# Shoreline Management Plan

John H. Kerr Dam and Reservoir
Roanoke River Basin, North Carolina and Virginia
2016

## 1. PURPOSE.

This plan has been developed in accordance with the requirements of Engineer Regulation 1130-2-406, "Shoreline Management at Civil Works Projects" to provide guidance and information to the public for the effective management of the shoreline at John H. Kerr Reservoir. The types of private uses which may be permitted on the shoreline are described within this plan. Additionally, this plan addresses the shoreline allocations, rules, regulations and other information relative to the John H. Kerr Shoreline Management Program.

## 2. POLICY.

It is the policy of the Chief of Engineers to protect and manage shorelines of all Civil Works water resource development projects under Corps jurisdiction in a manner which will promote the safe and healthful use of these shorelines by the public while maintaining environmental safeguards to ensure a quality resource for use by the public. Public pedestrian access to and exit from these shorelines shall be preserved. For projects or portions of projects where the Federal real estate interest is limited to easement only, management actions will be limited by the estate acquired.

In accordance with Engineer Regulation (ER) 1130-2-406, shoreline management plans will be reviewed at least once every five years and revised as necessary. When approved, this plan will become part of the John H. Kerr Reservoir Operational Management Plan. Shoreline management plans and permits/licenses are subject to all applicable laws and regulations which may alter policy and implementation of the plan.

## 3. GENERAL OBJECTIVES.

The primary objective of this plan is to define policies and regulations applicable to the shoreline of John H. Kerr Reservoir that will maintain the aesthetic and environmental characteristics of the reservoir for the full benefit of the general public. All management actions will seek to achieve a balance between private uses and protection of natural and cultural resources for use by the general public.

4. REFERENCES.

a. Section 4 of the Flood Control Act of 1944, as amended (16 U.S.C. 460d)

b. The Rivers and Harbors Act of 1894, as amended (33 U.S.C. 1)

c. Section 10 of the River and Harbor Act of 1899 (33 U.S.C. 403)

d. National Historic Preservation Act of 1966 (P.L. 89-665), as amended (16 U.S.C. 470 et seq.)

e. National Environmental Policy Act of 1969 (42 U.S.C. 4321, et seq.)

f. Clean Water Act (33 USC 1344, et seq.)

g. Water Resources Development Act of 1986 (P.L. 99-662)

h. Endangered Species Act of 1973, as amended

i. Federal Insecticide, Fungicide, and Rodenticide Act of 1972 (P.L. 92-516), as amended

j. Reservoir/Forest Cover Act of Sept. 6, 1960 (P.L. 86-717)

k. 36 C.F.R. Part 327, "Rules and Regulations Governing Public Use of Water Resources Development Projects Administered by the Chief of Engineers"

l. 33 C.F.R. Parts 320-330, "Regulatory Programs of the Corps of Engineers"

m. Executive Order 12088, "Federal Compliance with Pollution Control Standards" (13 October 1978), as amended by Executive Order 12580, "Superfund Implementation" (23 January 1987).

n. Executive Order 11990, "Protection of Wetlands" (24 May 1977), as amended by Section 28 of Executive Order 12608, "Elimination of Unnecessary Executive Orders and Technical Amendments to Others" (9 September 1987)

o. ER 1130-2-406, "Shoreline Management at Civil Works Projects," dated October 31, 1990 and revised May 28, 1999.

p. ER 1130-2-400, "Management of Natural Resources and Outdoor Recreation at Civil Works Water Resource Projects"

q. ER 405-1-12, Real Estate Handbook, Chapter 8, Real Property Management

r. EM 385-1-1, “Safety and Health Requirements Manual”.

s. Division Regulation (DR) 1130-15-1, Shoreline Management at South Atlantic Division Civil Works Projects (1 December 2015).

5. BACKGROUND.

a. John H. Kerr Reservoir. The impoundment of the Roanoke and Dan Rivers to create the Kerr Reservoir was originally authorized for the purpose of flood control and hydroelectric generation. Various laws and regulations have expanded the reservoir's operating authorities to include fish and wildlife conservation, recreation, and water supply. The reservoir has a shoreline of approximately 800 miles and a water surface of approximately 48,900 acres. The reservoir extends approximately 39 miles upstream of the dam on the Roanoke River and approximately 19 miles upstream on the Dan River above its junction with the Roanoke River.

In general, the reservoir will fill during the early spring months and be drawn down periodically during the fall and winter. From an average of 302 feet above Mean Sea Level (M.S.L.) in April and May, the water level in the reservoir falls gradually to an average of 299.5 feet in June. The water level usually fluctuates within a 3-foot range during the recreation season of June through September. From October to December the water level is gradually lowered to an average of 295.5 feet M.S.L. and remains there until the end of March. The normal pool elevation is 300 feet M.S.L. A guide curve (Lake Level) table can be found in Exhibit A.

b. Shoreline Management. The original Lakeshore Management Plan was used as an interim plan until the Project Master Plan was completed. Completion of the Master Plan and the Operational Management Plan necessitated revisions to the Lakeshore Management Plan, which was subsequently approved as "Appendix F to the Master Plan" in 1980. In 1994, a revision of the 1980 Lakeshore Management Plan was initiated, resulting in the approval and implementation of the Shoreline Management Plan for John H. Kerr in January 1995. Review of the 1995 plan was initiated in January 2014.

c. Public Involvement. In January 2014, notification was provided to the appropriate congressional delegations, local elected officials, and Federal and State agencies concerning the public review process to update the 1995 plan. The public process continued with three public meetings. Each public meeting was conducted as an open house allowing interested parties to attend between the hours of 4:00 pm and 7:00 pm. Participants were given comment sheets to facilitate their feedback. Comments were provided in person, by regular mail, and by email.

Public meetings were held at the following locations:

February 4, 2014 at the South Hill Public Library;

February 6, 2014 at the Clarksville Community Center; and
February 11, 2014 at the Vance Granville Civic Center.

Written comments were accepted until February 28, 2014. After consideration of all received comments, a draft plan was publicized on November 5, 2014. Written comments on the draft were accepted until December 15, 2014.

d. Permit History. John H. Kerr Reservoir is located in a predominately rural area within the piedmont of Virginia and North Carolina. Privately-owned residential properties adjacent to the reservoir continue to be developed. Likewise, existing residential developments are expanding, resulting in an increased demand for private use of public lands and waters. Each year applications continue to be filed for floating facilities, shoreline and vegetation modifications, utility lines, and other permitted and/or licensed activities. The number of shoreline-use permits and real estate licenses that have been, and continue to be issued, show significant private use of the public resource. Table 1 depicts the growing number of individual users.

Table 1

Cumulative Totals of Permits and Licenses

| Year | Floating/Land-Based Facility Permits |
|---|---|
| 1975 | 1,000 |
| 1980 | 1,426 |
| 1985 | 1,455 |
| 1990 | 2,562 |
| 1994 | 2,744 |
| 2014 | 4,436 |

It is anticipated that the demand for permits and licenses to allow private use of public lands and waters will continue to increase as additional adjacent lands are developed.

## 6. EXISTING RESERVOIR LAND USE.

John H. Kerr Dam and Reservoir contains 55,754 acres above the normal pool elevation of 300 feet M.S.L. The following approximate acreage is assigned to the various land use allocations:

| | |
|---|---|
| Multiple Resource Management | 47,516 |
| Recreation | 7,864 |
| Project Operations | 374 |
| TOTAL PROJECT ACREAGE: | 55,754 |
| Flowage Easements | 10,509 |

Land use allocations provide the basic framework that guide the development, management, and operation of all project resources and facilities. Shorelines adjacent to all reservoir lands have been further classified into shoreline allocations as described in Paragraph 7 below.

7. SHORELINE ALLOCATIONS.

a. In compliance with the Corps of Engineers' shoreline management regulation (ER 1130-2-406), all shorelines of John H. Kerr Reservoir have been classified into four allocation categories. These allocation categories are described below and are consistent with the reservoir's Master Plan and Operational Management Plan. Shoreline Allocation Maps showing the boundaries and breaks from one allocation category to another are available for public inspection at the Visitor Assistance Center or on-line.

b. Requests for Shoreline Allocation changes will only be accepted as part of a formal update. However, changes in laws, regulations or policy may necessitate changes in shoreline allocations after the publication of this plan.

c. With the revision of this plan, 16.7 miles of shoreline have been re-allocated from the designations in the 1995 Shoreline Management Plan. Table 2 summarizes these changes.

Table 2

Summary of Shoreline Re-allocations

| Previous Allocation | New Allocation | Miles Affected | % Total Shoreline |
|---|---|---|---|

| | | | |
|---|---|---|---|
| Limited Development | Recreation | 0.09 miles | 0.01% |
| Limited Development | Protected | 8.04 miles | 1.01% |
| Recreation | Protected | 3.10 miles | 0.39% |
| Recreation | Limited Development | 2.57 miles | 0.32% |
| Protected | Recreation | 0.82 miles | 0.10% |
| Protected | Limited Development | 2.18 miles | 0.27% |
| | Totals: | 16.8 miles | 2.1% |

d. The criteria used to determine the appropriate allocation of all shoreline areas is located in Exhibit D. Based on these criteria; the following shoreline allocations were established and defined.

1. Limited Development Shoreline. (Green) (30 % of Total Shoreline) This allocation category refers to areas where private floating and certain land-based facilities and activities are permitted provided all conditions outlined in this plan are met. All shorelines not designated as public recreation shorelines, prohibited access areas, or protected lakeshore areas are included in the Limited Development Shoreline.

2. Public Recreation Shoreline. (Red) (38% of Total Shoreline) Shorelines in this allocation category consist of lands set aside for recreational use by the public. These lands include existing parks, quasi-public lease areas, recreational trails, wildlife management areas, and other areas reserved for future recreational development. All legally authorized, existing private facilities currently within this shoreline allocation will continue to be allowed for current and future owners provided that permit conditions are maintained (see Section 12). New Shoreline Use Permits/Licenses authorizing floating or land-based facilities will not be issued within this shoreline allocation. Upon development of an area for public recreation, all affected existing private facilities will be removed. No private shoreline use facilities and/or activities will be permitted within or near designated or developed public recreation areas.

3. Protected Shoreline. (Yellow) (32 % of Total Shoreline) Shorelines in this allocation category are designated for the purpose of maintaining or restoring aesthetic quality, protecting and conserving natural and cultural resources, providing fish and wildlife habitat, and reducing conflicts between private and public activities. Land-based facilities permitted and/or licensed in Protected Shoreline areas prior to this plan will be honored to current and future owners provided permit conditions are maintained. No new Shoreline Use Permits and/or Licenses for floating and land-based facilities will be allowed in Protected Shoreline Areas. Permits for up to 5-foot wide Vegetation Modification paths may be issued to allow safe access to the water if the Operations Project Manager determines that the activity will not adversely impact the environment or the physical characteristics for which the area was designated as protected, to include consideration of the effect on water quality.

4. Prohibited Access Shoreline. (Black) (Less than 1% of Total Shoreline) Shorelines in this allocation category are designated because of safety concerns relating

to recreational visitors. These shoreline areas are located adjacent to lands utilized for industrial and reservoir operations and contain dangerous structures or maintenance facilities. Shoreline Use Permits and/or Licenses will not be permitted within these areas. Additional areas may be allocated to this shoreline category as new structures are constructed and hazards are identified.

8. FLOWAGE EASEMENT LANDS.

a. There are lands at John H. Kerr Reservoir where the Corps of Engineers' real estate interest is limited to easement interest only. However, on all waters of the reservoir, regardless of ownership of the underlying land, the Corps of Engineers must assure the public's safety and navigational integrity. In this plan, easement lands are included in shoreline use allocations in the same manner as fee-owned lands. Adjoining landowners who desire to place floating facilities, such as docks or buoys, on waters over flowage easement lands must obtain a Shoreline Use Permit from the Operations Project Manager. Because filling of or construction on flowage easement lands utilizes space allocated for the storage of flood waters, landowners whose property is subject to a flowage easement may not place any structures directly on flowage easement lands without written consent from the Corps of Engineers. Installation of any structure must be in compliance with easement rights and privileges acquired by the Corps of Engineers. A Shoreline Use Real Estate License is not typically required for structures placed on flowage easement lands. However, a permit under Section 404 of the Clean Water Act and/or Section 10 of the Rivers and Harbors Act of 1899 may be required if work is performed in waters of the United States.

b. To avoid interference with water management operations and minimize property damage, the John H. Kerr project has designated elevation limits on construction of facilities on Government property and Government-held easements surrounding the Reservoir. These elevations are 321 feet M.S.L. in areas downstream (east) of the old Highway 58 Bridge; 325 feet M.S.L. in most areas upstream (west) of the bridge but higher in certain designated areas along the Dan River at South Boston, Virginia; and 290 feet M.S.L. for the Island Creek sub-impoundment. However, the Operations Project Manager may allow the placement of a septic system or any of its parts or elements within the Corps of Engineers' flowage easement if (1) the system, parts, or elements do not adversely affect the flowage easement or Corps of Engineers operations; (2) the system, parts and/or elements comply with all applicable federal, state, and local laws and regulations; (3) the appropriate local Health Department issues a permit for the septic system, parts, or elements on land within the Corps of Engineers' flowage easement; and (4) the owner of the septic system, its parts and/or its elements accepts the responsibility for meeting all applicable water quality standards in the operation of the septic system, parts, or elements.

c. Filling of or construction on easement lands utilizes space allocated for the storage of flood waters. Proposed earth moving operations, including dredging or

construction on these lands, **must** be reviewed and approved in writing by the Operations Project Manager. If the proposed project impacts jurisdictional wetlands, a DA permit will also be required.

d. Field surveys and marking of easement area boundary lines will be accomplished as budgets allow. Fee owners will be contacted before these boundary lines are established and marked. It is the responsibility of the property owner to identify the easement boundary before initiating any land-disturbing activities or the construction of any structure.

## 9. ABANDONMENT AND IMPOUNDMENT OF PERSONAL PROPERTY.

As provided in Federal regulations at 36 C.F.R. 327.15, personal property of any kind (e.g., old docks, picnic tables, barbeque grills, benches, hammocks, lawn chairs, and stored boats) shall not be abandoned, stored, or left unattended upon the land or waters of John H. Kerr Reservoir. After a period of 24 hours, or at any time after a posted closure hour in a public use area, or for the purpose of providing public safety or resource protection, unattended personal property shall be presumed to be abandoned and may be impounded and stored at a location designated by the Operations Project Manager. The Operations Project Manager may collect a reasonable impoundment fee before the impounded property is returned to its owner. Violations due to abandonment of personal property could lead to the revocation of the permit. In accordance with 36 C.F.R. 327.15, the Operations Project Manager shall dispose of all lost, abandoned, or unclaimed personal property by public or private sale or otherwise.

## 10. SHORELINE TIE-UP OF VESSELS.

a. Temporary shoreline tie-up is allowed at John H. Kerr Reservoir. Temporary shoreline tie-up is defined as the intermittent moorage of private watercraft along the shoreline during a period of recreational activity. This practice will be allowed as long as a conflict of use does not develop, the tie-up lasts no more than twenty-four (24) hours, and owners maintain constant supervision over their vessels. Prior permission of the Operations Project Manager is not required for a temporary shoreline tie-up that complies with the requirements in this plan. A Violation Notice may be issued for a tie-up exceeding the twenty-four (24) hour period.

b. Campers registered at a designated campsite within a park may tie up vessels below their campsites throughout their stay. Watercraft owners who are not registered campers but desire a tie-up period exceeding the 24-hour period for a temporary shoreline tie-up are encouraged to contact local marinas for extended moorage or apply for a dock or mooring buoy permit.

11. SHORELINE USE PERMITS AND REAL ESTATE LICENSES.

a. Permits and Licenses are required for certain activities and facilities on public lands and waters owned by the Corps of Engineers at John H. Kerr Reservoir. Procedures for obtaining Shoreline Use Permits and Real Estate Licenses are found in Exhibit B. Shoreline Use Permits and Real Estate Licenses are normally issued for a period of five years. These documents contain general terms and conditions that are uniformly applicable to all permits and licenses issued (see Exhibit C). However, unique circumstances and issues may require the establishment of additional terms and/or special conditions. All applications for Shoreline Use Permits and Real Estate Licenses on the reservoir are subject to approval by the Operations Project Manager (Permit) and the Real Estate Contracting Officer (License). An applicant may appeal a decision if submitted in writing within 30 days through the Operations Project Manager to the Wilmington District Commander.

b. Requests for activities not specifically addressed in this plan should be submitted in writing to the Operations Project Manager for consideration under a Specified Acts Permit.

c. Applicants must be at least 18 years of age. Area Shoreline Rangers must meet with the applicant on-site at the Shoreline Use Permit and/or License location. Applications cannot be accepted through a second party. The on-site meeting establishes the exact location of all permitted facilities/activities and/or licensed facilities.

d. Issuance of a Shoreline Use Permit and/or license does not convey any property rights or exclusive use rights to the permit holder. **Permits and/or licenses are nontransferable and become null and void when:**

1. The permittee and/or licensee and his/her legal spouse are deceased; or

2. Legal access to public property at the location of the permit is no longer available to the permittee and/or licensee. Loss of legal access usually occurs upon sale or transfer of adjacent private property (see Section 14).

e. Prospective adjacent property owners should not assume that activities being permitted to the present adjacent owner will be allowed to continue. Many authorized facilities or activities are grandfathered to the present permittee as prior commitments before the establishment of this plan (see Section 12). New and prospective adjacent property owners should contact the Area Shoreline Ranger for information on authorized shoreline uses and permitting procedures.

f. Re-issuance of Permits and/or Licenses. All previously permitted activities /facilities are non-transferable. Upon request from the permittee and/or licensee, the permit/license may be reissued to a new applicant who meets the criteria for a permit

and/or license. The new applicant must contact the Area Shoreline Ranger within 15 days or remove facilities within 30 days of assuming ownership. The new applicant will need to obtain a relinquishment statement from the previous permittee and/or licensee releasing the permit/license into their name. If a facility does not meet permit/license conditions at the time of re-issuance, the new permittee/licensee assumes all responsibility for any repair, modifications or removal requests issued by the Corps.

g. Fees will be collected for specific permitted and/or licensed activities and facilities prior to the issuance of a Shoreline Use Permit and/or Real Estate License. A current fee schedule is found in Exhibit B-1. Fees are to be mailed or delivered in person to the Visitor Assistance Center along with the necessary applications. Area Shoreline Rangers are not allowed to accept cash, checks, or money orders in the field.

h. Individuals issued a Shoreline Use Permit and/or Real Estate License agree to give the Operations Project Manager or his/her representative access to their property for the purpose of inspecting the permitted/licensed facilities and/or activities.

i. The Corps of Engineers assumes no liability or responsibility for the safety of individuals engaged in any activity associated with private facilities authorized by the Shoreline Use Permit and/or Real Estate License on public property. The permittee/licensee assumes full liability and responsibility for the safe conduct of the activity and must assure the safe condition of any permitted structure.

j. All Shoreline Use Permits are issued and enforced in accordance with the provisions of 36 C.F.R. Part 327. Failure to obtain the proper permits or non-compliance with any of the terms and conditions, general or special, may result in the Shoreline Use Permit being revoked. Additionally, restitution for damages and/or the issuance of a Violation Notice may be considered. Title 36 violations may subject the violator to a fine of not more than $5,000.00 and/or imprisonment for not more than six months.

All Real Estate Licenses issued in conjunction with a Shoreline Use Permit at John H. Kerr Reservoir will be issued in accordance with the Shoreline Management Program as set forth in South Atlantic Division Regulation 1130-15-1. A template that contains the standard license conditions can be found in Appendix B of that regulation. Non-compliance with the terms and conditions, general or special, of the Real Estate License may result in the revocation of the license.

Non-compliance may also result in a moratorium, preventing the issuance of a new permit until compliance satisfactory to the Operations Project Manager has been achieved. The length of moratoriums will be determined based on the extent of the violation(s). In those instances where Government property has been damaged, the moratorium will apply to the current property owner/developer responsible for the encroachment/trespass, as well as any successors in title for a period of up to 15 years from the date that the encroachment or trespass is resolved. In those instances where there is no damage to Government property, the moratorium will not exceed 5 years. In either case, if shoreline allocations are changed during the moratorium to Protected

Shoreline, a request for reinstatement of the permit/license will not be considered, and/or any previously grandfathered rights (as to location, limits, design, etc.) will be null and void and will not be reinstated.

In instances where vegetation has been damaged, destroyed, altered or removed from Government property without a permit, the amount of restitution and the length of the moratorium will be determined using the Wilmington District Encroachment Resolution Policy and the below table of appraised values of damage to Government property. Other types of damages will be appraised on a case-by-case basis using the best available method. The length of the moratorium will be based on the following appraised values:

| Appraised Damages | Length of Moratorium |
|---|---|
| Less than $5,000 | 5 years |
| $5,000 – $10,000 | 10 years |
| Greater than $10,000 | 15 years |

12. PRIOR COMMITMENTS AND GRANDFATHERED ACTIVITIES, FACILITIES, AND STRUCTURES.

a. Prior Commitments are defined as certain previously permitted activities, facilities, and structures that are allowed to continue in areas where, because of changes in shoreline allocations and/or regulations, that private use would not currently be allowed. For example, activities, facilities and structures previously authorized in areas that are now allocated as Protected Shoreline areas (yellow) or Public Recreation Areas (red) are permitted to continue as Prior Commitments. A Prior Commitment may be reissued to new owners at the discretion of the Operations Project Manager. Prior Commitments are subject to conditions 1 - 4 below.

1. Floating and Land Based Facilities must be maintained in usable and safe conditions at all times. If major repair or replacement is required, docks and land-based facilities must meet current standards. With the exception of gangwalks, docks cannot be enlarged.

2. Such property must not present a threat to life, health or safety or property.

3. The holder of the permit must be in substantial compliance with the terms of the existing permit.

4. Prior Commitment applies except where necessary for immediate use for public purposes, higher public use, or an authorized purpose for a water resources project.

b. A "grandfathered" activity, facility, or structure is one that was authorized under a previous policy and prior permit, but for which new permits/licenses are no longer issued. Grandfathered facilities and structures must be maintained in a usable and safe condition. Furthermore, grandfathered activities, facilities, and structures must not present a threat to life, health or safety or property, and the permittee must be in substantial compliance with the existing permit conditions. If a grandfathered facility or structure does not meet these requirements, it must be removed and cannot be replaced. An activity that does not meet these requirements must be discontinued immediately. Existing permits/licenses issued prior to this plan will be managed as follows:

1. Floating Facilities: Existing Shoreline Use Permits and licenses issued prior to this plan through adjacent fee simple property or dedicated subdivision access will be honored to current and future owners, regardless of lot width, crossovers (that is, when the line from a property to the dock for that property crosses the line from an adjacent property to the dock for the adjacent property), or off-set locations, provided that compliance with permit and/or license conditions are maintained.

2. Deed of Easement: Permits/licenses issued through deed of easement may be renewed to the existing permittee **until** transfer of ownership or death of the permittee and his or her legal spouse, at which time such facilities must be removed from the Reservoir. Permits/licenses issued through easement will not qualify for new land based facilities. A deed of easements that is perpetual, legally recorded and dated prior to November 5, 2014 and/or serves as a dedicated subdivision access may be reissued to existing and future permittees.

3. Land-Based Facilities: Individual permits and/or licenses for land-based facilities issued prior to this plan based on adjacent fee simple property or dedicated subdivision access will be honored to current and future owners, subject to the limitations set forth in this plan. Individual permits and/or licenses for land-based facilities previously issued through existing dedicated subdivision access points will not qualify for a new permit and/or license. Grandfathered activities, facilities, or structures allowed under permits and licenses issued through adjacent fee simple property must have a minimum of 20 feet of common boundary in order to qualify for authorization of additional land-based facilities and will not be considered for utilities if the installation of utilities would create a crossover.

## 13. OFF-ROAD VEHICLE USE.

a. This section pertains to all vehicles, including but not limited to, automobiles, trucks, motorcycles, mini-bikes, snowmobiles, go-carts, dune buggies, all-terrain vehicles (ATV), boat trailers, campers, tractors, or any other such motorized vehicles.

b. Launching of any vessel from the shoreline or an improved walkway is prohibited, with the exception of vessels that can be hand carried (such as canoes, paddle boats, and kayaks).

c. The operation of motorized vehicles is prohibited on public lands with the exception of the following:

i. Vehicle use on right-of-way easements or under a License granted by the Corps for private access across Government lands and any authorized vehicle access trails (see Section 18);

ii. Golf carts, small and slow-moving lawn mowers and/or Utility Terrain Vehicles (UTV), subject to prior approval of the Operations Project Manager, may be authorized on permitted improved walkways above 302 feet M.S.L. (see Section 19.e.9.); and

iii. Riding lawn mowers are permitted only within vegetation modification areas and in accordance with the terms of an issued vegetation modification permit.

## 14. ACCESS REQUIREMENTS FOR OBTAINING SHORELINE USE PERMITS AND/OR REAL ESTATE LICENSES.

a. Applicants for a Shoreline Use Permit and/or Real Estate License must own private property adjacent to public land in fee simple and provide a recorded deed and recorded survey plat (prepared by a registered surveyor) for the adjacent private property. A plat of the adjacent private property, with dimensions of ownership clearly delineated, must be furnished for inclusion in the Shoreline Use Permit/License application. To be considered for floating and land-based facilities, the subject property must share a common boundary with public property that is classified as a limited development area for a minimum width of 50 feet along the common boundary. Also, the subject lot must be of a practical design (i.e., extremely shallow or narrow lots, known as finger lots, will not qualify for permits and/or licenses). Public roads do not constitute legitimate access. However, in situations where a public road and public land have a common boundary, adjacent landowners directly across from the Government boundary may be considered as having access. The safety of applicants crossing public roadways will be considered in the decision to issue permits and/or licenses.

b. Lots in limited development areas that share a common boundary of less than 50 feet, but greater than 20 feet, will meet the criteria for consideration of a permit for all activities except a floating facility. Land based facilities that are not associated

with a floating facility will not be required to use lot line projections. Newly approved land based facilities, to the greatest extent possible, will be placed directly in front of the area where the applicant and Government share a common boundary, do not create crossovers, and give consideration to the allocation of space for future applicants.

c. If one structure (e.g., house, other dwelling, and garage) or supporting structure (e.g., driveway, swimming pool, and porch) occupies more than one identified piece of property, the properties together will be considered one lot and will meet the criteria for consideration of one Shoreline Use Permit and/or Real Estate License. In the event a structure/feature is built across separate properties for which permits and/or licenses were issued prior to construction of the subject structure/feature, the previous permit, as necessary, will be canceled (and associated facilities removed) so only one permit remains for the subject property.

d. For the purpose of placing/establishing permitted and/or licensed facilities/activities, private lot lines will be projected from the outside corner pins (typically left and right lot pins as viewed when facing the water) to the lake (see Exhibit E). This is considered the primary frontage for an area and will be used to consider the placement of permitted and/or licensed facilities and activities; it does not constitute any property rights over public land nor prevent the use of the subject area by other adjacent landowners or the public in general. Floating facilities should be placed taking future applicants into consideration and should never be placed any closer than 50 feet to either projection line when 100 feet or more is within the primary frontage. When less than 100 feet is available within the primary frontage, the floating facility should be placed as close as possible to the center of the available frontage. If the projection lines bisects/crosses other frontage areas, previously permitted areas, or private property before it reaches 300 feet M.S.L., the property will not qualify for a shoreline use permit and/or license (see Exhibit E-1). Prior to the issuance of any new permits and/or licenses, applicants will be required to submit a projection document, completed by a registered surveyor and to a scale of 1 inch equals 100 feet along with copies of the deeds and plats. These documents must show the common boundary and projections and the existing shoreline at 300 feet M.S.L. Temporary wooden stakes representing the projections are to be installed just above 300 feet M.S.L.

e. In subdivisions where a minimum of 30 feet of dedicated easement or access corridor provides legal access to public lands and waters for all subdivision landowners, the access corridor will be considered sufficient legal access to support an application for a new community Shoreline Use Permit and/or Real Estate License. Spacing for community docks and other permitted community facilities may be reserved at these dedicated public access corridors if requested by the subdivision's recognized landowner association.

f. Existing Shoreline Use Permits/and/or Real Estate Licenses issued prior to this plan through adjacent fee simple property or dedicated subdivision access will be honored to current and future owners, regardless of lot width, cross-overs, or off-set locations, provided compliance with permit conditions are maintained. Permits and/or licenses issued through existing dedicated subdivision access points will not qualify for new land based facilities. Existing permits and/or licenses issued through adjacent fee simple property must have a minimum of 20 feet of common boundary to qualify for new land based facilities and will not be considered for utilities if they create a crossover situation. Permits and/or licenses issued through a deed of easement may be renewed to the existing permittee **until** transfer of ownership or death of the permittee and his or her legal spouse, at which time such facilities must be removed from the Reservoir. Permits and/or Licenses issued through a deed of easement will not qualify for new land based facilities. Deed of easements that are perpetual, legally recorded and dated prior to November 5, 2014 and/or serve as a dedicated subdivision access may be reissued to existing and future permittees.

15. PRIVATE FLOATING FACILITIES.

Shoreline Use Permits are required for all "private floating facilities," which includes individual boat docks, community docks, and mooring buoys but does not include registered vessels. Vessels in use on Kerr Reservoir must conform to Federal regulations in 46 C.F.R. Part 183 ("Boats and Associated Equipment") and have a valid registration from the state of origin. Private floating facilities must be able to accommodate the size of the vessel being moored, and no vessel may be more than 40 feet in length. Vessels with a Marine Sanitation Device (MSD) are prohibited from being moored at a private individual floating facility at any time. Boat owners with vessels longer than 40 feet or that have a MSD must moor their boats at commercial marinas, utilize dry storage facilities off project lands, or trailer their boats to a public launching facility. Floating facilities are considered private structures permitted on public land; therefore, the permittee may restrict the general public from using the facility.

See Exhibit B-1 for current fees and Exhibit C for "Permit Conditions" relating to these permits and licenses.

a. Applicant. A dock or mooring buoy can be authorized to only one member of any family household having legal pedestrian access to the Government property. When a floating facility permit is issued, it grants the permittee permission to maintain a facility on the reservoir. It does not, however, necessarily imply ownership of the facility. When a floating facility is owned by more than one individual, the permit will be issued to the owner of the property that is adjacent to the location of the facility. Multiple owners may submit an ownership statement to the Operations Project Manager for inclusion in the permit file along with a written request that the permit be reissued to a different owner if the current permittee terminates the permit. The request will not be granted automatically

but, instead, will undergo the same evaluation as all requests for a permit for a private floating facility.

b. Location Requirements. In most cases, docks will be placed within the primary frontage of a lot as described in Section 14.a. The placement of floating facilities will take into consideration future applicants and must not be placed closer than 50 feet to either projection line when 100 feet or more of primary frontage is available for placement. When less than 100 feet is available within the primary frontage, the floating facility should be placed as close as possible to the center of the available frontage. If site conditions within the primary frontage are not conducive for placement of a dock or mooring buoy (for example, due to unusual land features or spacing limitations), the property is not eligible for a floating facility. Docks must be installed perpendicular to the shoreline, not angled. For locations in which two or more pieces of private property qualify for placement of a dock in the same area but when all docks would not meet the spacing requirement, docks will be issued on a first come, first served basis. The exact location will be determined by the Operations Project Manager and marked by an Area Shoreline Ranger. Floating facilities may not be moved to any other location without permission from the Operations Project Manager, with the exception of "chasing water," (as discussed in Section 15.c.3. below). Requests for a seasonal relocation may be approved, subject to the requirements of this plan, provided adequate justification exists, is appropriate for the current designated shoreline allocation, and the new location does not encroach on spacing requirements of another facility as addressed in Paragraph 15.c.

c. Spacing Requirements.

1. Each floating facility, unless grandfathered, must be separated by a minimum of 100 feet of shoreline but, if next to an existing community dock, it must be separated by a minimum of 200 feet. In addition, a minimum distance of 50 feet must be maintained across reservoir waters from one floating facility to another. Any vessel moored to the outside edge of the dock cannot come within 50 feet of another dock. The spacing will be measured using the centerline of dock walkways or the posted permit tag for a buoy. All shoreline distances will be measured at the 300 feet M.S.L. elevation.

2. No dock will extend out from the shoreline more than one-third of the total perpendicular distance across any particular cove at the permit location. Buoys and moored vessels may not occupy more than one-third of any cove and must be anchored within 100 feet of the shoreline. Floating facilities cannot render any portion of a cove non-navigable or create any navigation hazard.

3. Water Depth. Low water conditions and potential hazards may exist in some areas due to normal fluctuations in the lake's elevation. If the lake has at least 3 feet of water depth at the proposed location, then a permit application for a floating facility may be accepted for review. All floating facility permits are issued in relation to 300 feet M.S.L. The issuance of a floating facility permit does not guarantee continual usability of the structure (for example, due to drought, high water conditions, and siltation). If

necessary during brief periods of low water due to seasonal drought conditions, individuals may temporarily "chase the water" in an effort to keep their floating facilities afloat, provided such action does not prevent/block access to existing facilities or coves. This practice has been allowed in the past, and will continue to be permitted provided that the temporary relocation does not create safety hazards (such as crowding, crossing over other docks, and creating a navigation hazard), does not involve temporary relocation into an area allocated as a Protected Shoreline area (yellow) or Public Recreation Area (red), or does not otherwise violate the requirements of this plan. Individuals may not "chase the water" if the usability of a floating facility is hampered by siltation or any situation other than seasonal drought conditions. When lake levels return to normal, individuals are responsible for returning their floating facilities to the permitted locations and removing all temporary anchorage in a reasonably timely manner.

d. Facility Placement. Floating facilities must be constructed or under contract for construction and placed at the approved location within one year (12 months) of permit issuance and maintained in place during the permit term, except when chasing the water during drought conditions. The permittee must install the shoreline use permit tag at the location of the gangwalk or the buoy on the shoreline within 30 days of permit issuance. The permittee must notify the Area Shoreline Ranger when the facility has been installed. If the floating facility is not in place within one year, the authorization for the facility is subject to revocation unless the permittee has submitted a written request to the Operations Project Manager with an explanation for the delay, and the Operations Project Manager has provided an extension in response.

e. Multiple Floating Facilities.

1. Issued to Same Individual. Shoreline Use Permits and/or Licenses may be considered for each separate piece of property, as defined in Section 14, that an individual owns adjacent to Limited Development shoreline.

2. Issued to Same Location. In the past, a mooring buoy was permitted in conjunction with a primary floating facility. Because of congestion and confusion associated with the placement of this type of mooring buoy, they will not be allowed. Upon change of ownership, only one floating facility will be authorized.

f. Allowable Permit Area. New floating facilities will be allowed in any area of the reservoir's shoreline allocated as Limited Development. No new floating facilities will be allowed in other shoreline allocations except for facilities located in areas covered by real estate outgrants where plans are approved through the grantee. Shoreline Use Permits and/or Licenses authorizing docks or buoys at locations in other shoreline allocation categories that were permitted and in place prior to this plan can be reissued to existing and future permittees/licensees, as originally permitted (see Section 12).

g. Maximum Density. Maximum density occurs when there exists, for any given area of shoreline allocated as Limited Development, one dock permit for each 100 feet of shoreline at 300 feet M.S.L. No other new floating facilities can be issued within this

area as long as this situation exists. In all cases, sufficient open area will be maintained for safe maneuvering of watercraft. In those cases where current density of development exceeds one dock for each 100 feet of shoreline, the density will be reduced to the prescribed level through attrition.

h. Facility Construction.

1. Standards for Docks. All plans for new docks and modifications to existing docks, including gangwalks, must be certified by a Professional Engineer to ensure a quality, safe design suitable for conditions at John H. Kerr Reservoir.

a. Plans. All new docks and buoys and those to be repaired or replaced must be approved by the Operations Project Manager and constructed according to a Corps approved plan that was certified by a Professional Engineer. Dock builders may submit master plans for each type of dock they intend to build, along with a master list of available colors. These plans must also be certified by a Professional Engineer. Once approved, these plans will be kept on file at the Operations Project Manager's Office. Dock builders will supply new applicants an 8.5 x 11 inch drawing showing the dimensions of the proposed structure, flotation type, gangwalk placement, and a side view of the roof and anchor system. This drawing must include a signed statement that the structure meets or exceeds specifications for dock plans on file for that particular dock builder.

b. If an applicant does not want to contract with a builder that has master plans or minimum standards on file, the applicant may submit his or her own plan provided it is certified by a Professional Engineer and accepted by the Operations Project Manager The proposed color must be included. The applicant must include a statement with the plan certifying that the dock will be built in accordance with the certified engineer plan.

c. Alterations to the original approved plan may not be made without the prior approval of the Operations Project Manager. Two-story structures, side walls, and sun decks are prohibited. Generally, additions of benches and railings may be approved as long as they are securely fastened to the dock in a safe manner.

2. Mooring buoys must be commercially manufactured and meet all Federal and state buoy requirements including, but not limited to, the following (see Exhibit M-1):

a. White in color with a blue band and numbers that are a minimum of 3 inches high;

b. Cone or sphere shaped and at least 15 inches in diameter; and

c. Must float in an acceptable manner so as to be easily seen and identified as a mooring buoy by the boating public.

3. The maximum size of boat docks will be calculated using length times width. All dock allowances will be calculated excluding the gangwalk.

a. The maximum allowable size of an individual dock without slips is 320 square feet. Neither the length nor width of the structure can exceed 26 feet.

b. The maximum allowable size of any slip dock is 960 square feet, including the slip area, jet ski ports, platforms, and any add-ons that are attached to the dock. Neither the length nor width of the structure can exceed 36 feet.

c. The maximum dimension of any attached platform/deck will not exceed 320 square feet. All attachments, including existing floating platforms, rafts, decks, and other structures which do not have enclosed hulls or are not designed and used primarily for recreational navigation, will be considered a part of the dock structure. The surface area of such structures will be counted toward the total square footage of the dock, regardless of the method of attachment or the presence of a boat motor or state boat registration numbers.

d. The minimum size for any dock is 8 feet by 10 feet. Size requirements apply to all new permits and licenses. Slip fingers must be 4 feet in width. If the structure has a roof, overhangs of up to 24 inches will be allowed. Renovated docks must meet these requirements. All dock and gangwalk plans are subject to approval by the Operations Project Manager and must be certified by a Professional Engineer.

4. Used Docks. If an applicant is considering the purchase of a used dock that is already permitted on the Reservoir, the applicant must provide the permit number to the Operations Project Manager's office by which the subject dock was last authorized so that plans for the dock can be reviewed. If dock plans for the subject used dock cannot be located, applicants must submit engineer-certified plans for the dock. Docks relocated to new areas must comply with current color and size requirements.

5. Color restrictions. Permittees are not required to paint metal or stain wood components of their facilities. However, if painted, colors such as dark browns, black, and dark greens that blend with the natural surroundings are required. Bright colors are not authorized. Wood surfaces may be left untreated to weather naturally. Roofs shall be non-reflective.

6. Gangwalks must connect docks to the shoreline and be constructed from 4 feet to 6 feet in width. Non-floating aluminum gangwalks may be 3 feet in width provided they have a handrail. Each floating gangwalk must have enough floatation to provide a stable walking platform or be one solid piece connecting the shoreline to the dock without touching water. Gangwalks must be included on an approved dock plan. Alternative anchoring methods will be considered on a case-by-case basis. Size requirements apply to all new docks. Gangwalks for renovated docks must meet these size requirements.

7. All new docks and existing docks are required to have attached at least four international orange or red reflectors at least 3 inches in diameter. Reflectors should be placed as shown on Exhibit M and visible to boat traffic.

8. One storage box not to exceed 96 cubic feet is allowed to be fixed to the top surface of the dock and constructed of Corps approved material. Storage compartments are limited to a maximum height of 48 inches. A walking surface of 36 inches will be maintained around the box.

9. Slides, diving boards, diving platforms, tiki bars, and fish cleaning sinks may not be attached to docks and will not be considered part of any approved dock plan. Any attachments to the dock must be approved by the Operations Project Manager prior to installation.

10. Dock Attachments and Amenities. Attachments, such as personal watercraft lifts, may be secured to a dock, but will be counted as part of the square footage of the dock structure because these types of facilities increase the "footprint" of the dock (that is, the actual water surface area occupied by the entire dock structure). After-market attachments (for example, dock boxes) that are secured to the landward side of the dock structure will not be counted as part of the square footage as long as placement does not affect the spacing between docks. After-market attachments must be approved by the Operations Project Manager.

a. Outdoor or patio-type furniture may be used on platform sections of the dock provided the furniture does not restrict or interfere with the walkways or otherwise cause a hazard. Four-foot wide dock sections are not considered adequate to accommodate furniture. Due to wind and wave action, dock owners are required to securely attach all personal items to the dock or remove it when not in use.

b. Diving boards/structures of any type as well as sliding boards, hammocks, and playground equipment are prohibited. Additionally, all items that denote habitation and are generally associated with a residence (for example, indoor furniture, grills, sinks, cabinets, appliances, satellite dishes, security cameras and permanent stereo systems) are prohibited.

11. Electrical/Solar Power on Boat Docks.

a. A plan must be submitted, prior to initiating any work, showing the proposed location of all electrical installations and components. An Electrical Utility Certification Statement (Exhibit H) will be required within 15 days after installation is complete. A new signed Electrical Utility Certification Statement will be required at each permit renewal, transfer of ownership, or changes to the system. This signed statement certifies that all conditions and requirements have been met.

b. All solar systems shall meet the current National Electrical Code for the environment served and comply with these standards. All electrical components must be

rated and suitable for the environment served. All electrical components will comply with the requirements stated in this section as well as requirements in Exhibit H and state and local laws and regulations.

c. All switches, receptacles and fixtures on the floating structure must be a minimum of 2 feet above the decking of the dock.

d. All wiring must be fully enclosed in conduit. Receptacles must have weather-proof in use covers.

e. All lighting must be "Dark Sky Friendly," full cut off, and white in color. No timers or dusk to dawn sensors are authorized. Motion detectors are allowed.

f. Electrical components cannot extend beyond the outer perimeter of a dock structure.

g. Solar power installed on the dock must not exceed 12 volts and must be a stand- alone system.

h. All components are permanently fixed to the dock structure.

12. Boat lifts can be placed on docks; however, the lifts cannot cause the dock size to exceed the maximum described in Section15.h.3. above. Electrical AC motors associated with boat lifts may be permanently fixed to the lift or dock, in accordance with manufacturer specifications. Battery- or air-operated lifts are preferred. Solar-powered lifts will be addressed on a case-by-case basis. Any solar panel in connection with a motor and boat lift must be included as part of the engineered dock drawings that are submitted before installation. Extension cords plugged into a ground fault electrical circuit may be utilized temporarily to operate lift motors. Temporary cords must be removed immediately after use.

i. Flotation Material. Floats and the flotation material for all docks shall be fabricated of materials that are manufactured for marine use. The float and its flotation material shall be 100 percent warranted for a minimum of eight (8) years against sinking, becoming waterlogged, cracking, peeling, fragmenting, or losing beads. All floats shall resist puncture and penetration and shall not be subject to damage by animals under normal conditions for the area. All floats and the flotation material used in them shall be fire resistant. Any float which is within 40 feet of a line carrying fuel shall be 100 percent impervious to water and fuel. The use of new or recycled plastic or metal drums or non-compartmentalized air containers for encasement or floats is prohibited. For any floats installed after the effective date of this specification, repair or replacement shall be required when it or its flotation material no longer performs its designated function or it fails to meet the specifications for which it was originally warranted.

1. No metal-covered or injected drum flotation is allowed.

2. White Foam bead flotation must be removed from the lake at change of ownership and/or time of renewal.

3. Polystyrene foam which has undergone the extrusion process is acceptable.

j. Anchoring. Floating facilities must be physically attached to the shore with a gangwalk and equipped with an anchoring system that will withstand fluctuating water levels, severe wave action, and wind. Anchoring must be done with a minimum 5/16 inch diameter wire rope (cable) or ½ inch rope above 302 feet M.S.L. (see Exhibit M-1).

1. The minimum anchoring system consists of two anchor lines connecting the dock to the shoreline, with each line at a 45 degree angle to the bank. Anchor lines shall be secured to the shoreline with metal or wooden posts, concrete, or screw augers and placed so as not to endanger visitors or damage vegetation. Lines will not be attached to trees, rocks, or other natural vegetation. Anchor lines must not obstruct the public's use of the shoreline or water surface. Supplemental anchoring systems will be considered on a case-by-case basis (e.g., Helix mooring and gangwalk hinge/fifth wheel).

2. Pole and Collar Anchoring System for Docks. This method consists of using a pole installed in the same manner as an electric pole above 302 feet M.S.L. and extending at least 2 feet above Maximum Flood Pool (which is 320 feet above M.S.L. East of Clarksville Bridge and 325 feet above M.S.L. West of Clarksville Bridge). A collar attaches the dock to the pole (see Exhibit M). The collar must be constructed in a way that it will free float on the pole and not hang or bind on the pole. No other structures will be permitted on the exterior of this pole (such as lines for electricity or water).

3. Dead man type anchors shall be located only underneath the footprint of the dock. This will prevent the creation of obstructions and navigation hazards in the lake. They must be installed according to the diagram in Exhibit M-1.

4. Anchor Post (Spud Pole) Anchoring System. This method consists of using a maximum of two anchor posts attached to either the walkway and/or the shoreline side of the dock. Community docks of 10 slips or less may use a maximum of 3-anchor posts. Community docks of more than 10 slips may use a maximum of 5-anchor posts. Anchor post must be used in conjunction with anchor cables. The use of anchor post does not exclude the need for anchor cables. No other structures will be permitted on the posts (such as electric lines, flags, and birdhouses). Posts cannot be physically driven into the ground as a permanent structure. The permit holder must ensure that the floating facility will never become elevated above the ground or water, and must prevent the loss of the posts during periods of lake level fluctuation. A detailed sketch of the dock and anchor posts must be submitted to the Operations Project Manager for approval, prior to the installation of the post. The Corps has the right to request the immediate removal of these posts if they become a safety hazard to the public.

k. Repairs, Replacements and Additions. Inspections of docks and buoys will be performed periodically. If deficiencies are found, the permittee will be notified and requested to make repairs within 30 days.

i. If the facility is found to be in such poor condition that total replacement is required, the permittee will be given 6 months to install a new floating facility and remove the old one from public property or Federal waters. Time extensions will be considered only if the permittee submits a written request.

ii. The Area Shoreline Ranger must be notified in writing prior to voluntary replacement or alteration of floating facilities. Approval must be granted by the Operations Project Manager prior to installation or alteration of any facility. All replacements or alterations must be in accordance with certified engineering plans.

l. Dock Builders List. A referral list is maintained at the Visitors Assistance Center and on-line for all dock builders who have Corps-approved plans suitable for use on John H. Kerr Reservoir.

m. Shoreline Use Permit and License Signs. Permit holders are required to post a Shoreline Use Permit and/or license sign on the lakeside of their dock, or on a 4-inch by 4-inch treated post at the location of a buoy or a permit without a floating facility as designated by the Operations Project Manager. In addition to the permit and/or license sign on the lakeside of the dock, the permit number must be labeled or stenciled in black text in 3 inch numbers in an additional location on the landward side of the dock (see Exhibit M).

16. COMMUNITY DOCKS.

a. With the exception of dock size limits, community docks will be subject to the same shoreline allocation requirements and fees as stipulated for individual facilities. Shoreline Use Permits/Licenses authorizing community moorage facilities will be considered when it has been determined that there is a need for moorage in a particular area, access to the area is available, and an appropriate site location exists for community mooring. Community docks will be considered in areas that do not conflict with commercial marina services, public launching facilities, or other access points. Community docks will be considered for standard residential subdivision developments and multi-residential developments, such as condominiums, townhomes, or other types of development where property adjoining public land is commonly owned by all unit owners. See Exhibit B-1 for current fees and Exhibit C for "Permit Conditions" relating to this type of permit.

b. Applicant. Community dock Permits/Licenses will be issued to associations, signed by a designated point of contact, and approved based on development plans submitted by the association and accepted by the Operations Project Manager.

i. At a minimum, a Community Dock Association Agreement (Exhibit J) will be completed, signed by the appropriate association representative(s), and included as official permit documentation.

ii. The signed and submitted Community Dock Association Agreement must include the names, addresses, and lot numbers of the individual members, and any other pertinent information relating to the proposed community dock. This document must designate an association member who will sign the permit.

c. Size of Facility. The maximum number of slips allowed for any one community dock is 20 slips. A slip is defined as a mooring opportunity per lot and cannot exceed 12 feet wide by 28 feet long. The actual size of the facility may be reduced by the availability and suitability of the area, as determined by the Operations Project Manager. Each lot that is shown on an approved development plan, as that development plan is recorded in the County Courthouse, can qualify for a slip on a community dock. Only one slip may be associated with any one lot. Lots that are used as drainage fields or storage will not be eligible for a slip.

d. Access. All applicants for a community dock must provide the articles of incorporation (which also may be referred to as the certificate of incorporation or the corporate charter) for the association (as filed with the state in which the community is located) and a recorded plat showing 30 feet minimum width of common access for their association members. Access to the facility across public land will be limited to those described in Section 19.e. Existing community dock access points that are less than 30 feet in width will be grandfathered.

e. Construction Criteria. All dock and gangwalk plans are subject to approval by the Operations Project Manager prior to placement and must be certified by a Professional Engineer. Concrete bulkheads at the walkway connection to the shoreline can be approved at elevation 302 to 310 feet M.S.L. Plans must show the dock configuration and maximum number of slips proposed. Installation, however, may be accomplished in phases. Gangwalk, center walkway, and dock fingers may vary from a minimum of four feet to a maximum of six feet. No deviation or change from approved plans will be permitted without prior written approval.

f. Maintenance of Facility. The association may collect fees in an amount necessary to maintain the community dock facilities and to assure the removal of the facility upon termination of the Shoreline Use Permit and/or License. Facilities granted under this permit will not be leased, rented, sublet, or provided to others by any means of engaging in commercial activities) by the permittee or his/her agent for monetary gain. This does not preclude the permittee from selling total ownership of the facility, but a change in ownership of the facility does not automatically transfer the permit and/or license.

g. Spacing Requirement. Spacing requirements must be able to be met within the primary frontage of the subdivision, as established by lot projection lines. The following spacing is required on either side of the gangwalk of a community dock:

- 2-5 slips – 200 feet;
- 6-10 slips – 300 feet;
- 11-15 slips - 400 feet; and
- 16-20 slips - 500 feet.

h. Individual Private Moorage. Individuals with an existing private floating facility that is located within the 200 foot spacing required on either side of a community dock will be contacted during the application process and notified of the request for a community dock that is within the required spacing. These individuals do not have to agree to remove their private floating facilities and join the community dock. If an individual with a permit does not agree, a permit cannot be issued for a community dock.

i. Special Conditions of Community Docks. The designated representative shall sign a statement certifying that the regulations and conditions covering the issuance of the permit have been read and understood. The applicant should be aware of the following special conditions and submission requirements necessary for approval of a community dock.

1. The term of the permit will not exceed five years.

2. The name, address, and phone number of a person designated by the association that will provide 24-hour surveillance of the dock and receive correspondence from the Corps must be supplied. The Operations Project Manager must be advised of any changes in this designee.

3. Members must allow all individuals having legal access to the facility to join its membership until such time that all slips are occupied. Only boats owned by association members may be moored at the community dock.

4. The United States is not responsible for damage to any property or injuries to any person or persons which may involve the facility that is authorized under a permit and/or license.

5. All commercial activities of any kind are prohibited.

6. Vessels or other watercraft, while moored at the facility, may only be used for overnight occupancy when such use is incidental to recreational boating. Vessels or other watercraft are not to be used as a place of habitation or residence. All vessels or watercraft shall display an appropriate registration on board in accordance with applicable Federal, state, and local laws whenever the vessel is on project waters.

7. The permitted and/or licensed facility shall be subject to periodic inspection by Corps of Engineers personnel. If an inspection reveals conditions causing pollution of public lands or water or conditions which make the facility unsafe in any way or which deviate from the approved application and plans, such conditions will be corrected immediately by the permittee upon receipt of notification and may be subject to appropriate enforcement action.

8. The construction and operation of the permitted facility shall not unduly obstruct or inhibit the free public use of the shoreline.

9. Operation of the facility shall be conducted in accordance with all Federal, state, and local laws and regulations.

10. Vegetation modification shall be limited to a 15-foot wide pathway including the Improved Walkway (if permitted) to the location of the floating facility and then will be limited to a 50 foot by 50 foot area at the location of the floating facility to facilitate safe access to and maintenance of the facility.

11. The operation of the permitted and/or licensed community dock shall in no way be conducted in a manner that is discriminatory against any person or persons because of sex, race, creed, color, or national origin. Any person owning or holding a long-term interest in residential property in the subdivision/association shall be eligible for moorage privileges at the permitted facility.

17. VEGETATIVE MODIFICATION.

a. Underbrushing. Underbrushing is defined as the selective cutting and continued control of woodland understory vegetation (for example, weeds, vines, and briars) and the thinning of tree saplings, as stipulated in the terms of the permit. Shoreline Use Permits for removal of underbrush are allowed on shorelines classified as Limited Development or Protected Shoreline (footpath only). Regardless of the shoreline classification, the Operations Project Manager may add special restrictions to the permit to protect environmental features, such as cultural resource sites, highly erodible slopes, or unique vegetative species. Within the underbrush area, the permittee will delineate the Government property line, as surveyed and marked by the Government, in a clear but unobtrusive manner in accordance with this plan.

The following specific conditions or terms apply to all Shoreline Use Permits authorizing underbrushing.

1. Underbrushing can be authorized to adjacent landowners having legal access to the public property covered under the permit. Generally, only one underbrushing area per individual will be authorized. However, more than one area may be allowed provided it is associated with an existing dwelling or one under construction.

2. Size of Area. The maximum size limit for a new underbrush permit is limited to the applicant's adjacent lot frontage but only up to a maximum width of 100 feet. This permit area generally runs from the Government's boundary line down to the water and cannot exceed one acre (that is, 43,560 square feet) in size.

3. In new underbrush areas, native trees, seedlings, and saplings must be maintained at a spacing of approximately 25 feet on center (25' x 25') regardless of tree diameter. If tree stocking falls below this minimum level, then additional trees must be established. This will occur by planting or through natural regeneration.

4. Within existing underbrushing areas that were established prior to the approval of this plan, tree stocking levels must be brought up to the standard of approximately 25 feet on center (25' x 25'). To be acceptable, a tree must be 1 inch in diameter at its base by January 1, 2020.

**5.** Should the permittee plant within an underbrush area, the species selected must be from the approved list in Exhibit F. The permittee will be allowed to mow around the planted trees within the designated permit area. Ornamental flower beds and non-native plants are not authorized.

6. The furnished Shoreline Use Permit sign must be posted at the location designated by the Operations Project Manager. When an underbrushing permit is associated with a dock, the permit sign is placed on the dock.

7. Tree Spacing. Within the underbrush area, vegetation having a stump diameter less than three inches (measured within one inch of ground level) may be cut or mowed, provided it is not protected under a special condition. In new underbrush areas, native trees, seedlings, or saplings must be maintained at a spacing of approximately 25 feet on center (25' x 25') regardless of tree diameter. Under no circumstance will vegetation measuring greater than 3 inches in diameter be cut without the prior approval of the Operations Project Manager. The Corps reserves the right to re-vegetate the shoreline when tree spacing falls below the acceptable minimum stocking level. This might occur in the case of timber encroachments; insect and disease attacks; and fire, storms, or other natural disasters. These events may require the planting of vegetation and trees within the designated underbrushing area. If plantings occur, the permittee is required to protect these trees from future cuttings.

8. Limbing. Dead or dangerous limbs may be pruned. Pruning of living vegetation is permitted but must be limited to small limbs less than one inch in diameter at the trunk and located within 10 feet of the ground or 1/3 the height of the tree, whichever is less.

9. Tools. Within the designated underbrush area, hand tools (such as weed eaters, chain saws and lawn mowers) can be utilized to cut brush provided they do not damage the remaining vegetation. The creation of mowed lawns is prohibited. If

mowing is selected as a means to control brush within the permit area, the permittee must establish trees at a minimum spacing of 25 feet (25'x 25').

10. Open Burning. Open burning on the exposed lake-bed is permitted only to those individuals with a valid vegetation modification permit. Burning is restricted to the exposed lake bottom below 300 feet M.S.L. During periods of normal or high lake levels (that is, 300 feet M.S.L. or greater), burning is prohibited. Materials to be burned are limited to underbrush material and driftwood taken from public land. Any burning must be coordinated with the local fire agency and be in accordance with applicable state and local laws. The burning-off or removal of leaves and other natural materials is prohibited.

11. Appearance of Private Ownership. The establishment of grass lawns, flowerbeds, and/or other landscaping activities or the placement of personal items that create the appearance of private ownership and control of public land are not allowed. The removal of natural ground litter (by raking, blowing, bagging, etc.) such as pine straw and/or leaves is also prohibited. Permitted facilities (for example, utility rights-of-way and improved walkways) will be located within the designated underbrush area unless site conditions, as determined by an Area Shoreline Ranger dictate otherwise.

12. Dead Trees. Standing dead or diseased trees may be cut only after they are inspected and marked for removal by an Area Shoreline Ranger. Downed dead trees in zoned Limited Development vegetation modification areas may be removed. Removal must be accomplished without damaging other vegetation. Standing dead trees are beneficial to wildlife and will be preserved provided they are not considered a safety hazard.

a. Foot Paths. In Limited Development and Protected Shoreline Allocations where underbrushing is not applicable, a Shoreline Use Permit authorizing a foot path may be obtained to provide safe access to the water. This permit will allow the permittee to clear vegetation within a five foot swath. The path must be routed to minimize the effects on vegetation and the location must be approved by the Operations Project Manager. Foot paths cannot be utilized as roadways by motorized and/or off-road vehicles.

b. Specified Acts Permits. Other short term permits are available to the public and are described below.

1. Herbicide Application. Herbicide use is permitted on certain noxious plants (for example, poison ivy, kudzu, or other invasive, exotic plants). Prior to using an herbicide, the chemicals must be approved and a special use permit be issued to the permittee. Herbicide use must be in accordance with the manufacturer's label and all applicable Federal, state, and local laws. Herbicides cannot be used to establish or maintain standard underbrush areas.

2. Dead or Danger Tree. A permit may be obtained to cut dead, dangerous standing, or downed trees for use as firewood and/or to eliminate an unsafe condition.

Individual trees must be marked by an Area Shoreline Ranger before cutting. All debris must be disposed of so as not to create a safety hazard. Deadwood removal must be accomplished without damaging other vegetation or creating a roadway. Standing dead trees within designated wildlife areas deemed beneficial to wildlife may be reserved provided they are not considered potential safety hazards. If the purpose of cutting dead trees is to obtain firewood, a fee may be charged for a deadwood permit provided multiple trees are requested and the amount of wood involved exceeds one cord.

3. Greenwood (Firewood). A permit may be obtained to cut live standing timber when it has been determined by the Operations Project Manager that it is beneficial to do so. The permittee may be required to pay the assessed value for all timber authorized for removal. Under no circumstances will timber be made available for the exclusive purpose of improving a view of the lake.

4. Driftwood Removal. A permit may be obtained to remove or burn driftwood and other debris which have accumulated along the reservoir shoreline. This permit may authorize the use of motorized equipment below the 302 feet M.S.L. If motorized equipment is utilized, the permittee may not damage public property, vegetation, or construct a roadway to the work area. Burning of piled debris must be accomplished in compliance with all applicable local and state open burning laws. This permit is cost free.

5. Hydrilla and other noxious aquatic vegetation. Individuals wishing to control aquatic vegetation must request and receive authorization from the Operations Project Manager. Permittees are responsible for complying with all laws and regulations regarding the handling and disposal of noxious weeds. Vegetation removed by hand will be left to dry on high ground. Improper disposal or transport of aquatic vegetation classified as a noxious weed is a violation of state and Federal law. Control of Hydrilla and other noxious aquatic vegetation on the reservoir must be performed in compliance with the Aquatic Vegetation Management Program for John H. Kerr Reservoir and applicable Federal and state law (e.g., Plant Protection Act, 7 U.S.C. Chapter 104; [North Carolina's] Plant Protection and Conservation Act, G.S. 106-202.12 to 106-202.22; [North Carolina regulation] 02 NCAC 48A .1702 (Noxious Weeds); and Virginia Code § 3.2-800 to 3.2-809 (Noxious Weeds)).

## 18. VEHICLE ACCESS TRAILS.

Private vehicle access trails that existed prior to the 1980 Lakeshore Management Plan will be inventoried and permitted and/or licensed to the adjacent landowner controlling private access or to another responsible party having access. Failure to maintain a permit and/or license and abide by its conditions may cause the access trail to be closed to vehicles. A Footpath or Improved Walkway permit may be authorized in a location where vehicular access is terminated.

a. Vehicle access trails that existed prior to the 1980 Lakeshore Management Plan may be allowed to remain open in accordance with the following.

1. An adjacent landowner or other responsible party having legal access across private lands at the location of the access trail must obtain a permit. If an existing Shoreline Use Permit and/or License has been issued to the responsible party, authorization will be included in the existing permit and/or license. An existing vehicle access trail permit may be re-assigned to a new property owner. If a responsible party cannot be located, then the access trail will be closed.

2. Existing vehicle access trails that serve as extensions of a dedicated public access corridor used by all subdivision members may be authorized to a homeowners association.

3. Maintenance of any authorized vehicle access trail will be limited to resurfacing with materials existing at the time of authorization or subsequently approved soil erosion control materials and techniques.

4. Existing vehicle access trail turnarounds and parking areas will be restricted as designated in the conditions of the permit to protect soil erosion areas. These restrictions may include, but are not limited to, the mandatory installation of restrictive barriers by the responsible party and designated no vehicle operation and/or no parking zones.

5. Operation/parking of vehicles off of the designated vehicle access trail will result in the termination of the authorization and subsequent closing of the trail.

6. Generally, only one vehicle access trail will be permitted per adjacent private home or private tract of land. Multiple trails must be combined if they serve the same authorized party and/or general location. Persons with existing trails in close proximity to one another may be required to share one trail.

b. Construction or use of vehicle access trails developed after the 1980 Lakeshore Management Plan are prohibited. These access trails will be closed utilizing barriers and signs.

## 19. LAND-BASED SHORELINE USES.

a. A Shoreline Use Real Estate License for certain land-based facilities may be granted to applicants having legal access to public property along shorelines allocated as Limited Development. This License is not required for structures placed on flowage easement lands. However, facilities placed on flowage easement lands must be installed according to all appropriate governmental regulations, codes, and license/consent conditions. Installation must also be in compliance with easement rights and privileges acquired by the Corps of Engineers.

b. Facilities installed prior to this Plan will be allowed to remain in shoreline allocation areas other than Limited Development shorelines, subject to Section 12.a. of this Plan.

c. The following special conditions apply to all land-based facilities regardless of shoreline allocation:

1. The Area Shoreline Ranger will designate and/or approve the facility location to minimize the adverse effect on public property.

2. The facility must be installed within one year of the date on which the License was granted. Within fifteen (15) days after installation, the Operations Project Manager's Office must be notified so that an inspection of the facility can be scheduled.

3. No work shall take place on public property prior to issuance of the Shoreline Use Permit and/or License.

d. Electric Utility Lines. Electric lines licensed on public property are subject to the specific conditions listed below:

1. A plan must be submitted, prior to initiating any work, showing the proposed location of all electrical installations and components. All electrical components will comply with the requirements stated in Exhibit G; the current National Electric Code; and state and local laws and regulations.

2. Previously authorized above ground lines must be installed underground upon transfer of ownership. A copy of an Electrical Utility Certification Statement (Exhibit H), provided with the permit application, must be signed by a licensed electrician and provided to the Operations Project Manager within fifteen (15)days after installation. A new signed Electrical Utility Certification Statement will be required at each permit renewal, transfer of ownership, or changes to the system. This signed statement certifies that all conditions and requirements have been met.

3. Electrical systems cannot exceed one (1) 125 volts, 20 amp branch circuit and must have Ground-Fault Circuit Interrupter (GFCI) protection at the circuit breaker box on private property. A master cut off switch or quick disconnect must be readily accessible outside and located on private property. No exceptions will be allowed. The system must remain de-energized unless the owner or guest is present.

4. All fixtures and receptacles on Government land must be located at least 2 feet above the Maximum Flood Pool Elevation as shown on Exhibit H.

5. All above ground wiring must be in approved water tight electrical conduit with proper connections. Non-metallic rigid electrical conduit or metallic rigid threaded type conduit may be used. Conduit which leads to receptacles or switches must be supported by pressure treated wood posts with sufficient clamps installed to prevent

movement. Flexible conduit must be used at all moveable joints. PVC water pipe is not allowed to be used in lieu of electrical conduit.

6. All utility poles must be either metal, treated wood, or commercially built and located at least 100 feet apart. No utility pole may be located below the 302 feet M.S.L. elevation.

7. Solar Powered Lighting. Land-based solar powered electrical systems must be installed according to the same guidelines as wired systems. The use of individual solar lights or panels or stand-alone systems are limited to floating structures only. These systems are subject to the required Electrical Utility Certification Statement and criteria established under Section 15.h.11.

8. Electrical pumps and motors are not allowed on Government land. However, electric pumps can be placed within the dock area for minor water withdrawal and boat lifts. See Section 19.f. for minor water withdrawal information.

9. Disturbed areas for underground installation must be seeded over for erosion control using a seed type recommended in Exhibit I-1.

10. All electrical installations will be permanent in nature **except for the required** retractable cord reel and associated cord and plug. The cord reel must be rated for outdoor hard or extra hard usage.

11. All lights will be full cut off, "Dark Sky Friendly," and white in color. No dusk to dawn photo cells or timers are allowed. Motion sensors are acceptable.

a. Land Based. Lights located on public lands must be installed at least 100 feet apart; mounted on commercially approved poles of metal, treated wood or other approved material; non-decorative in nature; and located a minimum of 2 feet above the maximum flood pool (see Exhibit H). The lowest base elevation of any utility pole will be 302 feet M.S.L. Only one receptacle may be installed on the land-based utility pole and must be suitable for the environment served.

b. Solar panels may be located on private property and, with prior approval, utilities may be extended across public lands. Solar applications extending across public lands must be ground fault protected. Any individual solar panels or solar lighting across public land must be installed according to plans submitted to the Operations Project Manager and approved for installation.

e. Improved Walkways and Steps. All improved walkways and steps providing access across Government lands require a Real Estate License. A delineated path or the use of materials for the purpose of improving access is defined as an improved walkway. Walkway improvements will be removed from public property at the expense of the Licensee upon termination of the Shoreline Use Real Estate License.

Walkways and steps authorized on public property are subject to the conditions listed below.

1. The walkway is not to exceed six feet in width. Walkway and step licenses are available for the purpose of providing a safe access to reservoir waters. If stepping stones are utilized, they must not exceed 18 square inches in size to facilitate easy removal upon termination of the permit.

2. With prior approval of the Operations Project Manager, concrete and asphalt walkways can be re-assigned to a new landowner but must be replaced with an approved non-concrete design when it deteriorates to the point of requiring replacement.

3. A resting bench is permitted as long as it does not cause the walkway to exceed the six foot width limitation. Benches must be made out of pressure treated wood or other approved material. Benches may be set in the ground with a maximum of one resting bench every 200 feet along the walkway between the private property line and the floating facility.

4. All walkways must follow a route, taking topographic conditions into account, which will prevent soil erosion. All routes are subject to designation and/or approval of the Operations Project Manager and Real Estate Contracting Officer for the purpose of minimizing the adverse impact on public property and other permits and/or licenses. Walkways cannot extend below elevation 300 feet M.S.L.

5. Authorized walkways and steps cannot be physically attached to any private dwelling. There must be at least a three-foot separation. Structures extending across the boundary line from private dwellings are considered encroachments. The Operations Project Manager or Real Estate Contracting Officer may also designate requirements for several breaks in handrails and walkways to facilitate lateral pedestrian access.

6. Footbridges with handrails, constructed to a maximum of 6 feet in width, may be authorized for access across larger drainage ditches and low areas on public land. Professional Engineer certification will be required on footbridge plans that are 4 feet or higher from the ground. Footbridges may not extend below or cross over 302 feet M.S.L. elevation, and all materials must be treated for ground contact.

7. If a substantial structure is being considered, detailed plans for the construction of the steps or walkway will be required. See Exhibit L for an approved stairway design. All carpentry and construction must meet all state and local codes. All lumber must be commercially pressure treated and approved for outdoor ground contact use.

8. Natural, unimproved pathways that do not adversely impact the environment may require a Shoreline Use Permit but do not require a license.

9. Walkways cannot be used for vehicular traffic, including off-road vehicles, all-terrain vehicles, motorbikes, and other similar motorized equipment. However, golf carts, small slow-moving lawn mowers, and/or Utility Terrain Vehicles (UTV) may be used on licensed improved walkways above 302 feet M.S.L. but only if the Real Estate

Contracting Officer provides prior written approval. Turn-outs or loops for authorized equipment should be part of an approved plan. Unauthorized vehicular traffic on a walkway may result in the termination of the Permit/License.

10. The permittee and/or licensee cannot restrict the general public's use of any permitted/licensed walkways and steps that are located on public property.

f. Water Utility Lines. An underground potable waterline extending from private land to a single, above ground spigot on public land may be permitted and/or licensed. Additional spigots may be installed on the dock, but sinks and showerheads are prohibited. The Operations Project Manager and/or Real Estate Contracting Officer must designate the location of such underground potable water lines on public property to minimize the impact on public property and other permits and/or licenses issued in the area. All permanent potable water lines, must be placed underground to reduce any conflicts with other uses of public land. Cuts for underground lines must be seeded over for erosion control utilizing a seed type that is recommended in Exhibit I-1.

g. Minor Water Withdrawals.

1. All existing shoreline use permits/real estate licenses that include utility rights of way for minor water withdrawals shall remain in effect. These permits/licenses shall be reissued at the applicant's request, as appropriate, when the permit/license expires or is subject to a change of ownership. The following conditions must be satisfied for the transfer of an existing minor water withdrawal.

a. Only one raw water line that is no larger than 2 inches in diameter with an anti-siphon device is allowed.

b. The minimum elevation for a raw water supply intake line is 295.5 feet M.S.L.

c. The location of each intake for a raw water line, as well as the minimum elevation level, shall be clearly marked and identified for safety and to assist Corps personnel during periodic inspections.

d. The type of pump and its location must be submitted to the Operations Project Manager and approved prior to installation.

2. New non-potable water (previously referred to as "raw water") intakes and electric pumps may be authorized for use on a permitted floating facility for minor use purposes within the dock area, such as rinsing off the dock and watercraft. The Operations Project Manager will evaluate requests for new non-potable water lines that extend to private property in accordance with Wilmington District and South Atlantic Division policy.

h. Miscellaneous Utility Lines. Miscellaneous utility lines may be considered for approval on a case-by-case basis. This may include the underground installation of air lines to facilitate the operation of boat lifts.

20. FACILITIES FOR PERSONS WITH DISABILITIES.

The Corps and other managing agencies have developed a number of facilities for lake access in public recreation areas that comply with the Americans with Disabilities Act (ADA). Adjacent landowners and permittees are encouraged to use these facilities when the need for disability access arises. If direct access to a dock is required from the adjoining property for a disabled resident, authorization for specialized facilities can be requested in writing and will be considered. Each case will be reviewed based upon its own merits. To qualify, the applicant must provide a doctor's letter that is not more than one (1) month old and describes the disability. The letter must provide sufficient details concerning the disability and the type of access that is medically necessary for continued use of the facilities. Benches, handrails, or use of a motorized cart or similar vehicle may be authorized. Authorization will be granted for the minimum improvements necessary to provide safe access. In any case, the person requiring the access must reside full time in the home of the permittee. At renewal of the permit and/or license, this need must be re-established with a subsequent doctor's letter that is not more than one (1) month old at the time it is submitted. Site conditions may limit the Corps' ability to accommodate every applicant.

21. EROSION CONTROL ACTIVITIES.

a. Shoreline Erosion. John H. Kerr Reservoir is subject to extreme shoreline bank erosion. Although it is not economically feasible to implement an extensive shoreline erosion control program, the Corps strives to prevent and minimize erosion whenever possible. The Corps' first priority for its limited erosion control funds are the shorelines associated with developed recreation areas. However, if an adjacent landowner desires to perform erosion control work on Government property, the Operations Project Manager may issue a cost free permit for the work. Normally, permits for this purpose will be issued only in shoreline areas zoned as Limited Development, but a permit may be issued in other zoning areas if a need can be demonstrated. When an erosion problem originates on private property and extends onto public land, corrective action on private property must be taken to prevent further erosion of public land. Failure to prevent silt from extending from private property to public land, during construction or any other time, may result in the issuance of citations, the required removal of silt, the non-issuance of shoreline use permits and/or licenses, and/or the cancellation of all or part of existing shoreline use permits and/or licenses. A listing of erosion control permit requirements are as follows.

1. All work must meet the specifications of Section 10 of the Rivers and Harbors Act of 1899 and Section 404 of the Clean Water Act. Protection activities must not exceed one cubic yard/linear feet of fill and not exceed 500 linear feet of shoreline. Nationwide and regional permits may apply.

2. Riprap, if used, must be natural stone 6 to 12 inches in diameter and be clean of unnatural materials and building rubble. Riprap material should be placed on a filter cloth material or bedding stone as approved by the Operations Project Manager.

3. All vegetative planting or seeding must be of an approved species listed in Exhibit I and Exhibit I-1, respectively.

4. Retaining walls for the purpose of stabilizing shoreline erosion may be approved if extenuating circumstances exist which prevent the use of other approved methods. Retaining walls require design certification by a state Professional civil or structural engineer who is experienced in retaining wall construction. In addition, review is required by the Environmental Division in the Wilmington District Office.

b. Trail Erosion. Trail erosion is generally caused by overuse of an area by either foot or vehicle traffic. When overuse of an access route to the shoreline is creating an erosion problem, use of the trail must cease. Another alternative is for the users to apply for approval to construct an improved walkway. When vehicles using authorized vehicle access trails are causing an erosion problem, portions of existing roads may be closed to implement and/or protect soil erosion measures.

## 22. ACTIVITIES BELOW NORMAL POOL ELEVATION (300 FEET M.S.L.).

a. Dredging below the normal lake elevation (300 feet M.S.L.) for the benefit of private exclusive use will not be permitted. Removal of deposited alluvial-silt material will be considered on a case-by-case basis. Access to the area will be taken into consideration and should be readily accessible, with minimal impact to the surrounding land.

i. No more than 5,000 cubic yards of silt material may be removed from public lands and waters in one single project. The removal may not extend into the original hard clay bottom of the lake and is not permitted to increase cove depth beyond that of the original lake bottom.

ii. Silt removal applications must be coordinated though project staff, and the permittee must obtain a permit for silt removal prior to initiating any work.

b. Activities in the navigable waters of the United States (e.g., placing riprap and fills) and the discharge of dredged or fill material into the waters of the United States may be authorized under conditions specified in permits that are issued pursuant to Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403) and Section 404 of the Clean Water Act (33 U.S.C. 1344). All proposed work must be reviewed for possible impacts on flood storage, and a permit must be obtained under the applicable statute(s) prior to the initiation of the work. Contact the Visitor Assistance Center for application procedures.

c. Dredging, filling, or permanent construction on easement or fee lands requires written consent from the Corps of Engineers and consultation with the appropriate Corps Regulatory and Real Estate Offices (see Section 8.c.).

23. BOUNDARY LINE ENCROACHMENTS.

a. The boundary line at John H. Kerr Reservoir has been established and marked by the Corps of Engineers in accordance with standard survey techniques. The boundary line is marked utilizing a series of orange painted hacks and blazes on line and witness trees (see Exhibit K). In open areas where the distance between corners is such that the monuments or pins are not visible, boundary line posts are used by the Corps of Engineers to witness the line. Whenever possible, witness posts with appropriate identification will be placed near existing corner pins. These pins and posts should not be moved or destroyed.

b. The Corps of Engineers regularly repaints the boundary line. This ensures that the existing boundary line is not lost due to development or natural causes. If a private need arises to identify the exact location of the common Government-private property line, the adjacent property owner (at private expense) must utilize a licensed surveyor. If requested, the Corps of Engineers may provide information to surveyors or property owners which might assist in the location of boundary lines and property corners. Such information, if available, is maintained at the Visitor Assistance Center. Any discrepancies identified by the privately-funded survey must be raised to and resolved with the Operations Project Manager.

c. Any activities, other than public recreational activities or pedestrian access, which are not covered by a Shoreline Use Permit and/or Real Estate License, may be considered an encroachment or degradation of public property. These unauthorized activities are violations of the Federal regulations at36 C.F.R. Part 327. Examples of such violations include, but are not limited to, unauthorized motorized vehicle operation; development of roads; removal or placement of debris-fill dirt; placement of dog pens, swings, patios, decks, steps, or buildings; storage of equipment or vehicles; burning; tree and vegetation cutting; and grading of landforms. Violations due to unauthorized activities and actions will result in removal, restitution, and/or issuance of a Violation Notice requiring the payment of a fine and/or the appearance before a Federal Magistrate with the possibility of a fine and/or imprisonment as specified in 36 C.F.R. 327.25.

24. PROJECT CONTACT INFORMATION

John H. Kerr Reservoir Operations Management personnel are available to address any questions concerning the Shoreline Management Plan. The John H. Kerr Visitor Assistance Center is located one-half mile west of John H. Kerr Dam on Mays Chapel Road and contains displays depicting on a larger scale the shoreline allocation areas as described in the plan. Further information concerning the Shoreline Management program is available at the Visitor Assistance Center or by calling (434) 736-6143 or 738-6144.

25. CONCLUSION.

a. It is the intent of the John H. Kerr Reservoir Shoreline Management Plan to optimize recreational benefits to the public while preserving and sustaining the natural environment of the reservoir. As presented, the plan is and will continue to be a flexible and working document. Periodically, shoreline allocations are adjusted, as necessary.

b. Natural Resources Management personnel at John H. Kerr Reservoir will continually monitor the needs of the lake's recreational users and recommend revisions to minimize conflicts between various interests. Accordingly, this plan will be periodically reevaluated and, as needed, revised. The District Engineer will approve minor changes to the plan. For any proposed major revisions to this plan, an additional public comment period and/or public meetings will be held as required by ER 1130-2-406. After consideration of all comments, proposed major revisions will be submitted to the South Atlantic Division Commander for approval.

EXHIBIT A

John H. Kerr Reservoir--Guide Curve
Guide Curve
Bottom of Flood Control Pool
Reservoir Level, ft-msl
304.00
303.00
302.00
301.00
300.00
299.00
298.00
297.00
296.00
295.00
294.00
293.00
292.00
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec

# EXHIBIT B
# Procedures for Obtaining Shoreline Use Permits/Licenses
# John H. Kerr Reservoir

**Step 1** Applicant makes a written or telephone request for a permit to the Visitor Assistance Center at 1930 Mays Chapel Rd., Boydton, VA 23917 or 434-738-6143. Be prepared to give the following information:

a. Type of permit or license desired.
b. The location of desired permit
c. Name and telephone number of where you can be reached between the hours of 8:00 am and 4:00 pm, Monday – Friday.

**Step 2** If rangers are unavailable, they will contact the prospective permittee by phone and schedule a meeting at the Permit location.

**Step 3** The rangers on site will establish the location and types of facilities and accept an application based upon requirements of the plan. Upon tentative approval, Rangers will provide the permittee with the appropriate instructions to complete the permitting process.

**Step 4** The permit/license application package and fee schedule will be mailed or given to the permittee at the on-site meeting. These documents must be completed and returned with the appropriate fees within 30 days of the site visit. In addition, a copy of property deed, plat map of property and appropriate facility plans are required. Failure to respond will cause permit process to be terminated. Checks for permit fees should be made payable to "FAO, USAED Wilmington." All documents and fees should be sent to the Operations Project Manager's Office.

**Step 5** Upon receipt, the Operations Project Manager will approve/deny the permit/license. If approved a copy, along with an appropriate permit/license sign will be mailed back to the permittee. If the permit is denied, a written explanation will be mailed to the applicant stating why the permit application has been denied.

**Step 6** The permittee must immediately post the permit tag as directed in the cover letter sent with the permit.

**Step 7** The permittee maintains the facility or permit area according to the terms of the permit/license. Near the expiration date the Corps will contact the permittee concerning renewal.

**Address:** **John H. Kerr Reservoir**
**Attention: Shoreline Management Section**
**1930 Mays Chapel Rd.**
**Boydton, VA 23917**
**Phone: (434) 738-6143**

EXHIBIT B-1

# FEE SCHEDULE

FOR
"CONSOLIDATED PERMITS" COVERING
SHORELINE FACILITIES/ACTIVITIES

*AMINISTRATIVE FEES for Docks &Other Facilities (5 – Year Term)*

| | | |
|---|---|---|
| New Permit (or new owner of existing facility) | …… | $400 |
| Re-issue Permit (to same owner of existing facility) | …… | $175 |
| Permit Modification[1] (additions/changes to existing facility) | …… | $90 |
| Vegetation Modification/Footpath/Mowing[1] | …… | $10 |
| Erosion Control | …… | $0 |

PLUS +

*FAIR MARKET VALUE FEE (if applicable) (5-Year Term)*

| | | |
|---|---|---|
| Utility right-of-way (each utility) | …… | $35 |
| Improved steps and/or walkway | …… | $50 |
| Handrails only | …… | $28 |
| Boat launching ramp[2] | …… | $67 |
| Marine way[2] | …… | $67 |
| Improved road and turnaround[2] | …… | $56 |
| Picnic shelter and patios[2] | …… | $50 |
| Land-based or stationary boathouse[2] | …… | $67 |
| Pump house[2] | …… | $20 |

[1] Modifications may not be for a five-year term.
2 No new activities of this type will be permitted.

# EXHIBIT C
# SHORELINE USE PERMIT CONDITIONS

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 and/or activities.

3. Ownership, construction, operation, use 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 any authorized project purposes, including navigation in connection with the ownership, construction, operation or maintenance of the permitted facility and/or activities.

5. The permittee agrees that if subsequent operations by the government require an alteration in the location of the permitted facility and/or activity or if in the opinion of the district commander the permitted facility and/or activity shall cause unreasonable obstruction to navigation or that the public interest so requires, the permittee shall be required, upon written notice from the district commander 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 a permitted facility which may be caused by or result from subsequent operations 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. This includes any damage that may occur to private property if a facility is removed for noncompliance with the conditions of the permit.

7. Ownership, construction, operation, use and maintenance of a permitted facility and/or activity are subject to all applicable Federal, state, and local laws and regulations. Failure to abide by these applicable laws and regulations may be cause for revocation of the permit.

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, use or maintenance of the permitted facility.

9. The permittee agrees to construct the facility within the time limit agreed to on the permit issuance date (usually six months). The permit shall become null and void if construction is not completed within that period. Further, the permittee agrees to operate or maintain a permitted facility and/or activity in a manner so as to provide safety, minimize any adverse impact on fish and wildlife habitat, natural, environmental, or cultural resources values and in a manner so as to minimize the degradation of water quality.

10. The permittee shall remove the permitted facility within 30 days, at his expense, and restore the waterway and lands to a condition accepted by the resource manager upon termination or revocation of this permit or if the permittee ceases to use, operate, or maintain a permitted facility and/or activity. If the permittee fails to comply to the satisfaction of the resource manager, the district commander may remove the facility by contract or otherwise and the permittee agrees to pay all costs incurred thereof.

11. If permitted facilities are removed for storage or extensive maintenance, the resource manager may require all portions of the facility be removed from public property.

12. The use of a permitted boat dock facility shall be limited to the mooring of the permittee's vessel or watercraft and the storage, in enclosed locker facilities, of his/her hear essential to the operation of such vessel or watercraft.

13. Neither a permitted facility nor any houseboat, cabin, cruiser, or other vessel moored thereto shall be used as a place of habitation or as a full or part-time residence or in any manner which gives the appearance of converting the public property, on which the facility is located, to private use.

14. Facilities granted under this permit will not be leased, rented, sub-let or provided to others by any means of engaging in commercial activity(s) by the permittee or his/her agent for monetary gain. This does not preclude the permittee from selling total ownership to the facility.

15. Floats and the flotation material for all docks and boat mooring buoys shall be fabricated of materials manufactured for marine use. The float and its flotation material shall be 100% warranted for a minimum of 8 years against sinking, becoming water-logged, cracking, peeling, fragmenting, or losing beads. All floats shall resist puncture and penetration and shall not be subject to damage by animals under normal conditions for the area. All floats and the flotation material used in them shall be fire resistant. Any float which is within 40 feet of a line carrying fuel shall be 100% impervious to water and fuel. The use of new or recycled plastic or metal drums or non-compartmentalized air containers for encasement or floats is prohibited. Existing floats are authorized until it or its flotation material is no longer serviceable, at which time it shall be replaced with a float that meets the conditions listed above. For any floats installed after the effective date of this specification, repair or replacement shall be required when it or its flotation material no longer performs its designated function or it fails to meet the specifications for which it was originally warranted.

16. Permitted facilities and activities are subject to periodic inspection by authorized Corps representatives. If an inspection reveals conditions which make the facility unsafe in any way, 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.

17. Floating facilities shall be securely attached to the shore in accordance with the approved plans by means of moorings which do not obstruct general public use of the shoreline or adversely affect the natural terrain or vegetation. Anchoring to vegetation is prohibited.

18. The permit display tag provided shall be posted on the permitted facility and/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.

19. No vegetation other than that prescribed in the permit may be damaged, destroyed, or removed. No vegetation of any kind will be planted, other than that specifically prescribed in the permit. (not applicable on easement lands)

20. When vegetation modification on these lands is accomplished by chemical means, the program will be in accordance with appropriate Federal, state and local laws, rules and regulations.

21. When vegetation modification is allowed, the permittee will delineate the government property line in a clear, but unobtrusive manner approved by the resource manager and in accordance with the project Shoreline Management Plan.

22. No change in land form such as grading, excavation, or filling is authorized by this permit. (easement lands may require written consent)

23. This permit is non-transferable, Upon the sale or other transfer of the permitted facility or the death of the permittee and his/her legal spouse, this permit is null and void.

24. If the ownership of a permitted facility is sold or transferred, the permittee or new owner will notify the resource manager of the action prior to finalization. The new owner must apply for a Shoreline Use Permit within 14 days or remove the facility and restore the area within 30 days from the date of ownership transfer.

25. By 30 days written notice, mailed to the permittee by registered or certified letter, the district commander may revoke this permit whenever the public interest necessitates such revocation or when the permittee fails to comply with any permit condition or term. The revocation notice shall specify the reasons for such action. If permittee requests a hearing in writing to the district commander through the resource manager within the 30 day period, the district commander shall grant the hearing date at the earliest opportunity. In no event shall the hearing date exceed 60 days from the date of the hearing request. Following the hearing, a written decision will be rendered and a copy mailed to the permittee by certified letter.

26. Notwithstanding the condition cited in condition 25 above, if in the opinion of the district commander, emergency circumstances dictate otherwise, the district commander may summarily revoke this permit.

27. The resource manager or his/her authorized representative shall be allowed to cross the permittee's property, as necessary, to inspect facilities and/or activities under permit.

EXHIBIT D
CRITERIA FOR ASSIGNING SHORELINE ALLOCATIONS

The following criteria were utilized in assigning the lakeshore allocations prescribed in this plan. In all shoreline allocation classifications, general consideration was given to previous commitments, land acquisition policies, increasing public use and increasing private development. Criteria were established with the intention of protecting both public lands and private investments to the extent possible. However, with consideration given to existing and future competing needs, the conservation of the public resource is the primary objective of the Shoreline Management Plan.

a. Limited Development Areas. All shoreline areas that are not included in the allocations for public recreation areas, prohibited access, and protected lakeshore (as determined by applying the criteria specified below) will be included in the limited development area allocation.

b. Public Recreation Areas. The Land Allocations Plan found in the Master Plan for John H. Kerr Dam and Reservoir indicates land areas required for existing and future recreation use. Based on this plan, shoreline adjacent to these areas are allocated Public Recreation to include:

(1) Shoreline adjacent to existing or future recreation areas as identified in the Master Plan.

(2) Shoreline adjacent to areas under lease to quasi-public groups.

(3) Shoreline adjacent to marina areas.

(4) Shoreline adjacent to lands utilized by the Corps of Engineers or other agencies for designated wildlife management areas.

c. Prohibited Access Areas. The primary purpose of the Prohibited Access Area allocation is for the provision of physical safety to the recreational visitor and security of the project operations. Shoreline where public access is prohibited include the following:

(1) Shoreline adjacent to lands allocated to Project Operations such as the waters above and below John H. Kerr Dam, the reservoir maintenance area, and pumping stations.

(2) Areas that present a definite safety hazard, (such as industrial water intake structures) as determined by the Operations Project Manager.

d. Protected Shoreline Areas. The Protected Shoreline allocation is applied to areas for the purpose of protecting environmental quality, sustained public use of the reservoir, and unique features. Criteria upon which this allocation is made include the following:

(1) Shoreline adjacent to significant historical, geological, archaeological, and ecological areas (including fish and wildlife habitat). This includes shoreline within 500 ft. of the actual resource to be protected.

(2) Shoreline of all the islands in the reservoir.

(3) Shoreline within 300 ft. of bridges, road crossings, and road ends, measured perpendicular to the right of way and from the edge of the road fill.

(4) On shoreline across the cove from recreation areas where private development would conflict with public recreation.

(5) In areas where moorage is not practical because of terrain, wind, currents, narrow stream widths (less than 50 ft. in width), wave action, water depth, debris, or other physical features.

(6) Where private facility development would impair the commercial viability of nearby marina areas.

(7) Within coves containing commercial facilities.

(8) Within 1000 ft. of the lease limits of the marina, or a distance determined to be reasonable based on the physical characteristics of the shoreline.

(9) Shoreline areas exceeding 2000 ft. in length and a distance of more than 1000 ft. from the nearest boundary line or a distance determined to be reasonable based on physical characteristics of adjacent private property and the shoreline.

(10) Shoreline areas where natural conditions are needed to protect the visual quality of the reservoir, such as shorelines adjacent to industrial development.

US Army Corps
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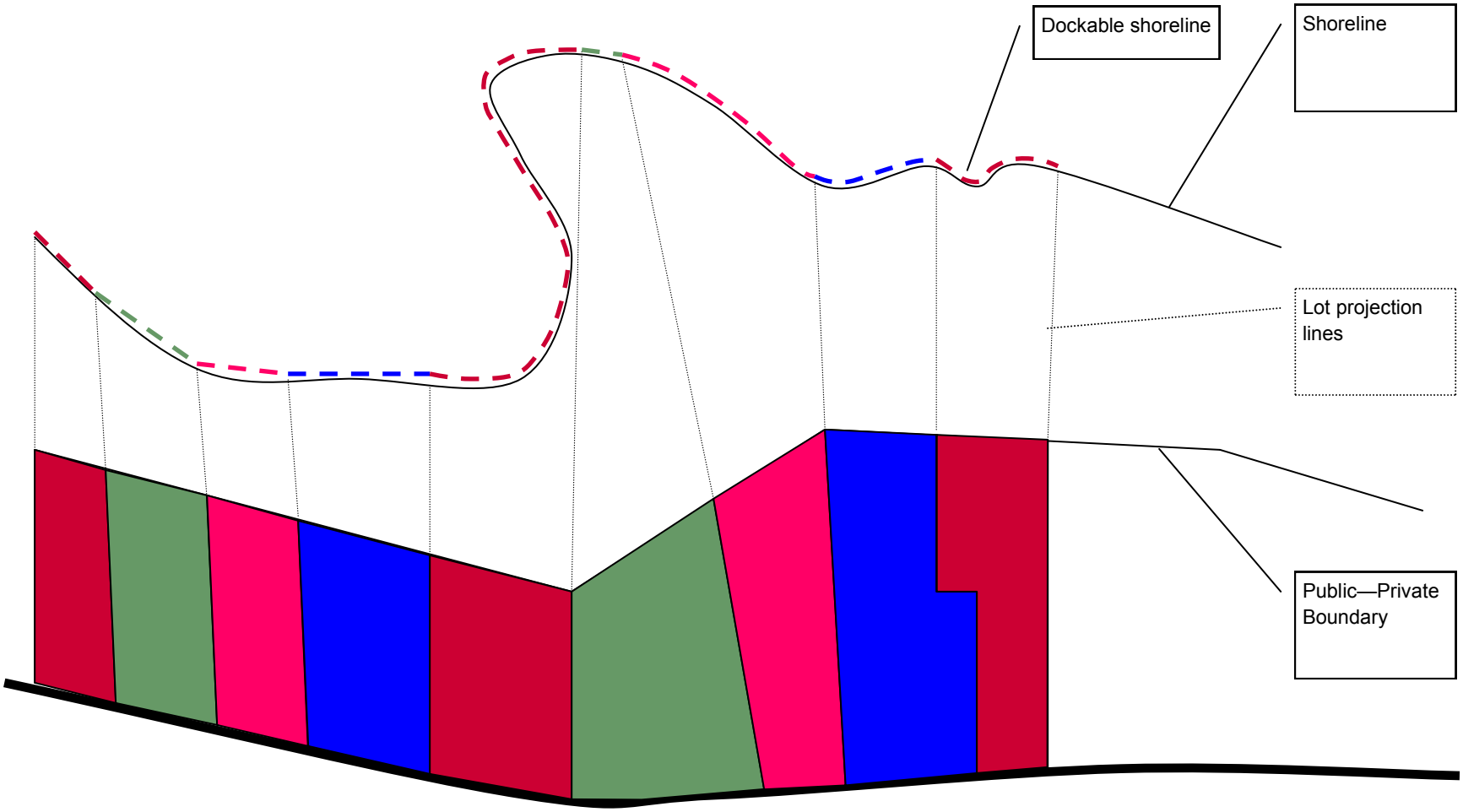
Wilmington District

**EXHIBIT E : Lot Projection Depiction — Tangent Property Line**

# JOHN H. KERR RESERVOIR



US Army Corps
of Engineers
Wilmington District

**EXHIBIT E-1 : Lot Projection Depiction — Contour Property Line**

# JOHN H. KERR RESERVOIR

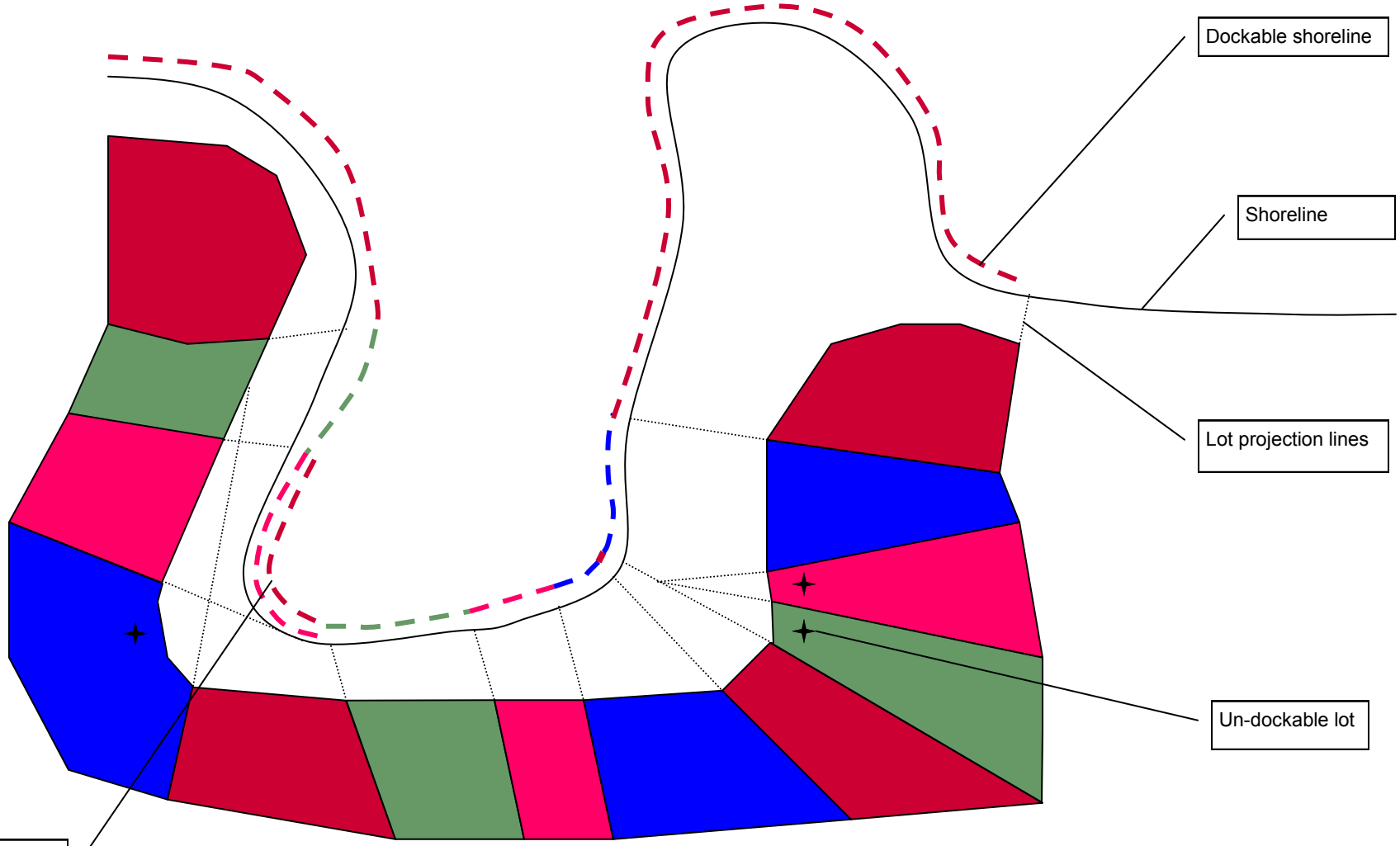


Exhibit F
John H. Kerr Reservoir
Approved Tree List

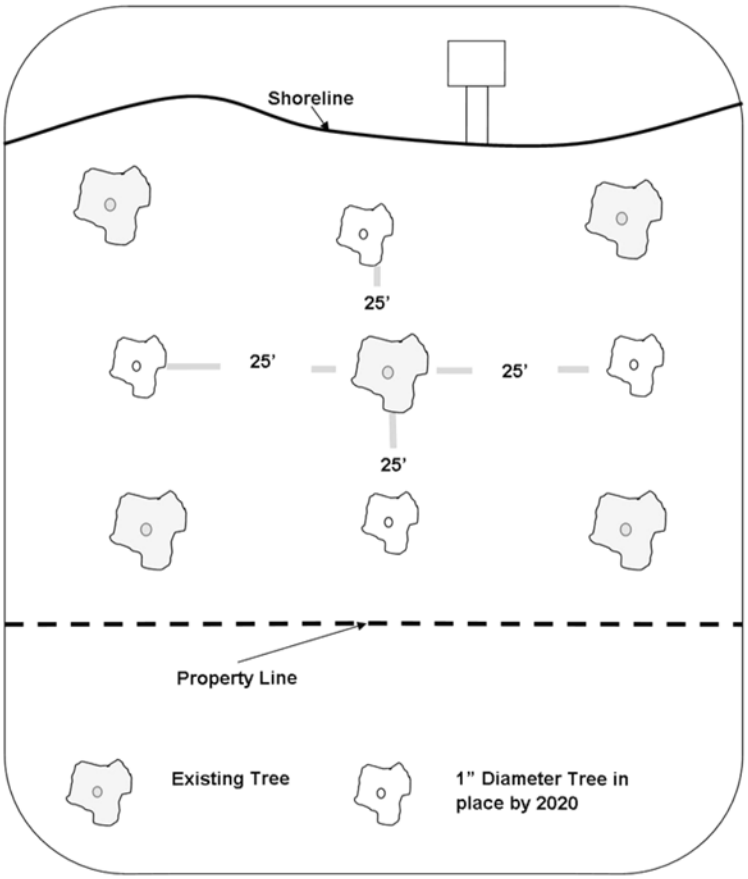
| Scientific Name | Common Name | Light | Planting Notes |
|---|---|---|---|
| | | | |
| **Tall Trees (more than 30 ft)** | | | |
| Acer barbatum | Southern Sugar Maple | F-S | 310 |
| Acer rubrum | Red Maple | F-P | water tolerant |
| Acer saccharum | Sugar Maple | F-S | 310 |
| Aesculus flava | Yellow Buckeye | P-S | 310 |
| Betula lenta | Sweet Birch | F-S | 310 |
| Betula nigra | River Birch | F | water tolerant |
| Carya aquacica | Water Hickory | F-P | water tolerant |
| Carya Cordiformus | Swamp Hickory | F-P | 305 |
| Carya glabra | Pignut Hickory | F-S | 310 |
| Carya ovata | Shagbark Hickory | F-S | 305 |
| Carya tomentosa | Mockernut Hickory | F-S | 310 |
| Celtis laevigata | Sugarberry | F-S | 305 |
| Chamaecyparis thyoides | Atlantic White Cedar | F-P | water tolerant |
| Diospyros virginiana | Persimmon | F-P | 310 |
| Fagus grandifolia | American Beech | P-S | 310 |
| Fraxinus Americana | White Ash | F-S | 310 |
| Fraxinus pennsylvanica | Green Ash | F-P | water tolerant |
| Gordonia lasianthus | Loblolly Bay | F-P | water tolerant |
| Ilex opaca | American Holly | F-S | 310 |
| Juglans nigra | Black Walnut | F | 310 |
| Juniperus virginiana | Eastern Red Cedar | F-P | 305 |
| Liquidambar styraciflua | Sweetgum | F-P | water tolerant |
| Liriodendron tulipifera | Yellow Poplar | F-P | 305 |
| Magnolia acuminata | Cucumber Tree | F-P | 310 |
| Magnolia grandiflora | Southern Magnolia | P-S | 310 |
| Magnolia virginiana | Sweetbay | F-P | water tolerant |
| Nyssa sylvatica | Blackgum | F-P | water tolerant |
| Oxydendrum arboreum | Sourwood | F-S | 310 |
| Persea borbonia | Redbay | F-S | water tolerant |
| Pinus echinata | Shortleaf Pine | F-P | 310 |
| Pinus palustris | Longleaf Pine | F | 310 |
| Pinus Serotina | Marsh Pine | F-P | water tolerant |
| Pinus strobus | Eastern White Pine | F | 310 |
| Pinus taeda | Loblolly Pine | F | 305 |
| Pinus Virginia | Scrub Pine | F-P | 310 |
| Platanus occidentalis | Sycamore | F-P | water tolerant |
| Populus deltoides | Eastern Cottonwood | F | 305 |
| Prunus serotina | Black Cherry | F | 310 |
| Quercus alba | White Oak | F-P | 310 |
| Quercus bicolor | Swamp White Oak | F | water tolerant |
| Quercus coccinea | Scarlet Oak | F-P | 310 |
| Quercus falcata | Southern Red Oak | F-P | 310 |
| Quercus michauxii | Swamp Chestnut Oak | F-P | 305 |
| Quercus nigra | Water Oak | F-P | water tolerant |
| Quercus pagoda | Cherrybark Oak | F-P | 305 |

Exhibit F
John H. Kerr Reservoir
Approved Tree List

| | | | |
|---|---|---|---|
| Quercus palustris | Pin Oak | F | water tolerant |
| Quercus phellos | Willow Oak | F-P | water tolerant |
| Quercus rubra | Red Oak | F-P | 310 |
| Quercus shumardii | Shumard Oak | F-P | 305 |
| Quercus stellata | Post Oak | F | 310 |
| Quercus velutina | Black Oak | F-P | 310 |
| Quercus virginiana | Live Oak | F | 310 |
| Robinia pseudoacacia | Black Locust | F-P | 310 |
| Salix nigra | Black Willow | F-S | water tolerant |
| Sassafras albidum | Sassafras | F-P | 310 |
| Taxodium distichum | Baldcypress | F-P | water tolerant |
| Tilia americana | Basswood | F-P | 310 |
| Tsuga canadensis | Eastern Hemlock | P-S | 310 |
| Ulmus alata Winged | Elm | F-P | 310 |
| Ulmus americana | American Elm | F-P | 305 |
| Ulmus rubra | Slippery Elm | F-P | water tolerant |
| **Small Trees/Shrubs (10-30 ft)** | | | |
| Aesculus pavia | Red Buckeye | P | 305 |
| Aesculus sylvatica | Painted Buckeye | F-P | 305 |
| Alnus serrulata | Hazel or Smooth Alder | F-P | water tolerant |
| Amelanchier arborea | Serviceberry | F-P | 305 |
| Amelanchier canadensis | Juneberry | F-P | water tolerant |
| Amelanchier laevis | Allegheny Serviceberry | F-P | 305 |
| Aralia spinosa | Devil’s Walking Stick | F-P | 305 |
| Asimina triloba | Pawpaw | F-S | water tolerant |
| Carpinus caroliniana | Ironwood | P-S | 305 |
| Castanea pumila | Chinquapin | F-P | 305 |
| Celtis tenuifolia | Dwarf Hackberry | F-P | 310 |
| Cercis canadensis | Eastern Redbud | F-P | 305 |
| Chionanthus virginicus | Fringetree | F-P | 305 |
| Cornus alternifolia | Alternate-leaf Dogwood | P-S | 305 |
| Cornus amomum | Silky Dogwood | P-S | 305 |
| Cornus florida | Flowering Dogwood | P | 305 |
| Crataegus spp. | Hawthorn | F-S | water tolerant |
| Cyrilla racemiflora | Titi | F-S | water tolerant |
| Halesia tetraptera | Carolina Silverbell | P | 305 |
| Hamamelis virginiana | Witch-Hazel | F-P | 305 |
| Ilex decidua | Possumhaw | F-P | water tolerant |
| Ilex verticillata | Winterberry | F-S | watertolerant |
| Ilex vomitoria | Yaupon | F-S | 305 |
| Morus rubra | Red Mulberry | F-S | water tolerant |
| Myrica cerifera | Wax Myrtle | F-P | water tolerant |
| Osmanthus americana | Wild Olive, Devilwood | F-P | water tolerant |
| Ostrya virginiana | Hophornbeam | F-S | 310 |
| Prunus americana | Wild Plum | F | water tolerant |
| Prunus angustifolia | Chickasaw Plum | F-P | 310 |
| Prunus caroliniana | Carolina Laurel Cherry | F-P | 310 |
| Prunus pensylvanica | Fire Cherry | F | 310 |

Exhibit F
John H. Kerr Reservoir
Approved Tree List

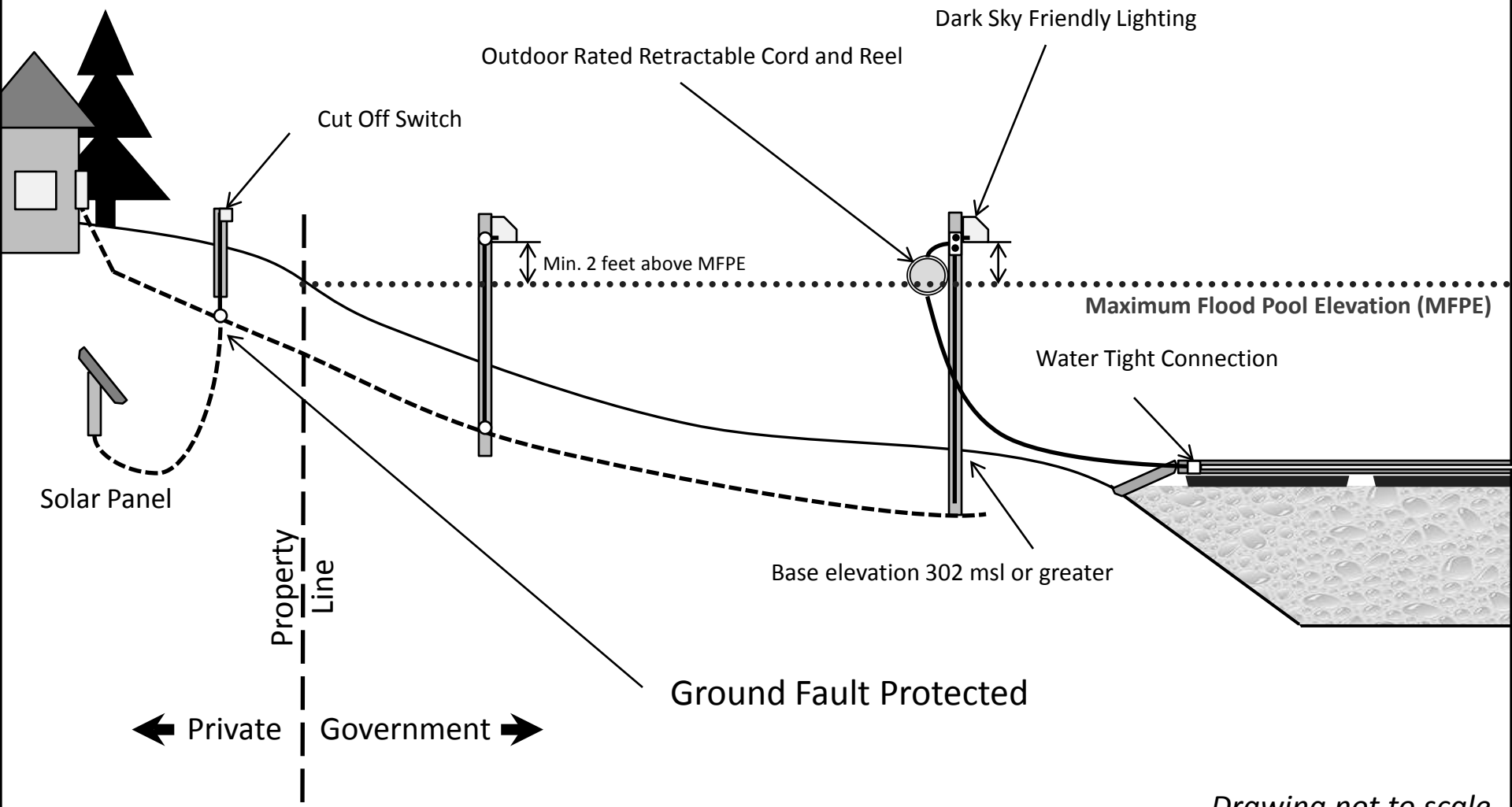
| | | | |
|---|---|---|---|
| Quercus marilandica | Blackjack Oak | F-P | 310 |
| Rhus copallina | Winged Sumac | F-P | 310 |
| Rhus glabra | Smooth Sumac | F-P | 310 |
| Salix caroliniana | Carolina Willow | F-S | 310 |
| Sambucus canadensis | Elderberry | F-P | watertolerant |
| Sorbus americana | Mountain-Ash | F | 310 |
| Symplocos tinctoria | Sweetleaf | F-S | water tolerant |
| Viburnum prunifolium | Black Haw | F-P | 310 |
| Viburnum rufidulum | Rusty Blackhaw | F-P | 310 |
| | | | |
| **LIGHT KEY** | **F = Full Sun P = Partial Shade** | **S = Full Shade** | |



US Army Corps of Engineers
Wilmington District

# EXHIBIT G: Approved Drawing of Underground Electric Line

# JOHN H. KERR RESERVOIR




*Drawing not to scale*

EXHIBIT H

# ELECTRICAL UTILITY CERTIFICATION STATEMENT

**John H. Kerr Reservoir - (434) 738-6143**

My Shoreline Use Permit/License Number is _____.

Lake Address:_____my location is (circle one) East or West of Highway 58 Bridge at Clarksville, Virginia, for determination of which minimum fixture and receptacle elevations apply to me over project lands(322' above Mean Sea Level (M.S.L.) East of Clarksville Bridge 327' above M.S.L. West of the Bridge).

1.All electric utility lines must be installed underground upon initial installation, or if overhead line was permitted prior to 1995 upon the transfer to a new owner or they must be removed.

2.All electric utilities have been inspected and certified by a state licensed electrician at each 5 year renewal, at the time of any repairs, upgrades, additions, or sale to a new owner.

3.All electric utilities across project lands and waters are protected at the breaker box or sub panel with a quick disconnect or switch installed in a readily accessible location with a GFCI breaker outside on private property. No exceptions.

4.All electric components are approved and rated for wet locations. All above ground wiring across project lands and waters are fully enclosed in conduit and boxes.

5.All utilities are limited to one (1) 125 volt, 20 amp branch circuit. All wiring is permanent in nature**, except the required** outdoor rated retractable cord and plug protection. See Exhibit G

6. All switches, receptacles and fixtures on the floating structure must be a minimum 2 feet above the decking of the dock and rated for wet locations and suitable for the environment served. Receptacles must have weatherproof in use covers. Electrical fixtures cannot extend beyond the outer perimeter of a dock structure. The use of individual/self-contained solar lights and/or panels on the floating structure may be permitted provided that they are permanently attached to the dock and are a minimum of

2 feet above the decking of the dock. Solar power installed on the dock must not exceed 12 volts and be a stand alone system.

7. All lights are a down directional in nature or shielded and are white in color. All lights across project lands are located a minimum 100 feet apart and mounted on commercially approved poles of metal, treated wood or other approved material, non decorative in nature and suitable for the environment served and located a minimum of 2 feet above the flood pool.

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**Part 2. (To be completed by licensed electrician.)**

I, _____, a currently licensed electrician in the State of _____, registration/ license number_____ hereby certify that the above grantee's electrical utility meets all **current** National Electrical Code (NEC, NFPA 70) requirements for wet locations and county building codes. I also certify that the electric utility also meets all additional Corps of Engineers requirements stated above.

Signed: _____ Phone#:_____

Print Name: _____

Signed: _____
Grantee/Permit Holder

Date: _____

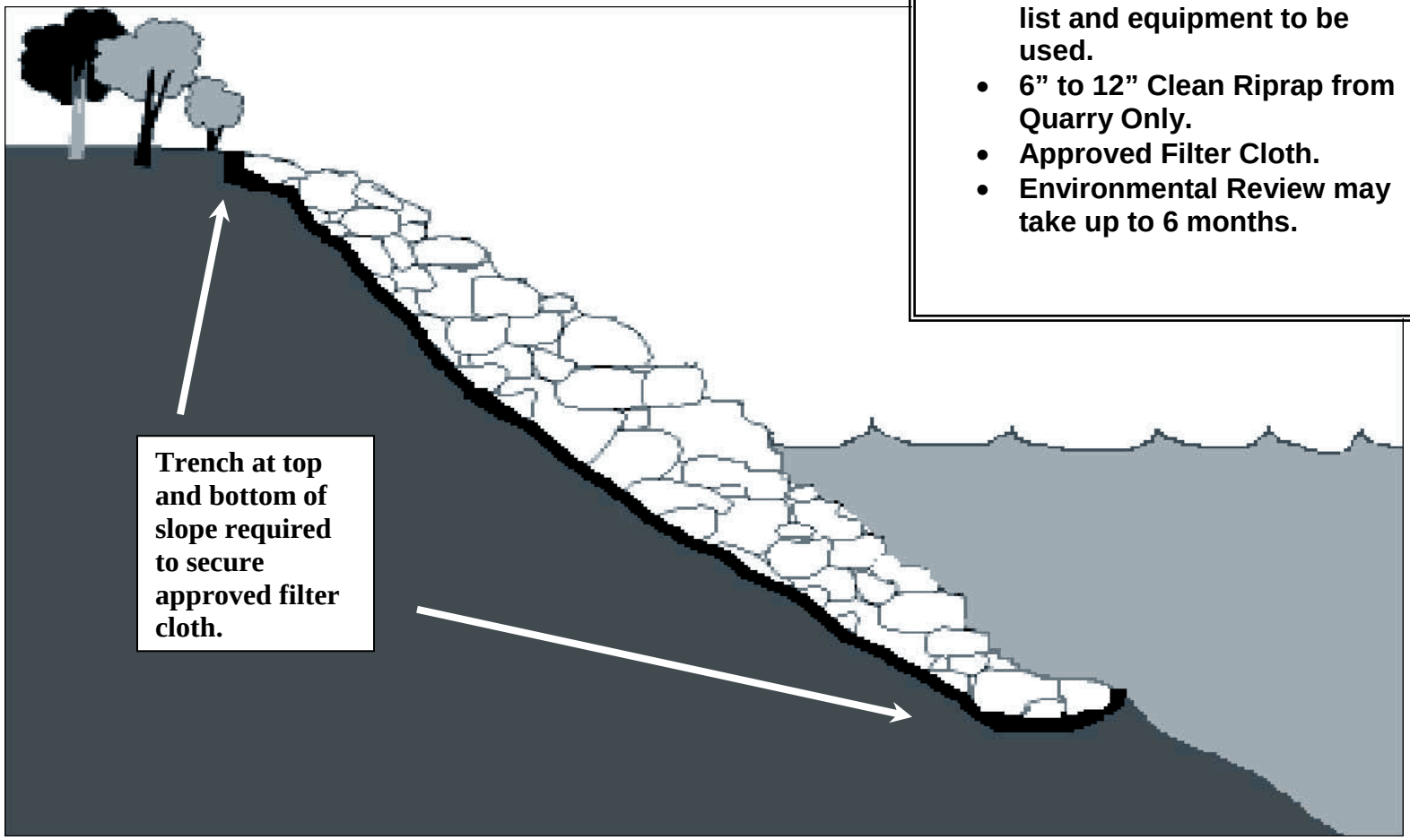
**RETURN THIS FORM WITHIN FIFTEEN DAYS OF CERTIFICATION**

US Army Corps of Engineers ®
Wilmington District

# EXHIBIT I: APPROVED EROSION CONTROL ACTIVITIES
# JOHN H. KERR DAM AND RESERVOIR
## Cost Free Permit

**REQUIREMENTS**

- **Plan including contractor, contact information, materials list and equipment to be used.**
- **6” to 12” Clean Riprap from Quarry Only.**
- **Approved Filter Cloth.**
- **Environmental Review may take up to 6 months.**



# EXHIBIT I-1
# RECOMMENDED EROSION CONTROL PLANTING
# JOHN H. KERR RESERVOIR

The following seed mixtures will help control erosion on bare ground areas. Other grass mixtures may be permitted on a case by case basis.

A mixture of several of the following grass species: Switchgrass, Annual Rye, Perl Millet, Browntop Millet, Kobe Lespedeza, Korean Lespedeza, Ladino Clover and Buckwheat

Bermuda Sod or Unhulled Bermuda

No form of fescue may be planted on public lands for the purpose of erosion control.

Recommended planting dates for the southern piedmont, with Fall being the optimum time frame:

Fall- September 1 – October 1
Spring- March 1 – April 1

Seed should be available from your local agricultural supply store or home improvement store

**EXHIBIT J**
**Community Dock Association Agreement**

The purpose of this document is to emphasize requirements for which members or the (Name of the Respective Homeowners Association)

arc responsible for adhering to in relation to maintaining a Shoreline Permit/License for a community dock and related facilities and activities on public land and waters adjacent to the development known as (Name of Subdivision/Development). "WE" refers to all members of said association.

WE understand that the ability to maintain a community dock on John H. Kerr Reservoir is a privilege dependent upon compliance with all Shoreline Use Permit conditions and John H. Kerr Reservoir Shoreline Management policy including those associated with the installation/establishment and maintenance of improved walkway (s), utilities and underbrushing and those associated with encroachments of structures, personal property and or vegetation onto public land.

WE understand that violations by any one member may result in the loss of all or part of the above noted privileges to all members.

WE understand that (Name of the subject community dock) is approved based on the attached development plan dated _____as recorded in the _____County Courthouse at (Deed Book and Page No.) and that any changes made to the said development plan may result in the cancellation and/or modification of the Shoreline Use Permit/License authorizing said dock.

WE understand that one member, as designated/appointed/elected in accordance with accepted by-laws, will act as the point of contact between the "Association" and the US Army Corps of Engineers, John H. Kerr Reservoir. WE further understand that it is required that it is required to notify the John H. Kerr shoreline staff in writing of any changes to the point of contact including name, mailing address and phone number.

WE understand that the point of contact will act on behalf of all members and that a change in the point of contact docs not relieve the Association from complying and adhering to all applicable rules, regulations and policy related to the subject Shoreline Use Permit/License.

WE understand and accept the fact that the point of contact is responsible for informing all members of applicable rules, regulations and policy, but that failure of the point of contact to do so docs not relieve the Association from it's responsibilities to comply with all such rules, regulations and policy and does not relieve the Association from consequences for non-compliance.

WE understand that any actions on public land related to the community dock (s) and/or other facilities/activities must be coordinated with the US Army Corps of Engineers, John H. Kerr Reservoir prior to any work being initiated.

We accept this agreement this _____day of _____, 20__

_____

Name of Association

_____

Printed Name – Point of Contact

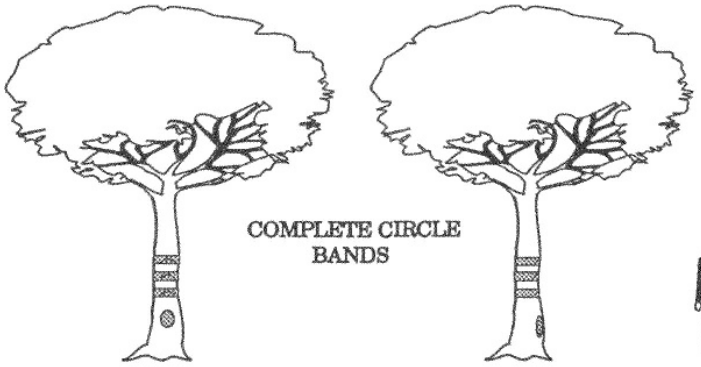
_____

Signature of Point of Contact

US Army Corps of Engineers
Wilmington District

# EXHIBIT K: BOUNDARY LINE MARKINGS
## JOHN H. KERR RESERVOIR

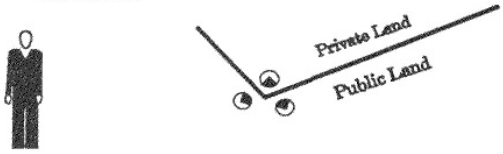
Witness trees in Wilmington District are painted orange to delineate the boundary line. Where trees are not available, a similarly marked metal or fiberglass post is used. A survey by a licensed surveyor will be necessary to determine the exact line location. The types and meanings of the markings are illustrated below.




FRONT SIDE

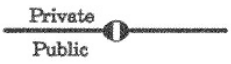
### WITNESS TREE FOR CORNER

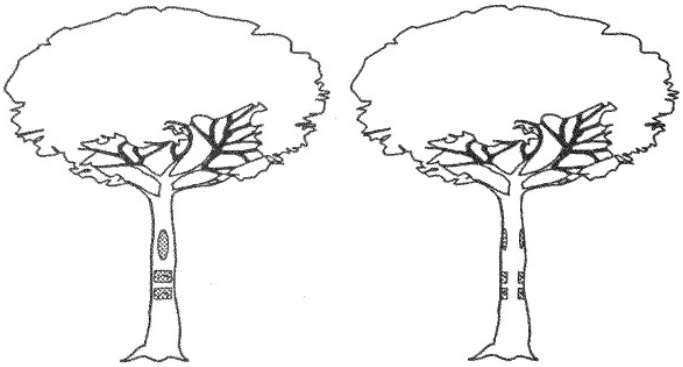
Three bands are painted completely around tree with hack marks in the band facing the corner. A blaze is located approximately waist high facing the corner.



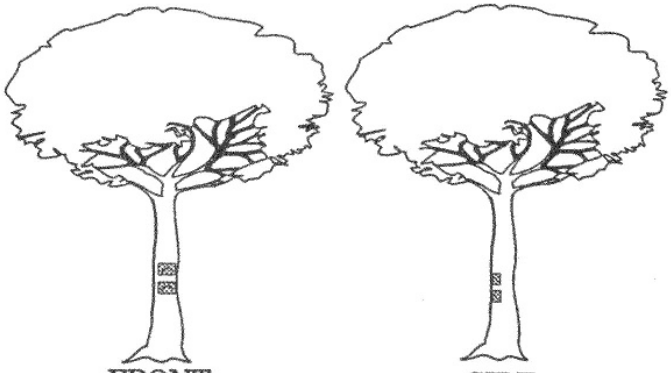

### IN LINE TREE

Two bands each are painted on opposite sides of the tree in the direction of the line, with a hack cut in each band. The bands do not completely encircle the tree. A blaze is made above the bands. These markings indicate that the boudary line passes through the tree.



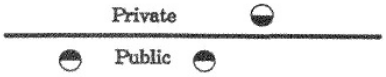
FRONT SIDE



FRONT SIDE

### LINE WITNESS TREE

Two bands are painted on the tree with hacks facing in the direction of the line. The bands are painted around the edges of the tree, so that they may be seen from a distance when walking the line. These trees are normally on government property. Note that these trees are not the boundary line; they only illustrate on which side the boundary line falls.



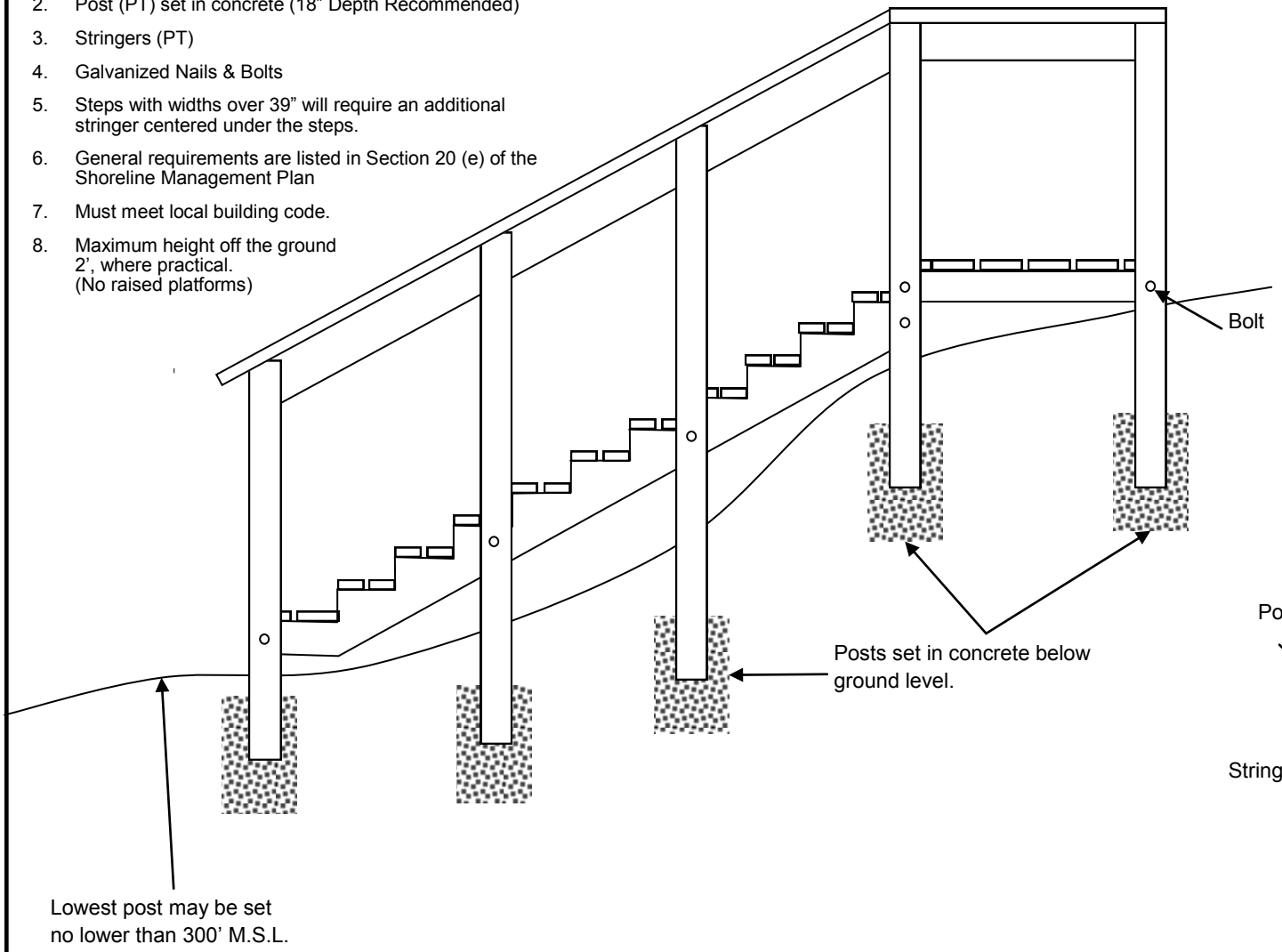
US Army Corps
of Engineers
Wilmington District

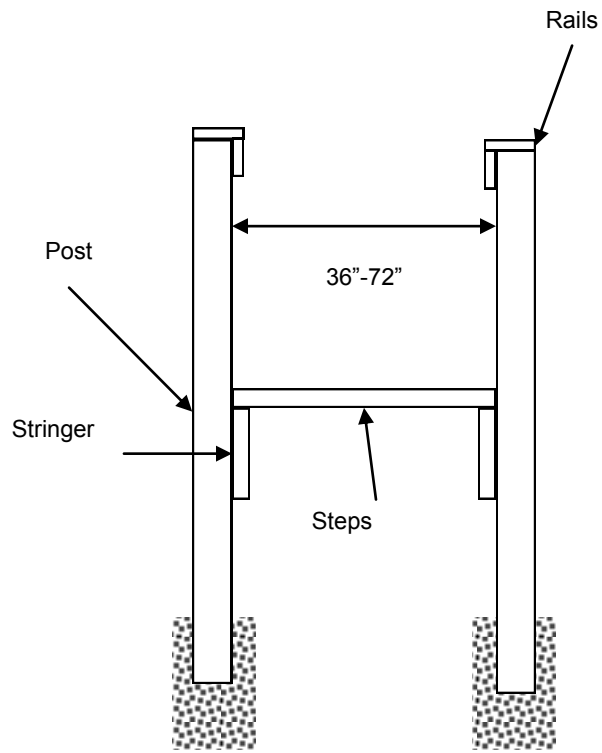
## EXHIBIT L: Approved Drawing of Typical Stairway

# JOHN H. KERR RESERVOIR

**Materials List**

1. Pressure Treated (PT) Handrails & Steps
2. Post (PT) set in concrete (18" Depth Recommended)
3. Stringers (PT)
4. Galvanized Nails & Bolts
5. Steps with widths over 39" will require an additional stringer centered under the steps.
6. General requirements are listed in Section 20 (e) of the Shoreline Management Plan
7. Must meet local building code.
8. Maximum height off the ground 2', where practical. (No raised platforms)



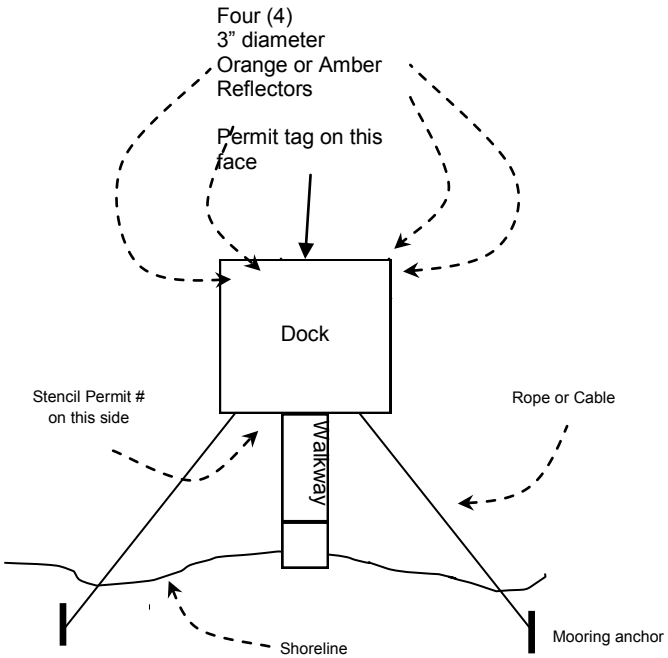




Drawing not to scale.

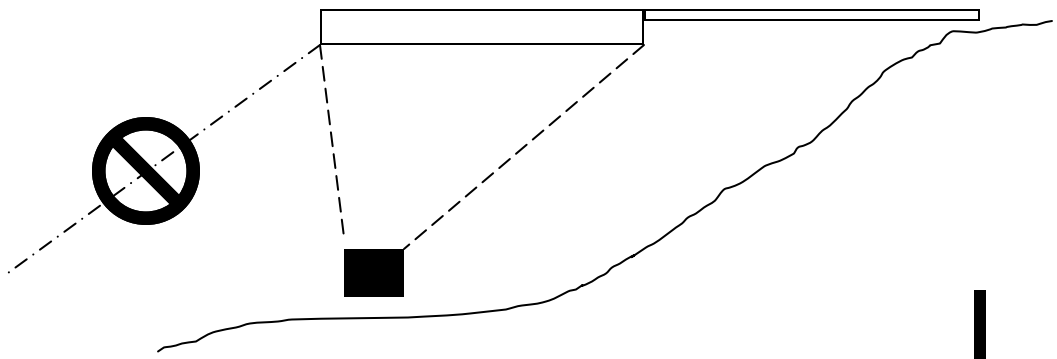
US Army Corps
of Engineers
Wilmington District

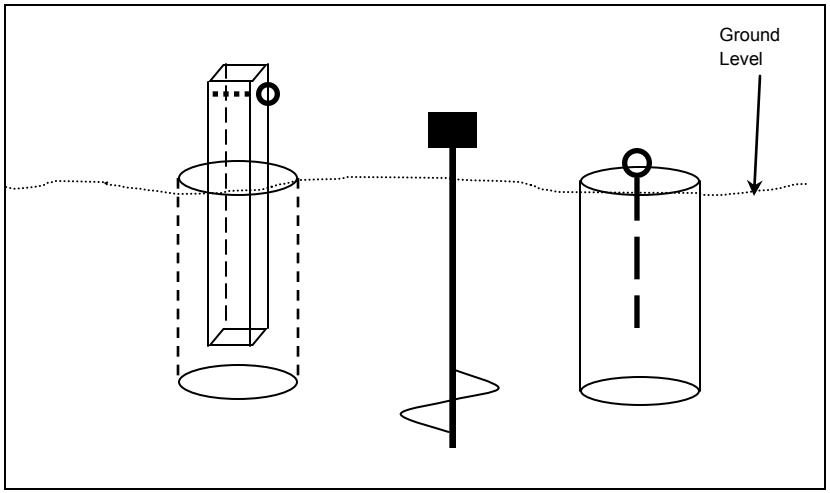
## EXHIBIT M APPROVED ANCHORING METHODS

# JOHN H. KERR RESERVOIR

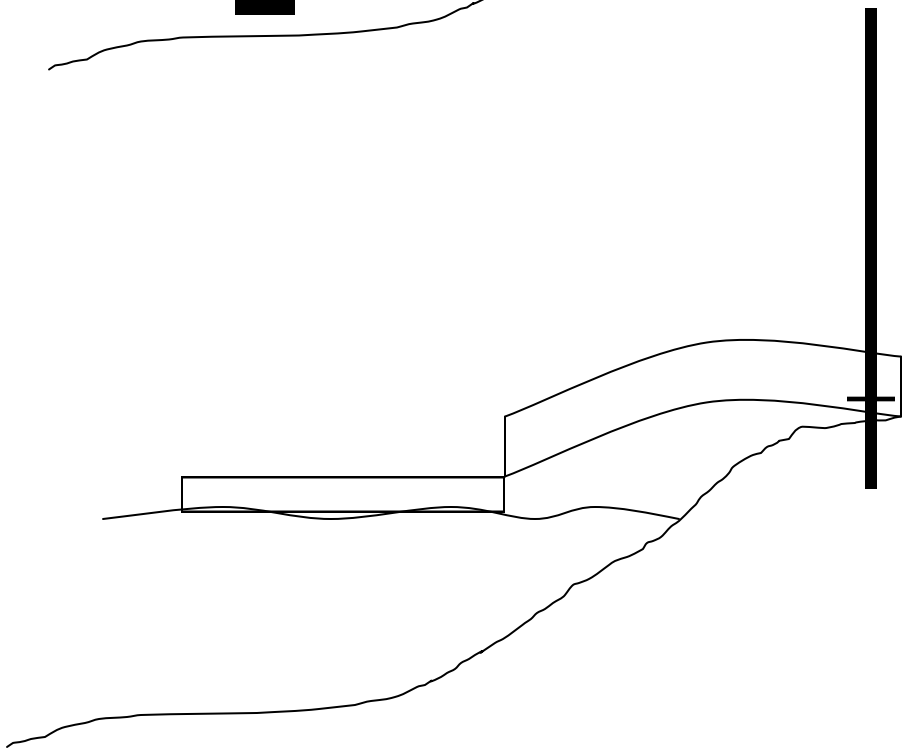



"Deadman" anchors below dock. Line should not extend in front of dock.






4"X4" in Concrete | Mobile home screw-in anchor | Eye-hook in Concrete

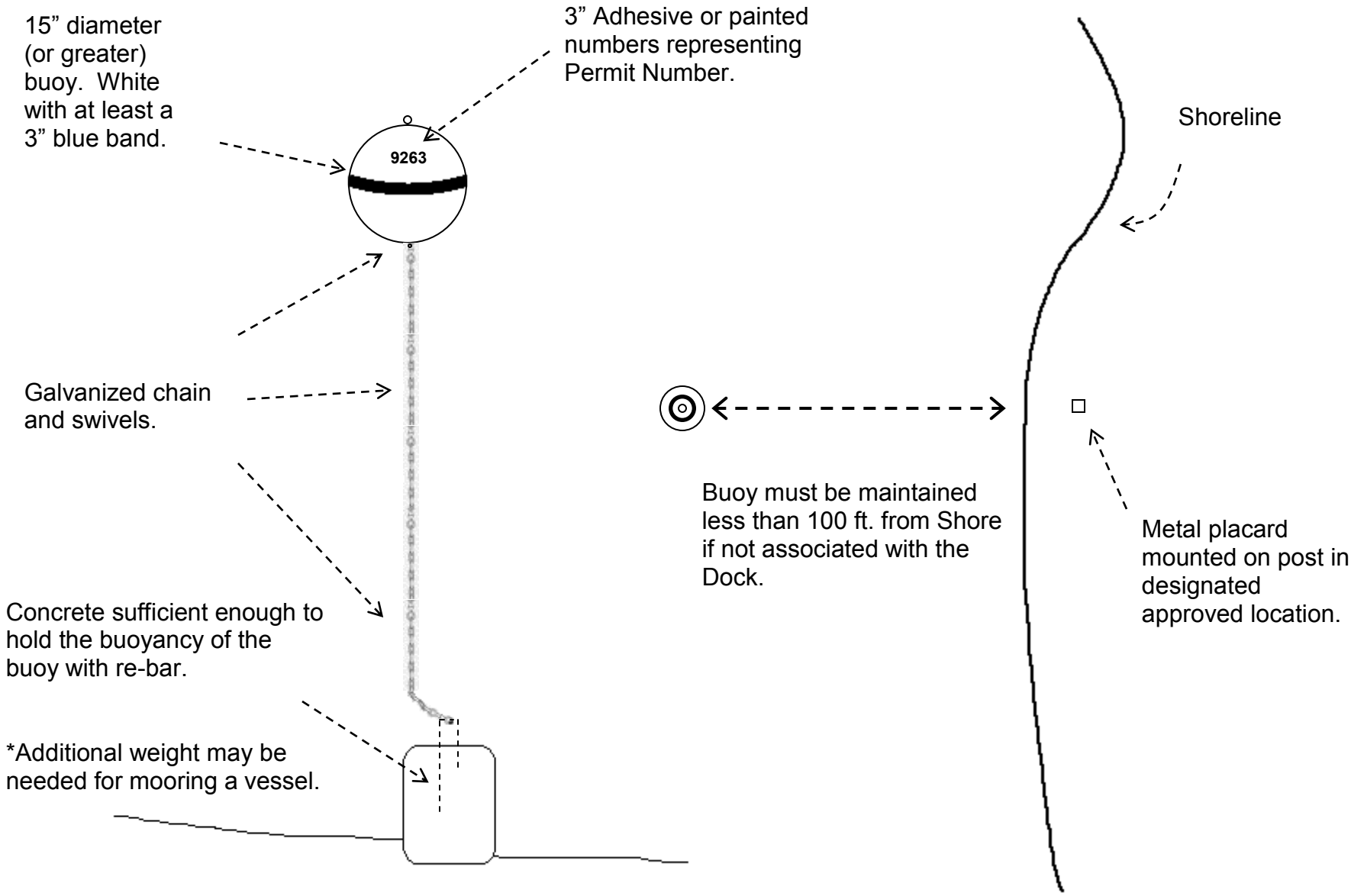


Pole and collar attachment at the walkway is a supplemental method of anchoring. Pole cannot be installed below 302msl.

US Army Corps
of Engineers
Wilmington District

## EXHIBIT M-1 Approved Drawing of Private Mooring Buoy

# JOHN H. KERR RESERVOIR



# LOT LINE PROJECTION CRITERIA

John H. Kerr Dam and Reservoir
Roanoake River Basin, North Carolina and Virginia
2016

1. PURPOSE.

This document is to inform you of a new shoreline management requirement for John H. Kerr Lake pertaining to a lot line projection survey for adjacent property owners who are applying for a new shoreline use permit and/or licences.

2. POLICY.

In accordance with our 2016 Shoreline Management Plan, Section 14d, ACCESS REQUIREMENTS FOR OBTAINING SHORELINE USE PERMITS AND/OR REAL ESTATE LICENSES, prior to the issuance of any new permit and/or license, applicants will be required to submit a projection document that is completed by a registered surveyor. This document will identify the primary frontage area of a subject lot by projecting a tangent line from the outside corner pins of the lot (reference Exhibit E).

3. CRITERIA.

The Projection Documentation Criteria that needs to be included is listed below:

1. Must be submitted on an 8 ½ X 11-inch sheet for individual lots. Larger tracts may be submitted on larger paper.

2. Scale should be 1 inch equals 100 feet for standard individual lots. Larger tracts may require a different scale.

3. Elevation 300 msl should be identified on the survey and on site.

4. Temporary wooden stakes are to be installed where projection lines intersect 300 msl (the projection stake should be flush with the ground and topped with flagging tape).

5. Bearings and distances are to be recorded on the survey indicating the distance from lot corner pins to the wooden stakes set at 300 msl.

6. Projection surveys must be completed by a registered land surveyor and include the surveyor's seal and date of survey.

7. Projection survey must identify subject lot. (i.e. - Lot 7, Lake View, as recorded in Deed Book _____, Page _____ , _____ County )
****The projection survey itself does not need to be recorded, but must reference the recordation of the subject lot/property.****

8. Bearing of common boundary line (from which projections are being made) must be identified.

9. Boat docks and other facilities should **NOT** be shown.

10. If you have any questions concerning these new requirements, please contact your area Shoreline Ranger at (434) 738-6143.