

Re: Shoreline Protection Permit for the City of Norfolk's Watershed Properties

Dear Homeowner:

Thank you for your interest in restoring and sustaining the shoreline of one of the City of Norfolk's reservoirs. The reservoir located behind your property is a vital part of the drinking water supply to almost one million residents of Hampton Roads and it is the responsibility of the Department of Utilities to maintain and protect the system.

**New Construction or Modification of an existing structure**

If you would like to apply for a permit to build or modify an existing structure to protect the shoreline, construct a pier or similar structure or a fence, we have developed minimum standards by which all owners/applicants must comply. You will need to complete the attached application in its entirety, including all applicable drawings and appendices. All structures built on City of Norfolk property require an Erosion and Sediment Control Plan & Narrative (Appendix A) and a Landscape Plan (Appendix B). The Owner/Applicant is also required to obtain and keep in force liability insurance as described below.

**Existing Structures**

If you are a new homeowner and there is an existing structure on City of Norfolk property behind your property, such as a bulkhead, riprap revetment, pier or fence, a permit is required to acknowledge responsibility for the maintenance and upkeep of the structure. Complete pages 7 through 9 of the application and obtain and keep in force liability insurance as described below. Following inspection to ensure the structure is in good repair and meets Building Guidelines, a permit will be issued. Any structure not in compliance or in disrepair will need to be brought into compliance or repaired before a permit will be issued.

A Checklist has been provided on the following pages to assist you in submitting a completed application.

**The property owner must obtain and keep in affect liability insurance in the minimum amount of \$400,000 combined personal injury/property damage per occurrence. The City of Norfolk must be listed as a named-insured party on the proposed structure. This is normally part of your Homeowners Insurance Policy, not an additional policy. The City shall also receive proof of insurance annually.** This is required for protecting both the City of Norfolk and you as the responsible party.

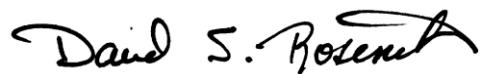
The insurance policy should read:

City of Norfolk  
Department of Utilities  
Division of Water Resources  
6040 Waterworks Road  
Norfolk, Virginia 23502

You are also required to obtain all applicable permits from other local, state and federal agencies.

Please review the attached documentation and contact us if you have any questions. Your cooperation will enhance reservoir water quality and ensure a safe and sustainable environment.

Sincerely,



David S. Rosenthal, CLM  
Reservoir Manager

## **Local State and Federal Agency Addresses and Phone Numbers**

City of Norfolk  
Department of Utilities  
6040 Waterworks Road Norfolk,  
Virginia 23502  
(757) 441-5678  
[NorfolkReservoirs@norfolk.gov](mailto:NorfolkReservoirs@norfolk.gov)

City of Norfolk  
Development Services Center  
Building Permits  
(757) 664-6565  
<https://norfolkvapermits.force.com/>

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U.S. Army Corps of Engineers  
Norfolk District  
803 Front Street  
Norfolk, Virginia 23510  
(757) 201-7652

City of Virginia Beach  
Permits and Inspections  
2875 Sabre Street  
Suite 500  
Virginia Beach, Virginia 23452  
(757) 385-4211  
[PermlInsp@vbgov.com](mailto:PermlInsp@vbgov.com)

City of Suffolk  
Community Development/Inspections  
442 W. Washington Street  
Suffolk, Virginia 23434  
(757) 514-4150

Isle of Wight Inspections Department  
P.O. Box 80  
17140 Monument Cir.  
Isle of Wight, Virginia 23397  
(757) 365-6215

## How to obtain a Norfolk Shoreline Protection Permit

Mail the completed application to:

City of Norfolk  
Shoreline Permits  
6040 Waterworks Road  
Norfolk, VA 23502

Email an electronic copy to:

[Norfolkreservoirs@norfolk.gov](mailto:Norfolkreservoirs@norfolk.gov)

Subject: Shoreline Permits

### Requirements:

Incomplete applications will not be reviewed until all the required submittals are received, including insurance documentation.

An onsite meeting with the City, Owner/Applicant, and Contractor is required upon submittal of an application.

**Answer all applicable questions and fill in all the blanks required on all the application forms.**

1. The proposed alignment of all projects shall be staked in the field at the time the application is submitted. Stake the lakeward extent of the proposed structure at each angle and the landward end of each return. Clearly label all stakes. Long pieces of white PVC work well, especially if there is tall vegetation or deep water.
  - a. For riprap, stake the lakeward toe.
  - b. For piers, stake all corners.
2. Submit good quality legible drawings, on nothing larger than 8.5" X 14" paper, on the fewest number of sheets necessary to adequately illustrate the project.
3. Lettering must be legible. Refrain from abbreviations.
4. For each submittal or resubmittal provide complete, accurate and consistent title blocks on all pages of the application drawings, including consistent revised dates on all pages of the drawings.
5. All dimension lines on the application drawings must be labeled.
6. Specify the datum (NAVD 88) used for the project on each drawing.

7. Only the work shown on the plans approved by the Department of Utilities Water Resources is authorized to be performed. Field changes without approval are not allowed. If after a permit is issued there is a need, for whatever reason, to change, modify, improve, alter, delete, add, or increase any activity shown on the approved plan, express consent must be first obtained from Water Resources. There are no exceptions. If there is any doubt, ask first. The steps necessary to grant such changes vary from site to site depending on the nature of the project and the significance of the change. Accordingly, extreme care should be used in the original design of each project. Contractors, agents, engineers and consultants should thoroughly discuss the wants and needs of the owner/applicant prior to the original submittal to avoid unrealistic expectations and the need for changes after the plan is approved.
8. The Department of Utilities Water Resources shall be notified a minimum of one (1) week prior to the beginning of construction at (757) 441-5678.
9. The Department of Utilities Water Resources shall be notified at the completion of the construction at (757) 441-5678. A Final Inspection will be performed at this time.
  - a. The Landscape Mitigation plantings will receive a Final Inspection one (1) year following project completion to ensure vegetation and tree survival. Replanting may be required.

#### **PLAN VIEW REQUIREMENTS**

1. Show and label, with dimensions, all property lines for the project site as shown on a legally recorded plat. The use of match lines is acceptable for large lots.
2. Specify the scale and provide a graphic scale bar on each drawing.
3. Show and label the location of all easements and all adjacent property owners.
4. Show and label the existing physical features at the project site. Where applicable, clearly label existing waterfront structures. Specify if the existing structures will remain or be removed.
5. Show and label the location of the Normal water level. See *Table 1* below.
6. Show and label the City of Norfolk property.
7. Show and label all proposed structures, specifically waterfront structures, at the project site. Where appropriate, clearly label structures to be altered.
8. Provide tie down distances to the lakeward toe of proposed riprap; and to the landward and lakeward corner of a proposed pier, starting from an existing permanent point of reference, readily recoverable in the field such as house corners and property pins. If additional reference points or control stakes are used, provide tie down distances to each as required above.
9. Indicate a single construction access way to the project area. Indicate the limits of construction and all land disturbing activities along the entire limit of the construction footprint and provide the square footage of the disturbed area.

## CROSS SECTION VIEW REQUIREMENTS

1. Provide the appropriate number of cross sections to accurately depict the proposed project and the different conditions within the project area.
2. Provide accurate cross sections, drawn to scale, with appropriate grade elevations showing existing and proposed bank and bottom profiles for all proposed riprap and pier projects.
3. Specify the limits and maximum depth of proposed fill and the proposed elevation to match existing grade.
4. Show the length of the existing slope, height of the bank, and the distance from the toe of the slope to the toe of riprap.
5. Specify the proposed slope for riprap structures and the square footage above Normal water level (See *Table 1*).
6. Specify if the existing structures will remain or be removed.
7. Specify the size and type of all construction materials, including size and type of riprap material to be used.
8. Provide specifications for treatment of all construction materials (e.g. treatment retention of 2.5pcf CCA for lumber, Hot Dipped Galvanizing for hardware) in accordance with industry standards.
9. Specify the location of filter fabric for riprap projects.
10. Provide a comprehensive construction sequence of events and time schedule specific to the proposal.
11. The following notes shall be placed on the application cross section drawings:
  - a) "All erosion and sediment control measures shall be installed and maintained in accordance with the Virginia Erosion Control Handbook, and as required by the City Inspectors."
  - b) "All excavated material and construction debris will be disposed of in a lawful manner."
  - c) "All manufactured structures or products will be used and/or installed pursuant to the manufacturer's specifications and recommendations."
12. All plan and section views must be drawn to scale (NTS or plus or minus distances are unacceptable). Relying on dimensions is not sufficient.

*Table 1. Reservoir Spillway Elevations*

Reservoir	Normal Elevation Feet (NAVD 88)
Lake Prince	25.7
Burnt Mills	33.7
Western Branch Reservoir	19.7
Lake Smith	7.16
Little Creek Reservoir	5.92
Lake Whitehurst	5.92
Lake Lawson	7.16

**BASIC APPLICATION FORM**  
**RESERVOIR SHORELINE PROTECTION PERMIT**  
**CITY OF NORFOLK, VIRGINIA - DEPARTMENT OF UTILITIES**

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1. Owner/Applicant's name and complete address:

Mr., Mrs., Ms. (circle one)

Telephone numbers:

Mobile: \_\_\_\_\_

Work: \_\_\_\_\_

Email: \_\_\_\_\_

2. Authorized agent's name

and complete address (if applicable):

Telephone numbers:

Mobile: \_\_\_\_\_

Work: \_\_\_\_\_

Email: \_\_\_\_\_

3. Have you obtained a contractor for the project?    Yes    No. If your answer is "Yes", complete the remainder of this question and submit the Applicant's and Contractor's Acknowledgement Form with your application.

Contractor's name and complete address:

Telephone numbers:

Mobile: \_\_\_\_\_

Work: \_\_\_\_\_

Email: \_\_\_\_\_

4. Please give the name of the waterbody at the project site, the city the project is located in:

Waterbody \_\_\_\_\_ is located in \_\_\_\_\_  
City \_\_\_\_\_

5. State the project purpose and provide a brief description of the project.

6. a. State the area of City property impacted by project \_\_\_\_\_ square feet.

b. Will the project impact wetlands?

\_\_\_\_\_ Yes \_\_\_\_\_ No \_\_\_\_\_ Uncertain

If your answer is "YES":

Vegetated wetland area(s) to be impacted \_\_\_\_\_ square feet.

7. Does proposed project involve any existing structures that are on City of Norfolk Property?

\_\_\_\_\_ Yes \_\_\_\_\_ No If your answer is "Yes", provide the following information:

a. Type of structure: \_\_\_\_\_

b. Approximate age of structure \_\_\_\_\_

c. Did the City of Norfolk issue an authorization permit?

\_\_\_\_\_ Yes \_\_\_\_\_ No \_\_\_\_\_ Unsure If Yes, date issued \_\_\_\_\_

d. Date the property was purchased: Month \_\_\_\_\_ Year \_\_\_\_\_

8. Have you previously had a site visit, applied to, or obtained a permit from any agency (Federal, State, or Local) for any portion of the project described in this application or *any other* project at the site?

\_\_\_\_\_ Yes \_\_\_\_\_ No If your answer is "Yes", provide the following information:

Name of Representative: \_\_\_\_\_

<u>Agency</u>	<u>Activity</u>	<u>Application Number</u>	<u>Action Taken</u> (check the appropriate box)
			_____ Issued _____ Denied
			_____ Withdrawn _____ Site Visit

Date Action taken: \_\_\_\_\_

9. a. Has any work commenced or has any portion of the project for which you are seeking a permit been completed?

\_\_\_\_\_ Yes \_\_\_\_\_ No

b. Are you submitting this application at the direction of any state, local or federal agency?

\_\_\_\_\_ Yes \_\_\_\_\_ No

If your answer to either question above is "Yes", give details below stating when the work was completed, who performed the work, and which agency (if any) directed you to submit the application. (Please clearly differentiate on your application drawings that portion of the work that has been completed from that which is proposed.)

10. Approximately how long will it take to complete the project after all required permits have been issued? \_\_\_\_\_ months.

11. List the name and complete mailing address of each adjacent property owner to the project.

12. Have you obtained and enclosed a public liability insurance policy with the City of Norfolk as named-insured, in the minimum amount of \$400,000 combined personal injury/property damage per occurrence on the proposed structure? \_\_\_\_\_ Yes \_\_\_\_\_ No. **A permit cannot be issued until insurance is obtained.** If No, please explain:

As an owner/applicant, I/we \_\_\_\_\_ certify that I/we have read and understand the authorization ordinance (Sec. 46.1-58 et al) and will meet all of its requirements. The owner/applicant(s) also certifies that the residence and ownership requirements stated in Sec 46.1-61 have been met. The owner/applicant(s) declares that in consideration of the City of Norfolk permitting me/us to build and/or maintain a structure on its property subject to the authorization ordinance referred to in this application, hereby, to hold and serve the City of Norfolk harmless as stated in Sec 46.1-62. The owner/applicant(s) certifies that all information contained herein is true, accurate and complete.

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OWNER/APPLICANT'S SIGNATURE

DATE

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OWNER/APPLICANT'S SIGNATURE

DATE

## APPENDIX A

### EROSION AND SEDIMENT CONTROL & NARRATIVE

**All Shoreline Projects require an Erosion and Sediment Control Narrative. Any project with land disturbance in excess of 2,500 square feet will also require a *Land Disturbing Permit* from the appropriate locality in addition to any other required permits.**

#### **SAMPLE EROSION CONTROL PLAN NARRATIVE**

Homeowners, John and Jane Doe, propose to construct a 400 L.F. riprap revetment along the shoreline of the reservoir to provide erosion control. A 25'x 6' pier will be built from the shore to provide access to the reservoir for recreational fishing and boating. The pier materials to be used will be pressure-treated lumber and all hardware will be hot-dipped galvanized.

The terrain in the area that will be disturbed slopes very gently to the lake. The fall over the area is about 4 feet over the width of land owned by the City of Norfolk. The soil on this slope bears a heavy growth of deciduous trees and shrubs with a dense root system that are native to the area. At the present time, there is evidence in certain areas of moderate to severe bank erosion. The most severe erosion conditions are on the northeast corner of the property.

A construction entrance will be provided for ingress and egress of construction equipment. This will eliminate tracking of on-site materials onto the roadway. Prior to any land disturbing activity, silt fence will be installed along the upper portion of property to prevent any sedimentation into the reservoir by any land disturbance from equipment. A turbidity curtain will be placed in the water the entire length of the proposed revetment to provide sediment protection for the lake from the upslope land disturbance. Tree protection will be provided around all trees that are not to be removed. Upon completion of the revetment and pier construction, the area will be properly graded, and native vegetation planted as detailed in the Landscape Plan. The silt fence will remain in place until permanent vegetation is established.

**APPENDIX B**  
**LANDSCAPE PLAN**  
**REQUIRED FOR ALL SHORELINE PROTECTION PROJECTS**

The City of Norfolk, Division of Water Resources is tasked with protecting approximately 200 miles of shoreline surrounding our drinking water reservoirs. Most of the shoreline next to City of Norfolk property is bordered by private property owners that would like to enjoy the reservoirs for recreation and visual appeal. As such, the shoreline has been altered over the years by the removal of native vegetation and ground cover which can ultimately lower the quality of the water in the reservoirs. The City of Norfolk has undertaken an effort to reverse this trend and now requires Landscape Plans for all Shoreline Protection Permits.

For all land disturbing activities, including Shoreline Protection projects, the City of Norfolk requires that adjacent landowners restore an area at a ratio of 1:1 of altered area to native vegetation. If a Shoreline Protection project impacts 100 square feet of City property, 100 square feet of native vegetation will be replanted. If an adjacent property owner requests to remove undesirable vegetation (briars, etc.) to enhance the view of the reservoir, restoration may also be required.

The area to be restored shall be City of Norfolk property or contiguous areas, if needed. The restoration should focus on minimizing turf grass and the establishment of natural vegetation for water quality protection of the reservoir.

When determining the proper amount and type of vegetation to be planted, the following guidelines shall be used. The number of plants from each category (trees, shrubs and herbaceous plants or woody groundcover) depends on the total square footage to be restored. The City of Norfolk's rule requires replacement of plants of like category based for every 100 square foot of disturbance:

- One (1) tree @ 1 ½" – 2" caliper, 6-8' tall.
- Four (4) shrubs, at least 24" tall.
- Ten (10) herbaceous plants or woody groundcover, planted in clumps of 2 to 3 OR a native plant seed mix at the recommended coverage rate.
- Turf grass will be minimized on City of Norfolk property.

**All Landscape Plans shall be prepared and stamped by a Registered Landscape Architect, Certified Landscape Designer or Virginia Certified Horticulturist. Checkout lawn care tip #9 from our partners at [askHRGreen.org](http://askHRGreen.org) to learn more.**

**LANDSCAPE PLAN**  
***REQUIRED WITH ALL PLANS***

**PLEASE COMPLETE THE CHECKLIST. THE DRAWING MUST CONTAIN THE FOLLOWING INFORMATION OR THEY WILL BE RETURNED AS INCOMPLETE:**

**Plan View Drawing**

- north arrow
- adjacent waterway name
- existing structures
- benchmarks showing distances to fixed points of reference
- normal water elevation
- location of vegetated wetlands at the project site
- shoreline, property lines, and location of adjacent property owners (if in a cove or the waterway is less than 100 feet wide, also show the location of the property owner across from the site)
- City of Norfolk property line
- proposed landscaping

**Cross Section Drawing**

- proposed landscaping
- normal water elevation
- existing contours of the shoreline and/or bank
- proposed grading of existing bank relative to normal water elevation
- erosion and sediment control measures (e.g. silt fence)

- Vicinity Map** The name of the map from which the vicinity map was taken and the exact location of the project site must be included (U.S.G.S. quad sheet, street map, or county map is preferred).

## APPENDIX C PRIVATE PIERS

**PLEASE COMPLETE THE CHECKLIST. THE DRAWINGS MUST CONTAIN THE FOLLOWING INFORMATION OR THEY WILL BE RETURNED AS INCOMPLETE:**

### **Plan View Drawing**

- north arrow
- adjacent waterway name
- existing structures
- benchmarks showing distances to fixed points of reference
- normal water elevation
- location of vegetated wetlands at the project site
- shoreline, property lines, and location of adjacent property owners (if in a cove or the waterway is less than 100 feet wide, also show the location of the property owner across from the site)
- City of Norfolk property line
- distance the proposed structure will be located from the adjoining property lines
- width of the waterway (measuring from normal water elevation)
- channelward encroachment relative to normal water elevation
- dimensions of pier and all L/T-head section, platform, or deck

### **Side View Drawing**

- existing contours of the bottom and wetland surface
- normal water elevation
- height of pier over existing bottom or wetland surface
- erosion and sediment control measures (e.g. silt fence)

- Vicinity Map** The name of the map from which the vicinity map was taken and the exact location of the project site must be included (U.S.G.S. quad sheet, street map, or county map is preferred).

1. What portion of the project will be placed on wetlands or subaqueous land?

	<b>Nontidal</b>
Vegetated wetlands	sf
Subaqueous land	sf

2. Total impact to City property: \_\_\_\_\_ sf.

## APPENDIX D

### RIPRAP REVETMENT

**PLEASE COMPLETE THE CHECKLIST AND ANSWER THE QUESTIONS. THE DRAWING MUST CONTAIN THE FOLLOWING INFORMATION OR THEY WILL BE RETURNED AS INCOMPLETE:**

#### **Plan View Drawing**

- north arrow
- adjacent waterway name
- existing structures
- benchmarks showing distances to fixed points of reference
- normal water elevation
- location of vegetated wetlands at the project site
- shoreline, property lines, and location of adjacent property owners (if in a cove or the waterway is less than 100 feet wide, also show the location of the property owner across from the site)
- City of Norfolk property line
- channelward encroachment relative to normal water elevation
- connection with existing bulkhead or riprap structures (if applicable)
- proposed backfill
- proposed landscaping
- length of revetment

#### **Cross Section Drawing**

- proposed backfill
- proposed landscaping
- normal water elevation
- existing contours of the shoreline and/or bank
- dimensions of proposed revetment
- filter cloth
- buried toe or riprap apron
- proposed grading of existing bank relative to normal water elevation
- erosion and sediment control measures (e.g. silt fence)

**Vicinity Map** The name of the map from which the vicinity map was taken and the exact location of the project site must be included (U.S.G.S. quad sheet, street map, or county map is preferred).

1. What will be the average amount of material placed below the plane of normal water elevation per linear foot of shoreline? \_\_\_\_\_ cu. yd(s) per ft. OR \_\_\_\_\_ ton(s) per ft.
2. What type of material will be used for construction of the riprap revetment (e.g. quarry stone, etc.)?

3. What will be the average weight of the:
  - a. Core material (bottom layers) \_\_\_\_ pounds per stone
  - b. Armor material (top 2 layers) \_\_\_\_ pounds per stone.
4. If the revetment will be backfilled, describe the composition of the material to be used (e.g. 80% sand, 15% clay and 5% silt):
5. What is the source of the backfill material?
6. What portion of the project will be placed on wetlands or subaqueous land?

	<b>Nontidal</b>
Vegetated wetlands	sf
Subaqueous land	sf

7. Total impact to City property: \_\_\_\_\_ sf.

## APPENDIX E BOAT STORAGE RAMP

**PLEASE COMPLETE THE CHECKLIST AND ANSWER THE QUESTIONS. THE DRAWING MUST CONTAIN THE FOLLOWING INFORMATION OR THEY WILL BE RETURNED AS INCOMPLETE:**

### **Plan View Drawing**

- north arrow
- adjacent waterway name
- existing structures
- benchmarks showing distances to fixed points of reference
- normal water elevation
- location of vegetated wetlands at the project site
- shoreline, property lines, and location of adjacent property owners (if in a cove or the waterway is less than 100 feet wide, also show the location of the property owner across from the site)
- City of Norfolk property line
- channelward encroachment relative to normal water elevation
- connection with existing structures (if applicable)
- dimensions of boat storage ramp

### **Cross Section Drawing**

- materials to be used for construction
- normal water elevation
- existing contours of the shoreline and/or bank
- erosion and sediment control measures (e.g. silt fence)

**Vicinity Map** The name of the map from which the vicinity map was taken and the exact location of the project site must be included (U.S.G.S. quad sheet, street map, or county map is preferred).

1. Will any other structures be installed concurrently with the boat storage ramp  Yes  No.  
If Yes, list the other structures.
2. What portion of the project will be placed on wetlands or subaqueous land?

	<b>Nontidal</b>
Vegetated wetlands	sf
Subaqueous land	sf

Total impact to City property: \_\_\_\_\_ sf.

### AGENT CERTIFICATION OF AUTHORIZATION

I, \_\_\_\_\_, hereby certify that I have authorized \_\_\_\_\_ to act on my  
(OWNER/APPLICANT'S NAME) (AGENT'S NAME)  
behalf and take all actions to the processing, issuance, and acceptance of this permit and any and all standard  
and special conditions attached.

We hereby certify that the information submitted in this application is true and accurate to the best of our  
knowledge.

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OWNER/APPLICANT'S SIGNATURE

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AGENT'S SIGNATURE

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DATE

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DATE

**Completion of this form will allow the agent to sign all future application correspondence. Also, please provide the name(s) and complete address(es) of all legal property owner(s) as shown on your recorded deed.**

## ADJACENT PROPERTY OWNER'S ACKNOWLEDGEMENT FORM

I, \_\_\_\_\_, own land next to or across the water from  
(ADJACENT PROPERTY OWNER'S NAME)  
the land of \_\_\_\_\_. I have reviewed the applicant's project drawings dated  
(OWNER/APPLICANT'S NAME)  
\_\_\_\_\_ to be submitted for all necessary Local, State, and Federal permits.  
(DATE)

I  HAVE NO COMMENT  DO NOT OBJECT  DO OBJECT to the project.

The owner/applicant has agreed to contact me for additional comments if the proposal changes prior to construction of the project.

**(Before signing this form, please be sure you have checked the appropriate box above.)**

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ADJACENT PROPERTY OWNER'S SIGNATURE

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DATE

**NOTE: IF YOU OBJECT TO THE PROPOSAL - THE REASONS YOU OPPOSE THE PROJECT MUST BE SUBMITTED TO THE CITY OF NORFOLK IN WRITING. AN OBJECTION WILL NOT NECESSARILY RESULT IN DENIAL OF THE PROJECT, BUT, VALID COMPLAINTS WILL BE GIVEN FULL CONSIDERATION DURING THE PERMIT REVIEW PROCESS.**

**NOTE: Please photocopy this form if additional copies are needed.**

## APPLICANT'S AND CONTRACTOR'S ACKNOWLEDGEMENT FORM

I, \_\_\_\_\_, have contracted \_\_\_\_\_  
(OWNER/APPLICANT'S NAME) (CONTRACTOR/COMPANY NAME)  
to perform the work described in the application signed and dated \_\_\_\_\_.  
\_\_\_\_\_  
(DATE)

We will read and abide by all conditions as set forth in all Local, State, and Federal permits as required for this project. We understand that failure to follow the conditions of the permits may constitute a violation of applicable Local, State, and Federal statutes and that will be liable for any civil and/or criminal penalties imposed by these statutes.

In addition, we agree to make available a copy of any permit to any regulatory representative visiting the project site to ensure permit compliance. If we fail to provide the applicable permit upon request, we understand that the representative will have the option of stopping our operation until it has been determined that we have a properly signed and executed permit and are in full compliance with all terms and conditions.

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OWNER/APPLICANT'S SIGNATURE

---

DATE

---

CONTRACTOR'S SIGNATURE AND TITLE

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DATE

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CONTRACTOR'S NAME OR NAME OF FIRM  
(PRINTED/TYPED)

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CONTRACTOR'S OR FIRM'S ADDRESS

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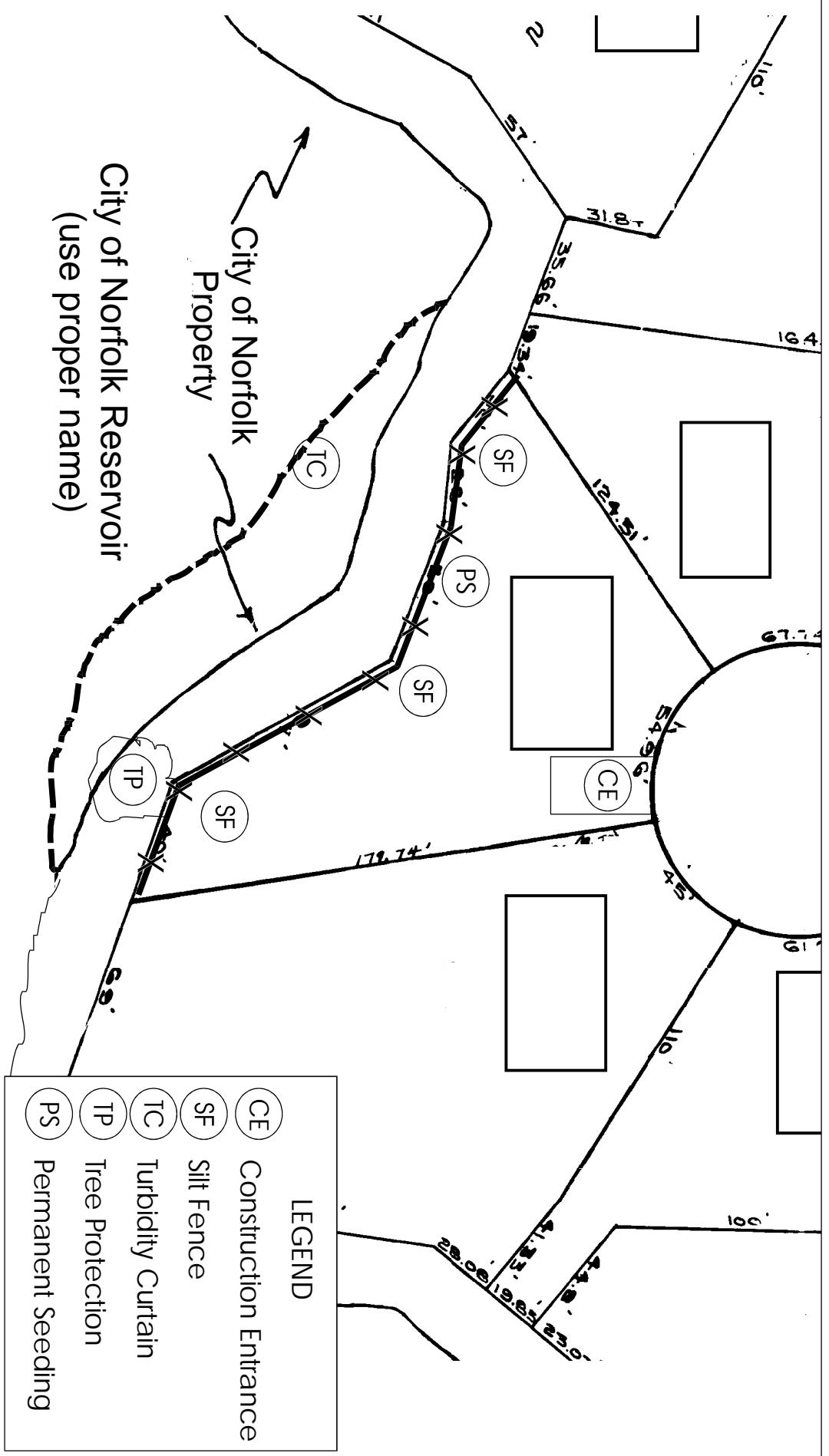
VIRGINIA CONTRACTOR LICENSE NUMBER

## **BUILDING GUIDELINES**

The following pages are building guidelines as established by the City of Norfolk for structures that may be allowed on City of Norfolk property surrounding the reservoirs.

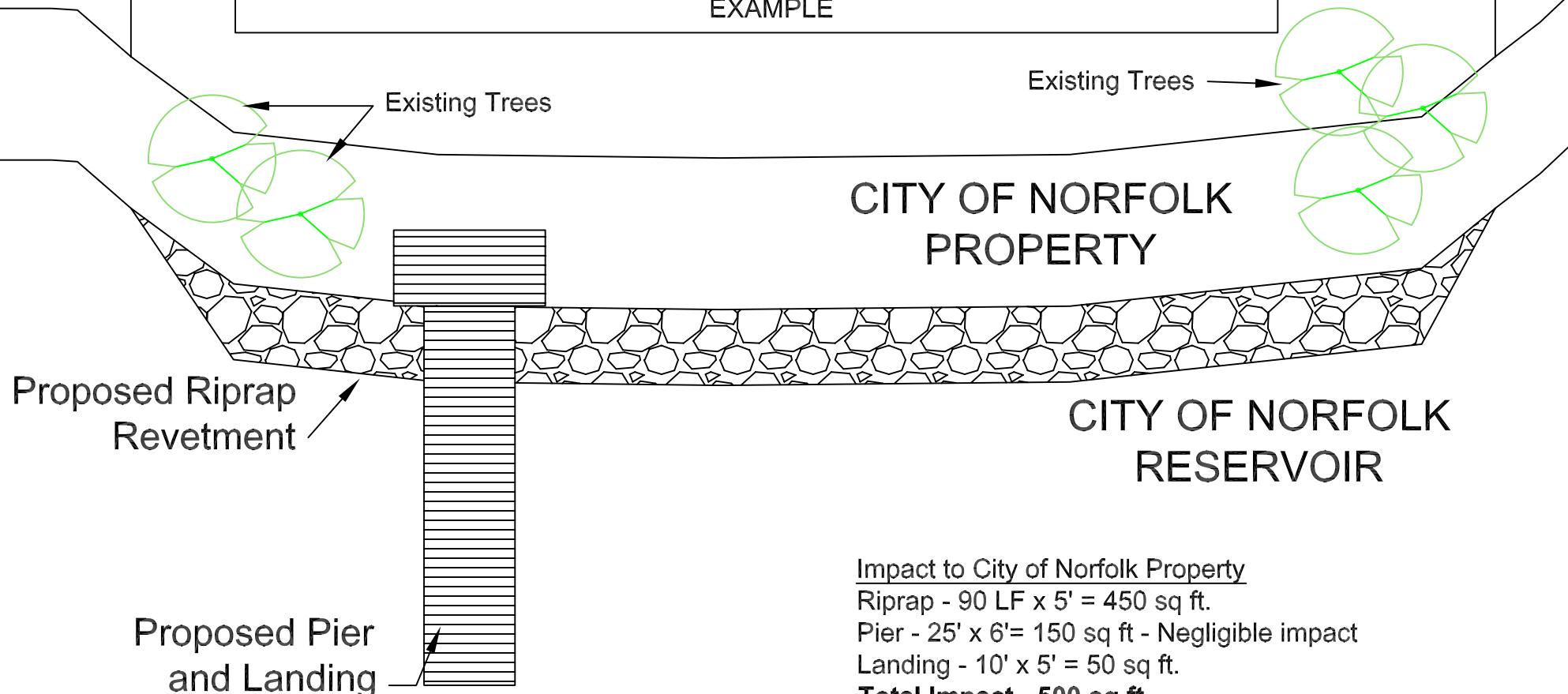
# SAMPLE EROSION & SEDIMENT CONTROL PLAN

## CITY OF NORFOLK UTILITIES



# CITY OF NORFOLK LANDSCAPE PLAN REQUIREMENTS\*

## EXAMPLE



### Impact to City of Norfolk Property

Riprap - 90 LF x 5' = 450 sq ft.

Pier - 25' x 6' = 150 sq ft - Negligible impact

Landing - 10' x 5' = 50 sq ft.

**Total Impact - 500 sq ft.**

### Landscape Plan Minimum

1 sapling per 100 sq ft = 5

4 shrubs per 100 sq ft = 20

10 herbaceous plants per 100 sq ft = 50

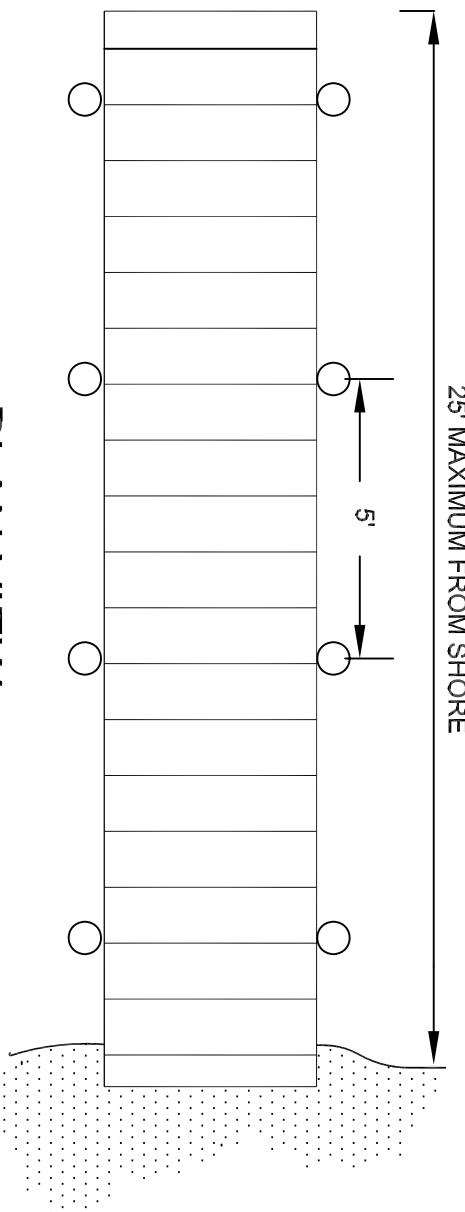
Mulch beds around all plants

Scale - 1" = 10'

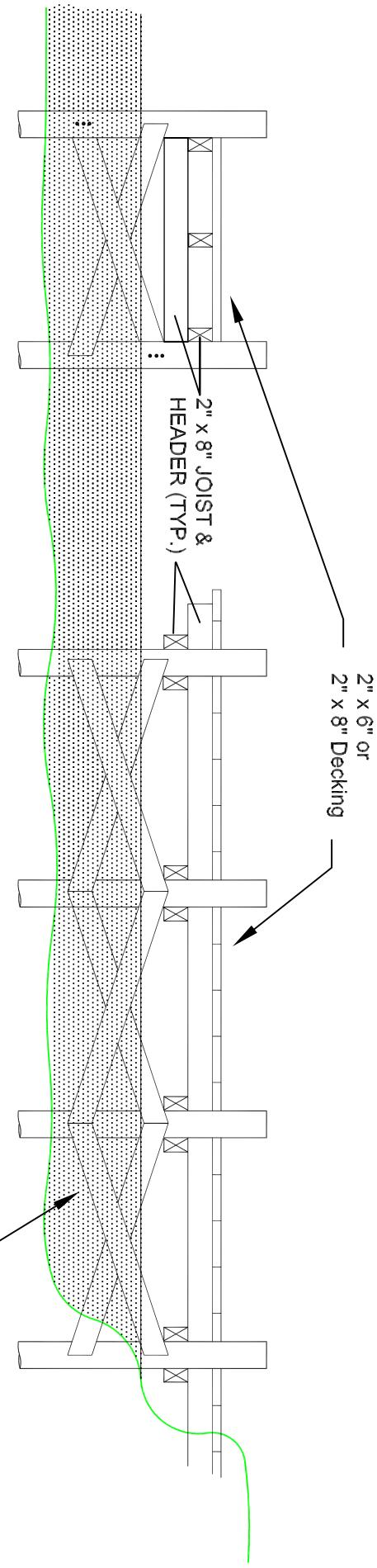
\* All Landscape Plans shall be prepared and stamped by a Registered Landscape Architect, Certified Landscape Designer or Virginia Certified Horticulturist.

Sapling minimum 6-8' tall; Shrub minimum 24" tall; Herbaceous plants in clumps of 2 to 3

## PLAN VIEW

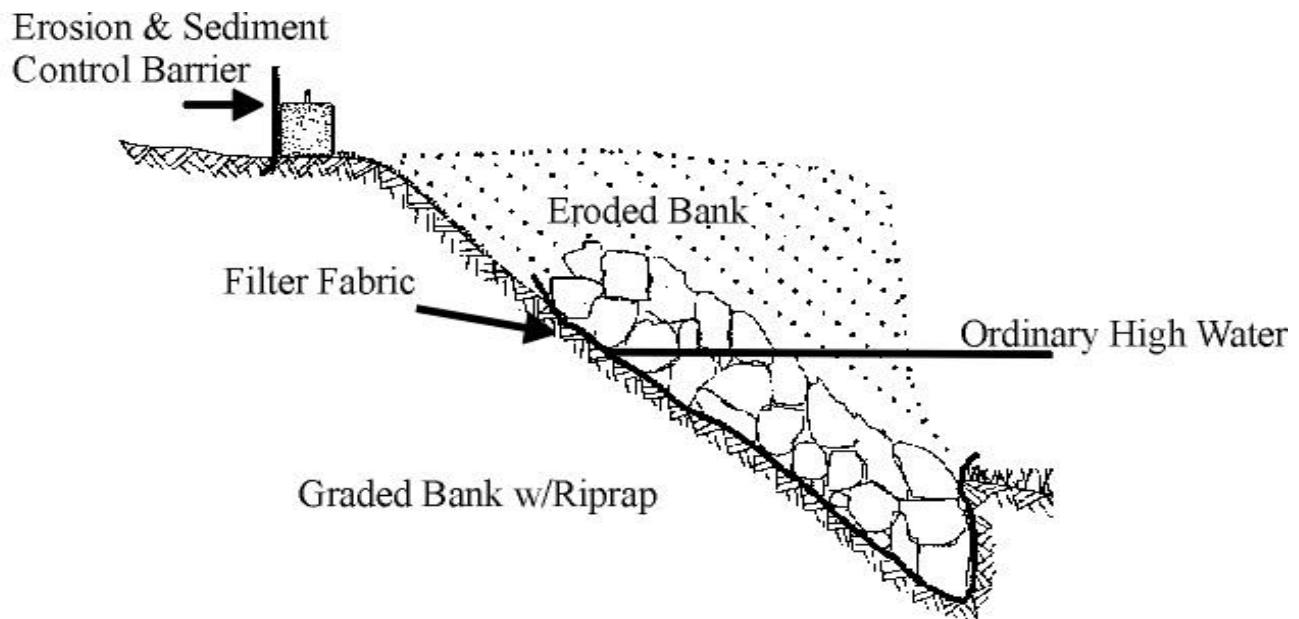


## SIDE VIEW



## NOTES

1. Materials - Pressure treated timber only.
2. All headers to be fastened with minimum 1/2" hot-dipped galvanized bolts, nuts and washers. Braces and decking may be fastened with nails.
3. 150 square foot maximum.
4. 25 feet maximum distance from shore.
5. Maximum height of decking above normal pool elevation is to be 5.0 feet.
6. Depth of piles to be determined in field.
7. Configuration of pier may vary from this example as long as it does not exceed the above dimensions.



## PLAN VIEW

(Not to Scale)

1. Materials -- VDOT Class AI stone ("man-size"). Broken concrete and premixed concrete bags are not allowed.
2. All riprap revetments shall be constructed using the proper application of filter fabric.
3. Slope to be 2:1 or 3:1 typical

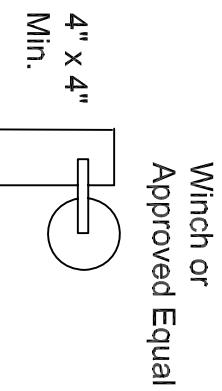
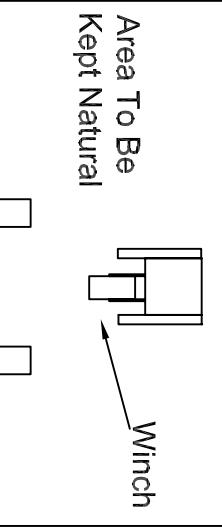
City of Norfolk, Department of Utilities

### RIPRAP DETAIL

(Not to Scale)

# BOAT STORAGE RAMP DETAIL

(NOT TO SCALE)



## SECTION A-A

## PLAN VIEW

1. Materials - Pressure treated timber only. A creosote or tar based timber is not allowed.
2. All fasteners to be hot-dipped galvanized.
3. Land under and around the Boat Storage Ramp must be kept in a previous (natural) state.
4. Boat to be attached to winch by cable or strap.
5. Boat must remain free of standing water