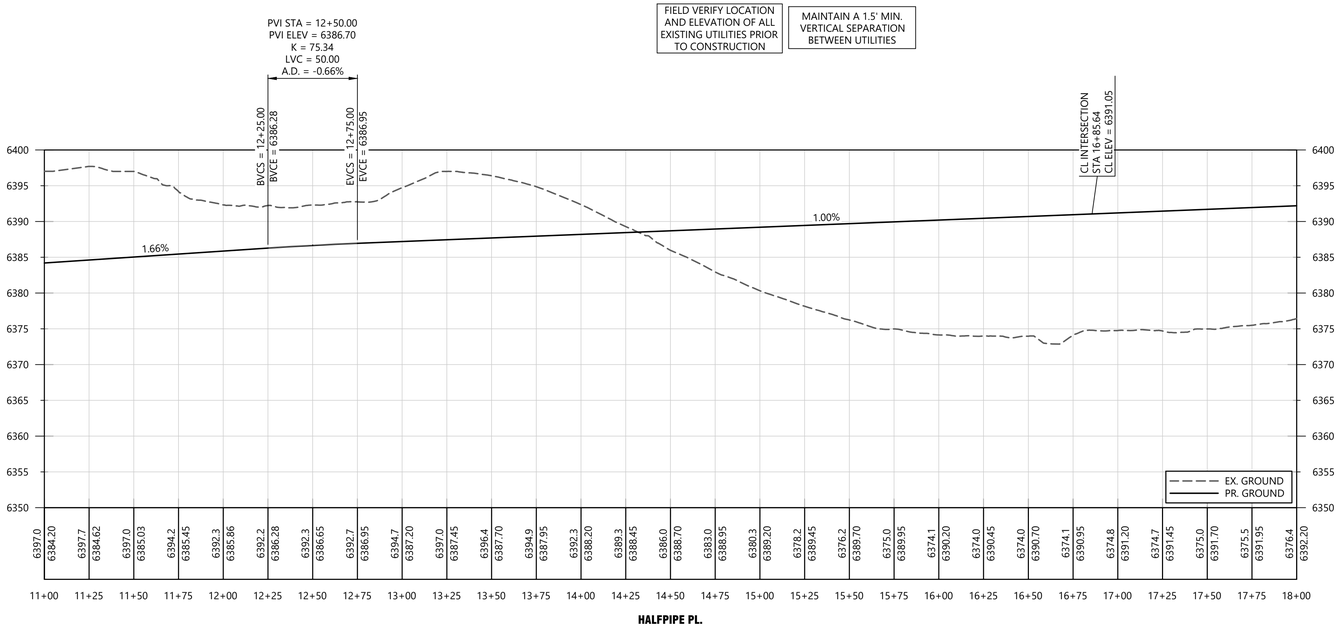


CURB RETURN
SCALE: 1" =40'



NOTES:

1. REFER TO RAMBLEWOOD FILING NO. 1, STREET & STORM SEWER CONSTRUCTION PLANS FOR STREET AND STORM SEWER DESIGN INFORMATION.
2. SEE SHEET 2 FOR TYPICAL STREET SECTIONS.
3. SEE SHEET 1 FOR LEGEND AND GENERAL ABBREVIATIONS.
4. REFER TO RAMBLEWOOD FILING NO. 1, PARKER WATER & SANITATION CONSTRUCTION PLANS FOR WATER & SANITARY SEWER DESIGN INFORMATION.
5. SEE SHEET 10 FOR UTILITY CROSSING INFORMATION.
6. CONTRACTOR SHALL ROTATE ALL SANITARY SEWER MANHOLES TO PROVIDE 1' MINIMUM CLEARANCE BETWEEN MANHOLE LID MAINS AND LIP OF GUTTER OR EDGE OF CURB.
7. MIN. DISTANCE BETWEEN WATER AND LIP OF GUTTER SHALL BE 5' AND MIN. DISTANCE BETWEEN CENTER OF SANITARY MH AND LIP OF GUTTER 1'.
8. ALL OFF-STREET SANITARY SEWER MANHOLES SHALL HAVE SEALED & LOCKING LIDS.
9. SANITARY MANHOLES 20' OR GREATER SHALL HAVE INTERMEDIATE PLATFORMS PER PWSD DETAIL S3.6



01 UTILITY CROSSING
SEE SHEET 10 FOR INFO

PROJECT BENCHMARK:

NGS BENCHMARK Z-336
ELEVATION = 6612.35' (NAVD 88)

SITE BENCHMARK:
CENTER SECTION CORNER OF SECTION 6-T7S-R65W
ELEVATION = 6398.76 (NAVD 88)

ELEVATION OF GROUND TOPOGRAPHIC SURVEY CONTOUR INTERVALS ARE 1 FOOT

SCALE
1 inch = 40 ft.

ASSISTANT DIRECTOR OF DEVELOPMENT REVIEW

DATE

THESE CONSTRUCTION DRAWINGS HAVE BEEN REVIEWED BY DOUGLAS COUNTY FOR STREET AND DRAINAGE IMPROVEMENTS ONLY

ENGINEERING DIVISION ACCEPTANCE BLOCK

LJA
1765 W. 121st Avenue
Suite 300
Westminster, CO 80234
303-421-4224 • www.lja.com

Revision Type:

No.	Rev. Date:
1	
2	
3	
4	
5	
6	

Designed: TBS
Prepared: DL
Approved: DKH
Job No.: 1084-0006
Scale Horiz: 1" = 40'
Scale Vert: 1" = 10'
Sheet: 19 of 49
Date: February 20, 2026

Proj. Name: Ramblewood Filing No. 1
Location: Douglas County, Colorado
Plan Set: Street & Storm Sewer Construction Plans
Sheet Name: P&P - Street & Storm - Halfpipe Place

NOT FOR CONSTRUCTION

Know what's below. Call before you dig.

No. 19

I:\JOB FOLDERS\1084\1084-0006\CIVIL\PROD\CD - STR-STM\PP-HALFPIP PLACE PRINTED ON: 2/20/2026 3:37 PM

LEGEND

H = ALLOWABLE HEIGHT OF COVER OVER THE TOP OF THE PIPE, EXCLUDING PAVEMENT THICKNESS.

THE MINIMUM COVER SHALL BE THE DIMENSIONS SHOWN IN THE TABLE BELOW OR THE ENTIRE PAVEMENT STRUCTURE THICKNESS AS DEFINED IN SPECIFICATION 101.02, WHICHEVER IS GREATER.

THE MINIMUM COVER IN THE TABLE BELOW IS MEASURED FROM THE TOP OF THE PIPE TO THE BOTTOM OF THE PAVEMENT: HMA OR PCCP

FILL HEIGHTS AND DESIGN ASSUMPTIONS ARE BASED ON AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 8TH EDITION, SECTION 12, AND AASHTO T180 MINIMUM RELATIVE COMPACTION OF 95%

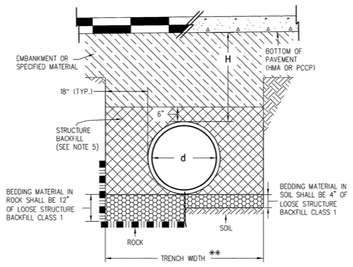
FILL HEIGHTS ARE BASED ON AASHTO M330 FOR POLYPROPYLENE TYPE S PIPES WITH OUTER, CORRUGATED WALLS AND SMOOTH INNER LINEARS.

L_1 = LENGTH OF PIPE TO BE MEASURED WHEN PLACED IN ACCORDANCE WITH SECTION 624.

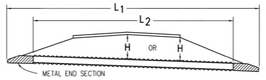
L_2 = LENGTH OF PIPE TO BE MEASURED WHEN PLACED IN ACCORDANCE WITH SECTION 603.

M = THE MINIMUM SPACING BETWEEN THE OUTSIDE WALLS OF MULTIPLE PIPES OR END SECTIONS IS 18" OR ½(d), WHICHEVER IS GREATER.

d = INNER DIAMETER OF PIPE.

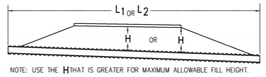


INSTALLATION OF PIPE



NOTE: USE THE H THAT IS GREATER FOR MAXIMUM ALLOWABLE FILL HEIGHT.

PIPE WITH END SECTIONS



NOTE: USE THE H THAT IS GREATER FOR MAXIMUM ALLOWABLE FILL HEIGHT.

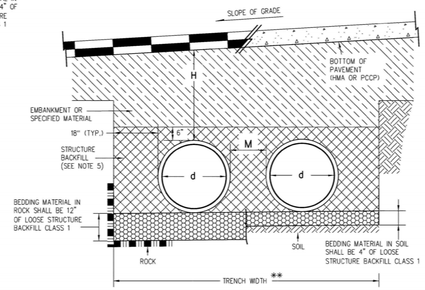
PIPE WITHOUT END SECTIONS

POLYPROPYLENE (PP) FINAL FILL HEIGHTS				
		H MAXIMUM COVER (FT.)		
PIPE DIA. d (IN.)	H MIN. COVER (FT.)	FLOWABLE FILL COMP.	CDOT CLASS 3 AND A-1, A-3 95%	CDOT CLASS 1, 2, AND A-2-4, A-2-5 95%
12	1	41	28	20
15	1	42	29	21
18	1	44	30	22
24	1	30	21	16
30	1	39	27	19
36	1	28	20	14
42	1	30	21	15
48	1	29	20	14
60	2	29	20	14

MINIMUM AND MAXIMUM COVER

GENERAL NOTES

1. ALL PIPES SHALL MEET THE REQUIREMENTS OF AASHTO M330 FOR POLYPROPYLENE TYPE S FOR POLYPROPYLENE PIPE (PP) WITH SMOOTH INNER SURFACE.
2. WHEN A PIPE IS TO BE EXTENDED, THE SAME PIPE MATERIAL AND SIZE AS IN THE ORIGINAL INSTALLATION SHALL BE USED.
3. MINIMUM COVER FOR TEMPORARY/CONSTRUCTION LOADS SHALL BE PROVIDED DURING CONSTRUCTION TO PROTECT THE PIPE FROM DAMAGE AS SHOWN THE IN TABLE. FINAL MAXIMUM COVER HEIGHTS (H) SHALL NOT BE EXCEEDED DURING CONSTRUCTION.
4. WHEN INSTALLING A GUARDRAIL OR A SIGN POST DIRECTLY ABOVE A PIPE, THE POST'S BOTTOM MUST BE AT LEAST 1 FOOT ABOVE THE TOP OF THE PIPE. THE HOLE FOR THE POST SHALL BE DRILLED INTO THE SOIL.
5. STRUCTURE BACKFILL MATERIAL SHALL BE CLASS 1.
6. FOR PIPES 24 INCHES OR LESS IN DIAMETER, H MIN. MAY BE REDUCED TO ONE FOOT FOR LOW VOLUME APPROACH ROADS NOT ON STATE HIGHWAYS.
7. FOR FLOWABLE FILL INSTALLATIONS, REFER TO SECTION 206.02(A)6. CONTRACTOR SHALL BE RESPONSIBLE TO MAINTAIN PROPER PIPE ALIGNMENT AND PREVENT DISPLACEMENT DUE TO PIPE BOUYANCY.



INSTALLATION OF MULTIPLE PIPES

NOTE: M IS 12 INCHES FOR DIAMETERS (d) UP TO AND INCLUDING 24 INCHES AND d/2 FOR GREATER DIAMETERS.

** TRENCH WIDTH ASSUMES STABLE IN-SITU SIDE WALL

NOMINAL PIPE DIAMETER (IN.)	MINIMUM COVER (IN.) FOR INDICATED AXLE LOADS (KIPS)			
	18.0-50.0	50.0-75.0	75.0-110.0	110.0-150.0
24 - 36	24.0	30.0	36.0	36.0
42 - 48	36.0	36.0	42.0	48.0
54 - 60	36.0	36.0	42.0	48.0

MINIMUM COVER FOR CONSTRUCTION LOADS

Computer File Information		Sheet Revisions		
Creation Date: 07/31/19		Date:	Comments	
Designer Initials: JBK	(R-X)	03/07/22	Separated the previous M-603-4, Corrugated Polyethylene Pipe (AASHTO M252) and Corrugated Polypropylene (AASHTO M330) sheet into 2 separate sheets. Revised the Legend and Gen. Notes. Deleted the "Construction Minimum Cover for Pipe" detail and incorporated its dimensions in to the tables and installation of Pipes details.	
Last Modification Date: 03/07/22	(R-X)			
Detailer Initials: LTA	(R-X)			
CAD Ver.: MicroStation V8 Scale: Not to Scale Units: English	(R-X)			

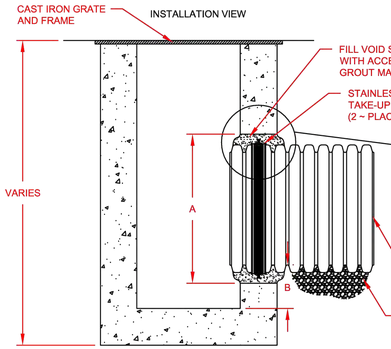
Colorado Department of Transportation
2829 West Howard Place
CDOT HQ, 3rd Floor
Denver, CO 80204
Phone: 303-757-9021 FAX: 303-757-9868
Construction Engineering Services JBK

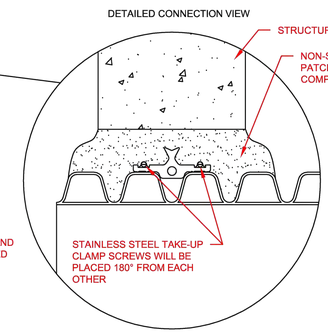
CORRUGATED POLYPROPYLENE PIPE (AASHTO M330)

Issued by the Project Development Branch: July 31, 2019

STANDARD PLAN NO.
M-603-4
Standard Sheet No. 2 of 2
Project Sheet Number:

12"-60" HP STORM WATERSTOP GROUTED MANHOLE CONNECTION (DUAL WALL)





PIPE SIZE	PIPE OD	"A" MIN. HOLE Ø	"B" MIN. DISTANCE FROM PIPE INVERT TO STRUCTURE INVERT	ADS PRODUCT CODE
12" (300mm)	14.5" (368mm)	19.50" (495mm)	3.7" (94mm)	1202PS
15" (375mm)	17.6" (447mm)	23.00" (584mm)	4.0" (102mm)	1502PS
18" (450mm)	21.2" (538mm)	26.50" (673mm)	4.2" (107mm)	1802PS
21" (525mm)	24.8" (630mm)	30.25" (768mm)	4.5" (114mm)	2102PS
24" (600mm)	27.8" (706mm)	33.25" (845mm)	4.5" (114mm)	2402PS
30" (750mm)	35.1" (892mm)	40.50" (1029mm)	5.2" (132mm)	3002PS
36" (900mm)	41.1" (1044mm)	47.00" (1194mm)	5.5" (140mm)	3602PS
42" (1050mm)	47.7" (1212mm)	53.00" (1346mm)	5.7" (145mm)	4202PS
48" (1200mm)	53.6" (1361mm)	59.00" (1499mm)	5.7" (145mm)	4802PS
60" (1500mm)	66.3" (1684mm)	72.00" (1829mm)	6.4" (163mm)	6002PS

NOTES:

PERFORMANCE HIGHLY DEPENDENT ON INSTALLATION. CONTRACTOR MUST ENSURE MANHOLE GASKET IS UNIFORMLY SEATED AROUND STRUCTURE ADAPTER. EXTRA PRECAUTIONS MUST BE TAKEN TO PREVENT DIFFERENTIAL SETTLEMENT BETWEEN THE PIPE AND MANHOLE.

INSTALLATION RECOMMENDATIONS ARE ALSO SPECIFIED IN INSTALLATION GUIDE 1.05: WATERSTOP INSTALLATION

© 2016 ADS, INC

ADVANCED DRAINAGE SYSTEMS, INC. ("ADS") HAS PREPARED THIS DETAIL BASED ON INFORMATION PROVIDED TO ADS. THIS DRAWING IS INTENDED TO DEPICT THE COMPONENTS AS REQUESTED. ADS HAS NOT PERFORMED ANY ENGINEERING OR DESIGN SERVICES FOR THIS PROJECT, NOR HAS ADS INDEPENDENTLY VERIFIED THE INFORMATION SUPPLIED. THE INSTALLATION DETAILS PROVIDED HEREIN ARE GENERAL RECOMMENDATIONS AND ARE NOT SPECIFIC FOR THIS PROJECT. THE DESIGN ENGINEER SHALL REVIEW THESE DETAILS PRIOR TO CONSTRUCTION. IT IS THE DESIGN ENGINEERS RESPONSIBILITY TO ENSURE THE DETAILS PROVIDED HEREIN MEETS OR EXCEEDS THE APPLICABLE NATIONAL, STATE, OR LOCAL REQUIREMENTS AND TO ENSURE THAT THE DETAILS PROVIDED HEREIN ARE ACCEPTABLE FOR THIS PROJECT.

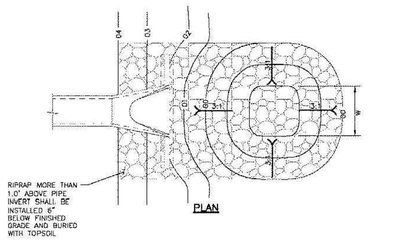
REV.	DESCRIPTION	BY	MM/DD/YY	CHK'D
3	ADDED METRIC UNITS AND RENAMED	TJR	01/30/16	

12"-60" HP STORM MH GROUTED WATERSTOP

DRAWING NUMBER: STD-206A

ADS Advanced Drainage Systems, Inc. 4640 TRUEMAN BLVD HILLIARD, OHIO 43026

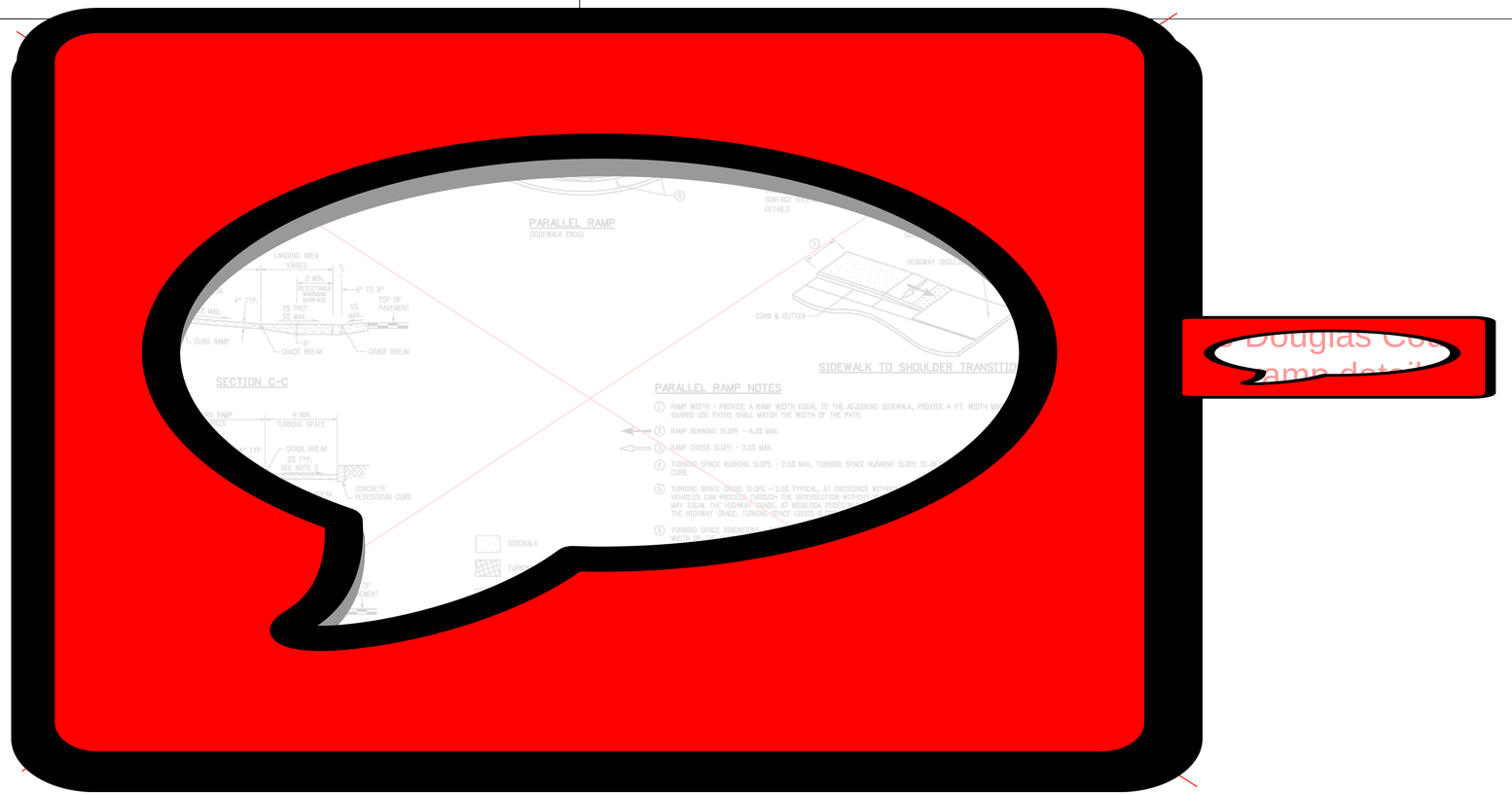
DRAWN BY: JAB
DATE: 4/3/09
DES BY:
APP BY:
SCALE: NTS
SHEET: 1 OF 1



PIPE SIZE OR BOX HEIGHT	D	W*	L
18" - 24"	1'-0"	4'	15'
30" - 36"	1'-6"	6'	20'
42" - 48"	2'-0"	7'	24'
54" - 60"	2'-6"	8'	28'
66" - 72"	3'-0"	9'	32'

* IF OUTLET PIPE IS A BOX CULVERT WITH A WIDTH GREATER THAN W, THEN W = CULVERT WIDTH

Figure 9-37. Low tailwater riprap basin



LJA
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Westminster, CO 80234
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No.	Rev. Date:	Revision Type:
1		
2		
3		
4		
5		
6		

Designed: TBS
Prepared: PAV
Approved: DKH

Job No.: 1084-0006
Scale Horiz: N/A
Scale Vert: N/A
Sheet: 48 of 49
Date: February 20, 2026

Proj. Name: Ramblewood Filing No. 1
Location: Douglas County, Colorado
Plan Set: Street & Storm Sewer Construction Plans
Sheet Name: Detail Sheet

NOT FOR CONSTRUCTION

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

No. 48

I:_JOB FOLDERS\1084\1084-0006\CIVIL\PROD\CD - STR-STM\M-DETAILS PRINTED ON: 2/19/2026 6:33 PM

DOUGLAS COUNTY
COLORADO

Department of Public Works Engineering
Engineering Services

www.douglas.co.us

July 30, 2024

Mr. Evan Fischgrund, P.E.
Regional Engineer, Southwest Region
Advanced Drainage Systems, Inc.
6800 Smith Road
Denver, CO 80207

Subject: Extension of Conditional Approval for Trial Period of Advanced Drainage Systems, Inc. HP Storm Polypropylene Pipe for Storm Drainage Applications in Unincorporated Douglas County

Dear Mr. Fischgrund:

Douglas County has agreed to administratively grant an extension to the Trial Period for ADS HP Storm Pipe applications within Douglas County. The Trial period will now run to **May 18, 2026,** instead of May 18, 2024.

Douglas County will allow the limited use of polypropylene pipe for storm sewer applications within the public Right-of-Way as an alternative to reinforced concrete pipe (RCP) for a trial period of two years. Douglas County currently requires that RCP be used within public easements and right-of-way, as outlined in Section 9.2.1 of the Douglas County Storm Drainage Design and Technical Criteria Manual. The following conditions and requirements will apply to the trial period:

- The use of polypropylene pipe for storm sewer applications will be limited to local and collector roadway classifications.
- Polypropylene pipe ranging in diameter form 18-inch to 60-inch will be allowed.
- Conformance with the following standards and/or specifications:
  - ASTM F2881 – Standard Specification for 12-to-60-inch (300 t0 1500 mm) Polypropylene (PP) Dual Wall Pipe and Fittings for Non-Pressure Storm Sewer Applications.
  - ASTM D2321 – Underground Installation for Thermoplastic Pipe for Sewers and Other Gravity-Flow Applications.
  - ASTM F477 – Elastomeric Seals (Gaskets) for Joining Plastic Pipe.

rmation as
tes on the

100 Third Street, Castle Rock, Colorado 80104 • 303.660.7490

- ASTM D3212 – Standard Specification for Joints for Drain and Sewer Plastic Pipes Using Flexible Elastomeric Seals.
- Colorado Department of Transportation (CDOT) Standard Plan M-603-4, Sheet 2

- Minimum and maximum pipe cover shall be based on CDOT M-603-4, Sheet 2.

- The minimum cover specified on CDOT M-603-4, Sheet 2, is based on the pipe strength and required installation and bedding conditions. The required minimum depth will likely be determined during the construction drawing review process and based on hydraulics and keeping the pipe a minimum depth below the pavement section. The pavement section includes surface material, base course, depth of moisture treatment and compaction, or excavation and replacement of subgrade material to mitigate for swelling soils.

- Transition to RCP at an upstream manhole prior to surface outfalls into detention facilities, open channels, swales, etc.

- Water-stop gasket/band at all inlets, manholes, or structure connections.

- Douglas County will require that deflection testing by use of a mandrel be completed by the contractor or an independent agency, approved by Douglas County, and paid for by the contractor or owner/developer. Deflection testing shall be done prior to paving and not less than thirty days after installation. The maximum allowable deflection shall not exceed 5% during the testing. Pipes 36-inch in diameter and larger may be entered and deflection levels measured directly. This allows for specific equipment such as Go/No Go sticks, cut to 95% of the inside diameter. If using a mandrel, it shall be a nine (or greater odd number) arm mandrel and shall be sized and inspected by the Douglas County Engineering Inspector prior to testing.

- Pipe through which the mandrel does not pass will be considered unacceptable, shall be re-laid, and then retested consistent with the testing requirements.

- Douglas County will require video inspection be completed by the contractor or an independent agency, approved by Douglas County, and paid for by the contractor or owner/developer. Video inspection will be required prior to initial and final warranty acceptance. Additional mandrel testing may be required if areas of concern are identified during the video inspection.

- Douglas County will require the contractor to coordinate with ADS representatives regarding on-site preconstruction consultation and site visits

during construction. When Douglas County feels comfortable with contractor capability, proficiency, and/or Douglas County Inspections staff familiarity with installation practices, this requirement can be re-evaluated.

- Douglas County will allow the use of joint deflections up to 3 degrees of deflection within proposed storm lines in lieu of manholes on curved streets. The designer will need to coordinate with ADS pipe on the design of the joint deflections to replace manholes.

To our knowledge, the only manufacturer of polypropylene pipe is Advanced Drainage Systems, Inc. If another manufacturer can provide polypropylene pipe that meets the above referenced specifications, conditions, and requirements, that product may be allowed, as well.

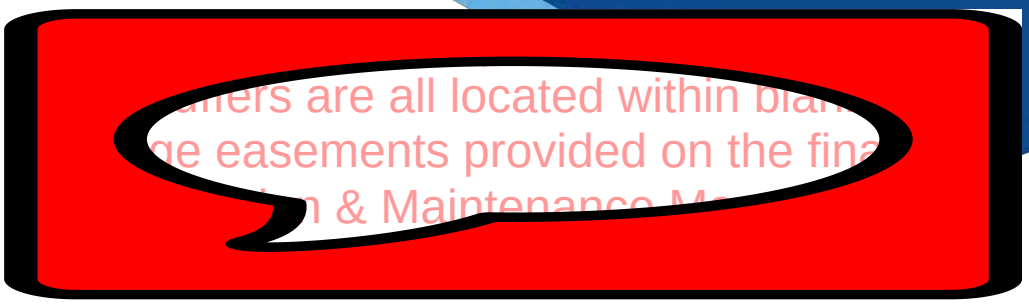
Upon expiration of the trial period, Douglas County will evaluate the permanent acceptance of polypropylene pipe for storm sewer pipe applications. That evaluation will be based on, but not limited to, performance, proficiency of contractors, input of County Inspections staff, and any other relative considerations.

We look forward to beginning this trial period and working cooperatively with ADS, Inc., contractors, engineers, and developers to ensure successful installations and long-term performance.

Sincerely,

Janet R. Herman, P.E.
Public Works Director

Cc: Matt Williams, P.E., CFM, Assistant Director of Public Works Engineering
Dan Roberts, P.E., Assistant Director of Public Works Operations
Pete George, P.E., Engineering Inspections Supervisor
Art Griffith, P.E., Transportation Capital Improvements Project Manager
Sean Owens, P.E., Special Projects Manager



Phase III Drainage Report
for
Ramblewood Filing No. 1
Douglas County, Colorado

Prepared for:

Miller United Real Estate, LLC
6900 E. Belleview Ave, Suite 300
Greenwood Village, CO 80111
Contact: Dan Sheldon
Contact Email: dsheldon@miller-united.com

By:

1765 West 121st Avenue, Suite 300
Westminster, CO 80234
Contact: Kevin Lovelace
Contact Email: klovelace@lja.com

Date: February 20, 2026

RAMBLEWOOD

LOCATED IN SECTION 6, TOWNSHIP 7 SOUTH, RANGE 65 WEST OF THE 6TH P.M., COUNTY OF DOUGLAS, STATE OF COLORADO

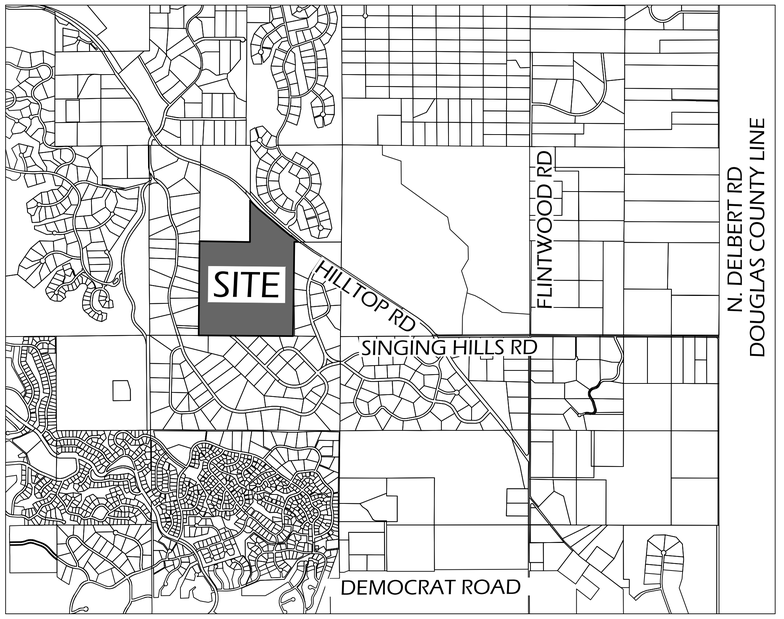
176.795 ACRES - 70 RESIDENTIAL LOTS - 8 TRACTS / SB2026-009

LEGAL DESCRIPTION

A PARCEL OF LAND LOCATED IN THE SOUTHWEST QUARTER AND THE SOUTHEAST QUARTER OF SECTION 6, TOWNSHIP 7 SOUTH, RANGE 65 WEST OF THE 6TH PRINCIPAL MERIDIAN, COUNTY OF DOUGLAS, STATE OF COLORADO, MORE PARTICULARLY DESCRIBED AS FOLLOWS: (THE BASIS OF BEARINGS FOR THIS DESCRIPTION IS SOUTH 00°00'27" WEST ALONG THE WEST LINE OF THE SOUTHWEST QUARTER OF SAID SECTION 6)
COMMENCING AT THE WEST QUARTER CORNER OF SAID SECTION 6;
THENCE SOUTH 88°58'23" EAST ALONG THE NORTH LINE OF THE SOUTHWEST QUARTER OF SAID SECTION 6 A DISTANCE OF 1426.97 FEET TO A POINT ON THE EAST BOUNDARY LINE OF HIDDEN VILLAGE FILING NUMBER ONE, A SUBDIVISION FILED WITH THE DOUGLAS COUNTY CLERK AND RECORDER'S OFFICE AND RECORDED APRIL 29, 1966 AT RECEPTION NO. 125234;
THENCE SOUTH 01°03'11" WEST ALONG THE EAST BOUNDARY LINE OF SAID HIDDEN VILLAGE FILING NUMBER ONE A DISTANCE OF 12.62 FEET TO THE SOUTHWEST CORNER OF A PARCEL OF LAND DESCRIBED BY DEED RECORDED DECEMBER 26, 1995 AT RECEPTION NO. 9561360 FILED IN THE DOUGLAS COUNTY CLERK AND RECORDER'S OFFICE, SAID POINT BEING THE POINT OF BEGINNING;
THENCE SOUTH 88°26'07" EAST ALONG THE SOUTH LINE OF THE PARCEL DESCRIBED AT SAID RECEPTION NO. 9561360 A DISTANCE OF 1408.26 FEET TO THE SOUTHEAST CORNER OF SAID PARCEL, SAID POINT ALSO BEING THE SOUTHWEST CORNER OF A PARCEL OF LAND DESCRIBED BY DEED RECORDED DECEMBER 26, 1995 AT RECEPTION NO. 9561359 FILED IN THE DOUGLAS COUNTY CLERK AND RECORDER'S OFFICE;
THENCE SOUTH 89°42'56" EAST ALONG THE SOUTH LINE OF THE PARCEL OF LAND DESCRIBED AT SAID RECEPTION NO. 9561359 AND THE SOUTH LINE OF A PARCEL OF LAND DESCRIBED BY DEED RECORDED JUNE 8, 1995 AT RECEPTION NO. 9525595 FILED IN THE DOUGLAS COUNTY CLERK AND RECORDER'S OFFICE A DISTANCE OF 1148.46 FEET TO THE SOUTHWEST CORNER OF A PARCEL OF LAND DESCRIBED BY DEED RECORDED MAY 5, 1995 AT RECEPTION NO. 9519762 FILED IN THE DOUGLAS COUNTY CLERK AND RECORDER'S OFFICE;
THENCE NORTH 00°57'00" EAST ALONG THE WEST LINE OF THE PARCEL OF LAND DESCRIBED AT SAID RECEPTION NO. 9519762 AND THE WEST LINE OF A PARCEL OF LAND DESCRIBED BY DEED RECORDED MAY 5, 1995 AT RECEPTION NO. 9519760 FILED IN THE DOUGLAS COUNTY CLERK AND RECORDER'S OFFICE A DISTANCE OF 176.40 FEET, SAID POINT ALSO BEING ON THE SOUTHWESTERLY RIGHT OF WAY LINE OF HILLTOP ROAD;
THENCE SOUTH 49°24'37" EAST ALONG THE SOUTHWESTERLY RIGHT OF WAY LINE OF HILLTOP ROAD AS DESCRIBED AT SAID RECEPTION NO. 9519760 (AND ALONG SAID DESCRIBED COURSE EXTENDED SOUTHEASTERLY) A DISTANCE OF 272.68 FEET TO A POINT ON THE NORTH LINE OF LOT 98, HIDDEN VILLAGE FILING NO. 4, A SUBDIVISION FILED WITH THE DOUGLAS COUNTY CLERK AND RECORDER AND RECORDED NOVEMBER 12, 1968 AT RECEPTION NO. 131583;
THENCE NORTH 89°42'56" WEST ALONG THE NORTH LINE OF SAID LOT 98 A DISTANCE OF 118.17 FEET TO THE NORTHWEST CORNER OF SAID LOT 98;
THENCE SOUTH 01°16'51" WEST ALONG THE WEST LINE OF SAID HIDDEN VILLAGE FILING NO. 4 A DISTANCE OF 2633.91 FEET TO THE SOUTHWEST CORNER OF LOT 102 OF SAID HIDDEN VILLAGE FILING NO. 4, SAID POINT ALSO BEING ON THE NORTH LINE OF LOT 58-A, HIDDEN VILLAGE FILING NO. 2, 2ND AMENDMENT, A SUBDIVISION FILED IN THE DOUGLAS COUNTY CLERK AND RECORDER'S OFFICE AND RECORDED APRIL 13, 2005 AT RECEPTION NO. 2005032337;
THENCE NORTH 89°04'32" WEST ALONG THE NORTH LINE OF SAID HIDDEN VILLAGE FILING NO. 2, 2ND AMENDMENT A DISTANCE OF 950.95 FEET TO THE NORTHWEST CORNER OF LOT 59-A OF SAID HIDDEN VILLAGE FILING NO. 2, 2ND AMENDMENT;
THENCE NORTH 89°01'58" WEST ALONG THE NORTH LINE OF HIDDEN VILLAGE FILING NUMBER TWO, A SUBDIVISION FILED IN THE DOUGLAS COUNTY CLERK AND RECORDER'S OFFICE AND RECORDED FEBRUARY 23, 1966 AT RECEPTION NO. 127014 A DISTANCE OF 1686.96 FEET TO THE SOUTHEAST CORNER OF TRACT B OF HIDDEN VILLAGE FILING NUMBER ONE AMENDED, A SUBDIVISION FILED IN THE DOUGLAS COUNTY CLERK AND RECORDER'S OFFICE AND RECORDED AUGUST 2, 1966 AT RECEPTION NO. 125878;
THENCE NORTH 01°03'11" EAST ALONG THE EAST BOUNDARY OF SAID HIDDEN VILLAGE FILING NUMBER ONE AMENDED AND THE EAST LINE OF SAID HIDDEN VILLAGE FILING NUMBER ONE A DISTANCE OF 2634.49 FEET TO THE POINT OF BEGINNING.

A PARCEL OF LAND LOCATED IN THE EAST HALF OF SECTION 6, TOWNSHIP 7 SOUTH, RANGE 65 WEST OF THE SIXTH PRINCIPAL MERIDIAN, COUNTY OF DOUGLAS, STATE OF COLORADO, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE EAST QUARTER CORNER OF SAID SECTION 6;
THENCE NORTH 89°37'37" WEST ALONG THE NORTH LINE OF THE SOUTHEAST QUARTER OF SAID SECTION 6, 1401.02 FEET TO THE POINT OF BEGINNING, SAID POINT BEING ON A LINE 63.72 FEET WEST OF AND PARALLEL WITH THE EAST LINE OF THE WEST HALF OF THE SOUTHEAST QUARTER OF SAID SECTION 6;
THENCE SOUTH 00°17'50" WEST ALONG SAID LINE, 10.98 FEET;
THENCE SOUTH 89°37'54" WEST, 1148.45 FEET;
THENCE NORTH 00°01'01" WEST, 25.84 FEET TO THE SOUTH LINE OF THE NORTHEAST QUARTER OF SAID SECTION 6, SAID POINT BEING SOUTH 89°37'37" EAST, 123.96 FEET FROM THE SOUTHWEST CORNER OF THE NORTHEAST QUARTER OF SAID SECTION 6;
THENCE CONTINUING NORTH 00°01'01" WEST, 1175.26 FEET TO THE SOUTH RIGHT-OF-WAY LINE OF HILLTOP ROAD; THENCE ALONG SAID SOUTH RIGHT-OF-WAY LINE THE FOLLOW TWO (2) COURSES:
1. THENCE SOUTH 36°30'00" EAST, 180.00 FEET;
2. THENCE SOUTH 50°03'47" EAST, 1359.35 FEET TO A LINE 63.72 FEET WEST OF AND PARALLEL WITH THE EAST LINE OF THE WEST HALF OF THE NORTHEAST QUARTER OF SAID SECTION 6;
THENCE SOUTH 00°17'50" WEST ALONG SAID LINE, 165.42 FEET TO THE POINT OF BEGINNING;
LESS AND EXCEPT THAT PORTION CONVEYED BY SPECIAL WARRANTY DEED RECORDED OCTOBER 3, 2023 UNDER RECEPTION NO. 2023042659, COUNTY OF DOUGLAS, STATE OF COLORADO.



VICINITY MAP
SCALE: 1" = 2000'

DEVELOPER	CIVIL ENGINEER	SURVEYOR
MILLER UNITED 6900 E. BELLVIEW AVE. GREENWOOD VILLAGE, CO 80111 PHONE: (303) 799-6300 CONTACT: DAN SHELDON	LJA ENGINEERING, INC. 1765 WEST 121ST AVE., SUITE 300 WESTMINSTER, CO 80234 PHONE: (303) 421-4224 CONTACT: KEVIN LOVELACE	LJA SURVEYING, INC 2725 ROCKY MOUNTAIN AVE., SUITE 450 LOVELAND, CO 80538 PHONE: (970) 340-2414 CONTACT: J.R. MCGEHEE

dedication statement will need to include the ROW dedication for Alpine Drive

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 RAMBLEWOOD. 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.

OWNER: MU HILLTOP LLC, A COLORADO LIMITED LIABILITY COMPANY

BY: _____, AS _____
OF MU HILLTOP LLC, A COLORADO LIMITED LIABILITY COMPANY.

STATE OF COLORADO)
) SS.
COUNTY OF DOUGLAS)

ACKNOWLEDGED BEFORE ME THIS _____ DAY OF _____ A.D., _____ BY _____
(NAME)
MY COMMISSION EXPIRES: _____

WITNESS MY HAND AND OFFICIAL SEAL: _____
NOTARY PUBLIC

OWNER: RAMBLEWOOD METROPOLITAN DISTRICT

BY: _____, AS _____
OF RAMBLEWOOD METROPOLITAN DISTRICT.

STATE OF COLORADO)
) SS.
COUNTY OF DOUGLAS)

ACKNOWLEDGED BEFORE ME THIS _____ DAY OF _____ A.D., _____ BY _____
(NAME)
MY COMMISSION EXPIRES: _____

WITNESS MY HAND AND OFFICIAL SEAL: _____
NOTARY PUBLIC

PLANNING COMMISSION

THE PRELIMINARY PLAN SB2025-040 FOR THIS FINAL PLAT WAS REVIEWED BY THE PLANNING COMMISSION ON FEBRUARY 23, 2026.

_____ _____
PLANNING DIRECTOR, ON BEHALF OF THE PLANNING COMMISSION DATE

SURVEYOR'S CERTIFICATE

I, JOHN ROBERT MCGEHEE, 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 FEBRUARY 4, 2026 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 _____ , 20___.

_____
JOHN ROBERT MCGEHEE
COLORADO REGISTERED PLS NO. 38219
FOR AND ON BEHALF OF LJA SURVEYING, INC.

FOR REVIEW ONLY

Certification needs to Dedication Sheet

SHEET INDEX

SHEET	SHEET TITLE
1	COVER 1
2	COVER 2
3	OVERALL
4	LOT DETAILS
5	LOT DETAILS
6	LOT DETAILS
7	LOT DETAILS

ACCEPTANCE CERTIFICATE

THE DEDICATION OF TRACTS B, D, E, F, G, H, AND I ARE HEREBY ACCEPTED FOR OWNERSHIP AND MAINTENANCE BY THE RAMBLEWOOD METROPOLITAN DISTRICT.

BY: _____

TITLE: _____

STATE OF COLORADO)
) SS.
COUNTY OF _____)

ACKNOWLEDGED BEFORE ME THIS _____ DAY OF _____ , 20___ BY _____

AS _____ OF _____ .

MY COMMISSION EXPIRES: _____

WITNESS MY HAND AND OFFICIAL SEAL

_____
NOTARY PUBLIC

THE DEDICATION OF TRACTS C IS HEREBY ACCEPTED FOR OWNERSHIP BY MU HILLTOP LLC, A COLORADO LIMITED LIABILITY COMPANY AND MAINTENANCE BY THE RAMBLEWOOD METROPOLITAN DISTRICT.

BY: _____

TITLE: _____

STATE OF COLORADO)
) SS.
COUNTY OF _____)

ACKNOWLEDGED BEFORE ME THIS _____ DAY OF _____ , 20___ BY _____

AS _____ OF _____ .

MY COMMISSION EXPIRES: _____

WITNESS MY HAND AND OFFICIAL SEAL

_____
NOTARY PUBLIC

THE DEDICATION OF TRACT A IS HEREBY ACCEPTED FOR OWNERSHIP AND MAINTENANCE BY MU HILLTOP LLC, A COLORADO LIMITED LIABILITY COMPANY.

BY: _____

TITLE: _____

STATE OF COLORADO)
) SS.
COUNTY OF _____)

ACKNOWLEDGED BEFORE ME THIS _____ DAY OF _____ , 20___ BY _____

AS _____ OF _____ .

MY COMMISSION EXPIRES: _____

WITNESS MY HAND AND OFFICIAL SEAL

_____
NOTARY PUBLIC

TITLE VERIFICATION

WE_____, 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.

COMPANY NAME: COMMONWEALTH LAND TITLE INSURANCE COMPANY

BY: _____
NAME DATE

TITLE: _____

STATE OF COLORADO)
) SS.
COUNTY OF DOUGLAS)

ACKNOWLEDGED BEFORE ME THIS _____ DAY OF _____ A.D. 2026 BY _____

MY COMMISSION EXPIRES: _____

WITNESS MY HAND AND OFFICIAL SEAL: _____
NOTARY PUBLIC

BOARD OF COUNTY COMMISSIONERS

THIS PLAT WAS APPROVED FOR FILING BY THE BOARD OF COUNTY COMMISSIONERS OF DOUGLAS COUNTY, CO, ON THE _____ DAY OF _____, 202__, SUBJECT TO ANY CONDITIONS SPECIFIED HEREON. THE DEDICATIONS OF UTILITY EASEMENTS, DRAINAGE AND BLANKET ACCESS EASEMENTS, HALFPIPE PLACE, FREERIDER POINT, FREERIDER WAY, DERAILER STREET, RAILBENDER STREET, AND ALPINE DRIVE ARE HEREBY 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

LJA SURVEYING
4700 S. Syracuse Street
Suite 500
Denver, CO 80237
303-390-8510
www.lja.com

Date: 3/18/2026 | Job No.: 1084-0006 | Sheet: 1 of 7

I:\JOB FOLDERS\1084\1084-0006\SURVEY\06 CAD\PRODUCTION FILES\1084-0006_RAMBLEWOOD - COVER PRINTED ON: 3/18/2026 4:00 PM

RAMBLEWOOD

LOCATED IN SECTION 6, TOWNSHIP 7 SOUTH, RANGE 65 WEST OF THE 6TH P.M., COUNTY OF DOUGLAS, STATE OF COLORADO

176.795 ACRES - 70 RESIDENTIAL LOTS - 8 TRACTS / SB2026-009

GENERAL NOTES

1. 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.

2. ANY PERSON WHO KNOWINGLY REMOVES, ALTERS OR DEFACES ANY PUBLIC LAND SURVEY MONUMENT OR LAND BOUNDARY MONUMENT OR ACCESSORY, COMMITS A CLASS TWO (2) MISDEMEANOR PURSUANT TO STATE STATUTE 18–4-508, C.R.S.

3. THIS SURVEY DOES NOT CONSTITUTE A TITLE SEARCH BY LJA SURVEYING TO DETERMINE OWNERSHIP OR EASEMENTS OF RECORD. FOR ALL INFORMATION REGARDING EASEMENTS, RIGHTS-OF-WAY, AND TITLE OF RECORD, LJA SURVEYING RELIED UPON THE TITLE REPORT PREPARED BY LAND TITLE GUARANTEE COMPANY, ORDER NUMBER ABC70847001-4, WITH AN EFFECTIVE DATE OF JANUARY 16, 2026 AT 5:00 P.M. AND THE TITLE REPORT PREPARED BY LAND TITLE GUARANTEE COMPANY, ORDER NUMBER ABC70847009-4, WITH AN EFFECTIVE DATE OF JANUARY 26, 2026 AT 5:00 P.M.

4. THE LINEAL UNIT USED IN THE PREPARATION OF THIS SURVEY IS THE U.S. SURVEY FOOT AS DEFINED BY THE UNITED STATES DEPARTMENT OF COMMERCE, NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY.

5. BASIS OF BEARINGS: THE EAST LINE OF THE SOUTHWEST QUARTER OF SECTION 6, TOWNSHIP 7 SOUTH, RANGE 65 WEST OF THE 6TH P.M. BEING ASSUMED TO BEAR NORTH 00°19'46" EAST, SAID LINE BEING MONUMENTED ON THE NORTH BY THE CENTER QUARTER CORNER OF SAID SECTION 6 BEING A 3.25" ALUMINUM CAP STAMPED "1994 PLS 12405" (0.3' ABOVE GROUND), AND ON THE SOUTH BY THE SOUTH QUARTER CORNER OF SAID SECTION 6 BEING A FOUND 3.25" ALUMINUM CAP STAMPED "1991 PLS 12405" (0.5' ABOVE GROUND) WITH ALL BEARINGS CONTAINED HEREIN RELATIVE THERETO.

6. FLOODPLAIN: THE SURVEYED PROPERTY IS LOCATED WITHIN ZONE X, OTHER AREAS — DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN, AS IDENTIFIED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) ON FLOOD INSURANCE RATE MAP (FIRM) — MAP NUMBER 08035C0202F AND 08035C0204F WITH A MAP REVISED DATE OF OF SEPTEMBER 30, 2005.

7. UTILITY EASEMENTS: FIFTEEN FOOT (15') WIDE UTILITY EASEMENTS AS SHOWN HEREON ARE DEDICATED FOR THE INSTALLATION, MAINTENANCE AND REPLACEMENT OF ELECTRIC, GAS, TELEVISION, CABLE AND TELECOMMUNICATIONS FACILITIES. PERMANENT STRUCTURES, IMPROVEMENTS, OBJECTS, BUILDINGS, WELLS, WATER METERS AND OTHER OBJECTS THAT MAY INTERFERE WITH THE UTILITY FACILITIES OR USE THEREOF (INTERFERING OBJECTS) SHALL NOT BE PERMITTED WITHIN SAID UTILITY EASEMENTS AND THE UTILITY PROVIDERS, AS GRANTEES, MAY REMOVE ANY INTERFERING OBJECTS AT NO COST TO SUCH GRANTEES, INCLUDING, WITHOUT LIMITATION, VEGETATION. PUBLIC SERVICE COMPANY OF COLORADO (PSCO) AND ITS SUCCESSORS RESERVE THE RIGHT TO REQUIRE ADDITIONAL EASEMENTS AND TO REQUIRE THE PROPERTY OWNER TO GRANT PSCO AN EASEMENT ON ITS STANDARD FORM.

8. TRACT A IS HEREBY DEDICATED TO MU HILLTOP LLC, A COLORADO LIMITED LIABILITY COMPANY FOR THE USE OF DRAINAGE AND OPEN SPACE. SAID TRACT WILL ALSO BE MAINTAINED BY MU HILLTOP LLC, A COLORADO LIMITED LIABILITY COMPANY.

9. TRACT C IS HEREBY DEDICATED TO MU HILLTOP LLC, A COLORADO LIMITED LIABILITY COMPANY FOR THE USE OF DRAINAGE, OPEN SPACE AND UTILITIES. SAID TRACT WILL BE MAINTAINED BY THE RAMBLEWOOD METROPOLITAN DISTRICT.

10. TRACTS B, D, E, F, G, H, AND I ARE HEREBY DEDICATED TO THE RAMBLEWOOD METROPOLITAN DISTRICT FOR USE OF DRAINAGE, OPEN SPACE AND UTILITIES. SAID TRACTS WILL ALSO BE MAINTAINED BY THE RAMBLEWOOD METROPOLITAN DISTRICT.

11. PRIMARY DRAINAGE EASEMENTS ARE DEDICATED TO DOUGLAS COUNTY AND SHALL REMAIN FREE OF OBSTRUCTION.

LAND USE SUMMARY CHART				
TYPE	LOTS	SQ. FT.	ACRES	%
LOT AREA - RESIDENTIAL	70	4,568,435	104.877	59.32%
PUBLIC RIGHT-OF-WAY AREA		488,282	11.209	6.34%
TRACTS - (9)		2,644,453	60.708	34.34%
TOTALS		7,701,170	176.795	100.00%

TRACT SUMMARY CHART					
TRACT	USE	OWNED	MAINTAINED	SQ. FT.	ACRES
TRACT A	DRAINAGE, OPEN SPACE	OWNER	OWNER	119,341	2.740
TRACT B	DRAINAGE, OPEN SPACE, UTILITIES	METRO DISTRICT	METRO DISTRICT	89,268	2.049
TRACT C	DRAINAGE, OPEN SPACE, UTILITIES	OWNER	METRO DISTRICT	10,071	0.231
TRACT D	DRAINAGE, OPEN SPACE, PARK, UTILITIES	METRO DISTRICT	METRO DISTRICT	1,139,439	26.158
TRACT E	DRAINAGE, OPEN SPACE	METRO DISTRICT	METRO DISTRICT	42,974	0.987
TRACT F	DRAINAGE, OPEN SPACE, UTILITIES	METRO DISTRICT	METRO DISTRICT	186,741	4.287
TRACT G	DRAINAGE, OPEN SPACE, UTILITIES	METRO DISTRICT	METRO DISTRICT	44,590	1.024
TRACT H	DRAINAGE, OPEN SPACE, UTILITIES	METRO DISTRICT	METRO DISTRICT	946,689	21.733
TRACT I	OPEN SPACE, PARK	METRO DISTRICT	METRO DISTRICT	65,340	1.500
			TOTAL AREA	2,644,453	60.708

d this Note
SE
...LE"), THE "FACILITIES"). IN THE...
...AND ASSIGNS ("SYSTEM OWNER") FAILS TO SATISFA...
...S, A BLANKET EASEMENT OVER THE SUBDIVISION IS ALSO GRANT...
...T FOR THE PURPOSES OF ACCESSING THE FACILITIES IN THE EVENT THA...
...NOT PROVIDE ADEQUATE ACCESS. THE MAINTENANCE AND REPAIR OF THE F...
...BDIVISION, AS SHOWN ON THE CONSTRUCTION PLANS ACCEPTED BY DOUGLAS ...
...OR THE SUBDIVISION, SHALL BE THE RESPONSIBILITY OF THE SYSTEM OWNER, I...
...TENANCE AND REPAIR ARE NOT PREFORMED BY THE SYSTEM OWNER TO TH...
...TY, THEN DOUGLAS COUNTY SHALL HAVE THE RIGHT, BUT NOT THE OB...
...L, AFTER TEN (10) DAYS PRIOR WRITTEN NOTICE TO THE SYST...
...WHICH CASE DOUGLAS COUNTY SHALL GIVE NO...
...ORK, THE COST OF...
...TEM OWNER F...
...THE PU...

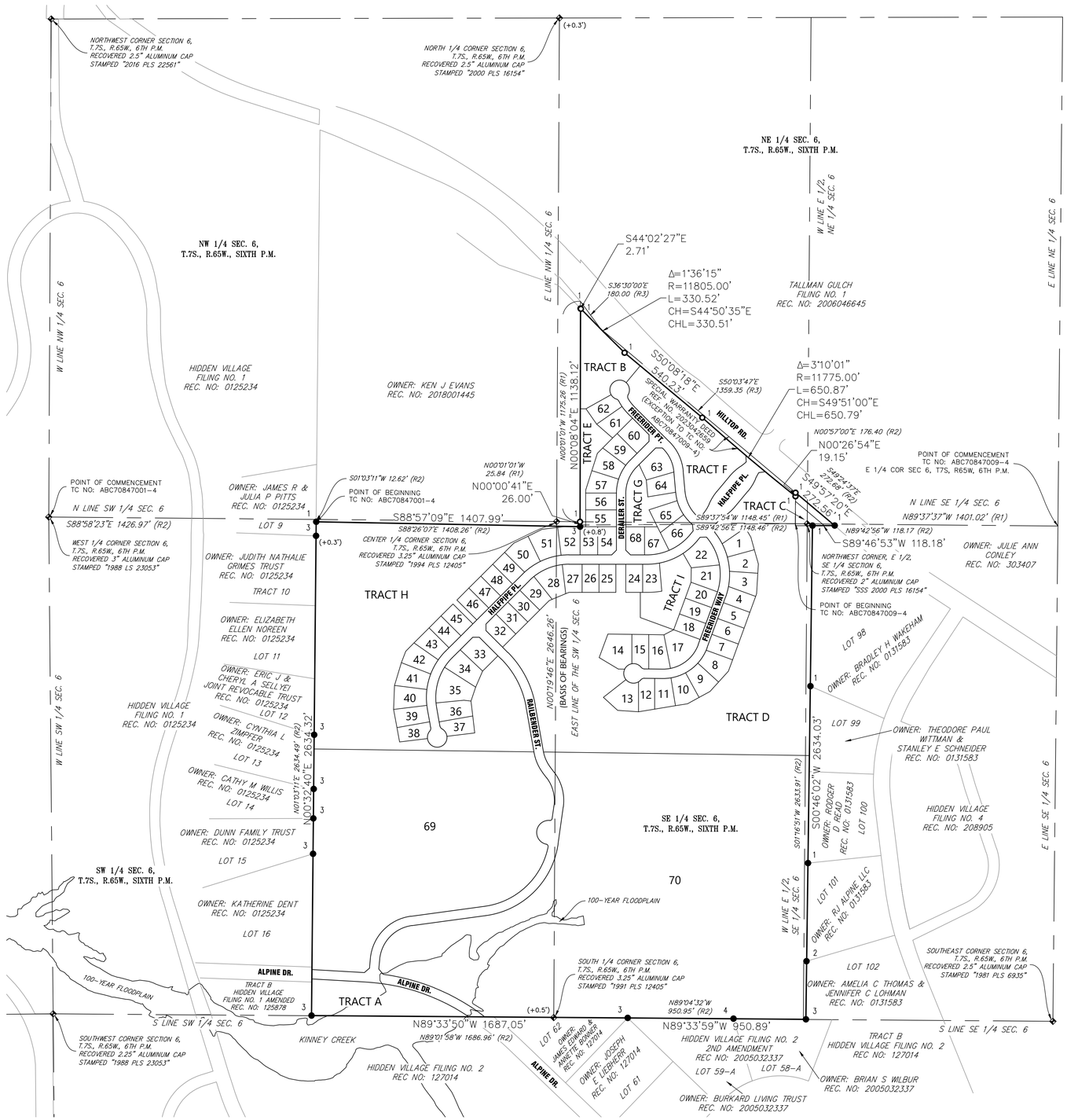
LJA SURVEYING
4700 S. Syracuse Street
Suite 500
Denver, CO 80237
303-390-8510
www.lja.com

Date: 3/18/2026 | Job No.: 1084-0006 | Sheet: 2 of 7

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RAMBLEWOOD

LOCATED IN SECTION 6, TOWNSHIP 7 SOUTH, RANGE 65 WEST OF THE 6TH P.M., COUNTY OF DOUGLAS, STATE OF COLORADO
176.795 ACRES - 70 RESIDENTIAL LOTS - 8 TRACTS / SB2026-009



MONUMENT SYMBOL LEGEND

	ALL MONUMENTS WERE RECOVERED FLUSH WITH THE GROUND UNLESS NOTED OTHERWISE
✥	RECOVERED SECTION CORNER AS NOTED HEREON
1 ○	SET 18" LONG NO. 5 REBAR WITH 1.25" ORANGE PLASTIC CAP STAMPED "LJA SURVEYING PLS 38219" FLUSH WITH GROUND
1 ●	RECOVERED NO. 5 REBAR WITH 2" GREEN PLASTIC CAP STAMPED "FRONTIER SURVEY 30830"
2 ●	RECOVERED NO. 5 REBAR WITH 1" ALUMINUM CAP STAMPED "RLS 4440"
3 ●	RECOVERED IRON ROD WITH NO CAP
4 ●	RECOVERED NO. 5 REBAR WITH YELLOW PLASTIC CAP STAMPED "PLS 29052"
(R1)	DIMENSION PER RECEPTION NO. 2023042659 WITHIN LAND TITLE GUARANTEE COMPANY TITLE COMMITMENT ORDER NUMBER ABC70847009-4.
(+0.3')	DENOTES POSITION OF RECOVERED MONUMENT ABOVE (+) OR BELOW (-) SURROUNDING GROUND

LEGEND

- S.E. = SANITARY SEWER EASEMENT HEREBY GRANTED
- D.E. = PRIMARY DRAINAGE EASEMENTS HEREBY DEDICATED TO DOUGLAS COUNTY
- D.U.E. = DRY UTILITY EASEMENT HEREBY GRANTED
- U.E. = UTILITY EASEMENT HEREBY GRANTED
- REC. NO: = RECEPTION NUMBER
- P.W.S.D.E. = PARKER WATER & SANITATION DISTRICT EASEMENT
- (BEARING/DISTANCE R1) = BEARING, DISTANCE OR CURVE LABEL FROM TITLE COMMITMENT NO. ABC70847009-4 LEGAL DESCRIPTION
- (BEARING/DISTANCE R2) = BEARING, DISTANCE OR CURVE LABEL FROM TITLE COMMITMENT NO. ABC70847001-4 LEGAL DESCRIPTION
- (BEARING/DISTANCE R3) = BEARING, DISTANCE OR CURVE LABEL FROM RIGHT-OF-WAY DEED RECEPTION NO. 2023042659 LEGAL DESCRIPTION

N

300 0 150 300
SCALE
1 inch = 300 ft.

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FOR REVIEW ONLY

FOR AND ON BEHALF OF LJA SURVEYING, INC.

LJA SURVEYING
4700 S. Syracuse Street Suite 500 Denver, CO 80237 303-390-8510 www.lja.com

Date: 3/18/2026 | Job No: 1084-0006 | Sheet: 3 of 7

RAMBLEWOOD

LOCATED IN SECTION 6, TOWNSHIP 7 SOUTH, RANGE 65 WEST OF THE 6TH P.M., COUNTY OF DOUGLAS, STATE OF COLORADO

176.795 ACRES - 70 RESIDENTIAL LOTS - 8 TRACTS / SB2026-009

NE 1/4 SEC. 6,
T.7S., R.65W., SIXTH P.M.

MATCH TO RIGHT

MATCH TO LEFT

SEE SHEET 3

SEE SHEET 3

MATCH TO SHEET 6

MATCH TO SHEET 6

HILLTOP ROAD
(R.O.W. VARIES)

TALLMAN GULCH
FILING NO. 1
REC. NO: 2006046645

DERAILER ST.
(50' PUBLIC R.O.W.)

FREERIDER PT.
(50' PUBLIC R.O.W.)

MERRYVALE TR.

HA... (PUBLIC R...)

OWNER: KEN J EVANS
REC. NO: 2018001445

MONUMENT SYMBOL LEGEND

ALL MONUMENTS WERE RECOVERED FLUSH WITH THE GROUND UNLESS NOTED OTHERWISE

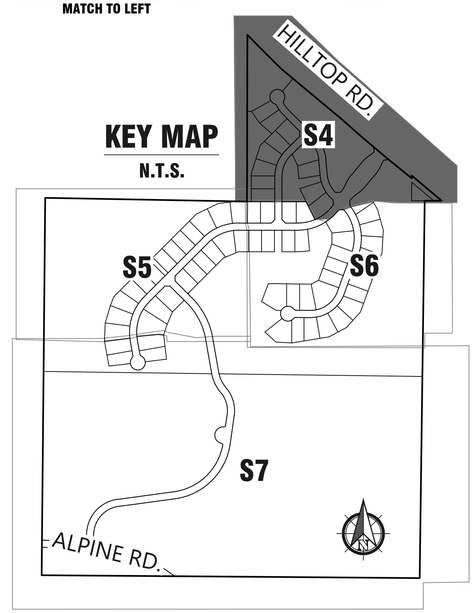
- RECOVERED SECTION CORNER AS NOTED HEREON
- 1 SET 18" LONG NO. 5 REBAR WITH 1.25" ORANGE PLASTIC CAP STAMPED "LJA SURVEYING PLS 38219" FLUSH WITH GROUND
- 2 RECOVERED NO. 5 REBAR WITH 2" GREEN PLASTIC CAP STAMPED "FRONTIER SURVEY 30830"
- RECOVERED NO. 5 REBAR WITH 1" ALUMINUM CAP STAMPED "RLS 4440"
- 3 RECOVERED IRON ROD WITH NO CAP
- 4 RECOVERED NO. 5 REBAR WITH YELLOW PLASTIC CAP STAMPED "PLS 29052"

(-0.3') DENOTES POSITION OF RECOVERED MONUMENT ABOVE (+) OR BELOW (-) SURROUNDING GROUND

LEGEND

- S.E. = SANITARY SEWER EASEMENT HEREBY GRANTED
- D.E. = PRIMARY DRAINAGE EASEMENTS HEREBY DEDICATED TO DOUGLAS COUNTY
- D.U.E. = DRY UTILITY EASEMENT HEREBY GRANTED
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- (BEARING/DISTANCE R1) = BEARING, DISTANCE OR CURVE LABEL FROM TITLE COMMITMENT NO. ABC70847009-4 LEGAL DESCRIPTION
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- (BEARING/DISTANCE R3) = BEARING, DISTANCE OR CURVE LABEL FROM RIGHT-OF-WAY DEED RECEPTION NO. 2023042659 LEGAL DESCRIPTION

KEY MAP
N.T.S.



LINE TABLE		
LINE	BEARING	LENGTH
L1	N00°00'41"E	26.00'
L9	N66°16'02"E	24.73'
L10	S88°25'53"W	33.11'
L11	N03°22'00"W	34.44'
L12	S83°10'43"W	34.44'

CURVE TABLE					
CURVE	LENGTH	RADIUS	DELTA	CHORD BEARING	CHORD LENGTH
C7	18.80'	25.00'	43°05'13"	N48° 38' 35"W	18.36
C8	252.45'	52.00'	278°09'43"	N68° 53' 40"E	68.12
C9	25.54'	25.00'	58°31'33"	S01° 17' 15"E	24.44
C12	284.15'	325.00'	50°05'38"	S64° 57' 11"W	275.18

SCALE
1 inch = 50 ft.

FOR REVIEW ONLY

FOR AND ON BEHALF OF
LJA SURVEYING, INC.

LJA SURVEYING
4700 S. Syracuse Street
Suite 500
Denver, CO 80237
303-390-8510
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Date: 3/18/2026 | Job No.: 1084-0006 | Sheet: 4 of 7

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RAMBLEWOOD

LOCATED IN SECTION 6, TOWNSHIP 7 SOUTH, RANGE 65 WEST OF THE 6TH P.M., COUNTY OF DOUGLAS, STATE OF COLORADO

176.795 ACRES - 70 RESIDENTIAL LOTS - 8 TRACTS / SB2026-009

SEE SHEET 3

OWNER: KEN J EVANS
REC. NO: 2018001445

NW 1/4 SEC. 6,
T.7S., R.65W., SIXTH P.M.

CENTER 1/4 CORNER SECTION 6,
T.7S., R.65W., 6TH P.M.
RECOVERED 3.25" ALUMINUM CAP
STAMPED "1994 PLS 12405"

N00°01'01"W
1175.26' (R1)

N00°08'04"E
11.38.12'

L1

N00°01'01"W
25.84' (R1)

NORTH LINE OF THE SW 1/4 SEC. 6

S88°57'09"E 1407.99'
1335.01'
S88°26'07"E 1408.26' (R2)

OWNER: JAMES R & JULIA P PITTS
REC. NO: 0125234

LOT 9

TRACT 10

OWNER: JUDITH NATHALIE GRIMES TRUST
REC. NO: 0125234

SW 1/4 SEC. 6,
T.7S., R.65W., SIXTH P.M.

HIDDEN VILLAGE FILING NO. 1
REC. NO: 0125234

N01°03'11"E 2634.49' (R2)
N00°32'40"E 2634.32'
N00°32'40"E 1211.76'

SEE SHEET 3

LOT 11

OWNER: ELIZABETH ELLEN NOREEN
REC. NO: 0125234

OWNER: ERIC J & CHERYL A SELLYEI JOINT REVOCABLE TRUST
REC. NO: 0125234

LOT 12

FOR REVIEW ONLY

FOR AND ON BEHALF OF
LJA SURVEYING, INC.

LEGEND

S.E. = SANITARY SEWER EASEMENT HEREBY GRANTED
D.E. = PRIMARY DRAINAGE EASEMENTS HEREBY DEDICATED TO DOUGLAS COUNTY
D.U.E. = DRY UTILITY EASEMENT HEREBY GRANTED
U.E. = UTILITY EASEMENT HEREBY GRANTED
REC. NO: = RECEPTION NUMBER
P.W.S.D.E. = PARKER WATER & SANITATION DISTRICT EASEMENT
(BEARING/DISTANCE R1) = BEARING, DISTANCE OR CURVE LABEL FROM TITLE COMMITMENT NO. ABC70847009-4 LEGAL DESCRIPTION
(BEARING/DISTANCE R2) = BEARING, DISTANCE OR CURVE LABEL FROM TITLE COMMITMENT NO. ABC70847001-4 LEGAL DESCRIPTION
(BEARING/DISTANCE R3) = BEARING, DISTANCE OR CURVE LABEL FROM RIGHT-OF-WAY DEED RECEPTION NO. 2023042659 LEGAL DESCRIPTION

LINE TABLE		
LINE	BEARING	LENGTH
L1	N00°00'41"E	26.00'
L5	N83°08'00"E	178.52'
L6	N84°31'35"E	150.00'
L7	S83°13'39"E	37.56'

MONUMENT SYMBOL LEGEND

ALL MONUMENTS WERE RECOVERED FLUSH WITH THE GROUND UNLESS NOTED OTHERWISE

- RECOVERED SECTION CORNER AS NOTED HEREON
- 1 SET 18" LONG NO. 5 REBAR WITH 1.25" ORANGE PLASTIC CAP STAMPED "LJA SURVEYING PLS 38219" FLUSH WITH GROUND
- 1 RECOVERED NO. 5 REBAR WITH 2" GREEN PLASTIC CAP STAMPED "FRONTIER SURVEY 30830"
- 2 RECOVERED NO. 5 REBAR WITH 1" ALUMINUM CAP STAMPED "RLS 4440"
- 3 RECOVERED IRON ROD WITH NO CAP
- 4 RECOVERED NO. 5 REBAR WITH YELLOW PLASTIC CAP STAMPED "PLS 29052"
- (-0.3') DENOTES POSITION OF RECOVERED MONUMENT ABOVE (+) OR BELOW (-) SURROUNDING GROUND

TRACT H
946,689 SF
21.733 AC

check sight distance at this intersection

40	18,472 SF	0.424 AC	
41	17,798 SF	0.409 AC	
42	17,632 SF	0.405 AC	
43	15,177 SF	0.348 AC	
44	13,500 SF	0.310 AC	
45	13,500 SF	0.310 AC	
46	13,500 SF	0.310 AC	
47	13,500 SF	0.310 AC	
48	13,500 SF	0.310 AC	
49	13,501 SF	0.310 AC	
50	19,470 SF	0.447 AC	
51	21,495 SF	0.493 AC	
52	16,674 SF	0.383 AC	
27	14,657 SF	0.336 AC	
28	19,416 SF	0.446 AC	
29	14,560 SF	0.334 AC	
30	13,500 SF	0.310 AC	
31	13,500 SF	0.310 AC	
32	14,687 SF	0.337 AC	
33	19,099 SF	0.438 AC	
34	19,628 SF	0.451 AC	
35	26,560 SF	0.610 AC	

TRACT D
1,139,439 SF
26.158 AC

(BASIS OF BEARINGS)
N00°19'46"E 2646.26'
EAST LINE OF THE SW 1/4 SEC. 6

S89°14'35"E 284.91'
TEMPORARY CONSTRUCTION EASEMENT
N89°14'35"W 241.13'
N10°54'09"E 378.36'
S10°54'09"W 377.80'

HALFPIPE PL. (50' PUBLIC R.O.W.)
RAILBENDER ST. (50' PUBLIC R.O.W.)

MATCH TO SHEET 7
MATCH TO SHEET 6

KEY MAP
N.T.S.

HILLTOP RD.
ALPINE RD.
S4
S5
S6
S7

SCALE
1 inch = 50 ft.
50 0 25 50

LJA SURVEYING
4700 S. Syracuse Street
Suite 500
Denver, CO 80237
303-390-8510
www.lja.com

Date: 3/18/2026 | Job No.: 1084-0006 | Sheet: 5 of 7

I:\JOB FOLDERS\1084\1084-0006\SURVEY\06 CAD\PRODUCTION FILES\1084-0006_RAMBLEWOOD - SHEETS PRINTED ON: 3/18/2026 2:45 PM

RAMBLEWOOD

LOCATED IN SECTION 6, TOWNSHIP 7 SOUTH, RANGE 65 WEST OF THE 6TH P.M., COUNTY OF DOUGLAS, STATE OF COLORADO

176.795 ACRES - 70 RESIDENTIAL LOTS - 8 TRACTS / SB2026-009

MATCH TO SHEET 4

MATCH TO SHEET 5

MATCH TO SHEET 7

SEE SHEET 3

SE 1/4 SEC. 6, T.7S., R.65W., SIXTH P.M.

W LINE E 1/2, SE 1/4 SEC. 6

S00°46'02"W 2634.03' (R2)

S01°16'51"W 2633.91' (R2)

1226.76'

0.3'

1

OWNER: BRADLEY H WAKEHAM
REC. NO: 0131583

HIDDEN VILLAGE
FILING NO. 4
REC. NO: 208905

DERAILER ST. (50' PUBLIC R.O.W.)

HALFPIPE PL. (50' PUBLIC R.O.W.)

FREERIDER WAY (50' PUBLIC R.O.W.)

TRACT I
65,340 SF
1.500 AC

TRACT D
1,139,439 SF
26.158 AC

TRACT D
1,139,439 SF
26.158 AC

MONUMENT SYMBOL LEGEND

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- 3 RECOVERED IRON ROD WITH NO CAP
- 4 RECOVERED NO. 5 REBAR WITH YELLOW PLASTIC CAP STAMPED "PLS 29052"
- (-0.3') DENOTES POSITION OF RECOVERED MONUMENT ABOVE (+) OR BELOW (-) SURROUNDING GROUND

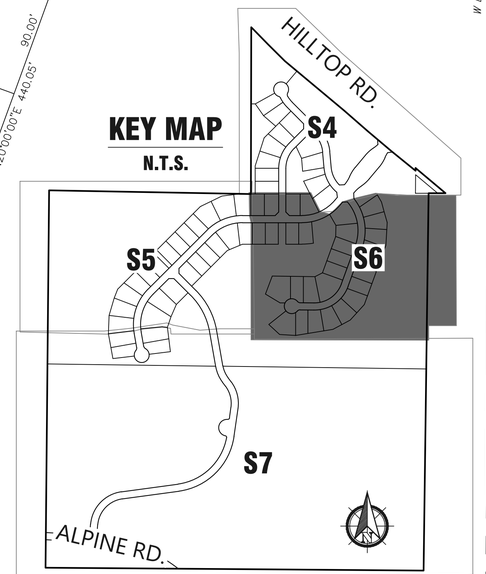
LEGEND

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- (BEARING/DISTANCE R3) = BEARING, DISTANCE OR CURVE LABEL FROM RIGHT-OF-WAY DEED RECEPTION NO. 2023042659 LEGAL DESCRIPTION

LINE TABLE		
LINE	BEARING	LENGTH
L10	S88°25'53"W	33.11'

CURVE TABLE					
CURVE	LENGTH	RADIUS	DELTA	CHORD BEARING	CHORD LENGTH
C1	21.60'	25.00'	49°30'26"	S66° 00' 49"W	20.94
C2	253.23'	52.00'	279°00'53"	N00° 46' 02"E	67.53
C3	21.60'	25.00'	49°30'26"	S64° 28' 45"E	20.94
C12	284.15'	325.00'	50°05'38"	S64° 57' 11"W	275.18

KEY MAP
N.T.S.



SCALE
1 inch = 50 ft.
50 0 25 50

FOR REVIEW ONLY

FOR AND ON BEHALF OF
LJA SURVEYING, INC.

LJA SURVEYING
4700 S. Syracuse Street
Suite 500
Denver, CO 80237
303-390-8510
www.lja.com

Date: 3/18/2026 | Job No.: 1084-0006 | Sheet: 6 of 7

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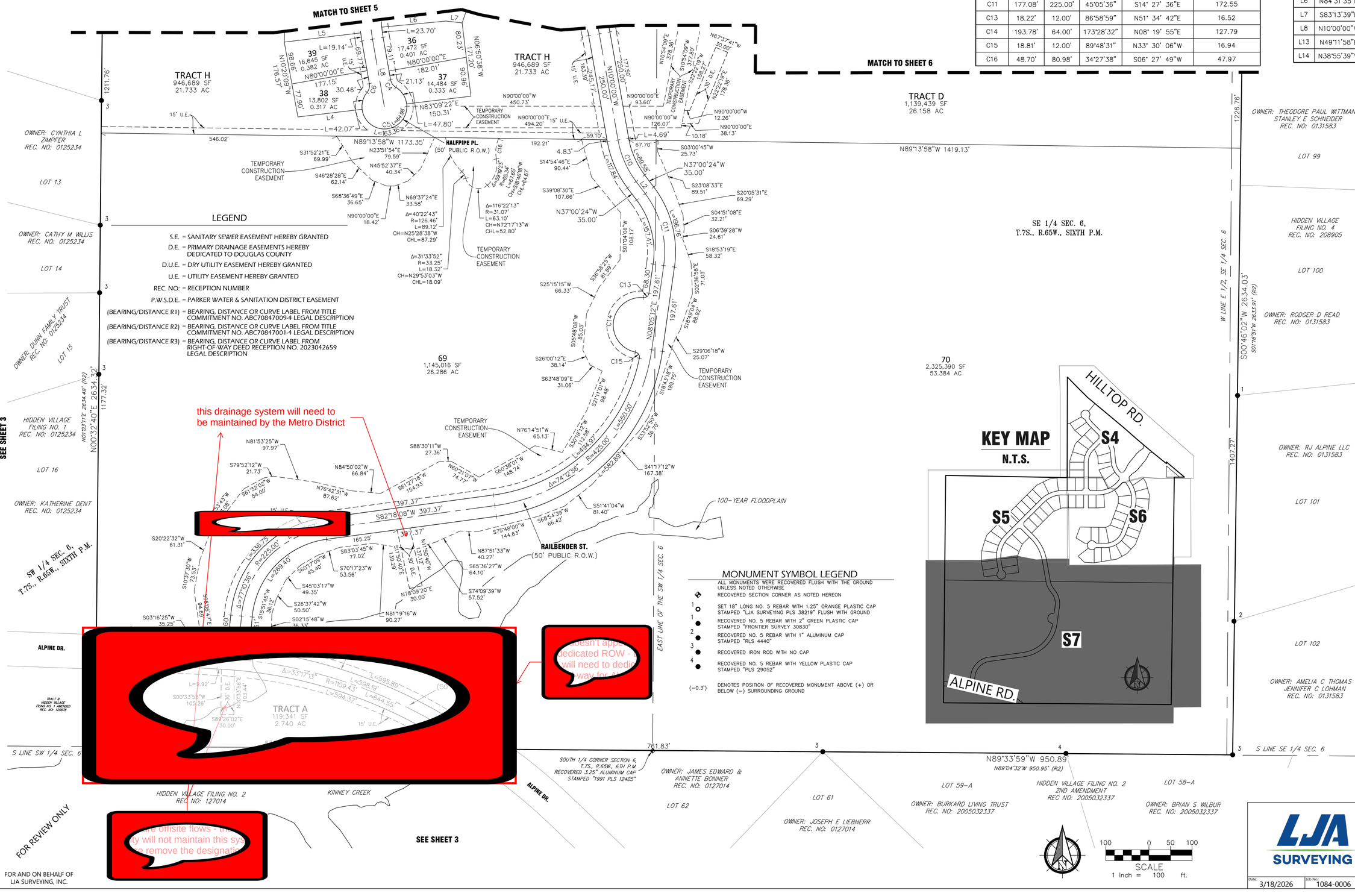
RAMBLEWOOD

LOCATED IN SECTION 6, TOWNSHIP 7 SOUTH, RANGE 65 WEST OF THE 6TH P.M., COUNTY OF DOUGLAS, STATE OF COLORADO

176.795 ACRES - 70 RESIDENTIAL LOTS - 8 TRACTS / SB2026-009

CURVE TABLE					
CURVE	LENGTH	RADIUS	DELTA	CHORD BEARING	CHORD LENGTH
C4	21.60'	25.00'	49°30'26"	S34° 45' 13"E	20.94
C5	253.23'	52.00'	279°00'53"	S80° 00' 00"W	67.53
C6	21.60'	25.00'	49°30'26"	N14° 45' 13"E	20.94
C10	106.05'	225.00'	27°00'24"	S23° 30' 12"E	105.08
C11	177.08'	225.00'	45°05'36"	S14° 27' 36"E	172.55
C13	18.22'	12.00'	86°58'59"	N51° 34' 42"E	16.52
C14	193.78'	64.00'	173°28'32"	N08° 19' 55"E	127.79
C15	18.81'	12.00'	89°48'31"	N33° 30' 06"W	16.94
C16	48.70'	80.98'	34°27'38"	S06° 27' 49"W	47.97

LINE TABLE		
LINE	BEARING	LENGTH
L2	S37°00'24"E	35.00'
L3	S05°07'31"W	101.33'
L4	S83°09'22"W	150.00'
L5	N83°08'00"E	178.52'
L6	N84°31'35"E	150.00'
L7	S83°13'39"E	37.56'
L8	N10°00'00"W	158.80'
L13	N49°11'58"E	35.92'
L14	N38°55'39"W	35.93'



LEGEND

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KEY MAP

N.T.S.

SCALE
1 inch = 100 ft.
100 0 50 100

LJA SURVEYING
4700 S. Syracuse Street
Suite 500
Denver, CO 80237
303-390-8510
www.lja.com

Date: 3/18/2026 | Job No.: 1084-0006 | Sheet: 7 of 7

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mments on the GESC Re

Grading, Erosion, and Sediment Control (GESC) Plan for Ramblewood Douglas County, Colorado

Prepared for:

Miller United Real Estate, LLC
6900 E. Belleview Ave, Suite 300
Greenwood Village, CO 80111
Contact: Dan Sheldon
Contact Email: dsheldon@miller-united.com

By:

1765 West 121st Avenue, Suite 300
Westminster, CO 80234
Contact: Kevin Lovelace
Contact Email: klovelace@lja.com

Date: February 20th, 2026

RAMBLEWOOD FILING NO. 1

STREET & STORM SEWER CONSTRUCTION PLANS

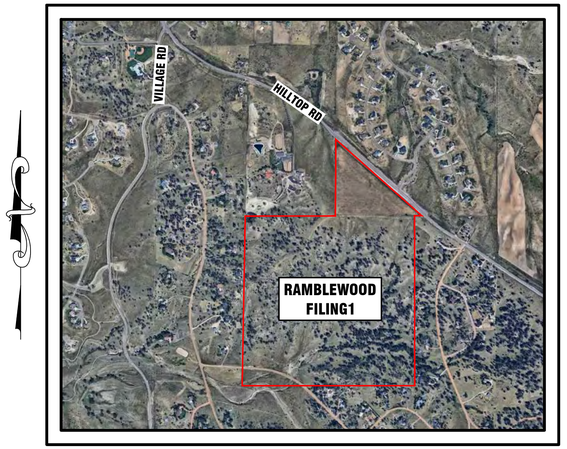
LOCATED IN SECTION 6, TOWNSHIP 7 SOUTH, RANGE 65 WEST OF THE SIXTH PRINCIPAL MERIDIAN, COUNTY OF DOUGLAS, STATE OF COLORADO

LEGEND

- Property Line
- Right of Way Line
- Centerline
- Easement Line
- Lot Line
- Site Line
- Sight Distance Line
- Top of Embankment
- 100-YR W.S.E.
- Phase Line
- Retaining Wall
- Prop. Asphalt Pavement
- Prop. Asphalt Mill & Overlay
- Prop. Concrete Pavement
- Prop. Concrete Walk
- Prop. Crushed Fines
- Ex. Concrete Walk
- Ex. Asphalt Pavement
- Sight Distance Area
- FEMA Floodplain Limits
- Sanitary Sewer Line
- Water Line
- Storm Sewer Line
- SS — Ex. Sanitary Line
- W — W — Ex. Water Line
- STM — Ex. Storm Sewer Line
- IRR — Ex. Irrigation Pipe
- FO — Ex. Fiber Optic Line
- G — Ex. Gas Line
- T — T — Ex. Telephone Line
- OHUT — Ex. Overhead Electric
- X — Ex. Fence
- SS — SS — Sanitary Service Line
- WS — WS — Water Service Line
- Sanitary Sewer Manhole
- Fire Hydrant
- Thrust Block
- Water Valve
- Water Meter
- Storm Manhole
- Ex. Sanitary Sewer Manhole
- Ex. Water Valve
- Ex. Fire Hydrant
- Ex. Storm Manhole
- Ex. Street Light
- Ex. Sign
- Prop. Street Light
- Prop. Sign
- 5280 — Proposed Major Contour
- Proposed Minor Contour
- 5280 — Existing Major Contour
- Existing Minor Contour
- DBO Major Contour
- DBO Minor Contour

GENERAL ABBREVIATIONS

A.E.	ACCESS EASEMENT
BKL	BIKE LANE
BL CONST	BASELINE OF CONSTRUCTION
BS	BOTTOM ELEVATION OF RISE
B.S.I.	BY SEPARATE INSTRUMENT
CDS	CUL-DE-SAC
CE	CURB EXTENSION
CL	CENTERLINE
CT	CURB TRANSITION
CWN	CROWN
DBO	DESIGN BY OTHERS
DC	MEDIAN CURB & GUTTER
D.E.	DRAINAGE EASEMENT
DIST.	DISTANCE
D.U.E.	DRAINAGE & UTILITY EASEMENT
EOA	EDGE OF ASPHALT
EOP	EDGE OF PAVEMENT
E.A.E.	EMERGENCY ACCESS EASEMENT
E.ATT.E.	EXISTING AT&T EASEMENT
E.P.E.	EXISTING PIPELINE EASEMENT
ESMT.	EASEMENT
FES	FLARED END SECTION
FGB	FINISHED GROUND AT BOTTOM WALL ELEVATION
FGT	FINISHED GROUND AT TOP WALL ELEVATION
FH	FIRE HYDRANT
FL	FLOWLINE
FV	FIELD VERIFY
G	FINISHED GROUND
G.E.	GAS EASEMENT
G.O.E.	GAS & OIL EASEMENT
GV	GATE VALVE
HP	HIGH POINT
I.E.	IRRIGATION EASEMENT
LL	LOT LINE
LP	LOW POINT
LS	LANDSCAPING
LTWD	LITTLE THOMPSON WATER DISTRICT
MC	MOUNTABLE CURB & GUTTER
MH	MANHOLE
MSE	MECHANICALLY STABILIZED EARTH
P	PAVEMENT
P&P	PLAN & PROFILE
P.A.E.	PUBLIC ACCESS EASEMENT
PC	POINT OF CURVATURE
PCC	POINT OF COMPOUND CURVATURE
PCR	POINT OF CURB RETURN
PERF.	PERFORATED
PGL	PROFILE GRADE LINE
PI	POINT OF INFLECTION
PISWD	PINERY WATER & WASTEWATER DISTRICT
PRC	POINT OF REVERSE CURVATURE
PWSD	PARKER WATER & SANITATION DISTRICT
PT	POINT OF TANGENCY
RELOC	TO BE RELOCATED
R.O.W.	RIGHT OF WAY
RN	RECORDING NUMBER
S.E.	SANITARY EASEMENT
SD.E.	SIGHT DISTANCE EASEMENT
SEC	SECTION LINE
SL	SANITARY LINE
SS	SANITARY SERVICE
SW	SIDEWALK
SW.E.	SIDEWALK EASEMENT
TB	THRUST BLOCK
TC	TOP OF CURB
TEMP.	TEMPORARY
TRANS.	TRANSITION
TR.E.	TRANSPORTATION EASEMENT
TS	TOP ELEVATION OF RISER
UD	UNDERDRAIN
U.E.	UTILITY EASEMENT
U.G.E	UTILITY & GAS EASEMENT
VC	VERTICAL CURB & GUTTER
W.E.	WATER EASEMENT
WL	WATER LINE
WS	WATER SERVICE
W.S.W.	WATER SURFACE ELEVATION
WV	WATER VALVE



VICINITY MAP
1" = 1000'

Sheet List Table

Sheet Number	Sheet Title
1	Cover Sheet
2	Notes Sheet
3	Overall Plan
4	Demolition Plan
5	Master Utility Plan
6	Master Utility Plan
7	Master Utility Plan
8	Master Utility Plan
9	Master Utility Plan
10	Utility Crossings Plan
11	Overlot Grading Plan
12	Overlot Grading Plan
13	Overlot Grading Plan
14	Overlot Grading Plan
	Signing and Striping Plan
	[illegible]
17	P&P - Street & Storm - Halfpipe Place
18	P&P - Street & Storm - Halfpipe Place
19	P&P - Street & Storm - Halfpipe Place
20	P&P - Street & Storm - Halfpipe Place
21	P&P - Street & Storm - Halfpipe Place
22	P&P - Street & Storm - Halfpipe Place
23	P&P - Street & Storm - Freerider Point
24	P&P - Street & Storm - Freerider Point
25	P&P - Street & Storm - Freerider Way
26	P&P - Street & Storm - Freerider Way
27	P&P - Street & Strom - Derailer Street
28	P&P - Street & Storm - Derailer Street
29	P&P - Street & Storm - Railbender Street
30	P&P - Street & Storm - Railbender Street
31	P&P - Street & Storm - Railbender Street
32	P&P - Street & Storm - Railbender Street
33	P&P - Street & Storm - Railbender Street
34	P&P - Street & Storm - Stormlines 1 & 2 & 3
35	P&P - Street & Storm - Stormline 5
36	P&P - Street & Storm - Stormline 6
37	P&P - Street & Storm - Stormlines 7 & 8 & 9
38	Private Detention Pond A
39	Private Detention Pond A Forebay
40	Private Detention Pond A Outlet
41	Private Detention Pond B
42	Private Detention Pond B Forebay
43	Private Detention Pond B Outlet
44	Detail Sheet
45	Detail Sheet
46	Detail Sheet
47	Detail Sheet
48	Detail Sheet
49	Detail Sheet

[illegible] nty Signage/Striping

DEVELOPER
MILLER UNITED
6900 E. BELLVIEW AVE
GREENWOOD VILLAGE, CO 80111
PHONE: (303) 799-6300
CONTACT: DAN SHELDON

CIVIL ENGINEER
LJA ENGINEERING, INC.
1765 WEST 121ST AVE, SUITE 300
WESTMINSTER, CO 80234
PHONE: (303) 421-4224
CONTACT: KEVIN LOVELACE

SURVEYOR
LJA SURVEYING, INC
1765 WEST 121ST AVE, SUITE 300
WESTMINSTER, CO 80234
PHONE: (303) 358-7002
CONTACT: DEREK BROWN

PLANNER/LANDSCAPE
NORRIS DESIGN
1101 BANNOCK ST.
DENVER, CO 80204
PHONE: (303) 892-1166
CONTACT: SARAH TENGEN

GEOTECHNICAL ENGINEER
A.G. WASSENAAR
3211 SOUTH ZUNI ST.
ENGLEWOOD, CO 80110
PHONE: (303) 759-8100
CONTACT: ASHLEY MCDANIELS, P.E.

AGENCY LIST

DOUGLAS COUNTY
100 THIRD STREET
CASTLE ROCK, CO 80104
PHONE: (303) 660-7460
CONTACT: CHUCK SMITH

PARKER WATER & SANITATION DISTRICT
19801 E. MAIN STREET
PARKER, CO 80138
PHONE: (313) 841-4627
CONTACT: JAROD BAYLIE

CORE ELECTRIC COOPERATIVE
5496 US-85
SEDALIA, CO 80135
PHONE: (800) 332-9540

PROJECT BENCHMARK:

NGS BENCHMARK Z-336
ELEVATION = 6612.35' (NAVD 88)

SITE BENCHMARK:
CENTER SECTION CORNER OF SECTION 6-T7S-R65W
ELEVATION = 6398.76 (NAVD 88)

ELEVATION OF GROUND TOPOGRAPHIC SURVEY CONTOUR INTERVALS ARE 1 FOOT

BASIS OF BEARINGS:

THE NORTH LINE OF THE NORTHWEST QUARTER OF SECTION 6, TOWNSHIP 7 SOUTH, RANGE 65 WEST OF THE SIXTH PRINCIPAL MERIDIAN, COUNTY OF DOUGLAS, STATE OF COLORADO. ASSUMED TO BEAR NORTH 89°29'26" WEST BASED ON NAD83 (2011) COLORADO STATE PLANE CENTRAL ZONE (502) COORDINATES, BEING MONUMENTED AT THE WEST BY 3 INCH ALUMINUM CAP STAMPED "1988 PLS 23053" AND AT THE EAST END BY A 3.25" ALUMINUM CAP STAMPED "1994 PLS 112405."

ENGINEERING CERTIFICATION NOTE:

THESE CONSTRUCTION PLANS FOR RAMBLEWOOD FILING NO. 1 WERE PREPARED BY ME (OR UNDER MY DIRECT SUPERVISION) IN ACCORDANCE WITH THE REQUIREMENTS OF DOUGLAS COUNTY'S ROADWAY DESIGN AND CONSTRUCTION STANDARDS, STORM DRAINAGE DESIGN AND TECHNICAL CRITERIA, AND THE GRADING, EROSION AND SEDIMENT CONTROL MANUAL.

DYLAN HARDY, PE
LJA ENGINEERING

ASSISTANT DIRECTOR OF DEVELOPMENT REVIEW

DATE

THESE CONSTRUCTION DRAWINGS HAVE BEEN REVIEWED BY DOUGLAS COUNTY FOR STREET AND DRAINAGE IMPROVEMENTS ONLY

ENGINEERING DIVISION ACCEPTANCE BLOCK

LJA
1765 W. 121st Avenue
Suite 300
Westminster, CO 80234
303-421-4224 • www.lja.com

Revision Type:

No.	Rev. Date:
1	
2	
3	
4	
5	
6	

Designed: TBS
Prepared: CGM
Approved: DKH
Job No.: 1084-0006
Scale Horiz: N/A
Scale Vert: N/A
Sheet: 1 of 49
Date: February 20, 2026

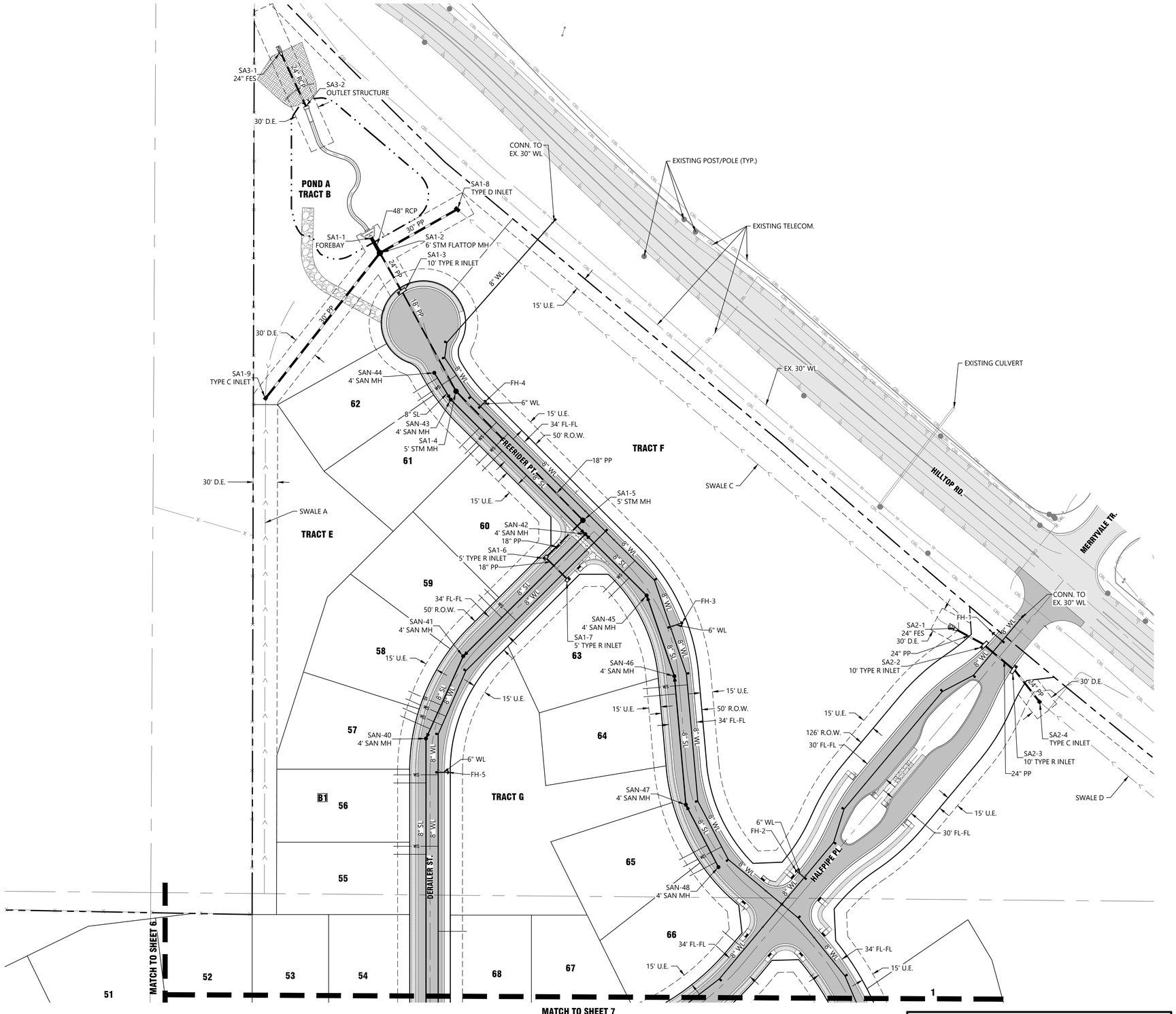
Proj. Name: Ramblewood Filing No. 1
Location: Douglas County, Colorado
Plan Set: Street & Storm Sewer Construction Plans
Sheet Name: Cover Sheet

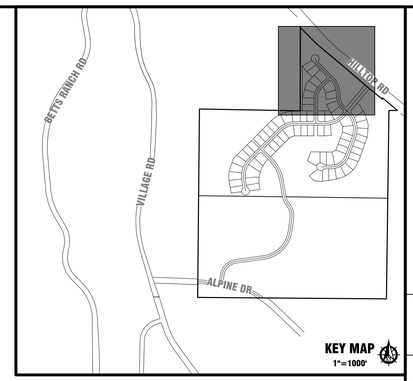
NOT FOR CONSTRUCTION

Know what's below. Call before you dig.

No. 1

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UTILITY NOTES:

1. SEE SHEET 1 FOR LEGENDS AND GENERAL ABBREVIATIONS
2. ALL UTILITIES ARE PROPOSED UNLESS OTHERWISE NOTED.
3. ALL PROPOSED WATER MAINS SHALL BE C900 PVC UNLESS OTHERWISE NOTED.
4. ALL PROPOSED FIRE HYDRANT LATERALS SHALL BE 6" DIP.
5. ALL PROPOSED SANITARY SEWER MAIN PIPES SHALL BE SDR-35 PVC.
6. STORM INLETS LOCATED AT PCR ARE STATIONED AT PCR. ALL OTHERS ARE STATIONED AT INLET FLOWLINE MIDPOINT.
7. ALL PROPOSED STORM SEWER MAIN PIPES SHALL BE POLYPROPOLENE UNLESS OTHERWISE NOTED.
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PROJECT BENCHMARK:

NGS BENCHMARK Z-336
ELEVATION = 6612.35' (NAVD 88)

SITE BENCHMARK:

CENTER SECTION CORNER OF SECTION 6-T7S-R65W
ELEVATION = 6398.76 (NAVD 88)

ELEVATION OF GROUND TOPOGRAPHIC SURVEY CONTOUR INTERVALS ARE 1 FOOT

60 0
SCALE
1 inch =

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Revision Type:

No.	Rev. Date:
1	
2	
3	
4	
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6	

Designed: TBS
Prepared: PAV
Approved: DKH

Job No.: 1084-0006
Scale Horiz: 1" = 60'
Scale Vert: N/A

Sheet: 5 of 49
Date: February 20, 2026

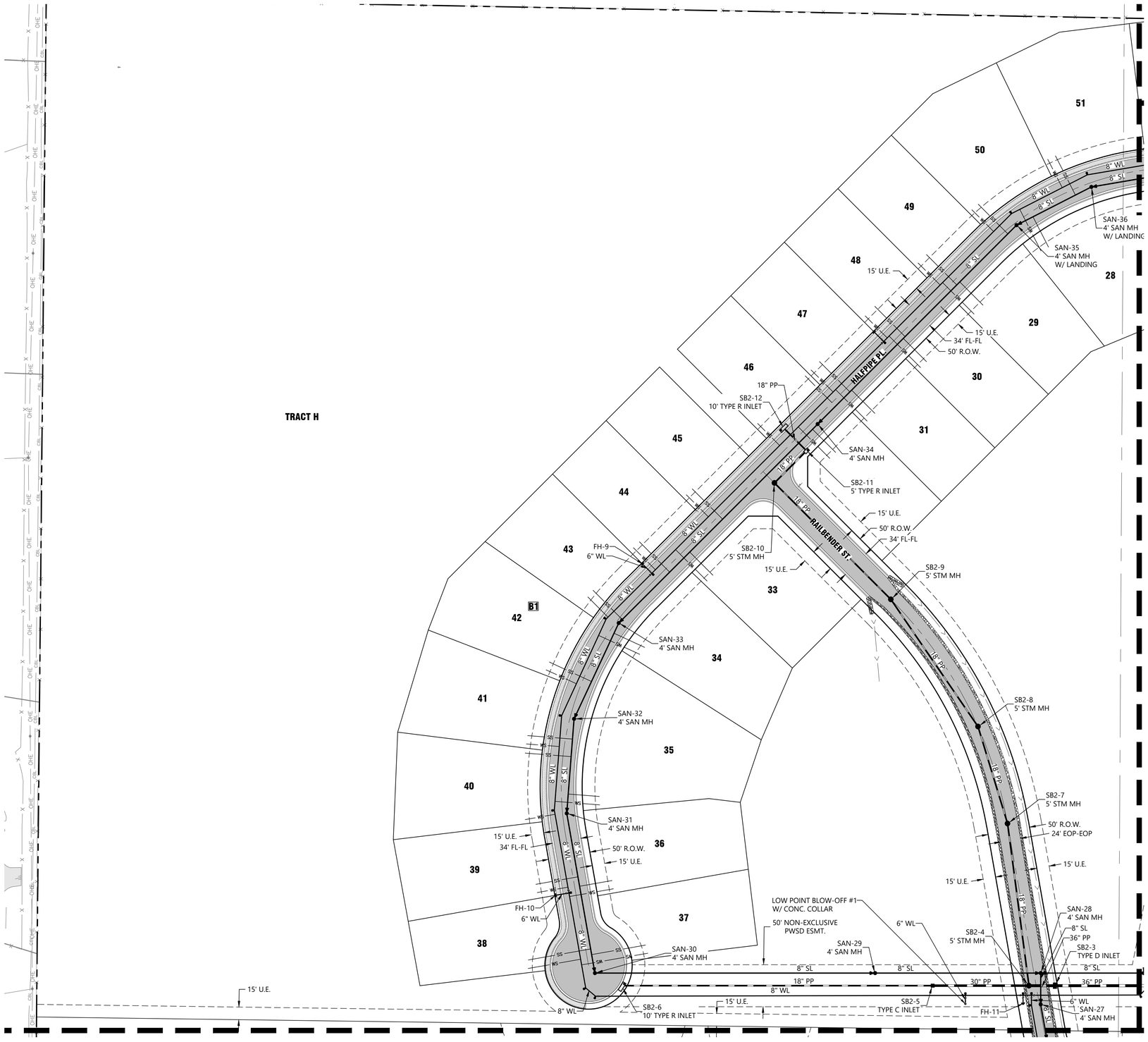
Proj. Name: Ramblewood Filing No. 1
Location: Douglas County, Colorado
Plan Set: Street & Storm Sewer Construction Plans
Sheet Name: Master Utility Plan

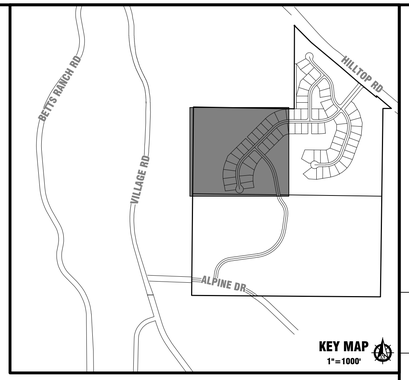
NOT FOR CONSTRUCTION

ASSISTANT DIRECTOR OF DEVELOPMENT REVIEW
DATE

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UTILITY NOTES:

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NGS BENCHMARK Z-336
ELEVATION = 6612.35' (NAVD 88)

SITE BENCHMARK:

CENTER SECTION CORNER OF SECTION 6-T7S-R65W
ELEVATION = 6398.76 (NAVD 88)

ELEVATION OF GROUND TOPOGRAPHIC SURVEY CONTOUR INTERVALS ARE 1 FOOT



60 0

SCALE
1 inch = 60

ASSISTANT DIRECTOR OF DEVELOPMENT REVIEW

DATE

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No.	Rev. Date:	Revision Type:
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Designed: TBS
Prepared: PAV
Approved: DKH

Job No.: 1084-0006
Scale Horiz: 1" = 60'
Scale Vert: N/A

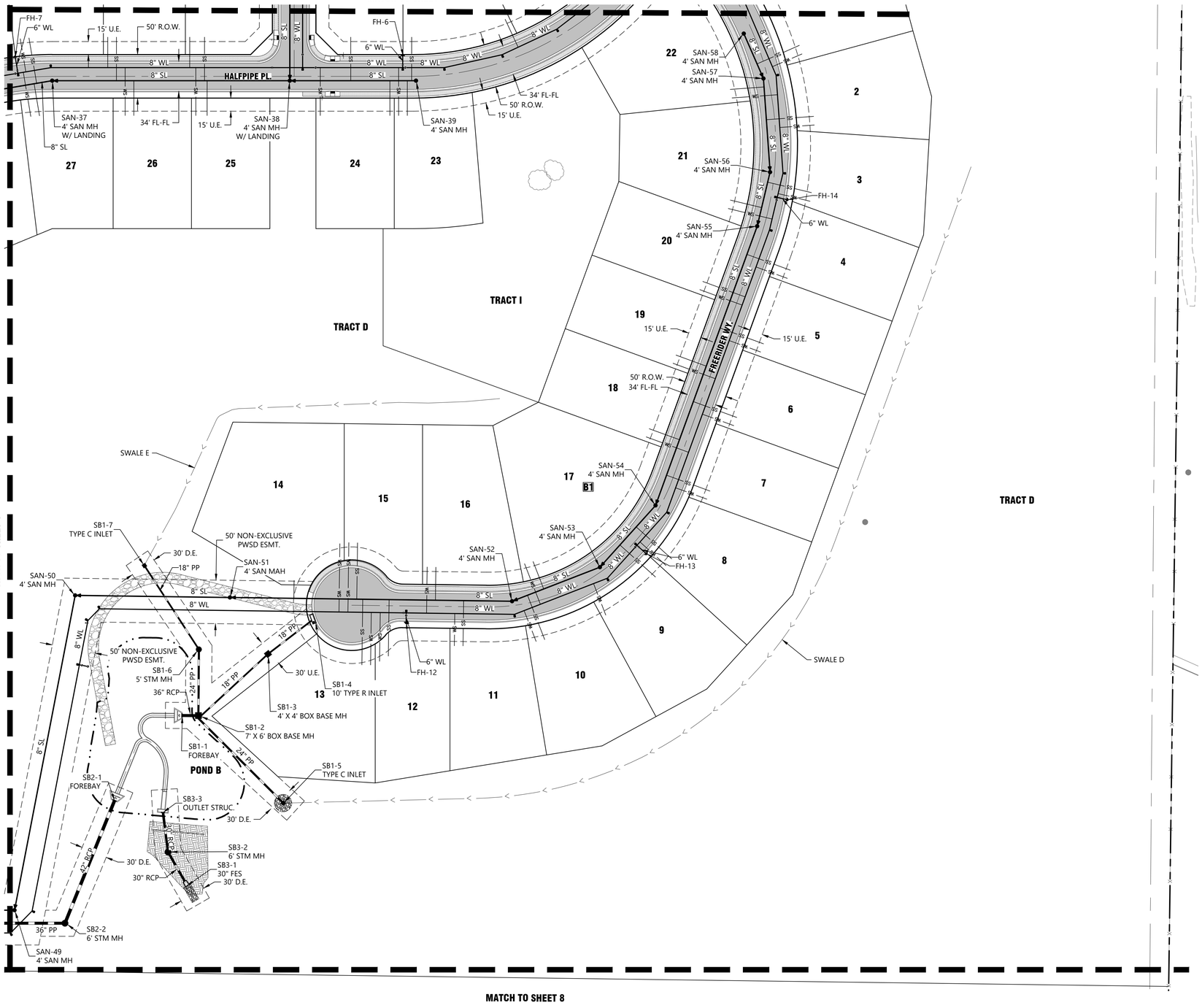
Sheet: 6 of 49
Date: February 20, 2026

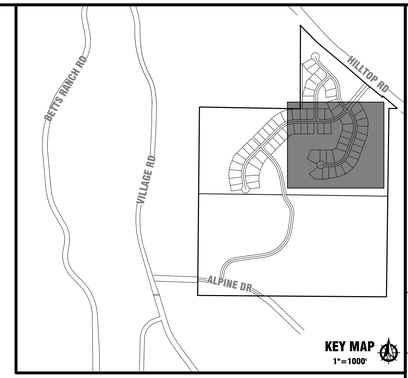
Proj. Name: Ramblewood Filing No. 1
Location: Douglas County, Colorado
Plan Set: Street & Storm Sewer Construction Plans
Sheet Name: Master Utility Plan

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UTILITY NOTES:

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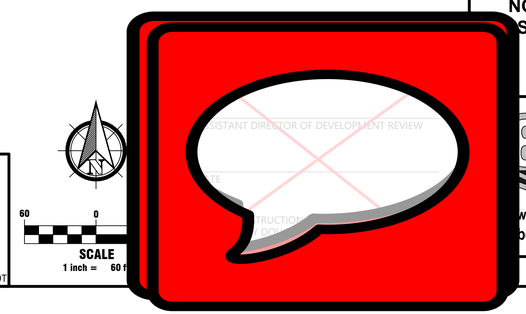
PROJECT BENCHMARK:

NGS BENCHMARK Z-336
ELEVATION = 6612.35' (NAVD 88)

SITE BENCHMARK:

CENTER SECTION CORNER OF SECTION 6-T7S-R65W
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Designed: TBS
Prepared: PAV
Approved: DKH
Job No.: 1084-0006
Scale Horiz: 1" = 60'
Scale Vert: N/A
Sheet: 7 of 49
Date: February 20, 2026

Proj. Name: Ramblewood Filing No. 1
Location: Douglas County, Colorado
Plan Set: Street & Storm Sewer Construction Plans
Sheet Name: Master Utility Plan

NOT FOR CONSTRUCTION

ASSISTANT DIRECTOR OF DEVELOPMENT REVIEW

DATE

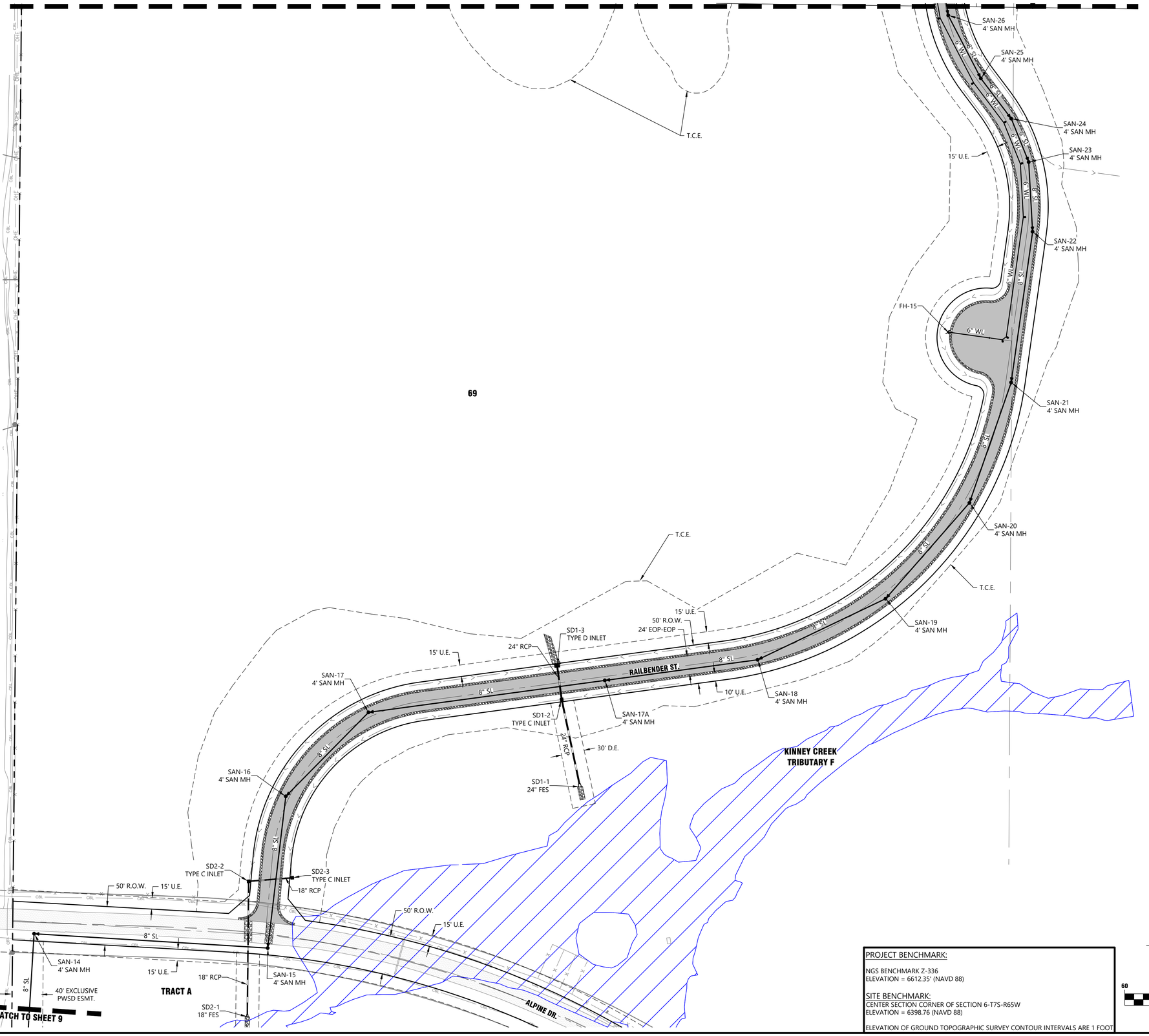
CONSTRUCTION DOCUMENTS

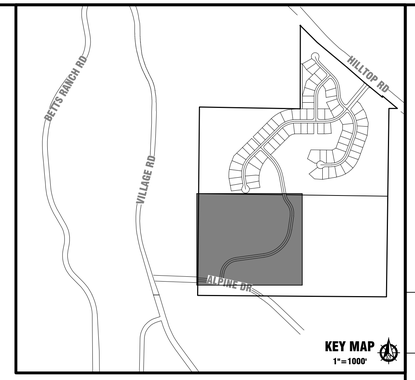
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Ramblewood Final Plat
Project File # SB2026-009
Board of County Commissioners Staff Report - Page 109 of 332

MATCH TO SHEET 6





UTILITY NOTES:

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ELEVATION = 6612.35' (NAVD 88)

SITE BENCHMARK:

CENTER SECTION CORNER OF SECTION 6-T7S-R65W
ELEVATION = 6398.76 (NAVD 88)

ELEVATION OF GROUND TOPOGRAPHIC SURVEY CONTOUR INTERVALS ARE 1 FOOT

SCALE
1 inch = 60

ASSISTANT DIRECTOR OF DEVELOPMENT REVIEW

DATE

CONSTRUCTION DRAWINGS ARE NOT APPROVED BY DOUGLAS COUNTY UNLESS SIGNATURES ARE IMPRINTED

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Designed: TBS
Prepared: PAV
Approved: DKH

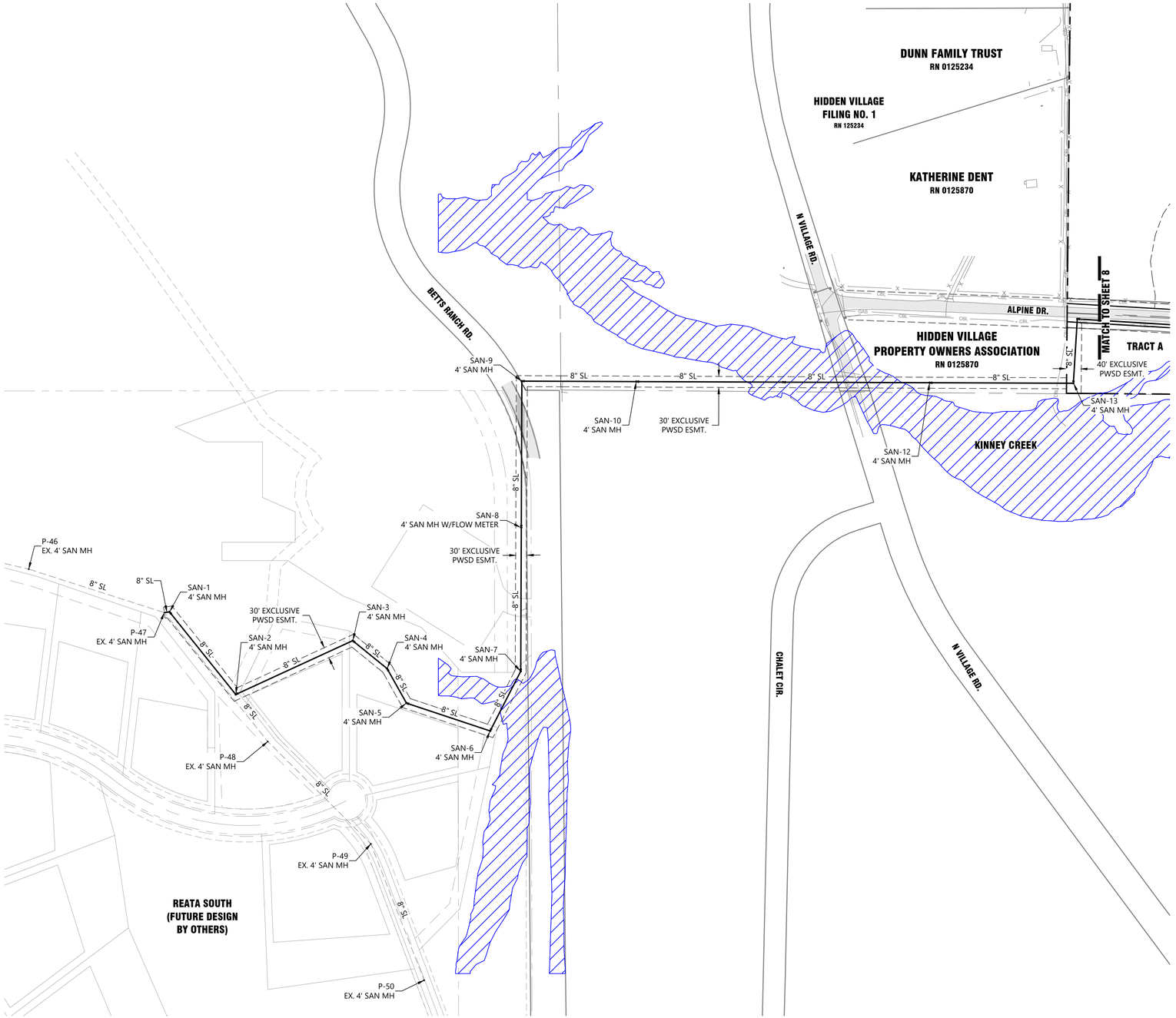
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Scale Horiz: 1" = 60'
Scale Vert: N/A

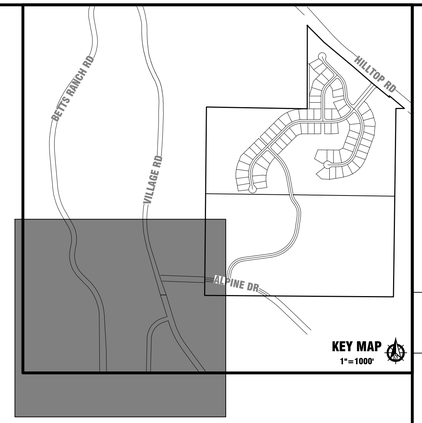
Sheet: 8 of 49
Date: February 20, 2026

Proj. Name: Ramblewood Filing No. 1
Location: Douglas County, Colorado
Plan Set: Street & Storm Sewer Construction Plans
Sheet Name: Master Utility Plan

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CENTER SECTION CORNER OF SECTION 6-T7S-R65W
ELEVATION = 6398.76 (NAVD 88)

ELEVATION OF GROUND TOPOGRAPHIC SURVEY CONTOUR INTERVALS ARE 1 FOOT

150 0 7

SCALE
1 inch = 150 ft.

ASSISTANT DIRECTOR OF DEVELOPMENT REVIEW

DATE

CONSTRUCTION DRAWINGS FOR
OF DOUGLAS COUNTY, COLORADO
IMPROVEMENTS

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Revision Type:	No.	Rev. Date:
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Designed: TBS
Prepared: PAV
Approved: DKH
Job No.: 1084-0006
Scale Horiz: 1" = 150'
Scale Vert: N/A
Sheet: 9 of 49
Date: February 20, 2026

Proj. Name: Ramblewood Filing No. 1
Location: Douglas County, Colorado
Plan Set: Street & Storm Sewer Construction Plans
Sheet Name: Master Utility Plan

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UTILITY CROSSING TABLE

XING NUM.	TOP PIPE		B.O.P. ELEV.	BOTTOM PIPE		T.O.P. ELEV.	CLEAR	DEFLECT
1	8''	WL	6376.57	8''	SL	6372.42	4.1'	NO
2	18''	STM	6376.52	8''	SL	6369.57	7.0'	NO
3	18''	STM	6377.35	8''	SL	6369.09	8.3'	NO
4	18''	STM	6377.50	8''	WL	6375.99	1.5'	YES
5	24''	STM	6376.65	8''	WL	6375.13	1.5'	YES
6	8''	WL	6328.68	36''	STM	6327.21	1.5'	NO
7	36''	STM	6324.87	8''	SL	6323.42	1.5'	NO
8	18''	STM	6327.44	8''	SL	6324.17	3.3'	NO
9	18''	STM	6371.93	8''	WL	6370.48	1.5'	YES
10	18''	STM	6371.65	8''	SL	6361.16	10.5'	NO
11	8''	WL	6384.83	8''	SL	6366.07	18.8'	NO
12	8''	WL	6329.29	8''	SL	6323.19	6.1'	NO
13	24''	STM	6274.01	8''	SL	6270.94	3.1'	NO
14	24''	STM	6261.73	8''	SL	6259.71	2.0'	NO
15	18''	STM	6329.61	8''	WL	6327.74	1.9'	YES
16	18''	STM	6330.42	8''	SL	6328.96	1.5'	NO
17	18''	STM	6257.57	8''	SL	6255.77	1.8'	NO
18	N/A	TELECOMM.	6258.02	8''	SL	6249.89	8.1'	NO
19	N/A	TELECOMM.	6249.02	8''	SL	6238.53	10.5'	NO
20	N/A	GAS	N/A	8''	SL	6225.21	3.0'	NO

POND A
TRACT B
TRACT E
TRACT F
TRACT G
TRACT C
TRACT H
TRACT D
TRACT I
TRACT A
POND B
FREERIDER PL
FREERIDER WY
DERAILER ST
HALFPIPE PL
RAILBENDER ST
MERRYVALE TR.
HILLTOP RD.
ALPINE DR.
N VILLAGE RD.
BETTS RANCH RD.
KINNEY CREEK TRIBUTARY F
KINNEY CREEK
REATA SOUTH (FUTURE DESIGN BY OTHERS)

JAMES R PITTS & JULIA P PITTS
RN 0125234

JUDITH NATHALIE GRIMES TRUST
RN 0125234

ELIZABETH ELLEN NOREEN
RN 0125234

ERIC J SELLYEI & CHERYL A SELLYEI JOINT REVOCABLE TRUST
RN 0125234

CYNTHIA L ZIMPFER
RN 0125234

HIDDEN VILLAGE FILING NO. 1
RN 125234

CATHY M WILLIS
RN 0125234

DUNN FAMILY TRUST
RN 0125234

KATHERINE DENT
RN 0125870

HIDDEN VILLAGE PROPERTY OWNERS ASSOCIATION
RN 0125870

BRADLEY H WAKEHAM
RN 0131583

WITTMAN/SCHNEIDER
RN 0131583

RODGER D READ
RN 0131583

RJ ALPINE LLC
RN 0131583

JAMES EDWARD BONNER & ANNETTE BONNER
RN 0127014

JOSEPH E LIEBHERR
RN 0127014

BURKARD LIVING TRUST
RN 2005032337

BRIAN S WILBUR
RN 2005032337

69
70

MATCH TO VIEW 2

VIEW 2

PROJECT BENCHMARK:

NGS BENCHMARK Z-336
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ELEVATION OF GROUND TOPOGRAPHIC SURVEY CONTOUR INTERVALS ARE 1 FOOT

200 0

SCALE
1 inch = 2

ASSISTANT DIRECTOR OF DEVELOPMENT REVIEW
DATE
CONSTRUCTION DRAWINGS
ED BY DOUGLAS COUNTY

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Revision Type:	No.	Rev. Date:
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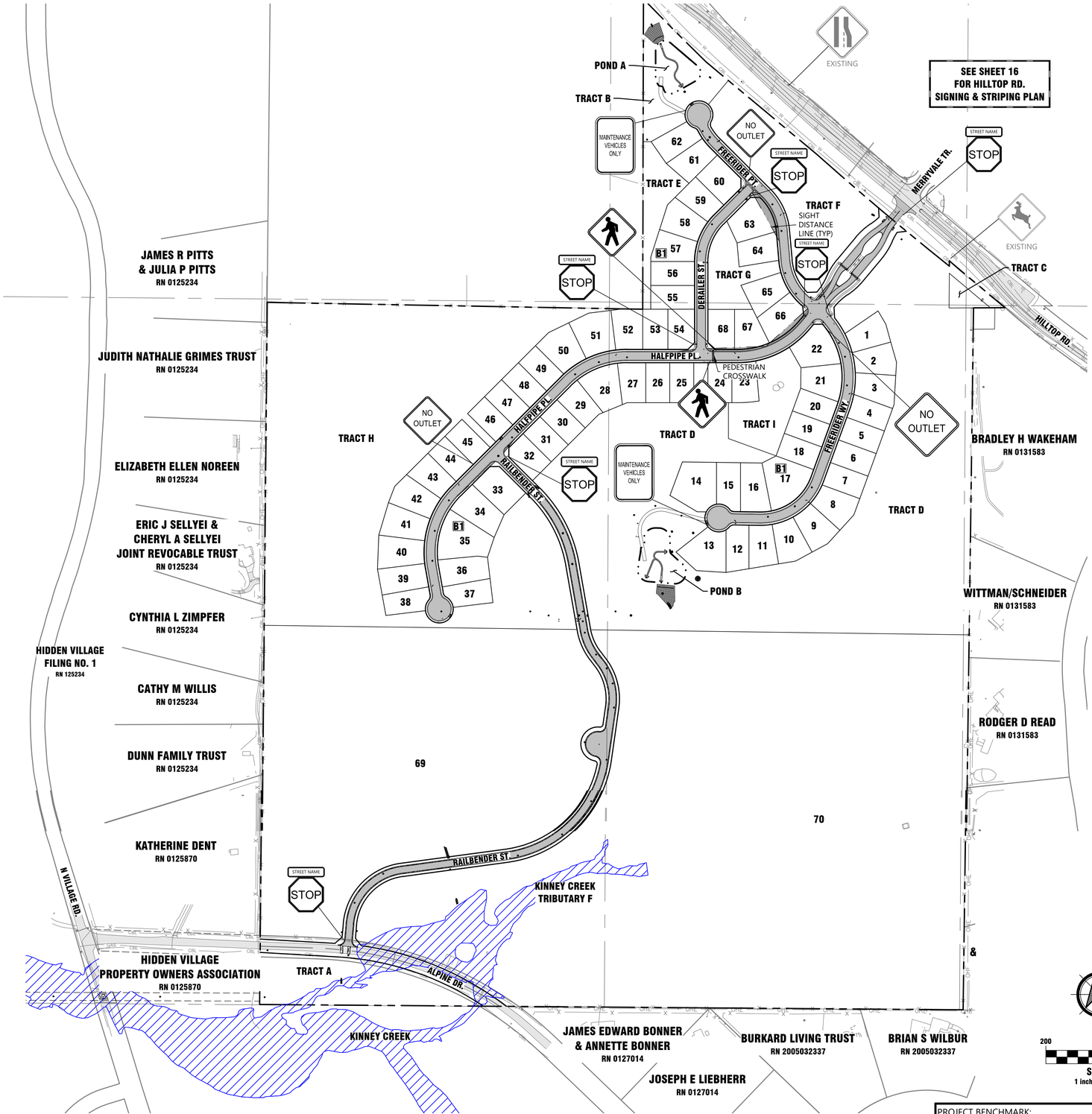
Designed: TBS
Prepared: PAV
Approved: DKH

Job No.: 1084-0006
Scale Horiz: 1" = 200'
Scale Vert: N/A

Sheet: 10 of 49
Date: February 20, 2026

Proj. Name: Ramblewood Filing No. 1
Location: Douglas County, Colorado
Plan Set: Street & Storm Sewer Construction Plans
Sheet Name: Utility Crossings Plan

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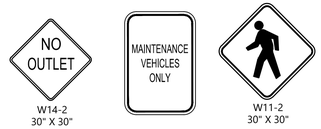


DOUGLAS COUNTY SIGNAGE AND STRIPING:

1. ALL SIGNAGE AND STRIPING FOR PUBLIC AND/OR PRIVATE ROADWAYS, WALKWAYS OR BICYCLE TRAILS OPEN TO PUBLIC TRAVEL SHALL CONFORM TO THE MOST RECENT VERSION OF THE FEDERAL MANUAL ON UNIFORM TRAFFFIC CONTROL DEVICES (MUTCD), THE COLORADO SUPPLEMENTAL MUTCD, AND THE DOUGLAS COUNTY SIGNAGE AND STRIPING SUPPLEMENTALL STREET NAMES SHOWN ARE FOR INFORMATION ONLY. FOR ACCEPTED STREET NAMES, REFER TO THE RECORDED FINAL PLAT FOR THIS SUBDIVISION.
2. STRIPING MATERIAL WILL BE:
   - 2.1. LONG LINE: "WATERBORNE PAINT" PER CDOT SPECIFICATIONS WITH GLASS BEADS PER DOUGLAS COUNTY SPECIFICATIONS.
   - 2.2. WORD AND SYMBOL LEGEND: THERMOPLASTIC
3. ALL PAVEMENT MARKINGS ARE SUBJECT TO MATERIAL CHANGES DUE TO SEASON AND\OR WEATHER. TEMPORARY MARKING MATERIALS MAY BE REQUIRED. SPECIFIED FINAL PAVEMENT MARKING MATERIALS SHALL BE INSTALLED WHEN SEASON \ WEATHER ALLOW.
4. ALL SIGN POSTS INSTALLED IN HARDSCAPE RAISED MEDIANS SHALL BE INSTALLED USING THE KLEEN BREAK MODEL 425 SIGN POST COUPLER (PART #XKB42520-G) FROM XCCESSORIES SQUARED DEVELOPMENT AND MANUFACTURING INC. REFER TO DOUGLAS COUNTY STANDARD DRAWING SS-9.
5. PRIOR TO PLACEMENT OF ANY HARDSCAPE MATERIAL, A 4" DIAMETER PVC SLEEVE WITH A TEMPORARY COVER SHALL BE INSTALLED AT ALL SIGN POST AND DELINEATOR LOCATIONS.

SIGNING & STRIPING LEGEND





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ASSISTANT DIRECTOR OF DEVELOPMENT REVIEW

DATE

PUBLIC WORKS ENGINEERING DIRECTOR

DATE

THESE CONSTRUCTION DRAWINGS HAVE BEEN REVIEWED BY DOUGLAS COUNTY FOR SIGNAGE AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

NOT FOR CONSTRUCTION

Know what's below. Call before you dig.

LJA
1765 W. 121st Avenue
Suite 300
Westminster, CO 80234
303-421-4224 • www.lja.com

No.	Revision Type:	Rev. Date:
1		
2		
3		
4		
5		
6		

Designed: TBS
Prepared: DL
Approved: DKH
Job No.: 1084-0006
Scale Horiz: 1" = 200'
Scale Vert: N/A
Sheet: 15 of 49
Date: February 20, 2026

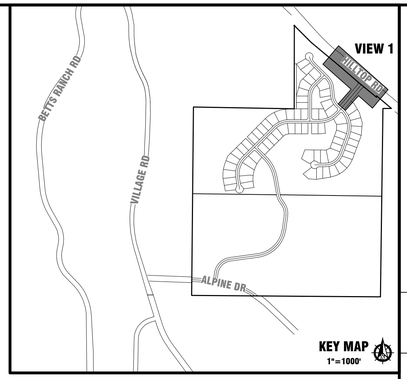
Proj. Name: Ramblewood Filing No. 1
Location: Douglas County, Colorado
Plan Set: Street & Storm Sewer Construction Plans
Sheet Name: Signing and Striping Plan

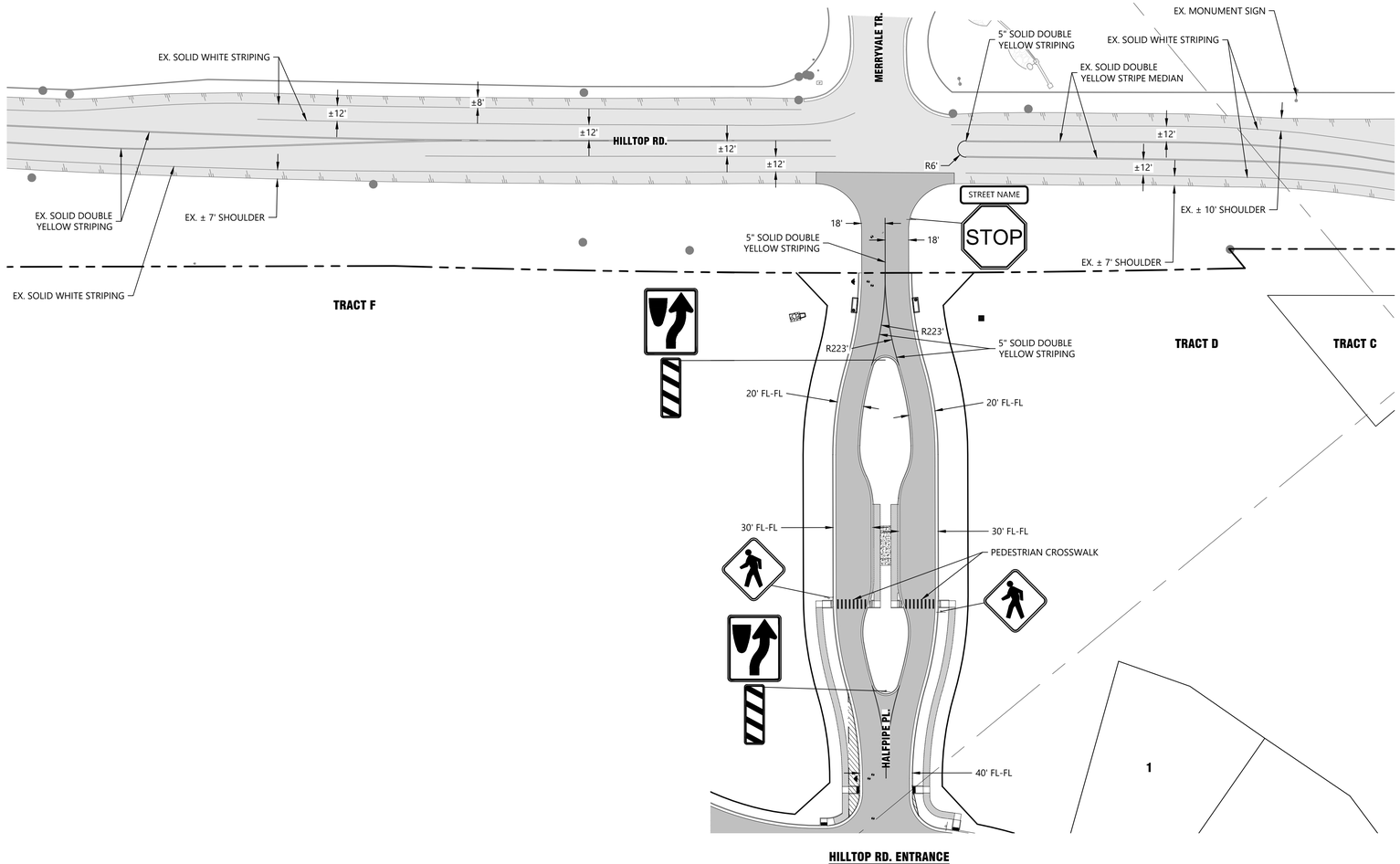
No. 15

I:\JOB FOLDERS\1084\1084-0006\CIVIL\PROD\CD - STR-STM\M-SIGN-STRIPE PRINTED ON: 2/20/2026 4:01 PM

DOUGLAS COUNTY SIGNAGE AND STRIPING:

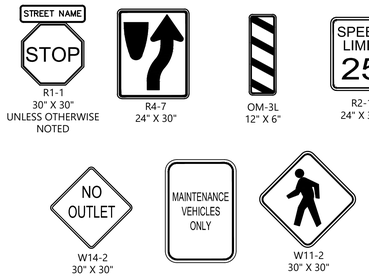
1. ALL SIGNAGE AND STRIPING FOR PUBLIC AND/OR PRIVATE ROADWAYS, WALKWAYS OR BICYCLE TRAILS OPEN TO PUBLIC TRAVEL SHALL CONFORM TO THE MOST RECENT VERSION OF THE FEDERAL MANUAL ON UNIFORM TRAFFFIC CONTROL DEVICES (MUTCD), THE COLORADO SUPPLEMENTAL MUTCD, AND THE DOUGLAS COUNTY SIGNAGE AND STRIPING SUPPLEMENTAIL STREET NAMES SHOWN ARE FOR INFORMATION ONLY. FOR ACCEPTED STREET NAMES, REFER TO THE RECORDED FINAL PLAT FOR THIS SUBDIVISION.
2. STRIPING MATERIAL WILL BE:
   2.1. LONG LINE: "WATERBORNE PAINT" PER CDOT SPECIFICATIONS WITH GLASS BEADS PER DOUGLAS COUNTY SPECIFICATIONS.
   2.2. WORD AND SYMBOL LEGEND: THERMOPLASTIC
3. ALL PAVEMENT MARKINGS ARE SUBJECT TO MATERIAL CHANGES DUE TO SEASON AND\OR WEATHER. TEMPORARY MARKING MATERIALS MAY BE REQUIRED. SPECIFIED FINAL PAVEMENT MARKING MATERIALS SHALL BE INSTALLED WHEN SEASON \ WEATHER ALLOW.
4. ALL SIGN POSTS INSTALLED IN HARDSCAPE RAISED MEDIANS SHALL BE INSTALLED USING THE KLEEN BREAK MODEL 425 SIGN POST COUPLER (PART #XKB42520-G) FROM XCCESSORIES SQUARED DEVELOPMENT AND MANUFACTURING INC. REFER TO DOUGLAS COUNTY STANDARD DRAWING SS-9.
5. PRIOR TO PLACEMENT OF ANY HARDSCAPE MATERIAL, A 4" DIAMETER PVC SLEEVE WITH A TEMPORARY COVER SHALL BE INSTALLED AT ALL SIGN POST AND DELINEATOR LOCATIONS.





HILLTOP RD. ENTRANCE

SIGNING & STRIPING LEGEND



50 0 25 50

SCALE
1 inch = 50 ft.

PROJECT BENCHMARK:

NGS BENCHMARK Z-336
ELEVATION = 6612.35' (NAVD 88)

SITE BENCHMARK:
CENTER SECTION CORNER OF SECTION 6-T7S-R65W
ELEVATION = 6398.76 (NAVD 88)

ELEVATION OF GROUND TOPOGRAPHIC SURVEY CONTOUR INTERVALS ARE 1 FOOT

ASSISTANT DIRECTOR OF DEVELOPMENT REVIEW

DATE

PUBLIC WORKS ENGINEERING DIRECTOR

DATE

THESE CONSTRUCTION DRAWINGS HAVE BEEN REVIEWED BY DOUGLAS COUNTY FOR SIGNAGE AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

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No.	Rev. Date:
1	
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Designed: TBS
Prepared: DL
Approved: DKH
Job No.: 1084-0006
Scale Horiz: 1" = 50'
Scale Vert: N/A
Sheet: 16 of 49
Date: February 20, 2026

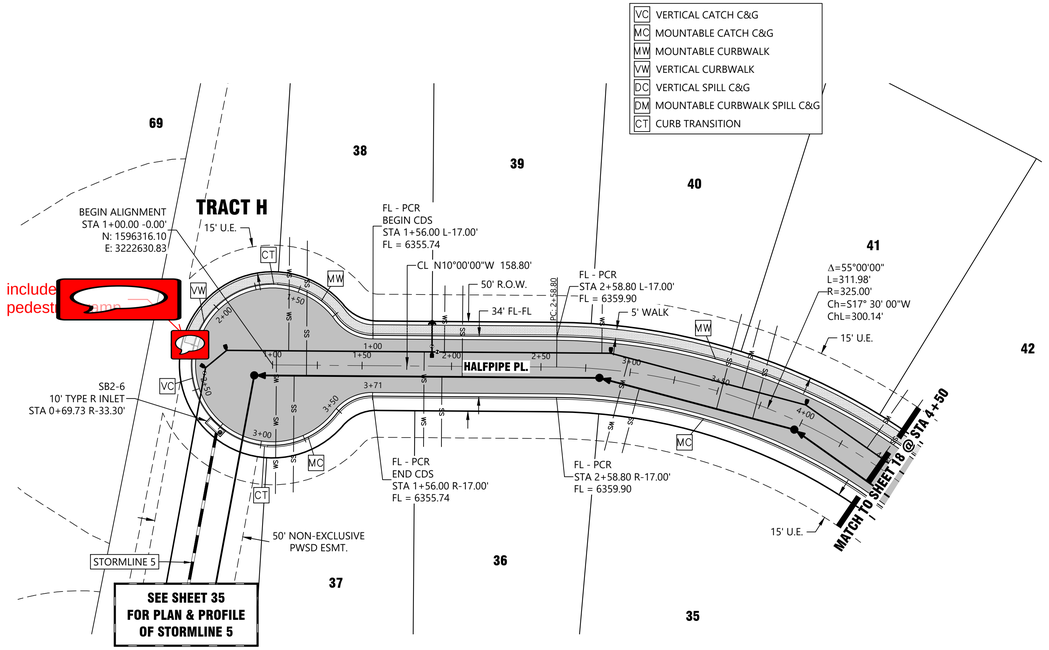
Proj. Name: Ramblewood Filing No. 1
Location: Douglas County, Colorado
Plan Set: Street & Storm Sewer Construction Plans
Sheet Name: Signing and Striping Plan - Hilltop Road

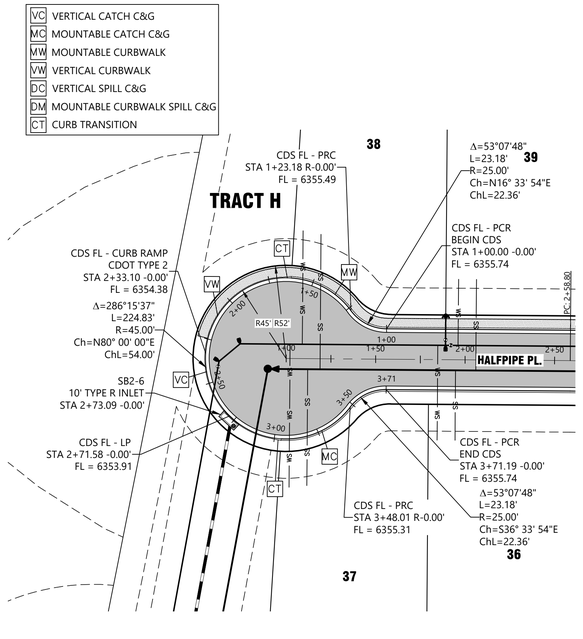
NOT FOR CONSTRUCTION

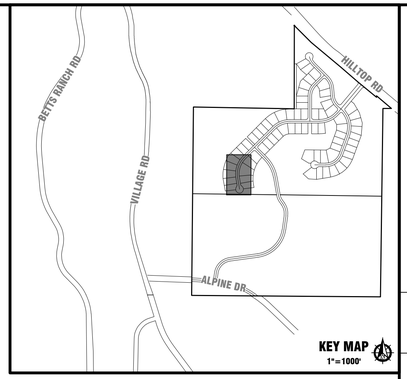
Know what's below. Call before you dig.

No. 16

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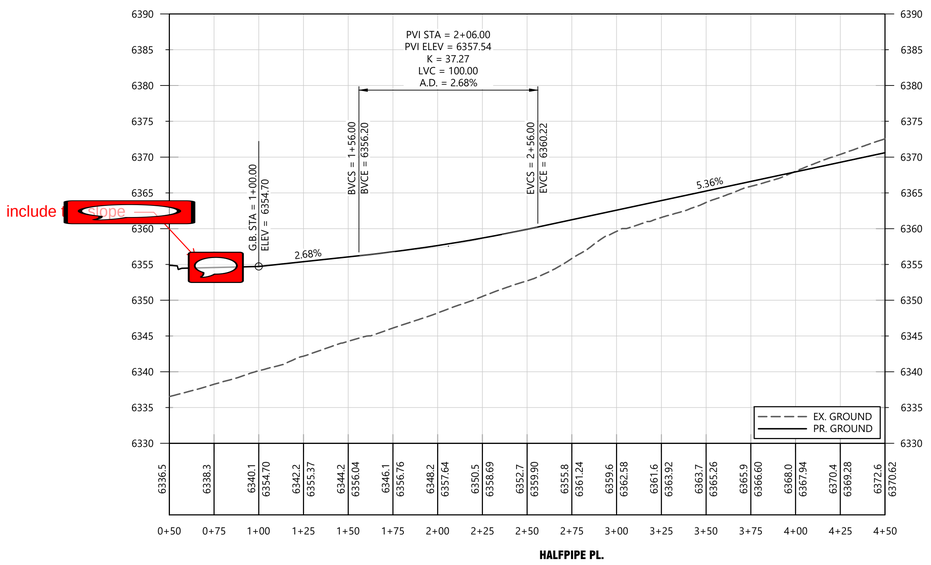


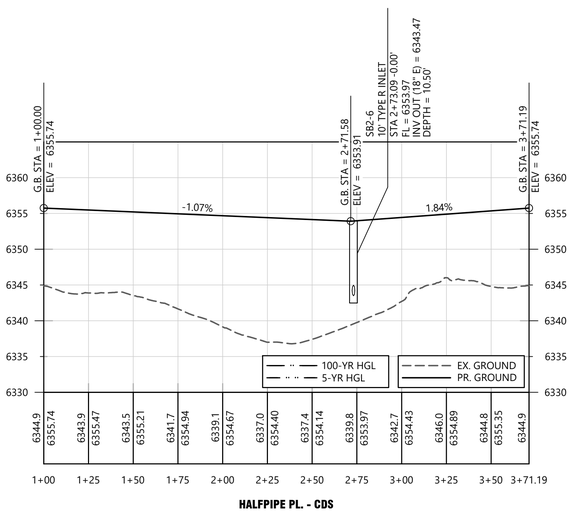
NOTES:

1. REFER TO RAMBLEWOOD FILING NO. 1, STREET & STORM SEWER CONSTRUCTION PLANS FOR STREET AND STORM SEWER DESIGN INFORMATION.
2. SEE SHEET 2 FOR TYPICAL STREET SECTIONS.
3. SEE SHEET 1 FOR LEGEND AND GENERAL ABBREVIATIONS.
4. REFER TO RAMBLEWOOD FILING NO. 1, PARKER WATER & SANITATION CONSTRUCTION PLANS FOR WATER & SANITARY SEWER DESIGN INFORMATION.
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FIELD VERIFY LOCATION AND ELEVATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION

MAINTAIN A 1.5' MIN. VERTICAL SEPARATION BETWEEN UTILITIES





include ramp detailed (10 scale or better) showing spot elevations to be consistent

01 UTILITY CROSSING
SEE SHEET 10 FOR INFO

PROJECT BENCHMARK:

NGS BENCHMARK Z-336
ELEVATION = 6612.35' (NAVD 88)

SITE BENCHMARK:
CENTER SECTION CORNER OF SECTION 6-T7S-R65W
ELEVATION = 6398.76 (NAVD 88)

ELEVATION OF GROUND TOPOGRAPHIC SURVEY CONTOUR INTERVALS ARE 1 FOOT

40 0 20 40
SCALE
1 inch = 40 ft.

ASSISTANT DIRECTOR OF DEVELOPMENT REVIEW

DATE

THESE CONSTRUCTION DRAWINGS HAVE BEEN REVIEWED BY DOUGLAS COUNTY FOR STREET AND DRAINAGE IMPROVEMENTS ONLY

ENGINEERING DIVISION ACCEPTANCE BLOCK

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Designed: TBS
Prepared: DL
Approved: DKH
Job No.: 1084-0006
Scale Horiz: 1" = 40'
Scale Vert: 1" = 10'
Sheet: 17 of 49
Date: February 20, 2026

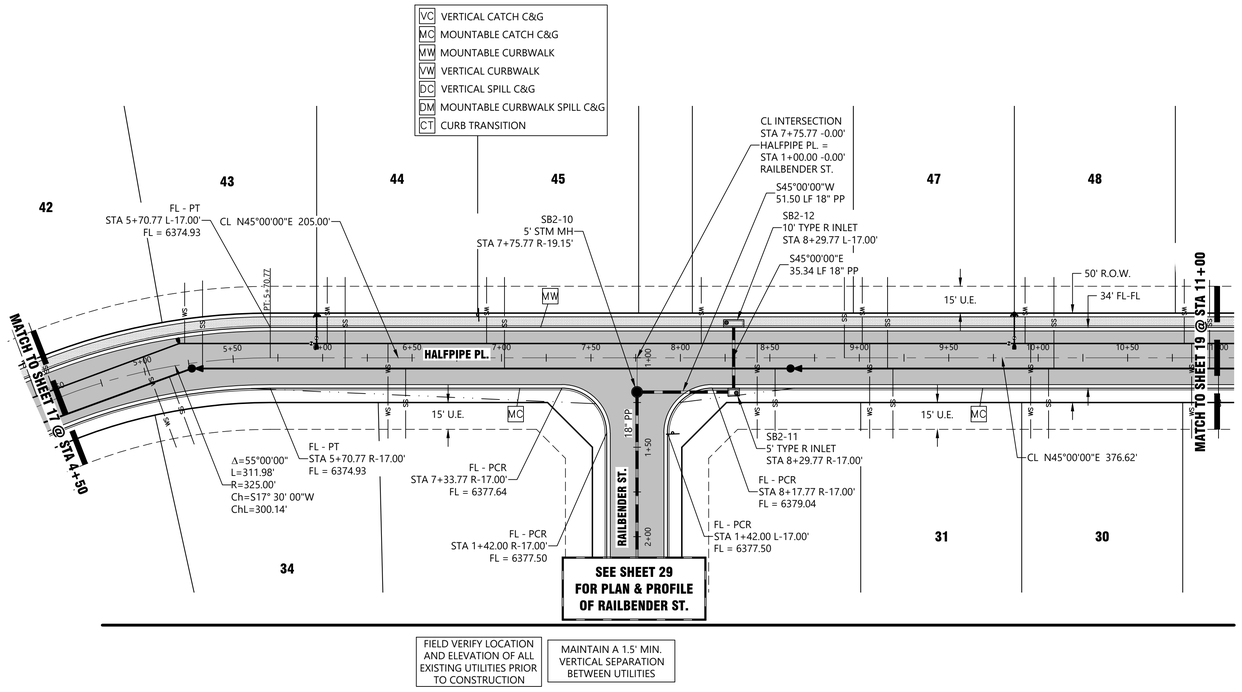
Proj. Name: Ramblewood Filing No. 1
Location: Douglas County, Colorado
Plan Set: Street & Storm Sewer Construction Plans
Sheet Name: P&P - Street & Storm - Halfpipe Place

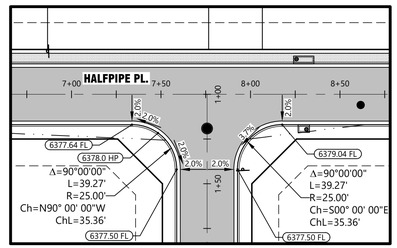
NOT FOR CONSTRUCTION

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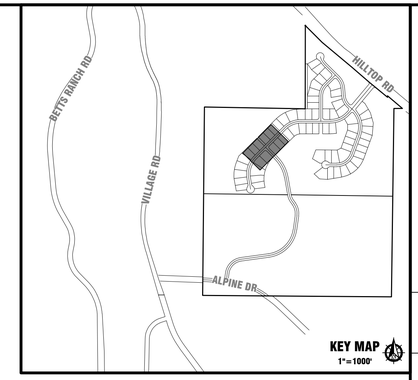
No. 17

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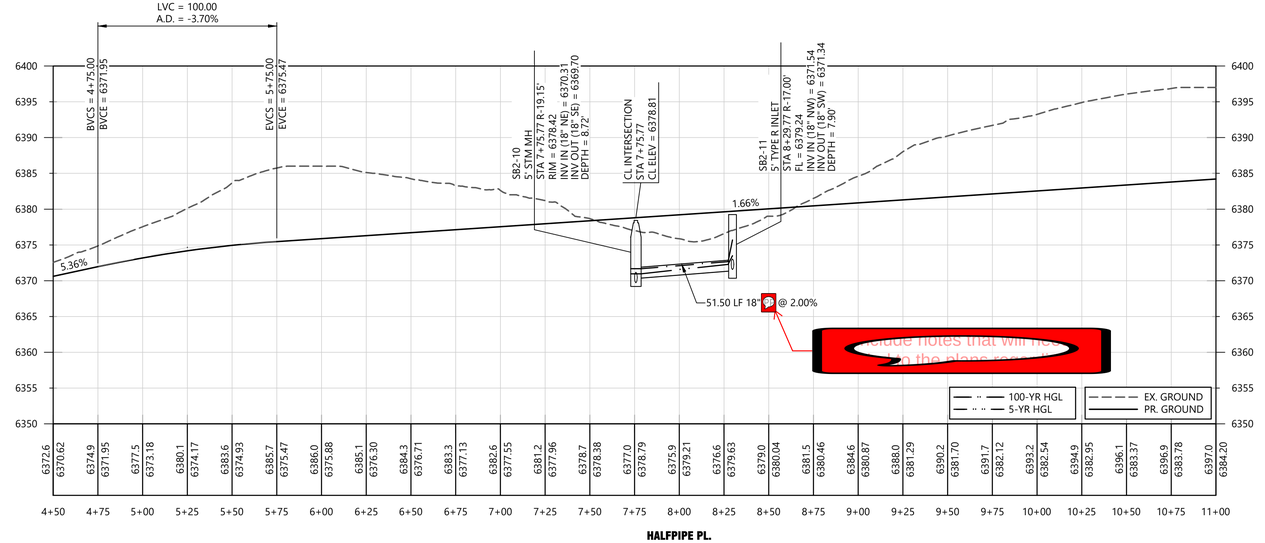


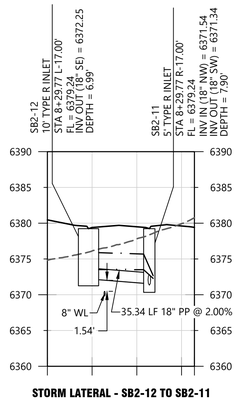
CURB RETURN
SCALE: 1" =40'



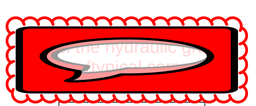
NOTES:

1. REFER TO RAMBLEWOOD FILING NO. 1, STREET & STORM SEWER CONSTRUCTION PLANS FOR STREET AND STORM SEWER DESIGN INFORMATION.
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3. SEE SHEET 1 FOR LEGEND AND GENERAL ABBREVIATIONS.
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STORM LATERAL - SB2-12 TO SB2-11



PROJECT BENCHMARK:

NGS BENCHMARK Z-336
ELEVATION = 6612.35' (NAVD 88)

SITE BENCHMARK:
CENTER SECTION CORNER OF SECTION 6-T7S-R65W
ELEVATION = 6398.76 (NAVD 88)

ELEVATION OF GROUND TOPOGRAPHIC SURVEY CONTOUR INTERVALS ARE 1 FOOT

40 0 20 40
SCALE
1 inch = 40 ft.

ASSISTANT DIRECTOR OF DEVELOPMENT REVIEW

DATE

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ENGINEERING DIVISION ACCEPTANCE BLOCK

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No.	Rev. Date:	Revision Type:
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Designed: TBS
Prepared: DL
Approved: DKH
Job No.: 1084-0006
Scale Horiz: 1" = 40'
Scale Vert: 1" = 10'
Sheet: 18 of 49
Date: February 20, 2026

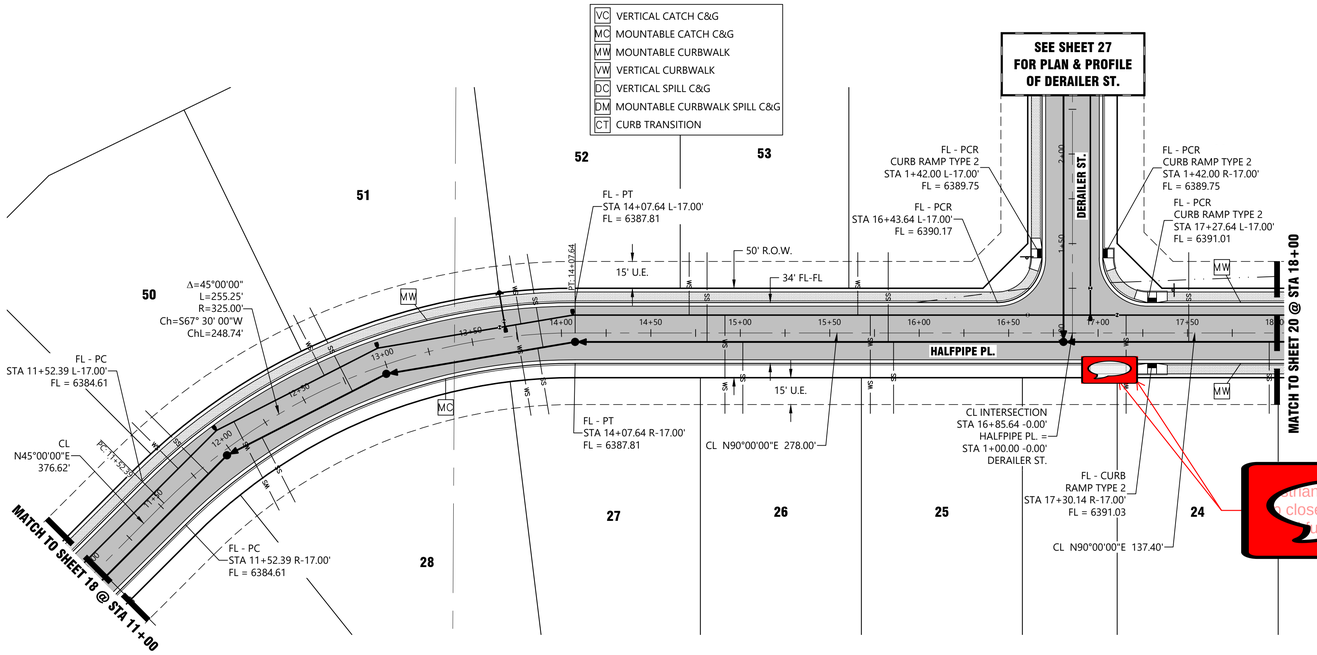
Proj. Name: Ramblewood Filing No. 1
Location: Douglas County, Colorado
Plan Set: Street & Storm Sewer Construction Plans
Sheet Name: P&P - Street & Storm - Halfpipe Place

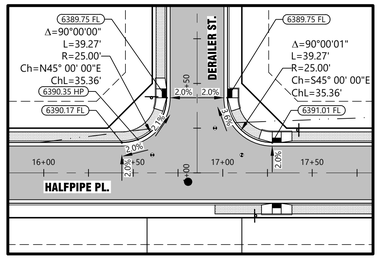
NOT FOR CONSTRUCTION

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Call before you dig.

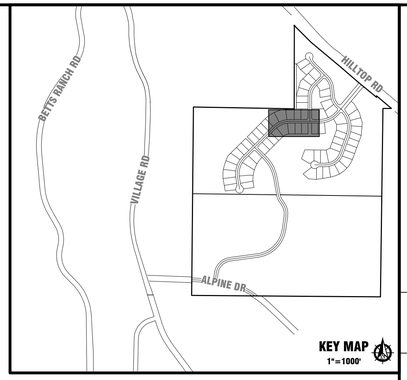
No. 18

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CURB RETURN
SCALE: 1" =40'



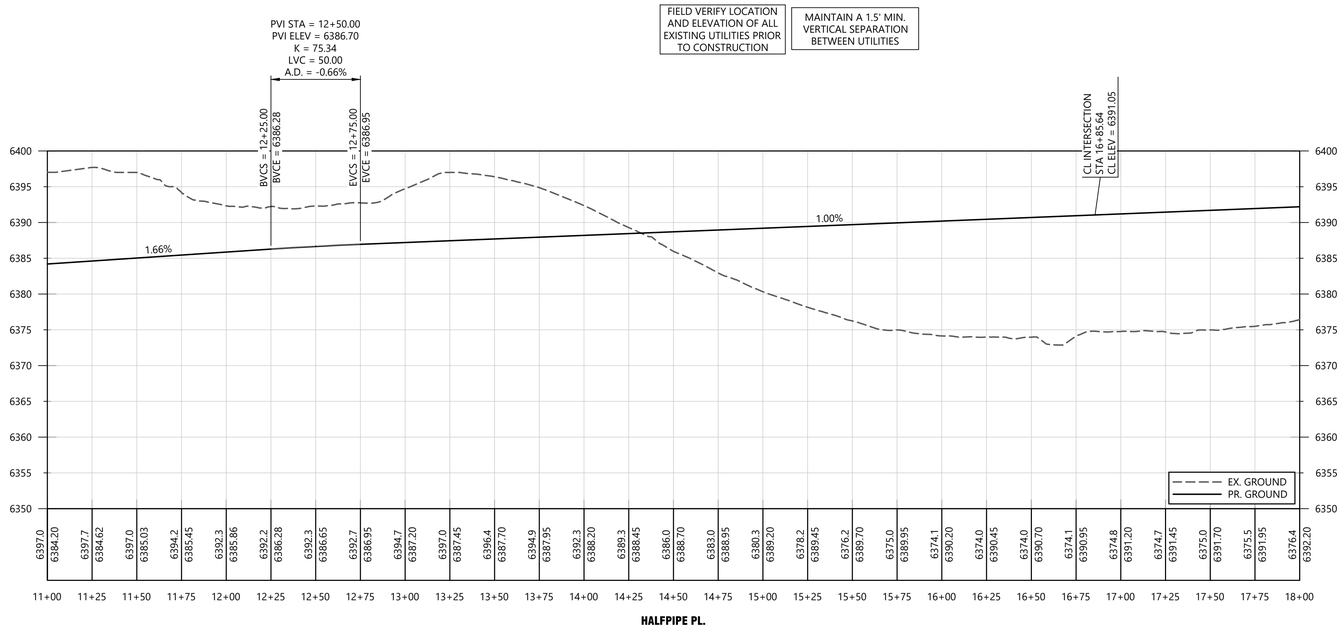
KEY MAP
1"=1000'

NOTES:

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2. SEE SHEET 2 FOR TYPICAL STREET SECTIONS.
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FIELD VERIFY LOCATION AND ELEVATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION

MAINTAIN A 1.5' MIN. VERTICAL SEPARATION BETWEEN UTILITIES



01 UTILITY CROSSING
SEE SHEET 10 FOR INFO

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NGS BENCHMARK Z-336
ELEVATION = 6612.35' (NAVD 88)

SITE BENCHMARK:
CENTER SECTION CORNER OF SECTION 6-T7S-R65W
ELEVATION = 6398.76 (NAVD 88)

ELEVATION OF GROUND TOPOGRAPHIC SURVEY CONTOUR INTERVALS ARE 1 FOOT

SCALE
1 inch = 40 ft.

ASSISTANT DIRECTOR OF DEVELOPMENT REVIEW

DATE

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ENGINEERING DIVISION ACCEPTANCE BLOCK

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Revision Type:

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Designed: TBS
Prepared: DL
Approved: DKH
Job No.: 1084-0006
Scale Horiz: 1" = 40'
Scale Vert: 1" = 10'
Sheet: 19 of 49
Date: February 20, 2026

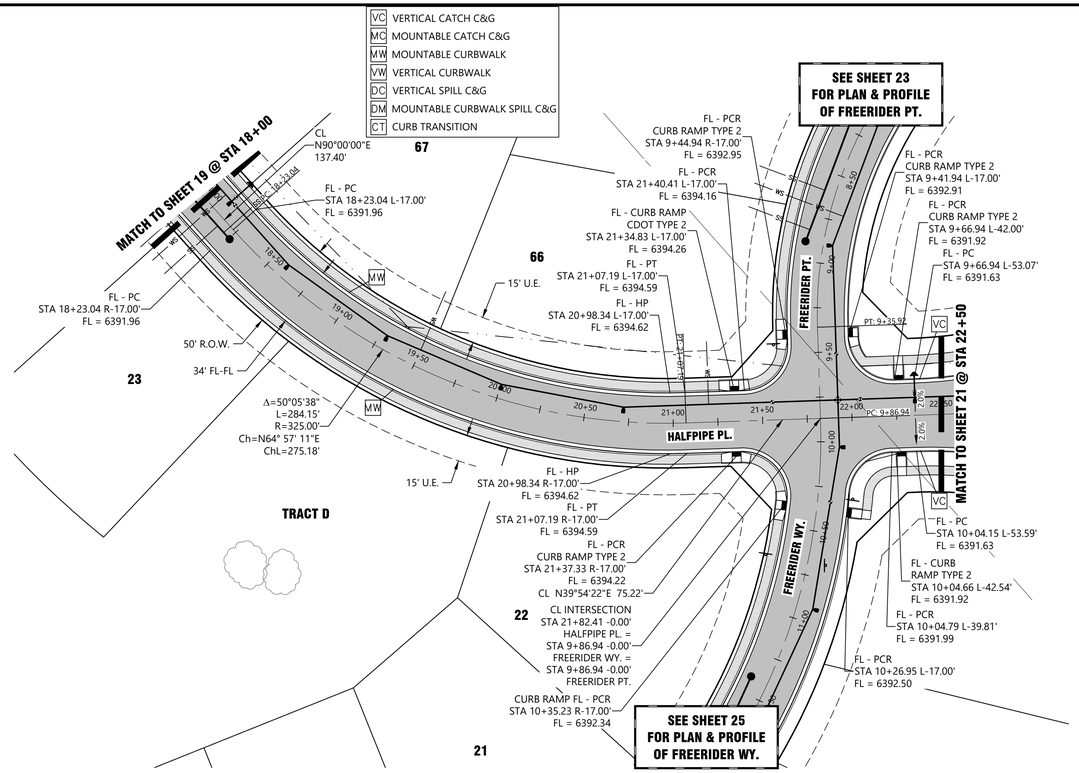
Proj. Name: Ramblewood Filing No. 1
Location: Douglas County, Colorado
Plan Set: Street & Storm Sewer Construction Plans
Sheet Name: P&P - Street & Storm - Halfpipe Place

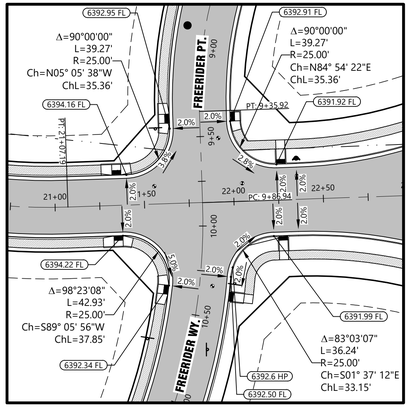
NOT FOR CONSTRUCTION

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

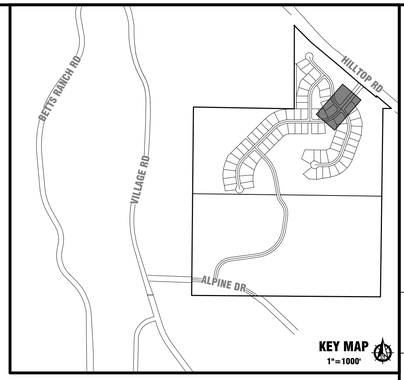
No. 19

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CURB RETURN
SCALE: 1" =40'



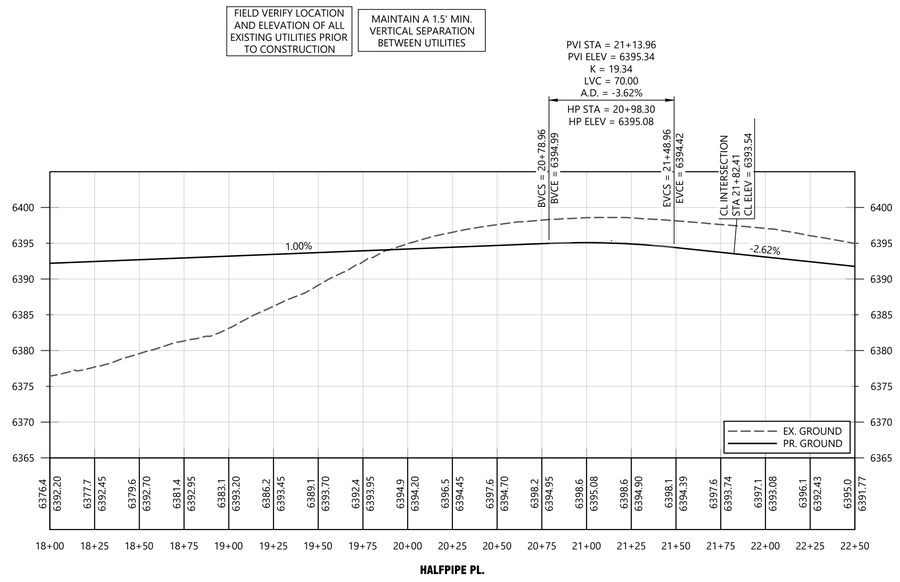
KEY MAP
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NOTES:

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FIELD VERIFY LOCATION AND ELEVATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION

MAINTAIN A 1.5' MIN. VERTICAL SEPARATION BETWEEN UTILITIES



HALFPIPE PL.

01 UTILITY CROSSING
SEE SHEET 10 FOR INFO

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SCALE
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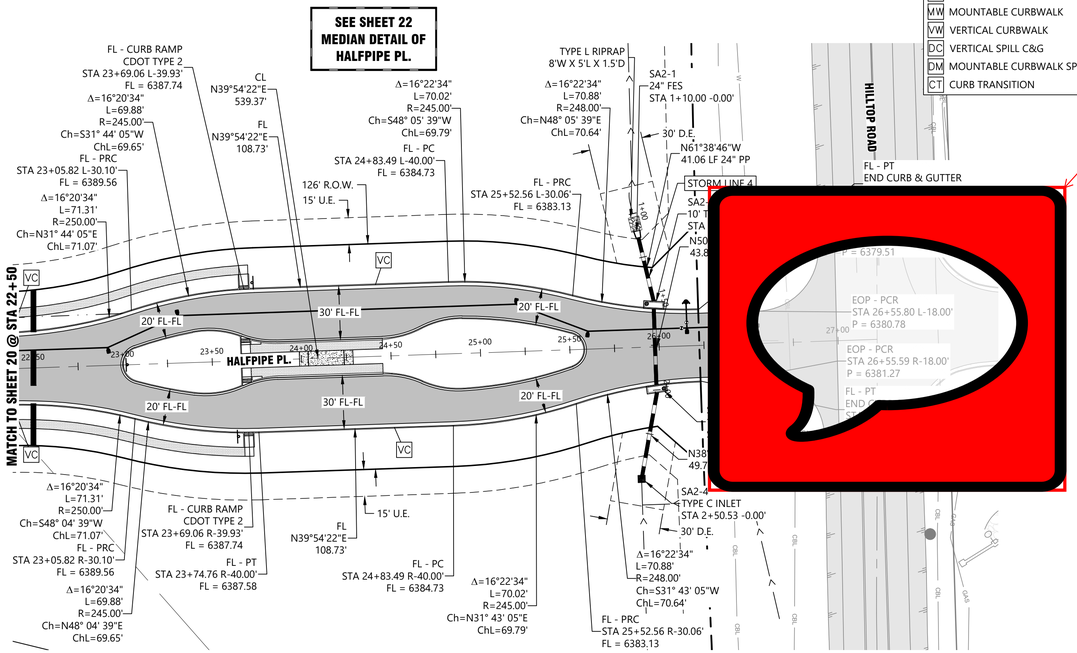
Proj. Name: Ramblewood Filing No. 1
Location: Douglas County, Colorado
Plan Set: Street & Storm Sewer Construction Plans
Sheet Name: P&P - Street & Storm - Halfpipe Place

NOT FOR CONSTRUCTION

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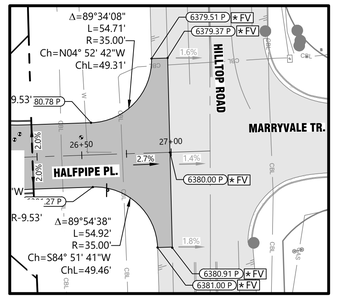
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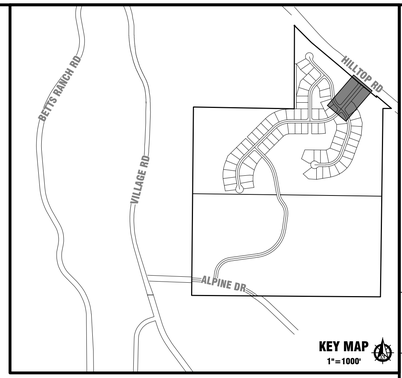
VC VERTICAL CATCH C&G
MC MOUNTABLE CATCH C&G
MW MOUNTABLE CURBWALK
VW VERTICAL CURBWALK
DC VERTICAL SPILL C&G
DM MOUNTABLE CURBWALK SPILL C&G
CT CURB TRANSITION

Eliminate all grading in connection with the improvements



CURB RETURN
SCALE: 1" =40'

FV FIELD VERIFY EXISTING ELEVATIONS
XX



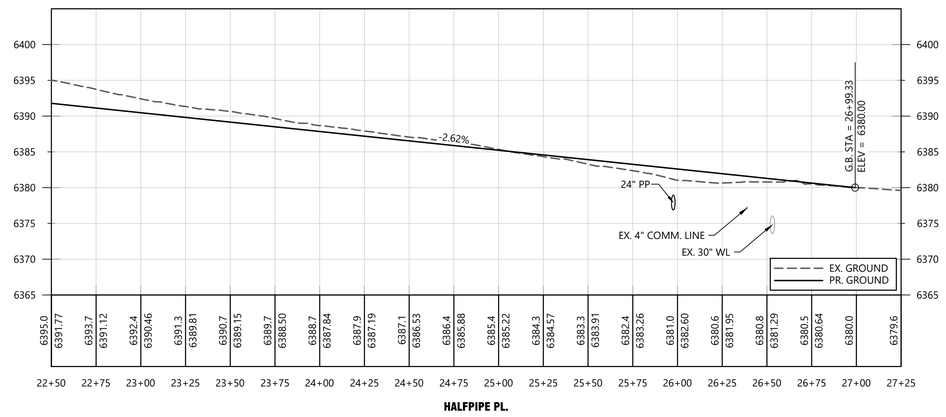
NOTES:

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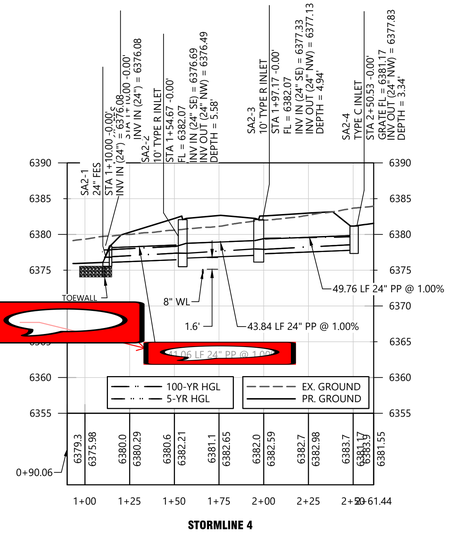
FIELD VERIFY LOCATION AND ELEVATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION

MAINTAIN A 1.5' MIN. VERTICAL SEPARATION BETWEEN UTILITIES

HALFPIPE PL. TO TIE-IN TO HILLTOP RD. AT EDGE OF PAVEMENT. HALFPIPE PL. TO MATCH EX GRADE THROUGH CONNECTION



HALFPIPE PL.



this section of pip
will need to be R

STORMLINE 4

01 UTILITY CROSSING SEE SHEET 10 FOR INFO

PROJECT BENCHMARK:

NGS BENCHMARK Z-336
ELEVATION = 6612.35' (NAVD 88)

SITE BENCHMARK:
CENTER SECTION CORNER OF SECTION 6-T7S-R65W
ELEVATION = 6398.76 (NAVD 88)

ELEVATION OF GROUND TOPOGRAPHIC SURVEY CONTOUR INTERVALS ARE 1 FOOT

40 0 20 40
SCALE
1 inch = 40 ft.

ASSISTANT DIRECTOR OF DEVELOPMENT REVIEW

DATE

THESE CONSTRUCTION DRAWINGS HAVE BEEN REVIEWED BY DOUGLAS COUNTY FOR STREET AND DRAINAGE IMPROVEMENTS ONLY

ENGINEERING DIVISION ACCEPTANCE BLOCK

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No.	Rev. Date:	Revision Type:
1		
2		
3		
4		
5		
6		

Designed: TBS
Prepared: DL
Approved: DKH
Job No.: 1084-0006
Scale Horiz: 1" = 40'
Scale Vert: 1" = 10'
Sheet: 21 of 49
Date: February 20, 2026

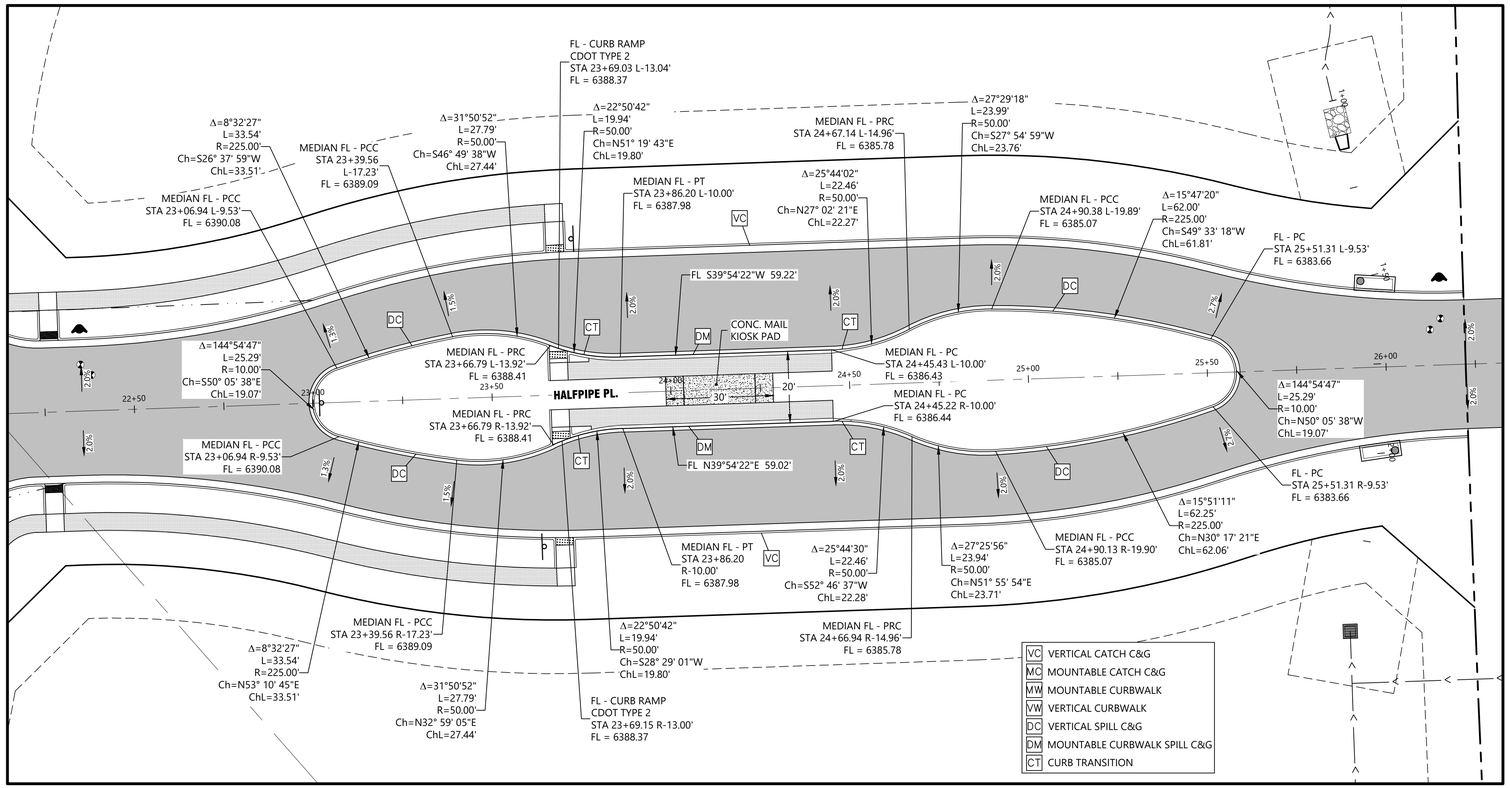
Proj. Name: Ramblewood Filing No. 1
Location: Douglas County, Colorado
Plan Set: Street & Storm Sewer Construction Plans
Sheet Name: P&P - Street & Storm - Halfpipe Place

NOT FOR CONSTRUCTION

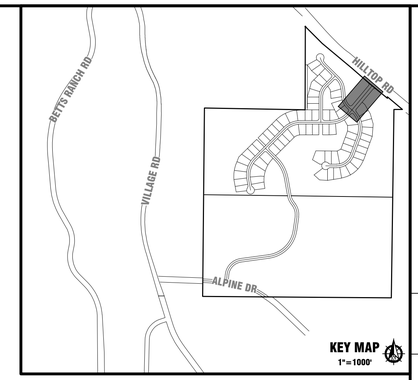
811 Know what's below. Call before you dig.

No. 21

I:\JOB FOLDERS\1084\1084-0006\CIVIL\PROD\CD - STR-STM\PP-HALFPIP PLACE PRINTED ON: 2/20/2026 4:02 PM



MEDIAN DETAIL VIEW
SCALE: 1" =20'



NOTES:

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01 UTILITY CROSSING
SEE SHEET 10 FOR INFO

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40 0 20 40
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ASSISTANT DIRECTOR OF DEVELOPMENT REVIEW

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No.	Rev. Date:	Revision Type:
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6		

Designed: TBS
Prepared: DL
Approved: DKH

Job No.: 1084-0006
Scale Horiz: 1" = 20'
Scale Vert: N/A

Sheet: 22 of 49
Date: February 20, 2026

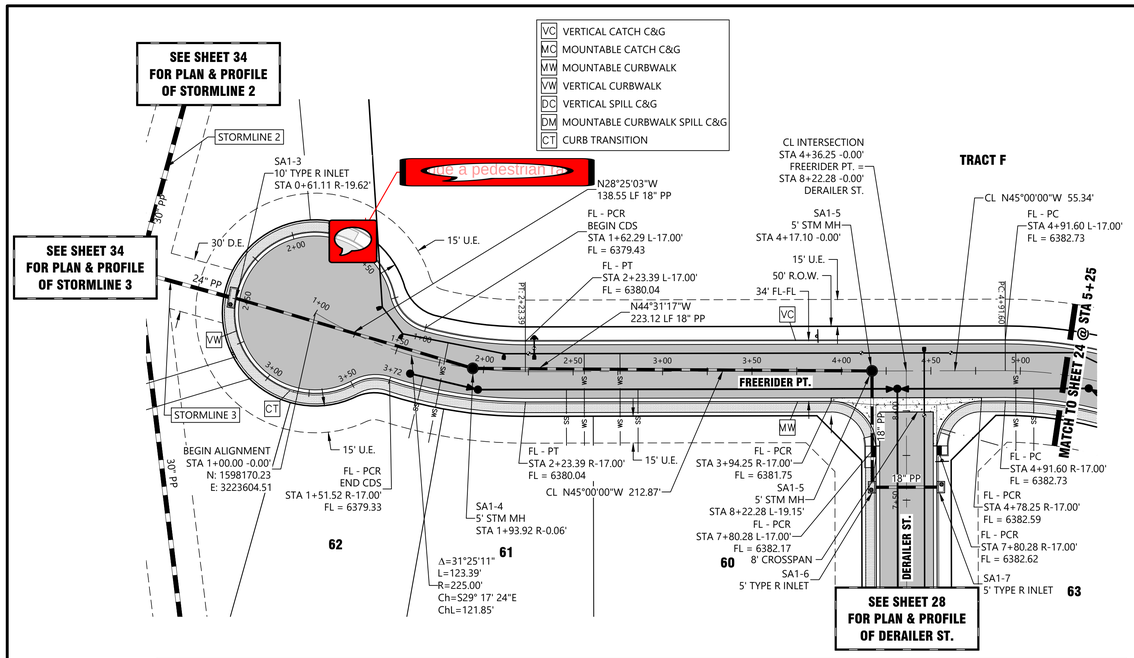
Proj. Name: Ramblewood Filing No. 1
Location: Douglas County, Colorado
Plan Set: Street & Storm Sewer Construction Plans
Sheet Name: P&P - Street & Storm - Halfpipe Place

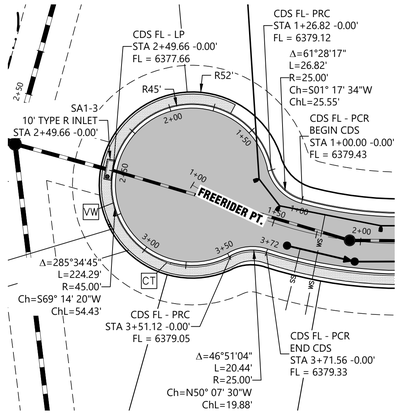
NOT FOR CONSTRUCTION

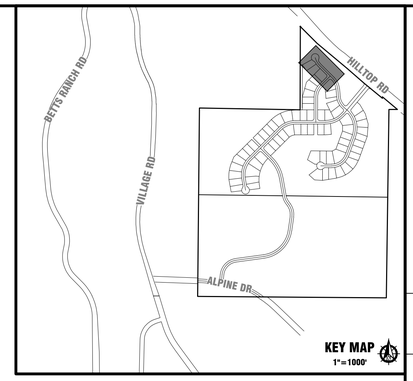
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No. 22

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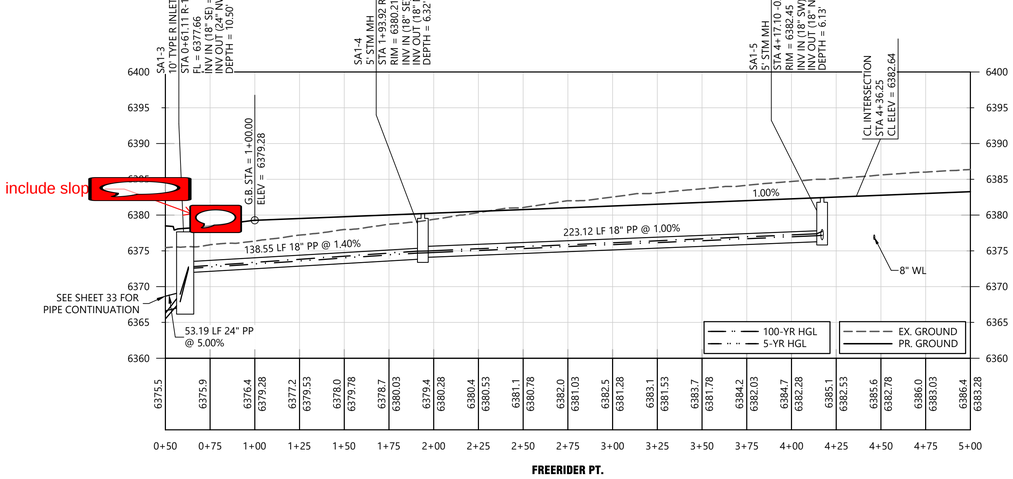
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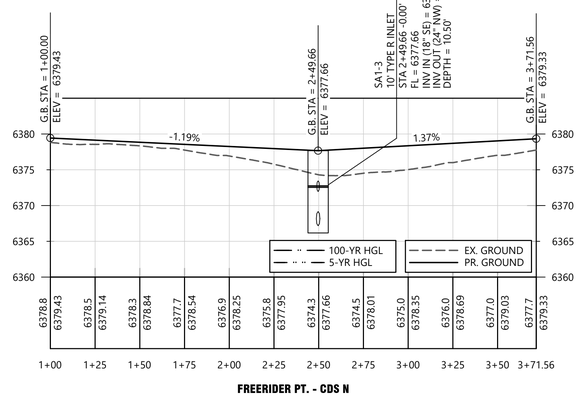
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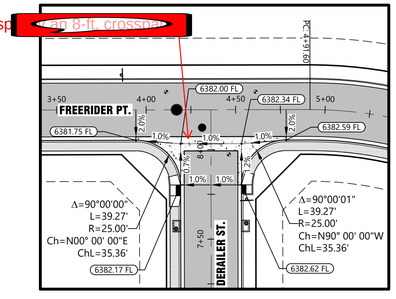
FIELD VERIFY LOCATION AND ELEVATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION

MAINTAIN A 1.5' MIN. VERTICAL SEPARATION BETWEEN UTILITIES

MAINTAIN 4.5' MINIMUM COVER OVER WL







CURB RETURN
SCALE: 1" =40'

01 UTILITY CROSSING
SEE SHEET 10 FOR INFO

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SCALE
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ASSISTANT DIRECTOR OF DEVELOPMENT REVIEW

DATE

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Revision Type:

No.	Rev. Date:
1	
2	
3	
4	
5	
6	

Designed: TBS
Prepared: DL
Approved: DKH

Job No.: 1084-0006
Scale Horiz: 1" = 40'
Scale Vert: 1" = 10'

Sheet: 23 of 49
Date: February 20, 2026

Proj. Name: Ramblewood Filing No. 1
Location: Douglas County, Colorado
Plan Set: Street & Storm Sewer Construction Plans
Sheet Name: P&P - Street & Storm - Freerider Point

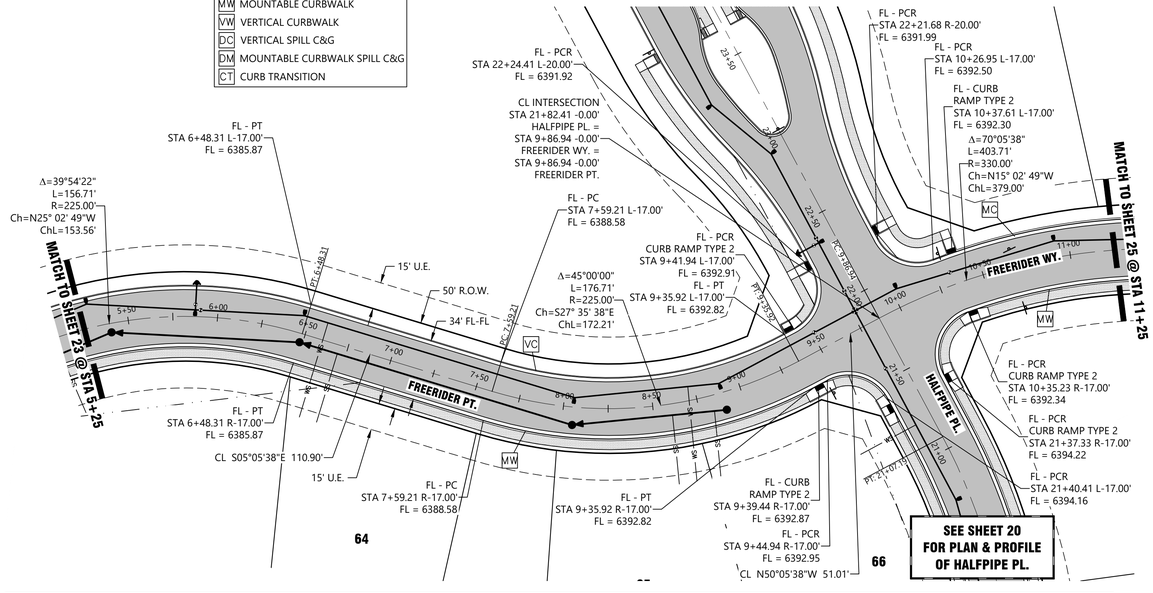
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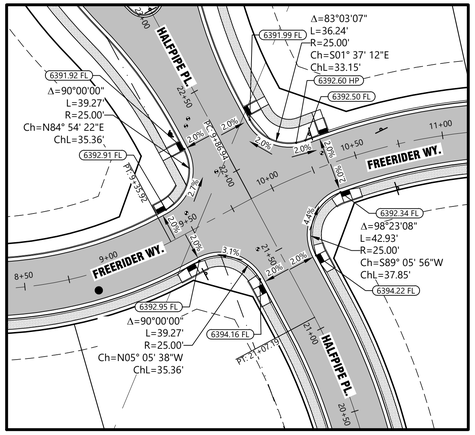
811 Know what's below. Call before you dig.

No. 23

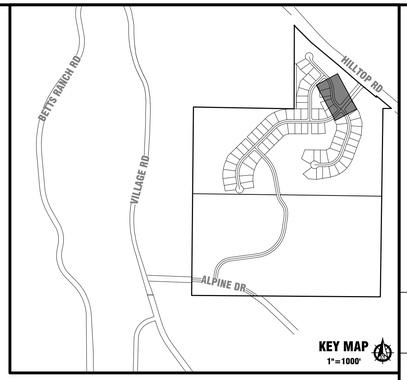
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VC	VERTICAL CATCH C&G
MC	MOUNTABLE CATCH C&G
MW	MOUNTABLE CURBWALK
VW	VERTICAL CURBWALK
DC	VERTICAL SPILL C&G
DM	MOUNTABLE CURBWALK SPILL C&G
CT	CURB TRANSITION





CURB RETURN
SCALE: 1" = 40'



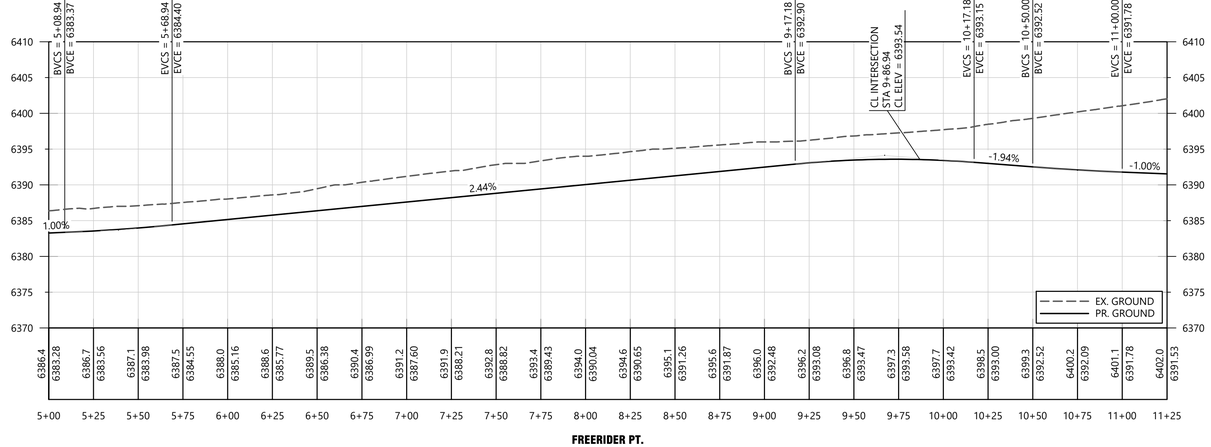
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FIELD VERIFY LOCATION AND ELEVATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION

MAINTAIN A 1.5' MIN. VERTICAL SEPARATION BETWEEN UTILITIES

MAINTAIN 4.5' MINIMUM COVER OVER WL



FREERIDER PT.

01 UTILITY CROSSING
SEE SHEET 10 FOR INFO

PROJECT BENCHMARK:

NGS BENCHMARK Z-336
ELEVATION = 6612.35' (NAVD 88)

SITE BENCHMARK:
CENTER SECTION CORNER OF SECTION 6-T7S-R65W
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40 0 20 40
SCALE
1 inch = 40 ft.

ASSISTANT DIRECTOR OF DEVELOPMENT REVIEW

DATE

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ENGINEERING DIVISION ACCEPTANCE BLOCK

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No.	Rev. Date:	Revision Type:
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6		

Designed: TBS
Prepared: DL
Approved: DKH
Job No.: 1084-00006
Scale Horiz: 1" = 40'
Scale Vert: 1" = 10'
Sheet: 24 of 49
Date: February 20, 2026

Proj. Name: Ramblewood Filing No. 1
Location: Douglas County, Colorado
Plan Set: Street & Storm Sewer Construction Plans
Sheet Name: P&P - Street & Storm - Freerider Point

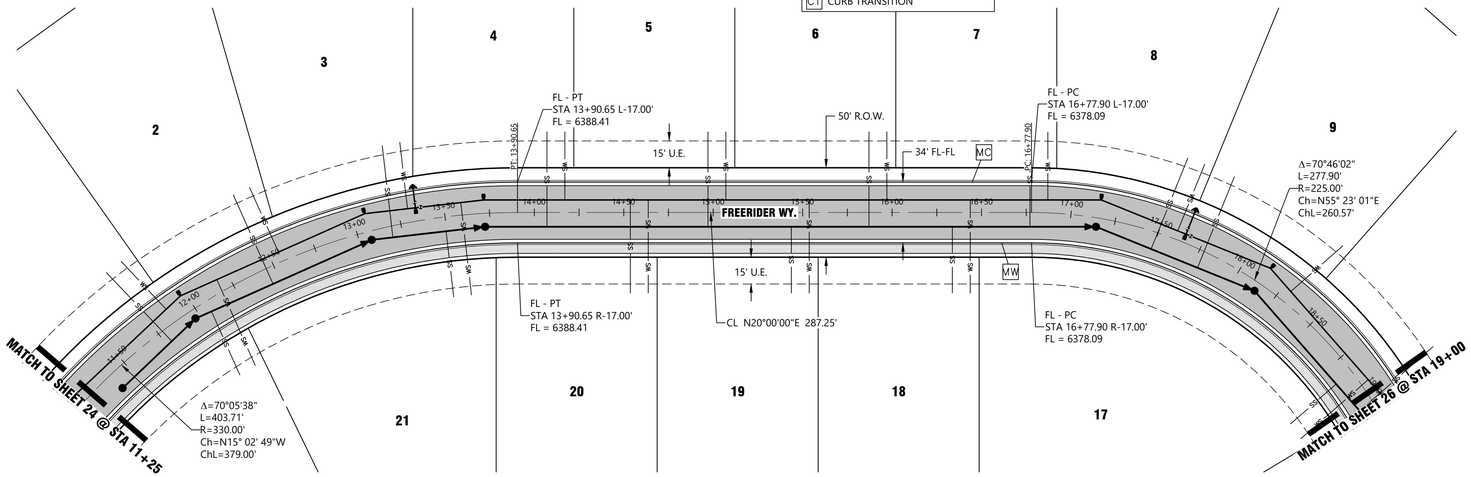
NOT FOR CONSTRUCTION

Know what's below.
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No. 24

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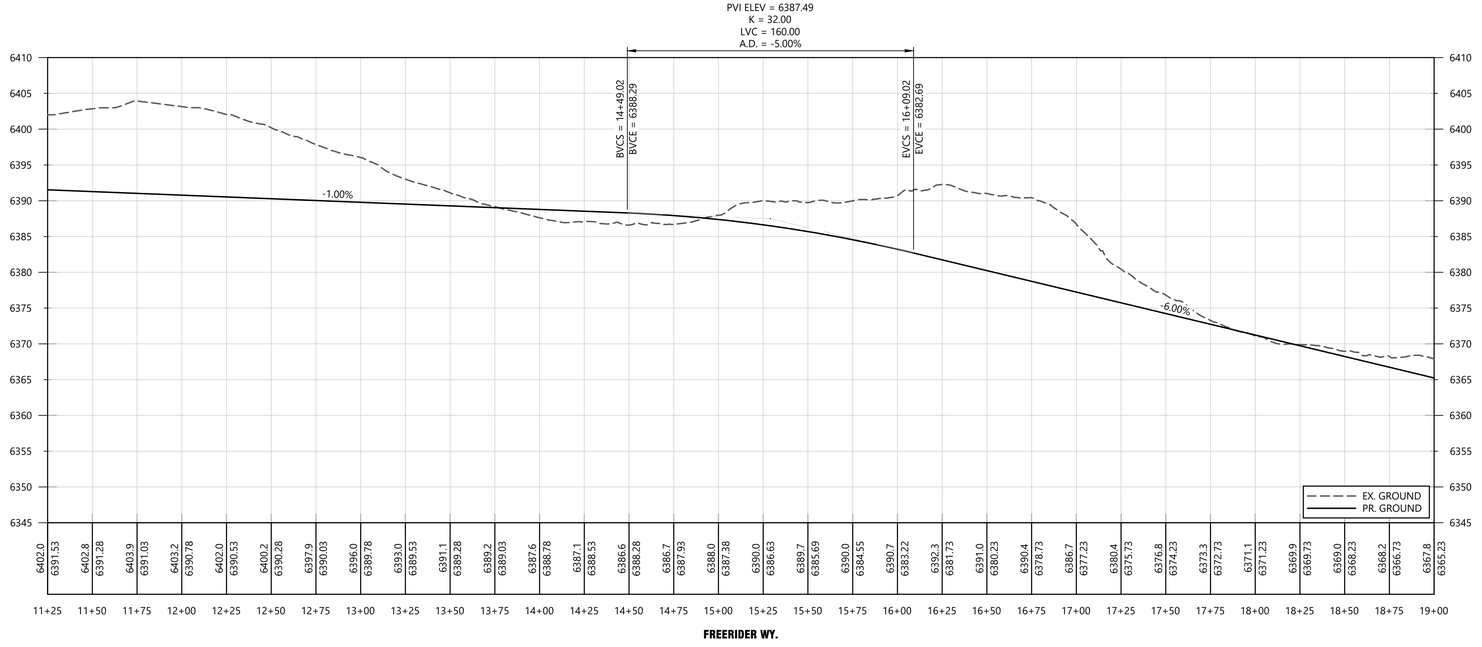
VC	VERTICAL CATCH C&G
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DM	MOUNTABLE CURBWALK SPILL C&G
CT	CURB TRANSITION



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01 UTILITY CROSSING
SEE SHEET 10 FOR INFO

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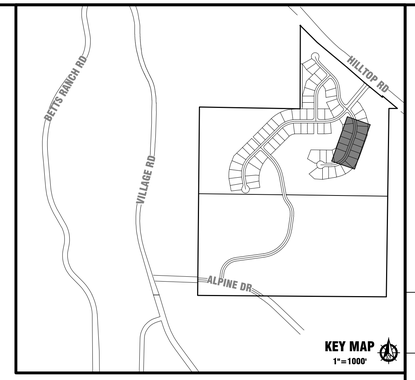
SCALE
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ASSISTANT DIRECTOR OF DEVELOPMENT REVIEW

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Designed: TBS
Prepared: DL
Approved: DKH
Job No.: 1084-0006
Scale Horiz: 1" = 40'
Scale Vert: 1" = 10'
Sheet: 25 of 49
Date: February 20, 2026

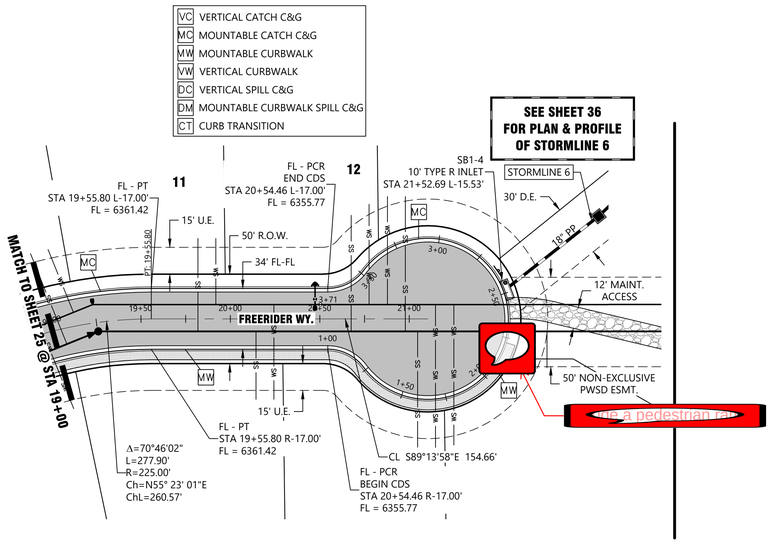
Proj. Name: Ramblewood Filing No. 1
Location: Douglas County, Colorado
Plan Set: Street & Storm Sewer Construction Plans
Sheet Name: P&P - Street & Storm - Freerider Way

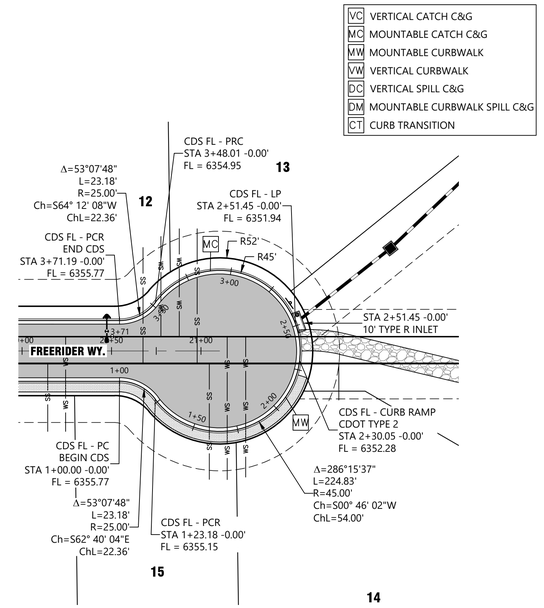
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No. 25

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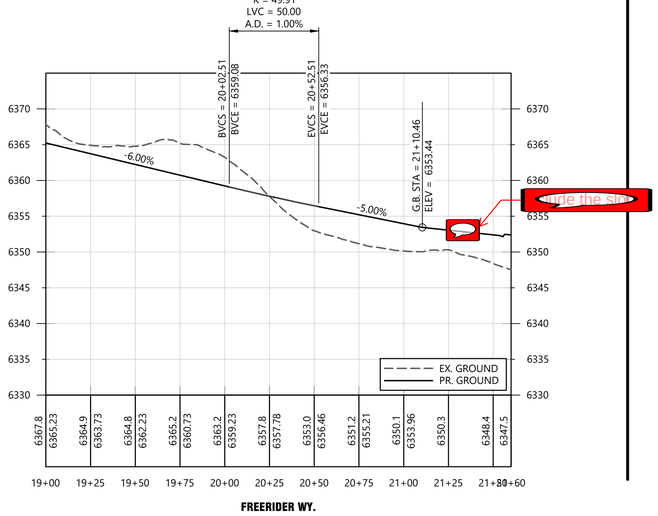


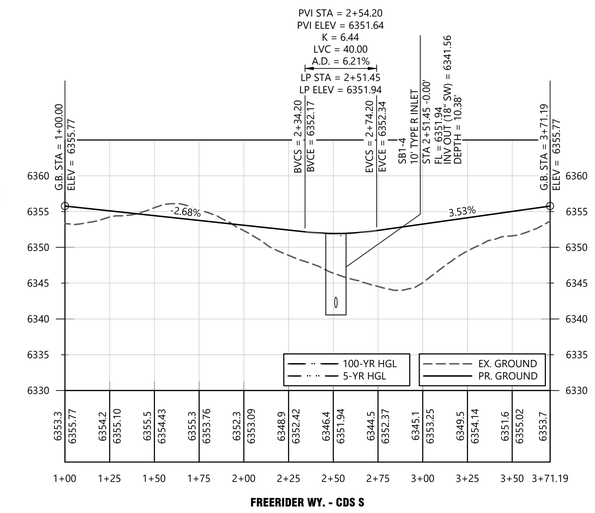


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01 UTILITY CROSSING
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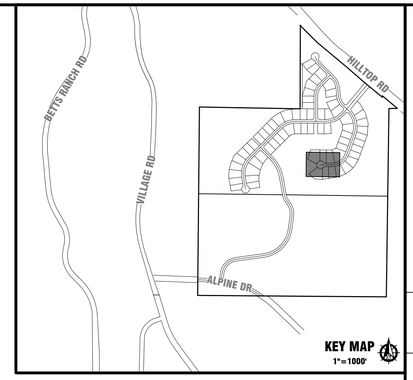
SCALE
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No.	Rev. Date:	Revision Type:
1		
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Designed: TBS
Prepared: DL
Approved: DKH
Job No.: 1084-0006
Scale Horiz: 1" = 40'
Scale Vert: 1" = 10'
Sheet: 26 of 49
Date: February 20, 2026

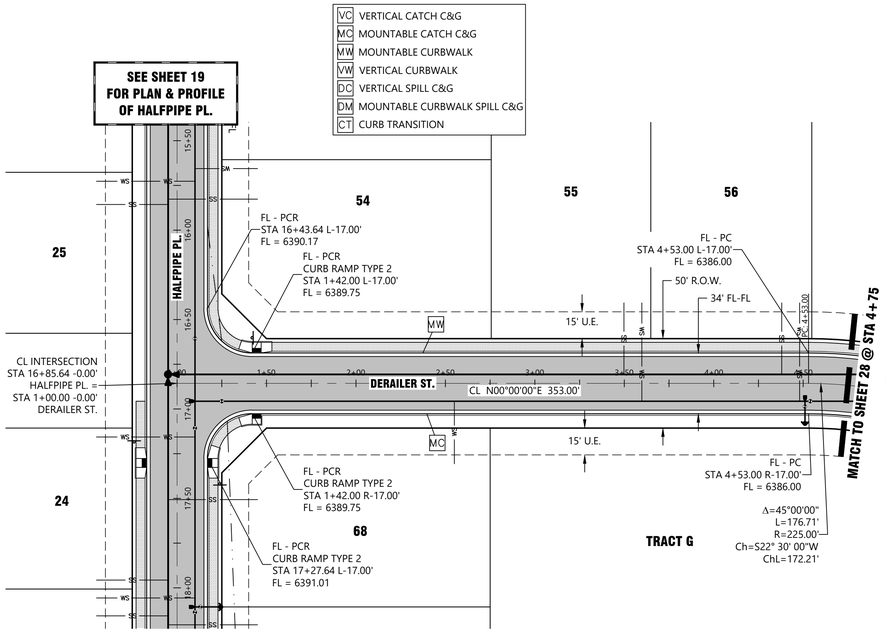
Proj. Name: Ramblewood Filing No. 1
Location: Douglas County, Colorado
Plan Set: Street & Storm Sewer Construction Plans
Sheet Name: P&P - Street & Storm - Freerider Way

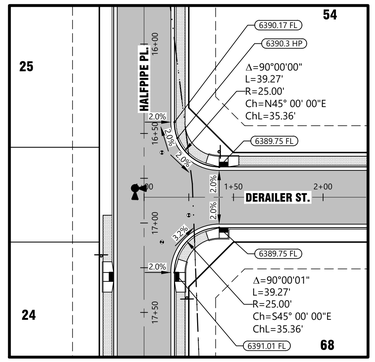
NOT FOR CONSTRUCTION

Know what's below. Call before you dig.

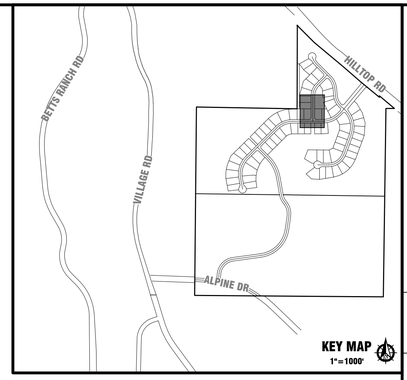
No. 26

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CURB RETURN
SCALE: 1" =40'



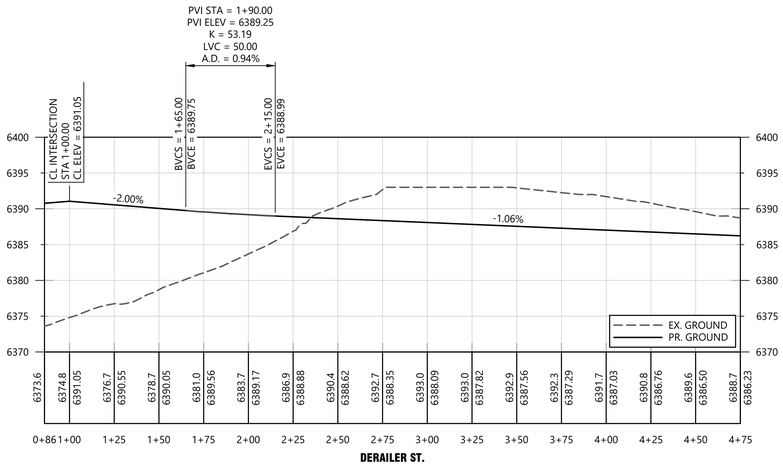
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MAINTAIN A 1.5' MIN. VERTICAL SEPARATION BETWEEN UTILITIES

MAINTAIN 4.5' MINIMUM COVER OVER WL



01 UTILITY CROSSING
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NGS BENCHMARK Z-336
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CENTER SECTION CORNER OF SECTION 6-T7S-R65W
ELEVATION = 6398.76 (NAVD 88)

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40 0 20 40
SCALE
1 inch = 40 ft.

ASSISTANT DIRECTOR OF DEVELOPMENT REVIEW

DATE

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Designed: TBS
Prepared: GJG
Approved: DKH

Job No.: 1084-0006
Scale Horiz: 1" = 40'
Scale Vert: 1" = 10'

Sheet: 27 of 49
Date: February 20, 2026

Proj. Name: Ramblewood Filing No. 1
Location: Douglas County, Colorado
Plan Set: Street & Storm Sewer Construction Plans
Sheet Name: P&P - Street & Strom - Derailer Street

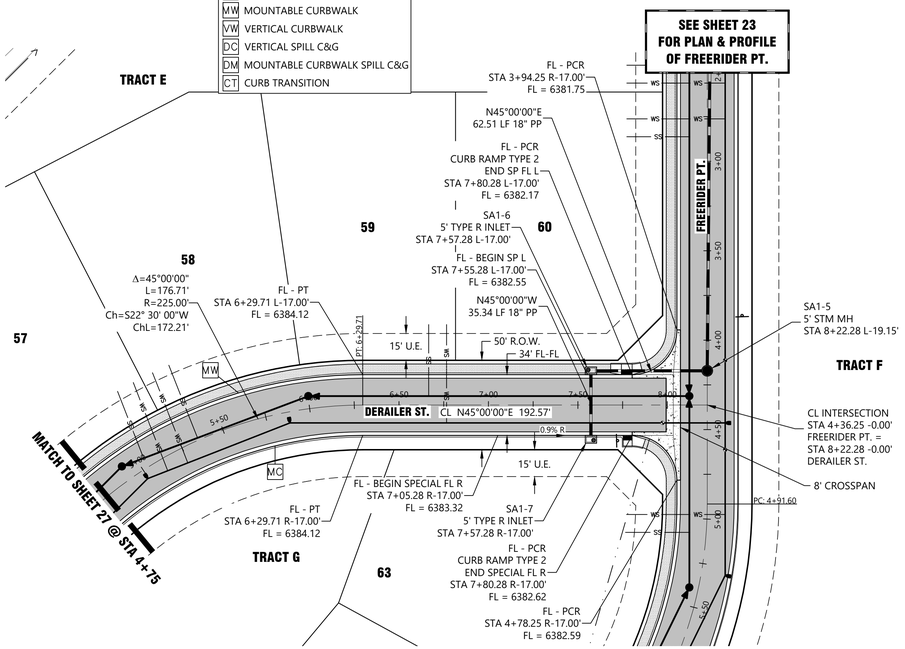
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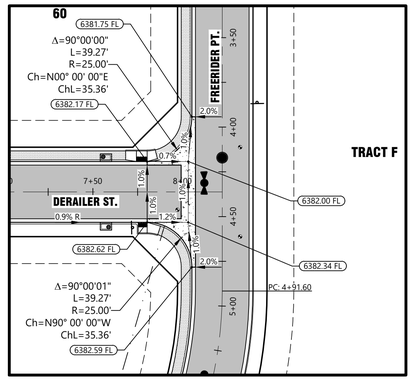
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No. 27

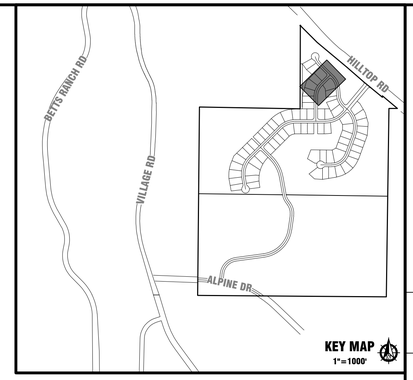
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VC	VERTICAL CATCH C&G
MC	MOUNTABLE CATCH C&G
MW	MOUNTABLE CURBWALK
VW	VERTICAL CURBWALK
DC	VERTICAL SPILL C&G
DM	MOUNTABLE CURBWALK SPILL C&G
CT	CURB TRANSITION





CURB RETURN & CROSSPAN
SCALE: 1" =40'



KEY MAP
1"=1000'

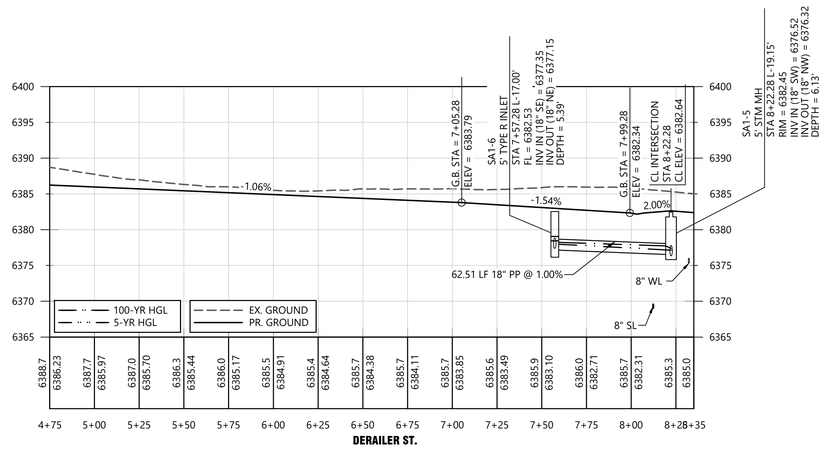
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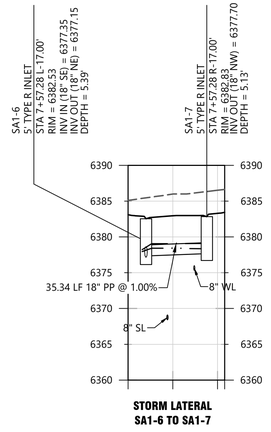
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DERAILER ST.



STORM LATERAL
SA1-6 TO SA1-7

01 UTILITY CROSSING
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40 0 20 40
SCALE
1 inch = 40 ft.

ASSISTANT DIRECTOR OF DEVELOPMENT REVIEW

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Designed: TBS
Prepared: GJG
Approved: DKH
Job No.: 1084-0006
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Scale Vert: 1" = 10'
Sheet: 28 of 49
Date: February 20, 2026

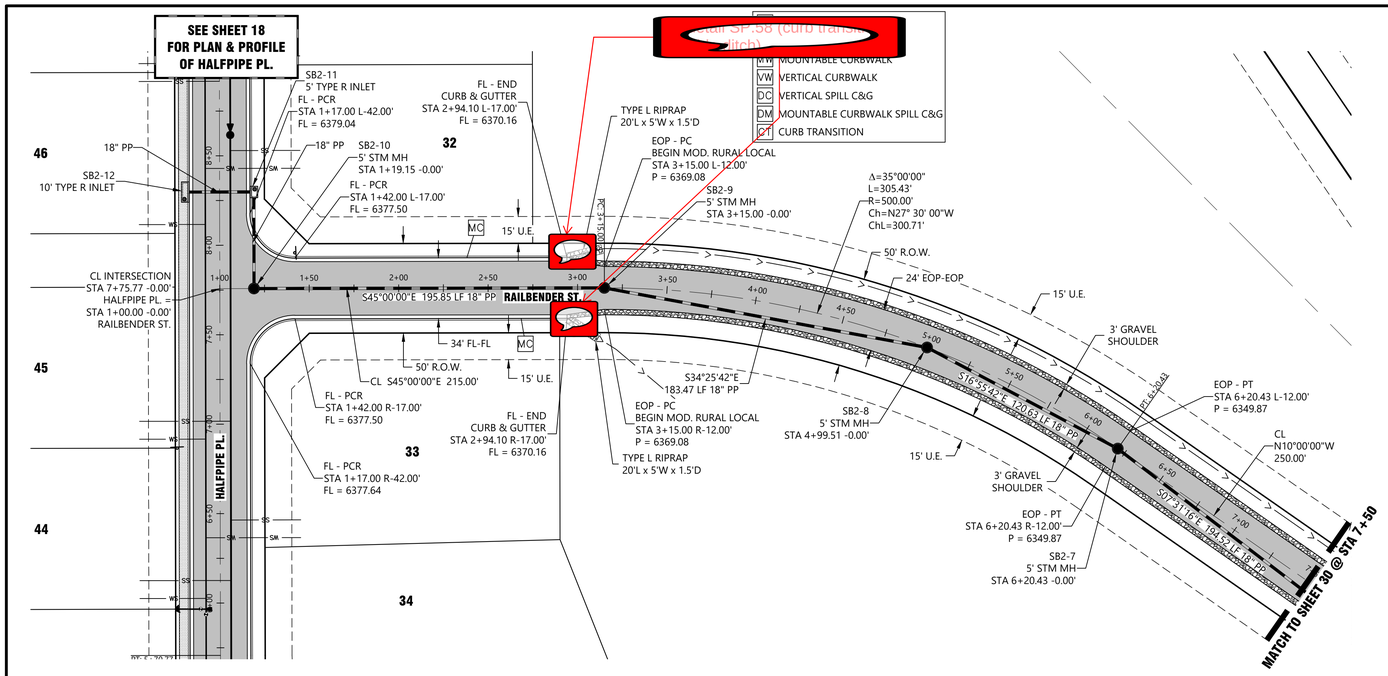
Proj. Name: Ramblewood Filing No. 1
Location: Douglas County, Colorado
Plan Set: Street & Storm Sewer Construction Plans
Sheet Name: P&P - Street & Storm - Derailer Street

NOT FOR CONSTRUCTION

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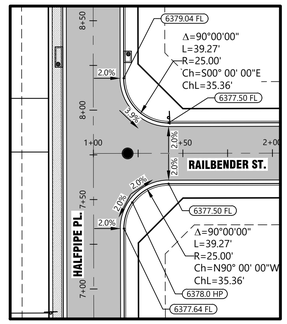
No. 28

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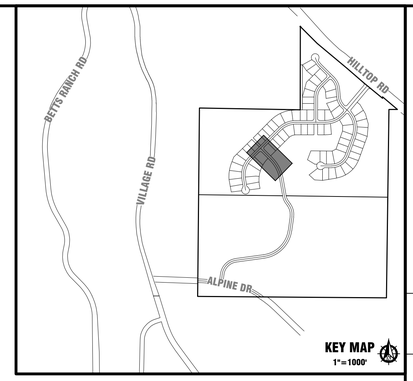


Curb SP.58 (curb transition pitch)

MW	MOUNTABLE CURBWALK
VW	VERTICAL CURBWALK
DC	VERTICAL SPILL C&G
DM	MOUNTABLE CURBWALK SPILL C&G
CT	CURB TRANSITION

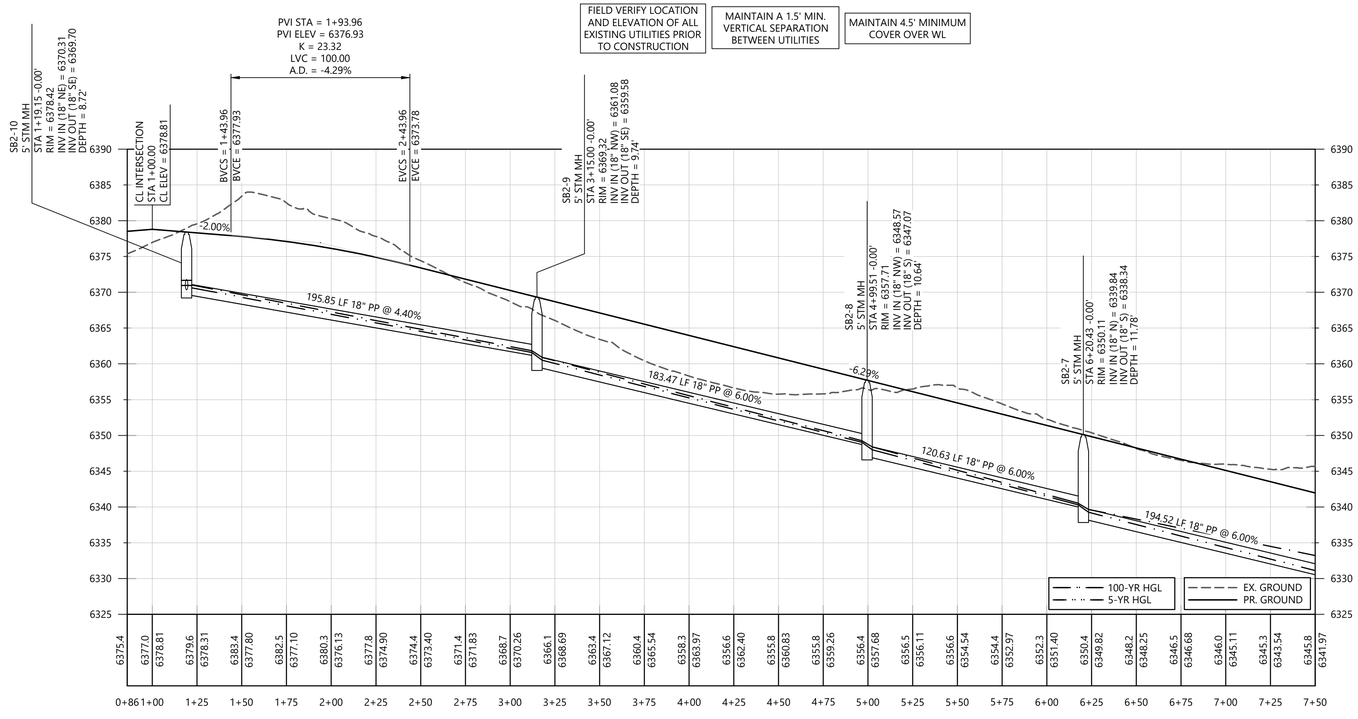


CURB RETURN
SCALE: 1" =40'



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Designed: TBS
Prepared: DL
Approved: DKH

Job No.: 1084-0006
Scale Horiz: 1" = 40'
Scale Vert: 1" = 10'

Sheet: 29 of 49
Date: February 20, 2026

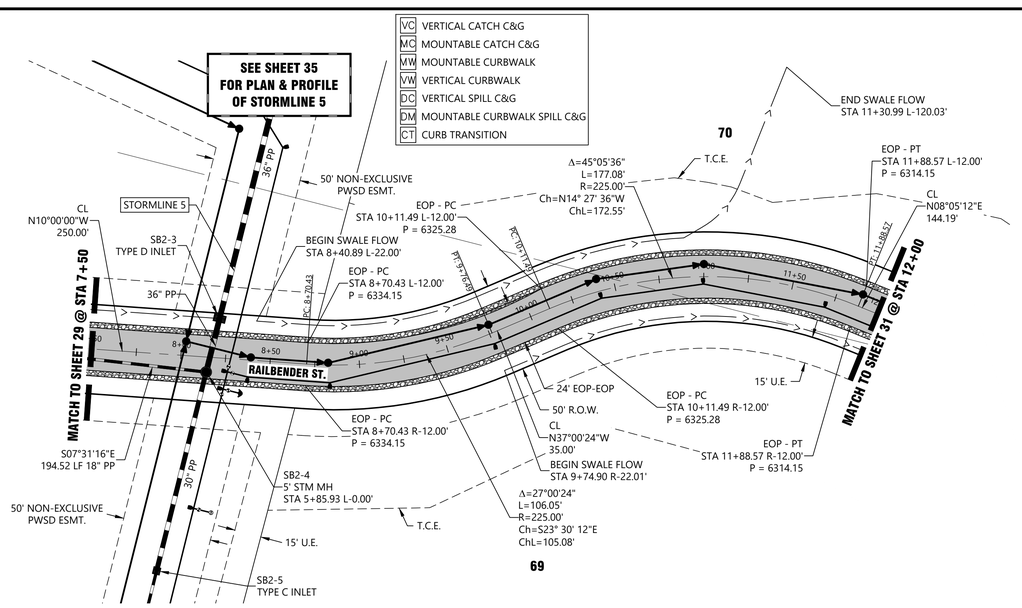
Proj. Name: Ramblewood Filing No. 1
Location: Douglas County, Colorado
Plan Set: Street & Storm Sewer Construction Plans
Sheet Name: P&P - Street & Storm - Railbender Street

NOT FOR CONSTRUCTION

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

No. 29

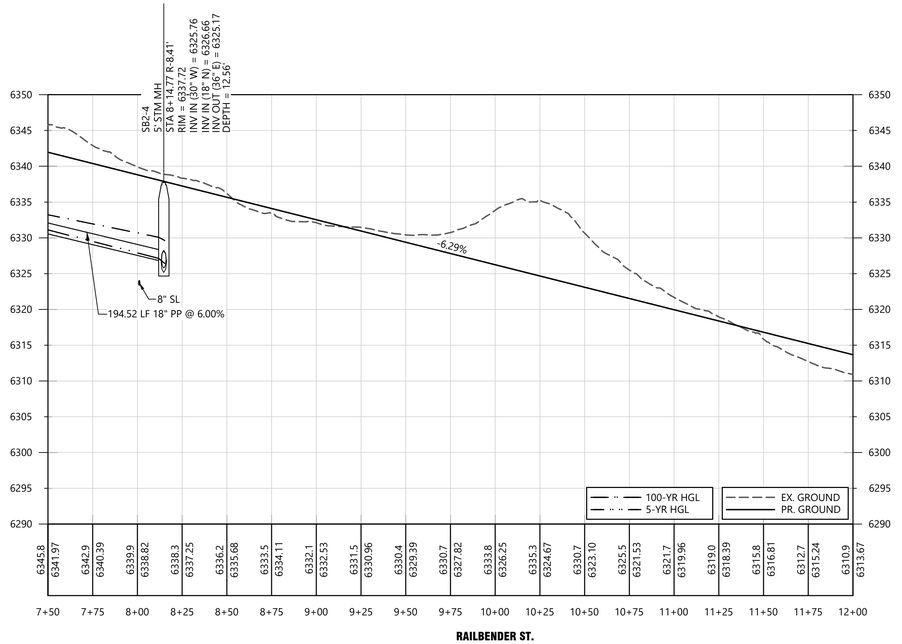
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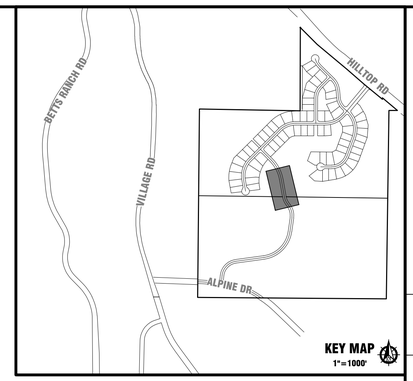


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40 0 20 40

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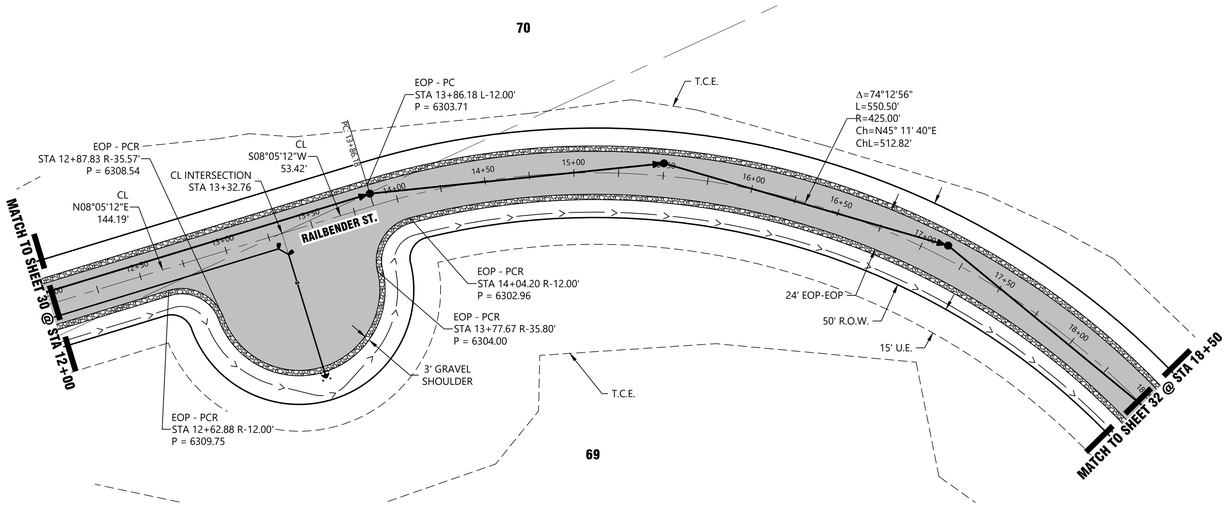
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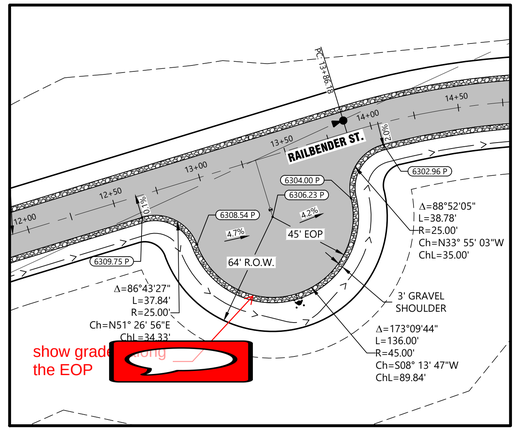
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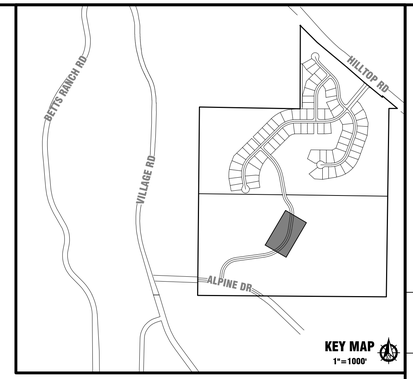
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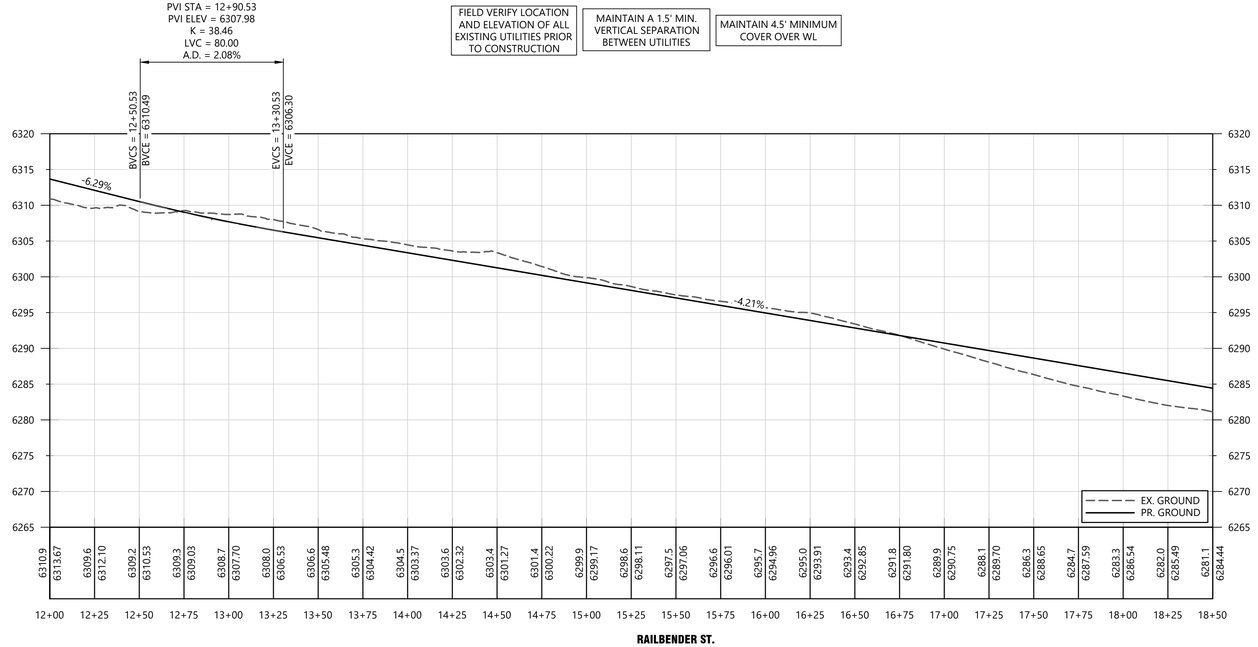


EMERGENCY VEHICLE TURNAROUND
SCALE: 1" =40'



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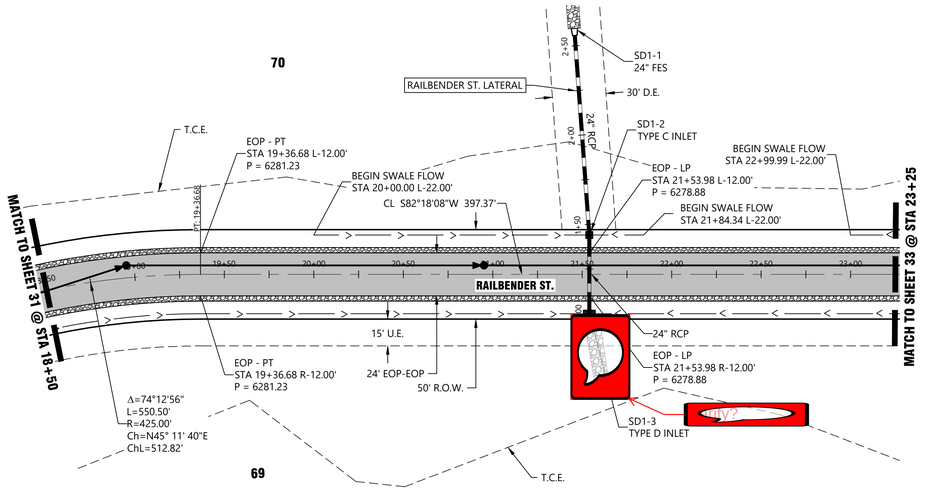
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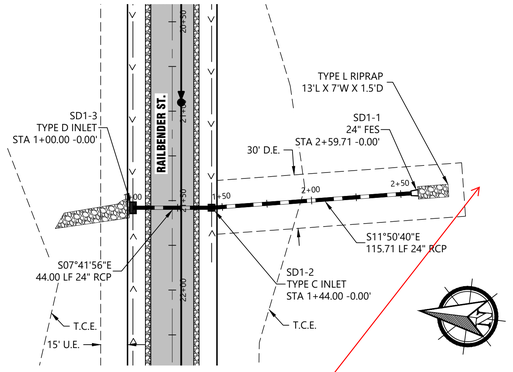
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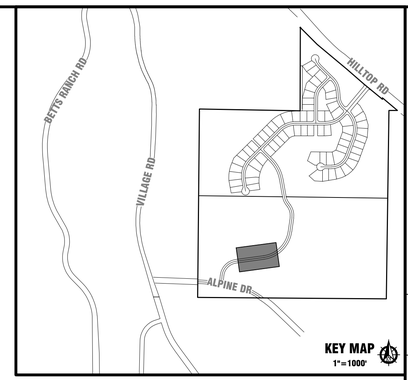
Know what's below.
Call before you dig.

No. 31

I:\JOB FOLDERS\1084\1084-0006\CIVIL\PROD\CD - STR-STM\PP-RAILBENDER STREET PRINTED ON: 2/20/2026 3:46 PM







NOTES:

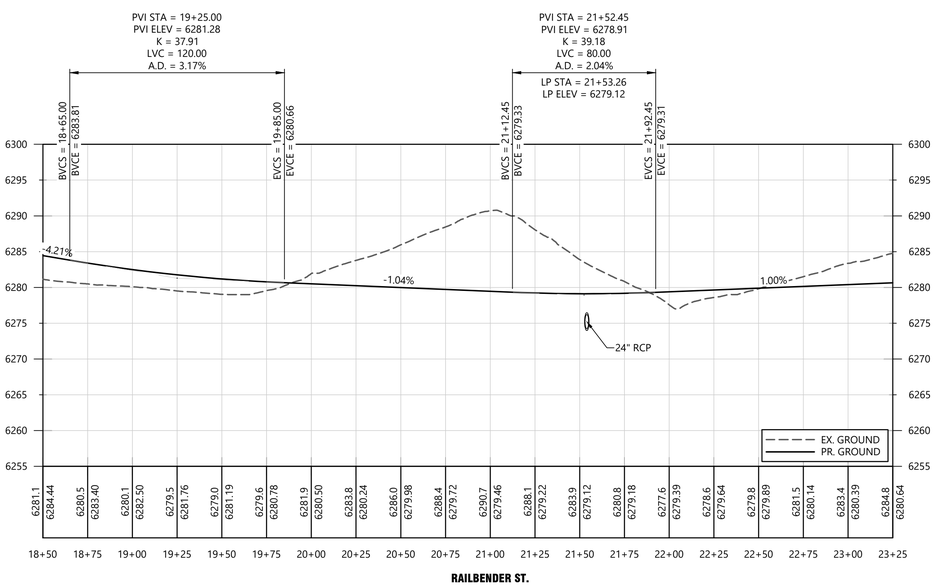
1. REFER TO RAMBLEWOOD FILING NO. 1, STREET & STORM SEWER CONSTRUCTION PLANS FOR STREET AND STORM SEWER DESIGN INFORMATION.
2. SEE SHEET 2 FOR TYPICAL STREET SECTIONS.
3. SEE SHEET 1 FOR LEGEND AND GENERAL ABBREVIATIONS.
4. REFER TO RAMBLEWOOD FILING NO. 1, PARKER WATER & SANITATION CONSTRUCTION PLANS FOR WATER & SANITARY SEWER DESIGN INFORMATION.
5. SEE SHEET 10 FOR UTILITY CROSSING INFORMATION.
6. CONTRACTOR SHALL ROTATE ALL SANITARY SEWER MANHOLES TO PROVIDE 1' MINIMUM CLEARANCE BETWEEN MANHOLE LID MAINS AND LIP OF GUTTER OR EDGE OF CURB.
7. MIN. DISTANCE BETWEEN WATER AND LIP OF GUTTER SHALL BE 5' AND MIN. DISTANCE BETWEEN CENTER OF SANITARY MH AND LIP OF GUTTER 1'.
8. ALL OFF-STREET SANITARY SEWER MANHOLES SHALL HAVE SEALED & LOCKING LIDS.
9. SANITARY MANHOLES 20' OR GREATER SHALL HAVE INTERMEDIATE PLATFORMS PER PWSD DETAIL S3.6

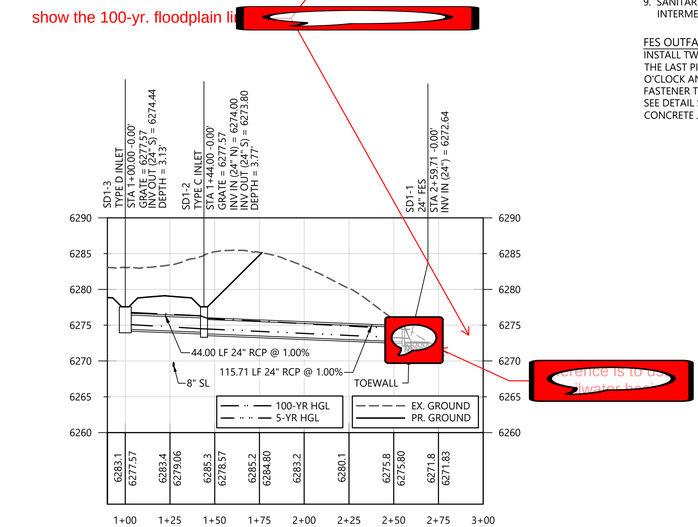
FES OUTFALL NOTE:
INSTALL TWO JOINT FASTENERS BETWEEN THE FES AND THE LAST PIPE SECTION. INSTALL THESE AT THE TEN O'CLOCK AND TWO O'CLOCK POSITIONS AND TRIM JOINT FASTENER THREADS FLUSH WITH THE INTERIOR BOLTS. SEE DETAIL SHEET 47 FOR CDOT DETAIL M-603-10 FOR CONCRETE JOINT FASTENER DETAIL.

FIELD VERIFY LOCATION AND ELEVATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION

MAINTAIN A 1.5' MIN. VERTICAL SEPARATION BETWEEN UTILITIES

MAINTAIN 4.5' MINIMUM COVER OVER WL





01 UTILITY CROSSING
SEE SHEET 10 FOR INFO

PROJECT BENCHMARK:

NGS BENCHMARK Z-336
ELEVATION = 6612.35' (NAVD 88)

SITE BENCHMARK:
CENTER SECTION CORNER OF SECTION 6-T7S-R65W
ELEVATION = 6398.76 (NAVD 88)

ELEVATION OF GROUND TOPOGRAPHIC SURVEY CONTOUR INTERVALS ARE 1 FOOT

SCALE
1 inch = 40 ft.

ASSISTANT DIRECTOR OF DEVELOPMENT REVIEW

DATE

THESE CONSTRUCTION DRAWINGS HAVE BEEN REVIEWED BY DOUGLAS COUNTY FOR STREET AND DRAINAGE IMPROVEMENTS ONLY

ENGINEERING DIVISION ACCEPTANCE BLOCK

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Westminster, CO 80234
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No.	Rev. Date:	Revision Type:
1		
2		
3		
4		
5		
6		

Designed: T.BS
Prepared: JT
Approved: DKH
Job No.: 1084-0006
Scale Horiz: 1" = 40'
Scale Vert: 1" = 10'
Sheet: 32 of 49
Date: February 20, 2026

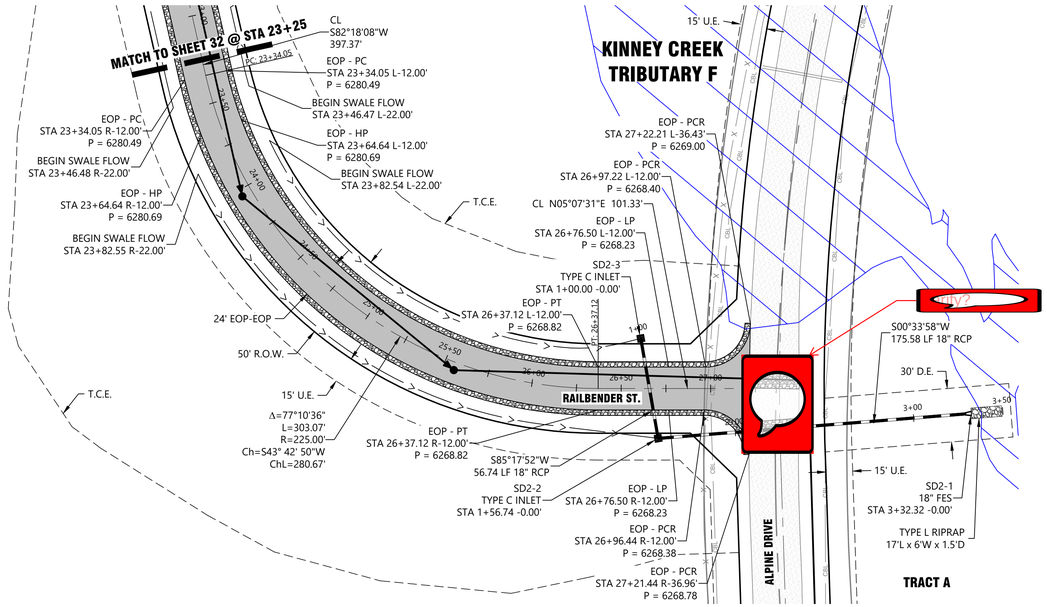
Proj. Name: Ramblewood Filing No. 1
Location: Douglas County, Colorado
Plan Set: Street & Storm Sewer Construction Plans
Sheet Name: P&P - Street & Storm - Railbender Street

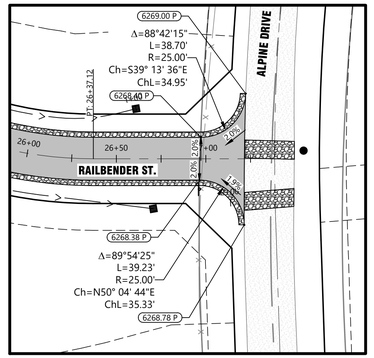
NOT FOR CONSTRUCTION

Know what's below. Call before you dig.

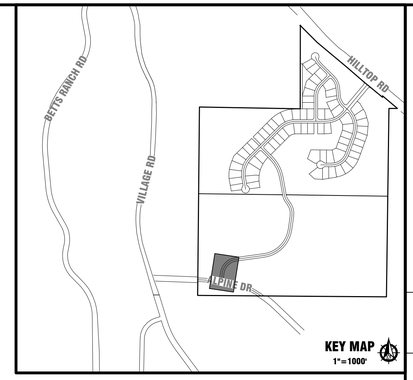
No. 32

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CURB RETURN
SCALE: 1" = 40'



KEY MAP
1"=1000'

NOTES:

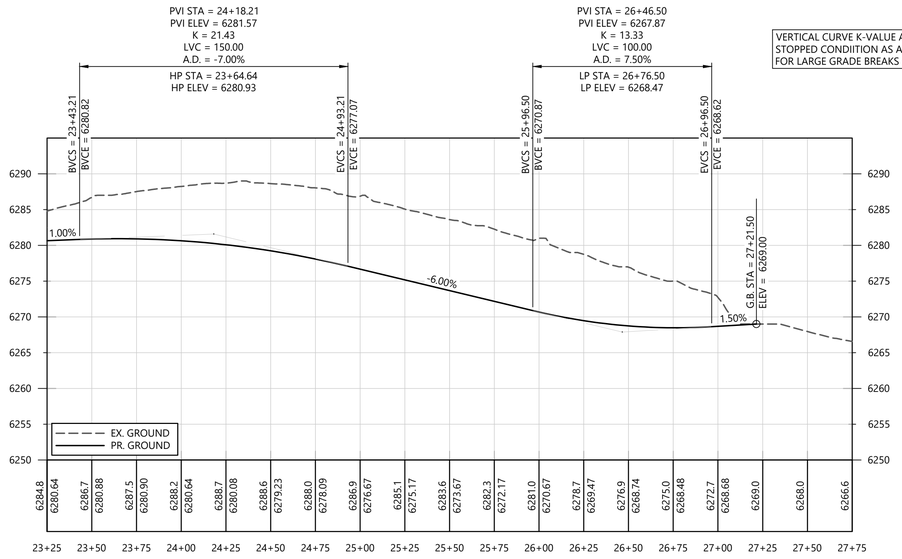
1. REFER TO RAMBLEWOOD FILING NO. 1, STREET & STORM SEWER CONSTRUCTION PLANS FOR STREET AND STORM SEWER DESIGN INFORMATION.
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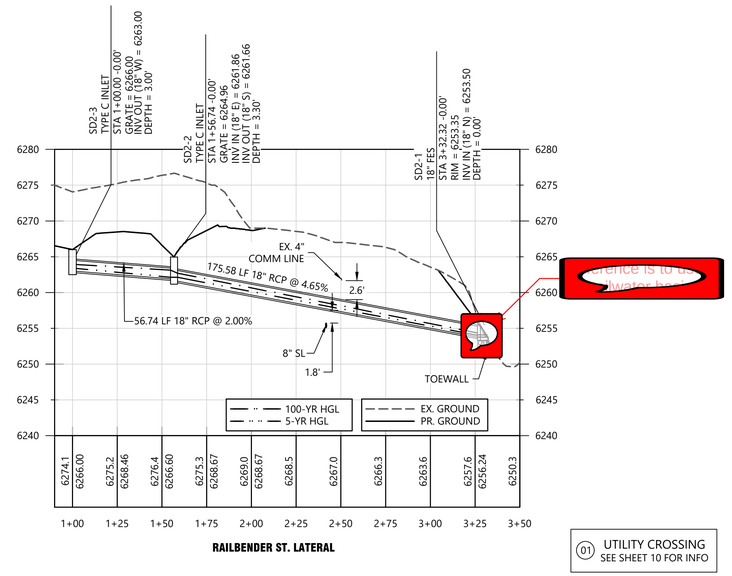
FIELD VERIFY LOCATION AND ELEVATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION

MAINTAIN A 1.5' MIN. VERTICAL SEPARATION BETWEEN UTILITIES

MAINTAIN 4.5' MINIMUM COVER OVER WL



VERTICAL CURVE K-VALUE ADJUSTED FOR APPROACHING A STOPPED CONDITION AS AN ALTERNATIVE TO ALLOWANCES FOR LARGE GRADE BREAKS AT CROSS-PAN INTERSECTIONS.



01 UTILITY CROSSING
SEE SHEET 10 FOR INFO

PROJECT BENCHMARK:

NGS BENCHMARK Z-336
ELEVATION = 6612.35' (NAVD 88)

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SCALE
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ASSISTANT DIRECTOR OF DEVELOPMENT REVIEW

DATE

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No.	Rev. Date:	Revision Type:
1		
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3		
4		
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Designed: TBS
Prepared: DL
Approved: DKH
Job No.: 1084-0006
Scale Horiz: 1" = 40'
Scale Vert: 1" = 10'
Sheet: 33 of 49
Date: February 20, 2026

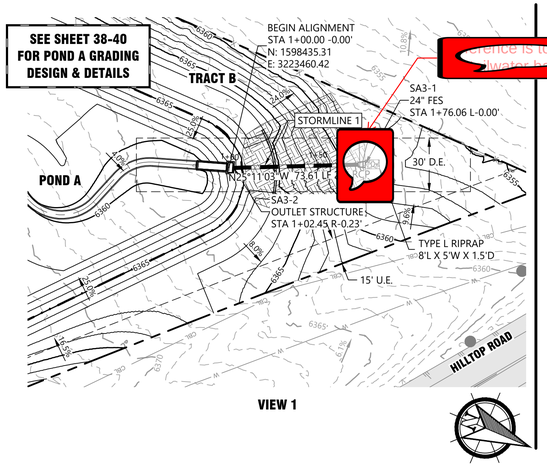
Proj. Name: Ramblewood Filing No. 1
Location: Douglas County, Colorado
Plan Set: Street & Storm Sewer Construction Plans
Sheet Name: P&P - Street & Storm - Railbender Street

NOT FOR CONSTRUCTION

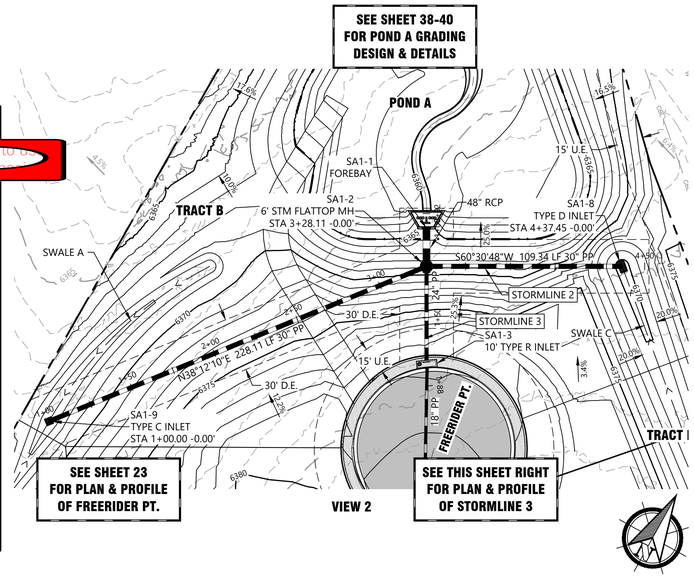
811 Know what's below. Call before you dig.

No. 33

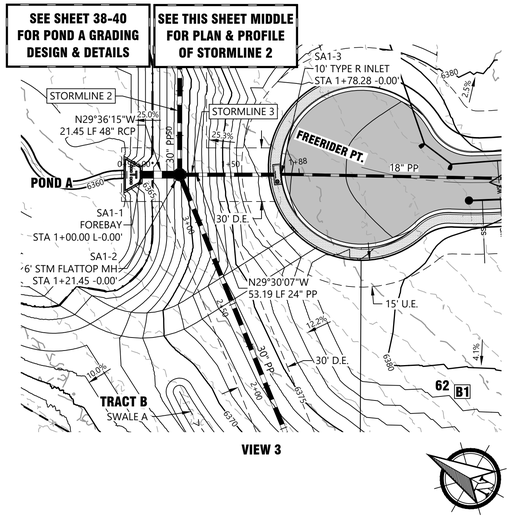
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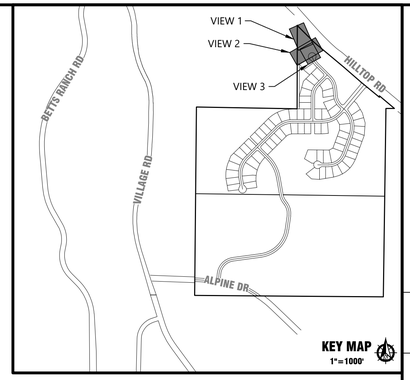
VIEW 1



VIEW 2



VIEW 3

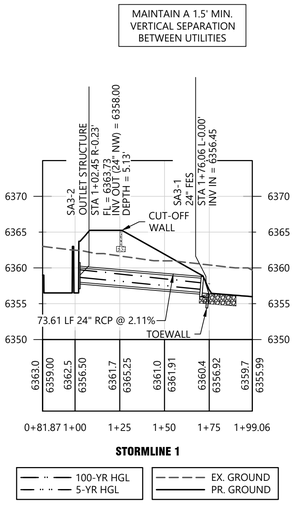


KEY MAP
1"=1000'

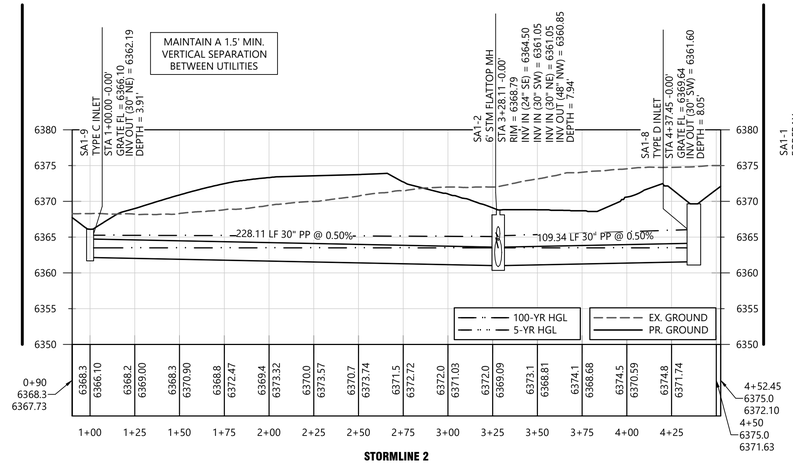
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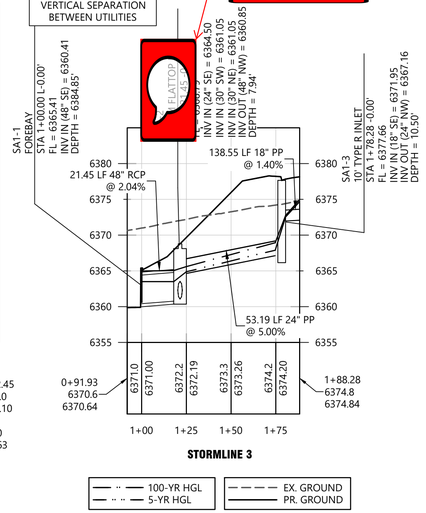
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STORMLINE 1



STORMLINE 2



STORMLINE 3

01 UTILITY CROSSING
SEE SHEET 10 FOR INFO

PROJECT BENCHMARK:

NGS BENCHMARK Z-336
ELEVATION = 6612.35' (NAVD 88)

SITE BENCHMARK:
CENTER SECTION CORNER OF SECTION 6-T7S-R65W
ELEVATION = 6398.76 (NAVD 88)

ELEVATION OF GROUND TOPOGRAPHIC SURVEY CONTOUR INTERVALS ARE 1 FOOT

40 0 20 40
SCALE
1 inch = 40 ft.

ASSISTANT DIRECTOR OF DEVELOPMENT REVIEW

DATE

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ENGINEERING DIVISION ACCEPTANCE BLOCK

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Revision Type:	No.	Rev. Date:
	1	
	2	
	3	
	4	
	5	
	6	

Designed: TBS
Prepared: SRS
Approved: DKH
Job No.: 1084-0006
Scale Horiz: 1" = 40'
Scale Vert: 1" = 10'
Sheet: 34 of 49
Date: February 20, 2026

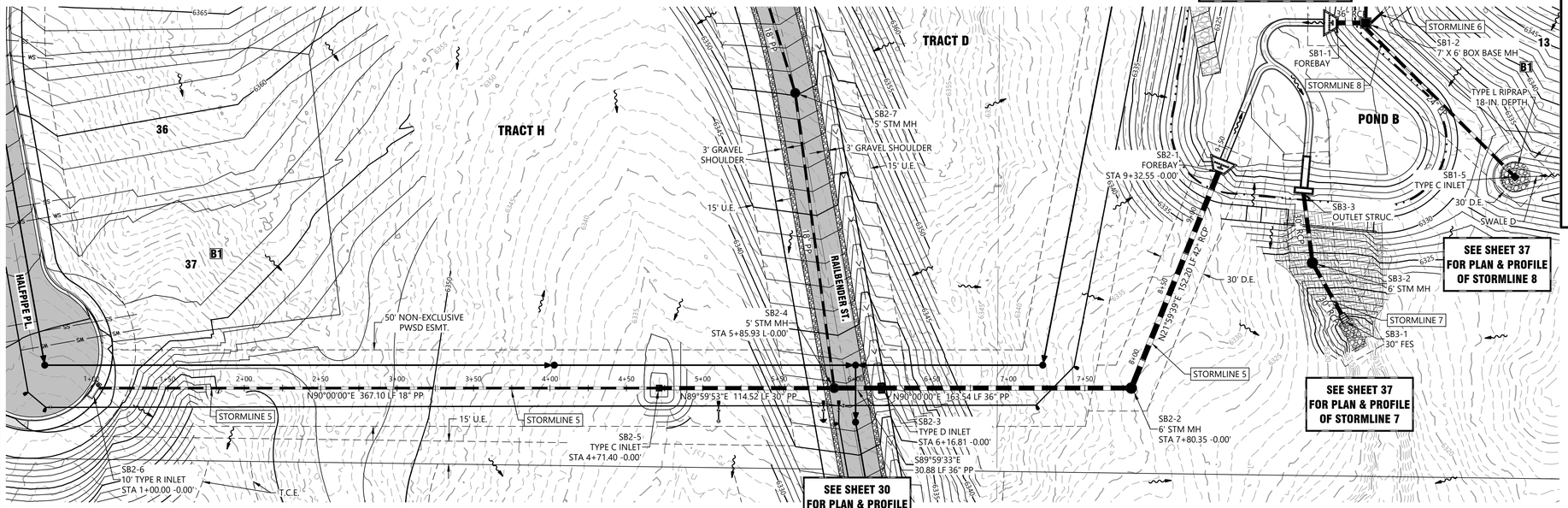
Proj. Name: Ramblewood Filing No. 1
Location: Douglas County, Colorado
Plan Set: Street & Storm Sewer Construction Plans
Sheet Name: P&P - Street & Storm - Stormlines 1 & 2 & 3

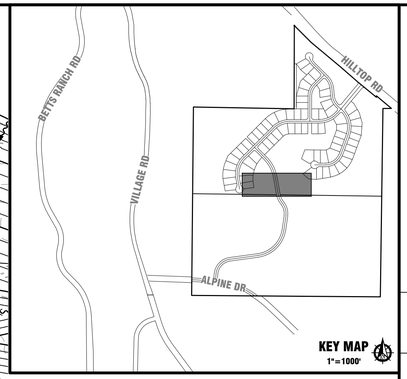
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Know what's below.
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No. 34

I:_JOB FOLDERS\1084\1084-0006\CIVIL\PROD\CD - STR-STM\PP-STORMLINE 1 PRINTED ON: 2/20/2026 3:49 PM

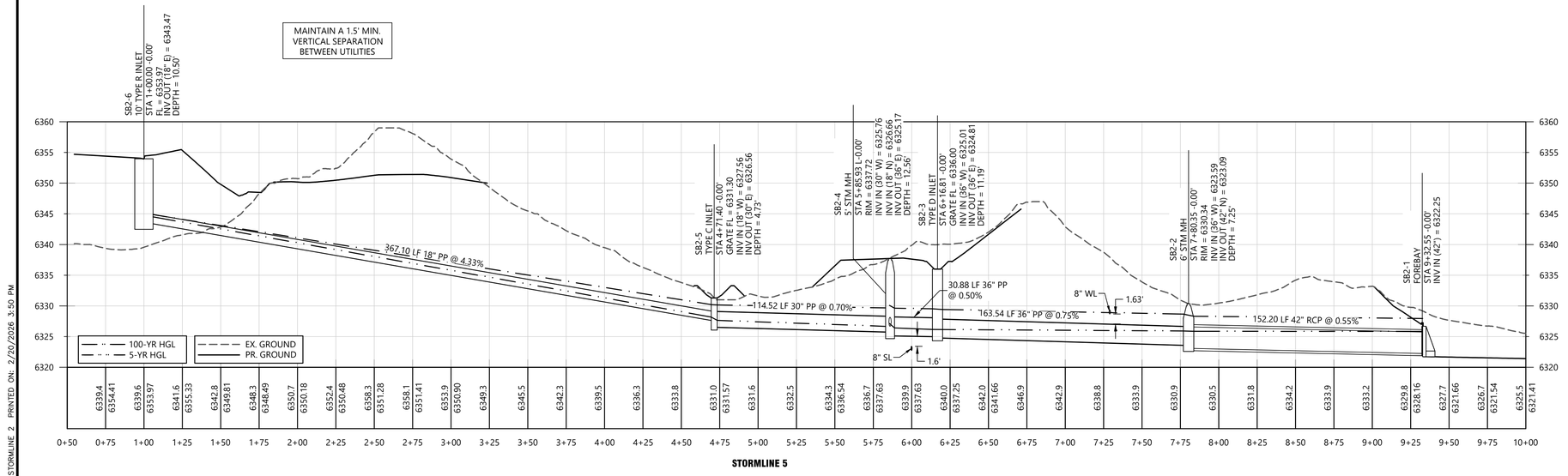




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01 UTILITY CROSSING
SEE SHEET 10 FOR INFO

PROJECT BENCHMARK:

NGS BENCHMARK Z-336
ELEVATION = 6612.35' (NAVD 88)

SITE BENCHMARK:
CENTER SECTION CORNER OF SECTION 6-T7S-R65W
ELEVATION = 6398.76 (NAVD 88)

ELEVATION OF GROUND TOPOGRAPHIC SURVEY CONTOUR INTERVALS ARE 1 FOOT

N

SCALE
1 inch = 40 ft.

ASSISTANT DIRECTOR OF DEVELOPMENT REVIEW

DATE

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ENGINEERING DIVISION ACCEPTANCE BLOCK

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Designed: TBS
Prepared: SRS
Approved: DKH
Job No.: 1084-0006
Scale Horiz: 1" = 40'
Scale Vert: 1" = 10'
Sheet: 35 of 49
Date: February 20, 2026

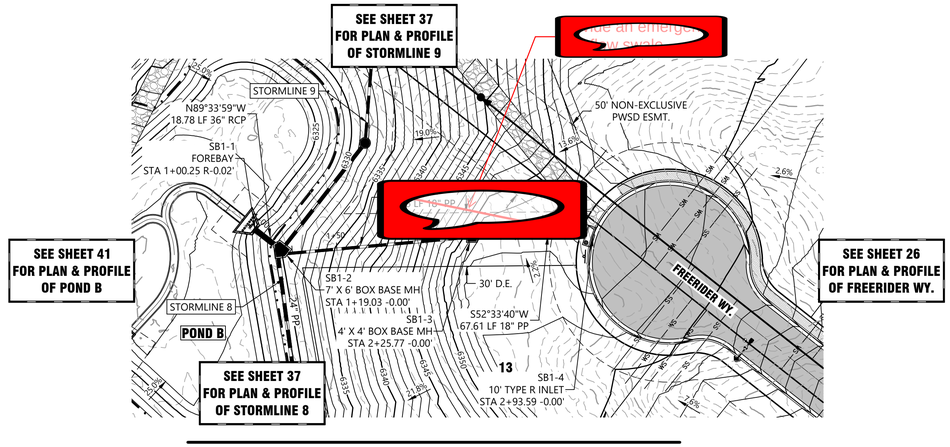
Proj. Name: Ramblewood Filing No. 1
Location: Douglas County, Colorado
Plan Set: Street & Storm Sewer Construction Plans
Sheet Name: P&P - Street & Storm - Stormline 5

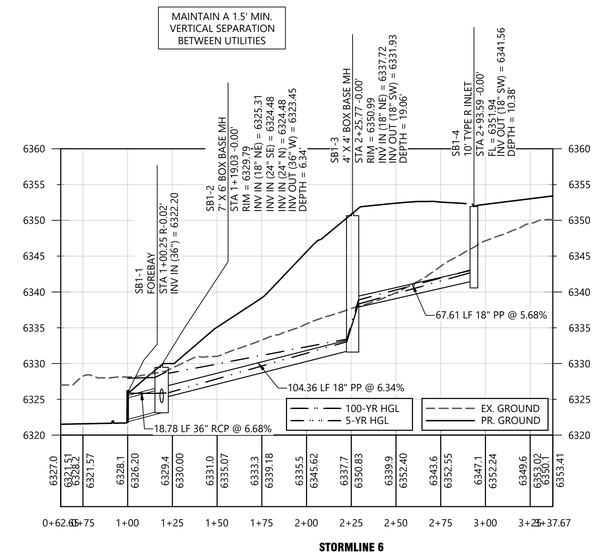
NOT FOR CONSTRUCTION

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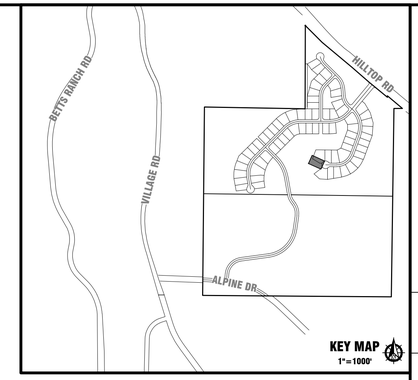
No. 35

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STORMLINE 6



NOTES:

1. REFER TO RAMBLEWOOD FILING NO. 1, STREET & STORM SEWER CONSTRUCTION PLANS FOR STREET AND STORM SEWER DESIGN INFORMATION.
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01 UTILITY CROSSING
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40 0 20 40
SCALE
1 inch = 40 ft.

ASSISTANT DIRECTOR OF DEVELOPMENT REVIEW

DATE

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Designed: T.BS
Prepared: JT
Approved: DKH
Job No.: 1084-0006
Scale Horiz: 1" = 40'
Scale Vert: 1" = 10'
Sheet: 36 of 49
Date: February 20, 2026

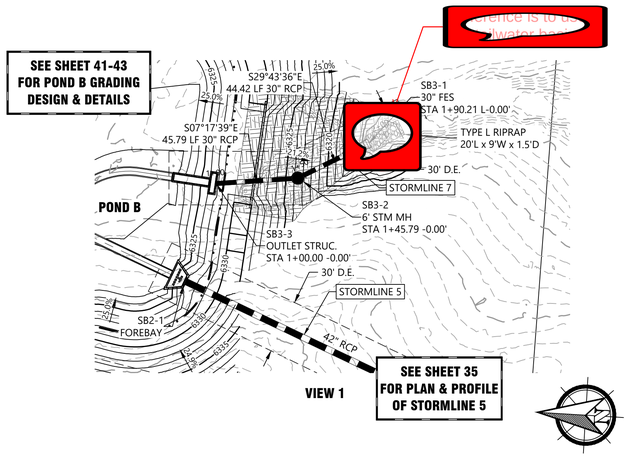
Proj. Name: Ramblewood Filing No. 1
Location: Douglas County, Colorado
Plan Set: Street & Storm Sewer Construction Plans
Sheet Name: P&P - Street & Storm - Stormline 6

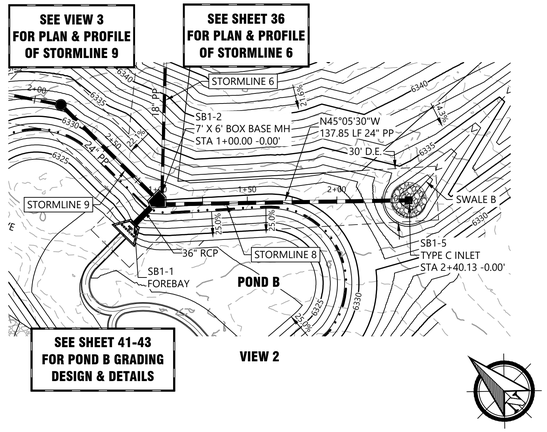
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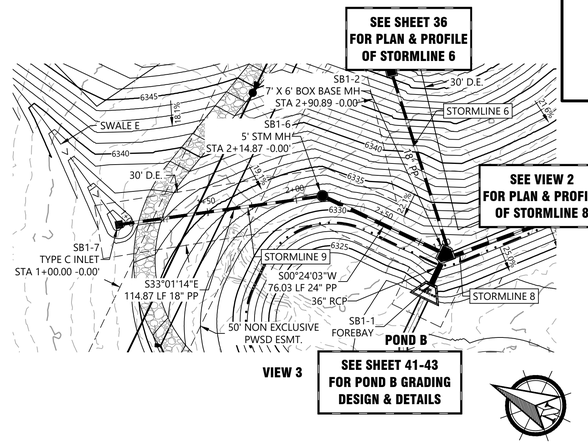
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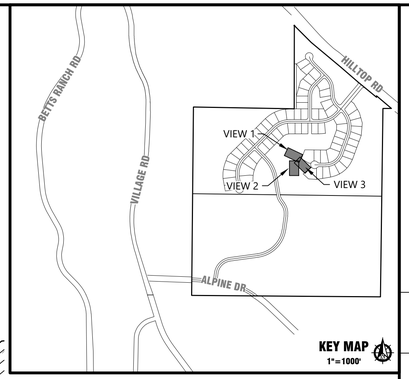
No. 36

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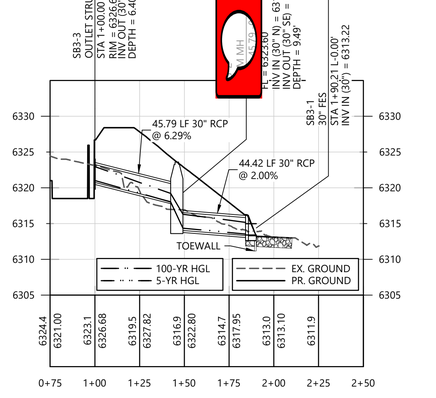


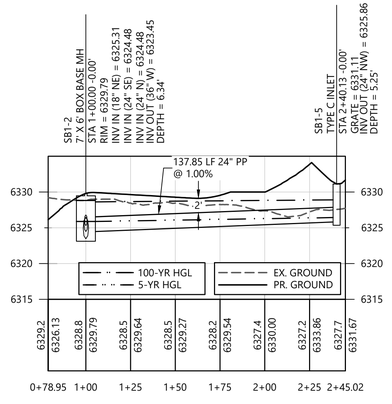


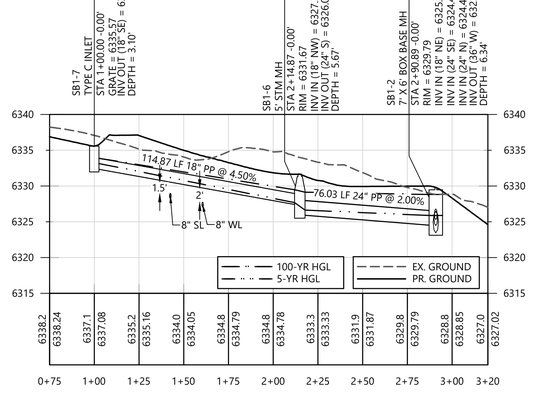
NOTES:

1. REFER TO RAMBLEWOOD FILING NO. 1, STREET & STORM SEWER CONSTRUCTION PLANS FOR STREET AND STORM SEWER DESIGN INFORMATION.
2. SEE SHEET 2 FOR TYPICAL STREET SECTIONS.
3. SEE SHEET 1 FOR LEGEND AND GENERAL ABBREVIATIONS.
4. REFER TO RAMBLEWOOD FILING NO. 1, PARKER WATER & SANITATION CONSTRUCTION PLANS FOR WATER & SANITARY SEWER DESIGN INFORMATION.
5. SEE SHEET 10 FOR UTILITY CROSSING INFORMATION.
6. CONTRACTOR SHALL ROTATE ALL SANITARY SEWER MANHOLES TO PROVIDE 1' MINIMUM CLEARANCE BETWEEN MANHOLE LID MAINS AND LIP OF GUTTER OR EDGE OF CURB.
7. MIN. DISTANCE BETWEEN WATER AND LIP OF GUTTER SHALL BE 5' AND MIN. DISTANCE BETWEEN CENTER OF SANITARY MH AND LIP OF GUTTER 1'.
8. ALL OFF-STREET SANITARY SEWER MANHOLES SHALL HAVE SEALED & LOCKING LIDS.
9. SANITARY MANHOLES 20' OR GREATER SHALL HAVE INTERMEDIATE PLATFORMS PER PWSD DETAIL S3.6

FES OUTFALL NOTE:
INSTALL TWO JOINT FASTENERS BETWEEN THE FES AND THE LAST PIPE SECTION. INSTALL THESE AT THE TEN O'CLOCK AND TWO O'CLOCK POSITIONS AND TRIM JOINT FASTENER THREADS FLUSH WITH THE INTERIOR BOLTS. SEE DETAIL SHEET 47 FOR CDOT DETAIL M-603-10 FOR CONCRETE JOINT FASTENER DETAIL.







01 UTILITY CROSSING
SEE SHEET 10 FOR INFO

PROJECT BENCHMARK:

NGS BENCHMARK Z-336
ELEVATION = 6612.35' (NAVD 88)

SITE BENCHMARK:
CENTER SECTION CORNER OF SECTION 6-T7S-R65W
ELEVATION = 6398.76 (NAVD 88)

ELEVATION OF GROUND TOPOGRAPHIC SURVEY CONTOUR INTERVALS ARE 1 FOOT

SCALE
1 inch = 40 ft.
40 0 20 40

ASSISTANT DIRECTOR OF DEVELOPMENT REVIEW

DATE

THESE CONSTRUCTION DRAWINGS HAVE BEEN REVIEWED BY DOUGLAS COUNTY FOR STREET AND DRAINAGE IMPROVEMENTS ONLY

ENGINEERING DIVISION ACCEPTANCE BLOCK

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No.	Rev. Date:	Revision Type:
1		
2		
3		
4		
5		
6		

Designed: TBS
Prepared: JT
Approved: DKH
Job No.: 1084-0006
Scale Horiz: 1" = 40'
Scale Vert: 1" = 10'
Sheet: 37 of 49
Date: February 20, 2026

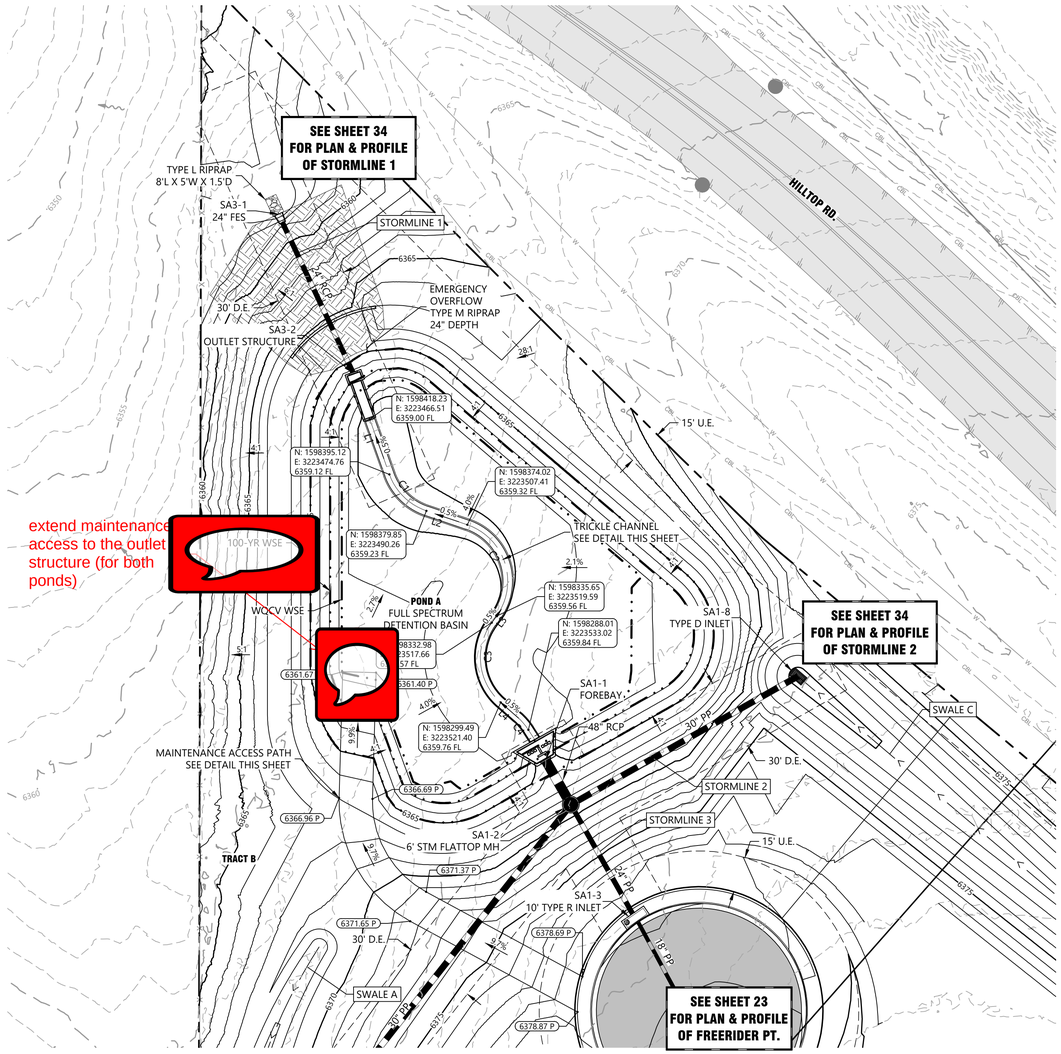
Proj. Name: Ramblewood Filing No. 1
Location: Douglas County, Colorado
Plan Set: Street & Storm Sewer Construction Plans
Sheet Name: P&P - Street & Storm - Stormlines 7 & 8 & 9

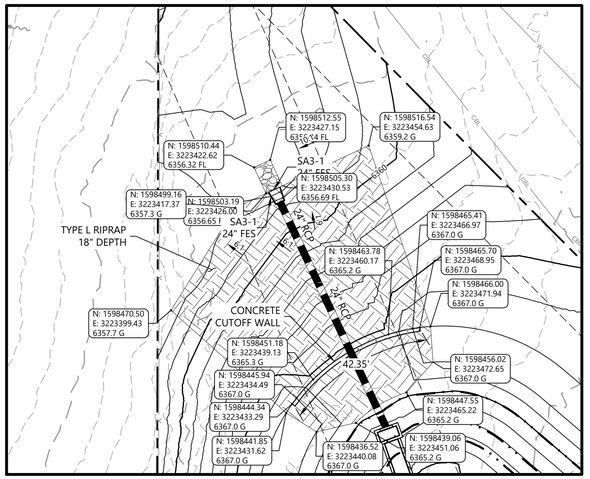
NOT FOR CONSTRUCTION

Know what's below.
Call before you dig.

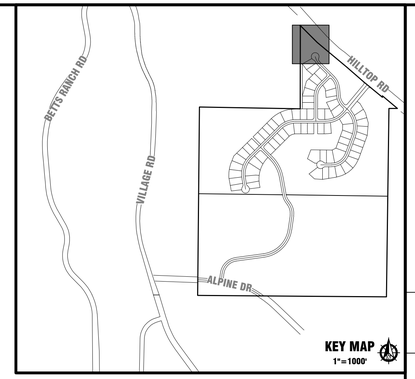
No. 37

I:\JOB FOLDERS\1084\1084-0006\CIVIL\PROD\CD - STR-STM\PP-STORMLINE 7 & 8 PRINTED ON: 2/20/2026 3:54 PM

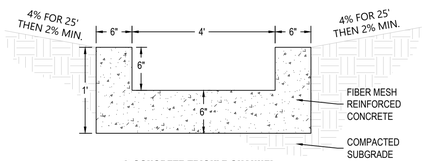




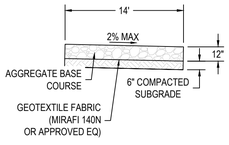
POND A EMERGENCY OVERFLOW WEIR
1" = 20'



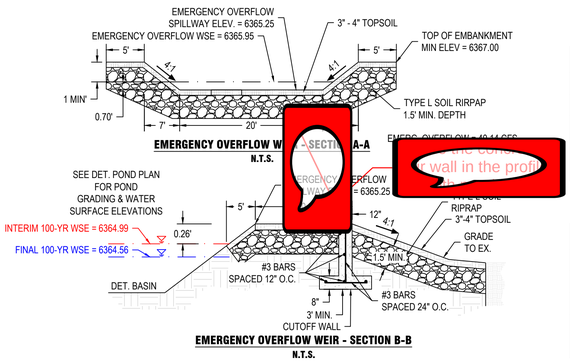
KEY MAP
1"=1000'



4' CONCRETE TRICKLE CHANNEL
N.T.S.



POND MAINTENANCE ACCESS PATH
N.T.S



EMERGENCY OVERFLOW WEIR - SECTION B-B
N.T.S.

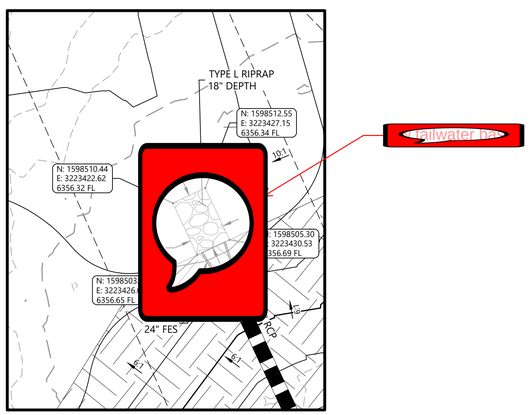
CURVE TABLE					
NO.	DELTA	LENGTH	RADIUS	CHORD	CH. LENGTH
C1	051°35'45"	22.51'	25.00'	S45°25'52"E	21.76'
C2	107°14'26"	46.79'	25.00'	N17°36'32"W	40.26'
C3	084°46'07"	36.99'	25.00'	S06°22'22"E	33.71'
C4	016°00'51"	6.99'	25.00'	N40°45'00"W	6.96'

LINE TABLE		
NO.	LENGTH	DIRECTION
L1	24.54'	S19°37'59"E
L2	18.12'	S71°13'45"E
L3	3.29'	S36°00'42"W
L4	9.41'	S48°45'26"E

NOTES:

1. REFER TO RAMBLEWOOD FILING NO. 1, STREET & STORM SEWER CONSTRUCTION PLANS FOR STREET AND STORM SEWER DESIGN INFORMATION.
2. SEE SHEET 2 FOR TYPICAL STREET SECTIONS.
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POND A OUTFALL
1" = 10'

Interim Detention Pond A Volume Table

	Required Vol. (ac-ft.)	Provided Vol. (ac-ft.)	Elevation (ft)	Depth (ft)
Bottom of Pond	N/A	N/A	6359.00	0.00
WQCV	0.340	0.341	6361.71	2.71
EURV	0.455	0.795	6362.92	3.92
100-yr	1.810	1.752	6364.99	5.99
Emergency Overflow Weir	N/A	N/A	6365.25	6.25
Emergency Overflow WSE	N/A	N/A	6365.95	6.95
Freeboard / Top of Pond	N/A	N/A	6367.00	8.00
		100-yr Allowable Release=		24.6
		100-yr Release=		23.0

Final Detention Pond A Volume Table

	Required Vol. (ac-ft.)	Provided Vol. (ac-ft.)	Elevation (ft)	Depth (ft)
Bottom of Pond	N/A	N/A	6359.00	0.00
WQCV	0.281	0.282	6361.53	2.53
EURV	0.379	0.663	6362.59	3.59
100-yr	1.494	1.534	6364.56	5.56
Emergency Overflow Weir	N/A	N/A	6365.25	6.25
Emergency Overflow WSE	N/A	N/A	6365.95	6.95
Freeboard / Top of Pond	N/A	N/A	6368.00	9.00
		100-yr Allowable Release=		20.0
		100-yr Release=		19.5

PROJECT BENCHMARK:

NGS BENCHMARK Z-336
ELEVATION = 6612.35' (NAVD 88)

SITE BENCHMARK:
CENTER SECTION CORNER OF SECTION 6-T7S-R65W
ELEVATION = 6398.76 (NAVD 88)

ELEVATION OF GROUND TOPOGRAPHIC SURVEY CONTOUR INTERVALS ARE 1 FOOT

30 0 15 30
SCALE
1 inch = 30 ft.

ASSISTANT DIRECTOR OF DEVELOPMENT REVIEW

DATE

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ENGINEERING DIVISION ACCEPTANCE BLOCK

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Revision Type:	No.	Rev. Date:
	1	
	2	
	3	
	4	
	5	
	6	

Job No.: 1084-0006 | Sheet: 38 of 49
Scale Horiz: 1" = 30' | Date: February 20, 2026
Scale Vert: N/A
Designed: TBS
Prepared: PAV
Approved: DKH

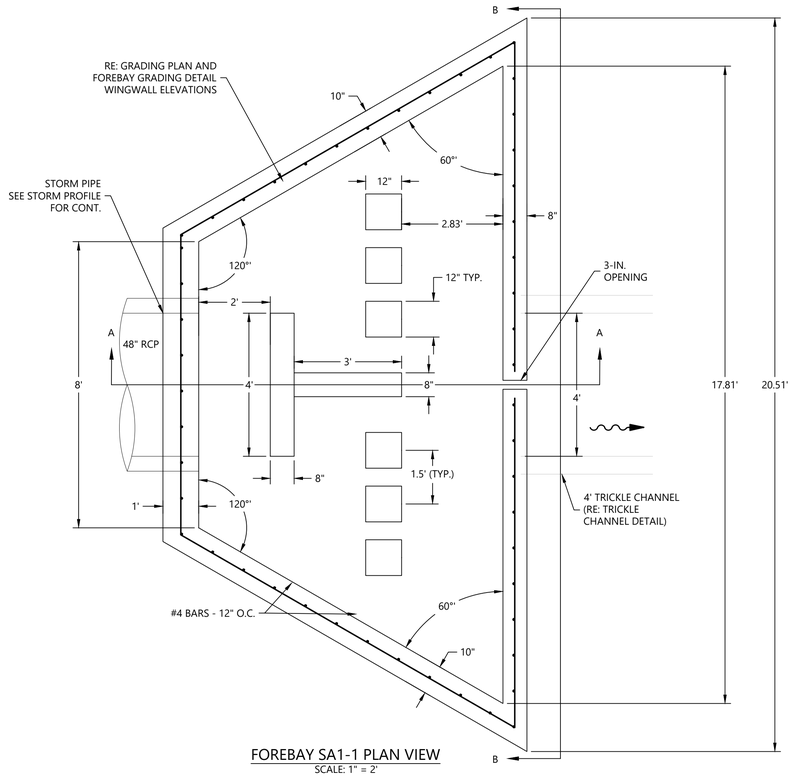
Proj. Name: Ramblewood Filing No. 1
Location: Douglas County, Colorado
Plan Set: Street & Storm Sewer Construction Plans
Sheet Name: Private Detention Pond A

NOT FOR CONSTRUCTION

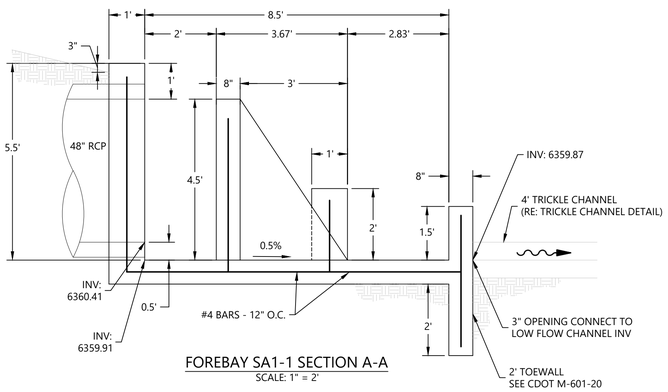
Know what's below.
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No. 38

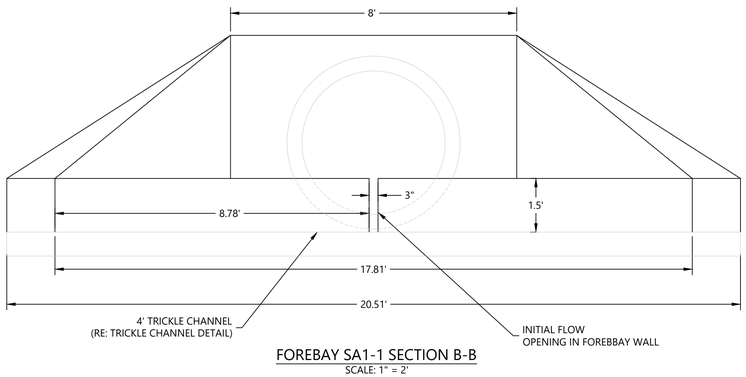
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FOREBAY SA1-1 PLAN VIEW
SCALE: 1" = 2'



FOREBAY SA1-1 SECTION A-A
SCALE: 1" = 2'



FOREBAY SA1-1 SECTION B-B
SCALE: 1" = 2'

PROJECT BENCHMARK:

NGS BENCHMARK Z-336
ELEVATION = 6612.35' (NAVD 88)

SITE BENCHMARK:
CENTER SECTION CORNER OF SECTION 6-T7S-R65W
ELEVATION = 6398.76 (NAVD 88)

ELEVATION OF GROUND TOPOGRAPHIC SURVEY CONTOUR INTERVALS ARE 1 FOOT

ASSISTANT DIRECTOR OF DEVELOPMENT REVIEW

DATE

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ENGINEERING DIVISION ACCEPTANCE BLOCK

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No.	Rev. Date:	Revision Type:
1		
2		
3		
4		
5		
6		

Designed: TBS
Prepared: CGM
Approved: DKH
Job No.: 1084-0006
Scale Horiz: N/A
Scale Vert: N/A
Sheet: 39 of 49
Date: February 20, 2026

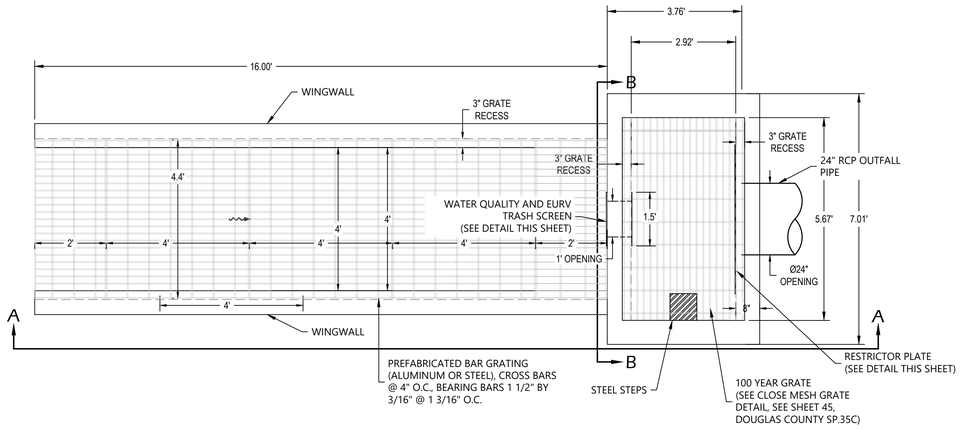
Proj. Name: Ramblewood Filing No. 1
Location: Douglas County, Colorado
Plan Set: Street & Storm Sewer Construction Plans
Sheet Name: Private Detention Pond A Forebay

NOT FOR CONSTRUCTION

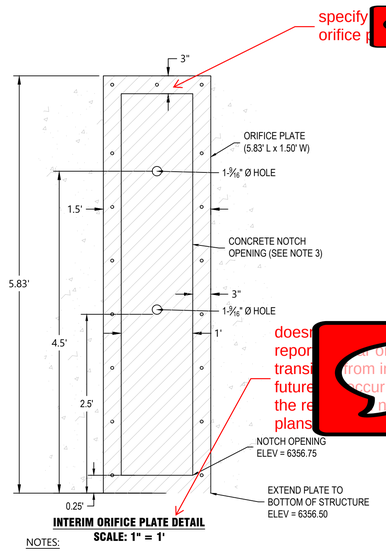
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No. 39

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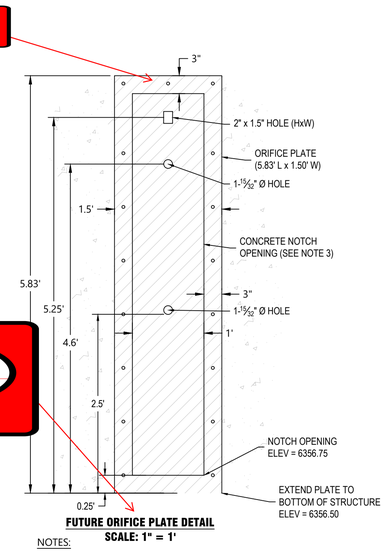
OUTLET STRUCTURE AND MICROPOOL DETAIL
POND A - PLAN VIEW
SCALE: 1" = 2'



INTERIM ORIFICE PLATE DETAIL
SCALE: 1" = 1'

NOTES:

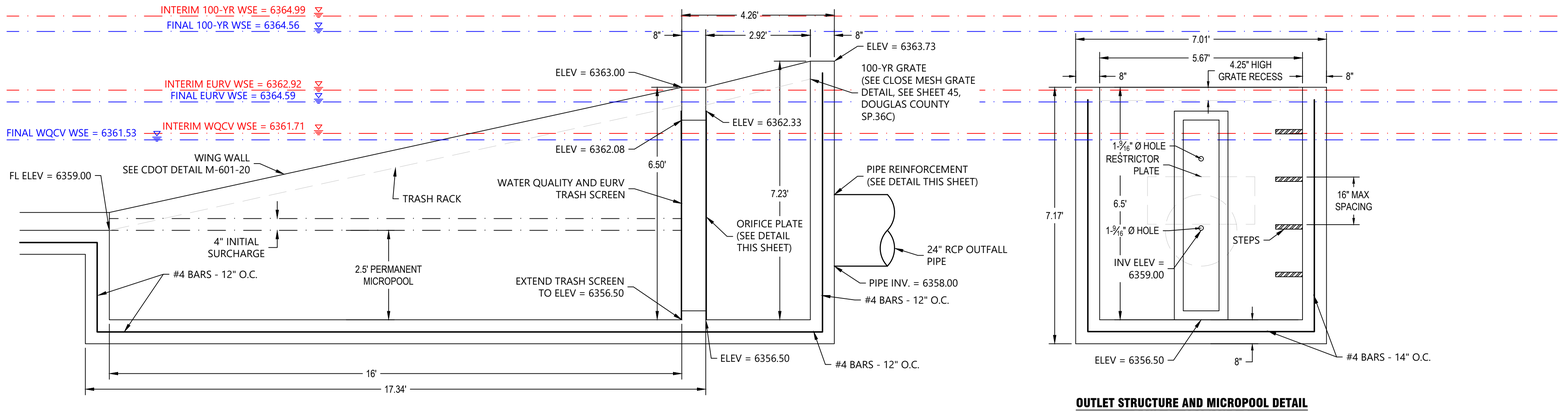
1. USE 16 - ⅜" Ø CONCRETE WEDGE ANCHORS TO ATTACH PLATE TO BOX WALL.
2. PROVIDE CONTINUOUS NEOPRENE GASKET ALONG THE PERIMETER OF ORIFICE PLATE, BETWEEN PLATE AND CONCRETE WALL.
3. CONCRETE NOTCH OPENING DIMENSIONS = 5.33' H X 1.00' WIDE.



FUTURE ORIFICE PLATE DETAIL
SCALE: 1" = 1'

NOTES:

1. USE 16 - ¾" Ø CONCRETE WEDGE ANCHORS TO ATTACH PLATE TO BOX WALL.
2. PROVIDE CONTINUOUS NEOPRENE GASKET ALONG THE PERIMETER OF ORIFICE PLATE, BETWEEN PLATE AND CONCRETE WALL.
3. CONCRETE NOTCH OPENING DIMENSIONS = 5.33' H X 1.00' WIDE.



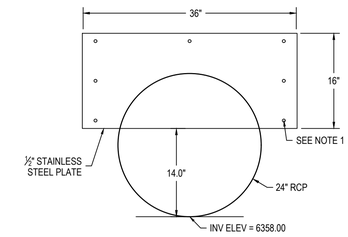
OUTLET STRUCTURE AND MICROPOOL DETAIL
POND A - SECTION A-A
SCALE: 1" = 2'

OUTLET STRUCTURE AND MICROPOOL DETAIL
POND A - SECTION B-B
SCALE: 1" = 2'

FINAL RESTRICTOR PLATE DETAIL
SCALE: N.T.S.

NOTES:

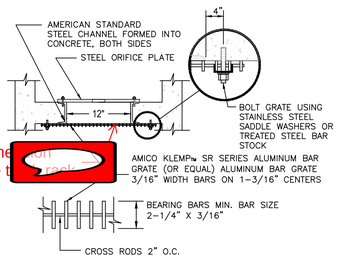
1. USE 12 - ⅜" Ø CONCRETE WEDGE ANCHORS TO ATTACH PLATE TO BOX WALL, SPACED 8" O.C.



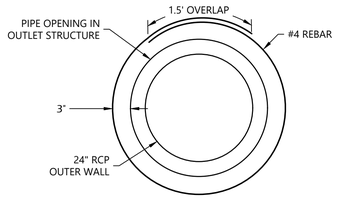
INTERIM RESTRICTOR PLATE DETAIL
SCALE: N.T.S.

NOTES:

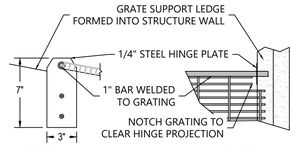
1. USE 12 - ⅜" Ø CONCRETE WEDGE ANCHORS TO ATTACH PLATE TO BOX WALL, SPACED 8" O.C.



WATER QUALITY TRASH SCREEN DETAIL
SCALE: N.T.S.



PIPE REINFORCEMENT DETAIL
SCALE: N.T.S.



HINGE DETAIL
N.T.S

NOTES:

1. ALL METAL PERTS SHALL BE STAINLESS STEEL, ALUMINUM, OR STEEL. STEEL SHALL BE HOT DIP GALVANIZED AND MAY BE PAINTED AFTER GALVANIZING.
2. MINIMUM CONCRETE MIX SHALL BE 5 1/2 SACK, 3000 PSI. CONCRETE TO BE REINFORCED WITH #4 BARS 12" O.C. EACH DIRECTION. 1" CHAMFER ON ALL EXPOSED CORNERS OF WALLS.

NOTES:

1. ALL CONCRETE WORK SHALL CONFORM TO DOUGLAS COUNTY CRITERIA.
2. SUBGRADE COMPACTION SHALL BE 95% STANDARD PROCTOR DENSITY.
3. ORIFICE PLATE SHALL BE ¼" STEEL.
4. USE ⅜" Ø CONCRETE WEDGE ANCHORS TO ATTACH PLATE AND TRASH RACK TO BOX WALL.
5. WATER QUALITY TRASH SCREEN SHALL BE STAINLESS STEEL WELL SCREEN - AMICO KLEMP$_{TM}$ SR SERIES ALUMINUM BAR GRATE OR APPROVED EQUIVALENT. SEE DETAIL THIS SHEET.
6. 100-YR GRATE SHALL CONSIST OF THE TYPE D STANDARD INLET GRATE PER CDOT DETAIL M-604-11.
7. REFER TO SHEETS ## AND ## FOR CDOT DETAILS M-604-10 AND M-604-11 FOR GRATE INSTALLATION AND HARDWARE REQUIREMENTS.
8. PROVIDE CONTINUOUS NEOPRENE GASKET ALONG THE PERIMETER OF ORIFICE PLATE AND THE 100-YR RESTRICTOR, BETWEEN PLATE AND CONCRETE WALL.

PROJECT BENCHMARK:

NGS BENCHMARK Z-336
ELEVATION = 6612.35' (NAVD 88)

SITE BENCHMARK:
CENTER SECTION CORNER OF SECTION 6-T7S-R65W
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ASSISTANT DIRECTOR OF DEVELOPMENT REVIEW

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Revision Type:

No.	Rev. Date:
1	
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3	
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Designed: TBS
Prepared: CGM
Approved: DKH
Job No.: 1084-0006
Scale Horiz: N/A
Scale Vert: N/A
Sheet: 40 of 49
Date: February 20, 2026

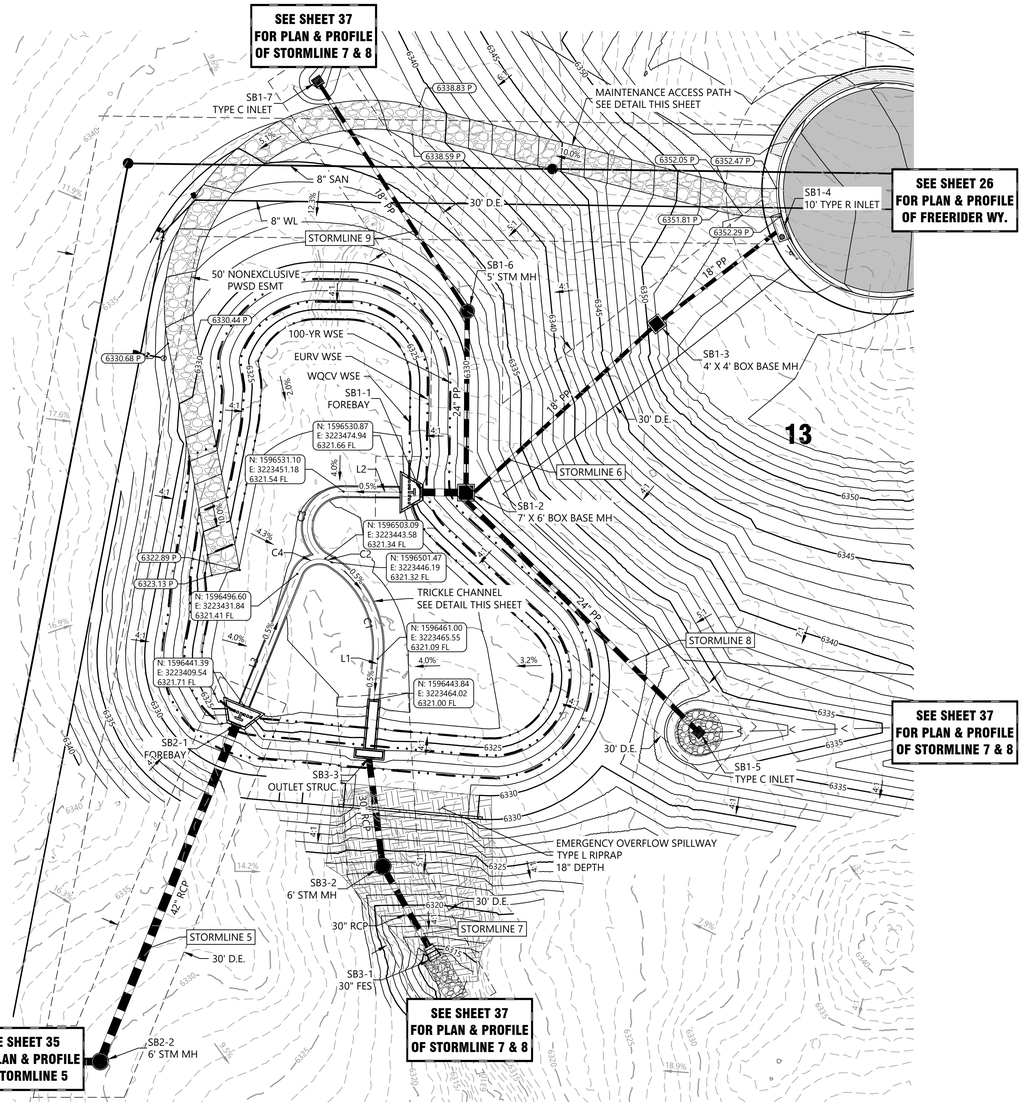
Proj. Name: Ramblewood Filing No. 1
Location: Douglas County, Colorado
Plan Set: Street & Storm Sewer Construction Plans
Sheet Name: Private Detention Pond A Outlet

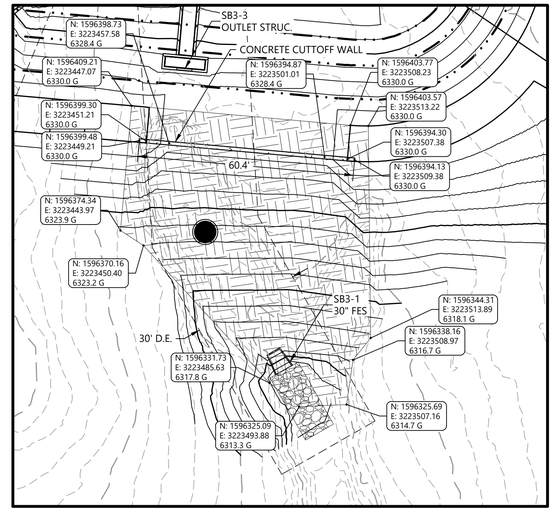
NOT FOR CONSTRUCTION

Know what's below. Call before you dig.

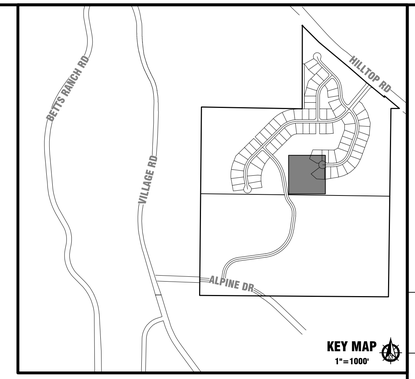
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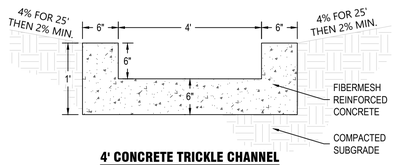




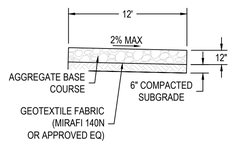
POND B EMERGENCY OVERFLOW WEIR
1" = 20'



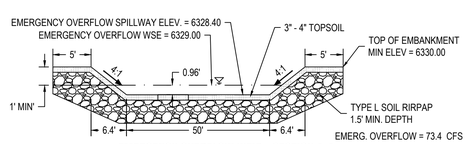
KEY MAP
1"=1000'



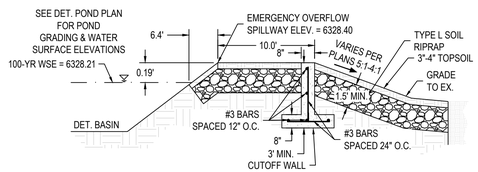
4' CONCRETE TRICKLE CHANNEL
NTS



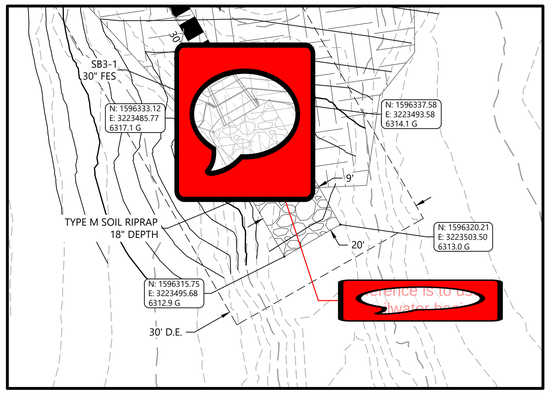
POND MAINTENANCE ACCESS PATH
N.T.S



EMERGENCY OVERFLOW WEIR - SECTION A-A
N.T.S.



EMERGENCY OVERFLOW WEIR - SECTION B-B
N.T.S.



POND B OUTFALL
1" = 10'

NOTES:

1. REFER TO RAMBLEWOOD FILING NO. 1, STREET & STORM SEWER CONSTRUCTION PLANS FOR STREET AND STORM SEWER DESIGN INFORMATION.
2. SEE SHEET 2 FOR TYPICAL STREET SECTIONS.
3. SEE SHEET 1 FOR LEGEND AND GENERAL ABBREVIATIONS.
4. REFER TO RAMBLEWOOD FILING NO. 1, PARKER WATER & SANITATION CONSTRUCTION PLANS FOR WATER & SANITARY SEWER DESIGN INFORMATION.
5. SEE SHEET 10 FOR UTILITY CROSSING INFORMATION.
6. CONTRACTOR SHALL ROTATE ALL SANITARY SEWER MANHOLES TO PROVIDE 1' MINIMUM CLEARANCE BETWEEN MANHOLE LID MAINS AND LIP OF GUTTER OR EDGE OF CURB.
7. MIN. DISTANCE BETWEEN WATER AND LIP OF GUTTER SHALL BE 5' AND MIN. DISTANCE BETWEEN CENTER OF SANITARY MH AND LIP OF GUTTER 1'.
8. ALL OFF-STREET SANITARY SEWER MANHOLES SHALL HAVE SEALED & LOCKING LIDS.
9. SANITARY MANHOLES 20' OR GREATER SHALL HAVE INTERMEDIATE PLATFORMS PER PWSD DETAIL S3.6

FES OUTFALL NOTE:
INSTALL TWO JOINT FASTENERS BETWEEN THE FES AND THE LAST PIPE SECTION. INSTALL THESE AT THE TEN O'CLOCK AND TWO O'CLOCK POSITIONS AND TRIM JOINT FASTENER THREADS FLUSH WITH THE INTERIOR BOLTS. SEE DETAIL SHEET 47 FOR CDOT DETAIL M-603-10 FOR CONCRETE JOINT FASTENER DETAIL.

CURVE TABLE					
NO.	DELTA	LENGTH	RADIUS	CHORD	CH. LENGTH
C1	065°17'24"	47.38'	41.58'	N25°33'37"W	44.85'
C2	004°00'02"	3.07'	44.00'	N58°12'19"W	3.07'
C3	150°46'05"	39.47'	15.00'	N15°10'42"E	29.03'
C4	098°33'28"	17.20'	10.00'	N71°16'23"E	15.16'

LINE TABLE		
NO.	LENGTH	DIRECTION
L1	17.23'	N05°05'03"E
L2	20.37'	S89°26'15"E
L3	59.54'	N21°59'39"E

Detention Pond B Volume Table

	Required Vol. (ac-ft.)	Provided Vol. (ac-ft.)	Elevation (ft)	Depth (ft)
Bottom of Pond	N/A	N/A	6321.00	0.00
WQCV	0.502	0.502	6324.02	3.02
EURV	0.749	1.255	6325.84	4.84
100-yr	2.511	2.504	6328.21	7.21
Emergency Overflow Weir	N/A	N/A	6328.40	7.40
Emergency Overflow WSE	N/A	N/A	6329.00	8.00
Freeboard / Top of Pond	N/A	N/A	6330.00	9.00
		100-yr Allowable Release=		42.6
		100-yr Release=		34.4

PROJECT BENCHMARK:

NGS BENCHMARK Z-336
ELEVATION = 6612.35' (NAVD 88)

SITE BENCHMARK:
CENTER SECTION CORNER OF SECTION 6-T7S-R65W
ELEVATION = 6398.76 (NAVD 88)

ELEVATION OF GROUND TOPOGRAPHIC SURVEY CONTOUR INTERVALS ARE 1 FOOT

30 0 15 30
SCALE
1 inch = 30 ft.

ASSISTANT DIRECTOR OF DEVELOPMENT REVIEW

DATE

THESE CONSTRUCTION DRAWINGS HAVE BEEN REVIEWED BY DOUGLAS COUNTY FOR STREET AND DRAINAGE IMPROVEMENTS ONLY

ENGINEERING DIVISION ACCEPTANCE BLOCK

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No.	Rev. Date:	Revision Type:
1		
2		
3		
4		
5		
6		

Designed: TBS
Prepared: CGM
Approved: DKH
Job No.: 1084-00006
Scale Horiz: 1" = 30'
Scale Vert: N/A
Sheet: 41 of 49
Date: February 20, 2026

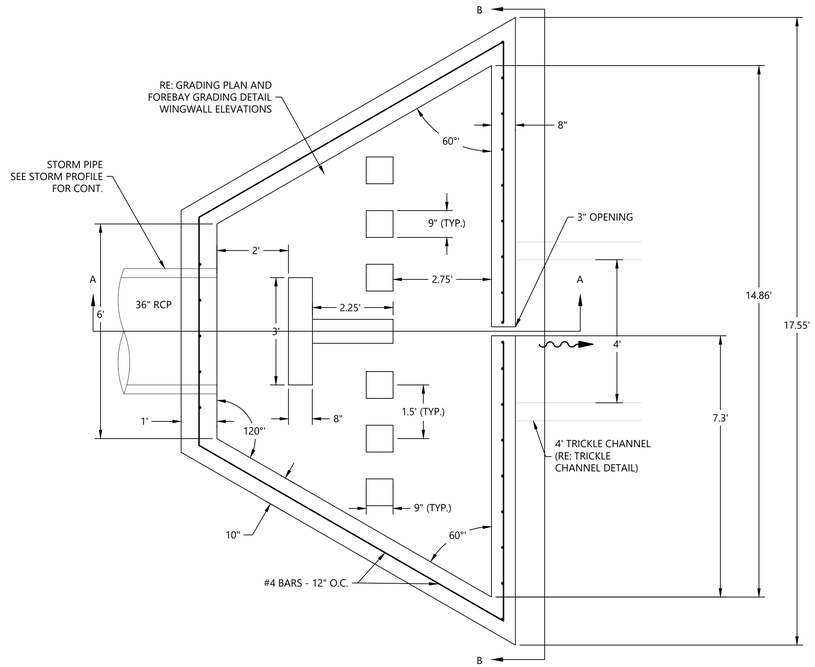
Proj. Name: Ramblewood Filing No. 1
Location: Douglas County, Colorado
Plan Set: Street & Storm Sewer Construction Plans
Sheet Name: Private Detention Pond B

NOT FOR CONSTRUCTION

Know what's below. Call before you dig.

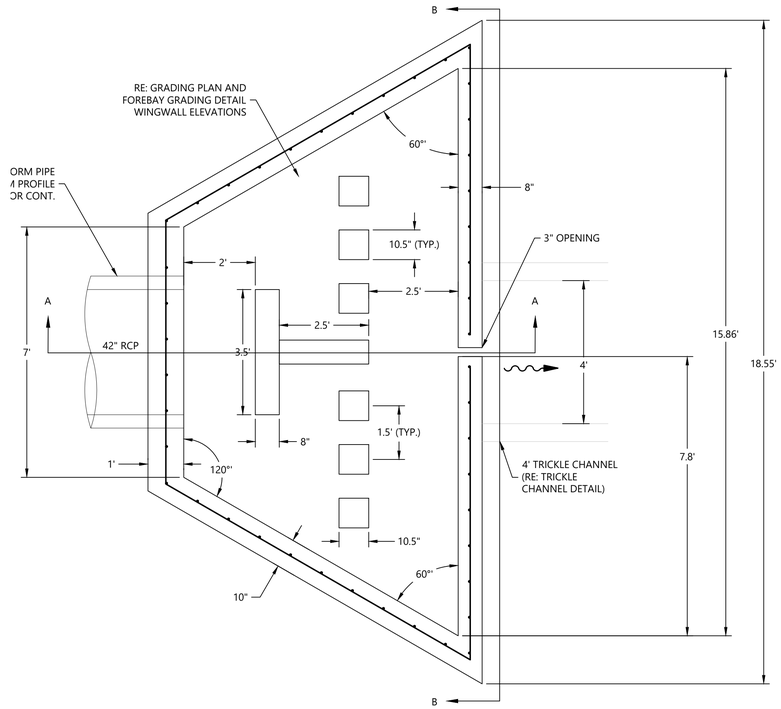
No. 41

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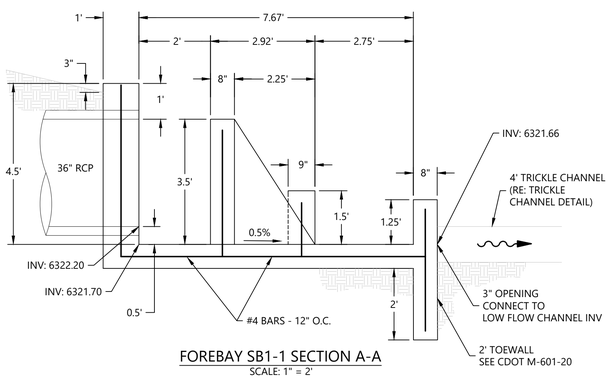
FOREBAY SB1-1 PLAN VIEW

SCALE: 1" = 2'



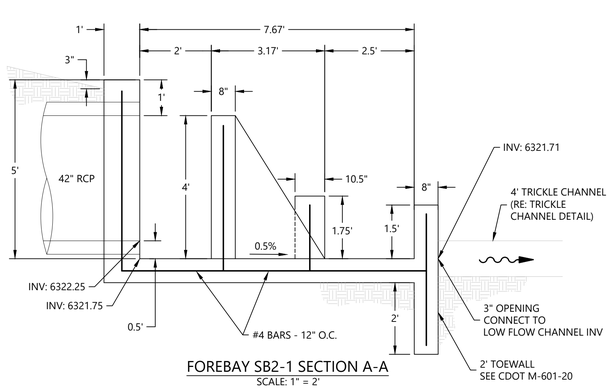
FOREBAY SB2-1 PLAN VIEW

SCALE: 1" = 2'



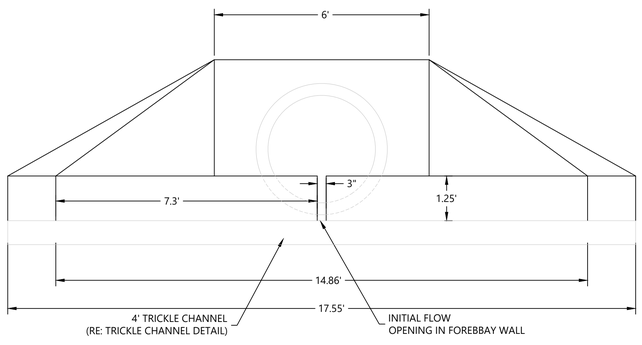
FOREBAY SB1-1 SECTION A-A

SCALE: 1" = 2'



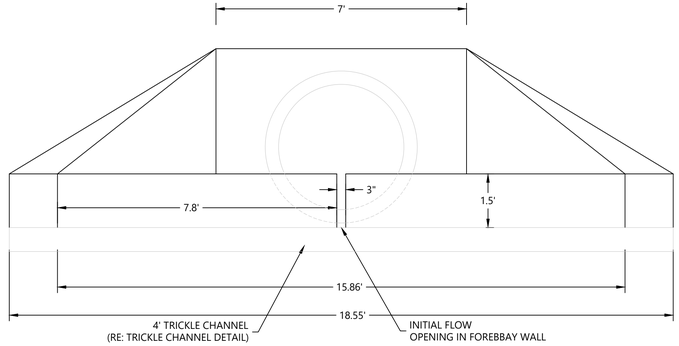
FOREBAY SB2-1 SECTION A-A

SCALE: 1" = 2'



FOREBAY SB1-1 SECTION B-B

SCALE: 1" = 2'



FOREBAY SB2-1 SECTION B-B

SCALE: 1" = 2'

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No.	Rev. Date:	Revision Type:
1		
2		
3		
4		
5		
6		

Designed: TBS
Prepared: CGM
Approved: DKH

Job No.: 1084-0006
Scale Horiz: N/A
Scale Vert: N/A

Sheet: 42 of 49
Date: February 20, 2026

Proj. Name: Ramblewood Filing No. 1
Location: Douglas County, Colorado
Plan Set: Street & Storm Sewer Construction Plans
Sheet Name: Private Detention Pond B Forebay

PROJECT BENCHMARK:

NGS BENCHMARK Z-336
ELEVATION = 6612.35' (NAVD 88)

SITE BENCHMARK:
CENTER SECTION CORNER OF SECTION 6-T7S-R65W
ELEVATION = 6398.76 (NAVD 88)

ELEVATION OF GROUND TOPOGRAPHIC SURVEY CONTOUR INTERVALS ARE 1 FOOT

NOT FOR CONSTRUCTION

ASSISTANT DIRECTOR OF DEVELOPMENT REVIEW

DATE

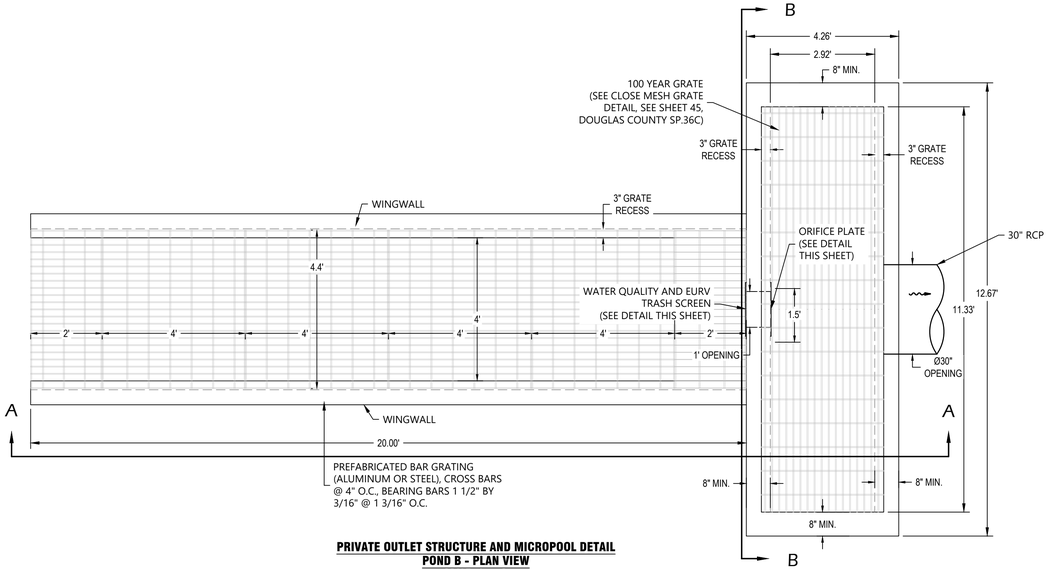
THESE CONSTRUCTION DRAWINGS HAVE BEEN REVIEWED BY DOUGLAS COUNTY FOR STREET AND DRAINAGE IMPROVEMENTS ONLY

ENGINEERING DIVISION ACCEPTANCE BLOCK

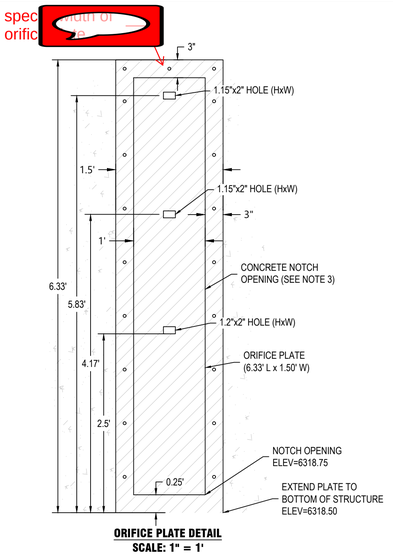
811 Know what's below. Call before you dig.

No. 42

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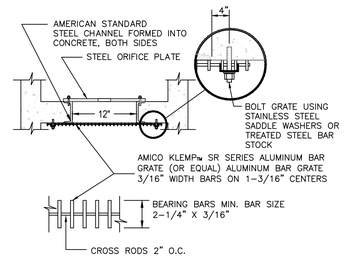
PRIVATE OUTLET STRUCTURE AND MICROPOOL DETAIL
POND B - PLAN VIEW
SCALE: 1" = 2'



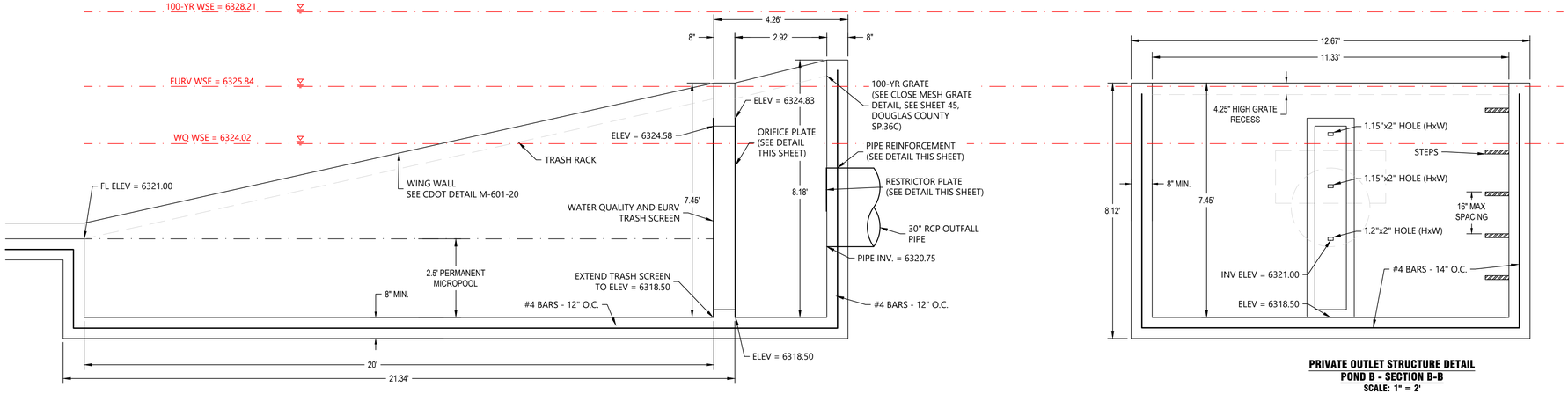
ORIFICE PLATE DETAIL
SCALE: 1" = 1'

NOTES:

1. USE 16 - ⅜" Ø CONCRETE WEDGE ANCHORS TO ATTACH PLATE TO BOX WALL.
2. PROVIDE NEOPRENE GASKET ALONG THE PERIMETER OF ORIFICE PLATE, BETWEEN PLATE AND CONCRETE WALL.
3. CONCRETE NOTCH OPENING DIMENSIONS = 5.83 H X 1.50' WIDE.

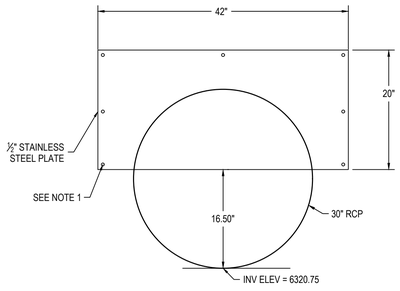


WATER QUALITY TRASH SCREEN DETAIL
SCALE: N.T.S.



PRIVATE OUTLET STRUCTURE AND MICROPOOL DETAIL
POND B - SECTION A-A
SCALE: 1" = 2'

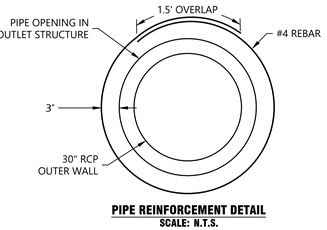
PRIVATE OUTLET STRUCTURE DETAIL
POND B - SECTION B-B
SCALE: 1" = 2'



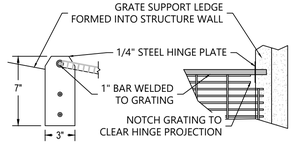
RESTRICTOR PLATE DETAIL
SCALE: N.T.S.

NOTES:

1. USE 7 - ⅜" Ø CONCRETE WEDGE ANCHORS TO ATTACH PLATE TO BOX WALL, SPACED 8" O.C.



PIPE REINFORCEMENT DETAIL
SCALE: N.T.S.



HINGE DETAIL
N.T.S

NOTES:

1. ALL METAL PERTS SHALL BE STAINLESS STEEL, ALUMINUM, OR STEEL. STEEL SHALL BE HOT DIP GALVANIZED AND MAY BE PAINTED AFTER GALVANIZING.
2. MINIMUM CONCRETE MIX SHALL BE 5 1/2 SACK, 3000 PSI. CONCRETE TO BE REINFORCED WITH #4 BARS 12" O.C. EACH DIRECTION. 1" CHAMFER ON ALL EXPOSED CORNERS OF WALLS.

NOTES:

1. ALL CONCRETE WORK SHALL CONFORM TO DOUGLAS COUNTY CRITERIA.
2. SUBGRADE COMPACTION SHALL BE 95% STANDARD PROCTOR DENSITY.
3. ORIFICE PLATE SHALL BE ¼" STEEL.
4. USE ⅜" Ø CONCRETE WEDGE ANCHORS TO ATTACH PLATE AND TRASH RACK TO BOX WALL.
5. WATER QUALITY TRASH SCREEN SHALL BE STAINLESS STEEL WELL SCREEN - AMICO KLEMP$_{TM}$ SR SERIES ALUMINUM BAR GRATE OR APPROVED EQUIVALENT. SEE DETAIL THIS SHEET.
6. 100-YR GRATE SHALL CONSIST OF THE TYPE D STANDARD INLET GRATE PER CDOT DETAIL M-604-11.
7. REFER TO SHEET 45 FOR CDOT DETAILS M-604-10 AND M-604-11 FOR GRATE INSTALLATION AND HARDWARE REQUIREMENTS.
8. PROVIDE CONTINUOUS NEOPRENE GASKET ALONG THE PERIMETER OF ORIFICE PLATE AND THE 100-YR RESTRICTOR, BETWEEN PLATE AND CONCRETE WALL.

PROJECT BENCHMARK:

NGS BENCHMARK Z-336
ELEVATION = 6612.35' (NAVD 88)

SITE BENCHMARK:
CENTER SECTION CORNER OF SECTION 6-T7S-R65W
ELEVATION = 6398.76 (NAVD 88)

ELEVATION OF GROUND TOPOGRAPHIC SURVEY CONTOUR INTERVALS ARE 1 FOOT

ASSISTANT DIRECTOR OF DEVELOPMENT REVIEW

DATE

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ENGINEERING DIVISION ACCEPTANCE BLOCK

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Revision Type:

No.	Rev. Date:
1	
2	
3	
4	
5	
6	

Designed: TBS
Prepared: CGM
Approved: DKH

Job No.: 1084-0006
Scale Horiz: N/A
Scale Vert: N/A

Sheet: 43 of 49
Date: February 20, 2026

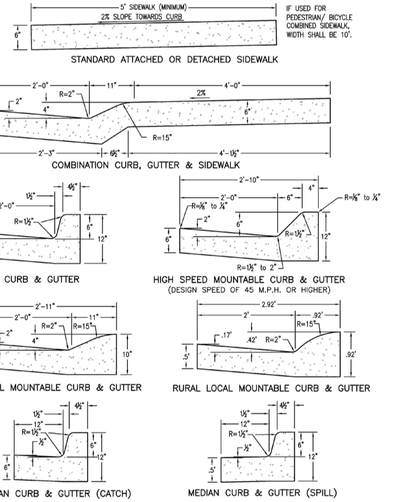
Proj. Name: Ramblewood Filing No. 1
Location: Douglas County, Colorado
Plan Set: Street & Storm Sewer Construction Plans
Sheet Name: Private Detention Pond B Outlet

NOT FOR CONSTRUCTION

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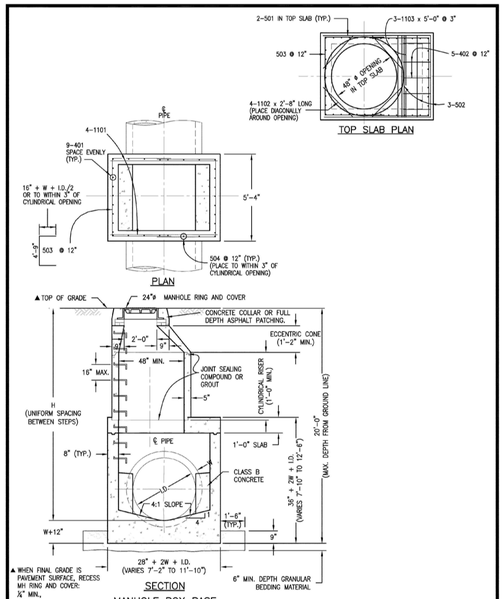
No. 43

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NOTES:
1. IF A SIDEWALK IS PLACED BEHIND THE CURB BUT IS NOT PLACED MONOLITHICALLY, EXPANSION JOINT MATERIAL AND A SILICONE BASE SEALER MUST BE APPLIED BETWEEN THE SIDEWALK AND THE CURB.
2. SEE DRAWING NUMBER SP.20 FOR TRENCH DRAIN.
3. SEE DRAWING NUMBER SP.28 AND SP.29 FOR CONCRETE JOINTS

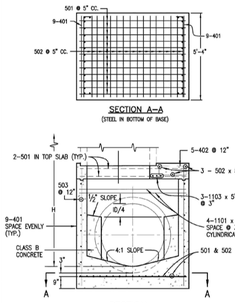
	CURB & GUTTERS AND SIDEWALKS	Issued: 05/2013
	DOUGLAS COUNTY COLORADO	Revised:
		Drawing No. **SP.17**



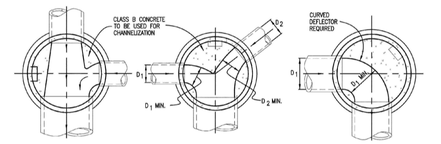
REFERENCE: CDOT M & S STANDARDS M-604-20	**MANHOLES**	Issued: 05/2013
	DOUGLAS COUNTY COLORADO	Revised:
		Drawing No. **SP.43a**

GENERAL NOTES

1. SINCE ALL PIPE ENTRIES INTO THE BASE ARE VARIABLE, THE DIMENSIONS SHOWN ARE TYPICAL. ACTUAL DIMENSIONS AND QUANTITIES FOR CONCRETE AND REINFORCEMENT SHALL BE AS REQUIRED IN THE WORK.
2. THE PRECAST FLAT TOP MAY BE USED ON ANY MANHOLE. THE ECCENTRIC CONE MAY BE USED WHEN THE MANHOLE "H" HEIGHT IS AT LEAST 8'.
3. THE MH RING (FRAME) SHALL BE SET ON CONCRETE GRADE RINGS. THE FRAME SHALL BE SURROUNDED WITH A CONCRETE COLLAR IN UNPAVED AREA AND CONCRETE PAVEMENT, OR FULL DEPTH ASPHALT IN ASPHALT PAVEMENT. SEE DETAILS ON SHEETS 2 AND 3.
4. DESIGN OF BOX BASE IS BASED ON STRAIGHT RUNS OF CONDUIT OR CHANGE IN DIRECTION OF LESS THAN 45°. SPECIAL DESIGN IS REQUIRED FOR 45° OR GREATER.
5. PRECAST MANHOLES AND REINFORCEMENT SHALL CONFORM TO ASTM C 478 (AASHTO M 199).
6. CAST-IN-PLACE MANHOLES SHALL BE CLASS D CONCRETE.
7. STEPS SHALL BE REQUIRED WHEN THE MANHOLE DEPTH EXCEEDS 3'-0" AND SHALL BE IN ACCORDANCE WITH AASHTO M 199.
8. ALL REINFORCING STEEL SHALL HAVE A MINIMUM YIELD STRENGTH OF 60,000 PSI. VERTICAL STEEL SHALL BE PLACED AT L OF WALL. ALL BARS SHALL HAVE A 2" MINIMUM CLEARANCE. ALL REINFORCING BARS SHALL BE EPOXY COATED.
9. IF ANY REBAR HAS TO BE CUT ON THE JOB SITE, THE EXPOSED BARE STEEL SHALL BE IMMEDIATELY COVERED WITH A MANUFACTURE APPROVED EPOXY PAINT PRIOR TO POUR.
10. ALL PIPE ENTRIES INTO THE BASE OF MANHOLE SHALL BE CONNECTED BY OPEN CHANNELIZATION ADJUSTED FOR PIPE SIZE, SHAPE, SLOPE, AND DIRECTION OF FLOW. DETAILS SHOWN ARE TYPICAL FOR INSTALLATIONS WITH ALL INVERTS OF SAME RELATIVE ELEVATION. FOR EXCESSIVE ELEVATION DIFFERENCE BETWEEN INVERTS, SPECIAL BASE/CHANNEL DETAILS WILL BE SHOWN ON THE PLANS.
11. FLOW CHANNELS AND INVERTS SHALL BE FORMED BY SHAPING WITH CLASS B CONCRETE.
12. STUB-OUTS SHALL EXTEND A MINIMUM OF 1 PIPE SECTION BEYOND OUTSIDE WALL SURFACE OF MANHOLE AND BE SATISFACTORILY PLUGGED.
13. CHECK WITH THE LOCAL GOVERNMENT AUTHORITY FOR ANY ADDITIONAL SANITARY SEWER SPECIFICATIONS, DETAILS, OR REGULATIONS.
14. THE SLOPE OF THE MANHOLE COVER SHALL MATCH THE ROADWAY PROFILE AND CROSS SLOPE.



REFERENCE: CDOT M & S STANDARDS M-604-20	**MANHOLES**	Issued: 05/2013
	DOUGLAS COUNTY COLORADO	Revised:
		Drawing No. **SP.43b**



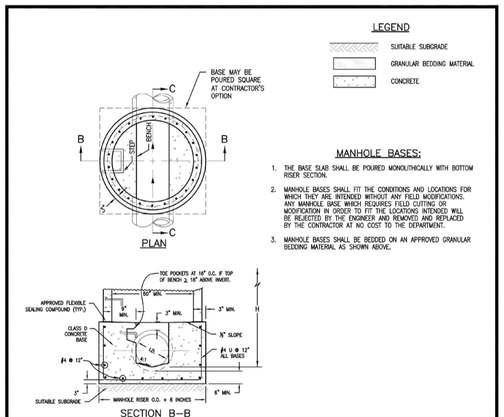
TYPICAL CHANNELIZATION DETAILS

QUANTITIES FOR CONCRETE MANHOLE BOX BASE

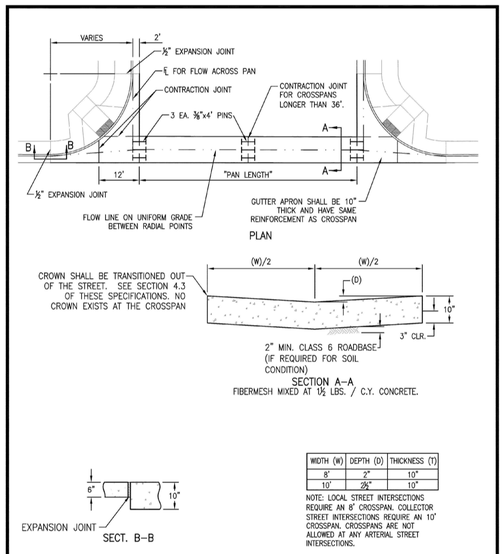
MARK	SIZE	TYPE	WT. ø/FT.	BARS	I.D. 60"	66"	72"	84"	96"	FORMULAS
401	4	I	0.668	NO. REQ'D.	18	18	18	18	18	401 BAR LENGTH = 32"+2W+I.D.
				LENGTH	8'-8"	9'-3"	9'-10"	11'-0"	12'-2"	
				WEIGHT ø	104.2	111.2	118.2	132.3	146.3	
402	4	III	0.668	NO. REQ'D.	5	5	5	5	5	402 BAR LENGTH = I.D. + 2W
				LENGTH	6'-0"	6'-7"	7'-2"	8'-4"	9'-6"	
				WEIGHT ø	20.0	22.0	23.9	27.8	31.7	
501	5	I	1.043	NO. REQ'D.	17	17	17	17	17	501 BAR LENGTH = 24" + I.D. + 2W
				LENGTH	8'-0"	8'-7"	9'-2"	10'-4"	11'-6"	
				WEIGHT ø	141.8	152.2	162.5	183.2	203.9	
502	5	I	1.043	NO. REQ'D.	23	25	26	29	32	502 NUMBER BARS REQ'D. = $3+\left(\frac{24+I.D.+2W}{5}+1\right)$
				LENGTH	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	
				WEIGHT ø	119.9	130.4	135.6	151.2	166.9	
503	5	II	1.043	NO. REQ'D.	16	18	18	20	24	503 NUMBER BARS REQ'D. = $2\left(\frac{13+I.D.+2W}{6}+1\right)$
				LENGTH	13'-5"	14'-0"	14'-7"	15'-9"	16'-11"	
				WEIGHT ø	223.9	262.8	273.8	328.5	423.5	BAR LENGTH = 4'-9"+2(16+W+I.D./2)
504	5	I	1.043	NO. REQ'D.	14	14	16	18	20	504 NUMBER BARS REQ'D. = $2\left(\frac{2W+I.D.-4}{12}+1\right)$
				LENGTH	8'-8"	9'-3"	9'-10"	11'-0"	12'-2"	
				WEIGHT ø	126.6	135.1	164.1	206.5	253.8	BAR LENGTH = 32"+2W+I.D.
1101	11	I	5.313	NO. REQ'D.	4	4	4	4	4	1101 BAR LENGTH = 21" + I.D. + 2W
				LENGTH	7'-9"	8'-4"	8'-11"	10'-1"	11'-3"	
				WEIGHT ø	164.7	177.1	189.5	214.3	239.1	
1102	11	I	5.313	NO. REQ'D.	4	4	4	4	4	BENDING
				LENGTH	2'-8"	2'-8"	2'-8"	2'-8"	2'-8"	TYPE I 4"–5" STRAIGHT
				WEIGHT ø	56.7	56.7	56.7	56.7	56.7	
1103	11	I	5.313	NO. REQ'D.	3	3	3	3	3	TYPE II 4"–5" 16"+W+I.D./2
				LENGTH	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	
				WEIGHT ø	79.7	79.7	79.7	79.7	79.7	
REINFORCING STEEL TOTAL ø					1,037.5	1,127.2	1,204.0	1,380.2	1,601.6	TYPE III 12" 12" I.D.+2W–38"
CONCRETE – CUBIC YARDS – TOTAL					6.6	7.3	8.0	9.5	11.1	

NOTE: QUANTITIES ARE BASED ON SAME SIZE PIPE ENTRANCE TO AND EXIT FROM BASE AND A 4 FT. MANHOLE ENTRANCE INTO TOP SLAB OF BASE.

REFERENCE: CDOT M & S STANDARDS M-604-20	**MANHOLES**	Issued: 05/2013
	DOUGLAS COUNTY COLORADO	Revised:
		Drawing No. **SP.43c**



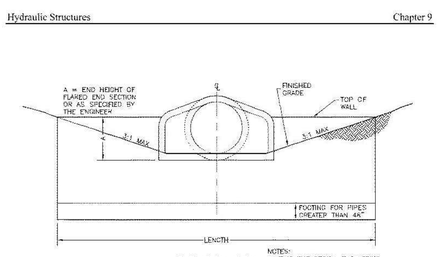
REFERENCE: CDOT M & S STANDARDS M-604-20	**MANHOLES**	Issued: 05/2013
	DOUGLAS COUNTY COLORADO	Revised:
		Drawing No. **SP.43d**



WIDTH (W)	DEPTH (D)	THICKNESS (T)
8'	2"	10"
10'	3½"	10"

NOTE: LOCAL STREET INTERSECTIONS REQUIRE AN 8' CROSSPAN. COLLECTOR STREET INTERSECTIONS REQUIRE AN 10' CROSSPAN. CROSSPANS ARE NOT ALLOWED AT ANY ARTERIAL STREET INTERSECTIONS.

	CROSSPAN	Issued: 05/2013
	DOUGLAS COUNTY COLORADO	Revised:
		Drawing No. **SP.21**



HEADWALL DESIGN TABLE

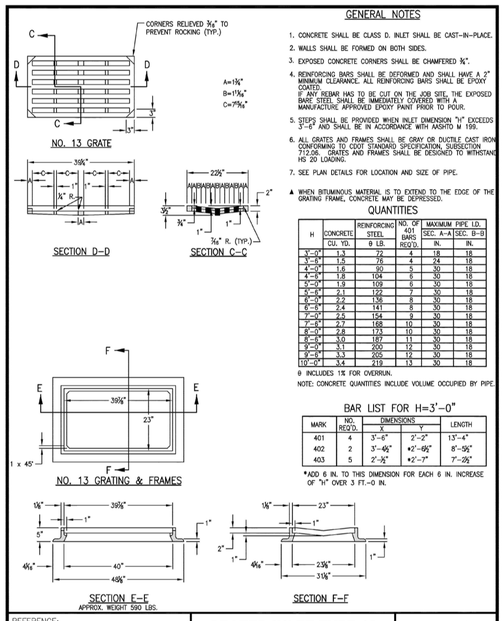
PIPE SIZE	LENGTH, MIN
18"	7'-0"
24"	8'-0"
30"	10'-0"
36"	12'-6"
42"	15'-9"
48"	17'-8"
54"	19'-6"
60"	21'-6"
66"	22'-6"
72"	24'-0"

Figure 9-29. Flared end section (FES) headwall concept

GENERAL NOTES

1. CONCRETE SHALL BE CLASS D. INLET SHALL BE CAST-IN-PLACE.
2. WALLS SHALL BE FORMED ON BOTH SIDES.
3. EXPOSED CONCRETE CORNERS SHALL BE CHAMFERED ¾".
4. REINFORCING BARS SHALL BE DEFORMED AND SHALL HAVE A 2" MINIMUM CLEARANCE. ALL REINFORCING BARS SHALL BE EPOXY COATED.
   IF ANY REBAR HAS TO BE CUT ON THE JOB SITE, THE EXPOSED BARE STEEL SHALL BE IMMEDIATELY COVERED WITH A MANUFACTURE APPROVED EPOXY PAINT PRIOR TO POUR.
5. STEPS SHALL BE PROVIDED WHEN INLET DIMENSION "H" EXCEEDS 3'-0" AND SHALL BE IN ACCORDANCE WITH AASHTO M 199.
6. ALL GRATES AND FRAMES SHALL BE GRAY OR DUCTILE CAST IRON CONFORMING TO CDOT STANDARD SPECIFICATION, SUBSECTION 712.08. GRATES AND FRAMES SHALL BE DESIGNED TO WITHSTAND HS 20 LOADING.
7. SEE PLAN DETAILS FOR LOCATION AND SIZE OF PIPE.

▲ WHEN BITUMINOUS MATERIAL IS TO EXTEND TO THE EDGE OF THE GRATING FRAME, CONCRETE MAY BE DEPRESSED.



QUANTITIES

H	CONCRETE CU. YD.	REINFORCING STEEL θ LB.	NO. OF 401 BARS REQ'D.	MAXIMUM PIPE I.D. SEC. A–A IN.	SEC. B–B IN.
1'-0"	1.2	72	4	18	18
1'-6"	1.5	76	4	24	18
2'-0"	1.6	90	5	30	18
2'-6"	1.8	104	6	30	18
3'-0"	1.9	109	6	30	18
3'-6"	2.1	122	7	30	18
4'-0"	2.2	136	8	30	18
5'-0"	2.4	141	8	30	18
6'-0"	2.5	154	9	30	18
7'-0"	2.7	168	10	30	18
8'-0"	2.8	173	10	30	18
8'-6"	3.0	187	11	30	18
9'-0"	3.1	200	12	30	18
9'-6"	3.4	205	12	30	18
10'-0"	3.4	219	13	30	18

θ INCLUDES 1% FOR OVERRUN.
NOTE: CONCRETE QUANTITIES INCLUDE VOLUME OCCUPIED BY PIPE.

BAR LIST FOR H=3'-0"

MARK	NO. REQ'D.	DIMENSIONS X	Y	LENGTH
401	4	3'-6"	2'-2"	13'-4"
402	2	3'-4⅝"	*2'-0⅝"	8'-5⅝"
403	5	2'-3⅝"	*2'-7"	7'-2⅝"

*ADD 6 IN. TO THIS DIMENSION FOR EACH 6 IN. INCREASE OF "H" OVER 3 FT.-0 IN.

REFERENCE: CDOT M & S STANDARDS M-604-13	**GRATED INLET TYPE 13**	Issued: 05/2013
	DOUGLAS COUNTY COLORADO	Revised:
		Drawing No. **SP.37b**

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No.	Rev. Date:	Revision Type:	Job No.: 1084-0006	Sheet: 44 of 49
1			Scale Horiz: N/A	Date: February 20, 2026
2			Scale Vert: N/A	
3				
4				
5				
6				

Designed: TBS
Prepared: PAV
Approved: DKH

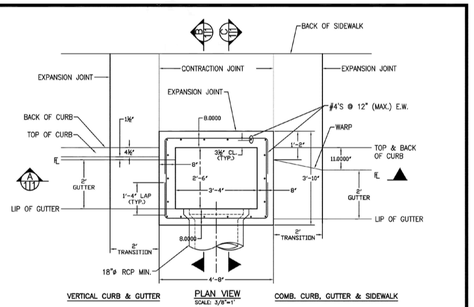
Proj. Name: Ramblewood Filing No. 1
Location: Douglas County, Colorado
Plan Set: Street & Storm Sewer Construction Plans
Sheet Name: Detail Sheet

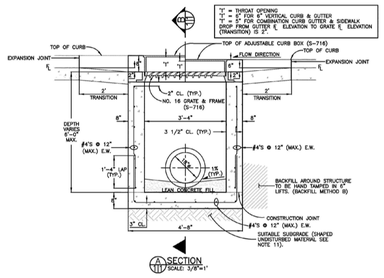
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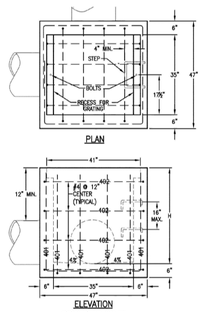


REFERENCE:
CITY AND COUNTY OF DENVER
DRAWING NUMBER S-616.1

COMBINATION INLET TYPE 13/ DENVER TYPE 16 - SINGLE NO. 16 OPEN THROAT INLET ADJUSTABLE CURB BOX

DOUGLAS COUNTY COLORADO

Issued: 05/2013
Revised:
Drawing No. **SP.38a**



GENERAL NOTES

1. CONCRETE SHALL BE CLASS D. INLET SHALL BE CAST-IN-PLACE.
2. REINFORCING BARS SHALL BE EPOXY COATED AND DEFORMED #4, AND SHALL HAVE A MINIMUM 2 IN. CLEARANCE, CUT OR BEND AROUND PIPES AS REQUIRED. IF ANY REBAR HAS TO BE CUT ON THE JOB SITE, THE EXPOSED BARE STEEL SHALL BE IMMEDIATELY COVERED WITH A MANUFACTURE APPROVED EPOXY PAINT PRIOR TO POUR.
3. CONCRETE SLOPE PAVING SHALL INCLUDE FIBERMESH AT 1½ LBS/C.Y. OF CONCRETE.
4. STRUCTURAL STEEL FOR GRATES AND GRATE INSTALLATION HARDWARE SHALL BE GALVANIZED, AND SHALL BE IN ACCORDANCE WITH COOT STANDARD SPECIFICATIONS, SUBSECTION 712.06.

   THE STANDARD INLET GRATES SHALL BE USED ON ALL TYPE C INLETS UNLESS
5. CLOSE MESH GRATES ARE ACCEPTED BY DOUGLAS COUNTY THROUGH WRITTEN VARIANCE.
6. STEPS SHALL BE PROVIDED WHEN INLET DIMENSION "H" IS EQUAL TO OR GREATER THAN 3 FT.–6 IN., AND SHALL CONFORM TO AASHTO M 199.
7. SEE STANDARD DETAIL SD–3, FOR REINFORCEMENT AROUND THE PIPE OPENING.
8. CONCRETE SLOPE AND DITCH PAVING WILL BE REQUIRED WHEN SHOWN ON PLANS.

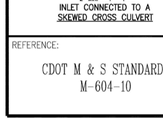
QUANTITIES FOR ONE INLET

H	CONCRETE (CU. YDS.)	STEEL (LBS.)	NO. STEPS REQ'D.
2'–6"	0.9	75	0
3'–0"	1.0	80	0
3'–6"	1.2	96	0
4'–0"	1.3	101	1
4'–6"	1.4	116	2
5'–0"	1.5	122	2
5'–6"	1.7	137	2
6'–0"	1.8	143	3
6'–6"	1.9	158	3
7'–0"	2.0	163	3
7'–6"	2.2	179	4
8'–0"	2.3	184	4
8'–6"	2.4	199	4
9'–0"	2.5	205	5
9'–6"	2.7	220	5
10'–0"	3.0	235	6
11'–6"	3.4	251	6

▼PIPE INSIDE DIAMETER SHALL BE 30 IN. OR LESS. CONCRETE AND STEEL QUANTITIES ARE FOR ONE ENTIRE INLET BEFORE DEDUCTION FOR VOLUME OCCUPIED BY PIPE. WEIGHT OF STEEL INCLUDES A RING FOR THE MAXIMUM PIPE DIAMETER.

BAR LIST FOR H=2 FT–6 IN.
AND BENDING DIAGRAM

MARK	NO. REQ'D.	HEIGHT	LENGTH
401	2	2'–3"	7'–11"
402	6	2'–3"	8'–3"
403	3	½"	15'–0"



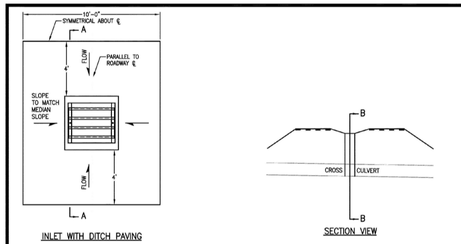
402 BARS WILL BE EQUALLY SPACED FROM EACH OTHER.

REFERENCE:
CDOT M & S STANDARDS
M-604-10

INLET TYPE C

DOUGLAS COUNTY COLORADO

Issued: 05/2013
Revised:
Drawing No. **SP.35a**

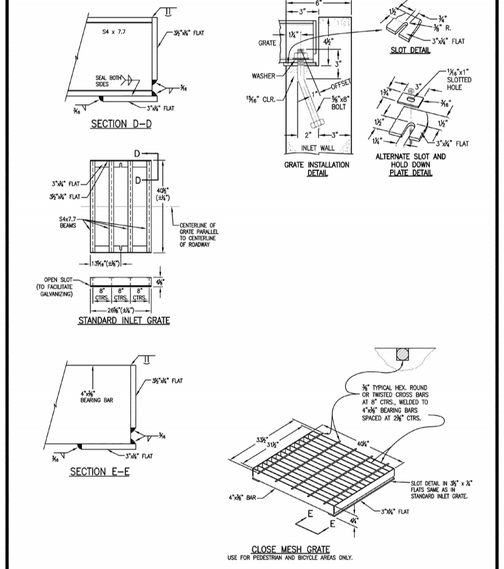


REFERENCE:
CDOT M & S STANDARDS
M-604-10

INLET TYPE C

DOUGLAS COUNTY COLORADO

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Drawing No. **SP.35b**

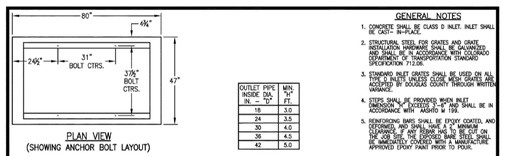


REFERENCE:
CDOT M & S STANDARDS
M-604-10

INLET TYPE C

DOUGLAS COUNTY COLORADO

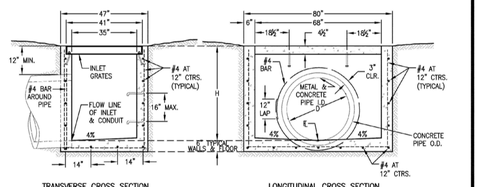
Issued: 05/2013
Revised:
Drawing No. **SP.35c**

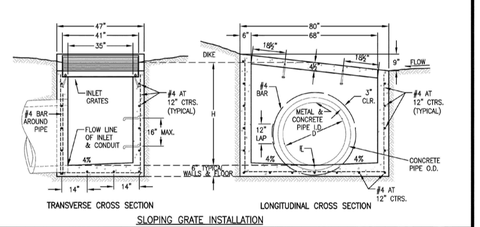


OUTLET PIPE INSIDE DIA. IN. – "I"	MIN. "H" FT.
18	3.0
24	3.5
30	4.0
36	4.5
42	5.0

GENERAL NOTES

1. CONCRETE SHALL BE CLASS D INLET. INLET SHALL BE CAST– IN–PLACE.
2. STRUCTURAL STEEL FOR GRATES AND GRATE INSTALLATION HARDWARE SHALL BE GALVANIZED AND SHALL BE IN ACCORDANCE WITH COLORADO DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATION 712.06.
3. STANDARD INLET GRATES SHALL BE USED ON ALL TYPE D INLETS UNLESS CLOSE MESH GRATES ARE ACCEPTED BY DOUGLAS COUNTY THROUGH WRITTEN VARIANCE.
4. STEPS SHALL BE PROVIDED WHEN INLET DIMENSION "H" IS EQUAL TO OR GREATER THAN 3 FT.–6 IN., AND SHALL BE IN ACCORDANCE WITH AASHTO M 199.
5. REINFORCING BARS SHALL BE EPOXY COATED, AND DEFORMED #5 BARS AND LARGER. A MINIMUM CLEARANCE OF 2 IN. SHALL BE MAINTAINED ON THE TOP AND SIDE. THE EXPOSED BARE STEEL SHALL BE IMMEDIATELY COVERED WITH A MANUFACTURE APPROVED EPOXY PAINT PRIOR TO POUR.



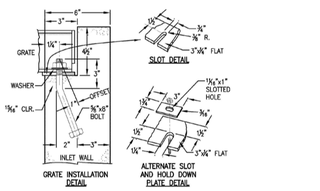


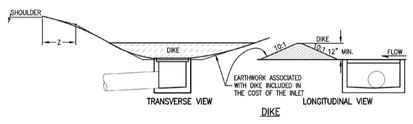
REFERENCE:
CDOT M & S STANDARDS
M-604-11

INLET TYPE D

DOUGLAS COUNTY COLORADO

Issued: 05/2013
Revised:
Drawing No. **SP.36a**





QUANTITIES FOR ONE INLET

H FT.	CONCRETE CU. YD.	STEEL LB.	CIRCULAR PIPE RANGE INSIDE DIA. IN. – "D"
3.0	1.5	127	18
3.5	1.7	149	18–24
4.0	1.9	157	18–30
4.5	2.0	179	18–36
5.0	2.2	187	18–42
5.5	2.4	208	18–42
6.0	2.6	215	18–42
6.5	2.8	236	18–42
7.0	2.9	243	18–42
7.5	3.1	264	18–42
8.0	3.3	271	18–42
8.5	3.5	292	18–42
9.0	3.6	299	18–42
9.5	3.8	320	18–42
10.0	4.0	327	18–42

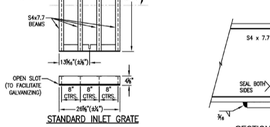
▼CONCRETE AND STEEL QUANTITIES ARE FOR ONE ENTIRE INLET BEFORE DEDUCTION FOR VOLUME OCCUPIED BY PIPE. WEIGHT OF STEEL INCLUDES A RING FOR THE MAXIMUM PIPE DIAMETER.

REFERENCE:
CDOT M & S STANDARDS
M-604-11

INLET TYPE D

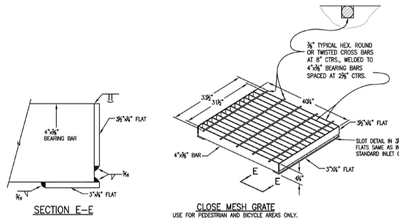
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Drawing No. **SP.36b**



QUANTITIES: 2 STEEL GRATES PER INLET

NO. PIECES	DESCRIPTION	LENGTH	LB. PER FT.	WEIGHT (LBS.)
8	5x7.7 BEAM	40"	7.70	206
4	35"x⅜" FLAT	26⅝"	2.98	26
4	3"x⅜" FLAT	26⅝"	2.55	24
				TOTAL 256 LBS.

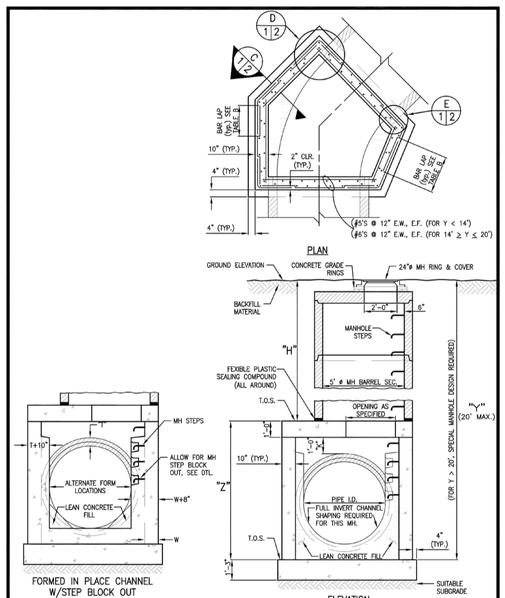


REFERENCE:
CDOT M & S STANDARDS
M-604-11

INLET TYPE D

DOUGLAS COUNTY COLORADO

Issued: 05/2013
Revised:
Drawing No. **SP.36c**



REFERENCE:
CITY AND COUNTY OF DENVER
DRAWING NUMBER S-504.1

TYPE "P" MANHOLE

DOUGLAS COUNTY COLORADO

Issued: 05/2013
Revised:
Drawing No. **SP.44a**

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Revision Type:

No.	Rev. Date:
1	
2	
3	
4	
5	
6	

Job No.: 1084-0006 | Sheet: 45 of 49
Scale Horiz: N/A | Date: February 20, 2026
Scale Vert: N/A

Designed: TBS
Prepared: PAV
Approved: DKH

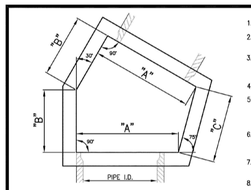
Proj. Name: Ramblewood Filing No. 1
Location: Douglas County, Colorado
Plan Set: Street & Storm Sewer Construction Plans
Sheet Name: Detail Sheet

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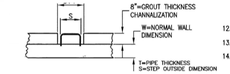
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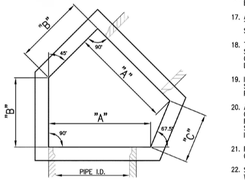


STRUCTURE DIMENSIONS 30° BEND

PIPE SIZE	"A"	"B"	"C"
60"	8' – 3"	3' – 10"	4' – 2"
66"	8' – 10"	4' – 0"	4' – 2"
72"	7' – 5"	4' – 2"	4' – 2"
78"	8' – 0"	4' – 4"	4' – 2"



STEP BLOCK OUT DETAIL



STRUCTURE DIMENSIONS 45° BEND

PIPE SIZE	"A"	"B"	"C"
60"	6' – 3"	4' – 3"	3' – 0"
66"	6' – 10"	4' – 8"	3' – 0"
72"	7' – 5"	4' – 8"	3' – 0"
78"	8' – 0"	5' – 0"	3' – 0"

GENERAL NOTES

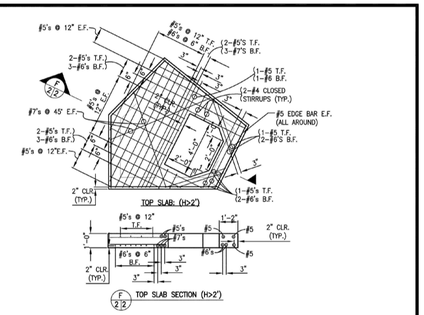
1. THIS MANHOLE IS APPLICABLE ONLY WHERE SPECIFIED ON THE DRAWINGS.
2. TOTAL "Y" DEPTH IS LIMITED TO 20' MAXIMUM. FOR Y > 20' A SPECIAL DESIGN IS REQUIRED.
3. PRECAST MH BARRELS AND SECTIONS SHALL CONFORM TO ASTM C-478. IN ADDITION, MANHOLE STEPS, BARRELS, SHIPLAP JOINTS, RING & COVER SHALL CONFORM TO ALL APPLICABLE DOUGLAS COUNTY STANDARDS.
4. WALLS SHALL BE FORMED ON BOTH SIDES.
5. CAST-IN-PLACE MANHOLE SHALL BE CLASS D CONCRETE AND SHALL CONFORM TO DOUGLAS COUNTY STANDARD SPECIFICATIONS FOR REINFORCED CONCRETE STRUCTURES AND THE STANDARD CONSTRUCTION SPECIFICATIONS EXCEPT AS AMENDED BELOW.
6. ALL REINFORCING STEEL SHALL HAVE A MINIMUM YIELD STRENGTH OF 60,000 PSI. VERTICAL STEEL SHALL BE PLACED AT ℄ OF WALL. ALL BARS SHALL HAVE A 2" MINIMUM CLEARANCE. ALL REINFORCING BARS SHALL BE EPOXY COATED.
7. CLEAR COVER REQUIREMENT (UNLESS OTHERWISE NOTED) TO BE 2" (3" FROM BOTTOM OF FOUNDATION SLAB.)
8. LATERAL SUPPORT SHALL BE PROVIDED AND MAINTAINED FOR WALLS DURING BACKFILLING OPERATIONS.
9. BEFORE CONCRETE IS PLACED, DESIGN DRAWINGS & PLACING DRAWINGS WILL BE CHECKED TO INSURE THE PROPER PLACEMENT OF EMBEDDED ITEMS, PIPE, REINFORCING STEEL, MANHOLE RINGS, KEYWAYS, ETC.
10. ALL REINFORCING BARS WILL BE PLACED ONLY AS SHOWN ON DOUGLAS COUNTY APPROVED DETAILS (PLACING) DRAWINGS.
11. REINFORCING BARS WILL BE SPLICED ONLY AT LOCATIONS SHOWN AND DETAILED ON THE DRAWINGS. BARS WILL BE WIRE-TIED. NO TACK WELDING WILL BE PERMITTED. MINIMUM BAR BENDING DIAMETER IS SIX TIMES THE DIAMETER OF THE REBAR BEING BENT.
12. SHOP DRAWINGS (PLACEMENT DRAWINGS) WILL BE REQUIRED.
13. REINFORCEMENT IN WALLS & BASE SLAB IS VARIED BY DESIGN HEIGHT "Y".
14. WHEN DIMENSION H < 2' SET TOP SLAB ELEVATION NO MORE THAN 12" + BELOW FINAL GRADE TO ALLOW COVER FOR MH RING & COVER, CONCRETE GRADE RINGS. DIMENSION K MAY BE GREATER THAN 12".
15. EXPOSED CONCRETE CORNERS SHALL BE CHAMFERED ¾".
16. STEPS SHALL BE PROVIDED WHEN MANHOLE DEPTH EXCEEDS 3'-6" AND SHALL BE IN ACCORDANCE WITH AASHTO M 199.
17. ALL GRATES AND FRAMES SHALL BE GRAY OR DUCTILE CAST IRON CONFORMING TO CDOT STANDARD SPECIFICATION, SUBSECTION 712.06. GRATES AND FRAMES SHALL BE DESIGNED TO WITHSTAND HS 20 LOADING.
18. THE MH RING (FRAME) SHALL BE SET ON CONCRETE GRADE RINGS. THE FRAME SHALL BE SURROUNDED WITH A CONCRETE COLLAR IN UNPAVED AREA AND CONCRETE PAVEMENT, OR FULL DEPTH ASPHALT IN ASPHALT PAVEMENT. SEE DETAILS ON STANDARD DETAIL SD–6, SHEETS 2 AND 3.
19. IF ANY REBAR HAS TO BE CUT ON THE JOB SITE, THE EXPOSED BARE STEEL SHALL BE IMMEDIATELY COVERED WITH A MANUFACTURE APPROVED EPOXY PAINT PRIOR TO POUR.
20. ALL PIPE ENTRIES INTO THE BASE OF MANHOLE SHALL BE CONNECTED BY OPEN CHANNELIZATION ADJUSTED FOR PIPE SIZE, SHAPE, SLOPE, AND DIRECTION OF FLOW. DETAILS SHOWN ARE TYPICAL FOR INSTALLATIONS WITH ALL INVERTS OF SAME RELATIVE ELEVATION. FOR EXCESSIVE ELEVATION DIFFERENCE BETWEEN INVERTS, SPECIAL BASE/CHANNEL DETAILS WILL BE SHOWN ON THE PLANS.
21. FLOW CHANNELS AND INVERTS SHALL BE FORMED BY SHAPING WITH CLASS B CONCRETE.
22. STUB–OUTS SHALL EXTEND A MINIMUM OF 1 PIPE SECTION BEYOND OUTSIDE WALL SURFACE OF MANHOLE AND BE SATISFACTORILY PLUGGED.
23. THE SLOPE OF THE MANHOLE COVER SHALL MATCH THE ROADWAY PROFILE AND CROSS SLOPE.

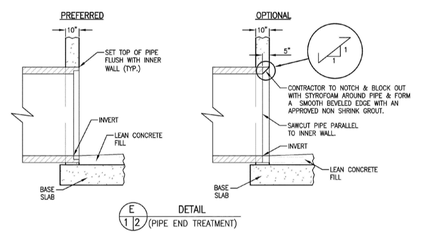
REFERENCE: CITY AND COUNTY OF DENVER DRAWING NUMBER S–504.1

TYPE "P" MANHOLE

DOUGLAS COUNTY COLORADO

Issued: 05/2013 Revised: Drawing No. **SP.44b**





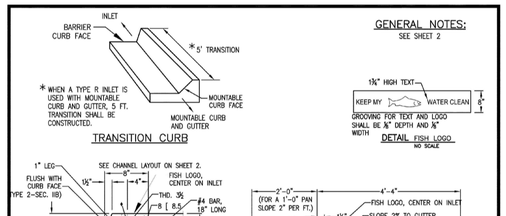
DETAIL (PIPE END TREATMENT)

REFERENCE: CITY AND COUNTY OF DENVER DRAWING NUMBER S–504.1

TYPE "P" MANHOLE

DOUGLAS COUNTY COLORADO

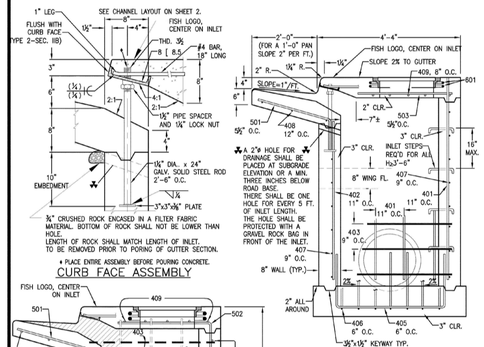
Issued: 05/2013 Revised: Drawing No. **SP.44c**



TRANSITION CURB

GENERAL NOTES: SEE SHEET 2

DETAIL FISH LOGO NO SCALE

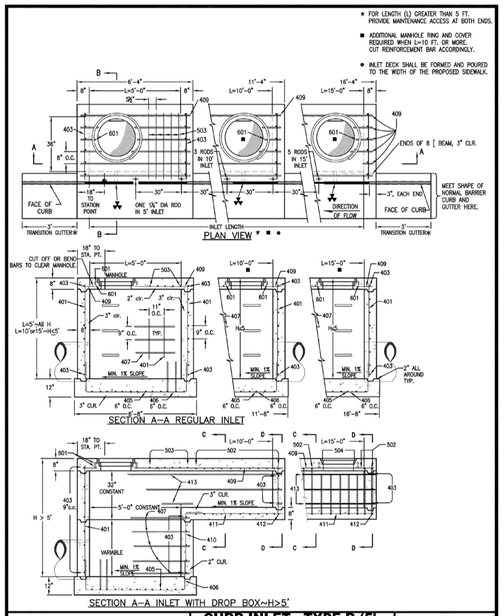


REFERENCE: CDOT M & S STANDARDS M–604–12

CURB INLET - TYPE R (5', 10' OR 15' IN LENGTH)

DOUGLAS COUNTY COLORADO

Issued: 05/2013 Revised: Drawing No. **SP.34a**



REFERENCE: CDOT M & S STANDARDS M–604–12

CURB INLET - TYPE R (5', 10' OR 15' IN LENGTH)

DOUGLAS COUNTY COLORADO

Issued: 05/2013 Revised: Drawing No. **SP.34b**

MARK	BAR # OR SIZE	O.C. SPACING	TYPE	ALL INLETS L = 5 FT. NO. REQ'D.	ALL INLETS L = 5 FT. LENGTH	INLETS: H ≤ 5 FT. L = 10 FT. NO. REQ'D.	INLETS: H ≤ 5 FT. L = 10 FT. LENGTH	INLETS: H ≤ 5 FT. L = 15 FT. NO. REQ'D.	INLETS: H ≤ 5 FT. L = 15 FT. LENGTH	INLETS: H > 5 FT. L = 10 FT. NO. REQ'D.	INLETS: H > 5 FT. L = 10 FT. LENGTH	INLETS: H > 5 FT. L = 15 FT. NO. REQ'D.	INLETS: H > 5 FT. L = 15 FT. LENGTH
401	4	11"	II	15	*	21	*	26	*	11	*	11	*
402	4	11"	II	7	*	13	*	18	*	7	*	7	*
403	4	9"	II	*	4'–0"	*	4'–0"	*	4'–0"	*	4'–0"	*	4'–0"
405	4	6"	VI	11	6'–10"	21	6'–10"	31	6'–10"	11	6'–10"	11	6'–10
406	4	6"	VIII	7	8'–10"	7	13'–10"	7	16'–10"	7	8'–10"	7	8'–10"
407	4	9"	II	*	5'–10"	*	10'–10"	*	15'–10"	*	5'–10"	*	5'–10"
408	4	12"	II	3	6'–10"	3	11'–10"	3	16'–0"	3	11'–10"	3	16'–0"
409	4	8"	II	6	5'–10"	6	10'–10"	6	15'–10"	6	10'–10"	6	15'–10"
410	4	11"	VII							3	*	3	*
411	4	11"	II							3	5'–2"	3	10'–2"
412	4	11"	II							3	2'–9"	3	2'–9"
413	4	9"	II							7	10'–10"	7	15'–10"
501	5	5½"	IV	11	3'–4"	22	3'–4"	33	3'–4"	22	3'–4"	33	3'–4"
502	5	5½"	III							11	11'–5"	17	11'–5"
503	5	5½"	II	5	3'–6"	16	3'–6"	27	3'–6"	6	3'–6"	6	3'–6"
504	5	5½"	IX									5	8'–4"
601	6	2½"	V	2	8'–10"	2	8'–10"	2	8'–10"	2	8'–10"	4	8'–10"
■ ℄(8.5				1	5'–10"	1	10'–10"	1	15'–10"	1	10'–10"	1	15'–10"
				3 BARS, 1 ROD	——	6 BARS, 3 RODS	——	8 BARS, 5 RODS	——	6 BARS, 3 RODS	——	8 BARS, 5 RODS	——

* VARIABLE, REFER TO TABLE TWO.
■ INCLUDE #4, 18 IN. BARS (SEE CHANNEL LAYOUT).

REGULAR INLETS DROP BOX INLETS

TABLE ONE ~ BAR LIST FOR CURB INLETS, TYPE "R"

'H'	LENGTH 401	402	410	NO. REQ'D. REGULAR	NO. REQ'D. DROP BOX	403	407	L=5' CONC. CU. YDS.	L=5' STEEL LBS.	L=10' CONC. CU. YDS.	L=10' STEEL LBS.	L=15' CONC. CU. YDS.	L=15' STEEL LBS.
3'–0"	2'–8"	1'–9"		10	7			3.2	285	5.3	497	7.4	706
3'–6"	3'–2"	2'–3"		10	7			3.4	305	5.7	528	7.9	747
4'–0"	3'–8"	2'–8"		12	9			3.7	326	6.0	559	8.4	786
4'–6"	4'–2"	3'–2"		12	9			3.9	334	6.4	571	8.8	803
5'–0"	4'–8"	3'–8"		14	11			4.1	354	6.7	602	9.3	844
5'–8"	5'–2"	4'–2"	3'–5"	16	13	15	6	4.4	375	6.0	607	7.4	850
6'–0"	5'–8"	4'–8"	3'–11"	16	13	16	6	4.6	382	6.2	616	7.6	860
6'–8"	6'–2"	5'–2"	4'–5"	18	15	18	8	4.8	402	6.4	637	7.8	880
7'–0"	6'–8"	5'–8"	4'–11"	20	17	19	10	5.0	423	6.6	654	8.0	897
7'–8"	7'–2"	6'–2"	5'–5"	20	17	20	10	5.3	430	6.9	664	8.3	907
8'–0"	7'–8"	6'–8"	5'–11"	22	19	22	12	5.5	451	7.1	684	8.5	927
8'–8"	8'–2"	7'–2"	6'–5"	24	21	23	14	5.7	471	7.3	702	8.7	944
9'–0"	8'–8"	7'–8"	6'–11"	24	21	24	14	6.0	479	7.6	711	9.0	954
9'–8"	9'–2"	8'–2"	7'–5"	26	23	26	16	6.2	499	7.8	732	9.2	974
10'–0"	9'–8"	8'–8"	7'–11"	28	25	27	18	6.4	520	8.0	749	9.4	992
10'–4"	10'–0"	9'–2"	8'–5"	28	25	28	18	6.7	527	8.3	759	9.7	1001
11'–0"	10'–8"	9'–8"	8'–11"	30	27	30	20	6.9	547	8.5	779	9.9	1022

NOTES: FOR L=5 FT., L=10 FT., AND L=15 FT.
REGULAR INLETS: TOTAL QUANTITIES NEEDED ARE OUTSIDE THE HEAVY BLACK LINE.
DROP BOX INLETS: TOTAL QUANTITIES NEEDED ARE INSIDE THE HEAVY BLACK LINE.

STEEL WEIGHTS DO NOT INCLUDE STRUCTURAL STEEL CHANNEL.

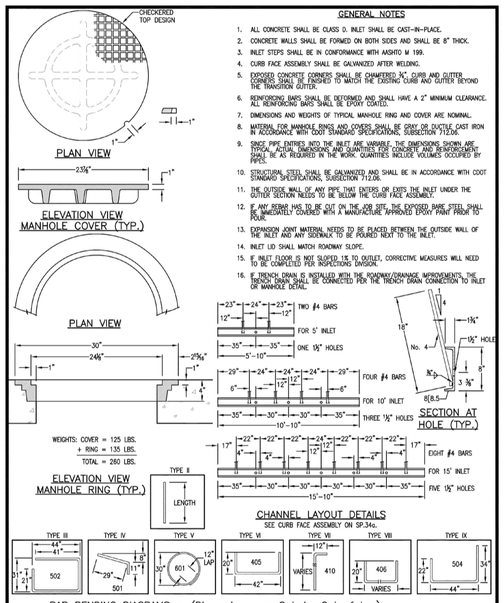
TABLE TWO ~ BARS AND QUANTITIES VARIABLE WITH "H"

REFERENCE: CDOT M & S STANDARDS M–604–12

CURB INLET - TYPE R (5', 10' OR 15' IN LENGTH)

DOUGLAS COUNTY COLORADO

Issued: 05/2013 Revised: Drawing No. **SP.34c**

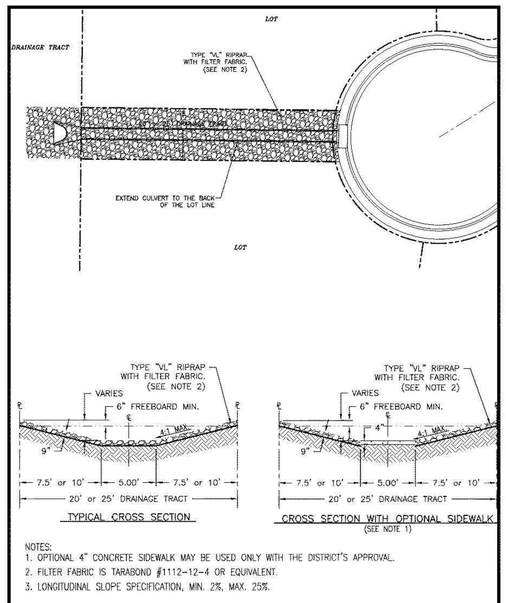


REFERENCE: CDOT M & S STANDARDS M–604–12

CURB INLET - TYPE R (5', 10' OR 15' IN LENGTH)

DOUGLAS COUNTY COLORADO

Issued: 05/2013 Revised: Drawing No. **SP.34d**



NOTES:
1. OPTIONAL 4" CONCRETE SIDEWALK MAY BE USED ONLY WITH THE DISTRICT'S APPROVAL.
2. FILTER FABRIC IS TARABOND #1112–12–4 OR EQUIVALENT.
3. LONGITUDINAL SLOPE SPECIFICATION, MIN. 2%, MAX. 25%.

EMERGENCY OVERFLOW CHANNEL (IN DRAINAGE TRACT)

DOUGLAS COUNTY COLORADO

Issued: 05/2013 Revised: Drawing No. **SP.56**

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No.	Rev. Date:	Revision Type:
1		
2		
3		
4		
5		
6		

Designed: TBS
Prepared: PAV
Approved: DKH

Job No.: 1084-0006 Sheet: 46 of 49
Scale Horiz: N/A Date: February 20, 2026
Scale Vert: N/A

Proj. Name: Ramblewood Filing No. 1
Location: Douglas County, Colorado
Plan Set: Street & Storm Sewer Construction Plans
Sheet Name: Detail Sheet

NOT FOR CONSTRUCTION

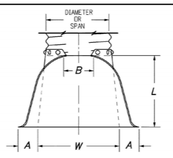
Know what's below. Call before you dig.

No. 46

I:\JOB FOLDERS\1084\1084-0006\CIVIL\PROJ\CD — STR–STM\M–DETAILS PRINTED ON: 2/19/2026 6:33 PM

PIPE DIA.	THICKNESS	DIMENSIONS					
		A	B	H	L	W	T
		IN.					
12	0.064	6	6	6	21	24	34
18	0.064	8	10	6	31	36	46
21	0.064	9	12	6	36	42	52
24	0.064	10	13	6	41	48	58
30	0.079	12	16	8	51	60	70
36	0.079	14	19	9	60	72	84
42	0.109	16	22	11	69	84	106
48	0.109	18	27	12	78	90	112
54	0.109	18	30	12	84	102	124
60	0.109	18	33	12	87	114	136
66	0.109	18	36	12	87	120	142
72	0.109	18	39	12	87	126	148
78	0.109	18	42	12	87	132	154
84	0.109	18	45	12	87	138	160

FLEXIBLE ROUND PIPE



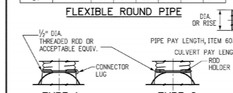
PLAN VIEW

PIPE ARCH SPAN x RISE	THICKNESS	DIMENSIONS					
		A (21°)	B (MAX.)	H (21°)	L (21.5°)	W (32°)	T
		IN.					
21 x 15	0.064	7	10	6	23	36	46
24 x 18	0.064	8	12	6	28	42	52
28 x 20	0.064	9	14	6	32	48	58
35 x 24	0.079	10	16	6	39	60	70
42 x 29	0.079	12	18	8	46	75	85
49 x 33	0.109	13	21	9	53	85	103
57 x 38	0.109	15	26	12	63	90	108
64 x 43	0.109	18	30	12	70	102	120
71 x 47	0.109	18	33	12	77	114	132

FLEXIBLE PIPE ARCH

GENERAL NOTES

1. DIMENSIONS OF END SECTIONS MAY VARY SLIGHTLY FROM THOSE SHOWN ON THE TABLES DUE TO DIFFERENT MANUFACTURERS' CONFIGURATIONS.
2. CONCRETE END SECTIONS SHALL BE FURNISHED WITH TONGUE OR GROOVE AS REQUIRED.
3. DESIGN LENGTH OF PIPE OR SIDE DRAIN IS BASED ON LENGTH OF END SECTION SHOWN IN TABLE. ANY ADDITIONAL PIPE REQUIRED TO PROVIDE THE DESIGN LENGTH SHALL BE FURNISHED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE PROJECT.
4. THE INSIDE CONFIGURATION AND THE JOINT OF CONCRETE END SECTION AND PIPE SHALL MATCH.
5. END SECTIONS FOR CMP ARCH PIPE SHALL MATCH THE DIMENSIONS OF THE PIPE SHOWN ON THE PLANS.
6. GALVANIZED TOE PLATE AS SHOWN IS REQUIRED ON END SECTIONS FOR CORRUGATED STEEL PIPE AND SHALL BE THE SAME THICKNESS AS END SECTIONS. TOE PLATE SHALL BE FIELD-BOLTED TO END SECTION WITH ⅜ IN. GALVANIZED BOLTS, NUTS AND WASHERS.
7. GALVANIZED STEEL SHALL CONFORM TO AASHTO M 111, M 218 OR M 232.
8. CONCRETE PIPE JOINT FASTENERS, WHERE SHOWN ON PLANS, SHALL BE INSTALLED SO THAT A MINIMUM OF 15 LINEAR FEET OF THE OUTLET END OF THE PIPE ARE MECHANICALLY LOCKED TOGETHER. END SECTION LENGTHS WHEN USED, SHALL BE INCLUDED IN THE 15 LF REQUIREMENT.
9. CONNECTIONS OF METAL END SECTIONS TO PLASTIC PIPE SHALL BE APPROVED BY THE ENGINEER. PLASTIC END SECTIONS SHALL NOT BE USED.
10. THE END SECTION STYLE, EITHER REGULAR OR SAFETY, SHALL BE AS SHOWN ON THE PLANS.
11. AT THE OPTION OF THE CONTRACTOR AND APPROVAL OF THE CDOT PROJECT ENGINEER, REINFORCED CONCRETE END SECTIONS MAY BE MADE WITH SYNTHETIC FIBERS INSTEAD OF STEEL FOR PIPES 36 INCHES IN DIAMETER AND SMALLER, AND CONFORM TO AASHTO M 86 AND SUBSECTION 601.03.

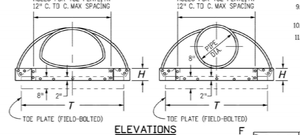


TYPE 1
FOR 18 IN. THRU 24 IN. ROUND PIPE WITH ANNULAR CORRUGATIONS. NOT TO BE USED ON HELICALLY-FORMED PIPE UNLESS RECORRUGATED.

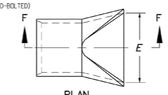
TYPE 2
FOR 30 IN. THRU 36 IN. ROUND PIPE WITH ANNULAR CORRUGATIONS. NOT TO BE USED ON HELICALLY-FORMED PIPE UNLESS RECORRUGATED.

TYPE 3
FOR 42 IN. THRU 84 IN. ROUND PIPE WITH ANNULAR CORRUGATIONS AND ALL SIZES WITH HELICAL CORRUGATIONS AND FOR ALL METAL PIPE ARCH CULVERTS. SHOP ATTACH A 24 IN. MIN. LENGTH OF ANNULAR PIPE WITH GALV. RIVETS OR BOLTS, SPOT WELDS, OR 2 IN. LONG SKIP WELDS ON 8 IN. CTRS. REPAIR BURNT GALVANIZING IN ACCORDANCE WITH SUBSECTION 707.09.

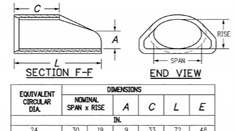
TYPICAL CONNECTIONS



ELEVATIONS



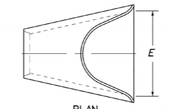
DETAIL A



EQUIVALENT CIRCULAR DIA.	DIMENSIONS				
	NOMINAL SPAN x RISE	A	C	L	E
	IN.				
24	30 x 19	9	33	72	48
30	38 x 24	10	18	72	60
36	45 x 29	12	24	84	72
42	53 x 34	16	36	96	78
48	60 x 38	21	36	96	84
54	68 x 43	26	36	96	90
60	76 x 48	30	36	96	96

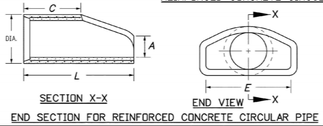
END SECTION FOR REINFORCED CONCRETE ELLIPTICAL PIPE

END SECTION AND CONNECTION DETAILS FOR ROUND AND ARCH METAL PIPES

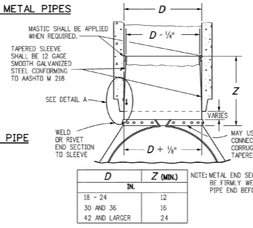


PIPE I.D.	DIMENSIONS			
	A	C	L	E
	IN.			
18	10	48	78	36
24	10	48	78	48
30	14	36	96	60
36	18	36	96	72
42	24	36	96	78
48	28	24	96	84
54	30	36	96	90
60	36	36	96	96
72	34	20	96	108

REINFORCED CONCRETE CIRCULAR PIPE



END SECTION FOR REINFORCED CONCRETE CIRCULAR PIPE

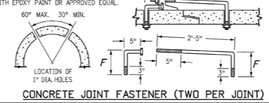


D	Z (MIN.)
IN.	
18 - 24	12
30 AND 36	16
42 AND LARGER	24

NOTE: METAL END SECTION SHALL BE FIRMLY WEDGED INTO PIPE END BEFORE BACKFILLING.

STEEL END SECTION FOR CONCRETE CIRCULAR PIPE
(ALTERNATIVE FOR CONCRETE END SECTION)

PIPE DIAMETER	F
IN.	
18 - 30	5
36 - 42	6
48 - 60	7
72 - 84	9



CONCRETE JOINT FASTENER (TWO PER JOINT)

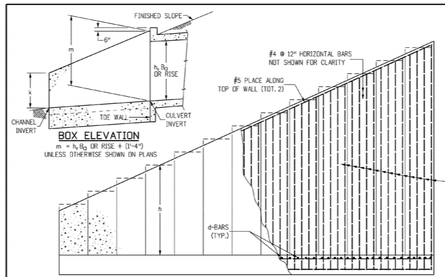
Computer File Information		Sheet Revisions	
Creation Date: 07/31/19		Date:	Comments
Designer Initials: JBK			
Last Modification Date: 07/31/19			
Detailer Initials: LTA			
CAD Ver.: MicroStation V8 Scale: Not to Scale Units: English			

Colorado Department of Transportation
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CONCRETE AND METAL END SECTIONS

Issued by the Project Development Branch: July 31, 2019

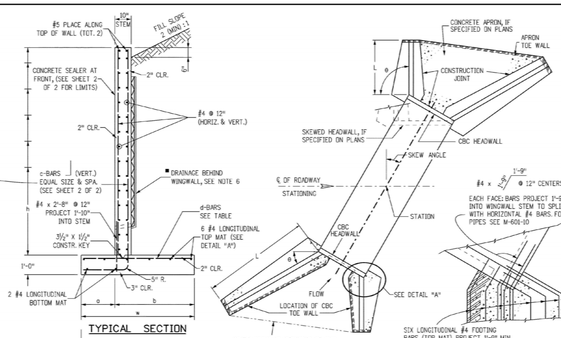
STANDARD PLAN NO.
M-603-10
Standard Sheet No. 1 of 1
Project Sheet Number:



	2'	3'	4'	5'	6'	7'	8'	9'	10'	11'	12'	13'	14'
h =	2'	3'	4'	5'	6'	7'	8'	9'	10'	11'	12'	13'	14'
a =	1'-0"	1'-2"	1'-4"	1'-6"	1'-8"	1'-10"	2'-0"	2'-2"	2'-4"	2'-6"	2'-8"	2'-10"	3'-0"
b =	1'-8"	2'-0"	2'-4"	2'-8"	3'-0"	3'-4"	3'-8"	4'-0"	4'-4"	4'-8"	5'-0"	5'-4"	5'-8"
w =	2'-8"	3'-2"	3'-8"	4'-2"	4'-8"	5'-2"	5'-8"	6'-2"	6'-8"	7'-2"	7'-8"	8'-2"	8'-8"
d-BARS	#4 @ 7"	#4 @ 7"	#4 @ 7"	#4 @ 9"	#4 @ 9"	#4 @ 9"	#5 @ 10"	#5 @ 10"	#5 @ 10"	#5 @ 8"	#5 @ 8"	#7 @ 9"	#7 @ 7"
* CONC. CY/LF	0.161	0.220	0.259	0.309	0.358	0.407	0.457	0.506	0.556	0.605	0.654	0.704	0.753

* DOES NOT INCLUDE TOE WALL QUANTITIES SEE SHEET 2 OF 2 FOR REINFORCING STEEL QUANTITY
■ REQUIRED DRAINAGE BEHIND WINGWALLS SEE NOTE 6

TYPICAL SECTION



TYPICAL CULVERT LAYOUT

DETAIL "A"

DESIGN DATA:

AASHTO LRFD EIGHTH EDITION, 2017
DESIGN METHOD: LOAD AND RESISTANCE FACTOR DESIGN, YIELD LINE METHOD

REINFORCED CONCRETE:
CONCRETE CLASS D (BOX CULVERT): f'_c = 4,500 PSI
REINFORCING STEEL: f_y = 60,000 PSI

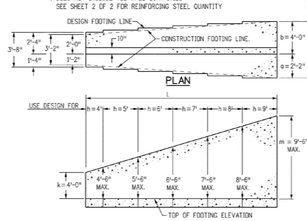
LOADING:
AT REST EARTH (FLUID) PRESSURE FOR CONCRETE STEM DESIGN = 55 PCF FOR 2 (MIN.):1 SLOPED BACKFILL
ACTIVE EARTH (FLUID) PRESSURE FOR CONCRETE FOOTING DESIGN = 40 PCF FOR 2 (MIN.):1 SLOPED BACKFILL
LIVE LOAD SURCHARGE = 2'
MINIMUM RESISTANCE FOR SOIL BEARING = 5.5 KSF
SOIL BEARING RESISTANCE FACTOR = 0.45

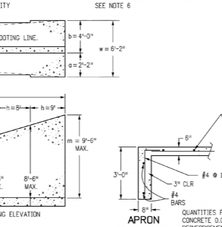
GENERAL NOTES:

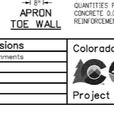
1. ALL EXPOSED CONCRETE CORNERS SHALL BE CHAMFERED ¾ IN.
2. WINGWALL FOOTING AND FLOOR OF BOX CULVERT SHALL BE PLACED MONOLITHICALLY.
3. DIMENSIONS "h", "h$_1$", "h$_2$", "m" AND ANGLE "#" FOR WINGWALL SHALL BE AS SHOWN ON THE PLANS.
4. MINIMUM CLASS B LAP SPLICE LENGTH FOR BLACK REINFORCING BARS:

BAR SIZE:	#4	#5	#6	#7
SPLICE LENGTH:	1'-6"	1'-11"	2'-3"	2'-7"

5. DESIGN DOES NOT CONSIDER ANY SCOUR EFFECTS.
6. WINGWALL DRAIN SHALL BE REQUIRED IF "h" ≥ 12.0 FT., SEE SHEET 2 OF 2 FOR DETAILS.







QUANTITIES FOR TOE WALL ONLY:
CONCRETE 0.049 CU. YD./LIN. FT.
REINFORCEMENT 5.1 LB./LIN. FT.

REINFORCEMENT 1.34 LB./SQ. FT.

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Project Development Branch JBK

WINGWALLS FOR PIPE OR BOX CULVERTS

Issued by the Project Development Branch: July 31, 2019

STANDARD PLAN NO.
M-601-20
Standard Sheet No. 1 of 2
Project Sheet Number:

c-BARS AND REINFORCING STEEL QUANTITY (EXCLUDE TOE WALL)

* REINFORCING STEEL QUANTITY INCLUDES STEM AND FOOTING QUANTITIES, BUT DOES NOT INCLUDE TOE WALL QUANTITIES.

L (MULTIPLE OF m)		≤ (1.0 x m)		≤ (1.25 x m)		≤ (1.5 x m)		≤ (1.75 x m)		≤ (2.0 x m)		≤ (2.25 x m)		≤ (2.5 x m)		≤ (2.75 x m)		≤ (3.0 x m)		≤ (3.25 x m)		≤ (3.5 x m)	
m (FT)	k (FT)	c-BARS	∗ REINF. LB./L.F.	c-BARS	∗ REINF. LB./L.F.	c-BARS	∗ REINF. LB./L.F.	c-BARS	∗ REINF. LB./L.F.	c-BARS	∗ REINF. LB./L.F.	c-BARS	∗ REINF. LB./L.F.	c-BARS	∗ REINF. LB./L.F.	c-BARS	∗ REINF. LB./L.F.	c-BARS	∗ REINF. LB./L.F.	c-BARS	∗ REINF. LB./L.F.	c-BARS	∗ REINF. LB./L.F.
14	4	#4 @ 10"	53.60	#5 @ 10"	57.95	#5 @ 10"	57.10	#5 @ 8"	60.22	#5 @ 7"	62.43	#5 @ 7"	62.09	#5 @ 6"	65.38	#5 @ 6"	65.15	#6 @ 8"	67.10	#6 @ 8"	66.94	#6 @ 7"	70.66
	5	#4 @ 10"	55.86	#5 @ 10"	60.46	#5 @ 10"	59.60	#5 @ 8"	62.89	#5 @ 7"	65.23	#5 @ 7"	64.88	#5 @ 6"	68.34	#5 @ 6"	68.11	#6 @ 8"	70.17	#6 @ 8"	70.00	#6 @ 7"	73.90
	6	#5 @ 10"	64.43	#6 @ 10"	70.60	#6 @ 10"	69.69	#6 @ 8"	74.93	#6 @ 8"	74.45	#6 @ 7"	78.30	#6 @ 6"	83.64	#6 @ 6"	83.40	#6 @ 6"	83.22	#6 @ 6"	83.05	#7 @ 7"	89.64
	7	#5 @ 10"	67.29	#6 @ 10"	73.76	#6 @ 10"	72.83	#6 @ 8"	78.32	#6 @ 8"	77.84	#6 @ 7"	81.87	#6 @ 6"	87.45	#6 @ 6"	87.21	#6 @ 6"	87.02	#6 @ 6"	86.86	#7 @ 7"	93.73
	8	#5 @ 10"	74.71	#6 @ 8"	83.45	#6 @ 7"	87.09	#6 @ 6"	92.54	#7 @ 7"	99.47	#7 @ 7"	99.08	#7 @ 6"	107.11	#7 @ 6"	106.86	#7 @ 6"	106.65	#7 @ 6"	106.49	#7 @ 6"	106.35
	9	#5 @ 8"	78.10	#6 @ 8"	87.23	#6 @ 7"	91.03	#6 @ 6"	96.72	#7 @ 7"	103.93	#7 @ 7"	103.54	#7 @ 6"	111.90	#7 @ 6"	111.65	#7 @ 6"	111.45	#7 @ 6"	111.28	#7 @ 6"	111.13
13	4	#4 @ 10"	50.51	#4 @ 10"	49.25	#5 @ 10"	53.71	#5 @ 10"	53.09	#5 @ 10"	52.36	#5 @ 9"	53.85	#5 @ 8"	55.54	#5 @ 7"	57.85	#5 @ 7"	57.67	#5 @ 7"	57.51	#6 @ 9"	59.93
	5	#4 @ 10"	52.66	#4 @ 10"	51.37	#5 @ 10"	56.09	#5 @ 10"	55.46	#5 @ 10"	54.99	#5 @ 9"	56.29	#5 @ 8"	58.08	#5 @ 7"	60.51	#5 @ 7"	60.33	#5 @ 7"	60.17	#6 @ 9"	62.72
	6	#4 @ 10"	54.82	#4 @ 10"	53.48	#5 @ 9"	59.48	#5 @ 9"	60.31	#5 @ 9"	57.56	#5 @ 8"	67.08	#5 @ 8"	66.70	#5 @ 8"	69.53	#5 @ 8"	69.28	#5 @ 7"	73.12	#6 @ 7"	72.95
	7	#4 @ 10"	57.36	#5 @ 10"	62.16	#5 @ 9"	63.05	#5 @ 9"	70.66	#5 @ 9"	70.16	#5 @ 9"	69.78	#5 @ 8"	72.75	#5 @ 8"	72.50	#5 @ 8"	76.52	#5 @ 7"	76.35	#6 @ 7"	76.20
	8	#5 @ 10"	68.39	#6 @ 10"	72.82	#6 @ 8"	77.97	#6 @ 7"	81.68	#6 @ 7"	81.35	#6 @ 6"	86.67	#6 @ 6"	86.37	#7 @ 7"	93.18	#7 @ 7"	92.97	#7 @ 7"	92.80	#7 @ 7"	92.64
	9	#5 @ 8"	69.37	#6 @ 8"	74.10	#6 @ 8"	81.49	#6 @ 7"	85.37	#6 @ 7"	84.87	#6 @ 6"	90.59	#7 @ 7"	97.39	#7 @ 7"	97.18	#7 @ 7"	97.01	#7 @ 7"	96.85	#7 @ 7"	96.71
12	2	#4 @ 10"	43.91	#4 @ 10"	42.65	#4 @ 10"	41.82	#4 @ 10"	41.22	#4 @ 10"	40.78	#4 @ 9"	41.29	#5 @ 10"	44.61	#5 @ 10"	44.37	#5 @ 9"	44.18	#5 @ 10"	44.01	#5 @ 10"	43.87
	3	#4 @ 10"	45.82	#4 @ 10"	44.55	#4 @ 10"	43.71	#4 @ 10"	43.11	#4 @ 10"	42.66	#4 @ 9"	43.22	#5 @ 10"	46.75	#5 @ 10"	46.51	#5 @ 10"	46.32	#5 @ 10"	46.15	#5 @ 10"	46.01
	4	#4 @ 10"	47.80	#4 @ 10"	46.51	#4 @ 10"	45.65	#5 @ 10"	50.06	#5 @ 10"	49.59	#5 @ 10"	49.23	#5 @ 10"	48.94	#5 @ 10"	48.69	#5 @ 9"	50.00	#5 @ 8"	51.72	#5 @ 8"	51.57
	5	#4 @ 10"	49.84	#4 @ 10"	48.53	#4 @ 10"	47.66	#5 @ 10"	52.33	#5 @ 10"	51.85	#5 @ 10"	51.48	#5 @ 10"	51.19	#5 @ 10"	50.94	#5 @ 9"	52.33	#5 @ 8"	54.14	#5 @ 8"	54.00
	6	#4 @ 10"	51.99	#4 @ 10"	50.65	#5 @ 10"	56.34	#5 @ 8"	58.41	#5 @ 8"	57.93	#5 @ 10"	60.60	#5 @ 10"	60.29	#6 @ 9"	62.42	#6 @ 9"	62.22	#6 @ 9"	62.04	#6 @ 8"	64.89
	7	#4 @ 10"	54.30	#5 @ 10"	58.80	#5 @ 10"	57.87	#5 @ 8"	61.10	#5 @ 8"	60.61	#5 @ 8"	63.43	#5 @ 10"	63.11	#6 @ 9"	65.35	#6 @ 9"	65.15	#6 @ 9"	64.97	#6 @ 8"	67.96
	8	#4 @ 10"	62.91	#5 @ 10"	61.45	#5 @ 9"	67.46	#5 @ 6"	70.68	#5 @ 6"	70.20	#5 @ 7"	76.44	#5 @ 7"	76.13	#6 @ 7"	75.87	#6 @ 6"	81.30	#6 @ 6"	81.12	#6 @ 6"	80.98
	9	#5 @ 10"	65.64	#5 @ 10"	64.15	#5 @ 9"	70.44	#5 @ 6"	73.82	#5 @ 6"	73.33	#5 @ 7"	79.86	#5 @ 7"	79.54	#6 @ 7"	79.28	#6 @ 6"	84.95	#6 @ 6"	84.77	#6 @ 6"	84.62
11	2	#4 @ 10"	41.70	#4 @ 10"	40.42	#4 @ 10"	39.57	#4 @ 10"	38.96	#4 @ 10"	38.50	#4 @ 10"	38.15	#4 @ 10"	37.87	#4 @ 10"	37.63	#4 @ 9"	38.25	#5 @ 10"	41.46	#5 @ 10"	41.31
	3	#4 @ 10"	43.57	#4 @ 10"	42.27	#4 @ 10"	41.40	#4 @ 10"	40.79	#4 @ 10"	40.33	#4 @ 10"	39.97	#4 @ 10"	39.69	#4 @ 10"	39.45	#4 @ 9"	40.12	#5 @ 10"	43.54	#5 @ 10"	43.39
	4	#4 @ 10"	45.48	#4 @ 10"	44.18	#4 @ 10"	43.28	#4 @ 10"	42.66	#4 @ 9"	43.09	#4 @ 9"	42.71	#5 @ 10"	46.27	#5 @ 10"	46.02	#5 @ 10"	45.82	#5 @ 10"	45.65	#5 @ 10"	45.51
	5	#4 @ 10"	47.46	#4 @ 10"	46.10	#4 @ 10"	45.21	#4 @ 10"	44.58	#4 @ 9"	45.06	#5 @ 10"	48.74	#5 @ 10"	48.44	#5 @ 10"	48.19	#5 @ 10"	47.99	#5 @ 10"	47.81	#5 @ 10"	47.67
	6	#4 @ 10"	49.52	#4 @ 10"	48.14	#4 @ 9"	48.23	#5 @ 10"	51.88	#5 @ 10"	51.38	#5 @ 9"	52.57	#5 @ 9"	52.27	#5 @ 8"	53.99	#5 @ 8"	53.79	#5 @ 7"	56.16	#5 @ 7"	56.01
	7	#4 @ 10"	51.73	#4 @ 10"	50.33	#4 @ 9"	50.43	#5 @ 10"	54.29	#5 @ 10"	53.78	#5 @ 9"	55.04	#5 @ 9"	54.73	#5 @ 8"	56.55	#5 @ 8"	56.35	#5 @ 7"	58.84	#5 @ 7"	58.70
	8	#4 @ 10"	54.00	#5 @ 10"	58.44	#5 @ 10"	57.45	#5 @ 8"	60.64	#5 @ 7"	62.92	#5 @ 9"	66.25	#5 @ 6"	65.94	#5 @ 6"	65.69	#5 @ 8"	67.76	#6 @ 8"	67.57	#6 @ 7"	71.45
	9	#4 @ 10"	56.20	#5 @ 10"	60.87	#5 @ 10"	59.85	#5 @ 8"	63.21	#5 @ 7"	65.60	#5 @ 9"	69.09	#5 @ 6"	68.78	#5 @ 6"	68.52	#5 @ 8"	70.69	#6 @ 8"	70.51	#6 @ 7"	74.57
10	2	#4 @ 10"	39.84	#4 @ 10"	38.53	#4 @ 10"	37.65	#4 @ 10"	37.03	#4 @ 10"	36.57	#4 @ 10"	36.20	#4 @ 10"	35.91	#4 @ 10"	35.67	#4 @ 10"	35.48	#4 @ 9"	36.07	#4 @ 9"	35.93
	3	#4 @ 10"	41.68	#4 @ 10"	40.39	#4 @ 10"	39.47	#4 @ 10"	38.84	#4 @ 10"	38.36	#4 @ 10"	38.00	#4 @ 10"	37.71	#4 @ 10"	37.46	#4 @ 9"	37.27	#4 @ 9"	37.91	#4 @ 9"	37.76
	4	#4 @ 10"	43.58	#4 @ 10"	42.22	#4 @ 10"	41.31	#4 @ 10"	40.67	#4 @ 10"	40.19	#4 @ 10"	39.82	#4 @ 10"	39.53	#4 @ 10"	39.28	#4 @ 10"	39.08	#4 @ 9"	39.77	#4 @ 9"	39.63
	5	#4 @ 10"	45.53	#4 @ 10"	44.14	#4 @ 10"	43.21	#4 @ 10"	42.56	#4 @ 10"	42.07	#5 @ 10"	46.44	#5 @ 10"	46.13	#5 @ 10"	45.87	#5 @ 10"	45.67	#5 @ 10"	45.49	#5 @ 10"	45.34
	6	#4 @ 10"	47.58	#4 @ 10"	46.14	#4 @ 10"	45.20	#4 @ 10"	44.53	#4 @ 10"	44.03	#5 @ 10"	48.67	#5 @ 10"	48.36	#5 @ 10"	48.10	#5 @ 10"	47.89	#5 @ 10"	47.72	#5 @ 10"	47.58
	7	#4 @ 10"	49.79	#4 @ 10"	48.31	#4 @ 10"	47.34	#5 @ 10"	51.97	#5 @ 10"	51.45	#5 @ 10"	51.04	#5 @ 10"	50.72	#5 @ 10"	50.46	#5 @ 10"	50.25	#5 @ 10"	50.07	#5 @ 10"	49.92
	8	#4 @ 10"	52.06	#4 @ 10"	50.54	#4 @ 10"	49.54	#5 @ 10"	54.43	#5 @ 10"	53.89	#5 @ 9"	53.47	#5 @ 9"	53.12	#5 @ 9"	52.83	#5 @ 9"	52.59	#5 @ 9"	52.38	#5 @ 9"	52.21
9	2	#4 @ 10"	38.01	#4 @ 10"	36.75	#4 @ 10"	35.85	#4 @ 10"	35.21	#4 @ 10"	34.73	#4 @ 10"	34.36	#4 @ 10"	34.06	#4 @ 10"	33.81	#4 @ 10"	33.60	#4 @ 10"	33.42	#4 @ 10"	33.27
	3	#4 @ 10"	39.73	#4 @ 10"	38.56	#4 @ 10"	37.64	#4 @ 10"	36.99	#4 @ 10"	36.51	#4 @ 10"	36.13	#4 @ 10"	35.82	#4 @ 10"	35.57	#4 @ 10"	35.36	#4 @ 10"	35.18	#4 @ 10"	35.03
	4	#4 @ 10"	41.81	#4 @ 10"	40.40	#4 @ 10"	39.47	#4 @ 10"	38.81	#4 @ 10"	38.31	#4 @ 10"	37.93	#4 @ 10"	37.62	#4 @ 10"	37.36	#4 @ 10"	37.14	#4 @ 10"	36.95	#4 @ 10"	36.79
	5	#4 @ 10"	43.75	#4 @ 10"	42.30	#4 @ 10"	41.35	#4 @ 10"	40.

LEGEND

H = ALLOWABLE HEIGHT OF COVER OVER THE TOP OF THE PIPE, EXCLUDING PAVEMENT THICKNESS.

THE MINIMUM COVER SHALL BE THE DIMENSIONS SHOWN IN THE TABLE BELOW OR THE ENTIRE PAVEMENT STRUCTURE THICKNESS AS DEFINED IN SPECIFICATION 101.02, WHICHEVER IS GREATER.

THE MINIMUM COVER IN THE TABLE BELOW IS MEASURED FROM THE TOP OF THE PIPE TO THE BOTTOM OF THE PAVEMENT: HMA OR PCCP

FILL HEIGHTS AND DESIGN ASSUMPTIONS ARE BASED ON AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 8TH EDITION, SECTION 12, AND AASHTO T180 MINIMUM RELATIVE COMPACTION OF 95%

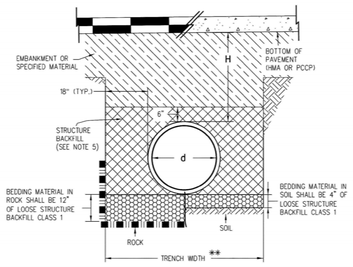
FILL HEIGHTS ARE BASED ON AASHTO M330 FOR POLYPROPYLENE TYPE S PIPES WITH OUTER, CORRUGATED WALLS AND SMOOTH INNER LINEARS.

L_1 = LENGTH OF PIPE TO BE MEASURED WHEN PLACED IN ACCORDANCE WITH SECTION 624.

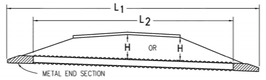
L_2 = LENGTH OF PIPE TO BE MEASURED WHEN PLACED IN ACCORDANCE WITH SECTION 603.

M = THE MINIMUM SPACING BETWEEN THE OUTSIDE WALLS OF MULTIPLE PIPES OR END SECTIONS IS 18" OR ½(d), WHICHEVER IS GREATER.

d = INNER DIAMETER OF PIPE.

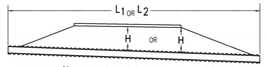


INSTALLATION OF PIPE



NOTE: USE THE H THAT IS GREATER FOR MAXIMUM ALLOWABLE FILL HEIGHT.

PIPE WITH END SECTIONS



NOTE: USE THE H THAT IS GREATER FOR MAXIMUM ALLOWABLE FILL HEIGHT.

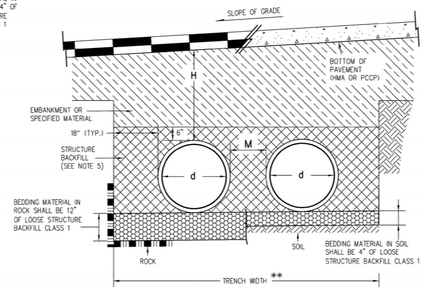
PIPE WITHOUT END SECTIONS

	POLYPROPYLENE (PP) FINAL FILL HEIGHTS			
		H MAXIMUM COVER (FT.)		
PIPE DIA. d (IN.)	H MIN. COVER (FT.)	FLOWABLE FILL COMP.	CDOT CLASS 3 AND A-1, A-3 95%	CDOT CLASS 1, 2, AND A-2-4, A-2-5 95%
12	1	41	28	20
15	1	42	29	21
18	1	44	30	22
24	1	30	21	16
30	1	39	27	19
36	1	28	20	14
42	1	30	21	15
48	1	29	20	14
60	2	29	20	14

MINIMUM AND MAXIMUM COVER

GENERAL NOTES

1. ALL PIPES SHALL MEET THE REQUIREMENTS OF AASHTO M330 FOR POLYPROPYLENE TYPE S FOR POLYPROPYLENE PIPE (PP) WITH SMOOTH INNER SURFACE.
2. WHEN A PIPE IS TO BE EXTENDED, THE SAME PIPE MATERIAL AND SIZE AS IN THE ORIGINAL INSTALLATION SHALL BE USED.
3. MINIMUM COVER FOR TEMPORARY/CONSTRUCTION LOADS SHALL BE PROVIDED DURING CONSTRUCTION TO PROTECT THE PIPE FROM DAMAGE AS SHOWN THE IN TABLE. FINAL MAXIMUM COVER HEIGHTS (H) SHALL NOT BE EXCEEDED DURING CONSTRUCTION.
4. WHEN INSTALLING A GUARDRAIL OR A SIGN POST DIRECTLY ABOVE A PIPE, THE POST'S BOTTOM MUST BE AT LEAST 1 FOOT ABOVE THE TOP OF THE PIPE. THE HOLE FOR THE POST SHALL BE DRILLED INTO THE SOIL.
5. STRUCTURE BACKFILL MATERIAL SHALL BE CLASS 1.
6. FOR PIPES 24 INCHES OR LESS IN DIAMETER, H MIN. MAY BE REDUCED TO ONE FOOT FOR LOW VOLUME APPROACH ROADS NOT ON STATE HIGHWAYS.
7. FOR FLOWABLE FILL INSTALLATIONS, REFER TO SECTION 206.02(A)4. CONTRACTOR SHALL BE RESPONSIBLE TO MAINTAIN PROPER PIPE ALIGNMENT AND PREVENT DISPLACEMENT DUE TO PIPE BOUYANCY.



INSTALLATION OF MULTIPLE PIPES

NOTE: M IS 12 INCHES FOR DIAMETERS (d) UP TO AND INCLUDING 24 INCHES AND d/2 FOR GREATER DIAMETERS.

** TRENCH WIDTH ASSUMES STABLE IN-SITU SIDE WALL

NOMINAL PIPE DIAMETER (IN.)	MINIMUM COVER (IN.) FOR INDICATED AXLE LOADS (KIPS)			
	18.0-50.0	50.0-75.0	75.0-110.0	110.0-150.0
24 - 36	24.0	30.0	36.0	36.0
42 - 48	36.0	36.0	42.0	48.0
54 - 60	36.0	36.0	42.0	48.0

MINIMUM COVER FOR CONSTRUCTION LOADS

Computer File Information		Sheet Revisions	
Creation Date: 07/31/19		Date:	Comments
Designer Initials: JBK	(R-X)	03/07/22	Separated the previous M-603-4, Corrugated Polyethylene Pipe (AASHTO M252) and Corrugated Polypropylene Pipe (AASHTO M330) sheet into 2 separate sheets. Revised the Legend and Gen. Notes. Deleted the "Construction Minimum Cover for Pipe" detail and incorporated its dimensions in to the tables and Installation of Pipes details.
Last Modification Date: 03/07/22	(R-X)		
Detailer Initials: LTA	(R-X)		
CAD Ver.: MicroStation V8 Scale: Not to Scale Units: English	(R-X)		

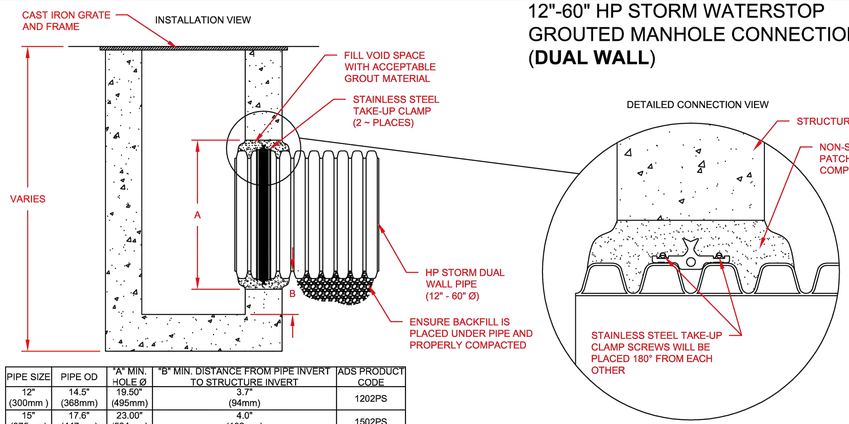
Colorado Department of Transportation
2829 West Howard Place
CDOT HQ, 3rd Floor
Denver, CO 80204
Phone: 303-757-9021 FAX: 303-757-9868
Construction Engineering Services JBK

CORRUGATED POLYPROPYLENE PIPE (AASHTO M330)

Issued by the Project Development Branch: July 31, 2019

STANDARD PLAN NO. M-603-4
Standard Sheet No. 2 of 2
Project Sheet Number:

12"-60" HP STORM WATERSTOP GROUTED MANHOLE CONNECTION (DUAL WALL)



PIPE SIZE	PIPE OD	"A" MIN. HOLE Ø	"B" MIN. DISTANCE FROM PIPE INVERT TO STRUCTURE INVERT	ADS PRODUCT CODE
12" (300mm)	14.5" (368mm)	19.50" (495mm)	3.7" (94mm)	1202PS
15" (375mm)	17.6" (447mm)	23.00" (584mm)	4.0" (102mm)	1502PS
18" (450mm)	21.2" (538mm)	26.50" (673mm)	4.2" (107mm)	1802PS
21" (525mm)	24.8" (630mm)	30.25" (768mm)	4.5" (114mm)	2102PS
24" (600mm)	27.8" (706mm)	33.25" (845mm)	4.5" (114mm)	2402PS
30" (750mm)	35.1" (892mm)	40.50" (1029mm)	5.2" (132mm)	3002PS
36" (900mm)	41.1" (1044mm)	47.00" (1194mm)	5.5" (140mm)	3602PS
42" (1050mm)	47.7" (1212mm)	53.00" (1346mm)	5.7" (145mm)	4202PS
48" (1200mm)	53.6" (1361mm)	59.00" (1499mm)	5.7" (145mm)	4802PS
60" (1500mm)	66.3" (1684mm)	72.00" (1829mm)	6.4" (163mm)	6002PS

NOTES:

PERFORMANCE HIGHLY DEPENDENT ON INSTALLATION. CONTRACTOR MUST ENSURE MANHOLE GASKET IS UNIFORMLY SEATED AROUND STRUCTURE ADAPTER. EXTRA PRECAUTIONS MUST BE TAKEN TO PREVENT DIFFERENTIAL SETTLEMENT BETWEEN THE PIPE AND MANHOLE.

INSTALLATION RECOMMENDATIONS ARE ALSO SPECIFIED IN INSTALLATION GUIDE 1.05: WATERSTOP INSTALLATION

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ADVANCED DRAINAGE SYSTEMS, INC. ("ADS") HAS PREPARED THIS DETAIL BASED ON INFORMATION PROVIDED TO ADS. THIS DRAWING IS INTENDED TO DEPICT THE COMPONENTS AS REQUESTED. ADS HAS NOT PERFORMED ANY ENGINEERING OR DESIGN SERVICES FOR THIS PROJECT, NOR HAS ADS INDEPENDENTLY VERIFIED THE INFORMATION SUPPLIED. THE INSTALLATION DETAILS PROVIDED HEREIN ARE GENERAL RECOMMENDATIONS AND ARE NOT SPECIFIC FOR THIS PROJECT. THE DESIGN ENGINEER SHALL REVIEW THESE DETAILS PRIOR TO CONSTRUCTION. IT IS THE DESIGN ENGINEERS RESPONSIBILITY TO ENSURE THE DETAILS PROVIDED HEREIN MEETS OR EXCEEDS THE APPLICABLE NATIONAL, STATE, OR LOCAL REQUIREMENTS AND TO ENSURE THAT THE DETAILS PROVIDED HEREIN ARE ACCEPTABLE FOR THIS PROJECT.

REV.	DESCRIPTION	BY	MM/DD/YY	CHK'D
3	ADDED METRIC UNITS AND RENAMED	TJR	01/30/16	

12"-60" HP STORM MH GROUTED WATERSTOP

DRAWING NUMBER: STD-206A

ADS Advanced Drainage Systems, Inc. 4640 TRUEMAN BLVD HILLIARD, OHIO 43026

DRAWN BY: JAB
DATE: 4/3/09
DATE REV:
SCALE: NTS
SHEET: 1 OF 1

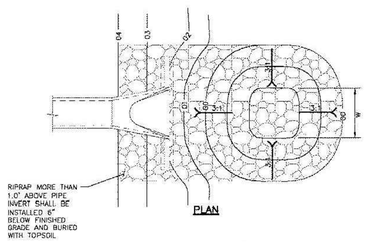
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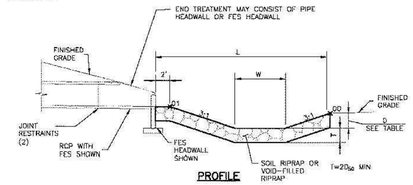
No.	Rev. Date:	
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Designed: TBS
Prepared: PAV
Approved: DKH

Job No.: 1084-0006
Scale Horiz: N/A
Scale Vert: N/A
Sheet: 48 of 49
Date: February 20, 2026



PLAN

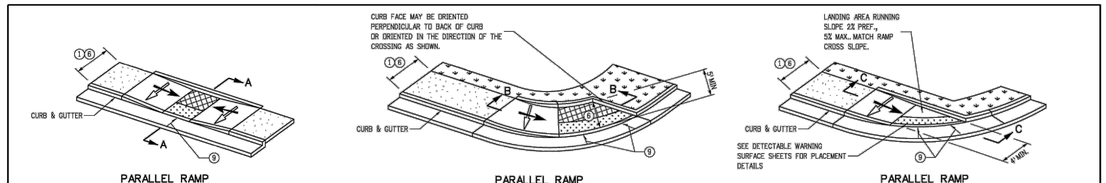


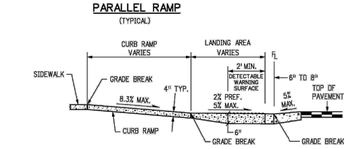
PROFILE

PIPE SIZE OR BOX HEIGHT	D	W*	L
18" - 24"	1'-0"	4'	15'
30" - 36"	1'-6"	6'	20'
42" - 48"	2'-0"	7'	24'
54" - 60"	2'-6"	8'	28'
66" - 72"	3'-0"	9'	32'

* IF OUTLET PIPE IS A BOX CULVERT WITH A WIDTH GREATER THAN W, THEN W = CULVERT WIDTH

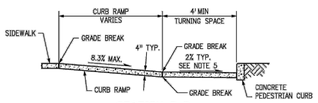
Figure 9-37. Low tailwater riprap basin



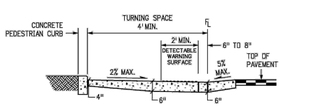


SECTION C-C

SIDEWALK TO SHOULDER TRANSITION



SECTION B-B



SECTION A-A

SIDEWALK

TURNING SPACE ④ ⑤ ⑥

DETECTABLE WARNING SURFACE (DWS)

PARALLEL RAMP NOTES

① RAMP WIDTH - PROVIDE A RAMP WIDTH EQUAL TO THE ADJOINING SIDEWALK, PROVIDE 4 FT. WIDTH MINIMUM. RAMPS SERVICING SHARED USE PATHS SHALL MATCH THE WIDTH OF THE PATH.

② RAMP RUNNING SLOPE - 8.3% MAX.

③ RAMP CROSS SLOPE - 2.0% MAX.

④ TURNING SPACE RUNNING SLOPE - 2.0% MAX. TURNING SPACE RUNNING SLOPE IS MEASURED PERPENDICULAR TO THE BACK OF CURB.

⑤ TURNING SPACE CROSS SLOPE - 2.0% TYPICAL, AT CROSSINGS WITHOUT YIELD OR STOP CONTROL, OR WITH A SIGNAL WHERE VEHICLES CAN PROCEED THROUGH THE INTERSECTION WITHOUT SLOWING OR STOPPING, THE CROSS SLOPE OF THE TURNING SPACE MAY EQUAL THE HIGHWAY GRADE. AT MIDBLOCK PEDESTRIAN STREET CROSSINGS THE TURNING SPACE CROSS SLOPE MAY EQUAL THE HIGHWAY GRADE. TURNING SPACE CROSS SLOPE IS MEASURED IN THE DIRECTION OF THE RAMP RUN.

⑥ TURNING SPACE DIMENSIONS - PROVIDE A TURNING SPACE AT THE BOTTOM OF PARALLEL RAMPS WITH A WIDTH EQUAL TO THE WIDTH OF THE CURB RAMP. PROVIDE 4 FT. MINIMUM, MEASURED IN THE DIRECTION OF THE RAMP RUN. IF THE TURNING SPACE IS CONSTRAINED ON TWO SIDES, PROVIDE 5 FT. MEASURED IN THE DIRECTION OF PEDESTRIAN STREET CROSSING. THE TURNING SPACE MAY CONTAIN THE DETECTABLE WARNING SURFACE.

⑦ RAMP ALIGNMENT - RAMPS SHALL BE ALIGNED SO THE TURNING SPACE IS FULLY CONTAINED WITHIN THE CROSSWALK OR STREET CROSSING THEY SERVE. PROVIDE ONE RAMP FOR EACH STREET CROSSING DIRECTION. IN ALTERATIONS, WHERE EXISTING PHYSICAL CONSTRAINTS PREVENT PROVIDING ONE CURB RAMP FOR EACH CROSSING DIRECTION, A SINGLE DIAGONAL CURB RAMP ON THE APEX OF A CORNER) SHALL BE PERMITTED TO SERVE BOTH PEDESTRIAN STREET CROSSINGS. DIAGONAL RAMPS ARE NOT ACCEPTABLE IN NEW CONSTRUCTION, OR FULL-DEPTH RECONSTRUCTION.

⑧ RAMP LENGTH - PARALLEL RAMP LENGTH IS DEPENDENT UPON THE RAMP SLOPE AND THE CHANGE OF ELEVATION FROM THE TURNING SPACE TO THE SIDEWALK. WHERE TERRAIN IS SLOPING A RAMP IS NOT REQUIRED TO CHASE GRADE MORE THAN 15 FT. REGARDLESS OF THE RESULTING RAMP SLOPE.

⑨ GUTTER COUNTER SLOPE - 5.0% MAX.

TYPE 2 PARALLEL CURB RAMPS

Computer File Information		Sheet Revisions	
Creation Date: 07/31/19		Date:	Comments
Designer Initials: JBK	(R-X)		
Last Modification Date: 07/31/19	(R-X)		
Detailer Initials: LTA	(R-X)		
CAD Ver.: MicroStation V8 Scale: Not to Scale Units: English	(R-X)		

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Denver, CO 80204
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Project Development Branch JBK

CURB RAMPS

Issued by the Project Development Branch: July 31, 2019

STANDARD PLAN NO. M-608-1
Standard Sheet No. 4 of 10
Project Sheet Number:

Proj. Name: Ramblewood Filing No. 1
Location: Douglas County, Colorado
Plan Set: Street & Storm Sewer Construction Plans
Sheet Name: Detail Sheet

NOT FOR CONSTRUCTION

Know what's below. Call before you dig.

No. 48

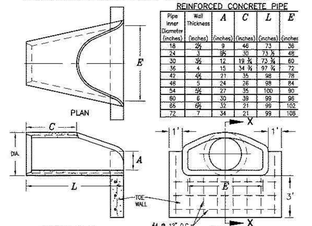
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GENERAL NOTES

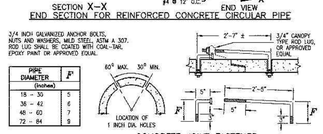
1. DIMENSIONS OF END SECTIONS MAY VARY SLIGHTLY FROM THOSE SHOWN ON THE TABLES DUE TO DIFFERENT MANUFACTURER'S VARIATIONS.
2. CONCRETE END SECTIONS ARE TO BE FURNISHED WITH TONGUE OR GROOVE AS REQUIRED.
3. DESIGN LENGTH OF CULVERT OR SIDE DRAIN IS BASED ON LENGTH OF END SECTION SHOWN IN TABLE. ANY ADDITIONAL PIPE REQUIRED TO PROVIDE THE DESIGN LENGTH SHALL BE FURNISHED BY AND AT THE EXPENSE OF THE CONTRACTOR.
4. INSIDE CONFIGURATION AND JOINT OF CONCRETE END SECTION END PIPE SHALL MATCH.
5. END SECTIONS FOR CMP ARCH CULVERT SHALL MATCH THE DIMENSIONS OF THE CULVERT SHOWN ON THE PLANS.
6. GALVANIZED TOE PLATE AS SHOWN, WILL BE REQUIRED ON END SECTIONS FOR CORRUGATED STEEL PIPE AND SHALL BE THE SAME THICKNESS AS END SECTIONS. TOE PLATE SHALL BE FIELD-BOLTED TO END SECTION WITH (8) GALVANIZED BOLTS, NUTS AND WASHERS.
7. GALVANIZED STEEL SHALL BE IN CONFORMANCE WITH AASHTO M 111, M 218 OR M 232.
8. FOR TYPE SD END SECTIONS, BARS SHALL BE FABRICATED FROM NPS-3 GALVANIZED STEEL SCHEDULE 40 PIPE WHICH SHALL BE IN CONFORMANCE WITH ASTM A 53.
9. FOR A TYPE SD END SECTION, THE INSTALLATION OF ALTERNATIVE 1 OR ALTERNATIVE 2 END SECTION SHALL BE THE CONTRACTOR'S OPTION.
10. CONCRETE PIPE JOINT FASTENERS SHALL BE INSTALLED AT THE FLARED END SECTION AND LAST TWO PIPE JOINTS OF ALL RCP OUTFALLS.
11. CONNECTIONS OF METAL END SECTIONS TO PLASTIC PIPE SHALL BE APPROVED BY THE ENGINEER.
12. CLASS D CONCRETE TOE WALLS ARE REQUIRED AT THE ENDS OF ALL FLARED END SECTIONS.

REINFORCED CONCRETE PIPE

Pipe Inner Diameter (Inches)	Wall Thickness (Inches)	A (Inches)	C (Inches)	L (Inches)	E (Inches)
18	2½	9	46	73	26
24	3	12	35	73 ½	35
30	3½	12	19 ½	73 ½	60
36	4	15	34 ½	97 ½	72
42	4½	21	35	98	78
48	5	24	16	98	84
54	5½	27	35	100	90
60	6	30	33	99	96
66	6½	33	21	99	102
72	7	34	21	99	108



SECTION X–X
END SECTION FOR REINFORCED CONCRETE CIRCULAR PIPE



PIPE DIAMETER (Inches)	F (Inches)
18 – 30	5
36 – 42	6
48 – 60	7
72 – 84	9

3/4 INCH GALVANIZED ANCHOR BOLTS, NUTS AND WASHERS, MILD STEEL, ASTM A 307. ROD LUG SHALL BE COATED WITH CORE-TAR, EPOXY PAINT OR APPROVED EQUAL

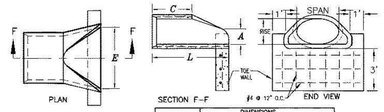
CONCRETE JOINT FASTENER (TWO PER JOINT)

REFERENCE: CDOT M & S STANDARDS M-603-10

CONCRETE OR METAL END SECTIONS

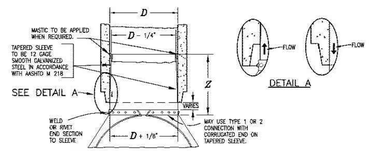
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Issued: 05/2013
Revised:
Drawing No. **SP.52a**



EQUIVALENT CIRCULAR DIA.	NOMINAL SPAN x RISE (Inches)	A (Inches)	C (Inches)	L (Inches)	E (Inches)
24	30 x 19	19	9	33	72	48
30	38 x 24	24	10	18	73	60
36	43 x 27	29	12	24	84	72
42	53 x 34	34	16	36	96	78
48	60 x 38	38	21	36	96	84
54	68 x 43	43	26	36	96	90
60	76 x 48	48	30	36	96	96

END SECTION FOR REINFORCED CONCRETE ELLIPTICAL PIPE



D (INCHES)	Z (MIN.)
18 – 24	12
30 & 36	16
42 & LARGER	24

NOTE: METAL END SECTION TO BE FIRMLY WEDGED INTO PIPE END BEFORE BACKFILLING

STEEL END SECTION FOR CONCRETE PIPE
(ALTERNATIVE FOR CONCRETE END SECTION)

REFERENCE: CDOT M & S STANDARDS M-603-10

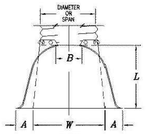
CONCRETE OR METAL END SECTIONS

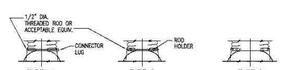
DOUGLAS COUNTY COLORADO

Issued: 05/2013
Revised:
Drawing No. **SP.52b**

THIN-WALL ROUND PIPE

PIPE DIA.	THICKNESS	DIMENSIONS A (Inches)	B (Inches)	H (Inches)	L (Inches)	W (Inches)	T (Inches)
15	0.064	6	6	6	21	24	34
18	0.064	8	10	6	31	36	46
21	0.064	9	12	6	36	42	52
24	0.064	10	13	6	41	48	58
30	0.079	12	16	8	51	60	70
36	0.079	14	19	9	60	72	94
42	0.109	16	22	11	69	84	106
48	0.109	18	27	12	78	96	112
54	0.109	18	30	12	84	102	124
60	0.109	18	33	12	87	114	136
66	0.109	18	36	12	87	120	142
72	0.109	18	39	12	87	126	148
78	0.109	18	42	12	87	132	154
84	0.109	18	45	12	87	138	160



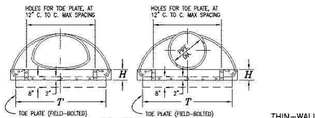


FOR 18 IN. THRU 24 IN. ROUND PIPE WITH ANNULAR CORRUGATIONS. NOT TO BE USED ON HELICALLY-FORMED PIPE UNLESS RECORRUGATED.

FOR 30 IN. THRU 36 IN. ROUND PIPE WITH ANNULAR CORRUGATIONS. NOT TO BE USED ON HELICALLY-FORMED PIPE UNLESS RECORRUGATED.

FOR 42 IN.THRU 84 IN. ROUND PIPE WITH ANNULAR CORRUGATIONS AND ALL SIZES WITH HELICAL CORRUGATIONS AND FOR ALL METAL PIPE ARCH CULVERTS. SHOP ATTACH A 24 IN. MIN. LENGTH OF ANNULAR PIPE WITH GALV. RIVETS OR BOLTS, SPOT WELDS, OR 2 IN. LONG SKIP WELDS ON 8 IN. CTRS. REPAIR BURNT GALV. PER SPEC.

TYPICAL CONNECTIONS



THIN-WALL PIPE ARCH

PIPE ARCH SPAN x RISE	THICKNESS	DIMENSIONS A (Inches)	B (Max.) (Inches)	H (1"±) (Inches)	L (1.5"±) (Inches)	W (2"±) (Inches)	T (Inches)
21 x 15	0.064	7	10	6	23	36	46
24 x 18	0.064	8	12	6	28	42	52
28 x 20	0.064	9	14	6	32	48	58
35 x 24	0.079	10	18	8	39	60	70
42 x 29	0.079	12	18	8	46	75	85
49 x 33	0.109	13	21	9	53	85	103
57 x 38	0.109	18	26	12	63	90	108
64 x 43	0.109	18	30	12	70	102	120
71 x 47	0.109	18	33	12	77	114	132

END SECTION AND CONNECTION DETAILS FOR ROUND AND ARCH CORRUGATED METAL PIPE CULVERTS

REFERENCE: CDOT M & S STANDARDS M-603-10

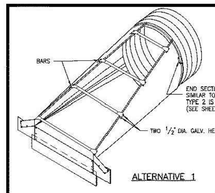
CONCRETE OR METAL END SECTIONS

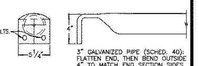
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Issued: 05/2013
Revised:
Drawing No. **SP.52c**

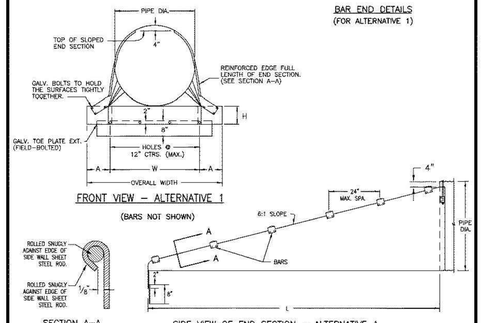
END SECTIONS FOR CIRCULAR PIPES

PIPE DIA. (in.)	MIN. THICK (in.)	DIMENSION (INCHES) A	H	W	OVERALL WIDTH	SLOPE	LENGTH L
15	.064	8	6	21	37	6:1	30
18	.064	8	6	24	40	6:1	48
21	.064	8	6	27	43	6:1	66
24	.079	8	6	30	46	6:1	84
30	.079	12	9	36	60	6:1	120
36	.109	12	9	42	66	6:1	156





BAR END DETAILS
(FOR ALTERNATIVE 1)



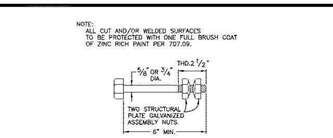
TYPE SD END SECTIONS FOR SIDE DRAIN

REFERENCE: CDOT M & S STANDARDS M-603-10

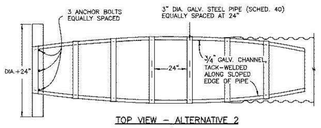
CONCRETE OR METAL END SECTIONS

DOUGLAS COUNTY COLORADO

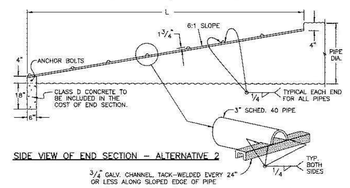
Issued: 05/2013
Revised:
Drawing No. **SP.52d**



TYPICAL ANCHOR BOLT
(GALVANIZED)



TOP VIEW – ALTERNATIVE 2



SIDE VIEW OF END SECTION – ALTERNATIVE 2

BAR END DETAIL
(FOR ALTERNATIVE 2)

TYPE SD END SECTIONS FOR SIDE DRAIN

REFERENCE: CDOT M & S STANDARDS M-603-10

CONCRETE OR METAL END SECTIONS

DOUGLAS COUNTY COLORADO

Issued: 05/2013
Revised:
Drawing No. **SP.52e**

LJA
1765 W. 121st Avenue
Suite 300
Westminster, CO 80234
303-421-4224 • www.lja.com

No.	Rev. Date:	Revision Type:
1		
2		
3		
4		
5		
6		

Designed: TBS
Prepared: PAV
Approved: DKH

Job No.: 1084-0006
Scale Horiz: N/A
Scale Vert: N/A

Sheet: 49 of 49
Date: February 20, 2026

Proj. Name: Ramblewood Filing No. 1
Location: Douglas County, Colorado
Plan Set: Street & Storm Sewer Construction Plans
Sheet Name: Detail Sheet

NOT FOR CONSTRUCTION

Know what's below. Call before you dig.

No. 49

I:\JOB FOLDERS\1084\1084-0006\CIVIL\PROD\CD - STR-STM\M-DETAILS PRINTED ON: 2/19/2026 6:33 PM

DOUGLAS COUNTY
COLORADO

Department of Community Development
Planning Services

www.douglas.co.us

REFERRAL RESPONSE REQUEST

Date sent: March 18, 2026 Comments due by: **April 15, 2026**

Project Name:	Ramblewood – Final Plat
Project File #:	SB2026-009
Project Summary:	Request for a final plat consisting of 68 single-family residential lots, 2 agricultural lots, and 9 tracts.

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:
Please note PWSD will require this project to be included in the Parker Water & Sanitation district prior to any reviews being completed.

☐ See letter attached for detail.

Agency: Parker Water & Sanitation	**Phone #: 720-842-4260**
Your Name: Robert Ramsey	**Your Signature: R Ramsey**
(please print)	**Date: 04/14/2026**

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, may result in written comments being accepted for informational purposes only.

Sincerely,

Trevor Bedford, AICP, Senior Planner
tbedford@douglas.co.us

SOUTH METRO FIRE RESCUE
FIRE MARSHAL'S OFFICE

Trevor Bedford, AICP, Senior Planner
Douglas County Department of Community Development, Planning Services
100 Third St
Castle Rock Co 80104
303.660.7460
303.660.9550 Fax

Project Name:	Ramblewood – Final Plat
Project File #:	**SB2026-009**
S Metro Review #	REFFP26-00066
Review date:	March 25, 2026
Plan reviewer:	Aaron Miller 720.989.2246 aaron.miller@southmetro.org
Project Summary:	Request for a final plat consisting of 68 single-family residential lots, 2 agricultural lots, and 9 tracts.
Code Reference:	Douglas County Fire Code, 2018 International Fire Code, and 2021 International Building Code with amendments as adopted by Douglas County.

South Metro Fire Rescue (SMFR) has reviewed the provided documents and has no objection to the proposed final plat.

Applicants and Contractors are encouraged to contact SMFR regarding the applicable permit requirements for the proposed project.

REFERRAL RESPONSE REQUEST

Date sent: March 18, 2026 Comments due by: **April 15, 2026**

Project Name:	Ramblewood – Final Plat
Project File #:	SB2026-009
Project Summary:	Request for a final plat consisting of 68 single-family residential lots, 2 agricultural lots, and 9 tracts.

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: The Pinery Homeowners' Association		**Phone #:** 303-841-8572
Your Name Sonia Eyre *(please print)*		**Your Signature:** Sonia Eyre **Date:** 4/15/2026

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, may result in written comments being accepted for informational purposes only.

Sincerely,

Trevor Bedford, AICP, Senior Planner
tbedford@douglas.co.us

Right of Way & Permits

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

April 6, 2026

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

Attn: Trevor Bedford

Re: Ramblewood - Final Plat, Case # SB2026-009

Public Service Company of Colorado's (PSCo) Right of Way and Permits Referral Desk has reviewed the Final Plat for Ramblewood. As always, thank you for the opportunity to take part in the review process.

The property owner/developer/contractor must complete the application process for any new natural gas service via Building and Remodeling | Partner Resources | Xcel Energy. It is then the responsibility of the developer to contact the Xcel Designer assigned to the project for approval of design details.

Additional easements may need to be acquired by separate document. The Designer must contact the appropriate Right-of-Way Agent.

As a safety precaution, PSCo would like to remind the developer to contact Colorado 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

Although "branded" as Xcel Energy, the legal owner and operator of the utility facilities in Colorado is Public Service Company of Colorado. All utility facilities and related land rights, including fee property, easements, permits, etc., are owned by, operated by and held in the name of Public Service Company of Colorado, a Colorado Corporation.

NORRIS DESIGN
PEOPLE + PLACEMAKING
1101 Bannock Street
Denver, Colorado 80204
303.892.1166

April 24, 2026

Trevor Bedford
Department of Community Development
100 Third Street
Castle Rock, CO 80104

Re: Referral Review of Ramblewood Final Plat (SB2026-009)

Dear Mr. Bedford,

Thank you for your comments for the second Submittal review of a Final Plat application for the property known as Ramblewood. We are pleased to make our third submittal for the Final Plat, addressing the comments provided by the County prior to the Referral process. Please see below for the responses provided to all written County comments.

We look forward to continuing to work with the County during the review and approval process for this application. Please contact us if you have any questions or if you need additional information.

Sincerely,
Norris Design

Sarah Tengen

Sarah Tengen
Project Manager

NORRIS DESIGN
PEOPLE + PLACEMAKING
1101 Bannock Street
Denver, Colorado 80204
303.892.1166

GENERAL

- Tracts may only be used to identify areas to be dedicated for parks, schools, utilities, or landscape, and not for residential or nonresidential buildings other than park facilities or schools. As such, tracts must be dedicated to a public entity. See attached email from Jeanette Bare for further information regarding Tract A and Tract C.
  Response: Noted. The land described as Tract A has been incorporated in Lot 69 per discussion with the County. The previous Tract C will be used as the Director's parcel and will remain under the ownership of the "Owner" for plat recordation after which it will be transferred to the appropriate entity by separate document.

- Our water review will be delayed until we receive required documentation including evidence of inclusion into the district. Please ensure there is time to adequately review all necessary information prior to the Board's consideration of the final plat.
  Response: Noted. The project team is currently working with Parker Water & Sanitation District on the inclusion process and will ensure that there is adequate time to review the necessary information prior to the Board's consideration of the final plat.

- The provided appraisal is being evaluated by our appraiser.
  Response: Noted, thank you for your review.

- Douglas County Historic Preservation will review the Class II Cultural Resources Survey when received. Please send directly to Brittany Cassel at bcassell@douglas.co.us and copy me.
  Response: Noted. The project team will send the Class II Cultural Resources Survey to Brittany Cassel. Thank you for your review.

- A Location and Extent for offsite sewer improvements will be required prior to the Board's consideration of the final plat.
  Response: Noted. The project team is currently working through the Location and Extent application for offsite sewer improvements. The applicant is currently working with the Pinery Water & Sanitation District to determine the requirements and improvements. Once PWSD and PWWD have reviewed the associated construction documents to confirm general alignment and infrastructure requirements, the formal submittal of the L&E application will commence.

EXHIBIT

- See marked up exhibit.
  Response: The Final Plat exhibit has been revised per the mark ups received.

- Title block shows 8 tracts, there appear to be 9 tracts. Please correct the discrepancy.
  Response: The title block reflects 8 tracts, now accurate after the land previously defined as Tract A has been incorporated into Lot 69.

- Ensure owners signing in the dedication statement will be the property owners at the time of recordation. Currently, MU Hilltop and Ramblewood Metro District are listed.
  Response: Noted, thank you.

ADDRESSING ANALYST

- No comment. No action necessary.
  Response: Noted, thank you for your review.

ASSESSOR

- Please make sure ownership blocks match actual ownership. Current Owners for R0622871 is BRADLEY A WHITTLESEY & JOAN V WHITTLESEY and Owners for R0620578 is Hilltop Jam LLC please make sure appropriate ownership blocks match ownership at time of recording.
  Response: Ownership blocks have been revised to reflect correct ownership.

- Ramblewood Metro District does not need to sign as owner unless they own one of the parent parcels.
  Response: Noted. The Ramblewood Metropolitan District is now only referenced under the Acceptance Certificate.

- Notes 8 and 9 are not valid we are unable to dedicate ownership to a private entity via a plat. This ownership will need to be conveyed via a separate deed.
  Response: These notes have been revised. The Director's parcel will be retained by the Owner and will be transferred via separate document following recordation of the plat.

- Note 10 Tract C is not listed as being dedicated to Ramblewood Metro District but the plat table does list ownership being Ramblewood metro district.
  Response: This note has been revised per comment above. This note is now Note #9 and is now Tract D instead of Tract C.

- Portions of Lots 55,65,66 may be in mixed ownership due to overlapping multiple parent parcels with different owners. Lots in the NE ¼ would have a different owner than lots in the SE ¼ due to current ownership.
  Response: Acknowledged. We do not anticipate this being an issue.

AT&T LONG DISTANCE - ROW

- No response received. No action necessary.
  Response: Noted.

BUILDING SERVICES

- No comment. No action necessary.
  Response: Noted, thank you for your review.

CENTURYLINK

- No response received. No action necessary.
  Response: Noted.

CHERRY CREEK BASIN WATER QUALITY AUTHORITY

- The Cherry Creek Basin Water Quality Authority (Authority) acknowledges notification from Douglas County that the proposed development plans for SB2026-009, Ramblewood Final Plat have been or will be reviewed by Douglas County for compliance with the applicable Regulation 72 construction and post-construction requirements. Based on the Authority's current policy, the Authority will no longer routinely conduct a technical review and instead the Authority will defer to Douglas County's review and ultimate determination that the proposed development plans comply with Regulation 72.
- If a technical review of the proposed development plan is needed, please contact LandUseReferral@ccbwqa.org. The review may include consultation with the Authority's Technical Manager to address specific questions or to conduct a more detailed Land Use Review, if warranted
  Response: Noted, thank you.

COLORADO DIVISION OF WATER RESOURCES

- We have reviewed the documentation from Referral SB2026-009 relating to the Final Plat for Ramblewood Subdivision. Based on our review, there have been no changes to the demands or proposed water supply source for the Ramblewood Subdivision.

  Attached are letters dated April 8, 2025 and May 12, 2025 that were previously sent by our office during the review of ZR2024-031.

  The May 12, 2025 letter provided an opinion that the water supply for the subdivision is adequate and can be provided without causing injury to decreed water rights, so long as the District is committed to serving the lots.
  Response: Acknowledged, thank you for your review.

COLORADO GEOLOGICAL SURVEY

- I find no response or acknowledgement among the Ramblewood final plat referral documents to the Colorado Geological Survey's SB2025-040 preliminary plan review comments, so our 12/8/2025 advisory comments remain valid:

  No unusual geologic conditions or geotechnical constraints are present within the proposed Ramblewood subdivision area (approximate location 39.4674, -104.7087) that would preclude the proposed residential use and density. CGS therefore has no objection to approval of the Ramblewood plat.

  AGW's Geotechnical Due Diligence Study, Hilltop 177, Douglas County, Colorado (AGW Project No. 245004, October 9, 2024) contains a valid preliminary characterization of subsurface conditions and makes appropriate preliminary recommendations for mitigating, through overexcavation and replacement as a properly placed and compacted structural fill, the site's expansive soils and shallow, expansive claystone bedrock. CGS agrees (page 4) that "overexcavation depths between 10 and 12 feet below lowest foundation elevation should be expected."

  -- Jill Carlson, Engineering geologist, Colorado Geological Survey, carlson@mines.edu
  Response: Acknowledged. A more detailed Geotechnical Study is expected to be prepared as part of the development phase of the project, with specific over-excavation recommendations and other construction-level recommendations. No additional action is necessary at this time.

COMCAST

- No response received. No action necessary.
  Response: Noted.

CORE ELECTRIC COOPERATIVE

- CORE Electric Cooperative approves the plat. CORE will require the following language be added to the plat notes.

  No improvements that conflict with or interfere with construction, maintenance or access to utilities shall be placed within the utility easements. Prohibited improvements include, but are not limited to, permanent structures, buildings, counter-forts, decks, attached porches, attached stairs, window wells, air conditioning units, retaining walls/components and other objects that may interfere with the utility facilities or access, use and maintenance thereof.
  Response: Acknowledged. This note has been added as Note 11.

DOUGLAS COUNTY HEALTH DEPARTMENT

- Based the narrative letter, DCHD is providing a favorable recommendation regarding the proposed method of sewage disposal via Ramblewood Metro District/Inclusion Agreement with the Parker Water and Sanitation District.
  Response: Acknowledged, thank you for your review.

DOUGLAS COUNTY HISTORIC PRESERVATION

- At this time the Curator has no further recommendations. If there are future development plans that involve any ground disturbance a Class II survey will need to be conducted to evaluate for cultural resources before any disturbance occurs. A Class I file search does not fulfill a cultural survey. A walking pedestrian survey would be recommended before any ground disturbance.

  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.
  Response: Acknowledged. A Class II Walking Pedestrian Survey will be provided prior to any ground disturbing activities and is expected to be completed and ready for review by the first week of May. Upon completion, the applicant will follow up directly with Douglas County Historic Preservation with this Survey to resolve this comment.

DOUGLAS COUNTY PARKS AND TRAILS

- Applicant would be responsible for meeting parkland dedication as outlined in Article 10 of the Douglas County Subdivision Resolution.
  Response: Acknowledged, thank you for your review.

DOUGLAS COUNTY SCHOOL DISTRICT RE 1

- DCSD has calculated the amount of school site land requirement for students generated by the

proposed planned development. A total of 67 students are expected from the development (as proposed) generating a land dedication requirement of 1.579-acres. Since this is smaller than DCSD's minimum school site size and since the applicant has stated in their project summary that cash-in-lieu of land dedication will be paid at final plat, DCSD requests cash-in-lieu of land dedication.

As per Article 1004.05.3 of the Douglas County Subdivision Regulations, "The cash-in-lieu fee shall be equivalent to the full market value of the acreage required for school land dedication. Value shall be based on anticipated market value after completion of platting. The applicant shall submit a proposal for the cash-in-lieu fee and supply the information necessary for the Board to evaluate the adequacy of the proposal. This information shall include at least one appraisal of the property by a qualified appraiser." And as per Article 1004.06, "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…."

The applicant has provided DCSD with an appraisal of the property. The appraisal was conducted by JRES and is dated January 30, 2026. The report appraised the ~176.7941-acre property proposed for development at $7,060,000. This equates to a per acre value of $39,933. Based on the calculated school land dedication requirement of 1.579 acres the required cash in lieu of land dedication fee is $63,054.

Assuming neither the applicant nor Douglas County object to these fees DCSD has no objection to the proposed project. DCSD looks forward to future collaboration with the applicant and Douglas County on this proposal.
Response: Acknowledged. The applicant has no objection to these fees and looks forward to future collaboration with DCSD.

DOUGLAS COUNTY WATER COMMISSION

- No response received. No action necessary.
  Response: Noted.

DOUGLAS ENGINEERING SERVICES

- *Comment documents provided over email to applicant.*
  Response: The following PDF Response Documents are included with this resubmittal:
  - ***260424-Ramblewood-FP-Response to Signage & Striping Plan Comments-3***
  - ***260424-Ramblewood-FP-Response to Street & Storm Construction Plan Comments-3***
  - ***260424-Ramblewood-FP-Response to GESC Plan Comments-3***
  - ***260424-Ramblewood-FP-Response to Drainage Report Comments-3***
  - ***260424-Ramblewood-FP-Response to Final Plat Redlines-3***

  Responses are provided directly in the response PDF and are differentiated in color with blue boxes for engineering and green boxes for survey.

HIDDEN VILLAGE POA

- No response received. No action necessary.
  Response: Noted.

MILE HIGH FLOOD DISTRICT

- No response received. No action necessary.
  Response: Noted.

OFFICE OF EMERGENCY MANAGEMENT

- No comment. No action necessary.
  Response: Noted, thank you for your review.

PARKER WATER SANIATION DISTRICT

- Please note PWSD will require this project to be included in the Parker Water & Sanitation district prior to any reviews being completed.
  Response: Acknowledged. The applicant team is working directly with PWSD Staff to ensure all requirements are met in order to allow for full review of associated construction documents and agreements.

RURAL WATER AUTHORITY OF DOUGLAS COUNTY

- No response received. No action necessary.
  Response: Noted.

SHERIFF'S OFFICE

- No response received. No action necessary.
  Response: Noted.

SHERIFF'S OFFICE E911

- No response received. No action necessary.
  Response: Noted.

SOUTH METRO FIRE RESCUE

- South Metro Fire Rescue (SMFR) has reviewed the provided documents and has no objection to the proposed final plat. Applicants and Contractors are encouraged to contact SMFR regarding the applicable permit requirements for the proposed project.
  Response: Acknowledged. The applicant is working with Parker Water & Sanitation District to review the plans prior to submitting signed and sealed plans (required) for SMFR review. The site plan received a preliminary review from SMFR during the Preliminary Plan process and we do not anticipate issues with seeking approval of the plans once they are available for SMFR to review.

THE PINERY HOA

- No comment. Not action necessary.
  Response: Noted, thank you for your review.

TOWN OF PARKER DEVELOPMENT REVIEW

- No response received. Not action necessary.
  Response: Noted, thank you for your review.

NORRIS DESIGN
PEOPLE + PLACEMAKING
1101 Bannock Street
Denver, Colorado 80204
303.892.1166

TOWN OF PARKER PUBLIC WORKS

- No response received. Not action necessary.
  Response: Noted, thank you for your review.

WILDFIRE MITIGATION

- No response received. Not action necessary.
  Response: Noted, thank you for your review.

XCEL ENERGY-RIGHT OF WAY & PERMITS

- Public Service Company of Colorado's (PSCo) Right of Way and Permits Referral Desk has reviewed the Final Plat for Ramblewood. As always, thank you for the opportunity to take part in the review process. The property owner/developer/contractor must complete the application process for any new natural gas service via Building and Remodeling | Partner Resources | Xcel Energy. It is then the responsibility of the developer to contact the Xcel Designer assigned to the project for approval of design details. Additional easements may need to be acquired by separate document. The Designer must contact the appropriate Right-of-Way Agent. As a safety precaution, PSCo would like to remind the developer to contact Colorado 811 for utility locates prior to construction.
  Response: Noted, thank you for your review.

End of response to comments

Trevor Bedford

From: Adam Fenton <Adam@narrateholdings.com>
Sent: Friday, June 5, 2026 10:38 AM
To: BOCC
Cc: Trevor Bedford
Subject: Ramblewood - Letter of Support

Follow Up Flag: Follow up
Flag Status: Flagged

Caution: This email originated outside the organization. Be cautious with links and attachments.

Dear Commissioners:

I'm writing to encourage you to support the Ramblewood Final Plat which will come before you on June 23rd. I've greatly appreciated your willingness to support the rezoning and preliminary plat for this project as it's a great example of thoughtful development that follows closely with your Comprehensive Master Plan.

I've been supportive of this project for the following reasons:

- Miller United chose to thoughtfully cluster their lots to create significant buffers between their homes and adjacent neighbors which preserves their rural lifestyle
- The clustering of lots also means creating significant open space and minimizing grading on the property
- The project proposes to use a renewable water resource with service from Parker Water & Sanitation
- They have thoughtful setbacks from Hilltop Rd that align with the character of the area

Thanks for your time and I hope you'll support their Final Plat in a couple of weeks.

Sincerely,

Adam Fenton
Managing Partner
Narrate Holdings / Narrate Ventures

adam@narrateholdings.com
+1 720 334 1726
afent
2149 S Holly St, Denver, CO 80222
www.narrateholdings.com

SAVE CONTACT

Trevor Bedford

From: Gus Burkard <gusburkard@gmail.com>
Sent: Friday, May 29, 2026 11:29 AM
To: BOCC
Cc: Trevor Bedford
Subject: Ramblewood Final Plat – SB-2026-009

Follow Up Flag: Follow up
Flag Status: Flagged

Caution: This email originated outside the organization. Be cautious with links and attachments.

Dear Douglas County Board of County Commissioners:

My name is Gus Burkard and I am writing as an adjacent property owner to express **my continued and full support** of the proposed Ramblewood development project. I have followed this project closely and attended the developer's neighborhood meetings, and I have been genuinely impressed by the thoughtfulness that has gone into the planning process.

The decision to cluster lots, preserve open space, and avoid mass grading reflects a real respect for the land and the people who live nearby. I also want to specifically commend the move away from a lift station in favor of a gravity flow sewer system. This is exactly the kind of thoughtful, lower-impact, environmentally responsible decision making that a project like this needs to protect the natural character of the land.

This property is truly special. Hundreds of ancient Ponderosa Pines and sweeping views stretching from Longs Peak to Pikes Peak. As a neighbor, I want nothing more than to see it treated with the care it deserves, and I believe the Ramblewood project does just that.

I urge the Board to approve the Ramblewood Final Plat on June 23rd. Thank you for your time and service to our community. And thanks for listening to me ramble on at your previous hearings on this matter.

Sincerely,
Gus Burkard
6499 Village Road
Parker, CO 80134

Trevor Bedford

From: Scott G <sgoldammers@gmail.com>
Sent: Thursday, May 21, 2026 11:58 AM
To: Trevor Bedford
Cc: pw@wkccolorado.com
Subject: Ramblewood Final Plat – (SB-2026-009)

Follow Up Flag: Follow up
Flag Status: Flagged

Caution: This email originated outside the organization. Be cautious with links and attachments.

May 21, 2026

Douglas County Board of County Commissioners
c/o Trevor Bedford
Email: tbedford@douglas.co.us

RE: Ramblewood Final Plat – (SB-2026-009)

Dear Douglas County Commissioners:

This letter is in support of the Ramblewood Final Plat based on the following:

1. Meets with the zoning criteria set forth in the approved Planned Development.
2. Provides central water & sewer systems in an area that is generally served by well and septic.
3. Supports not only onsite, but also offsite wildfire mitigation with the installation of fire hydrants within the community.
4. Minimizes land disturbance based on the developer's use of clustering the homes.
5. Provides over 4 times the required open space requirements.
6. Provides 2 ranch lots containing over 80 acres within the community that provides a good mix of both semi-rural and rural agricultural uses.
7. Contributes to offsite roadway paving projects in surrounding neighborhoods.
8. Follows the Douglas County Comprehensive Master Plan's criteria for clustering homes.
9. Maintains generous wildlife corridors.

Based on these facts, I recommend the Douglas County Board of County Commissioners approve this project's Final Plat.

Thank you!

Scott Goldammer
Douglas County Resident

Trevor Bedford

From: Tommy Salaba <tommysalaba@gmail.com>
Sent: Monday, June 8, 2026 5:09 PM
To: BOCC
Cc: Trevor Bedford
Subject: Ramblewood Final Plat – SB-2026-009

Follow Up Flag: Follow up
Flag Status: Flagged

Caution: This email originated outside the organization. Be cautious with links and attachments.

Douglas County Board of County Commissioners:

My name is Tommy Salaba and I'm writing as a Douglas County resident to express my full support for the Ramblewood Final Plat that will be before you on June 23rd. I've been supportive of this project since the zoning stage given the developer's thoughtful approach to clustering lots, preserving the natural character of the site, using a renewable water source, and providing fire hydrants that will serve the greater Hidden Village community.

Ramblewood is an example of thoughtful development in the right location that follows closely with your CMP.

I hope you'll support the final approval for this project on June 23rd and help ensure this development comes to fruition. Thank you again for the time and consideration.

Sincerely,

Tommy Salaba

TRAFFIC IMPACT STUDY

For

Ramblewood
Douglas County, Colorado

October 2024
Revised May 2025

Prepared for:

MU Hilltop LLC
6900 E Belleview Avenue, Suite 300
Greenwood Village, Colorado 80111

Prepared by:

SM ROCHA, LLC
TRAFFIC AND TRANSPORTATION CONSULTANTS

8700 Turnpike Drive, Suite 240
Westminster, Colorado 80031
(303) 458-9798

6 South Tejon Street, Suite 618
Colorado Springs, Colorado 80903
(719) 203-6639

Project Manager:
Stephen Simon, EIT

Project Engineer:
Zac Trotter, EIT

Engineer in Responsible Charge:
Fred Lantz, PE



24-082230

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APPENDIX B LEVEL OF SERVICE DEFINITIONS
APPENDIX C CAPACITY WORKSHEETS
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I. Introduction

Project Overview

This traffic impact study is provided as a planning document and addresses the capacity, geometric, and control requirements associated with the development entitled Ramblewood.

This traffic impact study has been revised to address County review comments made to the October 2024 version regarding updated intersection geometry and additional long-term mitigation methods.

This proposed residential is located to the southwest of Hilltop Road, north of Alpine Drive, and east of Village Road in Douglas County, Colorado.

Study Area Boundaries

The study area to be examined in this analysis encompasses the area bounded by Hilltop Road from Village Road east to Alpine Drive, Village Road from Betts Ranch Road east to Alpine Drive, and includes proposed site accesses. Site Access Drives internal to the overall development were not included in this analysis as internal intersection operations are expected to be comparable to, or better than, those projected for Hilltop Road and Alpine Drive.

Figure 1 illustrates location of the site and study intersections.

Site Description

Land for the development is currently vacant and surrounded by residential land uses.

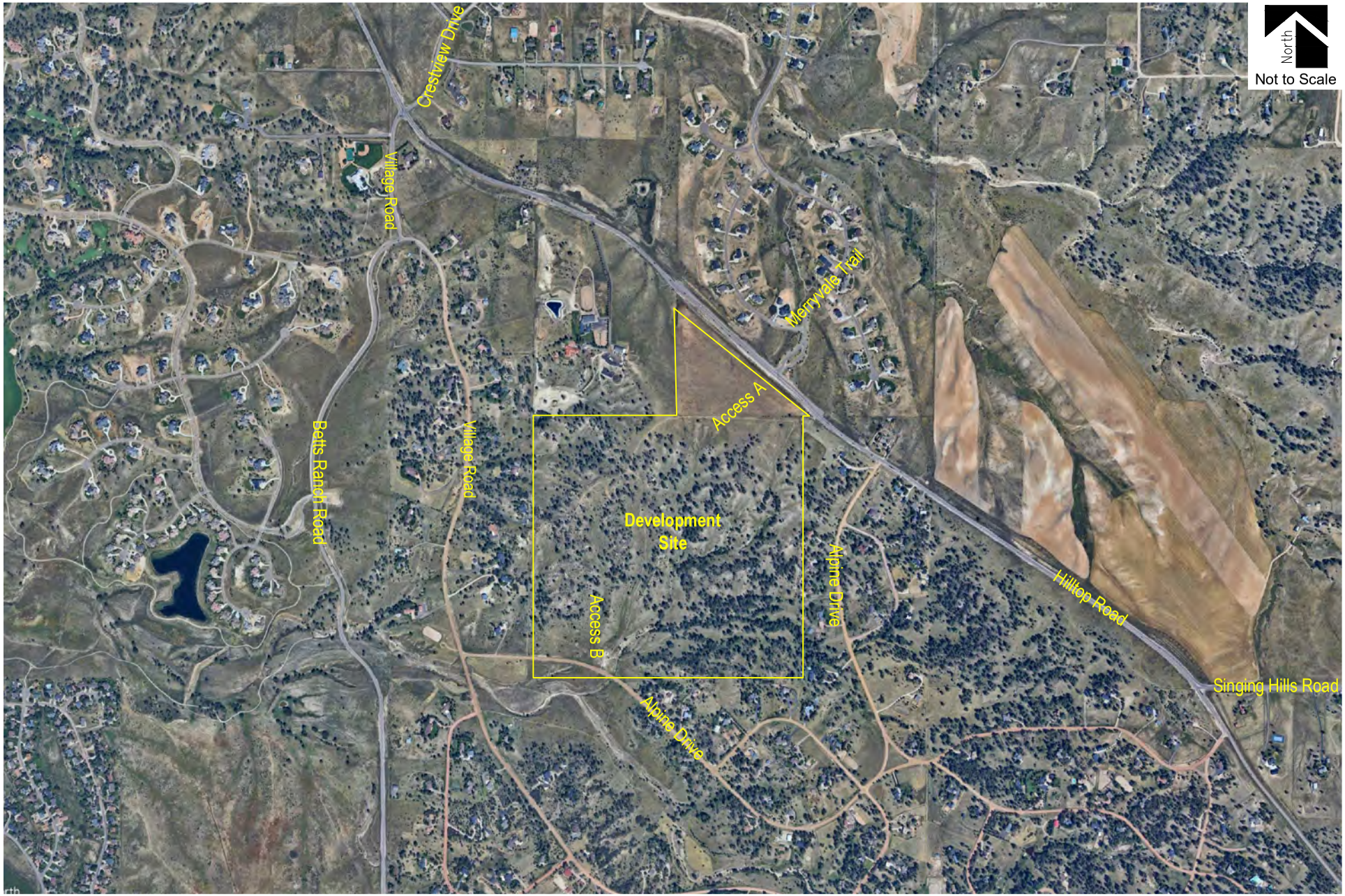
The proposed development is understood to entail the new construction of 70 single-family detached homes.

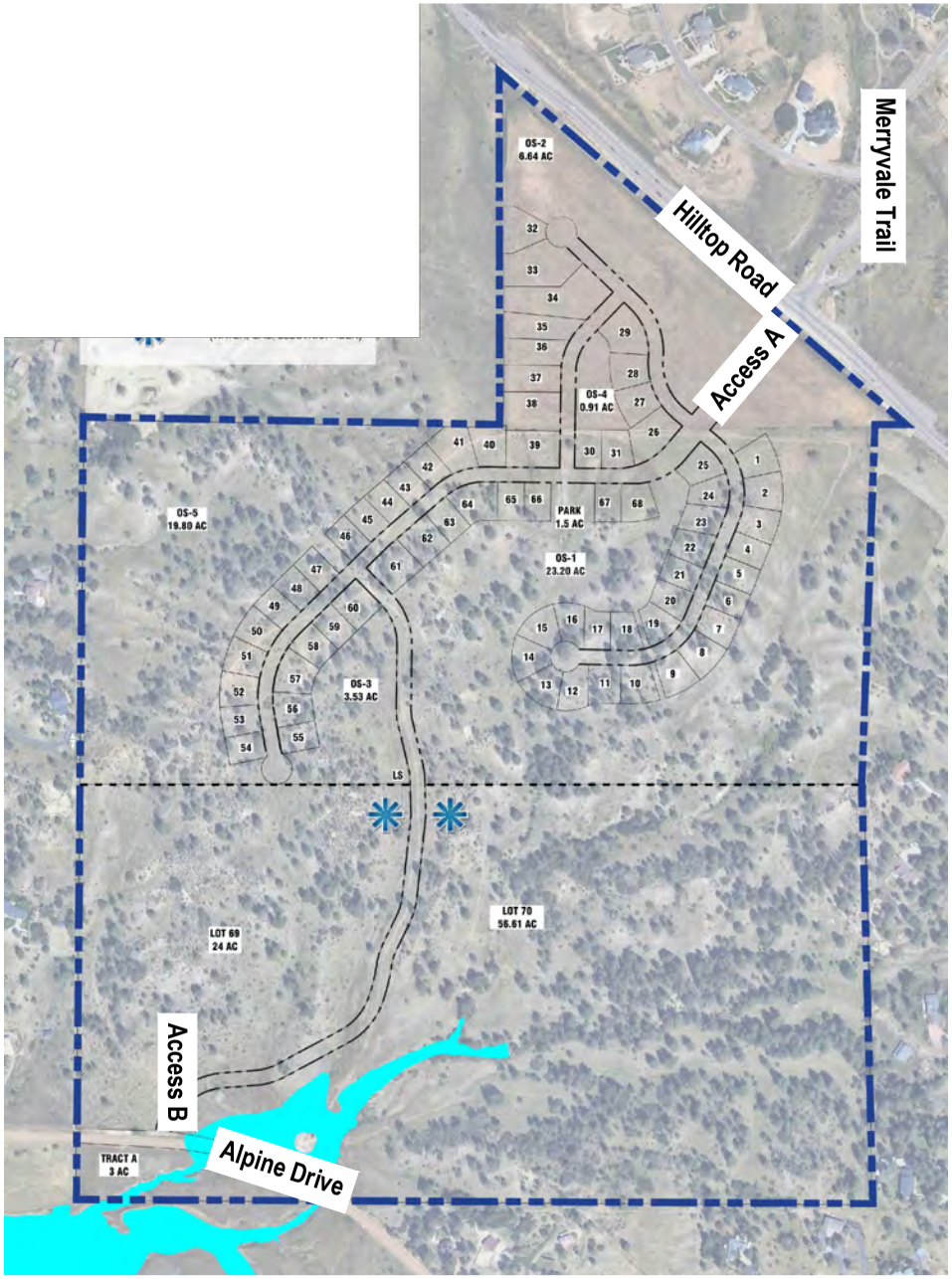
Proposed access to the development is provided at the following locations: one-full movement access onto Hilltop Road aligning with Merryvale Trail (referred to as Access A) and one full-movement access onto Alpine Drive (referred to as Access B).

For purposes of this study, it is anticipated that development construction would be completed by end of Year 2029.

General site and access locations are shown on Figure 1.

A conceptual site plan, as prepared by Norris Design is shown on Figure 2. This plan is provided for illustrative purposes only.


North
Not to Scale
Crestview Drive
Village Road
Merryvale Trail
Access A
Betts Ranch Road
Village Road
Development Site
Alpine Drive
Hilltop Road
Access B
Alpine Drive
Singing Hills Road



North
Not to Scale

Existing and Committed Surface Transportation Network

Within the study area, Hilltop Road and Alpine Drive are the primary roadways that will accommodate traffic to and from the proposed development. The secondary roadways include Village Road, Merryvale Trail, Crest View Drive, and Betts Ranch Road. A brief description of each roadway, based on the County's 2040 Transportation Master Plan (TMP)[1] and Douglas County Roadway Design & Construction Standards (Roadway Standards)[2], is provided below:

Hilltop Road is generally a northwest-southeast expressway roadway having two through lanes (one lane in each direction) with a combination of shared and exclusive turn lanes at the intersection within the study area. Hilltop Road provides a posted speed limit of 45 MPH.

Alpine Drive is generally a north-south roadway having two through lanes (one lane in each direction) with shared turn lanes at the intersections within the study area. Alpine Drive is unclassified in the County's TMP. However, per Section 4.2 and Table 4-1 and the roadway's estimated right-of-way (ROW) width, Alpine Drive is assumed to be classified as a rural local roadway with a posted speed limit of 25 MPH. Alpine Drive is unpaved.

Village Road is generally a north-south roadway having two through lanes (one lane in each direction) with shared and exclusive turn lanes at the intersections within the study area. Alpine Drive is unclassified in the County's TMP. However, per Section 4.2 and Table 4-1 and the roadway's estimated ROW width, Village Road is assumed to be classified as a rural local roadway with a posted speed limit of 25 MPH. East of Betts Ranch Road, Village Road is unpaved.

Merryvale Trail is a north-south roadway having two through lanes (one lane in each direction) with shared turn lanes at the intersection within the study area. Merryvale Trail is unclassified in the County's TMP. However, per Section 4.2 and Table 4-1 and the roadway's estimated ROW width, Merryvale Trails is assumed to be classified as a rural local roadway with a posted speed limit of 25 MPH.

Betts Ranch Road is generally a north-south roadway having two through lanes (one lane in each direction) with shared turn lanes at the intersection within the study area. Betts Ranch Road is unclassified in the County's TMP. However, per Section 4.2 and Table 4-1, the roadway's estimated ROW width, and a posted speed limit of 40 MPH, Merryvale Trails is assumed to be classified as a rural local roadway.

Crest View Drive is generally a north-south roadway having two through lanes (one lane in each direction) with shared turn lanes at the intersection within the study area. Merryvale Trail is unclassified in the County's TMP. However, per Section 4.2 and Table 4-1 and the roadway's estimated ROW width, Merryvale Trails is assumed to be classified as a rural Local roadway with a posted speed limit of 25 MPH.

[1] 2040 Douglas County Transportation Plan, David Evans and Associates, Inc., September 2019.
[2] Douglas County Roadway Design and Construction Standards, Douglas County, June 2020.

All study intersections operate under a stop-controlled condition. A stop-controlled intersection is defined as a roadway intersection where vehicle rights-of-way are controlled by one or more "STOP" signs.

Pursuant to the Hilltop Road (Legend High School to Crest View Drive) Improvements Project Webpage[3], Hilltop Road will be widened and reconstructed in three phases.

- Phase one (Hilltop Road from Legend High School to Crestview Drive/Village Road) – Construction is anticipated to begin in early 2025 with completion of the project taking between 12 to 18 months.

- Phase two (Hilltop Road from Crestview Drive/Village Road to Alpine Drive) - Construction is anticipated to begin in late 2025 or early 2026 with completion taking between nine to 12 months.

- Phase three (Alpine Drive on Hilltop Road to Flintwood Road on Signing Hills Road) - Construction is anticipated to begin in 2027 with completion taking between 12 to 18 months.

For purposes of this analysis, it is assumed that Hilltop Road will be widened from two to four to the east of Alpine Drive and the intersection of Hilltop Road and Village Road will be improved to a roundabout-controlled intersection by Year 2029. Additionally, it is assumed that Hilltop Road will be widened from two to four through lanes west of Alpine Drive by Year 2044.

No regional or specific improvements for the above-described roadways are known to be planned or committed at this time.

[3] Hilltop Road (Legend High School to Crest View Drive) Improvements Project, Douglas County, October 7, 2024.

II. Existing Traffic Conditions

Morning (AM) and afternoon (PM) peak hour traffic counts were collected at the Hilltop Road intersections with Village Road, Merryvale Trail, and Alpine Drive as well as the Village Road intersections with Betts Ranch Road and Alpine Drive. Average daily traffic (ADT) volumes were collected over a 24-hour period on Hilltop Road, Village Road, and Alpine Drive. Counts were collected on Wednesday, September 25, 2024, with AM peak hour counts being collected during the period of 7:00 a.m. to 9:00 a.m. and PM peak hour counts being collected during the period of 4:00 p.m. to 6:00 p.m.

Existing volumes and intersection geometry are shown on Figure 3. Traffic count data is included for reference in Appendix A.

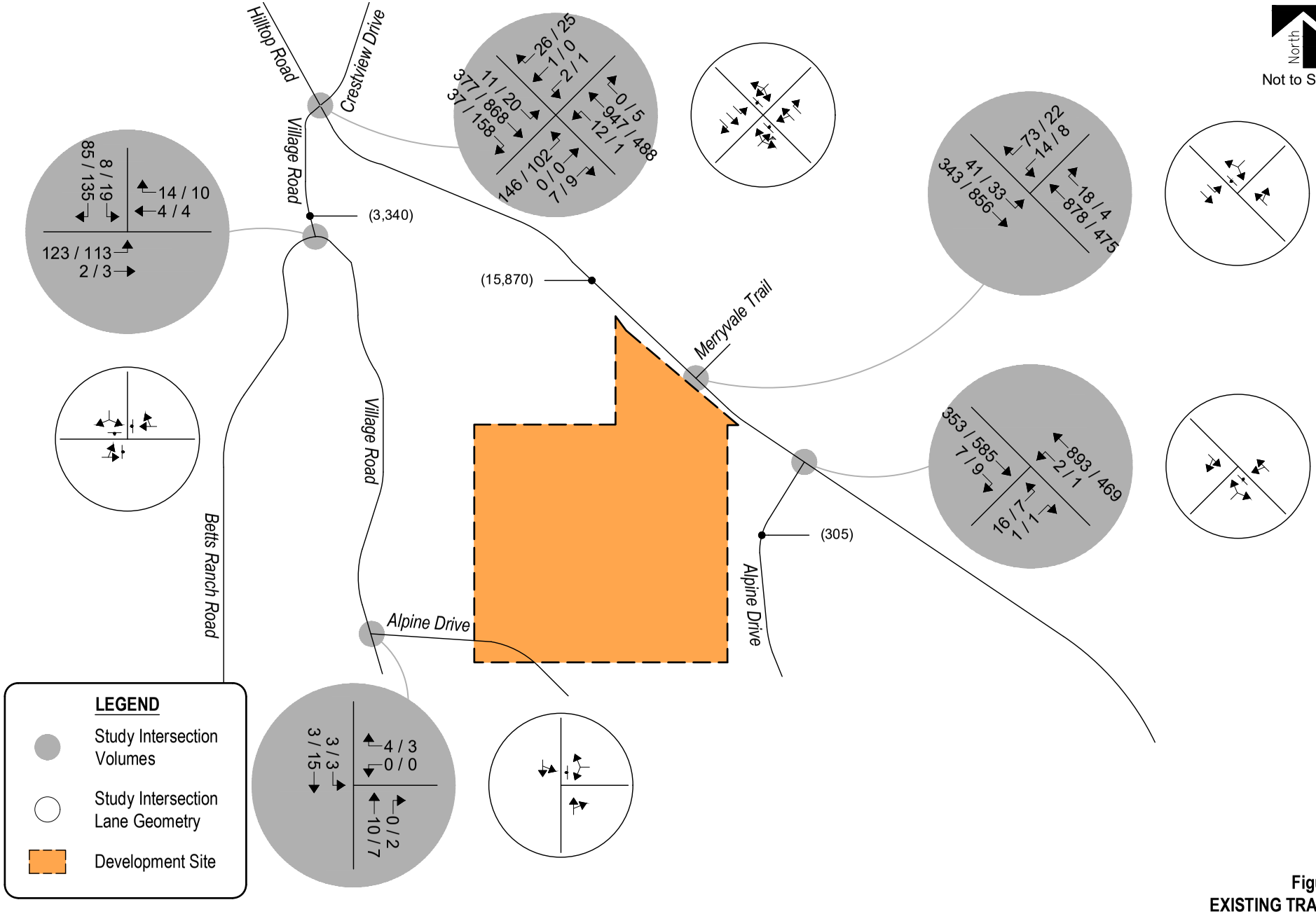


Figure 3
EXISTING TRAFFIC
Volumes & Intersection Geometry
AM / PM Peak Hour
(ADT) : Average Daily Traffic

Peak Hour Intersection Levels of Service – Existing Traffic

The Unsignalized Intersection Analysis techniques, as published in the Highway Capacity Manual (HCM), 7th Edition, by the Transportation Research Board and as incorporated into the SYNCHRO computer program, was used to analyze the study intersections for existing and future traffic conditions. This nationally accepted technique allows for the determination of intersection level of service (LOS) based on the congestion and delay of each traffic movement.

Level of service is a method of measurement used by transportation professionals to quantify a driver's perception of travel conditions that include travel time, number of stops, and total amount of stopped delay experienced on a roadway network. The HCM categorizes level of service into a range from "A" which indicates little, if any, vehicle delay, to "F" which indicates a level of operation considered unacceptable to most drivers. These levels of service grades with brief descriptions of the operating condition, for unsignalized and signalized intersections, are included for reference in Appendix B and have been used throughout this study.

The level of service analyses results for existing conditions are summarized in Table 1.

Intersection capacity worksheets developed for this study are provided in Appendix C.

Table 1 – Intersection Capacity Analysis Summary – Existing Traffic

INTERSECTION	LEVEL OF SERVICE	
LANE GROUPS	AM PEAK HOUR	PM PEAK HOUR
Hilltop Road / Village Road / Crest View Road (Stop-Controlled)		
Southeastbound Left	B	A
Northwestbound Left and Through	A	B
Northeastbound Left, Through and Right	F	F
Southwestbound Left, Through and Right	C	B
Hilltop Road / Merryvale Trail (Stop-Controlled)		
Southeastbound Left	B	A
Southwestbound Left and Right	D	C
Hilltop Road / Alpine Drive (Stop-Controlled)		
Northwestbound Through and Left	A	A
Northeastbound Left and Right	D	D
Betts Ranch Road / Village Road (Stop-Controlled)		
Eastbound Left and Through	A	A
Westbound Right and Through	A	A
Southbound Left and Right	A	A
Village Road / Alpine Drive (Stop-Controlled)		
Westbound Left and Right	A	A
Southbound Left and Through	A	A

Key: Stop-Controlled Intersection: Level of Service

Existing Traffic Analysis Results

Under existing conditions, operational analysis shows that the unsignalized intersection of Hilltop Road and Village Road has turning movement operations at LOS C or better during the morning peak traffic hour and LOS B or better during the afternoon peak traffic hour. Exceptions include the northeast turning movement which operates at LOS F during the morning and afternoon peak traffic hours. The LOS F operations are attributed to the through traffic volume along Hilltop Road and the stop-controlled nature of the intersection. However, pursuant to planned and ongoing roadway improvements as discussed in Section I, conversion of the intersection to a roundabout is anticipated to mitigate these operations.

The unsignalized intersection of Hilltop Road and Merryvale Trail has turning movement operations at LOS D or better during the morning peak traffic hours and LOS C or better during the afternoon peak traffic hours.

The unsignalized intersection of Hilltop Road and Alpine Drive has turning movement operations at LOS D or better during the morning and afternoon peak traffic hours.

The unsignalized intersection of Betts Ranch Road and Village Road has turning movement operations at LOS A during the morning and afternoon peak traffic hours.

The unsignalized intersection of Village Road and Alpine Drive has turning movement operations at LOS A during the morning and afternoon peak traffic hours.

It is to be noted that it is not uncommon for unsignalized movements to or from an arterial roadway, in urban areas, to operate with noticeable delays during peak traffic hours. It is, however, likely that turn movements will operate better than the results obtained with this HCM Two-Way Stop-Control (TWSC) level of service analysis would indicate, as the HCM analysis may not accurately account for the effect of vehicle platooning and gaps caused by upstream signals.

III. Future Traffic Conditions Without Proposed Development

Background traffic is the traffic projected to be on area roadways without consideration of the proposed development. Background traffic includes traffic generated by development of vacant parcels in the area.

To account for projected increases in background traffic for Years 2029 and 2044, a compounded annual growth rate of approximately two percent was applied to existing traffic volumes.

It is important to note that ingress and egress traffic volumes for some roadways are not subject to annual growth patterns since these roads do not provide connection to other roadways, therefore do not serve regional traffic. The following intersections include:

- The southwest leg of Alpine Drive and Hilltop Road
- The east leg of Betts Ranch Road and Village Road
- The northeast leg of Hilltop Road and Village Road
- The intersection of Village Road and Alpine Drive

To account for projected traffic from adjacent developments not yet built, trip generations from the Fields[4] traffic study were added to background traffic volumes with an updated density as described by County Staff. Trip generation information for the Fields traffic study is included for reference in Appendix D.

Pursuant to the proposed area roadway improvements discussed in Section I, Year 2029 assumes the expansion of Hilltop Road from two to four through lanes from Village Road to Alpine Drive as well as the intersection of Hilltop Road and Village Road being converted to a roundabout-controlled intersection. Year 2044 assumes the expansion of Hilltop Road from two to four through lanes east past Alpine Drive. This assumption provides for a conservative analysis.

Projected background traffic volumes and intersection geometry for Years 2029 and 2044 are shown on Figure 4 and Figure 5, respectively.

[4] Fields: Traffic Impact Analysis, Felsberg, Holt, and Ullevig, November, 2021

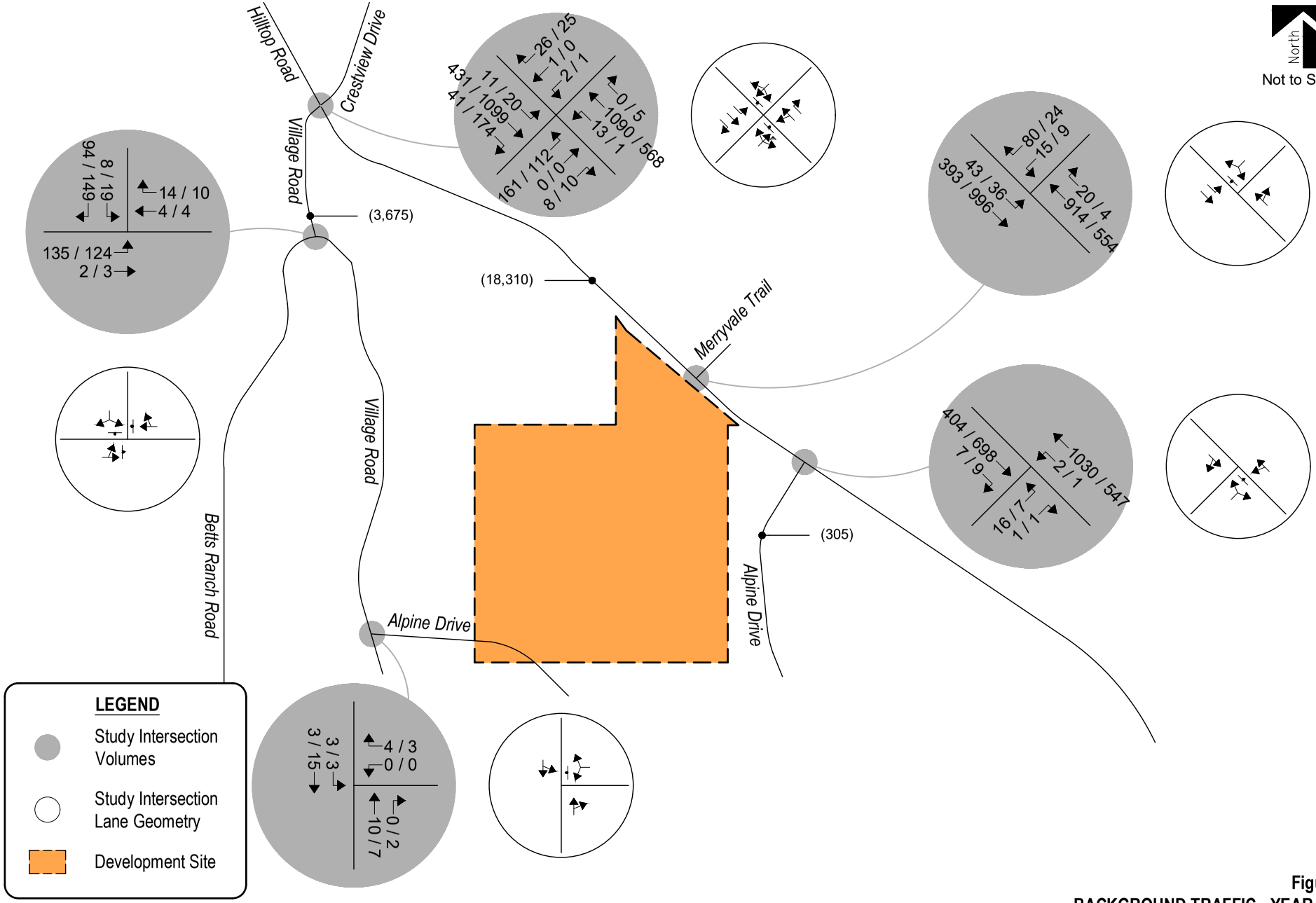


Figure 4
BACKGROUND TRAFFIC - YEAR 2029
Volumes & Intersection Geometry
AM / PM Peak Hour
(ADT) : Average Daily Traffic

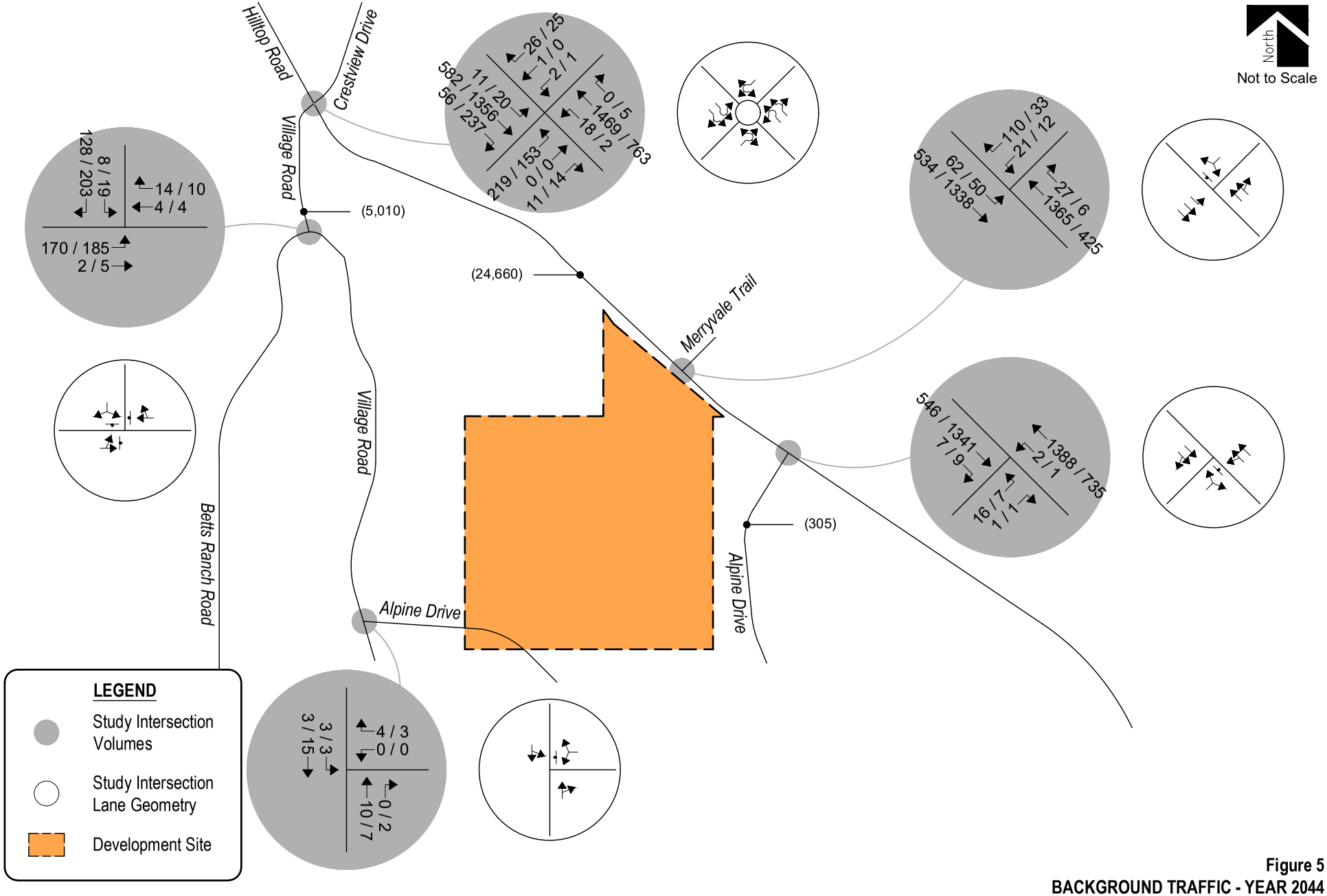


Figure 5
BACKGROUND TRAFFIC - YEAR 2044
Volumes & Intersection Geometry
AM / PM Peak Hour
(ADT) : Average Daily Traffic

Peak Hour Intersection Levels of Service – Background Traffic

As with existing traffic conditions, the operations of study intersections were analyzed under background conditions, without the proposed development, using the SYNCHRO computer program.

Background traffic level of service analysis results for Year 2029 are listed in Table 2. Year 2044 operational results are summarized in Table 3.

Definitions of levels of service are given in Appendix B. Intersection capacity worksheets are provided in Appendix C.

Table 2 – Intersection Capacity Analysis Summary – Background Traffic – Year 2029

INTERSECTION	LEVEL OF SERVICE	
LANE GROUPS	AM PEAK HOUR	PM PEAK HOUR
Hilltop Road / Village Road / Crest View Road (Roundabout-Controlled)		
Southeastbound Left and Through	A	A
Southeastbound Through and Right	A	A
Northwestbound Left and Through	A	A
Northwestbound Through and Right	A	A
Northeastbound Left, Through and Right	A	B
Southwestbound Left, Through and Right	A	A
Hilltop Road / Merryvale Trail (Stop-Controlled)		
Southeastbound Left	B	A
Southwestbound Left and Right	C	C
Hilltop Road / Alpine Drive (Stop-Controlled)		
Northwestbound Through and Left	A	A
Northeastbound Left and Right	E	D
Betts Ranch Road / Village Road (Stop-Controlled)		
Eastbound Left and Through	A	A
Westbound Right and Through	A	A
Southbound Left and Right	A	A
Village Road / Alpine Drive (Stop-Controlled)		
Westbound Left and Right	A	A
Southbound Left and Through	A	A

Key: Stop-Controlled Intersection: Level of Service
Roundabout Intersection: Level of Service

Background Traffic Analysis Results – Year 2029

Year 2029 background traffic analysis indicates that the roundabout-controlled intersection of Hilltop Road and Village Road has turning movement operations at LOS A during the morning and afternoon peak traffic hours.

The unsignalized intersection of Hilltop Road and Merryvale Trail has turning movement operations at LOS C or better during the morning and afternoon peak traffic hours.

The unsignalized intersection of Hilltop Road and Alpine Drive has turning movement operations at LOS A during the morning peak traffic hour and LOS D or better during the afternoon peak traffic hour. Exceptions include the northeastbound turning movement which has operations at LOS E during the morning peak traffic hour. The LOS E operation is attributed to the through traffic volumes along Hilltop Road and the stop-controlled nature of the intersection. Potential mitigations may include the addition of a northeastbound to a northwestbound left turn acceleration lane along Hilltop Road.

The unsignalized intersection of Betts Ranch Road and Village Road has turning movement operations at LOS A during the morning and afternoon peak traffic hours.

The unsignalized intersection of Village Road and Alpine Drive has turning movement operations at LOS A during the morning and afternoon peak traffic hours.

Table 3 – Intersection Capacity Analysis Summary – Background Traffic – Year 2044

INTERSECTION LANE GROUPS	LEVEL OF SERVICE AM PEAK HOUR	 PM PEAK HOUR
Hilltop Road / Village Road / Crest View Road (Roundabout-Controlled)		
Southeastbound Left and Through	A	B
Southeastbound Through and Right	A	B
Northwestbound Left and Through	C	A
Northwestbound Through and Right	C	A
Northeastbound Left, Through and Right	A	C
Southwestbound Left, Through and Right	C	A
Hilltop Road / Merryvale Trail (Stop-Controlled)		
Southeastbound Left	B	A
Southwestbound Left and Right	F	C
Hilltop Road / Alpine Drive (Stop-Controlled)		
Northwestbound Through and Left	A	B
Northeastbound Left and Right	D	F
Betts Ranch Road / Village Road (Stop-Controlled)		
Eastbound Left and Through	A	A
Westbound Right and Through	A	A
Southbound Left and Right	A	A
Village Road / Alpine Drive (Stop-Controlled)		
Westbound Left and Right	A	A
Southbound Left and Through	A	A

Key: Stop-Controlled Intersection: Level of Service
Roundabout Intersection: Level of Service

Background Traffic Analysis Results – Year 2044

By Year 2044 and without the proposed development, the roundabout controlled intersection of Hilltop Road and Village Road has turning movement operations at LOS C or better during the morning and afternoon peak traffic hours.

The unsignalized intersection of Hilltop Road and Merryvale Trail has turning movement operations at LOS B during the morning peak traffic hour and LOS C or better during the afternoon peak traffic hour. Exceptions include the southwestbound turning movement which has operations at LOS F during the morning peak traffic hour. The LOS F operation is attributed to the through traffic volumes along Hilltop Road and the stop-controlled nature of the intersection. Potential mitigations may include the addition of a southwestbound to southeastbound left turn acceleration lane along Hilltop Road or conversion of the intersection to either a signal-controlled intersection or a roundabout controlled intersection.

The unsignalized intersection of Hilltop Road and Alpine Drive has turning movement operations at LOS D during the morning peak traffic hour and LOS B during the afternoon peak traffic hour. Exceptions include the northeastbound turning movement which has operations at LOS F during the afternoon peak traffic hour. The LOS F operation is attributed to the through traffic volumes along Hilltop Road and the stop-controlled nature of the intersection. Potential mitigations continue to include the addition of a northeastbound to northwestbound left turn acceleration lane along Hilltop Road.

The unsignalized intersection of Betts Ranch Road and Village Road has turning movement operations at LOS A during the morning and afternoon peak traffic hours.

The unsignalized intersection of Village Road and Alpine Drive has turning movement operations at LOS A during the morning and afternoon peak traffic hours.

It is to be noted that it is not uncommon for unsignalized movements to or from an arterial roadway, in urban areas, to operate with noticeable delays during peak traffic hours. It is, however, likely that turn movements will operate better than the results obtained with this HCM Two-Way Stop-Control (TWSC) level of service analysis would indicate, as the HCM analysis may not accurately account for the effect of vehicle platooning and gaps caused by upstream signals.

IV. Proposed Project Traffic

Trip Generation

Standard traffic generation characteristics compiled by the Institute of Transportation Engineers (ITE) in their report entitled Trip Generation Manual, 11th Edition, were applied to the proposed land use in order to estimate average daily traffic (ADT), AM Peak Hour, and PM Peak Hour vehicle trips. A vehicle trip is defined as a one-way vehicle movement from a point of origin to a point of destination.

The ITE land use code 210 (Single-Family Detached Housing) was used for estimating trip generation because of its conservative rates and best fit to the proposed land use description.

Trip generation rates used in this study are presented in Table 4.

Table 4 – Trip Generation Rates

			TRIP GENERATION RATES						
ITE			24	AM PEAK HOUR			PM PEAK HOUR		
CODE	LAND USE	UNIT	HOUR	ENTER	EXIT	TOTAL	ENTER	EXIT	TOTAL
210	Single-Family Detached Housing	DU	9.43	0.18	0.53	0.70	0.59	0.35	0.94

Key: DU = Dwelling Units.
Note: All data and calculations above are subject to being rounded to nearest value.

Table 5 illustrates projected ADT, AM Peak Hour, and PM Peak Hour traffic volumes likely generated by the proposed development upon build-out.

Table 5 – Trip Generation Summary

			TOTAL TRIPS GENERATED						
ITE			24	AM PEAK HOUR			PM PEAK HOUR		
CODE	LAND USE	SIZE	HOUR	ENTER	EXIT	TOTAL	ENTER	EXIT	TOTAL
210	Single-Family Detached Housing	70 DU	660	12	37	49	41	24	66
		Total:	*660*	*12*	*37*	*49*	*41*	*24*	*66*

Key: DU = Dwelling Units.
Note: All data and calculations above are subject to being rounded to nearest value.

Upon build-out, Table 5 illustrates that the proposed development has the potential to generate approximately 660 daily vehicle trips with 49 of those occurring during the morning peak hour and 66 during the afternoon peak hour.

Adjustments to Trip Generation Rates

A development of this type is not likely to attract trips from within area land uses nor pass-by or diverted link trips from the adjacent roadway system, therefore no trip reduction was taken in this analysis.

Trip Distribution

The overall directional distribution of site-generated traffic was determined based on the location of development site within the County, proposed and existing area land uses, allowed turning movements, and available roadway network.

Overall trip distribution patterns for the development are shown on Figure 6.

Trip Assignment

Traffic assignment is how generated and distributed vehicle trips are expected to be loaded onto the available roadway network.

Applying trip distribution patterns to site-generated traffic provides the overall site-generated trip assignments shown on Figure 6.

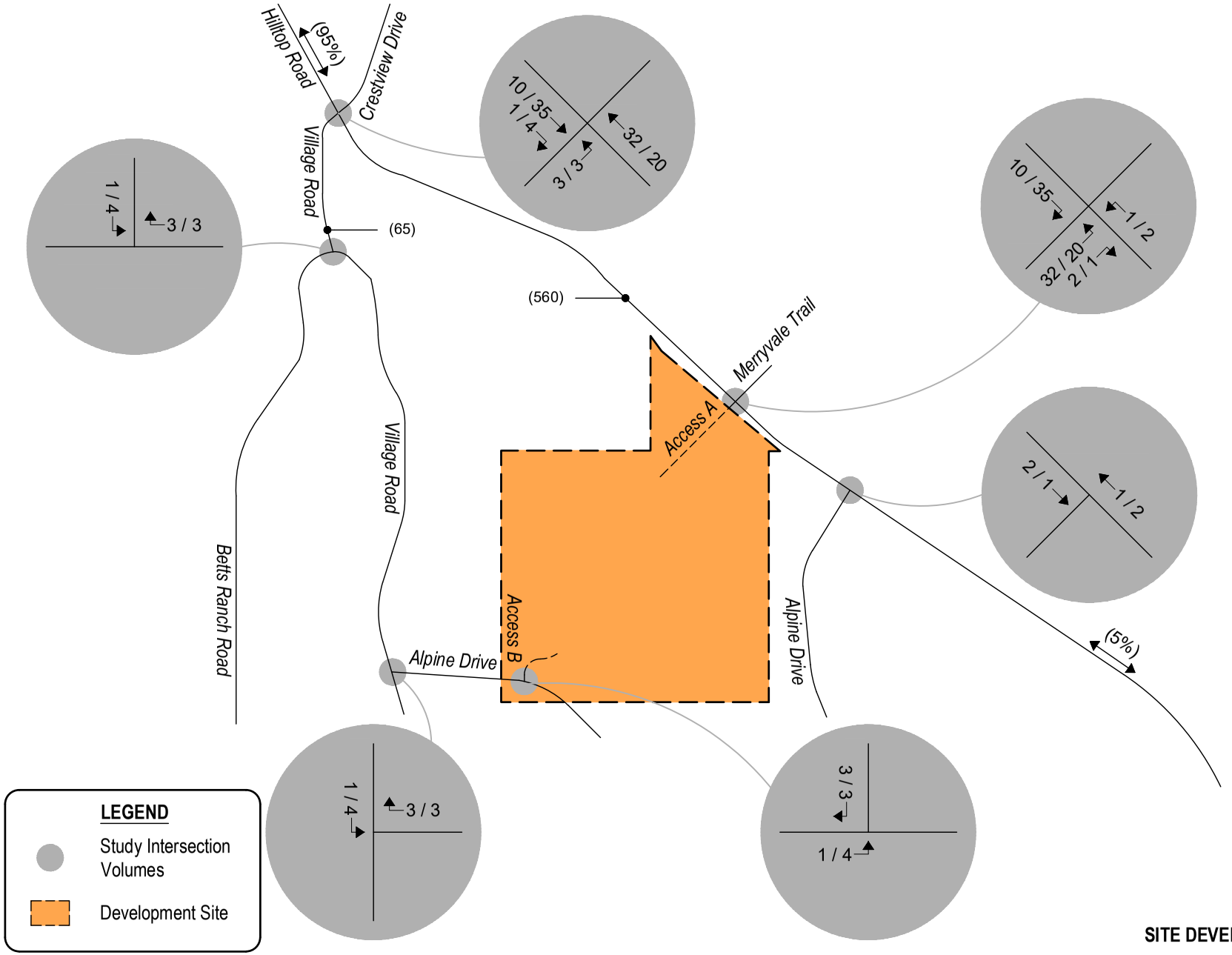


Figure 6
SITE DEVELOPMENT DISTRIBUTION
(%) : Overall
SITE-GENERATED TRIPS
AM / PM Peak Hour
(ADT) : Average Daily Traffic

V. Future Traffic Conditions With Proposed Developments

Total traffic is the traffic projected to be on area roadways with consideration of the proposed development. Total traffic includes background traffic projections for Years 2029 and 2044 with consideration of site-generated traffic. For analysis purposes, it was assumed that development construction would be completed by end of Year 2029.

Pursuant to area roadway improvement discussions provided in Section III, Year 2029 and Year 2044 total traffic conditions assume no roadway improvements to accommodate regional transportation demands. Roadway improvements associated with site development are expected to be limited to site access and frontage as required by the governing agency.

Total Traffic Auxiliary Lane Analysis

Auxiliary lanes for Hilltop Road were evaluated and are to be based on the County's Roadway Standards.

Section 4.13 of the County's Roadway Standards also indicates that the need for auxiliary lanes on roadways that have greater than two lanes are to be established by an accepted traffic impact study. Considering build-out traffic, an evaluation of auxiliary lane requirements, pursuant to Section 4.13 of the County's Roadway Standards, analysis results indicate that a shared northwestbound left turn lane operates at LOS B or better and with minimal queues. However, it is understood pursuant to County review that a left-turn lane is required with the planned widening of Hilltop Road to a four-lane roadway section.

Projected Year 2029 total traffic volumes and intersection geometry are shown in Figure 7.

Figure 8 shows projected total traffic volumes and intersection geometry for Year 2044.

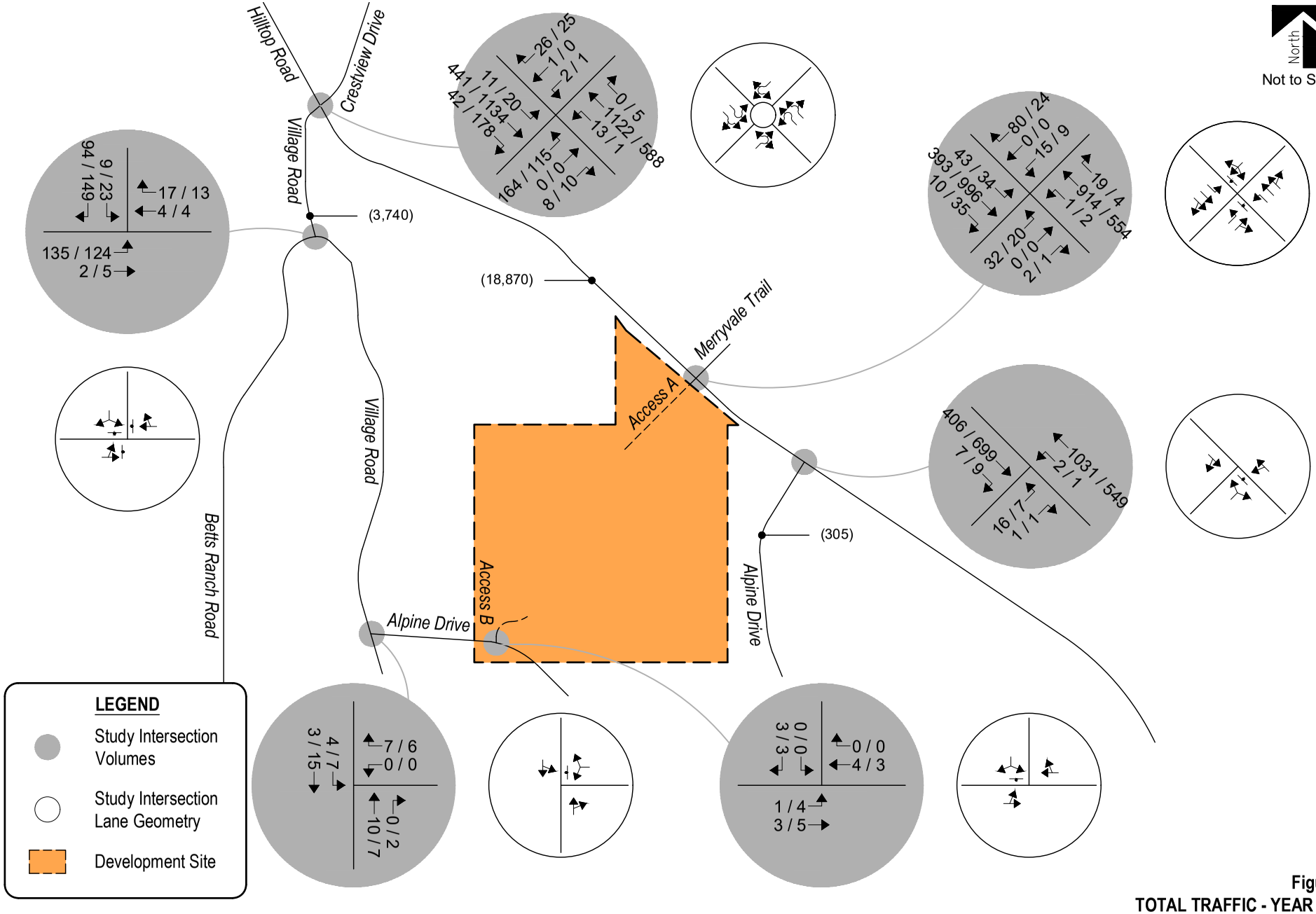


Figure 7
TOTAL TRAFFIC - YEAR 2029
Volumes & Intersection Geometry
AM / PM Peak Hour
(ADT) : Average Daily Traffic

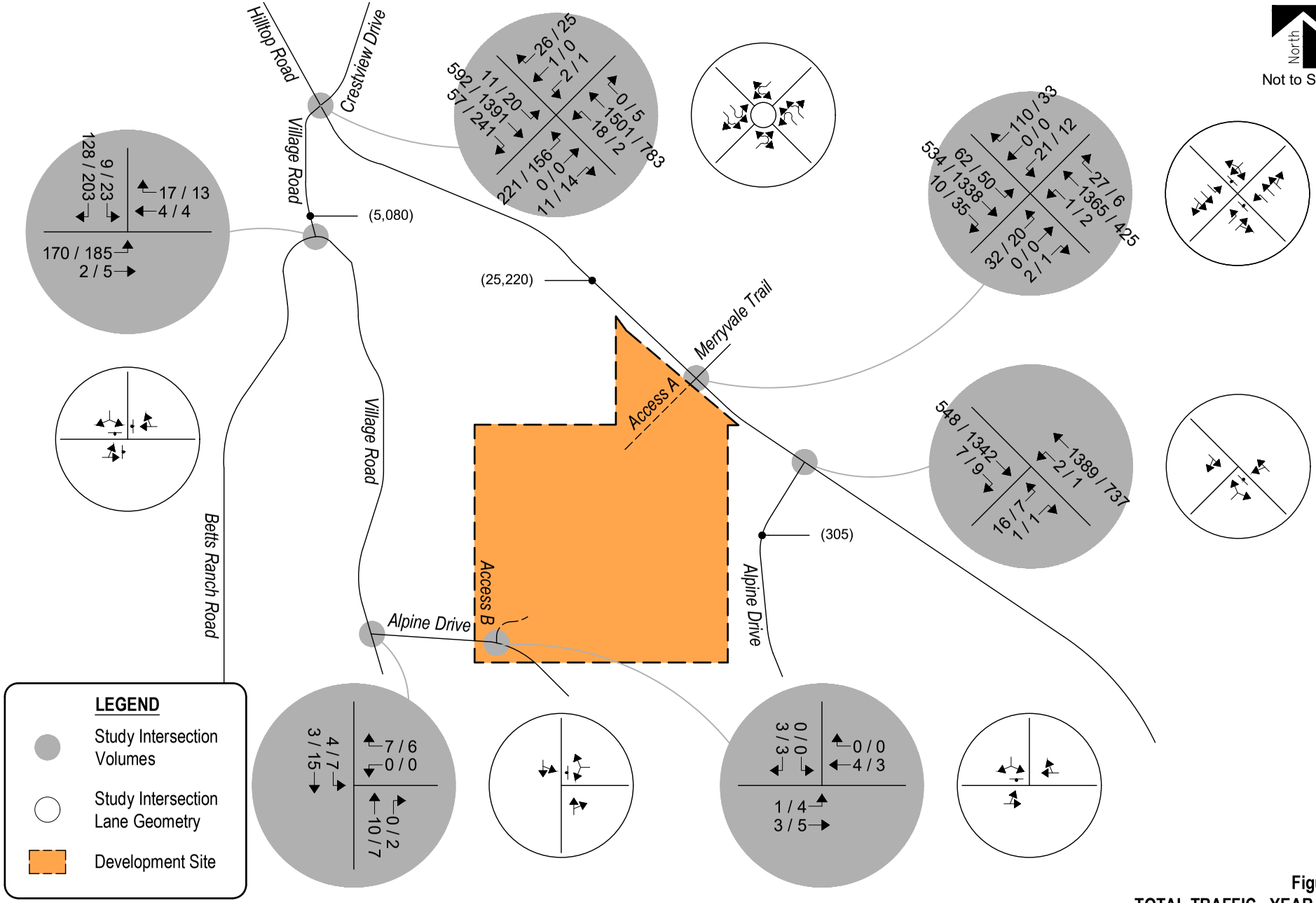


Figure 8
TOTAL TRAFFIC - YEAR 2044
Volumes & Intersection Geometry
AM / PM Peak Hour
(ADT) : Average Daily Traffic

VI. Project Impacts

The analyses and procedures described in this study were performed in accordance with the latest HCM are based upon the worst-case conditions that occur during a typical weekday upon build-out of site development and analyzed land uses. Therefore, study intersections are likely to operate with traffic conditions better than those described within this study, which represent the peak hours of weekday operations only.

Peak Hour Intersection Levels of Service – Total Traffic

As with background traffic, the operations of the study intersections were analyzed under projected total traffic conditions using the SYNCHRO computer program. Total traffic level of service analysis results for Years 2029 and 2044 are summarized in Table 6 and Table 7, respectively.

Definitions of levels of service are given in Appendix B. Intersection capacity worksheets are provided in Appendix C.

Table 6 – Intersection Capacity Analysis Summary – Total Traffic – Year 2029

INTERSECTION LANE GROUPS	LEVEL OF SERVICE AM PEAK HOUR	 PM PEAK HOUR
Hilltop Road / Village Road / Crest View Road (Roundabout-Controlled)		
Southeastbound Left and Through	A	A
Southeastbound Through and Right	A	A
Northwestbound Left and Through	A	A
Northwestbound Through and Right	A	A
Northeastbound Left, Through and Right	A	B
Southwestbound Left, Through and Right	A	A
Hilltop Road / Merryvale Trail / Access A (Stop-Controlled)		
Southeastbound Left	B	A
Northwestbound Left	A	B
Northeastbound Left	E	F
Northeastbound Through and Right	A	B
Southwestbound Left, Through and Right	C	C
Hilltop Road / Alpine Drive (Stop-Controlled)		
Northwestbound Through and Left	A	A
Northeastbound Left and Right	E	D
Betts Ranch Road / Village Road (Stop-Controlled)		
Eastbound Left and Through	A	A
Westbound Right and Through	A	A
Southbound Left and Right	A	A
Village Road / Alpine Drive (Stop-Controlled)		
Westbound Left and Right	A	A
Southbound Left and Through	A	A
Alpine Drive / Access B (Stop-Controlled)		
Eastbound Left and Through	A	A
Southbound Left and Right	A	A

Key: Stop-Controlled Intersection: Level of Service
Roundabout Intersection: Level of Service

Table 7 – Intersection Capacity Analysis Summary – Total Traffic – Year 2044

INTERSECTION LANE GROUPS	LEVEL OF SERVICE AM PEAK HOUR	 PM PEAK HOUR
Hilltop Road / Village Road / Crest View Road (Roundabout-Controlled)		
Southeastbound Left and Through	A	B
Southeastbound Through and Right	A	B
Northwestbound Left and Through	C	A
Northwestbound Through and Right	C	A
Northeastbound Left, Through and Right	A	C
Southwestbound Left, Through and Right	C	A
Hilltop Road / Merryvale Trail / Access A (Stop-Controlled)		
Southeastbound Left	B	A
Northwestbound Left	A	B
Northeastbound Left	F	F
Northeastbound Through and Right	B	B
Southwestbound Left, Through and Right	F	C
Hilltop Road / Alpine Drive (Stop-Controlled)		
Northwestbound Through and Left	A	B
Northeastbound Left and Right	D	F
Betts Ranch Road / Village Road (Stop-Controlled)		
Eastbound Left and Through	A	A
Westbound Right and Through	A	A
Southbound Left and Right	A	A
Village Road / Alpine Drive (Stop-Controlled)		
Westbound Left and Right	A	A
Southbound Left and Through	A	A
Alpine Drive / Access B (Stop-Controlled)		
Eastbound Left and Through	A	A
Southbound Left and Right	A	A

Key: Stop-Controlled Intersection: Level of Service
Roundabout Intersection: Level of Service

Total Traffic Analysis Results Upon Development Build-Out

Table 7 illustrates how, by Year 2044 and upon development build-out, the roundabout-controlled intersection has turning movement operations at LOS C or better during the morning and afternoon peak traffic hours. Compared to the background traffic analysis, the traffic generated by the proposed development is not expected to significantly change the operations of the study intersection.

The stop-controlled intersection of Hilltop Road and Access A has turning movement operations at LOS B or better during the morning peak traffic hour and LOS C or better during the afternoon peak traffic hours. Exceptions include the southwestbound turning movement, which operates at LOS F during the morning peak traffic hour, and the northeastbound left turning movement, which operates at LOS F during the morning and afternoon peak traffic hour. The LOS F operations are attributed to the through traffic volumes along Hilltop Road and the stop-controlled nature of the intersection. Similar to background traffic conditions potential mitigations include conversion of the intersection to either a signal-controlled intersection or a roundabout controlled intersection. It is important to note that this development does not significantly contribute or change operations compared to background traffic conditions.

The stop-controlled intersection of Hilltop Road and Alpine Drive has turning movement operations at LOS D or better during the morning peak traffic hour and LOS B during the afternoon peak traffic hour. Exceptions continue to include the northeastbound turning movement which has turning movement operations at LOS F during the afternoon peak traffic hour. The LOS F operation continues to be attributed to the through traffic volumes along Hilltop Road and the stop-controlled nature of the intersection. As with background traffic conditions, potential mitigations continue to include the addition of a northeastbound to northwestbound left turn acceleration lane along Hilltop Road.

The stop-controlled intersection of Betts Ranch Road and Village Road has turning movement operations at LOS A during the morning and afternoon peak traffic hours.

The stop-controlled nature of the intersection of Village Road and Alpine Drive has turning movement operations at LOS A during the morning and afternoon peak traffic hours.

The stop-controlled nature of the intersection of Alpine Drive and Access B has turning movement operations at LOS A during the morning and afternoon peak traffic hours.

It is to be noted that it is not uncommon for unsignalized movements to or from an arterial roadway, in urban areas, to operate with noticeable delays during peak traffic hours. It is, however, likely that turn movements will operate better than the results obtained with this HCM Two-Way Stop-Control (TWSC) level of service analysis would indicate, as the HCM analysis may not accurately account for the effect of vehicle platooning and gaps caused by upstream signals.

These intersection operations are similar to background conditions.

Compared to Year 2044 background traffic conditions along Hilltop Road, a potential increase of approximately 560 trips per day is expected as shown in Figure 6. This equates to an approximate 2% increase from background traffic volumes and is considered minor. Percent contribution calculations are provided for reference in Appendix E.

Queue Length Analysis

Queue lengths for the study intersections were analyzed using Year 2044 total traffic conditions. The analysis yields estimate of 95th percentile queue lengths, which have only a five percent probability of being exceeded during the analysis time period. An average vehicle length of 25 feet was assumed. Queue lengths were modeled and are included with the Synchro worksheets in Appendix C.

Table 8 summarizes the 95th percentile queue results in comparison to the projected storage requirements for turn movements within study area for Year 2044.

Table 8 – Turn Lane Queues and Storage Requirements – Total Traffic – Year 2041

Intersection	Turn Movement		Existing Turn Lane Length (feet)	AM Peak Hour		PM Peak Hour		Recommended Turn Lane Length (feet)
				95th Percentile Queue Length (feet)	Vehicle Equivalent (vehicles)	95th Percentile Queue Length (feet)	Vehicle Equivalent (vehicles)	
Roundabout-Controlled Intersections								
Hilltop Road / Village Road / Crest View Road	SEB	L,T	-	25'	1	130'	6	-
		T,R	-	25'	1	150'	6	-
	NWB	L,T	-	175'	7	50'	2	-
		T,R	-	200'	8	50'	2	-
	NEB	L,T,R	-	25'	1	75'	3	-
	SWB	L,T,R	-	0'	0	0'	0	-
Stop-Controlled Intersections								
Hilltop Road / Merryvale Trail / Access A	SEB	L	315'	13'	0	5'	0	315'
		T,R	-	0'	0	0'	0	-
	NWB	L	-	0'	0	0'	0	315'
		T,R	-	0'	0	0'	0	-
	NEB	L	-	70'	0	45'	0	75'
		T,R	-	0'	0	0'	0	-
	SWB	L,T,R	-	185'	0	15'	0	-
Hilltop Road / Alpine Drive	SEB	T,R	-	0'	0	0'	0	-
	NWB	L,T	-	0'	0	0'	0	-
	NEB	L,R	-	10'	0	10'	1	-
Village Road / Betts Ranch Road	EB	L,T	-	23'	1	28'	2	-
	WB	T,R	-	3'	1	3'	0	-
	SB	L,R	-	15'	1	28'	0	-
Village Road / Alpine Drive	WB	L,R	-	0'	0	0'	0	-
	NB	T,R	-	0'	0	0'	0	-
	SB	L,R	-	0'	0	0'	0	-
Alpine Drive / Access B	EB	L,T	-	0'	0	0'	0	-
	WB	T,R	-	0'	0	0'	0	-
	SB	L,R	-	0'	0	0'	0	-

Note: Turn Lane Length does not include taper length.

As Table 8 shows, all turn lane lengths at stop-controlled intersections have sufficient storage to accommodate future traffic volumes.

VII. Conclusion

This traffic impact study addressed the capacity, geometric, and control requirements associated with the development entitled Ramblewood. This proposed residential development development consists of a single-family home development. The development is located to the southwest of Hilltop Road, north of Alpine Drive, and east of N Village Road in Douglas County, Colorado.

The study area examined in this analysis encompassed the area bounded by Hilltop Road from Village Road east to Alpine Drive, Village Road from Betts Ranch Road east to Alpine Drive, and includes proposed site accesses.

Analysis was conducted for critical AM Peak Hour and PM Peak Hour traffic operations for existing traffic conditions, Year 2029 and Year 2044 background traffic conditions, and Year 2029 and Year 2044 total traffic conditions.

Analysis of existing traffic conditions indicates that the unsignalized intersections within the study area have turning movement operations at LOS D or better during the morning and afternoon peak traffic hour. Exceptions include the northeastbound turning movement which operates at LOS F during the morning and afternoon peak traffic hour at the intersection of Hilltop Road and Village Road.

Without the proposed development, Year 2029 background operational analysis shows that the roundabout-controlled intersection of Hilltop Road and Village Road has turning movement operations at LOS A during the morning and afternoon peak traffic hours. The unsignalized intersections within the study area have turning movement operations at LOS D or better during the morning peak traffic hour and LOS B or better during the afternoon peak traffic hour. Exceptions include the northeastbound turning movement at the intersection of Hilltop Road and Alpine Drive which operates at LOS E during the afternoon peak traffic hour. The LOS E operation is attributed to the through traffic volumes along Hilltop Road and the stop-controlled nature of the intersection.

By Year 2044 and without the proposed development, the roundabout-controlled intersection of Hilltop Road and Village Road has turning movement operations at LOS C or better during the morning and afternoon peak traffic hours. The unsignalized intersections within the study area have turning movement operations at LOS D or better during the morning peak traffic hour and LOS C or better during the afternoon peak traffic hour. Exceptions include the southwestbound turning movement at the intersection of Hilltop Road and Merryvale Trail which operates at LOS F during the morning peak traffic and the northeastbound turning movement at the intersection of Hilltop Road and Alpine Drive which operates at LOS F during the afternoon peak traffic hour. The LOS F operations are attributed to the through traffic volumes along Hilltop Road and the stop-controlled nature of the intersection.

Analysis of future traffic conditions indicates that the addition of site-generated traffic is expected to create no negative impact to traffic operations for the existing and surrounding roadway system upon consideration of the various roadway and intersection control improvements assumed within this analysis. With all conservative assumptions defined in this analysis, the study intersections are projected to operate at future levels of service comparable to Year 2044 background traffic conditions. Proposed site accesses have long-term operations at LOS A or better during peak traffic periods and upon build-out. Exceptions include the northeastbound left turning movement at the intersection of Hilltop Road and Access A, which operates at LOS F during the morning and afternoon peak traffic hours. Potential mitigations may include converting the intersection to a signal-control. It is again important to note that this development does not significantly contribute or change operations compared to background traffic conditions. It is recommended that County Staff monitor the study intersections in order to determine when specific mitigation measures may be necessary as planned corridor improvements occur.

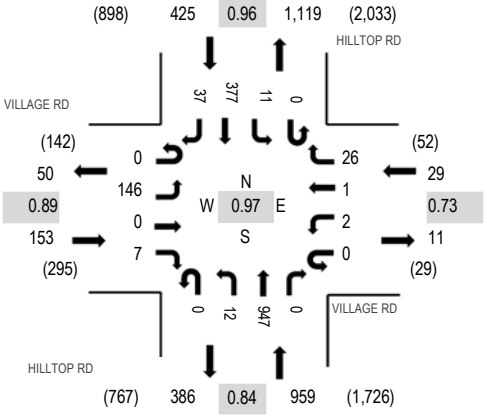
APPENDIX A

Traffic Count Data
Approved Base Assumptions

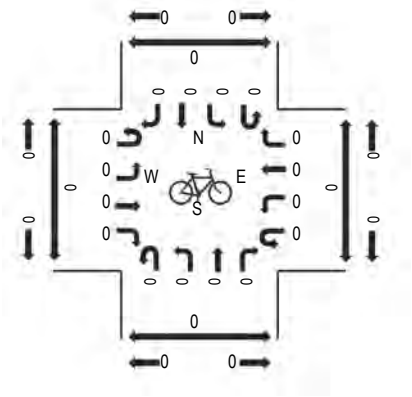
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 1 HILLTOP RD & VILLAGE RD AM
Date: Wednesday, September 25, 2024
Peak Hour: 07:00 AM - 08:00 AM
Peak 15-Minutes: 07:00 AM - 07:15 AM

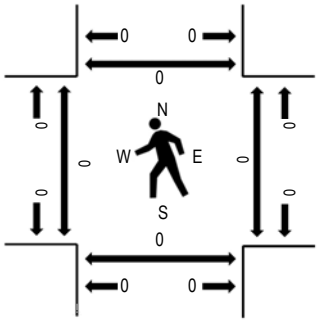
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

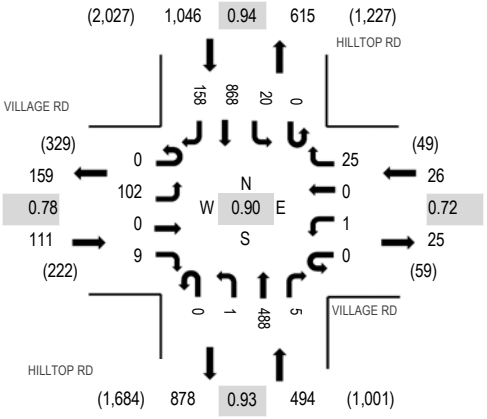
Traffic Counts - Motorized Vehicles

Interval Start Time	VILLAGE RD Eastbound				VILLAGE RD Westbound				HILLTOP RD Northbound				HILLTOP RD Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00 AM	0	42	0	0	0	1	0	6	0	1	284	0	0	0	66	5	405	1,566	0	0	0	0
7:15 AM	0	27	0	4	0	1	0	9	0	4	223	0	0	5	115	11	399	1,538	0	0	0	0
7:30 AM	0	36	0	1	0	0	1	5	0	3	215	0	0	4	101	11	377	1,494	0	0	0	0
7:45 AM	0	41	0	2	0	0	0	6	0	4	225	0	0	2	95	10	385	1,464	0	0	0	0
8:00 AM	0	40	0	0	0	0	0	5	0	2	215	1	0	4	88	22	377	1,405	0	0	0	0
8:15 AM	0	28	0	1	0	1	0	6	0	3	201	0	0	5	91	19	355		0	0	0	0
8:30 AM	0	25	0	1	0	0	0	4	0	2	194	0	0	3	99	19	347		0	0	0	0
8:45 AM	0	46	0	1	0	0	0	7	0	6	143	0	0	5	99	19	326		0	0	0	0
Count Total	0	285	0	10	0	3	1	48	0	25	1,700	1	0	28	754	116	2,971		0	0	0	0
Peak Hour	0	146	0	7	0	2	1	26	0	12	947	0	0	11	377	37	1,566		0	0	0	0

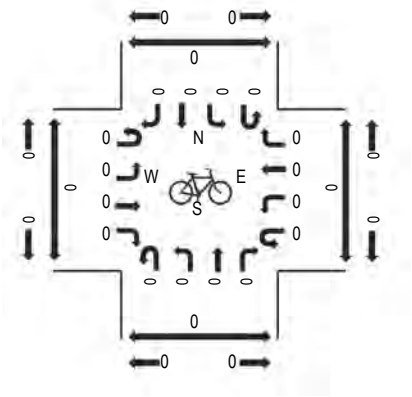
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 1 HILLTOP RD & VILLAGE RD PM
Date: Wednesday, September 25, 2024
Peak Hour: 04:15 PM - 05:15 PM
Peak 15-Minutes: 04:15 PM - 04:30 PM

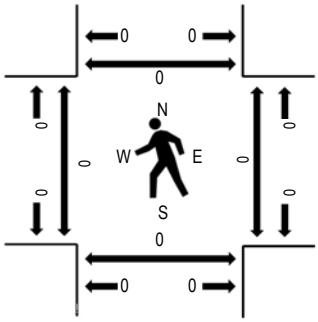
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

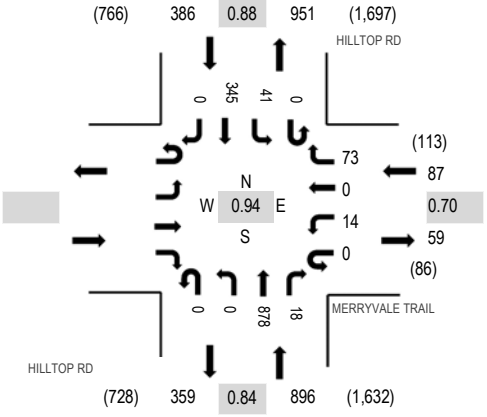
Traffic Counts - Motorized Vehicles

Interval Start Time	VILLAGE RD Eastbound				VILLAGE RD Westbound				HILLTOP RD Northbound				HILLTOP RD Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
4:00 PM	0	30	0	5	0	0	0	4	0	0	114	0	0	4	171	32	360	1,630	0	0	0	0
4:15 PM	0	36	0	4	0	0	0	9	0	1	139	0	0	6	214	57	466	1,677	0	0	0	0
4:30 PM	0	20	0	2	0	0	0	6	0	0	128	2	0	1	218	38	415	1,641	0	0	0	0
4:45 PM	0	25	0	2	0	0	0	7	0	0	96	1	0	6	223	29	389	1,653	0	0	0	0
5:00 PM	0	21	0	1	0	1	0	3	0	0	125	2	0	7	213	34	407	1,669	0	0	0	0
5:15 PM	0	20	1	5	0	1	0	5	0	4	133	1	0	12	215	33	430		0	0	0	0
5:30 PM	0	27	0	3	0	1	0	7	0	2	136	2	0	10	198	41	427		0	0	0	0
5:45 PM	0	19	0	1	0	0	0	5	0	2	112	1	0	3	206	56	405		0	0	0	0
Count Total	0	198	1	23	0	3	0	46	0	9	983	9	0	49	1,658	320	3,299		0	0	0	0
Peak Hour	0	102	0	9	0	1	0	25	0	1	488	5	0	20	868	158	1,677		0	0	0	0

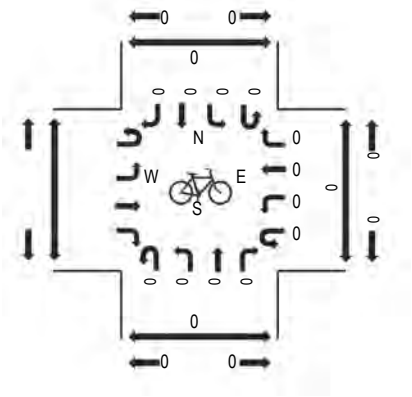
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 2 HILLTOP RD & MERRYVALE TRAIL AM
Date: Wednesday, September 25, 2024
Peak Hour: 07:00 AM - 08:00 AM
Peak 15-Minutes: 07:00 AM - 07:15 AM

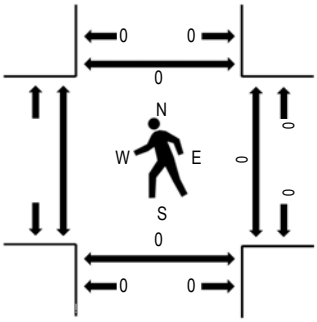
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

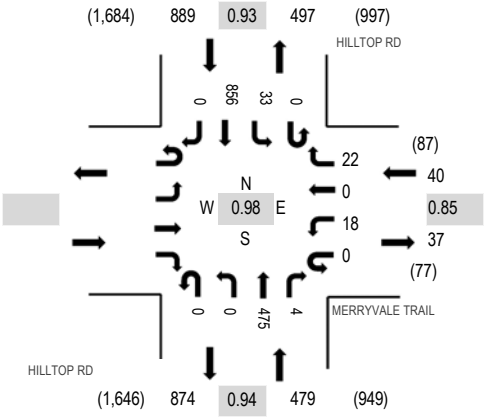
Traffic Counts - Motorized Vehicles

Interval Start Time	Eastbound				MERRYVALE TRAIL Westbound				HILLTOP RD Northbound				HILLTOP RD Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00 AM					0	1	0	26	0	0	261	5	0	7	65	0	365	1,369		0	0	0
7:15 AM					0	6	0	25	0	0	198	5	0	12	102	0	348	1,301		0	0	0
7:30 AM					0	3	0	11	0	0	196	6	0	14	90	0	320	1,253		0	0	0
7:45 AM					0	4	0	11	0	0	223	2	0	8	88	0	336	1,223		0	0	0
8:00 AM					0	3	0	5	0	0	201	2	0	8	78	0	297	1,142		0	0	0
8:15 AM					0	0	0	5	0	0	191	4	0	5	95	0	300			0	0	0
8:30 AM					0	2	0	4	0	0	195	1	0	4	84	0	290			0	0	0
8:45 AM					0	3	0	4	0	0	141	1	0	2	104	0	255			0	0	0
Count Total					0	22	0	91	0	0	1,606	26	0	60	706	0	2,511			0	0	0
Peak Hour					0	14	0	73	0	0	878	18	0	41	345	0	1,369			0	0	0

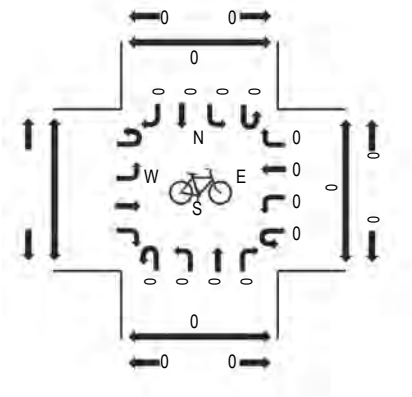
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 2 HILLTOP RD & MERRYVALE TRAIL PM
Date: Wednesday, September 25, 2024
Peak Hour: 04:15 PM - 05:15 PM
Peak 15-Minutes: 05:00 PM - 05:15 PM

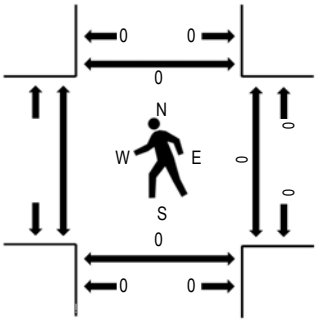
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

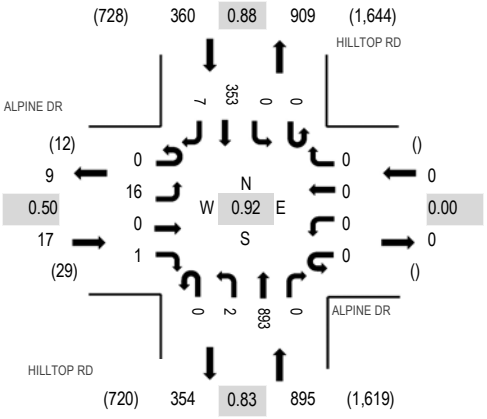
Traffic Counts - Motorized Vehicles

Interval Start Time	Eastbound				MERRYVALE TRAIL Westbound				HILLTOP RD Northbound				HILLTOP RD Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
4:00 PM					0	3	0	9	0	0	106	1	0	1	171	0	291	1,340		0	0	0
4:15 PM					0	6	0	8	0	0	128	0	0	9	207	0	358	1,408		0	0	0
4:30 PM					0	4	0	3	0	0	120	2	0	7	209	0	345	1,381		0	0	0
4:45 PM					0	4	0	6	0	0	98	0	0	6	232	0	346	1,398		0	0	0
5:00 PM					0	4	0	5	0	0	129	2	0	11	208	0	359	1,380		0	0	0
5:15 PM					0	4	0	8	0	0	121	1	0	12	185	0	331			0	0	0
5:30 PM					0	3	0	10	0	0	131	0	0	14	204	0	362			0	0	0
5:45 PM					0	4	0	6	0	0	109	1	0	10	198	0	328			0	0	0
Count Total					0	32	0	55	0	0	942	7	0	70	1,614	0	2,720			0	0	0
Peak Hour					0	18	0	22	0	0	475	4	0	33	856	0	1,408			0	0	0

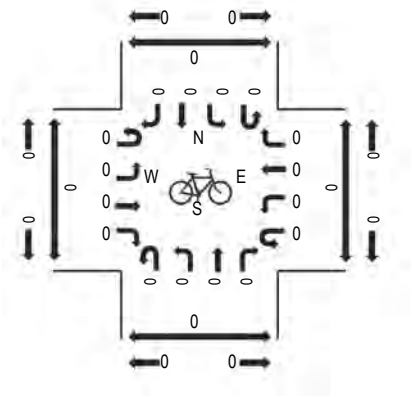
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 3 HILLTOP RD & ALPINE DR AM
Date: Wednesday, September 25, 2024
Peak Hour: 07:00 AM - 08:00 AM
Peak 15-Minutes: 07:00 AM - 07:15 AM

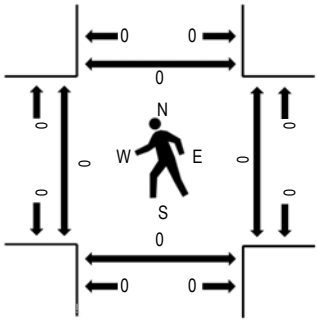
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

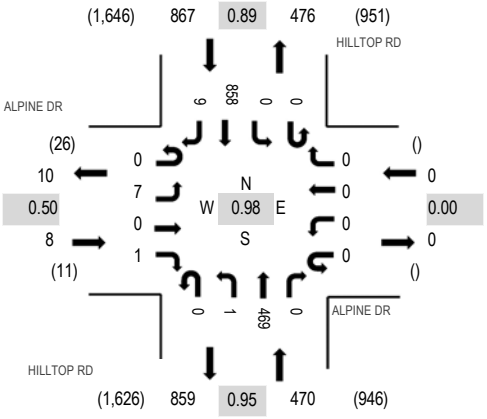
Traffic Counts - Motorized Vehicles

Interval Start Time	ALPINE DR Eastbound				ALPINE DR Westbound				HILLTOP RD Northbound				HILLTOP RD Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00 AM	0	5	0	0	0	0	0	0	0	1	269	0	0	0	68	1	344	1,272	0	0	0	0
7:15 AM	0	2	0	1	0	0	0	0	0	1	201	0	0	0	105	1	311	1,215	0	0	0	0
7:30 AM	0	9	0	0	0	0	0	0	0	0	191	0	0	0	93	2	295	1,195	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	232	0	0	0	87	3	322	1,182	0	0	0	0
8:00 AM	0	3	0	0	0	0	0	0	0	0	201	0	0	0	82	1	287	1,104	0	0	0	0
8:15 AM	0	5	0	1	0	0	0	0	0	0	191	0	0	0	92	2	291		0	0	0	0
8:30 AM	0	2	0	0	0	0	0	0	0	0	193	0	0	0	87	0	282		0	0	0	0
8:45 AM	0	1	0	0	0	0	0	0	0	0	139	0	0	0	104	0	244		0	0	0	0
Count Total	0	27	0	2	0	0	0	0	0	2	1,617	0	0	0	718	10	2,376		0	0	0	0
Peak Hour	0	16	0	1	0	0	0	0	0	2	893	0	0	0	353	7	1,272		0	0	0	0

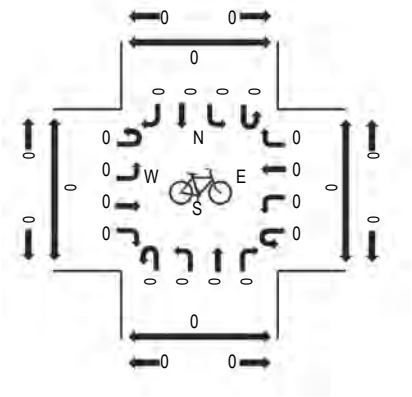
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 3 HILLTOP RD & ALPINE DR PM
Date: Wednesday, September 25, 2024
Peak Hour: 04:15 PM - 05:15 PM
Peak 15-Minutes: 04:15 PM - 04:30 PM

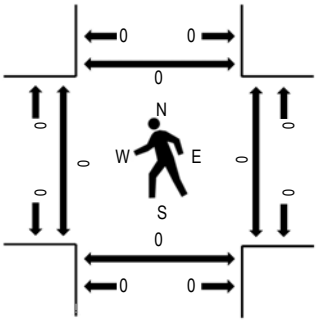
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

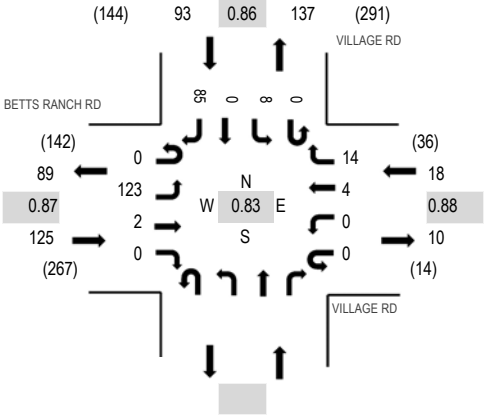
Traffic Counts - Motorized Vehicles

Interval Start Time	ALPINE DR Eastbound				ALPINE DR Westbound				HILLTOP RD Northbound				HILLTOP RD Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
4:00 PM	0	0	0	1	0	0	0	0	0	0	109	0	0	0	173	2	285	1,293	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	130	0	0	0	209	3	342	1,345	0	0	0	0
4:30 PM	0	3	0	0	0	0	0	0	0	0	114	0	0	0	206	1	324	1,321	0	0	0	0
4:45 PM	0	3	0	1	0	0	0	0	0	0	95	0	0	0	242	1	342	1,333	0	0	0	0
5:00 PM	0	1	0	0	0	0	0	0	0	1	130	0	0	0	201	4	337	1,310	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	1	0	123	0	0	0	190	4	318		0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	2	129	0	0	0	199	6	336		0	0	0	0
5:45 PM	0	2	0	0	0	0	0	0	0	0	112	0	0	0	203	2	319		0	0	0	0
Count Total	0	9	0	2	0	0	0	0	1	3	942	0	0	0	1,623	23	2,603		0	0	0	0
Peak Hour	0	7	0	1	0	0	0	0	0	1	469	0	0	0	858	9	1,345		0	0	0	0

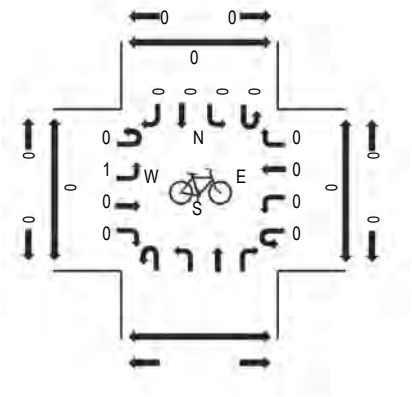
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 4 VILLAGE RD & VILLAGE RD AM
Date: Wednesday, September 25, 2024
Peak Hour: 08:00 AM - 09:00 AM
Peak 15-Minutes: 08:45 AM - 09:00 AM

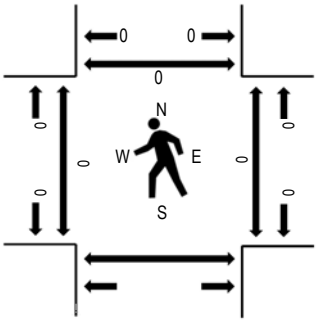
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

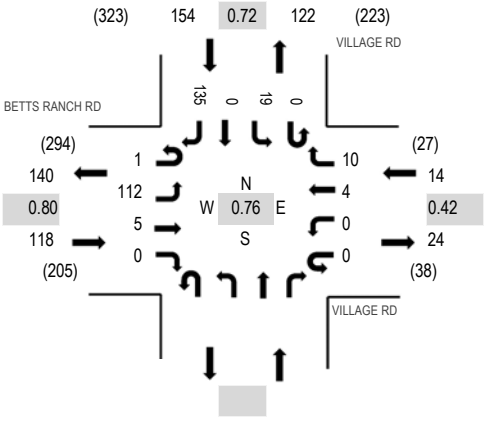
Traffic Counts - Motorized Vehicles

Interval Start Time	BETTS RANCH RD Eastbound				VILLAGE RD Westbound				Northbound				VILLAGE RD Southbound					Rolling Hour	Pedestrian Crossings		
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South North
7:00 AM	0	41	0	0	0	0	1	0					0	1	0	5	48	211	0	0	0
7:15 AM	0	26	0	0	0	0	2	4					0	2	0	14	48	224	0	0	0
7:30 AM	0	35	1	0	0	0	1	5					0	0	0	14	56	231	0	0	0
7:45 AM	0	39	0	0	0	0	1	4					0	0	0	15	59	224	0	0	0
8:00 AM	0	34	0	0	0	0	1	3					0	0	0	23	61	236	0	0	0
8:15 AM	0	30	1	0	0	0	0	1					0	3	0	20	55		0	0	0
8:30 AM	0	22	0	0	0	0	1	6					0	2	0	18	49		0	0	0
8:45 AM	0	37	1	0	0	0	2	4					0	3	0	24	71		0	0	0
Count Total	0	264	3	0	0	0	9	27					0	11	0	133	447		0	0	0
Peak Hour	0	123	2	0	0	0	4	14					0	8	0	85	236		0	0	0

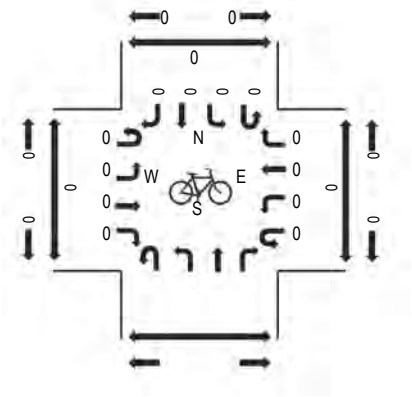
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 4 VILLAGE RD & VILLAGE RD PM
Date: Wednesday, September 25, 2024
Peak Hour: 04:00 PM - 05:00 PM
Peak 15-Minutes: 04:15 PM - 04:30 PM

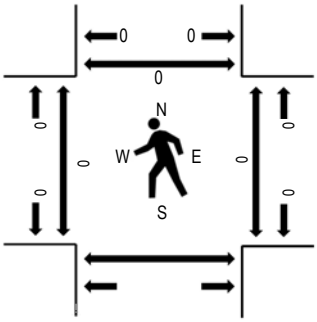
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

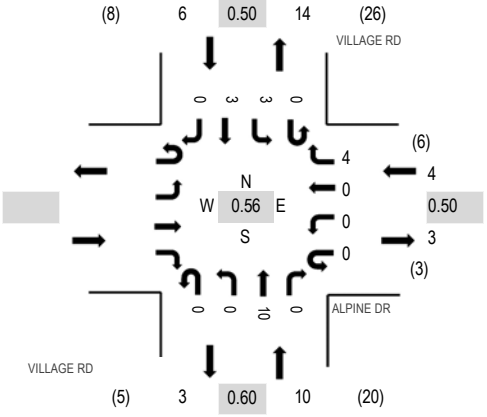
Traffic Counts - Motorized Vehicles

Interval Start Time	BETTS RANCH RD Eastbound				VILLAGE RD Westbound				Northbound				VILLAGE RD Southbound					Rolling Hour	Pedestrian Crossings		
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South North
4:00 PM	0	35	1	0	0	0	1	0					0	4	0	27	68	286	0	0	0
4:15 PM	1	35	1	0	0	0	1	3					0	9	0	44	94	272	0	0	0
4:30 PM	0	18	1	0	0	0	2	3					0	5	0	36	65	240	0	0	0
4:45 PM	0	24	2	0	0	0	0	4					0	1	0	28	59	247	0	0	0
5:00 PM	0	21	0	0	0	0	0	2					0	2	0	29	54	269	0	0	0
5:15 PM	0	25	0	0	0	0	0	0					0	0	0	37	62		0	0	0
5:30 PM	0	21	0	0	0	0	0	9					0	4	0	38	72		0	0	0
5:45 PM	0	20	0	0	0	0	0	2					1	8	0	50	81		0	0	0
Count Total	1	199	5	0	0	0	4	23					1	33	0	289	555		0	0	0
Peak Hour	1	112	5	0	0	0	4	10					0	19	0	135	286		0	0	0

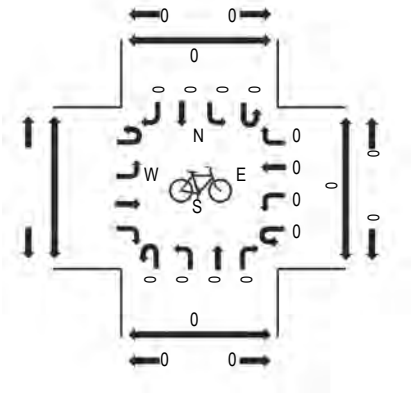
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 5 VILLAGE RD & ALPINE DR AM
Date: Wednesday, September 25, 2024
Peak Hour: 08:00 AM - 09:00 AM
Peak 15-Minutes: 08:45 AM - 09:00 AM

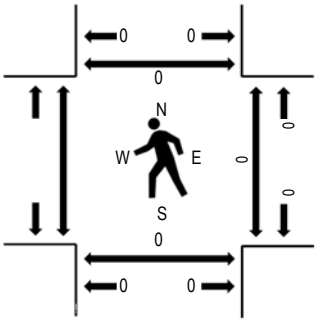
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

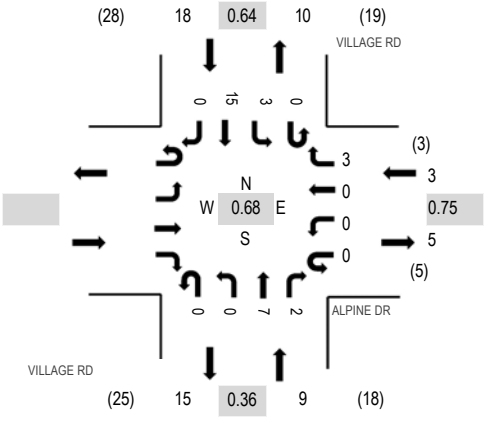
Traffic Counts - Motorized Vehicles

Interval Start Time	Eastbound				ALPINE DR Westbound				VILLAGE RD Northbound				VILLAGE RD Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00 AM					0	0	0	0	0	0	0	0	0	0	0	0	0	14	0	0	0	0
7:15 AM					0	0	0	0	0	0	5	0	0	0	1	0	6	16	0	0	0	0
7:30 AM					0	0	0	2	0	0	2	0	0	0	0	0	4	14	0	0	0	0
7:45 AM					0	0	0	0	0	0	3	0	0	0	1	0	4	15	0	0	0	0
8:00 AM					0	0	0	0	0	0	2	0	0	0	0	0	2	20	0	0	0	0
8:15 AM					0	0	0	1	0	0	1	0	0	0	2	0	4		0	0	0	0
8:30 AM					0	0	0	2	0	0	2	0	0	0	1	0	5		0	0	0	0
8:45 AM					0	0	0	1	0	0	5	0	0	3	0	0	9		0	0	0	0
Count Total					0	0	0	6	0	0	20	0	0	3	5	0	34		0	0	0	0
Peak Hour					0	0	0	4	0	0	10	0	0	3	3	0	20		0	0	0	0

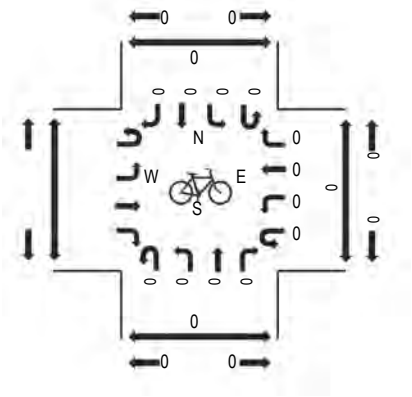
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 5 VILLAGE RD & ALPINE DR PM
Date: Wednesday, September 25, 2024
Peak Hour: 04:00 PM - 05:00 PM
Peak 15-Minutes: 04:30 PM - 04:45 PM

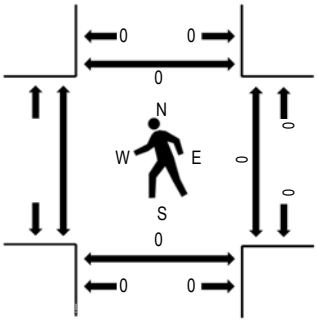
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	Eastbound				ALPINE DR Westbound				VILLAGE RD Northbound				VILLAGE RD Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
4:00 PM					0	0	0	0	0	0	1	1	0	1	2	0	5	30		0	0	0
4:15 PM					0	0	0	1	0	0	1	1	0	1	6	0	10	27		0	0	0
4:30 PM					0	0	0	1	0	0	3	0	0	1	6	0	11	18		0	0	0
4:45 PM					0	0	0	1	0	0	2	0	0	0	1	0	4	16		0	0	0
5:00 PM					0	0	0	0	0	0	0	0	0	0	2	0	2	19		0	0	0
5:15 PM					0	0	0	0	0	0	1	0	0	0	0	0	1			0	0	0
5:30 PM					0	0	0	0	0	0	7	0	0	0	2	0	9			0	0	0
5:45 PM					0	0	0	0	0	0	1	0	0	0	6	0	7			0	0	0
Count Total					0	0	0	3	0	0	16	2	0	3	25	0	49			0	0	0
Peak Hour					0	0	0	3	0	0	7	2	0	3	15	0	30			0	0	0

All Traffic Data Services
12200 W 52nd Ave
Wheat Ridge, CO 80033
www.alltrafficdata.net

Site Code: 6
Station ID: 6
HILLTOP RD N.O. MERRYVALE TRL

Start Time	25-Sep-24 Wed	NB	SB							Total
12:00 AM		5	23							28
01:00		4	8							12
02:00		9	3							12
03:00		21	4							25
04:00		107	9							116
05:00		295	31							326
06:00		707	160							867
07:00		**951**	**386**							**1337**
08:00		746	380							1126
09:00		527	349							876
10:00		494	356							850
11:00		469	383							852
12:00 PM		442	442							884
01:00		476	454							930
02:00		494	492							986
03:00		**520**	705							1225
04:00		478	**842**							1320
05:00		519	842							**1361**
06:00		384	689							1073
07:00		232	478							710
08:00		130	362							492
09:00		53	192							245
10:00		33	118							151
11:00		10	56							66
Total		8106	7764							15870
Percent		51.1%	48.9%							
AM Peak	-	07:00	07:00	-	-	-	-	-	-	07:00
Vol.	-	951	386	-	-	-	-	-	-	1337
PM Peak	-	15:00	16:00	-	-	-	-	-	-	17:00
Vol.	-	520	842	-	-	-	-	-	-	1361
Grand Total		8106	7764							15870
Percent		51.1%	48.9%							
ADT		ADT 15,870		AADT 15,870						

Ramblewood Final Plat
Project File # SB2026-009
Board of County Commissioners Staff Report - Page 206 of 332

All Traffic Data Services
12200 W 52nd Ave
Wheat Ridge, CO 80033
www.alltrafficdata.net

Site Code: 7
Station ID: 7
ALPINE DR W.O. HILLTOP RD

Ramblewood Final Plat
Project File # SB2026-009
Board of County Commissioners Staff Report - Page 207 of 332

Start Time	25-Sep-24 Wed	EB	WB							Total
12:00 AM		0	0							0
01:00		0	0							0
02:00		0	0							0
03:00		1	0							1
04:00		1	0							1
05:00		1	1							2
06:00		6	2							8
07:00		**17**	9							26
08:00		12	3							15
09:00		9	**20**							**29**
10:00		12	11							23
11:00		10	11							21
12:00 PM		**17**	8							**25**
01:00		11	11							22
02:00		10	9							19
03:00		8	5							13
04:00		8	7							15
05:00		3	**19**							22
06:00		11	11							22
07:00		9	9							18
08:00		2	8							10
09:00		0	4							4
10:00		1	5							6
11:00		1	0							1
Total		150	153							303
Percent		49.5%	50.5%							
AM Peak	-	07:00	09:00	-	-	-	-	-	-	09:00
Vol.	-	17	20	-	-	-	-	-	-	29
PM Peak	-	12:00	17:00	-	-	-	-	-	-	12:00
Vol.	-	17	19	-	-	-	-	-	-	25
Grand Total		150	153							303
Percent		49.5%	50.5%							
ADT		ADT 303		AADT 303						

All Traffic Data Services
12200 W 52nd Ave
Wheat Ridge, CO 80033
www.alltrafficdata.net

Site Code: 8
Station ID: 8
VILLAGE RD W.O. HILLTOP RD

Ramblewood Final Plat
Project File # SB2026-009
Board of County Commissioners Staff Report - Page 208 of 332

Start Time	25-Sep-24 Wed	EB	WB							Total
12:00 AM		2	8							10
01:00		2	1							3
02:00		0	1							1
03:00		5	0							5
04:00		9	2							11
05:00		40	2							42
06:00		98	22							120
07:00		**153**	50							203
08:00		142	92							**234**
09:00		112	**99**							211
10:00		98	88							186
11:00		110	93							203
12:00 PM		97	101							198
01:00		108	114							222
02:00		119	126							245
03:00		120	147							267
04:00		**124**	157							**281**
05:00		98	**172**							270
06:00		89	153							242
07:00		51	132							183
08:00		25	75							100
09:00		12	51							63
10:00		4	25							29
11:00		2	10							12
Total		1620	1721							3341
Percent		48.5%	51.5%							
AM Peak	-	07:00	09:00	-	-	-	-	-	-	08:00
Vol.	-	153	99	-	-	-	-	-	-	234
PM Peak	-	16:00	17:00	-	-	-	-	-	-	16:00
Vol.	-	124	172	-	-	-	-	-	-	281
Grand Total		1620	1721							3341
Percent		48.5%	51.5%							
ADT		ADT 3,341		AADT 3,341						

Transportation Impact Study
Base Assumptions

Project Information			
Project Name	Hilltop 177		
Location	Douglas County, Colorado		
Study Area Boundaries	Hilltop Road from Village Road to Alpine Drive,		
	Village Road from Hilltop Road to Alpine Drive, and		
	Alpine Drive from Village Road to Hilltop Road		
Study Area Intersections	Hilltop Road / Village Road, Hilltop Road / Merryvale Trail		
	Hilltop Road / Alpine Drive, Village Road / Betts Ranch Road		
	Village Road / Alpine Drive		
	And includes proposed site accesses		
Study Assumptions			
Type of Study	Traffic Impact Study		
Trip Generation Rate Reference	ITE 11th Edition		
Study Years	Short Term: 2026	Long Term: 2044	
Peak Hour Time Period	AM: 7:00 – 9:00	PM: 4:00 – 6:00	Weekend: N/A
Overall Trip Distribution	See Attached Sketch		
Future Traffic Growth Rate	2%		
Trip Adjustment Factors	Pass-by: None Proposed	Internal Capture Rate: None Proposed	
Mode Split Assumption	None		
Committed Roadway Improvements	Expansion of Hilltop Road to four lanes to just east of Alpine Drive.		
Areas Requiring Special Study	None		
Other Traffic Studies	Fields Traffic Impact Study, Felsberg Holt, and Ullevig, November 2021.		

Date: September 17, 2024
Traffic Engineer: SM Rocha, LLC
Jurisdiction Engineer: _____

SITE DATA	
SITE AREA	177 AC
SINGLE-FAMILY LOTS	70
DENSITY	0.4 DU/AC
OPEN SPACE	37.23 AC
AVERAGE LOT SIZE (EXCLUDING LOT 69 & 70)	14,913 SF
MINIMUM LOT SIZE	11,700 SF
MAXIMUM LOT SIZE (EXCLUDING LOT 69 & 70)	33,793 SF
PARK PARCEL	1.25 AC

100-YEAR FLOODPLAIN

PROPERTY LINE

OS-2
7 AC

PARK
1.25 AC

LOT 69
35 AC

OS-1
28 AC

LOT 69
APPROXIMATE
BUILDING
FOOTPRINT
AREA

LOT 70
71 AC

LOT 70 -
APPROXIMATE
BUILDING
FOOTPRINT
AREA

TRACT A
3 AC

MILLER UNITED
REAL ESTATE

Hilltop 177 | Douglas County, CO

THIS PLAN IS CONCEPTUAL AND SUBJECT TO CHANGE.

NORTH

0' 75' 150' 300'
SCALE

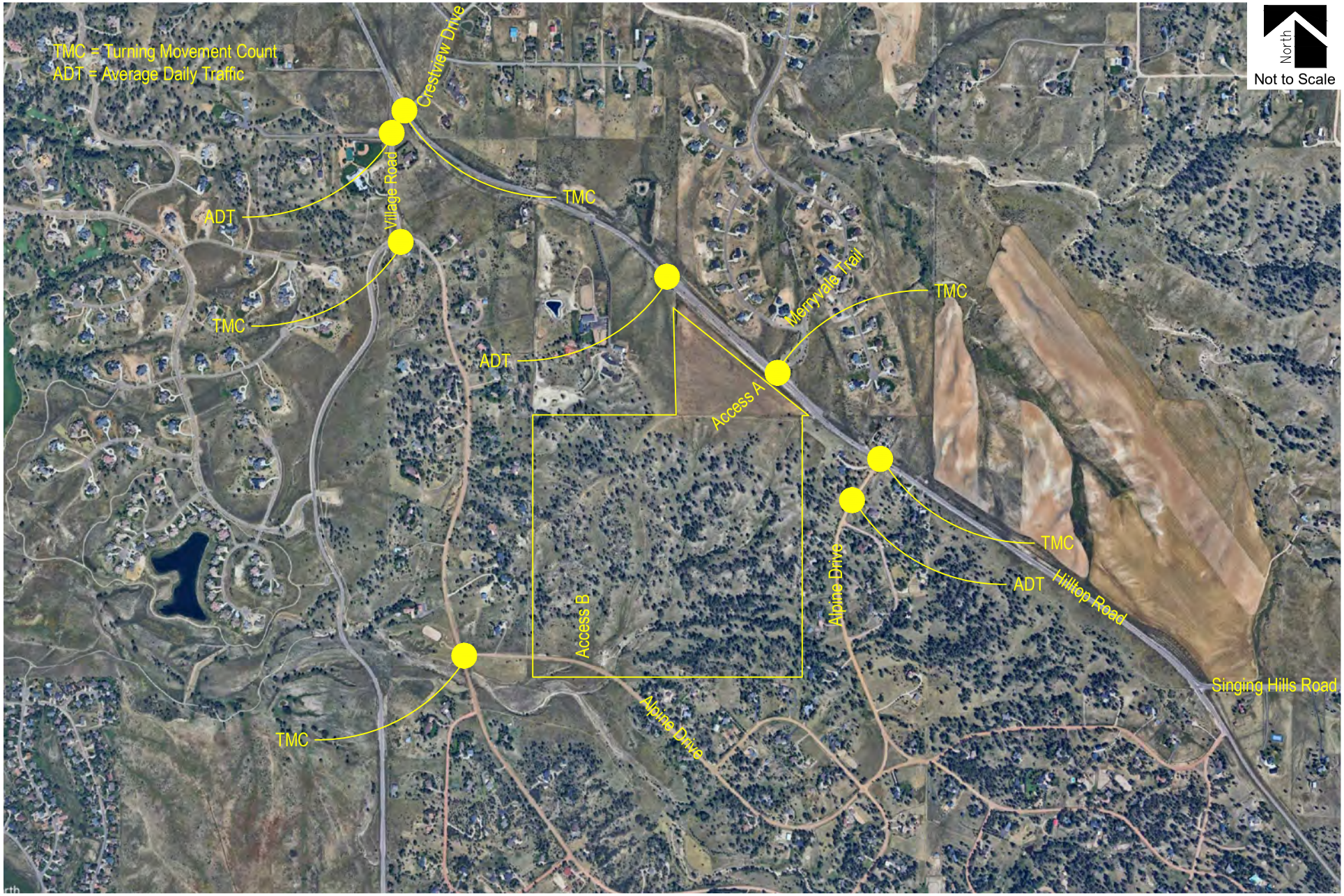
NORRIS DESIGN
PEOPLE + PLACEMAKING

ITE CODE	LAND USE	UNIT	TRIP GENERATION RATES						
			24 HOUR	AM PEAK HOUR			PM PEAK HOUR		
				ENTER	EXIT	TOTAL	ENTER	EXIT	TOTAL
210	Single-Family Detached Housing	DU	9.43	0.18	0.53	0.70	0.59	0.35	0.94

Key: DU = Dwelling Units.
Note: All data and calculations above are subject to being rounded to nearest value.

ITE CODE	LAND USE	SIZE	TOTAL TRIPS GENERATED						
			24 HOUR	AM PEAK HOUR			PM PEAK HOUR		
				ENTER	EXIT	TOTAL	ENTER	EXIT	TOTAL
210	Single-Family Detached Housing	70 DU	660	12	37	49	41	24	66
		Total:	*660*	*12*	*37*	*49*	*41*	*24*	*66*

Key: DU = Dwelling Units.
Note: All data and calculations above are subject to being rounded to nearest value.

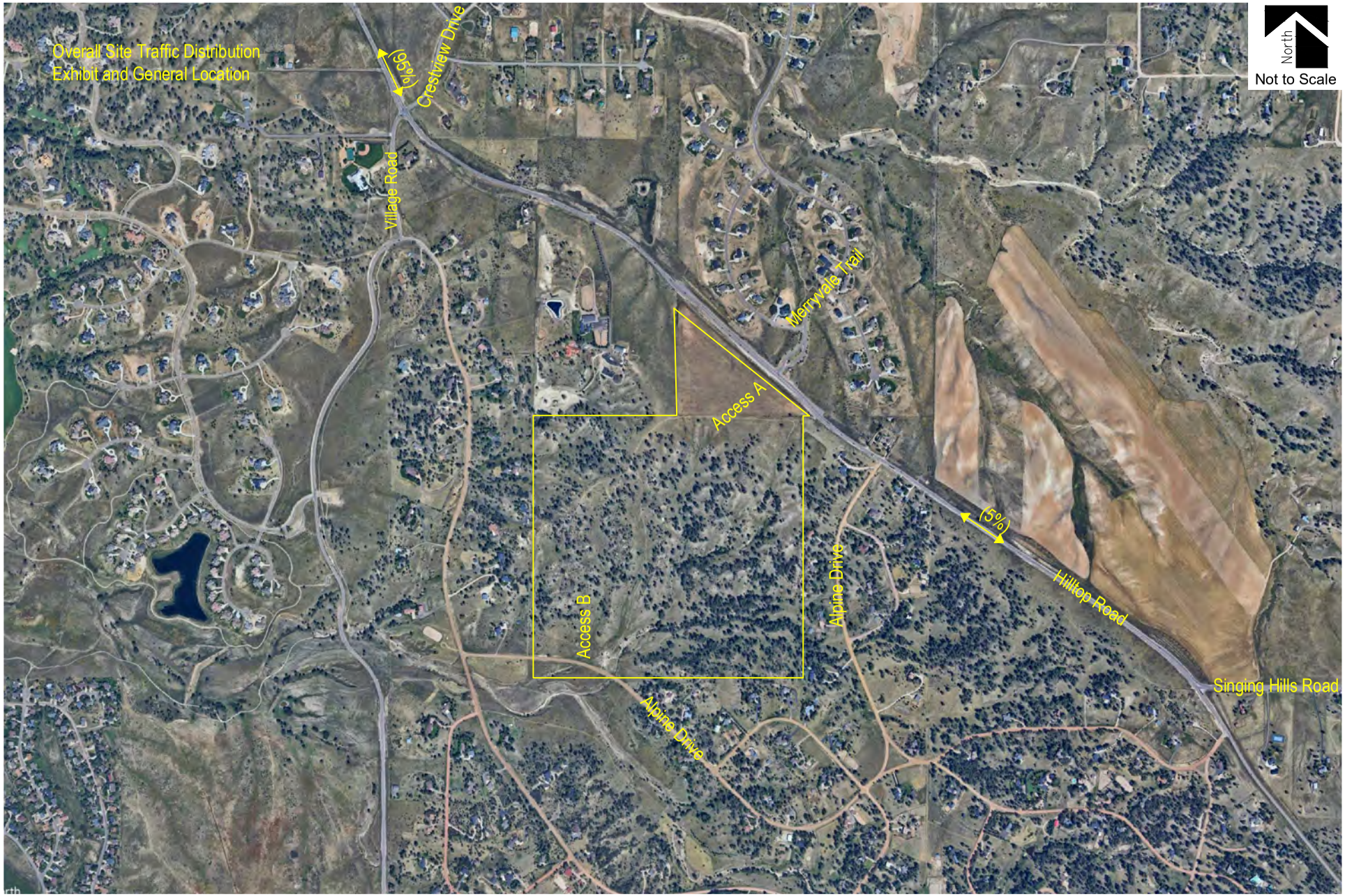


HILLTOP 177
Base Assumption

SM ROCHA, LLC
Traffic and Transportation Consultants

Figure 1
STUDY AREA INTERSECTIONS

September 2024
Page 4


Overall Site Traffic Distribution
Exhibit and General Location
North
Not to Scale
Crestview Drive
(5%)
Village Road
Merryvale Trail
Access A
Access B
Alpine Drive
Alpine Drive
(5%)
Hilltop Road
Singing Hills Road

APPENDIX B

Level of Service Definitions

The following information is referenced from the Highway Capacity Manual: A Guide for Multimodal Mobility Analysis, 7th Edition, Transportation Research Board, 2022: Chapter 19 – Signalized Intersections.

Motorized Vehicle Level of Service (LOS) for Signalized Intersections

Levels of service are defined to represent reasonable ranges in control delay.

LOS A Describes operations with a control delay of 10 s/veh or less and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is low and either progression is exceptionally favorable or the cycle length is very short. If it is due to favorable progression, most vehicles arrive during the green indication and travel through the intersection without stopping.

LOS B Describes operations with control delay between 10 and 20 s/veh and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is low and either progression is highly favorable or the cycle length is short. More vehicles stop than with LOS A.

LOS C Describes operations with control delay between 20 and 35 s/veh and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when progression is favorable or the cycle length is moderate. Individual *cycle failures* (i.e., one or more queued vehicles are not able to depart as a result of insufficient capacity during the cycle) may begin to appear at this level. The number of vehicles stopping is significant, although many vehicles still pass through the intersection without stopping.

LOS D Describes operations with control delay between 35 and 55 s/veh and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is high and either progression is ineffective or the cycle length is long. Many vehicles stop and individual cycle failures are noticeable.

LOS E Describes operations with control delay between 55 and 80 s/veh and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is high, progression is unfavorable, and the cycle length is long. Individual cycle failures are frequent.

LOS F Describes operations with control delay exceeding 80 s/veh or a volume-to-capacity ratio greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is very high, progression is very poor, and the cycle length is long. Most cycles fail to clear the queue.

Control Delay (s/veh)	LOS by Volume-to-Capacity Ratio[a]	
	$v/c \leq 1.0$	$v/c > 1.0$
≤ 10	A	F
> 10 – 20	B	F
> 20 – 35	C	F
> 35 – 55	D	F
> 55 – 80	E	F
> 80	F	F

Note: [a] For approach-based and intersectionwide assessments, LOS is defined solely by control delay.

The following information is referenced from the Highway Capacity Manual: A Guide for Multimodal Mobility Analysis, 7th Edition, Transportation Research Board, 2022: Chapter 20 – Two-Way Stop-Controlled Intersections, Chapter 21 – All-Way Stop-Controlled Intersections, and Chapter 22 - Roundabouts.

Motorized Vehicle Level of Service (LOS) for Unsignalized & Roundabout Intersections

LOS is a quantitative stratification of performance measure(s) representing quality of service. Quality of service describes how well a transportation facility or service operates from a traveler's perspective. LOS is measured on an A – F scale, with LOS A representing the best operating conditions from a traveler's perspective.

Control Delay (s/veh)	LOS by Volume-to-Capacity Ratio[a]	
	$v/c \leq 1.0$	$v/c > 1.0$
0 – 10	A	F
> 10 – 15	B	F
> 15 – 25	C	F
> 25 – 35	D	F
> 35 – 50	E	F
> 50	F	F

Note: The LOS criteria apply to each lane on a given approach and to each approach on the minor street. LOS is not calculated for major-street approaches or for the intersection as a whole.

[a] For approaches and intersectionwide assessment, LOS is defined solely by control delay.

APPENDIX C

Capacity Worksheets

Intersection	
Int Delay, s/veh	48.3

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	11	377	37	12	947	0	146	0	7	2	1	26
Future Vol, veh/h	11	377	37	12	947	0	146	0	7	2	1	26
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	Stop	-	-	None
Storage Length	100	-	200	-	-	150	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	12	410	40	13	1029	0	159	0	8	2	1	28

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1029	0	0	450	0	0	1490	1489	410	1489	1529	1029
Stage 1	-	-	-	-	-	-	434	434	-	1055	1055	-
Stage 2	-	-	-	-	-	-	1056	1055	-	434	474	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	675	-	-	1110	-	-	~ 102	124	642	102	117	284
Stage 1	-	-	-	-	-	-	601	581	-	273	302	-
Stage 2	-	-	-	-	-	-	272	302	-	601	558	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	675	-	-	1110	-	-	~ 87	118	642	96	112	284
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 87	118	-	96	112	-
Stage 1	-	-	-	-	-	-	590	571	-	265	294	-
Stage 2	-	-	-	-	-	-	238	294	-	583	548	-

Approach	SE	NW	NE	SW
HCM Control Delay, s/v	0.27	0.1	$ 488.55	22.33
HCM LOS			F	C

Minor Lane/Major Mvmt	NELn1	NWL	NWT	NWR	SEL	SET	SERSWLn1
Capacity (veh/h)	91	23	-	-	675	-	- 239
HCM Lane V/C Ratio	1.825	0.012	-	-	0.018	-	- 0.132
HCM Control Delay (s/veh)	$ 488.5	8.3	0	-	10.4	-	- 22.3
HCM Lane LOS	F	A	A	-	B	-	- C
HCM 95th %tile Q(veh)	13.9	0	-	-	0.1	-	- 0.4

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection	
Int Delay, s/veh	2

Movement	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Vol, veh/h	41	345	878	18	14	73
Future Vol, veh/h	41	345	878	18	14	73
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	315	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	45	375	954	20	15	79

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	974	0	-	0	1428	964
Stage 1	-	-	-	-	964	-
Stage 2	-	-	-	-	464	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	708	-	-	-	149	310
Stage 1	-	-	-	-	370	-
Stage 2	-	-	-	-	633	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	708	-	-	-	139	310
Mov Cap-2 Maneuver	-	-	-	-	139	-
Stage 1	-	-	-	-	347	-
Stage 2	-	-	-	-	633	-

Approach	SE	NW	SW
HCM Control Delay, s/v	1.11	0	26.72
HCM LOS			D

Minor Lane/Major Mvmt	NWT	NWR	SEL	SET	SWLn1
Capacity (veh/h)	-	-	708	-	259
HCM Lane V/C Ratio	-	-	0.063	-	0.366
HCM Control Delay (s/veh)	-	-	10.4	-	26.7
HCM Lane LOS	-	-	B	-	D
HCM 95th %tile Q(veh)	-	-	0.2	-	1.6

Intersection	
Int Delay, s/veh	0.4

Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Vol, veh/h	353	7	2	893	16	1
Future Vol, veh/h	353	7	2	893	16	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	384	8	2	971	17	1

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	391	0	1362	387
Stage 1	-	-	-	-	387	-
Stage 2	-	-	-	-	975	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1167	-	163	661
Stage 1	-	-	-	-	686	-
Stage 2	-	-	-	-	366	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1167	-	162	661
Mov Cap-2 Maneuver	-	-	-	-	162	-
Stage 1	-	-	-	-	686	-
Stage 2	-	-	-	-	364	-

Approach	SE	NW	NE
HCM Control Delay, s/v	0	0.02	28.76
HCM LOS			D

Minor Lane/Major Mvmt	NELn1	NWL	NWT	SET	SER
Capacity (veh/h)	170	4	-	-	-
HCM Lane V/C Ratio	0.109	0.002	-	-	-
HCM Control Delay (s/veh)	28.8	8.1	0	-	-
HCM Lane LOS	D	A	A	-	-
HCM 95th %tile Q(veh)	0.4	0	-	-	-

Intersection	
Intersection Delay, s/veh	7.7
Intersection LOS	A

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	123	2	4	14	8	85
Future Vol, veh/h	123	2	4	14	8	85
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	134	2	4	15	9	92
Number of Lanes	0	1	1	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay, s/veh	8.2	6.9	7.2
HCM LOS	A	A	A

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	98%	0%	9%
Vol Thru, %	2%	22%	0%
Vol Right, %	0%	78%	91%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	125	18	93
LT Vol	123	0	8
Through Vol	2	4	0
RT Vol	0	14	85
Lane Flow Rate	136	20	101
Geometry Grp	1	1	1
Degree of Util (X)	0.163	0.02	0.103
Departure Headway (Hd)	4.324	3.749	3.67
Convergence, Y/N	Yes	Yes	Yes
Cap	829	945	959
Service Time	2.352	1.812	1.757
HCM Lane V/C Ratio	0.164	0.021	0.105
HCM Control Delay, s/veh	8.2	6.9	7.2
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.6	0.1	0.3

Intersection	
Int Delay, s/veh	2.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	4	10	0	3	3
Future Vol, veh/h	0	4	10	0	3	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	4	11	0	3	3

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	21	11	0	0	11	0
Stage 1	11	-	-	-	-	-
Stage 2	10	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	996	1070	-	-	1608	-
Stage 1	1012	-	-	-	-	-
Stage 2	1013	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	994	1070	-	-	1608	-
Mov Cap-2 Maneuver	994	-	-	-	-	-
Stage 1	1012	-	-	-	-	-
Stage 2	1011	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	8.38	0	3.62
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	1070	900	-
HCM Lane V/C Ratio	-	-	0.004	0.002	-
HCM Control Delay (s/veh)	-	-	8.4	7.2	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0	0	-

Intersection	
Int Delay, s/veh	16.5

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	20	868	158	1	488	5	102	0	9	1	0	25
Future Vol, veh/h	20	868	158	1	488	5	102	0	9	1	0	25
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	Stop	-	-	None
Storage Length	100	-	200	-	-	150	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	22	943	172	1	530	5	111	0	10	1	0	27

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	536	0	0	1115	0	0	1520	1525	943	1520	1691	530
Stage 1	-	-	-	-	-	-	987	987	-	533	533	-
Stage 2	-	-	-	-	-	-	533	538	-	987	1159	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1032	-	-	626	-	-	~ 97	118	318	97	93	549
Stage 1	-	-	-	-	-	-	298	325	-	531	525	-
Stage 2	-	-	-	-	-	-	531	522	-	298	270	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1032	-	-	626	-	-	~ 90	115	318	92	91	549
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 90	115	-	92	91	-
Stage 1	-	-	-	-	-	-	292	319	-	529	524	-
Stage 2	-	-	-	-	-	-	503	521	-	283	264	-

Approach	SE	NW	NE	SW
HCM Control Delay, s/v	0.16	0.02	244.15	13.32
HCM LOS			F	B

Minor Lane/Major Mvmt	NELn1	NWL	NWT	NWR	SEL	SET	SERSWLn1
Capacity (veh/h)	98	4	-	-	1032	-	- 461
HCM Lane V/C Ratio	1.228	0.002	-	-	0.021	-	- 0.061
HCM Control Delay (s/veh)	244.1	10.8	0	-	8.6	-	- 13.3
HCM Lane LOS	F	B	A	-	A	-	- B
HCM 95th %tile Q(veh)	8.3	0	-	-	0.1	-	- 0.2

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	0.6

Movement	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Vol, veh/h	33	856	475	4	8	22
Future Vol, veh/h	33	856	475	4	8	22
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	315	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	36	930	516	4	9	24

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	521	0	-	0	1521	518
Stage 1	-	-	-	-	518	-
Stage 2	-	-	-	-	1002	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1046	-	-	-	131	557
Stage 1	-	-	-	-	598	-
Stage 2	-	-	-	-	355	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1046	-	-	-	126	557
Mov Cap-2 Maneuver	-	-	-	-	126	-
Stage 1	-	-	-	-	577	-
Stage 2	-	-	-	-	355	-

Approach	SE	NW	SW
HCM Control Delay, s/v	0.32	0	18.9
HCM LOS			C

Minor Lane/Major Mvmt	NWT	NWR	SEL	SET	SWLn1
Capacity (veh/h)	-	-	1046	-	291
HCM Lane V/C Ratio	-	-	0.034	-	0.112
HCM Control Delay (s/veh)	-	-	8.6	-	18.9
HCM Lane LOS	-	-	A	-	C
HCM 95th %tile Q(veh)	-	-	0.1	-	0.4

Intersection	
Int Delay, s/veh	0.2

Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Vol, veh/h	858	9	1	469	7	1
Future Vol, veh/h	858	9	1	469	7	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	933	10	1	510	8	1

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	942	0	1449	938
Stage 1	-	-	-	-	938	-
Stage 2	-	-	-	-	512	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	728	-	144	321
Stage 1	-	-	-	-	381	-
Stage 2	-	-	-	-	602	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	728	-	144	321
Mov Cap-2 Maneuver	-	-	-	-	144	-
Stage 1	-	-	-	-	381	-
Stage 2	-	-	-	-	600	-

Approach	SE	NW	NE
HCM Control Delay, s/v	0	0.02	29.66
HCM LOS			D

Minor Lane/Major Mvmt	NELn1	NWL	NWT	SET	SER
Capacity (veh/h)	155	4	-	-	-
HCM Lane V/C Ratio	0.056	0.001	-	-	-
HCM Control Delay (s/veh)	29.7	10	0	-	-
HCM Lane LOS	D	A	A	-	-
HCM 95th %tile Q(veh)	0.2	0	-	-	-

Intersection	
Intersection Delay, s/veh	7.8
Intersection LOS	A

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	113	5	4	10	19	135
Future Vol, veh/h	113	5	4	10	19	135
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	123	5	4	11	21	147
Number of Lanes	0	1	1	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay, s/veh	8.3	7	7.5
HCM LOS	A	A	A

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	96%	0%	12%
Vol Thru, %	4%	29%	0%
Vol Right, %	0%	71%	88%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	118	14	154
LT Vol	113	0	19
Through Vol	5	4	0
RT Vol	0	10	135
Lane Flow Rate	128	15	167
Geometry Grp	1	1	1
Degree of Util (X)	0.158	0.016	0.171
Departure Headway (Hd)	4.433	3.9	3.681
Convergence, Y/N	Yes	Yes	Yes
Cap	805	904	957
Service Time	2.478	1.984	1.77
HCM Lane V/C Ratio	0.159	0.017	0.175
HCM Control Delay, s/veh	8.3	7	7.5
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.6	0	0.6

Intersection	
Int Delay, s/veh	1.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	3	7	2	3	15
Future Vol, veh/h	0	3	7	2	3	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	3	8	2	3	16

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	32	9	0	0	10	0
Stage 1	9	-	-	-	-	-
Stage 2	23	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	982	1073	-	-	1610	-
Stage 1	1014	-	-	-	-	-
Stage 2	1000	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	980	1073	-	-	1610	-
Mov Cap-2 Maneuver	980	-	-	-	-	-
Stage 1	1014	-	-	-	-	-
Stage 2	998	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	8.36	0	1.21
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	1073	300	-
HCM Lane V/C Ratio	-	-	0.003	0.002	-
HCM Control Delay (s/veh)	-	-	8.4	7.2	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0	0	-

Intersection	
Intersection Delay, s/veh	7.5
Intersection LOS	A

Approach	SE	NW	NE	SW
Entry Lanes	2	2	1	1
Conflicting Circle Lanes	2	2	2	2
Adj Approach Flow, veh/h	525	1199	184	31
Demand Flow Rate, veh/h	535	1223	188	32
Vehicles Circulating, veh/h	17	190	491	1401
Vehicles Exiting, veh/h	1417	488	61	12
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	4.3	9.1	5.9	9.7
Approach LOS	A	A	A	A

Lane	Left	Right	Left	Right	Left	Left
Designated Moves	LT	TR	LT	TR	LTR	LTR
Assumed Moves	LT	TR	LT	TR	LTR	LTR
RT Channelized						
Lane Util	0.469	0.531	0.470	0.530	1.000	1.000
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.535	2.535
Critical Headway, s	4.645	4.328	4.645	4.328	4.328	4.328
A (Intercept)	1350	1420	1350	1420	1420	1420
B (Slope)	9.199e-4	8.501e-4	9.199e-4	8.501e-4	8.501e-4	8.501e-4
Entry Flow, veh/h	251	284	575	648	188	32
Cap Entry Lane, veh/h	1329	1400	1133	1208	935	432
Entry HV Adj Factor	0.982	0.979	0.980	0.981	0.979	0.968
Flow Entry, veh/h	247	278	564	636	184	31
Cap Entry, veh/h	1306	1370	1111	1185	916	418
V/C Ratio	0.189	0.203	0.507	0.536	0.201	0.074
Control Delay, s/veh	4.3	4.3	9.1	9.2	5.9	9.7
LOS	A	A	A	A	A	A
95th %tile Queue, veh	1	1	3	3	1	0

Intersection	
Int Delay, s/veh	1.6

Movement	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Vol, veh/h	45	393	914	20	15	80
Future Vol, veh/h	45	393	914	20	15	80
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	315	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	49	427	993	22	16	87

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1015	0	-	0	1316	508
Stage 1	-	-	-	-	1004	-
Stage 2	-	-	-	-	311	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	679	-	-	-	149	510
Stage 1	-	-	-	-	315	-
Stage 2	-	-	-	-	716	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	679	-	-	-	138	510
Mov Cap-2 Maneuver	-	-	-	-	138	-
Stage 1	-	-	-	-	292	-
Stage 2	-	-	-	-	716	-

Approach	SE	NW	SW
HCM Control Delay, s/v	1.1	0	19.06
HCM LOS			C

Minor Lane/Major Mvmt	NWT	NWR	SEL	SET	SWLn1
Capacity (veh/h)	-	-	679	-	358
HCM Lane V/C Ratio	-	-	0.072	-	0.288
HCM Control Delay (s/veh)	-	-	10.7	-	19.1
HCM Lane LOS	-	-	B	-	C
HCM 95th %tile Q(veh)	-	-	0.2	-	1.2

Intersection	
Int Delay, s/veh	0.5

Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Vol, veh/h	404	7	2	1030	16	1
Future Vol, veh/h	404	7	2	1030	16	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	439	8	2	1120	17	1

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	447	0	1563	439
Stage 1	-	-	-	-	439	-
Stage 2	-	-	-	-	1124	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1114	-	123	618
Stage 1	-	-	-	-	650	-
Stage 2	-	-	-	-	310	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1114	-	122	618
Mov Cap-2 Maneuver	-	-	-	-	122	-
Stage 1	-	-	-	-	650	-
Stage 2	-	-	-	-	309	-

Approach	SE	NW	NE
HCM Control Delay, s/v	0	0.02	37.71
HCM LOS			E

Minor Lane/Major Mvmt	NELn1	NWL	NWT	SET	SER
Capacity (veh/h)	128	3	-	-	-
HCM Lane V/C Ratio	0.144	0.002	-	-	-
HCM Control Delay (s/veh)	37.7	8.2	0	-	-
HCM Lane LOS	E	A	A	-	-
HCM 95th %tile Q(veh)	0.5	0	-	-	-

Intersection	
Intersection Delay, s/veh	7.8
Intersection LOS	A

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	135	2	4	14	8	94
Future Vol, veh/h	135	2	4	14	8	94
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	147	2	4	15	9	102
Number of Lanes	0	1	1	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay, s/veh	8.3	6.9	7.3
HCM LOS	A	A	A

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	99%	0%	8%
Vol Thru, %	1%	22%	0%
Vol Right, %	0%	78%	92%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	137	18	102
LT Vol	135	0	8
Through Vol	2	4	0
RT Vol	0	14	94
Lane Flow Rate	149	20	111
Geometry Grp	1	1	1
Degree of Util (X)	0.18	0.021	0.117
Departure Headway (Hd)	4.342	3.777	3.785
Convergence, Y/N	Yes	Yes	Yes
Cap	823	934	952
Service Time	2.381	1.855	1.785
HCM Lane V/C Ratio	0.181	0.021	0.117
HCM Control Delay, s/veh	8.3	6.9	7.3
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.7	0.1	0.4

Intersection	
Int Delay, s/veh	2.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	4	10	0	3	3
Future Vol, veh/h	0	4	10	0	3	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	4	11	0	3	3

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	21	11	0	0	11	0
Stage 1	11	-	-	-	-	-
Stage 2	10	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	996	1070	-	-	1608	-
Stage 1	1012	-	-	-	-	-
Stage 2	1013	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	994	1070	-	-	1608	-
Mov Cap-2 Maneuver	994	-	-	-	-	-
Stage 1	1012	-	-	-	-	-
Stage 2	1011	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	8.38	0	3.62
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	1070	900	-
HCM Lane V/C Ratio	-	-	0.004	0.002	-
HCM Control Delay (s/veh)	-	-	8.4	7.2	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0	0	-

Intersection	
Intersection Delay, s/veh	7.5
Intersection LOS	A

Approach	SE	NW	NE	SW
Entry Lanes	2	2	1	1
Conflicting Circle Lanes	2	2	2	2
Adj Approach Flow, veh/h	1406	623	133	28
Demand Flow Rate, veh/h	1434	635	135	29
Vehicles Circulating, veh/h	2	146	1242	754
Vehicles Exiting, veh/h	781	1231	194	27
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	8.1	5.4	11.5	5.4
Approach LOS	A	A	B	A

Lane	Left	Right	Left	Right	Left	Left
Designated Moves	LT	TR	LT	TR	LTR	LTR
Assumed Moves	LT	TR	LT	TR	LTR	LTR
RT Channelized						
Lane Util	0.470	0.530	0.469	0.531	1.000	1.000
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.535	2.535
Critical Headway, s	4.645	4.328	4.645	4.328	4.328	4.328
A (Intercept)	1350	1420	1350	1420	1420	1420
B (Slope)	9.199e-4	8.501e-4	9.199e-4	8.501e-4	8.501e-4	8.501e-4
Entry Flow, veh/h	674	760	298	337	135	29
Cap Entry Lane, veh/h	1347	1418	1180	1254	494	748
Entry HV Adj Factor	0.981	0.981	0.982	0.979	0.985	0.966
Flow Entry, veh/h	661	745	293	330	133	28
Cap Entry, veh/h	1321	1390	1159	1228	487	722
V/C Ratio	0.500	0.536	0.253	0.269	0.273	0.039
Control Delay, s/veh	7.9	8.2	5.4	5.3	11.5	5.4
LOS	A	A	A	A	B	A
95th %tile Queue, veh	3	3	1	1	1	0

Intersection	
Int Delay, s/veh	0.5

Movement	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Vol, veh/h	36	996	554	4	9	24
Future Vol, veh/h	36	996	554	4	9	24
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	315	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	39	1083	602	4	10	26

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	607	0	-	0	1224	303
Stage 1	-	-	-	-	604	-
Stage 2	-	-	-	-	620	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	968	-	-	-	171	693
Stage 1	-	-	-	-	508	-
Stage 2	-	-	-	-	499	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	968	-	-	-	164	693
Mov Cap-2 Maneuver	-	-	-	-	164	-
Stage 1	-	-	-	-	488	-
Stage 2	-	-	-	-	499	-

Approach	SE	NW	SW
HCM Control Delay, s/v	0.31	0	15.79
HCM LOS			C

Minor Lane/Major Mvmt	NWT	NWR	SEL	SET	SWLn1
Capacity (veh/h)	-	-	968	-	369
HCM Lane V/C Ratio	-	-	0.04	-	0.097
HCM Control Delay (s/veh)	-	-	8.9	-	15.8
HCM Lane LOS	-	-	A	-	C
HCM 95th %tile Q(veh)	-	-	0.1	-	0.3

Intersection	
Int Delay, s/veh	0.2

Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Vol, veh/h	698	9	1	547	7	1
Future Vol, veh/h	698	9	1	547	7	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	759	10	1	595	8	1

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	768	0	1355	759
Stage 1	-	-	-	-	759	-
Stage 2	-	-	-	-	597	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	846	-	165	407
Stage 1	-	-	-	-	462	-
Stage 2	-	-	-	-	550	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	846	-	164	407
Mov Cap-2 Maneuver	-	-	-	-	164	-
Stage 1	-	-	-	-	462	-
Stage 2	-	-	-	-	549	-

Approach	SE	NW	NE
HCM Control Delay, s/v	0	0.02	26.32
HCM LOS			D

Minor Lane/Major Mvmt	NELn1	NWL	NWT	SET	SER
Capacity (veh/h)	178	3	-	-	-
HCM Lane V/C Ratio	0.049	0.001	-	-	-
HCM Control Delay (s/veh)	26.3	9.3	0	-	-
HCM Lane LOS	D	A	A	-	-
HCM 95th %tile Q(veh)	0.2	0	-	-	-

Intersection	
Intersection Delay, s/veh	8
Intersection LOS	A

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	124	5	4	10	19	149
Future Vol, veh/h	124	5	4	10	19	149
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	135	5	4	11	21	162
Number of Lanes	0	1	1	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay, s/veh	8.5	7.1	7.7
HCM LOS	A	A	A

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	96%	0%	11%
Vol Thru, %	4%	29%	0%
Vol Right, %	0%	71%	89%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	129	14	168
LT Vol	124	0	19
Through Vol	5	4	0
RT Vol	0	10	149
Lane Flow Rate	140	15	183
Geometry Grp	1	1	1
Degree of Util (X)	0.174	0.017	0.192
Departure Headway (Hd)	4.459	4.041	3.794
Convergence, Y/N	Yes	Yes	Yes
Cap	798	891	951
Service Time	2.521	2.041	1.794
HCM Lane V/C Ratio	0.175	0.017	0.192
HCM Control Delay, s/veh	8.5	7.1	7.7
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.6	0.1	0.7

Intersection	
Int Delay, s/veh	1.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	3	7	2	3	15
Future Vol, veh/h	0	3	7	2	3	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	3	8	2	3	16

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	32	9	0	0	10	0
Stage 1	9	-	-	-	-	-
Stage 2	23	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	982	1073	-	-	1610	-
Stage 1	1014	-	-	-	-	-
Stage 2	1000	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	980	1073	-	-	1610	-
Mov Cap-2 Maneuver	980	-	-	-	-	-
Stage 1	1014	-	-	-	-	-
Stage 2	998	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	8.36	0	1.21
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	1073	300	-
HCM Lane V/C Ratio	-	-	0.003	0.002	-
HCM Control Delay (s/veh)	-	-	8.4	7.2	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0	0	-

Intersection	
Intersection Delay, s/veh	12.3
Intersection LOS	B

Approach	SE	NW	NE	SW
Entry Lanes	2	2	1	1
Conflicting Circle Lanes	2	2	2	2
Adj Approach Flow, veh/h	706	1617	250	31
Demand Flow Rate, veh/h	720	1649	255	32
Vehicles Circulating, veh/h	23	255	660	1892
Vehicles Exiting, veh/h	1901	660	83	12
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	5.0	16.1	8.2	15.3
Approach LOS	A	C	A	C

Lane	Left	Right	Left	Right	Left	Left
Designated Moves	LT	TR	LT	TR	LTR	LTR
Assumed Moves	LT	TR	LT	TR	LTR	LTR
RT Channelized						
Lane Util	0.469	0.531	0.470	0.530	1.000	1.000
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.535	2.535
Critical Headway, s	4.645	4.328	4.645	4.328	4.328	4.328
A (Intercept)	1350	1420	1350	1420	1420	1420
B (Slope)	9.199e-4	8.501e-4	9.199e-4	8.501e-4	8.501e-4	8.501e-4
Entry Flow, veh/h	338	382	775	874	255	32
Cap Entry Lane, veh/h	1322	1393	1068	1143	810	284
Entry HV Adj Factor	0.982	0.980	0.981	0.981	0.980	0.968
Flow Entry, veh/h	332	374	760	857	250	31
Cap Entry, veh/h	1298	1365	1047	1121	794	275
V/C Ratio	0.256	0.274	0.726	0.764	0.315	0.113
Control Delay, s/veh	5.0	5.0	15.6	16.6	8.2	15.3
LOS	A	A	C	C	A	C
95th %tile Queue, veh	1	1	7	8	1	0

Intersection	
Int Delay, s/veh	5.2

Movement	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Vol, veh/h	62	534	1365	27	21	110
Future Vol, veh/h	62	534	1365	27	21	110
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	315	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	67	580	1484	29	23	120

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1513	0	-	0	1923	757
Stage 1	-	-	-	-	1498	-
Stage 2	-	-	-	-	425	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	438	-	-	-	59	350
Stage 1	-	-	-	-	171	-
Stage 2	-	-	-	-	627	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	438	-	-	-	50	350
Mov Cap-2 Maneuver	-	-	-	-	50	-
Stage 1	-	-	-	-	145	-
Stage 2	-	-	-	-	627	-

Approach	SE	NW	SW
HCM Control Delay, s/v	1.53	0	76.86
HCM LOS			F

Minor Lane/Major Mvmt	NWT	NWR	SEL	SETSWLn1	
Capacity (veh/h)	-	-	438	-	178
HCM Lane V/C Ratio	-	-	0.154	-	0.801
HCM Control Delay (s/veh)	-	-	14.7	-	76.9
HCM Lane LOS	-	-	B	-	F
HCM 95th %tile Q(veh)	-	-	0.5	-	5.4

Intersection	
Int Delay, s/veh	0.3

Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Vol, veh/h	546	7	2	1388	16	1
Future Vol, veh/h	546	7	2	1388	16	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	593	8	2	1509	17	1

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	601	0	1356	301
Stage 1	-	-	-	-	597	-
Stage 2	-	-	-	-	759	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	972	-	140	696
Stage 1	-	-	-	-	512	-
Stage 2	-	-	-	-	423	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	972	-	140	696
Mov Cap-2 Maneuver	-	-	-	-	140	-
Stage 1	-	-	-	-	512	-
Stage 2	-	-	-	-	421	-

Approach	SE	NW	NE
HCM Control Delay, s/v	0	0.05	33.03
HCM LOS			D

Minor Lane/Major Mvmt	NELn1	NWL	NWT	SET	SER
Capacity (veh/h)	147	5	-	-	-
HCM Lane V/C Ratio	0.126	0.002	-	-	-
HCM Control Delay (s/veh)	33	8.7	0	-	-
HCM Lane LOS	D	A	A	-	-
HCM 95th %tile Q(veh)	0.4	0	-	-	-

Intersection	
Intersection Delay, s/veh	8.2
Intersection LOS	A

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	170	2	4	14	8	128
Future Vol, veh/h	170	2	4	14	8	128
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	185	2	4	15	9	139
Number of Lanes	0	1	1	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay, s/veh	8.8	7.1	7.6
HCM LOS	A	A	A

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	99%	0%	6%
Vol Thru, %	1%	22%	0%
Vol Right, %	0%	78%	94%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	172	18	136
LT Vol	170	0	8
Through Vol	2	4	0
RT Vol	0	14	128
Lane Flow Rate	187	20	148
Geometry Grp	1	1	1
Degree of Util (X)	0.229	0.022	0.159
Departure Headway (Hd)	4.406	3.972	3.864
Convergence, Y/N	Yes	Yes	Yes
Cap	810	904	933
Service Time	2.466	1.985	1.866
HCM Lane V/C Ratio	0.231	0.022	0.159
HCM Control Delay, s/veh	8.8	7.1	7.6
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.9	0.1	0.6

Intersection	
Int Delay, s/veh	2.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	4	10	0	3	3
Future Vol, veh/h	0	4	10	0	3	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	4	11	0	3	3

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	21	11	0	0	11	0
Stage 1	11	-	-	-	-	-
Stage 2	10	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	996	1070	-	-	1608	-
Stage 1	1012	-	-	-	-	-
Stage 2	1013	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	994	1070	-	-	1608	-
Mov Cap-2 Maneuver	994	-	-	-	-	-
Stage 1	1012	-	-	-	-	-
Stage 2	1011	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	8.38	0	3.62
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	1070	900	-
HCM Lane V/C Ratio	-	-	0.004	0.002	-
HCM Control Delay (s/veh)	-	-	8.4	7.2	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0	0	-

Intersection	
Intersection Delay, s/veh	10.1
Intersection LOS	B

Approach	SE	NW	NE	SW
Entry Lanes	2	2	1	1
Conflicting Circle Lanes	2	2	2	2
Adj Approach Flow, veh/h	1754	836	181	28
Demand Flow Rate, veh/h	1788	853	184	29
Vehicles Circulating, veh/h	3	191	1526	1017
Vehicles Exiting, veh/h	1043	1519	265	27
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	10.7	6.7	20.0	6.8
Approach LOS	B	A	C	A

Lane	Left	Right	Left	Right	Left	Left
Designated Moves	LT	TR	LT	TR	LTR	LTR
Assumed Moves	LT	TR	LT	TR	LTR	LTR
RT Channelized						
Lane Util	0.470	0.530	0.470	0.530	1.000	1.000
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.535	2.535
Critical Headway, s	4.645	4.328	4.645	4.328	4.328	4.328
A (Intercept)	1350	1420	1350	1420	1420	1420
B (Slope)	9.199e-4	8.501e-4	9.199e-4	8.501e-4	8.501e-4	8.501e-4
Entry Flow, veh/h	840	948	401	452	184	29
Cap Entry Lane, veh/h	1346	1417	1132	1207	388	598
Entry HV Adj Factor	0.981	0.980	0.980	0.981	0.984	0.966
Flow Entry, veh/h	824	929	393	443	181	28
Cap Entry, veh/h	1321	1389	1110	1184	382	578
V/C Ratio	0.624	0.669	0.354	0.374	0.474	0.048
Control Delay, s/veh	10.3	11.0	6.8	6.7	20.0	6.8
LOS	B	B	A	A	C	A
95th %tile Queue, veh	5	6	2	2	2	0

Intersection	
Int Delay, s/veh	0.6

Movement	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Vol, veh/h	50	1338	425	6	12	33
Future Vol, veh/h	50	1338	425	6	12	33
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	315	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	54	1454	462	7	13	36

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	468	0	-	0	1301	234
Stage 1	-	-	-	-	465	-
Stage 2	-	-	-	-	836	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	1089	-	-	-	153	768
Stage 1	-	-	-	-	598	-
Stage 2	-	-	-	-	386	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1089	-	-	-	145	768
Mov Cap-2 Maneuver	-	-	-	-	145	-
Stage 1	-	-	-	-	569	-
Stage 2	-	-	-	-	386	-

Approach	SE	NW	SW
HCM Control Delay, s/v	0.31	0	16.65
HCM LOS			C

Minor Lane/Major Mvmt	NWT	NWR	SEL	SET	SWLn1
Capacity (veh/h)	-	-	1089	-	358
HCM Lane V/C Ratio	-	-	0.05	-	0.137
HCM Control Delay (s/veh)	-	-	8.5	-	16.6
HCM Lane LOS	-	-	A	-	C
HCM 95th %tile Q(veh)	-	-	0.2	-	0.5

Intersection	
Int Delay, s/veh	0.3

Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Vol, veh/h	1341	9	1	735	7	1
Future Vol, veh/h	1341	9	1	735	7	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1458	10	1	799	8	1

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1467	0	1864	734
Stage 1	-	-	-	-	1462	-
Stage 2	-	-	-	-	402	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	456	-	64	363
Stage 1	-	-	-	-	179	-
Stage 2	-	-	-	-	645	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	456	-	64	363
Mov Cap-2 Maneuver	-	-	-	-	64	-
Stage 1	-	-	-	-	179	-
Stage 2	-	-	-	-	643	-

Approach	SE	NW	NE
HCM Control Delay, s/v	0	0.06	62.15
HCM LOS			F

Minor Lane/Major Mvmt	NELn1	NWL	NWT	SET	SER
Capacity (veh/h)	72	5	-	-	-
HCM Lane V/C Ratio	0.122	0.002	-	-	-
HCM Control Delay (s/veh)	62.2	12.9	0	-	-
HCM Lane LOS	F	B	A	-	-
HCM 95th %tile Q(veh)	0.4	0	-	-	-

Intersection	
Intersection Delay, s/veh	8.8
Intersection LOS	A

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	185	5	4	10	19	203
Future Vol, veh/h	185	5	4	10	19	203
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	201	5	4	11	21	221
Number of Lanes	0	1	1	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay, s/veh	9.4	7.4	8.4
HCM LOS	A	A	A

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	97%	0%	9%
Vol Thru, %	3%	29%	0%
Vol Right, %	0%	71%	91%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	190	14	222
LT Vol	185	0	19
Through Vol	5	4	0
RT Vol	0	10	203
Lane Flow Rate	207	15	241
Geometry Grp	1	1	1
Degree of Util (X)	0.268	0.018	0.264
Departure Headway (Hd)	4.668	4.25	3.942
Convergence, Y/N	Yes	Yes	Yes
Cap	774	842	915
Service Time	2.668	2.276	1.956
HCM Lane V/C Ratio	0.267	0.018	0.263
HCM Control Delay, s/veh	9.4	7.4	8.4
HCM Lane LOS	A	A	A
HCM 95th-tile Q	1.1	0.1	1.1

Intersection	
Int Delay, s/veh	1.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	3	7	2	3	15
Future Vol, veh/h	0	3	7	2	3	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	3	8	2	3	16

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	32	9	0	0	10	0
Stage 1	9	-	-	-	-	-
Stage 2	23	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	982	1073	-	-	1610	-
Stage 1	1014	-	-	-	-	-
Stage 2	1000	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	980	1073	-	-	1610	-
Mov Cap-2 Maneuver	980	-	-	-	-	-
Stage 1	1014	-	-	-	-	-
Stage 2	998	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	8.36	0	1.21
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	1073	300	-
HCM Lane V/C Ratio	-	-	0.003	0.002	-
HCM Control Delay (s/veh)	-	-	8.4	7.2	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0	0	-

Intersection	
Intersection Delay, s/veh	7.3
Intersection LOS	A

Approach	SE	NW	NE	SW
Entry Lanes	2	2	1	1
Conflicting Circle Lanes	2	2	2	2
Adj Approach Flow, veh/h	537	1234	134	31
Demand Flow Rate, veh/h	548	1258	137	32
Vehicles Circulating, veh/h	17	140	503	1386
Vehicles Exiting, veh/h	1401	500	62	12
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	4.4	8.7	5.4	9.5
Approach LOS	A	A	A	A

Lane	Left	Right	Left	Right	Left	Left
Designated Moves	LT	TR	LT	TR	LTR	LTR
Assumed Moves	LT	TR	LT	TR	LTR	LTR
RT Channelized						
Lane Util	0.471	0.529	0.470	0.530	1.000	1.000
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.535	2.535
Critical Headway, s	4.645	4.328	4.645	4.328	4.328	4.328
A (Intercept)	1350	1420	1350	1420	1420	1420
B (Slope)	9.199e-4	8.501e-4	9.199e-4	8.501e-4	8.501e-4	8.501e-4
Entry Flow, veh/h	258	290	591	667	137	32
Cap Entry Lane, veh/h	1329	1400	1187	1261	926	437
Entry HV Adj Factor	0.979	0.982	0.981	0.980	0.978	0.968
Flow Entry, veh/h	253	285	580	654	134	31
Cap Entry, veh/h	1301	1375	1164	1236	906	423
V/C Ratio	0.194	0.207	0.498	0.529	0.148	0.073
Control Delay, s/veh	4.4	4.3	8.6	8.8	5.4	9.5
LOS	A	A	A	A	A	A
95th %tile Queue, veh	1	1	3	3	1	0

Intersection	
Int Delay, s/veh	2.5

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	45	393	10	1	914	20	32	0	2	15	0	80
Future Vol, veh/h	45	393	10	1	914	20	32	0	2	15	0	80
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	315	-	-	150	-	-	150	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	49	427	11	1	993	22	35	0	2	16	0	87

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1015	0	0	438	0	0	1029	1548	219	1318	1542	508
Stage 1	-	-	-	-	-	-	530	530	-	1007	1007	-
Stage 2	-	-	-	-	-	-	499	1017	-	311	536	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	679	-	-	1118	-	-	188	113	785	115	114	510
Stage 1	-	-	-	-	-	-	500	525	-	258	317	-
Stage 2	-	-	-	-	-	-	522	313	-	674	522	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	679	-	-	1118	-	-	144	105	785	106	106	510
Mov Cap-2 Maneuver	-	-	-	-	-	-	144	105	-	106	106	-
Stage 1	-	-	-	-	-	-	464	487	-	258	317	-
Stage 2	-	-	-	-	-	-	433	313	-	623	484	-

Approach	SE	NW	NE	SW
HCM Control Delay, s/v	1.08	0.01	35.99	21.59
HCM LOS			E	C

Minor Lane/Major Mvmt	NELn1	NELn2	NWL	NWT	NWR	SEL	SET	SER	SWLn1
Capacity (veh/h)	144	785	1118	-	-	679	-	-	319
HCM Lane V/C Ratio	0.241	0.003	0.001	-	-	0.072	-	-	0.324
HCM Control Delay (s/veh)	37.6	9.6	8.2	-	-	10.7	-	-	21.6
HCM Lane LOS	E	A	A	-	-	B	-	-	C
HCM 95th %tile Q(veh)	0.9	0	0	-	-	0.2	-	-	1.4

Intersection	
Int Delay, s/veh	0.5

Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Vol, veh/h	406	7	2	1031	16	1
Future Vol, veh/h	406	7	2	1031	16	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	441	8	2	1121	17	1

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	449	0	1566	441
Stage 1	-	-	-	-	441	-
Stage 2	-	-	-	-	1125	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1111	-	122	616
Stage 1	-	-	-	-	648	-
Stage 2	-	-	-	-	310	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1111	-	122	616
Mov Cap-2 Maneuver	-	-	-	-	122	-
Stage 1	-	-	-	-	648	-
Stage 2	-	-	-	-	308	-

Approach	SE	NW	NE
HCM Control Delay, s/v	0	0.02	37.88
HCM LOS			E

Minor Lane/Major Mvmt	NELn1	NWL	NWT	SET	SER
Capacity (veh/h)	128	3	-	-	-
HCM Lane V/C Ratio	0.145	0.002	-	-	-
HCM Control Delay (s/veh)	37.9	8.2	0	-	-
HCM Lane LOS	E	A	A	-	-
HCM 95th %tile Q(veh)	0.5	0	-	-	-

Intersection	
Intersection Delay, s/veh	7.8
Intersection LOS	A

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	135	2	4	17	9	94
Future Vol, veh/h	135	2	4	17	9	94
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	147	2	4	18	10	102
Number of Lanes	0	1	1	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay, s/veh	8.3	6.9	7.3
HCM LOS	A	A	A

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	99%	0%	9%
Vol Thru, %	1%	19%	0%
Vol Right, %	0%	81%	91%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	137	21	103
LT Vol	135	0	9
Through Vol	2	4	0
RT Vol	0	17	94
Lane Flow Rate	149	23	112
Geometry Grp	1	1	1
Degree of Util (X)	0.18	0.024	0.118
Departure Headway (Hd)	4.346	3.76	3.798
Convergence, Y/N	Yes	Yes	Yes
Cap	823	938	949
Service Time	2.386	1.838	1.798
HCM Lane V/C Ratio	0.181	0.025	0.118
HCM Control Delay, s/veh	8.3	6.9	7.3
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.7	0.1	0.4

Intersection	
Int Delay, s/veh	3.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	7	10	0	4	3
Future Vol, veh/h	0	7	10	0	4	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	8	11	0	4	3

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	23	11	0	0	11	0
Stage 1	11	-	-	-	-	-
Stage 2	12	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	993	1070	-	-	1608	-
Stage 1	1012	-	-	-	-	-
Stage 2	1011	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	991	1070	-	-	1608	-
Mov Cap-2 Maneuver	991	-	-	-	-	-
Stage 1	1012	-	-	-	-	-
Stage 2	1008	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	8.39	0	4.14
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	1070	1029	-
HCM Lane V/C Ratio	-	-	0.007	0.003	-
HCM Control Delay (s/veh)	-	-	8.4	7.2	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0	0	-

Intersection	
Int Delay, s/veh	2.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	1	3	4	0	0	3
Future Vol, veh/h	1	3	4	0	0	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	3	4	0	0	3

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	4	0	-	0	10	4
Stage 1	-	-	-	-	4	-
Stage 2	-	-	-	-	5	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1617	-	-	-	1010	1079
Stage 1	-	-	-	-	1019	-
Stage 2	-	-	-	-	1018	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1617	-	-	-	1010	1079
Mov Cap-2 Maneuver	-	-	-	-	1010	-
Stage 1	-	-	-	-	1018	-
Stage 2	-	-	-	-	1018	-

Approach	EB	WB	SB
HCM Control Delay, s/v	1.81	0	8.35
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	450	-	-	-	1079
HCM Lane V/C Ratio	0.001	-	-	-	0.003
HCM Control Delay (s/veh)	7.2	0	-	-	8.3
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection	
Intersection Delay, s/veh	7.7
Intersection LOS	A

Approach	SE	NW	NE	SW
Entry Lanes	2	2	1	1
Conflicting Circle Lanes	2	2	2	2
Adj Approach Flow, veh/h	1448	645	136	28
Demand Flow Rate, veh/h	1477	658	139	29
Vehicles Circulating, veh/h	2	150	1281	781
Vehicles Exiting, veh/h	808	1270	198	27
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	8.3	5.5	12.3	5.5
Approach LOS	A	A	B	A

Lane	Left	Right	Left	Right	Left	Left
Designated Moves	LT	TR	LT	TR	LTR	LTR
Assumed Moves	LT	TR	LT	TR	LTR	LTR
RT Channelized						
Lane Util	0.470	0.530	0.470	0.530	1.000	1.000
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.535	2.535
Critical Headway, s	4.645	4.328	4.645	4.328	4.328	4.328
A (Intercept)	1350	1420	1350	1420	1420	1420
B (Slope)	9.199e-4	8.501e-4	9.199e-4	8.501e-4	8.501e-4	8.501e-4
Entry Flow, veh/h	694	783	309	349	139	29
Cap Entry Lane, veh/h	1347	1418	1176	1250	478	731
Entry HV Adj Factor	0.981	0.980	0.981	0.980	0.978	0.966
Flow Entry, veh/h	681	768	303	342	136	28
Cap Entry, veh/h	1322	1390	1154	1225	468	706
V/C Ratio	0.515	0.552	0.263	0.279	0.291	0.040
Control Delay, s/veh	8.2	8.5	5.5	5.5	12.3	5.5
LOS	A	A	A	A	B	A
95th %tile Queue, veh	3	4	1	1	1	0

Intersection	
Int Delay, s/veh	1.4

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	36	996	35	2	554	4	20	0	1	9	0	24
Future Vol, veh/h	36	996	35	2	554	4	20	0	1	9	0	24
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	315	-	-	150	-	-	150	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	39	1083	38	2	602	4	22	0	1	10	0	26

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	607	0	0	1121	0	0	1485	1791	560	1228	1808	303
Stage 1	-	-	-	-	-	-	1180	1180	-	609	609	-
Stage 2	-	-	-	-	-	-	305	611	-	620	1199	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	968	-	-	619	-	-	86	80	471	134	78	693
Stage 1	-	-	-	-	-	-	202	262	-	449	484	-
Stage 2	-	-	-	-	-	-	679	483	-	442	257	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	968	-	-	619	-	-	80	77	471	128	75	693
Mov Cap-2 Maneuver	-	-	-	-	-	-	80	77	-	128	75	-
Stage 1	-	-	-	-	-	-	194	252	-	448	482	-
Stage 2	-	-	-	-	-	-	651	481	-	424	246	-

Approach	SE	NW	NE	SW
HCM Control Delay, s/v	0.3	0.04	63.94	17.92
HCM LOS			F	C

Minor Lane/Major Mvmt	NELn1	NELn2	NWL	NWT	NWR	SEL	SET	SER	SWLn1
Capacity (veh/h)	80	471	619	-	-	968	-	-	314
HCM Lane V/C Ratio	0.273	0.002	0.004	-	-	0.04	-	-	0.114
HCM Control Delay (s/veh)	66.5	12.7	10.8	-	-	8.9	-	-	17.9
HCM Lane LOS	F	B	B	-	-	A	-	-	C
HCM 95th %tile Q(veh)	1	0	0	-	-	0.1	-	-	0.4

Intersection	
Int Delay, s/veh	0.2

Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Vol, veh/h	699	9	1	549	7	1
Future Vol, veh/h	699	9	1	549	7	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	760	10	1	597	8	1

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	770	0	1359	760
Stage 1	-	-	-	-	760	-
Stage 2	-	-	-	-	599	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	845	-	164	406
Stage 1	-	-	-	-	462	-
Stage 2	-	-	-	-	549	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	845	-	164	406
Mov Cap-2 Maneuver	-	-	-	-	164	-
Stage 1	-	-	-	-	462	-
Stage 2	-	-	-	-	548	-

Approach	SE	NW	NE
HCM Control Delay, s/v	0	0.02	26.42
HCM LOS			D

Minor Lane/Major Mvmt	NELn1	NWL	NWT	SET	SER
Capacity (veh/h)	177	3	-	-	-
HCM Lane V/C Ratio	0.049	0.001	-	-	-
HCM Control Delay (s/veh)	26.4	9.3	0	-	-
HCM Lane LOS	D	A	A	-	-
HCM 95th %tile Q(veh)	0.2	0	-	-	-

Intersection	
Intersection Delay, s/veh	8
Intersection LOS	A

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	124	3	4	13	23	149
Future Vol, veh/h	124	3	4	13	23	149
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	135	3	4	14	25	162
Number of Lanes	0	1	1	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay, s/veh	8.5	7.1	7.8
HCM LOS	A	A	A

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	98%	0%	13%
Vol Thru, %	2%	24%	0%
Vol Right, %	0%	76%	87%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	127	17	172
LT Vol	124	0	23
Through Vol	3	4	0
RT Vol	0	13	149
Lane Flow Rate	138	18	187
Geometry Grp	1	1	1
Degree of Util (X)	0.171	0.021	0.198
Departure Headway (Hd)	4.472	4.02	3.81
Convergence, Y/N	Yes	Yes	Yes
Cap	795	896	948
Service Time	2.54	2.02	1.812
HCM Lane V/C Ratio	0.174	0.02	0.197
HCM Control Delay, s/veh	8.5	7.1	7.8
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.6	0.1	0.7

Intersection	
Int Delay, s/veh	2.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	6	7	2	7	15
Future Vol, veh/h	0	6	7	2	7	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	7	8	2	8	16

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	40	9	0	0	10	0
Stage 1	9	-	-	-	-	-
Stage 2	32	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	971	1073	-	-	1610	-
Stage 1	1014	-	-	-	-	-
Stage 2	991	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	967	1073	-	-	1610	-
Mov Cap-2 Maneuver	967	-	-	-	-	-
Stage 1	1014	-	-	-	-	-
Stage 2	986	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	8.38	0	2.31
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	1073	573	-
HCM Lane V/C Ratio	-	-	0.006	0.005	-
HCM Control Delay (s/veh)	-	-	8.4	7.2	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0	0	-

Intersection	
Int Delay, s/veh	3.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	4	5	3	0	0	3
Future Vol, veh/h	4	5	3	0	0	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	5	3	0	0	3

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	3	0	-	0	17	3
Stage 1	-	-	-	-	3	-
Stage 2	-	-	-	-	14	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1619	-	-	-	1001	1081
Stage 1	-	-	-	-	1020	-
Stage 2	-	-	-	-	1009	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1619	-	-	-	998	1081
Mov Cap-2 Maneuver	-	-	-	-	998	-
Stage 1	-	-	-	-	1017	-
Stage 2	-	-	-	-	1009	-

Approach	EB	WB	SB
HCM Control Delay, s/v	3.21	0	8.34
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	800	-	-	-	1081
HCM Lane V/C Ratio	0.003	-	-	-	0.003
HCM Control Delay (s/veh)	7.2	0	-	-	8.3
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection	
Intersection Delay, s/veh	12.9
Intersection LOS	B

Approach	SE	NW	NE	SW
Entry Lanes	2	2	1	1
Conflicting Circle Lanes	2	2	2	2
Adj Approach Flow, veh/h	717	1652	252	31
Demand Flow Rate, veh/h	731	1685	257	32
Vehicles Circulating, veh/h	23	257	670	1930
Vehicles Exiting, veh/h	1939	670	84	12
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	5.0	17.0	8.3	15.9
Approach LOS	A	C	A	C

Lane	Left	Right	Left	Right	Left	Left
Designated Moves	LT	TR	LT	TR	LTR	LTR
Assumed Moves	LT	TR	LT	TR	LTR	LTR
RT Channelized						
Lane Util	0.471	0.529	0.470	0.530	1.000	1.000
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.535	2.535
Critical Headway, s	4.645	4.328	4.645	4.328	4.328	4.328
A (Intercept)	1350	1420	1350	1420	1420	1420
B (Slope)	9.199e-4	8.501e-4	9.199e-4	8.501e-4	8.501e-4	8.501e-4
Entry Flow, veh/h	344	387	792	893	257	32
Cap Entry Lane, veh/h	1322	1393	1066	1141	803	275
Entry HV Adj Factor	0.980	0.982	0.981	0.981	0.981	0.968
Flow Entry, veh/h	337	380	777	876	252	31
Cap Entry, veh/h	1295	1368	1045	1119	788	266
V/C Ratio	0.260	0.278	0.743	0.782	0.320	0.116
Control Delay, s/veh	5.1	5.0	16.4	17.6	8.3	15.9
LOS	A	A	C	C	A	C
95th %tile Queue, veh	1	1	7	8	1	0

Intersection	
Int Delay, s/veh	11.6

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	62	534	10	1	1365	27	32	0	2	21	0	110
Future Vol, veh/h	62	534	10	1	1365	27	32	0	2	21	0	110
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	315	-	-	150	-	-	150	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	67	580	11	1	1484	29	35	0	2	23	0	120

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1513	0	0	591	0	0	1465	2236	296	1926	2227	757
Stage 1	-	-	-	-	-	-	721	721	-	1501	1501	-
Stage 2	-	-	-	-	-	-	744	1515	-	425	726	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	438	-	-	980	-	-	90	42	701	40	43	350
Stage 1	-	-	-	-	-	-	385	430	-	128	183	-
Stage 2	-	-	-	-	-	-	373	180	-	578	428	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	438	-	-	980	-	-	50	35	701	34	36	350
Mov Cap-2 Maneuver	-	-	-	-	-	-	50	35	-	34	36	-
Stage 1	-	-	-	-	-	-	326	364	-	128	183	-
Stage 2	-	-	-	-	-	-	245	180	-	487	362	-

Approach	SE	NW	NE	SW
HCM Control Delay, s/v	1.51	0.01	164.82	142.14
HCM LOS			F	F

Minor Lane/Major Mvmt	NELn1	NELn2	NWL	NWT	NWR	SEL	SET	SER	SWLn1
Capacity (veh/h)	50	701	980	-	-	438	-	-	140
HCM Lane V/C Ratio	0.698	0.003	0.001	-	-	0.154	-	-	1.014
HCM Control Delay (s/veh)	174.5	10.2	8.7	-	-	14.7	-	-	142.1
HCM Lane LOS	F	B	A	-	-	B	-	-	F
HCM 95th %tile Q(veh)	2.8	0	0	-	-	0.5	-	-	7.4

Intersection	
Int Delay, s/veh	0.3

Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Vol, veh/h	548	7	2	1389	16	1
Future Vol, veh/h	548	7	2	1389	16	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	596	8	2	1510	17	1

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	603	0	1359	302
Stage 1	-	-	-	-	599	-
Stage 2	-	-	-	-	759	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	970	-	140	694
Stage 1	-	-	-	-	511	-
Stage 2	-	-	-	-	423	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	970	-	139	694
Mov Cap-2 Maneuver	-	-	-	-	139	-
Stage 1	-	-	-	-	511	-
Stage 2	-	-	-	-	421	-

Approach	SE	NW	NE
HCM Control Delay, s/v	0	0.05	33.16
HCM LOS			D

Minor Lane/Major Mvmt	NELn1	NWL	NWT	SET	SER
Capacity (veh/h)	146	5	-	-	-
HCM Lane V/C Ratio	0.126	0.002	-	-	-
HCM Control Delay (s/veh)	33.2	8.7	0	-	-
HCM Lane LOS	D	A	A	-	-
HCM 95th %tile Q(veh)	0.4	0	-	-	-

Intersection	
Intersection Delay, s/veh	8.2
Intersection LOS	A

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	170	2	4	17	9	128
Future Vol, veh/h	170	2	4	17	9	128
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	185	2	4	18	10	139
Number of Lanes	0	1	1	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay, s/veh	8.8	7.1	7.6
HCM LOS	A	A	A

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	99%	0%	7%
Vol Thru, %	1%	19%	0%
Vol Right, %	0%	81%	93%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	172	21	137
LT Vol	170	0	9
Through Vol	2	4	0
RT Vol	0	17	128
Lane Flow Rate	187	23	149
Geometry Grp	1	1	1
Degree of Util (X)	0.229	0.025	0.16
Departure Headway (Hd)	4.41	3.957	3.875
Convergence, Y/N	Yes	Yes	Yes
Cap	808	908	931
Service Time	2.471	1.968	1.877
HCM Lane V/C Ratio	0.231	0.025	0.16
HCM Control Delay, s/veh	8.8	7.1	7.6
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.9	0.1	0.6

Intersection	
Int Delay, s/veh	3.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	7	10	0	4	3
Future Vol, veh/h	0	7	10	0	4	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	8	11	0	4	3

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	23	11	0	0	11	0
Stage 1	11	-	-	-	-	-
Stage 2	12	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	993	1070	-	-	1608	-
Stage 1	1012	-	-	-	-	-
Stage 2	1011	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	991	1070	-	-	1608	-
Mov Cap-2 Maneuver	991	-	-	-	-	-
Stage 1	1012	-	-	-	-	-
Stage 2	1008	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	8.39	0	4.14
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	1070	1029	-
HCM Lane V/C Ratio	-	-	0.007	0.003	-
HCM Control Delay (s/veh)	-	-	8.4	7.2	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0	0	-

Intersection	
Int Delay, s/veh	2.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	1	3	4	0	0	3
Future Vol, veh/h	1	3	4	0	0	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	3	4	0	0	3

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	4	0	-	0	10	4
Stage 1	-	-	-	-	4	-
Stage 2	-	-	-	-	5	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1617	-	-	-	1010	1079
Stage 1	-	-	-	-	1019	-
Stage 2	-	-	-	-	1018	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1617	-	-	-	1010	1079
Mov Cap-2 Maneuver	-	-	-	-	1010	-
Stage 1	-	-	-	-	1018	-
Stage 2	-	-	-	-	1018	-

Approach	EB	WB	SB
HCM Control Delay, s/v	1.81	0	8.35
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	450	-	-	-	1079
HCM Lane V/C Ratio	0.001	-	-	-	0.003
HCM Control Delay (s/veh)	7.2	0	-	-	8.3
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection	
Intersection Delay, s/veh	10.5
Intersection LOS	B

Approach	SE	NW	NE	SW
Entry Lanes	2	2	1	1
Conflicting Circle Lanes	2	2	2	2
Adj Approach Flow, veh/h	1796	858	185	28
Demand Flow Rate, veh/h	1831	875	188	29
Vehicles Circulating, veh/h	3	195	1565	1043
Vehicles Exiting, veh/h	1069	1558	269	27
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	11.1	6.9	21.6	7.0
Approach LOS	B	A	C	A

Lane	Left	Right	Left	Right	Left	Left
Designated Moves	LT	TR	LT	TR	LTR	LTR
Assumed Moves	LT	TR	LT	TR	LTR	LTR
RT Channelized						
Lane Util	0.470	0.530	0.470	0.530	1.000	1.000
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.535	2.535
Critical Headway, s	4.645	4.328	4.645	4.328	4.328	4.328
A (Intercept)	1350	1420	1350	1420	1420	1420
B (Slope)	9.199e-4	8.501e-4	9.199e-4	8.501e-4	8.501e-4	8.501e-4
Entry Flow, veh/h	861	970	411	464	188	29
Cap Entry Lane, veh/h	1346	1417	1128	1203	375	585
Entry HV Adj Factor	0.980	0.981	0.981	0.980	0.984	0.966
Flow Entry, veh/h	844	952	403	455	185	28
Cap Entry, veh/h	1320	1390	1107	1179	369	565
V/C Ratio	0.640	0.685	0.364	0.386	0.501	0.050
Control Delay, s/veh	10.6	11.4	6.9	6.9	21.6	7.0
LOS	B	B	A	A	C	A
95th %tile Queue, veh	5	6	2	2	3	0

Intersection	
Int Delay, s/veh	2.3

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	50	1338	35	2	425	6	20	0	1	12	0	33
Future Vol, veh/h	50	1338	35	2	425	6	20	0	1	12	0	33
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	315	-	-	150	-	-	150	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	54	1454	38	2	462	7	22	0	1	13	0	36

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	468	0	0	1492	0	0	1817	2055	746	1305	2071	234
Stage 1	-	-	-	-	-	-	1582	1582	-	470	470	-
Stage 2	-	-	-	-	-	-	235	473	-	836	1601	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1089	-	-	446	-	-	49	55	356	118	53	768
Stage 1	-	-	-	-	-	-	114	167	-	543	559	-
Stage 2	-	-	-	-	-	-	747	557	-	328	164	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1089	-	-	446	-	-	44	52	356	111	51	768
Mov Cap-2 Maneuver	-	-	-	-	-	-	44	52	-	111	51	-
Stage 1	-	-	-	-	-	-	108	159	-	541	556	-
Stage 2	-	-	-	-	-	-	708	554	-	311	155	-

Approach	SE	NW	NE	SW
HCM Control Delay, s/v	0.3	0.06	143.95	19.47
HCM LOS			F	C

Minor Lane/Major Mvmt	NELn1	NELn2	NWL	NWT	NWR	SEL	SET	SER	SWLn1
Capacity (veh/h)	44	356	446	-	-	1089	-	-	298
HCM Lane V/C Ratio	0.496	0.003	0.005	-	-	0.05	-	-	0.164
HCM Control Delay (s/veh)	150.4	15.1	13.1	-	-	8.5	-	-	19.5
HCM Lane LOS	F	C	B	-	-	A	-	-	C
HCM 95th %tile Q(veh)	1.8	0	0	-	-	0.2	-	-	0.6

Intersection	
Int Delay, s/veh	0.3

Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Vol, veh/h	1342	9	1	737	7	1
Future Vol, veh/h	1342	9	1	737	7	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1459	10	1	801	8	1

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1468	0	1866	734
Stage 1	-	-	-	-	1464	-
Stage 2	-	-	-	-	403	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	455	-	64	362
Stage 1	-	-	-	-	179	-
Stage 2	-	-	-	-	644	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	455	-	64	362
Mov Cap-2 Maneuver	-	-	-	-	64	-
Stage 1	-	-	-	-	179	-
Stage 2	-	-	-	-	642	-

Approach	SE	NW	NE
HCM Control Delay, s/v	0	0.06	62.37
HCM LOS			F

Minor Lane/Major Mvmt	NELn1	NWL	NWT	SET	SER
Capacity (veh/h)	71	5	-	-	-
HCM Lane V/C Ratio	0.122	0.002	-	-	-
HCM Control Delay (s/veh)	62.4	12.9	0	-	-
HCM Lane LOS	F	B	A	-	-
HCM 95th %tile Q(veh)	0.4	0	-	-	-

Intersection	
Intersection Delay, s/veh	8.8
Intersection LOS	A

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	185	5	4	13	23	203
Future Vol, veh/h	185	5	4	13	23	203
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	201	5	4	14	25	221
Number of Lanes	0	1	1	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay, s/veh	9.4	7.4	8.4
HCM LOS	A	A	A

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	97%	0%	10%
Vol Thru, %	3%	24%	0%
Vol Right, %	0%	76%	90%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	190	17	226
LT Vol	185	0	23
Through Vol	5	4	0
RT Vol	0	13	203
Lane Flow Rate	207	18	246
Geometry Grp	1	1	1
Degree of Util (X)	0.269	0.022	0.27
Departure Headway (Hd)	4.683	4.232	3.962
Convergence, Y/N	Yes	Yes	Yes
Cap	772	846	909
Service Time	2.683	2.259	1.978
HCM Lane V/C Ratio	0.268	0.021	0.271
HCM Control Delay, s/veh	9.4	7.4	8.4
HCM Lane LOS	A	A	A
HCM 95th-tile Q	1.1	0.1	1.1

Intersection	
Int Delay, s/veh	2.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	6	7	2	7	15
Future Vol, veh/h	0	6	7	2	7	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	7	8	2	8	16

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	40	9	0	0	10	0
Stage 1	9	-	-	-	-	-
Stage 2	32	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	971	1073	-	-	1610	-
Stage 1	1014	-	-	-	-	-
Stage 2	991	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	967	1073	-	-	1610	-
Mov Cap-2 Maneuver	967	-	-	-	-	-
Stage 1	1014	-	-	-	-	-
Stage 2	986	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	8.38	0	2.31
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	1073	573	-
HCM Lane V/C Ratio	-	-	0.006	0.005	-
HCM Control Delay (s/veh)	-	-	8.4	7.2	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0	0	-

Intersection	
Int Delay, s/veh	3.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	4	5	3	0	0	3
Future Vol, veh/h	4	5	3	0	0	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	5	3	0	0	3

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	3	0	-	0	17	3
Stage 1	-	-	-	-	3	-
Stage 2	-	-	-	-	14	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1619	-	-	-	1001	1081
Stage 1	-	-	-	-	1020	-
Stage 2	-	-	-	-	1009	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1619	-	-	-	998	1081
Mov Cap-2 Maneuver	-	-	-	-	998	-
Stage 1	-	-	-	-	1017	-
Stage 2	-	-	-	-	1009	-

Approach	EB	WB	SB
HCM Control Delay, s/v	3.21	0	8.34
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	800	-	-	-	1081
HCM Lane V/C Ratio	0.003	-	-	-	0.003
HCM Control Delay (s/veh)	7.2	0	-	-	8.3
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

APPENDIX D

Fields Trip Generation

ITE CODE	LAND USE	UNIT	TRIP GENERATION RATES						
			24 HOUR	AM PEAK HOUR			PM PEAK HOUR		
				ENTER	EXIT	TOTAL	ENTER	EXIT	TOTAL
210	Single-Family Detached Housing	DU	9.43	0.18	0.53	0.70	0.59	0.35	0.94

Key: DU = Dwelling Units.
Note: All data and calculations above are subject to being rounded to nearest value.

ITE CODE	LAND USE	SIZE	TOTAL TRIPS GENERATED						
			24 HOUR	AM PEAK HOUR			PM PEAK HOUR		
				ENTER	EXIT	TOTAL	ENTER	EXIT	TOTAL
210	Single-Family Detached Housing	118 DU	1,113	21	62	83	70	41	111
-	Rural Lots	2 DU	29	1	2	3	2	1	3
-	Rural Estate Lots	6 DU	78	1	4	5	5	2	7
		Total:	*1,220*	*23*	*68*	*91*	*77*	*44*	*121*

Key: DU = Dwelling Units.
Note: All data and calculations above are subject to being rounded to nearest value.

APPENDIX E

Percent Contribution Calculation

Percent Contribution Calculations

Hilltop Road ADT (between Village & Merryvale)	
Background 2044	24,660
Total 2044	25,220
Percent Contribution	2.22%

ParkerWater
& SANITATION DISTRICT

April 29, 2025

Mr. Kevin Lovelace, P.E.
LIA Land Development
1765 West 121st Avenue, Suite #300
Westminster, CO 80234

RE: Will Serve Letter
Ramblewood, South of Hilltop Road, Douglas County Previously
known as Hilltop 177 renamed to "Ramblewood";
Total of seventy lots, (sixty-eight standard SFE, two larger lots, exact size TDB)
County of Douglas, State of Colorado.

Dear Mr. Lovelace:

The Parker Water & Sanitation District (PWSD) acknowledges its willingness and ability to serve Ramblewood as described above. The parcel is identified as future build out and will be part of PWSD upon successful completion of inclusion.

COMMITMENT TO SERVE

PWSD is committed to providing service to all future developments within its service area, based on the water supply sources available within the PWSD's water rights portfolio. Such commitment to provide service is conditioned upon compliance with all PWSD Rules and Regulations, Standard and Specifications, and/or conditions specific to the property; including payment of the appropriate fees and any charges related to water and/or sanitation service, as established from time to time by PWSD Directors.

DISTRICT WATER DEMAND

The current PWSD water demand is approximately 7,700 acre-feet per year (Acre Feet/yr), while at build out, the total of 23,500 Acre Feet/yr. The proposed development of **Ramblewood** will be included in our future projections.

PROPOSED RAMBLEWOOD DEMAND (1805A)

The projected demand based on PWSD Section 3, Rules and Regulations, Landscape/Irrigation worksheet is equivalent to 92.4 Acre feet/yr. The districts demand calculation of 1.1 Acre Feet/yr. Per SFE plus additional irrigation requirements require a higher standard than the Douglas County's 1805A of 0.75 Acre Feet/Yr per residence.

DISTRICT WATER SUPPLY

PWSD has an extensive water rights portfolio of adjudicated Denver Basin aquifer groundwater rights, both junior and senior tributary water rights, storage rights in Rueter-Hess Reservoir of 71,920 AF, return flows from effluent and lawn irrigation for use in the PWSD augmentation plan.

The attached Table 1 summarizes PWSD's adjudicated first-use rights, which indicates a total of 41,134 AF/yr (the anticipated yield of these rights in both an average and dry year (Section 1805A.01.2(2)b. of the DCZR). Not included in Table 1 are the rights associated with storage in

Rueter-Hess Reservoir or any of PWSD's reuse rights, which will provide significant additional supplies to PWSD.

In summary, with the estimated buildout demand of 23,500 AF/yr, and PWSD's 41,134 AF/yr of adjudicated first-use water rights and the Denver Basin groundwater that Ramblewood will dedicate with successful inclusion, PWSD has significant excess water supplies which can serve **Ramblewood**, and all future planned buildout within PWSD.

WATERQUALITY

PWSD is in compliance with the Colorado Department of Public Health and Environment testing and quality requirements and provides a high-quality water supply to all customers.

SANITARY SERVICE

PWSD shall provide sanitary service for all water taps requested for **Ramblewood**.

FEASIBILITY OF SERVICE

It is physically and economically feasible for PWSD to provide service to the proposed development of **Ramblewood**.

If you have any questions regarding any of the information provided or PWSD's ability to provide service to the proposed development, please do not hesitate to call us.

Sincerely,
Parker Water & Sanitation District
Heather Justus
Water Resource Manager

Attachments and Links:

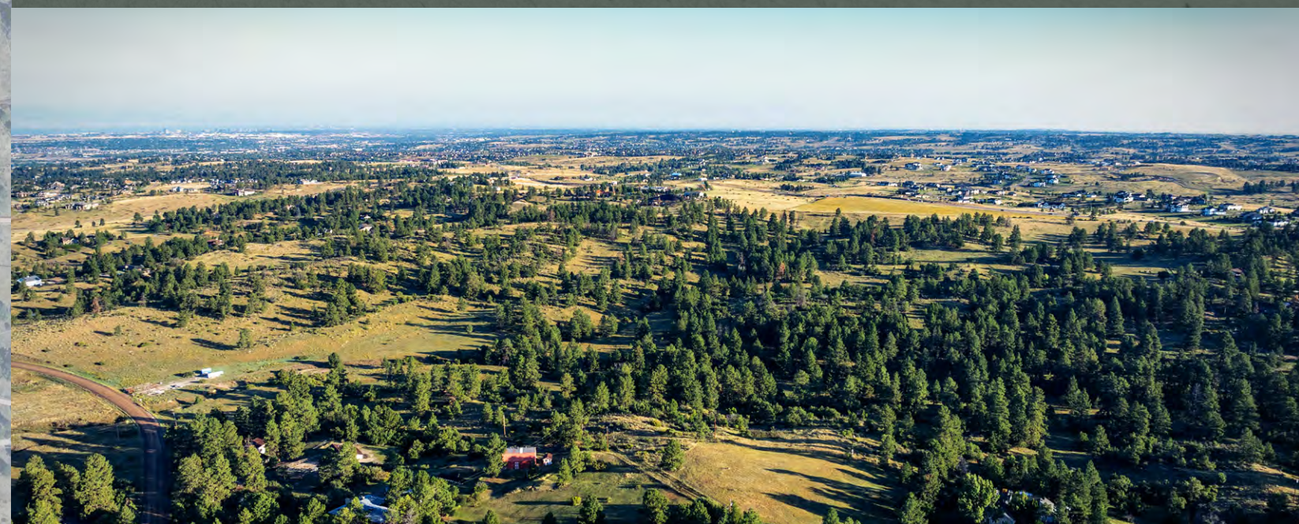
Exhibit Plan
Table 1 Summary of PWSD Water Rights
Map of the existing PWSD's service area (Section 1805A.01.2(2)f. of the DCZR)
2022 Evidence of potability of PWSD's water supply for the subdivision (Section 1805A.01.2(3) of the DCZR). 2022
https://www.pwsd.org/DocumentCenter/View/3584/2022-Consumer- Confidence-Report-PDF?bidId=
2023 Consumer Confidence Report
https://www.pwsd.org/DocumentCenter/View/3763/2023- PWSD-Consumer-Confidence-Report-PDF



LOT SIZE	TOTAL
SFD (90’ X 130’ MINIMUM)	68
RANCH LOT 1 (25 ACRES)	1
RANCH LOT 2 (58 ACRES)	1

COMMUNITY SUMMARY

- 177 Acres
- 68 SFD Lots
- 2 Ranch Lots Totaling 83 Acres
- Approximately 60 Acres of Open Space
- Located in Unincorporated Douglas County
- Douglas County School District
  - Mountain View Elementary
  - Sagewood Middle School
  - Ponderosa High School



SITE PLAN IS CONCEPTUAL AND SUBJECT TO CHANGE

TABLE 1
SUMMARY OF PWSD WATER RIGHTS

DECREED WATER AVAILABLE FOR PWSD USE

SOURCE	Volume (ac-ft/yr) Decreed in Case No.												
	83CW348(A)	95CW039	87CW104(A) [2]	87CW104(B) [2]	95CW089 [2]	99CW006 [2]	06CW179 [2]	02CW227 [3]	94CW042 [4]	03CW258, et al [5]	82CW434 [6]	85CW448, 04CW348 [7]	TOTAL
Cherry Creek alluvium [1]	726.7	132.3										24,130	859.0
Lower Dawson-NT			742.6	631.8	391.8	430.2	868.6	30.6	178.3	821.0	364.0		4,458.9
Lower Dawson-NNT			219.4	0.0	79.5	380.8	807.6						1,487.3
Denver-NT			430.1	908.6	272.6	611.9	235.6	94.4	104.0	1258.0	422.0		4,337.2
Denver-NNT			1016.2	9.0	377.9	616.1	1980.6						3,999.8
Arapahoe-NT			1161.7	627.0	698.3	1945.7	2447.1	64.5	547.3	2954.0	487.0		10,932.6
Laramie-Fox Hills-NT			1044.1	625.3	419.2	700.8	1350.0	49.4	16.0	980.0	310.0		5,494.8
												TOTAL [8] =	31,569.6

DENVER BASIN WATER DEEDED AS PART OF INCLUSION (NOT CURRENTLY PART OF PWSD WELL FIELDS)

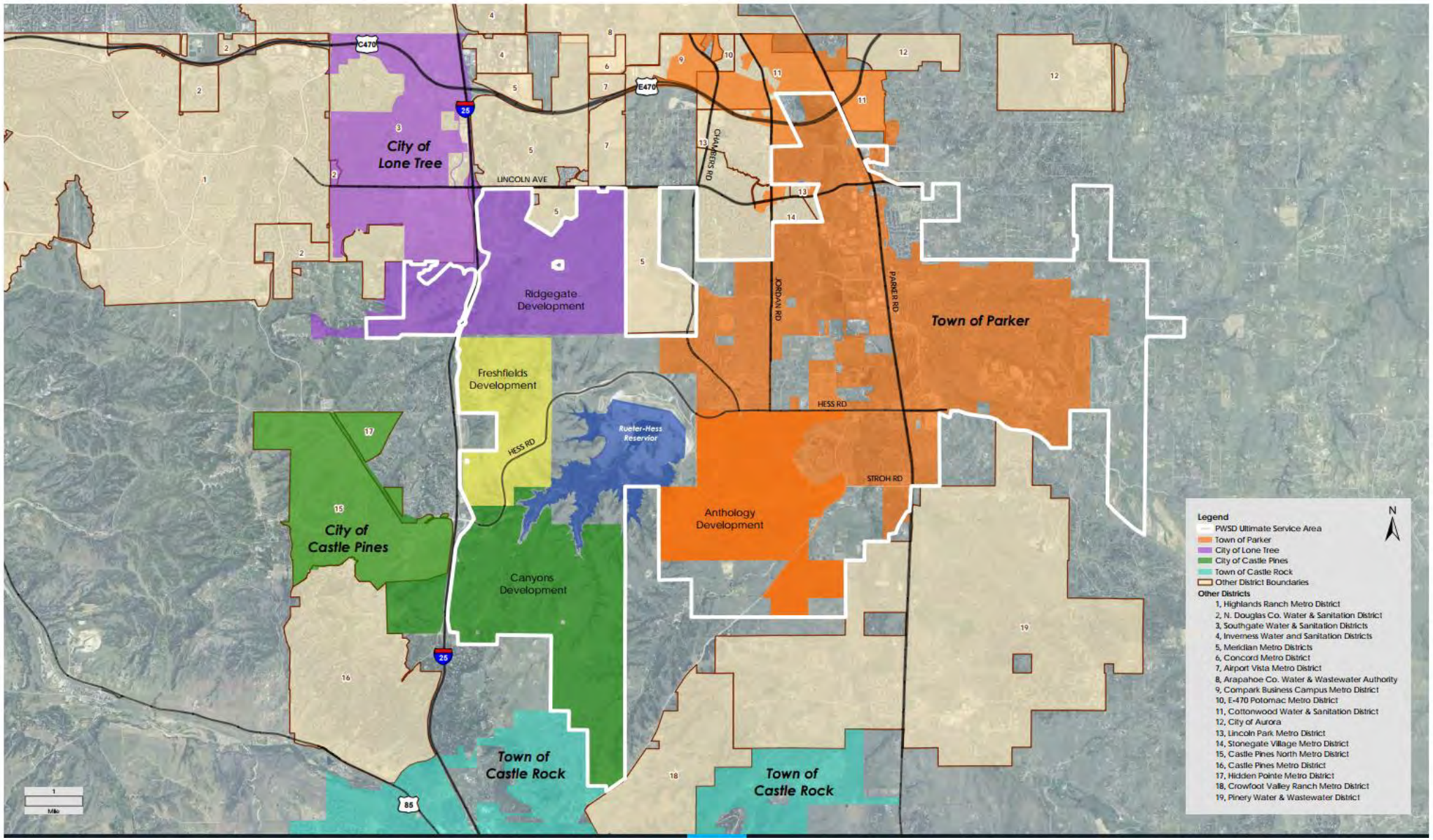
SOURCE	Annual Volume (ac-ft) Dedicated as Part of PWSD Inclusion [9]												
	Carousel Farms	Cielo	Developmental Pathways	Dransfeldt Place	Gregg East	Harvie Park	Hess Ranch	Hess Road Gailen Buck	Hess Road Town of Parker	Meadowlark	Miller Creek	Parker Parcel	Parker Homestead Parcel A
Upper Dawson - NNT		13.8				4.1	38.4						
Lower Dawson-NT		41.8	0.4	1.7	1.7	20.0	457.6	6.0	4.7	19.4	5.7	14.5	
Lower Dawson-NNT	11.2												51.0
Denver-NT		73.4			3.1	24.6	655.0	7.5	6.1	89.1	7.9	20.4	
Denver-NNT	18.1		0.5	9.1			164.6						71.0
Arapahoe-NT	17.6	75.2	0.5	8.1	3.1	0.0	780.7	8.3	6.6	108.4	7.0	21.4	75.3
Laramie-Fox Hills-NT	11.3	47.4	0.3	6.3	2.3	22.6	474.7	5.1	4.0	65.0	5.7	14.2	45.9

SOURCE	Annual Volume (ac-ft) Dedicated as Part of PWSD Inclusion [9]										
	Parker Point	Public Service CO Sec 20	Public Service CO Sec 21	Public Service CO Sec 22	Reata Ridge Parcel	Salisbury Heights	Sierra Ridge	Steven's Ranch	Stroh Ranch Parcel	Twenty Mile Town Center II	TOTAL
Upper Dawson - NNT								43.8			100.1
Lower Dawson-NT	4.2		3.7		15.4	4.1		442.8	595.9	0.9	1640.5
Lower Dawson-NNT		4.4		6.4			77.9				150.9
Denver-NT	5.8			10.4	21.4	5.1		318.4	855.7	1.3	2105.1
Denver-NNT		6.6	4.8				132.5	387.2			794.4
Arapahoe-NT	7.4	6.6	4.9	9.4	26.4	5.4	143.1	724.0	920.3	1.2	2960.8
Laramie-Fox Hills-NT	4.6	4.0	3.2	7.3	16.5	3.5	89.6	431.5	546.7	0.9	1812.6
										TOTAL =	9,564.4

GRAND TOTAL (DENVER BASIN AND CHERRY CREEK WATER RIGHTS) [10] =	41,134.0

1) Water rights changed to municipal use. All of this water is fully consumable and reusable.
2) PWSD well field decree.
3) Hover parcel.
4) Well field established between PWSD and Stroh Ranch for full Stroh Ranch water supply, but water availability limited to volume of water deeded to PWSD from Stroh Ranch.
5) Rights also include water decreed in 82CW116, W-8033, 81CW403, 83CW333, and 98CW459. Water deeded to PWSD from RidgeGate property but not part of the PWSD well fields.
6) Water deeded to PWSD from Freshfields property but not part of the PWSD well fields.
7) Combined RHR and Lake Gulch storage rights - RHR as alternate place of storage, not included in totals
8) Total potential yield of these rights
9) All wellfield inclusion volumes are preliminary and subject to change
10) Updated March, 2019

PWSD Service Area



RESOLUTION NO. 2026-08

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE PARKER WATER AND SANITATION DISTRICT INCLUDING CERTAIN REAL PROPERTY INTO THE BOUNDARIES OF THE DISTRICT

(Bradley A, and Joan V. Whittlesey and Hilltop JAM LLC)

WHEREAS, a Petition for Inclusion of real property into the Parker Water and Sanitation District has been received from Bradley A. and Joan V. Whittlesey and Hilltop Jam LLC, as the owner of the property described in **Exhibit A** attached hereto and incorporated herein;

WHEREAS, said Petition complies with all requirements of C.R.S. § 32-1-401, *et seq.*;

WHEREAS, notice of the public hearing on said inclusion has been published in the Douglas County News Press in the form prescribed by C.R.S. § 32-1-401(1)(b);

WHEREAS, no person showed cause in writing, and no person appeared in person to show cause orally, why the Petition should not be granted; and

WHEREAS, it is in the best interests of the District and the property owners and the water and sewer users of the District to grant the within inclusion.

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of the Parker Water and Sanitation District as follows:

1. The Petition of Bradley A. and Joan V. Whittlesey and Hilltop Jam LLC for the inclusion of the real property described in **Exhibit A** attached hereto and incorporated herein into the boundaries of said Parker Water and Sanitation District is hereby granted in its entirety, subject to the terms of the associated inclusion agreement, addendum thereto, and the IGA for sanitary sewer service between the District, the Denver Southeast Suburban Water And Sanitation District D/B/A Pinery Water and Wastewater District, Acting by and through its Enterprise Fund, and the Ramblewood Metropolitan District.

2. Staff and legal counsel, on behalf of the Board of Directors, are directed to prepare and submit to the District Court in and for the County of Douglas, State of Colorado, all necessary and appropriate petitions and orders to legally effect the within inclusion, as agreed upon and subject to the conditions set forth in the Inclusion Agreement, Addendum thereto, and the IGA for sanitary sewer service.

DONE AND RESOLVED this 14th day of May 2026.

PARKER WATER & SANITATION DISTRICT

By: _____
Merlin Klotz, President

ATTEST:

_____
Secretary

EXHIBIT B

PARKER WATER AND SANITATION DISTRICT
REAL PROPERTY INCLUSION AGREEMENT

THIS AGREEMENT, is made and entered into and shall be effective this 14th day of May, 20 26, by and between the PARKER WATER AND SANITATION DISTRICT, with an address of 13939 Ancestry Drive, Parker, Colorado 80134 (the "District") and Bradley A. and Joan V. Whittlesey with an address of 4700 E. Princeton Ave, Englewood, Colorado 80113 and Hilltop JAM LLC, with an address of 2554 Aspen Springs Drive, Park City, Utah 84060 (collectively the "Petitioner").

WHEREAS, Petitioner has filed a Petition for Inclusion of certain real property being known as **Ramblewood** and more specifically described in **Exhibit A**, attached hereto (the "Property");

WHEREAS, Petitioner desires to proceed with the inclusion of the Property and requests the District to cause said Property to be included in the District pursuant to the Colorado Special District Act, the terms and conditions of the District's Rules and Regulations, and the terms and conditions of this Agreement;

WHEREAS, the District is willing to include the Property into the District on the terms and conditions contained in this Agreement;

WHEREAS, Petitioner, by ownership of the above-described property, owns certain rights to nontributary, and/or not nontributary groundwater underlying said Property, and to the extent historically used on or associated with, tributary water, which rights Petitioner is obligated to and agrees to convey to the District in accordance with the terms and conditions of this Agreement and the Rules and Regulations of the District;

WHEREAS, the District imposes certain fees and charges, including, without limitation, an inclusion fee, water and sewer system development fees, a water resources system development fee, a water resource toll fee in lieu of water dedications (if required and permitted by the District), water and sewer standby fees, among other fees, all of which may be amended from time-to-time and all of which applicable fees and charges Petitioner agrees to pay or cause to be paid in accordance with the Rules and Regulations of the District in effect at the time such fees are due;

WHEREAS, Petitioner acknowledges that the District's policy is that development pays for development, which requires that the costs of all infrastructure and facilities needed to serve

the Property shall be paid for by Petitioner except if a facility serves multiple unrelated developments, in which case Petitioner shall be responsible for the portion of the infrastructure and/or facilities serving the Property unless the District, in its sole discretion, determines in writing to assume some or all of the costs of the facility; and

WHEREAS, execution of this Agreement sets forth the terms and conditions of the District's inclusion of the Property if the District's Board of Directors, in the exercise of its sole discretion, approves the Petition for Inclusion, and this Agreement does not itself constitute approval of the Petitioner's Petition for Inclusion.

NOW THEREFORE, for good and valuable consideration, the sufficiency of which is acknowledged, it is agreed as follows:

I. **PRECEDENCE OF RULES AND REGULATIONS**. The Property shall be subject to the Rules and Regulations of the District as they may from time to time by amended. In the event of an inconsistency between the terms and conditions of this Inclusion Agreement and the Rules and Regulations, the provision of the Rules and Regulations shall control.

II. **PETITIONER OBLIGATIONS**. On or before approval of a resolution including the Property in the District by the District's Board of Directors, Petitioner shall comply with the following:

A. **Payment and Document Delivery**. Deliver to the District the following:

1. Inclusion Fee. Payment of an inclusion fee of Three Hundred Twenty-Two Thousand Four Hundred Forty-Three dollars ($322,443.00) as further described in the attached Addendum to Parker Water and Sanitation District Real Property Inclusion Agreement.

2. Water Resource Credits. Payment of a cash-in-lieu of water rights in the amount of zero dollars ($0.00) representing a payment of twenty-seven thousand dollars ($27,000) per Single Family Equivalent (SFE).

3. Cash-in-Lieu for Well Site. Payment of a cash-in-lieu of land for a well site in the amount of Fifty-Seven Thousand One Hundred Three dollars ($57,103.00) representing a payment of Ninety-One point Six Seven Two cents ($0.91672) per square ft of land required for a well site. The District requires 1 well site per 300 SFEs, and 5 acres per well site.

4. Special Warranty Deed. An executed special warranty deed, free and clear of all liens and encumbrances, conveying to the District all not nontributary and nontributary water and water rights appurtenant to the Property, and all tributary water rights used on or associated with the Property, which water and water rights are identified in **Exhibit B**. The conveyance shall meet the standards set for thin **Exhibit C**.

5. Groundwater Consent Forms. Executed Colorado State Engineer GWS-3B Consent Forms for each aquifer associated with the water and water rights.

6. Title Commitment. A current title commitment for the Property from a title insurance company acceptable to the District, which shall be updated at the District's request any time until issuance of an order of district court approving the inclusion resolution by the District's Board of Directors.

7. Property Owner Releases. As the District may require, fully executed releases of the water and water rights to be conveyed, from each person, as defined at C.R.S 37-90-137(4)(b.5)(II), with a recorded interest in the Property overlying any groundwater to be conveyed.

8. Additional Documentation. Any additional documentation required by the District.

B. **Dismissal of Oppositions**. Petitioner shall dismiss with prejudice, or withdraw, any statements of opposition to any District water case or preceeding, whether said case or proceeding is pending before the Colorado Water Court, any appellate court, or any administrative body or agency.

C. **Well Conveyance and Abandonment**. There are certain existing wells on the Property identified by Permit Numbers (n/a) ("Existing Wells"). All Existing Wells, upon direction by PWSD, shall be abandoned in accordance with the State of Colorado Rules and Regulations for Water Well Construction, Pump Installation, Cistern Installation, and Monitoring and Observation Well/Hole Construction (Colorado Water Well Contractor Rules, 2 CCR 402-2, September 1, 2016), as they may be amended from time-to-time at the sole cost of the Petitioner; provided that if Petitioner desires to continue to use one or more of the Existing Wells until the Property is connected to District water service, the District may, at the District's sole discretion, permit Petitioner to delay abandoning one or more of the Existing Wells and use the water from such wells via a license agreement between the District and Petitioner. Upon inclusion, the

permits for any Existing Wells not abandoned and all associated water rights shall be conveyed to the District via special warranty deed free and clear of all liens and encumbrances. Any other wells subsequently discovered on the property at any time shall be abandoned at Petitioner's sole cost in the same manner as set forth herein for Existing Wells.

D. **Consent to Wellfield Inclusion**. Be deemed to have irrevocably granted permission to the District to include the Property into the District's adjudicated well field.

III. **WELL SITE CONVEYANCE**.

A. **General Warranty Deed**. By general warranty deed and in fee, pursuant to the standards set forth in **Exhibit C**, Petitioner shall convey to the District one well site, of five acres minimum, for each 300 single family residences or equivalent thereto, provided that if the development will serve less than the equivalent of 300 single family residences, the District may, in its sole discretion, permit wells sites of lesser acreage. The well sites to be conveyed shall be identified as part of the final platting process of all, or any phase of the development of the Property, and shall be subject to acceptance by the District or its engineers prior to, and as a condition of, final plat approval. Sites acceptable to the District must be easily accessible to and usable by drilling and repair equipment. Well sites must be generally flat and rectangular to accommodate drill rigs, pump rigs, and related operation and maintenance equipment. The District shall cooperate with Petitioner in the selection and approval of well sites so as not to unreasonably interfere with Petitioner's platting and development plans and concepts, provided that the District shall have the final right, in its sole discretion, to determine whether a proposed well site is acceptable.

B. **Fee in lieu**. The District may, in its sole discretion, accept a fee in lieu of dedication of well sites, which shall be calculated by determining the fair market value of the property that would otherwise need to be dedicated to the District under Subsection A, above, prorated as appropriate based on the number of SFEs to be served. By way of example only, if the development required service equivalent to 150 SFEs, Petitioner would be required to pay the fair market value of 2.5 acres of property meeting the specifications set forth in Subsection A, above. The fee in lieu shall be paid prior to, and as a condition of, final plat approval for the phase of development of the Property subject to the wellsite conveyance obligation set forth herein.

IV. **AWARD OF WATER RESOURCE CREDITS.** In return for Petitioner's compliance with all obligations set forth in this Agreement, the District shall issue to Petitioner 87 SFEs of Water Resource Credits, as that term is defined in the District's Rules and Regulations (the "Awarded Water Resource Credits"), for use on the Property in accordance with the District's Rules and Regulations, or on other property in the District to the extent, if at all, permitted by the District's Rules and Regulations, as they may be amended from time-to-time. Petitioner acknowledges that its rights to use the Awarded Water Resource Credits on property in the District other than the Property is subject to change at any time as the District's Rules and Regulations are amended, and that Petitioner has no vested right to use the Awarded Water Resource Credits on other property.

V. **INFRASTRUCTURE.** Except for wells (which the District will construct at its own expense), Petitioner shall be responsible for the design and construction and associated costs of all infrastructure required to serve the Property, including without limitation, all water and sewer lines, pump stations, related facilities and required easements (the "Infrastructure"). If any Infrastructure serving the Property will serve other property, Petitioner shall be responsible for the portion of the Infrastructure serving the Property, unless the District in its sole discretion determines to assume a portion or all such costs. Petitioner shall be responsible for any cost-sharing arrangements with third parties for shared Infrastructure; provided that the District may, in its sole discretion, participate in impact area cost-sharing agreements for oversized Infrastructure. The design and construction of the Infrastructure shall be subject to approval of the District. Petitioner acknowledges that the District shall have full and absolute authority, in the District's sole discretion, to mandate the design (including the location and route of infrastructure and whether Infrastructure must be oversized and shared with third parties) of all Infrastructure serving the Property, provided any such requirements are consistent with the District's then-applicable standards and specifications. All Infrastructure to be conveyed to the District shall be located on property free and clear of all liens and encumbrances, and shall meet the standards set forth in **Exhibit C**.

VI. **CONNECTION TO WATER SYSTEM.**

A. **Adequacy of Awarded Water Resource Credits**

1. For the entire development, or if the Property is to be developed in phases, for each phase of development, or for any plat amendment, rezoning, or similar modification, Petitioner shall submit to the District such information as the District requires to determine the water demand of the development or the

phase being developed (which may include without limitation, water demand studies prepared by a qualified professional engineer or fixture counts of proposed development). The District may require such information at any time the District, in its sole discretion, determines it is necessary to determine the water demands of the proposed development, which may be without limitation prior to final platting, replatting, or issuance of a building permit. The District shall then determine the water demand, which Petitioner shall satisfy with the Awarded Water Resource Credits.

2. If insufficient Awarded Water Resources Credits exist to serve the Property as a whole, any phase thereof, or any modification to the development, Petitioner shall provide additional water supplies to the District, which at the District's sole discretion, may include surplus supplies from Petitioner's other properties within the District, or if the District determines that the District has water available for such purpose and that it is in the District's best interest, supplies acquired by payment to the District of a fee-in-lieu of a water dedication as specified in the Rules and Regulations of the District, in order to allow connection of that project or phase of the development to the water supply system of the District.

3. If the water credits allocated to a particular phase of development are more than adequate to serve that phase, then Petitioner may apply such excess credits to subsequent phases of development, but the determination that there are excess credits in a particular phase of development shall be made solely by the District and shall be made at the time that development of such subsequent phase is approved. The requirement that Petitioner provide sufficient water to serve the demand of the Property shall be a continuing and perpetual obligation. If the need for additional water to serve the Property arises in the future due to changed development plans or water demands on the Property, Petitioner and its successors-in-interest shall be solely responsible for satisfying such deficiency as permitted herein.

B. **Hold Harmless**. Petitioner acknowledges that the Water Resource Toll required of Petitioner (either via conveyance of Petitioners' water rights or by payment of a fee-in-lieu, as permitted by the District) shall be based on the District's water demand criteria for the uses located on the Property, provided that any water demand in excess of the amount determined by the District shall require Petitioner to convey additional water rights or pay a fee-in-lieu as permitted by the District. The District assumes no responsibility for, and Petitioner holds the District

harmless from, the eventuality that there may not be sufficient water to support the development of the entire Property.

VII. **WATER CONSERVATION**. The District is in the process of developing water efficiency and conservation requirements ("Water Conservation Requirements") to which new inclusions will be subject. Instead of denying Petitioner's application for inclusion until such Water Conservation Requirements are enacted, the District and Petitioner desire to agree to subject the Property to the Water Conservation Requirements when they are enacted and Petitioner acknowledges that it may need to alter its current landscaping and irrigation plans and other aspects of its development to comply with the Water Conservation Requirements. Petitioner, therefore, agrees to comply with the District's Water Conservation Requirements and to the extent required to comply with the Water Conservation Requirements, Petitioner shall modify its landscaping and irrigation plans and other aspects of tis development. The District may withhold the issuance of water and sewer taps and other required approvals pending the District's completion and adoption of the District's Water Conservation Requirements and Petitioner's demonstration that the development of the Property will comply with such requirements.

VIII. **DISCLAIMER AND WAIVER OF CLAIMS**. The District hereby expressly disclaims any liability for and Petitioner does hereby waive and forego any claims or demands against the District for any cause or circumstances whatsoever arising from or in relation to the District's inability to provide water and sewer service to the subject Property as contemplated by this Agreement.

IX. **REJECTION OF INCLUSION**. Nothing set forth in this Agreement shall be deemed to require the District to approve Petitioner's Petition for Inclusion. If the Petition for Inclusion is not approved by the District, the District shall return uncashed instruments for any fees required to be paid to the District under this Agreement and shall refund Petitioner for any amounts already paid to the District under this Agreement; provided that Petitioner shall not be entitled to a refund of fees paid by Petitioner for the District's legal and consultant costs incurred in reviewing the Petition for Inclusion and advising the District. The District shall have no liability for any other expenses or costs incurred by Petitioner.

X. **MISCELLANEOUS**.

A. **Governing Law and Venue**. This Agreement shall be governed by the laws of the State of Colorado, and any legal action concerning the provisions hereof shall be brought in Douglas County, Colorado.

B. **No Waiver**. Delays in enforcement or the waiver of any one or more defaults or breaches of this Agreement by the District shall not constitute a waiver of any of the other terms or obligations of this Agreement.

C. **Integration**. This Agreement and the following attached exhibits, which are incorporated into and made part of this Agreement by this reference, constitute the entire Agreement between Petitioner and the District, superseding all prior oral or written communications:

Exhibit A – Property Legal Description

Exhibit B – Water and Water Rights

Exhibit C – Real Property and Water Conveyance Standards

Exhibit D – Water Demand Study

Exhibit E – Addendum

Exhibit F – Well License Agreement

D. **Third Parties**. There are no intended third-party beneficiaries to this Agreement.

E. **Notice**. Any notice under this Agreement shall be in writing, and shall be3 deemed sufficient when directly presented or sent pre-paid, first class United States Mail to the party at the address set forth on the first page of this Agreement.

F. **Severability**. If any provision of this Agreement is found by a court of competent jurisdiction to be unlawful or unenforceable for any reason, the remaining provisions hereof shall remain in full force and effect.

G. **Modification**. This Agreement may only be modified upon written agreement of the Parties.

H. **Governmental Immunity**. The District and its officers, attorneys and employees are relying on, and do not waive or intend to waive by any provision of this Agreement, the monetary limitations or any other rights, immunities, and protections provided by the Colorado Governmental Immunity Act, C.R.S 24-10-101, *et seq.*, as amended, or otherwise available to the District and its officers, attorneys or employees.

I. **Runs with Land**. It is mutually agreed that all the covenants and agreements contained herein shall run with the Property and shall extend to and by binding upon the successors and assigns of the respective parties. Petitioner consents to this Agreement being recorded against the property in the office of the Clerk and Recorder of Douglas County, Colorado.

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed as of the day and year first set forth above.

[*Signatures on Following Page*]

DISTRICT

PARKER WATER & SANITATION DISTRICT

By: _____

Ron R. Redd, P.E., District Manager

13939 Ancestry Drive

Parker, Colorado 80134

Attest:

By: _____

PETITIONER

By: _____
Bradley A. Whittlesey

By: _____
Joan V. Whittlesey

4700 E. Princeton Avenue

Englewood, Colorado 80113

STATE OF COLORADO)
) ss.
COUNTY OF ARAPAHOE)

The foregoing instrument was acknowledged before me this 5th day of March, 2026, by Bradley A. Whittlesey and Joan V. Whittlesey.

Witness my hand and official seal.

My commission expires: 5/14/2029

_____
Notary Public

ANETTE TRUJILLO
NOTARY PUBLIC
STATE OF COLORADO
NOTARY ID# 20254018331
MY COMMISSION EXPIRES 05/14/2029

PETITIONER

HILLTOP JAM LLC, a Colorado limited liability company

By: James Helfand

James Helfand, its Manager

2554 Aspen Springs Drive

Park City, Utah 84060

STATE OF Utah)
) ss.
COUNTY OF Summit)

The foregoing instrument was acknowledged before me this 5th day of March, 2026, by James Helfand, Manager of Hilltop JAM LLC, a Colorado limited liability company.

Witness my hand and official seal.

My commission expires: October 21, 2028

NOTARY PUBLIC
ANTHONY I LANDAVERDE
739762
MY COMMISSION EXPIRES
OCTOBER 21, 2028
STATE OF UTAH

Notary Public

ADDENDUM TO PARKER WATER AND SANITATION DISTRICT REAL PROPERTY INCLUSION AGREEMENT

THIS ADDENDUM TO PARKER WATER AND SANITATION DISTRICT REAL PROPERTY INCLUSION AGREEMENT (the "**Addendum**") is made and entered into and shall be effective this 14th day of May, 2026, by and between the PARKER WATER AND SANITATION DISTRICT, with an address of 13939 Ancestry Drive, Parker, Colorado 80134 (the "**District**") and BRADLEY A. and JOAN V. WHITTLESEY, with an address of 4700 E. Princeton Avenue, Cherry Hills Village, Colorado 80113 and HILLTOP JAM, LLC, a Colorado limited liability company, with an address of 2554 Aspen Springs Drive, Park City, Utah, 84060 (collectively, the "**Petitioner**").

WHEREAS, Petitioner and the District have entered or will enter into that certain Parker Water and Sanitation District Real Property Inclusion Agreement (the "**Inclusion Agreement**") pertaining to the inclusion of the Property owned by Petitioner into the District. All initially capitalized terms used herein without definition shall have the meanings ascribed to them in the Agreement and the Exhibits thereto;

WHEREAS, the District Board of Directors has agreed to accept a fee-in-lieu payment rather than the dedication of a well site;

WHEREAS, the Board of Directors has agreed to reduce the charges for inclusion based on areas that will not be developed or irrigated on the Property so that the water demand does not exceed the supply of water dedicated to the District;

WHEREAS, the parties have agreed that the proposed inclusion shall be conditional upon approval by the Douglas County Board of County Commissioners (the "**County**") of Petitioner's application to subdivide the subject Property (the "**Subdivision Application**"), as further set forth herein; and

WHEREAS, Petitioner and the District have agreed to the following additional terms and conditions of the District's inclusion of the Property, which shall control over any conflicting terms in the Inclusion Agreement.

NOW THEREFORE, for good and valuable consideration, the sufficiency of which is acknowledged, it is agreed as follows:

1. Inclusion Fee.

a. Pursuant to Section II(A)(1) of the Inclusion Agreement, the inclusion fee of Three Hundred Twenty Two Thousand Four Hundred Forty Three dollars ($322,443.00) shall be paid to the District no later than three (3) months after the later of (a) approval by the County of Petitioner's Subdivision Application (the "**Subdivision Approval**") or (b) recording of the final plat for the Property; provided that if Subdivision Approval and final plat recordation do not occur by December 31, 2026 (the "**Inclusion Deadline**"), approval of the inclusion by the District shall be deemed null and void, and Petitioner shall be relieved of all obligations set forth herein and in the Inclusion Agreement, including without limitation Petitioner's obligations to pay the Inclusion Fee and the Wellsite Fee-

in-Lieu (Section 5, below). Notwithstanding the foregoing, if the Subdivision Approval is subjected to a judicial challenge pursuant to Colorado Rules of Civil Procedure Rule 106(a)(4) or other form of judicial challenge to the Subdivision Approval (a "**Subdivision Appeal**"), the Inclusion Deadline will be extended by one day for each day that the Subdivision Appeal is pending until the entry of a final, non-appealable order in such Subdivision Appeal.

b. The inclusion fee payable represents the following:

i. Five thousand dollars ($5,000.00) per acre for the 36.1726 acres that make up the portion of the Property containing lots for single family residential development and public right of way;

ii. Two-thousand dollars ($2,000.00) per acre for the 60.7898 acres that will make up the open space portion of the Property; and

iii. Twenty Thousand dollars ($20,000.00) for the two (2) ranch lots (the "Ranch Lots") that comprise the remaining 79.8336 acres of the Property based on two (2) acres per Ranch Lot (understanding that the actual acreage of each Ranch Lot is greater than two (2) acres). If the Ranch Lots are ever rezoned to allow for additional density or redeveloped in a higher density in any way including without limitation resubdivision, an additional inclusion fee payable at the then-current inclusion fee amount established by the District shall be paid to the District at the time of such rezoning, resubdivision, or redevelopment.

c. The following is a table that strictly comports with the land use applications being processed at Douglas County showing a breakdown of the inclusion fees:

LAND USE TABLE - PWSD INCLUSION FEE CALCULATIONS					
TYPE	AREA (SF)	AREA (AC)	% OF TOTAL AREA	INCLUSION FEE/ACRE	INCLUSION FEE
TOTAL NUMBER OF RESIDENTIAL LOTS (68)	1,092,256	25.0747	14.18%	$ 5,000	$ 125,374
AREA OF PUBLIC STREET DEDICATION (ROW, ONSITE)	483,424	11.0979	6.28%	$ 5,000	$ 55,490
TOTAL NUMBER OF RESIDENTIAL LOTS (68) AND PUBLIC ROW	1,575,680	36.1726	20.46%	$ 5,000	$ 180,863
TOTAL NUMBER OF (OPEN SPACE) TRACTS (8)	2,648,004	60.7898	34.38%	$ 2,000	$ 121,580
RANCH LOTS (2)	3,477,550	79.8336	45.16%	$10,000/LOT	$ 20,000
TOTAL INCLUSION FEE	7,701,234	176.80	100.00%		**$ 322,443**

d. If the Ranch Lots are ever rezoned to allow for additional density or redeveloped in a higher density in any way, including without limitation resubdivision, an additional inclusion fee payable at the then-current inclusion fee amount established by the District shall be paid to the District at the time of such rezoning, resubdivision, or redevelopment based on the acreage affected.

2. Water Rights – Fee-in-lieu. Section II(A)(2) of the Inclusion Agreement is hereby deleted because Petitioner has conveyed sufficient water rights to serve the planned demand for

the development. If the density increases or the water demand increases for any reason at any time in the future in excess of the Awarded Water Resource Credits (as set forth in Section IV of the Inclusion Agreement), Petitioner shall dedicate sufficient additional water rights to meet the increased demand or may request permission to pay a fee-in-lieu at the then-current cost.

3. Conveyance of Water Rights. Pursuant to Section II(A)(4) of the Inclusion Agreement, a special warranty deed conveying all water rights in a form satisfactory to the District and the Non-Tributary Ground Water Consent Landownership Statements for the Denver, Dawson, Laramie-Fox Hills, and Arapahoe aquifers (collectively, the "**Conveyance Documents**"), as more fully described in the Inclusion Agreement, shall be executed notarized, and delivered to the District concurrently with execution of this Addendum, and upon approval of the inclusion by the District's Board of Directors, shall be immediately recorded with the Douglas County Clerk and Recorder by the District.

4. Inclusion Conditional upon Subdivision Approval. If the District's Board of Directors approves a resolution approving the inclusion of the Property, the District shall not file a petition with the Douglas County District Court in accordance with C.R.S. § 32-1-401(1)(c)(I) seeking a court order of inclusion for the Property until Subdivision Approval has occurred and such approval is final and non-appealable pursuant to the Colorado Rules of Civil Procedure Rule 106. If Subdivision Approval and recording of the final plat do not occur by the Inclusion Deadline (provided that the Inclusion Deadline shall be extended as set forth in Section 1(a), above, if a judicial challenge is filed), the following shall occur (each a "Event of Inclusion Termination"):

a. Within ten (10) calendar days after being notified of an Event of Inclusion Termination, the District shall reconvey the Water Rights to Petitioner via quitclaim deed;

b. The Board of Directors' resolution approving the inclusion shall be deemed null and void; and

c. Both parties shall be relieved of all remaining obligations set forth herein and in the Inclusion Agreement, including without limitation Petitioner's obligation to pay the Inclusion Fee and the Well Site Fee-in-Lieu.

5. Well Site Fee-in-Lieu. Pursuant to Section III of the Inclusion Agreement, Petitioner is not required to convey a well site to the District. Instead, Petitioner shall pay a fee-in-lieu in an amount of Fifty Seven Thousand One Hundred Three Dollars ($57,103.00). Payment of this fee-in-lieu shall be made to the District on or before the date the Inclusion Fee must be paid.

6. Ranch Lot Water Resource Credits. Pursuant to Section IV of the Inclusion Agreement, the District shall allocate four (4) water resource credits to each of the large Ranch Lots.

7. Sanitary Sewer Service by the Pinery. Petitioner and the District acknowledge and agree that sanitary sewer services will be provided to the inclusion property by the Denver Southeast Suburban Water and Sanitation District d/b/a Pinery Water and Wastewater District (the "Pinery") through an intergovernmental agreement (the "Pinery IGA") to be entered into by and between the District, the Pinery and the Ramblewood Metropolitan District ("Ramblewood"),

which is a metropolitan district formed for the inclusion property to, among other things, provide financing for water and wastewater public improvements. The form of Pinery IGA shall be considered by the District's Board of Directors at the time the Inclusion Agreement and this Addendum are approved by the District's Board of Directors. Failure of the District's Board of Directors to approve any one of such three agreements shall render approval of any of the other agreements null and void. Petitioner may seek approval from the District for the two (2) Ranch Lots to be served by septic systems rather than connected to the District's sanitary sewer system. Approval of such request shall be at the sole discretion of the District.

8. Indemnification. To the maximum extent permitted by law, Petitioner hereby agrees to indemnify and hold harmless the District, any directors, officers, employees, and agents of the District from any costs, expenses, damages, claims or demands incurred or asserted against the District relating to or arising from Petitioner's conveyance and, if applicable, the District's reconveyance of the Water Rights in connection with the inclusion of the Property.

9. District Right to Withhold Service. If Petitioner does not comply with all of its obligations set forth herein, the District shall not be obligated to, and shall be lawfully entitled to refuse to, provide water service to the portion of the Property subject to such Final Plat. The District shall retain all other remedies lawfully available to it.

10. Conflict. In the event of an inconsistency or conflict between any term or condition of this Addendum and any term or condition of the Inclusion Agreement, the terms and conditions of this Addendum shall control the rights and obligations of the parties.

IN WITNESS WHEREOF, the parties have caused this Addendum to be executed as of the day and year first set forth above.

[*Signatures on Following Pages*]

PARKER WATER & SANITATION DISTRICT

13939 Ancestry Drive
Parker, Colorado 80134

Ron R. Redd, P.E., District Manager

STATE OF COLORADO)
) ss.
COUNTY OF DOUGLAS)

The foregoing instrument was acknowledged before me this 15 day of May, 2026, by Ron R. Redd, as District Manager of the Parker Water and Sanitation District.

My commission expires: 5/26/2030.

SEAL

Notary Public

LISA A. SINDALL
NOTARY PUBLIC
STATE OF COLORADO
NOTARY ID 20094020277
MY COMMISSION EXPIRES MAY 26, 2030

PETITIONER:

BRADLEY A. WHITTLESEY

Bradley A. Whittlesey

STATE OF COLORADO)
) ss.
COUNTY OF)

The foregoing instrument was acknowledged before me this 5th day of March, 2026, by Bradley A. Whittlesey.

My commission expires: 5/14/2029

SEAL

Notary Public

ANETTE TRUJILLO
NOTARY PUBLIC
STATE OF COLORADO
NOTARY ID# 20254018331
MY COMMISSION EXPIRES 05/14/2029

PETITIONER:

JOAN V. WHITTLESEY

Joan V. Whittlesey

Joan V. Whittlesey

STATE OF COLORADO)
) ss.
COUNTY OF)

The foregoing instrument was acknowledged before me this 5th day of March 2026, by Joan V. Whittlesey.

My commission expires: 5/14/2029

SEAL

Notary Public

ANETTE TRUJILLO
NOTARY PUBLIC
STATE OF COLORADO
NOTARY ID# 20254018331
MY COMMISSION EXPIRES 05/14/2029

PETITIONER:

HILLTOP JAM LLC, a Colorado limited liability company

James Helfand, its Manager

STATE OF Utah)
) ss.
COUNTY OF Summit)

The foregoing instrument was acknowledged before me this 5th day of March, 2026, by James Helfand, as Manager of Hilltop JAM LLC, a Colorado limited liability company.

My commission expires: October 21, 2028

SEAL

Notary Public

NOTARY PUBLIC
ANTHONY I LANDAVERDE
739762
MY COMMISSION EXPIRES
OCTOBER 21, 2028
STATE OF UTAH

January 29, 2026

Parker Water & Sanitation District
c/o Jerod Baylie & Heather Justus
13939 Ancestry Drive
Parker, CO 80134

RE: PWSD Inclusion Agreement – Landowner Statement of Authority

Due to the entity agreeing to pay all costs to PWSD being different than the Landowners, please consider this the Landowner Statement of Authority authorizing MU Hilltop LLC to represent our interests in this Inclusion Agreement matter.

As the Landowner, I hereby authorize MU Hilltop LLC to represent my interest in the Inclusion Agreement Matter.

Sincerely,

HILLTOP JAM LLC

James Helfand 2/5/2026
James Helfand | Date
Manager

STATE OF Utah)
) ss.
COUNTY OF Summit)

The foregoing instrument was acknowledged before me this 5th day of February, 2026, by James Helfand.

Witness my hand and official seal.

My commission expires : 2/5/2029

AMY JOLYNN WARREN
Notary Public
State Of Utah
My Commission Expires February 5, 2029
741451

Amy Jolynn Warren
Notary Public

January 29, 2026

Parker Water & Sanitation District
c/o Jerod Baylie & Heather Justus
13939 Ancestry Drive
Parker, CO 80134

RE: PWSD Inclusion Agreement – Landowner Statement of Authority

Due to the entity agreeing to pay all costs to PWSD being different than the Landowners, please consider this the Landowner Statement of Authority authorizing MU Hilltop LLC to represent our interests in this Inclusion Agreement matter.

As the Landowners, we hereby authorize MU Hilltop LLC to represent our interest in the Inclusion Agreement Matter.

Sincerely,

Bradley A. Whittlesey

Bradley A. Whittlesey
Signature Date 2/2/26

Joan V. Whittlesey

Joan V. Whittlesey
Signature Date Feb. 2, 2026

STATE OF COLORADO)
) ss.
COUNTY OF Arapahoe)

The foregoing instrument was acknowledged before me this 2nd day of February, 2026, by Bradley A. Whittlesey and Joan V. Whittlesey.

Witness my hand and official seal.

My commission expires: 5/14/2029

Anette Trujillo
Notary Public

ANETTE TRUJILLO
NOTARY PUBLIC
STATE OF COLORADO
NOTARY ID# 20254018331
MY COMMISSION EXPIRES 05/14/2029

RAMBLEWOOD METROPOLITAN DISTRICT:

By: _____
Daniel R Sheldon, President
Ramblewood Metropolitan District

ATTEST:

_____
Assistant Secretary

STATE OF COLORADO)
) ss.
COUNTY OF ARAPAHOE)

Subscribed and sworn to before me this 9th day of April, 2026, by Daniel Sheldon, President and Sandra Caldera, Assistant Secretary of the Ramblewood Metropolitan District.

My commission expires: 5/14/2029

_____
Notary Public

ANETTE TRUJILLO
NOTARY PUBLIC
STATE OF COLORADO
NOTARY ID# 20254018331
MY COMMISSION EXPIRES 05/14/2029

Ref #2026024837, Date: 5/19/2026 4:43 PM, Pages: 1 of 2 ,RECORDING $43.00
Electronically Recorded Douglas County, CO. Sheri Davis, Clerk and Recorder

EXHIBIT D

STATE OF COLORADO OFFICE OF

THE STATE ENGINEER DIVISION OF

WATER RESOURCES

NON-TRIBUTARY GROUND WATER CONSENT LANDOWNERSHIP STATEMENT

Bradley A. Whittlesey and Joan V. Whittlesey, whose mailing address is 4700 E. Princeton Ave Englewood CO 80113, claims and says that it is the owner of the following described property consisting of ~160 acres in the county of Douglas, State of Colorado:

SEE EXHIBIT "A" (Legal Description)

and that it has granted written consent to PARKER WATER AND SANITATION DISTRICT, a Colorado Special District, to withdraw ground water from the ARAPAHOE aquifer(s)* as evidenced by the attached copy of a deed or other document recorded in the county or counties in which the land is located, and that said ground water has not been conveyed or reserved to another, not has consent been given to withdrawal by another except as indicated in the attached deed or other recorded document.

Further, I Bradley A. Whittlesey claim and say that I have read the statements made herein; know the contents hereof; and that the same are true to my own knowledge.

By: Bradley A Whittlesey Date: 12/9/24

STATE OF COLORADO)

)SS.

COUNTY OF Arapahoe)

The foregoing instrument was acknowledged before me this 9th day of December, 2024 by Bradley A. Whittlesey.

Witness my hand and official seal.

My Commission Expires: 7/15/25

Notary Public: Sarah L

SARAH LEHR
NOTARY PUBLIC
STATE OF COLORADO
NOTARY ID# 20014019579
MY COMMISSION EXPIRES 7/15/2025

Further, I JOAN V. WHITTLESEY of ENGLEWOOD, CO claim and say that I have read the statements make herein; know the contents hereof; and that the same are true to my own knowledge.

By: Joan V. Whittlesey Date: 12/9/24

STATE OF COLORADO)

)SS.

COUNTY OF Arapahoe)

The foregoing instrument was acknowledged before me this 9th day of December, 2024 by Joan V. Whittlesey, of Englewood CO.

Witness my hand and official seal.

My Commission Expires: 7/15/~~2025~~2025

Notary Public: Sarah Lehr

SARAH LEHR
NOTARY PUBLIC
STATE OF COLORADO
NOTARY ID# 20014019579
MY COMMISSION EXPIRES 7/15/2025

*note: A separate form must be provided for each of the following aquifers:

1. Arapahoe 2. Denver 3. Dawson 4. Laramie Fox Hills

Ref #2026024838, Date: 5/19/2026 4:43 PM, Pages: 1 of 2 ,RECORDING $43.00
Electronically Recorded Douglas County, CO. Sheri Davis, Clerk and Recorder

EXHIBIT D

STATE OF COLORADO OFFICE OF

THE STATE ENGINEER DIVISION OF

WATER RESOURCES

NON-TRIBUTARY GROUND WATER CONSENT LANDOWNERSHIP STATEMENT

Bradley A. Whittlesey + Joan V. Whittlesey, whose mailing address is 4700 E Princeton Ave Englewood CO 80113, claims and says that it is the owner of the following described property consisting of ~160 acres in the county of Douglas, State of Colorado:

SEE EXHIBIT "A" (Legal Description)

and that it has granted written consent to PARKER WATER AND SANITATION DISTRICT, a Colorado Special District, to withdraw ground water from the DAWSON aquifer(s)* as evidenced by the attached copy of a deed or other document recorded in the county or counties in which the land is located, and that said ground water has not been conveyed or reserved to another, not has consent been given to withdrawal by another except as indicated in the attached deed or other recorded document.

Further, I Bradley A. Whittlesey claim and say that I have read the statements made herein; know the contents hereof; and that the same are true to my own knowledge.

By: Bradley A Whittlesey Date: 12/9/2024

STATE OF COLORADO)

)SS.

COUNTY OF Arapahoe)

The foregoing instrument was acknowledged before me this 9th day of December, 20 24 by Bradley A. Whittlesey.

Witness my hand and official seal.

My Commission Expires: 7/15/~~24~~25 82

Notary Public: Sarah Lehr

SARAH LEHR
NOTARY PUBLIC
STATE OF COLORADO
NOTARY ID# 20014019579
MY COMMISSION EXPIRES 7/15/2025

Further, I JOAN V. Whittlesey of Englewood, CO claim and say that I have read the statements make herein; know the contents hereof; and that the same are true to my own knowledge.

By: Joan V. Whittlesey Date: 12/9/2024

STATE OF COLORADO)

)SS.

COUNTY OF Arapahoe)

The foregoing instrument was acknowledged before me this 9th day of December, 20 24 by Joan V. Whittlesey, of Englewood CO.

Witness my hand and official seal.

My Commission Expires: 7/15/25

Notary Public: Sarah Lehr

SARAH LEHR
NOTARY PUBLIC
STATE OF COLORADO
NOTARY ID# 20014019579
MY COMMISSION EXPIRES 7/15/2025

*note: A separate form must be provided for each of the following aquifers:

1. Arapahoe 2. Denver 3. Dawson 4. Laramie Fox Hills

Ref #2026024839, Date: 5/19/2026 4:43 PM, Pages: 1 of 2 ,RECORDING $43.00
Electronically Recorded Douglas County, CO. Sheri Davis, Clerk and Recorder

EXHIBIT D

STATE OF COLORADO OFFICE OF

THE STATE ENGINEER DIVISION OF

WATER RESOURCES

NON-TRIBUTARY GROUND WATER CONSENT LANDOWNERSHIP STATEMENT

Bradley A. Whittlesey & Joan V. Whittlesey, whose mailing address is 4700 E. Princeton Ave, Englewood CO 80113, claims and says that it is the owner of the following described property consisting of ~160 acres in the county of Douglas, State of Colorado:

SEE EXHIBIT "A" (Legal Description)

and that it has granted written consent to PARKER WATER AND SANITATION DISTRICT, a Colorado Special District, to withdraw ground water from the DENVER aquifer(s)* as evidenced by the attached copy of a deed or other document recorded in the county or counties in which the land is located, and that said ground water has not been conveyed or reserved to another, not has consent been given to withdrawal by another except as indicated in the attached deed or other recorded document.

Further, I Bradley A. Whittlesey claim and say that I have read the statements made herein; know the contents hereof; and that the same are true to my own knowledge.

By: Bradley A Whittlesey Date: 12/9/2024

STATE OF COLORADO)

)SS.

COUNTY OF Arapahoe)

The foregoing instrument was acknowledged before me this 9th day of December, 20 24 by Bradley A. Whittlesey.

Witness my hand and official seal.

My Commission Expires: 7/15/25

Notary Public: Sarah Lehr

SARAH LEHR
NOTARY PUBLIC
STATE OF COLORADO
NOTARY ID# 20014019579
MY COMMISSION EXPIRES 7/15/2025

Further, I JOAN V. WHITTLESEY of Englewood CO claim and say that I have read the statements make herein; know the contents hereof; and that the same are true to my own knowledge.

By: Joan V. Whittlesey Date: 12/9/2024

STATE OF COLORADO)

)SS.

COUNTY OF Arapahoe

The foregoing instrument was acknowledged before me this 9th day of December, 2024 by Joan V. Whittlesey of Englewood CO.

Witness my hand and official seal.

My Commission Expires: 7/15/25

Notary Public: Sarah Lehr

SARAH LEHR
NOTARY PUBLIC
STATE OF COLORADO
NOTARY ID# 20014019579
MY COMMISSION EXPIRES 7/15/2025

*note: A separate form must be provided for each of the following aquifers:

1. Arapahoe 2. Denver 3. Dawson 4. Laramie Fox Hills

Ref #2026024840, Date: 5/19/2026 4:43 PM, Pages: 1 of 2 ,RECORDING $43.00
Electronically Recorded Douglas County, CO. Sheri Davis, Clerk and Recorder

EXHIBIT D

STATE OF COLORADO OFFICE OF

THE STATE ENGINEER DIVISION OF

WATER RESOURCES

NON-TRIBUTARY GROUND WATER CONSENT LANDOWNERSHIP STATEMENT

Bradley A. Whittlesey + Joan V. Whittlesey, whose mailing address is 4700 E. Princeton Ave Englewood CO 80113, claims and says that it is the owner of the following described property consisting of ~160 acres in the county of Douglas, State of Colorado:

SEE EXHIBIT "A" (Legal Description)

and that it has granted written consent to PARKER WATER AND SANITATION DISTRICT, a Colorado Special District, to withdraw ground water from the LARAMIE FOX HILLS aquifer(s)* as evidenced by the attached copy of a deed or other document recorded in the county or counties in which the land is located, and that said ground water has not been conveyed or reserved to another, not has consent been given to withdrawal by another except as indicated in the attached deed or other recorded document.

Further, I Bradley A. Whittlesey claim and say that I have read the statements made herein; know the contents hereof; and that the same are true to my own knowledge.

By: Bradley A Whittlesey Date: 12/9/2024

STATE OF COLORADO)

)SS.

COUNTY OF Arapahoe)

The foregoing instrument was acknowledged before me this 9th day of December, 20 24 by Bradley A. Whittlesey.

Witness my hand and official seal.

My Commission Expires: 7/15/2025

Notary Public: Sarah Lehr

SARAH LEHR
NOTARY PUBLIC
STATE OF COLORADO
NOTARY ID# 20014019579
MY COMMISSION EXPIRES 7/15/2025

Further, I Joan V. Whittlesey of Englewood, CO claim and say that I have read the statements make herein; know the contents hereof; and that the same are true to my own knowledge.

By: Joan V. Whittlesey Date: 12/9/2024

STATE OF COLORADO)

)SS.

COUNTY OF Arapahoe

The foregoing instrument was acknowledged before me this 9th day of December, 20 24 by Joan V. Whittlesey, of Englewood CO.

Witness my hand and official seal.

My Commission Expires: 7/15/2025

Notary Public: Sarah Lehr

SARAH LEHR
NOTARY PUBLIC
STATE OF COLORADO
NOTARY ID# 20014019579
MY COMMISSION EXPIRES 7/15/2025

*note: A separate form must be provided for each of the following aquifers:

1. Arapahoe 2. Denver 3. Dawson 4. Laramie Fox Hills

Ref #2026024841, Date: 5/19/2026 4:43 PM, Pages: 1 of 2 ,RECORDING $43.00
Electronically Recorded Douglas County, CO. Sheri Davis, Clerk and Recorder

STATE OF COLORADO
OFFICE OF THE STATE ENGINEER
DIVISION OF WATER RESOURCES

NON-TRIBUTARY GROUND WATER CONSENT LANDOWNERSHIP STATEMENT

Hilltop JAM LLC, a Colorado limited liability company, with an address of 2554 Aspen Springs Drive, Park City, Utah 84060 claims and says that it is the owner of the following described property consisting of 16.99 acres, more or less, in the County of Douglas, State of Colorado:

SEE **EXHIBIT "A"** (Legal Description)

and that it has granted written consent to the PARKER WATER AND SANITATION DISTRICT, a Colorado Special District, to withdraw ground water from the Arapahoe Aquifer as evidenced by the attached copy of a deed or other document recorded in the County or Counties in which the land is located, and that said ground water has not been conveyed or reserved to another, nor has consent been given to withdrawal by another except as indicated in the attached deed or other recorded document.

I, James Helfand, as Manager of Hilltop JAM LLC, a Colorado limited liability company, claim and say that I have read the statements made herein; know the contents hereof; and that the same are true to my own knowledge.

By: James Helfand Date: April 10, 2026

STATE OF Utah)
) ss.
COUNTY OF Summit)

The foregoing instrument was acknowledged before me this 10th day of April, 2026, by James Helfand, as Manager of Hilltop Jam LLC, a Colorado LLC.

My commission expires: Feb 5, 2029.

SEAL

Amy Jolynn Warren
Notary Public

AMY JOLYNN WARREN
Notary Public
State Of Utah
My Commission Expires February 5, 2029
741451

EXHIBIT A

LEGAL DESCRIPTION

A parcel of land located in the East half of Section 6, Township 7 South, Range 65 West of the Sixth Principal Meridian, County of Douglas, State of Colorado, more particularly described as follows:

Commencing at the East quarter corner of said Section 6; thence N 89°37'37"W along the North line of the Southeast quarter of said Section 6, 1401.02 feet to the Point of Beginning, said point being on a line 63.72 feet West of and parallel with the East line of the West half of the Southeast quarter of said Section 6;
Thence S00°17'50"W along said line, 10.98 feet;
Thence S 89°37'54"W, 1148.45 feet;
Thence N00°01 '01 "W, 25.84 feet to the South line of the Northeast quarter of said Section 6, said point being S89°37'37"E, 123.96 feet from the Southwest corner of the Northeast quarter of said Section 6;
Thence continuing N 00°01'0l"W, 1175.26 feet to the South right-of-way line of Hilltop Road;
Thence along said South right-of-way line the following two (2) courses:

1. Thence S36°30'00"E, 180.00 feet;
2. Thence S50°03' 47"E, 1359.35 feet to a line 63.72 feet West of and parallel with the East line of the West half of the Northeast quarter of said Section 6;

Thence S00°17'50"W along said line, 165.42 feet to the Point of Beginning. County of Douglas, State of Colorado.

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Ref #2026024842, Date: 5/19/2026 4:43 PM, Pages: 1 of 2 ,RECORDING $43.00
Electronically Recorded Douglas County, CO. Sheri Davis, Clerk and Recorder

STATE OF COLORADO
OFFICE OF THE STATE ENGINEER
DIVISION OF WATER RESOURCES

NON-TRIBUTARY GROUND WATER CONSENT LANDOWNERSHIP STATEMENT

Hilltop JAM LLC, a Colorado limited liability company, with an address of 2554 Aspen Springs Drive, Park City, Utah 84060 claims and says that it is the owner of the following described property consisting of 16.99 acres, more or less, in the County of Douglas, State of Colorado:

SEE **EXHIBIT "A"** (Legal Description)

and that it has granted written consent to the PARKER WATER AND SANITATION DISTRICT, a Colorado Special District, to withdraw ground water from the Dawson Aquifer as evidenced by the attached copy of a deed or other document recorded in the County or Counties in which the land is located, and that said ground water has not been conveyed or reserved to another, nor has consent been given to withdrawal by another except as indicated in the attached deed or other recorded document.

I, James Helfand, as Manager of Hilltop JAM LLC, a Colorado limited liability company, claim and say that I have read the statements made herein; know the contents hereof; and that the same are true to my own knowledge.

By: James Helfand Date: April 10, 2026

STATE OF Utah)
) ss.
COUNTY OF Summit)

The foregoing instrument was acknowledged before me this 10th day of April, 2026, by James Helfand, as manager of HillTop Jam LLC a Colorado LLC.

My commission expires: Feb 5, 2029.

SEAL

Amy Jolynn Warren
Notary Public

AMY JOLYNN WARREN
Notary Public
State Of Utah
My Commission Expires February 5, 2029
741451

EXHIBIT A

LEGAL DESCRIPTION

A parcel of land located in the East half of Section 6, Township 7 South, Range 65 West of the Sixth Principal Meridian, County of Douglas, State of Colorado, more particularly described as follows:

Commencing at the East quarter corner of said Section 6; thence N 89°37'37"W along the North line of the Southeast quarter of said Section 6, 1401.02 feet to the Point of Beginning, said point being on a line 63.72 feet West of and parallel with the East line of the West half of the Southeast quarter of said Section 6;
Thence S00°17'50"W along said line, 10.98 feet;
Thence S 89°37'54"W, 1148.45 feet;
Thence N00°01 '01 "W, 25.84 feet to the South line of the Northeast quarter of said Section 6, said point being S89°37'37"E, 123.96 feet from the Southwest corner of the Northeast quarter of said Section 6;
Thence continuing N 00°01'0l"W, 1175.26 feet to the South right-of-way line of Hilltop Road;
Thence along said South right-of-way line the following two (2) courses:

1. Thence S36°30'00"E, 180.00 feet;
2. Thence S50°03' 47"E, 1359.35 feet to a line 63.72 feet West of and parallel with the East line of the West half of the Northeast quarter of said Section 6;

Thence S00°17'50"W along said line, 165.42 feet to the Point of Beginning. County of Douglas, State of Colorado.

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Ref #2026024843, Date: 5/19/2026 4:43 PM, Pages: 1 of 2 ,RECORDING $43.00
Electronically Recorded Douglas County, CO. Sheri Davis, Clerk and Recorder

STATE OF COLORADO
OFFICE OF THE STATE ENGINEER
DIVISION OF WATER RESOURCES

NON-TRIBUTARY GROUND WATER CONSENT LANDOWNERSHIP STATEMENT

Hilltop JAM LLC, a Colorado limited liability company, with an address of 2554 Aspen Springs Drive, Park City, Utah 84060 claims and says that it is the owner of the following described property consisting of 16.99 acres, more or less, in the County of Douglas, State of Colorado:

SEE **EXHIBIT "A"** (Legal Description)

and that it has granted written consent to the PARKER WATER AND SANITATION DISTRICT, a Colorado Special District, to withdraw ground water from the Denver Aquifer as evidenced by the attached copy of a deed or other document recorded in the County or Counties in which the land is located, and that said ground water has not been conveyed or reserved to another, nor has consent been given to withdrawal by another except as indicated in the attached deed or other recorded document.

I, James Helfand, as Manager of Hilltop JAM LLC, a Colorado limited liability company, claim and say that I have read the statements made herein; know the contents hereof; and that the same are true to my own knowledge.

By: James Helfand Date: April 10, 2026

STATE OF Utah)
) ss.
COUNTY OF Summit)

The foregoing instrument was acknowledged before me this 10th day of April, 2026, by James Helfand, as manager of Hilltop Jam LLC a Colorado LLC.

My commission expires: Feb 5, 2029.

SEAL

Amy Jolynn Warren
Notary Public

AMY JOLYNN WARREN
Notary Public
State Of Utah
My Commission Expires February 5, 2029
741451

EXHIBIT A

LEGAL DESCRIPTION

A parcel of land located in the East half of Section 6, Township 7 South, Range 65 West of the Sixth Principal Meridian, County of Douglas, State of Colorado, more particularly described as follows:

Commencing at the East quarter corner of said Section 6; thence N 89°37'37"W along the North line of the Southeast quarter of said Section 6, 1401.02 feet to the Point of Beginning, said point being on a line 63.72 feet West of and parallel with the East line of the West half of the Southeast quarter of said Section 6;
Thence S00°17'50"W along said line, 10.98 feet;
Thence S 89°37'54"W, 1148.45 feet;
Thence N00°01 '01 "W, 25.84 feet to the South line of the Northeast quarter of said Section 6, said point being S89°37'37"E, 123.96 feet from the Southwest corner of the Northeast quarter of said Section 6;
Thence continuing N 00°01'0l"W, 1175.26 feet to the South right-of-way line of Hilltop Road;
Thence along said South right-of-way line the following two (2) courses:

1. Thence S36°30'00"E, 180.00 feet;
2. Thence S50°03' 47"E, 1359.35 feet to a line 63.72 feet West of and parallel with the East line of the West half of the Northeast quarter of said Section 6;

Thence S00°17'50"W along said line, 165.42 feet to the Point of Beginning. County of Douglas, State of Colorado.

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Ref #2026024844, Date: 5/19/2026 4:43 PM, Pages: 1 of 2 ,RECORDING $43.00
Electronically Recorded Douglas County, CO. Sheri Davis, Clerk and Recorder

STATE OF COLORADO
OFFICE OF THE STATE ENGINEER
DIVISION OF WATER RESOURCES

NON-TRIBUTARY GROUND WATER CONSENT LANDOWNERSHIP STATEMENT

Hilltop JAM LLC, a Colorado limited liability company, with an address of 2554 Aspen Springs Drive, Park City, Utah 84060 claims and says that it is the owner of the following described property consisting of 16.99 acres, more or less, in the County of Douglas, State of Colorado:

SEE **EXHIBIT "A"** (Legal Description)

and that it has granted written consent to the PARKER WATER AND SANITATION DISTRICT, a Colorado Special District, to withdraw ground water from the Laramie-Fox Hills Aquifer as evidenced by the attached copy of a deed or other document recorded in the County or Counties in which the land is located, and that said ground water has not been conveyed or reserved to another, nor has consent been given to withdrawal by another except as indicated in the attached deed or other recorded document.

I, James Helfand, as Manager of Hilltop JAM LLC, a Colorado limited liability company, claim and say that I have read the statements made herein; know the contents hereof; and that the same are true to my own knowledge.

By: James Helfand Date: April 10, 2026

STATE OF Utah)
) ss.
COUNTY OF Summit)

The foregoing instrument was acknowledged before me this 10th day of April, 2026, by James Helfand, as manager of Hilltop Jam LLC a Colorado LLC.

My commission expires: Feb 5, 2029.

SEAL

Amy Jolynn Warren
Notary Public

AMY JOLYNN WARREN
Notary Public
State Of Utah
My Commission Expires February 5, 2029
741451

EXHIBIT A

LEGAL DESCRIPTION

A parcel of land located in the East half of Section 6, Township 7 South, Range 65 West of the Sixth Principal Meridian, County of Douglas, State of Colorado, more particularly described as follows:

Commencing at the East quarter corner of said Section 6; thence N 89°37'37"W along the North line of the Southeast quarter of said Section 6, 1401.02 feet to the Point of Beginning, said point being on a line 63.72 feet West of and parallel with the East line of the West half of the Southeast quarter of said Section 6;
Thence S00°17'50"W along said line, 10.98 feet;
Thence S 89°37'54"W, 1148.45 feet;
Thence N00°01 '01 "W, 25.84 feet to the South line of the Northeast quarter of said Section 6, said point being S89°37'37"E, 123.96 feet from the Southwest corner of the Northeast quarter of said Section 6;
Thence continuing N 00°01'0l"W, 1175.26 feet to the South right-of-way line of Hilltop Road;
Thence along said South right-of-way line the following two (2) courses:

1. Thence S36°30'00"E, 180.00 feet;
2. Thence S50°03' 47"E, 1359.35 feet to a line 63.72 feet West of and parallel with the East line of the West half of the Northeast quarter of said Section 6;

Thence S00°17'50"W along said line, 165.42 feet to the Point of Beginning. County of Douglas, State of Colorado.

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Ref #2026024845, Date: 5/19/2026 4:45 PM, Pages: 1 of 2 ,RECORDING $43.00
Electronically Recorded Douglas County, CO. Sheri Davis, Clerk and Recorder

SPECIAL WARRANTY DEED

Water Rights

THIS DEED is dated the 5th day of March 2026, and is made between, (whether one, or more than one),

HILLTOP JAM LLC, a Colorado limited liability company

the "Grantor" of the County of Summit and State of Utah and

PARKER WATER AND SANITATION DISTRICT, a quasi-municipal corporation and political subdivision of the State of Colorado

In Severality, the "Grantee", whose legal address is

13939 Ancestry Drive, Parker, of the County of Douglas and State of Colorado.

WITNESS, that the Grantor, for and in consideration of the sum of **Ten Dollars and No Cents ($10.00)**, the receipt and sufficiency of which is hereby acknowledged, hereby grants, bargains, sells, conveys and confirms unto the Grantee and the Grantee's heirs and assigns forever, all the real property, together with any improvements thereon, located in the County of Douglas and State of Colorado described as follows:

Any and all water, groundwater, water rights, and groundwater rights owned by the Grantor, including any wells and equipment.

Any volume of groundwater conveyed herein does not constitute a representation or warranty regarding the actual physical availability of groundwater underlying the property. Grantor makes no representation or warranty, express or implied, as to the existence, quantity, quality, recoverability, or sustainability of any groundwater supply.

Underlying and appurtenant to an approximately 17-acre parcel of land generally located in the E1/2 of the NW/4, and the SW1/4 of the NE1/4, Section 6, Township 7 South, Range 65 West of the 6th P.M., as described on the attached **Exhibit A**.

Also known by street address as Vacant Land, Parker, CO 80134.

TOGETHER with all and singular the hereditaments and appurtenances thereto belonging, or in anywise appertaining, the reversions, remainders, rents, issues, and profits thereof, and all the estate, right, title, interest, claim and demand whatsoever of the Grantor, either in law or equity, of, in and to the above bargained premises, with the hereditaments and appurtenances;

TO HAVE AND TO HOLD the said premises above bargained and described, with the appurtenances, unto the Grantee, and the Grantee's heirs and assigns forever. The Grantor, for the Grantor and the Grantor's heirs and assigns, does covenant, grant, bargain, and agree that the Grantor shall and will WARRANT THE TITLE AND DEFEND the above described premises, in the quiet and peaceable possession of the Grantee and the heirs and assigns of the Grantee, against all and every person or persons claiming the whole or any part thereof, by, through, or under the Grantor except and subject to: Statutory Exceptions as defined in C.R.S. § 38-30-113(5)(a).

IN WITNESS WHEREOF, the Grantor has executed this deed on the date set forth above.

James Helfand

JAMES HELFAND, Manager,
Hilltop JAM LLC

State of Utah

County of Summit

The foregoing instrument was acknowledged before me this 5th day of March, 2026, by **James Helfand, Manager for Hilltop JAM LLC.**

Notary Public

My Commission Expires: October 21, 2028

NOTARY PUBLIC
ANTHONY I LANDAVERDE
739762
MY COMMISSION EXPIRES
OCTOBER 21, 2028
STATE OF UTAH

EXHIBIT A

LEGAL DESCRIPTION

A parcel of land located in the East half of Section 6, Township 7 South, Range 65 West of the Sixth Principal Meridian, County of Douglas, State of Colorado, more particularly described as follows:

Commencing at the East quarter corner of said Section 6; thence N 89°37'37"W along the North line of the Southeast quarter of said Section 6, 1401.02 feet to the Point of Beginning, said point being on a line 63.72 feet West of and parallel with the East line of the West half of the Southeast quarter of said Section 6;
Thence S00°17'50"W along said line, 10.98 feet;
Thence S 89°37'54"W, 1148.45 feet;
Thence N00°01 '01 "W, 25.84 feet to the South line of the Northeast quarter of said Section 6, said point being S89°37'37"E, 123.96 feet from the Southwest corner of the Northeast quarter of said Section 6;
Thence continuing N 00°01'0l"W, 1175.26 feet to the South right-of-way line of Hilltop Road;
Thence along said South right-of-way line the following two (2) courses:

1. Thence S36°30'00"E, 180.00 feet;
2. Thence S50°03' 47"E, 1359.35 feet to a line 63.72 feet West of and parallel with the East line of the West half of the Northeast quarter of said Section 6;

Thence S00°17'50"W along said line, 165.42 feet to the Point of Beginning. County of Douglas, State of Colorado.

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Ref #2026024846, Date: 5/19/2026 4:45 PM, Pages: 1 of 3 ,RECORDING $43.00
Electronically Recorded Douglas County, CO. Sheri Davis, Clerk and Recorder

SPECIAL WARRANTY DEED
Water Rights

THIS DEED is dated the 9th day of February 2026, and is made between, (whether one, or more than one),

BRADLEY A. WHITTLESEY and JOAN V. WHITTLESEY

the "Grantor" of the County of Arapahoe and State of Colorado and

PARKER WATER AND SANITATION DISTRICT, a quasi-municipal corporation and political subdivision of the State of Colorado

In Severality, the "Grantee", whose legal address is

13939 Ancestry Drive, Parker, of the County of Douglas and State of Colorado.

WITNESS, that the Grantor, for and in consideration of the sum of **Ten Dollars and No Cents ($10.00)**, the receipt and sufficiency of which is hereby acknowledged, hereby grants, bargains, sells, conveys and confirms unto the Grantee and the Grantee's heirs and assigns forever, all the real property, together with any improvements thereon, located in the County of Douglas and State of Colorado described as follows:

Any and all water, groundwater, water rights, and groundwater rights owned by the Grantor, including, but not limited to, the groundwater volumes quantified in Case No. 2007CW107, District Court, Water Division 1, on February 28, 2008:

Aquifer	Annual Volume 100 Years (acre-feet)	Total Volume (acre-feet)
Lower Dawson (NT)	32	3,200
Denver (NT)	70.7	7,070
Arapahoe (NT)	68	6,800
Laramie-Fox Hills (NT)	46.8	4,680

The volumes of groundwater referenced herein represent decreed amounts only and do not constitute a representation or warranty regarding the actual physical availability of groundwater underlying the property. Grantor makes no representation or warranty, express or implied, as to the existence, quantity, quality, recoverability, or sustainability of any groundwater supply.

Underlying and appurtenant to an approximately 160-acre parcel of land generally located in E1/2 of the SW/4, and the W1/2 of the SE1/4, Section 6, Township 7 South, Range 65 West of the 6th P.M., as described on **Exhibit A**.

Also known by street address as 9757 Hilltop Road, Parker, CO 80134.

TOGETHER with all and singular the hereditaments and appurtenances thereto belonging, or in anywise appertaining, the reversions, remainders, rents, issues, and profits thereof, and all the estate, right, title, interest, claim and demand whatsoever of the Grantor, either in law or equity, of, in and to the above bargained premises, with the hereditaments and appurtenances;

TO HAVE AND TO HOLD the said premises above bargained and described, with the appurtenances, unto the Grantee, and the Grantee's heirs and assigns forever. The Grantor, for the Grantor and the Grantor's heirs and assigns, does covenant, grant, bargain, and agree that the Grantor shall and will WARRANT THE TITLE AND DEFEND the above described premises, in the quiet and peaceable possession of the Grantee and the heirs and assigns of the Grantee, against all and every person or persons claiming the whole or any part thereof, by, spellcheck, or under the Grantor except and subject to: Statutory Exceptions as defined in C.R.S. § 38-30-113(5)(a).

IN WITNESS WHEREOF, the Grantor has executed this deed on the date set forth above.

Bradley A Whittlesey
BRADLEY A. WHITTLESEY

Joan V. Whittlesey
JOAN V. WHITTLESEY

State of Colorado
County of Arapahoe

The foregoing instrument was acknowledged before me this 9th day of February, 2026, by **Bradley A. Whittlesey and Joan V. Whittlesey**.

Anette Trujillo
Notary Public

My Commission Expires: 5/14/2029

ANETTE TRUJILLO
NOTARY PUBLIC
STATE OF COLORADO
NOTARY ID# 20254018331
MY COMMISSION EXPIRES 05/14/2029

EXHIBIT A

LEGAL DESCRIPTION

PARCEL A
A PARCEL OF LAND LOCATED IN THE SOUTHWEST QUARTER AND THE SOUTHEAST QUARTER OF SECTION 6, TOWNSHIP 7 SOUTH, RANGE 65 WEST OF THE SIXTH PRINCIPAL MERIDIAN COUNTY OF DOUGLAS, STATE OF COLORADO, MORE PARTICULARLY DESCRIBED AS FOLLOWS;

THE BASIS OF BEARINGS FOR THIS DESCRIPTION IS S00°00'27"W ALONG THE WEST LINE OF THE SOUTHWEST QUARTER OF SAID SECTION 6.

COMMENCING AT THE WEST QUARTER CORNER OF SAID SECTION 6; THENCE S88°58'23"E ALONG THE NORTH LINE OF THE SOUTHWEST QUARTER OF SAID SECTION 6 A DISTANCE OF 1426.97 FEET TO A POINT ON THE EAST BOUNDARY LINE OF HIDDEN VILLAGE FILING NUMBER ONE, A SUBDIVISION FILED WITH THE DOUGLAS COUNTY CLERK AND RECORDER'S OFFICE AT RECEPTION NO. 125234; THENCE S01°03'11"W ALONG THE EAST BOUNDARY LINE OF SAID HIDDEN VILLAGE FILING NUMBER ONE A DISTANCE OF 12.62 FEET TO THE SOUTHWEST CORNER OF A PARCEL OF LAND DESCRIBED AT RECEPTION NO 9561360 FILED IN THE DOUGLAS COUNTY CLERK AND RECORDER'S OFFICE; SAID POINT BEING THE POINT OF BEGINNING; THENCE S88°26'07"E ALONG THE SOUTH LINE OF THE PARCEL DESCRIBED AT SAID RECEPTION NO. 9561360 A DISTANCE OF 1408.26 FEET TO THE SOUTHEAST CORNER OF SAID PARCEL; SAID POINT ALSO BEING THE SOUTHWEST CORNER OF A PARCEL OF LAND DESCRIBED AT RECEPTION NO. 9561359 FILED IN THE DOUGLAS COUNTY CLERK AND RECORDER'S OFFICE; THENCE S89°42'56"E ALONG THE SOUTH LINE OF THE PARCEL OF LAND DESCRIBED AT SAID RECEPTION NO. 9561359 AND THE SOUTH LINE OF A PARCEL OF LAND DESCRIBED AT RECEPTION NO. 9525595 FILED IN THE DOUGLAS COUNTY CLERK AND RECORDER'S OFFICE A DISTANCE OF 1148.46 FEET TO THE SOUTHWEST CORNER OF A PARCEL OF LAND DESCRIBED AT RECEPTION NO. 9519762 FILED IN THE DOUGLAS COUNTY CLERK AND RECORDER'S OFFICE; THENCE N00°57'00"E ALONG THE WEST LINE OF THE PARCEL OF LAND DESCRIBED AT SAID RECEPTION NO. 9519762 AND THE WEST LINE OF A PARCEL OF LAND DESCRIBED AT RECEPTION NO. 9519760 FILED IN THE DOUGLAS COUNTY CLERK AND RECORDER'S OFFICE A DISTANCE OF 176.40 FEET; SAID POINT ALSO BEING ON THE SOUTHWESTERLY RIGHT OF WAY LINE OF HILLTOP ROAD; THENCE S49°24'37"E ALONG THE SOUTHWESTERLY RIGHT OF WAY LINE OF HILLTOP ROAD AS DESCRIBED AT SAID RECEPTION NO. 9519760 (AND ALONG SAID DESCRIBED COURSE EXTENDED SOUTHEASTERLY) A DISTANCE OF 272.68 FEET TO A POINT ON THE NORTH LINE OF LOT 98, HIDDEN VILLAGE FILING NO. 4, A SUBDIVISION FILED WITH THE DOUGLAS COUNTY CLERK AND RECORDER AT RECEPTION NO. 131583; THENCE N89°42'56"W ALONG THE NORTH LINE OF SAID LOT 98 A DISTANCE OF 118.17 FEET TO THE NORTHWEST CORNER OF SAID LOT 98; THENCE S01°16'51"W ALONG THE WEST LINE OF SAID HIDDEN VILLAGE FILING NO. 4 A DISTANCE OF 2633.91 FEET TO THE SOUTHWEST CORNER OF LOT 102 OF SAID HIDDEN VILLAGE FILING NO. 4; SAID POINT ALSO BEING ON THE NORTH LINE OF LOT 58-A, HIDDEN VILLAGE FILING NO. 2, 2ND AMENDMENT, A SUBDIVISION FILED IN THE DOUGLAS COUNTY CLERK AND RECORDER'S OFFICE AT RECEPTION NO. 2005032337; THENCE N89°04'32"W ALONG THE NORTH LINE OF SAID HIDDEN VILLAGE FILING NO. 2, 2ND AMENDMENT A DISTANCE OF 950.95 FEET TO THE NORTHWEST CORNER OF LOT 59-A OF SAID HIDDEN VILLAGE FILING NO. 2, 2ND AMENDMENT; THENCE N89°01'58"W ALONG THE NORTH LINE OF HIDDEN VILLAGE FILING NUMBER TWO, A SUBDIVISION FILED IN THE DOUGLAS COUNTY CLERK AND RECORDER'S OFFICE AT RECEPTION NO. 127014A DISTANCE OF 1686.96 FEET TO THE SOUTHEAST CORNER OF TRACT B OF HIDDEN VILLAGE FILING NUMBER ONE AMENDED, A SUBDIVISION FILED IN THE DOUGLAS COUNTY CLERK AND RECORDER'S OFFICE AT RECEPTION NO. 125878; THENCE N01°03'11"E ALONG THE EAST BOUNDARY OF SAID HIDDEN VILLAGE FILING NUMBER ONE AMENDED AND THE EAST LINE OF SAID HIDDEN VILLAGE FILING NUMBER ONE A DISTANCE OF 2634.49 FEET TO THE POINT OF BEGINNING;

SAID PARCEL CONTAINS 6,962,108 SQUARE FEET, 159.828 ACRES, MORE OR LESS,

[DESCRIPTION CONTINUED ON NEXT PAGE]

PARCEL B

TOGETHER WITH AN EASEMENT FOR INGRESS AND EGRESS OVER AND THROUGH THE TRACT OF LAND CONTAINED IN DEED RECORDED JANUARY 2, 1976 IN BOOK 284 AT PAGE 875 AND DESCRIBED AS FOLLOWS:

BEGINNING AT THE NW CORNER OF THE E1/2 SE1/4 OF SAID SECTION 6, TOWNSHIP 7 SOUTH, RANGE 65 WEST;
THENCE EAST 80 FEET ALONG THE NORTH LINE OF E1/2 SE 1/4 OF SAID SECTION 6; THENCE SOUTH 80 FEET; THENCE WEST 80 FEET TO THE WEST LINE OF THE E1/2 SE 1/4 OF SAID SECTION 6; THENCE NORTH ALONG SAID WEST LINE OF THE E1/2 SE 1/4 OF SAID SECTION 6 TO THE POINT OF BEGINNING.

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RAMBLEWOOD

LOCATED IN SECTION 6, TOWNSHIP 7 SOUTH, RANGE 65 WEST OF THE 6TH P.M., COUNTY OF DOUGLAS, STATE OF COLORADO

176.795 ACRES - 70 RESIDENTIAL LOTS - 8 TRACTS / SB2026-009

LEGAL DESCRIPTION

A PARCEL OF LAND LOCATED IN THE SOUTHWEST QUARTER AND THE SOUTHEAST QUARTER OF SECTION 6, TOWNSHIP 7 SOUTH, RANGE 65 WEST OF THE 6TH PRINCIPAL MERIDIAN, COUNTY OF DOUGLAS, STATE OF COLORADO, MORE PARTICULARLY DESCRIBED AS FOLLOWS:
(THE BASIS OF BEARINGS FOR THIS DESCRIPTION IS SOUTH 00°00'27" WEST ALONG THE WEST LINE OF THE SOUTHWEST QUARTER OF SAID SECTION 6)
COMMENCING AT THE WEST QUARTER CORNER OF SAID SECTION 6;
THENCE SOUTH 88°58'23" EAST ALONG THE NORTH LINE OF THE SOUTHWEST QUARTER OF SAID SECTION 6 A DISTANCE OF 1426.97 FEET TO A POINT ON THE EAST BOUNDARY LINE OF HIDDEN VILLAGE FILING NUMBER ONE, A SUBDIVISION FILED WITH THE DOUGLAS COUNTY CLERK AND RECORDER'S OFFICE AND RECORDED APRIL 29, 1966 AT RECEPTION NO. 125234;
THENCE SOUTH 01°03'11" WEST ALONG THE EAST BOUNDARY LINE OF SAID HIDDEN VILLAGE FILING NUMBER ONE A DISTANCE OF 12.62 FEET TO THE SOUTHWEST CORNER OF A PARCEL OF LAND DESCRIBED BY DEED RECORDED DECEMBER 26, 1995 AT RECEPTION NO. 9561360 FILED IN THE DOUGLAS COUNTY CLERK AND RECORDER'S OFFICE, SAID POINT BEING THE POINT OF BEGINNING;
THENCE SOUTH 88°26'07" EAST ALONG THE SOUTH LINE OF THE PARCEL DESCRIBED AT SAID RECEPTION NO. 9561360 A DISTANCE OF 1408.26 FEET TO THE SOUTHEAST CORNER OF SAID PARCEL, SAID POINT ALSO BEING THE SOUTHWEST CORNER OF A PARCEL OF LAND DESCRIBED BY DEED RECORDED DECEMBER 26, 1995 AT RECEPTION NO. 9561359 FILED IN THE DOUGLAS COUNTY CLERK AND RECORDER'S OFFICE;
THENCE SOUTH 89°42'56" EAST ALONG THE SOUTH LINE OF THE PARCEL OF LAND DESCRIBED AT SAID RECEPTION NO. 9561359 AND THE SOUTH LINE OF A PARCEL OF LAND DESCRIBED BY DEED RECORDED JUNE 8, 1995 AT RECEPTION NO. 9525595 FILED IN THE DOUGLAS COUNTY CLERK AND RECORDER'S OFFICE A DISTANCE OF 1148.46 FEET TO THE SOUTHWEST CORNER OF A PARCEL OF LAND DESCRIBED BY DEED RECORDED MAY 5, 1995 AT RECEPTION NO. 9519762 FILED IN THE DOUGLAS COUNTY CLERK AND RECORDER'S OFFICE;
THENCE NORTH 00°57'00" EAST ALONG THE WEST LINE OF THE PARCEL OF LAND DESCRIBED AT SAID RECEPTION NO. 9519762 AND THE WEST LINE OF A PARCEL OF LAND DESCRIBED BY DEED RECORDED MAY 5, 1995 AT RECEPTION NO. 9519760 FILED IN THE DOUGLAS COUNTY CLERK AND RECORDER'S OFFICE A DISTANCE OF 176.40 FEET, SAID POINT ALSO BEING ON THE SOUTHWESTERLY RIGHT OF WAY LINE OF HILLTOP ROAD;
THENCE SOUTH 49°24'37" EAST ALONG THE SOUTHWESTERLY RIGHT OF WAY LINE OF HILLTOP ROAD AS DESCRIBED AT SAID RECEPTION NO. 9519760 (AND ALONG SAID DESCRIBED COURSE EXTENDED SOUTHEASTERLY) A DISTANCE OF 272.68 FEET TO A POINT ON THE NORTH LINE OF LOT 98, HIDDEN VILLAGE FILING NO. 4, A SUBDIVISION FILED WITH THE DOUGLAS COUNTY CLERK AND RECORDER AND RECORDED NOVEMBER 12, 1968 AT RECEPTION NO. 131583;
THENCE NORTH 89°42'56" WEST ALONG THE NORTH LINE OF SAID LOT 98 A DISTANCE OF 118.17 FEET TO THE NORTHWEST CORNER OF SAID LOT 98;
THENCE SOUTH 01°16'51" WEST ALONG THE WEST LINE OF SAID HIDDEN VILLAGE FILING NO. 4 A DISTANCE OF 2633.91 FEET TO THE SOUTHWEST CORNER OF LOT 102 OF SAID HIDDEN VILLAGE FILING NO. 4, SAID POINT ALSO BEING ON THE NORTH LINE OF LOT 58-A, HIDDEN VILLAGE FILING NO. 2, 2ND AMENDMENT, A SUBDIVISION FILED IN THE DOUGLAS COUNTY CLERK AND RECORDER'S OFFICE AND RECORDED APRIL 13, 2005 AT RECEPTION NO. 2005032337;
THENCE NORTH 89°04'32" WEST ALONG THE NORTH LINE OF SAID HIDDEN VILLAGE FILING NO. 2, 2ND AMENDMENT A DISTANCE OF 950.95 FEET TO THE NORTHWEST CORNER OF LOT 59-A OF SAID HIDDEN VILLAGE FILING NO. 2, 2ND AMENDMENT;
THENCE NORTH 89°01'58" WEST ALONG THE NORTH LINE OF HIDDEN VILLAGE FILING NUMBER TWO, A SUBDIVISION FILED IN THE DOUGLAS COUNTY CLERK AND RECORDER'S OFFICE AND RECORDED FEBRUARY 20, 1966 AT RECEPTION NO. 127014 A DISTANCE OF 1686.96 FEET TO THE SOUTHEAST CORNER OF TRACT B OF HIDDEN VILLAGE FILING NUMBER ONE AMENDED, A SUBDIVISION FILED IN THE DOUGLAS COUNTY CLERK AND RECORDER'S OFFICE AND RECORDED AUGUST 2, 1966 AT RECEPTION NO. 125878;
THENCE NORTH 01°03'11" EAST ALONG THE EAST BOUNDARY OF SAID HIDDEN VILLAGE FILING NUMBER ONE AMENDED AND THE EAST LINE OF SAID HIDDEN VILLAGE FILING NUMBER ONE A DISTANCE OF 2634.49 FEET TO THE POINT OF BEGINNING.

A PARCEL OF LAND LOCATED IN THE EAST HALF OF SECTION 6, TOWNSHIP 7 SOUTH, RANGE 65 WEST OF THE SIXTH PRINCIPAL MERIDIAN, COUNTY OF DOUGLAS, STATE OF COLORADO, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE EAST QUARTER CORNER OF SAID SECTION 6;
THENCE NORTH 89°37'37" WEST ALONG THE NORTH LINE OF THE SOUTHEAST QUARTER OF SAID SECTION 6, 1401.02 FEET TO THE POINT OF BEGINNING, SAID POINT BEING ON A LINE 63.72 FEET WEST OF AND PARALLEL WITH THE EAST LINE OF THE WEST HALF OF THE SOUTHEAST QUARTER OF SAID SECTION 6;
THENCE SOUTH 00°17'50" WEST ALONG SAID LINE, 10.98 FEET;
THENCE SOUTH 89°37'54" WEST, 1148.45 FEET;
THENCE NORTH 00°01'01" WEST, 25.84 FEET TO THE SOUTH LINE OF THE NORTHEAST QUARTER OF SAID SECTION 6, SAID POINT BEING SOUTH 89°37'37" EAST, 123.96 FEET FROM THE SOUTHWEST CORNER OF THE NORTHEAST QUARTER OF SAID SECTION 6;
THENCE CONTINUING NORTH 00°01'01" WEST, 1175.26 FEET TO THE SOUTH RIGHT-OF-WAY LINE OF HILLTOP ROAD; THENCE ALONG SAID SOUTH RIGHT-OF-WAY LINE THE FOLLOW TWO (2) COURSES:
1. THENCE SOUTH 36°30'00" EAST, 180.00 FEET;
2. THENCE SOUTH 50°03'47" EAST, 1359.35 FEET TO A LINE 63.72 FEET WEST OF AND PARALLEL WITH THE EAST LINE OF THE WEST HALF OF THE NORTHEAST QUARTER OF SAID SECTION 6;
THENCE SOUTH 00°17'50" WEST ALONG SAID LINE, 165.42 FEET TO THE POINT OF BEGINNING;
LESS AND EXCEPT THAT PORTION CONVEYED BY SPECIAL WARRANTY DEED RECORDED OCTOBER 3, 2023 UNDER RECEPTION NO. 2023042659, COUNTY OF DOUGLAS, STATE OF COLORADO.

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 RAMBLEWOOD. 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. THE HALFPIPE PLACE, FREERIDER POINT, FREERIDER WAY, DERAILER STREET, RAILBENDER STREET, AND ALPINE DRIVE, AND EASEMENTS SHOWN HEREON ARE DEDICATED AND CONVEYED TO DOUGLAS COUNTY, CO. IN FEE SIMPLE ABSOLUTE, WITH MARKETABLE TITLE, FOR PUBLIC USES AND PURPOSES.

TRACTS A, B, C, E, F, G, AND H ARE HEREBY DEDICATED TO THE RAMBLEWOOD METROPOLITAN DISTRICT. SAID TRACTS WILL ALSO BE MAINTAINED BY THE RAMBLEWOOD METROPOLITAN DISTRICT.

OWNER: BRADLEY A. WHITTLESEY

BY: _____
BRADLEY A. WHITTLESEY

OWNER: JOAN V. WHITTLESEY

BY: _____
JOAN V. WHITTLESEY

STATE OF COLORADO)
) SS.
COUNTY OF DOUGLAS)

ACKNOWLEDGED BEFORE ME THIS _____ DAY OF _____ A.D., _____ BY _____
(NAME)

MY COMMISSION EXPIRES: _____

WITNESS MY HAND AND OFFICIAL SEAL: _____
NOTARY PUBLIC

OWNER: HILLTOP JAM, LLC, A COLORADO LIMITED LIABILITY COMPANY

BY: _____

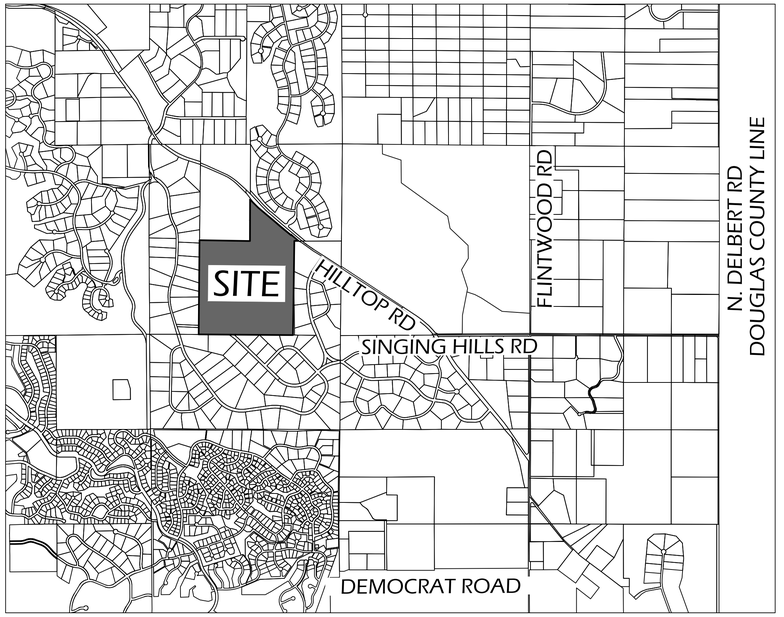
ITS: _____

STATE OF COLORADO)
) SS.
COUNTY OF DOUGLAS)

ACKNOWLEDGED BEFORE ME THIS _____ DAY OF _____ A.D., _____ BY _____
(NAME)

MY COMMISSION EXPIRES: _____

WITNESS MY HAND AND OFFICIAL SEAL: _____
NOTARY PUBLIC



VICINITY MAP
SCALE: 1" = 2000'

DEVELOPER	CIVIL ENGINEER	SURVEYOR
MU HILLTOP LLC 6900 E. BELLVIEW AVE. GREENWOOD VILLAGE, CO 80111 PHONE: (303) 799-6300 CONTACT: DAN SHELDON	LJA ENGINEERING, INC. 1765 WEST 121ST AVE., SUITE 300 WESTMINSTER, CO 80234 PHONE: (303) 421-4224 CONTACT: KEVIN LOVELACE	LJA SURVEYING, INC 2725 ROCKY MOUNTAIN AVE., SUITE 450 LOVELAND, CO 80538 PHONE: (970) 340-2414 CONTACT: J.R. MCGEHEE

PLANNING COMMISSION

THE PRELIMINARY PLAN SB2025-040 FOR THIS FINAL PLAT WAS REVIEWED BY THE PLANNING COMMISSION ON FEBRUARY 23, 2026.

_____ _____
PLANNING DIRECTOR, ON BEHALF OF THE PLANNING COMMISSION DATE

ACCEPTANCE CERTIFICATE

THE DEDICATION OF TRACTS A, B, C, E, F, G, AND H ARE HEREBY ACCEPTED FOR OWNERSHIP AND MAINTENANCE BY THE RAMBLEWOOD METROPOLITAN DISTRICT.

BY: _____

TITLE: _____

STATE OF COLORADO)
) SS.
COUNTY OF _____)

ACKNOWLEDGED BEFORE ME THIS _____ DAY OF _____ , 20___ BY _____

AS _____ OF _____ .

MY COMMISSION EXPIRES: _____

WITNESS MY HAND AND OFFICIAL SEAL

_____
NOTARY PUBLIC

TITLE VERIFICATION

WE_____, 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.

COMPANY NAME: LAND TITLE GUARANTEE COMPANY

BY: _____
NAME DATE

TITLE: _____

STATE OF COLORADO)
) SS.
COUNTY OF DOUGLAS)

ACKNOWLEDGED BEFORE ME THIS _____ DAY OF _____ A.D. 2026 BY _____

MY COMMISSION EXPIRES: _____

WITNESS MY HAND AND OFFICIAL SEAL: _____
NOTARY PUBLIC

BOARD OF COUNTY COMMISSIONERS

THIS PLAT WAS APPROVED FOR FILING BY THE BOARD OF COUNTY COMMISSIONERS OF DOUGLAS COUNTY, CO, ON THE _____ DAY OF _____, 202__, SUBJECT TO ANY CONDITIONS SPECIFIED HEREON. THE DEDICATIONS OF UTILITY EASEMENTS, DRAINAGE AND BLANKET ACCESS EASEMENTS, HALFPIPE PLACE, FREERIDER POINT, FREERIDER WAY, DERAILER STREET, RAILBENDER STREET, AND ALPINE DRIVE ARE HEREBY 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

SURVEYOR'S CERTIFICATE

I, JOHN ROBERT MCGEHEE, 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 FEBRUARY 4, 2026 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 _____ , 20___.

_____
JOHN ROBERT MCGEHEE
COLORADO REGISTERED PLS NO. 38219
FOR AND ON BEHALF OF LJA SURVEYING, INC.

FOR REVIEW ONLY

SHEET INDEX

SHEET	SHEET TITLE
1	COVER 1
2	COVER 2
3	OVERALL
4	LOT DETAILS
5	LOT DETAILS
6	LOT DETAILS
7	LOT DETAILS

LJA SURVEYING
4700 S. Syracuse Street
Suite 500
Denver, CO 80237
303-390-8510
www.lja.com

Date: 6/10/2026 | Job No.: 1084-0006 | Sheet: 1 of 7

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RAMBLEWOOD

LOCATED IN SECTION 6, TOWNSHIP 7 SOUTH, RANGE 65 WEST OF THE 6TH P.M., COUNTY OF DOUGLAS, STATE OF COLORADO
176.795 ACRES - 70 RESIDENTIAL LOTS - 8 TRACTS / SB2026-009

GENERAL NOTES

1. 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.

2. ANY PERSON WHO KNOWINGLY REMOVES, ALTERS OR DEFACES ANY PUBLIC LAND SURVEY MONUMENT OR LAND BOUNDARY MONUMENT OR ACCESSORY, COMMITS A CLASS TWO (2) MISDEMEANOR PURSUANT TO STATE STATUTE 18–4-508, C.R.S.

3. THIS SURVEY DOES NOT CONSTITUTE A TITLE SEARCH BY LJA SURVEYING TO DETERMINE OWNERSHIP OR EASEMENTS OF RECORD. FOR ALL INFORMATION REGARDING EASEMENTS, RIGHTS-OF-WAY, AND TITLE OF RECORD, LJA SURVEYING RELIED UPON THE TITLE REPORT PREPARED BY LAND TITLE GUARANTEE COMPANY, ORDER NUMBER ABC70847001-4, WITH AN EFFECTIVE DATE OF JANUARY 16, 2026 AT 5:00 P.M. AND THE TITLE REPORT PREPARED BY LAND TITLE GUARANTEE COMPANY, ORDER NUMBER ABC70863452-9, WITH AN EFFECTIVE DATE OF APRIL 2, 2026 AT 5:00 P.M.

4. THE LINEAL UNIT USED IN THE PREPARATION OF THIS SURVEY IS THE U.S. SURVEY FOOT AS DEFINED BY THE UNITED STATES DEPARTMENT OF COMMERCE, NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY.

5. BASIS OF BEARINGS: THE EAST LINE OF THE SOUTHWEST QUARTER OF SECTION 6, TOWNSHIP 7 SOUTH, RANGE 65 WEST OF THE 6TH P.M. BEING ASSUMED TO BEAR NORTH 00°19'46" EAST, SAID LINE BEING MONUMENTED ON THE NORTH BY THE CENTER QUARTER CORNER OF SAID SECTION 6 BEING A 3.25" ALUMINUM CAP STAMPED "1994 PLS 12405" (0.3' ABOVE GROUND), AND ON THE SOUTH BY THE SOUTH QUARTER CORNER OF SAID SECTION 6 BEING A FOUND 3.25" ALUMINUM CAP STAMPED "1991 PLS 12405" (0.5' ABOVE GROUND) WITH ALL BEARINGS CONTAINED HEREIN RELATIVE THERETO.

6. FLOODPLAIN: THE SURVEYED PROPERTY IS LOCATED WITHIN ZONE X, OTHER AREAS — DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN, AS IDENTIFIED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) ON FLOOD INSURANCE RATE MAP (FIRM) — MAP NUMBER 08035C0202F AND 08035C0204F WITH A MAP REVISED DATE OF OF SEPTEMBER 30, 2005.

7. UTILITY EASEMENTS: FIFTEEN FOOT (15') WIDE UTILITY EASEMENTS AS SHOWN HEREON ARE DEDICATED FOR THE INSTALLATION, MAINTENANCE AND REPLACEMENT OF ELECTRIC, GAS, TELEVISION, CABLE AND TELECOMMUNICATIONS FACILITIES. PERMANENT STRUCTURES, IMPROVEMENTS, OBJECTS, BUILDINGS, WELLS, WATER METERS AND OTHER OBJECTS THAT MAY INTERFERE WITH THE UTILITY FACILITIES OR USE THEREOF (INTERFERING OBJECTS) SHALL NOT BE PERMITTED WITHIN SAID UTILITY EASEMENTS AND THE UTILITY PROVIDERS, AS GRANTEES, MAY REMOVE ANY INTERFERING OBJECTS AT NO COST TO SUCH GRANTEES, INCLUDING, WITHOUT LIMITATION, VEGETATION. PUBLIC SERVICE COMPANY OF COLORADO (PSCO) AND ITS SUCCESSORS RESERVE THE RIGHT TO REQUIRE ADDITIONAL EASEMENTS AND TO REQUIRE THE PROPERTY OWNER TO GRANT PSCO AN EASEMENT ON ITS STANDARD FORM.

8. THIS LOT 69 SPANS BOTH SIDES OF ALPINE DRIVE. THE TOTAL ACREAGE REFLECTED INCLUDES THE LAND ON EITHER SIDE OF ALPINE DRIVE.

9. TRACT D IS HEREBY RETAINED BY THE OWNER FOR USE AS A DIRECTOR'S PARCEL AND WILL BE MAINTAINED BY THE RAMBLEWOOD METROPOLITAN DISTRICT, ITS SUCCESSORS AND ASSIGNS, FOR (OPEN SPACE, UTILITIES, AND DRAINAGE). THE USE LISTED FOR UTILITIES IS NOT A GRANT OF BLANKET EASEMENT OVER THE TRACTS, UTILITY EASEMENTS ARE SHOWN HEREON OR DEFINED BY SEPARATE INSTRUMENT. IT IS INTENDED THAT WHEN TRACT D IS NO LONGER NEEDED FOR A DIRECTORS PARCEL, THE SAME SHALL BE CONVEYED TO THE RAMBLEWOOD METROPOLITIAN DISTRICT FOR OWNERSHIP.

10. PRIMARY DRAINAGE EASEMENTS ARE DEDICATED TO DOUGLAS COUNTY AND SHALL REMAIN FREE OF OBSTRUCTION.

11. NO IMPROVEMENTS THAT CONFLICT WITH OR INTERFERE WITH CONSTRUCTION, MAINTENANCE OR ACCESS TO UTILITIES SHALL BE PLACED WITHIN THE UTILITY EASEMENTS. PROHIBITED IMPROVEMENTS INCLUDE, BUT ARE NOT LIMITED TO, PERMANENT STRUCTURES, BUILDINGS, COUNTER-FORTS, DECKS, ATTACHED PORCHES, ATTACHED STAIRS, WINDOW WELLS, AIR CONDITIONING UNITS, RETAINING WALLS/COMPONENTS AND OTHER OBJECTS THAT MAY INTERFERE WITH THE UTILITY FACILITIES OR ACCESS, USE AND MAINTENANCE THEREOF.

12. SECONDARY DRAINAGE EASEMENTS, AS SHOWN HEREON, ARE HEREBY GRANTED TO DOUGLAS COUNTY ACROSS TRACTS A, B, C, D, E, & F FOR THE PURPOSES OF ACCESSING, MAINTAINING, AND REPAIRING STORM WATER MANAGEMENT IMPROVEMENTS, INCLUDING, BUT NOT LIMITED TO, INLETS, PIPES, CULVERTS, CHANNELS, DITCHES, HYDRAULIC STRUCTURES, RIPRAP, DETENTION BASINS, FOREBAYS, MICROPOOLS, AND WATER QUALITY FACILITIES (COLLECTIVELY, THE "FACILITIES"). IN THE EVENT RAMBLEWOOD METROPOLITAN DISTRICT, ITS SUCCESSORS AND ASSIGNS ("SYSTEM OWNER") FAILS TO SATISFACTORILY MAINTAIN OR REPAIR SAID FACILITIES, A BLANKET EASEMENT OVER THE SUBDIVISION IS ALSO GRANTED TO DOUGLAS COUNTY, BUT ONLY FOR THE PURPOSES OF ACCESSING THE FACILITIES IN THE EVENT THAT THE DRAINAGE EASEMENTS DO NOT PROVIDE ADEQUATE ACCESS. THE MAINTENANCE AND REPAIR OF THE FACILITIES LOCATED IN SUBDIVISION, AS SHOWN ON THE CONSTRUCTION PLANS ACCEPTED BY DOUGLAS COUNTY OR ON THE PLAT FOR THE SUBDIVISION, SHALL BE THE RESPONSIBILITY OF THE SYSTEM OWNER, IN THE EVENT THAT SUCH MAINTENANCE AND REPAIR ARE NOT PREFORMED BY THE SYSTEM OWNER TO THE SATISFICATON OF DOUGLAS COUNTY, THEN DOUGLAS COUNTY SHALL HAVE THE RIGHT, BUT NOT THE OBLIGATION, TO ENTER SAID SUBDIVISION, AFTER TEN (10) DAYS PRIOR WRITTEN NOTICE TO THE SYSTEM OWNER, UNLESS THERE IS AN EMERGENCY, IN WHICH CASE DOUGLAS COUNTY SHALL GIVE NOTICE AS SOON AS PRACTABLE, TO PREFORM ALL NECESSARY WORK, THE COST OF WHICH SHALL BE PAID BY THE SYSTEM OWNER UPON BILLING. IN THE EVENT THE SYSTEM OWNER FAILS TO REIMBURSE DOUGLAS COUNTY WITHIN THIRTY (30) DAYS AFTER SUBMISSION OF THE BILL FOR THE COSTS INCURRED, DOUGLAS COUNTY SHALL HAVE THE RIGHT TO ENFORCE SUCH OBLIGATIONS BY APPROPIATE LEGAL ACTION. IT IS THE SYSTEM OWNER'S RESPONSIBILITY TO CONSTRUCT, MAINTAIN, AND REPAIR THE FACILITIES IN A MANNER CONSISTENT WITH ALL APPLICABLE PLANS APPROVED OR ACCEPTED BY DOUGLAS COUNTY.

13. SIGHT DISTANCE EASEMENTS SHOWN HEREON ARE DEDICATED TO DOUGLAS COUNTY FOR LINE OF SIGHT TOGETHER WITH THE FOLLOWING RESTRICTIONS OVER SAID EASEMENTS: NO OBJECT WITHIN THE SIGHT DISTANCE EASEMENT SHALL BE MORE THAN THIRTY-SIX (36) INCHES ABOVE THE FLOW-LINE TO THE ADJACENT STREET. SUCH OBJECTS SHALL INCLUDE BUT ARE NOT LIMITED TO BUILDINGS, VEGETATION, FILL MATERIAL, UTILITY CABINETS, WALLS, SIGNS, FENCING, ETC. PARKING IS ALSO RESTRICTED WITHIN SAID EASEMENT.

LAND USE SUMMARY CHART				
TYPE	LOTS	SQ. FT.	ACRES	%
LOT AREA - RESIDENTIAL	70	4,659,306	106.963	60.50%
PUBLIC RIGHT-OF-WAY AREA		516,528	11.858	6.71%
TRACTS - (8)		2,525,337	57.974	32.79%
TOTALS		7,701,171	176.795	100.00%

TRACT SUMMARY CHART					
TRACT	USE	OWNED	MAINTAINED	SQ. FT.	ACRES
TRACT A	DRAINAGE, OPEN SPACE, UTILITIES	METRO DISTRICT	METRO DISTRICT	89,268	2.049
TRACT B	DRAINAGE, OPEN SPACE	METRO DISTRICT	METRO DISTRICT	186,862	4.290
TRACT C	DRAINAGE, OPEN SPACE, PARK, UTILITIES	METRO DISTRICT	METRO DISTRICT	1,139,541	26.160
TRACT D	DRAINAGE, OPEN SPACE, UTILITIES	OWNER	METRO DISTRICT	10,071	0.231
TRACT E	DRAINAGE, OPEN SPACE, UTILITIES	METRO DISTRICT	METRO DISTRICT	946,689	21.733
TRACT F	DRAINAGE, OPEN SPACE	METRO DISTRICT	METRO DISTRICT	42,974	0.987
TRACT G	DRAINAGE, OPEN SPACE, UTILITIES	METRO DISTRICT	METRO DISTRICT	44,590	1.024
TRACT H	OPEN SPACE, PARK	METRO DISTRICT	METRO DISTRICT	65,340	1.500
			TOTAL AREA	2,525,335	57.974

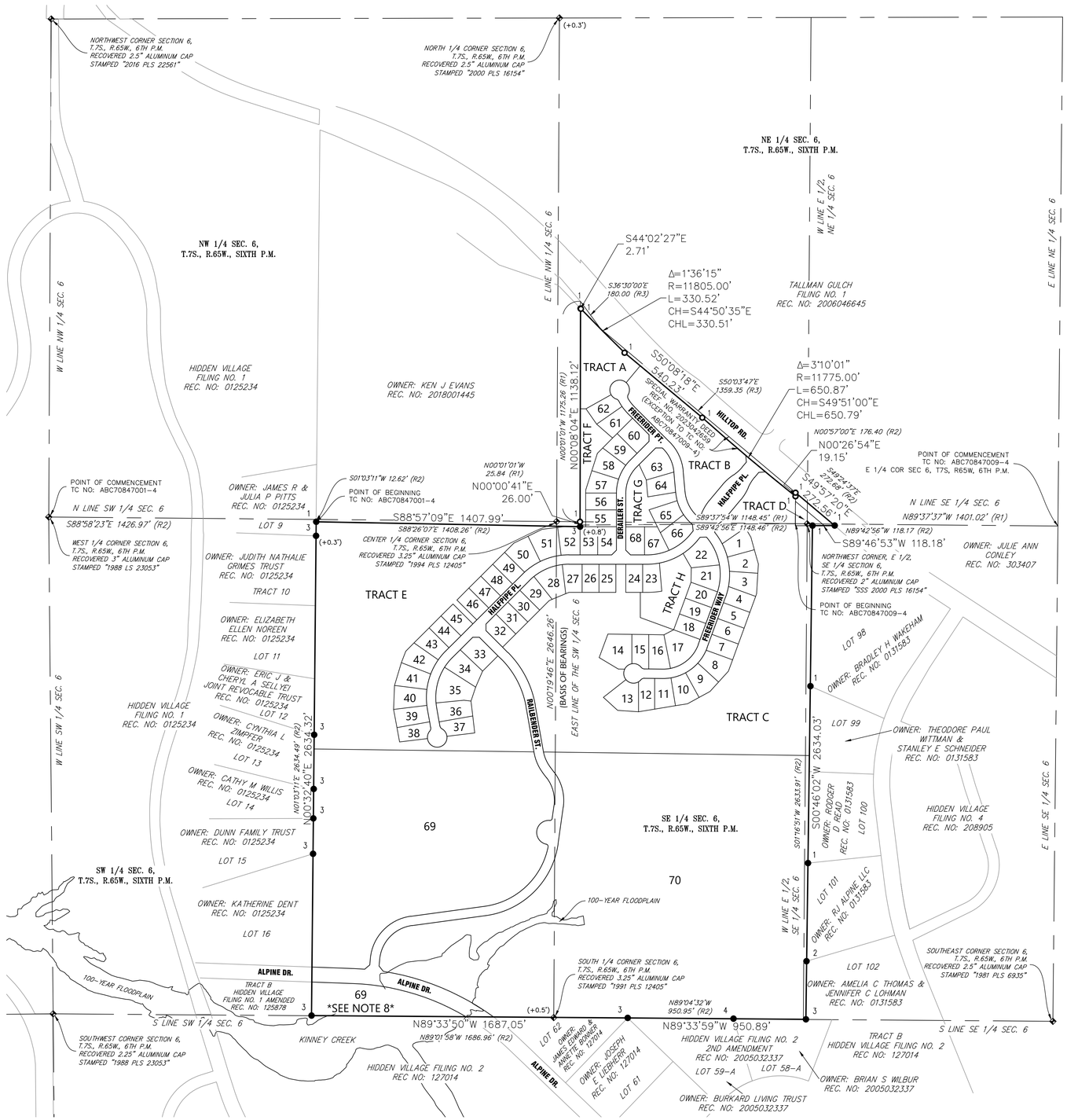
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Date: 6/10/2026 | Job No: 1084-0006 | Sheet: 2 of 7

RAMBLEWOOD

LOCATED IN SECTION 6, TOWNSHIP 7 SOUTH, RANGE 65 WEST OF THE 6TH P.M., COUNTY OF DOUGLAS, STATE OF COLORADO
176.795 ACRES - 70 RESIDENTIAL LOTS - 8 TRACTS / SB2026-009



MONUMENT SYMBOL LEGEND

ALL MONUMENTS WERE RECOVERED FLUSH WITH THE GROUND UNLESS NOTED OTHERWISE

- RECOVERED SECTION CORNER AS NOTED HEREON
- 1 SET 18" LONG NO. 5 REBAR WITH 1.25" ORANGE PLASTIC CAP STAMPED "LJA SURVEYING PLS 38219" FLUSH WITH GROUND
- 1 RECOVERED NO. 5 REBAR WITH 2" GREEN PLASTIC CAP STAMPED "FRONTIER SURVEY 30830"
- 2 RECOVERED NO. 5 REBAR WITH 1" ALUMINUM CAP STAMPED "RLS 4440"
- 3 RECOVERED IRON ROD WITH NO CAP
- 4 RECOVERED NO. 5 REBAR WITH YELLOW PLASTIC CAP STAMPED "PLS 29052"
- (R1) DIMENSION PER RECEPTION NO. 2023042659 WITHIN LAND TITLE GUARANTEE COMPANY TITLE COMMITMENT ORDER NUMBER ABC70847009-4.
- (+0.3') DENOTES POSITION OF RECOVERED MONUMENT ABOVE (+) OR BELOW (-) SURROUNDING GROUND

LEGEND

- S.E. = SANITARY SEWER EASEMENT HEREBY GRANTED
- S.D.E. = SIGHT DISTANCE EASEMENT HEREBY GRANTED
- D.E. = PRIMARY DRAINAGE EASEMENTS HEREBY DEDICATED TO DOUGLAS COUNTY
- D.U.E. = DRY UTILITY EASEMENT HEREBY GRANTED
- U.E. = UTILITY EASEMENT HEREBY GRANTED
- REC. NO: = RECEPTION NUMBER
- P.W.S.D.E. = PARKER WATER & SANITATION DISTRICT EASEMENT
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- (BEARING/DISTANCE R2) = BEARING, DISTANCE OR CURVE LABEL FROM TITLE COMMITMENT NO. ABC70847001-4 LEGAL DESCRIPTION
- (BEARING/DISTANCE R3) = BEARING, DISTANCE OR CURVE LABEL FROM RIGHT-OF-WAY DEED RECEPTION NO. 2023042659 LEGAL DESCRIPTION

SCALE
1 inch = 300 ft.

FOR REVIEW ONLY

FOR AND ON BEHALF OF
LJA SURVEYING, INC.

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Date: 6/10/2026 | Job No: 1084-0006 | Sheet: 3 of 7

RAMBLEWOOD

LOCATED IN SECTION 6, TOWNSHIP 7 SOUTH, RANGE 65 WEST OF THE 6TH P.M., COUNTY OF DOUGLAS, STATE OF COLORADO

176.795 ACRES - 70 RESIDENTIAL LOTS - 8 TRACTS / SB2026-009

NE 1/4 SEC. 6,
T.7S., R.65W., SIXTH P.M.

MATCH TO RIGHT

MATCH TO LEFT

SEE SHEET 3

SEE SHEET 3

MATCH TO SHEET 6

MATCH TO SHEET 6

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MONUMENT SYMBOL LEGEND

ALL MONUMENTS WERE RECOVERED FLUSH WITH THE GROUND UNLESS NOTED OTHERWISE

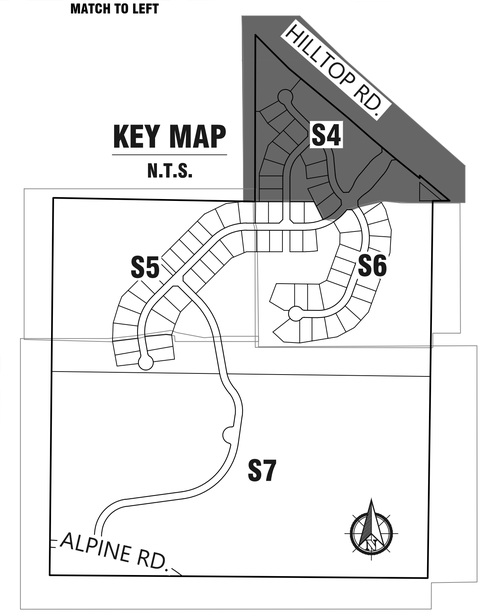
- RECOVERED SECTION CORNER AS NOTED HEREON
- SET 18" LONG NO. 5 REBAR WITH 1.25" ORANGE PLASTIC CAP STAMPED "LJA SURVEYING PLS 38219" FLUSH WITH GROUND
- RECOVERED NO. 5 REBAR WITH 2" GREEN PLASTIC CAP STAMPED "FRONTIER SURVEY 30830"
- RECOVERED NO. 5 REBAR WITH 1" ALUMINUM CAP STAMPED "RLS 4440"
- RECOVERED IRON ROD WITH NO CAP
- RECOVERED NO. 5 REBAR WITH YELLOW PLASTIC CAP STAMPED "PLS 29052"

(-0.3') DENOTES POSITION OF RECOVERED MONUMENT ABOVE (+) OR BELOW (-) SURROUNDING GROUND

LEGEND

- S.E. = SANITARY SEWER EASEMENT HEREBY GRANTED
- S.D.E. = SIGHT DISTANCE EASEMENT HEREBY GRANTED
- D.E. = PRIMARY DRAINAGE EASEMENTS HEREBY DEDICATED TO DOUGLAS COUNTY
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- (BEARING/DISTANCE R3) = BEARING, DISTANCE OR CURVE LABEL FROM RIGHT-OF-WAY DEED RECEPTION NO. 2023042659 LEGAL DESCRIPTION

KEY MAP
N.T.S.



LINE TABLE		
LINE	BEARING	LENGTH
L1	N00°00'41"E	26.00'
L10	S88°25'53"W	33.11'
L11	N05°05'38"W	35.52'
L12	S84°54'22"W	35.52'

CURVE TABLE					
CURVE	LENGTH	RADIUS	DELTA	CHORD BEARING	CHORD LENGTH
C7	18.80'	25.00'	43°05'13"	N48° 38' 35"W	18.36
C8	252.45'	52.00'	278°09'43"	N68° 53' 40"E	68.12
C9	25.54'	25.00'	58°31'33"	S01° 17' 15"E	24.44
C12	284.15'	325.00'	50°05'38"	S64° 57' 11"W	275.18
C17	12.69'	227.00'	3°12'08"	N25° 09' 52"E	12.68

50 0 25 50
SCALE
1 inch = 50 ft.

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Date: 6/10/2026 | Job No: 1084-0006 | Sheet: 4 of 7

RAMBLEWOOD

LOCATED IN SECTION 6, TOWNSHIP 7 SOUTH, RANGE 65 WEST OF THE 6TH P.M., COUNTY OF DOUGLAS, STATE OF COLORADO

176.795 ACRES - 70 RESIDENTIAL LOTS - 8 TRACTS / SB2026-009

SEE SHEET 3

OWNER: KEN J EVANS
REC. NO: 2018001445

NW 1/4 SEC. 6,
T.7S., R.65W., SIXTH P.M.

CENTER 1/4 CORNER SECTION 6,
T.7S., R.65W., 6TH P.M.
RECOVERED 3.25" ALUMINUM CAP
STAMPED "1994 PLS 12405"

NORTH LINE OF THE SW 1/4 SEC. 6

S88°57'09"E 1407.99'
S88°26'07"E 1408.26' (R2)
1335.01'

N00°01'01"W
1175.26' (R1)

N00°01'01"W
25.84' (R1)

N00°08'04"E
11.38.12'

L1

OWNER: JAMES R & JULIA P PITTS
REC. NO: 0125234

LOT 9

TRACT 10

OWNER: JUDITH NATHALIE GRIMES TRUST
REC. NO: 0125234

SW 1/4 SEC. 6,
T.7S., R.65W., SIXTH P.M.

HIDDEN VILLAGE FILING NO. 1
REC. NO: 0125234

N01°03'11"E 2634.49' (R2)
N00°32'40"E 2634.32'

SEE SHEET 3

LOT 11

OWNER: ELIZABETH ELLEN NOREEN
REC. NO: 0125234

OWNER: ERIC J & CHERYL A SELLYE! JOINT REVOCABLE TRUST
REC. NO: 0125234

LOT 12

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FOR AND ON BEHALF OF
LJA SURVEYING, INC.

LEGEND

S.E.	= SANITARY SEWER EASEMENT HEREBY GRANTED
S.D.E.	= SIGHT DISTANCE EASEMENT HEREBY GRANTED
D.E.	= PRIMARY DRAINAGE EASEMENTS HEREBY DEDICATED TO DOUGLAS COUNTY
D.U.E.	= DRY UTILITY EASEMENT HEREBY GRANTED
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REC. NO:	= RECEPTION NUMBER
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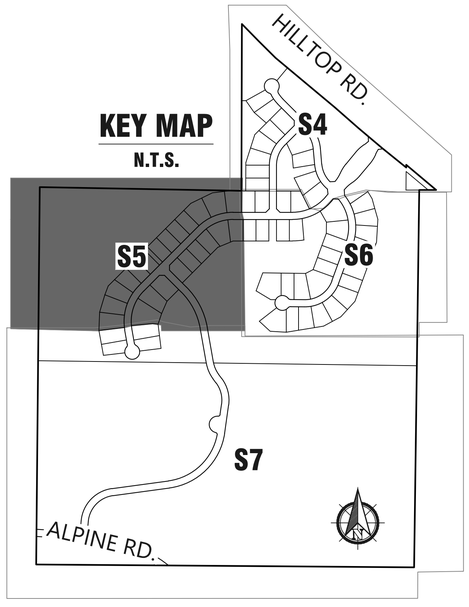
LINE TABLE		
LINE	BEARING	LENGTH
L1	N00°00'41"E	26.00'
L5	N83°08'00"E	178.52'
L6	N84°31'35"E	150.00'
L7	S83°13'39"E	37.56'

MONUMENT SYMBOL LEGEND

ALL MONUMENTS WERE RECOVERED FLUSH WITH THE GROUND UNLESS NOTED OTHERWISE

- RECOVERED SECTION CORNER AS NOTED HEREON
- 1 SET 18" LONG NO. 5 REBAR WITH 1.25" ORANGE PLASTIC CAP STAMPED "LJA SURVEYING PLS 38219" FLUSH WITH GROUND
- 1 RECOVERED NO. 5 REBAR WITH 2" GREEN PLASTIC CAP STAMPED "FRONTIER SURVEY 30830"
- 2 RECOVERED NO. 5 REBAR WITH 1" ALUMINUM CAP STAMPED "RLS 4440"
- 3 RECOVERED IRON ROD WITH NO CAP
- 4 RECOVERED NO. 5 REBAR WITH YELLOW PLASTIC CAP STAMPED "PLS 29052"
- (−0.3') DENOTES POSITION OF RECOVERED MONUMENT ABOVE (+) OR BELOW (−) SURROUNDING GROUND

KEY MAP
N.T.S.



TRACT E
946,689 SF
21.733 AC

51	21,495 SF	0.493 AC
52	16,674 SF	0.383 AC
50	19,470 SF	0.447 AC
49	13,501 SF	0.310 AC
48	13,500 SF	0.310 AC
47	13,500 SF	0.310 AC
46	13,500 SF	0.310 AC
45	13,500 SF	0.310 AC
44	13,500 SF	0.310 AC
43	15,177 SF	0.348 AC
42	17,632 SF	0.405 AC
41	17,798 SF	0.409 AC
40	18,472 SF	0.424 AC
35	26,560 SF	0.610 AC
34	19,628 SF	0.451 AC
33	19,099 SF	0.438 AC
32	14,687 SF	0.337 AC
31	13,500 SF	0.310 AC
30	13,500 SF	0.310 AC
29	14,560 SF	0.334 AC
28	19,416 SF	0.446 AC
27	14,657 SF	0.336 AC

TRACT C
1,139,541 SF
26.160 AC

HALFPIPE PL. (50' PUBLIC R.O.W.)
RAILBENDER ST. (50' PUBLIC R.O.W.)

(BASIS OF BEARINGS)
N00°19'46"E 2646.26'
EAST LINE OF THE SW 1/4 SEC. 6

50' NON-EXCLUSIVE P.W.S.D.E.

MATCH TO SHEET 6
MATCH TO SHEET 7

SCALE
1 inch = 50 ft.

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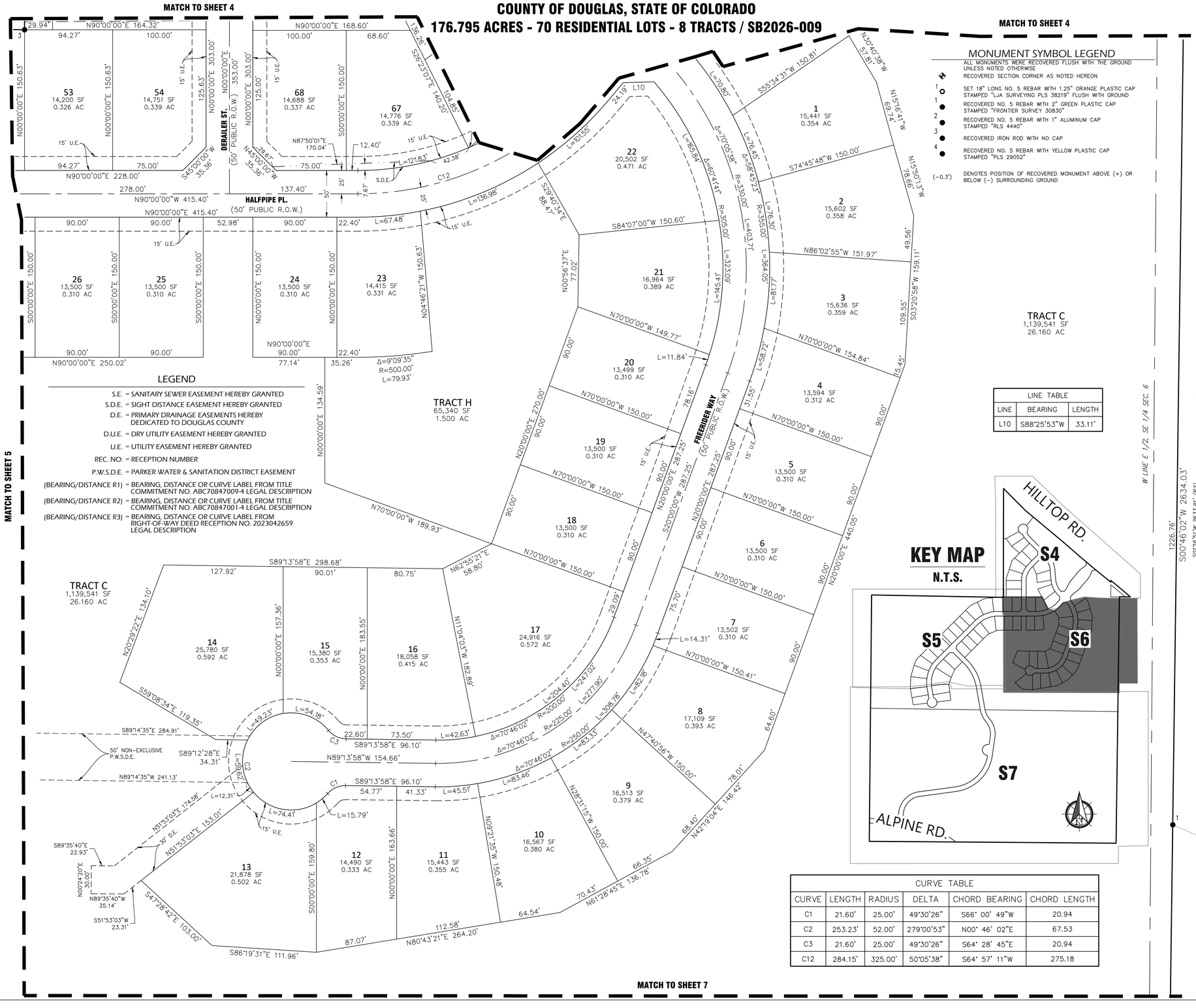
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RAMBLEWOOD

LOCATED IN SECTION 6, TOWNSHIP 7 SOUTH, RANGE 65 WEST OF THE 6TH P.M., COUNTY OF DOUGLAS, STATE OF COLORADO

176.795 ACRES - 70 RESIDENTIAL LOTS - 8 TRACTS / SB2026-009



LINE TABLE		
LINE	BEARING	LENGTH
L10	S88°25'53"W	33.11'

CURVE TABLE					
CURVE	LENGTH	RADIUS	DELTA	CHORD BEARING	CHORD LENGTH
C1	21.60'	25.00'	49°30'26"	S66° 00' 49"W	20.94
C2	253.23'	52.00'	279°00'53"	N00° 46' 02"E	67.53
C3	21.60'	25.00'	49°30'26"	S64° 28' 45"E	20.94
C12	284.15'	325.00'	50°05'38"	S64° 57' 11"W	275.18

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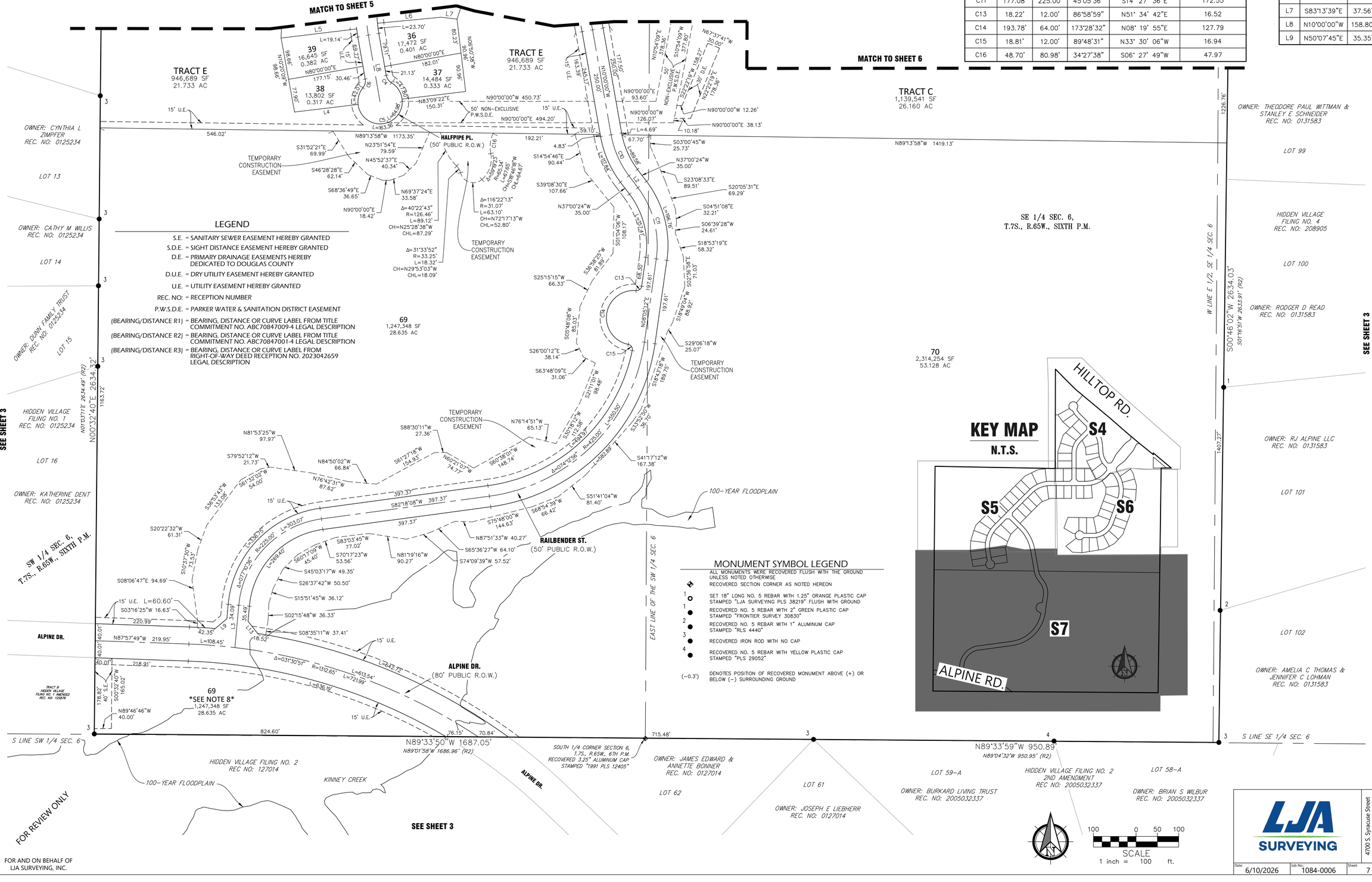
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176.795 ACRES - 70 RESIDENTIAL LOTS - 8 TRACTS / SB2026-009

CURVE TABLE					
CURVE	LENGTH	RADIUS	DELTA	CHORD BEARING	CHORD LENGTH
C4	21.60'	25.00'	49°30'26"	S34° 45' 13"E	20.94
C5	253.23'	52.00'	279°00'53"	S80° 00' 00"W	67.53
C6	21.60'	25.00'	49°30'26"	N14° 45' 13"E	20.94
C10	106.05'	225.00'	27°00'24"	S23° 30' 12"E	105.08
C11	177.08'	225.00'	45°05'36"	S14° 27' 36"E	172.55
C13	18.22'	12.00'	86°58'59"	N51° 34' 42"E	16.52
C14	193.78'	64.00'	173°28'32"	N08° 19' 55"E	127.79
C15	18.81'	12.00'	89°48'31"	N33° 30' 06"W	16.94
C16	48.70'	80.98'	34°27'38"	S06° 27' 49"W	47.97

LINE TABLE		
LINE	BEARING	LENGTH
L2	S37°00'24"E	35.00'
L3	S05°07'31"W	99.58'
L4	S83°09'22"W	150.00'
L5	N83°08'00"E	178.52'
L6	N84°31'35"E	150.00'
L7	S83°13'39"E	37.56'
L8	N10°00'00"W	158.80'
L9	N50°07'45"E	35.35'



LEGEND

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- (-0.3') DENOTES POSITION OF RECOVERED MONUMENT ABOVE (+) OR BELOW (-) SURROUNDING GROUND

KEY MAP

N.T.S.

SCALE
1 inch = 100 ft.
100 0 50 100

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