

PGAL



# Town of Highland Beach Fire Station

Commission Update

Prelim Program & Concept Drawings

02-01-2022

## Conceptual Approach Options:

**Based on the Commissions Comments at the meeting of January 18, 2022, We have updated and addressed as follows:**

Vice Mayor Moore:

Liked Option #4 would like to see a 2<sup>nd</sup> Floor for Admin and E.O.C

Commissioner Shoemaker:

Would like a Fourth truck bay on Option #1, how much would it cost?

Commissioner Gossett-Seidman:

Wants to see pros and cons of option #4

**Review of the Approaches by the Fire Services Implementation Committee at their meeting of January 28, 2022:**

Reviewed three options including input from the building official

**We have updated the presentation to address as follows:**



Conceptual Approach Options:  
Updates on Option's #1 and #4

**Option # 1: Phased 3-Bay Rebuild with Temporary Truck Canopy in Parking Lot**

**Estimated Construction Cost \$5,335,457\***

- Pros:

Consolidates Fire Station at Existing Location  
Two Phase Replacement keeps Firefighters in existing housing  
Rebuild Station House to Raise floor Above Flood Elevation
  - Uses existing bay for Housing raising floor approx. 1.75 Feet
  - Totally Hardened and Code Compliant Structure
  - Demo Frame roof portion (south end) to allow for higher floor
  - 3 new consolidated bays
- Cons:

Need temporary area to house trucks (canopy)  
Compromise on space to accommodate footprint and existing configuration  
Building heights vary and fake façade needed to tie buildings together

**Option # 1A: Phased 4-Bay Rebuild with Temporary Truck Canopy in Parking Lot**

**Estimated Construction Cost \$6,196,757\***

- Pros:

Same as Option 1  
Additional bay for the future
- Cons:

Need temporary area to house trucks (canopy)  
Compromise on space to accommodate footprint and existing configuration  
Building heights vary and fake façade needed to tie buildings together

**Option # 4: Split Bay Station Temporary Station and Total Build New Two-Story on Existing Site**

**Estimated Construction Cost \$5,250,007\***

+++

- Pros:

Do not have to relocate during construction  
Four-bay station  
Can be Built without interfering with Existing Station  
Fire Admin on 2<sup>nd</sup> Floor and EOC identified as adding (\$5,000,007 + \$250,000)
- Cons:

Minimal Change to Existing
  - Station House below Flood Elevation (potential code violation/raise floor/flood proofing)
  - Non-Hardened Facility
  - One Bunk Room Has to be Added after Completion (5) in Existing
  - ADA non-compliant restrooms (potential code violation)Split Bays Require Duplication of Elements for Fire and Rescue
  - Bunker Gear Room
  - Decontamination RoomLess space
  - One less bunk room (only 5) limits future growth
  - Smaller gym (hard to share with PD (77 sf less)
  - Smaller dayroom/kitchen area (382 sf)

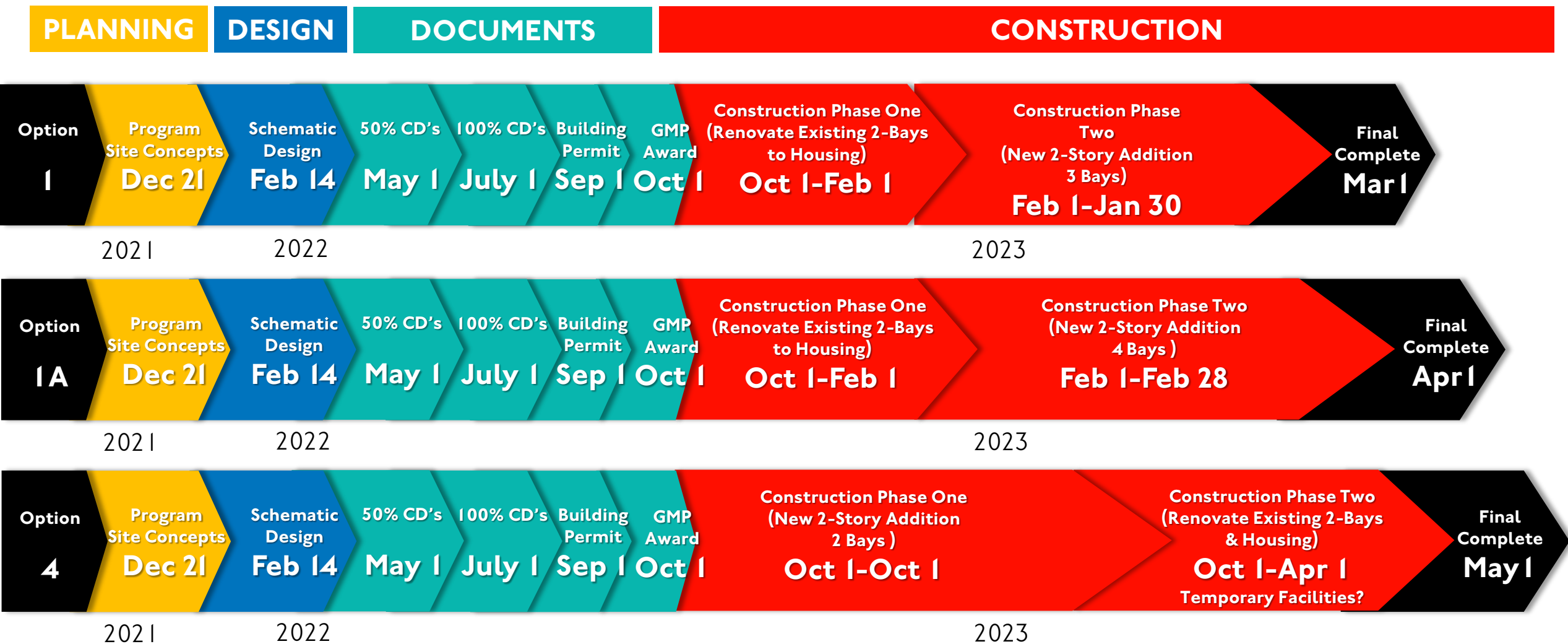
Unknown Cost: Floodproofing  
Hurricane Hardening  
ADA Improvements



• Estimated Cost include CM @ Risk hard cost and Overhead and Profit. Design fees are not included in the estimate.  
+++ Does not include Floodproofing or ADA improvements Cost or Temporary Facilities



# Conceptual Approach Option Design & Construction Schedule Comparisons:



## Option # 1: Phased Rebuild with Temporary Station

### Phase One

- Covert 2-Bays to Housing
- Maintain Existing Housing
- Temporary 2-Bay Canopy for Trucks

### Phase Two

- Move Into New Housing (2-Bay)
- Demo Existing Housing
- Build Two Story 3-Bay Addition

### Estimated Square Footage

Fire Station Renovate Existing 2 bays	1,960 GSF
Fire Station Two-Story Addition	8,769 GSF
Total GSF	10,720 GSF

### Estimated Construction Cost

Addition: 8,769 GSF @ \$450/SF	\$3,946,050
Renovation: 1,960 GSF @ \$350/SF	\$ 686,000
Sitework/Utilities:	\$ 603,407
Temp Station Canopy (leased):	\$ 100,000
<b>Total Estimated Cost:</b>	<b>\$5,335,457</b>



### Apparatus Area

SPACE	# Spaces	NSF	Total NSF
Elevator Lobby	1	68	68
Appartaus Bays (3 Bay)	1	2822	2822
Hose Storage	1	64	64
SCBA Work Area	1	90	90
Decontamination	1	100	100
Bunker Gear	1	142	142
Shop/ Storage	1	0	0
Electrical/Generator (Exterior)	1	250	250
Medical Storage	1	100	100
Ice	1	64	64
Stair	2	248	496

### Living Quarters

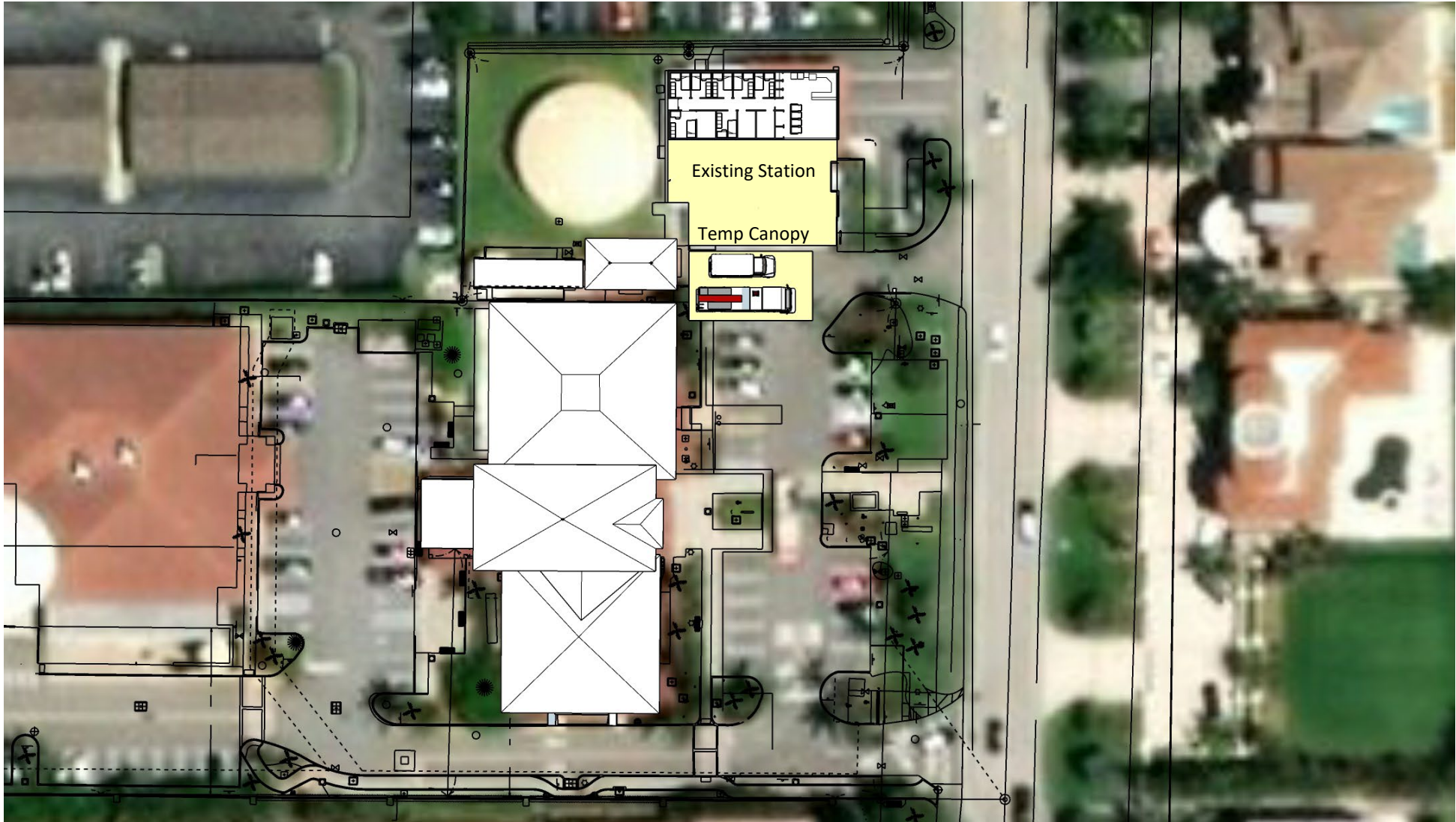
<b>Living Quarters (One Story)</b>			
Kitchen/ Dining/Dayroom	1	832	832
Pantry	3	6	18
Bunk Room	6	80	480
Captain Bunk	1	132	132
Restroom/Shower	3	64	192
Laundry	1	18	18
Janitor/Storage	1	12	12
Mechanical/Electrical	1	168	168

### Fire Administration

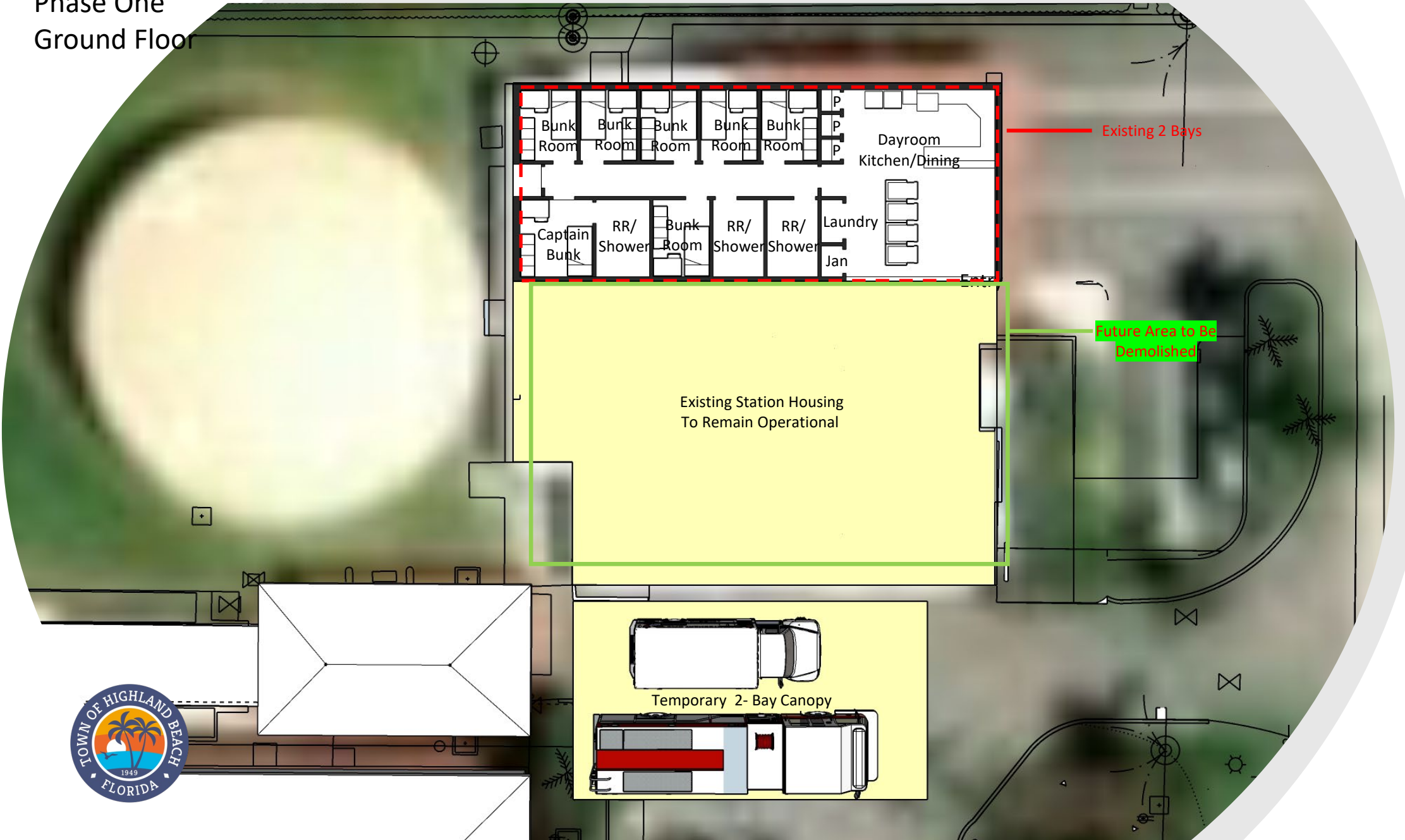
<b>Fire Administration (2nd Floor)</b>			
Lobby/ Reception		212	212
Elevator		80	80
Public Restrooms/Shower		180	180
Janitor		64	64
Office	2	155	310
Chief's Office/Conference	1	369	369
Open Office	4	36	144
Conference Room	1	155	155
Gym	1	335	335
E.O.C.	1	500	500
Break Area	1	52	52
I.T.	1	40	40
Stair	2	248	496
Mechanical/Electrical	1	182	182
Total Net			9167
Net to Gross			1553
<b>Total GSF</b>			<b>10720</b>



Site Plan

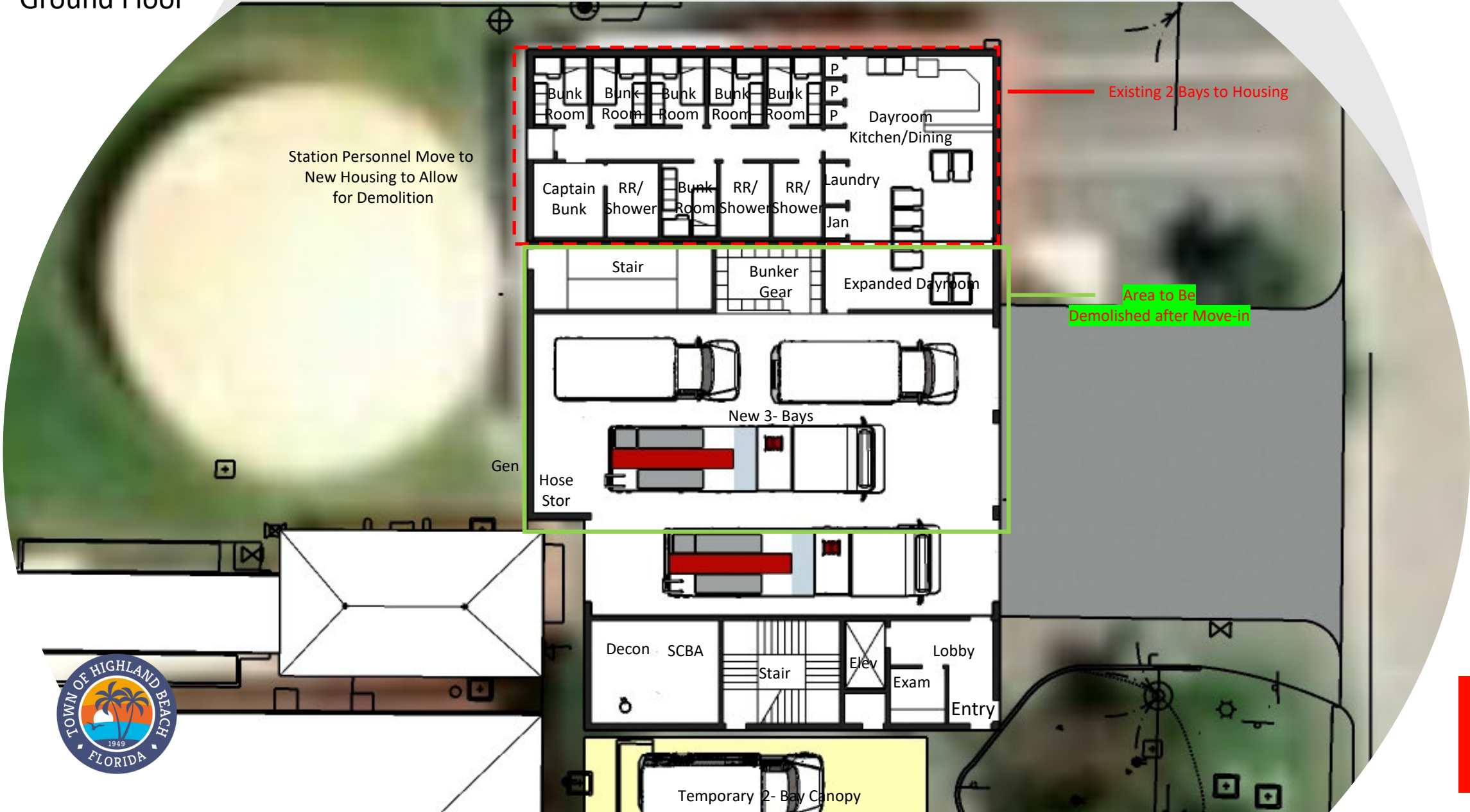


Phase One  
Ground Floor





Phase Two  
Ground Floor





Phase Two  
Second Floor



## Site Massing



## Option # 1a: Phased Rebuild with Temporary Station with 4<sup>th</sup> Bay

### Phase One

- Covert 2-Bays to Housing
- Maintain Existing Housing
- Temporary 2-Bay Canopy for Trucks

### Phase Two

- Move Into New Housing (2-Bay)
- Demo Existing Housing
- Build Two Story 4-Bay Addition

### Estimated Square Footage

Fire Station Renovate Existing 2 bays	1,960 GSF
Fire Station Two-Story Addition	10,683 GSF
<b>Total GSF</b>	<b>12,643 GSF</b>

### Estimated Construction Cost

Addition: 10,683 GSF @ \$450/SF	\$4,807,350
Renovation: 1,960 GSF @ \$350/SF	\$ 686,000
Sitework/Utilities:	\$ 603,407
Temp Station Canopy (leased):	\$ 100,000
<b>Total Estimated Cost:</b>	<b>\$6,196,757</b>

### Apparatus Area

SPACE	# Spaces	NSF	Total NSF
Elevator Lobby	1	165	165
Elevator	1	80	80
Appartaus Bays (4 Bay)	1	3700	3700
Hose Storage	1	64	64
SCBA Work Area	1	138	138
Decontamination	1	138	138
Bunker Gear	1	150	150
Shop/ Storage	1	0	0
Electrical/Generator (Exterior)	1	250	250
Medical Storage	1	100	100
Exam	1	64	64
Ice	1	64	64
Stair	2	248	496
<b>Living Quarters (One Story)</b>			
Kitchen/ Dining/Dayroom	1	832	832
Pantry	3	6	18
Bunk Room	6	80	480
Captain Bunk	1	132	132
Restroom/Shower	3	64	192
Laundry	1	18	18
Janitor/Storage	1	12	12
Mechanical/Electrical	1	168	168
<b>Fire Administration (2nd Floor)</b>			
Lobby/ Reception		212	212
Elevator		80	80
Public Restrooms/Showers		180	180
Janitor		64	64
Office	2	155	310
Chief's Office/Conference	1	369	369
Open Office	4	36	144
Conference Room	1	298	298
Gym	1	335	335
E.O.C.	1	632	632
Break Area	1	52	52
I.T.	1	40	40
Office/Storage	1	288	288
File Storage	1	138	138
Stair	2	248	496
Mechanical/Electrical	1	182	182
<b>Total Net</b>			
			11081
<b>Net to Gross</b>			1562
<b>Total GSF</b>			<b>12643</b>

### Living Quarters

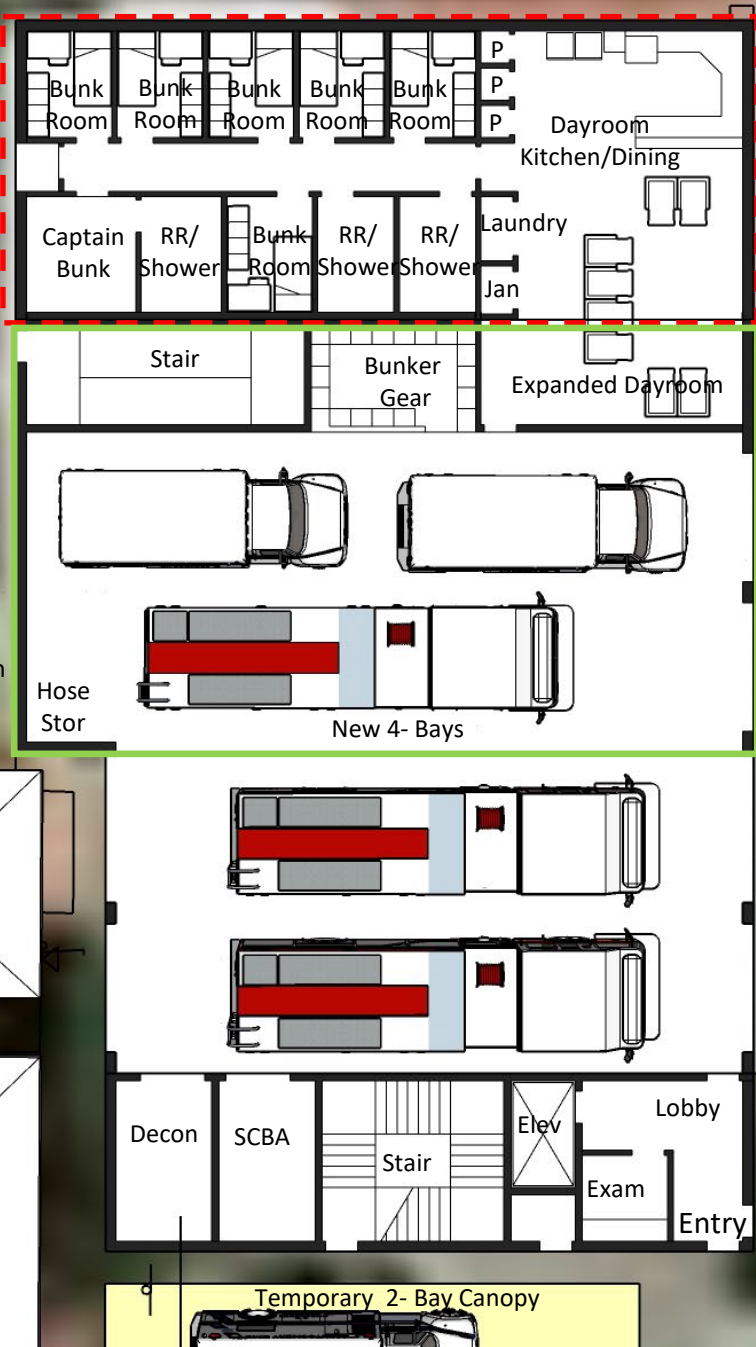
### Fire Administration





Ground Floor

Station Personnel Move to  
New Housing to Allow  
for Demolition



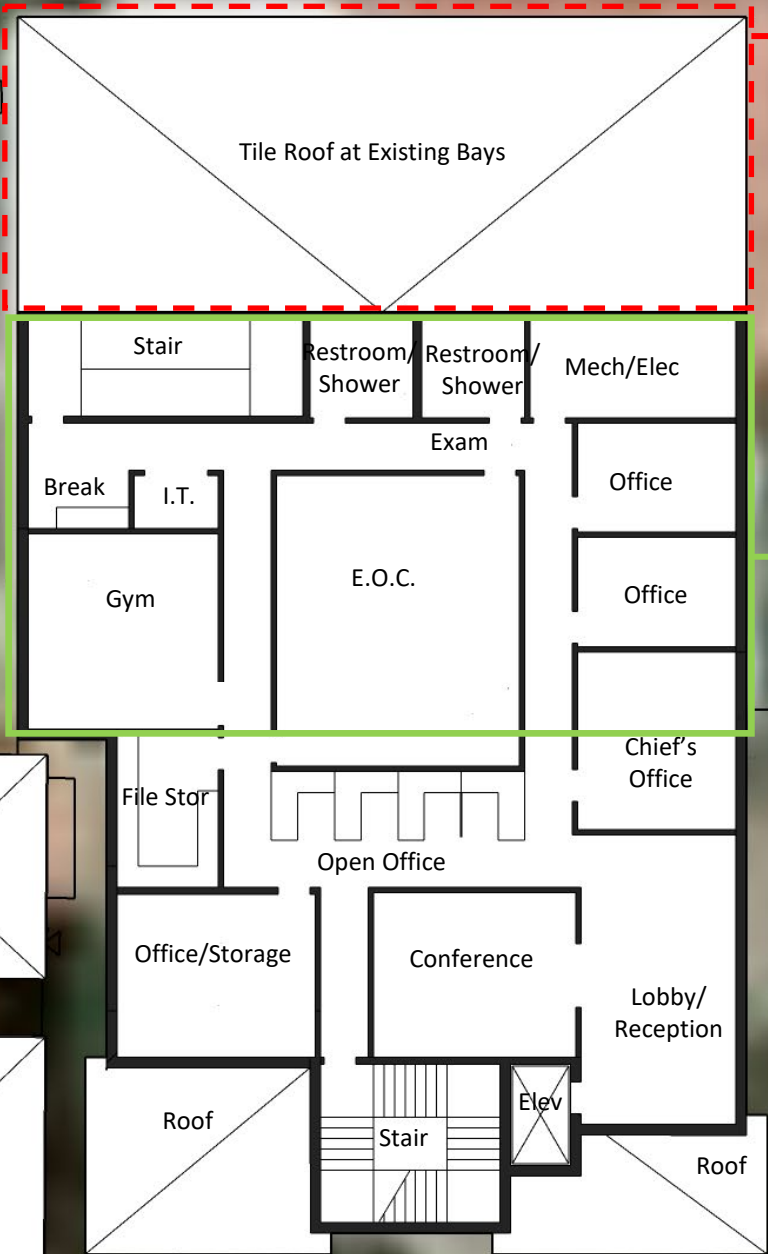
Existing 2 Bays to Housing

Area to Be  
Demolished after Move-in





Phase Two  
Second Floor



Existing 2 Bays  
One-Story

Area to Be  
Demolished

Temp 2- Bay to be Removed at Completion



## Site Massing



Option # 4: Provide a Two-Story 2-Bay Addition on South Side of Existing and Minor Cosmetic Renovations to Existing

Estimated Square Footage

Existing Fire Station Renovation	4,726 GSF
Addition 2 Bay	4,360 GSF
Second Floor Admin (above new bays)	4,360 GSF
Total GSF	9,086 GSF

Estimated Construction Cost

Addition:	8,720 sf @ \$450/SF	\$3,924,000
Renovation:	4726 sf @ \$100/SF	\$ 472,600
Cosmetic changes and reroof existing		\$ 250,000
Site/Utilities:		\$ 603,407
Total Estimated Cost		\$5,250,007

Additional Cost to be considered:  
Floodproofing  
ADA Improvements  
Hardening of Roof  
Temporary Facilities



Existing Fire Station Ground Floor

New Addition Ground Floor

SPACE	# Spaces	NSF	Total NSF
<b>Existing</b>			
Rescue Bays (2 Bay)	1	1548	1548
Laundry	1	86	86
Janitorial	1	36	36
Decontamination	1	86	86
Bunker Gear	1	142	142
Shop/ Storage	1	200	200
Electrical/Generator	1	250	250
Lobby	1	36	36
Watch Room	1	120	120
Medical Storage	1	51	51
Conference Room	1	136	136
Exam	1	75	75
Kitchen/ Dining/Dayroom**	1	450	450
Ice	1	0	0
Pantry	3	4	12
I.T. Server	1	45	45
Custodial	1	36	36
Captain's Office	1	98	98
New Bunk Room (from gym)	1	64	64
Bunk Room	4	67	268
Captain Bunk	1	132	132
Captain Restroom/Shower*	1	64	192
Restroom/Shower*	2	312	312
New Storage (from gym)	1	80	80
Mechanical	1	0	0
Subtotal			4455
Net to Gross			
Total Existing GSF			4726
<b>New Construction</b>			
<b>Ground Floor</b>			
Apparatus Bays (2 Bay)	1	2312	2312
Hose Storage	1	64	64
SCBA Work Area	1	100	100
Decon	1	172	172
Gym	1	258	258
New Bunker Gear	1	158	158
Lobby	1	150	150
Mechanical	1		
Total Net			3214
Net to Gross			1146
Total GSF New Building			4360
Total GSF New and Existing			9086
* Restroom Need ADA Upgrades			
** Relocate Gym for added Bunk Room and Added Dayroom Space			





Base Plan  
Ground Floor







Site Massing

