

EXHIBIT 2

City of Vista

FIRE STATION DESIGN AND CONSTRUCTION STANDARDS

NOVEMBER 29, 2006

This document provides guidelines only, subject to final review by the City of Vista.

TABLE OF CONTENTS

	PAGE
A. GENERAL INFORMATION	3
B. FIRE STATION - INTERIOR.....	5
C. FIRE STATION - EXTERIOR.....	8
D. APPARATUS BAY.....	11
E. SPECIALIZED AREAS/ROOM.....	14
F. FIRE STATION LIVING AREAS.....	16
G. SLEEPING AREAS.....	19
H. BATHROOMS.....	20
I. FITNESS AREA.....	21
J. STORAGE ROOMS.....	21
K. PATIO.....	21
L. PUMP TEST PIT.....	21
M. STAND-BY GENERATOR.....	21
N. GENERAL PLUMBING.....	22
O. GENERAL ELECTRICAL.....	22
P. TRASH ENCLOSURE.....	23

FIRE STATION DESIGN REQUIREMENTS

A. GENERAL INFORMATION

The following information has been prepared for fire station design requirements for the Vista Fire Department. These are presented as minimum requirements for normal Fire Stations, and specialty stations will have additional requirements. The requirements will be reviewed at initial design meetings and throughout design development.

Plans shall be prepared showing all details and notes required to provide the contractor with sufficient clarification and information to construct the project to the intended design. Specifications shall be in CSI format with all referenced standards defined in a supplemental manual and presented to the City of Vista.

The design of the fire stations shall consider the use of Green Building Technology. The design shall meet Title 24, ADA and ADAAG access standards. Clarification for design issues regarding ADAAG will be provided by the City as required. A statement shall be made on the cover of the plans and specifications noting that this is an essential service building and that the contractor is responsible for understanding and meeting all specific requirements and codes that apply.

Any items specified in this outline shall be confirmed to be the most current available products for the need.

1. Station Area:

Fire Station 5 will be located in the southern portion of the City, most likely on City-owned property at S. Melrose Drive and Green Oak Road. Fire Station 5 is a four bay, 11 personnel, 10,000-14,000 sq. ft. station (square footage determination is dependent on final site location).

Fire Station 6 will be located in the northern portion of the City, somewhere in the vicinity of Escondido Avenue and East Vista Way. This station will be located north of the east-west rail corridor that runs through the City. Fire Station 6 is a four bay, 11 personnel, 10,000-14,000 sq. ft. station (square footage determination is dependent on final site location).

2. Crew Size

A standard fire station will accommodate a crew of 11 personnel, including the following as required:

- a. 2 Fire Captains
- b. 2 Fire Engineers
- c. 6 Fire Fighter/Paramedics
- d. 1 Paramedic Trainee

3. Fire Apparatus Vehicles

The following fire apparatus/vehicles will be typically assigned to a fire station.

- a. 1 triple combination pumper:

Length:	29-32 feet
Width:	10.0 feet
Turning Radius:	52.0 feet
Weight:	47,000 pounds

- b. 1 aerial ladder truck

Length:	60.0 feet
Width:	10.0 feet
Height:	12.0 feet
Turning Radius:	Varies on apparatus, up to 65' radius,
Weight:	71,000 pounds

- c. 2 miscellaneous vehicles (e.g., B.C. vehicle, ambulance, brush rig or utility vehicles).

- d. Approaches and driveways shall not exceed 4% grade.

4. Communications and Paging System using a system that will allow for individual company and dormitory alerting through audio and visual alerting systems.

- a. Provide a paging alerting system, by ComTech or equal, with speakers located to be audible throughout the entire station and exterior areas under all conditions.

1. Provide alerting control station that allows each dorm to be

individually determined, and set to one of four (4) unit assignments (i.e., engine, ambulance, truck, chief (or other)).

2. Provide exterior weatherproof speakers at all sides of station with an ON/OFF function wired to an automatic timer unit.

3. Provide automatically adjusting paging speakers located to provide complete audio coverage of the apparatus floor.

4. Provide speakers in all rooms, rest rooms and showers.

5. Provide conduit runs to the communication room from each speaker to allow for individual home runs.

b. An in-house telephone paging system will be installed.

c. Provide a quick dial 9-1-1 phone to be used for emergencies only. Phone to be housed in an ADA approved and positioned red weather box with "EMERGENCY 911" noted on the exterior of the box. This shall be located on the exterior of the station near the public entrance.

5. Security

a. The facility will have security fencing/wall and an electrically operated rolling gate at a minimum of 6' above grade. The ornamental iron fence will be designed to provide security for City and personal property.

b. All rolling gates will be electrically operated with key pad, Knox Box key, and remote switch capability in station and using Delta III controller-receiver or equal, and have a metal guidance track mounted in concrete that will guide the gate to its predetermined closure point for every operation and include safety loops.

B. FIRE STATION - INTERIOR

1. Lighting

a. General illumination, energy efficient office type lighting will be provided. Extreme Performance T-8 fluorescent fixtures with electronic ballast system with cool white bulbs or new generation energy efficient systems approved by the City of Vista.

- b. Natural lighting (including windows and skylights) will be provided whenever possible.
- c. Energy efficient lighting systems will be designed according to location and use, such as apparatus bay, kitchen, and sleeping areas.
- d. Provide a night lighting system in hallways and apparatus bay.
- e. Provide an emergency lighting system though out the station.
- f. Some light fixtures should be equipped with timed motion sensor with temporary override capability.

2. Doors and Windows

- a. All exterior windows shall be high quality, noise-reducing, dual glaze, temperature efficient designs, and UV protected. Second story windows shall have a tilt feature allowing cleaning from the interior. Windows shall be operable.
- b. All exterior doors shall be 3' x 7', metal and hung on metal frames.
- c. All interior doors shall be an exterior grade, 3' x 7', and swing in the direction of the apparatus bay, except that doors entering into a hall will open in.
- d. Panic hardware is required on interior doors leading directly into the apparatus bay and second floor fire pole vestibule.
- e. Privacy locks and latch sets are to be utilized on interior doors which lead to dorm rooms.
- f. Lock sets will be Best or equal, and shall have 7 (seven) pin Best (or equal) cores on all locking doors.
- g. Lock sets shall have ability to be keyed to current Vista Fire Department standard locks.
- h. Doors will have a window area as allowed by code, except at restrooms, dorm rooms, and storage rooms.
- i. Doors leading to restrooms, apparatus bay, and the exterior of station

shall have mechanical closures.

j. Stainless steel push plates and kick plates will be installed on all doors.

3. Floor and Window Coverings

a. All flooring used in the fire station shall be of a commercial grade.

b. Exterior windows will be provided with 1" metal mini-blinds or 3" vertical blinds.

4. Walls and Ceiling Surfaces

a. Restrooms, kitchen, storage rooms, weight room, work room, communication room, and apparatus bay shall be painted with 100% acrylic semi gloss finish.

b. Ceilings are to be drywall at restrooms, kitchen, and apparatus bay. Other areas may have drop ceilings as appropriate. Apparatus bay ceiling shall be enclosed with dry wall and insulated.

c. All outside hall corners, apparatus bay area, and high traffic areas shall have 4' high stainless steel corner guards installed.

d. Restrooms shall have tile wainscot.

5. Central Air Conditioning/Forced Air Heating

Central air conditioning and forced air heating shall be provided in living areas as required to maintain 68-72 degrees. The system shall be designed to allow for easy cleaning of the units and duct work.

6. Fire, Smoke, Carbon Monoxide Detectors and Sprinkler System

a. Fire, smoke, and carbon dioxide detectors shall be installed as required by the Uniform Building Code for Group B occupancies.

b. The building shall be provided with a complete automatic fire sprinkler system per existing code. If the station is located in an urban-wildland fire area sprinklers may be required on the exterior of the building.

c. Sprinkler alarm shall be capable of being connected to a central

monitoring station.

7. Cable T.V. Wiring

a. Fire Stations will be wired and connected with cable television; outlets will be located in the day room, kitchen, personnel dorm rooms and weight room.

b. Provide adequate T V cabinet space or wall brackets at each cable outlet location.

C. FIRE STATION - EXTERIOR

1. No landscaping shall be placed within 3' of the exterior of the fire station. Positive drainage shall be provided away from the station.

2. Exterior doors shall be 3' x 7' metal with metal frames, except front entry door which may be store front type or patio doors if approved by the City of Vista.

3. Doorbells shall be interfaced with the station alerting system which ring all areas of the station. They are to be installed on both front and rear exterior doors, with different tones for each.

4. The exterior shall be of a finish that is complementary to the surrounding community, meeting City standards for exterior design.

5. The roofs shall be designed as sloped roofs.

6. The use of flat roofs shall be used to a minimum for mechanical needs only. These areas shall have positive drainage and crickets as needed to direct water to drains. Flat roof surfaces shall be SBS modified bitumen roof system with rock coating over Fesco or equal. Mechanical penetrations shall be kept to a minimum, but when used, shall have a 12" SBS modified granular cap sheet at that area. Parapet walls shall be covered with the appropriate flashing material, and all copings are to be galvanized metal. All terminations in the roof shall be reflected in plan details. All areas of the roof shall have roof ladders for access and provide walking pads to all roof top equipment.

7. Sloped roofs shall not be standing metal seam systems.

8. Rain gutters will be a separate unit and independent of the other roof systems. Rain gutters must be able to be removed and replaced without compromising the integrity of the roofing, flashing, or building finishes. Gutters shall be designed, sized and installed in a manner to catch water shed. Internal roof drains shall be insulated to minimize interior noise in living areas.

9. Hose bibs shall be provided at each side of the apparatus bay, the patio, at each corner of the building, as needed at 75' intervals and at the trash enclosure. If necessary, provide a 1 1/2" supply line off the fire sprinkler supply with a 1 1/2" hose bib with National Standard Pipe tread, controlled with a bronze ball valve, located next to the above ground fuel tank.

10. Provide a hose drying ramp 6' x 55-60' sloped at 1/4" per foot. The ramp shall be surrounded on all sides with a 3' sidewalk.

11. Private Vehicle Parking Areas Driveways and Security Fencing.

a. Where space is available, a private parking area shall accommodate, as space allows, 2 (two) parking spaces per assigned crew.

b. The employee parking area shall be enclosed with a 6 ft. high ornamental iron, or concrete block wall. The gate shall be rolling type, electronically controlled by code pad, Knox Box key control, and Linear remote.

c. An unfenced visitor parking area shall be provided for at least two visitor spaces, and at least one ADA compliant space near the front door.

12. All outside paved areas shall be of 6 inches, 3600 psi concrete, with steel at 12" on center, designed to accommodate heavy equipment. All concrete shall be positively sloped for drainage, with catch basins if required.

13. Outside Lighting

a. Outside lighting shall be timer controlled with a switch override and provided as needed to illuminate the general surrounding area of the fire station, and separate front porch and patio lighting.

b. The crew parking area shall be illuminated with energy efficient

fixtures, with cost-effective replacement bulbs, controlled by photocell in series with a switching ability.

c. Working lights shall be provided at the exterior front and rear of the apparatus bay. These fixtures will be controlled with individual switches.

d. A red light shall be located near the entrance of the fire station, The light will be controlled with a photocell.

e. Two lights shall be located to illuminate the flag pole. These shall be controlled by a photocell in series and have a switch to override the lighting.

14. Landscaping:

a. Provide low maintenance, drought tolerant landscaping with irrigation systems and automatic timers. Whenever possible, fire-safe plant materials shall be used to provide a demonstration of fire-safe landscaping for the benefit of the community.

b. Irrigation shall have a separate meter. Reclaimed water will be considered.

c. The landscaped areas shall have positive drainage away from the building and off the lot.

15. Fire Station Signs: The fire station sign shall be approved by the City of Vista. The sign should read VISTA FIRE STATION ____". The size of the letters is to be 12".

16. Address characters shall be a minimum of 8" high, visible from the street, and illuminated.

17. Flagpole: Provide a 30', ground mounted aluminum flagpole capable of accommodating two 4'x6' flags.

18. Fire Hydrant: a fire hydrant with one 2 1/2" and one 4" outlet shall be positioned near the driveway at the front of the fire station and on the same side of the street, adjacent to the driveway. When drive through capabilities exist, the hydrant shall be placed near the rear of the station driveway on the drivers side.

19. Traffic Control Device: The installation of traffic control devices shall be considered with regards to station locations and traffic signal controls in the area.

20. Provide truck wash area which drains to the oil separator and has a rain diverter valve.

D. APPARATUS BAY:

(No pre- engineered buildings, i.e. Butler Building, shall be used.)

1. The apparatus bay shall, where possible, have drive-through stalls and shall provide 4 (four) bays, and will be defined in design development. Bays shall be a minimum 72' in length unless otherwise approved.

a. The apparatus bay shall be capable of housing 3-6 vehicles including any combination of the following:

- 2 triple combination pumpers (1 for front line, 1 reserve)
- 1 Aerial ladder truck
- 1 Brush rig
- 1 Ambulance
- 1 Battalion Vehicle
- 1 Utility Vehicle

b. The apparatus bay shall be provided with passive and positive ventilation.

c. The apparatus bay shall be constructed with out columns in the open space area.

2. Heavy duty doors shall be provided at the front and at the rear of the apparatus area, for each bay. Bi-fold doors shall be considered, with overhead doors considered as an alternative or addition.

a. Doors are to be individual for each apparatus. One single large door is NOT to be used. Doors shall be sectional and not roll up. Doors shall have a 100,000 cycle heavy duty spring.

b. The apparatus door dimensions are as follows:

- Height: 14 feet
- Width: 14 feet

c. If apparatus doors are to be the overhead sectional type, electrically-operated type. Each door will have a separate electric eye and pneumatic safety device to prevent contact with fire apparatus.

d. Doors are to be able to be operated with push buttons located by each door and radio-controlled with a Linear Delta III controller receiver. The receiver antenna shall be located to receive a signal from the street.

e. Buttons shall have open, stop and close positions.

f. Vision panels are required on each door.

g. All doors shall be wired to the emergency electrical circuit to facilitate continuous operation.

h. Doors are to be factory finished with powder coating.

i. Apparatus doors shall have the ability to have a manual override enabling the door to be opened manually in less than 1.5 minutes

3. Apparatus bay floor is to be 6", 4200 psi concrete, and reinforced with re-bar 12" on center.

a. The apparatus floor shall be poured in keyed sections using greased rods to connect each section.

b. Sections shall be poured in a manner to slope to floor drains at each bay.

c. Where the concrete comes in contact with side walls, front and rear driveways, and any other surface, the floor will be fitted with zip cap felt and caulking.

d. The finished concrete shall be cleaned and sealed in the final phase of finish construction. (notes shall be made on the drawing to protect the concrete finish through out construction)

4. Floor drains are to be located to have at least 2 (two) drains in each bay located under the apparatus. These are to be connected to an oil separator as required by code. Wherever possible, the use of floor-length trench drains down the center of the apparatus bay floor shall be

considered.

5. Apparatus Area Walls/Wall Space

a. Stem walls shall be a minimum of 6" high with 4' high ceramic tile wainscot with an integral-covered base.

b. A smooth 10'x10' wall surface shall be provided for a service area map. This shall be constructed of 3/4' plywood, edge banded, joints sealed and painted white to take sizing/ paper. A map display hanger shall be installed (equal to existing map hangers at current stations). Two 4' fixtures in line fluorescent light with two tubes each shall be provided over the map area, and switched next to the map.

c. A wall mounted 3'x3' whiteboard shall be provided with adjacent telephone.

6. Exhaust Extraction System

a. Adequate separation between the apparatus room and the living area shall be provided to prevent the transmission of apparatus exhaust from the apparatus area to the living areas of the station.

b. Mechanical ventilation shall be provided for the apparatus area with direct hookups to the apparatus exhaust pipe removing 100% of engine exhaust to the outside of the station.

c. The ventilation system shall be automatically actuated and have the ability to provide drive through or back in operation.

d. System shall be Evec System, PlymoVent or pre-approved equal.

7. Lighting shall be provided between each bay with some remaining on at all times, and have the ability to have the remaining lights to be switched on and automatically come on when the paging alert system activates. This requires a relay at the communication room.

8. Drop cords shall be provided on the drivers side of each vehicle. Each drop is to be on its own circuit. The cord shall be 12/3, 600V, and water resistant. The cord shall have a rubber coated, water proof bell box with a rubber coated lid, HBL17CM85, having a built in switch and an on indicator light. The cord will terminate with a female 20 amp connector. A 2' (two)

foot break away section will be added to the female termination having a 20 amp male fitting on one end and a 30 amp 125 V twist end, HBL2613, on the other end. The 30 amp end is to hang 12" from the floor.

9. Provide electrical outlets along all walls spaced at 12' intervals, on walls between apparatus doors, and on any stem walls.

10. A compressor capable of 150 psi, Ingersall-Rand 2475N5 W/ starter, shall be installed and plumbed to provide access to designated areas of the apparatus bay. Plumbing shall be sloped to water separator and have ¼" quick connections.

E. SPECIALIZED ROOMS/AREAS (WASH ROOM, WORK ROOM, ELECTRICAL ROOM, MECHANICAL ROOM, LOCKER ROOM, WEIGHT ROOM, AND COMMUNICATION ROOM)

1. Wash room shall be provided containing a washer and dryer, deep sink, shower area, and a hose bib.

a. The wash room shall be finished in tiles with a central floor drain.

b. A shower stall will be provided, being 4' x 5' in the clear.

c. A wall mounted deep sink shall be provided in this area.

d. Provide area to accommodate a commercial grade washer, dryer and extractor. This area for the washer shall have hot and cold water, a drain for a residential washer. The dryer area shall be capable of being gas or electrical, and be vented to the exterior.

2. Work Room

a. A work room shall be directly adjacent to the apparatus area.

b. A 30"x8' work bench constructed with a solid 1 1/2" hardwood top covered with galvanized sheet metal. A storage base cabinet and upper cabinets shall be provided. A space with backing shall be provided for mounting a vise on workbench top.

c. A floor drain will be installed in this area going to the oil and sand separator.

3. Water Room: Provide a separate area for a commercial quality water heating system. Consider methods to provide hot water in a timely to all areas of the fire station.

4. Electrical Room: An electrical/mechanical room shall be located in a manner that would allow access by utility companies.

5. Communications Equipment Room

a. The communication room shall be a minimum of 8' x 10' in the clear.

b. The room shall be air conditioned.

c. One 10' wall and one 8' wall shall be covered with 3/4" plywood, good one side, beginning 3' off the floor and extending to 7'.

d. Provide conduit, pull boxes, and pull cords to all rooms requiring communication connections, including phones, cable TV, computer equipment, and Alert System.

e. Provide four (4) circuits in communication room in double duplex boxes. Each circuit shall be on emergency power and isolated ground.

f. Provide a two-inch conduit between the communication room and a weather head mounted on the exterior of the building. This shall be located on a high portion of the building next to a location for an antenna mount. An antenna mount shall be provided using two Unistrut post placed 2' apart securely attached to the building.

6. Storage Room / Hose Storage Area: Provide an exterior storage room 5' x 9' with a vented door.

7. Locker Room: A turn out locker room shall be provided to house the required number of lockers for the crew size. The room shall be vented to the exterior and enclosed with doors.

a. The number of lockers shall be for a crew of 11 is 36, and 12 is 38.

b. The locker room shall be located next to the apparatus bay. The room will be provided with passive and positive ventilation.

c. The lockers, without legs, shall be installed on concrete house keeping

pads.

d. The lockers shall be of a type determined by the City of Vista.

F. FIRE STATION LIVING AREAS:

MAIN ENTRY DOOR: The main entry door and entry area shall be located next to the watch room/office and have an ADA restroom adjacent to this area.

1. Office Space

There will be three separate offices for the Captain, Engineer, and Firefighter/Paramedics.

A. Captain's office

1. The Captain's office will provide ample work and desk space for 2 Captains. The work space will provide enough room for each captain to have a computer terminal, desk work space, file cabinet and mailbox. A space for a third computer will also be included, if possible. A built-in wall mounted bookcase will also be included.
2. Electrical outlets for three computers, two printers and a fax machine in the captain's office will also be provided.
3. Provide conduits for phone data lines.
4. Each office shall have a window, if possible.

B. Engineer's office

1. The Engineer's office will provide ample work and desk space for two engineers. The work space will provide enough room for each engineer to have a computer terminal, desk work space, file cabinet and a mail box. A built-in wall mounted bookcase will also be included.
2. Provide electrical outlets for two computers, one printer and a fax machine in the engineer's office.
3. Provide conduits for phone data lines.
4. Each Engineer office should have a window, if possible.

C. Firefighter/Paramedic's Office

1. The Firefighter/Paramedic's office will provide ample work and desk space for four (4) firefighter/paramedics. The work space will provide enough room for each firefighter\paramedic to have a computer terminal, desk work space, file cabinet and mailbox. A built-in wall mounted book case will also be included.
2. Provide electrical outlets for five computers, one printer and a fax machine.

3. Provide conduit for phone data lines.
4. The firefighter/paramedics office should have a window, if possible.

2. Training Room

The training room should be of sufficient size to accommodate the training needs of the personnel assigned to the station and if necessary, hold community meetings up to a group of 40 people.

- a. The room should be accessible from the public areas of the parking lot and separated from the main station by way of a key pad entry lock. Restroom facilities shall be accessible to the public from the entryway.
- b. Provide a wall mounted dry-erase board (4' x 8') with a bottom shelf.
- c. Provide a wall mounted bulletin board (3' x 6').
- d. Provide a motorized projection screen in the front of the room of suitable size to allow for viewing of a presentation by all the room occupants.
- e. Provide ceiling mount, electrical connection, and VGA/DVI connector for video projector as specified by the fire department.
- f. Provide cable TV, electrical, and network connections for the Tandberg video conferencing system preferably in the floor (Rancho network line) at a location designated by the fire department.
- g. Provide display cabinets to house memorabilia.
- h. Provide cabinet to house the computer required for the video projector. This area should also have a network cable (city computer system) and be able to hold a VCR/DVD player, overhead presenter, and A/V switcher.
- i. Consider having microphone and amp to overhead speaker system for audio.
- j. Provide electrical outlets and network outlets in event the room becomes a department operation center in the event of a large scale incident.
- k. Provide upper and lower cabinets similar to those in the kitchen for a small kitchenette. Countertop should contain a sink.
- l. Small storage room for tables and chairs accessible from the room is desirable.
- m. Provide wall mounted jacks for network, audio (XLR, 1/4", RCA, and 1/8" jacks), and VGA/DVI cables for use with laptop computer near the front of the room.
- n. Provide built-in book case approximately 4' x 6'.

3. DAY ROOM: The day room shall be large enough to house the number of crew assigned to the station in large chairs. The day room is to be separate from the kitchen and dining area.

- a. Provide a wall mounted bulletin board (3'x6').
- b. Provide a built-in bookcase approximately 4' x 6'.
- c. Provide built-in cabinet space for a 52" TV and video cassette recorder, and DVD player, with access to a double duplex outlet and cable TV outlet. This unit may be designed with the book shelving.
- e. Floor is to be carpeted in this area.

4. KITCHEN AND DINING AREA

- a. The kitchen and dining rooms may be designed together and shall be sufficient to accommodate the size of crew. If the two are to be open to each other sufficient wall space will be considered to allow adequate cabinets for storage.
- b. Cabinet Space Storage Space:
 - 1. All cabinets shall be W.I.C. custom grade.
 - 2. The countertops shall be stainless steel, or of a solid surface, similar to Corian, Silestone, or equivalent.
 - 3. Provide four separate pantries, each pantry is to have individual lock and key, the minimum size of each pantry is 2'x2'x8', and adjustable shelves are to the same as above.
 - 4. Provide cabinets over the kitchen counter to assure adequate storage space for dishes and food. Depth of upper cabinets shall be 12 inches in the clear (14" in depth). Provide two microwave ovens in the uppers with electrical.
 - 5. Base cabinets counter tops shall be 37 1/2" high with drawers on heavy duty glides. Cabinet space shall be maximized to provide adequate storage for utensils, pots and pans, and food. Base cabinets shall be 30" deep at the stove and sink. The sink base cabinet shall be 40" wide.
 - 6. Provide a stainless steel or solid surface kitchen counter with full back splash to bottom of upper cabinets and a built-in large double sink. Sink to be #4 finish, 14-gauge, bottom coated, one side of the double sink is to be 18"x18"and 10" and the other is to be 18" x 18" x 8" deep; sink is to

have a 3-holes for faucet plus two holes for spray accessory and filtered water spigot. Provide electrical outlets with stainless steel cover plates. Provide a heavy duty (minimum 3/4 horsepower) SS garbage disposal.

7. Provide commercial grade, stainless steel dishwasher and electrical and piping for operation.

8. Provide kitchen island for food prep with sink and disposal.

9. Provide cabinet door for opening equal sized to the dishwasher for a trash receptacle and continue adjacent floor covering into this area.

d. Wall and Floor Surfaces

1. Walls shall be painted with 100% acrylic paint with a semi gloss surface.

2. Floors shall be covered with commercial floor covering.

3. A floor drain shall be provided, with the appropriate floor slope to drain.

e. Refrigerators: Provide space, water supply for ice makers, and electrical outlets and ventilation for four (4) 36" wide refrigerators.

f. Gas Range and Oven: Provide space to accommodate a 48" wide heavy duty gas range and oven. Clearance on each side of the range shall be a min. of 6" and the adjacent cabinets and rear wall shall be covered in stainless steel.

g. Range Hood:

1. Install suitable range hood for stove and oven.

2. Range hood shall include two (2) lights, a two-speed, roof-mounted exhaust fan with a 3/4 HP motor capable of proper CFM, and removable, washable stainless steel filter screens. The hood shall conform to Health Code, U.B.C., U.M.C., and N.E.C. as adopted by the City and County of San Diego.

G. SLEEPING AREAS: All dimensions are in the clear.

1. The Captain's room is to be a minimum of 10' x 12' with an attached

restroom. A restroom is to be provided for each captain. Shared restrooms can be utilized if space demands this modified design and can be shared by two officers if the rooms are adjoining. Under this condition, each officers room will have an individual sink.

2. The fire fighters /paramedics are to have a minimum of 10' x 10' rooms in the clear.

3. Sleeping areas shall be located to minimize disturbance when one crew is called to respond. Each room shall be insulated and have sound battens on adjoining walls.

4. Lockers are to be provided in each dorm room

a. Four lockers shall be located in each room.

b. Provide a padlock eye set Master 60.

5. Desks tops are to be built into each room. The crew rooms are to have 30" desk top units. The Captains are to have a 5' desk with a file drawer and pencil drawer. The Battalion Chief is to have a 6' desk in their office with drawers on each side to accommodate files and a pencil drawer.

6. Lighting

a. Provide fluorescent wall mount lighting above each desk and bed with individual control, and adequate reading light above bed.

b. The overhead lighting fixture is to be individually controlled from within each room.

c. Provide an exterior window to provide natural light.

7. Provide adequate room for televisions in each dorm room with cable and electrical outlets provided.

H. BATHROOMS: Battalion Chiefs and Captains will have individual bathrooms attached to their dorm rooms and the remaining crews will have one bathroom per each 3 dorms.

1. Bathrooms will be provided that will accommodate separate male and female occupancy.

2. The showers shall be 36" x 40", minimum, in the clear, Showers pans are to be hot mopped in or have a solid terrazzo or equal pan. The tile at the shower area is to be epoxy grouted.

3. Lavatory sinks are to be mounted on 37 1/2" cabinets, specified to match the kitchen in quality, and to be epoxy grouted tiles on sealed wonder board or solid polymer. The mirror will be constructed with a SS frame, size call out varies with opening size, minimum 2' x 2'. A liquid soap dispenser, and a paper towel holder, a SS towel hook shall be adjacent, or towel bar.

4. The water closet shall be enclosed by walls and have a double roll toilet paper dispenser.

5. Floors are to have floor drains and be finished in commercial grade flooring.

I. FITNESS AREA: A fitness area shall be provided in the fire station. This room shall be a minimum of 20' x 20' and be provided with a window if possible and have HVAC. The walls will be backed with a minimum of 1/2" ply with drywall covering, and have backing to mount weight equipment. The floors shall be on concrete or have double 3/4" plywood and be covered with rubber matting.

J. STORAGE ROOMS: Provide two (2) storage rooms inside the station, both are to be minimum 3' x 4' and have adjustable shelves, one is to have a lock fitted door for medical supplies. An additional exterior storage room is to be provided with a minimum of 4' x 5'.

K. PATIO: Provide a private patio with a gas outlet, electrical outlet for a barbeque and switched lighting. Provide SS Barbeque.

L. PUMP TEST PIT

A standard pump test pit shall be included for one of the stations.

M. STAND-BY GENERATOR

1. A diesel-fueled stand-by generator shall be provided for continuous standby service and sized at 25KW or other designated size by the City. The unit shall have a weather/sound enclosure.

2 The fuel tank shall be integrated with the generator and have remote fill capability. Tank will be sized to provide 48 hours of operating run time and

shall meet all applicable codes and regulations. When the location of the generator and fuel tank are in close proximity (10') the fuel can be supplied by the fuel tank. The fuel line can be exposed and have a gutter under it leading to the curbed area around the tank.

3. A trickle charger shall be installed to maintain proper charge of generator batteries and a remote monitoring panel shall be located in the office.

4. The stand-by generator shall operate the following locations as a minimum: overhead doors, all communications equipment including phones, alert monitors with amplifier, kitchen appliances and refrigerators, minimum selected lighting throughout the station, fuel dispensing systems, various selected outlets throughout the station (emergency outlets shall be color-coded red and there will be a minimum of one per room), exhaust extraction system.

5. The generator and its engine shall meet the most current Federal, State, County and Local laws, regulations, standards, and codes. The engine shall be certified, and meet all State and local EPA standards.

N. GENERAL PLUMBING:

1. Toilets shall be wall mounted with water saving flush valves.

2. The kitchen and restrooms shall have floor drains with trap primers. Primers are to be solid brass or bronze, no plastic parts, and are easily accessed via inspection panels.

3. Hose bibs on the building shall be installed. They are to be located on each side of the apparatus bays and at 75' intervals.

4. Plumbing walls shall have 2" x 6" studs.

5. All hot water pipes are to be insulated.

6. All angle stops shall be ball type with 2 A FIP.

7. Kitchen faucet is to be Chicago, hot and cold single wing handles, swing spout with hose and spray, Model 1102 CP, or approved equal.

8. Lavatory faucets are to be single handle, Moen L4721, or approved equal.

O. GENERAL ELECTRICAL

1. All exterior lights shall be energy conserving and time clock controlled and motion sensors.
2. Cost of replacement bulbs will be considered in selection of fixtures.
3. Flexible conduit should only be used to connect motors and for lay out of fixtures.
4. All receptacles and switch boxes shall be 4" x4" x 1/2" with mud rings.
5. Telephone systems, computer systems, radio communications and cable television systems shall be designed in the building development using conduit.
6. Computer systems shall be on dedicated circuits.
7. Use stranded conductors for all feeders and branch circuits.
8. All wall switches shall be commercial grade, heavy duty, 20 amp, 120v/277v and duplex receptacles shall be commercial grade heavy duty, 15-20 amp 120v/277v.
9. Wall plates shall be non breakable nylon or SS.
10. Use T-8 and other energy efficient fluorescent light systems where ever possible, except for individual reading lamps, or wherever applicable.
11. Provide a wire marker on each connector in the pull panel, pull boxes, and junction boxes. Label the inside of all cover plates and the junction boxes with the circuit number.
12. Connect all wiring device grounding terminals to an outlet box with bonding jumper.
13. Provide source protector (surge protection) for power entering the building.

P. TRASH ENCLOSURE: Adequate enclosed space shall be provided for trash and garbage containers 10'x6'x6' high minimum.