

**U.S. Naval Air Station Moffett Field
Building 18 Re-Use Guidelines
Final Report**

Moffett Federal Air Field, California



prepared for

NASA/Ames Research Center

Moffett Federal Airfield, California

prepared by

Architectural Resources Group

Architects, Planners & Conservators, Inc.

San Francisco, California

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Introduction

The Guidelines for Rehabilitating Buildings at U.S. Naval Air Station Moffett Field have been prepared to assist NASA Ames professional staff, tenants and their consultants in rehabilitating structures on the historic Navy base. The guidelines are intended to be a design aid in determining acceptable alterations, additions, and repairs for preserving the character of the existing buildings. They are based upon *The Secretary of the Interior's Standards for Rehabilitation*.

The Rehabilitation Guidelines of this study are particularly concerned with identifying intact historic fabric at each building and establishing parameters for rehabilitation work for building re-use.

I. Executive Summary

The Aerological Building, Building 18, was constructed in 1933 on the corner of Bushnell Road and McCord Avenue. The building's exterior remains mostly intact while the interior has been heavily modified with many additive finish changes. The building's size and configuration present challenges for re-use, due to access and egress code deficiencies, while still meeting *The Secretary of the Interior's Standards for Rehabilitation*. Further upgrades in the structural, mechanical, electrical, and plumbing systems will be required as re-use designs are developed.

II. Methodology

Building 18 was inspected by Architectural Resources Group (ARG) in December of 2001, for historically and architecturally significant features of each building.

During the on-site inspection, the team photographed the building and gathered information from the following repositories:

1950 Navy Docks & Yards Micro Film
Engineering Documentation Center
Ames Imaging Library

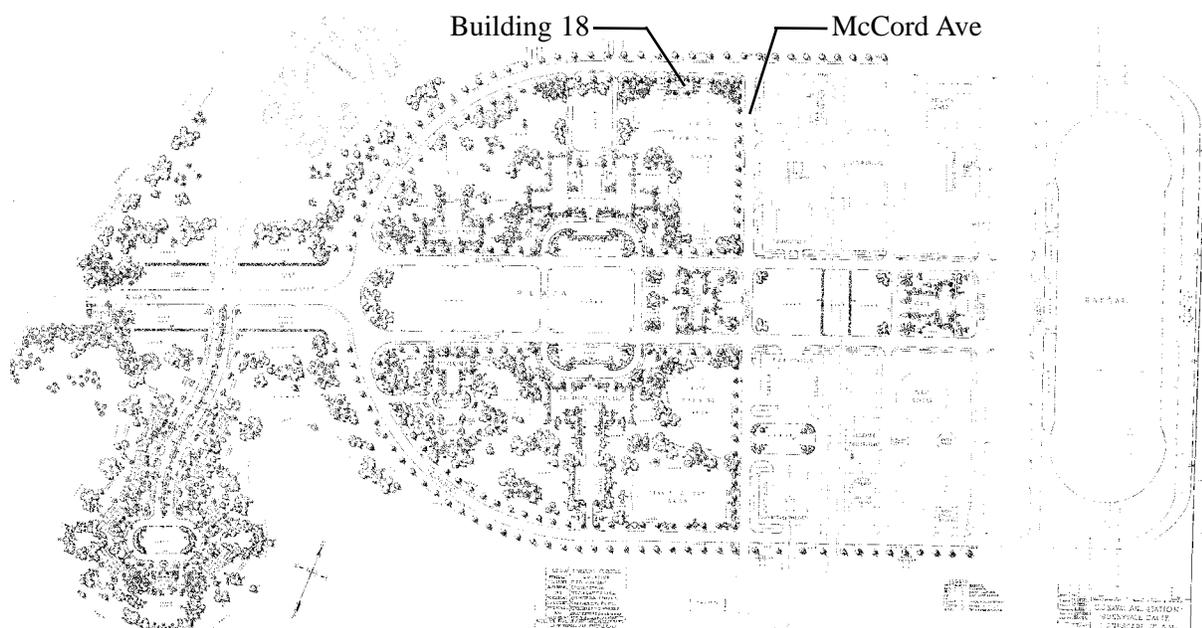
From the various repositories the following documents were utilized as the primary sources of information:

The 1994 National Register of Historic Places Nomination Form for the US Naval Air Station Moffett Field Central Historic District;
The Department of the Navy, Bureau of Yards and Docks Record Drawings dated 1934 (reprinted from microfilm);
CAD Floor Plans to the Existing Conditions dated December 2001;
Aerial photographs dating from 1931 through 1944.



III. Building Summary

Location:	Building 18 Bushnell Road
Area:	US Naval Air Station Moffett Field - Central Historic District
Date of Construction:	1933
Historic Structure:	Yes
Historic Use:	Aerological Building
Current Use:	Office
Hazard Level:	Moderate/High
Number of Floors:	3 story
1st Floor:	1,782 sq. ft.
2nd Floor::	1,782 sq. ft.
Observation Room:	749 sq. ft.
Total:	4,313 sq. ft.
Exterior Materials:	Concrete with integral colored stucco Built-up Roofing
Construction Frame:	Poured-in-place, reinforced concrete walls, beams and roof



Site plan from 1933

IV. Site Evaluation

A. Historical Background of Moffett Field

Sunnyvale Naval Air Station was commissioned on April 12, 1932. The formality and hierarchy of the base and building designs are prime examples of American military base design. In order to understand the significance of the buildings individually, one needs to consider them in the larger context as they relate to the site and each other. All of the buildings within the original base are constructed in the Spanish Colonial Revival Style. All of the buildings within the administration portion of the original base are contributing buildings to US Naval Air Station Moffett Field - Central Historic District.

The original 1933 base was defined by perimeter roads, Wescot Road & Bushnell Road & Sayre Avenue. These roads would later become the boundary of the US Naval Air Station Moffett Field - Central Historic District. McCord Avenue which runs north/south divided the base into two halves, to the west-administration and to the east-industrial. The Administration portion was comprised primarily by those buildings which define Shenandoah Plaza, Buildings 17, 19, 20, 23, & 25 and their support structures, building 21, 22, & 24. North and South Akron Road form a strip of land along the central axis of the base bisecting the administration and industrial sides. Only two buildings were constructed in this area, Building 17 & 3. This lack of development allows for an unobstructed view of Hanger 1.

Building 18 is unique in its siting on the base. It is clearly not considered industrial. Yet it does not contribute to defining Shenandoah Plaza as all of the other buildings do within the administration side. It clearly faces away from the plaza with its formal entrance facing Wescot Road. It is constructed in the Spanish Colonial Revival Style. The detailing is simplified yet complimentary and consistent with the primary buildings surrounding the Plaza.

For the purpose of this report we concur with the National Register nomination form that the Period of Significance for these structures is 1930–1935 and 1942–1946, which corresponds to the period of Navy occupation.

B. Recommendations/Rehabilitation Guidelines

Although the buildings surrounding Shenandoah Plaza were originally designed with provisions for future additions, Building 18 did not have such provisions. Proposals for additions to the structure at this time must be very carefully considered with the integrity of the historic district in mind. Additions to the building should be considered comprehensively for the entire district as opposed to being considered on a building by building basis. Additions should be designed in concert with the intent of the original site plan to be symmetrically located relative to each structure and relative to the overall complex. All additions should be carefully designed to not destroy existing historic materials. The new work should be differentiated from the original, yet be compatible with the historic materials, features, size, scale and proportion, and massing. Because of its compact central plan and form, additions to Building 18 will be difficult to accommodate without major impacts to its appearance.

Additions of ramps and other site features should be sensitive to the context of the historic district. The additions of ramps to accommodate building access should be designed with minimal visual impact, preferably as walkways with minimal slope. Landscape features such as plantings, lawns, walkways and streets should be preserved in the same manner as the buildings. Just as the buildings should be in keeping with the *The Standards*, the landscaping and site features should be in keeping with *The Secretary of the Interior's Guidelines for the Treatment of Cultural Landscapes*.

V. Architectural Evaluation

A. Description

Building 18 consists of a two story base structure with a modified rectangular floor plan and an octagonally shaped third story centered on the roof of the base structure. The third story served as an observation room and has a 30' tall metal instrument tower mounted on the roof. The base structure has a flat roof. These flat roofs allowed for access via a ship's ladder to the roof of the penthouse for observation. Exterior features of the building include: integrally colored cement plaster wall surface, plain exterior wall surface, limestone ornamental surround at the entry, paneled entry doors and steel windows. At this time, the historic use for Building 18 is unclear.

The current exterior is consistent with the original drawings with some minor changes: a small one story addition has been added to the east elevation, and the urns originally at the front entry and the wrought iron railing at the casement window above the entry have been removed.

The first and second floor are organized around the entry lobby and the central stair. The detailing of the lobby is very simple. With the exception of the lobby, stairs, and restrooms, the first floor had an open plan. The second floor had two large offices on the east and west ends of the building, leaving the central portion of the second floor divided into a series of smaller rooms: restrooms, flask and filling rooms.

The most significant interior space is the third floor, octagonal shaped observation room, with a terrazzo floor, ceiling material of insulation clad with copper, and wood crown mold wrapped in copper. Two doors, one on the east elevation and one on the west elevation, provide access to the flat roof areas. A ship's ladder on the east roof provides access to the roof of the observation room and to the instrument tower. A metal tube allowed people on the roof deck to communicate with people in the observation room. A metal handrail surrounds the roof deck.

The original interior finishes within Building 18 were similar to the other buildings on the original base. With the exception of the entry lobby and toilet, the first floor was unfinished. The flooring within the entry lobby, second floor stair lobby, second floor offices and observation room is terrazzo border and base with asphalt tile in a checker board pattern. The wall finishes throughout were plaster. The ceilings varied. In the more formal areas, lobbies and stairs, the ceiling was exposed concrete slab and beam. In the office areas, ceiling tiles were directly adhered to the underside of the concrete floor slab above. And as previously mentioned, the observation room ceiling was suspended insulation clad in copper.

Many of the interior finishes are still present, although some interior alterations have occurred over time. The first floor has been subdivided into offices while the second floor remains spatially in its original form. Many of the original plaster wall finishes are now concealed behind wood paneling. With the exception of the entry lobby and second floor stair lobby, suspended acoustical ceiling has been installed throughout the building. Carpeting has also been installed throughout the building over the original floor finishes. The restroom finish appear to be intact on the first floor. On the second floor, one toilet room remains intact while the fixtures of the other toilet room have been removed.

B. Areas of Historical Significance

The building has been surveyed and evaluated for areas of historical and architectural significance and the features have been categorized into levels of descending importance: significant, contributing, tertiary, and non-contributing. The buildings original use, “Aerological Building”, should be the subject of further research. Its original design is clearly related to that function but the functions themselves are not well understood. Additional knowledge about the original function of this building will assist in better understanding of its historical significance and will further inform its rehabilitation.

In considering alterations and rehabilitation efforts for the building reuse, the areas of greatest significance should be dealt with in the most careful manner. See the floor plans and list of Character-Defining Features for additional information. The following is a definition of each level of importance and the features of the building included in each category.

1. Significant Character-Defining Features: These features are the most important, both architecturally and historically, without which the building would lose its distinctive character. Alteration or removal of these features should be avoided.

The following are significant features:

- Overall form—base structure with octagonal penthouse
- Exterior walls, fenestration, parapets
- Entry: limestone surround, wood door, and light fixtures
- Observation Room (penthouse)
- Interior public spaces: stairs
- Instrument Tower

2. **Contributing Features:** Contributing features are important elements which contribute to the understanding of the original design. Alteration or removal of these features may be necessary for programmatic or building system requirements. However, removal should be minimized and where necessary mitigated.

The following are significant features:

Interior public spaces: first floor lobby

3. **Tertiary Features:** Tertiary Features are original elements of the building which are of a lower importance relative to the understanding of the original design. Alteration or removal of these features, if necessary, would have a limited affect on the integrity of the building.

The following are tertiary features:

Interior doors, transom and frames.

4. **Non-Contributing Features:** Non-Contributing features are areas of the building which have been remodeled or where additional alteration would not affect the original integrity of the building. In some cases, removal of the non-contributing features may be beneficial to the historic integrity of the building.

The following are non-contributing features:

Interior infill construction - first floor

Exterior one story addition

Recently applied Interior finishes:

Suspended acoustical ceiling

Wood paneling

Carpet

C. Conservation Responsibilities

The following materials require special care and treatment in their maintenance and rehabilitation:

Integral color stucco

Terrazzo Flooring

Copper ceiling and crown mold

D. Recommendations/Rehabilitation Guidelines

Any alterations to the significant character-defining features should be approached carefully and sensitively, following *The Secretary of the Interior's Standards for Rehabilitation*. These *Standards* define Rehabilitation as "the process of returning a property to a state of utility, through repair or alteration, which makes possible an efficient contemporary use while preserving those portions and features of the property which are significant to its historic, architectural, and cultural values." Alteration of significant character-defining features will require consultation with the California Office of Historic Preservation.

The spatial relationships of the buildings throughout Moffett Field are significant to the historic character of the district. Although Building 18 is not immediately located on the plaza, the relationship of Building 18 as an anomaly to the other structures on the base contributed to the evolution of the historic district. Maintaining these relationships is important in protecting the Historic District and National

Register status of Moffett Field.

Building 18 is in good physical condition, and the exterior remains in its original configuration. The exterior form is a significant feature of the structure and should be maintained, particularly in respect to its contextual role as support structures for the base. The buildings uniqueness is a key factor in its significance within the U.S. Naval Air Station Moffett Field. Further research should be undertaken to better understand the historical use for the building. It contributes to the overall historic character of Moffett Field.

The building's continued use as office function is appropriate. Re-use of the building could be accomplished with a few alterations as outlined in Section VI, below.

Restoration of the historic exterior color scheme is recommended as a long term goal for the district, along with the other buildings in the district, which are all an integral-colored stucco. This original finish has been painted many times. As it is not known what the original color scheme was, a complete analysis should be performed on the integrally-colored stucco and other exterior components. Consideration should be given to removing paint and restoring the original integrally-colored stucco finish.

VI. Fire Rating/Life Safety Evaluation

A. Description

Building 18, constructed in 1933, is three-story unsprinklered building. The building has a gross floor area of 4,313 square feet and consists of concrete slab, concrete exterior walls, and a concrete roof slab. The building was reviewed for general code compliance with the provisions of the 1998 California Building Code (CBC).

The building is currently classified as B occupancy and Type II-N construction. The following review is based on the same occupancy. If a change in occupancy or mixed occupancies is proposed, further detailed code analysis will be required.

B. Requirements

Occupancy

Allowable height: Section 506 of the CBC limits the number of stories of the building to 2 stories.

Exiting/ Egress

Exit access: Section 1004.2.3.2 of the CBC requires two exits from every story except the first unless required by table 10-A. Currently the second and third story only have one exit from each.

Doors: Section 1003.3.1.3 of the CBC requires a clear opening of 32". Section 1003.3.1.5 requires the door to swing in the direction of egress. Section 1003.3.1.6a requires a level landing on each side of all doors which are part of the means of egress system. This section also requires the landing to be 44" in length when the door swings away and 60" in the direction of door swing. Currently, the front and rear entry have an approximate 6" step up and inswing door, and numerous interior doors do not have 32" clear dimension.

Stairs: CBC section 1003.3.3.6a requires all stairs (two or more risers) to have a handrail on each side. Currently the existing interior stair does not have code compliant a handrail and the front entry stair has no handrail.

Guardrails Section 509 of the CBC requires guardrails at all unenclosed floor or roof openings, open or glazed stairways, aisles landings, ramps, balconies, or porches, which are over 30” above grade or the floor below. Currently the flat roof adjacent to the observation room and the interior stairs landings do not have code compliant guardrails

C. Recommendations/Rehabilitation Guidelines

California’s State Historical Building Code (SHBC) shall be used in conjunction with the California Building Code as stated in section 8-102.1: “These regulations are applicable for all issues regarding building code compliance for qualified historical buildings or properties. These regulations are to be used in conjunction with the regular code to provide alternatives to the regular code to facilitate the preservation of qualified historical buildings or properties. These regulations shall be used whenever compliance with the regular code is required for qualified historical buildings or properties.”

Occupancy

Allowable height: Section 506 of the CBC allows for height increase of one story if an approved automatic sprinkler system is installed throughout.

Exiting/Egress

Exit access: Because of the small floor area if the second and third floor, adding a second interior stair would significantly impact the historical character of the building. Section 8-502.1 of the SHBC allows for a fire escape or fire escape ladder to be acceptable as one of the required exits. Provide an exterior fire escape or fire escape ladder which can be accessed by the observation room and second floor as a second means of egress. Further study of the location and the configuration of the fire escape is necessary to minimize the visual impact tot he building.

Doors: Provide a code compliant level landing at the front entry and rear exit. Re-swing the existing exterior doors to swing out in the direction of egress. Provide 32” clear at all doors (offset hinges).

Stairs: Provide a code compliant handrail at the front entry. Provide a new code compliant handrail at the interior exit stair which are compatible to the existing ornamented metal handrail.

Guardrails: Provide a code compliant guardrail at the flat roof areas adjacent to the observation room and the observation room roof. Provide a code compliant guardrail at the second floor stair landing/ lobby and the observation room which is compatible with the existing ornamented metal handrail.

VII. Disabled Accessibility

A. Requirements

Site Access

Access to entrance/access from exits: Section 1127B.1 of the CBC requires access shall be provided to all entrances and ground floor exits. Currently access is not provided to the front entry or the rear exit.

Accessible Parking: CBC section 1129B.1 requires that where parking is provide for public as clients, guests, or employees it shall provide accessible parking. Section 1129B.4 requires for eight spaces provided one shall be van accessible. Currently there are no accessible parking spaces provided.

Building Access

Entrances / Ground Level Exits: Section 1133B.1 of the CBC requires all entrances and ground floor exits shall be accessible. Currently the front entry and the rear exit is not accessible.

Exits: Section 1114B.2.1 of the CBC states that all required exits shall be accessible. If they are not, an area of evacuation must be provided. The interior stair is currently the sole means of egress and is non accessible and no floors are accessible.

Doors: Section 1133B.2.4 of the CBC requires a level landing on each side of the door. Section 1133B.2.4.2 requires maneuvering clearance to be 60” on the swing side of interior doors and 48” on the non-swing side of the door with a closer (44” without closer). The clearance on the swing side shall extend 18” beyond the strike side of the door for interior doors and 24” on exterior doors. The clearance for the non-swing side shall extend 12” when the door has a closer. Section 1133b.2.5.1 requires hardware which is hand operated with a single effort with out requiring the ability to grasp. Currently the front entry, the rear exit, and the observation room exterior doors do not have a level landing. Some of the interior door do not have the required maneuvering clearances. None of the door hardware is code compliant

Stairs: See handrail section above under Fire Rating/ Life Safety Evaluation. Section 1133B.4.4 of the CBC requires striping for the visually impaired on the lowest and upper most tread of a run of stairs. This section also requires all exterior stairs to have striping for the visually impaired at every tread. Currently there there is no striping on the interior or exterior stairs.

Accessible Route: Section 1114B.1.2 requires an accessible route of travel to all portions of the building which are required to be accessible. Currently there is no accessible path of travel through the building and no floors are accessible.

Restrooms: Section 1115B.1 requires restrooms serving buildings, which are required to be accessible, to be accessible. Currently the building does not have accessible restrooms.

B. Recommendations/Rehabilitation Guidelines

SHBC shall be used in conjunction with the California Building Code as stated in section 8-102.1: “These regulations are applicable for all issues regarding building code compliance for qualified historical buildings or properties. These regulations are to be used in conjunction with the regular code to provide alternatives to the regular code to facilitate the preservation of qualified historical buildings or properties. These regulations shall be used whenever compliance with the regular code is required for qualified historical buildings or properties.”

Site Access

Access to entrance/access from exits: The CHBC allows for the accessible entrance to be provided within 200 feet of the primary entrance. Providing access to the front entry would have great impact on the front entry, a significant character defining feature. Provide a code compliant access to the rear doors.

Accessible Parking: Provide code compliant accessible parking.

Building Access

Entrances / Ground Level Exits: See below for alterations to the entrances doors.

Exits: The exception to Section 1114B.2.1 states “areas of evacuation are not required in building with a supervised automatic sprinklered system.” As a sprinkler system is required for the height increase under Section 506 of the CBC, areas of evacuation need not be provided.

Doors: As stated above under Fire Rating/ Life Safety Evaluation, provided a code compliant level landing at the entrance door, rear exit door and observation room. Re-work the doors to swing in the direction of egress. Provide 32” clear and code compliant hardware at all doors.

Stairs: See the handrail section above under Fire Rating/ Life Safety Evaluation. Provide code compliant striping for the visually impaired at the lowest and upper most treads of each run of interior stairs. Provide code compliant striping for the visually impaired at every tread of the exterior stairs.

Accessible Route: Because of the small floor plate of the Building (especially the third floor), providing access to the second and third floor by means of a new elevator would significantly impact the historical character of the upper floors, as well as significantly reduce the usable floor area. Providing an elevator in the building would destroy the significant character defining features of the observation room, a clear unobstructed 360 degree view for observation. Exception 2.1 of Section 1103B.1 of the CBC states privately funded multistory office buildings which are less than three stories or less than 3,000 square feet per story are not required to provide a ramp or elevator above and below the first floor. The SHBC section 8-604 allows for equivalent facilitation to be provide in lieu of a path of travel to all areas of the building provided providing access “would threaten or destroy the historical significance or character-defining features of the building or site or cause unreasonable hardship.” Further study of these access issues will be needed as re-use options are developed in more detail.

Restrooms: SHBC section 8-603.4 allows for construction of a unisex accessible toilet in lieu of modifying the existing toilet room. Consideration should be given to preserving the existing toilet room in the eventual re-use of the building.

VIII. Energy Conservation

A. Description

The historic structure was designed with some energy-conserving features. Monolithic terrazzo floors throughout the building and thick concrete walls contribute to the effectiveness of passive climate control for the building.

B. Recommendations/Rehabilitation Guidelines

As an historic building, Building 18 is exempt from energy code requirements, however measures to reduce energy consumption and provide for user comfort are recommended. These may include ceiling insulation, and exterior wall insulation where the walls are opened during construction. The existing steel sash windows are historic features and they should be repaired and weather-stripped rather than replaced.

IX. Hazardous Materials Evaluation

A. Description

Although a hazardous materials report has not yet been completed, signs posted around the building indicate that several types of historic material and finishes are known to contain asbestos and that other hazardous materials exist in the building.

B. Recommendation/Rehabilitation Guidelines

It is recommended that a complete hazardous materials report be performed.

X. Mechanical and Electrical Systems

The mechanical and electrical systems were not inspected as part of this report. It is assumed that the rehabilitation and re-use of Building 18 will entail all new mechanical and electrical systems, with the exception of the plumbing drainage/ waste system.

All new mechanical and electrical systems will need to be designed with care to preserve the character of significant materials and spaces identified in this report.

XI. Structural System

Building 18 is a three-story structure with a crawl space. The exterior walls of both are reinforced concrete walls with stucco-exterior finish coat. The roof/ceiling are concrete slab with reinforced concrete beams running east/west.

The building appears to be in excellent condition. In the course of design for rehabilitation and reuse, they should be analyzed for seismic and gravity load deficiencies and strengthened as necessary. Strengthening provisions should be designed with care to preserve significant materials and spaces.

U.S. Naval Air Station Moffett Field
Building 18 Re-Use Guidelines

Shenandoah Plaza Historic District
Building 18 Re-Use Guidelines
Moffett Federal Air Field, California

Appendix 1. Character-Defining Features

Shenandoah Plaza Historic District
 Building 18

Character-Defining Features				
Elements	Material	Significance	Condition	Comments
Exterior				
Roof Line				
Observation Tower		S	G	
Octagonal Shape		S	G	
ladder & hand rail		C	G	
Cornice		C	G	
Speaking tube		C	F	
Concrete pedestal		C	F	
Low Roof		S		
Flat roof		T	G	
Scuppers	Copper	T	G	
Collection Boxes & Rain Leaders	Copper	C	G	
Parapet Profile	Stucco	C	G	
Tower	Metal	S	F	
Cladding				
Stucco- integral color		C	G	(painted over)
Base	Concrete	C	G	
Windows				
Observation Tower Casement	Metal/ Glass	S	G	
4 Pane & 6 Pane Double Hung	Metal/ Glass	S	G/P	
Doors & Frames				
Frame	Wood	C	G	
Trim & casing	Wood	C	G	
Hardware (latch)	Metal	C	G	
Entries				
Primary entrance in the center of the north elevation		S		
Limestone Surround		S	G	
Concrete Landing with Quarry Tile		C	G	
Concrete Cheek walls with Quarry Tile		C	G	
Concrete Step with Quarry Tile		C	G	
Light Fixtures	Metal/ Glass	S	G	
Door	Wood	S	G	
Keystone	Stone	S	G	
Casement Window with Fan Light	Metal/ Glass	S	F	
Interior				
Lobby - 1st & 2nd				
Flooring	Terrazzo Border & Base	S	F	
Ceiling	Concrete with Applied Tile	C	G	

Significance Rating:

- S=Significant
- C=Contributing
- T=Tertiary
- N=Non-contributing

Condition Rating:

- G=Good
- F=Fair
- P=Poor

Shenandoah Plaza Historic District
 Building 18

Character-Defining Features				
Elements	Material	Significance	Condition	Comments
Flooring				
Carpet		N		
Terrazzo & Tile		C	G	
Walls				
Interior partitions	Gypsum Board	N		
Faux Wood Paneling		N		
Interior partitions	Plaster	T	G	
Interior Plaster on Furring on exterior walls	Plaster	C	G	
Window Features				
Trim & Casing	Wood	T	G	some are concealed under finishes
Trim & Casing	Faux Wood Paneling	N		
Hardware	Metal	C	G/F	
Ceiling				
Suspended Acoustical Tile		N		
Applied ceiling tiles (perforated)		T	G	

Significance Rating:

- S=Significant
- C=Contributing
- T=Tertiary
- N=Non-contributing

Condition Rating:

- G=Good
- F=Fair
- P=Poor

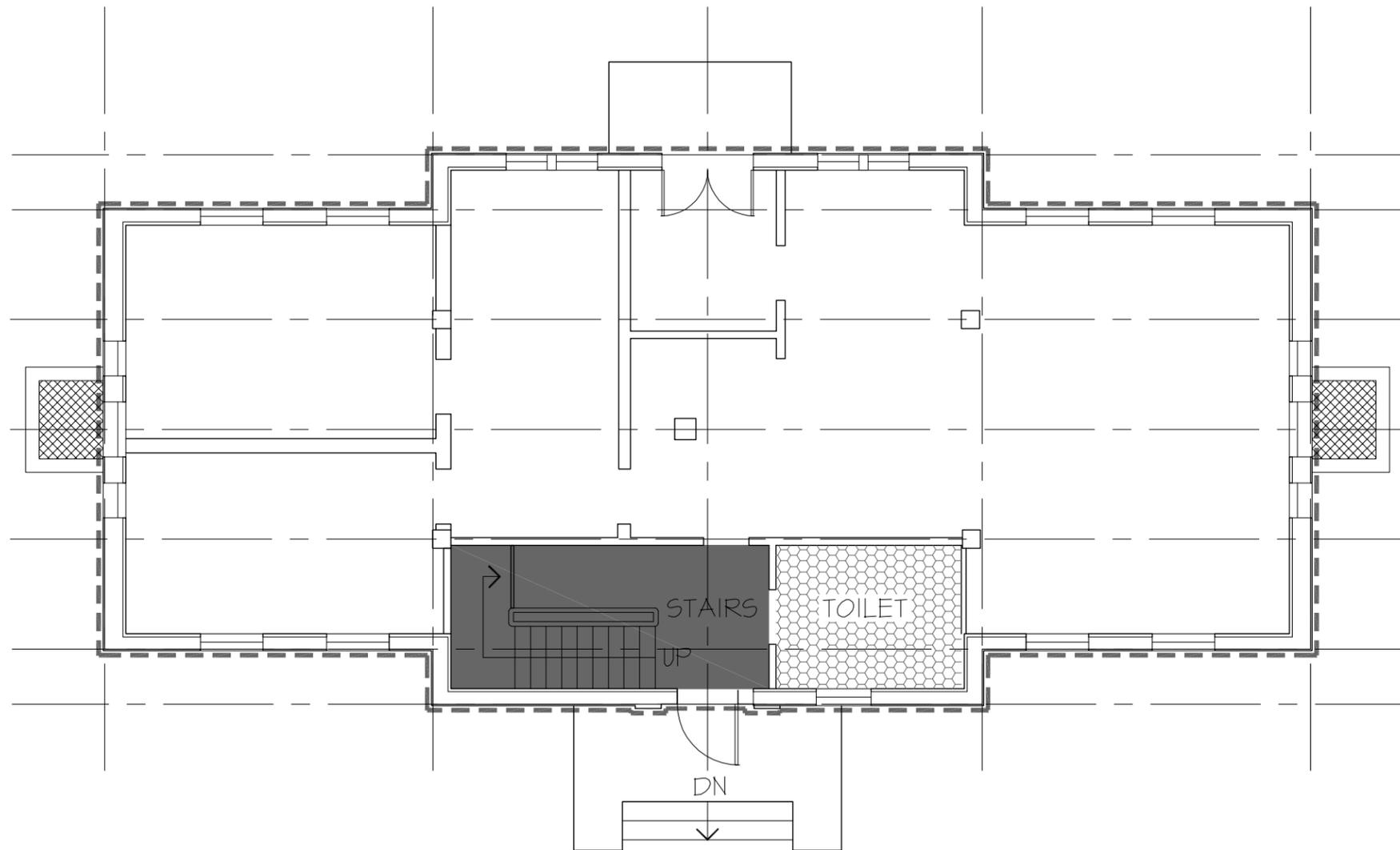
U.S. Naval Air Station Moffett Field
Building 18 Re-Use Guidelines

Shenandoah Plaza Historic District
Building 18 Re-Use Guidelines
Moffett Federal Air Field, California

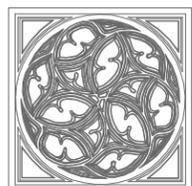
Appendix 2. Historic Significance Plans

LEGEND

- SIGNIFICANT 
- SIGNIFICANT EXTERIOR WALL SURFACE 
- CONTRIBUTING 
- TERTIARY 
- NON-CONTRIBUTING 



AREAS OF HISTORICAL SIGNIFICANCE
FIRST FLOOR



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Architects, Planners & Conservators, Inc.



BUILDING 18
US Naval Air Station Historic District

Sunnyvale, California
00114

2.28.02

LEGEND

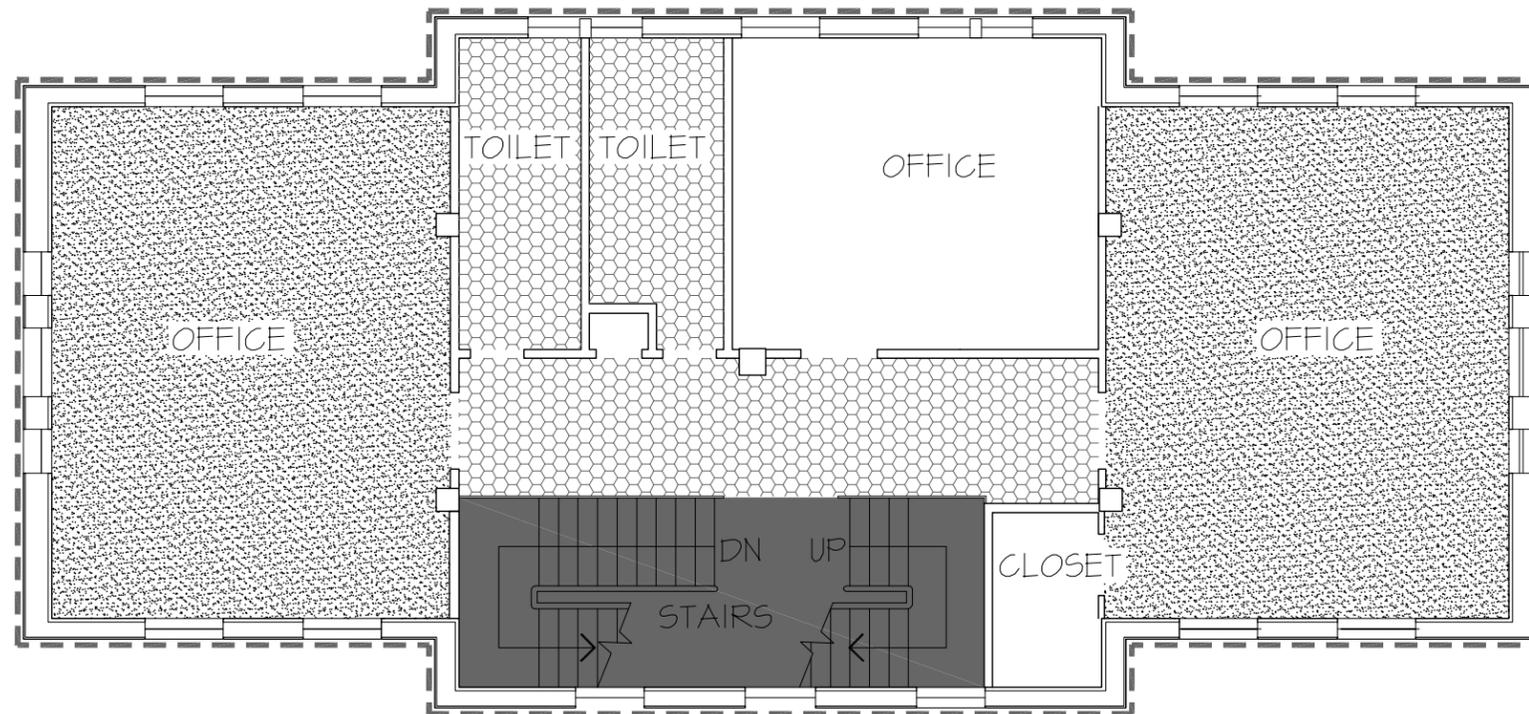
SIGNIFICANT 

SIGNIFICANT EXTERIOR WALL SURFACE 

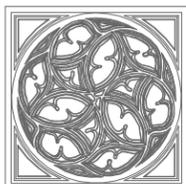
CONTRIBUTING 

TERTIARY 

NON-CONTRIBUTING 



AREAS OF HISTORICAL SIGNIFICANCE
SECOND FLOOR



ARCHITECTURAL
RESOURCES GROUP

Architects, Planners & Conservators, Inc.



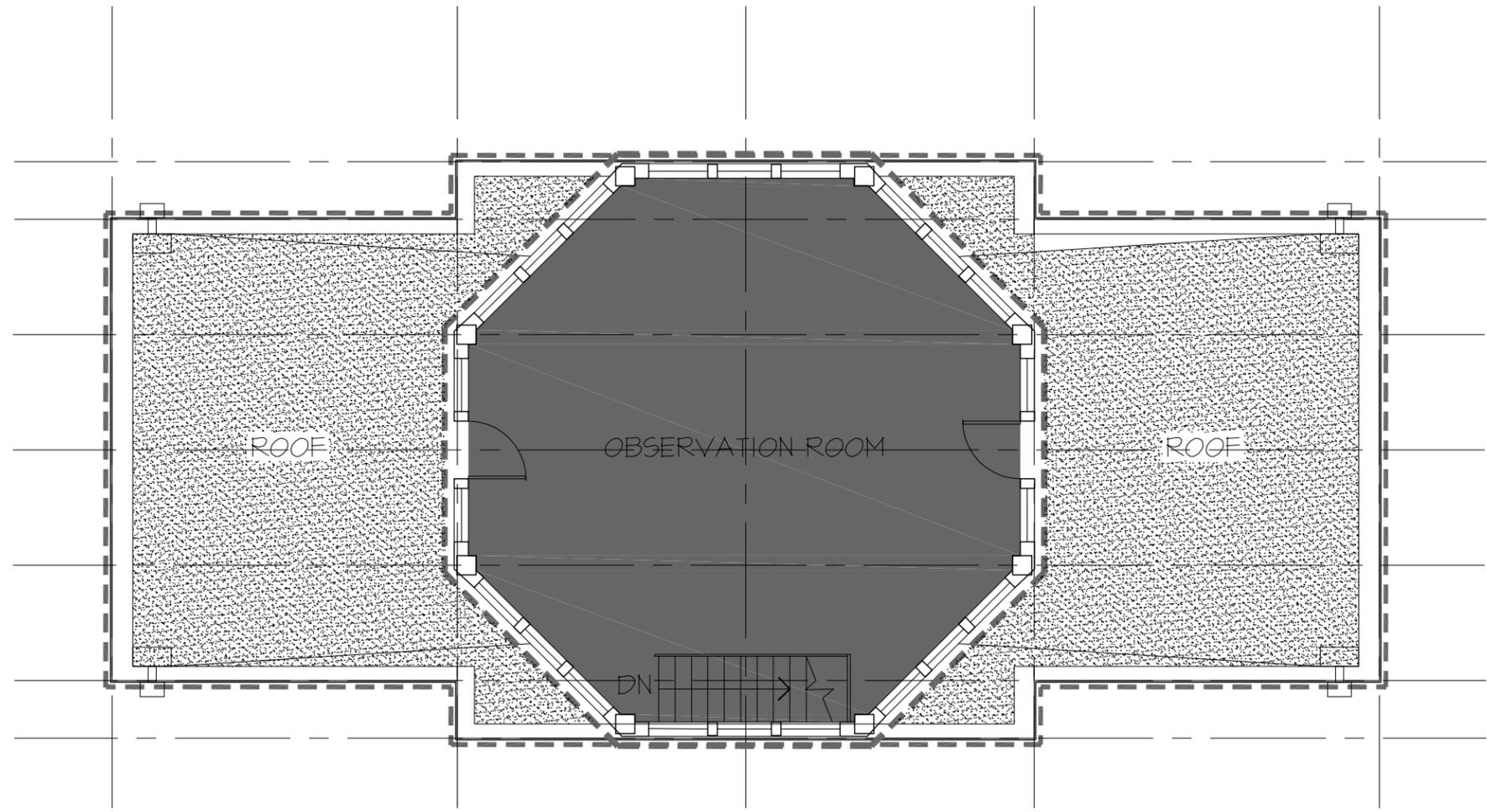
BUILDING 18
US Naval Air Station Historic District

Sunnyvale, California
00114

2.28.02

LEGEND

- SIGNIFICANT 
- SIGNIFICANT EXTERIOR WALL SURFACE 
- CONTRIBUTING 
- TERTIARY 
- NON-CONTRIBUTING 



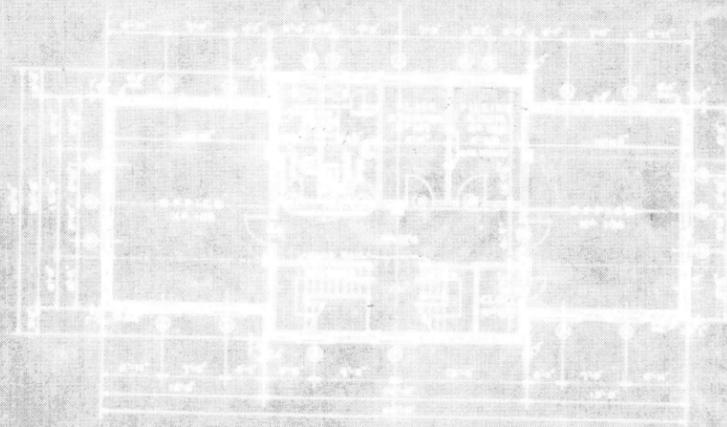
AREAS OF HISTORICAL SIGNIFICANCE
THIRD FLOOR / ROOF



U.S. Naval Air Station Moffett Field
Building 18 Re-Use Guidelines

Shenandoah Plaza Historic District
Building 18 Re-Use Guidelines
Moffett Federal Air Field, California

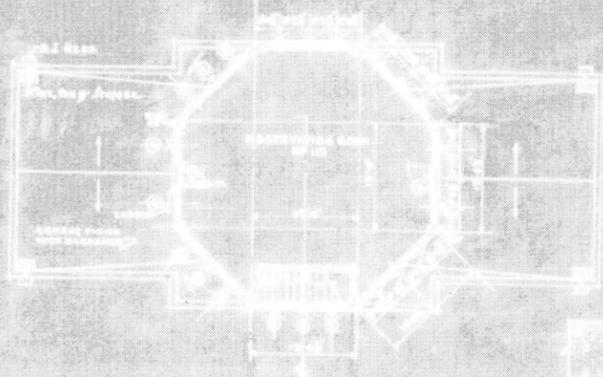
Appendix 3. Original Construction Documents



SECOND FLOOR PLAN
SCALE: 1/8" = 1'-0"

GENERAL NOTES

ALL EXTERIOR CONCRETE WALLS EXCEPT THOSE OF ROOM 101 SHALL BE FINISHED WITH PLASTER. EXTERIOR WALLS OF OBSERVATION ROOM SHALL BE FINISHED AS SHOWN IN DETAILS.
 THE FINISH SIDE OF ALL TOILET ROOM WINDOWS SHALL HAVE BRASS OR BRASS PLATE.
 TERRAZZO BASE SHALL EXTEND ONE QUARTER INCH OUTSIDE OF PLASTER. MULTIPLE DETAILS OF TOILET ROOMS AND INTERIOR TOILET ROOMS SHALL BE FINISHED AS SHOWN IN DETAILS AND FINISHING OF ALL THE TOILET ROOMS.
 ALL INTERIOR PARTITIONS SHALL BE FINISHED WITH STUCCO, SEE SPECIFICATIONS.



BUILDING SYMMETRICAL FRONT ELEVATION

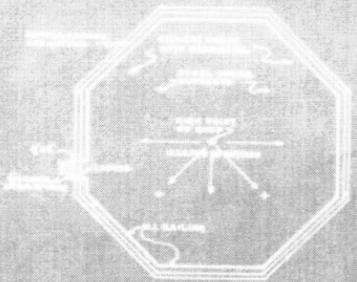


TYPICAL INTERIOR DOORS
SCALE: 1/2" = 1'-0"

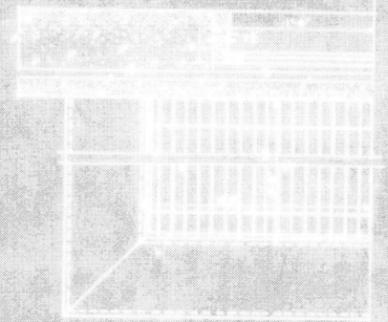
DOOR SCHEDULE

NO.	TYPE	SIZE	FINISH	REMARKS
1	SWING	3'-0" x 7'-0"	WOOD	SEE DETAIL
2	SLIDING	3'-0" x 7'-0"	WOOD	SEE DETAIL
3	SLIDING	3'-0" x 7'-0"	WOOD	SEE DETAIL
4	SLIDING	3'-0" x 7'-0"	WOOD	SEE DETAIL
5	SLIDING	3'-0" x 7'-0"	WOOD	SEE DETAIL
6	SLIDING	3'-0" x 7'-0"	WOOD	SEE DETAIL
7	SLIDING	3'-0" x 7'-0"	WOOD	SEE DETAIL
8	SLIDING	3'-0" x 7'-0"	WOOD	SEE DETAIL
9	SLIDING	3'-0" x 7'-0"	WOOD	SEE DETAIL
10	SLIDING	3'-0" x 7'-0"	WOOD	SEE DETAIL

THIRD FLOOR & ROOF PLAN
SCALE: 1/8" = 1'-0"



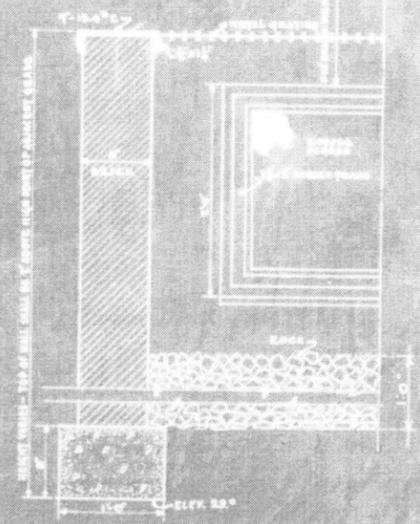
ROOF PLAN OF OBSERVATION RM.
SCALE: 1/8" = 1'-0"



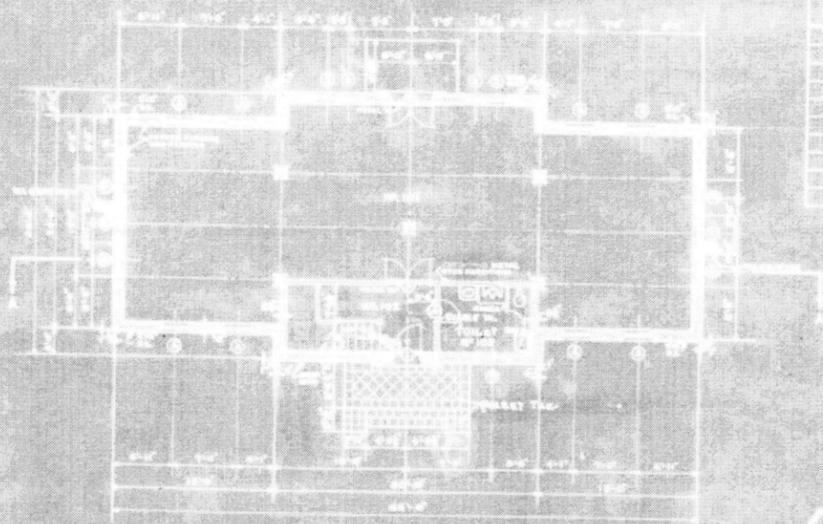
ONE HALF PLAN

WINDOW SCHEDULE

NO.	TYPE	SIZE	FINISH	REMARKS
1	SWING	3'-0" x 7'-0"	WOOD	SEE DETAIL
2	SWING	3'-0" x 7'-0"	WOOD	SEE DETAIL
3	SWING	3'-0" x 7'-0"	WOOD	SEE DETAIL
4	SWING	3'-0" x 7'-0"	WOOD	SEE DETAIL
5	SWING	3'-0" x 7'-0"	WOOD	SEE DETAIL
6	SWING	3'-0" x 7'-0"	WOOD	SEE DETAIL
7	SWING	3'-0" x 7'-0"	WOOD	SEE DETAIL
8	SWING	3'-0" x 7'-0"	WOOD	SEE DETAIL
9	SWING	3'-0" x 7'-0"	WOOD	SEE DETAIL
10	SWING	3'-0" x 7'-0"	WOOD	SEE DETAIL



SECTION
DETAILS OF AREA WALLS & GRATING
SCALE: 1/2" = 1'-0"



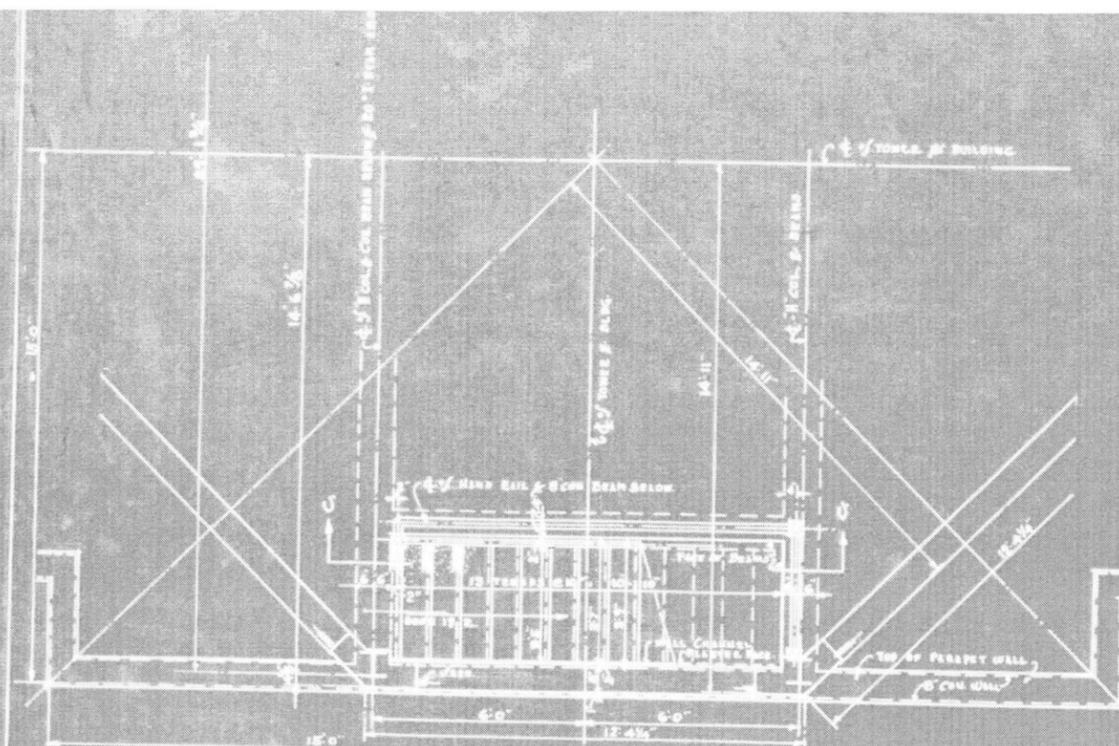
FIRST FLOOR PLAN
SCALE: 1/8" = 1'-0"

FINISH SCHEDULE

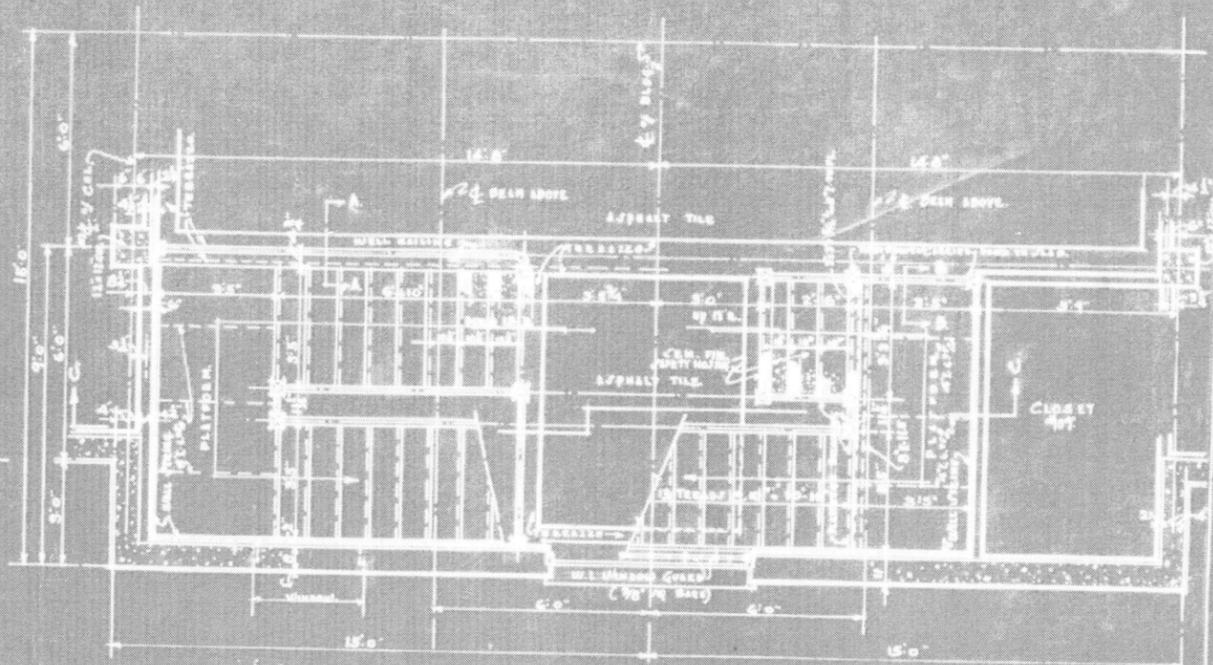
ROOM	FLOOR	BASE	WALLS	WINDOWS	CEILING	REMARKS
101	CONCRETE SLAB	WOOD	NO PLASTER	WOOD	NO PLASTER	SEE DETAIL
102	TERRAZZO	TERRAZZO	PLASTER	WOOD	NO PLASTER	SEE DETAIL
103	CONCRETE SLAB	WOOD	NO PLASTER	WOOD	NO PLASTER	SEE DETAIL
104	TERRAZZO	TERRAZZO	PLASTER	WOOD	NO PLASTER	SEE DETAIL
105	CONCRETE SLAB	WOOD	NO PLASTER	WOOD	NO PLASTER	SEE DETAIL
106	TERRAZZO	TERRAZZO	PLASTER	WOOD	NO PLASTER	SEE DETAIL
107	CONCRETE SLAB	WOOD	NO PLASTER	WOOD	NO PLASTER	SEE DETAIL
108	TERRAZZO	TERRAZZO	PLASTER	WOOD	NO PLASTER	SEE DETAIL
109	CONCRETE SLAB	WOOD	NO PLASTER	WOOD	NO PLASTER	SEE DETAIL
110	TERRAZZO	TERRAZZO	PLASTER	WOOD	NO PLASTER	SEE DETAIL
111	CONCRETE SLAB	WOOD	NO PLASTER	WOOD	NO PLASTER	SEE DETAIL
112	TERRAZZO	TERRAZZO	PLASTER	WOOD	NO PLASTER	SEE DETAIL

U.S. NAVAL AIR STATION
SUNNYVALE, CALIF.
AEROLOGICAL BUILDING
PLANS & DETAILS

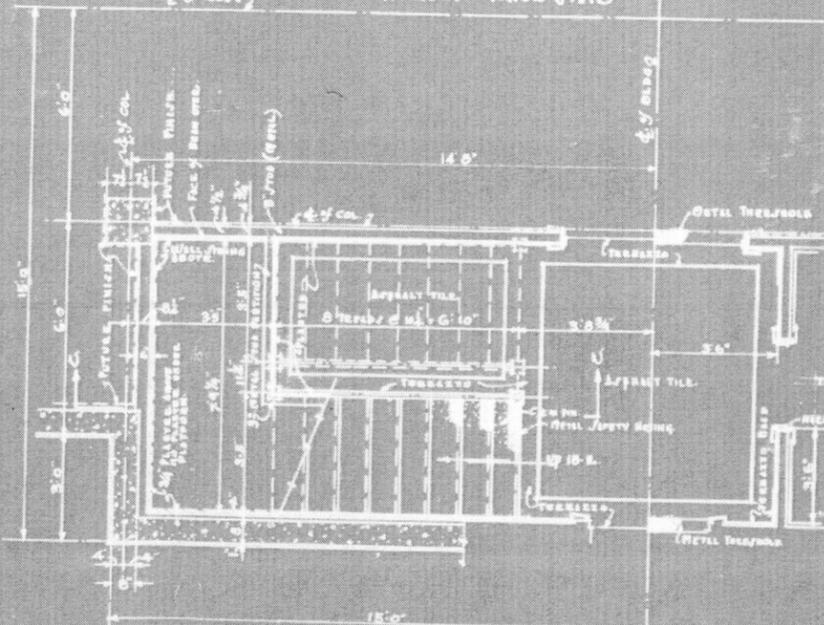
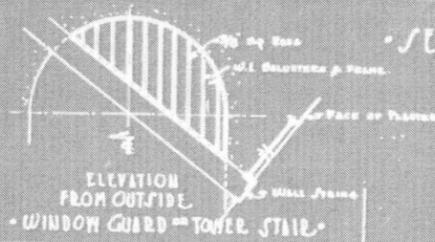
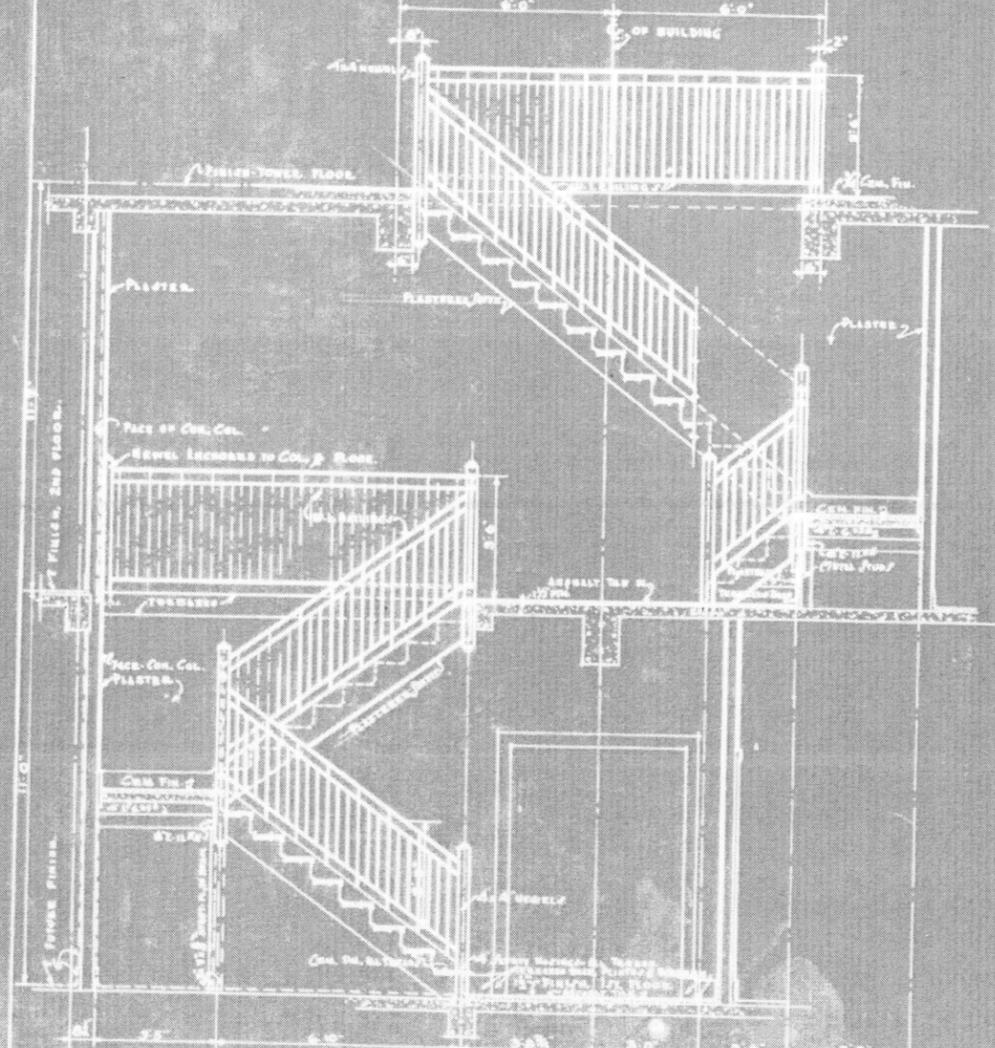
112655



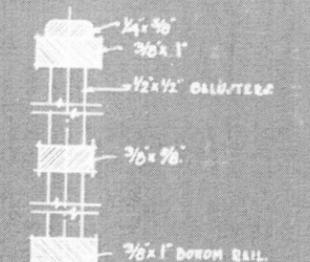
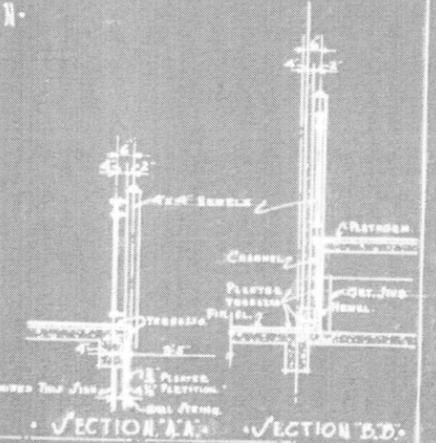
THIRD FLOOR PLAN (TOWER FLOOR)



SECOND FLOOR PLAN



FIRST FLOOR PLAN

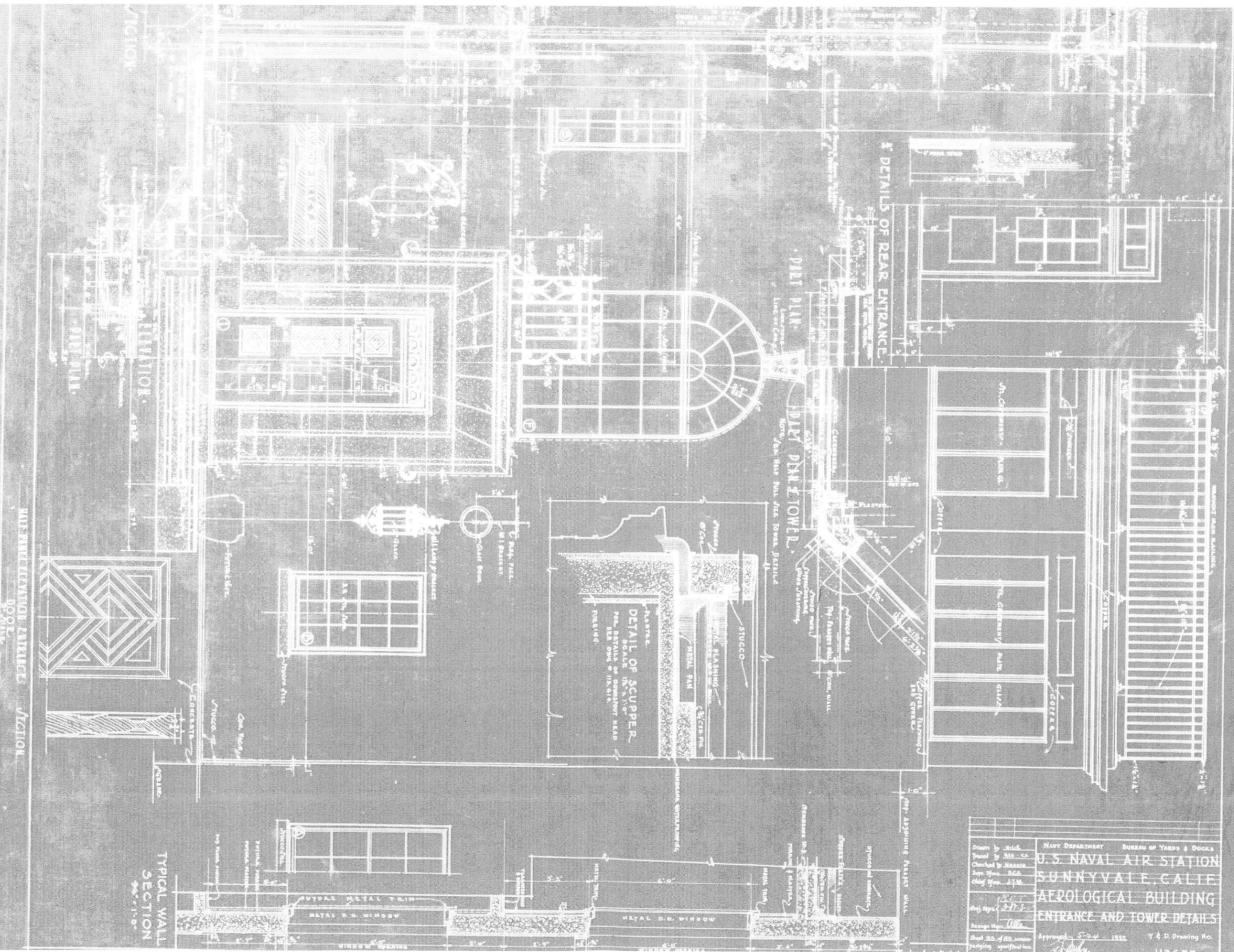


UNBOUGHT-IRON HAND-RAILING

HALF-INCH SCALE STAIR DETAILS
PLANS & SECTIONS

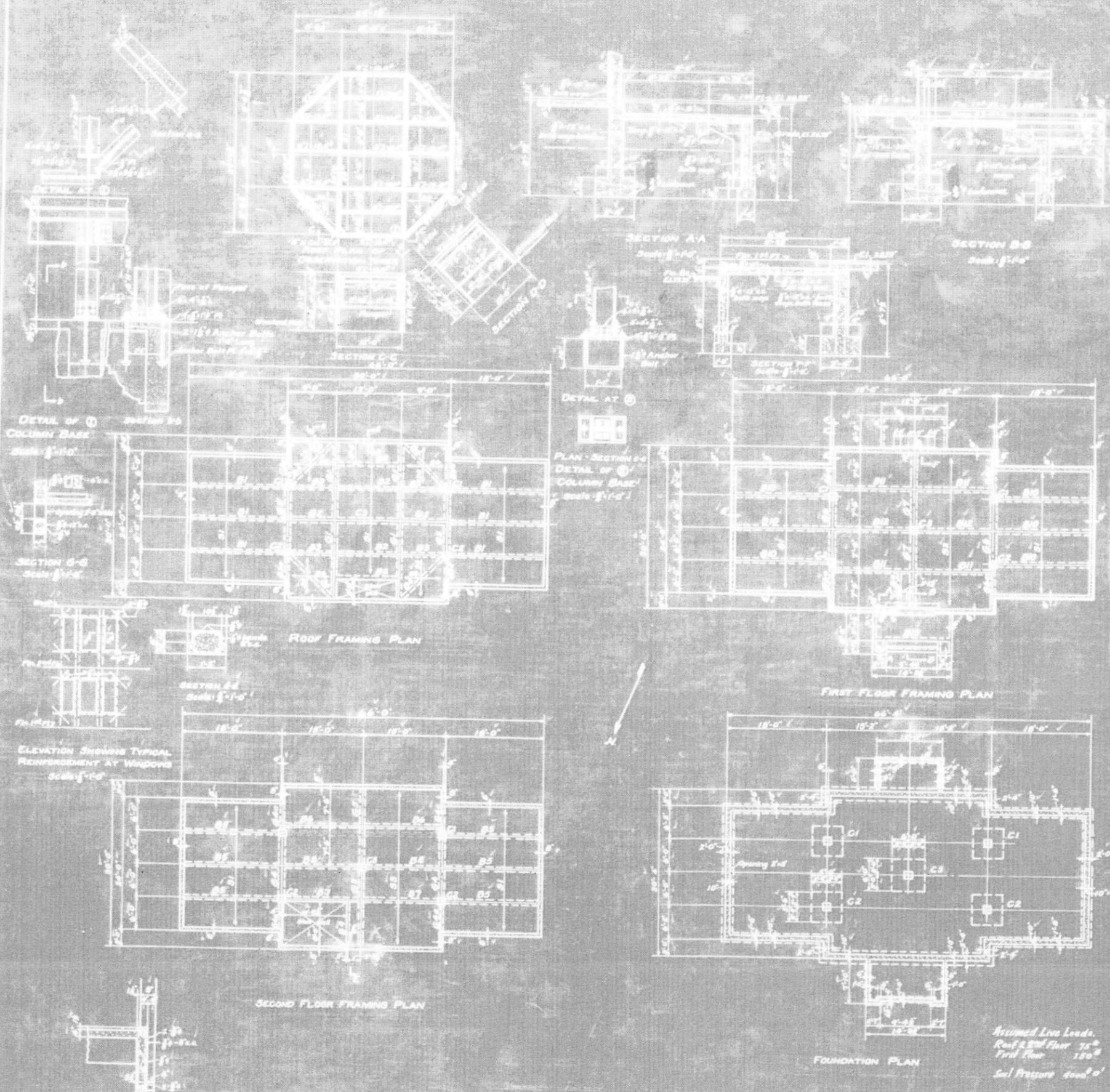
Drawn by J. S. ...	NAVY DEPARTMENT	BUREAU OF YARDS & DOCKS
Checked by ...	U.S. NAVAL AIR STATION	
App'd by ...	SUNNYVALE, CALIF.	
Drawn by ...	AEROLOGICAL BUILDING	
Sheet No. 03	STAIR DETAILS	
Approved ...	APR 22 1932	Y. P. D. Drawing No. ...

NOTE: FOR TYPICAL FINISHING DETAILS SEE STAIR DETAIL SHEET NO. 112625



DRAWN BY: J.L.C.
 CHECKED BY: M.B.-C.
 SUP. BY: S.C.
 DESIGNED BY: J.L.C.
 DATE: 1-27-18
 SCALE: 1/8" = 1'-0"
 APPROVED: [Signature]
 Y & D Drawing No. 1136

NAVY DEPARTMENT BUREAU OF YARDS & DOCKS
 U.S. NAVAL AIR STATION
 SUNNYVALE, CALIF.
 AEROLOGICAL BUILDING
 ENTRANCE AND TOWER DETAILS



COLUMN SCHEDULE

	NO.	C1	C2	C3
2nd Fl.	1	12" x 12"	12" x 12"	12" x 12"
1st Fl.	2	12" x 12"	12" x 12"	12" x 12"
1st Fl.	3	12" x 12"	12" x 12"	12" x 12"
1st Fl.	4	12" x 12"	12" x 12"	12" x 12"
1st Fl.	5	12" x 12"	12" x 12"	12" x 12"
1st Fl.	6	12" x 12"	12" x 12"	12" x 12"
1st Fl.	7	12" x 12"	12" x 12"	12" x 12"
1st Fl.	8	12" x 12"	12" x 12"	12" x 12"

BEAM AND GIRDER SCHEDULE

NO.	SIZE	SPACING	SPAN	REMARKS
B1	8" x 16"	12"	12'	100% REINFORCED
B2	8" x 16"	12"	12'	100% REINFORCED
B3	8" x 16"	12"	12'	100% REINFORCED
B4	8" x 16"	12"	12'	100% REINFORCED
B5	8" x 16"	12"	12'	100% REINFORCED
B6	8" x 16"	12"	12'	100% REINFORCED
B7	8" x 16"	12"	12'	100% REINFORCED
B8	8" x 16"	12"	12'	100% REINFORCED
B9	8" x 16"	12"	12'	100% REINFORCED
B10	10" x 16"	12"	12'	100% REINFORCED
B11	10" x 16"	12"	12'	100% REINFORCED
B12	10" x 16"	12"	12'	100% REINFORCED
B13	8" x 12"	12"	10'	100% REINFORCED
G1	12" x 16"	12"	12'	100% REINFORCED
G2	12" x 20"	12"	12'	100% REINFORCED
G3	12" x 22"	12"	12'	100% REINFORCED
G4	8" x 22"	12"	12'	100% REINFORCED
G5	12" x 16"	12"	12'	100% REINFORCED
G6	8" x 16"	12"	12'	100% REINFORCED
G7	12" x 18"	12"	12'	100% REINFORCED
G8	12" x 18"	12"	12'	100% REINFORCED
G9	8" x 16"	12"	12'	100% REINFORCED
G10	12" x 20"	12"	12'	100% REINFORCED

SLAB SCHEDULE

NO.	THICKNESS	REMARKS
S1	4"	F.C.C.
S2	4"	F.C.C.
S3	4"	F.C.C.
S4	4"	F.C.C.



NOTE: 1- For general notes see Dwg. No. 113627 ✓
 For typical wall reinforcement see Dwg. No. 113629 ✓

Assumed Live Loads:
 Roof & 2nd Floor 75' #
 First Floor 120' #
 Soil Pressure 4000' #

Drawn by J.E.B.
 Checked by J.E.B.
 Approved by J.E.B.
 Date 11/21/50

NAVY DEPARTMENT BUREAU OF NAVAL ARCHITECTURE
U.S. NAVAL AIR STATION
 SUNNYVALE, CALIF.
AEROLOGICAL BLD'G
 PLANS & DETAILS

Approved 12-21-50 Y.N.D. Drawing No. 113658

U.S. Naval Air Station Moffett Field
Building 18 Re-Use Guidelines

Shenandoah Plaza Historic District
Building 18 Re-Use Guidelines
Moffett Federal Air Field, California

Appendix 4. Historic Photographs (ca. 1934)



*Historic photograph of the Building 18 observatory, looking north
ca. 1934*

U.S. Naval Air Station Moffett Field
Building 18 Re-Use Guidelines



*Historic photograph of Building 18, looking north
ca. 1934*

U.S. Naval Air Station Moffett Field
Building 18 Re-Use Guidelines



*Historic photograph of general view of Building 18 and radio towers, looking southeast
ca. 1934*

U.S. Naval Air Station Moffett Field
Building 18 Re-Use Guidelines

Shenandoah Plaza Historic District
Building 18 Re-Use Guidelines
Moffett Federal Air Field, California

Appendix 5. Current Conditions Photographs (2001)



*West elevation & portion of the south elevation, Building 18
December 13, 2001*



*West elevation of the observation room, Building 18
December 18, 2001*



*East elevation & portion of the south elevation, Building 18
December 13, 2001*



*Non-contributing addition on east elevation, Building 18
December 13, 2001*



*Front Entry on the North Elevation, Building 18
December 13, 2001*



*Front entry door, Building 18
December 13, 2001*



*Detail of light at the front entry, Building 18
December 13, 2001*



*Interior stair—first floor, Building 18
December 13, 2001*



*Interior stair—second floor, Building 18
December 13, 2001*



*Detail of newel post, Building 18
December 13, 2001*



*Interior stair to observation room, Building 18
December 13, 2001*



*Typical interior—first floor, Building 18
December 13, 2001*



*Detail of original interior ceiling, Building 18
December 13, 2001*



*Interior finishes—second floor, Building 18
December 13, 2001*