



Town Hall 551 Hot Springs Blvd
Pagosa Springs, CO 81147

AGENDA
Planning Commission Meeting
June 23, 2026 @ 5:30 PM

REMOTE PARTICIPATION

Join Zoom Meeting By Computer - <https://us06web.zoom.us/j/82738710091>
Dial by Phone - 1-719-359-4580 US - Meeting ID: 827 3871 0091

A Zoom link is made available. The Town cannot guarantee internet service or online broadcasting. Remote participation is at the risk of attendees. The meeting will continue in person regardless of the broadcast capability.

I. CALL MEETING TO ORDER

II. ANNOUNCEMENTS

III. APPROVAL OF MINUTES

1. June 9, 2026 Minutes Approval

IV. PUBLIC COMMENT

An opportunity for the public to provide comments and to address the Planning Commission on items not on the agenda.

V. BOARD OF ADJUSTMENTS

VI. DESIGN REVIEW BOARD

VII. PLANNING COMMISSION

1. Major Subdivision, Sketch Plan Review, Pagosa West

VIII. REPORTS AND COMMENTS

IX. PUBLIC COMMENT

X. ADJOURNMENT

Public comment and agenda comment item sign-up sheets are available at the meeting
Copies of proposed Ordinances and Resolutions are available to the public from the Town Clerk

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Copies of proposed Ordinances and Resolutions are available to the public from the Town Clerk



AGENDA BRIEF

MEETING: Planning Commission - 6/23/2026

FROM: Katelyn Tunnell

PROJECT: June 9, 2026 Minutes Approval

ACTION:

PURPOSE/BACKGROUND:

Draft Minutes Approval.



Town Hall 551 Hot Springs Blvd
Pagosa Spring, CO 81147

MINUTES
Planning Commission Meeting
June 9, 2026 @ 5:30 PM

A regular meeting of the Planning Commission was called to order on June 9, 2026 at 5:30 PM in the Town Hall 551 Hot Springs Blvd.

**COMMISSIONERS
PRESENT:**

Commission Chair Pitcher, Commissioner Hodges, Commissioner Gurule

**COMMISSIONERS
ABSENT:**

Commissioner Reid, Commissioner Nobles

I. CALL MEETING TO ORDER

at 5:29 p.m.

II. ANNOUNCEMENTS

None.

III. APPROVAL OF MINUTES

1. Approval of April 14, 2026, Meeting Minutes.

Commissioner Hodges moved to approve the meeting minutes, Commissioner Gurule seconded.

IV. PUBLIC COMMENT

None.

V. PLANNING COMMISSION

1. 6th/7th Alley Rezone

Senior Planner Tunnell presented the staff report. Member Gurule asked what the difference between MU-R and the MU-TC zoning district is. Senior Planner Tunnell answered that MU-TC allows for more commercial activity while MU-R is more residential with some lesser

impact commercial allowances. Member Gurule asked if the rezoning is only for the applicant's property. Senior Tunnell answered no and that all five neighbors on that block have agreed upon the rezone. Member Gurule asked where the parking for nine vehicles is accessed on the property. The applicant, Jason Dockter, answered that they are primarily located on the west side of the lot, but there is some parking behind the home. Member Hodges asked if all neighbors have signed the neighborhood agreements. Senior Planner Tunnell answered yes. Senior Planner did remind the commission that any B&B approval would be a conditional use permit and will be an additional application for Planning Commission to consider in the future. Chair Pitcher asked if the neighborhood agreement that was signed by neighbors was standard, or is something that staff recently created. Senior Planner Tunnell answered that this is a new form that the applicant has the neighbors sign to avoid any confusion. Member Gurule asked if the alley were to be paved. Senior Planner answered no, as that would be a consideration during the conditional use permit application. Chair Pitcher opened for public comment. None. Closed public comment. Commissioner Gurule moved to approve the 6th/7th Alley rezone as presented with no conditions; Commissioner Hodges seconded.

VI. REPORTS AND COMMENTS

1. Planning Division Report - May 2026

VII. PUBLIC COMMENT

None.

VIII. ADJOURNMENT

at 5:50 p.m.



AGENDA BRIEF

MEETING: Planning Commission - 6/23/2026

FROM: Owen O'Dell

PROJECT: Major Subdivision, Sketch Plan Review, Pagosa West
ACTION: Discussion and Action

PURPOSE/BACKGROUND:

Arena Labs LLC has applied for the Approval of Pagosa West Major **Subdivision, Amendment 2025-01, Sketch Plan at 80 S. Pagosa Blvd, 100 S. Pagosa Blvd, and 3800 W. Hwy 160 (Parcel #s 569920156001, 569921229001, 569920400163)**. The applicant plans to develop the entire site to accommodate residential, mixed-use commercial, and open space to better serve the entire community. The existing parcels are zoned Mixed-Use Corridor (MU-C), Mixed-Use Town Center (MU-TC), and Mixed-Use Residential (MU-R).

PROPOSED MOTION

I move to **APPROVE** of the Arena Labs LLC, Major Subdivision, Amendment 2026-01, Sketch Plan at 80 S. Pagosa Blvd, 100 S. Pagosa Blvd, and 3800 W. Highway 160 with findings A and B, and with conditions 1-15, as presented.

ALTERNATE MOTIONS

I move to **DENY** the Arena Labs LLC, Major Subdivision, Amendment 2026-01, Sketch Plan at 80 S. Pagosa Blvd, 100 S. Pagosa Blvd, and 3800 W. Highway 160

I move to **TABLE** the Arena Labs LLC, Major Subdivision, Amendment 2026-01, Sketch Plan at 80 S. Pagosa Blvd, 100 S. Pagosa Blvd, and 3800 W. Highway 160

I move to **CONTINUE** Arena Labs LLC, Major Subdivision, Amendment 2026-01, Sketch Plan at 80 S. Pagosa Blvd, 100 S. Pagosa Blvd, and 3800 W. Highway 160

I move to **DIRECT STAFF** to....

Town of Pagosa Springs
Development Services
551 Hot Springs Blvd / P. O. Box 1859
Pagosa Springs, Colorado 81147
970-264-4151



STAFF REPORT

TO: Town of Pagosa Springs Planning Commission

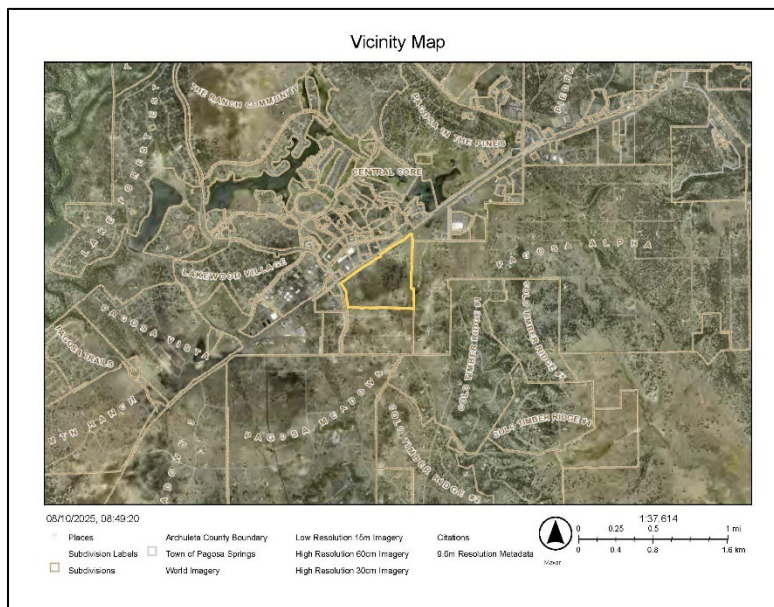
FROM: Owen O'Dell, Planning Manager

DATE: June 23, 2026

STAFF REPORT: Pagosa West, Major Subdivision, Amendment 2026-01, Sketch Plan Review

EXECUTIVE SUMMARY

Arena Labs LLC has applied for the Approval of Pagosa West Major **Subdivision, Amendment 2025-01, Sketch Plan at 80 S. Pagosa Blvd, 100 S. Pagosa Blvd, and 3800 W. Hwy 160 (Parcel #s 569920156001, 569921229001, 569920400163)**. The applicant plans to develop the entire site to accommodate residential, mixed-use commercial, and open space to better serve the entire community. The existing parcels are zoned Mixed-Use Corridor (MU-C), Mixed-Use Town Center (MU-TC), and Mixed-Use Residential (MU-R).



REVIEW PROCEDURE

Article 2.4.3 C.2 of the *Town of Pagosa Springs' Land Use Development Code* ("the Code") requires Major Subdivisions to undergo the Sketch Plan, Preliminary Plat and Final Plat Reviews. The Sketch Plan review is required to be reviewed by the Planning Commission for approval or denial.

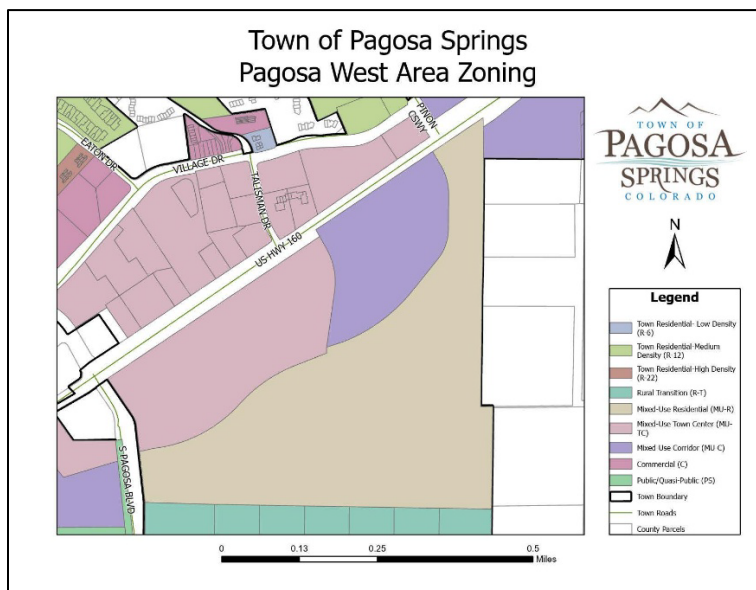
Article 2.4.3 C.3 outlines the purpose of the Sketch Plan review and allows for an evaluation of a proposed subdivision before detailed planning and engineering works has been undertaken. This allows the applicant to understand the scope of requirements and feasibility of the proposed subdivision before substantial expenses have been incurred.

All public notice requirements in Article 2.3.6 and Table 2.3-1 have been complied with for this project.

DISCUSSION

The applicant, Arena Labs LLC, is proposing a multi-phased subdivision development, a major subdivision (amendment of Pagosa Lakes Plaza Minor Impact Subdivision), with the addition of two (2) new parcels. Phase 1 is expected to, after the completion of the sketch plan major subdivision review, construct a 44-unit multi-family housing development and a fuel station. The applicant initially expected to commence these initial developments after the Final Plat review, however, they now plan to propose a boundary line adjustment (via Plat Amendment) after the Sketch Plan to enable themselves to begin development. If the Boundary Line Adjustment is pursued, it will be reviewed administratively. Though it is included in the phase 1 master plan, it is important to note this review is specific to the Sketch Plan of the development of the Major Subdivision and not the individual site developments.

Though this is not the stage for Major Design review of the proposed multi-family housing and fuel station it is important to note the viability of such proposals. The proposal for the multi-family housing development is currently on Tract 3 of the Pagosa Lakes Plaza Minor Impact Subdivision, which is zoned as Mixed-Use Residential (MU-R). In the MU-R district, a multi-family development is allowable but requires a Major Design Review to be heard by the Design Review Board. The proposed fuel station is currently on Tract 1 of the above-mentioned minor subdivision. Tract 1 is currently zoned Mixed-Use Town Center (MU-TC). In the MU-TC zoning district, a fuel station (categorized as 'Gasoline Sales') is an allowable use with an approved Conditional Use Permit from the Town of Pagosa Springs' Planning Commission as well as an approved Major Design Review permit.



DEVELOPMENT STANDARDS

Article 2 of the Land Use Development Code outlines the approval criteria for the Sketch Plan for a Major Subdivision.

LUDC 2.4.3.C.3.b.(ii)(1), MAJOR SUBDIVISION SKETCH PLAN APPROVAL CRITERIA

The Planning Commission shall evaluate the applicant's sketch plan application to determine whether it complies with the following approval criteria.

(a) The proposed subdivision complies with all applicable use, density, development, and design standards set forth in Articles 4, 5, 6, and 7 of this Land Use Code that have not otherwise been modified or waived pursuant to this Chapter and that would affect or influence the layout of lots, blocks, and streets. Applicants shall avoid creating lots or patterns of lots in the subdivision that will make compliance with such development and design standards difficult or infeasible.

Article 4, Use Regulations: For the proposed Phase 1 development, the applicant is proposing to construct an 44-unit multi-family apartment complex in the Mixed-Use Residential District, which is an allowable use and shall be reviewed in a separate Major Design Review application process. The other proposed development is a fuel station which allowable pursuant to an approved Conditional Use Permit, within the Mixed-Use Town Center zoning district and shall be reviewed in a separate Major Design Review application process.

Article 5, Dimensional Standards: The majority of Dimensional standards are considered for individual lot development and will be considered during the respective development Major Design Review application process. There are no minimum lots sizes for Mixed-Use zoning districts.

Article 6, Development Standards: The Land Use Development Code outlines the Development Standards that must be followed when developing property or establishing new uses of property within the boundaries of Pagosa Springs. Below are the subsections that pertain to this proposal.

6.3.1 Excavation, Grading, and Erosion Control

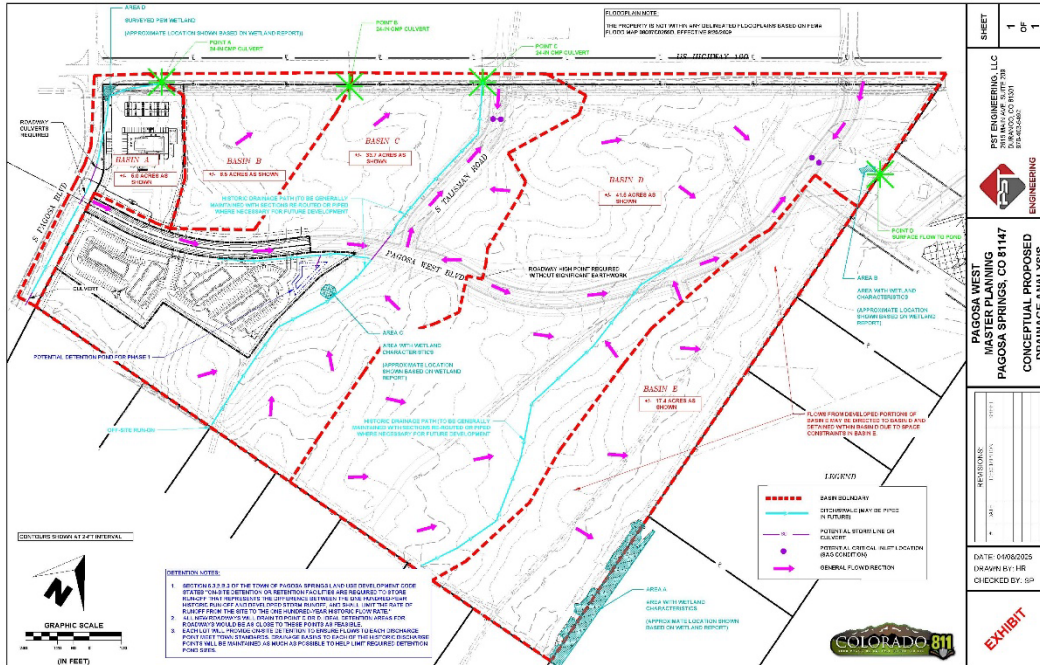
The prevention of soil erosion and transport of sediments during construction is of paramount importance. Therefore, the developer will be responsible for creating an erosion control plan consistent with the State of Colorado's requirements for Stormwater Management Plans (SWMP), and providing to the Director a copy of the stormwater discharge permit obtained from the State of Colorado.

6.3.2 Site Drainage

The applicant submitted a conceptual drainage plan with their application, which includes on-site and off-site detention for the developments within Phase 1. The developer also identified historic drainage basins with the intent of preservation through maintenance following the natural topography of the land (Figure 3 Below). The applicant identified 5 potential drainage basins based on the topography of the site to allow for the easiest transfer of storm water without

impacting surrounding areas. For the submission of the Preliminary Plan Review, a drainage study, prepared by a Licensed Professional Colorado Engineer will be required. Stormwater detention is required to be depicted at Preliminary Application for all roads, sidewalks and trails.

Figure 3: Conceptual Drainage



6.3.3 Snow Storage

The applicant submitted a Road Section Exhibit (attached) which identifies a six (6) foot buffer on both sides of the road for landscaping and snow storage. It is suggested that one (1) square foot of storage be provided for each two (2) square feet of area to be cleared, which the applicant is providing on road networks. During the Major Design Review stages of the proposed developments in Phase 1, individual parcel snow storage will be scrutinized.

6.3.6 Fire Hydrants

The subdivision or development shall be required to install fire hydrants at points per the requirements of any fire district having jurisdiction over the property and in compliance with the adopted fire code. The Pagosa Fire Protection District does not have any objections to the Sketch Plan application, but did provide comments regarding fire hydrant spacing and roadway turning radius specifications. Their comments are included in this report and reflected as conditions.

6.4.3 Natural Features

Subdivisions and any development shall make every effort to preserve existing waterways (lakes, rivers, and streams), primary vegetation (trees), rock formations, and other natural vistas. An aquatic Resource Delineation Report has been provided with the application documents (attached), prepared by SME Environmental Consultants (November 15, 2024).

Though the State of Colorado has not yet developed final rules as a result of HB24-1379, verification shall be provided by the Colorado Department of Public Health and Environment regarding the need for a Temporary Authorization for fill not subject to federal jurisdiction, as well as any Clean Water Act permitting that may be required. Avoidance and protection of identified wetlands shall be addressed in the Preliminary Subdivision application. Additional U.S. Army Corps of Engineers permitting maybe required depending on totality of any impacts.

Figure 4: View of Wetland Area Looking North



Figure 5: Example Soil Pit



In addition to the wetlands delineation, the applicant adjusted the location and size of the multi-family development anticipated for Phase 1 to create a larger buffer from the Single-Family Residential Units to the south. By doing this, the developer allocated more open space for the development. The road networks were also reshaped to preserve mature Ponderosa Pine outcroppings and natural drainage areas.

6.4.6 Wildfire Hazard Areas

Per the LUDC, the Town shall not approve any subdivision plan if the proposed subdivision is within an area identified as a wildfire hazard, unless it meets the following conditions:

- A. Any development in which residential activity is to take place shall be designed to minimize significant wildfire hazards to public health, safety, and property.*
- B. Any development shall have adequate roads for emergency service by fire trucks, fire fighting personnel, and fire breaks or other means of alleviating conditions conducive to wildfire hazard.*

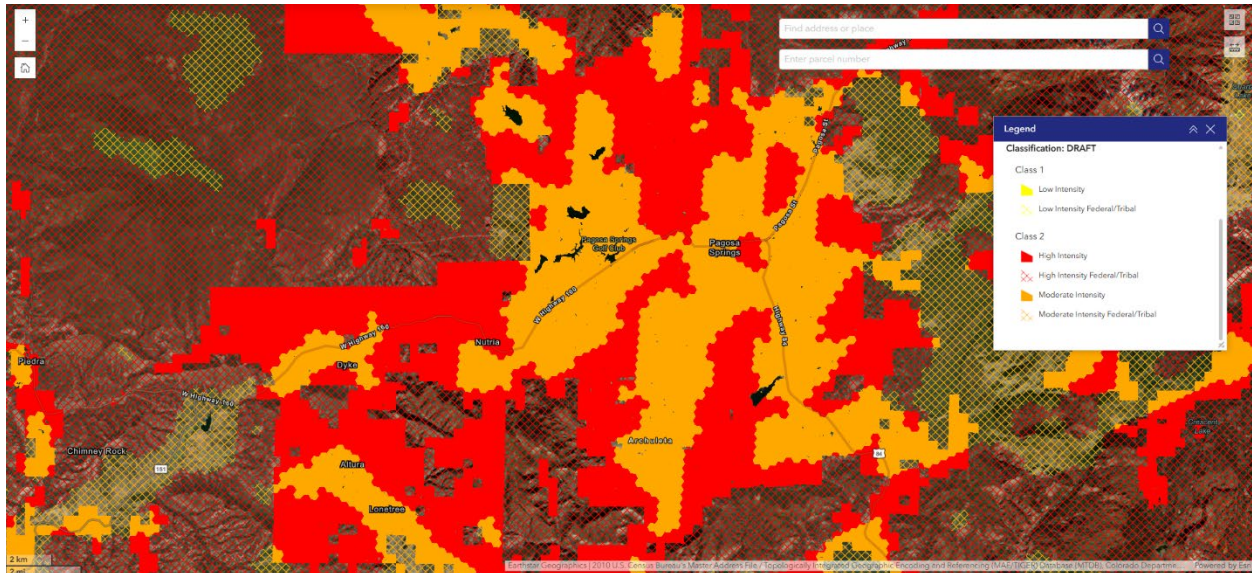
C. Precautions required to reduce or eliminate wildfire hazards shall be provided at the time of initial development.

D. All subdivisions and development shall adhere to the Guidelines and Criteria for Wildfire Hazard Areas published by the Colorado State Forest Service.

E. Consideration shall be given to recommendations of the State Forest Service resulting from review of a proposed subdivision or development in a wildfire hazard area.

This proposal, and the entirety of the Town of Pagosa Springs, is within Class 2 (Moderate and High Intensity) fire danger. This designation comes from the Colorado Wildfire Resiliency Code Board. With the adoption of the code by April 1, 2026, the developer will be required to comply with all provisions of LUDC Section 6.4.6 and the Wildfire Resiliency Code presented by the State of Colorado. This will be a review criteria for the proposed Multi-Family and Gasoline Sales Developments that are intended in Phase 1.

Figure 6: CWRC Hazard Map



6.4.8 Riparian Setback Areas

The following standards are intended to promote, preserve, and enhance the important hydrologic, biological, ecological, aesthetic, recreational, and educational functions that river and stream corridors, associated riparian areas, and wetlands provide. Though there is not an explicit setback distance listed in local, state, or federal regulations, staff requests the applicant provide written justification from a wetland professional for appropriate buffers distances between development activities and riparian areas to avoid conflict with delineated wetlands as well as protection measures during construction activities.

6.6.2 Connectivity

The applicant is underway with a traffic study that will inform their CDOT access permit application. The results of the CDOT access permit approval will be incorporated into the applicants' Preliminary Subdivision application documents and plans. The CDOT permit will

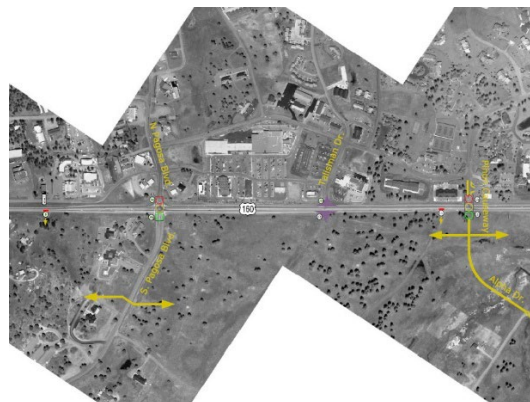
typically identify Highway intersection improvement design requirements, and separation distances from Hwy intersections for driveways and local intersections to allow for proper vehicle queuing at Hwy intersections. The traffic study will also inform public road design standards internal to the subdivision.

- i. New southern leg to be installed at the Pinon Causeway intersection traffic signal, consistent with the Access Control Plan.
- ii. New Right-in right-out only intersection at Talisman Drive, consistent with Access Control Plan.
- iii. Provide a plat dedication of a reserved area at SE corner of Hwy 160 and S. Pagosa to accommodate future HWY 160 225' diameter Traffic Circle and 40-foot setback.
- iv. Traffic Study Report is in process. A CDOT Access permit is required and will provide further considerations for access that should be included in the Preliminary Subdivision application.
- v. Staff has requested that the access for the Fuel C-Store lot be provided from the new internal road system, not from S. Pagosa Blvd, due to the volume of traffic expected for the proposed fuel station and the distance from the Hwy 160 intersection.

6.6.3 Roadways

Internal Roadway design will be a function of the results of the Traffic Study. The main roadway, Pagosa West Drive, between S. Pagosa and Pinon Causeway will serve as a portion of the local road network contemplated in the Access Control Plan adopted by CDOT, Town and County. It is expected the Internal main road will be designed as a Major Collector Street serving more than 2,000 average daily vehicle trips and will separate the residential uses from the commercial uses. Accommodation for left-hand turn pockets should be considered for free-flowing traffic. Additionally, the development of internal roads will be phased out and detailed in their Development Improvement Agreement, that will be negotiated at the Preliminary Plan Review and executed at the Final subdivision application stage. The construction of internal roadways will be inspected by a qualified engineer and by the Town of Pagosa Springs Public Works Department. The newly developed roadways are intended to be adopted as publicly maintained roads by the Town of Pagosa Springs. The proposed subdivision's access points align with the jointly adopted Access Control Plan for US Hwy 160.

Figure 7: ACP



6.6.4 Private Driveways

Applicant must ensure curb cuts be installed to each proposed lot during the initial infrastructure installation.

6.7. Commercial and Mixed-Use Design Standards.

The standards of LUDC Sections 6.7.3. General Standards, 6.7.4. Additional Standards: Properties with Hwy 160 frontage, and 6.7.5. Additional Standards: Mixed Use Town Center shall be considered for individual lot design standards as more attention is needed to the specifics of the LUDC standards. Though these are reviewed in more detail during the Major Design Review application process. It is recommended that the applicant consider these provisions in their Preliminary Subdivision application site layout.

6.9. Parking and Loading

Generally considered in the proposed subdivision plan, however, specific site development design is considered during the Design Review application process. LUDC 6.7.3, 6.7.4 and 6.7.5 provide guidance on parking lot locations.

6.10. Landscaping and Buffers

Native, drought tolerant, landscaping treatments shall be provided along the 6-foot buffer between the sidewalk and curb and gutter, at subdivision entrances, and in public open spaces.

(b) The general layout of lots, roads, driveways, utilities, drainage facilities, and other services within the proposed subdivision is designed in a way that minimizes the amount of land disturbance, maximizes the amount of open space in the development, preserves existing trees/vegetation and riparian areas, protects critical wildlife habitat, and otherwise accomplishes the purposes and intent of this Land Use Code.

The applicant is utilizing a majority of the existing right-of-way (ROW) easement for the depicted Pagosa West Blvd from the 2004 Minor Impact Subdivision (Rec. 20503963). This existing ROW easement will require a slight realignment and potential widening to accommodate the final road /sidewalk and trail cross sectional dimensions. This will be included on the final plat as dedicated Town ROW.

Utilities will be aligned along the dedicated ROW.

Drainage facilities associated with public ROW will be along the ROW in addition to a stormwater detention facility. Each future lot development will include individual a stormwater detention facility

The applicant has conducted a Tree Survey to assist in preserving as many trees as possible.

The current sketch plan focuses on lots associated with the proposed phase 1. The Preliminary subdivision plan application shall indicate future conceptual lots and phases.

A full utility build-out analysis shall be provided at Preliminary subdivision application.

- (c) The applicant has provided evidence that provision has been made for a public water supply system or, if other methods of water supply are proposed, adequate evidence that the water supply is sufficient in terms of quantity, quality, and dependability for the type of subdivision proposed.***

The applicant submitted an application to Pagosa Area Water and Sanitation District (PAWSD) in 2024. They have indicated they'd continue with the water modeling after the approval of their Sketch Plan Review. PAWSDs provided comments are included in this report. This will be scrutinized in greater detail during the Preliminary Plan Review. Confirmation of availability of service shall be provided with the Preliminary Subdivision application.

- (d) The applicant has provided evidence that provision has been made for a public sewage disposal system or, if other methods of sewage disposal are proposed, adequate evidence that such system shall comply with state and local laws and regulations.***

The applicant submitted an application to Pagosa Area Water and Sanitation District (PAWSD) in 2024. They have indicated they'd continue with the water modeling after the approval of their Sketch Plan Review. This will be scrutinized in greater detail during the Preliminary Plan Review. Confirmation of availability of service shall be provided with the Preliminary Subdivision application.

- (e) The applicant has provided evidence to show that all areas of the proposed subdivision that may involve soil or topographical conditions presenting hazards or requiring special precautions have been identified by the subdivider and that the proposed use of these areas are compatible with such conditions.***

The applicant has commissioned an Aquatic Resources Delineation Report and have identified wetlands and natural drainages on the Master Plan, with the majority of these areas identified as public open space areas. They have also conducted a tree survey of all trees twelve (12) inches in diameter and larger in an effort to preserve as many of these trees as possible.

The Boundary Survey shows the topography of the area, in which no substantial slopes exists.

- (f) The application provides a clear assumption of responsibility for maintaining all roads, open spaces, and other public and common facilities in the subdivision.***

The main road through the development, Pagosa West Blvd, and the Talisman Drive extension are anticipated to be accepted and maintained by the Town, as these roads and associated pedestrian facilities, will contribute to the local connector roadways as contemplated in the adopted Access Control Plan (ACP). Smaller interior roads and pedestrian paths may require HOA maintenance.

More detailed information shall be provided with the Preliminary Subdivision application regarding maintenance responsibilities of other roadways as the subdivision brings forward additional phases for consideration. The Preliminary application is the stage at which Town

Council will consider the applicants' proposal for accepting infrastructure for Town maintenance obligations.

Pending the results of agreements with PAWSD, the water and sewer infrastructure may be accepted by PAWSD or be privately maintained by an HOA.

(g) As applicable, the proposed phasing for development of the subdivision is rational in terms of available infrastructure capacity and financing.

The applicant has proposed phase 1 that includes subdividing two lots for development in the future. Both of these conceptual developments require a separate Major Design Review application process. Phase one appears to be financially manageable given the limited amount of initial infrastructure improvements needed. All infrastructure shall be designed for future connectivity to accommodate full build out of the 100 acres.

The applicant currently has provided their anticipated phasing to be a multi-decade process. They have presented a twelve (12) phase proposal, with phase one (1) being broken into 3 separate internal phases (1A, 1B, and 1C) as depicted on their Concept Development Plan. To follow, they anticipate building out the highway corridor then shifting towards the southern portion of the property. Based on the plan provided, the applicant would not fulfill the entirety of the Town to Lakes Trail until the completion of Phase 5 (Realistically 9 phases in).

A Conceptual Phasing Plan is important as it helps the Town and community better understand when additional critical public infrastructure improvements will be required, for example; Talisman Drive and Pinion Causeway Hwy intersection improvements, Town to Lakes Commuter Trail, sewer/water/electric infrastructure, public open space, etc.

The phasing plan also informs sizing of all public infrastructure to ensure all utilities and public infrastructure are sized to accommodate the eventual build-out of the subdivision.

(h) The subdivision is consistent with the Comprehensive Plan and other adopted Town policies and plans, including any adopted transportation plan or streets/roadway plan.

Access Control Plan (ACP): The concept sketch plan appears to be consistent with the intent of the adopted ACP regarding the Talisman Drive and Pinion Causeway Hwy 160 intersection improvements and the new internal connector roadway (Pagosa West Blvd).

Town to Pagosa Lakes (TTPL) Trail: The concept sketch plan appears to be consistent with the intent of the TTPL trail plan as the commuter trail alignment easement is shown on the plan sheets. This section of trail should accommodate a 12-foot-wide trail with a 25-foot-wide easement width to accommodate drainage facilities and a meandering trail.

Comprehensive Plan

Goal E-1 in the adopted 2018 Comprehensive Plan, Action item E states:

Ensure Comprehensive Plan housing goals and implementation measures can provide housing for the current and future local workforce.

With the proposed 44-unit workforce housing development serving between 60%-140% of Average Median Income (AMI) in Phase 1B and 1C aligns with the objective of retaining and expanding existing local businesses through housing. By implementing the goals of the Comprehensive Plan, the developer aims to provide housing for the current and future workforce of our community.

Development in the uptown area is encouraged to prevent urban sprawl by centralizing development in the already established Uptown Core. This would allow for infill development that is within walking distance of surrounding commercial development.

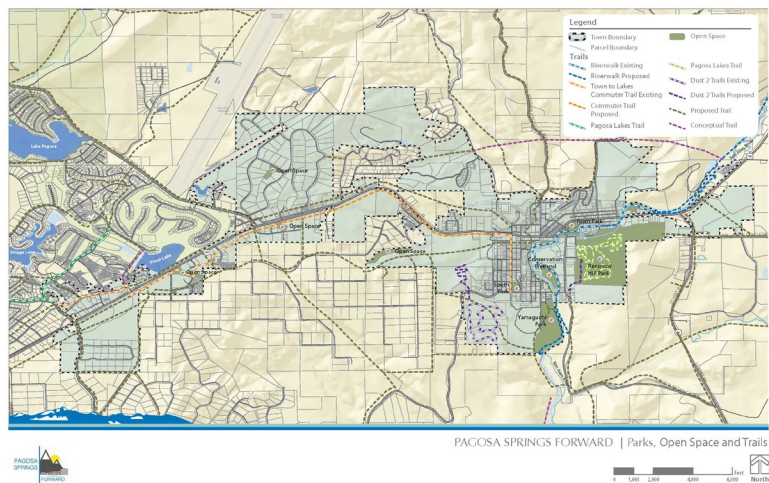
Goal H-3 in the adopted 2018 Comprehensive Plan, Action item B and C state:

B. Ensure housing is located in close proximity to existing or planned infrastructure, services, intermodal transit connections, trails and employment.

C. Provide appropriate amenities for housing, such as childcare, adequate storage area for sports and outdoor equipment, trail connectivity and public transit connectivity.

This proposal addresses both of these action items by establishing housing and trails that are near intermodal transportation, trails, and employment. Some of the largest employers in our community (Pagosa Springs Medical Center, City Market, and Walmart) are within walking distance to the proposed multi-family development. Additionally, the developer aims to provide connection to the Town to Lakes Trail Master Plan with their proposed pedestrian network. The developer has also identified areas within their development for transit stops that would provide downtown connection to residents.

Figure 8: Proposed Trail Networks



Referral Agency Review

The project was staffed to all the required agencies as listed in Article 2.3.5 the Code. Their conditions are reflected in this report.

Public Comment

Public comments sought clarification on the review process and submittal requirements for the Sketch Major Subdivision. Questions focused on whether the hearing aligns with the Land Use and Development Code (LUDC), why the subdivision is under review given its existing status, and the completeness of submitted materials such as PAWSD coordination and lot details. Additional comments raised general concerns about reviewing development plans after subdivision approval and potential community impacts. Comments were received through MyPagosa.org and email. All comments received have been included as an attachment to this report.

Based on the evidence provided, staff recommends that if the Planning Commission finds that:

- a. The application does meet the review criteria for development in the Mixed-Use districts, in Section 2.4 of the *Town of Pagosa Springs Land Use Development Code*, and
- b. The application does meet the review criteria for a Sketch Plan in Section 2.4.3 C. 3b (ii) of the Code, then

That the **Planning Commission approves of the Arena Labs LLC, Major Subdivision, Amendment 2026-01, Sketch Plan at 80 S. Pagosa Blvd, 100 S. Pagosa Blvd, and 3800 W. US Hwy 160**, as presented with the following conditions:

1. Applicant must, on the Preliminary Plan Review submission, provide a preliminary subdivision plat meeting the Town's criteria for such (Planning Staff Review).
2. Applicant must provide a full utility build-out analysis including a lighting plan for roadways and pedestrian networks, water and sewer, fiber, and electric in their submission for their Preliminary Plan Review (LUDC 7.3.6).
3. Applicant must set and depict reference monuments for all perimeter boundaries within the proposed major subdivision development (LUDC 7.3.9).
4. Applicant must submit a Drainage Study, prepared by a Licensed Colorado Professional Engineer, with runoff rates determined using the NRCS TR-20 method, to include detention for all roads, sidewalks, and trails. This study must also identify the current condition of the drainage culverts that would divert water under Highway 160 (LUDC 6.3.2)
5. Applicant should provide written justification from a wetland professional for appropriate buffer distances between development activities and riparian areas to avoid conflict with delineated wetlands as well as protection measures during construction activities (Planning Staff Review).

6. Applicant must provide native, drought tolerant, landscaping treatments along the 5-foot buffer between the sidewalk and curb and gutter, at subdivision entrances, and in public open spaces (Planning Division Review).
7. Applicant must, for the individual site developments, contact the Town of Pagosa Springs Planning Division for respective development application permitting (Planning Staff Review).
8. Applicant must enter into a Development Improvement Agreement with the Town of Pagosa Springs to set specific timelines on the phases of this proposal, at Final Subdivision application (Planning Staff Review).
9. Applicant must install a temporary cul-de-sac during Phase 1 to accommodate the dead end of the depicted Pagosa West Boulevard (LUDC 6.6.2 E.).
10. Staff recommends the northern access for fuel station be reconstructed to only gain access from the depicted Pagosa West Boulevard. Roads entering a roadway from opposite sides of the road shall either be directly across from each other or offset by at least one hundred twenty-five (125) feet from centerline to centerline or sight distance requirements, whichever is greater (LUDC 6.6.3 B.3.I(vi)).
11. Applicant should contact U.S. Fish and Wildlife Service pertaining the active osprey nest located adjacent to the proposed development for preservation and protection. Colorado Parks and Wildlife recommends a ¼ mile buffer of No Surface Occupancy around active osprey nests, with no permitted, authorized or human encroachment activities within ¼ mile between the dates of March 15th to August 15th (Colorado Parks and Wildlife Review).
12. Colorado Parks and Wildlife recommends the use of wildlife-resistant trash containers at both residential and commercial developments to reduce the potential for conflicts with black bears (Colorado Parks and Wildlife Review).
13. Colorado Parks and Wildlife recommends keeping any fencing around the property to a minimum. If boundary fencing is use, “wildlife friendly” fencing is recommended, allowing the safe passage of deer, elk, and other wildlife (Colorado Parks and Wildlife Review).
14. Pagosa Springs Fire Protection District Requirements:
 - a. Fire hydrants shall be spaced at a maximum of 500 feet throughout the subdivision.
 - b. Hydrants shall be located within 400 feet of all buildings.

- c. Buildings requiring fire sprinkler systems, shall have a hydrant located within 150 feet of the Fire Department Connection (FDC).
- d. The roadways shall maintain a minimum inside turning radius of 28 feet to allow adequate maneuverability for fire apparatus.

15. Pagosa Springs Area Water and Sanitation District Requirements:

- a. Water and wastewater modeling are required and conditions of service will be predicated on the results of the modeling. All modeling fees to be paid for by the applicant.
- b. PAWSD requires a 24" by 36" and a digital copy of the Final Recorded Plat be provided to the District. There will be a \$135 mapping fee added to the account(s) of any and all newly created lots upon recordation of the plat map.
- c. Existing vacant lots and any and all newly created vacant lots will be placed on Availability of Service until the water and wastewater connections are accomplished.
- d. All existing easements will remain in effect and any and all new easements are a condition of service.
- e. Connection Permit Application for water and wastewater service submitted by someone with signatory authority for the project must be approved by the District.
- f. Applicant must pay all costs required to complete the connection(s) for the project to the District's water and wastewater services.
- g. If applicable, a Mainline Extension Agreement and Permit for water and/or wastewater service submitted by someone with signatory authority must be approved by the District.
- h. Connection to District services is contingent upon multiple conditions, not all of which may be apparent at the time of issuance of these comments. Any project design changes may affect the approval of connections and void any previous approvals and/or agreements.
- i. If a project design change occurs after modeling results are received, the District reserves the right to reassess fees, availability, and project responsibilities based on the District's Rules and Regulations in place at the time notwithstanding any statements made in these comments or any other documents.
- j. These comments do not commit the District to providing water and wastewater services until the project has formally requested services including, but not limited to as provided herein, fulfilled all of the District's requirements, and executed all infrastructure improvement agreements if so required by the district.
- k. Any and all other conditions required by the District's Rules and Regulations in place at the time and/or District Board of Director requirements apply.

PROPOSED MOTION

I move to APPROVE of the Arena Labs LLC, Major Subdivision, Amendment 2026-01, Sketch Plan at 80 S. Pagosa Blvd, 100 S. Pagosa Blvd, and 3800 W. Highway 160 with findings A and B, and with conditions 1-15, as presented.

ALTERNATE MOTIONS

I move to DENY the Arena Labs LLC, Major Subdivision, Amendment 2026-01, Sketch Plan at 80 S. Pagosa Blvd, 100 S. Pagosa Blvd, and 3800 W. Highway 160

I move to TABLE the Arena Labs LLC, Major Subdivision, Amendment 2026-01, Sketch Plan at 80 S. Pagosa Blvd, 100 S. Pagosa Blvd, and 3800 W. Highway 160

I move to CONTINUE Arena Labs LLC, Major Subdivision, Amendment 2026-01, Sketch Plan at 80 S. Pagosa Blvd, 100 S. Pagosa Blvd, and 3800 W. Highway 160

I move to DIRECT STAFF to....

ATTACHMENTS:

Attachment 1: General Development Information

Attachment 2: Concept Development Plan

Attachment 3: Tree Survey

Attachment 4: Road Section Exhibit

Attachment 5: Conceptual Drainage

Attachment 6: Phase 1 Development Plan

Attachment 7: Future Phases Development

Attachment 8: Conceptual Water

Attachment 9: Conceptual Sanitary

Attachment 10: Aquatic Resources Delineation

Project Description

Pagosa West is a residential and mixed-use commercial development located in Pagosa Springs, Colorado, situated on a +/- 100-acre site along the south frontage of US Highway 160, between South Pagosa Blvd and Pinon Causeway (see Context and Vicinity Map exhibit).

General Development Information

(i) Discuss general design rationale and how the development is connected/integrated with surrounding land uses, how it responds to site features/constraints and whether the plan is consistent with development standards and design guidelines per Article 5, Article 6 and Article 7 of the LUDC;

Pagosa West utilizes the existing zoning categories of Mixed-Use Corridor (MU-C), Mixed-Use Town Center (MU-TC), and Mixed-Use Residential (MU-R) to help meet pressing community workforce housing needs, preserve open space and create recreational amenities, and activate business uses.

The development aligns with and complements nearby commercial centers. An interconnected pedestrian network, including sidewalks, paths, and trails, links homes to public open spaces, as well as the existing and proposed 'Town to Lakes Trail' system.

The interaction between vehicles on the highway and the development has been carefully considered and is in compliance with CDOT guidelines. The development's main spine road, named Pagosa West Blvd, effectively distributes vehicle traffic through controlled points, utilizing shared common ingress/egress easements to minimize conflicting traffic patterns.

Pagosa West will be developed in phases, with the first phase including workforce housing apartments and a convenience store and service station. These items are included in the narrative, along with future planned development concepts, to understand how the balance of the neighborhood could be developed. Future development is subject to utility availability timelines.

The proposed design concept—emphasizing mixed-use and diversity—is consistent with the Town Land Use Plan and the guidelines outlined in the Town's Comprehensive Plan (please refer to the attached Zoning Map Exhibit).

Pagosa West representatives have engaged with neighboring businesses and residential areas to listen to their concerns and desires. Feedback from these discussions has been incorporated into the development strategy while fully complying

with existing zoning and land entitlements. From these discussions, the Applicant made changes to the masterplan, which include moving the apartments further away from the residential neighborhood to the south, reducing the phase I apartments from 88 to 44 units, adding additional open space, reshaping the interior roads to avoid mature Ponderosa Pine outcroppings, and preserving and enhancing natural habitats, particularly along the natural drainage areas.

Mixed-Use Residential (MU-R) - (+/- 52 acres net)

The first phase of development at Pagosa West will feature workforce housing apartments. These rental apartments will complement existing residential in the area and be in compliance with the Mixed-Use Residential zoning. These apartments will directly address the critical workforce housing need in the community.

Mixed-Use Town Center (MU-TC) / Mixed-Use Corridor (MU-C) - (+/- 42 acres net)

The commercial-zoned lots are strategically located along the entire highway frontage, functioning in unison with the existing commercial developments to the east, west, and across the highway, creating a larger contextual corridor of commercial activity. The Town Center Zoning District is at the heart of the Pagosa West development, featuring a large open space 'Town Center Plaza' surrounded by hotels, restaurants, retail, office, and other service users. In future phases, Pagosa West will submit for approval of the intended uses for these areas as the demand grows in the uptown neighborhood.

The Town Center Plaza will serve as a recognizable destination point, with thoughtful design elements establishing the character of the entire development. Features such as appropriate architecture, landscaping, sidewalks, cafes, courtyards, porches, and balconies will create a vibrant space that encourages daily interaction and public life. The plaza is envisioned to host community events, such as music performances, art festivals, and farmers' markets.

The development will include ample parking, exceeding code minimums, and will be sensitively distributed across multiple smaller parking areas to minimize large centralized parking lots. The abundant parking will also provide areas for snow storage in winter and accommodate the larger parking needs during the summer tourism season.

(ii) An analysis of the traffic count that may be generated by the subdivision and the proposed methods of mitigation of any impacts on the existing transportation infrastructure;

An in-depth traffic study was completed of the original, high-density master plan to model out maximum use and appropriate phasing. Gross project trips were estimated for 2045 assuming full buildout of Pagosa West in the next 20 years -

AM (vph)			PM (vph)			Weekday (vpd)		
In	Out	Total	In	Out	Total	In	Out	Total
880	712	1,592	904	1,034	1,938	10,477	10,478	20,955

In the short term, there are minimal to no traffic improvements required to support the first phase of development at Pagosa West (as the existing traffic conditions are sufficient). As we approach the mid-term, additional improvements are recommended in the report, subject to road construction segmentation and traffic counts. Future development phases are dependent on the availability of utilities. Road improvements take into consideration in-place access control plans completed in late 2010 (3 total access points into Pagosa West), which are on file with both the Town of Pagosa Springs and CDOT.

It is important to note that the mid-term and long-term possible improvements noted below are based on the maximum potential density.

Intersection	Timing	Recommended Action	Reason
US Highway 160 and Pagosa Blvd	n/a	Maintain the existing intersection configuration and signal operations.	It provides acceptable traffic operations in all analysis conditions.
	Near-term	Extend the SB left turn deceleration lane to Navajo Trail Dr. Also consider converting the existing driveways on the east and west side of Pagosa Blvd to right-in/right-out configuration.	Accommodate longer vehicle queue.
	Mid-term	Extend the SB right turn deceleration lane by 95-ft. This could also be done with the short-term improvements as one overall effort on this leg.	Accommodate longer vehicle queue.
	Mid-term	Extend the NB left turn	Accommodate

		<i>deceleration lane by 105-ft.</i>	<i>longer vehicle queue.</i>
	<i>Long-term</i>	<i>Extend the EB left turn deceleration lane by 55-ft (restriping).</i>	<i>Accommodate longer vehicle queue.</i>

(iii) An estimate of the impacts on services and amenities including; fire protection, recreational facilities, schools and police protection;

The surrounding area is already served by the Pagosa Fire Protection District, Pagosa Springs Police Department, Town of Pagosa Springs Parks and Recreation, and Archuleta School District #50JT. Pagosa West will be built out in multiple phases over several decades. Commercial users will generate sales tax revenue and residential development will generate property tax revenue for the community. The proposed development fits into the existing zoning uses of the property. Phase 1 intends to utilize existing PAWSD water and sewer systems. The Applicant intends to upgrade utilities as required in future phases.

(iv) Water supply information including the number of water taps and the estimated amount of water needed to serve the development;

We previously submitted detailed water demand information to PAWSD for their application process. The expected number of water taps needed based on the conceptual plan is 29 commercial/multi-family taps and 150 single family residential unit taps. For the estimated amount of water needed based on the conceptual plan, we expect approximately 58,420 gallons per day (once the development is fully built out in at least 20 years).

(v) Sewage disposal information including the type of collection system and the estimated amount of waste generated; and

We anticipate a large majority of the site can be served by gravity sewer consisting of SDR-35 PVC main lines with a minimum size of 8" with manholes spaced per PAWSD standards. Service lines (4" min dia) will be used to connect each building to the sewer mains. A portion of the site on the northeast corner may require grinder pumps or low pressure sewer due to grade constraints. This is the red-dashed area that is shown in the Sanitary Sewer Exhibit. There are multiple sanitary sewer lines located within the property boundary. We intend to utilize and preserve as many of these as is possible and will design around them and provide appropriate easements where none exist.

As far as the estimated amount of waste generated based on the conceptual plan, we expect approximately 61,722 gallons per day (once the development is fully built out).

(vi) A description identifying the relationship between the proposal and the Town Land Use Plan and/or the [Comprehensive Plan](#).

The proposed design and development at Pagosa West is consistent with the Town's Land Use Plan and addresses several priorities outlined in the Comprehensive Plan (outlined in detail below).

Environment and Energy -

- *Goal N-1 - Protect and conserve water resources, water quality, the San Juan River corridor, streams, lakes, wetlands, and geothermal resources.*

The project will protect and conserve jurisdictional wetlands on the property. Specific wetland and drainage areas will be preserved and serve as critical wildlife open spaces. Property landscaping will prioritize the use of drought-tolerant, low-water-use plants for landscaping.

- *Goal N-3 - Preserve, restore, and enhance natural habitats, forests, and open spaces.*

The developer completed a tree study of the entire property and revised the master plan to protect as many trees (especially mature trees) as possible. As development progresses, tree preservation will remain a priority, with a proposed requirement to replace any removed tree with at least two new trees in a dedicated tree sanctuary.

- *Goal N-4 - Maintain the scenic beauty of the natural environment.*

The developer has prioritized generous setbacks to existing developments and either meets or exceeds these requirements. The developer is also ensuring that exterior lighting meets or exceeds requirements to prevent light trespass and minimize light pollution to adjacent properties.

- *Goal N-7 - Reduce the community's contribution to climate change and prepare for a future that is adapted to a changing climate.*

The developer is incorporating energy-efficient practices into building design. In the first phase of development, the workforce apartments will feature Energy Star-rated appliances and aim to meet or exceed the National Green Building Standards - Bronze.

Housing

- *Goal H-2 - With Archuleta County, collaborate to create an environment that supports affordable housing development and home buying through resource allocation, LUDC amendments, and policy.*

The proposed workforce housing apartments offer a solution to critical workforce housing challenges faced by local employers in Pagosa Springs and Archuleta County. The up to 88 apartment units will be constructed for individuals earning between 60-140% of the area median income.

- *Goal H-3 - Apply housing strategies and practices to ensure high quality housing for all Pagosa Springs area families, households and employees with a mix of dwelling and unit types that meet the needs of residents of different income levels.*

The proposed development leverages existing zoning (MU-R, Mixed Use Residential) to bring needed workforce housing apartments to the community. The apartments will be built using energy-efficient and green building techniques to reduce household energy consumption and utility bills, ensuring long-term affordability in new housing units. The Town applied for and was awarded nearly \$2 million in grant funding through the Colorado Department of Local Affairs to support the development of public infrastructure near the proposed workforce housing site. Additionally, the workforce housing proposed location provides an opportunity for families to live and work uptown and avoids isolating workforce housing to certain areas of town. The proposed housing is located in close proximity to existing or planned infrastructure, services, intermodal transit connections, trails and employment and provides appropriate amenities for housing, such as adequate storage area for sports and outdoor equipment, trail connectivity and public transit connectivity.

Transportation and Mobility

- *Goal T-1 - Create high-quality, convenient, and safe connections for pedestrians and bicyclists. The Town aims to provide a variety of opportunities to both*

residents and visitors for recreation and transportation.

The developer is proposing a multi-modal transit stop near the workforce housing apartments. This will offer connectivity with local transit routes. The transit stop will include bike racks for bicyclists. Additionally, the development will feature sidewalks, recreational areas, and trails for community use. Lastly, traffic calming measures on interior roads will be implemented to improve safety and encourage walking. The Developer is proposing narrow streets and posted speed limits to reduce the volume and speed of vehicles and make the space more hospitable to all street users, including pedestrians and cyclists. The development will include separate (narrower) sidewalks for walking and wider sidewalks for bikes, ebikes, etc. Pagosa West Boulevard is designed with curves to slow traffic and to take advantage of view corridors that enhance the drivers experience in viewing tree sanctuaries created within the development as well as other natural features within the site.

- *Goal T-3 - Invest in a quality transit system that connects important local and regional destinations for both residents and visitors. In providing viable transit options, Pagosa Springs will address how to move people throughout the Town and to neighboring jurisdictions and amenities. As Pagosa Springs continues to grow as a resort community, creating non-automobile dependent destinations will alleviate transportation issues that arise during peak tourist seasons.*

Land Use

- *Goal LU-4 - New development shall complement existing residential, commercial and other development and shall incorporate principles of livable and sustainable design including green spaces, walkable and bikeable environments, sensible connections to existing development and other desired amenities.*

Pagosa West will complement existing development by placing the residential area next to the existing residential neighborhood and the commercial development along Highway 160. The development will include recreational areas and trails, along with pedestrian and bicyclist connectivity via the Town to Pagosa Lakes Trail. The workforce apartments will feature energy-efficient design and seek to meet or exceed the National Green Building Standards - Bronze.

- *Goal LU-8 - Town's existing neighborhoods will continue to thrive.*

Pagosa West will provide significant infrastructure upgrades to uptown Pagosa Springs, specifically water, sewer, electric, and broadband internet. This will benefit not only the Pagosa West development but the surrounding area.

Economic Vitality

Goal E-1 - Help retain and expand existing local businesses.

In meeting with a number of local businesses and community representatives, the developer understands how critical workforce housing is to retaining and expanding local business and public organizations. By offering workforce apartment rentals as part of the first phase of development, the developer is directly contributing to the solution and helping to catalyze economic development in the region. Additionally, the commercial areas will offer opportunities for local businesses to expand, pending future availability of utilities.

Goal E-2 - Support new businesses that complement the distinct character and community values of Pagosa Springs and Archuleta County.

The commercial area will include a combination of essential services for local residents as well as businesses that meet the needs of both locals and tourists (subject to future availability of utilities).

Goal E-4 - Create an economically-resilient community by supporting and attracting economically diverse, year-round businesses and industries that sustain the local economy and level out seasonal and boom and bust fluctuations.

The commercial area will include businesses that are compatible with industries and businesses in Pagosa Springs. Additionally, the development intends to deliver new hotel units for short term visitors who frequent the area.

Infrastructure and Government

Goal I-1

Ensure there is adequate infrastructure to support existing, zoned and planned development in the area working with Archuleta County, PAWSD, the FPD, CDOT, the USJHSD and other applicable agencies.

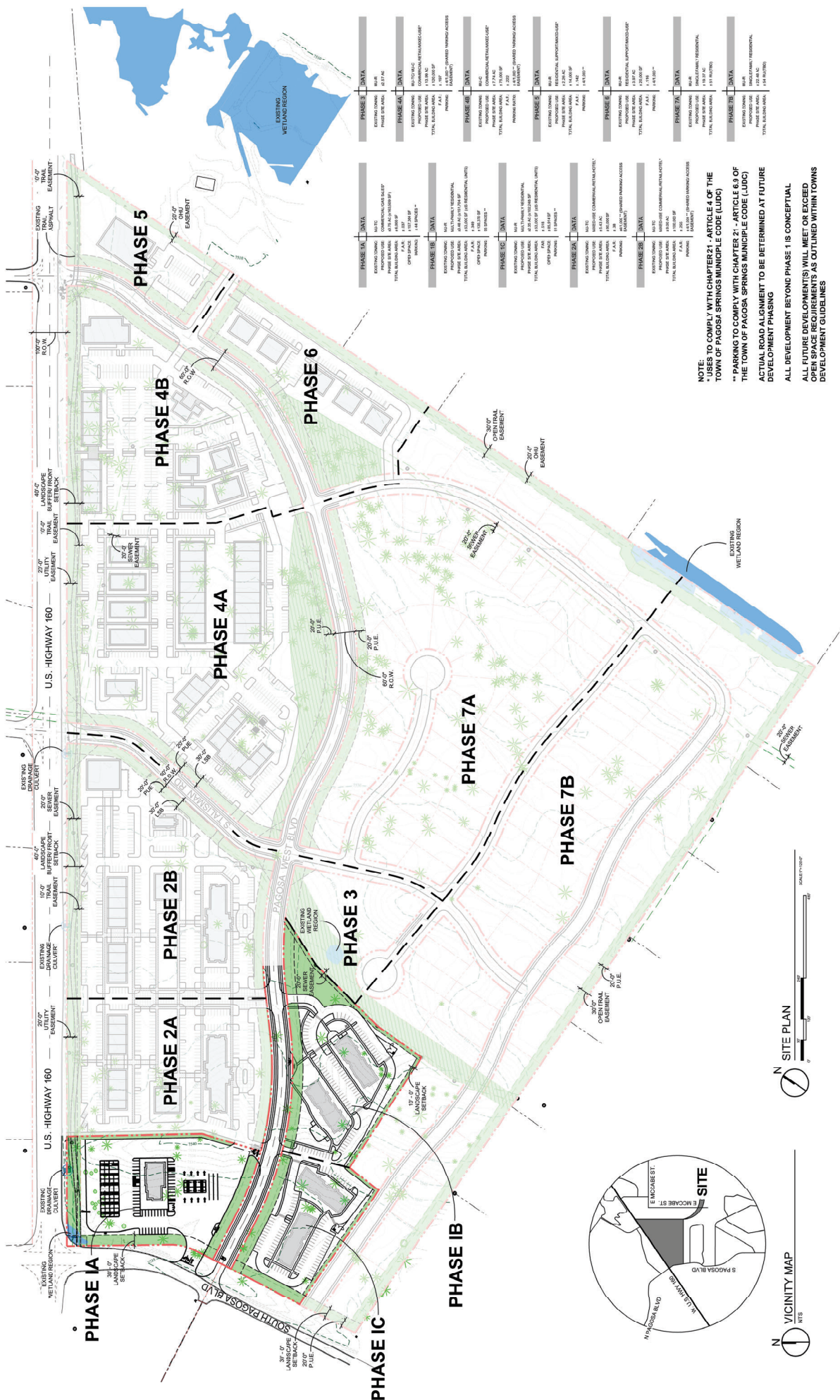
The developer intends to bring broadband internet access to the development, which will activate broadband for the area. By building the necessary infrastructure to support the development, the adjacent neighborhoods and uptown Pagosa Springs will benefit from the upgraded water, sewer, electrical, and internet. Pagosa West will provide safe non-motorized connection between downtown and uptown via the north end of the property which will connect to the Town to Pagosa Lakes Trail. The development will offer a multi-modal transit stop along with local and regional connectivity.

Beyond helping to meet several stated goals within the Town's Comprehensive Plan, Pagosa West will also bring solutions to recommendations outlined in the Smart Growth America report, which was adopted by the Town Council in 2017. Specifically, Pagosa West will -

- Help to create a sense of place in uptown;*
- Assist in marketing town amenities and lifestyle to bring new businesses, residents, and visitors to town;*
- Invest in broadband internet access to support current residents and businesses and to attract new businesses; and*
- Increase affordable housing connected to downtown (along with complementary services required to meet daily needs).*

Additional Info

We appreciate the Town of Pagosa Springs' consideration of our sketch plan submission.



PHASE 1A	PHASE 1B	PHASE 1C	PHASE 2A	PHASE 2B	PHASE 2C	PHASE 3	PHASE 4A	PHASE 4B	PHASE 4C	PHASE 5	PHASE 6	PHASE 7A	PHASE 7B	PHASE 7C
EXISTING ZONING: M10	EXISTING ZONING: M10	EXISTING ZONING: M10	EXISTING ZONING: M10	EXISTING ZONING: M10	EXISTING ZONING: M10	EXISTING ZONING: M10	EXISTING ZONING: M10	EXISTING ZONING: M10	EXISTING ZONING: M10	EXISTING ZONING: M10	EXISTING ZONING: M10	EXISTING ZONING: M10	EXISTING ZONING: M10	EXISTING ZONING: M10
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TOTAL BUILDING AREA: 11,000 SF	TOTAL BUILDING AREA: 11,000 SF	TOTAL BUILDING AREA: 11,000 SF	TOTAL BUILDING AREA: 11,000 SF	TOTAL BUILDING AREA: 11,000 SF	TOTAL BUILDING AREA: 11,000 SF	TOTAL BUILDING AREA: 11,000 SF	TOTAL BUILDING AREA: 11,000 SF	TOTAL BUILDING AREA: 11,000 SF	TOTAL BUILDING AREA: 11,000 SF	TOTAL BUILDING AREA: 11,000 SF	TOTAL BUILDING AREA: 11,000 SF	TOTAL BUILDING AREA: 11,000 SF	TOTAL BUILDING AREA: 11,000 SF	TOTAL BUILDING AREA: 11,000 SF
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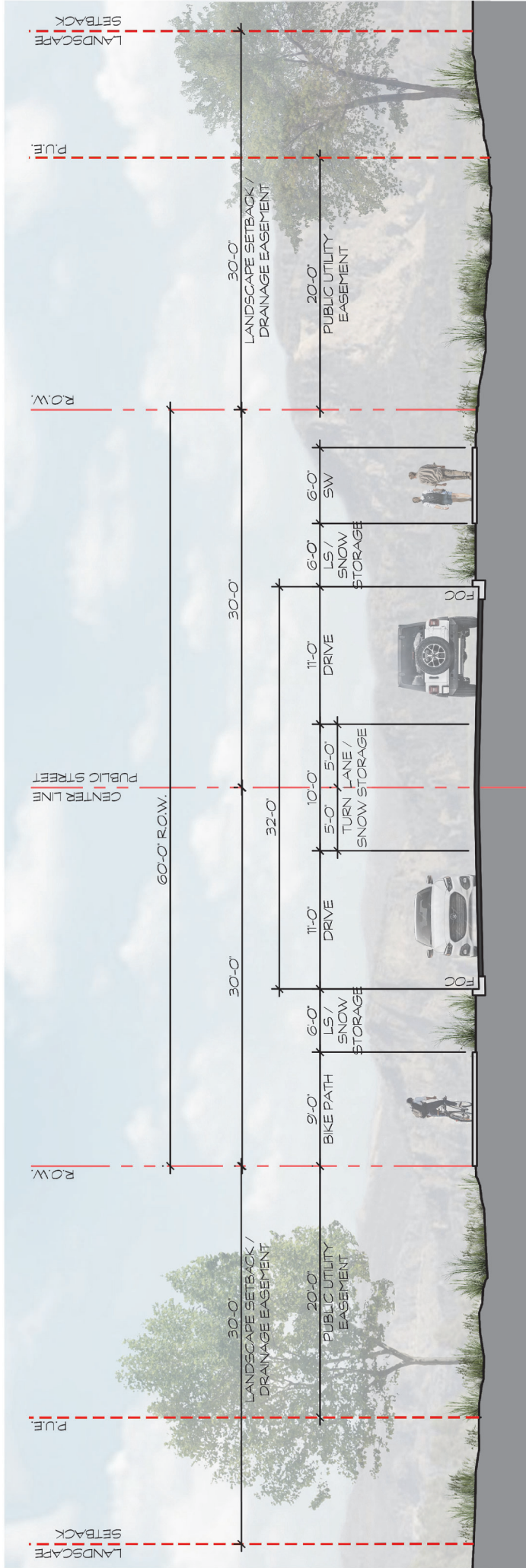
NOTE: TO COMPLY WITH CHAPTER 91, ARTICLE 6.4 OF THE TOWN OF PAGOSA SPRINGS MUNICIPAL CODE (LUDS)

** PARKING TO COMPLY WITH CHAPTER 21 - ARTICLE 6.9 OF THE TOWN OF PAGOSA SPRINGS MUNICIPAL CODE (LUDC) ACTUAL ROAD ALIGNMENT TO BE DETERMINED AT FUTURE DEVELOPMENT PHASING

ALL DEVELOPMENT BEYOND PHASE 1 IS CONCEPTUAL. ALL FUTURE DEVELOPMENT(S) WILL MEET OR EXCEED OPEN SPACE REQUIREMENTS AS OUTLINED WITHIN TOWNS DEVELOPMENT GUIDELINES

PAGOSA WEST
 PAGOSA SPRINGS, CO
 CONCEPT DEVELOPMENT PLAN
 04.22.2026





PUBLIC STREET CROSS SECTION

NOT TO SCALE

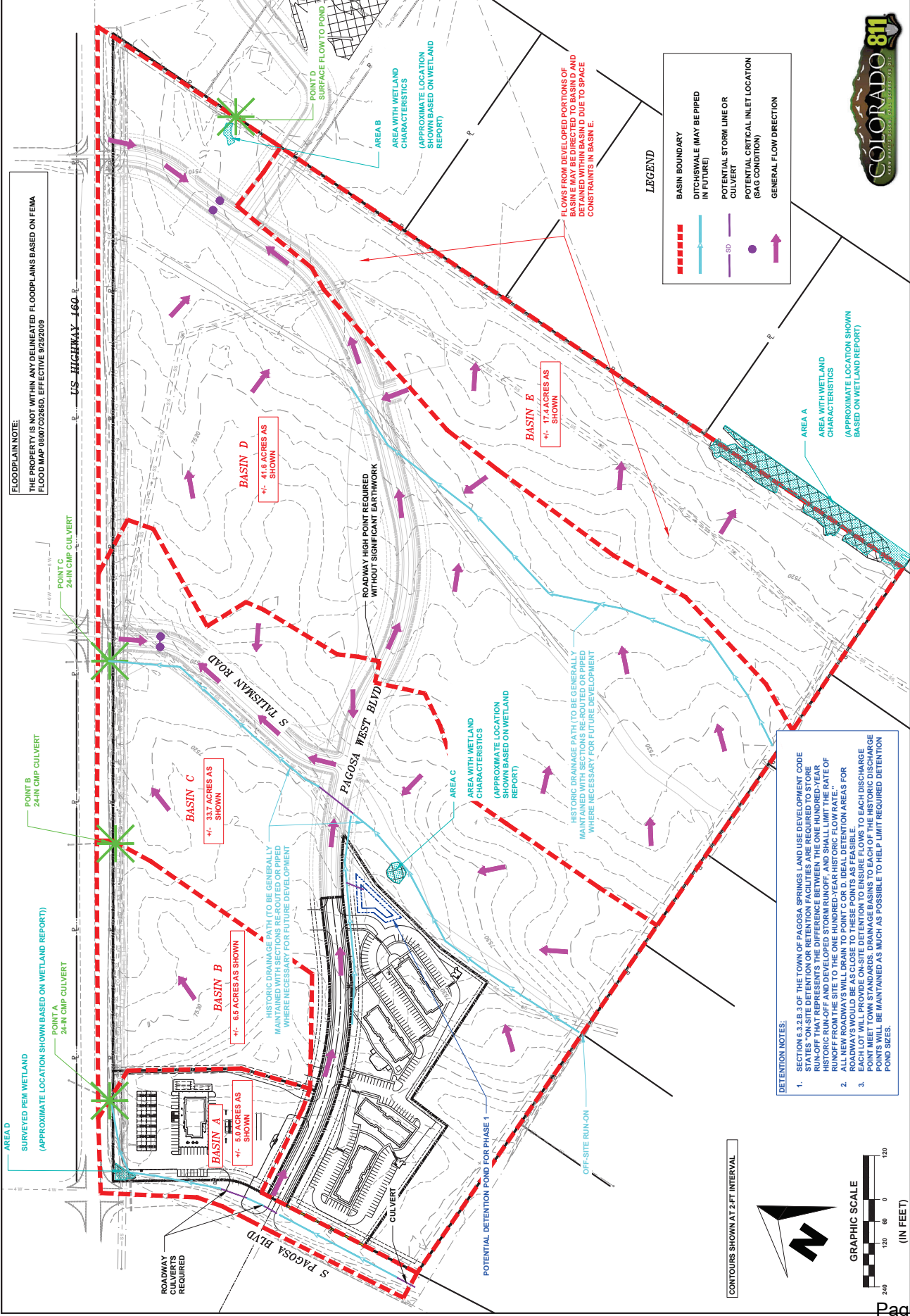
PAGOSA WEST

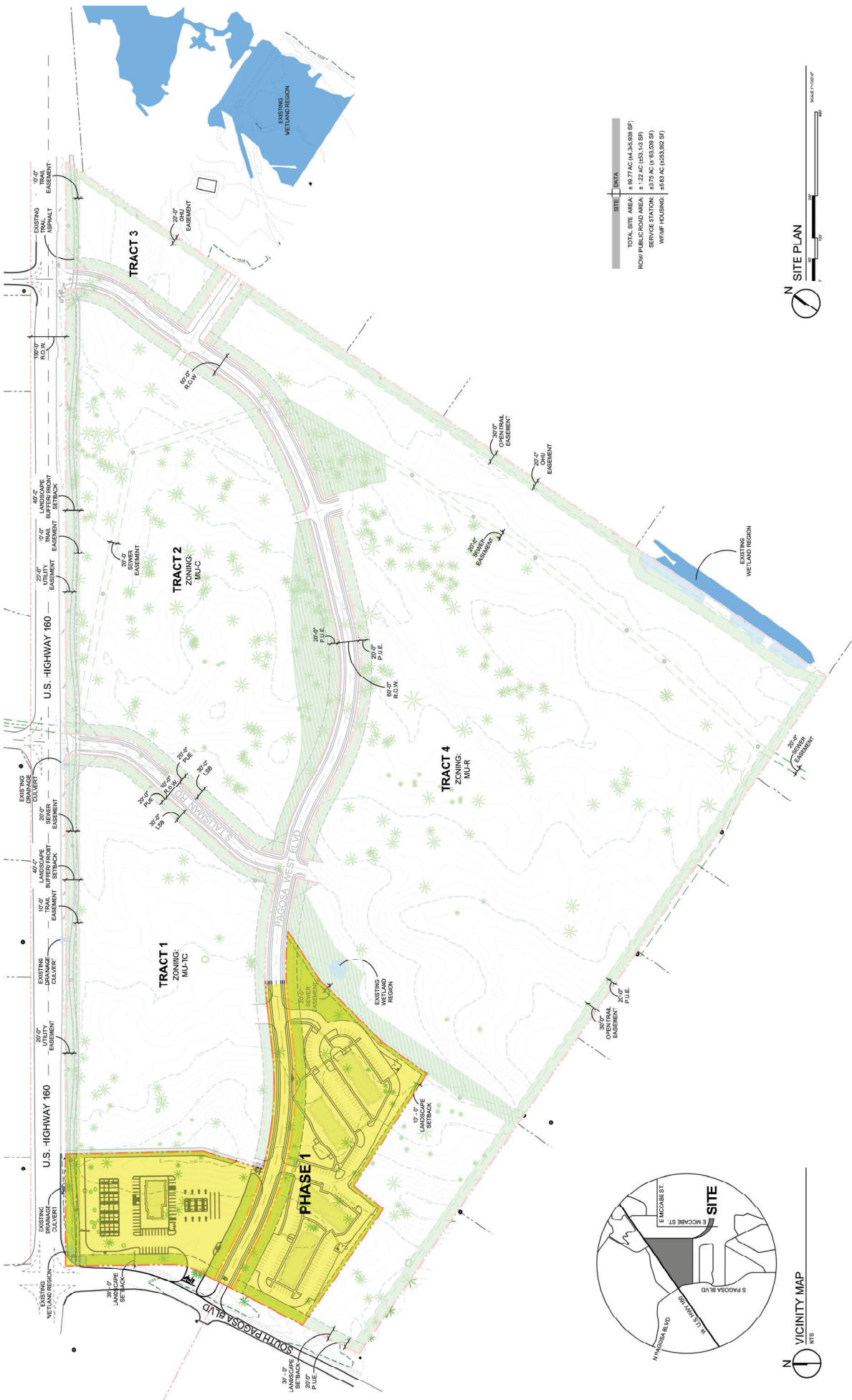
PAGOSA SPRINGS CO
PUBLIC STREET CROSS SECTION
09.15.2025

#	DATE	DESCRIPTION

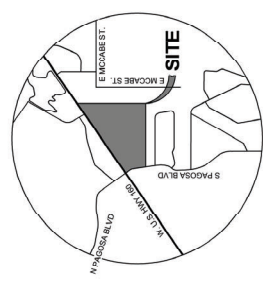
DATE: 04/08/2025
 DRAWN BY: HR
 CHECKED BY: SP

EXHIBIT

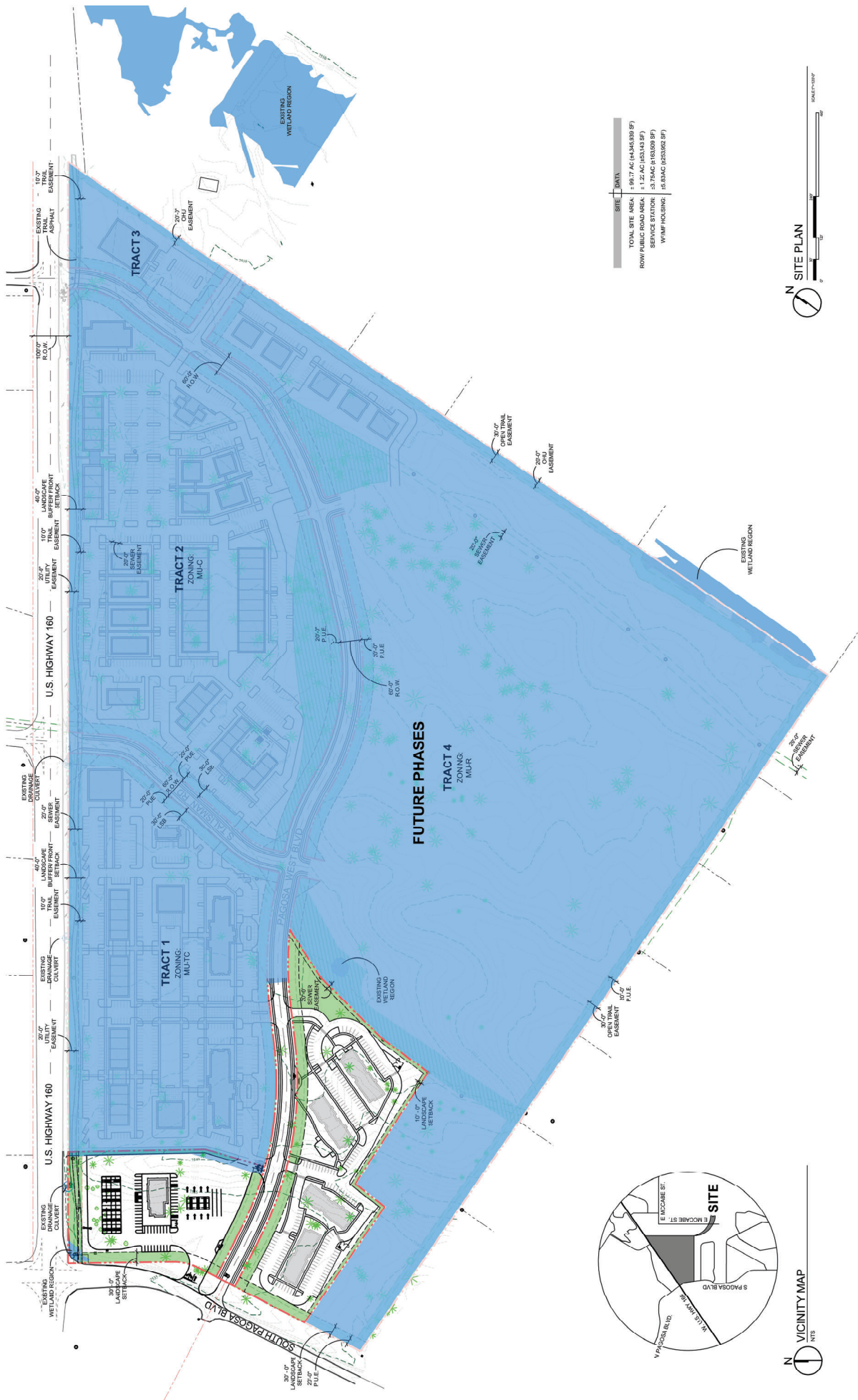




SITE	DATA
TOTAL SITE AREA:	4,987,774 SQ. FT. (43.45 AC)
ROW PUBLIC ROAD AREA:	1,122,420 SQ. FT. (25.51 AC)
SERVICES W/IN ROW:	237,920 SQ. FT. (5.44 AC)
W/IN ROW HOUSING:	145,510 SQ. FT. (3.30 AC)



PAGOSA WEST
 PAGOSE SPRINGS, CO
 PHASE I DEVELOPMENT EXHIBIT
 04.22.2026



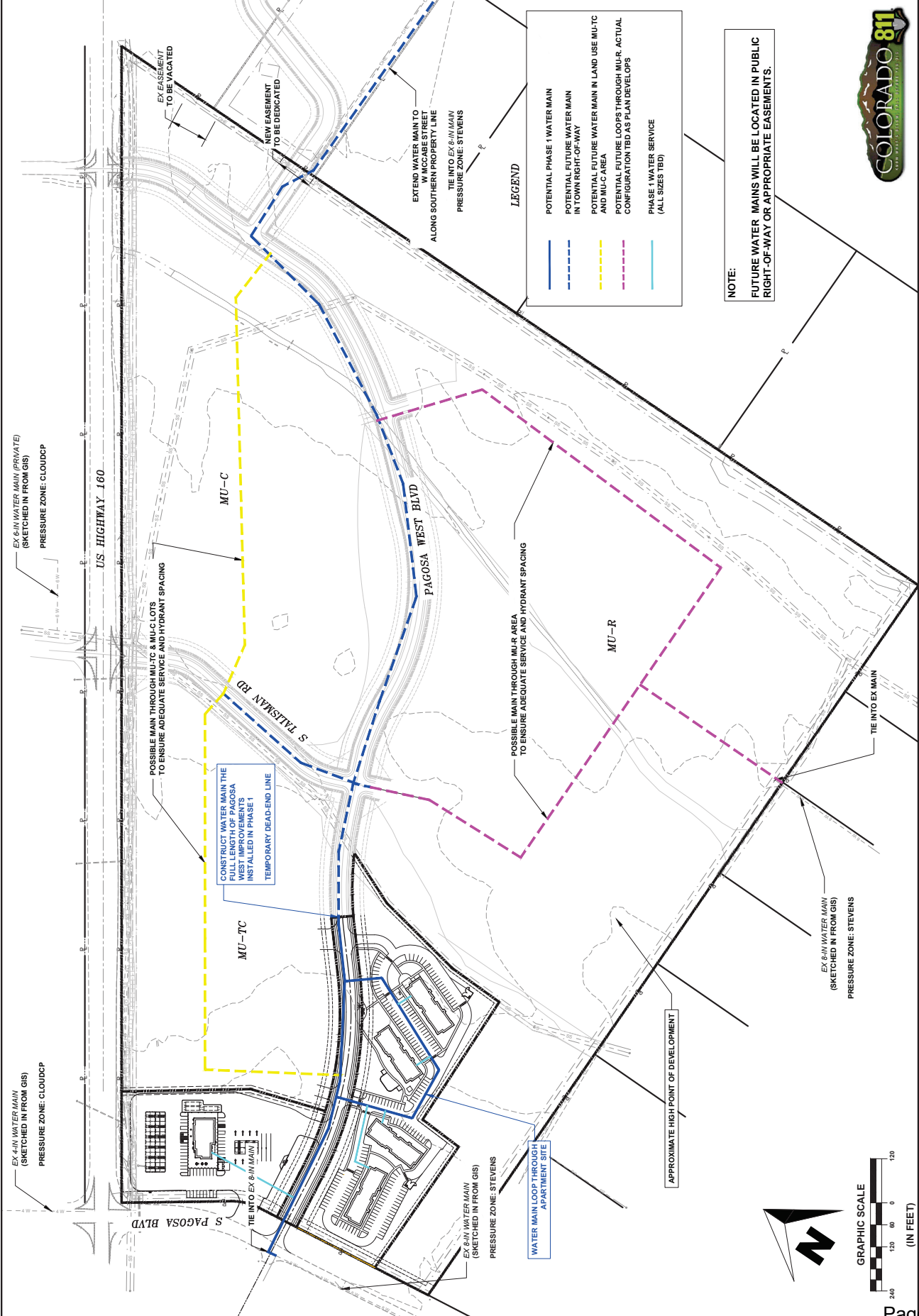


PAGOSA WEST MASTER PLANNING
PAGOSA SPRINGS, CO 81147
CONCEPTUAL WATER ANALYSIS

#	DATE	DESCRIPTION	SHEET

DATE: 04/08/2026
 DRAWN BY: HR
 CHECKED BY: SP

EXHIBIT



PST ENGINEERING, LLC
 2615 MAIN AVE. SUITE 209
 DURANGO, CO 81301
 970.403.4492

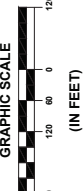
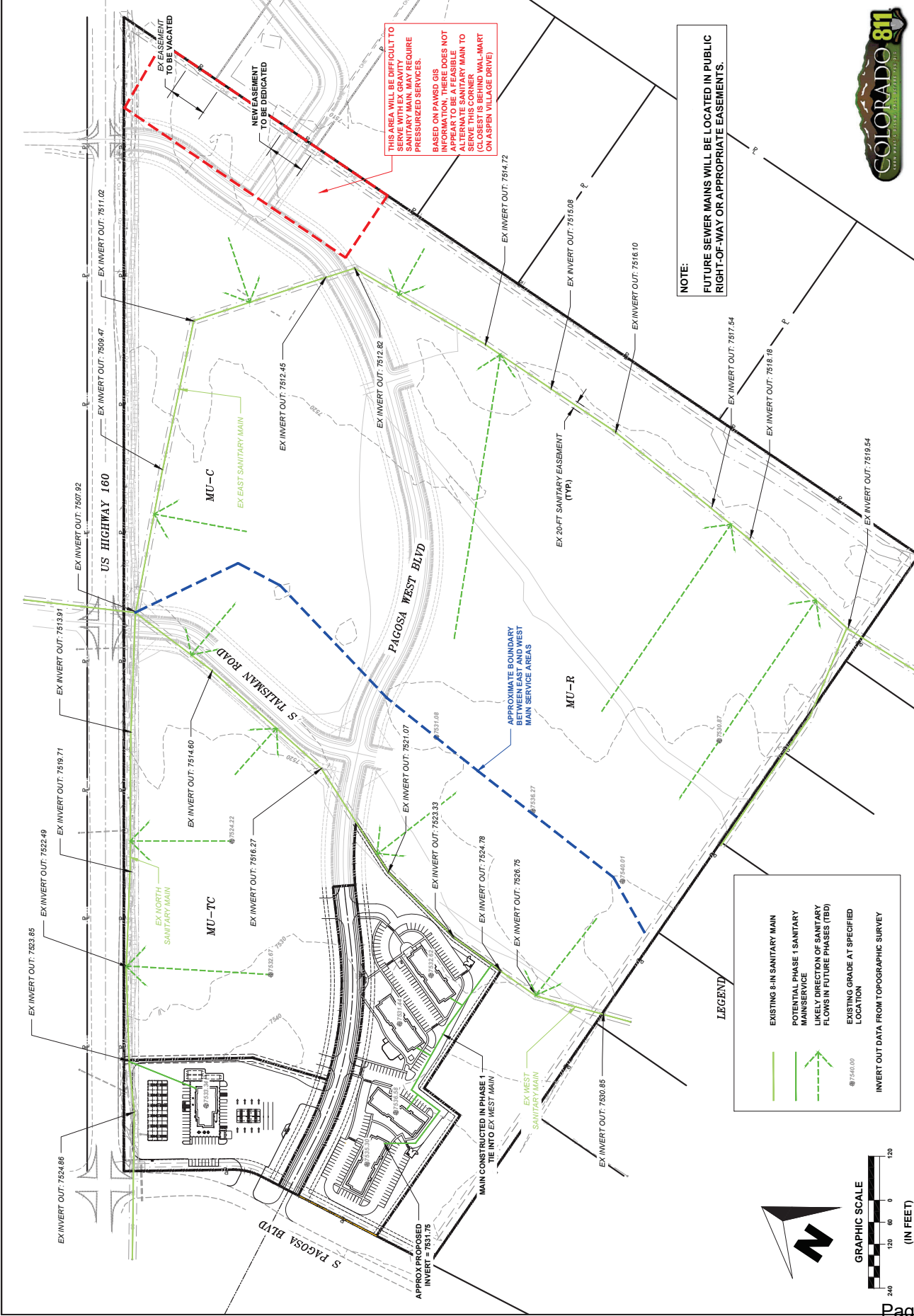
ENGINEERING

PAGOSA WEST MASTER PLANNING
PAGOSA SPRINGS, CO 81147
CONCEPTUAL SANITARY SEWER ANALYSIS

#	DATE	DESCRIPTION	SHEET

DATE: 04/08/2026
 DRAWN BY: HR
 CHECKED BY: SP

EXHIBIT



File Path: C:\Users\holsheid\OneDrive\Engineering\2024 Pagosa West\CAD\Exhibit\2026\0408 Conceptual Plans\Conceptual Sanitary.dwg



November 15, 2024

James Dickhoff
Community Development Director
Town of Pagosa Springs
551 Hot Springs Boulevard
Pagosa Springs, Colorado 81147

Re: Pagosa Plaza Aquatic Resources Delineation and Confirmation of no 404 Permit Needed from the USACE

Dear James:

On behalf of ARENALABS, LLC, SME Environmental, Inc. (SME) recently prepared the attached Aquatic Resources Delineation report for the Pagosa Plaza project. As we understand it, the project is about to enter the planning process (for a subdivision) with the Town of Pagosa Springs under your direction and this report will be included in the initial planning submittal to you by David and Doug Drago with ARENALABS.

As detailed in our report, SME delineated two jurisdictional wetland areas on the subject property: Wetland A and Wetland D. Wetland A is located in the southeast corner of the property and Wetland D is located on the northwestern corner of the property. Both of these wetlands have continuous surface connections (through culverts to the north of US 160) to the Martinez/Stollsteimer Creeks and Piedra River drainages so the wetlands are clearly jurisdictional per the most recent Waters of the US (WOUS) rule. Wetland A will be located on the non-development portions of six residential lots so will not be impacted by the proposed subdivision. Wetland D will be located in a drainage easement that will lead to CDOT ROW so will also not be impacted by the proposed subdivision.

SME also investigated two other low-lying areas on the subject property: Area B and Area C. Both of these areas have small, scattered areas of disconnected wetlands located within them – primarily dominated by rushes and sedges. While some of these areas do meet the US Army Corps of Engineers (USACE) definition of a wetland, (unlike Wetlands A and D) none of these features have a continuous surface connection to Martinez Creek. Accordingly, in the opinion of SME, none of these features are USACE-jurisdictional per the latest WOUS rule.

Typically, when we believe certain wetlands on a property are not USACE-jurisdictional, we submit a request for an “Approved Jurisdictional Determination” (AJD) to the USACE. However, per recent correspondence with Kara Hellige of the USACE Durango Regulatory Office, due to current staff shortages, the priority of that office currently is 404 Permit processing and AJD

requests will take from one to two years to process. Kara also said that in certain cases, they may respond in a more timely manner to “confirmation of no 404 Permit required” requests.

Since both of the USACE-jurisdictional wetlands on the subject property will be avoided within the site plan and all other wetland areas on the property are non USACE-jurisdictional (in SME’s opinion), there should be no need for a 404 Permit for the Pagosa Plaza project and a request for no 404 Permit required from the USACE is appropriate.

Additionally, since the need for this analysis was dictated by the subdivision/planning process, we feel it would be most appropriate for your department to submit this letter and report to the Durango Regulatory Office of the USACE with a request for review and confirmation of no 404 Permit required for the Pagosa Plaza project.

Please let me know if you have any questions or need any other information in order to make this request to the USACE.

Sincerely,

A handwritten signature in blue ink, appearing to read "Sean Moore", written in a cursive style.

Sean Moore
President

Aquatic Resources Delineation Report

Pagosa Plaza Parcel

Archuleta County, CO



Prepared for:

**ARENALABS, LLC
PO BOX 1267
Montrose, CO 81402**

Prepared by:



**ENVIRONMENTAL CONSULTANTS
679 East 2nd Avenue, Unit E2
Durango, Colorado 81301**

November 2024

EXECUTIVE SUMMARY

Wetlands and other Waters of the U.S. (WOUS) in the survey area were initially identified by SME Environmental, Inc. (SME) in July and August 2024 using the methodology defined in the Routine Determination procedure set forth in the U.S. Army Corps of Engineers Wetlands Delineation Manual (USACE 1987). SME verified the boundaries of wetlands and other WOUS using the methodology defined in the Routine Determination procedure set forth in the *U.S. Army Corps of Engineers Wetlands Delineation Manual* (USACE 1987) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0)*. Wetland boundaries were defined based on presence of hydrophytic vegetation, hydric soils, and hydrologic indicators that under normal conditions would indicate wetland conditions. Additionally, SME surveyed for the presence of an ordinary high water mark (OHWM) in accordance with *A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States* (USACE 2008) and *Regulatory Guidance Letter No. 05-05, Guidance on Ordinary High Water Mark Identification* (USACE 2005). Aquatic resource boundaries during the 2024 site visit were survey-located using a Trimble R1 GNSS Receiver (real-time sub-meter accuracy).

The Pagosa Plaza survey area is approximately 97.9 acres (4,266,702 square feet). Based on the site investigation, approximately 0.81 acre (35,296 square feet) of USACE-jurisdictional aquatic resources exist in the survey area. The survey area is located approximately 4.1 miles west of downtown Pagosa Springs, east of the intersection of Pagosa Blvd and US Highway 160, and along US Highway 160, within Archuleta County. SME prepared this report for David Dragoo of ARENALABS, LLC to document the boundaries of aquatic resources within the survey area of the Pagosa Plaza project.

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Appendix D: Plant List

Appendix E: USDA NRCS Soils Report

ACRONYMS AND ABBREVIATIONS

US 160	US Highway 160
HUC	Hydrologic Unit Code
NAD	North American Datum
NRCS	Natural Resources Conservation Service
NWI	National Wetland Inventory
NWPL	National Wetland Plant List
OHWM	Ordinary high water mark
PEM	Palustrine Emergent Wetland
PSS	Palustrine Scrub/Shrub Wetland
SME	SME Environmental, Inc.
TNW	Traditional Navigable Water
USACE	U.S. Army Corps of Engineers
USDA	U.S. Department of Agriculture
USGS	U.S. Geological Survey
USFWS	U.S. Fish and Wildlife Service

1.0 INTRODUCTION

Project Name: Pagosa Plaza Parcel

USACE File #: N/A, initial submittal

SME #: 240037

Applicant:

ARENALABS, LLC

PO BOX 1267

Contact: Mr. David Dragoo

Phone: (602) 363-4427; Email: david@coloradooutdoors.co

Agent/Consultant:

SME Environnemental, Inc. (SME)

679 East 2nd Avenue, Unit 8, Durango, CO 81301

Contact: Mr. Sean Moore, Principal; Email: smoore@sme-env.com

Phone: (970) 403 - 0571; Fax: (970) 259-0050

Survey Area Description: The survey area is located approximately 4.1 miles west of downtown Pagosa Springs, east of the intersection of Pagosa Blvd and US Highway 160, and along US Highway 160, within Archuleta County. The Pagosa Plaza survey area is approximately 97.9 acres in size.

Purpose: The purpose of this report is to identify and describe aquatic resources within the survey area for due diligence with Clean Water Act Section 404 permitting and to provide information for an AJD.

2.0 PROJECT LOCATION

Municipality: Pagosa Springs; **County:** Archuleta County; **State:** Colorado; **Street Address:** East of the intersection of Pagosa Boulevard and US Highway 160.

Section, Township, Range (New Mexico Principal Meridian): Section 20 and 21, Township 35 North, Range 2 West

Lat/Long: Survey area centroid approximately latitude 37.254208° and longitude -107.072508° (NAD 83).

USGS Quad Name: Pagosa Springs, Colorado.

Directions: The survey area is located approximately 4.1 miles west of downtown Pagosa Springs, east of the intersection of Pagosa Blvd and US Highway 160, and along US Highway 160, within Archuleta County. From the intersection of Hot Springs Blvd and US Highway 160 in downtown Pagosa Springs, take US Highway 160 west for 4.1 miles. The survey area is located on the left and south of US Highway 160. A road map is provided as [Figure 1](#) and a topographic map is provided as [Figure 2](#) in [Appendix A](#).

3.0 DELINEATION METHODS

Aquatic resources in the survey area were identified on July 2, and August 23, 2024 by SME staff using the methodology defined in the Routine Determination procedure set forth in the *U.S. Army Corps of Engineers Wetlands Delineation Manual* (USACE 1987) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0), A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States* (USACE 2008) and *Regulatory Guidance Letter No. 05-05, Guidance on Ordinary High Water Mark Identification* (USACE 2005). Wetland boundaries were defined based on presence of hydrophytic vegetation, hydric soils, and hydrologic indicators that under normal conditions would indicate wetland conditions. In the absence of wetland conditions, the extent of aquatic resources was determined based on the lateral extent of the OHWM.

Prior to conducting the field survey, SME conducted a desktop survey of available publications covering the survey area including U.S. Geological Survey (USGS) 7.5' topographic quadrangles, U.S. Fish and Wildlife (USFWS) National Wetlands Inventory (NWI) data, U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) soils data ([Figure 3](#)), National Wetland Inventory data, and *USDA FSA NAIP* aerial imagery. The boundaries of aquatic resources, as depicted on [Figures 4, 4A, 4B, 4C and 4D](#)), were survey-located using a Trimble R1 GNSS Receiver (real-time sub-meter accuracy).

4.0 EXISTING CONDITIONS

4.1 Landscape Setting

Size of Survey Area: Approximately 97.9 acres.

Watershed Name and Size (HUC 8): Piedra, HUC 14080102, 562 square miles.

Elevation Range of Site: Approximately 7,515 – 7,555 feet above mean sea level (msl) ([Figure 2](#)).

Geographic Setting: The survey area is located west of downtown Pagosa Springs, Colorado, on a mesa between the Piedra and San Juan Rivers. The San Juan Mountains are situated to the north and east of the survey area.

Geology: The geology of the survey area is composed of Mancos Shale (Km), which contains thin calcareous shale and limestone. Mancos Shale is a sedimentary rock formation from the Cretaceous epoch. (Tweto, 1979).

Land Use: The survey area is currently undeveloped. There are a few sparse residences located south and east of the survey area. Commercial and residential developments occupy the greater area surrounding the survey area. The developments to the north of the survey area, north of US 160, have been present for decades, while the commercial developments to the east were mostly

constructed in the last 9-10 years, including the Walmart which is located just northeast of the survey area. North of US 160, the development is relatively dense, while the areas to the south consist primarily of scattered residences and small ranches. US 160 (to the north of the survey area) experiences high vehicular traffic.

Precipitation: According to the U.S. Drought Monitor, Archuleta County was in a period of abnormally dry during the July 2, 2024 site visit, and in no period of drought during the August 23, 2024 site visit (NOAA, July 2, 2024) (NOAA, August 23, 2024). Average annual precipitation near Pagosa Springs, Colorado is 21.66 inches/year and 116.4 inches of snow/year (WRCC-Pagosa Springs). The average amount of precipitation during the month of July is 2.01 inches, and the average amount of precipitation during the month of August is 2.70 inches.

Existing Field Conditions: The July 2 and August 23, 2024, field surveys were conducted in the 2024 growing season when vegetation was mature. At the time of the July and August 2024 site visits, the survey area had signs of moisture and the vegetation was relatively green.

4.2 Aquatic Resources

Four areas containing aquatic resources exist in the survey area and are described below. Wetland Areas A and D are considered USACE-jurisdictional resources and Areas B and C will ultimately be considered under a USACE approved jurisdictional determination (AJD) as they appear to lack continuous surface connections to nearby jurisdictional resources. Photographs of delineated aquatic resources are included in [Appendix B](#). Wetland Determination Data forms for the Arid West Region are included with this report as [Appendix C](#). Data point/Soil Boring locations have been labeled as DP1 (Data point 1), DP2 etc., on [Figure 4](#).

Wetland (Area) A

Wetland A is a Palustrine Emergent Wetland (PEM) that is connected to a larger wetland complex that drains into Pinon Lake on the northern side of US Highway 160. SME believes Wetland A is USACE-jurisdictional as it is considered an (a)(3) wetland -- having a continuous surface connection (through two culverts) to Pinon Lake to the north of US Highway 160, that eventually drains to the Piedra River ((a)(1) Traditional Navigable Water) through a series of creeks (including Martinez Creek) and drainages. This feature is consistent with the NWI data as it is mapped very similarly to the part of the larger wetland complex that drains to Pinon Lake to the north of US 160 (Figure 5).

The wetland/upland boundary in the Wetland A appears to be along the transition zone of dominance by sedge (*Carex sp.*) and rush (*Juncus sp.*) species and upland grasses (note: seed heads on the sedge and rush species were not yet present for the 2024 growing season, but it is assumed the dominant sedge and rush plants to be *Carex aquatilis* and *Juncus balticus*, respectively). The dominant grass species at the wetland/upland interface in the upland is western wheat grass (*Pascopyrum smithii*). A list of all plant species observed at the subject property during the site visit is included in [Appendix D](#).

Area B

Area B is a low lying swale and contains several small Palustrine Emergent Wetland (PEM) areas. On the August 23, 2024 site visit, SME delineated the PEM wetland area that is located furthest

east in the swale. A small culvert is located just northeast of the PEM wetland and conveys water to the northeast from this swale during big precipitation events. The area between the culvert and the PEM wetland is upland, creating a lack of a continuous surface connection. During the field visit, SME concluded the isolated National Wetland Inventory data PEM wetland that is mapped resembles the swale area of several wetlands separated by upland areas that was mapped by SME. Although this swale contains small areas of PEM wetlands, it is largely upland and it does not have a continuous surface connection to the larger wetland complex to the east which drains into Pinon Lake (Wetland A, described above). This feature is consistent with the NWI data as it is separated from the larger mapped wetland to the east. Additionally, in 2021 SME conducted a detailed delineation of aquatic resources on the parcels due east of the northeastern corner of the Pagosa Plaza parcel and determined that wetlands on those parcels do not continue west off of those parcels to Area B on the Pagosa Plaza parcel. Therefore, SME believes any wetlands in/near Area B is non USACE-jurisdictional.

The wetland/upland boundaries in Area B also appear to be along the transition zone of dominance by *Carex aquatilis* and *Juncus balticus*, to upland areas dominated by *Pascopyrum smithii* and *Bromus inermis*.

Area C

The NWI mapping presents this feature to be riverine in nature through the southern and central parts of the subject property ending on the northern end of the property. Older USGS maps of the area dating back to 1920 also indicate this area to convey water from south to north. Various maps also indicate that a stock pond was once constructed on this feature.

Currently, Area C appears to be a mix of mostly upland and small, scattered PEM wetland polygons – probably indicating it is in the long-term process of drying out. While there is a culvert under US 160 at the northern end of this feature, the culvert does not appear to convey a continuous surface connection under the highway to the Martinez Creek/Piedra River watersheds to the north (as is the case with Wetlands A and D). Therefore, SME believes Area C is not USACE-jurisdictional as it does not have a continuous surface connection to the permanent waters north of US 160. Please see [Appendix C](#) for an upland data sheet near the culvert under US 160 that supports the notion that there is no continuous surface connection from Area C to USACE-jurisdictional resources to the north of the highway.

Wetland (Area) D

Wetland D is a very small Palustrine Emergent Wetland (PEM) that exists in the very northwest corner of the survey area but exists otherwise mostly in CDOT right-of-way along the south side of US 160. A culvert exists under US 160 at the northeastern end of this feature and the culvert conveys a continuous surface connection under the highway to the Martinez Creek/Piedra River ((a)(1) Traditional Navigable Water) watersheds to the north (as is the case with Wetland A). Therefore, SME believes this wetland complex is USACE-jurisdictional as it does have a continuous surface connection to the permanent waters north of US 160.

The wetland/upland boundary at this wetland appears to be along the transition zone of dominance by sedge (*Carex sp.*) and Cattail (*Typha latifolia*) species and upland grasses. The dominant grass

species at the wetland/upland interface in the upland are western wheatgrass (*Pascopyrum smithii*) and crested wheatgrass (*Agropyron cristatum*).

Summary

It is clear that NWI data is a valuable source of general locations and types of aquatic resources across the United States. It is acknowledged by the USFWS (the agency who produced and maintains the NWI database) that NWI data is not a substitute for site-specific delineation data and it should not be used for regulatory purposes (e.g., the initiation of a 404 Permit process), but the NWI data on the Pagosa Plaza project area is generally accurate relative to what SME ground-truthed on the property.

SME believes that Wetland Areas A and D would be considered jurisdictional by the USACE as they both have a continuous surface connection to Martinez Creek and the Piedra River to the north and west. SME believes Areas B and C would not be considered USACE-jurisdictional due to lack of continuous surface connections to Martinez Creek and the Piedra River. Any impacts to USACE-jurisdictional features would be subject to the need for a 404 Permit while impacts to non USACE-jurisdictional features would not be subject to the need for a 404 Permit. However, to date, SME has had no contact with the USACE regarding the jurisdictional status of aquatic resources that exist on the subject property nor the potential need for a 404 Permit for the project you are proposing thereon.

Table 1. Cowardin Classification, Acreage, and Linear Footage of Aquatic Resources within the Survey Area.

Aquatic Resources	Square Feet	Acres	Linear Feet
Palustrine Emergent (PEM) Wetland (Area A)	34,266	0.79	NA
Palustrine Emergent (PEM) Wetland (Area D)	1,030	0.02	NA
TOTAL	35,296	0.81	NA

Table 2. Characteristics of Aquatic Resources within the Survey Area.

Name	Flow Frequency	Flows to	Rationale
PEM Wetland (Area A)	Seasonally saturated	Piedra River	(a)(4) Adjacent Wetland
Swale/PEM (Area B)	Seasonally saturated	Does not flow to any WOUS	Does not have continuous surface connection
Swale/PEM (Area C)	Seasonally saturated	Does not flow to any WOUS	Does not have continuous surface connection
PEM Wetland (Area D)	Seasonally saturated	Piedra River	(a)(4) Adjacent Wetland

4.3 Vegetation

The PEM areas within the survey area are dominated primarily by Baltic rush (*Juncus balticus*), broad leaf cattail (*Typha latifolia*), and sedge species (*Carex sp.*). The upland areas are dominated primarily by western wheatgrass (*Pascopyrum smithii*), muttongrass (*Poa fendleriana*), and crested wheatgrass (*Agropyron cristatum*). Appendix D provides a list of plant species observed during the field investigation. Wetland Determination Data forms for the Arid West Region are

included with this report as [Appendix C](#) and include detailed information about the vegetation observed at each data point location.

4.4 Soils

Soil data for the survey area was obtained from the USDA NRCS. A soil map is included as [Figure 3](#). The survey area includes one soil map unit; a description of this unit is derived from the USDA NRCS Soil Reports and is provided in [Appendix E](#).

The survey area is located within the mapped *Goldbug family loam, warm, 3 to 12 percent slopes* soil unit. The mapped soil unit is not considered hydric based off of major or minor components in the map unit (State Soil Data Access Hydric Soils List, NRCS 2024). Data collected from soil borings during the field investigation revealed primarily silty/loamy soils. The primary hydric soil indicator observed at the soil boring locations within the PEM areas was redoximorphic features (i.e. mottles) located with a dark soil matrix (F6 – Redox Dark Surface). Data from specific soil borings is presented on the data sheets in [Appendix C](#).

4.5 Hydrology

The primary source of hydrology that supports the USACE-jurisdictional PEM areas within the survey area is groundwater charge. Secondary sources of hydrology include snowmelt and other precipitation events (primarily in the monsoon season). The primary indicators of hydrology found in the PEM area on site were oxidized rhizospheres on living roots. See the data forms in [Appendix D](#) for more detailed hydrology information at each of the data point locations depicted on [Figure 4](#).

4.6 Limitations

Field indicators can change with variations in hydrology and other factors. This report assesses the potential for aquatic resources at the site at the time of our review and does not address conditions at a given time in the future. Accordingly, on behalf of our client, SME reserves the right to revisit the jurisdictional status of boundaries of aquatic resources as presented herein, should any of this information warrant modifications. We make no other warranties, either expressed or implied, and our report is not a recommendation to buy, sell or develop the property. This report does not constitute a Jurisdictional Determination of Waters of the United States since such determinations must be verified by the USACE or the NRCS (as applicable) and are subject to review by the U.S. Environmental Protection Agency (USEPA).


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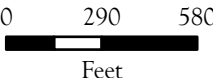
APPENDIX A
Figures



 Survey Area



SME
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www.sme-env.com (970) 259-9595

Drawn by:	Rvwd. by:	Project No.:
SB	SM	240037
Date:	Rvsd. Date:	Scale:
11/1/2024	NA	1:7,000
 		

ROAD VICINITY MAP

AQUATIC RESOURCES
PAGOSA PLAZA
ARCHULETA COUNTY, CO

FIGURE
1

Document Path: S:\Projects\240037 Pagosa Plaza Wetlands\GIS\Pagosa Plaza 404 Ave\Pro\Pagosa Plaza 404 Ave\Pro.aprx "Figure 1 Road Vicinity Map\Delin", Coordinate System: NAD 1983 StatePlane Colorado South FIPS 0503 Feet

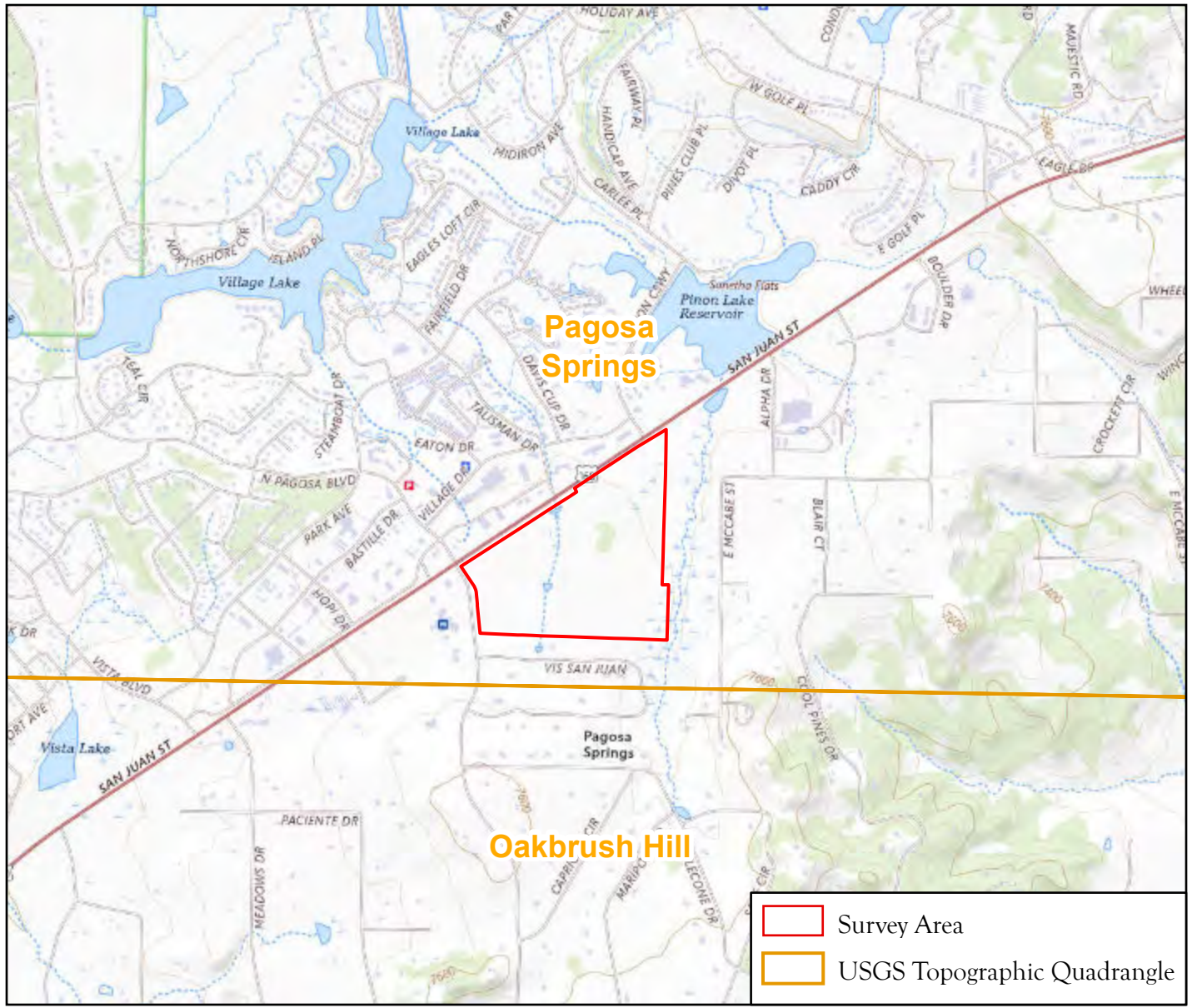
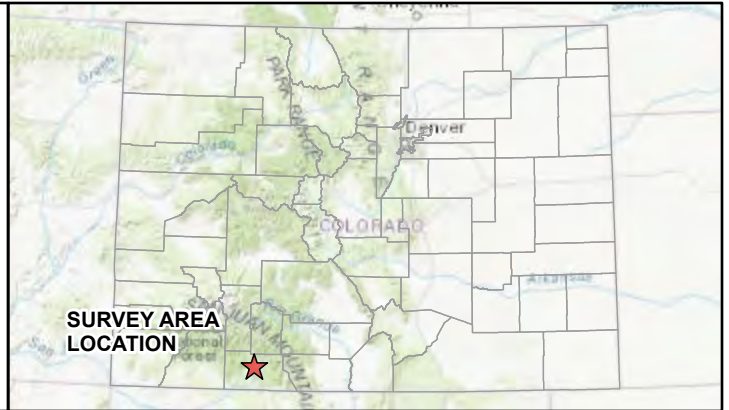
Sources: Map data © OpenStreetMap contributors, Microsoft, Facebook, Inc. and its affiliates, Esri Community Maps contributors, Map layer by Esri, Esri, TomTom, Garmin, Safe/CoPho, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, USDA, ESFWS

SURVEY LOCATION:

Township 35 North, Range 2 West, NESE, SENE of Section 20, NESW, NWSW, NWNW, SWNW of Section 21;
 New Mexico Principal Meridian
 Archuleta County, Colorado.

SURVEY AREA CENTROID (NAD83):

Latitude: 37.25436°
 Longitude: -107.07220°



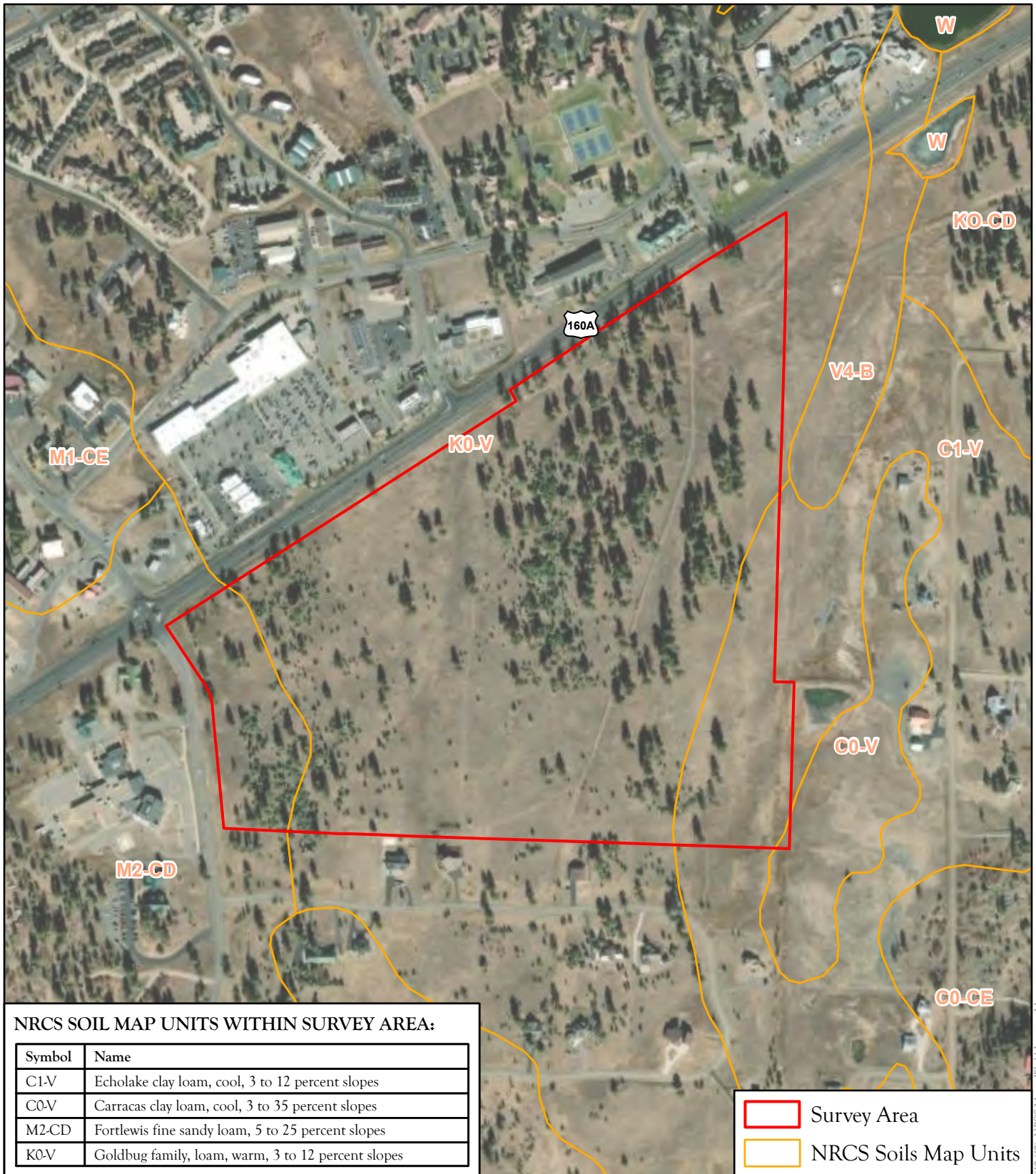
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Drawn by:	Rvwd. by:	Project No.:
SB	SM	240037
Date:	Rvsd. Date:	Scale:
11/1/2024	NA	1:24,000

TOPOGRAPHIC LOCATION MAP	
AQUATIC RESOURCES PAGOSA PLAZA ARCHULETA COUNTY, CO	FIGURE 2

Document Path: S:\Projects\240037 Pagosa Plaza Wetlands\GIS\Pagosa Plaza 404 ArcPro\Pagosa Plaza 404 ArcPro.aprx "Figure 2 Topographic Location Map-Delin"; Coordinate System: NAD 1983 StatePlane Colorado South FIPS 0503 Feet


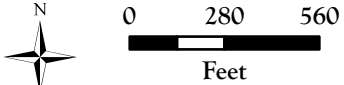
Sources: World Topographic Map; Esri, HERE, Garmin, FAO, NOAA, USGS, EPA, NPS, USGS Elevation Programs, Geographic Names Information System, National Hydrography Dataset, National Land Cover Database, National Transportation Dataset, USGS Global Ecosystems, US Census Bureau, TIGER/



NRCS SOIL MAP UNITS WITHIN SURVEY AREA:

Symbol	Name
C1-V	Echolake clay loam, cool, 3 to 12 percent slopes
C0-V	Carracas clay loam, cool, 3 to 35 percent slopes
M2-CD	Fortlewis fine sandy loam, 5 to 25 percent slopes
K0-V	Goldbug family, loam, warm, 3 to 12 percent slopes

Survey Area
 NRCS Soils Map Units

 ENVIRONMENTAL CONSULTANTS 679 East 2nd Ave. Unit E2, Durango, Colorado 81301 www.sme-env.com (970) 259-9595	Drawn by: SB Date: 11/1/2024	Rvwd. by: SM Rvsd. Date: NA	Project No.: 240037 Scale: 1:6,800	SOILS MAP AQUATIC RESOURCES PAGOSA PLAZA ARCHULETA COUNTY, CO	FIGURE 3
					

Document Path: S:\Projects\240037 Pagosa Plaza Wetlands\GIS\Pagosa Plaza 404 ArcPro\Pagosa Plaza 404 ArcPro.aprx. Coordinate System: NAD 1983 StatePlane Colorado South FIPS 0503 Feet

Sources: DigitalGlobe Aerial Imagery acquired 9/19/17; NRCS; Maxar; World Imagery; Maxar

GENERAL NOTES

1. Survey area boundary created by SME, based on Archuleta County parcel data.
2. SME Environmental, Inc. (SME) staff visited the site on July 2 and August 23, 2024 to assess and delineate the boundaries water, the jurisdictional boundary was identified based on evidence of the OHWM of wetlands and other Waters of the U.S. (WOUS) in the area of interest using the methodology defined in the Routine 4. The boundaries of WOUS were survey-located using a Trimble R1 GNSS Receiver (real-time sub-meter accuracy). Determination procedure set forth in the U.S. Army Corps of Engineers Wetlands Delineation Manual (USACE 1987), the 5. Areas which likely satisfy the USACE criteria as WOUS are labeled. Note that WOUS continue beyond the survey area Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains Region (USACE 2010), A boundary.
3. Wetland boundaries were defined based on presence of hydrophytic vegetation, hydric soils, and hydrologic indicators that under normal conditions would indicate wetland conditions. Where wetland conditions did not occur adjacent to surface water, the jurisdictional boundary was identified based on evidence of the OHWM.
4. The boundaries of WOUS were survey-located using a Trimble R1 GNSS Receiver (real-time sub-meter accuracy). Note that WOUS continue beyond the survey area.
5. Areas which likely satisfy the USACE criteria as WOUS are labeled. Note that WOUS continue beyond the survey area.
6. All WOUS boundaries, depicted hereon, are subject to modification until jurisdictional verification has been completed and Coast Region of the United States (USACE 2014), ~ or ~ the Regional Supplement to the Corps of Engineers Wetland the USACE.
7. Please be aware that impacts to WOUS may require authorization from Local, State and/or Federal regulatory agencies.
8. Aquatic resources delineation table represents acreages, linear footage, square footage and centroid locations.



JURISDICTIONAL AQUATIC RESOURCES DELINEATION TABLE				
Area	Acres	Square Ft.	Centroid Y	Centroid X
A	0.79	34,266	-107.06881	37.25274
D	0.02	1,030	-107.07748	37.25410
Total	0.81	35,296		

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PRELIMINARY: NOT FOR CONSTRUCTION

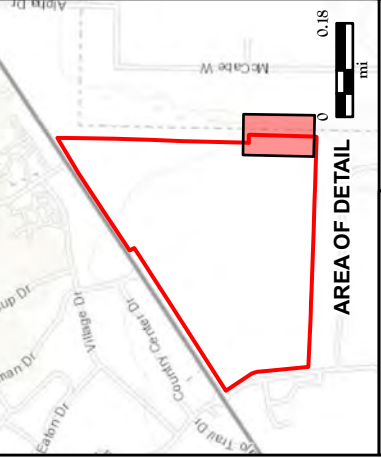
AQUATIC RESOURCES MAP

AQUATIC RESOURCES
PAGOSA PLAZA
ARCHULETA COUNTY, CO

- Data Point
- ▭ Survey Area
- ▭ Surveyed PEM Wetland
- CAD Master Plan Polyline
- ↔ WOUS_Cont

Sources: DigitalGlobe aerial imagery (acquired September 19, 2017); Bureau of Land Management, Esri, HERE, Garmin, INCREMENT P, USGS, METI/NASA, EPA, USA, USA, Maxar, Microsoft

Drawn by:	SB	Date drawn:	11/6/2024
Revised by:	SM	Date revised:	
Proj. No.	240037	Scale:	1:1,150



0 50 100 ft

N

0 0.18 mi

AREA OF DETAIL

FIGURE 4A

GENERAL NOTES

1. Survey area boundary created by SME, based on Archuleta County parcel data.
2. SME Environmental, Inc. (SME) staff visited the site on July 2 and August 23, 2024 to assess and delineate the boundaries water, the jurisdictional boundary was identified based on evidence of the OHWM.
3. Wetland boundaries were defined based on presence of hydrophytic vegetation, hydric soils, and hydrologic indicators that under normal conditions would indicate wetland conditions. Where wetland conditions did not occur adjacent to surface water, the jurisdictional boundary was identified based on evidence of the OHWM.
4. The boundaries of WOUS were surveyed using a Trimble R1 GNSS Receiver (real-time sub-meter accuracy).
5. Areas which likely satisfy the USACE criteria as WOUS are labeled. Note that WOUS continue beyond the survey area.
6. All WOUS boundaries, depicted hereon, are subject to modification until jurisdictional verification has been completed.
7. Please be aware that impacts to WOUS may require authorization from Local, State and/or Federal regulatory agencies.
8. Aquatic resources delineation table represents acreages, linear footage, square footage and centroid locations.



JURISDICTIONAL AQUATIC RESOURCES DELINEATION TABLE				
Area	Acres	Square Ft.	Centroid Y	Centroid X
A	0.79	34,266	-107.06881	37.25274
D	0.02	1,030	-107.07748	37.25410
Total	0.81	35,296		

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PRELIMINARY: NOT FOR CONSTRUCTION

AQUATIC RESOURCES MAP

AQUATIC RESOURCES
 PAGOSA PLAZA
 ARCHULETA COUNTY, CO

- Data Point
- ⊕ Culvert
- ▭ Survey Area
- ▭ Areas with wetland characteristics
- ▭ Low-Lying Swale
- CAD Master Plan Polylines

Drawn by:	SB	Date drawn:	11/6/2024
Revised by:	SM	Date revised:	
Proj. No.	240037	Scale:	1:700

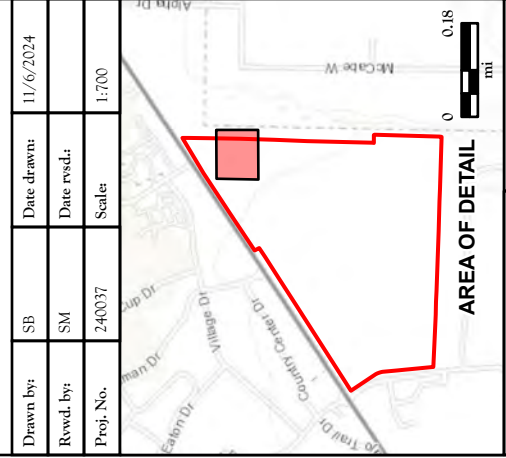


FIGURE 4B

GENERAL NOTES

1. Survey area boundary created by SME, based on Archuleta County parcel data.
2. SME Environmental, Inc. (SME) staff visited the site on July 2 and August 23, 2024 to assess and delineate the boundaries water, the jurisdictional boundary was identified based on evidence of the OHWM of wetlands and other Waters of the U.S. (WOUS) in the area of interest using the methodology defined in the Routine 4. The boundaries of WOUS were survey-located using a Trimble R1 GNSS Receiver (real-time sub-meter accuracy). Determination procedure set forth in the U.S. Army Corps of Engineers Wetlands Delineation Manual (USACE 1987), the 5. Areas which likely satisfy the USACE criteria as WOUS are labeled. Note that WOUS continue beyond the survey area Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains Region (USACE 2010), A boundary.
3. Wetland boundaries were defined based on presence of hydrophytic vegetation, hydric soils, and hydrologic indicators that under normal conditions would indicate wetland conditions. Where wetland conditions did not occur adjacent to surface water, the jurisdictional boundary was identified based on evidence of the OHWM.
4. The boundaries of WOUS were survey-located using a Trimble R1 GNSS Receiver (real-time sub-meter accuracy).
5. Areas which likely satisfy the USACE criteria as WOUS are labeled. Note that WOUS continue beyond the survey area Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains Region (USACE 2010), A boundary.
6. All WOUS boundaries, depicted hereon, are subject to modification until jurisdictional verification has been completed and Coast Region of the United States (USACE 2014), ~ or ~ the Regional Supplement to the Corps of Engineers Wetland the USACE.
7. Please be aware that impacts to WOUS may require authorization from Local, State and/or Federal regulatory agencies.
8. Aquatic resources delineation table represents acreages, linear footage, square footage and centroid locations.



SME
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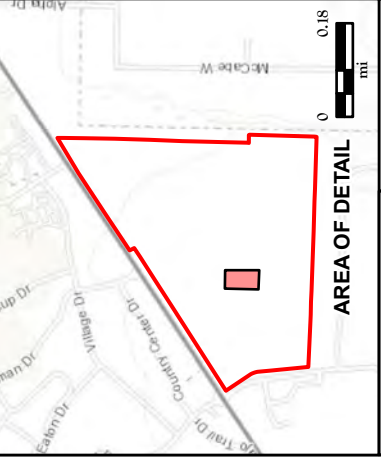
PRELIMINARY: NOT FOR CONSTRUCTION

AQUATIC RESOURCES MAP

AQUATIC RESOURCES
PAGOSA PLAZA
ARCHULETA COUNTY, CO

- Juncus Point
- Survey Area
- Areas with wetland characteristics
- CAD Master Plan Polylines

Drawn by:	SB	Date drawn:	11/6/2024
Revd. by:	SM	Date revd.:	
Proj. No.	240037	Scale:	1:600



AREA OF DETAIL

FIGURE 4C

GENERAL NOTES

1. Survey area boundary created by SME, based on Archuleta County parcel data.
2. SME Environmental, Inc. (SME) staff visited the site on July 2 and August 23, 2024 to assess and delineate the boundaries water, the jurisdictional boundary was identified based on evidence of the OHWM.
3. Wetland boundaries were defined based on presence of hydrophytic vegetation, hydric soils, and hydrologic indicators that under normal conditions would indicate wetland conditions. Where wetland conditions did not occur adjacent to surface waters and other Waters of the U.S. (WOUS) in the area of interest using the methodology defined in the Routine 4. The boundaries of WOUS were survey-located using a Trimble R1 GNSS Receiver (real-time sub-meter accuracy). Determination procedure set forth in the U.S. Army Corps of Engineers Wetlands Delineation Manual (USACE 1987), the 5. Areas which likely satisfy the USACE criteria as WOUS are labeled. Note that WOUS continue beyond the survey area Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains Region (USACE 2010), A boundary.
4. Guide to Ordinary High Water Mark (OHWM) Delineation for Non-Perennial Streams in the Western Mountains, Valleys, 6. All WOUS boundaries, depicted hereon, are subject to modification until jurisdictional verification has been completed and Coast Region of the United States (USACE 2014), ~ or ~ the Regional Supplement to the Corps of Engineers Wetland the USACE.
5. Delineation Manual: Arid West Region (USACE 2010) and the Field Guide to the Identification of the Ordinary High Water 7. Please be aware that impacts to WOUS may require authorization from Local, State and/or Federal regulatory agencies. Mark (OHWM) in the Arid West Region of the Western United States (USACE 2008).
8. Aquatic resources delineation table represents acreages, linear footage, square footage and centroid locations.



JURISDICTIONAL AQUATIC RESOURCES DELINEATION TABLE				
Area	Acres	Square Ft.	Centroid Y	Centroid X
A	0.79	34,266	-107.06881	37.25274
D	0.02	1,030	-107.07748	37.25410
Total	0.81	35,296		

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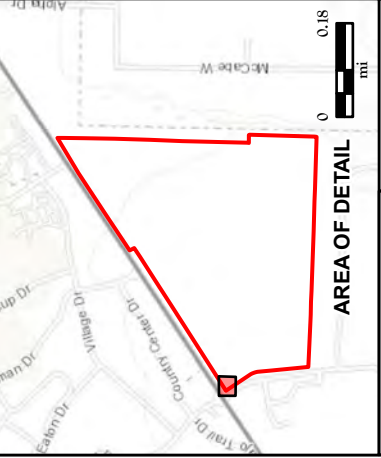
PRELIMINARY: NOT FOR CONSTRUCTION

AQUATIC RESOURCES MAP

AQUATIC RESOURCES
PAGOSA PLAZA
ARCHULETA COUNTY, CO

- Data Point
- ▭ Survey Area
- ▭ Surveyed PEM Wetland
- CAD Master Plan Polyline
- ↔ WOUS_Cont

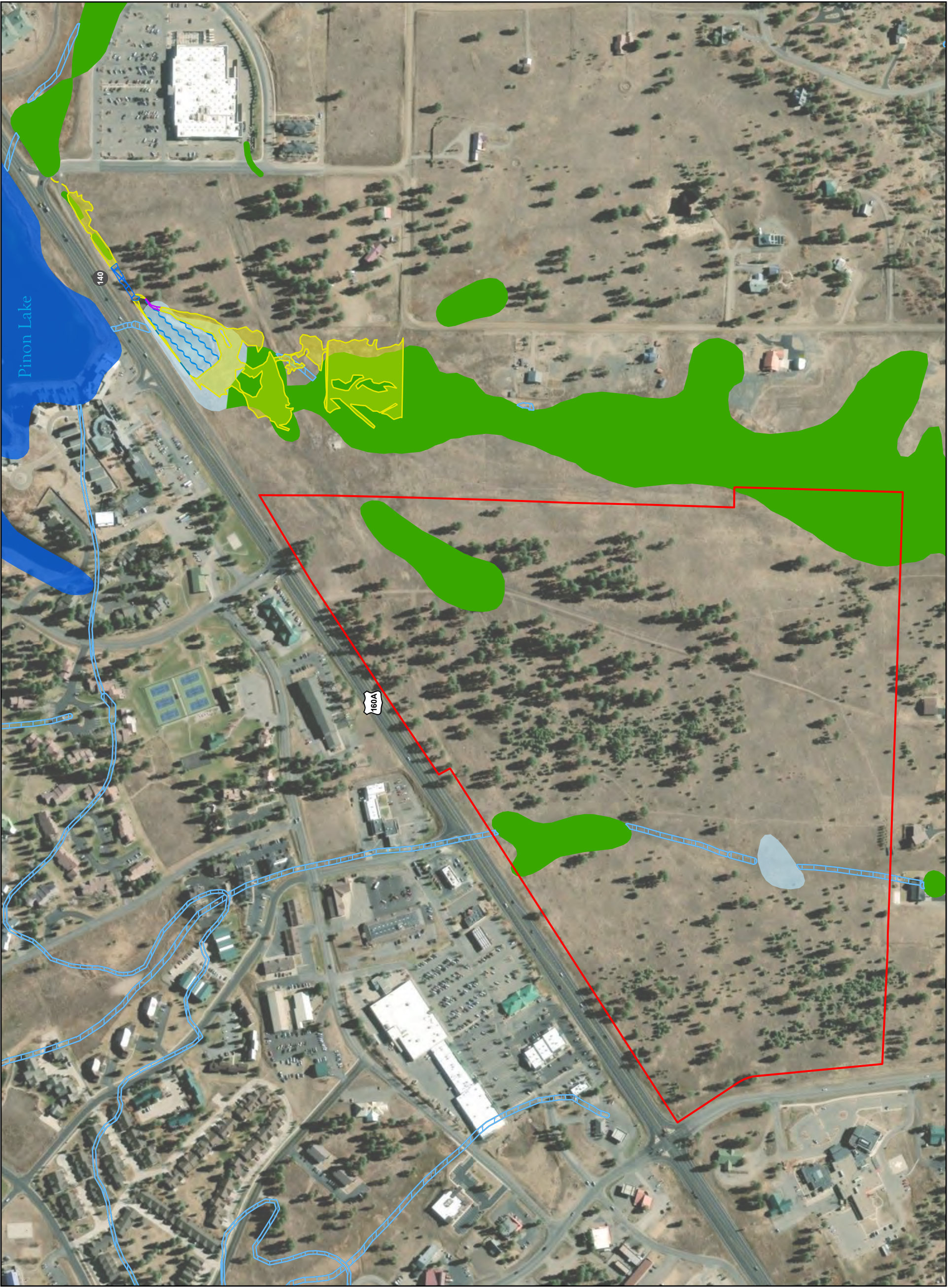
Drawn by:	SB	Date drawn:	11/6/2024
Revd. by:	SM	Date revsd.:	
Proj. No.	240037	Scale:	1:300



0 10 20 ft

0 10 20 mi

FIGURE 4D



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 www.sme-env.com (970) 259-9595

PRELIMINARY: NOT FOR CONSTRUCTION

NWI MAP

AQUATIC RESOURCES
 PAGOSA PLAZA
 ARCHULETA COUNTY, CO

- Mile Point
- ▭ Survey Area
- National Wetland Inventory Data**
- Freshwater Emergent Wetland
- Freshwater Pond
- Lake
- ▨ Riverine
- Legacy Alliance Holdings 2021 Delin**
- ▨ Open Water
- PEM Wetland
- ▨ PEM/PSS mix
- ▨ R4SBx (Ditch)

Drawn by:	SB	Date drawn:	11/6/2024
Revised by:	SM	Date revised:	
Proj. No.	240037	Scale:	1:4,646



FIGURE 5

Sources: DigitalGlobe aerial imagery (acquired September 19, 2017); Esri, HERE, Garmin, FAO, USGS, EPA, NPS, Maxar

APPENDIX B
Photo Documentation



Photo 1: View of wetland area A looking north.



Photo 2: View of wetland area A looking south.



Photo 3: View of DP2W.



Photo 4: View of DP2U.



Photo 5: View of area west of wetland area A looking north.



Photo 6: View of Area B.



Photo 7: View of Area B looking north.



Photo 8: View of Area B looking northeast.



Photo 9: View looking southwest of Area B.



Photo 10: View of culvert northeast of Area B.



Photo 11: View of area B and DP1W.



Photo 12: View of DP1W.



Photo 13: View of DP1U.



Photo 14: View of Area C looking south from north side.



Photo 15: View of culvert on north end of Area C.



Photo 16: View of general vegetation near DP3U.



Photo 17: View of DP3U.



Photo 18: View of wetland area D.



Photo 19: View of wetland area that connects to wetland area D from culvert.



Photo 20: Culvert that drains wetland area D.



Photo 21: View of DP4W.



Photo 22: View of DP4U.

APPENDIX C
Wetland Determination Data Forms

Project/Site: Pagosa Plaza City/County: Archuleta Sampling Date: 8/23/24
 Applicant/Owner: ARENALABS - David Dragoo State: CO Sampling Point: DPU1
 Investigator(s): Sander Aplet and Sean Moore Section, Township, Range: S21, T35N, R2W
 Landform (hillside, terrace, etc.): Meadow/Field Local relief (concave, convex, none): None Slope (%): 0
 Subregion (LRR): LRR D Lat: 37.257830 Long: -107.068978 Datum: NAD83
 Soil Map Unit Name: Goldbug family, loam, warm, 3 to 12 percent slopes NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No _____ Hydric Soil Present? Yes _____ No <u>X</u> Wetland Hydrology Present? Yes _____ No <u>X</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u>
Remarks:	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
=Total Cover				
Sapling/Shrub Stratum (Plot size: _____)				
1. _____	_____	_____	_____	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>0</u> x 2 = <u>0</u> FAC species <u>95</u> x 3 = <u>285</u> FACU species <u>5</u> x 4 = <u>20</u> UPL species <u>0</u> x 5 = <u>0</u> Column Totals: <u>100</u> (A) <u>305</u> (B) Prevalence Index = B/A = <u>3.05</u>
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
=Total Cover				
Herb Stratum (Plot size: <u>1</u>)				
1. <u>Pascopyrum smithii</u>	<u>95</u>	<u>Yes</u>	<u>FAC</u>	Hydrophytic Vegetation Indicators: <input checked="" type="checkbox"/> Dominance Test is >50% <input type="checkbox"/> Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. <u>Grindelia squarrosa</u>	<u>5</u>	<u>No</u>	<u>FACU</u>	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
100 =Total Cover				
Woody Vine Stratum (Plot size: _____)				
1. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes <u>X</u> No _____
2. _____	_____	_____	_____	
=Total Cover				
% Bare Ground in Herb Stratum _____		% Cover of Biotic Crust _____		

Remarks:

SOIL

Sampling Point: DPU1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-6	10YR 3/3	100						
6-12	10YR 3/3	100						
12-20	10YR 3/3	100						

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)			Indicators for Problematic Hydric Soils ³ :		
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 1 cm Muck (A9) (LRR C)			
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> 2 cm Muck (A10) (LRR B)			
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR D)			
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Reduced Vertic (F18)			
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Red Parent Material (F21)			
<input type="checkbox"/> 1 cm Muck (A9) (LRR D)	<input type="checkbox"/> Redox Dark Surface (F6)	<input type="checkbox"/> Very Shallow Dark Surface (F22)			
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Dark Surface (F7)	<input type="checkbox"/> Other (Explain in Remarks)			
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Depressions (F8)				
<input type="checkbox"/> Sandy Mucky Mineral (S1)					
<input type="checkbox"/> Sandy Gleyed Matrix (S4)					

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes _____ No <u> X </u>
---	---

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:		
Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Water Marks (B1) (Riverine)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Biotic Crust (B12)	<input type="checkbox"/> Sediment Deposits (B2) (Riverine)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Drift Deposits (B3) (Riverine)
<input type="checkbox"/> Water Marks (B1) (Nonriverine)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> FAC-Neutral Test (D5)

Field Observations: Surface Water Present? Yes _____ No <u> X </u> Depth (inches): _____ Water Table Present? Yes _____ No <u> X </u> Depth (inches): _____ Saturation Present? Yes _____ No <u> X </u> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes _____ No <u> X </u>
--	--

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Project/Site: Pagosa Plaza City/County: Archuleta Sampling Date: 8/23/24
 Applicant/Owner: ARENALABS - David Dragoo State: CO Sampling Point: DPU2
 Investigator(s): Sander Aplet and Sean Moore Section, Township, Range: S21, T35N, R2W
 Landform (hillside, terrace, etc.): Hill Local relief (concave, convex, none): None Slope (%): 0
 Subregion (LRR): LRR D Lat: 37.252245 Long: -107.068953 Datum: NAD83
 Soil Map Unit Name: Echolake clay loam, cool, 3 to 12 percent slopes NWI classification: _____
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No <u>X</u> Hydric Soil Present? Yes _____ No <u>X</u> Wetland Hydrology Present? Yes _____ No <u>X</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u>
Remarks:	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50.0%</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
=Total Cover				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>10</u> x 2 = <u>20</u> FAC species <u>50</u> x 3 = <u>150</u> FACU species <u>0</u> x 4 = <u>0</u> UPL species <u>15</u> x 5 = <u>75</u> Column Totals: <u>75</u> (A) <u>245</u> (B) Prevalence Index = B/A = <u>3.27</u>
Sapling/Shrub Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
=Total Cover				
Herb Stratum (Plot size: <u>1</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Pascopyrum smithii</u>	<u>40</u>	<u>Yes</u>	<u>FAC</u>	
2. <u>Hedeoma drummondii</u>	<u>15</u>	<u>Yes</u>	<u>UPL</u>	
3. <u>Juncus balticus</u>	<u>10</u>	<u>No</u>	<u>FACW</u>	
4. <u>Hordeum jubatum</u>	<u>10</u>	<u>No</u>	<u>FAC</u>	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
=Total Cover				
Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
=Total Cover				
% Bare Ground in Herb Stratum <u>25</u> % Cover of Biotic Crust _____				

Hydrophytic Vegetation Indicators:
 ___ Dominance Test is >50%
 ___ Prevalence Index is ≤3.0¹
 ___ Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
 ___ Problematic Hydrophytic Vegetation¹ (Explain)
¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No X

Remarks:

SOIL

Sampling Point: DPU2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-6	10YR 4/3	100						
6-12	10YR 3/3	100						
12-16	10YR 3/3	100						
16-20	10YR 3/3	100						

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 1 cm Muck (A9) (LRR C)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> 2 cm Muck (A10) (LRR B)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR D)
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Redox Dark Surface (F6)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Depleted Dark Surface (F7)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Redox Depressions (F8)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)		

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes _____ No <u> X </u>
Remarks:	

HYDROLOGY

Wetland Hydrology Indicators:	
Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Biotic Crust (B12)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input type="checkbox"/> Water Marks (B1) (Nonriverine)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)
<input type="checkbox"/> Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Other (Explain in Remarks)
	<input type="checkbox"/> Water Marks (B1) (Riverine)
	<input type="checkbox"/> Sediment Deposits (B2) (Riverine)
	<input type="checkbox"/> Drift Deposits (B3) (Riverine)
	<input type="checkbox"/> Drainage Patterns (B10)
	<input type="checkbox"/> Dry-Season Water Table (C2)
	<input type="checkbox"/> Crayfish Burrows (C8)
	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
	<input type="checkbox"/> Shallow Aquitard (D3)
	<input type="checkbox"/> FAC-Neutral Test (D5)

Field Observations: Surface Water Present? Yes _____ No <u> X </u> Depth (inches): _____ Water Table Present? Yes _____ No <u> X </u> Depth (inches): _____ Saturation Present? Yes _____ No <u> X </u> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes _____ No <u> X </u>
--	--

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
No indications of hydrology

Project/Site: Pagosa Plaza City/County: Archuleta Sampling Date: 8/23/24
 Applicant/Owner: ARENALABS - David Dragoo State: CO Sampling Point: DPU3
 Investigator(s): Sander Aplet and Sean Moore Section, Township, Range: S20, T35N, R2W
 Landform (hillside, terrace, etc.): Swale Local relief (concave, convex, none): None Slope (%): 0
 Subregion (LRR): LRR D Lat: 37.256167 Long: -107.073577 Datum: NAD83
 Soil Map Unit Name: Goldbug family, loam, warm, 3 to 12 percent slopes NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No <u>X</u> Hydric Soil Present? Yes _____ No <u>X</u> Wetland Hydrology Present? Yes _____ No <u>X</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u>
Remarks:	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50.0%</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
=Total Cover				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>0</u> x 2 = <u>0</u> FAC species <u>45</u> x 3 = <u>135</u> FACU species <u>10</u> x 4 = <u>40</u> UPL species <u>45</u> x 5 = <u>225</u> Column Totals: <u>100</u> (A) <u>400</u> (B) Prevalence Index = B/A = <u>4.00</u>
Sapling/Shrub Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
=Total Cover				
Herb Stratum (Plot size: <u>1</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Pascopyrum smithii</u>	<u>45</u>	<u>Yes</u>	<u>FAC</u>	
2. <u>Poa fendleriana</u>	<u>45</u>	<u>Yes</u>	<u>UPL</u>	
3. <u>Grindelia squarrosa</u>	<u>5</u>	<u>No</u>	<u>FACU</u>	
4. <u>Helianthus annuus</u>	<u>5</u>	<u>No</u>	<u>FACU</u>	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
100 =Total Cover				
Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
=Total Cover				
% Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____				

Hydrophytic Vegetation Indicators:
 ___ Dominance Test is >50%
 ___ Prevalence Index is ≤3.0¹
 ___ Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
 ___ Problematic Hydrophytic Vegetation¹ (Explain)
¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No X

Remarks:
 Mouth of culvert north of point on CDOT ROW has hydric soils, and FAC veg, but did not map due to being off survey area.

SOIL

Sampling Point: DPU3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-6	10YR 4/4	80	10YR 3/2	20				
6-12	10YR 3/3	80	10YR 4/4	20				
12-20	10YR 3/2	100						

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)			Indicators for Problematic Hydric Soils ³ :		
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 1 cm Muck (A9) (LRR C)			
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> 2 cm Muck (A10) (LRR B)			
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR D)			
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Reduced Vertic (F18)			
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Red Parent Material (F21)			
<input type="checkbox"/> 1 cm Muck (A9) (LRR D)	<input type="checkbox"/> Redox Dark Surface (F6)	<input type="checkbox"/> Very Shallow Dark Surface (F22)			
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Dark Surface (F7)	<input type="checkbox"/> Other (Explain in Remarks)			
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Depressions (F8)				
<input type="checkbox"/> Sandy Mucky Mineral (S1)					
<input type="checkbox"/> Sandy Gleyed Matrix (S4)					

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes _____ No <u> X </u>
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Remarks:

HYDROLOGY

Wetland Hydrology Indicators:		
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Water Marks (B1) (Riverine)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Biotic Crust (B12)	<input type="checkbox"/> Sediment Deposits (B2) (Riverine)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Drift Deposits (B3) (Riverine)
<input type="checkbox"/> Water Marks (B1) (Nonriverine)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> FAC-Neutral Test (D5)

Field Observations: Surface Water Present? Yes _____ No <u> X </u> Depth (inches): _____ Water Table Present? Yes _____ No <u> X </u> Depth (inches): _____ Saturation Present? Yes _____ No <u> X </u> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes _____ No <u> X </u>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Arid West Region
 See ERDC/EL TR-08-28; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp: 11/30/2024
 Requirement Control Symbol EXEMPT:
 (Authority: AR 335-15, paragraph 5-2a)

Project/Site: Pagosa Plaza City/County: Archuleta Sampling Date: 8/23/24
 Applicant/Owner: ARENALABS - David Dragoo State: CO Sampling Point: DPU4
 Investigator(s): Sander Aplet and Sean Moore Section, Township, Range: S20, T35N, R2W
 Landform (hillside, terrace, etc.): Field Local relief (concave, convex, none): None Slope (%): 0
 Subregion (LRR): LRR D Lat: 37.254068 Long: -107.077423 Datum: NAD83
 Soil Map Unit Name: Fortlewis fine sandy loam, 5 to 25 percent slopes NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No <u>X</u> Hydric Soil Present? Yes _____ No <u>X</u> Wetland Hydrology Present? Yes _____ No <u>X</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u>
Remarks: _____ _____ _____	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50.0%</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
_____ = Total Cover				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>0</u> x 2 = <u>0</u> FAC species <u>60</u> x 3 = <u>180</u> FACU species <u>0</u> x 4 = <u>0</u> UPL species <u>30</u> x 5 = <u>150</u> Column Totals: <u>90</u> (A) <u>330</u> (B) Prevalence Index = B/A = <u>3.67</u>
Sapling/Shrub Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____ = Total Cover				
Herb Stratum (Plot size: <u>1</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Indicators: _____ Dominance Test is >50% _____ Prevalence Index is ≤3.0 ¹ _____ Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Pascopyrum smithii</u>	<u>60</u>	<u>Yes</u>	<u>FAC</u>	
2. <u>Agropyron cristatum</u>	<u>30</u>	<u>Yes</u>	<u>UPL</u>	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
<u>90</u> = Total Cover				
Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Present? Yes _____ No <u>X</u>
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
_____ = Total Cover				
% Bare Ground in Herb Stratum <u>10</u> % Cover of Biotic Crust _____				

Remarks: _____

SOIL

Sampling Point: DPU4

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-6	10YR 3/4	100						
6-12	10YR 4/6	100						
12-20	10YR 4/6	100						

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)			Indicators for Problematic Hydric Soils ³ :		
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 1 cm Muck (A9) (LRR C)			
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> 2 cm Muck (A10) (LRR B)			
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR D)			
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Reduced Vertic (F18)			
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Red Parent Material (F21)			
<input type="checkbox"/> 1 cm Muck (A9) (LRR D)	<input type="checkbox"/> Redox Dark Surface (F6)	<input type="checkbox"/> Very Shallow Dark Surface (F22)			
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Dark Surface (F7)	<input type="checkbox"/> Other (Explain in Remarks)			
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Depressions (F8)				
<input type="checkbox"/> Sandy Mucky Mineral (S1)					
<input type="checkbox"/> Sandy Gleyed Matrix (S4)					

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes _____ No <u>X</u>
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Remarks:

HYDROLOGY

Wetland Hydrology Indicators:		
Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Water Marks (B1) (Riverine)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Biotic Crust (B12)	<input type="checkbox"/> Sediment Deposits (B2) (Riverine)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Drift Deposits (B3) (Riverine)
<input type="checkbox"/> Water Marks (B1) (Nonriverine)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> FAC-Neutral Test (D5)

Field Observations: Surface Water Present? Yes _____ No <u>X</u> Depth (inches): _____ Water Table Present? Yes _____ No <u>X</u> Depth (inches): _____ Saturation Present? Yes _____ No <u>X</u> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes _____ No <u>X</u>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Project/Site: Pagosa Plaza City/County: Archuleta Sampling Date: 8/23/24
 Applicant/Owner: ARENALABS - David Dragoo State: CO Sampling Point: DPW1
 Investigator(s): Sander Aplet and Sean Moore Section, Township, Range: S21, T35N, R2W
 Landform (hillside, terrace, etc.): Meadow Local relief (concave, convex, none): None Slope (%): 0
 Subregion (LRR): LRR D Lat: 37.257791 Long: -107.069020 Datum: NAD83
 Soil Map Unit Name: Goldbug family, loam, warm, 3 to 12 percent slopes NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No _____ Hydric Soil Present? Yes <u>X</u> No _____ Wetland Hydrology Present? Yes <u>X</u> No _____	Is the Sampled Area within a Wetland? Yes <u>X</u> No _____
Remarks:	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
=Total Cover				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>90</u> x 2 = <u>180</u> FAC species <u>5</u> x 3 = <u>15</u> FACU species <u>5</u> x 4 = <u>20</u> UPL species <u>0</u> x 5 = <u>0</u> Column Totals: <u>100</u> (A) <u>215</u> (B) Prevalence Index = B/A = <u>2.15</u>
Sapling/Shrub Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
=Total Cover				
Herb Stratum (Plot size: <u>1</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Indicators: <input checked="" type="checkbox"/> Dominance Test is >50% <input checked="" type="checkbox"/> Prevalence Index is ≤3.0 ¹ _____ Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Juncus balticus</u>	<u>90</u>	<u>Yes</u>	<u>FACW</u>	
2. <u>Hordeum jubatum</u>	<u>5</u>	<u>No</u>	<u>FAC</u>	
3. <u>Grindelia squarrosa</u>	<u>5</u>	<u>No</u>	<u>FACU</u>	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
100 =Total Cover				
Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Present? Yes <u>X</u> No _____
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
=Total Cover				
% Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____				

Remarks:

SOIL

Sampling Point: DPW1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-6	10YR 2/1	100						
6-12	10YR 2/1	100						
12-20	10YR 2/1	100						

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)			Indicators for Problematic Hydric Soils ³ :		
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 1 cm Muck (A9) (LRR C)			
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> 2 cm Muck (A10) (LRR B)			
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR D)			
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Reduced Vertic (F18)			
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Red Parent Material (F21)			
<input type="checkbox"/> 1 cm Muck (A9) (LRR D)	<input type="checkbox"/> Redox Dark Surface (F6)	<input type="checkbox"/> Very Shallow Dark Surface (F22)			
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Dark Surface (F7)	<input type="checkbox"/> Other (Explain in Remarks)			
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Depressions (F8)				
<input type="checkbox"/> Sandy Mucky Mineral (S1)					
<input type="checkbox"/> Sandy Gleyed Matrix (S4)					

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
---	---

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:		
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Water Marks (B1) (Riverine)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Biotic Crust (B12)	<input type="checkbox"/> Sediment Deposits (B2) (Riverine)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Drift Deposits (B3) (Riverine)
<input type="checkbox"/> Water Marks (B1) (Nonriverine)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Sediment Deposits (B2) (Nonriverine)	<input checked="" type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Other (Explain in Remarks)	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)

Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Project/Site: Pagosa Plaza City/County: Archuleta Sampling Date: 8/23/24
 Applicant/Owner: ARENALABS - David Drago State: CO Sampling Point: DPW2
 Investigator(s): Sander Aplet and Sean Moore Section, Township, Range: S21, T35N, R2W
 Landform (hillside, terrace, etc.): Meadow Local relief (concave, convex, none): None Slope (%): 0
 Subregion (LRR): LRR D Lat: 37.252256 Long: -107.068900 Datum: NAD83
 Soil Map Unit Name: Echolake clay loam, cool, 3 to 12 percent slopes NWI classification: _____
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No _____ Hydric Soil Present? Yes <u>X</u> No _____ Wetland Hydrology Present? Yes <u>X</u> No _____	Is the Sampled Area within a Wetland? Yes <u>X</u> No _____
Remarks:	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
=Total Cover				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>80</u> x 2 = <u>160</u> FAC species <u>10</u> x 3 = <u>30</u> FACU species <u>0</u> x 4 = <u>0</u> UPL species <u>10</u> x 5 = <u>50</u> Column Totals: <u>100</u> (A) <u>240</u> (B) Prevalence Index = B/A = <u>2.40</u>
Sapling/Shrub Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
=Total Cover				
Herb Stratum (Plot size: <u>1</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Juncus balticus</u>	<u>30</u>	<u>Yes</u>	<u>FACW</u>	
2. <u>Carex sp.</u>	<u>50</u>	<u>Yes</u>	<u>FACW</u>	
3. <u>Hedeoma drummondii</u>	<u>10</u>	<u>No</u>	<u>UPL</u>	
4. <u>Hordeum jubatum</u>	<u>10</u>	<u>No</u>	<u>FAC</u>	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
=Total Cover				
Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
=Total Cover				
% Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____				

Hydrophytic Vegetation Indicators:
 Dominance Test is >50%
 Prevalence Index is ≤3.0¹
 Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
 Problematic Hydrophytic Vegetation¹ (Explain)
¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No _____

Remarks:

SOIL

Sampling Point: DPW2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-6	10YR 3/2	80	10YR 4/6	20				
6-12	10YR 3/2	80	10YR 4/6	20				
12-20	10YR 3/2	80	10YR 4/6	20				

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)			Indicators for Problematic Hydric Soils ³ :		
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 1 cm Muck (A9) (LRR C)			
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> 2 cm Muck (A10) (LRR B)			
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR D)			
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Reduced Vertic (F18)			
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Red Parent Material (F21)			
<input type="checkbox"/> 1 cm Muck (A9) (LRR D)	<input checked="" type="checkbox"/> Redox Dark Surface (F6)	<input type="checkbox"/> Very Shallow Dark Surface (F22)			
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Dark Surface (F7)	<input type="checkbox"/> Other (Explain in Remarks)			
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Depressions (F8)				
<input type="checkbox"/> Sandy Mucky Mineral (S1)					
<input type="checkbox"/> Sandy Gleyed Matrix (S4)					

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____
---	--

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:		
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Water Marks (B1) (Riverine)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Biotic Crust (B12)	<input type="checkbox"/> Sediment Deposits (B2) (Riverine)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Drift Deposits (B3) (Riverine)
<input type="checkbox"/> Water Marks (B1) (Nonriverine)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Sediment Deposits (B2) (Nonriverine)	<input checked="" type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Other (Explain in Remarks)	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)

Field Observations: Surface Water Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Project/Site: Pagosa Plaza City/County: Archuleta Sampling Date: 8/23/24
 Applicant/Owner: ARENALABS - David Dragoo State: CO Sampling Point: DPW4
 Investigator(s): Sander Aplet and Sean Moore Section, Township, Range: S20, T35N, R2W
 Landform (hillside, terrace, etc.): Wetland Local relief (concave, convex, none): None Slope (%): 0
 Subregion (LRR): LRR D Lat: 37.254063 Long: -107.077464 Datum: NAD83
 Soil Map Unit Name: Fortlewis fine sandy loam, 5 to 25 percent slopes NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No _____ Hydric Soil Present? Yes <u>X</u> No _____ Wetland Hydrology Present? Yes <u>X</u> No _____	Is the Sampled Area within a Wetland? Yes <u>X</u> No _____
Remarks:	

VEGETATION – Use scientific names of plants.

Tree Stratum	(Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____					Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)
2. _____					
3. _____					
4. _____					
_____ =Total Cover					
Sapling/Shrub Stratum	(Plot size: _____)				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species <u>20</u> x 1 = <u>20</u> FACW species <u>60</u> x 2 = <u>120</u> FAC species <u>2</u> x 3 = <u>6</u> FACU species <u>18</u> x 4 = <u>72</u> UPL species <u>0</u> x 5 = <u>0</u> Column Totals: <u>100</u> (A) <u>218</u> (B) Prevalence Index = B/A = <u>2.18</u>
1. _____					
2. _____					
3. _____					
4. _____					
_____ =Total Cover					
Herb Stratum	(Plot size: <u>1</u>)				Hydrophytic Vegetation Indicators: <input checked="" type="checkbox"/> Dominance Test is >50% <input checked="" type="checkbox"/> Prevalence Index is ≤3.0 ¹ _____ Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Carex sp.</u>		60	Yes	FACW	
2. <u>Typha latifolia</u>		20	Yes	OBL	
3. <u>Phleum pratense</u>		16	No	FACU	
4. <u>Rumex crispus</u>		2	No	FAC	
5. <u>Cichorium intybus</u>		2	No	FACU	
6. _____					
7. _____					
8. _____					
_____ 100 =Total Cover					
Woody Vine Stratum	(Plot size: _____)				Hydrophytic Vegetation Present? Yes <u>X</u> No _____
1. _____					
2. _____					
_____ =Total Cover					
% Bare Ground in Herb Stratum _____		% Cover of Biotic Crust _____			

Remarks:

SOIL

Sampling Point: DPW4

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-6	10YR 3/2	90	10YR 5/6	10				
6-12	10YR 3/2	90	10YR 5/6	10				

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)			Indicators for Problematic Hydric Soils ³ :		
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 1 cm Muck (A9) (LRR C)			
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> 2 cm Muck (A10) (LRR B)			
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR D)			
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Reduced Vertic (F18)			
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Red Parent Material (F21)			
<input type="checkbox"/> 1 cm Muck (A9) (LRR D)	<input checked="" type="checkbox"/> Redox Dark Surface (F6)	<input type="checkbox"/> Very Shallow Dark Surface (F22)			
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Dark Surface (F7)	<input type="checkbox"/> Other (Explain in Remarks)			
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Depressions (F8)				
<input type="checkbox"/> Sandy Mucky Mineral (S1)					
<input type="checkbox"/> Sandy Gleyed Matrix (S4)					

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Remarks:
Standing water

HYDROLOGY

Wetland Hydrology Indicators:	
Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)
<input checked="" type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Biotic Crust (B12)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input type="checkbox"/> Water Marks (B1) (Nonriverine)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Sediment Deposits (B2) (Nonriverine)	<input checked="" type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)
<input type="checkbox"/> Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Other (Explain in Remarks)
	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)

Field Observations: Surface Water Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

APPENDIX D
Plant List

Appendix D: List of Dominant Plant Species Observed within the Survey Area.

Scientific Name*	Common Name	Wetland Indicator Status**
TREES		
<i>Pinus ponderosa</i>	ponderosa pine	FACU
SHRUBS		
<i>Amelanchier alnifolia</i>	Saskatoon service-berry	FACU
<i>Heterotheca villosa</i>	Hairy false goldenaster	NL
HERBS		
<i>Achillea millefolium</i>	common yarrow	FACU
<i>Artemisia carruthii</i>	Carruth's sagebrush	NL
<i>Carduus nutans</i>	nodding plumeless-thistle	FACU
<i>Cirsium arvense</i>	Canadian thistle	FACU
<i>Dieteria canescens</i>	Hoary false tansy-aster	UPL
<i>Eriogonum racemosum</i>	Redroot buckwheat	NL
<i>Grindelia squarrosa</i>	Curly-cup gumweed	FACU
<i>Helianthus annuus</i>	Common Sunflower	FACU
<i>Heliomeris multiflora</i>	Showy goldeneye	NL
<i>Ipomopsis aggregata</i>	Scarlet gilia	NL
<i>Mellilotus officinalis</i>	Yellow sweet clover	FACU
<i>Potentilla hippiana</i>	Wooly cinquefoil	NL
<i>Solidago nana</i>	Dwarf goldenrod	NL
<i>Tragopogon sp.</i>	salsify sp.	NL
GRAMINOIDS		
<i>Bouteloua gracilis</i>	blue grama grass	NL
<i>Bromus inermis</i>	smooth brome	FACU
<i>Carex sp.</i>	Sedge sp.	N/A
<i>Elymus elymoides</i>	Western bottle-brush grass	FACU
<i>Hordeum jubatum</i>	fox-tail barley	FAC
<i>Juncus balticus</i>	Baltic rush	FACW
<i>Pascopyrum smithii</i>	Western wheatgrass	FAC
<i>Phleum pratense</i>	common timothy	FACU
<i>Poa fendleriana</i>	Mutton grass	NL

• OBL: Almost always is a hydrophyte, rarely in uplands

• FAC: Commonly occurs as either a hydrophyte or non-hydrophyte

• NL (Not Listed): generally indicates upland species

* Scientific names according to Synonymized Checklist of the Vascular Flora of the United States, Canada, and Greenland (Kartesz 2009) and National Wetland Plant List (NWPL).

** 2020 NWPL is regionalized along the 10 wetland delineation supplement regions. Wetland indicator status based on Arid West Region.

• FACW: Usually is a hydrophyte but occasionally found in uplands

• FACU: Occasionally is a hydrophyte but usually occurs in uplands

• N/A: Unable to identify to species due to time of year

APPENDIX E
USDA NRCS Soils Report

Appendix E: USDA NRCS Soils Report for soil units within the Survey Area

Archuleta County Area, Colorado

Map Unit: C0-V—Carracas clay loam, cool, 3 to 35 percent slopes

Component: Carracas, cool, and similar soils (85%)

The Carracas, cool and similar soils component makes up 85 percent of the map unit. Slopes are 3 to 35 percent. This component is on hillslopes. The parent material consists of colluvium and/or slope alluvium derived from shale. Depth to a restrictive layer is 10 to 20 inches to paralithic bedrock. The natural drainage class is well drained. Water movement in the most restrictive layer is low to moderately high. Available water to a depth of 60 inches (or restricted depth) is very low. This soil is not flooded. It is not ponded. This component is in the R048AY248CO – Mountain Clay Loam ecological site. Non-irrigated and irrigated land capability classification is 7s. This soil does not meet hydric criteria.

Minor Components:

Component: Echolake, cool (10%)

Generated brief soil descriptions are created for major soil components. The Echolake, cool soil is a minor component.

Component: Herm, cool (5%)

Generated brief soil descriptions are created for major soil components. The Herm, cool soil is a minor component.

Map Unit: C1-V-Echolake clay loam, cool, 3 to 12 percent slopes

Component: Echolake, cool, and similar soils (85%)

The Echolake, cool, and similar soils component makes up 85 percent of the map unit. Slopes are 3 to 12 percent. This component is on hillslopes. The parent material consists of slope alluvium derived from shale. Depth to a restrictive layer is 20 to 40 inches to paralithic bedrock. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately low to moderately high. Available water to a depth of 60 inches (or restricted depth) is low. This soil is not flooded. It is not ponded. This component is in the R048AY257CO – Clayey Valley ecological site. Non-irrigated and irrigated land capability classification is 4e. This soil does not meet hydric criteria.

Minor Components:

Component: Herm, cool (10%)

Generated brief soil descriptions are created for major soil components. The Herm, cool soil is a minor component.

Component: Herm, cool (5%)

Generated brief soil descriptions are created for major soil components. The Herm, cool soil is a minor component.

Map Unit: K0-V—Goldbug family, loam, warm, 3 to 12 percent slopes

Component: Goldbug, warm, and similar soils (85%)

The Goldbug family, loam, warm component makes up 85 percent of the map unit. Slopes are 3 to 12 percent. This component is on mesas and structural benches. The parent material consists of slope alluvium derived from sandstone and shale. Depth to a restrictive layer is greater than 80 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately low to moderately high. Available water to a depth of 60 inches (or restricted depth) is moderate. This soil is not flooded. It is not ponded. This component is in the R048AY255CO - Pine Grasslands ecological site. Non-irrigated and irrigated land capability classification is 4e. This soil does not meet hydric criteria.

Minor Components:

Component: Fortlewis (10%)

Generated brief soil descriptions are created for major soil components. The Fortlewis soil is a minor component.

Component: Valto (5%)

Generated brief soil descriptions are created for major soil components. The Valto soil is a minor component.

Map Unit: M2-CD—Fortlewis fine sandy loam, 5 to 25 percent slopes

Component: Fortlewis and similar soils (85%)

The Fortlewis and similar soils component makes up 85 percent of the map unit. Slopes are 5 to 25 percent. This component is on mountain slopes. The parent material consists of slope alluvium and/or colluvium derived from sandstone and shale. Depth to a restrictive layer is 20 to 40 inches to lithic bedrock. The natural drainage class is well drained. Water movement in the most restrictive layer is low to moderately high. Available water to a depth of 60 inches (or restricted depth) is low. This soil is not flooded. It is not ponded. This component is in the F048AY925CO Ponderosa Pine Forest ecological site. Non-irrigated and irrigated land capability classification is 6e. This soil does not meet hydric criteria.

Minor Components:

Component: Goldbug (10%)

Generated brief soil descriptions are created for major soil components. The Goldbug soil is a minor component.

Component: Valto (5%)

Generated brief soil descriptions are created for major soil components. The Valto soil is a minor component.