

ESER 2014 - Neighborhood Fire Stations

FS35 – Fireboats Headquarters

**Presentation to
the Capital
Planning
Committee**

October 19, 2015

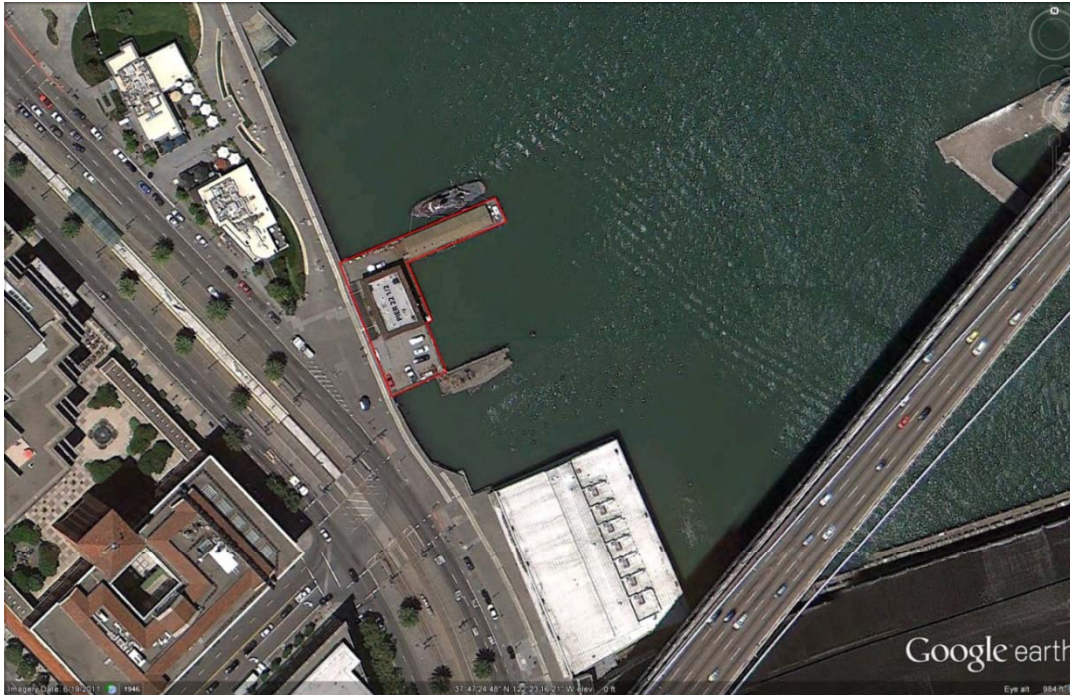
Agenda

- Existing Conditions
- Operations
- Apparatus & Equipment
- Response Time
- Building Program
- Like-Jurisdiction Comparison
- Budget
- Schedule



Neighborhood Fire Stations – ESER 2014

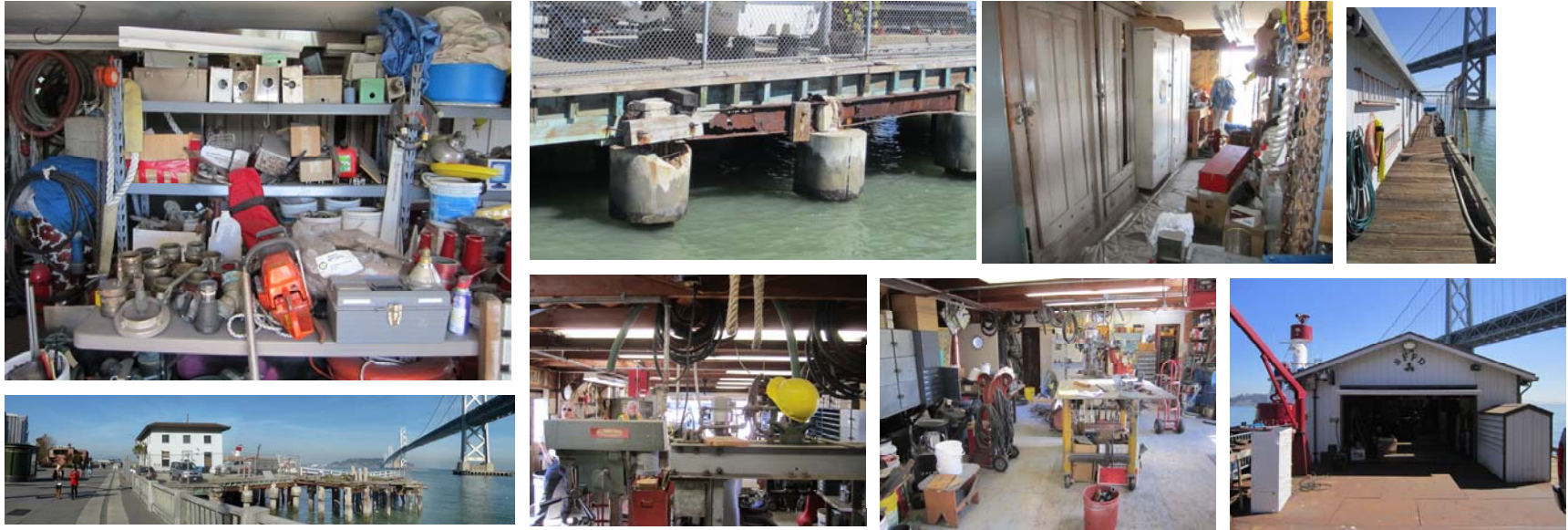
FS35 – Fireboats Pier – *EXISTING CONDITIONS*



- Fire station #35 is 4,736 sf
- Fireboats Operations Facility is 1,720 sf
- 1 dock
- 21 members are assigned to FS35.
- There are a minimum of 7 members on shift at any given time

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FS35 – Fireboats Headquarters – *EXISTING CONDITIONS*



- The current space is grossly undersized
- Both piers are deteriorating and one is deemed completely unsafe
- Current facilities are over 100 yrs old - costly repairs continue to mount
- Locker facilities and rest rooms are inadequate for male and female fire fighters
- Storage is offsite - equipment is out of reach of responders in major emergency
- Spill response containment booms in trailers away from water
- Split operations
- A third Fireboat is scheduled to be delivered next year

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FS35 – Fireboats Headquarters – *EXISTING FACILITY DEFICIENCIES*

SFFD operational effectiveness is limited by the current facility

- The fireboats need regular and ongoing maintenance including welding and other metal work – this is currently done in the existing wood framed shed structure.
- Welding is hazardous in this facility.
- Fire station and pier structure have not been seismically retrofitted
- No ambulance access to back of fire station for transfer of injured
- No waste oil tank for service truck access – currently stored in 55 gallon drums
- No decontamination space for firefighters and equipment
- No drying or storage space for wet suits and lifejackets (must be separate from turn-out drying)
- No cranes to raise/lower small rescue water craft into water
- No reasonable means to lift heavy equipment to/from fire boats - maintenance or fire fighting equipment

Neighborhood Fire Stations – ESER 2014

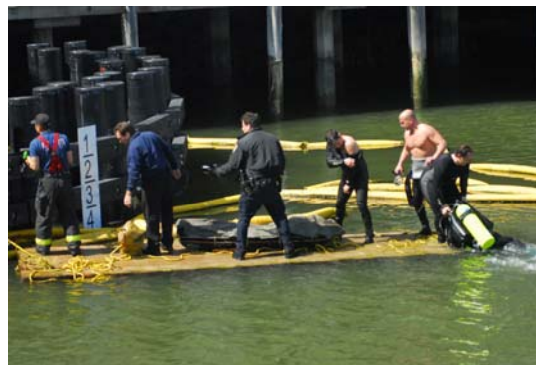
FS35 – Fireboats Headquarters - *OPERATIONS*



- Water rescue, Fire ops, EMS, body recovery, spill containment, PWSS & AWSS
- Significant maritime traffic and several bridges.
- SFO generates 1,500 – 2,000 flights daily with runway approaches over the bay.
- Commercial ship traffic brings significant tonnage of freight across the Bay
- Ferry & Cruise companies carry millions of passengers per year around, and in & out of the Bay.
- Oil refineries for Chevron, ARCO and Shell; jet fuel companies such as Kinder Morgan in Bay Area.

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FS35 – Fireboats Headquarters – *APPARATUS & EQUIPMENT*



- Only Type 1 Fire Boats in California, North of Los Angeles
- Two Dive Teams, rescue boats, jet skis
- Emergency Ambulance access onto pier is essential

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FS35 – Fireboats Headquarters – *RESPONSE TIME*



- Both water and land operations affected
- Originally, most calls came from the GG bridge side of the Bay.
- The City is creating new development on the South East side of the City and Waterfront

Neighborhood Fire Stations – ESER 2014

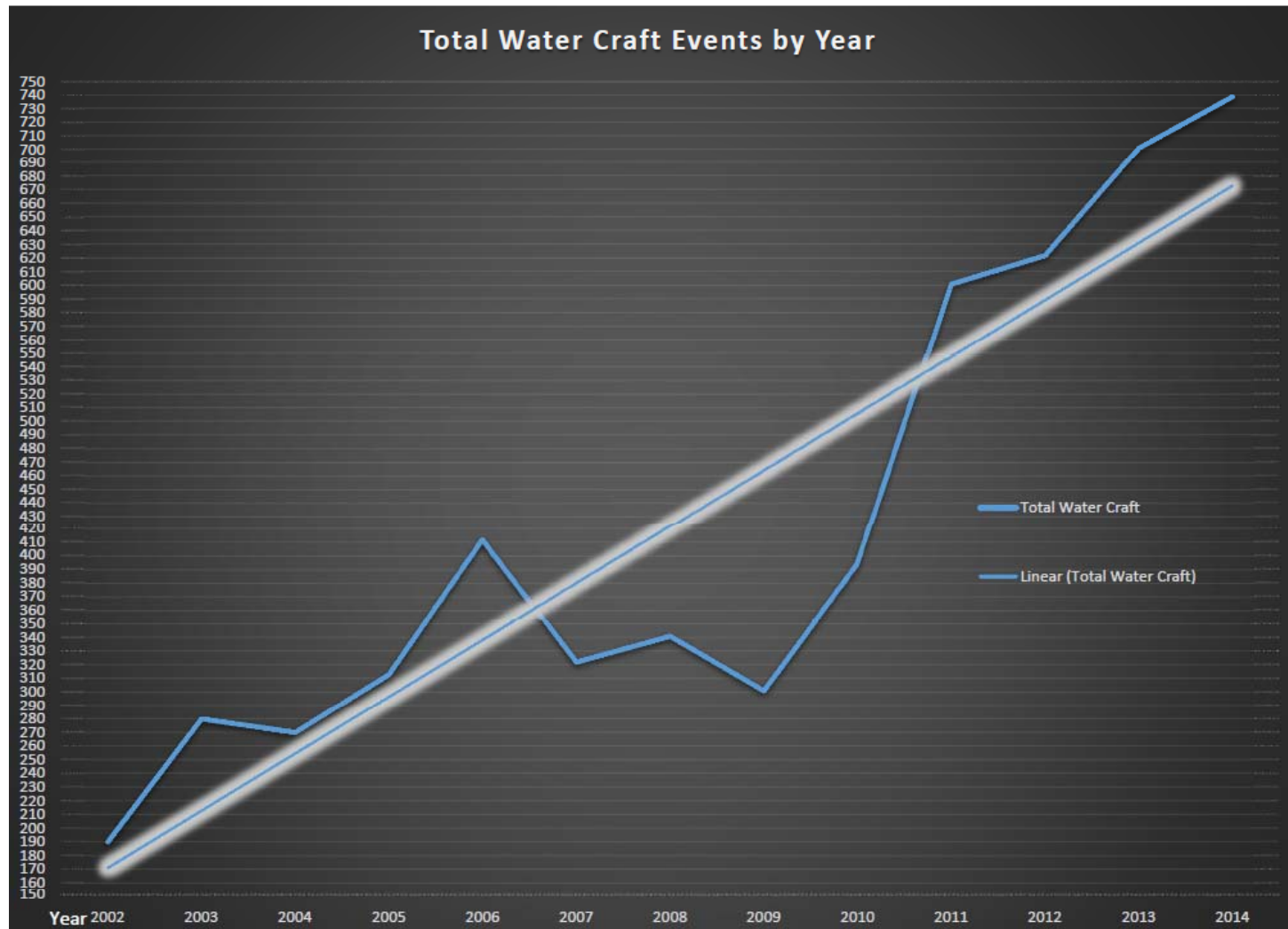
FS35 – Fireboats Headquarters – *All Craft Service Response*

Units	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
CR1	25	25	19	43	47	47	49	52	52	59	69	73	99
FB1	143	185	230	210	244	173	149	141	184	252	219	293	267
FB2	11	49		3			25						
RB1					1	4	11	4	39	111	116	124	117
Other RB UNITS	0	0	0	4	0	0	0	2	1	0	0	0	0
RWC1			4	11	47	41	36	35	42	70	87	92	101
RWC2			4	9	45	38	34	35	41	76	90	91	94
SR1	11	21	13	33	28	19	37	32	35	33	41	28	61
Grand Total	190	280	270	313	412	322	341	301	394	601	622	701	739

CR1 – Cliff Rescue
 FB1, 2 – Fire Boat
 RB – Rescue Boat
 RWC1, 2 – Rescue Water Craft
 SR – Surf Rescue

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FS35 – Fireboats Headquarters – *Total Water Craft Service Response*



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FS35 – Fireboats Headquarters – *BUILDING PROGRAM – 1st Flr.*

PROGRAM	EXISTING AREA	MMA PROGRAM AREA (SF)	BDC PROGRAM AREA (SF)	COMMENTS
NEW BUILDING				
FIRST FLOOR				
MARINE EOC	0	936	935	
NIGHT WATCH / COMMUNICATIONS	352	234	234	
UNISEX RESTROOMS (2)	0	98	98	
I-BEAM CRANE	0	480	800	
RESCUE BOAT BAY	0	340	600	
AMBULANCE STAGING & CIRCULATION	0	1,485	1,485	
PATIENT AREA	0	120	120	
MEDICAL STORAGE	0	24	24	
WET SUIT & LIFE JACKET STORAGE	0	190	190	
DECONTAMINATION ROOM	0	70	70	
SPECIALTY GEAR STORAGE	0	360	360	
EXTRACTOR & DRYING ROOM	0	176	176	
BOAT STORAGE	0	132	130	
SCBA REFILL ROOM	0	220	220	
FUEL STORAGE, CLASS A	0	88	90	
BOSON'S ROOM/STORAGE	0	900	900	
HOT WORK ROOM	0	90	90	
HOSE STORAGE	0	80	80	
FOAM STORAGE	0	150	150	
BOOM STORAGE	0	100	100	
CUSTODIAL ROOM	0	35	35	
AUTO FIRE SPRINKLER	0	24	24	
GAS METER ENCLOSURE	0	18	18	
TRASH ENCLOSURE	0	60	60	
ELEVATOR	0	72	66	
ELEVATOR MACHINE ROOM	0	42	98	
STAIRWAY	0	378	311	
FIREFIGHTER'S POLE	0	16	54	3 SLIDE POLES IN BDC PROGRAM
NEW FIRST FLOOR TOTAL	1,292	6,918	7,518	

Neighborhood Fire Stations – ESER 2014

FS35 – Fireboats Headquarters – *BUILDING PROGRAM – 2nd Flr.*

PROGRAM	EXISTING AREA	MMA PROGRAM AREA (SF)	BDC PROGRAM AREA (SF)	COMMENTS
MEZZANINE				
MECHANICAL ROOM	0	88	100	MOVED TO MEZZ FOR FLOOD RESISTANT DESIGN
COMMUNICATIONS ROOM	0	96	96	MOVED TO MEZZ FOR FLOOD RESISTANT DESIGN
ELECTRICAL ROOM	0	72	75	MOVED TO MEZZ FOR FLOOD RESISTANT DESIGN
GENERATOR ENCLOSURE	0	176	176	MOVED TO MEZZ FOR FLOOD RESISTANT DESIGN
ELEVATOR	0	0	66	
STAIRWAY	0	0	162	
FIREFIGHTER'S POLE	0	0	0	NO SLIDE POLE ACCESS FROM MEZZANINE REQ'D
STORMWATER MANAGEMENT	0	0	850	SIZE REQUIRED UNKNOWN, TBD LATER
OPEN STORAGE	0	0	150	
NEW MEZZANINE TOTAL	0	432	1,675	

SOME of the following FIRST RESPONSE equipment is currently stored at the site, **but MOST is away from the water, and/or elsewhere in the City, hindering rapid deployment:**

- Jet Skis – at St Francis Yacht Club (SFYC)
- Oil containment booms – at Station 9
- Rescue boats - 2 at SFYC , 1 at end of pier, **1 at Station 29** - should be closer to water
- Spare fire fighting hose – Station 33
- SCUBA/tank filling – Station 1
- Firefighting Foam – need to store 100 5-gallon buckets – currently stored at 1415 Evans
- Port Response vehicles – at Station 4, Station 51 and BOE (25th and Utah)

Neighborhood Fire Stations – ESER 2014

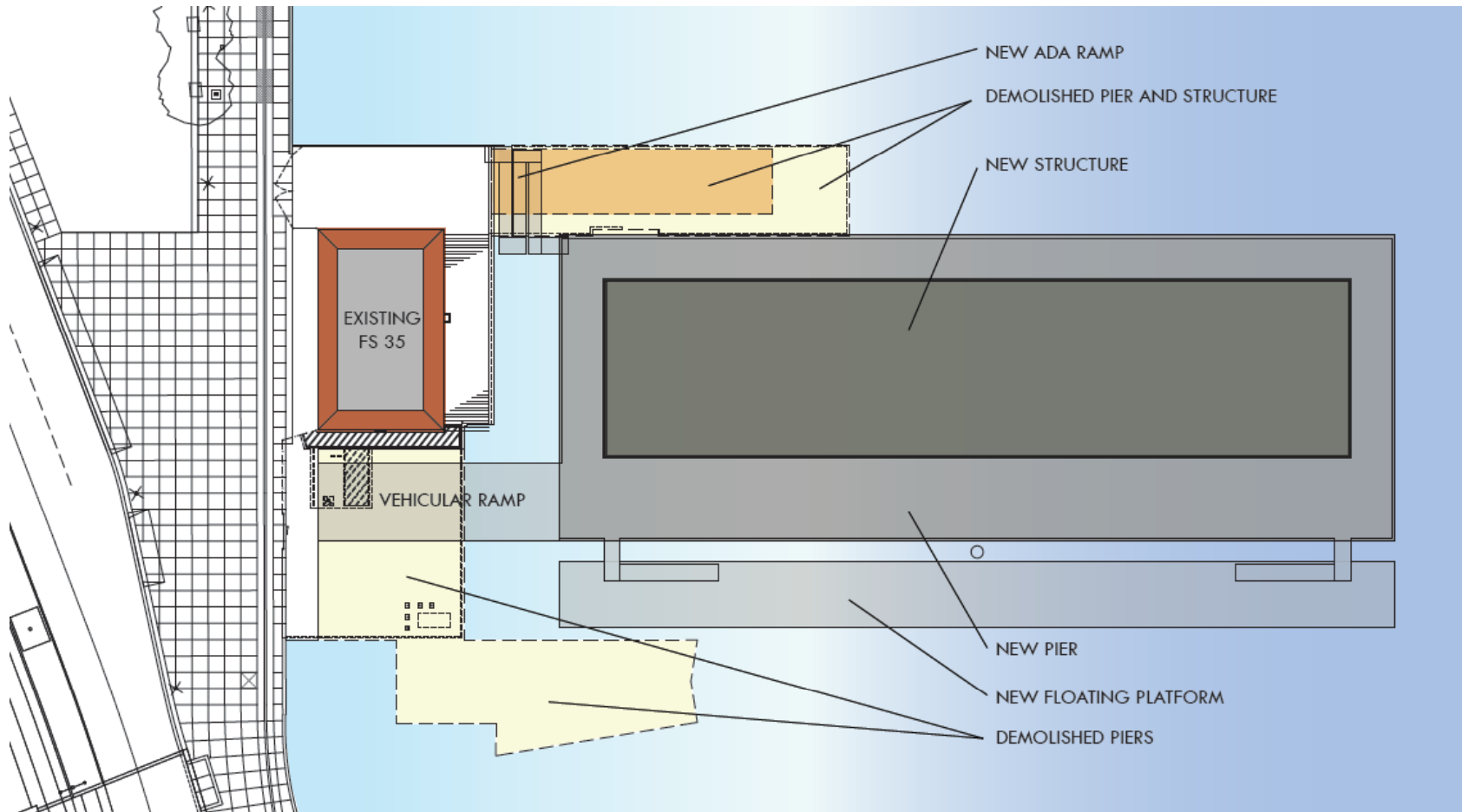
FS35 – Fireboats Headquarters – *BUILDING PROGRAM – 3rd Flr.*

PROGRAM	EXISTING AREA	MMA PROGRAM AREA (SF)	BDC PROGRAM AREA (SF)	COMMENTS
SECOND FLOOR				
KITCHEN	240	421	425	
PANTRY	4	64	70	
DINING AREA	0	350	360	
DAY ROOM AREA	0	504	500	
LAUNDRY ROOM	0	120	100	
FITNESS	435	864	750	
FIREFIGHTER'S DORMITORY	945	1,760	1,555	
MEN'S LOCKER ROOM	171	756	760	
WOMEN'S LOCKER ROOM	0	360	350	
OFFICER SUITE - NON-ACCESSIBLE (3)	857	1,098	935	
OFFICER SUITE - ACCESSIBLE (1)	0	383	300	
COMMANDER SUITE - ACCESSIBLE (1)	0	383	400	
STUDY ROOM	0	140	200	
COMMUNICATIONS ALCOVE	0	45	60	
STORAGE CLOSET	0	53	145	3 IN BDC PROGRAM
MECHANICAL ROOM	0	88	151	
ELECTRICAL ROOM	0	56		
CUSTODIAL ROOM	0	64	32	
ELEVATOR	0	72	66	
STAIRWAY	0	378	325	
FIREFIGHTER'S POLE	0	16	50	3 SLIDE POLES IN BDC PROGRAM
NEW SECOND FLOOR TOTAL	2,652	7,975	7,534	
NEW BUILDING TOTAL	3,944	15,325	16,727	
GROSS SQUARE FOOTAGE		20,687	23,120	ADDED MEZZANINE AND LENGTHENED BUILDING TO AVOID ALTERATIONS AT HISTORIC BUILDING



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FS35 – Fireboats Headquarters – *PRELIMINARY CONFIGURATION*



Neighborhood Fire Stations – ESER 2014

FS35 – Fireboats Headquarters – *LIKE-JURISDICTION COMPARISON*

City of San Francisco		Operations	Daily Staffing	Approx. SF	Marine Assets	Special Elements
Fire Station 35	Fireboat		3	24,000	88' new Fireboat	Historic Station to Remain
	Engine Company		4		90' Guardian	
	Future Engine/Rescue		4		90' Phoenix	Only water Rescue unit in the City with direct water access
	Commander		1			Current staffing is 7 per shift
		Totals:	12	24,000		Population served - 900K (Residents only). The fireboats provide protection for the entire bay area waterfront from the South Bay to Vallejo.
City of Long Beach		Operations	Daily Staffing	Approx. SF	Marine Assets	Special Elements
Fire Station 15	Fireboat 15		6	10,000	112' Fireboat	Covered berth
Marine Disaster Center	Disaster Resource Center.		0	12,000	Personnel Watercraft Storage	Dive locker, training class room/EOC, fitness room, conference. Support Station 15 and 20 operations.
Fire Station 20	Fireboat 20		4	10,000	112' Fireboat	Covered berth
	Medic 20		2			Land-based Medic Unit
Fire Station 6	Rescue 6		2	6,000	25' Rescue vessel,	Stand alone Rescue station
Fire Station 21	Rescue 21		2	6,000	25' Rescue vessel,	Stand alone Rescue station
		Totals:	16	44,000		Population served - 500K (Residents only) Serves the Port of Long Beach and adjacent beach areas of the city. The Port provides a marine-based EOC.

Neighborhood Fire Stations – ESER 2014

FS35 – Fireboats Headquarters – *LIKE-JURISDICTION COMPARISON*

City of Los Angeles	Operations	Daily Staffing	Approx. SF	Marine Assets	Special Elements
9	Fireboat 4	5	15,000	80' Fireboat	Mid-size Fireboat
	Rescue 3	3		40' Rescue	
10	Rescue 1	3	6,000	40' Rescue	
11	Fireboat 2	8	15,000	110' Fireboat	Large Fireboat
12	Rescue 2	3	6,000	40' Rescue	All City of LA fire/Rescue vessels have covered berths
	Totals:	22	42,000		Population served - 13M Greater LA Basin (Residents only) Serves the Port of Los Angeles and adjacent beach cities. The Port provides a marine-based EOC.
City of Portland	Operations	Daily Staffing	Approx. SF	Marine Assets	Special Elements
Station 17	Fireboat 17	1	6,000	50' Fireboat	Covered floating berth
	Rescue 17	3		25' Rescue	
Station 6	Fireboat 6	1	5,000	40' Fireboat	
	Rescue 6	3		25' Rescue	
Station 21	Rescue 21	3	15,000	25' Rescue	Covered floating berth
	Fireboat 21	1		50' Fireboat	
	Totals:	12	26,000		Population served - 800K (Residents only). Serves Port of Portland. The Port provides a marine EOC.

Neighborhood Fire Stations – ESER 2014

FS35 – Fireboats Headquarters – *LIKE-JURISDICTION COMPARISON*

City of Seattle	Operations	Daily Staffing	Approx. SF	Marine Assets	Special Elements
Station 5	Fireboat "Leschi"	4	berthing only 10,000	108 Fireboat	The City of Seattle has four fireboats with a single daily crew of 4. The crews travel to the boat closest to the incident. These fireboats crews are supplemented by Rescue 5 and rescue units in adjacent cities.
	Fireboat "Marine 1"	0		45' Fireboat	
	Rescue 5	4		25' Rescue	
Port of Seattle	Fireboat "Marine 2"	0	berthing only	45' Rescue	
Station 4	Fireboat "Chief Seattle"	0	berthing only	97' Fireboat	
Station 36	Rescue 36	4	6,000	25' Rescue	
Totals:		12	16,000		Population served - 662K (Residents only).

New York City	Operations	Daily Staffing	Approx. SF	Marine Assets	Special Elements
Marine 1	Fireboat "343"	12	30,000	140' FB	New Station
	Marine 1A	8		Rescue	
	Marina 1B	8		EMS Rescue	
	Reserve Fireboat	0		Rescue	
Marine 3, Seasonal	Marine 3	4	6,000	Rescue	Seasonal
Marine 4, Seasonal	Marine 4	4	6,000	Rescue	Seasonal
Marine 6	Fireboat "Bravest"	10	20,000	65' Fireboat	
	Marine 6A	8		Rescue	
	Reserve Fireboat	0		60' Fireboat	
Marine 8, Seasonal	Marine 8	4	6,000	Rescue	Seasonal
Marine 9	Fireboat "Firefighter II"	10	10,000	60' Fireboat	
	Marine 9A	6		Rescue	
Marine Administration	Marine Command Staff	12	12,000		Administration and Marine EOC
	Marine Maintenance	10			
Totals:		96	90,000		Population Served - 8M



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FS35 – Fireboats Headquarters - *BUDGET*

Cost Component	Area (GSF)	\$/GSF	Percentage of Site & Building Cost	Budget
Construction				
Site & Building	23,120	777.00		17,964,240
TOTAL CONSTRUCTION CONTRACT				33,745,825
Construction change order contingency			10%	1,796,424
Escalation to MID-POINT OF CONSTRUCTION, 2019			5%	3,592,848
EXTRAordinary Market Conditions contingency			4%	1,349,833
TOTAL CONSTRUCTION COST				35,095,658
Art Enrichment			2%	674,916
Better Streets/Curb Cuts Allowance				250,000
New Utility Services Allowance				500,000
Hazardous Materials Allowance				750,000
ADJUSTED TOTAL CONSTRUCTION COST				37,270,574
Project Control				
Total Project Control			39.9%	14,852,324
Total Construction + Project Control				52,122,898

ORIGINAL Preliminary Total Construction & Project Control budget of \$27M was based on a first opinion of building area of 16,000 GSF

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FS35 – Fireboats Headquarters - *SCHEDULE*

- **Project Programming** April 2015 – September 2015
- **Concept Design** September 2015 – January 2016
- **Schematic Design thru Construction Docs Phases** February 2015 – March 2017
- **CEQA-Environmental Study** September 2015 – February 2018
(Assumes EIR duration)
- **All Permitting Complete** June 2018
- **Bidding/Construction** July 2018 – September 2020



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Questions/Discussion

