

U.S. NAVAL BASE, PEARL HARBOR, AVIATION STOREHOUSE
(U.S. Naval Base, Pearl Harbor, Fleet and Industrial Supply Center)
(U.S. Naval Base, Pearl Harbor, General Warehouse Depot)
(Facility No. 474)
Vincennes Avenue at Simms Street
Pearl Harbor
Honolulu County
Hawaii

HABS HI-519
HI-519

HABS
HI-519

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

HISTORIC AMERICAN BUILDINGS SURVEY
PACIFIC GREAT BASIN SUPPORT OFFICE
National Park Service
U.S. Department of the Interior
1111 Jackson Street
Oakland, CA 94607

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Location: Southeast corner of Vincennes Avenue & Simms Street
Pearl Harbor Naval Base
City and County of Honolulu, Hawai'i
U.S.G.S. Pearl Harbor, Hawaii Quadrangle (7.5 minute series)
Universal Transverse Mercator Coordinates 04.609120.2362760

Significance: Facility 474 is located within the Pearl Harbor National Historic Landmark and is a contributing resource. It is an example of the large storehouses built during the expansion of facilities at Pearl Harbor during World War II. It is significant as the only Aviation Storehouse built in the main base area, since aviation facilities at Pearl Harbor were first concentrated on Ford Island, and later expanded into several outlying areas. This warehouse has been used for other types of supply materials since 1944.

Description: Facility 474 is located on a flat portion of Kuahua Peninsula, with asphalt pavement entirely surrounding the building. The west end of the building is about 200' from the harbor at Berth K-6, and the views west down the loading docks are of the waterfront. This building sits on a graded portion of the original Kuahua Island, unlike most other flat areas on the peninsula, which are fill land. The change in grade is evident on the south side of the building, where Facility 452K sits about 6' higher than Facility 474. Facility 452K is not parallel to Facility 474, having been sited in response to the natural contours, unlike the geometrical layout of the buildings on the flat land to the north of it. A low concrete retaining wall runs along the base of the steeply sloped strip of unpaved ground adjacent to Facility 452K.

Facility 474 is a two-story, rectangular-plan, reinforced concrete warehouse with loading platforms along its sides, constructed from aggregate and concrete made nearby at the Red Hill batch plant. The exterior of Facility 474 is currently painted white, with a grey-green paint at the base of the building below the water table. The facility has retained its original structural fabric and most of its original windows. The exterior looks much as it did when it was constructed, however the paint scheme was camouflaged during World War II. The facility retains its architectural integrity as a WWII warehouse.

The structure is fourteen bays long and seven bays wide, each bay 20' square. The overall building footprint is approximately 280' x 140'. According to drawings, the height of the building from grade to the top of

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the roof edge is 28'-6", and from grade to the top of the elevator machine room is 47'-5". The first-floor to second-floor height is 14'-4" while the second-floor to roof level is about 10'-6".

The building's structure is poured in place concrete construction. Drawings show that the reinforced-concrete columns and perimeter foundation walls rest on concrete pile caps on foundation piles. The facility's foundation wall is shown on drawings as 1'-0" thick all around the building and the same thickness for the parallel foundation walls of the loading platforms. At the ends of the building the foundation wall narrows to 10" with a step on the interior side 1'-0" below the top of the first-floor slab. A sloped water table is at the top of the foundation wall, about 3' above grade. The water table is at the same level as the loading platforms. The walls of Facility 474 are 8"-thick concrete along the sides and west end, but the east end wall, including the stairwell at this end, and the infill portions of the elevator machinery rooms and parapet walls are built of concrete hollow tile (concrete masonry units). Beams above the windows are about 1' wide, several inches thicker than the walls below the windows, with the extra thickness on the interior of the building to keep the exterior wall surface flat. These beams vary in depth from 2'-6" to 2'-9", with larger measurements on the first floor.

Facility 474 has 2'-6" diameter, reinforced-concrete, interior columns with conical capitals. These flare out at a 45-degree angle, creating a 4'-6" diameter circle where the capitals meet drop panels on the underside of the second-floor or roof slab. A drop panel is the thickened portion on the underside of a concrete slab which surrounds a column capital. These drop panels measure 7'-0" square and are about 4" thick. Unlike the free-standing round columns, there are square pilasters at the exterior walls, each with a "capital" shaped like a wedge, projecting at a 45-degree angle from the top 1'-3" of the pilaster's interior face only. This is termed a column bracket on the drawings. These pilasters and brackets meet drop panels which measure about 3'-6" x 7'. Columns and capitals at one corner of each freight elevator are octagonal.

Loading platforms extend about 200' along the north and south long sides of the facility. They are centered on the building's sides and are approximately 10' wide and about 3' above grade with 40'-0" ramps at either end that slope down to grade level. There are 10'-0" wide tapered cantilevered concrete canopies covering the loading platforms and ramps. Drawings show that these canopies taper from a thickness of 10" at the walls to a 3" thickness near the end. At the end, is a 3" high lip that is about 5" wide. Each canopy has three drains that channel water into 4"-diameter pipes, each running inside a pilaster. One drain is located at the mid-point of the walls and the other two are situated 40'-0" from each end. The underside of each canopy has protrusions to accommodate the pipe thickness. The eight roof drains run through the column capitals and to the center of the round columns.

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Almost all the doors at Facility 474 appear to be modern replacements, but most are in the original openings. The original 10'-0" x 4'-9" transformer room door on the south side retains its original 12-light upper section, but the lower panel has been replaced by metal louvers. The transom-like vent above the door, whose top aligns with the 12'-0" height of the window and door openings, is screened with expanded metal mesh. A few additional doors have been installed. One of these is the main entry door on the north side of the building, which is located where a window for a janitor's closet is shown on the original drawings. This entry door is a two-panel metal door with a glazed opening in the upper panel. The other added doors are modern flush metal type, about 7' x 3'. These standard doors are dwarfed by the freight elevator and loading dock openings. Freight elevators have modern vertical bi-parting metal doors, similar to those shown on the original drawings. The elevator openings measure 8'-6" x 9'-0". The 12'-0" square openings at the loading docks into the first-floor storage space have large metal overhead roll-up doors. These appear to be modern replacements, but similar to the original doors. Each is mounted on the interior wall of the opening. There are two such doors at the north side of the building and three at the south side. At these loading dock openings there are also double metal-frame, metal-mesh gates, which appear historic. While not on the original drawings these gates may have been installed soon after construction, to secure the openings and also provide ventilation. Each gate section is 8'-10" high and approximately 6' wide. There is X-bracing in the lower two-thirds of the metal frame of each gate.

Facility 474 has bands of steel-sash windows that extend almost continuously around it at the first and second floors. The first-floor windows are taller than those on the second floor. The first-floor band is interrupted at the facility corners, elevator towers, and loading platform doors. The tallest windows (about 8'-6" in height) on the first floor are in four bays on the north side, where the offices were located. Three of the four bays have four ganged sashes, and the fourth bay has three ganged sashes, plus a separate four-light pivoting window. The large composite windows at the office bays have sashes with either fifteen or twenty lights; these are arranged in various symmetrical patterns with awning and hopper sections plus fixed lights. There are two pairs of shorter windows (6'-10" tall) in the bay between the office space and the elevator tower. These four 16-light sashes each have a center-pivoting 8-light section with a row of fixed lights above and below. The remainder of the first-floor windows (measuring 5'-2" tall) originally had a predictable pattern. In each of these remaining bays there were fixed sashes (each with fifteen lights) flanking a central 12-light sash with a pivoting eight-light section. Most of these original windows remain, but the windows at the transformer room have been replaced by metal louvers. A fixed six-light sash is located at each pilaster. A number of the lights, especially in the five bays with the tallest windows, are blue-tinted glass with a fine vertical ribbing on its interior. Some other lights are obscure wire glass, for example near fire proof stairs, but most are clear.

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At the second floor, the band of windows is about 3'-6" high with perimeter columns inset on the interior of the steel windows and is interrupted only at the building corners and at the elevator towers. Each bay originally had fixed ten-light sash flanking a central pivoting eight-light sash. Fixed four-light sash were at each pilaster. At the northwest corner of the building the original windows have been replaced by jalousies and fixed single-light windows. At the east end of Facility 474 the enclosure for the exterior stairway has six-light windows with 4-light pivoting sections above two fixed lights. These windows have double strength blue-tinted wire glass added in 1952.

Facility 474 has a very-low-slope roof ($\frac{1}{4}$ " per foot) with an almost imperceptible hip pattern. Drawings indicate that roll roofing covers $\frac{3}{4}$ " of perlite on tapered rigid insulation. Prior to renovation the roof slope was formed with coral concrete fill. There are no eaves and the original CMU parapets were removed when the third floor was demolished. A 10" copper gutter encircling the roof empties into 6"-diameter cylindrical copper downspouts. At the loading docks these copper downspouts only extend down to the concrete canopy. Below the canopy 6"-diameter cast iron downspouts carry the rainwater. At the east and west ends of the building, the copper downspouts extend to the ground. The concrete canopies over the loading docks are also covered with roll roofing.

The two freight elevator machinery rooms on the roof are constructed of reinforced concrete frames with concrete hollow tile walls. The building's two original stairways provide roof access, adjacent to these elevator machine rooms. A concrete stairway, added in 1952, reaches the roof at the center of the east end. The stairwell doors and doors to the machine rooms are modern flush metal doors. The machine rooms have 8-light windows, each with a four-light center pivoting section. An abandoned walkway, built when there was a third floor of Facility 474, extends across Vincennes Avenue from the roof level of this building to the third floor of Facility 475. This steel-framed, open-sided walkway has a flat-Pratt truss design. It has a flat roof with copper fascia over a ceiling of tongue-and-groove boards. The walkway deck surface has been removed, although four 4" x 6" nailing beams remain. There are 2"-diameter steel handrails welded to the truss frame. This walkway is designated as Facility S 798.

The floor plan of Facility 474 is primarily open on both the first and second floors to facilitate its use as a warehouse. Rows of metal shelving and conveyors have been added over the years. There are also sections of wire mesh fencing to secure areas on each floor. Two freight elevators link the loading docks with the second floor. One is located along the north wall of the building, in the fifth bay from the west. The other is along the south wall, in the fifth bay from the east. Each freight elevator bay also holds a stairway which runs from the first floor to the roof. A third stairway was added in the center of the east wall. All stairs are concrete and have 2"-diameter metal pipe rails.

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On the first floor, office space and toilet rooms are located along the five bays of the north wall to the east of the elevator. These interior partition walls are concrete hollow tile and commercial steel frames and plaster board; ceilings are acoustic tile. The bathrooms have ceramic tile flooring and wainscot. The rest of the first floor has concrete slab floors, ceilings, and columns. The ceiling surface shows impressions from the boards used for the concrete formwork. All the concrete and CMU wall and ceiling surfaces of the interior are painted, but the floors are generally smooth-troweled unfinished surfaces.

The second floor of Facility 474 has an office and meeting room area in the northwest corner of the building. This area occupies the four western bays along the north wall, and is one bay deep. The interior finishes here are plaster board walls, acoustic ceiling tiles, carpeting, and vinyl composition floor tiles.

The first-floor office windows along the north wall have metal-mesh screens for security. There are hand access spaces between screens and they are boxed out from the wall areas about 1' to allow operation of the awning and hopper windows. Most window hardware has been removed, but original locking handles on the awning windows and ring-pull latches on the hopper windows remain in the bay closest to the east overhead roll-up door. The eastern end of the building has window guards built with ½"-diameter metal rods. These security bars have projecting sections to accommodate the operation of the pivot windows.

The interior doors in Facility 474 are flush metal, some with vision panels. The fire escape doors in the stairways have crash bars.

The square pilasters along the exterior walls are integrated with the beams and walls above and below the windows, but are set away from the windows by about 1". This slight clearance between the perimeter pilasters and inside of the windows provides continuous bands of windows and is an unusual detail, but typical to the International Style as seen in this building and in the nearby Facilities 475 and 479.

Facility 474 has a conveyor system that links its first and second floors and connects to Facility 475 on the north and Facility 452K on the south. The conveyor connections between the floors of Facility 474 are routed through holes in the second-floor slab. One is located near the west wall of the building, at about its mid-point, and the other is about 50' from the south wall, again nearly in line with the mid-point of the wall. The connection with Facility 452K is on the first floor, through the center loading dock opening on the south side of the building. The conveyor on this south side of the building runs through an enclosed connecting bridge of ribbed metal siding. This "bridge" is low and the conveyor blocks vehicular traffic. On the north side the conveyor connection runs from the second floor of Facility 474 to the first floor of Facility 475. It is enclosed in ribbed metal siding, running under the abandoned pedestrian bridge (Facility S 798).

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Facility 474 has no heating equipment, and air conditioning is limited to window units installed at the office spaces. The building has natural ventilation through window openings and the metal mesh gates at the openings to the loading docks. Interior lighting is supplied by a combination of fluorescent and incandescent fixtures in the warehouse areas of both floors. The building has fire protection system piping and sprinklers in all areas.

Historical Context: For an overview of warehouses at Pearl Harbor see HABS No. HI-383. For reports on similar concrete storehouses on Kuahua peninsula, see HABS No. HI-433 (Facility 475) and HABS No. HI-434 (Facility 479). This building was part of the massive expansion of warehouse and other facilities that occurred at the Pearl Harbor and other Pacific installations of the Navy in the build-up to World War II and during the war years. Much of the work was done by a consortium of construction firms called Contractors Pacific Naval Air Bases (CPNAB).

The 1941 drawings for the building are initialed by T.M & W.H. and were produced by the 14th Naval District, probably based on the Navy's Bureau of Yards And Docks design standards. Facility 474 is an International Style building, a design which features unadorned functionality with smooth wall surfaces, no decorative detailing at doors or windows, a flat roof usually without coping, and bands of windows flush with the outer wall. The International Style originated in the period between World Wars I and II and became popular as an appealing idea in a time of technological advancement. The style emphasized the importance of functionalism as traditional decorative elements were rejected. This idea had tremendous influence on American building during the ensuing decades and many buildings at Pearl Harbor were designed in the International Style. The 1952 alteration drawings for Facility 474 have the signature "Henderson" who may have been one of the original architects having done other major facilities for the 14th Naval District since the 1930s.

Facility 474 was completed in August 1942 (Contractors Pacific Naval Air Bases, n.d.: p. A-706, A-709). Original drawings dated April 7, 1941 have "Aviation Storehouse" in the title block. A September 1942 site plan titled "Rehabilitation of Electrical Distribution System" (U.S. Navy, drawing M-N26-111) shows the name of the building as "Aviation Materials Storehouse," while November 1943 alteration drawings for the third-floor addition, call the building "Aviation Material Storehouse." The September 1942 site plan for the electrical system shows that the two-story Facility 474 was just the first increment of a larger building which would ultimately have almost double the footprint (by virtue of expansion to the east) and also rise to a height of six stories. In addition the site plan shows the projected construction of an almost identical six-story Aviation Material Storehouse just to the east. The plans to enlarge Facility 474 and construct the additional building near it were changed sometime during

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the war. As primary storage buildings, Facilities 474, 475, and 479 were camouflaged during World War II.

Instead of expanding at Kuahua, and rather than building concrete six-story warehouses, several outlying sites with wooden storehouses for aviation supplies were built by the Navy on Oahu between 1942 and 1945. At the tip of Pearl City Peninsula was a "waterfront terminal for the aviation supply depot" where "six wood-frame sheds were erected for the sorting and temporary storage of cargo" (Bureau of Yards and Docks, Vol. II 1947, 133). These buildings consisted of 4 storehouses and 2 transit sheds (Dodge, 2005). Also, 20 more warehouses were built in "an auxiliary area, just south of the Manana storage area" (Bureau of Yards and Docks, Vol. II 1947, 132). The Waiawa Aviation Supply Depot by 1943 had about two dozen wooden warehouses, all built by the Navy in Waiawa Gulch near Pearl City Peninsula (Fourteenth Naval District, "Navy and Army Installations" 1943). Most of Waiawa reverted to private ownership after the war, but part of the depot was transferred to the Hawaii Army National Guard. The administrative history of the Fourteenth Naval District also mentions a separate activity, established on January 1, 1944 at Pearl Harbor, called "Naval Overseas Air Cargo Terminal" (Fourteenth Naval District, "*U.S. Naval Administration*" 1945, 475). The Navy took over John Rodgers Field and it became NAS Honolulu along with the Naval Transport Service at Keehi, area near John Rodgers Airport Road, and areas 2, 3, 4, & 9 for Keehi Seadrome facility. The Moanalua Supply Depot also supported these functions (Dodge, 2005).

A memo dated April 6, 1943 stated that "ultimately the Aviation Storehouse (now occupied by the Naval Air Station) will be utilized for assembly and distribution of incoming cargo" (Gaffney 1943). Buildings 39, 26, 26A, 75, 79W, and 79E at Ford Island likely played important supply functions through the key assembly and repair hangars numbers 79 at NAS Ford Island, 117 NAS Barbers Point, and 375 NAS Kaneohe (Dodge, 2005). In early 1944 two new tenants in the building were noted, so the aviation supply function had apparently moved to the outlying areas. In February 1944 the third floor of Facility 474 housed the offices of the Freight Division of the Pearl Harbor Naval Supply Depot, which handled cargo arriving from the mainland and departing to forward areas of the Pacific theatre ("NSD Freight Division" 1944). The Spare Parts Distribution Center (SPDC) for the central Pacific area occupied some or all of Facility 474 soon after April 1944. The SPDC was responsible for distributing spare parts for "internal combustion engines installed in all surface vessels . . . [and] all types of craft and deck gear" ("Introducing the Depot" 1944).

The original plans for Facility 474 have indications of the planned expansion of the building. The east end had a special footing detail on the original plans, with short column bases at that exterior wall extending up about 5' from the top of the concrete pile caps of the foundation, or about 3' above grade. Notes on the drawings to these bases state "For

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future columns” and “Enclose column dowels in cement brick pier.” The tops of the interior columns are also shown on the original plans as extending 2'-6", above the roof level. They are noted as “Cement brick piers” that enclose the columns’ reinforcing rods. Presumably, the expansion plan was also the reason that the east wall of Facility 474 was made of concrete hollow tile – to facilitate construction of an addition on the east side.

When it was constructed, Facility 474 had a flat roof with multiple low-slope ($\frac{1}{4}$ " in 12") planes that diverted rainwater to the eight roof drains. The roof drains were routed into 4"-diameter drain pipes that are imbedded in the reinforced concrete of the circular interior columns. Because of the planned additional stories, the drain pipes at the roof are offset from the columns and angled through the column capitals, to reach the vertical drain pipes in the center of the columns. The building originally had a 3'-0" high parapet of 8" concrete block at the roof perimeter set back 1" either to show the change in material or more likely to allow for a plaster finish to weatherseal the parapet (Dodge, 2005). The top of the parapet was designed with a 5" wide continuous bond beam set back from the face of the building.

In late 1943 and early 1944 a third floor was added to Facility 474. This wood-framed addition, unlike the originally planned additional concrete floors, had a low slope ($\frac{1}{2}$ " in 12") gable roof with 4'-0" overhanging eaves. The third-floor ceiling height was 10'-0" at the exterior walls, and 12'-6" in the middle. This addition's structure included 6" square posts supporting 6" x 12" beams and 2" x 12" rafters at 30" o.c. There were also 2" x 6" diagonal braces at the top of the posts. The posts rested on the piers that projected above the second-floor ceiling (former roof level). The third floor's roof was composed of 4-ply asphalt and gravel over 1" x 6" shiplap sheathing on top of $\frac{3}{4}$ " canec panels (a product made from sugar cane fibers remaining after the extraction process). Canec siding was also used in the gable ends above the windows, apparently to insulate and partially finish the exposed interior ceilings. The parapet wall and windows or screened openings composed the remainder of the exterior walls. Wood-louvered shades covered the west-end windows and wrapped around to cover the openings on the four westernmost bays on both sides. Exterior stairways were constructed at the center of the east and west walls to provide additional access to the third floors. They were built of wood, with 8" posts, 8" x 12" beams, 2" x 6" joists and 2" x 10" diagonal bracing.

The interior layout of the new third floor was quite open originally, with the majority of the space apparently devoted to storage. Two office spaces, a 40' x 40' bunk room with a small galley, and two toilet rooms were located in the western end of the third floor. The office area had double-hung windows, while the bunk and toilet rooms had screened openings to the exterior. At the interior wall that was parallel with the north wall, the bunk room had continuous screened openings, above the door height, that ran the full width of the partition.

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An overhead walkway was added in late 1951 or early 1952 to connect the third floor of Facility 474 with the third floor of Facility 475, over Vincennes Avenue. This walkway, designated Facility S 798, is now abandoned. In 1951 the building's designation was listed as "Storehouse, Retail Issue, Ships Supply" (Fourteenth Naval District, "Building and Structure List" 1951).

In 1952, at the east end of the building, the exterior wood stairs were replaced by fireproof stairs (Naval Facilities Engineering Command, drawing 516648 thru 516650). The stairs and stair landing slabs are reinforced concrete, enclosed in reinforced concrete and concrete block walls which rest on 16" square reinforced concrete piles. The piles were specified to be driven to a minimum depth of 20' below the cut-off. It is interesting that the original plan to expand this building to six floors had not yet been abandoned. A note on the 1952 drawings for these fireproof stairs states: "Pile foundations are designed to carry stairs to future 4th, 5th, & 6th floors." The fireproof stairs that were called for in these 1952 drawings at the west end of the building were never built.

By April 1961 a conveyor belt, to move small parcels from Facility 474 to Facility 452K, had been constructed in and between the two buildings. The belt traveled from the second-floor of Facility 474, down to its first floor and then south across a paved area to Facility 452K, which sits on a small rise. The April 1961 drawings show an existing 59' conveyor spanned the distance between the buildings, running from the edge of the loading platform of Facility 474 to just inside Facility 452K, at approximately the mid-point of each building. New conveyor sections expanded the system into each building.

About 1964, an addition to the conveyor system linked Facility 474 with Facility 475 as well as with Facility 452K. The only drawing (no. 1031038) found of this system at Naval Facilities Engineering Command Plan Files was a preliminary design sketch, dated October 1963 and filed under Facility S 798, showing how the conveyor was to be hung from that pedestrian walkway. The conveyor belt runs from the first floor of Facility 475 to the second floor of Facility 474 then continued, as described above, to Facility 452K. This improved conveyor system was installed during a time of military build-up in the early stages of the Vietnam War. It "immediately began working overtime, transporting hundreds of thousands of items to support our military personnel in the seas and jungles of Vietnam" ("33-Year Old Tote Pan" 1998). The 1960s conveyor was designed to move plastic "tote pans" between the three warehouses. In April 1998 that conveyor system was decommissioned and in August 1998 the present conveyor was installed in its place ("33-Year Old Tote Pan" 1998).

In 1979 some renovations were made to the building. The offices and bunk room at the west end of the third floor had been removed by this date. A waiting area, reception area, treatment room, interview rooms, storage room and two offices were added for the Navy Regional Medical

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Clinic along the north wall. At the southeast corner, office space and training rooms for the Food Management Team were added. New floor coverings, gypsum board partitions, doors, cabinets, shelving, and bathroom fixtures were added in some areas.

In January 1980 a storm severely damaged the third floor and the roof of Facility 474, and in June 1980 the third floor was described as "no longer usable" (Pfarrer 1980). In January 1982 the Navy decided that the cost to repair and maintain the third floor "did not justify its preservation" and the Navy notified Hawaii State Historic Preservation Division and the National Park Service of their intent to remove the third floor (Dallum 1980).

In 1982 Facility 474 was restored to a two-story building by removing the added wood-framed third floor. Drawings dated May 1982 show that the existing wood roof structure and the concrete block parapet were removed. The concrete brick piers and posts at the interior were also removed and a new roof installed. The copper gutters and downspouts were added, and the wood-framed stair structure at the west side of the building was also removed

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Pfarrer, M.D. "Historic Resources Inventory Bldg 474," 1980. Inventory Form prepared by U.S. Naval Reserve officer, with photocopies of photos showing building before removal of the third floor. In Hawaii State Historic Preservation Division files for Pearl Harbor.

Rosendahl, Paul H., Ph.D. Inc., Mason Architects, Inc. and Maptech, Inc. *Pearl Harbor Naval Complex, Cultural Resources Management Plan*. 2000. Prepared for Commander, Pacific Division, Naval Facilities Engineering Command: Pearl Harbor, HI.

U.S. Navy. "Aviation Supply Depot, U.S. Naval Supply Center, Waiawa, Oahu, T.H., Showing conditions on 30 June 1951. Drawing no. OA-N1-2208." 1951. Map provided by Jeffrey Dodge, Pacific Division, Naval Facilities Engineering Command.

_____. "Naval Supply Depot, Kuahua Island, Rehabilitation of Elec. Distribution System. Drawing No. M-N26-111, revised September 1942." 1942. Map of Kuahua Peninsula on microfilm at Pacific Division, Naval Facilities Engineering Command Plan Files.

U.S. NAVAL BASE, PEARL HARBOR, AVIATION STOREHOUSE
(U.S. Naval Base, Pearl Harbor, Fleet and Industrial Supply Center)
(U.S. Naval Base, Pearl Harbor, General Warehouse Depot)
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HABS No. HI-519 (Page 12)

Woodbury, David O. *Builders For Battle, How The Pacific Naval Air Bases Were Constructed.* New York: E.P. Dutton and Company, 1946.

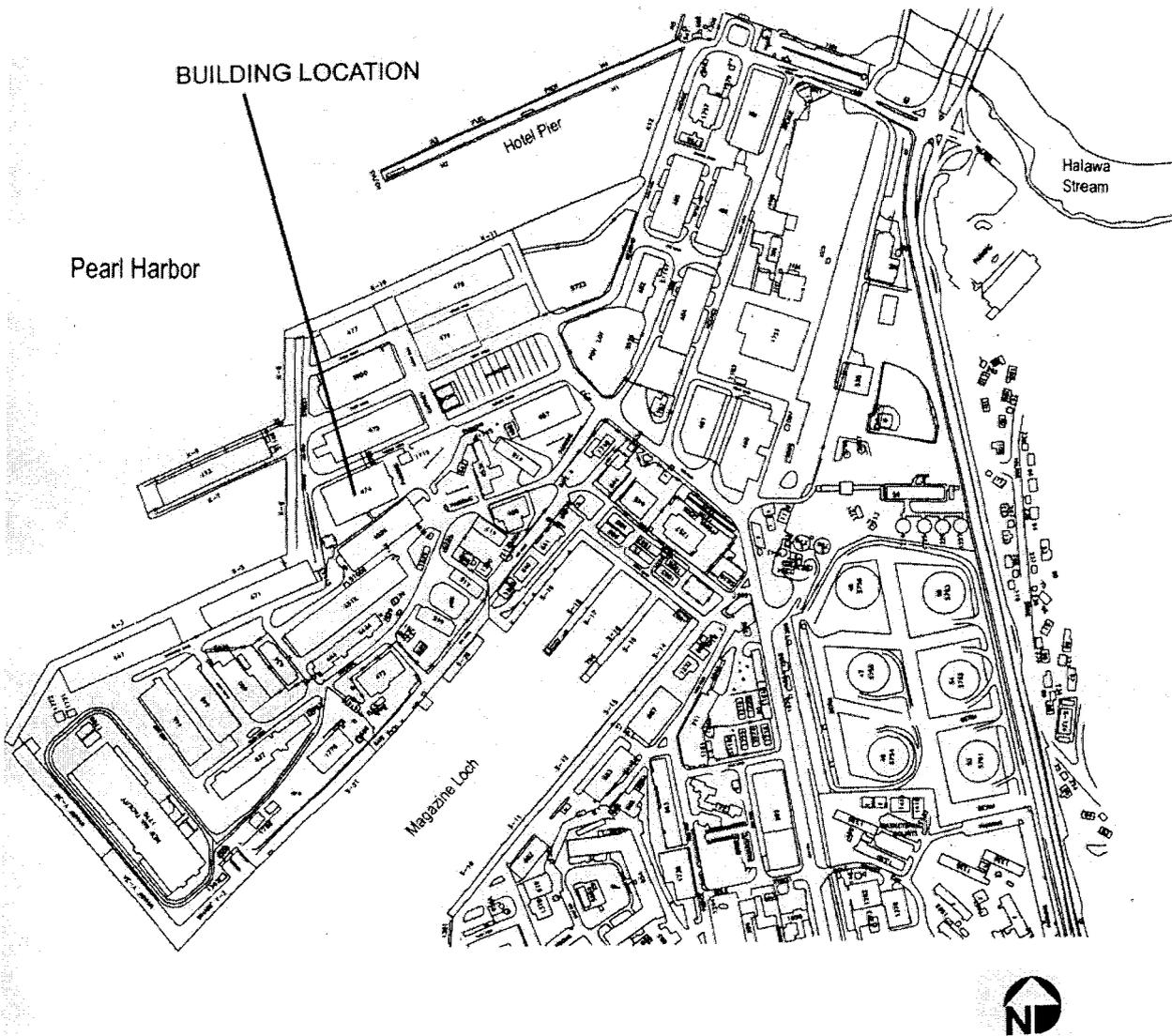
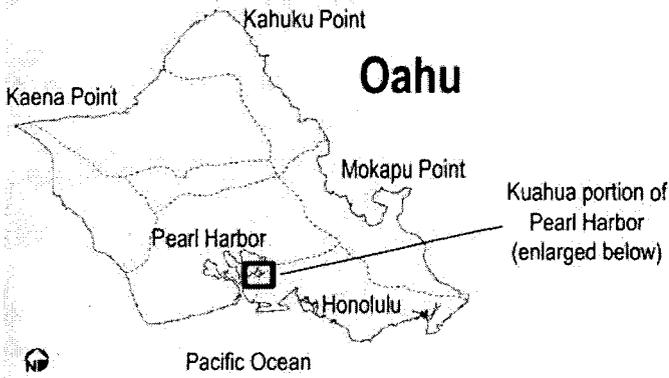
Project Information: Replacement of windows in this building, and in two other similar ones nearby (Facilities 475 and 479), has been proposed by the Navy, to meet anti-terrorism/force protection (AT/FP) requirements. In accordance with 36 CFR Part 800, implementing regulations of Section 106, National Historic Preservation Act, Commander Navy Region (COMNAVREG) Hawaii has consulted with the Hawaii State Historic Preservation Officer (SHPO) and other consulting parties. This photo documentation and recordation is a partial fulfillment of the mitigations stipulated in the Memorandum of Agreement among COMNAVREG Hawaii and SHPO. This report was prepared under a Historic Preservation Services contract (N62742-03-D-1832) awarded to Helber Hastert & Fee, Planners, Inc., the prime contractor, by the U.S. Navy, Pacific Division, Naval Facilities Engineering Command. This project is being supervised by Jeffrey Dodge A.I.A., Historical Architect at the NAVFAC Hawaii. The photographic documentation was undertaken by David Franzen, photographer. Dee Ruzicka and Ann Yoklavich, Architectural Historians at Mason Architects, Inc., wrote and edited, respectively, the written documentation. The field work and research was conducted for this report by Dee Ruzicka in February and March 2004.

Prepared by: Dee Ruzicka, Architectural Historian
Mason Architects, Inc.
119 Merchant Street, Suite 501
Honolulu, HI 96813

Date of Report: March 2005

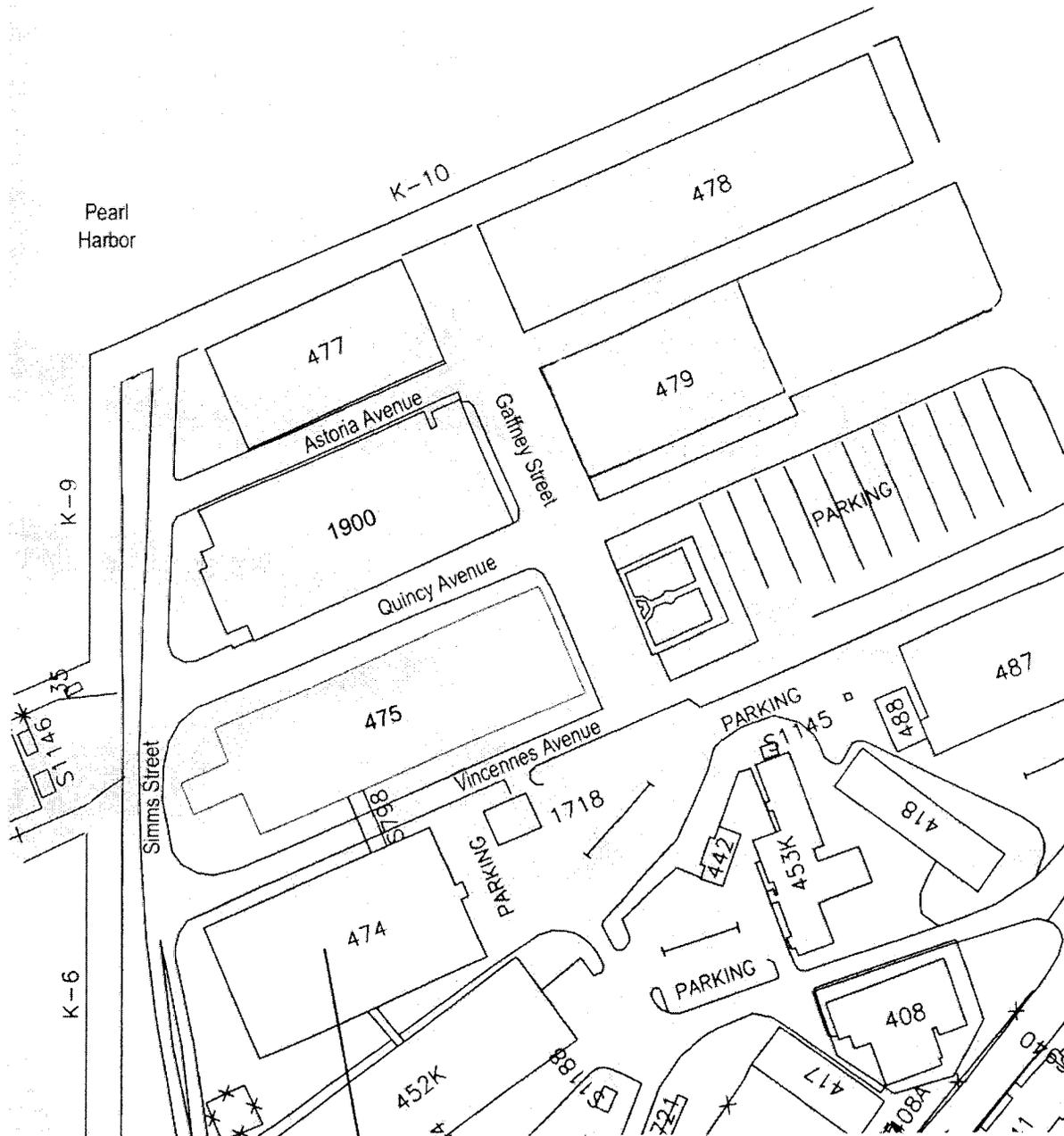
U.S. NAVAL BASE, PEARL HARBOR, AVIATION STOREHOUSE
(U.S. Naval Base, Pearl Harbor, Fleet and Industrial Supply Center)
(U.S. Naval Base, Pearl Harbor, General Warehouse Depot)
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Project location map (not to scale)



U.S. NAVAL BASE, PEARL HARBOR, AVIATION STOREHOUSE
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Enlarged Area Map (not to scale)

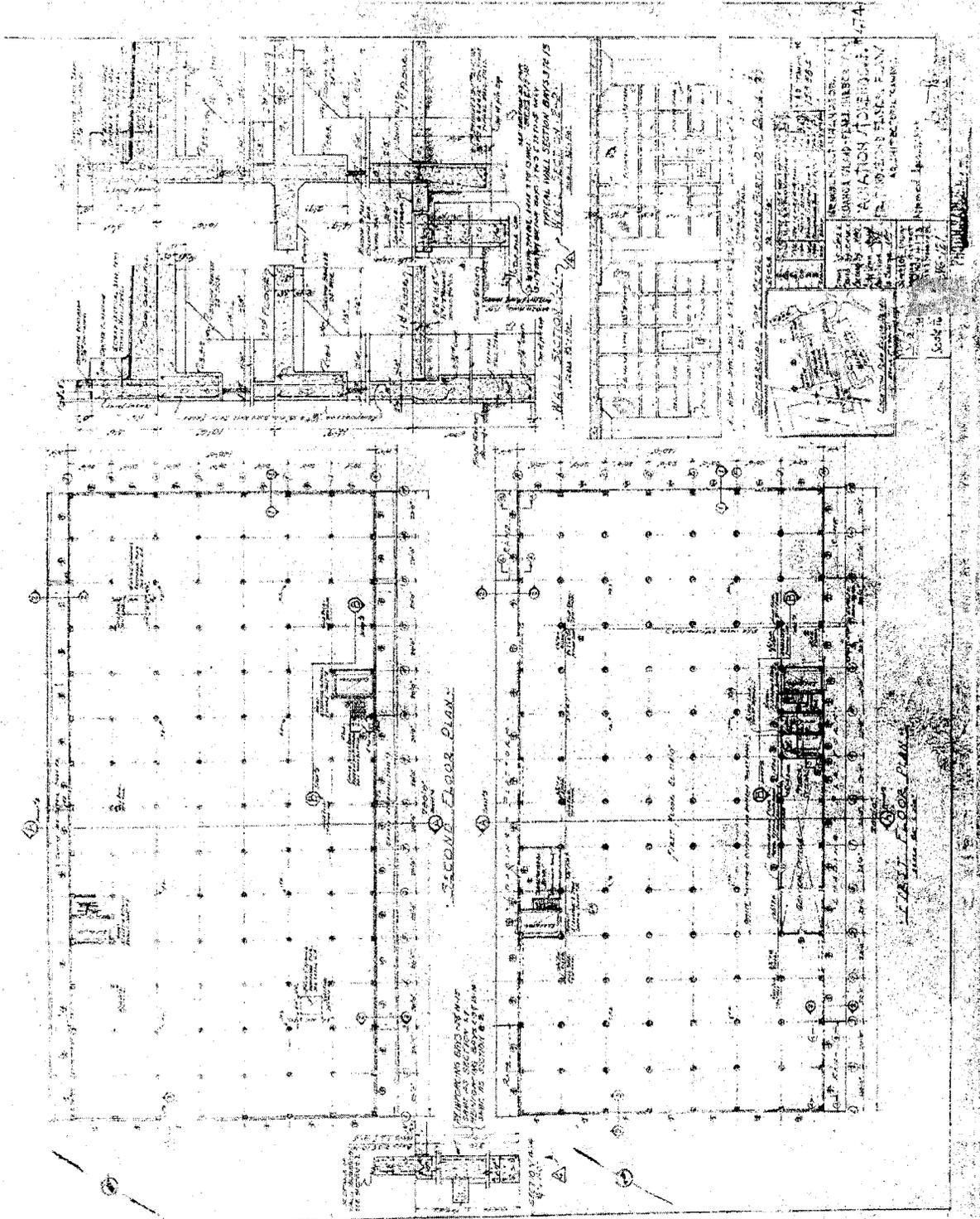


Building Location



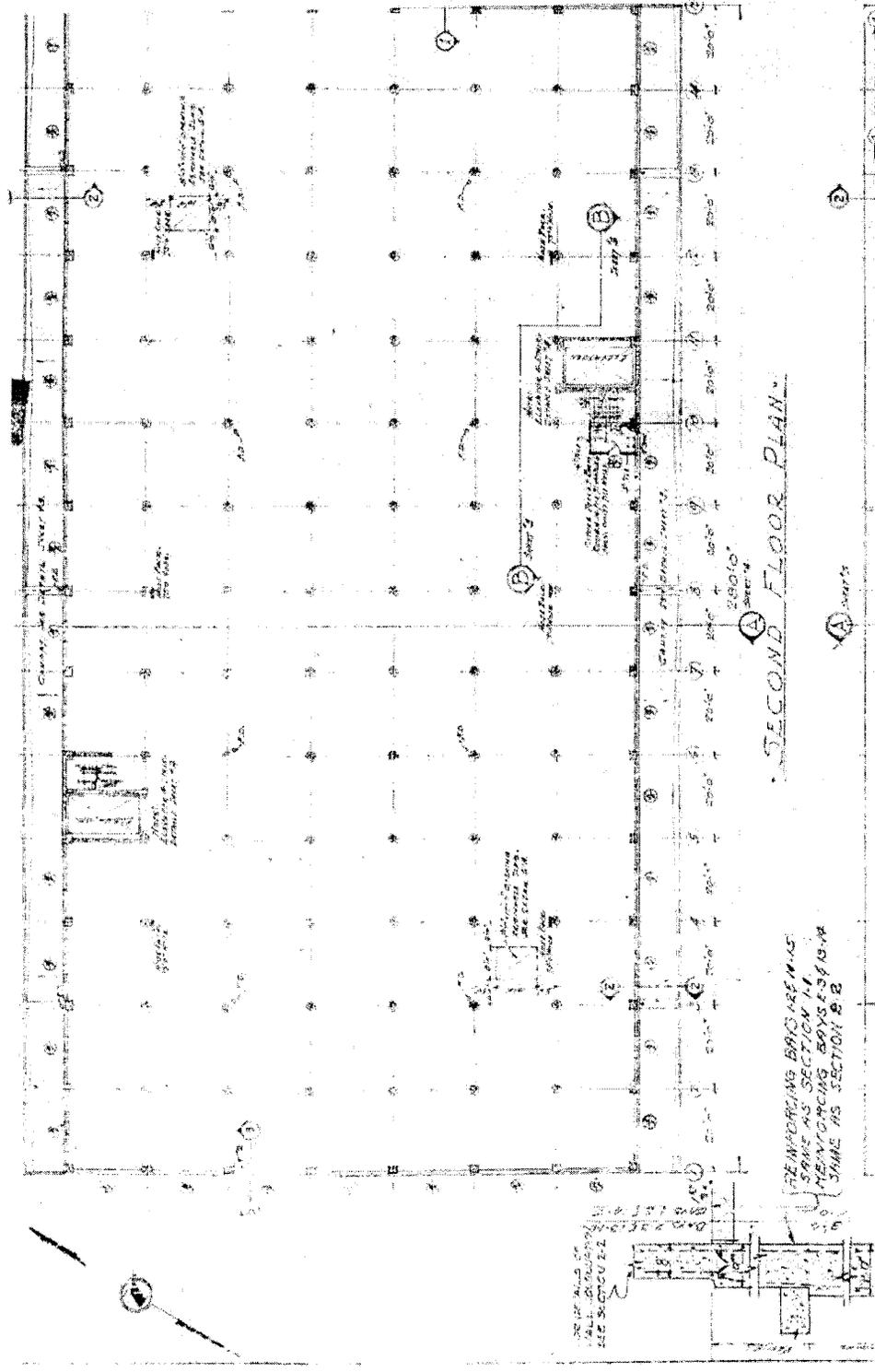
U.S. NAVAL BASE, PEARL HARBOR, AVIATION STOREHOUSE
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(U.S. Naval Base, Pearl Harbor, General Warehouse Depot)
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HABS No. HI-519 (Page 15)

First and Second Floor Plans
(Drawing No. 158584, dated April 7, 1941) (reduced)
This drawing is sectioned and enlarged on the following four pages.



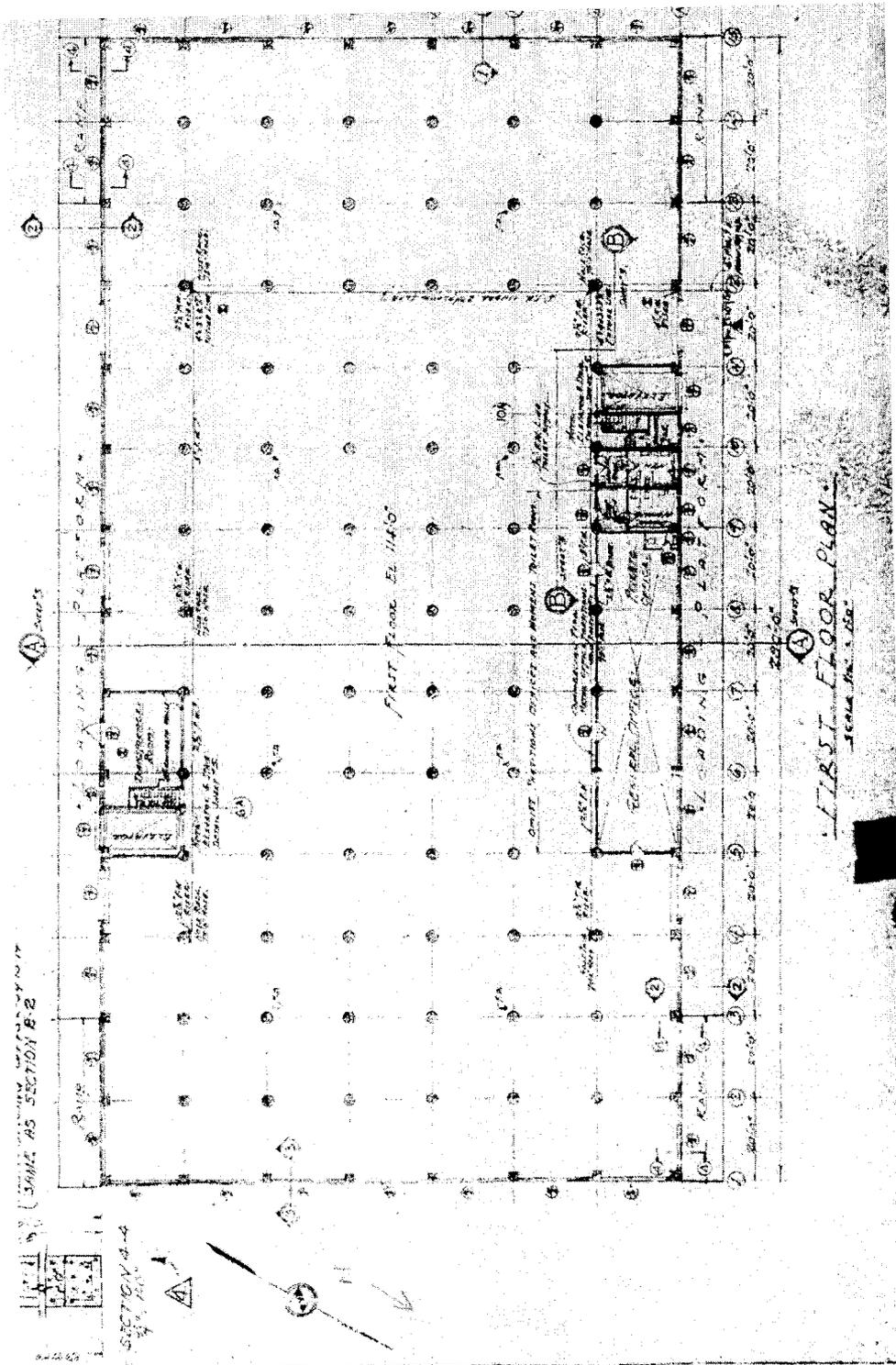
U.S. NAVAL BASE, PEARL HARBOR, AVIATION STOREHOUSE
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(U.S. Naval Base, Pearl Harbor, General Warehouse Depot)
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First and Second Floor Plans
(Upper left portion of Drawing No. 158584, dated April 7, 1941)
Refer to the complete drawing on page 14.



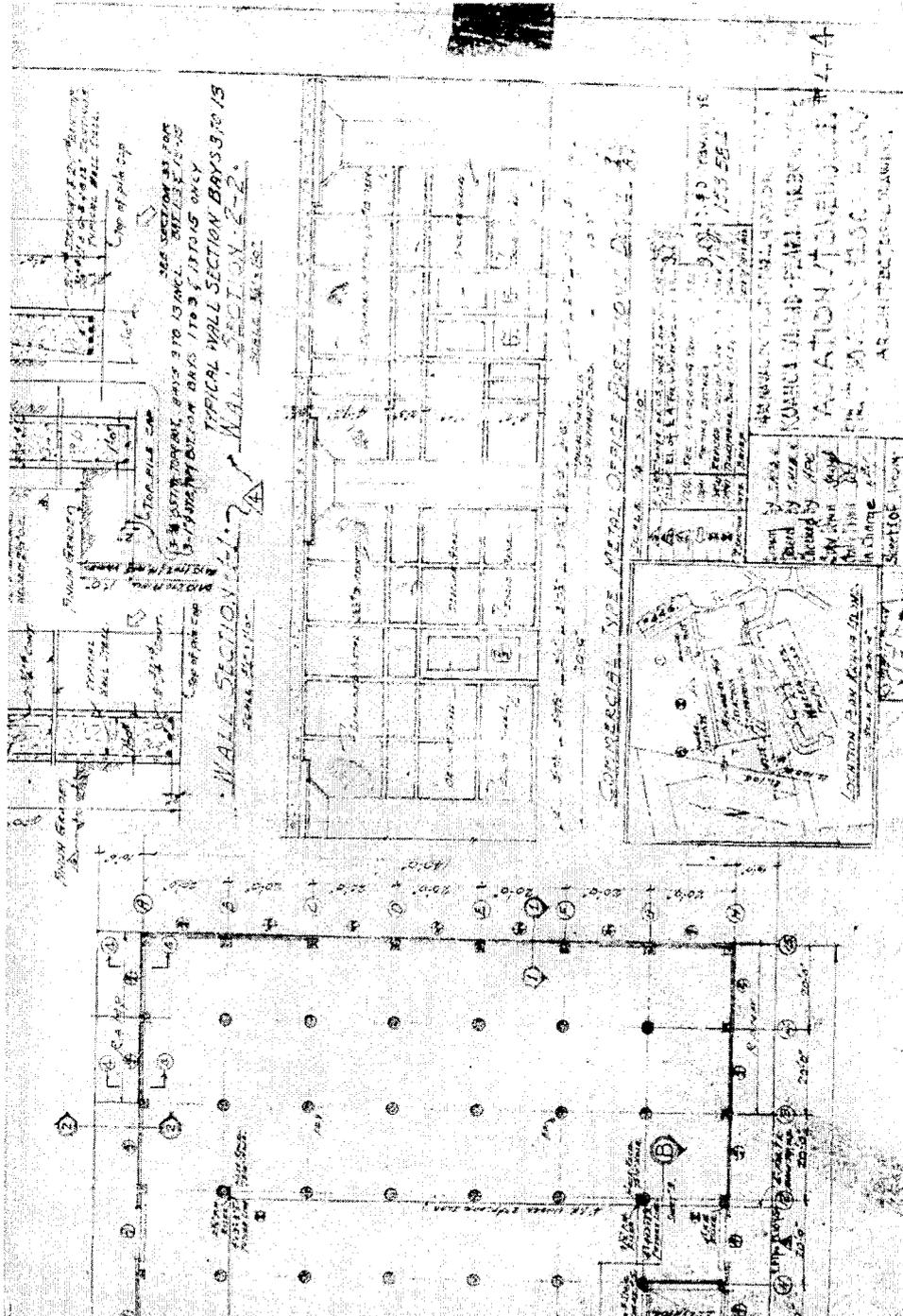
U.S. NAVAL BASE, PEARL HARBOR, AVIATION STOREHOUSE
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 (U.S. Naval Base, Pearl Harbor, General Warehouse Depot)
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HABS No. HI-519 (Page 18)

First and Second Floor Plans
 (Lower left portion of Drawing No. 158584, dated April 7, 1941)
 Refer to the complete drawing on page 14.



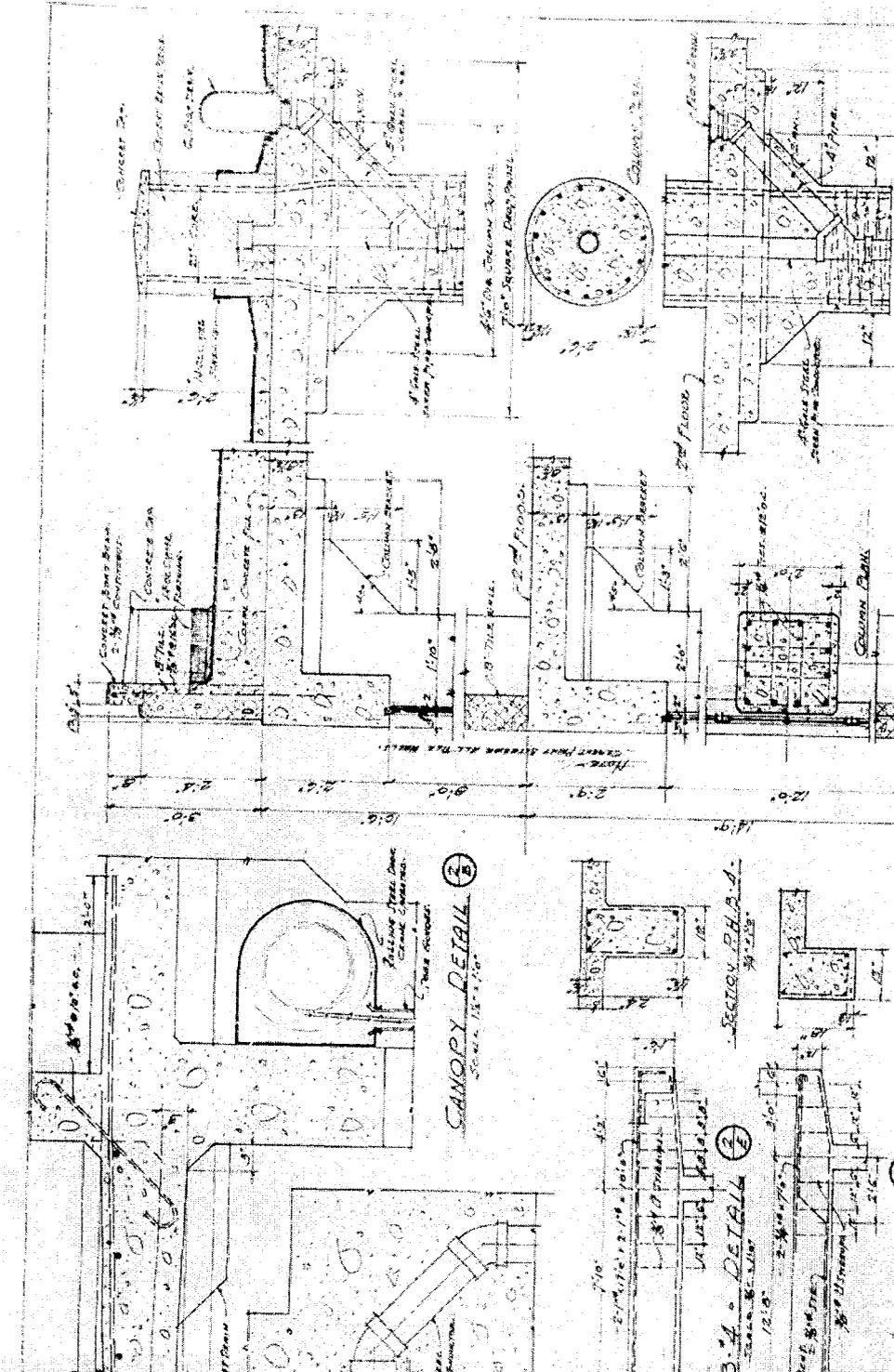
U.S. NAVAL BASE, PEARL HARBOR, AVIATION STOREHOUSE
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(U.S. Naval Base, Pearl Harbor, General Warehouse Depot)
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HABS No. HI-519 (Page 19)

First and Second Floor Plans
(Lower right portion of Drawing No. 158584, dated April 7, 1941)
Refer to the complete drawing on page 14.



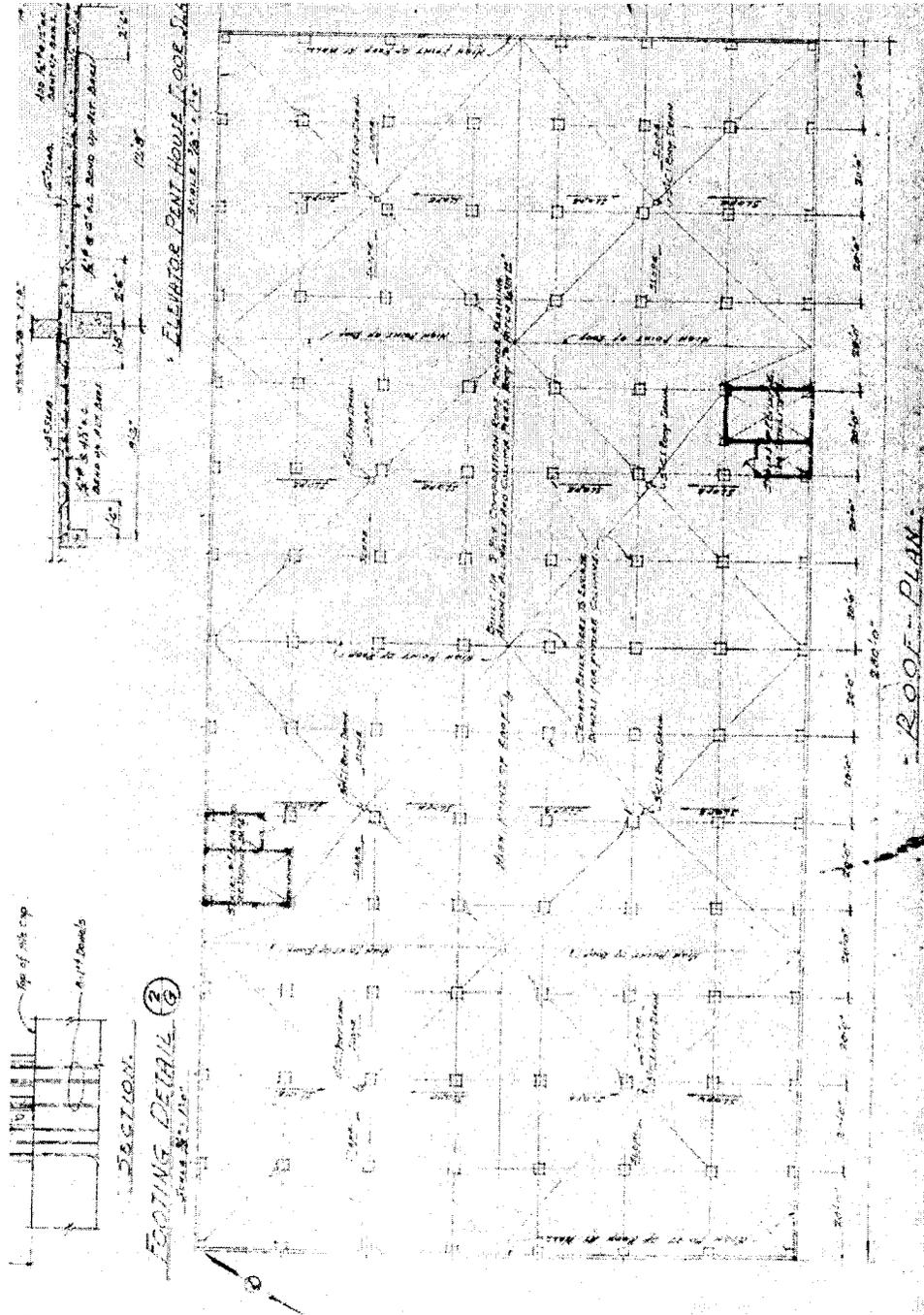
U.S. NAVAL BASE, PEARL HARBOR, AVIATION STOREHOUSE
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(U.S. Naval Base, Pearl Harbor, General Warehouse Depot)
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HABS No. HI-519 (Page 22)

Roof Plan & Structural Details
(Upper right portion of Drawing No. 158585, dated April 7, 1941)
Refer to the complete drawing on page 19.



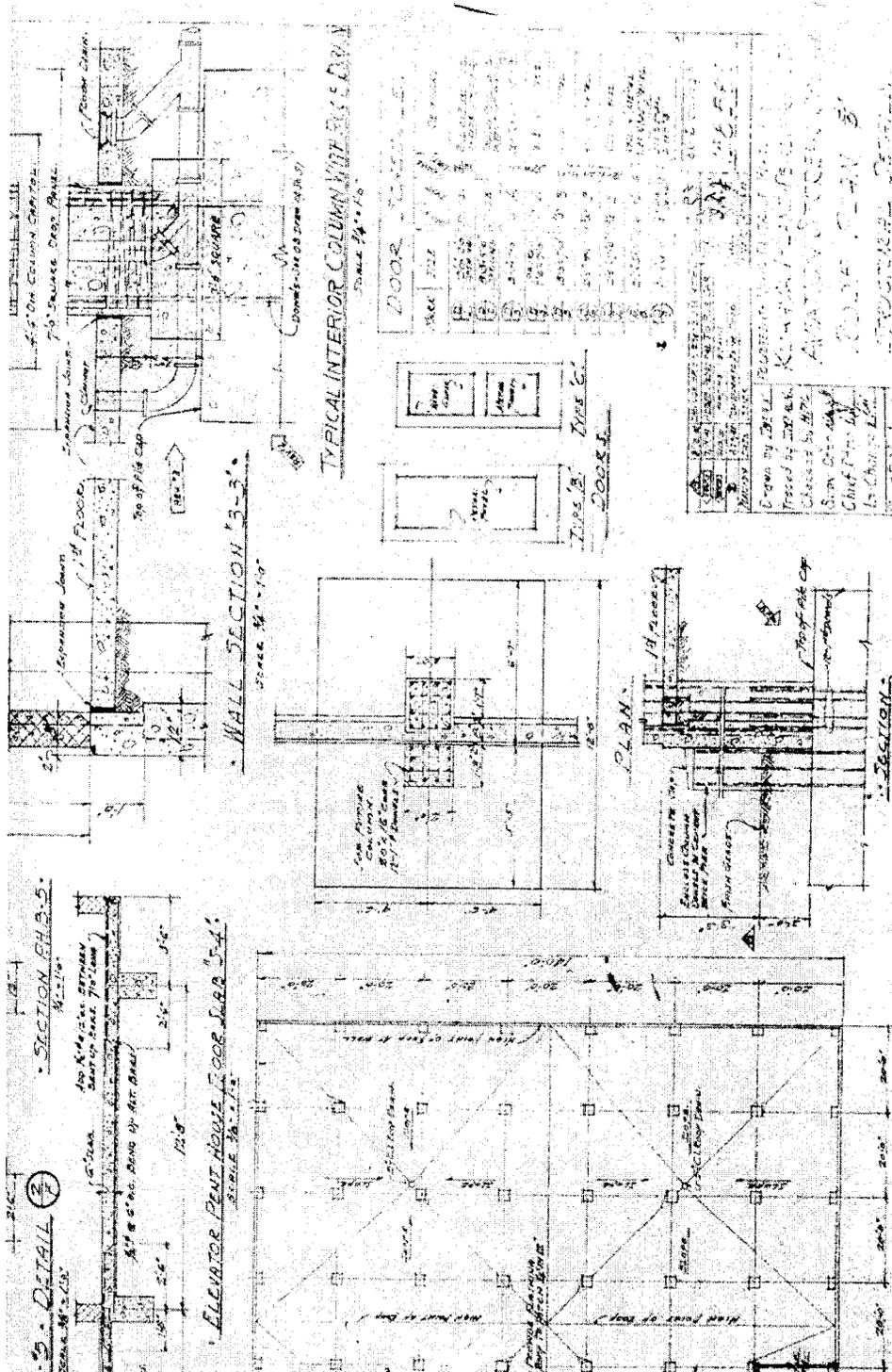
U.S. NAVAL BASE, PEARL HARBOR, AVIATION STOREHOUSE
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(U.S. Naval Base, Pearl Harbor, General Warehouse Depot)
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HABS No. HI-519 (Page 23)

Roof Plan & Structural Details
(Lower left portion of Drawing No. 158585, dated April 7, 1941)
Refer to the complete drawing on page 19.



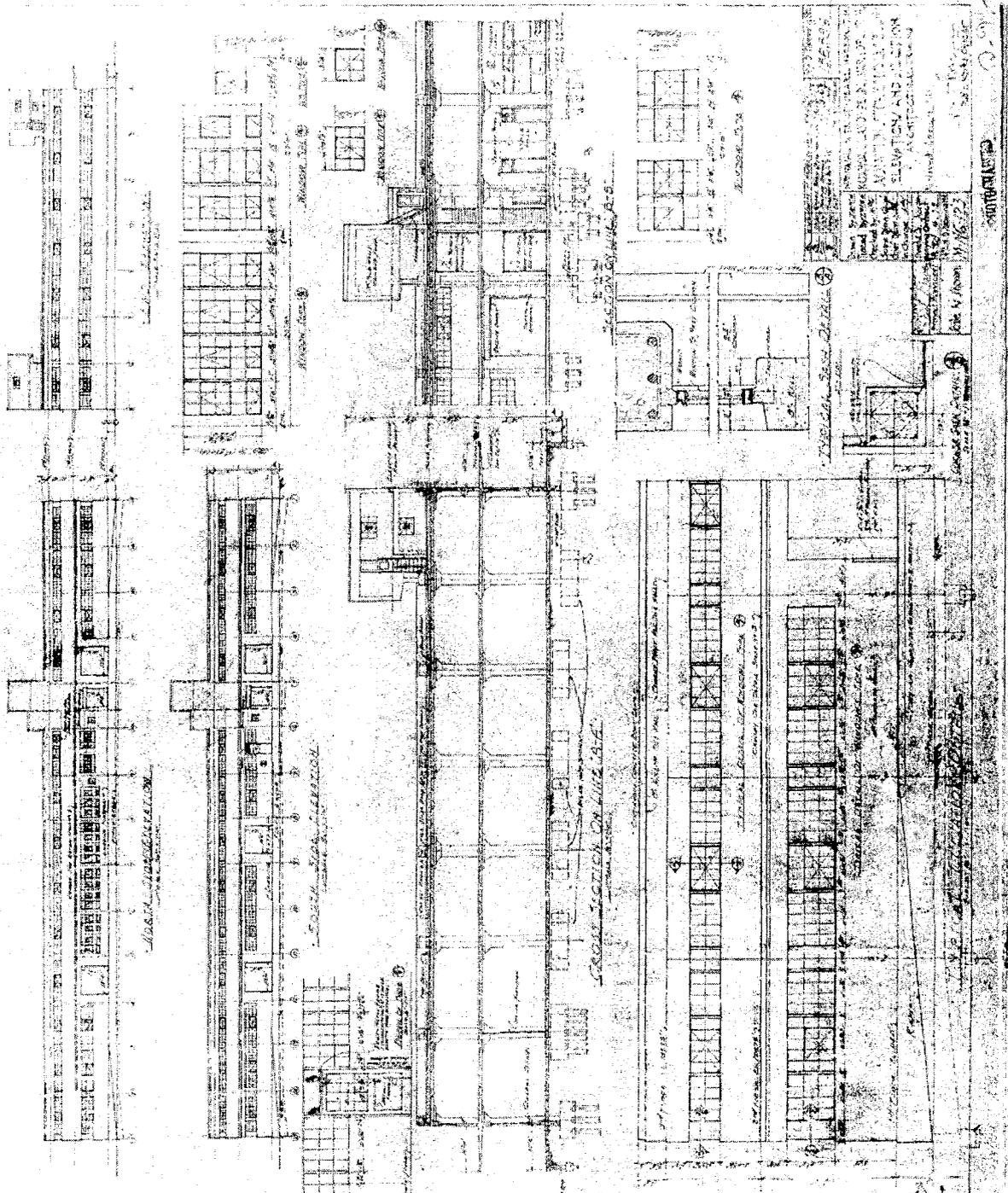
U.S. NAVAL BASE, PEARL HARBOR, AVIATION STOREHOUSE
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 (U.S. Naval Base, Pearl Harbor, General Warehouse Depot)
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HABS No. HI-519 (Page 24)

Roof Plan & Structural Details
 (Lower right portion of Drawing No. 158585, dated April 7, 1941)
 Refer to the complete drawing on page 19.



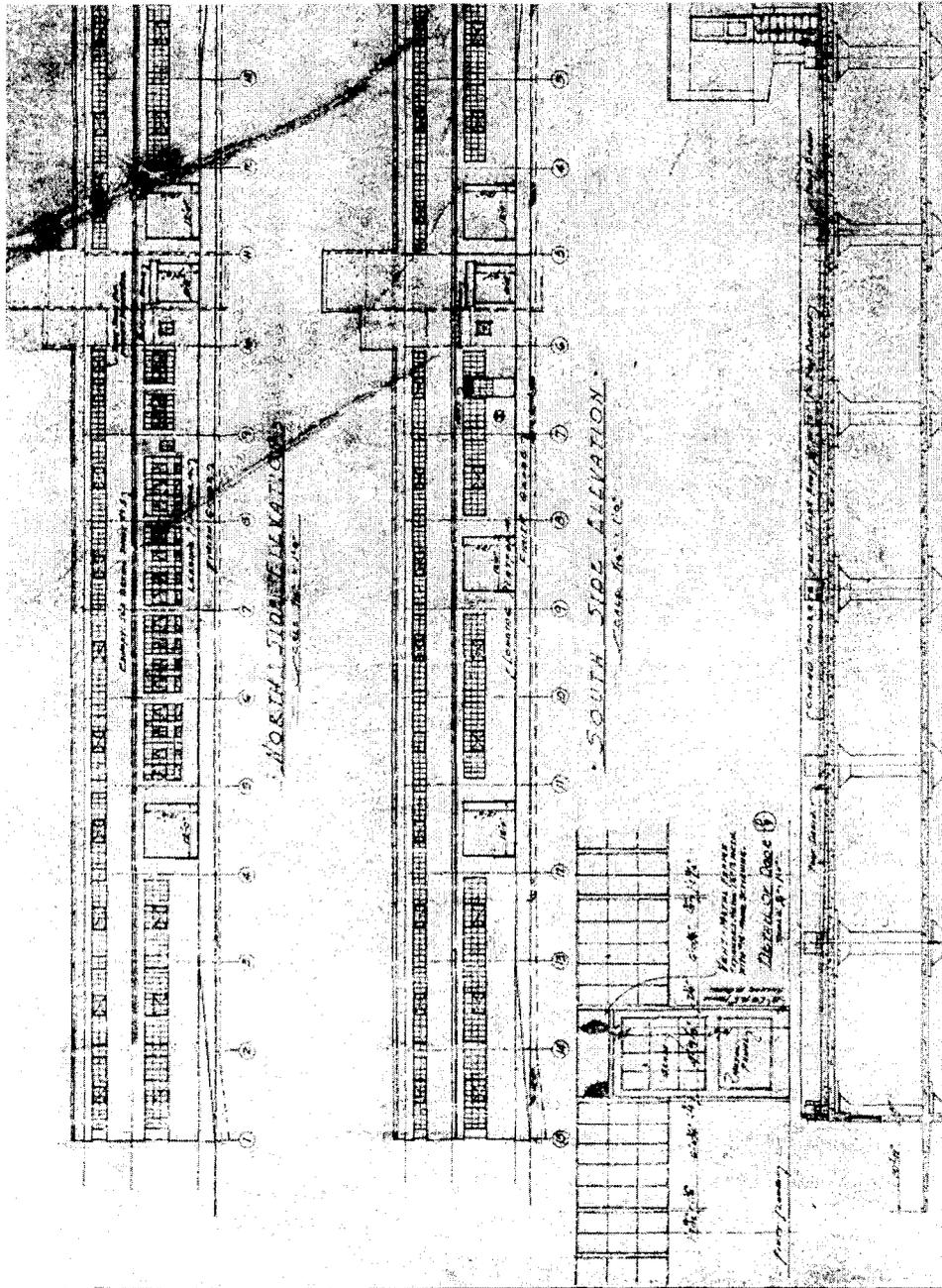
U.S. NAVAL BASE, PEARL HARBOR, AVIATION STOREHOUSE
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(U.S. Naval Base, Pearl Harbor, General Warehouse Depot)
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HABS No. HI-519 (Page 25)

Elevations and Section
(Drawing No. 158586, dated April 7, 1941) (reduced)
This drawing is sectioned and enlarged on the following four pages.



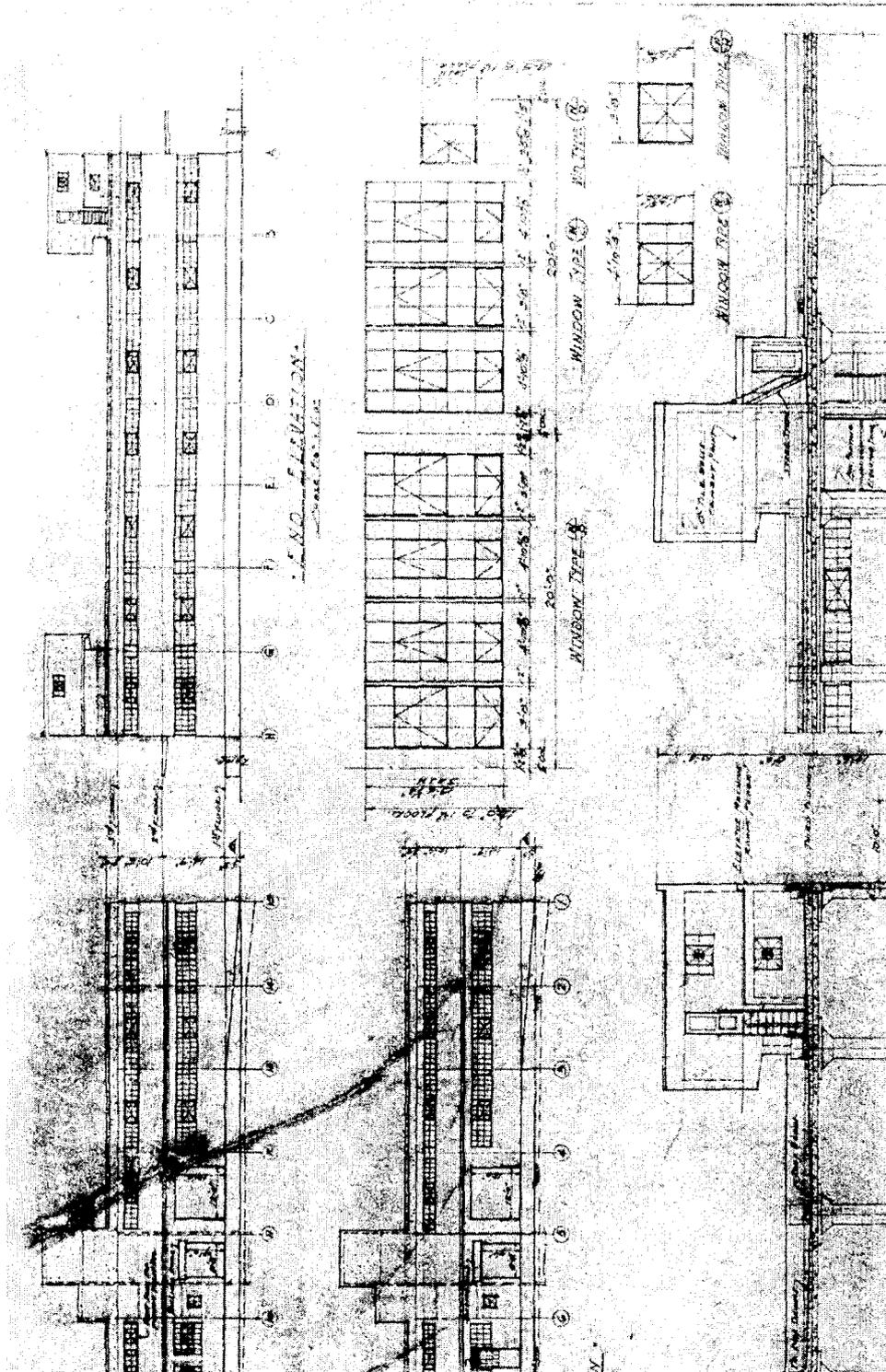
U.S. NAVAL BASE, PEARL HARBOR, AVIATION STOREHOUSE
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(U.S. Naval Base, Pearl Harbor, General Warehouse Depot)
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HABS No. HI-519 (Page 26)

Elevations and Section
(Upper left portion of Drawing No. 158586, dated April 7, 1941)
Refer to the complete drawing on page 24.



U.S. NAVAL BASE, PEARL HARBOR, AVIATION STOREHOUSE
(U.S. Naval Base, Pearl Harbor, Fleet and Industrial Supply Center)
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(Facility No. 474)
HABS No. HI-519 (Page 27)

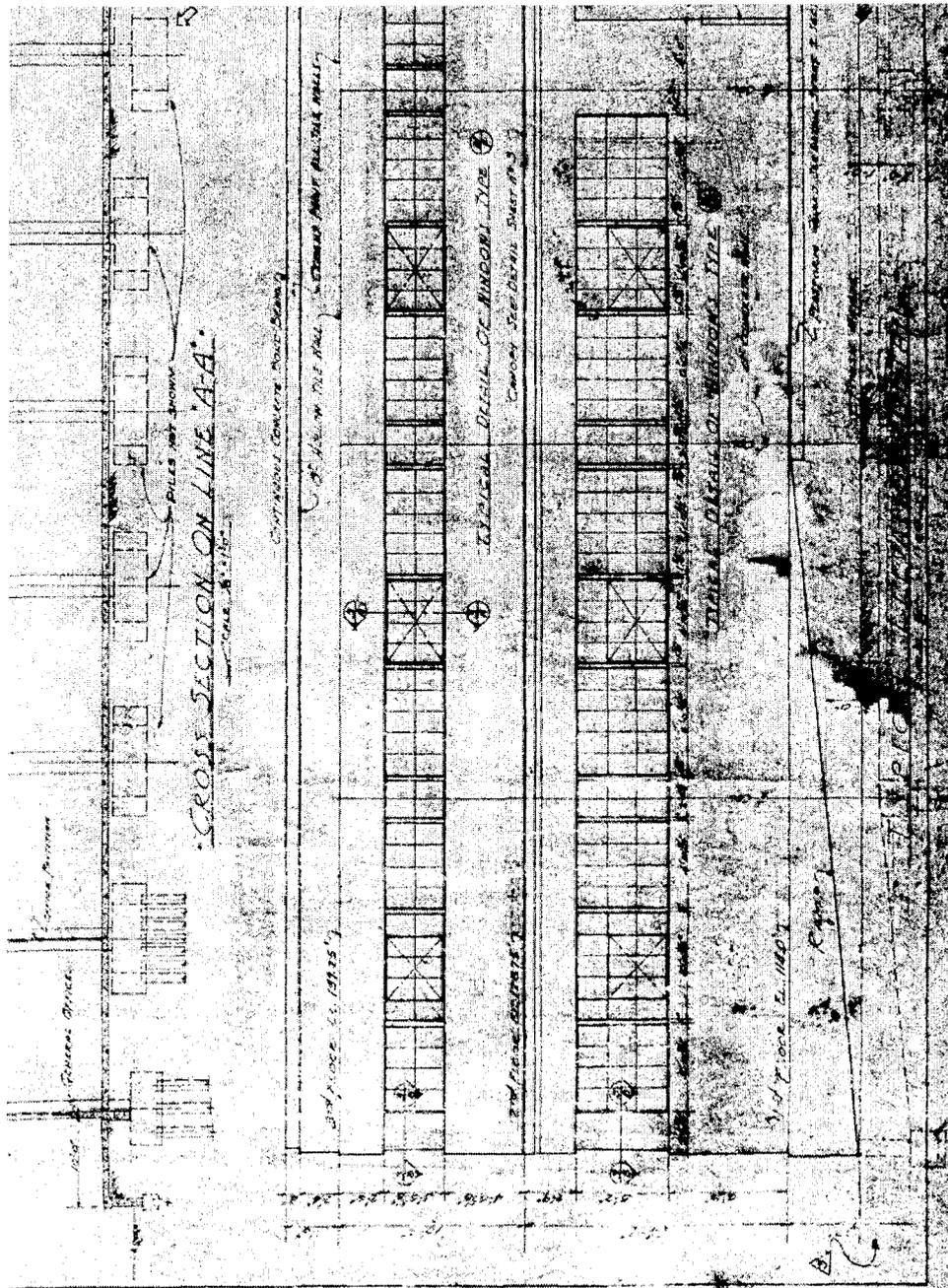
Elevations and Section
(Upper right portion of Drawing No. 158586, dated April 7, 1941)
Refer to the complete drawing on page 24.



U.S. NAVAL BASE, PEARL HARBOR, AVIATION STOREHOUSE
(U.S. Naval Base, Pearl Harbor, Fleet and Industrial Supply Center)
(U.S. Naval Base, Pearl Harbor, General Warehouse Depot)
(Facility No. 474)
HABS No. HI-519 (Page 28)

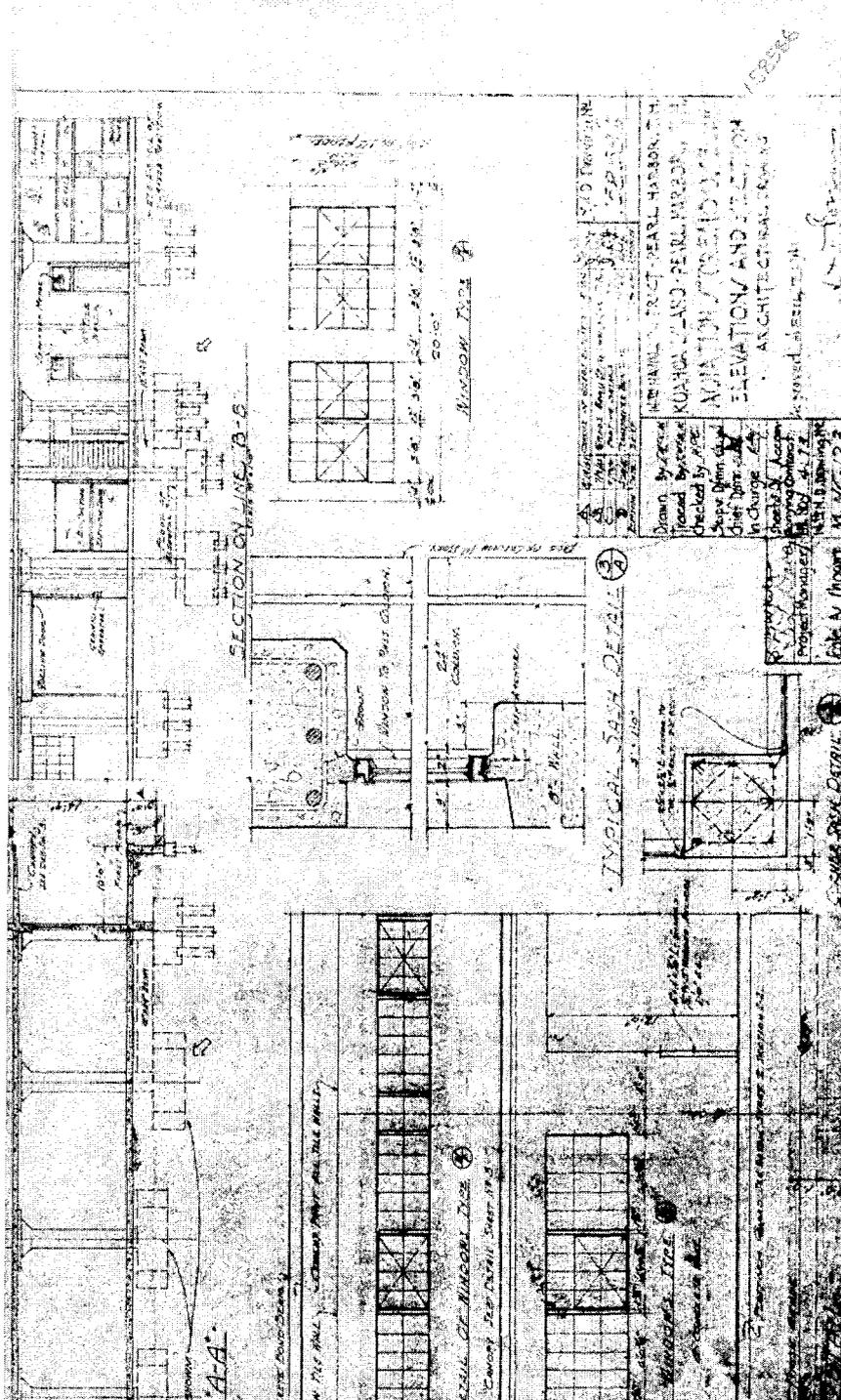
Elevations and Section

(Lower left portion of Drawing No. 158586, dated April 7, 1941)
Refer to the complete drawing on page 24.



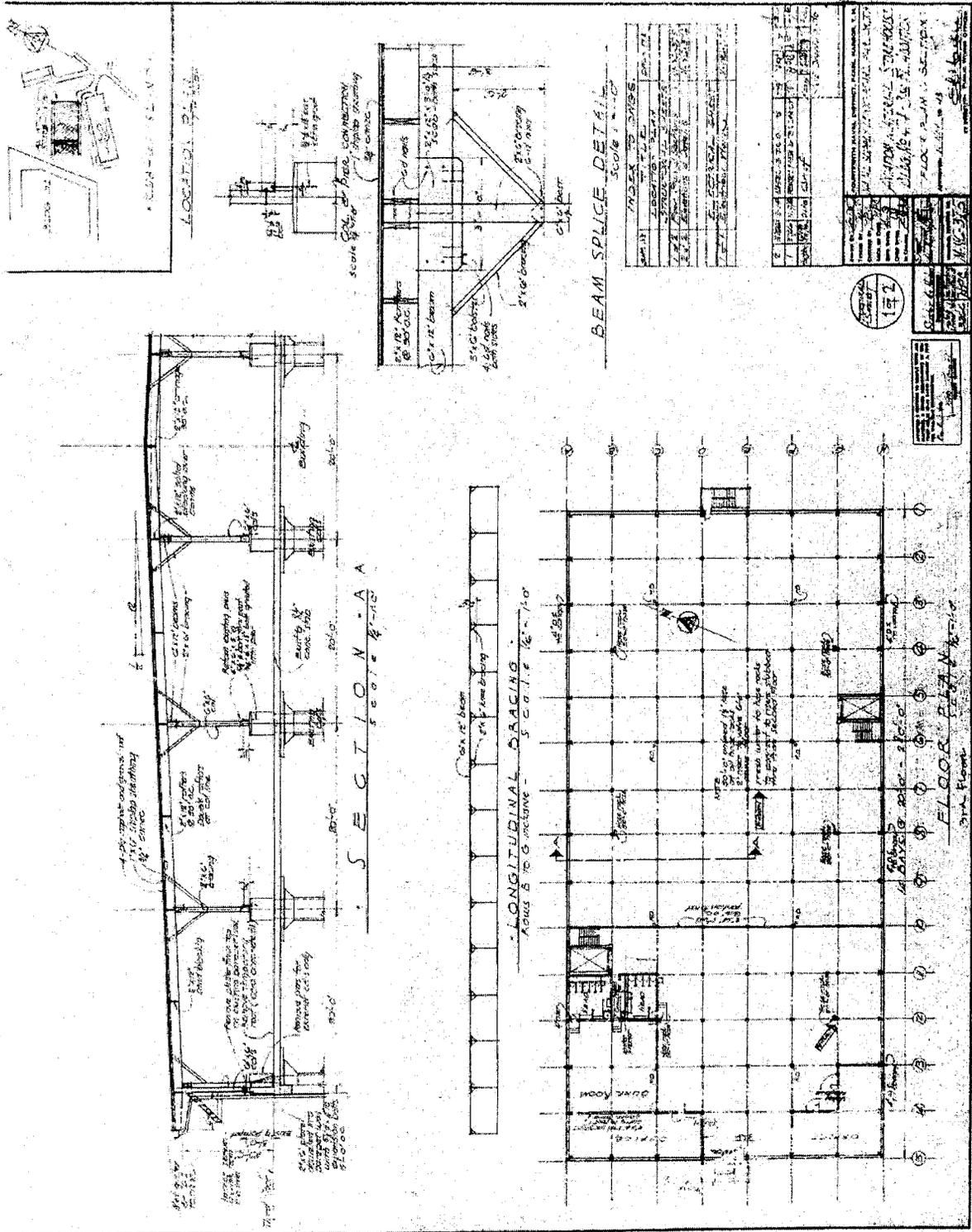
U.S. NAVAL BASE, PEARL HARBOR, AVIATION STOREHOUSE
(U.S. Naval Base, Pearl Harbor, Fleet and Industrial Supply Center)
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HABS No. HI-519 (Page 29)

Elevations and Section
(Lower right portion of Drawing No. 158586, dated April 7, 1941)
Refer to the complete drawing on page 24.



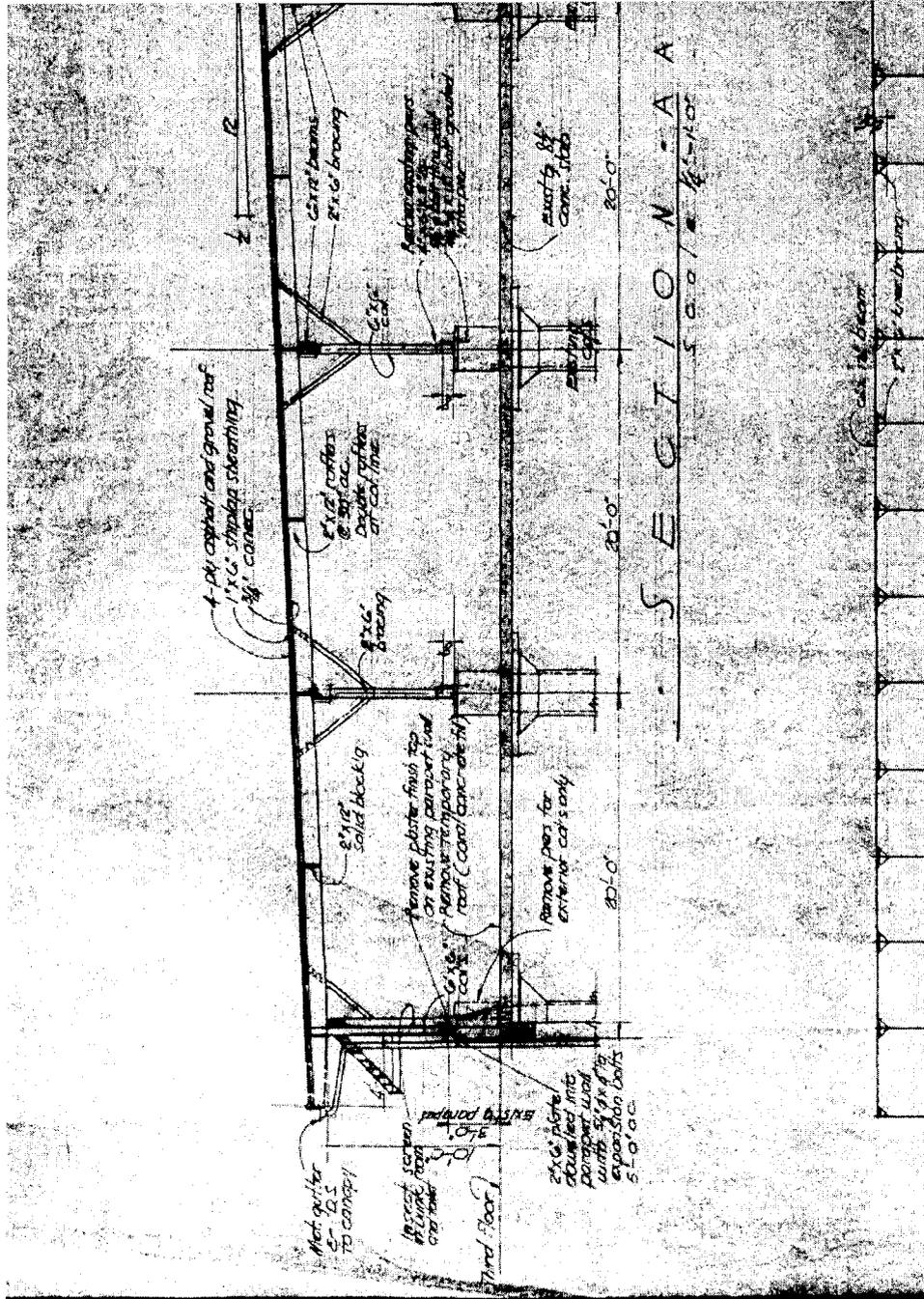
U.S. NAVAL BASE, PEARL HARBOR, AVIATION STOREHOUSE
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HABS No. HI-519 (Page 30)

Third-Floor Addition, Floor Plan & Sections
(Drawing No. M-N6-375, dated November 11, 1943) (reduced)
This drawing is sectioned and enlarged on the following four pages.



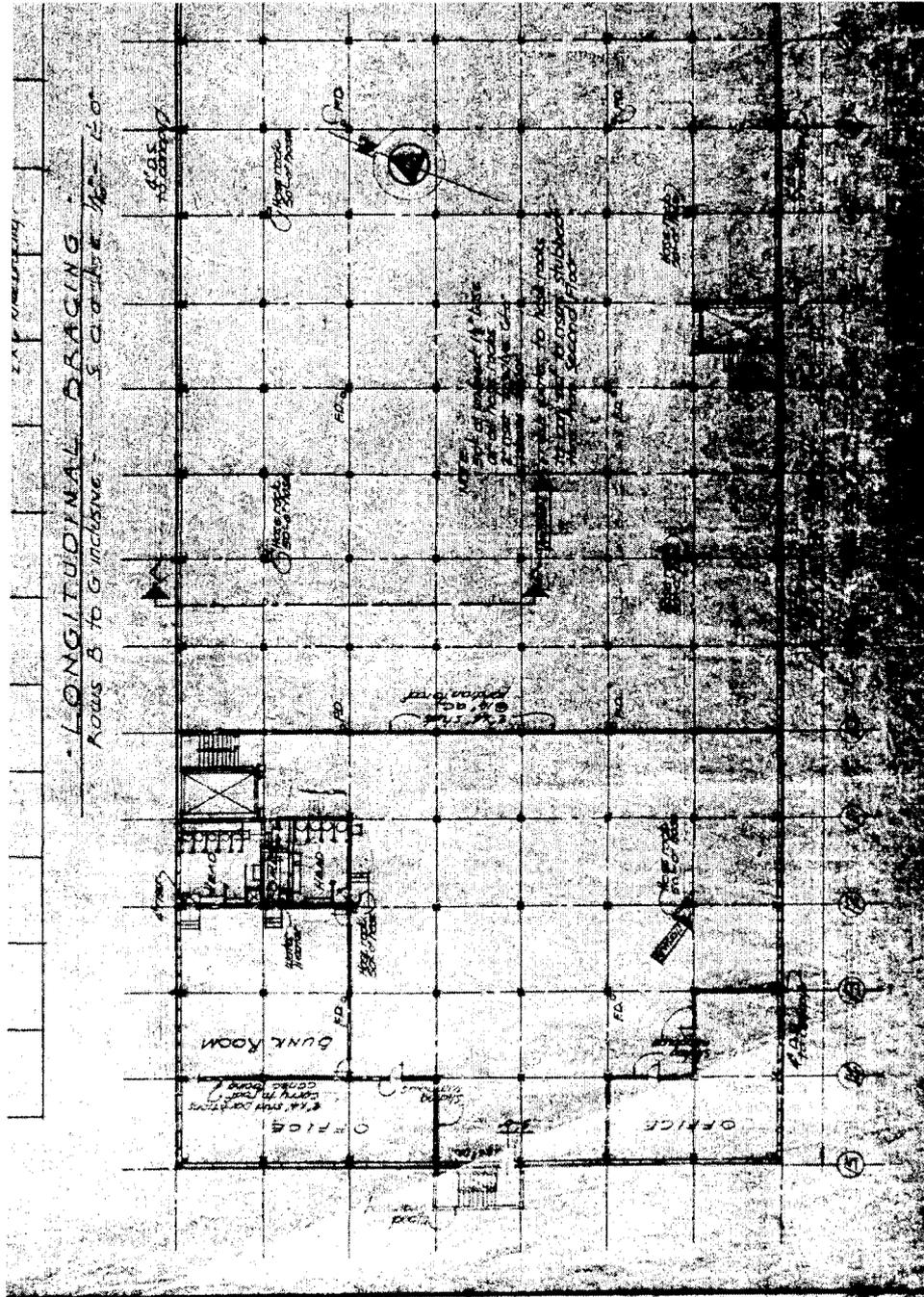
U.S. NAVAL BASE, PEARL HARBOR, AVIATION STOREHOUSE
(U.S. Naval Base, Pearl Harbor, Fleet and Industrial Supply Center)
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HABS No. HI-519 (Page 31)

Third-Floor Addition, Floor Plan & Sections
(Upper left portion of Drawing No. M-N6-375, dated November 11, 1943)
Refer to the complete drawing on page 29.



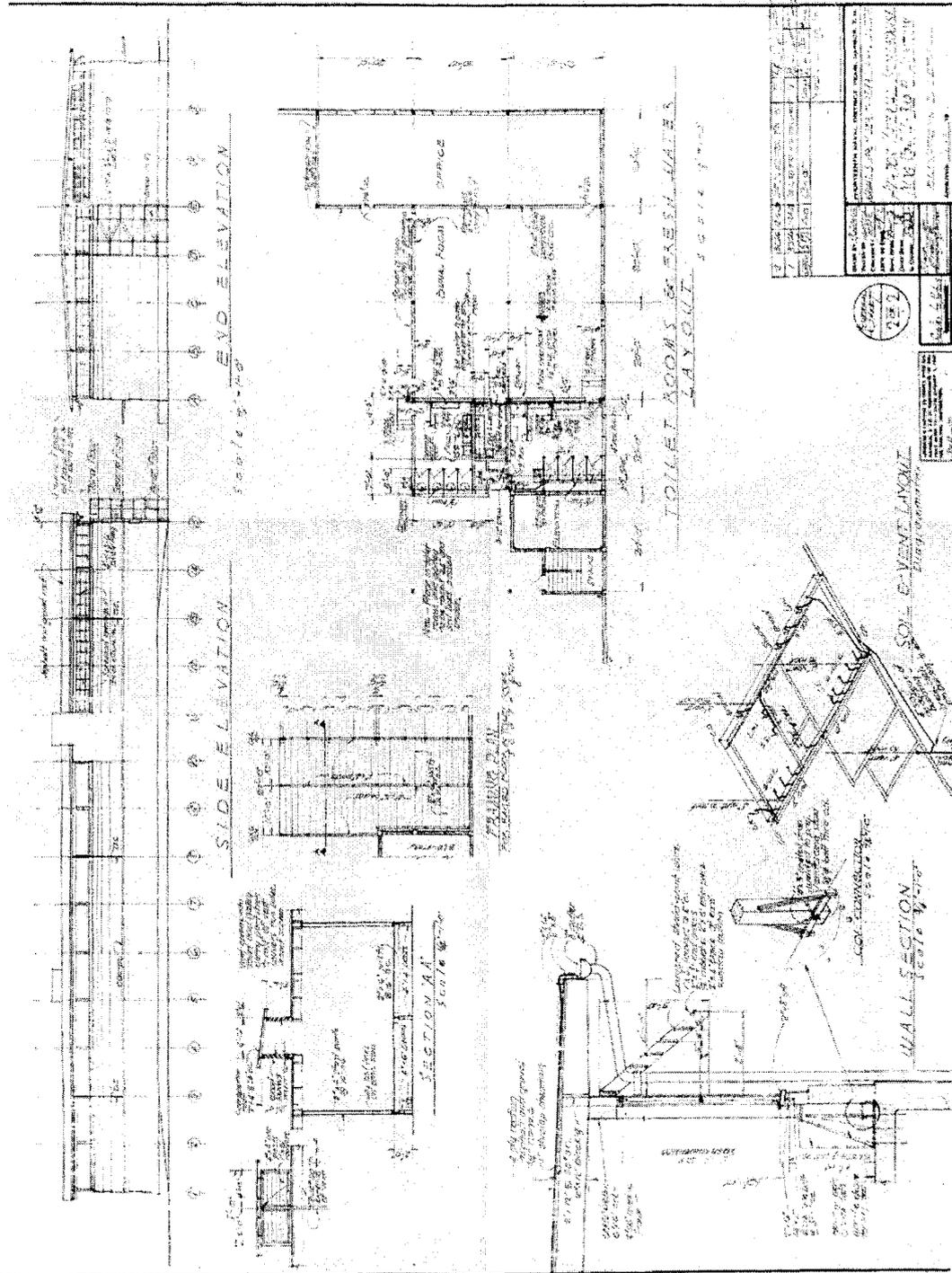
U.S. NAVAL BASE, PEARL HARBOR, AVIATION STOREHOUSE
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Third-Floor Addition, Floor Plan & Sections
(Lower left portion of Drawing No. M-N6-375, dated November 11, 1943)
Refer to the complete drawing on page 29.



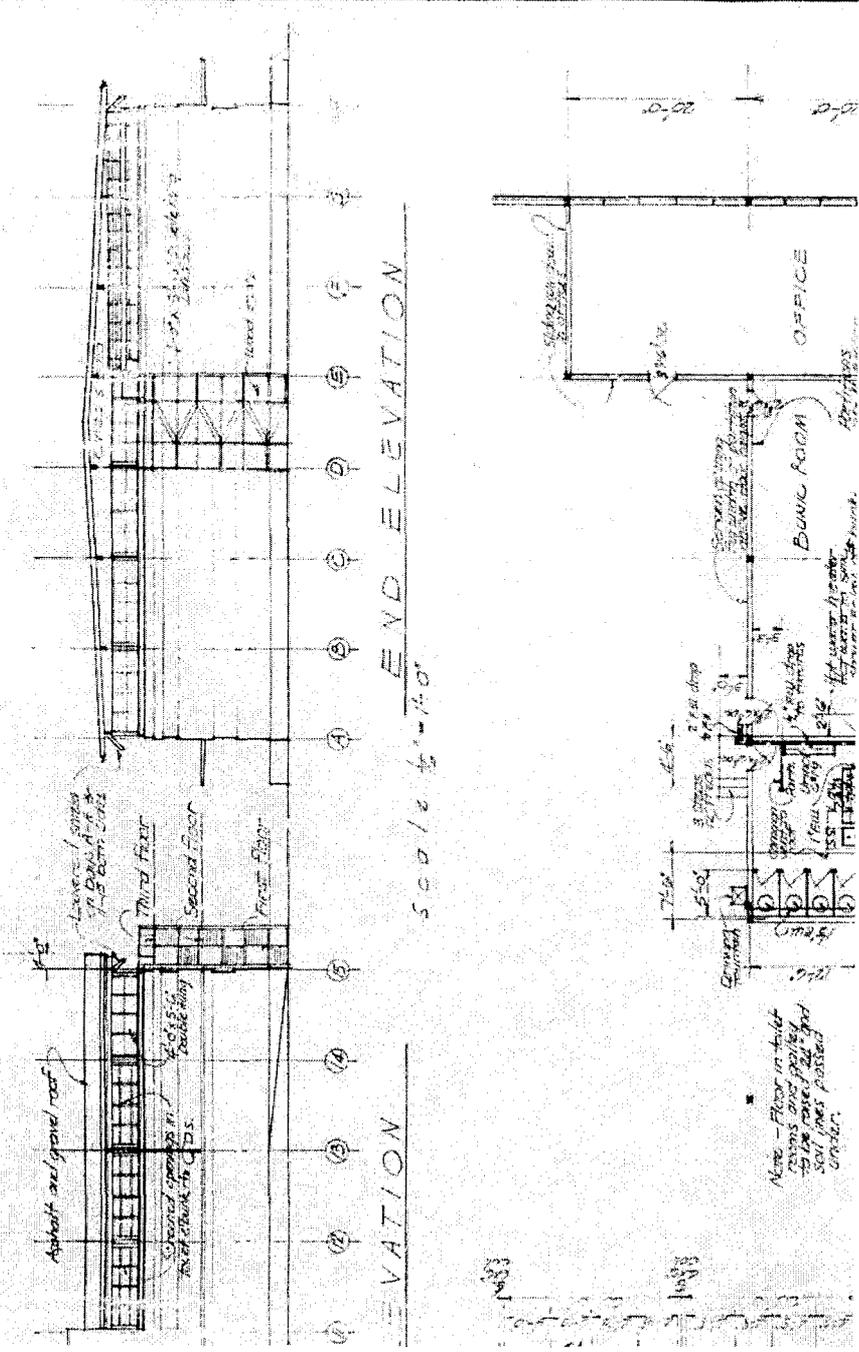
U.S. NAVAL BASE, PEARL HARBOR, AVIATION STOREHOUSE
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HABS No. HI-519 (Page 35)

Third-Floor Addition, Elevations
(Drawing No. M-N6-376, dated November 11, 1943) (reduced)
This drawing is sectioned and enlarged on the following four pages.



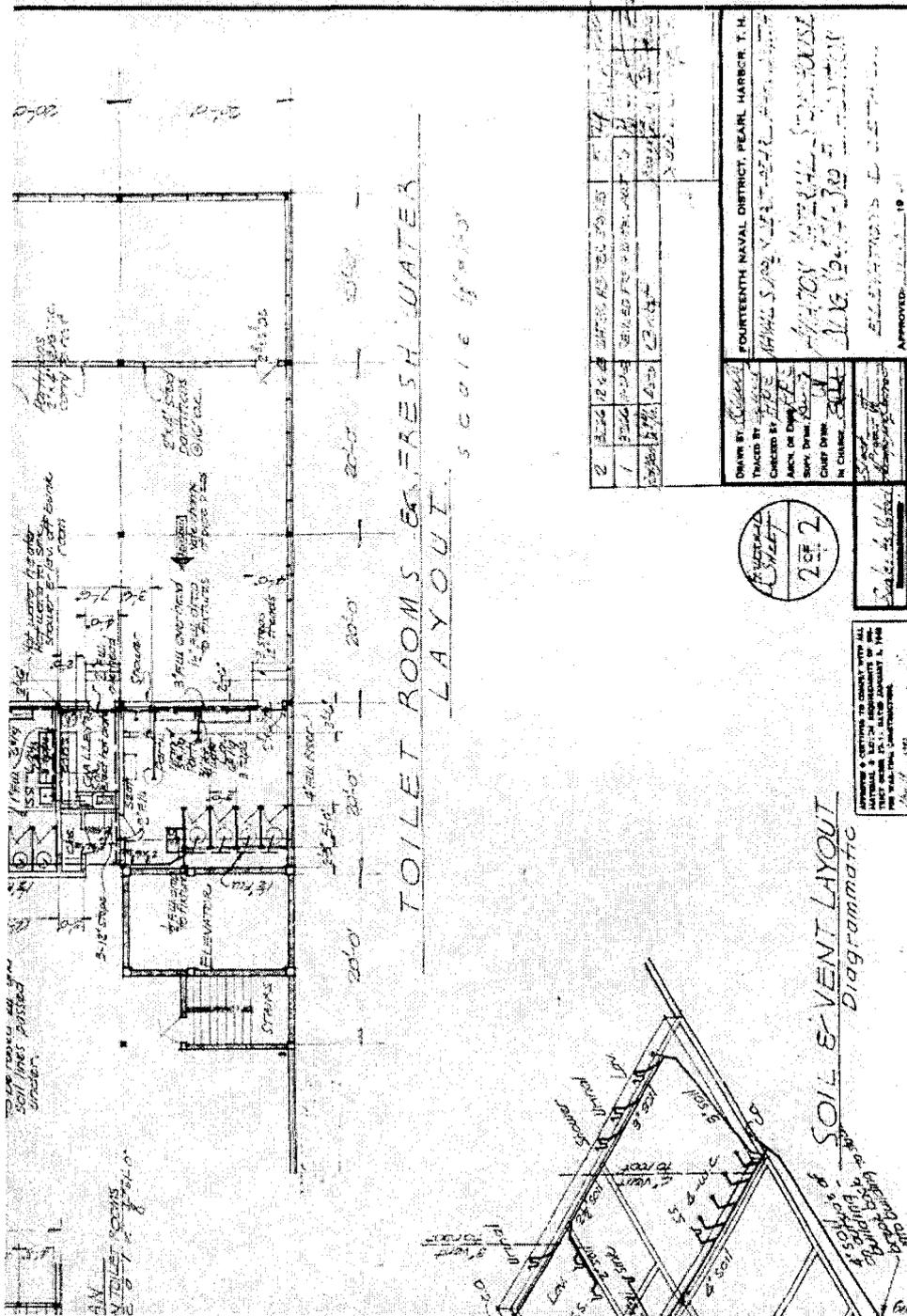
U.S. NAVAL BASE, PEARL HARBOR, AVIATION STOREHOUSE
 (U.S. Naval Base, Pearl Harbor, Fleet and Industrial Supply Center)
 (U.S. Naval Base, Pearl Harbor, General Warehouse Depot)
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Third-Floor Addition, Elevations
 (Upper right portion of Drawing No. M-N6-376, dated November 11, 1943)
 Refer to the complete drawing on page 34.



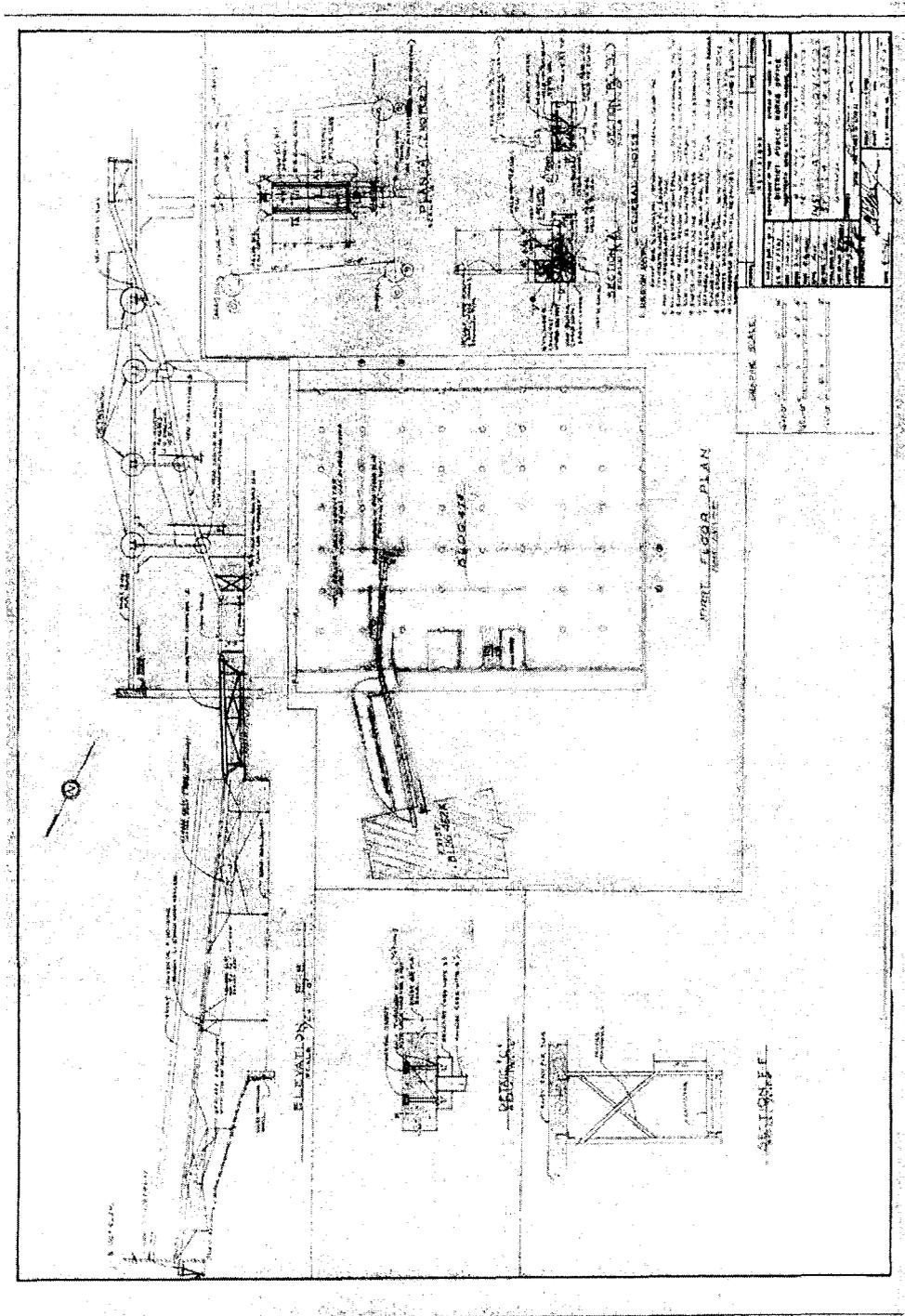
U.S. NAVAL BASE, PEARL HARBOR, AVIATION STOREHOUSE
 (U.S. Naval Base, Pearl Harbor, Fleet and Industrial Supply Center)
 (U.S. Naval Base, Pearl Harbor, General Warehouse Depot)
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Third-Floor Addition, Elevations
 (Lower right portion of Drawing No. M-N6-376, dated November 11, 1943)
 Refer to the complete drawing on page 34.



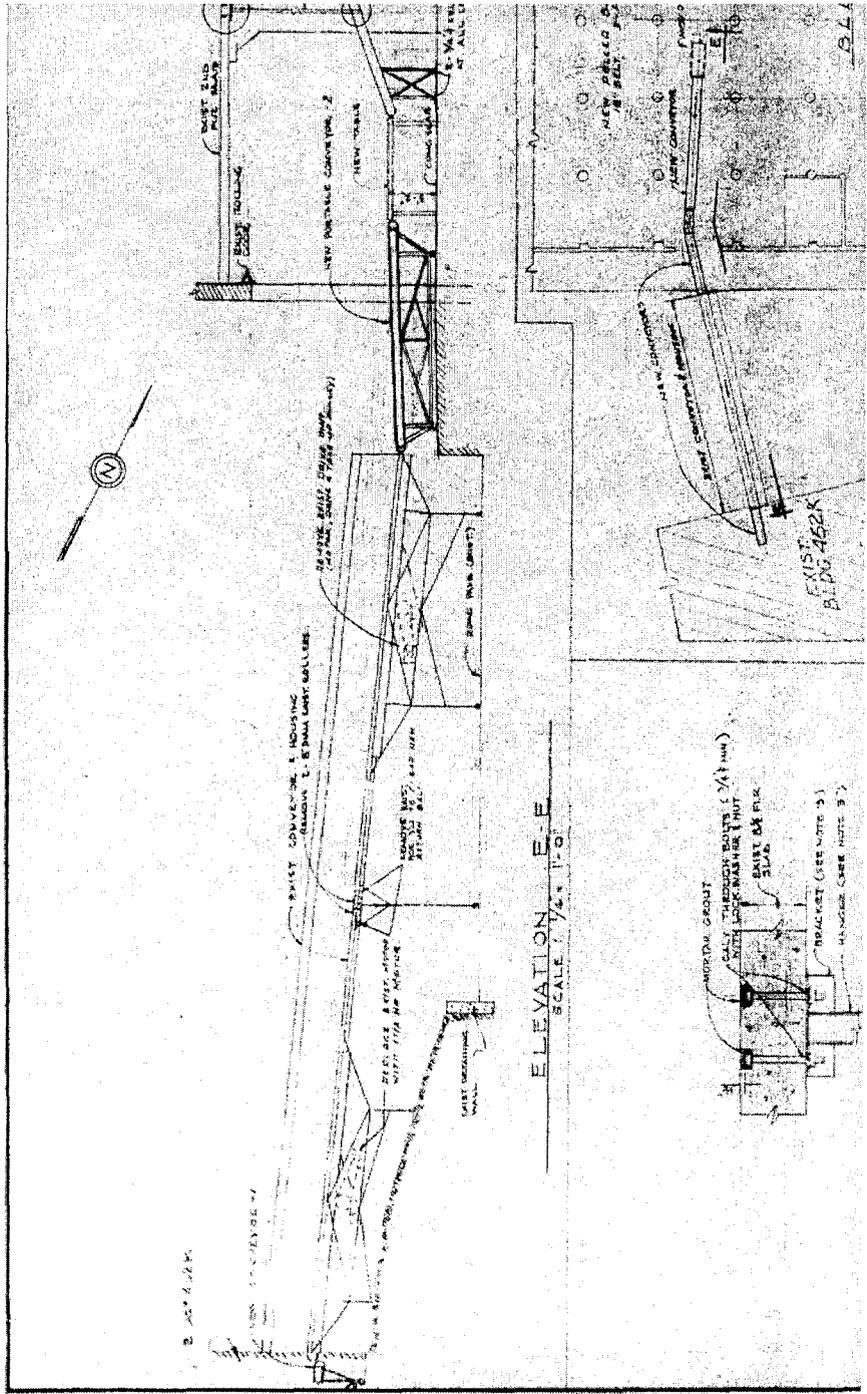
U.S. NAVAL BASE, PEARL HARBOR, AVIATION STOREHOUSE
(U.S. Naval Base, Pearl Harbor, Fleet and Industrial Supply Center)
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HABS No. HI-519 (Page 40)

Installation of Conveyor System in Facilities 474 and 452K
(Drawing No. 923567, dated April 17, 1961) (reduced))
This drawing is sectioned and enlarged on the following four pages.



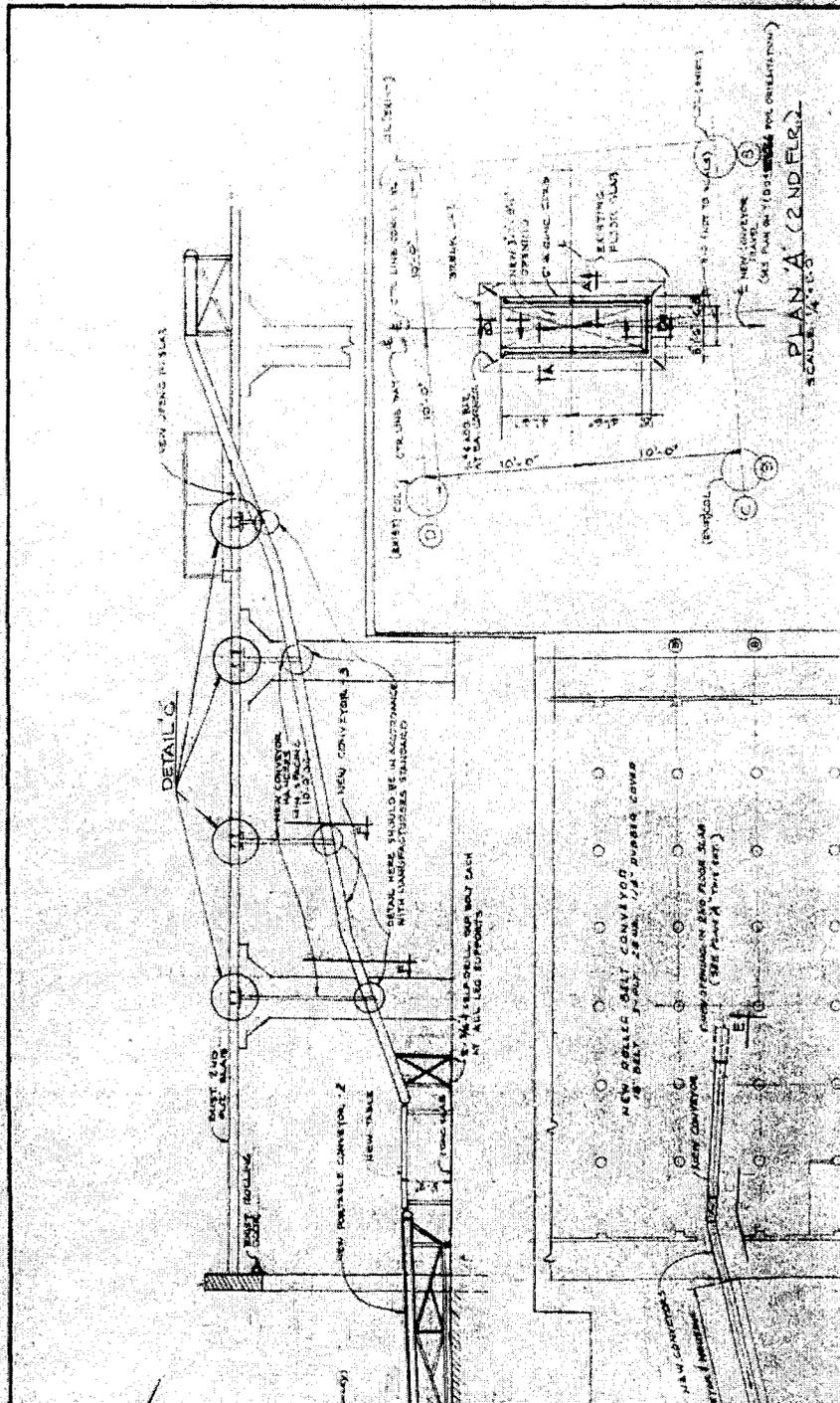
U.S. NAVAL BASE, PEARL HARBOR, AVIATION STOREHOUSE
(U.S. Naval Base, Pearl Harbor, Fleet and Industrial Supply Center)
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HABS No. HI-519 (Page 41)

Installation of Conveyor System in Facilities 474 and 452K
(Upper left portion of Drawing No. 923567, dated April 17, 1961)
Refer to the complete drawing on page 39.



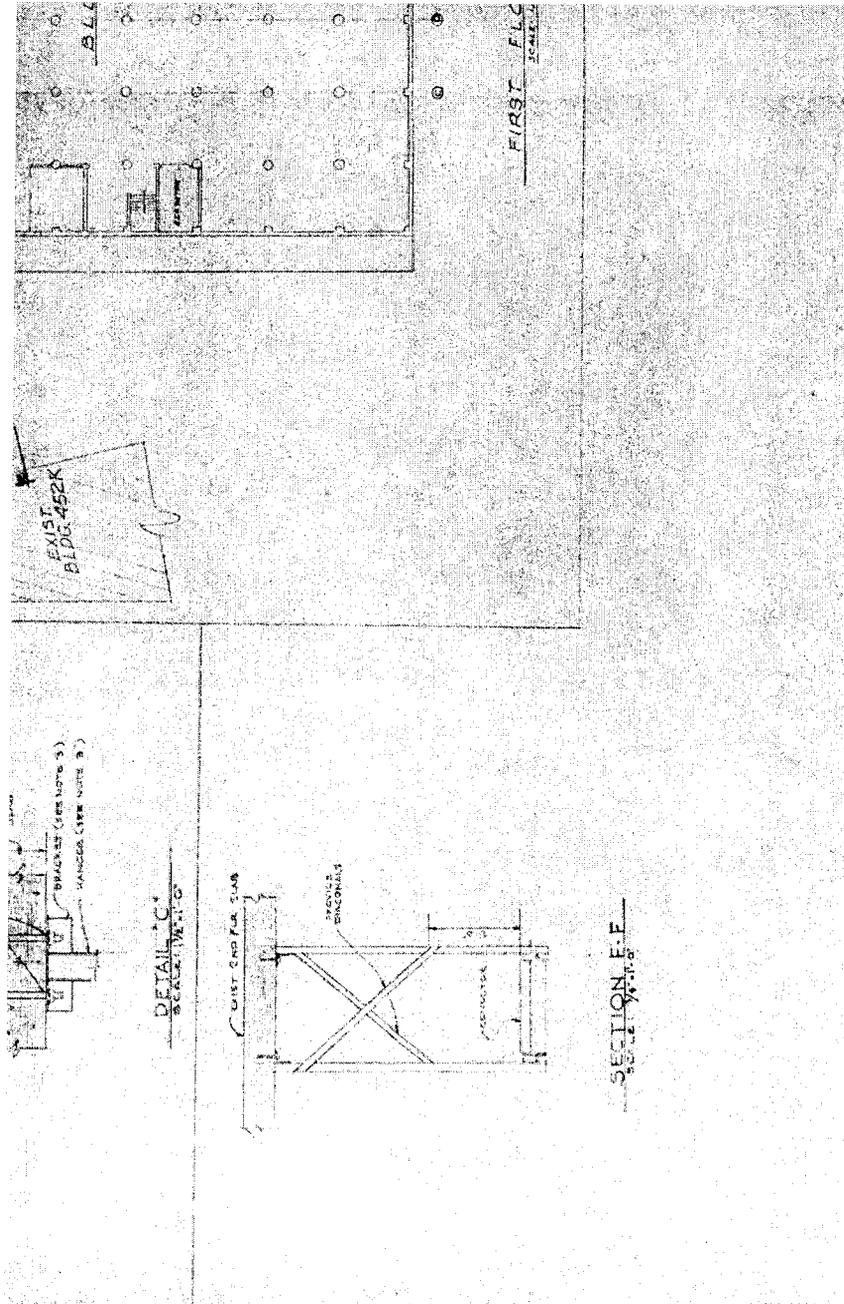
U.S. NAVAL BASE, PEARL HARBOR, AVIATION STOREHOUSE
(U.S. Naval Base, Pearl Harbor, Fleet and Industrial Supply Center)
(U.S. Naval Base, Pearl Harbor, General Warehouse Depot)
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Installation of Conveyor System in Facilities 474 and 452K
(Upper right portion of Drawing No. 923567, dated April 17, 1961)
Refer to the complete drawing on page 39.



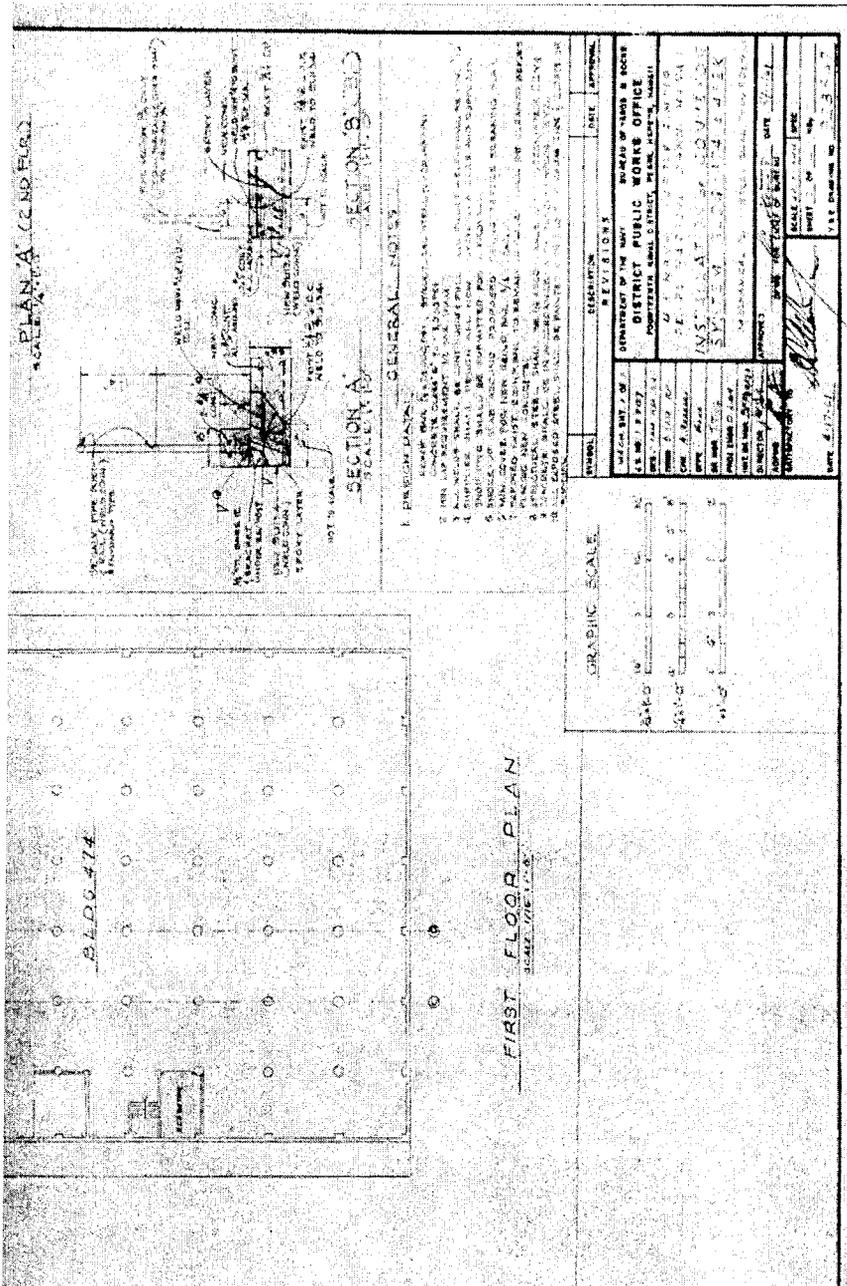
U.S. NAVAL BASE, PEARL HARBOR, AVIATION STOREHOUSE
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(U.S. Naval Base, Pearl Harbor, General Warehouse Depot)
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Installation of Conveyor System in Facilities 474 and 452K
(Lower left portion of Drawing No. 923567, dated April 17, 1961)
Refer to the complete drawing on page 39.



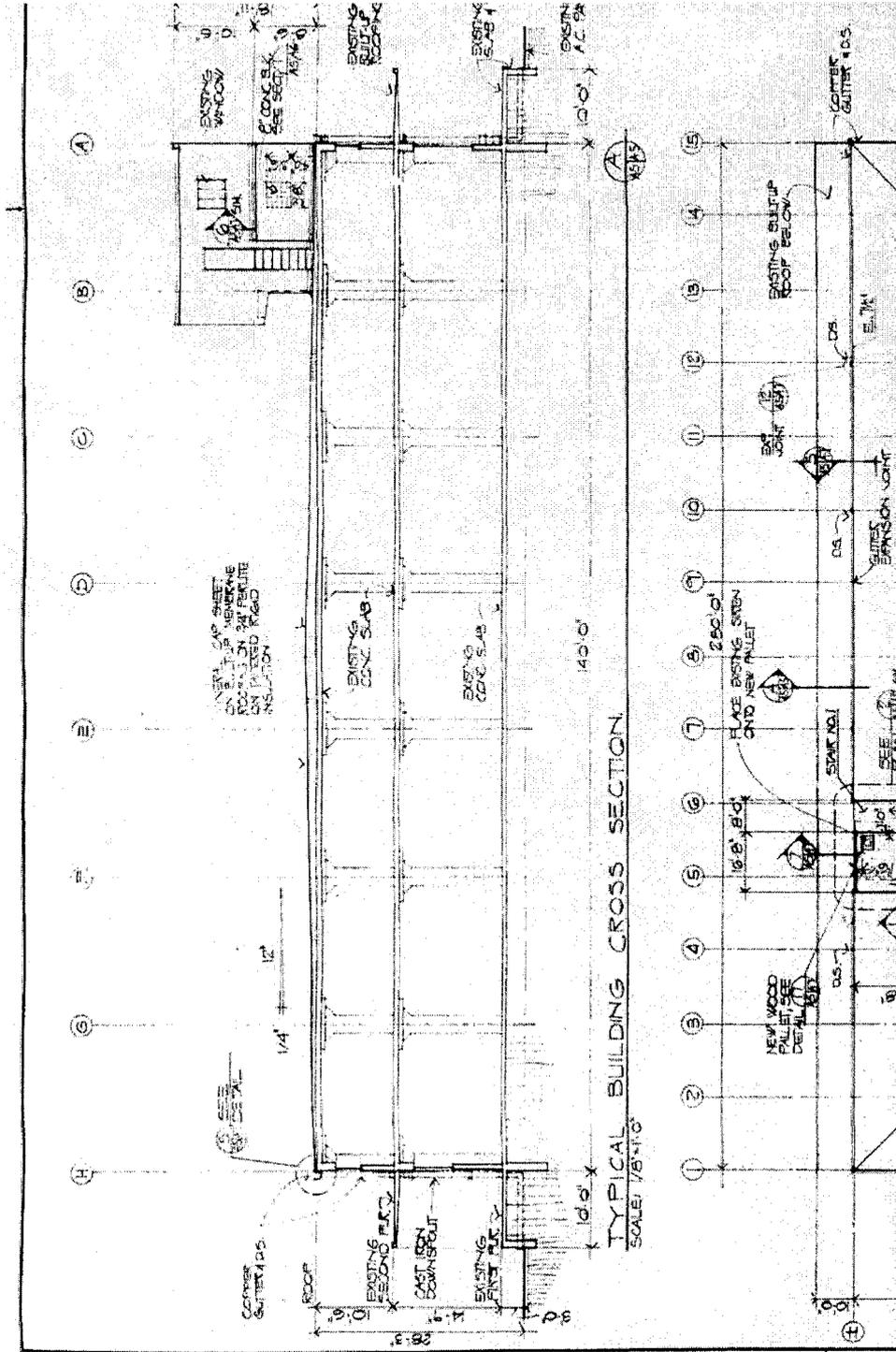
U.S. NAVAL BASE, PEARL HARBOR, AVIATION STOREHOUSE
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Installation of Conveyor System in Facilities 474 and 452K
(Lower right portion of Drawing No. 923567, dated April 17, 1961)
Refer to the complete drawing on page 39.



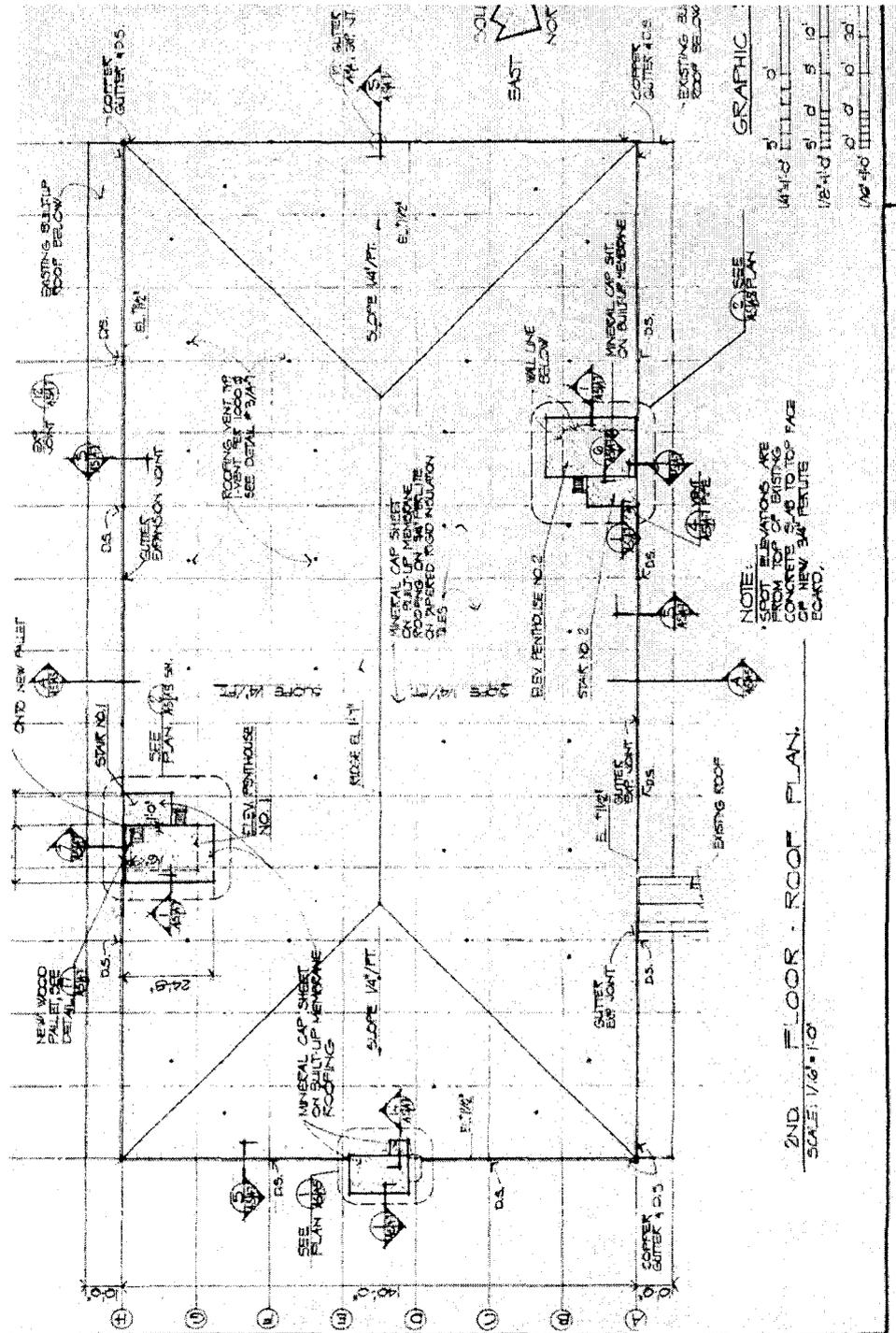
U.S. NAVAL BASE, PEARL HARBOR, AVIATION STOREHOUSE
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 (U.S. Naval Base, Pearl Harbor, General Warehouse Depot)
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Demolition of Third Floor and New Roofing
 (Upper left portion of Drawing No. 7037982, dated May 1, 1982)
 Refer to the complete drawing on page 44.



U.S. NAVAL BASE, PEARL HARBOR, AVIATION STOREHOUSE
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Demolition of Third Floor and New Roofing
 (Lower left portion of Drawing No. 7037982, dated May 1, 1982)
 Refer to the complete drawing on page 44.



U.S. NAVAL BASE, PEARL HARBOR, AVIATION STOREHOUSE
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Demolition of Third Floor and New Roofing
 (Low right portion of Drawing No. 7037982, dated May 1, 1982)
 Refer to the complete drawing on page 44.

