**COASTSIDE FIRE PROTECTION DISTRICT**

**ADDENDUM NO. 8**
**Dated Thursday, October 29, 2026**

**FIRE STATION #44 REPLACEMENT PROJECT**

Notice is hereby given to prospective bidders that the Project documents for the subject project are modified as set forth in the following addendum. This addendum must be attached to, and form a part of, the bid submitted by each bidder.

**The deadline to submit bids remains 2:00 PM on Tuesday, November 3, 2026.**

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## THE FOLLOWING CHANGES AND CLARIFICATIONS ARE MADE:

1. **Tier 4 Generator & Enclosure**
   See **attached** Tier 4 generator spec section 26 32 13 (which replaces the previously issued version), and cut sheet VD150-04FT4-HSD for revised generator specs and basis of design. See **attached** sheets A1.1.1, and A1.2 for updates to generator enclosure. Generator and enclosure canopy are still to be deferred submittal items as previously stated.

2. **Removal of Existing Generator, Fuel Tank, Air Compressor**
   Removal of existing generator, fuel tank, and air compressor shall be by owner and not included within the scope of this project. This supersedes previous direction to salvage these items.

3. **HRU1, HRU2, HRU3**
   Related to the new HRU 3 and adjust locations of HRU's 1 & HRU2 shown in Addendum 6, provide the following structural supports: New 4x12 under HRU3 . Additionally, adjust location of 4x12 beams to center of HRU Mech. units. Finally, see **attached** sheet A4.1 for updated architectural roof plan showing updated HRU's, and shifted solatube location.

## BELOW ARE RESPONSES TO QUESTIONS RECEIVED FROM BIDDERS:

(None)

Attachments to this Addendum No. 7

1. Specification 26 32 13 (supersedes prior version)
2. Generator Cut Sheet VD150-04FT4-HSD
3. Sheet A1.1.1 (supersedes prior version)
4. Sheet A1.2 (supersedes prior version)
5. Sheet A4.1 (supersedes prior version)

If there are any questions regarding this addendum, please contact Sean Rose, Contract Project Manager for Coastside Fire District, at sean@srroseengineering.com.

SECTION 263213 GENERATOR

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Engine-generator assembly.
2. Diesel engine.
3. Diesel fuel-oil system.
4. Control and monitoring.
5. Generator overcurrent and fault protection.
6. Generator paralleling.
7. Alternator, exciter, and voltage regulator.
8. Outdoor engine generator enclosure.
9. Remote radiator motors.
10. Vibration isolation devices.
11. Finishes.

B. Related Requirements:
1. Section 263600 "Transfer Switches" for transfer switches including sensors and relays to initiate automatic-starting and -stopping signals for engine generators.

1.2 DEFINITIONS

A. ECM: Engine control module.

B. EPS: Emergency power supply.

C. EPSS: Emergency power supply system.

D. Operational Bandwidth: The total variation from the lowest to highest value of a parameter over the range of conditions indicated, expressed as a percentage of the nominal value of the parameter.

1.3 ACTION SUBMITTALS

A. Product Data: For each type of product.

1. Include rated capacities, operating characteristics, electrical characteristics, and furnished specialties and accessories.
2. Include thermal damage curve for generator.
3. Include time-current characteristic curves for generator protective device.
4. Include fuel consumption in gallons per hour (liters per hour) at 0.8 power factor at 50, 75, and 100 percent of generator capacity.
5. Include generator efficiency at 0.8 power factor at 0.5, 0.75, and 1.0 times generator capacity.
6. Include airflow requirements for cooling and combustion air in cubic feet per minute at 0.8 power factor at 104 deg F cooling system rating. Provide radiator air flow restriction data for ambient rating.

7. Include generator characteristics, including, but not limited to, kilowatt rating, efficiency, reactances, and short-circuit current capability.

B. Shop Drawings:

1. Include plans and elevations for engine generator and other components specified.
2. Include details of equipment assemblies. Indicate dimensions, weights, loads, required clearances, method of field assembly, components, and location and size of each field connection.
3. Identify fluid drain ports.
4. Vibration Isolation Base Details: Detail including anchorages and attachments to structure and to supported equipment. Include base weights.
5. Include diagrams for power, signal, and control wiring. Complete schematic, wiring, and interconnection diagrams showing terminal markings for engine generators and functional relationship between all electrical components.

1.4 INFORMATIONAL SUBMITTALS

A. Qualification Data: For installer

B. Seismic Qualification Data: Certificates, for engine generator, accessories, and components, from manufacturer.

1. Basis for Certification: Indicate whether withstand certification is based on actual test of assembled components or on calculation.
2. Dimensioned Outline Drawings of Equipment Unit: With engine and generator mounted on rails, identify center of gravity and total weight, including, supplied enclosure, silencer (Tier 4), and each piece of equipment not integral to the engine generator, and locate and describe mounting and anchorage provisions.
3. Detailed description of equipment anchorage devices on which the certification is based and their installation requirements.

C. Source Quality-Control Reports: Including, but not limited to, the following:

1. Certified Summary of prototype-unit test report.
2. Certified Test Reports: For components and accessories that are equivalent, but not identical, to those tested on prototype unit.
3. Report of factory test on units to be shipped for this Project, showing evidence of compliance with specified requirements.
4. Report of sound generation.
5. Report of exhaust emissions showing compliance with applicable regulations.
6. Certified Torsional Vibration Compatibility: Comply with NFPA 110.

1.5 CLOSEOUT SUBMITTALS

A. Operation and Maintenance Data: For packaged engine generators to include in emergency, operation, and maintenance manuals.

1. In addition to items specified in Section 017823 "Operation and Maintenance Data," include the following:

a. List of tools and replacement items recommended to be stored at Project for ready access. Include part and drawing numbers, current unit prices, and source of supply.
b. Training plan.

1.6 MAINTENANCE MATERIAL SUBMITTALS

A. Furnish extra materials that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.

1. Fuses: One for every 10 of each type and rating, but no fewer than one of each.
2. Replaceable Indicator Lamps: Two for every six of each type used, but no fewer than two of each.
3. Filters: One set each of lubricating oil, fuel, and combustion-air filters.
4. Tools: Each tool listed by part number in operations and maintenance manual.

1.7 QUALITY ASSURANCE

A. Manufacturer Qualifications:

1. ISO 9001 certified for design, development, production and service complete product line.
2. Produced this type of equipment for a period of at least 10 years.
3. Actively maintaining a 24-hour parts and service organization regularly engaged in maintenance contract programs to perform preventive maintenance and service on equipment similar to that specified.
4. Furnish a service agreement that includes system operation under simulated operating conditions; adjustment to the generator set, transfer switch, and switchgear controls as required, and certification in the owner's maintenance log of repairs made and functional tests performed on all systems.
5. Engine-driven generator assembly furnished by a single manufacturer, responsible for design, coordination, and testing of the complete system.

1.8 WARRANTY

A. Manufacturer's Warranty: Manufacturer agrees to repair or replace components of packaged engine generators and associated auxiliary components that fail in materials or workmanship within specified warranty period.

1. Warranty Period: 2 years from date of registered startup or commissioning.
2. The generator set to include a standard warranty covering one (1) year or 2000 hours Standby, whichever occurs first (hours or years), to warrant against defective material and workmanship in accordance with the manufacturer's published warranty from the date of initial startup.

1.9 PERMITS

A. The contractor shall be responsible for obtaining all permits, file applications and pay for all fees required for the following:

1. Bay area air quality management district (BAAQMD) permit to construct.
2. BAAQMD permit to operate.
3. BAAQMD health risk screening analysis.
4. Planning Department environmental permit (air and noise).
5. Fire Marshal hazardous materials permit.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Basis-of-Design Product: Subject to compliance with requirements, Blue Star Tier 4 EPA Certified Series engine generator. Manufacturer's Representative: Collicutt Energy Services at (310) 245-0292 or Tony.Miccolis@Collicutt.com .

B. Source Limitations: Obtain packaged engine generators and auxiliary components from single source from single manufacturer.

2.2 PERFORMANCE REQUIREMENTS

A. Seismic Performance: Engine generator housing, engine generator, batteries, battery racks, silencers, sound attenuating equipment, accessories, and components to withstand the effects of earthquake motions determined in accordance with ASCE/SEI 7.

1. The term "withstand" means "the unit will remain in place without separation of any parts when subjected to the seismic forces specified and the unit will be fully operational after the seismic event."
2. Shake-table testing or Seismic Calculations to comply with ICC-ES AC156. Testing to be performed with all fluids at worst-case normal levels. For life-safety components required to function after an earthquake (such as fire-sprinkler systems, components that contain hazardous content, and storage racks in structures open to the public), the Component Importance Factor is 1.5. For other components, the Component Importance Factor is 1.0 unless the structure is in Seismic Use Group III and component is necessary for continued operation of facility or failure of component could impair continued operation of facility, in which case the Component Importance Factor is 1.5.
3. Component Importance Factor: 1.5.

B. NFPA Compliance:

1. Comply with NFPA 30.
2. Comply with NFPA 37.
3. Comply with NFPA 70.
4. Comply with NFPA 99.
5. Comply with NFPA 110 requirements for Level 1 EPSS.

C. UL Compliance: Comply with UL 2200 "Stationary Engine Generator Assemblies."

D. Engine Exhaust Emissions: Comply with EPA Tier 4 Certified requirements and applicable state and local government requirements.

E. Noise Emission:
1. Maximum sound pressure emitted by engine generator within sound-attenuating enclosure of 74 dBA at a distance of 23 ft. (7 m) while operating at 100 percent load and including engine, engine exhaust, engine cooling-air intake and discharge, and other components of installation.

F. Environmental Conditions: Engine generator system to withstand the following environmental conditions without mechanical or electrical damage or degradation of performance capability:

1. Ambient Temperature: 5 deg F to 77 deg F.

2.3 ENGINE GENERATOR ASSEMBLY DESCRIPTION

A. Factory-assembled and -tested, liquid-cooled engine, with brushless generator and accessories.

B. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and use.

C. Power Rating: Standby.

D. EPSS Class: Engine generator to be classified as a Class 1 in accordance with NFPA 110.

E. Nameplate Rating: 150 kW.

F. Power Factor: 0.8, lagging.

G. Frequency: 60 Hz.

H. Voltage: 208 VAC.

I. Phase: Three-phase, four-wire.

J. Governor: Adjustable isochronous, with speed sensing.

K. Mounting Frame: Structural steel framework to maintain alignment of mounted components without depending on concrete foundation. Provide lifting attachments sized and spaced to prevent deflection of base during lifting and moving.

L. Capacities and Characteristics:

1. Power Output Ratings: Nominal ratings as indicated at 0.8 power factor excluding power required for the continued and repeated operation of the unit and auxiliaries.
2. Nameplates: For each major system component to identify manufacturer's name and address, and model and serial number of component.

M. Engine Generator Performance:

1. Steady-State Voltage Operational Bandwidth: 0.5 percent of rated output voltage from no load to full load.
2. Transient Voltage Performance: Not more than 25 percent variation for 50 percent step-load increase or decrease and meets ISO8528-5, Class G1 for standard loads. Voltage to recover and remain within the steady-state operating band within ten seconds.
3. Steady-State Frequency Operational Bandwidth: 0.25 percent of rated frequency from no load to full load.
4. Transient Frequency Performance: Less than 15 percent variation for 50 percent step-load increase or decrease and meets ISO8528-5, Class G1 for standard loads. Frequency to recover and remain within the steady-state operating band within ten seconds.
5. Output Waveform: At no load, harmonic content measured line to line or line to neutral may not exceed 5 percent total and 3 percent for single harmonics. Telephone influence factor, determined in accordance with NEMA MG 1, may not exceed 50.
6. Sustained Short-Circuit Current: For a three-phase, bolted short circuit at system output terminals, system to supply a minimum of 250 percent of rated full-load current for not less than 10 seconds and then clear the fault automatically, without damage to generator system components.

7. Start Time:

    a. Comply with NFPA 110, Type 10 system requirements.

N. Engine Generator Performance for Sensitive Loads:

1. Oversizing generator compared with the rated power output of the engine is permissible to meet specified performance.

    a. Nameplate Data for Oversized Generator: Show ratings required by the Contract Documents rather than ratings that would normally be applied to generator size installed.

2. Steady-State Voltage Operational Bandwidth: 0.5 percent of rated output voltage from no load to full load.
3. Transient Voltage Performance: Not more than 20 percent variation for 50 percent step-load increase or decrease and meets ISO8528-5, Class G2 for sensitive loads. Voltage to recover and remain within the steady-state operating band within six seconds.
4. Steady-State Frequency Operational Bandwidth: Plus or minus 0.25 percent of rated frequency from no load to full load.
5. Transient Frequency Performance: Less than 10 percent variation for 50 percent step-load increase or decrease and meets ISO8528-5, Class G2 for sensitive loads. Frequency to recover and remain within the steady-state operating band within five seconds.
6. Output Waveform: At no load, harmonic content measured line to line and line to neutral may not exceed 5 percent total or 3 percent for a single harmonic. Telephone influence factor, determined in accordance with NEMA MG 1, may not exceed 50.
7. Sustained Short-Circuit Current: For a three-phase, bolted short circuit at system output terminals, system to supply a minimum of 300 percent of rated full-load current for not less than 10 seconds and then clear the fault automatically, without damage to winding insulation or other generator system components.
8. Excitation System: Performance to be unaffected by voltage distortion caused by nonlinear load.
9. Start Time:

    a. Comply with NFPA 110, Type 10 system requirements.

## 2.4 DIESEL ENGINE

A. Fuel: ASTM D975, diesel fuel oil, Grade 2-D.

B. Rated Engine Speed: 1800 rpm.

C. Minimum Standby Load Factor Rating: 70 percent.

D. Lubrication System: Engine or skid-mounted.

1. Filter and Strainer: Rated to particles that may damage engine per manufacturer's written instructions while passing full flow.
2. Thermostatic Control Valve: Control flow in system to maintain optimum oil temperature. Unit to be capable of full flow and is designed to be fail-safe.
3. Closed Crankcase Ventilation: System: Prevents crankcase oil vapor from draining or escaping the engine.

4. Crankcase Drain: Arranged for complete gravity drainage to an easily removable container with no disassembly and without use of pumps, siphons, special tools, or appliances.

E. Jacket Coolant Heater: Electric-tank type, factory installed in coolant jacket system. Comply with UL 499 and with NFPA 110 requirements for Level 1 equipment for heater capacity.

F. Integral Cooling System: Closed loop, liquid cooled, with radiator factory mounted on engine generator set mounting frame and integral engine-driven coolant pump.

1. Coolant: Solution of 50 percent ethylene-glycol-based antifreeze and 50 percent water, with anticorrosion additives as recommended by engine manufacturer.
2. Size of Radiator: Adequate to contain expansion of total system coolant to 110 percent of capacity.
3. Expansion Tank: Constructed of welded steel plate and rated to withstand maximum closed-loop coolant system pressure for engine used. Equip with gage glass and petcock.
4. Temperature Control: Self-contained, thermostatic-control valve modulates coolant flow automatically to maintain optimum constant coolant temperature as recommended by engine manufacturer.
5. Coolant Hose: Flexible assembly with inside surface of nonporous rubber and outer covering of aging-, UV-, and abrasion-resistant material.

    a. Rating: 50-psig (345-kPa) maximum working pressure with coolant at 215 deg F (102 deg C), and noncollapsible under vacuum.

G. Muffler/Silencer/ Certified Tier 4 System:

1. Critical type, sized as recommended by engine manufacturer and selected with exhaust piping system to not exceed engine manufacturer's engine backpressure requirements.

    a. Minimum sound attenuation of 25 dB at 500 Hz.

H. Air-Intake Filter: Standard - duty, engine-mounted air cleaner with replaceable dry-filter element and "blocked filter" indicator.

I. Starting System: 24-V dc electric, with negative ground.

1. Cranking Cycle: As required by NFPA 110 for system level specified.

2. Battery: Lead acid, with capacity within ambient temperature range specified in "Performance Requirements" Coordinate "Battery Cable" Subparagraph below with Drawings.

3. Battery Cable: Size as recommended by engine manufacturer for cable length indicated. Include required interconnecting conductors and connection accessories.
4. Battery-Charging Alternator: Factory mounted on engine with solid-state voltage regulation and continuous rating per manufacturer's standard.

J. Battery Charger Per Manufacture provided:

1. Source Limitations: Obtain battery charger from engine-driven generator manufacturer.
2. UL Compliance: Comply with UL 1236 for Category BBHH.
3. NFPA Compliance: Comply with NFPA 110.

4. Charger Operation: Current-limited, constant-voltage, automatic-boost-type charger designed for batteries.

## 2.5 DIESEL FUEL-OIL SYSTEM

A. Piping: Fuel-oil piping to be Schedule 40 black steel, complying with requirements in the Plumbing specifications. Cast iron, aluminum, copper, and galvanized steel may not be used in the fuel-oil system.

B. Main Fuel Pump: Mounted on engine to provide primary fuel flow under starting and load conditions.

C. Fuel Filtering: Remove water and contaminants larger than 1 micron.

D. Relief-Bypass Valve: Automatically regulates pressure in fuel line and returns excess fuel to source.

## 2.6 CONTROL AND MONITORING

A. Automatic Starting System Sequence of Operation: When mode-selector switch on the control and monitoring panel is in the automatic position, remote-control contacts in one or more separate automatic transfer switches initiate starting and stopping of engine generator. When mode-selector switch is switched to the on position, engine generator starts. The off position of the same switch initiates generator-set shutdown. When the engine generator is running, specified system or equipment failures or derangements automatically shut down engine generator and initiate alarms.

B. Comply with UL 508A.

C. Configuration:
1. Operating and safety indications, protective devices, basic system controls, and engine gauges will be grouped in a common control and monitoring panel mounted on the engine generator. The mounting method will isolate the control panel from generator-set vibration. Panel will be powered from the engine generator battery.

D. Control and Monitoring Panel:
1. Digital engine generator controller with integrated graphical touch screen TFT display and microprocessor, capable of local and remote control, monitoring, and programming, with battery backup.
2. Digital engine generator controller with integrated alphanumeric display, providing two lines of data. The display has back lighting for ease of operator use in high- and low-light conditions. Capable of local and remote control, monitoring, and programming.
3. Controller Face Ingress Protection: IP 65.
4. Operating Temperature: Minus 40 to plus 158 deg F.
5. Maximum Operating Humidity: 95 percent noncondensing.
6. Corrosion Resistant: Tested in accordance with ASTM B117 (salt spray test).
7. Controller Features:
   a. Mode Selector: Allowing selection of one of the following modes:
      1) Off/Reset: Prohibits the generator from starting and resets shutdowns. In this mode, the controller does not respond to remote start and stop commands.
      2) Manual: Allows user to locally start and stop to operate the generator. In this mode, the controller does not respond to remote start and stop commands.

3) Auto: Allows generator to start and stop based on remote commands. In this mode, the generator does not respond to manual start and stop commands.

b. Emergency Stop Switch: Latch-type remote stop switch, red in color with mushroom-type head. Depressing the stop button will immediately stop the generator set and lock out any automatic remote starting.

c. Audible Alarm: Horn sounds for specific warning and shutdown conditions.

d. Alarm Silence/Lamp Test Pushbutton: Silences audible alarm when depressed. All controller-indicating lights are simultaneously illuminated while actuated.

e. Fault Light: LED indicating abnormal conditions:
   1) Yellow: Active warning condition or mode selector switch not in automatic.
   2) Red: Active shutdown condition.

f. Real-time clock and calendar for time-stamping events.

g. Load Management:
   1) Programmable outputs to command the connect and disconnect of loads based on system state:
      a) Loads connected based on available capacity.
      b) Loads disconnected at system startup.
      c) Loads disconnected based on a maximum kW setting or underfrequency setting.
   2) Support up to 16 load steps.

h. Engine Control Features:
   1) Programmable engine start delay.
   2) Programmable engine cool-down delay.
   3) Programmable warm-up delay based on time or engine temperature.
   4) Programmable idle speed.
   5) Programmable cyclic cranking with adjustable on time, off time, and number of cycles.

i. Event Logging:
   1) Maintain record of a minimum of 1,000 events with date and time locally for warning and shutdown faults.
   2) Event log easily available for download onto USB storage device or PC.
   3) Event Snapshot: Capture 15 seconds of critical data around the time of a fault or warning. Data to be viewable on the controller and downloadable.

j. Data Logging: Capable of time-based recording of customized parameters.
   1) Parameters selectable from all monitored parameters.
   2) Sample period configurable from one second to one day.
   3) Collected data stored on USB storage device plugged into the control panel.

k. Minimum of three user access levels.

l. Password protection to prevent unauthorized modification to system parameters.

m. Customizable Interface:
   1) Overview Screen: Dedicated screen allowing user to display up to 16 parameters for immediate access.
   2) Favorites: User-customizable menu set up for enhanced usability.

8. Monitoring Instruments: Accessible through the digital engine generator controller and viewable during operation.
   a. Engine-coolant temperature.
   b. Battery voltage.
   c. Running-time meter.
   d. Engine speed.
   e. Oil pressure.
   f. Fuel level (with optional sensor)
   g. Fuel pressure.
   h. Fuel Consumption.
   i. Exhaust temperature (with optional sensor).
   j. Ambient temperature.
   k. Charge air pressure.

l. Charge air temperature.
m. AC output voltage for each phase, 0.25 percent accuracy.
n. AC output current for each phase, 0.25 percent accuracy.
o. AC frequency meter, 0.25 percent accuracy.
p. Power factor total and per phase with leading/lagging indication.
q. kW total and per phase, 0.5 percent accuracy.
r. kVARS total and per phase, 0.5 percent accuracy.
s. kVA total and per phase, 0.5 percent accuracy.
t. kW hours.
u. Generator duty level (actual kW loading divided by kW nameplate).

9. Service Data: Stored in the controller and available for display.
   a. Generator model number and serial number.
   b. ECM serial number.
   c. Alternator part number.
   d. Engine model number and serial number.
   e. Controller serial number and firmware version.
10. Operational Records: Stored in controller beginning at system startup.
   a. Total run-time hours.
   b. Total loaded hours.
   c. Total kW hours.
   d. Controller run-time hours.
   e. Number of starts.
   f. Total unloaded hours.
   g. Controller hours.
   h. ECM run-time hours.
   i. Number of crank attempts.
   j. Last crank duration.
   k. Last start runtime duration.
   l. Last start date and time.
   m. Last stop date and time.
11. Maintenance Records: Stored in controller beginning at system startup, user resettable to zero.
   a. Total run-time hours since last maintenance.
   b. Total loaded hours since last maintenance.
   c. Total unloaded hours since last maintenance.
   d. Total kW hours since last maintenance.
12. Controls and Protective Devices: Controls, shutdown devices, and common visual alarm indication, including the following:
   a. Mode selector switch not in automatic position.
   b. Overcrank shutdown.
   c. Low lubricating-oil pressure warning.
   d. Low lubricating-oil pressure shutdown.
   e. Low coolant temperature warning.
   f. High engine temperature warning.
   g. High engine temperature shutdown.
   h. Overspeed shutdown.
   i. Low fuel pressure shutdown.
   j. Low fuel main tank.

   k. Coolant low-level shutdown device.
   l. Coolant high-temperature warning.
   m. Coolant high-temperature shutdown.
   n. ECM Digital Trouble Codes warnings.
   o. ECM Digital Trouble Codes shutdown.
   p. Loss of ECM Communications shutdown.
   q. ECM mismatch shutdown.

r. Battery high-voltage warning.
s. Battery-charger malfunction warning.
t. Battery low-voltage warning.
u. Remote manual stop shutdown.
v. Local manual stop shutdown.
w. Alternator protection shutdown.
x. Overcurrent warning.
y. Overcurrent shutdown.
z. Under frequency warning.
aa. Under frequency shutdown.
bb. Over frequency warning.
cc. Over frequency shutdown.
dd. Over power warning.
ee. Over power shutdown.
ff. Under voltage warning.
gg. Under voltage shutdown.
hh. Over voltage warning.
ii. Over voltage shutdown.
jj. User-defined input warning.
kk. User-defined input shutdown.
ll. No oil pressure signal shutdown.
mm. No speed sensor signal shutdown.
nn. Fail-to-start shutdown.

E. Connection to Datalink:
1. Provide connections for datalink transmission of indications to remote data terminals via BACnet.

F. Supporting Items: Sensors, transducers, terminals, relays, and other devices located on engine or generator unless otherwise indicated.

G. Remote Emergency-Stop Switch: Wall mounted unless otherwise indicated. Push button must be permanently labeled and protected from accidental operation.

H. Remote Alarm Annunciator: LED indicator light labeled with proper alarm conditions will identify each alarm event, and a common audible signal will sound for each alarm condition in accordance with NFPA 110. The silencing switch in face of panel will silence signal without altering visual indication. Connect so that after an alarm is silenced, clearing of initiating condition will reactivate alarm until silencing switch is reset. Controls to include "Lamp Test" momentary switch wired to illuminate all LED indicator lights regardless of alarm state while switch is on. Cabinet and faceplate are surface- or flush-mounting type to suit mounting conditions indicated.

I. Start Signal Wiring Integrity Monitor: UL-listed modular system to monitor condition of generator remote start circuit(s), annunciate faults, and start generator in accordance with NFPA 70, Article 700.10(D)(4).
1. Output Contacts: Two form "C" contacts, one for engine start and one for start circuit alarm.

## 2.7 GENERATOR OVERCURRENT AND FAULT PROTECTION

A. Overcurrent protective devices to be coordinated to optimize selective tripping when a short circuit occurs.

1. Overcurrent protective devices for the entire EPSS to be coordinated to optimize selective tripping when a short circuit occurs. Coordination of protective devices considers both utility and EPSS as the voltage source.
2. Overcurrent protective devices for the EPSS to be accessible only to authorized personnel.

B. Generator Overcurrent Protective Device:

1. Molded-case circuit breaker, electronic-trip type; 100 percent rated; complying with UL 489. Generator: (1) 800 amp frame, adjustable trip circuit breaker, set circuit breaker to trip at 600A. Load Bank: (1) 800 amp frame, adjustable trip circuit breaker, set circuit breaker to trip at 600A.

    a. Tripping Characteristics: Adjustable long-time and short-time delay and instantaneous.
    b. Trip Settings: Selected to coordinate with generator thermal damage curve.
    c. Shunt Trip: Connected to trip breaker when engine generator is shut down by other protective devices.
    d. Mounting: Adjacent to, or integrated with, control and monitoring panel.

C. Generator Protector: Microprocessor-based unit to continuously monitor current level in each phase of generator output, integrate generator heating effect over time, and predict when thermal damage of alternator will occur. When signaled by generator protector or other engine generator protective devices, a shunt-trip device in the generator disconnect switch opens the switch to disconnect the generator from load circuits. Protector performs the following functions:

1. Initiates a generator overload alarm when generator has operated at an overload equivalent to 110 percent of full-rated load for 60 seconds. Indication for this alarm is integrated with other engine generator malfunction alarms. Contacts to be available for load shed functions.

2. Under three-phase fault conditions, generator to supply 300 percent of rated full-load current for up to 10 seconds.
3. Tested to AC output short-circuit requirements.
4. Energy Reduction Maintenance Switch/Mode.

D. Generator Protective Relay: Multifunctional, microprocessor-based relay systems complying with IEEE C37.90.

1. Standard generator protective functions for shutdown with user-adjustable limits and time delays:

    a. Over Voltage (ANSI Device 59):
        1) User-Adjustable Pickup: 100 to 130 percent.
        2) User-Adjustable Time Delay: Zero to 120 seconds.

    b. Under Voltage (ANSI Device 27):
        1) User-Adjustable Pickup: 70 to 100 percent.
        2) User-Adjustable Time Delay: Zero to 120 seconds.

    c. Over Frequency (ANSI Device 81O):
        1) User-Adjustable Pickup: 100 to 140 percent.
        2) User-Adjustable Time Delay: Zero to 120 seconds.

d. Reverse Power (ANSI Device 32R):
   1) User-Adjustable Pickup: Zero to 50 percent.
   2) User-Adjustable Time Delay: Zero to 120 seconds.

e. Over Power (ANSI Device 32O):
   1) User-Adjustable Pickup: 90 to 150 percent.
   2) User-Adjustable Time Delay: Zero to 120 seconds.

f. Loss of Field (ANSI Device 40 Reverse VARS):
   1) User-Adjustable Pickup: 10 to 100 percent.
   2) User-Adjustable Time Delay: Zero to 120 seconds.

g. Overcurrent with Voltage Range:
   1) User-Adjustable Range: 100 to 200 percent.
   2) User-Adjustable Time Delay: Zero to 120 seconds.

E. Ground-Fault Indication: Comply with NFPA 70, "Emergency System" signals for ground fault.

1. Indicate ground fault with other engine generator alarm indications.
2. Trip generator protective device on ground fault.

## 2.8 ALTERNATOR, EXCITER, AND VOLTAGE REGULATOR

A. Comply with NEMA MG 1.

B. Maximum Temperature Rise: 105 deg C at full load over 40C ambient.

C. Drive: Alternator shaft to be directly connected to engine shaft. Exciter to be rotated integrally with alternator rotor.

D. Electrical Insulation: Class H.

E. Stator-Winding Leads: Brought out to terminal box to permit future reconnection for other voltages if required.

F. Construction to prevent mechanical, electrical, and thermal damage due to vibration, overspeed up to 125 percent of rating, and heat during operation.

G. Enclosure: Dripproof.

H. Voltage Regulator: Microprocessor-based, high-speed digital voltage regulator, separate from exciter, with three-phase, true RMS sensing, providing performance as specified and as required by NFPA 110.

1. Maintain steady-state voltage within 0.5 percent from no load to full load.
2. Adjusting Feature on Control and Monitoring Panel: Provide plus or minus 10 percent adjustment of output-voltage operating band.

I. Alternator Strip Heater: Thermostatically controlled unit arranged to maintain stator windings above dew point.

J. Windings: Two-thirds pitch stator winding and fully linked amortisseur winding.

K. Subtransient Reactance: 16 percent, maximum.

## 2.9 OUTDOOR ENGINE GENERATOR ENCLOSURE

A. Description:
   1. Vandal-resistant, sound-attenuating, level 2, weatherproof, corrosion resistant, aluminum enclosure, with 14-gauge-thick walls; wind resistant. Multiple panels to be lockable and provide adequate access to components requiring maintenance, minimum two doors per side. Access to controller and main line circuit breaker in accordance with NFPA 70. Panels to be removable by one person without tools. Instruments and controls to be mounted within enclosure.
   2. Prefabricated or pre-engineered, aluminum-clad, integral structural-steel-framed, walk-in enclosure; erected on concrete foundation.

B. Source Limitations: Obtain enclosure from engine-driven generator manufacturer.

C. Structural Design and Anchorage: Comply with ASCE/SEI 7 for wind loads up to 181 mph.

D. Seismic Design: Comply with seismic requirements.

E. Access doors and panels rubber sealed to prevent water intrusion and minimize noise.

F. Hinged Doors: Lockable; keyed alike with recessed locks.

G. Insulation Flammability Classification: UL 94 HF1.

H. Muffler Location: Complete exhaust system located within enclosure.

I. Engine-Cooling Airflow through Enclosure: Maintain temperature rise of system components within required limits.

J. Stainless steel latches, hinges, and hardware on external panels of enclosure.

K. External, weatherproof, recessed-mounted emergency stop pushbutton.

L. Maximum dimensions: 134” L x 60” W x 82” H.

## 2.10 VIBRATION ISOLATION DEVICES

A. Elastomeric Vibration Isolators: Oil- and water-resistant elastomer neoprene or natural rubber, molded with a nonslip pattern and baseplates of sufficient stiffness for uniform loading over pad area, and factory cut to sizes that match requirements of supported equipment. Compliant with ISO 8528-9.

B. Comply with requirements for vibration isolation and flexible connector materials for steel piping.

C. Comply with requirements for vibration isolation and flexible connector materials for exhaust shroud and ductwork.

D. Vibration isolation devices may not be used to accommodate misalignments or to make bends.

2.11 FINISHES

A. Indoor and Outdoor Enclosures and Components: Heavy-duty, high-durability, fade-, scratch- and corrosion-resistant finish achieved through a multi-stage finishing process from the genset manufacturer including:
   1. Pre-cleaning: Enclosure components cleaned with a two-stage alkaline cleaning process to remove grease, grit, and grime from parts then subjected to a Zirconium-based conversion coating process to prepare the metal for electrocoat (e-coat) adhesion.
   2. Primer: All enclosure parts to receive 100 percent epoxy primer electrocoat (e-coat) with high-edge protection.
   3. Finish Coating: Powder-baked paint for superior finish, durability, and appearance.
   4. Minimum Enclosure Corrosion Resistance: 3000 hours salt spray test in accordance with ASTM B117.
   5. Powder coat for fading and abrasion resistance.

2.12 SOURCE QUALITY CONTROL

A. Prototype Testing: Factory test engine generator using same engine model, constructed of identical or equivalent components and equipped with identical or equivalent accessories.

   1. Tests: Comply with IEEE 115 and with NFPA 110, Level 1 Energy Converters.

B. Project-Specific Equipment Tests: Before shipment, factory test engine generator and other system components and accessories manufactured specifically for this Project. Perform tests at rated load and power factor. Include the following tests:

   1. Test generator, exciter, and voltage regulator as a unit.
   2. Load Test: 25, 50, 75 and 100 percent rated load.
   3. Single-step load pickup.
   4. Safety shutdown.
   5. Overcrank.
   6. Locked rotor.
   7. Mechanical Readings: Oil pressure, ambient temperature, and coolant temperature.
   8. Test components and accessories furnished with installed unit that are not identical to those on tested prototype to demonstrate compatibility and reliability.
   9. Maximum power.
   10. Voltage regulation.
   11. Transient and steady-state governing.
   12. Provide 14 days' advance notice of tests and opportunity for observation of tests by Owner's representative.
   13. Report factory test results within 10 days of completion of test.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine areas, equipment bases, and conditions, with Installer present, for compliance with requirements for installation and other conditions affecting packaged engine generator performance.

B. Examine roughing-in for piping systems and electrical connections. Verify actual locations of connections before packaged engine generator installation.

C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

A. Interruption of Existing Electrical Service: Do not interrupt electrical service to facilities occupied by Owner or others unless permitted under the following conditions and then only after arranging to provide temporary electrical service in accordance with requirements indicated:

1. Notify Owner no fewer than two working days in advance of proposed interruption of electrical service.
2. Do not proceed with interruption of electrical service without Owner's written permission.

3.3 INSTALLATION

A. Comply with NECA 1 and NECA 404.

B. Comply with packaged engine generator manufacturers' written installation and alignment instructions and with NFPA 110.

C. Equipment Mounting:

1. Install engine generators on cast-in-place concrete equipment bases. Comply with requirements for equipment bases and foundations specified in Section 033000 "Cast-in-Place Concrete."
2. Coordinate size and location of concrete bases for engine generators. Cast anchor-bolt inserts into bases. Concrete, reinforcement, and formwork requirements are specified with concrete.

D. Install packaged engine generator to provide access, without removing connections or accessories, for periodic maintenance.

E. Cooling System: Install Schedule 40 black steel piping with welded joints for cooling water piping between engine generator and heat exchanger. Piping materials and installation requirements are specified in Section 232113 "Hydronic Piping."

1. Install isolating thimbles where exhaust piping penetrates combustible surfaces. Provide a minimum of 9 inches (225 mm) of clearance from combustibles.
2. Insulate cooling-system piping and components in accordance with requirements in Section 230719 "HVAC Piping Insulation."

F. Exhaust System: Install Schedule 40 black steel piping with welded joints and connect to engine muffler. Install thimble at wall. Piping sized in accordance with allowable back pressure for the engine and indicated on mechanical plans.

1. Piping materials and installation requirements are specified in the plumbing specifications.
2. Install flexible connectors and steel piping materials in accordance with requirements in plumbing specifications.
3. Insulate muffler/silencer and exhaust system components in accordance with requirements in plumbing specifications.
4. Install isolating thimbles where exhaust piping penetrates combustible surfaces with a minimum of 9 inches (225 mm) of clearance from combustibles.

G. Drain Piping: Install condensate drain piping to muffler drain outlet full size of drain connection with a shutoff valve, stainless steel flexible connector, and Schedule 40 black steel.

1. Piping materials and installation requirements are specified in the plumbing specifications.
2. Drain piping valves, connectors, and installation requirements are specified in the plumbing specifications.

H. Fuel Piping:

1. Diesel storage tanks, tank accessories, piping, valves, and specialties for fuel systems. are specified in the plumbing specifications.
2. Copper and galvanized steel may not be used in the fuel-oil piping system.

I. Install electrical devices furnished by equipment manufacturers but not specified to be factory mounted.

## 3.4 CONNECTIONS

A. Piping installation requirements. are specified in other Sections. Drawings indicate general arrangement of piping and specialties.

B. Connect fuel, cooling-system, and exhaust-system piping adjacent to packaged engine generator to allow space for service and maintenance.

C. Connect cooling-system water piping to engine generator and heat exchanger with flexible connectors.

D. Connect engine exhaust pipe to engine with flexible connector.

E. Connect fuel piping to engines with a gate valve and union and flexible connector.

F. Ground equipment in accordance with NFPA 70 and Section 260000.

G. Connect wiring in accordance with NFPA 70 and Section 260000. Provide flexible conduit routed to the engine generator from a stationary element.

H. Balance single-phase loads to obtain a maximum of 10 percent unbalance between any two phases.

## 3.5 IDENTIFICATION

A. Identify system components in accordance with Section 260000.

B. Install a sign indicating the generator neutral is bonded to the main service neutral at the main service location.

## 3.6 FIELD QUALITY CONTROL

A. Testing Agency:

1. Owner will engage a qualified testing agency to perform tests and inspections.

2. Engage a qualified testing agency to perform tests and inspections.
3. Engage a factory-authorized service representative to test and inspect components, assemblies, and equipment installations, including connections.
4. Perform tests and inspections with the assistance of a factory-authorized service representative.

B. Tests and Inspections:

1. Perform tests recommended by manufacturer and each visual and mechanical inspection and electrical and mechanical test listed in first two subparagraphs below, as specified in NETA ATS. Certify compliance with test parameters.

    a. Visual and Mechanical Inspection:
        1) Compare equipment nameplate data with Drawings and the Specifications.
        2) Inspect physical and mechanical condition.
        3) Inspect anchorage, alignment, and grounding.
        4) Verify that the unit is clean.

    b. Electrical and Mechanical Tests:

        1) Verify phase rotation, phasing, and synchronized operation as required by the application.
        2) Functionally test engine shutdown for low oil pressure, overtemperature, overspeed, and other protection features as applicable.

2. NFPA 110 Acceptance Tests: Perform tests required by NFPA 110 that are additional to those specified here, including, but not limited to, single-step full-load pickup test.
3. Battery Tests: Equalize charging of battery cells in accordance with manufacturer's written instructions. Record individual cell voltages.

    a. Measure charging voltage and voltages between available battery terminals for full-charging and float-charging conditions. Check electrolyte level and specific gravity under both conditions.
    b. Test for contact integrity of all connectors. Perform an integrity load test and a capacity load test for the battery.
    c. Verify acceptance of charge for each element of the battery after discharge.
    d. Verify that measurements are within manufacturer's specifications.

4. Battery-Charger Tests: Verify specified rates of charge for both equalizing and float-charging conditions.
5. System Integrity Tests: Methodically verify proper installation, connection, and integrity of each element of engine generator system before and during system operation. Check for air, exhaust, and fluid leaks.
6. Exhaust-System Back-Pressure Test: Use a manometer with a scale exceeding 40-inch wc (120 kPa). Connect to exhaust line close to engine exhaust manifold. Verify that back pressure at full-rated load is within manufacturer's written allowable limits for the engine.
7. Exhaust Emissions Test: Comply with applicable government test criteria.
8. Voltage and Frequency Transient Stability Tests: Use recording oscilloscope to measure voltage and frequency transients for 50 percent step-load increases and decreases and verify that performance is as specified.
9. Noise Level Tests: Measure A-weighted level of noise emanating from engine generator installation, including engine exhaust and cooling-air intake and discharge, at four locations 23 ft. (7 m) from edge of the generator enclosure and compare measured levels with specified values.

C. Coordinate tests with tests for transfer switches and run them concurrently.

D. Test instruments to have been calibrated within the past 12 months, traceable to NIST Calibration Services, and adequate for making positive observation of test results. Make calibration records available for examination on request.

E. Leak Test: After installation, inspect exhaust, coolant, and fuel systems and test for leaks. Repair leaks and retest until no leaks exist.

F. Operational Test: After electrical circuitry has been energized, start units to confirm proper motor rotation and unit operation for generator and associated equipment.

G. Test and adjust controls and safeties. Replace damaged and malfunctioning controls and equipment.

H. Remove and replace malfunctioning units and retest/reinspect as specified above.

I. Retest: Correct deficiencies identified by tests and observations, and retest until specified requirements are met.

J. Report results of tests and inspections in writing. Record adjustable relay settings and measured insulation resistances, time delays, and other values and observations. Attach a label or tag to each tested component indicating satisfactory completion of tests.

K. Infrared Scanning: After Substantial Completion, but not more than 60 days after final acceptance, perform an infrared scan of each power wiring termination and each bus connection while running with maximum load.

1. Follow-up Infrared Scanning: Perform an additional follow-up infrared scan 11 months after date of Substantial Completion.
2. Instrument: Use an infrared scanning device designed to measure temperature or to detect significant deviations from normal values. Provide calibration record for device.
3. Record of Infrared Scanning: Prepare a certified report that identifies terminations and connections checked and that describes scanning results. Include notation of deficiencies detected, remedial action taken, and observations after remedial action.

## 3.7 MAINTENANCE SERVICE

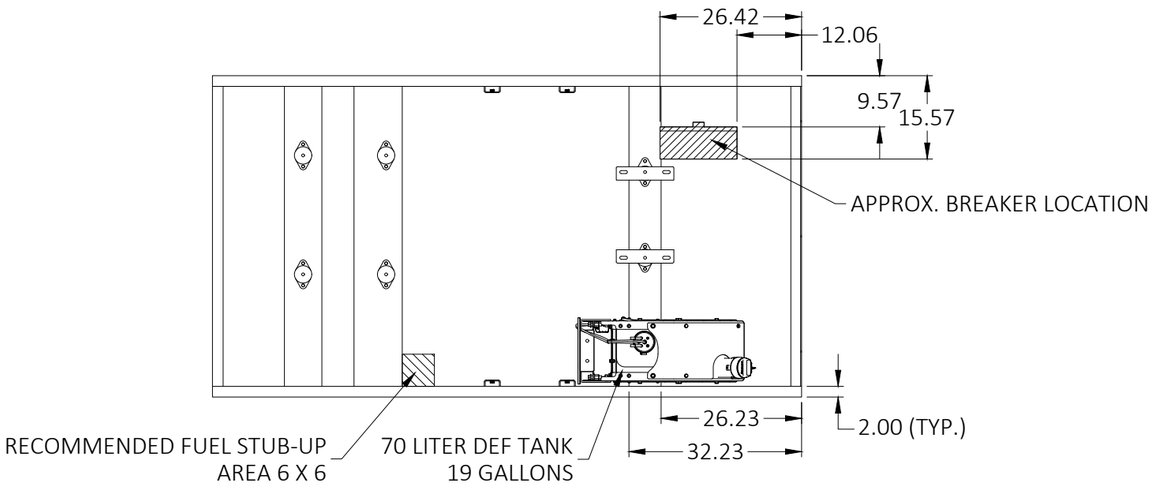
A. Generator supplier to provide a one-year maintenance contract, two times per year with load bank testing. On the 6th month following start-up, a visual inspection will be conducted along with topping off fluids (coolant & oil) Diesel fuel not included. On the 12th month following start up, a visual inspection will be conducted along with an oil and filter change with a 2-hour load bank test. (Load bank test report will be provided to the end user).

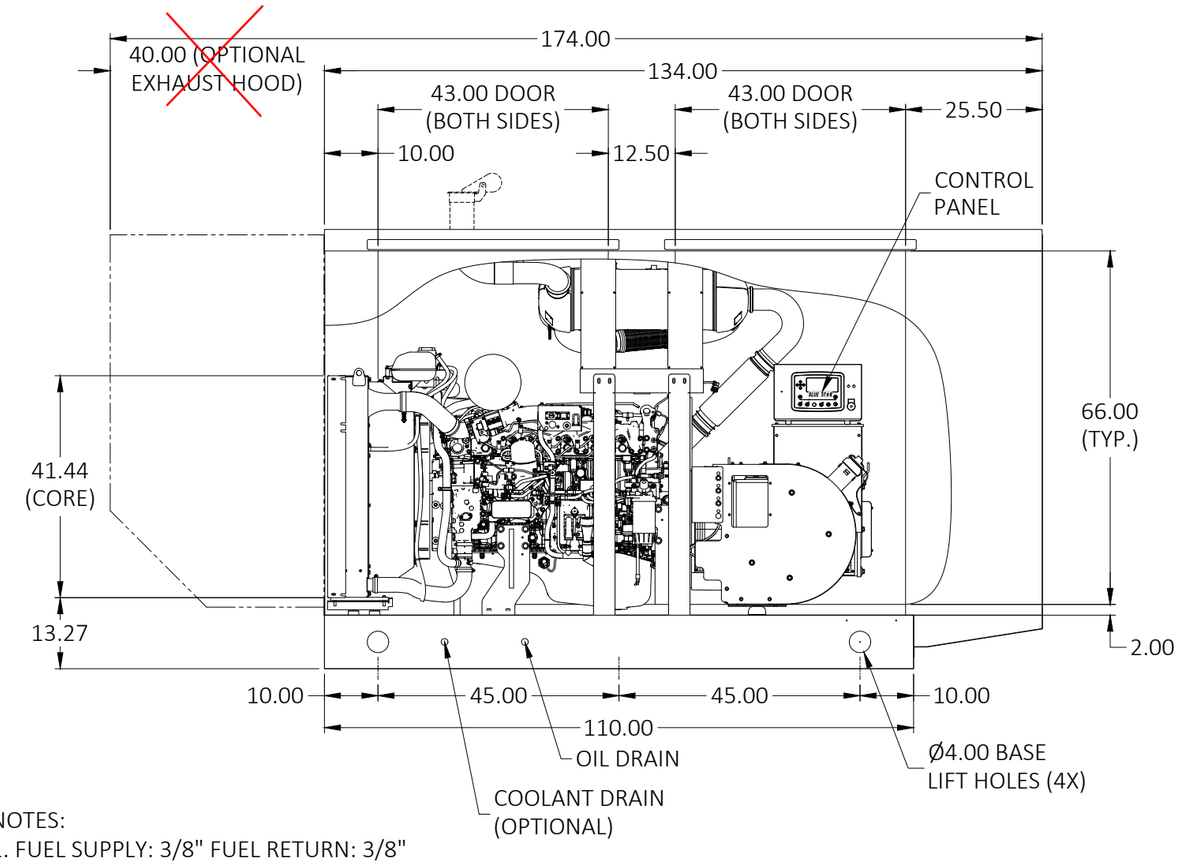
## 3.8 DEMONSTRATION

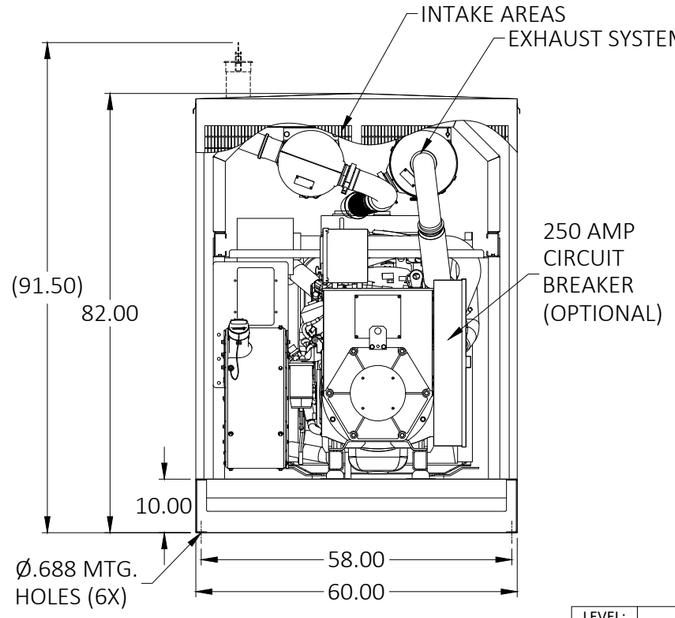
A. Engage a factory-authorized service representative to train Owner's maintenance personnel to adjust, operate, and maintain packaged engine generators.

END OF SECTION

DRAWING: VD150-04FT4-HSD




NOTES:
1. FUEL SUPPLY: 3/8" FUEL RETURN: 3/8"
2. RADIATOR CORE WIDTH 35.50"
3. APPROXIMATE BREAKER LOCATION SHOWN
4. (OPTIONAL):EXHAUST HOOD INCLUDED LEVEL 3 ONLY
5. (OPTIONAL):EXHAUST ROUTED THROUGH EXHAUST HOOD LEVEL 3 ENCLOSURE ONLY
6. SOUND ATTENUATION FOAM INCLUDED LEVEL 2 & 3 ENCLOSURES ONLY
7. (XX.XX) DIMENSIONS ARE FOR REFERENCE ONLY

| LEVEL: | DESCRIPTION: | DATE: | BY: |
|---|---|---|---|
| REVISIONS: | | | |

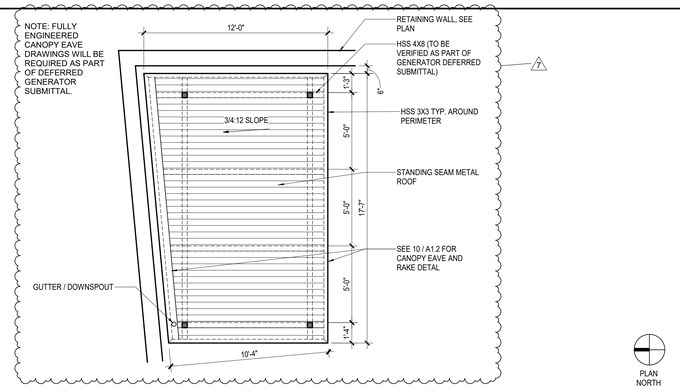
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DRAWN BY: RPS
DATE: 10-24-2024

BLUE STAR Power Systems
2250 CARLSON DRIVE, NORTH MANKATO, MINNESOTA 56003 | 1 507 345 1776

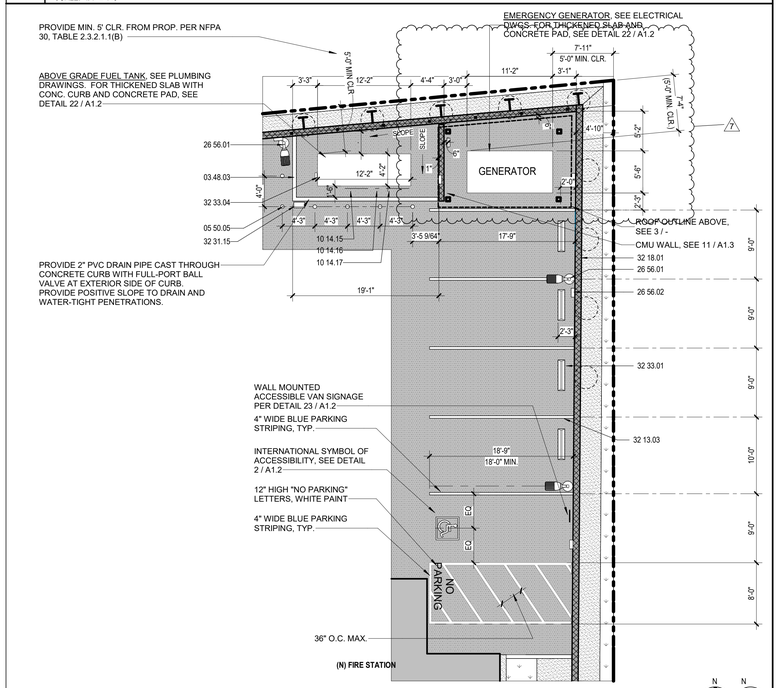
| ENGINE: | BASE: | TANK: |
|---|---|---|
| TAD881VE | 32962 | NONE |
| GENERATOR: | HSG: | SIZE: |
| UCI274F | WPE-109 | B |

SCALE: NONE | SHEET: 1 OF 1




## 3 GENERATOR ENCLOSURE ROOF PLAN

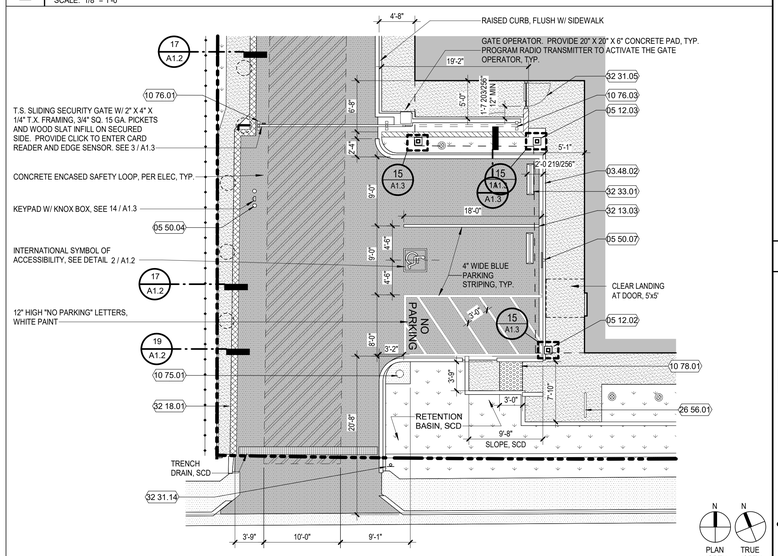
SCALE: 1/4" = 1'-0"




NOTE:. PROVIDE FUEL TANK SHUT-OFF SWITCH AND SIGNAGE AT CONSPICUOUS LOCATION AT LEAST 50' AWAY FROM THE FUEL TANK. SEE DETAIL 15 / A1.2 FOR SIGNAGE INFORMATION.

## 2 ENLARGED SITE PLAN AT GEN / FUEL TANK & ACCESSIBLE PARKING

SCALE: 1/8" = 1'-0"




## 1 ENLARGED SITE PLAN AT ENTRY

SCALE: 1/8" = 1'-0"

## KEYNOTES

| | |
|---|---|
| 03.48.02 | 6" CONCRETE CURB, SEE CIVIL DRAWINGS |
| 03.48.03 | RAISED CONCRETE CURB, TYP. |
| 05 12.02 | STEEL COLUMN. SEE 15/A1.3 & STRUCT. DWGS |
| 05 12.03 | EXTERIOR BUILDING COLUMN, SEE DETAIL 15/A1.3 |
| 05 50.04 | PIPE BOLLARD, FIXED |
| 05 50.05 | PIPE BOLLARD, REMOVABLE, SEE DETAIL 2/A1.3 |
| 05 50.07 | PARKING SIGN POST, SEE DETAIL 23/A1.2 |
| 10 14.15 | FUEL TANK WARNING SIGN, SEE DETAIL 3/A1.2, ADHERE TO FUEL TANK |
| 10 14.16 | NO SMOKING SIGN, SEE DETAIL 12/A1.2, ADHERE TO FUEL TANK |
| 10 14.17 | COMBUSTIBLE LIQUID SIGN, SEE DETAIL 7/A1.2, ADHERE TO FUEL TANK |
| 10 75.01 | FLAGPOLE, SEE DETAIL 11/A1.2 |
| 10 76.01 | GATE STOP, SEE DETAIL 5/A1.3 |
| 10 76.03 | 'ROLLING GATE TRACK WITH STOP GATE RECEIVER AT END OF TRACK SEE 4/A1.3 |
| 10 78.01 | WET SET TRUNCATED DOMES, SEE DETAIL 4/A1.2 |
| 26 56.01 | EXTERIOR POLE MOUNT LIGHT FIXTURE FOR EMERGENCY OPERATIONS ONLY, ON +3'-6" HT. CONC. BASE, KEY SWITCH OPERATED, DIMMABLE W/ SHUTOFF TIMER, SED |
| 26 56.02 | EXTERIOR WALL MOUNT LIGHT FIXTURE FOR NORMAL NON-EMERGENCY OPERATIONS, WARM LIGHT, KEY SWITCH OPERATED & DIMMABLE, SED |
| 32 13.03 | PAVEMENT STRIPING PER SPECS |
| 32 18.01 | RETAINING WALL VARIES IN HEIGHT, SEE CIVIL & 'SS' STRUCTURAL DRAWINGS |
| 32 31.05 | METAL FENCE GATE, SEE DETAILS 9, 10 |
| 32 31.14 | PARKING ENTRANCE SIGN, SEE DETAIL 13 / A1.2 |
| 32 31.15 | GATE PEDESTAL / FUEL KEY READER, SEE PLUMBING DWGS |
| 32 33.01 | CONCRETE WHEEL STOP, SEE DETAIL 9/A1.2 |
| 32 33.04 | FUEL HOSE HANGER |

## SITE PLAN LEGEND

- CONCRETE (SIDEWALK) - 4" P.C.C. OVER 4" AB - #3 REBAR, 18" O.C. EA. WAY, PER SEC. 6.8.4 OF GEOTECH REPORT
- HEAVY TRAFFIC CONCRETE - 8" P.C.C. OVER 12" A.B. - #3 REBAR, 18" O.C. EA. WAY, PER SEC. 6.10.3 & 6.10.5 OF GEOTECH REPORT
- LANDSCAPED AREA, SEE LANDSCAPE DWGS.
- FIRE HYDRANT, SEE CIVIL DWGS
- BUILDING FOOTPRINT
- FIRE DEPARTMENT CONNECTION
- FIRE ACCESS LANE
- BUILDING ID SIGN
- CONC. RETAINING WALL, SEE 19 / A1.2 & RETAINING WALL DWGS
- 8" CMU WALL, SEE DETAIL 11 / A1.3
- PROPERTY LINE
- PROPOSED (N) WOOD FENCING SEE 7 / A1.3, 9 / A1.3 & 19 / A1.2
- POST LOCATIONS
- ACCESSIBLE PATH OF TRAVEL TO BE MIN. 4' WIDE WITH MAX X-SLOPE OF 1.98% & RUNNING SLOPE OF MAX 5%
- LIGHT FIXTURES, SEE ELECTRICAL DRAWINGS
- (E) WOOD FENCE, VARIES IN HEIGHT

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**FIRE STATION #44**
COASTSIDE FIRE PROTECTION DISTRICT

501 STETSON STREET
MOSS BEACH, CA 94038
PLAN CHECK 02 RESPONSE

COASTSIDE FIRE PROTECTION DISTRICT EST. 1923

**PLAN CHECK 02 RESPONSE**




KEY PLAN

CLIENT
COASTSIDE FIRE PROTECTION DISTRICT
PROJECT NUMBER
230137
DATE 03/13/2026
DRAWN BY: KF/OS CHKED BY: AD

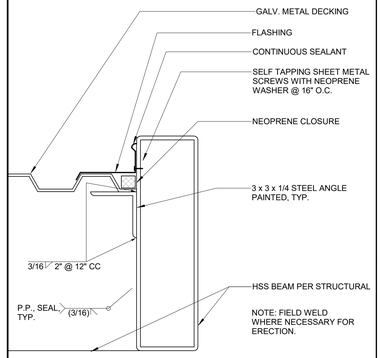
REVISIONS

| # | DESCRIPTION | DATE |
|---|---|---|
| 1 | PLANCHECK #1 RESPONSE | 12/11/25 |
| 2 | NON-PC REVISION | 12/11/25 |
| 3 | PLANCHECK #2 RESPONSE | 03/13/26 |
| 7 | ADDENDUM 8 | 10/28/2026 |

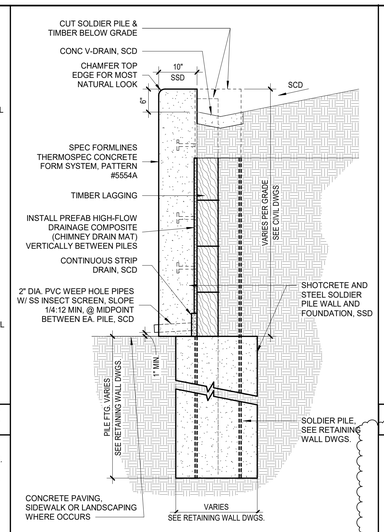
This document is for plan review only

**SITE - ENLARGED PLANS**

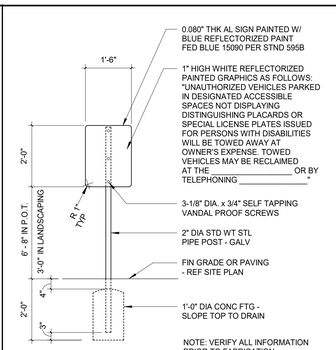
**A1.1.1**



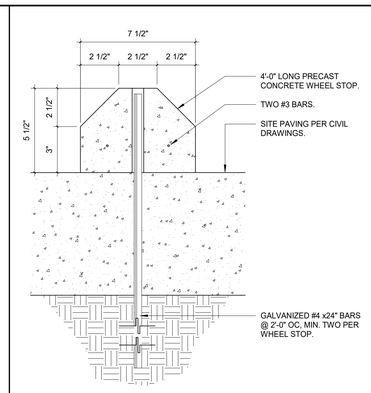

## 21 GENERATOR ENCLOSURE CANOPY RAKE
SCALE: 3" = 1'-0"



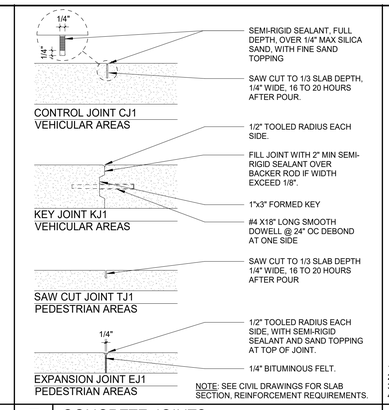

## 17 SOLDIER PILE RETAINING WALL
SCALE: 3/4" = 1'-0"



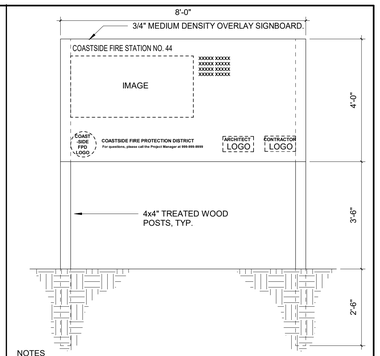

## 13 PARKING SIGN
SCALE: 1/2" = 1'-0"



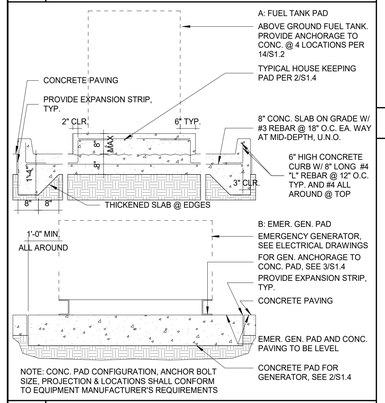

## 9 CONC WHEEL STOP
SCALE: 3" = 1'-0"



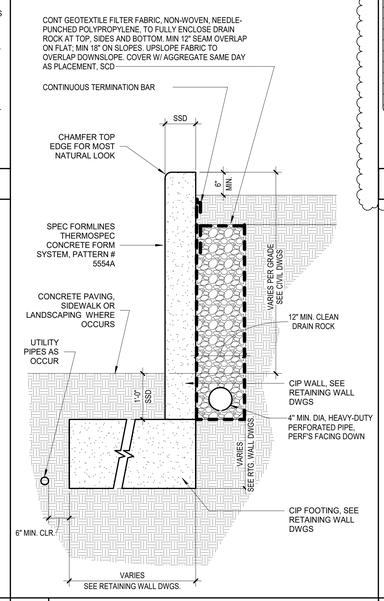

## 5 CONCRETE JOINTS
SCALE: 1" = 1'-0"



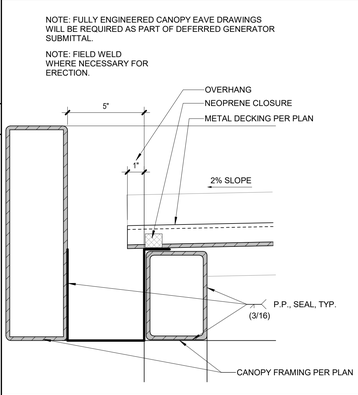

## 1 CONSTRUCTION SIGN
SCALE: 1/2" = 1'-0"



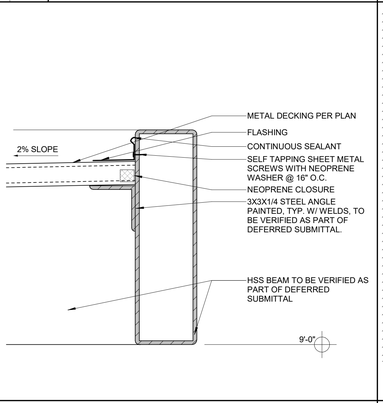

## 22 FUEL TANK + GENERATOR PAD
SCALE: 1/2" = 1'-0"



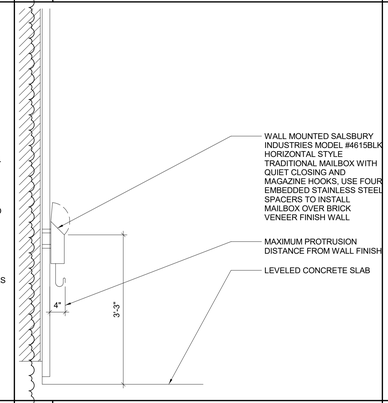

## 19 L-TYPE RETAINING WALL
SCALE: 3/4" = 1'-0"



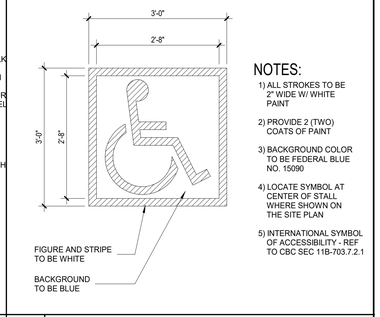

## 10 GENERATOR ENCLOSURE CANOPY EAVE
SCALE: 3" = 1'-0"

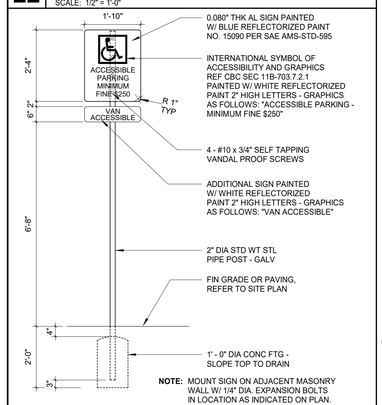



## 6 MAIL BOX
SCALE: 3/4" = 1'-0"

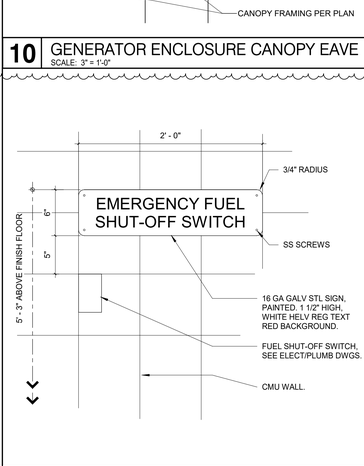



## 2 ACCESS SYMBOL
SCALE: 3/4" = 1'-0"

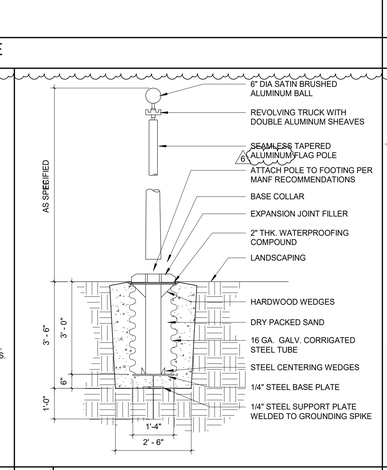


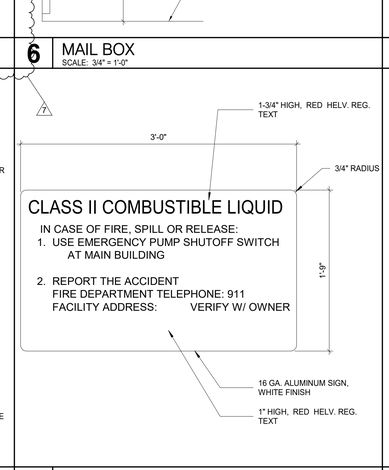

## 23 ACCESSIBLE PARKING SIGN
SCALE: 1/2" = 1'-0"



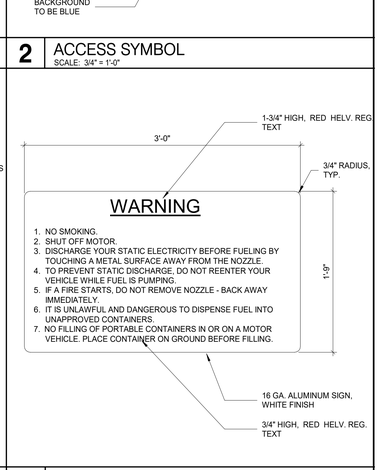

## 15 EMERGENCY SHUTOFF SIGN
SCALE: 1 1/2" = 1'-0"



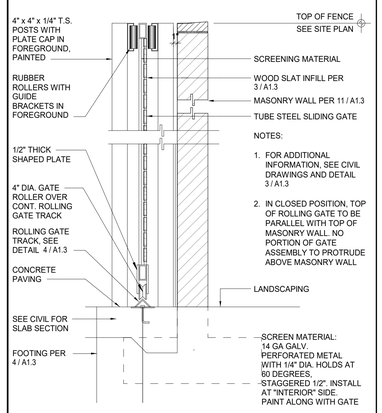

## 11 FLAGPOLE
SCALE: 1/2" = 1'-0"



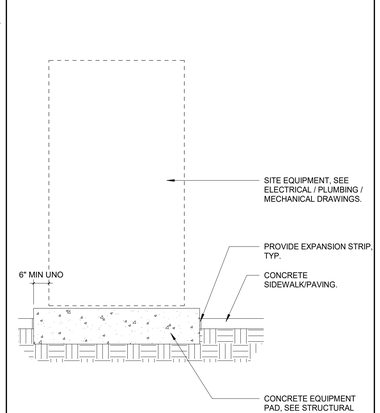

## 7 COMBUSTIBLE LIQUID SIGN
SCALE: 1 1/2" = 1'-0"



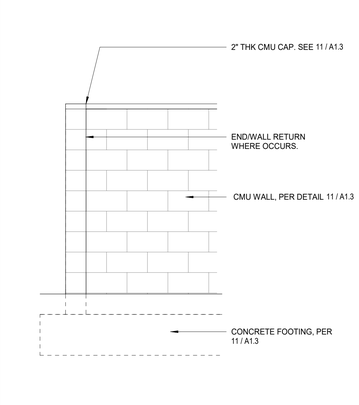

## 3 FUEL TANK WARNING SIGN
SCALE: 1 1/2" = 1'-0"



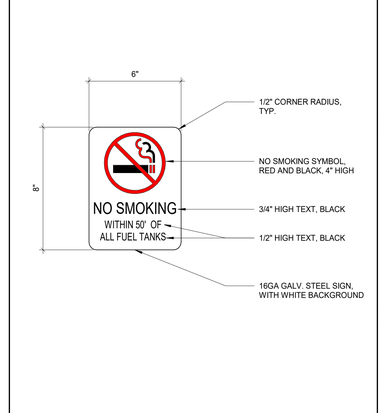

## 24 WALL AT GATE
SCALE: 3/4" = 1'-0"



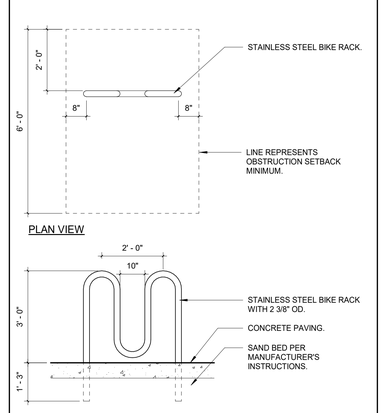

## 20 TYP. EQUIPMENT PAD
SCALE: 1/2" = 1'-0"



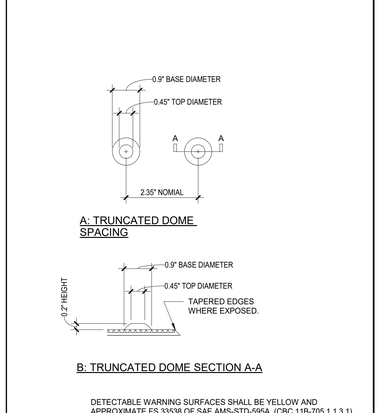

## 16 TYP SITEWALL ELEV
SCALE: 1/2" = 1'-0"




## 12 NO SMOKING SIGNAGE
SCALE: 3" = 1'-0"




## 8 BIKE RACK
SCALE: 1/2" = 1'-0"




## 4 2.1/4 TRUNC. DOME SPACING
SCALE: 6" = 1'-0"

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**FIRE STATION #44**
COASTSIDE FIRE PROTECTION DISTRICT

501 STETSON STREET
MOSS BEACH, CA 94038
PLAN CHECK 02 RESPONSE

COASTSIDE FIRE PROTECTION DISTRICT

**PLAN CHECK 02 RESPONSE**




KEY PLAN
PLAN NORTH
TRUE NORTH

CLIENT
COASTSIDE FIRE PROTECTION DISTRICT
PROJECT NUMBER
230137
DATE 03/13/2026
DRAWN BY: KF/OS CHKED BY: AD

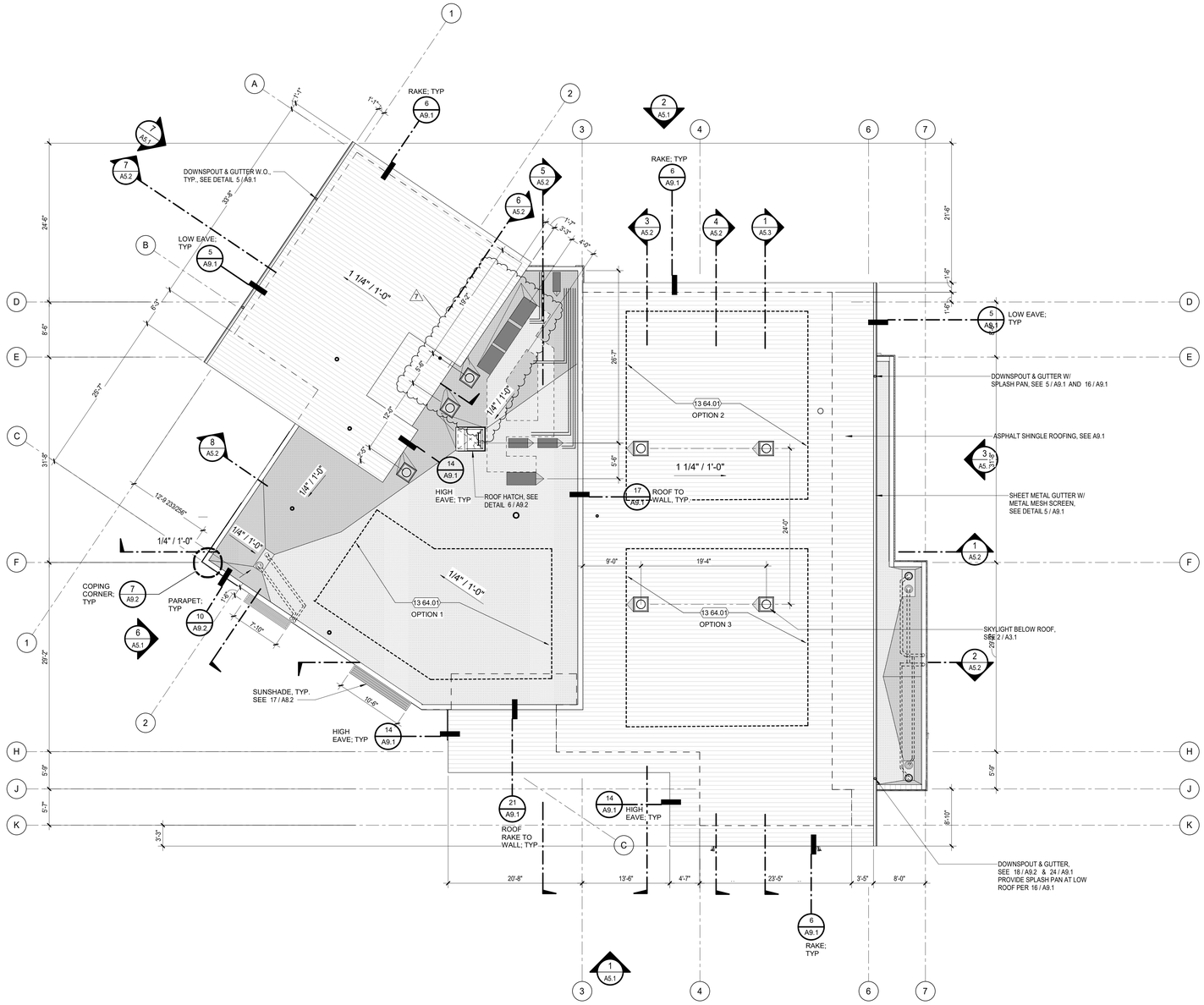
REVISIONS

| # | DESCRIPTION | DATE |
|---|---|---|
| 1 | PLANCHECK #1 RESPONSE | 12/11/25 |
| 6 | ADDENDUM 6 | 10/23/2026 |
| 7 | ADDENDUM 8 | 10/28/2026 |

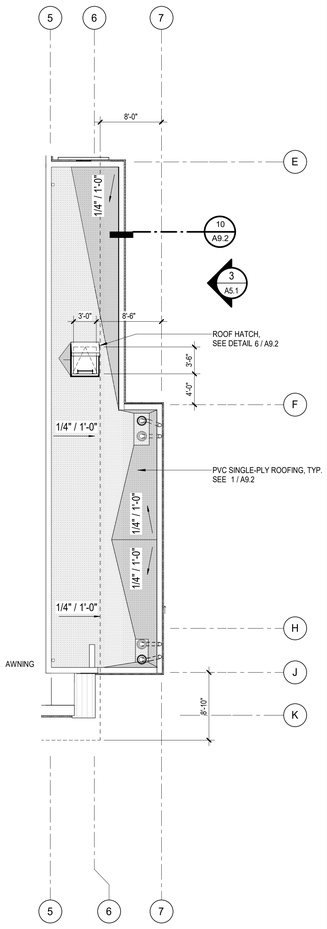
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**SITE DETAILS**

**A1.2**




1 OVERALL ROOF PLAN
SCALE: 1/8" = 1'-0"




2 LOWER ROOF PLAN
SCALE: 1/8" = 1'-0"

## ROOF PLAN LEGEND

- TPO ROOFING MEMBRANE, SEE SPECS
  - MEMBRANE MANUFACTURER: SEE SPECS
  - SYSTEM: SEE SPECS
  - FIRE HAZARD CLASSIFICATION: UL CLASS B
- STANDING SEAM METAL ROOFING, SEE A9.1 AND SPECS.
- ROOF AND OVERFLOW DRAIN, SEE DETAIL 18 / A9.2, 15 / A9.2 AND PLUMBING DRAWINGS
- ROOF ACCESS HATCH, SEE DETAIL 6 / A9.2
- CRICKET, SEE DETAIL 1 / A9.2
- MECHANICAL UNITS, SEE MECHANICAL DRAWINGS. FOR LOUVER AT WALLS SEE MECH. DWGS. & 18 / A9.1
- ROOF GUTTER AND DOWNSPOUT, TYP.
- ROOF WALKWAY MAT, TYP. SEE SPECS AND DETAIL 11 / A9.2
- SKYLIGHT, SOLARTUBE OR EQUAL, SEE SPECS

## GENERAL NOTES

ROOF PLAN NOTES:

1. ALL HEIGHTS ARE REFERENCED FROM FINISH FLOOR ELEVATION = 0'-0". REFER TO PLANS AND SECTIONS FOR ADDITIONAL INFORMATION.
2. FOR ADDITIONAL CONDUIT AND PIPING PENETRATIONS AT ROOF AREAS, SEE MECHANICAL, PLUMBING, ELECTRICAL DRAWINGS AND DETAILS 23 / A9.1 AND 22 / A9.1 AND 19 / A9.1.
3. SEE DETAIL 5 / A9.2 FOR ROOF TOP EQUIPMENT CRICKET.
4. SEE DETAIL 16 / A9.2 FOR FLASHING AT INTERSECTING WALLS.
5. PROVIDE MINIMUM 1/2" PER FOOT ROOF SLOPE FOR DRAINAGE AT ALL FLAT ROOF LOCATIONS.
6. PROVIDE SPLASH PAN FOR DOWNSPOUT TERMINATING AT FLAT ROOF. SEE DETAIL 16 / A9.1
7. PROVIDE SPLASH BLOCK FOR DOWNSPOUT TERMINATION AT GRADE. SEE 20 / A9.1
8. SEE MECH. DRAWINGS FOR FLASHING AT HVAC DUCT AND EQUIPMENT CURBS.

## KEYNOTES

13 64.01 PROVIDE AND INSTALL PHOTOVOLTAIC SOLAR PANELS. (BASIS OF DESIGN, MFR: RECGROUP, MODEL: 'REC ALPHA PURE-R') INSTALL PER MFR DETAILS. SEE ELEC DRAWINGS FOR EQUIPMENT AND ADDITIONAL REQUIREMENTS. ALL ATTACHMENT POINTS MUST BE SECURED TO STRUCTURAL ROOF MEMBERS (RAFTERS/TRUSSES) OR APPROVED BLOCKING METHODS. COMPLY WITH DETAILS FOR ROOF PENETRATION AND FLASHING DETAILS. MAINTAIN MINIMUM AIRSPACE CLEARANCE BETWEEN PANELS AND SHINGLES PER FIRE CODE AND MFR INSTRUCTIONS FOR PROPER VENTILATION.

N PLAN NORTH
N TRUE NORTH

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PLAN CHECK 02 RESPONSE

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**PLAN CHECK 02 RESPONSE**




KEY PLAN
PLAN NORTH
TRUE NORTH

CLIENT
COASTSIDE FIRE PROTECTION DISTRICT
PROJECT NUMBER
230137
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DRAWN BY: KF/OS CHKED BY: AD

REVISIONS

| # | DESCRIPTION | DATE |
|---|---|---|
| 2 | NON-PC REVISION | 12/11/25 |
| 7 | ADDENDUM 8 | 10/28/2026 |

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**ROOF PLAN**

**A4.1**

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