

REPORT

# HIGH FOREST ESTATES SUBDIVISION

+ *Wildland Fire & Hazard Mitigation Plan*

+ *Water Supply Analysis*



## PREPARED FOR

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Proposal #: FBS-COSP-26-009  
Report #: 1VLC26005.000  
Date: April 15, 2026

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### *Revision Record Summary*

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<i>Revision</i>	<i>Revision Summary</i>
0	Initial Delivery

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## 1.0 Introduction

El Paso County Land Development Code (LDC) Section 6.3.3 requires the preparation of a Fire Protection Report and a Wildland Fire and Hazard Severity Analysis (Wildland Fire and Hazard Mitigation Plan) for all subdivision applications. These reports are intended to evaluate and document key elements related to fire protection, including the responding fire authority's capabilities, available water supply, emergency access, and site-specific wildfire mitigation measures. The findings and recommendations are subject to review and approval by El Paso County and the Elbert County Fire Protection District (EFPD).

The High Forest Estates Subdivision, located at 8855 Walker Road in the northwestern portion of El Paso County, encompasses approximately 13.81 acres. The proposed project would subdivide the property into two (2) lots: one (1) 5.0-acre parcel and one (1) 8.81-acre parcel. The site currently includes an existing homestead, and while future development is anticipated, no specific timeline has been established. Although the property is located within El Paso County jurisdiction, it is served by EFPD, which presents a unique jurisdictional consideration for fire protection planning and response.

This report provides an overview of existing site conditions, the proposed subdivision layout, EFPD response capabilities, available water supply, and fire department access. In recognition of the property's location within a designated wildfire risk area, a separate Wildfire Mitigation Plan has been prepared to further evaluate hazards and recommend site-specific mitigation strategies. This is included in the **Wildland Fire and Hazard Severity Analysis Section 8.0**.

## 2.0 Applicable Codes and Standards

The following codes and standards apply to the High Forest Estates Subdivision:

- + El Paso County Land Development Code (LDC), May 2023 Edition
- + International Fire Code (IFC), 2021 Edition, as adopted by EFPD
- + EFPD Rural and Non-Hydrant Standards (NFPA 1142-based)
- + 2025 Colorado Wildfire Resiliency Code (reference) Existing Site and Conditions

## 3.0 Existing Site and Conditions

The property, owned by Paula Donohoo and Brian Frazier, is located at 8855 Walker Road in Colorado Springs, Colorado. The site encompasses approximately 13.81 acres (**Figure 1**) and is developed with two existing structures associated with a rural residential homestead. The surrounding area is characterized by low-density development and open landscapes typical of the region.

Primary access to the property is provided by an approximately 760-foot-long gravel driveway extending from Walker Road. The driveway ranges from 12 to 15 feet in width (**Figure 2**) and is in good condition, providing adequate access for passenger vehicles and emergency response apparatus. The alignment is relatively straight with gentle grades, allowing for safe and efficient ingress and egress.

The site consists predominantly of gently sloping terrain with a slight grade running from west to east. Vegetation is primarily composed of perennial grasses, dominated by brome (cheatgrass), with minimal presence of shrubs or trees. A drainage feature traverses the southern portion of the property from east to west and includes a small holding pond (**Figure 3**). While the pond may retain water seasonally, it is not considered a reliable or accessible water source for fire suppression purposes due to its limited capacity and lack of infrastructure.

The property has been proactively managed to reduce wildfire risk and is maintained in accordance with FIREWISE USA recommendations. Vegetation across the site is regularly mowed and maintained at a height of approximately 4 inches or less, significantly reducing available fuel loading. Defensible space has been established and maintained around both structures, including the removal of combustible materials and the reduction of vegetation in accordance with recommended Home Ignition Zone (HIZ) practices. These efforts contribute to an overall reduction in wildfire vulnerability and improve the likelihood of successful structure protection in the event of a fire.



Figure 1 - Property Exhibit



Figure 2 - Property Driveway



Figure 3 - Property Holding Pond

The existing structures (**Figure 4**) are not equipped with automatic fire protection systems. Additionally, the property does not have a centralized water system or fire protection cistern. Fire suppression water is currently provided through EFPD’s mobile (hauled) water capabilities, supplemented by mutual and automatic aid partners. **Table 1** provides dimensions for the existing structures.

Table 1 - Existing Structures and Size

<i>Structure Type</i>	<i>Size</i>
Home	1,814 ft <sup>2</sup>
3-Car Garage, including breezeway	832 ft <sup>2</sup>



Figure 4 - Existing Residential Structures

## 4.0 Proposed Subdivision

The proposed subdivision will divide the 13.81-acre parcel into two lots:

- + One (1) 5.0-acre lot for future residential development
- + One (1) 8.81-acre lot retaining the existing residence and structures

The property is located near the intersection of Walker Road and Table Rock Road. Access will continue to be provided by the existing 760-foot gravel driveway extending east from Walker Road, approximately 400 feet north of the intersection.

Fire protection services for future development will be provided by EFPD. All applicable codes and standards in effect at the time of construction, including the 2021 IFC, NFPA 1142, the Colorado Wildfire Resiliency Code, and the El Paso County LDC will be enforced.

At this time, no construction timeline has been established for the undeveloped lot.

### 4.1 SUBDIVISION PARAMETERS

The property owners (Donohoo/Frazier) have established the following parameters for future development:

1. Development will be limited to residential dwellings and accessory structures.
2. All structures will comply with applicable fire code requirements in effect at the time of construction.
3. Development will be guided by EFPD and El Paso County LDC requirements.

Any deviation from these parameters will require review and approval by EFPD and El Paso County.

## 5.0 Elbert County Fire Protection District (EFPD)

EFPD is a combination career and volunteer fire department consisting of three stations, approximately 30 personnel, and administrative staff. The department provides emergency medical, fire suppression and all hazard services. The department staffs eight firefighters per shift and provides service across approximately 186 square miles, in both Elbert and El Paso counties, serving a population of approximately 27,000 people. (2022 census)

Fire protection for the High Forest Estates Subdivision will be provided by Station 233, as identified in the Fire Commitment Letter (**Appendix D**).

### 5.1 SERVICES

Station 233, located at 700 County Road 98 in Elbert, Colorado, provides all-hazards emergency response services, including:

- + Structural and wildland fire suppression
- + Advanced life support (ALS) and patient transport
- + Technical rescue services
- + Vehicle extrication and entrapment response
- + Hazardous materials response

EFPD also maintains a Fire Prevention and Code Compliance Division responsible for development review and inspections.

## 5.2 APPARATUS

Station 233 operates the following apparatus:

- + Engine 233 (750-gallon capacity)
- + Medic 233
- + Brush 233 (750-gallon capacity)
- + Squad 233 (300-gallon capacity)



Figure 5 - EFPD Engine 233

## 5.3 STRATEGIC PARTNERSHIPS

EFPD participates in automatic and mutual aid agreements with surrounding agencies, including Black Forest Fire Protection District and Monument Fire Protection District. These partnerships enhance response capabilities through additional personnel, apparatus, and water delivery resources.

EFPD also maintains a Memorandum of Understanding with El Paso County for commercial plan review and inspections. Residential plan review and inspection services are provided through the Pikes Peak Regional Building Department.

## 5.4 RESPONSE TIME

The two closest fire stations to the site (EFPD Station 233 and Black Forest Station 2) were evaluated for response time.

Estimated response times (**Table 2**) were calculated using travel distance and an average response speed of 35 mph, consistent with RAND Corporation guidance for emergency response under typical conditions. **Appendix B** provides a map indicating station locations.

Table 2 - Estimated Fire Department Response Times to 8855 Walker Road

Agency	Station	Address	Distance	Time
EFPD	Station 233	700 County Road 98 Elbert, CO 80106	11 Miles	17 min
BFFD	Station 2	16465 Ridge Run Drive Colorado Springs, CO 80908	3.9 Miles	6 min

## 6.0 Fire Department Access

Fire department access is defined by the fire code as a road that provides fire apparatus access from a fire station to a facility, building or portion thereof.

### 6.1 ACCESS ROADS

The property is located at the intersection of Walker Road and Table Rock Road. Primary access is provided by an approximately 760-foot-long, 12-foot-wide gravel driveway extending east from Walker Road, approximately 400 feet north of its intersection with Table Rock Road.

Walker Road and Table Rock Road consist of engineered, compacted, self-draining gravel road base. The on-site driveway is similarly constructed and is considered capable of supporting heavy fire apparatus.

Due to the presence of a well and leach field, fire apparatus access will be limited to the established roadway and driveway system. Turnaround provisions for fire apparatus should be evaluated and approved by EFPD.

Additionally, direct fire apparatus access to the drainage feature or holding pond (**Figure 3**) on the southern portion of the property is not required for compliance with the El Paso County Land Development Code and will be delivered through mobile operations as described in the **Water Supply**.

### 6.2 NON-ROAD ACCESS (DRIVEWAY)

Where any portion of a future structure is located more than 150 feet from an access road, a driveway will be provided in accordance with Section 6.3.3 of the LDC.

The driveway will meet the following minimum requirements:

- + Minimum unobstructed width of 10 feet
- + Minimum vertical clearance of 13 feet 6 inches

### 6.3 GATES

No gates are currently proposed. Should gates be installed in the future, they will comply with applicable fire code requirements, including:

- + Placement a minimum of 30 feet from the public right-of-way
- + Inward-swinging operation

Any gated access equipped with locking mechanisms will be subject to review and approval by EFPD to ensure emergency access is maintained.

## 6.4 PREMISE IDENTIFICATION

Following subdivision, the existing address (8855 Walker Road) will be replaced with two separate addresses. Address identification will be clearly visible from Walker Road.

Address markers will be installed at each structure and at the entrance to each driveway or access point in accordance with IFC Section 505.1. Address numbers will:

- + Be a minimum of 4 inches in height
- + Have a minimum stroke width of 0.5 inches
- + Be displayed on a contrasting background for visibility

Final addressing and signage requirements should be confirmed with EFPD and El Paso County.

## 7.0 Construction in Wildland Fire Area

The proposed subdivision involves construction within a designated wildland fire per Colorado State Forest Service and El Paso County.

### 7.1 GENERAL

The proposed subdivision is located within a designated wildland fire area. As such, the requirements of LDC Section 6.3.3(D) apply and are addressed within this report in the Wildland Fire and Hazard Severity Analysis section.

Per LDC requirements, a site-specific wildfire risk and hazard mitigation plan must be prepared by a qualified professional and tailored to the stage of development and construction.

An on-site evaluation was conducted in March 2026. Based on Colorado State Forest Service modeling, the property is classified as having a low to moderate wildfire risk. The site is well maintained, and mitigation measures are actively implemented.

The predominant fuel type brome grass has been maintained at a height of 4 inches or less for a distance of at least 200 feet from all structures and along driveway access (see **Figure 6**). This level of maintenance is sustained year-round by the property owners.



Figure 6 - Property Lawn Maintenance

## 8.0 Wildland Fire and Hazard Severity Analysis

This is prepared in accordance with El Paso County Land Development Code Section 6.5 – Wildfire Hazard Areas

### 8.1 SITE DESCRIPTION AND WILDFIRE HAZARD CLASSIFICATION

The property located at 8855 Walker Road is situated within a wildfire hazard area as designated by the Colorado State Forest Service and regulated under El Paso County Land Development Code (LDC) Section 6.5. The site is located in northern El Paso County near the Elbert County boundary and encompasses approximately 13.81 acres.

The property consists of gently sloping terrain descending from west to east with a west-northwest aspect. Vegetation is dominated by perennial grasses, primarily brome, with minor intermixed grasses and weeds. These fuels are classified as short grass fuel models, consisting of fine fuels less than ¼ inch in diameter and generally under 20 inches in height.

Seventeen small, immature (less than 5 feet tall) ponderosa pines are scattered throughout the site. These trees are widely spaced, exhibit signs of stress, and do not contribute to ladder fuels or vertical fuel continuity.

An existing 1,814-square-foot, wood-frame single-family residence is located in the northeast portion of the property. The structure has been mitigated to a level exceeding the recommendations of FIREWISE USA and NFPA 1144/1141 Home Ignition Zone (HIZ) standards (see **Figure 7**).



Figure 7 - Property HIZ

Based on existing site conditions, fuel characteristics, and fire history, the overall wildfire hazard classification for the property is considered low to moderate, consistent with Colorado State Forest Service modeling and LDC risk considerations.

## 8.2 WILDFIRE HAZARD AND FIRE BEHAVIOR ASSESSMENT

In accordance with LDC Section 6.5.3, wildfire hazard is evaluated based on fuel type, fuel loading, topography, weather patterns, and potential fire behavior.

Fuel loading on the site is minimal and primarily composed of continuous fine fuels (short grasses). While these fuels can support rapid rates of fire spread, they generally produce lower fire intensity compared to timber or heavy brush fuel models unless influenced by extreme weather conditions.

Under conditions of high wind, low humidity, and cured fuels, grass fires may produce flame lengths up to 20 feet and spread rapidly across the landscape. These fine fuels may act as carrier fuels, increasing the likelihood of fire spread to structures.

The area is a high desert environment with low humidity, periodic drought, and limited fuel moisture recovery. Fire risk peaks from late spring through summer when grasses cure and become more ignitable. Despite these factors, the following conditions reduce overall wildfire hazard:

- + Limited fuel loading and absence of heavy or dense vegetation
- + Lack of ladder fuels and minimal vertical continuity
- + Sparse development and low ignition source density
- + No significant wildfire history (greater than one acre) within the past 20 years

The primary wildfire risk to the property is associated with wind-driven grass fires, rather than high-intensity heavy fuel loading fire behavior.

## 8.3 COMPLIANCE WITH LDC MITIGATION REQUIREMENTS

This Wildland Fire and Hazard Mitigation Plan addresses the required components of LDC Section 6.5, including:

- + Emergency access and evacuation
- + Fuel modification and defensible space
- + Water supply for fire suppression
- + Ignition resistance and reduction measures

## 8.4 EMERGENCY ACCESS, EGRESS, AND EVACUATION

In accordance with LDC Section 6.5.6, safe and adequate access for emergency response and evacuation is critical.

Access to the property is provided via an approximately 760-foot-long gravel driveway connecting to Walker Road. The nearest major through route is Black Forest Road, located approximately 1.5 miles from the site.

Residents shall maintain situational awareness by monitoring fire weather conditions and emergency notifications issued by El Paso and Elbert Counties. In the event of a wildfire:

- + Pre-evacuation notices should prompt immediate preparation to evacuate
- + Mandatory evacuation orders shall be followed without delay
- + Evacuation routes will be designated and managed by the El Paso County Office of Emergency Management and local law enforcement agencies

Early evacuation is strongly emphasized as the primary life safety measure.

## 8.5 FUEL MODIFICATION AND DEFENSIBLE SPACE

Fuel modification measures are designed to comply with LDC Section 6.5.7 and reduce fire intensity, rate of spread, and structure ignition potential.

Defensible space shall be maintained in accordance with FIREWISE USA and NFPA standards, including:

- + Zone 1 (0–5 feet): Non-combustible materials and irrigated landscaping immediately adjacent to structures
- + Zone 2 (5–30 feet): Reduced and well-maintained vegetation with limited fuel continuity
- + Zone 3 (30–100 feet): Managed vegetation to reduce fuel loading and fire spread potential

Recommended fuel treatment practices include:

- + Mechanical Treatment: Maintain grasses at a height of 4 inches or less to reduce flame length and fire intensity
- + Irrigation: Apply irrigation in Zones 1 and 2 to increase fuel moisture and reduce ignition susceptibility
- + Grazing: Utilize grazing where feasible to reduce fuel continuity across the site
- + Prescribed Burning: Conduct agricultural burning in compliance with state and local regulations to reduce accumulated fuels

These measures are consistent with LDC intent to modify fire behavior and improve defensibility of structures.

## 8.6 WATER SUPPLY FOR FIRE PROTECTION

In accordance with LDC Section 6.5.8, water supply must be adequate to support wildfire suppression operations.

Initial emergency response from the EFPD is anticipated to include apparatus with a combined water capacity of approximately 1,800 gallons. Based on current site conditions, fuel characteristics, and expected fire behavior, this level of initial response is considered adequate for structure protection.

Ongoing compliance will include maintaining clear access for emergency apparatus and ensuring that any available water sources remain accessible and functional.

## 8.7 IGNITION RESISTANCE AND FIRE PREVENTION

Ignition potential on the property is low and consistent with LDC Section 6.5.5 objectives to reduce human-caused ignitions.

Key factors contributing to low ignition potential include:

- + Buried electrical service, minimizing risk from powerlines
- + Well-maintained site conditions with minimal combustible debris
- + Irrigated landscaping surrounding the residence
- + Limited human activity and absence of high-risk infrastructure

Common ignition sources such as equipment use, debris burning, and open flames (cooking and recreational fires) should continue to be managed in accordance with local regulations and fire restrictions.

## 8.8 CONCLUSIONS

The property meets the intent and applicable requirements of El Paso County LDC Section 6.5 for development within a wildfire hazard area.

While the site is located within a mapped wildfire risk area, the overall hazard is low to moderate due to limited fuel loading, absence of hazardous vegetation conditions, and implementation of mitigation measures.

The primary wildfire threat is limited to fast-moving, wind-driven grass fires. Implementation and ongoing maintenance of defensible space, fuel modification, and emergency preparedness measures will effectively reduce wildfire risk and support firefighter operations.

## 9.0 Water Supply Analysis

### 9.1 OVERVIEW

An adequate water supply is critical for fire protection at the proposed development. Due to the lack of a centralized system or cisterns, alternative water supply methods will be used. This report outlines applicable requirements and evaluates fire flow needs.

### 9.2 APPLICABLE CODES AND STANDARDS

In accordance with El Paso County Land Development Code (LDC) Section 6.3.3(C)(1)(a), a fire protection water supply is required for all development. In areas where a centralized water system is not available, this requirement defaults to NFPA 1142, Standard on Water Supplies for Suburban and Rural Fire Fighting.

Additionally, LDC Section 6.3.3(C)(1)(d) requires the installation of fire cisterns in areas without hydrants unless an alternative water supply is approved by the fire authority.

Per the Elbert Fire Protection District (EFPD) *Cistern and Dry Hydrant Specifications* (Section 1.1), fire cisterns are only required for subdivisions consisting of five (5) or more lots.

### 9.3 WATER SUPPLY REQUIREMENTS AND PLAN

Based on the parameters established in Section 4.1 and the NFPA 1142 analysis described in Section 6.3, the minimum required fire protection water supply for a 5,000 ft<sup>2</sup> Type V residential structure is calculated to be 4,284 gallons, assuming the installation of an NFPA 13D automatic sprinkler system. This value is preliminary and may vary depending on the final size, layout, and construction characteristics of any future residence. Final water supply requirements should be verified during the design phase in coordination with the El Paso County Fire Protection District Fire Marshal's Office.

Per El Paso County Land Development Code (LDC) Section 6.3.3(C)(1)(a), fire protection water supply is required. In areas without a centralized water system, supply must comply with NFPA 1142. Section 6.3.3(C)(1)(d) further requires fire cisterns unless an alternative is approved by the fire authority. According to El Paso County Fire Protection District "Cistern and Dry Hydrant Specifications," cisterns are only required for subdivisions of five or more lots; therefore, as the proposed development consists of two (2) lots, installation of a fire cistern is not required.

Fire protection water supply will instead be provided through mobile (hauled) water operations in accordance with NFPA 1142. The El Paso County Fire Protection District, along with mutual and automatic aid partners, can sustain an estimated 250 gallons per minute (gpm) under optimal conditions using a water shuttle system.

## 9.4 WATER SUPPLY ANALYSIS

In the absence of a centralized water supply, NFPA 1142 establishes minimum requirements for alternative water supplies for structural firefighting. The water supply may be provided by an on-site supply, a mobile water system, or a combination of both, as needed.

### NFPA 1142

Two equations are provided in Chapter 4 of NFPA 1142 for calculating the minimum water supply requirements for any proposed residential building. One equation accounts for exposures while the other does not. It has been determined that there will be no structures within 50 ft of the primary structure or the other existing structure on the property. Thus, this analysis is based solely on the equation that does not account for exposures.

The minimum water supply requirement is determined by using the following key components:

- + Total Volume of the Structure – The total volume of the structure is used to determine the size of the structure and the volume of potential combustible contents. This volume includes the attic, basement, and crawl space.
- + Occupancy Hazard Classification – This is a mathematical factor that quantifies the nature of the occupancy and how it will be used. The lower occupancy hazard classification number equates to an occupancy with a more severe hazard and a higher risk potential. These classifications are based on the quantity and combustibility of the contents, the rate of spread, and the heat release rate.
- + Construction Classification – This is a mathematical factor that quantifies the construction type of the structure. This factor is directly based on the construction type (I, II, III, IV, or V) of a structure. Construction types are determined based on the fire-resistance rating of multiple elements of the structure construction, including interior/exterior bearing walls, interior/exterior non-bearing walls, columns, beams, floors, and roofs. The lower the construction classification, the more resistive the construction is to fire.

The input parameters used for this analysis are summarized in **NOTE:** El Paso and Elbert County do not have a limit on single-family square footage. However, consultation with the El Paso County LDC, EFPD, and Black Forest Fire is highly recommended. In addition to building construction materials, fire suppression capability and response times should be a consideration for new construction. Calculations are based on a 5,000 ft<sup>2</sup> Type V (wood frame) structure.

Table 3. The evaluation assumes a single-family residential structure not exceeding 5,000 ft<sup>2</sup>, constructed as Type V (wood-frame) construction with typical residential building materials, similar to the existing structure on the property, with no adjacent exposures. (**Figure 4**).

**NOTE:** El Paso and Elbert County do not have a limit on single-family square footage. However, consultation with the El Paso County LDC, EFPD, and Black Forest Fire is highly recommended. In addition to building construction materials, fire suppression capability and response times should be a consideration for new construction. Calculations are based on a 5,000 ft<sup>2</sup> Type V (wood frame) structure.

Table 3 - NFPA 1142 Input Parameters

Input Parameters	Resulting Values
Occupancy Hazard Classification Number per NFPA 1142	7 – Dwelling
Construction Classification per NFPA 221	Type V (000)

Construction Classification Number per NFPA 1142	1.0 <sup>a</sup>
Total Structure Area (including Attics/Basement)	5,000 ft <sup>2</sup>
Average Ceiling Height	12 ft
Total Structure Volume	60,000 ft <sup>3</sup>
Exposure Distance within 50 feet	None
Automatic Sprinkler Protection	NFPA 13D

<sup>a</sup> Not to exceed 1.0 for dwellings, regardless of construction classification.

The minimum water supply calculation for structures without exposure hazards is used in accordance with NFPA 1142 Section 4.2.1, shown below as Equation 1.

**Equation 1:**  $WS_{min} = \frac{VS_{tot}}{OHC} (CC)$

where  $WS_{min}$  is the minimum water supply [gal],  $VS_{tot}$  is the total volume of the structure [ft<sup>3</sup>], OHC is the occupancy hazard classification number per NFPA 1142, and CC is the construction classification number per NFPA 1142.

**Equation 1 Result:**  $\frac{60,000}{7} (1.0) = 8,571 \text{ gal}$

The minimum fire protection water supply is calculated to be 8,571 gallons, prior to any sprinkler reductions.

### 9.5 WATER SUPPLY PLAN

Per El Paso County LDC Section 6.3.3(C)(1)(a), fire protection water supply is required. In areas without a centralized water system, supply must comply with NFPA 1142. Section 6.3.3(C)(1)(d) further requires fire cisterns unless an alternative is approved by the fire authority.

According to El Paso County Fire Protection District (EFPD) “Cistern and Dry Hydrant Specifications,” cisterns are only required for subdivisions of five or more lots. As the proposed development consists of two (2) lots, installation of a fire cistern is not required.

Fire protection water supply will be provided through mobile (hauled) water operations in accordance with NFPA 1142. EFPD and its mutual and automatic aid partners can sustain an estimated 250 gallons per minute (gpm) using a water shuttle system.

Additional fire safety information is available on the EFPD website (“Fire Information for Homeowners”), included as **Appendix C**

### 9.6 FIRE PROTECTION CAPABILITIES

Fire suppression services for the site are provided by EFPD, which utilizes a combination of Type 1 and Type 3 fire apparatus along with water tenders. These resources are supported by a robust mutual and automatic aid network, providing both structural and wildland firefighting capabilities.

The initial response from EFPD Station 233 is expected to include three apparatus with a combined onboard water capacity of approximately 1,800 gallons. Given current fuel conditions, fire risk, staffing levels, and anticipated response strategies, this initial response is expected to provide adequate water for effective wildland fire structure protection. Overall fire protection effectiveness is influenced by response time, water delivery logistics, and interagency coordination.

## 9.7 FIRE SPRINKLER CONSIDERATION

Based on the proposed lot sizes, the development does not meet the threshold requiring installation of automatic fire sprinkler systems under El Paso County Land Development Code requirements. Therefore, residential fire sprinklers are not required for the proposed lots.

## 9.8 RESIDENTIAL FIRE PROTECTION STRATEGY

Fire protection within the subdivision will rely on a combination of:

- + Compliance with applicable fire and building codes
- + Adequate emergency access
- + Implementation of defensible space
- + Utilization of mobile water supply operations

These measures, combined with available firefighting resources, provide a comprehensive approach to reducing fire risk and supporting suppression efforts.

## 9.9 CONCLUSIONS

The proposed development complies with applicable El Paso County LDC requirements and NFPA 1142 standards for fire protection water supply. Due to the small size of the subdivision, a fire cistern is not required.

The required fire protection water supply will be met through mobile (hailed) water operations supported by EFPD and its mutual aid partners. Based on the analysis, the estimated minimum water supply requirement of 4,284 gallons can be effectively supported under anticipated response conditions.

Final water supply and fire protection measures should be verified during the design phase in coordination with the EFPD Fire Marshal to ensure compliance with all applicable requirements.

### 10.0 Final Recommendations and Conclusions

The property at 8855 Walker Road has a low potential for catastrophic wildfire. Fuels consist primarily of approximately 13 acres of brome grasses with minor intermixed vegetation, and the primary value at risk is the existing residence. The property is well maintained, and the occupants demonstrate a strong awareness of the surrounding fire environment.

The single-family wood-frame structure has been mitigated to a level exceeding FIREWISE USA standards, including Zones 1, 2, and 3 (**Figure 8**). Surrounding grasses are consistently maintained at a height of 4 inches or less, including along the access driveway, which is in excellent condition. There are no combustible materials (e.g., debris, clutter, or wood storage) adjacent to or near the structure. Using standard National Wildfire Coordinating Group “Structure Triage” criteria, the property would be classified as defensible, and it is likely the structure could survive a wildfire event even without direct suppression efforts.

It is recommended that the occupants continue current mitigation and maintenance practices and apply them to any proposed structures. As an additional measure, and similar to the existing structure, installation of garden or lawn-type sprinklers is encouraged. The onsite well appears sufficient to support a domestic sprinkler system, which would help increase fuel moisture and further reduce potential fire intensity.

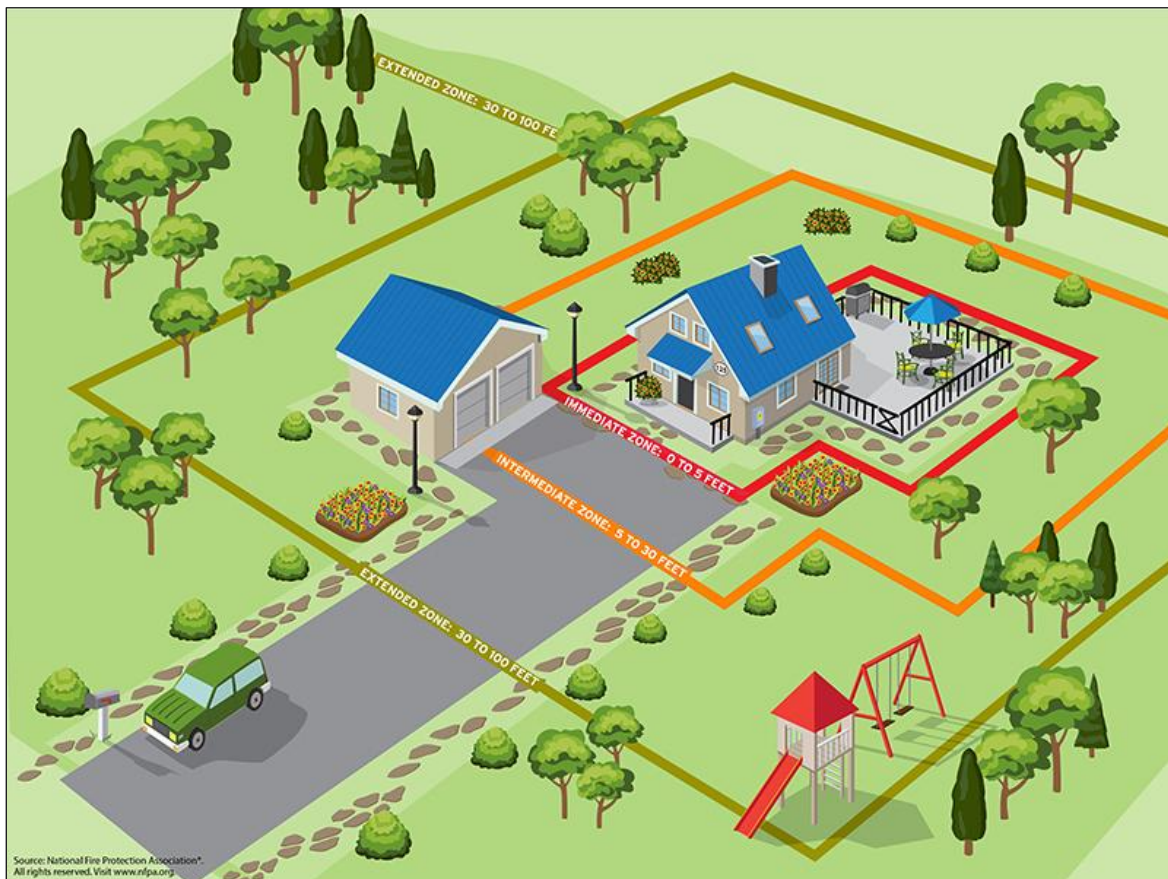
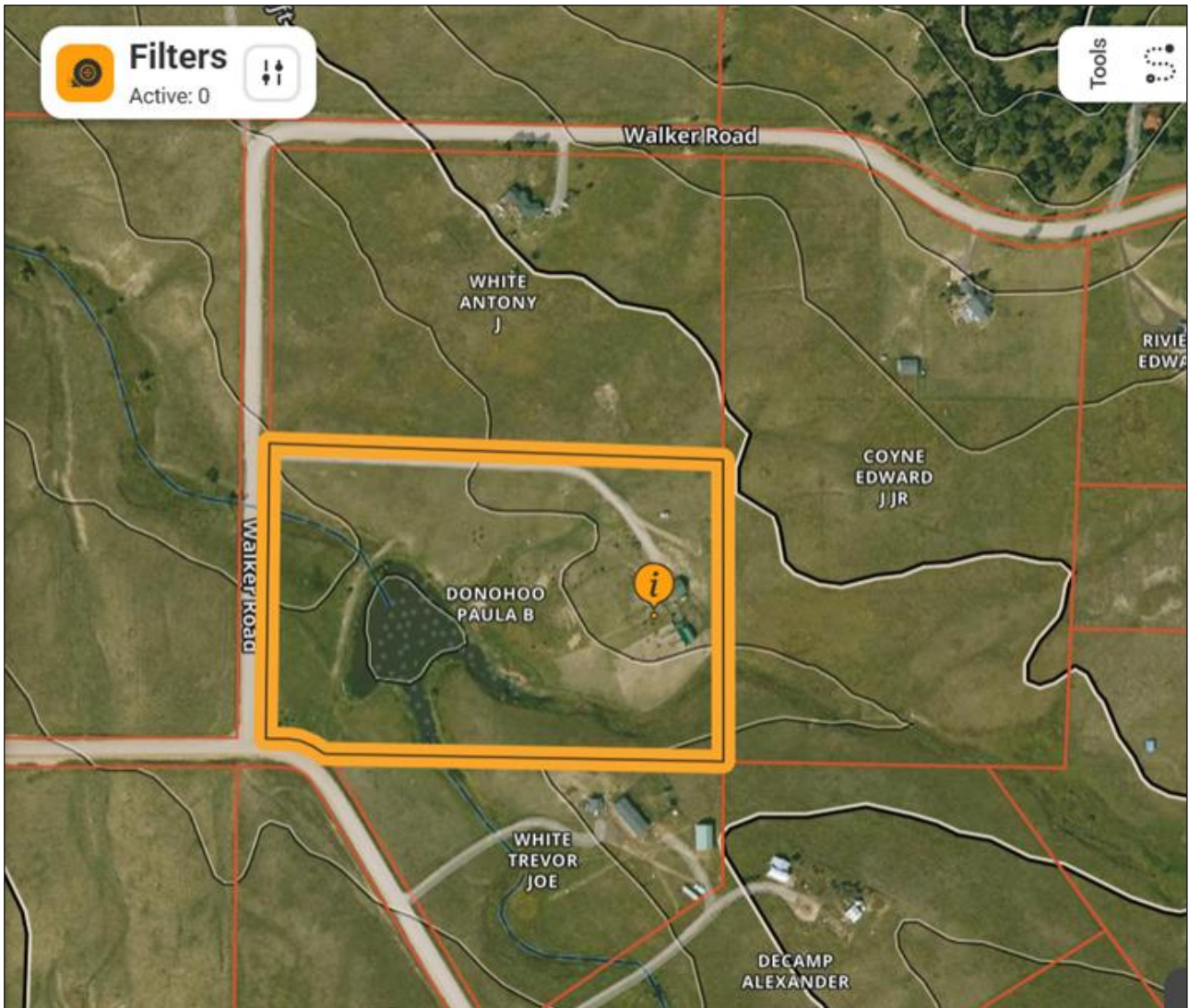
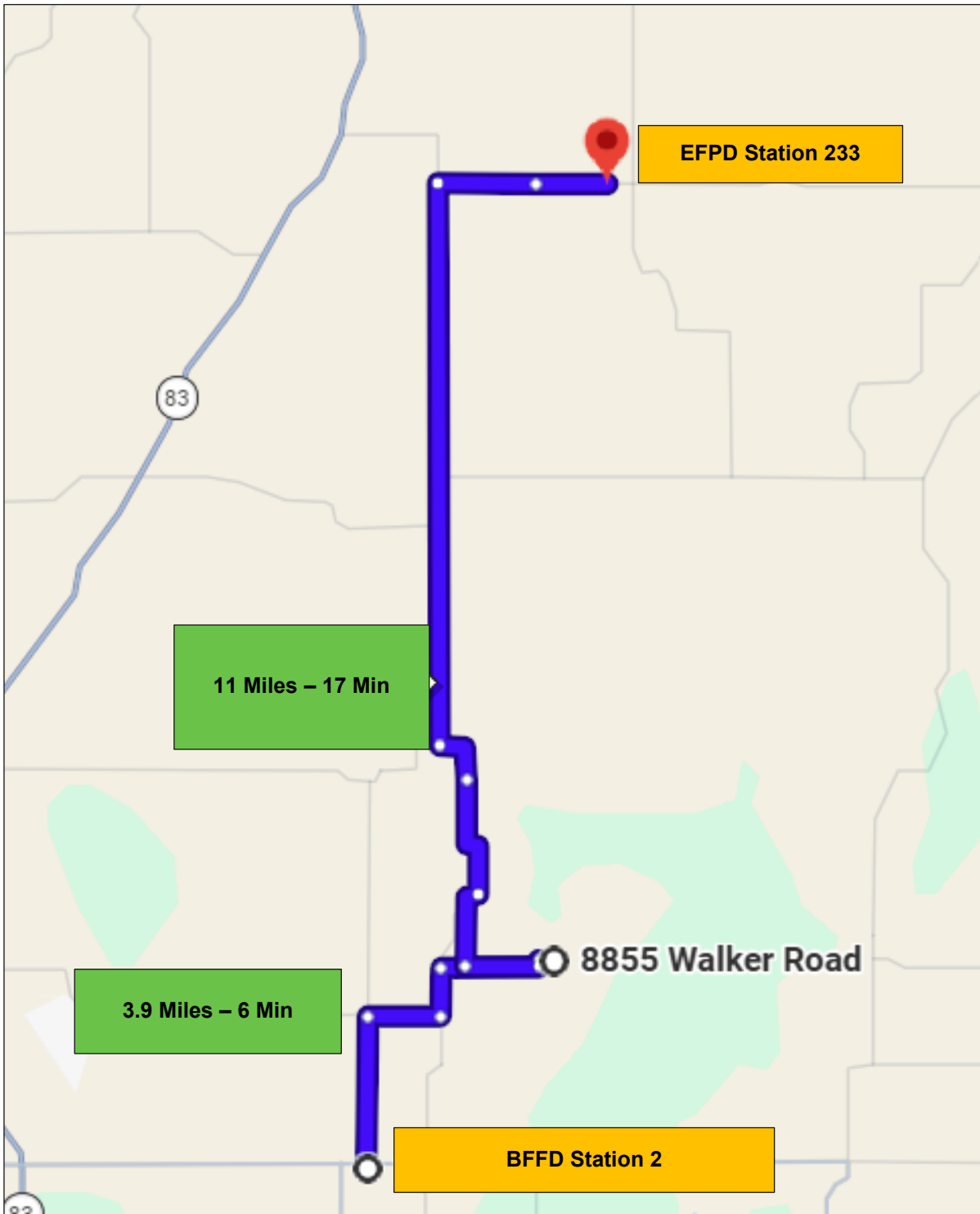


Figure 8 - FIREWISE USA Home Ignition Zone (HIZ)

### Appendix A Subdivision Layout



Appendix B Station Location Map



## *Appendix C EFPD Fire Information for Homeowners*

The Elbert County Fire Protection District provides a wide range of services and plans reviews for initiating fire protection guidelines and standards for new and existing construction. Included are inspections and plans reviews. Further information can be obtained from the EFPD Fire Marshal at 24310 Main Street, Elbert Colorado, 80106. Telephone (303) 648-3000, [Elbertfire.org](http://Elbertfire.org).

Additional information regarding fire code requirements can be obtained through the 2024 Land Development Code of El Paso County at [planningdevelopment.elpaso.com](http://planningdevelopment.elpaso.com)

Wildfire prevention and structural preparation can be found at:

- + Colorado State Forest Service FIREWISE USA
- + [csfs.colostate.edu](http://csfs.colostate.edu) > wildfire mitigation
- + [elbertfire.org](http://elbertfire.org)
- + [elpasoco.com](http://elpasoco.com)

## Appendix D Fire Commitment Letter



**ELBERT FIRE PROTECTION DISTRICT**  
24310 MAIN STREET  
P.O. BOX 98  
ELBERT, COLORADO 80106

### FIRE COMMITMENT LETTER

September 13, 2022

To whom it may concern,

The Elbert Fire Protection District currently provides fire protection services to the single-family residence address listed at 8855 Walker Road, as they are in our primary response area. We will continue to provide fire protection services to the 2-lot subdivision proposed at the same address.

The Elbert Fire Protection District is currently an ISO 10 in areas without hydrants. The ISO rating for the property at 8855 Walker Road is 10.

The primary station servicing this subdivision is Elbert Station 233, located at 700 County Rd 98, Elbert, CO 80106. Elbert Station 233 is approximately 11 miles from the subdivision with an average response time of 17 minutes depending on weather and road conditions.

Further requests for information should be directed to Fire Marshal Alexyss Papi at (303) 648-3000 or [apapi@elbertfire.org](mailto:apapi@elbertfire.org).

A handwritten signature in black ink, appearing to read 'Alexyss Papi'.

Alexyss Papi  
Fire Marshal  
Elbert Fire Protection District  
24310 Main St  
Elbert, CO 80117  
303-648-3000