



THE CITY OF SAN DIEGO

# SAN DIEGO FIRE-RESCUE DEPARTMENT

## LIFEGUARD STATION AND FACILITIES DESIGN & CONSTRUCTION STANDARDS

LIFEGUARD STATION **NAME**  
**STREET ADDRESS**

This document provides as guidelines only. Drawings and specifications developed for design and construction are subject to final review and approval by San Diego Fire-Rescue Department's Logistics-Facilities Division.

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# LIFEGUARD STATION DESIGN AND CONSTRUCTION STANDARDS

## A. GENERAL INFORMATION

The following information has been prepared for lifeguard station design requirements for San Diego Fire-Rescue Department. These are presented as minimum requirements for Lifeguard Stations, and specialty stations will have additional requirements. The requirements will be reviewed at the initial design meetings and through-out 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 Construction Specification Institute (CSI) format with all referenced standards defined in a supplemental manual and presented to San Diego Fire-Rescue Department.

While most lifeguard Stations are well below 5,000 square feet, please note that the architectural design of the lifeguard station shall use Green Building Technology in accordance with the City of San Diego adapting the minimum Silver LEED Standard, Leadership in Energy and Environmental Design. The design shall meet Title 24, Americans with Disabilities Act (ADA) and Americans with Disabilities Act Accreditation Guidelines access standards. Clarification for design issues regarding ADAAG will be provided by the City as required. In addition 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 meet 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 intended use.

### **1. Station Area: \_\_\_\_\_ Lifeguard Station**

Lifeguard Station at \_\_\_\_\_, located at,  
\_\_\_\_\_ shall be a \_\_\_\_\_ bay, \_\_\_\_ personnel,  
\_\_\_\_\_ square feet station.

### **2. Crew Size**

A standard lifeguard station will accommodate a crew of \_\_\_\_ personnel, including the following as required: A lifeguard permanent crew consists of: (March through October) 3-4 seasonal/day, 2 sergeants and 1 lieutenant. Three permanent staffs = 5 staff/ per day, during the summer peak months

(mid June through 1<sup>st</sup> week September) 16 Seasonal per day (A total of 21 staff during peak months).

### **3. Lifeguard Rescue Vehicle Facility (RVF)**

The following lifeguard Rescue Vehicle Facility (RVF)/to accommodate various rescue vehicles that will be typically assigned to a lifeguard station.

- a. Rescue Vehicle 11' height
- b. Miscellaneous vehicles (e.g., PWC's or utility vehicles). Tandem parking is acceptable, in some circumstances.
- c. Approaches and driveways shall not exceed 4% grade.
- d. Storage for rescue tools including buoys, rescue boards, personal rescue equipment (wet suits, fins, dry suits, float coats, various hand tools, work bench) shall be provided. In addition, provide storage to accommodate two ADA wheelchairs for beach access.
- e. RV wash area shall be provided that meets current Stormwater's JURMP, BMP regulations. This area shall be used to wash rescue vehicles and flush PWC.
- f. Walls shall be structurally sound for eyelets & anchors to be attached, to provide cliff rescue training.

### **4. Lifeguard Observation Tower (Primary)**

Lifeguard observation tower area shall be a minimum of \_\_\_\_\_. The glass shall be opti-gray factory finished tinting. The front & side glass shall be tilted at a minimum of 10 degrees and a maximum of 15 degrees. Track on the ceiling for the high powered binoculars "Big eyes" rack shall be provided... A full 360 degrees observation shall be achieved, to provide visual access to the water, the sides and possibly the parking lot area of the beach. Positive airflow circulation shall be provided through operable windows and/or doors. Based on the proposed design and existing topography, a simulated visual study shall be conducted to ensure it meets lifeguard's visual access requirements for rescue operations.

### **5. Communications and Paging System**

Use a system that will allow for alerting through audio and visual alerting systems. A specific company for the communication needs to be determined.

- a. Provide a designated, LIFEGUARD STATION Control System alert paging system, with speakers located to be audible throughout the entire facility

and exterior areas under all conditions.

- I. Provide the capability to turn facility paging system off and on in designated rooms.
- II. Provide exterior weatherproof speakers compatible with marine environment at ocean side of facility.
- III. Provide automatically adjusting paging speakers located to provide complete audio coverage of the Rescue Vehicle Facility (RVF) floor.
- IV. Provide speakers in all rooms, rest rooms and locker rooms.
- V. Provide conduit runs to the communication room from each speaker to allow for individual electrical home runs.
- VI. Communication room typically applies to Lifeguard Headquarters.
- VII. An in-house telephone alert paging system will be installed to meet the requirements of the Public Works Communications Department. This system may be integrated with facility alerting system
- VIII. Provide an auto dial 9-1-1 phone equal to the new alert phone installed at Fire Stations 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.
- IX. The Communications Division require that a conduit be installed at any new Fire & Lifeguard facility to meet present or future need to communicate with the City's wireless networks. While, not all facilities will need to utilize this conduit as the signal strength in some areas may be adequate for an internal antenna, there may be future systems that require an external antenna and the conduit/roof penetration. Both should be reflected in the design and the construction phases of the facility. The conduit is for the transmission line, not fiber optics.
- X. Conduit for Transmission Line: The Communications Division requires a 2" conduit from the TELCO room to the roof. The conduit needs to penetrate the roof and be capped with a weather hood. When possible, use the most direct path between the TELCO room and roof. The Communications Division will provide the transmission line and antenna when needed. Plan review and final inspection will be conducted at the project site by the IT Department of the Communications Division for

approval.

## **B. LIFEGUARD STATION - INTERIOR**

### **1. Lighting**

- a. General illumination, energy efficient office type lighting will be provided. An example of this is the extreme Performance T-8 fluorescent fixtures with electronic ballast system with extended life cool white bulbs or new generation energy efficient systems approved by the Fire-Rescue Department. Every effort will be made to limit the use of non-standard light bulbs.
- b. Natural day 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 Rescue Vehicle Facility (RVF) area and break room.
- d. Provide a night lighting system in hallways, restrooms, common areas and Rescue Vehicle Facility (RVF) floor.
- e. Provide an emergency lighting system though out the station (if generator is located on the facility).
- f. Light fixtures will be equipped with occupancy sensor with override capability.
- g. Provide exterior lighting to all sides of the building.

### **2. Doors and Windows**

- a. The RVF should be on the north side and the south side shall have either operable awning windows or louvers that will allow ample circulation air from the south side to ventilate the RVF area.
- b. All exterior doors shall be 3' x 6' -8", (standard 3068) metal and hang on metal frames. All exterior doors shall have a factory powder coated finish to withstand the severe marine environment.
- c. All interior doors that lead to the RVF shall be an exterior grade, solid

wood core, birch skinned, 3' x 6'-8", and swing into the direction of the RVF floor area. Doors that lead entering into a hallway shall open in.

- d. Panic hardware is required on interior doors leading directly into the RVF area. Panic hardware shall be Von Dupin® or equal.
- e. Privacy locks and latch sets are to be utilized on interior doors which lead to locker rooms.
- f. Lock sets will be by Best and shall have 7 (seven) pin Best cores on all locking doors. Contractor shall provide a construction core and those cores will be replaced by City of San Diego lock shop personnel.
- g. Doors will have window area as allowed by code, except at restrooms, locker rooms, and storage rooms.
- h. Doors leading to restrooms, Rescue Vehicle Facility (RVF) room, and the exterior of station shall have mechanical closures.
- i. Stainless steel push plates and kick plates will be installed on all doors
- j. Look Out Tower Windows: Standard window angle for windows within look-out tower shall be 115-130 degrees.
- k. Look Out Tower Windows: Pull Down Mylar is the Triplex, color : Eclipse
- l. For office only windows only: (privacy blinds) Sheer weave, U65 Eco/Ebony, Style: 4400

### **3. Floor and Window Coverings**

- a. Non-carpet flooring such as wood laminate, cork, stained & sealed concrete, or Interlocking floating vinyl flooring, commercial grade only, shall be utilized for offices, locker room, hallways, and break room.
- b. The restrooms shall be tile, commercial grade linoleum, or stained & sealed concrete.
- c. Break room shall be commercial grade linoleum or stained & sealed



concrete.

- d. Fitness room shall have a rubber workout flooring of ½" thickness.
- e. Exterior windows which require shading from the sun will be provided with vertical blinds or 1" metal mini-blinds or 3" vertical blinds (except in the tower).
- f. Exterior windows shall have protection for Lifeguard after-hours security.

#### **4. Walls and Ceiling Surfaces**

- a. Locker rooms, restrooms, break room, storage rooms, fitness room, work room, office, communication room, and Rescue Vehicle Facility (RVF) shall be painted with 100% acrylic semi gloss finish.
- b. Ceilings are to be mold resistant drywall in locker rooms, restrooms, break room, and Rescue Vehicle Facility (RVF); other areas may have drop ceilings as appropriate. Rescue Vehicle Facility (RVF) ceiling shall be enclosed with dry wall and insulated.
- c. All outside corners within the interior walls shall have corner guards installed using stainless steel guards.
- d. Restrooms shall have tile wainscot.

#### **5. Central Air Conditioning/Forced Air Heating**

Central air conditioning and forced air heating shall be provided in designated areas as required to maintain 68-72 degrees. The system shall have a protective coating on the heating and air conditioning equipment; coils, fins, tubes, fans, and even the cabinets. The protective coating extends the life of the equipment and help to maintain good air flow efficiencies. The system shall be designed to allow for easy cleaning of the units and ducting.

#### **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.

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

## **7. Cable T.V. Wiring**

a. LIFEGUARD STATIONS will be wired and connected with cable television service; outlets will be located in the break room, kitchen, and fitness room. TV mounting brackets shall be installed at an elevated position in each designated room.

b. Provide flat screen T V wall mount brackets at each location.

## **8. Centrifuge Dryer**

I. Lifeguard Stations will be equipped with one Centrifuge Dryer for swimsuits.

9. Ensure 8' desk space 2 personnel within look-out tower.

## **C. LIFEGUARD STATION - EXTERIOR**

### **1. Doors & Windows:**

I. Exterior doors shall be 3' x 6'-8" metal with metal frames, except front entry door which may be storefront type or patio doors as approved by Fire-Rescue Department.

II. All exterior windows shall be high quality, noise-reducing, dual insulated glaze (double or triple pane), temperature efficient designs, and UV protected. Second story windows shall have a tilt feature allowing cleaning from the interior. Windows shall be operable.

III.

**2. Doorbells** shall be interfaced with the station alerting system that rings all areas of the station and is connected to computers. They are to be installed on both front and rear exterior doors, with different tones for each.

### **3. Private Vehicle Parking Areas Driveways**

I. Twelve parking spaces shall be provided.

II. All outside driveways and aprons adjacent to the RVF room floor and be a minimum of 10 inches, 4200 psi concrete, with steel at 12"

on center, designed to accommodate the department's Fire Rescue equipment and apparatus.

- III. All other outside paved areas such as walkways, parking areas shall be a minimum of 6 inches, 3600 psi concrete, with steel at 12" on center. All concrete shall be positively slope for drainage, catch basins if required.
- IV. A designated area shall be utilized for the washing of rescue vehicles and shall comply with storm water requirements.

**4. Bird Proofing** shall be provided for all lifeguard stations with wires (not stainless steel) or Monofilament Lines arranged vertically and horizontally over the entire roof.

## **5. Outdoor/Exterior Lighting**

- I. Outside lighting shall be timer and photocell controlled with a switch override and provided as needed, to illuminate the general surrounding area of the LIFEGUARD STATION and a separate front porch.
- II. 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.
- III. Working lights shall be provided at the exterior front and rear of the RVF room. These fixtures will be controlled with individual switches.

## **6. Landscaping:**

- I. Provide low maintenance, drought tolerant landscaping with irrigation systems and automatic timers.
- II. Irrigation shall have a separate meter. Use reclaimed water if available.
- III. The landscaped areas shall have good drainage away from the building and off the lot.
- IV. No landscaping shall be place within 3' of the exterior of the LIFEGUARD STATION. To address potential drainage issue. As an alternative a xeriscape landscape shall be installed.

## **7. LIFEGUARD STATION Exterior Signs:**

The LIFEGUARD STATION sign shall be approved by the Fire-Rescue Department. The sign should read "City of San Diego, LIFEGUARD STATION \_\_\_\_". The size of the letters is to be a minimum of 8" and 10". The font style shall match with the architectural style of the building.

- a. Address characters shall be a minimum of 12" high, visible from the street, and illuminated.
- b. Red Cross' to be painted on building at locations set by the design consultant and accepted by Fire-Rescue Dept.
- c. Flagpole:
  - I. Provide a 30' ground mounted aluminum flagpole with locking halyard box if the pole is in the public area.
  - II. Outrigger type wall mount pole
  - III. Vertical wall mount pole capable of accommodating a 4'x6' flag.

## **8. Mail Slot**

Lifeguard Station shall have a slot in the door for receiving mail. It should meet the following standards.

- a. The opening must be at least 1 1/2" x 7".
- b. Horizontal slots must have a flap hinged at the top. Vertical slots should be hinged on the opposite side from the door's hinges.
- c. If you have an inside hood for more privacy, the hooded portion shouldn't be below the bottom of the outside plate on a horizontal slot. On a vertical slot, the hood shouldn't extend beyond the side of the outside plate on same side as the door's hinges.
- d. The hood should not project more than 2 1/16" beyond the inside of the door.
- e. The bottom of the slot must be at least 30" above floor.

## **9. Outdoor Equipment Racks**

- I. Materials to be used: Baltic or Marine Grey Plywood.

#### **D. Rescue Vehicle Facility (RVF):**

1. The Rescue Vehicle Facility (RVF) room shall, where possible, provide 3 (three) or 4 (four) bays as required by size Rescue Vehicles. Rescue Vehicles consist of jet skies, quads, and surf rescue board racks. Bays shall be a minimum 20' in length and provide 14' Rescue Vehicle Facility (RVF) doors, both in height and width unless otherwise approved.

- a. The Rescue Vehicle Facility (RVF) shall be provided with passive and positive ventilation.

- b. The Rescue Vehicle Facility (RVF) shall be constructed with out columns in the open space area.

2. Commercial quality overhead doors shall be provided for each bay.

- a. Doors are to be individual for each Rescue Vehicle Facility (RVF). 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. During operation each door will have a safety strobe light indicating while the door is opening to full height.

- b. The Rescue Vehicle Facility (RVF) door dimensions are as follows:

Height:	11 feet
Width:	14 feet

- c. Rescue Vehicle Facility (RVF) doors are to be the overhead sectional type, electrically-operated type. Each door will have a separate electric eye and electrical safety device to prevent contact with lifeguard vehicles. Eyes shall be set at 2.5 feet above floor to intersect the vehicle bumper.

- d. Doors are to be able to be operated both at push buttons located by each door, a master control panel adjacent to the main Rescue Vehicle Facility (RVF) floor door entry. Doors operators shall be compatible with 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 at approximately 5'6".
  - g. All doors shall be wired to the emergency electrical circuit to facilitate continuous operation. Cut-off switch shall be installed at each door within reach, for maintenance & repair purposes.
  - h. Doors are to be factory finished with powder coating capable of withstanding the severe marine environment.
  - i. Rescue Vehicle Facility (RVF) doors shall have the ability to have a manual override enabling the door to be opened manually in less than 1.5 minutes
3. Rescue Vehicle Facility (RVF) room floor shall be a minimum of 6 inches, 4200 psi concrete, and reinforced with re-bar 12" on center
- a. The Rescue Vehicle Facility (RVF) 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 2 (two) drains in each bay located under the Rescue Vehicle Facility (RVF). These are to be connected to an oil separator as required by code.

#### **5. Rescue Vehicle Facility (RVF) 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. Lighting shall be provided between each bay with occupant sensors and lighting override.
- c. Provide electrical outlets along all walls spaced at 12' intervals, on walls between Rescue Vehicle Facility (RVF) doors, and on any stem walls.

- a. A compressor capable of 150 psi, Ingersoll-Rand 2475N5 W/ starter, shall be installed and plumbed to provide access to designated areas of the Rescue Vehicle Facility (RVF) room. Plumbing shall be sloped to water separator and have ¼" quick connections.

**E. SPECIALIZED ROOMS/AREAS** (First Aid Room, Wash room, Electrical and phone room, mechanical room. and fitness room).

**a. First Aid Room** shall be a minimum of 10' x 12' with an attached ADA restroom.

- I. Shall be provided containing a stainless steel counter with a stainless steel sink.

II. The first aid room shall be finished with a central floor drain.

III. A floor basin shall be provided with hot and cold water for filling buckets.

**b. Wash room** shall be provided containing a washer and dryer, deep sink, and a hose bib.

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

b. A mop service floor basin will be provided, being 4' x 5' in the clear.

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

d. Provide area to accommodate an electric washer and 220 volt dryer. 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 vented to the exterior.

**c. Electrical Room:** An electrical/mechanical room shall be located in a manner that would allow access by San Diego Gas & Electric Company and the phone company without accessing the building.

**d. Communications Equipment Room**

- a. The communication room shall be a minimum of 4' 6" x 10' in the clear.

- b. The room shall be air conditioned or conditioned from an adjacent room through louvered doors.
- c. Provide conduit, pull boxes to accommodate City's cable contractors to pull cable cords to all rooms requiring communication connections, including phones, cable TV, computer equipment, and Alert System. All cabling is provided by the City's current vendor (Cable Inc.) in order to obey City standards for all Communications requirements. This may change in the future).
- d. Provide four (4) circuits in communication room in double duplex boxes. Each circuit shall be on emergency power (if generator is installed).
- e. 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. Station Alerting must comply with SDFD's current standards and specifications (see Exhibit #1)
- f. The final conduits size and location shall be identified to be used for phone/data ports, PA system, intercom (station alerting system if needed). The current City approved vendor contract and Department of Communication require two 2" conduits with a 12x12x4" pull box set(s) on the wall with the small back entrance door. If more than one pull box is required, both will accept two, 2" conduits. The current City vendor shall identify the correct height from the finish floor and final location for the pull box.

**6. Locker Room:** A locker room, one for the men and one for women, shall be provided to house the required number of lockers for the crew size. The rooms shall be vented to the exterior and enclosed with doors.

- a. The number of lockers shall be for a crew of \_\_\_\_ is \_\_\_\_.
- b. The locker rooms shall be located next to the Rescue Vehicle Facility (RVF) room. The room will be provided with passive and positive ventilation.
- c. The lockers shall be installed on concrete housekeeping pads.



- d. The lockers shall be heavy duty, non-rusting, 45% ventilated metal or other types of industrial material lockers (thermal plastic or others), 24"x24"x72"; 16 gauge steel, flat tops, bottoms and sides; 14 gauge steel doors with recessed handles with padlock attachment, and space for name tag. The lockers shall have a shelf at the top and three (3) each paired hooks, one on each side and one on the back.

## **F. LIFEGUARD STATION AREAS:**

**1. RECEPTION AREA:** The office room shall be, approximately 10' x 12', large enough to provide for;

- a. One built in standard 30"x60" desks with a swivel chair.
- b. Counter space for a computer terminal 23" W x 15" D, one printer, fax, and copier all in one, and desk top telephone.
- c. Provide built in legal size file cabinets.
- d. Provide electrical outlet for a computer, printer, fax machine, and table top cable grommets in proper locations near work station. These are to be on emergency power (if generator is installed).
- e. Provide a 1 inch conduits for four (4) phone/data lines, two (2) for phones one for computers and one for fax.
- f. Provide a counter for public near front entry with ADA approved section.
- g. Provide a window.

**2. MAIN ENTRY DOOR:** The main entry door and entry area shall be located next to the office / first aid room and have an ADA rest room adjacent to this area.

## **3. BREAK ROOM AREA**

- I. The Break room, cooking area, and dining area may be designed together or considered separate. The area of the dining area shall be (15 -20) x (20-25). If the two are to be open to each other sufficient wall space will be considered to allow adequate cabinets for storage.

II. The floor of both areas is to be sealed concrete, porcelain, or ceramic tile.

III. Cabinet Space Storage Space:

- I. All cabinets shall be Wood Institute Criteria (W.I.C.) premium grade.
- II. The sides, bottoms, and backs are to be 3/4" exterior glue plywood. The doors are to be of solid wood. The top is to be 3/4" ply as a backing for stainless steel counter top. Shelves shall be 3/4" exterior rated ply covered on both sides with laminate, edge faced with 1 1/4" banding, and be adjustable. No particle board with melamine.
- III. Doors are to be installed with SS Rockford Process Control hinges, 851 overlay brushed stainless steel. Pulls are to be SS wire pull type. Drawers and pull-out shelves are to be constructed of Baltic Ply with self-closing full extension drawer guides.
- IV. All cabinets exposed surfaces shall be plastic laminated material.
- V. Provide cabinets over the break room counter to assure adequate storage space for dishes. Depth of upper cabinets shall be 12 inches in the clear (14" in depth). Provide a section to house a microwave oven in the uppers with electrical.
- VI. Base cabinets counter tops shall be 37 1/2" high with drawers on heavy duty, self-closing 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.
- VII. Provide a one piece stainless kitchen counter with full back splash to bottom of upper cabinets and a built-in large double sink. Counter top shall be 16 gauge, 304 stainless steel with marine edge on front and exposed ends and extend over the edges of drawers and doors. Integral built in 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 22 gauge, 303 stainless steel, for wall covering from counter top back splash to under side of upper cabinets. Provide electrical outlets with stainless steel cover plates. Provide a heavy duty (minimum 3/4 horsepower) SS garbage disposal.

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

#### IV. Wall and Floor Surfaces

- I. Walls shall be painted with 100% acrylic paint with a semi gloss surface.
- II. Floors shall be covered with a porcelain, non-porous tile, ceramic tile or terrazzo.
- III. A floor drain shall be provided, with the appropriate floor slope to drain.

V. Refrigerators: Provide space, water supply for ice makers, and electrical outlets and ventilation for one 36" wide refrigerator. Fire-Rescue Department will provide the refrigerator.

VI. Electrical Range and Oven: Provide space to accommodate a 48" wide, heavy duty electric 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.

#### VII. Range Hood:

- 1. Install a stainless steel commercial grade or equivalent hood sized to extend 6" beyond each stove edge (varies by stove model). A 48" range shall be provided and the hood shall be compatible with BTU output of the provided range.
- 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.

VIII. Provide a cabinet space and electrical outlet for a 1.5 cubic foot

microwave oven.

**G. FIRST AID ROOM:** All dimensions are in the clear.

The First Aid Room shall be a minimum of 10' x 12' with an access to ADA restroom.

**H. BATHROOMS:**

1. Bathrooms will be provided that will accommodate separate male and female locker room.
2. Provide a shower, a sink and a water closet per each three lifeguards.
3. If partitions are to be used, they shall be Phenolic or solid plastic type, with SS hardware, and no metal partitions.
4. The showers shall be 48" x 48" (4' x 4'), minimum, in the clear, with individual drying enclosures, if required, which will be contiguous with their respective showers. The enclosure will have a folding seat with phenolic seat and SS frame, as Bobrick B5191, two (2) SS hooks, Bobrick B-6777, a 24" towel bar, Bobrick B205, a shelf Bobrick, B-295-16. The shower shall have a soap dispenser, Bobrick B-2111, a shelf, Bobrick B-204-16 and a shower door will be installed. The drying area, if required, shall have a privacy door. 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.
5. 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, as Bobrick B290, size call out varies with opening size, minimum 2' x 2'. A liquid soap dispenser, Bobrick, B-2111 and a paper towel holder as Bobrick, B-359, a SS towel hook shall be adjacent, Bobrick B-6777 or towel bar, Bobrick B-205.
6. The water closet shall be enclosed by walls or partitions and have a double roll toilet paper dispenser, Bobrick, B6867.
7. Floors shall slope towards floor drains and be finished in tile. The walls are to have tile wainscot to 4'.

**I. EXERCISE / PHYSICAL CONDITIONING AREA:** An exercise room or physical conditioning area shall be provided in the LIFEGUARD 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 fitness equipment. The floors shall be on concrete or have double 3/4" plywood and be covered with rubber matting.

**J. STORAGE ROOMS:** Provide one mini storage room inside the station at each floor, both are to be minimum 3' x 4' and have adjustable shelves; one is to have a lock fitted door for medical supplies and other station supplies.

**K. GENERAL PLUMBING:**

1. Toilets shall be wall mounted with a height equal to the ADA requirements with water saving flush valves.
2. The break room and locker room 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
  - I. With restricted public access shall be provided at each side of the RVF room, at each corner of the building, as needed at maximum 25' intervals and at the trash enclosure.
  - II. Hose bibs on the building shall be installed with box housing and be key controlled type. They are to be located on each side of the Rescue Vehicle Facility (RVF) bays and at 15' intervals.
  - III. One hose bib shall have Hot Water capability.
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.
7. Shower valves and head are to be Moen, posi-temp, Model T2444 +25902.
8. First Aid Room and Break Room faucet is to be Chicago, hot and cold single wing handles, high rise swing spout with hose and spray, Model 1102 CP, or approved equal.
9. Lavatory faucets are to be single handle, Moen L4721.
10. All PVC and ABS pipes and fittings shall be solvent welded. Pressed fittings

are unacceptable.

11. Dedicate one hose bib for Hot & Cold Capabaility.

12. Water Meters shall be 1.5".

## **L. GENERAL ELECTRICAL**

1. All exterior lights shall be energy conserving LED and time clock controlled and motion sensors.

2. Cost and standardization of extended life 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 Stainless Steel. Galvanized steel can be used in Rescue Vehicle Facility (RVF) Bay areas.

10. Use T-8 extended life bulbs and other energy efficient fluorescent light systems where ever possible. Lighting in the Rescue Vehicle Facility (RVF) shall have occupancy sensors and a manual override. LED lighting can be used if approved by Fire-Rescue Facilities Manager. No incandescent lamps.

11. Provide a wire marker on each connector in the panel, 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.
14. All outlets on emergency back-up generator shall be noted on wall plate.

#### **M. TRASH ENCLOSURE:**

Adequate enclosed space shall be provided for garbage containers (10'x6'x6' high minimum) or dumpster containers to accommodate trash and recyclables.

#### **N. ATTACHMENTS:**

- Surge protection building system

#### **O. ADA COMPLIANCE:**

LIFEGUARD STATION facilities must comply with current American with Disabilities Act (ADA) requirements. Please consult directly with Fire-Rescue Facilities Manager to discuss & coordinate compliance review. Each project is reviewed on a case by case basis.

Note: LIFEGUARD STATIONS must provide one ADA-compliant public restroom. One of several bathrooms designed for the lifeguard crew must be “adaptable” by providing a temporary shower curb that can be removed if needed, while ensuring the prevention of potential drainage issues. Other design alternatives include: providing a shower wall towards the door and have an opening on one side for access or shower enclosure, in lieu of a curtain.

#### **P. TEMPORARY DISPLACEMENT REQUIREMENTS:**

1. **LIFEGUARD STATION facilities** that require complete demolition of an existing station and new construction require a comprehensive temporary displacement plan that outlines the temporary location (in coordination with Real Estate Assets Department – READ and possibly other City departments), to accommodate the existing station crew and the necessary Rescue Vehicle Facility (RVF) and other office equipment, bathroom, kitchen, to ensure that lifeguard operations are not interrupted and the temporary facility and area are secured.



2. **Single Wide Trailer** shall provide office space, small kitchen and bathroom.
3. **Designated parking** for lifeguard staff.
4. **Temporary Tower, Example:**



5. **Temp area** to be completely fenced off from Construction & Staging Area.

Temporary Lifeguard Towers cost roughly \$48K and may be purchased through "Industrial Design Research": <http://surveyorlifeguardtowers.com/index.htm>

#### **Q. Phone/Data Cable**

1. **Communications Closet** shall be 3' deep X 4' wide X 8' tall.
2. **Conduits** should be 2" (PVC Interior, Rigid Galvanized Conduit Exterior).
3. **800 MGH2 Antenna** and City Fiber Optics connect to roof via 2" Rigid



Galvanized Conduits.

4. **PA System** shall be a standalone system.
5. **Provide conduit and pull boxes** to accommodate City's cable contractors to pull cable cords to all rooms requiring communication connections, including phones, cable TV, Data and Alert System. All cabling is provided by Cable Inc in order to obey City and Xerox (or the City's current approved vendor) standards for all of Communications requirements. This may change in the future.

## **R. FURNISHINGS, FURNITURES & EQUIPMENT (FF&E):**

### **1. RADIO CHARGING STATIONS:**

A charger full of radios needs to be 20" wide (side to side), 18" High (Top to bottom with radios in the charger), and 18" deep (Front to back this includes the tilt of the radios). We would like to fit 4 chargers. Preferably, two chargers side by side per shelf with an extra shelf for charged radios and dead batteries. So, we would like a total of three shelves at least forty inches wide, 18 inches deep, and 18 inches apart from each other. We need to be able to lock the cabinet or add a pad lock to it. It needs to have ventilation and multiple outlets.

### **2. FIRST AID BED:**

Provide a rolling hospital bed or gurney or similar equipment that provides versatility and saves space. Ex. <http://www.buckeyemedical.com/Hausted-APC-Manual-Gurney-Chair-Refurbished/>

### **3. DOOR KEYLESS HARDWARE:**

The door keyless entry systems for doors is Essex or similar specifications that can With stand the harsh corrosive marine environment.



### **4. Equipment Racks**

- a. The fin and buoy rack shall be of 3/4 marine grade ply triple coated with

marine resin (two part varnish?).

- b. The surf rack (the builder has a patent pending). 1 1/2" marine grade ply, triple coated with two part marine resin.
- c. The wetsuit rack shall be of aluminum tubing and speed rail.

## **S. Glazing**

### **1. Look-Out Tower Glass**

The Pacific Beach Lifeguard tower glass is as follows:

The raked observation tower glass is a 3/8" laminated glass with a make-up of: 1/4" Optigray 23 - .030 clear laminate - 1/8" clear with low-E

The aluminum window glass make up is 1" insulated glass with a make-up of: 1/4" Optigray 23 - 1/2" air space - 1/4" clear with low-E

The Optigray 23 has been discontinued by the manufacturer PPG. Oldcastle Glass has recommended Graylite II glass as an alternative.

Please visit the [www.ppg.com](http://www.ppg.com) website for more info on the updated Graylite II glass.



**PPG Industries, Inc. Flat Glass**

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**Monolithic Glass Unit Performance Data**

	IGU Thick	Transmittance			Reflectance			U-Value								
		UV	Visible	Solar	Visible Exterior	Visible Interior	Solar Exterior	Winter Night	Summer Day	SC	SHGC	RHG	LSG	Tdw-K	Tdw- ISO	
* All information represents Center of Glass Performance Data *																
6mmOptigray23 Monolithic (old)	0.223	8%	23%	19%	5%	5%	5%	1.02	0.93	0.50	0.43	112.2	0.53	13.4%	19.6%	
6mmOptigray Monolithic (new)	0.223	33%	63%	51%	6%	6%	5%	1.02	0.93	0.74	0.64	161.2	0.98	40.3%	54.9%	

Simulations were ran using LBNL Window6.3 software with version 37.0 of the International Glazing Database and represents center of glass performance data.

Performance data is based on representative samples of factory production. Actual values may vary slightly due to variations in the production process. This data is to be used for comparison purposes and should not be considered a contract or guarantee of product availability. It is the recipient's responsibility to ensure the manufacturability of the above glazing configurations as well as evaluating appropriate design considerations such as wind and snow load analysis, thermal stress analysis, and local building code compliance. PPG recommends that a full size mock-up be reviewed under the specific job-site conditions and retain the mock-up as a basis of acceptable product.

Simulations provided are NFRC approved.

**Steven D. Marino**

Manager, Technical Support

PPG Flat Glass

10/1/2014

**2. Mylar for Lookout Tower**

Mylar is the Triplex, color: Eclipse

**3. Window Shades**

Sheer weave, U65 Eco/Ebony, Style: 4400

**4. All other Windows**

Window Hardware shall be non-corrosive, commercial grade for marine environment.

**T. Architectural Design**

**1. Catwalk/Deck**

Deck shall be recessed below finish floor elevation to provide uninterrupted, full visual access.

**2. Rebar**

All rebar shall be "Epoxy Coated".

3.

**U. ALMP**

## **1. Inspection Reports**

Provide a copy of the ALMP Inspection Report and all ongoing air monitoring sampling results for our records.

Any hazardous materials (Lead & Asbestos) that have been identified