

Town of Exeter, NH

Public Safety Complex
Police & Fire Departments
Continental & Court Street

Conceptual design

Date:

September 2, 2022

Prepared for:

Town of Exeter, New Hampshire

LBA Consultants:

VHB; Bedford NH

Jobin Construction Consultants, LLC



The Town of Exeter Police Department and Fire Substation – New Construction Option

6 Continental Drive
Exeter, New Hampshire
Date: September 2, 2022



The Town of Exeter Police Department and Fire Substation – New Construction Option

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Executive summary

The proposed new Exeter Police Department and Fire substation is located on the corner of Continental Drive and Jillian Lane. The site is relatively flat in the front and slopes up toward the back of the property requiring retaining walls to accommodate the PD and FD secure parking, auto impound, a 2-bay detached garage, and a trash enclosure. A 60' apparatus apron will be provided from the FD substation with direct access to Continental Drive. The proposed two-story building is approximately 23,165 gross square feet (16,285 GSF for the Police Department and 6,880 GSF for the Fire Substation). Visitors will enter the building from the east side of the property under a covered entry entering a two-story vestibule/lobby which will allow natural light into the building. A large Community Room is accessed from the Main Lobby allowing flexible day or nighttime use directly from the public lobby. The police officers and staff, and fire crew will enter the building from the rear allowing direct access to their secure departments.

The exterior of the building will be constructed with brick veneer, decorative concrete masonry units (cmu), maintenance-free clapboard siding, asphalt roofing shingles, and high-efficient exterior doors and windows. Some additional key features to the building are listed below:

- A two-stall sally port with a secure entry from the rear of the PD building.
- Secure parking for PD vehicles, PD staff, and FD staff.
- An open-air covered deck located at the rear of the PD second floor provides a quiet place for PD staff to take a break and as a decompression area.
- A two-bay apparatus floor will accommodate a large fire truck, EMS ambulance, work truck and associated FD storage.
- The Firehouse provides decontamination spaces and healthy firefighter living and work areas.

Sustainability initiatives

1. The proposed building will meet &/or exceed the current NH energy code.
2. The building will be designed with all electrical equipment which will be Net Zero or Passive House ready in the future for solar panels.
3. Sustainable materials, Low flow fixtures and LED lights will be used throughout the project.



Police Department & Fire Substation

Conceptual Layout

6 Continental Drive, Exeter, NH

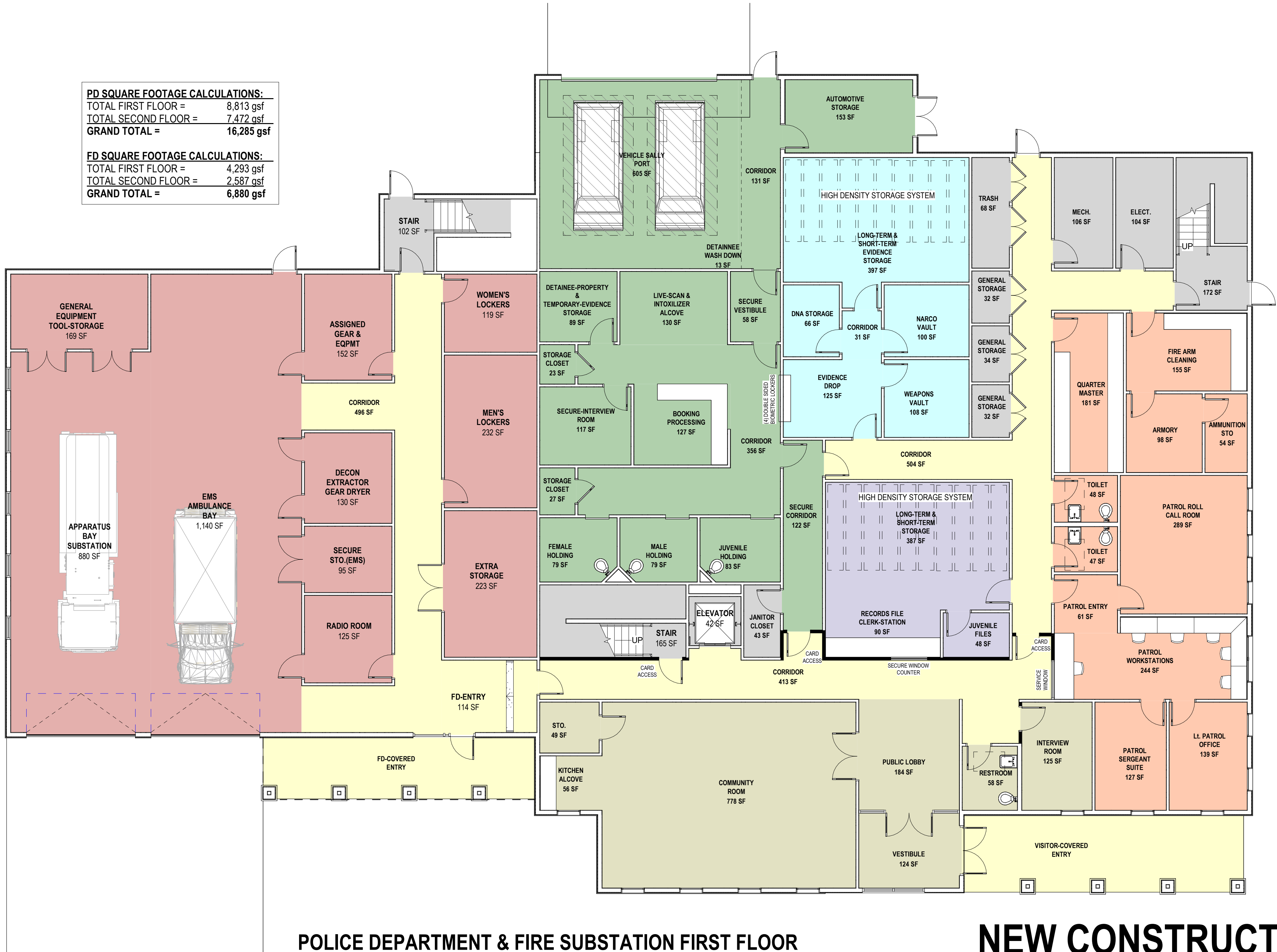
Source: **VHB**
 Prepared for: **Review**
 Date: **September 2, 2022**

PARKING TOTAL - 68 SPACES

- FIRE DEPARTMENT STAFF PROVIDED - 11 SPACES
- POLICE DEPARTMENT STAFF PROVIDED - 33 SPACES
- PUBLIC PROVIDED - 24 SPACES
- ACCESSIBLE PROVIDED - 3 SPACES



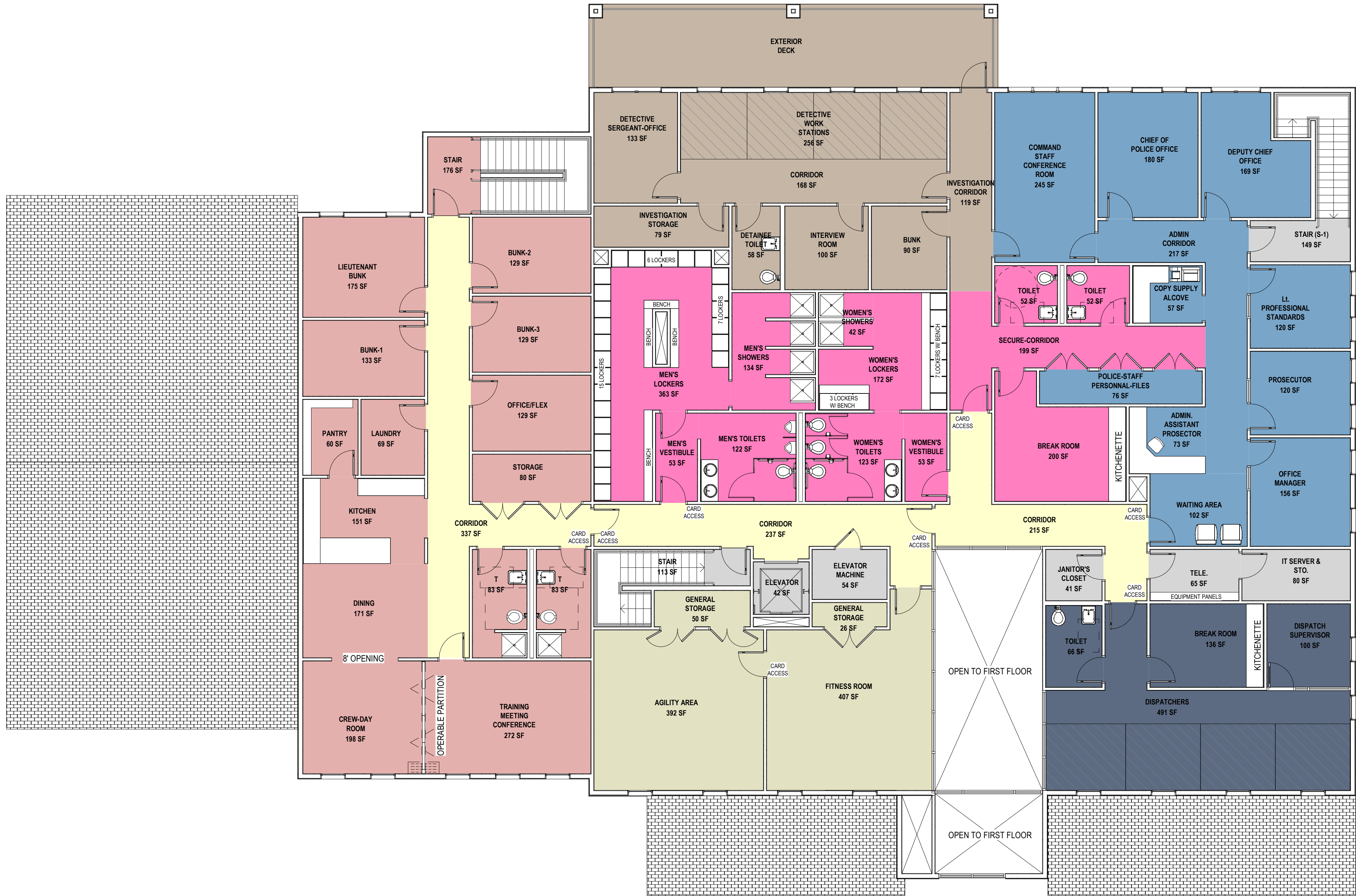
PD SQUARE FOOTAGE CALCULATIONS:	
TOTAL FIRST FLOOR =	8,813 gsf
TOTAL SECOND FLOOR =	7,472 gsf
GRAND TOTAL =	16,285 gsf
FD SQUARE FOOTAGE CALCULATIONS:	
TOTAL FIRST FLOOR =	4,293 gsf
TOTAL SECOND FLOOR =	2,587 gsf
GRAND TOTAL =	6,880 gsf



POLICE DEPARTMENT & FIRE SUBSTATION FIRST FLOOR

NEW CONSTRUCTION





POLICE DEPARTMENT & FIRE SUBSTATION SECOND FLOOR

NEW CONSTRUCTION





1 FRONT MASSING MODEL - 1
PRES-0.1B



2 FRONT MASSING MODEL - 2
PRES-0.1B

POLICE DEPARTMENT & FIRE SUBSTATION - OPTION 1B

NEW CONSTRUCTION





1 REAR MASSING MODEL - 1
PRES-0.1D



2 REAR MASSING MODEL - 2
PRES-0.1D

NEW CONSTRUCTION



TOWN OF EXETER, NH - PUBLIC SAFETY BUILDING STUDY
CONCEPTUAL BUDGET

September 2, 2022

6 CONTINENTAL DRIVE - NEW POLICE & FIRE SUBSTATION - 2 STORIES		LOW		HIGH			
Site Development		\$	1,200,000	\$	1,300,000		
Police Station - 16,285 s.f.	\$ 325-350 psf	\$	5,292,625	\$	5,699,750		
Fire Station - 6,880 s.f.	\$ 325-350 psf	\$	2,236,000	\$	2,408,000		
Design and Construction Contingency - 10%		\$	872,863	\$	940,775		
Contractor General Conditions		\$	660,000	\$	660,000		
Construction Management Fee - 5%		\$	513,074	\$	550,426		
Subtotal Construction Costs:		\$	10,774,562	\$ 465/sf	\$	11,558,951	\$ 499/sf
Project Soft Costs - 20% of Construction Costs		\$	2,154,912	\$	2,311,790		
Architectural/engineering fees							
Geotechnical engineering							
Planning and permitting fees							
Builders' risk insurance							
Owner representative/clerk of the works							
Utility connection fees							
Backup generator							
Exterior signage							
Furniture, fixtures, equipment							
Gear storage, extractors, laundry equipment							
Security and IT equipment							
6 Continental Drive - Conceptual Level Project Costs in 2022:		\$	12,929,474	\$ 558/sf	\$	13,870,742	\$ 599/sf
Project Cost Associated with the Police Station		\$	9,050,632	\$	9,709,519		
Project Cost Associated with the Fire Substation		\$	3,878,842	\$	4,161,222		
6 Continental Drive - Anticipated Conceptual Level Project Costs in Q1 2024:		\$	14,868,895	\$ 642/sf	\$	15,951,353	\$ 689/sf

This budget assumes mid-level construction materials including; masonry veneer, metal stud framing, with a structural steel superstructure and standard foundation systems, pending further geotechnical investigation.

ALTERNATES:

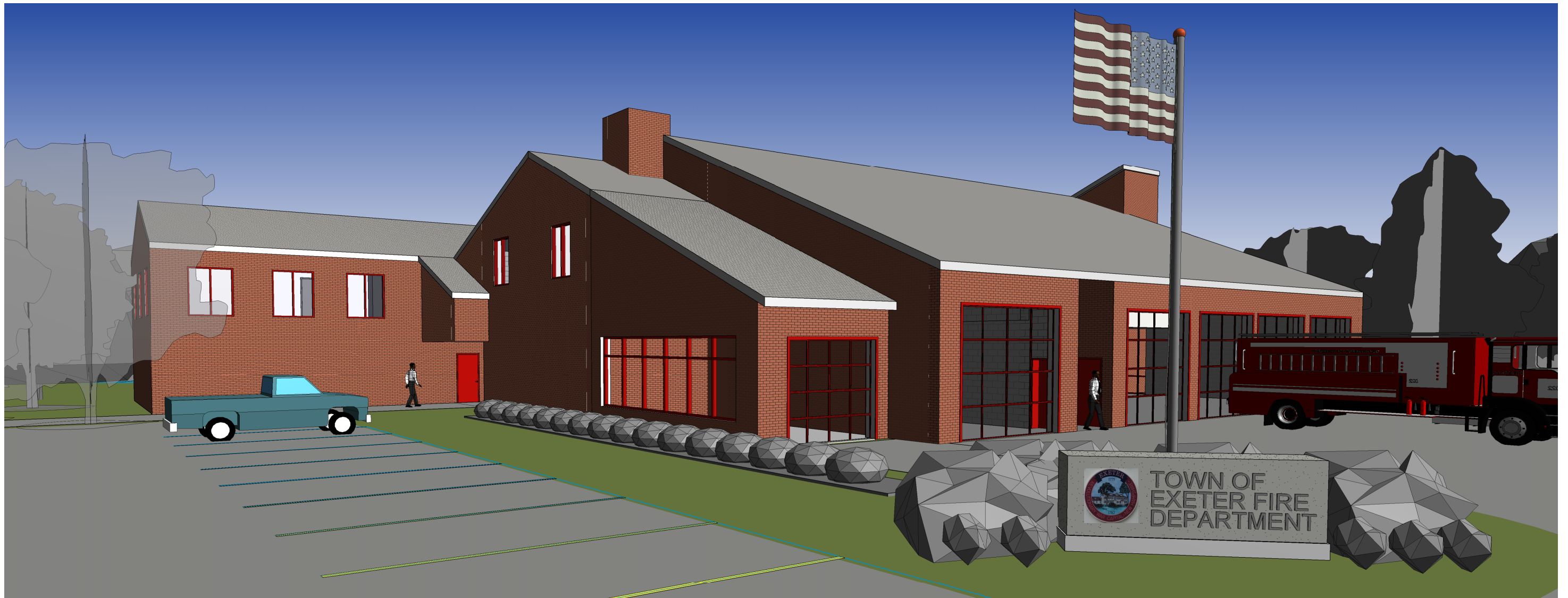
Added cost for covered parking structure of 13 spaces \$ 375,000
 Implementation of a Net Zero approach will add approximately 3-4% to this budget

Costs not included:

Land acquisition costs are not included in this budget
 Any temporary accommodations, relocations, and facility rental costs during construction are not included in this budget
 New or relocated communications equipment; including radio antenna, dispatch consoles, and radio systems

The Town of Exeter Fire Department – Renovation Option

20 Court Street
Exeter, New Hampshire
Date: September 2, 2022



The Town of Exeter Fire Department – Renovation Option

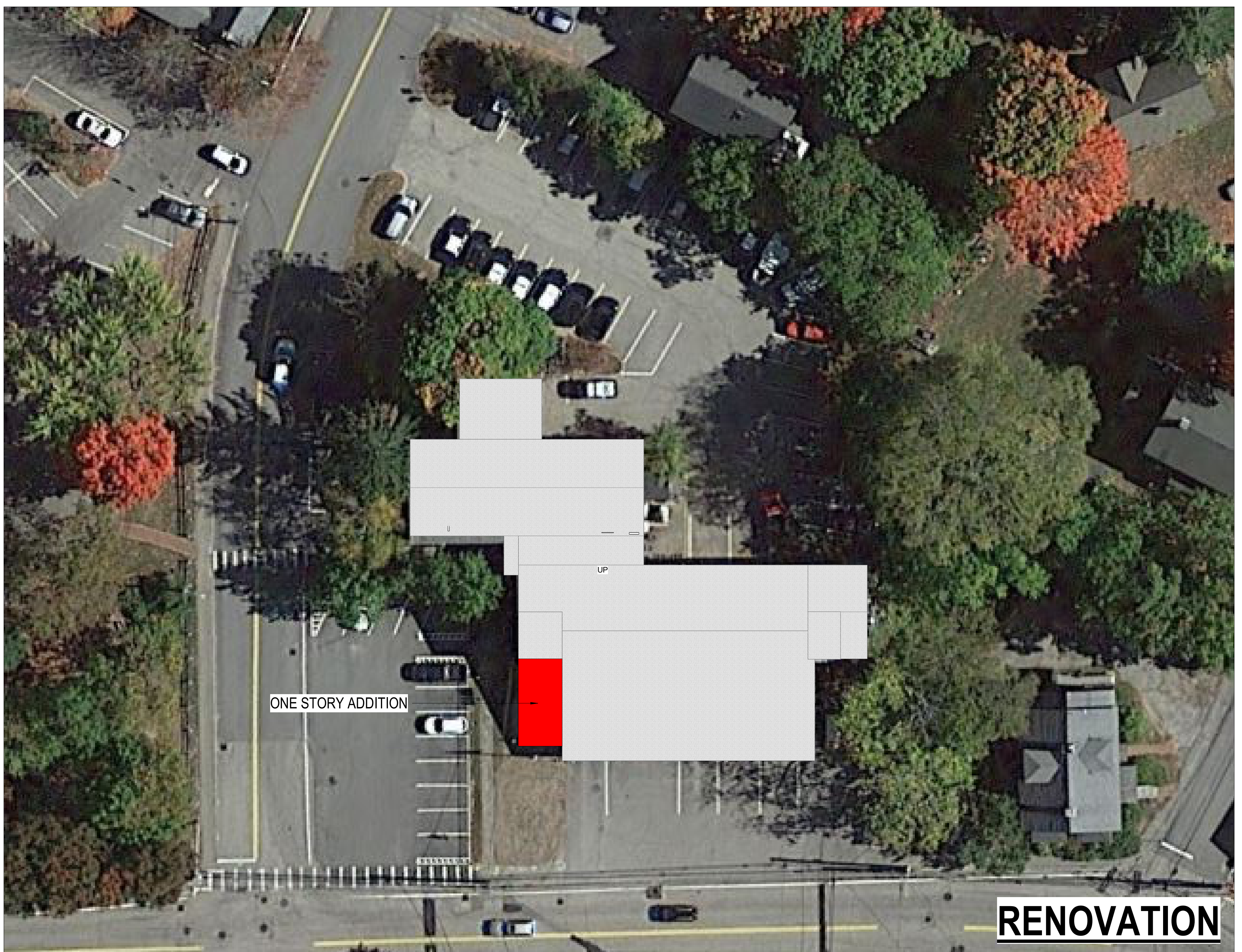
20 Court Street
Exeter, New Hampshire
Date: September 2, 2022

Executive summary

At some point after the PD and FD Substation functions have relocated to 6 Continental Drive, the Fire Department will expand the department's space use to incorporate the entire approximately 18,777 gross square foot existing two-story building. The existing non-loading bearing interior walls on the first & second floor will be adjusted as required to accommodate the long-term space needs of the Fire Department. A new Emergency Operations Center (EOC) and Fire Prevention Office will be provided on the first floor of the building and will be designed to be fully accessible. The existing apparatus bays will receive minor improvements including a fresh coat of paint throughout and wider apparatus bay door opening for the large ladder truck to enter and exit the building with adequate clearances. On the second floor, the existing sleeping quarters, kitchen/dining and laundry areas will receive a fresh coat of paint and cosmetic improvements to minimize construction cost – all other areas will receive new flooring, paint, ceilings and lighting.

Added optional features

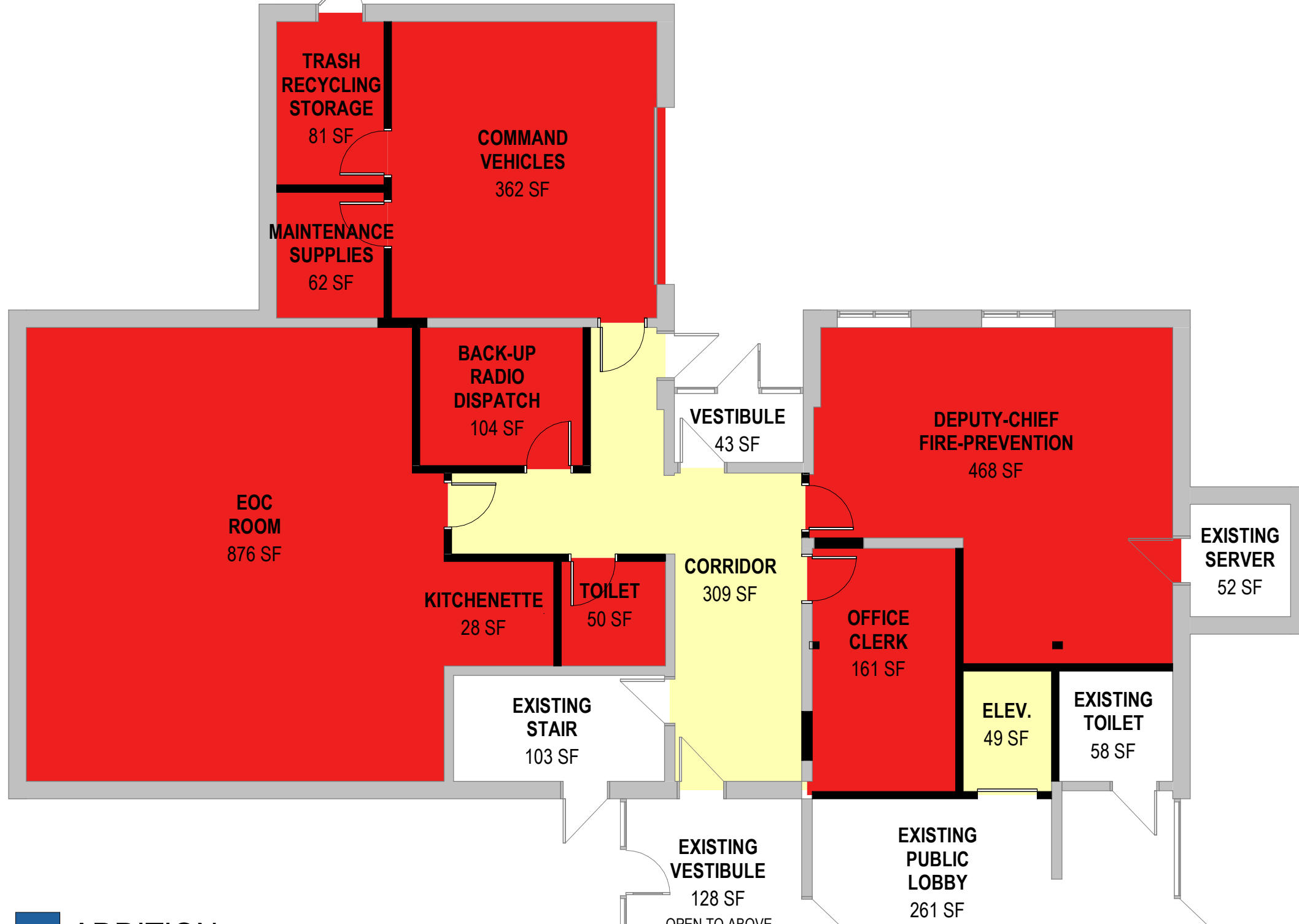
1. Replace mechanical, electrical, plumbing and fire protection (MEP & FP) equipment with electric systems.
2. Add one story historic steam engine display adjacent to apparatus bays.
3. Replace all exterior doors and windows with energy efficient units.
4. Add two-stop ADA elevator
5. Upgrade the building's exterior wall envelope to enhance the insulation level of the building.



ONE STORY ADDITION

RENOVATION

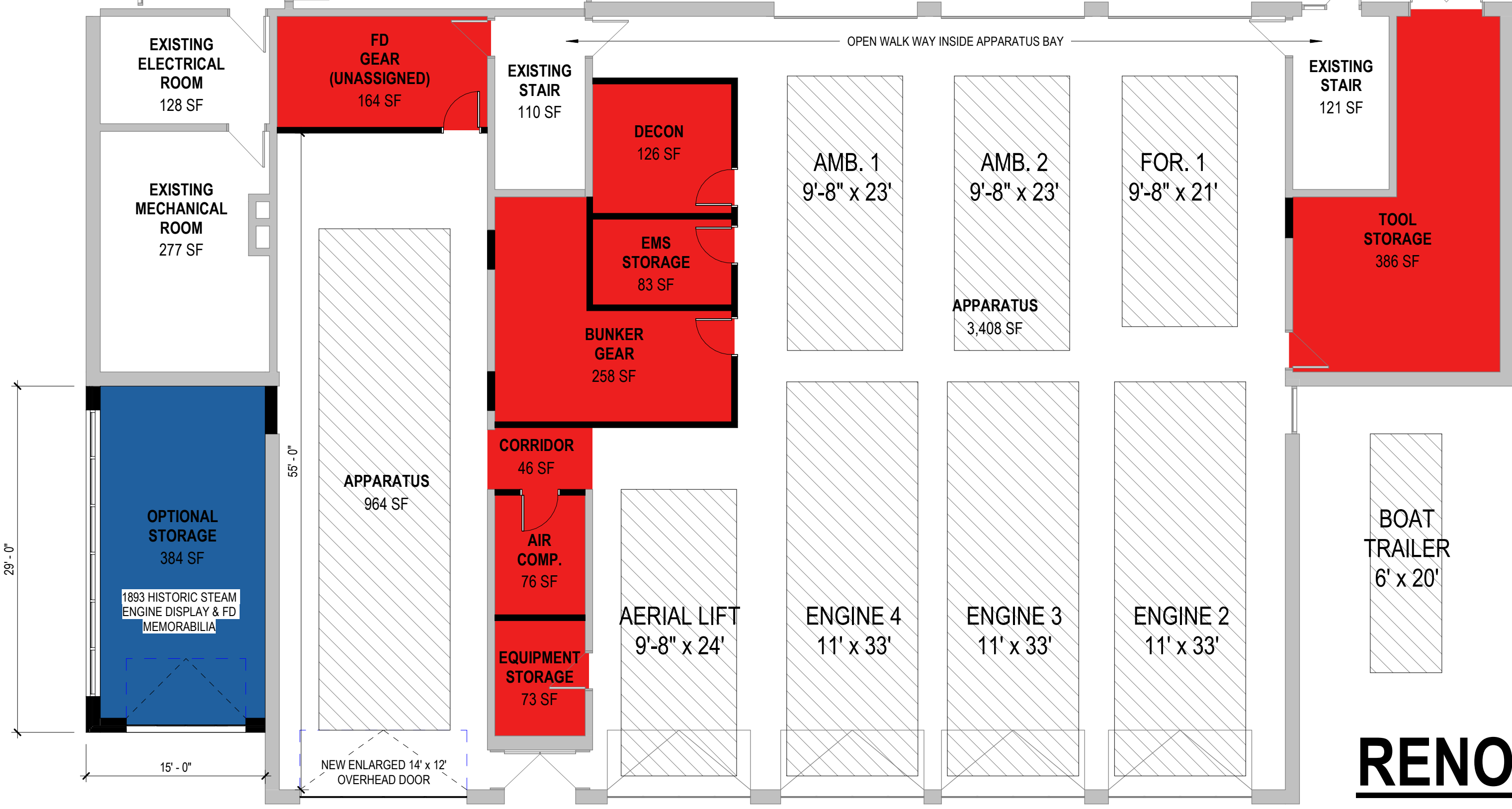
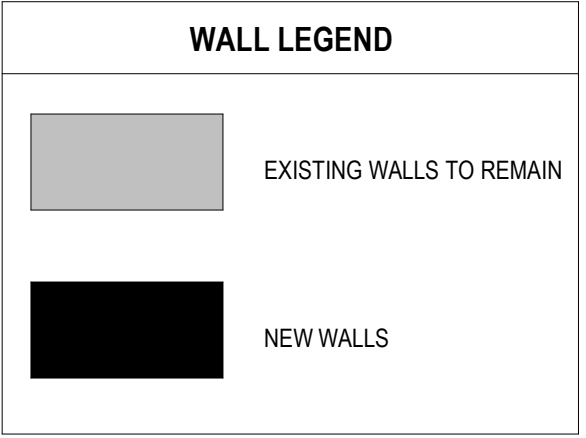




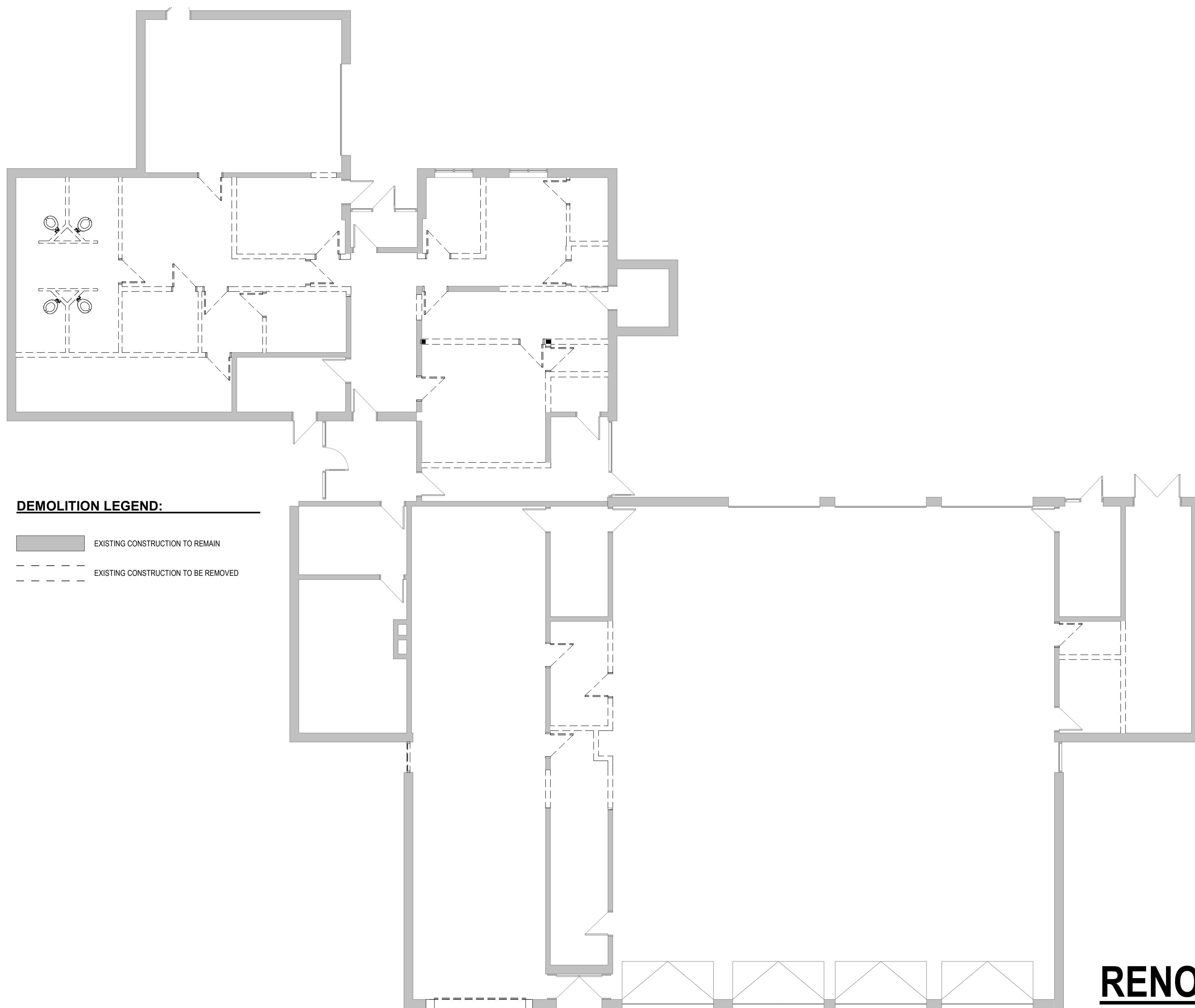
AREA CALCULATIONS:

FIRST FLOOR =	10,901 gsf
SECOND FLOOR =	7,876 gsf
TOTAL BUILDING AREA =	18,777+/- gsf

- ADDITION
- CIRCULATION
- EXISTING
- FIRE DEPARTMENT



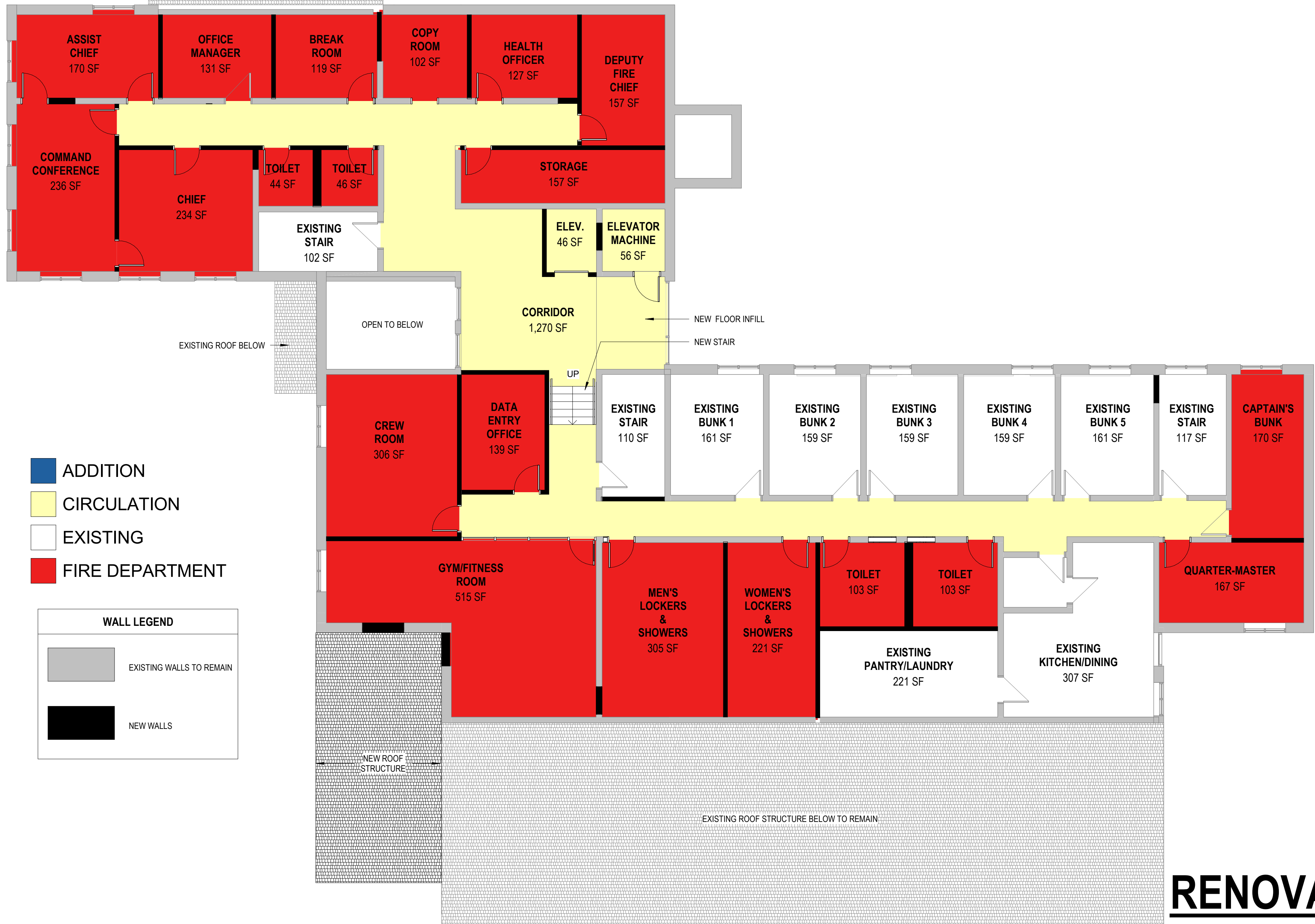
RENOVATION



DEMOLITION LEGEND:

- EXISTING CONSTRUCTION TO REMAIN
- EXISTING CONSTRUCTION TO BE REMOVED

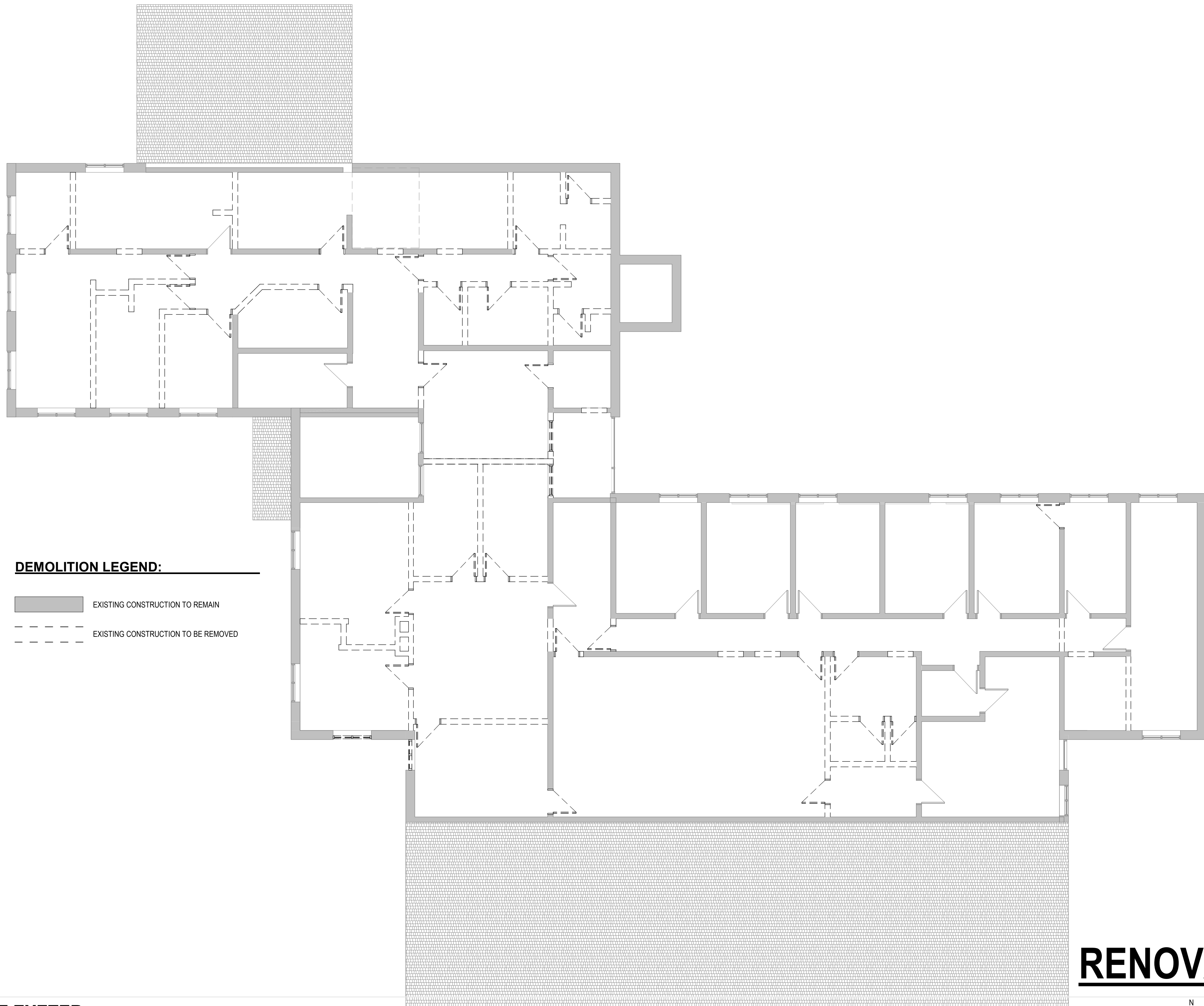
RENOVATION




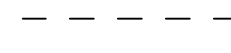
- ADDITION
- CIRCULATION
- EXISTING
- FIRE DEPARTMENT

WALL LEGEND	
	EXISTING WALLS TO REMAIN
	NEW WALLS

RENOVATION



DEMOLITION LEGEND:

-  EXISTING CONSTRUCTION TO REMAIN
-  EXISTING CONSTRUCTION TO BE REMOVED

CONCEPTUAL BUDGET

20 COURT STREET - FIRE DEPARTMENT ONLY RENOVATION/ADDITION OPTION			
ASSUMES FIRE SUBSTATION WILL BE BUILT			
Site Development - allowance		\$	125,000
App Bay - Minor cosmetic and mechanical upgrade 5,635 s.f.	\$ 80/psf	\$	450,800
Extensive Renovation to 6,379 s.f. of Existing	\$ 225/psf	\$	1,435,275
Cosmetic Renovation to 6,379 s.f. of Existing	\$ 90/psf	\$	574,110
Design and Construction Contingency - 10%		\$	258,519
Contractor General Conditions		\$	600,000
Construction Management Fee - 5%		\$	172,185
	Subtotal Construction Costs:	\$	3,615,889
			\$ 193/sf
Project Soft Costs - 10% of Construction Costs		\$	361,589
Architectural/engineering fees			
Geotechnical engineering - Assumes none are required			
Planning and permitting fees			
Builders' risk insurance			
Owner representative/clerk of the works			
Backup generator - Assumes re-using existing			
Exterior signage - Assumes re-using existing			
Furniture, fixtures, equipment - Assumes re-using existing			
Gear storage, extractors - Assumes re-using existing			
Laundry Equipment - Assumes re-using existing			
Security and IT equipment - Assumes re-using existing			
	20 Court Street - Conceptual Level Project Costs:	\$	3,977,478
			\$ 212/sf

ALTERNATES:

Cost increase for all new MEP/FP for the entire facility	\$	1,314,390
Some equipment upgrades are included in the base project cost		
Addition for steam engine display	\$	180,000
Replacement of all windows and exterior doors	\$	260,000
Add 2 stop elevator with shaft	\$	380,000
Upgrade existing exterior wall envelope in non-apparatus areas	\$	370,000

This conceptual level budget is based on 2022 construction costs. Add 9-12% escalation per year beyond 2022

This concept includes minor cosmetic upgrades to the apparatus bay area and widening of 1 overhead door

This concept includes 6,379 s.f. of minor cosmetic upgrades and 6,379 s.f. of more extensive renovations

This option is based on a 3-phase implementation once the PD is relocated to a new location. This approach will pose challenges to the day to day operations of the FD and will result in a longer construction duration.

Costs not included:

Land acquisition costs are not included in this budget

Any temporary accommodations, relocations, and facility rental costs during construction are not included in this budget

New or relocated communications equipment; including radio antenna, dispatch consoles, and radio systems

The Town of Exeter Fire Department – New Construction Option

20 Court Street
Exeter, New Hampshire
Date: September 2, 2022



The Town of Exeter Fire Department – New Construction Option

20 Court Street
Exeter, New Hampshire
Date: September 2, 2022

Executive summary

The existing Police & Fire department located on the corner of Court and Bow Street will be demolished to allow for the construction of a new single-story 17,101 GSF Fire Department at some point after the PD and FD Substation have relocated to 6 Continental. The proposed new Fire Department will be constructed with brick veneer, decorative concrete masonry units (cmu), flat rubber roof, asphalt roofing shingles on sloped roofs, and high-efficiency exterior doors and windows. An eight-bay apparatus will be provided to accommodate (1) ladder truck, (3) engine trucks, (2) ambulances, an aerial lift and forest truck that will have direct access to Court & Bow Street. Visitors will park on the South side of the property and enter the building along Bow Street into a public vestibule and lobby. The remaining parking on site will be secure parking for Fire Department staff. An Emergency Operations Center (EOC) will be located directly off the main lobby allowing flexible access day or night, along with an optional 1893 Historic Steam Engine Display area. The EOC is designed to be self-sufficient in case of a major event or emergency and can accommodate other town departments. The Fire administration department will have direct access to the lobby limiting visitors access to the building. The proposed layout also provides separation of clean and contaminated areas of the fire station. The firefighter living and working areas provide clean uncontaminated space with natural daylight.

Sustainability initiatives

1. The proposed building will meet &/or exceed the current NH energy code.
2. The building will be designed with all electrical equipment and mechanical systems which will be Net Zero or Passive House ready in the future for solar panels.
3. Sustainable materials, Low flow fixtures and LED lights will be used throughout the project.

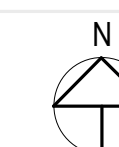


TOWN OF EXETER

EXETER FIRE DEPARTMENT - 20 COURT STREET

SITE PLAN - NEW CONSTRUCTION

SCALE: 1/16" = 1'-0"



September 2, 2022

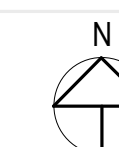
LAVALLEE BRENSINGER ARCHITECTS

TOWN OF EXETER

EXETER FIRE DEPARTMENT - 20 COURT STREET

MAIN LEVEL FLOOR PLAN

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



September 2, 2022

LAVALLEE BRENSINGER ARCHITECTS

GROSS SQUARE FOOTAGE CALCULATIONS:

C-1 COMMON / SUPPORT SPACES =	1,817 gsf.
F-1 FIRE ADMINISTRATION =	2,581 gsf.
F-2 FIRE STATION =	9,939 gsf.
F-3 FIRE DEPARTMENT SUPPORT =	1,838 gsf.
S-1 FACILITY SUPPORT =	926 gsf.
TOTAL =	17,101 gsf.



NEW CONSTRUCTION



1 EXTERIOR PERSPECTIVE FROM THE CORNER OF BOW & COURT STREET
A8.5

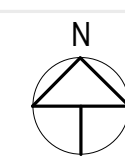


2 EXTERIOR PERSPECTIVE FROM EXISTING PARKING LOT
A8.5

NEW CONSTRUCTION



3 EXTERIOR PERSPECTIVE FROM BOW STREET
A8.5



TOWN OF EXETER, NH - PUBLIC SAFETY BUILDING STUDY
CONCEPTUAL BUDGET

September 2, 2022

20 COURT STREET - NEW FIRE STATION - 1 STORY BUILDING	LOW		HIGH	
Site Development	\$	925,000	\$	975,000
Demolition of Existing Building	\$	275,000	\$	325,000
New 17,101 s.f. Fire Station \$ 350-370 psf	\$	5,985,350	\$	6,327,370
Design and Construction Contingency - 10%	\$	718,535	\$	762,737
Contractor General Conditions	\$	740,000	\$	740,000
Construction Management Fee - 5%	\$	432,194	\$	456,505
Subtotal Construction Costs:	\$	9,076,079	\$ 531/sf	\$ 9,586,612
Project Soft Costs - 20% of Construction Costs	\$	1,815,216	\$	1,917,322
Architectural/engineering fees				
Geotechnical engineering				
Planning and permitting fees				
Builders' risk insurance				
Owner representative/clerk of the works				
Utility connection fees				
Backup generator				
Exterior signage				
Furniture, fixtures, equipment				
Gear storage, extractors, laundry equipment				
Security and IT equipment				
20 Court Street - Conceptual Level Project Costs:	\$	10,891,295	\$ 637/sf	\$ 11,503,935
20 Court Street - Anticipated Conceptual Level Project Costs in Q1 2024:	\$	12,524,989	\$ 732/sf	\$ 13,229,525

The budget assumes mid-level construction materials including; masonry veneer, metal stud framing, with a structural steel superstructure and standard foundation systems, pending further geotechnical investigation.

ALTERNATES:

Increase apparatus bay from 50' to 55' and EMS from 38' to 40'	\$	354,288
Provide steam engine display area	\$	457,500
Increase corridors from 5' to 6'	\$	197,640

Implementation of a Net Zero approach will add approximately 3-4% to this budget

Costs not included:

- Land acquisition costs are not included in this budget
- Any temporary accommodations, relocations, and facility rental costs during construction are not included in this budget
- New or relocated communications equipment; including radio antenna, dispatch consoles, and radio systems