



Harris & Associates

FIRE SUPPRESSION ASSESSMENT DISTRICT NO. 2024-1

ENGINEER'S REPORT

April 11, 2024

Prepared under the provisions of Government Code Section 50078
et. seq.

Prepared for the

RIPON CONSOLIDATED FIRE DISTRICT

San Joaquin County, California

TABLE OF CONTENTS

	Page
1 OVERVIEW	
1.1 Introduction	1
1.2 Fire District Background.....	2
1.3 Historical Revenues Sources	2
1.4 Service Levels	3
1.5 Existing District Revenue and Expenditures	4
2 FIRE SUPPRESSION SERVICES	
2.1 General Benefit	5
2.2 Special Benefit.....	7
2.3 Expense Distribution	8
3 METHOD OF APPORTIONMENT	
3.1 Government Code.....	11
3.2 Parcel Classification	12
3.3 Assessment Rate Calculation	13
3.4 Benefit Analysis.....	16
3.5 Assessment Rate and Duration.....	17
3.6 Protest Hearing	19
3.7 Accuracy of Data and Appeals	19
4 ASSESSMENT ROLL.....	20
5 DISTRICT DIAGRAM.....	20
APPENDIX	
A. Assessment Roll	
B. District Diagram	
C. NFPA Fire Flow Table - Fire Fighting Benefit Factors	
D. Property Loss Factor	

**DRAFT ENGINEER'S REPORT
RIPON CONSOLIDATED FIRE PROTECTION DISTRICT
FIRE SUPPRESSION BENEFIT ASSESSMENT DISTRICT 2024-1**

The undersigned respectfully submits the enclosed report as directed by the Board of Directors of the Ripon Consolidated Fire Protection District. The undersigned certifies that they are a Professional Engineer, registered in the State of California.



DATED:

By: Alison Bouley
Assessment Engineer
R.C.E. No.C61383

I HEREBY CERTIFY that the enclosed Engineer's Report, together with Assessment Roll hereto attached was filed with me on the _____ day of _____, 2024.

District Secretary, Ripon Consolidated
Fire Protection District
San Joaquin County, California

By: _____

I HEREBY CERTIFY that the enclosed Engineer's Report, together with Assessment Roll thereto attached was approved and confirmed by the Board of Directors of the Ripon Consolidated Fire Protection District, San Joaquin County, California, on the ___ day of _____, 2024.

District Secretary, Ripon Consolidated
Fire Protection District
San Joaquin County, California

By: _____

1 OVERVIEW

1.1 INTRODUCTION

The Ripon Consolidated Fire District ("Fire District") provides fire protection and emergency response services within the City of Ripon as well as unincorporated areas in southern San Joaquin County ("County"), north of the Stanislaus River, south of Lone Tree Road, east of the City of Manteca and west of the City of Ripon. This basic level of service, whether actually used or not, is available at the same level to all properties in the Fire District's service area.

As a result of limited available funds, increased demand for fire suppression services, increasing costs to provide fire protection services, the need to replace retiring personnel, and the Fire District's desire to increase the level of service provided, the Fire District intends to initiate proceedings for the adoption of a Fire Suppression Assessment ("Assessment") pursuant to the provisions of Government Code 50078 et. seq. (the "Code") and California Constitution Article XIII D ("Proposition 218"). The Code provides for the levy and collection of assessments by the Fire District to generate revenue to pay for fire suppression services and equipment, which provides a special benefit to the parcels within the Fire District.

The Assessment will provide a portion of the funds needed to maintain and enhance fire protection service capacity by providing a revenue stream dedicated to fire suppression service, salaries and benefits of firefighting personnel, and fire suppression equipment and apparatus.

This report is to be filed with the Clerk of the Board of the Fire District and contains the following elements, in compliance with the Code:

- A description of each lot or parcel of property proposed to be subject to the assessment.
- The amount of the assessment for each lot or parcel for the initial fiscal year.
- The maximum amount of the assessment which may be levied for each lot or parcel during any fiscal year.
- The duration of the assessment.
- The basis of the assessment.
- The schedule of the assessment.

1.2 FIRE DISTRICT BACKGROUND

The original Fire District was formed in 1921 and provided fire protection services to an area of approximately one square mile. In 1940, the Ripon Rural Fire District was formed and provided emergency services to the rural areas around the City of Ripon. In 1963, the two fire districts combined to form the Ripon Consolidated Fire Protection District and added emergency ambulance services beginning in 1974. At that time, the Fire District was the first in San Joaquin County to provide paramedic services to their residents. The Fire District currently serves an area of approximately 56 square miles and a population of approximately 21,000, which includes 17,000 residents within the City of Ripon.

The Fire District currently has three fire stations. Station No. 1 is located at 142 South Stockton Avenue in the City of Ripon. Station No. 2 is located at 18800 Murphy Road, and Station No. 3 is located at 1705 North Ripon Road, both of which are currently un-staffed. Station No. 2 was staffed by volunteer personnel until 2015. Station No. 3 has not been staffed since its construction.

1.3 HISTORICAL REVENUE SOURCES

The Fire District currently receives funding from multiple sources, which include an allocation of property taxes, Redevelopment Agency (“RDA”) pass-through revenues using tax increment bonds, interest income and a 1985 special tax on all developed properties. Over the three years shown below, the revenue for the Fire District breaks down as:

Source	FY 2020-21	Source	FY 2021-22	Source	FY 2022-23
Property Taxes	\$ 1,502,700	Property Taxes	\$ 1,668,923	Property Taxes	\$1,728,062
Special Taxes	\$ 773,272	Special Taxes	\$ 796,767	Special Taxes	\$ 807,058
RDA Pass-Through	\$ 246,412	RDA Pass-Through	\$ 255,641	RDA Pass-Through	\$ 273,501
Interest	\$ 1,727	Interest	\$ 1,054	Interest	\$ 6,487
Total for FY 2020-21	\$ 2,524,110	Total for FY 2021-22	\$ 2,722,385	Total for FY 2022-23	\$2,815,107

* Information in the tables above is provided by San Joaquin County.

Property taxes generated \$1,728,062 in Fiscal Year (“FY”) 2022-23 for the Fire District. This amount has increased slightly each year due to new development and increasing property values.

In addition, Fire District voters approved a special tax for fire protection in 1985 for fire prevention and suppression services, which generated approximately \$807,058 in FY 2023-24.

The special tax rate applied to each parcel does not include an annual inflationary adjustment, meaning the amount paid by a parcel in 1985 is the same as it is in FY 2023-24. If the special tax rate had included an inflationary adjustment from 1985, the additional revenue would be significant. As an example:

The residential tax rate is \$0.03 per square foot. A 3,600 square foot single-family home is charged a special tax amount of \$108.00. That amount has not changed over the past 35 years. If the Consumer Price Index (“CPI”) had been included as an inflationary adjustment, that same parcel would now be charged a special tax amount of approximately \$327.06 in FY 2023-24,

The difference in what the total assessment revenue for the Fire District would be, if CPI had been included in 1985, is shown in the table below.

Fiscal Year	CPI in Change	Actual Assessment Revenue - FY 2023/24	Assessment Revenue w/CPI
1985-86	108.00	N/A	N/A
2023-24	327.06	\$807,058	\$2,444,039

1.4 SERVICE LEVELS

The Fire District continues to see an increase in the number of calls it receives. In response to the continued increase in the number of calls, the Fire District continually evaluates its ability to respond to emergency events adequately. The Fire District has an average response time of 7-8 minutes in the urban areas of the Fire District. This includes from the time a call comes into a dispatcher, the call is routed and assigned, and they arrive on scene. Times for rural responses varies greatly due to the size of the service area and where the incident occurs. According to the National Fire Protection Association (NFPA) website, the standard is to have the first fire engine on scene within four (4) minutes. As the number of calls continues to increase, response times will also increase and there will be inadequate personnel available to provide a full fire suppression response.

To improve response times and to meet future needs, the Fire District’s goal is to add additional full-time firefighter positions including increased pay and benefits to attract future firefighters, increase existing firefighters’ salaries and benefits to retain current staffing levels, and to open Station No. 3 with three shifts of three person teams, in addition to the maintenance and servicing of an engine and corresponding equipment.

The cost to open Station No. 3 is approximately \$2,800,000 annually. The Fire District current revenues are insufficient to support the additional staffing levels and other increases in operating costs. Existing revenue totaled \$2,815,107 in FY 2022-23.

In order to fund Station No. 3 and the other items mentioned above, the Fire District is proposing to adopt a fire suppression benefit assessment ("Fire Suppression Assessment"), in addition to the existing special tax. If approved, the Assessment would fund the additional costs, allowing the Fire District to operate Station No. 3, reduce response times, and increase salaries and benefits.

The assessments and method of apportionment described in this Engineer's Report ("Report") for the proposed Fire Suppression Assessment utilize accepted assessment engineering practices and have been calculated and proportionately spread to each parcel based on the special benefits received by each class or type of property.

1.5 EXISTING DISTRICT REVENUES AND EXPENDITURES

The proposed Fire Suppression Assessment would add additional full-time firefighter positions including increased pay and benefits to attract future firefighters, increase existing firefighters' salaries and benefits to retain current staffing level, and operate Station No. 3. These additional expenditures will increase the Fire District's budget by approximately \$2,846,803. However, the Fire District is only seeking to fund \$1,886,519 with the Proposed Fire Suppression Assessment. The remaining amount will be funded by other revenue sources.

Table 1 on the following page shows the projected revenues and expenditures for Fiscal Year 2023-24, and the estimated funding shortfall resulting from the proposed additional staffing and operating costs.

Table 1
Projected FY 2023-24 Revenues and Expenditures,

Revenues	
Property Taxes	\$1,549,092
Special Taxes	\$810,381
RDA Funds	\$462,896
Fees and Services	\$1,683,752
Total Revenues	\$4,506,121
Expenditures	
Salaries & Benefits	\$2,979,356
General Operations	\$277,800
Insurance	\$55,000
Special Department Expenses	\$343,475
Capital Outlay	\$310,000
Additional Expenses*	\$2,846,803
Total Expenditures	\$6,812,434
Funding Shortfall	\$2,306,313

* Includes expenditures related to additional full-time firefighter positions including increased pay and benefits to attract future firefighters, increase existing firefighters’ salaries and benefits to retain current staffing level, and operate Station No. 3.

2 GENERAL VS SPECIAL BENEFIT

Article III D of the California Constitution requires any local agency proposing to implement a benefit assessment, to “separate the general benefits from the special benefits conferred on a parcel.” The rationale for separating special from general benefits is to ensure that property owners subject to the benefit assessment are not paying for general benefits, which are benefits available to the public at large. An assessment can fund special benefits but cannot fund general benefits. Accordingly, a separate estimate of the special and general benefit is described herein.

There is no widely accepted or statutory formula for determining general benefit. General benefits are described as “not particular and distinct” and are “not over and above” benefits received by the public at large or other properties not subject to an assessment.

2.1 GENERAL BENEFIT

The services provided by the Fire District were described in Section 1 of this Report, and those services provide a direct benefit to the parcels in the Fire District. With the adoption of the proposed Fire Suppression Assessment, the fire protection and suppression services within the Fire District will be enhanced significantly and such services will be over and above what otherwise would be provided.

The expenses to be financed from the proposed Fire Suppression Assessment are based on the needs of the Fire District. The Fire District is responsible for obtaining, furnishing, operating and maintaining fire suppression equipment and/or apparatus, and for the purpose of paying the salaries and benefits of the firefighting personnel who provide fire suppression services to the parcels within the Fire District, whether or not fire suppression services are actually used by a parcel or property. Other services include, but are not limited to, fire prevention, inspection and education, training, hazardous material response, etc.

The proposed Fire Suppression Assessment will also contribute to cover the general costs of administering the Fire District, its facilities and operations, as well as the salaries and benefits of any administrative personnel.

Since assessments can only be levied on the basis of special benefit, the first requirement in the development of the Fire Suppression Assessment is to separate general from special benefit. In determining the Fire Suppression Benefit, general benefit would include the costs associated with responding to medical emergencies, traffic accidents and other services provided by the Fire District that reduce the Fire District's ability to respond to a fire, and that are not directly related to fire suppression activities for properties within the Fire District.

In order to identify the costs associated with providing services that may be considered General Benefit, an analysis was made of the number of calls responded to by the Fire District and the personnel hours associated in providing the required services.

Table 2 on the following page summarizes information on the number of personnel hours related to fire over the previous four fiscal years.

Table 2
Summary of Calls for Service and Resource Allocations

Fiscal Year	Total Available Hours	Non-Fire Response Hours	% Hours Avail. For Fire Suppression
2019-20	6,570	628.8	90.43%
2020-21	6,570	1,258.4	80.85%
2021-22	6,570	1,745.1	73.44%
2022-23	6,570	1,454.6	77.86%
Totals:	26,280	5,086.9	80.64%

The hours and costs associated with “Non-Fire Suppression” are deemed to be related to General Benefit and may not be paid for from Fire Suppression Assessment revenue. As shown in the table above, 19.36% of the total available personnel time were devoted to non-fire suppression activities. For purposes of estimating General Benefit and therefore may not be paid using Fire Suppression Assessment revenue.

Although call volume will increase as a result of new development, additional property tax revenue and additional assessments from those newly developed properties paying an assessment, should off-set the additional expenses.

2.2 SPECIAL BENEFIT

Special Benefit is defined by Article IIX D of the California Constitution as a “particular and distinct benefit, over and above general benefits.” The fire suppression services to be funded by the proposed assessment provide a “particular and distinct” benefit because the enhanced service level will be “over and above” what the Fire District is currently able to provide to the properties within the Fire District. The additional personnel funded by the proposed new assessment will enhance the Fire District’s ability to reduce response times and increase the fire suppression resources available to property owners within the Fire District.

Properties within the Fire District receive almost all of the special benefits from the fire suppression services because the services are provided solely within the boundaries of the Fire District. It should be noted however, that fire suppression services may, at times, be used outside the Fire District boundaries. This service is part of a mutual aid agreement with other fire agencies in the area and is offset by similar services being provided to the Fire District by those other fire agencies.

In order to allocate the assessments, the Engineer identified the types of benefit arising from the proposed assessment and the enhanced services that will be provided to the Fire District parcels.

The following benefit categories have been established, representing the types of special benefit conferred to the Fire District parcels, resulting from the enhanced level of services to be funded by the assessment.

- Increased Safety and Protection of property and individuals.
- Enhanced Fire Suppression capabilities resulting in a reduction of property damage and economic loss.

The proposed Fire Suppression Assessment will fund enhanced levels of fire suppression, fire prevention and protection services, thereby significantly reducing the risk of property damage, human injury, or death associated with fires within the Fire District. Fire mitigation specifically benefits the properties within the Fire District. According to the National Fire Protection Association (NFPA) website:

Local fire departments responded to 1,504,500 fires in 2022. These fires caused 3,500 civilian deaths, 13,250 civilian injuries and over \$18 billion in property damage.

Every 23 seconds, a fire department in the United States responds to a fire somewhere in the nation. A fire occurs in a structure at the rate of one every 64 seconds, and a home fire occurs every 89 seconds.

Seventy-four percent of all fire deaths were caused by home fires. This includes the 64 percent that resulted from fires in one- or two-family homes and the 10 percent caused by fires in apartments or other multi-family housing.

2.3 EXPENSE DISTRIBUTION

The Fire District's estimated expense budget for FY 2023-24 is shown in Table 3 on the following page. In general, costs have been allocated between fire suppression and non-fire suppression, using the percentage distribution of labor hours shown in Table 2. Based upon the consultant's experience, this is a reasonable allocation of costs since most costs are proportional to the number of personnel including employee expenses, such as employee health insurance and workers' compensation insurance.

Table 3
Projected FY 2023-24 Budget Distribution by Type of Response

Description	Total 100.00%	Non-Fire Suppr. Hours (General Benefit) 19.36%	Hours Avail. Fire Suppr. (Special Benefit) 80.64%
Salaries & Benefits			
Salaries-Regular (includes scheduled overtime)	\$ 1,801,125	\$ 348,698	\$ 1,452,493
Salaries-Unscheduled overtime	\$ 251,951	\$ 48,778	\$ 203,182
Salaries-Part Time Reserves	\$ 5,000	\$ 968	\$ 4,032
Salaries-Mutual Aid	\$ -	\$ -	\$ -
Volunteers	\$ 3,000	\$ 581	\$ 2,419
Holiday Compensation	\$ 57,260	\$ 11,086	\$ 46,177
FICA (Social Security)-District	\$ 124,938	\$ 24,188	\$ 100,755
Medicare-District	\$ 29,219	\$ 5,657	\$ 23,563
Unemployment Comp. Insurance	\$ 6,000	\$ 1,162	\$ 4,839
Retirement-District	\$ 302,270	\$ 58,519	\$ 243,762
Health Insurance	\$ 360,155	\$ 69,726	\$ 290,442
Life Insurance	\$ 6,000	\$ 1,162	\$ 4,839
Dental Insurance	\$ 32,438	\$ 6,280	\$ 26,159
Total Salaries & Benefits	\$ 2,979,356	\$ 576,803	\$ 2,402,661
Operations	\$ 277,800	\$ 53,782	\$ 224,018
Insurance	\$ 55,000	\$ 10,648	\$ 44,352
Special Department Expenses	\$ 343,475	\$ 66,497	\$ 276,978
Capital Outlay	\$ 310,000	\$ 60,016	\$ 249,984
Total Expenditures	\$ 3,965,631	\$ 767,746	\$ 3,197,993
% of Total	100.00%	19.36%	80.64%

As shown, up to \$3,197,993 of the annual costs can be identified as providing a Special Benefit related to the Fire District's ability to respond to calls for fire suppression services.

Table 4 below outlines the Maximum Fire Suppression Assessment, which represents the variance between the expenses associated with fire suppression services and the existing revenue from special taxes.

Table 4
Special Benefit
Fiscal Year 2024/25

Costs Related to Fire Suppression Services	\$3,197,993
Special Taxes*	(\$810,381)
Maximum Fire Suppression Assessment	\$2,387,612

As previously mentioned, the Fire District is only seeking to fund \$1,886,519 with the Proposed Fire Suppression Assessment. The remaining amount will be funded by other revenue sources.

Harris & Associates believes that this allocation of costs represents a conservative basis for the identification of those fire suppression activities or costs that may be considered as providing a special benefit to property within the Fire District.

Since the primary goal of the Fire District is to respond and suppress fires, the total resources that would be needed to provide a similar level of fire response and suppression services would be almost identical based upon the requirements of NFPA 1720 even if the Fire District did not provide emergency medical response or other services that are not property related. This is a result of the requirement that to effectively begin fire suppression activities, the Fire District must:

- Get a minimum number of personnel and fire suppression equipment on scene to establish an uninterrupted water supply to support fire suppression efforts, as well as teams for victim search and rescue, ventilation of the structure and support personnel to operate safely and effectively.
- Have the capability for sustained operations, including fire suppression, engagement in search and rescue, forcible entry, ventilation, and preservation of property accountability for personnel; and, provision of support activities for those situations that are beyond the initial response.

The other services provided by the Fire District, although important, could be provided in other ways with reduced resources just as it currently does by not using Type I Engines to respond to medical emergency calls or other non-fire responses.

3 METHOD OF APPORTIONMENT

3.1 GOVERNMENT CODE

Section 50078 of the Government Code permits the establishment of fire suppression assessments by agencies for the purpose of:

"... obtaining, furnishing, operating, and maintaining fire suppression equipment or apparatus or for the purpose of paying the salaries and benefits of firefighting personnel, or both, whether or not fire suppression services are actually used by or upon a parcel, improvement, or property."

The Act further requires that the assessment be levied according to benefit rather than assessed value and that the agency:

"... shall establish uniform schedules and rates based upon the type of use of property and the risk classification of the structures or other improvements on, or the use of, the property. The risk classification may include, but need not be limited to, the amount of water required for fire suppression on that property, the structure size, type of construction, structure use, and other factors relating to potential fire and panic hazards and the costs of providing the fire suppression by the district to that property. The assessment shall be related to the benefits to the property assessed."

The formula used for calculating assessments on parcels within the Fire District's service area therefore reflects the composition of the parcels, and the improvements and services provided, to fairly apportion the costs based on estimated benefit to each parcel. In addition, pursuant to Article XIID Section 4 in the California Constitution:

"No assessment shall be imposed on any parcel which exceeds the reasonable cost of the proportional special benefit conferred on that parcel. Only special benefits are assessable and an agency shall separate the general benefits from the special benefits conferred on a parcel."

3.2 PARCEL CLASSIFICATION

All parcels are assigned a classification based upon use code assigned by the San Joaquin County Assessor's Office. These land use classifications are defined as follows:

Single Family Dwelling – Single-family residential parcels, mobile homes and condominiums represent approximately 80% of the total parcels within the Fire District's service area and it is used as the basic unit of scale.

Single-family residential parcels are defined as parcels that have a land use classification as single-family residential or as a mobile home on a residential lot with the San Joaquin County Assessor's Office. Mobile home parcels are defined as parcels that have a land use classification as mobile home or manufactured home.

Multi-Family Dwelling Units – Multi-family parcels are defined as parcels that have a land use classification as multi-family, which includes duplexes, triplexes and fourplexes.

Apartment Buildings – Includes multi-family parcels with more than four dwelling units.

Non-Residential – Includes improved parcels that have a land use classification as commercial, office, retail, hotels/motels, industrial, church, schools, specialty, government, and SBE (State Board of Equalization) parcels. Non-residential also includes mixed-use commercial/residential parcels and agricultural parcels with buildings on the parcel.

Agricultural – includes unimproved parcels that have a land use classification as agricultural and includes orchards and vineyards.

Vacant – Unimproved parcels are defined as parcels that have no improvements constructed thereon and have a land use classification as vacant or unimproved. These maybe residential or non-residential parcels.

Exempt – Public or private roadways or streets and utility parcels are excluded from assessment. Also excluded are common areas, landscape strips, right of ways and sliver parcels (non-buildable due to size and any assessment would likely be lower than cost to place onto tax roll).

A summary of those parcels within the Fire District's service area based upon the County Assessor's records shows 6,758 assessable parcels within the Fire District's service area as shown in Table 5 on the following page.

Table 5
Parcel Summary by Land Use

Land Use	Number of Parcels
Residential	
Single Family Dwellings*	5,276
Multi-Family Dwelling Units	82
Apartment Buildings	21
Non-Residential	
Commercial/Office/Retail	149
Hotels/Motels	4
Agriculture	25
Agriculture w/SFR	30
Vineyards	39
Vineyards w/SFR	13
Orchards	295
Orchards w/SFR	302
Industrial	54
Church	26
Schools - Private	1
Specialty	3
Government	18
SBE Parcels	36
Vacant	306
Exempt	78
Total Parcels	6,758

*Includes Mobile homes and Condos

3.3 ASSESSMENT RATE CALCULATION

Since assessments must be apportioned to parcels based upon the benefit they receive, the following sections describe the methodology used to assign Benefit Units (BU's) to each parcel within the Fire District based upon its land use and type(s) of structures on the parcel, and risk of fire.

Benefit Factors

Since assessments must be allocated to each parcel based in proportion to the special benefits it receives from the availability of the enhanced fire suppression services, a method of apportionment (method of assessment) has been established.

Each of the parcels within the Fire District's service area has been reviewed and the corresponding assessments have been proportionally spread to each parcel based on the special benefits received from the availability of fire suppression services to that parcel. The method of assessment is based on the premise that each assessed parcel within the Fire District's service area receives special benefits from the availability of fire suppression services, and that the benefit which a parcel receives is proportional to the risk of fire, the resources needed to fight the fire, and the property loss that would result in the case of fire.

The established rates are based upon the following benefit factors:

- Fire Fighting Benefit Factor
- Property Loss Factors
- Property Risk Factor

Fire Fighting Benefit Factor

This benefit is tied directly to the amount of water (flow) and time (duration) required to suppress a fire based on structure type, size and use, according to the National Fire Protection Association (NFPA). The Total Fire Flow is determined by the following:

$$\text{Fire Flow (gallons per minute)} \times 60 \text{ minutes} \times \text{Flow Duration (hours)}$$

The Fire Fighting Benefit Factor is then calculated by dividing the Total Fire Flow for each Property Type by the Total Fire Flow for a single-family dwelling – up to 3,600 SF.

The California Building Code (Fire-Flow requirements for Buildings) also adopted the NFPA standards where applicable. A copy of the table can be found on the NFPA website and is included as Table C.1 in Appendix C.

Fire Fighting Benefit units are based on structure type and size, not property value, thus, structures which present difficulties for firefighters (e.g., larger, more complex structures, or those containing hazardous materials), are assigned more Fire Fighting Benefit units. For example, one (1) Fire Fighting Benefit unit is assigned to single family homes up to 3,600 square feet and 1.17 Fire Fighting Benefit factors are assigned to single family homes ranging 3,601-4,800 square feet. Table C.2 in Appendix C illustrates the number of fire benefit factors assigned to each structure type and size.

The NFPA data does not address vacant (undeveloped) or agricultural parcels. The fire flow benefit units for these parcels are assigned based on the percentage of fire incidents and time spent on scene, as compared to developed parcels.

Buildings with internal firefighting sprinkler systems inherently include a benefit to that structure that helps firefighting efforts by applying water to a fire prior to when firefighters arrive on scene. As a result, a 25% discount is applied to the Fire Fighting Benefit Factor, as determined by the California Building Code and the NFPA.

Property Loss Factor

This benefit factor is assigned to parcels based on the number of fire incidents and losses (in millions), by parcel type. The special benefit to properties associated with the enhanced fire suppression capabilities is proportional to the economic loss which would result in the event of a fire. Due to limited fire loss data available for parcels within the Fire District, National property loss statistics were used to estimate property loss for Fire District properties. National property loss statistics were taken from the report published by the National Fire Protection Association, *Fire Loss in the United States During 2022* by Marty Ahrens and Ben Evarts. The report presents national estimates of property loss by property type due to structure fires. Property loss data is used to represent the estimated economic loss of a fire for each land use. The factor is calculated by dividing the property loss per incident for each land use type by the property loss per incident of a single-family home.

The Property Loss Factor for residential, agricultural and vacant property is calculated by dividing the Property Loss Factor for each property class by the Property Loss Factor for a Residential (one and two-family homes).

Non-residential structures have varying degrees of economic loss based on the factors such as building size, complex structures, or those containing hazardous materials. Thus, the Property Loss Factor for non-residential parcels are scaled based on size of structure. For example, one (1) Property Loss Factor is assigned to buildings up to 5,900 square feet and 1.34 Property Loss Factors are assigned to buildings ranging 5,901-7,800 square feet.

The Property Loss Factor for non-residential property is calculated by dividing the Property Loss Factor for each non-residential property range by the Property Loss Factor for a non-residential property up to 5,900 square feet.

Appendix D illustrates the number of fire benefit factors assigned to each structure type and size.

Property Risk Factor

Parcels within the Fire District each receive a special benefit based on enhanced fire suppression response capabilities that will result from the addition of personnel and equipment. This benefit factor is assigned to each assessable parcel based on parcel, number of buildings on that parcel, and/or dwelling units (multi-family, etc.). For parcels with multiple buildings a benefit factor was assigned for each building since each building has a risk. Therefore, each developed property, and corresponding units, is assigned a fire risk factor as shown in Tab 6, below.

**Table 6
Risk Factor**

Occupancy Type	Property Risk Factor
Residential	
Residential (1 & 2 family)*	1.000 per unit
Apartments & Other Multi-Family	1.000 per unit
Agricultural	1.000 per parcel
Vacant/Wildland	1.000 per parcel
Non-Residential	1.000 per building

Each parcel and each building on a particular parcel, have an inherent risk of fire. Therefore, each parcel is assigned a Risk Factor of 1, a parcel with 2 buildings (residential or non-residential) is assigned a Risk Factor of 2. Parcels with multiple units are assigned a Risk Factor based on the number of units on that parcel.

Exempt parcels include small unbuildable/sliver parcels, roads, parking lots, common areas, pipeline rights-of-way, etc. These parcels receive no benefit from fire suppression services and are therefore not assessed.

3.4 BENEFIT ANALYSIS

Each of the parcels within the Fire District’s service area has been reviewed and the corresponding assessments have been proportionally spread to each parcel based on the special benefits received from the availability of fire suppression services to the parcel. The preceding method of apportionment is based on the premise that each assessed parcel within the Fire District’s service area receives special benefits from the availability of fire suppression services, and that the benefit a parcel receives is proportional to the risk of fire and the economic loss which would occur as the result of a fire.

In order to apportion the cost of the enhanced fire suppression activities funded by the assessment, a Fire Suppression Assessment Benefit Factor was established for each occupancy type based upon the benefit it receives from the availability of fire suppression services. Table 7 shows the Fire Suppression Assessment per Benefit Assessment Unit.

Table 7
Allocation of Benefit by Land Use

Property Type	Total Benefit Assessment Units*
Residential	5,587.72
Res. Multi Family	357.16
Non-Residential	622.60
Agricultural	806.32
Vacant	172.30
Total Benefit Assessment Units	7,546.10
Fire Suppression Assessment	\$1,886,519.42
Fire Suppression Assessment per Benefit Assessment Unit	\$250.00

3.5 ASSESSMENT RATE AND DURATION

The annual levy for each parcel will be based upon the land use shown on the County Assessor's roll or the actual land use as determined by the District Fire Chief based upon a field review of the parcel. If there are multiple land uses on the parcel, the assessment shall be calculated for each land use on the parcel. For Fiscal Year 2024-25, the assessments shall be assigned to each assessable parcel within the Fire District based upon its land use.

The standard assessment rate for a single-family home up to 3,600 square feet is \$250.00. Actual assessments vary due to size (square footage) of the development, and whether the building includes an internal fire suppression sprinkler system, which applies a 25% discount to Fire Fighting Benefit Factor No. Sample calculations are included in Table 8 on the following page.

Table 8
Sample Fire Suppression Assessment Benefit Factors

Occupancy Type	Fire Fighting Benefit Factor	Property Loss Factor	Property Risk Factor	25% Sprinkler Discount	Total Benefit Units	Total Adjusted Benefit Units	Assessment Rate	Assessment per Parcel
Single Family Dwelling - up to 3,600 S.F.	1.00	1.00	1.00	0.00	3.00	1.00	\$250.00	\$250.00
Single Family Dwelling - 4,611 S.F.	1.17	1.00	1.00	0.00	3.17	1.06	\$250.00	\$264.17
Single Family Dwelling - 8,899 S.F.	1.67	1.00	1.00	0.00	3.67	1.22	\$250.00	\$305.83
Duplex	1.00	2.00	2.00	0.00	5.00	1.67	\$250.00	\$416.67
Triplex	1.00	2.33	3.00	0.00	6.33	2.11	\$250.00	\$527.50
Fourplex	1.00	3.10	4.00	0.00	8.10	2.70	\$250.00	\$675.13
Apt. Complex - 11 Units (13,235 S.F.)	1.50	8.53	11.00	-0.38	20.65	6.88	\$250.00	\$1,721.19
Apt. Complex - 41 Units (11,000 S.F.)	1.33	31.79	41.00	-0.33	73.79	24.60	\$250.00	\$6,149.04
Apt. Complex - 100 Units (87,166 S.F.)	8.75	77.54	100.00	-2.19	184.10	61.37	\$250.00	\$15,341.78
Non-Residential - 3,500 S.F.	1.00	1.00	1.00	0.00	3.00	1.00	\$250.00	\$250.00
Non-Residential - 9,765 S.F.	1.33	1.66	1.00	-0.33	3.66	1.22	\$250.00	\$304.88
Non-Residential - 13,026 S.F. (2 buildings)	1.67	2.61	2.00	-0.42	5.86	1.95	\$250.00	\$488.56
Non-Residential - 78,539 S.F.	8.00	14.19	1.00	-2.00	21.19	7.06	\$250.00	\$1,765.54
Agricultural	0.63	0.09	1.00	0.00	1.72	0.57	\$250.00	\$143.29
Vacant/Wildland	0.52	0.00	1.00	0.00	1.52	0.51	\$250.00	\$126.32

The Total Benefit Units is the summation of the Fire Fighting Benefit Factor, Property Loss Factor, and Property Risk Factor, less the 25% Sprinkler Discount applied to the Fire Fighting Benefit Factor.

The Total Adjusted Benefit Units is calculated by dividing the Total Benefit Units for each Property Type by the Total Benefit Unit for a single-family dwelling – up to 3,600 SF. A minimum Total Adjusted Benefit Unit of one (1) has been assigned to all developed property.

A new Fire Suppression Assessment would be levied in perpetuity unless the Board elects to discontinue the Fire Suppression Assessment at some point in the future.

It is generally recognized that most budgetary items will be impacted by inflation in future years. In accordance with California Constitution Section 53739 (b)(1), assessments “may be adjusted for inflation pursuant to a clearly defined formula...”. A formula for an inflationary adjustment is therefore included as part of the proposed Fire Suppression Assessment. Said inflationary adjustment may be authorized by the Board of Directors and approved by the property owners at the time the fire suppression assessment is established.

The initial maximum assessment rate, if approved, will be established at \$250.00. Each parcel has an assigned benefit unit, which is then multiplied by the rate to determine the actual assessment for each parcel. This initial maximum assessment shall be adjusted each subsequent fiscal year by the following Assessment Range Formula:

- On July 1 of each year, the Maximum Assessment Rate allowed each fiscal year ("Adjusted Maximum Assessment Rate") shall be adjusted annually by the three percent (3%)*.
- Each fiscal year, 3% shall be applied to the Maximum Assessment Rate established the previous fiscal year to calculate the appropriate Adjusted Maximum Assessment Rate for the then current fiscal year.
- If the proposed annual assessment rate (levy per BU) for the upcoming fiscal year is less than or equal to the Adjusted Maximum Assessment Rate established for that fiscal year then the proposed annual assessment is not considered an increased assessment under Proposition 218.

* Three percent was used for the annual inflationary clause because it allows for property owners and the Fire District to plan for future increases, rather than being subject to the fluctuations that often occur with using the Consumer Price Index (CPI). Also, a short study was completed to determine the difference between CPI and 3% over the course of approximately 45 years. The difference was mere pennies, indicating that the CPI is typically about 3% each year.

3.6 *PROTEST AND HEARING*

As required by Proposition 218, a Notice and Property Owner Ballot shall be mailed to each property owner whose parcel would be subject to the assessment not less than 45 days prior to the Public Hearing to consider the adoption of the assessment. The assessment may not be imposed if a majority of the ballots returned by property owners are in opposition to the levy of the assessment versus the ballots returned by property owners in support of the assessment, weighted by assessment amount. Prior to mailing the Property Owner Ballot, the Board shall adopt procedures for the return and tabulation of the Property Owner Ballots.

3.7 *ACCURACY OF DATA AND APPEALS*

The assessment roll attached is based upon the most current data shown on the County Assessor's records. Any property owner may file a written request for an appeal with the Fire District's designee if they believe that information shown for their parcel is incorrect. This may include total square footage, number of buildings or whether a property has an internal sprinkler system. The Fire District will review the data used to calculate the assessment, and if warranted, will update the data to reflect the current use for the parcel and the appropriate changes will be made to the assessment roll.

4 ASSESSMENT ROLL

The proposed assessment and the amount of the assessment apportioned to each lot or parcel, as shown on the latest roll at the Assessor's Office, is shown in Appendix A. The description of lot or parcel is part of the records of the Assessor of the County of San Joaquin and those records are, by reference, made part of this report. The assessments shown will be submitted to the County Auditor-Controller and included on the property tax roll for each parcel shown in the assessment roll for Fiscal Year 2024-25.

5 DISTRICT DIAGRAM

The assessment diagram for the proposed Fire Suppression Assessment District is shown in Appendix B. Parcel identification, the lines and dimensions of each lot, parcel and subdivision of land within the Fire District, are inclusive of the parcels as shown on the County of San Joaquin's Assessor's Parcel Maps as they existed at the time of the passage of the Resolution of Intention, and shall include subsequent subdivisions, lot line adjustments or parcel changes therein. Reference is hereby made to the County of San Joaquin Assessor's maps for a detailed description of the line and dimensions of each lot and parcel within the County.

APPENDIX A
ASSESSMENT ROLL

The assessment set forth for each parcel is shown on the Assessment Roll for the District, submitted separately, as "Assessment Roll for the Ripon Consolidated Fire District, Fire suppression Benefit Assessment District, Fiscal Year 2024-25", which exhibit is incorporated by reference herein as Appendix A under separate cover, and is on file in the Office of the Clerk of the Board.

The Assessment Roll lists all parcels within the boundaries of the District as shown on the Assessment Diagram, Appendix B herein, and on the last equalized roll of the Assessor of the County of San Joaquin, which is by reference made part of this report.

A list of names and addresses of the owners of all parcels within this District is shown on the last equalized Property Tax Roll of the Assessor of the County of San Joaquin, which by reference is hereby made a part of this report. This list is keyed to the Assessor's Parcel Numbers as shown on the Assessment Roll on file in the office of the Clerk of the Board.

APPENDIX B
DISTRICT DIAGRAM

To be provided prior to final approval of this Report

APPENDIX C
TABLE C.1
NFPA FIRE FLOW TABLE

TABLE B105.1(2)

REFERENCE TABLE FOR TABLES B105.1(1) AND B105.2

FIRE-FLOW CALCULATION AREA (square feet)					FIRE FLOW (gallons per minute) ^b	FLOW DURATION (hours)
Type IA and IB ^a	Type IIA and IIIAa	Type IV and V-A ^a	Type IIB and IIIBa	Type V-B ^a		
High-Rise Office	Schools	Mult-Family	Commercial	SFR		
0-22,700	0-12,700	0-8,200	0-5,900	0-3,600	1,500	2
22,701-30,200	12,701-17,000	8,201-10,900	5,901-7,900	3,601-4,800	1,750	
30,201-38,700	17,001-21,800	10,901-12,900	7,901-9,800	4,801-6,200	2,000	
38,701-48,300	21,801-24,200	12,901-17,400	9,801-12,600	6,201-7,700	2,250	
48,301-59,000	24,201-33,200	17,401-21,300	12,601-15,400	7,701-9,400	2,500	
59,001-70,900	33,201-39,700	21,301-25,500	15,401-18,400	9,401-11,300	2,750	3
70,901-83,700	39,701-47,100	25,501-30,100	18,401-21,800	11,301-13,400	3,000	
83,701-97,700	47,101-54,900	30,101-35,200	21,801-25,900	13,401-15,600	3,250	
97,701-112,700	54,901-63,400	35,201-40,600	25,901-29,300	15,601-18,000	3,500	
112,701-128,700	63,401-72,400	40,601-46,400	29,301-33,500	18,001-20,600	3,750	
128,701-145,900	72,401-82,100	46,401-52,500	33,501-37,900	20,601-23,300	4,000	4
145,901-164,200	82,101-92,400	52,501-59,100	37,901-42,700	23,301-26,300	4,250	
164,201-183,400	92,401-103,100	59,101-66,000	42,701-47,700	26,301-29,300	4,500	
183,401-203,700	103,101-114,600	66,001-73,300	47,701-53,000	29,301-32,600	4,750	
203,701-225,200	114,601-126,700	73,301-81,100	53,001-58,600	32,601-36,000	5,000	
225,201-247,700	126,701-139,400	81,101-89,200	58,601-65,400	36,001-39,600	5,250	5
247,701-271,200	139,401-152,600	89,201-97,700	65,401-70,600	39,601-43,400	5,500	
271,201-295,900	152,601-166,500	97,701-106,500	70,601-77,000	43,401-47,400	5,750	
295,901-Greater	166,501-Greater	106,501-115,800	77,001-83,700	47,401-51,500	6,000	
—	—	115,801-125,500	83,701-90,600	51,501-55,700	6,250	
—	—	125,501-135,500	90,601-97,900	55,701-60,200	6,500	6
—	—	135,501-145,800	97,901-106,800	60,201-64,800	6,750	
—	—	145,801-156,700	106,801-113,200	64,801-69,600	7,000	
—	—	156,701-167,900	113,201-121,300	69,601-74,600	7,250	
—	—	167,901-179,400	121,301-129,600	74,601-79,800	7,500	
—	—	179,401-191,400	129,601-138,300	79,801-85,100	7,750	7
—	—	191,401-Greater	138,301-Greater	85,101-Greater	8,000	
—	—	125,501-135,500	90,601-97,900	55,701-60,200	6,500	
—	—	135,501-145,800	97,901-106,800	60,201-64,800	6,750	
—	—	145,801-156,700	106,801-113,200	64,801-69,600	7,000	
—	—	156,701-167,900	113,201-121,300	69,601-74,600	7,250	8
—	—	167,901-179,400	121,301-129,600	74,601-79,800	7,500	
—	—	179,401-191,400	129,601-138,300	79,801-85,100	7,750	
—	—	191,401-Greater	138,301-Greater	85,101-Greater	8,000	
—	—	125,501-135,500	90,601-97,900	55,701-60,200	6,500	

For SI: 1 square foot = 0.0929 m², 1 gallon per minute = 3.785 L/m, 1 pound per square inch = 6.895 kPa.

- a. Types of construction are based on the California Building Code.
- b. Measured at 20 psi residual pressure.

TABLE C.2
FIRE FIGHTING BENEFIT FACTORS

	Fire Flow (GPM)	Flow Duration (hrs)	Total Flow (Gallons)	Fire Flow Factor
SINGLE FAMILY DWELLING (Type SFR V-B)				
0-3600 SF	1500	2	180000	1.00
3601-4800	1750	2	210000	1.17
4801-6200	2000	2	240000	1.33
6201-7700	2250	2	270000	1.50
7701-9400	2500	2	300000	1.67
9401-11300	2750	2	330000	1.83
11301-13400	3000	3	540000	3.00
13401-15600	3250	3	585000	3.25
15601-18000	3500	3	630000	3.50
18001-20600	3750	3	675000	3.75
20601-23300	4000	4	960000	5.33
23301-26300	4250	4	1020000	5.67
26301-29300	4500	4	1080000	6.00
29301-32600	4750	4	1140000	6.33
32601-36000	5000	4	1200000	6.67
36001-39600	5250	5	1575000	8.75
39601-43400	5500	5	1650000	9.17
43401-47400	5750	5	1725000	9.58
47401-51500	6000	6	2160000	12.00
51501-55700	6250	6	2250000	12.50
55701-60200	6500	6	2340000	13.00
60201-64800	6750	6	2430000	13.50
64801-69600	7000	7	2940000	16.33
69601-74600	7250	7	3045000	16.92
74601-79800	7500	7	3150000	17.50
79801-85100	7750	7	3255000	18.08
85100 +	8000	7	3360000	18.67

TABLE C.2 CONTINUED
FIRE FIGHTING BENEFIT FACTORS

	Fire Flow (GPM)	Flow Duration (hrs)	Total Flow (Gallons)	Fire Flow Factor
NON-RESIDENTIAL (Type Commerical IIB)				
0-5900	1500	2	180000	1.00
5901-7900	1750	2	210000	1.17
7901-9800	2000	2	240000	1.33
9801-12600	2250	2	270000	1.50
12601-15400	2500	2	300000	1.67
15401-18400	2750	2	330000	1.83
18401-21800	3000	3	540000	3.00
21801-25900	3250	3	585000	3.25
25901-29300	3500	3	630000	3.50
29301-33500	3750	3	675000	3.75
33501-37900	4000	4	960000	5.33
3701-42700	4250	4	1020000	5.67
42701-47700	4500	4	1080000	6.00
47701-53000	4750	4	1140000	6.33
53001-58600	5000	4	1200000	6.67
58601-65400	5250	4	1260000	7.00
65401-70600	5500	4	1320000	7.33
70601-77000	5750	4	1380000	7.67
77001-83700	6000	4	1440000	8.00
83701-90600	6250	4	1500000	8.33
90601-97900	6500	4	1560000	8.67
97901-106800	6750	4	1620000	9.00
106801-113200	7000	4	1680000	9.33
113201-121300	7250	4	1740000	9.67
121301-129600	7500	4	1800000	10.00
129601-138300	7750	4	1860000	10.33
138301-Greater	8000	4	1920000	10.67

TABLE C.2 CONTINUED
FIRE FIGHTING BENEFIT FACTORS

	Fire Flow (GPM)	Flow Duration (hrs)	Total Flow (Gallons)	Fire Flow Factor
APARTMENT BUILDINGS (Type High Rise)				
0-22700	1500	2	180000	1.00
22701-30200	1750	2	210000	1.17
30201-38700	2000	2	240000	1.33
MULTI-FAMILY DWELLING UNITS (Type Multi-Family V-A)				
0-8200	1500	2	180000	1.00
8201-10900	1750	2	210000	1.17
10901-12900	2000	2	240000	1.33
12901-17400	2250	2	270000	1.50
17401-21300	2500	2	300000	1.67
21301-25500	2750	2	330000	1.83
25501-30100	3000	3	540000	3.00
30101-35200	3250	3	585000	3.25
35201-40600	3500	3	630000	3.50
40601-46400	3750	3	675000	3.75
46401-52500	4000	4	960000	5.33
52501-59100	4250	4	1020000	5.67
59101-66000	4500	4	1080000	6.00
66001-73300	4750	4	1140000	6.33
73301-81100	5000	4	1200000	6.67
81101-89200	5250	5	1575000	8.75
89201-97700	5500	5	1650000	9.17
97701-106500	5750	5	1725000	9.58
106501-115800	6000	6	2160000	12.00
115801-125500	6250	6	2250000	12.50
125501-135500	6500	6	2340000	13.00
135501-145800	6750	6	2430000	13.50
145801-156700	7000	7	2940000	16.33
AGRICULTURAL				63.40%
VACANT				51.58%

**APPENDIX D
 PROPERTY LOSS FACTORS**

Incident Type	Property Loss Factor
Residential Structure Fire	
Home Structure Fire	
<i>Residential (1 & 2 Family)</i>	1.00
<i>Apartment and other Multi-Family</i>	0.78
Outside Fire	
Agricultural	0.09
Vacant	-
Non-Residential	
0-5900 SF	1.00
5901-7900 SF	1.34
7901-9800 SF	1.66
9801-12600 SF	2.14
12601-15400 SF	2.61
15401-18400 SF	3.12
18401-21800 SF	3.69
21801-25900 SF	4.39
25901-29300 SF	4.97
29301-33500 SF	5.68
33501-37900 SF	6.42
3701-42700 SF	7.24
42701-47700 SF	8.08
47,701-53,000 SF	8.98
53,001-58,600 SF	9.93
58,601-65,400 SF	11.08
65,401-70,600 SF	11.97
70,601-77,000 SF	13.05
77,001-83,700 SF	14.19
83,701-90,600 SF	15.36
90,601-97,900 SF	16.59
97,901-106,800 SF	18.10
106,801-113,200 SF	19.19
113,201-121,300 SF	20.56
121,301-129,600 SF	21.97
129,601-138,300 SF	23.44
138,301-Greater SF	33.90+