PAJARO VALLEY FIRE PROTECTION DISTRICT

562 CASSERLY ROAD, WATSONVILLE, CA (831) 722-6188

MINUTES OF THE REGULAR MEETING FOR THE BOARD OF DIRECTORS OF THE
PAJARO VALLEY FIRE PROTECTION DISTRICT

Tuesday, October 21, 2025

1.0 Call to Order @ 5:10pm

1.1 Call Meeting to Order - Roll Call
Present: Chairperson Martone, Director Sampson, Director Erbe, Director Dellamonica, Vice Chairperson Moules

2.0 Agenda Amendments

2.1 Additions to Agenda
Remove 3.1 from Consent Agenda in case there are any modifications

2.0 Public Comments

Alex Miller- Aptos resident. Since last meeting there was another Salt River Fire. Asked the Board to consider the high probability of a response to a similar fire in the District.
Nina Audino- owns a home in rural Corralitos. Urged a strong collaboration between County Fire, Board of Supervisors and County Planning to create a strong ordinance. Sent a copy of Solano's ordinance. Reviewed the guidelines included in this ordinance. Asked that a protective ordinance be established.
Carol Bjorn- requested that ordinance require non-flammable materials. Expressed agreement with Ms. Audino. Spoke regarding elective power institute and stated she has statistics on failures since 2021. Ms. Bjorn stated that she spoke at Watsonville City Council regarding fire prevention and how to respond.
Becky Steinbruner- Aptos resident. Spoke on the ordinance being written by New Leaf and Dudek and expressed concern that they are defining for the County the agricultural designations and critical infrastructure. Ms. Steinbruner stated that City of Watsonville City Council did not allow public comment. Supervisor Felipe Hernandez has scheduled a meeting but will not be discussing the 90 Minto Project. Ms. Steinbruner also expressed agreement with other speakers.
Marilyn Gearhart- Aptos resident. Read Central Water District's letter of protest to the County Board of Supervisors regarding the project on Freedom Boulevard and to consider the economic, environmental and public risks.

3.0 Consent Agenda

3.1 **Minutes** – Approval of the minutes from the Special Board meeting on September 22, 2025
Motion by Director Dellamonica; Second by Director Erbe; All in favor: all

and the Regular Board meeting on September 25, 2025.
Motion by Vice Chair Moules; Second by Director Erbe; All in favor: all

3.2 **Claims Disbursement –** Expenditure report, Vendor & Deposit summary, Year to Date Financial Report and American Express Statement

Motion:Director Dellamonica
Second:Vice Chair Moules
All in favor:All

4.0 Presentations

4.1 Pajaro Valley Chief's Report & Run Report for August-
Battalion Chief Urbani reported on the following:

- Features added to home page: current agenda and past agendas; contact us; meeting dates
- Incidents- small vegetation fire.
- All equipment in service
- Training- quarterly training roof ventilation
- Facility update- insurance regarding septic system, waiting for response on coverage
- Resume review on engineer position
- Community outreach Murphy's Crossing, school presentation at Amesti School

4.2 Watsonville Run Report
No questions from Board

4.3 Pitch In Santa Cruz – Trash Talkers upcoming event on Casserly Rd
Director Dellamonica invited the Board to participate on Thursday 23rd at 9am; working with Felipe Hernadnez. The event will be from Casserly to Alianza School and maybe Whiting Rd. Cover Engine 4511 will participate along with Chief Whitaker. 9am. All are welcome.

5.0 Committee Reports

5.1 Strategic Planning Committee – None

5.2 Finance Committee – None

5.3 Audit Committee – BC Urbani
BC Urbani reported: audit is week of Nov. 3rd; all has been provided to the auditors; asked the Board if they want a kickoff meeting.

5.4 LAFCO Ad HOC Committee – Chair Martone & Director Dellamonica
Chair Martone reported that the committee met to discuss funding needed to maintain 3-0 staffing. $207 needed which is higher than previous request which failed; if CSA 48 takes over it will bring $1.7M; Chair Martone reviewed the cost difference between PV staying as a district or CSA 48. The 218 Benefit Assessment would need every single-family dwelling to vote to pass the District would get 51% but they would also pay more; the weighted vote is on the businesses.

6.0 Continuing Business

6.1 Pajaro Valley FPD & Watsonville City FD Contract Update
The Board receives an update from staff on the status of the Pajaro Valley FPD and Watsonville City FD Contract.
Recommended Action: Discuss, make a motion and/or give any directions to staff if needed.
Chief Wilson spoke to Acting Fire Chief Schaefer and is still awaiting a response from the City. Recommended that the Board write a letter to the City; Director Dellamonica stated that letters have been drafted and presented to the Acting Chief but there has been no response, and the City continues to collect funds; Director Sampson asked what the ramifications are if Watsonville does not respond as it will impact the community without ALS. Director Dellamonica reported that there are some responses that fall under Auto Aid/Mutual Aid; when PV Fire responds to Watsonville calls there is no charge as they fall under Auto Aid/Mutual Aid;
BC Urbani reviewed the number of ALS calls being responded to by Watsonville. The Board discussed the various responses by Watsonville into the District.
Director Dellamonica motioned to direct staff to draft a letter to meet and determine a resolution within 30 days or terminate the contract within 30 days due to lack of response and pro-rate the amount owed. Director Erbe second. Roll call vote-Vice Chair Moules-Yes; Director Dellamonica-Yes; Director Erbe, Yes; Director Sampson-Nay; Chair Martone, Yes

Becky Steinbruner – questioned if the District would still have mutual aid in a fire. The response is yes.

6.2 218 Benefit Assessment update from Pajaro Valley Fire's LAFCO Ad Hoc Committee

The board will receive an update from Pajaro Valley Fire's LAFCO Ad Hoc Committee on the status of the proposed 218 Benefit Assessment.

Recommended Action: Discuss, make a motion and/or give any directions to staff if needed.

Chair Martone recommended ceasing work on the 218 Benefit Assessment and directing staff to work with SCI and pay only for the work completed thus far.

Director Dellamonica motioned to cease and desist with SCI and benefit assessment. Second – Director Sampson.

Becky Steinburg- Spoke on the legality of assessing the land and the assessment tax and stated the engineer report needs to identify general benefit vs specific benefit.

Roll call vote: Vice Chair Moules- yes; Director Dellamonica, yes; Director Erbe- yes; Director Sampson, yes; Chair Martone, yes.

6.3 Update on Director Badges

The Board will receive an update on the badges that were ordered for the members of the Board and the next steps needed to be able to issue them.

Recommended Action: Discuss and/or give any directions to staff if needed.

BC Urbani showed the Board the sample of the badges for the Directors for their approval.

7.0 New Business

7.1 Establish a working group for Battery Energy Storage System (BESS) Facility proposed at 90 Minto Rd

The Board to discuss if they want to establish a BESS Facility Working Group to advise the Pajaro Valley FPD Board of Directors on information gathered in reference to the BESS Facility proposed at 90 Minto Rd.

Recommended Action: Discuss, appointment members, make a motion and/or give any directions to staff if needed.

Chief Wilson reported that the working group would include board members, subject matter experts and CalFire staff (Chief Wilson, BC Urbani, two board members, Chris Walters with Joe Packman subject matter experts). They would meet prior to the Board of Supervisors meeting; Chair Martone and Director Dellamonica expressed interest in joining the group.

Becky Steinbruner thanked the Board and requested the opportunity for members of the public to add input; she again asked that the Board look at other county ordinances as a template such as the Central Water District letter. Ms. Steinbruner expressed her opinion on the dangers of BESS and again thanked the Board for their efforts.

Director Sampson motioned to establish a working group.

Motion: Director Sampson
Second:Director Erbe
All in favor:All

Director Sampson motioned to add Chair Martone and Director Dellamonica- second Vice Chair Moules, All in Favor: All

7.2 Resolution 2025-16 Volunteer Firefighter Assistant Grant

Board to review documents and Resolution 2025-16 Volunteer Firefighter Assistant Grant for Fiscal Year 2025-2026

Recommended Action: Adopt by motion Resolution 2025-16 Volunteer Firefighter Assistant Grant.

BC Urbani reported that the grant was awarded. Request $20K and received $10K. Resolution to accept the funds and the authorize Chief Wilson to accept the grant and will reimburse- for turnouts.

Director Dellamonica- asked re volunteer firefighter assistance grant name. This is the grant available to districts.

Motion: Director Moules
Second:Director Erbe
All in favor:All

8.0 Correspondence

8.1 – Alex Miller Handout on BESS Facilities that was handed out to the Board Members at the Regular Board Meeting on September 25.

8.2 – Email from Becky Steinbruner sent on 9/25/25 and handed out to the Board Members at the Regular Board Meeting on September 25.

8.3 – Email from Becky Steinbruner send on 10/8/25 regarding Santa Cruz County Draft Ordinance hearing and YouTube link for BESS Fire Code.

8.4 – Email on 10/10/25 from Senior Project Developer Max Christian responsible for the "Seahawk" project proposed for 90 Minto Rd.
Becky Steinbruner spoke on this letter and shared copies of applications submitted by Mr. Christian and shared information she gathered with the Board.

8.5 – Email from Becky Steinbruner on 10/14/25 BESS presentation to Watsonville City Council.

9.0 Agenda items for the next meeting

CSA 48- discuss deficit spending and possibility of additional staffing on engines for 3-0 staffing
BESS working group report
Fire Code final reading
SCI final report
Resolution for Board Members W/C Coverage
Watsonville Contract Update

10.0 Adjournment

Motion:Vice Chair Moules
Second:Director Erbe
All in favor:all
Time:6:17pm

Expenditure

Transaction Type = Actual; Revenues/Expenditures = R,(E; Chart Fields = GLKey,FundType,Object

Fiscal Month [04] and Post On [@current-fiscal-year] and Revenues/Expenditures [XP] and GL Key [683100]

Fiscal Year	Fiscal Month	Post On	Document No	Revenues/Expenditures	GL Key	Object	Amount	Description
Fund Type: 76 – INVESTMT TRUST-LOCAL BOARDS IN								
Object: 61222 – TELECOM SERVICES								
2026	04	10/07/2025	24146669	Expenditures	683100	61222	-99.08	Phone ()
2026	04	10/07/2025	24147231	Expenditures	683100	61222	-60.69	Phone ()
Total 61222 – TELECOM SERVICES							-159.77	
Object: 61425 – OTHER HOUSEHOLD EXP-SERVICES								
2026	04	10/07/2025	68215	Expenditures	683100	61425	-13.15	Map Cyl. (Cust)
Total 61425 – OTHER HOUSEHOLD EXP-SERVICES							-13.15	
Object: 61720 – MAINT-MOBILE EQUIPMENT-SERV								
2026	04	10/01/2025	11558	Expenditures	683100	61720	-240.60	WT-4551 90-Day
2026	04	10/31/2025	11675	Expenditures	683100	61720	-7,224.86	E4511 Annual/Tires/Pump Test
Total 61720 – MAINT-MOBILE EQUIPMENT-SERV							-7,465.46	
Object: 61920 – MEDICAL, DENTAL & LAB SUPPLIES								
2026	04	10/31/2025	1647580	Expenditures	683100	61920	-265.78	EMS Supplies (Cus)
Total 61920 – MEDICAL, DENTAL & LAB SUPPLIES							-265.78	
Object: 62223 – SUPPLIES								
2026	04	10/01/2025	45667476	Expenditures	683100	62223	-16.55	Business Cards)
2026	04	10/31/2025	45890230	Expenditures	683100	62223	-16.55	B.Cards (Acct#)
2026	04	10/31/2025	45911881	Expenditures	683100	62223	-16.55	B.Cards (Acct#)
Total 62223 – SUPPLIES							-49.65	
Object: 62304 – ATTORNEY								
2026	04	10/31/2025	34916	Expenditures	683100	62304	-50.00	Attorney Services 9/1 - 9/30
Total 62304 – ATTORNEY							-50.00	
Object: 62381 – PROF & SPECIAL SERV-OTHER								
2026	04	10/01/2025	62701	Expenditures	683100	62381	-144.00	Fire Plan Review
2026	04	10/01/2025	909714	Expenditures	683100	62381	-350.79	Fire Alarm Service
2026	04	10/01/2025	PVFD092125	Expenditures	683100	62381	-30.60	Board Minutes
2026	04	10/07/2025	2429754	Expenditures	683100	62381	-171.34	25-26 Prop. Tax (P)
2026	04	10/07/2025	755523	Expenditures	683100	62381	-888.94	Board Member Badges
2026	04	10/07/2025	PVFD100325	Expenditures	683100	62381	-8.50	25-26 Parcel Tax (P)
2026	04	10/31/2025	38443449	Expenditures	683100	62381	-108.00	Pest Cont (Acct:)
Total 62381 – PROF & SPECIAL SERV-OTHER							-1,702.17	

Expenditure

Transaction Type = Actual; Revenues/Expenditures = R,(E; Chart Fields = GLKey,FundType,Object

Fiscal Month [04] and Post On [@current-fiscal-year] and Revenues/Expenditures [XP] and GL Key [683100]

Fiscal Year	Fiscal Month	Post On	Document No	Revenues/Expenditures	GL Key	Object	Amount	Description
Fund Type: 76 – INVESTMT TRUST-LOCAL BOARDS IN								
Object: 62420 – LEGAL NOTICES								
2026	04	10/01/2025	153141	Expenditures	683100	62420	-210.40	Notice-Public Hearing 9/25/25
Total 62420 – LEGAL NOTICES							-210.40	
Object: 62920 – GAS, OIL, FUEL								
2026	04	10/31/2025	289324	Expenditures	683100	62920	-804.58	Fuel (Acct ID:)
2026	04	10/31/2025	289543	Expenditures	683100	62920	-378.16	Fuel (Acct ID:)
Total 62920 – GAS, OIL, FUEL							-1,182.74	
Object: 63074 – UTILITIES								
2026	04	10/01/2025	PVFD092225	Expenditures	683100	63074	-1,288.22	Utilities (Acct#
2026	04	10/31/2025	8409778	Expenditures	683100	63074	-368.37	Trash/Rec (Cust ID:
2026	04	10/31/2025	PVFD101525	Expenditures	683100	63074	-1,210.43	Gas/Elec.)
Total 63074 – UTILITIES							-2,867.02	
Object: 86110 – BUILDINGS AND IMPROVEMENTS								
2026	04	10/07/2025	68231	Expenditures	683100	86110	-55.88	Air Line Repair)
2026	04	10/31/2025	45446	Expenditures	683100	86110	-356.50	1716-App Bay Door Repair
2026	04	10/31/2025	91615675	Expenditures	683100	86110	-440.31	Plymo-vent Repair
Total 86110 – BUILDINGS AND IMPROVEMENTS							-852.69	
Total 76 – INVESTMT TRUST-LOCAL BOARDS IN							-14,818.83	
							-14,818.83	

Classic Blue Cash® for Business Credit Card

PAJARO VALLEY FIRE
MIKE URBANI
Closing Date 10/28/25 Next Closing Date 11/27/25
Account Ending

Customer Care: 1-800-521-6121
TTY: Use Relay 711
Website: americanexpress.com

New Balance	**$2,538.56**
Minimum Payment Due	**$35.00**
Payment Due Date	**11/22/25**

Late Payment Warning: If we do not receive your Minimum Payment Due by the Payment Due Date of 11/22/25, you may have to pay a late fee of up to $39.00 and your APRs may be increased to the Penalty APR of 29.99%.

Minimum Payment Warning: If you make only the minimum payment each period, you will pay more in interest and it will take you longer to pay off your balance. For example:

If you make no additional charges and each month you pay...	You will pay off the balance shown on this statement in about...	And you will pay an estimated total of...
Only the Minimum Payment Due	10 years	$4,923
$91	3 years	$3,272 *(Savings = $1,651)*

If you would like information about credit counseling services, call 1-888-733-4139.

See page 2 for important information about your account.

Please refer to the **IMPORTANT NOTICES** section for any changes to your Account terms and any other communications.

Reward Dollars
As of Sep 2025
78.18

For details, please see your Reward Dollars Summary.

Account Summary

Previous Balance	$369.43
Payments/Credits	-$369.43
New Charges	+$2,538.56
Fees	+$0.00
Interest Charged	+$0.00
New Balance	**$2,538.56**
Minimum Payment Due	**$35.00**
Credit Limit	$15,000.00
Available Credit	$12,461.44
Cash Advance Limit	$500.00
Available Cash	$500.00

Days in Billing Period: 32

↓Please fold on the perforation below, detach and return with your payment ↓

Payment Coupon
Do not staple or use paper clips

Pay by Computer
americanexpress.com/business

Pay by Phone
1-800-472-9297

Account Ending
Enter 15 digit account # on all payments.
Make check payable to American Express.

MIKE URBANI
PAJARO VALLEY FIRE
562 CASSERLY RD
WATSONVILLE CA 95076

Payment Due Date
11/22/25
New Balance
$2,538.56
Minimum Payment Due
$35.00

See reverse side for instructions on how to update your address, phone number, or email.

AMERICAN EXPRESS
PO BOX 60189
CITY OF INDUSTRY CA 91716-0189

$_____.____
Amount Enclosed

Classic Blue Cash® for Business Credit Card

PAJARO VALLEY FIRE
MIKE URBANI
Closing Date 10/28/25

Customer Care & Billing Inquiries **1-800-521-6121**
International Collect 1-623-492-7719
Cash Advance at ATMs Inquiries 1-800-CASH-NOW
Large Print & Braille Statements **1-800-521-6121**

Hearing Impaired
Online chat at **americanexpress.com** or use **Relay dial 711** and **1-800-521-6121**

Website: americanexpress.com

Customer Care & Billing Inquiries
P.O. BOX 981535
EL PASO, TX
79998-1535

Payments
PO BOX 60189
CITY OF INDUSTRY
CA
91716-0189

Payments and Credits

Summary

	Total
Payments	-$369.43
Credits	$0.00
Total Payments and Credits	**-$369.43**

Detail

*Indicates posting date

Payments			**Amount**
10/04/25*	MIKE URBANI	PAYMENT RECEIVED - THANK YOU	-$369.43

New Charges

Summary

	Total
MIKE URBANI	$1,909.55
PHILLIP MATTESON	$439.08
STEPHONE PARSON	$189.93
Total New Charges	**$2,538.56**

Detail

MIKE URBANI Card Ending

				Amount
10/01/25	IN *COASTLINE MARKETING GROUP, INC. 45194 939012	SALINAS	CA	$375.00
10/20/25	LEISURE WEST CAMPER 831-443-3884	SALINAS	CA	$45.00
10/22/25	IDCREATOR 855-625-3437	PHOENIX	AZ	$66.40
10/23/25	BESTBUYCOM807101453826 50300009944 888BESTBUY	RICHFIELD	MN	$1,423.15

PHILLIP MATTESON Card Ending

				Amount
09/27/25	AMAZON MARKETPLACE NA PA MERCHANDISE	AMZN.COM/BILL	WA	$31.74
09/29/25	AMAZON MARKETPLACE NA PA MERCHANDISE	AMZN.COM/BILL	WA	$42.71
10/01/25	GOOGLE *YOUTUBE TV DIGITAL GOODS: MEDIA	G.CO/HELPPAY#	CA	$82.99

Continued on reverse

Detail Continued

				Amount
10/10/25	VZWRLSS APOCC VISB BILL PAYMENT	800-922-0204	FL	$150.40
10/19/25	SPECTRUM CABLE SVC	855-707-7328	MO	$131.24

STEPHONE PARSON
Card Ending

				Amount
10/24/25	SAFEWAY #2840 2840 800-898-4027	FREEDOM	CA	$189.93

Fees

	Amount
Total Fees for this Period	**$0.00**

Interest Charged

	Amount
Total Interest Charged for this Period	**$0.00**

About Trailing Interest

You may see interest on your next statement even if you pay the new balance in full and on time and make no new charges. This is called "trailing interest". Trailing interest is the interest charged when, for example, you didn't pay your previous balance in full. When that happens, we charge interest from the first day of the billing period until we receive your payment in full. You can avoid paying interest on purchases by paying your balance in full and on time each month. Please see the "When we charge interest" sub-section in your Cardmember Agreement for details.

2025 Fees and Interest Totals Year-to-Date

	Amount
Total Fees in 2025	$0.00
Total Interest in 2025	$0.00

Interest Charge Calculation

Your Annual Percentage Rate (APR) is the annual interest rate on your account.
Variable APRs will not exceed 29.99%.

	Annual Percentage Rate	Balance Subject to Interest Rate	Interest Charge
Purchases	17.24% (v)	$0.00	$0.00
Cash Advances	29.24% (v)	$0.00	$0.00
Total			**$0.00**

(v) Variable Rate

Reward Dollar Summary

Total Reward Dollars as of Sep 2025 Billing Period Charges
$78.18

Beginning Reward Dollar Balance	+66.85
Reward Dollars Accrued*	+11.33
Total Available Balance	**+78.18**

***Reward Dollars accrued this period are pending until the minimum due is paid and your account is in good standing. Reward Summary information is one billing cycle behind the charges on this billing statement.**

Base Reward Dollars

Sep 2025 Billing Period Charges	Qualified Spend $		Reward Dollars
Eligible Purchases	-105.32	@0.5%	-0.53
Eligible Purchases	474.75	@2.5%	11.86
Total	**369.43**		**11.33**

Important Messages

Remember to pay at least the Minimum Payment Due by the Payment Due Date, to be eligible for reward dollars and to avoid late fees.

Reward Dollars are calculated on each eligible transaction. The reward dollars shown above have been summarized for informational purposes. For specific details, please visit your online statement.

Get Reward Dollars Everywhere You Use The Card

Tab 3.1 - Consent Agenda - Oct 2025 Revenues

Transaction Type = Actual; Revenues/Expenditures = R,(E; Chart Fields = GLKey,FundType,Object

Fiscal Month [04] and Post On [@current-fiscal-year] and Revenues/Expenditures [RV] and GL Key [683100]

Fiscal Year	Fiscal Month	Post On	Document No	Revenues/Expenditures	GL Key	Object	Amount
Fund Type: 76 – INVESTMT TRUST-LOCAL BOARDS IN							
Object: 40110 – PROPERTY TAX-CURRENT UNSEC-GEN							
2026	04	10/09/2025	JV16391	Revenues	683100	40110	6,503.26
Total 40110 – PROPERTY TAX-CURRENT UNSEC-GEN							6,503.26
Object: 40130 – PROPERTY TAX-PRIOR UNSEC-GEN							
2026	04	10/09/2025	JV16393	Revenues	683100	40130	716.52
Total 40130 – PROPERTY TAX-PRIOR UNSEC-GEN							716.52
Object: 40150 – SUPP PROP TAX-CURRENT SEC							
2026	04	10/09/2025	JV16387	Revenues	683100	40150	1,921.42
Total 40150 – SUPP PROP TAX-CURRENT SEC							1,921.42
Object: 40151 – SUPP PROP TAX-CURRENT UNSEC							
2026	04	10/09/2025	JV16388	Revenues	683100	40151	241.70
Total 40151 – SUPP PROP TAX-CURRENT UNSEC							241.70
Object: 40160 – SUPP PROP TAX-PRIOR SEC							
2026	04	10/09/2025	JV16386	Revenues	683100	40160	278.16
Total 40160 – SUPP PROP TAX-PRIOR SEC							278.16
Object: 40161 – SUPP PROP TAX-PRIOR UNSEC							
2026	04	10/09/2025	JV16389	Revenues	683100	40161	138.32
Total 40161 – SUPP PROP TAX-PRIOR UNSEC							138.32
Object: 40196 – FIRE PROTECTION TAX							
2026	04	10/09/2025	JV16393	Revenues	683100	40196	5.00
Total 40196 – FIRE PROTECTION TAX							5.00
Object: 44142 – PENALTIES FOR DELINQUENT TAXES							
2026	04	10/09/2025	JV16386	Revenues	683100	44142	25.46
2026	04	10/09/2025	JV16389	Revenues	683100	44142	11.66
Total 44142 – PENALTIES FOR DELINQUENT TAXES							37.12
Object: 44143 – REDMPTN PNLTIES FOR DELINQ TXS							
2026	04	10/09/2025	JV16386	Revenues	683100	44143	53.04

Tab 3.1 - Consent Agenda - Oct 2025 Revenues

Transaction Type = Actual; Revenues/Expenditures = R,(E; Chart Fields = GLKey,FundType,Object

Fiscal Month [04] and Post On [@current-fiscal-year] and Revenues/Expenditures [RV] and GL Key [683100]

Description

Fund Type: 76 – INVESTMT TRUST-LOCAL BOARDS IN

Object: 40110 – PROPERTY TAX-CURRENT UNSEC-GEN

Sep25 CurrentUnsecNonSuppNoAir

Object: 40130 – PROPERTY TAX-PRIOR UNSEC-GEN

Sep25 DefaultUnsecNonSuppNoAir

Object: 40150 – SUPP PROP TAX-CURRENT SEC

Sep25 CurrentSecuredSupplement

Object: 40151 – SUPP PROP TAX-CURRENT UNSEC

Sep25 CurrentUnsecuredSupp

Object: 40160 – SUPP PROP TAX-PRIOR SEC

Sep25 DefaultSecuredSupplement

Object: 40161 – SUPP PROP TAX-PRIOR UNSEC

Sep25 DefaultUnsecuredSupp

Object: 40196 – FIRE PROTECTION TAX

Sep25 DefaultUnsecNonSuppNoAir

Object: 44142 – PENALTIES FOR DELINQUENT TAXES

Sep25 DefaultSecuredSupplement

Sep25 DefaultUnsecuredSupp

Object: 44143 – REDMPTN PNLTIES FOR DELINQ TXS

Sep25 DefaultSecuredSupplement

Tab 3.1 - Consent Agenda - Oct 2025 Revenues

Transaction Type = Actual; Revenues/Expenditures = R,(E; Chart Fields = GLKey,FundType,Object

Fiscal Month [04] and Post On [@current-fiscal-year] and Revenues/Expenditures [RV] and GL Key [683100]

Fiscal Year	Fiscal Month	Post On	Document No	Revenues/Expenditures	GL Key	Object	Amount
Fund Type: 76 – INVESTMT TRUST-LOCAL BOARDS IN							
Object: 44143 – REDMPTN PNLTIES FOR DELINQ TXS							
2026	04	10/09/2025	JV16389	Revenues	683100	44143	0.12
Total 44143 – REDMPTN PNLTIES FOR DELINQ TXS							53.16
Total 76 – INVESTMT TRUST-LOCAL BOARDS IN							9,894.66
							9,894.66

Tab 3.1 - Consent Agenda - Oct 2025 Revenues

Transaction Type = Actual; Revenues/Expenditures = R,(E; Chart Fields = GLKey,FundType,Object

Fiscal Month [04] and Post On [@current-fiscal-year] and Revenues/Expenditures [RV] and GL Key [683100]

Description

Fund Type: 76 – INVESTMT TRUST-LOCAL BOARDS IN

Object: 44143 – REDMPTN PNLTIES FOR DELINQ TXS

Sep25 DefaultUnsecuredSupp

Rev/Exp Summary 683100

As Of = @current-fiscal-year-end; Years = 1; Chart Fields = Division,GLKey,Object; Balances = Adopted Budget,Adjusted Budget,Year-To-Date Actual,Year-To-Date Variance; Revenues/Expenditures = R,E

GL Key [683100] and Division [6831]

		FY 2026		
Object	GL Object Title	Adopted Budget	Adjusted Budget	Year-To-Date Actual
40100	PROPERTY TAX-CURRENT SEC-GEN	2,315,152.00	2,315,152.00	0.00
40110	PROPERTY TAX-CURRENT UNSEC-GEN	49,056.00	49,056.00	41,839.90
40130	PROPERTY TAX-PRIOR UNSEC-GEN	2,300.00	2,300.00	1,188.57
40150	SUPP PROP TAX-CURRENT SEC	20,000.00	20,000.00	9,533.17
40151	SUPP PROP TAX-CURRENT UNSEC	0.00	0.00	1,100.87
40160	SUPP PROP TAX-PRIOR SEC	1,000.00	1,000.00	1,343.72
40161	SUPP PROP TAX-PRIOR UNSEC	0.00	0.00	494.58
40196	FIRE PROTECTION TAX	142,006.00	142,006.00	5.00
40430	INTEREST	6,000.00	6,000.00	8,018.74
40830	ST-HOMEOWNERS' PROP TAX RELIEF	10,294.00	10,294.00	0.00
41322	PLAN CHECKING FEES	25,000.00	25,000.00	6,245.77
42030	FIRE PROTECTION SERVICES	500.00	500.00	0.00
42384	OTHER REVENUE	10,000.00	10,000.00	0.00
42450	SLS OF FIXED ASSETS-NONTAXABLE	0.00	0.00	0.00
42462	OPERATING TRANSFER IN	0.00	0.00	0.00
44142	PENALTIES FOR DELINQUENT TAXES	0.00	0.00	152.19
44143	REDMPTN PNLTIES FOR DELINQ TXS	0.00	0.00	156.79
52010	OASDI-SOCIAL SECURITY	-150.00	-150.00	0.00
52015	PERS	-63,000.00	-63,000.00	-60,936.00
54010	WORKERS COMPENSATION INSURANCE	-1,100.00	-1,100.00	-1,023.00
61110	CLOTHING & PERSONAL SUPPLIES	-46,000.00	-46,000.00	0.00
61217	RADIO	-5,000.00	-5,000.00	0.00
61221	TELEPHONE-NON TELECOM 1099	0.00	0.00	0.00
61222	TELECOM SERVICES	-6,000.00	-6,000.00	-1,277.08
61310	FOOD	-5,000.00	-5,000.00	0.00
61425	OTHER HOUSEHOLD EXP-SERVICES	-4,000.00	-4,000.00	-747.22
61535	OTHER INSURANCE	-23,771.00	-23,771.00	-23,771.00
61720	MAINT-MOBILE EQUIPMENT-SERV	-52,500.00	-52,500.00	-7,476.42
61730	MAINT-OTH EQUIP-SERVICES	-8,000.00	-8,000.00	0.00
61848	MAINT-STRUCT/GRDS-OTH-SRV	-16,850.00	-16,850.00	0.00
61920	MEDICAL, DENTAL & LAB SUPPLIES	-5,000.00	-5,000.00	-816.99
62020	MEMBERSHIPS	-2,050.00	-2,050.00	-2,050.00
62219	PC SOFTWARE PURCHASES	-1,000.00	-1,000.00	-210.14
62221	POSTAGE	-500.00	-500.00	-1.07

Rev/Exp Summary 683100

As Of = @current-fiscal-year-end; Years = 1; Chart Fields = Division,GLKey,Object; Balances = Adopted Budget,Adjusted Budget,Year-To-Date Actual,Year-To-Date Variance; Revenues/Expenditures = R,E

GL Key [683100] and Division [6831]

		FY 2026		
Object	GL Object Title	Adopted Budget	Adjusted Budget	Year-To-Date Actual
62223	SUPPLIES	-3,600.00	-3,600.00	-1,006.91
62301	ACCOUNTING AND AUDITING FEES	-40,000.00	-40,000.00	-2,840.00
62304	ATTORNEY	-3,000.00	-3,000.00	-575.00
62327	DIRECTORS' FEES	-6,000.00	-6,000.00	0.00
62381	PROF & SPECIAL SERV-OTHER	-2,620,512.00	-2,620,512.00	-80,201.42
62415	PUBLICATION PRINTING COSTS	-2,000.00	-2,000.00	0.00
62420	LEGAL NOTICES	-1,000.00	-1,000.00	-210.40
62715	SMALL TOOLS & INSTRUMENTS	-5,600.00	-5,600.00	-388.40
62827	ELECTION EXPENSE-OTHER	-27,000.00	-27,000.00	0.00
62888	SPEC DIST EXP-SERVICES	-38,491.00	-38,491.00	0.00
62914	EDUCATION & TRAINING(REPT)	-10,000.00	-10,000.00	0.00
62920	GAS, OIL, FUEL	-19,000.00	-19,000.00	-3,395.21
62922	LODGING	-10,000.00	-10,000.00	0.00
63070	GSD-UTILITIES	0.00	0.00	0.00
63074	UTILITIES	-21,300.00	-21,300.00	-6,526.59
74500	INTEREST-OTHER	-300.00	-300.00	0.00
75231	CONTRIB TO OTHER AGENCIES-OTH	-3,000.00	-3,000.00	-2,805.46
86110	BUILDINGS AND IMPROVEMENTS	-157,200.00	-157,200.00	-16,514.57
86209	MOBILE EQUIPMENT	-29,000.00	-29,000.00	0.00
90000	OPERATING TRANSFERS OUT	-100,000.00	-100,000.00	-100,000.00
98700	APPROP FOR CONTINGENCIES	-100,000.00	-100,000.00	0.00
		-855,616.00	-855,616.00	-242,693.58

Year to Date Rev_Exp Summary 683120

As Of = @current-fiscal-year-end; Years = 1; Chart Fields = Division,GLKey,Object; Balances = Adopted Budget,Adjusted Budget,Year-To-Date Actual,Year-To-Date Variance; Revenues/Expenditures = R,E

GL Key [683120] and Division [6831]

		FY 2026		
Object	GL Object Title	Adopted Budget	Adjusted Budget	Year-To-Date Actual
40430	INTEREST	8,000.00	8,000.00	13,228.54
42462	OPERATING TRANSFER IN	100,000.00	100,000.00	100,000.00
61110	CLOTHING & PERSONAL SUPPLIES	-30,000.00	-30,000.00	0.00
62715	SMALL TOOLS & INSTRUMENTS	-105,000.00	-105,000.00	0.00
86110	BUILDINGS AND IMPROVEMENTS	-200,000.00	-200,000.00	0.00
86209	MOBILE EQUIPMENT	-1,053,907.00	-1,053,907.00	0.00
90000	OPERATING TRANSFERS OUT	0.00	0.00	0.00
		-1,280,907.00	-1,280,907.00	113,228.54

Pajaro Valley Fire Protection District

562 Casserly Road, Watsonville, CA 95076

Chief's Report

November 2, 2025

To: Board of Directors

From: Mike Urbani, Battalion Chief

Subject: October Chief's Report

General

- In general, all is good.

Emergency Incident Response:

- Had a vehicle accident on Casserly Rd that required extrication.
- Assisted Watsonville with a structure fire.
- Responded to stage for a shooting but there were no patients.
- Responded for a shooting on the Pajaro River levee with one victim.
- Had a travel trailer fire behind Orchard Park Market.

Apparatus:

- E-4511 went to have a part of the turbo system and coolant leaks repaired. It is back in service.

Training:

- Nothing to report

Facilities:

- Added the TV to the board room.
- Battalion Chief bay door is hopefully fixed.

Personnel:

- New FAE position should be filled and starting at Pajaro Valley on November 24th.

Fire Prevention/Community Outreach

- Did two Trunk-or-Treat events at the Fair Grounds and the Church of Nazarene

Pajaro Valley Fire Response Times

Pajaro Valley Fire Protection District

October 01, 2025 to October 31, 2025

November 01, 2025

Only First On-Scene Unit Shown. Cancelled Calls or UTL Not Shown.

Incident #	Date	Dispatch Time	On Scene	Elapse Time	Unit	Location	Incident Type	RA
6636	10/1/25	06:12:27	06:25:41	13:14	E4411	56 CUTTER DR ,PAJARO_VALLEY_WTS	FIRE, RESIDENTIAL	PV2A
6643	10/1/25	12:06:48	12:13:55	7:07	E1794	FREEDOM BL ,PAJARO_VALLEY_WTS	MEDICAL	PV7
6657	10/1/25	20:15:30	20:19:29	3:59	E4511	WATSONVILLE CHARTER SCH OF ART @ 75	FIRE, COMMERCIAL	PV3
6663	10/1/25	22:45:31	22:51:45	6:14	E1784	FREEDOM BL ,PAJARO_VALLEY	MEDICAL	PV7BZ
6668	10/2/25	07:12:09	07:20:18	8:09	B1714	510 HECKER PASS RD / 100 RED HAWK PL	MED, TRAFFIC	K12
6673	10/2/25	08:36:45	08:45:03	8:18	B1714	510 HECKER PASS RD / 100 RED HAWK PL	MED, TRAFFIC	K12
6684	10/2/25	16:29:43	16:38:07	8:24	B1714	=L(36.925467,-121.732933)	FIRE, WILDLAND	PV2A
6687	10/2/25	18:10:58	18:20:51	9:53	E4511	60 AIRPORT BL / 130 PAJARO LN	FIRE, SMOKE CHECK	PV7A
6703	10/3/25	17:42:04	17:46:39	4:35	E4511	GREEN VALLEY RD ,PAJARO_VALLEY	MEDICAL	PV4
6708	10/3/25	18:47:57	18:52:12	4:15	E4511	2400 E LAKE AV ,PAJARO_VALLEY (SAINT	MED, TRAFFIC	PV3
6718	10/4/25	10:35:05	10:41:07	6:02	E4411	25 DEVON LN ,PAJARO_VALLEY_WTS	FIRE, RESIDENTIAL	PV5
6728	10/4/25	13:15:32	13:23:33	8:01	E4412	112 ONYX DR ,PAJARO_VALLEY_WTS	HAZ, GAS	PV5
6732	10/4/25	15:02:51	15:07:37	4:46	E4511	CASSERLY RD ,PAJARO_VALLEY	MEDICAL	PV4
6742	10/4/25	20:23:36	20:29:40	6:04	E4511	DIAS LN ,PAJARO_VALLEY	MEDICAL	PV3
6752	10/5/25	09:56:54	10:04:54	8:00	E4412	HI GRADE LN ,PAJARO_VALLEY_WTS	MEDICAL	PV7A
6757	10/5/25	11:45:53	11:48:16	2:23	E1794	FREEDOM BL ,PAJARO_VALLEY	MEDICAL	PV7BZ
6766	10/5/25	15:52:04	16:00:10	8:06	E4511	PINTO LAKE MOBILE ESTATES @ GREEN	MEDICAL	PV4
6775	10/5/25	22:02:25	22:04:33	2:08	E4511	STATION 45 (PAJARO VALLEY FS) @	MEDICAL	K10A
6783	10/6/25	14:21:21	14:24:38	3:17	E4412	AMESTI RD ,PAJARO_VALLEY_WTS	MEDICAL	PV7A
6784	10/6/25	15:11:19	15:16:22	5:03	E1784	VIA NICOLA ,PAJARO_VALLEY_WTS	MEDICAL	PV7
6790	10/6/25	17:37:25	17:44:40	7:15	E4412	E LAKE AV ,PAJARO_VALLEY_WTS	MEDICAL	PV5
6792	10/6/25	18:54:18	18:59:01	4:43	E4412	STEWART AV ,PAJARO_VALLEY_WTS	MEDICAL	PV7A
6797	10/7/25	01:17:49	01:17:52	0:03	E1794	W PHILLIPS RD ,PAJARO_VALLEY	MEDICAL	PV4A
6800	10/7/25	06:17:29	06:24:50	7:21	E4511	272 CASSERLY RD ,PAJARO_VALLEY	HAZ, ELECTRICAL	K10A

Incident #	Date	Dispatch Time	On Scene	Elapse Time	Unit	Location	Incident Type	RA
6828	10/8/25	08:50:04	08:52:57	2:53	E4412	60 AIRPORT BL / 130 PAJARO LN	FIRE, SMOKE CHECK	PV7A
6834	10/8/25	12:00:17	12:06:12	5:55	E1784	MANN AV ,PAJARO_VALLEY_WTS	MEDICAL	PV7A
6840	10/8/25	15:47:24	15:55:23	7:59	E4511	2 PAULSEN RD / 600 GREEN VALLEY RD	MED, TRAFFIC	PV4
6842	10/8/25	16:57:41	17:01:54	4:13	E4511	110 CARLTON RD ,PAJARO_VALLEY	MED, TRAFFIC	PV1A
6861	10/9/25	13:59:25	14:03:08	3:43	E4511	WATSONVILLE CHARTER SCH OF ART @	MEDICAL	PV3
6865	10/9/25	16:05:32	16:11:58	6:26	E4411	400 LAKEVIEW RD / 198 COLLEGE RD	FIRE, VEH PASSENGER	PV2A
6874	10/10/25	01:02:48	01:11:58	9:10	E4511	PONDEROSA AV ,PAJARO_VALLEY	MEDICAL	PV4
6877	10/10/25	07:48:51	07:51:06	2:15	B1714	216 RIVERSIDE RD / 2 LAKEVIEW RD	FIRE, DEBRIS	PV2A
6879	10/10/25	09:14:35	09:25:20	10:45	E4511	563 GREEN VALLEY RD	HAZ, HAZARD	PV5
6890	10/10/25	16:48:47	16:55:34	6:47	E4412	BEHLER RD ,PAJARO_VALLEY_WTS	MEDICAL	PV5
6911	10/11/25	13:00:38	13:13:20	12:42	E4511	RIVERSIDE RD ,PAJARO_VALLEY	MED, CODE 2	PV1A
6931	10/12/25	13:22:11	13:29:44	7:33	E4511	GIZDICH RANCH @ PECKHAM RD	MEDICAL	PV1A
6937	10/12/25	19:45:40	19:51:12	5:32	E4511	PINTO LAKE MOBILE ESTATES @ GREEN	MEDICAL	PV4
6940	10/12/25	22:34:57	22:40:45	5:48	E4412	BUENA VISTA DR ,PAJARO_VALLEY_WTS	MEDICAL	PV7
6941	10/13/25	01:17:41	01:24:21	6:40	E4511	980 CASSERLY RD / 2 WHEELOCK RD	MED, TRAFFIC	PV4
6944	10/13/25	06:51:25	07:00:06	8:41	E4511	298 COWARD RD / 700 CARLTON RD	MED, TRAFFIC	PV1A
6952	10/13/25	12:48:03	12:59:30	11:27	E4511	2 HECKER PASS RD / 2 CASSERLY RD	FIRE, DEBRIS	PV3
6953	10/13/25	13:02:46	13:11:30	8:44	E4511	CUTTER DR ,PAJARO_VALLEY_WTS	MEDICAL	PV2A
6955	10/13/25	14:01:54	14:09:39	7:45	E4511	BEHLER RD ,PAJARO_VALLEY_WTS	MEDICAL	PV5
6962	10/13/25	16:09:11	16:17:49	8:38	E4511	800 CARLTON RD / 206 THOMPSON RD	MED, TRAFFIC	PV1A
6972	10/14/25	02:25:39	02:30:55	5:16	E4412	=L(36.941473,-121.773381)	FIRE, DEBRIS	PV7A
6976	10/14/25	06:48:03	06:57:41	9:38	E1784	BRIARWOOD DR ,PAJARO_VALLEY_WTS	MEDICAL	PV7
6987	10/14/25	14:47:10	14:49:09	1:59	E1784	22 HOLOHAN RD ,PAJARO_VALLEY_WTS	FIRE, SMOKE CHECK	PV5
6993	10/14/25	20:01:29	20:07:42	6:13	E4511	PINTO LAKE MOBILE ESTATES @ GREEN	MED, CODE 2	PV4
6997	10/15/25	02:34:18	02:44:23	10:5	E4511	GREEN VALLEY RD / 2 AMESTI RD	MEDICAL	PV7A
7005	10/15/25	09:28:23	09:34:31	6:08	E4511	LESTER CT ,PAJARO_VALLEY	MEDICAL	PV4
7009	10/15/25	10:31:50	10:34:58	3:08	E4412	CARLENE CT ,PAJARO_VALLEY_WTS	MEDICAL	PV7
7015	10/15/25	15:46:22	15:53:00	6:38	E4412	129 PAJARO CIR ,PAJARO_VALLEY_WTS	HAZ, HAZARD	PV7A
7028	10/16/25	10:27:25	10:32:45	5:20	B1714	60 LAKEN DR / 30 HOLOHAN RD	MED, TRAFFIC	PV5
7051	10/16/25	22:16:35	22:25:10	8:35	E4511	60 AIRPORT BL / 130 PAJARO LN	FIRE, DEBRIS	PV7A
7053	10/17/25	04:14:22	04:20:14	5:52	E4412	COWLES RD ,PAJARO_VALLEY_WTS	MEDICAL	PV7A
7056	10/17/25	06:48:35	06:52:18	3:43	E4411	216 RIVERSIDE RD / 2 LAKEVIEW RD	MED, TRAFFIC	PV2A
7059	10/17/25	11:23:41	11:29:03	5:22	E4511	PINTO LAKE MOBILE ESTATES @ GREEN	MEDICAL	PV4

Incident #	Date	Dispatch Time	On Scene	Elapse Time	Unit	Location	Incident Type	RA
7062	10/17/25	13:20:29	13:29:17	8:48	E4511	PECKHAM RD ,PAJARO_VALLEY (GIZDICH	MEDICAL	PV1A
7116	10/18/25	21:15:23	21:30:41	15:18	E4511	510 HECKER PASS RD / 100 RED HAWK PL	MED, TRAFFIC	K12
7117	10/18/25	21:51:49	22:00:08	8:19	E4511	2300 E LAKE AV / 2 HOLOHAN RD	FIRE, DEBRIS	PV5
7122	10/19/25	06:17:10	06:19:28	2:18	E4411	216 RIVERSIDE RD / 2 LAKEVIEW RD	FIRE, DEBRIS	PV2A
7133	10/19/25	16:58:06	17:01:18	3:12	E4411	RIVERSIDE RD / 2 LAKEVIEW RD	MEDICAL	PV2A
7144	10/19/25	20:47:46	20:55:57	8:11	E4510	CASSERLY RD ,PAJARO_VALLEY	MEDICAL	PV3
7152	10/20/25	10:17:02	10:25:02	8:00	E4510	130 PIONEER RD ,PAJARO_VALLEY	HAZ, ELECTRICAL	PV4
7155	10/20/25	17:24:13	17:29:20	5:07	E4412	BEHLER RD ,PAJARO_VALLEY_WTS	MEDICAL	PV5
7159	10/20/25	20:11:41	20:16:20	4:39	E1774	CALABASAS RD ,PAJARO_VALLEY_WTS	MEDICAL	PV7
7167	10/21/25	08:47:51	08:56:28	8:37	E4510	DOERING LN ,PAJARO_VALLEY	MEDICAL	PV4
7177	10/21/25	16:42:06	16:54:26	12:20	ATCE35	HWY 129 / 960 CARLTON RD	MED, TRAFFIC	PV1
7192	10/22/25	12:50:12	12:54:39	4:27	E4412	COWLES RD ,PAJARO_VALLEY_WTS	MEDICAL	PV7A
7195	10/22/25	16:44:32	16:45:19	0:47	E4510	HECKER PASS RD ,PAJARO_VALLEY	MEDICAL	PV3A
7200	10/22/25	18:02:55	18:09:54	6:59	E4510	PONDEROSA AV ,PAJARO_VALLEY	MEDICAL	PV4
7212	10/23/25	10:36:19	10:44:29	8:10	E4412	VISTA DEL LAGO CIR	MEDICAL	PV7A
7214	10/23/25	10:52:04	10:57:14	5:10	E1774	PINTO LAKE MOBILE ESTATES @ 789 GREEN	PA, PERSON	PV4
7221	10/23/25	16:11:57	16:17:43	5:46	E4412	BRIARWOOD DR ,PAJARO_VALLEY_WTS	MEDICAL	PV7
7237	10/24/25	16:34:56	16:39:06	4:10	E4412	AIRPORT BL / 300 GREEN VALLEY RD	MED, TRAFFIC	PV7A
7246	10/24/25	20:37:28	20:43:59	6:31	E4510	PONDEROSA AV ,PAJARO_VALLEY	MEDICAL	PV4
7251	10/24/25	21:36:13	21:45:17	9:04	E4510	PINTO LAKE MOBILE ESTATES @ GREEN	MED, CODE 2	PV4
7260	10/25/25	09:02:51	09:10:38	7:47	E4510	344 CARLTON RD ,PAJARO_VALLEY	HAZ, GAS	PV1A
7265	10/25/25	12:08:53	12:14:53	6:00	E4510	60 AIRPORT BL / 130 PAJARO LN	FIRE, DEBRIS	PV7A
7267	10/25/25	13:40:17	13:44:12	3:55	P1721	VISTA DEL LAGO CIR	MED, CPR IN	PV7A
7268	10/25/25	14:32:34	14:38:25	5:51	E4510	156 CARLTON RD / 798 LAKEVIEW RD	MED, TRAFFIC	PV1A
7286	10/26/25	02:23:31	02:27:33	4:02	E4510	HATHAWAY AV ,PAJARO_VALLEY	MEDICAL	PV4
7290	10/26/25	07:37:31	07:51:15	13:44	E4510	QUINTA ,PAJARO_VALLEY	MED, CODE 2	PV4
7299	10/26/25	13:04:55	13:11:21	6:26	E4510	AMADOR ,PAJARO_VALLEY	MEDICAL	PV4
7305	10/26/25	17:01:31	17:08:03	6:32	E4510	PINTO LAKE COUNTY PARK @ 757 GREEN	FIRE, DEBRIS	PV4
7307	10/26/25	17:36:13	17:41:35	5:22	E4411	5 TAYLOR RD ,PAJARO_VALLEY_WTS	MED, TRAFFIC	PV2A
7308	10/26/25	17:56:17	18:07:41	11:24	E1774	2475 FREEDOM BL ,PAJARO_VALLEY_WTS	FIRE, RESIDENTIAL	PV7
7320	10/27/25	02:38:19	02:43:04	4:45	E4412	COWLES RD ,PAJARO_VALLEY_WTS	MEDICAL	PV7A
7324	10/27/25	11:29:51	11:34:39	4:48	E4412	MONUMENT AV ,PAJARO_VALLEY_WTS	MEDICAL	PV7
7325	10/27/25	11:50:26	11:56:41	6:15	E4510	E LAKE AV ,PAJARO_VALLEY_WTS	MEDICAL	PV5

Incident #	Date	Dispatch Time	On Scene	Elapse Time	Unit	Location	Incident Type	RA
7328	10/27/25	13:32:34	13:39:58	7:24	E4510	LITTLEWAY LN ,PAJARO_VALLEY	MEDICAL	PV4
7330	10/27/25	14:49:37	14:55:39	6:02	E4510	E LAKE AV ,PAJARO_VALLEY (LAKEVIEW	MEDICAL	PV3
7357	10/28/25	17:45:10	17:50:29	5:19	E4510	DOERING LN ,PAJARO_VALLEY	MEDICAL	PV4
7377	10/29/25	13:11:54	13:18:13	6:19	E4412	BEHLER RD ,PAJARO_VALLEY_WTS	MEDICAL	PV5
7384	10/29/25	15:08:16	15:14:31	6:15	E1774	FREEDOM BL ,PAJARO_VALLEY	MEDICAL	PV7BZ
7390	10/29/25	17:52:43	18:00:08	7:25	E4511	60 AIRPORT BL / 130 PAJARO LN	FIRE, DEBRIS	PV7A
7401	10/30/25	09:37:03	09:44:00	6:57	E4412	BRADFORD RD ,PAJARO_VALLEY_WTS	MEDICAL	PV7
7414	10/30/25	21:59:23	22:06:12	6:49	E4511	PINTO LAKE MOBILE ESTATES @ GREEN	MEDICAL	PV4

Average Elapsed Minutes: **6:34** Std. Deviation **2.90**

Pajaro Valley Fire Response Times

Pajaro Valley Fire Protection District

October 01, 2025 to October 31, 2025

November 01, 2025

Only First On-Scene Unit Shown. Cancelled Calls or UTL Not Shown.

Incident #	Date	Dispatch Time	On Scene	Elapse Time	Unit	Location	Incident Type	RA
7116	10/18/25	21:15:23	21:30:41	15:18	E4511	510 HECKER PASS RD / 100 RED HAWK PL	MED, TRAFFIC	K12

This call should be included. E4511 was on another call and responded from Watsonville City area, in addition the reported call location was incorrect.

Average Elapsed Minutes: **6:34** Std. Deviation **2.90**

Watsonville Fire Dept.

Watsonville, CA

This report was generated on 11/8/2025 12:06:15 AM

Incident Response Detail EXPANDED for Date Range (Landscape)

Zone(s): CA1 - PV Contract Area- Station 1, CA2 - PV Contract Area- Station 2 | Start Date: 10/01/2025 | End Date: 10/31/2025

INCIDENT DATE	INCIDENT #	ADDRESS	INCIDENT TYPE	ALARM TIME	DISPATCH TIME	ARRIVAL TIME
ZONE: PV Contract Area- Station 1						
10/06/2025	2025-04343	E LAKE AVE	321 - EMS call, excluding vehicle accident with injury	10/6/2025 17:34:36	10/6/2025 17:36:08	10/6/2025 17:44:05
10/16/2025	2025-04520	42 RIVERSIDE RD	622 - No incident found on arrival at dispatch address	10/16/2025 16:08:51	10/16/2025 16:11:31	
10/17/2025	2025-04527	RIVERSIDE / LAKEVIEW	322 - Motor vehicle accident with injuries	10/17/2025 06:43:05	10/17/2025 06:44:54	10/17/2025 06:50:19
10/19/2025	2025-04568	RIVERSIDE / LAKEVIEW	561 - Unauthorized burning	10/19/2025 06:09:47	10/19/2025 06:11:09	10/19/2025 06:19:00
ZONE: PV Contract Area- Station 2						
10/01/2025	2025-04271	AIRPORT BLVD	611 - Dispatched & cancelled en route	10/1/2025 20:40:40	10/1/2025 20:41:43	
10/04/2025	2025-04314	25 DEVON LN	733 - Smoke detector activation due to malfunction	10/4/2025 10:32:01	10/4/2025 10:33:00	10/4/2025 10:47:12
10/04/2025	2025-04319	112 ONYX DR	412 - Gas leak (natural gas or LPG)	10/4/2025 13:13:46	10/4/2025 13:14:39	10/4/2025 13:23:24
10/05/2025	2025-04324	HI GRADE LN	321 - EMS call, excluding vehicle accident with injury	10/5/2025 09:53:29	10/5/2025 09:56:14	10/5/2025 10:02:44
10/06/2025	2025-04337	AMESTI RD	321 - EMS call, excluding vehicle accident with injury	10/6/2025 14:17:25	10/6/2025 14:19:27	10/6/2025 14:24:22
10/06/2025	2025-04344	STEWART AVE	321 - EMS call, excluding vehicle accident with injury	10/6/2025 18:53:17	10/6/2025 18:53:44	10/6/2025 18:58:50
10/08/2025	2025-04367	AIRPORT BLVD	561 - Unauthorized burning	10/8/2025 08:45:58	10/8/2025 08:46:37	10/8/2025 08:53:09
10/10/2025	2025-04412	BEHLER RD	321 - EMS call, excluding vehicle accident with injury	10/10/2025 16:46:24	10/10/2025 16:48:00	10/10/2025 16:55:22
10/12/2025	2025-04449	BUENA VISTA DR	321 - EMS call, excluding vehicle accident with injury	10/12/2025 22:33:22	10/12/2025 22:33:49	10/12/2025 22:40:19
10/15/2025	2025-04499	CARLENE CT	321 - EMS call, excluding vehicle accident with injury	10/15/2025 10:29:22	10/15/2025 10:29:54	10/15/2025 10:34:42
10/15/2025	2025-04503	129 PAJARO CIR	600 - Good intent call, other	10/15/2025 15:42:45	10/15/2025 15:43:20	10/15/2025 15:52:00
10/16/2025	2025-04511	LAKEN DR	322 - Motor vehicle accident with injuries	10/16/2025 10:25:46	10/16/2025 10:26:42	10/16/2025 10:32:48
10/16/2025	2025-04524	AIRPORT BLVD	611 - Dispatched & cancelled en route	10/16/2025 22:12:32	10/16/2025 22:14:23	
10/17/2025	2025-04526	COWLES RD	321 - EMS call, excluding vehicle accident with injury	10/17/2025 04:11:03	10/17/2025 04:12:29	10/17/2025 04:20:05
10/18/2025	2025-04563	GAFFEY RD	611 - Dispatched & cancelled en route	10/18/2025 21:11:57	10/18/2025 21:22:14	
10/20/2025	2025-04586	BEHLER RD	321 - EMS call, excluding vehicle accident with injury	10/20/2025 17:20:37	10/20/2025 17:22:46	10/20/2025 17:29:20
10/22/2025	2025-04604	COWLES RD	321 - EMS call, excluding vehicle accident with injury	10/22/2025 12:46:22	10/22/2025 12:48:48	10/22/2025 12:54:27
10/23/2025	2025-04626	BRIARWOOD DR	321 - EMS call, excluding vehicle accident with injury	10/23/2025 16:10:34	10/23/2025 16:11:05	10/23/2025 16:17:31
10/24/2025	2025-04642	AIRPORT BLVD	322 - Motor vehicle accident with injuries	10/24/2025 16:33:35	10/24/2025 16:33:55	10/24/2025 16:38:51
10/27/2025	2025-04691	COWLES RD	321 - EMS call, excluding vehicle accident with injury	10/27/2025 02:32:17	10/27/2025 02:35:17	10/27/2025 02:42:51
10/27/2025	2025-04696	MONUMENT AVE	321 - EMS call, excluding vehicle accident with injury	10/27/2025 11:27:17	10/27/2025 11:29:23	10/27/2025 11:34:39
10/29/2025	2025-04740	BEHLER RD	321 - EMS call, excluding vehicle accident with injury	10/29/2025 13:09:02	10/29/2025 13:11:04	10/29/2025 13:18:00
10/30/2025	2025-04758	BRADFORD RD	321 - EMS call, excluding vehicle accident with injury	10/30/2025 09:33:49	10/30/2025 09:36:38	10/30/2025 09:44:01

Only REVIEWED incidents included. Alarm, Dispatch and Arrival Date/times are earliest recorded for an incident, across all responding apparatus. Back in Service is the Latest recorded for an incident across all responding apparatus

Pajaro Valley Fire Protection District

Staff Report

Date: November 12, 2025

To: Board of Directors

From: Mike Urbani, Battalion Chief

Subject: **Adoption of 2025 California Fire Code and the 2024 International Fire Code**

Background

On September 22, 2025, your board was introduced to the proposed ordinance. At that time your board took the following actions:

- Public notice was posted on the website, at the Pajaro Valley Fire Station and in the Pajaronian on October 24th and October 31st, 2025
- Adopted Resolution 2025-12 "Notice of Intent to adopt the 2024 International & 2025 California Fire Codes with amendments" and set this meeting for a public hearing. As directed, staff posted notice of this hearing in accordance with California Government Code §54954.2
- Adopted Resolution 2025-13 "Resolution Finding Modification of State Housing Law" and directed staff to forward a copy of the findings, with a copy of proposed Ordinance 2025-15 to the Santa Cruz County Board of Supervisors for review and comment.
- Directed staff to make available copies of proposed Ordinance 2025-15 for review by the public in-lieu of the first reading. Ordinance 2025-15 was posted on the District's website and a copy at the Pajaro Valley Fire Protection District's fire station.
- Adopted Resolution 2025-14 "Notice of intent to Adopt a Negative Declaration" and directed staff to prepare the Environmental Checklist for consideration at this meeting as necessary to adopt a negative declaration in accordance with Public Resources Code §21152

Ordinance 2025-15 proposes to adopt the 2024 International and 2025 California Fire Codes with amendments. The California Health and Safety Code identifies a specific process for adoption of the Fire Code with specific actions and timelines. Because of the adoption process, the District is required to update the ordinance and adopt the current model code with amendments each code cycle, which is approximately every three years.

Fire districts are required to solicit comments from the County Board of Supervisors after the first reading of the ordinance and no comments have been received from either the county or the general public.

Pajaro Valley Fire Protection District

Staff Report

Discussion

To adopt Ordinance 2025-15, it is necessary for your Board to complete the following actions:

1. Conduct a public hearing on Ordinance 2025-15, “An Ordinance Adopting the 2025 California and 2024 International Fire Codes with amendments”.
2. Accept the Environmental Impact Check List that has been prepared at your Boards’ direction and direct the Fire Chief or clerk of the board to forward a Notice of Determination of a Negative Declaration as required.
3. Adopt Ordinance 2025-15, “An Ordinance Adopting the 2025 California and 2024 International Fire Codes with amendments”.

Recommendation

Open public hearing – hear any comment from the public with regards to the adoption of Ordinance 2025-15. After hearing all comments close the public hearing. Board may act upon comments as deemed necessary or appropriate.

1. A **motion** shall be entertained to accept the environmental check list as submitted and direct the Fire Chief or Clerk of the Board to make the appropriate filings.

2. A **motion** shall be entertained to suspend the reading of Ordinance 2025-15 due to time. Copies have been available for review at the Administrative Office and on the District’s website for those parties that have been interested since September 23, 2025.

3. A **motion** shall be entertained to adopt Ordinance 2025-15, “An Ordinance Adopting the 2025 California and 2024 International Fire Codes with amendments”.

NOTE* After adoption, the Board Chair shall sign 2 original copies which shall be forwarded to the Santa Cruz County Board of Supervisors for ratification. 1 original will be returned to the fire district for internal filing. All other filings may be by photocopies.

INITIAL STUDY

ENVIRONMENTAL CHECKLIST FORM

I. Background

1. Name of Proponent: Pajaro Valley Fire Protection District

2. Address and Phone Number of Proponent:
562 Casserly Rd, Watsonville, California, 95076 (831) 722-6188

3. Date of Check list Submitted: September 23, 2025

Name of Proposal (if applicable): Adoption of the Pajaro Valley Fire Protection District Fire Code and prescribing regulations governing conditions hazardous to life and property from fire and explosion, and providing for the issuance of permits.

II. Environmental Impacts

	Yes	Maybe	No
1. **Earth.** Will the proposal result in:			
a. Unstable earth conditions or in changes in geologic substructures?	____	____	X
b. Disruptions, displacements, compaction or over-covering of the soil?	____	____	X
c. Change in topography or ground surface relief features?	____	____	X
d. The destruction, covering or modification of any unique geologic or physical features?	____	____	X
e. Any increase in wind or water erosion of soils, either on or off the site?	____	____	X
f. Changes in deposition or erosion of beach sands, or changes in siltation, deposition or erosion which may modify the channel of a river or stream or the bed of the ocean or any bay, inlet or lake?	____	____	X
g. Exposure of people or property to geologic hazards such as earthquakes, landslides, mudslides, ground failure, or similar hazards?	____	____	X

	Yes	Maybe	No
2. **Air**. Will the proposal result in:			
a. Substantial air emissions or deterioration of ambient air quality?	_____	_____	X
b. The creation of objectionable odors?	_____	_____	X
c. Alteration of air movement, moisture, or temperature, or any change in climate, either locally or regionally?	_____	_____	X
3. **Water.** Will the proposal result in:			
a. Changes in currents, or the course of direction of water movements, in either marine or fresh water?	_____	_____	X
b. Changes in absorption rates, drainage patterns, or the rate and amount of surface runoff?	_____	_____	X
c. Alterations to the course or low of flood waters?	_____	_____	X
d. Change in the amount of surface water in any water body?	_____	_____	X
e. Discharge into surface waters, or in any alteration of surface water quality, including but not limited to temperature, dissolved oxygen or turbidity?	_____	_____	X
f. Alteration of the direction or rate of flow of ground waters?	_____	_____	X
g. Change in the quantity of ground waters, either through direct additions or withdrawals, or through interception of an aquifer by cuts or excavations?	_____	_____	X
h. Substantial reduction in the amount of water otherwise available for public water supplies?	_____	_____	X
i. Exposure of people or property to water related hazards such as flooding or tidal waves?	_____	_____	X
4. **Plant Life**. Will the proposal result in:			
a. Change in the diversity of species, or number of any species of plants (including trees, shrubs, grass, crops, and aquatic plants)?	_____	_____	X

	Yes	Maybe	No
b. Reduction of the numbers of any unique, rare or endangered species of plants?			X
c. Introduction of new species of plants into an area, or in a barrier to the normal replenishment of existing species?			X
d. Reduction in acreage of any agricultural crop?			X
5. **Animal Life**. Will the proposal result in:			
a. Changes in the diversity of species, or numbers of any species of animals (birds, land animals including reptiles, fish and shellfish, benthic organisms or insects)?			X
b. Reduction of the numbers of any unique, rare or endangered species of animals?			X
c. Introduction of new species of animals into an area, or result in a barrier to the migration or movement of animals?			X
d. Deterioration to existing fish or wildlife habitat?			X
6. **Noise.** Will the proposal result in:			
a. Increases in existing noise levels?			X
b. Exposure of people to severe noise levels?			X
7. **Light and Glare**. Will the proposal produce new light or glare?			X
8. **Land Use**. Will the proposal result in a substantial alteration of the present or planned land use of the area?			X
9. **Natural Resources**. Will the Proposal result in:			
a. Increase in the rate of use of any natural resources?			X
10. **Risk of Upset**. Will the proposal involve:			
a. A risk of an explosion or the release of hazardous substances (including, but not limited to, oil, pesticides, chemicals or radiation) in the event of an accident or upset conditions?		X	

	Yes	Maybe	No
b. Possible interference with an emergency response plan or an emergency evacuation plan?			X
11. **Population.** Will the proposal alter the location, distribution, density, or growth rate of the human population of an area?			X
12. **Housing.** Will the proposal affect existing housing, or create a demand for additional housing?			X
13. **Transportation/Circulation**. Will the proposal result in:			
a. Generation of substantial additional vehicular movement?			X
b. Effects on existing parking facilities, or demand for new parking?			X
c. Substantial impact upon existing transportation systems?			X
d. Alternatives to present patterns of circulation or movement of people and/or goods?		X	
e. Alterations to waterborne, rail or air traffic?			X
f. Increase in traffic hazards to motor vehicles, bicyclists or pedestrians?			X
14. **Public Services**. Will the proposal have an effect upon, or result in a need for new or altered governmental services in any of the following areas:			
a. Fire Protection?			X
b. Police Protection?			X
c. Schools?			X
d. Parks or other recreational facilities?			X
e. Maintenance of public facilities, including roads?			X
f. Other government services?			X
15. **Energy**. Will the proposal result in:			
a. Use of substantial amounts of fuel or energy?			X

	Yes	Maybe	No
b. Substantial increase in demand upon existing sources of energy, or require the development of new sources of energy?			X
16. **Utilities**. Will the proposal result in a need for new systems, or substantial alterations to the following utilities:			
a. Power or natural gas			X
b. Communications systems			X
c. Water			X
d. Sewer or septic tanks			X
e. Storm water drainage			X
f. Solid waste disposal			X
17. **Human Health.** Will the proposal result in:			
a. Creation of any health hazard or potential health hazard (excluding mental health)?			X
b. Exposure of people to potential health hazards?		X	
18. **Aesthetics**. Will the proposal result in the obstruction of any scenic vista or view open to the public, or will the proposal result in the creation of an aesthetically offensive site open to public view?			X
19. **Recreation.** Will the proposal result in an impact upon the quality or quantity of existing recreational opportunities?			X
20. **Cultural Resources.**			
a. Will the proposal result in the alteration of or the destruction of a prehistoric or historic archaeological site?			X
b. Will the proposal result in adverse physical or aesthetic effects to a prehistoric or historic building, structure, or object?			X
c. Does the proposal have the potential to cause a physical change which would affect unique ethnic cultural values?			X
d. Will the proposal restrict existing religious or sacred uses within the potential impact area?			X

	Yes	Maybe	No
21. **Mandatory findings of Significance**			
a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range or a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	_____	_____	X
b. Does the project have the potential to achieve short-term, to the disadvantage of long-term, environmental goals? (A short-term impact on the environment is one which occurs in a relatively brief, definitive period of time while long-term impacts will endure well into the future.)	_____	_____	X
c. Does the project have impacts which are individually limited, but cumulatively considerable? (A project may impact on two or more separate resources where the impact on each resource is relatively small, but where the effect of the total of those impacts on the environment is significant.)	_____	_____	X
d. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	_____	_____	X

III. Discussion of Environmental Evaluation

10.a. Because provisions of the Ordinance would govern the control and disposition of certain situations hazardous to life and property resulting from fire and explosion, and would control the potential for fire and explosion, through imposing certain standards and/or procedures, it is possible that in implementing provisions of the Ordinance there may be a risk of upset. The intent and purpose of the Ordinance is to alleviate same, and as a result there should be no significant adverse impact on the environment.

13.d. To the extent that the Ordinance requires a certain type and kind of response to conditions hazardous to life, the environment and property resulting from fire and explosion based on the location and time of day for required response, there may be alterations to the present patterns of circulation or movement of people and/or goods, but, because the project would establish standards for the

safeguarding or protection of that circulation or movement, there is no possibility of an adverse impact on the environment.

17.b. Conditions that are hazardous to life, the environment and property may occur which would be subject to standards or procedures authorized by the Ordinance. Due to this, there is the potential for exposure of people to health impacts. However, it is the intent and purpose of the Ordinance to alleviate hazardous conditions, thus alleviating an adverse impact to the environment.

IV. Determination

On the basis of this initial evaluation, I find that the project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

Date: 11/5/2025

DocuSigned by:
Jed Wilson
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Signature: Jed Wilson
Fire Chief
Pajaro Valley Fire Protection District

Pajaro Valley Fire Protection District
Fire Code

ORDINANCE NO. 2025-15

An ordinance of the Pajaro Valley Fire Protection District adopting the 2025 edition of the California Fire Code, regulating and governing the safeguarding of life and property from fire and explosion hazards arising from the storage, handling and use of hazardous substances, materials and devices, and from conditions hazardous to life or property in the occupancy of buildings and premises in the Pajaro Valley Fire Protection District providing for the issuance of permits and collection of fees therefore; repealing the Previous Adoption of the 2022 California Fire Code and all other ordinances and parts of the ordinances in conflict therewith.

PART 1

The Pajaro Valley Fire Protection District Fire Code does ordain as follows:

That portion of the 2025 California Fire Code that imposes substantially the same requirements as are contained in the International Fire Code, 2024 Edition published by the International Code Council and the California Building Standards Commission with Errata, together with those portions of the International Fire Code, 2024 Edition, including Appendices B, BB, C, CC, D, I, N and O as published by the International Code Council not included in the California Fire Code, and Appendix P as published by the California Building Standards Commission as modified and amended by this ordinance, are adopted by this reference into this code, and are hereby collectively declared to be the Fire Code of the Pajaro Valley Fire Protection District, in the State of California regulating and governing the safeguarding of life and property from fire and explosion hazards arising from the storage, handling and use of hazardous substances, materials and devices, and from conditions hazardous to life or property in the occupancy of buildings and premises as herein provided; providing for the issuance of permits and collection of fees for same; and each and all of the regulations, provisions, penalties, conditions and terms of said Fire Code on file in the office of the Pajaro Valley Fire Protection District are hereby referred to, adopted, and made a part hereof, as if fully set out in this ordinance, with the additions, insertions, deletions and changes, if any, prescribed in Part 2 of this ordinance.

PART 2

Resolution 2023-02 of the Pajaro Valley Fire Protection District is hereby repealed and replaced with Ordinance 2025-15 to read as follows:

California Fire Code Adopted.
That portion of the 2025 California Fire Code that imposes substantially the same requirements as are contained in the International Fire Code, 2024 Edition published by the International Code Council and the California Building Standards Commission with errata, together with those portions of the International Fire Code, 2024 Edition, including Appendices B, BB, C, CC, D, I, N and O published by the International Code Council not included in the 2025 California Fire Code, and Appendix P as published by the California Building Standards Commission as modified and amended by this ordinance, are adopted by this reference into code, and are hereby collectively declared to be the Fire Code of the Pajaro Valley Fire Protection District for the purpose of regulating and governing the safeguarding of life, property and public welfare to a reasonable degree from the hazards of fire, hazardous materials release and explosion arising from the storage, use and handling of dangerous and hazardous materials, substances and devices, conditions hazardous to life or property in the occupancy and use of buildings and premises, the operation, installation, construction, location, safeguarding and maintenance of attendant equipment, the installation and maintenance of adequate means of egress not provided for by the building code, and providing for the issuance of permits and collection of fees for same.

Section 45.101.1 is amended – Title.

Section 101.1 of Chapter 1 of the Fire Code of the Pajaro Valley Fire Protection District is amended to read as follows:

45.101.1 - Title. These regulations shall be known as the Fire Code of the Pajaro Valley Fire Protection District, hereinafter referred to as "this code."

Section 45.102.1 is amended – Construction and design provisions.

Section 102.1 of Chapter 1 of the Fire Code of the Pajaro Valley Fire Protection District is amended to read as follows:

45.102.1 - Construction and design provisions. The construction and design provisions of this code shall apply to:

1. Structures, facilities and conditions arising after the adoption of this code.
2. Existing structures, facilities and conditions not legally in existence at the time of adoption of this code.
3. Existing structures, facilities and conditions where required in Chapter 11.
4. Existing structures, facilities and conditions that, in the opinion of the fire code official, constitute a distinct hazard to life or property.
5. Existing Structures, Alterations and Repairs. All new work performed in alterations and/or repairs to existing structures shall comply with the current provisions of this Chapter. When alterations and/or repairs result in the removal, alteration, modification, replacement and/or repair of fifty percent or more of the external walls of a building, or result in the removal, modification, replacement and/or repair of fifty percent or more of the existing internal structural and/or non-structural framework, independently or in combination thereof, within a five year period, the entire building shall be made to conform to the current provisions of this chapter. The determination under this section of the requirement for upgrading any existing structure to full conformance with current provisions of this Chapter shall be at the sole discretion of the Fire Code Official.

Section 45.102.9 is amended - Matters not provided for.

Section 102.9 of Chapter 1 of the Fire Code of the Pajaro Valley Fire Protection District is amended to read as follows:

45.102.9 - Matters not provided for. Requirements that are essential for the public safety of an existing or proposed activity, building or structure, or for the safety of the occupants thereof, which are not specifically provided for by this code shall be determined by the fire code official.

The fire chief is authorized to render interpretations of this code and to make and enforce rules, supplemental regulations and standards in order to carry out the application and intent of its provisions. Such interpretations, rules, regulations and standards shall be in conformance with the intent and purpose of this code and shall be available to the public during normal business hours. Those standards promulgated by the Santa Cruz County Fire Chiefs Association shall be deemed as prima facie evidence of compliance with this code.

Section 45.103.5 is added – Law enforcement powers.

Section 103.5 of Chapter 1 of the Fire Code of the Pajaro Valley Fire Protection District is added to read as follows:

45.103.5 - Law enforcement powers. The fire code official and his/her deputies shall have the powers of law enforcement officers in performing their duties under this code. When requested to do so by the fire code official, the chief of police or county sheriff of the jurisdiction is authorized to assign such available law enforcement as necessary to assist the fire code official with enforcing the provisions of this code.

Section 45.105.1 is amended – General.

Section 105 of Chapter 1 of the Fire Code of the Pajaro Valley Fire Protection District is amended to read as follows:

45.105.1 - General. Permits shall be in accordance with Sections 105.1.1. through 105.6.25 or other provisions of this code as required by the jurisdiction having authority. When required by the fire code official, a permit shall be obtained. Permit fees, if any, shall be paid prior to issuance of the permit. Issued permits shall be kept on the premises designated therein at all times and shall be readily available for inspection by the fire code official.

Sections 112.1 through 112.4 are deleted and replaced – Means of Appeals.

Sections 112.1 through 112.4 of Chapter 1 of the Fire Code of the Pajaro Valley Fire Protection District are deleted and replaced to read as follows:

Section 45.112.1 is added - Board of appeals established.

Section 112.1 of Chapter 1 of the Fire Code of the Pajaro Valley Fire Protection District is added to read as follows:

45.112.1—Board of appeals established. In order to hear and decide appeals of orders, decisions or determinations made by the fire code official relative to the application and interpretation of this code, there shall be and is hereby created a Board of Appeals. The Board of Appeals shall be:

1. For the Santa Cruz County Fire Department, the Board of Supervisors of Santa Cruz County, or a sub-committee as appointed by the Board of Supervisors of Santa Cruz County; or,

2. For the independent Fire Districts in Santa Cruz County, the Board of Directors of the Fire District, or a sub-committee as appointed by the Board of Directors of the Fire District.

The fire code official shall be an ex-officio member of said board but shall have no vote on any matter before the board. The board may adopt additional rules of procedure for conducting its business and shall render all decisions and findings in writing to the appellant with a duplicate copy to the fire code official.

Section 45.112.2 is added – Limitations on Authority.

Section 112.2 of Chapter 1 of the Fire Code of the Pajaro Valley Fire Protection District is added to read as follows:

45.112.2 Limitations on Authority. An application for appeal shall be based on a claim that the true intent of this code or the rules legally adopted thereunder have been incorrectly interpreted, the provisions of this code do not fully apply or an equivalent or better form of construction is proposed. The board shall not have authority to waive requirements of this code or interpret the administration of this code.

Section 45.112.3 is added - Qualifications.

Section 112.3 of Chapter 1 of the Fire Code of the Pajaro Valley Fire Protection District is added to read as follows:

45.112.3 Qualifications. The board of appeals shall consist of members who are qualified by experience and training to pass on matters pertaining to hazards of fire, explosions, hazardous conditions or fire protection systems, and are not employees of the jurisdiction.

45.112.4 is added – Appeals process.

112.4 of Chapter 1 of the Fire Code of the Pajaro Valley Fire Protection District is added to read as follows:

45.112.4.1 - Initiating appeal. Any beneficially interested party has the right to appeal the order served by the fire code official by filing a written "NOTICE OF APPEAL" with the office of the fire code official within

fourteen (14) days after service of such order. The notice shall state the order appealed from, the identity and mailing address of the appellant, and the specific grounds upon which the appeal is made.

45.112.4.2 - Stay of order. The filing of a properly completed notice of appeal shall have the effect of staying the implementation of the order appealed from, until the final decision of appeal.

Exception: Orders affecting acts or conditions which in the opinion of the fire code official, pose an immediate threat to life, property, or the environment as a result of panic, fire, explosion, or release.

45.112.4.3 - Hearing of appeal. Following is the process for establishing and hearing appeals:

1. The Board of Appeals, or the secretary thereof, shall set the matter to be heard at a date within thirty days of receipt of such notice of appeal. Written notice of the time and place set for hearing shall be served on the appellant by first class mail to the mailing address given in the notice of appeal at least five days prior to the date set for the hearing. The fire code official shall transmit to the Board of Appeals all records related to the appeal.
2. At the hearing on the appeal, the appellant shall, in the first instance present evidence in support of the grounds enumerated in her/his notice of appeal. The fire code official shall next present evidence in support of her/his order. The appellant and the fire code official shall each have one opportunity to rebut the evidence presented by the other. The hearing shall be de novo in all respects.

45.112.4.4 - Decision of the board of appeals. Upon hearing the appeal, the Board of Appeals may issue a decision affirming, modifying or vacating the order of the fire code official. The decision shall be in writing and shall be served upon the appellant by first class mail to the mailing address given in the notice of appeal.

45.112.4.5 - Time of decision. The Board of Appeals shall have the power to continue any hearing and may, in its discretion, take the appeal under submission. The Board of Appeals shall render a decision not later than the seventh day following the date the matter was taken under submission, and forthwith notify the interested parties as previously set forth.

Section 45.113.4 is amended – Violation penalties.

Section 113.4 of Chapter 1 of the Fire Code of the Pajaro Valley Fire Protection District is amended to read as follows:

45.113.4 - Violation penalties. Persons who shall violate a provision of this code or shall fail to comply with any of the requirements thereof or who shall erect, install, alter, repair or do work in violation of the approved construction documents, or of a permit or certificate used under provisions of this code, shall be guilty of an infraction.

Acts denominated as infractions shall not be punishable by imprisonment. Every violation determined to be an infraction is punishable by:

1. A fine not exceeding one hundred dollars for a first violation;
2. A fine not exceeding two hundred dollars for a second violation of the same provision of this code within one year;
3. A fine not exceeding five hundred dollars for each additional violation of the same provision of this code within one year.

A person charged with an infraction shall not be entitled to a trial by jury. A judgment that a person convicted of an infraction be punished by fine may also provide for the payment to be made within a specified time or in specified installments, contingent upon the person giving his written promise to either pay the fine as provided or to appear in court on the due date. Any person who willfully violates any such written promise is guilty of a misdemeanor.

Each day that a violation continues after due notice has been served shall be deemed a separate offense.

Section 45.113.4.1 is amended – Abatement of violation.

Section 113.4.1 of Chapter 1 of the Fire Code of the Pajaro Valley Fire Protection District is amended to read as follows:

45.113.4.1 - Abatement of violation. In addition to the imposition of the penalties herein described, the fire code official is authorized to institute appropriate action to prevent unlawful construction or to restrain, correct or abate a violation; or to prevent illegal occupancy of a structure or premises; or to stop an illegal act, conduct of business or occupancy of a structure on or about any premises. Any violation of this code shall be deemed a public nuisance pursuant to Santa Cruz County Code Section 1.12.050 and/or the County of Santa Cruz Fire Code. In the event that a public nuisance is not abated in accordance with the fire code official's order or the order of the Board of Appeals, if any, the fire code official may, upon securing approval of the Board of Supervisors of the County of Santa Cruz, or if violation is in a fire district, the Board of Directors of said District, proceed to abate the nuisance by force account, contract, or any other method deemed most expedient by the Board. The cost of such abatement may be charged to the owner of record or assessed to the property in a manner provided in Sections 1.14.040 through 1.14.080 of the County of Santa Cruz Fire Code.

Section 45.113.4.2 is added – Enforcement.

Section 113.4.2 of Chapter 1 of the Fire Code of the Pajaro Valley Fire Protection District is added to read as follows:

45.113.4.2 - Enforcement. The fire code official and her/his delegated subordinates, pursuant to the provisions of Section 836.5 of the Penal Code of the State of California, are hereby authorized to arrest a person without a warrant whenever they have reasonable cause to believe that the person has committed a violation of any of the provisions of this Code in their presence.

Upon making such an arrest, the fire code official or her/his delegated subordinate shall prepare a citation and release the person arrested pursuant to Section 853.6 of the Penal Code of the State of California, the provisions of which are hereby adopted by reference as part of this Section.

Section 45.114.4 is amended – Failure to comply.

Section 114.4 of Chapter 1 of the Fire Code of the Pajaro Valley Fire Protection District is amended to read as follows:

45.114.4 - Failure to comply. It is unlawful for any person, firm or corporation to violate or fail to comply with any lawful order of the fire code official; fail to comply with an order by the Board of Appeals; or, fail to comply with an order of the court of competent jurisdiction within the time fixed therein. Every such violation shall be deemed a misdemeanor and shall be punishable by a fine of not more than $500.00 plus court assigned fees or by imprisonment not exceeding 1 year in the county jail, or both such fine and imprisonment.

Section 45.202 is amended – Definition of All-Weather Surface.

Definition of All-Weather Surface in Section 202 of Chapter 2 of the Fire Code of Pajaro Valley Fire Protection District is added after Alcohol-Blended Fuels to read as follows:

ALL WEATHER SURFACE. An all-weather surface shall be a minimum of 6" of compacted Class II base rock for grades up to and including 5%, oil and screened for grades up to and including 15%, and asphaltic concrete for grades exceeding 15%. No grade shall be allowed to exceed 16% in State Responsibility Area (SRA) or 20% in Local Responsibility Area (LRA).

Section 45.202 is amended – Definition of Bridge.

Definition of Bridge in Section 202 of Chapter 2 of the Fire Code of the Pajaro Valley Fire Protection District is added after Breakout to read as follows:

BRIDGE. A bridge shall be defined as a structure designed to carry a roadway over a depression or obstacle.

Section 45.202 is amended – Definition of De Novo.

Definition of De Novo in Section 202 of Chapter 2 of the Fire Code of the Pajaro Valley Fire Protection District is added after Deluge System to read as follows:

DE NOVO. adj. Latin for "anew," which means starting over, as in a trial de novo. For example, a decision in a small claims case may be appealed to a local trial court, which may try the case again, de novo.

Section 45.202 is amended – Definition of Greenhouse.

Definition of Greenhouse in Section 202 of Chapter 2 of the Fire Code of the Pajaro Valley Fire Protection District is added after Grandstand to read as follows:

GREENHOUSE. A greenhouse is a structure with walls and roof made chiefly of a non-combustible, transparent material, such as glass, in which plants requiring regulated climatic conditions are grown. Construction within the greenhouse is also of a non-combustible nature.

Section 45.202 is amended – Definition of Local Responsibility Area (LRA).

Definition of Local Responsibility Area (LRA) in Section 202 of Chapter 2 of the Fire Code of the Pajaro Valley Fire Protection District is added after Listed to read as follows:

LOCAL RESPONSIBILITY AREA (LRA). Shall mean lands on which neither the state nor the federal government has any legal responsibility for providing fire protection. Local responsibility areas include incorporated cities and cultivated agriculture lands. Local responsibility area fire protection is typically provided by city fire departments, fire protection districts, special districts, counties, and by CAL FIRE under contract to local government.

Section 45.202 is amended – Definition of Stage.

Definition of Stage in Section 202 of Chapter 2 of the Fire Code of the Pajaro Valley Fire Protection District is added after Sprinkler Express Riser to read as follows:

STAGE. A space within a building utilized for entertainment or presentations, which includes overhead hanging curtains, drops, scenery or stage effects other than lighting and sound. Stage area shall be measured to include the entire performance area and adjacent backstage and support areas not separated from the performance area by fire-resistance rated construction. Stage height shall be measured from the lowest point on the stage floor to the highest point of the roof or floor deck above the stage.

Section 45.202 is amended – Definition of State Responsibility Area (SRA).

Definition of State Responsibility Area (SRA) in Section 202 of Chapter 2 of the Fire Code of the Pajaro Valley Fire Protection District is added after Standpipe System, Classes Of to read as follows:

STATE RESPONSIBILITY AREA (SRA). Shall mean lands that are classified by the Board of Forestry pursuant to Public Resources Code Section 4125-4127; and the California Code of Regulations, Title 14, Division 1.5, Chapter 7, Article 1, Sections 1220-1220.5 where the financial responsibility of preventing and suppressing forest fires is primarily the responsibility of the State of California.

Section 45.202 is amended – Definition of Turnaround.

Definition of Turnaround in Section 202 of Chapter 2 of the Fire Code of the Pajaro Valley Fire Protection District is added after Tube Trailer to read as follows:

TURNAROUND. A roadway, unobstructed by parking, which allows for a safe opposite change of direction for emergency equipment. Maximum grade in all directions may not exceed 5% and maximum distance from the structure is 150 feet (45,720 mm) or as approved by the fire code official. Design of such area may be found in Santa Cruz County Fire Prevention Officers Standards.

Section 45.202 is amended – Definition of Turnout.

Definition of Turnout in Section 202 of Chapter 2 of the Fire Code of the Pajaro Valley Fire Protection District is added after Turnaround to read as follows:

TURNOUT. A widening in a roadway to allow vehicles to pass. Design of such area may be found in Santa Cruz County Fire Prevention Officers Standards.

Section 45.304.1.3 is amended - Vegetation.

Section 304.1.3 of Chapter 3 of the Fire Code of the Pajaro Valley Fire Protection District is amended to read as follows:

45.304.1.3 - Vegetation. Weeds, grass, vines or other growth that is capable of being ignited and endangering property, shall be cut down and removed by the owner or occupant of the premises. Vegetation clearance requirements in urban-wildland interface areas shall be maintained around and adjacent to buildings and structures. A firebreak shall be made by removing and clearing away, for a distance of not less than 30 feet on each side of the building or structure or to the property line, whichever is nearer, all flammable vegetation or other combustible growth. This does not apply to single specimens of trees or other vegetation that is well-pruned and maintained so as to effectively manage fuels and not form a means of rapidly transmitting fire from other nearby vegetation to any building or structure.

When required by state law, or local ordinance, rule or regulation, an additional fire protection zone or firebreak may be made by removing all brush, flammable vegetation, or combustible growth that is located within 100 feet from the building or structure or to the property line. This section does not prevent an insurance company that insures a building or structure from requiring the owner of the building or structure to maintain a firebreak of more than 100 feet around the building or structure. Grass and other vegetation located more than 30 feet from the building or structure and less than 18 inches in height above the ground may be maintained where necessary to stabilize the soil and prevent erosion. This does not apply to single specimens of trees or other vegetation that is well-pruned and maintained so as to effectively manage fuels and not form a means of rapidly transmitting fire from other nearby vegetation to a dwelling or structure.

Vegetation clearance requirements in the wildland-urban interface areas shall be in accordance with Part 7 of Title 24 California Code of Regulations (California Wildland-Urban Interface Code).

Section 45.305.4 is amended – Deliberate or negligent burning

Section 305.4 of Chapter 3 of the Fire Code of the Pajaro Valley Fire Protection District is amended to read as follows:

45.305.4 Deliberate or negligent burning. It shall be unlawful to deliberately or through negligence set fire to or cause the burning of combustible material in such a manner as to endanger the safety of persons or property. Any person or entity violating this section is guilty of a misdemeanor; however, any violation of this section may, in the discretion of the district attorney, be charged and prosecuted as an infraction.

Section 45.307.2 is amended – Permit required.

Section 307.2 of Chapter 3 of the Fire Code of the Pajaro Valley Fire Protection District is amended to read as follows:

45.307.2 - Permit required. When required by the CAL FIRE Fire Chief for the San Mateo-Santa Cruz Unit, a permit shall be obtained ~~from the fire code official~~ in accordance with Section 105.6 prior to kindling a fire for recognized silvicultural or range or wildlife management practices, prevention or control of disease or pests, or a bonfire. Application for such ~~approval~~ permit shall only be presented by and permits issued to the owner of the land upon which the fire is to be kindled. In addition, open burning is not allowed within the Local Responsibility Area of Santa Cruz County without the approval of the local fire chief having jurisdiction over that property.

The open burn season for Santa Cruz County unless otherwise declared shall be December 1st through April 30th of the calendar year. Within areas designated State Responsibility Area, open burn season shall not be declared between May 1st and the date CAL FIRE declares, by proclamation, that hazardous fire conditions have been abated for that year.

During the open burn season pile burning is allowed under CAL FIRE permits provided that all conditions specified in the permits are followed. Monterey Bay Area Unified Air Pollution Control District (MBARD) permits may also be required given the location, time of year, and type of burn. Responsibility for obtaining the proper MBARD permit rests with the applicant.

Section 45.311.5 is amended – Placards.

Section 311.5 of Chapter 3 of the Fire Code of the Pajaro Valley Fire Protection District is amended to read as follows:

45.311.5 – Placards. When required by the fire code official, ~~Any~~ any building or structure determined to be unsafe pursuant to Section 110 of this code relating to structural or interior hazards shall be marked as required by Sections 311.5.1 through 311.5.5.

Section 45.501.3 is amended – Construction documents.

Section 501.3 of Chapter 5 of the Fire Code of the Pajaro Valley Fire Protection District is amended to read as follows:

45.501.3 – Construction documents. Construction documents for proposed fire apparatus access, location of fire lanes, security gates across fire apparatus access roads and construction documents and hydraulic calculations for fire hydrant systems shall be submitted to the fire department for review and approval prior to construction. When grading work is needed for the access road(s) within the jurisdiction of Santa Cruz County, application for a grading permit shall be made with the Santa Cruz County Planning Department pursuant to the Santa Cruz County Grading Ordinance. Such Permits shall be reviewed by the Santa Cruz County Environmental Coordinator as required.

Section 45.503 is added – Fire Apparatus Access Roads.

Section 503 of Chapter 5 of the Fire Code of the Pajaro Valley Fire Protection District is added and amended below.

Section 45.503.2.1 is amended – Dimensions.

Section 503.2.1 of Chapter 5 of the Fire Code of the Pajaro Valley Fire Protection District is amended to read as follows:

45.503.2.1 – Dimensions. Fire Apparatus access roads shall have an unobstructed width of not less than 20 feet (6096 mm) except for approved security gates in accordance with Section 503.7, and an unobstructed vertical clearance of not less than 13 feet 6 inches (4115 mm). In addition, areas within 10 feet (3048 mm) on each side of portions of highways, public and private streets and roads which are ordinarily used for vehicular traffic shall be cleared of flammable vegetation and other combustible growth.

Single specimens of trees, ornamental shrubbery or cultivated ground cover such as green grass, ivy, succulents or similar plants used as ground covers, are exempt provided that they do not form a means of readily transmitting fire.

EXCEPTIONS:

1. Outside of the Urban Services Line as established by the County of Santa Cruz, access roads shall be a minimum of 18 feet wide for all access roads or driveways serving more than two habitable structures, and 12 feet for an access road or driveway serving two or fewer habitable structures. Where it is environmentally inadvisable to meet these criteria (due to excessive grading, tree removal or other environmental impacts), a 12-foot wide all-weather surface access road with

12-foot wide by 35-foot long turnouts located approximately every 500 feet may be provided with the approval of the fire code official.

2. Inside of the Urban Services Line, private access roads extending from a public road shall be a minimum of 18 feet wide for all access roads or driveways serving more than two habitable structures, and 12 feet for an access road or driveway serving two or fewer habitable structures. Where it is environmentally inadvisable to meet these criteria (due to excessive grading, tree removal or other environmental impacts), a 12-foot wide all-weather surface access road with 12-foot wide by 35-foot long turnouts located approximately every 500 feet may be provided with the approval of the fire code official.

3. Vertical clearance may be reduced, provided such reduction does not impair access by fire apparatus and approved signs are installed and maintained indicating the established vertical clearance when approved by the fire code official.

Section 45.503.2.1.1 is added – Vegetation clearance along access roads.

Section 503.2.1.1 of Chapter 5 of the Fire Code of the Pajaro Valley Fire Protection District is added to read as follows:

45.503.2.1.1 – Vegetation clearance along access roads. Areas within 10 feet (3048 mm) horizontal and 15 feet (4572 mm) vertical on each side of portions of highways, public and private streets, roads and driveways which are ordinarily used for vehicular traffic shall be cleared of flammable vegetation and other combustible growth. Design of such area may be found in Santa Cruz County Fire Prevention Officers Standards.

Exception: Single specimens of trees, ~~ornamental shrubbery~~ or cultivated ground cover such as green grass, ivy, succulents or similar plants used as ground covers, are exempt provided they do not form a means of readily transmitting fire at the discretion of the fire code official.

Section 45.503.2.3 is amended – Surface.

Section 503.2.3 of Chapter 5 of the Fire Code of the Pajaro Valley Fire Protection District is amended to read as follows:

45.503.2.3 - Surface. An all-weather surface shall be a minimum of 6" of compacted Class II base rock for grades up to and including 5%, oil and screened for grades up to and including 15%, and asphaltic concrete for grades exceeding 15%. No grade shall be allowed to exceed 16% in State Responsibility Area (SRA) or 20% in Local Responsibility Area (LRA).

Section 45.503.2.4 is amended – Turning radius.

Section 503.2.4 of Chapter 5 of the Fire Code of the Pajaro Valley Fire Protection District is amended to read as follows:

45.503.2.4 – Turning radius. In the State Responsibility Area (SRA) no roadway shall have a horizontal inside radius of curvature of less than 50 feet and additional surface width of 4 feet shall be added to curves of 50-100 feet radius; 2 feet to those from 100-200 feet. In the Local Responsibility Area (LRA) the minimum centerline radius shall be 35 feet.

Section 45.503.2.5.1 is added – New dead-end access roads.

Section 503.2.5 of Chapter 5 of the Fire Code of the County of Pajaro Valley Fire Protection District is amended to read as follows:

45.503.2.5.1 – New dead-end access roads. New dead-end roads are prohibited, without secondary access, serving more than one parcel in new minor land divisions or subdivisions which exceed the following distances from an adequate through road unless approved by the applicable fire protection agency, the Department of Public Works, and by the Planning Commission; in no case shall a new dead-end road exceed ½ mile in length.

Urban & Suburban General Plan and LCP Land Use Plan designation	500’
Rural General Plan and LCP Land Use Plan designation	1000’
Mountain General Plan and LCP Land Use Plan designation	1500’

Section 45.503.2.6.1 is added – Width.

Section 503.2.6.1 of Chapter 5 of the Fire Code of the Pajaro Valley Fire Protection District is added to read as follows:

45.503.2.6.1 - Width. All bridges shall be a minimum of 20 feet of clear width. The fire code official may allow the width to be reduced for access to U or R-3 occupancies in accordance with Objective 6.5 – Fire Hazards of the Santa Cruz County General Plan.

Section 45.503.2.6.2 is added – Certification.

Section 503.2.6.2 of Chapter 5 of the Fire Code of the Pajaro Valley Fire Protection District is added to read as follows:

45.503.2.6.2 - Certification. Every private bridge hereafter constructed shall be engineered by a licensed civil or structural engineer and approved by the fire code official. Certification shall be provided by the licensed engineer in writing that the bridge complies with the design standard required by this section to the fire code official.

Section 45.503.2.6.3 is added – Recertification.

Section 503.2.6.3 of Chapter 5 of the Fire Code of the Pajaro Valley Fire Protection District is added to read as follows:

45.503.2.6.3 - Recertification. Every private bridge shall be recertified every ten years or whenever deemed necessary by the fire code official. Such recertification shall be in accordance with the requirements of 503.2.6.2.

Section 45.503.2.6.4 is added – Existing private bridges.

Section 503.2.6.4 of Chapter 5 of the Fire Code of the Pajaro Valley Fire Protection District is added to read as follows:

45.503.2.6.4 - Existing private bridges. An existing private bridge not conforming to these regulations may be required to conform when in the opinion of the fire code official, such repairs are necessary for public safety.

Section 45.503.2.6.5 is added – Fees.

Section 503.2.6.5 of Chapter 5 of the Fire Code of the Pajaro Valley Fire Protection District is added to read as follows:

45.503.2.6.5 - Fees. All fees charged for the purpose of certification or recertification shall be at the owner’s expense.

Section 45.503.2.7 is amended – Grade.

Section 503.2.7 of Chapter 5 of the Fire Code of the Pajaro Valley Fire Protection District is amended to read as follows:

45.503.2.7 – Grade. The grade for all roads, streets, private lanes and driveways shall not exceed 16% in State Responsibility Area (SRA) and 20% in Local Responsibility Area (LRA).

Section 45.503.6 is added – Gates.

Section 503.6 of Chapter 5 of the Fire Code of the Pajaro Valley Fire Protection District is amended to read as follows:

45.503.6 – Gates. The installation of security gates across a fire apparatus access road shall be approved by the fire code official. Where security gates are installed, they shall have an approved means of emergency operation. The security gates and the emergency operation shall be maintained operational at all times. Electric gate operators, where provided, shall be listed in accordance with UL 325. Gates intended for automatic operation shall be designed, constructed and installed to comply with the requirements of ASTM F2200.

All Gates providing access from a road to a driveway, or within any access road, shall be located at least 30 feet from the roadway and shall open to allow a vehicle to stop without obstructing traffic on the road. Gate entrances shall be at least 2 (two) feet wider than the access road being secured, but in no case shall the width be less than 14 (fourteen) feet unobstructed horizontal clearance and unobstructed vertical clearance of 15 (fifteen) feet. When gates are to be locked, the installation of a key box or other acceptable means for immediate access may be required as in Section 506.1

Section 45.505.2 is amended – Street and road signs.

Section 505.2 of Chapter 5 of the Fire Code of the Pajaro Valley Fire Protection District is amended to read as follows:

45.505.2 - Street and road signs. Streets and roads shall be identified with approved signs. Temporary signs shall be installed at each street intersection when construction of new roadways allows passage by vehicles. Signs shall be of an approved size, weather resistant and be maintained until replaced by permanent signs. Posting of any road names and numbers not authorized by the Office of Street Naming and Numbering of the County of Santa Cruz, and the fire code official is prohibited.

Section 45.507.3 is amended – Fire flow.

Section 507.3 of Chapter 5 of the Fire Code of the Pajaro Valley Fire Protection District is amended to read as follows:

45.507.3 – Fire flow. Fire flow requirements for buildings or portions of buildings and facilities shall be determined by an approved method, Appendix B, or Appendix BB (for school buildings as scoped in BB 101.1)

Parcels not within the boundaries of a public or private water purveyor shall have a minimum water supply capable of supplying a flow of 500 gallons per minute for 20 minutes (10,000 gallons) for all new fire sprinklered (NFPA 13D) dwellings, residential additions in excess of 500 square feet, and other structures classified as a residential accessory uses such as garages, storage buildings, barns, etc..

Privately owned water that is not supplied by a licensed water purveyor shall:

1. serve no more than two dwellings and no more than 10,000 square feet of habitable dwelling space, and;
2. be provided pursuant to a recorded covenant that runs with the land if the water supply originates from another parcel. If a water purveyor supplies the water, the applicant must submit with the building plan written verification from the licensed purveyor that the water supply meets the flow requirement.

   Exception: A 2% reduction will be allowed for flow supplied by approved stationary water tanks, to account for the nominal standardized capacity of such tanks.

Section 45.507.5.7 is added – Painting.

Section 507.5.7 of Chapter 5 of the Fire Code of the Pajaro Valley Fire Protection District is added to read as follows:

45.507.5.7 – Painting. When required by the fire code official, fire hydrants shall be painted in accordance with NFPA 291 and Santa Cruz County Fire Prevention Officers Standards.

Section 45.509.1.2 is added – Alternate power sources.

Section 509.1.2 of Chapter 5 of the Fire Code of the Pajaro Valley Fire Protection District is added to read as follows:

45.509.1.2. - Alternate power sources. All permanent installations of electrical generators, wind generators, solar photovoltaic cells, or other power sources shall be approved by the building code official. In addition to all applicable provisions of Title 24 CCR for any such installation, a sign reading:

> "WARNING – This premise is provided with an Alternate Power Source. Disconnection of commercial power may not disable the electrical power source"

shall be permanently affixed. Sign shall be red in color with a minimum of ½" tall contrasting lettering and shall be permanently affixed on each electrical panel subject to back-feed from alternate power sources. Any and all power disabling switches shall be clearly labeled.

CFC Sections 903.2 through 903.2.10.2 are deleted and replaced – Automatic Sprinkler Systems.

Sections 903.2 through 903.2.10.2 of Chapter 9 of the Fire Code of Pajaro Valley Fire Protection District are deleted and replaced to read as follows:

45.903.2 - Where required. Approved automatic sprinkler systems in new buildings and structures shall be provided in the locations described in this section.

45.903.2.1 - New structures. An automatic fire sprinkler system shall be provided in all new occupancies as defined in Chapter 3 of the California Building Code, regardless of type of construction and/or floor area, unless otherwise pre-empted by the California Health and Safety Code. Any occupancy not specifically mentioned shall be included in the group that it most nearly resembles based on the proposed life and fire hazard;

Exceptions:

1. Private garages, carports, sheds not more than 1,000 square feet (93 m2) of total floor area shall not require fire sprinklers where they are detached and separate from other structures and provided with exterior wall and opening protection as per the California Building Code.

2. Sheds exceeding 1,000 square feet, (93 m2) but not exceeding 3,000 square feet (278 m2) shall not require fire sprinklers at the discretion of the fire chief when the applicant demonstrates that the applicant's proposal does not increase the fire hazard or fire load.

3. Agricultural buildings as defined in Appendix Chapter C, of the California Building Code having a clear unobstructed side yard exceeding 60 feet (18,280 mm) in all directions, not exceeding 25 feet (7620 mm) in height and located within an Agricultural zoned district, as defined in the Santa Cruz County Planning Code.

    a. Not exceeding 2,000 square feet (186 m2) or as exempted by the fire chief, shall not require fire sprinklers.
    b. Exceeding 2,000 square feet (186 m2) but not exceeding 5,000 square feet, shall not require fire sprinklers at the discretion of the fire chief when the applicant demonstrates the applicant's proposal does not increase the fire hazard or fire load.
    c. Greenhouses of non-combustible construction shall not require fire sprinklers.

4. Group B and Group M Occupancies not more than 500 square feet (46.5 m2) shall not require fire sprinklers where they are detached and separate from other structures and provided with exterior wall and opening protection as per the California Building Code, Table 508.3.3.

5. For public school state-funded construction projects see CFC Section 903.2.19.

45.903.2.1.4 - Group R. An automatic sprinkler system installed in accordance with Section 903.3 shall be provided throughout all buildings with a Group R fire area.

Exceptions:

1. Existing Group R-3 occupancies converted to Group R-3.1 occupancies not housing bedridden clients, not housing non-ambulatory clients above the first floor, and not housing clients above the second floor.
2. Existing Group R-3 occupancies converted to Group R-3.1 occupancies housing only one bedridden client and complying with section 425.8.3.3 of the California Building Code.
3. Pursuant to Health and Safety Code Section 13113 occupancies housing ambulatory children only, none of whom are mentally ill or mentally retarded, and the buildings or portions thereof in which such children are housed are not more than two stories in height, and buildings or portions thereof housing such children have an automatic fire alarm system activated by approved smoke detectors.
4. Pursuant to Health and Safety Code Section 13143.6 occupancies licensed for protective social care which house ambulatory clients only, none of whom is a child (under the age of 18 years), or who is elderly (65 years of age or over).
   When not used in accordance with Section 504.2 or 506.3 of the California Building Code an automatic sprinkler system installed in accordance with Section 903.3.1.2 shall be allowed in Group R-2.1 occupancies.

45.903.2.1.5 - Group R-3 congregate residences. An automatic sprinkler system installed in accordance with Section 903.3.1.3 shall be permitted in Group R-3 congregate living facilities with 16 or fewer residents.

45.903.2.1.6 - Care facilities. An automatic sprinkler system installed in accordance with Section 903.3.1.3 shall be permitted in care facilities with 5 or fewer individuals in a single-family dwelling.

45.903.2.2 - Existing buildings and structures except for one- and two-family dwellings. An automatic sprinkler system shall be installed in existing buildings and structures, except One- and Two-Family Dwellings, after the effective date of this code, when a building permit is issued to allow additions to be made, as follows:

1. For existing buildings less than 6,000 square feet in gross floor area when an addition to the building causes the structure to exceed 6,000 square feet, the entire structure shall be provided with an automatic sprinkler system.
2. For existing buildings larger than 6,000 square feet in gross floor area when an addition is equal to or greater than 10% of the existing square footage or when extensive renovation or remodeling is done to more than 50% of the gross floor area, the entire structure shall be provided with an automatic sprinkler system.

For the purposes of this section, extensive renovation or remodeling shall be defined as any change, addition or modification in construction or occupancy or structural repair or change in primary function to an existing structure made by, on behalf of or for the use of a public accommodation or commercial facility that affects or could affect the usability of the building or facility or part thereof. Alterations include, but are not limited to, remodeling, renovation, rehabilitation, reconstruction, historic restoration, changes or rearrangement of the structural parts or elements, and changes or rearrangement in the plan configuration of walls and full-height partitions.

All new work performed in alterations and/or repairs to existing structures shall comply with the current provisions of this Chapter. When alterations and/or repairs result in the removal, alteration, modification, replacement and/or repair of fifty percent or more of the external walls of a building, or result in the removal, modification, replacement and/or repair of fifty percent or more of the existing internal structural and/or non-structural framework, independently or in combination thereof, within a five year period, the entire building shall be made to conform to the current provisions of this chapter. The determination under this section of the requirement for upgrading any existing structure to full conformance with current provisions of this Chapter shall be at the sole discretion of the Fire Code Official.

Exceptions to Section 45.903.2.2 (1 and 2)

(a) **Group A2.** An automatic sprinkler system shall be provided throughout stories containing Group A-2 occupancies and throughout all stories from the Group A-2 occupancy to and including the levels of exit discharge serving that occupancy where one of the following conditions exists:

1. The fire area exceeds 5,000 square feet (464 m^2).
2. The fire area has an occupant load of 100 or more.
3. The fire area is located on a floor other than a level of exit discharge serving such occupancies.
4. *The structure exceeds 5,000 square feet (465 m^2), contains more than one fire area containing a Group A-2 occupancy, and is separated into two or more buildings by fire walls of not less than 4-hour fire-resistance rating without openings.*

(b) **Group A-5.** Occupancies exceeding 1,000 square feet in the following areas: concession stands, retail areas, press boxes and other accessory use areas shall have an automatic sprinkler system installed.

(c) **Assembly occupancies on roofs.** Where an occupied roof has an assembly occupancy with an occupant load exceeding 100 for Group A-2 and 300 for other Group A occupancies, all floors between the occupied roof and the level of exit discharge shall be equipped with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2.

Exception: Open Parking garages of Type I or Type II construction.

(d) **Multiple fire areas of Group A-1, A-2, A-3 or A-4** occupancies share exit or exit access components and the combined occupant load of these fire areas is 300 or more.

(e) Group B. Regardless of square footage, an automatic sprinkler system shall be provided for Group B occupancies as follows:

1. **Ambulatory Care Facilities.** An automatic sprinkler system shall be installed throughout the entire floor containing an ambulatory care facility where either of the following conditions exist at any time:
    a. Four or more care recipients are incapable of self-preservation.
    b. One or more care recipients that are incapable of self-preservation are located at other than the level of exit discharge serving such a facility.

    In buildings where ambulatory care is provided on levels other than the level of exit discharge, an automatic sprinkler system shall be installed throughout the entire floor as well as all floors below where such care is provided, and all floors between the level of ambulatory care and the nearest level of exit discharge, the level of exit discharge, and all floors below the level of exit discharge.

    Exception: Floors classified as an open parking garage are not required to be sprinklered.

2. **Laboratories involving research and development or testing**. An automatic sprinkler system shall be installed throughout the fire areas utilized for the research and development or testing of lithium-ion or lithium metal batteries.

(f) **Group F-1 occupancies.** An automatic sprinkler system shall be provided throughout all buildings containing a Group F-1 occupancy where one of the following conditions exists:

1. A Group F-1 fire area exceeds 6,000 square feet (1115 m^2).

2. A Group F-1 fire area is located more than three stories above grade plane.
3. The combined area of all Group F-1 fire areas on all floors, including any mezzanines, exceeds 5,000 square feet (2230 m^2).

Group F-1 Woodworking Operations. An automatic sprinkler system shall be provided throughout all Group F-1 occupancy fire areas that contain woodworking operations in excess of 2,500 square feet (232 m2) in area that generate finely divided combustible waste or use finely divided combustible materials. [SFM] A fire wall of less than 4-hour fire-resistance rating without openings, or any fire wall with openings, shall not be used to establish separate fire areas.

Group F-1 Distilled Spirits. An automatic sprinkler system shall be provided throughout a Group F-1 fire area used for the manufacture of distilled spirits.

Group F-1 Upholstered Furniture or Mattresses. An automatic sprinkler system shall be provided throughout a Group F-1 fire area that exceeds 2,500 square feet (232 m2) used for the manufacture of upholstered furniture or mattresses.

(g) **Group H occupancies** shall be provided with an automatic sprinkler system.

(h) **Group I occupancy** fire areas shall be provided with an automatic sprinkler system.

Exceptions:
(1) Those areas exempted by Section 407.6 of the California Building Code.
(2) Group I-2 occupancies, or any alterations thereto, located in Type IA construction in existence on or before March 4, 1972 as required in California Health and Safety Code Section 13113(d).

(i) **Group I-2 occupancies.** An existing, unsprinklered Group I-2, nurses' stations open to fire-resistive exit access corridors shall be protected by an automatic sprinkler system located directly above the nurses' station. It shall be permitted to connect the automatic sprinkler system to the domestic water service.

(j) **Group I-3 occupancies.** Every building, or portion thereof, where inmates or persons are in custody or restrained shall be protected by an automatic sprinkler system conforming to NFPA 13. The main sprinkler control valve or valves and all other control valves in the system shall be locked in the open position and electrically supervised so that at least an audible and visual alarm will sound at a constantly attended location when valves are closed. The sprinkler branch piping serving cells may be embedded in the concrete construction.

(k) **Group M occupancy** used for the display and sale of upholstered furniture or mattresses exceeds 5,000 square feet.

(l) **Group M**. An automatic sprinkler system shall be provided throughout buildings containing a Group M occupancy where one of the following conditions exists:
1. A Group M fire area exceeds 12,000 square feet (1115 m^2).
2. A Group M fire area is located more than three stories above grade plane.
3. The combined area of all Group M fire areas on all floors, including any mezzanines, exceeds 24,000 square feet (2230 m^2).
4. ***[SFM]*** *The structure exceeds 24,000 square feet (465 m^2), contains more than one fire area containing a Group M occupancy, and is separated into two or more buildings by fire walls of not less than 4-hour fire-resistance rating without openings.*

(m) **Group S-1** occupancies used for the storage of commercial motor vehicles where the fire area exceeds 5,000 square feet.

(n) **Group S-1** occupancies exceeding 2,500 square feet used for the storage of upholstered furniture or mattresses shall have an automatic sprinkler system installed.

(o) **Group S-1** fire areas exceeding 5,000 square feet used for the repair of commercial motor vehicles.

(p) Structures where the area for the storage of tires exceeds 20,000 cubic feet shall be equipped throughout with an automatic fire sprinkler system in accordance with Section 903.3.1.1.

(q) **Group U** occupancies exceeding 1,000 square feet shall have an automatic sprinkler system installed. Group U occupancies not exceeding 1,000 square feet are exempt where they are detached and separate from other structures and provided with exterior wall and opening protection as per the California Building Code.

(r) Sheds exceeding 1,000 square feet but not exceeding 3,000 square feet shall not require fire sprinklers at the discretion of the fire chief when the applicant demonstrates that the applicant's proposal does not increase the fire hazard or fire load.

(s) Agricultural buildings as defined in Appendix Chapter C, of the California Building Code having a clear unobstructed side yard exceeding 60 feet (18,280 mm) in all directions, not exceeding 25 feet (7620 mm) in height and located within an Agricultural zoned district, as defined in the Santa Cruz County Planning Code.

i. Not exceeding 2,000 square feet (186 m2) or as exempted by the fire chief, shall not require fire sprinklers.
ii. Exceeding 2,000 square feet (186 m2) but not exceeding 5,000 square feet, shall not require fire sprinklers at the discretion of the fire chief when the applicant demonstrates the applicant's proposal does not increase the fire hazard or fire load.
iii. Greenhouses of non-combustible construction shall not require fire sprinklers.

3 Any alteration and/or repair within a building that contains an automatic fire sprinkler system requires that the automatic fire sprinkler system be extended/modified to the area of proposed work, thus, creating fire sprinkler protection throughout the entire building.

4. Any change in use or occupancy creating a more hazardous fire/life safety condition, as determined by the Fire Chief, requires that the entire structure be provided with an automatic sprinkler system.

5. Any combination of addition, alteration, repair and/or change of use shall comply with Sections 903.2.11 through 903.6.

Exceptions to Section 45.903.2.2:

(a) Seismic or Accessibility improvements.
(b) Any exemption otherwise allowable under the Fire Code, if in the discretion of the Fire Chief, the safety of the public is not compromised.

(c) Exterior improvements and work not requiring permits as provided in the Building Code.
(d) Work requiring only a mechanical, electrical, plumbing and/or demolition permit.

45.903.2.3 - Existing one- and two-family dwellings. An automatic sprinkler system shall be installed in existing one- and two-family dwellings, after the effective date of this code, when a building permit is issued to allow additions to be made, as follows:

1. Any addition is made which increases the total existing square footage by 50% or more.
2. The proposed total floor area exceeds the available fire flow as specified in Section 507.1 or APPENDIX B.
3. Any addition to a one- or two-family dwelling that contains an automatic fire sprinkler system requires that the automatic fire sprinkler system be extended/modified to the area of proposed work, thus, creating fire sprinkler protection throughout the entire dwelling.

Exceptions to Section 45.903.2.3:

(a) Additions of 500 square feet or less when the proposed total floor area does not exceed the available fire flow are exempt from fire sprinklers unless the dwelling is already protected by a fire sprinkler system.

Section 45.903.2.4 – is added – Accessory Dwelling Unit (ADU)

Section 903.2.4 of Chapter 9 of the Fire Code of the Pajaro Valley Fire Protection District is added to read as follows:

Accessory Dwelling Unit(s). The following is included for clarification of the requirements for newly constructed accessory dwelling units. All newly constructed ADUs are required to comply with the standards for fire protection such as water supply and fire department access contained in Chapter 5 of this code.

1. Accessory Dwelling Units constructed on lots with an existing sprinklered primary residence:
   a) Attached to main residence – fire sprinklers required.
   b) Detached from main residence, fire sprinklers required.

2. Accessory Dwelling Units constructed on lots with an existing non-sprinklered primary residence:
   a) Fire sprinklers not required

3. Accessory Dwelling Units are required to comply with the standards for fire protection such as water supply and fire department access set forth in Chapter 5 of this code.
   a) Water supply for fire protection shall be a minimum of 1,000 gpm for 60 minutes as required in §507.3 and Appendix B Table 105.1(1) of this code.
   b) Access for new ADUs and JADUs shall be within 150 feet of all portions of the structure in accordance with §503.1.1 of this code.

   Where a newly constructed accessory dwelling unit does not meet these fire protection standards, an automatic residential sprinkler system may be utilized as an alternative to items 3(a) and, or 3(b) above.

Section 45.903.3.1.3 is amended – NFPA 13D sprinkler systems.

Section 903.3.1.3 of Chapter 9 of the Fire Code of the Pajaro Valley Fire Protection District is amended to read as follows:

45.903.3.1.3 - NFPA 13D sprinkler systems. Automatic sprinkler systems installed in one and two-family dwellings, Group R-3 and R-4 congregate living facilities and townhouses, non-habitable structures classified as accessory to a residential use and not intended for commercial usage or mercantile, shall be permitted to be installed throughout in accordance with NFPA 13D and installation guidelines as promulgated by the Santa Cruz County Fire Chiefs Association.

Section 45.903.3.7 is amended – Fire department connections.

Section 903.3.7 of Chapter 9 of the Fire Code of the Pajaro Valley Fire Protection District is amended to read as follows:

45.903.3.7 - Fire department connections. Fire department connections for automatic sprinkler systems shall be installed in accordance with Section 912. Buildings equipped with a fire sprinkler system in accordance with this chapter shall have a fire department connection located within 100 feet (183m). The location of the fire department connections shall be approved by the fire code official.

> **Exception:** Single- and two-family dwellings protected by a fire sprinkler system in accordance with Section 903.3.1.3.

Section 45.3905.1.3 is amended – Operation

Section 3905.1.3 of Chapter 39 of the Fire Code of the Pajaro Valley Fire Protection District is amended to read as follows:

45.3905.1.3 – Operation. Activation of the gas detection system shall result in all of the following:

1. Initiation of distinct audible and visual alarm signals in extraction room.
2. Deactivation of all heating systems located in the extraction room.
3. Activation of the mechanical ventilation system, where the system is interlocked with gas detection.
4. De-energize all light switches and electrical outlets.
5. For detection levels at or exceeding 25% of the LEL/LFL shall result in the activation of the building's fire alarm system.

Section 45.5303.5.3 is amended – Securing compressed gas containers, cylinders and tanks.

Section 5303.5.3 of Chapter 53 of the Fire Code of the Pajaro Valley Fire Protection District is amended to read as follows:

45.**5303.5.3 - Securing compressed gas containers, cylinders and tanks.** Compressed gas containers, cylinders and tanks shall be secured to prevent falling caused by contact, vibration or seismic activity. Securing of compressed gas containers, cylinders and tanks shall be by one of the following methods:

1. Securing containers, cylinders and tanks to a fixed object with ~~one~~ two or more non-combustible restraints. The object used to anchor the restraint to shall be capable of withstanding the anticipated load(s) imposed. Anchor(s) shall be attached to a structural framing member or similar.
2. Securing containers, cylinders and tanks on a cart or other mobile device designed for the movement of compressed gas containers, cylinders or tanks.
3. Nesting of compressed gas containers, cylinders and tanks at container filling or servicing facilities or in seller's warehouses not accessible to the public. Nesting shall be allowed provided the nested containers, cylinders or tanks, if dislodged, do not obstruct the required means of egress.
4. Securing of compressed gas containers, cylinders and tanks to or within a rack, framework, cabinet or similar assembly designed for such use.

> **Exception:** Compressed gas containers, cylinders and tanks in the process of examination, filling, transport or servicing.

CHAPTER 56 is amended - EXPLOSIVES AND FIREWORKS.

Chapter 56 of the Fire Code of the Pajaro Valley Fire Protection District is amended to read as follows:

45.5601.1.3 – Fireworks. The possession, manufacture, storage, sale, handling and use of fireworks are prohibited within the County of Santa Cruz.

> **Exception:** The use of fireworks for fireworks displays, pyrotechnics before a proximate audience and pyrotechnic special effects in motion pictures, television, theatrical or group

entertainment productions as allowed in Title 19, Division 1, Chapter 6 Fireworks reprinted in Section 5608 and Health and Safety Code Division 11.

45.5601.2 – Permit required. Permits shall be required as set forth in 105.5 and regulated in accordance with this section. Permits for explosives as contained within this chapter, with the exception of display fireworks, shall be obtained by the Law Enforcement Agency of Jurisdiction.

45.5601.2.2 - Sale and retail display. Persons shall not construct a retail display nor offer for sale explosives, explosive materials or fireworks ~~on highways, sidewalks, public property or in Group A or E occupancies.~~ within Santa Cruz County.

CHAPTER 90 is added – SUPPRESSION AND CONTROL OF FIRE IN WILDFIRE RISK AREAS.

Chapter 90 of the Fire Code of the Pajaro Valley Fire Protection District is added to read as follows:

45.9001 - SCOPE. The unrestricted use of grass-, grain-, brush- or forest-covered land in wildfire risk areas is a potential menace to life and property from fire and resulting erosion. Safeguards to prevent the occurrence of fires and to provide adequate fire-protection facilities to control the spread of fire which might be caused by recreational, residential, commercial, industrial or other activities shall be in accordance with Chapter 90.

45.9002 - RESTRICTED ENTRY. The fire code official shall determine and publicly announce when wildfire risk areas shall be closed to entry and when such areas shall again be opened to entry. Entry on and occupation of wildfire risk areas, except public roadways, inhabited areas or established trails and camp sites which have not been closed during such time when the wildfire risk area is closed to entry, is prohibited.

Exceptions:

1. Residents and owners of private property within wildfire risk areas and their invitees and guests going to or being upon their lands.
2. Entry, in the course of duty, by peace or police officers, and other duly authorized public officers, members of a fire department and members of the United States Forest Service.

45.9003 - TRESPASSING ON POSTED PROPERTY.

45.9003.1 - General. When the fire code official determines that a specific area within a wildfire risk area presents an exceptional and continuing fire danger because of the density of natural growth, difficulty of terrain, proximity to structures or accessibility to the public, such areas shall be closed until changed conditions warrant termination of closure. Such areas shall be posted as hereinafter provided.

45.9003.2 - Signs. Approved signs prohibiting entry by unauthorized persons and referring to §9002 shall be placed on every closed area.

45.9003.3 - Trespassing. Entering and remaining within areas closed and posted is prohibited.

Exception: Owners and occupiers of private or public property within closed and posted areas, their guests or invitees, and local, state and federal public officers and their authorized agents acting in the course of duty.

45.9004 - USE OF FIRE ROADS AND FIREBREAKS. Motorcycles, motor scooters and motor vehicles shall not be driven or parked upon, and trespassing is prohibited upon, fire roads or firebreaks beyond the point where travel is restricted by a cable, gate or sign, without the permission of the property owners. Vehicles shall not be parked in a manner which obstructs the entrance to a fire road or firebreak.

Exception: Public officers acting within their scope of duty.

Radio and television aerials, guy wires thereto, and other obstructions shall not be installed or maintained on fire roads or firebreaks unless located 16 feet (4877 mm) or more above such fire road or firebreak.

45.9005 - USE OF MOTORCYCLES, MOTOR SCOOTERS AND MOTOR VEHICLES. Motorcycles, motor scooters and motor vehicles shall not be operated within wildfire risk areas, without a permit by the fire code official, except upon clearly established public or private roads. Permission from the property owner shall be presented when requesting a permit.

45.9006 - LIABILITY FOR DAMAGE. The expenses of fighting fires which result from a violation of this chapter shall be a charge against the person whose violation caused the fire. Damages caused by such fires shall constitute a debt of such person and are collectable by the fire code official in the same manner as in the case of an obligation under a contract, expressed or implied.

PART 3

The geographic limits referred to in certain sections of the Fire Code of the Pajaro Valley Fire Protection District are hereby established as follows:

Establishment of limits of districts in which storage of flammable or combustible liquids in outside aboveground tanks is prohibited. The limits referred to in Sections 5704.2.9.6.1 and 5706.2.4.4 of the Fire Code of the County of Santa Cruz in which the storage of Class I flammable liquids or Class II combustible liquids in aboveground tanks outside of buildings is restricted are hereby established as the incorporated area of the political boundary of the Pajaro Valley Fire Protection District.

Exceptions: Such use is allowed in the following zoning districts:

1. The storage of Class I flammable liquids or Class II combustible liquids in aboveground tanks outside of buildings is allowed in A or A-1 Zones;
2. The storage of Class I flammable liquids or Class II combustible liquids in aboveground tanks outside of buildings is allowed in M-1, M-2 or M-3 Zones;
3. The storage of Class I flammable liquids or Class II combustible liquids in aboveground tanks outside of buildings is allowed in NR Zones.

Establishment of limits of districts in which storage of flammable cryogenic fluids in stationary containers is to be prohibited. The limits referred to in Section 5806.2 of the Fire Code of the Pajaro Valley Fire Protection District in which storage of flammable cryogenic fluids in stationary containers is prohibited are hereby established as the political boundary of the County of Santa Cruz.

Exceptions:

1. The storage of flammable cryogenic fluids in stationary containers is allowed in an M-2 Zone with a Conditional Use Permit issued by the Planning Department.
2. The storage of flammable cryogenic fluids in stationary containers is allowed in an M-3 Zone.

Establishment of limits for storage of Liquefied Petroleum Gas. The limits referred to in Section 6104.2 of the Fire Code of the County of Santa Cruz are hereby limited to a maximum of 2,000 gallons water capacity within the political boundary of the County of Santa Cruz.

PART 4

Ordinance No. 2025-15 of the Pajaro Valley Fire Protection District entitled “2025 Fire Code”, and all other ordinances or parts of ordinances in conflict herewith are hereby repealed.

PART 5

That if any section, subsection, sentence, clause or phrase of this ordinance is, for any reason, held to be unconstitutional, such decision shall not affect the validity of the remaining portions of this ordinance. The Board of Directors of the Pajaro Valley Fire Protection District hereby declares that it would have passed this ordinance, and each section, subsection, clause or phrase thereof, irrespective of the fact that any one or more sections, subsections, sentences, clauses and phrases be declared unconstitutional.

PART 6

That nothing in this ordinance or in the Fire Code hereby adopted shall be construed to affect any suit or proceeding impending in any court, or any rights acquired, or liability incurred, or any cause or causes of action acquired or existing, under any act or ordinance hereby repealed as cited in Part 4 of this ordinance; nor shall any just or legal right or remedy of any character be lost, impaired or affected by this ordinance.

PART 7

That the Clerk of the Board is hereby ordered and directed to cause a notice of this ordinance to be published in a newspaper in general circulation in accordance with Section 6066 of the California Government Code.

PART 8

That this ordinance and the rules, regulations, provisions, requirements, orders and matters established and adopted hereby shall take effect and be in full force and effect on January 1, 2026 pursuant to Health and Safety Code Section 18941.5. This Ordinance shall remain in full force and effect until a subsequent superseding ordinance becomes effective.

PASSED AND ADOPTED this 12th day of November 2025, by the Board of Directors of the Pajaro Valley Fire Protection District by the following vote:

YES:	Director Martone, Direct Dellamonica, Director Moules, Director Erbe, Director Sampson
NOES:	None
ABSENT:	None
ABSTAIN:	None

_____

Dave Martone
Chairperson of the Pajaro Valley Fire Protection District Board of Directors

ATTEST:

_____

Mike Urbani
Clerk of the Board

APPROVED AS TO FORM:

_____

District Council

DISTRIBUTION: Board of Supervisors

RATIFIED _____

DENIED _____

MODIFIED _____

this _____ day of _____, 2025, by the Board of Supervisors of the County of Santa Cruz by the following vote:

AYES: _____ SUPERVISORS

NOES: _____ SUPERVISORS

ABSENT: _____ SUPERVISORS

ABSTAIN: _____ SUPERVISORS

_____
Chairperson of the Board of Supervisors

ATTEST:

_____
Clerk of the Board

DISTRIBUTION: County Administrative Office
County Counsel
Planning Department
General Services Department/O.E.S.
State of California Housing & Community Development
Office of the California State Fire Marshal

Pajaro Valley Fire Protection District
562 Casserly Road, Watsonville, CA 95076
831.722.6188 831.722.7333 www.pajarovalleyfire.com

NEGATIVE DECLARATION

Pajaro Valley Fire Protection District

Ordinance 2025-15

1. Project Description: Adoption by the Pajaro Valley Fire Protection District of an Ordinance adopting the 2025 California and 2024 International Fire Codes prescribing regulations governing conditions hazardous to life and property and the environment from fire, explosion and dangerous conditions and providing for the issuance or permits.

2. Project Location: All territory within the boundaries of the Pajaro Valley Fire Protection District.

3. Project Proponent: Pajaro Valley Fire Protection District.

4. Proposed Finding of No Significant Effect. Section IV of the Initial Study/Environmental Checklist, attached, sets forth the proposed finding that the project will not have a significant effect on the environment.

Pajaro Valley Fire Protection District

562 Casserly Road, Watsonville, CA 95076

Staff Report

November 2, 2025

To: Board of Directors

From: Mike Urbani, Battalion Chief

Subject: Resolution 2025-17 Board of Directors Workers Compensation Coverage

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DISCUSSION:

In California, fire district board members who serve without compensation are generally considered volunteers and are not automatically covered under workers' compensation insurance. According to California Labor Code § 3352, unpaid individuals serving a public agency— including board members—are excluded from the definition of "employee" and therefore not entitled to workers' compensation by default.

However, there is a provision that allows coverage: under Labor Code § 3363.5, a fire district (or any public agency) may elect to provide workers' compensation coverage to volunteers, including unpaid board members, by adopting a formal resolution. This resolution must be filed appropriately to activate coverage.

- Unpaid fire district board members are not automatically covered.
- Coverage can be extended if the district adopts a resolution under Labor Code § 3363.5.
- Volunteer firefighters, however, are an exception and are considered employees for workers' comp purposes.

BACKGROUND:

Staff looked through all the files archived and were unable to find a resolution that provided workers compensation coverage for its Board members.

RECOMMENDATION:

While not required, the insurance company recommends adopting a resolution to have on file for future Pajaro Valley Fire Protection Districts Board Members.

PAJARO VALLEY FIRE PROTECTION DISTRICT

Resolution No. 2025-17

A Resolution of the Board of Directors of the Pajaro Valley Fire Protection District Electing to Provide Workers' Compensation Coverage to Volunteer Board Members Pursuant to California Labor Code Section 3363.5

WHEREAS, the Pajaro Valley Fire Protection District is a public agency organized and operating under the laws of the State of California; and
WHEREAS, the Board of Directors of the District includes individuals who serve without compensation and are considered volunteers under California law; and
WHEREAS, California Labor Code Section 3363.5 permits public agencies to extend workers' compensation coverage to volunteers by adopting a resolution to that effect;
NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of Pajaro Valley Fire Protection District as follows:

1. Declaration of Coverage
   The District hereby elects to provide workers' compensation coverage to volunteer board members who serve on the Board of Directors of the Pajaro Valley Fire Protection District.
2. Filing of Resolution
   A copy of this resolution shall be filed with the District's workers' compensation insurance carrier and with the appropriate state agencies as required by law.
3. Effective Date
   This resolution shall take effect immediately upon its adoption.

PASSED AND ADOPTED by the Board of Directors of the Pajaro Valley Fire Protection District on this 12th day of November, 2025, by the following vote:

AYES: [Insert Names]
NOES: [Insert Names]
ABSENT: [Insert Names]

Approved:

_____
Chairperson, Board of Directors
Dave Martone

Attest:

_____
Board Secretary
Mike Urbani

ENGINEER'S REPORT

Pajaro Valley Fire Protection District

Fire Protection and Emergency Response Services Assessment

Fiscal Year 2026-27

Pursuant to California Government Code Section 50078 et seq. and Article XIIID of the California Constitution

Engineer of Work:

SCIConsultingGroup
Public Finance Consulting Services

4745 Mangels Boulevard
Fairfield, California 94534
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www.sci-cg.com

Pajaro Valley Fire Protection District

Board of Directors

- Dave Martone
- Robert Erbe
- Ashley Moules
- John Sampson
- Jake Dellamonica

Fire District Staff

- Mike Urbani, Battalion Chief

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Introduction

The Pajaro Valley Fire Protection District ("Pajaro Valley FPD," "Fire District," or "District") was formed in 1994 through a consolidation recommended by the Local Agency Formation Commission (LAFCO), merging the Salsipuedes Fire Protection District and the Freedom Fire Protection District. The District operated independently for three years before entering into a cooperative agreement with CAL FIRE in 1997 to provide administrative and staffing support.

Historically, the District contracted with the Watsonville Fire Department to provide emergency services in urbanized areas of the District that are closer to the City's fire stations. In addition, Pajaro Valley FPD maintains automatic and mutual aid agreements with neighboring agencies, including the City of Watsonville, Santa Cruz County Fire (Corralitos), Aromas Tri-County Fire, and Santa Clara County Central Fire. These agreements enhance regional response capabilities and benefit all participating departments.

Pajaro Valley FPD serves a rural population of approximately 18,000 residents across a 52-square-mile area, making it the largest fire district in Santa Cruz County. The District's jurisdiction includes both State Responsibility Areas (SRA) and Local Responsibility Areas (LRA), and its personnel respond to a wide range of incidents, including structure fires, wildland fires, vehicle accidents, hazardous materials incidents, medical emergencies, and search and rescue operations. On average, the District responds to approximately 1,100 to 1,600 emergency calls per year.

The District operates a single fire station located at 562 Casserly Road in Watsonville, California. The station houses two Type 1 engines and one Type 1 water tender. Pajaro Valley FPD is a full-time paid department staffed with nine personnel: one Battalion Chief, two Captains, five Engineers, and one Fire Marshal (whose cost is shared with Santa Cruz County). Daily engine staffing consists of three personnel, all trained to the Emergency Medical Technician (EMT) level, providing Basic Life Support (BLS) services. Advanced Life Support (ALS) ambulance transport is provided by American Medical Response, Inc. (AMR), a private company contracted by Santa Cruz County. AMR ambulances are typically staffed with one paramedic and one EMT.

Governance of the District is provided by a five-member Board of Directors, elected by a simple-majority vote. Board members serve four-year terms and may seek re-election. The Board meets monthly at the fire station to oversee operations, budgets, and strategic planning.

The proposed Assessment District described in this Engineer's Report is intended to establish a secure and ongoing funding source for local fire protection services within the Pajaro Valley Fire Protection District. The District is currently funded through local property taxes, licensing and permit fees, and a pre-Proposition 218 benefit Assessment with a fixed annual rate of $30 per single-family residence, with varying rates for other land uses. This existing Assessment has remained unchanged since fiscal year 1996-97 and does not include a cost-of-living adjustment mechanism.

Over the past 25 years, the cost of providing fire protection and emergency response services has increased significantly. Contributing factors include rising emergency call volumes, enhanced firefighter training requirements, increased wildfire risk, and substantial growth in operational costs such as fuel, utilities, equipment, insurance, and personnel. Staffing and personnel costs remain the District's primary expenditure. Pajaro Valley FPD does not receive discretionary State or County general-fund support; its share of dedicated ad valorem property taxes and the legacy Assessment provide most of its revenue. Because the existing Assessment lacks a cost-of-living adjustment, the District has been limited in its ability to keep pace with these rising costs.

In 2024 a ballot measure to increase funding was not successful. As a result, the District now faces financial shortfalls that may lead to reorganization into County Service Area No. 48 (CSA 48). The Pajaro Valley FPD Board of Directors has adopted a resolution initiating a formal reorganization process with the Local Agency Formation Commission (LAFCO), which includes the dissolution of the District and concurrent reorganization into CSA 48. This process is being considered due to the District's projected insolvency within the next 18 months. If the District is annexed into County Service Area 48 (CSA 48), property owners would become subject to CSA 48's existing funding structure. This includes a benefit Assessment that supports general fire protection services and a separate fire flow fee based on benefit factors. These funding mechanisms are designed to reflect the level of service and infrastructure needed to support fire protection across the CSA 48 service area. The combined charges may result in a different annual cost for property owners than the proposed Assessment under Pajaro Valley FPD.

The proposed new Assessment would provide funding to train and retain experienced firefighters, preserve 24/7 rapid response capabilities for fire protection and emergency services, and maintain essential firefighting equipment and apparatus. This Engineer's Report supports the implementation of a new Assessment to enhance existing funding sources, sustain service levels, and ensure the continued delivery of fire protection and emergency response services throughout the District. If this proposed Assessment is approved, the District will suspend the dissolution process described above.

Table 1 – Proposed Assessment Rates

Property Type	Proposed Rate	Unit
Single Family	$206.58	each
Multi-Family	$58.26	res unit
Commercial/Industrial	$1,043.46	acre
Office	$296.40	acre
Storage	$1,401.71	acre
Parking Lot	$41.50	each
Vacant	$41.50	each
Agriculture	$16.48	acre
Range Land & Open Space	$0.92	acre

These proposed Assessment rates, adjusted by the relative fire hazard zone factor and the relative travel time factor, are used to calculate the specific assessment for each parcel. These factors are explained in more detail in the Method of Apportionment section of this report.

This Engineer's Report (the "Report") was prepared to:

- Describe the fire suppression, safety and emergency response Services that would be funded by the assessments
- Establish a budget for the Services that would be funded by the assessments in 2026-27
- Determine the special benefits received from the proposed Services by property within the Pajaro Valley FPD Assessment (the "Assessment District")
- Describe the method of apportionment to lots and parcels within the Assessment District

This Report and the proposed assessments have been made in compliance with California Government Code Section 50078 et seq. (the "Code") and Article XIIID of the California Constitution (the "Article").

The Assessment District is narrowly drawn to include only properties that directly receive the additional fire protection and prevention services provided by the assessment funds and are specially benefited from such Services. The Assessment Diagram included in this Report shows the boundaries of the Assessment District.

Legal Analysis of Proposition 218

The proposed Assessment complies with Proposition 218, The Right to Vote on Taxes Act (approved by the voters of California in 1996 and is now Articles XIIIC and XIIID of the California Constitution). Proposition 218 provides for benefit assessments to be levied to fund the cost of providing Services, improvements, as well as maintenance and operation expenses of a public improvement that provide a special benefit to the assessed property.

Proposition 218 imposes many important requirements, including property-owner balloting, for the formation and continuation of assessments, and these requirements are satisfied by the process used to establish this Assessment.

Silicon Valley Taxpayers Association, Inc. v Santa Clara County Open Space District *(2008) 44 Cal.4th 431*

On July 14, 2008, the California Supreme Court issued its ruling in *Silicon Valley Taxpayers Association, Inc. v. Santa Clara County Open Space District* ("*Silicon Valley*"). Several of the most important elements of the ruling are:

- Benefit assessments are for special, not general benefit
- The services and/or improvements funded by assessments must be clearly defined
- Special benefits are directly received by and provide a direct advantage to property in the Assessment District

Dahms v. Downtown Pomona Property *(2009) 174 Cal.App.4th 708*

On June 8, 2009, the Court of Appeal amended its original opinion upholding a benefit assessment for property in the downtown area of the City of Pomona. On July 22, 2009, the California Supreme Court granted review and transferred the case back to the Court of Appeal for reconsideration in light of the Supreme Court's discussion in the *Silicon Valley* case. In *Dahms*, the Appellate Court then upheld the assessment that was 100% special benefit (i.e. 0% general benefit) holding that the services and improvements funded by the assessments were directly provided to property in the assessment District. The Court also upheld discounts and exemptions from the assessment for certain properties.

Bonander v. Town of Tiburon *(2009) 46 Cal.4th 646*

On December 31, 2009, the Court of Appeal overturned a benefit assessment approved by property owners to pay for placing overhead utility lines underground in an area of the Town of Tiburon. The Court invalidated the assessments on the grounds that the assessments had been apportioned to assessed property based in part on relative costs within sub-areas of the assessment district, instead of each individual property's proportional special benefits.

Beutz v. County of Riverside *(2010) 184 Cal.App.4th 1516*

On May 26, 2010, the California Court of Appeal issued its decision in *Steven Beutz v. County of Riverside ("Beutz")*. This decision overturned an assessment for park maintenance in Wildomar, California, primarily because the general benefits associated with improvements and services were not explicitly calculated, quantified, and separated from the special benefits.

Golden Hill Neighborhood Association V. City of San Diego *(2011) 199 Cal.App.4th 416*

On September 22, 2011, California Court of Appeal issued its decision in *Golden Hill Neighborhood Association v. City of San Diego*. This decision overturned an assessment for street and landscaping maintenance in the Greater Golden Hill neighborhood of San Diego, California. The court described two primary reasons for its decision. First, as in *Beutz*, the court found the general benefits associated with services were not explicitly calculated, quantified and separated from the special benefits. Second, the court found that the City had failed to document the basis for the assessment on city-owned parcels.

Compliance with Current Law

This Engineer's Report is consistent with the requirements of Article XIIIC and XIIID of the California Constitution and with the *Silicon Valley* decision because the Services to be funded are clearly defined; the Services are available to and will be directly provided to all benefited property in the Assessment District; the Services provide a direct advantage to property in the Assessment District that would not be received in the absence of the assessment; and the Services are benefits that are over and above general benefits conferred on real property located in Pajaro Valley FPD or to the public at large by other public entities that make up the membership of the District.

This Report is consistent with *Dahms* because, similar to the *Downtown Pomona* assessment validated in *Dahms*, the Services will be directly provided to property in the Assessment District. More specifically, as discussed hereafter, the Services afford benefits specifically unique and supplied only to property owners within the District, with a corresponding effect that is not shared by other parcels outside of the District or real property in general, including the public at large. While *Dahms* could be used as the basis for a finding of 0% general benefits, this Engineer's Report establishes a more generous separation and quantification of general benefits.

This Report is also consistent with *Bonander* because the Assessment has been apportioned based on the proportional special benefit to each property. Furthermore, the Assessment is consistent with *Beutz* and *Golden Hill* because the general benefits have been explicitly calculated, quantified, and excluded from the Assessment.

Assessment Process

Following submittal of this Report to Pajaro Valley FPD for preliminary approval, the Pajaro Valley FPD Board of Directors (the "Board") may, by Resolution, call for an assessment ballot proceeding and public hearing on the proposed establishment of a Fire Protection and Emergency Response Services Assessment.

If the Board approves such a Resolution, a Notice of Assessment and Assessment Ballot will be mailed to each property owner within the proposed Assessment District boundaries who will be subject to the proposed Assessment. The Notice will include a description of the Services to be funded by the proposed Assessment, the total amount of the proposed Assessment and the amount chargeable to the owner's parcel, the reasons for the proposed Assessment and the basis upon which it was calculated, and an explanation of the process for submitting a ballot. Each Notice will also include a postage prepaid return envelope and a ballot on which the property owner may mark his or her approval or disapproval of the proposed Assessment as well as affix his or her signature.

After the ballots are mailed to property owners in the Assessment District, a minimum 45-day time period must be provided for the return of the assessment ballots. Following this balloting time period, a public hearing must be held for the purpose of allowing public testimony regarding the proposed assessments. Ballots will be received if previously mailed and received by the public agency before the public hearing, or if physically submitted at the public hearing. At the public hearing, the public will have the opportunity to speak on the issue. The public hearing is currently scheduled to open (TO BE DETERMINED). After receiving ballots and public comment, the public input portion of the public hearing will be closed. The Board will then recess in order for the ballots to be tabulated.

If it is determined that the assessment ballots submitted in opposition to the proposed Assessment do not exceed the assessment ballots submitted in favor of the Assessment (weighted by the proportional financial obligation of the property for which ballots are submitted), the Board may approve the imposition of Assessment for fiscal year 2026-27 and each fiscal year thereafter. If the Assessment is confirmed and approved, the Board will order the levy of the Assessment to be submitted to the Santa Cruz County Auditor/Controller for inclusion on the property tax roll for fiscal year 2026-27. The levy and collection of the Assessment would continue year-to-year until terminated by the Board.

The Assessment granted by the ballot proceeding would be for a maximum Assessment rate of $206.58 per single family home, increased each subsequent year by the consumer price index for All Urban Consumers in the San Francisco-Oakland-Hayward as of December of each succeeding year, not to exceed 4% (four percent) per year without a further vote or balloting process. Any change in the CPI in excess of 4% shall be cumulatively reserved as the "Unused CPI" and shall be used to increase the maximum authorized assessment rate in years in which the CPI is less than 4%. The maximum authorized assessment rate is equal to the maximum assessment rate in the first fiscal year the Assessment was levied adjusted annually by the minimum of 1) 4% or 2) the change in the CPI plus any Unused CPI as described above.

In each subsequent year for which the Assessment will be continued, an updated proposed budget, assessment rate and an updated assessment roll listing all parcels and their proposed assessment for the upcoming fiscal year shall be prepared and considered by the Board of Directors. At this meeting, the Board will also call for the publication in a local newspaper a legal notice of the intent to continue the Assessment for the next fiscal year and set the date for the noticed public hearing. At the annual public hearing, members of the public can provide input to the Board prior to the Board's decision on continuing the Services and Assessment for the next fiscal year.

If the Assessment is confirmed and approved, the levies would be submitted to the Santa Cruz County Auditor/Controller for inclusion on the property tax roll for fiscal year 2026-27.

Description of Services

Pajaro Valley FPD provides a range of fire suppression and protection, prevention, and other fire and emergency-related services to properties within its boundaries. This proposed benefit Assessment would provide continued funding for three major areas of service improvements within the District for its fire suppression and protection operations (with the majority of the proposed Assessment revenue being dedicated to staffing costs).

- Retain trained and experienced firefighters
- Preserve rapid response times, 24/7 for fire protection and emergency services
- Maintain existing firefighting equipment and apparatus

The formula below describes the relationship between the final level of services, the baseline level of service based on existing funding, and the enhanced level of services funded by the Assessment if it is approved. It should be noted that current operating costs are increasing at a faster rate than current funding sources, thus the baseline level of services is diminishing over time.

Final Level of Service	=	*Current and Diminishing Baseline Level of Service*	+	*Proposed Enhanced Level of Service*

Below is a more detailed description of these improvements that are provided for the special benefit of property in the Assessment District.

Retain Trained and Experienced Firefighters

Pajaro Valley Fire Protection District contracts with CAL FIRE for fire protection services. Historically, CAL FIRE personnel have worked a 72-hour duty week, which exceeds the 56-hour industry standard followed by most paid fire departments in Santa Cruz County. In 2022, CAL FIRE's labor union negotiated a reduction to a 66-hour work week, scheduled to take effect on November 1, 2024. The union has also expressed its intent to pursue a further reduction to the 56-hour standard during contract negotiations beginning July 1, 2024.

A 56-hour work week, which is equivalent to ten 24-hour shifts per month, would require additional staffing to maintain current service levels, particularly the District's three-person engine staffing model. The State of California has initiated a phased hiring plan to support this transition, with full implementation projected to require over 2,400 new positions statewide by fiscal year 2028-29.

The proposed benefit Assessment provides a funding mechanism to address the incremental staffing costs associated with the reduced work schedule. This funding would help ensure continuity of service and support the retention of trained and experienced personnel during the transitional period.

Preserve Rapid Response Times, 24/7 for Fire Protection and Emergency Services

The operational effectiveness of firefighting emergency response is commonly assessed through the colloquial descriptors of "speed and weight," with "speed" describing the response time and "weight" describing the number and types of personnel deployed. Additionally, staffing levels are often articulated in terms of the firefighting staff per apparatus, such as "4 on an initial response" or "3 on an initial response." Imminent changes in the firefighter work schedule will necessitate an enhancement in staffing levels ("weight") in order to preserve response times ("speed").

Although there are many approaches to deploying firefighting staff, the Occupational Safety and Health Administration ("OSHA") guidelines place strict requirements on operations, particularly when firefighters are required to enter potentially Immediately Dangerous to Life and Health ("IDLH") environments such as structure fires. In these atmospheres, OSHA requires that personnel use self-contained breathing apparatus ("SCBA"), that a minimum of two firefighters work as a team inside the structure, and that a minimum of two firefighters be on standby outside the structure to provide assistance or perform rescue.

Adhering to the "2 in, 2 out" standard recommended by the National Fire Protection Association (NFPA) requires four (4) personnel per apparatus for a community of this size and risk. Due to budget constraints, the District cannot currently meet that standard. The next viable approach is to align with industry norms, which call for staffing each apparatus with three (3) personnel. At present, the District operates with two (2) personnel on an initial response. If this proposed assessment is approved, it would enable the District to staff three (3) personnel on an initial response, 24 hours a day.

At the time of its formation in 1994, the Pajaro Valley Fire Protection District entered into a contract with the Watsonville Fire Department to provide emergency services in urbanized areas of the District, particularly those formerly served by the Freedom Fire Protection District. This arrangement was necessary following the closure of the Freedom Fire Station, ensuring that the closest available units could respond to emergencies in those areas. However, this service model has since changed. Watsonville Fire Department no longer provides fire suppression services under this agreement and now only delivers emergency medical services. Under Proposition 218, benefit assessments must be based on "special benefits" conferred to property, and general governmental services, such as medical-only response, do not qualify as assessable special benefits. As a result, the travel time premiums and benefit factors previously associated with contracted fire protection services may be adjusted during the benefit assessment balloting process to reflect the current service delivery model.

Maintain Existing Firefighting Equipment and Apparatus

Maintaining existing firefighting equipment and apparatus is crucial for ensuring the effectiveness and safety of firefighting operations. The proposed Assessment is intended to close the equipment and apparatus maintenance (and resulting benefit) shortfall and is vital for several reasons:

Equipment Upkeep and Repairs: Firefighting equipment is subject to wear and tear due to frequent use, exposure to harsh conditions, and the nature of emergency response situations. Regular maintenance and timely repairs are necessary to keep the equipment in optimal working condition. The proposed Assessment will fund the costs of replacement parts, labor, and technical expertise needed for repairs.

Compliance with Standards and Regulations: Firefighting equipment must meet specific safety standards and regulations to ensure the protection of both firefighters and the public. Regular inspections, testing, and upgrades may be necessary to comply with evolving safety standards. The proposed Assessment will fund conducting these assessments and implementing necessary modifications to meet compliance requirements.

Technology Advancements: The field of firefighting constantly evolves with technological advancements. Upgrading existing equipment to incorporate new technologies can enhance firefighting capabilities, improve response times, and increase overall effectiveness. The proposed Assessment will fund the investment in and adoption of these innovations.

Extended Lifespan: Proper maintenance and timely repairs can extend the lifespan of firefighting equipment. This is a cost-effective approach as it reduces the frequency of replacements, which can be significantly more expensive than routine maintenance. The

proposed Assessment will support preventive maintenance measures that contribute to the longevity of firefighting apparatus.

Emergency Preparedness: Fire departments must be prepared for various emergency scenarios. This includes having well-maintained equipment that can be quickly deployed in crises. The proposed Assessment ensures that firefighting apparatus is ready for immediate use, enhancing the department's overall emergency response capabilities.

Liability and Accountability: In emergencies, the reliability of firefighting equipment is crucial for the safety of both firefighters and the public. The proposed Assessment ensures that equipment failures are minimized, reducing the risk of accidents and potential liabilities. It also helps in maintaining accountability for the condition of the equipment.

In summary, the proposed Assessment is essential for maintaining existing firefighting equipment and apparatus to ensure operational readiness, compliance with safety standards, and the overall effectiveness of firefighting efforts. Regular investments in maintenance, repairs, and upgrades contribute to the safety of both firefighters and the communities they serve.

Cost and Budget

The following budget lists the proposed expenditures funded by the Assessment District in Fiscal Year 2026-27.

Table 2 – Cost and Budget

Pajaro Valley Fire Protection District Estimate of Costs Fiscal Year 2026-27 Budget Item	Amount
CAL FIRE Contract	$ 3,071,758.00
Watsonville Contract to Service Proximate District Areas	$ 40,000.00
Services and Supplies	$ 388,700.00
Capital Outlay/Asset Replacement	$ 338,000.00
Gas, Fuel and Oil	$ 19,650.00
Utilities	$ 22,400.00
CALPERS Liability	$ 63,000.00
Total Service Needs (a)	**$ 3,943,508.00**
Less: Est. Dedicated Revenue from Property Taxes & Other Sources (b)	$ (2,534,158.00)
Less: Est. Dedicated Revenue from Current Benefit Assessment (c)	$ (142,400.00)
Est Total Revenue from Other Sources (General benefit contribution) (b+c) = (d)	**$ (2,676,558.00)**
Net Cost of Servicing to Assessment District (a-d) = (e)	**$ 1,266,950.00**
Allowance for County Collection (e * 1%) = (f)	$ 12,669.50
Total Fire Suppression and Protection Services Budget (e+f) =(g)	**$ 1,279,619.50**
Total Proposed Assessment Budget (g)	**$ 1,279,619.50**
Effective Single Family Equivalent Benefit Units in Assessment District (h)	6194.2
Proposed Assessment per Effective Single Family Equivalent Unit (SFE) (g/h)	**$ 206.58**

"Service Needs" cost estimates are presented in the budget table above for the 2026-27 fiscal year only, but are based upon financial forecasting over a 10-year cycle and beyond. This forecasting concludes that these costs will likely persist consistently into the future. Consistent with the General Benefit requirement described later in this Report, at least 9.7% of the total cost of the Pajaro Valley FPD Fire Services must be funded from sources other than this proposed Assessment to cover any general benefits from the Services. Therefore, the cost of services of $1,279,620 funded by the proposed Assessment can be funded exclusively through the assessment levy as a special benefit since the current County contributions from its dedicated ad valorem property taxes and the existing benefit assessment revenue exceed approximately 67.9% ($2,676,558/$3,943,508) of the total cost of Pajaro Valley FPD Fire Services, far in excess of the above required 9.7% non-assessment general benefit funding requirements. The 67.9% funding is from property taxes and other sources. The Total SFEs are the sum of the assigned Single Family Equivalent units for each affected parcel based upon a parcel-by-parcel analysis of the service area consistent with the Method of Apportionment described later in the Report. Due to SFE Calculations, slight rounding may occur in displayed numbers.

Method of Apportionment

This section includes an explanation of the special benefits to be derived from the Services, the criteria for the expenditure of assessment funds, and the methodology used to apportion the total assessment to properties within the Assessment District.

The Assessment District area consists of all Assessor Parcels within Pajaro Valley FPD boundaries. The method used for apportioning the assessment is based upon the proportional special benefits from the Services to be provided to the properties in the assessment area over and above general benefits conferred on real property or to the public at large. Special benefit is calculated for each parcel in the Assessment District using the following process:

1. Identification of all benefit factors derived from the improved services
2. Calculation of the proportion of these benefits that are general
3. Determination of the relative special benefit within different areas within the Assessment District
4. Determination of the relative special benefit per property type
5. Calculation of the specific assessment for each individual parcel based upon special vs. general benefit; location, property type, property characteristics, improvements on property and other supporting attributes

Implementation of an Assessment for Fire Protection Services

California Government Code Section 50078 et. seq. allows agencies which provide fire suppression services, such as Pajaro Valley FPD, to levy assessments for fire suppression services. Section 50078 states the following:

> *"Any local agency which provides fire suppression services directly or by contract with the state or a local agency may, by ordinance or by resolution adopted after notice and hearing, determine and levy an assessment for fire suppression services pursuant to this article."*

In addition, California Government Code Section 50078.1 defines the term "fire suppression" as follows:

> *"(c) "Fire suppression" includes firefighting and fire prevention, including, but not limited to, vegetation removal or management undertaken, in whole or in part, for the reduction of a fire hazard."*

Therefore, the Services to be provided by the Assessment District fall within the scope of services that may be funded by assessments under the Code.

The Assessment must be levied based on the special benefit to property. Special benefit means a particular and distinct benefit received by property over and above any general benefits conferred on real property located in the Assessment District or the public at large. With reference to the requirements for assessment, Section 50078.5 of the California Government Code states:

> *"(b) The benefit assessment shall be levied on a parcel, class of improvement to property, or use of property basis, or a combination thereof, within the boundaries of the local agency, zone, or area of benefit."*
>
> *"The assessment may be levied against any parcel, improvement, or use of property to which such services may be made available whether or not the service is actually used."*

Proposition 218, as codified in Article XIIID of the California Constitution, has confirmed that assessments must be based on the special benefit to property:

> *"No assessment shall be imposed on any parcel which exceeds the reasonable cost of the proportional special benefit conferred on that parcel."*

Since assessments are levied on the basis of special benefit, they are not a tax and are not governed by Article XIIIA of the California Constitution.

The following two sections describe how and why the Fire Protection Services specially benefit properties. This special benefit is particular and distinct from its effect on other property, and that other real property and the public at large do not share the special benefit.

Overview of Special Benefits from Fire Protection Services

Special Benefit is defined in Article XIIID of the California Constitution as a "particular and distinct benefit over and above general benefits." The proposed Services and improvements provide "particular and distinct" benefit because they are distinctly defined and described, and are provided directly to the parcels within the Assessment District boundaries. The proposed Services and improvements are "over and above general benefits" currently supplied by the Pajaro Valley FPD and other agencies.

Moreover, this Assessment for fire protection Services can be clearly contrasted with assessments for parks and recreation, or even open space, as addressed in *Silicon Valley,* because fire services are provided directly to individual parcels in the form of fire prevention and suppression; by contrast, property owners must travel from their properties to dispersed locations to fully enjoy the benefits of parks and open space.

In summary, real property located within the boundaries of the proposed Assessment District distinctly and directly benefits from increased safety and protection of real property and human life in the Assessment District.

Description of Special Benefit from Fire Protection Services

In order to allocate the assessments, the special benefit arising from the Services that will be provided to property in the Assessment District has been identified and described below. This special benefit must confer a direct advantage to the assessed properties; otherwise it would be general benefit, as described further in this report.

The following special benefit confers to residential, commercial, industrial, institutional, and other lots and parcels resulting from the improved fire protection and emergency response services that will be provided in the Assessment District.

A detailed description of the primary fire protection Services to be funded by the proposed Assessment is included in the Section "Description of Services" above, including:

- Retain trained and experienced firefighters
- Preserve rapid response times, 24/7 for fire protection and emergency services
- Maintain existing firefighting equipment and apparatus

These Services clearly support the special benefit to all parcels within the District as follows:

Increased safety and protection of real property assets for all property owners within the Assessment District.

The proposed Assessments will fund improved fire suppression, prevention, protection and emergency response services, and thereby can significantly reduce the risk of property damage, human injury, or death associated with fires within the Assessment District. Clearly, fire mitigation helps to protect and specifically benefits both improved properties and vacant properties in the Assessment District.

"Fire is the largest single cause of property loss in the United States. In the last decade, fires have caused direct losses of more than $120 billion and countless billions more in related cost."[1]

"Over 140,000 wildfires occurred on average each year, burning a total of almost 14.5 million acres. And since 1990, over 900 homes have been destroyed each year by wildfires."[2]

"The strategies and techniques to address fire risks in structures are known. When implemented, these means have proven effective in the reduction of losses."[3]

The proposed improved fire suppression, prevention, protection, and emergency response services support this special benefit by providing Pajaro Valley FPD with the needed resources to protect real property from uncontrolled fires.

General Versus Special Benefit

Article XIII D of the California Constitution requires any local agency proposing to increase or impose a benefit assessment to "separate the general benefits from the special benefits conferred on a parcel."

In other words:

Total Benefit	=	*General Benefit*	+	*Special Benefit*

The rationale for separating special and general benefits is to ensure that property owners subject to the benefit assessment are not paying for general benefits. The Assessment, therefore, can fund special benefits but cannot fund general benefits.

Please note that the property owners of the parcels subject to the Assessment *should not* and *cannot* be required to pay for the general benefits arising from the proposed service and equipment improvements – this is an essential assessment-payer-protection requirement of all Proposition 218-compliant assessments. In order to clearly and overwhelmingly satisfy this important requirement, the general benefit has been calculated in each step, favoring its reasonable maximum to totally avoid any possibility that the total general benefit to be funded from other sources is under-calculated.

There is no statutory formula to calculate, quantify, and separate general benefit in support of benefit assessment analysis. General benefits are benefits from improvements or services that are not special in nature, are not "particular and distinct," and are not "over and above" benefits received by other properties, or the public at large. *Silicon Valley* provides some clarification by indicating that general benefits provide "an indirect, derivative advantage" and are not necessarily proximate to the improvements. Again, in this Report, the general benefit is generously estimated and described, and then budgeted so that it is funded by sources other than the Assessment. Although there is not an industry standard for this general benefit calculation, the three-component (plus an adjustment for emergency medical) approach shown in the formula below has been the most widely used.

	1.) Benefit to Real Property Outside the Assessment District
+	*2.) Benefit to Real Property Inside the Assessment District that is Indirect and Derivative*
+	*3.) Benefit to the Public at Large*
+	*(Adjustment for Emergency Medical Services)*
=	*General Benefit*

Special benefit, on the other hand, is defined in the California Constitution as "a particular and distinct benefit over and above general benefits conferred on real property located in the District or to the public at large." The *Silicon Valley* decision indicates that a special benefit is conferred to a property if the property "receives a direct advantage from the improvement (e.g., proximity to a park)." In this Assessment, as noted previously, the improved Services are available when needed to all properties in the Assessment District, so the overwhelming proportion of the benefits conferred to property is special, and the benefits are only minimally received by property outside the Assessment District or the public at large.

Calculating General Benefit

This section provides a measure of the general benefits from the assessments.

1.) Benefit to Property Outside the Assessment District

Properties within the Assessment District receive almost all of the special benefits from the Services because the Services will be provided solely in the Assessment District boundaries. (It should be noted that the Services may, at times, be used outside the Pajaro Valley FPD boundaries. However, this use is part of a mutual aid agreement and is offset, at least in part, by the provision of Services by other outside agencies within the Assessment District boundaries).

Properties proximate to, but outside of, the boundaries of the Assessment District receive some benefit from the proposed Services due to some degree of indirect reduced fire risk to their property. Specifically, the parcels immediately contiguous to Pajaro Valley FPD's boundaries enjoy a reduction in the possibility of a fire "jumping" from an adjacent structure (within the District boundaries) because Pajaro Valley FPD controls structure fires within its boundaries. Since Pajaro Valley FPD's primary role is directed towards structure fires, as opposed to wildland fires, and structure fires generally "jump" more slowly, it is reasonable to only consider the directly adjacent, but outside, parcels. These are estimated to receive some benefit relative to parcels within the Assessment District, but they do not directly receive the improved fire protection resulting from the Services funded by the Assessments.

At the time the Assessment was proposed, the Engineer of Work, using the Geographic Information Systems, quantified the number of parcels proximate to the Assessment District boundary but outside the Assessment District, and thereby determined that there were approximately 256 directly adjacent properties. Further consideration of the types, use, location, and other attributes of the outside but proximate parcels is not warranted due to numeric insignificance and would not materially increase the accuracy of this analysis:

256 parcels outside Pajaro Valley FPD but proximate to the District Boundaries

***4,266** parcels in the Assessment District.*

Calculation:

General Benefit to Property Outside the Assessment District =

*256 / (4,266+256) = **5.70%:** ~*

It can reasonably be argued that properties protected inside, but near the Assessment District boundaries, are offset by similar fire protection provided outside, but near, the Assessment District's boundaries, through mutual aid agreements. However, this analysis uses the more generous approach of finding that 5.7% of the Services may be of general benefit to property outside the Assessment District, and cannot be funded by this Assessment.

2.) Benefit to Property Inside the District that is *Indirect and Derivative*

In determining the proposed Assessment District area, Pajaro Valley FPD has been careful to only include parcels that will directly receive the benefit of the improved Services. All parcels will directly benefit from the use of the improved Services throughout the Assessment District in order to maintain the same improved level of fire suppression and protection throughout the area. Fire protection and suppression will be provided as needed throughout the area. The shared special benefit - reduced severity and number of fires - would be received on an equivalent basis by all parcels in the Assessment District due to the proposed increased funding. Furthermore, all parcels in the Assessment District would directly benefit from the ability to request or receive service from Pajaro Valley FPD and to have a Pajaro Valley FPD resource promptly respond directly to the parcel and address the owner's or resident's service need.

The *Silicon Valley* decision indicates that the fact that a benefit is conferred throughout the Assessment District area does not make the benefit general rather than special, so long as the Assessment District is narrowly drawn and limited to the parcels directly receiving shared special benefits from the service. This concept is particularly applicable in situations involving a landowner-approved assessment-funded extension or improvement of a local government service to benefit lands. This Report therefore concludes that, other than the general benefit to properties outside the Assessment District (discussed above) and to the public at large (discussed below), the general benefit from the fire protection services that is "indirect and derivative" is negligible.

3.) Benefit to the Public at Large

Because the Services directly serve and benefit all of the property in the Assessment District, any general benefit conferred on the public at large would be small.

The public at large uses the public highways, and when traveling in and through the Assessment District, the public may benefit from the services without contributing to the Assessment. Although the protection of this critical infrastructure is certainly a benefit to all the property within Pajaro Valley FPD, this protection is arguably "indirect and derivative" and possibly benefits people rather than property. A fair and appropriate measure of the general benefit to the public at large, therefore, is the amount of highway and throughway street area within the Assessment District relative to the overall land area. An analysis of maps of the Assessment District shows that approximately 0.49% of the land area in the Assessment District is covered by highways and throughway streets.

Note that the District is relatively removed from through-traffic and there are very few visitors that are not engaged (e.g., in employment, residence, commerce, etc.). California Highway 1 is heavily travelled and proximate, but fire response issues associated with it are addressed almost exclusively by the City of Watsonville Fire Department. Similarly, Highway 152 over the Hecker Pass does pass through the District, but is far less heavily used the Highway 1 and again, is almost exclusively served by the City of Watsonville Fire Department.

A 1.0% contribution, therefore, is a generous, fair and appropriate measure of the general benefit to the public at large within the Assessment District and cannot be funded by this Assessment.

Adjustment to Account for Emergency Medical Services as General Benefit

For the purposes of this Report, an additional adjustment has been made to the general benefits calculation to account for general benefits that may result from the District's rescue and emergency medical services ("EMS") associated with the proposed Services. *(Limitations on the appropriateness of Proposition 218-compliant assessments to fund EMS are still debated - in any case, this Assessment does not include funding for EMS.)* This Assessment is designed to provide funding for fire protection and emergency response services, including fire-related and non-fire-related rescue and associated medical services. However, it is not designed to fund typical, non-fire/non-rescue medical calls (e.g., a cardiac arrest medical call).

Pajaro Valley FPD is authorized to provide EMS in addition to its primary responsibility of fire prevention and suppression. In fact, a significant portion of Pajaro Valley FPD's emergency service calls are associated with providing EMS. Nonetheless, the largest portion by far of the costs associated with operating Pajaro Valley FPD is support for fire suppression Services, as illustrated in Table 3, below.

Incremental costs associated with non-fire/non-rescue emergency medical service include almost exclusively the operating costs associated with transportation to such calls, such as fuel and maintenance. For further clarification, these are costs that are only incurred because of EMS, and do not include fixed costs such as personnel who would be on active duty in any case, as well as the associated training, and would therefore be incurred in any event in satisfying Pajaro Valley FPD's primary responsibility of fire protection and suppression.

Evaluation of the transportation associated with non-fire/non-rescue emergency medical calls for several similar fire districts in California indicates that typically around 2% of overall operating costs are for such calls. An analysis of Pajaro Valley FPD's actual additional costs for non-fire/non-rescue emergency medical calls is shown in Table 3, below, and supports an adjustment of 0.95%. This adjustment has been generously rounded up to 3%.

Table 3 – Emergency Medical Expenses Versus Overall Budget

Emergency Medical Expenses	Annual Costs
EMS Fuel Cost	$11,590.00
EMS Apparatus Operations and Maintenance Cost	$13,376.00
EMS Supplies and Equipment	$5,000.00
Annual EMS Training and Certification Costs	$7,500.00
Total EMS Cost (a)	**$37,466.00**
Total Budget from Table 2 (b)	**$ 3,943,508.00**
Percentage of Total Budget on Emergency Medical (a/b)	**0.95%**

The proposed Assessment, as indicated through this Report, will exclusively fund special benefits conferred upon the properties within Pajaro Valley FPD boundaries, while EMS is directly funded from Pajaro Valley FPD through non-assessment sources including property taxes. For purposes of this Report, EMS costs over and above those necessary for fire suppression have been treated as general benefits, and it is conceded that these general benefits may exist at the same percentage for the proposed Services as with the existing baseline Services. Therefore, it can be concluded that Pajaro Valley FPD'services are 0.95 % general as a result of providing EMS services; The engineer is requiring a 3% adjustment for this component.

Summary of General Benefits

Using a sum of the measures of general benefit for the public at large and land outside the Assessment Area, we find that approximately 9.7% of the benefits conferred by the proposed Fire Protection and Emergency Response Assessment may be general in nature and must therefore be funded by sources other than the Assessment.

General Benefit Calculation

5.7% (1. Outside the Assessment District - Adjacent parcels)
+ 0.0% (2. "Indirect and Derivative" Property within the Assessment District)
+ 1.0% (3. Public at Large)
= 6.7% (Subtotal of General Benefit)

+ 3.0% (Emergency Medical Adjustment)

*=**9.7%** (Total of General Benefits)*

The Assessment District's total budget for 2026-27 is $3,943,508. Of this total Assessment budget amount, the District will contribute at least $2,676,558, which is more than 67.9% of the total budget from sources other than this proposed Assessment, including dedicated property taxes and the existing benefit assessment. This contribution constitutes significantly more than the 9.7% general benefits estimated by the Assessment Engineer, which must be paid for by non-assessment sources.

Zones of Benefit

The Assessment District has been narrowly drawn. The assessments will fund improved fire protection services relatively uniformly throughout the Assessment District. Properties of similar type will receive essentially equivalent types of special benefit with reasonable, parcel-by-parcel adjustments for fire hazard zone and proximity to fire stations (as explained later in the Method of Assessment section), and no broad, widespread Zones of Benefit are needed. Instead, each parcel is subject to geographic factors, acting as an effective individual mini-zone.

The Assessment Area is a mix of dense residential areas as well as patchworks of agricultural areas and various nurseries throughout the District of moderate fire risk. Further, travel by roadway throughout the Assessment Area is very limited, and travel times from station to specific parcels vary greatly. Accordingly, in lieu of traditional Zones of Benefits, the specific benefit of each parcel is individually calculated and adjusted for both fire risk zone and response travel time.

Assessment Apportionment

The Assessment Engineer determined that the appropriate method of assessment should be based on the type of property, the relative risk of fire by type of property, the relative fire hazard zone factor, the relative travel time factor, the relative size of the property, and the relative damage value (replacement cost) of fires by property type. This method is further described below.

Method of Assessment

The next step in apportioning assessments is to determine the relative special benefit for each property. This process involves determining the relative benefit received by each property in relation to a "benchmark" property, a single family detached dwelling on one parcel (one “Single Family Equivalent Benefit Unit” or “SFE”).

This SFE methodology is commonly used to distribute assessments in proportion to estimated special benefits and is generally recognized as providing the basis for a fair and appropriate distribution of assessments. In this Report, all properties are assigned an SFE value, which is each property’s relative benefit in relation to the benefit received by a single family home on one parcel.

The relative benefit to properties from fire-related services is:

Equation 1 – Relative Special Benefit to Properties

Special Benefit =

∑(Fire Risk Factors) * ∑(Structure Replacement Factors) * ∑(Location/Topography Factors)

Simply put, the special benefit conferred to property is the product of the fire risk, the structure replacement costs, and the location and topographic factors.

Typically, the development of the rate methodology for fire assessments is based upon fire risk and structure value. However, in this case, due to the particular nature of Pajaro Valley FPD fire hazards and terrain, two additional factors (Fire Hazard Zone and Proximity (Travel Time) were added in support of a uniquely rigorous and detailed, parcel-by-parcel development of rate and assessment.

For example, by this formula, a hypothetical parcel used for a high fire risk use (i.e., a self-storage facility), with high-value structures, in a high fire hazard zone and very close to a fire station, receives a high amount of special benefit. Conversely, a vacant lot not in a high fire hazard area, and a long way from a fire station, would receive far less special benefit. It follows that the special benefit, and accordingly, the assessment amount, should be calculated and assigned consistently with this logic. Any particularly high risk parcels that are identified in the Assessment District will have their special benefit individually calculated by the Assessment Engineer as needed.

Overview of Approach

Each parcel is evaluated, and the special benefit is calculated using four attribute criteria:

Risk and Replacement Factors:

1.) Fire Risk (see Table 4)

2.) Structure Replacement Value (see Table 5)

These factors are summarized in Table 6

Location and Topography Adjustments:

3.) Location and Topography - Hazard Zone (see Table 7)

4.) Location and Topography - Proximity (Travel Time) (see Table 8)

Overview of Normalization in Adjustments in Multi-Attribute Analysis

One of the greatest engineering challenges in modeling and calculating special benefit on a specific parcel is the need to balance the effect of various attributes in a multi-attribute analysis. In this case, the special benefit method of apportionment is based upon four different attributes, and each must be "weighted" to affect the overall special benefit calculation in a reasonable way, commensurate with its effect on the overall special benefit. The general approach taken is to adjust each attribute value towards a reasonable proportion of one, such that it is consistent with the base unit of one Single Family Equivalent. See the "Area Adjustment Factor" used in Table 5 and the Impact Factor used in Tables 7 and 8.

1.) Fire Risk Factors

This fire risk is based upon the specific parcel type and use, including use of structure (e.g., used for cooking), type of structure (centralized heating), etc.

In 2021, the National Fire Protection Association ("NFPA"), one of the preeminent authorities on fire protection in the United States, published the Structure Fires by Occupancy 2015-2019 Annual Averages Report. This report comprehensively tabulates the number of fires for each classification of property type within the United States from 2015-2019, and serves as a reasonable and rational basis to determine fire risk.

The percent of fires for each property is then divided by the total number of that property type to determine un-normalized fire risk factors. Finally, the risk factors are normalized based upon a factor of 1.00 for a single family property. Table 4 below tabulates the Fire Risk Factors for each property type.

Table 4 – Normalized Fire Risk Factors

Property Type	Percentage of Study Units(a)	Percentage of Fires(b)	Risk Factor(b/a)	Normalized Risk Factor
Single Family	68.4%	52.5%	0.7674	1.0000
Multi-Family	13.1%	23.9%	1.8294	2.3839
Commercial/Industrial	3.4%	14.9%	4.3716	5.6967
Office	0.6%	0.7%	1.2228	1.5934
Storage	0.5%	4.9%	10.6702	13.9045
Parking Lot(1)	NA	NA	0.0000	0.2151
Vacant	11.7%	1.9%	0.1651	0.2151
Agriculture	1.7%	1.2%	0.6983	0.9099
Range Land & Open Space	0.8%	0.1%	0.0837	0.1090

Structure Fires by Occupancy 2015-2019 Annual Averages, NFPA, and an analysis of the percentage of properties by property type in the State of California by SCI.

(1) This study did not provide sufficient analysis to develop risk factors for parking lots, so the vacant property type is used as a proxy.

The effect of installed fire sprinklers on the special benefit received from the proposed Services must be tempered by the fact that many factors, including fire type, weather, roofing material, building materials response time, defensible space, use of working smoke detectors, type of windows, maintenance of sprinkler system, etc., likely more significantly affect fire protection. These factors are incorporated into our analysis. Sprinklers have been required for commercial parcels for many years, so that element is already incorporated into the risk analysis. However, more recently, sprinklers for new and renovated residential structures have become required. Special cases will be considered as part of the standard appeals process described later in this Report.

2.) Structure Replacement Value Factors

The relative value of different property types was evaluated within the District to determine the Structure Replacement Value Factor according to the following formula:

Equation 2 – Structure Replacement Value Factors

Structure Replacement Value =

Normalized: [((Structure Weighting Factor * (Average Improved Value)) +

((Land Weighting Factor * (Average Land Value))] * Area Adjustment Factor

Where:

- "Structure Weighting Factor" = 10 to "weight" relative importance of structure over land.
- "Average Improved Value" is the average of the value of all structures and improvements.
- "Normalized: []" process is required to adjust the Structure Replacement Value factor as compared to a Single Family property type. The calculated structure replacement value for a specific property type is divided by the structure replacement value for a single family property type, and then it is multiplied by the area adjustment factor.
- Area Adjustment Factor adjusts for various average parcel sizes as compared to an average single family residence and only affects multi-family parcels for the service area. Hence, the adjustment factor is 0.42 for multi-family parcels and 1.0 (e.g., no effect) for all other property use types.
- "Land Weighting Factor" = 1
- "Average Land Value" is the average of the value of all land per property type.

Table 5 on the next page is a tabulation of the structure replacement values for each property type as defined by Equation 2, on the previous page.

Table 5 – Structure Replacement Factors

Property Type	Average Improvement Values (a)	Average Land Values (b)	Adjusted, Weighted Normalized Replacement Value Factor	Unit
Single Family	$264,373	$330,026.00	1.0000	each
Multi-Family	$92,300	$111,510.00	0.1215	res unit
Commercial/Industrial	$258,661	$293,707.00	0.9686	acre
Office	$245,476	$293,707.00	0.9242	acre
Storage	$137,938	$167,553.00	0.5202	acre
Parking Lot	NA	NA	0.6319	acre
Vacant	$39,536	$161,927.00	0.6319	each
Agriculture	$16,121	$31,541.00	0.0648	acre
Range Land & Open Space	$12,799	$12,952.00	0.0474	acre

(a) and (b) values derived from an analysis of the Pajaro Valley FPD and County Service Area 48 since the sample size from Pajaro Valley FPD is too small.

Summary of Risk and Replacement Factors

Per Equation 1, the relative special benefit for each property type (the "SFE" or "Single Family Equivalent" Benefit Units) is determined as the product of the normalized Fire Risk Factors and the normalized Structure Replacement Value Factors. Table 6, below, summarizes the benefit for each property type.

Note that to derive an actual Assessment amount, each of these values needs to be then multiplied by the parcel-specific Fire Hazard Zone Risk Factors and Proximity (Travel Time) Risk Factors in Tables 8 and 9, below.

Table 6 – Benefit Summary per Property Type

Property Type	Fire Risk Factors	Replacement Cost Factors	SFE Factors	Unit
Single Family	1.0000	1.0000	1.0000	each
Multi-Family	2.3220	0.1215	0.2820	res unit
Commercial/Industrial	5.2150	0.9686	5.0511	acre
Office	1.5524	0.9242	1.4348	acre
Storage	13.0438	0.5202	6.7853	acre
Parking Lot	0.3179	0.6319	0.2009	each
Vacant	0.3179	0.6319	0.2009	each
Agriculture	1.2310	0.0648	0.0798	acre
Range Land & Open Space	0.0935	0.0474	0.0044	acre

Residential Properties

All improved residential properties with a single residential dwelling unit are assigned one Single Family Equivalent or 1.0 SFE. Residential properties on parcels that are larger than one acre receive additional benefit and are assigned additional SFEs on an "Agricultural/Rangeland" basis. Detached or attached houses, zero lot-line houses and town homes are included in this category.

Properties with more than one residential unit are designated as multi-family residential properties. These properties benefit from the Services in proportion to the number of dwelling units that occupy each property. The relative benefit for multi-family properties was determined per Equation 1 to be 0.2820 SFEs per residential unit. This rate applies to condominiums as well.

Commercial/Industrial & Office Properties

Commercial and industrial properties are assigned benefit units per acre, since there is a relationship between parcel size, structure size and relative benefits. The relative benefit for commercial and industrial properties was determined per Equation 1 to be 5.0511 SFEs per acre. The relative benefit for office properties was determined per Equation 1 to be 1.4348 SFEs per acreor portion thereof.

Vacant and Undeveloped Properties

The relative benefit for vacant properties was determined per Equation 1 to be 0.2009 SFEs per parcel. The relative benefit for stand-alone parking lots was determined per Equation 1 to be 0.2009 SFEs per parcel.

Rangeland & Open Space Properties

The relative benefit for range land & open space properties was determined per Equation 1 to be 0.0044 SFEs per acre or portion thereof. (This group includes Timberland Production Zone parcels.)

Agricultural Properties

The relative benefit for agricultural properties requires additional analysis, as required by Government Code 50078 *et seq* and the unique aspects of agricultural properties within the boundaries. This analysis considered how agricultural operations may mitigate risk, onsite or proximate water availability, response time, capability of the fire suppression service, and any other factors that reflect the benefit to the land resulting from the fire suppression service provided. Agricultural properties have been analyzed for fire risk and replacement cost per Equation 1. The relative benefit for agricultural properties was determined per Equation 1 to be 0.0798 SFEs per acre or portion thereof.

Other Properties

Properties that do not fit within the major categories described above have been individually reviewed and the special benefit has been individually calculated. These properties are primarily mixed-use properties with the relative special benefit calculated from the relative proportion of each of the underlying property uses.

Article XIIID, Section 4 of the California Constitution states that publicly owned properties shall not be exempt from assessment unless there is clear and convincing evidence that those properties receive no special benefit.

All public properties that are specially benefited are assessed. Publicly owned property that is used for purposes similar to private residential, commercial, industrial or institutional uses is benefited and assessed at the same rate as such privately owned property.

Miscellaneous, small and other parcels such as roads, and right-of-way parcels typically do not have significant risk of fire damage. Moreover, for common area parcels, the fire benefits are assigned to the other improved parcels in the project that share common ownership of the common area. These miscellaneous parcels receive minimal benefit from the Services and are assessed an SFE benefit factor of 0.

3.) Fire Hazard Zone Risk Factors

CAL FIRE works with local agencies to study various fire risk factors throughout rural California including terrain, vegetation, fuel load, wind, weather, etc. and designates specific geographic areas according to fire risk. Within the Assessment Area certain areas are designated as Very High, High, or Moderate as well as areas that do not fall into any of these zones (“None”). Accordingly, parcels receive higher special benefit from the fire protection and emergency response services if they are higher risk zones. Refer to Appendix A for a diagram of the Fire Hazard Areas in Pajaro Valley FPD.

Table 7 shows the normalized Fire Hazard Risk Factor for each fire risk zone.

Table 7 – Fire Hazard Zone Risk Factors

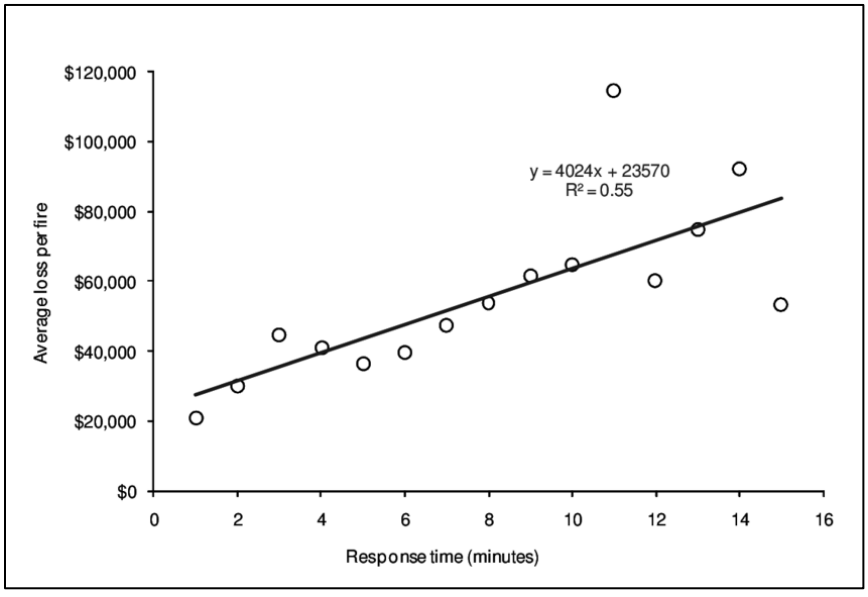
Fire Hazard Zone	Score	Impact Effect	Normalized Fire Hazard Zone
Very High	2	120	1.20
HC	1.2	112	1.12
HM	1	110	1.10
None	0	100	1

The Score is relative special benefit conferred for each risk zone. The Impact Factor is the relative weight for this risk factor on the overall special benefit calculation, and is the Score multiplied by 10 and added to the base value of 100.

4.) Proximity (Travel Time) Risk Factors

Timely response is a critical factor in responding to emergency calls to ensure the safety of people and protection of property. Numerous studies have confirmed this well-established understanding and the results of one such study is included with this Report. The graph below shows the linear function relationship ranking between response time and loss in dollars. Accordingly, parcels that are closer to a fire station require a shorter travel time for response, and receive a higher level of special benefit than parcels with a longer travel time.

Travel Time versus Property Loss



Source: Neil Challands "The Relationships Between Fire Service Response Time and Fire Outcomes," Fire Technology, July 2010.

Travel time from the District's fire station at 562 Casserly Rd, Watsonville, CA 95076 was analyzed using Geographical Information Systems. Refer to Appendix B for a diagram of the Response Areas Travel Time in Pajaro Valley FPD.

Table 8 below shows the relative normalized value of travel time.

Table 8 – Travel Time Premium Factor

Travel Time	Score ($)	Impact Effect	Normalized Travel Time Factor
<5	43,690	138	1.15
5 to 10	63,810	126	1.05
11-15	83,930	120	1.00
16-20	104,050	116	0.97
20+	124,170	114	0.95

Assessments Calculation

Each parcel's assessment is calculated by multiplying the assessment rate by the SFE benefit factor (Table 6), fire hazard zone factor (Table 7) and travel time premium factor (Table 8):

Example Calculations

Case #1: Single Family Residence in a Very High Hazard Zone with a 5-10 minute Travel Time

Assessment Rate = Annual Base SFE Rate * 1.000 (from table 6) * 1.20 (from table 7)

* 1.05 (from table 8) = 1.26 * Annual Base SFE Rate

Case #2: Single Family Residence in Moderate Hazard Zone with a 20+ minute Travel Time

Assessment Rate = Annual Base SFE Rate * 1.000 (from table 6) * 1.10 (from table 7)

* 0.95 (from table 8) = 1.045 * Annual Base SFE Rate

Case #3: Commercial Property on 2 Acres in a Very High Hazard Zone with a 5–10 minute Travel Time

Assessment Rate = Annual Base SFE Rate * 5.0511 (from table 6) * 2 acres* 1.20 (from table 7) * 1.05 (from table 8) = 12.7287 * Annual Base SFE Rate

Case #4: Vacant Lot in a Moderate Hazard Zone with a <5 minute Travel Time

Assessment Rate = Annual Base SFE Rate * 0.2009 (from table 6) * 1.10 (from table 7)

* 1.15 (from table 8) = 0.2541 * Annual Base SFE Rate

Annual Base SFE Rate = $206.58 for 2026-27Implementation of Government Code §§ 53759.1 and 53759.2 (AB 2257 Compliance)

In accordance with Government Code § 53759.1, as enacted by Assembly Bill 2257 and effective January 1, 2025, the Pajaro Valley Fire Protection District intends to implement an exhaustion of administrative remedies requirement for the proposed Fire Protection and Emergency Response Services Assessment under Proposition 218. Property owners will be required to submit any written objections to the proposed assessment in writing, by a deadline no less than 45 days after the mailing of the Proposition 218 notice. Property owners who do not submit a timely written objection in accordance with this process will be prohibited from subsequently challenging the assessment in court, pursuant to Government Code § 53759.1.

The District will compile written responses to all timely submitted objections and will present these responses to the Pajaro Valley FPD Board of Directors prior to the close of the Proposition 218 protest hearing. The Board will then make the findings and determinations required under Government Code § 53759.1. This administrative objection process will run concurrently with the Proposition 218 protest procedures and does not limit a property owner's right to vote against the proposed Assessment. Pursuant to Government Code § 53759.2, if a legal challenge is later brought against the adopted Assessment, the court's review shall be limited to the administrative record of the ratemaking proceeding, provided the District complied with Government Code § 53759.1. All relevant deadlines, procedures, and instructions for submitting objections will be included in the mailed Proposition 218 notice.

Appeals of Assessments Levied to Property

Any property owner who feels that the assessment levied on the subject property is in error as a result of incorrect information being used to apply the foregoing method of assessment or for any other reason, may file a written appeal with the Pajaro Valley FPD Fire Chief, or his or her designee. Any such appeal is limited to correction of an assessment during the then current fiscal year. Upon the filing of any such appeal, the Chief, or his or her designee, will promptly review the appeal and any information provided by the property owner. If the Chief, or his or her designee, finds that the assessment should be modified, the appropriate changes shall be made to the assessment roll. If any such changes are approved after the assessment roll has been filed with the County for collection, the Chief, or his or her designee, is authorized to refund to the property owner the amount of any approved reduction. Any dispute over the decision of the Chief, or his or her designee, shall be referred to the Pajaro Valley FPD Board of Directors; the decision of the Board shall be final.

Additional Background on Relative Benefit

When property owners decide how to cast their ballot for a proposed Assessment, each property owner should weigh the perceived value of the Services proposed to them and their property against the proposed cost of the assessment to their property. If property owners of a certain type of property are either opposed or in support of the Assessment in much greater percentages than owners of other property types, this is an indication that, as a group, these property owners perceive that the proposed Assessment has relatively higher or lower “utility” or value to their property relative to owners of other property types. One can also infer from these hypothetical ballot results, that the apportionment of benefit (and assessments) was too high or too low for that property type. In other words, property owners, by their balloting, ultimately indicate if they perceive the special benefits to their property to exceed the cost of the Assessment, and, as a group, whether the determined level of benefit and proposed Assessment (the benefit apportionment made by the Assessment Engineer) is consistent with the level of benefits perceived by the owners of their type of property relative to the owners of other types of property.

Criteria and Policies

This sub-section describes the criteria that shall govern the expenditure of assessment funds and ensures equal levels of benefit for properties of similar type. The criteria established in this Report cannot be substantially modified; however, the Board may adopt additional criteria to further clarify certain criteria or policies established in this Report, or to establish additional criteria or policies that do not conflict with this Report.

Duration of Assessment

It is proposed that the Assessment be levied for fiscal year 2026-27 and continued every year thereafter, so long as the risk of fire on property in the Assessment District remains in existence and Pajaro Valley FPD Fire requires funding from the Assessment for improved fire protection and suppression services. As noted previously, if the Assessment and the duration of the Assessment are approved by property owners in an assessment ballot proceeding, the Assessment can be imposed and continued annually after the Board approves an annually updated budget and rate for the Assessment. In addition, the Board must hold an annual public hearing to continue the Assessment.

Assessment

WHEREAS, the Board of Directors of the Pajaro Valley Fire Protection District formed the Fire Protection and Emergency Response Services Assessment District and is proceeding with the proposed levy of assessments under California Government Code sections 50078 et seq. (the "Code") and Article XIIID of the California Constitution (the "Article");

WHEREAS, the undersigned Engineer of Work has prepared and filed a report presenting an estimate of costs, a diagram for the Assessment District and an allocation of the estimated costs of the Services upon all assessable parcels within the Assessment District;

NOW, THEREFORE, the undersigned hereby recommends the following assessment to cover the estimated cost of said Services, including incidental costs.

The amount to be paid for said Services and the expense incidental thereto, to be paid by the Assessment District for the fiscal year 2026-27 is generally as follows:

Table 9 – Summary Cost Estimate

FISCAL YEAR 2026-27 BUDGET		
Total for Servicing	$	3,943,508
Property Tax, Assessment Fee, and Licensing/Permits	$	(2,676,558)
Total Allowance for Collections	$	12,670
Total Fire Suppression & Protection Services Budget	$	1,279,620

An Assessment Diagram is hereto attached and made a part hereof showing the exterior boundaries of said Assessment District. The distinctive number of each parcel or lot of land in said Assessment District is its Assessor Parcel Number appearing on the Assessment Roll.

I do hereby assess and apportion said net amount of the cost and expenses of said Services, including the costs and expenses incident thereto, upon the parcels and lots of land within said Assessment District, in accordance with the special benefits to be received by each parcel or lot, from the Services, and more particularly set forth in the Cost Estimate and Method of Assessment hereto attached and by reference made a part hereof.

The Assessment is subject to an annual adjustment tied to the Consumer Price Index-U for San Francisco-Oakland-Hayward as of December of each succeeding year (the "CPI"), with a maximum annual adjustment not to exceed 4%. Any change in the CPI in excess of 4% shall be cumulatively reserved as the "Unused CPI" and shall be used to increase the maximum authorized assessment rate in years in which the CPI is less than 4%. The maximum authorized assessment rate is equal to the maximum assessment rate in the first fiscal year the assessment was levied adjusted annually by the minimum of 1) 4% or 2) the change in the CPI plus any Unused CPI as described above.

Each parcel or lot of land is described in the Assessment Roll by reference to its parcel number as shown on the Assessor's Maps of Santa Cruz County for the fiscal year 2026-27. For a more particular description of said property, reference is hereby made to the deeds and maps on file and of record in the office of the County Recorder of Santa Cruz County.

I hereby place opposite the Assessor Parcel Number for each parcel or lot within the Assessment Roll, the amount of the assessment for the fiscal year 2026-27 for each parcel or lot of land within the said Assessment District.

Dated: October 20, 2025

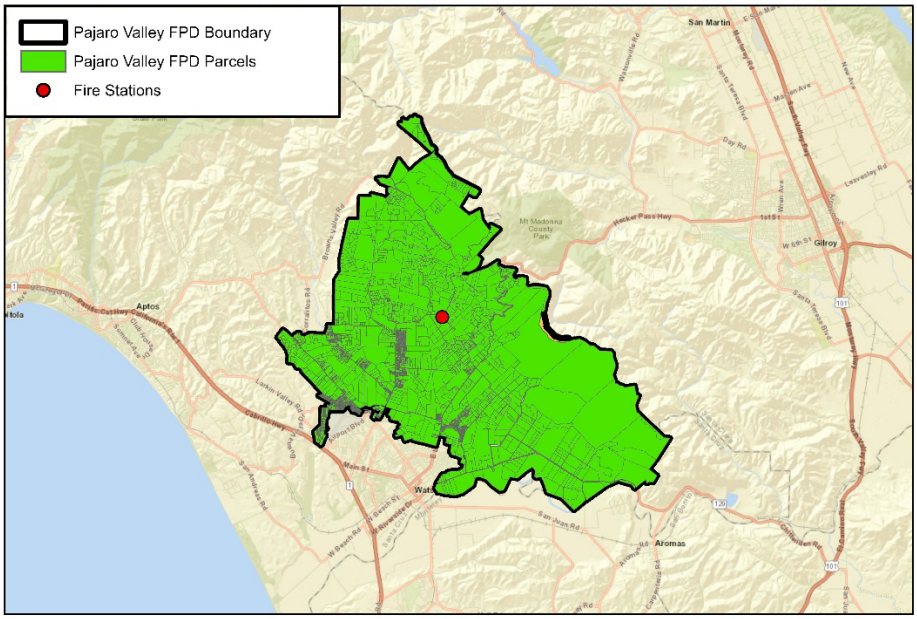
Engineer of Work

By _____

John W. Bliss, License

Assessment Diagram

The Assessment District includes all properties within the boundaries of the Fire Protection and Emergency Response Services District. The boundaries of the Assessment District are displayed on the following Assessment Diagram. The lines and dimensions of each lot or parcel within the Assessment District are those lines and dimensions as shown on the maps of the Assessor of Santa Cruz County, and are incorporated herein by reference, and made a part of this Diagram and this Report.



FILED IN THE OFFICE OF THE FIRE CHIEF OF THE PAJARO VALLEY FIRE PROTECTION DISTRICT, COUNTY OF SANTA CRUZ, CALIFORNIA, THIS _____ DAY OF _____, 2025.

_____
CLERK OF THE BOARD

RECORDED IN THE OFFICE OF THE FIRE CHIEF OF PAJARO VALLEY FIRE PROTECTION DISTRICT, COUNTY OF SANTA CRUZ, CALIFORNIA THIS _____ DAY OF _____, 2025.

_____
CLERK OF THE BOARD

Note:
REFERENCE IS HEREBY MADE TO THE MAPS AND DEEDS OF RECORD IN THE OFFICE OF THE ASSESSOR OF THE COUNTY OF SANTA CRUZ FOR A DETAILED DESCRIPTION OF THE LINES AND DIMENSIONS OF ANY PARCEL SHOWN HEREIN. THOSE MAPS SHALL GOVERN FOR ALL DETAILS CONCERNING THE LINES AND DIMENSIONS OF SUCH PARCELS. EACH PARCEL IS IDENTIFIED IN SAID MAPS BY ITS DISTINCTIVE ASSESSOR'S PARCEL NUMBER.

AN ASSESSMENT WAS CONFIRMED AND LEVIED BY THE BOARD OF COMMISSIONERS OF PAJARO VALLEY FIRE PROTECTION DISTRICT, COUNTY OF SANTA CRUZ ON THE LOTS, PIECES AND PARCELS OF LAND ON THIS ASSESSMENT DIAGRAM ON THE _____ DAY OF _____, 2025 FOR THE FISCAL YEAR 2026-27 AND SAID ASSESSMENT DIAGRAM AND THE ASSESSMENT ROLL FOR SAID FISCAL YEAR WERE FILED IN THE OFFICE OF THE COUNTY AUDITOR OF THE COUNTY OF SANTA CRUZ ON THE _____ DAY OF _____, 2025. REFERENCE IS HEREBY MADE TO SAID RECORDED ASSESSMENT ROLL FOR THE EXACT AMOUNT OF EACH ASSESSMENT LEVIED AGAINST EACH PARCEL OF LAND.

_____
CLERK OF THE BOARD

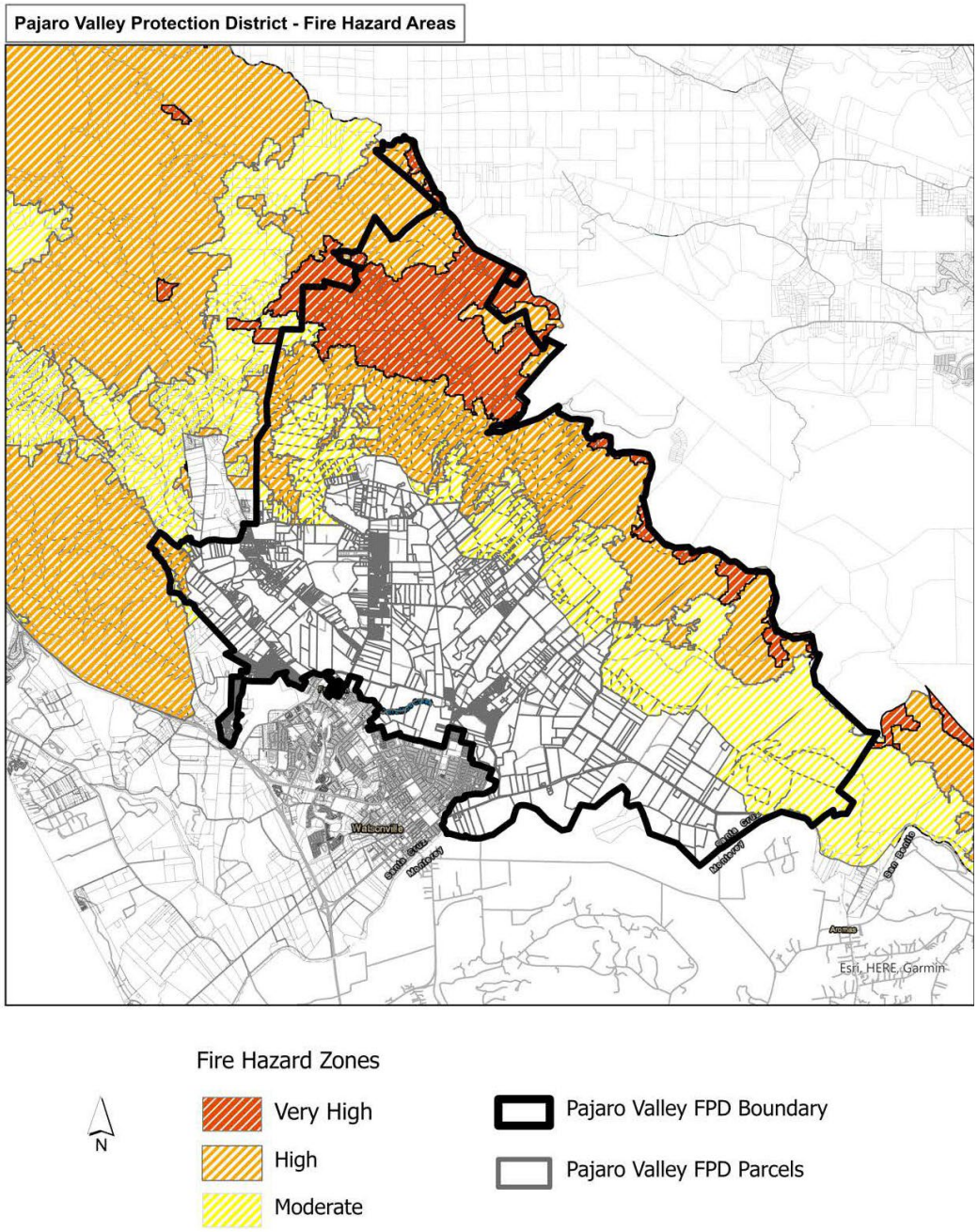
FILED THIS _____ DAY OF _____, 2025 AT THE HOUR OF _____ O'CLOCK __M. IN THE OFFICE OF THE COUNTY TAX COLLECTOR OF THE COUNTY OF SANTA CRUZ, STATE OF CALIFORNIA, AT THE REQUEST OF THE BOARD OF PAJARO VALLEY FIRE PROTECTION DISTRICT.

_____
COUNTY TAX COLLECTOR, COUNTY OF SANTA CRUZ

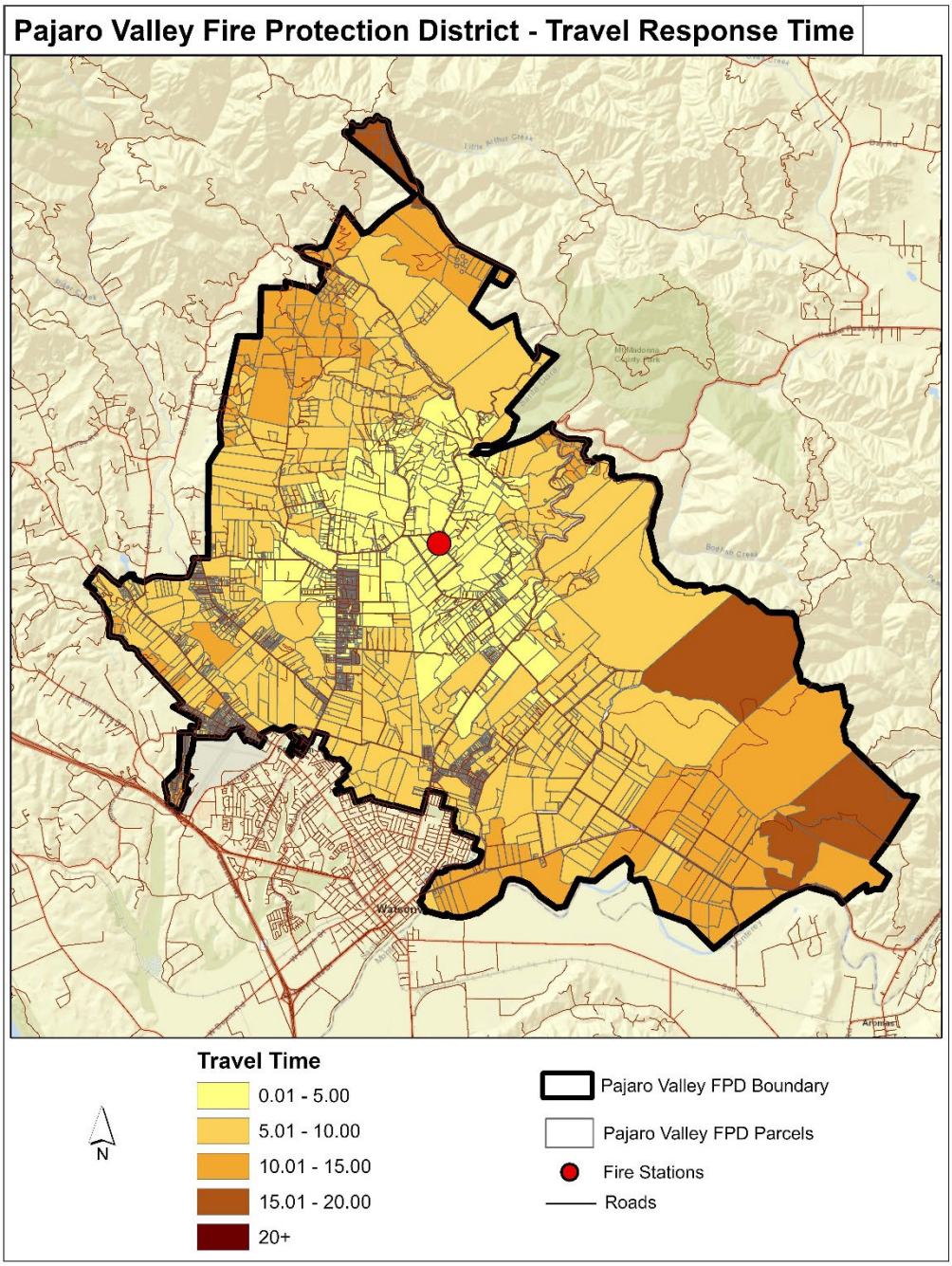
SCI Consulting Group
4745 Mangels Blvd
Fairfield, CA 94534
707-430-4300

Pajaro Valley Fire Protection District
Fire Protection and Emergency Response Services
Assessment Diagram

Appendix A – Fire Hazard Areas Diagram



Appendix B – Response Areas Travel Time Diagram



Appendix C – Assessment Roll, Fiscal Year 2026-27

The Assessment Roll is made part of this Report and is available for public inspection during normal office hours. Each lot or parcel listed on the Assessment Roll is shown and illustrated on the latest County Assessor records, and these records are, by reference, made part of this Report and shall govern for all details concerning the description of the lots or parcels.

In accordance with Government Code § 50078.6, this Engineer's Report, the Assessment Diagram, and the Assessment Roll shall be kept on file with the District and made available for public inspection.

End Notes

[1] Insurance Services Offices Inc. http://www.rockwall.com/documents/fire/ISO.pdf

[2] Institute for Business & Home Safety, "Protect Your Home Against Wildfire Damage," http://www.ibhs.org/publications/view.asp?id=125

[3] ibid., p.2

Pajaro Valley Fire Protection District

562 Casserly Road, Watsonville, CA 95076

Staff Report

November 5, 2025

To: Board of Directors

From: Mike Urbani, Battalion Chief

Subject: 2025 ISO Rating Findings

DISCUSSION:

The report was created in June 2025. The ratings are effective October 1, 2025. There was no change to the District's ISO Ratings from the previous review. Below is a diagram of the what the ISO Ratings are for each category.

Your home is in Class 3 when a fire station is within 5 miles of travel and a fire hydrant is located within 1,000 feet. This distance is measured along roadways that provide fire apparatus access.

Your home is in Class 5 when a fire station is within 5 miles of travel and an alternate water supply must be provided by your fire department. An alternate water supply is defined where fire hydrants are more than 1,000 feet or your water tank has less than 30,000 gallons capacity; this is typical in our rural areas with well water.

Your home is in Class 10 when a fire station is more than 5 miles travel to your house and 1,000 feet or more from a creditable water supply.

Your home may be a Class 10W when in the 5-to-7-mile area around the responding fire station. The difference between Class 10 and 10W is that the 10W-graded risk or property is within 1,000 feet of a creditable water supply. Creditable water supplies include fire protection systems using hauled water in any of the split classification areas.

RECOMMENDATION:

Review the attached documents in the November 12th Board Package.

ATTACHEMNTS:

- Class 3 Rating Letter
- Class 3 Rating Report
- Class 5/10 Rating Letter
- Class 5/10 Rating Report

1000 Bishops Gate Blv. Ste 300
Mt. Laurel, NJ 08054-5404

t1.800.444.4554 Opt.2
f1.800.777.3929

June 30, 2025

Mr. Dave Martone, Board Chairman
Pajaro Valley FPSA
562 Casserly RD
Watsonville, California, 95076

RE: Pajaro Valley Fpsa, Santa Cruz County, California (N)
Public Protection Classification: 03
Effective Date: October 01, 2025

Dear Mr. Dave Martone,

We wish to thank you and Chief Jed Wilson for your cooperation during our recent Public Protection Classification (PPC) survey. ISO has completed its analysis of the structural fire suppression delivery system provided in your community. The resulting classification is indicated above.

If you would like to know more about your community's PPC classification, or if you would like to learn about the potential effect of proposed changes to your fire suppression delivery system, please call us at the phone number listed below.

ISO's Public Protection Classification Program (PPC) plays an important role in the underwriting process at insurance companies. In fact, most U.S. insurers – including the largest ones – use PPC information as part of their decision- making when deciding what business to write, coverage's to offer or prices to charge for personal or commercial property insurance.

Each insurance company independently determines the premiums it charges its policyholders. The way an insurer uses ISO's information on public fire protection may depend on several things – the company's fire-loss experience, ratemaking methodology, underwriting guidelines, and its marketing strategy.

Through ongoing research and loss experience analysis, we identified additional differentiation in fire loss experience within our PPC program, which resulted in the revised classifications. We based the differing fire loss experience on the fire suppression capabilities of each community. The new classifications will improve the predictive value for insurers while benefiting both commercial and residential property owners. We've published the new classifications as "X" and "Y" — formerly the "9" and "8B" portion of the split classification, respectively. For example:

- A community currently graded as a split 6/9 classification will now be a split 6/6X classification; with the "6X" denoting what was formerly classified as "9."
- Similarly, a community currently graded as a split 6/8B classification will now be a split 6/6Y classification, the "6Y" denoting what was formerly classified as "8B."

- Communities graded with single “9” or “8B” classifications will remain intact.
- Properties over 5 road miles from a recognized fire station would receive a class 10.

PPC is important to communities and fire departments as well. Communities whose PPC improves may get lower insurance prices. PPC also provides fire departments with a valuable benchmark, and is used by many departments as a valuable tool when planning, budgeting and justifying fire protection improvements.

ISO appreciates the high level of cooperation extended by local officials during the entire PPC survey process. The community protection baseline information gathered by ISO is an essential foundation upon which determination of the relative level of fire protection is made using the Fire Suppression Rating Schedule.

The classification is a direct result of the information gathered, and is dependent on the resource levels devoted to fire protection in existence at the time of survey. Material changes in those resources that occur after the survey is completed may affect the classification. Although ISO maintains a pro-active process to keep baseline information as current as possible, in the event of changes please call us at 1-800-444-4554, option 2 to expedite the update activity.

ISO is the leading supplier of data and analytics for the property/casualty insurance industry. Most insurers use PPC classifications for underwriting and calculating premiums for residential, commercial and industrial properties. The PPC program is not intended to analyze all aspects of a comprehensive structural fire suppression delivery system program. It is not for purposes of determining compliance with any state or local law, nor is it for making loss prevention or life safety recommendations.

If you have any questions about your classification, please let us know.

Sincerely,

Alex Shubert

Alex Shubert
Manager -National Processing Center

cc: Chief Jed Wilson, Chief, Santa Cruz County Fire Department
Mr. Beau Kayser, Water Superintendent, Watsonville Public Works

Public Protection Classification

(PPC®)

Summary Report

Pajaro Valley FPSA

California (N)

Prepared by

Insurance Services Office, Inc.
1000 Bishops Gate Blvd., Ste. 300
P.O. Box 5404
Mt. Laurel, New Jersey 08054-5404
1-800-444-4554

Report Created JUNE 2025

Effective OCTOBER 1, 2025

Background Information

Introduction

ISO collects and evaluates information from communities in the United States on their structure fire suppression capabilities. The data is analyzed using our Fire Suppression Rating Schedule (FSRS) and then a Public Protection Classification (PPC©) grade is assigned to the community. The surveys are conducted whenever it appears that there is a possibility of a PPC change. As such, the PPC program provides important, up-to-date information about fire protection services throughout the country.

The FSRS recognizes fire protection features only as they relate to suppression of first alarm structure fires. In many communities, fire suppression may be only a small part of the fire department's overall responsibility. ISO recognizes the dynamic and comprehensive duties of a community's fire service, and understands the complex decisions a community must make in planning and delivering emergency services. However, in developing a community's PPC grade, only features related to reducing property losses from structural fires are evaluated. Multiple alarms, simultaneous incidents and life safety are not considered in this evaluation. The PPC program evaluates the fire protection for small to average size buildings. Specific properties with a Needed Fire Flow in excess of 3,500 gpm are evaluated separately and assigned an individual PPC grade.

A community's investment in fire mitigation is a proven and reliable predictor of future fire losses. Statistical data on insurance losses bears out the relationship between excellent fire protection – as measured by the PPC program – and low fire losses. So, insurance companies use PPC information for marketing, underwriting, and to help establish fair premiums for homeowners and commercial fire insurance. In general, the price of fire insurance in a community with a good PPC grade is substantially lower than in a community with a poor PPC grade, assuming all other factors are equal.

ISO is an independent company that serves insurance companies, communities, fire departments, insurance regulators, and others by providing information about risk. ISO's expert staff collects information about municipal fire suppression efforts in communities throughout the United States. In each of those communities, ISO analyzes the relevant data and assigns a PPC grade – a number from 1 to 10. Class 1 represents an exemplary fire suppression program, and Class 10 indicates that the area's fire suppression program does not meet ISO's minimum criteria.

ISO's PPC program evaluates communities according to a uniform set of criteria, incorporating nationally recognized standards developed by the National Fire Protection Association and the American Water Works Association. A community's PPC grade depends on:

- **Needed Fire Flows**, which are representative building locations used to determine the theoretical amount of water necessary for fire suppression purposes.
- **Emergency Communications**, including emergency reporting, telecommunicators, and dispatching systems.
- **Fire Department**, including equipment, staffing, training, geographic distribution of fire companies, operational considerations, and community risk reduction.
- **Water Supply**, including inspection and flow testing of hydrants, alternative water supply operations, and a careful evaluation of the amount of available water compared with the amount needed to suppress fires up to 3,500 gpm.

Data Collection and Analysis

ISO has evaluated and classified over 39,000 fire protection areas across the United States using its FSRS. A combination of meetings between trained ISO field representatives and the dispatch center coordinator, community fire official, and water superintendent is used in conjunction with a comprehensive questionnaire to collect the data necessary to determine the PPC grade. In order for a community to obtain a grade better than a Class 9, three elements of fire suppression features are reviewed. These three elements are Emergency Communications, Fire Department, and Water Supply.

A review of the **Emergency Communications** accounts for 10% of the total classification. This section is weighted at **10 points,** as follows:

- Emergency Reporting 3 points
- Telecommunicators 4 points
- Dispatch Circuits 3 points

A review of the **Fire Department** accounts for 50% of the total classification. ISO focuses on a fire department's first alarm response and initial attack to minimize potential loss. The fire department section is weighted at **50 points,** as follows:

- Engine Companies 6 points
- Reserve Pumpers 0.5 points
- Pump Capacity 3 points
- Ladder/Service Companies 4 points
- Reserve Ladder/Service Trucks 0.5 points
- Deployment Analysis 10 points
- Company Personnel 15 points
- Training 9 points
- Operational considerations 2 points
- Community Risk Reduction 5.5 points (in addition to the 50 points above)

A review of the **Water Supply** system accounts for 40% of the total classification. ISO reviews the water supply a community uses to determine the adequacy for fire suppression purposes. The water supply system is weighted at **40 points,** as follows:

- Credit for Supply System 30 points
- Hydrant Size, Type & Installation 3 points
- Inspection & Flow Testing of Hydrants 7 points

There is one additional factor considered in calculating the final score – **Divergence**.

Even the best fire department will be less than fully effective if it has an inadequate water supply. Similarly, even a superior water supply will be less than fully effective if the fire department lacks the equipment or personnel to use the water. The FSRS score is subject to modification by a divergence factor, which recognizes disparity between the effectiveness of the fire department and the water supply.

The Divergence factor mathematically reduces the score based upon the relative difference between the fire department and water supply scores. The factor is introduced in the final equation.

PPC Grade

The PPC grade assigned to the community will depend on the community's score on a 100-point scale:

PPC	Points
1	90.00 or more
2	80.00 to 89.99
3	70.00 to 79.99
4	60.00 to 69.99
5	50.00 to 59.99
6	40.00 to 49.99
7	30.00 to 39.99
8	20.00 to 29.99
9	10.00 to 19.99
10	0.00 to 9.99

The classification numbers are interpreted as follows:

- Class 1 through (and including) Class 8 represents a fire suppression system that includes an FSRS creditable dispatch center, fire department, and water supply.
- Class 8B is a special classification that recognizes a superior level of fire protection in otherwise Class 9 areas. It is designed to represent a fire protection delivery system that is superior except for a lack of a water supply system capable of the minimum FSRS fire flow criteria of 250 gpm for 2 hours.
- Class 9 is a fire suppression system that includes a creditable dispatch center, fire department but no FSRS creditable water supply.
- Class 10 does not meet minimum FSRS criteria for recognition, including areas that are beyond five road miles of a recognized fire station.

New PPC program changes effective July 1, 2014

We have revised the PPC program to capture the effects of enhanced fire protection capabilities that reduce fire loss and fire severity in Split Class 9 and Split Class 8B areas (as outlined below). This new structure benefits the fire service, community, and property owner.

New classifications
Through ongoing research and loss experience analysis, we identified additional differentiation in fire loss experience within our PPC program, which resulted in the revised classifications. We based the differing fire loss experience on the fire suppression capabilities of each community. The new PPC classes will improve the predictive value for insurers while benefiting both commercial and residential property owners. Here are the new classifications and what they mean.

Split classifications
When we develop a split classification for a community — for example 5/9 — the first number is the class that applies to properties within 5 road miles of the responding fire station and 1,000 feet of a creditable water supply, such as a fire hydrant, suction point, or dry hydrant. The second number is the class that applies to properties within 5 road miles of a fire station but beyond 1,000 feet of a creditable water supply. We have revised the classification to reflect more precisely the risk of loss in a community, replacing Class 9 and 8B in the second part of a split classification with revised designations.

What's changed with the new classifications?
We've published the new classifications as "X" and "Y" — formerly the "9" and "8B" portion of the split classification, respectively. For example:

- A community currently displayed as a split 6/9 classification will now be a split 6/6X classification; with the "6X" denoting what was formerly classified as "9".
- Similarly, a community currently graded as a split 6/8B classification will now be a split 6/6Y classification, the "6Y" denoting what was formerly classified as "8B".
- Communities graded with single "9" or "8B" classifications will remain intact.

Prior Classification	New Classification
1/9	1/1X
2/9	2/2X
3/9	3/3X
4/9	4/4X
5/9	5/5X
6/9	6/6X
7/9	7/7X
8/9	8/8X
9	9

Prior Classification	New Classification
1/8B	1/1Y
2/8B	2/2Y
3/8B	3/3Y
4/8B	4/4Y
5/8B	5/5Y
6/8B	6/6Y
7/8B	7/7Y
8/8B	8/8Y
8B	8B

What's changed?
As you can see, we're still maintaining split classes, but it's how we represent them to insurers that's changed. The new designations reflect a reduction in fire severity and loss and have the potential to reduce property insurance premiums.

Benefits of the revised split class designations

- To the fire service, the revised designations identify enhanced fire suppression capabilities used throughout the fire protection area
- To the community, the new classes reward a community's fire suppression efforts by showing a more reflective designation
- To the individual property owner, the revisions offer the potential for decreased property insurance premiums

New water class
Our data also shows that risks located more than 5 but less than 7 road miles from a responding fire station with a creditable water source within 1,000 feet had better loss experience than those farther than 5 road miles from a responding fire station with no creditable water source. We've introduced a new classification —10W — to recognize the reduced loss potential of such properties.

What's changed with Class 10W?
Class 10W is property-specific. Not all properties in the 5-to-7-mile area around the responding fire station will qualify. The difference between Class 10 and 10W is that the 10W-graded risk or property is within 1,000 feet of a creditable water supply. Creditable water supplies include fire protection systems using hauled water in any of the split classification areas.

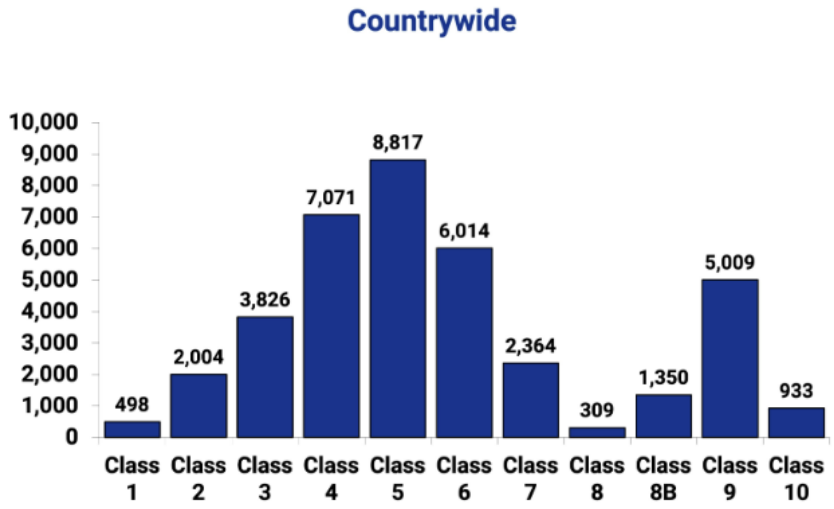
What's the benefit of Class 10W?
10W gives credit to risks within 5 to 7 road miles of the responding fire station and within 1,000 feet of a creditable water supply. That's reflective of the potential for reduced property insurance premiums.

What does the fire chief have to do?
Fire chiefs don't have to do anything at all. The revised classifications went in place automatically effective July 1, 2014 (July 1, 2015 for Texas).

What if I have additional questions?
Feel free to contact ISO at 800.444.4554 or email us at PPC-Cust-Serv@iso.com.

Distribution of PPC Grades

The 2023 published countrywide distribution of communities by the PPC grade is as follows:



Assistance

The PPC program offers help to communities, fire departments, and other public officials as they plan for, budget, and justify improvements. ISO is also available to assist in the understanding of the details of this evaluation.

The PPC program representatives can be reached by telephone at (800) 444-4554. The technical specialists at this telephone number have access to the details of this evaluation and can effectively speak with you about your questions regarding the PPC program. What's more, we can be reached via the internet at www.isomitigation.com/talk/.

We also have a website dedicated to our Community Hazard Mitigation Classification programs at www.isomitigation.com. Here, fire chiefs, building code officials, community leaders and other interested citizens can access a wealth of data describing the criteria used in evaluating how cities and towns are protecting residents from fire and other natural hazards. This website will allow you to learn more about the PPC program. The website provides important background information, insights about the PPC grading processes and technical documents. ISO is also pleased to offer Fire Chiefs Online — a special, secured website with information and features that can help improve your PPC grade, including a list of the Needed Fire Flows for all the commercial occupancies ISO has on file for your community. Visitors to the site can download information, see statistical results and also contact ISO for assistance.

In addition, on-line access to the FSRS and its commentaries is available to registered customers for a fee. However, fire chiefs and community chief administrative officials are given access privileges to this information without charge.

To become a registered fire chief or community chief administrative official, register at www.isomitigation.com.

PPC Review

ISO concluded its review of the fire suppression features being provided for Pajaro Valley FPSA. The resulting community classification is **Class 03**.

If the classification is a single class, the classification applies to properties with a Needed Fire Flow of 3,500 gpm or less in the community. If the classification is a split class (e.g., 6/XX):

- The first class (e.g., "6" in a 6/XX) applies to properties within 5 road miles of a recognized fire station and within 1,000 feet of a fire hydrant or alternate water supply.
- The second class (XX or XY) applies to properties beyond 1,000 feet of a fire hydrant but within 5 road miles of a recognized fire station.
- Alternative Water Supply: The first class (e.g., "6" in a 6/10) applies to properties within 5 road miles of a recognized fire station with no hydrant distance requirement.
- Class 10 applies to properties over 5 road miles of a recognized fire station.
- Class 10W applies to properties within 5 to 7 road miles of a recognized fire station with a recognized water supply within 1,000 feet.
- Specific properties with a Needed Fire Flow in excess of 3,500 gpm are evaluated separately and assigned an individual classification.

FSRS Feature	Earned Credit	Credit Available
Emergency Communications		
414. Credit for Emergency Reporting	**3.00**	**3**
422. Credit for Telecommunicators	**3.08**	**4**
432. Credit for Dispatch Circuits	**2.85**	**3**
440. Credit for Emergency Communications	**8.93**	**10**
Fire Department		
513. Credit for Engine Companies	**5.43**	**6**
523. Credit for Reserve Pumpers	**0.49**	**0.50**
532. Credit for Pump Capacity	**3.00**	**3**
549. Credit for Ladder Service	**0.62**	**4**
553. Credit for Reserve Ladder and Service Trucks	**0.00**	**0.50**
561. Credit for Deployment Analysis	**0.93**	**10**
571. Credit for Company Personnel	**10.10**	**15**
581. Credit for Training	**8.39**	**9**
730. Credit for Operational Considerations	**2.00**	**2**
590. Credit for Fire Department	**30.96**	**50**
Water Supply		
616. Credit for Supply System	**21.24**	**30**
621. Credit for Hydrants	**3.00**	**3**
631. Credit for Inspection and Flow Testing	**6.30**	**7**
640. Credit for Water Supply	**30.54**	**40**
Divergence	**-2.89**	--
1050. Community Risk Reduction	**4.41**	**5.50**
Total Credit	**71.95**	**105.50**

Emergency Communications

Ten percent of a community's overall score is based on how well the communications center receives and dispatches fire alarms. Our field representative evaluated:

- Communications facilities provided for the general public to report structure fires
- Enhanced 9-1-1 Telephone Service including wireless
- Computer-aided dispatch (CAD) facilities
- Alarm receipt and processing at the communication center
- Training and certification of telecommunicators
- Facilities used to dispatch fire department companies to reported structure fires

	Earned Credit	Credit Available
414. Credit Emergency Reporting	**3.00**	3
422. Credit for Telecommunicators	**3.08**	4
432. Credit for Dispatch Circuits	**2.85**	3
Item 440. Credit for Emergency Communications:	**8.93**	**10**

Item 414 - Credit for Emergency Reporting (3 points)

The first item reviewed is Item 414 "Credit for Emergency Reporting (CER)". This item reviews the emergency communication center facilities provided for the public to report fires including 911 systems (Basic or Enhanced), Wireless Phase I and Phase II, Voice over Internet Protocol, Computer Aided Dispatch and Geographic Information Systems for automatic vehicle location. ISO uses National Fire Protection Association (NFPA) 1221, *Standard for the Installation, Maintenance and Use of Emergency Services Communications Systems* as the reference for this section.

Item 410. Emergency Reporting (CER)	Earned Credit	Credit Available
A./B. Basic 9-1-1, Enhanced 9-1-1 or No 9-1-1 For maximum credit, there should be an Enhanced 9-1-1 system, Basic 9-1-1 and No 9-1-1 will receive partial credit.	**20.00**	**20**
1. E9-1-1 Wireless Wireless Phase I using Static ALI (automatic location identification) Functionality (10 points); Wireless Phase II using Dynamic ALI Functionality (15 points); Both available will be 25 points	**25.00**	**25**
2. E9-1-1 Voice over Internet Protocol (VoIP) Static VoIP using Static ALI Functionality (10 points); Nomadic VoIP using Dynamic ALI Functionality (15 points); Both available will be 25 points	**25.00**	**25**
3. Computer Aided Dispatch Basic CAD (5 points); CAD with Management Information System (5 points); CAD with Interoperability (5 points)	**15.00**	**15**
4. Geographic Information System (GIS/AVL) The PSAP uses a fully integrated CAD/GIS management system with automatic vehicle location (AVL) integrated with a CAD system providing dispatch assignments. The individual fire departments being dispatched do not need GIS/AVL capability to obtain this credit.	**15.00**	**15**
Review of Emergency Reporting total:	**100.00**	**100**

Item 422- Credit for Telecommunicators (4 points)

The second item reviewed is Item 422 "Credit for Telecommunicators (TC)". This item reviews the number of Telecommunicators on duty at the center to handle fire calls and other emergencies. All emergency calls including those calls that do not require fire department action are reviewed to determine the proper staffing to answer emergency calls and dispatch the appropriate emergency response. The 2013 Edition of NFPA 1221, *Standard for the Installation, Maintenance and Use of Emergency Services Communications Systems,* recommends that ninety-five percent of emergency calls shall be answered within 15 seconds and ninety-nine percent of emergency calls shall be answered within 40 seconds. In addition, NFPA recommends that eighty percent of emergency alarm processing shall be completed within 60 seconds and ninety-five percent of alarm processing shall be completed within 106 seconds of answering the call.

To receive full credit for operators on duty, ISO must review documentation to show that the communication center meets NFPA 1221 call answering and dispatch time performance measurement standards. This documentation may be in the form of performance statistics or other performance measurements compiled by the 9-1-1 software or other software programs that are currently in use such as Computer Aided Dispatch (CAD) or Management Information System (MIS).

Item 420. Telecommunicators (CTC)	Earned Credit	Credit Available
A1. Alarm Receipt (AR) Receipt of alarms shall meet the requirements in accordance with the criteria of NFPA 1221	**19.26**	**20**
A2. Alarm Processing (AP) Processing of alarms shall meet the requirements in accordance with the criteria of NFPA 1221	**17.68**	**20**
B. Emergency Dispatch Protocols (EDP) Telecommunicators have emergency dispatch protocols (EDP) containing questions and a decision-support process to facilitate correct call categorization and prioritization.	**0.00**	**20**
C. Telecommunicator Training and Certification (TTC) Telecommunicators meet the qualification requirements referenced in NFPA 1061, *Standard for Professional Qualifications for Public Safety Telecommunicator,* and/or the Association of Public-Safety Communications Officials - International (APCO) *Project 33.* Telecommunicators are certified in the knowledge, skills, and abilities corresponding to their job functions.	**20.00**	**20**
D. Telecommunicator Continuing Education and Quality Assurance (TQA) Telecommunicators participate in continuing education and/or in-service training and quality-assurance programs as appropriate for their positions	**20.00**	**20**
Review of Telecommunicators total:	**76.94**	**100**

Item 432 - Credit for Dispatch Circuits (3 points)

The third item reviewed is Item 432 “Credit for Dispatch Circuits (CDC)”. This item reviews the dispatch circuit facilities used to transmit alarms to fire department members. A “Dispatch Circuit” is defined in NFPA 1221 as “A circuit over which an alarm is transmitted from the communications center to an emergency response facility (ERF) or emergency response units (ERUs) to notify ERUs to respond to an emergency”. All fire departments (except single fire station departments with full-time firefighter personnel receiving alarms directly at the fire station) need adequate means of notifying all firefighter personnel of the location of reported structure fires. The dispatch circuit facilities should be in accordance with the general criteria of NFPA 1221. “Alarms” are defined in this Standard as “A signal or message from a person or device indicating the existence of an emergency or other situation that requires action by an emergency response agency”.

There are two different levels of dispatch circuit facilities provided for in the Standard – a primary dispatch circuit and a secondary dispatch circuit. In jurisdictions that receive 730 alarms or more per year (average of two alarms per 24-hour period), two separate and dedicated dispatch circuits, a primary and a secondary, are needed. In jurisdictions receiving fewer than 730 alarms per year, a second dedicated dispatch circuit is not needed. Dispatch circuit facilities installed but not used or tested (in accordance with the NFPA Standard) receive no credit.

The score for Credit for Dispatch Circuits (CDC) is influenced by monitoring for integrity of the primary dispatch circuit. There are up to 0.90 points available for this Item. Monitoring for integrity involves installing automatic systems that will detect faults and failures and send visual and audible indications to appropriate communications center (or dispatch center) personnel. ISO uses NFPA 1221 to guide the evaluation of this item. ISO's evaluation also includes a review of the communication system's emergency power supplies.

Item 432 “Credit for Dispatch Circuits (CDC)” = 2.85 points

Fire Department

Fifty percent of a community's overall score is based upon the fire department's structure fire suppression system. ISO's field representative evaluated:

- Engine and ladder/service vehicles including reserve apparatus
- Equipment carried
- Response to reported structure fires
- Deployment analysis of companies
- Available and/or responding firefighters
- Training

	Earned Credit	Credit Available
513. Credit for Engine Companies	**5.43**	6
523. Credit for Reserve Pumpers	**0.49**	0.5
532. Credit for Pumper Capacity	**3.00**	3
549. Credit for Ladder Service	**0.62**	4
553. Credit for Reserve Ladder and Service Trucks	**0.00**	0.5
561. Credit for Deployment Analysis	**0.93**	10
571. Credit for Company Personnel	**10.10**	15
581. Credit for Training	**8.39**	9
730. Credit for Operational Considerations	**2.00**	2
Item 590. Credit for Fire Department:	**30.96**	**50**

Basic Fire Flow

The Basic Fire Flow for the community is determined by the review of the Needed Fire Flows for selected buildings in the community. The fifth largest Needed Fire Flow is determined to be the Basic Fire Flow. The Basic Fire Flow has been determined to be 2500 gpm.

Item 513 - Credit for Engine Companies (6 points)

The first item reviewed is Item 513 "Credit for Engine Companies (CEC)". This item reviews the number of engine companies, their pump capacity, hose testing, pump testing and the equipment carried on the in-service pumpers. To be recognized, pumper apparatus must meet the general criteria of NFPA 1901, *Standard for Automotive Fire Apparatus* which include a minimum 250 gpm pump, an emergency warning system, a 300 gallon water tank, and hose. At least 1 apparatus must have a permanently mounted pump rated at 750 gpm or more at 150 psi.

The review of the number of needed pumpers considers the response distance to built-upon areas; the Basic Fire Flow; and the method of operation. Multiple alarms, simultaneous incidents, and life safety are not considered.

The greatest value of A, B, or C below is needed in the fire district to suppress fires in structures with a Needed Fire Flow of 3,500 gpm or less: **2 engine companies**

a) **2 engine companies** to provide fire suppression services to areas to meet NFPA 1710 criteria or within 1½ miles.

b) **2 engine companies** to support a Basic Fire Flow of 2500 gpm.

c) **2 engine companies** based upon the fire department's method of operation to provide a minimum two engine response to all first alarm structure fires.

The FSRS recognizes that there are **2 engine companies** in service.

The FSRS also reviews Automatic Aid. Automatic Aid is considered in the review as assistance dispatched automatically by contractual agreement between two communities or fire districts. That differs from mutual aid or assistance arranged case by case. ISO will recognize an Automatic Aid plan under the following conditions:

- It must be prearranged for first alarm response according to a definite plan. It is preferable to have a written agreement, but ISO may recognize demonstrated performance.
- The aid must be dispatched to all reported structure fires on the initial alarm.
- The aid must be provided 24 hours a day, 365 days a year.

FSRS Item 512.D "Automatic Aid Engine Companies" responding on first alarm and meeting the needs of the city for basic fire flow and/or distribution of companies are factored based upon the value of the Automatic Aid plan (up to 1.00 can be used as the factor). The Automatic Aid factor is determined by a review of the Automatic Aid provider's communication facilities, how they receive alarms from the graded area, inter-department training between fire departments, and the fire ground communications capability between departments.

For each engine company, the credited Pump Capacity (PC), the Hose Carried (HC), the Equipment Carried (EC) all contribute to the calculation for the percent of credit the FSRS provides to that engine company.

Item 513 "Credit for Engine Companies (CEC)" = 5.43 points

Item 523 - Credit for Reserve Pumpers (0.50 points)

The item is Item 523 "Credit for Reserve Pumpers (CRP)". This item reviews the number and adequacy of the pumpers and their equipment. The number of needed reserve pumpers is 1 for each 8 needed engine companies determined in Item 513, or any fraction thereof.

Item 523 "Credit for Reserve Pumpers (CRP)" = 0.49 points

Item 532 – Credit for Pumper Capacity (3 points)

The next item reviewed is Item 532 "Credit for Pumper Capacity (CPC)". The total pump capacity available should be sufficient for the Basic Fire Flow of 2500 gpm. The maximum needed pump capacity credited is the Basic Fire Flow of the community.

Item 532 "Credit for Pumper Capacity (CPC)" = 3.00 points

Item 549 – Credit for Ladder Service (4 points)

The next item reviewed is Item 549 "Credit for Ladder Service (CLS)". This item reviews the number of response areas within the city with 5 buildings that are 3 or more stories or 35 feet or more in height, or with 5 buildings that have a Needed Fire Flow greater than 3,500 gpm, or any combination of these criteria. The height of all buildings in the city, including those protected by automatic sprinklers, is considered when determining the number of needed ladder companies. Response areas not needing a ladder company should have a service company. Ladders, tools and equipment normally carried on ladder trucks are needed not only for ladder operations but also for forcible entry, ventilation, salvage, overhaul, lighting and utility control.

The number of ladder or service companies, the height of the aerial ladder, aerial ladder testing and the equipment carried on the in-service ladder trucks and service trucks is compared with the number of needed ladder trucks and service trucks and an FSRS equipment list. Ladder trucks must meet the general criteria of NFPA 1901, *Standard for Automotive Fire Apparatus* to be recognized.

The number of needed ladder-service trucks is dependent upon the number of buildings 3 stories or 35 feet or more in height, buildings with a Needed Fire Flow greater than 3,500 gpm, and the method of operation.

The FSRS recognizes that there are **0 ladder companies** in service. These companies are needed to provide fire suppression services to areas to meet NFPA 1710 criteria or within 2½ miles and the number of buildings with a Needed Fire Flow over 3,500 gpm or 3 stories or more in height, or the method of operation.

The FSRS recognizes that there are **1 service companies** in service.

Item 549 "Credit for Ladder Service (CLS)" = 0.62 points

Item 553 – Credit for Reserve Ladder and Service Trucks (0.50 points)

The next item reviewed is Item 553 “Credit for Reserve Ladder and Service Trucks (CRLS)”. This item considers the adequacy of ladder and service apparatus when one (or more in larger communities) of these apparatus are out of service. The number of needed reserve ladder and service trucks is 1 for each 8 needed ladder and service companies that were determined to be needed in Item 540, or any fraction thereof.

Item 553 “Credit for Reserve Ladder and Service Trucks (CRLS)” = 0.00 points

Item 561 – Deployment Analysis (10 points)

Next, Item 561 “Deployment Analysis (DA)” is reviewed. This Item examines the number and adequacy of existing engine and ladder-service companies to cover built-upon areas of the city.

To determine the Credit for Distribution, first the Existing Engine Company (EC) points and the Existing Engine Companies (EE) determined in Item 513 are considered along with Ladder Company Equipment (LCE) points, Service Company Equipment (SCE) points, Engine-Ladder Company Equipment (ELCE) points, and Engine-Service Company Equipment (ESCE) points determined in Item 549.

Secondly, as an alternative to determining the number of needed engine and ladder/service companies through the road-mile analysis, a fire protection area may use the results of a systematic performance evaluation. This type of evaluation analyzes computer-aided dispatch (CAD) history to demonstrate that, with its current deployment of companies, the fire department meets the time constraints for initial arriving engine and initial full alarm assignment in accordance with the general criteria of in NFPA 1710, *Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments.*

A determination is made of the percentage of built upon area within 1½ miles of a first-due engine company and within 2½ miles of a first-due ladder-service company.

Item 561 “Credit Deployment Analysis (DA)” = 0.93 points

Item 571 – Credit for Company Personnel (15 points)

Item 571 "Credit for Company Personnel (CCP)" reviews the average number of existing firefighters and company officers available to respond to reported first alarm structure fires in the city.

The on-duty strength is determined by the yearly average of total firefighters and company officers on-duty considering vacations, sick leave, holidays, "Kelley" days and other absences. When a fire department operates under a minimum staffing policy, this may be used in lieu of determining the yearly average of on-duty company personnel.

Firefighters on apparatus not credited under Items 513 and 549 that regularly respond to reported first alarms to aid engine, ladder, and service companies are included in this item as increasing the total company strength.

Firefighters staffing ambulances or other units serving the general public are credited if they participate in fire-fighting operations, the number depending upon the extent to which they are available and are used for response to first alarms of fire.

On-Call members are credited on the basis of the average number staffing apparatus on first alarms. Off-shift career firefighters and company officers responding on first alarms are considered on the same basis as on-call personnel. For personnel not normally at the fire station, the number of responding firefighters and company officers is divided by 3 to reflect the time needed to assemble at the fire scene and the reduced ability to act as a team due to the various arrival times at the fire location when compared to the personnel on-duty at the fire station during the receipt of an alarm.

The number of Public Safety Officers who are positioned in emergency vehicles within the jurisdiction boundaries may be credited based on availability to respond to first alarm structure fires. In recognition of this increased response capability the number of responding Public Safety Officers is divided by 2.

The average number of firefighters and company officers responding with those companies credited as Automatic Aid under Items 513 and 549 are considered for either on-duty or on-call company personnel as is appropriate. The actual number is calculated as the average number of company personnel responding multiplied by the value of AA Plan determined in Item 512.D.

The maximum creditable response of on-duty and on-call firefighters is 12, including company officers, for each existing engine and ladder company and 6 for each existing service company.

Chief Officers are not creditable except when more than one chief officer responds to alarms; then extra chief officers may be credited as firefighters if they perform company duties.

The FSRS recognizes **5.00 on-duty personnel** and an average of **0.00 on-call personnel** responding on first alarm structure fires.

Item 571 "Credit for Company Personnel (CCP)" = 10.10 points

Item 581 – Credit for Training (9 points)

Training	Earned Credit	Credit Available
A. Facilities, and Use For maximum credit, each firefighter should receive 18 hours per year in structure fire related subjects as outlined in NFPA 1001.	**35.0(**	**35**
B. Company Training For maximum credit, each firefighter should receive 16 hours per month in structure fire related subjects as outlined in NFPA 1001.	**18.25**	**25**
C. Classes for Officers For maximum credit, each officer should be certified in accordance with the general criteria of NFPA 1021. Additionally, each officer should receive 12 hours of continuing education on or off site.	**12.00**	**12**
D. New Driver and Operator Training For maximum credit, each new driver and operator should receive 60 hours of driver/operator training per year in accordance with NFPA 1002 and NFPA 1451.	**5.00**	**5**
E. Existing Driver and Operator Training For maximum credit, each existing driver and operator should receive 12 hours of driver/operator training per year in accordance with NFPA 1002 and NFPA 1451.	**5.00**	**5**
F. Training on Hazardous Materials For maximum credit, each firefighter should receive 6 hours of training for incidents involving hazardous materials in accordance with NFPA 472.	**1.00**	**1**
G. Recruit Training For maximum credit, each firefighter should receive 240 hours of structure fire related training in accordance with NFPA 1001 within the first year of employment or tenure.	**5.00**	**5**
H. Pre-Fire Planning Inspections For maximum credit, pre-fire planning inspections of each commercial, industrial, institutional, and other similar type building (all buildings except 1-4 family dwellings) should be made annually by company members. Records of inspections should include up-to date notes and sketches.	**12.0(**	**12**

Item 580 "Credit for Training (CT)" = 8.39 points

Item 730 – Operational Considerations (2 points)

Item 730 "Credit for Operational Considerations (COC)" evaluates fire department standard operating procedures and incident management systems for emergency operations involving structure fires.

Operational Considerations	Earned Credit	Credit Available
Standard Operating Procedures The department should have established SOPs for fire department general emergency operations	**50**	**50**
Incident Management Systems The department should use an established incident management system (IMS)	**50**	**50**
Operational Considerations total:	**100**	**100**

Item 730 "Credit for Operational Considerations (COC)" = 2.00 points

Water Supply

Forty percent of a community's overall score is based on the adequacy of the water supply system. The ISO field representative evaluated:

- the capability of the water distribution system to meet the Needed Fire Flows at selected locations up to 3,500 gpm.
- size, type and installation of fire hydrants.
- inspection and flow testing of fire hydrants.

	Earned Credit	Credit Available
616. Credit for Supply System	**21.24**	30
621. Credit for Hydrants	**3.00**	3
631. Credit for Inspection and Flow Testing	**6.30**	7
Item 640. Credit for Water Supply:	**30.54**	**40**

Item 616 – Credit for Supply System (30 points)

The first item reviewed is Item 616 "Credit for Supply System (CSS)". This item reviews the rate of flow that can be credited at each of the Needed Fire Flow test locations considering the supply works capacity, the main capacity and the hydrant distribution. The lowest flow rate of these items is credited for each representative location. A water system capable of delivering 250 gpm or more for a period of two hours plus consumption at the maximum daily rate at the fire location is considered minimum in the ISO review.

Where there are 2 or more systems or services distributing water at the same location, credit is given on the basis of the joint protection provided by all systems and services available.

The supply works capacity is calculated for each representative Needed Fire Flow test location, considering a variety of water supply sources. These include public water supplies, emergency supplies (usually accessed from neighboring water systems), suction supplies (usually evidenced by dry hydrant installations near a river, lake or other body of water), and supplies developed by a fire department using large diameter hose or vehicles to shuttle water from a source of supply to a fire site. The result is expressed in gallons per minute (gpm).

The normal ability of the distribution system to deliver Needed Fire Flows at the selected building locations is reviewed. The results of a flow test at a representative test location will indicate the ability of the water mains (or fire department in the case of fire department supplies) to carry water to that location.

The hydrant distribution is reviewed within 1,000 feet of representative test locations measured as hose can be laid by apparatus.

For maximum credit, the Needed Fire Flows should be available at each location in the district. Needed Fire Flows of 2,500 gpm or less should be available for 2 hours; and Needed Fire Flows of 3,000 and 3,500 gpm should be obtainable for 3 hours.

Item 616 "Credit for Supply System (CSS)" = 21.24 points

Item 621 – Credit for Hydrants (3 points)

The second item reviewed is Item 621 "Credit for Hydrants (CH)". This item reviews the number of fire hydrants of each type compared with the total number of hydrants.

There are a total of 254 hydrants in the graded area.

620. Hydrants, - Size, Type and Installation	Number of Hydrants
A. With a 6 -inch or larger branch and a pumper outlet with or without 2½ -inch outlets	254
B. With a 6 -inch or larger branch and no pumper outlet but two or more 2½ -inch outlets, or with a small foot valve, or with a small barrel	0
C./D. With only a 2½ -inch outlet or with less than a 6 -inch branch	0
E./F. Flush Type, Cistern, or Suction Point	0

Item 621 "Credit for Hydrants (CH)" = 3.00 points

Item 630 – Credit for Inspection and Flow Testing (7 points)

The third item reviewed is Item 630 "Credit for Inspection and Flow Testing (CIT)". This item reviews the fire hydrant inspection frequency, and the completeness of the inspections. Inspection of hydrants should be in accordance with AWWA M-17, *Installation, Field Testing and Maintenance of Fire Hydrants.*

Frequency of Inspection (FI): Average interval between the 3 most recent inspections.

Frequency	Points
1 year	30
2 years	20
3 years	10
4 years	5
5 years or more	No Credit

Note: The points for inspection frequency are reduced by 10 points if the inspections are incomplete or do not include a flushing program. An additional reduction of 10 points are made if hydrants are not subjected to full system pressure during inspections. If the inspection of cisterns or suction points does not include actual drafting with a pumper, or back-flushing for dry hydrants, 20 points are deducted.

Total points for Inspections = 3.94 points

Frequency of Fire Flow Testing (FF): Average interval between the 3 most recent inspections.

Frequency	Points
5 years	40
6 years	30
7 years	20
8 years	10
9 years	5
10 years or more	No Credit

Total points for Fire Flow Testing = 2.36 points

Item 631 "Credit for Inspection and Fire Flow Testing (CIT)" = 6.30 points

Divergence = -2.89

The Divergence factor mathematically reduces the score based upon the relative difference between the fire department and water supply scores. The factor is introduced in the final equation.

Community Risk Reduction

	Earned Credit	Credit Available
1025. Credit for Fire Prevention and Code Enforcement (CPCE)	**2.10**	2.2
1033. Credit for Public Fire Safety Education (CFSE)	**1.21**	2.2
1044. Credit for Fire Investigation Programs (CIP)	**1.10**	1.1
Item 1050. Credit for Community Risk Reduction	**4.41**	**5.50**

Item 1025 – Credit for Fire Prevention Code Adoption and Enforcement (2.2 points)	Earned Credit	Credit Available
Fire Prevention Code Regulations (PCR) Evaluation of fire prevention code regulations in effect.	10.00	10
Fire Prevention Staffing (PS) Evaluation of staffing for fire prevention activities.	8.00	8
Fire Prevention Certification and Training (PCT) Evaluation of the certification and training of fire prevention code enforcement personnel.	5.50	6
Fire Prevention Programs (PCP) Evaluation of fire prevention programs.	14.60	16
Review of Fire Prevention Code and Enforcement (CPCE) subtotal:	38.10	40

Item 1033 – Credit for Public Fire Safety Education (2.2 points)	Earned Credit	Credit Available
Public Fire Safety Educators Qualifications and Training (FSQT) Evaluation of public fire safety education personnel training and qualification as specified by the authority having jurisdiction.	0.00	10
Public Fire Safety Education Programs (FSP) Evaluation of programs for public fire safety education.	22.00	30
Review of Public Safety Education Programs (CFSE) subtotal:	22.00	40

Item 1044 – Credit for Fire Investigation Programs (1.1 points)	Earned Credit	Credit Available
Fire Investigation Organization and Staffing (IOS) Evaluation of organization and staffing for fire investigations.	8.00	8
Fire Investigator Certification and Training (IQT) Evaluation of fire investigator certification and training.	6.00	6
Use of National Fire Incident Reporting System (IRS) Evaluation of the use of the National Fire Incident Reporting System (NFIRS) for the 3 years before the evaluation.	6.00	6
Review of Fire Investigation Programs (CIP) subtotal:	20.00	20

Summary of PPC Review
for
Pajaro Valley FPSA

FSRS Item	Earned Credit	Credit Available
Emergency Communications		
414. Credit for Emergency Reporting	**3.00**	**3**
422. Credit for Telecommunicators	**3.08**	**4**
432. Credit for Dispatch Circuits	**2.85**	**3**
440. Credit for Emergency Communications	**8.93**	**10**
Fire Department		
513. Credit for Engine Companies	**5.43**	**6**
523. Credit for Reserve Pumpers	**0.49**	**0.5**
532. Credit for Pumper Capacity	**3.00**	**3**
549. Credit for Ladder Service	**0.62**	**4**
553. Credit for Reserve Ladder and Service Trucks	**0.00**	**0.5**
561. Credit for Deployment Analysis	**0.93**	**10**
571. Credit for Company Personnel	**10.10**	**15**
581. Credit for Training	**8.39**	**9**
730. Credit for Operational Considerations	**2.00**	**2**
590. Credit for Fire Department	**30.96**	**50**
Water Supply		
616. Credit for Supply System	**21.24**	**30**
621. Credit for Hydrants	**3.00**	**3**
631. Credit for Inspection and Flow Testing	**6.30**	**7**
640. Credit for Water Supply	**30.54**	**40**
Divergence	**-2.89**	--
1050. Community Risk Reduction	**4.41**	**5.50**
Total Credit	**71.95**	**105.5**

Final Community Classification = 03

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June 30, 2025

Mr. Dave Martone, Board Chairman
Pajaro Valley FDS
454 Amesti Rd
Watsonville, California, 95076

RE: Pajaro Valley Fds, Santa Cruz County, California (N)
Public Protection Classification: 05/10
Effective Date: October 01, 2025

Dear Mr. Dave Martone,

We wish to thank you and Chief Jed Wilson for your cooperation during our recent Public Protection Classification (PPC) survey. ISO has completed its analysis of the structural fire suppression delivery system provided in your community. The resulting classification is indicated above.

If you would like to know more about your community's PPC classification, or if you would like to learn about the potential effect of proposed changes to your fire suppression delivery system, please call us at the phone number listed below.

ISO's Public Protection Classification Program (PPC) plays an important role in the underwriting process at insurance companies. In fact, most U.S. insurers – including the largest ones – use PPC information as part of their decision- making when deciding what business to write, coverage's to offer or prices to charge for personal or commercial property insurance.

Each insurance company independently determines the premiums it charges its policyholders. The way an insurer uses ISO's information on public fire protection may depend on several things – the company's fire-loss experience, ratemaking methodology, underwriting guidelines, and its marketing strategy.

Through ongoing research and loss experience analysis, we identified additional differentiation in fire loss experience within our PPC program, which resulted in the revised classifications. We based the differing fire loss experience on the fire suppression capabilities of each community. The new classifications will improve the predictive value for insurers while benefiting both commercial and residential property owners. We've published the new classifications as "X" and "Y" — formerly the "9" and "8B" portion of the split classification, respectively. For example:

- A community currently graded as a split 6/9 classification will now be a split 6/6X classification; with the "6X" denoting what was formerly classified as "9."
- Similarly, a community currently graded as a split 6/8B classification will now be a split 6/6Y classification, the "6Y" denoting what was formerly classified as "8B."

- Communities graded with single “9” or “8B” classifications will remain intact.
- Properties over 5 road miles from a recognized fire station would receive a class 10.

PPC is important to communities and fire departments as well. Communities whose PPC improves may get lower insurance prices. PPC also provides fire departments with a valuable benchmark, and is used by many departments as a valuable tool when planning, budgeting and justifying fire protection improvements.

ISO appreciates the high level of cooperation extended by local officials during the entire PPC survey process. The community protection baseline information gathered by ISO is an essential foundation upon which determination of the relative level of fire protection is made using the Fire Suppression Rating Schedule.

The classification is a direct result of the information gathered, and is dependent on the resource levels devoted to fire protection in existence at the time of survey. Material changes in those resources that occur after the survey is completed may affect the classification. Although ISO maintains a pro-active process to keep baseline information as current as possible, in the event of changes please call us at 1-800-444-4554, option 2 to expedite the update activity.

ISO is the leading supplier of data and analytics for the property/casualty insurance industry. Most insurers use PPC classifications for underwriting and calculating premiums for residential, commercial and industrial properties. The PPC program is not intended to analyze all aspects of a comprehensive structural fire suppression delivery system program. It is not for purposes of determining compliance with any state or local law, nor is it for making loss prevention or life safety recommendations.

If you have any questions about your classification, please let us know.

Sincerely,

Alex Shubert

Alex Shubert
Manager -National Processing Center

cc: Ms. Stephanie French, Operations Manager, Santa Cruz Regional 911
Chief Jed Wilson, Chief, Santa Cruz County Fire Department

Public Protection Classification

(PPC®)

Summary Report

Pajaro Valley FDS

California (N)

Prepared by

Insurance Services Office, Inc.
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P.O. Box 5404
Mt. Laurel, New Jersey 08054-5404
1-800-444-4554

Report Created JUNE 2025

Effective OCTOBER 1, 2025

Background Information

Introduction

ISO collects and evaluates information from communities in the United States on their structure fire suppression capabilities. The data is analyzed using our Fire Suppression Rating Schedule (FSRS) and then a Public Protection Classification (PPC©) grade is assigned to the community. The surveys are conducted whenever it appears that there is a possibility of a PPC change. As such, the PPC program provides important, up-to-date information about fire protection services throughout the country.

The FSRS recognizes fire protection features only as they relate to suppression of first alarm structure fires. In many communities, fire suppression may be only a small part of the fire department's overall responsibility. ISO recognizes the dynamic and comprehensive duties of a community's fire service, and understands the complex decisions a community must make in planning and delivering emergency services. However, in developing a community's PPC grade, only features related to reducing property losses from structural fires are evaluated. Multiple alarms, simultaneous incidents and life safety are not considered in this evaluation. The PPC program evaluates the fire protection for small to average size buildings. Specific properties with a Needed Fire Flow in excess of 3,500 gpm are evaluated separately and assigned an individual PPC grade.

A community's investment in fire mitigation is a proven and reliable predictor of future fire losses. Statistical data on insurance losses bears out the relationship between excellent fire protection – as measured by the PPC program – and low fire losses. So, insurance companies use PPC information for marketing, underwriting, and to help establish fair premiums for homeowners and commercial fire insurance. In general, the price of fire insurance in a community with a good PPC grade is substantially lower than in a community with a poor PPC grade, assuming all other factors are equal.

ISO is an independent company that serves insurance companies, communities, fire departments, insurance regulators, and others by providing information about risk. ISO's expert staff collects information about municipal fire suppression efforts in communities throughout the United States. In each of those communities, ISO analyzes the relevant data and assigns a PPC grade – a number from 1 to 10. Class 1 represents an exemplary fire suppression program, and Class 10 indicates that the area's fire suppression program does not meet ISO's minimum criteria.

ISO's PPC program evaluates communities according to a uniform set of criteria, incorporating nationally recognized standards developed by the National Fire Protection Association and the American Water Works Association. A community's PPC grade depends on:

- **Needed Fire Flows**, which are representative building locations used to determine the theoretical amount of water necessary for fire suppression purposes.
- **Emergency Communications**, including emergency reporting, telecommunicators, and dispatching systems.
- **Fire Department**, including equipment, staffing, training, geographic distribution of fire companies, operational considerations, and community risk reduction.
- **Water Supply**, including inspection and flow testing of hydrants, alternative water supply operations, and a careful evaluation of the amount of available water compared with the amount needed to suppress fires up to 3,500 gpm.

Data Collection and Analysis

ISO has evaluated and classified over 39,000 fire protection areas across the United States using its FSRS. A combination of meetings between trained ISO field representatives and the dispatch center coordinator, community fire official, and water superintendent is used in conjunction with a comprehensive questionnaire to collect the data necessary to determine the PPC grade. In order for a community to obtain a grade better than a Class 9, three elements of fire suppression features are reviewed. These three elements are Emergency Communications, Fire Department, and Water Supply.

A review of the **Emergency Communications** accounts for 10% of the total classification. This section is weighted at **10 points,** as follows:

- Emergency Reporting 3 points
- Telecommunicators 4 points
- Dispatch Circuits 3 points

A review of the **Fire Department** accounts for 50% of the total classification. ISO focuses on a fire department's first alarm response and initial attack to minimize potential loss. The fire department section is weighted at **50 points,** as follows:

- Engine Companies 6 points
- Reserve Pumpers 0.5 points
- Pump Capacity 3 points
- Ladder/Service Companies 4 points
- Reserve Ladder/Service Trucks 0.5 points
- Deployment Analysis 10 points
- Company Personnel 15 points
- Training 9 points
- Operational considerations 2 points
- Community Risk Reduction 5.5 points (in addition to the 50 points above)

A review of the **Water Supply** system accounts for 40% of the total classification. ISO reviews the water supply a community uses to determine the adequacy for fire suppression purposes. The water supply system is weighted at **40 points,** as follows:

- Credit for Supply System 30 points
- Hydrant Size, Type & Installation 3 points
- Inspection & Flow Testing of Hydrants 7 points

There is one additional factor considered in calculating the final score – **Divergence**.

Even the best fire department will be less than fully effective if it has an inadequate water supply. Similarly, even a superior water supply will be less than fully effective if the fire department lacks the equipment or personnel to use the water. The FSRS score is subject to modification by a divergence factor, which recognizes disparity between the effectiveness of the fire department and the water supply.

The Divergence factor mathematically reduces the score based upon the relative difference between the fire department and water supply scores. The factor is introduced in the final equation.

PPC Grade

The PPC grade assigned to the community will depend on the community's score on a 100-point scale:

PPC	Points
1	90.00 or more
2	80.00 to 89.99
3	70.00 to 79.99
4	60.00 to 69.99
5	50.00 to 59.99
6	40.00 to 49.99
7	30.00 to 39.99
8	20.00 to 29.99
9	10.00 to 19.99
10	0.00 to 9.99

The classification numbers are interpreted as follows:

- Class 1 through (and including) Class 8 represents a fire suppression system that includes an FSRS creditable dispatch center, fire department, and water supply.
- Class 8B is a special classification that recognizes a superior level of fire protection in otherwise Class 9 areas. It is designed to represent a fire protection delivery system that is superior except for a lack of a water supply system capable of the minimum FSRS fire flow criteria of 250 gpm for 2 hours.
- Class 9 is a fire suppression system that includes a creditable dispatch center, fire department but no FSRS creditable water supply.
- Class 10 does not meet minimum FSRS criteria for recognition, including areas that are beyond five road miles of a recognized fire station.

New PPC program changes effective July 1, 2014

We have revised the PPC program to capture the effects of enhanced fire protection capabilities that reduce fire loss and fire severity in Split Class 9 and Split Class 8B areas (as outlined below). This new structure benefits the fire service, community, and property owner.

New classifications
Through ongoing research and loss experience analysis, we identified additional differentiation in fire loss experience within our PPC program, which resulted in the revised classifications. We based the differing fire loss experience on the fire suppression capabilities of each community. The new PPC classes will improve the predictive value for insurers while benefiting both commercial and residential property owners. Here are the new classifications and what they mean.

Split classifications
When we develop a split classification for a community — for example 5/9 — the first number is the class that applies to properties within 5 road miles of the responding fire station and 1,000 feet of a creditable water supply, such as a fire hydrant, suction point, or dry hydrant. The second number is the class that applies to properties within 5 road miles of a fire station but beyond 1,000 feet of a creditable water supply. We have revised the classification to reflect more precisely the risk of loss in a community, replacing Class 9 and 8B in the second part of a split classification with revised designations.

What's changed with the new classifications?
We've published the new classifications as "X" and "Y" — formerly the "9" and "8B" portion of the split classification, respectively. For example:

- A community currently displayed as a split 6/9 classification will now be a split 6/6X classification; with the "6X" denoting what was formerly classified as "9".
- Similarly, a community currently graded as a split 6/8B classification will now be a split 6/6Y classification, the "6Y" denoting what was formerly classified as "8B".
- Communities graded with single "9" or "8B" classifications will remain intact.

Prior Classification	New Classification
1/9	1/1X
2/9	2/2X
3/9	3/3X
4/9	4/4X
5/9	5/5X
6/9	6/6X
7/9	7/7X
8/9	8/8X
9	9

Prior Classification	New Classification
1/8B	1/1Y
2/8B	2/2Y
3/8B	3/3Y
4/8B	4/4Y
5/8B	5/5Y
6/8B	6/6Y
7/8B	7/7Y
8/8B	8/8Y
8B	8B

What's changed?
As you can see, we're still maintaining split classes, but it's how we represent them to insurers that's changed. The new designations reflect a reduction in fire severity and loss and have the potential to reduce property insurance premiums.

Benefits of the revised split class designations

- To the fire service, the revised designations identify enhanced fire suppression capabilities used throughout the fire protection area
- To the community, the new classes reward a community's fire suppression efforts by showing a more reflective designation
- To the individual property owner, the revisions offer the potential for decreased property insurance premiums

New water class
Our data also shows that risks located more than 5 but less than 7 road miles from a responding fire station with a creditable water source within 1,000 feet had better loss experience than those farther than 5 road miles from a responding fire station with no creditable water source. We've introduced a new classification —10W — to recognize the reduced loss potential of such properties.

What's changed with Class 10W?
Class 10W is property-specific. Not all properties in the 5-to-7-mile area around the responding fire station will qualify. The difference between Class 10 and 10W is that the 10W-graded risk or property is within 1,000 feet of a creditable water supply. Creditable water supplies include fire protection systems using hauled water in any of the split classification areas.

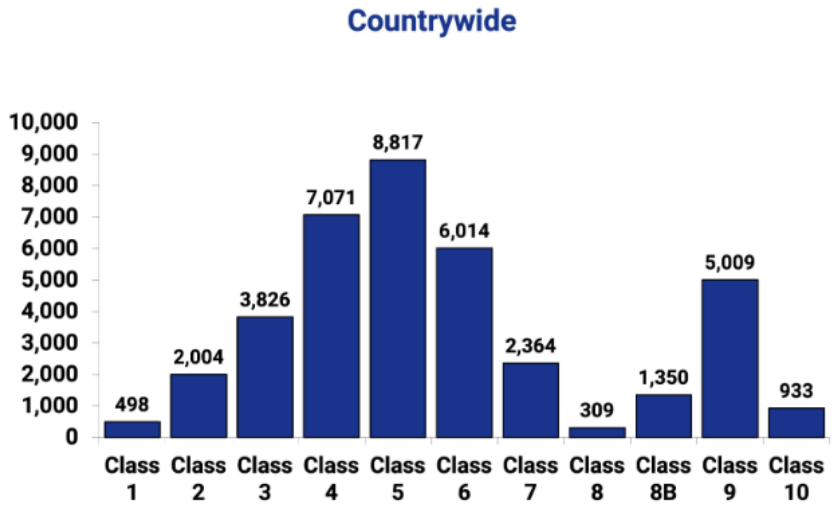
What's the benefit of Class 10W?
10W gives credit to risks within 5 to 7 road miles of the responding fire station and within 1,000 feet of a creditable water supply. That's reflective of the potential for reduced property insurance premiums.

What does the fire chief have to do?
Fire chiefs don't have to do anything at all. The revised classifications went in place automatically effective July 1, 2014 (July 1, 2015 for Texas).

What if I have additional questions?
Feel free to contact ISO at 800.444.4554 or email us at PPC-Cust-Serv@iso.com.

Distribution of PPC Grades

The 2023 published countrywide distribution of communities by the PPC grade is as follows:



Assistance

The PPC program offers help to communities, fire departments, and other public officials as they plan for, budget, and justify improvements. ISO is also available to assist in the understanding of the details of this evaluation.

The PPC program representatives can be reached by telephone at (800) 444-4554. The technical specialists at this telephone number have access to the details of this evaluation and can effectively speak with you about your questions regarding the PPC program. What's more, we can be reached via the internet at www.isomitigation.com/talk/.

We also have a website dedicated to our Community Hazard Mitigation Classification programs at www.isomitigation.com. Here, fire chiefs, building code officials, community leaders and other interested citizens can access a wealth of data describing the criteria used in evaluating how cities and towns are protecting residents from fire and other natural hazards. This website will allow you to learn more about the PPC program. The website provides important background information, insights about the PPC grading processes and technical documents. ISO is also pleased to offer Fire Chiefs Online — a special, secured website with information and features that can help improve your PPC grade, including a list of the Needed Fire Flows for all the commercial occupancies ISO has on file for your community. Visitors to the site can download information, see statistical results and also contact ISO for assistance.

In addition, on-line access to the FSRS and its commentaries is available to registered customers for a fee. However, fire chiefs and community chief administrative officials are given access privileges to this information without charge.

To become a registered fire chief or community chief administrative official, register at www.isomitigation.com.

PPC Review

ISO concluded its review of the fire suppression features being provided for Pajaro Valley FDS. The resulting community classification is **Class 05/10**.

If the classification is a single class, the classification applies to properties with a Needed Fire Flow of 3,500 gpm or less in the community. If the classification is a split class (e.g., 6/XX):

- The first class (e.g., "6" in a 6/XX) applies to properties within 5 road miles of a recognized fire station and within 1,000 feet of a fire hydrant or alternate water supply.
- The second class (XX or XY) applies to properties beyond 1,000 feet of a fire hydrant but within 5 road miles of a recognized fire station.
- Alternative Water Supply: The first class (e.g., "6" in a 6/10) applies to properties within 5 road miles of a recognized fire station with no hydrant distance requirement.
- Class 10 applies to properties over 5 road miles of a recognized fire station.
- Class 10W applies to properties within 5 to 7 road miles of a recognized fire station with a recognized water supply within 1,000 feet.
- Specific properties with a Needed Fire Flow in excess of 3,500 gpm are evaluated separately and assigned an individual classification.

FSRS Feature	Earned Credit	Credit Available
Emergency Communications		
414. Credit for Emergency Reporting	**3.00**	**3**
422. Credit for Telecommunicators	**3.08**	**4**
432. Credit for Dispatch Circuits	**2.85**	**3**
440. Credit for Emergency Communications	**8.93**	**10**
Fire Department		
513. Credit for Engine Companies	**5.63**	**6**
523. Credit for Reserve Pumpers	**0.49**	**0.50**
532. Credit for Pump Capacity	**3.00**	**3**
549. Credit for Ladder Service	**0.62**	**4**
553. Credit for Reserve Ladder and Service Trucks	**0.00**	**0.50**
561. Credit for Deployment Analysis	**1.28**	**10**
571. Credit for Company Personnel	**6.50**	**15**
581. Credit for Training	**8.39**	**9**
730. Credit for Operational Considerations	**2.00**	**2**
590. Credit for Fire Department	**27.91**	**50**
Water Supply		
616. Credit for Supply System	**6.78**	**30**
621. Credit for Hydrants	**3.00**	**3**
631. Credit for Inspection and Flow Testing	**6.40**	**7**
640. Credit for Water Supply	**16.18**	**40**
Divergence	**-3.07**	--
1050. Community Risk Reduction	**4.41**	**5.50**
Total Credit	**54.36**	**105.50**

Emergency Communications

Ten percent of a community's overall score is based on how well the communications center receives and dispatches fire alarms. Our field representative evaluated:

- Communications facilities provided for the general public to report structure fires
- Enhanced 9-1-1 Telephone Service including wireless
- Computer-aided dispatch (CAD) facilities
- Alarm receipt and processing at the communication center
- Training and certification of telecommunicators
- Facilities used to dispatch fire department companies to reported structure fires

	Earned Credit	Credit Available
414. Credit Emergency Reporting	**3.00**	3
422. Credit for Telecommunicators	**3.08**	4
432. Credit for Dispatch Circuits	**2.85**	3
Item 440. Credit for Emergency Communications:	**8.93**	**10**

Item 414 - Credit for Emergency Reporting (3 points)

The first item reviewed is Item 414 "Credit for Emergency Reporting (CER)". This item reviews the emergency communication center facilities provided for the public to report fires including 911 systems (Basic or Enhanced), Wireless Phase I and Phase II, Voice over Internet Protocol, Computer Aided Dispatch and Geographic Information Systems for automatic vehicle location. ISO uses National Fire Protection Association (NFPA) 1221, *Standard for the Installation, Maintenance and Use of Emergency Services Communications Systems* as the reference for this section.

Item 410. Emergency Reporting (CER)	Earned Credit	Credit Available
A./B. Basic 9-1-1, Enhanced 9-1-1 or No 9-1-1 For maximum credit, there should be an Enhanced 9-1-1 system, Basic 9-1-1 and No 9-1-1 will receive partial credit.	**20.00**	**20**
1. E9-1-1 Wireless Wireless Phase I using Static ALI (automatic location identification) Functionality (10 points); Wireless Phase II using Dynamic ALI Functionality (15 points); Both available will be 25 points	**25.00**	**25**
2. E9-1-1 Voice over Internet Protocol (VoIP) Static VoIP using Static ALI Functionality (10 points); Nomadic VoIP using Dynamic ALI Functionality (15 points); Both available will be 25 points	**25.00**	**25**
3. Computer Aided Dispatch Basic CAD (5 points); CAD with Management Information System (5 points); CAD with Interoperability (5 points)	**15.00**	**15**
4. Geographic Information System (GIS/AVL) The PSAP uses a fully integrated CAD/GIS management system with automatic vehicle location (AVL) integrated with a CAD system providing dispatch assignments. The individual fire departments being dispatched do not need GIS/AVL capability to obtain this credit.	**15.00**	**15**
Review of Emergency Reporting total:	**100.00**	**100**

Item 422- Credit for Telecommunicators (4 points)

The second item reviewed is Item 422 "Credit for Telecommunicators (TC)". This item reviews the number of Telecommunicators on duty at the center to handle fire calls and other emergencies. All emergency calls including those calls that do not require fire department action are reviewed to determine the proper staffing to answer emergency calls and dispatch the appropriate emergency response. The 2013 Edition of NFPA 1221, *Standard for the Installation, Maintenance and Use of Emergency Services Communications Systems,* recommends that ninety-five percent of emergency calls shall be answered within 15 seconds and ninety-nine percent of emergency calls shall be answered within 40 seconds. In addition, NFPA recommends that eighty percent of emergency alarm processing shall be completed within 60 seconds and ninety-five percent of alarm processing shall be completed within 106 seconds of answering the call.

To receive full credit for operators on duty, ISO must review documentation to show that the communication center meets NFPA 1221 call answering and dispatch time performance measurement standards. This documentation may be in the form of performance statistics or other performance measurements compiled by the 9-1-1 software or other software programs that are currently in use such as Computer Aided Dispatch (CAD) or Management Information System (MIS).

Item 420. Telecommunicators (CTC)	Earned Credit	Credit Available
A1. Alarm Receipt (AR) Receipt of alarms shall meet the requirements in accordance with the criteria of NFPA 1221	**19.26**	**20**
A2. Alarm Processing (AP) Processing of alarms shall meet the requirements in accordance with the criteria of NFPA 1221	**17.68**	**20**
B. Emergency Dispatch Protocols (EDP) Telecommunicators have emergency dispatch protocols (EDP) containing questions and a decision-support process to facilitate correct call categorization and prioritization.	**0.00**	**20**
C. Telecommunicator Training and Certification (TTC) Telecommunicators meet the qualification requirements referenced in NFPA 1061, *Standard for Professional Qualifications for Public Safety Telecommunicator,* and/or the Association of Public-Safety Communications Officials - International (APCO) *Project 33.* Telecommunicators are certified in the knowledge, skills, and abilities corresponding to their job functions.	**20.00**	**20**
D. Telecommunicator Continuing Education and Quality Assurance (TQA) Telecommunicators participate in continuing education and/or in-service training and quality-assurance programs as appropriate for their positions	**20.00**	**20**
Review of Telecommunicators total:	**76.94**	**100**

Item 432 - Credit for Dispatch Circuits (3 points)

The third item reviewed is Item 432 “Credit for Dispatch Circuits (CDC)”. This item reviews the dispatch circuit facilities used to transmit alarms to fire department members. A “Dispatch Circuit” is defined in NFPA 1221 as “A circuit over which an alarm is transmitted from the communications center to an emergency response facility (ERF) or emergency response units (ERUs) to notify ERUs to respond to an emergency”. All fire departments (except single fire station departments with full-time firefighter personnel receiving alarms directly at the fire station) need adequate means of notifying all firefighter personnel of the location of reported structure fires. The dispatch circuit facilities should be in accordance with the general criteria of NFPA 1221. “Alarms” are defined in this Standard as “A signal or message from a person or device indicating the existence of an emergency or other situation that requires action by an emergency response agency”.

There are two different levels of dispatch circuit facilities provided for in the Standard – a primary dispatch circuit and a secondary dispatch circuit. In jurisdictions that receive 730 alarms or more per year (average of two alarms per 24-hour period), two separate and dedicated dispatch circuits, a primary and a secondary, are needed. In jurisdictions receiving fewer than 730 alarms per year, a second dedicated dispatch circuit is not needed. Dispatch circuit facilities installed but not used or tested (in accordance with the NFPA Standard) receive no credit.

The score for Credit for Dispatch Circuits (CDC) is influenced by monitoring for integrity of the primary dispatch circuit. There are up to 0.90 points available for this Item. Monitoring for integrity involves installing automatic systems that will detect faults and failures and send visual and audible indications to appropriate communications center (or dispatch center) personnel. ISO uses NFPA 1221 to guide the evaluation of this item. ISO's evaluation also includes a review of the communication system's emergency power supplies.

Item 432 “Credit for Dispatch Circuits (CDC)” = 2.85 points

Fire Department

Fifty percent of a community's overall score is based upon the fire department's structure fire suppression system. ISO's field representative evaluated:

- Engine and ladder/service vehicles including reserve apparatus
- Equipment carried
- Response to reported structure fires
- Deployment analysis of companies
- Available and/or responding firefighters
- Training

	Earned Credit	Credit Available
513. Credit for Engine Companies	**5.63**	6
523. Credit for Reserve Pumpers	**0.49**	0.5
532. Credit for Pumper Capacity	**3.00**	3
549. Credit for Ladder Service	**0.62**	4
553. Credit for Reserve Ladder and Service Trucks	**0.00**	0.5
561. Credit for Deployment Analysis	**1.28**	10
571. Credit for Company Personnel	**6.50**	15
581. Credit for Training	**8.39**	9
730. Credit for Operational Considerations	**2.00**	2
Item 590. Credit for Fire Department:	**27.91**	**50**

Basic Fire Flow

The Basic Fire Flow for the community is determined by the review of the Needed Fire Flows for selected buildings in the community. The fifth largest Needed Fire Flow is determined to be the Basic Fire Flow. The Basic Fire Flow has been determined to be 2000 gpm.

Item 513 - Credit for Engine Companies (6 points)

The first item reviewed is Item 513 "Credit for Engine Companies (CEC)". This item reviews the number of engine companies, their pump capacity, hose testing, pump testing and the equipment carried on the in-service pumpers. To be recognized, pumper apparatus must meet the general criteria of NFPA 1901, *Standard for Automotive Fire Apparatus* which include a minimum 250 gpm pump, an emergency warning system, a 300 gallon water tank, and hose. At least 1 apparatus must have a permanently mounted pump rated at 750 gpm or more at 150 psi.

The review of the number of needed pumpers considers the response distance to built-upon areas; the Basic Fire Flow; and the method of operation. Multiple alarms, simultaneous incidents, and life safety are not considered.

The greatest value of A, B, or C below is needed in the fire district to suppress fires in structures with a Needed Fire Flow of 3,500 gpm or less: **3 engine companies**

a) **3 engine companies** to provide fire suppression services to areas to meet NFPA 1710 criteria or within 1½ miles.

b) **2 engine companies** to support a Basic Fire Flow of 2000 gpm.

c) **3 engine companies** based upon the fire department's method of operation to provide a minimum two engine response to all first alarm structure fires.

The FSRS recognizes that there are **3 engine companies** in service.

The FSRS also reviews Automatic Aid. Automatic Aid is considered in the review as assistance dispatched automatically by contractual agreement between two communities or fire districts. That differs from mutual aid or assistance arranged case by case. ISO will recognize an Automatic Aid plan under the following conditions:

- It must be prearranged for first alarm response according to a definite plan. It is preferable to have a written agreement, but ISO may recognize demonstrated performance.
- The aid must be dispatched to all reported structure fires on the initial alarm.
- The aid must be provided 24 hours a day, 365 days a year.

FSRS Item 512.D "Automatic Aid Engine Companies" responding on first alarm and meeting the needs of the city for basic fire flow and/or distribution of companies are factored based upon the value of the Automatic Aid plan (up to 1.00 can be used as the factor). The Automatic Aid factor is determined by a review of the Automatic Aid provider's communication facilities, how they receive alarms from the graded area, inter-department training between fire departments, and the fire ground communications capability between departments.

For each engine company, the credited Pump Capacity (PC), the Hose Carried (HC), the Equipment Carried (EC) all contribute to the calculation for the percent of credit the FSRS provides to that engine company.

Item 513 "Credit for Engine Companies (CEC)" = 5.63 points

Item 523 - Credit for Reserve Pumpers (0.50 points)

The item is Item 523 "Credit for Reserve Pumpers (CRP)". This item reviews the number and adequacy of the pumpers and their equipment. The number of needed reserve pumpers is 1 for each 8 needed engine companies determined in Item 513, or any fraction thereof.

Item 523 "Credit for Reserve Pumpers (CRP)" = 0.49 points

Item 532 – Credit for Pumper Capacity (3 points)

The next item reviewed is Item 532 "Credit for Pumper Capacity (CPC)". The total pump capacity available should be sufficient for the Basic Fire Flow of 2000 gpm. The maximum needed pump capacity credited is the Basic Fire Flow of the community.

Item 532 "Credit for Pumper Capacity (CPC)" = 3.00 points

Item 549 – Credit for Ladder Service (4 points)

The next item reviewed is Item 549 "Credit for Ladder Service (CLS)". This item reviews the number of response areas within the city with 5 buildings that are 3 or more stories or 35 feet or more in height, or with 5 buildings that have a Needed Fire Flow greater than 3,500 gpm, or any combination of these criteria. The height of all buildings in the city, including those protected by automatic sprinklers, is considered when determining the number of needed ladder companies. Response areas not needing a ladder company should have a service company. Ladders, tools and equipment normally carried on ladder trucks are needed not only for ladder operations but also for forcible entry, ventilation, salvage, overhaul, lighting and utility control.

The number of ladder or service companies, the height of the aerial ladder, aerial ladder testing and the equipment carried on the in-service ladder trucks and service trucks is compared with the number of needed ladder trucks and service trucks and an FSRS equipment list. Ladder trucks must meet the general criteria of NFPA 1901, *Standard for Automotive Fire Apparatus* to be recognized.

The number of needed ladder-service trucks is dependent upon the number of buildings 3 stories or 35 feet or more in height, buildings with a Needed Fire Flow greater than 3,500 gpm, and the method of operation.

The FSRS recognizes that there are **0 ladder companies** in service. These companies are needed to provide fire suppression services to areas to meet NFPA 1710 criteria or within 2½ miles and the number of buildings with a Needed Fire Flow over 3,500 gpm or 3 stories or more in height, or the method of operation.

The FSRS recognizes that there are **1 service companies** in service.

Item 549 "Credit for Ladder Service (CLS)" = 0.62 points

Item 553 – Credit for Reserve Ladder and Service Trucks (0.50 points)

The next item reviewed is Item 553 "Credit for Reserve Ladder and Service Trucks (CRLS)". This item considers the adequacy of ladder and service apparatus when one (or more in larger communities) of these apparatus are out of service. The number of needed reserve ladder and service trucks is 1 for each 8 needed ladder and service companies that were determined to be needed in Item 540, or any fraction thereof.

Item 553 "Credit for Reserve Ladder and Service Trucks (CRLS)" = 0.00 points

Item 561 – Deployment Analysis (10 points)

Next, Item 561 "Deployment Analysis (DA)" is reviewed. This Item examines the number and adequacy of existing engine and ladder-service companies to cover built-upon areas of the city.

To determine the Credit for Distribution, first the Existing Engine Company (EC) points and the Existing Engine Companies (EE) determined in Item 513 are considered along with Ladder Company Equipment (LCE) points, Service Company Equipment (SCE) points, Engine-Ladder Company Equipment (ELCE) points, and Engine-Service Company Equipment (ESCE) points determined in Item 549.

Secondly, as an alternative to determining the number of needed engine and ladder/service companies through the road-mile analysis, a fire protection area may use the results of a systematic performance evaluation. This type of evaluation analyzes computer-aided dispatch (CAD) history to demonstrate that, with its current deployment of companies, the fire department meets the time constraints for initial arriving engine and initial full alarm assignment in accordance with the general criteria of in NFPA 1710, *Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments.*

A determination is made of the percentage of built upon area within 1½ miles of a first-due engine company and within 2½ miles of a first-due ladder-service company.

Item 561 "Credit Deployment Analysis (DA)" = 1.28 points

Item 571 – Credit for Company Personnel (15 points)

Item 571 "Credit for Company Personnel (CCP)" reviews the average number of existing firefighters and company officers available to respond to reported first alarm structure fires in the city.

The on-duty strength is determined by the yearly average of total firefighters and company officers on-duty considering vacations, sick leave, holidays, "Kelley" days and other absences. When a fire department operates under a minimum staffing policy, this may be used in lieu of determining the yearly average of on-duty company personnel.

Firefighters on apparatus not credited under Items 513 and 549 that regularly respond to reported first alarms to aid engine, ladder, and service companies are included in this item as increasing the total company strength.

Firefighters staffing ambulances or other units serving the general public are credited if they participate in fire-fighting operations, the number depending upon the extent to which they are available and are used for response to first alarms of fire.

On-Call members are credited on the basis of the average number staffing apparatus on first alarms. Off-shift career firefighters and company officers responding on first alarms are considered on the same basis as on-call personnel. For personnel not normally at the fire station, the number of responding firefighters and company officers is divided by 3 to reflect the time needed to assemble at the fire scene and the reduced ability to act as a team due to the various arrival times at the fire location when compared to the personnel on-duty at the fire station during the receipt of an alarm.

The number of Public Safety Officers who are positioned in emergency vehicles within the jurisdiction boundaries may be credited based on availability to respond to first alarm structure fires. In recognition of this increased response capability the number of responding Public Safety Officers is divided by 2.

The average number of firefighters and company officers responding with those companies credited as Automatic Aid under Items 513 and 549 are considered for either on-duty or on-call company personnel as is appropriate. The actual number is calculated as the average number of company personnel responding multiplied by the value of AA Plan determined in Item 512.D.

The maximum creditable response of on-duty and on-call firefighters is 12, including company officers, for each existing engine and ladder company and 6 for each existing service company.

Chief Officers are not creditable except when more than one chief officer responds to alarms; then extra chief officers may be credited as firefighters if they perform company duties.

The FSRS recognizes **4.00 on-duty personnel** and an average of **0.00 on-call personnel** responding on first alarm structure fires.

Item 571 "Credit for Company Personnel (CCP)" = 6.50 points

Item 581 – Credit for Training (9 points)

Training	Earned Credit	Credit Available
A. Facilities, and Use For maximum credit, each firefighter should receive 18 hours per year in structure fire related subjects as outlined in NFPA 1001.	**35.0(**	**35**
B. Company Training For maximum credit, each firefighter should receive 16 hours per month in structure fire related subjects as outlined in NFPA 1001.	**18.25**	**25**
C. Classes for Officers For maximum credit, each officer should be certified in accordance with the general criteria of NFPA 1021. Additionally, each officer should receive 12 hours of continuing education on or off site.	**12.00**	**12**
D. New Driver and Operator Training For maximum credit, each new driver and operator should receive 60 hours of driver/operator training per year in accordance with NFPA 1002 and NFPA 1451.	**5.00**	**5**
E. Existing Driver and Operator Training For maximum credit, each existing driver and operator should receive 12 hours of driver/operator training per year in accordance with NFPA 1002 and NFPA 1451.	**5.00**	**5**
F. Training on Hazardous Materials For maximum credit, each firefighter should receive 6 hours of training for incidents involving hazardous materials in accordance with NFPA 472.	**1.00**	**1**
G. Recruit Training For maximum credit, each firefighter should receive 240 hours of structure fire related training in accordance with NFPA 1001 within the first year of employment or tenure.	**5.00**	**5**
H. Pre-Fire Planning Inspections For maximum credit, pre-fire planning inspections of each commercial, industrial, institutional, and other similar type building (all buildings except 1-4 family dwellings) should be made annually by company members. Records of inspections should include up-to date notes and sketches.	**12.0(**	**12**

Item 580 "Credit for Training (CT)" = 8.39 points

Item 730 – Operational Considerations (2 points)

Item 730 "Credit for Operational Considerations (COC)" evaluates fire department standard operating procedures and incident management systems for emergency operations involving structure fires.

Operational Considerations	Earned Credit	Credit Available
Standard Operating Procedures The department should have established SOPs for fire department general emergency operations	**50**	**50**
Incident Management Systems The department should use an established incident management system (IMS)	**50**	**50**
Operational Considerations total:	**100**	**100**

Item 730 "Credit for Operational Considerations (COC)" = 2.00 points

Water Supply

Forty percent of a community's overall score is based on the adequacy of the water supply system. The ISO field representative evaluated:

- the capability of the water distribution system to meet the Needed Fire Flows at selected locations up to 3,500 gpm.
- size, type and installation of fire hydrants.
- inspection and flow testing of fire hydrants.

	Earned Credit	Credit Available
616. Credit for Supply System	**6.78**	30
621. Credit for Hydrants	**3.00**	3
631. Credit for Inspection and Flow Testing	**6.40**	7
Item 640. Credit for Water Supply:	**16.18**	**40**

Item 616 – Credit for Supply System (30 points)

The first item reviewed is Item 616 "Credit for Supply System (CSS)". This item reviews the rate of flow that can be credited at each of the Needed Fire Flow test locations considering the supply works capacity, the main capacity and the hydrant distribution. The lowest flow rate of these items is credited for each representative location. A water system capable of delivering 250 gpm or more for a period of two hours plus consumption at the maximum daily rate at the fire location is considered minimum in the ISO review.

Where there are 2 or more systems or services distributing water at the same location, credit is given on the basis of the joint protection provided by all systems and services available.

The supply works capacity is calculated for each representative Needed Fire Flow test location, considering a variety of water supply sources. These include public water supplies, emergency supplies (usually accessed from neighboring water systems), suction supplies (usually evidenced by dry hydrant installations near a river, lake or other body of water), and supplies developed by a fire department using large diameter hose or vehicles to shuttle water from a source of supply to a fire site. The result is expressed in gallons per minute (gpm).

The normal ability of the distribution system to deliver Needed Fire Flows at the selected building locations is reviewed. The results of a flow test at a representative test location will indicate the ability of the water mains (or fire department in the case of fire department supplies) to carry water to that location.

The hydrant distribution is reviewed within 1,000 feet of representative test locations measured as hose can be laid by apparatus.

For maximum credit, the Needed Fire Flows should be available at each location in the district. Needed Fire Flows of 2,500 gpm or less should be available for 2 hours; and Needed Fire Flows of 3,000 and 3,500 gpm should be obtainable for 3 hours.

Item 616 "Credit for Supply System (CSS)" = 6.78 points

Item 621 – Credit for Hydrants (3 points)

The second item reviewed is Item 621 "Credit for Hydrants (CH)". This item reviews the number of fire hydrants of each type compared with the total number of hydrants.

There are a total of 250 hydrants in the graded area.

620. Hydrants, - Size, Type and Installation	Number of Hydrants
A. With a 6 -inch or larger branch and a pumper outlet with or without 2½ -inch outlets	250
B. With a 6 -inch or larger branch and no pumper outlet but two or more 2½ -inch outlets, or with a small foot valve, or with a small barrel	0
C./D. With only a 2½ -inch outlet or with less than a 6 -inch branch	0
E./F. Flush Type, Cistern, or Suction Point	0

Item 621 "Credit for Hydrants (CH)" = 3.00 points

Item 630 – Credit for Inspection and Flow Testing (7 points)

The third item reviewed is Item 630 "Credit for Inspection and Flow Testing (CIT)". This item reviews the fire hydrant inspection frequency, and the completeness of the inspections. Inspection of hydrants should be in accordance with AWWA M-17, *Installation, Field Testing and Maintenance of Fire Hydrants.*

Frequency of Inspection (FI): Average interval between the 3 most recent inspections.

Frequency	Points
1 year	30
2 years	20
3 years	10
4 years	5
5 years or more	No Credit

Note: The points for inspection frequency are reduced by 10 points if the inspections are incomplete or do not include a flushing program. An additional reduction of 10 points are made if hydrants are not subjected to full system pressure during inspections. If the inspection of cisterns or suction points does not include actual drafting with a pumper, or back-flushing for dry hydrants, 20 points are deducted.

Total points for Inspections = 4.00 points

Frequency of Fire Flow Testing (FF): Average interval between the 3 most recent inspections.

Frequency	Points
5 years	40
6 years	30
7 years	20
8 years	10
9 years	5
10 years or more	No Credit

Total points for Fire Flow Testing = 2.40 points

Item 631 "Credit for Inspection and Fire Flow Testing (CIT)" = 6.40 points

Divergence = -3.07

The Divergence factor mathematically reduces the score based upon the relative difference between the fire department and water supply scores. The factor is introduced in the final equation.

Community Risk Reduction

	Earned Credit	Credit Available
1025. Credit for Fire Prevention and Code Enforcement (CPCE)	**2.10**	2.2
1033. Credit for Public Fire Safety Education (CFSE)	**1.21**	2.2
1044. Credit for Fire Investigation Programs (CIP)	**1.10**	1.1
Item 1050. Credit for Community Risk Reduction	**4.41**	**5.50**

Item 1025 – Credit for Fire Prevention Code Adoption and Enforcement (2.2 points)	Earned Credit	Credit Available
Fire Prevention Code Regulations (PCR) Evaluation of fire prevention code regulations in effect.	10.00	10
Fire Prevention Staffing (PS) Evaluation of staffing for fire prevention activities.	8.00	8
Fire Prevention Certification and Training (PCT) Evaluation of the certification and training of fire prevention code enforcement personnel.	5.50	6
Fire Prevention Programs (PCP) Evaluation of fire prevention programs.	14.60	16
Review of Fire Prevention Code and Enforcement (CPCE) subtotal:	38.10	40

Item 1033 – Credit for Public Fire Safety Education (2.2 points)	Earned Credit	Credit Available
Public Fire Safety Educators Qualifications and Training (FSQT) Evaluation of public fire safety education personnel training and qualification as specified by the authority having jurisdiction.	0.00	10
Public Fire Safety Education Programs (FSP) Evaluation of programs for public fire safety education.	22.00	30
Review of Public Safety Education Programs (CFSE) subtotal:	22.00	40

Item 1044 – Credit for Fire Investigation Programs (1.1 points)	Earned Credit	Credit Available
Fire Investigation Organization and Staffing (IOS) Evaluation of organization and staffing for fire investigations.	8.00	8
Fire Investigator Certification and Training (IQT) Evaluation of fire investigator certification and training.	6.00	6
Use of National Fire Incident Reporting System (IRS) Evaluation of the use of the National Fire Incident Reporting System (NFIRS) for the 3 years before the evaluation.	6.00	6
Review of Fire Investigation Programs (CIP) subtotal:	20.00	20

Summary of PPC Review
for
Pajaro Valley FDS

FSRS Item	Earned Credit	Credit Available
Emergency Communications		
414. Credit for Emergency Reporting	**3.00**	**3**
422. Credit for Telecommunicators	**3.08**	**4**
432. Credit for Dispatch Circuits	**2.85**	**3**
440. Credit for Emergency Communications	**8.93**	**10**
Fire Department		
513. Credit for Engine Companies	**5.63**	**6**
523. Credit for Reserve Pumpers	**0.49**	**0.5**
532. Credit for Pumper Capacity	**3.00**	**3**
549. Credit for Ladder Service	**0.62**	**4**
553. Credit for Reserve Ladder and Service Trucks	**0.00**	**0.5**
561. Credit for Deployment Analysis	**1.28**	**10**
571. Credit for Company Personnel	**6.50**	**15**
581. Credit for Training	**8.39**	**9**
730. Credit for Operational Considerations	**2.00**	**2**
590. Credit for Fire Department	**27.91**	**50**
Water Supply		
616. Credit for Supply System	**6.78**	**30**
621. Credit for Hydrants	**3.00**	**3**
631. Credit for Inspection and Flow Testing	**6.40**	**7**
640. Credit for Water Supply	**16.18**	**40**
Divergence	**-3.07**	--
1050. Community Risk Reduction	**4.41**	**5.50**
Total Credit	**54.36**	**105.5**

Final Community Classification = 05/10

Pajaro Valley Fire Protection District

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Nov. 4, 20204

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1523 Pacific Avenue
Santa Cruz, CA 95060

RE: Agenda Item #18, Consolidated Grants Program: Support for Full Funding of the Interlake Routes Phase 1

Dear Chair, Montesino and Members of the Commission,

On behalf of the Pajaro Valley Fire Protection District, I am writing in support of full funding of $800,000 for the Interlaken Routes Phase 1 Resurfacing Project along Casserly Road. This corridor serves as one of the most critical emergency response and evacuation routes in South County, directly connecting our station to major access points such as Highway 152 and Green Valley Road. Maintaining this route is essential to ensuring timely emergency response and safe evacuation for residents across a broad rural service area.

The deteriorating pavement conditions on Casserly Road currently hinder emergency response operations by increasing travel time and causing undue wear on emergency vehicles. Resurfacing will improve safety, reliability, and resiliency—particularly during seasonal flooding, when Paulsen Road, another key route, becomes impassable.

This project directly supports the RTC's goals of System Preservation, Equity Priority Populations, Safety and Health, and Climate Resiliency, helping ensure that vital infrastructure remains functional and accessible—especially when lives depend on it.

Thank you for your consideration and continued commitment to investing in rural public safety and critical infrastructure.

Sincerely,

Fire Chief, Pajaro Valley Fire Protection District

Outlook

Resources for developing rigorous fire safety requirements in the SC Energy Storage Combining District Ordinance -- model Solano County BESS Ordinance

From Nina Audino <gregeninahome@hotmail.com>

Date Tue 10/21/2025 12:17 AM

To Wilson, Jed@CALFIRE <Jed.Wilson@fire.ca.gov>; Walters, Chris@CALFIRE <Chris.Walters@fire.ca.gov>; Paquin, Joe@CALFIRE <Joe.Paquin@fire.ca.gov>; Urbani, Mike@CALFIRE <Mike.Urbani@fire.ca.gov>

Cc rudy.lopez.sr@watsonville.gov <rudy.lopez.sr@watsonville.gov>; jason.nee@centralfiresc.org <jason.nee@centralfiresc.org>; erin.collins@centralfiresc.org <erin.collins@centralfiresc.org>; roatey@cityofsantacruz.com <roatey@cityofsantacruz.com>; mcarreira@scottsvalleyfire.com <mcarreira@scottsvalleyfire.com>; MBingham@BCFD <mbingham@bcfd.com>; notis@ucsc.edu <notis@ucsc.edu>

2 attachments (988 KB)

Solano County BESS Ordinance 2025.pdf; Recommendations for the Santa Cruz County Energy Storage ES Combining District Ordinance 2025.pdf;

Dear Fire Marshal Wilson, Deputy Fire Marshals Walters and Paquin and Fire Chief Urbani,

We need to introduce you to a California County BESS zoning ordinance with very high, rigorous fire safety requirements for BESS facilities using battery technology at risk of thermal runaway. We have attached Solano County's draft BESS ordinance, which is currently very near adoption.

County planners Stephanie Hansen and Evan Ditmars stated in meetings with us last week that they were impressed by the thoroughness of Solano County's ordinance. We are as well.

Stephanie and Evan also stated that the Santa Cruz County Energy Storage (ES) Combining District Ordinance is currently out with other agencies, like Fire, for additions.

The BESS ordinances being drafted in multiple California counties, including ours, are unprecedented, tackling what's basically uncharted.

We sincerely hope that Solano's model ordinance will help.

Solano County formed a Technical Working Group that has met monthly for the last 15 months to advise on their ordinance development. The group has six members representing the Ag Commission, Fire, Emergency Services, Environmental Heath and Hazardous Materials, CESA and the community.

We are helping to lead a county wide group of concerned residents who are advocating for a BESS zoning ordinance that prioritizes public safety and the integrity of the environment, and we are glad to be able to connect you to resources.

Thank you for your service to our community.

Respectfully,
Nina and Greg Audino
831.234.7992 (Nina's mobile)
"Courage starts with showing up and letting ourselves be seen."
"Daring leaders say the unsaid, unsurface what's been pushed down, and bring to light the stuff that's in the shadows and in the corners."
– Brené Brown

Recommendations for the Santa Cruz County Energy Storage (ES) Combining District Ordinance 2025– Suggested Regulations and Requirements from Concerned and Informed Santa Cruz County Residents

Lithium-ion (including LFP) BESS Underreported Safety Risks

As opponents of New Leaf Energy's proposed BESS at 90 Minto Road, we recognize and support the need for lithium-based BESS as part of the growing clean-energy future. But these systems pose serious public health and safety risks. The industry, still in its infancy, has little consensus on proper safety protocols for these types of projects, although the updated 2026 version of the NFPA 855 and SB 283 have initiated the critical work to institutionalize higher safety standards. **Lithium-based BESS need to be planned – and sited – carefully and appropriately. And alternatives to flammable lithium technology must be considered.**

It is reasonable to conclude that appropriate siting for utility-scale lithium-ion energy storage facilities is in industrial zones or undeveloped rural land far from homes and other sensitive receptors. **The safety and public health threats from a utility- and industrial-scale lithium-based BESS are incompatible with siting adjacent to sensitive receptors like schools, parks, care facilities, hospitals and densely populated neighborhoods.**

Lithium-based BESS like the proposed New Leaf Energy project at 90 Minto Road are inherently volatile and at significant risk of catching fire. **Such fires are extremely difficult to extinguish and pose elevated health and safety risks to firefighters.** Following are several key points that drill deeper into LFP BESS operations and risks that are regularly overlooked or underreported by industry representatives. Statements are cited.

First, although LFP battery chemistry is somewhat 'safer' (relative to NMC) due to its higher thermal runaway temperature point, **LFP chemistry is potentially more explosive and releases more HF gas**.[1]

Secondly, both scientific, peer-reviewed research and industry reviews underscore that a multitude of factors can lead to thermal runaway. A peer reviewed scientific study in the May 2024 issue of the *Journal of Chemistry* concluded that many factors besides chemistry can make lithium-ion batteries, including LFP, prone to thermal runaway. These causes include battery aging, short circuits, manufacturing defects, overcharging, over discharging, mechanical abuses in packaging, assembly into modules, installation, maintenance on racks, external events near the BESS, and thermal abuse when overheating or overcooling.[2] In their 2024 BESS manufacturing defects study based on 320 factory quality audits in five countries including the US and China, ***Clean Energy Associates*** **found that 50% of risks for thermal runaway lie in BESS system-level failures** — e.g., coolant leakage due to deformed flange plates, defective valves, loose

pipe connections, malfunctioning temperature, smoke, gas sensors, audible and visual alarms due to internal misfiring, structural deformation, poor wiring and cabling, grounding mechanism defects, water ingress issues, markings, openings defects, etc.[3]

Thirdly, **a precise state of charge (SOC) calculation is vital for safety, protecting the battery from degradation and potential thermal runaway**. **However, LFP chemistry presents critical challenges in estimating accurate SOC**, due to the battery's flat voltage curve.[4]

Fourthly, estimating battery degradation with pinpoint accuracy is impossible. Battery life is not linear. **Degradation rates depend heavily on real-world operating conditions, which are highly variable.[5] So, when a developer promises 15 or 20 years, in reality the batteries' end of life (EOL) could be 8 or 10**. This is why typically developers will include either overbuilding or augmentation into their plans. New Leaf Energy's plans include augmentation. Industry wide, augmentation may involve one or more of the following: replacing the existing battery modules, adding more battery modules, upgrading battery packs and upgrading power conversion systems. **We would like to note that upgrading battery packs could involve replacing whole battery packs with non-flammable and non-explosive better performing or cheaper technology such as sodium-ion.**[6]

Lastly, questionable claims regarding safety like New Leaf Energy's that there have been no LFP BESS facility fires as yet in California need to be weighed against the fact that BESS installations in the United States began in March of 2022, making most of these facilities less than 3 years old. LFP BESS technology is in its infancy and has not established a reliable record of safety. **Known/reported BESS type LFP fires have occurred in Beijing China in 2021, in Warwick NY (2 fires on the same day) in 2023 and in Neermoor Germany in 2024.[7] All of these fires triggered evacuations**.

An evacuation triggered by a lithium battery fire at a BESS facility at 90 Minto Road would involve limited evacuation routes for thousands of people in dense residential neighborhoods on two-lane roads. Should a fire incident involving even just two containers in a pair occur on a high wind day, plumes of toxic, potentially deadly smoke would pose a significant health risk to families and children in the vicinity, including at the nine schools within a two-mile radius and to evacuees at the county fairgrounds evacuation center, which is less than 1.5 miles from 90 Minto Road.

Suggested Regulations and Requirements for the Santa Cruz County Energy Storage (ES) Combining District Ordinance

It is therefore critically important that the county develop the Energy Storage Combining District Ordinance into a comprehensive regulatory BESS ordinance with safety requirements that exceed or are more restrictive when needed than the safety standards in the NFPA 855 (2026) and SB 283 BEFORE this ordinance begins to undergo CEQA.

These include:

- **minimum 330' or greater setback from sensitive receptors, subject to extension based on plume study results, for battery technologies determined to pose thermal runaway risk (the EPA's July 2025 "BESS Main Considerations for Safe Installation and Incident Response" specifies an isolation zone for first responders of at least 330' for large commercial BESS)[8]**
- **30' minimum spacing between all containers**
- **30' fire access road encircling facility**
- exclusion from High and Very High Fire Hazard Severity Zones (as defined by Cal Fire)
- exclusion from agricultural zones, including commercial-agricultural
- exclusion from residential, resource conservation and park zones
- limited to manufacturing, commercial and industrial zones
- owner paid 24/7 security monitoring
- incentive for nonflammable battery chemistry/technology **("BESS facilities shall use best commercially available battery technologies that minimize the risk of thermal runaway. Applicants are strongly encouraged to select technologies with no or low thermal runaway risk. All BESS applications must include third-party written documentation evaluating whether the proposed battery technology poses a risk of thermal runaway." Solano County draft Ordinance October 2025.**)
- owner paid, comprehensive alternative battery energy storage technology comparison analyses if the proposed battery technology is determined by the County to present thermal runaway risk
- **owner paid, county-selected, independent third-party ignition-based, large scale fire testing (even if no flammable gases detected at cell or module level)**
- **owner paid, county-selected, independent third-party plume and toxic gas dispersion study based on LSFT for various scenarios including all containers burning at once (require the most aggressive industry plume modeling assumptions)**
- **an AEGL-1 (San Diego County Ordinance)**
- **owner pays for 10 or more permanent air monitors, number and positions determined by county selected, independent third-party air monitoring expert to detect toxins hazardous to human life or wildlife, emitted as a result of thermal runaway**
- **owner pays for routine drone air monitoring as determined by county-selected, independent third-party expert to detect toxins hazardous to human life or wildlife**
- **owner paid, county selected, independent third-party monitoring of charging/discharging (state of charge/SOC)**
- owner paid equipment for County Environmental Health Lab soil, water and air sampling
- owner paid, county selected, independent third-party soil, water and air baseline sampling prior to construction
- owner paid, county selected, independent third-party air (drone) sampling immediately during and after failure/fire, both over and downwind of facility that tests for all battery chemistry specific toxic elements, HF included

- owner paid, county selected, independent third-party soil and water sampling within 24 hours of failure/fire, including downwind of facility that tests for all toxic elements, including heavy metals, dioxins, PCBs, chlorinated compounds, polyaromatic hydrocarbons (PAHs), volatile organic compounds (VOCs) and PFAS
- **owner paid training and special equipment for responding fire agencies and hazmat teams**
- **owner paid annual county/regional training for all first responders, including fire and medical response agencies/jurisdictions**
- **owner paid radio interoperability support**
- **owner paid annual comprehensive safety reporting to County staff**
- **augmentation will prioritize replacing whole battery packs with non-flammable and non-explosive better performing or cheaper technology such as sodium-ion**
- **fire department NFPA 855 mandated maintenance and inspection to be completed at 100% level (this inspection model cited as indispensable at the Santa Cruz County Commission on the Environment Expert Public Workshops on BESS by presenter Mike Nichols, former Kern County Fire Captain)**
- owner paid compensation to residents for health, job and property losses suffered in the event of thermal runaway fire
- owner reimburses county for all emergency costs associated with thermal runaway event and root cause analyses that fire agency with jurisdiction will oversee and coordinate subject matter experts for
- owner reimburses county for county selected, one or more independent third-party assessments of damage to the environment, agriculture, businesses and residents and for all testing, damages and remediation that is required to return all sites in the path of the plume to the previous condition before the thermal runaway incident or other hazardous incident (Solano County draft Ordinance October 2025)
- financial assurance to full decommissioning and/or abandonment less salvage value paid 100% up front by commercial operation start
- compliance with CEQA
- applications require pre-application meetings with County staff and third-party experts, technical review fund payments and public hearings before the Planning Department and the Board of Supervisors

Citations

[1]*Journal of Energy Storage*. "Review of gas emissions from lithium-ion battery thermal runaway failure — Considering toxic and flammable compounds." Volume 87, March 2024. https://www.sciencedirect.com/science/article/pii/S2352152X24008739?ref=pdf_download&fr=RR-2&rr=912a086e6fdd67f0

[1]*Applied Energy*. "A comprehensive insight into the thermal runaway issues in the view of lithium-ion battery intrinsic safety performance and venting gas explosion hazards." Volume 345, November 2023. https://www.sciencedirect.com/science/article/abs/pii/S0306261923010152

[2]**Journal of Energy Chemistry*. "A holistic approach to improving safety for battery energy storage systems (BESS)." Volume 92, May 2024. https://www.sciencedirect.com/science/article/pii/S2095495624000482?ref=pdf_download&fr=RR-2&rr=941bcbe95b7fdbcc

[3]**Clean Energy Associates*. "Most Common Battery Energy Storage System Manufacturing Defects." 2024. https://www.cea3.com/cea-blog/most-common-bess-manufacturing-defects-of-2024

[4]*Journal of Energy Storage*. "Towards robust state estimation for LFP batteries: Model-in-the-loop analysis with hysteresis modelling and perspectives for other chemistries." Volume 92, July 2024. https://www.sciencedirect.com/science/article/pii/S2352152X24016281

[5]Abdelrazek, Sherif. *Energy Storage News*. "Grid-tied battery lifecycle estimation, the Achilles' heel of energy storage project development." September 2022.

[6]Shaniyaa Holness-McKenzie. *Modeenergy*. "Augmentation: What is it and why is it important to BESS?" August 2024. https://modoenergy.com/research/gb-explainer-battery-energy-storage-augmentation-repowering-energy-capacity

[7]*CTIF (International Association of Fire and Rescue Services*. "Accident analysis of the Beijing lithium battery explosion which killed two firefighters." May 25, 2021. https://ctif.org/news/accident-analysis-beijing-lithium-battery-explosion-which-killed-two-firefighters

[7]Hofffer-Loibl, Gail. *Warwick Advertiser*. "Manufacturing defect blamed for battery fires at Convergent storage facilities Warwick. Convergent Energy said replacements may not be available until late 2024." October 23, 2023.

[7]*News12 Westchester, New York*. "'It smells like glue.' Lithium-ion battery fire at energy storage facility in Warwick burns for second day." June 28, 2023
https://westchester.news12.com/fire-at-battery-storage-facility-burns-off-combustible-material

[7]*Business Wire*. "Alsym Energy: Fires in Warwick, NY Highlight Dangers of Lithium-Ion Storage in Urban Centers – Energy tech innovator joins city officials in urging communities to re-evaluate safety protocols, zoning, and permit requirements for lithium-ion storage systems near schools, parks, and other high-density areas." July 12, 2023.
https://www.businesswire.com/news/home/20230712037244/en/Alsym-Energy-Fires-in-Warwick-NY-Highlight-Dangers-of-Lithium-Ion-Storage-in-Urban-Centers

[7]*Northern German Broadcasting (NDR)*. "Container with lithium batteries on fire: firefighters slightly injured." April 28, 2024.
"Two firefighters were slightly injured on Saturday evening when a container loaded with lithium batteries caught fire. According to the police on Sunday, the fire on the industrial estate in Neermoor (Leer district) could only be contained under difficult conditions and with a large fire department team. Due to the heavy smoke development, the highway 31 was fully closed between 11.30 pm and 5.30 am. Residents were asked to keep their doors and windows closed. The police estimate the damage at around 500,000 euros. The cause of the fire is unknown."
(Translated with DeepL.com/ free version)
https://www.ndr.de/nachrichten/niedersachsen/oldenburg_ostfriesland/Container-mit-Lithium-Akkus-brennt-zwei-Feuerwehrleute-verletzt,aktuelloldenburg15544.html

[7]Tang, Harry. *LinkedIn Pulse*. "LFP battery energy storage project caught fire and exploded, is it still safe?" May 11, 2024.
https://www.linkedin.com/pulse/lfp-battery-energy-storage-project-caught-fire-exploded-herry-tang-lwuuc/?trackingId=szFaXSG%2FTgeVOmBApFVc9Q%3D%3D

[8]Environmental Protection Agency. "Battery Energy Storage Systems: Main Considerations for Safe Installation and Incident Response." July 2025.
https://www.epa.gov/system/files/documents/2025-08/battery_energy_storage_systems_fact_sheet.pdf

SOLANO COUNTY PLANNING COMMISSION

RESOLUTION NO. XXX

RESOLUTION OF THE SOLANO COUNTY PLANNING COMMISSION RECOMMENDING APPROVAL OF ZONE TEXT AMENDMENT NO. ZT-25-02 TO THE SOLANO COUNTY BOARD OF SUPERVISORS

WHEREAS, the Solano County Planning Commission, after proper notice, conducted a public hearing on September 18, 2025, to consider a proposed ordinance, zone text amendment ZT-25-02, that would amend Chapter 28 (Zoning Regulations) of the Solano County Code to revise and update regulations related to front-of-the-meter Battery Energy Storage Systems (BESS) in the unincorporated area of Solano County; and

WHEREAS, the proposed zone text amendment is exempt from the California Environmental Quality Act (CEQA) under State CEQA Guidelines Sections 15061(b)(3) [it can be seen with certainty that there is no possibility the activity in question may have a significant effect on the environment], 15307 [regulatory activity to assure the protection of natural resources], and 15308 [regulatory activity to assure the protection of the environment]. Under current Zoning Regulations, front-of-the-meter BESS facilities are allowed in all zoning districts in unincorporated Solano County as "Utility facility or infrastructure, outside of R.O.W." This general land use category has no BESS-specific development standards to protect human health, safety, and welfare, as well as the County's natural resources and the environment, which may be impacted by the siting of front-of-the-meter BESS. This project will not allow BESS facilities to be located in new zoning districts, but will limit their placement to those districts that present the most conducive environment for safe placement consistent with the County's General Plan. This project also incorporates BESS-specific standards to ensure the protection of public health, public safety, natural resources, and the environment from the unique and complex risks these facilities pose; and

WHEREAS, based on the staff report and recommendations, and after considering all public testimony and due deliberation, the Planning Commission determines that the proposed zone text amendment is appropriate and desirable, and is consistent with the Solano County General Plan.

RESOLVED, that the Solano County Planning Commission does hereby recommend approval of the proposed ordinance, ZT-25-02, attached hereto as Exhibit A, to the Solano County Board of Supervisors.

****

I hereby certify that the foregoing resolution was adopted at the regular meeting of the Solano County Planning Commission on September 18, 2025, by the following vote:

AYES:	Commissioners	_____
NOES:	Commissioners	_____
ABSTAIN:	Commissioners	_____
ABSENT:	Commissioners	_____

By: _____
Hector De La Rosa, Chair

Attest:

By: _____
James Bezek, Secretary

ORDINANCE NO. 2025-XXXX

An ordinance amending Chapter 28 (Zoning Regulations) of the Solano County Code to revise and update regulations related to front-of-the-meter Battery Energy Storage Systems (BESS) in the unincorporated area of Solano County (ZT-25-02)

Whereas, there is a growing demand for front-of-the-meter (FTM) Battery Energy Storage Systems (BESS) in the State of California due to increased demand for renewable electricity to reach the State's clean energy goals and mechanisms to ensure reliability of the State's electric system, among other things; and

Whereas, in general, a front-of-the-meter BESS facility collects energy from the grid, stores it, and then discharges that energy later to provide electricity or other grid services when needed, typically at times of high demand. The facility is directly connected to the transmission or distribution grid and primarily serves wholesale market functions. FTM BESS facilities can help improve the reliability and efficiency of the electric grid system while also potentially stabilizing power rates.

Whereas, there have been several recent fires at FTM BESS facilities both in California and nationwide. FTM BESS facilities that use lithium-ion batteries create particularly unique fire and explosion hazards. Lithium-ion batteries are inherently safe and stable but certain conditions elevate the risk of fire and thermal runaways such as impacts, puncture or mechanical damage, overcharging, overheating, and short circuits.

Whereas, on October 7, 2023, the Governor of California signed into law Senate Bill 38 (SB 38), which amends California Public Utilities Code section 761.3 to address safety concerns with BESS projects. SB 38 requires every BESS facility in California to establish an emergency response and emergency action plan for the facility to protect surrounding residents, neighboring properties, emergency responders, and the environment. The BESS facility owner or operator must coordinate with local emergency management agencies, unified program agencies, and local first responders to develop the plan, and submit the plan to the county where the facility is located.

Whereas, Solano County's current Zoning Regulations allow FTM BESS facilities in all zoning districts in the County with a Use Permit as "Utility facilities or infrastructure, outside of right-of-way." Zoning districts that currently allow FTM BESS include Exclusive Agricultural Districts, Agriculture-Suisun Valley Districts, Agriculture Tourist Center Districts, Rural Residential Districts, Residential-Traditional Community Districts, Commercial Districts, Manufacturing and Industrial Districts, Industrial-Agricultural Service Districts, Marsh Preservation Districts, and Park Districts.

Whereas, the County's current Zoning Regulations do not contain any specific standards for FTM BESS facilities, so only the general development standards applicable to all land uses in the County are applied. The potential for development of new FTM BESS facilities within Solano County without adequate land use policies and standards in place to implement SB 38 and other best practices to prevent catastrophic interference with nearby communities presents a current and immediate threat to the public's safety and welfare. The approval of use permits, building permits, or other applicable entitlements for FTM BESS without specific standards in

place would result in that threat to public safety and welfare.

Whereas, on January 23, 2024, at a duly noticed public hearing, the Board of Supervisors adopted as an urgency measure Ordinance No. 2024-1852-U, an interim ordinance prohibiting new commercial BESS facilities within the entire unincorporated territory of Solano County. Consistent with Government Code Section 65858, on February 27, 2024, the Solano County Board of Supervisors conducted a noticed public hearing and approved an extension of the interim ordinance for 22 months and 15 days (Ordinance No. 2024-1852-U-E). The interim ordinance is set to expire on January 23, 2026, unless the Board repeals the ordinance prior to that date.

Whereas, on August 26, 2025, at a duly noticed public hearing, the Board of Supervisors amended the interim ordinance, Ordinance No. 2024-1852-U-E Amendment No. 1, to remove the prohibition on FTM BESS in Manufacturing and Industrial Zoning Districts with specific interim standards in place. The amendment retained the interim prohibition in all other zoning districts because staff needed additional time to understand impacts and best practices where FTM BESS facilities present more complex and imminent threats to human health, safety, and welfare due to their proximity to sensitive receptors, including human residence.

Whereas, County staff has now completed a draft proposed permanent ordinance related to FTM BESS in Solano County. The ordinance development process involved a Technical Working Group consisting of stakeholders from various sectors who met numerous times to advise on ordinance development. The Technical Working Group and County staff conducted extensive interviews with national experts on FTM BESS, and other California counties that have experienced BESS thermal runaway incidences, to understand impacts and best practices related to safety and fire risk, emerging technologies, and environmental impacts, among other things.

Whereas, in the time since Ordinance No. 2024-1852-U was adopted, County staff have worked diligently to understand the complexities surrounding FTM BESS facilities, the risks such facilities pose, and best practices for implementing specific standards to protect public health, safety, and welfare. County staff established a Technical Working Group consisting of stakeholders from various sectors who generally meet on a monthly basis to advise on ordinance development. The Technical Working Group and County staff have conducted extensive interviews with national experts on FTM BESS, and other California counties that have experienced BESS thermal runaway incidences, to understand impacts and best practices related to safety and fire risk, emerging technologies, and environmental impacts, among other things.

Whereas, on September 18, 2025, the Solano County Planning Commission held a noticed public hearing to consider the proposed ordinance, and adopted a resolution recommending approval by the Board of Supervisors; and

Whereas, based on the staff report, recommendation of the Planning Commission, and all other relevant evidence presented to the Board of Supervisors, and after considering all public testimony and due deliberation, the Board of Supervisors determines that the proposed ordinance, ZT-25-02, is appropriate and desirable, and is consistent with the Solano County General Plan.

Therefore, the Solano County Board of Supervisors ordains as follows:

SECTION I

Section 28.01 of Chapter 28 of the Solano County Code is amended to add the following definition:

> Battery Energy Storage System (BESS). An electrochemical device, with a rated capacity of equal to or greater than 1,000-kilowatt hours (1 megawatt hour), that charges or collects energy from the grid or a generation facility, stores that energy, and then discharges that energy at a later time to provide electricity or other grid services when needed.

SECTION II

Section 28.21 of Chapter 28 of the Solano County Code is amended by amending Table 28.21A, the table of allowed uses in the Exclusive Agricultural zoning districts, to prohibit Battery Energy Storage Systems, as follows:

TABLE 28.21A TABLE OF ALLOWED USES

A = Allowed by right, AP = Administrative Permit, MUP = Minor Use Permit, UP = Use Permit, E = Exempt, - - - = Prohibited					
ALLOWED USES* *See Definitions Section 28.01	**Permit Requirements**				**Land Use Regulations**** **See Section 28.70.10
	A-40	**A-80**	**A-20**	**A-160**	
COMMUNICATION AND INFRASTRUCTURE USES					
B. INFRASTRUCTURE USES					
Battery Energy Storage System	---	---	---	---	
Utility facility or infrastructure, outside of R.O.W.	UP	UP	UP	UP	28.78.20(A) & (B)(9)

SECTION III

Section 28.22.20 of Chapter 28 of the Solano County Code is amended by amending Table 28.22A, the table of allowed uses in the Suisun Marsh Agricultural District, to prohibit Battery Energy Storage Systems, as follows:

TABLE 28.22A TABLE OF ALLOWED USES

A = Allowed by right, AP = Administrative Permit, MUP = Minor Use Permit, UP = Use Permit, - - - = Prohibited		
ALLOWED USES See Definitions Section 28.01	**Permit Requirements A-SM-80 and A-SM-160(1) Zoning Districts**	**Land Use Regulations See Section 28.70.10**
28.78 COMMUNICATION, INFRASTRUCTURE AND SERVICE USES		

B. INFRASTRUCTURE USES		
Battery Energy Storage System	---	
Utility facilities or infrastructure, outside of R.O.W.	UP	28.78.20(A) & (B)(9)

SECTION IV

Section 28.23.30 of Chapter 28 of the Solano County Code is amended by amending Table 28.23A, the table of allowed uses in the Agriculture - Suisun Valley (A-SV-20) District, the Agriculture Tourist Center (ATC) District, and the Agriculture Tourist Center – North Connector (ATC-NC) District, to prohibit Battery Energy Storage Systems, as follows:

TABLE 28.23A TABLE OF ALLOWED USES

A = Allowed by right, AP = Administrative Permit, MUP = Minor Use Permit, UP = Use Permit, E = Exempt, - - - = Prohibited				
ALLOWED USES* *See Definitions Section 28.01	**Permit Requirements**			**Land Use Regulations** **See Section 28.70.10**
	A-SV-20	**ATC**	**ATC-NC**	
COMMUNICATION AND INFRASTRUCTURE USES				
Battery Energy Storage System	---	---	---	
Utility facilities or infrastructure, outside of R.O.W.	UP	UP	UP	28.78.20(A) & (B)(9)

SECTION V

Section 28.31.20 of Chapter 28 of the Solano County Code is amended by amending Table 28.31A, the table of allowed uses in the Rural Residential zoning districts, as follows:

TABLE 28.31A TABLE OF ALLOWED USES

A = Allowed by right, AP = Administrative Permit, MUP = Minor Use Permit, UP = Use Permit, E = Exempt, - - - = Prohibited				
ALLOWED USES* *See Definitions Section 28.01	**Permitted Uses**			**Land Use Regulations** **See Section 28.70.10**
	RR-2.5	**RR-5**	**RR-10**	
28.78 COMMUNICATION, INFRASTRUCTURE AND PUBLIC SERVICE USES				
B. INFRASTRUCTURE USES				
Battery Energy Storage System	---	---	---	
Utility facilities or infrastructure, outside of R.O.W.	UP	UP	UP	28.78.20(A) & (B)(9)

SECTION VII

Section 28.32.20 of Chapter 28 of the Solano County Code is amended by amending Table 28.32A and Table 28.32B, the tables of allowed uses in the Residential-Traditional Community zoning districts, as follows:

TABLE 28.32A ALLOWED USES: R-TC-1AC, R-TC-20, R-TC-15, R-TC-10, R-TC-6 DISTRICTS

A = Allowed by right, AP = Administrative Permit, MUP = Minor Use Permit, UP = Use Permit, E = Exempt, - - - = Prohibited						
ALLOWED USES* *See Definitions Section 28-01	**Permitted Uses**					**Land Use Regulations** **See Section 28-70.10**
	R-TC-1AC	**R-TC-20**	**R-TC-15**	**R-TC-10**	**R-TC-6**	
COMMUNICATION, INFRASTRUCTURE AND SERVICE USES						
B. INFRASTRUCTURE USES						
Battery Energy Storage System	---	---	---	---	---	
Utility facilities or infrastructure, outside of R.O.W.	MUP	MUP	MUP	MUP	MUP	28.78.20(A) & (B)(9)

TABLE 28.32B ALLOWED USES: R-TC-5, R-TC-4, R-TC-D, R-TC-MF, R-TC-MU DISTRICTS

A = Allowed by right, AP = Administrative Permit, MUP = Minor Use Permit, UP = Use Permit, E = Exempt, - - - = Prohibited							
ALLOWED USES* *See Definitions Section 28-01	**Permitted Uses**						**Land Use Regulations** **See Section 28-70.10**
	R-TC-5	**R-TC-4(1)**	**R-TC-D-4**	**R-TC-D-6**	**R-TC-MF**	**R-TC-MU**	
COMMUNICATION, INFRASTRUCTURE AND SERVICE USES							
B. INFRASTRUCTURE USES							
Battery Energy Storage System	---	---	---	---	---	---	
Utility facilities or infrastructure, outside of R.O.W.	UP	UP	UP	UP	UP	UP	28.78.30(A) & (B)(4)

SECTION VIII

Section 28.41.20 of Chapter 28 of the Solano County Code is amended by amending Table 28.41A, the table of allowed uses in the Commercial zoning districts, as follows:

TABLE 28.41A ALLOWED USES: (C-H), (C-N), (C-R), (C-R-L), (C-S), (C-O) DISTRICTS

A = Allowed by right, AP = Administrative Permit, MUP = Minor Use Permit, PD = Planned Unit Development, UP = Use Permit, E = Exempt, - - - = Prohibited							
ALLOWED USES* *See Definitions Section 28-01	**Permitted Uses**						**Land Use Regulations** **See Section 28.70.10**
	C-H	**C-N**	**C-R**	**C-R-L[(6)]**	**C-S**	**C-O**	
28.78 COMMUNICATION, INFRASTRUCTURE AND SERVICE USES							
B. INFRASTRUCTURE USES							
Battery Energy Storage System	---	---	---	---	UP	---	
Utility facilities or infrastructure, outside of R.O.W.	UP	UP	UP	UP	UP	UP	28.78.20(B)(9)

SECTION IX

Section 28.42.20 of Chapter 28 of the Solano County Code is amended by amending Table 28.42A, the table of allowed uses in the Manufacturing and Industrial zoning districts, as follows:

TABLE 28.42A TABLE OF ALLOWED USES

A = Allowed by right, AP = Administrative Permit, MUP = Minor Use Permit, UP = Use Permit, E = Exempt, - - - = Prohibited					
ALLOWED USES* *See Definitions Section 28.01	**Permit Requirements**				**Land Use Regulations** **See Section 28.70.10**
	M-L	**M-G-1/2**	**M-G-3**	**I-WD[8]**	
COMMUNICATION AND INFRASTRUCTURE USES					
B. INFRASTRUCTURE USES					
Battery Energy Storage System	UP	UP	UP	UP	28.83
Utility facilities or infrastructure, outside of R.O.W.	UP	UP	UP	UP	28.78.20(A) & (B)(9)

SECTION X

Section 28.43.20 of Chapter 28 of the Solano County Code is amended by amending Table 28.43A, the table of allowed uses in the Industrial – Agricultural Service zoning district, as follows:

TABLE 28.43A TABLE OF ALLOWED USES

A = Allowed by right, AP = Administrative Permit, MUP = Minor Use Permit, UP = Use Permit, E = Exempt, - - - = Prohibited		
ALLOWED USES* *See Definitions Section 28.01	**Permit Requirements**	**Land Use Regulations** **See Section 28.70.10**
	I-AS	

COMMUNICATION AND INFRASTRUCTURE USES		
B. INFRASTRUCTURE USES		
Battery Energy Storage System	UP	28.83
Utility facilities or infrastructure, outside of R.O.W.	UP	28.78.20(A) & (B)(9)

SECTION XI

Section 28.51 of Chapter 28 of the Solano County Code is amended by amending Table 28.51A, the table of allowed uses in the Watershed and Conservation district, as follows:

TABLE 28.51A TABLE OF ALLOWED USES

A = Allowed by right, AP = Administrative Permit, MUP = Minor Use Permit, UP = Use Permit, E = Exempt, - - - = Prohibited		
ALLOWED USES* *See Definitions Section 28-01	**Permitted Uses**	**Land Use Regulations** ****See Section 28.70.10**
	W District	
28.78 COMMUNICATION, INFRASTRUCTURE AND SERVICE USES		See Section 28.78
B. INFRASTRUCTURE USES		
Battery Energy Storage System	---	
Utility facilities or infrastructure, outside of R.O.W.	UP	28.78.20(A) & (B)(9)

SECTION XII

Section 28.52.20 of Chapter 28 of the Solano County Code is amended by amending Table 28.52A, the table of allowed uses in the Marsh Preservation district, as follows:

TABLE 28.52A TABLE OF ALLOWED USES

A = Allowed by right, AP = Administrative Permit, MUP = Minor Use Permit, UP = Use Permit, - - - = Prohibited		
ALLOWED USES See Definitions Section 28.01	**Permit Requirements MP(1) Zoning District**	**Land Use Regulations See Section 28.70.10**
28.78 COMMUNICATION, INFRASTRUCTURE AND SERVICE USES		
B. INFRASTRUCTURE USES		
Battery Energy Storage System	---	
Utility facilities or infrastructure, outside of R.O.W.	UP	28.78.20(A) & (B)(9)

SECTION XIII

Section 28.61 of Chapter 28 of the Solano County Code is amended by amending Table 28.61A, the table of allowed uses in the Park district, as follows:

TABLE 28.61A TABLE OF ALLOWED USES

A = Allowed by right, AP = Administrative Permit, MUP = Minor Use Permit, UP = Use Permit, E = Exempt, - - - = Prohibited		
ALLOWED USES* *See Definitions Section 28.01	**Permitted Uses**	**Land Use Regulations** **See Section 28.70.10**
	P District	
28.78 COMMUNICATION, INFRASTRUCTURE AND SERVICE USES		
B. INFRASTRUCTURE USES		
Battery Energy Storage System	---	
Utility facilities or infrastructure, outside of R.O.W.	UP	28.78.20(A) & (B)(9)

SECTION XIV

Section 28.78.20(B)(9) of Article III of Chapter 28 of the Solano County Code is amended as follows:

28.78.20 INFRASTRUCTURE USES
B. Specific Requirements
9. Utility Facilities or Infrastructure, outside of R.O.W.

All utility accessory uses and structures for transmission or distribution of electricity, gas, water, oil, gasoline, telephone, television or other utility services may be permitted in any district. Utility accessory uses and structures include, but are not limited to, compression, drying, regeneration stations, substations, or pumping stations. Battery Energy Storage Systems are not regulated as Utility Facilities or Infrastructure for purposes of this Chapter.

SECTION 6. Interim Amendment to Section 28.83 of the Solano County Code

Section 28.83 is added to Article III of Chapter 28 of the Solano County Code as follows:

28.83 BATTERY ENERGY STORAGE SYSTEMS

A. Purpose

Battery Energy Storage System regulations are adopted with the intent of advancing and protecting the public health, safety, and welfare of the community by establishing regulations for the installation and use of BESS. The regulations herein are intended to protect the health, safety,

welfare, and quality of life for the general public, to ensure compatible land uses in the areas affected by energy storage facilities, and to mitigate the impacts of energy storage facilities on the environment.

B. Definitions

"National Fire Protection Association" (NFPA) is a nonprofit organization that develops and publishes consensus codes and standards intended to minimize the risk and effects of fire by establishing criteria for building, processing, design, service, and installation in the United States and internationally.

"NFPA 855," the *Standard for the Installation of Stationary Energy Storage Systems*, is a set of comprehensive guidelines for the safe installation of stationary energy storage systems, including those with lithium batteries. These standards address various aspects of installation to mitigate fire and explosion risks associated with energy storage technologies. It covers topics such as system design, construction, operation, and maintenance to ensure safety and reliability.

"UL 9540" is a standard for Energy Storage Systems and Equipment, designed to ensure the safety of these systems and covers their construction, performance, and testing requirements. UL 9540 certification intends to verify that energy storage systems, such as batteries and related equipment, meet safety standards to prevent hazards related to electrical, mechanical, and environmental conditions.

"IEEE" is the Institute of Electrical and Electronics Engineers is a global professional organization dedicated to advancing technology for the benefit of humanity. IEEE develops and maintains international standards in various fields of electrical and electronic engineering, computer science, and related disciplines.

"Front-of-the-meter (FTM) Battery Energy Storage System" refers to a Battery Energy Storage System (BESS) that is directly connected to the transmission or distribution grid and primarily serves wholesale market functions such as grid support, frequency regulation, or energy arbitrage.

"Behind-the-meter (BTM) Battery Energy Storage System" refers to a Battery Energy Storage System (BESS) installed on the customer's side of the utility meter. These systems are designed to support energy use by providing backup power, demand charge management, load shifting, or renewable energy integration.

"Commissioning" is a systematic process that provides documented confirmation that a battery energy storage system functions according to the intended design criteria and complies with applicable code requirements.

"Decommissioning" is the process of removing equipment and other infrastructure associated with a project and restoring the site for viable reuse consistent with the zoning district.

"Thermal runaway" refers to an uncontrollable, self-sustaining exothermic chain reaction within a battery energy storage system, initiated by a failure mechanism (e.g., internal short circuit, overcharging, physical damage, or thermal exposure). This reaction results in a rapid increase in cell temperature, leading to the release of flammable electrolytes, generation of toxic gases (e.g.,

hydrogen fluoride, carbon monoxide), and potential cascading failures to adjacent cells. If unmitigated, thermal runaway may cause fire, explosion, or hazardous material release, posing risks to public safety, property, and the environment.

C. Applicability

1. The requirements of Section 28.83 shall apply to all front-of-the-meter Battery Energy Storage Systems in the unincorporated territory of Solano County that have a rated nameplate capacity equal to or greater than 1,000 kilowatt hours (1 megawatt hour).

2. The requirements of Section 28.83 do not apply to behind-the-meter BESS supporting residential, commercial, agricultural, manufacturing and industrial uses.

D. Land Use and Siting Standards.

1. **Zoning Districts**: Battery Energy Storage Systems may be permitted only in zoning districts that expressly allow BESS under Article II (Districts and Allowable Uses) of this Chapter.

2. **Natural Disaster Zone Exclusion**:

   a. BESS facilities are not permitted in Very High Fire Hazard Severity Zones as determined by Cal Fire within a State Responsibility Area or a Local Responsibility Area. Applicants must submit mapping of the proposed site demonstrating compliance with this section. If the maps listed are updated prior to permit issuance, the application must be amended to reflect most recent maps.

   b. BESS facilities are not permitted in High Fire Hazard Severity Zones as determined by Cal Fire within a State Responsibility Area or a Local Responsibility Area, except for facilities located in the Manufacturing and Industrial (M-L, M-G-1/2, M-G-3, I-WD) and Industrial-Agricultural Service (I-AS) zoning districts. Applicants must submit mapping of the proposed site demonstrating compliance with this section. If the maps listed are updated prior to permit issuance, the application must be amended to reflect most recent maps.

   c. BESS facilities are not permitted within a FEMA designated floodplain unless the parcel or developed area where the BESS is to be installed is raised to at least two feet above the Base Flood Elevation (BFE) through engineered fill or equivalent flood protection measures. A Conditional Letter of Map Revision (CLOMR) shall be obtained from FEMA prior to site grading or fill, demonstrating that the project will not result in an increase in BFE or adverse floodplain impacts, demonstrating that the proposed project meets all applicable NFIP requirements.

3. **Setbacks**: BESS facilities shall comply with all state and NFPA 855 requirements related to setbacks and buffers for BESS, and shall also meet the following County requirements. Where NFPA 855, state, and County standards differ, the more stringent standard shall apply. These setback requirements can be increased at the discretion of the Board of Supervisors based on technical studies required as part of the application.

If a risk of thermal runaway is deemed present as defined in Section 28.83(E)(1), the following setback standards apply:

a. The minimum distance of a BESS module from any existing sensitive receptor, as defined in California Health and Safety Code § 42705.5(a)(5), is 300 ft.
b. A 30-foot-wide fire rated access road must encircle the entire module array inside a security perimeter fence. There must be a minimum of two entrances to the access road.
c. Setbacks from the front property line to the first BESS module are a minimum of 100 feet.
d. Setbacks from the rear and side property line to the first BESS module are a minimum of 50 feet.
e. Property owners and residents residing on the same parcel as a BESS facility can exempt occupied buildings from distance requirement in Section 28.83(D)(3)(a) with written approval contained in the project application.

If no risk of thermal runaway is determined as in described in Section 28.83(E)(1), state standards and a minimum setback of 20 feet from all property lines form the first BESS module

f. Property owners and residents residing on the same parcel as a BESS facility can exempt occupied buildings from distance requirement in Section 28.83(D)(3)(a) with written approval contained in the project application.

4. **Security and Screening**: BESS facilities shall comply with the following security and screening requirements.

a. The facility shall have a non-scalable and transparent perimeter fence of at least 10 feet in height. The perimeter fence shall have at minimum two entrance gates equipped with a rapid access system chosen in consultation with fire agency with jurisdiction over the project site.
b. The facility shall be equipped with a security system to prevent break-ins including cameras and barbed wire that is visible from public roads. The cameras must be monitored 24 hours a day, 7 days a week, with any threats immediately reported to law enforcement.
c. The facility shall comply with NFPA 855 specifications related to barriers and buffering.
d. BESS modules shall not be visible from any non-participating occupied structure or public right of way.
e. Signage shall be located on BESS modules, perimeter fences and any other security barriers. Signage shall include a site map. Signage shall contain 24-hour emergency contact information, product description, site owner and hazard warnings. Signage or maps should identify isolation distances response personnel shall maintain from BESS during an emergency. Signage shall be provided for grid-interactive BESS operating in parallel with other power generating sources. Signage shall be provided indicating explosion hazard zones. Signage must be compliant with all NFPA 704 standards.

5. **Sound Levels**: The average noise generated from a BESS facility, its components, and associated ancillary equipment, measured at the occupied structure or public right of way, shall not exceed 65 decibels.

6. **Hours of Construction:** Any construction related to a BESS facility shall only occur within the hours of 7:00 a.m. and 6:00 p.m. Monday through Friday.

7. **Below Grade Interconnection:** All on-site utility lines shall be placed underground to the extent feasible, except for the main service connection at the utility company right-of-way and any new interconnection equipment, including without limitation, any poles, with new easements and right-of-way as required.

8. **Site Plan:** A site plan is required and shall include the following information. Additional information may be requested by the County.

    a. Property lines and physical features, including roads, for the project site.
    b. Proposed changes to the landscape of the site, grading, vegetation clearing and planting, exterior lighting, and screening vegetation or structures.

9. **Road Maintenance**: BESS facilities shall be subject to the Solano County Road Improvement Standards and Land Development Requirements. Additionally, the applicant shall coordinate with Public Works Engineering to establish the necessary Road Damage Agreements with surety, as determined by the County.

E. <u>Battery Chemistry Technology</u>

1. **Best Available Technology**: BESS facilities shall utilize commercially available battery technologies that minimize the risk of thermal runaway. Applicants are strongly encouraged to select technologies with no or low thermal runaway risk. All BESS applications must include third party written documentation evaluating whether the proposed battery technology poses a risk of thermal runaway.

    a. If the proposed battery technology is determined by the County to present a thermal runaway risk, the applicant shall submit a comprehensive technology comparison analysis. This analysis must include, at a minimum: A techno-economic comparison of alternative battery technologies based on publicly available information; an assessment of hazardous chemicals involved in the event of thermal runaway, qualitative and quantitative risk analysis of thermal runaway; A thermal runaway plume modeling analysis; and any additional information deemed necessary by the Director of Resource Management.

    b. If the proposed battery technology is determined by the County to present no risk of thermal runaway, applications are exempt from the requirements in Sections 28.83(D)(2), (F)(3), (F)(4), (J)(4)(e)-(f). Applicants must instead submit the following: Third-party verification of system stability (e.g., material safety analysis, abuse

tolerance testing results) and basic chemical hazard documentation to demonstrate no risk of hazardous emissions or thermal runaway propagation.

c. Within the Commercial-Service (C-S) zoning district, the proposed battery technology must present no risk of thermal runaway. Applications for BESS facilities that present a thermal runaway risk are not permitted in the C-S zoning district.

2. **Owner Responsibility for Thermal Runaway:** BESS facility owners must reimburse Solano County and emergency response agencies, including fire agencies, for all costs associated with a thermal runaway event. This includes thermal runaway response costs, as tracked by the emergency response agency with jurisdiction over the incident command team. In the event of thermal runaway, the fire agency having jurisdiction over the site will oversee and coordinate subject matter experts conducting a root cause analysis, with costs borne by the BESS facility owner.

   The BESS facility owner must also reimburse costs of an assessment of damage to the environment, agriculture, residents, and businesses conducted by one or more third party consultants selected by the County and all testing, damages and remediation conducted by responsible entities that is required to return all sites in the path of the plume caused by thermal runaway to the previous condition after thermal runaway incident or other hazardous incident.

F. **Impact Mitigation Measures**

A BESS applicant may be subject to mitigation measures at the discretion of the County including, but not limited to, the following. The County may exempt a BESS applicant from the following mitigation measures if a determination is made that the proposed battery chemistry does not have a risk of thermal runaway.

1. Annual contribution for fire response equipment as deemed necessary by the Solano County Office of Emergency Services to respond to a BESS emergency event. System manufacturer shall provide a list of recommended equipment for addressing a thermal runaway incident.
2. Annual contribution for training of all Solano County emergency response agencies and mutual aid partners for BESS emergency response, as determined by the County.
3. Contribution to radio interoperability to assist in efficient and effective BESS emergency response, as determined by the County.
4. Contribution to support a consolidated fire and medical public safety answering point for efficient and effective BESS emergency response, as determined by the County.
5. Confirmation that point of sale for all BESS project equipment is located in unincorporated Solano County.

G. **Cybersecurity**

BESS facilities must comply with Solano County Office of Emergency Services *"Emergency Response Plan Guidance"* document. Although not all decisions regarding cybersecurity can

be expected to be made prior to land use permits being issued, project applicants shall to agree to comply with all requirements in *"Emergency Response Plan Guidance"* document.

H. Safety Standards and Certifications

1. Safety Requirements

a. The following must be included in a BESS application submittal:

i. A preliminary emergency response plan that includes site access, equipment locations and potential hazards for responders in addition to any other requirements. This document can be edited, after land use permits are approved, with written approval from emergency response agencies with jurisdiction over the project. A final emergency response plan, with written approval from the emergency response agency with jurisdiction over the project, must be submitted prior to issuance of any building permits.

ii. A report documenting coordination to-date with emergency response organizations in developing the required emergency response plan in compliance with Solano County Office of Emergency Services *"Emergency Response Plan Guidance"* and all applicable state laws

iii. A plan for offering site-specific training to the fire service and emergency personnel prior to commencing operation.

iv. A hazard mitigation analyses if required by NFPA 855.

v. A comprehensive technology comparison analysis, if applicable under Section 28.83(E).

vi. A financial assurance plan, including a battery cell manufacturer responsibility agreement and liability insurance policy for thermal runaway events and other hazardous incidents.

vii. A description of cybersecurity risks and mitigation measures associated with BESS modules, the Battery Management System, and active and passive fire and explosion detection systems.

viii. Submitted plans and documents must be under the signature and seal of CA Licensed design professional.

ix. HMA, Fire Risk Analysis, fire suppression and deflagration protection analysis submittals shall be from a CA Licensed Fire Protection Engineer approved by the emergency response agency with jurisdiction over the project site per California Fire Code (CFC) Section [A]104.7.2 as it may be amended. Submittals will require signature and seal.

x. Fire protection system submittals such as fire suppression and water supply shall include a C-16 - Fire Protection Contractor of record.

xi. Fire alarm systems, fire detection, gas detection shall include a C-10 - Electrical Contractor of record.

xii. Final approvals of any BESS or safety related equipment that has routine maintenance requirements according to the code or manufacturer's instructions will not receive approval until a maintenance plan has been submitted to the emergency response agency with jurisdiction over the project site. Maintenance must comply with NFPA 68, NFPA 69, and NFPA 72.F

xiii. Once an application is accepted for review, any updated submittals during the period of review, installation and final inspections must either be signed and sealed by the design professional of record, or a cover letter signed and sealed by the design professional of record shall accompany the submittal, attesting that the updated information conforms to the overall design and code requirements.

xiv. Documentation of a dedicated fire water supply is required. This requirement can be waived if the Director of the Department of Resource Management in conjunction with the fire agency having jurisdiction over the project that a water supply is not required. The request to omit a water supply shall be in accordance with NFPA 855 and must be validated by the approved Hazard Mitigation Analysis. Where municipal water supply is not available, and a water supply is determined necessary, the provided water supply quantity shall be determined by the Hazard Mitigation Analysis. Rural water supply installations shall comply with NFPA 22.

xv. Applicant must provide funding to the air quality district with jurisdiction over the project site to establish 10 or more permanent air monitors, at distances and elevations determined by the air quality district with jurisdiction over the project site to detect harmful constituents, hazardous to human life or wildlife, emitted as a result of thermal runaway as determined by the air quality district with jurisdiction over the project site. The number of sensors deployed will be determined by the air quality district with jurisdiction over the project site. If a thermal runaway incident occurs or air monitors detect hazardous constituents, a County staff contact as determined by the County will be notified. After an incident, related to BESS thermal runaway or otherwise, County staff will have access to the raw, unfiltered data from the air monitors.

xvi. BESS operator will submit a comprehensive annual report to County staff as designated by the County consisting of but not limited to; the number of threats made to the site, the number of trips of the site security system, the number of hazardous incidents at the site, the number of fire and law responses to the site, soil testing on-site and the surrounding properties for hazardous chemicals existing in the battery system, air monitor results. This list can be supplemented and modified by County staff at any time.

xvii. Front-of-the meter BESS modules will not be permitted indoors.

b. Applicants must make a commitment in writing that the proposed BESS facility will comply with the latest published version of the NFPA 855, *Standard for Installation of Stationary Energy Storage Systems*, and UL 9540, *Energy Storage System Requirements,* at the date of the submission of the application in addition to any specific requirements set forth herein:

i. All technical studies, Hazard Mitigation Analysis and planning documents required by SB 38, NFPA 855 and the County must include both a probable scenario of limited thermal runaway and possible scenarios of simultaneous thermal runaway in all site modules at once, and shall address hazards as outlined in the "*Emergency Response Plan Guidance"* to the site and mitigation measures deployed.

ii. Applicants must submit technical studies prepared by a third-party fire protection engineer selected by the County detailing the proposed fire safety features of the design, operation, and use of the BESS. Changes in installation configuration from the initial UL 9540A cell, module, and unit level test and the separate large scale fire testing, including internal architecture of modules and units will not be accepted unless it is demonstrated that the configuration provides equivalent results. Fire safety features must include mechanisms for maintaining the temperature and humidity ratings of the listing.

iii. Technical studies prepared by a third-party fire protection engineer, which the County has the discretion to select, must account for setback requirements and best practices from residential buildings and sensitive receptors. Technical study must include estimated impacts to property values and insurability of properties potentially impacted by a plume caused by thermal runaway.

iv. Technical studies prepared by third party subject matter experts, which the County has the discretion to select, must include plume modeling and toxic gas dispersion analysis, specifically addressing impacts on missions and flight paths of Travis Air Force Base and other Solano County airports.

v. Technical studies prepared by third party subject matter experts selected by the County analyzing the chemical composition of BESS fire emissions and associated human, wildlife and environmental hazards, specifically at which distances emission impacts will be hazardous.

vi. Technical studies prepared must analyze runoff of water and fire suppression liquid associated impacts to groundwater, wildlife, waterways, and the environment. If determined to be required by County staff, site plans must include a system for capturing runoff water, whose size requirements will be determined based on technical studies in consultation with County and fire agency with jurisdiction over the project site, for water or fire suppressant liquid that may be used by first responders during thermal runaway incidents, and a geo-lined impermeable layer under all BESS modules. The retention basin must be emptied the same day if filled by rain or flood water. If thermal runaway occurs, five samples of fire suppressant liquid or water utilized must be taken by third party subject matter expert selected by the County and mitigation measures will be taken to reduce the adverse impact by third party subject matter experts selected by the County, with the costs being paid for by the site owner.

vii. BESS facilities must have active and passive fire and explosion detection systems in place, including gas detectors that meet UL 9540A, NFPA 72, and NFPA 69 standards. These systems must be able to detect explosive gases, trigger alarms, and initiate ventilation systems to mitigate risks from thermal runaway.

viii. Battery Management System (BMS) must be approved and meet manufacturer's specifications. The BMS must transmit signals to an approved location if hazardous conditions are detected and be monitored twenty four hours a day seven days a week. BMS documentation must identify security risks and potential threats, along with the mitigation measures implemented to reduce each identified risk.

ix. A combustible gas concentration reduction system compliant with NFPA 855, NFPA 69, UL 9540, and CFC that has undergone UL 9540A testing will have the ability to be automatically activated.

I. Decommissioning.

1. A BESS applicant shall provide a decommissioning plan that complies with the following requirements with their building permit application submittal. The decommissioning plan shall include any agreements reached between the applicant and other landowners of property on which the BESS is sited that ensures the return of all such properties to a useful condition, including removal of above-surface facilities and infrastructure that have no ongoing purpose. Land that was used for agricultural production within the ten years prior to BESS construction must be restored to a condition conducive for agricultural production.

2. The decommissioning plan shall also include the following:

1. An overview of the decommissioning process developed specifically for the BESS that is to be decommissioned.
2. Roles and responsibilities for all those involved in the decommissioning of the BESS and their removal from the site.
3. Plans and specifications necessary to understand the BESS and all associated operational controls and safety systems, as built, operated, and maintained.
4. A detailed description of each activity to be conducted during the decommissioning process and who will perform that activity and at what point in time.
5. Procedures to be used in documenting the BESS and all associated operational controls and safety systems that have been decommissioned.
6. Guidelines and format for a decommissioning checklist and relevant operational testing forms and necessary decommissioning logs and progress reports.
7. A description of how any changes to the surrounding areas and other systems adjacent to the BESS, including, but not limited to, structural elements, building penetrations, means of egress, and required fire detection and suppression systems, will be protected during decommissioning and confirmed as being acceptable after the system is removed.

3. The decommissioning plan shall include insurance for bankruptcy in the form of a bridge policy. The decommissioning plan shall include, but is not limited to, financial assurance in the form of a bond, a parent company guarantee, or an irrevocable letter of credit, but excluding cash. The amount of the financial assurance shall not be less than the estimated cost of decommissioning the energy facility, after deducting salvage or recycling value, as calculated by a third party with expertise in decommissioning, which the County has the discretion to select and paid for by the applicant. The entire financial assurance must be posted by the start of full commercial operation of the BESS facility.

4. Ownership Changes: If the owner of a BESS facility changes, or the owner of the property changes, project approvals shall remain in effect, provided that the successor owner or operator assumes in writing all the obligations of the project, site plan approval, and decommissioning plan. A new owner or operator of the BESS facility shall notify the Department of Resource Management of such change in ownership or operator within 30 days of the ownership change. A new owner or operator must provide such notification to

the Department of Resource Management in writing. The project and all approvals for the BESS facilities will be void if a new owner or operator fails to provide written notification to the Department of Resource Management in the required timeframe and fines may be issued to new owner. Reinstatement of a voided project or approvals will be subject to the same review and approval processes as new BESS applications under this chapter.

5. Manufacturer Responsibility: A BESS application must include an agreement stating the facility owner's responsibility to recover and recycle battery cells upon decommissioning.

J. Permitting

1. **Technical Review Fund**: Applicants will provide two payments established by the County; one payment prior to conducting a pre-application meeting and a second payment with initial application for County to retain the services of third-party experts to review and process the application, with unused fees reimbursed upon completion of permitting process or withdrawal of a pending application. Additional fees may be required by the County as established in the County's adopted fee schedule.

2. **Required Pre-Application Meeting:** Prior to the submittal of an application, the applicant must request a pre-application meeting to allow discussion and review by County staff, public agencies and third-party subject matter experts.

3. **Use Permit Approval:** Applications for BESS permits shall be approved in accordance with Section 28.106 of this Chapter, except that the application shall be scheduled for public hearing before the Planning Commission for its recommendation and then the Board of Supervisors for final action.

4. **Site Plan:** The requirements listed in the following section are not required for the issuance of a land use permit. Prior to issuance of a building permit, BESS applicants shall submit documentation that contains at minimum:

    a. An electrical diagram detailing the BESS layout, associated components, and electrical interconnection methods, with all National Electrical Code compliant disconnects and over current devices.
    b. A preliminary equipment specification sheet that documents the proposed BESS components, inverters and associated electrical equipment that are to be installed. A final equipment specification sheet shall be submitted prior to the issuance of the building permit.
    c. Name, address, and contact information of proposed or potential system installer, the owner and operator of the BESS facility, and liability insurance provider.
    d. A commissioning report meeting the requirements of NFPA 855 shall be submitted prior to final inspection.
    e. Large-scale fire testing reports, per UL9540A, of the batteries used in the Energy Storage Systems shall be provided for cell, module and unit levels.
    f. Documentation that separate fire protection permits will be obtained for each battery enclosure.

g. Documentation that separate fire alarm permits will be obtained based on the proposed design for monitoring all the fire suppression systems.
h. Prior to construction, soil testing conducted must include measuring for baseline content for heavy metals present in thermal runaway plume and off gassing. Prior to construction, air quality testing must measure baseline content for heavy metals present in thermal runaway plume and off gassing.
i. Documentation of soil corrosivity at project site is required. If soil is determined to be highly corrosive by a third-party expert, mitigation measures may be required to combat degradation, annual inspection and report on grounding system condition and maintenance of the grounding system are required.
j. Fault line analysis shall be included and shall include: risks associated with seismic activity, mitigation measures employed, and history of seismic activity at the project area.
k. All batteries integrated within the BESS shall be listed under UL 1973. The BESS equipment and configuration shall be listed and tested in accordance with UL 9540A large scale fire testing, either from the manufacturer or by field evaluation.
l. Communications and Battery Management Systems shall be listed and compliant with UL 1741, UL 9540, IEEE 2686, and IEEE 2688 standards.

5. Review of Augmentation Plans:

a. BESS applications may include a plan for periodic augmentation to maintain the capacity of the system or nominally increase the capacity of the system for approval as part of the initial site plan application. Any augmentation greater than 10% of initial nameplate capacity will require a Use Permit amendment subject to Planning Commission approval. Augmentation greater than 20% will require a new Use Permit application. Any utilization of reused battery modules shall require the submission of an augmentation plan and is subject to approval by the Director of Resource Management with concurrence of Office of Emergency Services.

b. The owner of an operating BESS facility shall provide notice to the Department of Resource Management at least 90 days prior to the commencement of augmentation activities at the site of the BESS facility. The owner shall also provide an updated site plan that identifies any changes resulting from augmentation of the battery energy storage system.

SECTION XV

This Ordinance is exempt from the California Environmental Quality Act (Public Resources Code §21000, et seq.) (CEQA) pursuant to CEQA Guidelines (Cal. Code Regs., tit. 14, §15000 et seq.) Sections 15061(b)(3) [it can be seen with certainty that there is no possibility the activity in question may have a significant effect on the environment], 15307 [Class 7 categorical exemption for regulatory activity to assure the protection of natural resources], and 15308 [Class 8 categorical exemption for regulatory activity to assure the protection of the environment].

Under current Solano County Zoning Regulations, front-of-the-meter BESS facilities are allowed in all zoning districts in unincorporated Solano County as “Utility facility or infrastructure, outside of R.O.W.” This general land use category has no BESS-specific development standards

to protect human health, safety, and welfare, as well as the County's natural resources and the environment, which may be impacted by the siting of front-of-the-meter BESS. This Ordinance will not change existing conditions, other than to limit the placement of front-of-the-meter BESS facilities to those zoning districts that present the most conducive environment for safe placement consistent with the County's General Plan. This Ordinance will not allow BESS facilities to be located in any new zoning districts where they were not previously allowed. This Ordinance also incorporates BESS-specific standards to ensure the protection of public health, public safety, natural resources, and the environment from the unique and complex risks these facilities pose.

SECTION XVI

Solano County Interim Ordinance No. 2024-1852-U, as extended by Ordinance No. 2024-1852-U-E and amended by Amendment No. 1 on August 26, 2025, is repealed in its entirety and shall be of no further force or effect. The Solano County Board of Supervisors has determined that, based on best available information, the regulations and standards set forth in Sections I through XIV of this Ordinance adequately alleviate the conditions which led to the adoption of Interim Ordinance No. 2024-1852-U under Government Code Section 65858.

SECTION XVII

This Ordinance will be effective thirty (30) days after its adoption.

SECTION XVIII

If any provision of this Ordinance or the application thereof to any persons or circumstances is held invalid, such invalidity shall not affect other provisions or applications of this ordinance which can be given effect without the invalid provision or application, and to this end the provisions of this ordinance are hereby declared to be severable.

SECTION XIX

A summary of this ordinance will be published within 15 days of its adoption in the Fairfield Daily Republic, as newspaper of general circulation in Solano County.

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Passed and adopted by the Solano County Board of Supervisors at its regular meeting on _____, 2025 by the following vote:

AYES: SUPERVISORS _____

NOES: SUPERVISORS _____

EXCUSED: SUPERVISORS _____

MITCH H. MASHBURN, Chair
Solano County Board of Supervisors

ATTEST:
BILL EMLEN, Clerk

Solano County Board of Supervisors

Introduced:
Adopted:
Effective:
Operative:

By: _____
Alicia Draves, Chief Deputy Clerk

ALARMING TRUTHS: The *HAZARDS* of Current BESS (Battery Energy Storage Systems)

COMMON FAILURES

International research shows that fires & explosions at Lithium-Based BESS facilities keep happening, in spite of current protective systems. Many, often common, factors lead to thermal runaway (catching fire), including battery aging; battery manufacturing defects; over-charging or over-discharging; mechanical abuses that may happen in packaging the batteries, assembling them into modules, and installing them; maintaining the batteries on racks; thermal abuse (overheating, overcooling); and even external events that may happen in proximity to the BESS.

*Journal of Energy Chemistry. Volume 92, May 2024
https://www.sciencedirect.com/science/article/pii/S2095495624000482?ref=pdf_download&fr=RR-2&rr=941bcbe95b7fdbcc

Other research shows that a high percentage—50%—of risks for thermal runaway are due to BESS system defects such as coolant leakage due to deformed flange plates; defective valves; loose pipe connections; malfunctioning temperature, smoke, & gas sensors; audible & visual alarms due to internal misfiring; structural deformation; poor wiring & cabling; grounding mechanism defects; water ingress; etc.

*Clean Energy Associates. Most Common Battery Energy Storage System Manufacturing Defects. 2024
https://www.cea3.com/cea-blog/most-common-bess-manufacturing-defects-of-2024

MISLEADING CLAIMS OF SAFETY

BESS industry sources claim that LFP (Lithium Iron Phosphate) batteries (the kind planned for the BESS at 90 Minto Road, Watsonville, CA) are safer than NMC (Nickel Manganese Cobalt) batteries (the kind that burned at Moss Landing). But that is "an oversimplified view," according to a 2024 review of flammability & toxicity hazards of different battery chemistries. LFP batteries are a greater flammability hazard and show greater toxicity than NMC, depending on relative state of charge (SOC). LFP is more toxic at lower SOC (State of Charge) respective to themselves; and LFP off-gas has a greater flammability hazard.

*Journal of Energy Storage. Volume 87, March 2024
https://www.sciencedirect.com/science/article/pii/S2352152X24008739?ref=pdf_download&fr=RR-2&rr=912a086e6fdd67f0

MEDICAL RESEARCHER URGES: STOP Lithium-Ion BESS!

Based on his March 19, 2025 literature review* of the National Library of Medicine, examining over 200 citations of Lithium-Ion Battery thermal runaway & 65 citations of Lithium Battery fires, researcher Dr. David Gelmont of the University of Southern CA Keck School of Medicine recommends: *"pause all construction of BESS based on Lithium-Ion NMC (Nickel Manganese Cobalt) and LFP (Lithium Iron Phosphate) until further information regarding potential short and long-term health effects are investigated," and "build (BESS) which are non-Lithium-Ion or LFP based which are proven to be non-fire/toxic prone and are away from populated areas."*

*Potential Medical Consequences of Lithium Ion Electric Battery Fire. March 19, 2025
https://www.stoplithiumbessinsantacruz.org/_files/ugd/4cc561_f229aa4a97074344ab16635894ccb29c.pdf

WE AREN'T EQUIPPED TO DEAL WITH LITHIUM BATTERY FIRES

Survey of research* in peer-reviewed scientific journals (2015-2025), shows that LFP Lithium-Ion batteries are highly dangerous, when on fire cannot be extinguished with water or flame retardants, spontaneously reignite, and that "first responders are entirely unequipped to deal with these catastrophic events."

*LFP Batteries Are Dangerous, Say Research Scientists. Calvin Luther Martin PhD Feb. 24, 2025
Synopsis of five research articles from peer-reviewed science journals
https://app.box.com/s/u2byp59221ivurmmqrls57ixp98x6dvw/file/1858129598382

DEADLY "FOREVER CHEMICALS" in Lithium-Ion Batteries

PFAS* (polyfluoroalkyl substances), internationally recognized, dangerous toxins that are now prohibited & highly regulated worldwide, are released during manufacturing, use, & disposal of Lithium-Ion batteries.

*The Dirty Side of Green Energy: Lithium-Ion Batteries as a Source of PFAS in the Environment / Research Square, July 2023
https://www.researchgate.net/publication/372839627_The_dirty_side_of_clean_energy_Lithium_ion_batteries_as_a_source_of_PFAS_in_the_environment

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September 23, 2025

VIA EMAIL TO: BOARDOFSUPERVISORS@SANTACRUZCOUNTYCA.GOV

Kimberly De Serpa, Supervisor
Santa Cruz County 2nd District
701 Ocean Street, Room 500
Santa Cruz, CA 95060

Re: **Proposed Energy Storage Facilities within the Central Water District Sphere of Influence**

Dear Supervisor De Serpa,

Our firm serves as general counsel to the Central Water District ("District"), which is a special water district located in Santa Cruz County. I am writing on behalf of the District Board of Directors ("Board") to express the District's strong opposition to the Santa Cruz County ("County") Board of Supervisors regarding the installation of the proposed battery energy storage system ("BESS") facility in Aptos, California ("Project"). The District has many concerns regarding the proposed Project and its potential negative impacts on our community.

Proposed Site Location

The proposed Project is less than 100 feet from residential homes and is located 500 feet from Aptos High School (with over 1,300 students on campus when in session). The proposed Project site is also located 900 feet away from the New Hope Aptos church, a local institution with a Food Pantry program that regularly distributes produce and pantry goods to the community. Additionally, the District's new drinking water well, coming online in 2026, is less than 600 feet away from the proposed Project site, and the District's remaining three (3) drinking water wells are just downstream of the proposed Project.

Wildfire Vulnerability

The Project site is highly vulnerable to wildfire. The BESS facility would be composed of lithium batteries, which can be extremely dangerous if they overheat, causing the batteries to catch fire. While all types of batteries used in similar large

storage facilities have a history of failures, lithium-ion battery fires emit toxic gases within seconds of igniting, are notoriously difficult to extinguish, are prone to reignition, and can blanket entire neighborhoods in hazardous smoke for days. Containment efforts are often the only option for such fires, but containment cannot eliminate the smoke and toxic material that would be released into the local atmosphere with contaminants that are unsafe to breathe and can leach into the soil and reach the groundwater table. This poses severe health risks to first responders, local residents, and schoolchildren. In the event that a fire spreads beyond containment, the proposed Project site's natural vegetation, steep terrain, and surrounding landscape pose a significant and immediate threat to all nearby homes, schools, churches, and businesses.

Environmental and Public Health Risks

In addition to the heightened risk of wildfires, the proposed Project site presents other environmental and public health risks. Thermal runaway fires at BESS facilities require significant amounts of water to cool and control. The proposed Project site currently has no water connection or source to implement fire protection measures. As a result, there are concerns regarding the volume of water needed to fight this type of fire, and the potential for contamination of any water or fire-extinguishing compound used to combat the fire. The only nearby water supply is the District's wells, primarily used as a source of residential drinking water for our customers. A prolonged fire could eliminate the District's storage supply of drinking water and cause significant damage to infrastructure, resulting in health and safety issues for District customers.

The proposed Project's location within the Santa Cruz Mid-County Groundwater Basin water table raises additional water quality concerns. Water or fire-extinguishing compounds used to combat the fire could easily become contaminated with heavy metals and toxic material and be absorbed into the region's soil, causing severe negative environmental impacts to the local ecosystem. Water and compounds used to fight a fire that are not absorbed into the soil above the aquifer will flow offsite. Runoff not absorbed into the aquifer would flow toward Valencia Lagoon, a primary habitat for the endangered Santa Cruz Long-toed Salamander, and continue from there to merge with Valencia Creek, Trout Creek, and Aptos Creek before it exits to Monterey Bay.

The proposed Project presents an unacceptable risk to the health and safety of our customers and community. This letter serves as an official protest against the Project. The District respectfully requests that the County Board of Supervisors reject the proposed Project location.

CEQA Compliance

Further, as you evaluate other proposed BESS projects within the County and within the District's Sphere of Influence, the District requests that the County carefully and fully consider the associated adverse fire, economic, environmental, and public

COPY

safety risks. Accordingly, this letter serves as a standing protest against the consideration or approval of any future BESS facilities within the District's Sphere of Influence that do not include full environmental review under the California Environmental Quality Act ("CEQA"). Failure to comply with CEQA requirements results in a lack of consideration for the potentially significant impacts of a project, including the loss of endangered species habitat, degradation of water quality, and compliance with Section 15201 of the CEQA guidelines regarding provisions for wide public involvement, consistent with existing activities and procedures, in order to receive and evaluate public reactions to environmental issues.

Sincerely,

NOLAND, HAMERLY, ETIENNE & HOSS
A Professional Corporation

Heidi A. Quinn
Heidi A. Quinn

HAQ:tsg

cc: Board of Directors, Central Water District
Santa Cruz County Board of Supervisors

INFORMATION RE: CLAIMS OF PG&E GREEN VALLEY INFRASTRUCTURE DETERMINATIONS & CPUC ACTIONS

PG&E dismissed their application with the CPUC for this work to upgrade the Rob Roy substation when residents (including Nina) filed action to force an EIR. **PG&E could not prove there was any need to do the improvements, and agreed to dismiss the application.**
https://ia.cpuc.ca.gov/environment/info/panoramaenv/santacruz_115kvreinforcement/santacruz_115%20reinforcement%20project.html

March 30, 2015 Update: The application for the Santa Cruz 115-kV Reinforcement Project has been dismissed. PG&E is not currently pursuing this project.

On March 26, 2015, the Commission approved the Motion to Dismiss without Prejudice PG&E's Application for a Permit to Construct the Santa Cruz 115 Kilovolt Reinforcement Project.

Decision 15-03-030

Background

The proposed Project would increase transmission system reliability in the Santa Cruz area during outages. The project will add a second 115 kV circuit between Green Valley Substation and Rob Roy Substation to prevent potential large-scale service interruptions if there are overlapping outages in the existing local electricity supply system. The proposed project includes converting the existing 7.1 miles of single-circuit 115 kV power line to a double-circuit 115 kV power line by replacing existing wood poles with tubular steel poles (TSPs); constructing a new, approximately 1.7-mile-long single-circuit 115 kV power line connecting the Green Valley-Camp Evers 115 kV Power Line to Rob Roy Substation; and modifying the existing Rob Roy Substation and existing power lines to accommodate the new circuit.

The new circuit will provide two sources of power in the event of an outage on either the southern line between Green Valley Substation and Rob Roy Substation or on the existing northern line between Green Valley Substation and Camp Evers Substation.

Project Description

The project is located in southern Santa Cruz County, California near the cities of Watsonville and Aptos. The project traverses an area of rolling terrain, including agricultural valleys and grassland, as well as low ridgelines forested with mature trees. The predominant development pattern throughout the project area is a mix of low-density residential, open space, and agricultural land uses. The agricultural areas are predominantly apple orchards, berry orchards, livestock pastures, and row crops.
The primary project components are summarized below:

1. *Northern Alignment – approximately 7.1 miles of an existing single-circuit 115 kV power line will be converted to a double-circuit 115 kV power line by replacing existing wood poles with TSPs.*

2. *Cox-Freedom Segment - a new, approximately 1.7-mile-long single-circuit 115 kV power line connecting the Green Valley-Camp Evers 115 kV Power Line to Rob Roy Substation will be constructed in an existing distribution line alignment by installing new poles and collocating some existing distribution facilities.*

3. *Rob Roy Substation Modifications - the existing substation will be modified to accommodate the new circuit.*

4. *Rob Roy Substation Connections – one new TSP will be installed and two existing power poles will be replaced with TSPs to accommodate the interconnection of existing power lines following modification of Rob Roy Substation.*

Proponent's Environmental Assessment (PEA)

PG&E filed an application (A. 12-01-012) for a Permit to Construct and the Proponent's Environmental Assessment on January 25, 2012. The PEA is a starting point for the independent environmental review process conducted by the CPUC.

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