

## REQUIRED UPDATES TO 1976 WHITNEY LAKE SHORELINE MANAGEMENT PLAN

Note: The following list of items are changes to the 1976 Whitney Lake Shoreline Management Plan that are needed to comply with public law and district policy. These required updates will be included in the 2019 revision of the Shoreline Management Plan.

1. Page F-07: The term “Restricted Limited Development Area” will be eliminated. These areas were originally designated to recognize private docks located outside of Limited Development Areas and were given one year (beginning August 1976) to move to a Limited Development Area. If not moved they would gradually be removed from the lake through attrition. Today, the docks in these areas are allowed to remain in place as long as the permit remains in effect, the dock is maintained according to standards, and the permittee does not otherwise voluntarily remove the dock.
2. Page F-12: Section 6-07a (1) (a) 1. The sentence stating that “Repairs will not be allowed if the cost will exceed 50 percent of the cost of a new structure exactly like the one being repaired” will be removed. All docks may now be repaired or replaced as long as it is not a safety hazard and the permittee is in compliance with permit conditions.
3. Page F-12: Section 6-07a (1) (a) 2. This section will be removed because the 1 year implementation period has expired. Docks may no longer be moved to a Limited Development Area unless space exists within the Limited Development Area and dock owners go through the required procedures to obtain a space.
4. Page F-12: Section 6-07a (1) (b). This section on “Transfer of Ownership” will be changed to make it clear that transfer of ownership is allowed regardless of where a dock is located as long as the dock is compliant with standards for existing facilities.
5. Page F-18: Section 8-06. This section on Stairs, Elevators and Trolleys needs revision to be compliant with District policy dating back to 1988. In general, this policy prohibits installation of new elevators or trollies. New stairs may be permitted only in Limited Development Areas.
6. Page F-23 thru F- 34: Standards for Existing or New Facilities. These standards need revision to reflect current safety standards such as handrails and electrical.

DESIGN MEMORANDUM NUMBER 1C

**APPENDIX F**  
**LAKESHORE MANAGEMENT PLAN**  
**REVISED MASTER PLAN**

**WHITNEY LAKE**

BRAZOS RIVER BASIN

BRAZOS RIVER, TEXAS



U.S. ARMY ENGINEER DISTRICT

FORT WORTH, TEXAS

AUGUST 1976



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WHITNEY LAKE  
LAKESHORE MANAGEMENT PLAN  
SECTION I  
INTRODUCTION

1-01 Purpose - The purpose of this plan is to provide for the management of the shorelines of Whitney Lake.

1-02 Authority - The authority to establish this plan is ER 1130-2-406 dated 13 December 1974.

1-03 References -

- a. Fort Worth District Floating Facilities Policy, 1 November 1970.
- b. Title 16 U.S.C., Section 460d (Section 4, Flood Control Act of 1944, as amended).
- c. Title 32 U.S.C., Section 483a (The Right to Charge Fees).
- d. Title 43 U.S.C., Section 4321, 4331, 4347 (National Environmental Policy Act of 1969).
- e. Title 43 U.S.C., Sections 1155, 1157, 1158 to 1251 et seq. (Federal Water Pollution Control Act, as amended).
- f. Title 36, Chapter III, Part 327 Code of Federal Regulations (Rules and Regulations Governing Public Use).
- g. Title 42 U.S.C., Section 4331 (Executive Order 11752, Environmental Policy Act).
- h. Title 33, Chapter II, Part 209, Section 209.120, Code of Federal Regulations (Permits for Work in Navigable Waters and Ocean Waters).

1-04 History - Whitney Lake was authorized in the Flood Control Acts of 18 August 1941 and 22 December 1944. Construction began in May 1947 and impoundment of water began in December 1951. Prior to 1 November 1970 permits were issued on request of private citizens for private floating facilities and other facilities when their plans and specifications were approved. The number of private floating facilities on the lake increased until by the mid-1950's, there were over 800 facilities. The flood of 1957 caused the destruction of about half of these facilities. Recreational use of the lake increased significantly during the 1960's. After 1 November 1970 private floating facility permits were no longer transferrable and no new permits were issued.





## SECTION II

### OBJECTIVES OF THE PLAN

2-01 General - The objectives of this plan are to manage the resources of Whitney Lake to afford maximum use and enjoyment of the lake lands and waters for all segments of the public and to honor past commitments to private individuals.

2-02 Commercial Concessions - Boatowners will be encouraged to moor their boats at commercial marinas, utilize dry storage facilities off project lands or trailer their boats to public launching ramps which are provided by the Corps at no charge. Concessionaires will be encouraged to increase their storage capacity based on public demand. Additional concessions will be considered when the need is demonstrated.

2-03 Private Exclusive Use - Private exclusive use privileges have been granted in the past for floating facilities and other lakeshore uses. Accordingly, past written commitments will be honored. Because of the intense recreational use, and need to protect water quality and environmental values, it is not an objective to extend private exclusive use privileges to areas where conflicts with general recreational use may occur.

2-04 Public Involvement - The public has been involved in the draft of this plan through their comments on the proposed regulation published in the Federal Register on 30 May 1974, workshops held at the project on 23 May 1975 and 30 June and 1 July 1976, a public meeting held at Whitney High School on 10 June 1975, and verbal and written contacts to Corps' personnel during the period from May 1974 to August 1976. Each future review involving any change of consequence to this plan will follow a similar procedure. (See Section X).



## SECTION III

### DESCRIPTION OF SHORELINE

3-01 General - Whitney Lake was constructed in a section of the Brazos Basin which flows through hill country and the topography varies from gently sloped banks to steep high cliffs which rise to some 200 feet above the river bottom.

3-02 Shoreline - The shoreline is 250 miles long at the normal pool elevation of 533 feet above sea level. This shoreline is made up of approximately 25 miles of vertical bluffs which rise 15 feet or more from the water's edge; 125 miles of steep banks adjacent to deep water; and 100 miles of gently sloping banks. Pool level fluctuations in elevation average 20 feet from high to low every year and can vary as much as 61 feet in a single year. Pool level variations can change the shoreline over 100 feet horizontally for every one foot vertical change in the gentle sloping areas. About 40 percent of the surrounding land area is in timber. Dominant tree species on Whitney Lake are juniper, live oak, and elm with many other deciduous species found in less abundance. Ground cover consists of native grasses and forbs with grass species being dominant in areas with thin, rocky topsoil.

#### 3-03 Present Land Use

a. Corps of Engineers - The Corps manages 4,094 acres of designated park areas for high intensity recreational use; 565 acres of natural areas and minimum physical development for low intensity public use; 3,880 acres of wildlife areas where management is directed to soil, vegetative and habitat improvement; and 9,776 acres which are set aside for management of resources for multiple recreational uses not requiring supporting facilities.

b. State of Texas - The Texas Parks and Wildlife Department manages 955 acres designated as Lake Whitney State Park for high intensity recreational uses.

c. Non-Profit Agencies - Non-profit organizations or agencies rendering a public recreational/educational service of a charitable or character building nature manage 858 acres for group use on a non-exclusive basis.

#### 3-04 Existing Private Development

a. Private Floating Facilities - At present there are four main types of floating facilities under permit on the lake. First are boathouses, either closed or open, with slips for the mooring of boats, designed to store the boat within the confines of the outer dimensions of the facility. Second are inclosed structures of the houseboat-type which are permanently moored at random sites around the lake. These structures are not and cannot be used for storage for boats. They are used primarily as fishing shacks and/or weekend cabins. Third are open flat docks or barges used as open mooring docks beside which boats can tie up or which can be used as fishing platforms. Fourth are the pontoon-type deck boats or barges to which a motor can be mounted. Most of these are used as semi-permanent fishing platforms and many are permanently moored at a bank site or anchorage without a dock.

b. Commercial Concessions - At present there are four commercial concessions on the lake with the capacity to store 247 floating boats and 164 in dry storage. Two of the concessions provide complete marina service including storage, fuel, sales, and repair, while the other two do not offer repair or sales except for bait, tackle, and fuel. The concessions with dry storage provide the service of placing the boat on the reservoir and removing it as the customer desires.

c. Commercial Developments - There are 14 lodge-type operations on private land adjacent to Government property which have limited water facilities available for their customers and with rights for providing some emergency service for the general public such as refueling.

d. Subdivisions - There are 68 active or planned subdivisions concentrated in eight main areas around the lake. Residents of these subdivisions have the same rights as other adjacent owners of free foot access to the adjoining public lands for recreational purposes. As adjacent owners, they have no special rights or privileges beyond those of other visitors, regardless of where they may reside.

3-05 Existing Access - Existing access roads to designated park areas, which were constructed and maintained by the Corps are good to excellent. Access to areas outside the developed park areas is generally poor. Many of these are old volunteer roads and are undedicated. Pedestrian access is good in most areas.

3-06 Indian Lands - There are no Indian lands within the boundaries of Whitney Lake project.

3-07 Joint Jurisdiction - No other Federal agencies have jurisdiction over administration of the Takeshore covered by this plan.

SECTION IV  
LAKESHORE ALLOCATION

4-01 General - Whitney Lake shoreline is allocated into specific categories as shown by the attached Lakeshore Management Plan Map. Detailed site investigations of each area were accomplished before area classification was established. Factors taken into consideration during the shoreline survey were as follows:

- a. Site, size and location.
- b. Land profile.
- c. Exposure to wind and currents.
- d. Accessibility to the public.
- e. Water depth.
- f. Vegetative growth
- g. Site environment.
- h. Aesthetics.

Areas along the shoreline are presently being used according to the allocations as set forth in Section 4-02 below.

a. Limited Development Areas - Limited development areas are those areas allocated for the mooring of privately owned floating facilities. Four areas were initially designated as meeting the criteria for limited development areas and are listed below with their capacities and number of existing facilities. Because the capacity for additional facilities in these four areas is very limited, and because under this allocation a majority of existing facilities were located in public use areas and protected lakeshore areas, eleven additional areas were designated as restricted limited development areas and are also listed below. These areas will be treated the same as the limited development areas except that no new facilities will be permitted, and when a facility is removed for any reason the space will also be eliminated. Ownership may be transferred in these areas subject to the facility meeting requirements of the standards for existing facilities at the time it is sold.

<u>Limited Development Areas</u>	<u>Capacity</u>	<u>Existing</u>
Steele Creek Harbor	25	22
Redwood Cove	15	13
King Creek	12	25
Little Rocky (West Shore)	75	64
Total	127	124

<u>Restricted Limited Development Areas</u>	<u>Capacity</u>	<u>Existing</u>
Little Rocky (East Shore)	25	22
Big Rocky	15	6
Pioneer Cove (Cedar Creek Park)	8	3
Live Oak (Cedar Creek Park)	15	12
Wann's Slough	10	16
Deep Canyon	6	4
Hillcrest Camp	10	11
Moore's Slough	5	4
Angler's Haven	5	5
Sunset Lodge Slough	4	0
Navy Camp	6	0
Total	109	83

## Marinas

Three concession areas, Cedar Creek Marina, Dave's Marina, and Aero Vista Marina, will also be considered as Restricted Limited Development Areas. All private floating facilities in these areas will be required to obtain a Corps of Engineers' permit and meet requirements of the standards for existing facilities within one year after implementation of this plan. New private floating facilities will not be permitted in these areas. Private floating facilities in concession areas are subject to additional controls or terms of agreements with the concession operator.

If the above areas do not provide enough space for owners wishing to move their facility from a public use area or protected lakeshore area during a one year period following implementation of this plan, this allocation will be reevaluated and additional restricted limited development areas will be established at that time. No permits for new facilities will be issued for available spaces in the four limited development areas until all owners of existing facilities have had the opportunity to move in accordance with Section 6-07 of this plan.

b. Public Recreation Areas - There are 16 designated public recreation areas on Whitney Lake including Lake Whitney State Park. Existing private facilities will be allowed to remain under the provisions of the "grandfather clause." At the present time there are private facilities located within six of these public parks. Implementation of this plan will include eventual removal through attrition of all private facilities from recreation areas. Except for unique situations, vegetative modification permits will not be issued in areas under this allocation. Land form modification (changing of contours) will not be allowed by adjacent owners.

c. Protected Lakeshore Areas - Protected lakeshore areas are designated primarily to protect aesthetic, environmental and wildlife resources. These areas are available for low density recreational activities requiring no physical development. No new private facilities of any type will be permitted in such areas and existing facilities will be eliminated by attrition. Modification of land form and vegetation by private concerns may be permitted only after due consideration of its effects or the environmental and physical characteristics of the site.

d. Prohibited Access Areas - These lakeshore areas are allocated for project operation facilities, protection of ecosystems, and the physical safety of the recreation visitors. This allocation includes the project headquarters, embankment (front and back slopes) and stilling basin. Private exclusive use and modification of land form and vegetative communities is not permitted in these areas.

## SECTION V

### PERMITS

5-01 Lakeshore Use Permits - Permits are issued and enforced in accordance with provisions of Section 327.19, Chapter III, Title 36, Code of Federal Regulations. Permits are issued from the project office for all structures of any kind that are to be in the waters of the lake for a period of 72 hours or longer. These permits are nontransferable and shall become null and void upon sale or transfer of the structure, or the death of the permittee. Existing permittees will be allowed to place the name of the spouse on a renewal permit to be issued under this plan. This permit shall remain in effect for 5 years and will be renewed as long as either spouse shall live if the facility is properly maintained. Lakeshore use permits are also issued for vegetative modification activities on the land which does not involve in any way a disruption to or a change in land form. Lakeshore use permits are subject to revocation with thirty (30) day's notice if removal of the permitted structure or activity is required to conform with the law, this plan, or the operational procedures of the lake.

5-02 Department of the Army Permits - Permits for such activities as dredging, construction of fixed structures, including fills and combination fixed-floating structures, and the discharge of dredged or fill material in navigable waters will be issued under conditions specified in permits issued under authority of Section 10, Rivers and Harbor Act of 3 March 1899 (33USC 403) (not applicable to Whitney Lake) and Section 404 of the Federal Water Pollution Control Act (33USC 1344). Lakeshore Use Permits will not be used under these circumstances.

5-03 Real Estate Instruments - Real Estate instruments shall cover all commercial development activities and all activities by individuals which are not covered in Sections 8 and 9. These involve changes in land form or appropriate land-based support facilities required for private floating facilities. All rights-of-way for waterlines, stairways, trolleys, roads, electric lines, and livestock movement and watering shall also be included and must be covered by a Real Estate instrument. Use of Government land covered by a Real Estate instrument shall be at not less than the appraised fair market value.

5-04 Conditions - Any individual or group wishing to change, landscape, build upon, or place upon Government property any facility, must obtain written permission through the project office. Plans must be approved by project officials prior to a permit being issued. All plans must be submitted on 8½" by 14" legal size paper. Construction of shoreline improvements will be subject to the following requirements:

- a. Only hand operated tools may be used. The use of heavy equipment such as tractors and bulldozers is not permitted.
- b. Only dead or diseased trees, previously inspected by project officials may be cut. Any cut trees must be removed from Government owned lands.
- c. No flowering trees or shrubs such as dogwood or redbud may be removed, regardless of their size.
- d. Trimming of healthy trees is prohibited.

5-05 Fees - Project Rangers must inspect the site where any work on public lands is to be done. Before the permit is issued an exact understanding must be reached as to what will be done and in what manner. A final inspection will then be made once the work is completed as well as an annual inspection to insure compliance with permit conditions. For private floating facilities an administration charge of \$10 will be made for permits as they become eligible for renewal after implementation of this plan. A \$5 annual inspection fee will also be made and will be collected at the time of issuance of the permit. A \$10 administration charge will be made for lakeshore use permits issued for other structures, vegetative modification, or landscaping. No fee will be charged for mowing and landscaping inspections, or for mowing only where the purpose is for safety and/or is to the benefit of the Government.





## SECTION VI

### IMPLEMENTATION OF THE PLAN

6-01 Existing Facilities Now Under Permit - On 1 December 1975 there were 324 permitted floating facilities on the lake.

6-02 Existing Facilities in Limited Development Areas - Of the 324 permitted facilities, 124 are presently in designated "limited development areas" which have an ultimate capacity of 127. An additional 83 permitted facilities are located in designated restricted limited development areas which have a capacity of 109.

6-03 Existing Facilities in Public Recreation Areas - On 1 December 1975 there were 69 facilities, with permits, in designated or developed public parks.

6-04 Existing Facilities in Protected Lakeshore Areas - On 1 December 1975 there were 134 facilities in these areas. With establishment of restricted limited development areas, there are 63 facilities remaining in protected lakeshore areas.

6-05 Existing Facilities in Prohibited Areas - None

6-06 Policy and Standards

a. Commercial Concessions - Wet storage of boats is preferred at commercial concessions rather than private floating facilities. All commercial operations or activities on areas under control of the Corps shall be in accordance with the terms in the Real Estate instrument. These terms will meet or exceed the safety and construction standards required for private facilities. Project officials are responsible for reporting deficiencies and for inspection of the facilities for compliance with the instrument.

b. Community Dry Storage - This type operation will be encouraged above all other alternatives in the future as it provides the greatest environmental protection. Developers, subdivisions, or communities desiring to construct dry storage on private lands may obtain a boat launching complex and access road through a Real Estate instrument subject to the following conditions: Compensation will be at fair market value, the facility will be open to the general public, and plans for the complex and access along with a centerline description of the area will be submitted for prior approval. Approval for this type of facility will depend on the desired location's impact on aesthetic and environmental conditions and the distance from commercial concessions.

c. Community Docks - Community docks will be encouraged in order to reduce the proliferation of individual facilities. Lakeshore permits will be granted for such facilities in "limited development areas" when the sites are removed from commercial marine services and granting of such permits will not despoil the shoreline nor inhibit the public use of the area. It is the policy to issue only one permit for a community boat mooring facility with one person designated as the permittee and responsible for all moorage spaces of the facility. This type of facility shall be for a minimum of five boats and will be for the storage of boats only. No fuel or other concession privileges will be granted.

d. Private Facilities - Permits for private exclusive use facilities either individually or community-owned, will be granted in "limited development areas" when spaces are available. Owners of existing permitted structures will be given the first opportunity for the available spaces. Any remaining spaces will be available for new structures.

6-07 Permit Provisions

a. Grandfather Rights - The Government will honor valid permits issued before 01 November 1970 for existing structures under a grandfather clause or rights. These "rights" provide that such structures will be allowed to remain in their present locations for the term of the permit. The permit will be renewed as long as the structure is properly maintained, remains in the same ownership, the owners comply with the conditions of the permit and the area is not required for a higher priority use.

(1) Facilities Having Current Permits:

(a) Owners of presently permitted facilities which are not in one of the four limited development areas or in a restricted limited development area will have three options under this plan:

1 Under provisions of the Grandfather Clause they may leave their facility at the present location providing the structure is brought up to the Standard for Existing Facilities within one year after this plan is implemented. Repairs will not be allowed if the cost will exceed 50 percent of the cost of a new structure exactly like the one being repaired.

2 They may request in writing to move their facility into a limited development area or a restricted limited development area as listed in paragraph 4-02a. within one (1) year after implementation of this plan providing capacity for additional facilities exists at the desired area.

3 After the one year period for moving an existing facility, an owner may still move his facility into one of the four limited development areas if a space is available and he secures a permit through the drawing procedures listed below.

(b) Transfer of ownership of an existing facility may be done under the following conditions:

1 The facility must be in a limited development area or a restricted limited development area; or the new owner must have a permit for a space in one of the four limited development areas and must move the facility into the limited development areas when the sale is consummated.

2 The facility must conform to all of the requirements of the standards for existing facilities at the time it is sold. A joint inspection will be arranged by the seller, with the buyer, seller, and project personnel before the sale is consummated to assure all parties are aware of the conditions of the sale.

(2) New Space Allocations:

(a) Structures which meet standards for existing facilities will be given first priority for available spaces in limited development areas or restricted limited development areas for the first year following implementation of this plan. Owners who wish to move their structure into a limited development area or restricted limited development area must notify the Project Engineer in writing of their desire to move. No letters will be accepted beyond (1) one year after this plan goes into effect. No drawing for permits under "c" below will be carried out until all who are eligible to move have done so.

(b) Community Governments and/or non-profit coops of boatowners who desire to construct and maintain the aforementioned "community dock" will have second priority for spaces as they become available in the limited development areas. Representatives of these groups must notify, in writing, the project manager of their desire to place a community dock on the lake. A list will be developed with order of priority based on the date of receipt of letter notification, with the first notification received being placed at the top of the list.

(c) After this list is exhausted and additional spaces become available in limited development areas, permits for these available spaces (limited to boathouses only) will be issued by a drawing of names. This drawing will be held on the second Wednesday of the first month of each quarter. If a prospective permittee's name is drawn, that person will have sixty (60) days to submit detailed plans and specifications of the proposed boathouse for approval. If the plans are not submitted within the allotted time, a new drawing for the space will be held. Names will be placed in the drawing pool based on letter applications. The letter application must be renewed each year. Requests which have been in the pool for more than a year will be withdrawn each month prior to any drawing. All drawings will be announced and will be open to public observation.

(3) Permit Expiration

(a) All permits will expire the last day of the month listed for expiration. A notice will be sent to the permittee forty five (45) days prior to the expiration date by the Corps of Engineers. The permittee must then call the

project office and arrange for a joint inspection of the facility during this forty five (45) day period. Inspections will be made Monday through Friday between the hours of 8 a.m. and 4 p.m.. Failure of the permittee to contact the project office and arrange for the joint inspection during this forty five (45) day period will result in the permit expiring of its own terms. If a permit expires because of no action in the forty five (45) day period, the party who held the permit may only get a new permit by going through the procedures shown above.

b. A responsible party, owner or caretaker, must be available locally to care for the structure and provide entrance to the structure and/or information to the Corps of Engineers.



## SECTION VII

### CONSTRUCTION AND MAINTENANCE REQUIREMENTS

#### PRIVATE FLOATING FACILITIES

7-01 Minimum Design Standards - See Standards for Existing Facilities which will be allowed to remain on the lake or its shores. Standards for Existing Facilities contains the requirement which all structures must meet within one year after this plan goes into effect in order to be permitted. Standards for New Facilities lists the conditions for new structures which will be allowed in the "limited development areas". This last is subject to the buyer obtaining a permit through procedures listed above.

7-02 Safety Checklist for Inspection of Docks - For details see the Standards.



## SECTION VIII

### OTHER LAKESHORE USES BY INDIVIDUALS

8-01 Private Exclusive Use of the Shoreline - Any private exclusive use of public shoreline must be denied except in those specially designated areas where private facilities are permitted, or where grandfather rights provisions are applicable.

8-02 Access Paths - It is understood that a property owner next to public lands has the same right to access as any other citizen. Real Estate instruments for access paths may be issued provided the following criteria are met:

- a. That the path is for pedestrian traffic only.
- b. That the path be laid out so as to blend naturally with existing topography and vegetation.
- c. That the path be a maximum of three feet in width.
- d. That proper precautions are taken to prevent any erosion.
- e. That portion of the path located on Government property must be open to public traffic.
- f. The authorization does not convey the right to construct any structures (steps, bridges, etc.) in connection with the path.
- g. Any other requirements which the Project Office may deem necessary must be met.

8-03 Trails - It is recognized that trails or roads for vehicular traffic have in the past been allowed for access to private floating facilities. Where existing trails lead from Government maintained roads to private floating facilities, and represent a valid need for access, they will be considered as secondary roads, and consideration will be given by the Government for minimum maintenance. Where several trails exist, every effort will be made to provide a single, maintained secondary road to serve the same purpose. No new trails or secondary roads will be authorized.

8-04 Landscaping - Landscaping is the changing of the existing scenery of a place for a desired purpose or effect. The definition of landscaping includes the modification of landforms, which is the changing of contours by such actions as grading, excavating or filling. Landscaping also includes vegetative modification, which is defined as the altering of existing vegetation by some physical or chemical means. Vegetation modification activities includes not only the planting of lawns, ground covers, shrubs and trees, but also their removal through the use of herbicides or such practices as cutting, clearing, mowing or thinning.

Permits may be issued to private individuals for limited landscaping but any permit issued for landscaping does not convey any special right or privilege. Requests for this type of shoreline improvement must contain:

- a. A well described or detailed landscape plan which provides for better management of the area for the enhancement of wildlife propagation, preservation of the aesthetics and prevention of erosion.
- b. A map showing the dimensions and location of the proposed action.
- c. The purpose of the plan.
- d. No planting of species other than those recommended by the project personnel which will benefit wildlife and help control erosion.

8-05 Mowing - Permits to mow grass and weeds are presently issued and will continue to be issued for private individuals. Each adjacent landowner will be given due consideration for request to mow Government land adjacent to his property. No tree species or beneficial plants may be mowed and the height of the cut vegetation must not be less than three (3) inches. Site environmental characteristics will dictate the amount to be mowed and it will be defined on the permit.



8-06 Stairs, Elevators, and Trolleys - There are 125 sets of unauthorized stairs now in existence. Project personnel will inspect existing stairs and obtain detailed photographs for record in lieu of plans. At the time of inspection needed repairs will be discussed with the owner.

a. Minimum criteria for permitting existing stairs are sound construction, treads and risers shall be of uniform dimensions, shall have sound handrail, all material must be free of rot and/or rust which creates a weakness in structure.

b. New stairway construction requires a Real Estate Instrument. Before new stairs or extensive reconstruction of existing stairs will be allowed, detailed plans will be submitted to the Project Engineer for approval (see Permits 5-03). Plans will be submitted on 8½ by 14" legal size paper. New stairs must be of metal construction. Concrete or wood stairways will not be permitted. Concrete foundations for metal stairs will be limited to that amount approved by the Project Engineer or Reservoir Manager.

c. Movable access to floating facilities such as gangways, short ladders, etc., designed to allow for access to the facility at various lake stages will not be considered as stairways and will be considered a part of the floating facility.

d. All fixed structures will be considered as separate structures and require a separate approval.

## SECTION IX

### OTHER LAND AND WATER USES

9-01 Project Lands - Sanitation facilities on project lands include trash and garbage removal from park areas on a schedule varied by park use, waterborne toilets with septic tanks where soils will accommodate them, pit-type toilets elsewhere (pumping scheduled as needed), and trailer dump stations in the larger parks to handle waste from mobile camper units.

9-02 Adjoining Lands - Lands adjoining U.S. Government lands are subject to laws of the State of Texas in regard to sanitation. Lake Whitney State Park toilets are waterborne with septic tanks. Garbage is hauled by contractor. Private homes on lands adjoining Government land have septic tank systems. Inspections are made to insure that raw sewage is not allowed to flow onto Government land.

9-03 Marine Sanitary Facilities - Commercial marinas will handle marine sanitary facilities. Toilets on floating facilities are a violation of the terms of the Lakeshore Use Permit and will result in cancellation of the permit. Houseboats are to have holding tanks for sewage until it can be pumped out at marinas and disposed of into septic tanks or other authorized treatment facility. At no time will raw sewage be allowed to run into lake waters.

9-04 Hunting - Prior to each hunting season the Project Engineer will issue maps showing land areas at Whitney Lake where hunting will be allowed. Specific hunting regulations established by the Corps of Engineers will be publicized. General hunting regulations such as seasons and bag limits are established by the Texas Parks and Wildlife Department and are enforced by that agency under State law.

9-05 Other - Revocable permits will be granted for ski jumps, floats, boat moorage facilities, all types of duck blinds, and other private floating recreation facilities, where such facilities will not inhibit the public use or enjoyment of the project waters or shoreline.



## SECTION X

### REVIEW

10-01 Review - This plan has been prepared based on ER 1130-2-406 dated 13 December 1974. Letters to Congress and to the Corps of Engineers, public and private comments by private citizens, and public workshops and hearings were all considered in compiling this plan and the plan constitutes Appendix F of the Whitney Lake Project Master Plan. The plan will be reviewed for revision periodically as a part of the Master Plan review. Revisions required by changes to Federal laws will be made as required. Other revisions will be made after announcement is made to the public of the need and comment has been obtained through the use of public workshops, public hearings, or other public participation.

10-02 Recommendation - Approval of this plan as submitted is recommended.



## STANDARDS FOR EXISTING FACILITIES

All facilities must comply with this standard within one year after implementation of this plan or the permit will be revoked.

1. Floatation - Unsinkable, well secured, not likely to sink or separate from structure within one year. Must be styrofoam or equal. Steel barrels or similar floatation are not acceptable. Coast Guard approved floatation which meets current Coast Guard criteria will be approved if it is in good condition. Use of modified expandable polystyrene is recommended because of the added safety of fire retardant floatation.

2. Substructure - No rotten wood or badly rusted metal which is likely to fail within one year. All connections, nails, bolts, angles, etc., must be secure and not likely to fail within one year.

3. Decks - No rotten wood. No scabbed on patches which contribute to tripping hazards. If metal, no badly rusted areas which might fail within one year.

4. Walkways -

a. Walkways shall not be less than three (3) feet wide, except between slips where the minimum width shall be two (2) feet.

b. Walkways shall be kept free from mud, ice, snow, grease, or any other material or obstructions which would render them unsafe to the persons using them.

c. Walkways shall be structurally sound. Lumber used in these walkways shall be free from knots, splits, decay, or other conditions which would decrease the strength of the walkway. Lumber used in walkways shall have a minimum size of two (2) inches by six (6) inches or be of equivalent strength.

d. Walkways shall be free from protruding nails.

e. Walkways from shore to dock shall be free from excessive spring, deflection, or lateral movement; adequately supported with floatation where necessary; and above water at all times, so as to provide safe access.

5. Superstructure Must be reasonably plumb and square with adequate internal bracing to handle 25 pounds per square foot wind loads. Covering, whether wood, sheet metal, fiberglass, or some form of composition board must be free of large holes or major rusted areas, and must present a neat orderly appearance. It is suggested that owners consider replacing solid side sheeting with chainlink fence or some similar material as required in the Standards for New Facilities. This is less resistant to windloads, more aesthetically acceptable and provides reasonable security.

6. Anchorage or Mooring System - Must be adequate to withstand 50 MPH winds. No cables, braces, etc., will be permitted in front of any lines forward of lines extending rearward at 45 degree angles from the front corners of the structure. Anchorage must be attached to the lakeshore.

7. Electrical - Electrical permits will be handled on a case by case situation in order to prevent a proliferation of electrical lines along the shores. To receive consideration, the permittee must make written application to the project office explaining their needs, and proposed uses for electrical service. It would be helpful to give as many details in this respect as possible. Other related information which should be attached to your request is as follows:

a. Detailed Electrical Plans - These plans should meet all specifications as outlined in the National Electrical Code, and illustrate such in the form of a blueprint or similar drawing. This plan should include all electrical facilities on the meter pole, wiring method and type (from meter pole to boathouse), and internal wiring inside the structure.

b. Elevations and Centerline Description - Metes and bounds with a center line description for the proposed electrical line route will be necessary from the meter pole to the boathouse walkway, with width of easement area requested shown.

The bases of all service poles carrying electric meters and line disconnecting devices must be at or above 571 feet MSL. (This provision may be waived if the power company serving the line will agree in writing to disconnect the power supply to the service pole in the event of high water. The base of the power company's pole on which their line disconnecting device is located must be at or above 571 feet MSL). The meter may be required to be placed on a common pole in certain areas in order to reduce the number of poles on Government land. The electric service to individual private facilities will be limited to 115 volt receptacles and lighting circuits. Number of circuits shall be limited to two, and circuit breakers in the boathouse shall be limited to 20 amperes.

c. In some areas service conductors may be required to be buried from the meter pole to the dock. The dock end of the service conductors may be installed on a take-up reel or other similar mechanism, so positioned that the conductor angle will be practically vertical, or may be installed with a loop in the cable underwater. Buried cable shall meet the requirements of the National Electric Code for the intended use.

d. All electrical work shall be carefully designed. A plan showing the physical layout of the fixtures, conduit fittings, wiring diagrams, and catalog data covering the items of material to be incorporated in the work shall be submitted to the Corps of Engineers for approval. Approval of the above shall be obtained before any work is commenced. Electrical work shall be performed by a licensed electrician and shall be subject to approval by the Corps, as well as all local and State agencies.

8. Household Furnishings - No sleeping accommodations, cooking, heating, or toilet and shower facilities, refrigeration, telephones, televisions and/or other items conducive to human habitation will be allowed.

9. Repairs - Photos will be made of existing structure by Corps of Engineers personnel before repairs begin. No structural modifications may be made during or after repairs without specific written approval of the project manager.

10. Inspections - Inspections will be conducted not less than annually, and more frequently as necessary because of storms and flooding. Failure to comply with these standards within thirty (30) days after any inspection will result in the revocation of the permit and the owner will be given an additional thirty (30) days to remove the facility. Failure to remove the structure within thirty (30) days will result in impoundment and removal by the Government or contractor forces.

11. Design Criteria - No changes in design of structures presently permitted will be allowed without prior written approval. Modifications, except those which provide for storage of boats and marine related equipment, probably will not be approved. A locker will be allowed, but only large enough for storing those items required to operate the boat. Lifesaving equipment will be available at the facility.

12. Design Loads - Floatation must support all of the structure, except the actual floatation units, 8 inches above the water surface. One cubic foot of floatation will be submerged for each 64 pounds of structure weight.

13. Fire Protection -

a. An A-B-C dry chemical fire extinguisher of not less than ten (10) pounds in capacity shall be located on every community dock. On community docks over 50 linear feet an extinguisher will be located every 50 feet.

b. It is recommended that a fire extinguisher be located at the entrance to the dock.

c. All fire extinguishers shall be inspected by owner every four months and bear a date inspection tag.

14. Emergency Rescue Equipment - A United States Coast Guard approved ring buoy, having 50 feet of 3/8 inch manilla rope or equal, shall be located on each community dock. Where the community dock exceeds 100 linear feet, a ring buoy shall be located every 100 linear feet.

15. Storage Rooms -

- a. Gas cans and batteries shall not be stored in the same storage room.
- b. Storage rooms where flammable liquids are stored shall be ventilated so as to have no accumulation of fumes.
- c. Rooms in which batteries are charged shall be well ventilated near the ceiling to prevent hazardous accumulation of gases.
- d. A locker will be allowed, but only large enough for storing those items required to operate the boat.





## STANDARDS FOR NEW FACILITIES

The criteria listed below are construction standards for all newly constructed and permitted structures to be placed in limited development areas as spaces may become available.

### INTRODUCTION

1. This presents criteria to be used as minimum standards in the design and construction of floating structures and instructions to be followed in making formal application to place and/or maintain such structures on any fresh water lake under the jurisdiction of the Southwestern Division, Corps of Engineers. It also outlines some of the conditions to be followed during the construction period and in the operation of the structure when placed and/or operated on such fresh water lakes.
2. The criteria is divided into three (3) sections as follows: Section 1 consists of the specifications for minimum design standards. Section 2 consists of typical plans for docks and boathouses. Section 3 consists of ENG Form 4264-R dated 1 December 1974, "Application for Lakeshore Use Permit" (ER 1130-2-406).
3. Corps personnel will be advised in advance of site location on or near Government property where structure will be constructed or assembled, as well as date of initiation of construction or assembly.
4. Structure will be subject to periodic inspection by Corps personnel during construction and/or assembly period; therefore, one set of approved plans shall be available at construction and/or assembly site at all times. No deviation or changes from approved plans will be permitted without prior written approval of Corps personnel.
5. One set of as-built drawings must be submitted to Corps personnel before permit will be issued. The permit will, in most cases, include a license plate or decal. The license plate or decal will be placed and maintained on the structure in accordance with instructions issued by Corps personnel.
6. All floating structures placed and/or operated on a lake are subject to periodic inspection by Corps personnel. If an inspection reveals conditions at or on any floating structure that make it unsafe from a safety, navigation or other standpoint, such conditions must be corrected immediately by the owner upon receipt of notification by Corps personnel. Household furnishings are not permitted in boathouses or on barges of any type, except houseboats.
7. A mooring or docking site location will be assigned when the permit is issued.

## SPECIFICATIONS FOR MINIMUM DESIGN STANDARDS FOR NEW FACILITIES

1. Inspections - Inspections will be conducted not less than annually, and more frequently as necessary because of storms and flooding. Failure to comply with these standards within thirty (30) days after any inspection will result in the revocation of the permit and the owner will be given an additional thirty (30) days to remove the facility. Failure to remove the structure within thirty (30) days will result in impoundment and removal by the Government or contractor forces.

### 2. Design Criteria -

a. Any structure approved for construction in the future must be for the storage of boats only, a boathouse, and shall be only large enough to store the boat within the outer dimensions of the structure, with enough additional room for walkways and securing of the floatation. A locker will be allowed, but only large enough for storing those items required to operate the boat. Life saving equipment will be available at the facility.

b. Wood Material - When wood material is used it will be designed in accordance with Federal Housing Administration Minimum Property Standards for one and two living units, No. 300, 1960 edition, as applicable. However, all connections will be secured with galvanized sheet metal, steel plates, metal straps or treated plywood gussets to resist movement that would otherwise tend to dismantle the structural connections. All wood material in the substructure including the deck must be treated with a preservative. Wood material in the superstructure will not require preservative treatment, but the exposed exterior will be painted with not less than two (2) coats of exterior oil paint.

c. Metal Material - When metal material is used it will be designed in accordance with American Institute of Steel Construction Specifications of the American Society of Civil Engineers' Proceedings for Aluminum Structures depending on the type of metal used. Welded or bolted connections are optional. New metal on the exposed exterior of the superstructure is desired. Used metal may be authorized if it is in good condition; however, if the used metal is of a dull color, application of paint may be required.

d. Bracing - Wood or metal material or a combination thereof: All columns and studwalls will be adequately braced to resist wind loads of at least 25 pounds per square foot. Bracing will be designed and constructed to counteract design loads. The structure will have sufficient flexibility whereby wave actions will not damage the structural or roof system.

### 3. Design Loads (Minimum) -

a. Deck loads (substructure) 50# sq. ft.

b. Approach bridges or walkways 50# sq. ft.

c. Wind loads (substructure and superstructure) 25# sq. ft.

d. Roof loads (superstructure) to provide for a 2 inch ice load or equivalent amount of snow load.

e. Floatation must support all of the structure, except the actual floatation units, 8 inches above the water surface. One cubic foot of floatation will be submerged for each 64 pounds of structure weight.

4. Floatation Material - Unsinkable, well secured, not likely to sink or separate from structure within one (1) year. Must be styrofoam or equal. Steel barrels or similar floatation are not acceptable. Coast Guard approved floatation which meets current Coast Guard criteria will be approved if it is in good condition. Use of modified expandable polystyrene is recommended because of the added safety of fire retardant floatation.

5. Anchorage or Mooring of Facilities - Design of these facilities will be submitted for each separate structure and will be developed in accordance with the site where facility will be moored, taking into consideration the water depth, exposure to fetch and wind loads. Anchorage must not impinge on any area forward of a line drawn 45 degrees rearward from the front corners of the facility. The front shall be looking away from the bank at 90 degrees. Anchorage shall allow for a 10 foot plus or minus fluctuation from elevation 533 feet without the structure having to be moved.

6. Walkway -

- a. Walkway shall be not less than three (3) ft. wide and structurally sound.
- b. Floatation material will be determined on length of walkway in the water and/or connections on the floating craft and the shore.
- c. The proposed method of anchoring the walkway to the floating structure and the shore will be shown.
- d. Walkways must have adequate handrails on at least one side, in accordance with Section 5, Fort Worth District Safety Checklist.

7. Electrical -

- a. The supply cable from the meter pole to the dock shall consist of stranded conductors and shall be either a multiconductor, neoprene-jacketed cable, or messenger-type service cable. Wire shall be sized for the intended service, but in no case shall the conductors be smaller than a No. 12 copper or No. 10 aluminum. The supply cable shall be installed to maintain a minimum of 18 feet clearance above ground where public vehicular traffic may travel and a minimum of 12 feet clearance above ground or water at all other locations. A take-up reel shall be furnished either at the dock or the final pole to eliminate the excess sag. "Dock" refers to any separate floating structure requiring electrical service. A simple sketch illustrating the above requirement is shown on Plate 1.
- b. A fused disconnect switch shall be provided for de-energizing the supply cable at the meter pole. The supply cable shall be terminated on a main circuit breaker in a panel board at the dock. The panel board shall be designed to accommodate the number of branch circuits furnished on the dock. The panel board shall be centrally and conspicuously located on the dock and shall be in a rainproof enclosure.
- c. Receptacle shall be rated not more than 20 amperes and shall be of the grounding type, mounted at least three feet above the floor. Outside receptacles shall be weatherproof. Other circuits shall be designed for the intended use. The dock lighting fixtures shall be so constructed and installed that water cannot enter or accumulate in the lampholders or other electrical parts. The fixtures shall be suitable for damp or wet locations. Each fixture shall be mounted on a corrosion-resistant box equipped with a neoprene gasket and threaded hubs for conduit connections. Fixtures shall be mounted at least seven feet above the walkway.
- d. The following items shall be grounded by an insulated conductor with a green cover, such conductor to be run with other circuit conductors:
  - (1) Boxes, cabinets, and all other metallic enclosures.
  - (2) Metal frames of utilization equipment.
  - (3) Grounding terminals on receptacles. (All receptacles shall be grounding type with ground wire attached.)
- e. All dock wiring shall be installed in conduit except that nonmetallic sheathed cable approved for the purpose may be used where there is a need for continuous flexibility or in areas that are inaccessible, such as above ceilings and in dry walls. Conduit may be galvanized steel, PVC or electrical metallic tubing.
- f. The meter pole location shall be such that the meter and pole mounted service equipment are installed a minimum of three feet above the elevation of the top of the flood control pool. In areas where no flood control is provided, the meter and pole mounted service equipment shall be mounted above the maximum water elevation at which the dock can be safely maintained.
- g. Service conductors may be buried from the meter pole to the dock. The dock end of the service conductors may be installed on a take-up reel, so positioned that the conductor angle will be practically vertical, or may be installed with a loop in the cable underwater. Buried cable shall meet the requirements of the National Electric Code for the intended use.

h. All electrical work shall be carefully designed. A plan showing the physical layout of the fixtures, conduit fittings, wiring diagrams, and catalog data covering the items of material to be incorporated in the work shall be submitted to the Corps of Engineers for approval. Approval of the above shall be obtained before any work is commenced. Electrical work shall be performed by licensed electricians and shall be subject to Corps of Engineers' approval, as well as all local and State codes and the National Electric Code in effect at the time. All work not in accordance with the above will be subject to disapproval and correction will be required.

i. All new docks shall be wired to meet the requirements of this regulation when constructed. All new wiring installed on existing docks shall meet the requirements of this regulation. All hazardous wiring and/or electrical apparatus which in the opinion of the Corps of Engineers' inspector is an immediate threat to the safety of the public shall be repaired to the satisfaction of the inspector until the dock is completely rehabilitated.

#### 8. Fire Protection -

a. An A-B-C dry chemical fire extinguisher of not less than ten pounds in capacity shall be located on every community dock. On community docks over 50 linear feet an extinguisher will be located every 50 feet.

b. It is recommended that a fire extinguisher be located at the entrance to the dock.

c. All fire extinguishers shall be inspected by owner every four (4) months and bear a date inspection tag.

9. Emergency Rescue Equipment - A United States Coast Guard approved ring buoy, having 50 feet of 3/8" manila rope or equal, shall be located on each community dock. Where the community dock exceeds 100 linear feet, a ring buoy shall be located every 100 linear feet.

#### 10. Storage Rooms -

a. Gas cans and batteries shall not be stored in the same storage room.

b. Storage rooms where flammable liquids are stored shall be ventilated so as to have no accumulation of fumes.

c. Rooms in which batteries are charged shall be well ventilated near the ceiling to prevent hazardous accumulation of gasses.

d. A locker will be allowed, but only large enough for storing those items required to operate the boat.

11. Siding on Superstructure - Any new structures, which may be permitted in designated limited development areas, must be open sided. Chainlink mesh or similar material will be allowed for security. All siding must be maintained in a neat uniform condition, free of holes, rust, patched appearance, etc.

#### 12. Roofs (Superstructure) -

a. Roofs may be gabled or monosloped.

b. Wood roof joists or rafters shall not be less than 2" by 6" and spaced not more than 2'-0" center to center. Consideration will be given to approving 4'-0" spacing where sufficient vertical supports and bracing are provided. Purlins shall be not less than 2" X 4" and spaced not more than 30" center to center.

c. Wood roofs must consist of 1" nominal tongue and groove, shiplap or 1/2" plywood sheathing covered with 30 pound asphalt roll roofing or asphalt shingles. (When asphalt shingles are used the roof slope must be four on twelve or steeper.) The use of wood roofs is not recommended due to their weight and the expense of maintenance.

d. Metal roof joists or rafters shall be not less than 1 1/4" ID standard pipe or structural aluminum tubing, either round, square or rectangular and spaced not more than 2'-0" center to center. Consideration will be given to approving 4'-0" spacing where sufficient vertical supports and bracing are provided. Purlins shall be not less than 2" ID pipe or structural aluminum tubing and spaced not more than 2'-0" center to center.

e. Metal roofs must be steel, minimum gauge of 28, or aluminum, minimum thickness of 0.032".

f. Roofs must be securely fastened to the superstructure to resist wind uplift.

13. Wood Construction -

a. Floor joists and floatation frames shall be not less than 2"X8" and stringers shall not exceed 24" center to center.

b. Framing for wood columns shall be not less than 4" X 4" and/or double 2" X 4" spaced not more than 4'-0" center to center or 2" X 4", spaced not more than 2' -0" center to center. Flooring or decking shall be not less than 1" nominal rough or 2" X 6" S4S material and spaced in such a manner to allow for expansion. Concrete or similar types of flooring and decking will be approved.

14. Metal Construction -

a. Floor joists and floatation frames shall be not less than 2" ID standard pipe. Other standard structural steel sections will be approved.

b. Framing for pipe construction shall be not less than 1½" ID standard pipe or structural aluminum, round, square, or rectangular tubing. Studs shall not exceed 48" center to center. Other standard steel or structural aluminum sections will be approved.

c. All exposed metal, if not galvanized or aluminum must be painted. Galvanizing is recommended.

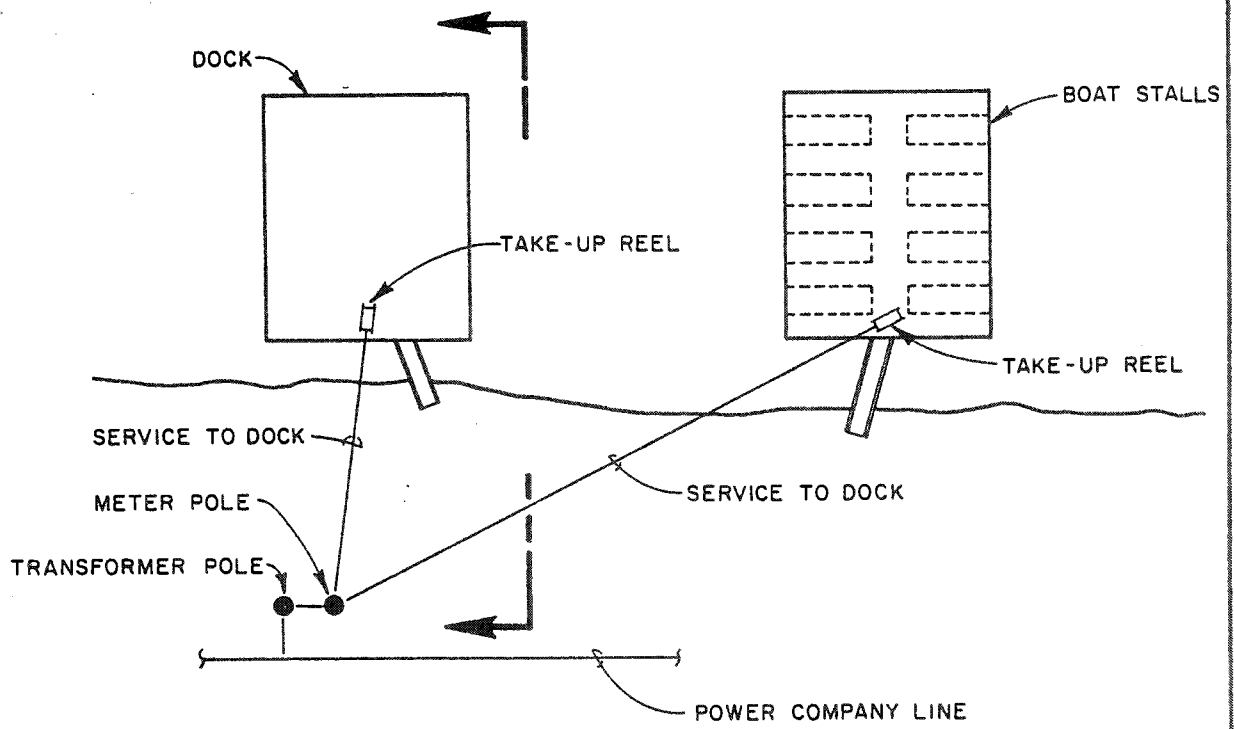
15. Stabilized or Underwater Brace -

a. A stabilized or underwater metal brace is mandatory on the front (lake side) of the boathouse between the dock walkways.

b. The size of the metal brace will be determined on the width between the dock walkways.

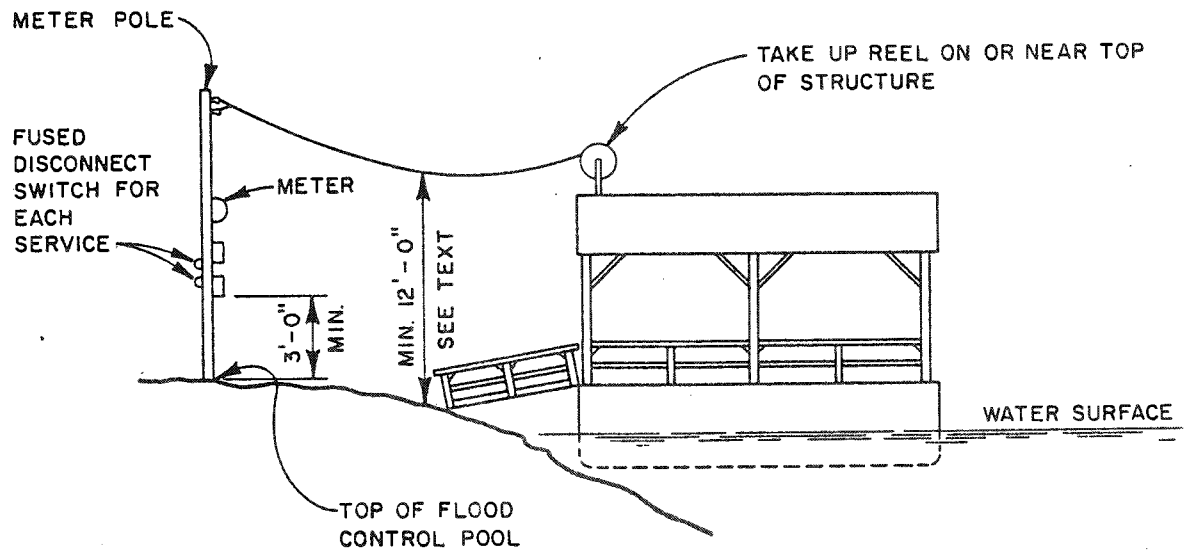
c. The depth of the metal brace below the waterline will be determined on the draft of the floating craft to be stored in the boathouse.





**PLAN**

NO SCALE



**SECTION**

NO SCALE  
(TYPICAL ALL DOCKS)



## FORT WORTH DISTRICT SAFETY CHECK LIST FOR INSPECTION OF COMMUNITY AND PRIVATE DOCKS

1. **CONSTRUCTION DETAILS.** In wood construction, all connections shall be secured with sheet metal, steel plates, metal straps, or plywood gussets to resist movement that would tend to dismantle the structure. All columns and walls shall be adequately braced to resist windloads. Roofs shall be securely fastened to the superstructure to resist wind uplift.

### 2. FLOTATION.

a. Flotation shall be of materials which will not become waterlogged or sink when punctured.

b. Flotation shall be adequate to maintain a stabilized and safe dock.

c. The three grades of molded expandable polystyrene are described below in order of preference:

(1) Type SE - Self extinguishing or fire retardant. As long as there is nothing to kindle the flame, the foam will not burn.

(2) Type GR - Gasoline resistant. While not impervious to petroleum products, this type of foam performs well in cases of splash or spills. In such instances, evaporation can occur before the attack on the foam becomes apparent.

(3) Type REG - This is the most common type of expandable polystyrene. It is neither gasoline resistant nor fire retardant.

Use of Type SE expandable polystyrene is recommended because of added safety of having fire retardant flotation.

3. **ANCHORAGE.** An anchorage system shall be provided which will insure secure mooring of the structure, taking into consideration the water depth, exposure to wave action, and windloads. For structures anchored in rivers, the anchorage shall provide safety against extreme water level fluctuations, currents, drift impact, and wave action.

### 4. WALKWAYS.

a. Walkways shall not be less than 3 feet in width, except between slips where the minimum width shall be 2 feet.

b. Walkways shall be kept free from mud, ice, snow, grease, or any other material or obstructions which would render them unsafe to the persons using them.

c. Walkways shall be structurally sound. Lumber used in these walkways shall be free from knots, splits, decay, or other conditions which would decrease the strength of the walkway. Lumber used in walkways shall have a minimum size of 2 inches by 6 inches or be of equivalent strength.

d. Walkways shall be free from protruding nails.

e. Walkways from shore to dock shall be free from excessive spring, deflection, or lateral movement; adequately supported with flotation where necessary; and above water at all times, so as to provide safe access.

### 5. HANDRAILS.

a. Handrails around outside perimeter of docks shall be 42 inches in height, with a guardrail approximately 20 inches in height below the handrail.

b. Handrails shall be structurally sound and maintained in a state of good repair, and be a minimum size of 2 inches by 4 inches.

c. Walkway from shore to dock shall have a minimum of one handrail, 42 inches in height, with a guardrail approximately 20 inches in height below the handrail.

d. Handrails shall be located in all areas of the perimeter not subjected to frequent loading and unloading of boats.

### 6. ELECTRICAL:

a. The supply cable from the meter pole to the dock shall consist of stranded conductors and shall be either a multiconductor, neoprene-jacketed cable, or messenger-type service cable. Wire shall be sized for the intended service, but in no case shall the conductors be smaller than No. 12 copper or No. 10 aluminum. The supply cable shall be installed to maintain a minimum of 18 feet clearance above ground where public vehicular traffic may travel and a minimum of 12 feet clearance above ground or water at all lake elevations at other locations. A takeup reel shall be furnished either at the dock or the final pole to eliminate the excess sag. "Dock" refers to any separate floating structure requiring electrical service. A simple sketch illustrating the above requirements is shown on Plate 1.

b. A fused disconnect switch shall be provided for deenergizing the supply cable at the meter pole. The supply cable shall be terminated on a main circuit breaker in a panelboard at the dock. The panelboard shall be designed to accommodate the number of branch circuits furnished on the dock. (See requirement in subparagraph 6c below for determination of number of circuits.) The panelboard shall be centrally and conspicuously located on the dock and shall be in a rainproof enclosure.

c. Receptacles shall be rated not less than 20 amperes and shall be of the grounding type, mounted at least 3 feet above the floor. Outside receptacles shall be weatherproof. Other circuits shall be designed for the intended use. The dock lighting fixtures shall be suitable for damp or wet locations. Each fixture shall be mounted on a corrosion-resistant box equipped with a neoprene gasket and threaded hubs for conduit connections. Fixtures shall be mounted at least 7 feet above the walkway.

d. The following items shall be grounded by an insulated conductor with a green cover, such conductor to be run with other circuit conductors:

(1) Boxes, cabinets, and all other metallic enclosures.

(2) Metal frames of utilization equipment.

(3) Grounding terminals on receptacles. (All receptacles shall be grounding type.)

e. All dock wiring shall be installed in conduit except that nonmetallic sheathed cable approved for the purpose may be used where there is a need for continuous flexibility or in areas that are inaccessible, such as above ceilings and in dry walls. Conduit may be galvanized steel, PVC, or electrical metallic tubing.

f. A manual standard fused line disconnecting device shall be installed a minimum of 3 feet above the elevation of the top of the flood control pool. In areas where no flood control is provided, line disconnecting device shall be mounted above the maximum water elevation at which the dock can be safely maintained.

g. Minimum wire sizes shall be:

(1) No. 12 Awg copper for service conductors.

(2) No. 12 Awg copper for feeder conductors.

(3) No. 12 Awg for branch circuit conductors.

h. Service conductors may be buried from the meter pole to the dock. The dock end of the service conductors may be installed on a takeup reel, so positioned that the conductor angle will be practically vertical, or may be installed with a loop in the cable underwater. Buried cable shall meet the requirements of the National Electric Code for the intended use.

i. All electrical work shall be carefully designed. A plan showing the physical layout of the fixtures, conduit, fittings, wiring diagrams, and catalog data covering the items of material to be incorporated in the work shall be submitted to the Corps of Engineers for approval. Approval of the above shall be obtained before any work is commenced. Electrical work shall be performed by competent electricians in a workmanlike manner and shall be subject to Corps of Engineers approval, as well as all local and State codes and the National Electric Code in effect at the time. All work not in accordance with the above will be subject to disapproval and correction will be required.

j. All new docks shall be wired to meet the requirements of this regulation when constructed. All new wiring installed on existing docks shall meet the requirements of this regulation. All hazardous wiring and/or electrical apparatus which in the opinion of the Corps of Engineers inspector is an immediate threat to the safety of the public shall be repaired to the satisfaction of the inspector until the dock is completely rehabilitated.

### 7. FIRE PROTECTION.

a. An A-B-C dry chemical fire extinguisher of not less than 10 pounds in capacity shall be located on every community dock. On community docks over 50 linear feet, an A-B-C dry chemical fire extinguisher shall be located every 50 linear feet.

b. It is recommended that a fire extinguisher be located at the entrance to the dock.

c. All fire extinguishers shall be inspected by owner every 4 months and bear a date inspection tag.

8. **EMERGENCY RESCUE EQUIPMENT.** A United States Coast Guard approved ring buoy, having 50 feet of 3/8-inch manila rope or equal, shall be located on each community dock. Where the community dock exceeds 100 linear feet, a ring buoy shall be located every 100 linear feet.

### 9. STORAGE ROOMS.

a. Gas cans and batteries shall not be stored in the same storage room.

b. Storage rooms where flammable liquids are stored shall be ventilated so as to have no accumulation of fumes.

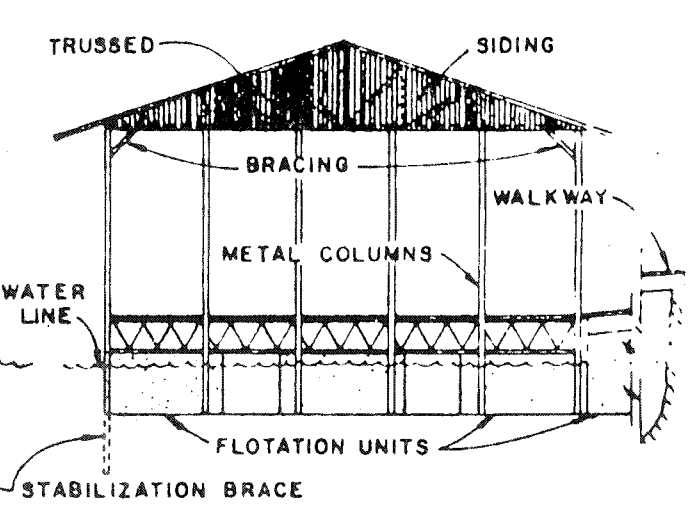
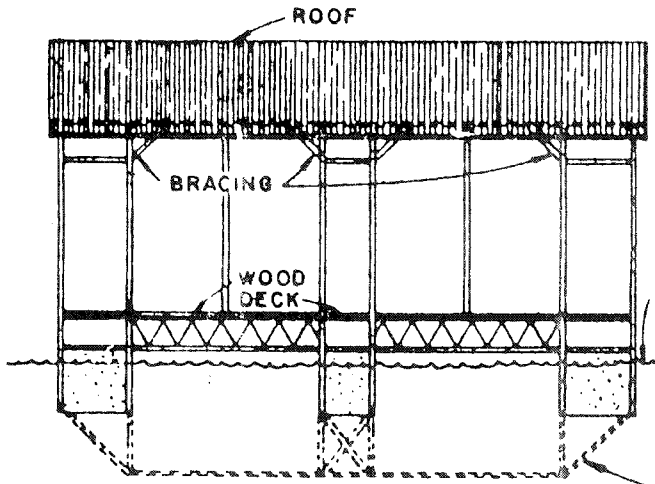
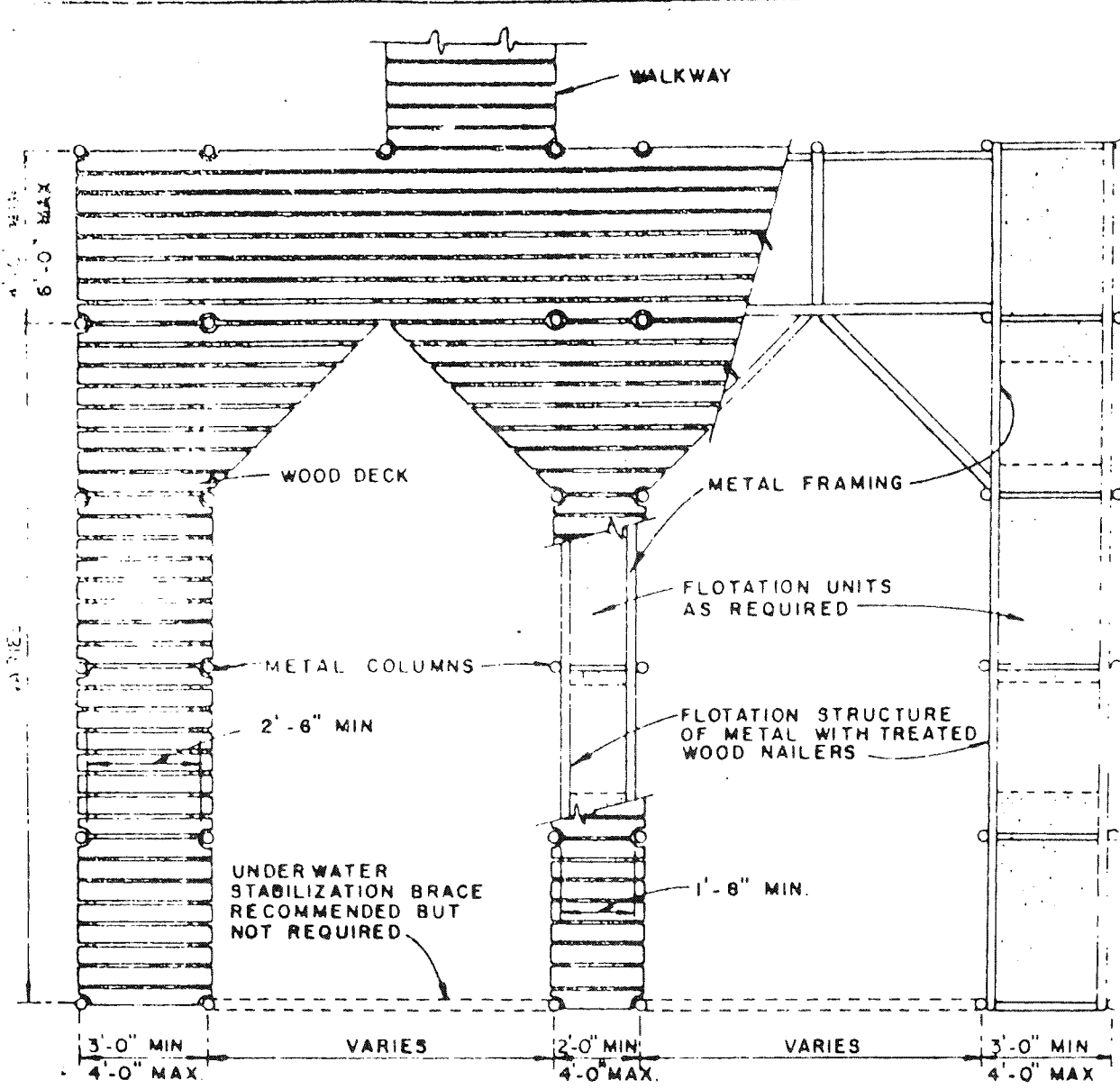
c. Rooms in which batteries are charged shall be well ventilated near the ceiling to prevent hazardous accumulation of gases.

10. **INSPECTION.** The above-mentioned docks shall be subject to periodic safety inspections not less than annually by the Resident Engineer.



## CONDITIONS OF PERMIT FOR LAKESHORE USE

1. This permit is granted solely for the purpose described by the permittee on the opposite side of this form.
2. The permittee agrees to and does hereby release and agree to save and hold the Government harmless from any and all causes of action, suits at law or equity, or claims or demands or from any liability of any nature whatsoever for or on account of any damages to persons or property, including the permitted facility, growing out of the ownership, construction, operation or maintenance by the permittee of the permitted facilities.
3. The ownership, construction, operation or maintenance of the permitted facility is subject to the Government's navigation servitude.
4. No attempt shall be made by the permittee to forbid the full and free use by the public of all navigable waters at or adjacent to the permitted facility or to unreasonably interfere with navigation in connection with the ownership, construction, operation or maintenance of the permitted facility.
5. The permittee agrees that if subsequent operations by the Government require an alteration in the location of the permitted facility or if in the opinion of the District Engineer the permitted facility shall cause unreasonable obstruction to navigation or that the public interest so requires the permittee shall be required, upon written notice from the District Engineer to remove, alter, or relocate the permitted facility, without expense to the Government.
6. The Government shall in no case be liable for any damage or injury to the permitted facility which may be caused by or result from subsequent operation undertaken by the Government for the improvement of navigation or for other lawful purposes, and no claims or right to compensation shall accrue from any such damage.
7. The ownership, construction, operation and maintenance of the permitted facility is subject to all applicable Federal, State and local laws and regulations.
8. This permit does not convey any property rights either in real estate or material; and does not authorize any injury to private property or invasion of private rights or any infringement of Federal, State or local laws or regulations nor does it obviate the necessity of obtaining State or local assent required by law for the construction, operation or maintenance of the permitted facility.
9. The permittee shall comply promptly with any lawful regulations or instructions of any Federal, State or local agency of the Government.
10. The permittee agrees that he will complete the facility construction action within one year of the permit issuance date. The permit shall become null and void if the construction action is not completed within that period. Further, he agrees that he will operate and maintain the permitted facility in a manner so as to minimize any adverse impact on fish and wildlife habitat, natural environmental values and in a manner so as to minimize the degradation of water quality.
11. At such time that the permittee ceases to operate and maintain the permitted facility, upon expiration of this permit, or upon revocation of this permit, the permittee shall remove the permitted facility within 30 days, at his expense, and restore the waterway and lands to its former condition. If the permittee fails to remove and so restore to the satisfaction of the District Engineer, the District Engineer may do so by contract or otherwise and recover the cost thereof from the permittee.
12. No pier or boathouse is to be used for human habitation. Household furnishings are not permitted on boat piers or boathouses.
13. No houseboat, cabin cruiser or other vessel shall be used for human habitation at a fixed or permanent mooring point.
14. No charge may be made for use by others of the permitted facility nor commercial activity be engaged in thereon.
15. The size of all structures shall be kept to a minimum to limit encroachment on the water surface.
16. Boat mooring buoys and flotation units of floating facilities shall be constructed of materials which will not become waterlogged or sink when punctured.
17. Floating structures are subject to periodic inspection by the Corps rangers. If an inspection reveals conditions which make the facility unsafe in any way or conditions which deviate from the approved plans, such conditions will be corrected immediately by the owner upon receipt of notification. No deviation or changes from approved plans will be permitted without prior written approval of the Resource Manager.
18. Floating facilities shall be securely anchored to the shore in accordance with the approved plans by means of moorings which do not obstruct the free use of the lakeshore.
19. That the display permit tag provided shall be posted on the floating facility or on the land areas covered by the permit so that it can be visually checked with ease in accordance with instructions of the Resource Manager.
20. No vegetation other than that prescribed in the permit may be damaged, destroyed or removed.
21. No change in land form such as grading, excavation or filling may be done.
22. No vegetation planting of any kind may be done, other than that specifically prescribed in the permit.
23. This permit is non-transferable. Upon the sale or other transfer of the permitted facility or the death of the permittee, this permit is null and void.
24. By 30 days written notice, mailed to the permittee by registered or certified letter the District Engineer may revoke this permit whenever he determines that the public interest necessitates such revocation or when he determines that the permittee has failed to comply with the conditions of this permit. The revocation notice shall specify the reasons for such action. If within the 30 day period, the permittee, in writing requests a hearing, the District Engineer shall grant such hearing at the earliest opportunity. In no event shall the hearing date exceed 60 days from the date of the hearing request. At the conclusion of such hearing, the District Engineer shall render a final decision in writing and mail such decision to the permittee by registered or certified letter. The permittee may, within 5 days of receipt of the decision of the District Engineer appeal such decision to the Division Engineer. The decision of the Division Engineer shall be rendered as expeditiously as possible and shall be sent to the permittee by registered or certified letter. The permittee may, within 5 days of receipt of the decision of the Division Engineer appeal such decision in writing to the Chief of Engineers. The decision of the Chief of Engineers shall be final from which no further appeal may be taken.
25. Notwithstanding condition 24 above if, in the opinion of the District Engineer, emergency circumstances dictate otherwise the District Engineer may summarily revoke this permit.

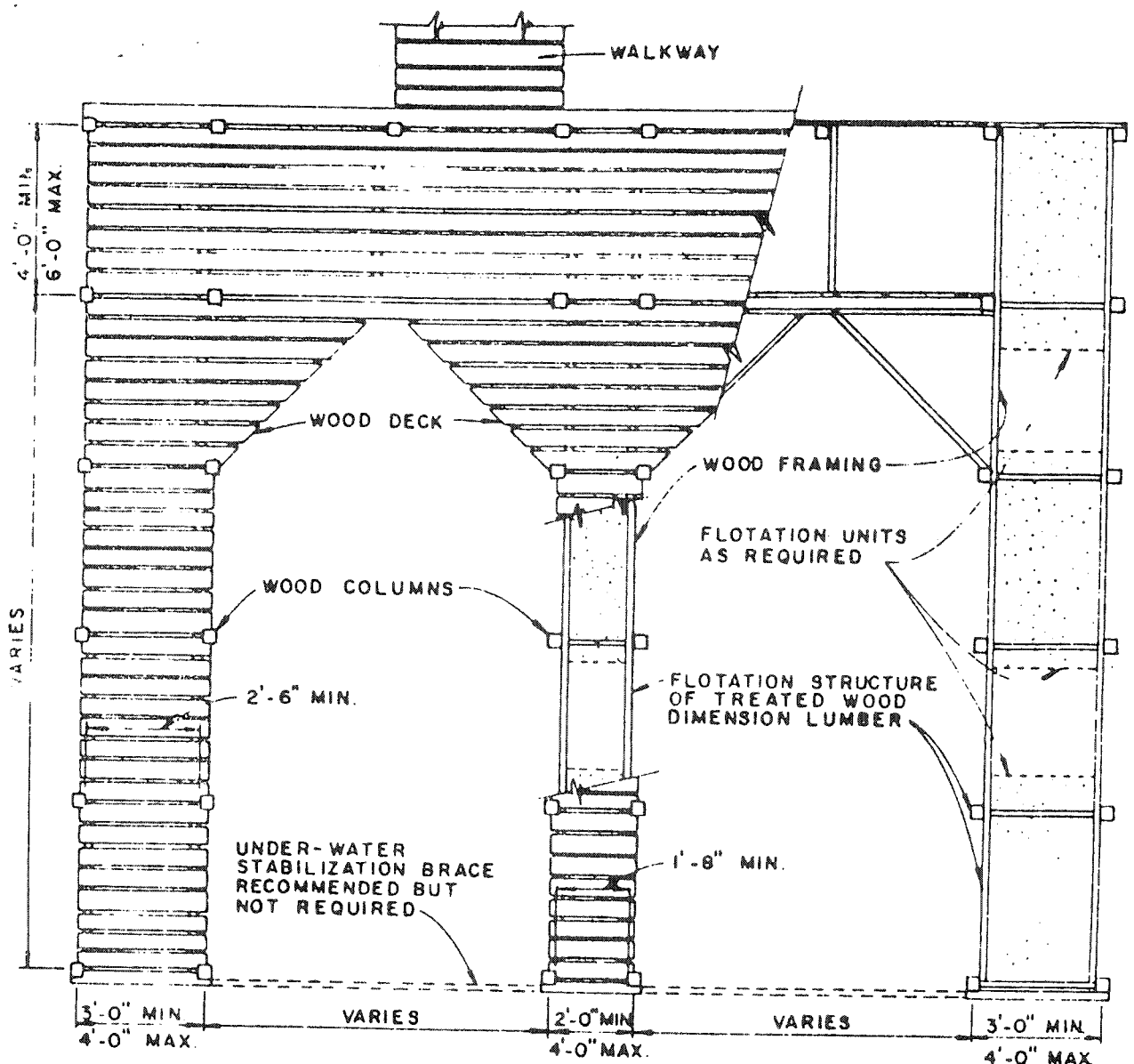


FRONT ELEVATION

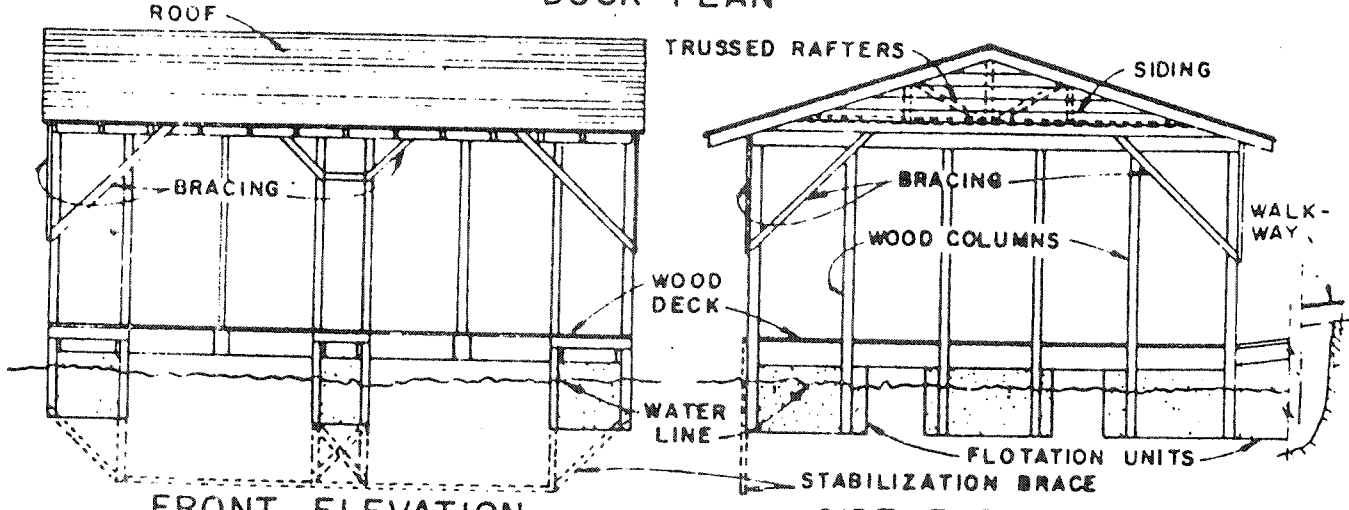
SIDE ELEVATION

TYPICAL METAL BOAT DOCK PLAN

NOT TO SCALE

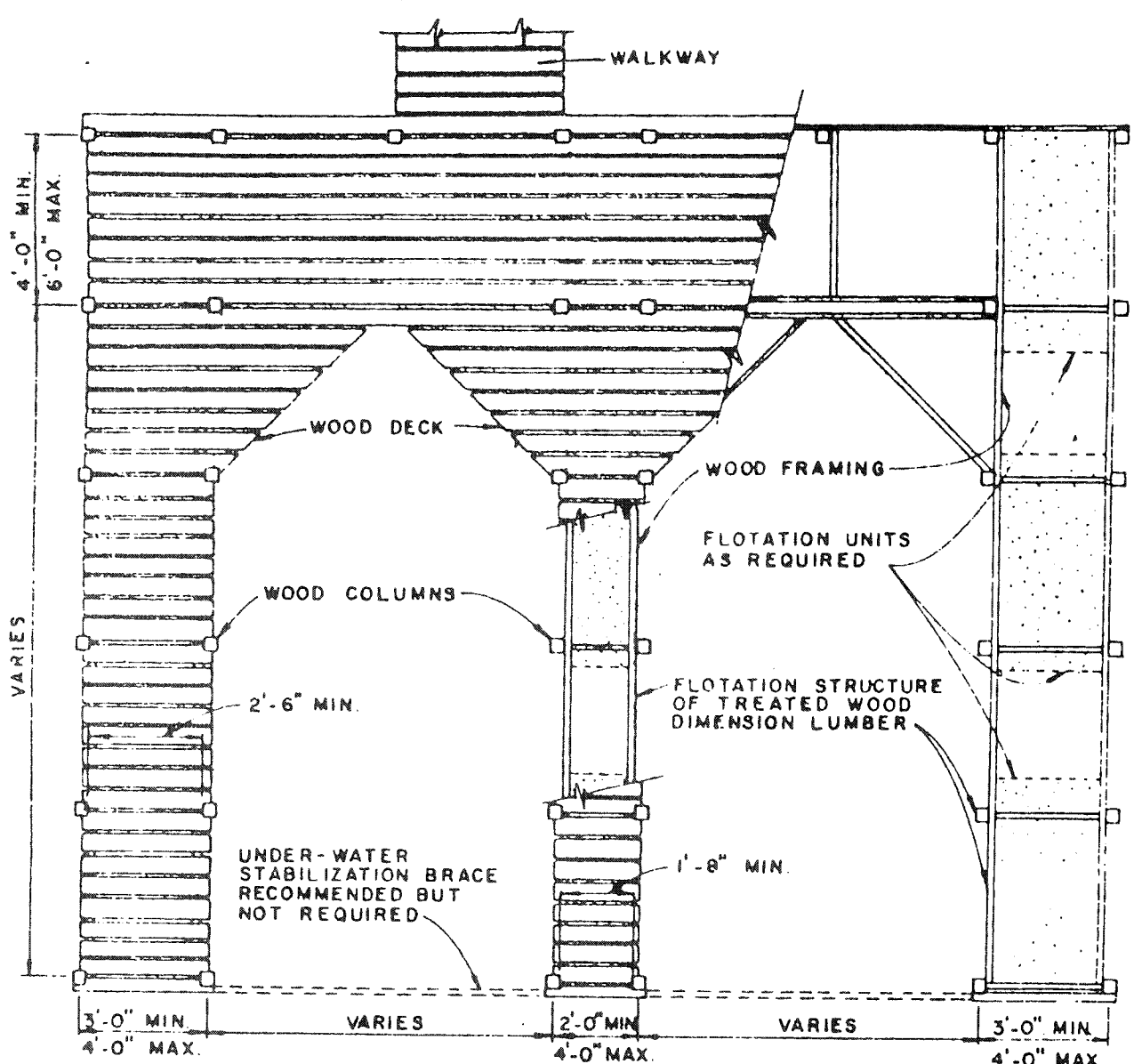


DOCK PLAN

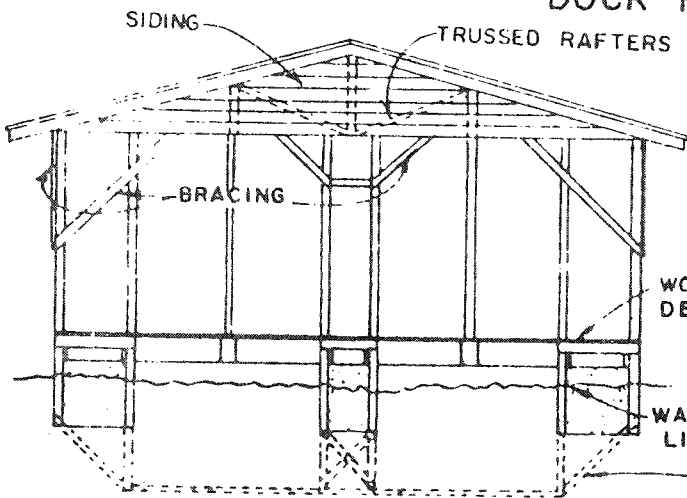


TYPICAL WOOD BOAT DOCK PLAN

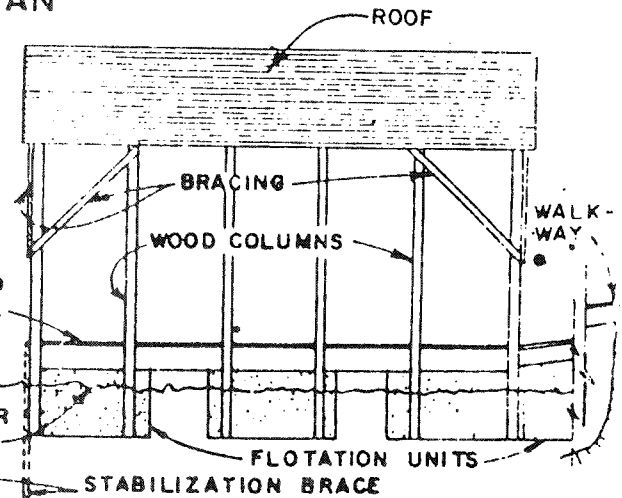
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**DOCK PLAN**



**FRONT ELEVATION**

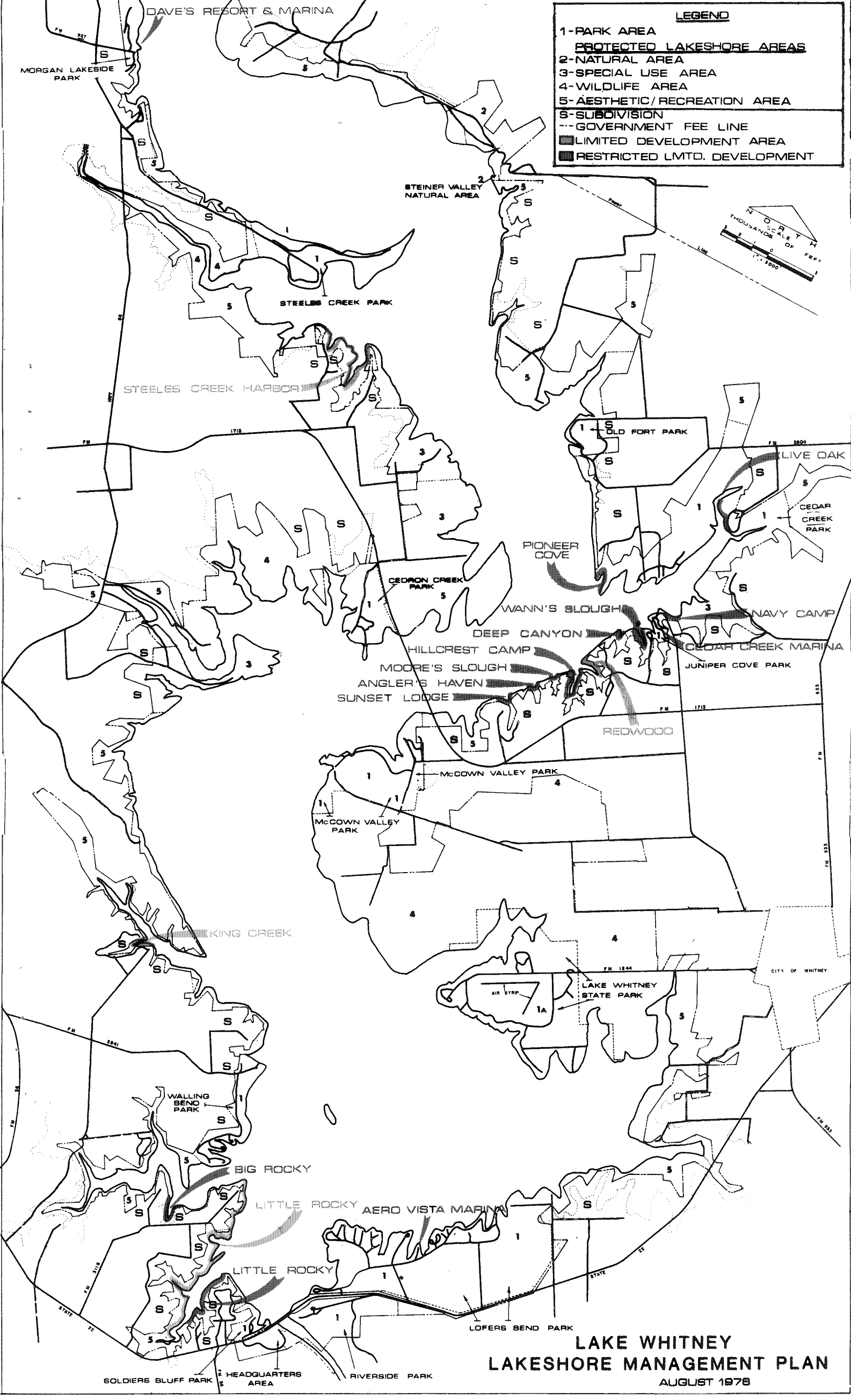


**SIDE ELEVATION**

**ALTERNATE TYP. WOOD BOAT DOCK PLAN**

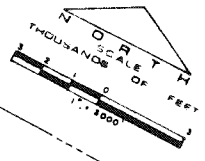
NOT TO SCALE





**LEGEND**

1-PARK AREA  
**PROTECTED LAKESHORE AREAS**  
 2-NATURAL AREA  
 3-SPECIAL USE AREA  
 4-WILDLIFE AREA  
 5-AESTHETIC/RECREATION AREA  
 S-SUBDIVISION  
 --- GOVERNMENT FEE LINE  
 [Hatched Box] LIMITED DEVELOPMENT AREA  
 [Solid Black Box] RESTRICTED LMTD. DEVELOPMENT



**LAKE WHITNEY  
 LAKESHORE MANAGEMENT PLAN  
 AUGUST 1978**



