



# CONTRA COSTA COUNTY FIRE PROTECTION DISTRICT

**FP**

F.D. Permit Number

Date

Description of Work: \_\_\_\_\_

Diesel driven \_\_\_\_\_ Electrically driven \_\_\_\_\_ Pump Rating: Pressure \_\_\_\_\_ PSI Flow \_\_\_\_\_ GPM

Project Name: \_\_\_\_\_ Address: \_\_\_\_\_

Suite: \_\_\_\_\_ City: \_\_\_\_\_ Zip: \_\_\_\_\_

Contractor: \_\_\_\_\_ Contractor's License/Type #: \_\_\_\_\_

Address: \_\_\_\_\_ City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Contact Person: \_\_\_\_\_ Phone No. ( ): \_\_\_\_\_ Email: \_\_\_\_\_

**OFFICE USE ONLY: DO NOT COMPLETE BELOW THIS LINE**

The Fire District has reviewed the proposed **fire pump** plans for the project facility. Our review is to ensure compliance with the minimum code requirements related to fire and life safety as set forth in the 2022 California Fire Code, and 2019 NFPA 20. The following selected comments shall apply to this project:

- Where fire pumps are required to be monitored and a building fire alarm system is installed, a pump running alarm shall be permitted to be a supervisory or alarm signal. (NFPA 72 23.8.5.9.1) Configure the fire pump running signal as an alarm signal.
- Automatic shutdown shall not be permitted if starting and running causes are present. (NFPA 20 12.7.5.2) Configure the fire pump controller for manual shut down only. (CCCFPD)
- An approved or listed source of heat shall be provided for maintaining the temperature of a pump room or pump house, where required, above 40 degrees F (4 degrees C) (NFPA 20 4.14.3.1)
- Certified shop test curves showing head capacity and brake horsepower of the pump shall be furnished by the manufacturer to the purchaser. (NFPA 20 4.5.1) Provide an additional copy of the shop curve to the Fire District.
- The adequacy of the water supply shall be determined and evaluated prior to the specification and installation of the fire pump. (NFPA 20 4.6.2.3)
- Where the minimum pump suction pressure is below 20 psi under any flow condition, the suction gauge shall be a compound pressure and vacuum gauge. (NFPA 20 4.11.2.1.1)
- A recirculation relief valve shall provide sufficient water flow to prevent the fire pump from overheating when operating with no discharge. (NFPA 20 4.13.1.4) This applies to electrically driven fire pumps and diesel driven fire pumps that do not have their cooling water provided from the fire pump discharge.
- Pump rooms shall be provided with emergency lighting. (NFPA 20 4.14.5.1)

(CONTINUED OVER)

Fee computed by: \_\_\_\_\_ Amount Due: \$ \_\_\_\_\_

Received by: \_\_\_\_\_ Amount Received: \$ \_\_\_\_\_

Cash  Credit  Check No. \_\_\_\_\_ Invoice No. \_\_\_\_\_

- The pump room or pump house shall be provided with a floor drain that will discharge to a frost free location. (NFPA 20 4.14.7.2)
- Fire pump buildings or rooms enclosing diesel engine pump drivers and day tanks shall be protected with an automatic sprinkler system installed in accordance with NFPA 13 as an Extra Hazard Group 2 Occupancy. (NFPA 20 4.14.1.3)
- Except as permitted in 4.14.1.1.6, rooms containing fire pumps shall be free from storage, equipment, and penetrations not essential to the operation of the pump and related components. (NFPA 20 4.14.1.1.5)
- Where the suction supply is of sufficient pressure to be of material value without the pump, the pump shall be installed with a bypass. (NFPA 20 4.16.4.1)
- No control valve other than a listed (OS&Y) gate valve and the devices as permitted in 4.29.3 shall be installed in the suction pipe within 50 ft of the pump suction flange. (NFPA 20 4.16.5.4)
- Where a metering device is installed in a loop arrangement for fire pump flow testing, an alternate means of measuring flow shall be provided. (NFPA 20 4.22.2.10)
- There shall be no shutoff valve in the pump controller pressure sensing line. (NFPA 20 4.32.5)
- Fire pumps shall furnish not less than 150 percent of rated flow at not less than 65 percent of total rated head. (NFPA 20 6.2.1)
- Overhung impeller and impeller between bearings design pumps and driver shall be mounted on a common grouted base. (NFPA 20 6.4.1)
- Flexible couplings and flexible connecting shafts shall be listed for fire pump service and installed in accordance with the listing. (NFPA 20 6.5.1.2).

Fire pump acceptance testing shall be accomplished in accordance with Chapter 14 NFPA 20. All documentation of the acceptance test shall be provided to Contra Costa County Fire Protection District. Records of the acceptance testing shall be retained by the building owner.

Approved plans **shall** be onsite at time of inspection. Failure to have approved plans onsite may result in the **cancellation of the inspection**, and a **reinspection fee** being assessed.

Contact the Fire District at **925-941-3300 ext. 3902** (minimum **two** working days' notice required) to schedule an onsite inspection. No inspections will be scheduled on Fridays.

***On the morning of the inspection, a confirmation telephone call made to the Fire District at 925-941-3300 is necessary between 8:00 and 8:30 AM. Otherwise, the inspection will be cancelled.***

***Final acceptance may be subject to field inspections.***

**Approval does not relieve the designer / contractor from complying with all applicable fire code requirements, nor does it abrogate the requirements of other authorities having jurisdiction.**

- Approved as submitted                       Approved with Comments                       Denied, Resubmittal Required

Reviewed by: \_\_\_\_\_ Date: \_\_\_\_\_