

Building 1208 - ENLISTED MEN'S BARRACKS



View from the Southeast

March 1993

Location: RALSTON AVENUE
NPS Planning Area: FORT WINFIELD SCOTT

Date of Construction: 1910

Historic Structure: YES

Contributing to NHL: YES

Historic Use: INSTITUTIONAL HOUSING
 (MILITARY)

Current Use: INSTITUTIONAL HOUSING
 (MILITARY)

Occupancy Classification: RESIDENTIAL

Hazard Level: ORDINARY

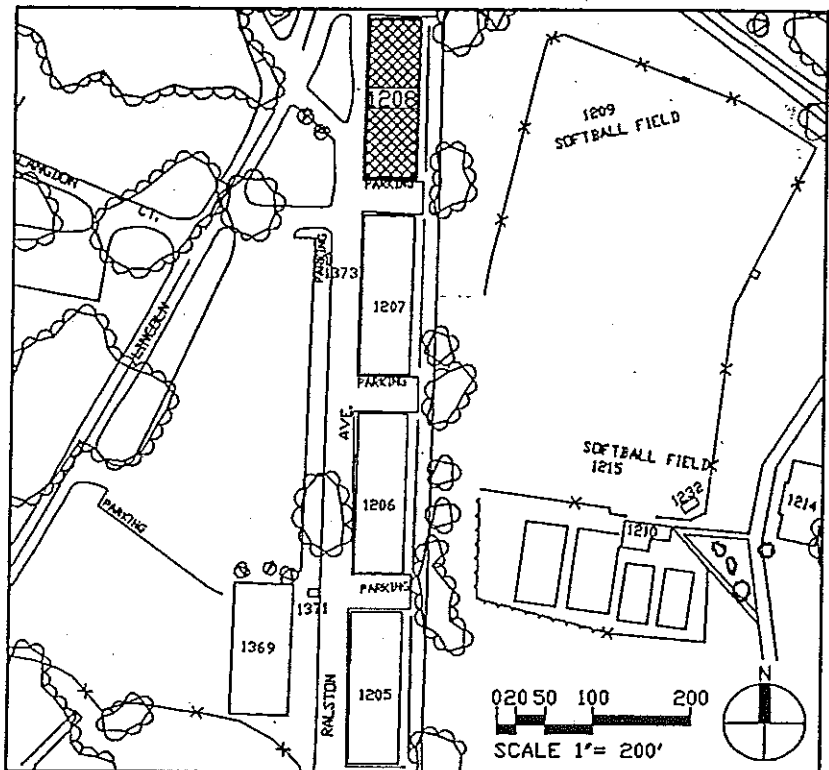
Construction Type: TYPE III

Gross Floor Areas/Ceiling Hts.:

Attic	4,350 gsf±	9'-0"
Second Floor	8,230 gsf±	8'-0"
First Floor	7,560 gsf±	8'-0"
Basement	1,660 gsf±	8'-6"
Total	21,800 gsf	

Building Significance:
 Fort Winfield Scott, originally a Presidio sub-post, marks the introduction of the Mission Revival style at the Presidio. The layout of the buildings around the parade ground curves with the land and represents a departure from traditional army design.

This two-and-one-half story concrete barracks, constructed to house 120 soldiers, has a tiled gable roof, bell-curved parapet, smooth stucco surface and front open arcade. The interior has been modified to include single rooms and offices.



Location Map

February 1993

This fact sheet is presented as a brief synopsis of the information currently available for this building as of 04/12/95. For additional information pertaining to this building or its planning area, refer to the building file and the Presidio General Management Plan.

FORT WINFIELD SCOTT

BUILDING 1208, ENLISTED MEN'S BARRACKS

CHARACTER-DEFINING ARCHITECTURAL FEATURES:

EXTERIOR:

Highly sensitive to alteration:

- building form, shape, materials, configuration, symmetry
- curved gable end walls on end wings with decorative parapets
- seven-bay recessed arcade, front elevation
- segmental arches in arcade
- iron porch railing (portion of railing removed in south bay)
- intersecting gable roofs with shingle tile finishes
- three dormers, front and rear elevations with shingle tile wall and roof finishes
- lug sills
- fenestration pattern
- original windows, third floor; three-over-three double hung in dormers; Palladian format windows in gable ends with four-light casements flanking six-over-six double

- hung arched window
- louvered vents at gable ends, main block
- wide eaves with decorative rafter tails, supported by decorative brackets and paired joists
- stucco-covered chimney, kitchen wing of barracks, braced
- original transoms over doors (replacement)
- some original doors (gable ends and wings) with six lights and single inset panel
- cast-iron boot scraper on edge of concrete entrance steps
- concrete entrance steps
- recessed original entrance

Less sensitive to alteration:

- exterior paint colors (stucco and wood trim)

INTERIOR:

Highly sensitive to alteration:

- remnants of original room configuration where they occur
- exposed structure: cast-iron columns, banded and flanged at the top, supporting 10x10 timber beams (first and second floors) or supporting reinforced concrete beams (basement, coffered ceiling effect); exposed concrete beams and ceiling, basement; third floor 6x6 columns capped with bolsters that support 8x8 notched timbers; exposed concrete foundation walls in basement with impression of wooden formwork
- original plaster finish on interior side of all exterior walls
- original ceiling height (most often now hidden by suspended acoustical tiles or dropped sheetrock ceiling)
- chair rail with bullnosed edge, central hallway and immediate areas of corridors off

- central hall including stairways
- interior staircases with simple banisters and newel posts
- concrete basement floor; wood and concrete floors, first floor; wood second floor; and wide wood planks, third floor
- original baseboards, window trim and picture moldings where they occur
- porcelain tile wainscots in kitchen and latrine areas
- metal ash removal doors in basement, at base of chimney
- square grid air vents

Less sensitive to alteration:

- new partitions
- cosmetic finishes

The physical history report provides important information on historic structures that shall be used as a guide for making rehabilitation decisions. These character-defining features, excerpted from the report, are architectural elements that contribute to a building's significance. For additional information on this building, please refer to the complete physical history report.

STRUCTURAL EVALUATION

BUILDING 1208: ENLISTED MEN'S BARRACKS

Building 1208 was originally constructed in 1910 for use as a barracks. The building was evaluated for possible structural deficiencies by use of the Inventories and Conditions Assessment Program (ICAP) and a checklist developed by the National Earthquakes Hazards Reduction Program (NEHRP) that identifies possible weak links in the seismic-resisting system of a building.

Deficiencies in the structural system were determined during an on-site inspection of the building, and were duly noted in the ICAP evaluation. No analyses were performed, no finishes were removed and no materials testing was done. The deficiencies noted are based on conditions observed and engineering judgement.

General Description

Two-story building with concrete perimeter and stair enclosure walls, a partial basement and a finished, occupied attic. It is situated on a gently sloping site:

Overall plan dimensions are 54'x155'.

Story heights are - 8'-6" at the basement (height of adjacent crawl space varies)
- 12'-6" at the first and second floor levels

The condition of the building is good.

Specific Descriptions

Foundations

Footings were not observable, but are assumed to be concrete spread footings under isolated concrete columns and continuous footings under concrete walls.

Floors

Basement: Concrete slab-on-grade.

First Floor: Structural concrete slab supported by concrete beams that span to perimeter concrete walls or interior concrete columns.

Second Floor: Unknown wood sheathing on wood joists.

Attic Floor: Unknown sheathing supported by wood framing.

Roofing and Roof Framing

Clay tile on straight sheathing supported on wood rafters that span to wood interior and concrete perimeter walls.

Walls

Perimeter and interior bearing walls are of reinforced concrete construction.

Partitions are wood framed. Basement walls are reinforced concrete.

Vertical Load-Carrying System

Joists and rafters span to perimeter concrete bearing walls and to wood beams supported by cast iron pipe columns.

Visible members are in good condition. Members that are not visible are assumed to be in good condition also, since there is no outward evidence that would indicate otherwise.

Seismic Resisting System

Concrete slab at the first floor, and wood sheathing at the roof and second floor serve as horizontal diaphragms that span to the perimeter walls. The concrete perimeter walls of the building serve as vertical diaphragms to carry lateral loads to the supporting soil.

Deficiencies

The deficiencies noted below are derived from an evaluation of the structural system based on conditions observed and engineering judgement. These deficiencies are classified as either known or assumed deficiencies:

Known deficiencies are deficiencies which were observed during the site visit and may present a life-safety hazard.

Assumed deficiencies are conditions which could not be observed but are assumed to exist, given generally accepted details of construction during the period when the building was constructed. Further investigation is required to determine the degree to which assumed deficiencies present a life-safety hazard.

Known Deficiencies

- ◆ None

Assumed Deficiencies

- ◆ Anchorage of horizontal diaphragms to the walls is not sufficient to transfer in-plane and out-of-plane lateral loads.
- ◆ Openings in walls and diaphragms lack adequate ties to transfer lateral loads.
- ◆ Roof diaphragm lacks sufficient strength to transfer lateral loads to walls.

BUILDING 1208
EVALUATION STATEMENTS FOR BUILDING TYPE 9:
CONCRETE SHEAR WALLS

The vertical components of the lateral-force-resisting system in these buildings are concrete shear walls that are usually bearing walls. In older buildings, the walls often are quite extensive and the wall stresses are low but reinforcing is light. When remodeling calls for enlarging the windows, the strength of the modified walls becomes a critical concern. In newer buildings, the shear walls often are limited in extent, thus generating concerns about boundary members and overturning forces.

Address the following evaluation statements, marking each either true (T) or false (F). Statements that are found to be true identify issues that are acceptable according to the criteria of this handbook; statements that are found to be false identify issues that need investigation. For guidance in the investigation, refer to the handbook section indicated in parentheses at the end of the statement.

Be advised that the numerical indices preceded by an asterisk (*) in these statements are based on high seismicity ($A_v = 0.4$). Adjustments are reasonable for lower seismicity. The appropriate adjustment is not necessarily a direct ratio of seismicity.

BUILDING SYSTEMS

? T
DIAPHRAGM
TO WALL
CONNECTION

- F LOAD PATH: The structure contains a complete load path for seismic force effects from any horizontal direction that serves to transfer the inertial forces from the mass to the foundation (NOTE: Write a brief description of this linkage for each principal direction.) (Sec. 3.1)
- (T) F REDUNDANCY: The structure will remain laterally stable after the failure of any single element. (Sec. 3.2)
- (T) F WEAK STORY: Visual observation or a Quick Check indicates that there are no significant strength discontinuities in any of the vertical elements in the lateral-force-resisting system; the story strength at any story is not less than 80 percent of the strength of the story above. (Sec. 3.3.1)
- (T) F SOFT STORY: Visual observation or a Quick Check indicates that there are no significant stiffness discontinuities in any of the vertical elements in the lateral-force-resisting system; the lateral stiffness of a story is not less than 70 percent of that in the story above or less than 80 percent of the average stiffness of the three stories above. (Sec. 3.3.2)
- (T) F GEOMETRY: There are no significant geometrical irregularities; there are no setbacks (i.e., no changes in horizontal dimension of the lateral-force-resisting system of more than 30 percent in a story relative to the adjacent stories). (Sec. 3.3.3)
- (T) F MASS: There are no significant mass irregularities; there is no change of effective mass of more than 50 percent from one story to the next, excluding light roofs. (Sec. 3.3.4)
- (T) F VERTICAL IRREGULARITIES: All shear walls are continuous to the foundation. (Sec. 3.3.5)

- (T) F TORSION: The lateral force resisting elements form a well balanced system that is not subject to significant torsion. Significant torsion will be taken as any condition where the distance between the story center of rigidity and the story center of mass is greater than 20 percent of the width of the structure in either major plan dimension. (Sec. 3.3.6)
- (T) F CONCRETE WALL CRACKS: All diagonal cracks in the wall elements are 1.0 mm or less in width, are in isolated locations, and do not form an X pattern. (Sec. 3.5.6)
- (T) F DETERIORATION OF CONCRETE: There is no visible deterioration of concrete or reinforcing steel in any of the frame elements. (Sec. 3.5.4)
- N.A. T F POST-TENSIONING ANCHORS: There is no evidence of corrosion or spalling in the vicinity of post-tensioning or end fittings. Coil anchors have not been used. (Sec. 3.5.5)

SHEAR WALLS

- ? T F SHEARING STRESS CHECK: The building satisfies the Quick Check of the shearing stress in the shear walls. (Sec. 5.1.1)
- ? T F REINFORCING STEEL: The area of reinforcing steel for concrete walls is greater than 0.0025 times the gross area of the wall along both the longitudinal and transverse axes and the maximum spacing of reinforcing steel is 18 inches. (Sec. 5.1.7)
- ? T F OVERTURNING: All shear walls have h_w/l_w ratios less than 4 to 1. (Sec. 5.1.2)
- ? T F CONFINEMENT REINFORCING: For shear walls with h_w/l_w greater than 2.0, the boundary elements are confined with spirals or ties with spacing less than $8d_b$. (Sec. 5.1.6)
- ? T F REINFORCING AT OPENINGS: There is special wall reinforcement around all openings. (Sec. 5.1.8)
- N.A. T F COUPLING BEAMS: The stirrups in all coupling beams over means of egress are spaced at $d/2$ or less and are anchored into the core with hooks of 135 degrees or more. (Sec. 5.1.3)

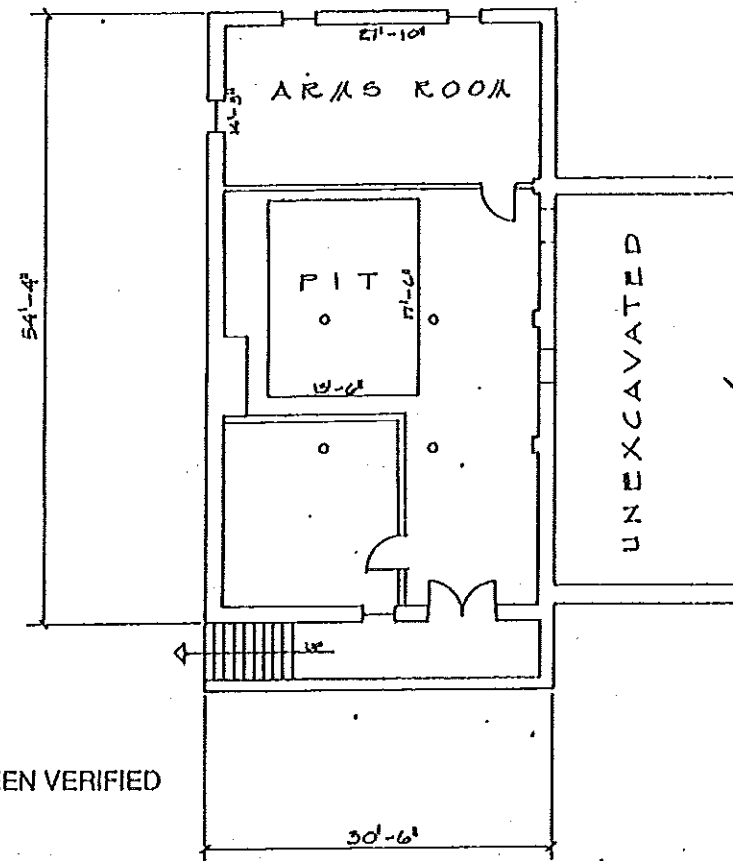
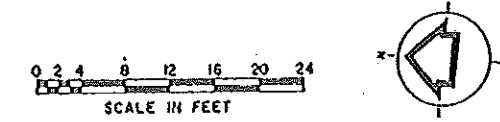
DIAPHRAGMS

- ? T F PLAN IRREGULARITIES: There is significant tensile capacity at re-entrant corners or other locations of plan irregularities. (Sec. 7.1.1)
- ? T F REINFORCING AT OPENINGS: There is reinforcing around all diaphragm openings larger than 50 percent of the building width in either major plan dimension. (Sec. 7.1.3)
- (T) F OPENINGS AT SHEAR WALLS: Diaphragm openings immediately adjacent to the shear walls constitute less than 25 percent of the wall length, and the available length appears sufficient. (Sec. 7.1.4)
- T (F) SHEATHING: None of the diaphragms consist of straight wood sheathing, or have span/depth ratios greater than 2 to 1. (Sec. 7.2.1)

CONNECTIONS

- ? T F TRANSFER TO SHEAR WALLS: Diaphragms are reinforced and connected for transfer of loads to the shear walls. (Sec. 8.3.1)
- ? T F WALL REINFORCING: All vertical wall reinforcing is doweled into the foundation. (Sec. 8.4.4)

BUILDING 1208 - Basement



NOTE: DIMENSIONS HAVE NOT BEEN VERIFIED

CURRENT REPAIR NEEDS (ICAP MAINTENANCE FEATURES)

<i>Exterior</i>	<i>Interior</i>	<i>Life Safety/Egress</i>	<i>Disabled Access</i>	<i>Mechanical/Electrical</i>
4140 Broken mullions, wood deteriorated on exterior window. Replace sash with new to match existing.	4210 Efflorescence, broken and cracked plaster wall in basement. Patch damaged plaster and paint.	None Noted.	None Noted.	None Noted.

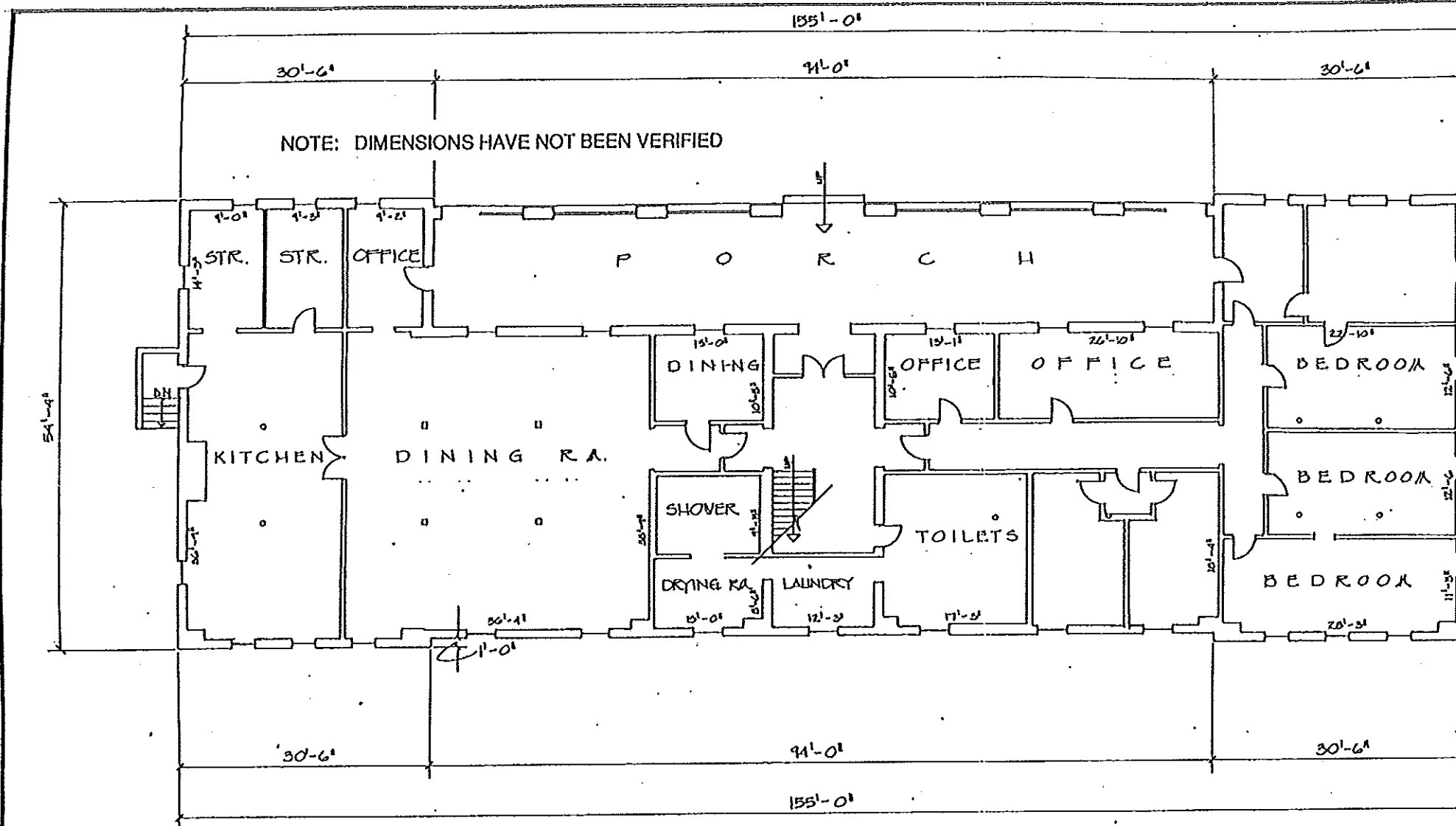
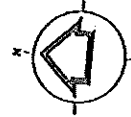
CEILING HEIGHT: ±8'-6"

REHABILITATION GUIDELINES BUILDING 1208
 PRESIDIO OF SAN FRANCISCO
 NPS CX-2000-0-0030 W.O. 14

BASEMENT PLAN

Sheet 1 of 4 March 1993

BUILDING 1208 - First Floor



CURRENT REPAIR NEEDS (ICAP MAINTENANCE FEATURES)

Exterior

- 4110 Broken clay tiles on exterior wall. Replace with new clay tiles to match existing.
- 4131 Spalling and cracks in concrete porch floor. Patch spalling and cracks.

Interior

- 4244 Transom glass is painted over. Remove paint from glass.
- 4253 Trim is missing. Install new trim in historic style.

Life Safety/Egress

- 4133 Exterior guardrails too low; openings between rails too large. Install new guardrail behind existing; new guardrail to be 1 pipe rail and wire mesh.
- 4254 Interior doors have non-safety glass in hazardous location. Reglaze with safety glass.
- 4273 Stair handrail is too low and not grippable; guardrails are too low. Add new handrail at wall with returns; add rails at guardrail to achieve 42" height.
- 4711 No level landing at exterior side door. Install 44"x 60" landing at each door.

Disabled Access

- 4712 No handrails on exterior stair. Install new metal handrails.
- 4712 There is a step at the door, handrail and guardrail are non-conforming, stairs too steep, open risers, guardrail missing. Replace entire stair.
- 4255 Knob hardware on interior doors is not code compliant. Replace with lever lockset hardware.
- 4713 Doors do not meet disabled access requirements. Install 36" wide door, patch wall to match adjacent finishes.

- 4771 No designated handicap parking. Provide striping, signage, curb cut for disabled parking space.
- 4772 No handicap access to door; no access to porch from grade. Install handicap accessible ramps and railings.
- 4772 No disabled access between floors. Install 3-stop elevator.
- 4773 Floor is 1" lower than corridor; 1/2" max. allowed for handicap accessibility. Flare flooring at 1:15 slope to corridor floor.

- 4774 No handicap accessible fixtures or accessories in restrooms. Rework to provide 1 disabled accessible wc, lavatory and accessories.
- 4775 Drinking fountain not handicap compliant. Replace with handicap compliant electric water coolers.

Mechanical/Electrical

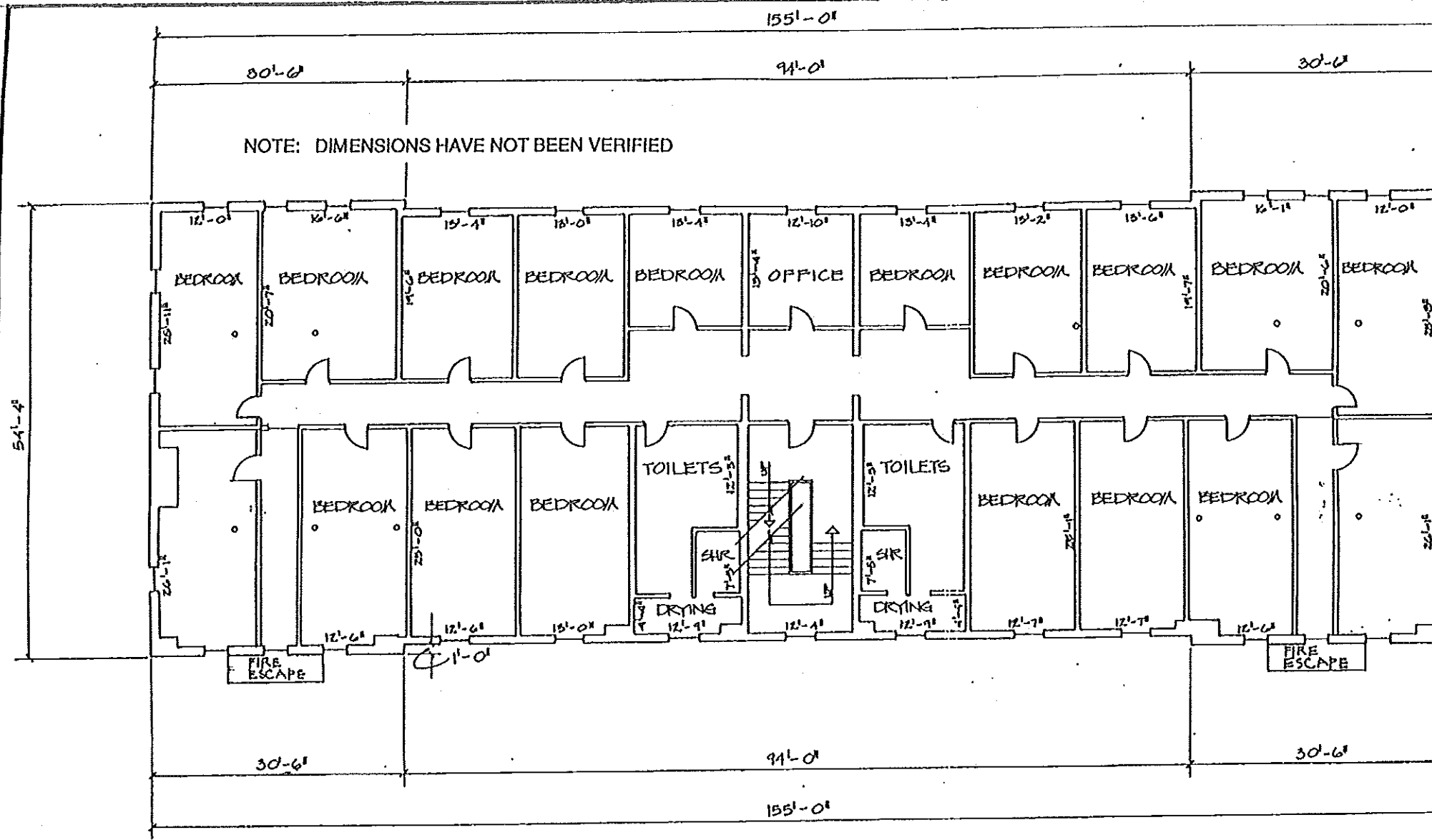
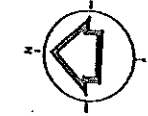
- 5026 No back flow prevention at hose bibbs. Install back flow prevention devices.
- 5074 No bird screen at kitchen exhaust. Install bird screen.

CEILING HEIGHTS: ±8'-0" SUSPENDED CEILING;
±11'-2" ORIGINAL CEILING

REHABILITATION GUIDELINES BUILDING 1208
PRESIDIO OF SAN FRANCISCO
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FIRST FLOOR PLAN

BUILDING 1208 - Second Floor



CURRENT REPAIR NEEDS (ICAP MAINTENANCE FEATURES)

Exterior

None Noted.

Interior

4213 Vinyl base is missing. Install new vinyl base.

Life Safety/Egress

4254 Interior doors have non-safety glass in hazardous location. Reglaze with safety glass.

4273 Stair handrail is too low and not grippable; guardrails are too low. Add new handrail at wall with returns; add rails at guardrail to achieve 42" height.

4711 No code compliant second means of egress from second floor or attic. Provide enclosed exit stairs at each end of building.

Disabled Access

4255 Knob hardware on interior doors is not code compliant. Replace with lever lockset hardware.

4713 Doors do not meet disabled access requirements. Install 36" wide door, patch wall to match adjacent finishes.

4772 No disabled access between floors. Install 3-stop elevator.

4774 No handicap accessible fixtures or accessories in restrooms. Rework to provide 1 disabled accessible wc, lavatory and accessories.

4775 Drinking fountain not handicap compliant. Replace with handicap compliant electric water coolers.

Mechanical/Electrical

None Noted.

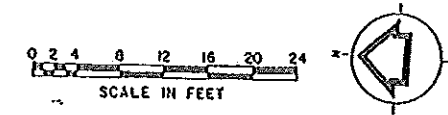
CEILING HEIGHTS: ±8'-0" SUSPENDED CEILING;
±12'-0" ORIGINAL CEILING

REHABILITATION GUIDELINES BUILDING 1208
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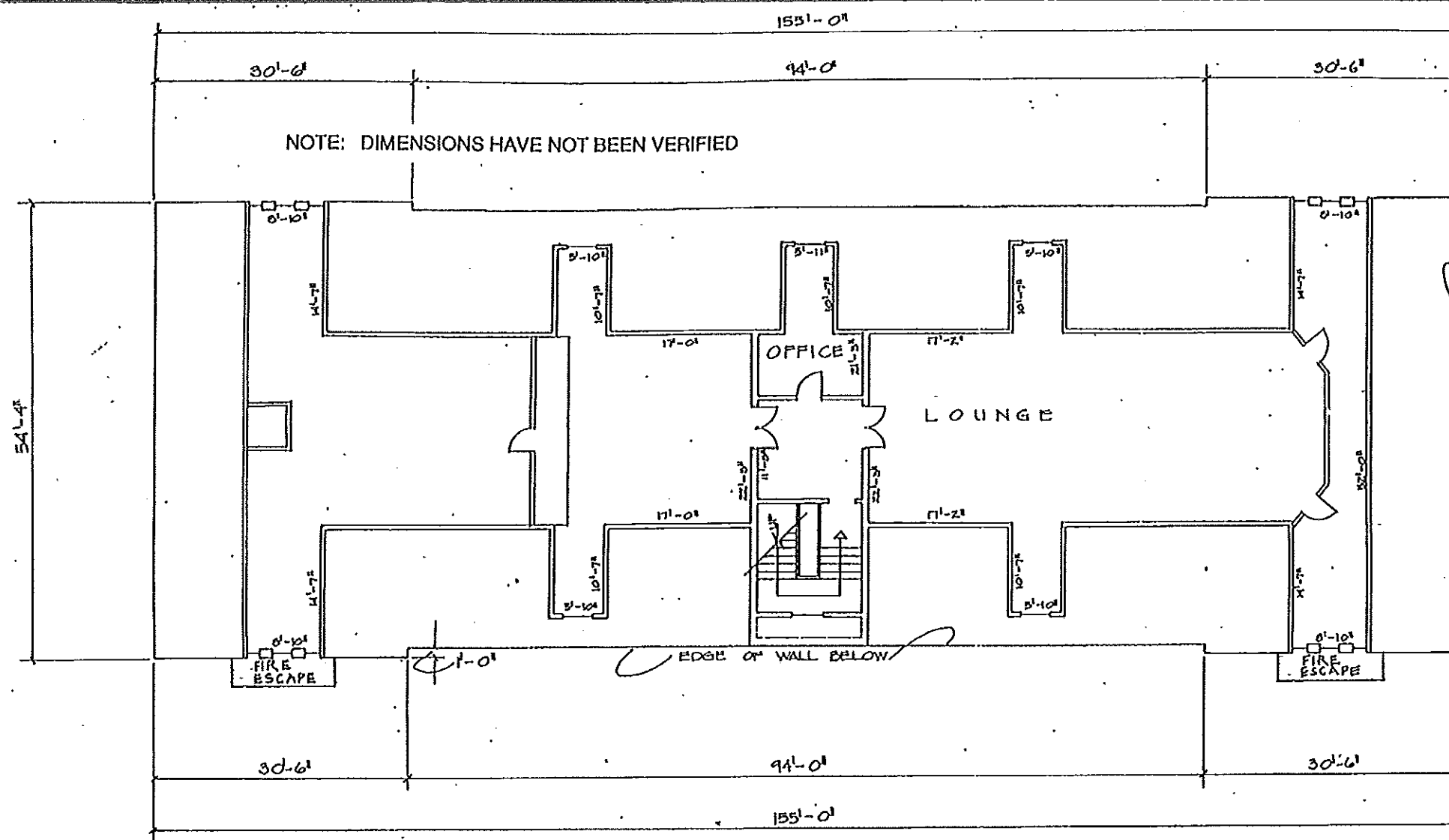
SECOND FLOOR PLAN

Sheet 3 of 4 March 1993

BUILDING 1208 - Attic



NOTE: DIMENSIONS HAVE NOT BEEN VERIFIED



CURRENT REPAIR NEEDS (ICAP MAINTENANCE FEATURES)

Exterior

- 4142 Window sash is missing. Install new sash to match existing.
- 4144 Glass is painted over. Remove paint from glass.
- 4146 Wood window sill is deteriorated. Replace with new to match.

Interior

None Noted.

Life Safety/Egress

- 4254 Interior doors have non-safety glass in hazardous location. Replace with safety glass.

- 4273 Stair handrail is too low and not graspable; guardrails are too low. Add new handrail at wall with returns; add rails at guardrail to achieve 42" height.

- 4711 No code compliant second means of egress from second floor or attic. Provide enclosed exit stairs at each end of building.

Disabled Access

- 4255 Knob hardware on interior doors is not code compliant. Replace with lever lockset hardware.

- 4713 Doors do not meet disabled access requirements. Install 36" wide door, patch wall to match adjacent finishes.
- 4772 No disabled access between floors. Install 3-stop elevator.

- 4773 8" platform/stage with no handicap access. Install wood ramp.

Mechanical/Electrical

None Noted.

CEILING HEIGHTS: ±6'-0" AT WALLS; ±9'-0" AT CENTER

REHABILITATION GUIDELINES BUILDING 1208
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ATTIC PLAN

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