

# Los Alamos Fire Station No.4 Replacement

## Site Selection County Council Presentation

Incorporated County of Los Alamos

Public Works Department

Los Alamos Fire Department

November 12, 2024



ATTACHMENT A

LOS ALAMOS

# Overview



1. Overview
2. Purpose
3. Schedule
4. Phase Overview
5. The Sites
6. Site Studies
7. Survey Results

# Strategic Goals & Priorities



# New Fire Station Principles + Benefits

- **The Problem**
  - **Firefighting takes a toll on the Body and the Mind**
    - Firefighters face serious long term health risks, and higher cancer rates due to exposure to dangerous carcinogens such as asbestos, benzene, flame retardants, formaldehyde, polychlorinated biphenyls, PAH's and PFAS to name a few.
    - Firefighting is consistently ranked as one of the most stressful jobs in the country due to the nature of the work, long hours and poor sleep quality.
    - Firefighter recruitment is becoming more difficult.
  - **Improvements in Design, Technology and Equipment are needed to maximize Fire Department Effectiveness**
  - **The Existing Fire Station No. 4 is an outdated, inefficient building with existing costly maintenance needs.**

# New Fire Station Principles + Benefits

- **Our Goal is to address these problems with a new, State of the Art, Fire Station designed to improve:**
  - **Firefighter Health and Quality of Life**
    - Physical Health – Clean environment, Quality Sleep, Improved Fitness
    - Mental Health – Places to De-stress, Commune, be Outdoors, have Quiet
    - Recruitment & Retention – Gender Inclusive Design, Warm and Comfortable Space
  - **Improve the functionality of the Fire Station**
    - Increased capacity for equipment
    - Improve Turnout Times
    - Top Shelf Alerting and Technology
  - **Improve the Sustainability of the Fire Station**
    - LEED Silver Certified

# Project Schedule

<u>Phase</u>	<u>Est. Completion</u>
• <b>Site Selection</b> (current)	<b>11/2024</b>
• Pre-Design	12/2024
• Schematic Design	02/2025
• Design Development	04/2025
• Contract Documents	06/2025
• Bidding + Permitting	TBD
• Construction	TBD

# Site Selection: Phase Overview

## Purpose:

- To comprehensively evaluate 3 sites near the existing Fire Station No. 4 to provide information to the community about potential sites for the new Fire Station location.
- To communicate this information to the community and solicit feedback.
- To present findings to County Council for the selection of a site.

# Site Selection: Phase Overview

## Information Studied:

- Topography
- Utilities
- Natural Resources
  - Tree Study
  - Cultural Resources
  - Carbon Impact
  - Protected Species
- Fire Response Times
- Disruptions to Trails
- Proximity to Residential
- Conceptual Site Layouts
- Conceptual Construction Costs
- Zoning

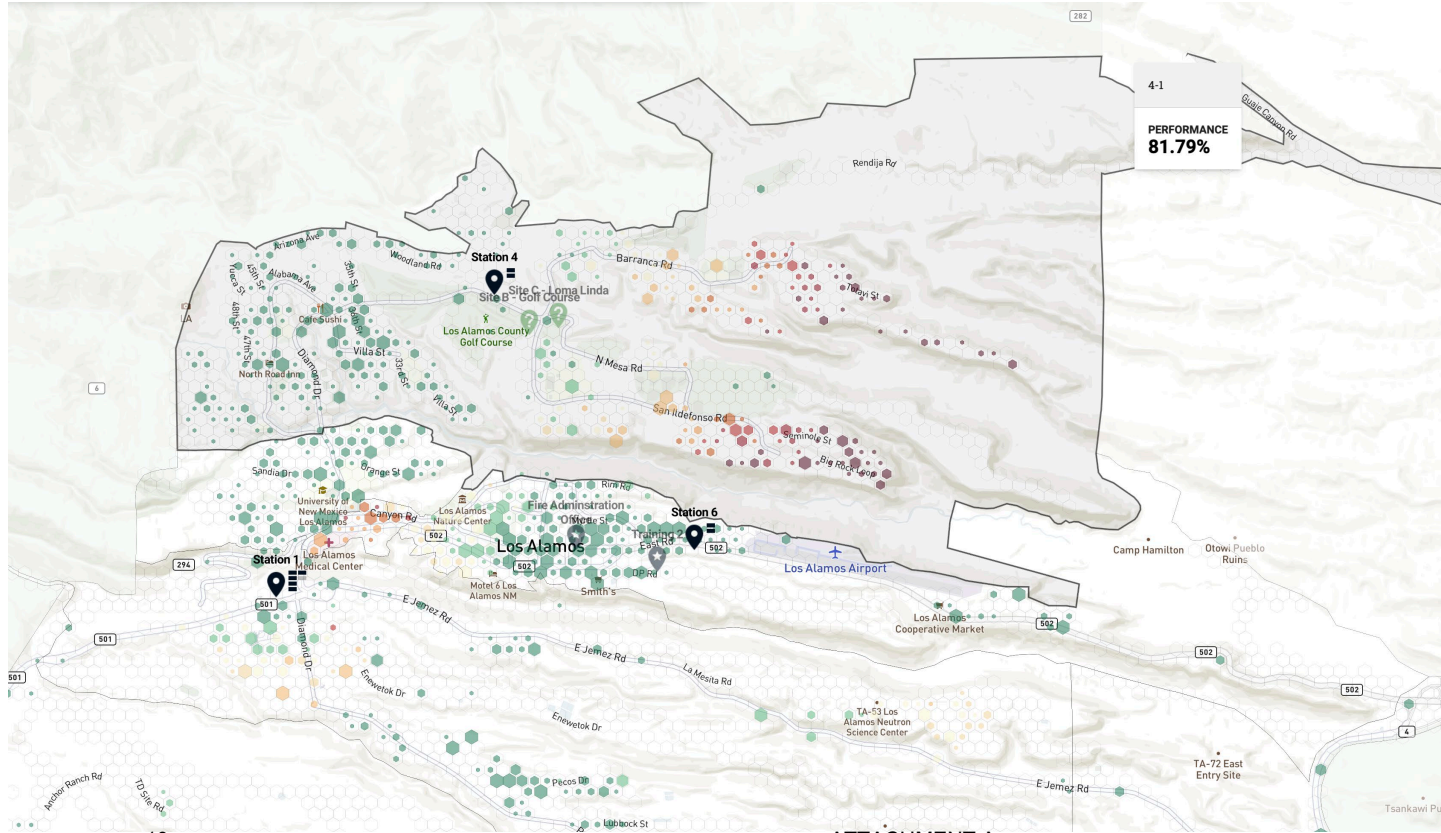


# Site Selection: Phase Overview

## Public Meetings:

- 1<sup>st</sup> Community Meeting **9/23/24**
  - Survey closes **10/07/24**
- 2<sup>nd</sup> Community Meeting **10/15/24**
  - Present conceptual site plans
  - Present Site, Environmental and Response Time studies, Present Conceptual Estimates
  - Discussion of Pros/Cons
- 3<sup>rd</sup> Neighborhood Meeting **10/21/24**
  - Present additional site context information
- County Council Presentation **11/12/24**

# Site Selection: Area Served



# Site Selection: Site Overview



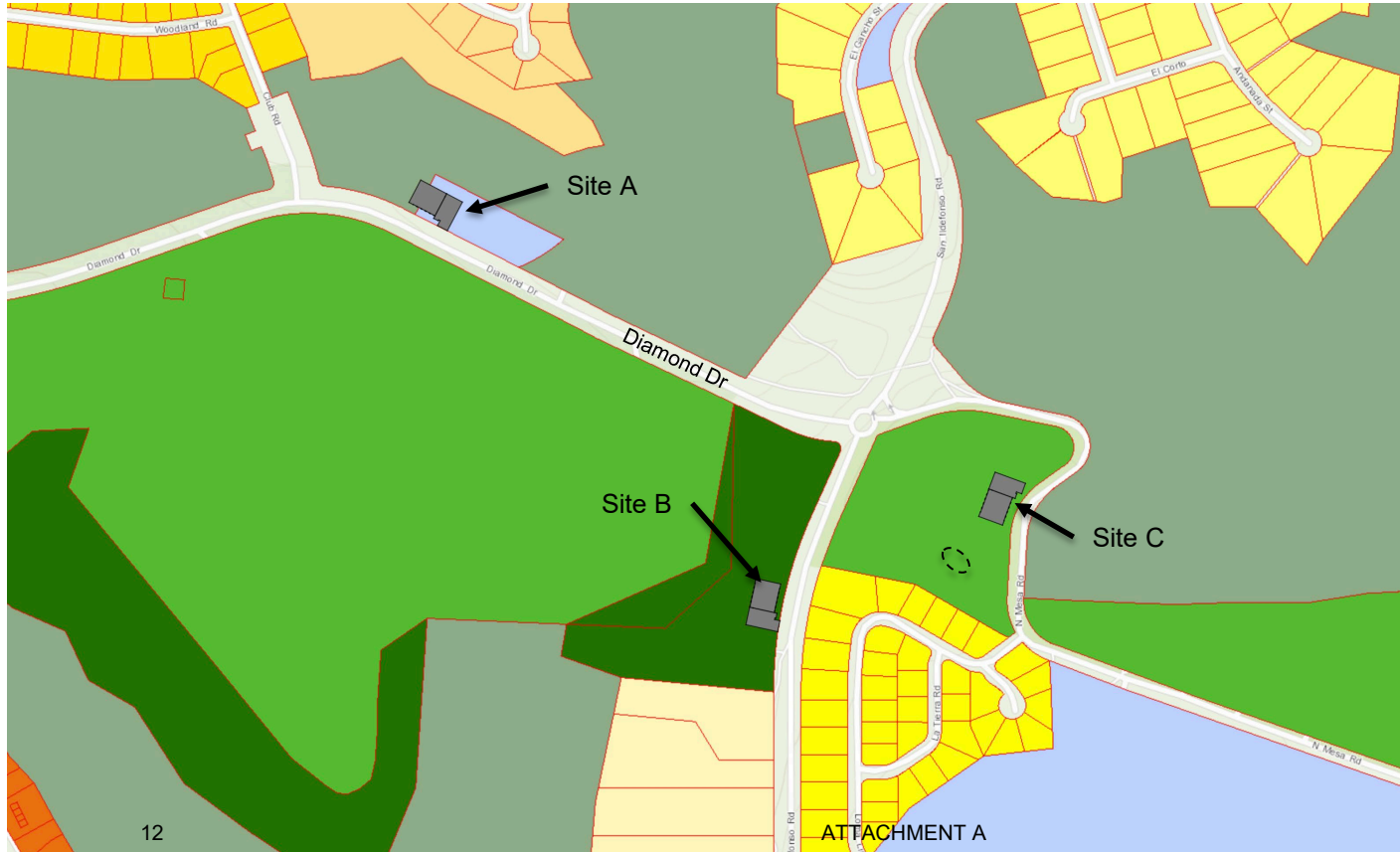
Site A  
3D Virtual Tour

Site B  
3D Virtual Tour

Site C  
3D Virtual Tour

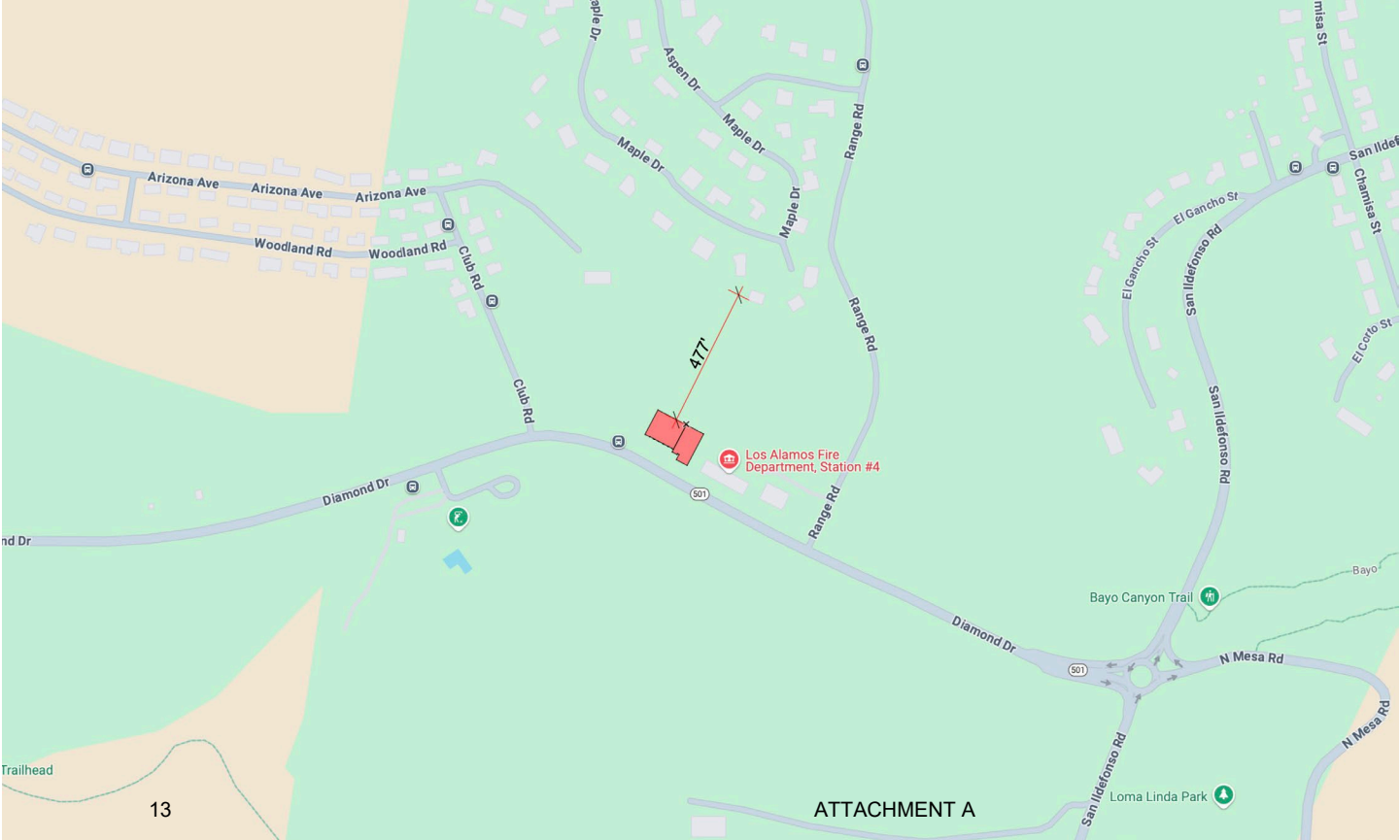
Virtual Tour of Proposed Sites  
Provided on Project Webpage

# Site Selection: Zoning Overview

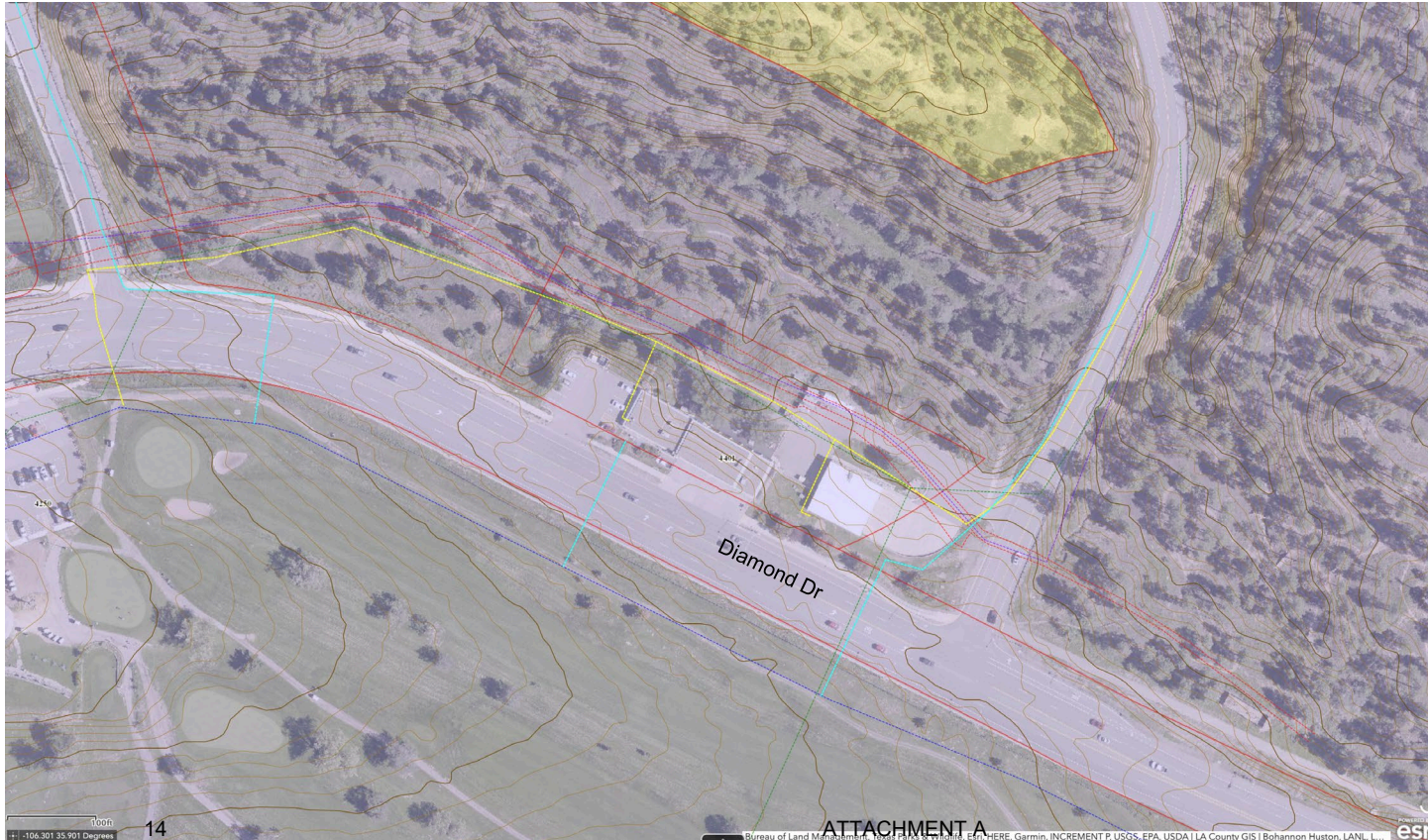


- OS-RO Recreational
- OS-AO Active
- OS-PP Public Parks
- OS-PO Passive
- INS Institutional
- RE Residential Estate
- SFR-1 Single-Family Res
- SFR-2 Single-Family Res
- SFR-3 Single-Family Res
- SFR-4 Single-Family Res

# Site Selection: Site A

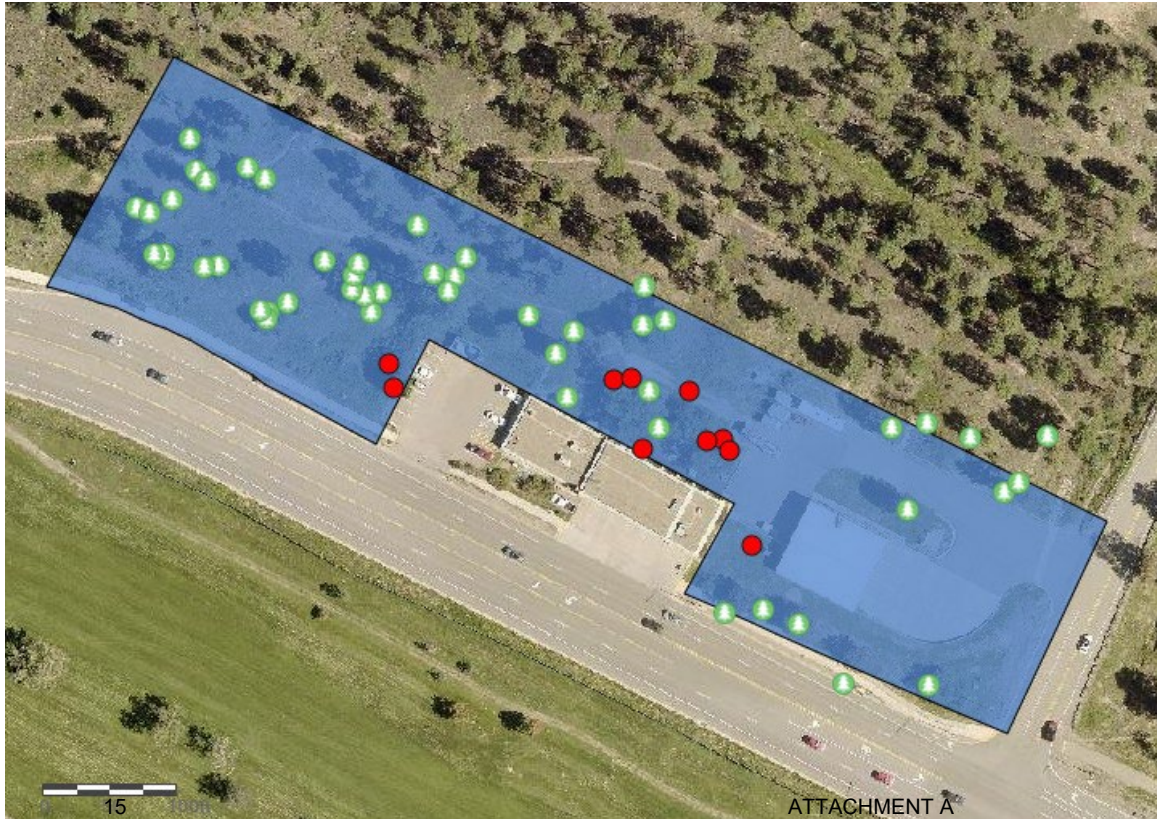


# Site Selection: Site A



- Water Main
- Electric Underground
- Electric Overhead
- Non-Potable Water
- Gas
- Sewer

# Site A: Tree Survey



## Tree Inventory within the Study Area:

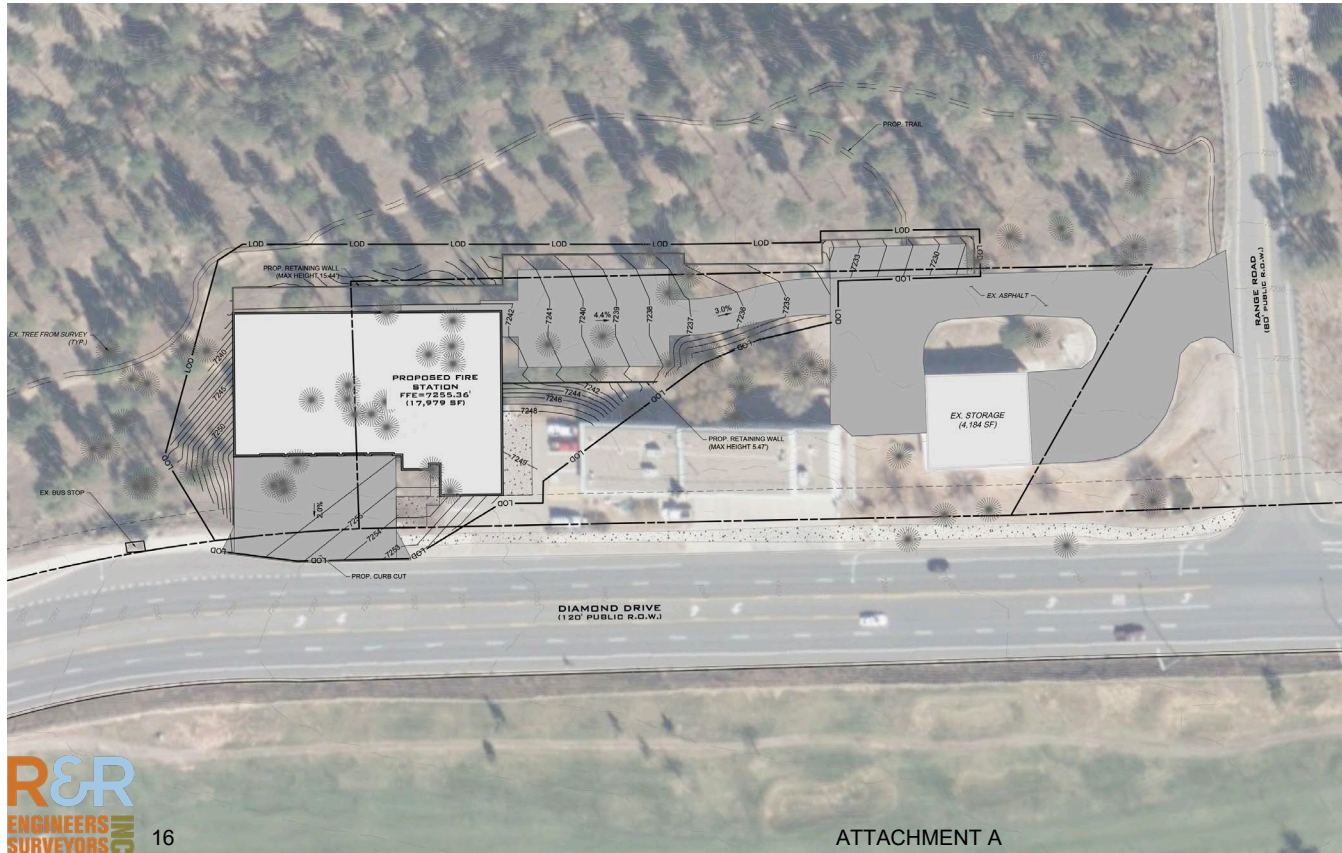
- 5 Juniper
- 24 Ponderosa
- 16 Siberian Elm
- 2 Other

## Dead, Diseased, or Invasive Trees Identified for Removal:

- 1 Ponderosa
- 1 Juniper
- 8 Siberian Elm
- 1 Russian Olive
- 1 Plum

The blue shaded area illustrates a broad potential area of impact.

# Site Selection: Site A



Based on a preliminary building footprint, roughly 20 trees may require removal; 2 of which are categorized as dead, diseased, or invasive.

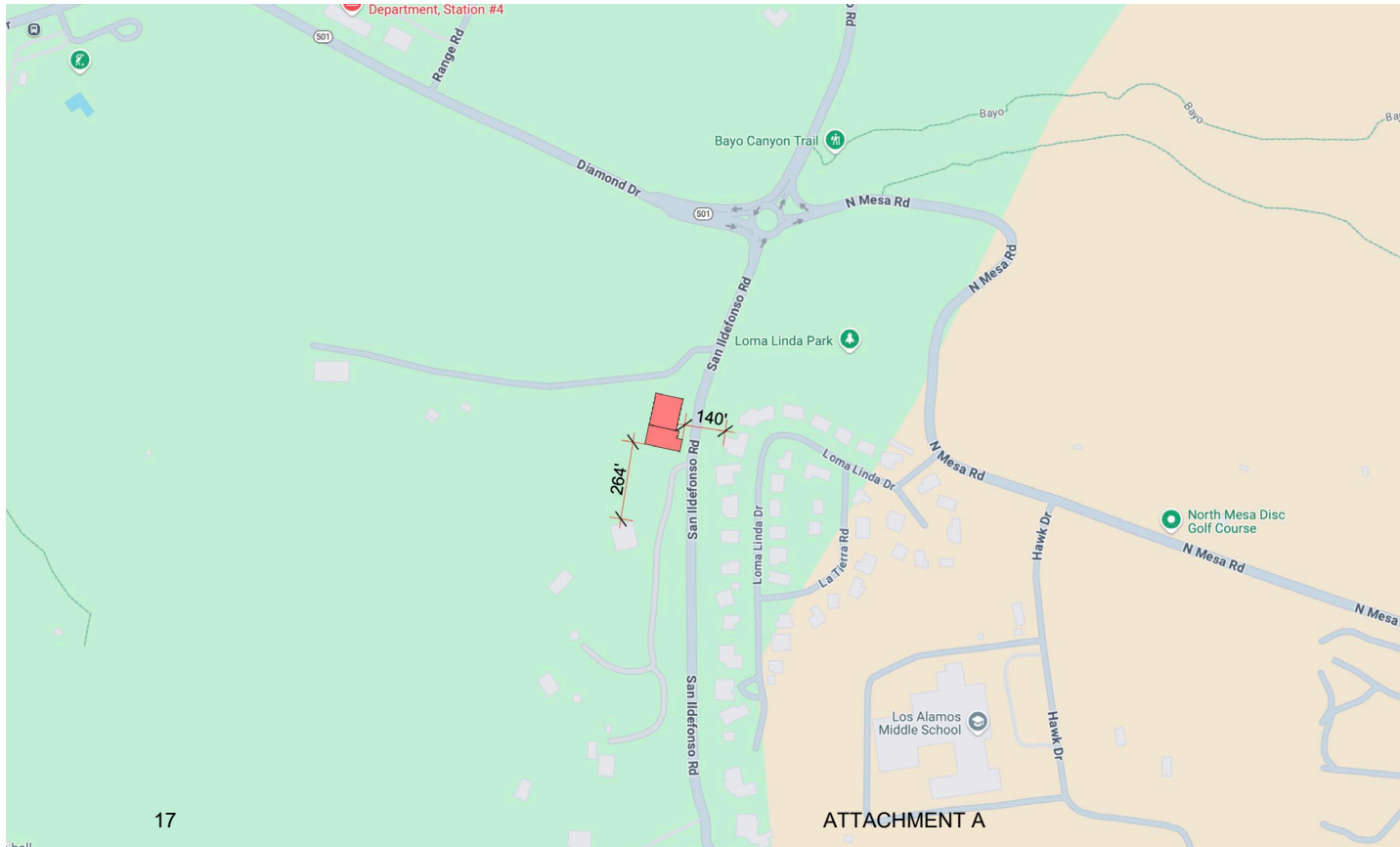
Existing topography is a challenge.

Utilities are readily available.

Traffic, access and open space considerations.



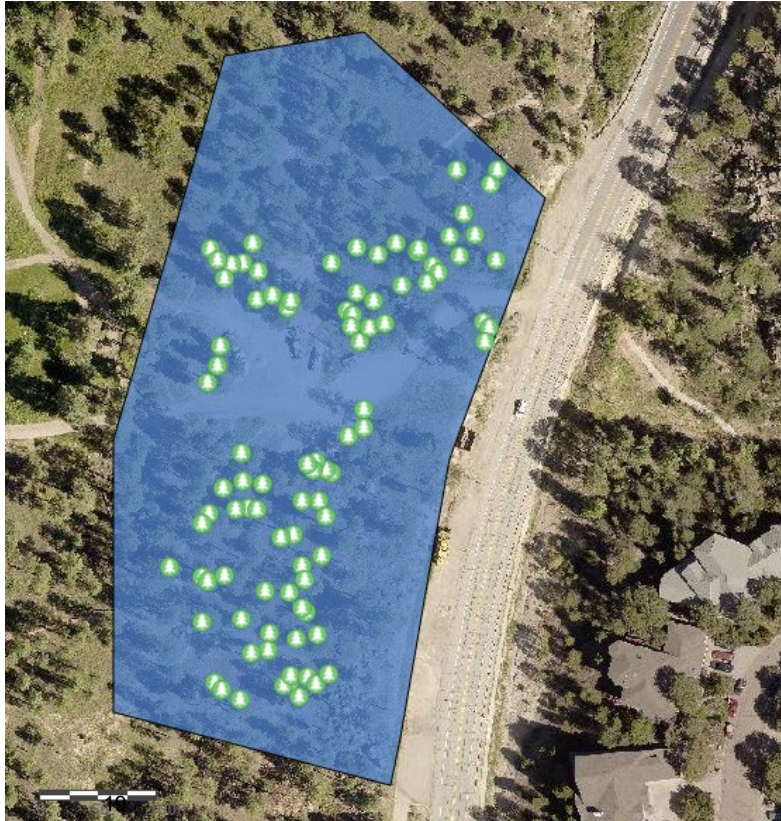
# Site Selection: Site B



# Site Selection: Site B



# Site B: Tree Survey



ATTACHMENT A

## Tree Inventory within the Study Area:

All Trees are Ponderosa

## Dead, Diseased, or Invasive Trees Identified for Removal:

None

The blue shaded area illustrates a broad potential area of impact.

# Site Selection: Site B



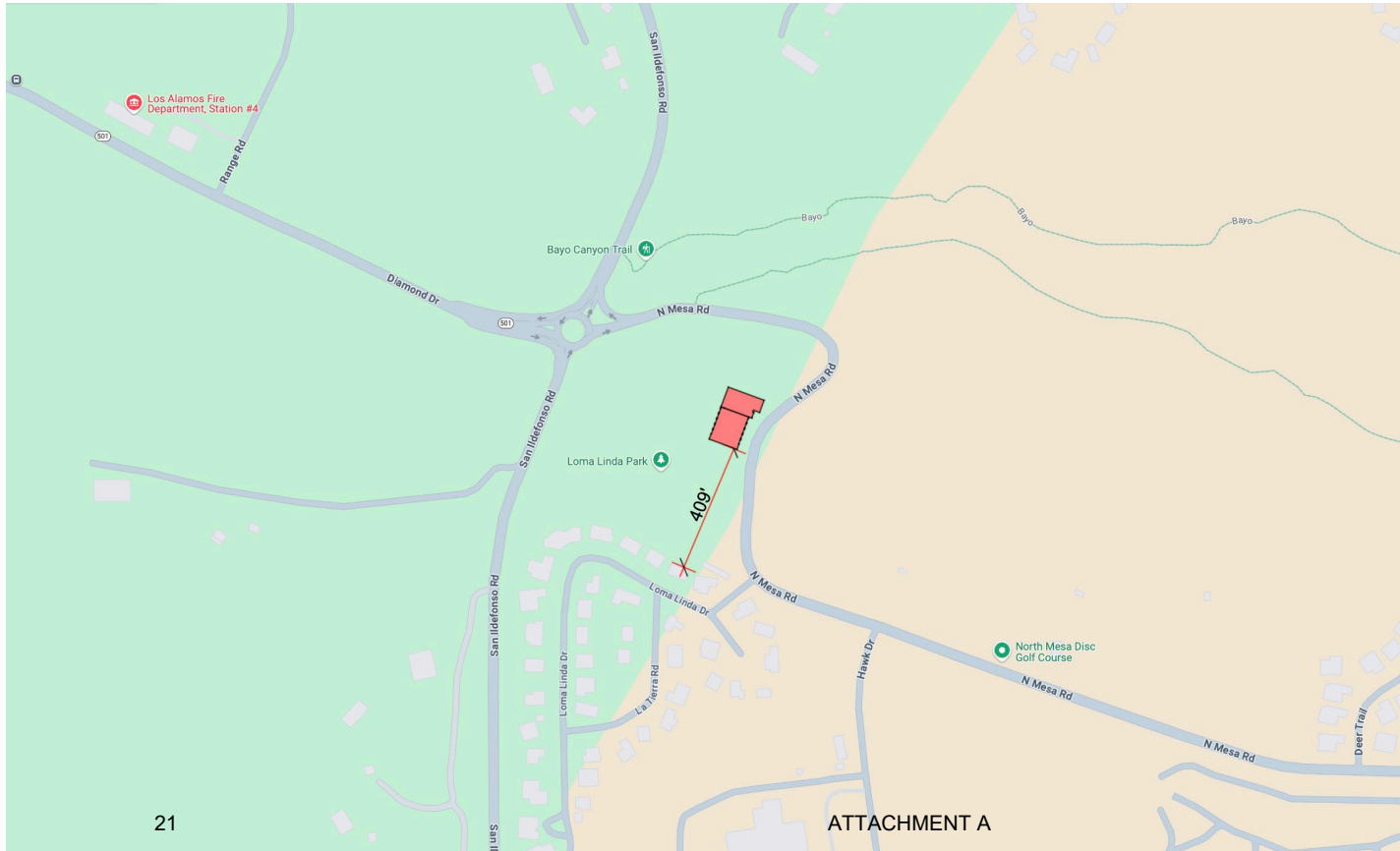
Based on a preliminary building footprint, roughly 40 trees may require removal; there are no Dead, Diseased, or Invasive trees on this site.

Existing topography.

Utility considerations.

Traffic, access and open space considerations.

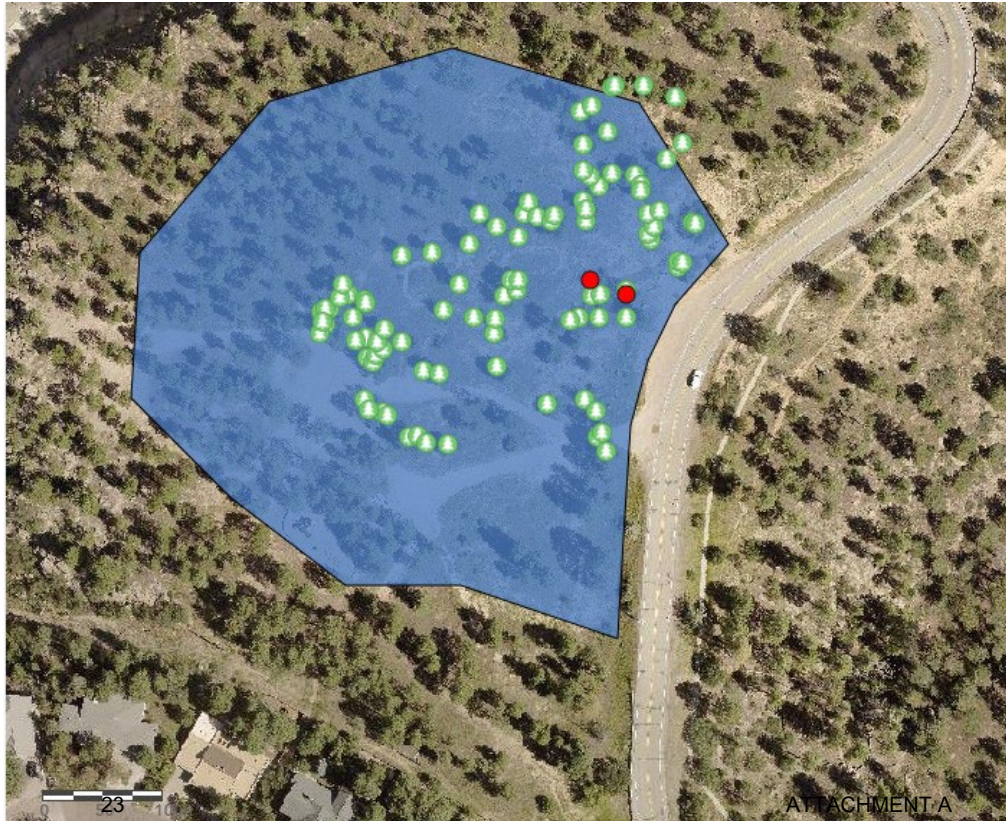
# Site Selection: Site C



# Site Selection: Site C



# Site C: Tree Survey



## Tree Inventory within the Study Area:

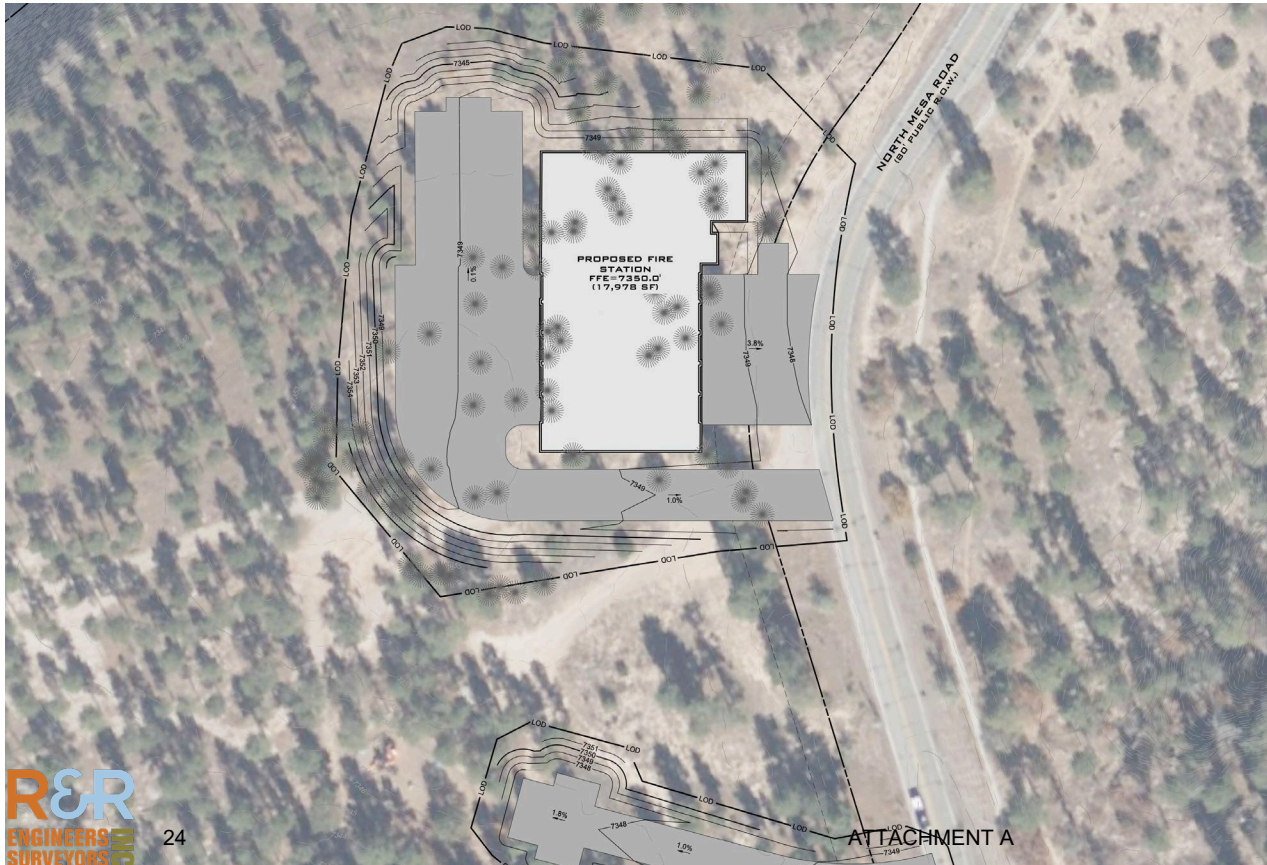
17 Juniper  
90 Ponderosa

## Dead, Diseased, or Invasive Trees Identified for Removal:

1 Ponderosa  
1 Juniper

The blue shaded area illustrates a broad potential area of impact.

# Site Selection: Site C



Based on a preliminary building footprint, roughly 50 trees may require removal; 2 of which are categorized as Dead, Diseased, or Invasive.

Existing topography.

Utility considerations.

Traffic, access and open space considerations.



# Site Design Analysis

## Site A

## Site B

## Site C

### Pro's

- Immediate access to large road
- All utilities immediately available
- 2<sup>nd</sup> floor works well with existing grade
- Smaller limit of disturbance
- Minimal disturbance of existing trails

- Utility access available

- Minimal earthwork anticipated
- Minimal fill anticipated
- Utility access available

### Con's

- Significant fill required
- Significant retaining walls required
- Relocation of stormwater main anticipated

- Overhead utilities will need to be relocated
- Utility service extensions anticipated and Lift station may be required
- Significant rock outcroppings will need to be removed
- Significant fill will be required
- Substantial reconfiguration of existing trails anticipated

- Grade of North Mesa Rd may cause difficulties during winter months
- Utility service extensions anticipated

### Zoning

- Rezoning required if lot lines are adjusted which is anticipated

- Lot Split and Rezoning required

- Lot Split and Rezoning required

# Conceptual Estimates of Cost

Site	Site A (28,000 GSF*)	Site B (28,000 GSF*)	Site C (28,000 GSF*)
Fire Station	\$12,000,000	\$ 12,000,000	\$ 12,000,000
Site Improvements	\$ 1,000,000	\$ 2,000,000	\$ 1,000,000
<b>TOTAL</b>	<b>\$13,000,000</b>	<b>\$ 14,000,000</b>	<b>\$ 13,000,000</b>

\*Additional Storage of approximately 10,000sf has been included in the conceptual estimates for all three sites for comparison purposes. For Site A, this is anticipated to be located below the main level which will offset some site improvement costs. For Sites B and C, it is anticipated that this will be built on grade.

# Site Selection: Survey Results

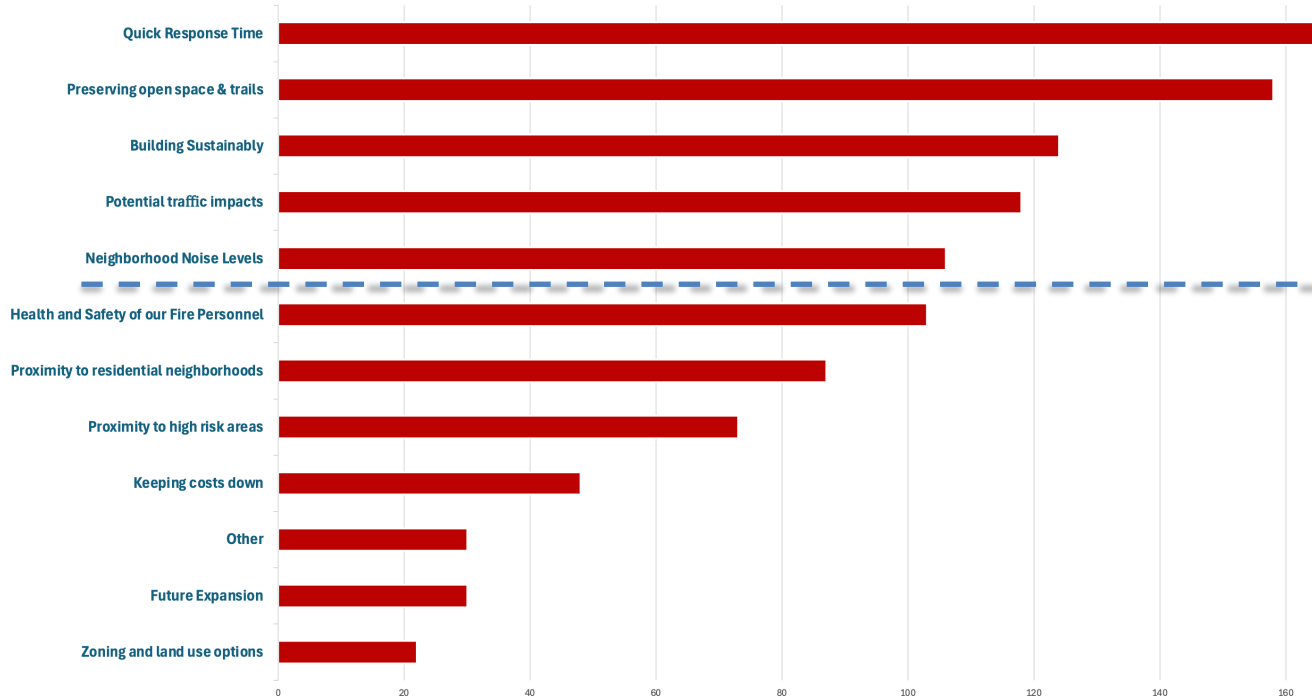
**Total Respondents: 251**

## **Main Takeaways:**

- Neighborhood is used to current site from a noise and traffic perspective
- Strong desire to limit disturbance of open space
- Site A is preferred
- Site B will disturb too many trails and wildlife corridors
- Site C has traffic complications and will disrupt a community park.

# Site Selection: Survey Results

What are the top five factors most important to you as the County considers which of the three sites to build the new Fire Station 4?

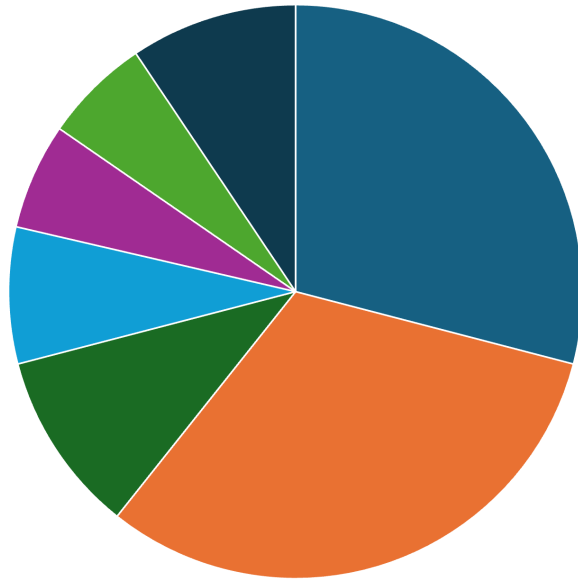


## Comment Themes:

- Neighborhood is used to current site from a noise and traffic perspective
- Limit disturbance of open space
- Site A is preferred
- Site B will disturb too many trails and wildlife corridors
- Site C has traffic complications and will disrupt a community park.

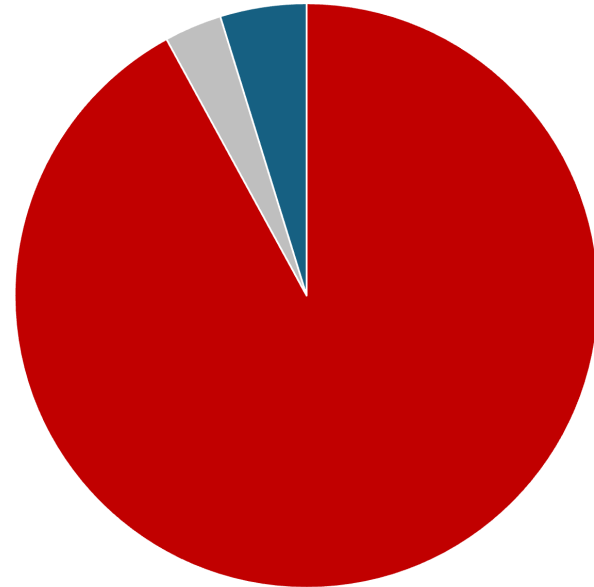
# Site Selection: Survey Results

## Where do you live?



- North Community
- Barranca Mesa
- Downtown / Eastern Area
- Other
- North Mesa
- Western Area
- White Rock

## Which site do you prefer?



- Site A
- Site B
- Site C

# Site Comparison Matrix

Site	Site A	Site B	Site C
Community Support	+	-	-
Natural Resources	+	=	=
Fire Response Time	=	=	=
Construction Cost	+	-	+
Distance to Residential	+	-	=

# Discussion & Questions



**Full Report available on Project Website @:**

<https://www.losalamosnm.us/County-Projects/Fire-Station-4-Replacement-Site-Selection>

