H30-DSC-TMW

MAR 21 1979

Memorandum

To: Regional Director, Midwest Region

From: Associate Manager, Denver Service Center

Reference: Apostle Islands National Lakeshore, Package No. 150, Little Sand Bay, Historic Structure Report, Hokenson Fish Dock Buildings

Subject: Transmittal of Draft Historic Structures Report

Enclosed for your review and approval are five copies of the subject report which has been recommended by this office. I urge your careful review to insure that this report clearly and fully identifies and responds to your needs. A copy is being sent concurrently to the Superintendent of Apostle Islands National Lakeshore, the Midwest Archeological Center, Harpers Ferry Center, and Cultural Resources Division, WASO, for their review and recommendations to be sent to your office for consolidation.

Your early reply is urged so that this project may be completed.

(Sgd.) Robert L. Steenhagen

Robert L. Steenhagen

Enclosures (5)

RECEIVED
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WASHINGTON OFFICE
MAR 29 12 03 PM '79

cc:
WASO-560, Holland, w/enc.
Supt., Apostle Islands National Lakeshore, w/enc.
Chief, Midwest Archeological Center, w/enc.
Manager, Harpers Ferry Center, w/enc.

APOSTLE ISLAND NATIONAL LAKESHORE

LITTLE SAND BAY, WISCONSIN

HISTORIC STRUCTURE REPORT

ARCHITECTURAL DATA SECTION

PACKAGE NO. 150

HOKENSON FISH DOCK BUILDINGS

RECOMMENDED: Robert D Sheller 3/20/79

Act ASSISTANT MANAGER, DENVER SERVICE CENTER
MIDWEST/ROCKY MOUNTAIN TEAM,

CONCURRED: Robert J Steenhagen 3.20.79

ASSOCIATE MANAGER, DENVER SERVICE CENTER

SUPERINTENDENT, APOSTLE ISLANDS NATIONAL LAKESHORE

MANAGER, HARPERS FERRY CENTER

APPROVED:

REGIONAL DIRECTOR, MIDWEST REGION

ARCHITECTURAL DATA SECTION

APOSTLE ISLAND NATIONAL LAKESHORE

LITTLE SAND BAY, WISCONSIN

Prepared by
Michele M. Benda

Hokenson Dock and Fish House	HS-01-138A
Hokenson Ice House	HS-01-138B
Hokenson Twine Shed	HS-01-153A

DENVER SERVICE CENTER
MIDWEST/ROCKY MOUNTAIN TEAM
NATIONAL PARK SERVICE
UNITED STATES DEPARTMENT OF THE INTERIOR
DENVER, COLORADO

November, 1978

ARCHITECTURAL DATA SECTION

The Hokenson Brothers Commercial Fishing Buildings
Little Sand Bay, Wisconsin

Architectural History

A. Historical Significance

The Hokenson Brothers commerical fishing operation is located on a northerly facing site at Little Sand Bay on the northern tip of Bayfield Penninsula on the southwestern shore of Lake Superior. Built between 1927 and 1931 by the brothers themselves and incrementally added to over the years, the complex consists of a two-story Twine Shed, a one-and-one-half-story Ice House, a Fish House (Herring Storage Shed), an L-shaped Dock, and a privy (see Site Plan). A winch for hauling the boat from the lake and a water pump are also located on the edge of the bluff above the shore. All the buildings are of frame construction, covered by tongue and groove siding, with either wood shingle or rolled roofing. The buildings were originally painted white, with white trim, although presently they have weathered to bare wood. The dock is built of wooden piles driven into the lake bed and a crib of logs. Rocks are placed within the crib causing the dock to act as a breakwater. The dock is decked with 2-inch wooden planking of various widths and is unpainted. These buildings are noted on the National Register nomination form for being of exceptional importance to the area because they were part of the

only intact fishing and packing operation within the boundaries of the Apostle Islands National Lakeshore. This type of local enterprise played a significant role in the commercial fishing industry of the region.

B. General Description

1. L-shaped Dock

The dock roughly 150 feet long with a 90 foot leg, (Photographs 1-10) one of the first elements of the complex constructed in 1927, is built of wooden piles driven into the lake bed and a crib of logs. Large rocks were placed within the crib, causing the dock to act as a breakwater, which enabled boats to tie up within the "L" and be protected from wind and waves. The builders left gaps in the rock fill to allow pressure relief for the dock during a storm. Sand deposits did build up within the "L" over the years and had to be dredged from time to time (Photograph Nos. 5-8).

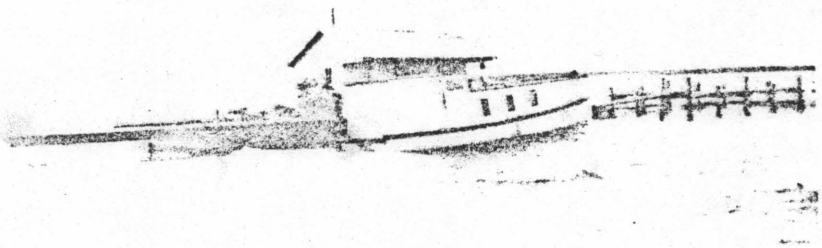
The pilings are of local timber species, most likely hemlock, although some white pine was used. Due to wear and deterioration over time, some piles have been replaced and others doubled with newer reinforcements of maple. Repair work has been performed on the portion of the dock structure beneath the Fish House (Herring Storage Shed). The decking for the dock was originally white pine planking, which did not last very well. This decking was subsequently replaced by hemlock.

The decking up to the turn for the "L" leg has been recently reinstalled.

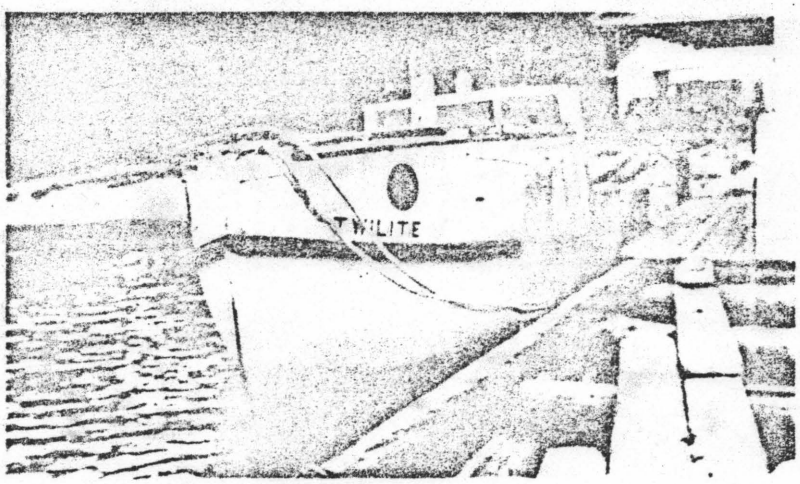
The entire dock as it is seen today grew over the years. The first phase was built in 1927. As illustrated in photographs 1, 2 and 4, the decking at that time extended only to the north end of the first phase of the Fish House. Beyond that point, the structure and cribbing continued north past the end of the Fish House to the leg in the "L" but only various planks were laid over the structure for walking. At that time the dock was not extended as far as it is presently. The expansion of the dock followed that of the Fish House, and therefore, the dock as it is seen today was substantially complete around 1948-49.

New decking and some new and some reinforcement structural piles and cribs have been installed over the past few years, up to the bend in the "L." From that point on though, the decking is in extremely deteriorated condition due to weathering and water damage. The piles and cribs also are severely worn. The fence on the dock, installed after the dock was built, to protect against ice and wind, was knocked down recently during a storm, and is in the process of being replaced.

There are two uprights on the leg end of the dock, which were installed in the 1950's. These uprights were used to carry a motor boat of a Hokenson relative and were not part of the fishing operation. At the landward end of the dock, there is a frame across the walkway. Centered in the frame is a pulley which was used to haul nets up from the boats.



Phase 1 - Fish House #1



1937 - Fish House and Dock #2

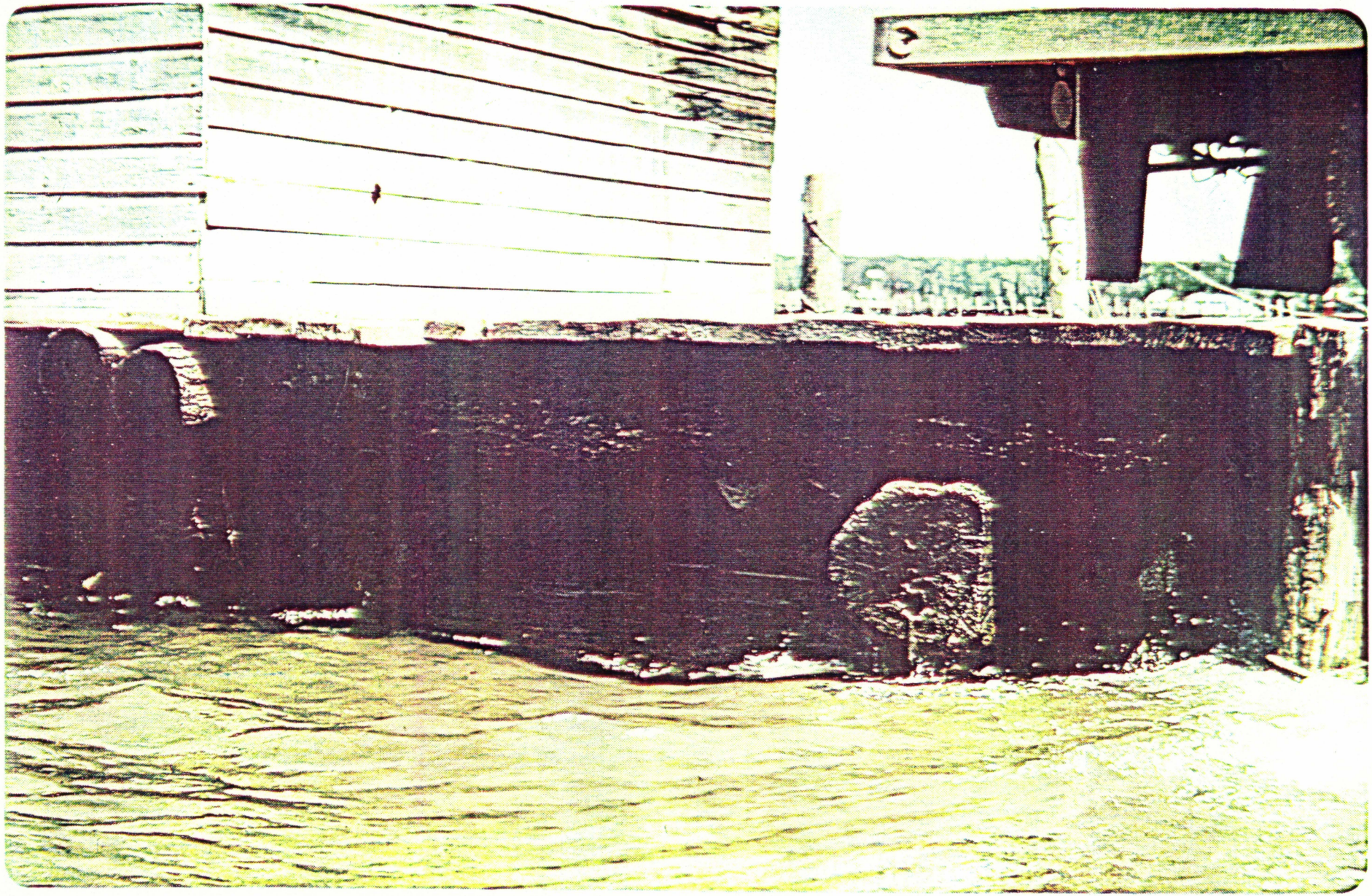
swale in the ground surface behind the top of the wall will be necessary to keep surface runoff from coming in contact with the wall. A retaining wall built with pressure treated or creosoted railroad ties should be adequate to support the anticipated lateral soil pressures.

Final recommendations for the building's foundation are, of course, dependant on the anticipated use and design life of the structure. The longer the design life is to be, the more extensive and expensive the foundation work should be. In any case, treated 6 x 6 sill plates should replace all existing sill plates. The treatment should be a non-leaching type effective against both insect and rot damage. A soils investigation should be conducted in the area surrounding the building to determine soil characteristics that would effect not only foundation design, but design of the recommended retaining wall. Depending on the results of such an investigation and the proposed design life of the building, a more extensive foundation than the present one may be needed. A continuous concrete grade beam beneath the 6 x 6 sill plates of the east side of the building may be beneficial in providing stability to the structure as well as increasing the life of the sill plates and wall framing.

The Engineer, Denver Service Center recommends that all rotted and deteriorated materials be replaced. This would mean essentially all framing members in every wall be replaced and 50 percent of the

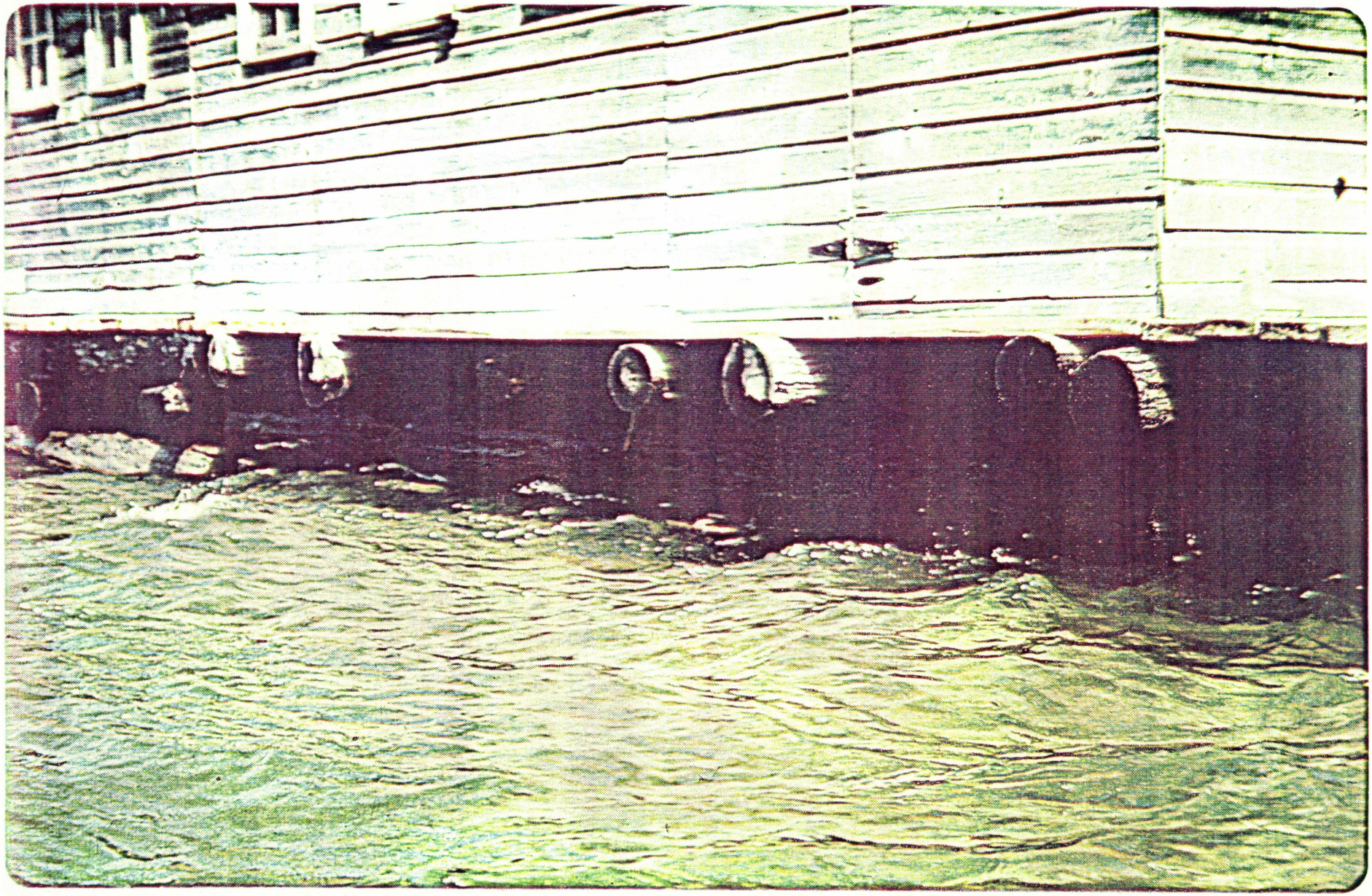
wall's siding. Some means of laterally tying the hip joints of each pair of rafter together will be necessary. Either 2 x 6 cross-ties at the hip joints or collar ties at the midspan of each rafter would be effective. If neither of these systems fits into the structure's proposed function, another means of lateral support should be considered. After the walls are reframed and sided, the roof could be lifted back onto the walls' top plates and the two top plates could be nailed back together. Wood used to rebuild the walls need not be treated, but protection from moisture and insects should be provided.

If the interior of the building is to contain a significant depth of sawdust, a vapor barrier should be provided to ensure positive protection against moisture and insects is afforded the interior walls. Some means of keeping tree roots from penetrating the floor or walls should also be considered in the final analysis, such as soil sterilization.



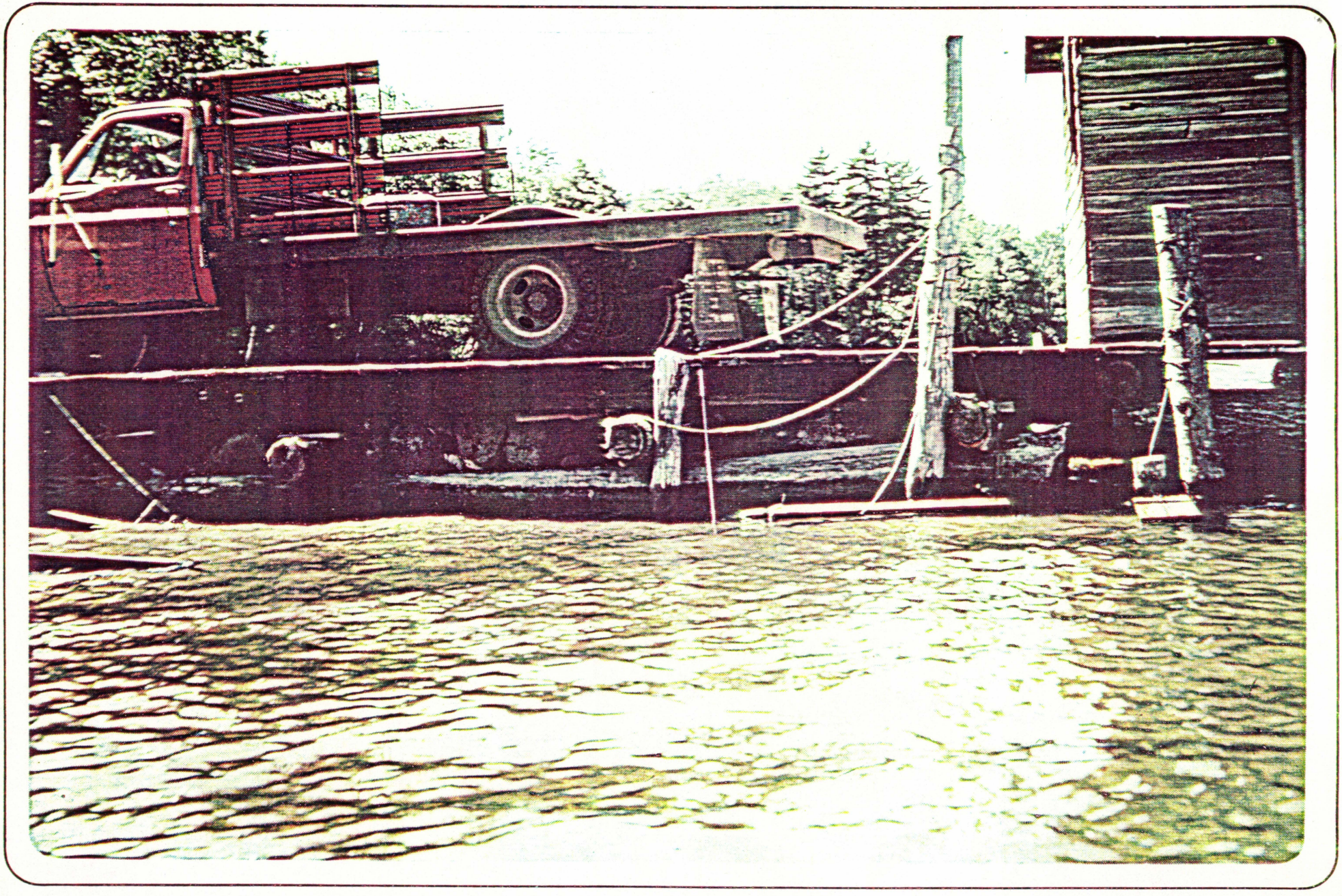
Existing Dock Pilings and Cribbing

#3.



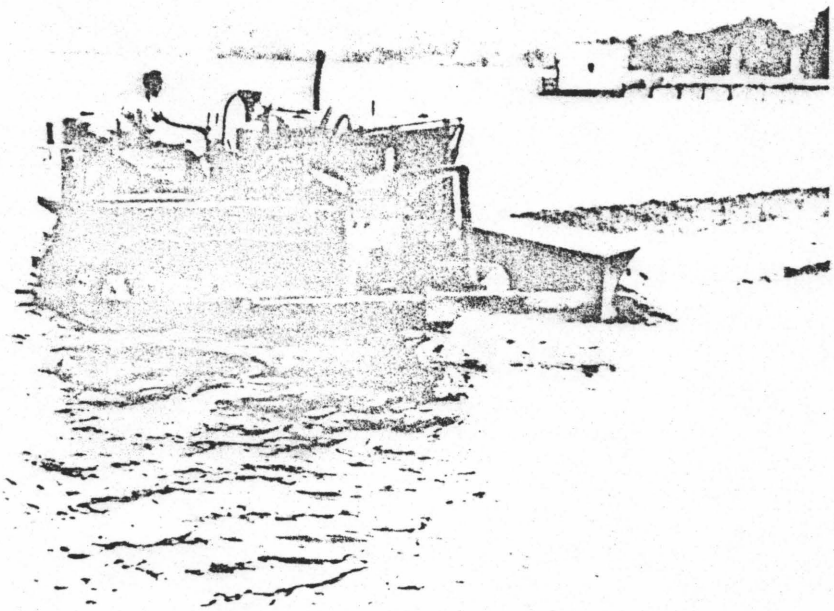
Existing Pilings and Cribbing - West Side

#4

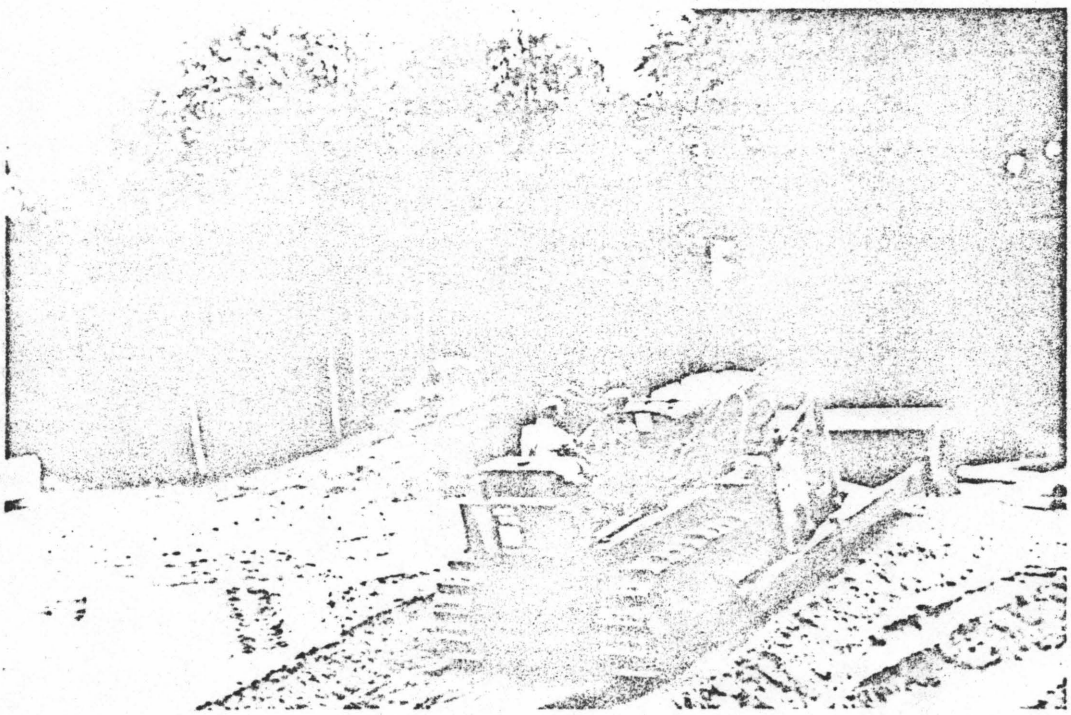


Existing Pilings and Cribbing

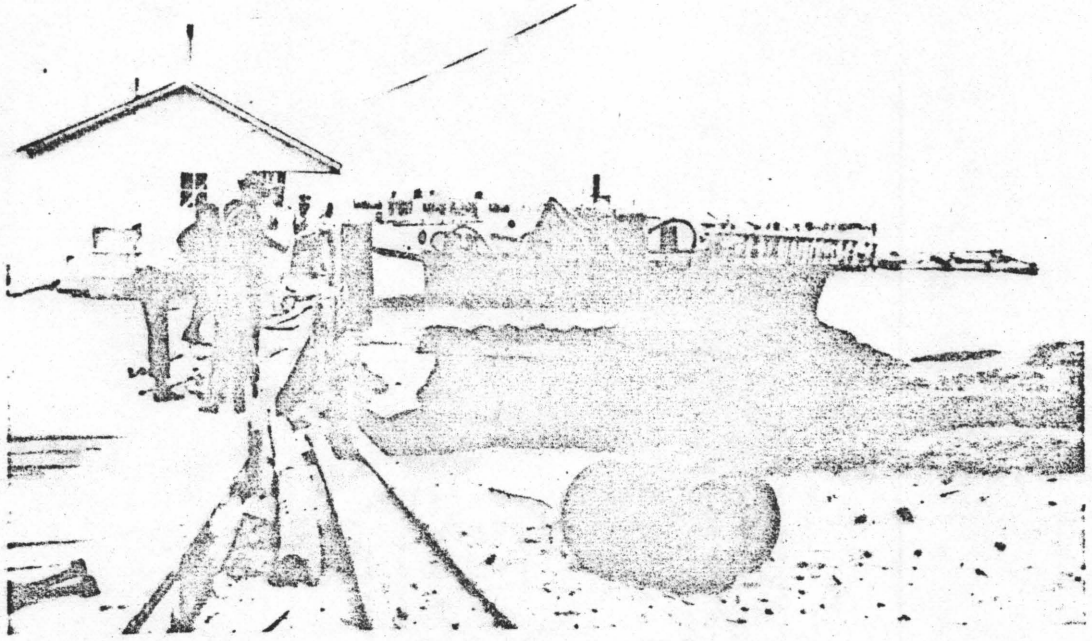
#5



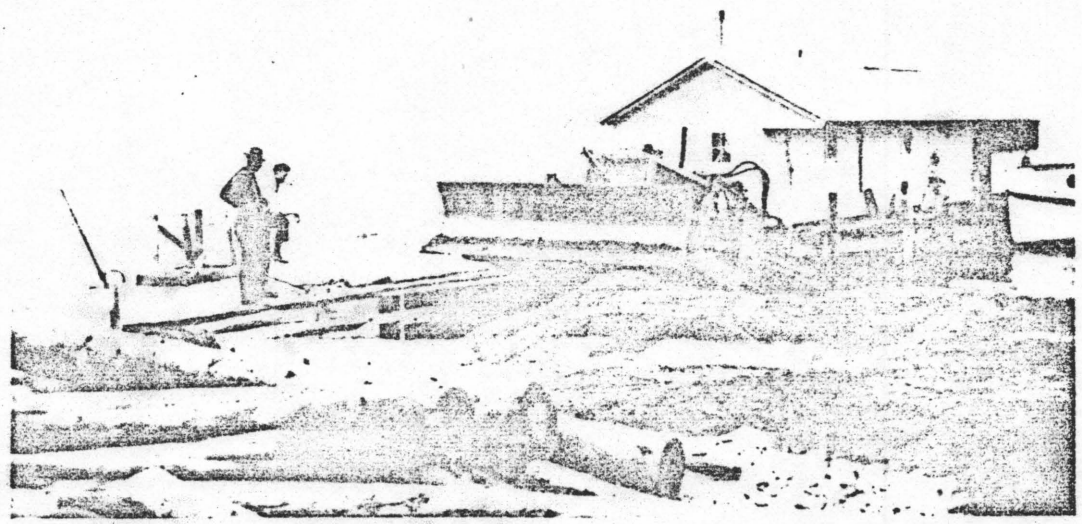
Dredging Mooring Area #6



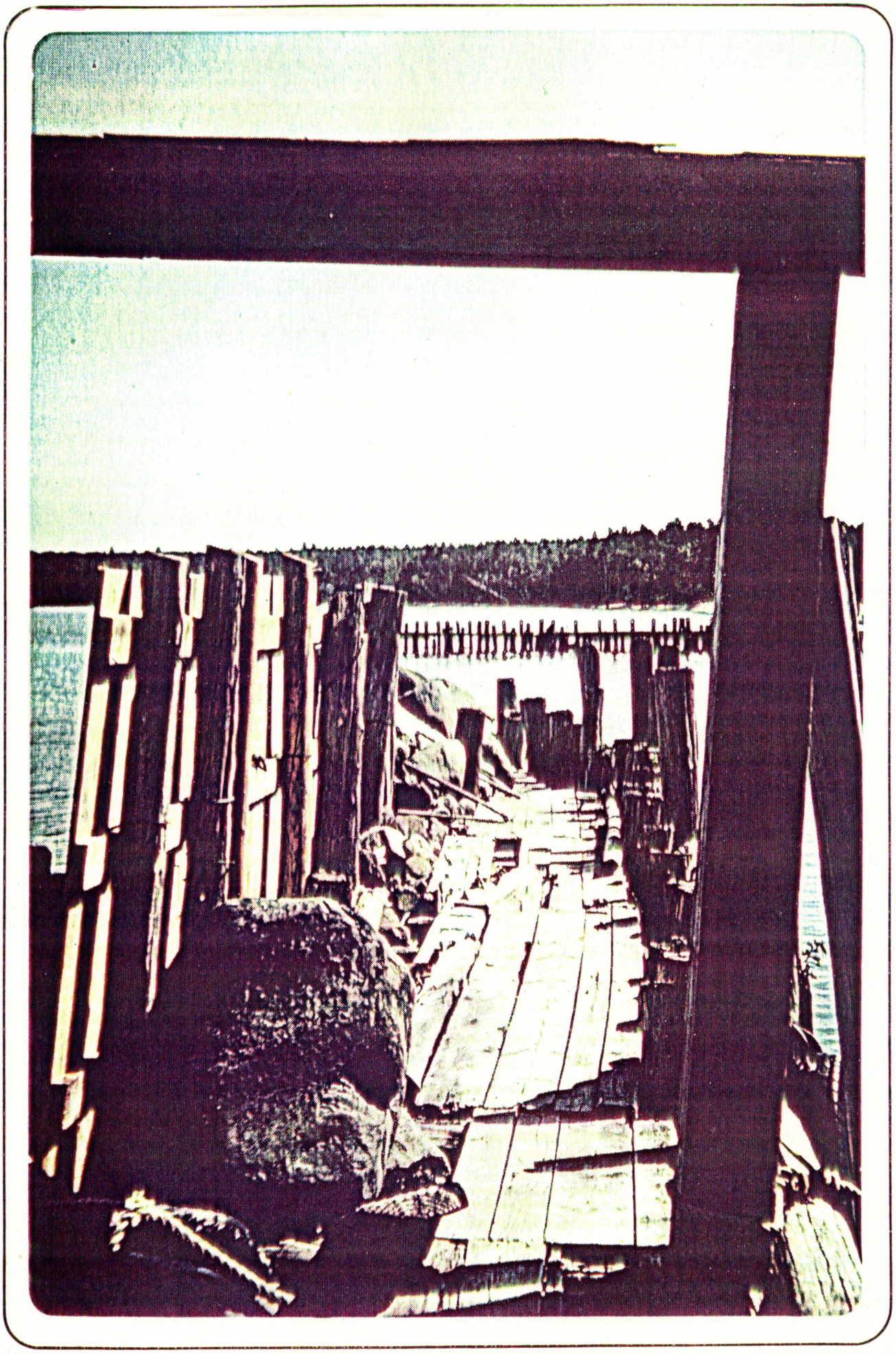
Dredging the Mooring Area #7



Dredging the Mooring Area #8



Dredging the mooring Area #9



#10

Existing Conditions - Leg of Dock

2. Fish House (Herring Storage Shed) (Ref: Photographs 11-18)

This building, constructed around 1930-31 is a one-story frame structure with a single gable roof, which cantilevers the dock on its eastern side by approximately 4 feet. The building rests on the same pile/crib foundation as the dock itself and is framed with 2 by 4 rough sawn members sheathed with tongue and groove siding.

Examination of the building fabric reveals evidence of a three-phase sequence of construction. This was also confirmed in interviews with the Hokensons' and in photographs (see photographs 11, 12, 13, and 15). Photographs 11 and 12 illustrate the building in 1937 with only Phase One complete. Photograph 13, taken in 1941, reveals Phase Two complete, and photographs 15 thru 18, show the complete building as seen today. No documentation or recollection of the precise dates of Phases Two and Three was found or determined.

Today, the entire structure is 58 feet, 3 inches long by 11 feet, 8 inches wide. The southernmost room, (Phase One, see plan), was the first element built in the early 1930's. A vertical seam in the siding, at approximately 20 feet, 3 inches from the south wall, demarks the first phase of construction. This space originally housed all the activities for the cleaning, salting, and dressing of the herring. A wood burning stove for heat was located along the south wall, and the old flue opening, since roofed over, can be seen in the ridge. No

documentation of the date for the second phase of the work was discovered, but by 1941, this second room had already been added. The operations within the first room were then expanded into both areas. The third phase, the storage area, was added sometime between 1941 and 1949. With the expansion of the space, the heating stove was moved to the middle of the west wall in the middle room, as evidenced by the roof vent. In addition, along this same wall was a simple bench and a first aid case hung on the wall. The stove and bench are no longer in the space, but the first aid case is in the area, though not hung in place. There was a pump along the north wall of this room, which is no longer in place but the holes in the siding for the exhaust pipes and hoses evidence its former location. The water tanks were located along the east wall, and these are no longer in the building.

In the southern room, there was a cleaning table along the west wall, the only part of which left, is the wood plank back splash. The final cleaning tanks, salt table and stacking area were along the east wall. The south wall also has an exhaust pipe hole in it, evidencing where the pump was originally. In the southern room, there was a floor hatch used for draining water when the area was cleaned and hosed down. This hatch was not replaced when the new decking was installed.

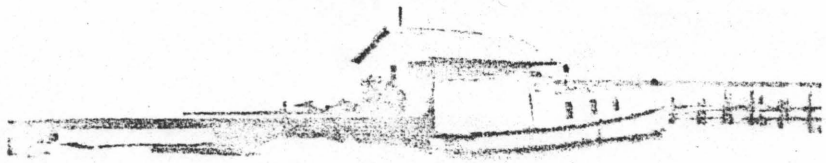
The building is framed in rough sawn hemlock 2 by 4's, although some white pine was used also, spaced 2'0" on centers. All the lumber was milled at the Hokenson's mill a few miles inland. There is no interior wall finish, thus leaving all framing exposed. The siding, bought through a Bayfield lumber yard is Weyerhauser 3/4-inch thick west coast hemlock, tongue and groove "select-tite." The roof is also framed in 2 by 4 rough sawn hemlock members and is a single gable structure which cantilevers the dock approximately 4 feet, providing a sheltered walkway along the east side of the building.

The roof is sheathed in 1-inch boards of various widths, and although there is a new cedar shingle roof, there are water stains on the sheathing from previous roof deterioration. There are 2 by 4 collar ties at every alternate rafter except for at the building ends of each room where the collar beams are notched 2 by 6 members (see section AA - Fish House).

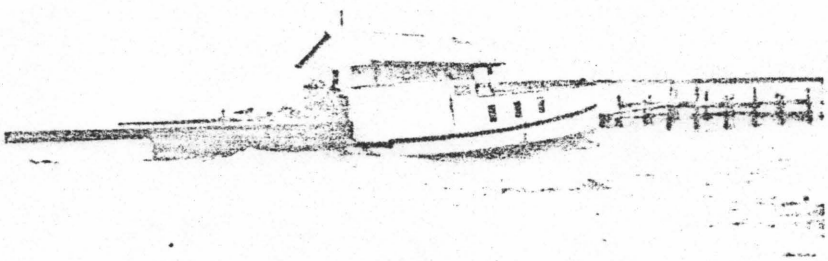
The windows are stock items, inoperable 4 light sash units 20" wide by 30" high, bought through a Bayfield lumber yard. The windows are stopped into the buck since there is no window frame. The doors (see detail A sheet 3) are framed with 1 by 6 boards sheathed with drop siding, the same as the building itself.

The north and south elevations are very similar except the north elevation has two window openings instead of the one opening on the south fascade. The openings on the north fascade are both boarded over. The east elevation is dominated by the cantilevered roof over the walkway. There are four window and two door openings. At the north end of the east elevation, there is a wide opening with no door that leads into the storage area.

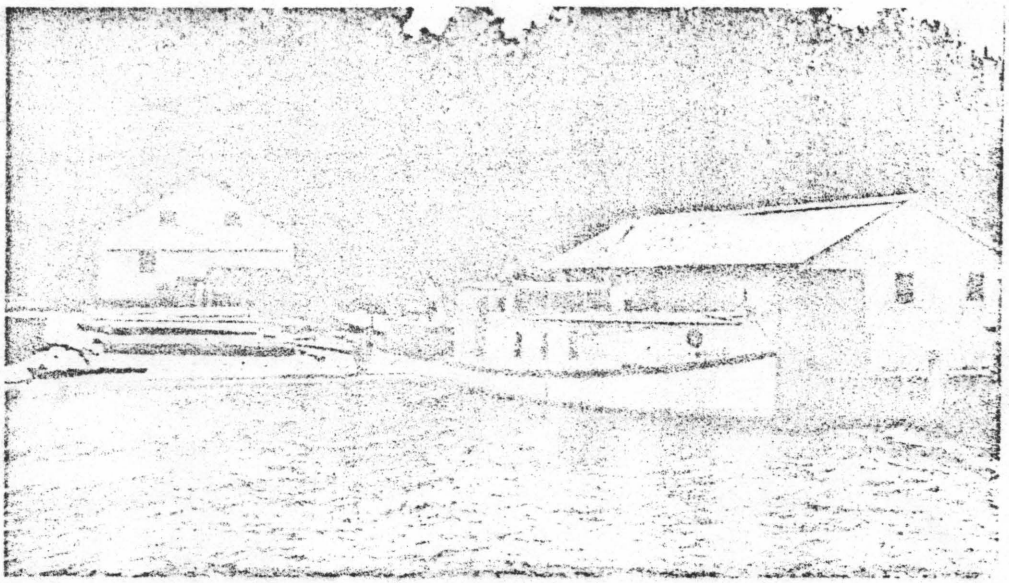
The fish house is in very good condition. The siding is also in good condition with very little damage. The structure was historically painted although presently the paint has weathered off and the structure has been treated by the Park with a water resistive preservative. Due to the work on the dock which raised its level, the doors can not open all the way. The windows are in fair condition although some window units are no longer in place. The muntins & rails have dried out severely on some windows and many have cracked. Some of the glass panes have also cracked.



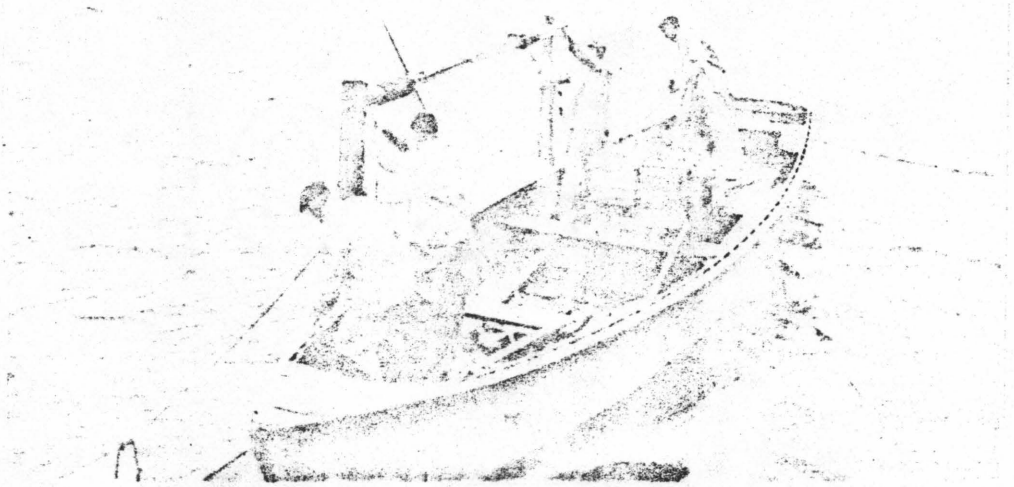
Phase 1 - Fish House 1937 #11



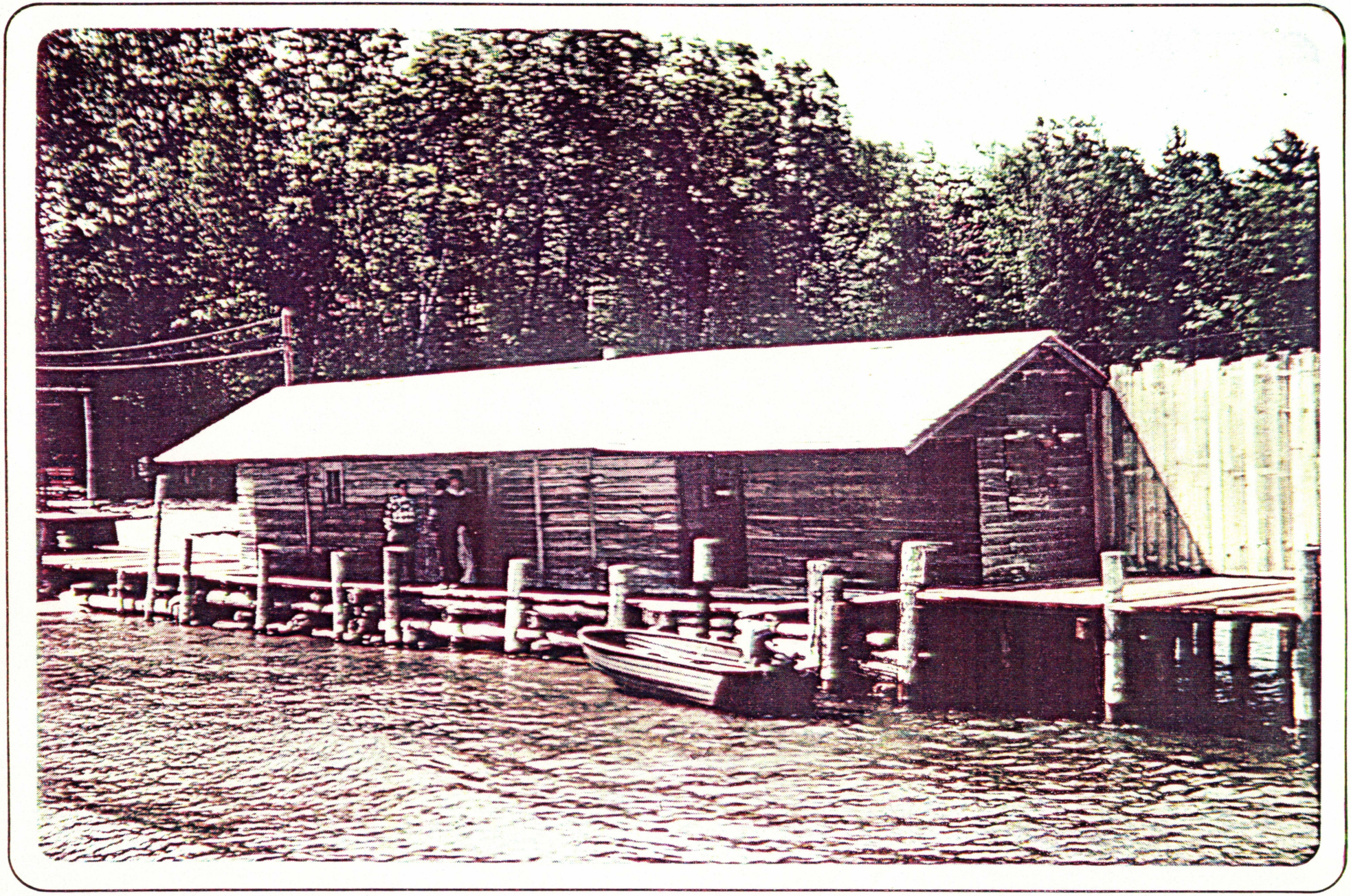
Phase 1 - Fish House 1937 #12



Phase II - Fish House 1941 #13



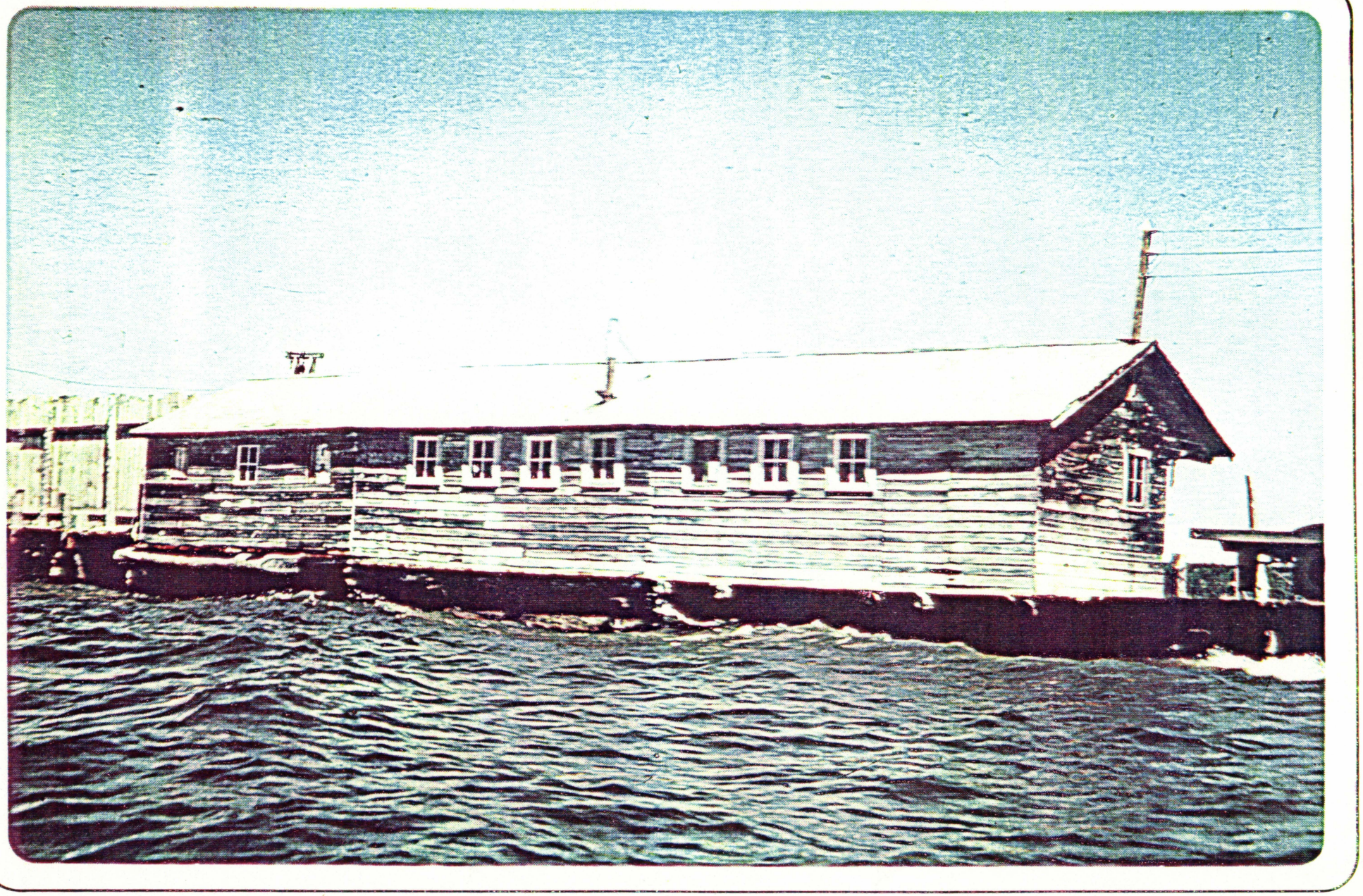
Small Fishing Craft 1941 #14



Existing Fish House - Phase III Complete 1978

#15

Existing Fish House- 1978 - East Fascade #16



Existing Fish House - 1978 - West Fascade

#17

Fish House Roof cantilever detail

#18

3. Ice House (Ref: Photographs 19-29)

Together with the dock, the ice house was the earliest structure in the complex to be built. It is a simple 1-1/2-story frame structure 26'3" by 24'2" with a single gable roof. The framing is rough sawn hemlock 2 by 6's set 2'0" on centers sheathed with the same tongue & groove hemlock siding. The building is approximately divided in half, the eastern portion being one large ice storage area, while the western portion was divided between two smaller areas, the work space and an additional small storage area (see plan - Sht. 6). The foundation reflects the different use patterns within the structure. There is a 6-inch concrete slab only under the west portion of the ice house upon which rests a 6 by 6 plate which runs around the perimeter of the slab. For the eastern half of the building, the 6 by 6 plate was set directly on the ground without a foundation, and these conditions have caused severe displacement. In addition, the south end of the ice house was set into the bluff and, due to contact with earth and ground moisture, has rotted all along the exterior walls where this contact occurred, primarily the south and east sides. Combined with the moisture derived from the ice in the interior held in by the sawdust, the south and east wall members and siding, from the upper plate down to the floor plate, are severely rotted. In addition, the bluff itself has been shifting downhill, increasing the earth pressure against the building. This

added pressure has caused the structure to be racked to the north and east. For this reason, many new braces have been added to the interior in order to attempt to temporarily stabilize the structure (see photographs 25 and 26).

The roof framing consists of 2 by 6 rough sawn rafters, set 2'0" on centers, with two collar beams tieing across at rafters in mid-building. The roof is sheathed with 1-inch boards of various widths and covered with rolled asphalt roofing felts, dark grey, and nailed in place.

The interior is an open space of approximately three areas on the ground level and a loft over the western half of the building. The main ice storage area comprised the eastern half of the structure (Area 1). There is no slab in this area since the ground maintained better insulating values. It is presently filled with about 2 feet of saw dust. The ice, which was hauled from the lake was cut into blocks approximately 1'6" by 1'6" by 4'0" up to 2'0" by 2'0" by 4'0". The ice was at first hand cut until the Hokenson's obtained a power saw. The loading of the blocks of ice into the storage area began through the ground level north window. For this purpose the window has special framing characteristics which allows for the removal of an inoperable window unit. The main framing is 3 inches wide on each side, with a 1 by 3 closing the gap between the window and the framing. They would load ice through

this window until it reached the level of the sill at which time they would begin to load the ice through the lower hatch in the south wall (Photo. 24). When the ice reached over the level of this south hatch, it was loaded by sliding it down the shoot on the south side of the structure and through the door on the loft.

There are three sizes of windows used in the building, all stock items bought through a Bayfield lumber yard. The large window on the ground level north side used for loading ice is a 9 light inoperable sash unit, 30" wide by 40" high, while up above, there are two 6 light inoperable windows 30" wide by 30" high. The other windows, on the east, west and south sides are the same 4 light inoperable sash units 20" wide by 30" high, as found in the herring storage shed. All glass is 9" by 12".

The west half of the ice house was divided into two spaces. The southern space, (Area III), was used for additional ice storage, and as the ice was used, the space held the excess saw dust. The remaining space on the west side (Area II) housed the packing operation. A large double-width door on the north end of this space opened the area for loading and shipping. The door slid along a metal rail mounted on the exterior of the building. Presently the door has derailed and cannot be opened. The largest piece of equipment was the ice crusher which was exhausted out a hole in the west wall until

an electric one was installed. The exhaust hole is still visible. The loft was used to store nets, and the hatch in the loft over the sliding door allowed for the hoisting of nets and lowering of ice. The other doors in the ice house are framed similarly to those in the other structures: 1 by 6 vertical frames, a 1 by 6 or 1 by 4 diagonal with drop siding. The exterior is sided with the same Weyerhauser hemlock tongue and groove siding as the other buildings. This building was also painted white historically although the paint has now weathered off. All trim around doors and windows is 1 by 4 inch boards, which were also painted white, but now have weathered to bare wood. There is a concrete slab in front of the large sliding door which is 30 inches wide and runs to a depth of approximately 3'0". This was poured to buttress the building against wave action when the water level was higher. (See photograph 27).

Before 1939 when the Hokenson's house was built on the bluff, the northeast corner of the ice house was used for sleeping and eating if weather necessitated the men staying the night to watch the structures and equipment. This use pattern is evidenced by the old roof vent visible in the ceiling above this area, where their heat and cook stove was vented.

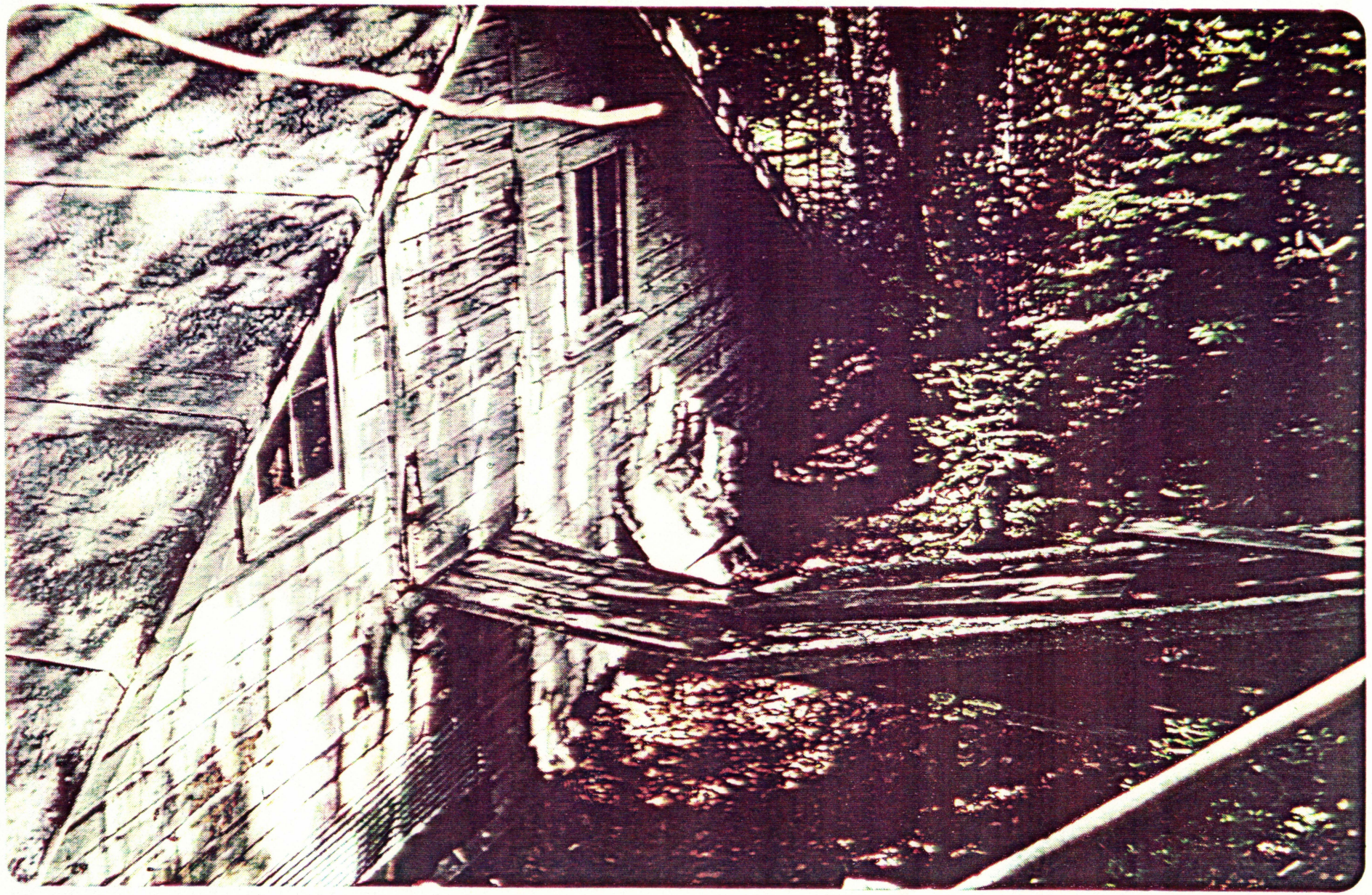
Structurally, the building is in very poor condition, due to wood rot and earth pressure exerted against the building from the the shifting hill. Many of the framing members and much of the lower siding on the east and south walls is severly rotted.

Ice House - North and West Fascades

#19

Ice House - North and East Fascades

#20

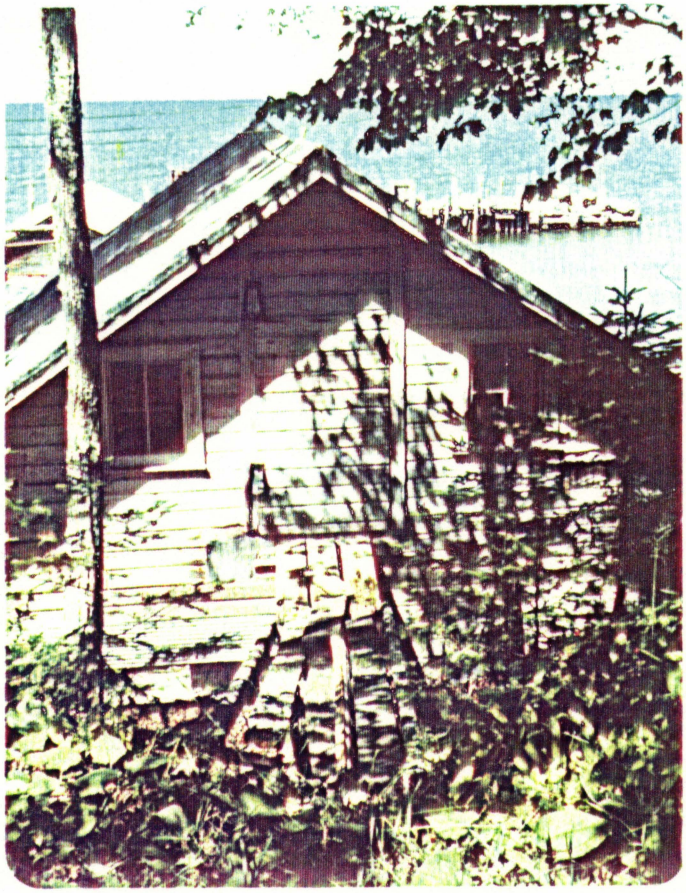


Ice House - South Fascade

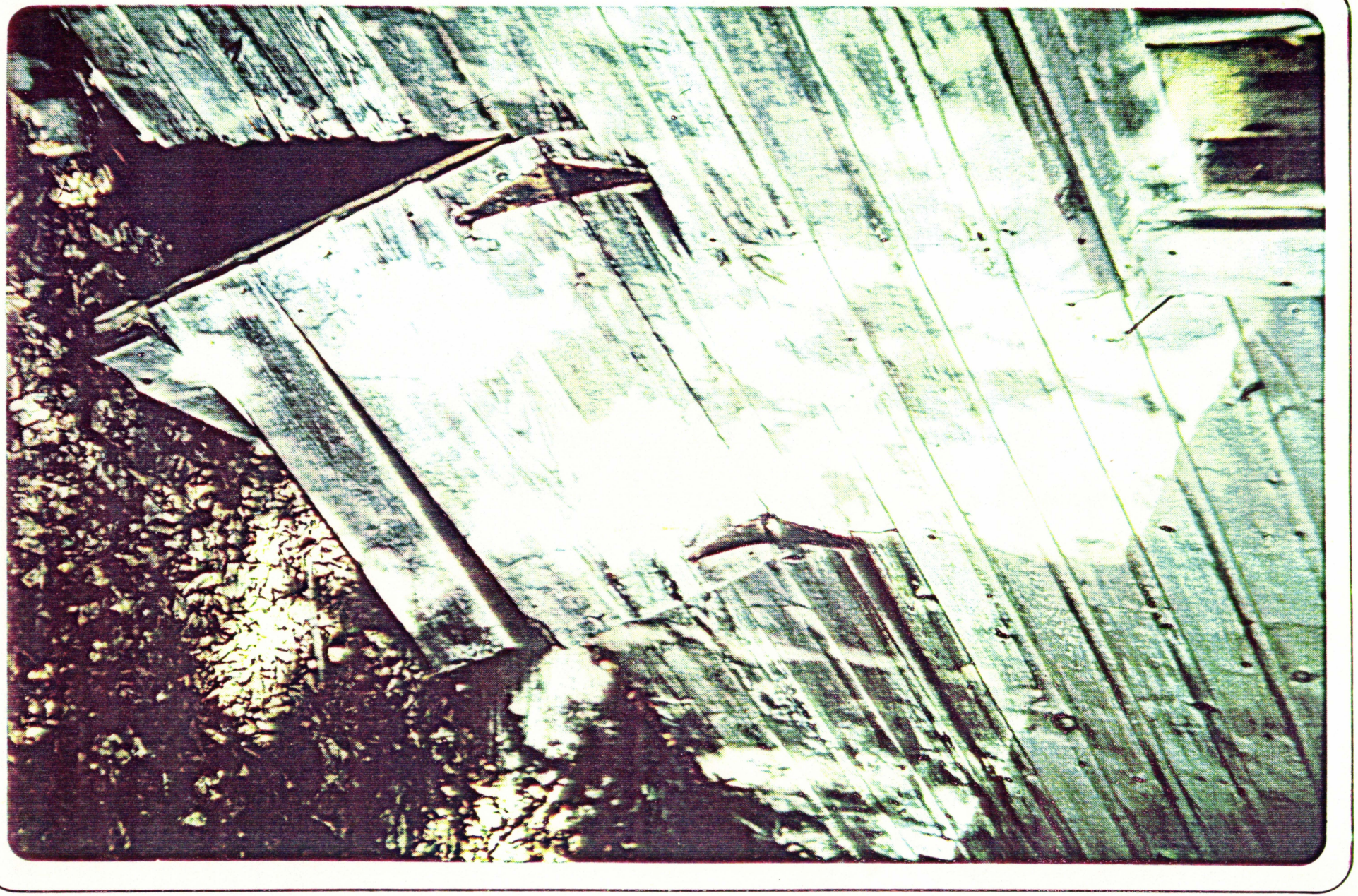
#21

#22

Ice House - South Fascade and Ice Shoot



Ice House - South Fascade and Ice Shoot #23



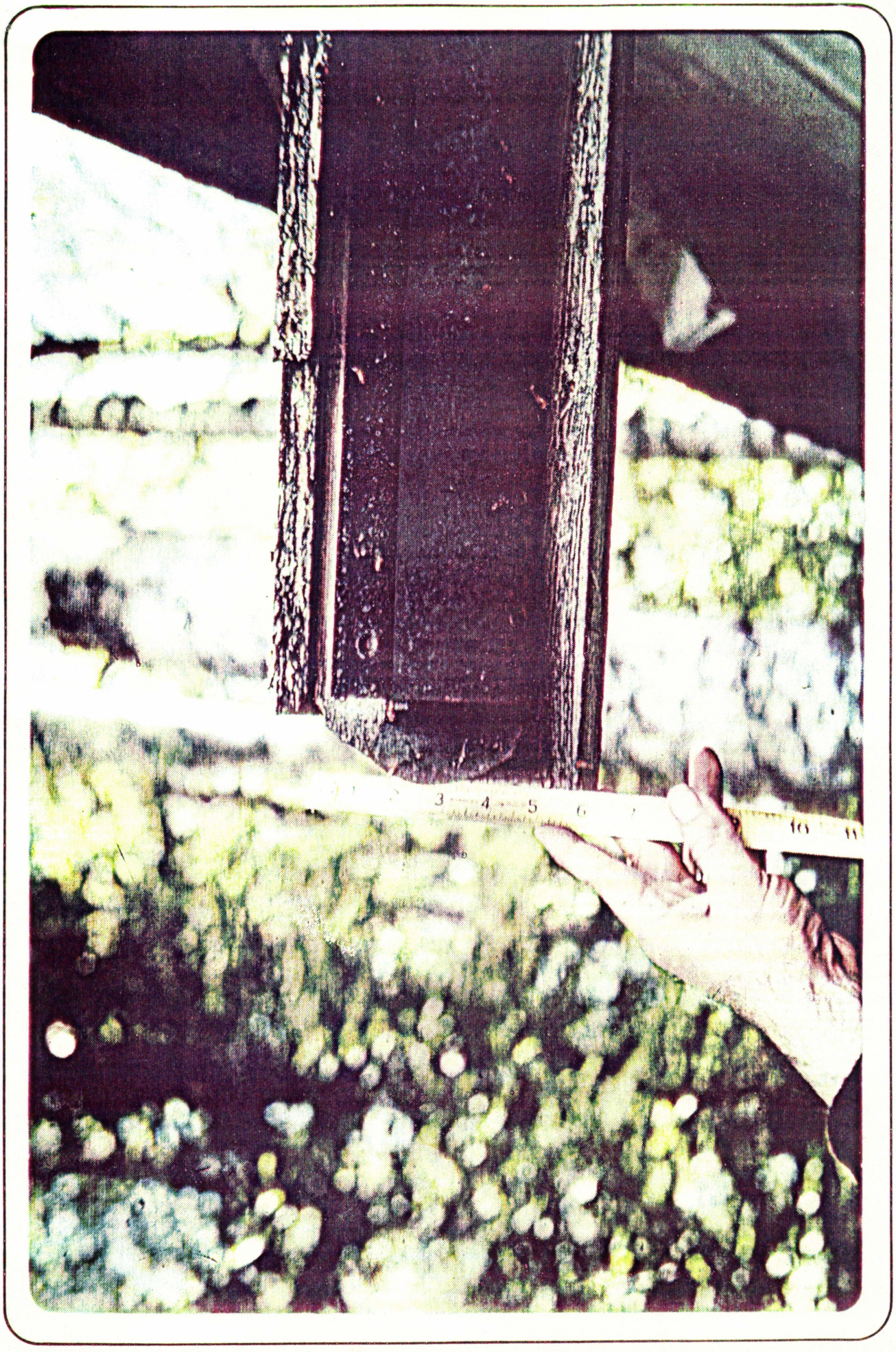
Ice House - Ice Hatch South Wall

#24

#25 Existing Temporary Bracing

#26

Concrete Walkway/Buttress #27



Sliding Door Rail - Ice House (Typical Both Doors) #28

4 Light window and trim detail #29

(Typical of all windows)

From the southwestern corner of this structure rises a stairway which climbs the bluff to the Twine Shed. This stairway (see photo 30) is new, installed August 1978, which replaced an older interior stairway which had rotted (see photo 31). The older stairway had been put in place about 15 years before, and had come from a church in Bayfield. Running along side this stairway are two narrow rails which were used to slide the packing boxes down the hill to the ice house from the bluff area where they were stored. These boxes, large wooden crates, were stored on the hill in order to minimize water damage to them in case the lake rose and to keep them sand-free. The boxes were sent down as needed. The rails are presently rusting and in poor condition. (See photographs 30 - 32).

4. Twine Shed (Ref: Photographs 33-39)

About 40 feet from the top of the stairway is a two-story, barn-like structure called the Twine Shed, approximately 50'-2" by 20'-2". This structure is framed with rough-sawn hemlock 2 by 4's resting on a concrete foundation wall about 15 to 16 inches high. The framing studs are spaced 24" on centers. From the upper plate down to the poured concrete foundation on the north wall only, the framing is 2 by 6 studs. This was done in order to stiffen the wall to withstand the increased stress caused by the movement of the sliding door. The sliding door is constructed like the one on the ice house; the double width door is hung on an exterior track, which is cantilevered past the side of the building to allow complete clearance of the opening. The floor is poured concrete which, due to water

infiltration beneath the foundation wall caused by inadequate drainage around the building, has broken up due to freeze/thaw action. The ground floor space was used for net repair, a blacksmith shop, float making, tool repair, boat repair and the like. A wood-burning box heater along the south wall was the only source of heat. The stove and brick chimney remain presently. The floor joists for the upper level are 2 by 8's, rough-sawn hemlock, spaced 24 inches on center running east-west. On the east and west walls, beneath the bottom of the joists, is a 1 by 6 ledger. The upper level is floored with 1 by 8's. An opening is framed above the sliding doorway in the 2nd floor. This opening allowed for the hoisting of nets to the upper level for winter storage and repair work. Gill nets were repaired downstairs as pond nets were repaired on the upper level. The gambrel roof is framed with 2 by 4's with 2 by 6's used approximately every fifth rafter. 1 by 4 bracing is used on both sides of the rafters at the gambrel bend.

The interior walls are unfinished, leaving all the framing exposed. The framing members are in excellent condition, with no rotting or splitting visible.

The exterior is sided with the same Weyerhauser hemlock tongue and groove siding. As with the other buildings, it was painted white, but again, almost all paint has weathered off and the building has been treated with a water resistive preservative. The window

and door trim is 1 by 4 boards. Other than some damaged siding along the east wall next to the door, the building is in good shape. The concrete flooring is broken up and destroyed.

There is one type of window, again the same type stock items as in the other buildings: a 6 light inoperable sash window, 20" wide by 40" high. The glass panes are 9" x 12".

The Twine Shed is in excellent condition. Some stabilization work had been completed, such as putting in a new foundation wall along the north and west fascades. The rest of the foundation has been patched.

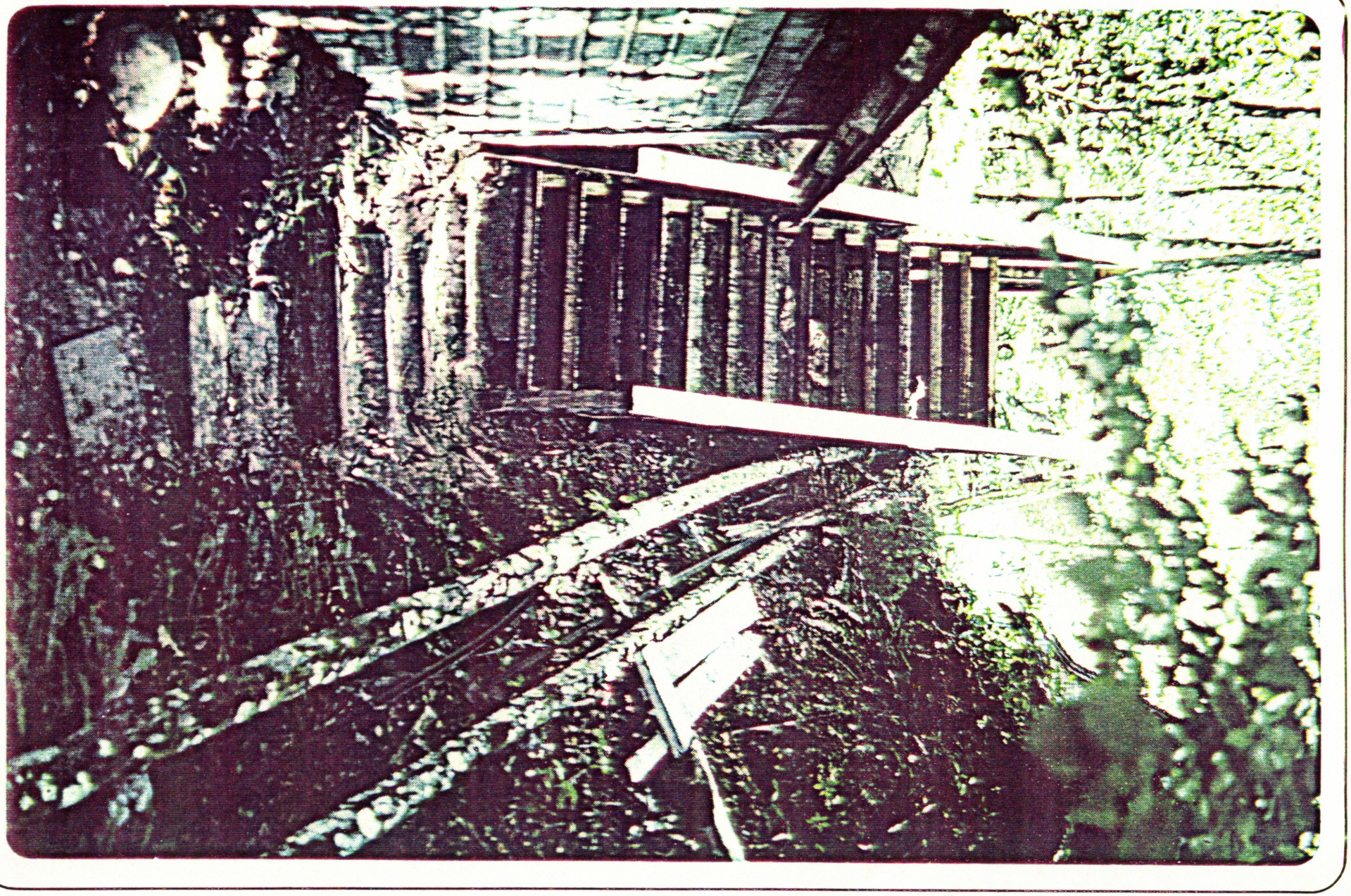
There is a lot of equipment in the structure at present, including the heating stove. This equipment is presently being tagged and logged.

5. The mechanical and electrical systems were very simple and may still be operable today.

The buildings employed natural light wherever possible, which explains the necessity for windows in the ice house. Auxiliary lighting was at first handled by kerosene lamps and coleman lanterns. In the early 1940's, after the Hokensons built their house on the bluff at Little Sand Bay, a 32-volt power plant was installed. The generator and batteries were located in the basement of the Hokenson

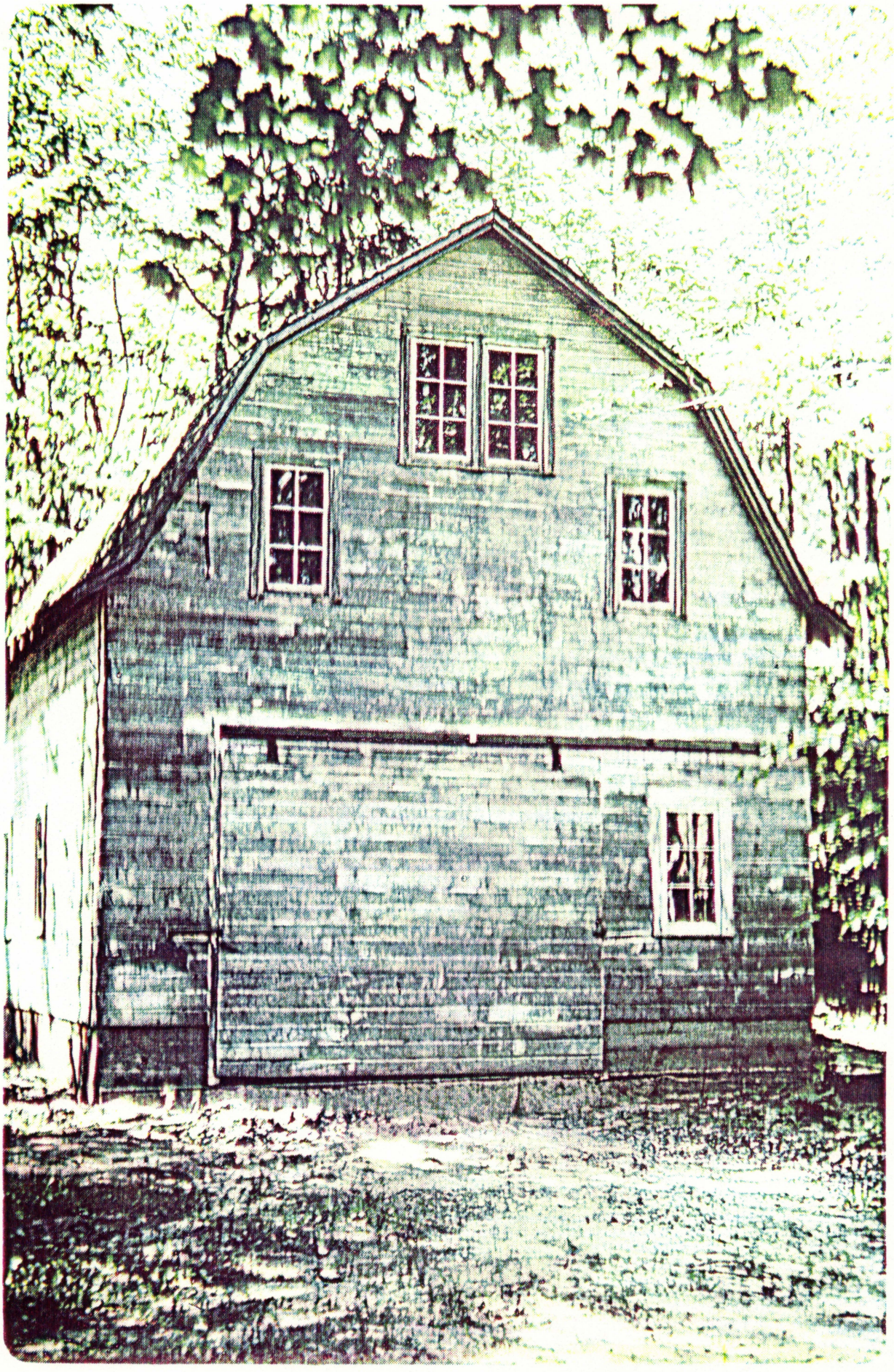
Existing stairway to Twine Shed #30

Previous rotted stairway.



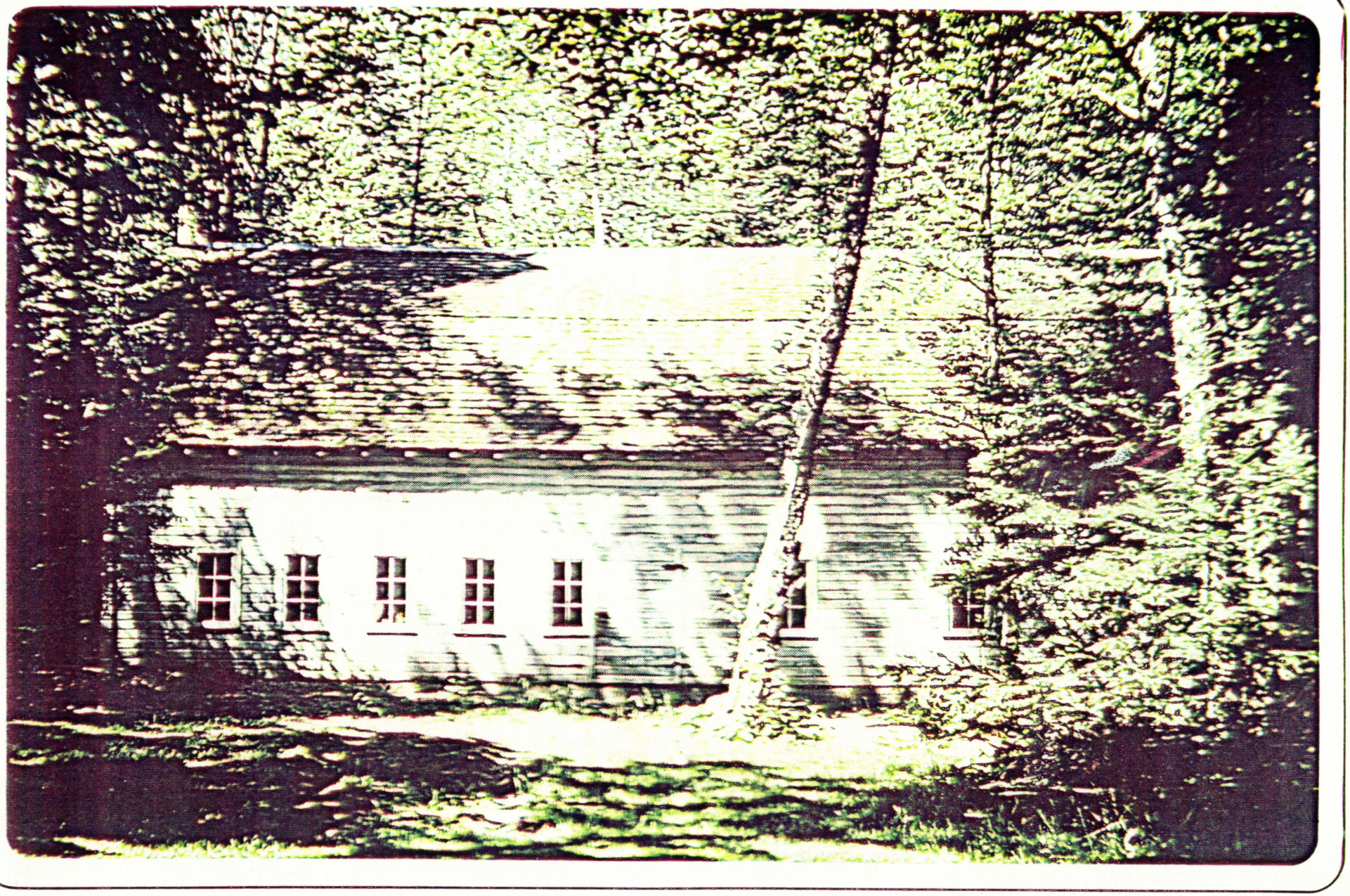
Existing stair to Twine Shed and box rails

#32



#33

Twine Shed - North Fascade



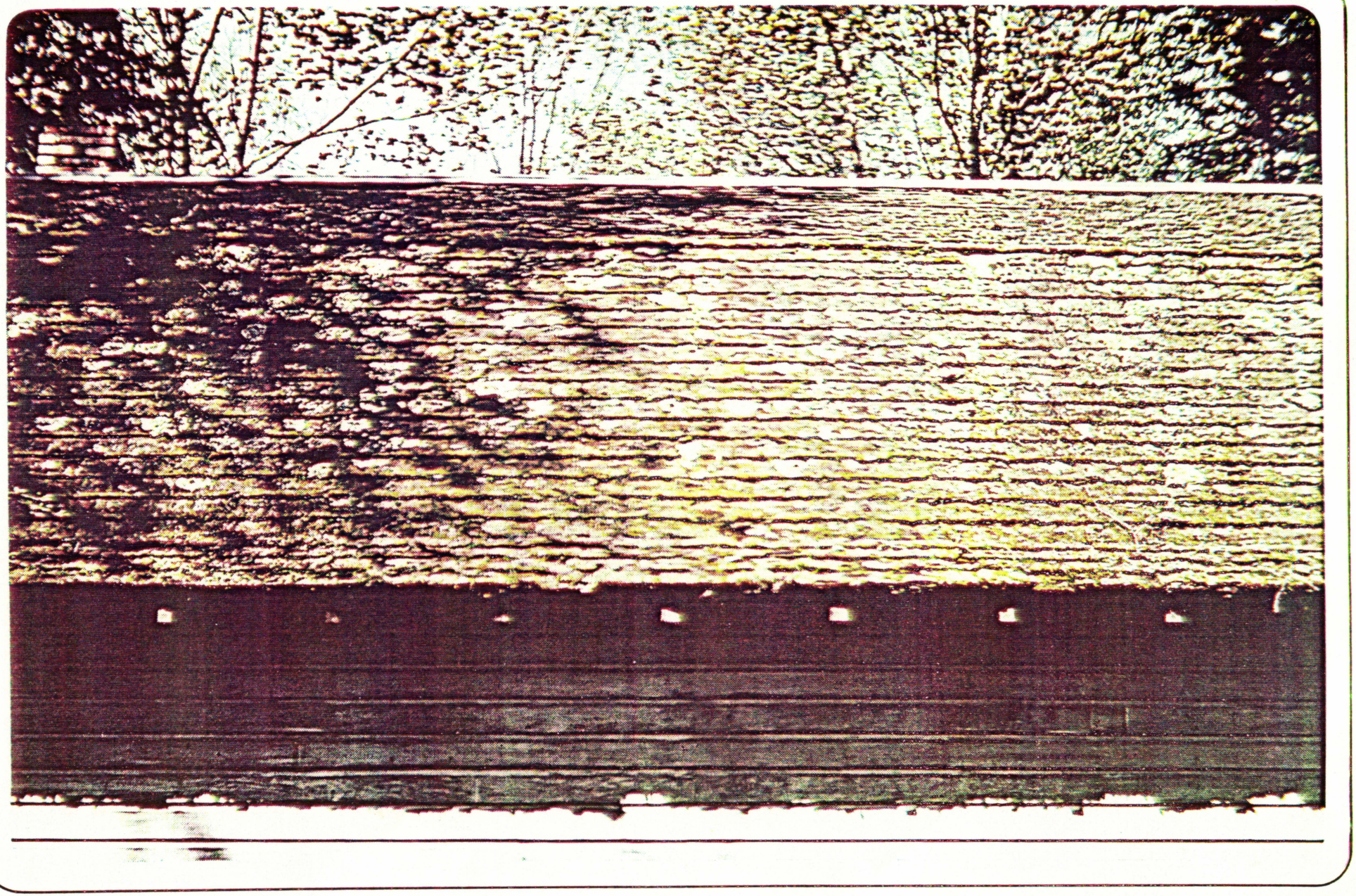
Twine Shed - East Fascade

#34

North and West Fascades

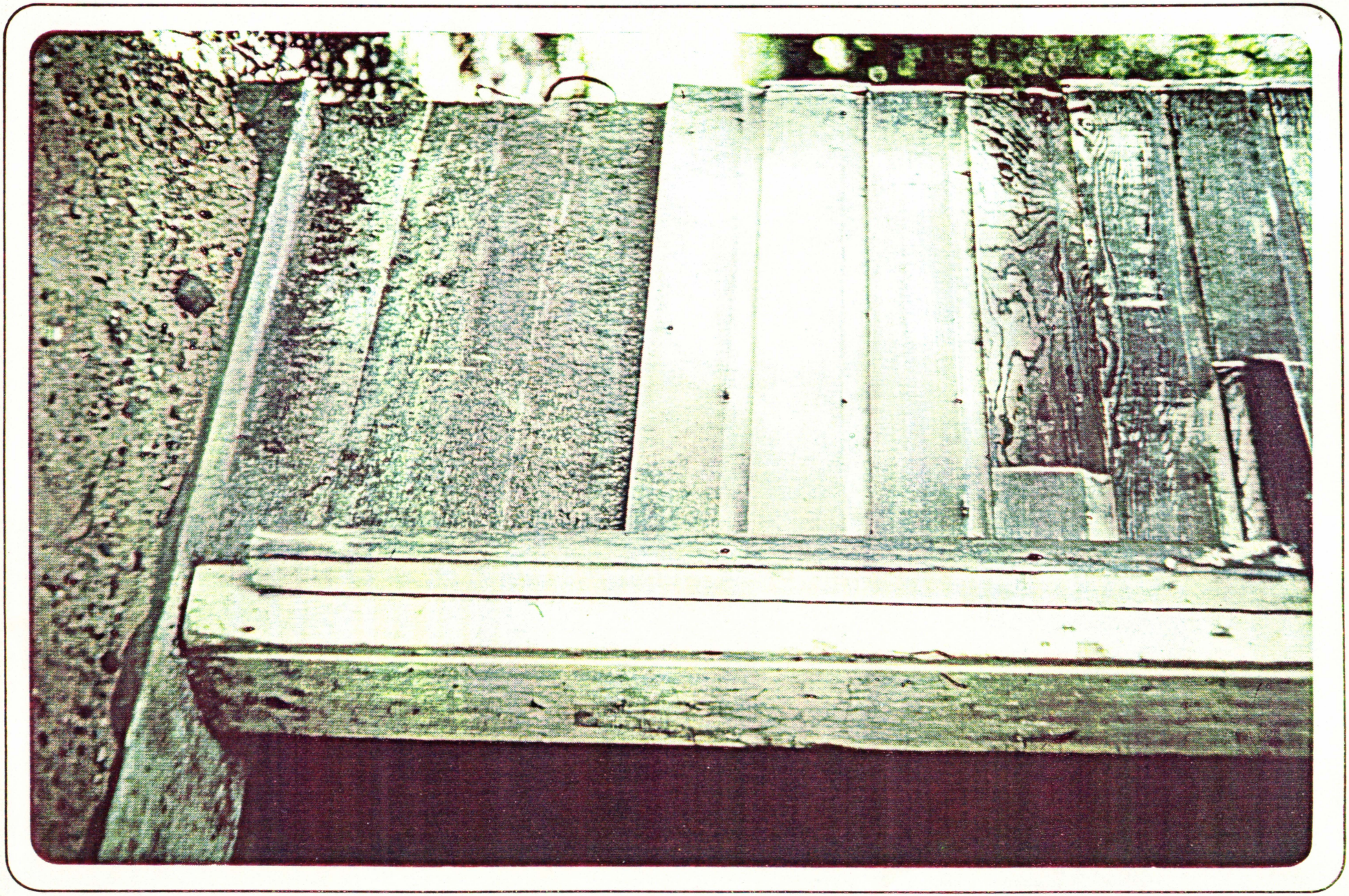
Twine Shed - East and South Fascades

#36



Twine Shed - Roof condition

#37



Twine Shed - Sliding Door Framing Detail

#38

Twine Shed - Heating Stove #39

Existing Electrical Condition (Typical) #40

House. In 1947, electricity was brought in by high line. The power source to the Fish House and Twine Shed was not tested, but the light source in the Ice House was operable.

The heating of the structures was handled by wood-burning stoves or box heaters. The vents for which are still visible in the Fish House and Ice House, and the chimney and stove are existing in the Twine Shed.

6. Recommendations

In view of the administrative decision to maintain the exterior of the buildings in their historic appearance and to rennovate the interiors for adaptive use as exhibition space, the following recommendations are submitted. The recommendations of this report pertain to exterior restoration and structural stabilization, with the interiors cleaned and left in their historic conditon prepared for reintroduction of historic furnishings and equipment.

The three broad options are:

a. Restoration/stabilization of the complex of buildings to a specific date dependent on research gathered in the forthcoming historical data section of the Historic Structures Report.

b. Restoration/stabilization of the structures on the site as they exist today (i.e., as the buildings existed when the Hokensons retired from their business in 1966).

c. No action, which would result in further deterioration and eventual building collapse.

Preferred Recommendation

The Historical Architect, Denver Service Center, recommends approach b to the complex of buildings. This option is the most direct, functional, and would be the only way to reflect the incremental changes and growth in the small operation fishing business. These changes are important to the documentation of the operational history of this industry.

Specifically, the work needed for this recommendation to stabilize/repair/maintain the buildings is outlined below:

L-Shaped Dock

Replace or reinforce existing piles with new maple pilings, as needed.

Repair/replace rotted or damaged cribs, as necessary.

Replace all old decking with like pieces of hemlock.

Examine rockfill for any necessary repositioning.

Remove upright posts on leg of dock.

Ice House

Structural stabilization (See Appendix A - attached)

Trench earth away from south, east and west walls and install retaining wall and proper drainage system.

Add grade beam foundation around east half of building.

Replace all rotted members: plates, studs, sills, with like members in same historic position.

Replace all rotted and missing siding with like material.

Replace all rotted or broken trim with like material.

Repaint structure and trim with oil-based paint, white- historical.

Replace existing roof with like material.

Clean and caulk windows as necessary.

Replace glass panes where needed.

Repair and realign sliding door.

Clean interior.

Fish House (Herring Storage Shed)

Repaint structure and trim with oil-base paint, white- historical.

Undercut all doors to allow for full swing operation.

Reinstall boarded-up windows with like units.

Add trim where missing.

Clean and caulk windows as needed.

Replace broken window panes as necessary.

Replace any damaged siding with like material.

Replace floor hatch in south room.

Clean interior.

Replace damaged Framing Members.

Twine Shed

Repaint structure and trim with oil-based paint, white-historical.

Replace damaged siding as necessary with like material.

Clean and caulk windows as needed.

Replace broken glass panes where necessary.

Replace roof with like kind.

Repair new concrete floor.

Clean interior.

Site

Thin and remove trees from around Twine Shed to allow daylight and air movement around the structure, as done historically.

Remove new stairway to lakeshore and replace with stairs of a shallower angle with proper rise/run ratios (per building code).

Replace or adjust handrail to suit public use.

Clean undergrowth around narrow gage rails.

Treat rails to protect them from further deterioration and weathering.

Add walkway from parking lot to Hokenson Complex.

Add two hydrants.

Utilities

Electrical: Rewire design and outlet placement and recommendations for the buildings are dependent upon the interior design which will not be complete until some date in the future; therefore, recommendations on electrical and wiring design should be made at that time. Existing lines should be checked and live power deadened where safety could be a factor until a decision on use and design

is made. Electrical lines are present to all buildings, and those lines should be updated and brought up to code compliance as electrical feeds, in order that electrical design may be accomplished when directed. The electrical main panel should be placed in the Twine Shed with the fire control panels. The building subpanels should be located within each structure, close to the feed entry on the wall as was done historically.

Telephone:

Telephone service does not presently exist in any of the three buildings. It is the recommendation of the Historical Architect, DSC, to feed telephone service to the Twine Shed only. Since phone service is in the area, this could be accomplished by bringing in a line from the maintenance building to the west.

Water:

Water service will be needed for all three buildings for fire protection. This should be accomplished through an hydrant system, exterior to the structures with a submersible pump into the lake.

Fire Protection:

Presently, there exist no fire detection or suppression systems in any of the structures. The architectural fabric, usage, and contents of the various buildings permits one manner of fire protection for all areas.

It is recommended that the detection system be the ionization type. This system would have several alarms actuated upon initiation of the smoke detector, and would also be tied into a self-dialing telephone

to the necessary personnel. The electrical and fire control and annnunciator panels should be located along the north wall of the Twine Shed, near the door for easy access. It is recommended that the fire suppresion system be by exterior hydrant, one on the bluff to the northwest of the Twine Shed, and the second below, between the Ice House and the Fish Hose. Hydrant and Hose House location shall be behind trees and sheltered for best site incorporation. It will be necessary to require one employee, who is instructed in the procedures of the fire response to be within five minutes of the site at all times, and who can be alerted by means of the automatic dialer. All employees should be trained in the methods of fighting historical structure fires. Portable hand extinguishers, all purpose type, should be located in each building for small non-structural fires.

An exterior hydrant system is recommended since it will cause the least fabric intrusion to each structure, and will accomplish necessary life-safety requirements.

7. Impact Analysis - Determination of Effect

The Hokenson Brothers Fish Dock complex, consisting of the Dock, the Ice House, the Fish House (Herring Storage Shed) and the Twine Shed (Workshop and Boat Storage), is listed in the National Register of Historic Places. Therefore, National Park Service projects undertaken in the area of these buildings must comply with Section 106 of the National Historic Preservation Act of 1966 and its implementing procedures, 36 CFR Part 800 ("Protection of Historic and Cultural Properties"). According to these procedures, the Advisory Council on Historic Preservation must be afforded an opportunity to comment on any effect that National Park Service undertakings may have on the properties.

The program of stabilization, restoration, and site modification recommended in this document will have an effect on the qualities that qualify the Hokenson Fish Dock buildings to the National Register, but that effect will not be adverse. Rather, the program, which includes general clean-up, repainting, replacement in kind of damaged building elements, electrical rewiring, tree and brush thinning at certain areas of the site, and installation of telephone service, water service, and a fire detection system, will have the effect of protecting, strengthening, and prolonging the life of these significant historic structures.

Conclusion

It is important that a consistent interpretation of this complex be adhered to, and it is the opinion of the Historical Architect, Denver

Service Center, that this interpretation should document the changes over time experienced in this operation. The danger is to complicate the interpretation of a group of buildings that are, themselves, very simple. Therefore, I am recommending a straight forward rehabilitation scheme that responds to all the structures that are there today, which reflects the growth and change of the small industry over the years of its operation.

APPENDIX A

On August 2, 1978, a structural inspection of Hokenson's Ice House at Apostle Islands National Park was conducted by Structural Engineer, Bruce Keller, Denver Service Center. This report pertains to the existing conditions and structural recommendations concerning this building.

Existing Conditions:

Hokenson's Ice House is a small wood framed building, approximately 26 ft. x 24 ft., with hemlock tongue and grove siding and 1 in. variable width roof sheathing under several plys of roofing felts.

The building sits on a sand beach approximately 25 yards south of the lake's edge. The south wall was built at the toe of a slope which rose abruptly from the level sand beach approximately 10 feet to the natural soil deposits and forest floor which bound the lake in an east-west direction at this site. Since construction of the building was completed this slope has been continuously eroding and soil slides have piled up around the south end of the ice house. The soil has been piled to a depth of approximately 4-5 feet behind the south wall but the slope appears to have reached its natural angle of repose and further slides should not occur unless the slope is excavated at the toe. The earth in contact with the building has led to extensive rot of the siding material and the soil pressures

have displaced some of the south wall's framing members and caved in most of the siding below grade. Tree roots have also penetrated the rotted siding along the south wall as well as those parts of the east and west walls below grade.

The building's roof is framed with 2 x 6 rafters on 2 foot centers. A 1 x 8 ridge beam runs north-south the full length of the roof. The rafters are nailed at the ridge beam and at the double sill plates on the top of the east and west walls. Cross ties (2 x 6) originally tied the hip joints of each pair of rafters together and prevented lateral displacement of the walls. All but one of these cross ties has been cut and removed from the east half of the building. The remaining west half of each cross tie bears on a 2 x 6 stud wall which runs north-south down the middle of the interior and is sided on the east side with 1 inch board siding. These cross ties have been used as floor joists to support a loft floor of 1 x 6 sheathing boards. Additional support for this loft floor system is provided by a post and beam system consisting of a 2 span continuous 6 x 6 beam supported on 3 - 6 x 6 posts which supports the floor joists at mid-span. This additional support appears to be a recent effort to increase the strength of the floor system.

In the east half and southwest corner of the buildings, sawdust has accumulated from ice storage methods to an average depth of two feet. This sawdust has been piled against the entire dividing wall,

both east and south walls as well as half of the north and west walls. At all places where the sawdust was in contact with the walls, extensive rot has occurred to all wood framing and siding members. Essentially all framing members in the exterior walls as well as most members in the interior wall are extensively rotted and structurally inadequate.

Under the west half of the ice house, a concrete slab, approximately 6 inches thick, was poured on grade. This slab acts as a floor surface to drain water out of the building toward the lake and also acts as a foundation for the west half of the building. Sill plates (6 x 6), for wall framing of the west wall and interior dividing wall, bear on the concrete slab and appear to have been set while the concrete was still plastic. These sill plates are somewhat damaged by rot and should probably be replaced. The bottom sill plates for the east and north walls are set directly on the natural sand deposits of the beach. These 6 x 6's are thoroughly rotted and must be replaced. The south wall's bottom sill plate is supported at each end by the sill plates of the east and west walls and thus is 6 inches higher than the east and west sill plates. This sill plate bears on soil which has filled in beneath the plate. This plate is also thoroughly rotted and must be replaced.

The roof and roof framing appear to be in good condition. All members of the roof framing are in good shape and can be reused. No evidence of leakage through the roofing was apparent.

Recommendations:

In renovating this building, the primary considerations should be given to removing the lateral soil load from the south wall and removing the potential for further rotting of wood members. For this reason, I feel the embankment of earth at the south end of the building must be cut back away from the building and maintained an adequate distance away from the walls to prevent moisture from collecting near the walls. Either a continuous maintenance program calling for annual excavation at the toe of the slope away from the building is necessary. I feel a retaining wall would have the advantage of low maintenance plus the added advantage of maintaining the slope's present repose. Thus, the top of the slope could be stabilized at its present position and would have no tendency to erode back away from the building as would result from a continuous toe excavation program.

The retaining wall should be recessed from the building's walls a distance adequate to ensure complete ventilation and positive drainage in order to keep moisture away from the walls. A recess of 18 inches should be adequate. The height of wall necessary to maintain a stable slope behind the building is approximately 4-5 feet. Wing walls along both east and west walls should be tapered to follow the present natural grade and would provide additional support for the main retaining wall. A gravel backfill behind the retaining wall will be necessary to provide positive drainage around the building and a

DSC-HFC
Form 802

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

PACKAGE ESTIMATING DETAIL

REGION	PARK
MIDWEST	APOSTLE ISLANDS NATIONAL LAKESHORE
PACKAGE NUMBER	**PACKAGE TITLE** HISTORIC STRUCTURES REPORT HOKENSON FISH DOCK BUILDINGS

(If more space is needed, use plain paper and attach)

ITEM	QUANTITY	COST
1. Wood dock - new	Lump Sum	$88,000
2. Fish house - repairs	" "	12,000
3. Ice house - repairs	" "	40,000
4. Twine shed - repairs	" "	14,000
5. Site improvements	" "	10,000
6. Utilities - electrical	" "	3,000
telephone	" "	1,000
fire protection	" "	30,000
CONSTRUCTION COST		$198,000
This estimate is valid to February 1979.		
R. Borras, 1/9/79		

SUMMARY OF CONSTRUCTION ESTIMATES		CLASS OF ESTIMATE: A ☐ Working Drawings; B ☐ Preliminary Plans; C ☒ Similar Facilities	
Proj. Type		Totals from Above B & U	R & T
52	Museum Exhibits		XXXXX
55	Wayside Exhibits		XXXXX
62	Audio-Visual		XXXXX
89	Ruins Stabilization		XXXXX
91	Construction	$198,000	
92	Utility Contracts		XXXXX

ESTIMATES APPROVED (Signature)	(title)	(date)

POST PROFESSIONAL SERVICES ESTIMATES AND SCHEDULING ON BACK OF FORM

SCHEDULING OF DEVELOPMENT RELATED PROJECT TYPES

DEVELOPMENT RELATED PROJECT TYPES (Add on to line item)		C-3 YEARS	C-2 YEARS	C-1 YEAR	C: YEAR OF CONSTRUCTION	Init.
07	Construction Drawings B&U					
07	Construction Drawings R&T					
36	Historic Structures Const. Drawings					
43	Archeological Salvage B&U					
43	Archeological Salvage R&T					
51	Museum Exhibit Design					
55	Wayside Exhibit Design					
61	Audiovisual Design					
	(Advance Planning)					
05	Surveys					
06	Comprehensive Design (Prel. Design)					
14	Utility Negotiations					
15	Special Studies					
34	Historic Furnishings Report					
35	Historic Structures Report (HIST)					
35	Historic Structures Report (ARCHIT)					
42	Archeological Research					

DISTRIBUTION OF ESTIMATED FUNDING REQUIREMENTS BY YEARS

ALL OTHER PROJECT TYPES		1st Year	2nd Year	3rd Year	4th Year	
01	New Area Study					
02	Existing Area Study					
03	Development Concept Plan					
04	Interpretive Prospectus					
15	Special Studies (Non-Develop. Related)					
16	E.I.S.					
17	Service-wide Projects					
18	Wilderness Studies					
31	Archeological Investigations					
32	Park History Study					
33	Special History Report					
53	Museum Exhibit Operations					
54	Curatorial Services					
63	Audiovisual Maintenance					
71	Free Folder					
72	Sales Folders					
73	Books					
74	Archeological Publication					
75	Gen. Information Booklet					
76	Posters					
77	Special Publications					
	Other					
	Other					

PRELIMINARY

TASK DIRECTIVE

APOSTLE ISLANDS NATIONAL LAKESHORE

LITTLE SAND BAY

BAYFIELD PENINSULA, WISCONSIN

PACKAGE 150

REHABILITATE FISH DOCK & BUILDINGS

Hokenson Dock and Fish House	01138A 06409 52
Hokenson Ice House	01138B 06410 53
Hokenson Twine Shed	01153A 06411 54

UNITED STATES DEPOARMENT OF THE INTERIOR

NATIONAL PARK SERVICE

DENVER SERVICE CENTER

May 9, 1978

PART I

Project Description

Apostle Islands National Lakeshore, Package 150, calls for the stabilization, rehabilitation and furnishing of the structures associated with the Hokenson Brothers commercial fishing operation at Little Sand Bay on the north tip of Bayfield Peninsula on the southwestern shore of Lake Superior. From this peninsula, the Achipelago of the twenty-two Apostle Islands stretches to the northeast. The structures of the fishing concern are the net house, the fish house, the ice house, and the fishing dock, which are all intact but are in the process of deterioration. In general, the work will involve the investigation and recording of historic fabric for a historic structures report, prior to historic structures construction documents and construction.

Commercial fishing has been a major industry among the Apostle Islands, and the history of this activity is of major interpretive value to the lakeshore. These buildings are of exceptional importance because they are part of the only intact fishing and packing operation within the boundaries of the Apostle Islands National Lakeshore. The site of the Hokenson Brothers fishing enterprise is on the National Register of Historic Places and the list of classified structures.

The three Hokenson Brothers started their fishing operation at Little Sand Bay in 1927, a few miles from the farm where their father had homesteaded many years before. At that time, in the late 1920's, small scale fish packers were facing stiff competition from national corporations which offered a constant market and stable prices, but the isolation of their operation necessitated independence from larger concerns. The first structures built in 1927 were the dock and ice houses, though the dock was not completed until 1930. The net storage building was constructed in 1930-31 and the herring equipment shed on the dock was finished about the same time. All of the buildings were designed and built by the brothers themselves. The fishing season lasted from April through November, and in the winter months, much of their time was spent repairing nets and preparing their equipment for the next fishing season. Over the years, one or two other fishermen moved into the area. The Hokenson dock is still used by a fisherman, Jack Erickson, while one Hokenson brother is deceased and the other two retired.

A thorough Class B architectural investigation will be conducted to establish design alternatives and recommendations for the rehabilitation of the fish house and wood dock to original condition, with required safety features, and to rehabilitate the net house for use as a living history interpretation. The

historic structure report will include an administrative data section, historical data section, archeological data section, and architectural data section.

Since the site of these structures was placed on the National Register of Historic Places, all projects affecting them are subject to the requirements of the Advisory Council on Historic Preservation "Procedures for the Protection of the Historic and Cultural Environment," (36 CFR Part 800). Therefore, at the appropriate stage of planning, the Regional Director shall, in consultation with the State Preservation Officer, apply the Advisory Council "Criteria for Effect and Adverse Effect" (see 800.8 and 800.9), and afford the Advisory Council the opportunity to review and/or comment on the proposals.

Harpers Ferry Center will design the museum and living history exhibits, interpretations, curatorial services, and audiovisual set-ups, as required.

Team

Superintendent, Apostle Islands National Lakeshore

Michele Benda, Project Hisotrical Architect, Denver Service Center

Richard Steeves, A/E Manager, Denver Service Center

David Fritz, Historian, Denver Service Center

Consultants

Midwest Regional Office

Superintendent and Staff, Apostle Islands National Lakeshore

Robert Simmonds, Supervisory Historical Architect, Midwest/ Rocky Mountain Team, Denver Service Center

Midwest/Rocky Mountain Team, Denver Service Center

Midwest Archeological Center

Cultural Resource Section, Quality Control, Denver Service Center

Harpers Ferry Center

Programmed Funds

Apostle Islands - Package 154

FY	Project Type	Description	Program Net	Amount	Acct. No.
78	06	Comprehensive Design	$ 8,300		0855-402
78	32	Historic Resource Study	$ 9,960		4097-402
78	34	Historic Furnishings Report	$ 9,960		0835-402
*78	35	Historic Structures Report	$ 30,949		0881-402
78	42	Archeological Research	$ -830		PCIP Pending

*There is a possibility that there will be excess funds at completion of the historic structure report, at which time the excess may be applied to other accounts.

Anticipated Programmed Funding

FY	Project Type	Description	Program Net	Amount	Acct. No.
*85	36	Historic Structure Constr. Documents	$ 39,010		
85	51	Museum Exhibit Description	$ 8,300		
85	56	Historic Furnishing Plan	$ 8,300		
85	61	Audio-visual Design	$ 8,300		
86	43	Archeological Salvage	$ 1,660		
86	52	Museum Exhibit Production	$ 49,800		
*86	91	Construction	$257,300		
*86	37	Construction Supervision	$ 38,595		

Estimated Work Schedule

Draft Task Directive	May , 1978
Task Directive Review and Approval	June, 1978
Final Draft Administrative Data Section	July, 1978
Final Draft Architectural Data Section	Dec., 1978
Final Draft Historical Data Section	Feb., 1979
Review by Denver Service Center, Region, Park, WASO Approval	Jan., 1979
Editing Completed	May , 1979
Final Distribution, Completed Historic Structure Report	Sept. 1979

*Programmed estimates may be revised lower upon completion of the historic structure report.

PART II

Scope of Work

Administrative Data: Superintendent will provide this section.

Historical Data : Historian will provide this section.

The history data section, including a resource study, structures report and furnishing study on the Hokenson Brothers operations and pertient related activities, will conform to National Park Service Activity Standards for the above named reports.

Archeological Data: Archeologists will provide this section, if required.

Architectural Data: The historical architects will conduct a thorough Class "B" investigation of the Hokenson Brothers fishing operation structures and will provide a narrative report with design proposals and recommendations, and full graphic documentation in the form of photographs and drawings.

The following is a brief outline for the architectural data section:

1. Historical Material
   - A. Architectural archival investigations will rely upon the data presented in the historical data section.
   - B. Structural Development: architectural measured drawings and restoration recommendations will be analyzed, including graphic documentation of the growth and changes to the structure as far as possible.
   - C. Comparative Data: a typological, stylistic study of the strucutres and furnishings.

2. Existing Conditions and Design Proposals

   A. Investigation and identification of the historic fabric; dating and defining each element of the strucutre, as far as possible.

   B. Examination and evaluation of the existing physical conditions of all elements of the structure.

   C. Restoration/rehabilitation design proposals for structures, to satisfy management requirements for use. This may include alternative proposals for the design of certain elements, which will require a management decision.

3. Graphic Documentation

   A. Drawings will record historic and existing conditions and restoration/rehabilitation design proposals. Final historic strucutres report will contain preliminary working drawings and outline specifications.

   B. Photographs will record existing conditions.

   C. Historical graphic material, photographs, and drawings.

4. Impact Analysis, according to Advisory Council Criteria of Effect and Adverse Effect for Design Proposals

5. Cost estimate for restoration/Rehabilitation Design Proposals

6. Bibliography and Basic Data

PART III

Basic Data

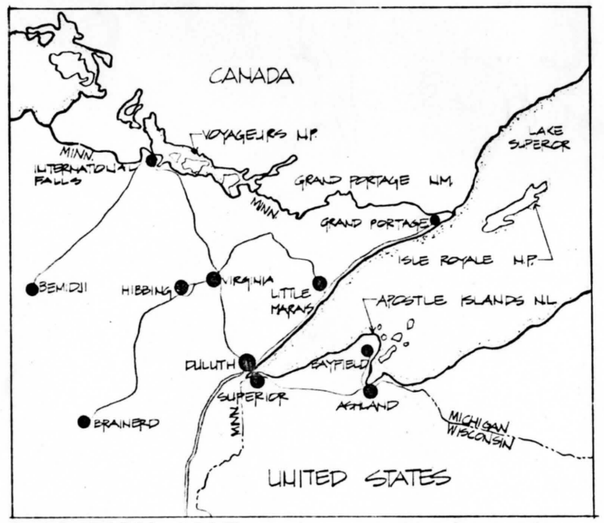
Activity Standards for Historic Resource Studies and Management, National Park Service, 1971

10-238, Development/Study Package Proposal, Package 150

Procedures for Protection of Historic and Cultural Properties, National Register of January 25, 1974, (36 CFR 3366) as codified in 36 CFR Part 800, expecially section 106

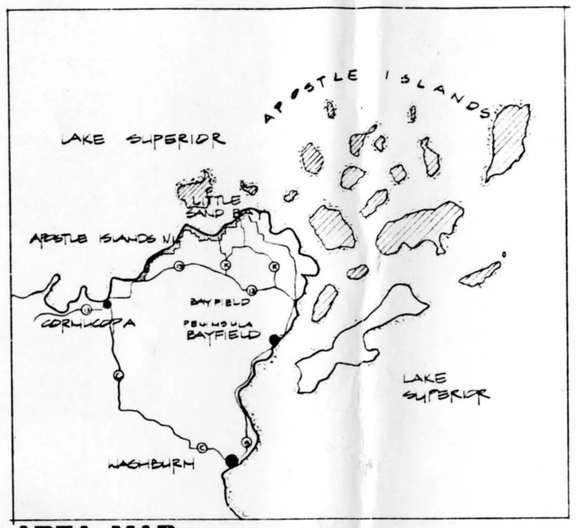
A Master Plan - Apostle Islands, April 14, 1971

Hokenson Fishing Dock - National Register of Historic Places Inventory - Nomination Form, State Historical Society of Wisconsin, Madison, Wisconsin 53706



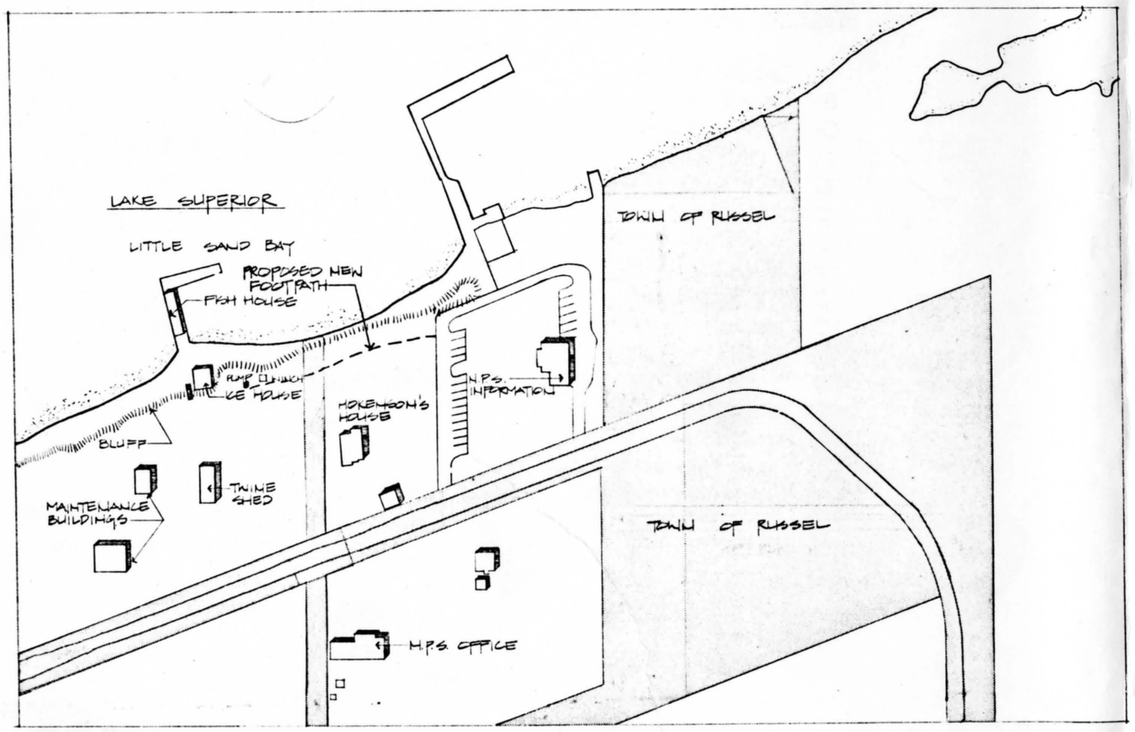
LOCATION MAP

SCALE IN MILES (DRAWN @ 1"=40 MILES)



AREA MAP

SCALE IN MILES (DRAWN @ 1/2" = 1 MILE)



SITE MAP

SCALE IN FEET (DRAWN @ 1"=100 FEET)

NORTH

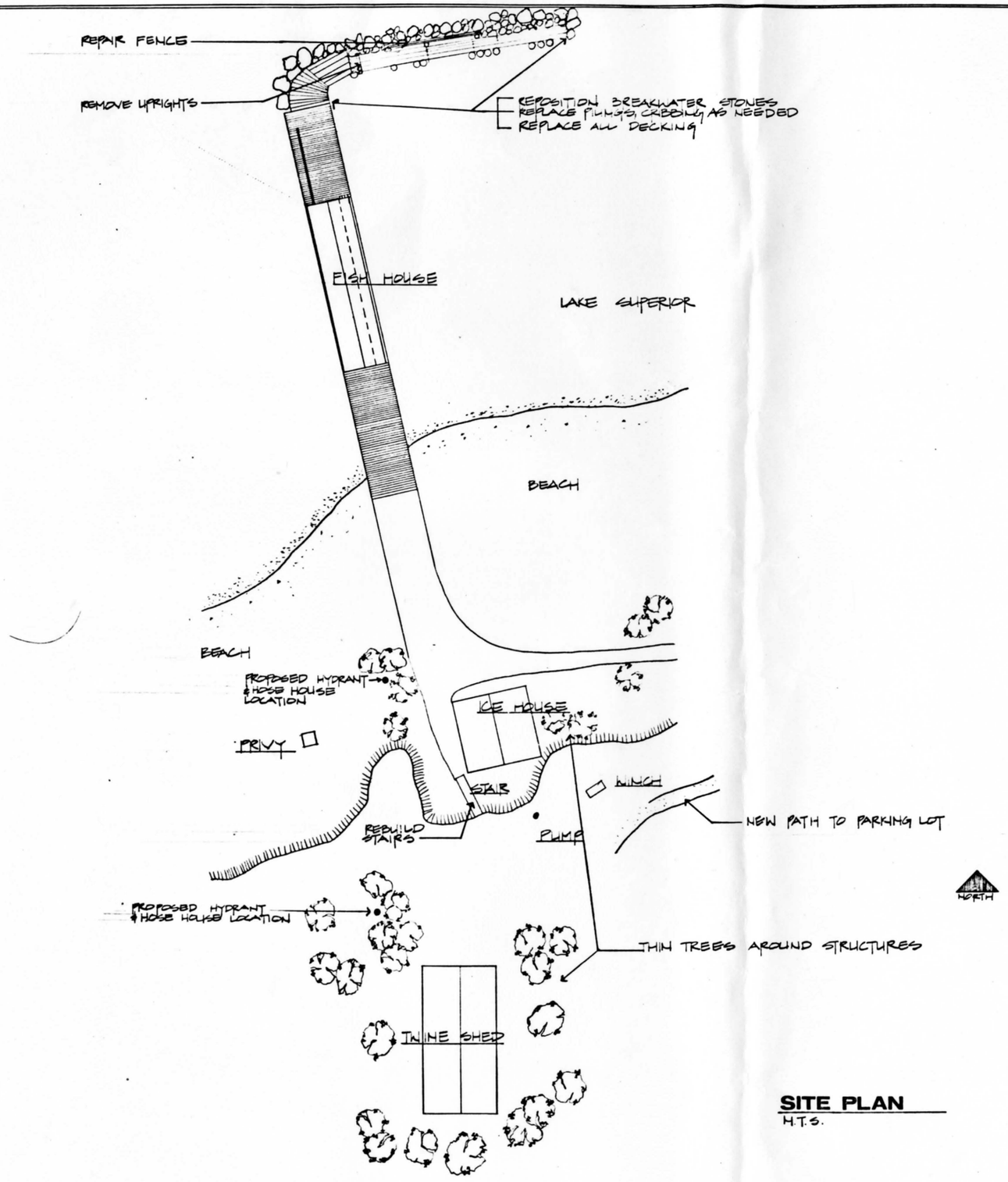
APOSTLE ISLANDS NATIONAL LAKESHORE

HISTORIC STRUCTURES REPORT: HOKENSON FISH DOCK BUILDINGS

Index to Measured Drawings

REDUCED SIZE REPRODUCTION

PREPARED	DRAWING NO.
DESIGNED EENDA	633 28,000
DRAWN SIMMONS	PCIP PKG. / SHEET 1
CHECKED / DATE	OF 17

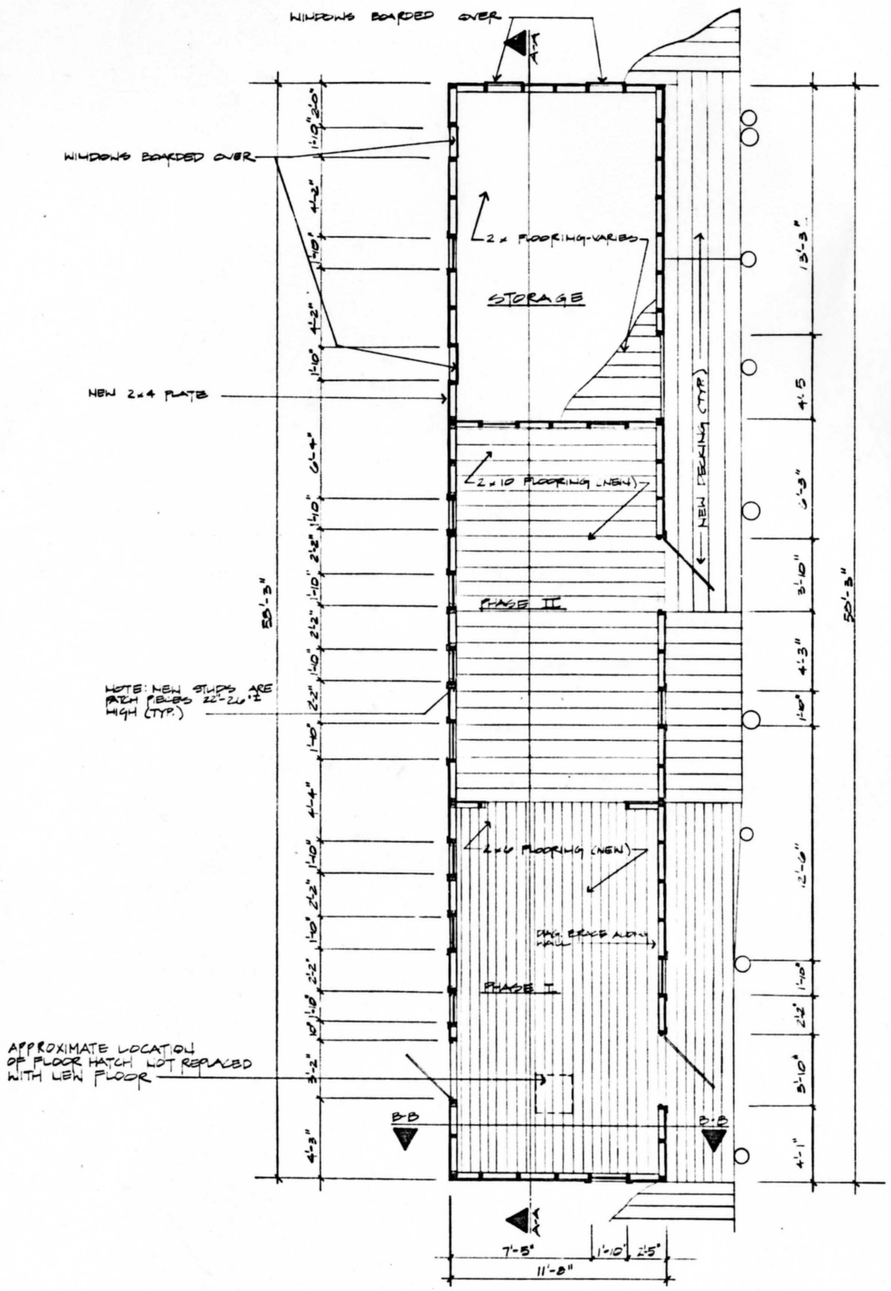


SITE PLAN
H.T.S.

HOKENSON FISH DOCK BUILDINGS

Site Plan

PREPARED	DRAWING NO.
DESIGNED	633 23,000
BENDA DRAWN	PCIP PKG. / SHEET
SIMMONS CHECKED	2
11/75 DATE	OF 17

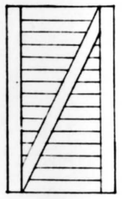


EXISTING DOCK LEVEL PLAN

DRAWN @ 1/4" = 1'-0"

■ OLD ▨ NEW

0 1' 5' 10' 15'



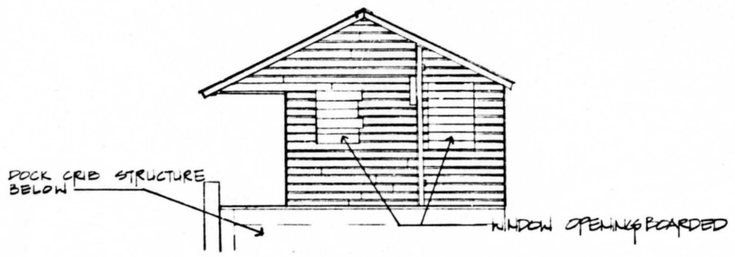
A. TYPICAL DOOR ELEVATION - INTERIOR VIEW

3/8" = 1'-0"

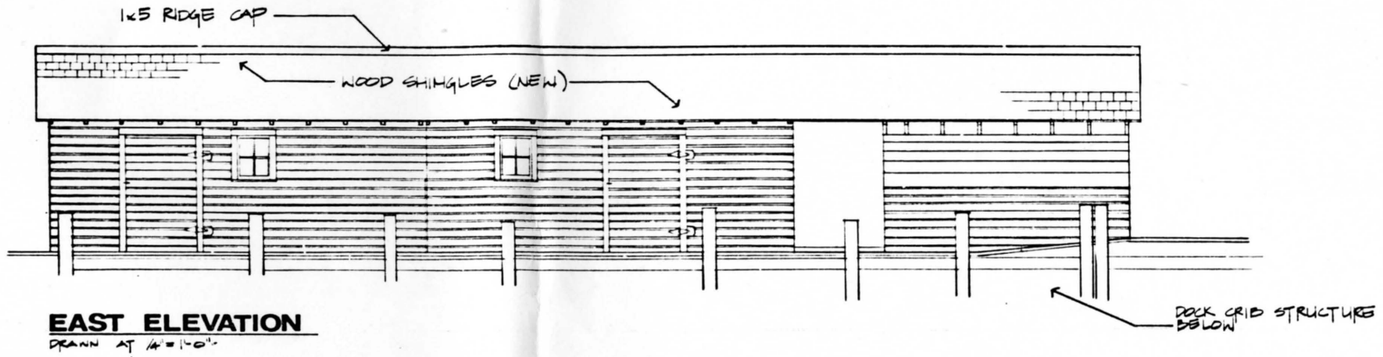
HOKENSON FISH DOCK BUILDINGS

Fish House Plan

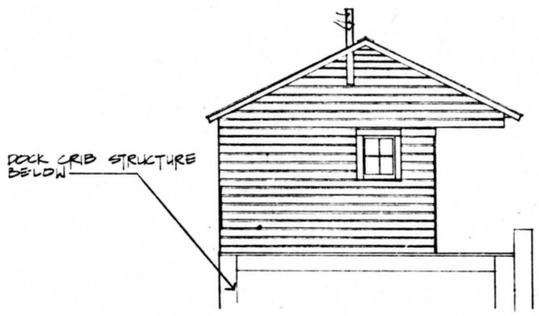
PREPARED	DRAWING NO.
DESIGNED	632
DRAWN	28,000
CHECKED	PCIP PKG. / SHEET 3
DATE 11/75	OF 7



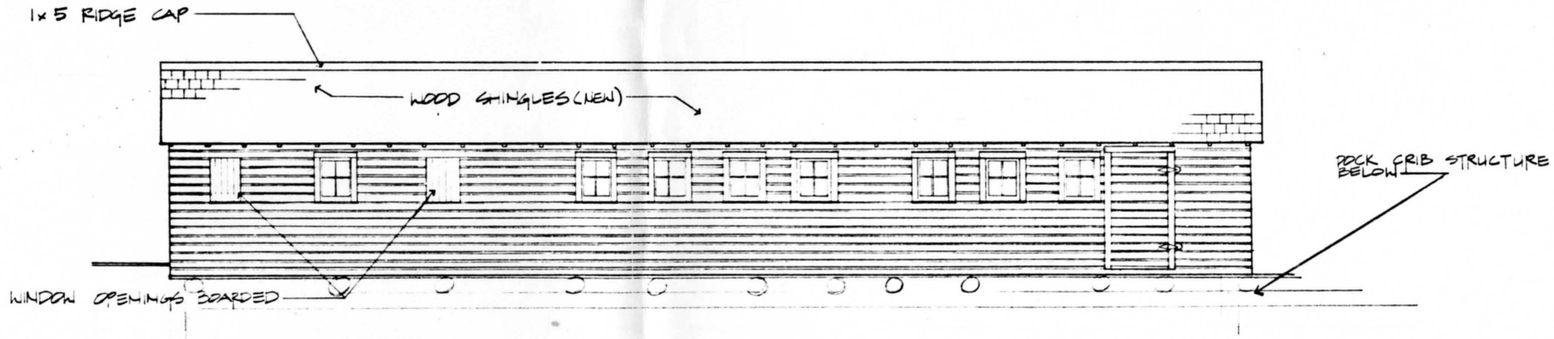
NORTH ELEVATION
DRAWN AT 1/4" = 1'-0"



EAST ELEVATION
DRAWN AT 1/4" = 1'-0"



SOUTH ELEVATION
DRAWN AT 1/4" = 1'-0"

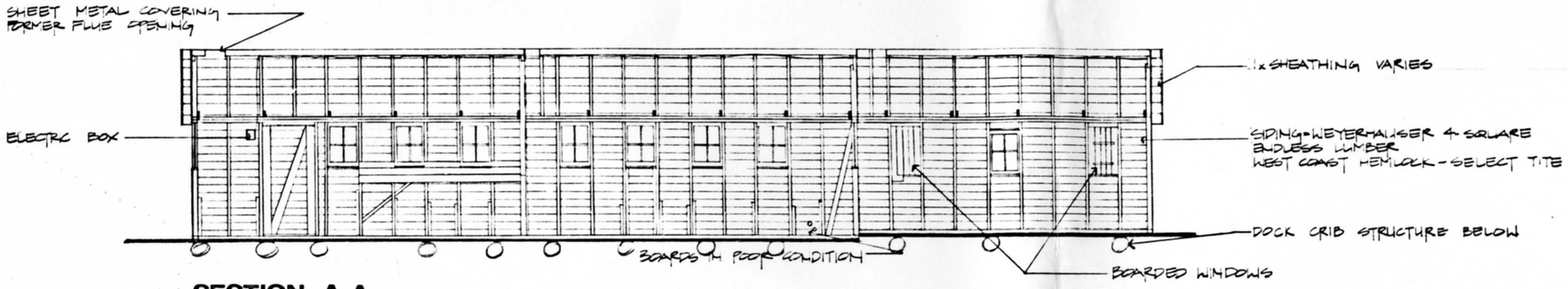


WEST ELEVATION
DRAWN AT 1/4" = 1'-0"

HOKENSON FISH DOCK BUILDINGS

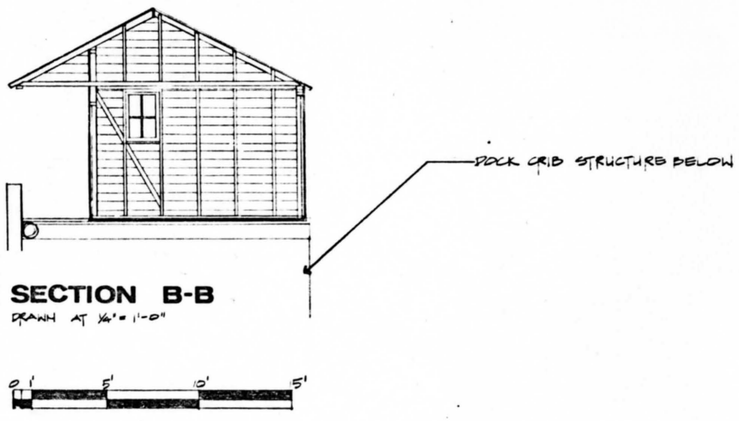
Fish House Elevations

PREPARED	DRAWING NO.
DESIGNED RE-DA	633 28,000
DRAWN SIMMONDS	PCIP PKG. — — —
CHECKED 11/79	SHEET 4
DATE	OF 17



SECTION A-A

DRAWN AT 1/4" = 1'-0"



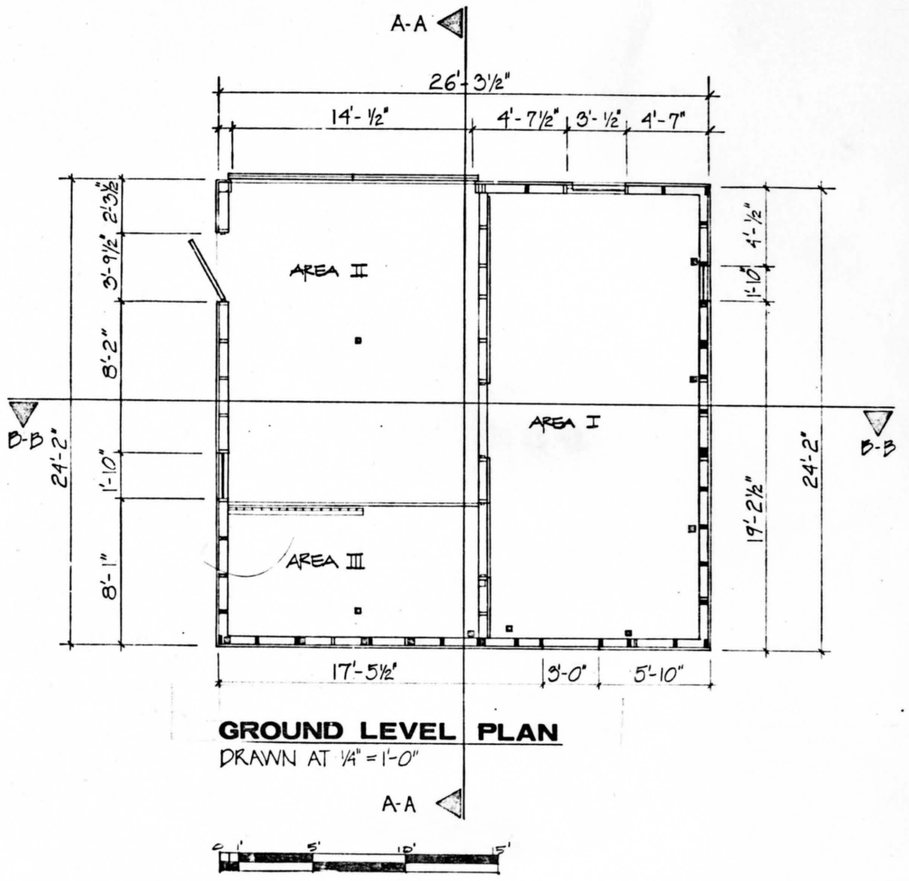
SECTION B-B

DRAWN AT 1/4" = 1'-0"

HOKENSON FISH DOCK BUILDINGS

Fish House Sections

PREPARED	DRAWING NO
DESIGNED BENDA	633 28,000
DRAWN SIMMONDS	PCIP PKG: — — — —
CHECKED	SHEET 5 OF 17
11/73 DATE	

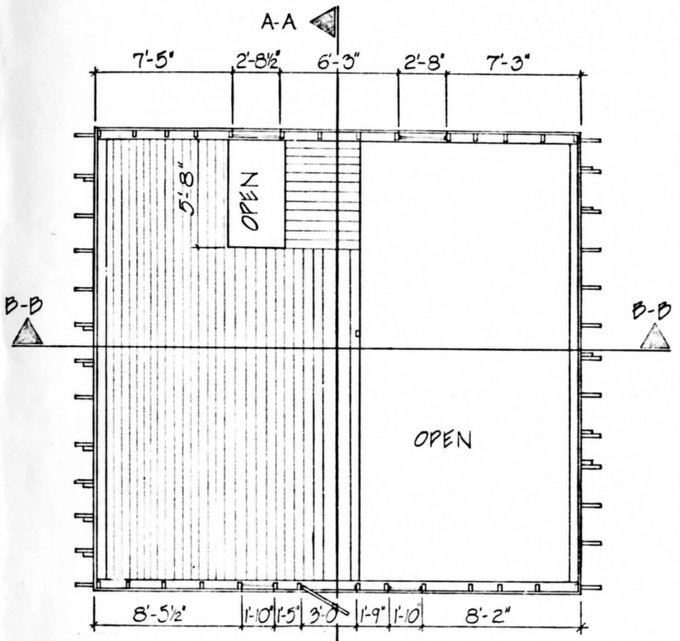


GROUND LEVEL PLAN

DRAWN AT ¼" = 1'-0"

▨ ROTTED WOOD

▧ NEW MATERIAL



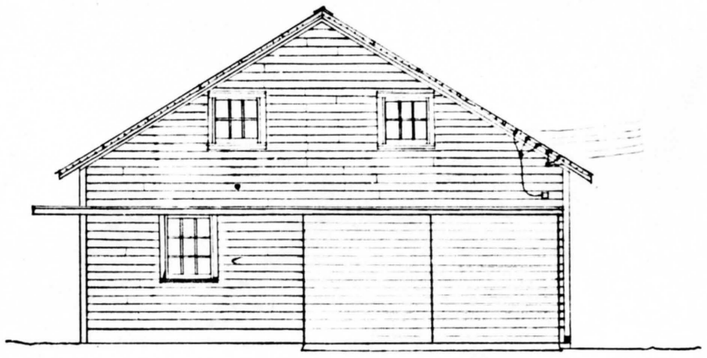
LOFT PLAN

DRAWN AT ¼" = 1'-0"

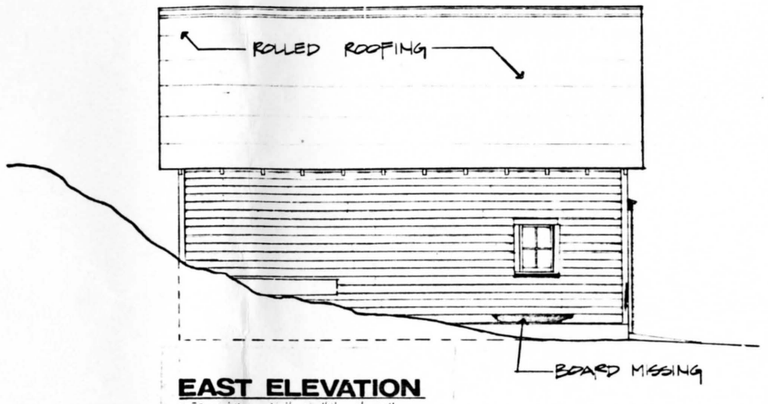
HOKENSON FISH DOCK BUILDINGS

Ice House Plans

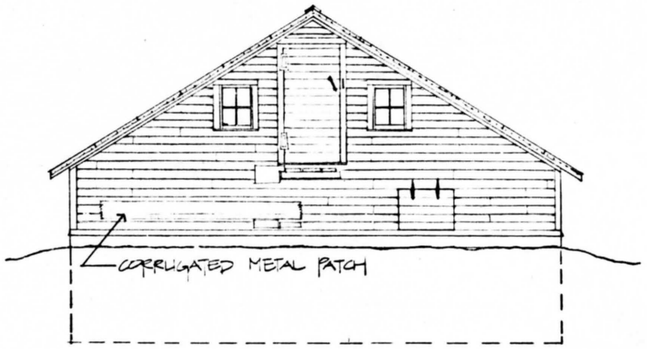
PREPARED	DRAWING NO.
DESIGNED CHRISTOFFER	633 28,000
DRAWN	PCIP PKG. / SHEET
CHECKED SIMMONDS	6
DATE 4/78	OF 7



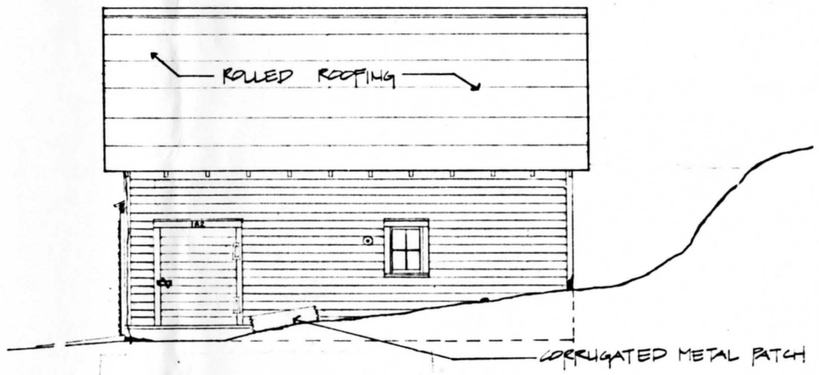
NORTH ELEVATION
DRAWN AT 1/4" = 1'-0"



EAST ELEVATION
DRAWN AT 1/4" = 1'-0"



SOUTH ELEVATION
DRAWN AT 1/4" = 1'-0"

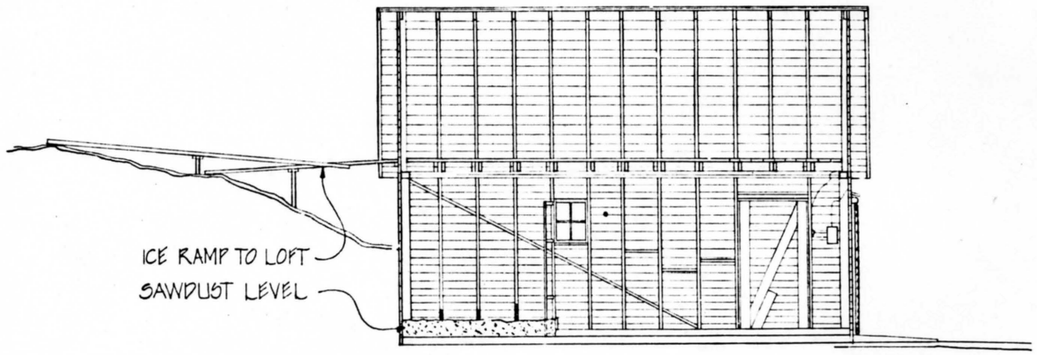


WEST ELEVATION
DRAWN AT 1/4" = 1'-0"

HOKENSON FISH DOCK BUILDINGS

Ice House Elevations

PREPARED	DRAWING NO.
DESIGNED CHRISTNER	633 28,000
DRAWN SIMMONDS	PCIP PKG. / SHEET 7
CHECKED	OF 17
4/79 DATE	



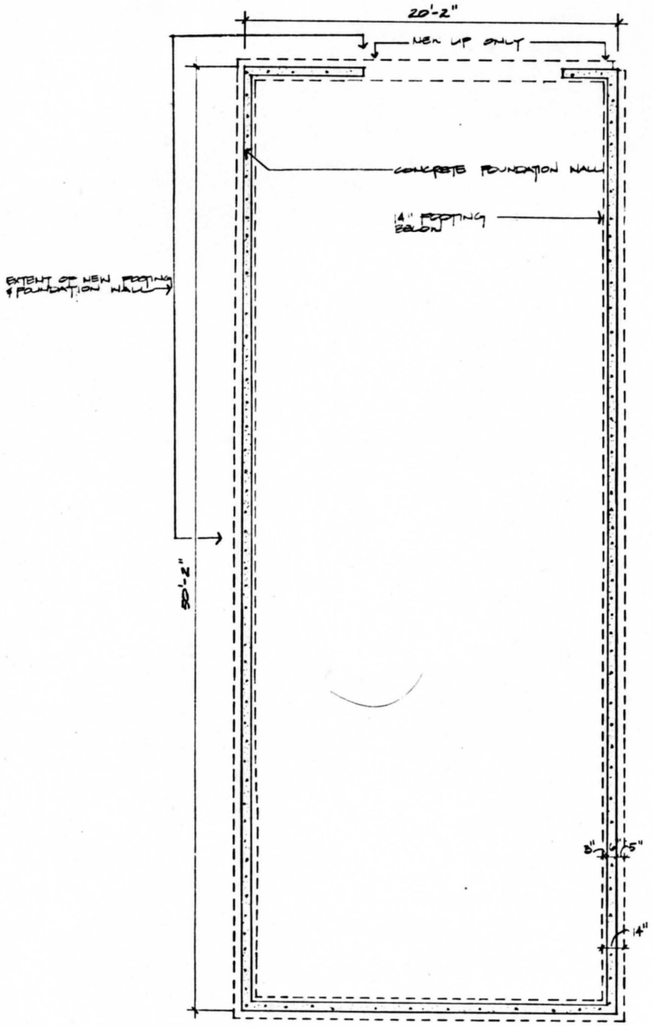
SECTION A-A
DRAWN AT 1/4" = 1'-0"

SECTION B-B
DRAWN AT 1/4" = 1'-0"

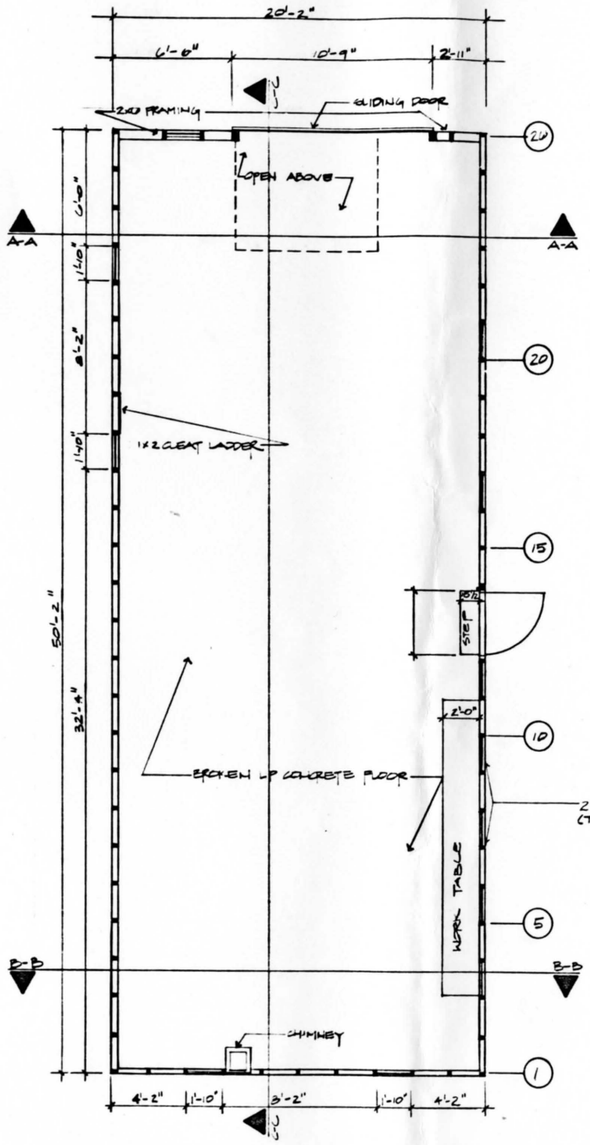
HOKENSON FISH DOCK BUILDINGS

Ice House Sections

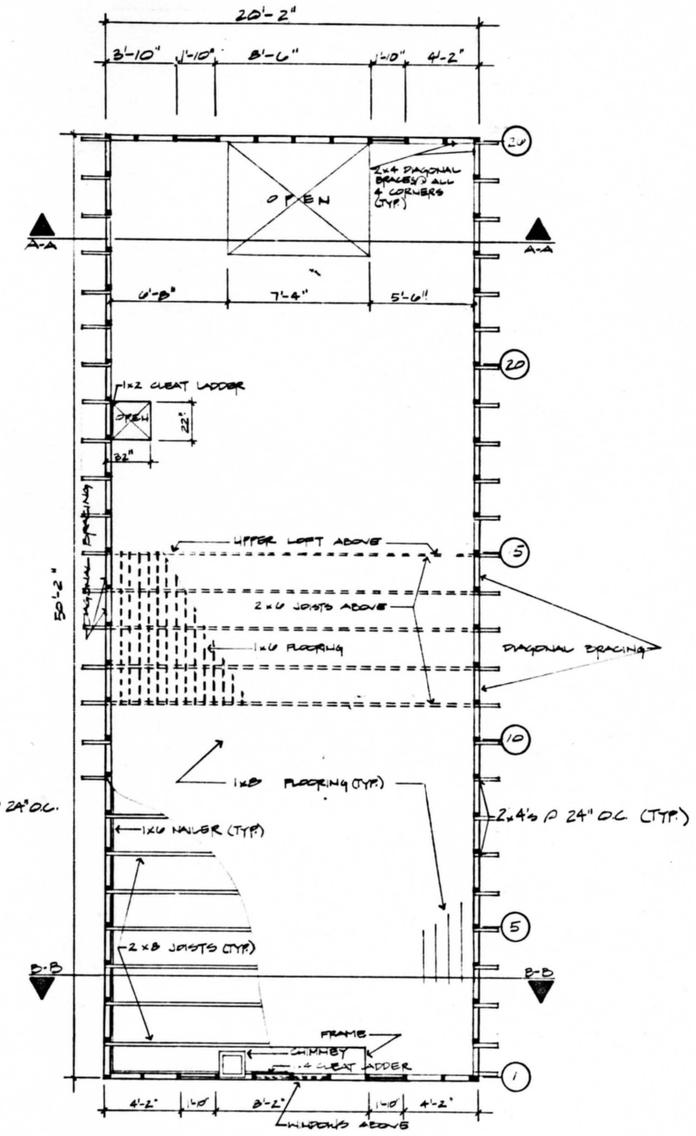
PREPARED	DRAWING NO.
DESIGNED CHRISTENSEN	6633 28,000
DRAWN SIMMONDS	PCIP PKG. / SHEET 3
CHECKED	OF 17
11-72 DATE	



EXISTING
FOUNDATION PLAN
DRAWN AT 1/4"=1'-0"



EXISTING
GROUND LEVEL PLAN
DRAWN AT 1/4"=1'-0"



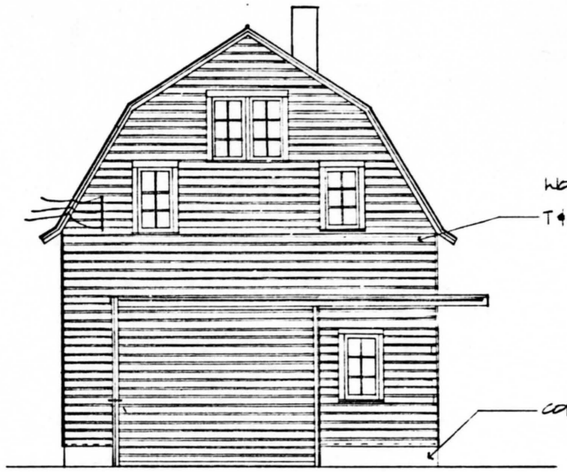
EXISTING
2nd LEVEL PLAN
DRAWN AT 1/4"=1'-0"

0 1' 5' 10' 15'

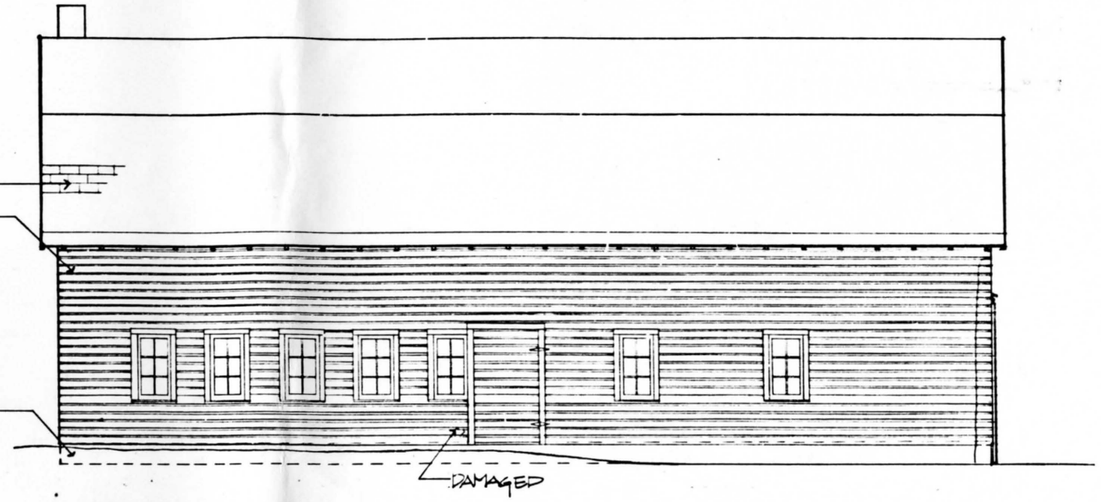
HOKENSON - FISH DOCK BUILDINGS

Twine Shed Plans

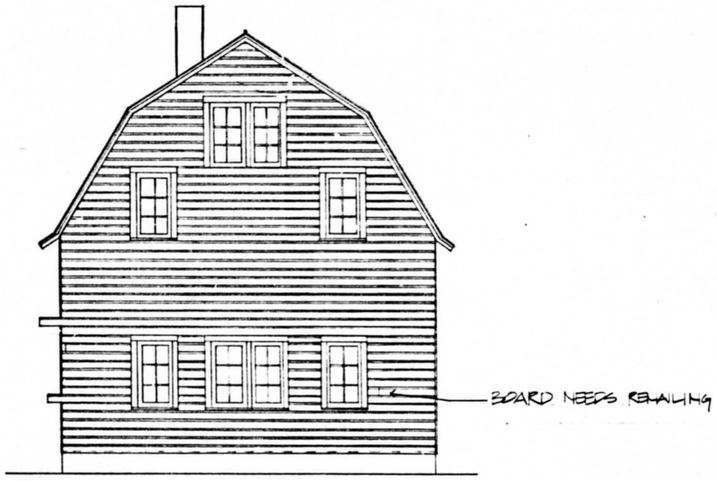
PREPARED	DRAWING NO.
DESIGNED BENDA	633 28,000
DRAWN SIMMONDS	PCIP PKG. — SHEET 9
CHECKED 1/73	— OF 17
DATE	—



NORTH ELEVATION
DRAWN AT 1/4"=1'-0"

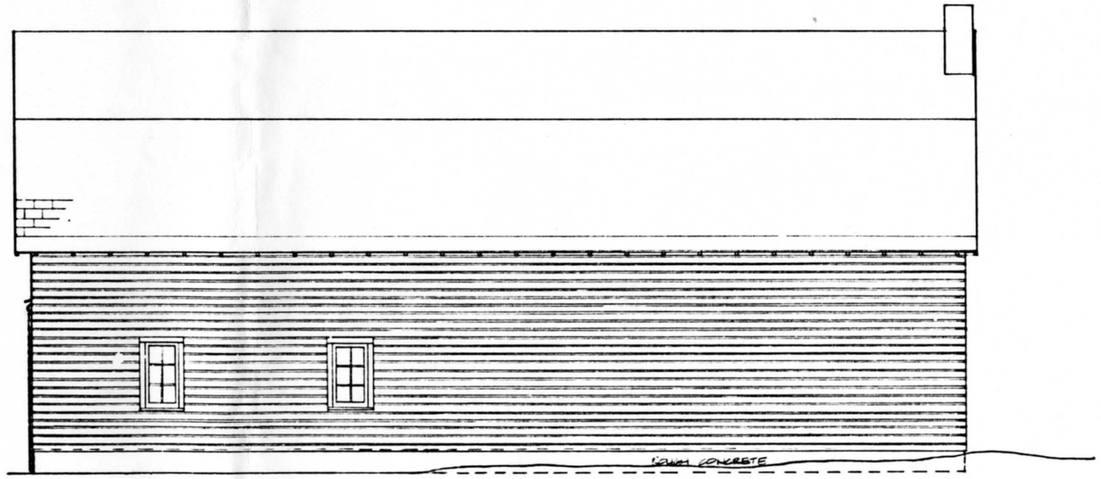


EAST ELEVATION
DRAWN AT 1/4"=1'-0"



SOUTH ELEVATION
DRAWN AT 1/4"=1'-0"

0 1' 5' 10' 15'

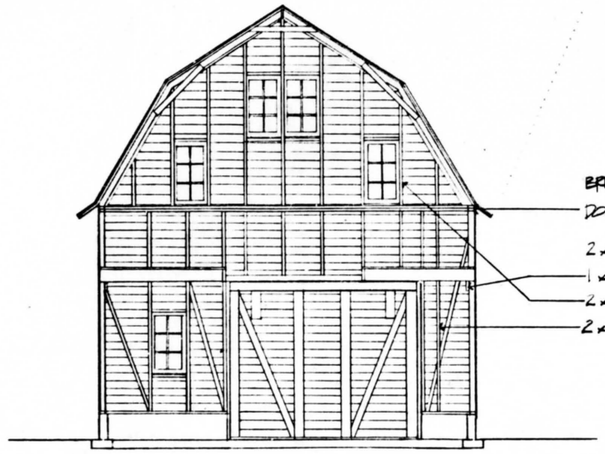


WEST ELEVATION
DRAWN AT 1/4"=1'-0"

HOKENSON FISH DOCK BUILDINGS

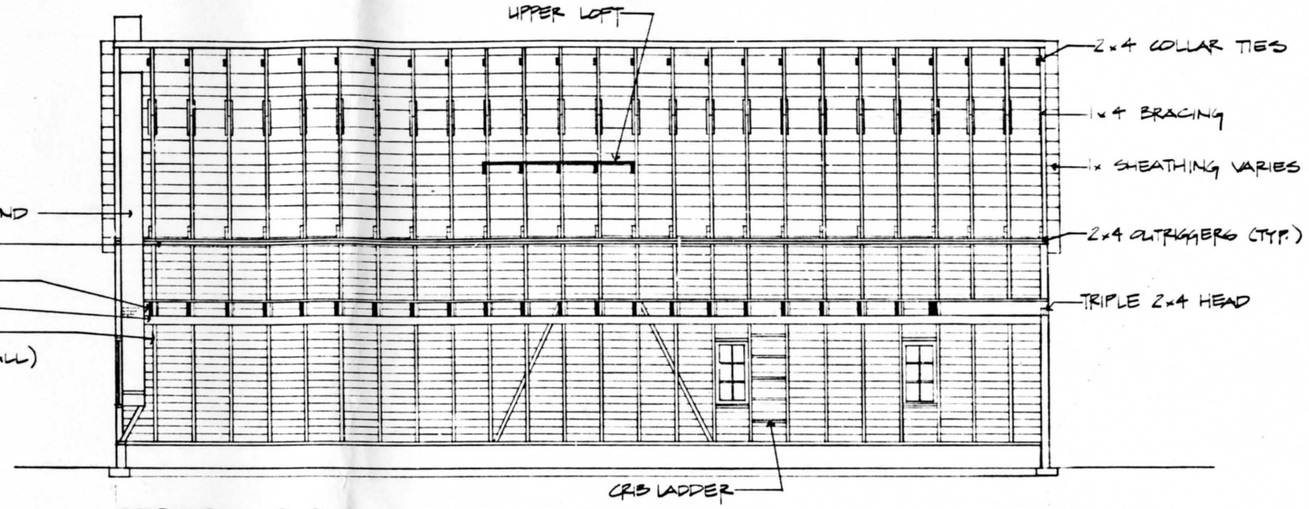
Twine Shed Elevations

PREPARED	DRAWING NO.
DESIGNED BENDA	633 28,000
DRAWN SIMMONDS	PCIP PKG. / SHEET 10
CHECKED	OF 17
11/73 DATE	



BRICK CHIMNEY-COMMON BOND
DOUBLE 2x4 PLATE
2x8 FLOOR JOISTS
1x6 NAILER
2x4 FRAMING (TYP.)
2x6 FRAMING (NORTH WALL)

SECTION A-A
DRAWN @ 1/4" = 1'-0"

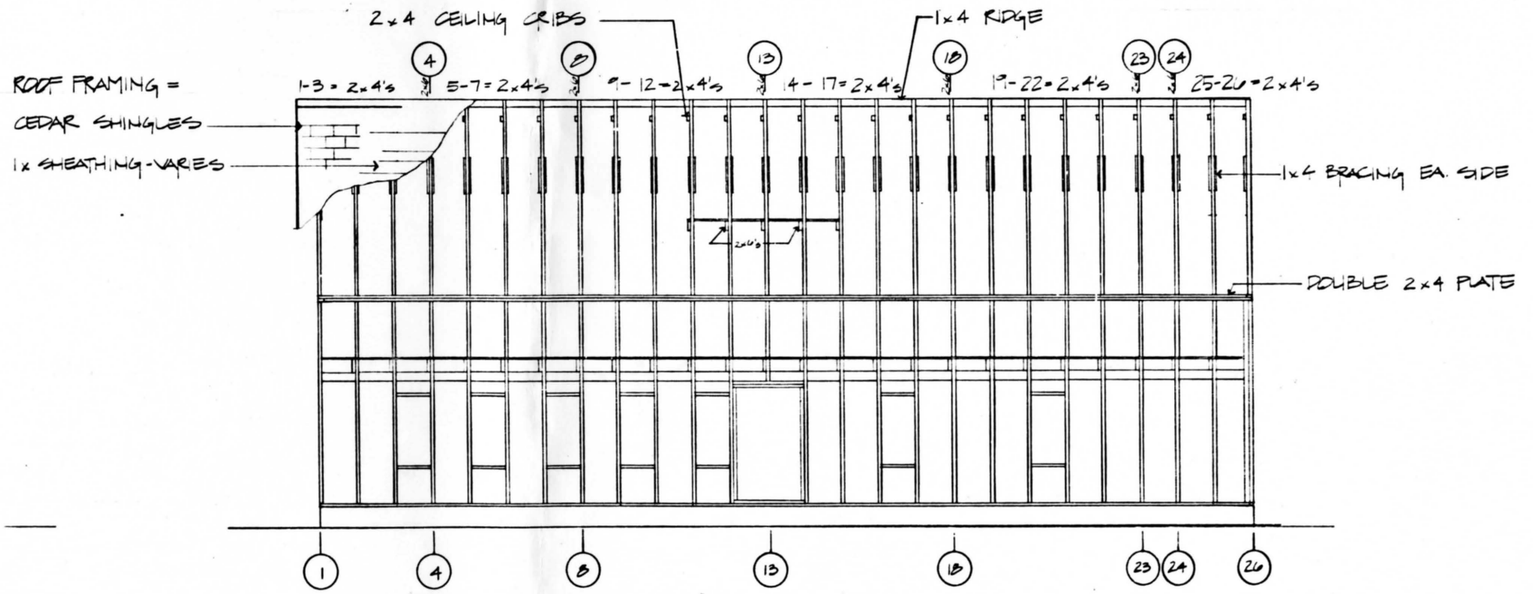


UPPER LOFT
2x4 COLLAR TIES
1x4 BRACING
1x SHEATHING VARIES
2x4 OUTRIGGERS (TYP.)
TRIPLE 2x4 HEAD
CRIB LADDER

SECTION C-C
DRAWN @ 1/4" = 1'-0"

SECTION B-B
DRAWN @ 1/4" = 1'-0"

0 1' 5' 10' 15'

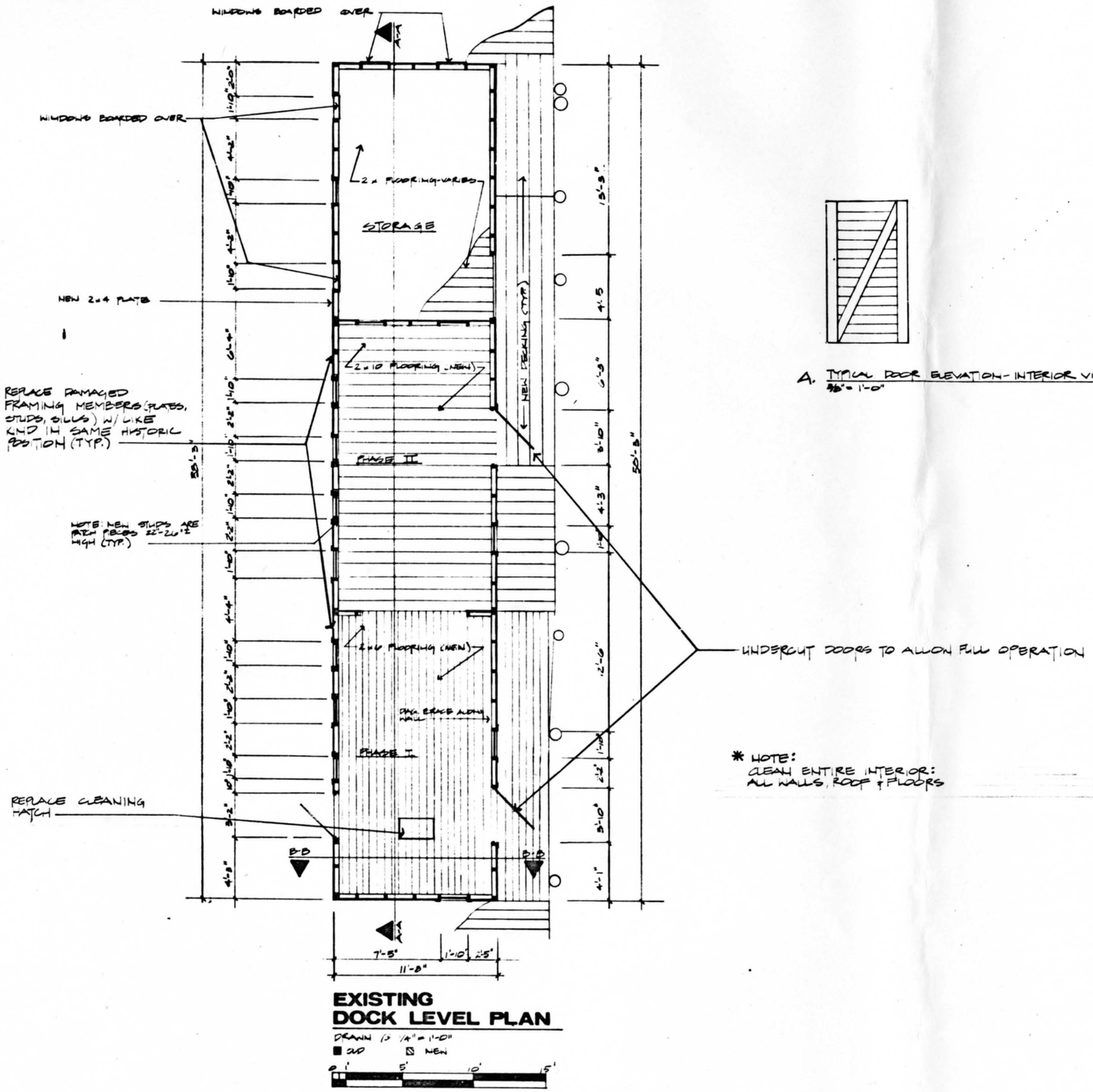


EAST FRAMING ELEVATION
DRAWN @ 1/4" = 1'-0"

HOKENSON FISH DOCK BUILDING

Twine Shed Sections

PREPARED	DRAWING NO.
DESIGNED BEJDA	633 28,000
DRAWN SMKJDP	PCIP PKG. — SHEET 1
CHECKED 11/73	— OF 17
DATE	—



EXISTING DOCK LEVEL PLAN

DRAWN 1/2 1/4" = 1'-0"

■ EXIST ▨ NEW

0 1' 5' 10' 15'

A. TYPICAL DOOR ELEVATION - INTERIOR VIEW

3/8" = 1'-0"

* NOTE:
CLEAN ENTIRE INTERIOR:
ALL WALLS, ROOF & FLOORS

RECOMMENDATION LIST

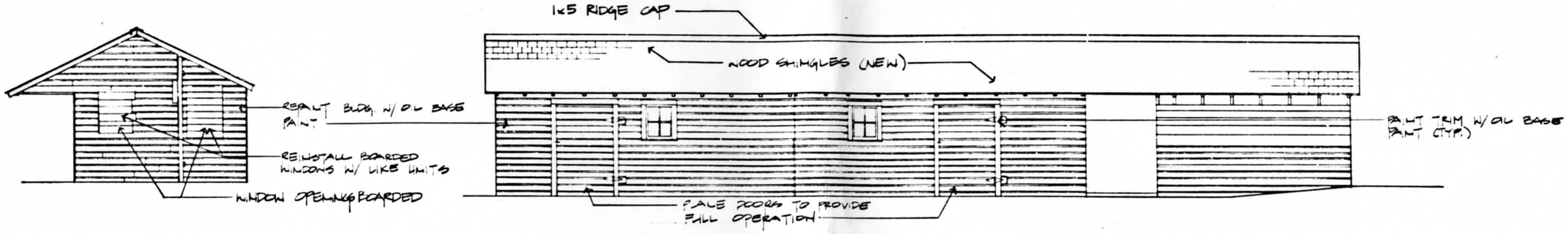
1. REPLACE DAMAGED FRAMING MEMBERS WITH LIKE KND IN HISTORIC LOCATIONS
2. REPLACE CLEANING HATCH
3. UNDERCUT DOORS TO ALLOW FULL SWING OPERATION
4. CLEAN ENTIRE INTERIOR

MAINTENANCE RECOMMENDATIONS

HOKENSON FISH DOCK BUILDINGS

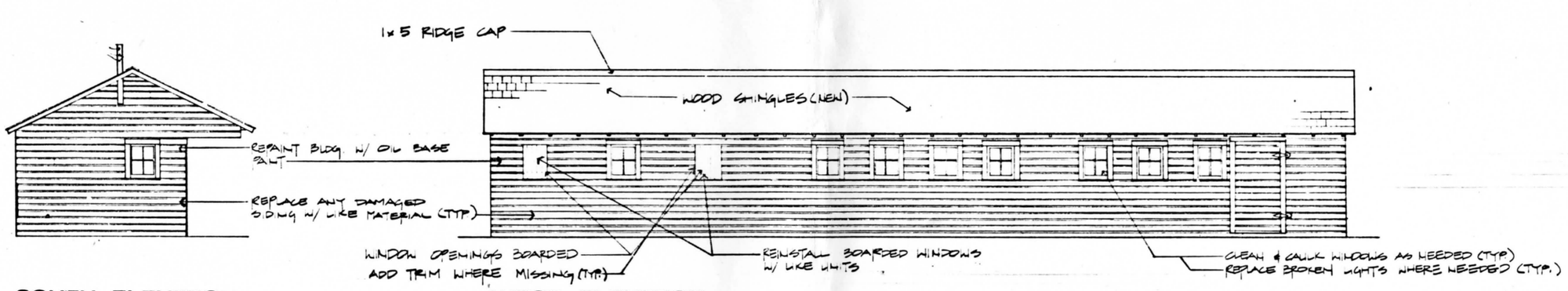
Fish House Plan

PREPARED	DRAWING NO.
DESIGNED	633
BENDA	28 000
DRAWN	PCIP PKG. / SHEET
SIMMONDS	
CHECKED	12
11/78	OF 17
DATE	



NORTH ELEVATION
DRAWN AT 1/4"=1'-0"

EAST ELEVATION
DRAWN AT 1/4"=1'-0"



SOUTH ELEVATION
DRAWN AT 1/4"=1'-0"

WEST ELEVATION
DRAWN AT 1/4"=1'-0"

0 1' 5' 10' 15'

MAINTENANCE RECOMMENDATIONS

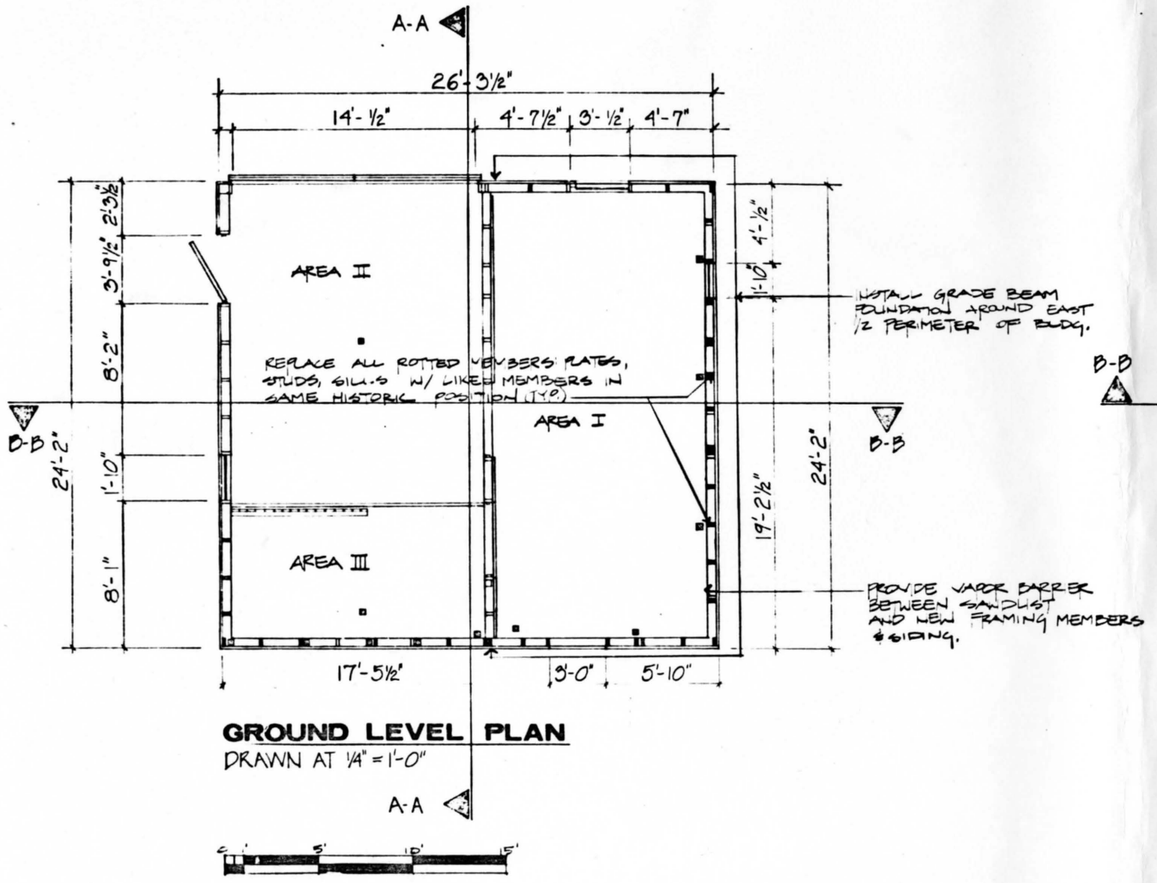
RECOMMENDATION LIST

1. REPAINT STRUCTURE & TRIM WITH OIL BASE PAINT, WHITE MATCH COLOR & TYPE
2. PLANE DOORS TO PROVIDE FULL OPERATION
3. REINSTALL BOARDED WINDOWS W/ LIKE UNITS
4. ADD TRIM WHERE MISSING
5. CLEAN & CAULK WINDOWS AS NEEDED
6. REPLACE BROKEN WINDOW PANES AS NECESSARY
7. REPLACE ANY DAMAGED SIDING W/ LIKE MATERIAL

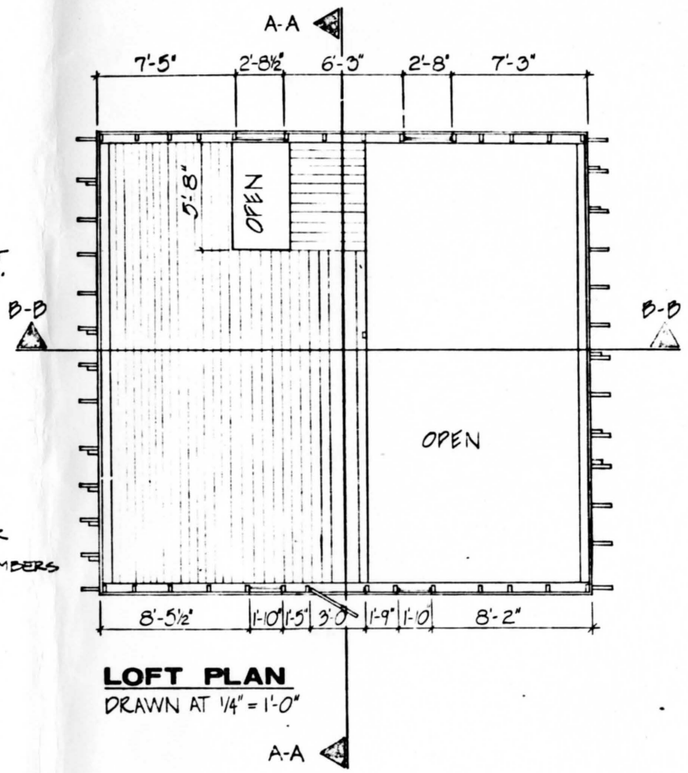
HOKENSON FISH DOCK BUILDINGS

Fish House Elevations

PREPARED	DRAWING NO.
DESIGNED BENDA	633 28,000
DRAWN SIMMONDS	PCIP PKG. — SHEET 13
CHECKED 11/73	— OF 17
DATE	—



GROUND LEVEL PLAN
DRAWN AT 1/4" = 1'-0"



LOFT PLAN
DRAWN AT 1/4" = 1'-0"

A-A

1' 5' 10' 15'

■ ROTTED WOOD
□ NEW MATERIAL

* NOTE
CLEAN ENTIRE INTERIOR:
ALL WALLS, ROOF, LOFT & FLOORS

RECOMMENDATION LIST

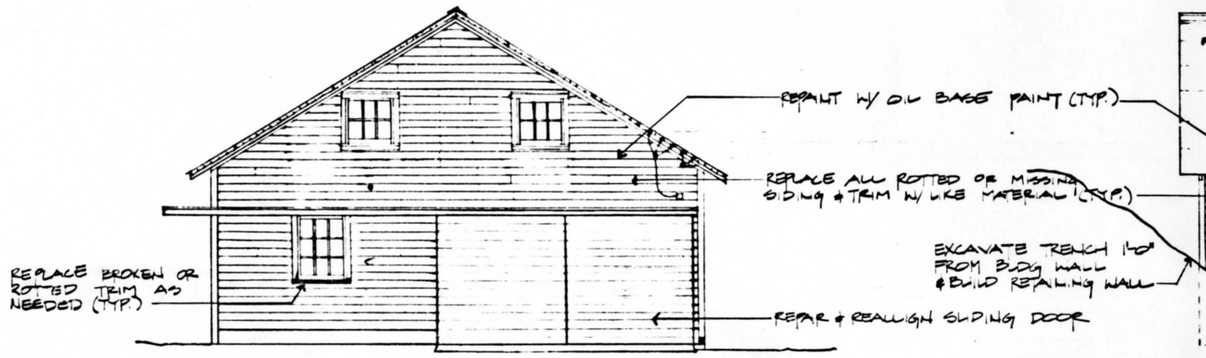
1. INSTALL GRADE BEAM AROUND EAST HALF OF BUILDING
2. REPLACE ALL ROTTED MEMBERS
3. PROVIDE VAPOR BARRIER
4. CLEAN INTERIOR

MAINTENANCE RECOMMENDATIONS

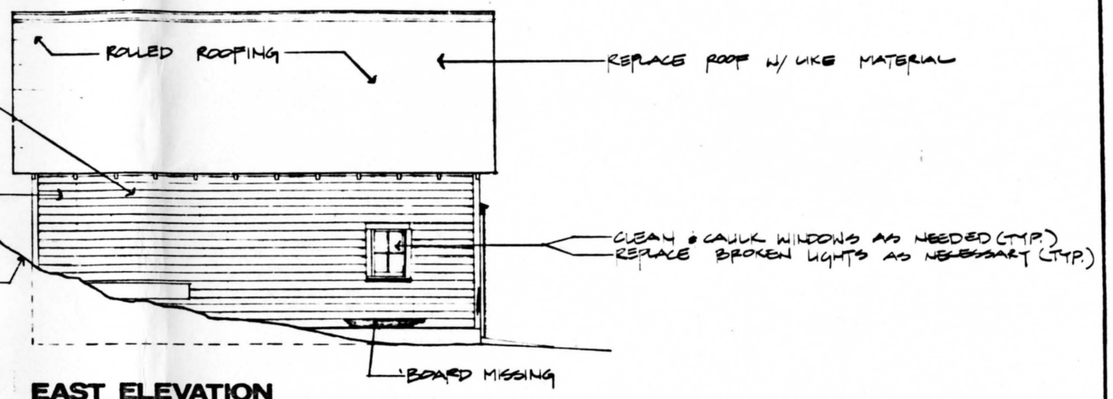
HOKENSON FISH DOCK BUILDINGS

Ice House Plans

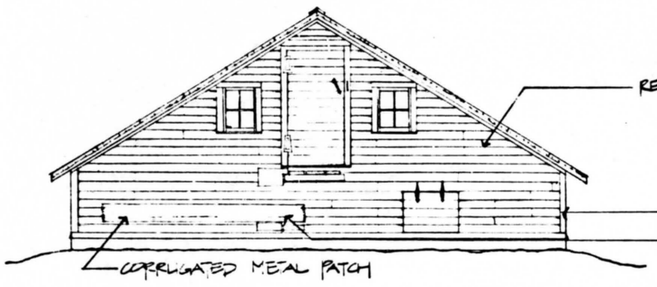
PREPARED	DRAWING NO.
DESIGNED CHRISTNER	233 28 000
DRAWN SIMMONS	PCIP PKG. — — —
CHECKED —	SHEET 14 OF —
DATE —	



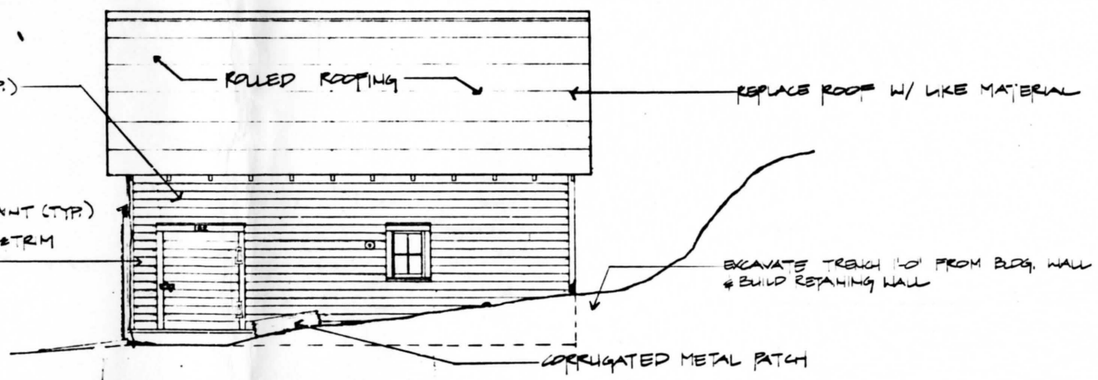
NORTH ELEVATION
DRAWN AT 1/4" = 1'-0"



EAST ELEVATION
DRAWN AT 1/4" = 1'-0"



SOUTH ELEVATION
DRAWN AT 1/4" = 1'-0"



WEST ELEVATION
DRAWN AT 1/4" = 1'-0"

0 1' 5' 10' 15'

RECOMMENDATION LIST

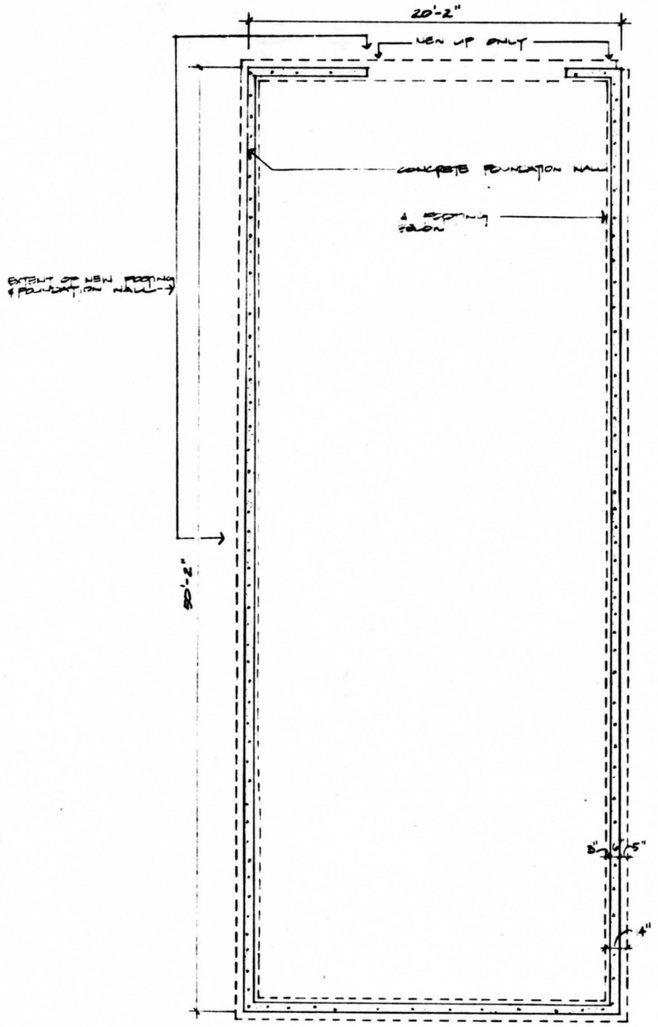
1. REPLACE ALL ROTTED OR MISSING SIDING & TRIM W/ LIKE MATERIAL
2. REPAINT STRUCTURE & TRIM W/ OIL BASE PAINT, MATCH COLOR & TYPE
3. TRENCH EARTH AWAY FROM BLDG., ADD RETAINING WALL
4. REPLACE ROOFING W/ LIKE KIND
5. CLEAN & CAULK WINDOWS AS NEEDED
6. REPLACE GLASS PANES WHERE NEEDED
7. REPAIR & REALIGN SLIDING DOOR

MAINTENANCE RECOMMENDATIONS

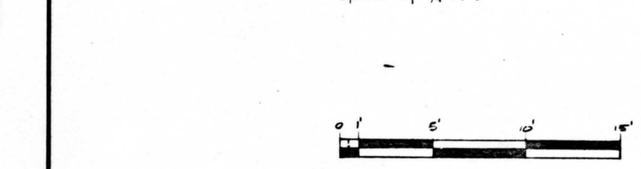
HOKENSON FISH DOCK BUILDINGS

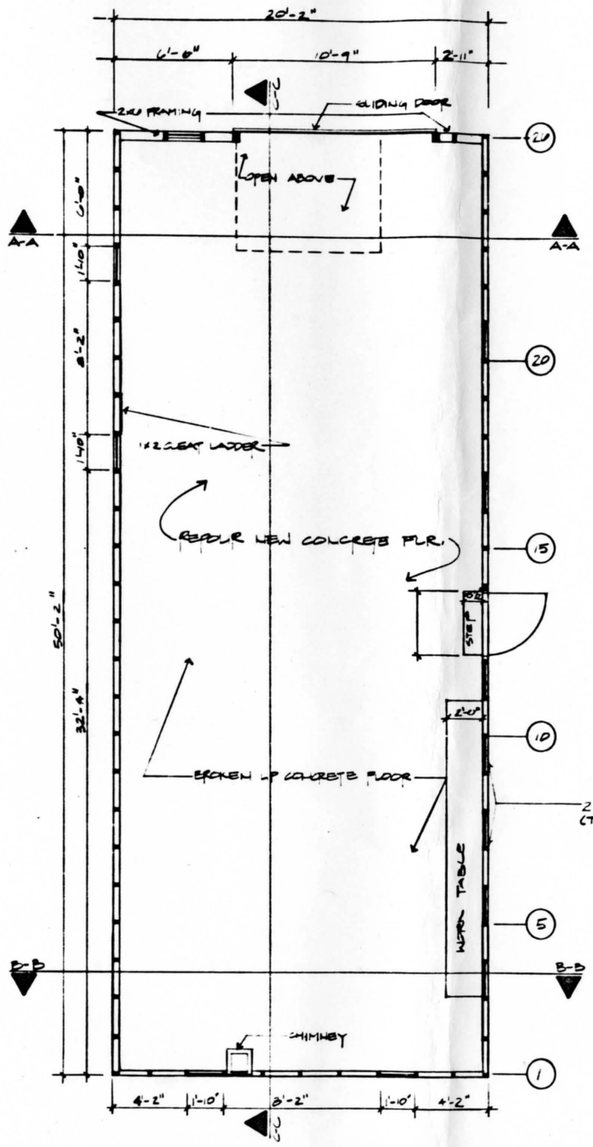
Ice House Elevations

PREPARED	DRAWING NO.
DESIGNED Christopher	433 28,000
DRAWN Simmons	PCIP PKG. — SHEET 5
CHECKED	— OF 17
DATE 8-79	



EXISTING
FOUNDATION PLAN
DRAWN AT 1/4"=1'-0"

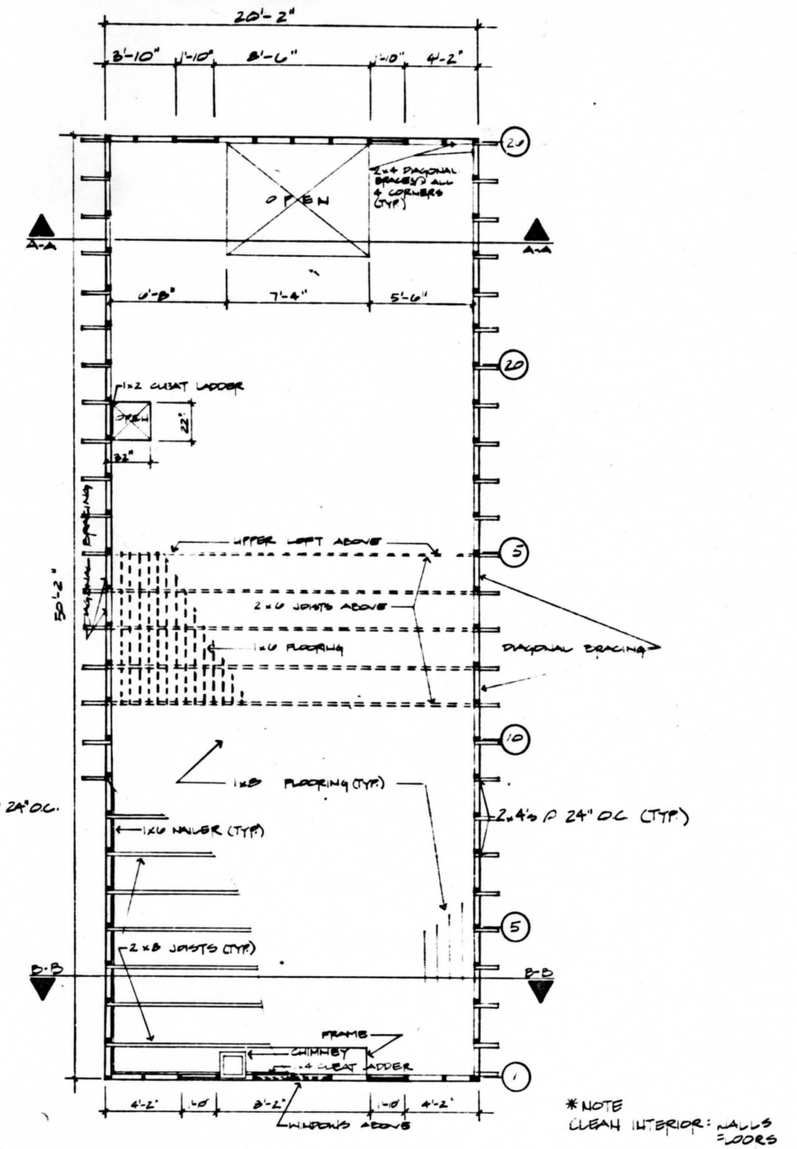




EXISTING
GROUND LEVEL PLAN
DRAWN AT 1/4"=1'-0"

RECOMMENDATION LIST

1. CLEAN INTERIOR
2. REPOUR CONCRETE FLOOR



EXISTING
2nd LEVEL PLAN
DRAWN AT 1/4"=1'-0"

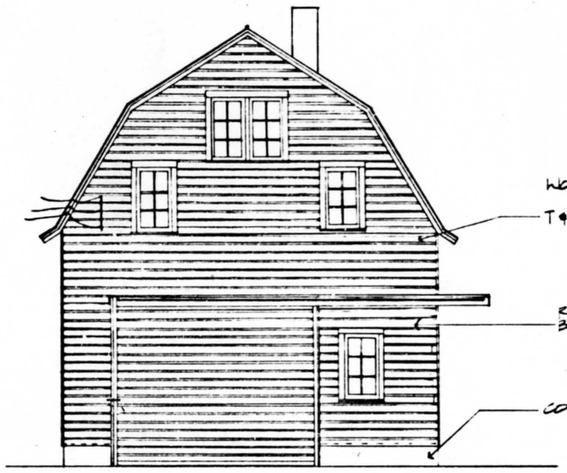
*NOTE
CLEAN INTERIOR: WALLS
FLOORS
JOISTS
ROOF
CEILINGS

MAINTENANCE RECOMMENDATIONS

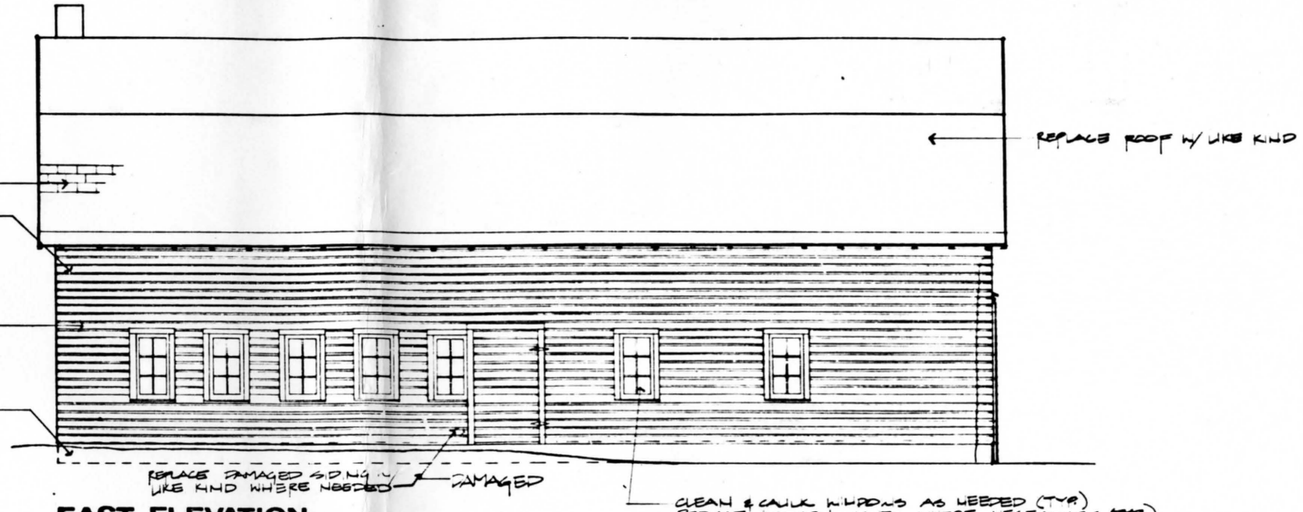
HOKENSON-FISH DOCK BUILDINGS

Twine Shed Plans

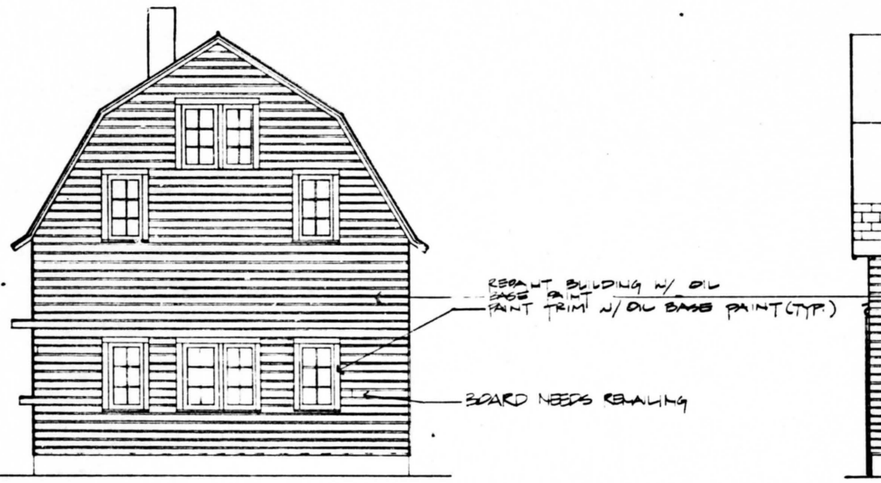
PREPARED	DRAWING NO.
DESIGNED BEVDA	633 28,000
DRAWN SIMMONDS	PCIP PKG. / SHEET
CHECKED TB	OF
DATE	



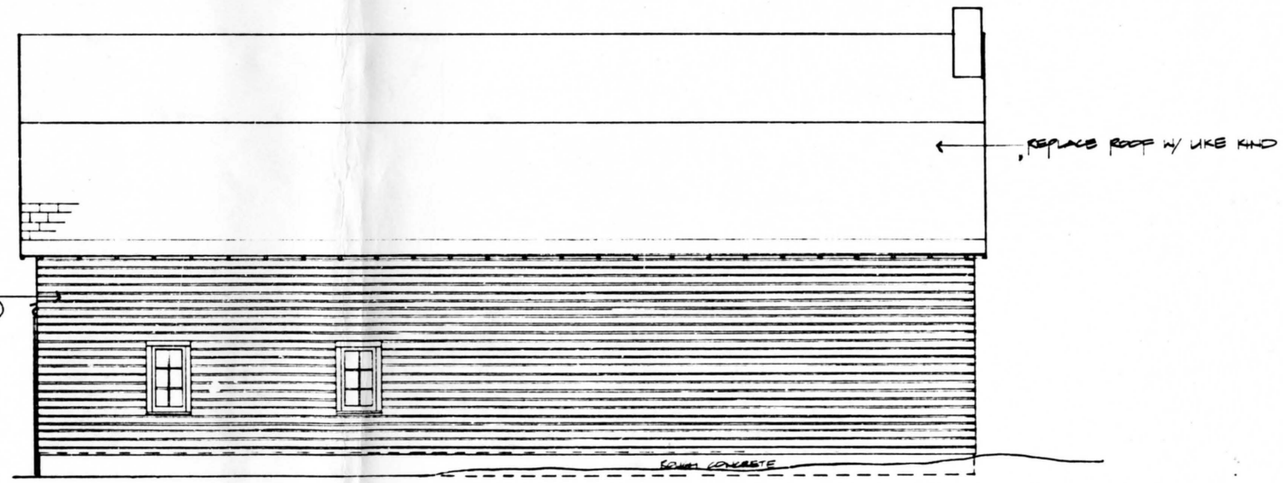
NORTH ELEVATION
DRAWN AT 1/4"=1'-0"



EAST ELEVATION
DRAWN AT 1/4"=1'-0"



SOUTH ELEVATION
DRAWN AT 1/4"=1'-0"



WEST ELEVATION
DRAWN AT 1/4"=1'-0"

0' 5' 10' 15'

RECOMMENDATION LIST

1. CLEAN & CAULK WINDOWS AS NEEDED
2. REPLACE BROKEN GLASS PANES WHERE NECESSARY
3. REPLACE ROOF W/ LIKE KIND
4. REPAINT STRUCTURE & TRIM W/ OIL BASE PAINT, WHITE, MATCH COLOR & TYPE
5. REPLACE DAMAGED SIDING W/ LIKE MATERIAL

MAINTENANCE RECOMMENDATIONS

HOKENSON FISH DOCK BUILDINGS

Twine Shed Elevations

PREPARED	DRAWING NO.
DESIGNED BENDA	633 28,000
DRAWN SIMMONDS	PCIP PKG. —
CHECKED	SHEET 17
DATE 11/78	OF 17

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NORTH ELEVATION